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ERRATA

Alphabetical List of Patentees, Sept. 8, page xxviii, line 24, "Standard-I. G. Company. (See Drauch, C., Pier and Eisenhut, assignors.)" should read *Standard-I. G. Company. (See Krauch, C., Pier and Eisenhut, assignors.)*

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Absosure Products, Inc., Royal Oak, Mich. Antiseptic paste. 286,701; Sept. 1; Serial No. 313,700; published June 9, 1931. Class 6.

Adam Hat Stores, Inc., New York, N. Y. Men's hats. 286,774; Sept. 1; Serial No. 313,218; published June 16, 1931. Class 39.

Adams Bros. Mfg. Co. Inc., Pittsburgh, Pa. Radiant gas heaters and parts thereof. 286,512; Sept. 1; Serial No. 312,327; published June 16, 1931. Class 34.

Adamson Bros. Company, New York, N. Y. Yarns. 286,680; Sept. 1; Serial No. 313,213; published June 16, 1931. Class 43.

Agfa Ansco Corporation, Binghamton, N. Y. Sensitized photographic paper. 286,706; Sept. 1; Serial No. 301,327; published June 23, 1931. Class 26.

Agfa Ansco Corporation, Binghamton, N. Y. Photographic cameras. 286,708–9; Sept. 1; Serial Nos. 301,323–4; published June 23, 1931. Class 26.

Ajax Hosiery Mills, Phoenixville, Pa. Hosiery. 286,625; Sept. 1; Serial No. 310,148; published June 16, 1931. Class 39.

All Fair Incorporated, Churchville, N. Y. Table games, table board games. 286,522; Sept. 1; Serial No. 313,524; published June 23, 1931. Class 22.

Airlite Mfg. Co. (See Fidelity Manufacturing Co.)

Altoona Malt Company, Altoona, Pa. Malt syrup. 286,637; Sept. 1; Serial No. 297,506; published Sept. 16, 1930. Class 46.

Aluminum Company of America, Pittsburgh, Pa. Metal cable clamps, devices for preventing vibration of electric cables, etc. 286,617–18; Sept. 1; Serial Nos. 307,875–6; published June 16, 1931. Class 13.

American Blue Stone Co., New York, N. Y. Flag stones. 286,628; Sept. 1; Serial No. 311,947; published June 16, 1931. Class 12.

American Druggists Syndicate, Inc., New York and Long Island City, N. Y. Pastilles for hoarseness, dryness of throat, and sore throat. 286,515; Sept. 1; Serial No. 312,734; published June 16, 1931. Class 6.

American Hair & Felt Company, Chicago, Ill. Underlining for floor coverings. 286,584; Sept. 1; Serial No. 310,277; published June 16, 1931. Class 50.

American Junior Aircraft Company, Portland, Oreg. Toy airplanes and gliders. 286,534; Sept. 1; Serial No. 311,904; published June 23, 1931. Class 22.

American Lace Paper Company, Milwaukee, Wis. Cast paper pulp cups. 286,516; Sept. 1; Serial No. 313,112; published June 9, 1931. Class 2.

American Pop Corn Company, Sioux City, Iowa. Oil for use in popping corn and pop corn seasoning. 286,567; Sept. 1; Serial No. 312,748; published June 16, 1931. Class 46.

American Pop Corn Company, Sioux City, Iowa. Oil for use in popping corn. 286,568; Sept. 1; Serial No. 312,749; published June 9, 1931. Class 46.

Anaconda Wire & Cable Company, New York, N. Y. Copper alloy wire and unfinished copper alloy rods and sheets. 286,740; Sept. 1; Serial No. 311,355; published June 9, 1931. Class 14.

Anchor Packing Company, The, Philadelphia, Pa. Machinery packing. 286,800; Sept. 1. Class 35.

Anderson, Glenn, Galesburg, Ill. Fittings and supplies used in plumbing and heating systems. 286,513; Sept. 1; Serial No. 312,685; published June 16, 1931. Class 13.

Andrews, O. B., Company, Chattanooga, Tenn. Canned fruits and vegetables. 286,559; Sept. 1; Serial No. 310,791; published June 16, 1931. Class 46.

Anstice, Josiah & Co., Inc., Rochester, N. Y. Vegetable peeling machines and slicing machines. 286,765; Sept. 1; Serial No. 303,310; published June 9, 1931. Class 23.

Argus Knitting Mills, Inc., Brooklyn, N. Y. Cotton, woolen, silk, etc., piece goods. 286,669; Sept. 1; Serial No. 311,907; published June 16, 1931. Class 42.

Arisman, Frank H., Chicago, Ill. Medicine. 286,690; Sept. 1; Serial No. 313,219; published June 16, 1931. Class 6.

Armstrong, Albert, Seattle, Wash. Burned clay brick and tile. 286,610; Sept. 1; Serial No. 306,991; published June 16, 1931. Class 12.

Aron, J., & Company, Inc., New York, N. Y. Green coffee. 286,580; Sept. 1; Serial No. 313,824; published June 9, 1931. Class 46.

Aschmann, C. G., & Co., New York, N. Y. Silk piece goods. 286,667; Sept. 1; Serial No. 310,464; published June 16, 1931. Class 42.

Ba-Bee-Net Manufacturing Co. (See Bramnick, Jacob M.)

Bacon Banjo Co., Inc., Groton, Conn. Banjo. 286,572; Sept. 1; Serial No. 313,175; published June 9, 1931. Class 36.

Bailey-Burruss Manufacturing Company, Atlanta, Ga. Helicoid conveyors, sectional flight conveyors, spiral conveyors, etc. 286,768; Sept. 1; Serial No. 306,483; published June 9, 1931. Class 23.

Baldauf, George L., doing business as The Borolatum Company, Milwaukee, Wis. Compound used for medicinal purposes. 286,688; Sept. 1; Serial No. 313,176; published June 16, 1931. Class 6.

Baltimore Butterine Company, The, Baltimore, Md. Pickle relish, butter, oleomargarine, and cooking compound. 286,614; Sept. 1; Serial No. 307,471; published Mar. 17, 1931. Class 46.

Barndollar, Charles B., Oakland, Calif. Canvas shoes. 286,623; Sept. 1; Serial No. 307,198; published June 9, 1931. Class 39.

Beacon Burner Manufacturing Corporation, The, Boston, Mass. Oil burners. 286,514; Sept. 1; Serial No. 312,689; published June 9, 1931. Class 34.

Bell, Thomas, doing business as Bell Supply Co., Richmond, Va. Tire patches. 286,766; Sept. 1; Serial No. 303,990; published June 9, 1931. Class 35.

Black & Decker Manufacturing Company, The, Towson, Md. Electric laundry washing machines and electric ironing machines or mangles. 286,696; Sept. 1; Serial No. 313,643; published June 16, 1931. Class 24.

Blum Bros. Jersey City N. J. Olive oil. 286,796; Sept. 1; Serial No. 297,120; published June 23, 1931. Class 46.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics for the manufacture of jacquettes in the piece. 286,655; Sept. 1; Serial No. 313,230; published June 16, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 286,660–3; Sept. 1; Serial Nos. 313,488–91; published June 16, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 286,665; Sept. 1; Serial No. 313,954; published June 16, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 286,681–4; Sept. 1; Serial Nos. 313,226–9; published June 16, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 286,759–60; Sept. 1; Serial Nos. 314,095–6; published June 23, 1931. Class 42.

Bobrick Manufacturing Corporation, Los Angeles, Calif. Liquid soap dispensers. 286,750; Sept. 1; Serial No. 308,286; published June 23, 1931. Class 13.

Bon-Air Radiator Corporation, Boston, Mass. Heat radiating systems. 286,510; Sept. 1; Serial No. 311,361; published June 9, 1931. Class 34.

Borolatum Company, The. (See Baldauf, George L.)

Boston Tea Party, Inc., Troy, Ala. Liquid tea syrup. 286,557; Sept. 1; Serial No. 311,467; published June 16, 1931. Class 46.

Bramnick, Jacob M., doing business as Ba-Bee-Net Manufacturing Co., Philadelphia, Pa. Canopies. 286,670; Sept. 1; Serial No. 311,950; published June 16, 1931. Class 42.

British Ropes Limited, London, England. Barbed wire fencing and wire netting and fencing. 286,754; Sept. 1; Serial No. 314,143; published June 23, 1931. Class 13.

Brooklands Knitting Industry Limited, Altrincham, England. Wool or worsted cloths and stuffs. 286,671; Sept. 1; Serial No. 312,028; published June 16, 1931. Class 42.

Brown Shoe Company, Inc., St. Louis, Mo. Shoes. 286,649; Sept. 1; Serial No. 313,729; published June 16, 1931. Class 39.

Burke Golf Company, The, Newark, N. J. Golf clubs. 286,523; Sept. 1; Serial No. 313,622; published June 23, 1931. Class 22.

Burnett, Aaron G., doing business as A. G. Burnett Pharmacal Co., Belleville, Ill. Medicinal preparation. 286,640; Sept. 1; Serial No. 298,011; published June 16, 1931. Class 6.

Burns, Jabez, & Sons, Inc., New York, N. Y. Temperature indicating devices for roasting machines. 286,781; Sept. 1; Serial No. 312,900; published June 9, 1931. Class 26.

Calavo Growers of California, Los Angeles, Calif. Avocado pulp. 286,748; Sept. 1; Serial No. 306,593; published June 23, 1931. Class 46.

California Packing Corporation, San Francisco, Calif. Fruit juices and ginger ale. 286,488; Sept. 1; Serial No. 307,254; published June 23, 1931. Class 45.

Canadian Pale Products Association, Harrisburg, Pa. Malt beverage. 286,805; Sept. 1. Class 48.

Canton Miniature Aircraft Corporation, The, Canton, Ohio. Miniature aircraft. 286,527; Sept. 1; Serial No. 314,553; published June 23, 1931. Class 22.

Carter & Moore Chemical Co., Waycross, Ga. Salve. 286,695; Sept. 1; Serial No. 313,464; published June 9, 1931. Class 6.

Chamberlin Metal Weather Strip Company, Detroit, Mich. Weather strips. 286,536; Sept. 1; Serial No. 312,794; published June 16, 1931. Class 12.

Chance Vought Corporation, Hartford, Conn. Aircraft and structural parts thereof. 286,752; Sept. 1; Serial No. 314,098; published June 23, 1931. Class 19.

Chemical Utilities, Inc., New York, N. Y. Metal plating and polishing compound. 286,594; Sept. 1; Serial No. 312,139; published June 16, 1931. Class 6.

Cheney, Byron M., Chicago, Ill. Railroad track spikes. 286,503; Sept. 1; Serial No. 298,934; published June 9, 1931. Class 13.

Chicago Pneumatic Tool Company, New York, N. Y. Flexible fluid conduits. 286,779; Sept. 1; Serial No. 313,904; published June 9, 1931. Class 35.

Chic-Tone Company, Inc., The, Angola, Ind. Medicine for general colds, roup, pneumonia, etc. 286,595; Sept. 1; Serial No. 312,835; published June 16, 1931. Class 6.

Chromoclast Laboratories. (See Major Bertrand De Jarnette.)

Churchill, S. H., & Company, Chicago, Ill. Men's coats, vests, pants, etc. 286,634; Sept. 1; Serial No. 302,178; published June 16, 1931. Class 39.

Cleveland City Forge Company, The, Cleveland, Ohio. Hand tools. 286,792; Sept. 1; Serial No. 311,822; published June 9, 1931. Class 23.

Clifford, H. B., Roofing Company, Detroit, Mich. Composition shingles. 286,629; Sept. 1; Serial No. 312,696; published June 16, 1931. Class 12.

Cohen, Goldman & Co., Inc., New York, N. Y. Outer garments, shirts, underwear, etc. 286,676; Sept. 1; Serial No. 312,887; published June 16, 1931. Class 39.

Colardo Products Limited, Reading, England. Fireproof paints. 286,636; Sept. 1; Serial No. 291,606; published June 16, 1931. Class 16.

Colorado Fuel and Iron Company, The, Denver, Colo. Nails. 286,738; Sept. 1; Serial No. 312,697; published June 23, 1931. Class 13.

Colorado Fuel and Iron Company, The, Denver, Colo. Spikes and bolts. 286,755; Sept. 1; Serial No. 314,150; published June 23, 1931. Class 13.

Columbus Washboard Company. (See Martin, Frederic, jr.)

Compression Anchor Company, Inc., New York, N. Y. Shoe laces. 286,672; Sept. 1; Serial No. 312,125; published June 9, 1931. Class 40.

Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Ornamental and chain link metal fencing. 286,504; Sept. 1; Serial No. 299,109; published June 16, 1931. Class 13.

Consolidated Products Corporation, Plainfield, N. J. Finishing polish. 286,583; Sept. 1; Serial No. 314,041; published June 16, 1931. Class 16.

Coxhead, Ralph C., Corporation, New York, N. Y. Calculating and adding machines. 286,713; Sept. 1; Serial No. 314,100; published June 23, 1931. Class 26.

Craig, S. J., Greenville, S. C. Hooked rugs. 286,675; Sept. 1; Serial No. 312,332; published June 16, 1931. Class 42.

Crisp, Michael A., Los Angeles, Calif. Medicines. 286,593; Sept. 1; Serial No. 310,914; published June 16, 1931. Class 6.

Davis, Charles M., doing business as Scientific Research Products, Long Beach, Calif. Automobile polishes. 286,747; Sept. 1; Serial No. 304,041; published June 23, 1931. Class 16.

Dehler-Signoret Corporation, New York, N. Y. Card sets, spinning machinery, finishing press accessories, and parts thereof. 286,710; Sept. 1; Serial No. 301,163; published June 9, 1931. Class 23.

De Jarnette, Major Bertrand, doing business as Chromoclast Laboratories, Nebraska City, Nebr. Spectrum selectors and transformers for the same. 286,780; Sept. 1; Serial No. 312,944; published June 9, 1931. Class 26.

Delco Products Corporation, Dayton, Ohio. Shock absorbers. 286,518; Sept. 1; Serial No. 313,125; published June 16, 1931. Class 19.

Dickey, Thomas L., doing business as Dickey Baking Company, Tulsa, Okla. Bread, cakes, cookies, and doughnuts. 286,801; Sept. 1. Class 46.

Divine, Fred D., Company, The, Utica, N. Y. Fishing rods and poles. 286,530; Sept. 1; Serial No. 314,751; published June 23, 1931. Class 22.

Duborel Corporation, The, Jersey City, N. J. Mouth wash and paste for mouth diseases. 286,807; Sept. 1. Class 6.

Duplex Printing Press Co., Battle Creek, Mich. Rotary printing presses, rotary folders and stereotype equipment. 286,707; Sept. 1; Serial No. 302,274; published June 9, 1931. Class 23.

Du Pont-Pathé Film Manufacturing Corporation, New York, N. Y. Photographic film. 286,725; Sept. 1; Serial No. 313,652; published June 2, 1931. Class 26.

Du Pont Pathé Film Manufacturing Corporation, New York, N. Y. Photographic film. 286,783; Sept. 1; Serial No. 313,651; published June 9, 1931. Class 26.

Du Pont Pathé Film Manufacturing Corporation, New York, N. Y. Photographic film. 286,798; Sept. 1; Serial No. 313,650; published June 9, 1931. Class 26.

Eastman Kodak Company, Rochester, N. Y. Squeegees and sporting brushes. 286,651; Sept. 1; Serial No. 313,840; published June 9, 1931. Class 29.

Eastman Kodak Company, Rochester, N. Y. Rollers, print trimmers, and paddles, etc. 286,721; Sept. 1; Serial No. 313,839; published June 23, 1931. Class 23.

Eastman Kodak Company, Rochester, N. Y. Ground glass substitute, lantern slide varnish, and spotting colors. 286,743; Sept. 1; Serial No. 313,837; published June 23, 1931. Class 16.

Electric Boat Company, Bayonne, N. J. Pleasure cruisers. 286,500; Sept. 1; Serial No. 300,862; published June 9, 1931. Class 19.

Elizabeth Arden, Inc., New York, N. Y. Perfume. 286,693; Sept. 1; Serial No. 313,321; published June 16, 1931. Class 6.

Empire Shield Company. (See Goldsmith, Julius W.)

Essex Foundry, Newark, N. J., and New York, N. Y. Machines for shaking out the cores from cast iron pipe. 286,712; Sept. 1; Serial No. 292,240; published June 23, 1931. Class 23.

Eureka Fire Hose Manufacturing Company, New York, N. Y. Hose of fabric and rubber. 286,795; Sept. 1; Serial No. 309,307; published June 16, 1931. Class 35.

Excelsior Varsity Underwear Corporation, Baltimore, Md. Men's pajamas. 286,551; Sept. 1; Serial No. 313,594; published June 16, 1931. Class 39.

Export Petroleum Company of California. (See Smith, Glenn A.)

Fair, The, Chicago, Ill. Linen table cloths, napkins, towels, etc. 286,678; Sept. 1; Serial No. 313,078; published June 16, 1931. Class 42.

Fairclough & Gold, Inc., Boston, Mass. Textile fabric curtains. 286,666; Sept. 1; Serial No. 309,772; published June 16, 1931. Class 42.

Farrington & Evans, Inc., New York, N. Y. Women's hats. 286,650; Sept. 1; Serial No. 313,731; published June 16, 1931. Class 39.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 286,543–4; Sept. 1; Serial Nos. 313,183–4; published June 9, 1931. Class 39.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 286,552; Sept. 1; Serial No. 313,595; published June 16, 1931. Class 39.

Ferment Company, The, New York, N. Y. Medicinal preparations. 286,686; Sept. 1; Serial No. 313,127; published June 9, 1931. Class 6.

Fidelity Manufacturing Co., Inc., doing business as Alrite Mfg. Co., Zionsville, Pa. Enamel, tire paint, and polishes. 286,566; Sept. 1; Serial No. 312,753; published June 16, 1931. Class 16.

Flexwood Company, The, Chicago, Ill. Fabric backed wood veneer. 286,555; Sept. 1; Serial No. 313,884; published June 16, 1931. Class 12.

Florence Stove Company, Boston and Gardner, Mass. Electric cook stoves. 286,639; Sept. 1; Serial No. 297,862; published June 9, 1931. Class 21.

Ford, J. B., Company, The, Wyandotte, Mich. Sterilizing material. 286,697; Sept. 1; Serial No. 313,656; published June 9, 1931. Class 6.

Foster Bros. & Chatillon Co., Fulton, N. Y. Knives. 286,769; Sept. 1; Serial No. 307,591; published June 23, 1931. Class 23.

Frank, Leland L., doing business as The Settlesit Company, Decatur, Ind. Preparation for clarifying black sooty cistern water. 286,687; Sept. 1; Serial No. 313,129; published June 9, 1931. Class 6.

Friedberg, Adolph, Montreal, Quebec, Canada. Flavoring extracts. 286,612; Sept. 1; Serial No. 307,351; published June 16, 1931. Class 46.

Fruehauf Trailer Company, Detroit, Mich. Trailers of all kinds. 286,726; Sept. 1; Serial No. 313,539; published June 23, 1931. Class 19.

G L E Candy Corporation of America, Chicago, Ill. Candy. 286,532; Sept. 1; Serial No. 310,863; published June 23, 1931. Class 46.

General Electric Company, Schenectady, N. Y. Laundry machines. 286,734; Sept. 1; Serial No. 313,130; published June 23, 1931. Class 24.

General Fireproofing Company, The, Youngstown, Ohio. Office, store, hospital, and bank furniture. 286,715; Sept. 1; Serial No. 314,691; published June 23, 1931. Class 32.

Gibson-Homans Company, The, Cleveland, Ohio. Asbestos roof coating and roof paint. 286,561; Sept. 1; Serial No. 312,283; published June 9, 1931. Class 16.

Gillette Safety Razor Company. (See Probak Corporation.)

Gly-Ders Footwear, Inc., Racine, Wis. Slippers and shoes. 286,679; Sept. 1; Serial No. 313,131; published June 16, 1931. Class 39.

Goldsmith, Julius W., doing business as Empire Shield Company, New York, N. Y. Sanitary step-ins, bloomers, aprons, and belts. 286,745; Sept. 1; Serial No. 313,596; published June 23, 1931. Class 44.

Goodier, Elwood J., doing business as Universal Laboratories, Dallas, Tex. Astringents, astringent cerates, bleach creams, beauty creams, etc. 286,609; Sept. 1; Serial No. 306,265; published June 9, 1931. Class 6.

Gray, Herbert, Company, Inc., Lincoln, Me. Fur scarfs. 286,549; Sept. 1; Serial No. 313,367; published June 9, 1931. Class 39.

Greilich, William, & Sons, Inc., Brooklyn, N. Y. Foot wear. 286,585; Sept. 1; Serial No. 310,763; published June 9, 1931. Class 39.

Grinnell Washing Machine Corporation, Grinnell, Iowa. Laundry washing machines. 286,691; Sept. 1; Serial No. 313,242; published June 16, 1931. Class 24.

Gulf States Chemical Co., Inc., Harlingen, Tex. Insecticides. 286,804; Sept. 1. Class 6.

Gustafson, Aron, doing business as Johnson & Gustafson, Barre, Vt. Granite monuments and memorials. 286,648; Sept. 1; Serial No. 313,659; published June 16, 1931. Class 50.

Hahn Department Stores, Inc., Wilmington, Del. Sanitary napkins. 286,728; Sept. 1; Serial No. 313,472; published June 23, 1931. Class 44.

Hanovia Chemical & Manufacturing Company, Newark, N. J. Ceramic decorating materials, luster colors, etc. 286,732; Sept. 1; Serial No. 313,186; published June 9, 1931. Class 16.

Hanovia Chemical & Manufacturing Company, Newark, N. J. Metallic decorating paints, lustre colors, etc. 286,733; Sept. 1; Serial No. 313,187; published June 16, 1931. Class 16.

Harpoon Paint Products, Inc., Long Island City, N. Y. Paint. 286,578; Sept. 1; Serial No. 313,541; published June 16, 1931. Class 16.

Harrison-Noyes Chemical Corp., Long Beach, Calif. Attachment or clasp for dental plates and mould boxes for dental inlays or the like. 286,736; Sept. 1; Serial No. 312,988; published June 23, 1931. Class 44.

Hawkins, Lynn A., doing business as The Silver-Forest Fruit and Stock Farms, Silver Creek and Forestville, N. Y. Fresh milk and live cattle. 286,772; Sept. 1; Serial No. 311,683; published June 23, 1931. Class 46.

Hayman, Michael, & Co., Inc., Buffalo, N. Y. Cement for jointing water mains. 286,542; Sept. 1; Serial No. 313,168; published June 16, 1931. Class 12.

Hazard Wire Rope Company, Wilkes-Barre, Pa. Wire rope. 286,528; Sept. 1; Serial No. 314,646; published June 23, 1931. Class 7.

Healoil Laboratories. (See Healy, Dan J.)

Healy, Dan J., doing business as Healoil Laboratories, Detroit, Mich. Shampoo. 286,599; Sept. 1; Serial No. 313,599; published June 16, 1931. Class 6.

Hearn, James A., & Son, Inc., New York, N. Y. Dresses, coats, sweaters, etc. 286,489; Sept. 1; Serial No. 298,536; published May 27, 1930. Class 39.

Heinrichs, K., Albany, N. Y. Maltless beverages. 286,487; Sept. 1; Serial No. 297,668; published June 23, 1931. Class 45.

Hill, W. K., doing business as W. K. Hill & Co., Greer, S. C. Bedspreads. 286,685; Sept. 1; Serial No. 309,380; published June 16, 1931. Class 42.

Hoelbinger, Otto W., doing business as O. H. Rubber Company of Folsom, Ridley Township, Delaware County, Pa. Pneumatic tube patches for automobile tires. 286,763; Sept. 1; Serial No. 302,896; published June 16, 1931. Class 35.

Holophane Company, Inc., New York, N. Y. Globes and reflectors. 286,611; Sept. 1; Serial No. 306,890; published June 9, 1931. Class 34.

Hopson, W. C., Company, doing business as Simplex Brooder Stove Co., Grand Rapids, Mich. Oil burning brooder stoves. 286,509; Sept. 1; Serial No. 310,141; published June 16, 1931. Class 34.

Horn, W. O., & Brother, Inc., New York, N. Y. Neckties and cravats. 286,545; Sept. 1; Serial No. 313,189; published June 9, 1931. Class 39.

Horton, M. E., Inc., Washington, D. C. Canned vegetables and fruits, spices, tomato catsup, etc. 286,771; Sept. 1; Serial No. 311,478; published June 23, 1931. Class 46.

Hosiery Mills Co., The, Chicago, Ill. Hosiery. 286,553; Sept. 1; Serial No. 313,852; published June 16, 1931. Class 39.

Hudson River Woolens Mills, New York, N. Y. Woolen overcoatings. 286,659; Sept. 1; Serial No. 313,433; published June 16, 1931. Class 42.

Huffman & Hulsebus, Harlan, Iowa. Chemical preparation. 286,703; Sept. 1; Serial No. 313,783; published June 9, 1931. Class 6.

Huron Milling Company, The, Harbor Beach, Mich. Sizing starch. 286,692; Sept. 1; Serial No. 313,295; published June 9, 1931. Class 6.

Hydraulic Press Manufacturing Company, The, Mount Gilead, Ohio. Hydraulic presses. 286,803; Sept. 1. Class 23.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Wetting-out agents and preservatives. 286,502; Sept. 1; Serial No. 298,895; published June 9, 1931. Class 6.

Illinois Moulding Company, The, Chicago, Ill. Refrigerators. 286,714; Sept. 1; Serial No. 314,566; published June 23, 1931. Class 31.

International Corset Company, Aurora, Ill. Corsets and combination corsets and brassières. 286,674; Sept. 1; Serial No. 311,735; published June 16, 1931. Class 39.

International Time Recording Company of New York, Endicott, N. Y. Time stamps. 286,770; Sept. 1; Serial No. 308,070; published June 23, 1931. Class 26.

Inter-State Grocer Company, The, Joplin, Mo. Raisins, honey, vinegar, etc. 286,746; Sept. 1; Serial No. 302,824; published June 23, 1931. Class 46.

Jaburg Brothers, Inc., New York, N. Y. Cutlery, machine tools and parts thereof, scoops, shovels, etc. 286,788; Sept. 1; Serial No. 312,648; published June 16, 1931. Class 23.

Jamieson C. E. & Company, Detroit, Mich. Mineral oil used as an intestinal lubricant. 286,598; Sept. 1; Serial No. 313,547; published June 16, 1931. Class 6.

Johnson, H. A., Company, Boston, Mass. Fruit preserves, pie and pastry fillings. 286,606; Sept. 1; Serial No. 303,769; published June 16, 1931. Class 46.

Johnson & Gustafson. (See Gustafson, Aaron.)

Joytoys, Incorporated, Chicago, Ill. Toy vehicles. 286,496; Sept. 1; Serial No. 307,624; published June 23, 1931. Class 22.

Junkers, Hugo, Dessau, Germany. Wire gauze, wire sieves and strainers, sheet metal casings, etc. 286,644; Sept. 1; Serial No. 279,931; published June 9, 1931. Class 13.

Kalas, Josef, doing business as Josef Kalas, North Judson, Ind. Log and timber cutter. 286,711; Sept. 1; Serial No. 296,062; published July 1, 1930. Class 23.

Kapsi-Kon Yeast Corporation, Baltimore, Md. Yeast. 286,581; Sept. 1; Serial No. 313,853; published June 16, 1931. Class 46.

Karagheusian, A. & M., Inc., New York, N. Y. Textile rugs and carpets. 286,664; Sept. 1; Serial No. 313,854; published June 16, 1931. Class 42.

Karwacki, F. W., doing business as Mighty Midgets Drug Co., Baltimore, Md. Pharmaceutical preparation. 286,507; Sept. 1; Serial No. 309,031; published June 9, 1931. Class 6.

Kattermann and Mitchell Company, New York, N. Y. Silk piece goods. 286,656; Sept. 1; Serial No. 313,371; published June 16, 1931. Class 42.

Keystone Varnish Company, Brooklyn, N. Y. Paint enamels and varnishes. 286,753; Sept. 1; Serial No. 314,117; published June 23, 1931. Class 16.

Kleengias (1929), Ltd., London, England. Machine for washing hollow-ware. 286,786; Sept. 1; Serial No. 312,806; published June 23, 1931. Class 23.

Knit Products Corporation, Belmont, N. C. Hosiery. 286,495; Sept. 1; Serial No. 307,554; published June 16, 1931. Class 39.

Kotex Company, Chicago, Ill. Sanitary napkins. 286,729; Sept. 1; Serial No. 313,299; published June 23, 1931. Class 44.

Kress, S. H., & Co., New York, N. Y. Hosiery. 286,548; Sept 1; Serial No. 313,438; published June 16, 1931. Class 39.

Kroydon Company, The, Maplewood, N. J. Golf clubs. 286,493; Sept. 1; Serial No. 300,353; published June 23, 1931. Class 22.

Landeshuter Leinen- und Gebildweberei F. V. Grünfeld, Berlin, Germany. Textile rugs. 286,506; Sept. 1; Serial No. 300,209; published June 16, 1931. Class 42.

Lee, Edwin A., Philadelphia, Pa. Silk hosiery. 286,619; Sept. 1; Serial No. 308,165; published June 16, 1931. Class 39.

Levy, Forman & Co., Inc., New York, N. Y. Bath robes, bathing suits, sweaters, etc. 286,758; Sept. 1; Serial No. 314,061; published June 16, 1931. Class 39.

Lexington Worsted Mills, Inc., Central Falls, R. I. Sample lengths of worsted cloth. 286,775; Sept. 1; Serial No. 313,740; published June 23, 1931. Class 42.

Lincoln Engineering Company, St. Louis, Mo. Stationary lubricating apparatus. 286,785; Sept. 1; Serial No. 312,922; published June 23, 1931. Class 23.

Link-Belt Company, Chicago, Ill. Sewage and water screens, settling tanks, collectors, etc. 286,793; Sept. 1; Serial No. 311,038; published June 23, 1931. Class 23.

Los Angeles Brewing Co., Los Angeles, Calif. Maltless beverages and syrups, extracts, and concentrates used in preparing the same. 286,529; Sept. 1; Serial No. 314,702; published June 23, 1931. Class 45.

Löwenthal & Weissberger G. m. b. H., Frankfort-on-the Main, Germany. Pyrophoric pocket lighters. 286,605; Sept. 1; Serial No. 304,621; published June 9, 1931. Class 34.

Ludlum Steel Co., Watervliet, N. Y. Rolled steel bars, steel forgings, and steel castings. 286,590; Sept. 1; Serial No. 313,347; published June 9, 1931. Class 14.

Lyndonville Canning Company, Inc., Lyndonville, N. Y. Canned apple sauce. 286,535; Sept. 1; Serial No. 312,441; published June 23, 1931. Class 46.

MacGillivray, W. S., San Antonio, Tex. Frozen confection. 286,570; Sept. 1; Serial No. 312,924; published June 16, 1931. Class 46.

Mallinger, Samuel, Pittsburgh, Pa. Bottle caps. 286,646; Sept. 1; Serial No. 313,475; published June 16, 1931. Class 50.

Marine Steel Corporation, New York, N. Y. Bright alloy steels. 286,654; Sept. 1; Serial No. 314,290; published June 16, 1931. Class 14.

Marsellus, John, Casket Company, Syracuse, N. Y. Tubular containers for mortuary records. 286,694; Sept. 1; Serial No. 313,378; published June 16, 1931. Class 2.

Marshall Field & Company, Chicago, Ill. Rubber tires and tubes for automobiles, automobile trucks and trailers. 286,790; Sept. 1; Serial No. 312,145; published June 9, 1931. Class 35.

Marshall, John G., Brooklyn, N. Y. Composition to be mixed with oil paints. 286,556; Sept. 1; Serial No. 310,343; published June 16, 1931. Class 16.

Marshall, John G., Brooklyn, N. Y. Preparation in the nature of a waterproof varnish. 286,560; Sept. 1; Serial No. 312,107; published June 16, 1931. Class 16.

Martin, Frederic, jr., doing business as Columbus Washboard Company, Columbus, Ohio. Washboards. 286,702; Sept. 1; Serial Nos. 313,742–3; published June 9, 1931. Class 24.

Martin, Glenn L. Motors Company, The, Middle River and Baltimore, Md. Engines. 286,723; Sept. 1; Serial No. 313,745; published June 23, 1931. Class 23.

Matzka, Zoya, Rye Hill, Monroe, N. Y. Canned berries and vegetables, canned and preserved fruits, etc. 286,641; Sept. 1; Serial No. 298,582; published June 9, 1931. Class 46.

Mayehoff, Incorporated, Norwalk, Conn. Dresses. 286,550; Sept. 1; Serial No. 313,444; published June 16, 1931. Class 39.

Menke, Frank G., New York, N. Y. Periodical. 286,643; Sept. 1; Serial No. 297,092; published Apr. 14, 1931. Class 38.

Midvale Company, The, Nicetown, Philadelphia, Pa. Flanges, forgings, steel billets, etc. 286,622; Sept. 1; Serial No. 306,502; published June 9, 1931. Class 14.

Midway Chemical Company, Chicago, Ill. Automobile polish. 286,762; Sept. 1; Serial No. 305,464; published June 23, 1931. Class 16.

Mighty Midgets Drug Co. (See Karwacki, F. W.)

Minnesota Mining & Manufacturing Company, Wilmington, Del. Polishing waxes and polishes. 286,642; Sept. 1; Serial No. 290,220; published June 16, 1931. Class 16.

Montague Rod and Reel Company, Montague City, Mass. Fishing rods. 286,498; Sept. 1; Serial No. 308,789; published June 23, 1931. Class 22.

Morgan Company, The, Chicago, Ill. Paint enamels. 286,562; Sept. 1; Serial No. 312,445; published June 9, 1931. Class 16.

Morgan Company, The, Chicago, Ill. Protective ready mixed paint. 286,563; Sept. 1; Serial No. 312,446; published June 16, 1931. Class 16.

Morsegraph Manufacturing Corporation, New York, N. Y. Telegraph recording instruments. 286,564; Sept. 1; Serial No. 312,487; published June 9, 1931. Class 21.

Multisort Company, Boston, Mass. Apparatus for use in arranging papers, cards, and the like for filing or distribution. 286,791; Sept. 1; Serial No. 312,112; published June 9, 1931. Class 32.

Muralo Company, Inc., The, New Brighton, N. Y. Powder used as a calcimine or decorative wall coating. 286,744; Sept. 1; Serial No. 314,026; published June 9, 1931. Class 16.

Mustad, O., & Son, Oslo, Norway. Fishhooks. 286,773; Sept. 1; Serial No. 312,264; published June 23, 1931. Class 22.

National Bellas Hess Company, Inc., New York, N. Y. Golf balls. 286,533; Sept. 1; Serial No. 311,442; published June 23, 1931. Class 22.

National Dental Laboratory, Baltimore, Md. Artificial dentures. 286,739; Sept. 1; Serial No. 312,284; published June 23, 1931. Class 44.

National Equipment Corporation, Milwaukee, Wis. Machines for pumping cementitious aggregates. 286,720; Sept. 1; Serial No. 313,864; published June 16, 1931. Class 23.

Negwer, Max, Potsdam, Germany. Wind and water protection devices for ears, sound absorbers for ears, etc. 286,741; Sept. 1; Serial No. 311,041; published June 23, 1931. Class 44.

Nelson, Ira I., doing business as The Stack Heater Company, Boston, Mass. Relief valves. 286,756; Sept. 1; Serial No. 314,422; published June 23, 1931. Class 13.

Nestlé's Milk Products, Inc., New York, N. Y. Evaporated milk. 286,727; Sept. 1; Serial No. 313,383; published June 23, 1931. Class 46.

New England Brick Company, Boston, Mass. Brick. 286,539; Sept. 1; Serial No. 313,089; published June 16, 1931. Class 12.

New Process Painting Co., Greenwich, Conn. Painting machines. 286,797; Sept. 1; Serial No. 313,580; published June 16, 1931. Class 23.

Nikol Jell Company, Portland, Oreg. Gelatin desserts. 286,569; Sept. 1; Serial No. 312,767; published June 16, 1931. Class 46.

O'Bryan Brothers, Chicago, Ill. Underwear. 286,626; Sept. 1; Serial No. 312,306; published June 9, 1931. Class 39.

Oneida Community, Limited, Oneida, N. Y. Silver flatware and hollow ware. 286,573; Sept. 1; Serial No. 313,257; published June 9, 1931. Class 28.

Orbit Listerated Gum Company, Chicago, Ill. Chewing gum. 286,525; Sept. 1; Serial No. 314,068; published June 23, 1931. Class 46.

Outing Manufacturing Company, Elkhart, Ind. Lubricating devices. 286,718; Sept. 1; Serial No. 314,125; published June 23, 1931. Class 23.

Pacific Commercial Co., New York, N. Y. Gasolene and kerosene. 286,565; Sept. 1; Serial No. 312,719; published June 9, 1931. Class 15.

Pacific Marine Supply Company, Seattle, Wash. Pack saddles, knapsack tanks, portable pumpers, fixed pumpers. 286,764; Sept. 1; Serial No. 303,205; published June 23, 1931. Class 23.

Padilla, Longinos, Los Olmos, Santiago de Cuba. Tooth paste and month wash. 286,511; Sept. 1; Serial No. 312,061; published June 16 1931. Class 6.

Paraffine Companies, Inc., The, San Francisco, Calif. Paraffine oil and flux oil. 286,638; Sept. 1; Serial No. 297,769; published June 9, 1931. Class 15.

Parker, I. C., Fort Worth, Tex. Ice cream confection. 286,742; Sept. 1; Serial No. 313,667; published June 23, 1931. Class 46.

Parks, Alfred M., doing business as Parks Equipment Company, Philadelphia, Pa. Device for testing and recording the time of drying. 286,782; Sept. 1; Serial No. 312,771; published June 9, 1931. Class 26.

Parks, Alfred M., doing business as Parks Equipment Company, Philadelphia, Pa. Testing and recording the time of drying. 286,784; Sept. 1; Serial No. 312,770; published June 9, 1931. Class 26.

Parks Equipment Company. (See Parks, Alfred M.)

Pastene, P., & Co., Inc., Boston, Mass. Canned fruits, vegetables and milk, canned soups, canned and dried fruits, etc. 286,751; Sept. 1; Serial No. 308,339; published June 23, 1931. Class 46.

Pauson & Company, San Francisco, Calif. Suits, overcoats, and topcoats. 286,737; Sept. 1; Serial No. 312,813; published June 16, 1931. Class 39.

Penlo Cigar Co., Inc., Philadelphia, Pa. Cigars. 286,652; Sept. 1; Serial No. 313,968; published June 9, 1931. Class 17.

Perlmann, Schal and Stern, Inc., New York, N. Y. Lace dollies, lace runners and bedspreads, lace table cloths. 286,657; Sept. 1; Serial No. 313,477; published June 16, 1931. Class 42.

Petrosemolo, Eugene J., New York, N. Y. Canned tomatoes. 286,490; Sept. 1; Serial No. 299,014; published June 23, 1931. Class 46.

Pinkham Holdings Co., Los Angeles, Calif. Fresh deciduous fruits. 286,806; Sept. 1. Class 46.

Pioneer Suspender Company, Philadelphia, Pa. Belts, suspenders, braces, and garters. 286,588–9; Sept. 1; Serial Nos. 313,202–3; published June 9, 1931. Class 39.

Pitman-Moore Company, Indianapolis, Ind. Ointment for treating acute mammitus. 286,600; Sept. 1; Serial No. 313,970; published June 16, 1931. Class 6.

Pitman-Moore Company, Indianapolis, Ind. Medicine for treating necrotic inflammation for the gastro-intestinal tract in swine. 286,601; Sept. 1; Serial No. 313,972; published June 16, 1931. Class 6.

Pitman-Moore Company, Indianapolis, Ind. Animal insecticide. 286,602; Sept. 1; Serial No. 313,973; published June 16, 1931. Class 6.

Pitman-Moore Company, Indianapolis, Ind. Medicine for treating pulmonary infections and gastro-intestinal fermentation in horses and cattle. 286,604; Sept. 1; Serial No. 313,988; published June 16, 1931. Class 6.

Piver, L. T., Inc., Wilmington, Del., and New York, N. Y. Perfume, toilet water, bath salts, rouge, etc. 286,689; Sept. 1; Serial No. 313,204; published June 9, 1931. Class 6.

Pratt, John L., New York, N. Y., and Fredericksburg, Va. Fresh apples. 286,526; Sept. 1; Serial No. 314,295; published June 23, 1931. Class 46.

Probak Corporation, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Razor blades. 286,761; Sept. 1; Serial No. 293,485; published Jan. 28, 1930. Class 23.

Public Service Community Kitchens, Inc., New York, N. Y. Chow mein, chop suey, Chinese rice cakes, etc. 286,757; Sept. 1; Serial Nos. 314,676–7; published June 23, 1931. Class 46.

Puritan Malt Extract Company, Chicago, Ill. Malt syrup. 286,579; Sept. 1; Serial No. 313,559; published June 16, 1931. Class 46.

Pyramiden-Fliegenfängerfabrik Max Dametz m. b. H. Zeltz, Germany. Fly catchers. 286,587; Sept. 1; Serial No. 312,198; published June 16, 1931. Class 50.

Rasmussen, Geo., Co., Chicago, Ill. Canned vegetables, fruits, fish, etc. 286,576; Sept. 1; Serial No. 313,317; published June 16, 1931. Class 46.

Raub Supply Co., Lancaster, Pa. Galvanized ridge roll for roofing, etc. 286,635; Sept. 1; Serial No. 303,299; published June 16, 1931. Class 12.

Real-Oil-Heat Burner Company, Winona, Minn. Oil burners. 286,808; Sept. 1. Class 34.

Reed & Carnrick, Jersey City, N. J. Medicinal preparations. 286,597; Sept. 1; Serial No. 313,479. Class 6.

Reliance Manufacturing Company, Chicago, Ill. Work shirts. 286,546; Sept. 1; Serial No. 312,199; published June 16, 1931. Class 39.

Reo Motor Car Company, Lansing, Mich. Automobiles and structural parts thereof. 286,615; Sept. 1; Serial No. 307,630; published June 9, 1931. Class 19.

Resinous Products & Chemical Company, The, Philadelphia, Pa. Metallo-organic compounds, being brittle resinous materials for use as driers. 286,558; Sept. 1; Serial No. 312,064; published June 16, 1931. Class 16.

Reynolds Printasign Corporation, Chicago, Ill. Machine for printing signs and display cards. 286,789; Sept. 1; Serial No. 312,496; published June 9, 1931. Class 23.

Richardson & Holland, Inc., Seattle, Wash. Bakery machinery. 286,719; Sept. 1; Serial No. 313,935; published June 9, 1931. Class 23.

Richmond Radiator Company, New York, N. Y. Radiators for use in steam, hot water, vapor, vacuum, or other heating systems. 286,735; Sept. 1; Serial No. 313,004; published June 23, 1931. Class 34.

Rixson, Oscar C., Co., The, Chicago, Ill. Builder's hardware. 286,731; Sept. 1; Serial No. 313,206; published June 23, 1931. Class 13.

Röhm & Haas Company, Philadelphia, Pa. Material in powder or liquid form containing enzymes used for treating plant juices and extracts. 286,596; Sept. 1; Serial No. 313,207; published June 16, 1931. Class 6.

Röhm & Haas Company, Philadelphia, Pa. Enzymic product. 286,704; Sept. 1; Serial No. 313,800; published June 9, 1931. Class 6.

Romson, Carl, Stockholm, Sweden. Fire escape rope apparatus. 286,586; Sept. 1; Serial No. 311,074; published June 16, 1931. Class 50.

Rorer, William H., Inc., Philadelphia, Pa. Medicine in ampul form, etc. 286,591; Sept. 1; Serial No. 309,879; published June 16, 1931. Class 6.

Royal Rayon Corporation, Brooklyn, N. Y. Knitted piece goods. 286,677; Sept. 1; Serial No. 313,006; published June 16, 1931. Class 42.

Sabin Machine Company, The, Cleveland, Ohio. Litter gathering implements. 286,722; Sept. 1; Serial No. 313,755; published June 23, 1931. Class 23.

Safety Processing Company, The, Youngstown, Ohio. Filler and binder in plastic form. 286,538; Sept. 1; Serial No. 313,056; published June 16, 1931. Class 12.

Samek Brothers, Brno-Brunn, Czechoslovakia. Woolens. 286,624; Sept. 1; Serial No. 308,317; published June 16, 1931. Class 42.

Sanovapor Laboratories, Inc., Huntington, W. Va. Preparation for the treatment of diabetes. 286,603; Sept. 1; Serial No. 313,976; published June 16, 1931. Class 6.

Sarnoff-Irving Hat Stores, Inc., New York, N. Y. Leather and fabric shoes. 286,809; Sept. 1. Class 39.

Sayre & Fisher Brick Company, Sayreville, N. J. Fire brick, brick specialties, etc. 286,645; Sept. 1; Serial No. 293,933; published June 16, 1931. Class 12.

Schallitz, Charles, Milwaukee, Wis. Malt beverages. 286,519; Sept. 1; Serial No. 312,742; published June 23, 1931. Class 48.

Schering & Glatz, Inc., New York, N. Y. Medicinal preparation. 286,486; Sept. 1; Serial No. 285,178; published Mar. 11, 1930. Class 6.

Schnefel Bros., Inc., Newark, N. J. Tweezers, scissors, desk sets, etc. 286,717; Sept. 1; Serial No. 314,466; published June 23, 1931. Class 23.

Schneierson, I., & Sons, Inc., New York, N. Y. Ladies' chemises, princess slips, bloomers, etc. 286,499; Sept. 1; Serial No. 308,799; published Feb. 3, 1931. Class 39.

Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. 286,554; Sept. 1; Serial No. 313,868; published June 16, 1931. Class 39.

Scientific Research Products. (See Davis, Charles M.)

Sears, Roebuck and Co., Chicago, Ill. Lawn mowers. 286,778; Sept. 1; Serial No. 302,487; published June 9, 1931. Class 23.

Secrets, Inc., Ottawa, Ill. Cleansing cream, tissue building cream, cold cream, etc. 286,608; Sept. 1; Serial No. 305,017; published June 16, 1931. Class 6.

Seidman & Cohnn, Inc., New York, N. Y. Articles of jewelry. 286,616; Sept. 1; Serial No. 307,791; published June 9, 1931. Class 28.

Selsky, Abraham, Coney Island, N. Y. Glass cutters. 286,724; Sept. 1; Serial No. 313,696; published June 23, 1931. Class 28.

Service Drug Company. (See Whitworth, Charles B.)

Settlesit Company, The. (See Frank, Leland L.)

Seymour Troy & Company, Inc., Brooklyn, N. Y. Ladies' shoes. 286,673; Sept. 1; Serial No. 312,575; published June 16, 1931. Class 39.

Shaler Company, The, Waupun, Wis. Golf clubs. 286,491–2; Sept. 1; Serial Nos. 299,803–4; published June 23, 1931. Class 22.

Sherwin-Williams Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 286,574; Sept. 1; Serial No. 313,260; published June 16, 1931. Class 16.

Sherwin-Williams Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 286,582; Sept. 1; Serial No. 313,870; published June 9, 1931. Class 16.

Shuttleworth Carton Co. Inc., New York, N. Y. Paper boxes and cartons. 286,698; Sept. 1; Serial No. 313,678; published June 16, 1931. Class 2.

Siegel, M. S., & Company, Inc., New York, N. Y. Ladies' vests, bloomers, panties, etc. 286,613; Sept. 1; Serial No. 307,433; published June 16, 1931. Class 39.

Silurian Waukesha Water Distributing Co., Milwaukee, Wis. Nonalcoholic maltless beverages and syrups and extracts for making same. 286,531; Sept. 1; Serial No. 314,778; published June 23, 1931. Class 45.

Silver-Forest Fruit and Stock Farms, The. (See Hawkins, Lynn A.)

Simons Co., The, Inc., New York, N. Y. Hosiery. 286,541; Sept. 1; Serial No. 313,156; published June 9, 1931. Class 39.

Simplex Brooder Stove Co. (See Hopson, W. C., Company.)

Slater, S., & Sons, Inc., New York, N. Y. Piece goods of silk, linen, etc. 286,668; Sept. 1; Serial No. 310,958; published June 16, 1931. Class 42.

Slote & Klein, Inc., New York, N. Y. Ladies' belts. 286,658; Sept. 1; Serial No. 313,697; published June 16, 1931. Class 39.

Smith, Glenn A., doing business as Export Petroleum Company of California, Los Angeles, Calif. Petroleum and petrolcum products. 286,502; Sept. 1. Class 15.

Society of Chemical Industry in Basle, Basel, Switzerland. Chemical product. 286,699; Sept. 1; Serial No. 313,679; published June 9, 1931. Class 6.

Society of Chemical Industry in Basle, Basel, Switzerland. Cardiotonic. 286,700; Sept. 1; Serial No. 313,680; published June 9, 1931. Class 6.

Sout Fire Appliances Ltd., London, England. Fire extinguishing machines (extincteurs). 286,794; Sept. 1; Serial No. 309,789; published June 9, 1931. Class 23.

Stack Heater Company, The. (See Nelson, Ira I.)

Staminite Corporation. Waterproof coating compound. 286,571; Sept. 1; Serial No. 313,059; published June 16, 1931. Class 16.

Standard Oil Company of New Jersey, Wilmington, Del. Pipe coating enamel. 286,577; Sept. 1; Serial No. 313,480; published June 9, 1931. Class 16.

Standard Pigment Company, Inc., Schuylerville, N. Y. Printing inks. 286,653; Sept. 1; Serial No. 313,872; published June 16, 1931. Class 11.

Standard Wall Covering Company, Inc., Philadelphia, Pa. Wall panels. 286,537; Sept. 1; Serial No. 312,877; published June 16, 1931. Class 12.

Star Expansion Bolt Company, New York, N. Y. Toggle bolts and parts thereof. 286,709; Sept. 1. Class 13.

Stearns, Frederick, & Company, Detroit, Mich. Headache medicine. 286,517; Sept. 1; Serial No. 313,158; published June 9, 1931. Class 6.

Stengel, Charles W., Philadelphia, Pa. Face and hair lotion. 286,607; Sept. 1; Serial No. 304,977; published June 9, 1931. Class 6.

Stern Brothers, New York, N. Y. Underwear and pyjamas. 286,627; Sept. 1; Serial No. 313,061; published June 9, 1931. Class 39.

Sun Heat Automatic Oil Burner Corp., New York, N. Y. Automatic oil burners. 286,730; Sept. 1; Serial No. 313,251; published June 23, 1931. Class 34.

Superior Produce Distributors, Los Angeles, Calif. Fresh citrus fruits and vegetables. 286,520; Sept. 1; Serial No. 312,932; published June 23, 1931. Class 46.

Tabin-Picker and Company, Chicago, Ill. Ladies' frocks. 286,540; Sept. 1; Serial No. 313,099; published June 16, 1931. Class 39.

Tomango Limited, Matafin, Eastern Transvaal, South Africa. Dried, preserved, candied, and crystallized fruits, vegetables, and peels, chutneys, and sauces. 286,505; Sept. 1; Serial No. 299,418; published June 16, 1931. Class 46.

Traylor Vibrator Company, The, Denver, Colo. Material treating apparatus. 286,787; Sept. 1; Serial No. 312,724; published June 9, 1931. Class 23.

Trelles, M., & Company, New Orleans, La. Cigars, cheroots, cigarettes, etc. 286,647; Sept. 1; Serial No. 313,614; published June 9, 1931. Class 17.

Trippe, Barker & Co., New York, N. Y. Piece goods. 286,501; Sept. 1; Serial No. 299,877; published June 16, 23, 1931. Class 42.

Universal Laboratories. (See Goodier, Elwood J.)

Valco Manufacturing Co., Inc., New York, N. Y. Pajamas. 286,547; Sept. 1; Serial No. 313,315; published June 16, 1931. Class 39.

Viscose Company, The, Marcus Hook, Pa. Underwear. 286,501; Sept. 1; Serial No. 299,877; published June 16, 1931. Class 39.

Vonein-Drayer Company, The, Baltimore, Md. Candies and assorted chocolates. 286,524; Sept. 1; Serial No. 313,874; published June 23, 1931. Class 46.

Von Holzer, Rudolf, doing business as Firm Rudolf von Holzer, Frankfort-on-the-Main, Germany. Typewriting machines, copying machines, etc. 286,767; Sept. 1; Serial No. 303,705; published June 23, 1931. Class 23.

Wallerstein Company, Inc., New York, N. Y. Enzymatic preparation used in the treatment of hides and skins. 286,592; Sept. 1; Serial No. 310,001; published June 16, 1931. Class 6.

Walman Optical Co., The, Minneapolis, Minn. Optical lenses. 286,716; Sept. 1; Serial No. 314,593; published June 23, 1931. Class 26.

Weigand, Otto F., doing business as C. A. Weigand, Philadelphia, Pa. Washable water-proof window shade fabric or material. 286,621; Sept. 1; Serial No. 306,333; published June 16, 1931. Class 42.

Weill, Raphael, & Company, San Francisco, Calif. Handkerchiefs. 286,777; Sept. 1; Serial No. 313,944; published June 23, 1931. Class 42.

White, H. N., Co. of New York, The, New York, N. Y., Saxophones, trumpets, cornets, etc. 286,575; Sept. 1; Serial No. 312,277; published June 9, 1931. Class 36.

Whitworth, Charles B., doing business as Service Drug Company, Nashville, Tenn. Preparation used in the treatment of influenza, colds, chills, etc. 286,521; Sept. 1; Serial No. 313,402; published June 9, 1931. Class 6.

Wohl Shoe Company, St. Louis, Mo. Women's and misses' boots, shoes, and slippers, etc. 286,620; Sept. 1; Serial No. 304,844; published June 9, 1931. Class 39.

Woodruff, Charles A., doing business as Woodruff's Chemicals, Detroit, Mich. Ointments, salves, and healing solutions. 286,508; Sept. 1; Serial No. 309,156; published June 9, 1931. Class 6.

Wyle Hat Company, Chicago, Ill. Women's hats. 286,749; Sept. 1; Serial No. 307,342; published June 16, 1931. Class 39.

Wyrstapes, Inc., New York, N. Y. Staples. 286,705; Sept. 1; Serial No. 313,880; published June 16, 1931. Class 13.

Young, L. A., Company, The, Detroit, Mich. Golf clubs. 286,497; Sept. 1; Serial No. 308,406; published June 23, 1931. Class 22.

Zizine, Pierre, Paris, France. Medicinal preparation. 286,494; Sept. 1; Serial No. 301,226; published June 16, 1931. Class 6.

Zizine, Pierre, Paris, France. Cod liver oil. 286,630; Sept. 1; Serial No. 301,223; published June 16, 1931. Class 6.
Zizine, Pierre, Paris, France. Powder used in diseases of the stomach, etc. 286,631; Sept. 1; Serial No. 301,224; published June 16, 1931. Class 6.
Zizine, Pierre, Paris, France. Cod liver oil. 286,632; Sept. 1; Serial No. 301,227; published June 16, 1931. Class 6.
Zizine, Pierre, Paris, France. Powder and tablets for diseases of the stomach. 286,633; Sept. 1; Serial No. 301,228; published June 16, 1931. Class 6.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Burgess Battery Company, Madison, Wis. Burgess Radiovisor Bridge. For Light Sensitive Cells. 39,635; Sept. 1.
Champagnette Corp., of New York, New York, N. Y. Champagnette. For Bottled Beverages. 39,636; Sept. 1.
Christie, Stephen P., doing business as Christie Sauce Co., New York, N. Y. Christie's Sauce. For Sance. 39,637; Sept. 1.
D'Angelo, Antonio, Avon, N. Y. D'Angelo's Best Brand Highest Grade Macaroni. For Macaroni. 39,638; Sept. 1.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's Crumb Buns. For Crumb Buns. 39,639; Sept. 1.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's Coffee Ring. For Coffee Rings. 39,640; Sept. 1.
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's Fresh Apple Butter. For Apple Butter. 39,641; Sept. 1.
Dutch Maid Products Co., Seattle, Wash. Dutch Maid Noodles. For Fresh Egg Noodles. 39,642; Sept. 1.
Greenwald, Abraham A., doing business as Jacob Stahl, jr. & Co., New York, N. Y. Brunswick. For Cigars. 39,643; Sept. 1.
"Hot Cops" Food Corporation, Nashville, Tenn. Hot Cops. For Frankfurters. 39,644; Sept. 1.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Hollywood. For Soda Crackers. 39,645; Sept. 1.
Mt. Zircon Spring Water Company, Rumford, Me. Zircon. For Ginger Ale. 39,646; Sept. 1.
National Consumers Paper Corp., New York, N. Y. High Gloss Ideal Brand Design Pattern. For Glossed Paper. 39,647; Sept. 1.
National Yeast Company, Pittsburgh, Pa. Yeast. For Yeast. 39,648; Sept. 1.
Non Glare Light Co. (See Stallings, Harry.)
Okmulgee Sausage Co. (See Potts, C. A.)
Parker, I. C., Fort Worth, Tex. Frozen Drumstick. For Ice Cream Product Consisting of an Ice Cream Cone Dipped in Candy, Etc. 39,649; Sept. 1.
Piel Bros., Inc., Brooklyn, N. Y. Over The Bar. For Ginger Ale. 39,650; Sept. 1.
Pollock Paper & Box Company, Dallas, Tex. Quality Thru and Thru. For Bread. 39,651; Sept. 1.
Potts, C. A., doing business as Okmulgee Sausage Co., Okmulgee, Okla. Ok-Sa-Co. For Sausages. 39,652; Sept. 1.
Schaper Products Company, Inc., St. Louis, Mo. Solid Gold Hands. For Bananas. 39,653; Sept. 1.
Stahl, Jacob, jr. & Co. (See Greenwald, Abraham A.)
Stallings, Harry, doing business as Non Glare Light Co., Boston, Mass. Saf-T-Nite-Lites. For Devices to Eliminate Glare for Automobile Head Lights. 39,654; Sept. 1.
Standard Solophone Mfg. Co., Inc., New York, N. Y. Tom Sawyer Painting Set. For Painting Sets. 39,655; Sept. 1.
Standard Solophone Mfg. Co., Inc., New York, N. Y. Tom Sawyer Nuart Poster Colors. For Poster Colors. 39,656; Sept. 1.
Talmage Gardens Company, De Land, Fla. Sure Blooming. For Narcissus Bulbs. 39,657; Sept. 1.
Walter, A. A., & Co., Albany, N. Y. Blue Ribbon Potato Chips. For Potato Chips. 39,658; Sept. 1.
Wesco Foods Co. (See Kroger Grocery & Baking Co., The.)

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Birk Manufacturing Company, Owensboro, Ky., and New Albany, Ind. Birk's Shaving Cream. For Shaving Cream. 13,392–3; Sept. 1.
Curtis Aero Ignition Co. Inc., Collingswood, N. J. Curtis Areo Ignition Co. Inc. For Spark Plugs. 13,394; Sept. 1.
Parke, Davis & Company, Detroit, Mich. Hydrogen Peroxide. For Hydrogen Peroxide. 13,395; Sept. 1.
Schafer, George, H. C. Pfaff Cigar Company, The., Baltimore, Md. Schafer's Big Shot 5¢ Cigar. For Cigars. 13,396; Sept. 1.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A A A Exterminating Service. (See Fain, Jacob R.)
A. & J. Manufacturing Co., The, Binghamton, N. Y. Kitchen tools and utensils. 303,079; Sept. 1. Class 23.
A. & J. Manufacturing Co., The, Binghamton, N. Y. Kitchen tools and utensils. 303,085; Sept. 1. Class 23.
Acme Disinfectant Company. (See Fain, Jacob R.)
Aluminum Industries, Inc., Cincinnati, Ohio. Alloy castings. 316,244; Sept. 1. Class 14.
American Bakeries Company, Atlanta, Ga. Bread. 316,988; Sept. 1. Class 46.
American Crayon Company, The, Sandusky, Ohio. Crayons. 316,110–11; Sept. 1. Class 37.
American Water Heater Company, St. Louis, Mo. Water heaters. 316,311; Sept. 1. Class 21.
American Zinc Institute, Incorporated, New York, N. Y. Zinc-coated ferrous sheets and sheet roofing. 316,624; Sept. 1. Class 14.
Arthur, James F., Dickson, Pa. Plumbers' wax. 315,668; Sept. 1. Class 12.
Association of North American Directory Publishers, Toronto, Ontario, Canada. Guide books. 305,596; Sept. 1. Class 38.
Autographic Register Company, Hoboken, N. J. Manifolding attachment for typewriters. 316,402; Sept. 1. Class 23.
Automobile Club of Michigan, The, Detroit, Mich. Periodical. 316,625; Sept. 1. Class 38.
Bastian-Blessing Company, The, Chicago, Ill. Pressure regulators. 303,414; Sept. 1. Class 13.
Batterium Metal and Visiok Limited, London, England. Non-ferrous metals in rods, tubes, sheets, etc. 317,242; Sept. 1. Class 14.
Bear Brand Hosiery Co., Kankakee, Ill. Hosiery. 316,183; Sept. 1. Class 39.
Berlos, J. M., doing business as Cowcream Specialty Shops, Denver, Colo. Malted milk. 306,926; Sept. 1. Class 46.
Betsy Ross Mint Co., Philadelphia, Pa. Candies. 308,390; Sept. 1. Class 46.
Bloomingdale Bros., Inc., New York, N. Y. Floor coverings of textile material. 316,548–9; Sept. 1. Class 42.
Bowers, Edward C., and C. L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Perforated sheet metal. 316,118; Sept. 1. Class 14.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Cigarette rolling devices. 316,476; Sept. 1. Class 23.
Buchl, Alexander J., New York, N. Y. Permanent wave machines. 312,504; Sept. 1. Class 44.
Calibron Products, Inc., East Orange, N. J. Perspective drawing charts. 317,066; Sept. 1. Class 26.
Castle, A. M., & Co., Chicago, Ill. Welding wire. 316,551; Sept. 1. Class 14.
Central Chemical Company, Inc., Hagerstown, Md. Insecticide. 316,552; Sept. 1. Class 6.
Champion Soap Co. Inc., New York, N. Y. Anti-freeze compounds. 316,628; Sept. 1. Class 6.
Concrete Reinforcing Steel Institute, Chicago, Ill. Structural steel bars. 316,084; Sept. 1. Class 12.
Consolidated Film Industries, Inc., New York, N. Y. Motion picture films. 305,392; Sept. 1. Class 26.
Continental Optical Company, Indianapolis, Ind. Frames and mounts for ophthalmic lenses. 317,425; Sept. 1. Class 26.
Copper Boilers Incorporated, New York, N. Y. Hot water storage systems. 316,711; Sept. 1. Class 34.
Copy Papers Inc., Chicago, Ill. Paper. 317,027; Sept. 1. Class 37.
Cowcream Specialty Shops. (See Berlos, J. M.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Cowles, John, doing business as The John Cowles Metal Laboratories, Pasadena, Calif. Metals, metal alloys, compounds and synthetic metals, etc. 316,358; Sept. 1. Class 14.
Crosley Radio Corporation, The, Cincinnati, Ohio. Radio receiving sets and parts thereof. 302,628; Sept. 1. Class 21.
Cuno Engineering Corporation, The, Meriden, Conn. Electrical cigar lighters, trouble lamps, and defrosters for windshields and parts thereof. 311,085; Sept. 1. Class 21.
Cyclone Fence Company, Waukegan, Ill. Wire baskets. 316,555; Sept. 1. Class 2.
Diamond Surfacing Products Co., Jamesburg, N. J. Wax polishing compound. 309,759; Sept. 1. Class 16.
Dick, A. B., Company, Chicago, Ill. Paper. 317,074; Sept. 1. Class 37.
Dixie Chemical Products Co., Inc., Birmingham, Ala. Nonsaponifying washing powder. 275,946; Sept. 1. Class 4.
Dolge, C. B., Company, Inc., The, Westport, Conn. Chemical to banish worms from putting greens. 315,390; Sept. 1. Class 6.
Earl Fruit Company, Wenatchee, Wash. Fresh deciduous fruits. 312,293; Sept. 1. Class 46.
Eastman Kodak Company, Rochester, N. Y. Albums and cardboard mounts, cash books, etc. 313,842; Sept. 1. Class 37.
Eaton, Josephine, doing business as J. E. Distributor, New York, N. Y. Syrup used in soft drinks. 316,772; Sept. 1. Class 45.
Eet-Rite Products Company, Fort Washington, Pa. Compound of grain, fruits, nuts, and vegetables used as food and a drink. 304,757; Sept. 1. Class 46.
Electric Sprayit Company, The, South Bend, Ind. Filled fertilizer cartridges. 315,348; Sept. 1. Class 7.
Electric Tamper & Equipment Co., Chicago, Ill. Tamping or vibrating machines. 316,087; Sept. 1. Class 23.
Electric Tamper & Equipment Co., Chicago, Ill. Concrete forms, pipes, conduits, etc. 316,088; Sept. 1. Class 12.
Electro Sun Company, Inc., New York, N. Y. Prints. 316,698; Sept. 1. Class 38.
Enterprise Manufacturing Company, Coleridge, N. C. Cord and twine. 317,304; Sept. 1. Class 7.
Fain, Jacob R., doing business as The Acme Disinfectant Company and A A A Exterminating Service, Washington, D. C. Insect, vermin, and rodent exterminating preparation. 316,774; Sept. 1. Class 6.
Falconer Plate Glass Corporation, Falconer, N. Y. Mirrors. 316,775; Sept. 1. Class 32.
Feldman, Charles L. (See Bowers, Edward C.)
Fletcher Paper Company, Alpena, Mich. Wrapping paper. 317,305; Sept. 1. Class 37.
Fluff-O Manufacturing Company, St. Louis, Mo. Candy confections. 316,882; Sept. 1. Class 46.
French, E. L., Co., Inc., Vancouver, Wash. Dried prunes. 317,167; Sept. 1. Class 46.
Fries, Harold H., New York, N. Y. Antiseptic and disinfectant. 317,080; Sept. 1. Class 6.
Frostyeast, Incorporated, Rochester, N. Y. A mixture of ice cream and yeast. 315,448; Sept. 1. Class 46.
Gaston Chemical Company. (See Picardi, Mariano.)
General Timber & Lumber Company, The, Cleveland, Ohio. Poker chips, checkers and counters or pieces. 317,432; Sept. 1. Class 22.
Genting, A. H., Company, Philadelphia, Pa. Shoes, wash suits, sweaters, etc. 314,643; Sept. 1. Class 39.
Giering, J. F., Bottling Co., Inc., The, Youngstown, Ohio. Ginger ale. 312,756; Sept. 1. Class 45.
Gildardo, Magana, Mexico, D. F., Mexico. Toilet soap. 307,141; Sept. 1. Class 4.
Gillette Safety Razor Company. (See Probak Corporation.)
Gladding, McBean & Co., Los Angeles, Calif. Fire brick, refractory brick, tile, etc. 307,714; Sept. 1. Class 12.
Golden State Company, Ltd., San Francisco, Calif. Milk, cream, butter, and ice cream. 307,975; Sept. 1. Class 46.
Gordon, James C., Los Angeles, Calif. Auxiliary air intake for engines. 316,964; Sept. 1. Class 23.
Grant, W. T., Company, Lynn, Mass., and New York, N. Y. Writing paper. 317,393; Sept. 1. Class 37.
Graphilium Corporation, Newark, N. J. Artificial graphite. 310,994–5; Sept. 1. Class 50.
Grayson Heat Control, Inc., Lynwood, Calif. Thermostatically controlled gas valves. 316,644; Sept. 1. Class 26.
Great Atlantic & Pacific Tea Company, The, New York, N. Y. Candy. 317,061; Sept. 1. Class 46.
Gunnison, Stanley E., New York, N. Y. Collapsible tube trays. 314,847; Sept. 1. Class 2.
Hagerstown Leather Co., Inc., Hagerstown, Md. Leather bill folds, key cases, brief cases, etc. 313,849; Sept. 1. Class 3.
Hance Brothers & White, Inc., Philadelphia, Pa. Alcohol preparation. 316,642; Sept. 1. Class 6.
Harrison-Noyes Chemical Corp., Long Beach, Calif. Dental impression material. 312,987; Sept. 1. Class 44.
Hart Drug Corporation, Miami, Fla. Ointment for skin infections. 316,266; Sept. 1. Class 6.
Hercules Powder Company, Wilmington, Del. Purified cotton linter pulp. 316,859–60; Sept. 1. Class 1.
Holmquist-Swanson Company, The, Chicago, Ill. Folding porch gates, baby play yards, and nursery chairs. 316,595; Sept. 1. Class 32.
Hospital Products Corporation of America, Pleasantville, N. J. Salve. 316,487; Sept. 1. Class 6.
Howlett & Hockmeyer Co., Inc., New York, N. Y. Textile fabrics. 317,040; Sept. 1. Class 42.
Howson Remedy Co., Red Mountain, Calif. Medicine for treating asthma, etc. 316,700; Sept. 1. Class 6.
Icyeast Company, Dayton, Ohio. Frozen confection containing yeast. 312,562; Sept. 1. Class 46.
Ideal Liquid Heat Machine Corp., St. Louis, Mo. Oil burners. 282,354; Sept. 1. Class 34.
Illinois Zinc Company, Chicago, Ill. Electric clocks and parts thereof. 317,251; Sept. 1. Class 27.
J. E. Distributor. (See Eaton, Josephine.)
J. G. Comfort Co., The, New York, N. Y. Comforts, blankets, bedspreads, curtains, etc. 313,960; Sept. 1. Class 42.
Jarrett, Edgar E., New York, N. Y. Toy bows and arrows and bow-and-arrow games. 316,815; Sept. 1. Class 22.
Johnson Products Company. (See Tyson & Company, Inc.)
Johnson, T. M. E., doing business as Johnson Company, Mulberry, Kans. Polishes. 309,434; Sept. 1. Class 16.
Johnny-Bite Ice Cream Co. (See Vernier, John C.)
Kayser, Julius, & Co., New York, N. Y. Hosiery. 316,492; Sept. 1. Class 39.
Keller-Dorian Paper Co., Inc., New York, N. Y. Papers, box wraps, and labels, etc. 312,343; Sept. 1. Class 37.
Keuffel & Esser Company, Hoboken, N. J. Slide rules. 316,842; Sept. 1. Class 26.
King, William C., San Antonio, Tex. Flowers, plants, shrubs, and trees. 316,434; Sept. 1. Class 1.
Klein-Lerner, Brooklyn, N. Y. Wheat flour. 316,328; Sept. 1. Class 46.
Kooperativa Förbundet Förening U. P. A., Stockholm, Sweden. Incandescent lamps. 308,892; Sept. 1. Class 21.
Koppers Products Company, Pittsburgh, Pa. Sulphur. 310,179; Sept. 1. Class 6.
Lambert Chemical Company, Inc., Washington, D. C. Preparation for the treatment of constipation. 316,435; Sept. 1. Class 6.
Lee, Harry C., & Company, Inc., New York, N. Y. Tennis rackets, golf clubs, tennis balls and golf balls. 316,972; Sept. 1. Class 22.
Leonard Refrigerator Company, Detroit, Mich. Refrigerators, electrical refrigerators and parts thereof. 317,362; Sept. 1. Class 31.
Lunnette Poducts Co. (See Milliman, George E.)
M. & M. Pharmacal Co., Philadelphia, Pa. Preparation for relieving menstrual pain. 316,439; Sept. 1. Class 6.
Madison Woolen Company, Madison, Me. Woolen piece goods. 317,175; Sept. 1. Class 42.
Manheimer Watch Company, Chicago, Ill. Watches, watch cases and watch movements. 317,129; Sept. 1. Class 27.
Manko, Louis H., doing business as L. H. Manko & Company and National Summer Clothing Company, Philadelphia, Pa. Suits, coats, vests, etc. 316,367; Sept. 1. Class 39.
Marine Chemicals Company, Ltd., San Francisco, Calif. Antacid laxative. 316,495; Sept. 1. Class 6.
May Hosiery Mills, Inc., Burlington, N. C. Hosiery. 316,932; Sept. 1. Class 39.
Mayflower Mills, Fort Wayne, Ind. Wheat and self-rising flours. 314,339; Sept. 1. Class 46.
McKay, John A., Manufacturing Co., The, Dunn, N. C. Farm implements. 313,442; Sept. 1. Class 23.
Metal Door & Trim Company, La Porte, Ind. Elevator enclosures. 317,003; Sept. 1. Class 12.
Milk-Maid Chocolate Company, Milwaukee, Wis. Soft drink. 316,331; Sept. 1. Class 45.
Milliman, George E., doing business as Lunnette Products Co., Rochester, N. Y. Cold cream, vanishing cream, hand lotion and massage cream. 315,916; Sept. 1. Class 6.
Morely Button Manufacturing Company, Portland, Me., and Portsmouth, N. H. Dry mats. 302,737; Sept. 1. Class 50.
Morris, Robert, Associates, The, Lansdowne, Pa. Monthly bulletin. 316,820; Sept. 1. Class 38.
National Aerating Process Company, Pittsburgh, Pa. Machine for aerating cream. 314,421; Sept. 1. Class 23.
National Dairy Products Corporation, Wilmington, Del. Frozen citrus juice. 315,106; Sept. 1. Class 46.
National Summer Clothing Company. (See Manko, Louis H.)
Nauman, Anna F., St. Helens, Oreg. Food chopper. 317,180; Sept. 1. Class 23.
Noma Electric Corporation, New York, N. Y. Reflectors. 316,443; Sept. 1. Class 22.
North & Pfeiffer Mfg. Co., doing business as North & Pfeiffer, Hartford, Conn., and Providence, R. I. Removable hob-nails and spikes. 316,565; Sept. 1. Class 13.
North & Pfeiffer Mfg. Co., Hartford, Conn., and Providence, R. I. Removable hob-nails and spikes. 316,739; Sept. 1. Class 13.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Ohio Leather Company, The, Girard, Ohio. Leather. 317,401; Sept. 1, Class 1.
Old Ben Coal Corporation, Chicago, Ill. Coal. 317,328; Sept. 1. Class 1.
Otis Company, Three Rivers, Mass. Cotton piece goods. 317,283; Sept. 1. Class 42.
Palmore, Ray B., Baltimore, Md. Cookies and sweetmeats. 317,370; Sept. 1. Class 46.
Paris Laboratories, Inc., New York, N. Y. Astringents, cold creams, pomades, etc. 317,091; Sept. 1. Class 6.
Peerless Stamping Company, Detroit, Mich. Metallic cans for containing liquids. 305,086; Sept. 1. Class 2.
People's Outfitting Company, Detroit, Mich. Clothing. 312,958; Sept. 1. Class 39.
Phoenix Hosiery Company,, Milwaukee, Wis. Hosiery. 316,658-9; Sept. 1. Class 39.
Picardi, Mariano, doing business as Gastom Chemical Company, Newark, N. J. Digestant, antacid, and laxative compound. 316,612; Sept. 1. Class 6.
Probak Corporation, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Razor blades and safety razors. 301,699; Sept. 1. Class 23.
Productos Selectos Del Cerdo, S. A. Manleu, Province of Barcelona, Spain. Foods derived from pork. 311,486; Sept. 1. Class 46.
Quaker Oats Company, The, Chicago, Ill. Rolled oats. 317,286; Sept. 1. Class 46.
R. H. B. Garment Company. (See Rosengarten, Ellis A.)
Ray Burner Company, San Francisco, Calif. Automatic electrical control units. 316,133; Sept. 1. Class 21.
Reed, Charles S., Davenport, Iowa. Artificial stone. 316,449; Sept. 1. Class 12.
Riverside & Dan River Cotton Mills, Inc., Danville, Va. Broadcloth in the piece. 315,872-3; Sept. 1. Class 42.
Rockbestos Products Corporation, New Haven, Conn. Electric cables and other conductors insulated. 316,018; Sept. 1. Class 21.
Roessler & Hasslacher Chemical Company, The, New York, N. Y. Systems of kiers, vats, and like circulating apparatus for bleaching, etc. 313,975; Sept. 1. Class 23.
Rosenblatt, Samson, New York, N. Y. Hand and finger nail cleanser and antiseptic and stain remover. 316,850; Sept. 1. Class 6.
Rosengarten, Ellis A., doing business as R. H. B. Garment Company, Dallas, Tex. Wash and silk dresses. 316,898; Sept. 1. Class 39.
Royal, Thomas M., & Co., Philadelphia, Pa. Bags of paper. 316,334-5; Sept. 1. Class 2.
S & B Chemical Co., Asheville, N. C. Antiseptic solution. 316,981; Sept. 1. Class 6.
St. Louis Carbonic Ice Co., St. Louis, Mo. Liquid and solid carbon dioxide. 290,148; Sept. 1. Class 6.
Salubra S. A., Basel, Switzerland. Oil paints. 315,761; Sept. 1. Class 16.
Salubra S. A., Basel, Switzerland. Oil paints. 315,763; Sept. 1. Class 16.
Sandoz Chemical Works, Inc., New York, N. Y. Dyestuffs, lakes, and chemical products for dyeing. 316,380 3; Sept. 1. Class 6.
Savage, Maurice F., Manchester, N. H. Textile fabric covers for mattresses, etc. 309,532; Sept. 1. Class 42.
Scheflow, Oscar, Elgin, Ill. Toy. 283,812; Sept. 1. Class 22.
Scribbans & Company Limited, Smethwick, England. Cakes, biscuits, puddings, etc. 316,852; Sept. 1. Class 46.
Shell Oil Company, San Francisco, Calif. Gasoline. 315,569; Sept. 1. Class 15.
Shelton Tack Co., The, Shelton, Conn. Golf tees. 317,410; Sept. 1. Class 22.
Silver-Marshall, Inc., Chicago, Ill. Radio receiving sets, kits, accessories and parts thereof. 312,929; Sept. 1. Class 21.
Simon Oil Co., Inc., Niagara Falls, N. Y. Gasoline and furnace fuel oil. 315,804; Sept. 1. Class 15.
Simons & French Company, Inc., New York, N. Y. Fresh vegetables, deciduous fruits, and citrus fruits. 315,931; Sept. 1. Class 46.
Singletary, B. D., & Sons, Thomasville, Ga. Table syrup. 312,587; Sept. 1. Class 46.
Standlee & Bryant, Brawley, Calif. Fresh vegetables and honeydew melons. 304,165; Sept. 1. Class 46.
Stearns, Frederick, & Company, Detroit, Mich. Germicidal detergent soap. 316,057; Sept. 1. Class 4.
Stern Brothers, New York, N. Y. Raincoats, rubbers, overshoes, etc. 315,708; Sept. 1. Class 39.
Superior Piston Ring Co., Inc., Detroit, Mich. Piston rings. 313,012; Sept. 1. Class 35.
Teahen, James M., Detroit, Mich. Water closets. 315,881; Sept. 1. Class 13.
Titmus Optical Company, Inc., Petersburg, Va. Optical lenses. 316,345; Sept. 1. Class 26.
Toch Brothers, Inc., New York, N. Y. Water proofing compounds. 301,731; Sept. 1. Class 12.
Traverse City Canning Co., Traverse City, Mich. Canned fruits. 313,686; Sept. 1. Class 46.
Tweedie Footwear Corporation, Jefferson City, Mo. Shoes. 316,304; Sept. 1. Class 39.
Tyson & Company, Inc., doing business as Johnson Products Company, Paris, Tenn. Meringue powder, cake icing, prepared cake flour, etc. 304,838; Sept. 1. Class 46.
Union Products Company, The, Cleveland, Ohio. Asphalt compounds. 316,982; Sept. 1. Class 12.
United Drug Company, Boston, Mass. Therapeutic lamps, vibrators and hair driers. 317,185; Sept. 1. Class 44.
United States Envelope Company, Springfield, Mass. Paper and envelopes. 317,141; Sept. 1. Class 37.
U. S. Golf Ball Corporation, Chicago, Ill. Golf balls. 317,229; Sept. 1. Class 22.
Vernier, John C., doing business as Johnny-Bite Ice Cream Co., Cleveland, Ohio. Ice cream confection. 316,790; Sept. 1. Class 46.
Vitalait Laboratory of California, Ltd., Pasadena, Calif. Preparation of whole stomach tissue. 316,349; Sept. 1. Class 6.
Wakefield Item Company, Wakefield, Mass. Pamphlets, time tables, whist scores, etc. 316,619; Sept. 1. Class 38.
Walker Press, Limited, Paris, Ontario, Canada. Spinning top game. 313,357; Sept. 1. Class 22.
Warr-Penn Refining Company, Warren, Pa. Motor lubricating oils. 316,795; Sept. 1. Class 15.
Welters, Edward A., doing business as Welters Mfg. Co., Jacksonville, Fla. Soap. 317,186; Sept. 1. Class 4.
White Star Batteries, Inc., New York, N. Y. Storage batteries. 298,124; Sept. 1. Class 21.
Wickwire Spencer Steel Company. (See Bowers, E. C., and Feldman, receivers.)
Williams, J. B., Company, The, Glastonbury, Conn. After shaving preparations. 316,307; Sept. 1. Class 6.
Wooster Brush Company, The, Wooster, Ohio. Brushes. 315,586; Sept. 1. Class 29.
Wylie, Harold C., Harvey, Ill. Root beer. 316,622; Sept. 1. Class 45.
Yale & Towne Mfg. Co., The, Stamford, Conn. Lift trucks and skid platforms. 317,234; Sept. 1. Class 19.
Zenith Radio Corporation, Chicago, Ill. Radio and television receiving sets and parts thereof. 314,186-7; Sept. 1. Class 21.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 2

Boxes and cartons, Paper. Shuttleworth Carton Co. Inc. 286,698; Sept. 1; Serial No. 313,678; published June 16, 1931.
Containers for mortuary records, Tubular. John Marsellus Casket Company. 286,694; Sept. 1; Serial No. 313,378; published June 16, 1931.
Cups, Cast paper pulp. American Lace Paper Company. 286,516; Sept. 1; Serial No. 313,112; published June 9, 1931.

CLASS 6

Antiseptic paste. Absosure Products, Inc. 286,701; Sept. 1; Serial No. 313,700; published June 9, 1931.
Astringents, astringent cerates, bleach creams, beauty creams. E. J. Goodier. 286,609; Sept. 1; Serial No. 306,265; published June 9, 1931.
Cardiotonic. Society of Chemical Industry in Basle. 286,700; Sept. 1; Serial No. 313,680; published June 9, 1931.
Chemical preparation. Huffman & Hulsebus. 286,703; Sept. 1; Serial No. 313,783; published June 9, 1931.
Chemical product. Society of Chemical Industry in Basle. 286,699; Sept. 1; Serial No. 313,679; published June 9, 1931.
Cod liver oil. P. Zizine. 286,630; Sept. 1; Serial No. 301,223; published June 16, 1931.
Cod liver oil. P. Zizine. 286,632; Sept. 1; Serial No. 301,227; published June 16, 1931.
Compound used for medicinal purposes. G. L. Baldauf. 286,688; Sept. 1; Serial No. 313,176; published June 16, 1931.
Cream, tissue building cream, cold cream, etc., Cleansing. Secrets, Inc. 286,608; Sept. 1; Serial No. 305,017; published June 16, 1931.
Enzymatic preparation used in the treatment of hides and skins. Wallerstein Company. 286,592; Sept. 1; Serial No. 310,001; published June 16, 1931.
Enzymic product. Röhm & Haas Company. 286,704; Sept. 1; Serial No. 313,800; published June 9, 1931.
Insecticide, Animal. Pitman-Moore Company. 286,602; Sept. 1; Serial No. 313,973; published June 16, 1931.
Insecticides. Gulf States Chemical Co. 286,804; Sept. 1.
Lotion, Face and hair. C. W. Stengel. 286,607; Sept. 1; Serial No. 304,977; published June 9, 1931.

Material in powder or liquid form containing enzymes for treating plant juices and extracts for aiding clarification. Röhm & Haas Company. 286,596; Sept. 1; Serial No. 313,207; published June 16, 1931.
Medicinal preparation. A. G. Burnett. 286,640; Sept. 1; Serial No. 298,011; published June 16, 1931.
Medicinal preparation. Schering & Glatz, Inc. 286,486; Sept. 1; Serial No. 285,178; published Mar. 11, 1930.
Medicinal preparation. P. Zizine. 286,494; Sept. 1; Serial No. 301,226; published June 16, 1931.
Medicinal preparations. Ferment Company. 286,686; Sept. 1; Serial No. 313,127; published June 9, 1931.
Medicinal preparations. Reed and Carnrick. 286,597; Sept. 1; Serial No. 313,479; published June 16, 1931.
Medicine. F. H. Arisman. 286,690; Sept. 1; Serial No. 313,219; published June 16, 1931.
Medicine. Chic-Tone Company. 286,595; Sept. 1; Serial No. 312,835; published June 16, 1931.
Medicine. Pitman-Moore Company. 286,601; Sept. 1; Serial No. 313,972; published June 16, 1931.
Medicine. Pitman-Moore Company. 286,604; Sept. 1; Serial No. 313,988; published June 16, 1931.
Medicine. Headache. Frederick Stearns & Company. 286,517; Sept. 1; Serial No. 313,158; published June 9, 1931.
Medicine in ampul form. William H. Rorer, Inc. 286,591; Sept. 1; Serial No. 309,879; published June 16, 1931.
Medicines. M. A. Crisp. 286,593; Sept. 1; Serial No. 310,914; published June 16, 1931.
Metal plating and polishing compound. Chemical Utilities, Inc. 286,594; Sept. 1; Serial No. 312,139; published June 16, 1931.
Mineral oil. C. E. Jamieson & Company. 286,598; Sept. 1; Serial No. 313,547; published June 16, 1931.
Mouth wash and paste for mouth diseases. Durobel Corporation. 286,807; Sept. 1.
Ointment. Pitman-Moore Company. 286,600; Sept. 1; Serial No. 313,970; published June 16, 1931.
Ointments, salves, and healing solutions. C. A. Woodruff. 286,508; Sept. 1; Serial No. 309,156; published June 9, 1931.
Pastilles used for hoarseness, dryness of throat, and sore throat. American Druggists Syndicate, Inc. 286,515; Sept. 1; Serial No. 312,734; published June 16, 1931.
Perfume. Elizabeth Arden, Inc. 286,698; Sept. 1; Serial No. 313,321; published June 16, 1931.
Perfume, toilet water, bath salts, rouge, etc. L. T. Piver, Inc. 286,689; Sept. 1; Serial No. 313,204; published June 9, 1931.
Pharmaceutical preparation. F. W. Karwacki. 286,507; Sept. 1; Serial No. 309,031; published June 9, 1931.
Powder and tablets for the stomach. P. Zizine. 286,633; Sept. 1; Serial No. 301,228; published June 16, 1931.
Powder used in diseases of the stomach, etc. P. Zizine. 286,631; Sept. 1; Serial No. 301,224; published June 16, 1931.
Preparation for clarifying black cistern water. L. L. Frank. 286,687; Sept. 1; Serial No. 313,129; published June 9, 1931.
Preparation for the treatment of diabetes. Sanovapor Laboratories, Inc. 286,603; Sept. 1; Serial No. 313,976; published June 16, 1931.
Preparation used in the treatment of influenza, colds, chills, etc. C. B. Whitworth. 286,521; Sept. 1; Serial No. 313,402; published June 9, 1931.
Salve. Carter & Moore Chemical Co. 286,695; Sept. 1; Serial No. 313,464; published June 9, 1931.
Shampoo. D. J. Healy. 286,599; Sept. 1; Serial No. 313,599; published June 16, 1931.
Starch, Sizing. Huron Milling Company. 286,692; Sept. 1; Serial No. 313,295; published June 9, 1931.
Sterilizing material. J. B. Ford Company. 286,697; Sept. 1; Serial No. 313,656; published June 9, 1931.
Tooth paste and mouth wash. L. Padilla. 286,511; Sept. 1; Serial No. 312,061; published June 16, 1931.
Wetting-out agents and preservatives. I. G. Farbenindustrie Aktiengesellschaft. 286,502; Sept. 1; Serial No. 298,895; published June 9, 1931.

CLASS 7

Rope, Wire. Hazard Wire Rope Company. 286,528; Sept. 1; Serial No. 314,646; published June 23, 1931.

CLASS 11

Inks, Printing. Standard Pigment Company. 286,653; Sept. 1; Serial No. 313,872; published June 16, 1931.

CLASS 12

Brick. New England Brick Company. 286,539; Sept. 1; Serial No. 313,089; published June 16, 1931.
Brick and brick specialties, Fire. Sayre & Fisher Brick Company. 286,645; Sept. 1; Serial No. 293,933; published June 16, 1931.
Brick and tile, Burned clay. A. Armstrong. 286,610; Sept. 1; Serial No. 306,991; published June 16, 1931.
Cement for jointing water mains. Michael Hayman & Co. 286,542; Sept. 1; Serial No. 313,168; published June 16, 1931.
Fabric backed wood veneer. Flexwood Company. 286,555; Sept. 1; Serial No. 313,884; published June 16, 1931.
Filler and binder. Safety Processing Company. 286,538; Sept. 1; Serial No. 313,056; published June 16, 1931.
Flag stones. American Blue Stone Co. 286,628; Sept. 1; Serial No. 311,947; published June 16, 1931.
Ridge roll for roofing, galvanized, etc. Raub Supply Co. 286,635; Sept. 1; Serial No. 303,299; published June 16, 1931.
Shingles Composition. H. B. Clifford Roofing Company. 286,629; Sept. 1; Serial No. 312,696; published June 16, 1931.
Wall Panels. Standard Wall Covering Company. 286,527; Sept. 1; Serial No. 312,877; published June 16, 1931.
Weather strips. Chamberlin Metal Weather Strip Company. 286,536; Sept. 1; Serial No. 312,794; published June 16, 1931.

CLASS 13

Cable clamps, devices for preventing vibration of electric cables, etc. Aluminum Company of America. 286,617-18; Sept. 1; Serial Nos. 307,875-6; published June 16, 1931.
Dispensers, Liquid soap. Bobrick Manufacturing Corporation. 286,750; Sept. 1; Serial No. 308,286; published June 23, 1931.
Fencing and wire netting and fencing, Barbed wire. British Ropes Limited. 286,754; Sept. 1; Serial No. 314,148; published June 23, 1931.
Fittings and supplies used in plumbing, heating systems, etc. G. Anderson. 286,513; Sept. 1; Serial No. 312,685; published June 16, 1931.
Hardware, Builders'. Oscar C. Rixson Co. 286,731; Sept. 1; Serial No. 313,206; published June 23, 1931.
Nails. Colorado Fuel and Iron Company. 286,738; Sept. 1; Serial No. 312,697; published June 23, 1931.
Metal fencing, Ornamental and chain link. Continental Steel Corporation. 286,504; Sept. 1; Serial No. 299,109; published June 16, 1931.
Spikes and bolts. Colorado Fuel and Iron Company. 286,755; Sept. 1; Serial No. 314,150; published June 23, 1931.
Spikes, Railroad track. B. M. Cheney. 286,503; Sept. 1; Serial No. 298,934; published June 9, 1931.
Staples. Wyrstapes, Inc. 286,705; Sept. 1; Serial No. 313,880; published June 16, 1931.
Toggle bolts and parts thereof. Star Expansion Bolt Company. 286,799; Sept. 1.
Valves, Relief. I. I. Nelson. 286,756; Sept. 1; Serial No. 314,422; published June 23, 1931.
Wire gauze, wire sieves and strainers, sheet metal casings, etc. H. Junkers. 286,644; Sept. 1; Serial No. 279,931; published June 9, 1931.

CLASS 14

Alloy steels. Marine Steel Corporation. 286,654; Sept. 1; Serial No. 314,290; published June 16, 1931.
Copper alloy and unfinished copper alloy rods and sheets. Anaconda Wire & Cable Company. 286,740; Sept. 1; Serial No. 311,355; published June 9, 1931.
Flanges, forgings, steel billets, etc. Midvale Company. 286,622; Sept. 1; Serial No. 306,502; published June 9, 1931.
Steel bars, steel forgings and steel castings, Rolled. Ludlum Steel Co. 286,590; Sept. 1; Serial No. 313,347; published June 9, 1931.

CLASS 15

Gasolene and kerosene. Pacific Commercial Co. 286,565; Sept. 1; Serial No. 312,719; published June 9, 1931.
Oil, Paraffine and flux. Paraffine Companies. 286,638; Sept. 1; Serial No. 297,769; published June 9, 1931.
Petroleum and petroleum products. G. A. Smith. 286,802; Sept. 1.

CLASS 16

Ceramic decorating materials, luster colors, etc. Hanovia Chemical & Manufacturing Company. 286,732; Sept. 1; Serial No. 313,186; published June 9, 1931.
Coating and roof paint, Asbestos roof. Gibson-Homans Company. 286,561; Sept. 1; Serial No. 312,283; published June 9, 1931.
Coating compound, Waterproof. Staminite Corporation. 286,571; Sept. 1; Serial No. 313,059; published June 16, 1931.
Composition to be mixed with oil paints to modify or decrease the color tone. J. G. Marshall. 286,556; Sept. 1; Serial No. 310,343; published June 16, 1931.
Compounds for use as driers, Metallo-organic. Resinous Products & Chemical Company. 286,558; Sept. 1; Serial No. 312,064; published June 16, 1931.
Enamel, Pipe coating. Standard Oil Company of New Jersey. 286,577; Sept. 1; Serial No. 313,480; published June 9, 1931.
Enamel, tire paint and polishes. Fidelity Manufacturing Co., Inc. 286,566; Sept. 1; Serial No. 312,753; published June 16, 1931.
Paint. Harpoon Paint Products, Inc. 286,578; Sept. 1; Serial No. 313,541; published June 16, 1931.
Paint. Morgan Company. 286,563; Sept. 1; Serial No. 312,446; published June 16, 1931.
Paint enamels. Morgan Company. 286,562; Sept. 1; Serial No. 312,445; published June 9, 1931.
Paint enamels and varnishes. Keystone Varnish Company. 286,753; Sept. 1; Serial No. 314,117; published June 23, 1931.
Paints, Fireproof. Colardo Products Limited. 286,636; Sept. 1; Serial No. 291,606; published June 16, 1931.

Paints, Metallic Decorating. Hanovia Chemical & Manufacturing Company. 286,733; Sept. 1; Serial No. 313,187; published June 16, 1931.
Paints, varnishes, lacquers, etc. Sherwin-Williams Company. 286,574; Sept. 1; Serial No. 313,260; published June 16, 1931.
Paints, varnishes, lacquers, etc. Sherwin-Williams Company. 286,582; Sept. 1; Serial No. 313,870; published June 9, 1931.
Polish, Automobile. Midway Chemical Company. 286,762; Sept. 1; Serial No. 305,464; published June 23, 1931.
Polish, Finishing. Consolidated Products Corporation. 286,583; Sept. 1; Serial No. 314,041; published June 16, 1931.
Polishes, Automobile. C. M. Davis. 286,747; Sept. 1; Serial No. 304,041; published June 23, 1931.
Powder used as a calcimine or decorative wall coating. Muralo Company. 286,744; Sept. 1; Serial No. 314,026; published June 9, 1931.
Preparation in the nature of a waterproof varnish. J. G. Marshall. 286,560; Sept. 1; Serial No. 312,107; published June 16, 1931.
Varnish, lantern slide varnish and spotting colors, Ground glass substitute. Eastman Kodak Company. 286,743; Sept. 1; Serial No. 313,837; published June 23, 1931.
Waxes and lacquer polishes. Minnesota Mining & Manufacturing Company. 286,642; Sept. 1; Serial No. 290,220; published June 16, 1931.

CLASS 17

Cigars. Penlo Cigar Co., Inc. 286,652; Sept. 1; Serial No. 313,968; published June 9, 1931.
Cigars, cheroots, cigarettes, etc. M. Trelles & Company. 286,647; Sept. 1; Serial No. 313,614; published June 9, 1931.

CLASS 19

Aircraft and structural parts thereof. Chance Vought Corporation. 286,752; Sept. 1; Serial No. 314,098; published June 23, 1931.
Automobiles and structural parts thereof. Reo Motor Car Company. 286,615; Sept. 1; Serial No. 307,630; published June 9, 1931.
Cruisers, Pleasure. Electric Boat Company. 286,500; Sept. 1; Serial No. 300,862; published June 9, 1931.
Shock absorbers. Delco Products Corporation. 286,518; Sept. 1; Serial No. 313,125; published June 16, 1931.
Trailers of all kinds. Fruehauf Trailer Company. 286,726; Sept. 1; Serial No. 313,539; published June 23, 1931.

CLASS 21

Cookstoves, Electric. Florence Stove Company. 286,639; Sept. 1; Serial No. 297,862; published June 9, 1931.
Telegraph recording instruments. Morsegraph Manufacturing Company. 286,564; Sept. 1; Serial No. 312,487; published June 9, 1931.

CLASS 22

Aircraft, Miniature. Canton Miniature Aircraft Corporation. 286,527; Sept. 1; Serial No. 314,553; published June 23, 1931.
Fish hooks. O. Mustad & Son. 286,773; Sept. 1; Serial No. 312,264; published June 23, 1931.
Fishing rods. Montague Rod and Reel Company. 286,498; Sept. 1; Serial No. 308,789; published June 23, 1931.
Fishing rods and poles. F. D. Divine Company. 286,530; Sept. 1; Serial No. 314,751; published June 23, 1931.
Golf balls. National Bellas Hess Company. 286,533; Sept. 1; Serial No. 311,442; published June 23, 1931.
Golf clubs. Burke Golf Company. 286,523; Sept. 1; Serial No. 313,622; published June 23, 1931.
Golf clubs. Kroydon Company. 286,493; Sept. 1; Serial No. 300,353; published June 23, 1931.
Golf clubs. Shaler Company. 286,491–2; Sept. 1; Serial Nos. 299,803–4; published June 23, 1931.
Golf clubs. L. A. Young Company. 286,497; Sept. 1; Serial No. 308,406; published June 23, 1931.
Table games, table board games. All Fair Incorporated. 286,522; Sept. 1; Serial No. 313,524; published June 23, 1931.
Toy airplanes and gliders. American Junior Aircraft Company. 286,534; Sept. 1; Serial No. 311,904; published June 23, 1931.
Toy vehicles. Joytoys, Incorporated. 286,496; Sept. 1; Serial No. 307,624; published June 23, 1931.

CLASS 23

Bakery machinery. Richardson & Holland, Inc. 286,719; Sept. 1; Serial No. 313,935; published June 9, 1931.
Card sets, spinning machinery, finishing press accessories, and parts thereof. Dehler-Signoret Corporation. 286,710; Sept. 1; Serial No. 301,163; published June 9, 1931.
Conveyors, sectional flight conveyors, spiral conveyors, etc., Helicoid. Bailey-Burruss Manufacturing Company. 286,768; Sept. 1; Serial No. 306,483; published June 9, 1931.
Cutlery, machine tools and parts thereof, scoops, shovels, etc. Jaburg Brothers, Inc. 286,788; Sept. 1; Serial No. 312,648; published June 16, 1931.
Engines. Glenn L. Martin Motors Company. 286,723; Sept. 1; Serial No. 313,745; published June 23, 1931.
Fire extinguishing machines. Sout Fire Appliances Ltd. 286,794; Sept. 1; Serial No. 309,789; published June 9, 1931.
Glass cutters. A. Selsky. 286,724; Sept. 1; Serial No. 313,696; published June 23, 1931.
Hydraulic presses. Hydraulic Press Manufacturing Company. 286,803; Sept. 1.
Knives. Foster Bros. & Chatillon Co. 286,769; Sept. 1; Serial No. 307,591; published June 23, 1931.
Lawn rakes. Sabin Machine Company. 286,722; Sept. 1; Serial No. 313,755; published June 23, 1931.
Log and timber cutter. J. Kalas. 286,711; Sept. 1; Serial No. 296,062; published July 1, 1930.
Lubricating apparatus, Stationary. Lincoln Engineering Company. 286,785; Sept. 1; Serial No. 312,922; published June 23, 1931.
Lubricating devices. Outing Manufacturing Company. 286,718; Sept. 1; Serial No. 314,125; published June 23, 1931.
Machine for printing signs and display cards. Reynolds Printasign Corporation. 286,789; Sept. 1; Serial No. 312,496; published June 9, 1931.
Machine for washing hollow-ware. Kleenglas (1929) Ltd. 286,786; Sept. 1; Serial No. 312,806; published June 23, 1931.
Machines for pumping cementitious aggregates. National Equipment Corporation. 286,720; Sept. 1; Serial No. 313,864; published June 16, 1931.
Machines for shaking out the cores from cast iron pipe. Essex Foundry. 286,712; Sept. 1; Serial No. 292,240; published June 23, 1931.
Material treating apparatus. Traylor Vibrator Company. 286,787; Sept. 1; Serial No. 312,724; published June 9, 1931.
Mowers, Lawn. Sears, Roebuck and Co. 286,778; Sept 1; Serial No. 302,487; published June 9, 1931.
Pack saddles, knapsack tanks, portable pumpers, fixed pumpers. Pacific Marine Supply Company. 286,764; Sept. 1; Serial No. 303,205; published June 23, 1931.
Painting machines. New Process Painting Co. 286,797; Sept. 1; Serial No. 313,580; published June 16, 1931.
Peeling machines and slicing machines, Vegetable. Josiah Anstice & Co. 286,765; Sept. 1; Serial No. 303,310; published June 9, 1931.
Printing presses, rotary folders, and stereotype equipment, Rotary. Duplex Printing Press Co. 286,707; Sept. 1; Serial No. 302,274; published June 9, 1931.
Razor blades. Probak Corporation. 286,761; Sept. 1; Serial No. 293,485; published Jan. 28, 1930.
Rollers, print trimmers, and paddles, etc. Eastman Kodak Company. 286,721; Sept. 1; Serial No. 313,839; published June 23, 1931.
Sewage and water screens, settling tanks, sludge grit and scum collectors, etc. Link-Belt Company. 286,793; Sept. 1; Serial No. 311,038; published June 23, 1931.
Tools, Hand. Cleveland City Forge Company. 286,792; Sept. 1; Serial No. 311,822; published June 9, 1931.
Tweezers, scissors, desk sets, etc. Schnefel Bros., Inc. 286,717; Sept. 1; Serial No. 314,466; published June 23, 1931.
Typewriting machines, copying machines, etc. R. von Holzer. 286,767; Sept. 1; Serial No. 303,705; published June 23, 1931.

CLASS 24

Laundry machines. General Electric Company. 286,734; Sept. 1; Serial No. 313,130; published June 23, 1931.
Laundry washing machines. Grinnell Washing Machine Corporation. 286,691; Sept. 1; Serial No. 313,242; published June 16, 1931.
Laundry washing machines and ironing machines or mangles, Electric. Black & Decker Manufacturing Company. 286,696; Sept. 1; Serial No. 313,643; published June 16, 1931.
Washboards. F. Martin, jr. 286,702; Sept. 1; Serial No. 313,742; published June 9, 1931.

CLASS 26

Calculating and adding machines. R. C. Coxhead Corporation. 286,713; Sept. 1; Serial No. 314,100; published June 23, 1931.
Device for testing and recording the time of drying. A. M. Parks. 286,782; Sept. 1; Serial No. 312,771; published June 9, 1930.
Drying, testing and recording the time of. A. M. Parks. 286,784; Sept. 1; Serial No. 312,770; published June 9, 1931.
Film, Photographic. Du Pont-Pathé Film Manufacturing Corporation. 286,725; Sept. 1; Serial No. 313,652; published June 2, 1931.
Film, Photographic. Du Pont-Pathé Film Manufacturing Corporation. 286,783; Sept. 1; Serial No. 313,651; published June 9, 1931.
Film, Photographic. Du Pont Pathé Film Manufacturing Corporation. 286,798; Sept. 1; Serial No. 313,650; published June 9, 1931.
Optical lenses. Walman Optical Co. 286,716; Sept. 1; Serial No. 314,593; published June 23, 1931.
Photographic cameras. Agfa Ansco Corporation. 286,708–9; Sept. 1; Serial Nos. 301,323–4; published June 23, 1931.

Photographic paper, Sensitized. Agfa Ansco Corporation. 286,706; Sept. 1; Serial No. 301,327; published June 23, 1931.
Spectrum selectors and transformers for the same. M. B. De Jarnette. 286,780; Sept. 1; Serial No. 312,944; published June 9, 1931.
Temperature indicating devices for roasting machines. Jabez Burns & Sons, Inc. 286,781; Sept. 1; Serial No. 312,900; published June 9, 1931.
Time stamps. International Time Recording Company of New York. 286,770; Sept. 1; Serial No. 308,070; published June 23, 1931.

CLASS 28

Jewelry. Seidman & Cohan, Inc. 286,616; Sept. 1; Serial No. 307,791; published June 9, 1931.
Silver flatware and hollow ware. Oneida Community, Limited. 286,573; Sept. 1; Serial No. 313,257; published June 9, 1930.

CLASS 29

Squeegees and spotting brushes. Eastman Kodak Company. 286,651; Sept. 1; Serial No. 313,840; published June 9, 1931.

CLASS 31

Refrigerators. Illinois Moulding Company. 286,714; Sept. 1; Serial No. 314,566; published June 23, 1931.

CLASS 32

Apparatus for use in arranging papers, cards, and the like for filing or distribution. Multisort Company. 286,791; Sept. 1; Serial No. 312,112; published June 9, 1931.
Office, store, hospital, and bank furniture. General Fireproofing Company. 286,715; Sept. 1; Serial No. 314,691; published June 23, 1931.

CLASS 34

Burners, Oil. Beacon Burner Manufacturing Corporation. 286,514; Sept. 1; Serial No. 312,689; published June 9, 1931.
Globes and reflectors. Holophane Company. 286,611; Sept. 1; Serial No. 306,890; published June 9, 1931.
Heat radiating systems. Bon-Air Radiator Corporation. 286,510; Sept. 1; Serial No. 311,361; published June 9, 1931.
Heaters and parts thereof, Radiant gas. Adams Bros. Mfg. Co. Inc. 286,512; Sept. 1; Serial No. 312,327; published June 16, 1931.
Lighters, Pyrophoric pocket. Löwenthal & Weissberger G. m. b. H. 286,605; Sept. 1; Serial No. 304,621; published June 9, 1931.
Oil burners. Real-Oil-Heat Burner Company. 286,808; Sept. 1.
Oil burners, Automatic. Sun Heat Automatic Oil Burner Corp. 286,730; Sept. 1; Serial No. 313,251; published June 23, 1931.
Radiators for use in steam, hot water, vapor, vacuum, or other heating systems. Richmond Radiator Company. 286,735; Sept. 1; Serial No. 313,004; published June 23, 1931.
Stoves, Oil burning brooder. W. C. Hopson Company. 286,509; Sept. 1; Serial No. 310,141; published June 16, 1931.

CLASS 35

Conduits, Flexible fluid. Chicago Pneumatic Tool Company. 286,779; Sept. 1; Serial No. 313,904; published June 9, 1931.
Hose of fabric and rubber. Eureka Fire Hose Manufacturing Company. 286,795; Sept. 1; Serial No. 309,307; published June 16, 1931.
Packing, Machinery. Anchor Packing Company. 286,800; Sept. 1.
Patches for automobile tires, Pneumatic tube. O. W. Hoelbinger. 286,763; Sept. 1; Serial No. 302,896; published June 16, 1931.
Tire patches. T. Bell. 286,766; Sept. 1; Serial No. 303,990; published June 9, 1931.
Tires and tubes for automobiles, automobile trucks and trailers. Marshall Field & Company. 286,790; Sept. 1; Serial No. 312,145; published June 9, 1931.

CLASS 36

Banjo. Bacon Banjo Co. 286,572; Sept. 1; Serial No. 313,175; published June 9, 1931.
Saxophone, trumpets, cornets, etc. H. N. White Co. 286,575; Sept. 1; Serial No. 312,277; published June 9, 1931.

CLASS 38

Periodical. F. G. Menke. 286,643; Sept. 1; Serial No. 297,092; published Apr. 14, 1931.

CLASS 39

Belts, Ladies'. Slote & Klein, Inc. 286,658; Sept. 1; Serial No. 313,697; published June 16, 1931.
Belts, suspenders, braces, and garters. Pioneer Suspender Company. 286,588–9; Sept. 1; Serial No. 313,202–3; published June 9, 1931.
Chemises, princess slips, bloomers, etc. I. Schneierson & Sons, Inc. 286,499; Sept. 1; Serial No. 308,799; published Feb. 3, 1931.
Clothing, Men's. S. H. Churchill & Company. 286,634; Sept. 1; Serial No. 302,178; published June 16, 1931.
Coats, vests, pants, and overcoats. Fashion Park Associates. 286,543–4; Sept. 1; Serial No. 313,183–4; published June 9, 1931.
Coats, vests, pants, and overcoats. Fashion Park Associates, Inc. 286,552; Sept. 1; Serial No. 313,595; published June 16, 1931.
Coats, vests, trousers, etc. J. Schoeneman, Incorporated. 286,554; Sept. 1; Serial No. 313,868; published June 16, 1931.
Corsets and combination corsets and brassières. International Corset Company. 286,674; Sept. 1; Serial No. 311,735; published June 16, 1931.
Dresses. Mayehoff, Incorporated. 286,550; Sept. 1; Serial No. 313,444; published June 16, 1931.
Dresses, coats, sweaters, etc. James A. Hearn & Son, Inc. 286,489; Sept. 1; Serial No. 298,536; published May 27, 1930.
Foot wear. William Greilich & Sons, Inc. 286,585; Sept. 1; Serial No. 310,763; published June 9, 1931.
Frocks, Ladies'. Tabin-Picker and Company. 286,540; Sept. 1; Serial No. 313,099; published June 16, 1931.
Garments, shirts, underwear, etc., Outer. Cohen, Goldman & Co. 286,676; Sept. 1; Serial No. 312,887; published June 16, 1931.
Hats, Men's. Adam Hat Stores, Inc. 286,774; Sept. 1; Serial No. 313,218; published June 16, 1931.
Hats, Women's. Farrington & Evans, Inc. 286,650; Sept. 1; Serial No. 313,731; published June 16, 1931.
Hats, Women's. Wyle Hat Company. 286,749; Sept. 1; Serial No. 307,342; published June 16, 1931.
Hosiery. Ajax Hosiery Mills. 286,625; Sept. 1; Serial No. 310,148; published June 16, 1931.
Hosiery. Hosiery Mills Co. 286,553; Sept. 1; Serial No. 313,852; published June 16, 1931.
Hosiery. Knit Products Corporation. 286,495; Sept. 1; Serial No. 307,554; published June 16, 1931.
Hosiery. S. H. Kress & Co. 286,548; Sept. 1; Serial No. 313,438; published June 16, 1931.
Hosiery. Simons Co. 286,541; Sept. 1; Serial No. 313,156; published June 9, 1931.
Hosiery, Silk. E. A. Lee. 286,619; Sept. 1; Serial No. 308,165; published June 16, 1931.
Neckties and cravats. W. O. Horn & Brother, Inc. 286,545; Sept. 1; Serial No. 313,189; published June 9, 1931.
Pajamas. Valco Manufacturing Co. 286,547; Sept. 1; Serial No. 313,315; published June 16, 1931.
Pajamas, Men's. Excelsior Varsity Underwear Corporation. 286,551; Sept. 1; Serial No. 313,594; published June 16, 1931.
Robes, bathing suits, sweaters, etc., Bath. Levy, Forman & Co. 286,758; Sept. 1; Serial No. 314,061; published June 16, 1931.
Scarfs, Fur. H. Gray. 286,549; Sept. 1; Serial No. 313,367; published June 9, 1931.
Shirts, Work. Reliance Manufacturing Company. 286,546; Sept. 1; Serial No. 312,199; published June 16, 1931.
Shoes. Brown Shoe Company. 286,649; Sept. 1; Serial No. 313,729; published June 16, 1931.
Shoes, boots, overshoes, and slippers. Wohl Shoe Company. 286,620; Sept. 1; Serial No. 304,844; published June 9, 1931.
Shoes, Canvas. C. B. Barndollar. 286,623; Sept. 1; Serial No. 307,198; published June 9, 1931.
Shoes, Ladies'. Seymour Troy & Company. 286,673; Sept. 1; Serial No. 312,575; published June 16, 1931.
Shoes, Leather and fabric. Sarnoff-Irving Hat Stores. 286,809; Sept. 1.
Slippers and shoes. Gly-Ders Footwear, Inc. 286,679; Sept. 1; Serial No. 313,131; published June 16, 1931.
Suits, overcoats, and topcoats. Pauson & Company. 286,737; Sept. 1; Serial No. 312,813; published June 16, 1931.
Underwear. O'Bryan Brothers. 286,626; Sept. 1; Serial No. 312,306; published June 9, 1931.
Underwear. Viscose Company. 286,501; Sept. 1; Serial No. 299,877; published June 16, 1931.
Underwear and pyjamas. Stern Brothers. 286,627; Sept. 1; Serial No. 313,061; published June 9, 1931.
Vests, bloomers, panties, etc., Ladies'. M. S. Siegel & Company Inc. 286,613; Sept. 1; Serial No. 307,433; published June 16, 1931.

CLASS 40

Shoe laces. Compression Anchor Company. 286,672; Sept. 1; Serial No. 312,125; published June 9, 1931.

CLASS 42

Bedspreads. W. K. Hill. 286,685; Sept. 1; Serial No. 309,380; published June 16, 1931.
Canopies. J. M. Bramnick. 286,670; Sept. 1; Serial No. 311,950; published June 16, 1931.
Cloths, napkins, towels, etc., Linen table. The Fair. 286,678; Sept. 1; Serial No. 313,078; published June 16, 1931.
Cotton, woolen, silk, etc., piece goods. Argus Knitting Mills, Inc. 286,669; Sept. 1; Serial No. 311,907; published June 16, 1931.
Doilies, runners, bedspreads, table cloths, Lace. Perlmann, Schal and Stern, Inc. 286,657; Sept. 1; Serial No. 313,477; published June 16, 1931.

Fabric curtains, Textile. Fairclough & Gold, Inc. 286,666; Sept. 1; Serial No. 309,772; published June 16, 1931.

Fabric or material, Washable water-proof window shade. O. F. Weigand. 286,621; Sept. 1; Serial No. 306,333; published June 16, 1931.

Fabrics, Pile. Sidney Blumenthal & Co. Inc. 286,759–60; Sept. 1; Serial Nos. 314,095–6; published June 23, 1931.

Handkerchiefs. Raphael Weill & Company. 286,777; Sept. 1; Serial No. 313,944; published June 23, 1931.

Knitted piece goods. Royal Rayon Corporation. 286,677; Sept. 1; Serial No. 313,006; published June 16, 1931.

Pile fabrics. Sidney Blumenthal & Co. Inc. 286,655; Sept. 1; Serial No. 313,230; published June 16, 1931.

Pile fabrics. Sidney Blumenthal & Co. Inc. 286,660–3; Sept. 1; Serial Nos. 313,488–91; published June 16, 1931.

Piece goods. S. Slater & Sons, Inc. 286,668; Sept. 1; Serial No. 310,958; published June 16, 1931.

Piece goods. Trippe, Barker & Co. 286,776; Sept. 1; Serial No. 313,942; published June 23, 1931.

Pile fabrics. Sidney Blumenthal & Co. Inc. 286,665; Sept. 1; Serial No. 313,954; published June 16, 1931.

Pile fabrics in the piece. Sidney Blumenthal & Co. Inc. 286,681–4; Sept. 1; Serial Nos. 313,226–9; published June 16, 1931.

Rugs and carpets, Textile. A. & M. Karaghensian, Inc. 286,664; Sept. 1; Serial No. 313,854; published June 16, 1931.

Rugs, Hooked. S. J. Craig. 286,675; Sept. 1; Serial No. 312,332; published June 16, 1931.

Rugs, Textile. Landeshuter Leinen-und Gebildweberei F. V. Grünfeld. 286,506; Sept. 1; Serial No. 300,209; June 16, 1931.

Silk piece goods. C. G. Aschmann & Co. 286,667; Sept. 1; Serial No. 310,464; published June 16, 1931.

Silk piece goods. Kattermann and Mitchell Company. 286,656; Sept. 1; Serial No. 313,371; published June 16, 1931.

Wool or worsted cloths and stuffs. Brooklands Knitting Industry Limited. 286,671; Sept. 1; Serial No. 312,028; published June 16, 1931.

Woolen overcoatings. Hudson River Woolen Mills. 286,659; Sept. 1; Serial No. 313,433; published June 16, 1931.

Woolens. Samek Brothers. 286,624; Sept. 1; Serial No. 318,317; published June 16, 1931.

Worsted cloths, Sample lengths of. Lexington Worsted Mills, Inc. 286,775; Sept. 1; Serial No. 313,740; published June 23, 1931.

CLASS 43

Yarns. Adamson Bros. Company. 286,680; Sept. 1; Serial No. 313,213; published June 16, 1931.

CLASS 44

Dental plates and mould boxes for dental inlays or the like, Attachment or clasp for. Harrison-Noyes Chemical Corp. 286,736; Sept. 1; Serial No. 312,988; published June 23, 1931.

Dentures Artificial. National Dental Laboratory. 286,739; Sept. 1; Serial No. 312,284; published June 23, 1931.

Protection devices for ears, sound absorbers for ears, etc., Wind and water. M. Negwer. 286,741; Sept. 1; Serial No. 311,041; June 23, 1931.

Sanitary napkins. Hahn Department Stores, Inc. 286,748; Sept. 1; Serial No. 313,472; published June 23, 1931.

Sanitary napkins. Kotex Company. 286,729; Sept. 1; Serial No. 313,299; published June 23, 1931.

Sanitary step-ins, bloomers, aprons, and belts. J. W. Goldsmith. 286,745; Sept. 1; Serial No. 313,596; published June 23, 1931.

CLASS 45

Beverages and syrups, extracts, and concentrates used in preparing the same, Maltless. Los Angeles Brewing Co. 286,529; Sept. 1; Serial No. 314,702; published June 23, 1931.

Beverages and syrups and extracts for making same. Non-alcoholic maltless. Silurian Waukesha Water Distributing Co. 286,531; Sept. 1; Serial No. 314,778; published June 23, 1931.

Beverages, Maltless. K. Heinrichs. 286,487; Sept. 1; Serial No. 297,668; published June 23, 1931.

Fruit juices and ginger ale. California Packing Corporation. 286,488; Sept. 1; Serial No. 307,254; published June 23, 1931.

CLASS 46

Apples, Fresh. J. L. Pratt. 286,526; Sept. 1; Serial No. 314,295; published June 23, 1931.

Avocado pulp. Calavo Growers of California. 286,748; Sept. 1; Serial No. 305,593; published June 23, 1931.

Bread, cakes, cookies, and doughnuts. T. L. Dickey. 286,801; Sept. 1.

Candies and assorted chocolates. Voneiff-Drayer Company. 286,524; Sept. 1; Serial No. 313,874; June 23, 1931.

Candy. G. L. E. Candy Corporation of America. 286,532; Sept. 1; Serial No. 310,863; published June 23, 1931.

Canned apple sauce. Lyndonville Canning Company, Inc. 286,535; Sept. 1; Serial No. 312,441; published June 23, 1931.

Canned berries and vegetables, canned and preserved fruits, etc. Z. Matzka. 286,641; Sept. 1; Serial No. 298,582; published June 9, 1931.

Canned fruits and vegetables. O. B. Andrews Company. 286,559; Sept. 1; Serial No. 310,791; published June 16, 1931.

Canned fruits, vegetables and milk, canned soups, canned and dried fruits, etc. P. Pastene & Co. 286,751; Sept. 1; Serial No. 308,339; published June 23, 1931.

Canned tomatoes. E. J. Petrosemolo. 286,490; Sept. 1; Serial No. 299,014; published June 23, 1931.

Canned vegetables and fruits, spices, tomato catsup, etc. M. E. Horton, Inc. 286,771; Sept. 1; Serial No. 311,478; published June 23, 1931.

Canned vegetables, fruits, fish, etc. Geo. Rasmussen Co. 286,576; Sept. 1; Serial No. 313,317; published June 16, 1931.

Chow mein, chop suey, Chinese rice cakes, etc. Public Service Community Kitchens, Inc. 286,757; Sept. 1; Serial No. 314,677; published June 23, 1931.

Citrus fruits and vegetables, Fresh. Superior Produce Distributors. 286,520; Sept. 1; Serial No. 312,932; published June 23, 1931.

Coffee, Green. J. Aron & Company. 286,580; Sept. 1; Serial No. 313,824; published June 9, 1931.

Confection, Frozen. W. S. MacGillivray. 286,570; Sept. 1; Serial No. 312,924; published June 16, 1931.

Confection, Ice cream. I. C. Parker. 286,742; Sept. 1; Serial No. 313,667; published June 23, 1931.

Extracts, Flavoring. A. Friedberg. 286,612; Sept. 1; Serial No. 307,351; published June 16, 1931.

Fruit preserves, pie and pastry fillings. H. A. Johnson Company. 286,606; Sept. 1; Serial No. 303,769; published June 16, 1931.

Fruits, Fresh deciduous. Pinkham Holding Co. 286,806; Sept. 1.

Fruits, vegetables, and peels, chutneys, and sauces, Dried, preserved, candied, and crystallized. Tomango Limited. 286,505; Sept. 1; Serial No. 299,418; published June 16, 1931.

Gelatin desserts. Nikol Jell Company. 286,569; Sept. 1; Serial No. 312,767; published June 16, 1931.

Gum, Chewing. Orbit Listerated Gum Company. 286,525; Sept. 1; Serial No. 314,068; published June 23, 1931.

Milk and live cattle, Fresh. L. A. Hawkins. 286,772; Sept. 1; Serial No. 311,663; published June 23, 1931.

Milk, Evaporated, Nestlé's Milk Products, Inc. 286,727; Sept. 1; Serial No. 313,383; published June 23, 1931.

Oil for use in popping corn. American Pop Corn Company. 286,568; Sept. 1; Serial No. 312,749; published June 9, 1931.

Oil for use in popping corn and pop corn seasoning. American Pop Corn Company. 286,567; Sept. 1; Serial No. 312,748; published June 16, 1931.

Olive oil. Blum Bros. 286,796; Sept. 1; Serial No. 297,120; published June 23, 1931.

Pickle relish, butter, oleomargarine, and cooking compound. Baltimore Butterine Company. 286,614; Sept. 1; Serial No. 307,471; published Mar. 17, 1931.

Raisins, honey, vinegar, etc. Inter-State Grocer Company. 286,746; Sept. 1; Serial No. 302,824; published June 23, 1931.

Syrup, Malt. Altoona Malt Company. 286,637; Sept. 1; Serial No. 297,506; published Sept 16, 1930.

Syrup, Malt. Puritan Malt Extract Company. 286,579; Sept. 1; Serial No. 313,559; published June 16, 1931.

Syrup, Tea. Boston Tea Party, Inc. 286,557; Sept. 1; Serial No. 311,467; published June 16, 1931.

Yeast. Kapsi-Kon Yeast Corporation. 286,581; Sept. 1; Serial No. 313,853; published June 16, 1931.

CLASS 48

Malt beverages. Canadian Pale Products Association. 286,805; Sept. 1.

Malt beverages. C. Schallitz. 286,519; Sept. 1; Serial No. 312,742; published June 23, 1931.

CLASS 50

Bottle caps. S. Mallinger. 286,646; Sept. 1; Serial No. 313,475; published June 16, 1931.

Fly catchers. Pyramiden-Fliegenfängerfabrik Max Dametz m. b. H. 286,587; Sept. 1; Serial No. 312,198; published June 16, 1931.

Fire escape rope apparatus. C. Romson. 286,586; Sept. 1; Serial No. 311,074; published June 16, 1931.

Monuments and memorials, Granite. A. Gustafson. 286,648; Sept. 1; Serial No. 313,659; published June 16, 1931.

Underlining for floor covering. American Hair & Felt Company. 286,584; Sept. 1; Serial No. 310,277; published June 16, 1931.

ALPHABETICAL LIST OF LABELS

Blue Ribbon Potato Chips. For Potato Chips. A. A. Walter & Co. 39,658; Sept. 1.

Brunswick. For Cigars. A. A. Greenwald. 39,643; Sept. 1.

Burgess Radiovisor Bridge. For Light Sensitive Cells. Burgess Battery Company. 39,635; Sept. 1.

Champagnette. For Bottled Beverages. Champagnette Corp., of New York. 39,636; Sept. 1.

Christie's Sauce. For Sauce. S. P. Christie. 39,637; Sept. 1.

D'Angelo's Best Brand Highest Grade Macaroni. For Macaroni. A. D'Angelo. 39,638; Sept. 1.

Dugan's Coffee Ring. For Coffee Rings. Dugan Brothers, Inc. 39,640; Sept. 1.

Dugan's Crumb Buns. For Crumb Buns. Dugan Brothers, Inc. 39,639; Sept. 1.

Dugan's Fresh Apple Butter. For Apple Butter. Dugan Brothers, Inc. 39,641; Sept. 1.

Dutch Maid Noodles. For Fresh Egg Noodles. Dutch Maid Products Co. 39,642; Sept. 1.

Frozen Drumstick. For Ice Cream Product consisting of an Ice Cream Cone Dipped in Candy, Etc. I. C. Parker. 39,649; Sept. 1.

High Gloss Ideal Brand Design Pattern. For Glossed Paper. National Consumers Paper Corp. 39,647; Sept. 1.

Hollywood. For Soda Crackers. The Kroger Grocery & Baking Co. 39,645; Sept. 1.

Hot Cops. For Frankfurters. "Hot Cops" Food Corporation. 39,644; Sept. 1.

Ok-Sa-Co. For Sausages. C. A. Potts. 39,652; Sept. 1.

Over The Bar. For Ginger Ale. Piel Bros., Inc. 39,650; Sept. 1.

Quality Thru and Thru. For Bread. Pollock Paper & Box Company. 39,651; Sept. 1.

Saf-T-Nite-Lites. For Devices to Eliminate Glare for Automobile Head Lights. H. Stallings. 39,654; Sept. 1.

Solid Gold Hands. For Bananas. Schaper Products Company. 39,653; Sept. 1.

Sure Blooming. For Narcissus Bulbs. Talmage Gardens Company. 39,657; Sept. 1.

Tom Sawyer Painting Set. For Painting Sets. Standard Solophone Mfg. Co., Inc. 39,655; Sept. 1.

Tom Sawyer Nuart Poster Colors. For Poster Colors. Standard Solophone Mfg. Co., Inc. 39,656; Sept. 1.

Yeast. For Yeast. National Yeast Company. 39,648; Sept. 1.

Zircon. For Ginger Ale. Mt. Zircon Spring Water Company. 39,646; Sept. 1.

ALPHABETICAL LIST OF PRINTS

Birk's Shaving Cream. For Shaving Cream. Birk Manufacturing Company. 13,392–3; Sept. 1.

Curtis Aero Ignition Co. Inc. For Spark Plugs. Curtis Aero Ignition Co. Inc. 13,394; Sept. 1.

Hydrogen Peroxide. For Hydrogen Peroxide. Parke, Davis & Company. 13,395; Sept. 1.

Schafer's Big Shot 5¢ Cigar. For Cigars. The George Schafer-H. C. Pfaff Cigar Company. 13,396; Sept. 1.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 1ST DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbens, Sidney M., assignor of one-half to Dorothy Kagan, San Francisco, Calif. Flatiron. 1,821,778; Sept. 1.

Abel, Walter T. (See Carley, L. R., and Abel).

Abelson, Alvar N., and M. T. Johnson, Cleveland, Ohio. Line fastener. 1,821,601; Sept. 1.

Abrasive Engineering Corporation. (See La Vercombe, Harley H., assignor.)

Accurometer Mfg. Co. (See Phelps, Clyde H., assignor.)

Addressograph Company. (See Mohler, Valentine J., assignor.)

Addison, Herbert, Worthing, and W. B. Luard, Falmouth, England. Navigating instrument. 1,821,870; Sept. 1.

Adohr Stock Farms. (See Rosenberger, Maynard, assignor.)

Air Sealed Tire Corporation. (See Trautman, Ira., assignor.)

Akin, Robert M., et al. (See Fleck, Philip H., assignor.)

Aktiebolaget Elektrisk Malmeetning. (See Sundberg, K., and Lindblom, assignors.)

Aktiebolaget Nordiska Armaturfabrikerna. (See Nathorst, Harry J. H., assignor.)

Albertson, William E., assignor of one-half to M. D. Moody, Jacksonville, Fla. Safety device for gas engines. 1,820,779; Sept. 1.

Alemite Corporation. (See Moore, George L., assignor.)

Alemite Corporation. (See Murphy, Howard J., assignor.)

Alemite Corporation. (See Zerk, Oscar U., assignor.)

Allan, Archibald, Tynemouth, assignor to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. Electric circuit-breaker. 1,821,414; Sept. 1.

Allen, Earl M., Swissvale, assignor to The Union Switch & Signal Company, Swissvale, Pa. Train indicating apparatus. 1,821,602; Sept. 1.

Allen, Frank B., Lower Marion Township, Montgomery County, assignor, by mesne assignments, to The Allen-Sherman Hoff Company, Philadelphia, Pa. Ash handling equipment. 1,821,603; Sept. 1.

Allen, Henry A., et al., trustees. (See Pratt, Harry P., assignor.)

Allen, Horace C., Merchantville, N. J., assignor to General Electric Company. Local distant switch for super-heterodyne receivers. 1,821,780; Sept. 1.

Allen-Sherman Hoff Company, The. (See Allen, Frank B., assignor.)

Allen, Thomas T., assignor to Sentry Safety Control Corporation, Philadelphia, Pa. Unitary safety device for motion picture projecting machines. 1,820,959; Sept. 1.

Alles, Kurt, Berlin, Germany, assignor to General Electric Company. Steam generating plant for the generation of high pressure steam. 1,821,781; Sept. 1.

Allied Products Corporation. (See Richard, O. K. and C. C., assignors.)

Allison, Albert J., assignor to Simonds Worden White Company, Dayton, Ohio. Beater roll construction. 1,821,604; Sept. 1.

Alma Manufacturing Company of Baltimore City. (See Kerngood, Allen H., assignor.)

Alt, Anne C. (See Meeks, M. W., and Alt.)

Altorfer Bros. Company. (See Defibaugh, Mark A., assignor.)

Alvord, Daniel R. (See Hirons, F. C., Mellor, and Alvord.)

American Air Filter Company. (See Birkholz, Hans E., assignor.)

American Air Filter Company. (See Gagen, Charles H., assignor.)

American Brake Materials Corporation. (See King, Howard E., assignor.)

American Brake Materials Corporation. (See Thompson, James S., assignor.)

American Brake Shoe & Foundry Company, The. (See Nelson, Albert, assignor.)

American Can Company. (See Hothersall, John M., assignor.)

American Cotton Machinery Co. (See Green, Sherwood, assignor.)

American Electric Switch Corporation. (See Lewis, Joseph C., assignor.)

American Electrical Heater Company. (See Kuhn F., and Thomas, assignors.)

American Fabrica Company, The. (See Lashar, Walter B., assignor.)

American Hardware Corporation, The. (See Hausmann, William F., assignor.)

American Propeller Company. (See Stelzer, William, assignor.)

American Saw Mill Machinery Company. (See Neighbour, Wilbur S., assignor.)

American Smelting and Refining Company. (See Greene, Gerald U., assignor.)

American Smelting and Refining Company. (See Jones, Thomas D., assignor.)

American Steel Foundries. (See Hedgcock, William C., assignor.)

American Telechronometer Company. (See Babcock, Garrison, assignor.)

American Telephone and Telegraph Company. (See Carpe, Allen, assignor.)

American Telephone and Telegraph Company. (See Cowan, Frank A., assignor.)

American Telephone and Telegraph Company. (See Crisson, George, assignor.)

American Telephone and Telegraph Company. (See Sithens, Edward J., assignor.)

Ames, Butler, Lowell, Mass. Reciprocating apparatus. 1,821,685; Sept. 1.

Ames, James W., Jersey City, N. J. Method of and apparatus for the recovery of matter from waste rubber tires. 1,821,049; Sept. 1.

Ammon, Charles D., Lincoln, Nebr. Cultivator. 1,821,370; Sept. 1.

Ammon, Charles D., Lincoln, Nebr. Leaf guard. 1,821,371; Sept. 1.

Andersen, Axel C., Borregaard, near Sarpsborg, Norway. Apparatus for measuring the contents of moisture in chemical and mechanical wood pulp. 1,821,605; Sept. 1.

Anderson, Anton, Chicago, Ill. Hinge. 1,821,606; Sept. 1.

Andersson, Gustav H., Stockholm, and Sven A. B. Dahlgren, Alsten, Sweden, assignors to the De Laval Separator Company, New York, N. Y. Centrifuge. 1,821,607; Sept. 1.

Andrews, Charles W., Duluth, Minn., and H. A. Brassert, assignors to H. A. Brassert & Company, Chicago, Ill. Manufacturing mixed water gas and oil gas. 1,821,050; Sept. 1.

Appel, Saul C., Medford, Mass. Radiator bracket. 1,821,084; Sept. 1.

Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Electric control mechanism for vehicle brakes. 1,821,200; Sept. 1.

Armington, Arthur P., Willoughby, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Drawbar means. 1,821,869; Sept. 1.

Armstrong Cork Company. (See Hawley, Elmer Cameron, assignor.)

Armstrong, Frank H. (See Heaton, H. C., and Armstrong.)

Arnold, Charles H., Dayton, Ohio. Liquid dispensing apparatus. 1,820,931; Sept. 1.

Arnold, Ernest H., Cleveland, Ohio. Metal wheel and making the same. 1,821,782; Sept. 1.

Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Plural section casing and latching mechanism therefor. 1,821,085; Sept. 1.

Art Metal Works, Inc. (See Arnson, Louis V., assignor.)

Asper, Lewis, Minneapolis, Minn. Storm sash holder. 1,821,415; Sept. 1.

Asphalto Concrete Corporation. (See Weir, Robert M., assignor.)

Atkinson, Spencer R., Pasadena, Calif. Orthodontic appliance. 1,821,171; Sept. 1.

Auto Radiator Manufacturing Company. (See Medville, Albert B., assignor.)

Autogiro Company of America. (See Pitcairn, Harold F., assignor.)

Autographic Register Company. (See Brenn, Carl W., assignor.)

Automatic File & Index Company, The. (See Straubel, Frederick L. G., assignor.)

Avery, Clarence W., Detroit, Mich., assignor to The Murray Corporation of America. Trapezoidal sliding window construction. 1,821,686; Sept. 1.

Avery, Henry A., Groton, assignor to L. C. Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,820,903; Sept. 1.

Axelrod, Alexander, Zurich, Switzerland. Melting cheese. 1,820,900; Sept. 1.

Babbitt, Henry K., Wilmington, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Blasting cap. 1,821,608; Sept. 1.

Babcock & Wilcox Company, The. (See Whittam, Benjamin B., assignor.)

Babcock, Garrison, assignor to American Telechronometer Company, Seattle, Wash. Telechronometer. 1,821,086; Sept. 1.

Baget, Léon, assignor to Compagnie de Produits Chimiques et Electrometallurgiques Alais, Froges, et Camarque, Paris, France. Device for standardizing shunts. 1,821,785; Sept. 1.

Bailey, Jamison B., Van Alstyne, Tex. Machine for pulling and grinding stalks. 1,821,131; Sept. 1.

Baily, Thaddeus F., Alliance, and L. G. Pfitz, Canton, Ohio; said Pritz assignor to said Baily. Making synthetic pig iron. 1,821,783; Sept. 1.

Baker, Charles G., Timaru, New Zealand. Swivel connection for electric cables and the like. 1,821,132; Sept. 1.

Baker, Frank C., R. J. Fleckenstein, and L. M. Landman, assignors to Texas Pacific Coal and Oil Company, Fort Worth, Tex. Apparatus for treating emulsified oil. 1,821,133; Sept. 1.

Baker, Howard A., Long Beach, Calif. Hood sign. 1,821,609; Sept. 1.

Bakeries Service Corporation. (See Ohlson, Albert J., assignor.)

Ballard, Howard T., et al., trustees. (See Pratt, Harry P., assignor.)

Ballew, Elmer L., Chicago, Ill. Racing apparatus. 1,821,784; Sept. 1.

Ballew, Elmer L., Chicago, Ill. Racing apparatus. 1,821,786; Sept. 1.

Ballew, Elmer L., Chicago, Ill. Portable moving racing apparatus. 1,821,826; Sept. 1.

Banschbach, Edward A., Madison, Wis. Buffer. 1,821,284; Sept. 1.

Barber-Colman Company. (See Drake, Russell P., assignor.)

Barber-Greene Company. (See Barber, Harry H., assignor.)

Barber, Harry H., Aurora, Ill., assignor to Barber-Greene Company. Loader. 1,821,536; Sept. 1.

Barber, Harry H., Aurora, Ill., assignor to Barber-Greene Company. Ditching machine. 1,821,537; Sept. 1.

Barker, Harry B., Chicago, Ill. Producing illuminated motion effects. 1,821,538; Sept. 1.

Barnes, John A., Chappaqua, assignor to The Superheater Company, New York, N. Y. Superheater unit and boiler using same. 1,821,134; Sept. 1.

Barrett Company, The. (See Dickson, John V. E., assignor.)

Barrows, Allan S., San Francisco, Calif., assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Car door. 1,821,491; Sept. 1.

Barrows, Donald S., Rochester, N. Y. Pipe organ valve action. 1,821,253; Sept. 1.

Barrows, Donald S., Rochester, N. Y. Removable pipe organ valve. 1,821,285; Sept. 1.

Barrows, Donald S., Rochester, N. Y. Adjustable pipe organ valve. 1,821,286; Sept. 1.

Barrows, Donald S., Rochester, N. Y. Organ stop or coupler actuating means. 1,821,610; Sept. 1.

Barry, James J., Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Washing and brining fish. 1,821,201; Sept. 1.

Baum, Isaac A., Chicago, Ill. Door framing. 1,821,254; Sept. 1.

Baum, W. A., Co. (See Baum, William A., assignor.)

Baum, William A., assignor to W. A. Baum Co., Inc., New York, N. Y. Manometer. 1,821,902; Sept. 1.

Baumann, Herman J., West New York, N. J. Window shade roller. 1,821,687; Sept. 1.

Bauroth, Walter J., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley harp. 1,821,423; Sept. 1.

Bayer, Adolph, New York, N. Y. Gas detection apparatus. 1,821,871; Sept. 1.

Baylis, Robert M., Dayton, Ohio. Toy airplane. 1,821,172; Sept. 1.

Beal, George W., Winston-Salem, assignor of one-half to S. R. Glass, Forsyth County, N. C. Friction clutch. 1,821,335; Sept. 1.

Beck, Almer B., Lititz, Pa. Convertible furniture. 1,820,904; Sept. 1.

Becket, Frederick M., New York, N. Y., assignor to Electro Metallurgical Company. Smelting of ores. 1,820,998; Sept. 1.

Beckman, Jacob H., Oakland, Calif. Ammonia condenser. 1,821,287; Sept. 1.

Beetem, Samuel H., Benicia, Calif., assignor to Rex Research Corporation, Toledo, Ohio. Bait bottle. 1,821,288; Sept. 1.

Beitman, Albert B., Cleveland Heights, Ohio. Windshield. 1,821,903; Sept. 1.

Belin, Edouard, Paris, France. Method of and apparatus for picture transmission. 1,821,416; Sept. 1.

Bell, Curtis A., Edmond, Okla. Book cover or similar article. Des. 84,971; Sept. 1.

Bell Telephone Laboratories, Incorporated. (See Peterson, Eugene, assignor.)

Bell Telephone Laboratories, Incorporated. (See Smythe, Edwin H., assignor.)

Belton, John M., Wheeling, W. Va., and C. H. Verwohlt, St. Clairsville, Ohio, assignors to Wheeling Steel Corporation, Wheeling, W. Va. Rolling sheet metal. 1,821,751; Sept. 1.

Bendix Brake Company. (See Apple, Vincent G., assignor.)

Bendix Brake Company. (See Gallup, David L., assignor.)

Bendix Brake Company. (See Hirvonen, E. J., and Tuttle, assignors.)

Bendix Brake Company. (See La Brie, Ludger E., assignor.)

Bendix Brake Company. (See Sanford, Roy S., assignor.)

Bendix Brake Company. (See Seaholm, E. W., Barker, and Stahlhuth, assignors.)

Benson, Fred F. (See Musgrove, C. A., and Benson.)

Berg, Christian P., Chicago, Ill. Apparatus for mortar manufacture. 1,821,289; Sept. 1.

Bergmann, Fred, Philadelphia, Pa. Sanitary cap remover. 1,820,999; Sept. 1.

Berner, Leo., South Milwaukee, and P. Lohr, Milwaukee, Wis. Fuel injection apparatus for internal combustion engines. 1,821,173; Sept. 1.

Bernhard, John B., Stoneleigh, Md. Boiler. 1,820,901; Sept. 1.

Bessler Disappearing Stairway Company, The. (See Bessler, Frank E., assignor.)

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing stairway. 1,821,872; Sept. 1.

Best, Clarence E., Canton, Ohio. Separable anti-friction bearing. 1,821,873; Sept. 1.

Bigelow-Sanford Carpet Co. (See Stone, Edwin W., assignor.)

Bilmarjac Corporation. (See King, W. J., assignor.)

Birkholz, Hans E., Chicago, Ill., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Renewable capsule filter. 1,821,202; Sept. 1.

Bishop & Babcock Manufacturing Co., The. (See Greiling, David J., assignor.)

Bishop, Elmer E., and F. J. Brook, Indianapolis, Ind. Static eliminator. 1,821,336; Sept. 1.

Bissell, Carl H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Traffic signal switch. 1,821,000; Sept. 1.

Bissonnette, Victor J. (See Bradley, James F., assignor.)

Black, Cadelle H., Brookline, Pa., assignor to General Electric Company. Retarding device. 1,821,787; Sept. 1.

Black, Lee J., Beaumont, Tex. Circulating system for brake flanges. 1,821,135; Sept. 1.

Black, Lee J., Beaumont, Tex. Crown block sheave assembly. 1,821,788; Sept. 1.

Black, Lee J., Beaumont, Tex. Swivel. 1,821,874; Sept. 1.

Black, William C., Dudley, England, assignor to Matthew S. Moore, Brussels, Belgium. Coal cutting machine and the like. 1,821,372; Sept. 1.

Blewett, John B., Wellsville, Ohio, assignor to McLain Fire Brick Company, Pittsburgh, Pa. Grate structure. 1,820,932; Sept. 1.

Blieberger, Charles, New York, N. Y. Loud speaker. 1,821,373; Sept. 1.

Blink, Peter. (See Mitchell, W., and Blink.)

Block, Herman W., New York, N. Y. Nursery toy. 1,820,905; Sept. 1.

Bloom, Joseph, Los Angeles, Calif. Emblem. Des. 84,972; Sept. 1.

Bocknek, Jacob, Brooklyn, N. Y. Brush handle attachment. 1,821,875; Sept. 1.

Boeye, Paul F., St. Paul, assignor to Waldorf Paper Products Company, St. Paul, Minn. Making composite corrugated and solid fiber board. 1,821,539; Sept. 1.

Bogatz, Peter S., Omaha, Nebr. Corn harvester. 1,821,374; Sept. 1.

Bohač, Karel, Prague, Czechoslovakia. Joint connection of the rods in structures, girders and the like. 1,821,736; Sept. 1.

Bolakowski, Vincent J., South Chicago, Ill. Hinge. 1,811,136; Sept. 1.

Bonander, John E., Calumet City, Ill. Card holder. 1,821,876; Sept. 1.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,821,904; Sept. 1.

Bonsleur, Le, assignor to The General Industries Company, Elyria, Ohio. Cutter for turntable covers. 1,821,611; Sept. 1.

Booth, F. E., Company. (See Peebles, David D., assignor.)

Boots, Eugene, Denver, Colo. Lifting jack. 1,821,737; Sept. 1.

Borg & Beck Company, The. (See Gamble, David E., assignor.)

Borgeson, Charles J. B., Syracuse, N. Y. Apparatus for cleaning waste pipes of sinks, etc. 1,821,789; Sept. 1.

Bostock, Charles F., Little Silver, N. J., assignor to International Silver Company, Meriden, Conn. Holder for mirrors. 1,821,137; Sept. 1.

Bottoms, Robert R., assignor to The Helium Company, Louisville, Ky. Extraction of helium from other gases containing the same. 1,821,540; Sept. 1.

Boughton, Edward B., W. Emmott, D. T. Brock, and A. C. Burdon, London, England. Hydraulic brake for aeroplanes. 1,821,419; Sept. 1.

Bounds, Orville T., Centralia, assignor of one-fourth to G. H. Somerville, Chicago, and one-half to M. R. Howard, Centralia, Ill. Automobile seat. 1,821,417; Sept. 1.

Bourne, Roland B., assignor to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,821,688; Sept. 1.

Bousman Mfg. Co. (See Hills, John H., assignor.)

Bower, James A., assignor to National Tile Company, Anderson, Ind. Tile handling machine. 1,821,001; Sept. 1.

Bowers, Charles R., assignor to C. T. Stedman, South Bend, Ind., as trustee. Control device for aeroplanes. 1,820,906; Sept. 1.

Bowman, Pearl J., Bell, and W. F. Bowman, Ocean Park, assignors of one-third to W. B. Eberhart, Bell, Calif. Pitman connection. 1,821,174; Sept. 1.

Bowman, William F. (See Bowman, P. J. and W. F.)

Bowne, Raymond W., assignor to Split Ballbearing Corporation, Lebanon, N. H. Locking device for antifriction bearing rings. 1,821,877; Sept. 1.

Bradley, James F., assignor of one-half to V. J. Bissonnette, Stafford Springs, Conn. Rubber heel. 1,821,878; Sept. 1.

Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburg, assignors to Bradley-McKeefe Corporation, New York, N. Y. Treatment of black liquor. 1,821,138; Sept. 1.

Bradley-McKeefe Corporation. (See Bradley, L., and McKeefe, assignors.)

Bradley Washfountain Company. (See Mullett, H. A., and Heine, assignors.)

Brain, George, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Water closet bowl. Des. 84,973; Sept. 1.

Brain, George, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Water closet bowl. Des. 84,974; Sept. 1.

Braucart, Yvon, Ronquieres, Belgium. Treating glass. 1,821,375; Sept. 1.

Brandenstein, Jerrol W., Schenectady, N. Y., assignor to General Electric Company. Self propelled vehicle. 1,821,827; Sept. 1.

Braselton, Chester H., Corporation. (See Knight, Charles Y., assignor.)

Brassard, Friedrick A., Bad Godesberg, Germany, assignor to Theodore Hemeke, trustee, Hicksville, Long Island, N. Y. Wall board and the like for covering walls. 1,820,933; Sept. 1.

Brassert, H. A., & Company. (See Andrews, C. W., and Brassert, assignors.)

Brassert, Herman A. (See Andrews, C. W., and Brassert.)

Braunsdorf, Otto. (See Nawiasky, P., Helzapfel, and Braunsdorf.)

Brenn, Carl W., Montclair, assignor to Autographic Register Company, Hoboken, N. J. Manifolding. 1,821,905; Sept. 1.

Bridgeport Metal Goods Manufacturing Company, The. (See Fullmer, Giles C., assignor.)

Briechle, Ambrosius, assignor to Fairchild Aerial Camera Corporation, New York, N. Y. Aerial camera control mechanism. 1,821,492; Sept. 1.

Brightman, Rainald, Blackley, Manchester, assignor to British Dyestuffs Corporation Limited, Manchester, England. Manufacture of azo dyestuffs. 1,821,255; Sept. 1.

Brightman, Rainald, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, London, England. Manufacture of diazo dyes. 1,812,290; Sept. 1.

Brightman, Rainald, and P. Chorley, Blackley, Manchester, assignors to British Dyestuffs Corporation Limited, Manchester, England. New azo dyestuffs and their application. 1,821,256; Sept. 1.

Brightman, Rainald, and P. Chorley, assignors to British Dyestuffs Corporation, Limited, Blackley, Manchester, England. Manufacture of azo dyestuffs. 1,821,257; Sept. 1.

Brightman, Rainald, and P. Chorley, assignors to British Dyestuffs Corporation, Limited, Blackley, Manchester, England. Manufacture of dyed products. 1,821,291; Sept. 1.

Brillo Manufacturing Company. (See Field, Crosby, assignor.)

British Dyestuffs Corporation Limited. (See Brightman, Rainald, assignor.)

British Dyestuffs Corporation Limited. (See Brightman, R., and Chorley, assignors.)

British Electrical and Allied Industries Research Association. (See Whitney, W. B., and Wedmore.)

Brock, Denis T. (See Boughton, E. B., Emmott, Brock, and Burdon.)

Broderick, Frank W. (See Golinick, P. A., and Broderick.)

Broeg, William E., Chicago, Ill., assignor to Doughnut Machine Corporation, New York, N. Y. Process and apparatus for preparing food products. 1,821,689; Sept. 1.

Brook, Fred J. (See Bishop, E. E., and Brook.)

Brooks, Charles A., Swissvale, and H. S. Young, Wilkinsburg, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic governing apparatus. 1,821,002; Sept. 1.

Brooks, Winfred M., West Orange, N. J. Sealing means. 1,821,418; Sept. 1.

Brown Bag Filling Machine Company, The. (See Greenlaw, Burpee D., assignor.)

Brown, Charles B. (See Brown, Charles H., assignor.)

Brown, Charles H., assignor of one-half to C. B. Brown, Flushing, N. Y. Shoe fitting apparatus. 1,821,051; Sept. 1.

Brown Company. (See Parker, Howard, assignor.)

Brown Company. (See Richter, George A., assignor.)

Brown, Frank, Malden, Mass. Combination clock and lamp. Des. 84,975; Sept. 1.

Brown, James F., Cincinnati, Ohio. Store. 1,821,541; Sept. 1.

Brown, John A., Indianapolis, Ind. Safety tower. 1,821,376; Sept. 1.

Brown, Leslie A., assignor to International Silver Company, Meriden, Conn. Spoon or other article of tableware. Des. 84,976; Sept. 1.

Brown, Leslie A., assignor to International Silver Company, Meriden, Conn. Spoon or other article of tableware. Des. 84,977; Sept. 1.

Browne, Vere B., Brackenridge, Pa. Annealing. 1,821,493; Sept. 1.

Bruner, Robert W., St. Louis, Mo., and A. Grauer, Detroit, Mich. Skylight construction. 1,821,003; Sept. 1.

Bryce, James W., Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Weighing scale. 1,821,087; Sept. 1.

Bryson, Tandy A., and F. I. Williams, Troy, N. Y., assignors to Tolhurst Machine Works, Inc. Centrifugal extractor. Re18,174; Sept. 1.

Buc, Hyym E., Roselle, N. J., assignor to Standard Oil Development Company. Separation of oxygen-containing materials from their solutions in hydrocarbons. 1,820,907; Sept. 1.

Buchli, Jacob, Winterthur, Switzerland. Composite crank axle for vehicles traveling on rails. 1,821,612; Sept. 1.

Buffalo Pressed Steel Company. (See Haas, Lucien L., assignor.)

Buhler, Henry W., Gloucester, Mass. Molded trimming. 1,820,934; Sept. 1.

Buhler, Henry W., Gloucester, Mass. Molded trimming. 1,820,935; Sept. 1.

Bullington, Frank A., Kansas City, Mo. Internal combustion engine. 1,821,139; Sept. 1.

Bullock, Howard W., Harrow, England. Transmission gearing. 1,820,902; Sept. 1.

Bunting Brass & Bronze Company, The. (See Yager, George F., assignor.)

Burdon, Austin C. (See Boughton, E. B., Emmott, Brock, and Burdon.)

Burnham Chemical Company. (See Debeau, M. A., and Robson, assignors.)

Burnham, George A., Saugus, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Multiphase electrical generating and switching system. 1,821,203; Sept. 1.

Burroughs Adding Machine Company. (See Horton, Allen A., assignor.)

Burroughs, Clark Ld., assignor to Hall-Neal Furnace Company, Indianapolis, Ind. Furnace damper control. 1,821,204; Sept. 1.

Caccamo, Samuel, San Jose, Calif. Illuminator for license plates. 1,821,420; Sept. 1.

Cairns Development Company. (See Carns, Edmund B., assignor.)

California Women of the Golden West, The. (See Isaacs, Lida S.)

Calkins, Frederic A., Waterbury, Conn. Splash guard for automobile rear fenders. 1,821,690; Sept. 1.

Callaway, Clarence R., assignor to Gurney Elevator Company, Inc., Honesdale, Pa. Automatic leveling device for elevators. 1,821,613; Sept. 1.

Calpin, Raymond, Everett, assignor to A. S. Campbell Company, East Boston, Mass. Latch. 1,821,879; Sept. 1.

Camel Company. (See Tobin, K. J., and Wasberg, assignors.)

Cameron Machine Company. (See Van Stry, Charles C., assignor.)

Campbell, A. S., Company. (See Calpin, Raymond, assignor.)

Campbell, Horace L., St. Louis, Mo. Aeroplane. 1,821,494; Sept. 1.

Canning, Eugene A., East Cleveland, assignor to Frank B. Stearns, Cleveland Heights, Ohio. Fuel injection valve. 1,821,790; Sept. 1.

Carbaugh, Conrad A., Dickeys Mountain, Pa. Adjusting stop for sawmill carriage head blocks. 1,821,421; Sept. 1.

Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)

Carley, Leonard R., Watertown, and F. R. White, assignors to The Patent Button Company, Waterbury, Conn. Flexible type button. 1,821,614; Sept. 1.

Carley, Leonard R., Watertown, and W. T. Abel, Waterville, assignors to The Patent Button Company, Waterbury, Conn. Fanciful button and making the same. 1,821,615; Sept. 1.

Carley, Leonard R., Watertown, and F. R. White, assignors to The Patent Button Company, Waterbury, Conn. Flexible type button. 1,821,616; Sept. 1.

Carns, Edmund B., New York, N. Y., assignor to Cairns Development Company, Wilmington, Del. Method and apparatus for shaping curved sheets. 1,820,936; Sept. 1.

Carne, Allen., New York, N. Y., assignor to American Telephone and Telegraph Company. Compression of frequency range. 1,821,004; Sept. 1.

Carpenter, Ivan S., Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo. Lubricating apparatus. 1,821,828; Sept. 1.

Carroll, Fred M., Yonkers, assignor to The Tabulating Machine Company, Endicott, N. Y. Group indicating flash mechanism. 1,821,088; Sept. 1.

Carroll, Fred M., Yonkers, assignor to The Tabulating Machine Company, Endicott, N. Y. Selective column tabulating machine. 1,821,089; Sept. 1.

Carroll, John T., assignor of forty-nine one-hundredths to S. B. Hunter, Tacoma, Wash. Fire extinguisher. 1,821,140; Sept. 1.

Cartier, Louis J., Budapest, Hungary, assignor to Cartier, Societe Anonyme, Paris, France. Malleable jewel mounted on a deformable basket-work. 1,821,791; Sept. 1.

Cartier, Louis J., Budapest, Hungary, and J. Toussaint, assignors to Cartier, Societe Anonyme, Paris, France. Jewelry. 1,821,792; Sept. 1.

Cartier, Societe Anonyme. (See Cartier, Louis J., assignor.)

Cartier, Societe Anonyme. (See Cartier, L. J., and Toussaint, assignors.)

Carver, Leo A., assignor, by mesne assignments, to The Paramount Fire Alarm Engineering Company, Cleveland, Ohio. Electric motor control system. 1,821,205; Sept. 1.

Case, J. I., Company. (See MacGregor, Wallace F., assignor.)

Casey, Dennis A., New Orleans, La. Card index system. 1,821,459; Sept. 1.

Caswell, Myron J., Sandusky, Ohio. Adjustable variable flow liquid dispensing nozzle. 1,821,206; Sept. 1.

Cawley, Michael J., assignor to M. M. Daniels, New York, N. Y. Burglar alarm switch device. 1,820,937; Sept. 1.

Central United National Bank, The. (See McKee, Willis, assignor.)

Ceskoslovenska Zbrojovka Akciova Spolecnost V Brne. (See Holek, Emanuel, assignor.)

Champagne, Joseph D., and G. R. Cunningham, Portland, Oreg. Flashlight. 1,820,960; Sept. 1.

Chaney, Newcomb K. (See Dittrick, C. H., and Chaney.)

Chase, Curtis D., Alston, Mass., assignor to Chase Holding Corporation. Snow melter. 1,821,292; Sept. 1.

Chase Holding Corporation. (See Chase, Curtis D., assignor.)

Chase, Lyle G., Plainfield, N. J., assignor to Yarnall-Waring Company, Philadelphia, Pa. Spray nozzle outlet. 1,821,542; Sept. 1.

Chase, March F. (See Skogmark, J., and Chase.)

Chemische Fabriek L. van der Grinten. (See van der Grinten, Karel, and L., assignors.)

Chemnitzer Strickmaschinen-Fabrick A. G. (See Sander, Paul E. B., assignor.)

Cheshire, Edward, St. Petersburg, Fla. Low slug attachment. 1,821,460; Sept. 1.

Chicago Electric Manufacturing Co. (See Preston, Edward S., assignor.)

Chiffey, Edward. (See George, J. I., and Chiffey.)

Chorley, Percy. (See Brightman, R., and Chorley.)

Christy, Robert T., New York, assignor to The Kurlash Company, Inc., Rochester, N. Y. Holder or appliance for cosmetics and the like. 1,821,141; Sept. 1.

Chudley, Leslie J., Oceanside, Calif. Automatic spool control for fishing reels. 1,821,461; Sept. 1.

Church, Harold D., assignor to The White Motor Company, Cleveland, Ohio. Clutch brake. 1,820,951; Sept. 1.

Circle F Mfg. Co. (See Petersen, Carl M., assignor.)

Clandrow, Frank F., New York, N. Y. Apparatus for roasting beans and seed. 1,820,938; Sept. 1.

Clapp, Albert L., Danvers, Mass. Paper manufacture. 1,820,962; Sept. 1.

Clar, Miguel, New York, N. Y. Signal device for vehicles. 1,821,691; Sept. 1.

Clark, Edgar M., New York, N. Y., assignor to Standard Oil Development Company. Manufacturing lubricating oil. 1,820,963; Sept. 1.

Clark, Ota A., Jens, Mont. Ax scabbard. 1,821,258; Sept. 1.

Clayborn, Norman F., Decatur, Ga. Marcel wave wrapper clamp. 1,821,738; Sept. 1.

Cleveland Heater Company. (See Te Pas, Edmund J., assignor.)

Cloer, Venus U. (See Sims, W. F., and Cloer.)

Cloutier, Arthur N. (See Lawson, R. H., and Cloutier.)

Cochran, Joseph T., Chicago, Ill. Sign. 1,820,964; Sept. 1.

Coe, Clifton P. (See Coe, Harlan and C. P.)

Coe, Harlan, Spokane, and C. P. Coe, Plaza, Wash. Grain drill disk. 1,821,829; Sept. 1.

Cohen, David G., Brooklyn, N. Y. Combined radio phonograph recorder, phonograph, radio and circuit therefor. 1,821,495; Sept. 1.

Cohen, David G., Brooklyn, N. Y. Radio and sound reproducing and recording device. 1,821,496; Sept. 1.

Cohen, Louis, Washington, D. C. Radiosignaling. 1,821,906; Sept. 1.

Colella, Louis, Detroit, Mich. Riding device. 1,821,462; Sept. 1.

Coles, Henry L. (See Donaldson, J. C., and Coles.)

Collins, Carroll B., Pittsburgh, Pa., assignor to The Koppers Company. Gas purification apparatus. 1,821,090; Sept. 1.

Colman, Barbara. (See Morel, Louise, assignor.)

Colson Company, The. (See Johnson, Wilfred G., assignor.)

Colson Company, The. (See Roe, De Forest, assignor.)

Colton, Arthur, Company. (See Kath, Alfred W., assignor.)

Columbus Auto Brass Company. (See Frame, Augustus J., assignor.)

Compagnie de Produits Chimiques et Electrometallurgiques Alais, Froges et Camarque. (See Baget, Léon, assignor.)

Condit Electrical Manufacturing Corporation. (See Burnham, George A., assignor.)

Cone, Carroll, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for forming and annealing sheet glass. 1,821,617; Sept. 1.

Conley, Charles E., Norwich, Conn., assignor to Downingtown Manufacturing Company, Downingtown, Pa. Suction roll. 1,821,793; Sept. 1.

Conn, C. G., Ltd. (See Loomis, Allen, assignor.)

Connery Alder F., Brooklyn, assignor to International Communications Laboratories, Incorporated, New York, N. Y. Synchronizer for rotary devices. 1,821,497; Sept. 1.

Connick, Raymond J., Fairport, N. Y. Rerailer. 1,821,880; Sept. 1.

Continental Oil Company. (See Langford, C. T., and Teplitz, assignors.)

Continental Stove Corporation. (See Hasting, Elmer G., assignor.)

Cooling & Air Conditioning Corporation, The. (See Fleisher, Walter L., assignor.)

Cooper, James W., Edgewood, assignor to Pilgrim Plush Company, Providence, R. I. Plush fabric. 1,821,498; Sept. 1.

Copeland, George A., Rochester, N. Y. Packing case. 1,821,692; Sept. 1.

Coppock, Fred D., Greenville, Ohio. Portable stacker. 1,821,881; Sept. 1.

Corey, Elmer O., Norwood, assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio. Gauge cock. 1,821,422; Sept. 1.

Cornell Bag Corporation. (See Cornell, John E., assignor.)

Cornell, John E., Chicago, Ill., assignor, by mesne assignments, to Cornell Bag Corporation. Bag. 1,821,207; Sept. 1.

Coseo, Frederick C., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley harp. 1,821,424; Sept. 1.

Coseo, Frederick C., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley harp. 1,821,425; Sept. 1.

Cottonwood Fiber Company. (See Loepfe, Charles M., assignor.)

Couch, S. H., Company. (See Morrison, Archie T., assignor.)

Coultas, Wilbur J., assignor to Deere & Company, Moline, Ill. Clutch mechanism. 1,821,543; Sept. 1.

Cowan, Frank A., East Orange, N. J., assignor to American Telephone and Telegraph Company. Gain measuring apparatus. 1,821,005; Sept. 1.

Cramer, Albert M., Philadelphia, Pa. Coin mechanism for vending machines. 1,821,740; Sept. 1.

Cramer, Albert M., assignor to Horn and Hardart Baking Company, Philadelphia, Pa. Coin mechanism for coin controlled vending machines. 1,821,739; Sept. 1.

Creamery Package Mfg. Company, The. (See Williams, George W., assignor.)

Creed and Company. (See Willson, E. A., Woodman, and Greig, assignors.)

Crisson, George, East Orange, N. J., assignor to American Telephone and Telegraph Company. Measurement of negative resistance. 1,821,006; Sept. 1.

Cross, Louise, assignor to Frankart, Inc., New York, N. Y. Lamp or similar article. Des. 84,978; Sept. 1.

Cross, Roy, Kansas City, Mo. Obtaining phenols from coal tar distillates. 1,820,908; Sept. 1.

Crouse-Hinds Company. (See Bissell, Carl H., assignor.)

Crouse-Hinds Company. (See Olley, Raymond H., assignor.)

Crowley, Joseph P., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for the manufacture of sheet glass. 1,821,618; Sept. 1.

Crumpton, Kenneth R., assignor to Kaufmann Department Stores, Inc., Pittsburgh, Pa. Vertical corner illuminating means. 1,821,693; Sept. 1.

Culver, Lazar R., Los Angeles, assignor of one-half to J. W. and E. F. Prillaman, Vista, Calif. Dipper door latch release. 1,821,499; Sept. 1.

Cunningham, Gordon R. (See Champagne, J. D., and Cunningham.)

Curr, Robert, Portsmouth, Va. Ship construction. 1,821,882; Sept. 1.

Curtis, George L. (See Goodenow, Roy S., assignor.)

Cushing, Daniel, Cambridge, Mass. Tuyère block for metallurgical furnaces. 1,821,175; Sept. 1.

Cusick, Hyland L., Pittsburgh, Pa. Key-holder. 1,821,377; Sept. 1.

Cutler-Hammer, Inc. (See Date, William E., assignor.)

Dahlberg, Henry W., Denver, Colo. Barium silico-ferrite and preparing the same. 1,821,208; Sept. 1.

Dahlgren, Sven A. B. (See Andersson, G. H., and Dahlgren.)

Dalton Co., The. (See Dalton, Edward, assignor.)

Dalton, Edward, Alton, Ill., assignor to The Dalton Co. Container. 1,821,741; Sept. 1.

Daniels, Maurice. (See Wright, Harry P., assignor.)

Daniels, Mildred M. (See Cawley, Michael J., assignor.)

Dans, Bernard D. (See Fleischer, P. W., Feybusch Hammer, and Dans.)

Danthine, Karl, Bern, assignor to H. Surber, Zurich, Switzerland. Machine gun. 1,821,463; Sept. 1.

Darrah, William A., Chicago, Ill. Apparatus for making boards. 1,821,209; Sept. 1.

Date, William E., East Orange, N. J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Motor controller. 1,821,091; Sept. 1.

Davies, Daniel B., Llanishen, Cardiff, and W. Daniel Griffiths, Cardiff, Wales. Block for road surface markings. 1,821,052; Sept. 1.

Davies, Guy C., Rockford, Ill., and D. G. Griswold, Los Angeles, Calif., assignors of forty per cent to said G. C. Davis, Rockford, and sixty per cent to H. L. Offenhiser, Pearl City, Ill. Folding table and bench. 1,821,259; Sept. 1.

Davis, Frederick W., Kansas City, Mo., deceased; R. A. Davis, administratrix. Shock absorber. 1,821,142; Sept. 1.

Davis, Guy C., et al. (See Davis, G. C., and Griswold, assignors.)

Davis, Rebecca A., administratrix. (See Davis, Frederick W., assignor.)

Davol, Harry A., Methuen, Mass., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Friction device for shuttles. 1,821,830; Sept. 1.

Dawley, Archie N., Tonkawa, Okla. Pumping apparatus. 1,821,143; Sept. 1.

Day, Roland B., Los Angeles, Calif. Bubble-cap. 1,821,619; Sept. 1.

Day, William H., East Haven, Conn., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Index or file. 1,821,293; Sept. 1.

Dayton Beater and Hoist Company. (See Folsom, Clarence P., assignor.)

Dayton Scale Company. (See Bryce, James W., assignor.)

Debeau, Maurice A., and H. L. Robson, Westend, Calif., assignor to Burnham Chemical Company, Reno, Nev. Obtaining borax from brines. 1,821,092; Sept. 1.

De Boer, John, Corsica, S. Dak. Tractor. 1,821,007; Sept. 1.

Deere & Company. (See Coultas, Wilbur J., assignor.)

Deere & Company. (See Paul, William L., assignor.)

Deere & Company. (See Strandlund, Carl G., assignor.)

Defibaugh, Mark A., assignor to Altorfer Bros. Company, Peoria, Ill. Washing machine. 1,821,544; Sept. 1.

Delacour, Henry M., Albany, N. Y., assignor to New York, Power & Light Corporation, Albany, N. Y. Garbage incinerator and process. 1,821,620; Sept. 1.

De Laval Separator Company, The. (See Andersson, G. H., and Dahlgren, assignors.)

De Liso, Vincent, Astoria, assignor to Saks & Co., New York, N. Y. Shoe. Des. 84,979; Sept. 1.

De Liso, Vincent, Astoria, assignor to Saks & Co., New York, N. Y. Shoe. Des. 84,980; Sept. 1.

Denning, Rufus R., Pueblo, Colo. Putty remover. 1,821,742; Sept. 1.

Dennison, Frank G., Newton, assignor to Spraco, Inc., Somerville, Mass. Spray table. 1,821,694; Sept. 1.

Dentists' Supply Company, The. (See Gibson, Albert E., assignor.)

Deutsche Gold-und Silber-Scheideanstalt vormals Roessler. (See Róka, Koloman, assignor.)

De Yes, Leonard. (See Laraway, William H., assignor.)

De Witt, William J., Auburn, assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,821,695; Sept. 1.

D'Hallcy, Audoin, Paris, France, assignor to International Safety Lock Nut Corporation, New York, N. Y. Lock nut. 1,820,965; Sept. 1.

Dickson, John V. E., Woodcliff-on-Hudson, N. J., assignor to The Barrett Company. Distillation process. 1,821,144; Sept. 1.

Dieter, Paul W., New York, N. Y. Pipe anchor and clamp. 1,821,294; Sept. 1.

Dieter, Paul W., New York, N. Y. Pipe anchor and clamp. 1,821,295; Sept. 1.

Dietz, Harold M., and S. E. Kary, Chicago, Ill. License plate holder. 1,821,053; Sept. 1.

Dillard, James E., Midlothian, Tex. Kapok product and making the same. 1,821,378; Sept. 1.

Dion, Frank J., Boston, Mass. Sealing device. 1,821,145; Sept. 1.

Dittrick, Clarence H., and N. K. Chaney, Lakewood, Ohio, assignor to National Carbon Company, Inc. Dry cell battery. 1,821,008; Sept. 1.

Dobrick, August C., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill. Wash basin fixture. 1,821,260; Sept. 1.

Doman, Albert E., assignor to Mando Company, Incorporated, Elbridge, N. Y. Electric motor. 1,821,911; Sept. 1.

Donaldson, Joseph G., and H. L. Coles, assignors to Guardian Metals Company, Hamilton, Ohio. Metallic refractory material. 1,820,966; Sept. 1.

Doughnut Machine Corporation. (See Broeg, William E., assignor.)

Doughty, Glenn A., and H. A. Johnston, Anaheim, Calif. Balanced gate valve. 1,821,054; Sept. 1.

Doversplke, Philip B. (See McMeans, Frank L., assignor.)

Dow Chemical Company, The. (See Griswold, Thomas, jr., assignor.)

Downes, John H. (See Hasley, William G., assignor.)

Downing, Edwin J., assignor to Gardner-Denver Company, Denver, Colo. Slip rotation for rock drills. 1,821,794; Sept. 1.

Downingtown Manufacturing Company. (See Conley, Charles E., assignor.)

Downingt wn Manufacturing Company. (See Kilberry, George D., assignor.)

Drake, Russell P., assignor to Barber-Colman Company, Rockford, Ill. Skein lacing machine. 1,821,545; Sept. 1.

Draper, Merritt S., Upland, Ind. Extension attachment for two row corn planters. 1,821,009; Sept. 1.

Drayage Service Corporation. (See Scott, William P., assignor.)

Drenning, Percy R., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md. Truck bolster with spring supported side bearings. 1,821,296; Sept. 1.

Dreyfus, Henry, London, England. Treatment of yarns, fabrics, films, and the like. 1,821,464; Sept. 1.

Dreyhaupt, Rudolf, Berlin, Germany. Method and device for turning out the rings of roller bearings and similar groundrings. 1,821,743; Sept. 1.

Driggs, Frank H., Bloomfield, and J. W. Marden, East Orange, N. J., assignor to Westinghouse Lamp Company. Preparing rare refractory metals. 1,821,176; Sept. 1.

Driscoll, Arthur, Tucson, Ariz. Cooling, heating, ventilating, and humidifying system. 1,821,297; Sept. 1.

Drucker, Samuel B., Brooklyn, N. Y. Making mayonnaise. 1,820,909; Sept. 1.

Drummond, Edwin D., Jacksonville, Fla. Ventilated door. 1,821,744; Sept. 1.

Dubilier Condenser Corporation. (See Dubilier, William, assignor.)

Dubilier, William, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,821,055; Sept. 1.

Dudley, Mrs. Elaine A. (See Isaacs, Lida S., assignor.)

Duff, Ralph A., Nebraska City, Nebr. Attachment for internal combustion engines. 1,821,745; Sept. 1.

Dugdale, Richard M. (See Thompson, R. E., and Dugdale.)

Du Grenier, Arthur H., Haverhill, Mass. Vending machine. 1,821,501; Sept. 1.

Dumm, Howard, and J. R. Russell, Long Beach, Calif. Hydraulic plug and whipstock. 1,821,426; Sept. 1.

Dunn, Edward L., East Orange, assignor to Otis Elevator Company, Jersey City, N. J. Indicator for elevators. 1,821,500; Sept. 1.

Du Pont Ammonia Corporation. See Woodhouse, John C., assignor.)

Du Pont, E. I., de Nemours & Company. (See Babbitt, Henry K., assignor.)

Du Pont, E. I., de Nemours & Company. (See Reid, Ebenezer E., assignor.)

Durand, Nelson C., East Orange, assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Combined stand and filing device. 1,821,621; Sept. 1.

Durham, Kenneth P., Seattle, Wash., assignor to Morris & Bogher, Inc. Discharge opening and closure for concrete mixers. 1,821,056; Sept. 1.

Dur-O-Lite Pencil Company. (See Kerran, Charles R., assignor.)

Dutro, Leslie C., Long Beach, Calif. Lubricator. 1,821,010; Sept. 1.

Dysert, Charles F., Johnstown, Pa. Aeroplane kite. 1,821,465; Sept. 1.

E.-K. Medical Gas Laboratories, Incorporated. (See Horner, A. P., and Gardenier, assignors.)

Eastwood Wire Corporation. (See Webb, Nelson W., assignor.)

Eberhart, Warren B. (See Bowman, P. J. and W. F., assignors.)

Eclipse Machine Company. (See McGrath, William L., assignor.)

Eclipse Textile Devices, Inc. (See Hasbrouck, Louis B., assignor.)

Eclipse Textile Devices, Inc. (See Mann, John V., assignor.)

Edge, Walter S., Westfield, N. J. Metal rod for building construction, etc. 1,821,696; Sept. 1.

Edison, Thomas A., Incorporated. (See Durand, Nelson C., assignor.)

Edison, Thomas A., Incorporated. (See Neef, Adolph J., assignor.)

Edison, Thomas A., Incorporated. (See Payne, P. D., and Iversen, assignors.)

Edna Brass Manufacturing Company, The. (See Corey, Elmer O., assignor.)

Edwards, William K., Big Spring, Tex. Tank valve. 1,821,622; Sept. 1.

Egloff, Gustav, Independence, Kans., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for cracking oil. 1,821,746; Sept. 1.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking oil. 1,821,747; Sept. 1.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Hydrocarbon oil conversion. 1,821,748; Sept. 1.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking oil. 1,821,749; Sept. 1.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking oil. 1,821,750; Sept. 1.

Elder, Archie G., Seattle, Wash. Reference holder. 1,821,427; Sept. 1.
Electric Progress Company. (See Sporn, P., and Freitag, assignors.)
Electro Metallurgical Company. (See Becket, Frederick M., assignor.)
Ellis, Arthur L., New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn. Controlling apparatus for variable speed transmissions. 1,821,502; Sept. 1.
Ellis, Ruby K., et al., administrators. (See Koenig, Joseph.)
Ellis, William R., Washington, D. C. Agitating cutter for dredges. 1,821,177; Sept. 1.
Ellsworth, Irving H., Orrville, Ohio. Leather mellowing cabinet. 1,821,210; Sept. 1.
Emmerich, John H., Rosedale, assignor to H. S. Holmes, New York, N. Y. Light condensing optical system. 1,821,623; Sept. 1.
Emmons, Arthur N., Nedrow, assignor to The Porter-Cable Machine Company, Syracuse, N. Y. Sandpapering machine. 1,821,624; Sept. 1.
Emmott, Willie. (See Boughton, E. B., Emmott, Brock, and Burdon.)
Engelmann, Max. (See Hoffmann, K., and Engelmann.)
Engineering Products Corporation. (See Sprong, Severn D., assignor.)
Enock, Arthur G., Wembley Park, England. Apparatus for transferring bottles or containers from one level to another. 1,821,883; Sept. 1.
Enyeart, James F., Denver, Colo. Toy motor. 1,820,967; Sept. 1.
Epstein, Barnett, New York, N. Y. Pocketbook. 1,821,379; Sept. 1.
Erban Patents Corporation. (See Erban, Richard, assignor.)
Erban, Richard, assignor to Erban Patents Corporation, New York, N. Y. Gearing for transmitting rotary motions. Re18,175; Sept. 1.
Erdman, Peter M., Los Angeles, Calif. Oil tank cleansing device. 1,821,503; Sept. 1.
Eriksson, August E., Dals Lerdal, Sweden. Sieve. 1,821,261; Sept. 1.
Euclid Crane & Hoist Company, The. (See Armington, Arthur P., assignor.)
Euclid Crane & Hoist Company, The. (See Juergens, Winfred H., assignor.)
Evans, Guy J., Buffalo, N. Y. Stencil sheet holder. 1,820,968; Sept. 1.
Everwear Manufacturing Company, The. (See Hoppes, Charles E., assignor.)
Fairbanks, Morse & Co. (See Heath, W. C., and Hobart, assignors.)
Fairbanks, Morse & Co. (See Hobart, Franklin G., assignor.)
Fairchild Aerial Camera Corporation. (See Briechle, Ambrosius, assignor.)
Farnik, John A., St. Louis, Mo. Rumble seat top. 1,821,884; Sept. 1.
Farrington & Evans, Inc. (See Silver, Maxwell, assignor.)
Fausch, Clarence. (See Thorp, J. R., and Fausch.)
Fedco System, Inc. (See Povalski, Bernard J., assignor.)
Federal Telegraph Company. (See Fisher, Gerhard R., assignor.)
Federal Telegraph Company. (See Kolster, F. A., and Kruesi, assignors.)
Federal Telegraph Company. (See Kolster, Frederick A., assignor.)
Federal Telegraph Company. (See Pierce, Leo F., assignor.)
Feiler, Saul, New York, N. Y. Woven body for decorative articles and the like. 1,821,504; Sept. 1.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Ornament and attachment therefor. 1,821,428; Sept. 1.
Ferreira, Charles E., Oakland, Calif. Reclining chair. 1,821,298; Sept. 1.
Ferreira, Charles E., Oakland, Calif. Reclining seat. 1,821,299; Sept. 1.
Ferreira, Charles E., Oakland, Calif. Chair for motor busses. 1,821,429; Sept. 1.
Ferris, William D., Sterling, assignor to Frantz Manufacturing Co., Sterling, Ill. Combined door hanger and hinge. 1,821,697; Sept. 1.
Feybusch, Martin. (See Fleischer, P. W., and Feybusch.)
Feybusch, Martin. (See Fleischer, P. W., Feybusch, Hammer, and Dans.)
Fiat Societa Anonima. (See Rosatelli, Celestino, assignor.)
Fibre Conduit Company, The. (See Wehman, Frederick G., assignor.)
Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc. Holder for metal wool or the like. 1,821,505; Sept. 1.
Figlear, John T., Buffalo, N. Y. Combined brake and pulley attachment for vehicles. 1,821,625; Sept. 1.
First National Bank of Chattanooga, The. (See Leventhal, Jacob F., assignor.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Packaging sealing means for constructional material. 1,821,885; Sept. 1.
Fisher, Gerhard R., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Light indicating system and method. 1,821,698; Sept. 1.
Fisher, Lewis J., Reedsburg, Wis. Oil burner. 1,821,752; Sept. 1.
Fisher, Martin M., Seattle, assignor, by mesne assignments, to Hassett Brake Company, Yakima, Wash. Hydraulic brake. 1,821,178; Sept. 1.
Fleck, Philip H., assignor of one-third to R. M. Akin and one-third to J. Royle, Ossining, N. Y. Low water and pressure governor. 1,821,699; Sept. 1.
Fleckenstein, Roger J. (See Baker, F. C., Fleckenstein, and Landman.)
Fleischer, Fritz, Weimar, Germany. Producing projection pictures. 1,821,626; Sept. 1.
Fleischer, Paul W., Weehawken, N. J., and M. Feybusch, Brooklyn, N. Y., assignors to New Jersey Machine Corporation, Hoboken, N. J. Paper box making machinery. 1,821,700; Sept. 1.
Fleischer, Paul W., Weehawken, N. J., M. Feybusch, F. J. Hammer, New York, and B. D. Dans, Brooklyn, N. Y., assignors to New Jersey Machine Corporation, Hoboken, N. J. Box making machinery. 1,821,701; Sept. 1.
Fleisher, Walter L., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y. Heating and humidification system and apparatus. 1,821,886; Sept. 1.
Flexible Truck Corporation. (See Taylor, Howard D., assignor.)
Flintermann, Gerhard, West Orange, N. J. Container for toilet accessories. Des. 84,981; Sept. 1.
Foli, John V., Croydon, England. Telegraphic communicating system. 1,821,146; Sept. 1.
Folsom, Clarence P., assignor to Dayton Beater and Hoist Company, Dayton, Ohio. Drier tank. 1,821,907; Sept. 1.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Cowl molding. 1,821,147; Sept. 1.
Ford Motor Company. (See Ford, Henry, assignor.)
Ford Motor Company. (See Galamb, Joseph, assignor.)
Ford Motor Company. (See Sorensen, Charles E., assignor.)
Ford Motor Company. (See Wharam, John J., assignor.)
Fotheringham, Ignacio H., Rio Cuarto, Argentina. Type of articulated and dismountable lifting jack. 1,821,627; Sept. 1.
Foulder, Henry B., Glenbrook, Conn. Bag tying machine. 1,821,506; Sept. 1.
Fowle, Frank F., Kenilworth, Ill., assignor to Indiana Steel & Wire Company, Muncie, Ind. Wire cable. 1,821,887; Sept. 1.
Fowle, Frank F., Kenilworth, Ill., assignor to Indiana Steel & Wire Company, Muncie, Ind. Composite wire cable. 1,821,908; Sept. 1.
Frame, Augustus J., assignor to Columbus Auto Brass Company, Columbus, Ohio. Automobile head lamp visor. Des. 84,982; Sept. 1.
Frankart, Inc. (See Cross, Louise, assignor.)
Franklin, Charles S., Buckhurst Hill, England, assignor to Radio Corporation of America. Transmitting or receiving aerial system for wireless telegraphy or telephony. 1,821,380; Sept. 1.
Franklin Railway Supply Company. (See Titus, Hubert J., assignor.)
Frantz Manufacturing Co. (See Ferris, William D., assignor.)
Frederick, Clarence H., Kenosha, Wis., assignor to C. L. Smythe, Chicago, Ill. Spike making machine. 1,821,888; Sept. 1.
Freeman, Ernest B., Newton, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Conductor for heat exchange apparatus. 1,821,702; Sept. 1.
Freitag, Henry D. (See Sporn, P., and Freitag.)
Fresh-Keeping Package Corporation. (See McCrosson, John T., assignor.)
Friedhelm, Leon J., St. Louis, Mo. Buckle. 1,820,969; Sept. 1.
Friedlaender, Walther, Ridgewood, N. J. Apparatus for and method of printing or embossing pencils. 1,821,337; Sept. 1.
Friend, Benjamin B., Burbank, Calif. Rocker chair. Des. 84,983; Sept. 1.
Frosted Foods Company. (See Barry, James J., assignor.)
Fullmer, Giles C., assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn. Focusing spotlight. 1,821,430; Sept. 1.
Fulton Company, The. (See Thorp, Joel R., assignor.)
Fulton Company, The. (See Thorp, J. R., and Fausch, assignors.)
G. & G. Atlas Systems, Inc. (See Stoetzel, Joseph J., assignor.)
Gagen, Charles H., New York, N. Y., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Double passage filter and closure for the same. 1,821,211; Sept. 1.
Gall, John F., Evanston, Ill. Combined inkwell and pen support. 1,821,179; Sept. 1.
Gains, Chester R., Muscatine, Iowa. Reminder clock. 1,821,628; Sept. 1.
Gains, Chester R., Muscatine, Iowa. Time controlled switch. 1,821,629; Sept. 1.
Galamb, Joseph, Detroit, assignor to Ford Motor Company, Dearborn Mich. Door latch. 1,821,148; Sept. 1.
Gale, Ewart I., Markham, Ontario, Canada. Page-end signaling device. 1,821,831; Sept. 1.
Gallup, Dana T., Cambridge, Mass. Badge. Des. 84,984; Sept. 1.

Gallup, David L., assignor to Bendix Brake Company, South Bend, Ind. Brake shoe connecting means. 1,821,149; Sept. 1.
Gamble, David E., assignor to The Borg & Beck Company, Chicago, Ill. Friction clutch. 1,821,150; Sept. 1.
Gammell, Ove L., and R. W. Woodward, assignors to Smith & Crosby, Attleboro, Mass. Bracelet construction. 1,821,507; Sept. 1.
Gardenier, Clyde B. (See Hornor, A. P., and Gardenier.)
Gardner-Denver Company. (See Carpenter, Ivan S., assignor.)
Gardner-Denver Company. (See Downing, Edwin J., assignor.)
Gardner-Denver Company. (See Gustafson, Hjalmer C., assignor.)
Gardner-Denver Company. (See Terry, Edward F., jr., assignor.)
Gardner, Grandison, Honolulu, Hawaii. Diving bomb sight. 1,821,431; Sept. 1.
Gardner, Herschel L. (See Lewis, Edward D., assignor.)
Garrett, Charles H., and B. G. Herber, Dallas, Tex. Regulator for sound reproducing and synchronizing machines. 1,821,630; Sept. 1.
Garson, Thorvald N., New Brighton, N. Y. Brake control for turret cranes. 1,821,338; Sept. 1.
Gavin, Gordon P., assignor to Kohler Company, Kohler, Wis. Siphon jet closet. 1,821,300; Sept. 1.
Gay, Frazer W., Newark, N. J. Refrigerating method and machine. 1,821,508; Sept. 1.
Gay, Frazer W., Newark, N. J. Thermal refrigerator. 1,821,509; Sept. 1.
Gaynor, Arthur C., Stratford, Conn. Electric switch. 1,821,180; Sept. 1.
Gearhart, Joseph W., Chicago, Ill. Type storing and delivering apparatus. 1,821,631; Sept. 1.
Geib, George A., St. Paul, Minn. Attachment for cigarette packages. 1,821,795; Sept. 1.
Geigy, J. R., S. A. (See Laeuger, Paul, assignor.)
General Alloys Company. (See McCormick, George C., assignor.)
General Aniline Works, Inc. (See Kugel, Max, assignor.)
General Aniline Works, Inc. (See Nusselein, Joseph, assignors.)
General Aniline Works, Inc. (See Schirmacher, K., and Schlichenmaier, assignors.)
General Aniline Works, Inc. (See Steiger, Norbert, assignor.)
General Aniline Works, Inc. (See Tesche, H., and Job, assignors.)
General Aniline Works, Inc. (See Weinand, Klaus, assignor.)
General Electric Company. (See Allen, Horace C., assignor.)
General Electric Company. (See Alles, Kurt, assignor.)
General Electric Company. (See Black, Cadelle H., assignor.)
General Electric Company. (See Brandenstein, Errol W., assignor.)
General Electric Company. (See Glidden, Everett, G., assignor.)
General Electric Company. (See Hill, Charles H., assignor.)
General Electric Company. (See Hull, Albert W., assignor.)
General Electric Company. (See Hull, Edwin H., assignor.)
General Electric Company. (See Huyette, Kenneth H., assignor.)
General Electric Company. (See Konn, Felix, assignor.)
General Electric Company. (See Miner, Roy B., assignor.)
General Electric Company. (See Newman, Delbert F., assignor.)
General Electric Company. (See Nicle, Clifford A., assignor.)
General Electric Company. (See Otaka, Yoshiro, assignor.)
General Electric Company. (See Schwarzhaupt, Paul J., assignor.)
General Electric Company. (See Title, Hulbert C., assignor.)
General Electric Company. (See Touly, Marcel L., assignor.)
General Industries Company. (See Bonsieur, L., assignor.)
Genest, Homer A., Danbury, Conn., assignor to United States Hat Machinery Corporation, New York, N. Y. Apparatus for and method of shrinking, etc., felt articles. 1,821,432; Sept. 1.
George, James S., and R. S. Sperry, assignors to Scovill Manufacturing Company, Waterbury, Conn. Article supporting rack. 1,821,546; Sept. 1.
George, John L., Hayes, and E. Chiffey, South Harrow, England, assignors by mesne assignments, to Radio Corporation of America, New York, N. Y. Talking machine. 1,821,632; Sept. 1.
Gerken, Bert B., Stockton, Calif. Toy gun. 1,821,381; Sept. 1.
Gerrard Company, The. (See McChesney, John S., assignor.)
Gesellschaft fur Drahtlose Telegraphie m. b. H. (See von Arco, Georg, assignor.)
Gesellschaft fur Linde's Eismaschinen A. G. (See Linde, Richard, assignor.)
Geuder, Paeschke & Frey Company. (See Kunkel, Frederick H., assignor.)
Gibson, Albert E., Springfield, Pa., assignor to The Dentists' Supply Company, New York. Pin for artificial teeth. 1,821,301; Sept. 1.
Gibson, George H., Upper Montclair, N. J. Combustion regulation. 1,820,939; Sept. 1.
Gibson, George H., Upper Montclair, N. J. Combustion control. 1,820,940; Sept. 1.
Gillette Safety Razor Company. (See Parry, William H., assignor.)
Gillette Safety Razor Company. (See Thompson, R. E., and Dugdale, assignors.)
Gillette-Vibber Company. (See Potter, James T., assignor.)
Gilmore, Mrs. George D. (See Isaacs, Lida S., assignor.)
Gilowitz, Benjamin, New York, N. Y. Composite shoe heel. 1,821,633; Sept. 1.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Car construction. 1,821,151; Sept. 1.
Girin, Antoine, Lyon, assignor to Albert M. J. Petronio, Nice, France. Carburetor. 1,821,909; Sept. 1.
Givens, Howard M., Abington, Pa. Rolling alloy steel. 1,821,382; Sept. 1.
Ginhe, Fred, Chicago, Ill., assignor to A. G. Spaulding & Bros., New York, N. Y. Hockey stick. 1,821,889; Sept. 1.
Glass, Samuel R. (See Beal, George W., assignor.)
Gleason Works. (See McMullen, Frederick E., assigner.)
Glidden, Everett G., Schenectady, N. Y., assignor to General Electric Company. Winding spool body. 1,821,796; Sept. 1.
Godefroy, Alexandre F., Los Angeles, Calif. Loading aircraft. 1,821,057; Sept. 1.
Goerig, Ernst., Mannheim, and Heinrich Lindhorst, Berlin, Germany. Hardening furnace with continuously operated charging device. 1,821,832; Sept. 1.
Goldsmith, Alfred N., New York, N. Y., assignor to Radio Corporation of America. Statistical directional transmitter. 1,821,383; Sept. 1.
Golhick, Paul A. and F. W. Broderick, assignors, by mesne assignments, to Selectograph Company, Chicago, Ill. Printing mechanism for addressing machines. 1,820,970; Sept. 1.
Gonzalez, Julio, Jersey City, N. J. Gas burner. 1,821,797; Sept. 1.
Goodenow, Roy S., Chicago, Ill., assignor of one-half to George L. Curtis, Clinton, Iowa. Gum resin compound. 1,821,703; Sept. 1.
Gookin, Sylvester L., Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Punching and fastener-inserting apparatus. 1,821,151; Sept. 1.
Görner, Arthur, assignor to the Firm: Plüschweberei Grefrath Aktiengesellschaft, Grefrath near Krefeld, Germany. Apparatus for printing colored patterns on plush fabrics or the like. 1,821,302; Sept. 1.
Goss, Henry F., Sacramento, Calif. Carrying fork attachment for clay products. 1,821,798; Sept. 1.
Grabler, Peter, Rocky River, and W. Grabler, Mansfield, Ohio. Flush valve. 1,821,799; Sept. 1.
Grabler, William. (See Grabler, P. and William.)
Graeff, Charles M., Harrisburg, Pa. Mail bag parachute. 1,821,433; Sept. 1.
Grannt, Joseph, San Francisco, Calif. Finger ring. Des. 84,985; Sept. 1.
Granger, Paul H., Los Angeles, Calif. Impact bit. 1,821,212; Sept. 1.
Grass, William, Roslyn Heights, N. Y. Method and apparatus for preparing lithographic printing plates. 1,821,466; Sept. 1.
Grauer, Albert. (See Bruner, R. W., and Grauer.)
Green, Charles W. Ilion, N. Y., assignor to Remington Arms Company, Inc. Cash register. 1,821,339; Sept. 1.
Green, Sherwood, assignor to American Cotton Machinery Co., Berkeley, Calif. Drying apparatus. Re18,172; Sept. 1.
Greene, Gerald U., Salt Lake City, Utah, assignor to American Smelting and Refining Company, New York, N. Y. Separation of metals. 1,821,634; Sept. 1.
Greenlaw, Burpee D., assignor to The Brown Bag Filling Machine Company, Fitchburg, Mass. Rip string envelope. 1,821,011; Sept. 1.
Greig, Emile. (See Willson, E. A., Woodman, and Greig.)
Greiling, David J., Cleveland Heights, assignor to The Bishop-Babcock Manufacturing Co., Cleveland, Ohio. Refrigerating cabinet. 1,821,093; Sept. 1.
Grennan Bakeries, Inc. (See Marsh, Henry, assignor.)
Griffin, Joseph F., Teaneck, N. J., and A. Williams, Flushing, assignors to The Superheater Company, New York, N. Y. Exhaust steam injector. 1,821,153; Sept. 1.
Griffiths, William D. (See Davies, D. B., and Griffiths.)
Griswold, Donald G. (See Davis, G. C., and Griswold.)
Griswold, Thomas, Jr., assignor to The Dow Chemical Company, Midland, Mich. Making phenols. 1,821,800; Sept. 1.
Grossman, Wallace G., White Plains, N. Y. Flexible seat folding chair. 1,821,704; Sept. 1.
Grover, William F., et al., trustees. (See Pratt, Harry P., assignor.)
Grunefeldt, Emil, Cleveland, Ohio. Shock absorber. 1,820,971; Sept. 1.
Guerdian Metals Company. (See Donaldson, J. G., and Coles.)

Gubelmann, I., J. B. Oesch, South Milwaukee, and E. Havas, Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation. Bromination products of 4,4'-dimethyl-6,6'-dichloro-thio-indigo, and process of making the same. 1,821,705; Sept. 1.

Guilbert, Paul, Rouen, and J. Legrand, St. Mande, France. Special motor driven car with several cranes driven from one point for the mechanical laying and removing of the elements of railroad tracks. 1,821,340; Sept. 1.

Gundelsen, George. (See Soderberg, Erik A., assignor.)

Gunn, Ross, Washington, D. C. Method and apparatus for transferring electrical energy. 1,821,181; Sept. 1.

Gurney Elevator Company. (See Callaway, Clarence R., assignor.)

Gusdorf, Harold M., Indianapolis, Ind. Pigskin innersole. 1,821,213; Sept. 1.

Gustafson, Hjalmer C., assignor to Gardner-Denver Company, Denver, Colo. Fluid operated tool. 1,821,801; Sept. 1.

Gustin, Daniel S., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Arc quenching device. 1,821,214; Sept. 1.

Guthrie, William S., assignor to Marvel Carbureter Company, Flint, Mich. Carburetor. 1,821,012; Sept. 1.

Haas, Lucien L., assignor to Buffalo Pressed Steel Company, Buffalo, N. Y. Muffler. 1,820,972; Sept. 1.

Hadley, Art, assignor to The Hadley Company, Inc., Providence, R. I. Making bracelet links. 1,821,058; Sept. 1.

Hadley Company, The. (See Hadley, Art, assignor.)

Haefely, Emil, Basel, Switzerland. Electrical condenser. 1,821,803; Sept. 1.

Hahn, Clarence J., Buffalo, N. Y. Flexible coupling. 1,821,215; Sept. 1.

Haines Hosiery Mills Inc. (See Haines, Joseph, jr., assignor.)

Haines, Joseph, jr., Meadowbrook, assignor to Haines Hosiery Mills Inc., Philadelphia, Pa. Welt closing mechanism for full fashioned hosiery machines. 1,821,154; Sept. 1.

Hall-Neal Furnace Company. (See Burroughs, Clark L., assignor.)

Hamilton Beach Manufacturing Company. (See Nielsen, Emanuel, assignor.)

Hamilton, Charles W. (See Leitch, D. C., and Hamilton.)

Hamilton, Erwin H., Riverdale, N. Y. Cooling fin for internal combustion engines. 1,821,434; Sept. 1.

Hamilton, Francis F., assignor to Hamilton Muffler Company, Indianapolis, Ind. Exhaust gas silencer. 1,821,013; Sept. 1.

Hamilton Muffler Company. (See Hamilton, Francis F., assignor.)

Hamilton, Tom M., jr., assignor to Lane Vegetable Spray Company, Dallas, Tex. Spray stand. 1,821,303; Sept. 1.

Hamlin, Elmer A., Seattle, Wash. Surgical apparatus. 1,821,435; Sept. 1.

Hammer, Ferdinand M., Buffalo, N. Y. Milk bottle cap. 1,821,467; Sept. 1.

Hammer, Franz J. (See Fleischer, P. W., Feybusch, Hammer, and Dans.)

Hammond Clock Company, The. (See Stephens, George H., assignor.)

Hanks, Austin K., Greensboro, N. C., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Slide shifting device. 1,821,341; Sept. 1.

Handey, John, Detroit, Mich. Mixing device. 1,821,468; Sept. 1.

Hanson, Sigvort, assignor to Racine Dispenser & Manufacturing Company, Racine, Wis. Dispensing machine. 1,821,510; Sept. 1.

Hardesty, Francis, et al. (See Hull, Alva M., assignor.)

Harding, Dana E., Melrose, assignor to Harding Engineering Company, East Boston, Mass. Fleshing machine. 1,821,094; Sept. 1.

Harding Engineering Company. (See Harding, Dana E., assignor.)

Harm, George O., Warren, Ohio. Cement charger. 1,820,910; Sept. 1.

Harner, Joseph P., assignor to W. F. Norman, Nevada, Mo. Grave box cover. 1,821,635; Sept. 1.

Harrison, Jamieson R., Middleton, Conn., assignor to Wired Radio, Inc., New York, N. Y. Crystal mounting and circuit arrangement. 1,821,304; Sept. 1.

Harter, Evan C., Sturgis, Mich. Chair construction. 1,821,636; Sept. 1.

Hartford-Empire Company. (See Peiler, Karl E., assignor.)

Hartley, Ralph V. L., South Orange, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Sound radiator. 1,821,547; Sept. 1.

Harvel Corporation, The. (See Harvey, Mortimer T., assignor.)

Harvey, Mortimer T., East Orange, assignor to The Harvel Corporation, Newark, N. J. Composition and making the same. 1,821,095; Sept. 1.

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Bobbin support. 1,821,706; Sept. 1.

Haskin, Walter E., Flushing, assignor to Pressed & Welded Steel Products Co., Long Island City, N. Y. Bookstand. 1,821,802; Sept. 1.

Hasley, William G., assignor of one-third to J. H. Downes, Pittsburgh, Pa. Filtering apparatus. 1,821,707; Sept. 1.

Hasselbusch, Henry C., St. Louis, Mo. Metallic window frame and sash. 1,821,511; Sept. 1.

Hassett Brake Company. (See Fisher, Martin M., assignor.)

Hasting, Elmer G., Dayton, assignor of three-fourths to Continental Stove Corporation, Ironton, Ohio. Thermostatically controlled gas valve. 1,821,512; Sept. 1.

Hastings, Ralph, et al., administrators. (See Marshall, John W.)

Hauenstein, John, Kansas City, Mo. Flashlight support and bracket therefor. 1,821,305; Sept. 1.

Haufe, Arthur R., Cincinnati, Ohio. Electric automobile. 1,820,973; Sept. 1.

Hausmann, William F., assignor to The American Hardware Corporation, New Britain, Conn. Lock. 1,821,155; Sept. 1.

Havas, Emeric. (See Gubelmann, I., Oesch, and Havas.)

Hawks, Miles W., Hayesville, Ohio. Door and door operating device. 1,820,941; Sept. 1.

Hawley, Charles G., assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,821,637; Sept. 1.

Hawley, Charles G., assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,821,638; Sept. 1.

Hawley, Elmer C., assignor to Armstrong Cork Company, Lancaster, Pa. Container cap. Des. 84,986; Sept. 1.

Hayes, Frank A., Middletown, N. J. Variable speed power transmission mechanism. 1,821,833; Sept. 1.

Heath, William C., and F. G. Hobart, Beloit, Wis., assignors to Fairbanks, Morse & Co., Chicago, Ill. Pump. 1,821,216; Sept. 1.

Heaton, Herman C., and F. H. Armstrong, assignors to Link Belt Company, Chicago, Ill. Hydraulic clamp for rotary car dumpers. 1,821,217; Sept. 1.

Heck, Harry J., assignor to Warner Gear Company, Muncie, Ind. Shifter mechanism. 1,821,890; Sept. 1.

Hedgcock, William C., assignor to American Steel Foundries, Chicago, Ill. Truck. 1,821,548; Sept. 1.

Heine, Herman B. (See Mullett, Howard A., and Heine.)

Heitzer, Frank H., Flint, Mich. Carburetor. 1,821,014; Sept. 1.

Helium Company, The. (See Bottoms, Robert R., assignor.)

Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Relay system for high-speed circuit breakers. 1,821,342; Sept. 1.

Hemeke, Theodore. (See Brassard, Friedrich A., assignor.)

Hemphill Company. (See Lawson, R. H., and Cloutier, assignors.)

Henderson, Albert, assignor to Henderson and Hatcher, Inc., Pittsburgh, Pa. Railway track system. 1,820,911; Sept. 1.

Henderson and Hatcher, Inc. (See Henderson, Albert, assignor.)

Hendryx, Andrew B., Company, The. (See Leon, Lewicki J., assignor.)

Hennessy, Daniel E., assignor to Lewis-Shepard Company, Watertown, Mass. Hand truck with tongue operated braking mechanism. 1,820,942; Sept. 1.

Herber, Bruno G. (See Garrett, C. H., and Herber.)

Herrington, George S., et al., trustees. (See Pratt, Harry P., assignor.)

Hess, William T. (See Snyder, W. U., and Hess.)

Hetter, Frederick L., San Diego, Calif. Athletic shoe. 1,821,834; Sept. 1.

Heywood-Wakefield Company. (See Larsen, Lewis, assignor.)

Hicks, Chester W., Langley Field, Hampton, Va. Sound amplifier. 1,821,469; Sept. 1.

Hicks, Cyrus W., Waltham, Mass. Rotary engine. 1,821,513; Sept. 1.

Hicks, John N., Los Angeles, and C. Severns, Long Beach, Calif. Drilling and swabbing head. 1,821,096; Sept. 1.

Hill, Charles H., Drexel Hill, Pa., assignor to General Electric Company. Electrical switch gear. 1,821,804; Sept. 1.

Hiller, Stanley, Oakland, Calif. Rendering process. 1,821,639; Sept. 1.

Hills, John H., Grand Rapids, Mich., assignor to Bousman Mfg. Co. Filter. 1,820,974; Sept. 1.

Hinderer, Louis C. and W. F., Kankakee, Ill. Push button window lock. 1,821,835; Sept. 1.

Hinderer, Walter F. (See Hinderer, L. C. and W. F.)

Hingst, Albert K. G., assignor to Frans van der Grinten, Benlo, Netherlands. Apparatus for applying thin even layers of liquids on surfaces. 1,821,306; Sept. 1.

Hintz, Henry E., Moline, assignor to Williams, White & Co., Moline, Ill. Mechanism for electric control of mechanical movements. 1,821,514; Sept. 1.

Hirons, Frederic C., New York, Frederic W. Mellor, White Plains, N. Y., and Daniel R. Alvord, Greenfield, Mass. Bank fixture. 1,821,708; Sept. 1.

Hirvonen, Erik J., Pontiac, Mich., and W. W. Tuttle, deceased, Putnam, Conn., by Henry A. Tuttle, administrator, Upton, Mass., assignors, by mesne assignments, to Bendix Brake Company, South Bend, Ind. Brake. 1,821,156; Sept. 1.

Hobart, Franklin G. (See Heath, W. C., and Hobart.)

Hobart, Franklin G., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Pump and pump construction and operation. 1,821,218; Sept. 1.

Hoerr, Louis A., and Frank H. Pletzsch, assignors to Western Railway Equipment Company, St. Louis, Mo. Bolt. 1,821,709; Sept. 1.

Hoffmann, Kurt, Dresden-A., and M. Engelmann, Lausa at Dresden, assignors to Zeiss Ikon Aktiengesellschaft Dresden, Dresden, Germany. Device for protecting films against ignition. 1,821,515; Sept. 1.

Hohn, Maia B., New York, N. Y. Musical educational device. 1,821,516; Sept. 1.

Holbert, Thomas B., Worthington, W. Va. Ballot box. 1,821,710; Sept. 1.

Holek, Emanuel, assignor to the Firm Ceskoslovenska zbrojovka akciova spolecnost v Buhe, Brunn, Czechoslovakia. Charging device for firearms. 1,821,385; Sept. 1.

Holloway, John J., assignor to The Stanley Works, New Britain, Conn. Portable power driven tool. 1,821,436; Sept. 1.

Holman, Medley S., Baker, Oreg. Snapper hasp. 1,821,640; Sept. 1.

Holmes, Harold S. (See Emmerich, John H., assignor.)

Holst, Gilles, Arend T. van Urk and R. Vermeulen, Eindhoven, Netherlands, assignors to Radio Corporation of America. Device for converting electric oscillations into mechanical vibrations. 1,820,943; Sept. 1.

Holzapfel, Eduard. (See Nawiasky, P., Holzapfel, and Braunsdorf.)

Home Sash and Manufacturing Company. (See Metler, W. S., and Schumacher, assignors.)

Honer, Henry, Los Angeles, Calif. Sheet metal wall tile construction. 1,821,343; Sept. 1.

Honigbaum, Harry H., New York, N. Y. Interfitting lock for containers. 1,821,059; Sept. 1.

Hoppes, Charles E., assignor to The Everwear Manufacturing Company, Springfield, Ohio. Coupling device. 1,821,182; Sept. 1.

Horan, Frank A., Brooklyn, N. Y. Plate lifter. 1,821,805; Sept. 1.

Horn and Hardart Baking Company. (See Cramer, Albert M., assignor.)

Hornor, Aurelius P., Caldwell, and C. B. Gardenier, Belleville, assignors to E.-K. Medical Gas Laboratories, Incorporated, West Orange, N. J. Apparatus for dehydrating and purifying gases. 1,821,549; Sept. 1.

Horton, Allen A., Plymouth, assignor to Burroughs Adding Machine Company, Detroit, Mich. Transfer mechanism for calculating machines. 1,821,711; Sept. 1.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Making container closures. 1,821,157; Sept. 1.

Hotze, John K., St. Louis, Mo. Bowler's ball and shoe bag. 1,821,806; Sept. 1.

Houseman, Wilbur L., Somerton, Pa., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Knitted fabric and making same. 1,820,975; Sept. 1.

Hovnan, William, Bellaire, N. Y. Combination cigarette case and lighter. 1,821,753; Sept. 1.

Howard, Milton R., et al. (See Bounds, Orville T., assignor.)

Howland, Carrold D., Plymouth, Mass. Box. 1,821,307; Sept. 1.

Howland, Levi S., Oakland, Calif. Dirigible construction. 1,821,158; Sept. 1.

Hudson, Charles E., Leominster, Mass. Mechanical toy. 1,821,712; Sept. 1.

Hudson Motor Car Company. (See Toncray, Millard H., assignor.)

Huff, Fred, Chicago, Ill. Tie plate. 1,821,807; Sept. 1.

Hughes, George, Trout Mills, Ontario, Canada. Fill cap. 1,821,308; Sept. 1.

Hughes, James F., New York, N. Y. Attachment for cigarettes. 1,821,159; Sept. 1.

Hughes, James F., New York, N. Y. Mouthpiece for cigarettes. 1,821,160; Sept. 1.

Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Space discharge device. 1,821,808; Sept. 1.

Hull, Alva M., Detroit, Mich., assignor of one-fifth to F. D. Hardesty and four-fifths to H. G. Westfall, trustee for N. M. Hull, T. M. Hull Westfall, and M. G. Pickett, Detroit, Mich. Fireproof building construction. 1,821,015; Sept. 1.

Hull, Edwin H., Schenectady, N. Y., assignor to General Electric Company. Pick-up device. 1,821,836; Sept. 1.

Hull, Norma M., et al. (See Hull, Alva M.)

Humphrey, Walter E., Jeannette, Pa., assignor to The Mason Tire & Rubber Corp., Kent, Ohio. Bead forming machine. 1,821,161; Sept. 1.

Humphrey, Walter E., assignor to The Mason Tire & Rubber Corporation, Kent, Ohio. Bead forming mechanism. 1,821,470; Sept. 1.

Hunter, Samuel B. (See Carroll, John T., assignor.)

Huschoe, Mae, and R. W. Porter, Los Angeles, Calif. Printing plate or similar article. Des. 84,987; Sept. 1.

Huyette, Kenneth H., Bluffton, Ind., assignor to General Electric Company. Air cooled condenser for refrigerating systems. 1,821,754; Sept. 1.

Hyatt, Charley T., Hulsa, Okla. Combination stool and stepladder. 1,821,517; Sept. 1.

Hydraulic Pressed Bearing Company. (See Stockfleth, Berger, assignor.)

Hyland, Lawrence A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Power supply for thermionic tubes. 1,821,262; Sept. 1.

Imai, Gosuke. (See Nagai, S., and Kawamura, assignors.)

Imbert, Georges, Diemeringen, France. Gas producer. 1,821,263; Sept. 1.

Imhoff, Karl, Essen, Germany. Sewage treatment. 1,820,976; Sept. 1.

Imhoff, Karl, Essen, Germany. Complete sewage treatment plant with submerged contact aerators. 1,820,977; Sept. 1.

Imhoff, Karl, Essen, Germany. Digestion of coarse matters left on sewage screens in the sewage treatment. 1,820,978; Sept. 1.

Imperial Brass Manufacturing Company, The. (See Dobrick, August C., assignor.)

Imperial Chemical Industries Limited. (See Bridgman, Rainald, assignor.)

Indiana Steel & Wire Company. (See Fowle, Frank F., assignor.)

Ingersoll-Rand Company. (See Smith, William A., assignor.)

International Communications Laboratories, Incorporated. (See Connery, Alder F., assignor.)

International Safety Lock Nut Corporation. (See d'Halloy, Audoin, assignor.)

International Silver Company. (See Bostock, Charles F., assignor.)

International Silver Company. (See Brown, Leslie A., assignor.)

International-Stacey Corporation. (See Owens, Robert H., assignor.)

International Time Recording Company of New York. (See Larrabee, Clinton E., assignor.)

Isaacs, Lida S., Eagle Rock, Calif., assignor to Mrs. G. D. Gilmore, Mrs. E. A. Dudley, and Mrs. E. C. Magauran, Los Angeles, Calif., doing business under the fictitious firm name of The California Women of the Golden West. Badge, pin, or emblem. Des. 84,988; Sept. 1.

Isaacson, Morris, Brooklyn, N. Y. Adjustable bookrest. 1,821,060; Sept. 1.

Iversen, Morton. (See Payne, P. D., and Iversen.)

Jeffrey Manufacturing Company, The. (See Bauroth, Walter J., assignor.)

Jeffrey Manufacturing Company, The. (See Cosco, Frederick C., assignor.)

Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)

Jenkins, George A., Philadelphia, Pa. Semibuoyant aircraft. 1,821,061; Sept. 1.

Jeschke, Frank J., assignor to Micromatic Hone Corporation, Detroit, Mich. Abrasive stone holder. 1,821,518; Sept. 1.

Jeter, John D., Salisbury, N. C. Baseball pitcher. 1,821,755; Sept. 1.

Job, Albert. (See Tesche, Heinrich, and Job.)

Johansen, Samuel, Detroit, Mich., assignor to I. and D. J. Scott, executors of the estate of W. Scott, deceased, Plainfield, N. J., doing business as Walter Scott & Company. Paper handling device. 1,821,713; Sept. 1.

Johansen, Adolph T., Chicago, Ill. Water heater. 1,820,979; Sept. 1.

Johnson, Alfred J., assignor to York Band Instrument Company, Grand Rapids, Mich. Piston valve structure for wind instruments. 1,821,641; Sept. 1.

Johnson, Emil E. (See Meinken, J., and Johnson.)

Johnson, Erling, assignor to the Firm: Odda Smelteverk A/S., Odda, Norway. Manufacturing compound fertilizers. 1,821,309; Sept. 1.

Johnson, Louis V., Brooklyn, N. Y. Pocket-protector. 1,821,809; Sept. 1.

Johnson, Louis V., Brooklyn, N. Y. Pocket protector. 1,821,837; Sept. 1.

Johnson, Martin T. (See Abelson, A. N., and Johnson.)

Johnson, Wilfred G., assignor to The Colson Company, Elyria, Ohio. Caster. 1,821,642; Sept. 1.

Johnston, Herbert A. (See Doughty, G. A., and Johnston.)

Jones, Elbert S. (See Wharton, Selvin T., assignor.)

Jones, Ethelbert. (See Matthews, W. R., and Jones.)

Jones, Gwilym D., Oak Creek, assignor of one-half to Benjamin W. Snodgrass, Denver, Colo. Flexible conveyer. 1,821,644; Sept. 1.

Jones, Gwilym D., Oak Creek, assignor of one-half to Benjamin W. Snodgrass, Denver, Colo. Power transferring device. 1,821,645; Sept. 1.

Jones, Gwilym D., Oak Creek, assignor of one-half to Benjamin W. Snodgrass, Denver, Colo. Power transmitting device. 1,821,646; Sept. 1.

Jones, Thomas D., Perth Amboy, N. J., assignor to American Smelting and Refining Company, New York, N. Y. Removal of tin from antimonial lead and alloy. 1,821,643; Sept. 1.

Jones, William O., Marissa, assignor of one-half to Homer W. Presly, Swanwick, Ill. Carbon removing tool. 1,821,891; Sept. 1.

Jorgensen, Bernhardt, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Pulling over machine. 1,821,162; Sept. 1.

Judelson Dryer Corporation. (See Judelson, Julius, assignor.)

Judelson, Julius, New York, N. Y., assignor to Judelson Dryer Corporation, Moundsville, W. Va. Drier. 1,821,097; Sept. 1.

Juergens, Winfred H., Cleveland, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Load brake for hoists. 1,821,838; Sept. 1.

Ka Dell, Harold W., Lakewood, Ohio, assignor to National Carbon Company, Inc. Electrical filtering system. 1,821,016; Sept. 1.

Kagan, Dorothy. (See Abbens, Sidney M., assignor.)

Kaltenbrunn, Anna, St. Nazlanz, Wis. Conveyer. 1,821,714; Sept. 1.

Karfiol, Edward, Brooklyn, N. Y. Dolly. Des. 84,989; Sept. 1.

Kary, Samuel E. (See Dietz, H. M., and Kary.)

Kath, Alfred W., assignor to Arthur Colton Company, Detroit, Mich. Tube seal. 1,821,017; Sept. 1.

Kaufmann Department Stores, Inc. (See Crumpton, Kenneth R., assignor.)

Kaufmann, John J., Elkins Park, assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa. Heddle frame. 1,821,647; Sept. 1.

Kausal, Joseph B., Chicago, Ill. Wall light. 1,821,062; Sept. 1.

Kautzman, John W. (See Kautzman, J. W., and Parker, assignors.)

Kautzman, John W., East Orange, and J. H. Parker, Newark, N. J., assignors to John W. Kautzman, trading as Sander Mfg. Co. Feeding device for meat choppers and the like. 1,821,344; Sept. 1.

Kawamura, Kichizo. (See Nagai, S., and Kawamura.)

Kawneer Company, The. (See Plym, Francis J., assignor.)

Keeran, Charles R., Evanston, assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Mechanical pencil. 1,821,183; Sept. 1.

Kelley, Isaiah S., New York, N. Y. Submarine rescuing device. 1,821,219; Sept. 1.

Kelly, Daniel J. (See Kelly, John W., and D. J.)

Kelly, John W., Erie, Pa. Illuminated sign. 1,820,912; Sept. 1.

Kelly, John W. and D. J., Erie, Pa. Illuminated sign. 1,820,913; Sept. 1.

Kendrick, Carl E., and B. W. Moore, Lithia, Fla.; said Moore assignor to said Kendrick. Compression brake for hoisting drums. 1,821,756; Sept. 1.

Kennedy, Daniel J., Vancouver, British Columbia, Canada. Treatment of coffee. 1,821,551; Sept. 1.

Keplinger, Charles W., receiver. (See Lewis, Joseph C., assignor.)

Kercher, Merrill A., executors. (See Ladd, James B.)

Kerngood, Allen H., Baltimore, Md., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md. Apparel buckle. 1,821,839; Sept. 1.

Ketchum, James T., Chicago, Ill. Sectional heating boiler. 1,821,648; Sept. 1.

Ketzschler, Kurt, Berlin-Tempelhof, Germany. Sight device for print mounting. 1,821,810; Sept. 1.

Kenls, Henry P. C., New York, N. Y., assignor to Sealed Joint Construction Corporation. Wall structure. 1,821,892; Sept. 1.

Kilberry, George D., assignor to Dowingtown Manufacturing Company, Downingtown, Pa. Suction roll. 1,821,757; Sept. 1.

Kilker, William F., Detroit, Mich. Vehicle brake. 1,821,550; Sept. 1.

King, Clarence W., Shreveport, La. Floating harbor. 1,821,310; Sept. 1.

King, Howard E., Buffalo, assignor to American Brake Materials Corporation, New York, N. Y. Clamp. 1,821,163; Sept. 1.

King, William J., East Orange, N. J., assignor to Bilmarjac Corporation, New York, N. Y. Seat indicating system. 1,821,264; Sept. 1.

Kinsley, Albert E., Oneida, N. Y. Game trap. 1,820,914; Sept. 1.

Kinstdunger-Patent-Verwertungs-Aktiengesellschaft. (See Larsson, Markus, assignor.)

Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing and making same. 1,821,552; Sept. 1.

Kleinschmidt, Edward E. (See Morton, S., Krum, and Kleinschmidt.)

Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Printing telegraphs. 1,821,164; Sept. 1.

Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Selective signaling and apparatus. 1,821,165; Sept. 1.

Kneher, Muller Company. (See Müller, Otto, assignor.)

Knight, Charles Y., Pasadena, Calif., assignor, by mesne assignments, to Chester H. Braselton Corporation, Jersey City, N. J. Steering apparatus for motor vehicles. 1,821,063; Sept. 1.

Knight Charles Y., Pasadena, Calif., assignor, by mesne assignments, to Chester H. Braselton Corporation, Jersey City, N. J. Vibration absorbing mechanism. 1,821,098; Sept. 1.

Knowles, Albert E., Heswall, England. Electrolytic apparatus. 1,821,018; Sept. 1.

Knowlton, Cutler D., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making sheet material. 1,821,166; Sept. 1.

Knowlton, Norwood H., Rockport, and W. H. Nutt, Beverly, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Heel and making and covering the same. 1,820,915; Sept. 1.

Koenig, Joseph, Manitowoc, Wis., deceased; R. Koenig and R. K. Ellis, administrators. Propeller. 1,821,519; Sept. 1.

Koenig, Remus, et al., administrators. (See Koenig, Joseph, assignor.)

Kohler Company. (See Gavin, Gordon P., assignor.)

Kohnle, Frederick, assignor to The Monarch Marking System Company, Dayton, Ohio. Type chase. 1,821,437; Sept. 1.

Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio system. 1,821,650; Sept. 1.

Kolster, Frederick A., and G. G. Kruesi, Palo Alto, assignors to Federal Telegraph Company, San Francisco, Calif. Antenna system and method. 1,821,649; Sept. 1.

Konn, Felix, Erie, Pa., assignor to General Electric Company. Signal and control system. 1,821,758; Sept. 1.

Koppers Company, The. (See Collins, Carroll B., assignor.)

Koppitz, Carl G., assignor to Railway and Industrial Engineering Company, Greensburg, Pa. Strain type disconnecting switch. 1,821,167; Sept. 1.

Kotzebue, Meinhard H., Tulsa, Okla. Combined feed water heater and steam condenser. 1,821,840; Sept. 1.

Krag, Frank K., Chicago, and J. V. Nelson, Elmhurst, assignors to U. S. Manufacturing Corporation, Decatur, Ill. Pipe thread protector. 1,821,520; Sept. 1.

Krementz & Company. (See Simpson, Harrison D., assignor.)

Krick, Vincent, Los Angeles, Calif. Steering wheel operated headlight. 1,821,220; Sept. 1.

Kristensson, August. (See Thorssell, T., and Kristensson.)

Kruesi, Geoffrey G. (See Kolster, F. A., and Kruesi.)

Krum, Howard L. (See Morton, S., and Krum.)

Krum, Howard L. (See Morton, S., Krum, and Kleinschmidt.)

Kuchinsky, Matthew K., Irvington, N. J. Surface washing machine. 1,821,715; Sept. 1.

Kugel, Max, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Anthraquinone dyestuff. 1,821,019; Sept. 1.

Kuhn, Frank, and L. H. Thomas, assignors to American Electrical Heater Company, Detroit, Mich. Electric plug. 1,821,553; Sept. 1.

Kunkel, Frederick H., assignor to Geuder, Paeschke & Frey Company, Milwaukee, Wis. Toggle press guard. 1,821,651; Sept. 1.

Kupferstoh, Max, New York, N. Y. Emblem plate or similar article. Des. 84,990; Sept. 1.

Kurlash Company, The. (See Christy, Robert T., assignor.)

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,821,099; Sept. 1.

Kusiv, James J., Newark, N. J. Paper trimmer. 1,821,716; Sept. 1.

Kyle, William D., assignor to Line Material Company, Milwaukee, Wis. Insulator and terminal. 1,821,221; Sept. 1.

Kyle, William D., assignor to Line Material Company, Milwaukee, Wis. Insulator. 1,821,222; Sept. 1.

La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,821,168; Sept. 1.

Ladd, James B., Ardmore, Pa., deceased; Merrill A. Kercher, executor. Nut lock. 1,821,652; Sept. 1.

Laeuger, Paul, assignor to the Firm of J. R. Geigy S. A., Basel, Switzerland. Manufacture of azo dyestuffs. 1,821,759; Sept. 1.

Lain, David E., Bellingham, Wash. Fuel burner. 1,820,916; Sept. 1.

Lamblin-Parent, Gustave Alphonse Marie, Lille, France. Cover glass lens for headlights. Des. 84,991; Sept. 1.

Lamblin-Parent, Gustave Alphonse Marie, Lille, France. Cover glass lens for headlights. Des. 84,992; Sept. 1.

Lamblin-Parent, Gustave Alphonse Marie, Lille, France. Cover glass lens for headlights. Des. 84,993; Sept. 1.

Lamblin-Parent, Gustave Alphonse Marie, Lille, France. Cover glass lens for headlights. Des. 84,994; Sept. 1.

Lamp, Charles J., San Francisco, Calif. Apparatus for teaching sight-singing. 1,821,311; Sept. 1.

Landers, Frary & Clark. (See Man, Edward A., assignor.)

Landman, Lester M. (See Baker, F. C., Fleckenstein, and Landman.)

Landreth, Emil Q. (See Moerk, Frank N., assignor.)

Lane, Frank A., Providence, R. I., assignor to The Textile-Finishing Machinery Company, Guider. 1,820,980; Sept. 1.

Lane Vegetable Spray Company. (See Hamilton, Tom M., jr., assignor.)

Langford, Cecil T., and A. J. Teplitz, assignors, by mesne assignments, to Continental Oil Company, Ponca City, Okla. Separating bitumen from bituminous sands and similar bituminous materials. 1,820,917; Sept. 1.

Langos, Otto A., Chicago, Ill. Musical toy. 1,821,184; Sept. 1.

Laraway, William H., assignor of one-half to Leonard DeVos, Grand Rapids, Mich. Vending machine. 1,821,223; Sept. 1.

Larco Del Valle & Cie. (See Vicherd, Georges A., assignor.)

Larrabee, Clinton E., Binghamton, assignor to International Time Recording Company of New York, Endicott, N. Y. Oscillating armature secondary clock. 1,821,100; Sept. 1.

Larsen, Lewis, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass. Forming fitched or fitch work articles. 1,821,554; Sept. 1.

Larsen, Louis H., Union City, N. J., and C. W. Nixon, New York, N. Y. Change-holding unit. 1,821,345; Sept. 1.

Larson, Alison B., St. Paul, Minn. Tail gate device for dump trucks. 1,821,584; Sept. 1.

Larson, Bert E., assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,821,555; Sept. 1.

Larsson, Markus, Berlin, Germany, assignor to Kunstdünger - Patent - Verwertungs - Aktiengesellschaft, Glarus, Switzerland. Leaching phosphate rock. 1,821,653; Sept. 1.

Lashar, Walter B., Fairfield, Conn., assignor to The American Fabrics Company. Label strip. 1,821,101; Sept. 1.

La Vercombe, Harley H., assignor to Abrasive Engineering Corporation, Detroit, Mich. Abrasive testing machine. 1,821,169; Sept. 1.

Lawaczeck, Franz, Munich, assignor to Firm: Lawaczeck Gesellschaft mit beschrankter Haftung, Berlin, Germany. Operation of power plants. 1,821,265; Sept. 1.

Lawaczeck Gesellschaft mit beschrankter Haftung, firm. (See Lawaczeck, Franz, assignor.)

Lawrence, Harry W., Denver, Colo. Light screen. Des. 84,995; Sept. 1.

Lawson, Robert H., Pawtucket, and A. N. Cloutier, Lonsdale, assignors to Hemphill Company, Central Falls, R. I. Dial pattern mechanism for effecting reverse plating. 1,821,893; Sept. 1.

Layfield, Clyde B., Phenix, Ala., assignor to Whitin Machine Works, Whitinsville, Mass. Bobbin holder of yarn winding spindle. 1,821,556; Sept. 1.

Leach, Charles H., Newton Highlands, Mass. Refining apparatus. 1,821,346; Sept. 1.

Leach, Charles H., Newton Highlands, Mass. Oil refining apparatus. 1,821,347; Sept. 1.

Leech, Aubrey B., Los Angeles, Calif. Apparatus for producing motion picture effects. 1,821,557; Sept. 1.

Le Fever, Harry M., Philadelphia, Pa. Apparatus for controlling liquid levels. 1,820,981; Sept. 1.

Legrand, Jules. (See Guilbert, P., and Legrand.)

Leitch, David C., and C. W. Hamilton, Oakland, Calif. Casket construction. 1,821,760; Sept. 1.

Lemmon, George N., assignor to Southern States Equipment Co., Birmingham, Ala. Automatic circuit breaker. 1,821,761; Sept. 1.

Leon, Lewicki J., West Chicago, Ill., assignor to The Andrew B. Hendryx Company, New Haven, Conn. Bird cage base. 1,821,348; Sept. 1.

Leopold, George O., assignor to North Bro's M'f'g Co., Philadelphia, Pa. Spiral screw driver. 1,821,841; Sept. 1.

Leventhal, Jacob F., New York, N. Y., assignor to The First National Bank of Chattanooga, Trustee, Chattanooga, Tenn. Optical Compensator. 1,821,349; Sept. 1.

Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Apparatus for handling coal. 1,821,438; Sept. 1.

Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal mining method and apparatus. 1,821,439; Sept. 1.

Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Apparatus for loading coal. 1,821,440; Sept. 1.

Levy, Harold, Chicago, Ill. Note holder and dispenser for cash drawers. 1,821,350; Sept. 1.

Lewis, Edward D., assignor of one-half to H. L. Gardner, Elmira, N. Y. Water treating apparatus and method. 1,821,266; Sept. 1.

Lewis, Joseph C., assignor to C. W. Keplinger, receiver of the American Electric Switch Corporation, Minerva, Ohio. Switch and fuse box. 1,821,224; Sept. 1.

Lewis-Shepard Company. (See Hennessy, Daniel E., assignor.)

Libbey-Owens-Ford Glass Company. See Cone, Carroll, assignor.)

Libbey-Owens-Ford Glass Company. (See Crowley, Joseph P., assignor.)

Libbey-Owens-Ford Glass Company. (See Watkins, George B., assignor.)

Lillig, Nicholas R., assignor to Tice Lock-Washer Manufacturing Co., Portland, Oreg. Lock washer. 1,821,312; Sept. 1.

Lindblom, Erik D. (See Sundberg, K., and Lindblom.)

Linde, Richard, assignor to Gesellschaft Fur Linde's Eismaschinen A. G., Hollriegelskreuth, Germany. Fractionation of coke oven gas. 1,821,170; Sept. 1.

Lindenblad, Nils E., Rocky Point, N. Y., assignor to Radio Corporation of America. Antenna. 1,821,386; Sept. 1.

Lindenblad, Nils E., Rocky Point, N. Y., assignor to Radio Corporation of America. Antenna. 1,821,387; Sept. 1.

Lindhorst, Heinrich. (See Goerig, E., and Lindhorst.)

Line Material Company. (See Kyle, William D., assignor.)

Link Belt Company. (See Heaton, H. C., and Armstrong, assignors.)

Link-Belt Company, The. (See Philips, William E., assignor.)

Locomotive Firebox Company. See Hawley, Charles G., assignor.)

Locomotive Firebox Company. (See Larson, Bert E., assignor.)

Locomotive Firebox Company. (See Reardon, Edward J., assignor.)

Loepfe, Charles M., assignor to Cottonwood Fiber Company, St. Louis, Mo. Oil burner. 1,821,654; Sept. 1.

Loesch, Christian W., St. Louis, Mo. Cigarette or cigar holder. 1,821,267; Sept. 1.

Loewe, Bernhard, Berlin-Friedenau, Germany, assignor to Radio Corporation of America. Vacuum tube and making same. 1,821,351; Sept. 1.

Lohr, Paul. (See Berner, L., and Lohr.)

Lombardi, Vencent, Brooklyn, N. Y. Knitting machine. 1,820,982; Sept. 1.

Long, Millard E., San Antonio, Tex. Dust collector. 1,821,842; Sept. 1.

Long, William H., Berkeley, Calif. Transmission device. 1,821,102; Sept. 1.

Longtin, William J., assignor to Wildman Mfg. Co., Norristown, Pa. Yarn feeding device for circular knitting machines. 1,821,268; Sept. 1.

Loomis, Allen, assignor to C. G. Conn, Ltd., Elkhart, Ind. Tuning device for wind musical instruments. 1,821,655; Sept. 1.

Loomis, Nathaniel E., Westfield, N. J., assignor to Standard Oil Development Company. Heavy oil fuel. 1,820,983; Sept. 1.

Lovell Manufacturng Company. (See Robertson, William, assignor.)

Luard, William B. (See Addison, H., and Luard.)

Lubin, Casper J., San Francisco, Calif. Coat. 1,821,225; Sept. 1.

Lucas, Earl S., Avoca, Iowa, assignor of one-half to F. J. Moran, Omaha, Nebr. Shoulder leveling and finishing machine. 1,821,843; Sept. 1.

Lucry, Michael, Chicago, Ill. Garment. 1,821,185; Sept. 1.

Luginbuhl, Elias, Norwood, Ohio. Roof framing tool. 1,821,103; Sept. 1.

Lundell, Bernard F., Welch, Minn. Dishwashing machine. 1,821,558; Sept. 1.

Mabey, Charles W., assignor to Mabey Electric Manufacturing Company, Indianapolis, Ind. Automatic discharging toaster. 1,821,226; Sept. 1.

Mabey Electric Manufacturing Company. (See Mabey, Charles W., assignor.)

MacGregor, Wallace F., assignor to J. I. Case Company, Racine, Wis. Combination harvester-thrasher. 1,821,065; Sept. 1.

Machen, Ferdinand H., Toledo, Ohio. Rake. 1,821,522; Sept. 1.

Mackenzie, Charles S., Bound Brook, N. J. Supporting trousers. 1,820,918; Sept. 1.

Mackey, Clarence H., Lancaster, and S. E. Preble, Orchard Park, N. Y. Road sign. 1,821,227; Sept. 1.

Mackline, William Y., Baltimore, Md. Gun mount. 1,821,521; Sept. 1.

Madore, Joseph A. E., Montreal, Quebec, Canada. Draft connection. 1,821,762; Sept. 1.

Magauran, Mrs. Ed. C. (See Isaacs, Lida S., assignor.)

Magrath, George H., Whitinsville, Mass. Bobbin clutch. 1,821,186. Sept. 1.

Mai, Kurt, Stuttgart, Germany. Chin rest for violins and similar musical instruments. 1,821,811; Sept. 1.

Mando Company Incorporated. (See Doman, Albert E., assignor.)

Manu, John V., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Bobbin holder for creels of spinning frames and the like. 1,821,656; Sept. 1.

Marbury, Thomas K., Meridian, Miss. Absorption refrigeration apparatus and system. 1,821,812; Sept. 1.

Marden, John W. (See Driggs, F. H., and Marden.)

Margulis, Peter H., New York, N. Y. Arctic, shoe, or overshoe. 1,821,471; Sept. 1.

Marmorstein, Herman L., New York, N. Y. Clock. 1,821,066; Sept. 1.

Marsh, Henry, assignor to Grennan Bakeries, Inc., Chicago, Ill. Cooky display stand. 1,821,313; Sept. 1.

Marsh, Jas. P., & Company. (See Rudolph, Walter J., assignor.)

Marshall, Helen H. (See Marshall, John W., assignor.)

Marshall, John W., deceased, New York; F. J. Seaman and R. Hastings, administrators, Tupper Lake, N. Y., assignors to H. H. Marshall, Baltimore, Md. Reenforced paper and process and machine to be employed in the manufacture of the same. 1,821,067; Sept. 1.

Martin, Dougall C., assignor of one-half to E. F. Schaffer, Paden City, W. Va. Storage battery terminal connection. 1,821,717; Sept. 1.

Martin, James V., Garden City, N. Y. Automobile structure. 1,821,657; Sept. 1.

Marvel Carbureter Company. (See Guthrie, William S., assignor.)

Marvel Carbureter Company. (See Wright, Rea P., assignor.)

Marx, Louis, Brooklyn, N. Y. Combined loading cart and sifter screen. 1,820,944; Sept. 1.

Mason Tire & Rubber Corp., The. (See Humphrey, Walter E., assignor.)

Mason Tire & Rubber Corporation, The. (See Humphrey, Walter E., assignor.)

Massey, Henry P., Montclair, N. J. Aircraft. 1,820,919; Sept. 1.

Masters, Edwin L., Chicago, Ill. Plant setter. 1,821,187; Sept. 1.
Mathieson Alkali Works, Inc., The. (See Munson, Horace D., and Petroe, assignors.)
Matthews, William R., and E. Jones, Spokane, Wash. Building front. Des. 84,996; Sept. 1.
Mau, Edward A., assignor to Landers, Frary & Clark, New Britain, Conn. Circuit controlling mechanism. 1,821,559; Sept. 1.
Maude, Aylmer H., C. J. Rodman, and C. A. Styer, Wilkinsburg, and W. C. Wilharm, Edgewood, Pa., assignors to Westinghouse Electric & Manufacturing Company. Deoxidizer. 1,821,388; Sept. 1.
Maxim Silencer Company, The. (See Bourne, Roland B., assignor.)
May, Adam J., assignor to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y. Headrest. 1,821,560; Sept. 1.
McBride, John J., Bayonne, N. J. Truck for railway cars. 1,821,104; Sept. 1.
McChesney, John S., Chicago, Ill., assignor, by mesne assignments to The Gerrard Company, Inc., San Francisco, Calif. Package wiring machine. 1,821,389; Sept. 1.
McClinton Theophilus H., Fort Smith, Ark. Well bucket bottom. 1,821,441; Sept. 1.
McCormick, George C. Needham, assignor to General Alloys Company, Boston, Mass. Furnace hearth. 1,821,658; Sept. 1.
McCoy, James L. (See Wensley, R. J., and McCoy.)
McCrosson, John T., Port au Prince, Haiti, assignor to Fresh-Keeping Package Corporation. Package for cigars, cigarettes, and smoking tobacco. 1,821,472; Sept. 1.
McCulloch, Leon, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacture Company. Composition of matter. 1,821,390; Sept. 1.
McEvoy, Joseph H., jr., Houston, Tex. Well strainer. 1,821,659; Sept. 1.
McFarland, James C., Fort Thomas, assignor to The Wadsworth Watch Case Co., Dayton, Ky. Decorating watch dials, etc. 1,821,561; Sept. 1.
McGrath, Arthur J., Washington, D. C. Course indicator for aircraft. 1,821,844; Sept. 1.
McGrath, William L., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,820,945; Sept. 1.
McIlvaine, Oran T., East Cleveland, Ohio, assignor to McIlvaine Patent Corporation, St. Charles, Ill. Apparatus for producing light waves. 1,821,442; Sept. 1.
McIlvaine Patent Corporation. (See McIlvaine, Oran T., assignor.)
McIlvried, Edwin J., Cleveland, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio. Wire drawing machine and process of threading the same. 1,821,845; Sept. 1.
McKee, Willis, Cleveland, Ohio, assignor to The Central United National Bank, Connecter. 1,820,984; Sept. 1.
McKee, Willis, Cleveland, Ohio, assignor to The Central United National Bank, Temperature controlled motor driven roller. 1,820,985; Sept. 1.
McKeefe, Edward P. (See Bradley, L., and McKeefe.)
McLain Fire Brick Company. (See Blewett, John B., assignor.)
McManis, Fred, assignor to W-K-M Company, Houston, Tex. Device for cleaning and coating pipe. 1,821,352; Sept. 1.
McMeans, Frank L., Apollo, assignor of one-half to P. B. Doverspike, Vandergrifts, Pa. Cleaning galvanizing pots. 1,821,105; Sept. 1.
McMullen, Frederick E., assignor to Gleason Works, Rochester, N. Y. Finishing gears. 1,821,188; Sept. 1.
McNally, Thomas, Pittsburg, Kans. Attachment for wheels. 1,821,269; Sept. 1.
McNeil Boiler Company, The. (See Worley, George I., assignor.)
Mead Paperboard Corporation. (See Zimmerman, Walter J., assignor.)
Mead Pulp and Paper Company, The. (See Rawling, Francis G., assignor.)
Mechau, Robert, assignor to the Firm Carl Zeiss, Jena, Germany. Device for ascertaining the opacity of blackened portions of photographic plates. 1,821,391; Sept. 1.
Medville, Albert B., assignor to Auto Radiator Manufacturing Company, Chicago, Ill. Radiator core. 1,821,562; Sept. 1.
Meeks, Martha W. and A. C. Alt, Compton, Calif. Brassiere. 1,821,353; Sept. 1.
Melnken, John, St. Paul, and E. E. Johnson, Minneapolis, Minn. Relief valve. 1,821,189; Sept. 1.
Melcher, Walter P., Chicago, Ill. Cutting implement. 1,821,718; Sept. 1.
Mellor, Frederic W. (See Hirons, F. C., Mellor, and Alvord.)
Mensforth, Thomas, Middleton, St. George, England. Foot attachment for pit props or steel arches employed as colliery or mining roof supports. 1,821,020; Sept. 1.
Mercer, Henry H., Claremont, N. H., assignor to Sullivan Machinery Company. Boring tool. 1,821,473; Sept. 1.
Mercer, Henry H., Claremont, N. H., assignor to Sullivan Machinery Company. Boring tool. 1,821,474; Sept. 1.
Merrymon, William W. (See Rentschler, H. C., and Merrymon.)
Messier, George L. R. J., Montrouge, France. Brake controlling device. 1,821,719; Sept. 1.
Metler, William S., and H. O. Schumacher, assignor to Home Sash and Manufacturing Company, Spokane, Wash. Window frame. 1,821,910; Sept. 1.
Metropolitan Device Corporation. (See Rypinski, Albert B., assignor.)
Meyer, William H., Brooklyn, N. Y. Card mount for strings. 1,821,354; Sept. 1.
Meyers, Roy L., Janesville, Wis. Boltless casing. 1,821,228; Sept. 1.
Meyerson, Louis, Brooklyn, N. Y. Combination cigarette and vanity case. 1,821,660; Sept. 1.
Micromatic Hone Corporation. (See Jeschke, Frank J., assignor.)
Mid-States Steel & Wire Company. (See Van Deventer, James E., assignor.)
Mid-West Forging Company. (See Rogers, Earl B., assignor.)
Milani, Edward, San Francisco, Calif. Preserving food products. 1,821,106; Sept. 1.
Miles, Thomas J., Buechel, Ky. Chair. 1,821,107; Sept. 1.
Miles, William A., Salisbury, Conn. Apparatus for molding in sand. 1,821,270; Sept. 1.
Millhomme, Alexander, Ridgefield Park, assignor to Progressive Silk Finishing Co., Hoboken, N. J. Machine for producing moiré fabrics. 1,821,392; Sept. 1.
Miller, Carl. (See Miller, Gustave, assignor.)
Miller, Gustave, assignor to Carl Miller, New Haven, Conn. Golf tee. 1,821,475; Sept. 1.
Miller, Harry J., Reading, Pa. Box. Des. 84,997; Sept. 1.
Miller, Harry L., Chester, Pa. Cooler. 1,821,846; Sept. 1.
Miller, Robert N., Altoona, Pa. Locomotive scale. 1,821,661; Sept. 1.
Millers Falls Company. (See Wilcox, George R., assignor.)
Miner, Roy B., Nahant, Mass., assignor to General Electric Company. Supporting device for lamps. 1,821,763; Sept. 1.
Mirov, Nicholas T. (See Offord, H. R., and Mirov.)
Mitchell Manufacturing Co. (See Mitchell, William, and Blink, assignors.)
Mitchell, William, Milwaukee, and P. Blink, West Allis, assignors to Mitchell Manufacturing Co., Milwaukee, Wis. Carrier. 1,821,563; Sept. 1.
Moerk, Frank N., assignor of one-half to E. Q. Landreth, Philadelphia, Pa. Treating nitrogenous waste. 1,820,920; Sept. 1.
Mohawk Asphalt Heater Company. (See Van Vorst, John, assignor.)
Mohler, Valentine J., River Forest, assignor to Addressograph Company, Chicago, Ill. Printing device. 1,821,108; Sept. 1.
Mohr, Hubert C., assignor to The Packard Electric Company, Warren, Ohio. Cable terminal. 1,821,443; Sept. 1.
Moise, Joseph R., Houma, La. Advertising device. 1,821,021; Sept. 1.
Monarch Marking System Company, The. (See Kohnle, Frederick, assignor.)
Montelius, Carl O. J., Stockholm, Sweden. Rotary pump, compressor or measuring device. 1,821,523; Sept. 1.
Montgomery Ward & Co., Incorporated. (See Prall, Bert R., assignor.)
Moody, Maxey D. (See Albertson, William E., assignor.)
Moore, Bert W. (See Kendrick, C. E., and Moore.)
Moore, Edgar J., Columbus, Ohio. Powder puff. 1,821,393; Sept. 1.
Moore, George L., assignor to Alemite Corporation, Chicago, Ill. Measuring unit for lubricating systems. 1,821,314; Sept. 1.
Moore, Matthew S. (See Black, William C., assignor.)
Moran, Frank J. (See Lucas, Earl S., assignor.)
Morel, Louise, assignor of forty per cent to B. Colman, Altadena, Calif. Toy or similar article. Des. 84,998; Sept. 1.
Morris & Boogher, Inc. (See Durham, Kenneth P., assignor.)
Morris & Boogher, Inc. (See Tuck, Clarence M., assignor.)
Morrison, Archie T., South Braintree, assignor to S. H. Couch Company, Inc., Quincy, Mass. Front plate for flush telephones. Des. 84,999; Sept. 1.
Morrison, Archie T., South Braintree, assignor to S. H. Couch Company, Inc., Quincy, Mass. Combined front plate and mouthpiece for suite telephones. Des. 85,000; Sept. 1.
Morrison, Archie T., South Braintree, assignor to S. H. Couch Company, Inc., Quincy, Mass. Transmitter mouthpiece for concealed speaker cordless telephones. Des. 85,001; Sept. 1.
Morse, Sterne, Cleveland Heights, Ohio. Resistor block and making. 1,821,022; Sept. 1.
Morton, James M., Jr., Fall River, Mass. Device for railroad ties and fasteners for rails. 1,821,720; Sept. 1.
Morton, Sterling, and H. L. Krum assignors to Teletype Corporation, Chicago, Ill. Selective system and apparatus. 1,821,109; Sept. 1.
Morton, Sterling, Chicago, H. L. Krum, Kenilworth, and E. E. Kleinschmidt, Park Ridge, assignors to Teletype Corporation, Chicago, Ill. Selecting and printing mechanism. 1,821,110; Sept. 1.
Moschetto, Frank. (See Moschetto, Joseph, assignor.)
Moschetto, Joseph, assignor to F. Moschetto, Paterson, N. J. Rotary cleaner. 1,821,394; Sept. 1.

Moyer, David A., near Birdsboro, Pa. Blade sharpener. 1,821,721; Sept. 1.
Muchlinski, Leon, Kenosha, Wis. Folding bed. 1,821,315; Sept. 1.
Mudd, Garrett W., Chicago, Ill., assignor, by mesne assignments, to Standard-Knapp Corporation, New York, N. Y. Packaging machine. 1,821,111; Sept. 1.
Mueller Brass Co. (See Rader, Harold K., assignor.)
Mulder, Johannes G. W. (See Reerink, E. H., and Mulder.)
Muller, Charles A., Brooklyn, N. Y. Internal combustion engine. 1,821,662; Sept. 1.
Muller, Otto, Richmond Hill, assignor to Kneher, Muller Company, Inc., New York, N. Y. Labeling and banding. 1,821,564; Sept. 1.
Mullett, Howard A., and H. E. Heine, assignors to Bradley Washfountain Company, Milwaukee, Wis. Compartment shower bath. 1,821,229; Sept. 1.
Munns, Ernest A., New York, N. Y. Paint and enamel composition. 1,821,444; Sept. 1.
Munson, Horace D., and G. A. Petroe, Niagara Falls, assignor to The Mathieson Alkali Works, Inc., New York, N. Y. Fluid transmission. 1,821,524; Sept. 1.
Muren, Albert L., Dearborn, Mich. Automatically regulated semiflash boiler system. 1,821,112; Sept. 1.
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,821,230; Sept. 1.
Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)
Murray Corporation of America, The. (See Avery, Clarence W., assignor.)
Murray Corporation of America, The. (See Westrope, Fred J., assignor.)
Murray, Edward J., Glenside, Pa. Adjustable wing safety device for aircraft. 1,821,764; Sept. 1.
Murray, Richard, New York, N. Y. Ceiling, floor, and roof construction. 1,821,355; Sept. 1.
Murray, Thomas E., jr., Brooklyn, and H. H. Williams, New York, N. Y.; said Williams assignor to said Murray. Production of vehicle wheels. 1,821,663; Sept. 1.
Musgrove, Charles A., and F. F. Benson, Chinook, Mont. Automatic stabilizer. 1,821,271; Sept. 1.
Musslewhite, Clarence E., Houston, Tex. Vehicle. 1,821,395; Sept. 1.
Myers, Guy M., Clarendon, Va., assignor to The Standard Stoker Company, Incorporated. Fuel distributing system for stokers. 1,821,068; Sept. 1.
Nagai, Shoichiro, Hongo-Ku, Tokyo, and K. Kawamura, Kyobashi-Ku, Tokyo, assignors to Gosuke Imai, Tokyo-Fu, Japan. Special mixed cement of a high grade strength. 1,821,565; Sept. 1.
Nardin, Celestin F., Brooklyn, N. Y. Fuel valve. 1,821,396; Sept. 1.
Nathorst, Harry J. H., assignor to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden. Pressure can. 1,820,948; Sept. 1.
National Carbon Company. (See Dittrick, C. H., and Chaney, assignors.)
National Carbon Company. (See Ka Dell, Harold W., assignor.)
National Supply Company of Delaware, The. (See Timbs, Edward, assignor.)
National Tile Company. (See Bower, James A., assignor.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, and E. Holzapfel and O. Braunsdorf, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat Dyestuff of the benzanthrone series and making same. 1,821,023; Sept. 1.
Neal, Brown, Wichita, Kans. Garment hanger support. 1,821,722; Sept. 1.
Neal, Elmer E., Coral Gables, Miami, Fla., assignor to Peerless Handcuff Company, Springfield, Mass. Handcuff. 1,821,566; Sept. 1.
Neal, Elmer E., New Haven, Conn., assignor to Peerless Handcuff Company, Springfield, Mass. Lock mechanism. 1,821,567; Sept. 1.
Neef, Adolph J., Brooklyn, N. Y., assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Tuning indicator for radioreceivers. 1,821,568; Sept. 1.
Neighbour, Wilbur S., assignor to American Saw Mill Machinery Company, Hackettstown, N. J. Mounting for rotary miter saws. 1,821,113; Sept. 1.
Nelson, Albert, Chicago, Ill., assignor to The American Brake Shoe & Foundry Company, Wilmington, Del. Brake shoe. 1,821,069; Sept. 1.
Nelson, Albert, Chicago, Ill., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,821,070; Sept. 1.
Nelson, Christian B., Chicago, Ill. Sawing-trimming machine. 1,821,569; Sept. 1.
Nelson, Emil A., Detroit, Mich. Brake drum construction. Re18,176; Sept. 1.
Nelson, John V. (See Krag, F. K., and Nelson.)
Nestor, Leonard, assignor of one-half to E. J. Ring, Minneapolis, Minn. Slice stacker. 1,821,445; Sept. 1.
Neumann, Carl. (See Werner, W. H., and Neumann.)
New Era Electro Devices. (See Whitehead, Connie W., assignor.)
New Haven Clock Co., The. (See Porter, Wilson E., assignor.)
New Jersey Machine Corporation. (See Fleischer, P. W., and Feybusch, assignor.)
New Jersey Machine Corporation. (See Fleischer, P. W., Feybusch, Hammer, and Dans, assignors.)
Newman, Delbert F., Schenectady, N. Y., assignor to General Electric Company. Condenser for refrigerating systems. 1,821,765; Sept. 1.
Newport Chemical Corporation. (See Gubelmann, I., Oesch, and Havas, assignors.)
Newton, E. C., Corporation. (See Newton, Edward C., assignor.)
Newton, Edward C., assignor to E. C. Newton Corporation, Los Angeles, Calif. Piston ring squeezer. 1,821,356; Sept. 1.
New York Power & Light Corporation. (See Delacour, Henry M., assignor.)
Nickle, Clifford A., Schenectady, N. Y., assignor to General Electric Company. Circuit making and breaking device. 1,821,813; Sept. 1.
Nickle, Clifford A., Schenectady, N. Y., assignor to General Electric Company. Circuit interrupter. 1,821,814; Sept. 1.
Nielsen, Emanuel, assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Hair drier. 1,821,525; Sept. 1.
Nilson, Leonard D., Wayzata, Minn. Planetary operating mechanism for lifting jacks. 1,821,231; Sept. 1.
Nixon, Clifton W. (See Larsen, L. H., and Nixon.)
Nixon, Clifton W., assignor to Nixon Vending and Change Making Machines, Inc., New York, N. Y. Coin testing device. 1,821,357; Sept. 1.
Nixon Vending and Change Making Machines, Inc. (See Nixon, Clifton W., assignor.)
Noble, Mark, Oakland, Calif. Shoe displayer. 1,821,024; Sept. 1.
Noble, Warren, Detroit, Mich. Oven construction and hinge therefor. 1,821,232; Sept. 1.
Nobst, Georg, and E. Ulbricht, Mittweida, Germany, assignors to Scott & Williams, Incorporated, New York, N. Y. Jacquard apparatus. 1,821,766; Sept. 1.
Norman, William F. (See Harner, Joseph P., assignor.)
North Bro's M'f'g Co. (See Leopold, George O., assignor.)
Norton-Lasier Co. (See Norton, Lewis C., assignor.)
Norton-Lasier Company. (See Norton, Lewis C., assignor.)
Norton, Lewis C., Altadena, Calif., assignor to Norton-Lasier Co., Chicago, Ill. Doorcheck, floor type. 1,821,570; Sept. 1.
Norton, Lewis C., Pasadena, Calif., assignor to Norton-Lasier Company, Chicago, Ill. Door arm. 1,821,571; Sept. 1.
Nusslein, Joseph, Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Dyeing fibrous materials. 1,821,476; Sept. 1.
Nutt, William H. (See Knowlton, N. H., and Nutt.)
Oakes, George C., Njoro, Kenya Colony, Africa. Beater drum mechanism for shelling maize. 1,821,316; Sept. 1.
Odda Smelteverk A/S. (See Johnson, Erling, assignor.)
Oesch, Joseph B. (See Gubelmann, I., Oesch, and Havas.)
Offenhiser, Harold L., et al. (See Davis, G. C., and Griswold, assignors.)
Offord, Harold R., and N. T. Mirov, Berkeley, Calif. Fireproofing and waterproofing textiles. 1,821,317; Sept. 1.
Ohlson, Albert J., assignor to Bakeries Service Corporation, New York, N. Y. Self supporting display card. 1,821,025; Sept. 1.
Old Colony Trust Company, trustee. (See Spencer, Percy L., assignor.)
Olds, F. E., & Son, Inc. (See Olds, Reginald B., assignor.)
Olds, Reginald B., assignor to F. E. Olds & Son, Inc., Los Angeles, Calif. Piston valve for wind instruments. 1,821,397; Sept. 1.
Olley, Raymond H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Switch operating mechanism. 1,821,026; Sept. 1.
Olvis, James E., Los Angeles, Calif. Rejection means for perforated coins. 1,821,233; Sept. 1.
Orr, William F. (See Phillips, Thomas J., assignor.)
Oswald, Alfred E., Hackensack, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Electric motor. 1,821,071; Sept. 1.
Otaka, Yosbiro, Tokyo, Japan, assignor to General Electric Company. Automatic mount making machine for incandescent lamps and similar articles. 1,821,894; Sept. 1.
Otis Elevator Company. (See Dunn, Edward L., assignor.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Apparatus for indicating printing light values. 1,821,399; Sept. 1.
Owens-Illinois Glass Company. (See Rohrich, Harold A., assignor.)
Owens, Robert H., Connersville, Ind., assignor, by mesne assignments, to International-Stacey Corporation, Columbus, Ohio. Fluid handling apparatus. 1,821,895; Sept. 1.
Oya, John A., Honolulu, Hawaii. Seat and seat cover actuating mechanism for toilets. 1,821,027; Sept. 1.
Pacific Coast Engineering Company. (See Plummer, Henry G., assignor.)
Packard Electric Company, The. (See Mohr, Hubert C., assignor.)
Panhandle Refining Company. (See Sims, W. F., and Cloer, assignors.)
Paramount Fire Alarm Engineering Company, The. (See Carver, Leo A., assignor.)

Parker, Guy E. (See Seaholm, E. W., Parker, and Stahlhuth.)
Parker, Howard, assignor to Brown Company, Berlin, N. H. Multiple conduit. 1,821,234; Sept. 1.
Parker, John H. (See Kantzman, J. W., and Parker.)
Parker, Kenneth S., assignor to The Parker Pen Company, Janesville, Wis. Filling mechanism for fountain pens. 1,821,477; Sept. 1.
Parker Pen Company, The. (See Parker, Kenneth S., assignor.)
Parkes, Deric W., West Bromwich, assignor of one-half to H. W. Robinson, Birmingham, England. Separation of ortho-dihydroxybenzene bodies. 1,821,815; Sept. 1.
Parry, William H., Malden, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,821,072; Sept. 1.
Patent and Licensing Corporation, The. (See Kirschbraun, Lester, assignor.)
Patent Button Company, The. (See Carley, L. R., and White, assignors.)
Patent Button Company. (See Varley, Leonard R., and Abel, assignors.)
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Tractor. 1,821,073; Sept. 1.
Paulson, Lawrence, and A. W. Roettger, Rothsay, Minn. Train order holder. 1,821,446; Sept. 1.
Payne, Paul D., Irvington, N. J., and M. Iversen, Brooklyn, N. Y., assignors to T. A. Edison, Incorporated, West Orange, N. J. Storage battery element and the production thereof. 1,821,572; Sept. 1.
Pearson, Axel H., Ceresco, Nebr. Automatic fire alarm. 1,821,028; Sept. 1.
Pedersen, John D., Jackson, Wyo. Reversible en bloc clip for cartridges. 1,821,526; Sept. 1.
Peebles, David D., Eureka, assignor to F. E. Booth Company, Inc., San Francisco, Calif. Odorless desiccating method and system. 1,820,986; Sept. 1.
Peer, Charles, Brush, Colo. Sugar beet topping machine. 1,821,573; Sept. 1.
Peerless Handcuff Company. (See Neal, Elmer E., assignor.)
Peerless Level & Tool Company, The. (See Weber, Jacob F., assignor.)
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Conveyer guide. 1,821,664; Sept. 1.
Peirce, Ralph S., Hinsdale, Ill. Anchorage device. 1,821,400; Sept. 1.
Peirce, Ralph S., Hinsdale, Ill. Attaching device. 1,821,401; Sept. 1.
Perfection Stove Company. (See Resek, Marc, assignor.)
Pernot, Frederick E., London, England. Alternating current signaling system. 1,821,114; Sept. 1.
Perry, Charles H., Miami, Fla. Sprinkler. 1,821,723; Sept. 1.
Peter, Bernard H., London, England, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling apparatus. 1,821,029; Sept. 1.
Peters, Carl A., Mead, Colo. Manure loader. 1,821,074; Sept. 1.
Peters, Peter N., Brooklyn, N. Y. Razor. 1,821,574; Sept. 1.
Peters, Spencer M., and A. B. Rochester, Springfield, Ill., said Rochester assignor to said Peters. Stepladder joint and shelf-support. 1,821,075; Sept. 1.
Petersen, Carl M., assignor to Circle F Mfg. Co., Trenton, N. J. Pull switch candelabrum socket. 1,821,030; Sept. 1.
Petersen, Carl M., assignor to Circle F Mfg. Co., Trenton, N. J. Flush receptacle. 1,821,031; Sept. 1.
Petersen, Ove, Hellerup, near Copenhagen, Denmark. Fuel valve with annular seat. 1,821,272; Sept. 1.
Peterson, Carl O., Essex, Iowa. Alarm switch. 1,821,318; Sept. 1.
Peterson, Eugene, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Amplifying system. 1,821,076; Sept. 1.
Peterson, Harold O., Riverhead, N. Y., assignor to Radio Corporation of America. Antenna. 1,821,402; Sept. 1.
Petroe, Gregory A. (See Munson, H. D., and Petroe.)
Petroleum Conversion Corporation. (See Tolman, Charles P., assignor.)
Petronio, Albert M. J. (See Girin, Antoine, assignor.)
Pfeiffer, Isadore F., Aurora, Ind. Pulverizing mill. 1,821,912; Sept. 1.
Phelps, Clyde H., Binghamton, N. Y., assignor, by mesne assignments, to Accurometer Mfg. Co., Inc. Axle level. 1,821,319; Sept. 1.
Phillips, William E., assignor to The Link-Belt Company, Chicago, Ill. Rolls for belt idlers. 1,821,235; Sept. 1.
Phillips, Thomas J., Pittsburgh, assignor of one-half to W. F. Orr, New Bethlehem, Pa. Combination sled and wagon. 1,821,896; Sept. 1.
Pickett, Mabel G., et al. (See Hull, Alva M., assignor.)
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Warming closet for cook stoves. Des. 85,002; Sept. 1.
Pierce, Leo F., San Diego, assignor to Federal Telegraph Company, San Francisco, Calif. Oscillating arc. 1,821,915; Sept. 1.
Pietzsch, Frank H. (See Hoerr, L. A., and Pietzsch.)
Pike, Frederick J., Buffalo, N. Y. Stabilizer for airplanes. 1,821,273; Sept. 1.
Pilgrim Plush Company. (See Cooper, James W., assignor.)
Pitcairn, Harold F., Bryn Athyn, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft. 1,820,946; Sept. 1.
Pitney-Bowes Postage Meter Co. (See Wheeler, W. H., Jr., and Viele, assignors.)
Pledger, Harry W., Ogden, Utah. Drinking fountain for poultry. 1,821,478; Sept. 1.
Plummer, Sidney G., Oakland, Calif. Pontoon. 1,821,320; Sept. 1.
Plummer, Henry G., assignor to Pacific Coast Engineering Company, Oakland, Calif. Flexible pipe-joint. 1,821,274; Sept. 1.
Plüschweberei Grefrath Aktiengesellschaft. (See Görner, Arthur, assignor.)
Plym, Francis J., assignor to The Kawneer Company, Niles, Mich. Window construction. 1,820,947; Sept. 1.
Polaire, Zero, Salem, Oreg. Latch. 1,821,847; Sept. 1.
Pons, John A., Valdese, N. C., assignor to Scott & Williams, Incorporated, New York, N. Y. Selective control of webholders. 1,821,848; Sept. 1.
Poole, Ralph E., Harlan, Iowa. Clover seed huller and scarifier. 1,821,767; Sept. 1.
Porter-Cable Machine Company, The. (See Emmons, Arthur N., assignor.)
Porter, Reuben W. (See Huseboe, M., and Porter.)
Porter, Wilson E., assignor to The New Haven Clock Co., New Haven, Conn. Electric clock. 1,821,897; Sept. 1.
Potdevin, Adolph, Garden City, assignor to Potdevin Machine Company, Brooklyn, N. Y. Apparatus for joining materials. 1,820,921; Sept. 1.
Potdevin Machine Company. (See Potdevin, Adolph, assignor.)
Potter, James T., Quakerhill, assignor to Gillette-Vibber Company, Incorporated, New London, Conn. Ground connecter. 1,821,575; Sept. 1.
Potter, Rissiter R., and M. Shakespeare, assignors to Shakespeare Products Company, Kalamazoo, Mich. Control device. 1,821,576; Sept. 1.
Pouchain, Adolfo, Turin, Italy. Negative electrode for electric accumulators. 1,821,768; Sept. 1.
Povalski, Bernard J., Jersey City, N. J., assignor to Fedco System, Inc. Identification plate and making same. 1,821,577; Sept. 1.
Povalski, Bernard J., Jersey City, N. J., assignor to Fedco System, Inc. Making identification plates. 1,821,578; Sept. 1.
Prall, Bert R., assignor to Montgomery Ward & Co., Incorporated, Chicago, Ill. Tire casing. Des. 85,003; Sept. 1.
Pratt, Harry P., et al, trustees. (See Pratt, Harry P., assignor.)
Pratt, Harry P., Chicago, Ill., assignor, by mesne assignments to H. P. Pratt, W. F. Grover, H. A. Allen, H. T. Ballard, and G. S. Herrington, trustees of Pratt Radio Trust. Radio vanity case. 1,821,236; Sept. 1.
Pratt Radio Trust et al. (See Pratt, Harry P., assignor.)
Preble, Stephen E. (See Mackey, C. H., and Preble.)
Presly, Homer W. (See Jones, William O., assignor.)
Pressed & Welded Steel Products Co. (See Haskin, Walter E., assignor.)
Preston, Edward S., assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Portable electric fan. Des. 85,004; Sept. 1.
Pricco, John, assignor of one-half to W. Smith, Los Angeles, Calif. Clamp and arm for rock drills and the like. 1,821,403; Sept. 1.
Prillaman, Ella F., et al. (See Culver, Lagar R., assignor.)
Prillaman, John W., et al. (See Culver, Lagar R., assignor.)
Prinz, Hans. (See Quaas, Johannes, assignor.)
Pritz, Lawrence G. (See Baily, T. F. and Pritz.)
Progressive Silk Finishing Co. (See Milhomme, Alexander, assignor.)
Prouty, William B., Evanston, Ill. Dust collector mechanism. 1,821,665; Sept. 1.
Pugh, Lawrence H. (See Schaubhut, Arthur A., assignor.)
Pullen, Horace J., Los Angeles, Calif. Vehicle driving wheel. 1,821,901; Sept. 1.
Pym, Arthur F. (See Whelton, J. M., and Pym.)
Pyrene-Minimax Corporation. (See Wagener, Clemens, assignor.)
Quaas, Johannes, assignor to Hans Prinz, Erfurt, Germany. Device for preventing side slips in motor vehicles and the like. 1,821,816; Sept. 1.
Racine Dispenser & Manufacturing Company. (See Hanson, Sigvort, assignor.)
Rader, Harold K., assignor to Mueller Brass Co., Port Huron, Mich. Lawn sprinkler. 1,821,579; Sept. 1.
Radio Corporation of America. (See Franklin, Charles S., assignor.)
Radio Corporation of America. (See George, J. L., and Chiffey, assignors.)
Radio Corporation of America. (See Goldsmith, Alfred N., assignor.)
Radio Corporation of America. (See Holst, G., van Urk, and Vermeulen, assignors.)
Radio Corporation of America. (See Lindenblad, Nils E., assignor.)

Radio Corporation of America. (See Loewe, Bernhard, assignor.)
Radio Corporation of America. (See Peterson, Harold O., assignor.)
Radio Corporation of America. (See Reerink, E. H., and Mulder, assignors.)
Radio Corporation of America. (See Usselman, George L., assignor.)
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Preventing breaks on paper machines. 1,821,849; Sept. 1.
Railway and Industrial Engineering Company. (See Koppitz, Carl G., assignor.)
Rapellin, René, San Gabriel, Calif. Grease gun. 1,821,404; Sept. 1.
Rapoport, Solomon, Brooklyn, N. Y. Variable feed for stokers. 1,821,666; Sept. 1.
Rawling, Francis G., Chillicothe, assignor to The Mead Pulp and Paper Company, Dayton, Ohio. Control mechanism. 1,821,237; Sept. 1.
Ray, Joshua R. (See Ray, Thomas and J. R.)
Ray, Thomas and J. R., Manistee, Mich. Screen box. 1,821,190; Sept. 1.
Reagan, Maurice E., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor starting system. 1,821,358; Sept. 1.
Reardon, Edward J., assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,821,527; Sept. 1.
Reerink, Engbert H., and J. G. W. Mulder, Eindhoven, Netherlands, assignors to Radio Corporation of America. Wehnelt-cathode. 1,821,359; Sept. 1.
Rees, Gomer H. (See Spencer, Kenneth S. S., assignor.)
Reid, Ebenezer E., Baltimore, Md., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Condensing alcohols. 1,821,667; Sept. 1.
Reinhardt, James H., East Orange, N. J. Page numbering machine. 1,821,360; Sept. 1.
Remington Arms Company. (See Green, Charles W., assignor.)
Remington Rand Inc. (See Day, William H., assignor.)
Rentschler, Harvey C., East Orange, and W. W. Merrymon, Glen Ridge, N. J., assignors to Westinghouse Lamp Company. Rectifier. 1,821,238; Sept. 1.
Resek, Marc, Cleveland Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Liquid supply system and oil burning apparatus incorporating same. 1,821,769; Sept. 1.
Reutter, Philip A., assignor to Scovill Manufacturing Company, Waterbury, Conn. Cosmetic container. 1,820,949; Sept. 1.
Rex Research Corporation. (See Beetem, Samuel H., assignor.)
Reyrolle, A., & Company Limited. (See Allan, Archibald, assignor.)
Richard, Clement C. (See Richard, O. K. and C. C.)
Richard, Otis K. and C. C., assignors to Allied Products Corporation, Detroit, Mich. Punch and die retainer. 1,821,770; Sept. 1.
Richter, George A., assignor to Brown Company, Berlin, N. H. Cellulose fiber for preparation of esters and producing same. 1,821,321; Sept. 1.
Richter, George A., assignor to Brown Company, Berlin, N. H. Cooking liquor for the production of sulphite pulp. 1,821,322; Sept. 1.
Riemenschneider, Edmund W., assignor to The Union Metal Manufacturing Company, Canton, Ohio. Tapered tubular poles. 1,821,850; Sept. 1.
Riese, Heinrich Zurich, Switzerland. Dynamo electric machine. 1,821,405; Sept. 1.
Rigby, Clark F., Butler, Pa. Head device for sand pumps and bailers. 1,821,479; Sept. 1.
Rinehart, Cecil H., Bristow, Okla. Nonfreezing water fountain. 1,821,724; Sept. 1.
Rinehart, Cecil H., Bristow, Okla. Hose support and elevator. 1,821,725; Sept. 1.
Ring, Edward J. (See Nestor, Leonard, assignor.)
Ritter Dental Manufacturing Company. (See May, Adam J., assignor.)
Robbins, Duane L., Sacred Heart, Minn. Oil can. 1,821,480; Sept. 1.
Roberts, Daniel C., Trenton, N. J. Aeroplane. 1,821,323; Sept. 1.
Roberts, Ellwood W., Germantown, Pa. Shoe rack. 1,821,771; Sept. 1.
Robertson, William, assignor to Lozell Manufacturing Company, Erie, Pa. Wringer. 1,821,275; Sept. 1.
Robinson, Herbert W. (See Parkes, Derlo W., assignor.)
Robinson, James, London, England. Wave-signaling system. 1,821,032; Sept. 1.
Robinson, James, London, England. Radio receiving apparatus. 1,821,033; Sept. 1.
Robinson, Joseph, Morristown, N. J. Automatic train pipe coupling. 1,821,115; Sept. 1.
Robinson, Roy H., Chicago, Ill. Golf club. 1,821,191; Sept. 1.
Robson, Homer L. (See Debeau, M. A., and Robson.)
Rochefort, François, Paris, France. Injection of fuel for internal combustion engines. 1,821,817; Sept. 1.
Rochester, Arthur B. (See Peters, S. M., and Rochester.)
Rochester Telephone Corporation, The. (See Vincent, William J., assignor.)
Rodman, Clarence J. (See Maude, A. H., Rodman, Styer, and Wilharm.)
Roe, De Forest, Elyria, assignor to The Celson Company, Cleveland, Ohio. Hand truck. 1,821,276; Sept. 1.
Roettger, Alphonse W. (See Paulson, L., and Roettger.)
Rogers, Earl B., assignor to Mid-West Forging Company, Chicago, Ill. Base for signs. 1,821,580; Sept. 1.
Rogers, Lore A., Washington, D. C. Can for the preservation of cheese. 1,821,447; Sept. 1.
Rohrich, Harold A., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,821,077; Sept. 1.
Róka, Koloman, Konstanz, Baden, assignor, by mesne assignments, to the Firm of Deutsche Gold-und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Producing acetone. 1,821,324; Sept. 1.
Rome Company, The. (See Thomas, Joseph R., assignor.)
Rosatelli, Celestino, assignor to Fiat Società Anonima, Turin, Italy. Aeroplane control switch. 1,821,581; Sept. 1.
Rosenberger, Maynard, Los Angeles, Calif., assignor to Adohr Stock Farms, Reseda, Calif. Bottle. Des. 85,005; Sept. 1.
Rosenthal China Corporation, The. (See Wesp, George, assignor.)
Ross, Oscar A., New York, N. Y. Folding metal box. 1,821,668; Sept. 1.
Routhe, Christian F., Redwood Falls, Minn. Conveyer for grain binders. 1,821,277; Sept. 1.
Royle, Joseph, et al. (See Fleck, Philip H., assignor.)
Rudolph, Walter J., assignor to Jas. P. Marsh & Company, Chicago, Ill. Gauge construction. 1,821,669; Sept. 1.
Rumbaugh, George W., Port Angeles, Wash. Clothesline pulley. 1,821,448; Sept. 1.
Russell, James R. (See Dumm, H., and Russell.)
Ruthman, Edward J., Cincinnati, Ohio. Reversible centrifugal pump. 1,821,772; Sept. 1.
Ryan, Lonnie W., Niagara Falls, N. Y., assignor to Titanium Pigment Company, Inc., New York, N. Y. Precipitating titanium compounds. 1,820,987; Sept. 1.
Ryan, Lonnie W., Niagara Falls, assignor to Titanium Pigment Company, Inc., New York, N. Y. Precipitating titanium compounds. 1,820,988; Sept. 1.
Rypinski, Albert B., Laurelton, Long Island, N. Y.; assignor, by mesne assignments, to Metropolitan Device Corporation. Ventilated switch box. 1,821,898; Sept. 1.
Sachs, Joseph, West Hartford, Conn. Inclosed fused switch. 1,821,671; Sept. 1.
Sackner, Wade W., Grand Rapids, Mich. Packing cord. 1,821,582; Sept. 1.
Saks & Co. (See De Liso, Vincent, assignor.)
Sanborn, Chester A., Lynn, Mass. Building. Des. 85,006; Sept. 1.
Sander, Paul E. B., assignor to Chemnitzer Strick-Maschinen-Fabrik, A. G., Chemnitz, Germany. Circular knitting machine. 1,820,989; Sept. 1.
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Lever connection. 1,821,452; Sept. 1.
Sanite Corporation. (See Whitehouse, John N., assignor.)
Saporta, Alberto, Milan, Italy. Closure for pressure vessels. 1,821,726; Sept. 1.
Sargent & Company. (See Shaw, John H., assignor.)
Sargent, Ralph M., Franklin Park, Mass. Ironing machine. 1,821,670; Sept. 1.
Sawin, Kenneth A., Winthrop, assignor to Wheeler Reflector Company, Boston, Mass. Shock-absorbing electric fixture. 1,821,406; Sept. 1.
Schaaff, John T., Washington, D. C., assignor to The Tabulating Machine Company, New York, N. Y. Punch and typewriter controlling means therefor. 1,821,078; Sept. 1.
Schaaff, Louis W., Weehawken, N. J. Coin-in-the-slot machine for the polishing of finger nails. 1,821,034; Sept. 1.
Schaffer, Everett F. (See Martin, Dougall C., assignor.)
Schaubhut, Arthur A., assignor of one-fifteenth to H. Pugh, Thibodaux, La. Rail coupling. 1,821,325; Sept 1.
Schempp, Anton, New York, N. Y. Mop. 1,821,481; Sept. 1.
Schirmacher, Karl, Frankfort-on-the-Main-Hochst, and H. Schlichenmaier, Bad-Soden-am-Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Compounds of the anthracene series and preparing them. 1,821,035; Sept. 1.
Schlemmer, Oliver H., Cincinnati, Ohio. Hot water heating system. 1,821,773; Sept. 1.
Schlichenmaier, Hans. (See Schirmacher, K., and Schlichenmaier.)
Schmidt, Albrecht, Hochst-on-the-Main, Germany, assignor, by mesne assignments, to Winthrop Chemical Company, New York, N. Y. Preparation for repelling gnats and similar insects. 1,821,036; Sept. 1.
Schneider, Bernard R., Lyndhurst, N. J. Strip feed mechanism. 1,821,899; Sept. 1.
Schonberg, Jackson R., Westfield, N. J., assignor to Standard Oil Development Company. Heating decomposable materials. 1,821,326; Sept. 1.
Schottky, Walter, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Decarburizing iron or steel or their alloys. 1,821,407; Sept. 1.

Schreiner, Aenne, Frankfort-on-the-Main, Germany. Producing highly active carbon. 1,821,117; Sept. 1.
Schubert, Arthur, Rosslau, Germany. Paper making machine. 1,821,583; Sept. 1.
Schulstadt, Hugo G., Maplewood, N. J. Adjustable prop. 1,820,950; Sept. 1.
Schultis, Charles F., Cleveland, Ohio. Waste and overflow fittings for lavatory wash basins, bathtubs, kitchen sinks, and the like. 1,821,584; Sept. 1.
Schultze, Charles E., Denver, Colo. Dental instrument. 1,821,079; Sept. 1.
Schulz, Arthur P. (See Teller, J., and Schulz.)
Schumacher, Herman O.. (See Metler, W. S., and Schumacher.)
Schuster, Ernst, Bremen, Germany. Vacuum evaporating apparatus. 1,821,278; Sept. 1.
Schutte, Charles F., Buffalo, N. Y. Hammer mill. 1,821,482; Sept. 1.
Schwarzhaupt, Paul J., Scotia, N. Y., assignor to General Electric Company. Phonograph record disk. 1,821,851; Sept. 1.
Schwob Freres & Cie. S. A. (See Vastlcar, Henri, assignor.)
Scott & Williams, Incorporated. (See Nobst, G., and Ulbricht, assignors.)
Scott & Williams, Incorporated. (See Pons, John A., assignor.)
Scott, David J., et al., executors. (See Johansen, Samuel, assignor.)
Scott, Isabella, et al., executors. (See Johansen, Samuel, assignor.)
Scott, Marie B., St. Louis, Mo. Suspenders. 1,821,239; Sept. 1.
Scott, Walter, deceased. (See Johansen, Samuel.)
Scott, William P., assignor to Drayage Service Corporation, Oakland, Calif. Automobile truck. 1,821,327; Sept. 1.
Scovill Manufacturing Company. (See Fenton, Paul E., assignor.)
Scovill Manufacturing Company. (See George, J. S., and Sperry, assignors.)
Scovill Manufacturing Company. (See Reutter, Philip A., assignor.)
Seaholm, Ernest W., G. E. Parker, and A. H. Stahlhuth, Detroit, Mich., assignors to Bendix Brake Company, Chicago, Ill. Brake. 1,821,852; Sept. 1.
Sealed Joint Construction Corporation. (See Keuls, Henry P. C., assignor.)
Seaman, Fred J., et al., administrators. (See Marshall, John W.)
Segelcke, Fritz W. H., Tulsa, Okla. Garter. 1,821,192; Sept. 1.
Segelhorst, August L., Huntington Beach, Calif. Tool joint. 1,821,328; Sept. 1.
Seidler, Joseph C., Wheeling, W. Va. Covering cleaned garments. 1,821,672; Sept. 1.
Selectograph Company. (See Gollnick, P. A., and Broderick, assignors.)
Seletzky, Anatoli C., Baltimore, Md., assignor to The Westinghouse Lamp Company, New York, N. Y. Machine for testing electric lamps. 1,821,240; Sept. 1.
Sentry Safety Control Corporation. (See Allen, Thomas T., assignor.)
Severns, Clayton. (See Hicks, John N., and Severns.)
Shakespeare, Monroe. (See Potter, R. R., and Shakespeare.)
Shakespeare Products Company. (See Potter, R. R., and Shakespeare, assignors.)
Shamp, Herbert, Memphis, Tenn. Method and apparatus for treating fiber-bearing plants. 1,821,673; Sept. 1.
Shapiro, Harry, New York, N. Y. Ventilator. 1,821,674; Sept. 1.
Shaw, George R., London, England. Casement window. 1,821,449; Sept. 1.
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock key. 1,821,361; Sept. 1.
Shekter, Abraham J., Jamaica, N. Y. Circuit controller. 1,821,727; Sept. 1.
Shipman, Luther W., Almonte, Ontario, Canada. Vaporizer. 1,821,728; Sept. 1.
Shoe Form Co. (See De Witt, William J., assignor.)
Short, Henry M., Penn Yan, N. Y. Automatic cut off switch. 1,821,853; Sept. 1.
Shover, Barton R., and F. P. Townsend, Pittsburgh, Pa. Rolling mill. 1,821,483; Sept. 1.
Sideman, Irving, Chicago, Ill. Retaining device. 1,821,675; Sept. 1.
Siebs, Claude T., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Indicator switch. 1,820,990; Sept. 1.
Siemens & Halske Aktiengesellschaft. (See Schottky, Walter, assignor.)
Silver, Maxwell, Bronx, assignor to Farrington & Evans, Inc., New York, N. Y. Imparting suede finish to woven paper hats. 1,821,854; Sept. 1.
Silvers, Samuel, Waterloo, Iowa. Air pump. 1,821,900; Sept. 1.
Simonds Worden White Company. (See Allison, Albert J., assignor.)
Simpson, Harrison D., assignor to Krementz & Company, Newark, N. J. Chain strap. 1,821,676; Sept. 1.
Simpson, Robert J. O., assignor to The L. S. Starrett Company, Athol, Mass. Micrometer calipers. 1,821,398; Sept. 1.
Sims, Willis F., and V. U. Cloer, assignors to Panhandle Refining Company, Wichita Falls, Tex. Apparatus for treating hydrocarbon vapors. 1,821,116; Sept. 1.
Sinykin, Jack L., St. Paul, Minn. Window display stand. Des. 85,007; Sept. 1.
Sisson, Vinton E., assignor to Union Metal Products Company, Chicago, Ill. Corrugated metallic plate. 1,821,118; Sept. 1.
Sithens, Edward J., Cynwyd, Pa., assignor to American Telephone and Telegraph Company, Bookholder. 1,821,279; Sept. 1.
Sivera, Vincent R., New Britain, Conn. Trimming ax. 1,821,855; Sept. 1.
Skogmark, John, and M. F. Chase, New York, N. Y. Purification of gases. 1,821,064; Sept. 1.
Slick, Edwin E., Pittsburgh, Pa. Dispensing apparatus. 1,820,951; Sept. 1.
Sloan, William E., Chicago, Ill. Valve. 1,821,241; Sept. 1.
Smith & Crosby. (See Gammell, O. L., and Woodward, assignors.)
Smith, Caldwell A., Noroton Heights, Conn. Key and license holder. 1,821,585; Sept. 1.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,821,528; Sept. 1.
Smith, Joseph A., Attleboro, Mass. Nursing nipple. 1,821,913; Sept. 1.
Smith, L. C., & Corona Typewriters Inc. (See Avery, Henry A., assignor.)
Smith, Walter. (See Pricco, John, assignor.)
Smith, William A., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Protective device. 1,821,677; Sept. 1.
Smurthwaite, Jesse A., Helena, Mont. Inscription attachment for cameras. 1,821,408; Sept. 1.
Smythe, Clayton L. (See Frederick, Clarence H., assignor.)
Smythe, Edwin H., Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,821,586; Sept. 1.
Snodgrass, Benjamin W. (See Jones, Gwilym D., assignor.)
Snodgrass, Benjamin W., Denver, Colo. Conveyer. 1,821,678; Sept. 1.
Snow, Isaac, Lawrence, Mass. Slanting horn shuttle. 1,821,729; Sept. 1.
Snyder, Frank S., Council Bluffs, Iowa. Garment. 1,821,818; Sept. 1.
Snyder, William U., and W. T. Hess, Kansas City, Mo. Clutch mechanism. 1,820,991; Sept. 1.
Soderberg, Erik A., assignor of one-half to G. Gundersen Alameda, Calif. Can handling device. 1,821,819; Sept. 1.
Somerville, George H., et al. (See Bounds, Orville T., assignor.)
Sommer, William H., Peoria, Ill. Barb wire machine. 1,821,730; Sept. 1.
Sommer, William H., Peoria, Ill. Fence structure. 1,821,731; Sept. 1.
Sorensen, Charles E., Detroit, assignor to Ford Motor Company, Fordson, Mich. Conveyer. 1,821,119; Sept. 1.
Souder, William H., Washington, D. C. Bowling pin. 1,821,037; Sept. 1.
Southern States Equipment Co. (See Lemmon, George N., assignor.)
Sovine, Tony F., Flint, Mich. Electric conduit connecter. 1,821,362; Sept. 1.
Spafford, Allen L., assignor to Wood Conversion Company, Cloquet, Minn. Manufacture of distended fibrous masses. 1,821,856; Sept. 1.
Spalding, A. G., & Bros. (See Glabe, Fred, assignor.)
Speck, Julius C., Cleveland, Ohio. Cigarette lighter. Des. 85,008; Sept. 1.
Spencer, Hugh M., assignor to The Upson Company, Lockport, N. Y. Molded composition. 1,821,120; Sept. 1.
Spencer, Kenneth S. S., Ilford, assignor to G. H. Rees, London, England. Acoustic device provided with vibratile diaphragms. 1,821,529; Sept. 1.
Spencer, Owen H., Indianapolis, Ind. Spiral blade fan. 1,821,484; Sept. 1.
Spencer, Percy L., Medford, Mass., assignor, by mesne assignments, to Old Colony Trust Company, trustee. Gaseous conduction apparatus. 1,821,242; Sept. 1.
Sperry, Roger S. (See George, J. S., and Sperry.)
Spinnler, Carl, Liestal, Switzerland. Belt buckle. 1,821,329; Sept. 1.
Spire, William H., Cleveland, Ohio, assignor to Thompson Products, Inc. Induction heater. 1,821,530; Sept. 1.
Split Ballbearing Corporation. (See Bowne, Raymond W., assignor.)
Sporn, Philip, Brooklyn, and H. D. Freitag, Lynbrook, assignors to Electric Process Company, Inc., New York, N. Y. Relay and meter testing and calibrating switch. 1,820,922; Sept. 1.
Spraco, Inc. (See Dennison, Frank G., assignor.)
Springer, Wilson R., Oskaloosa, Iowa. Facial change device for dolls. 1,821,243; Sept. 1.
Sprong, Severn D., Brooklyn, assignor to Engineering Products Corporation, Inc., New York, N. Y. Radiator. 1,821,080; Sept. 1.
Squires, Etta M., Amityville, N. Y. Ice skate. Des. 85,009; Sept. 1.
Stacey Bros. Gas Construction Company, The. (See Taylor, James J., assignor.)

Stahlhuth, Arthur H. (See Seaholm, E. W., Parker, and Stahlhuth.)
Standard-Knapp Corporation. (See Mudd, Garrett W., assignor.)
Standard Oil Development Company. (See Buc, Hyym E., assignor.)
Standard Oil Development Company. (See Clark, Edgar M., assignor.)
Standard Oil Development Company. (See Loomis, Nathaniel E., assignor.)
Standard Oil Development Company. (See Schonberg, Jackson R., assignor.)
Standard Sanitary Manufacturing Company. (See Brain, George, assignor.)
Standard Stoker Company, The. (See Myers, Guy M., assignor.)
Standard-Tropp Bros. Machine Company. (See Houseman, Wilbur L., assignor.)
Stanley Works, The. (See Holloway, John J., assignor.)
Starkey, Herbert C., Chadron, Nebr. Artificial hand. 1,821,081; Sept. 1.
Starrett, L. S., Company, The. (See Simpson, Robert J. O., assignor.)
Stearns, Frank B. (See Canning, Eugene A., assignor.)
Stedefeld, Curt, Heidelberg, Germany. Torpedo shaped suspended railway vehicle for high speeds. 1,821,121; Sept. 1.
Stedman, Charles T. (See Bowers, Charles R., assignor.)
Steel Heddle Manufacturing Company. (See Kaufmann, John J., assignor.)
Steiger, Norbert, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacturing 1-halogen-2-amino-naphthalene-sulphonic acids. 1,821,038; Sept. 1.
Stelzer, William, Chicago, Ill., assignor to American Propelled Company, Baltimore, Md. Propelling device for aircraft and the like. 1,821,450; Sept. 1.
Stephens, George H., Northbrook, assignor to The Hammond Clock Company, Chicago, Ill. Clock dial. Des. 85,010; Sept. 1.
Stephens, George H., Northbrook, assignor to The Hammond Clock Company, Chicago, Ill. Clock case. Des. 85,011; Sept. 1.
Sterling Clock Co., Inc. (See Stern, Lewis J., assignor.)
Stern, Lewis J., New York, N. Y., assignor to Sterling Clock Co., Inc. Electrically operated clock. 1,821,820; Sept. 1.
Stewart, Richard F., Briarcliff Manor, N. Y. Butter cutting machine. 1,821,363; Sept. 1.
Stewart-Warner Corporation. (See Tyler, Harvey E., assignor.)
Stockfleth, Berger, Miles, Mich., assignor to Hydraulic Pressed Bearing Company, Wilmington, Del. Bearing sleeve and making same. 1,821,122; Sept. 1.
Stoetzel, Joseph, Queens Village, assignor to G. & G. Atlas Systems, Inc., New York, N. Y. Dispatch tube apparatus. 1,821,857; Sept. 1.
Stoker, Paul P., Wilkinsburg, assignor to The Union Swith & Signal Company Swissvale, Pa. Train indicating apparatus. 1,821,039; Sept. 1.
Stone, Edwin W., Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Machine for trimming the tuft yarns of tube frames. 1,821,409; Sept. 1.
Stoneberg, Fritiof, Chicago, Ill. Intermittent operator for winches. 1,820,992; Sept. 1.
Storer, Norman W., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor generator locomotive control system. 1,821,364; Sept. 1.
Stowell, Arthur R., Greenwood, Me. Target. 1,821,330; Sept. 1.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Rolling colter. 1,821,774; Sept. 1.
Straubel, Frederick L. G., assignor to The Automatic File & Index Company, Green Bay, Wis. Filing card support. 1,821,244; Sept. 1.
Straubel, Frederick L. G., assignor to The Automatic File & Index Company, Green Bay, Wis. Spacer guide. 1,821,245; Sept. 1.
Streich, A. & Bro. Company. (See Streich, Frederick A., assignor.)
Streich, Frederick A., assignor to A. Streich & Bro. Company, Oshkosh, Wis. Dump wagon door operating device. 1,820,993; Sept. 1.
Strzelczyk, Samuel A., Milwaukee, Wis. Drafting tablet. 1,821,485; Sept. 1.
Stuart, Harve R., Springfield, Ohio. Oscillating motor. 1,821,123; Sept. 1.
Sturges, Perley C., Bronxville, N. Y. Boat equipment. 1,820,923; Sept. 1.
Sturtevant, B. F., Company. (See Freeman, Ernest B., assignor.)
Styer, Charles A. (See Maude, A. H., Rodman, Styer, and Wilharm.)
Suderov, Abraham, New York, N. Y. Finger ring or similar article. Des. 85,012; Sept. 1.
Sullivan Machinery Company. (See Mercer, Henry H., assignor.)
Sun Oil Company. (See Thomas, Henry, assignor.)
Sundberg, Karl, and E. D. Lindbion, assignors to Aktiebolaget Elektrisk Malmletning, Stockholm, Sweden. Method and apparatus for subsoil investigating. 1,820,953; Sept. 1.
Sundstrand Machine Tool C. (See Svenson, Ernest J., assignor.)
Superheater Company, The. (See Barnes, John A., assignor.)
Superheater Company, The. (See Griffin, J. F., and Williams, assignors.)
Surber, Heinrich. (See Danthine, Karl, assignor.)
Svenson, Ernest J., assignor to Sundstrand Machine Tool Co., Rockford, Ill. Tailstock. 1,821,331; Sept. 1.
Swan, Carl W., assignor to Teletype Corporation, Chicago, Ill. Selecting apparatus. 1,821,124; Sept. 1.
Symington, T. H., and Son, Inc. (See Dreuning, Percy R., assignor.)
Taber, Walter S., Honolulu, Hawaii. Lubricant dispensing device. 1,821,587; Sept. 1.
Tabulating Machine Company, The. (See Carroll, Fred M., assignor.)
Tabulating Machine Company, The. (See Schaaff, John T., assignor.)
Tabulating Machine Company, The. (See Wright, John E., assignor.)
Taylor Brothers Manufacturing Corporation. (See Taylor, Charles E., assignor.)
Taylor, Charles E., Los Angeles, Calif., assignor to Taylor Brothers Manufacturing Corporation, Elkhart, Ind. Battery terminal clamp. 1,821,486; Sept. 1.
Taylor, Henry P., Winston-Salem, N. C. Pressing and packing manufactured tobacco. Re18,173; Sept. 1.
Taylor, Howard D., New York, N. Y., assignor to Flexible Truck Corporation, Reading, Pa. Car truck bolster. 1,820,924; Sept. 1.
Taylor, James J., Wyoming, assignor to The Stacey Bros. Gas Construction Company, St. Bernard, Ohio. Riveter. 1,821,410; Sept. 1.
Taylor, William L., Cincinnati, Ohio. Multiplex bag. 1,821,246; Sept. 1.
Technicolor Motion Picture Corporation. (See Troland, Leonard T., assignor.)
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Teletype Corporation. (See Morton, S., and Krum, assignors.)
Teletype Corporation. (See Morton, S., Krum, and Kleinschmidt, assignors.)
Teletype Corporation. (See Swan, Carl W., assignor.)
Teller Corporation. (See Teller, J., and Schulz, assignors.)
Teller, Jacob, Chicago, and A. P. Schulz, Berwyn, Ill., assignors to Teller Corporation, Chattanooga, Tenn. Gas or electric range top. Des. 85,013; Sept. 1.
Teller, Jacob, Chicago, and A. P. Schulz, Berwyn, Ill., assignors to Teller Corporation, Chattanooga, Tenn. Gas or electric range. Des. 85,014; Sept. 1.
Te Pas, Edmund J., Lakewood, assignor to The Cleveland Heater Company, Cleveland, Ohio. Nonflashing gas burner. 1,821,858; Sept. 1.
Teplitz, Abraham J. (See Langford, C. T., and Teplitz.)
Terry, Edward F., jr., assignor to Gardner-Denver, Company, Denver, Colo. Tool retainer. 1,821,732; Sept. 1.
Terry, Walter J., Seattle, Wash. Dental handpiece attachment sealer. 1,821,451; Sept. 1.
Tesche, Heinrich and A. Job, Elberfeld, near Cologne, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New nitroarylaminoanthraquinone compound. 1,821,040; Sept. 1.
Texas Pacific Coal and Oil Company. (See Baker, F. C., Fleckenstein, and Landman, assignors.)
Textile-Finishing Machinery Company, The. (See Lane, Frank A., assignor.)
Thau, Walter E., South Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,821,332; Sept. 1.
Thibodeau, Ralph W., Quincy, Mass. Glare deflector. 1,821,733; Sept. 1.
Thom, Michael C., Carey, Ohio. Fence and post anchor. 1,821,125; Sept. 1.
Thomas, Arvine N., Canton, Ohio. Adjustable seat. 1,821,247; Sept. 1.
Thomas, Henry, Ridley Park, assignor to Sun Oil Company, Philadelphia, Pa. Tube still furnace. 1,821,531; Sept. 1.
Thomas, Joseph R., Fort Madison, Iowa, assignor of one-half to The Rome Company, Inc. Convertible furniture. 1,821,126; Sept. 1.
Thomas, Laurence H. (See Kuhn, F., and Thomas.)
Thompson, James S., assignor to American Brake Materials Corporation, New York, N. Y. Making friction blocks. 1,821,487; Sept. 1.
Thompson Products, Inc. (See Spire, William H., assignor.)
Thompson, Ralph E., Brookline, and R. M. Dugdale, Dedham, assignors to Gillette Safety Razor Company, Boston, Mass. Razor case. 1,821,365; Sept. 1.
Thorp, Joel R., assignor to The Fulton Company, West Allis, Wis. Foot pedal. 1,821,589; Sept. 1.
Thorp, Joel R., assignor to The Fulton Company, West Allis, Wis. Horn. 1,821,590; Sept. 1.
Thorp, Joel R., and C. Fausch, assignors to The Fulton Company, West Allis, Wis. Pedal. 1,821,588; Sept. 1.
Thorssell, Theodor, and A. Kristensson, Kassel, Germany. Production of potassium nitrate with simultaneous obtaining of dimagnesium phosphate. 1,821,859; Sept. 1.
Tice Lock-Washer Manufacturing Co. (See Lillig, Nicholas R., assignor.)
Timbs, Edward, Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y. Rotary machine for well drilling. 1,821,366; Sept. 1.

Titanium Pigment Company. (See Ryan, Lonnie W., assignor.)
Tittle, Hulbert C., Chicago, Ill., assignor to General Electric Company. Film controlled switch. 1,821,775; Sept. 1.
Titus, Hubert J., Paterson, N. J., assignor to Franklin Railway Supply Company, New York, N. Y. Steam engine. 1,821,532; Sept. 1.
Tobin, Kenneth J., and A. Wasberg, assignors to Camel Company, Chicago, Ill. Flush car door. 1,821,591; Sept. 1.
Toler, William L., Mounds, Ill. Display stand. 1,821,592; Sept. 1.
Tolhurst Machine Works, Inc. (See Bryson, T. A., and Williams, assignors.)
Tolman, Charles P., Kew Gardens, assignor to Petroleum Conversion Corporation, New York, N. Y. Method of and apparatus for heating and mingling fluids. 1,821,333; Sept. 1.
Toncray, Millard H., assignor to Hudson Motor Car Company, Detroit, Mich. Name plate attaching means. 1,820,925; Sept. 1.
Touly, Marcel L., Paris, France, assignor to General Electric Company. Frequency-increasing device employing mercury vapor lamps. 1,821,821; Sept. 1.
Toussaint, Jeanne. (See Cartier, L. J., and Toussaint.)
Townsend, Frank P. (See Shover, B. R., and Townsend.)
Trans-Lux Daylight Picture Screen Corporation. (See Hanks, Austin K., assignor.)
Trautman, Ira, Freeport, assignor to Air Sealed Tire Corporation, New York, N. Y. Molding tires. 1,821,679; Sept. 1.
Troland, Leonard T., Cambridge, assignor to Technicolor Motion Picture Corporation, Boston, Mass. Multiplex film and making. 1,821,680; Sept. 1.
Troy, Seymour, New York, N. Y. Woman's shoe. Des. 85,015; Sept. 1.
Troy, Seymour, New York, N. Y. Woman's shoe. Des. 85,016; Sept. 1.
Troy, Seymour, New York, N. Y. Woman's shoe. Des. 85,017; Sept. 1.
Troy, Seymour, New York, N. Y. Woman's shoe. Des. 85,018; Sept. 1.
Tuck, Clarence M., assignor to Morris & Boogher, Inc., Seattle, Wash. Transit concrete mixer. 1,820,954; Sept. 1.
Turner, John H., Los Angeles, Calif. Spike puller. 1,821,041; Sept. 1.
Tuttle, Henry A., administrator. (See Hirvonen, E. J., and Tuttle.)
Tuttle, Wallace W. (See Hirvonen, E. J., and Tuttle.)
Tyler, Harvey E., Chicago, assignor to Stewart-Warner Corporation, Chicago, Ill. Oil filter. 1,821,082; Sept. 1.
Ulbricht, Ernst. (See Nobst, G., and Ulbricht.)
Underhill, Elmer F., and L. R. Vidler, Seattle, Wash. Butter cutter. 1,821,042; Sept. 1.
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Oswald, Alfred E., assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Union Metal Manufacturing Company, The. (See Riemenschneider, Edmund W., assignor.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Metal Products Company. (See Sisson, Vinton E., assignor.)
Union Switch & Signal Company, The. (See Allen, Earl M., assignor.)
Union Switch & Signal Company, The. (See Peter, Bernard H., assignor.)
Union Switch & Signal Company, The. (See Stoker, Paul P., assignor.)
Union Switch & Signal Company, The. (See Brooks, C. A., and Young assignors.)
United Shoe Machinery Corporation. (See Gookin, Sylvester L., assignor.)
United Shoe Machinery Corporation. (See Jorgensen, Bernhardt, assignor.)
United Shoe Machinery Corporation. (See Knowlton, Cutler D., assignor.)
United Shoe Machinery Corporation. (See Knowlton, N. H., and Nutt, assignors.)
United Shoe Machinery Corporation. (See Whelton, J. M., and Pym, assignors.)
U. S. Bobbin & Shuttle Company 1929. (See Davol, Harry A., assignor.)
United States Hat Machinery Corporation. (See Genest, Homer A., assignor.)
U. S. Manufacturing Corporation. (See Krag, F. K., and Nelson.)
U. S. Slicing Machine Company. (See van Berkel, Cornelis F. M., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Upson Company, The. (See Spencer, Hugh M., assignor.)
Usselman, George L., Rocky Point, N. Y., assignor to Radio Corporation of America. Beam wobbler. 1,821,367; Sept. 1.
Van Allen, Clark E. E., Fort Payne, Ala. Safety device. 1,821,334; Sept. 1.
Van Berkel, Cornelis F. M., Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Device for sharpening the rotary circular knives of slicing and other machines. 1,821,280; Sept. 1.
Vandegrift, James N., New York, N. Y. Packing material. 1,820,955; Sept. 1.
Van der Grinten, Frans. (See Hingst, Albert K. G., assignor.)
Van der Grinten, Frans. (See van der Grinten, Karel and L., assignors.)
Van der Grinten, Karel and L., assignors to F. van der Grinten, trading as Chemische Fabriek L. van der Grinten, Venlo, Netherlands. Manufacture of diazo-types. 1,821,281; Sept. 1.
Van der Grinten, Louis. (See van der Grinten, Karel and L.)
Vandeveer, Perry, assignor of one-half to A. E. Walsh, Louisville, Ky. Clutch. 1,821,127; Sept. 1.
Van Deventer, James E., Anderson, assignor, by mesne assignments, to Mid-States Steel & Wire Company, Crawfordsville, Ind. Farm gate. 1,821,411; Sept. 1.
Van Riper, Lewis C. (See Woodward, Edgar F., assignor.)
Van Stry, Charles C., West Englewood, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting means. 1,821,681; Sept. 1.
Van Urk, Arend T. (See Holst, G., van Urk, and Vermeulen.)
Van Vorst, John, Schenectady, assignor to Mohawk Asphalt Heater Company, Schenectady, N. Y. Trailer. 1,821,593; Sept. 1.
Vasticar, Henri, Paris, France, assignor to Schwob Freres & Cie S. A., La Chaux-de-Fonds, Switzerland. Pocket case. 1,820,926; Sept. 1.
Vaughn Machinery Company, The. (See McIlvried, Edwin J., assignor.)
Vermeulen, Roelof. (See Holst, G., van Urk, and Vermeulen.)
Verwohlt, Clarence H. (See Belton, J. M., and Verwohlt.)
Vetter, Homer J., Newton, Kans. Toy. Des. 85,019; Sept. 1.
Viche, Joseph G., Duluth, Minn. Toe board. 1,821,734; Sept. 1.
Vicherd, Georges A., assignor to Larco Del Valle & Cie., Paris, France. Machine for cutting grooves in shoe heels. 1,821,594; Sept. 1.
Vidler, Louis R. (See Underhill, E. F., and Vidler.)
Viele, Augustus K. (See Wheeler, Walter H., jr., and Viele.)
Vincent, William J., assignor to The Rochester Telephone Corporation, Rochester, N. Y. Telephone system. 1,821,193; Sept. 1.
Vining, Archie C., Brooklyn, N. Y. Antiice airplane and improved wing construction therefor. 1,821,776; Sept. 1.
Visel, August C., Bronson, Mich. Counter bin. 1,821,083; Sept. 1.
Volk, Joseph A., jr., South Norwalk, Conn. Electrical fixture. 1,821,533; Sept. 1.
Von Arco, Georg, assignor to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Loud speaker. 1,820,956; Sept. 1.
Von Tell, Edward E., Gotenborg, Sweden. Cover for ships' hatchways. 1,821,595; Sept. 1.
Voorhees, Gardner T., Boston, Mass. Multiple effect gas compressing apparatus. 1,821,248; Sept. 1.
W-K-M Company. (See McManis, Fred, assignor.)
Wadsten, Sten, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Wire-bending die. 1,821,249; Sept. 1.
Wadsten, Sten, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Wire-coiling die. 1,821,250; Sept. 1.
Wadsworth Watch Case Co., The. (See McFarland, James C., assignor.)
Wagener, Clemens, Berlin, Germany, assignor to Pyrene-Minimax Corporation. Producing foam for fire extinguishing purposes. 1,821,914; Sept. 1.
Wakabayashi, Tatsuo, New York, N. Y. Inking means. 1,821,777; Sept. 1.
Waldorf Paper Products Company. (See Boeye, Paul F.)
Walker, John, jr., Melrose Park, Pa., assignor to Walker Manufacturing Company, Inc. Heddle frame. 1,821,596; Sept. 1.
Walker, Lewis D. (See Wanden, O., and Walker.)
Walker Manufacturing Company. (See Walker, John, jr., assignor.)
Wall, Robert C., Philadelphia, Pa. Windguard for automobiles. 1,821,282; Sept. 1.
Wallerstein Company. (See Wallerstein, Leo, assignor.)
Wallerstein, Leo, assignor to Wallerstein Company, Inc., New York, N. Y. Preserving enzyme solutions. 1,820,957; Sept. 1.
Wallin, Johan H., Bengtsfors, Sweden. Process of and apparatus for treating fibrous materials for pulping purposes. 1,820,994; Sept. 1.
Walsh, Austin E. (See Vandeveer, Perry, assignor.)
Wanden, Oscar, and L. D. Walker, Milwaukee, Wis. Trousers press. 1,821,597; Sept. 1.
Warner Gear Company. (See Heck, Harry J., assignor.)
Wasberg, Axel. (See Tobin, K. J., and Wasberg.)
Waterbury Tool Company, The. (See Ellis, Arthur L., assignor.)
Watkins, George B., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass. 1,821,598; Sept. 1.

Webb, Nelson W., assignor to Eastwood Wire Corporation, Belleville, N. J. Woven wire belt for paper-making machines. 1,821,412; Sept. 1.
Webb, Nelson W., assignor to Eastwood Wire Corporation, Belleville, N. J. Woven-wire belt for paper-making machines. 1,821,453; Sept. 1.
Webb, Nelson, W., assignor to Eastwood Wire Corporation, Belleville, N. J. Woven-wire belt for paper-making machines. 1,821,454; Sept. 1.
Webb, Nelson W., assignor to Eastwood Wire Corporation, Belleville, N. J. Woven-wire belt for paper-making machines. 1,821,455; Sept. 1.
Webb, Nelson W., assignor to Eastwood Wire Corporation, Belleville, N. J. Woven-wire belt for paper-making machines. 1,821,456; Sept. 1.
Weber, Jacob F., assignor to The Peerless Level & Tool Company, Sterling Ill. Spirit level. 1,821,534; Sept. 1.
Wedmore, Edmund B. (See Whitney, W. B., and Wedmore.)
Wehman, Frederick G., West Nyack, assignor to The Fibre Conduit Company, Orangeburg, N. Y. Housed outlets. 1,820,995; Sept. 1.
Wehrle Company, The. (See Pickup, George E., assignor.)
Weldman, Frederick W., Drumright, Okla. Air mail unloading and pick-up apparatus. 1,821,599; Sept. 1.
Weil, Maximilian, New York, N. Y. Sound amplifying system. 1,820,996; Sept. 1.
Weinand, Klaus, Flittard, near Cologne-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Hydroaryl amino anthraquinone compounds and making same. 1,821,043; Sept. 1.
Weir, Robert M., Montreal, Quebec, Canada, assignor to Asphalto Concrete Corporation. Apparatus for stripping molds from pipes. 1,821,128; Sept. 1.
Weisker, Ellis, New York, N. Y. Photographic copying apparatus. 1,821,129; Sept. 1.
Wensley, Roy J., Edgewood, and J. L. McCoy, Wilkinsburg, Pa., assignors to Westinghouse Elecenic & Manufacturing Company. Supervisory control system. 1,821,368; Sept. 1.
Werner, William H., and C. Neumann, Brooklyn, N. Y. Soot extractor. 1,821,860; Sept. 1.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 85,020; Sept. 1.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 85,021; Sept. 1.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 85,022; Sept. 1.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 85,023; Sept. 1.
Western Electric Company. (See Hartley, Ralph V. L., assignor.)
Western Electric Company. (See Siebs, Claude T., assignor.)
Western Railway Equipment Company. (See Hoerr, L. A., and Pletzsch, assignors.)
Westfall, Harry G., et al. (See Hull, Alva M., assignor.)
Westfall, Thelma M., Hull, et al. (See Hull, Alva M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hellmund, Rudolf E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Maude, A. H., Rodman, Styer, and Wilbarm, assignors.)
Westinghouse Electric & Manufacturing Company. (See McCulloch, Leon, assignor.)
Westinghouse Electric & Manufacturing Company. (See Reagan, Maurice E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Storer, Norman W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Thau, Walter E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wensley, R. J., and McCoy, assignors.)
Westinghouse Lamp Company. (See Driggs, F. H., and Marden, assignors.)
Westinghouse Lamp Company. (See Gustin, Daniel S., assignor.)
Westinghouse Lamp Company. (See Rentschler, H. C., and Merrymon., assignors.)
Westinghouse Lamp Company, The. (See Seletzky, Anatoli C., assignor.)
Westinghouse Lamp Company. (See Wadsten, Sten, assignor.)
Westrope, Fred J., Detroit, Mich., assignor to The Murray Corporation of America. Door spindle lock nut. 1,821,682; Sept. 1.
Wetherbee, Earl H., St. Paul, Minn. Holder and clamp. 1,821,488; Sept. 1.
Wetterstrand, Knut O. G., Summit, N. J. Guide for lettering. 1,821,369; Sept. 1.
Wharam, John J., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Lock. 1,821,130; Sept. 1.
Wharton, Selvin T., assignor of one-half to E. S. Jones, Columbus, Miss. Brake for fishing reels. 1,821,735; Sept. 1.
Wheeler Reflector Company. (See Sawin, Kenneth A., assignor.)
Wheeler, Walter H., jr., and A. K. Viele, assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn. Postage indicia stamp pad. 1,821,044; Sept. 1.
Wheeling Steel Corporation. (See Belton, J. M., and Verwohlt, assignors.)
Whelton, John M., Peabody, and A. F. Pym, Swampscott, Mass., assignors to United Shoe Machinery Corporation. Paterson, N. J. Machine for effecting relative movements between shoes and their lasts. 1,820,952; Sept. 1.
White, Franklin R. (See Carley, L. R., and White.)
White Motor Company, The. (See Church, Harold D., assignor.)
Whitehouse, John N., New York, N. Y., assignor to Sanite Corporation, Burlington, N. J. Shaping sheets of celluloid and the like. 1,821,413; Sept. 1.
Whithead, Connie W., assignor to New Era Electro Devices, Chattanooga, Tenn. Brake. 1,821,000; Sept. 1.
Whitin Machine Works. (See Layfield, Clyde B., assignor.)
Whitney, Willis B., and E. B. Wedmore, Westminster, London, assignors to The British Electrical and Allied Industries Research Association, London, England. Breaking electric circuits. 1,820,927; Sept. 1.
Whitney, Willis B., and E. B. Wedmore, assignors to The British Electrical and Allied Industries Research Association, London, England. Circuit breaker. 1,820,928; Sept. 1.
Whittam, Benjamin B., Elizabeth, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Header for water tube boilers. 1,821,683; Sept. 1.
Wiegand, Edwin L., Pittsburgh, Pa. Forming electrical heating elements. 1,821,822; Sept. 1.
Wiener, John A., Oswego, N. Y. Rotary pulp screen. 1,821,684; Sept. 1.
Wilckens, Ernst, Berlin, Germany. Sound transmitting apparatus. 1,821,823; Sept. 1.
Wilcox, Geroge R., Greenfield, assignor to Millers Falls Company, Millers Falls, Mass. Automatic screw driver. 1,821,194; Sept. 1.
Wildman Mfg. Co. (See Longtin, William J., assignor.)
Wilharm, William C. (See Maude, A. H., Rodman, Styer, and Wilharm.)
Wilkerson, Henry H., Quay, N. Mex. Grain header. 1,821,861; Sept. 1.
Williams, Arthur. (See Griffin, J. F., and Williams.)
Williams, Frank I. (See Bryson, T. A., and Williams.)
Williams, George W., Oak Park, assignor to The Creamery Package Mfg. Company, Chicago, Ill. Liquid cooler. 1,821,489; Sept. 1.
Williams, Harrison R., New York, N. Y. Vending machine. 1,820,929; Sept. 1.
Williams, Herbert H. (See Murray, T. E., jr., and Williams.)
Williams, John, Philadelphia, Pa. Piston ring. 1,821,251; Sept. 1.
Williams, White & Co. (See Hintz, Henry E.)
Willis, Ned T., New York, N. Y. Metal flanging or cutting and flanging machine. 1,821,457; Sept. 1.
Willson, Ethelred A., H. F. Woodman, and E. Greig, assignors to Creed and Company, Limited, Croydon, England. Quadruplex amplifier. 1,821,490; Sept. 1.
Wilson, Wylie G., Elizabeth, N. J. Sealing ring for joints. 1,821,862; Sept. 1.
Wilson, Wylie G., Elizabeth, N. J. Fluid tight joint and making. 1,821,863; Sept. 1.
Wilson, Wylie G., Elizabeth, N. J. Fluid tight joint and making. 1,821,864; Sept. 1.
Wilson, Wylie G., Elizabeth, N. J. Fluid tight joint and making. 1,821,865; Sept. 1.
Wilson, Wylie G., Elizabeth, N. J. Fluid tight joint and making. 1,821,866; Sept. 1.
Wilson, Wylie G., Elizabeth, N. J. Joint structure for pipes and the like. 1,821,867; Sept. 1.
Window Glass Machine Company. (See Zeh, Howard, assignor.)
Winslow, Charles A., Vallejo, Calif. Filtering pump and the like. 1,821,535; Sept. 1.
Winthrop Chemical Company. (See Schmidt, Albrecht, assignor.)
Wired Radio, Inc. (See Harrison, Jamison R., assignor.)
Wired Radio, Inc. (See Hyland, Lawrence A., assignor.)
Wisti, Andrew O., Minneapolis, Minn. Brake lining stretcher. 1,821,283; Sept. 1.
Wood Conversion Company. (See Spafford, Allen L., assignor.)
Woodhouse, John C., assignor to Du Pont Ammonia Corporation, Wilmington, Del. Gas purification. 1,821,195; Sept. 1.
Woodman, Harold F. (See Willson, E. A., Woodman, and Greig.)
Woods, Reuben E., Owatonna, Minn. Drawing apparatus. 1,821,252; Sept. 1.
Woodward, Edgar F., assignor to Lewis C. Van Riper, Brooklyn, N. Y. Dust collector. 1,821,824; Sept. 1.
Woodward, Roland W. (See Gammell, Ove L., and Woodward.)
Worley, George I., Willoughby, assignor to The McNeil Boiler Company, Akron, Ohio. Tractor attachment for trucks. 1,821,196; Sept. 1.
Wright, George J., Brookline, assignor to Mary Wright, Quincy, Mass. Shade roller. 1,821,045; Sept. 1.
Wright, Harry P., assignor of one-half to Maurice Daniels, Caribou, Me. Fertilizer disk mixer. 1,821,048; Sept. 1.
Wright, James A., Montreal, Quebec, Canada. Steering mechanism. 1,821,458; Sept. 1.

Wright, John E., assignor to The Tabulating Machine Company, New York, N. Y. Tabulating machine. 1,821,046; Sept. 1.
Wright, Mary. (See Wright, George J., assignor.)
Wright, Rea P., Washington, D. C., assignor to Marvel Carbureter Company, Flint, Mich. Heat controlling charge forming devices. 1,821,047; Sept. 1.
Yager, George F., assignor to The Bunting Brass & Bronze Company, Toledo, Ohio. Machine for manufacturing bushings. 1,821,199; Sept. 1.
Yarnall-Waring Company. (See Chase, Lyle G., assignor.)
Yarrow, Harold E., Scotstoun, Scotland. Distributor for pulverized fuel. 1,821,868; Sept. 1.
Yeidel, Dorothy R., Chicago, Ill. Drapery supporting device. 1,820,997; Sept. 1.
York Band Instrument Company. (See Johnson, Alfred J., assignor.)
Young, Henry S. (See Brooks, C. A., and Young.)
Youngstown Steel Door Company, The. (See Barrows, Allan S., assignor.)
Zeh, Howard, Belle Vernon, assignor to Window Glass Machine Company, Pittsburgh, Pa. Glass drawing machine. 1,820,930; Sept. 1.
Zeiss, Carl. (See Mechau, Robert, assignor.)
Zeiss Ikon Aktiengesellschaft Dresden. (See Hoffman, K., and Engelmann, assignors.)
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating gun. 1,821,197; Sept. 1.
Zinkowetsky, Jacob, New York, N. Y. Airplane safety device. 1,820,958; Sept. 1.
Zimmerman, Walter J., Dayton, Ohio, assignor to Mead Paperboard Corporation, Wilmington, Del. Paper manufacture. 1,821,198; Sept. 1.
Zumwalt, James M., Miami, Fla. Safety razor. 1,821,825; Sept. 1.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 1ST DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive testing machine. H. H. La Vercombe. 1,821,169; Sept. 1.
Acetone, Producing. K. Roka. 1,821,324; Sept. 1.
Acoustic device. E. H. Smythe. 1,821,586; Sept. 1.
Acoustic device provided with vibratile diaphragms. K. S. S. Spencer. 1,821,529; Sept. 1.
Advertising device. J. R. Moise. 1,821,021; Sept. 1.
Aerial system for wireless telegraphy or telephony, Transmitting or receiving. C. S. Franklin. 1,821,380; Sept. 1.
Aeroplane. H. L. Campbell. 1,821,494; Sept. 1.
Aeroplane. D. C. Roberts. 1,821,323; Sept. 1.
Aeroplane control switch. C. Rosatelli. 1,821,581; Sept. 1.
Aeroplanes, Control device for. C. R. Bowers. 1,820,906; Sept. 1.
Agitating cutter for dredges. W. R. Ellis. 1,821,177; Sept. 1.
Aircraft. H. P. Massey. 1,820,919; Sept. 1.
Aircraft. H. F. Pitcairn. 1,820,946; Sept. 1.
Aircraft, Loading. A. F. Godefroy. 1,821,057; Sept. 1.
Aircraft, Semi-buoyant. G. A. Jenkins. 1,821,061; Sept. 1.
Airplane and improved wing construction therefor, Anti-ice. A. C. Vining. 1,821,776; Sept. 1.
Airplane safety device. J. Zinkowetsky. 1,820,958; Sept. 1.
Airplane, Toy. R. M. Baylis. 1,821,172; Sept. 1.
Alarm: *See*—
Automatic fire alarm.
Alarm switch. C. O. Peterson. 1,821,318; Sept. 1.
Alcohols, Condensing. E. E. Reid. 1,821,667; Sept. 1.
Alternating current signaling system. F. E. Pernot. 1,821,114; Sept. 1.
Amplifier, Quadruplex. E. A. Willson, H. F. Woodman, and E. Greig. 1,821,490; Sept. 1.
Amplifier, Sound. C. W. Hicks. 1,821,469; Sept. 1.
Amplifying system. E. Peterson. 1,821,076; Sept. 1.
Amplifying system, Sound. M. Weil. 1,820,996; Sept. 1.
Anchor, Fence and post. M. C. Thom. 1,821,125; Sept. 1.
Anchorage device. R. S. Peirce. 1,821,400; Sept. 1.
Annealing. V. B. Browne. 1,821,493; Sept. 1.
Antenna. N. E. Lindenblad. 1,821,356–7; Sept. 1.
Antenna. H. O. Peterson. 1,821,402; Sept. 1.
Antenna system and method. F. A. Kolster and G. G. Kruesi. 1,821,649; Sept. 1.
Anthraquinone dyestuff. M. Kugel. 1,821,019; Sept. 1.
Apparatus for forming and annealing sheet glass. C. Cone. 1,821,617; Sept. 1.
Apparatus for handling coal. N. D. Levin. 1,821,438; Sept. 1.
Apparatus for loading coal. N. D. Levin. 1,821,440; Sept. 1.
Apparatus for the manufacture of sheet glass. J. P. Crowley. 1,821,618; Sept. 1.
Arc, Oscillating. L. F. Pierce. 1,821,915; Sept. 1.
Arc quenching device. D. A. Gustin. 1,821,214; Sept. 1.
Article supporting rack. J. S. George and R. S. Sperry. 1,821,546; Sept. 1.
Articulated and dismountable lifting jack, Type of. I. H. Fotheringham. 1,821,627; Sept. 1.
Ash handling equipment. F. B. Allen. 1,821,603; Sept. 1.
Attaching device. R. S. Peirce. 1,821,401; Sept. 1.
Attachment for internal combustion engines. R. A. Duff. 1,821,745; Sept. 1.
Automatic cut off switch. H. M. Short. 1,721,853; Sept. 1.
Automatic fire alarm. A. H. Pearson. 1,821,028; Sept. 1.
Automatic train pipe coupling. J. Robinson. 1,821,115; Sept. 1.
Automobile, Electric. A. R. Haufe. 1,820,973; Sept. 1.
Automobile seat. O. T. Bounds. 1,821,417; Sept. 1.
Automobile structure. J. V. Martin. 1,821,657; Sept. 1.
Automobile truck. W. P. Scott. 1,821,327; Sept. 1.
Ax, Trimming. V. R. Sivera. 1,821,855; Sept. 1.
Axle for vehicles traveling on rails, Composite crank. J. Buchli. 1,821,612; Sept. 1.
Badge. D. T. Gallup. Des. 84,984; Sept. 1.
Badge, pin or emblem. L. S. Isaacs. Des. 84,988; Sept. 1.
Bag: *See*—
Multiplex bag.
Bag. J. E. Cornell. 1,821,207; Sept. 1.
Bag tying machine. H. B. Foulder. 1,821,506; Sept. 1.
Ball and shoe bag, Bowler's. J. K. Hotze. 1,821,806; Sept. 1.
Ballot box. T. B. Holbert. 1,821,710; Sept. 1.
Barium silico-ferrite and preparing the same. H. W. Dahlberg. 1,821,208; Sept. 1.
Base, Bird cage. L. J. Leon. 1,821,348; Sept. 1.
Base for signs. E. B. Rogers. 1,821,580; Sept. 1.
Bath: *See*—
Shower bath.
Battery, Dry cell. C. H. Dittrick and N. K. Chaney. 1,821,008; Sept. 1.
Battery terminal clamp. C. E. Taylor. 1,821,486; Sept. 1.
Bead forming machine. W. E. Humphrey. 1,821,161; Sept. 1.
Bead forming mechanism. W. E. Humphrey. 1,821,470; Sept. 1.
Beam wobbler. G. L. Usselman. 1,821,367; Sept. 1.
Beans and seed, Apparatus for roasting. F. F. Clandrow. 1,820,938; Sept. 1.
Bearing, Separable anti-friction. C. E. Best. 1,821,873; Sept. 1.
Bearing sleeve and making same. B. Stockfleth. 1,821,122; Sept. 1.
Beater drum mechanism for shelling maize. G. C. Oakes. 1,821,316; Sept. 1.
Bed, Folding. L. Muchlinski. 1,821,315; Sept. 1.
Belt for paper-making machines, Woven wire. N. W. Webb. 1,821,412; Sept. 1.
Belt for paper-making machines, Woven-wire. N. W. Webb. 1,821,453–6; Sept. 1.
Bit: *See*—
Impact bit.
Bitumen from bituminous sands and similar bituminous materials, Separating. C. T. Langford and A. J. Teplitz. 1,820,917; Sept. 1.
Blade sharpener. D. A. Moyer. 1,821,721; Sept. 1.
Block: *See*—
Resistor block.
Blocks, Making friction. J. S. Thompson. 1,821,487; Sept. 1.
Board: *See*—
Toe board.
Board, Making composite corrugated and solid fiber. P. F. Boeye. 1,821,539; Sept. 1.
Boards, Apparatus and process for making. W. A. Darrah. 1,821,209; Sept. 1.
Boat equipment. P. C. Sturges. 1,820,923; Sept. 1.
Bobbin holder of yarn winding spindle. C. B. Layfield. 1,821,556; Sept. 1.
Bobbin support. L. B. Hasbrouck. 1,821,706; Sept. 1.
Bodies, Separation of ortho-dihydroxybenzene. D. W. Parkes. 1,821,815; Sept. 1.
Body for decorative articles and the like, Woven. S. Feller. 1,821,504; Sept. 1.
Boiler: *See*—
Locomotive boiler. Sectional heating boiler.
Boiler. J. B. Bernhard. 1,820,901; Sept. 1.
Boiler system, Automatically regulated semi-flash. A. L. Muren. 1,821,112; Sept. 1.
Bolster, Car truck. H. D. Taylor. 1,820,924; Sept. 1.
Bolt. L. A. Hoerr and F. H. Pletzsch. 1,821,709; Sept. 1.
Book cover or similar article. C. A. Bell. Des. 84,971; Sept. 1.
Book rest, Adjustable. M. Isaacson. 1,821,060; Sept. 1.
Bookholder. E. J. Sithens. 1,821,279; Sept. 1.
Bookstand. W. E. Haskin. 1,821,802; Sept. 1.
Borax from brines, Obtaining. M. A. Debeau and H. L. Robson. 1,821,092; Sept. 1.
Bottle. M. Rosenberger. Des. 85,005; Sept. 1.
Bottle, Bait. S. H. Beetem. 1,821,288; Sept. 1.
Bottles or containers from one level to another, Apparatus for transferring. A. G. Enock. 1,821,883; Sept. 1.
Bottom, Well bucket. T. H. McClinton. 1,821,441; Sept. 1.
Bowling pin. W. H. Souder. 1,821,037; Sept. 1.
Box: *See*—
Ballot box. Switch and fuse box.
Folding metal box. Ventilated switch box.
Screen box.
Box. C. D. Howland. 1,821,307; Sept. 1.
Box. H. J. Miller. Des. 84,997; Sept. 1.
Box making machinery. P. W. Fleischer, M. Feybusch, and F. J. Hammer, and B. D. Dans. 1,821,701; Sept. 1.
Bracelet construction. O. L. Gammell and R. W. Woodward. 1,821,507; Sept. 1.
Bracelet links, Making. A. Hadley. 1,821,058; Sept. 1.
Brake: *See*—
Clutch brake. Vehicle brake.
Hydraulic brake.
Brake. E. J. Hirvonen and W. W. Tuttle. 1,821,156; Sept. 1.
Brake. L. E. La Brie. 1,821,168; Sept. 1.
Brake. E. W. Seaholm, G. E. Parker, and A. H. Stahlhuth. 1,821,852; Sept. 1.
Brake. C. W. Whithead. 1,821,600; Sept. 1.

Brake and pulley attachment for vehicles, Combined. J. T. Figlear. 1,821,625; Sept. 1.
Brake control for turret cranes. T. N. Garson. 1,821,338; Sept. 1.
Brake controlling device. G. L. R. J. Messier. 1,821,719; Sept. 1.
Brake drum construction. E. A. Nelson. Re18,176; Sept. 1.
Brake flanges, Circulating system. L. J. Black. 1,821,135; Sept. 1.
Brake for fishing reels. S. T. Wharton. 1,821,735; Sept. 1.
Brake lining stretcher. A. O. Wistl. 1,821,283; Sept. 1.
Brake shoe. A. Nelson. 1,821,069–70; Sept. 1.
Brake shoe connecting means. D. L. Gallup. 1,821,149; Sept. 1.
Brassière. M. W. Meeks and A. C. Alt. 1,821,353; Sept. 1.
Brush handle attachment. J. Bochnek. 1,821,875; Sept. 1.
Buckle. L. J. Friedheim. 1,820,969; Sept. 1.
Buckle, Apparel. A. H. Kerngood. 1,821,839; Sept. 1.
Buckle, Belt. C. Spinnler. 1,821,329; Sept. 1.
Buffer. E. A. Banschbach. 1,821,284; Sept. 1.
Building. C. A. Sanborn. Des. 85,006; Sept. 1.
Building construction, Fireproof. A. M. Hull. 1,821,015; Sept. 1.
Building front. W. R. Matthews and E. Jones. Des. 84,996; Sept. 1.
Burglar alarm switch device. M. J. Cawley. 1,820,437; Sept. 1.
Burner: *See*—
Fuel burner. Non-flashing gas burner.
Gas burner. Oil burner.
Butter cutter. E. F. Underhill and L. R. Vidler. 1,821,042; Sept. 1.
Butter cutting machine. R. F. Stewart. 1,821,363; Sept. 1.
Button and making the same, Fanciful. L. Carley and W. T. Abel. 1,821,615; Sept. 1.
Button, Flexible type. L. R. Carley and F. R. White. 1,821,614; Sept. 1.
Button, Flexible type. L. R. Carley and F. R. White. 1,821,616; Sept. 1.
Cabinet, Leather mellowing. I. H. Ellsworth. 1,821,210; Sept. 1.
Cable, Composite wire. F. F. Fowle. 1,821,908; Sept. 1.
Cable, Wire. F. F. Fowle. 1,821,887; Sept. 1.
Calculating machines, Transfer mechanism for. A. A. Horton. 1,821,711; Sept. 1.
Caliper, Micrometer. R. J. Simpson. 1,821,398; Sept. 1.
Camera control mechanism, Aerial. A. Briechle. 1,821,492; Sept. 1.
Can: *See*—
Oil can. Pressure can.
Can for the preservation of cheese. L. A. Rogers. 1,821,447; Sept. 1.
Can handling device. E. A. Soderberg. 1,821,819; Sept. 1.
Cap, Blasting. H. K. Babbitt. 1,821,608; Sept. 1.
Cap, Bubble. R. B. Day. 1,821,619; Sept. 1.
Cap, Fill. G. Hughes. 1,821,308; Sept. 1.
Cap, Milk bottle. F. M. Hammer. 1,821,467; Sept. 1.
Cap remover, Sanitary. F. Bergmann. 1,820,999; Sept. 1.
Capsule filter, Renewable. H. E. Birkholz. 1,821,202; Sept. 1.
Car construction. G. G. Gilpin. 1,821,151; Sept. 1.
Car with several cranes driven from one point for the mechanical laying and removing of the elements of railroad tracks, Special motor driven. P. Guilbert and J. Legrand. 1,821,340; Sept. 1.
Carbon. Producing highly active. A. Schreiner. 1,821,117; Sept. 1.
Carburetor. A. Girin. 1,821,909; Sept. 1.
Carburetor. W. Guthrie. 1,821,012; Sept. 1.
Carburetor. F. H. Heitger. 1,821,014; Sept. 1.
Card mount for strings. W. H. Meyer. 1,821,354; Sept. 1.
Card, Self supporting display. A. J. Ohlson. 1,821,025; Sept. 1.
Carrier. W. Mitchell and P. Blink. 1,821,563; Sept. 1.
Carrying fork attachment for clay products. H. F. Goss. 1,821,798; Sept. 1.
Cart and sifter screen, Combined loading. L. Marx. 1,820,944; Sept. 1.
Case: *See*—
Packing case. Radio vanity case.
Pocket case. Razor case.
Casement window. G. R. Shaw. 1,821,449; Sept. 1.
Casing and latching mechanism therefor, Plural section. L. V. Aronson. 1,82-,085; Sept. 1.
Casing, Boltless. R. L. Meyers. 1,821,228; Sept. 1.
Cash register. C. W. Green. 1,821,339; Sept. 1.
Casket construction. D. C. Leitch and C. W. Hamilton. 1,821,760; Sept. 1.
Caster. W. G. Johnson. 1,821,642; Sept. 1.
Ceiling, floor, and roof construction. R. Murray. 1,821,355; Sept. 1.
Celluloid and the like, Shaping sheets of. J. N. Whitehouse. 1,821,413; Sept. 1.
Cellulose fiber for preparation of esters and process of producing same. G. A. Richter. 1,821,321; Sept. 1.
Cement charger. G. O. Harm. 1,820,910; Sept. 1.
Cement of a high grade strength, Special mixed. S. Nagai and K. Kawamura. 1,821,565; Sept. 1.
Centrifugal extractor. T. A. Bryson and F. I. Williams. Re18,174; Sept. 1.
Centrifuge. G. H. Andersson and S. A. B. Dahlgren. 1,821,607; Sept. 1.
Chain, Strap. H. D. Simpson. 1,821,676; Sept. 1.
Chair: *See*—
Reclining chair.
Chair. T. J. Miles. 1,821,107; Sept. 1.
Chair construction. E. C. Harter. 1,821,636; Sept. 1.
Chair for motor busses. C. E. Ferreira. 1,821,429; Sept. 1.
Cheese, Melting. A. Axelrod. 1,820,900; Sept. 1.
Cigarette and vanity case, Combination. L. Meyerson. 1,821,660; Sept. 1.
Cigarette case and lighter, Combination. W. Hovnan. 1,821,753; Sept. 1.
Cigarette lighter. J. C. Speck. Des. 85,008; Sept. 1.
Cigarette package, Attachment for. G. A. Gelb. 1,821,795; Sept. 1.
Cigarettes, Attachment for. J. F. Hughes. 1,821,159; Sept. 1.
Cigarettes, Mouthpiece for. J. F. Hughes. 1,821,160; Sept. 1.
Circuit breaker. W. B. Whitney and E. B. Wedmore. 1,820,928; Sept. 1.
Circuit breaker, Automatic. G. N. Lemmon. 1,821,761; Sept. 1.
Circuit controller. A. J. Shekter. 1,821,727; Sept. 1.
Circuit controlling mechanism. E. A. Mau. 1,821,550; Sept. 1.
Circuit interrupter. C. A. Nickle. 1,821,814; Sept. 1.
Circuit making and breaking device. C. A. Nickle. 1,821,813; Sept. 1.
Clamp: *See*—
Battery terminal clamp. Marcelwave wrapper clamp.
Clamp. H. E. King. 1,821,163; Sept. 1.
Clamp and arm for rock drills and the like. J. Pricco. 1,821,403; Sept. 1.
Cleaner: *See*—
Rotary cleaner.
Clip for cartridges, Reversible en bloc. J. D. Pedersen. 1,821,526; Sept. 1.
Clock. H. I. Marmorstein. 1,821,066; Sept. 1.
Clock and lamp, Combination. F. Brown. Des. 84,975; Sept. 1.
Clock case. G. H. Stephens. Des. 85,011; Sept. 1.
Clock dial. G. H. Stephans. Des. 85,010; Sept. 1.
Clock, Electric. W. E. Porter. 1,821,897; Sept. 1.
Clock, Electrically operated. L. J. Stern. 1,821,820; Sept. 1.
Clock, Oscillating armature secondary. C. E. Larrabee. 1,821,100; Sept. 1.
Clock, Reminder. C. R. Gains. 1,821,628; Sept. 1.
Closet: *See*—
Siphon jet closet.
Closure for pressure vessels. A. Saporta. 1,821,726; Sept. 1.
Clover seed huller and scarifier. R. E. Poole. 1,821,767; Sept. 1.
Club, Golf. R. H. Robinson. 1,821,191; Sept. 1.
Clutch. P. Vandeveer. 1,821,127; Sept. 1.
Clutch, Bobbin. G. H. Magrath. 1,821,186; Sept. 1.
Clutch brake. H. D. Church. 1,820,961; Sept. 1.
Clutch, Friction. G. W. Beal. 1,821,335; Sept. 1.
Clutch mechanism. W. J. Coultas. 1,821,543; Sept. 1.
Clutch mechanism. W. U. Snyder and W. T. Hess. 1,820,991; Sept. 1.
Coal cutting machine and the like. W. C. Black. 1,821,372; Sept. 1.
Coal mining method and apparatus. N. D. Levin. 1,821,439; Sept. 1.
Coat. C. J. Lubin. 1,821,225; Sept. 1.
Coffee, Treatment of. D. J. Kennedy. 1,821,551; Sept. 1.
Coin mechanism for coin controlled vending machines. A. M. Cramer. 1,821,739; Sept. 1.
Coin mechanism for vending machines. A. M. Cramer. 1,821,740; Sept. 1.
Coin testing device. C. W. Nixon. 1,821,357; Sept. 1.
Coins, Rejection means for perforated. J. E. Olvis. 1,821,233; Sept. 1.
Coke oven gas, Fractionation. R. Linde. 1,821,170; Sept. 1.
Collector, Dust. M. E. Long. 1,821,842; Sept. 1.
Collector, Dust. E. F. Woodward. 1,821,824; Sept. 1.
Collector mechanism, Dust. W. B. Prouty. 1,821,665; Sept. 1.
Column tabulating machine, Selective. F. M. Carroll. 1,821,089; Sept. 1.
Combustion control. G. H. Gibson. 1,820,940; Sept. 1.
Combustion regulation. G. H. Gibson. 1,820,939; Sept. 1.
Compartment shower bath. H. A. Mullett and H. E. Heine. 1,821,229; Sept. 1.
Composition and making the same. M. T. Harvey. 1,821,095; Sept. 1.
Composition of matter. L. McCulloch. 1,821,390; Sept. 1.
Compounds of the anthracene series and preparing them. K. Schirmacher and H. Schliehenmaier. 1,821,035; Sept. 1.
Compression brake for hoisting drums. C. E. Kendrick and B. W. Moore. 1,821,756; Sept. 1.
Concrete mixer, Transit. C. M. Tuck. 1,820,954; Sept. 1.
Concrete mixers, Discharge opening and closure for. K. P. Durham. 1,821,056; Sept. 1.

Condenser, Ammonia. J. H. Beckman. 1,821,287; Sept. 1.
Condenser, Electrical. W. Dubilier. 1,821,055; Sept. 1.
Condenser for refrigerating systems. D. F. Newman. 1,821,765; Sept. 1.
Condenser for refrigerating systems, Air cooled. K. H. Huyette. 1,821,754; Sept. 1.
Conductor for heat exchange apparatus. E. B. Freeman. 1,821,702; Sept. 1.
Conduit, Multiple. H. Parker. 1,821,234; Sept. 1.
Connecter. W. McKee. 1,820,984; Sept. 1.
Connecter, Electric conduit. T. F. Sovine. 1,821,362; Sept. 1.
Connecter, Ground. J. T. Potter. 1,821,575; Sept. 1.
Container. E. Dalton. 1,821,741; Sept. 1.
Container cap. E. C. Hawley. Des. 84,986; Sept. 1.
Container closures, Making. J. M. Hothersall. 1,821,157; Sept. 1.
Container for toilet accessories. G. Flintermann. Des. 84,981; Sept. 1.
Containers, Interfitting lock for. H. H. Honigbaum. 1,821,059; Sept. 1.
Control device. R. R. Potter and M. Shakespeare. 1,821,576; Sept. 1.
Control mechanism. F. G. Rawling. 1,821,237; Sept. 1.
Control system. W. E. Thau. 1,821,332; Sept. 1.
Controlling apparatus for variable speed transmissions. A. L. Ellis. 1,821,502; Sept. 1.
Controlling means for charge forming devices, Heat. R. P. Wright. 1,821,047; Sept. 1.
Conveyer. A. Kaltenbrunn. 1,821,714; Sept. 1.
Conveyer. B. W. Snodgrass. 1,821,678; Sept. 1.
Conveyer. C. E. Sorensen. 1,821,119; Sept. 1.
Conveyer, Flexible. G. D. Jones. 1,821,644; Sept. 1.
Conveyer for grain binders. C. F. Routhe. 1,821,277; Sept. 1.
Cooky display stand. H. Marsh. 1,821,313; Sept. 1.
Cooler: *See*—
Liquid cooler.
Cooler. H. L. Miller. 1,821,846; Sept. 1.
Cooling, heating, ventilating and humidifying system. A. Driscoll. 1,821,297; Sept. 1.
Core, Radiator. A. B. Medville. 1,821,542; Sept. 1.
Corner illuminating means, Vertical. K. R. Crumpton. 1,821,693; Sept. 1.
Cosmetic container. P. A. Reutter. 1,820,949; Sept. 1.
Counter bin. A. C. Visel. 1,821,083; Sept. 1.
Coupling: *See*—
Automatic train pipe coupling. Flexible coupling.
Rail coupling.
Coupling device. C. E. Hoppes. 1,821,182; Sept. 1.
Course indicator for aircraft. A. J. McGrath. 1,821,844; Sept. 1.
Cover for ships' hatchways. E. E. von Tell. 1,821,595; Sept. 1.
Cover, Grave box. J. P. Harner. 1,821,635; Sept. 1.
Cowl molding. H. Ford. 1,821,147; Sept. 1.
Crown block sheave assembly. L. J. Black. 1,821,788; Sept. 1.
Crystal mounting and circuit arrangement. J. R. Harrison, 1,821,304; Sept. 1.
Cultivator. C. D. Ammon. 1,821,370; Sept. 1.
Cutter: *See*—
Butter cutter.
Cutter for turntable covers. L. Bonsieur. 1,821,611; Sept. 1.
Dental instrument. C. E. Schultze. 1,821,079; Sept. 1.
Deoxidizer. A. H. Maude, C. J. Rodman, C. A. Styer, and W. C. Wilharm. 1,821,388; Sept. 1.
Dial pattern mechanism for effecting reverse plating. R. H. Lawson, and A. N. Cloutier. 1,821,893; Sept. 1.
Diazo-types, Manufacture of. K. and L. van der Grinten. 1,821,281; Sept. 1.
Die: *See*—
Wire-bending die. Wire-coiling die.
Dirigible construction. L. S. Howland. 1,821,158; Sept. 1.
Dishwashing machine. B. F. Lundell. 1,821,558; Sept. 1.
Disk, Grain drill. H. and C. P. Coe. 1,821,829; Sept. 1.
Disk, Phonograph record. P. J. Schwarzhaupt. 1,821,851; Sept. 1.
Dispensing apparatus. E. E. Slick. 1,821,951; Sept. 1.
Dispensing machine. S. Hanson. 1,821,510; Sept. 1.
Display stand. W. L. Toler. 1,821,592; Sept. 1.
Distillation. J. V. E. Dickson. 1,821,144; Sept. 1.
Distributor for pulverized fuel. H. E. Yarrow. 1,821,868; Sept. 1.
Ditching machine. H. H. Barber. 1,821,537; Sept. 1.
Dolly. E. Karfiol. Des. 84,989; Sept. 1.
Door and door operating device M. W. Hawks. 1,820,941; Sept. 1.
Door arm. L. C. Norton. 1,821,571; Sept. 1.
Door, Car. A. S. Barrows. 1,821,491; Sept. 1.
Door check, floor type. L. C. Norton. 1,821,570; Sept. 1.
Door, Flush car K. J. Tobin and A. Wasberg. 1,821,591; Sept. 1.
Door framing. I. A. Baum. 1,821,254; Sept. 1.
Door operating device, Dump wagon. F. A. Streich. 1,820,993; Sept. 1.
Door, Ventilated. E. D. Drummond. 1,821,744; Sept. 1.
Draft connection. J. A. E. Madore. 1,821,762; Sept. 1.
Drawbar means. A. P. Armington. 1,821,869; Sept. 1.
Drawing apparatus. R. E. Woods. 1,821,252; Sept. 1.
Drier: *See*—
Hair drier.
Drier. J. Judelson. 1,821,097; Sept. 1.
Drier tank. C. P. Folsom. 1,821,907; Sept. 1.
Drills, Slip rotation for rock. E. J. Downing. 1,821,794; Sept. 1.
Drinking fountain for poultry. H. W. Pledger. 1,821,478; Sept. 1.
Driver, Spiral screw. G. O. Leopold. 1,821,841; Sept. 1.
Drying apparatus. S. Green. Re18,172; Sept. 1.
Dyed products, Manufacture of. R. Brightman and P. Chorley. 1,821,291; Sept. 1.
Dyes, Manufacture of disazo. R. Brightman. 1,821,290; Sept. 1.
Dyestuff of the benzanthrone series and making same, Vat. P. Nawiasky, E. Holzapfel, and O. Braunsdorf. 1,821,023; Sept. 1.
Dyestuffs and their application, New azo. R. Brightman and P. Chorley. 1,821,256; Sept. 1.
Dyestuffs, Manufacture of azo. R. Brightman. 1,821,255; Sept. 1.
Dyestuffs, Manufacture of azo. R. Brightman and P. Chorley. 1,821,257; Sept. 1.
Dyestuffs, Manufacture of azo. P. Laeuger. 1,821,759; Sept. 1.
Dynamo electric machine. H. Riese. 1,821,405; Sept. 1.
Electric circuit-breaker. A. Allan. 1,821,414; Sept. 1.
Electric circuits, Breaking. W. B. Whitney and E. B. Wedmore. 1,820,927; Sept. 1.
Electric control mechanism for vehicle brakes. V. G. Apple. 1,821,200; Sept. 1.
Electric control of mechanical movements, Mechanism for. H. E. Hintz. 1,821,514; Sept. 1.
Electric fan, Portable. E. S. Preston. Des. 85,004; Sept. 1.
Electric lamps, Machine for testing. A. C. Seletzky. 1,821,240; Sept. 1.
Electric motor. A. E. Doman. 1,821,911; Sept. 1.
Electric motor. A. E. Oswald. 1,821,071; Sept. 1.
Electric motor control system. L. A. Carver. 1,821,205; Sept. 1.
Electric oscillation into mechanical vibration, Device for converting. G. Hoist, A. T. van Urk, and R. Vermeulen. 1,820,943; Sept. 1.
Electric plug. F. Kuhn and L. H. Thomas. 1,821,553; Sept. 1.
Electric switch. A. C. Gaynor. 1,821,180; Sept. 1.
Electrical condenser. E. Haefely. 1,821,803; Sept. 1.
Electrical energy, Method and apparatus for transforming. R. Gunn. 1,821,181; Sept. 1.
Electrical generating and switching system, Multi-phase. G. A. Burnham. 1,821,203; Sept. 1.
Electrical switch gear. C. H. Hill. 1,821,804; Sept. 1.
Electrode for electric accumulators, Negative. A. Ponchain. 1,821,768; Sept. 1.
Electrolytic apparatus. A. E. Knowles. 1,821,018; Sept. 1.
Emblem. J. Bloom. Des. 84,972; Sept. 1.
Emblem plate or similar article. M. Kupferstok. Des. 84,990; Sept. 1.
Enclosed fuse switch. J. Sachs. 1,821,671; Sept. 1.
Engine: *See*—
Internal-combustion engine. Steam engine.
Rotary engine.
Engine starter. W. L. McGrath. 1,820,945; Sept. 1.
Envelope, Rip string. B. D. Greenlaw. 1,821,011; Sept. 1.
Enzyme solutions, Preserving. L. Wallerstein. 1,820,957; Sept. 1.
Extinguisher, Fire. J. T. Carroll. 1,821,140; Sept. 1.
Extractor: *See*—
Soot extractor.
Fabric: *See*—
Knitting fabric. Plush fabric.
Fabrics, Machine for producing moire. A. Milhomme. 1,821,392; Sept. 1.
Facial change device for dolls. W. R. Springer. 1,821,243; Sept. 1.
Fan, Spiral blade. O. H. Spencer. 1,821,484; Sept. 1.
Farm gate. J. E. Van Deventer. 1,821,411; Sept. 1.
Feed for stoker, Variable. S. Rapoport. 1,821,666; Sept. 1.
Feed water heater and steam condenser, Combined. M. H. Kotzebue. 1,821,840; Sept. 1.
Feeding device for meat choppers and the like. J. W. Kautzman and J. H. Parker. 1,821,344; Sept. 1.
Felt articles, Apparatus for and method of shrinking, etc. H. A. Genest. 1,821,432; Sept. 1.
Fence structure. W. H. Sommer. 1,821,731; Sept. 1.
Fertilizer disk mixer. H. P. Wright. 1,821,048; Sept. 1.
Fertilizers. Manufacturing compound. E. Johnson. 1,821,309; Sept. 1.
Fibrous masses, Manufacture of distended. A. L. Spafford. 1,821,856; Sept. 1.
Fibrous materials, Dyeing. J. Nüsslein. 1,821,476; Sept. 1.
Fibrous materials for pulping purposes, Process of and apparatus for treating. J. H. Wallin. 1,820,994; Sept. 1.
Filling mechanism for fountain pens. K. S. Parker. 1,821,477; Sept. 1.
Film controlled switch. H. C. Tittle. 1,821,775; Sept. 1.
Films against ignition, Device for protecting. K. Hoffmann and M. Englemann. 1,821,515; Sept. 1.
Filter. J. H. Hills. 1,820,974; Sept. 1.
Filter and closure for the same, Double passage. C. H. Gagen. 1,821,211; Sept. 1.

Filtering apparatus. W. G. Hasley. 1,821,707; Sept. 1.
Filtering system, Electrical. H. W. Ka Dell. 1,821,016; Sept. 1.
Fin for internal combustion engines, Cooling. E. H. Hamilton. 1,821,434; Sept. 1.
Finger ring or similar article. A. Suderov. Des. 85,012; Sept. 1.
Firearms, Charging device. E. Holek. 1,821,385; Sept. 1.
Fish, Washing and brining. J. J. Barry. 1,821,201; Sept. 1.
Fitched or fitch work articles, Forming. L. Larsen. 1,821,554; Sept. 1.
Fitting apparatus, Shoe. C. H. Brown. 1,821,051; Sept. 1.
Fittings for lavatory wash basins, bath tubs, kitchen sinks, and the like, Waste and overflow. C. F. Schultis. 1,821,584; Sept. 1.
Fixture, Bank. F. C. Hirons, F. W. Mellor, and D. R. Alvord. 1,821,708; Sept. 1.
Fixture, Electrical. J. A. Volk, jr. 1,821,533; Sept. 1.
Fixture, Shock-absorbing electric. K. A. Sawin. 1,821,406; Sept. 1.
Fixture, Wash basin. A. C. Dobrick. 1,821,260; Sept. 1.
Flashlight. J. D. Champagne and G. C. Cunningham. 1,820,960; Sept. 1.
Flash mechanism, Group and indicating. F. M. Carroll. 1,821,088; Sept. 1.
Flatiron. S. M. Abbens. 1,821,778; Sept. 1.
Fleshing machine. D. E. Harding. 1,821,094; Sept. 1.
Flexible coupling. C. J. Hahn. 1,821,215; Sept. 1.
Fluid handling apparatus. R. H. Owens. 1,821,895; Sept. 1.
Fluid tight joint and making. W. G. Wilson. 1,821,863–6; Sept. 1.
Fluid transmission. H. D. Munson and G. A. Petroe. 1,821,524; Sept. 1.
Fluids, Method of and apparatus for heating and mingling. C. P. Tolman. 1,821,333; Sept. 1.
Flush valves. P. and W. Grabler. 1,821,799; Sept. 1.
Foam for fire extinguishing purposes, Producing. C. Wagener. 1,821,914; Sept. 1.
Folding metal box. O. A. Ross. 1,821,668; Sept. 1.
Food products, Preserving. E. Milani. 1,821,106; Sept. 1.
Food products, Process and apparatus for preparing. W. E. Broeg. 1,821,689; Sept. 1.
Form, Shoe. W. J. De Witt. 1,821,695; Sept. 1.
Fountain: *See*—
Non-freezing water fountain.
Frame: *See*—
Heddle frame. Window frame.
Frequency-increasing device employing mercury vapor lamps. M. L. Touly. 1,821,821; Sept. 1.
Frequency range, Compression of. A. Carpe. 1,821,004; Sept. 1.
Friction clutch. D. E. Gamble. 1,821,150; Sept. 1.
Friction device for shuttles. H. A. Davol. 1,821,830; Sept. 1.
Fuel burner. D. E. Lain. 1,820,916; Sept. 1.
Fuel for internal combustion engines, Injection of. F. Rochefort. 1,821,817; Sept. 1.
Fuel injection apparatus for internal combustion engines. L. Beiner and P. Lohr. 1,821,173; Sept. 1.
Fuel injection valve. E. A. Canning. 1,821,790; Sept. 1.
Fuel valve. C. F. Nardin. 1,821,396; Sept. 1.
Fuel valve with annular seat. O. Peterson. 1,821,272; Sept. 1.
Furnace: *See*—
Tube still furnace.
Furnace damper control. C. Ld. Burroughs. 1,821,204; Sept. 1.
Furnace hearth. G. C. McCormick. 1,821,658; Sept. 1.
Furniture, Convertible. A. B. Beck. 1,820,904; Sept. 1.
Furniture, Convertible. J. R. Thomas. 1,821,126; Sept. 1.
Gain measuring apparatus. F. A. Cowan. 1,821,005; Sept. 1.
Game trap. A. E. Kinsley. 1,820,914; Sept. 1.
Garment. M. Luery. 1,821,185; Sept. 1.
Garment. F. S. Snyder. 1,821,818; Sept. 1.
Garments, Covering cleaned. J. C. Seidler. 1,821,672; Sept. 1.
Garter. F. W. H. Segelcke. 1,821,192; Sept. 1.
Gas burner. J. Gonzalez. 1,821,797; Sept. 1.
Gas compressing apparatus, Multiple effect. G. T. Voorhees. 1,821,248; Sept. 1.
Gas detection apparatus. A. Bayer. 1,821,871; Sept. 1.
Gas engines, Safety device for. W. E. Albertson. 1,820,779; Sept. 1.
Gas or electric range. J. Teller and A. P. Schulz. Des. 85,014; Sept. 1.
Gas producer. G. Imbert. 1,821,263; Sept. 1.
Gas purification. J. C. Woodhouse. 1,821,195; Sept. 1.
Gas purification apparatus. C. B. Collins. 1,821,090; Sept. 1.
Gas valve, Thermostatically controlled. E. G. Hasting. 1,821,512; Sept. 1.
Gaseous conduction apparatus. P. L. Spender. 1,821,242; Sept. 1.
Gases, Dehydrating and purifying. A. P. Hornor and C. B. Gardenier. 1,821,549; Sept. 1.
Gases, Purification of. J. Skogmark and M. F. Chase. 1,821,064; Sept. 1.
Gate: *See*—
Farm gate.
Gauge cock. E. O. Corey. 1,821,422; Sept. 1.
Gauge construction. W. J. Rudolph. 1,821,669; Sept. 1.
Gearing for transmitting rotary motions. R. Erban. Re18,175; Sept. 1.
Gears, Finishing. F. E. McMullen. 1,821,188; Sept. 1.
Glare deflector. R. W. Thibodeau. 1,821,733; Sept. 1.
Glass: *See*—
Laminated glass.
Glass drawing machine. H. Zeh. 1,820,930; Sept. 1.
Glass lens for headlights, Cover. G. A. M. Lamblin-Parent. Des. 84,991–4; Sept. 1.
Glass, Treating. Y. Brancart. 1,821,375; Sept. 1.
Glassware forming machine. H. A. Rohrich. 1,821,077; Sept. 1.
Governor, Low water and pressure. P. H. Fleck. 1,821,699; Sept. 1.
Grain header. H. H. Wilkerson. 1,821,861; Sept. 1.
Grate structure. J. B. Bleweft. 1,820,932; Sept. 1.
Grooves in shoe heels, Machine for cutting. G. A. Vicherd. 1,821,594; Sept. 1.
Guard for automobile rear fenders, Splash. F. A. Calkins. 1,821,690; Sept. 1.
Guard, Leaf. C. D. Ammon. 1,821,371; Sept. 1.
Guard, Toggle press. E. H. Kunkel. 1,821,651; Sept. 1.
Guide, Conveyer. K. E. Pelle. 1,821,664; Sept. 1.
Guide for lettering. K. O. G. Wetterstrand. 1,821,369; Sept. 1.
Guide, Spacer. F. L. G. Straubel. 1,821,245; Sept. 1.
Guider. F. A. Lane. 1,820,980; Sept. 1.
Gun, Grease. R. Rapellin. 1,821,404; Sept. 1.
Gun, Lubricating. O. U. Zerk. 1,821,197; Sept. 1.
Gun, Machine. K. Danthine. 1,821,463; Sept. 1.
Gun mount. W. L. Mackine. 1,821,521; Sept. 1.
Gun, Toy. B. B. Gerken. 1,821,381; Sept. 1.
Hair drier. E. Nielsen. 1,821,525; Sept. 1.
Hammer mill. C. F. Schutte. 1,821,482; Sept. 1.
Hand, Artificial. H. C. Starkey. 1,821,081; Sept. 1.
Hand cuff. E. E. Neal. 1,821,566; Sept. 1.
Hand truck with tongue operated braking mechanism. D. E. Hennessy. 1,820,942; Sept. 1.
Hanger and hinge, Combined door. W. D. Ferris. 1,821,697; Sept. 1.
Hanger support, Garment. B. Neal. 1,821,722; Sept. 1.
Harbor, Floating. C. W. King. 1,821,310; Sept. 1.
Hardening furnace with continuously operated charging device. E. Goerig and H. Lindhorst. 1,821,832; Sept. 1.
Harp, Trolley. W. J. Bauroth 1,821,423; Sept. 1.
Harp, Trolley. F. C. Coseo. 1,821,424; Sept. 1.
Harvester, Corn. P. S. Bogatz. 1,821,374; Sept. 1.
Harvester thresher, Combination. W. F. MacGregor. 1,821,065; Sept. 1.
Hasp, Snapper. M. S. Holman. 1,821,640; Sept. 1.
Hats, Imparting suede finish to woven paper. M. Silver. 1,821,854; Sept. 1.
Head device for sand pumps and bailers. C. F. Rigby. 1,821,479; Sept. 1.
Head, Drilling and swabbing. J. N. Hicks and C. Severns. 1,821,096; Sept. 1.
Header for water tube boilers. B. B. Whittam. 1,821,683; Sept. 1.
Headlight, Steering wheel operated. V. Krick. 1,821,220; Sept. 1.
Headrest. A. J. May. 1,821,560; Sept. 1.
Heater: *See*—
Induction heater. Water heater.
Heating and humidification system and apparatus. W. L. Fleisher. 1,821,886; Sept. 1.
Heating elements, Forming electrical. E. L. Wiegand. 1,821,822; Sept. 1.
Heating system, Hot water. O. H. Schlemmer. 1,821,773; Sept. 1.
Heddle frame. J. J. Kaufmann. 1,821,647; Sept. 1.
Heddle frame. J. Walker, jr. 1,821,596; Sept. 1.
Heel and making and covering the same. N. H. Knowlton and W. H. Nutt. 1,820,915; Sept. 1.
Heel, Composite shoe. B. Gilowitz. 1,821,633; Sept. 1.
Heel, Rubber. J. F. Bradley. 1,821,878; Sept. 1.
Helium from other gases containing the same, Extraction of. R. R. Bottoms. 1,821,540; Sept. 1.
Hinge. A. Anderson. 1,821,606; Sept. 1.
Hinge. V. J. Bolakowski. 1,821,136; Sept. 1
Holder, Abrasive stone. F. J. Jeschke. 1,821,518; Sept. 1.
Holder and clamp. E. H. Wetherbee. 1,821,488; Sept. 1.
Holder and dispenser for cash drawers, Note. H. Levy. 1,821,350; Sept. 1.
Holder, Card. J. E. Bonander. 1,821,876; Sept. 1.
Holder, Cigarette or cigar. C. W. Loesch. 1,821,267; Sept. 1.
Holder for creels of spinning frames and the like, Bobbin. J. V. Mann. 1,821,656; Sept. 1.
Holder for metal wool or the like. C. Field. 1,821,505; Sept. 1.
Holder for mirrors. C. F. Bostock. 1,821,137; Sept. 1.
Holder, Key. H. L. Cusick. 1,821,377; Sept. 1.
Holder, Key and license. C. A. Smith. 1,821,585; Sept. 1.
Holder or appliance for cosmetics and the like. R. T. Christy. 1,821,141; Sept. 1.
Holder, Reference. A. G. Eder. 1,821,427; Sept. 1.
Holder, Stencil sheet. G. J. Evans. 1,820,968; Sept. 1.
Holder, Storm sash. L. Asper. 1,821,415; Sept. 1.

Holder, Train order. L. Paulson and A. W. Roettger. 1,821,446; Sept. 1.
Hood sign. H. A. Baker. 1,821,609; Sept. 1.
Horn. J. R. Thorp. 1,821,590; Sept. 1.
Horn shuttle, Slanting. I. Snow. 1,821,729; Sept. 1.
Huller: *See*—
Clover seed huller and scarifier.
Hydraulic brake. M. M. Fisher. 1,821,178; Sept. 1.
Hydraulic brake for aeroplanes. E. B. Boughton, W. Emmott, D. T. Brock, and A. C. Burden. 1,821,419; Sept. 1.
Hydraulic clamp for rotary car dumpers. H. C. Heaton and F. H. Armstrong. 1,821,217; Sept. 1.
Hydroaryl amino anthraquinone compounds and making same. K. Weinand. 1,821,043; Sept. 1.
Hydrocarbon vapors, Apparatus for treating. W. F. Sims and V. U. Cloer. 1,821,116; Sept. 1.
Ice skate. E. M. Squires. Des. 85,009; Sept. 1.
Illuminated motion effects, Producing. H. B. Barker. 1,821,538; Sept. 1.
Illuminator for license plates. S. Caccamo. 1,821,420; Sept. 1.
Impact bit. J. H. Granger. 1,821,212; Sept. 1.
Implement, Cutting. W. P. Melcher. 1,821,718; Sept. 1.
Incinerator and process, Garbage. H. M. Delacour. 1,821,620; Sept. 1.
Index or file. W. H. Day. 1,821,293; Sept. 1.
Index system, Card. D. A. Casey. 1,821,459; Sept. 1.
Indicating apparatus, Train. P. P. Stoker. 1,821,039; Sept. 1.
Indicator for elevators. E. L. Dunn. 1,821,500; Sept. 1.
Indicator for radioreceiver, Tuning. A. J. Neef. 1,821,568; Sept. 1.
Indicator switch. C. T. Siebs. 1,820,990; Sept. 1.
Indigo and making the same, Bromination products of 4, 4'-dimethyl-6, 6-dichloro-thio. I. Gubelmann, J. B. Oesch, and E. Havas. 1,821,705; Sept. 1.
Induction heater. W. H. Spire. 1,821,530; Sept. 1.
Injector, Exhaust steam. J. F. Griffin, and A. Williams. 1,821,153; Sept. 1.
Inking means. T. Wakabayashi. 1,821,777; Sept. 1.
Inkwell and pen support, Combined. J. F. Gail. 1,821,179; Sept. 1.
Innersole, Pigskin. H. M. Gusdorf. 1,821,213; Sept. 1.
Inscription attachment for cameras. J. A. Smurthwaite. 1,821,408; Sept. 1.
Instrument, Navigating. H. Addison, and W. B. Luard. 1,821,870; Sept. 1.
Insulator. W. D. Kyle. 1,821,222; Sept. 1.
Insulator and terminal. W. D. Kyle. 1,821,221; Sept. 1.
Internal combustion engine. F. A. Bullington. 1,821,189; Sept. 1.
Internal combustion engine. C. A. Muller. 1,821,662; Sept. 1.
Iron or steel or their alloys, Decarbonizing. W. Schottky. 1,821,407; Sept. 1.
Ironing machine. R. M. Sargent. 1,821,670; Sept. 1.
Jack: *See*—
Lifting jack.
Jacquard apparatus. G. Nobst, and E. Ulbricht. 1,821,766; Sept. 1.
Jewel mounted on a deformable basket-work, Malleable. L. J. Cartier. 1,821,791; Sept. 1.
Jewelry. L. J. Cartier, and J. Coussaint. 1,821,792; Sept. 1.
Joint: *See*—
Pipe joint. Tool joint.
Joint connection of the rods in structures, girders, and the like. K. Bohac. 1,821,736; Sept. 1.
Joint structure for pipes and the like. W. G. Wilson. 1,821,867; Sept. 1.
Kapok product and making the same. J. E. Dillard. 1,821,378; Sept. 1.
Kite, Aeroplane. C. F. Dysert. 1,821,465; Sept. 1.
Knitting fabric and making same. W. L. Houseman. 1,820,975; Sept. 1.
Knitting machine, Circular. P. E. B. Sander. 1,820,989; Sept. 1.
Knitting machines. V. Lombardi. 1,820,982; Sept. 1.
Knives of slicing and other machines, Device for sharpening the rotary circular. C. F. M. Van Berkel. 1,821,280; Sept. 1.
Labeling and banding. O. Muller. 1,821,564; Sept. 1.
Lacing machine, Skein. R. P. Drake. 1,821,545; Sept. 1.
Laminated glass. G. B. Watkins. 1,821,598; Sept. 1.
Lamp or similar article. L. Cross. Des. 84,978; Sept. 1.
Lamps and similar articles, Automatic mount making machine for incandescent. Y. Otaka. 1,821,894; Sept. 1.
Latch. R. Calpin. 1,821,879; Sept. 1.
Latch. Z. Polaire. 1,821,847; Sept. 1.
Latch, Door. J. Galamb. 1,821,148; Sept. 1.
Latch release, Dipper door. L. R. Culver. 1,821,499; Sept. 1.
Lawn sprinkler. H. K. Rader. 1,821,579; Sept. 1.
Level, Axle. C. H. Phelps. 1,821,319; Sept. 1.
Level, Spirit. J. F. Weber. 1,821,534; Sept. 1.
Leveling and finishing machine, Shoulder. E. S. Lucas. 1,821,843; Sept. 1.
Leveling device for elevators, Automatic. C. R. Callaway. 1,821,613; Sept. 1.
Lever connection. R. S. Sanford. 1,821,452; Sept. 1.
Lifter: *See*—
Plate lifter.
Lifting jack. E. Bootz. 1,821,737; Sept. 1.
Light: *See*—
Wall light.
Light condensing optical system. J. H. Emmerich. 1,821,623; Sept. 1.
Light indicating system and method. G. R. Fisher. 1,821,698; Sept. 1.
Light screen. H. W. Lawrence. Des. 84,995; Sept. 1.
Light waves, Apparatus for producing. O. T. McIlvaine. 1,821,442; Sept. 1.
Line fastener. A. N. Abelson and M. T. Johnson. 1,821,601; Sept. 1.
Liquid cooler. G. W. Williams. 1,821,489; Sept. 1.
Liquid dispensing apparatus. C. H. Arnold. 1,820,931; Sept. 1.
Liquid levels, Apparatus for controlling. H. M. Le Fever. 1,820,981; Sept. 1.
Liquid supply system and oil burning apparatus incorporating same. M. Resek. 1,821,769; Sept. 1.
Liquids on surfaces, Apparatus for applying thin even layers of. A. K. G. Hingst. 1,821,306; Sept. 1.
Liquor for the production of sulphite pulp, Cooking. G. A. Richter. 1,821,322; Sept. 1.
Liquor, Treatment of black. L. Bradley and E. P. McKeefe. 1,821,138; Sept. 1.
Load brake for hoists. W. H. Juergens. 1,821,838; Sept. 1.
Loader. H. H. Barber. 1,821,536; Sept. 1.
Local distant switch for super-heterodyne receivers. H. C. Allen. 1,821,780; Sept. 1.
Lock: *See*—
Nut lock. Push button window lock.
Lock. W. F. Hausmann. 1,821,155; Sept. 1.
Lock. J. J. Wharam. 1,821,130; Sept. 1.
Lock key. J. H. Shaw. 1,821,361; Sept. 1.
Lock mechanism. E. E. Neal. 1,821,567; Sept. 1.
Lock nut. A. d'Halloy. 1,820,965; Sept. 1.
Lock washer. N. R. Lillig. 1,821,312; Sept. 1.
Locomotive boiler. C. G. Hawley. 1,821,637–8; Sept. 1.
Locomotive boiler. B. E. Larson. 1,821,555; Sept. 1.
Locomotive boiler. E. J. Reardon. 1,821,527; Sept. 1.
Loud speaker. G. von Arco. 1,820,956; Sept. 1.
Lubricant dispensing device. W. S. Taber. 1,821,587; Sept. 1.
Lubricating apparatus. I. S. Carpenter. 1,821,828; Sept. 1.
Lubricating apparatus. H. J. Murphy. 1,821,230; Sept. 1.
Lubricator. L. C. Dutro. 1,821,010; Sept. 1.
Machine for manufacturing bushings. G. F. Yager. 1,821,199; Sept. 1.
Machine for pulling and grinding stalks. J. B. Bailey. 1,821,131; Sept. 1.
Machine for the polishing of finger nails, Coin-in-the-slot. L. W. Schaaff. 1,821,034; Sept. 1.
Mail unloading and pick up apparatus, Air. F. W. Weidman. 1,821,599; Sept. 1.
Manifolding. C. W. Brenn. 1,821,905; Sept. 1.
Manometer. W. A. Baum. 1,821,902; Sept. 1.
Manure loader. C. A. Peters. 1,821,074; Sept. 1.
Marcel wave wrapper clamp. N. F. Clayborn. 1,821,738; Sept. 1.
Materials, Heating decomposable. J. R. Schonberg. 1,821,326; Sept. 1.
Matter from waste rubber tires, Method and apparatus for the recovery of. J. W. Ames. 1,821,049; Sept. 1.
Mayonnaise, Making. S. B. Drucker. 1,820,909; Sept. 1.
Measuring the contents of moisture in chemical and mechanical wood pulp, Apparatus for. A. C. Andersen. 1,821,605; Sept. 1.
Measuring unit for lubricating systems. G. L. Moore. 1,821,314; Sept. 1.
Metal flanging or cutting and flanging machine. N. T. Willis. 1,821,457; Sept. 1.
Metal rod for building construction, etc. W. S. Edge. 1,821,696; Sept. 1.
Metal wheel and making the same. E. H. Arnold. 1,821,782; Sept. 1.
Metallic refractory material. J. G. Donaldson and H. L. Coles. 1,820,966; Sept. 1.
Metallic window frame and sash. H. C. Hasselbusch. 1,821,511; Sept. 1.
Metals, Preparing rare refractory. F. H. Driggs and J. W. Marden. 1,821,176; Sept. 1.
Metals, Separation of. G. U. Greene. 1,821,634; Sept. 1.
Mill: *See*—
Hammer mill. Rolling mill.
Pulverizing mill.
Mixer: *See*—
Concrete mixer. Fertilizer disk mixer.
Mixing device. J. Hanley. 1,821,468; Sept. 1.
Molded composition. H. M. Spencer. 1,821,120; Sept. 1.
Molding in sand, Apparatus for. W. A. Miles. 1,821,270; Sept. 1.
Molds from pipes, Apparatus for stripping. R. M. Weir. 1,821,128; Sept. 1.
Mop. A. Schempp. 1,821,481; Sept. 1.

Mortar manufacture, Apparatus for. C. P. Berg. 1,821,289; Sept. 1.
Motor: *See*—
Electric motor. Toy motor.
Oscillating motor.
Motor controller. W. E. Date. 1,821,091; Sept. 1.
Motor generator locomotive control system. N. W. Storer. 1,821,364; Sept. 1.
Motor starting system. M. E. Reagan. 1,821,358; Sept. 1.
Motor vehicles and the like, Device for preventing side slip in. J. Quaas. 1,821,816; Sept. 1.
Mounting for rotary miter saws. W. S. Neighbour. 1,821,113; Sept. 1.
Muffler. L. L. Haas. 1,820,972; Sept. 1.
Multiplex bag. W. L. Taylor. 1,821,246; Sept. 1.
Multiplex film and making. L. T. Troland. 1,821,680; Sept. 1.
Musical educational device. M. B. Hohn. 1,821,516; Sept. 1.
Musical toy. O. A. Langos. 1,821,184; Sept. 1.
Negative resistance, Measurement of. G. Crisson. 1,821,006; Sept. 1.
Nipple, Nursing. J. A. Smith. 1,821,913; Sept. 1.
Nitroarylaminoanthraquinone compound, New. H. Tesche and A. Job. 1,821,040; Sept. 1.
Nitrogenous waste materials, Treating. F. N. Moeck. 1,820,920; Sept. 1.
Non-flashing gas burner. E. J. Te Pas. 1,821,858; Sept. 1.
Non-freezing water fountain. C. H. Rinehart. 1,821,724; Sept. 1.
Nozzle, Adjustable variable flow liquid-dispensing. M. J. Caswell. 1,821,206; Sept. 1.
Nozzle outlet, Spray. L. G. Chase. 1,821,542; Sept. 1.
Nut, Door spindle lock. F. J. Westrope. 1,821,682; Sept. 1.
Nut lock. J. B. Ladd. 1,821,652; Sept. 1.
Odorless desiccating method and system. D. D. Peebles. 1,820,986; Sept. 1.
Oil, Apparatus for cracking. G. Egloff. 1,821,746; Sept. 1.
Oil, Apparatus for treating emulsified. F. C. Baker, R. J. Fleckenstein, and L. M. Landman. 1,821,133; Sept. 1.
Oil burner. L. J. Fisher. 1,821,752; Sept. 1.
Oil burner. C. M. Loepfe. 1,821,654; Sept. 1.
Oil can. D. L. Robbins. 1,821,480; Sept. 1.
Oil conversion, Hydrocarbon. G. Egloff. 1,821,748; Sept. 1.
Oil, Cracking. G. Egloff. 1,821,747; Sept. 1.
Oil, Cracking. G. Egloff. 1,821,749–50; Sept. 1.
Oil filter. H. E. Tyler. 1,821,082; Sept. 1.
Oil fuel, Heavy. N. E. Loomis. 1,820,983; Sept. 1.
Oil, Manufacturing lubricating. E. M. Clark. 1,820,963; Sept. 1.
Oil refining apparatus. C. H. Leach. 1,821,347; Sept. 1.
Oil tank cleaning device. P. M. Erdman. 1,821,503; Sept. 1.
1-halogen-2-amino-naphthalene-sulphonic acids, Manufacturing. N. Steiger. 1,821,038; Sept. 1.
Operator for winches, Intermittent. F. Stoneberg. 1,820,992; Sept. 1.
Optical compensator. J. F. Leventhal. 1,821,849; Sept. 1.
Organ stop or coupler actuating means. D. S. Darrows. 1,821,610; Sept. 1.
Ornament and attachment therefor. P. E. Fenton. 1,821,428; Sept. 1.
Orthodontic appliance. S. R. Atkinson. 1,821,171; Sept. 1.
Oscillating motor. H. R. Stuart. 1,821,123; Sept. 1.
Outlet, Housed. F. G. Wehman. 1,820,995; Sept. 1.
Oven construction and hinge therefor. W. Noble. 1,821,232; Sept. 1.
Oxygen-containing materials from their solutions in hydrocarbons, Separation of. H. E. Buc. 1,820,907; Sept. 1.
Package for cigars, cigarettes, and smoking tobacco. J. T. McCrosson. 1,821,472; Sept. 1.
Packaging machine. G. W. Mudd. 1,821,111; Sept. 1.
Packing case. G. A. Copeland. 1,821,692; Sept. 1.
Packing cord. W. W. Sackner. 1,821,582; Sept. 1.
Packing material. J. N. Vandegrift. 1,820,955; Sept. 1.
Pad: *See*—
Stamp pad.
Page-end signaling device. E. I. Gale. 1,821,831; Sept. 1.
Page numbering machine. J. H. Reinhardt. 1,821,360; Sept. 1.
Paint and enamal composition. E. A. Munns. 1,821,444; Sept. 1.
Paper and process and machine to be employed in the manufacture of the same, Reenforced. J. W. Marshall. 1,821,067; Sept. 1.
Paper box making machinery. P. W. Fleischer and M. Feybusch. 1,821,700; Sept. 1.
Paper handling device. S. Johansen. 1,821,713; Sept. 1.
Paper machines, Preventing breaks on. H. R. Rafton. 1,821,849; Sept. 1.
Paper making machine. A. Schubert. 1,821,583; Sept. 1.
Paper manufacture. A. L. Clapp. 1,820,962; Sept. 1.
Paper manufacture. W. J. Zimmerman. 1,821,198; Sept. 1.
Paper trimmer. J. J. Kusly. 1,821,716; Sept. 1.
Parachute, Mail bag. C. M. Graeff. 1,821,433; Sept. 1.
Patterns on plush fabrics or the like, Apparatus for printing colored. A. Gorner. 1,821,302; Sept. 1.
Pedal. J. R. Thorp and C. Fausch. 1,821,588; Sept. 1.
Pedal, Foot. J. R. Thorp. 1,821,589; Sept. 1.
Pencil, Mechanical C. R. Keeran. 1,821,183; Sept. 1.
Pencils, Apparatus for and method of printing or embossing. W. Friedlaender. 1,821,337.
Phenols from coal tar distillates, Obtaining. R. Cross. 1,820,908; Sept. 1.
Phenols, Making. T. Griswold, jr. 1,821,800; Sept. 1.
Phosphate rock, Leaching. M. Larsson. 1,821,653; Sept. 1.
Photographic copying apparatus. E. Weisker. 1,821,129; Sept. 1.
Pick-up device. E. H. Hull. 1,821,836; Sept. 1.
Picture effects, Apparatus for producing motion. A. B. Leech. 1,821,557. Sept. 1.
Picture projecting machines, Unitary safety device for motion. T. T. Allen. 1,820,959; Sept. 1.
Picture transmission, Method of and apparatus for. E. Belin. 1,821,416; Sept. 1.
Pictures, Producing projection. F. Fleischer. 1,821,626; Sept. 1.
Pig Iron, Making synthetic. T. F. Baily and L. G. Pritz. 1,821,782; Sept. 1.
Pin: *See*—
Bowling pin.
Pin for artificial teeth. A. E. Gibson. 1,821,301; Sept. 1.
Pipe anchor and clamp. P. W. Dieter. 1,821,294–5; Sept. 1.
Pipe, Device for cleaning and coating. F. McManis. 1,821,352; Sept. 1.
Pipe organ valve action. D. S. Barrows. 1,821,253; Sept. 1.
Pipe organ valve, Adjustable. D. S. Barrows. 1,821,286; Sept. 1.
Pipe organ valve, Removable. D. S. Barrows. 1,821,285; Sept. 1.
Pipes of sinks, etc., Apparatus for cleaning waste. C. J. B. Borgeson. 1,821,789; Sept. 1.
Pipe-joint, Flexible. H. G. Plummer. 1,821,274; Sept. 1.
Piston ring. J. Williams. 1,821,251; Sept. 1.
Piston ring squeezer. E. C. Newton. 1,821,356; Sept. 1.
Piston valve for wind instruments. R. B. Olds. 1,821,397; Sept. 1.
Pit props or steel arches employed as colliery or mining roof supports, Foot attachment for. T. Mensforth. 1,821,020; Sept. 1.
Pitcher, Baseball. J. D. Jeter. 1,821,755; Sept. 1.
Pitman connection. P. J. and W. F. Bowman. 1,821,174; Sept. 1.
Planetary operating mechanism for lifting jacks. L. D. Nilson. 1,821,231; Sept. 1.
Plant setter. E. L. Masters. 1,821,187; Sept. 1.
Planters, Extension attachment for two row corn. M. S. Draper. 1,821,009; Sept. 1.
Plants, Method and apparatus for treating fiber-bearing. H. Shamp. 1,821,673; Sept. 1.
Plate and making same, Identification. B. J. Povalski. 1,821,577; Sept. 1.
Plate and mouthpiece for suite telephones, Combined front. A. T. Morrison. Des. 85,000; Sept. 1.
Plate attaching means, Name. M. H. Toncray. 1,820,825; Sept. 1.
Plate, Corrugated metallic. V. E. Sisson. 1,821,118; Sept. 1.
Plate for flush telephones, Front. A. T. Morrison. Des. 84,999; Sept. 1.
Plate holder, License. H. M. Dietz and S. E. Kary. 1,821,053; Sept. 1.
Plate lifter. F. A. Horan. 1,821,805; Sept. 1.
Plate or similar article. G. Wesp. Des. 85,020–3; Sept. 1.
Plates, Device for ascertaining the opacity of blackened portions of photographic. R. Mechau. 1,821,301; Sept. 1.
Plates, Making identification. B. J. Povalski. 1,821,578; Sept. 1.
Plates, Method and apparatus for preparing lithographic printing. W. Grass. 1,821,466; Sept. 1.
Plug and whipstock, Hydraulic. H. Dumm and J. R. Russell. 1,821,426; Sept. 1.
Plush fabric. J. W. Cooper. 1,821,498; Sept. 1.
Pocketbook. B. Epstein. 1,821,379; Sept. 1.
Pocket case. H. Vasticar. 1,820,926; Sept. 1.
Pocket-protector. L. V. Johnson. 1,821,809; Sept. 1.
Pocket protector. L. V. Johnson. 1,821,837; Sept. 1.
Poles, Tapered tubular. E. W. Riemenschneider. 1,821,850; Sept. 1.
Pontoon. S. G. Plummer. 1,821,320; Sept. 1.
Potassium nitrate with simultaneous obtaining of dimagnesium phosphate, Production of. T. Thorssell and A. Kristensson. 1,821,859; Sept. 1.
Pots, Cleaning galvanizing. F. L. McMeans. 1,821,105; Sept. 1.
Powder puff. E. J. Moore. 1,821,393; Sept. 1.
Power: *See*—
Safety power.
Power plants, Operation of. F. Lawaczeck. 1,821,265; Sept. 1.
Power supply for thermionic tubes. L. A. Hyland. 1,821,262; Sept. 1.
Power transferring device. G. D. Jones. 1,821,645; Sept. 1.
Power transmitting device. G. D. Jones. 1,821,646; Sept. 1.

Preparations for repelling gnats and similar insects. A. Schmidt. 1,821,036; Sept. 1.
Press: *See*—
Trousers press.
Pressure cnn. H. J. H. Nathorst. 1,820,948; Sept. 1.
Printing device. V. J. Mohler. 1,821,108; Sept. 1.
Printing light values, Apparatus for indicating. F. H. Owens. 1,821,399; Sept. 1.
Printing mechanism for addressing machines. P. A. Gollnick and F. W. Broderick. 1,820,970; Sept. 1.
Printing mechanism, Selecting and. S. Morton, H. L. Krum, and E. E. Kleinschmidt. 1,821,110; Sept. 1.
Printing plate or similar article. M. Huseboe and R. W. Porter. Des. 84,987; Sept. 1.
Prop, Adjustable. H. G. Schulstadt. 1,820,950; Sept. 1.
Propeller. J. Koenig. 1,821,519; Sept. 1.
Propelling device for aircraft and the like. W. Stelzer. 1,821,450; Sept. 1.
Protective device. W. A. Smith. 1,821,677; Sept. 1.
Puller: *See*—
Spike puller.
Pulley, Clothes line. G. W. Rumbaugh. 1,821,448; Sept. 1.
Pulling over machine. B. Jorgensen. 1,821,162; Sept. 1.
Pulverizing mill. I. F. Pfeiffer. 1,821,912; Sept. 1.
Pump. W. C. Heath and F. G. Hobart. 1,821,216; Sept. 1.
Pump, Air. S. Silvers. 1,821,900; Sept. 1.
Pump and pump construction and operation. F. G. Hobart. 1,821,218; Sept. 1.
Pump and the like, Filtering. C. A. Winslow. 1,821,535; Sept. 1.
Pump, compressor, or measuring device, Rotary. C. O. J. Montelius. 1,821,623; Sept. 1.
Pump, Reversible centrifugal. E. J. Ruthman. 1,821,772; Sept. 1.
Pumping apparatus. A. N. Dawley. 1,821,143; Sept. 1.
Punch and typewriter controlling means therefor. J. T. Schaaff. 1,821,078; Sept. 1.
Punching and fastener-inserting apparatus. S. L. Gookin. 1,821,152; Sept. 1.
Push button window lock. L. C. and W. F. Hinderer. 1,821,835; Sept. 1.
Putty remover. R. R. Denning. 1,821,742; Sept. 1.
Racing apparatus. E. L. Ballew. 1,821,784; Sept. 1.
Racing apparatus. E. L. Ballew. 1,821,786; Sept. 1.
Racing apparatus, Portable moving. E. L. Ballew. 1,821,826; Sept. 1.
Rack: *See*—
Article supporting rack. Shoe rack.
Radiator. S. D. Sprong. 1,821,080; Sept. 1.
Radiator bracket. S. C. Appel. 1,821,084; Sept. 1.
Radiator, Sound. R. V. L. Hartley. 1,821,547; Sept. 1.
Radio and sound reproducing and recording device. D. G. Cohen. 1,821,496; Sept. 1.
Radiosignaling. L. Cohen. 1,821,906; Sept. 1.
Radio system. F. A. Kolster. 1,821,650; Sept. 1.
Radio vanity case. H. P. Pratt. 1,821,236; Sept. 1.
Rail coupling. A. A. Schaubhut. 1,821,825; Sept. 1.
Railroad ties and fasteners for rails, Device for. J. M. Morton, jr. 1,821,720; Sept. 1.
Railway track system. A. Henderson. 1,820,911; Sept. 1.
Rake. F. H. Machen. 1,821,522; Sept. 1.
Range top, Gas or electric. J. Teller and A. P. Schulz. Des. 85,013; Sept. 1.
Razor. P. N. Peters. 1,821,574; Sept. 1.
Razor case. R. E. Thompson and R. M. Dugdale. 1,821,365; Sept. 1.
Razor, Safety. W. H. Parry. 1,821,072; Sept. 1.
Razor, Safety. J. M. Zumwalt. 1,821,825; Sept. 1.
Receiving apparatus, Radio. J. Robinson. 1,821,033; Sept. 1.
Receptacle, Flush. C. M. Petersen. 1,821,031; Sept. 1.
Reciprocating apparatus. B. Ames. 1,821,685; Sept. 1.
Reclining chair. C. E. Ferreira. 1,821,298; Sept. 1.
Reclining seat. C. E. Ferreira. 1,821,299; Sept. 1.
Recorder, phonograph, radio and circuit therefor, Combined radio phonograph. D. G. Cohen. 1,821,495; Sept. 1.
Rectifier. H. C. Rentschler and W. W. Merrymon. 1,821,238; Sept. 1.
Refining apparatus. C. H. Leach. 1,821,346; Sept. 1.
Refrigerating apparatus and system, Absorption. T. K. Marbury. 1,821,812; Sept. 1.
Refrigerating cabinet. D. J. Greiling. 1,821,093; Sept. 1.
Refrigerating method and machine. F. W. Gay. 1,821,508; Sept. 1.
Refrigerator, Thermal. F. W. Gay. 1,821,509; Sept. 1.
Register: *See*—
Cash register.
Regulator for sound reproducing and synchronizing machines. C. H. Garrett and B. G. Herber. 1,821,630; Sept. 1.
Relay and meter testing and calibrating switch. P. Sporn and H. D. Freitag. 1,820,922; Sept. 1.
Relay system for high-speed circuit breakers. R. E. Hellmund. 1,821,342; Sept. 1.
Rendering process. S. Hiller. 1,821,639; Sept. 1.
Rerailer. R. J. Connick. 1,821,880; Sept. 1.
Resin compound, Gum. R. S. Goodenow. 1,821,703; Sept. 1.
Resistor block and making. S. Morse. 1,821,022; Sept. 1.
Rest for violins and similar musical instruments, Chin. K. Mai. 1,821,811; Sept. 1.
Retainer, Punch and die. O. K. and C. C. Richard. 1,821,770; Sept. 1.
Retaining device. I. Sideman. 1,821,675; Sept. 1.
Retarding device. C. H. Black. 1,821,787; Sept. 1.
Riding device. L. Colella. 1,821,462; Sept. 1.
Ring: *See*—
Piston ring.
Ring, Finger. J. Granat. Des. 83,985; Sept. 1.
Ring for joints, Sealing. W. G. Willson. 1,821,862; Sept. 1.
Rings, Locking device for anti-friction bearing. R. W. Bowne. 1,821,877; Sept. 1.
Rings of roller bearings and similar ground-rings, Method and device for turning out the. R. Dreyhaupt. 1,821,748; Sept. 1.
Riveter. J. J. Taylor. 1,821,410; Sept. 1.
Rocker chair. B. D. Friend Des. 84,983; Sept. 1.
Roll construction, Beater. A. J. Allison. 1,821,604; Sept. 1.
Roll for belt idlers. W. B. Philips. 1,821,235; Sept. 1.
Roll, Suction. C. E. Conley. 1,821,793; Sept. 1.
Roll, Suction. G. D. Kilberry. 1,821,757; Sept. 1.
Roller: *See*—
Shade roller. Window shade roller.
Temperature controlled motor driven roller.
Rolling colter. C. G. Strandlund. 1,821,774; Sept. 1.
Rolling mill. B. R. Shover and F. P. Townsend. 1,821,483; Sept. 1.
Roof, Car. C. D. Bonsall. 1,821,904; Sept. 1.
Roof framing tools. E. Luginbuhl. 1,821,103; Sept. 1.
Roofing and method of making same. L. Kirschbraun. 1,821,552; Sept. 1.
Rotary cleaner. J. Moschetto. 1,821,394; Sept. 1.
Rotary engine. C. W. Hicks. 1,821,513; Sept. 1.
Rotary machine for well drilling. E. Timbs. 1,821,366; Sept. 1.
Rotary pulp screen. J. A. Wiener. 1,821,684; Sept. 1.
Safety device. C. E. E. Van Allen. 1,821,334; Sept. 1.
Safety tower. J. A. Brown. 1,821,876; Sept. 1.
Sandpapering machine. A. N. Emmons. 1,821,624; Sept. 1.
Saw mill carriage head block, Adjusting stop for. C. A. Carbaugh. 1,821,421; Sept. 1.
Sawing-trimming machine. C. B. Nelson. 1,821,569; Sept. 1.
Scabbard, Axe. O. A. Clark. 1,821,258; Sept. 1.
Scale, Locomotive. R. N. Miller. 1,821,661; Sept. 1.
Scale, Weighing. J. W. Bryce. 1,821,087; Sept. 1.
Screen: *See*—
Rotary pulp screen.
Screen box. T. Ray and J. R. Ray. 1,821,190; Sept. 1.
Screw driver, Automatic. G. R. Wilcox. 1,821,194; Sept. 1.
Seat: *See*—
Automobile seat. Reclining seat.
Seal, Tube. A. W. Kath. 1,821,017; Sept. 1.
Sealer, Dental handpiece attachment. W. J. Terry. 1,821,451; Sept. 1.
Sealing device. F. J. Dion. 1,821,145; Sept. 1.
Sealing means. W. M. Brooks. 1,821,418; Sept. 1.
Sealing means for constructional material, Packaging. A. C. Fischer. 1,821,885; Sept. 1.
Seat, Adjustable. A. N. Thomas. 1,821,247; Sept. 1.
Seat folding chair, Flexible. W. G. Grossman. 1,821,704; Sept. 1.
Seat indicating system. W. J. King. 1,821,264; Sept. 1.
Sectional heating boiler. J. T. Ketchum. 1,821,648; Sept. 1.
Selecting apparatus. C. W. Swan. 1,821,124; Sept. 1.
Selective system and apparatus. S. Morton and H. L. Krum. 1,821,109; Sept. 1.
Sewage treatment. K. Imhoff. 1,820,976; Sept. 1.
Sewage treatment, Digestion of coarse substances left on sewage screens in the. K. Imhoff. 1,820,978; Sept. 1.
Sewage treatment plant with submerged contact aerators, Complete. K. Imhoff. 1,820,977; Sept. 1.
Shade roller. G. J. Wright. 1,821,045; Sept. 1.
Sheet material, Making. C. D. Knowlton. 1,821,166; Sept. 1.
Sheet metal, Rolling. J. M. Felton and C. H. Verwohlt. 1,821,751; Sept. 1.
Sheets, Method and apparatus for shaping curved. E. B. Carus. 1,820,936; Sept. 1.
Shifter mechanism. H. J. Heck. 1,821,890; Sept. 1.
Ship construction. R. Curr. 1,821,882; Sept. 1.
Shock absorber. F. W. Davis. 1,821,142; Sept. 1.
Shock absorber. E. Gruenfeldt. 1,820,971; Sept. 1.
Shoe. V. Deliso. Des. 84,979–80; Sept. 1.
Shoe, Athletic. F. L. Hetter. 1,821,834; Sept. 1.
Shoe displayer. M. Noble. 1,821,024; Sept. 1.
Shoe or overshoe, Arctic. P. H. Margulis. 1,821,471; Sept. 1.
Shoe rack. E. W. Roberts. 1,821,771; Sept. 1.
Shoe, Woman's. S. Troy. Des. 85,015–18; Sept. 1.
Shoes and their lasts, Machine for effecting relative movements between. J. M. Whelton and A. F. Pym. 1,820,952; Sept. 1.
Shunts, Device for standardizing. L. Baget. 1,821,785; Sept. 1.
Sieve. A. E. Eriksson. 1,821,261; Sept. 1.
Sight device for print mounting. K. Ketzscher. 1,821,810; Sept. 1.
Sight, Diving bomb. G. Gardner. 1,821,431; Sept. 1.

Sight-singing, Apparatus for teaching. C. J. Lamp. 1,821,311; Sept. 1.
Sign. J. T. Cochran. 1,820,964; Sept. 1.
Sign, Illuminated. J. W. Kelly. 1,820,912; Sept. 1.
Sign, Illuminated. J. W. and D. J. Kelly. 1,820,913; Sept. 1.
Sign, Road. C. H. Mackey and S. E. Preble. 1,821,227; Sept. 1.
Signal and control system. F. Konn. 1,821,758; Sept. 1.
Signal device for vehicles. M. Clar. 1,821,691; Sept. 1.
Signaling apparatus, Railway. B. H. Peter. 1,821,029; Sept. 1.
Signaling and apparatus, Selective. E. E. Kleinschmidt. 1,821,165; Sept. 1.
Signaling system, Wave. J. Robinson. 1,821,032; Sept. 1.
Silencer. R. B. Bourne. 1,821,688; Sept. 1.
Silencer, Exhaust gas. F. F. Hamilton. 1,821,013; Sept. 1.
Siphon jet closet. G. P. Gavin. 1,821,300; Sept. 1.
Skylight construction. R. W. Bruner and A. Grauer. 1,821,003; Sept. 1.
Sled and wagon, Combination. T. J. Phillips. 1,821,896; Sept. 1.
Slide shifting device. A. K. Hanks. 1,812,341; Sept. 1.
Slitting means. C. C. Van Stry. 1,821,681; Sept. 1.
Slug attachment, Low. E. Cheshire. 1,821,460; Sept. 1.
Smelting ores. F. M. Becket. 1,820,998; Sept. 1.
Snow melter. C. D. Chase. 1,821,292; Sept. 1.
Socket, Pull switch candelabrum. C. M. Petersen. 1,821,030; Sept. 1.
Soot extractor. W. H. Werner and C. Neumann. 1,821,860; Sept. 1.
Sound transmitting apparatus. E. Wilckens. 1,821,823; Sept. 1.
Space discharge device. A. W. Hull. 1,821,808; Sept. 1.
Speaker, Loud. C. Bliebergar. 1,821,373; Sept. 1.
Spike making machine. C. H. Frederick. 1,821,888; Sept. 1.
Spike puller. J. H. Turner. 1,821,041; Sept. 1.
Spool body winding. E. G. Glidden. 1,821,796; Sept. 1.
Spool control for fishing reels, Automatic. L. J. Chudley. 1,821,461; Sept. 1.
Spoon or other article of tableware. L. A. Brown. Des. 84,976–7; Sept. 1.
Spotlight, Focusing. G. C. Fullmer. 1,821,430; Sept. 1.
Spray stand. T. M. Hamilton, jr. 1,821,303; Sept. 1.
Spray table. F. G. Dennison. 1,821,694; Sept. 1.
Sprinkler: *See*—
Lawn sprinkler.
Sprinkler. C. H. Perry. 1,821,723; Sept. 1.
Stabilizer, Automatic. C. A. Musgrove and F. F. Benson. 1,821,271; Sept. 1.
Stabilizer for airplanes. F. J. Pike. 1,821,273; Sept. 1.
Stacker, Portable. F. D. Coppock. 1,821,881; Sept. 1.
Stacker, Slice. L. Nestor. 1,821,445; Sept. 1.
Stairway, Disappearing. F. E. Bessler. 1,821,872; Sept. 1.
Stamp pad, Postage indicia. W. H. Wheeler, jr. and A. K. Viele. 1,821,044; Sept. 1.
Stand: *See*—
Cooky display stand.
Display stand.
Spray stand.
Stand and filing device, Combined. N. C. Durand. 1,821,621; Sept. 1.
Static eliminator. E. E. Bishop and F. J. Brook. 1,821,836; Sept. 1.
Steam engine. H. J. Titus. 1,821,532; Sept. 1.
Steam generating plant for the generation of high pressure steam. K. Alles. 1,821,781; Sept. 1.
Steel, Rolling alloy. H. M. Givens. 1,821,882; Sept. 1.
Steering apparatus for motor vehicles. C. Y. Knight. 1,821,063; Sept. 1.
Steering mechanism. J. A. Wright. 1,821,458; Sept. 1.
Stepladder joint and self-support. S. M. Peters and A. B. Rochester. 1,821,075; Sept. 1.
Stick, Hockey. F. Glahe. 1,821,889; Sept. 1.
Stokers, Fuel distributing system for. G. M. Myers. 1,821,068; Sept. 1.
Stool and stepladder, Combination. C. T. Hyatt. 1,821,517; Sept. 1.
Storage battery element and the production thereof. P. D. Payne and M. Iversen. 1,821,572; Sept. 1.
Storage battery terminal connector. D. C. Martin. 1,821,717; Sept. 1.
Store. J. F. Brown. 1,821,541; Sept. 1.
Storing and delivering apparatus, Type. J. W. Gearhart. 1,821,631; Sept. 1.
Strain type disconnecting switch. C. G. Koppitz. 1,821,167; Sept. 1.
Strainer, Well. J. H. McEvoy, jr. 1,821,659; Sept. 1.
Strap: *See*—
Chain strap.
Strip feed mechanism. B. H. Schneider. 1,821,899; Sept. 1.
Strip, Label. W. B. Lashar. 1,821,101; Sept. 1.
Strip materials, Apparatus for joining. A. Potdevin. 1,820,921; Sept. 1.
Submarine rescuing device. I. S. Kelley. 1,821,219; Sept. 1.
Subsoil investigating, Method and apparatus for. K. Sundberg and E. D. Lindblom. 1,820,953; Sept. 1.
Sugar beet topping machine. C. Peer. 1,821,573; Sept. 1.
Superheater unit and boiler using same. J. A. Barnes. 1,821,134; Sept. 1.
Supervisory control system. R. J. Wensley and J. L. McCoy. 1,821,368; Sept. 1.
Support and bracket therefor, Flashlight. J. Hauenstein. 1,821,305; Sept. 1.
Support and elevator, Hose. C. H. Rinehart. 1,821,725; Sept. 1.
Support, Filing card. F. L. G. Straubel. 1,821,244; Sept. 1.
Supporting device, Drapery. D. R. Yiedel. 1,820,997; Sept. 1.
Supporting device for lamps. R. B. Miner. 1,821,763; Sept. 1.
Surface markings, Block and road. D. B. Davies and W. D. Griffiths. 1,821,052; Sept. 1.
Surgical apparatus. E. A. Hamlin. 1,821,435; Sept. 1.
Suspenders. M. B. Scott. 1,821,239; Sept. 1.
Switch: *See*—
Aeroplane control switch.
Alarm switch.
Automatic cut-off switch.
Electric switch.
Enclosed fuse switch.
Film controlled switch.
Indicator switch.
Strain type disconnecting switch.
Time controlled switch.
Traffic signal switch.
Switch and fuse box. J. C. Lewis. 1,821,224; Sept. 1.
Switch operating mechanism. R. H. Olley. 1,821,026; Sept. 1.
Swivel. L. J. Black. 1,821,874; Sept. 1.
Swivel connection for electric cables and the like. C. G. Baker. 1,821,132; Sept. 1.
Synchronizer for rotary devices. A. F. Connery. 1,821,497; Sept. 1.
Table: *See*—
Spray table.
Table and bench, Folding. G. C. Davies and D. G. Griswold. 1,821,259; Sept. 1.
Tablet, Drafting. S. A. Strzelczyk. 1,821,485; Sept. 1.
Tabulating machine. J. E. Wright. 1,821,046; Sept. 1.
Tail gate device for dump trucks. A. B. Larson. 1,821,884; Sept. 1.
Tail stock. E. J. Svenson. 1,821,331; Sept. 1.
Talking machine. J. I. George and E. Chiffey. 1,821,632; Sept. 1.
Tank: *See*—
Drier tank.
Tank valve. W. K. Edwards. 1,821,622; Sept. 1.
Target. A. R. Stowell. 1,821,330; Sept. 1.
Tee, Golf. G. Miller. 1,821,475; Sept. 1.
Telechronometer. G. Babcock. 1,821,086; Sept. 1.
Telegraph, Printing. E. E. Kleinschmidt. 1,821,164; Sept. 1.
Telegraphic communicating system. J. V. Foll. 1,821,146; Sept. 1.
Telephone system. W. J. Vincent. 1,821,198; Sept. 1.
Temperature controlled motor driven roller. W. McKee. 1,820,985; Sept. 1.
Terminal, Cable. H. C. Mohr. 1,821,443; Sept. 1.
Textiles, Fireproofing and waterproofing. H. R. Offord. and N. T. Mirov. 1,821,317; Sept. 1.
Thread protector, Pipe. F. K. Krag and J. V. Nelson. 1,821,520; Sept. 1.
Tile plate. F. H. ff. 1,821,807; Sept. 1.
Tile construction, Sheet metal wall. H. Honer. 1,821,843; Sept. 1.
Tile handling machine. J. A. Bower. 1,821,001; Sept. 1.
Time controlled switch. C. R. Gains. 1,821,629; Sept. 1.
Tin from antimonial lead and alloy, Removal of. T. D. Jones. 1,821,643; Sept. 1.
Tire casing. B. R. Prall. Des. 85,003; Sept. 1.
Tires, Molding. I. Trautman. 1,821,679; Sept. 1.
Titanium compounds, Precipitating. L. W. Ryan. 1,820,987–8; Sept. 1.
Toaster, Automatic discharging. C. W. Mabey. 1,821,226; Sept. 1.
Tobacco, Pressing and packing manufactured. H. P. Taylor. Re18,173; Sept. 1.
Toe board. J. G. Viche. 1,821,734; Sept. 1.
Toilets, Seat and seat cover actuating mechanism for. J. A. Oya. 1,821,027; Sept. 1.
Tool, Boring. H. H. Mercer. 1,821,473–4; Sept. 1.
Tool, Carbon removing. W. O. Jones. 1,821,891; Sept. 1.
Tool, Fluid operated. H. C. Gustafson. 1,821,801; Sept. 1.
Tool joint. A. L. Segelhorst. 1,821,328; Sept. 1.
Tool, Portable power driven. J. J. Holloway. 1,821,436; Sept. 1.
Tool retainer. E. F. Terry, jr. 1,821,732; Sept. 1.
Top, Rumble seat. J. A. Farnik. 1,821,884; Sept. 1.
Torpedo shaped suspended railway vehicles for high speeds. C. Stedefeld. 1,821,121; Sept. 1.
Toy. H. J. Vetter. Des. 85,019; Sept. 1.
Toy, Mechanical. C. E. Hudson. 1,821,712; Sept. 1.
Toy motor. J. F. Enyeart. 1,820,967; Sept. 1.
Toy, Nursery. H. W. Block. 1,820,905; Sept. 1.
Toy or similar article. L. Merel. Des. 84,998; Sept. 1.
Tractor. J. De Boer. 1,821,007; Sept. 1.
Tractor. W. L. Paul. 1,821,073; Sept. 1.
Tractor attachment for trucks. G. I. Worley. 1,821,196; Sept. 1.
Traffic governing apparatus, Railway. C. A. Brooks, and H. S. Young. 1,821,002; Sept. 1.
Traffic signal switch. C. Bissell. 1,821,000; Sept. 1.
Trailer. J. VanVorst. 1,821,593; Sept. 1.
Train indicating apparatus. E. M. Allen. 1,821,602; Sept. 1.

Transmission device. W. H. Long. 1,821,102; Sept. 1.
Transmission gearing. H. W. Bullock. 1,820,902; Sept. 1.
Transmitter mouthpiece for concealed speaker cordless telephones. A. T. Morrison. Des. 85,001; Sept. 1.
Transmitter, Statistical directional. A. N. Goldsmith. 1,821,383; Sept. 1.
Trap: *See*—
Game trap.
Trimmer: *See*—
Paper trimmer.
Trimming, molded. H. W. Buhler. 1,820,934–5; Sept. 1.
Trousers press. O. Wanden and L. D. Walker. 1,821,597; Sept. 1.
Trousers, Supporting. C. S. Mackenzie. 1,820,918; Sept. 1.
Truck. W. C. Hedgcock. 1,821,548; Sept. 1.
Truck bolster with spring supported side bearings. P. R. Drenning. 1,821,296; Sept. 1.
Truck for railway cars. J. J. McBride. 1,821,104; Sept. 1.
Truck, Hand. D. Roe. 1,821,276; Sept. 1.
Tube: *See*—
Vacuum tube.
Tube apparatus, Dispatch. J. Stoetzel. 1,821,857; Sept. 1.
Tube still furnace. H. Thomas. 1,821,531; Sept. 1.
Tuft yarns of tube frames, Machine for trimming. E. W. Stone. 1,821,409; Sept. 1.
Tuning device for wind musical instruments. A. Loomis. 1,821,655; Sept. 1.
Tuyère block for metallurgical furnaces. D. Cushing. 1,821,175; Sept. 1.
Type chase. F. Kohnle. 1,821,437; Sept. 1.
Typewriting machine. H. A. Avery. 1,820,903; Sept. 1.
Typewriting machine. A. G. F. Kurowski. 1,821,099; Sept. 1.
Typewriting machine. J. A. B. Smith. 1,821,528; Sept. 1.
Unit, Changing-holding. L. H. Larsen and C. W. Nixon. 1,821,345; Sept. 1.
Vacuum evaporating apparatus. E. Schuster. 1,821,278; Sept. 1.
Vacuum tube and making same. B. Loewe. 1,821,351; Sept. 1.
Valve. W. E. Sloan. 1,821,241; Sept. 1.
Valve, Balanced gate. G. A. Doughty and H. A. Johnston. 1,821,054; Sept. 1.
Valve, Relief. J. Meinken and E. E. Johnson. 1,821,189; Sept. 1.
Valve structure for wind instruments, Piston. A. J. Johnson. 1,821,641; Sept. 1.
Vaporizer. L. W. Shipman. 1,821,728; Sept. 1.
Variable speed power transmission mechanism. F. A. Hayes. 1,821,833; Sept. 1.
Vehicle. C. E. Musselwhite. 1,821,395; Sept. 1.
Vehicle brake. W. F. Kilker. 1,821,550; Sept. 1.
Vehicle driving wheel. H. J. Pullen. 1,821,901; Sept. 1.
Vehicle, Self propelled. E. W. Brandenstein. 1,821,827; Sept. 1.
Vending machine. A. H. Du Grenier. 1,821,501; Sept. 1.
Vending machine. W. H. Laraway. 1,821,223; Sept. 1.
Vending machine. H. R. Williams. 1,820,929; Sept. 1.
Ventilated switch box. A. B. Rypinski. 1,821,898; Sept. 1.
Ventilator. H. Shapiro. 1,821,674; Sept. 1.
Vibration absorbing mechanism. C. Y. Knight. 1,821,098; Sept. 1.
Visor, Automobile head lamp. A. J. Frame. Des. 84,982; Sept. 1.
Wallboard and the like for covering walls. F. A. Brassard. 1,820,933; Sept. 1.
Wall light. J. B. Kausal. 1,821,062; Sept. 1.
Wall structure. H. P. C. Keuls. 1,821,892; Sept. 1.
Warming closet for cook stoves. G. E. Pickup. Des. 85,002; Sept. 1.
Washer: *See*—
Lock washer.
Washing machine. M. A. Defibaugh. 1,821,544; Sept. 1.
Washing machine, Surface. M. K. Kuchinsky. 1,821,715; Sept. 1.
Watch dials, etc., Decorating. J. C. McFarland. 1,821,561; Sept. 1.
Water closet bowl. G. Brain. Des. 84,973–4; Sept. 1.
Water gas and oil gas, Manufacturing mixed. C. W. Andrews and H. A. Brassert. 1,821,050; Sept. 1.
Water heater. A. T. Johanson. 1,820,979; Sept. 1.
Water treating apparatus and method. E. D. Lewis. 1,821,266; Sept. 1.
Webholders, Selective control of. J. A. Pons. 1,821,848; Sept. 1.
Wehnelt-cathode. E. H. Reerink and J. G. W. Mulder. 1,821,359; Sept. 1.
Welt closing mechanism for full fashioned hosiery machines. J. Haines, jr. 1,821,154; Sept. 1.
Wheel: *See*—
Vehicle driving wheel.
Wheels, Attachment for. T. McNally. 1,821,269; Sept. 1.
Wheels, Production of vehicle. T. E. Murray, jr., and H. H. Williams. 1,821,663; Sept. 1.
Windguard for automobiles. R. C. Wall. 1,821,282; Sept. 1.
Window construction. F. J. Plym. 1,820,947; Sept. 1.
Window construction, Trapezoidal sliding. C. W. Avery. 1,821,686; Sept. 1.
Window display stand. J. L. Sinykin. Des. 85,007; Sept. 1.
Window frame. W. S. Metler and H. O. Schumacher. 1,821,910; Sept. 1.
Window shade roller. H. J. Baumann. 1,821,687; Sept. 1.
Windshield. A. B. Beitman. 1,821,903; Sept. 1.
Wing safety device for aircraft, Adjustable. E. J. Murray. 1,821,764; Sept. 1.
Wire-bending die. S. Wadsten. 1,821,249; Sept. 1.
Wire-coiling die. S. Wadsten. 1,821,250; Sept. 1.
Wire drawing machine and threading the same. E. J. McIlvried. 1,821,845; Sept. 1.
Wire machine, Barb. W. H. Sommer. 1,821,730; Sept. 1.
Wiring machine, Package. J. S. McChesney. 1,821,389; Sept. 1.
Wringer. W. Robertson. 1,821,275; Sept. 1.
Yarn feeding device for circular knitting machines. W. J. Lougtin. 1,821,268; Sept. 1.
Yarns, fabrics, films, and the like, Treatment of. H. Dreyfus. 1,821,464; Sept. 1.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 1, 1931

NOTE.—First number—class, second number—subclass, third number—patent number.

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6: 1,820,995
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298— 8: 1,820,910
23: 1,821,384
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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Aberle, H. C., Company, Incorporated, Philadelphia, Pa. Hosiery. 286,851; Sept. 8; Serial No. 314,262; published June 30, 1931. Class 39.

Agalyn Corporation, The, Pittsburgh, Pa. Dental material. 286,814; Sept. 8; Serial No. 311,169; published June 30, 1931. Class 44.

Algemeene Kunstzijde Unie N. V., Arnhem, Netherlands. Artificial yarns. 286,997; Sept. 8; Serial No. 314,888; published June 30, 1931. Class 43.

All Metal Products Company, Wyandotte, Mich. Popguns, air rifles, toy airplanes, etc. 286,966; Sept. 8; Serial No. 314,480; published June 30, 1930. Class 22.

Alperin, Strauss Co. Inc., New York, N. Y. Shirts, underwear, and pajamas. 287,051; Sept. 8. Class 39.

American Association of Personal Finance Companies, Washington, D. C. Monthly publication. 286,899; Sept. 8; Serial No. 314,075; published June 23, 1931. Class 38.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass., and Hoboken, N. J. Wire rope. 286,969; Sept. 8; Serial No. 314,835; published June 30, 1931. Class 7.

Amtorg Trading Corporation, New York, N. Y. Candy. 286,924; Sept. 8; Serial No. 313,072; published June 30, 1931. Class 46.

Apex Products Corporation, Chicago, Ill. Powder puffs. 287,037; Sept. 8. Class 29.

Appleton Coated Paper Co., The, Appleton, Wis. Book paper coated on two sides, each side different color. 286,871; Sept. 8; Serial No. 313,528; published June 16, 1931. Class 37.

Armstrong Cork Company, Lancaster, Pa. Magazine. 286,903; Sept. 8; Serial No. 313,952; published June 23, 1931. Class 38.

Atlas Mills. (See Goldman, Charles.)

Augusta Knitting Corporation, Utica, N. Y. Women's underwear. 286,854; Sept. 8; Serial No. 314,355; published June 23, 1931. Class 39.

Autobacconist Corporation, The, Glen Cove, N. Y. Cigarette vending machines. 286,959; Sept. 8; Serial No. 314,225; published June 30, 1931. Class 23.

Badger Rubber Works, The, Milwaukee, Wis. Inner tubes, tire patches, and boots and sleeves, etc. 286,988; Sept. 8; Serial No. 292,389; published June 30, 1931. Class 35.

Barrett Bros., Philadelphia, Pa. Malt syrups. 287,032; Sept. 8. Class 46.

Barrett Company, The, New York, N. Y. Prepared paint and for priming material and roof coating. 286,934; Sept. 8; Serial No. 298,266; published June 30, 1931. Class 16.

Barton & Guestier, Bordeaux, France. Olive oil. 287,020; Sept. 8; Serial No. 306,229; published June 30, 1931. Class 46.

Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic mountings. 287,036; Sept. 8. Class 26.

Better Bearings Corporation, Salt Lake City, Utah. Castings and alloys. 286,885; Sept. 8; Serial No. 307,086; published June 23, 1931. Class 14.

Beverly Hall Corporation, doing business as The Philosophical Publishing Company, Quakertown, Pa. Books, magazines, and courses of instruction. 286,867; Sept. 8; Serial No. 312,976; published June 30, 1931. Class 38.

Bienstock and Lubelsky, Inc., New York, N. Y. Fur trimmings. 286,925; Sept. 8; Serial No. 313,640; published June 30, 1931. Class 40.

Black-Sivalls & Bryson Manufacturing Company, Kansas City, Mo. Steel walkways and stairways. 287,040; Sept. 8. Class 12.

Blossom Hat Co. (See Mermelstein, Joseph R.)

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 286,999; Sept. 8; Serial No. 314,320; published June 30, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 287,000; Sept. 8; Serial No. 314,318; published June 30, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 287,005–6; Sept. 8; Serial Nos. 313,955–6; published June 30, 1931. Class 42.

Boston Knitting Mills, Inc., Newton, Mass. Underwear. 286,839; Sept. 8; Serial No. 313,279; published June 23, 1931. Class 39.

Bradley, Milton, Company, Springfield, Mass. Crayons. 286,901; Sept. 8; Serial No. 313,324; published June 16, 1931. Class 37.

Bradley, Milton, Company, Springfield, Mass. Artists' water color paints. 286,954; Sept. 8; Serial No. 314,443; published June 30, 1931. Class 16.

Bradner Smith & Co., Chicago, Ill. Bond paper. 287,035; Sept. 8. Class 37.

Brown's Beach Jacket Company, Worcester, Mass. Knitted sweaters, coats, vests, etc. 286,835; Sept. 8; Serial No. 312,837; published June 2, 1931. Class 39.

Buffume, Long Beach, Calif. Clothing. 286,837–8; Sept. 8; Serial Nos. 313,106–7; published June 30, 1931. Class 39.

Burton Brothers & Co. Inc., New York, N. Y. Cotton piece goods and mixtures of cotton and silk piece goods. 287,010; Sept. 8; Serial No. 313,588; published June 30, 1931. Class 42.

Byrne, Thomas F., Corporation, Phoenixville, Pa. Wash cloths. 286,859; Sept. 8; Serial No. 300,463; published June 30, 1931. Class 42.

C-C Manufacturing Company, The, Jersey City, N. J. Jock straps, suspensories, and athletic and ankle and wrist supporters. 286,882; Sept. 8; Serial No. 305,758; published June 30, 1931. Class 44.

California Packing Corporation, San Francisco, Calif. Fish meal. 286,818; Sept. 8; Serial No. 310,856; published June 30, 1931. Class 10.

California Packing Corporation, San Francisco, Calif. Canned fruit and vegetables, raisins, mincemeat, etc. 287,019; Sept. 8; Serial No. 307,257; published June 30, 1931. Class 46.

Campbell Company, New York, N. Y. Cotton goods. 287,014; Sept. 8; Serial No. 313,327; published June 30, 1931. Class 42.

Candy Kitchens, Inc., Chicago, Ill. Candy. 286,931; Sept. 8; Serial No. 314,483; published June 30, 1931. Class 46.

Carborundum Company, The, Niagara Falls, N. Y. Steel center abrasive wheels. 286,992; Sept. 8; Serial No. 281,074; published June 23, 1931. Class 4.

Carleton, Francis B., Boston, Mass. Gasoline blow torch. 286,951; Sept. 8; Serial No. 314,230; published June 30, 1931. Class 34.

Carpenter, F. D., Coal Co., Chicago, Ill. Coal. 287,054; Sept. 8. Class 1.

Carson Pirie Scott & Co., Chicago, Ill. Underwear. 287,025; Sept. 8. Class 39.

Carson Pirie Scott & Co., Chicago, Ill. Men's collars. 287,026–7; Sept. 8. Class 39.

Carson Pirie Scott & Co., Chicago, Ill. Underwear. 287,028; Sept. 8. Class 39.

Cattell, J. McKeen, doing business as The Science Press, New York, N. Y. Magazine. 286,913; Sept. 8; Serial No. 313,959; published June 30, 1931. Class 38.

Central Surety and Insurance Corporation, Kansas City, Mo. House organs. 286,902; Sept. 8; Serial No. 313,829; published June 9, 1931. Class 38.

Charlotte-Irving and Company. (See Wener, Irwin P.)

City Stores Company, doing business as Dorothy Lee Co., New York, N. Y. Cleansing cream, pore paste, astringent, etc. 287,052; Sept. 8. Class 6.

Clark and Jackson, Columbia, S. C. Cotton cordage, rope, and twine. 286,967; Sept. 8; Serial No. 314,788; published June 30, 1931. Class 7.

Cleveland Brick & Clay Company, Cleveland, Ohio. Paving bricks. 287,053; Sept. 8. Class 12.

Closet Shop, The. (See Herzog, Mrs. George.)

Clyde Cutlery Company, The, Clyde, Ohio. Kitchen ware. 286,965; Sept. 8; Serial No. 313,494; published June 30, 1931. Class 23.

Colonial Products Company. (See Silberman, L. E.)

Combustion Oil Burner Co. (See Milwaukee Air Power Pump Co.)

Condor Manufacturing Co., Inc., Long Island City, N. Y. Golf clubs. 286,958; Sept. 8; Serial No. 314,272; published June 30, 1931. Class 22.

Congoleum-Nairn, Inc., Kearny, N. J. Linoleum and products of a linoleum like nature. 286,945–6; Sept. 8. Serial Nos. 315,037–8; published June 30, 1931. Class 20.

Consolidated Ashcroft Hancock Company, New York, N. Y. Clocks. 286,981; Sept. 8; Serial No. 294,342; published Mar. 3, 1931. Class 27.

Consolidated Millinery Company, Chicago, Ill. Hats. 286,895; Sept. 8; Serial No. 301,248; published June 23, 1931. Class 39.

Corbett & North, Inc., New York, N. Y. Women's clothing. 286,923; Sept. 8; Serial No. 313,028; published June 23, 1931. Class 39.

Cross, W. W., & Company, Incorporated, Portland, Me. Tacks. 286,989; Sept. 8; Serial No. 291,326; published June 30, 1931. Class 13.

Daily Trade Record Co. of New York, New York, N. Y. Daily newspaper. 286,894; Sept. 8; Serial No. 313,076; published June 23, 1931. Class 38.

Day & Night Water Heater Co., Ltd., Monrovia, Calif. Gas and solar water heaters, water heating units, and range boilers. 286,813; Sept. 8; Serial No. 310,163; published June 30, 1931. Class 34.

De Gama Chemical Co. (See Gamage, Thomas F.)

Detroit Waste Works. (See Gallagher, John C.)

Diamond Shoe Corporation, New York, N. Y. Shoes. 286,926; Sept. 8; Serial No. 313,649; published June 23, 1931. Class 39.

Donnelly Garment Company, Kansas City, Mo. Dresses, frocks, aprons, etc. 286,852; Sept. 8; Serial No. 314,278; published June 23, 1931. Class 39.

Eagle Clothes, New York, N. Y. Clothing for men and young men. 286,841; Sept. 8; Serial No. 313,707; published June 23, 1931. Class 39.

Eastman Kodak Company, Rochester, N. Y. Laboratory aprons. 286,928; Sept. 8; Serial No. 313,841; published June 23, 1931. Class 39.

Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens. (See Mülhens, Paul P.)

Edwards & Walker Company, Portland, Me. Golf balls. 286,968; Sept. 8; Serial No. 314,793; published June 30, 1931. Class 22.

Electro-Chemical Society, New York, N. Y. Books or periodicals. 286,890; Sept. 8; Serial No. 311,713; published June 16, 1931. Class 38.

Elliott Ralston Corporation, Nashville, Tenn. Business directory and routing booklet. 286,869; Sept. 8; Serial No. 313,067; published June 30, 1931. Class 38.

Engl, Morris, doing business as The International At-A-Glance Chart Co., New York, N. Y. Charts. 286,866; Sept. 8; Serial No. 311,653; published June 30, 1931. Class 38.

Faber, A. W., Inc., Newark, N. J. Pencils, pencil cases, crayons, etc. 286,876; Sept. 8; Serial No. 301,254; published June 16, 1931. Class 37.

Fahlbusch, Oscar, Ridgewood, N. Y. Nasal and mouth inhalers. 286,857; Sept. 8; Serial No. 314,559; published June 30, 1931. Class 44.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 286,842–3; Sept. 8; Serial Nos. 313,999–314,000; published June 23, 1931. Class 39.

Fawcett Publications, Inc., Minneapolis, Minn. Magazine. 286,907; Sept. 8; Serial No. 314,403; published June 23, 1931. Class 38.

Flickerette Company, New York, N. Y. Animated picture booklets. 286,868; Sept. 8; Serial No. 313,034; published June 30, 1931. Class 38.

Fradus, Oscar, doing business as Setex Distributing Company, New York, N. Y. Toilet seat covers. 286,912; Sept. 8; Serial No. 314,905; published June 30, 1931. Class 37.

Franc-Strohmenger & Cowan, Inc., New York, N. Y. Neckties. 286,887; Sept. 8; Serial No. 308,159; published June 23, 1931. Class 39.

Frankwood Process Company, Portland, Me. Safety paper. 286,896; Sept. 8; Serial No. 314,329; published June 30, 1931. Class 37.

Gaede Silk Dyeing Company, Paterson, N. J. Piece dyed goods. 287,023; Sept. 8; Serial No. 311,271; published May 12, 1931. Class 42.

Gallagher, John C., doing business as Detroit Waste Works, Detroit, Mich. Polishing and dusting cloth. 286,820; Sept. 8; Serial No. 310,992; published June 30, 1931. Class 29.

Gamage, Thomas F., doing business as De Gama Chemical Co., San Francisco, Calif. Soap. 286,950; Sept. 8; Serial No. 314,157; published June 23, 1931. Class 4.

Gasser, M. M., Co., Duluth, Minn. Bread and wheat flour. 287,046; Sept. 8. Class 46.

General Refractories Company, Philadelphia, Pa. Refractories for furnace structures and linings. 287,049; Sept. 8. Class 12.

Gimbel Brothers, Inc., New York, N. Y. Bicycles. 286,935; Sept. 8; Serial No. 299,313; published June 30, 1931. Class 19.

Glicksman, Aaron, doing business as A. Glicksman & Co., Chicago, Ill. Leather findings. 286,833; Sept. 8; Serial No. 310,374; published June 23, 1931. Class 39.

Goldman, Charles, doing business as Atlas Mills, New York, N. Y. Silk crepe. 287,012; Sept. 8; Serial No. 313,431; published June 30, 1931. Class 42.

Goodman, Morris J., doing business as Goodman Cigar Co., Westfield, Mass. Cigars. 286,952; Sept. 8; Serial No. 314,283; published June 30, 1931. Class 17.

Grabosky, Louis B., Philadelphia, Pa. Cigars. 286,824–5; Sept. 8; Serial Nos. 312,372–3; published June 23, 1931. Class 17.

Grant, W. T., Company, Lynn, Mass., and New York, N. Y. Textile diapers. 287,009; Sept. 8; Serial No. 313,597; published June 30, 1931. Class 42.

Gravell, James H., Ambler, Pa. Printed charts. 286,914; Sept. 8; Serial No. 314,111; published June 30, 1931. Class 38.

Greer, J. W., Company, Cambridge, Mass. Coated fabrics. 286,816; Sept. 8; Serial No. 310,514; published June 23, 1931. Class 50.

Goodwear Knitting Mills, Philadelphia, Pa. Bathing suits. 286,831; Sept. 8; Serial No. 309,272; published Mar. 10, 1931. Class 39.

Half Size Dress Company, Inc., New York, N. Y. Gowns, frocks, and dresses. 286,830; Sept. 8; Serial No. 309,270; published June 30, 1931. Class 39.

Hamrah, Alex. J., Co. Inc., New York, N. Y. Art, decorative, and fancy linens. 286,863; Sept. 8; Serial No. 263,267; published June 30, 1931. Class 42.

Hamrah, Alex. J., Co. Inc., New York, N. Y. Art, decorative, and fancy linens. 286,864; Sept. 8; Serial No. 263,265; published June 30, 1931. Class 42.

Haskins, R. G., Co., Chicago, Ill. Shining compound or polish. 286,982; Sept. 8; Serial No. 294,113; published June 30, 1931. Class 16.

Health Food Company, The. (See Komar, Aaron.)

Hein, Otto, New York, N. Y. Rubber hosiery protector. 286,848; Sept. 8; Serial No. 314,238; published June 23, 1931. Class 39.

Henkin, Melvin, Inc., New York, N. Y. Leather. 287,038; Sept. 8. Class 1.

Herzog, Mrs. George, doing business as The Closet Shop, New York, N. Y. Electric lighting fixtures. 286,991; Sept. 8; Serial No. 283,332; published July 7, 1931. Class 21.

Hewitt Bros. Soap Company, The, Dayton, Ohio. Soap. 286,888; Sept. 8; Serial No. 308,828; published June 23, 1931. Class 4.

Hinkel, William E., Co., Inc., New York, N. Y. Cosmetics. 287,041; Sept. 8. Class 6.

Holland Shoe Company, Holland, Mich. Leather boots and shoes. 286,884; Sept. 8; Serial No. 306,566; published June 23, 1931. Class 39.

Hood, H. P., & Sons, Inc., Boston, Mass. Ice cream. 286,998; Sept. 8; Serial No. 314,332; published June 30, 1931. Class 46.

House, Chas. W., & Sons, Unionville, Conn. Woolen bed blankets. 287,016; Sept. 8; Serial No. 311,272; published June 30, 1931. Class 42.

Hunt, Harold R., doing business as H. R. Hunt Putty Mfg. Co., Los Angeles, Calif. Caulking compound. 287,039; Sept. 8. Class 12.

Indiana Clipping Service. (See Johnston, Fred G.)

International At-A-Glance Chart Co., The. (See Engl, Morris.)

International Publications, Inc., New York, N. Y. Publication. 286,900; Sept. 8; Serial No. 313,190; published June 23, 1931. Class 38.

Iteco Company, The, Portland, Oreg. Denture polish. 286,823; Sept. 8; Serial No. 311,784; published June 23, 1931. Class 4.

Johnston, Fred G., doing business as Indiana Clipping Service, Indianapolis, Ind. Newspapers. 286,893; Sept. 8; Serial No. 312,809; published June 16, 1931. Class 38.

Journal for the Piece Goods Buyer, Inc., The, New York, N. Y. Magazine. 286,909; Sept. 8; Serial No. 314,649; published June 23, 1931. Class 38.

Juci-Sweet Products Inc., Howey-in-the-Hills, Fla. Citrus fruit drinks. 286,964; Sept. 8; Serial No. 313,436; published June 30, 1931. Class 45.

Kahn's, E., Sons Company, The, Cincinnati, Ohio. Meats. 286,996; Sept. 8; Serial No. 260,449; published June 23, 1931. Class 46.

Kankakee Tool & Die Works, Kankakee, Ill. Ventilating window locks. 286,955; Sept. 8; Serial No. 313,964; published June 30, 1931. Class 25.

Kaplan, Meyer L., doing business as Kaplan & Son, Los Angeles, Calif. Dresses, coats, suits, and skirts. 286,832; Sept. 8; Serial No. 309,692; published June 23, 1931. Class 39.

Karagheusian, A. & M., Inc., New York, N. Y. Textile rugs and carpets. 287,008; Sept. 8; Serial No. 313,738; published June 16, 1931. Class 42.

Kattermann and Mitchell Company, New York, N. Y. Silk piece goods. 287,001; Sept. 8; Serial No. 314,160; published June 30, 1931. Class 42.

Kattermann and Mitchell Company, New York, N. Y. Silk piece goods. 287,013; Sept. 8; Serial No. 313,372; published June 30, 1931. Class 42.

King Features Syndicate, Inc., New York, N. Y. Comic strip or carton. 286,875; Sept. 8; Serial No. 313,923; published June 30, 1931. Class 38.

Kirby, Block & Fischer, Inc., New York, N. Y. Clothing. 286,849; Sept. 8; Serial No. 314,242; published June 30, 1931. Class 39.

Kleinert, I. B., Rubber Company, New York, N. Y. Dress shields. 286,956; Sept. 8; Serial No. 313,041; published June 23, 1931. Class 40.

Knape & Vogt Manufacturing Co., Grand Rapids, Mich. Clothing carriers, show racks, tie racks, etc. 286,821; Sept. 8; Serial No. 311,098; published June 30, 1931. Class 13.

Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Lead pencils. 286,993; Sept. 8; Serial No. 278,176; published June 23, 1931. Class 37.

Komar, Aaron, doing business as The Health Food Company, Chicago, Ill. Dietetic alimentary substances for food purposes. 287,044; Sept. 8. Class 46.

Kress, S. H., & Co., New York, N. Y. Playing cards. 286,941; Sept. 8; Serial No. 314,915; published June 30, 1931. Class 22.

Kress, S. H., & Co., New York, N. Y. Playing cards. 286,942; Sept. 8; Serial No. 314,917; published June 30, 1931. Class 22.

Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Fresh meat and chipped beef. 286,917; Sept. 8; Serial No. 311,337; published June 30, 1931. Class 46.

Kroy Wen Publishers, Inc., New York, N. Y. Magazine. 286,865; Sept. 8; Serial No. 310,626; published June 30, 1931. Class 38.

Laboratories de Biochimie Medicale, Paris, France. Pharmaceutical products. 287,029–30; Sept. 8. Class 6.

La Grande Distillerie E. Cusenier Fils Aine & Cie., Societe Anonyme, Paris, France. Maltless beverages and syrups for making the same. 286,918; Sept. 8; Serial No. 300,208; published June 30, 1931. Class 45.

Lash's Products Company, San Francisco, Calif. Maltless beverages. 286,961; Sept. 8; Serial No. 314,373; published June 30, 1931. Class 45.

Lee, Dorothy, Co. (See City Stores Company.)

Leffingwell Rancho Company, Whittier, Calif. Insecticides. 287,050; Sept. 8. Class 6.

Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Hosiery. 286,916; Sept. 8; Serial No. 299,663; published June 23, 1931. Class 39.

Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Hosiery. 286,979; Sept. 8; Serial No. 296,813; published June 23, 1931. Class 39.

Lemeland, Pierre, doing business as Pharmacie T. Leclerc, Paris, France. Solution for intravenous use for the treatment of hemorrhages, etc. 287,045; Sept. 8. Class 6.

Lenzner, Sol, Corp., Buffalo, N. Y. Chocolate sirup. 286,929; Sept. 8; Serial No. 314,118; published June 30, 1931. Class 46.

Lewis Method, Incorporated, Cleveland, Ohio. Pads for permanent waving of hair. 286,827; Sept. 8; Serial No. 313,663; published June 30, 1931. Class 44.

Liberty Orchards Company, Cashmere, Wash. Canned fruit. 286,933; Sept. 8; Serial No. 314,852; published June 30, 1931. Class 46.

Kupfer, Joseph, doing business as J. Kupfer & Co., New York, N. Y. Ladies' outer coats. 286,847; Sept. 8; Serial No. 314,164; published June 23, 1931. Class 39.

Macfadden Publications, Inc., New York, N. Y. Magazine. 286,892; Sept. 8; Serial No. 312,380; published June 23, 1931. Class 38.

Massey, Robert A., Washington, D. C. Daily scratch sheet. 286,874; Sept. 8; Serial No. 313,713; published June 30, 1931. Class 38.

McKesson & Robbins, Incorporated, Bridgeport, Conn. Hard rubber combs. 286,879; Sept. 8; Serial No. 303,031; published June 23, 1931. Class 40.

Media Records, Inc., New York, N. Y. Printed records, bulletins, and reports on business and advertising. 286,995; Sept. 8; Serial No. 275,905; published June 23, 1931. Class 38.

Mente & Co., Inc., New Orleans, La. Textile bagging material. 287,015; Sept. 8; Serial No. 312,382; published June 30, 1931. Class 42.

Meredith Publishing Company, Des Moines, Iowa. Cook books. 286,891; Sept. 8; Serial No. 311,922; published June 16, 1931. Class 38.

Mermelstein, Joseph R., doing business as Blossom Hat Co., New York, N. Y. Hats. 286,877; Sept. 8; Serial No. 301,277; published June 23, 1931. Class 39.

Met-L-Wood Corporation, Chicago, Ill. Laminate wood and metal, knocked down vehicle bodies and parts thereof. 287,042; Sept. 8. Class 19.

Mexico Refractories Company, Mexico, Mo. Plastic monolithic fire brick. 286,834; Sept. 8; Serial No. 312,659; published June 16, 1931. Class 12.

Mid-States Steel & Wire Co., Crawfordsville, Ind. Wire fence and barb wire. 286,819; Sept. 8; Serial No. 310,566; published June 30, 1931. Class 13.

Milwaukee Air Power Pump Co., doing business as Combustion Oil Burner Co., Milwaukee, Wis. Oil burners. 286,826; Sept. 8; Serial No. 313,144; published June 30, 1931. Class 34.

Montgomery Ward & Co., Inc., Chicago, Ill. Paints, enamels, kalsomine, and varnishes. 286,811; Sept. 8; Serial No. 310,024; published June 30, 1931. Class 16.

Moore, David P., New York, N. Y. Knitted pile fabrics. 287,017; Sept. 8; Serial No. 311,101; published June 30, 1931. Class 42.

Movesian, Edgar, Haverhill, Mass. Shoes. 286,921; Sept. 8; Serial No. 312,385; published June 23, 1931. Class 39.

Mülhens, Paul P., doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany. Soaps. 286,810; Sept. 8; Serial No. 311,018; published June 23, 1931. Class 4.

Mulhern, John, Company, San Francisco, Calif. Canned and bottled crushed fruits, shelled nuts, jams, etc. 286,861; Sept. 8; Serial No. 299,588; published June 30, 1931. Class 46.

Nanty Frocks, Inc., New York, N. Y. Dresses and dance frocks. 286,836; Sept. 8; Serial No. 312,956; published June 30, 1931. Class 39.

National Features Inc., Boston, Mass. Candy. 286,932; Sept. 8; Serial No. 314,814; published June 30, 1931. Class 46.

National Sugar Refining Company of New Jersey, The, Jersey City, N. J., and New York, N. Y. Sugar. 287,003; Sept. 8; Serial No. 314,124; published June 30, 1931. Class 46.

Nekoosa-Edwards Paper Company, Port Edwards, Wis. Kraft paper. 286,897; Sept. 8; Serial No. 314,625; published June 30, 1931. Class 37.

Nekoosa-Edwards Paper Company, Port Edwards, Wis. Bleached kraft paper. 286,911; Sept. 8; Serial No. 314,816; published June 30, 1931. Class 37.

New Idea Infants Wear Co., Inc., New York, N. Y. Hats, caps, hosiery, etc. 286,927; Sept. 8; Serial No. 313,748; published June 23, 1931. Class 39.

Newspaper Nature Features, Inc., Cleveland, Ohio. Periodical. 286,976–7; Sept. 8; Serial Nos. 299,218–19; published June 16, 1931. Class 38.

Nicholson & Miller, Fort Worth, Tex. Cartoon strips. 286,904; Sept. 8; Serial No. 314,007; published June 23, 1931. Class 38.

Norwegian Lutheran Church of America, Minneapolis, Minn. Periodical. 286,898; Sept. 8; Serial No. 314,654; published June 23, 1931. Class 38.

Omega Chemical Company, The, New York, N. Y. Toilet soap. 286,828; Sept. 8; Serial No. 313,752; published June 23, 1931. Class 4.

Overfold Company, The, Chardon, Ohio. Manifold forms. 286,910; Sept. 8; Serial No. 314,655; published June 30, 1931. Class 37.

Paraffine Companies, Inc., The, San Francisco, Calif. Paint enamel. 286,817; Sept. 8; Serial No. 310,693; published June 30, 1931. Class 16.

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Board game. 286,943; Sept. 8; Serial No. 314,926; published June 30, 1931. Class 22.

Parker, M. L., Company, Davenport, Iowa. Coats, suits, and dresses. 286,840; Sept. 8; Serial No. 313,386; published June 23, 1931. Class 39.

Peck Shoe Company, Worcester, Mass. Shoes. 286,920; Sept. 8; Serial No. 312,861; published June 23, 1931. Class 39.

Penney, J. C. Company, Wilmington, Del., and New York, N. Y. Hosiery. 286,853; Sept. 8; Serial No. 314,341; published June 23, 1931. Class 39.

Pharmacie T. Leclerc. (See Lemeland, Pierre.)

Philosophical Publishing Company, The. (See Beverly Hall Corporation.)

Plumbers Specialties Manufacturing Corporation, Los Angeles, Calif. Gaskets. 287,048; Sept. 8. Class 35.

Power Life Stock Remedy Co. (See Powers, Charles A.)

Powers, Charles A., doing business as Power Life Stock Remedy Co., Bloomfield, Iowa. Medicines for hogs and sheep. 287,034; Sept. 8. Class 6.

Price Awnlok Corporation, Buffalo, N. Y. Tents and awnings. 286,990; Sept. 8; Serial No. 291,176; published June 30, 1931. Class 50.

Price-Schlesinger Inc., New York, N. Y. Dresses. 286,846; Sept. 8; Serial No. 314,073; published June 30, 1931. Class 39.

Probak Corporation, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Razor blades. 286,983–7; Sept. 8; Serial Nos. 292,895–9; published Jan. 7, 1930. Class 23.

Putman, Robert, Candy Company, The, Cincinnati, Ohio. Candies, mayonnaise, bread, etc. 286,860; Sept. 8; Serial No. 299,594; published June 30, 1931. Class 46.

Rawlplug Company, Inc., The, New York, N. Y. Metal covers or heads for fasteners. 286,822; Sept. 8; Serial No. 311,751; published June 30, 1931. Class 13.

Research Foundation, Inc., New York, N. Y. Tooth powder, dentrifrices, and mouth wash. 286,812; Sept. 8; Serial No. 310,027; published May 5, 1931. Class 6.

Rex Products & Manufacturing Company, Detroit, Mich. Soap powders. 286,829; Sept. 8; Serial No. 313,798; published June 23, 1931. Class 4.

Rheinische Gummi- und Celluloid-Fabrik, Mannheim-Neckarau, Germany. Combs. 286,922; Sept. 8; Serial No. 312,862; published June 23, 1931. Class 40.

Richardson & Boynton Company, New York, N. Y. Gauges. 286,944; Sept. 8; Serial No. 314,929; published June 30, 1931. Class 26.

Roberts Company, Burlingame, Calif. Soil conditioner and snail control. 286,953; Sept. 8; Serial No. 314,343; published June 23, 1931. Class 10.

Roberts, F. H., Company, Boston, Mass. Chocolates. 286,930; Sept. 8; Serial No. 314,299; published June 30, 1931. Class 46.

Ronuk, Limited, Portslade, England. Boot polish. 286,947; Sept. 8; Serial No. 313,801; published June 23, 1931. Class 4.

Rosenbaum Company, The, Pittsburgh, Pa. Men's topcoats and overcoats. 286,994; Sept. 8; Serial No. 268,058; published June 30, 1931. Class 39.

Rosenblatt & Hollub, Inc., New York, N. Y. Dresses. 286,844; Sept. 8; Serial No. 314,018; published June 23, 1931. Class 39.

Ryan, Matthew W., Sons & Co. Inc., New York, N. Y. Linen, cotton and silk piece goods and mixtures thereof. 287,043; Sept. 8. Class 42.

Salubra, S. A., Basel, Switzerland. Wall coverings. 286,880–1; Sept. 8; Serial Nos. 303,657–8; published June 16, 1931. Class 37.

Saxon Paper Products Inc., New York, N. Y. Bond paper. 286,872; Sept. 8; Serial No. 313,562; published June 30, 1931. Class 37.

Schneierson, I., & Sons, Inc., New York, N. Y. Pajamas, princess slips, night gowns, etc. 286,855; Sept. 8; Serial No. 314,580; published June 30, 1931. Class 39.

Science Press, The. (See Cattell, J. McKeen.)

Scripto Manufacturing Company, Atlanta, Ga. Stationery items. 286,873; Sept. 8; Serial No. 313,563; published June 23, 1931. Class 37.

Sears, Roebuck and Co., Chicago, Ill. Lawn mowers. 286,878; Sept. 8; Serial No. 302,491; published June 30, 1931. Class 23.

Seneca Food Products Corporation, Utica, N. Y. Malt syrup. 287,002; Sept. 8; Serial No. 314,131; published June 30, 1931. Class 46.

Setex Distributing Company. (See Fradus, Oscar.)

Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Closet bowl cleaner and porcelain cleaner and polish. 286,815; Sept. 8; Serial No. 310,307; published June 23, 1931. Class 4.

Shearin Company, Inc., The, Atlanta, Ga. White petroleum jelly, salve, cold cream, etc. 287,047; Sept. 8. Class 6.

Shoe Form Co., Inc., Auburn, Ohio. Shoe forms. 286,949; Sept. 8; Serial No. 314,020; published June 23, 1931. Class 50.
Siegel, Jacob, doing business as Jacob Siegel Company, Philadelphia, Pa. Topcoats, overcoats, and suits. 286,957; Sept. 8; Serial No. 313,756; published June 23, 1931. Class 39.
Silberman, L. E., doing business as Colonial Products Company, Des Moines, Iowa. Powder compound used in the place of sugar for aging drinks. 286,883; Sept. 8; Serial No. 303,926; published June 30, 1931. Class 45.
Sipe, James B., & Co., Pittsburgh, Pa. Paints, enamels, lacquers, etc. 287,031; Sept. 8. Class 16.
Stagg, Geo. T., Co., Inc., The, Frankfort, Ky. Whiskey. 286,962; Sept. 8; Serial No. 314,382; published June 30, 1931. Class 49.
Stewart Inso Board Company, St. Joseph and South St. Joseph, Mo. Insulating building board. 286,978; Sept. 8; Serial No. 298,122; published May 13, 1930. Class 12.
Strouse-Baer Co., Inc., The, Baltimore, Md. Shorts, running trunks, gymnasium shirts, etc. 286,850; Sept. 8; Serial No. 314,256; published June 23, 1931. Class 39.
Sunland Laboratories, Inc., Los Angeles, Calif. Preparation used in treating skin afflictions and as an after shaving lotion. 287,033; Sept. 8. Class 6.
Texas Cotton Co-Operative Association, Dallas, Tex. Periodical. 286,905; Sept. 8; Serial No. 314,180; published June 23, 1931. Class 38.
Tide, Inc., New York, N. Y. Publication. 286,908; Sept. 8; Serial No. 314,472; published June 23, 1931. Class 38.
Toledo Glove Manufacturing Company, The, Toledo, Ohio. Gloves and gauntlets. 286,919; Sept. 8; Serial No. 311,578; published June 23, 1931. Class 39.
Tunstall Optical Co. Ltd., Croydon, England. Spectacles and eye glasses. 286,975; Sept. 8; Serial No. 309,876; published June 30, 1931. Class 26.
Union Bag & Paper Corporation, New York, N. Y. Paper bags. 286,856; Sept. 8; Serial No. 314,521; published June 30, 1931. Class 2.
Union Bag & Paper Corporation, New York, N. Y. Paper bags. 286,858; Sept. 8; Serial No. 314,727; published June 30, 1931. Class 2.
United Lace & Braid Manufacturing Co., Providence, R. I. Braids. 286,963; Sept. 8; Serial No. 313,356; published June 23, 1931. Class 40.
Universal Pictures Corporation, New York, N. Y. Motion picture films. 286,960; Sept. 8; Serial No. 314,348; published June 30, 1931. Class 26.
Van Raalte Company, New York, N. Y. Women's underwear. 286,845; Sept. 8; Serial No. 314,023; published June 23, 1931. Class 39.
Velga, Manuel G., Buenos Aires, Argentina. Green tea. 287,018; Sept. 8; Serial No. 309,102; published June 30, 1931. Class 46.
Velveray Corporation of America, New York, N. Y. Cotton, silk, woolen, etc., piece goods. 287,011; Sept. 8; Serial No. 313,456; published June 16, 1931. Class 42.
Vitaprint Process Company, Chicago, Ill. Prints, show cards, posters, etc. 286,906; Sept. 8; Serial No. 314,183; published June 23, 1931. Class 38.
Vitrea Company, Inc., Brooklyn, N. Y. Sheet glass. 287,021; Sept. 8; Serial No. 304,477; published June 30, 1931. Class 33.
Viviano, G., Inc., Detroit, Mich. Fish paste, fish products, jellies. 287,022; Sept. 8; Serial No. 303,356; published May 19, 1931. Class 46.
Vulcan Match Co., Inc., New York, N. Y. Matches. 286,936–9; Sept. 8; Serial Nos. 314,874–7; published June 30, 1931. Class 9.
Vulcan Match Co., Inc., New York, N. Y. Matches. 286,971–4; Sept. 8; Serial Nos. 314,870–3; published June 30, 1931. Class 9.
Walus, Andrew, Brooklyn, N. Y. Swimming belts. 286,970; Sept. 8; Serial No. 314,878; published June 30, 1931. Class 22.
Warren Featherbone Company, The, Three Oaks, Mich. Bias fold tape, blanket binding braids, collar supports, etc. 286,886; Sept. 8; Serial No. 307,189; published June 23, 1931. Class 40.
Wehn, Geo., & Co., Pittsburgh, Pa. Textile carpets and rugs. 287,004; Sept. 8; Serial No. 314,094; published June 30, 1931. Class 42.
Wener, Irwin P., doing business as Charlotte-Irving and Company, New Haven, Conn. Sheet music. 286,889; Sept. 8; Serial No. 311,406; published June 23, 1931. Class 38.
Westfield River Paper Company, Inc., Russell, Mass. Embossed paper. 286,915; Sept. 8; Serial No. 314,310; published June 23, 1931. Class 37.
Williams & Marcus Co., Philadelphia, Pa. Desk pads. 286,980; Sept. 8; Serial No. 296,039; published June 16, 1931. Class 37.
Willinger, John J., doing business as Willinger Products Co., Minneapolis, Minn. Preparation for cleaning windows, etc. 287,024; Sept. 8. Class 4.
Wilson-Jones Company, Chicago, Ill. Ring binders and filler sheets for same. 286,870; Sept. 8; Serial No. 313,519; published June 16, 1931. Class 37.
Wolf Brothers & Co., Red Lion, Pa. Cigars. 286,948; Sept. 8; Serial No. 313,814; published June 23, 1931. Class 17.
Woolen Corporation of America, The, New York, N. Y. Wool, cotton, silk, etc., fabrics. 287,007; Sept. 8; Serial No. 313,877; published June 30, 1931. Class 42.
Worumbo Manufacturing Company, Bath, Me. Woolen fabrics. 286,862; Sept. 8; Serial No. 294,549; published June 30, 1931. Class 42.
Wurlitzer, Rudolph, Company, The, Cincinnati, Ohio. Refrigerators of all types. 286,940; Sept. 8; Serial No. 314,884; published June 30, 1931. Class 31.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Berkshire & Becket Silk Co. (See Collingbourne Mills Inc.)
Best, James P., New York, N. Y. Caribbean Pepper Sauce. For Pepper Sauce. 39,659; Sept. 8.
Buttenheim, Henry, doing business as Trex Manufacturing Company, Brooklyn, N. Y. Non-inflammable Trex Wonderful cleaning fluid. For Cleaning Fluid. 39,660; Sept. 8.
Collingbourne Mills Inc., doing business as Dexter, Virginia Snow Studios, Jap Silk Co., and Berkshire & Becket Silk Co., Elgin, Ill. Pure silk mending and darning, 10 Tex-Tonic colors, Art. 54. For Pure Silk for Mending and Darning. 39,661; Sept. 8.
Dexter. (See Collingbourne Mills Inc.)
Di Santo, Joseph, doing business as Di Santo & Company, Duluth, Minn. Mazzini. For Cigars. 39,662; Sept. 8.
Dodge City Ice Cream and Produce Co., Dodge City, Kans. Prairie Maid. For Butter. 39,663; Sept. 8.
Foodtown Kitchens, Inc., Chicago, Ill. Wheat Pops. For Wheat Cereal. 39,664; Sept. 8.
Foodtown Kitchens, Inc., Chicago, Ill. Rice Pops. For Rice Cereal. 39,665; Sept. 8.
Fox, Frances, Ridgewood, N. J. Frances Fox Liquid Herbal Shampoo. For Liquid Herbal Shampoo. 39,666; Sept. 8.
Franck, Heinr., Sons, Inc., Flushing, N. Y. Franck Tablets. For Franck Tablets—a Pure Chicory Product. 39,667; Sept. 8.
Franzell, Chester, & Co., Pittsburgh, Pa. Bell Rock. For Fresh Vegetables. 39,668; Sept. 8.
Franzell, Chester, & Co., Pittsburgh, Pa. Capitol. For Fresh Vegetables. 39,669; Sept. 8.
Frost, Albert E., Chicago, Ill. Frost Old King Cole Salad Dressing. For Salad Dressing. 39,670; Sept. 8.
Gold Dust Corporation, New York, N. Y. Silver Dust. For Common Soap and Laundry Soap in Spray Form. 39,671; Sept. 8.
Hand-De Laney Co., Inc., New York, N. Y. Sweetheart Frocks. For Girls', Misses', and Women's Frocks. 39,672–3; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Brooks Shoe. For Boxes. 39,674; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Step In Style. For Boxes. 39,675; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Hardy-Fut Shoes. For Boxes. 39,676; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. The P & S Shoe. For Boxes. 39,677; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Healthy Fut. For Boxes. 39,678; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Fine and Dandy. For Boxes. 39,679; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Dr. Lampert's. For Boxes. 39,680; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Molco Shoes. For Boxes. 39,681; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Dr. Gilbert's. For Boxes. 39,682; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Jennie May. For Boxes. 39,683; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Smart Styles. For Boxes. 39,684; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. The Fashion Line. For Boxes. 39,685; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Arch Liberator. For Boxes. 39,686; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Freedman Shoe Co. For Boxes. 39,687; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Rogers-Stewart. For Boxes. 39,688; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. The Economy Shoe. For Boxes. 39,689; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Marion Shoe Co. Inc. For Boxes. 39,690; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. The De Luxe Line. For Boxes. 39,691; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. E. Z. Kumfort. For Boxes. 39,692; Sept. 8.
Hoague-Sprague Corporation, Lynn, Mass. Butler's. For Boxes. 39,693; Sept. 8.

Home Baking Co., Milwaukee, Wis. Home Baked. For Bread. 39,694; Sept. 8.
Houspray Manufacturing Company, The, Toledo, Ohio. Houspray. For Insecticide. 39,695; Sept. 8.
Jap Silk Co. (See Collingbourne Mills Inc.)
Kirk, Walter R., Chicago, Ill. Fancy-Dress Family Soap. For Soap Bars. 39,696; Sept. 8.
Krank, A. J., Co., St. Paul, Minn. Krank. For Lemon Cleansing Cream. 39,697; Sept. 8.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Her Grace. For Extract of True Vanilla. 39,698; Sept. 8.
Luntz, Joseph, Brooklyn, N. Y. Dr. Harris H. Luntz's Formula Q. For Preparation for Beautifying the Skin. 39,699; Sept. 8.
O'Donoghue, W. D., Augusta, Ga. The Hostess Package. For Ice Cream. 39,700; Sept. 8.
Pechin, C. D., St. Petersburg, Fla. Crystal the Original Genuine Platinum Plating (Platinizing) Salts. For Plating (Platinizing) Salts. 39,701; Sept. 8.
Platt Hosiery Company, New York, N. Y. Hy-Sox Hose and Garters. For Hose and Hose Supporters. 39,702; Sept. 8.
Reed, Oliver A., Inc., Plainfield, N. J. Famous and Handy Polish, Radio Brand. For Combination Cleaner and Polish. 39,703; Sept. 8.
Sacks-Sons Carton Co., Inc., Brooklyn, N. Y. Children's Knitted Sportswear. For Children's Knitted Sportswear. 39,704; Sept. 8.
Sacks-Sons Carton Co., Inc., Brooklyn, N. Y. Hand Made Carriage Cover Set. For Hand Made Carriage Cover Sets. 39,705; Sept. 8.
Schutter Johnson Candy Company, Inc., Chicago, Ill. Twin-Milks. For Candy. 39,706; Sept. 8.
Sordillo, Joseph L., Baltimore, Md. Sordillo Easter Greetings. For Candy. 39,707; Sept. 8.
Spraley Company, The, Dayton, Ohio. Brownie Bar, a Frozen Confection. For Frozen Confection Containing Fresh Yeast. 39,708; Sept. 8.
Sutherland, Dr. H. H., Co., Los Angeles, Calif. Doctor Sutherland's Tablets. For Tablets for Medicinal Purposes. 39,709; Sept. 8.
Sutherland Paper Company, Kalamazoo, Mich. Lake of the Ozarks. For Butter. 39,710; Sept. 8.
Sutherland Paper Company, Kalamazoo, Mich. Sweet Clover. For Butter. 39,711; Sept. 8.
Sutherland Paper Company, Kalamazoo, Mich. Brittain's. For Butter. 39,712; Sept. 8.
Sutherland Paper Company, Kalamazoo, Mich. Missouri Gold. For Butter. 39,713; Sept. 8.
Trex Manufacturing Company. (See Buttenheim, Henry.)
Trojan Hosiery Mills, Inc., Indianapolis, Ind. Satin-Dul. For Hosiery. 39,714; Sept. 8.
Trojan Hosiery Mills, Inc., Indianapolis, Ind. Satin-Glo. For Hosiery. 39,715; Sept. 8.
Trojan Hosiery Mills, Inc., Indianapolis, Ind. Satin-Sheen. For Hosiery. 39,716; Sept. 8.
Trojan Hosiery Mills, Inc., Indianapolis, Ind. Satin-Sheer. For Hosiery. 39,717; Sept. 8.
Ullman Manufacturing Company, The, Brooklyn, N. Y. Mystery Stencils with Paints and Crayons. #650. For Stencils, Crayons, and Paints. 39,718; Sept. 8.
Ullman Manufacturing Company, The, Brooklyn, N. Y. Mystery Stencils No. 649. For Stencils. 39,719; Sept 8.
Virginia Snow Studios. (See Collingbourne Mills Inc.)
Weed Destroyer Co., Inc., Aberdeen, Wash. Getzum Gun gets every Weed. For Weed Guns Consisting of Hand Tools for Piercing and Impregnating Weeds with a Poisonous Liquid, Etc. 39,720; Sept. 8.
Wesco Foods Co. (See Kroger Grocery & Baking Co., The.)

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Cream Of Wheat Corporation, The, Minneapolis, Minn. Like all Mothers Mrs. Richard H. Cobb wants her Children to have the best. For Wheat Breakfast Food. 13,397; Sept. 8.
DeBoth Home Makers' Schools, New York, N. Y. Fannie Hamilton. For Food Products and Household Appliances. 13,398; Sept. 8.
Easterbrook Coal Company, The, Cleveland, Ohio. Comfort Coal. For Coal. 13,399; Sept. 8.
Florida Power & Light Company, Miami, Coral Gables, Fort Lauderdale, Hollywood, Delray, etc., Fla. Florida Power & Light Company Ice Department. For Ice. 13,400; Sept. 8.
General Lock Corp., The, Lancaster, Pa. General Laminated Padlock No. 50. For Padlocks. 13,401; Sept. 8.
Platt Hosiery Company, New York, N. Y. Hy-Sox Hose and Garters. For Hose and Hose Supporters. 13,402; Sept. 8.
Postagraph Company, The, Baltimore, Md. Jandho's Postagraph. For Printed Blanks. 13,403; Sept. 8.
S. S. S. Company, The, Atlanta, Ga. S. S. S. Makes you feel like yourself again. For Medicine. 13,404; Sept. 8.
Scholl Mfg. Co., Inc., The, Chicago, Ill. When your Feet hurt you all over! Get Relief now! For pads for Treating Callouses, Corns, Bunions, Sore Heels, and Sore Toes. 13,405; Sept. 8.
Scholl Mfg. Co., Inc., The, Chicago, Ill. Corns, Pain gone for good. For Pads for Treating Callouses, Corns, Bunions, Sore Heels, and Sore Toes. 13,406; Sept. 8.
Shapleigh Hardware Company, St. Louis, Mo. Why Some brands of Sash Cord cost more and are worth more than others. For Sash Cords. 13,407; Sept. 8.
Society of the Colonaide, Incorporated, New York, N. Y. A Colon cleared daily is essential to health and Vigor. For Medicinal Preparation for Clearing the Clogged Colon. 13,408; Sept. 8.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adler-Richards Company, Inc., The, Boston, Mass. Hats. 317,385; Sept. 8. Class 39.
Alabama Pipe Company, Anniston, Ala. Metal pipe. 316,113; Sept. 8. Class 13.
Alex Scott, Union City, N. J. Emmenagogue pill. 316,175; Sept. 8. Class 6.
Alkahn Silk Label Co., Inc., New York, N. Y. Labels. 316,690; Sept. 8. Class 40.
American Maid Company, Chicago, Ill. Bloomers and pantalets. 297,999; Sept. 8. Class 39.
American Pop Corn Company, Sioux City, Iowa. Popping corn. 307,152; Sept. 8. Class 46.
American Utensil Co., Chicago, Ill. Food grinding, separating, and seeding machines. 316,114; Sept. 8. Class 23.
Aronson-Caplin Company, Inc., New York, N. Y. Slips, bloomers, petticoats, etc. 317,419; Sept. 8. Class 39.
Arranbee Doll Co., New York, N. Y. Dolls. 307,914; Sept. 8. Class 22.
Associated Apparel Industries, Inc. (See Venus Brassiere Co.)
Associated Press, The, New York, N. Y. Series of cartoons. 317,238; Sept. 8. Class 38.
Associated Press, The, New York, N. Y. Series of cartoons. 317,239–41; Sept. 8. Class 38.
Bear Brand Hosiery Co., Kankakee, Ill. Hosiery. 316,991; Sept. 8. Class 39.
Beaumonte, Florence R., New York, N. Y. Facial creams. 315,978; Sept. 8. Class 6.
Becker Pretzel Bakeries, The, Baltimore, Md. Pretzels. 317,622; Sept. 8. Class 46.
Bentley-Jones, Inc., Montgomery, Ala. Egg beaters, cream whippers, mayonnaise mixers, etc. 308,285; Sept. 8. Class 23.
Berkshire Fine Spinning Associates, Inc., Adams, Mass. Textile fabrics. 316,584; Sept. 8. Class 42.
Berry, F. E., Jr., & Co. Inc., Boston, Mass. Window ventilators. 316,314; Sept. 8. Class 34.
Best Brother's Keene's Cement Company, The, Medicine Lodge, Kans. Cement and plaster. 310,083; Sept. 8. Class 12.
Boza, Gonzalo, & Co. Inc., New York, N. Y. Tanned leather. 298,808; Sept. 8. Class 1.
British Enka Artificial Silk Company Limited, London, England. Braid made of cellulose. 316,252; Sept. 8. Class 40.
Bucyrus-Erie Company, South Milwaukee, Wis. Friction blocks of brakes and clutches. 316,405; Sept. 8. Class 35.
Bucyrus-Erie Company, South Milwaukee, Wis. Brake and clutch linings. 316,406; Sept. 8. Class 35.
Bulova Watch Company, Inc., New York, N. Y. Watches. 316,805; Sept. 8. Class 27.
Burdick, Austin F., Grand Ledge, Mich. Milk and cream. 315,895; Sept. 8. Class 46.
Cambridge Paint & Varnish Works. (See Sheldon, Albert K. Co.)
Capital City Products Company, The, Columbus, Ohio. Palm kernel or cocoanut oil. 315,439; Sept. 8. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Cate, Arlindo S., doing business as Merritt Chemical Co. Inc., Greensboro, N. C. Foot powder. 315,443; Sept. 8. Class 6.
Catherine Laboratories. (See Stegeman, Jacob R.)
Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving soap and shaving sticks. 316,807; Sept. 8. Class 4.
Consolidated Ashcroft Hancock Company, New York, N. Y. Instruments for recording water level and temperature changes. 316,585; Sept. 8. Class 26.
Continental Oil Company, Ponca City, Okla. Lubricating oil. 310,118; Sept. 8. Class 15.
Cook, William E. M., doing business as Frank A. Rogers, London, England. Insect specific. 313,705; Sept. 8. Class 6.
Co-Sen Manufacturing Company. (See Hardee, Alemena.)
Coven, Isidore E., doing business as Sars-A-Tone Herb Health Institute, Chicago, Ill. System cleanser. 308,469; Sept. 8. Class 6.
Crab Orchard Stone Co., Inc., Nashville, Tenn. Quartzite. 317,272; Sept. 8. Class 1.
Curo Process Company, Bartlesville, Okla. Demulsifying emulsions of mineral oils. 315,830; Sept. 8. Class 6.
Dallett Company, The, Philadelphia, Pa. Machine for grinding, polishing, buffing, etc. 295,329; Sept. 8. Class 23.
Dandyline Company, The, Chicago, Ill. Dresses. 315,584; Sept. 8. Class 39.
Daniels, Claude H., Boston, Mass. Boots, shoes, and slippers, etc. 317,199; Sept. 8. Class 39.
Dayton Rubber Mfg. Company, The, Dayton, Ohio. Tires. 314,399; Sept. 8. Class 35.
Dean, Charles A., jr., Detroit, Mich. Skin lotion. 315,251; Sept. 8. Class 6.
Deering Milliken & Co. Inc., New York, N. Y. Woolen piece goods. 317,508; Sept. 8. Class 42.
De Los Rios & Co., Detroit, Mich. Preparation for stimulating the growth of eyelashes. 314,750; Sept. 8. Class 6.
Detroit Daily Mirror, Inc., Detroit, Mich. Daily Newspaper. 317,352; Sept. 8. Class 38.
Dickinson, Albert, Company, The, Chicago, Ill. Dog food. 317,551; Sept. 8. Class 46.
Dierssen, E. B., Elk Grove, Calif. Fresh vegetables. 316,422; Sept. 8. Class 46.
District Grocery Stores, Inc., Washington, D. C. Coffee and butter. 317,457; Sept. 8. Class 46.
Diversey Corporation, The, Chicago, Ill. Sodium meta silicate. 315,488; Sept. 8. Class 6.
Dodge, F. W., Corporation, New York, N. Y. Magazines or trade journals, daily construction reports, etc. 304,944; Sept. 8. Class 38.
Drueding Brothers Company, Philadelphia, Pa. Sweat bands. 317,459; Sept. 8. Class 39.
Drug Products Co., Inc., The, Long Island City, N. Y. Alteratives, analgesics, anaphrodisiacs, etc. 315,252; Sept. 8. Class 6.
Eisenmayer Milling Company, Springfield, Mo. Wheat flour. 317,596; Sept. 8. Class 46.
Electric Household Utilities Corporation, doing business as Hurley Machine Company, Chicago, Ill. Laundry washing machines. 317,113; Sept. 8. Class 24.
Emery Food Company, Chicago, Ill. Canned sausage. 316,994; Sept. 8. Class 46.
Endicott Johnson Corporation, Endicott, N. Y. Boots and shoes. 316,773; Sept. 8. Class 39.
Englert, Harold C., Newark, N. J. Proprietary medicine. 315,963; Sept. 8. Class 6.
Eterne Manufacturing Corporation, Newark, N. J., and New York, N. Y. Hair waving pads. 314,603; Sept. 8. Class 44.
Eygio Company, Inc., New York, N. Y. Balm for eye lids. 316 005; Sept. 8. Class 6.
E-Z-On Elastic Lace Co., New York, N. Y. Shoe laces. 314,604; Sept. 8. Class 40.
Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, etc. 310,600; Sept. 8. Class 39.
Federated Purchaser. (See Roth, Samuel.)
Field, Fred F., Holsteins Dutchland Farms, trustees, Brockton, Mass. Milk, cream, ice cream, etc. 297,902; Sept. 8. Class 46.
Flanigan, John Thomas, Milford, Mass. Publication. 317,392; Sept. 8. Class 38.
Forta-Unternehmungen A.-G., Basel, Switzerland. Underwear, shirts, hosiery, etc. 298,162; Sept. 8. Class 39.
Fowler, William E., Portland, Oreg. Inhalant. 316,586; Sept. 8. Class 6.
Fredriksstad Preserving Co., Fredriksstad, Norway. Canned fish. 312,557; Sept. 8. Class 46.
Friedman Silver Co., Inc., Brooklyn, N. Y. Table hollow ware. 315 965; Sept. 8. Class 13.
Frigidaire Corporation, Dayton, Ohio. Periodicals. 316,962; Sept. 8. Class 38.
Furst-Mcness Co., Freeport, Ill. Insecticide. 316,635; Sept. 8. Class 6.
Gabilla, Incorporated, New York, N. Y. Perfume, toilet water, talcum powder, sachet powder, etc. 311,525; Sept. 8. Class 6.
Gahen, Lorene, doing business as The Vermont Company, St. Louis, Mo. Costumes. 283,030; Sept. 8. Class 39.
Gallenkamp Stores Co., San Francisco, Calif. Shoes. 316,124; Sept. 8. Class 39.
Gates, Lloyd E., Aurora, Colo. Cartoons. 316,996; Sept. 8. Class 38.
Gelbmann, Harry, Redwood City, Calif. Tool for cleaning ment bones. 316,776; Sept. 8. Class 23.
General Mills, Inc., Minneapolis, Minn. Biscuit flour. 317,541; Sept. 8. Class 46.
Gentile Bros. Company, Orlando, Fla. Oranges, lemons, pears, etc. 299,699; Sept. 8. Class 46.
George, P. D., Company, The, St. Louis, Mo. Paints, varnishes, and paint enamels, etc. 316,588; Sept. 8. Class 16.
Gernsback, Hugo, New York, N. Y. Publication. 312,182; Sept. 8. Class 38.
Gerstel, Alan A., Ltd., New York, N. Y. Dried figs. 315,909; Sept. 8. Class 46.
Girard Trust Company, Philadelphia, Pa. Periodical. 317,083; Sept. 8. Class 38.
Gladding, McBean & Co., Los Angeles, Calif. Fire brick and refractory or heat resisting formed clay bodies. 308,197; Sept. 8. Class 12.
Gray, Herbert, Company, Inc., Lincoln, Me. Fur scarfs. 313,368; Sept. 8. Class 39.
Great Western Manufacturing Company, Leavenworth, Kans. Feeders, separators, aspirators, etc. 315,533; Sept. 8. Class 23.
Greenwald, Abraham A., doing business as Jacob Stahl, Jr. & Co., New York, N. Y. Cigars. 313,918; Sept. 8. Class 17.
Grigsby-Grunow Company. (See Majestic Household Utilities Co.)
Grosbur Tonic Company, Inc., New York, N. Y. Astringent cerates, bleach creams, etc. 315,492; Sept. 8. Class 6.
Hahlo & Solomon, Inc., New York, N. Y. Fabrics of cellulose derivatives. 317,514; Sept. 8. Class 42.
Hall, E. C., Company, doing business as Nation-Wide Service Grocers and Nation-Wide Stores Co., Brockton and Hyannis, Mass., and Augusta, Me. Baking powder, bleach water, and salt. 308,507; Sept. 8. Class 6.
Haller, Louis, doing business as Haller's Bird Food Company, Cincinnati. Bird food. 317,601; Sept. 8. Class 46.
Hardee, Almena, doing business as Co-Sen Manufacturing Company, Georgetown, S. C. Herb tonic, face powder, hair dressing, toilet cream. 310,765; Sept. 8. Class 6.
Harland, John H. Company, Atlanta, Ga. Paper. 315,026; Sept. 8. Class 37.
Harris Drug Co. Inc., New York, N. Y. Capsules. 317,207; Sept. 8. Class 6.
Hat, Nancy, New York, N. Y. Reducing cream. 316,725; Sept. 8. Class 6.
Heintz, William J., Utica, N. Y. Head rests and head rest covers. 315,454; Sept. 8. Class 44.
Hillerich & Bradsby Co., Louisville, Ky. Baseball bats. 317,637–40; Sept. 8. Class 22.
Hogue Mercantile Co., Kansas City, Mo. Raw nut meats. 293,428; Sept. 8. Class 46.
Holland Sandwich Company. (See Law L. H.)
Hollywood Camerette Co., North Hollywood, Calif. Cigarette dispensers. 314,760; Sept. 8. Class 23.
Hollywood Standard Laboratories Co. (See Rapaport, Zigmund.)
Hostess Frocks, Inc., New York, N. Y. Frocks. 317,085; Sept. 8. Class 39.
Hurley Machine Company. (See Electric Household Utilities Corporation.)
Illinois Zinc Company, Chicago, Ill. Rods and bars, metal plates, strips and sheets, etc. 317,254; Sept. 8. Class 12.
Industrial Steel Products Ltd., Emeryville, Calif. Headlight devices. 315,638; Sept. 8. Class 19.
Jablow, Isidor, doing business as I. Jablow & Co., Philadelphia, Pa. Blouses, shirts, underwear, and play suits. 313,409; Sept. 8. Class 39.
Jacobs, D. Sons Co., Cincinnati, Ohio. Jewelry. 317,041; Sept. 8. Class 28.
Jaden, Fred, doing business as F. Jaden Mfg. Company, Hastings, Nebr. Preparation for killing dandelions. 314,648; Sept. 8. Class 6.
Jamestown Metals Engineering & Supply Company, Inc., New York, N. Y. Catalogues. 300,419; Sept. 8. Class 38.
Jersey Useful Products, Round Brook, N. J. Composition of food. 317,469; Sept. 8. Class 46.
Johnson Products Company. (See Tyson & Company.)
Jones-Thierbach Company, San Francisco, Calif. Coffee. 317,470; Sept. 8. Class 46.
Kalamazoo Pant Company, Kalamazoo, Mich. Trousers. 317,209; Sept. 8. Class 39.
Kavalco Products Inc., Nitro, W. Va. Aluminum stearate. 311,861; Sept. 8. Class 6.
Kebs Company, Inc., The, Buffalo, N. Y. Candies. 317,255; Sept. 8. Class 46.
Keller Knitting Company, The, Cleveland, Ohio. Knitted jackets. 316,728; Sept. 8. Class 39.
Kelley-Clarke Company, Seattle, Wash. Canned fish. 317,357; Sept. 8. Class 46.
Kennedy Car Liner & Bag Company, The, Shelbyville, Ind. Mothproof garment bags. 313,601–2; Sept. 8. Class 2.

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Kenra Laboratory Company, Inc., Indianapolis, Ind. Depilatory. 313,886; Sept. 8. Class 6.
Kleerplex Laboratories. (See Mayer, Rosalind.)
Kny-Scheerer Corporation, New York, N. Y. Steel knives, shears, scissors, etc. 315,463; Sept. 8. Class 23.
Koening, Harry D., doing business as Harry D. Koenig & Co., New York, N. Y. Face powder, lip stick, face rouge, etc. 315,841; Sept. 8. Class 6.
Konvisser, Benney, doing business as The Pep Salt & Liniment Company, Cleveland, Ohio. Medicinal preparations. 313,437; Sept. 8. Class 6.
Koppers Company of Delaware, The, Pittsburgh, Pa. Coke. 317,472; Sept. 8. Class 1.
Körting & Mathiesen Aktiengesellschaft, Leipzig-Leutzsch, Germany. Arc lamps, stands, and carbons. 304,054; Sept. 8. Class 44.
Kresge Department Store Corporation, Newark, N. J. Perfume, face powder, creams, etc. 315,541; Sept. 8. Class 6.
Kress, S. H., & Co., New York, N. Y. Men's garters. 311,966–7; Sept. 8. Class 39.
Laganas, George, doing business as Venus Shoe Company, Lowell, Mass. Shoes. 310,645; Sept. 8. Class 39.
Landreth, D., Seed Co., Bristol, Pa. Lawn grass seed. 316,275; Sept. 8. Class 1.
Larkwood Silk Hosiery Mills, Inc., Charlotte, N. C. Stockings. 317,173; Sept. 8. Class 39.
Law, Laurel H., doing business as Holland Sandwich Company, Converse, S. C. Sandwiches. 311,740; Sept. 8. Class 46.
Le Montree Manufacturing Company, The, Cincinnati, Ohio. Moth proof bag. 316 909; Sept. 8. Class 2.
Lorate Company, Inc., New York, N. Y. Medicinal preparation. 314,334; Sept. 8. Class 6.
Madison-Kipp Corporation, Madison, Wis. Grinding, cutting, cleaning, and polishing tools. 298,901; Sept. 8. Class 23.
Magana, Gildardo, Mexico, D. F., Mexico. Hair lotion. 307,140; Sept. 8. Class 6.
Magnus, S. W., Hdkf. Co., New York, N. Y. Handkerchiefs and linen piece goods. 317,475; Sept. 8. Class 42.
Majestic Household Utilities Co., assignor, by mesne assignments, to Grigsby-Grunow Company, Chicago, Ill. Refrigerators. 293,536; Sept. 8. Class 31.
Marcus, Benjamin M., Olean, N. Y. Gasoline. 309,257; Sept. 8. Class 15.
Mayer, Rosalind, doing business as Kleerplex Laboratories, New York, N. Y. Cosmetics. 315,166; Sept. 8. Class 6.
McPherson's, Baltimore, Md. Shirts and pajamas. Class 6. 316,894; Sept. 8. Class 39.
Mergenthaler Linotype Company, Brooklyn, N. Y. Matrix storage magazines. 316,211; Sept. 8. Class 23.
Mergenthaler Linotype Company, Brooklyn, N. Y. Matrices. 300,217; Sept. 8. Class 50.
Merritt Chemical Co. Inc. (See Cate, Arlindo S.)
Metal Findings Corporation, New York, N. Y. Clasps, pins, hook and eyes. 316,975; Sept. 8. Class 40.
Meyer & Lange, Inc., New York, N. Y. Canned fruits and vegetables, anchovies, and sardines. 317,326; Sept. 8. Class 46.
Middleman & Barg, Philadelphia, Pa. Dresses, creepers, and suits. 313,250; Sept. 8. Class 39.
Miller, I. & Sons, Incorporated, Long Island City, N. Y. Shoes and slippers. 311,788; Sept. 8. Class 39.
Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Temperature or pressure responsive switches. 304,419; Sept. 8. Class 21.
Minnesota Valley Canning Company, Le Sueur, Minn. Canned corn. 298,648; Sept. 1. Class 46.
Montana Mineral Products Co., Billings, Mont. Tooth paste. 315,917; Sept. 8. Class 6.
Munson Steamship Line, New York, N. Y. Cigars. 316,976; Sept. 8. Class 17.
Myers Remedy Company, Philippi, W. Va. Medicinal preparation. 315,918; Sept. 8. Class 6.
N. V. Phillips' Gloeilampenfabrieken, Eindhoven, Netherlands. Boxes, jars, perfume boxes, plates, etc. 317,438; Sept. 8. Class 2.
Nation-Wide Service Grocers. (See Hall, E. C., Company.)
Nation-Wide Stores Co. (See Hall, E. C., Company.)
National Bellas Hess Co. Inc., New York, N. Y. Dresses, cloaks, outer skirts, stockings, etc. 316,736; Sept. 8. Class 39.
National Remedy Co., New York, N. Y. External and internal medicinal preparation. 317,527; Sept. 8. Class 6.
National Synthetic Wood Co., Wilmington, Del. Footstools, magazine racks, lamp stands, etc. 315,919; Sept. 8. Class 32.
Naturalistic Beauty Studios, Inc., Dayton, Ohio. Chemical preparations used in waving hair. 315,867; Sept. 8. Class 6.
New England Confectionery Company, Cambridge, Mass. Candy. 317,399; Sept. 8. Class 46.
New England Lime Company, The, Pittsfield, Mass. Building material. 316,705; Sept. 8. Class 12.
Nubone Company, Inc., The, Erie, Pa. Supporting garments. 316,465; Sept. 8. Class 39.
Nu-Way Shoe Co., New York, N. Y. Shoes, oxfords and pumps. 309,761–2; Sept. 8. Class 39.
Oriental Show-You Company, Columbia City, Ind. Canned foods. 317,330; Sept. 8. Class 46.
Ossola Brothers Inc., Pittsburgh, Pa., and New York, N. Y. Food products. 316,232; Sept. 8. Class 46.
Out-Rite Company. (See Owen, James H.)
Owen, James H., doing business as Out-Rite Company, East Orange, N. J. Preparation for general cleaning purposes. 316,066; Sept. 8. Class 4.
Paige, Melba E., New York, N. Y. Publication. 317,009; Sept. 8. Class 38.
Paramount Nurseries, West Grove, Pa. Plants, trees, flowers, sarubbery, etc. 317,090; Sept. 8. Class 1.
Pawlowski, John, doing business as Renzet Co., The, Chicago, Ill. Leather cleanser. 310,137; Sept. 8. Class 4.
Peak Medicine Company. (See Siegel, Leo.)
Pekin Fireworks Company, Inc., Astoria and Portland, Oreg. Firecrackers, salutes, and flashbombs. 317,531; Sept. 8. Class 9.
Peo Manufacturing Corporation, Rochester, N. Y. Game played with balls, etc. 316,821; Sept. 8. Class 22.
Pep Salt & Liniment Company, The. (See Konvisser, Benney.)
Perfection Stove Company, Cleveland, Ohio. Stoves, ovens, oil burners, etc. 315,923; Sept. 8. Class 34.
Pollack, William, New York, N. Y. Ventilating moisture preventing attachment. 314,863; Sept. 8. Class 21.
Posner, Dr. A., Shoes, Inc., New York, N. Y. Shoes. 317,404; Sept. 8. Class 39.
Prolite, Cleveland, Ohio. Golf clubs, heads, grips, etc. 316,504; Sept. 8. Class 22.
Race Laboratories, Inc., New York, N. Y. Laxatives. 316,053–4; Sept. 8. Class 6.
Rapaport, Zigmund, doing business as Hollywood Standard Laboratories Co., Los Angeles, Calif. Deodorant. 315,325; Sept. 8. Class 6.
Reich, Ernest, doing business as Ernest Reich & Company, Chicago, Ill. Flour sifters, food mincers and choppers, etc. 300,668; Sept. 8. Class 23.
Renzep Co., The. (See Pawlowski, John.)
Robinson Chemical Co. Inc., New York, N. Y. Pharmaceutical preparation containing phenacetin. 315,701; Sept. 8. Class 6.
Rogers, Frank A. (See Cook, William E. M.)
Roth, Samuel, doing business as Federated Purchaser, New York, N. Y. House organ publication. 308,753; Sept. 8. Class 38.
S & W Laboratories. (See Weinborg, Sol B.)
Safe-O-Matic Auto Switch Company, St. Clair, Mich. Electric switch attachment. 315,874; Sept. 8. Class 21.
San-Nap-Pak Mfg., Inc., New York, N. Y. Absorbent cotton, gauze, and sanitary napkins. 317,441; Sept. 8. Class 44.
San-Nap-Pak Mfg. Co., Inc., New York, N. Y. Absorbent cotton, gauze, and sanitary napkins. 317,443; Sept. 8. Class 44.
Sars-A-Tone Herb Health Institute. (See Coven, Isidore E.)
Sawdey & Hunt, Los Angeles, Calif. Fresh lettuce. 313,354–5; Sept. 8. Class 46.
Seinsheimer Paper Co., The, Cincinnati, Ohio. Window shades. 310,414; Sept. 8. Class 32.
Shager Knitting Co. Inc., Brooklyn, N. Y. Knitted wash cloths. 315,814; Sept. 8. Class 42.
Shapiro Glove Co. Inc., New York, N. Y. Gloves. 312,240; Sept. 8. Class 39.
Shelby, Palm, New York, N. Y. Non-electrical wavers. 316,667; Sept. 8. Class 40.
Sheldon, Albert K., Co., doing business as Cambridge Paint & Varnish Works, Cambridge, Mass. Paints, paint enamels and colors, etc. 316,668; Sept. 8. Class 16.
Sherwin-Williams Company, The, Cleveland, Ohio. Paint, paint enamel, stains, driers, etc. 312,817; Sept. 8. Class 16.
Sherwin-Williams Company, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 313,871; Sept. 8. Class 16.
Siegel, A. L., Co. Inc., New York, N. Y. Powder puffs. 317,617; Sept. 8. Class 29.
Siegel, Leo, doing business as Peak Medicine Company, Chicago, Ill. Medicines used as a laxative. 303,127; Sept. 8. Class 6.
Skalaroff Brothers, Philadelphia, Pa. Hosiery. 316,853; Sept. 8. Class 39.
Smith, S. Morgan Company, York, Pa. Hydraulic turbine equipment. 316,107; Sept. 8. Class 23.
Stahl, Jacob, Jr. & Co. (See Greenwald, Abraham A.)
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Devices for supplying lubricants. 316,225; Sept. 8. Class 23.
Stegeman, Jacob R., doing business as Catherine Laboratories, East St. Louis, Ill. Scalp preparations. 311,937; Sept. 8. Class 6.
Steiger, A., Inc., Springfield, Mass. Men's shirts. 312,871; Sept. 8. Class 39.
Stern Brothers, New York, N. Y. Liquid antiseptics and disinfectants, bath salts, etc. 315,707; Sept. 8. Class 6.
Stetson, John B., Company, Philadelphia, Pa. Hats and cloth caps. 287,208; Sept. 8. Class 39.

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Stokes, Francis C., & Co., Inc., Philadelphia, Pa. Cucumber seeds. 308,839; Sept. 8. Class 1.
Sweeper-Vac Company, The, Worcester, Mass. Vacuum cleaners. 317,011; Sept. 8. Class 23.
Sweeper-Vac Company, The, Worcester, Mass. Vacuum cleaners. 317,012; Sept. 8. Class 23.
Terry & Terry, Oak Park, Ill. External foot lotion. 309,363; Sept. 8. Class 6.
Teufel, Wilh. Jul. Stuttgart, Germany. Medicinal plaster bandages. 307,515; Sept. 8. Class 6.
Timberman, A. R., Corporation, Milwaukee, Wis. Printing inks. 300,374; Sept. 8. Class 11.
Tyson & Company, Inc., doing business as Johnson Products Company, Paris, Tenn. Liniment. 304,839; Sept. 8. Class 6.
Ulmer, George, G., doing business as Ulmer Laboratories, Minneapolis, Minn. Medicinal preparation. 306,924; Sept. 8. Class 6.
United Mutual Life Insurance Company, Indianapolis, Ind. Letter paper and envelopes. 315,653; Sept. 8. Class 37.
U. S. Oil Company, Providence, R. I. Lubricating oils and greases. 309,831; Sept. 8. Class 15.
United States Radio & Television Corporation, Marion, Ind. Bulletins and pamphlets. 315,165; Sept. 8. Class 38.
Universal Manufacturing Company, Abilene, Tex. Coffee, peanut butter, tea, etc. 310,270; Sept. 8. Class 46.
Utah Producers Service Corp. of New York, New York, N. Y. Crated eggs. 316,172; Sept. 8. Class 46.
Vanity Fair Silk Mills, Reading, Pa. Bloomers, petticoats, chemises, etc. 317,339; Sept. 8. Class 39.
Van Koughnet, Wm. R., Whitehall, N. Y. Food coloring powder. 315,621; Sept. 8. Class 6.
Veeder-Root Incorporated, Hartford, Conn. Die castings. 317,585; Sept. 8. Class 14.
Venus Brassiere Co., assignor to Associated Apparel Industries, Inc., Chicago, Ill. Foundation garments. 316,755; Sept. 8. Class 39.
Venus Shoe Company. (See Laganas, George.)
Vermont Company, The. (See Gahen, Lorene.)
Viviny Perfumers, Inc., West Haven, Conn. Astringents, astringent cerates, bleach creams, etc. 315,811; Sept. 8. Class 6.
Vogue Brassiere Mfg. Co., Newark, N. J. Corsets, brassières, girdles, etc. 317,414; Sept. 8. Class 39.
Wagner Bros. Feed Corp., Brooklyn, N. Y. Bird seed and foods; dog, cat, and wild animal foods. 313,876; Sept. 8. Class 46.
Walsh, Christy, New York, N. Y. Films. 315,951–4; Sept. 8. Class 26.
Warfield Gilliland Development Co., Minneapolis, Minn. Endless tread chains. 314,386; Sept. 8. Class 23.
Weaver Brothers Company, The, Cleveland, Ohio. Neutralizers, inhibitors, and fume eliminators. 301,220; Sept. 8. Class 6.
Weinberg, Sol B., doing business as S. & W. Laboratories, Charlottesville, Va. Medicinal preparation. 316,710; Sept. 8. Class 6.
Wiedeke, Gustav, Co., Dayton, Ohio. Tube and flue cutters, expanders, bending tools, etc. 316,308; Sept. 8. Class 23
Woodbury Shoe Mfg. Co., Derry, N. H. Boots, shoes, sandals, and slippers. 317,232; Sept. 8. Class 39.
Worcester Salt Co., New York, N. Y. Salt. 315,714; Sept. 8. Class 6.
Wortbite Process Company, Fort Worth, Tex. Road surfacing and conditioning material. 317,233; Sept. 8. Class 12.
Young, Jack, Shoe Corporation, Boston, Mass. Leather shoes. 316,676; Sept. 8. Class 39.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. F. D. Carpenter Coal Co. 287,054; Sept. 8.
Leather. Melvin Henkin, Inc. 287,038; Sept. 8.

CLASS 2

Bags, Paper. Union Bag & Paper Corporation. 286,856; Sept. 8; Serial No. 314,521; published June 30, 1931.
Bags, Paper. Union Bag & Paper Corporation. 286,858; Sept. 8; Serial No. 314,727; published June 30, 1931.

CLASS 4

Abrasive wheels, Steel center. Carborundum Company. 286,992; Sept. 8; Serial No. 281,074; published June 23, 1931.
Cleaner and porcelain cleaner and polish, Closet bowl. J. A. Sexauer Mfg. Co. 286,815; Sept. 8; Serial No. 310,307 published June 23, 1931.
Polish, Boot. Ronuk, Limited. 286,947; Sept. 8; Serial No. 313,801; published June 23, 1931.
Polish, Denture. Iteco Company. 286,823; Sept. 8; Serial No. 311,784; published June 23, 1931.
Preparation for cleaning windows, etc. J. J. Willinger. 287,024; Sept. 8.
Soap. T. F. Gamage. 286,950; Sept. 8; Serial No. 314,157; published June 23, 1931.
Soap. Hewitt Bros. Soap Company. 286,888; Sept. 8; Serial No. 308,828 published June 23, 1931.
Soap powders. Rex Products & Manufacturing Company. 286,829; Sept. 8; Serial No. 313,798; published June 23, 1931.
Soap, Toilet. Omega Chemical Company. 286,828; Sept. 8; Serial No. 313,752; published June 23, 1931.
Soaps. P. P. Mülhens. 286,810; Sept. 8; Serial No. 311,018; published June 23, 1931.

CLASS 6

Cosmetics. William E. Hinkel Co. 287,041; Sept. 8.
Cream, pore paste, astringent, etc., Cleansing and tissue. City Stores Company. 287,052; Sept. 8.
Insecticides. Leffingwell Rancho Company. 287,050; Sept. 8.
Medicines for hogs and sheep. C. A. Powers. 287,034; Sept. 8.
Petroleum jelly, salve, cold cream, etc., White. Shearin Company. 287,047; Sept. 8.
Pharmaceutical products. Laboratoires de Biochimie Medicale. 287,029–30; Sept. 8.
Preparation used in treating skin afflictions and as an after shaving lotion. Sunland Laboratories, Inc. 287,033; Sept. 8.
Solution for intravenous use for the treatment of hemorrhages, etc. P. Lemeland. 287,045; Sept. 8.
Tooth powder, dentifrices, and mouth wash. Research Foundation. 286,812; Sept. 8; Serial No. 310,027; published May 5, 1931.

CLASS 7

Cordage, rope, and twine, Cotton. Clark and Jackson. 286,967; Sept. 8; Serial No. 314,788; published June 30, 1931.
Rope, Wire. American Steel and Wire Company of New Jersey. 286,969; Sept. 8; Serial No. 314,835; published June 30, 1931.

CLASS 9

Matches. Vulcan Match Co. 286,971–4; Sept. 8; Serial Nos. 314,870–3; published June 30, 1931.
Matches. Vulcan Match Co. Inc. 286,936–9; Sept. 8; Serial Nos. 314,874–7; published June 30, 1931.

CLASS 10

Fish meal. California Packing Corporation. 286,818; Sept. 8; Serial No. 310,856; published June 30, 1931.
Soil conditioner and snail control. Roberts Company. 286,953; Sept. 8; Serial No. 314,343; published June 23, 1931.

CLASS 12

Brick, Plastic monolithic fire. Mexico Refractories Company. 286,834; Sept. 8; Serial No. 312,659; published June 16, 1931.
Bricks, Paving. Cleveland Brick & Clay Company. 287,053; Sept. 8.
Caulking compound. H. R. Hunt. 287,039; Sept. 8.
Insulating building board. Stewart Inso Board Company. 286,978; Sept. 8; Serial No. 298,122; published May 13, 1930.
Refractories for furnace structures and linings. General Refractories Company. 287,049; Sept. 8.
Walkways and stairways, Steel. Black-Sivalls & Bryson Manufacturing Company. 287,040; Sept. 8.

CLASS 13

Carriers, show racks, tie backs, etc., Clothing. Knape & Vogt Manufacturing Co. 286,821; Sept. 8; Serial No. 311,098; published June 30, 1931.
Metal covers or heads for fasteners. Rawlplug Company. 286,822; Sept. 8; Serial No. 311,751; published June 30, 1931.
Tacks. W. W. Cross & Company. 286,989; Sept. 8; Serial No. 291,326; published June 30, 1931.
Wire fence and barb wire. Mid-States Steel & Wire Co. 286,819; Sept. 8; Serial No. 310,566; published June 30, 1931.

CLASS 14

Castings and alloys. Better Bearings Corporation. 286,885; Sept. 8; Serial No. 307,086; published June 23, 1931.

CLASS 16

Compound or polish, Shining. R. G. Haskins Co. 286,982; Sept. 8; Serial No. 294,113; published June 30, 1931.
Paint and for priming material and roof coating. Barrett Company. 286,934; Sept. 8; Serial No. 298,266; published June 30, 1931.
Paint enamel. Paraffine Companies. 286,817; Sept. 8; Serial No. 310,693; published June 30, 1931.
Paints, Artists' water color. Milton Bradley Company. 286,954; Sept. 8; Serial No. 314,443; published June 30, 1931.

Paints, enamels, kalsomine, and varnishes. Montgomery Ward & Co. 286,811; Sept. 8; Serial No. 310,024; published June 30, 1931.
Paints, enamels, lacquers, etc. James B. Sipe & Co. 287,031; Sept. 8.

CLASS 17

Cigars. M. J. Goodman. 286,952; Sept. 8; Serial No. 314,283; published June 30, 1931.
Cigars. L. B. Grabosky. 286,824–5; Sept. 8; Serial Nos. 312,372–3; published June 23, 1931.
Cigars. Wolf Brothers & Co. 286,948; Sept. 8; Serial No. 313,814; published June 23, 1931.

CLASS 19

Bicycles. Gimbel Brothers, Inc. 286,935; Sept. 8; Serial No. 299,313; published June 30, 1931.
Vehicle bodies and parts thereof, Knocked down. Met-L-Wood Corporation. 287,042; Sept. 8.

CLASS 20

Linoleum and products of a linoleum like nature. Congoleum-Nairn, Inc. 286,945–6; Sept. 8; Serial Nos. 315,037–8; published June 30, 1931.

CLASS 22

Belts, Swimming. A. Walus. 286,970; Sept. 8; Serial No. 314,878; published June 30, 1931.
Board game. Parker Brothers, Inc. 286,943; Sept. 8; Serial No. 314,926; published June 20, 1931.
Cards, Playing. S. H. Kress & Co. 286,941; Sept. 8; Serial No. 314,915; published June 30, 1931.
Cards, Playing. S. H. Kress & Co. 286,942; Sept. 8; Serial No. 314,917; published June 30, 1931.
Golf balls. Edwards & Walker Company. 286,968; Sept. 8; Serial No. 314,793; published June 30, 1931.
Golf clubs. Condor Manufacturing Co. 286,958; Sept. 8; Serial No. 314,272; published June 30, 1931.
Pop guns, air rifles, toy airplanes, etc. All Metal Products Company. 286,966; Sept. 8; Serial No. 314,480; published June 30, 1931.

CLASS 23

Cigarette vending machines. Autobacconist Corporation. 286,959; Sept. 8; Serial No. 314,225; published June 30, 1931.
Kitchen ware. Clyde Cutlery Company. 286,965; Sept. 8; Serial No. 313,494; published June 30, 1931.
Mowers, Lawn. Sears, Roebuck and Co. 286,878; Sept. 8; Serial No. 302,491; published June 30, 1931.
Razor blades. Probak Corporation. 286,983–7; Sept. 8; Serial No. 292,895–9; published Jan. 7, 1930.

CLASS 25

Locks, Ventilating window. Kankakee Tool & Die Works. 286,953; Sept. 8; Serial No. 313,904; published June 30, 1931.

CLASS 26

Films, Motion picture. Universal Pictures Corporation. 286,960; Sept. 8; Serial No. 314,348; published June 30, 1931.
Gauges. Richardson & Boynton Company. 286,944; Sept. 8; Serial No. 314,929; published June 30, 1931.
Ophthalmic mountings. Bausch & Lomb Optical Company. 286,036; Sept. 8.
Spectacles and eyeglasses. Tunstall Optical Co. Ltd. 286,975; Sept. 8; Serial No. 309,876; published June 30, 1931.

CLASS 27

Clocks. Consolidated Ashcroft Hancock Company. 286,981; Sept. 8; Serial No. 294,342; published Mar. 3, 1931.

CLASS 29

Cloth, Polishing and dusting. J. C. Gallagher. 286,820; Sept. 8; Serial No. 310,992; published June 30, 1931.
Powder puffs. Apex Products Corporation. 287,037; Sept. 8.

CLASS 31

Refrigerators of all types. Rudolph Wurlitzer Company. 286,940; Sept. 8; Serial No. 314,884; published June 30, 1931.

CLASS 32

Furnishings, Built-in household. Mrs. G. Herzog. 286,991; Sept. 8; Serial No. 283,332; published June 30, 1931.

CLASS 33

Glass, Sheet. Vitrea Company. 287,021; Sept. 8; Serial No. 304,477; published June 30, 1931.

CLASS 34

Burners, Oil. Milwaukee Air Power Pump Co. 286,826; Sept. 8; Serial No. 313,144; published June 30, 1931.
Heaters, heating units, and boilers. Day & Night Water Heater Co. 286,813; Sept. 8; Serial No. 310,163; published June 30, 1931.
Torch, Gasoline blow. F. B. Carleton. 286,951; Sept. 8; Serial No. 314,230; published June 30, 1931.

CLASS 35

Gaskets. Plumbers Specialties Manufacturing Corporation. 287,048; Sept. 8.
Inner tubes, tire patches, and boots and sleeves, etc. Badger Rubber Works. 286,988; Sept. 8; Serial No. 292,389; published June 30, 1931.

CLASS 37

Coverings, Wall. Salubra S. A. 286,880–1; Sept. 8; Serial Nos. 303,657–8; published June 16, 1931.
Covers made of paper, Toilet seat. O. Fradus. 286,912; Sept. 8; Serial No. 314,965; published June 30, 1931.
Crayons. Milton Bradley Company. 286,901; Sept. 8; Serial No. 313,324; published June 16, 1931.
Desk pads. Williams & Marcus Co. 286,980; Sept. 8; Serial No. 296,039; published June 16, 1931.
Lead pencils. Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth. 286,993; Sept. 8; Serial No. 278,176; published June 23, 1931.
Manifold forms. Overfold Company. 286,910; Sept. 8; Serial No. 314,655; published June 30, 1931.
Paper, Bleached kraft. Nekoosa-Edwards Paper Company. 286,911; Sept. 8; Serial No. 314,816; published June 30, 1931.
Paper, Bond. Bradner Smith & Co. 287,035; Sept. 8.
Paper, Bond. Saxon Paper Products Inc. 286,872; Sept. 8; Serial No. 313,562; published June 30, 1931.
Paper coated on two sides, each side different color, Book. Appleton Coated Paper Co. 286,871; Sept. 8; Serial No. 313,528; published June 16, 1931.
Paper, Embossed. Westfield River Paper Company. 286,915; Sept. 8; Serial No. 314,310; published June 23, 1931.
Paper, Kraft. Nekoosa-Edwards Paper Company. 286,897; Sept. 8; Serial No. 314,625; published June 30, 1931.
Paper, Safety. Frankwood Process Company. 286,896; Sept. 8; Serial No. 314,329; published June 30, 1931.
Pencils, pencil cases, crayons, etc. A. W. Faber, Inc. 286,876; Sept. 8; Serial No. 301,254; published June 16, 1931.
Ring binders and filler sheets for same. Wilson-Jones Company. 286,870; Sept. 8; Serial No. 313,519; published June 16, 1931.
Stationery items. Scripto Manufacturing Company. 286,873; Sept. 8; Serial No. 313,563; published June 23, 1931.

CLASS 38

Booklets. Animated picture. Flickerette Company. 286,868; Sept. 8; Serial No. 313,034; published June 30, 1931.
Books, Cook. Meredith Publishing Company. 286,891; Sept. 8; Serial No. 311,922; published June 16, 1931.
Books, magazines, and courses of instruction. Beverly Hall Corporation. 286,867; Sept. 8; Serial No. 312,970; published June 30, 1931.
Books or periodicals. Electrochemical Society. 286,890; Sept. 8; Serial No. 311,713; published June 16, 1931.
Cartoon strips. Nicholson & Miller. 286,904; Sept. 8; Serial No. 314,007; published June 23, 1931.
Charts. M. Engl. 286,866; Sept. 8; Serial No. 311,653; published June 30, 1931.
Charts, Printed. J. H. Gravell. 286,914; Sept. 8; Serial No. 314,111; published June 30, 1931.
Comic strip or carton. King Features Syndicate. 286,875; Sept. 8; Serial No. 313,923; published June 30, 1931.
Directory and routing booklet, Business. Elliott Ralston Corporation. 286,869; Sept. 8; Serial No. 313,067; published June 30, 1931.
House organs. Central Surety and Insurance Corporation. 286,902; Sept. 8; Serial No. 313,829; published June 9, 1931.
Magazine. Armstrong Cork Company. 286,903; Sept. 8; Serial No. 313,052; published June 23, 1931.
Magazine. J. M. Cattell. 286,913; Sept. 8; Serial No. 313,959; published June 30, 1931.
Magazine. Fawcett Publications. 286,907; Sept. 8; Serial No. 314,403; published June 23, 1931.
Magazine. Journal for the Piece Goods Buyer, Inc. 286,909; Sept. 8; Serial No. 314,649; published June 23, 1931.
Magazine. Kroy Wen Publishers, Inc. 286,865; Sept. 8; Serial No. 310,626; published June 30, 1931.
Magazine. Macfadden Publications, Inc. 286,892; Sept. 8; Serial No. 312,380; published June 23, 1931.
Music, Sheet. I. P. Wener. 286,889; Sept. 8; Serial No. 311,406; published June 23, 1931.
Newspaper, Daily. Daily Trade Record Co. of New York. 286,894; Sept. 8; Serial No. 313,076; published June 23, 1931.
News papers. F. G. Johnston. 286,893; Sept. 8; Serial No. 312,609; published June 16, 1931.
Periodical. Newspaper Nature Features, Inc. 286,976–7; Sept. 8; Serial Nos. 299,218–19; published June 16, 1931.
Periodical. Norwegian Lutheran Church of America. 286,898; Sept. 8; Serial No. 314,654; published June 23, 1931.
Periodical. Texas Cotton Co-Operative Association. 286,905; Sept. 8; Serial No. 314,180; published June 23, 1931.

Prints, show cards, posters, etc. Vitaprint Process Company. 286,900; Sept. 8; Serial No. 314,183; published June 23, 1931.
Publication. International Publications, Inc. 286,900; Sept. 8; Serial No. 313,190; published June 23, 1931.
Publication. Tide, Inc. 286,908; Sept. 8; Serial No. 314,472; published June 23, 1931.
Publication, Monthly. American Association of Personal Finance Companies. 286,899; Sept. 8; Serial No. 314,675; published June 23, 1931.
Records, bulletins, and reports on business and advertising, Printed. Media Records, Inc. 286,995; Sept. 8; Serial No. 275,905; published June 23, 1931.
Scratch sheet, Daily. R. A. Massey. 286,874; Sept. 8; Serial No. 313,713; published June 30, 1931.

CLASS 39

Aprons, Laboratory. Eastman Kodak Company. 286,928; Sept. 8; Serial No. 313,841; published June 23, 1931.
Boots and shoes, Leather. Holland Shoe Company. 286,884; Sept. 8; Serial No. 306,566; published June 23, 1931.
Clothing. Buffums'. 286,837–8; Sept. 8; Serial Nos. 313,106–7; published June 30, 1931.
Clothing. Eagle Clothes. 286,841; Sept. 8; Serial No. 313,707; published June 23, 1931.
Clothing. Kirby, Block & Fischer, Inc. 286,849; Sept. 8; Serial No. 314,242; published June 30, 1931.
Clothing, Women's. Corbett & North, Inc. 286,923; Sept. 8; Serial No. 313,028; published June 23, 1931.
Coats, Ladies' outer. J. Kupfer. 286,847; Sept. 8; Serial No. 314,164; published June 23, 1931.
Coats, suits, and dresses. M. L. Parker Company. 286,840; Sept. 8; Serial No. 313,386; published June 23, 1931.
Coats, vests, pants, and overcoats. Fashion Park Associates, Inc. 286,842–3; Sept. 8; Serial Nos. 313,999–4000; published June 23, 1931.
Collars, Men's. Carson Pirie Scott & Co. 287,026–7; Sept. 8.
Dresses. Price-Schlesinger Inc. 286,846; Sept. 8; Serial No. 314,073; published June 30, 1931.
Dresses. Rosenblatt & Hollub, Inc. 286,844; Sept. 8; Serial No. 314,018; published June 23, 1931.
Dresses and dance frocks. Nanty Frocks, Inc. 286,836; Sept. 8; Serial No. 312,956; published June 30, 1931.
Dresses, coats, suits, and skirts. M. L. Kaplan. 286,832; Sept. 8; Serial No. 309,692; published June 23, 1931.
Dresses, frocks, aprons, etc. Donnelly Garment Company. 286,852; Sept. 8; Serial No. 314,278; published June 23, 1931.
Gloves and gauntlets. Toledo Glove Manufacturing Company. 286,919; Sept. 8; Serial No. 311,578; published June 23 1931.
Gowns, frocks, and dresses. Half Size Dress Company. 286,830; Sept. 8; Serial No. 309,270; published June 30, 1931.
Hats. Consolidated Millinery Company. 286,895; Sept. 8; Serial No. 301,248; published June 23, 1931.
Hats. J. R. Mermelstein. 286,877; Sept. 8; Serial No. 301,277; published June 23, 1931.
Hats, caps, hosiery, etc. New Idea Infants Wear Co. 286,927; Sept. 8; Serial No. 313,748; published June 23, 1931.
Hosiery. H. C. Aberle Company. 286,851; Sept. 8; Serial No. 314,262; published June 30, 1931.
Hosiery. Lehigh Silk Hosiery Mills. 286,916; Sept. 8; Serial No. 299,663; published June 23, 1931.
Hosiery. Lehigh Silk Hosiery Mills. 286,979; Sept. 8; Serial No. 296,813; published June 23, 1931.
Hosiery. J. C. Penney Company. 286,853; Sept. 8; Serial No. 314,341; published June 23, 1931.
Hosiery protectors, Rubber. O. Hein. 286,848; Sept. 8; Serial No. 314,238; published June 23, 1931.
Leather findings. A. Glicksman. 286,833; Sept. 8; Serial No. 310,374; published June 23, 1931.
Neckties. Franc-Strohmenger & Cowan. 286,887; Sept. 8; Serial No. 308,150; published June 23, 1931.
Pajamas, princess slips, night gowns, etc. I. Schneierson & Sons, Inc. 286,855; Sept. 8; Serial No. 314,580; published June 30, 1931.
Shirts, underwear and pajamas. Alperin, Strauss Co., Inc. 287,051; Sept. 8.
Shoes. Diamond Shoe Corporation. 286,926; Sept. 8; Serial No. 313,649; published June 23, 1931.
Shoes. E. Movesian. 286,921; Sept. 8; Serial No. 312,385; published June 23, 1931.
Shoes. Peck Shoe Company. 286,920; Sept. 8; Serial No. 312,861; published June 23, 1931.
Shorts, running trunks, gymnasium shirts, etc. Strouse-Baer Co. 286,850; Sept. 8; Serial No. 314,256; published June 23, 1931.
Suits. Bathing. Goodwear Knitting Mills. 286,831; Sept. 8; Serial No. 309,272; published Mar. 10, 1931.
Sweaters, coats, vests, etc., Knitted. Brown's Beach Jacket Company. 286,835; Sept. 8; Serial No. 312,837; published June 2, 1931.
Topcoats and overcoats, Men's. Rosenbaum Company. 286,994; Sept. 8; Serial No. 268,058; published June 30, 1931.
Topcoats, overcoats, and suits. J. Siegel. 286,957; Sept. 8; Serial No. 313,756; published June 23, 1931.
Underwear. Boston Knitting Mills, Inc. 286,839; Sept. 8; Serial No. 313,279; published June 23, 1931.
Underwear. Carson Pirie Scott & Co. 287,025; Sept. 8.
Underwear. Carson Pirie Scott & Co. 287,028; Sept. 8.
Underwear, Women's. Augusta Knitting Corporation. 286,854; Sept. 8; Serial No. 314,355; published June 23, 1931.
Underwear, Women's. Van Raalte Company. 286,845; Sept. 8; Serial No. 314,023; published June 23, 1931.

CLASS 40

Braids. United Lace & Braid Manufacturing Co. 286,963; Sept. 8; Serial No. 313,356; published June 23, 1931.
Combs. Rheinische Gummi- und Celluloid-Fabrik. 286,922; Sept. 8; Serial No. 312,862; published June 23, 1931.
Combs, Hard rubber. McKesson & Robbins, Incorporated. 286,879; Sept. 8; Serial No. 303,031; published June 23, 1931.
Fur trimmings. Bienstock and Lubelsky, Inc. 286,925; Sept. 8; Serial No. 313,640; published June 30, 1931.
Shields, Dress. I. B. Kleinert Rubber Company. 286,956; Sept. 8; Serial No. 313,041; published June 23, 1931.
Tape, blanket binding braids, collar supports, etc., Bias fold. Warren Featherbone Company. 286,886; Sept. 8; Serial No. 307,189; published June 23, 1931.

CLASS 42

Bagging material in the piece, Textile. Mente & Co. 287,015; Sept. 8; Serial No. 312,382; published June 30, 1931.
Blankets, Woolen bed. Chas. W. House & Sons. 287,016; Sept. 8; Serial No. 311,272; published June 30, 1931.
Carpets and rugs, Textile. Geo. Wehn & Co. 287,004; Sept. 8; Serial No. 314,094; published June 30, 1931.
Cotton goods. Campbell Company. 287,014; Sept. 8; Serial No. 313,327; published June 30, 1931.
Cotton, silk, woolen, etc., piece goods. Velveray Corporation of America. 287,011; Sept. 8; Serial No. 313,456; published June 16, 1931.
Goods, Piece dyed. Gaede Silk Dyeing Company. 287,023; Sept. 8; Serial No. 311,271; published May 12, 1931.
Linen, cotton, and silk piece goods and mixtures thereof. Matthew W. Ryan Sons & Co. Inc. 287,043; Sept. 8.
Linens. Alex. J. Hamrah Co. Inc. 286,863; Sept. 8; Serial No. 263,267; published June 30, 1931.
Linens, Art, decorative, and fancy. Alex. J. Hamrah Co. Inc. 286,864; Sept. 8; Serial No. 263,265; published June 30, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 286,999; Sept. 8; Serial No. 314,320; published June 30, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 287,000; Sept. 8; Serial No. 314,318; published June 30, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 287,005–6; Sept. 8; Serial Nos. 313,955–6; published June 30, 1931.
Pile fabrics, Knitted. D. P. Moore. 287,017; Sept. 8; Serial No. 311,101; published June 30, 1931.
Rugs and carpets, Textile. A. & M. Karagheusian, Inc. 287,008; Sept. 8; Serial No. 313,738; published June 16, 1931.
Silk crepe. C. Goldman. 287,012; Sept. 8; Serial No. 313,431; published June 30, 1931.
Silk piece goods. Kattermann and Mitchell Company. 287,001; Sept. 8; Serial No. 314,160; published June 30, 1931.
Silk piece goods. Kattermann & Mitchell Company. 287,013; Sept. 8; Serial No. 313,372; published June 30, 1931.
Silk piece goods and mixtures of cotton and silk piece goods. Burton Brothers & Co. Inc. 287,010; Sept. 8; Serial No. 313,588; published June 30, 1931.
Textile diapers. W. T. Grant Company. 287,009; Sept. 8; Serial No. 313,597; published June 30, 1931.
Textile wash cloths. Thomas F. Byrne Corporation. 286,859; Sept. 8; Serial No. 300,463; published June 30, 1931.
Wool, cotton, silk, etc., Fabrics. Woolen Corporation of America. 287,007; Sept. 8; Serial No. 313,877; published June 30, 1931.
Woolen fabrics. Worumbo Manufacturing Company. 286,862; Sept. 8; Serial No. 294,549; published June 30, 1931.

CLASS 43

Yarns, Artificial. Algemeene Kunstzijde Unir N. V. 286,997; Sept. 8; Serial No. 314,888; published June 30, 1931.

CLASS 44

Dental material. Agalyn Corporation. 286,814; Sept. 8; Serial No. 311,169; published June 30, 1931.
Jock straps, suspensories, and athletic ankle and wrist supporters. C-C Manufacturing Company. 286,882; Sept. 8; Serial No. 305,758; published June 30, 1931.
Nasal and mouth inhalers. O. Fahlbusch. 286,857; Sept. 8; Serial No. 314,559; published June 30, 1931.
Pads for permanent waving of hair. Lewis Method, Incorporated. 286,827; Sept. 8; Serial No. 313,663; published June 30, 1931.

CLASS 45

Beverages and syrups for making the same, Maltless. La Grande Distillerie E. Cusenier Fils Aine & Cie., Societe Anonyme. 286,918; Sept. 8; Serial No. 300,208; published June 30, 1931.
Beverages, Maltless. Lash's Products Company. 286,961; Sept. 8; Serial No. 314,373; published June 30, 1931.
Drinks, Citrus fruit. Juci-Sweet Products Inc. 286,964; Sept. 8; Serial No. 313,436; published June 30, 1931.

Powder compound used in the place of sugar for aging drinks. L. E. Silberman. 286,883; Sept. 8; Serial No. 303,026; published June 30, 1931.

CLASS 46

Candies, mayonnaise, bread, etc. Robert Putman Candy Company. 286,860; Sept. 8; Serial No. 299,594; published June 30, 1931.
Candy. Amtorg Trading Corporation. 286,924; Sept. 8; Serial No. 313,072; published June 30, 1931.
Candy. Candy Kitchens, Inc. 286,931; Sept. 8; Serial No. 314,483; published June 30, 1931.
Candy. National Features Inc. 286,932; Sept. 8; Serial No. 314,814; published June 30, 1931.
Canned and bottled crushed fruits, shelled nuts, jams, etc. John Mulhern Company. 286,861; Sept. 8; Serial No. 299,588; published June 30, 1931.
Canned fruit. Liberty Orchards Company. 286,933; Sept. 8; Serial No. 314,852; published June 30, 1931.
Canned fruit and vegetables, raisins, mincemeat, etc. California Packing Corporation. 287,019; Sept. 8; Serial No. 307,257; published June 30, 1931.
Chocolates. F. H. Roberts Company. 286,930; Sept. 8; Serial No. 314,299; published June 30, 1931.
Dietetic alimentary substances for food purposes. A. Komar. 287,044; Sept. 8.
Fish paste, fish products, jellies, etc. G. Viviano, Inc. 287,022; Sept. 8; Serial No. 303,356; published May 19, 1931.
Flour, Bread and wheat. M. M. Glasser Co. 287,046; Sept. 8.
Ice cream. H. P. Hood & Sons, Inc. 286,998; Sept. 8; Serial No. 314,332; published June 30, 1931.
Meat and chipped beef, Fresh. Kroger Grocery & Baking Co. 286,917; Sept. 8; Serial No. 311,337; published June 30, 1931.
Meats. E. Kahn's Sons Company. 286,996; Sept. 8; Serial No. 260,449; published June 23, 1931.
Olive oil. Barton & Guestier. 287,020; Sept. 8; Serial No. 306,229; published June 30, 1931.
Sugar. National Sugar Refining Company of New Jersey. 287,003; Sept. 8; Serial No. 314,124; published June 30, 1931.
Sirup, Chocolate. Sol Lenzner Corp. 286,929; Sept. 8; Serial No. 314,118; published June 30, 1931.
Syrup, Malt. Seneca Food Products Corporation. 287,002; Sept. 8; Serial No. 314,131; published June 30, 1931.
Syrups, Malt. Barrett Bros. 287,032; Sept. 8.
Tea, Green. M. G. Velga. 287,018; Sept. 8; Serial No. 309,102; published June 30, 1931.

CLASS 49

Whiskey. Geo. T. Stagg Co. 286,962; Sept. 8; Serial No. 314,382; published June 30, 1931.

CLASS 50

Coated fabrics. J. W. Greer Company. 286,816 Sept. 8; Serial No. 310,514; published June 23, 1931.
Shoe forms. Shoe Form Co., Inc. 286,949; Sept. 8; Serial No. 314,020; published June 23, 1931.
Tents and awnings. Price Awnlok Corporation. 286,990; Sept. 8; Serial No. 291,176; published June 30, 1931.

ALPHABETICAL LIST OF LABELS

Arch Liberator. For Boxes. Hoague-Sprague Corporation. 39,686; Sept. 8.
Bell Rock. For Fresh Vegetables. Chester Franzell & Co. 39,668; Sept. 8.
Brittain's. For Butter. Sutherland Paper Company. 39,712; Sept. 8.
Brooks Shoe. For Boxes. Hoague-Sprague Corporation. 39,674; Sept. 8.
Brownie Bar, a Frozen Confection. For Frozen Confection Containing Fresh Yeast. Spraley Company. 39,708; Sept. 8.
Butler's. For Boxes. Hoague-Sprague Corporation. 39,693; Sept. 8.
Capitol. For Fresh Vegetables. Chester Franzell & Co. 39,669; Sept. 8.
Carribbean Pepper Sauce. For Pepper Sauce. J. P. Best. 39,659; Sept. 8.
Children's Knitted Sportswear. For Children's Knitted Sportswear. Sacks-Sons Carton Co. 39,704; Sept. 8.
Crystal the Original Genuine Platinum Plating (Platinizing) Salts. For Plating (Platinizing) Salts. C. D. Pechin. 39,701; Sept. 8.
Dr. Gilbert's. For Boxes. Hoague-Sprague Corporation. 39,682; Sept. 8.
Dr. Harris H. Luntz's Formula Q. For Preparation for Beautifying the Skin. J. Luntz. 39,699; Sept. 8.
Dr. Lampert's. For Boxes. Hoague-Sprague Corporation. 39,680; Sept. 8.
Doctor Sutherland's Tablets. For Tablets for Medicinal Purposes. Dr. H. H. Sutherland Co. 39,709; Sept. 8.
E. Z. Kumfort. For Boxes. Hoague-Sprague Corporation. 39,692; Sept. 8.
Famous and Handy Polish, Radio Brand. For Combination Cleaner and Polish. Oliver A. Reed, Inc. 39,703; Sept. 8.
Fancy-Dress Family Soap. For Soap Bars. W. R. Kirk. 39,696; Sept. 8.
Fine and Dandy. For Boxes. Hoague-Sprague Corporation. 39,679; Sept. 8.
Frances Fox Liquid Herbal Shampoo. For Liquid Herbal Shampoo. F. Fox. 39,666; Sept. 8.
Franck Tablets. For Franck Tablets—A Pure Chicory Product. Heinr. Franck Sons, Inc. 39,667; Sept. 8.
Freedman Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,687; Sept. 8.
Frost Old King Cole Salad Dressing. For Salad Dressing. A. E. Frost. 39,670; Sept. 8.
Getzum Gun gets every Need. For Weed Guns Consisting of Hand Tools for Piercing and Impregnating Weeds with a Poisonous Liquid, Etc. Weed Destroyer Co. 39,720; Sept. 8.
Hand Made Carriage Cover Set. For Hand Made Carriage Cover Sets. Sacks-Sons Carton Co. 39,705; Sept. 8.
Hardy-Fut Shoes. For Boxes. Hoague-Sprague Corporation. 39,676; Sept. 8.
Helthy Fut. For Boxes. Hoague-Sprague Corporation. 39,678; Sept. 8.
Her Grace. For Extract of True Vanilla. Kroger Grocery & Baking Co. 39,698; Sept. 8.
Home Baked. For Bread. Home Baking Co. 39,694; Sept. 8.
Houspray. For Insecticide. Houspray Manufacturing Company. 39,695; Sept. 8.
Hy-Sox Hose and Garters. For Hose and Hose Supporters. Platt Hosiery Company. 39,702; Sept. 8.
Jennie May. For Boxes. Hoague-Sprague Corporation. 39,683; Sept. 8.
Krank. For Lemon Cleansing Cream. A. J. Krank Co. 39,697; Sept. 8.
Lake of the Ozarks. For Butter. Sutherland Paper Company. 39,710; Sept. 8.
Marion Shoe Co. Inc. For Boxes. Hoague-Sprague Corporation. 39,690; Sept. 8.
Mazzini. For Cigars. J. Di Santo. 39,662; Sept. 8.
Missouri Gold. For Butter. Sutherland Paper Company. 39,713; Sept. 8.
Molco Shoes. For Boxes. Hoague-Sprague Corporation. 39,681; Sept. 8.
Mystery Stencils No. 649. For Stencils. Ullman Manufacturing Company. 39,719; Sept. 8.
Mystery Stencils with Paints and Crayons, #650. For Stencils, Crayons, and Paints. Ullman Manufacturing Company. 39,718; Sept. 8.
Non-Inflammable Trex Wonderful Cleaning Fluid. For Cleaning Fluid. H. Buttenheim. 39,660; Sept. 8.
Prairie Maid. For Butter. Dodge City Ice Cream and Produce Co. 39,663; Sept. 8.
Pure Silk mending and darning, 10 Tex-Tonic colors, Art. 54. For Pure Silk for Mending and Darning. Collingbourne Mills Inc. 39,661; Sept. 8.
Rice Pops. For Rice Cereal. Foodtown Kitchens, Inc. 39,665; Sept. 8.
Rogers-Stewart. For Boxes. Hoague-Sprague Corporation. 39,688; Sept. 8.
Satin-Dul. For Hosiery. Trojan Hosiery Mills, Inc. 39,714; Sept. 8.
Satin-Glo. For Hosiery. Trojan Hosiery Mills, Inc. 39,715; Sept. 8.
Satin-Sheen. For Hosiery. Trojan Hosiery Mills, Inc. 39,716; Sept. 8.
Satin-Sheer. For Hosiery. Trojan Hosiery Mills, Inc. 39,717; Sept. 8.
Silver Dust. For Common Soap and Laundry Soap in Spray Form. Gold Dust Corporation. 39,671; Sept. 8.
Smart Styles. For Boxes. Hoague-Sprague Corporation. 39,684; Sept. 8.
Sordillo Easter Greetings. For Candy. J. L. Sordillo. 39,707; Sept. 8.
Step in Style. For Boxes. Hoague-Sprague Corporation. 39,675; Sept. 8.
Sweet Clover. For Butter. Sutherland Paper Company. 39,711; Sept. 8.
Sweetheart Frocks. For Girls', Misses', and Women's Frocks. Hand-De Laney Co. 39,672–3; Sept. 8.
The De Luxe Line. For Boxes. Hoague-Sprague Corporation. 39,691; Sept. 8.
The Economy Shoe. For Boxes. Hoague-Sprague Corporation. 39,689; Sept. 8.
The Fashion Line. For Boxes. Hoague-Sprague Corporation. 39,685; Sept. 8.
The Hostess Package. For Ice Cream. W. D. O'Donoghue. 39,700; Sept. 8.
The P & S Shoe. For Boxes. Hoague-Sprague Corporation. 39,677; Sept. 8.
Twin-Milks. For Candy. Schutter Johnson Candy Company Inc. 39,706.
Wheat Pops. For Wheat Cereal. Foodtown Kitchens, Inc. 39,664; Sept. 8.

ALPHABETICAL LIST OF PRINTS

A colon cleared daily is essential to health and vigor. For Medicinal Preparation for Clearing the Clogged Colon. Society of the Colonaide, Incorporated. 13,408; Sept. 8.

Comfort Coal. For Coal. Easterbrook Coal Company. 13,399; Sept. 8.

Corns, Pain gone for good. For Pads for Treating Callouses, Corns, Bunions, Sore Heels, and Sore Toes. Scholl Mfg. Co. 13,406; Sept. 8.

Fannie Hamilton. For Food Products and Household Appliances. De Both Home Makers' Schools. 13,398; Sept. 8.

Florida Power & Light Company Ice Department. For Ice. Florida Power & Light Company. 13,400; Sept. 8.

General Laminated Padlock No. 50. For Padlocks. General Lock Corp. 13,401; Sept. 8.

Hy-Sox Hose and Garters. For Hose and Hose Supporters. Platt Hosiery Company. 13,402; Sept. 8.

Jandho's Postagraph. For Printed Blanks. Postagraph Company. 13,403; Sept. 8.

Like all Mothers Mrs. Richard H. Cobb wants her children to have the best. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,397; Sept. 8.

S. S. S. makes you feel like yourself again. For Medicine. S. S. S. Company. 13,404; Sept. 8.

When your Feet hurt you hurt all over! Get relief now! For Pads for Treating Callouses, Corns, Bunions, Sore Heels, and Sore Toes. Scholl Mfg. Co. 13,405; Sept. 8.

Why some Brands of Sash Cord cost more and are worth more than others. For Sash Cord. Shapleigh Hardware Company. 13,407; Sept. 8.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 8TH DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, Thomas J., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Folding machine. 1,822,470; Sept. 8.

Aceta G. m. b. H. (See Delle, Hermann, assignor.)

Acheson, Arthur M., Dobbs Ferry, and G. Ramsey, Brooklyn, assignors to Durium Products Corporation, New York, N. Y. Pin holder for phonograph records. 1,821,916; Sept. 8.

Ackerman-Blaesser-Fezzey, Inc. (See Ackerman, Edward L., assignor.)

Ackerman, Edward L., assignor to Ackerman-Blaesser-Fezzey, Inc., Detroit, Mich. Mechanism for operating sash in certain window construction. 1,822,580; Sept. 8.

Ackermann, Joseph, Brooklyn, N. Y. Game apparatus. 1,822,680; Sept. 8.

Adams, Walter A., Rochester, N. Y. Coupling for electrical fixtures. 1,822,200; Sept. 8.

Adamson, Percy, Rye, N. Y. Elastic yarn. 1,822,847; Sept. 8.

Addressograph Company. (See Hubbard, Henry E., assignor.)

Aiello, Peter P., Shorewood, Wis. Italian smoking chair. 1,822,638; Sept. 8.

Ainslie, George, Portland, Oreg. Suturing instrument. 1,822,330; Sept. 8.

Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)

Aktiebolaget Birka Regulator. (See Appelberg, Axel O., assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Jonas, Julius, assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Kobel, Ernst, assignor.)

Aktiengesellschaft Brown, Boveri and Cie. (See Meyer-Berg, H., and Keller, assignors.)

Aktiengesellschaft Brown Boveri & Cie. (See Suter, Philipp, assignor.)

Aktiengesellschaft Brown, Boveri & Cie. (See Walty, Werner, assignor.)

Alaska Packers Association. (See Clark, Frederick, assignor.)

Albanese, Giuseppe S., Paris, France. Coffeepot. 1,822,238; Sept. 8.

Albert, August, Munich, Germany, assignor to Winthrop Chemical Company, New York, N. Y. Process for producing an arsenobenzene and the product thereof. 1,821,919; Sept. 8.

Alland, Maurice, Atlantic City, N. J. Razor. 1,822,864; Sept. 8.

Allen, Edward B., Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Thread-cutter operating mechanism for sewing machines. 1,822,639; Sept. 8.

Allen, Edward B., Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Safety device for sewing machines. 1,822,854; Sept. 8.

Allen, George, jr., New York, N. Y., and F. C. Simpson, West Somerville, Mass., assignors to George Allen & Son, New York, N. Y. Baffle slot block. 1,822,002; Sept. 8.

Allen, George, & Son. (See Allen, G., jr., and Simpson, assignors.)

Allen, Joseph H., assignor to Inland Glass Works, Inc., Chicago, Ill. Lantern. Des. 85,024; Sept. 8.

Aluminum Company of America. (See Belding, George A., assignor.)

American Anode, Inc. (See Lane, Frederick H., assignor.)

American Anode, Inc. (See Schade, James W., assignor.)

American Anode, Inc. (See Szegvari, Andrew, assignor.)

American Bemberg Corporation. (See Bauriedel, G., and Fichthorn, assignors.)

American Brake Materials Corporation. (See Blume, William A., assignor.)

American Gasaccumulator Company. (See Oestnaes, Victor L., assignor.)

American Gypsum Company. (See Dubbert, Herman F., assignor.)

American Iron & Machine Works, Inc. (See Lincoln, Robert A., assignor.)

American Laundry Machinery Company, The. (See McCarthy, John E., assignor.)

American Manganese Steel Company. (See Carr, Bradley S., assignor.)

American Manganese Steel Company. (See Clark, John O., assignor.)

American Road Machinery Company. (See Schmidt, Carl G. A., jr., assignor.)

American Sheet and Tin Plate Company. (See McIlvried, Howard G., assignor.)

American Shoe-Polishing Machine Corp. (See Raschella, Vincent, assignor.)

American Telephone and Telegraph Company. (See Clark, Alva B., assignor.)

American Telephone and Telegraph Company. (See Tradup, Albert, assignor.)

American Telephone and Telegraph Company. (See Wintringham, William T., assignor.)

American Well Works, The. (See Sperry, John B., assignor.)

Anaconda Sales Company. (See Macan, Harry C., assignor.)

Andersen, Alex, assignor of one-half to G. Mathesen, Seattle, Wash. Aircraft. 1,822,386; Sept. 8.

Anderson, Anders A. (See Fitz Gerald, A. G., and Anderson.)

Anderson, Douglas, Pocatello, Idaho. Hose coupling. 1,822,259; Sept. 8.

Anderson, Eli J., assignor of one-half to L. B. Smith, Sheridan, Wyo. Gate fastener. 1,822,640; Sept. 8.

Andrew, Oren, Watkins, N. Y. Stovepipe heater. 1,821,920; Sept. 8.

Andrews, Frank W., Fort Wayne, Ind., assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,822,003; Sept. 8.

Angell, Clifton H., Westfield, Mass. Price tag and sign. 1,822,641; Sept. 8.

Antrim, William D., Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa. Safety gas valve. 1,822,794; Sept. 8.

Apple, Vincent G., Dayton, Ohio. Bar wound field element. 1,822,261; Sept. 8.

Apple, Vincent G., Dayton, Ohio. Power driven hair cutting device. 1,822,262; Sept. 8.

Apple, Vincent G., Dayton, Ohio. Dynamo electric machine. 1,822,263; Sept. 8.

Apple, Vincent G., Dayton, Ohio. Dynamo electric machine. 1,822,264; Sept. 8.

Appleberg, Axel O., assignor to Aktiebolaget Birka Regulator, Stockholm, Sweden. Thermostat switch. 1,822,191; Sept. 8.

Archer, Merton T., Pittsburgh, Pa., assignor to The National Supply Company, Toledo, Ohio. Pull rod clamp. 1,822,642; Sept. 8.

Arcturus Radio Tube Company. (See Harding, Robert, jr., assignor.)

Ardrey, Fred, et al. (See Hutchinson, Harry, assignor.)

Armington, Arthur P., Willoughby, Ohio. Land vehicle. 1,822,795; Sept. 8.

Aronoff, Samuel, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company. Electrical measuring instrument. 1,822,075; Sept. 8.

Art Metal Construction Company. (See Skar, John G. L., assignor.)

Arvey Corporation. (See Regenstein, Joseph, assignor.)

Askania-Werke Aktiengesellschaft vormals, Centralwerkstatt Dessau und Carl Bamberg-Friedenau. (See Wünsch, Erich P. G., assignor.)

Automatic Drive and Transmission Company. (See Vail, Henry H., assignor.)

Automatic Sprinkler Company of America. (See Hamilton, John R., assignor.)

Avery, Bruce W., Whiting, and S. K. Avery, Goodland, Ind. Artificial tooth. 1,822,837; Sept. 8.

Avery, Samuel K. (See Avery, Bruce W., and S. K.)

Axe, Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Window frame and sash construction. 1,822,838; Sept. 8.

Babcock, Wade H., Cleveland, Ohio. Sign. 1,822,265; Sept. 8.

Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)

Babcock & Wilcox Company, The. (See MacKay, Henry J. S., assignor.)

Baber, James E., Galesburg, Ill. Test switch. 1,822,866; Sept. 8.

Backus, A., jr., & Sons. (See Henze, Joseph J., assignor.)

"Baga", G. m. b. H. (See Baumgarden, Paul, assignor.)

Bahlke, William H., assignor to Standard Oil Company, Whiting, Ind. Distilling hydrocarbon oils and apparatus therefor. 1,822,607; Sept. 8.

Baker, Hiram L. and M. R., Leland, Ill. Wagon hitch. 1,821,917; Sept. 8.

Baker, Mervin R. (See Baker, Hiram L. and M. R.)

Ball, Albert P., assignor to Briggs Manufacturing Company, Detroit, Mich. Vehicle body construction. 1,821,957; Sept. 8.

Ball Brothers Company. (See Sterrett, Walter R., assignor.)

Bangay, Raymond D., Brentwood, England, assignor to Radio Corporation of America. Radio signaling system. 1,821,921; Sept. 8.

Barber, William, Brooklyn, N. Y. Cushion tire. 1,822,556; Sept. 8.

Barcalo Manufacturing Company. (See Vallone, Charles, assignor.)

Barclay, Earle H., assignor to The Silica Gel Corporation, Baltimore, Md. Preparing plural gels. 1,822,848; Sept. 8.

Barclay, Gustaf I., Park Ridge, assignor to Detroit Steel Products Company, Detroit, Mich. Window construction. 1,822,004; Sept. 8.

Barnes Scale Company. (See King, Bert W., assignor.)

Barnett, David E., London, England. Terminal connecter and the like. 1,822,192; Sept. 8.

Barnsdall Corporation. (See Reichard, Harold D., assignor.)

Barrel Fitting and Seal Corporation of America. (See Schwartz, Henry, assignor.)

Barrett, James, New York, N. Y. Rim tool. 1,822,643; Sept. 8.

Barrows, Alford C. (See Langford, G. W., Barrows, and McLean.)

Barry, James J., Halifax, Nova Scotia, assignor to Frosted Foods Company, Inc., Dover, Del. Refrigerating apparatus. 1,822,121; Sept. 8.

Barton, Sidney O., Long Beach, assignor to Pacific Oil Well Cementing Company, Incorporated, Los Angeles, Calif. Plug for cementing wells. 1,822,193; Sept. 8.

Basch, Arthur D. (See Kelly, William J., assignor.)

Bastian-Morley Co. (See Morley, James P., assignor.)

Bates, Albert J., jr., Chicago, Ill., assignor, by mesne assignments, to Bates Expanded Steel Corporation, East Chicago, Ind. Expanded metal joist. 1,822,331; Sept. 8.

Bates, Albert J., jr., Chicago, Ill., assignor to Bates Expanded Steel Corporation, East Chicago, Ind. Joist bridging. 1,822,332; Sept. 8.

Bates Expanded Steel Corporation. (See Bates, Albert J., jr., assignor.)

Bauersfeld, Walther, and H. Hartinger, assignors to the Firm Carl Zeiss, Jena, Germany. Illuminating arrangement. 1,822,076; Sept. 8.

Baum, David. (See Mansker, A., and Baum.)

Baum, Erich. (See Hermmann, W. O., Deutsch, and Baum.)

Baumgarten, Paul, Berlin-Halensee, assignor to "Baga" G. m. b. H., Berlin, Germany. Clock. 1,822,195; Sept. 8.

Bauriedel, Gotthard, Barmen, and W. Fichthorn, Elberfeld, Germany, assignors to the Firm American Remberg Corporation, New York, N. Y. Fastening device for spinning centrifuges used in the production of artificial silk. 1,822,194; Sept. 8.

Bausch & Lomb Optical Company. (See Loeser, E. O., and Gallasch, assignors.)

Beatton, Rowland S., Young, New South Wales, Australia. Dispensing apparatus. 1,822,557; Sept. 8.

Béchereau, Louis, assignor to Societe des Avions Bernard, Paris, France. Aeroplane. 1,822,196; Sept. 8.

Becker, Fred, Buffalo, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,821,922; Sept. 8.

Becket, Frederick M., New York, N. Y., assignor to Electro Metallurgical Company. Purification of ores. 1,822,266; Sept. 8.

Beecher, Eugene L., assignor to The Gabriel Company, Cleveland, Ohio. Liquid level indicating means for multiple cell storage batteries. 1,821,958; Sept. 8.

Beede, Herbert G., Pawtucket, R. I. Steaming board. 1,822,387; Sept. 8.

Beede, Herbert G., Pawtucket, R. I. Steaming valve for garment presses. 1,822,388; Sept. 8.

Beekman, Royce A., Schenectady, N. Y., assignor to General Electric Company. Ship propulsion system. 1,822,721; Sept. 8.

Beidler, George C., Rochester, N. Y. Automatic focusing device for photographing apparatus. 1,821,923; Sept. 8.

Belding, George A., assignor to Aluminum Company of America, Pittsburgh, Pa. Fastening corrugated sheets and the like. 1,822,558; Sept. 8.

Belding, George A., assignor to Aluminum Company of America, Pittsburgh, Pa. Fastening corrugated sheets and the like. 1,822,559; Sept. 8.

Bell, Eugene G., Norfolk, Va. Brake cylinder protector. 1,822,722; Sept. 8.

Bell Telephone Laboratories, Incorporated. (See Lum, George R., assignor.)

Belloch, Morris, Brooklyn, N. Y. Buckle and making the same. 1,822,796; Sept. 8.

Bendix Aviation Corporation. (See Stelzer, William, assignor.)

Bendix Brake Company. (See Bendix, Vincent, assignor.)

Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,822,687; Sept. 8.

Benedict, Abraham, et al., trustees. (See Bonsall, Seymour W., assignor.)

Benevolent and Protective Order of Elks of The United States of America. (See Connolly, Stephen, assignor.)

Berlin Foundry and Machine Company. (See Gosselin, Henry G., assignor.)

Bernier, Albert M., St. Paul, Minn. Toothbrush holder. 1,821,924; Sept. 8.

Berry, Claud C. (See Webb, E. H., and Berry.)

Bigelow-Sanford Carpet Co. (See Cooper, William H., assignor.)

Billig, Fred W. (See Scofield, T. J., and Billig.)

Binns, Frederick W., Wollaston, and J. M. Lurie, Jamaica Plain, Mass., assignor to Virginia Smelting Company, Portland, Me. Making bisulphite reactions with sulphur dioxide acid solutions. 1,822,122; Sept. 8.

Birdsall, Wilfred T., Montclair, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Controlling the movement of a tape. 1,821,925; Sept. 8.

Birdseye, Clarence, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Refrigerating apparatus. 1,822,077; Sept. 8.

Birdseye, Clarence, Gloucester, Mass., assignor to Frosted Foods Company, Inc., Dover, Del. Refrigerating apparatus. 1,822,124; Sept. 8.

Birdseye, Clarence, and B. Hall, Gloucester, Mass., assignors, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Refrigerating apparatus. 1,822,123; Sept. 8.

Birmann, Otto, assignor to Gifford-Wood Company, Hudson, N. Y. Flight conveyer. 1,822,797; Sept. 8.

Bishop, Alois S., Kohler, Wis. Basket-ball game. 1,821,918; Sept. 8.

Bishop & Babcock Mfg. Co., The. (See Levy, Edward J., assignor.)

Bishop, William K. (See Wenn, L. A., and Bishop.)

Blackmore, Lloyd, assignor to General Motors Corporation, Detroit, Mich. Steering gear. 1,822,855; Sept. 8.

Blakely, William W. (See Garilus, Bernt, assignor.)

Blakely, William W., Dexter, Mich. Coupling. 1,822,389; Sept. 8.

Bláthy, Otto T., Budapest, Hungary. Rotating field magnet for turbo-generators. 1,822,723; Sept. 8.

Blauner, Sidney H., Philadelphia, Pa. Dress protector. 1,822,267; Sept. 8.

Blaw-Knox Company. (See Martin, M. G., and Voelker, assignors.)

Bloch, Leon, Cleveland, Ohio. Bathtub. 1,821,959; Sept. 8.

Blodgett, Charles A., South Brewer, and H. H. Hanson, Bangor, assignors to Eastern Manufacturing Company, South Brewer, Me. Treatment of cellulosic materials. 1,822,125; Sept. 8.

Blodgett, Charles A., South Brewer, and H. H. Hanson, Bangor, assignors to Eastern Manufacturing Company, South Brewer, Me. Preparing sulphite pulp for filaments and films. 1,822,126; Sept. 8.

Bluemmel, Franz. (See Krzikalla, H., and Bluemmel.)

Blum, Anna and E., Chicago, Ill. Lingerie fastening device. 1,822,333; Sept. 8.

Blum, Ella. (See Blum, Anna and E.)

Blume, William A., Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y. Friction clutch block. 1,822,430; Sept. 8.

Boeing Airplane Company. (See Harding, John, jr., assignor.)

Boles, Robert T., assignor of one-half to H. C. Steinberg, El Dorado, Ark., and one-half to Phillips Petroleum Company, Bartlesville, Okla. Oil well rig. 1,822,268; Sept. 8.

Bolin, Simon, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass. Loom. 1,822,334; Sept. 8.

Bonsall, Seymour W., Newark, N. J., assignor, by mesne assignments, to E. W. Small and A. Benedict, trustees, New York, N. Y. Natural air drier. 1,822,431; Sept. 8.

Boos, Henry P. (See Hagman, Harry C., assignor.)

Booth, Frank, San Diego, Calif. Ironing apparatus. 1,822,269; Sept. 8.

Booth, Morris F., assignor to Mullins Manufacturing Corporation, Salem, Ohio. Cooling unit for refrigerating systems. Re18,182; Sept. 8.

Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Work chuck. 1,821,926; Sept. 8.

Borden, Arthur G., Washington, D. C. Advertising device. 1,822,608; Sept. 8.

Borden, Charles R. C., Brookline, Mass. Dust arresting ventilator. 1,822,471; Sept. 8.

Borden Company, The. (See McClatchie, John M., assignor.)

Bour, John W. (See Eckles, Noble, assignor.)

Bowlus, Claude A., Birmingham, assignor to Chrysler Corporation, Detroit, Mich. Welding. 1,822,197; Sept. 8.

Boyer, William E. (See Schellentrager, E. W., and Boyer.)

Bradley, Walter R., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Article handling apparatus. 1,822,432; Sept. 8.

Brady, George H., assignor to Improved Fire Detector Corporation, Baltimore, Md. Thermostatic circuit closer, 1,822,472; Sept. 8.

Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake mechanism for automotive vehicles. 1,822,688; Sept. 8.

Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)

Brand, Harry R., New York, N. Y. Beverage preparing and dispensing machine. 1,822,433; Sept. 8.

Brandl, Albert, and C. F. Wegner, Wausa, Nebr. Engine governor. 1,822,473; Sept. 8.

Brandt Automatic Cashier Company. (See Brandt, Edward J., assignor.)

Brandt, Edward J., assignor to Brandt Automatic Cashier Company, Watertown, Wis. Key for coin delivery machines. 1,822,560; Sept. 8.

Braunsdorf, Otto. (See Nawiasky, P., Braunsdorf, and Holzapfel.)

Bressler, Robert E., Hammond, and D. V. Moses, assignors to Graves Corporation, East Chicago, Ind. Filter tank. 1,822,689; Sept. 8.

Brewer-Titchener Corporation, The. (See Wenn, L. A., and Bishop, assignors.)

Brewster, Oswald C., Casper, Wyo., assignors to Standard Oil Company, Whiting, Ind. Bubble tower construction. 1,822,609; Sept. 8.

Bridgwater, Ernest R., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Rubber product and preparing the same. 1,822,561; Sept. 8.

Briggs Manufacturing Company. (See Ball, Albert P., assignor.)

Bristow, Thomas H. (See Hill, M. G., and Bristow.)

Broderick, Frank W. (See Gollnick, P. A., Broderick, and Emde.)

Brooks Bank Notes Company. (See Brooks, Joshua L., jr., assignor.)

Brooks, Joshua L., jr., assignor to Brooks Bank Note Company, Springfield, Mass. Display box. 1,821,960; Sept. 8.

Brooks, Winfred M., West Orange, N. J. Sealing means. 1,822,390; Sept. 8.

Broughton, Arthur E., Minneapolis, Minn. Automatic control adjusting device. 1,822,005; Sept. 8.

Brown, Albert W., Hatboro, Pa. Combined bread box, slicer, and knife holder. 1,822,581; Sept. 8.

Brown Company. (See Burke, Edmund, assignor.)

Brown, Ernest R., and P. S., Wilkinsburg, Pa. Thread protector. Re18,184; Sept. 8.

Brown, Franklin H., assignor to Cup-Lok Packing Company, Philadelphia, Pa. Stuffing box loader. 1,822,562; Sept. 8.

Brown, Porter S. (See Brown, Ernest R. and P. S.)

Brown, Robert L., assignor to Harnischfeger Corporation, Milwaukee, Wis. Operating mechanism for clutches. 1,822,335; Sept. 8.

Brown, Stephen D., and C. E. Shook, Waterloo, Iowa; said Shook assignor of one-sixth to said Brown. Traction cleat for vehicle wheels. 1,822,582; Sept. 8.

Brown, Sumner E., Dedham, Mass., assignor by mesne assignments to Guide Lamp Corporation, Anderson, Ind. Light directing means. 1,822,839; Sept. 8.

Brunton, Walter T., assignor of one-half to Paul Lessing, New York, N. Y. Electric light socket. 1,822,434; Sept. 8.

Bryant, Ozro N. (See Marsland, R., and Bryant.)

Bucklen, Herbert E., Corporation. (See Bucklen, Herbert E., assignor.)

Bucklen, Herbert E., Elkhart, Ind., assignor to Herbert E. Bucklen Corporation. Wind driven generator. 1,822,078; Sept. 8.

Budd Wheel Company. (See Davenport, Talmon A., assignor.)

Budlong, Robert D., assignor to The Hammond Clock Company, Chicago, Ill. Clock case. Des. 85,026; Sept. 8.

Budlong, Robert D., assignor to The Hammond Clock Company, Chicago, Ill. Clock case. Des. 85,027; Sept. 8.

Bull, Arthur A., assignor to Handy Governor Corporation, Detroit, Mich. Filter. 1,822,006; Sept. 8.

Bull, William R., Longmeadow, and C. E. Simpson, Springfield, Mass. Shock absorbing mechanism. 1,822,079; Sept. 8.

Bullard, Edward P., Fairfield, Conn. Tool clamping means. 1,822,514; Sept. 8.

Bulova, Arde, assignor to Bulova Watch Company, Inc., New York, N. Y. Dial for watches and clocks. Des. 85,028; Sept. 8.

Bulova Watch Company. (See Bulova, Arde, assignor.)

Bumsvign-Maschinenwerke Grimme, Natalis & Co., A.-G. (See Hoffmeister, Hermann, assignor.)

Bunch, Joel D., Hollywood, assignor to Earl Aviation Corporation, Ltd., Los Angeles, Calif. Aeroplane fuselage jig. 1,822,270; Sept. 8.

Bureau, Arthur A., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Reel. 1,822,474; Sept. 8.

Burgess, Louis. (See Loomis, N. E., and Burgess.)

Burgess, Louis, Roselle, N. J. Converting hydrocarbon oils. 1,822,861; Sept. 8.

Burghart, Lloyd M., Baltimore, Md., assignor to U. S. Industrial Alcohol Co., New York, N. Y. Manufacture of cellulose acetate. 1,822,563; Sept. 8.

Burke, Edmund, Portland, Me., assignor to Brown Company, Berlin, N. H. Multiple conduit. 1,822,475; Sept. 8.

Burns, Wilfred E., Burlingame, assignor to M. J. B. Co., San Francisco, Calif. Can hopper. 1,822,336; Sept. 8.

Bushnell, Alvah, Company. (See Clarke, R. E., and Reeves, assignors.)

Buss, Benhard G., Golden, Ill. Locking catch for foot pedals. 1,822,198; Sept. 8.

Butler, John E., Redwood City, Calif. Making hydraulic products from anhydrite. 1,821,961; Sept. 8.

Butts, Daniel G., Covington, La., assignor to The Faultless Manufacturing Company, Baltimore, Md. Garment loop. 1,822,724; Sept. 8.

C-S Engineering Company. (See Schellens, Eugene L. and C. A., assignors.)

Cable, Joseph S., Altoona, Pa. Combined case and display device. 1,822,007; Sept. 8.

Cadman, Addi B., Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Brake. 1,822,564; Sept. 8.

Cadoret, Louis A., Pawtucket, R. I. Aircraft. 1,822,476; Sept. 8.

Cairns Development Company. (See Carns, Edmund B., assignor.)

Callaway, Alfred S., Chicago, Ill., assignor to The Kendall Company, Boston, Mass. Athletic supporter. 1,821,962; Sept. 8.

Callsen, Jürgen, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Tribromoalcohols and preparing the same. 1,822,008; Sept. 8.

Campbell, Robert F., Stuart, Fla. Cattle muzzle. 1,822,610; Sept. 8.

Candor, Robert R., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,822,583; Sept. 8.

Caplan, Solomon, Brooklyn, assignor to Combustion Utilities Corporation, New York, N. Y. Purification of tar acid-bearing oils. 1,822,842; Sept. 8.

Caple, Sherman L., Sheridan, Wyo. Trouser support. 1,822,477; Sept. 8.

Carboloy Company, (See Martin, Walter H., assignor.) ard Display, Inc. (See Lamb, Franklin, assignor.)

Carns, Edmund B., New York, N. Y., assignor to Cairns Development Company, Wilmington, Del. Boat hull. 1,822,199; Sept. 8.

Carr, Bradley S., assignor to American Manganese Steel Company, Chicago, Ill. Support. 1,822,009; Sept. 8.

Carr, Fred S., Newton, Mass., deceased; M. F. Carr, executor, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,822,565; Sept. 8.

Carr, Moses F., executor. (See Carr, Fred S.)

Carroll, John B., Oak Park, Ill. Writing pad or recording device. 1,822,200; Sept. 8.

Carroll, Thomas J., New York, N. Y. Movable sign. 1,822,798; Sept. 8.

Cartia, Charles C., McKeesport, Pa. Lock. 1,822,611; Sept. 8.

Caruso, Louis. (See Cowen, J. L., and Caruso.)

Caruso, Louis, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y. Combined rheostat and switch. 1,821,927; Sept. 8.

Case, J. I., Company. (See Hendrickson, R. O., and Nelson, assignors.)

Case, Theodore W., Auburn, N. Y. Method and apparatus for producing photographic records. 1,822,865; Sept. 8.

Cassidy, Marshall, San Diego, Calif. Partitioned starting gate. 1,822,080; Sept. 8.

Caster, John E., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,822,337; Sept. 8.

Caterpillar Tractor Co. (See Thoen, Lowell H., assignor.)

Cecil, Charlie C., Salem, assignor to Rex Manufacturing Co., Roanoke, Va. Glove. 1,822,010; Sept. 8.

Celanese Corporation of America. (See Platt, Herbert, assignor.)

Centra Handels- & Industrie A.-G. (See Schaljohann, Paul S., assignor.)

Challenge Machinery Company. (See Lee, James E., assignor.)

Champion Hardware Company, The. (See Wellman, Guy A. assignor.)

Chandler, Franklin F. (See Young, R. E., and Chandler.)

Chandler, Milford G., Flint, Mich. Fuel feeding means for internal combustion engines. 1,822,011; Sept. 8.

Cheatham Electric Switching Device Co., et al. (See Richterkessing, Frank H., assignor.)

Chem-Electric Engineering Corporation. (See Winchester, William E., assignor.)

Cherry-Burrell Corporation. (See Feldmeier, Harvey, assignor.)

Chicago Pneumatic Tool Company. (See Meunier, Leon F., assignor.)

Chicago Pneumatic Tool Company. (See Stevens, Edward W., assignor.)

China American Tobacco Company. (See Saunders, J. H., and Williford, assignors.)

Christensen, Norman V., assignor to Union Special Machine Company, Chicago, Ill. Seam for sewed articles. 1,822,799; Sept. 8.

Christman, Edward A., assignor to The Faultless Manufacturing Company, Baltimore, Md. Undergarment. 1,822,515; Sept. 8.

Chrysler Corporation. (See Bowlus, Claude A., assignor.)

Chrysler Corporation. (See Cochrane, Walter S, assignor.)

Cincinnati Grinders Incorporated. (See Caster, John E., assignor.)

Cincinnati Grinders Incorporated. (See Hopkins, Cecil W., assignor.)

Clancy, John C., Asbury Park, N. J. Treatment of hydrocarbons. 1,822,127; Sept. 8.

Clark, Alva B., Wyoming, N. J., assignor to American Telephone and Telegraph Company. Telephone echo suppressor. 1,821,928; Sept. 8.

Clark, Frederick, Alameda, assignor to Alaska Packers Association, San Francisco, Calif. Transfer mechanism for can filling machines. 1,821,963; Sept. 8.

Clark, John O., University City, Mo., assignor by mesne assignments, to American Manganese Steel Company, Hanger for continuous enameling furnaces. 1,822,012; Sept. 8.

Clarke, Carlysle H. (See Clarke, Clovis E. and C. H.)

Clarke, Clarence M., Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Garment press. 1,822,613; Sept. 8.

Clarke, Clovis E. and C. H., Richmond, Va. Chair. Des. 85,029; Sept. 8.

Clarke, Rudolph E., Delanco, N. J., and R. B. Reeves, assignors to Alvah Bushnell Company, Philadelphia, Pa. Removable card holder for wallets. 1,822,843; Sept. 8.

Clary, Jan P., Hartford, Conn. Automatic inkwell. Des. 85,030; Sept. 8.

Clayton, Martin M., Baden, Pa., assignor to National Electric Products Corporation, New York, N. Y. Box and clamp therefor. 1,822,128; Sept. 8.

Clemens, Clinton A., Retsil, Wash. Excavator. 1,822,338; Sept. 8.

Cleveland Trust Company, The. (See Hater, Harry J., assignor.)

Cloutier, Arthur N. (See Lawson, R. H., and Cloutier.)

Cluett, Peabody & Co. (See Abbott, Thomas J., assignor.)

Cobb, Henry Z., Providence, R. I., assignor to Revere Rubber Company, Chelsea, Mass. Wheel frame. 1,822,516; Sept. 8.

Cochrane, Walter S., Detroit, assignor to Chrysler Corporation, Highland Park, Mich. Crank case ventilator. 1,822,201; Sept. 8.

Coggeshall, George W., Washington, D. C. Recovering oil from oil sands. 1,822,271; Sept. 8.

Colby, Delores S., Waterways, Alberta, Canada. Airship. 1,822,202; Sept. 8.

Cole, Henry, Company. (See Mayer, Leo, assignor.)

Coleman Auto Spring Suspension Company. (See Coleman, Stephen L. C., assignor.)

Coleman, Stephen L. C., Fredericton, New Brunswick, Canada, assignor to Coleman Auto Spring Suspension Company, Limited. Vehicle suspension. Re18,177; Sept. 8.

Coley, James, assignor to Wildt and Company Limited, Leicester, England. Yarn winding machine. 1,822,391; Sept. 8.

Collins, Frank M., Fullerton, Calif. Indicating means for wells. 1,822,203; Sept. 8.

Colman, Howard G. (See Stewart, D. J., and Lilja, assignors.)

Combustion Utilities Corporation. (See Caplan, Solomon, assignor.)

Combustion Utilities Corporation. (See Klees, Albert L., assignor.)

Compagnie Internationale pour la Fabrication des Essences et Petroles. (See Joseph, Alfred, assignor.)

Cone Gearing Corporation. (See Cone, Samuel I., assignor.)

Cone, Samuel I., Portsmouth, assignor to Cone Gearing Corporation, Norfolk, Va. Hindley worm gear. 1,822,800; Sept. 8.

Conn, C. G., Ltd. (See Gulick, Edward J., assignor.)

Connolly, Stephen J., Beverly, Mass., assignor to The Benevolent and Protective Order of Elks of The United States of America, Chicago, Ill. Badge. Des. 85,031; Sept. 8.

Connors, Frederick P., Detroit, Mich. Automatic expanding belt pulley. 1,822,584; Sept. 8.

Consolidated Mining and Smelting Company of Canada, Limited. (See Hannay, W. H., and Lee, assignors.)

Consortium fur Elektrochemische Industrie. (See Herrmann, W. O., Deutsch, and Baum, assignors.)

Consortium fur Elektrochemische Industrie G. m. b. H. (See Herrmann, W. O., and Haehnel, assignors.)

Constable, Charles E., assignor to The National Marking Machine Company, Cincinnati, Ohio. Ribbon actuating device for laundry tag marking machines. 1,822,339; Sept. 8.

Construction Francaise d'Apparells de Laiterie, Société Anonyme. (See Minet, Auguste, assignor.)

Cook, Wilder H., Athens, N. Y. Collapsible decoy. 1,822,763; Sept. 8.

Cooper, Hal S. and M. L., Knoxville, Tenn. Cleaning block. 1,822,725; Sept. 8.

Cooper, Morris L. (See Cooper, Hal S. and M. L.)

Cooper, William H., Amsterdam, N. Y., assignor, by mesne assignments, to Bigelow-Sanford Carpet Co., Inc. Patterned Axminster fabrics and making the same. 1,822,478; Sept. 8.

Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Unit formed partially of fired ceramic material. 1,822,013; Sept. 8.

Coppus, Frans H. C., assignor to A. M. C. Wecksberg, V. L. Wood, and F. H. C. Coppus, trustees, Worcester, Mass. Air turbine exhauster for locomotives. 1,822,081; Sept. 8.

Coppus, H. C., et al., trustees. (See Coppus, Frans H. C., assignor.)

Cornner, Asa F., and G. W. K. King, assignors of one-sixth to P. P. Haag, Coffeyville, Kans., seven-twelfth to R. T. Osborn, New York, N. Y., one-sixth to said Cornner, and one-twelfth to said King. Valve. 1,821,929; Sept. 8.

Cosgrove, Caroline E., administratrix. (See Cosgrove, John W.)

Cosgrove, John W., deceased, by C. E. Cosgrove, administratrix, Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Cementing machine. 1,822,014; Sept. 8.

Couade, Maurice, Paris, France. Cinematographic projector. 1,821,930; Sept. 8.

Coultas, Wilbur J., assignor to Deere & Company, Moline, Ill. Mower. 1,822,204; Sept. 8.

Couten, Marie, (born Dominget), Vincennes, France. Automatic fire extinguisher. 1,822,801; Sept. 8.

Cowen, Joshua L., New York, N. Y., and L. Caruso, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y. Electrical toy. 1,822,015; Sept. 8.

Cowman, Clifford J., Mallard, Iowa. Humidifier. 1,822,644; Sept. 8.

Cox, John W., assignor to Erie Malleable Iron Company, Erie, Pa. Conduit fitting. 1,821,931; Sept. 8.

Craig, Palmer H., Cincinnati, Ohio, assignor to Invex Corporation. System and apparatus employing the Hall effect. 1,822,129; Sept. 8.

Craig, Palmer H., Cincinnati, Ohio, assignor to Invex Corporation. Electrical converter. 1,822,130; Sept. 8.

Crane Co. (See Olson, Charles A., assignor.)

Crane, Guy G., Owosso, Mich. Remote pressure control system for gas plants. 1,822,045; Sept. 8.

Creamette Company, The. (See Quiggle, A. W., and Lagaard, assignors.)

Critchfield, Walter O., Shelby, Ohio. Manifolding device. 1,822,764; Sept. 8.

Crosley Radio Corporation, The. (See Edelman, Philip E., assignor.)

Crossley, Alfred. (See Ryan, D. L., and Crossley.)

Crowell, J. Addison, assignor to J. B. Crowell & Son, Wallkill, N. Y. Brick mold. 1,822,646; Sept. 8.

Crowell, James B., & Son. (See Crowell, J. Addison, assignor.)

Crown Cork & Seal Company. (See Darling, Frank L., assignor.)

Culver, Edward. (See Watson, F. J. G. B., Culver, and Emerson.)

Cup-Lok Packing Company. (See Brown, Franklin H., assignor.)

Cushman, Orville E., and B. B. Farrington, Berkeley, assignors to Standard Oil Company of California, San Francisco, Calif. Waterproofing composition and preparing same. 1,821,932; Sept. 8.

Cutler-Hammer, Inc. (See Hunter, Richard B., assignor.)

Cutting, George B., Worcester, Mass. Packing. 1,821,964; Sept. 8.

Dahlstrom, Frank P. (See George, J. R., and Dahlstrom.)

Daley, Dennis W., Parkersburg, W. Va. Building block. 1,822,802; Sept. 8.

Dalgliesh, Herbert V., assignor, by mesne assignments, to Research & Development Corporation, Atlanta, Ga. Cooled lubricating system. 1,822,726; Sept. 8.

Danger, H. (See Danger, Otto G. L., assignor.)

Danger, Otto G. L., assignor to the firm H. Danger, Hamburg, Germany. Machine for automatically baking waffles and the like. 1,822,803; Sept. 8.

Daniels, Lloyd C., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Separation of organic acids. 1,822,016; Sept. 8.

Darby, Samuel E., trustee. (See Parker, Richard B., assignor.)

Darling, Frank L., Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Packaging and apparatus therefor. 1,822,614; Sept. 8.

Darnell, Rex C., Royal Oak, assignor of one-third to H. B. Putnam, Detroit, and one-third to F. L. Munson, Warren, Mich. Sound regenerating apparatus. 1,821,933; Sept. 8.

Darrow, Burgess, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire. Des. 85,032; Sept. 8.

Davenport, Talmon A., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Wheel. Des. 85,033; Sept. 8.

David, William H., Tottenville, N. Y. Automobile and aeroplane signal. 1,822,017; Sept. 8.

Davies, John B., Crafton, assignor to Mine Safety Appliances Company, Pittsburgh, Pa. Medicament applicator. 1,822,566; Sept. 8.

Davies, John B., Crafton, assignor to Mine Safety Appliances Company, Pittsburgh, Pa. Medicament applicator. 1,822,567; Sept. 8.

Davis, Floyd E., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Spring suspension for six-wheel vehicles. 1,822,131; Sept. 8.

Davis, Harold G., Denver, Colo. Steering device for aeroplanes. 1,822,082; Sept. 8.

Davis, Kenneth, Ebensburg, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del. Process and mechanism for separating intermixed divided materials. 1,822,840; Sept. 8.

Davis, Ralph E., Baker, Oreg. Antiskid calk for tractor belts. 1,822,132; Sept. 8.

Decker, Abram M., Red Bank, assignor of one-half to A. T. Dwight, Red Bank, N. J. Muffler and propeller assembly for internal combustion engines. 1,822,272; Sept. 8.

Deere & Company. (See Coultas, Wilbur J., assignor.)

Deere & Company. (See Silver, Walter H., assignor.)

Delle, Hermann, assignor to Aceta G. m. b. H., Berlin-Lichtenberg, Germany. Twisting continuously spun artificial threads. 1,822,018; Sept. 8.

De Laval Separator Company, The. (See Lindgren, Hans O., assignor.)

De Leeuw, Adolph L., Plainfield, N. J. Continuous rotary machine. 1,822,690; Sept. 8.

De Leeuw, Adolph L., Plainfield, N. J. Fluid pressure operated continuous rotary machine. 1,822,691; Sept. 8.

De Leeuw, Adolph L., Plainfield, N. J. Adjustable drive for spindle feeds. 1,822,692; Sept. 8.

Del Valle, Guillermo A., Schenectady, N. Y., assignor to General Electric Company. Film phonograph. 1,822,727; Sept. 8.

Demmler, Henry L., Kewanee, Ill. Core booking apparatus. 1,822,205; Sept. 8.

De Navrotzky, Nicolas, Paris, France. Apparatus for the recovery of the alcohol evolved by bread baking ovens. 1,822,804; Sept. 8.

De Silva, Roberto. (See Newton, C. D., and De Silva.)

Desmond, John J., Hubbard Woods, Ill., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Lighting fixture. 1,822,619; Sept. 8.

Detroit Steel Products Company. (See Barclay, Gustaf I., assignor.)

Deutsch, Hans. (See Herrmann, W. O., Deutsch, and Baum.)

Deutsche Telephonwerke und Kabelindustrie Aktiengesellschaft. (See Wilde, Kurt, assignor.)

d'Halloy, Audoin, Paris, France. Automatic lathe. 1,822,805; Sept. 8.

Diaz, Pedro, Montevideo, Uruguay. Filing appliance of numerous applications. 1,822,273; Sept. 8.

Dibble, Claude M., assignor to Moore Brothers Company, Joliet, Ill. Stove construction. 1,822,274; Sept. 8.

Dibner, Abraham B., Peekskill, N. Y. Terminal connection. 1,822,693; Sept. 8.

Dicke, Oscar H., assignor to General Railway Signal Company, Rochester, N. Y. Train dispatching system for railroads. 1,822,083; Sept. 8.

Dickey, Carl A., Alto, Tex. Multicolor thread sewing machine. 1,822,765; Sept. 8.

Diena, Jacopo, Paris, France. Apparatus for producing sudoriferous vapor baths. 1,822,615; Sept. 8.

Dirkes, Vincent M., assignor to General Motors Corporation, Detroit, Mich. Abrasive pad. 1,822,856; Sept. 8.

Dixon, Joseph, Crucible Company. (See Van Dorn, Horace B., assignor.)

Doble, Jesse W., Berkeley, now by judicial change of name W. Doble, assignor to Doble Laboratories, San Francisco, Calif. Boiler control system. 1,822,133; Sept. 8.

Doble Laboratories. (See Doble, Jesse W., assignor.)

Doble, Warren. (See Doble, Jesse W.)

Dodd, West, Des Moines, Iowa. Automobile compass. 1,822,340; Sept. 8.

Doehler Die-Casting Co. (See Morin, Louis H., assignor.)

Donahue, John E., et al. (See King, Joseph F., assignor.)

Donahue, Thomas M., et al. (See King, Joseph F., assignor.)

Donle, Harold P., Meriden, Conn., assignor, by mesne assignments, to Radio Inventions, Inc. Magnetic pick up. 1,822,841; Sept. 8.

Dos Santos Gallo, Carlos H. A. S., Marintha Grande, Portugal. Propeller. 1,822,867; Sept. 8.

Douglas, Peter S., San Francisco, and J. Filsbill, Cupertino, Calif. Collapsible box. 1,822,585; Sept. 8.

Dow Chemical Company, The. (See Putnam, Mark E., assignor.)

Dreher, Myron A., assignor to Morgan and Wright, Detroit, Mich. Tire. Des. 85,034; Sept. 8.

Dri-Steam Valve Corporation. (See Pascale, Pasquale, assignor.)

Drucker, Samuel B., Brooklyn, N. Y. Apparatus for making emulsions. 1,822,275; Sept. 8.

Dryice Equipment Corporation. (See Jones, Charles L., assignor.)

Dryice Equipment Corporation. (See Killeffer, David H., assignor.)

Dryice Equipment Corporation of America. (See Jones, C. L., and Small, assignors.)

Dubbert, Herman F., assignor to American Gypsum Company, Port Clinton, Ohio. Apparatus for grinding and separating minerals. 1,822,647; Sept. 8.

Ducey, Alfred M., assignor to Kadow Foundation, Inc., Toledo, Ohio. Sign. 1,822,084; Sept. 8.

Duffy, John M., Ventnor, N. J. Furnace appliance. 1,822,517; Sept. 8.

Duffy, Michael J., Brooklyn, N. Y. Safety razor and hair cutter. 1,822,766; Sept. 8.

Duggan, John M., and H. A. Neder, Woodbridge, N. J. Oil burning apparatus. 1,822,518; Sept. 8.

Duncanson, Walter E., assignor to J. G. Wilson Corporation, New York, N. Y. Door movement. 1,822,767; Sept. 8.

Duncanson, Walter E., assignor to J. G. Wilson Corporation, New York, N. Y. Folding partition. 1,822,768; Sept. 8.

Dunham, Rex J., Milwaukee, Wis. Antiskid device. 1,822,616; Sept. 8.

Dunkley, Melville E., assignor to Rosenberg Bros. and Co., San Francisco, Calif. Fruit treatment machine and method. 1,822,276; Sept. 8.

Dunlop, James. (See Kinnard, L. J., and Dunlop.)

Dupont, Adolph J., Rayne, La. Boll weevil insect destroyer and gatherer. 1,822,277; Sept. 8.

Du Pont, E. I., de Nemours & Company. (See Bridgwater, Ernest R., assignor.)

Du Pont Rayon Company. (See Nlogret, Henri F., assignor.)

Durium Products Corporation. (See Acheson, A. M., and Ramsey, assignors.)

Durium Products Corporation. (See Schulz, Edwin M., assignor.)

Duvall, James, Camas, Wash. Garment bag. 1,822,341; Sept. 8.

Dwight, Amos T. (See Decker, Abram M., assignor.)

Eames, William F., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Selective signal system. 1,822,085; Sept. 8.

Earl Aviation Corporation, Ltd. (See Bunch, Joel D., assignor.)

Eastern Alcohol Corporation, The. (See Funk, Forest J., assignor.)

Eastern Manufacturing Company. (See Blodgett, C. A., and Hanson, assignors.)

Eastern Manufacturing Company. (See Seaman, Stewart E., assignor.)

Eaton Axle & Spring Company, The. (See Veale, G. W., and Lindeman, assignors.)

Eavenson, Howard N., & Associates, Mining Engineers. (See Hicks, John R., assignor.)

Eckardt, William F. (See Hudson, W. L., and Eckardt.)

Eckberg, Rudolph A., Kansas City, Mo. Roofing. 1,822,134; Sept. 8.

Eckles, Noble, assignor of one-half to J. W. Bour, Los Angeles, Calif. Refrigerating device. 1,822,586; Sept. 8.

Eclipse Machine Company. (See McGrath, William L., assignor.)

Economy Baler Company. (See Langford, G. W., Barrows, and McLean, assignors.)

Edelman, Philip E., Chicago, Ill., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Capacity stabilizing device. 1,822,728; Sept. 8.

Edelmann, E., & Co. (See Edelmann, Leo, assignor.)

Edelmann, E., & Co. (See Edelmann, L., and Eden, assignors.)

Edelmann, Leo, assignor to E. Edelmann & Co., Chicago, Ill. Bearing antirattler. 1,822,479; Sept. 8.

Edelmann, Leo, assignor to E. Edelmann & Co., Chicago, Ill. Protecting means for frangible floats. 1,822,481; Sept. 8.

Edelmann, Leo, and H. W. Eden, assignors to E. Edelmann & Co., Chicago, Ill. Luggage carrier. 1,822,480; Sept. 8.

Eden, Harold W. (See Edelmann, L., and Eden.)

Edwards, O. M., Company Inc., The. (See Axe, Roy T., assignor.)

Eger, Ernst, assignor to Morgan & Wright, Detroit, Mich. Inner tube protector. 1,822,568; Sept. 8.

Ehrlich, Louis B., assignor to The Electric Auto-Lite Company, Toledo, Ohio. Frame structure for dynamo-electric machines. 1,822,342; Sept. 8.

Elane, Halvor O., Washington Island, Wis. Radial connecting rod. 1,822,694; Sept. 8.

Elnson-Freeman Co. (See Elnson, Morris M., assignor.)

Elnson, Morris M., Yonkers, assignor to Elnson-Freeman Co., Inc., Long Island City, N. Y. Display or supporting stand. 1,822,569; Sept. 8.

Elnson, Morris M., Yonkers, assignor to Elnson-Freeman Co. Inc., Long Island City, N. Y. Display device. 1,822,570; Sept. 8.

Elnson, Morris M., Yonkers, assignor to Elnson-Freeman Co. Inc., Long Island City, N. Y. Display device. 1,822,571; Sept. 8.

Eisenhut, August. (See Krauch, C., Pier, and Eisenhut.)

Eitzen, August D., assignor to News Projection Corporation, New York, N. Y. Tape regulating device for stock quotation projectors. 1,822,769; Sept. 8.

Eitzen, August D., assignor to News Projection Corporation, New York, N. Y. Ticker tape controlling means. 1,822,770; Sept. 8.

Eitzen, August D., assignor to News Projection Corporation, New York, N. Y. Ticker protecting means. 1,822,771; Sept. 8.

Ekstedt, Henry V., East St. Louis, Ill. Key holder. Des. 85,035; Sept. 8.

Electric Auto-Lite Company, The. (See Ehrlich, Louis B., assignor.)

Electric storage Battery Company, The. (See Lidke, William F., assignor.)

Electro Metallurgical Company. (See Becket, Frederick M., assignor.)

Electrolux Servel Corporation. (See Knight, Donald B., assignor.)

Electrolux Servel Corporation. (See Taylor, Robert S., assignor.)

Ellinger, Julius B., Seattle, Wash. Airship. 1,822,849; Sept. 8.

Ellingson, Elling, San Francisco, Calif. Mortise latch lock. 1,822,278; Sept. 8.

Ellingson, Elling, San Francisco, Calif. Door latch. 1,822,279; Sept. 8.

Emde, Kurt. (See Gollnick, P. A., Broderick, and Emde.)

Emerson, Alfred H. (See Watson, F. J. G. B., Culver, and Emerson.)

Ericson, Eric P., and W. J. Moyle, Hibbing, Minn. Control valve plunger. 1,822,617; Sept. 8.
Erie Malleable Iron Company. (See Cox, John W., assignor.)
Erie Malleable Iron Company. (See Selah, Howard A., assignor.)
Ervay, John F., Portland, Oreg. Carpenter's hammer. 1,822,280; Sept. 8.
Eschner, Leroy. (See Worthington, Everett, assignor.)
Essen, Eric E., Brooklyn, N. Y. Spring testing device. 1,822,587; Sept. 8.
Esterman, Joseph, and B. Gellman, London, England. Finger ring. 1,822,302; Sept. 8.
Estwick, Charles F., assignor to General Railway Signal Company, Rochester, N. Y. Signaling system for railroads. 1,822,572; Sept. 8.
Euga, Arthur B., Dover, Ohio. Excavating machine. 1,822,695; Sept. 8.
Evanoff, Theodore, Portland, Oreg. Ironing board. 1,822,281; Sept. 8.
Evans Auto Loading Co. Inc., The. (See Evans, Edward S., assignor.)
Evans, Edward S., assignor to The Evans Auto Loading Co. Inc., Detroit, Mich. Anchoring device. 1,822,648; Sept. 8.
Evans, William H., Chicago, Ill. Expansion pilot. 1,822,649; Sept. 8.
Facchin, Gioachino, College Point, Long Island, N. Y. Life saving and salvage apparatus for submarines. 1,822,435; Sept. 8.
Fairchild, Sherman M., New York, N. Y. Mapping. 1,822,650; Sept. 8.
Fairhurst, John T., assignor to J. G. Wilson Corporation, New York, N. Y. Door mounting. 1,822,729; Sept. 8.
Falknor, Frank B., and T. R. Goldsborough, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Relay system. 1,822,086; Sept. 8.
Farrington, Bruce B. (See Cushman, O. E., and Farrington.)
Fassnacht, Karl, and R. Gloss, assignors to Speidel Chain Co., Providence, R. I. Flexible chain. 1,822,393; Sept. 8.
Fasting, Johan S., Valby, near Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Grinding mill. 1,822,436; Sept. 8.
Faultless Manufacturing Company, The. (See Butts, Daniel G., assignor.)
Faultless Manufacturing Company, The. (See Christman, Edward A., assignor.)
Faultless Manufacturing Company, The. (See Krein, Andrew J., assignor.)
Favini, William E. (See Mizzy, A. D., and Favini.)
Federal Telegraph Company. (See Gebhard, Louis A., assignor.)
Feingold, Bernard, New York, N. Y. Dish drainer. 1,822,087; Sept. 8.
Feldman, Abraham G., Chicago, Ill. Crib. Des. 85,036; Sept. 8.
Feldman, Abraham G., Chicago, Ill. Crib. Des. 85,037; Sept. 8.
Feldman, Abraham G., Chicago, Ill. Crib. Des. 85,038; Sept. 8.
Feldmeier, Harvey, Little Falls, N. Y., assignor, by mesne assignments, to Cherry-Burrell Corporation, Wilmington, Del. Heat interchanger. 1,821,934; Sept. 8.
Fell, Clarence A., Etwall, England. Cage or crate for transporting livestock. 1,822,772; Sept. 8.
Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Zapf, Georg, assignor.)
Ferguson, Carry E., and C. E. Shockney, Lima, Ohio. Flue filer. 1,822,773; Sept. 8.
Ferguson, Richard E., St. Joseph, Mo. Surgical table. 1,822,206; Sept. 8.
Ferguson, William, Flint, Mich. Hammer. 1,822,394; Sept. 8.
Ferguson-Roberts, Kenneth, Oakland, Calif. Harmony calculator. 1,822,457; Sept. 8.
Fiat Societa Anonima. (See Zerbi, Tranquillo, assignor.)
Fichthorn, Willi. (See Bauriedel, G., and Fichthorn.)
Filshill, James. (See Douglas, P. S., and Filshill.)
Finch, James L., New York, N. Y., assignor to Radio Corporation of America. System for parallel operation of alternators. 1,821,935; Sept. 8.
Firth-Sterling Steel Company. (See Welch, Elmer B., assignor.)
Fish, John R., West Springfield, assignor to E. S. Searle, Springfield, Mass. Holder for steel wool. 1,822,395; Sept. 8.
Fisher, William C., assignor to The Russell Manufacturing Company, Middletown, Conn. Endless elastic band. 1,822,135; Sept. 8.
Fiske, Bradley A., New York, N. Y. Reading machine. 1,822,651; Sept. 8.
Fitz Gerald, Arthur G., West Newton, and A. A. Anderson, Waltham, Mass.; said Anderson assignor to said Fitz Gerald. Outboard drive for motor boats. 1,822,573; Sept. 8.
Fitzgerald Manufacturing Company, The. (See Reichold, Ludwig, assignor.)
Fleck, Joseph, Long Branch, N. J. Article cover. 1,822,014; Sept. 8.
Fleming, Janet G., Riverside, Calif. Doll. 1,822,437; Sept. 8.
Ford Motor Company. (See Ploch, W. F., and Martin, assignors.)
Fostoria Glass Company. (See Stahl, Eugene, assignor.)
Foulder, Henry B., Glenbrook, Conn. Tie twisting tool. 1,822,136; Sept. 8.
Foulder, Henry B., Glenbrook, Conn. Bag tying machine. 1,822,137; Sept. 8.
Fowler, Morris G., and D. Niconoff, Clarkdale, Ariz., assignors to United Verde Copper Company. Dezincing mattes and slags. 1,822,396; Sept. 8.
Fowler, Morris G., O. C. Ralston, and C. R. Kuzell, assignors to United Verde Copper Company, Clarkdale, Ariz. Recovering copper from slags. 1,822,588; Sept. 8.
Fowler, Truman S., Boothbay Harbor, Me. Ash tray. Des. 85,039; Sept. 8.
Fox, Charles G., London, England. Apparatus for distributing materials on road and other surfaces. 1,822,207; Sept. 8.
Fox, Charles H., assignor to Millers Falls Company, Millers Falls, Mass. Clamping lever for planes. 1,822,520; Sept. 8.
Fox, Edgar N., and E. Hampshire, assignors to The Garlock Packing Company, Palmyra, N. Y. Piston rod packing and scraping means. 1,822,521; Sept. 8.
Franke, Robert. (See Spröngerts, E., Schmidt, and Franke.)
Franklin, Charles S., Buckhurst Hill, England, assignor to Radio Corporation of America. Wireless telegraph and telephone aerial. 1,821,936; Sept. 8.
Franklin Railway Supply Company. (See Zouck, George H., assignor.)
Frederick, Roy L., and T. L. Williams, Detroit, Mich. Method of machining individual units and apparatus therefor. 1,822,730; Sept. 8.
Frick, Meindert. (See Kampmeyer, Frederick, E., sr., assignor.)
Fricke, Hermann, Halberstadt, Germany. Insert for preserve tins for sausages. 1,822,138; Sept. 8.
Fricke, Josef, Dillingen-Saar, Germany. Stereoprinting block. 1,822,574; Sept. 8.
Friedrich, Paul O. E., Millville, N. J., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y. Apparatus for spinning glass filaments. 1,821,937; Sept. 8.
Frigidaire Corporation. (See Andrews, Frank W., assignor.)
Frigidaire Corporation. (See Candor, Robert R., assignor.)
Frigidaire Corporation. (See Maccabee, David E., assignor.)
Frigidaire Corporation. (See Stout, E. O., and Summers, assignors.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frigidaire Corporation. (See Wayman, Charles R., assignor.)
Frosted Foods Company. (See Barry, James J., assignor.)
Frosted Foods Company. (See Birdseye, Clarence, assignor.)
Frosted Foods Company. (See Birdseye, C., and Hall, assignors.)
Frosted Foods Company. (See Hall, Bicknell, assignor.)
Fulcher, William H., and C. H. Wood, Oakland, Calif. Method and apparatus for making containers of vegetative pulp. 1,822,020; Sept. 8.
Fuller, Frank F., Elizabeth, N. J. Automatic piling lubricator. 1,822,208; Sept. 8.
Fuller Lehigh Company. (See Jones, Michael D., assignor.)
Funk, Forest J., Wilmington, assignor, by mesne assignments, to The Eastern Alcohol Corporation, Wilmington, Del. Butyl alcohol and acetone fermentation process. 1,822,139; Sept. 8.
Fuoss, Raymond M. (See Simons, F. L., Skinner, and Fuoss.)
Fuqua, Clarence V., Kansas City, Mo. Fluid clarifying apparatus. 1,822,021; Sept. 8.
Furness Corporation. (See Nonamaker, Frederick C., assignor.)
Gabriel Company, The. (See Beecher, Eugene L., assignor.)
Gallagher, Edward J., jr., Baltimore, Md. Windshield heater. 1,822,774; Sept. 8.
Gallaher, Andrew J., St. Louis Mo. Plug for oil wells and apparatus for seating the same. 1,822,140; Sept. 8.
Gallaher, Andrew J., St. Louis, Mo. Closing oil wells. 1,822,141; Sept. 8.
Gallasch, George B. (See Loeser, E. O., and Gallasch.)
Gammeter, John R., Akron, Ohio, assignor to The B. F. Gardner, Daniel, Ruell, France. Manufacture of pure colophony and other resinous products from resinous plants or woods. 1,822,210; Sept. 8.
Gallus, Bernt, Detroit, assignor to W. W. Blakely, Dexter, Mich. Mailing machine. 1,822,282; Sept. 8.
Garlock Packing Company, The. (See Fox, E. N., and Hampshire, assignors.)
Gay, Arthur W., Reno, Nev. Flexible vulcanizing spotter. 1,822,022; Sept. 8.
Geary, Albert V., Westville, N. H. Hydraulic power plant. 1,822,806 Sept. 8.
Gebhard, Louis A., Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. High power rectifier system. 1,822 618; Sept. 8.
Geizy, J. R., S. A. (See Oswald, Leopold, assignor.)
Gellman, Barnet. (See Esterman, J., and Gellman.)

Gemmer Manufacturing Company. (See Marles, Henry, assignor.)
Gemmer Manufacturing Company. (See Osburn, Wallace N., assignor.)
General Aniline Works, Inc. (See Hentrich, W., and Rimele, assignors.)
General Aniline Works, Inc. (See Krzikalla, H., and Bluemmel, assignors.)
General Aniline Works, Inc. (See Kunz, M. A. Koeberle, and Zerweck, assignors.)
General Aniline Works, Inc. (See Nawalsky, P. Braunsdorf, and Holzapfel, assignors.)
General Chemical Company. (See Harkness, Andrew M., assignor.)
General Chemical Company. (See Merriam, Henry F., assignor.)
General Electric Company. (See Beekman, Royce A., assignor.)
General Electric Company. (See del Valle, Guillermo A., assignor.)
General Electric Company. (See Karapetoff, Vladimir, assignor.)
General Electric Company. (See McEachron, Karl B., assignor.)
General Electric Company. (See Umansky, Leonid A., assignor.)
General Electric Company. (See Van Nordstrand, Robert D., assignor.)
General Electric Company. (See Wyman, Le Roy L., assignor.)
General Motors Corporation. (See Blackmore, Lloyd, assignor.)
General Motors Corporation. (See Dirkes, Vincent M., assignor.)
General Motors Corporation. (See McCuen, Charles L., assignor.)
General Motors Research Corporation. (See Summers, C. E., and Van Degrift, assignors.)
General Railway Signal Company. (See Dicke, Oscar H., assignor.)
General Railway Signal Company. (See Estwick, Charles F., assignor.)
General Railway Signal Company. (See Hailes, William D., assignor.)
General Railway Signal Company. (See Merkel, Joseph F., assignor.)
George, Jerome R., and F. P. Dahlstrom, assignors to Morgan Construction Company, Worcester, Mass. Coiling hot metal stock. 1,822,589; Sept. 8.
Gerken, Charles J., South Jacksonville, assignor of one-fourth to J. C. Phillips, Jacksonville, Fla. Toy. 1,822,283; Sept. 8.
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schroeter, Fritz, assignor.)
Giardino, Joachim, West New York, N. J. Let-off mechanism for novelty fabric looms. 1,822,696; Sept. 8.
Giebeler, Wilhelm, Konigstein-on-the-Elbe, Germany. Paper machine. 1,822,023; Sept. 8.
Gifford-Wood Company. (See Birmann, Otto, assignor.)
Gilburg, Roy O. (See Kohl, T. G., and Gilburg.)
Gillet, Alexis F., assignor to Jubilee Manufacturing Co., Omaha, Nebr. Automobile chain accessory. 1,822,343; Sept. 8.
Gillette-Vibber Company. (See Noble, Edward J., assignor.)
Gleason Works. (See Wildhaber, Ernest, assignor.)
Globe-Wernicke Company, The. (See Thies, Urban C., assignor.)
Gloss, Richard. (See Fassnacht, K., and Gloss.)
Gluckert, Josephine A., Philadelphia, Pa. Snuffer for candles. 1,822,652; Sept. 8.
Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening-inserting apparatus. 1,821,965; Sept. 8.
Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening inserting machine. 1,821,966; Sept. 8.
Göhre, Otto. (See Jannek, J., and Göhre.)
Goldberg, Benjamin D., Brooklyn, N. Y. Vacuum cleaner. 1,822,522; Sept. 8.
Goldsborough, Thaddeus R. (See Falknor, F. B., and Goldsborough.)
Goldschmidt, Th., A.-G. (See Sander, Wilhelm, assignor.)
Goldstein, William, New York, N. Y. Shoe. Des. 85,040; Sept. 8.
Golinick, Paul A., F. W. Broderick, and K. Emde, assignors to Selectograph Company, Chicago, Ill. Hand operated addressing machine. 1,822,344; Sept. 8.
Goodrich, B. F., Company, The. (See Gammeter, John R., assignor.)
Goodrich, B. F., Company, The. (See Kmentt, Waldemar D., assignor.)
Goodrich, B. F., Company, The. (See Richardson, C. M., and Howe, assignors.)
Goodrich Company, New York, N. Y. Method and apparatus for cutting sheet material into strips. 1,822,209; Sept. 8.
Goodson, Henry, Clareton, Wyo. Pitman boxing. 1,822,807; Sept. 8.
Goodyear Tire & Rubber Company, The. (See Darrow, Burgess, assignor.)
Gopfert, Heinrich, Apolda, Germany. Knitting machine. 1,822,024; Sept. 8.
Gordon, Maurice B., Roselle, N. J. Design producing device. 1,822,808; Sept. 8.
Goss Printing Press Company. (See Daycock, Kenneth G., assignor.)
Gosselin, Henry G., assignor to Berlin Foundry and Machine Company, Berlin, N. H. Economizer. 1,822,397; Sept. 8.
Gouinlock, Harold. (See Taylor, George L., assignor.)
Gould Storage Battery Corporation. (See Friedrich, Paul O. E., assignor.)
Gould Storage Battery Corporation. (See Hubbard, Albert S., assignor.)
Grabler Manufacturing Company, The. (See McCabe, Frank E., assignor.)
Grand Rapids Brass Company. (See Roedding, Gordon E., assignor.)
Graner, Hans. (See Ossanna, J., Graner, and Hoffmann.)
Grange, Leo O., assignor to W. J. Jarratt, Chicago, Ill. Vulcanizing apparatus. 1,822,590; Sept. 8.
Gravely, Benjamin F., Dunbar, W. Va. Hillside agricultural machine. 1,822,211; Sept. 8.
Graver Corporation. (See Bressler, R. E., and Moses, assignors.)
Graves, Henry W., Montreal, Quebec, Canada. String-supported figure toy. 1,821,967; Sept. 8.
Gray, Percy W., assignor to Vickers Limited, Westminster, England. Apparatus for use in the fire control of anti-aircraft guns. 1,821,968; Sept. 8.
Grebe, A. H., & Co. (See Grebe, A. H., and Lowell, assignors.)
Grebe, Alfred H., Hollis, and P. D. Lowell, Jamaica, assignors to A. H. Grebe & Co., Inc., Richmond Hill, N. Y. Phonograph coupling for radioreceivers. 1,822,653; Sept. 8.
Greene, Frank C., and I. F. Lauck, Seattle, Wash., assignors to Old Ben Coal Corporation, Chicago, Ill. Extracting values from coal and like material. 1,822,142; Sept. 8.
Greene, John S., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic apparatus. 1,822,345; Sept. 8.
Greene, Vergil O., Kansas City, Mo. Radiator ornament. Des. 85,041; Sept. 8.
Greenwood, George E., San Francisco, Calif. Form hanger. 1,821,969; Sept. 8.
Greis, Frederick A., Lynbrook, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,822,438; Sept. 8.
Greve, Herman L., Hollis, assignor to International Mailing Tube and Wrapper Company, Brooklyn, N. Y. Carton for shipping purposes. 1,822,575; Sept. 8.
Greve, Herman L., Hollis, assignor to International Mailing Tube & Wrapper Company, Brooklyn, N. Y. Mailing carton for books. 1,822,576; Sept. 8.
Griffiths, Richard T., Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del. Hand grip sleeve and making same. 1,822,212; Sept. 8.
Grigsby-Grunow Company. (See Perry, Arthur R., assignor.)
Grimes, David, Grasmere, assignor to Grimes Radio Engineering Company, Inc., New York, N. Y. Method and apparatus for making graphical representations at a distance. 1,822,868; Sept. 8.
Grimes Radio Engineering Company. (See Grimes, David, assignor.)
Griswell, Edward W., et al. (See Hutchinson, Harry, assignor.)
Grossman, Morris, New York, N. Y. Multicolor flash light. 1,822,619; Sept. 8.
Grundmann, Michael G., Vincennes, Ind. Shoe fastener. 1,822,284; Sept. 8.
Guide Lamp Corporation. (See Brown, Sumner E., assignor.)
Guiles, Daniel W., Seattle, Wash. Faucet. 1,822,346; Sept. 8.
Guinn, Samuel E., Johnson City, Tenn. Humidor. Des. 85,042; Sept. 8.
Guinot, Henri M. (See Ricard, E., Savarit, and Guinot.)
Gulbransen Company. (See Loar, Lloyd, assignor.)
Gulick, Edward J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Horn. 1,822,025; Sept. 8.
Gurney, Erving R., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Axle and final drive for vehicles. 1,822,143; Sept. 8.
Gussak, Hyman, New York, N. Y. Combination shirt and drawers. 1,822,482; Sept. 8.
Gustafson, Charles J. (See Gustafson, Emil, assignor.)
Gustafson, Emil, assignor to C. J. Gustafson, Cicero, Ill. Music sheet turner. 1,822,523; Sept. 8.
Guy, Frederick M., assignor of one-half to T. G. Murton, Detroit, Mich. Vibration damper. 1,822,026; Sept. 8.
Gyro Process Company. (See Smith, Clyde L., assignor.)
Haag, Plumus P., et al. (See Cornner, A. F., and King, assignors.)
Hadley Company, Inc., The. (See Mealy, Charles A., assignor.)
Haenel, Wolfram. (See Herrmann, W. O., and Haehnel.)
Hagman, Harry C., assignor of one-half to H. P. Boos, Minneapolis, Minn. Eliminating fusible patterns from dental molds. 1,822,285; Sept. 8.
Hahnemann, Paul R., assignor to Niagara Machine & Tool Works, Buffalo, N. Y. Sheet metal working machine. 1,822,697; Sept. 8.

Hahnemann, Walter, Berlin-Marienfelde, Germany, and K. Rath, New York, N. Y., assignors to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Alternating current system. 1,822,439; Sept. 8.

Hailes, William D., assignor to General Railway Signal Company, Rochester, N. Y. Continuous inductive train control system. 1,822,088; Sept. 8.

Haines, Claude E., Tacoma, Wash. Picture frame support. 1,822,398; Sept. 8.

Haines Hosiery Mills Inc. (See Paget, Harold F., assignor.)

Hakemeyer, Charles, Paterson, N. J. Let off device for looms. 1,822,286; Sept. 8.

Hall, Bicknell. (See Birdseye, C., and Hall.)

Hall, Bicknell, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Refrigerating apparatus. 1,822,089; Sept. 8.

Hallert, Albert J., Oakland, Calif. Fireplace heater. 1,822,090; Sept. 8.

Hallert, Albert J., Oakland, Calif. Fireplace heater. 1,822,091; Sept. 8.

Hamilton, Edward P., assignor to Hamilton Manufacturing Company, Two Rivers, Wis. Drawer pull. 1,822,213; Sept. 8.

Hamilton, John R., Cleveland Heights, assignor to Automatic Sprinkler Company of America, Cleveland, Ohio. Alarm for sprinkler system. 1,822,654; Sept. 8.

Hamilton, John R., assignor to Automatic Sprinkler Company of America, Cleveland, Ohio. Valve. 1,822,655; Sept. 8.

Hamilton Manufacturing Company. (See Hamilton, Edward P., assignor.)

Hammond Clock Company, The. (See Budlong, Robert D., assignor.)

Hammond Clock Company, The. (See Worthington, Everett, assignor.)

Hammond, John H., jr., Gloucester, Mass. Sostenuto control. 1,822,214; Sept. 8.

Hampshire, Edmund. (See Fox, E. N., and Hampshire.)

Handelan, Daniel, Minneapolis, Minn. Humidifier. 1,822,656; Sept. 8.

Handy Governor Corporation. (See Bull, Arthur A., assignor.)

Hannay, William H., and F. E. Lee, Tadanac, British Columbia, assignors to The Consolidated Mining and Smelting Company of Canada, Limited, Montreal, Canada. Electrodeposition of metal. 1,821,970; Sept. 8.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Oiling device. 1,822,092; Sept. 8.

Hanson, Hugo H. (See Blodgett, C. A., and Hanson.)

Harding, John, jr., assignor to Boeing Airplane Company, Seattle, Wash. Control device. 1,822,287; Sept. 8.

Harding, Robert, jr., White Plains, N. Y., assignor to Arcturus Radio Tube Company, Newark, N. J. Supporting elements in an electron device. 1,822,731; Sept. 8.

Harding, Robert, jr., White Plains, N. Y., assignor to Arcturus Radio Tube Company, Newark, N. J. Electrode supporting structure. 1,822,732; Sept. 8.

Hardy, Charles G. (See Jenkins, R. L., and Hardy.)

Harkey, Book L., Long Beach, Calif. Self-serving cafe or cafeteria. 1,822,288; Sept. 8.

Harkness, Andrew M., Nyack, assignor to General Chemical Company, New York, N. Y. Waste heat boiler. 1,822,483; Sept. 8.

Harnischfeger Corporation. (See Brown, Robert L., assignor.)

Harnsberger, Audley E., assignor to The Pure Oil Company, Chicago, Ill. Vacuum distillation of oil. 1,822,733; Sept. 8.

Harold, Charles F., Winchester, Va. Clothes washing machine. 1,822,215; Sept. 8.

Harper, Samuel B., Shreveport, La. Plate holding device. 1,822,809; Sept. 8.

Harrington, Jerome F., New York, N. Y. Necktie rack. 1,822,734; Sept. 8.

Hart, Hans, Munich, Germany. Device for tautening the cover of folding boats. 1,822,810; Sept. 8.

Harter, George F., assignor to The Standard Electric Time Company, Springfield, Mass. Electric time clock correction. 1,822,144; Sept. 8.

Harter, George F., assignor to The Standard Electric Time Company, Springfield, Mass. Electric time clock correction. 1,822,145; Sept. 8.

Hartinger, Hans. (See Bauersfeld, W., and Hartinger.)

Hartmann Trunk Company. (See Ritter, Alois A., assignor.)

Hartness, James, Springfield, Vt. Cam controlled thread gauge. 1,822,027; Sept. 8.

Hartness, James, Springfield, Vt. Screw thread gauge and method of gauging. 1,822,028; Sept. 8.

Hartson, Earl S., Los Angeles, Calif. Underreamer. 1,822,216; Sept. 8.

Hartsough, Ralph C., Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating electrical conductors. 1,822,484; Sept. 8.

Harvey, Walter J., Toronto, Ontario, Canada. Sunlight control and concentrating device. 1,822,029; Sept. 8.

Hastings, Herbert, Brighton, assignor to Rochester Manufacturing Company, Rochester, N. Y. Combined liquid level and pressure indicating mechanism. 1,822,735; Sept. 8.

Hater, Harry J., Cincinnati, Ohio, assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio. Piston. Re18,178; Sept. 8.

Hattery, Joseph S., Waterloo, Iowa, assignor of forty-nine one-hundredths to J. Van Llew, Los Angeles, Calif. Bracket device. 1,822,577; Sept. 8.

Hawley, Kent A., Victor, N. Y., assignor to Locke Insulator Corporation, Baltimore, Md. Insulator. 1,822,485; Sept. 8.

Haynes, Robert C., Brooklyn, N. Y. Automatic folding step stool. 1,822,399; Sept. 8.

Healy, Eugene C., Melrose, and N. D. Whalen, Attleboro, Mass. Curtain pull. 1,822,146; Sept. 8.

Heeter, Joseph W., Butler, Pa. Well tool and making same. 1,822,400; Sept. 8.

Heftler, Paul-Emile, Detroit, Mich., assignor to Societe Generale des Carburateur Zenith, Geneva, Switzerland. Carburetor. 1,822,401; Sept. 8.

Hektner, Joel, assignor to The Timken Roller Bearing Company, Canton, Ohio. Flexible journal box mounting. 1,822,347; Sept. 8.

Helmers, Henry H., Doon, Iowa. Self feeder construction. 1,822,289; Sept. 8.

Hemphill Company. (See Lawson, R. H., and Cloutier, assignors.)

Hendrickson, Robert O., and T. Nelson, assignors to J. I. Case Company, Racine, Wis. Tractor. 1,822,093; Sept. 8.

Hendrix, Leroy, Madeira, Ohio. Diaper supporter. 1,822,524; Sept. 8.

Henninger, Albert B., Berlin-Halensee, Germany. Self supporting car body of sheet metal for motor cars. 1,822,775; Sept. 8.

Henry, Andrew L., assignor to Trolley Shoe Wheel Company, Indianapolis, Ind. Trolley shoe. 1,822,620; Sept. 8.

Henry, Andrew L., assignor to Trolley Shoe Wheel Co., Indianapolis, Ind. Trolley shoe. 1,822,621; Sept. 8.

Hentrich, Winfrid, Wiesdorf-on-the-Rhine, and E. Rimele, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New azo dyestuffs. 1,821,938; Sept. 8.

Henze, Joseph J., assignor to A. Backus Jr. & Sons, Detroit, Mich. Packing crate. 1,822,736; Sept. 8.

Hercules Cement Corporation. (See Kind, Morris, assignor.)

Heritage, Clark C., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Drier. 1,822,486; Sept. 8.

Herrmann, Willy O., H. Deutsch, and E. Baum, assignors to Consortium fur Elektrochemische Industrie, Munich, Bavaria, Germany. Manufacture of esters of vinyl alcohol. 1,822,525; Sept. 8.

Herrmann, Willy O., and W. Haehnel, assignor to Consortium fur Elektrochemische Industrie G. m. b. H., Munich, Germany. Shoe stiffener. 1,822,526; Sept. 8.

Hermann, Wolfgang, assignor to Metal Specialties Manufacturing Co., Chicago, Ill. Spraying device for spraying paints, varnishes, etc. 1,822,622; Sept. 8.

Heywood-Wakefield Company. (See Bolin, Simon, assignor.)

Hickok, George F., Burlingame, Calif. Shock absorber and stop for pruning shear handles. 1,822,591; Sept. 8.

Hicks, John R., assignor to Howard N. Eavenson & Associates, Mining Engineers, Pittsburgh, Pa. Buffer and draw head. 1,822,094; Sept. 8.

High, Jurien S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical sound producing device. 1,822,095; Sept. 8.

Highway Trailer Company. (See Williams, Leroy E., assignor.)

Hildebrandt, Otto, Berlin, Germany. Arch support. 1,822,030; Sept. 8.

Hill, Marion M., assignor of one-fourth to M. E. Peck and L. J. Wall, Sioux Falls, S. Dak. Drive extension for trucks. 1,822,623; Sept. 8.

Hill, Maurice G., and T. H. Bristow, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Shoe stiffener and making the same. 1,821,930; Sept. 8.

Hill, Remmel H., Columbia, Mo. Instrument tray. 1,822,487; Sept. 8.

Hills Brothers Company, The. (See Smith, Albert K., assignor.)

Hinsen, William, Cat Spring, Tex. Traveling wheeled gyroscopic toy. 1,821,940; Sept. 8.

Hixon, Alfred J., Braintree, Mass. Lighting fixture. 1,822,527; Sept. 8.

Hoeftmann, Alexander O., Worcester, Mass. Cable shield. 1,822,624; Sept. 8.

Hoeltke, William F., Journal Square, N. J. Safety gas cock. 1,822,402; Sept. 8.

Hoffmeister, Herman, Gliesmarode, near Brunswick, assignor to Bumsviga-Maschinenwerke Grimme, Natalie & Co., A.-G., Brunswick, Germany. Calculating machine. 1,822,031; Sept. 8.

Hofmann, Fritz. (See Ossana, J., Graner, and Hofmann.)

Holcomb, Alpheus E., assignor to Koehring Company, Milwaukee, Wis. Power dipper trip. 1,822,403; Sept. 8.

Holcomb & Hoke Manufacturing Company. (See Holcomb, James I., assignor.)

Holcomb, James I., assignor to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind. Cabinet for pop corn machines. Des. 85,043; Sept. 8.

Hollander, Emil E., East Orange, assignor to Star Electric Motor Co., Newark, N. J. Motor frame construction. 1,822,096; Sept. 8.

Holland-Letz, Ludwig, Crown Point, Ind. Device for taking up the wear on antifriction bearings. 1,821,976; Sept. 8.

Holzapfel, Eduard. (See Nawiasky, P., Braunsdorf, and Holzapfel.)

Hoover Company, The. (See Nelson, Rudolph S., assignor.)

Hopkins, Cecil W., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,822,348; Sept. 8.

Horning, Harry L., Waukesha, Wis. Internal combustion engine. 1,822,097; Sept. 8.

Horning, Harry L., assignor to Waukesha Motor Company, Waukesha, Wis. Intake mixture heating system. 1,822,147; Sept. 8.

Hörrmann, Karl. (See Kraemer, E., and Hörrmann.)

Horton, Erwin C. (See Hueber, H., and Horton.)

Horton, William M., assignor to The Lamson & Sessions Company, Cleveland, Ohio. Bolt. 1,822,657; Sept. 8.

Hortvet, Richard M., assignor to Mahr Manufacturing Company, Minneapolis, Minn. Control device for flow of fluids. 1,822,578; Sept. 8.

Hough, Arthur, Passaic, N. J. Explosive. 1,822,290; Sept. 8.

How, Harlan W., assignor to Struthers-Wells Titusville Corporation, Warren, Pa. Baffle packing for heat exchangers. 1,822,698; Sept. 8.

Howe, Arthur J. (See Richardson, C. M., and Howe.)

Hubbard, Albert S., Bethel, Conn., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y. Current converting system. 1,822,611; Sept. 8.

Hubbard & Company. (See Kerschner, Richard M., assignor.)

Hubbard, Henry E., assignor, by mesne assignments, to Addressograph Company, Chicago, Ill. Printing device. 1,822,291; Sept. 8.

Hudson, Walter L., and W. F. Eckhardt, Greensboro, N. C. Joint fastener. 1,822,217; Sept. 8.

Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Apparatus and method for producing sound. 1,822,579; Sept. 8.

Huffman Manufacturing Company, The. (See Lumley, Maurice, assignor.)

Hughes, Charles H., Hackensack, N. J., assignor, by mesne assignments, to Semet-Solvay Engineering Corporation, New York, N. Y. Coke oven. 1,822,699; Sept. 8.

Hughes, Chauncey W. B. Marion, Ind. Bottle. Des. 85,044; Sept. 8.

Hull, Foster J., assignor to Pangborn Corporation, Hagerstown, Md. Sound blast chamber door. 1,822,404; Sept. 8.

Hume, Fred, St. Louis, Mo., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in the manufacture of shoes. Re18,179; Sept. 8.

Hunt, Wilfred, Glasgow, Scotland. Rotary mechanism for the transmission of power at varying speeds. 1,822,776; Sept. 8.

Hunt, William F., New Brighton, and H. C. Stelling, Orangeburg, N. Y., assignors to Oxweld Railroad Service Company. Acetylene generator. 1,822,625; Sept. 8.

Hunter, David E., assignor to Shaw-Walker Company, Muskegon, Mich. Furniture top construction. 1,822,032; Sept. 8.

Hunter, Richard B., Shorewood, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric control device. 1,822,700; Sept. 8.

Huntress, Ernest H., Melrose, assignor to Plymouth Cordage Company, Plymouth, Mass. Marking device. 1,822,098; Sept. 8.

Huntress, Ernest H., Melrose, assignor to Plymouth Cordage Company, Plymouth, Mass. Inchoately marked articles of manufacture. 1,822,148; Sept. 8.

Hutchinson, Harry, assignor of one-fourth to E. W. Griswell and one-fourth to F. Ardrey, Absecon, N. J. Tire valve. 1,822,592; Sept. 8.

Hyland, Lawrence A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. High frequency stabilizer. 1,822,812; Sept. 8.

I. G. Farbenindustrie Aktiengesellschaft. (See Jannek, J., and Göhre, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Michel, Richard, assignor.)

Ichijyo, Kurannosuke, Sacramento, Calif. Fruit cutting knife. 1,821,971; Sept. 8.

Improved Fire Detector Corporation. (See Brady, George H., assignor.)

Ingersoll Milling Machine Company, The. (See Sproul, William C., assignor.)

Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)

Ingersoll-Rand Company. (See Lear, Earl B., assignor.)

Ingersoll-Rand Company. (See Shepherd, Benjamin F., assignor.)

Ingram, Pearl, Los Angeles, Calif. Bag handle. Des. 85,045; Sept. 8.

Inland Glass Works, Inc. (See Allen, Joseph H., assignor.)

International Combustion Engineering Corporation. (See Jackson, George P., assignor.)

International Combustion Engineering Corporation. (See Kruse, John R., assignor.)

International Fireproof Products Corporation. (See Vivas, Fernando S., assignor.)

International Mailing Tube and Wrapper Company. (See Greve, Herman L., assignor.)

International Motor Company. (See Davis, Floyd E., assignor.)

International Motor Company. (See Gurney, Erving R., assignor.)

International Motor Company. (See Jupp, William B., assignor.)

International Motor Company. (See Masury, Alfred F., assignor.)

International Motor Company. (See Matthews, Philip E., assignor.)

International Standard Electric Corporation. (See Wright, Esmond P. G., assignor.)

Invex Corporation. (See Craig, Palmer H., assignor.)

Jabouley, Jeanny B., Villeurbanne, assignor, by mesne assignments, to L. Jalounstre, Paris, France. Circular loom for weaving. 1,822,292; Sept. 8.

Jackel, Arthur P., Paducah, Ky., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,822,128; Sept. 8.

Jackson, George P., Flushing, assignor to International Combustion Engineering Corporation, New York, N. Y. Water wall. 1,822,405; Sept. 8.

Jacobs, Frances A., assignor to The Sterling Company, Chicago, Ill. Dress. Des. 85,046; Sept. 8.

Jacobson, Harry, Brooklyn, N. Y. Gasoline filter. 1,822,440; Sept. 8.

Jahnke, Erich F., Appleton, Wis. Speaking clock. 1,822,813; Sept. 8.

Jalounstre, Leon. (See Jabouley, Joanny B., assignor.)

Jannek, Josef, and O. Göhre, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of soluble products from solid carbonizable substances. 1,822,349; Sept. 8.

Janvier, Julien H., Paris, France. Arrangement of perforations in cinematographic films. 1,822,350; Sept. 8.

Jarratt, Walter J. (See Grange, Leo O., assignor.)

Jenkin, Robert C. G., assignor to Wrights' Ropes Limited, Birmingham, England. Wire rope. 1,822,219; Sept. 8.

Jenkins, Russell L., and C. G. Hardy, Anniston, Ala., assignors to Swann Research, Incorporated. Sealing composition. 1,822,033; Sept. 8.

Jessen, Theodor A., Husum, Germany. Grate bar. 1,822,034; Sept. 8.

Joha, Elmer N., Wauwatosa, assignor to Reliable Knitting Works, Milwaukee, Wis. Knitted hat and making the same. 1,822,488; Sept. 8.

John, Wesley E., Johannesburg, Transvaal, South Africa. Moving lens cinematograph machine. 1,822,528; Sept. 8.

Johnson, Carl, Glencoe, Ill. Ignition device for oil burners and the like. 1,822,777; Sept. 8.

Johnson, Edward V., Gowrie, Iowa. Holder for egg beaters. 1,822,035; Sept. 8.

Johnson, Ellsworth W., assignor to Midwest Motor Supply, Hector, Minn. Cream cooler. 1,822,593; Sept. 8.

Johnson, Ernest W., London, assignor of one-half to Luwax Limited, London, England. Hydraulic shock absorber. 1,822,406; Sept. 8.

Johnson, Frank P., Martindale, Tex. Mechanic's tool or clamping lever. 1,822,294; Sept. 8.

Johnson, Hiram W., Miami, Fla. Sales slip pad holder. 1,822,295; Sept. 8.

Johnson, Jesse H., Denver, Colo. Combined enlarging projector and photographic camera. 1,822,220; Sept. 8.

Johnson, John E., Chicago, Ill. Coupling. 1,822,149; Sept. 8.

Johnston, Joseph W., Stenbenville, Ohio. Making brake drums. 1,822,814; Sept. 8.

Jonas, Julius, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Locating earth faults in electrical systems. 1,822,701; Sept. 8.

Jones, Charles L., Pittsburgh, Pa., and J. D. Small, Doughston, assignors by mesne assignments to Dryice Equipment Corporation of America, New York, N. Y. Method of and apparatus for storage and shipment of solid carbon dioxid. 1,822,626; Sept. 8.

Jones, Charles L., Pelyham, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus and method. 1,822,351; Sept. 8.

Jones, Michael D., Allentown, assignor to Fuller Lehigh Company, Fullerton, Pa. Process and apparatus for pulverizing material. 1,822,221; Sept. 8.

Jones, Wiley D., Jackson, Miss. Cheese cutter. 1,822,869; Sept. 8.

Jordan, C. F., Company. (See Protzeller, Harry W., assignor.)

Jordan, Hans. (See Schoeller, W., and Jordan.)

Joseph, Alfred, Enghein, Seine-et-Oise, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France. Regenerating contaminated purifying agents. 1,822,293; Sept. 8.

Jubilee Manufacturing Co. (See Gillet, Alexis F., assignor.)

Jung, Karl, Berlin, Germany. Interior grinding machine for grinding out bores accurately. 1,822,222; Sept. 8.

Junkers, Hugo, Dessau, Germany. Metal casing. 1,822,036; Sept. 8.

Jupp, William B., assignor to International Motor Company, New York, N. Y. Exciter differential field control. 1,822,150; Sept. 8.

Kadane, Fred A., Dallas, Tex. Poultry dressing cabinet. 1,821,972; Sept. 8.

Kadow Foundation, Inc. (See Ducey, Alfred M., assignor.)

Kaiser, Ludwig. (See Lichtenberger, T., and Kaiser.)

Kalle & Co., Aktiengesellschaft. (See Sprôngerts, E., Schmidt, and Franke, assignors.)

Kampmeyer, Frederick E., sr., assignor of one-third to M. Frick, Sibley, Iowa. Automatic exchanger for mail. 1,822,658; Sept. 8.

Kanofsky, Morris, assignor to J. Stein, Chicago, Ill. Floral basket. Des. 85,047; Sept. 8.

Kanolt, Clarence W., New York, N. Y. Registering device. 1,822,489; Sept. 8.

Kaplan, Victor, Brunn, Austria. Hydraulic turbine. 1,822,778; Sept. 8.

Karapetoff, Vladimir, Ithaca, N. Y., assignor to General Electric Company. Polyphase intersheath cable. 1,822,737; Sept. 8.

Karapetoff, Vladimir, Ithaca, N. Y., assignor to General Electric Company. Polyphase intersheath cable. 1,822,738; Sept. 8.

Karl, Rath. (See Hahnemann, W., and Rath.)

Keenok Gears Limited. (See Prendergast, Richard S., assignor.)

Keilly, John E., Greensboro, N. C., assignor to Vick Chemical Company, Philadelphia, Pa. Combined stopper and applicator. 1,822,296; Sept. 8.

Keller, Robert. (See Meyer-Berg, H., and Keller.)

Kelly, William J., assignor of one-half to A. D. Bach, Brooklyn, N. Y. Making shoes. 1,822,852; Sept. 8.

Kelly, William J., Brooklyn, N. Y., assignor of one-half to Arthur D. Basch, Brooklyn, N. Y. Making shoes. 1,822,853; Sept. 8.

Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)

Kelsey-Hayes Wheel Corporation. (See White, John W., assignor.)

Kemery, Ode, Wichita, Kans. Hat block and collapsible stand. 1,822,297; Sept. 8.

Kendall Company, The. (See Callaway, Alfred S., assignor.)

Kennedy, Homer R., Los Angeles, Calif. Wire spoke straightener and wheel aligning tool. 1,822,407; Sept. 8.

Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Baffle. 1,822,151; Sept. 8.

Kerrigan, Stephen J., Mahoney Plane, Pa. Slate jig. 1,822,298; Sept. 8.

Kerschner, Grace T., executrix. (See Kerschner, Richard M.)

Kerschner, Richard M., deceased, Pittsburgh; G. T. Kerschner, Zelienople, Pa., executrix, assignor to Hubbard & Company. Making insulator racks. 1,822,037; Sept. 8.

Keys, Walter C., Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio. Mounting bracket. 1,822,529; Sept. 8.

Killeffer, David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus and method. 1,822,850; Sept. 8.

Kind, Morris, Bryn Mawr, assignor to Hercules Cement Corporation, Philadelphia, Pa. Apparatus for handling cement or like material in bulk. 1,822,530; Sept. 8.

King, Bert W., assignor to Barnes Scale Company, Detroit, Mich. Check controlled scale. 1,822,038; Sept. 8.

King, George W. K. (See Cornner, A. F., and King.)

King, Joseph F., assignor of one-fourth to T. M. Donahue and one-fourth to J. E. Donahue, Portland, Me. Composition for treating pulp. 1,822,779; Sept. 8.

King, Louise, administratrix. (See King, Warren D.)

King, Warren D., Peabody, Mass., deceased; L. King, administratrix. Thermally actuated circuit controller. 1,822,408; Sept. 8.

Kingsbury, Edward H., executor. (See Smith, Edward G.)

Kinnard, Luther J., Chicago, and J. Dunlop, Park Ridge, Ill., assignors, by mesne assignments, to Westinghouse Electric Elevator Company. Selenium cell door closer. 1,822,152; Sept. 8.

Kinnard, Luther J., Los Angeles, Calif., assignor to Westinghouse Electric & Manufacturing Company. Control cable hanger. 1,822,153; Sept. 8.

Kinney, Fay D., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for applying pressure to shoes. 1,822,039; Sept. 8.

Kirkland, Harold R., South Orange, N. J. Annunciator or similar article. Des. 85,048; Sept. 8.

Kirsch, Michael, Milwaukee, Wis. Extracting air from water. 1,822,659; Sept. 8.

Kistner, Merrill M., Indianapolis, Ind. Wringer. 1,822,299; Sept. 8.

Klees, Albert L., assignor to Combustion Utilities Corporation, New York, N. Y. Apparatus for burning liquid fuel. 1,822,844; Sept. 8.

Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)

Klinger, Johann R., Nord-Bohmen, Czechoslovakia. Construction of ships, boats, and the like. 1,822,223; Sept. 8.

Klipstein, A., and Company. (See McArdle, Edward H., assignor.)

Klugh, Bethune G., Birmingham, and W. R. Seyfried, Anniston, assignors, by mesne assignments, to Swann Research, Inc., Birmingham, Ala. Manufacture of di-ammonium phosphate. 1,822,040; Sept. 8.

Kmentt, Waldemar D., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Apparatus for placing washers on heel-mold pins. 1,822,099; Sept. 8.

Knight, Donald B., Brooklyn, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,822,224; Sept. 8.

Knuuti, Charles O., Berwyn, and C. A. Metzger, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Assembling apparatus. 1,822,441; Sept. 8.

Kobel, Ernst, Ennetbaden, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Evacuating pump. 1,822,702; Sept. 8.

Koeberle, Karl. (See Kunz, M. A., Koeberle, and Zerweck.)

Koehring Company. (See Holcomb, Alpheus E., assignor.)

Koepp, Frido O., La Vernia, Tex. Starting attachment for motor vehicles. 1,822,041; Sept. 8.

Koepsell, August J., assignor of twenty-five per cent to W. A. Moericke, Mayville, Wis. Time recording clock. 1,822,225; Sept. 8.

Kohl, Theodore G., and R. O. Gilburg, Wausau, Wis. Motor operated door. 1,822,042; Sept. 8.

Köhler, Walter, Munich, Germany. Dentist's model. 1,822,043; Sept. 8.

Kondolf, Mathias R., Lower Merion Township, Montgomery County, Pa., assignor to The Lox Seal Corporation, Brooklyn, N. Y. Tagging. 1,822,660; Sept. 8.

Kondolf, Mathias R., Lower Merion Township, Montgomery County, Pa., assignor to The Lox Seal Corporation, Brooklyn, N. Y. Tagging. 1,822,661; Sept. 8.

Kopp Glass, Incorporated. (See Kopp, Nicholas, assignor.)

Kopp, Nicholas, Pittsburgh, Pa., assignor to Kopp Glass, Incorporated, Swissvale, Pa. Light shade or similar article. Des. 85,049; Sept. 8.

Koppers Company, The. (See Seil, Gilbert E., assignor.)

Körner, Ernst, Stuttgart, Germany. Trolley. 1,822,300; Sept. 8.

Kraemer, Ernst, Stuttgart, and K. Hörrmann, Ernstmuhl, near Hirsau, Germany. Protection against poisonous gases. 1,822,154; Sept. 8.

Krauch, Carl, Ludwigshaften-on-the-Rhine, M. Pier and A. Eisenbut, Heidelberg, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Purification of hydrogenation products of carbonaceous materials. 1,822,351; Sept. 8.

Krein, Andrew J., assignor to The Faultless Manufacturing Company, Baltimore, Md. Union undergarment. 1,822,531; Sept. 8.

Krissiep, Max, assignor to Textile Machine Works, Wyomissing, Pa. Automatic stop mechanism for braiding machines. 1,821,973; Sept. 8.

Kruger, Franz. (See Pfleumer, H., Kruger, and Oexmann.)

Kruse, John R., East Orange, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y. Steam separator. 1,822,442; Sept. 8.

Krzikalla, Hans, Mannheim, and F. Bloemmel, Seckenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs. 1,822,044; Sept. 8.

Kunz, Max A., Mannheim, K. Koeberle, Ludwigshafen-on-the-Rhine, and W. Zerweck, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of mononitroanthanthrones. 1,822,045; Sept. 8.

Kupper, Herman C., Inc. (See Lindley, Walter, assignor.)

Kurkjian, Yervant H., Hawthorne, N. J., assignor to Carl J. Schmid, Inc., New York, N. Y. Bead forming device. 1,822,443; Sept. 8.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,822,532; Sept. 8.

Kuzell, Charles R. (See Fowler, M. G., Ralston, and Kuzell.)

Kyrides, Lucas P., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Acridine dyes and making same. 1,822,490; Sept. 8.

Lagaard, Alexander S. T. (See Quiggle, A. W., and Lagaard.)

Lake, Clair D., Binghamton, assignor to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,822,594; Sept. 8.

Lamb, Frank C., Los Angeles, Calif. Safety brake for automobiles. 1,822,491; Sept. 8.

Lamb, Franklin, New York, N. Y., assignor to Card Display, Inc. Card display. 1,822,492; Sept. 8.

Lamb, Franklin, New York, N. Y., assignor to Card Display, Inc. Card display. 1,822,493; Sept. 8.

Lamson & Sessions Company, The. (See Horton, William M., assignor.)

Lancor, Joseph H., Cranston, R. I. Clasp. 1,822,595; Sept. 8.

Landsborough, Tom R., Florin, Calif. Swing saw. 1,822,155; Sept. 8.

Lane, Frederick H., Erdington, Birmingham, England, assignor to American Anode, Inc., Akron, Ohio. Determining optimum current strength in the electrodeposition of rubber and other substances. 1,822,226; Sept. 8.

Langford, George W., A. C. Barrows, and J. H. McLean, assignors to Economy Baler Company, Ann Harbor, Mich. High density compress. 1,822,046; Sept. 8.

Lasher, Frederick G., Brooklyn, N. Y. Printing ink. 1,822,533; Sept. 8.

Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Printing tabulator. 1,822,156; Sept. 8.

Lauck, Irving F. (See Greene, F. C., and Lauck.)

Launderville, Joseph S., Los Angeles, Calif. Rug tag-pin. 1,822,494; Sept. 8.

Laursen, Marius N., O'Brien County, Iowa. Planter wire scale. 1,822,352; Sept. 8.

Lawrence, Edward H., Snohomish County, Wash. Tire puller. 1,822,409; Sept. 8.

Lawson, Robert H., Pawtucket, and A. N. Cloutier, Lonsdale, R. I., assignors to Hemphill Company, Central Falls, R. I. Tension controlling device for knitting machines. 1,822,870; Sept. 8.

Lawton, Robert B., assignor to Weber Costello Company, Chicago Heights, Ill. Globe movable in meridian. 1,822,353; Sept. 8.

Laycock, Kenneth G., Shavertown, Pa., assignor to Goss Printing Press Company, Chicago, Ill. Method and mechanism for controlling the feeding of webs. 1,822,495; Sept. 8.

Lazich, Branko, Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,822,496; Sept. 8.

Lea Fabrics Inc. (See Smith, Paul S., assignor.)

Lea Manufacturing Company, The. (See Leather, Robert S., assignor.)

League, Maurice S., Tacoma, Wash. Package pick-up device for aircraft. 1,822,354; Sept. 8.

Lear, Earl B., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Air line oiler. 1,822,100; Sept. 8.

Leask, John P., Glenbrook, Conn., assignor to Peabody Engineering Corporation, New York, N. Y. Oil burning system. 1,822,047; Sept. 8.

Leather, Robert S., assignor to The Lea Manufacturing Company, Waterbury, Conn. Abrasive compound. 1,822,596; Sept. 8.

Leblanc, Joseph, Ottawa, Ontario, Canada. Swimming apparatus. 1,821,974; Sept. 8.

Lee, Frederick E. (See Hannay, W. H., and Lee.)

Lee, James E., assignor to Challenge Machinery Company, Grand Haven, Mich. Newspaper turtle proof press. 1,822,301; Sept. 8.

Leenhouts, Abraham, Holland, Mich. Razor. 1,821,975; Sept. 8.

Le Mare, Ernest B., St. Helens, assignor to Pilkington Brothers Limited, Liverpool, England. Glass rolling apparatus particularly applicable to the production of continuous glass strips. 1,822,627; Sept. 8.

Lendrich, Karl, deceased, Hamburg, Germany; L. B. P. Lendrich, widow; E. C. Wemmering, daughter, and Otto Lendrich, son, heirs at law. Improving coffee-beans. 1,822,227; Sept. 8.

Lendrich, Louise B. P., widow, et al., heirs. (See Lendrich, Karl.)

Lendrich, Otto, Sen, et al., heirs. (See Lendrich, Karl.)

Leonard Automobile Products Corporation. (See Pilblad, Eric J., assignor.)

Leopard Automobile Products Corporation. (See Zaparka, Edward F., assignor.)

Leslie, Percy R., Essendon, Victoria, Australia. Mechanism for the mechanical computation and the recording of labor costs. 1,821,941; Sept. 8.

Lessing, Paul. (See Brunton, Walter T., assignor.)

Letsch, Eugene, Lynbrook, N. Y., assignor, by mesne assignments, to Precision Scientific Company. Precision measuring instrument. 1,822,662; Sept. 8.

Levy, Edward J., now by judicial change of name E. L. Mayo, assignor to The Bishop & Babcock Mfg. Co., Cleveland, Ohio. Thermostatic valve. 1,822,863; Sept. 8.

Lévy, Marcel, assignor, by mesne assignments, to Prodorite S. A., Geneva, Switzerland. Manufacture of concrete. Re18,180; Sept. 8.

Lewis Differential Company. (See Tatter, John W., assignor.)

Lewis, James C., Los Angeles, Calif. Piston packing ring. 1,822,101; Sept. 8.

Libbey-Owens-Ford Glass Company. (See Mambourg, Leopold, assignor.)

Libbey-Owens-Ford Glass Company. (See Mambourg, Nestor, assignor.)

Liberty Amusement Company. (See Uphoff, L. P., and Sims, assignors.)

Lichtenberger, Theodor, and L. Kaiser, Heilbronn-on-the-Neckar, Germany. Manufacturing pure, white and finely distributed sulphate of barium and sulphate of calcium. 1,822,815; Sept. 8.

Lidke, William F., Omaha, Nebr., assignor, by mesne assignments, of one-half to The Electric Storage Battery Company, Philadelphia, Pa. Battery lifter. 1,822,102; Sept. 8.

Lieberknecht, Paul, assignor of one-half to Maschinenfabrik-Einsiedel Gesellschaft mit beschrankter Haftung, Einsiedel, Chemnitz, Germany. Lever shaft driving device of flat-full fashioned machines. 1,822,597; Sept. 8.

Lien, Jonas, Port Washington, N. Y. Self-cleaning, non-clogging traveling grizzly. 1,822,739; Sept. 8.

Lilja, Edgar D. (See Stewart, D. J., and Lilja.)

Lincoln, Robert A., assignor of one-half to American Iron & Machine Works, Inc., Tonkawa, Okla. Weight indicator. 1,822,628; Sept. 8.

Lindblad, Axel R., Djursholm, Sweden. Treating arsenious ore. 1,822,103; Sept. 8.

Lindeman, Edward H. (See Veale, G. W., and Lindeman.)

Lindgren, Hans O., Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Liquid cooler. 1,822,534; Sept. 8.

Lindley, Walter, Stoke-on-Trent, England, assignor to Herman C. Kupper, Inc., New York, N. Y. Tea pot or similar article. Des. 85,050; Sept. 8.

Line Material Company. (See Desmond, John J., assignor.)

Link-Belt Company. (See Pierce, Harold S., assignor.)

Link-Belt Company. (See Rothman, Charlie C., assignor.)

Lionel Corporation, The. (See Caruso, Louis, assignor.)

Lionel Corporation, The. (See Cowen, J. L., and Caruso, assignors.)

Loar, Lloyd, assignor to Gulbransen Company, Chicago, Ill. Piano. 1,821,977; Sept. 8.

Loar, Lloyd, assignor to Gulbransen Company, Chicago, Ill. Piano. 1,821,978; Sept. 8.

Locke Insulator Corporation. (See Hawley, Kent A., assignor.)

Locke Insulator Corporation. (See Rowland, D. H., and Robertson, assignors.)

Loeser, Edward O., and G. B. Gallasch, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Measuring instrument. 1,822,740; Sept. 8.

Loomis, Harold S., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,822,497; Sept. 8.

Loomis, Nathaniel E., Westfield, and L. Burgess, Roselle, N. J., assignors to Standard Oil Development Company. Converting oils. 1,822,862; Sept. 8.

Lord, Fred W., assignor to The Oakes Manufacturing Company, Tipton, Ind. Trap nest. 1,822,048; Sept. 8.

Lord, Fred W., assignor to The Oakes Manufacturing Company, Tipton, Ind. Brooder heater. 1,822,049; Sept. 8.

Lorenz, C., Aktiengesellschaft. (See Hahnemann, W., and Rath, assignors.)

Lorenzen, Edward, Marshalltown, Iowa. Oat huller. 1,822,741; Sept. 8.

Lowell, Percival D. (See Grebe, A. H., and Lowell.)

Lowen, Charles J., Denver, Colo. Apparatus for increasing circulation of the scalp. 1,821,979; Sept. 8.

Lox Seal Corporation, The. (See Kondolf, Mathias R., assignor.)

Luedtke, Charles E., Minneapolis, assignor of one-half to F. Skyhawk, Stewardville, Minn. Shears with detachable blades. 1,822,050; Sept. 8.

Lum, George R., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Mounting for vacuum tubes. 1,822,535; Sept. 8.

Lumley, Maurice, Cincinnati, assignor to The Huffman Manufacturing Company, Dayton, Ohio. Liquid measuring receptacle. 1,822,703; Sept. 8.

Lurie, Joseph M. (See Binns, F. W., and Lurie.)

Luwax Limited. (See Johnson, Ernest W., assignor.)

Lyons, George H. E., Dayton, Ohio. Emergency stopping device for automobiles. 1,822,157; Sept. 8.

Lytle, Harry R., Sacramento, assignor of one-half to D. R. Throop, Stockton, Calif. Leveler. 1,822,051; Sept. 8.

M. J. B. Co. (See Burns, Wilfred E., assignor.)

Maas, Frederick, New York, assignor, by mesne assignments, to W. Mano, Flushing, Long Island, N. Y. Coating and sealing composition. 1,822,536; Sept. 8.

Macan, Harry C., Rutherford, N. J., assignor to Anaconda Sales Company, New York, N. Y. Roof accessory. 1,822,410; Sept. 8.

Maccabee, David E., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,822,052; Sept. 8.

MacClatchie, John W., Compton, Calif. Cementing head. 1,822,444; Sept. 8.

Machat, Roland, and A. Mathieu, Brive, France. Tightening collar with gradually braked winder. 1,821,980; Sept. 8.

MacKay, Henry J. S., London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Multiple circulation boiler. 1,822,228; Sept. 8.

Magnan, Arthur U. (See Weber, Ralf E., assignor.)

Mahr Manufacturing Company. (See Hortvet, Richard M., assignor.)

Majer, Christian, Tubingen, Germany. Apparatus for drying sleeves. 1,822,158; Sept. 8.

Mallory, P. R., & Co. (See Weiger, Joseph A., assignor.)

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens Ford Glass Company, Toledo, Ohio. Sheet glass producing apparatus. 1,822,704; Sept. 8.

Mambourg, Nester, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Introducing batch ingredients into glass melting furnaces. 1,822,705; Sept. 8.

Manning & Co. (See Van Ranst, Cornelius W., assignor.)

Mano, William. (See Maas, Frederick, assignor.)

Mano, William, Flushing, N. Y. Pipe joint compound. 1,822,663; Sept. 8.

Mansker, Abraham, Dorchester, Mass., and D. Baum, Livermore Falls, Me., assignors to Pepperell Manufacturing Company, Boston, Mass. Shoe bag. 1,822,780; Sept. 8.

Marles, Henry, assignor to Gemmer Manufacturing Company, Detroit, Mich. Engine control mechanism for steering gears. 1,821,942; Sept. 8.

Marles, Henry, assignor to Gemmer Manufacturing Company, Detroit, Mich. Roller bearing. 1,822,053; Sept. 8.
Marshall, Charles O., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Advertising device. 1,822,537; Sept. 8.
Marsland, Roland, Moylan, and O. N. Bryant, Moores, Pa., assignors to Westinghouse Electric and Manufacturing Company. Fluid pressure relay. 1,822,445; Sept. 8.
Martin, Charles J. (See Ploch, W. F., and Martin.)
Martin, Marion G., Aspinwall, and F. Voelker, jr., Pittsburgh, Pa., assignors to Blaw-Knox Company. Material measuring and handling apparatus. 1,822,446; Sept. 8.
Martin, Walter H., Plainfield, N. J., assignor to Carboloy Company, Inc., New York, N. Y. Diagraphic tracing machine. 1,822,664; Sept. 8.
Maschinenfabrik-Einsiedel Gesellschaft mit beschrankter Haftung. (See Lieberknecht, Paul, assignor.)
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Individual wheel mounting. 1,822,159; Sept. 8.
Matheson, George. (See Anderson, Alex, assignor.)
Mathieu, Arthur. (See Machat, R., and Mathieu.)
Matthews, Philip E., Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Clutch brake. 1,822,160; Sept. 8.
Mayer, Leo, assignor to Henry Cole Company, Boston, Mass. Switch. 1,822,161; Sept. 8.
Maybew, Sanford B., Marietta Township, Whatcom County, Wash. Barbecue stove. 1,822,355; Sept. 8.
Mayo, Edward L. (See Levy, Edward J.)
Maytag Company, The. (See Miller, G. L., and Mikulasek, assignors.)
McArdle, Edward H., Elizabeth, N. J., assignor to A. Klipstein and Company, New York, N. Y. Core oils and producing same. 1,822,411; Sept. 8.
McCabe, Frank E., assignor to The Grabler Manufacturing Company, Cleveland, Ohio. Igniting gas expelled from foundry molds. 1,822,229; Sept. 8.
McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,822,498; Sept. 8.
McCarthy, John E., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Stretching machine. 1,822,104; Sept. 8.
McCartney, Charles E., and R. Miller, Los Angeles, Calif.; said McCartney assignor to said Miller. Apparatus for generating heat. 1,822,356; Sept. 8.
McClatchie, John M., assignor to The Borden Company, New York, N. Y. Manufacture of evaporated milk. 1,821,943; Sept. 8.
McClay, Samuel R., Canton, Ohio. Spring equalizer. 1,822,499; Sept. 8.
McClure, Foster M., San Diego, Calif. Material loading apparatus. 1,822,598; Sept. 8.
McCollough, William A., Webster City, Iowa. Poultry feeder. 1,822,302; Sept. 8.
McCuen, Charles L., Lansing, assignor to General Motors Corporation, Detroit, Mich. Water circulating system. 1,822,857; Sept. 8.
McCullough, Frederick S., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vacuum tube construction. 1,822,162; Sept. 8.
McEachron, Karl B., Pittsfield, Mass., assignor to General Electric Company. Discharge device and resistance material. 1,822,742; Sept. 8.
McGee, Rupert E., Tampa, Fla. Switch. 1,822,706; Sept. 8.
McGrath, William L., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,822,163; Sept. 8.
McIlvried, Howard G., Gary, Ind., assignor to American Sheet and Tin Plate Company. Hoisting mechanism. 1,822,629; Sept. 8.
McJilton, Karl F., Moberly, Mo. Valve. 1,822,230; Sept. 8.
McKinney Manufacturing Company. (See Scott, William A., assignor.)
McLaurin, King H., Duquesne, Pa. Clay gun clamping mechanism. 1,822,630; Sept. 8.
McLean, John H. (See Langford, G. W., Barrows, and McLean.)
McSkimming, James, Santa Barbara, Calif. Wire spacing and fastening device. 1,822,781; Sept. 8.
Mealy, Charles A., West Barrington, assignor to The Hadley Company, Inc., Providence, R. I. Watch bracelet. Des. 85,051; Sept. 8.
Mechanical Rubber Company, The. (See Keys, Walter C., assignor.)
Meier, Axel W., Menasha, Wis. Insert for automobile springs. 1,822,816; Sept. 8.
Melville, Herbert J., assignor to Wm. Wrigley, Jr., Company, Chicago, Ill. Box wrapping machine. 1,822,054; Sept. 8.
Mendosa, John A., Manteca, Calif. Combination buckle and fastener for overalls. 1,822,357; Sept. 8.
Menk, Rudolph W., Joliet, Ill. Sectional boiler furnace. 1,822,707; Sept. 8.
Merkel, Joseph F., Rochester, N. Y., assignor to General Railway Signal Company. Adjustable support for lamp sockets in light signals. 1,822,105; Sept. 8.
Merriam, Henry F., West Orange, N. J., assignor to General Chemical Company, New York, N. Y. Manufacture of H_2SO_4 from weak SO_2 gas. 1,822,447; Sept. 8.
Merz, John M., assignor to P. C. Sutton, Springfield, Ill. Heating boiler. 1,822,981; Sept. 8.
Metal Specialties Manufacturing Co. (See Hermann, Wolfgang, assignor.)
Metcalf, Elton C., Wrentham, assignor to Murdock & Geb Company, Franklin, Mass. Bobbin holder. 1,822,858; Sept. 8.
Metzger, Chester A. (See Knuuti, C. O., and Metzger.)
Meunier, Leon P., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Adjustable spring counterbalance for power drills. 1,822,231; Sept. 8.
Meyer, Christian F., assignor to Textile Machine Works, Wyomissing, Pa. Electrically controlled loop regulating mechanism for full fashioned knitting machines. 1,821,982; Sept. 8.
Meyer, Gerhard, Los Angeles, Calif. Novel packer for use with ove shot. 1,822,412; Sept. 8.
Meyer-Berg, Huldreich, Baden, and R. Keller, Ennetbaden, assignors to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Quick-acting regulator of the vibrating type. 1,822,232; Sept. 8.
Michel, Richard, Uerdingen, assignor to I. G. Farbenindustrie Aktiengeselischaft, Frankfort-on-the-Main, Germany. Separating ethylene from the higher homologues thereof in gaseous mixtures containing olefines. 1,822,358; Sept. 8.
Midwest Motor Supply. (See Johnson, Ellsworth W., assignor.)
Miesse, Richard E., assignor to Q. R. S. De Vry Corporation, Chicago, Ill. High electron emissive cathode. 1,822,359; Sept. 8.
Miesse, Richard E., assignor to Q. R. S. De Vry Corporation, Chicago, Ill. Projection lamp. 1,822,360; Sept. 8.
Miesse, Richard E., assignor to Q. R. S. De Vry Corporation, Chicago, Ill. Electrode for electrical discharge devices. 1,822,361; Sept. 8.
Mikulasek, John. (See Miller, G. L., and Mikulasek.)
Miller, Bianca A., Ardmore, Pa. Concentration method and apparatus. 1,822,362; Sept. 8.
Miller, Ernest B., assignor to The Silica Gel Corporation, Baltimore, Md. Revivifying adsorbent materials. 1,822,303; Sept. 8.
Miller, Frank W., Chicago, Ill. Locomotive refilling apparatus. 1,822,233; Sept. 8.
Miller, George L., and J. Mikulasek, assignor to The Maytag Company, Newton, Iowa. Safety overload governor cut out switch for electric motors. 1,822,304; Sept. 8.
Miller, Roy. (See McCartney, C. E., and Miller.)
Miller Rubber Company, Inc. (See Griffiths, Richart T., assignor.)
Millers Falls Company. (See Fox, Charles H., assignor.)
Mine Safety Appliances Company. (See Davies, John B., assignor.)
Minet, Auguste, assignor to Construction Francaise D'Appareils De Laiterie, Société Anonyme, St. Etienne, France. Lubrication system for vertical shafts. 1,822,817; Sept. 8.
Minton, Gustave M., New York, N. Y. Telephone stand. Des. 85,052; Sept. 8.
Mitchell, Frederick G., Ridgefield Park, N. J. Atomizer or sprayer. 1,822,743; Sept. 8.
Mitton, Robert E., Salt Lake City, Utah. Brake system. 1,822,665; Sept. 8.
Mizzy, Albert D., New York, and W. E. Favini, South Ozone Park, N. Y. 1,822,413; Sept. 8.
Modell, Robert, Sacramento, Calif. Oil burning firebox. 1,821,944; Sept. 8.
Moericke, Walter A. (See Koepsell, August J., assignor.)
Mollett, Ira D. (See Winchell, Laurence J., assignor.)
Monk, John L., Oakland, Calif. Testing gauge. 1,822,599; Sept. 8.
Moore Brothers Company. (See Dibble, Claude M., assignor.)
Moore, Charles A., Edina, Minn. Refrigerating system for cars. 1,822,305; Sept. 8.
Moore, George A., Boston, Mass. Finishing heads of set screws and other articles. 1,822,708; Sept. 8.
Moore, Raymond G., Bridgeport, Conn. Hood catch. 1,822,164; Sept. 8.
Moore, Raymond G., Bridgeport, Conn. Hood catch. 1,822,165; Sept. 8.
Moore, Robert N., Tempe, Ariz. Device for forming plant protectors. 1,822,818; Sept. 8.
Morau, Harry F., Wooster, Ohio, assignor to The Parkersburg Rig and Reel Company, Parkersburg, W. Va. Sand reel post. 1,822,819; Sept. 8.
Moreira, Nicoline G., Limeira, Brazil. Apparatus for drying grain and the like. 1,821,983; Sept. 8.
Morgan and Wright. (See Dreher, Myron A., assignor.)
Morgan & Wright. (See Eger, Ernst, assignor.)
Morgan and Wright. (See Sloman, Cheri M., assignor.)
Morgan Construction Company. (See George, J. R., and Dahlstrom, assignors.)
Morin, Arthur J., Auburn, assignor to Rice, Barton & Fales, Inc., Worcester, Mass. Cover for suction boxes of paper making machines. 1,822,363; Sept. 8.
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Furniture. 1,822,448; Sept. 8.
Morley, James P., Michigan City, assignor to Bastian-Morley Co., La Porte, Ind. Heating apparatus. 1,822,871; Sept. 8.
Moses, Douglas V. (See Dressler, R. E., and Moses.)

Mossberg, Frank, assignor to Mossberg Press Steel Corporation, Attleboro, Mass. Warp beam. 1,822,414; Sept. 8.
Mossberg Pressed Steel Corporation. (See Mossberg, Frank, assignor.)
Most, Lucifer J., New York, assignor to Mabie Todd & Co., New York County, N. Y. Fountain pen cap. 1,822,166; Sept. 8.
Most, Lucifer J., Kearny, N. J., assignor to Mabie Todd & Co., New York County, N. Y. Fountain pen cap. 1,822,167; Sept. 8.
Most, Lucifer J., Kearny, N. J., assignor to Mabie Todd & Co., New York, N. Y. Combination pocket and desk set fountain pen. 1,822,168; Sept. 8.
Mott, Frederick R., Seekonk, Mass. Fuel burning means for cooking vessels. 1,822,106; Sept. 8.
Moyer, Charles T., Garwin, Iowa. Clothesline support. 1,822,364; Sept. 8.
Moyle, William J. (See Ericson, E. P., and Moyle.)
Mullaney, John F., Colorado Springs, Colo. Check valve. 1,822,365; Sept. 8.
Mullaney, John F., Colorado Springs, Colo. Lid for receptacles. 1,822,366; Sept. 8.
Müller, Imanuel W., Neuenburg, Germany. Seal. 1,821,984; Sept. 8.
Mullins Manufacturing Corporation. (See Booth, Morris F., assignor.)
Munson, Frank L., et al. (See Darnell, Rex C., assignor.)
Munson, Luther S., West Riverdale, Md. Building wall. 1,822,820; Sept. 8.
Murdock & Geb Company. (See Metcalf, Elton C., assignor.)
Murray, Howard J., Brooklyn, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa. Cone gear synchronizer. 1,822,107; Sept. 8.
Murrill, Paul I., Plainfield, N. J., assignor to R. T. Vanderbilt Company, Inc., New York, N. Y. Stabilization of compounds containing a fatty acid radical. 1,822,108; Sept. 8.
Murton, Trevoe G. (See Guy, Frederick M., assignor.)
Muther, Lorenz F., Newton Center, Mass. Support for measuring instruments. 1,822,500; Sept. 8.
Nachod and United States Signal Co. et al. (See Richterkessing, Frank H., assignor.)
Næsheim, Albert, Eidfjord, Norway. Gas pedal. 1,822,055; Sept. 8.
Nakanishi, Kinjiro, Fukuoka, Japan. Photoelectrically controlled pattern apparatus. 1,822,306; Sept. 8.
National Aniline & Chemical Co. (See Heritage, Clark C., assignor.)
National Aniline & Chemical Co. (See Kyrides, Lucas P., assignor.)
National Blank Book Company. (See Schade, John, assignor.)
National Electric Products Corporation. (See Clayton, Martin M., assignor.)
National Marking Machine Company, The. (See Constable, Charles E., assignor.)
National Supply Company, The. (See Archer, Merton T., assignor.)
Naugatuck Chemical Company, The. (See ter Horst, Willem P., assignor.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, O. Braunsdorf and Eduard Holzapfel, Hochst-on-the-Main, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Manufacture of vat dyestuffs. 1,822,367; Sept. 8.
Neder, Henry A. (See Duggan, J. M., and Neder.)
Neidich, Samuel A., Edgewater Park, N. J. Treating articles of celluloid and the like. 1,822,538; Sept. 8.
Nelson, Rudolph S., Rockford, Ill., assignor to The Hoover Company, North Canton, Ohio. Method of and apparatus for producing refrigeration. 1,822,109; Sept. 8.
Nelson, Tolmar. (See Hendrickson, R. O., and Nelson.)
Nettekoven, Daniel, Escondido, Calif. Ant trap. 1,822,307; Sept. 8.
News Projection Corporation. (See Eitzen, August D., assignor.)
Newton, Carl D., and R. De Silva, San Antonio, Tex.; said De Silva assignor to said Newton. Negative holder. 1,822,783; Sept. 8.
Niagara Machine & Tool Works. (See Habnemann, Paul R., assignor.)
Niconoff, Dimitry. (See Fowler, M. G., and Niconoff.)
Niogret, Henri F., Lyon, France, assignor to Du Pont Rayon Company, New York, N. Y. Thread winding machine. 1,822,415; Sept. 8.
Noble, Edward J., assignor to Gillette-Vibber Company, Incorporated, New London, Conn. Threadless pipe connecter. 1,822,056; Sept. 8.
Nonamaker, Frederick C., Gloucester City, N. J., assignor to Furness Corporation, Philadelphia, Pa. Delustering artificial silk. 1,822,416; Sept. 8.
Nonamaker, Frederick C., assignor to Welsbach Company, Gloucester City, N. J. Lubricating and sealing fluid. 1,822,449; Sept. 8.
Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Induction electric furnace. 1,822,539; Sept. 8.
Norton, John S., San Francisco, Calif. Electrically operated welder's hood. 1,822,308; Sept. 8.
Novo, Angelo R., Guadalupe, Calif. Aeronautic device. 1,822,782; Sept. 8.
Nuñez, Ignacio, San Luis Potosi, Mexico. Dough cutting machine. 1,822,309; Sept. 8.
Nystrom, Martin, Chicago, Ill., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y. Sound reproducing device. 1,822,450; Sept. 8.
Oakes Manufacturing Company, The. (See Lord, Fred W., assignor.)
O'Donnell, Edward J., Lowell, Mass. Font of type. Des. 85,053; Sept. 8.
Oestnaes, Victor L., Westfield, assignor to American Gas-accumulator Company, Elizabeth, N. J. Mold for molding central triple reflectors. 1,822,451; Sept. 8.
Oexmann, Heinrich. (See Pfleumer, H., Kruger, and Oexmann.)
Ohio Brass Company, The. (See Pipes, Pliny P., assignor.)
Ohlson, Edgar A., Ogden, Iowa. Liquid filter. 1,822,368; Sept. 8.
Ohlsson, Charles J., Brooklyn, assignor to Paramount Oil Burners, Inc., New York, N. Y. Oil burner. 1,822,540; Sept. 8.
Old Ben Coal Corporation. (See Greene, F. C., and Lauck, assignors.)
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Making lock washers. 1,822,600; Sept. 8.
Olson, Charles A., Geneva, Ill., assignor to Crane Co., Chicago, Ill. Self-packing valve. 1,822,666; Sept. 8.
Onsrud Machine Works, Inc. (See Onsrud, Oscar, assignor.)
Onsrud, Oscar, assignor to Onsrud Machine Works, Inc., Chicago, Ill. Fluid actuated gripping and work-positioning means. 1,822,501; Sept. 8.
Osborn, Roy T., et al. (See Cormer, A. F., and King, assignors.)
Oshurn, Wallace N., Detroit, Mich., assignor to Gemmer Manufacturing Company. Motor vehicle steering gear. 1,821,945; Sept. 8.
Osman, William B., Indianapolis, Ind. Loose leaf binder. 1,822,310; Sept. 8.
Ossanna, Johann, H. Graner, Munich, and F. Hofmann, Munich-Taikirchen, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Cascade connection for commutator machines. 1,822,369; Sept. 8.
Oswald, Leopold, assignor to the firm J. R. Geigy S. A., Basel, Switzerland. Manufacture of mordant disazo dyestuffs. 1,822,784; Sept. 8.
Otwell, Walter E., Linn, Kans. Battery terminal. 1,822,744; Sept. 8.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., New York, N. Y. Motion picture apparatus. 1,821,946; Sept. 8.
Owens, Freeman H., New York, N. Y. Recording photographic sound records. 1,822,057; Sept. 8.
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Optical printer. 1,822,417; Sept. 8.
Oxweld Railroad Service Company. (See Hunt, W. F., and Stelling, assignors.)
Pacella, Michelangelo, Grays Lake, Ill. Composition of matter containing mercury. 1,822,709; Sept. 8.
Pacific Machinery Company. (See Thompson, Albert R., assignor.)
Pacific Oil Well Cementing Company. (See Barton, Sidney O., assignor.)
Paget, Harold F., assignor to Haines Hosiery Mills Inc., Philadelphia, Pa. Automatic control for stitch regulating mechanisms of flat knitting machines. 1,822,169; Sept. 8.
Palmer, Wallace G. (See Stover, W. A., and Palmer.)
Pangborn Corporation. (See Hull, Foster J., assignor.)
Paradise, William F., Atchison, Kans. Making, freezing and hardening ice cream and apparatus therefor. 1,822,170; Sept. 8.
Paramount Oil Burners, Inc. (See Ohlsson, Charles J., assignor.)
Park, Robert L., Darden, Tenn. Bean harvester. Re18,183; Sept. 8.
Parker, Richard B., Skaneateles, assignor to S. E. Darby, trustee, New York, N. Y. Retort construction, 1,822,541; Sept. 8.
Parkersburg Rig and Reel Company, The. (See Moran, Harry F., assignor.)
Parkersburg Rig & Reel Company, The. (See Schwemlein, William, assignor.)
Parks & Woolson Machine Company. (See Richardson, Charles G., assignor.)
Pascale, Pasquale, New York, N. Y., assignor to Dri-Steam Valve Corporation. Locomotive valve. 1,822,171; Sept. 8.
Patent Button Company, The. (See White, Franklin R., assignor.)
Payne, Harold, Sacramento, Calif. Current controller. 1,822,234; Sept. 8.
Peabody Engineering Corporation. See Leask, John P., assignor.)
Peale-Davis Company. (See Davis, Kenneth, assignor.)
Peck, Miles E., et al. (See Hill, Marion M., assignor.)
Pelco Auto Products, Inc. (See Pelletier, Henry E., assignor.)

Pelletier, Henry E., Jersey City, N. Y., assignor to Pelco Auto Products, Inc., New York, N. Y. Filter. 1,822,452; Sept. 8.

Pennington, Harry, Houston, Tex. Rotary drilling rig. 1,822,710; Sept. 8.

Pepperell Manufacturing Company. (See Mansker, A., and Baum, assignors.)

Perkins, Kenneth, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Electric motor. 1,822,859; Sept. 8.

Perry, Arthur R., assignor to Grigsby-Grunow Company, Chicago, Ill. Vacuum tube apparatus. 1,822,370; Sept. 8.

Perry, Eugene L., West Orange, assignor to Wilbarton Ware, Inc., Kearney, N. J. Method and machine for making articles of pulp. 1,822,058; Sept. 8.

Peterson, Christ H., Leland, Iowa. Anticlogging device for corn pickers. 1,821,985; Sept. 8.

Peterson, Oscar F., Duluth, Minn. Clippers. 1,822,311; Sept. 8.

Petrie, Frank N., Klamath Falls, Oreg. Fishing spinner. 1,822,785; Sept. 8.

Pfleumer, Herman, Dresden-Loschwitz., F. Kruger, Dresden, and H. Oexmann, Berlin-Lichterfelde, Germany. Producing tablets of powdery material framed in metal. 1,822,172; Sept. 8.

Philip, Martin, San Diego, Calif. Twin craft. 1,822,418; Sept. 8.

Phillips, James C. (See Gerken, Charles J., assignor.)

Phillips Petroleum Company, et al. (See Boles, Robert T., assignor.)

Photostat Corporation. See Greene, John S., assignor.)

Pier, Mathias. See Krauch, C., Pier, and Eisenhut.)

Pierce, Harold S., Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill. Friction chain belt. 1,822,821; Sept. 8.

Pierce, Walter H., Watertown, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Fastening installation. 1,822,845; Sept. 8.

Pilbiad, Eric J., Brooklyn, assignor, by mesne assignments, to Leopard Automobile Products Corporation, New York, N. Y. Supporting spring suspension devices for vehicles. 1,822,235; Sept. 8.

Pilbiad, Eric J., Rockville Center, assignor, by mesne assignments, to Leopard Automobile Products Corporation, New York, N. Y. Frictional retarding device for spring suspension. 1,822,236; Sept. 8.

Pilkington Brothers Limited. (See Le Mare, Ernest B., assignor.)

Ploch, William F., Detroit, and C. J. Martin, assignors to Ford Motor Company, Dearborn, Mich. Welding machine. 1,822,371; Sept. 8.

Pipes, Pliny P., assignor to The Ohio Brass Company, Mansfield, Ohio. Rail bond. 1,822,059; Sept. 8.

Pladson, Carl H., Binscarth, Manitoba, Canada. Hog grip and hook. 1,822,822; Sept. 8.

Platt, Herbert, Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y. Printing of fabrics containing organic derivatives of cellulose. 1,822,453; Sept. 8.

Platt, Joseph B., New York, N. Y. Fountain pen holder. Des. 85,054; Sept. 8.

Plint, Alexander F., Henley-on-Thames, assignor to Stuart Turner Limited, Henley-on-Thames, Oxford, England. Pulsator for milking machines. 1,821,986; Sept. 8.

Plymouth Cordage Company. (See Huntress, Ernest H., assignor.)

Pond's Extract Company. (See Tarleton, John V., assignor.)

Porter, Henry W., Brookline, Mass., assignor to H. K. Porter, Inc. Cutting tool. 1,822,745; Sept. 8.

Porter, H. K., Inc. (See Porter Henry W., assignor.)

Pouchain, Adolfo, Turin, Italy. Lead plate for electric accumulators. 1,822,746; Sept. 8.

Powell, Samuel L., Blue Ridge Summit, Md. Siphon valve for flush tanks. 1,822,060; Sept. 8.

Precision Scientific Company. (See Letsch, Eugene, assignor.)

Prendergast, Richard S., assignor to Keenok Gears Limited, London, England. Friction gearing. 1,822,601; Sept. 8.

Prentice, George E., Berlin, Conn. Making sliders. 1,822,173; Sept. 8.

Prodorite, S. A. (See Lévy, Marcel, assignor.)

Proell, Reinhold, Dresden-A., Germany. Oil-pressure regulating device for upholding an even speed of machines. 1,822,667; Sept. 8.

Protzeller, Harry W., assignor to O. F. Jordan Company, East Chicago, Ind. Railroad spreader. 1,822,312; Sept. 8.

Protzeller, Harry W., assignor to O. F. Jordan Company, East Chicago, Ind. Electromagnetic valve. 1,822,668; Sept. 8.

Pilkington Brothers Limited. (See Le Mare, Ernest B., assignor.)

Pure Oil Company, The. (See Harnsberger, Audley E., assignor.)

Putnam, Harold B., et al. (See Darnell, Rex C., assignor.)

Putnam, Mark E., assignor to The Dow Chemical Company, Midland, Mich. Removing volatile hydrocarbon compounds from aqueous halogen acids. 1,822,372; Sept. 8.

Q. R. S. De Vry Corporation. (See Miesse, Richard E. assignor.)

Quiggle, Arthur W., and A. S. T. Lagaard, assignors to The Creamette Company, Minneapolis, Minn. Machine for drying and curing macaroni and other products made from a paste of flour and water. 1,822,313; Sept. 8.

R. M. Company. (See Murray, Howard J., assignor.)

Radio Corporation of America. (See Bangay, Raymond D., assignor.)

Radio Corporation of America. (See Finch, James L., assignor.)

Radio Corporation of America. (See Franklin, Charles S., assignor.)

Radio Corporation of America. (See Roberts, Walter Van B., assignor.)

Radio Corporation of America. (See Young, Lloyd L., assignor.)

Radio Inventions, Inc. (See Donle, Harold P., assignor.)

Raffo, Andrea, Chiavari, Italy. Multiple gymnastic instrument. 1,822,786; Sept. 8.

Ralston, Oliver C. (See Fowler, M. G., Ralston, and Kuzell.)

Ramsey, George. (See Acheson, A. M., and Ramsey.)

Raschella, Vincent, Weehawken, N. J., assignor to American Shoe-Polishing Machine Corp. Shoe cleaning and polishing machine. 1,822,419; Sept. 8.

Raymond, Horace H., Berlin, assignor to The Stanley Works, New Britain, Conn. Fastening device. 1,822,110; Sept. 8.

Redshaw, Herbert, Georgetown, Ontario, Canada, assignor to Smith & Stone Limited. Fuse block terminal structure. 1,821,987; Sept. 8.

Reeves, Raymond B. (See Clarke, R. E., and Reeves.)

Regenstein, Joseph, assignor to Arvey Corporation, Chicago, Ill. Providing mounted lithographs with notches for centering. 1,822,373; Sept. 8.

Reichard, Harold D., Newark, Ohio, assignor to Barnsdall Corporation, Tulsa, Okla. Tire. Des. 85,055; Sept. 8.

Reichold, Ludwig, Winsted, assignor to The Fitzgerald Manufacturing Co., Torrington, Conn. Electric cooking apparatus. 1,822,314; Sept. 8.

Reichold, Ludwig, Winsted, assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Control switch particularly for electric sadirons and similar devices. 1,822,315; Sept. 8.

Reid, William L., Lima, Ohio. Locomotive construction. 1,822,420; Sept. 8.

Reiter, Daniel I., New York, N. Y. Key holder. 1,822,502; Sept. 8.

Reliable Knitting Works. (See Joba, Elmer N., assignor.)

Remington Rand Inc. (See Lasker, William W., assignor.)

Rench, William S., San Diego, Calif. Price tag and holder therefor. 1,822,421; Sept. 8.

Research & Development Corporation. (See Dalgliesh, Herbert V., assignor.)

Revere Rubber Company. (See Cobb, Henry Z., assignor.)

Rex Manufacturing Co. (See Cecil, Charlie C., assignor.)

Reynolds Company, The. (See Youngberg, Eric, assignor.)

Ricard, Eloi, P. Savarit, and H. M. Guinot, Melle, France, assignors, by mesne assignments, to U. S. Industrial Alcohol Co., New York, N. Y. Process and apparatus for the simultaneous distillation, purifying, and dehydration of alcohol obtained from fermented mash. 1,822,454; Sept. 8.

Ricard, Eloi, P. Savarit, and H. M. Guinot, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y. Simultaneous distillation, purifying, and dehydration of alcohol obtained from fermented mash. 1,822,455; Sept. 8.

Rice, Barton & Fales, Inc. (See Morin, Arthur J., assignor.)

Richardson, Charles G., assignor to Parks & Woolson Machine Company, Springfield, Vt. Seam-controlled shearing machine. 1,822,374; Sept. 8.

Richardson, Charles M., Akron, and A. J. Howe, Cuyahoga Falls, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Conveyer system. 1,822,111; Sept. 8.

Richardson, Henry, Passaic, assignor to Richardson Scale Company, Clifton, N. J. Bag holder. 1,822,747; Sept. 8.

Richardson, Herbert L., Worcester, Mass. Winding drum. 1,822,422; Sept. 8.

Richardson Scale Company. (See Richardson, Henry, assignor.)

Richter, Emil, Philadelphia, assignor, by mesne assignments, to Schletter & Zander, Inc., Holmesburg, Pa. Yarn feeding mechanism for straight knitting machines. 1,822,317; Sept. 8.

Richterkessing, Frank H., assignor to Cheatham Electric Switching Device Co., and Nachod and United States Signal Co., Louisville, Ky. Electric signal system. 1,822,503; Sept. 8.

Riddle, Napoleon B., St. Francisville, La. Signal window for doors of automobiles. 1,822,823; Sept. 8.

Rimele, Eugen. (See Hentrich, W., and Rimele.)

Ritter, Alois A., assignor to Hartmann Trunk Company, Racine, Wis. Textile fabric. Des. 85,056; Sept. 8.

Rivers, Daniel W. (See Rivers, Frank, and D. W.)

Rivers, Frank and D. W., Soldier, Ky. Traction attachment for wheels. 1,822,748; Sept. 8.

Roach, Henry D., Minneapolis, Minn. Automatic sash operator. 1,822,504; Sept. 8.

Roberts & Mander Stove Company. (See Antrim, William D., assignor.)

Roberts, Walter V., Princeton, N. J., assignor to Radio Corporation of America. Measuring light intensities. 1,822,061; Sept. 8.

Robertson, John C. (See Rowland, D. H., and Robertson.)

Robin, Philip T., and Carl J. Scheloske, assignors to G. H. Williams Company, Erie, Pa. Earth handling structure. 1,822,423; Sept. 8.

Robinson, Joseph, assignor of one-fourth to R. M. Wolvin, New York, N. Y. Electrical vaporizer. 1,822,456; Sept. 8.

Rochester Manufacturing Company. (See Hastings, Herbert, assignor.)

Roedding, Gordon E., assignor to Grand Rapids Brass Company, Grand Rapids, Mich. Latch. Des. 85,057; Sept. 8.

Roedding, Gordon E., assignor to Grand Rapids Brass Company, Grand Rapids, Mich. Hinge. Des. 85,058; Sept. 8.

Roese, Rudolf, Berlin-Friedenau, Germany. Double sliding window. 1,822,237; Sept. 8.

Rogers, Everett I., jr., Providence, R. I. Lighter. 1,822,505; Sept. 8.

Rohrbach Metall-Flugzenbau, G. m. b. H. (See Stalger, Ludwig, assignor.)

Roig, José M., Barcelona, Spain. Revolving toothbrush and nail polisher. 1,822,631; Sept. 8.

Rosenberg Bros. and Co. (See Dunkley, Melville E., assignor.)

Rosenmund, Alfred L., Rockaway Borough, N. J., assignor to Stapling Machines Co. Wire joining. 1,822,542; Sept. 8.

Rosenmund, Alfred L., Rockaway Borough, N. J., assignor to Stapling Machines Co. Wire joining. 1,822,543; Sept. 8.

Ross, Blair A., Memphis, Tenn. Revetment mat. 1,822,602; Sept. 8.

Ross, Blair A., Memphis, Tenn. Placing revetment mats. 1,822,603; Sept. 8.

Ross, Don H., Kalamazoo, Mich. Paper cutter for rolled paper. 1,821,947; Sept. 8.

Ross Gear & Tool Company. (See Young, R. E., and Chandler, assignors.)

Rothman, Charlie C., Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill. Silent chain. 1,822,749; Sept. 8.

Roumens, Jean, Paris, France. Shock absorbing device. 1,822,824; Sept. 8.

Rowland, Davidge H., Baltimore, and J. C. Robertson, Annapolis, assignors to Locke Insulator Corporation, Baltimore, Md. Measuring apparatus. 1,822,458; Sept. 8.

Rowles, Robert R., Goodhue, Minn. Carburetor. 1,821,988; Sept. 8.

Royle, Herbert S., Philadelphia, Pa. Textile fabric. Des. 85,059; Sept. 8.

Ruau, Felix F., Deptford, London, England. Cigarette making machine. 1,822,316; Sept. 8.

Russell, James G., and E. Schatz, Los Angeles, Calif. Tilting and locking device for venetian blinds. 1,822,318; Sept. 8.

Russell Manufacturing Company, The. (See Fisher, William C., assignor.)

Ryan, Dennis L., and A. Crossley, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Piezo electric crystal apparatus. 1,822,825; Sept. 8.

Ryder, Frank P., Niagara Falls, N. Y. Method and apparatus for skinning tomatoes. 1,822,375; Sept. 8.

S. U. Company. (See Skinner, George H., assignor.)

Sachs, Joseph, West Hartford, Conn. Electric circuit controlling appliance. 1,822,544; Sept. 8.

Sakier, George, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Support for lavatory basins or the like. Des. 85,060; Sept. 8.

Sakier, George, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Bathtub. Des. 85,061; Sept. 8.

Salmen, Arvid, Salem, Oreg. Safety clothes wringer. 1,822,239; Sept. 8.

Sander, Wilhelm, assignor to Firm Th. Goldschmidt A.-G., Essen-Ruhr, Germany. Accelerating the reaction in alumino-thermic processes especially in their application to welding. 1,822,506; Sept. 8.

Saunders, Joseph H., and H. A. Williford, assignors to China American Tobacco Company, Rocky Mount, N. C. Adjustable drum extension for hogsheads. 1,822,612; Sept. 8.

Savarit, Paul. (See Ricard, E., Savarit, and Guinot.)

Schade, James W., assignor to American Anode, Inc., Akron, Ohio. Method and apparatus for lining pipes. 1,822,240; Sept. 8.

Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Visible index book. 1,822,669; Sept. 8.

Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Lock lever for telescoping elements. 1,822,670; Sept. 8.

Schatz, Emil. (See Russell, J. G., and Schatz.)

Schechter, Louis, Los Angeles, Calif. Gasoline dispenser. 1,822,241; Sept. 8.

Schellens, Christopher A. (See Schellens, Eugene L. and C. A.)

Schellens, Eugene L., Milburn, N. J., and C. A. Schellens, Marblehead, Mass., assignors to C-S Engineering Company, Jersey City, N. J. Feed water heater. 1,822,459; Sept. 8.

Schellentrager, Eugene W., Shaker Heights, and W. E. Boyer, Cleveland, Ohio. Electric apparatus. 1,821,989; Sept. 8.

Scheloske, Carl J. (See Robin, P. T., and Scheloske.)

Schering-Kahlbaum Aktiengesellschaft. (See Schoeller, W., and Jordan, assignors.)

Schick, Adolph M., assignor of one-fourth to E. G. Voltz, Wheeling, W. Va. Air agitator. 1,822,671; Sept. 8.

Schick, Adolph M., assignor of one-fourth to E. G. Voltz, Wheeling, W. Va. Electric fan. 1,822,672; Sept. 8.

Schlegel, Charles P., assignor to The Schlegel Manufacturing Co., Rochester, N. Y. Shade tassel. Des. 85,062; Sept. 8.

Schlegel Manufacturing Co., The. (See Schlegel, Charles P., assignor.)

Schletter & Zander, Inc. (See Richter, Emil, assignor.)

Schmaljohann, Paul, Kiel, Germany, assignor to Centra Handels- & Industrie A.-G., Chur, Switzerland. Two stroke cycle internal combustion engine. 1,822,750; Sept. 8.

Schmid, Carl J., Inc. (See Kurkjian, Yervant H., assignor.)

Schmidt, Carl G. A., jr., assignor to American Road Machinery Company, Kennett Square, Pa. Vibrating screen. 1,822,507; Sept. 8.

Schmidt, Maximilian P. (See Spröngerts, E., Schmidt, and Franke.)

Schmitt, Otto G., Chicago, Ill. Process and apparatus for manufacturing flexible pads. 1,822,376; Sept. 8.

Schmitt, Otto G., Omaha, Nebr. Manufacturing flexible pads. 1,822,377; Sept. 8.

Schneider, Theodor, assignor to the Firm Carl Still, Recklinghausen, Germany. Extracting benzene hydrocarbons from gases. 1,822,751; Sept. 8.

Schockency, Charles E. (See Ferguson, C. E., and Shockency.)

Schoeller, Walter, Berlin-Westend, and H. Jordan, Berlin-Steglitz, assignors to the Firm Schering-Kahlbaum Aktiengesellschaft, Berlin, Germany. Manufacturing alkyl isoalkyl phenols. 1,822,062; Sept. 8.

Schofield, Stanley T., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Oil circuit breaker. 1,822,112; Sept. 8.

Schöngut, Gustav, Vienna, Austria. Pump for liquids. 1,822,242; Sept. 8.

Schossow, Frederick A., Detroit, Mich. Toilet bowl. 1,822,378; Sept. 8.

Schramm, Walter H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Meter testing switch. 1,822,113; Sept. 8.

Schroeter, Fritz, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Method to control light relays. 1,821,948; Sept. 8.

Schulman, Joseph, Brooklyn, N. Y. Aerial machine. 1,822,063; Sept. 8.

Schultz, George W., Davenport, Wash. Snowplow. 1,822,545; Sept. 8.

Schulz, Edwin M., assignor to Durium Products Corporation, New York, N. Y. Treating paper phonograph blanks. 1,822,508; Sept. 8.

Schwartz, Henry, assignor to Barrel Fitting and Seal Corporation of America, Chicago, Ill. Bushing structure. 1,822,144; Sept. 8.

Schwartz, Karl, Rostock, Germany. Boat closet. 1,822,319; Sept. 8.

Schwemlein, William, assignor to The Parkersburg Rig & Reel Company, Parkersburg, W. Va. Brace means for tug rims and band wheels. 1,822,826; Sept. 8.

Schwenke, Robert, Berlin-Charlottenburg, assignor to F. I. von Stieteneron, Welsede, Germany. Starting apparatus for motor vehicles with internal combustion engines. 1,822,673; Sept. 8.

Schofield, Theodore J., and F. W. Billig, assignors to The Sparks-Withington Company, Jackson, Mich. Signaling device. 1,822,674; Sept. 8.

Scott, William A., assignor to McKinney Manufacturing Company, Pittsburgh, Pa. Latch device. 1,822,424; Sept. 8.

Scully, John T., New York, N. Y. Safety razor. 1,822,379; Sept. 8.

Seaman, Stewart E., Bangor, assignor to Eastern Manufacturing Company, South Brewer, Me. Treatment of cellulose and product resulting therefrom. 1,822,174; Sept. 8.

Searle, Emerson S. (See Fish, John R., assignor.)

Sell, Gilbert E., Newark, N. J., assignor to The Koppers Company, Pittsburgh, Pa. Gas purification process and apparatus. 1,822,380; Sept. 8.

Selah, Howard A., assignor to Erie Malleable Iron Company, Erie, Pa. Conduit fitting. 1,821,949; Sept. 8.

Selden Company, The. (See Daniels, Lloyd C., assignor.)

Selectograph Company. (See Golinick, P. A., Broderick, and Emde, assignors.)

Semet-Solvay Engineering Corporation. (See Hughes, Charles H., assignor.)

Seyfried, Warren R. (See Klugh, B. G., and Seyfried.)

Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)

Shappell, Lemert, Levering, Mich. Snow remover. 1,822,827; Sept. 8.

Shaw-Walker Company. (See Hunter, David E., assignor.)

Shea, James P., Forest Park, Ill. Laundry machine safety release. 1,822,752; Sept. 8.

Shelkofsky, Herman A., assignor of one-half to H. C. Stowers, Montgomery, Ala. Weeder. 1,822,675; Sept. 8.

Shepherd, Benjamin F., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Chuck for rock drills. 1,822,115; Sept. 8.
Shoemaker, Alvin H., Seattle, Wash. Pneumatic tire and rim. 1,822,320; Sept. 8.
Shook, Charles E. (See Brown, S. D., and Shook.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Ossanna, J., Granner, and Hofman, assignors.)
Silica Gel Corporation, The. (See Barclay, Earle H., assignor.)
Silica Gel Corporation, The. (See Miller, Ernest B., assignor.)
Silver, Walter H., assignor to Deere & Company, Moline, Ill. Ridge burster. 1,822,711; Sept. 8.
Simons, Francis L., Kennebunk, Me., H. J. Skinner, Wakefield, and R. M. Fuoss, Cambridge, assignors to Skinner & Sherman Inc., Boston, Mass. Measuring the freeness of pulp. 1,822,604; Sept. 8.
Simpson, Clarence E. (See Bull, W. R., and Simpson.)
Simpson, Frederick C. (See Allen, G., Jr., and Simpson.)
Sims, Floyd A. (See Uphoff, L. P., and Sims.)
Singer Manufacturing Company, The. (See Allen, Edward B., assignor.
Singer Manufacturing Company, The. (See Perkins, Kenneth, assignor.)
Skar, John G. L., assignor to Art Metal Construction Company, Jamestown, N. Y. Metallic library or book stack. 1,821,990; Sept. 8.
Skinner Automotive Device Co. (See Skinner, Ralph L., assignor.)
Skinner, George H., Ealing, London, assignor to S. U. Company, Limited, London, England. Carburetor. 1,822,712; Sept. 8.
Skinner, Hervey J. (See Simons, F. L., Skinner, and Fuoss.)
Skinner Motors, Inc. (See Woodward, Arthur A., assignor.)
Skinner, Ralph L., assignor to Skinner Automotive Device Co., Inc., Detroit, Mich. Oil appliance for sleeve-type of internal combustion engines. 1,821,091; Sept. 8.
Skinner & Sherman Inc. (See Simons, F. L., Skinner, and Fuoss, assignors.)
Skyhawk, Forrest. (See Luedtke, Charles E., assignor.)
Slawson, Marion G., Girard, Kans. Plant marker. 1,822,787; Sept. 8.
Slayton, Ralph E., Brooklyn, N. Y. Fowl plucking machine. 1,822,243; Sept. 8.
Sloman, Cheri M., assignor to Morgan and Wright, Detroit, Mich. Tire. Des. 85,063; Sept. 8.
Small, Engine W., et al., trustees. (See Bonsall, Seymour W., assignor.)
Small, John D. (See Jones, C. L., and Small.)
Smidth, F. L., & Co. (See Fasting, Johan S., assignor.)
Smith, Albert K., West Orange, N. J., assignor to The Hills Brothers Company, Inc. Fruit pitting apparatus. 1,822,381; Sept. 8.
Smith, Albert K., West Orange, N. J., assignor to The Hills Brothers Company, Inc. Date pitting machine. 1,822,382; Sept. 8.
Smith, Blanchard D., New Orleans, La. Miniature golf course. 1,822,244; Sept. 8.
Smith, Clyde L., Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich. Cracking oil. 1,822,753; Sept. 8.
Smith, Clyde L., and C. B. Watson, Chicago, Ill. Oil fractionating apparatus. 1,822,755; Sept. 8.
Smith, Edward G., deceased, by E. H. Kingsbury, Little Falls, N. Y., executor. Sea drome. 1,822,245; Sept. 8.
Smith, Fred E., Santa Paula, Calif. Valve seat. 1,822,754; Sept. 8.
Smith, Laura B. (See Anderson, Eli J., assignor.)
Smith, Paul S., Madison, assignor by mesne assignments, to Lea Fabrics Inc., Newark, N. J. Machine for making pile fabrics. 1,822,509; Sept. 8.
Smith, Paul S., Summit, assignor to Lea Fabrics Inc., Newark, N. J. Machine for the making of pile fabric. 1,822,510; Sept. 8.
Smith & Stone Limited. (See Redshaw, Herbert, assignor.)
Smith, W. B. (See Werner, William, assignor.)
Snyder, Frederick T., New Canaan, Conn. Making a solid fuel. 1,822,383; Sept. 8.
Snyder, Harry L., Kansas City, Mo. Display rack. 1,822,175; Sept. 8.
Societe des Avions Bernard. (See Bechereau, Louis, assignor.)
Societe Generale des Carburateur Zenith. (See Heftler, Paul E., assignor.)
Sorensen, Clarance S., Los Angeles, Calif. Compressor. 1,822,004; Sept. 8.
Sparks-Withington Company, The. (See Scofield, T. J., and Billig, assignors.)
Speidel Chain Co. (See Fassnacht, K., and Gloss, assignors.)
Sperry, John B., assignor to The American Well Works, Aurora, Ill. Pumping apparatus. 1,822,546; Sept. 8.
Spillman, Albert, North Tonawanda, N. Y. Cable drive. 1,822,632; Sept. 8.
Spinner, Isidore. (See Spinner, Philip V. and I.)
Spinner, Philip V., Wilmette, and I. Spinner, Chicago, Ill. Box construction. 1,822,384; Sept. 8.
Spiri, Walter J., White Plains, N. Y. Packing box for attaching means. 1,822,246; Sept. 8.
Sprague, Frank J., New York, N. Y. Electric toaster. 1,822,633; Sept. 8.
Sprague, William P., Los Angeles, Calif. Clasp. 1,822,460; Sept. 8.
Sprongerts, Eduard, M. P. Schmidt, and R. Franke, assignors to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Azo dyestuff components and preparing them. 1,822,065; Sept. 8.
Sproul, William C., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Producing metal working tools. 1,822,176; Sept. 8.
Squires, Charles W., Beverly, Mass. Circuit closer. 1,822,461; Sept. 8.
Stahl, Eugene, assignor to Fostoria Glass Company, Moundsville, W. Va. Bowl or similar article. Des. 85,064; Sept. 8.
Stahl, Eugene, assignor to Fostoria Glass Company, Moundsville, W. Va. Candlestick or similar article. Des. 85,065; Sept. 8.
Staiger, Ludwig, Spandau, near Berlin, assignor to the Firm: Rohrbach Metall-Flugzeubau, G. m. b. H., Berlin, Germany. Box shaped central portion of metal aircraft wing. 1,822,247; Sept. 8.
Standard-I. G. Company. (See Drauch, C., Pier, and Eisenhut, assignors.)
Standard Electric Time Company. (See Harter, George F., assignor.)
Standard Oil Company. (See Bahlke, William H., assignor.)
Standard Oil Company. (See Brewster, Oswald C., assignor.)
Standard Oil Company of California. (See Cushman, O. E., and Farrington, assignors.)
Standard Oil Development Company. (See Loomis, N. E., and Burgess, assignors.)
Standard Sanitary Manufacturing Company. (See Sakier, George, assignor.)
Stanley Works, The. (See Raymond, Horace H., assignor.)
Stapling Machines Co. (See Rosenmund, Alfred L., assignor.)
Star Electric Motor Co. (See Hollander, Emil E., assignor.)
Steele, Ira E., Sioux City, Iowa. Draft control. 1,822,321; Sept. 8.
Steele, Ray N., Cedar Rapids, Iowa. Engine piston. 1,822,322; Sept. 8.
Steele, Thomas W., Hudson Falls, N. Y. Tractor wheel. 1,822,634; Sept. 8.
Stein, Jack. (See Kanofsky, Morris, assignor.)
Steinberg, Harry C., et al. (See Bodes, Robert T., assignor.)
Stelfox, James C., Westminster, London, England, assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Manufacturing gas. 1,822,547; Sept. 8.
Stelling, Herman C. (See Hunt, W. F., and Stelling.)
Stelling, William A., Providence, R. I., assignor to The Textile-Finishing Machinery Company. Tenter chain link. 1,822,676; Sept. 8.
Stelzer, William, Chicago, Ill., assignor to Bendix Aviation Corporation, New York, N. Y. Elastically mounted self adjusting airfoil. Re18,181; Sept. 8.
Sterling Company, The. (See Jacobs, Frances A., assignor.)
Sternau, Bernhard, Islip Terrace, N. Y. Game board. Des. 85,066; Sept. 8.
Sterrett, Walter R., Muncie, Ind., assignor to Ball Brothers Company. Glass jar. Des. 85,067; Sept. 8.
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Locking device for fluid pressure tools. 1,822,248; Sept. 8.
Stevens, Elbridge W., Baltimore, Md. Spark plug. 1,822,462; Sept. 8.
Stevens, Harry F., Bartlesville, Okla. Valve. 1,821,992; Sept. 8.
Stewart, Duncan J., and E. D. Lilja, assignors to H. D. Colman, Rockford, Ill. Induction motor. 1,822,679; Sept. 8.
Still, Carl. (See Schneider, Theodor, assignor.)
Stine, Samuel B., Osceola Mills, Pa. Screen plate and making same. 1,822,756; Sept. 8.
Stoffels, Josef, Eslingen-on-the-Neckar, Germany. Process and apparatus for producing solid carbon dioxide. 1,822,788; Sept. 8.
Stohl, Andrew K., Waterbury, Conn., assignor to Stohl Super Power Corporation, Fair Haven, Vt. Power transmission mechanism. 1,822,066; Sept. 8.
Stohl Super Power Corporation. (See Stohl, Andrew K., assignor.)
Stone, John S., and G. Wilson, San Diego, Calif. Advertising device. 1,822,511; Sept. 8.
Stout, Elmer O., and O. M. Summers, Dayton, Ohio, assignors, by mesne assignments, to Frigidaire Corporation. Pressure responsive device and its manufacture. 1,821,950; Sept. 8.
Stover, William A., and W. G. Palmer, Tulsa, Okla. Tray for bubble towers. 1,822,323; Sept. 8.
Stowers, Henry C. (See Shelkofsky, Herman A., assignor.)
Streich, Frederick A., Oshkosh, Wis. Dump body door operating mechanism. 1,822,324; Sept. 8.
Struthers-Wells Titusville Corporation. (See How, Harlan W., assignor.)

Stuart Turner Limited. (See Flint, Alexander F., assignor.)
Stueckman, Herman, Chicago, Ill. Cutting implement. 1,822,828; Sept. 8.
Summers, Caleb E., and T. C. Van Degrift, assignors to General Motors Research Corporation, Detroit, Mich. Crank shaft balancing machine. 1,822,860; Sept. 8.
Summers, Otto M. (See Stout, E. O., and Summers.)
Summers, Otto M., Dayton, assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,822,067; Sept. 8.
Summers, Otto M., assignor to Frigidaire Corporation. Dayton, Ohio. Refrigerating apparatus. 1,822,068; Sept. 8.
Surface, Carl F., Des Moines, Iowa. Carbon remover and eliminator. 1,822,829; Sept. 8.
Sussmith, John J., Fort Lee, N. J. Machine for and method of sizing textiles. 1,822,425; Sept. 8.
Suter, Philipp, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Protective device for multiphase motors. 1,822,713; Sept. 8.
Sutton, Pearl C. (See Merz, John M., assignor.)
Swan, Alfred H., Los Angeles, Calif. Fountain pen. 1,822,789; Sept. 8.
Swann Research, Incorporated. (See Jenkins, R. L., and Hardy, assignors.)
Swann Research, Inc. (See Klugh, B. G., and Seyfried, assignors.)
Swayne, Loren I., Denver, Colo. Runway jack. 1,822,325; Sept. 8.
Sykes, William, Rockford, Ill. Automatic door opener. 1,822,326; Sept. 8.
Szegvari, Andrew, assignor to American Anode, Inc., Akron, Ohio. Aqueous dispersions of organic substances. 1,822,249; Sept. 8.
Taber, George H., Binghamton, N. Y. Method and machine for testing brakes of vehicles. 1,822,463; Sept. 8.
Taber, George H., Binghamton, N. Y. Motor vehicle. 1,822,464; Sept. 8.
Tabulating Machine Company, The. (See Lake, Clair D., assignor.)
Tanner, Arnold J., North Haven, Conn. Container for merchandise. 1,822,512; Sept. 8.
Tarleton, John V., Jackson Heights, assignor to Pond's Extract Company, New York, N. Y. Bottle cap or the like. Des. 85,068; Sept. 8.
Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Steering and braking device. 1,822,714; Sept. 8.
Taylor, George L., Rochester, assignor, by mesne assignments, to H. Gouinlock, Batavia, N. Y. Photographic apparatus. 1,822,677; Sept. 8.
Taylor, George L., Rochester, assignor, by mesne assignments, to H. Gouinlock, Batavia, N. Y. Photographic apparatus and more particularly to the focusing mechanism thereof. 1,822,678; Sept. 8.
Taylor, Joseph, Eltham, New Zealand. Milking machine. 1,822,680; Sept. 8.
Taylor, Raymond A., Frederick, Md. Mail bag hook. 1,822,830; Sept. 8.
Taylor, Robert S., assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,822,250; Sept. 8.
Teeple, Lawrence R., Portland, Oreg. Mercury switch thermostat. 1,822,605; Sept. 8.
Telefonaktie Bolaget L. M. Ericsson. (See Trechcinski, Roman, assignor.)
Tenuta, Salvatore A., Chicago, Ill. Buckle. 1,822,177; Sept. 8.
Ter Horst, Willem P., Packanack Lake, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of rubber. 1,822,548; Sept. 8.
Textile-Finishing Machinery Company, The. (See Stelling, William A., assignor.)
Textile Machine Works. (See Krissiep, Max, assignor.)
Textile Machine Works. (See Meyer, Christian F., assignor.)
Thies, Urban C., Dayton, assignor, by mesne assignments, to The Globe-Wernicke Company, Cincinnati, Ohio. Door and door-way. 1,822,251; Sept. 8.
Thoen, Lowell H., Stockton, assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif. Land vehicle. 1,822,178; Sept. 8.
Thomas, Adolph A., New York, N. Y. Thermostat. 1,822,069; Sept. 8.
Thomas, Arthur E. C., San Bruno, Calif. Aeroplane wing construction. 1,822,179; Sept. 8.
Thomas, Edward G., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,822,549; Sept. 8.
Thomas, Pacific J., Wyoming, assignor to U. S. Textile Machine Company, Scranton, Pa. High speed reeling machine. 1,822,790; Sept. 8.
Thompson, Albert R., San Jose, assignor to Pacific Machinery Company, San Francisco, Calif. Fruit pitting machine. 1,822,180; Sept. 8.
Thompson, Bennie E., Lakeview, Stillwater, Minn. Portable sawing machine. 1,822,116; Sept. 8.
Thompson, Robert M., Windsor, Ontario, Canada. Tie wire pocket forming device. 1,821,951; Sept. 8.
Thoresen, Halfdan R., Brooklyn, N. Y. Pointer, underliner, and weight. 1,822,757; Sept. 8.
Thornley, Joseph H., Chicago, Ill. Foundation for buildings, bridges, and the like. 1,822,550; Sept. 8.
Throop, Damon R. (See Lytle, Harry R., assignor.)
Timken Roller Bearing Company, The. (See Hektner, Joel, assignor.)
Todd, Mable, & Co. (See Most, Lucifer J., assignor.)
Toledo Scale Company. (See Williams, Lawrence S., assignor.)
Toledo Scale Manufacturing Company. (See Marshall, Charles O., assignor.)
Toledo Scale Manufacturing Company. (See Thomas, Edward G., assignor.)
Tondreau, Albert, assignor to Warner Bros. Pictures, Inc., Los Angeles, Calif. Lens shifting mechanism for projecting machines. 1,822,551; Sept. 8.
Toulon, Pierre M. G., Puteaux, France. System for transmitting and amplifying vibratory currents and movements. 1,822,758; Sept. 8.
Tradup, Albert, West Englewood, N. J., assignor to American Telephone and Telegraph Company. Telephone system. 1,821,993; Sept. 8.
Trans-Lux Daylight Picture Screen Corporation. (See Birdsall, Wilfred T., assignor.)
Travis, John M., St. Louis, Mo. Beverage dispensing apparatus. 1,822,117; Sept. 8.
Trechcinski, Roman, Warsaw, Poland, assignor to Telefonaktie Bolaget L. M. Ericsson, Stockholm, Sweden. Circuit arrangement for the sending of current impulses over telephone lines. 1,822,635; Sept. 8.
Trépadé, Henri, Paris, France. Utilizing hygroscopic products with brooms. 1,822,831; Sept. 8.
Trico Products Corporation. (See Hueber, H., and Horton, assignors.)
Trolley Shoe Wheel Company. (See Henry, Andrew L., assignor.)
Trouton, Maurice, Cuddington, England, assignor to Wireless Music Limited. Electrical vibratory device such, for example, as a loud speaker. 1,822,465; Sept. 8.
Trumpler, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vibration indicator. 1,822,118; Sept. 8.
Trussell, Clarence D., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y. Cover for loose leaf books. 1,822,552; Sept. 8.
Trussell Manufacturing Company. (See Trussell, Clarence D., assignor.)
Tuck-Tite Lock and Fastener Company Limited. (See Widmer, Harry A., assignor.)
U. G. I. Contracting Company, The. (See Stelfox, James C., assignor.)
Udell, Louis N., Boston, Mass. Coil for refrigerating and other apparatus. 1,822,715; Sept. 8.
Ullom, Frank S., Renton, Wash. Door fastener. 1,822,327; Sept. 8.
Underwood Elliott Fisher Company. (See Becker, Fred, assignor.)
Underwood Elliott Fisher Company. (See Greis, Frederick A., assignor.)
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Ungerer, Fritz, Pforzheim, Germany. Adjustable supporting mechanism for straightening rolls of plate straightening machines. 1,822,119; Sept. 8.
Union Special Machine Company. (See Christensen, Norman V., assignor.)
Union Switch & Signal Company, The. (See Jackel, Arthur P., assignor.)
Union Switch & Signal Company, The. (See Lazich, Branko, assignor.)
Union Switch & Signal Company, The. (See Loomis, Harold S., assignor.)
Union Switch & Signal Company, The. (See McCann, Ronald A., assignor.)
United-Carr Fastener Corporation. (See Carr, Fred S., assignor.)
United-Carr Fastener Corporation. (See Pierce, Walter H., assignor.)
United Kingdom Optical Company. (See Watson, F. J. G. B., Culver, and Emerson, assignors.)
United Research Corporation. (See Nystrom, Martin, assignor.)
United Shoe Machinery Corporation. (See Cosgrove, John W., assignor.)
United Shoe Machinery Corporation. (See Goddu, George, assignor.)
United Shoe Machinery Corporation. (See Hill, M. G., and Bristow, assignors.)
United Shoe Machinery Corporation. (See Hume, Fred, assignor.)
United Shoe Machinery Corporation. (See Kinney, Fay D., assignor.)
United States Hoffman Machinery Corporation. (See Clarke, Clarence M., assignor.)
U. S. Industrial Alcohol Co. (See Burghart, Lloyd M., assignor.)
U. S. Industrial Alcohol Co. (See Ricard, E., Savarit, and Guinot, assignors.)
U. S. Textile Machine Company. (See Thomas, Pacific J., assignor.)
Umansky, Leonid A., Schenectady, N. Y., assignor to General Electric Company. Motor control system. 1,822,759; Sept. 8.
United Verde Copper Company. (See Fowler, M. G., and Niconoff, assignors.)
United Verde Copper Company. (See Fowler, M. G., Ralston, and Kuzell, assignors.)

Uphoff, Leo P., and F. A. Sims, assignors to Liberty Amusement Company, San Jose, Calif. Spraying device. 1,822,553; Sept. 8.
Vail, Henry H., Camden, assignor to Automatic Drive and Transmission Company, Gloucester City, N. J. Selective clutch mechanism. 1,822,716; Sept. 8.
Valdés Valdés, César L., Habana, Cuba. Adhesive supplying mechanism. 1,822,466; Sept. 8.
Vallone, Charles, assignor to Barcalo Manufacturing Company, Buffalo, N. Y. Holder for tools or implements. 1,822,070; Sept. 8.
Van Degrift, Thomas C. (See Summers, C. E., and Van Degrift.)
Vanderbilt, R. T., Company. (See Murrill, Paul I., assignor.)
Van Dorn, Horace B., Maplewood, assignor to Joseph Dixon Crucible Company, Jersey City, N. J. Pencil. 1,821,994; Sept. 8.
Van Llew, John. (See Hattery, Joseph S., assignor.)
Van Nordstrand, Robert D., Scotia, N. Y., assignor to General Electric Company. Ship propulsion system. 1,822,760; Sept. 8.
Van Ranst, Cornelius W., Auburn, Ind., assignor, by mesne assignments, to Manning & Co., Chicago, Ill. Gear shift mechanism for automobiles. 1,822,252; Sept. 8.
Veale, George W., Cleveland, and E. H. Lindeman, Cleveland Heights, assignors to The Eaton Axle & Spring Company, Cleveland, Ohio. Bumper construction. 1,822,717; Sept. 8.
Vick Chemical Company. (See Kelly, John E., assignor.)
Vickers Limited. (See Gray, Percy W., assignor.)
Virginia Smelting Company. (See Binns, F. W., and Lurie, assignor.)
Vivas, Fernando S., assignor to International Fireproof Products Corporation, New York, N. Y. Surface sealing compound or stain and producing the same. 1,822,253; Sept. 8.
Vivas, Fernando S., assignor to International Fireproof Products Corporation, New York, N. Y. Nonexplosive noninflammable soluble cotton and producing the same. 1,822,254; Sept. 8.
Voelker, Fred, jr. (See Martin, M. G., and Voelker.)
Voli, Mario, Philadelphia, Pa. Label pasting machine. 1,822,467; Sept. 8.
Voltz, E. G. (See Schick, Adolph M., assignor.)
Von Stieteneron, Freiherr I. (See Schwenke, Robert, assignor.)
Vucassovich, Michel P., Gloucester, Mass. Freezing apparatus. 1,822,718; Sept. 8.
Wagner, Emil C., Montesano, Wash. Dredging bucket. 1,822,181; Sept. 8.
Wagner, Karl W., Berlin, Germany. Duplex system for telegraph cables with loading coils. 1,822,182; Sept. 8.
Wales, George F., Kenmore, N. Y. Punch mounting, stripping, and lubricating means for stamping presses. 1,822,468; Sept. 8.
Wall, Lucius J., et al. (See Hill, Marion M., assignor.)
Wallene, Frank O., Lakewood, Ohio. Power control system. 1,822,071; Sept. 8.
Walty, Werner, Ennetbaden, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Automatic switch. 1,822,255; Sept. 8.
Ward, Douglas, Glendale, Calif. Life saving device. 1,822,120; Sept. 8.
Warner Bros. Pictures, Inc. (See Tondreau, Albert, assignor.)
Warner Electric Brake Corporation. (See Cadman, Addi B., assignor.)
Warner Electric Brake Corporation. (See Whyte, John, assignor.)
Watson, Cornelius B. (See Smith, C. L., and Watson.)
Watson, Francis J. G. B., Islington, E. Culver, Crouch End, and A. H. Emerson, Finchley, London, assignors to United Kingdom Optical Company, Limited, London, England. Manufacturing lenses and apparatus therefor. 1,822,606; Sept. 8.
Watson, Kenneth M., Madison, Wis., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for coating electrical conductors. 1,822,485; Sept. 8.
Watt, William H., Haddon Heights, N. J. Process and apparatus for molding tubes. 1,822,356; Sept. 8.
Wauksha Motor Company. (See Horning, Harry L., assignor.)
Wayman, Charles R., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,821,995; Sept. 8.
Webb, Ernest H., Denver, and C. C. Berry, Montrose, Colo. Lock for automobiles. 1,822,681; Sept. 8.
Weber Costello Company. (See Lawton, Robert B., assignor.)
Weber, Ralf E., Oakland, assignor to A. U. Magnan, Los Angeles, Calif. Separation apparatus for food remnants. 1,822,469; Sept. 8.
Webster, Lewis E., Wilkes-Barre, Pa. Split D handle for shovels and other implements. 1,822,761; Sept. 8.
Webster, Towner K., jr., Winnetka, Ill. Lamp. Des. 85,069; Sept. 8.
Wecksberg, Anna M. C., et al., trustees. (See Coppus, Frans H. C., assignor.)
Wegner, Carl F. (See Brandl, A., and Wegner.)
Weiger, Joseph A., Union City, N. J., assignor, by mesne assignments, to P. R. Mallory & Co., Incorporated, Indianapolis, Ind. Valve seat. 1,822,682; Sept. 8.
Weiss, Carl W., New York, N. Y. Transmission. 1,822,555; Sept. 8.
Weitzel, Robert, Paris, France. Manufacturing molded articles. 1,822,762; Sept. 8.
Welch, Elmer B., assignor to Firth-Sterling Steel Company, McKeesport, Pa. Compositions of matter and making the same. 1,822,426; Sept. 8.
Wellman, Guy A., assignor to The Champion Hardware Company, Geneva, Ohio. Friction casement adjuster. 1,822,719; Sept. 8.
Welsbach Company. (See Nonamaker, Frederick C., assignor.)
Wemmering, Erna C., daughter, et al., heirs. (See Lendrich, Karl.)
Wenn, Leslie A., and W. K. Bishop, Binghamton, assignors to The Brewer-Titchener Corporation, Cortland, N. Y. Vehicle seat adjuster. 1,822,427; Sept. 8.
Wentorf, Robert H., assignor to West Bend Aluminum Company, West Bend, Wis. Cooker. 1,822,257; Sept. 8.
Werner, William, assignor of one-half to W. B. Smith, Mexia, Tex. Threadless pipe coupling. 1,821,952; Sept. 8.
West Bend Aluminum Company. (See Wentorf, Robert H., assignor.)
West, Maxwell A., Portland, Oreg. Adjustable eraser attachment for pencils. 1,822,832; Sept. 8.
Western Electric Company. (See Bradley, Walter R., assignor.)
Western Electric Company. (See Bureau, Arthur A., assignor.)
Western Electric Company. (See Hartsough, Ralph C., assignor.)
Western Electric Company. (See Knuuti, C. O., and Metzger, assignors.)
Western Electric Company. (See Watson, Kenneth M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Aronoff, Samuel, assignor.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Falknor, F. B., and Goldsborough, assignors.)
Westinghouse Electric & Manufacturing Company. (See High, Jurjen S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kinnard, Luther J., assignor.)
Westinghouse Electric and Manufacturing Company. (See Marsland, R., and Bryant, assignors.)
Westinghouse Electric & Manufacturing Company. (See McCullough, Frederick S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schofield, Stanley T., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schramm, Walter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Trumpler, William E., assignor.)
Westinghouse Electric Elevator Company. (See Kinnard, L. J., and Dunlop, assignors.)
Whalen, Nicholas. (See Healy, E. C., and Whalen.)
Whitaker, Willard F., Fairfield, Iowa. Corn harvester construction. 1,822,328; Sept. 8.
White, Franklin R., assignor to The Patent Button Company, Waterbury, Conn. Tack puller or pliers. 1,821,953; Sept. 8.
White, John W., Buffalo, N. Y., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wheel. 1,821,954; Sept. 8.
Whitson, Delmar A., assignor to Whitson Photophone Corporation, Los Angeles, Calif. Sound photography system. 1,822,183; Sept. 8.
Whitson Photophone Corporation. (See Whitson, Delmar A., assignor.)
Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Brake. 1,822,554; Sept. 8.
Widmer, Harry A., assignor to Tuck-Tite Lock and Fastener Company Limited, London, England. Fastener for containers. Des. 85,070; Sept. 8.
Wiegand, William B., South Beach, Conn. Electrical insulation. 1,822,072; Sept. 8.
Wilberz, Johannes, Hilden, Germany. Method of and apparatus for trimming grinding wheels. 1,822,073; Sept. 8.
Wilburton Ware, Inc. (See Perry, Eugene L., assignor.)
Wilde, Kurt, Berlin-Wilmersdorf, assignor to Deutsche Telephonwerke Und Kabelindustrie Aktiengesellschaft, Berlin, Germany. Remote control indicator system. 1,822,683; Sept. 8.
Wildhaber, Ernest, Brooklyn, assignor to Gleason Works, Rochester, N. Y. Method of and device for improving gears. 1,822,846; Sept. 8.
Wildt and Company Limited. (See Coley, James, assignor.)
Wilking, Harry, Decatur, Ill. Wire twisting device. 1,822,833; Sept. 8.
Williams, G. H., Company. (See Robin, P. T., and Scheloske, assignors.)
Williams, Lawrence S., assignor to Toledo Scale Company, Toledo, Ohio. Weighing scale. 1,822,513; Sept. 8.

Williams, Leroy E., assignor to Highway Trailer Company, Edgerton, Wis. Gravity dump vehicle. 1,822,684; Sept. 8.
Williams, Thomas L. (See Frederick, R. L., and Williams.)
Williford, Hugh A. (See Saunders, J. H., and Williford.)
Willis, Carter A., C. J. Willis, and R. M. Willis, assignors to The Willis Drilling Machine and Manufacturing Company, Chanute, Kans. Drilling machine. 1,822,834; Sept. 8.
Willis Drilling Machine and Manufacturing Company, The. (See Willis, Carter A. and G. J., assignors.)
Willis, Gordon J. (See Willis, Carter A., G. J., and R. M.)
Willis, Reuben M. (See Willis, Carter A., G. J., and R. M.)
Willson, Frederick, assignor to Willson Products Inc., Reading, Pa. Respirator. 1,821,996; Sept. 8.
Willson Products Inc. (See Willson, Frederick, assignor.)
Wilson, Frank C., Arcade, N. Y. Chuck. 1,822,685; Sept. 8.
Wilson, Gordon. (See Stone, J. S., and Wilson.)
Wilson, J. G., Corporation. (See Duncanson, Walter E., assignor.)
Wilson, J. G., Corporation. (See Faidhurst, John T., assignor.)
Winchell, Laurence J., Newkirk, Okla., assignor of one-fourth to I. D. Mollett, Manhattan, Kans. Portable saw and power attachment. 1,822,329; Sept. 8.
Winchester, William E., Los Angeles, Calif., assignor to Chem-Electric Engineering Corporation. Self-freeing electric separator. 1,822,074; Sept. 8.
Wine, William E., Toledo, Ohio. Railway car. 1,822,835; Sept. 8.
Wine, William E., Toledo, Ohio. Hopper car. 1,822,836; Sept. 8.
Winkelmann, Henry F., Nebraska City, Nebr. Insulating material. 1,822,636; Sept. 8.
Winskill, Christopher, Vancouver, British Columbia, Canada. Barrel. 1,822,791; Sept. 8.
Winthrop Chemical Company. (See Albert, August, assignor.)
Winthrop Chemical Company. (See Callsen, Jürgen, assignor.)
Wintringham, William T., Brooklyn, N. Y., assignor to American Telephone & Telegraph Company. Compression of frequency range. 1,821,997; Sept. 8.
Wired Radio, Inc. (See Hyland, Lawrence A., assignor.)
Wired Radio, Inc. (See Ryan, D. L., and Crossley, assignors.)
Wireless Music Limited. (See Trouton, Maurice, assignor.)
Wolvin, Roy M. (See Robinson, Joseph, assignor.)
Wood, Charles H. (See Fulcher, W. H., and Wood.)
Wood, Vera L., et al, trustees. (See Coppus, Frans H. C., assignor.)
Woodward, Arthur A., assignor to Skinner Motors, Inc., Detroit, Mich. Internal-combustion engine lubrication system. 1,821,909; Sept. 8.
Worthington, Everett, assignor to The Hammond Clock Company, Chicago, Ill. Clock case. Des. 85,071; Sept. 8.
Worthington, Everett, assignor to The Hammond Clock Company, Chicago, Ill. Clock case. Des. 85,072; Sept. 8.
Worthington, Everett, assignor to L. Eschner, Chicago, Ill. Cigar and cigarette lighter. Des. 85,073; Sept. 8.
Wright, Esmond P. G., Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Circuit arrangement for automatic and semi-automatic telephone exchange systems. 1,821,998; Sept. 8.
Wrights' Ropes Limited. (See Jenkin, Robert C. G., assignor.)
Wrigley, Wm., jr., Company. (See Melville, Herbert J., assignor.)
Wuelker, William E., San Francisco, Calif. Lamp. 1,821,955; Sept. 8.
Wuenn, Edward, Chicago, Ill. Radiocabinet. Des 85,074; Sept. 8.
Wünsch, Erich P. G., Steglitz, near Berlin, assignor to Askania-Werke Aktiengesellschaft vormals, Centralwerkstatt Dessau und Carl Bamberg-Friedenau, Berlin-Friedenau, Germany. Device for the conversion of mechanical measuring values into corresponding electrical measuring values. 1,822,184; Sept. 8.
Wyman, Le Roy L., Schenectady, N. Y., assignor to General Electric Company. Metallic composition and preparing the same. 1,822,720; Sept. 8.
Yee, Jew Y., Washington, D. C. Apparatus for the oxidation of ammonia. 1,821,956; Sept. 8.
Young, Lloyd L., Port Jefferson, N. Y., assignor to Radio Corporation of America. Automatic tape transmitter. 1,822,000; Sept. 8.
Young, Raymond E., and F. F. Chandler, assignor to Ross Gear & Tool Company, La Fayette, Ind. Closing plate assembly for steering gear housings, etc. 1,822,637; Sept. 8.
Youngberg, Eric, assignor to The Reynolds Company, Providence, R. I. Shoe buckle. Des. 85,025; Sept. 8.
Youngblood, David F., San Antonio, Texas. Steel alloy. 1,822,792; Sept. 8.
Zaparka, Edward F., assignor to Leopard Automobile Products Corporation, New York, N. Y. Controlling device for vehicle spring suspension systems. 1,822,185; Sept. 8.
Zaparka, Edward F., assignor to Leopard Automobile Products Corporation, New York, N. Y. Controlling device for vehicle spring suspension systems. 1,822,186; Sept. 8.
Zaparka, Edward F., assignor to Leopard Automobile Products Corporation, New York, N. Y. Controlling device for vehicle spring suspension systems. 1,822,187; Sept. 8.
Zaparka, Edward F., assignor to Leopard Automobile Products Corporation, New York, N. Y. Controlling device for vehicle spring suspension systems. 1,822,188; Sept. 8.
Zapf, Georg, Riehlerwall, Cologne, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Reducing the extension of wire ropes. 1,822,189; Sept. 8.
Zeiss, Firm Carl. (See Bauersfeld, W., and Hartinger, assignors.)
Zent, Abram L., Dayton, Ohio. Machine for vending stamps and the like. 1,822,258; Sept. 8.
Zerbi, Tranquillo, assignor to Fiat Societa Anonima, Turin, Italy. Traction device for wheels. 1,822,793; Sept. 8.
Zerweck, Werner. (See Kunz, M. A., Koeberle, and Zerweck.)
Ziele, Herbert, Napier, New Zealand. Hot water bag. 1,822,190; Sept. 8.
Zillox, John, Orchard Park, N. Y. Wrench. 1,822,428; Sept. 8.
Zisch, George J., Newark, N. J. Thermostatic control device. 1,822,001; Sept. 8.
Zouck, George H., Orange, N. J., assignor to Franklin Railway Supply Company, New York, N. Y. Locomotive booster cylinder cock controlling mechanism. 1,822,429; Sept. 8.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 8TH DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive compound. R. S. Leather. 1,822,596; Sept. 8.
Abrasive pad. V. M. Dirkes. 1,822,856; Sept. 8.
Accelerating the reaction in alumino thermic processes especially in their application to welding. W. Sander. 1,822,506; Sept. 8.
Acetylene generator. W. F. Hunt and H. C. Stelling. 1,822,625; Sept. 8.
Acids, Separation of organic. L. C. Daniels. 1,822,016; Sept. 8.
Addressing machine, Hand operated. P. A. Collnick, F. W. Broderick, and K. Emde. 1,822,344; Sept. 8.
Adhesive supplying mechanism. C. L. V. Valdés. 1,822,466; Sept. 8.
Advertising device. A. G. Borden. 1,822,608; Sept. 8.
Advertising device. C. O. Marshall. 1,822,537; Sept. 8.
Advertising device. J. S. Stone and G. Wilson. 1,822,511; Sept. 8.
Aerial machine. J. Schulman. 1,822,063; Sept. 8.
Aerial, Wireless telegraph and telephone. C. S. Franklin. 1,821,936; Sept. 8.
Aeronautic device. A. R. Novo. 1,822,782; Sept. 8.
Aeroplane. L. Béchereau. 1,822,196; Sept. 8.
Aeroplane wing construction. A. E. C. Thomas. 1,822,179; Sept. 8.
Agricultural machine, Hillside. B. F. Gravely. 1,822,211; Sept. 8.
Air agitator. A. M. Schick. 1,822,671; Sept. 8.
Aircraft. A. Andersen. 1,822,386; Sept. 8.
Aircraft. L. A. Cadoret. 1,822,476; Sept. 8.
Aircraft wing, Box shaped central portion of metal. L. Staiger. 1,822,247; Sept. 8.
Airfoil, Elastically mounted self adjusting. W. Stelzer. Re18,181; Sept. 8.
Air from water, Extracting. M. Kirsch. 1,822,659; Sept. 8.
Airship. D. S. Colby. 1,822,202; Sept. 8.
Airship. J. B. Ellinger. 1,822,849; Sept. 8.
Alarm for sprinkler systems. J. R. Hamilton. 1,822,654; Sept. 8.
Alcohol and acetone fermentation process, Butyl. F. J. Funk. 1,822,139; Sept. 8.
Alcohol evolved by bread baking ovens, Apparatus for the recovery of the. N. de Navrotzky. 1,822,804; Sept. 8.
Alcohol obtained from fermented mash, Process and apparatus for the simultaneous distillation, purifying, and dehydration of. E. Ricard, P. Savarit, and H. M. Guinot. 1,822,454; Sept. 8.
Alcohol obtained from fermented mash, Process for the simultaneous distillation, purifying, and dehydration of. E. Ricard, P. Savarit, and H. M. Guinot. 1,822,455; Sept. 8.
Alternators, System for parallel operation of. J. L. Finch. 1,821,935; Sept. 8.
Ammonia, Apparatus for the oxidation of. J. Y. Yee. 1,821,956; Sept. 8.
Anchoring device. E. S. Evans. 1,822,648; Sept. 8.
Annunciator or similar article. H. R. Kirkland. Des. 85,048; Sept. 8.
Ant trap. D. Nettekoven. 1,822,307; Sept. 8.
Antirattler, Bearing. L. Edelmann. 1,822,479; Sept. 8.
Antiskid device. R. J. Dunham. 1,822,616; Sept. 8.
Apparatus for burning liquid fuel. A. L. Klees. 1,822,844; Sept. 8.
Applicator, Medicament. J. B. Davies. 1,822,566–7; Sept. 8.
Arsenobenzene and the product thereof, Producing an. A. Albert. 1,821,919; Sept. 8.
Article handling apparatus. W. R. Bradley. 1,822,432; Sept. 8.
Articles of celluloid and the like, Treating. S. A. Neidich. 1,822,538; Sept. 8.
Assembling apparatus. C. O. Knuuti, B. and C. A. Metzger. 1,822,441; Sept. 8.
Atomizer or sprayer. F. G. Mitchell. 1,822,743; Sept. 8.
Automatic piling lubricator. F. F. Fuller. 1,822,208; Sept. 8.
Automatic switch. W. Walty. 1,822,255; Sept. 8.
Automobile and aeroplane signal. W. H. David. 1,822,017; Sept. 8.
Automobiles, Emergency stopping device for. G. H. E. Lyons. 1,822,157; Sept. 8.
Axle and final drive for vehicles. E. R. Gurney. 1,822,143; Sept. 8.
Badge. S. J. Connolly. Des. 85,031; Sept. 8.
Baffle. H. J. Kerr. 1,822,151; Sept. 8.
Baffle slot block. G. Allen, jr., and F. C. Simpson. 1,822,002; Sept. 8.
Bag: *See*—
Garment bag
Hot water bag
Shoe bag
Bag handle. P. Ingram. Des. 85,045; Sept. 8.
Bag tying machine. H. B. Foulder. 1,822,137; Sept. 8.
Band, Endless elastic. W. C. Fisher. 1,822,135; Sept. 8.
Bar: *See*—
Grate bar
Bar wound field element. V. G. Apple. 1,822,261; Sept. 8.
Barium and sulphate of calcium, Manufacturing pure, white and finely distributed sulphate of. T. Lichtenberger and L. Kaiser. 1,822,815; Sept. 8.
Barrel. C. Winskill. 1,822,791; Sept. 8.
Basket ball game. A. S. Bishop. 1,821,918; Sept. 8.
Basket, Floral. M. Kanofsky. Des. 85,047; Sept. 8.
Baths, Apparatus for producing sudoriferous vapor. J. Diena. 1,822,615; Sept. 8.
Bathtub. L. Bloch. 1,821,959; Sept. 8.
Bathtub. G. Sakier. Des. 85,061; Sept. 8.
Battery lifter. W. F. Lidke. 1,822,102; Sept. 8.
Battery terminal. W. E. Otwell. 1,822,744; Sept. 8.
Bead forming device. Y. H. Kurkjian. 1,822,443; Sept. 8.
Bearing, Roller. H. Maries. 1,822,053; Sept. 8.
Bearings, Device for taking up the wear on antifriction. L. Holland-Letz. 1,821,976; Sept. 8.
Belt, Friction chain. H. S. Pierce. 1,822,821; Sept. 8.
Beverage, Preparing and dispensing machine. H. R. Brand. 1,822,433; Sept. 8.
Binder, Loose leaf. W. B. Osman. 1,822,310; Sept. 8.
Bisulphite reactions with sulphur dioxide acid solutions, Making. F. W. Binns and J. M. Lurie. 1,822,122; Sept. 8.
Blinds, Tilting and locking device for Venetian. J. G. Russell and E. Schatz. 1,822,318; Sept. 8.
Block: *See*—
Baffle slot block
Building block
Cleaning block
Friction clutch block
Stereoprinting block
Block and collapsible stand, Hat. O. Kemery. 1,822,297; Sept. 8.
Board: *See*—
Ironing board
Steaming board
Boat closet. K. Schwarz. 1,822,319; Sept. 8.
Boat hull. E. B. Carns. 1,822,199; Sept. 8.
Boiler: *See*—
Circulation boiler
Heating boiler
Waste heat boiler
Boiler control system. J. W. Doble. 1,822,133; Sept. 8.
Boiler furnace, Sectional. R. W. Menk. 1,822,707; Sept. 8.
Bolt. W. M. Horton. 1,822,657; Sept. 8.
Book, Visible index. J. Schade. 1,822,669; Sept. 8.
Bottle. C. W. B. Hughes. Des. 85,044; Sept. 8.
Bottle cap or the like. J. V. Tarleton. Des. 85,068; Sept. 8.
Bowl or similar article. E. Stahl. Des. 85,064; Sept. 8.
Bowl, Toilet. F. A. Schossow. 1,822,378; Sept. 8.
Box: *See*—
Collapsible box
Display box
Box and clamp therefor. M. M. Clayton. 1,822,128; Sept. 8.
Box construction. P. V. and I. Spinner. 1,822,384; Sept. 8.
Box wrapping machine. H. J. Melville. 1,822,054; Sept. 8.
Brace means for tug rims and band wheels. W. Schwemlein. 1,822,826; Sept. 8.
Bracelet, Watch. C. A. Mealy. Des. 85,051; Sept. 8.
Bracket: *See*—
Mounting bracket
Bracket device. J. S. Hattery. 1,822,577; Sept. 8.
Braiding machines, Automatic stop mechanism for. M. Krisslep. 1,821,973; Sept. 8.
Brake. V. Bendix. 1,822,687; Sept. 8.
Brake. A. B. Cadman. 1,822,564; Sept. 8.
Brake. J. Whyte. 1,822,554; Sept. 8.
Brake drums, Making. J. W. Johnston. 1,822,814; Sept. 8.
Brake for automobiles, Safety. F. C. Lamb. 1,822,491; Sept. 8.
Brake mechanism for automotive vehicles. C. S. Bragg and V. W. Kilsgrath. 1,822,688; Sept. 8.
Brake system. R. E. Mitton. 1,822,665; Sept. 8.
Brakes of vehicles, Method and machine for testing. G. H. Taber. 1,822,463; Sept. 8.
Brick mold. J. A. Crowell. 1,822,646; Sept. 8.
Brooder heater. F. W. Lord. 1,822,049; Sept. 8.

Bucket, Dredging. E. C. Wagner. 1,822,181; Sept. 8.
Buckle. S. A. Tenuta. 1,822,177; Sept. 8.
Buckle and fastener for overalls, Combination. J. A. Mendosa. 1,822,357; Sept. 8.
Buckle and making the same. M. Belloch. 1,822,796; Sept. 8.
Buckle, Shoe. E. Youngberg. Des. 85,025; Sept. 8.
Buffer and draw head. J. R. Hicks. 1,822,094; Sept. 8.
Building block. D. W. Daley. 1,822,802; Sept. 2.
Building wall. L. S. Munson. 1,822,820; Sept. 8.
Bumper construction. G. W. Veale, and E. H. Lindeman. 1,822,717; Sept. 8.
Burner: *See*—
Oil burner
Bushing structure. H. Schwartz. 1,822,114; Sept. 8.
Cabinet for pop corn machines. J. I. Holcomb. Des. 85,043; Sept. 8.
Cabinet, Poultry dressing. F. A. Kadane. 1,821,972; Sept. 8.
Cable, Polyphase intersheath. V. Karapetoff. 1,822,737–8; Sept. 8.
Cafe or cafeteria, Self serving. B. L. Harkey. 1,822,288; Sept. 8.
Cage or crate for transporting livestock. C. A. Fell. 1,822,772; Sept. 8.
Calculating machine. H. Hoffmeister. 1,822,031; Sept. 8.
Calk for tractor belts, Antiskid. R. E. Davis. 1,822,132; Sept. 8.
Camera, Combined enlarging projector and photographic. J. H. Johnson. 1,822,220; Sept. 8.
Can filling machines, Transfer mechanism for. F. Clark. 1,821,963; Sept. 8.
Candlestick or similar article. E. Stahl. Des. 85,065; Sept. 8.
Capacity stabilizing device. P. E. Edelman. 1,822,728; Sept. 8.
Car body of sheet metal for motor cars, Self supporting. A. B. Henninger. 1,822,775; Sept. 8.
Car, Hopper. W. E. Wine. 1,822,836; Sept. 8.
Car, Railway. W. E. Wine. 1,822,835; Sept. 8.
Carbon dioxide, Method of and apparatus for storage and shipment of solid. C. L. Jones and J. D. Small. 1,822,026; Sept. 8.
Carbon dioxide, Process and apparatus for producing solid. J. Stoffels. 1,822,788; Sept. 8.
Carbon remover and eliminator. C. F. Surface. 1,822,829; Sept. 8.
Carburetor. P. E. Heftler. 1,822,401; Sept. 8.
Carburetor. R. R. Rowles. 1,821,988; Sept. 8.
Carburetor. G. H. Skinner. 1,822,712; Sept. 8.
Card display. F. Lamb. 1,822,492–3; Sept. 8.
Carrier: *See*—
Luggage carrier
Carton for books, Mailing. H. L. Greve. 1,822,576; Sept. 8.
Carton for shipping purposes. H. L. Greve. 1,822,575; Sept. 8.
Cascade connection for commutator machines. J. Ossanna, H. Graner, and F. Hofmann. 1,822,369; Sept. 8.
Case and display device, Combined. J. S. Cable. 1,822,007; Sept. 8.
Casement adjuster, Friction. G. A. Wellman. 1,822,719; Sept. 8.
Casing, Metal. H. Junkers. 1,822,036; Sept. 8.
Catch for foot pedals, Locking. B. G. Buss. 1,822,198; Sept. 8.
Catch, Hood. R. G. Moore. 1,822,164–5; Sept. 8.
Cathode, High election emissive. R. E. Miesse. 1,822,359; Sept. 8.
Cellulose acetate, Manufacture of. L. M. Burghart. 1,822,563; Sept. 8.
Cellulose and product resulting therefrom, Treatment of. S. E. Seaman. 1,822,174; Sept. 8.
Cellulosic materials, Treatment of. C. A. Blodgett and H. H. Hanson. 1,822,125; Sept. 8.
Cement or like material in bulk, Apparatus for handling. M. Kind. 1,822,530; Sept. 8.
Cementing head. J. W. MacClatchie. 1,822,444; Sept. 8.
Cementing machine. J. W. Cosgrove. 1,822,014; Sept. 8.
Ceramic material, Unit formed partially of fired. L. G. Copeman. 1,822,013; Sept. 8.
Chain accessory, Automobile. A. E. Gillet. 1,822,343; Sept. 8.
Chain, Flexible. K. Fassnacht and R. Gloss. 1,822,393; Sept. 8.
Chain, Silent. C. C. Rothman. 1,822,749; Sept. 8.
Chair: *See*—
Smoking chair
Chair. C. E. and C. H. Clarke. Des. 85,029; Sept. 8.
Cheese cutter. W. D. Jones. 1,822,869; Sept. 8.
Chuck. F. C. Wilson. 1,822,685; Sept. 8.
Chuck for rock drills. B. F. Shepherd. 1,822,115; Sept. 8.
Chuck, Work. W. N. Booth. 1,821,926; Sept. 8.
Cigarette making machine. F. F. Ruau. 1,822,316; Sept. 8.
Cinematograph machine, Moving lens. W. E. John. 1,822,528; Sept. 8.
Cinematographic projector. M. Couade. 1,821,930; Sept. 8.
Circuit arrangement for automatic and semiautomatic telephone exchange systems. E. P. G. Wright. 1,821,998; Sept. 8.
Circuit arrangement for the sending of current impulses over telephone lines. R. Trechcinski. 1,822,635; Sept. 8.
Circuit breaker, Oil. S. T. Schofield. 1,822,112; Sept. 8.
Circuit closer. C. W. Squires. 1,822,461; Sept. 8.
Circuit closer, Thermostatic. G. H. Brady. 1,822,472; Sept. 8.
Circuit controller, Thermally actuated. W. D. King. 1,822,408; Sept. 8.
Circuit controlling appliance, Electric. J. Sachs. 1,822,544; Sept. 8.
Circulating system, Water. C. L. McCuen. 1,822,857; Sept. 8.
Circulation boiler, Multiple. H. J. S. MacKay. 1,822,228; Sept. 8.
Clamp: *See*—
Pull rod clamp
Clasp. J. H. Lancor. 1,822,595; Sept. 8.
Clasp. W. P. Sprague. 1,822,460; Sept. 8.
Cleaner: *See*—
Vacuum cleaner
Cleaning block. H. S. and M. L. Cooper. 1,822,725; Sept. 8.
Cleat for vehicle wheels, Traction. S. D. Brown and C. E. Shook. 1,822,582; Sept. 8.
Clippers. O. F. Peterson. 1,822,311; Sept. 8.
Clock. P. Baumgarten. 1,822,195; Sept. 8.
Clock case. R. D. Budlong. Des. 85,026–7; Sept. 8.
Clock case. E. Worthington. 85,071–2; Sept. 8.
Clock correction, Electric time. G. F. Harter. 1,822,144-5; Sept. 8.
Clock, Speaking. E. F. Jahnke. 1,822,813; Sept. 8.
Clock, Time recording. A. J. Koepsell. 1,822,225; Sept. 8.
Closet: *See*—
Boat closet
Clothes wringer, Safety. A. Salmen. 1,822,239; Sept. 8.
Clutch brake. P. E. Matthews. 1,822,160; Sept. 8.
Clutch mechanism, Selective. H. H. Vail. 1,822,716; Sept. 8.
Clutches, Operating mechanism for. R. L. Brown. 1,822,335; Sept. 8.
Coal and like material, Extracting values from. F. C. Greene and I. F. Lauck. 1,822,142; Sept. 8.
Coating and sealing composition. F. Maas. 1,822,536; Sept. 8.
Cock controlling mechanism, Locomotive booster cylinder. G. H. Zouck. 1,822,429; Sept. 8.
Cock, Safety gas. W. F. Hoeltke. 1,822,402; Sept. 8.
Coffee beans, Improving. K. Lendrich. 1,822,227; Sept. 8.
Coffeepot. G. S. Albanese. 1,822,238; Sept. 8.
Coil for refrigerating and other apparatus. L. N. Udell. 1,822,715; Sept. 8.
Collapsible box. P. S. Douglas and J. Filshell. 1,822,585; Sept. 8.
Collar with gradually braked winder, Tightening. R. Machat and A. Mathieu. 1,821,980; Sept. 8.
Colophony and other resinous products from resinous plants or woods, Manufacture of pure. D. Gardner. 1,822,210; Sept. 8.
Compass, Automobile. W. Dodd. 1,822,340; Sept. 8.
Composition of matter and making the same. E. B. Welch. 1,822,426; Sept. 8.
Compound, Pipe joint. W. Mano. 1,822,663; Sept. 8.
Compounds containing a fatty acid radical, Stabilization of. P. I. Murrill. 1,822,108; Sept. 8.
Compress, High density. G. W. Langford, A. C. Barrows, and J. H. McLean. 1,822,046; Sept. 8.
Compressor. C. S. Sorensen. 1,822,064; Sept. 8.
Computation and the recording of labor costs, Mechanism for the mechanical. R. R. Leslie. 1,821,941; Sept. 8.
Concentration method and apparatus. B. A. Miller. 1,822,362; Sept. 8.
Concrete, Manufacture of. M. Lévy. Re18,180; Sept. 8.
Conductors, Apparatus for coating electrical. K. M. Watson. 1,822,385; Sept. 8.
Conductors, Coating electrical. R. C. Hartsough. 1,822,484; Sept. 8.
Conduit, Multiple. E. Burke. 1,822,475; Sept. 8.
Connecter and the like, Terminal. D. E. Barnett. 1,822,192; Sept. 8.
Container for merchandise. A. J. Tanner. 1,822,512; Sept. 8.
Containers of vegetative pulp, Method and apparatus for making. W. H. Fulcher and C. H. Wood. 1,822,020; Sept. 8.
Control adjusting device, Automatic. A. E. Broughton. 1,822,005; Sept. 8.
Control cable hanger. L. J. Kinnard. 1,822,153; Sept. 8.
Control device. J. Harding, jr. 1,822,287; Sept. 8.
Control device for flow of fluids. R. M. Hortvet. 1,822,578; Sept. 8.
Control for stitch regulating mechanism of flat knitting machines, Automatic. H. F. Paget. 1,822,169; Sept. 8.
Control system, Motor. L. A. Umansky. 1,822,759; Sept. 8.
Controlling means, Ticker tape. A. D. Eitzen. 1,822,770; Sept. 8.
Controlling the feeding of webs, Method and mechanism for. K. G. Laycock. 1,822,495; Sept. 8.
Conveyer system. C. M. Richardson and A. J. Howe. 1,822,111; Sept. 8.

Cooker. R. H. Wentorf. 1,822,257; Sept. 8.
Cooler: *See*—
Cream cooler Liquid cooler
Cooling unit for refrigerating systems. M. F. Booth. Re18,182; Sept. 8.
Copper from slag, Recovering. M. G. Fowler, O. C. Ralston, and C. R. Kuzell. 1,822,588; Sept. 8.
Core booking apparatus. H. L. Demmler. 1,822,205; Sept. 8.
Corn rickers, Anticlogging device for. C. H. Peterson. 1,821,985; Sept. 8.
Cotton and producing the same, Nonexplosive, noninflammable, soluble. F. S. Vivas. 1,822,254; Sept. 8.
Counterbalance for power drills, Adjustable spring. L. F. Meunier. 1,822,231; Sept. 8.
Coupling: *See*—
Threadless pipe coupling
Coupling. W. W. Blakely. 1,822,380; Sept. 8.
Coupling. J. E. Johnson. 1,822,149; Sept. 8.
Coupling for electrical fixtures. W. A. Adams. 1,822,260; Sept. 8.
Cover, Article. J. Fleck. 1,822,519; Sept. 8.
Cover for loose leaf books. C. D. Trussell. 1,822,552; Sept. 8.
Cover for suction boxes of paper making machines. A. J. Morin. 1,822,363; Sept. 8.
Cover of folding boats, Devices for tautening the. H. Hart. 1,822,810; Sept. 8.
Craft, Twin. M. Philip. 1,822,418; Sept. 8.
Crank case ventilator. W. S. Cochrane. 1,822,201; Sept. 8.
Crankshaft balancing machine. C. E. Summers and T. C. Van Degrift. 1,822,860; Sept. 8.
Crate, Packing. J. J. Henze. 1,822,736; Sept. 8.
Cream cooler. E. W. Johnson. 1,822,593; Sept. 8.
Crib. A. G. Feldman. Des. 85,036–8; Sept. 8.
Current controller. H. Payne. 1,822,234; Sept. 8.
Current converting system. A. S. Hubbard. 1,822,811; Sept. 8.
Current system, Alternating. W. Habnemann and K. Rath. 1,822,439; Sept. 8.
Currents and movements, System for transmitting and amplifying vibratory. P. M. G. Toulon. 1,822,758; Sept. 8.
Curtain pull. E. C. Healy and N. D. Whalen. 1,822,146; Sept. 8.
Cutter: *See*—
Cheese cutter
Cutter for rolled paper, Paper. D. H. Ross. 1,821,947; Sept. 8.
Cutting implement. H. Stueckman. 1,822,828; Sept. 8.
Damper, Vibration. F. M. Guy. 1,822,026; Sept. 8.
Decoy, Collapsible. W. H. Cook. 1,822,763; Sept. 8.
Design producing device. M. B. Gordon. 1,822,808; Sept. 8.
Dial for watches and clocks. A. Bulova. Des. 85,028; Sept. 8.
Differential field control, Exciter. W. B. Jupp. 1,822,150; Sept. 8.
Discharge device and resistance material. K. B. McEachron. 1,822,742; Sept. 8.
Dispenser, Gasoline. L. Schechter. 1,822,241; Sept. 8.
Dispensing apparatus. R. S. Beatton. 1,822,557; Sept. 8.
Dispensing apparatus, Beverage. J. M. Travis. 1,822,117; Sept. 8.
Display box. J. L. Brooks, jr. 1,821,960; Sept. 8.
Display device. M. M. Elnson. 1,822,570–71; Sept. 8.
Display or supporting stand. M. M. Elnson. 1,822,569; Sept. 8.
Display rack. H. L. Snyder. 1,822,175; Sept. 8.
Doll. J. G. Fleming. 1,822,437; Sept. 8.
Door and doorway. U. C. Thies. 1,822,251; Sept. 8.
Door, Motor operated. T. G. Kohl and R. O. Gilburg. 1,822,042; Sept. 8.
Door mounting. J. T. Fairhurst. 1,822,729; Sept. 8.
Door movement. W. E. Duncanson. 1,822,767; Sept. 8.
Door opener, Automatic. W. Sykes. 1,822,326; Sept. 8.
Door operating mechanism, Dump body. F. A. Streich. 1,822,324; Sept. 8.
Door, Sound blast chamber. F. J. Hull. 1,822,404; Sept. 8.
Dough cutting machine. I. Nuñez. 1,822,309; Sept. 8.
Draft control. I. E. Steele. 1,822,321; Sept. 8.
Drainer, Dish. B. Feingold. 1,822,087; Sept. 8.
Drawer pull. E. P. Hamilton. 1,822,213; Sept. 8.
Dress. F. A. Jacobs. Des. 85,046; Sept. 8.
Drier: *See*—
Natural air drier
Drier. C. C. Heritage. 1,822,486; Sept. 8.
Drilling machine. C. A., G. J., and R. M. Willis. 1,822,834; Sept. 8.
Drive, Cable. A. Spillman. 1,822,632; Sept. 8.
Drive extension for trucks. M. M. Hill. 1,822,623; Sept. 8.
Drive for motor boats, Outboard. A. G. Fitz Gerald and A. A. Anderson. 1,822,573; Sept. 8.
Drive for spindle feeds, Adjustable. A. L. De Leeuw. 1,822,692; Sept. 8.
Driving device of flat-full fashioned machines, Lever shaft. P. Lieberknecht. 1,822,597; Sept. 8.
Drum extension for hogsheads, Adjustable. J. H. Saunders and H. A. Williford. 1,822,612; Sept. 8.
Drum, Winding. H. L. Richardson. 1,822,422; Sept. 8.
Duplex system for telegraph cables with loading coils. K. W. Wagner. 1,822,182; Sept. 8.
Dust arresting ventilator. C. R. C. Borden. 1,822,471; Sept. 8.
Dyes and making same, Acridine. L. P. Kyrides. 1,822,490; Sept. 8.
Dyestuff components and preparing them, Azo. E. Sprõngerts, M. P. Schmidt and R. Franke. 1,822,065; Sept. 8.
Dyestuffs, Azo. H. Krzikalla and F. Bluemmel. 1,822,044; Sept. 8.
Dyestuffs, Manufacture of mordant diazo. L. Oswald. 1,822,784; Sept. 8.
Dyestuffs, Manufacture of vat. P. Nawiasky, O. Braunsdorf and E. Holzapfel. 1,822,367; Sept. 8.
Dyestuffs, New azo. W. Hentrich and E. Rimele. 1,821,938; Sept. 8.
Earth handling structure. P. T. Robin and C. J. Scheloske. 1,822,423; Sept. 8.
Economizer. H. G. Gosselin. 1,822,397; Sept. 8.
Electric apparatus. E. W. Schellentrager and W. E. Boyer. 1,821,989; Sept. 8.
Electric control device. R. B. Hunter. 1,822,700; Sept. 8.
Electric cooking apparatus. L. Reichold. 1,822,314; Sept. 8.
Electric crystal apparatus, Piezo. D. L. Ryan and A. Crossley. 1,822,825; Sept. 8.
Electric furnace, Induction. E. F. Northrup. 1,822,539; Sept. 8.
Electric machine, Dynamo. V. G. Apple. 1,822,263–4; Sept. 8.
Electric motor. K. Perkins. 1,822,859; Sept. 8.
Electric separator, Self freeing. W. E. Winchester. 1,822,074; Sept. 8.
Electrical converter. P. H. Craig. 1,822,130; Sept. 8.
Electrical insulation. W. B. Wiegand. 1,822,072; Sept. 8.
Electrical sound producing device. J. S. High. 1,822,095; Sept. 8.
Electrical vibratory device such, for example, as a loud speaker. M. Trouton. 1,822,465; Sept. 8.
Electrode for electrical discharge devices. R. E. Miesse. 1,822,361; Sept. 8.
Electrode supporting structure. R. Harding, jr. 1,822,732; Sept. 8.
Emulsions, Apparatus for making. S. B. Drucker. 1,822,275; Sept. 8.
Engine: *See*—
Internal-combustion engine.
Eraser attachment for pencils, Adjustable. M. A. West. 1,822,832; Sept. 8.
Esters of vinyl alcohol, Manufacture of. W. O. Herrmann, H. Deutsch and E. Baum. 1,822,525; Sept. 8.
Ethylene from the higher homologues thereof in gaseous mixtures containing olefines, Separating. R. Michel. 1,822,358; Sept. 8.
Excavating machine. A. B. Euga. 1,822,695; Sept. 8.
Excavator. C. A. Clemens. 1,822,338; Sept. 8.
Exchanger for mail, Automatic. F. E. Kampmeyer, sr. 1,822,658; Sept. 8.
Explosive. A. Hough. 1,822,290; Sept. 8.
Fabrics and making the same, Patterned Axminster. W. H. Cooper. 1,822,478; Sept. 8.
Fan, Electric. A. M. Schick. 1,822,672; Sept. 8.
Fastener, Door. F. S. Ullom. 1,822,327; Sept. 8.
Fastener for containers. H. A. Widmer. Des. 85,070; Sept. 8.
Fastener, Gate. E. J. Anderson. 1,822,640; Sept. 8.
Fastener, Joint. W. L. Hudson and W. F. Eckardt. 1,822,217; Sept. 8.
Fastener, Separable. F. S. Carr. 1,822,565; Sept. 8.
Fastener, Shoe. M. G. Grundmann. 1,822,284; Sept. 8.
Fastening device. H. H. Raymond. 1,822,110; Sept. 8.
Fastening device for spinning centrifuges used in the production of artificial silk. G. Bauriedel, and W. Fichthorn. 1,822,194; Sept. 8.
Fastening device, Lingerie. A. and E. Blum. 1,822,333; Sept. 8.
Fastening-inserting apparatus. G. Goddu. 1,821,965–6; Sept. 8.
Fastening installation. W. H. Pierce. 1,822,845; Sept. 8.
Faucet. D. W. Guiles. 1,822,346; Sept. 8.
Faults in electrical systems, Locating earth. J. Jonas. 1,822,701; Sept. 8.
Feeder construction, Self. H. H. Helmers. 1,822,289; Sept. 8.
Feeder, Poultry. W. A. McCollough. 1,822,302; Sept. 8.
Filer, Flue. C. E. Ferguson and C. E. Shockency. 1,822,773; Sept. 8.
Filing appliance of numerous applications. P. Diaz. 1,822,273; Sept. 8.
Films, Arrangement of perforations in cinematographic. J. H. Jarnier. 1,822,350; Sept. 8.
Filter. A. A. Bull. 1,822,006; Sept. 8.
Filter. H. E. Pelletier. 1,822,452; Sept. 8.
Filter, Gasoline. H. Jacobson. 1,822,440; Sept. 8.
Filter, Liquid. E. A. Ohlson. 1,822,368; Sept. 8.
Filter tank. R. E. Bressler and D. V. Moses. 1,822,689; Sept. 8.
Finger ring. J. Esterman and B. Gellman. 1,822,392; Sept. 8.
Fire-box, Oil burning. R. Modell. 1,821,944; Sept. 8.
Fire control of antiaircraft guns, Apparatus for use in the. P. W. Gray. 1,821,968; Sept. 8.

Fire extinguisher, Automatic. M. Couten (born Dominget). 1,822,801; Sept. 8.
Fireplace heater. A. J. Hallert. 1,822,090–1; Sept. 8.
Fishing spinner. F. N. Petrie. 1,822,785; Sept. 8.
Fitting, Conduit. J. W. Cox. 1,821,931; Sept. 8.
Fitting, Conduit. H. A. Selab. 1,821,949; Sept. 8.
Flash light, Multicolor. M. Grossman. 1,822,619; Sept. 8.
Flight conveyer. O. Birmann. 1,822,797; Sept. 8.
Fluid clarifying apparatus. C. V. Fuqua. 1,822,021; Sept. 8.
Fluid, Lubricating and sealing. F. C. Nonamaker. 1,822,449; Sept. 8.
Folding machine. T. J. Abbott. 1,822,470; Sept. 8.
Folding partition. W. E. Duncanson. 1,822,768; Sept. 8.
Font of type. E. J. O'Donnell. Des. 85,053; Sept. 8.
Form hanger. G. E. Greenwood. 1,821,969; Sept. 8.
Foundation for buildings, bridges, and the like. J. H. Thornley. 1,822,550; Sept. 8.
Fowl plucking machine. R. E. Slayton. 1,822,243; Sept. 8.
Frame: *See*—
Wheel frame
Frame structure for dynamo electric machines. L. B. Ehrlich. 1,822,342; Sept. 8.
Freezing apparatus. M. P. Vucassovich. 1,822,718; Sept. 8.
Frequency range, Compression of. W. T. Wintringham. 1,821,997; Sept. 8.
Friction clutch block. W. A. Blume. 1,822,430; Sept. 8.
Fruit treatment machine and method. M. E. Dunkley. 1,822,276; Sept. 8.
Fuel burning means for cooking vessels. F. R. Mott. 1,822,106; Sept. 8.
Fuel feeding means for internal combustion engines. M. G. Chandler. 1,822,011; Sept. 8.
Fuel, Making a solid. F. T. Snyder. 1,822,383; Sept. 8.
Furnace: *See*—
Boiler furnace Electric furnace
Furnace appliance. J. M. Duffy. 1,822,517; Sept. 8.
Furniture. L. H. Morin. 1,822,448; Sept. 8.
Furniture top construction. D. E. Hunter. 1,822,032; Sept. 8.
Fuse block terminal structure. H. Redshaw. 1,821,987; Sept. 8.
Fuselage jig, Aeroplane. J. D. Bunch. 1,822,270; Sept. 8.
Game apparatus. J. Ackerman. 1,822,686; Sept. 8.
Game board. B. Sternau. Des. 85,006; Sept. 8.
Garment bag. J. Duvall. 1,822,341; Sept. 8.
Garment press. C. M. Clarke. 1,822,613; Sept. 8.
Gas expelled from foundry molds, Igniting. F. E. McCabe. 1,822,229; Sept. 8.
Gas, Manufacturing. J. C. Stelfox. 1,822,547; Sept. 8.
Gas purification process and apparatus. G. E. Seil. 1,822,380; Sept. 8.
Gases, Protection against poisonous. E. Kraemer and K. Hörrmann. 1,822,154; Sept. 8.
Gate: *See*—
Starting gate
Gauge: *See*—
Testing gauge Thread gauge
Gauge and method of gauging, Screw thread. J. Hartness. 1,822,028; Sept. 8.
Gear, Hindley worm. S. I. Cone. 1,822,800; Sept. 8.
Gear, Motor vehicle steering. W. N. Osburn. 1,821,945; Sept. 8.
Gear shift mechanism for automobiles. C. W. Van Ranst. 1,822,252; Sept. 8.
Gear, Steering. L. Blackmore. 1,822,855; Sept. 8.
Gearing, Friction. R. S. Prendergast. 1,822,601; Sept. 8.
Gears, Engine control mechanism for steering. H. Marles. 1,821,942; Sept. 8.
Gears, Method of and device for improving. E. Wildhaber. 1,822,846; Sept. 8.
Gels, Preparing plural. E. H. Barclay. 1,822,848; Sept. 8.
Generator: *See*—
Acetylene generator Wind driven generator
Glass filaments, Apparatus for spinning. P. O. E. Friedrich. 1,821,937; Sept. 8.
Glass jar. W. R. Sterrett. Des. 85,067; Sept. 8.
Glass melting furnace, Introducing ingredients into a. N. Mambourg. 1,822,705; Sept. 8.
Glass producing apparatus, Sheet. L. Mambourg. 1,822,704; Sept. 8.
Glass rolling apparatus particularly applicable to the production of continuous glass strips. E. B. Le Mare. 1,822,627; Sept. 8.
Globe movable in meridian. R. B. Lawton. 1,822,353; Sept. 8.
Glove. C. C. Cecil. 1,822,010; Sept. 8.
Golf course, Miniature. B. D. Smith. 1,822,244; Sept. 8.
Governor cut-out switch for electric motors, Safety overload. G. L. Miller and J. Mikulasek. 1,822,304; Sept. 8.
Governor, Engine. A. Brandi and C. F. Wagner. 1,822,473; Sept. 8.
Grain and the like, Apparatus for drying. N. C. Moreira. 1,821,983; Sept. 8.
Graphical representations at a distance, Method and apparatus for making. D. Grimes. 1,822,866; Sept. 8.
Grate bar. T. A. Jessen. 1,822,034; Sept. 8.
Grinding machine. C. W. Hopkins. 1,822,348; Sept. 8.
Grinding machine for grinding out bores accurately, Interior. K. Jung. 1,822,222; Sept. 8.
Grinding machinery. J. E. Caster. 1,822,337; Sept. 8.
Grinding mill. J. S. Fasting. 1,822,436; Sept. 8.
Grinding wheels, Method of and apparatus for trimming. J. Wilberz. 1,822,073; Sept. 8.
Grip and hook, Hog. C. H. Pladson. 1,822,822; Sept. 8.
Gripping and work-positioning means, Fluid actuated. O. Onsrud. 1,822,501; Sept. 8.
Grizzly, Self-cleaning, non-clogging traveling. J. Lien. 1,822,739; Sept. 8.
Gun clamping mechanism, Clay. K. H. McLaurin. 1,822,630; Sept. 8.
Gymnastic instrument, Multiple. A. Raffo. 1,822,786; Sept. 8.
Hair cutting device, Power driven. V. G. Apple. 1,822,262; Sept. 8.
Hall effect, System and apparatus employing the. P. H. Craig. 1,822,129; Sept. 8.
Hammer. W. Ferguson. 1,822,894; Sept. 8.
Hammer, Carpenter's. J. F. Ervay. 1,822,280; Sept. 8.
Handle for shovels and other implements, Split-D. L. E. Webster. 1,822,761; Sept. 8.
Hanger: *See*—
Control cable hanger Form hanger.
Hanger for continuous enameling furnaces. J. O'F. Clark. 1,822,012; Sept. 8.
Harmony calculator. K. Ferguson-Roberts. 1,822,457; Sept. 8.
Harvester, Bean. R. L. Park. Re18,183; Sept. 8.
Harvester construction, Corn. W. F. Whitaker. 1,822,328; Sept. 8.
Hat and making the same, Knitted. E. N. Joha. 1,822,488; Sept. 8.
Heads of set screws and other articles, Finishing. G. A. Moore. 1,822,708; Sept. 8.
Heat, Apparatus for generating. C. E. McCartney and R. Miller. 1,822,356; Sept. 8.
Heat interchanger. H. Feldmeier. 1,821,934; Sept. 8.
Heater: *See*—
Brooder heater Water heater
Fireplace heater Windshield heater
Stovepipe heater
Heating apparatus. J. P. Morley. 1,822,871; Sept. 8.
Heating boiler. J. M. Merz. 1,821,981; Sept. 8.
Heating system, Intake mixture. H. L. Horning. 1,822,147; Sept. 8.
Hinge. G. E. Roedding. Des. 85,058; Sept. 8.
Hoisting mechanism. H. G. McIlvried. 1,822,629; Sept. 8.
Holder, Bag. H. Richardson. 1,822,747; Sept. 8.
Holder, Bobbin. E. C. Metcalf. 1,822,858; Sept. 8.
Holder, Combined bread box, slicer and knife. A. W. Brown. 1,822,581; Sept. 8.
Holder for egg beaters. E. V. Johnson. 1,822,035; Sept. 8.
Holder for steel wool. J. R. Fish. 1,822,395; Sept. 8.
Holder for tools or implements. C. Vallone. 1,822,070; Sept. 8.
Holder for wallets, Removable card. R. E. Clarke and R. B. Reeves. 1,822,843; Sept. 8.
Holder, Fountain pen. J. B. Platt. Des. 85,054; Sept. 8.
Holder, Key. H. V. Ekstedt. Des. 85,035; Sept. 8.
Holder, Key. D. I. Reiter. 1,822,502; Sept. 8.
Holder, Sales slip pad. H. W. Johnson. 1,822,295; Sept. 8.
Holder, Toothbrush. A. M. Bernier. 1,821,924; Sept. 8.
Holding device, Plate. S. B. Harper. 1,822,809; Sept. 8.
Hood, Electrically operated welder's. J. S. Norton. 1,822,308; Sept. 8.
Hook: *See*—
Mail bag hook
Hopper, Can. W. E. Burns. 1,822,336; Sept. 8.
Horn. E. J. Gulick. 1,822,025; Sept. 8.
Hose coupling. D. Anderson. 1,822,259; Sept. 8.
Hot water bag. H. Ziele. 1,822,190; Sept. 8.
H_2SO_4 from weak SO_2 gas, Manufacture of. H. F. Merriman. 1,822,447; Sept. 8.
Huller: *See*—
Oat huller
Humidifier. C. J. Cowman. 1,822,644; Sept. 8.
Humidifier. D. Handelan. 1,822,656; Sept. 8.
Humidor. S. E. Guinn. Des. 85,042; Sept. 8.
Hydraulic products from anhydrite, Making. J. E. Butler. 1,821,961; Sept. 8.
Hydrocarbon compounds from aqueous halogen acids, Removing volatile. M. E. Putnam. 1,822,372; Sept. 8.
Hydrocarbons from gases, Extracting benzene. T. Schneider. 1,822,751; Sept. 8.
Hydrocarbons, Treatment of. J. C. Clancy. 1,822,127; Sept. 8.
Hydrogenation products of carbonaceous material, Purification of. C. Krauch, M. Pier, and A. Eisenhut. 1,822,351; Sept. 8.
Hygroscopic products with brooms, Utilizing. H. Trepade. 1,822,831; Sept. 8.
Ice cream and apparatus therefor, Making, freezing and hardening. W. F. Paradise. 1,822,170; Sept. 8.
Ignition device for oil burners and the like. C. Johnson. 1,822,777; Sept. 8.
Illuminating arrangement. W. Bauersfeld and H. Hartinger. 1,822,076; Sept. 8.
Inchoately marked articles of manufacture. E. H. Huntress. 1,822,148; Sept. 8.

Indicating means for wells. F. M. Collins. 1,822,203; Sept. 8.
Indicator: *See*—
Vibration indicator Weight indicator
Induction motor. D. J. Stewart and E. D. Lilja. 1,822,679; Sept. 8.
Ink, Printing. F. G. Lasher. 1,822,533; Sept. 8.
Inkwell, Automatic. J. P. Clary. Des. 85,030; Sept. 8.
Insect destroyer and gatherer, Boll weevil. A. J. Dupont. 1,822,277; Sept. 8.
Insert for preserve tins for sausages. H. Fricke. 1,822,138; Sept. 8.
Insulating material. H. F. Winkelmann. 1,822,636; Sept. 8.
Insulator. K. A. Hawley. 1,822,485; Sept. 8.
Insulator racks, Making. R. M. Kerschner. 1,822,037; Sept. 8.
Internal combustion engine. H. L. Horning. 1,822,097; Sept. 8.
Internal combustion engine, Two stroke cycle. P. Schmaljohann. 1,822,750; Sept. 8.
Ironing apparatus. F. Booth. 1,822,269; Sept. 8.
Ironing board. T. Evanoff. 1,822,281; Sept. 8.
Jack: *See*—
Runway jack
Jig, Slate. S. J. Kerrigan. 1,822,298; Sept. 8.
Joist bridging. A. J. Bates, jr. 1,822,332; Sept. 8.
Joist, Expanded metal. A. J. Bates, jr. 1,822,331; Sept. 8.
Key for coin delivery machines. E. J. Brandt. 1,822,560; Sept. 8.
Knife, Fruit cutting. K. Ichijyo. 1,821,971; Sept. 8.
Knitting machine. H. Göpfert. 1,822,024; Sept. 8.
Label pasting machine. M. Voll. 1,822,467; Sept. 8.
Lamp. T. K. Webster, jr. Des. 85,069; Sept. 8.
Lamp. W. E. Wuelker. 1,821,955; Sept. 8.
Lamp, Projection. R. E. Miesse. 1,822,300; Sept. 8.
Lantern. J. H. Allen. Des. 85,024; Sept. 8.
Latch. G. E. Roedding. Des. 85,057; Sept. 8.
Latch device. W. A. Scott. 1,822,424; Sept. 8.
Latch, Door. E. Ellingson. 1,822,279; Sept. 8.
Latch lock, Mortise. E. Ellingson. 1,822,278; Sept. 8.
Lathe, Automatic. A. d'Halloy. 1,822,805; Sept. 8.
Laundry tag marking machines, Ribbon actuating device for. C. E. Constable. 1,822,339; Sept. 8.
Lens shifting mechanism for projecting machines. A. Tondreau. 1,822,551; Sept. 8.
Lenses and apparatus therefor, Manufacturing. F. J. G. B. Watson, E. Culver, and A. H. Emerson. 1,822,606; Sept. 8.
Let-off mechanism for novelty fabric looms. J. Giardino. 1,822,690; Sept. 8.
Level and pressure indicating mechanism, Combined liquid. H. Hastings. 1,822,735; Sept. 8.
Leveler. H. R. Lytle. 1,822,051; Sept. 8.
Lever for planes, Clamping. C. H. Fox. 1,822,520; Sept. 8.
Lever for telescoping elements, Lock. J. Schade. 1,822,670; Sept. 8.
Library or book stack, Metallic. J. G. L. Skar. 1,821,990; Sept. 8.
Lid for receptacles. J. F. Mullaney. 1,822,366; Sept. 8.
Life saving device. D. Ward. 1,822,120; Sept. 8.
Lifter: *See*—
Battery lifter
Light: *See*—
Flashlight
Light directing means. S. E. Brown. 1,822,830; Sept. 8.
Light intensities, Measuring. W. Van B. Roberts. 1,822,061; Sept. 8.
Light relays, Method to control. F. Schroeter. 1,821,948; Sept. 8.
Lighter. E. I. Rogers, jr. 1,822,505; Sept. 8.
Lighter, Cigar and cigarette. E. Worthington. Des. 85,073; Sept. 8.
Lighting fixture. J. J. Desmond. 1,822,019; Sept. 8.
Lighting fixture. A. J. Hixon. 1,822,527; Sept. 8.
Link, Tenter chain. W. A. Stelling. 1,822,676; Sept. 8.
Liquid cooler. H. O. Lindgren. 1,822,534; Sept. 8.
Liquid level indicating means for multiple cell storage batteries. E. L. Beecher. 1,821,958; Sept. 8.
Lithographs with notches for centering, Providing mounted. J. Regenstein. 1,822,373; Sept. 8.
Loader, Stuffing box. F. H. Brown. 1,822,562; Sept. 8.
Loading apparatus, Material. F. M. McClure. 1,822,598; Sept. 8.
Lock: *See*—
Latch lock
Lock. C. C. Cartia. 1,822,611; Sept. 8.
Lock for automobiles. E. H. Webb and C. C. Berry. 1,822,681; Sept. 8.
Locking device for fluid-pressure tools. E. W. Stevens. 1,822,248; Sept. 8.
Locomotive construction. W. L. Reid. 1,822,420; Sept. 8.
Locomotive refilling apparatus. F. W. Miller. 1,822,233; Sept. 8.
Loom. S. Bolin. 1,822,334; Sept. 8.
Loom for weaving, Circular. J. B. Jabouley. 1,822,292; Sept. 8.
Looms, Let off device for. C. Hakemeyer. 1,822,286; Sept. 8.
Loop, Garment. D. G. Butta. 1,822,724; Sept. 8.
Loop regulating mechanism for full fashioned knitting machines, Electrically controlled. C. F. Meyer. 1,821,982; Sept. 8.
Lubricating system, Cooled. H. V. Dalgliesh. 1,822,726; Sept. 8.
Lubricating system for vertical shafts. A. Minet. 1,822,817; Sept. 8.
Lubrication system, Internal-combustion engine. A. A. Woodward. 1,821,999; Sept. 8.
Lubricator: *See*—
Automatic piling lubricator
Luggage carrier. L. Edelmann and H. W. Eden. 1,822,480; Sept. 8.
Machine for applying pressure to shoes. F. D. Kinney. 1,822,039; Sept. 8.
Machine for and method of sizing textiles. J. J. Sussmith. 1,822,425; Sept. 8.
Machine for automatically baking waffles and the like. O. G. L. Danger. 1,822,803; Sept. 8.
Machine for drying and curing macaroni and other products made from a paste of flour and water. A. W. Quiggle and A. S. T. Lagaard. 1,822,313; Sept. 8.
Machine for making pile fabrics. P. S. Smith. 1,822,509–10; Sept. 8.
Machine for use in the manufacture of shoes. F. Hume. Re18,179; Sept. 8.
Machine for vending stamps and the like. A. L. Zent. 1,822,258; Sept. 8.
Magnet for turbo-generators, Rotating field. O. T. Blathy. 1,822,723; Sept. 8.
Magnetic pick up. H. P. Donle. 1,822,841; Sept. 8.
Mail bag hook. R. A. Taylor. 1,822,830; Sept. 8.
Mailing machine. B. Garilus. 1,822,282; Sept. 8.
Manifolding device. W. O. Critchfield. 1,822,764; Sept. 8.
Mapping. S. M. Fairchild. 1,822,650; Sept. 8.
Marking device. E. H. Huntress. 1,822,098; Sept. 8.
Material into strips, Method and apparatus for cutting sheet. J. R. Gammeter. 1,822,209; Sept. 8.
Material measuring and handling apparatus. M. G. Martin, and F. Voelker, jr. 1,822,446; Sept. 8.
Materials on road and other surfaces, Apparatus for distributing. C. G. Fox. 1,822,207; Sept. 8.
Materials, Process and mechanism for separating intermixed divided. K. Davis. 1,822,840; Sept. 8.
Materials, Revivifying adsorbent. E. B. Miller. 1,822,303; Sept. 8.
Mats, Placing revetment. B. A. Ross. 1,822,603; Sept. 8.
Matter containing mercury, Composition of. M. Pacella. 1,822,709; Sept. 8.
Mattes and slags, Dezincing. M. G. Fowler, and D. Niconoff. 1,822,396; Sept. 8.
Measuring apparatus. D. H. Rowland and J. C. Robertson. 1,822,458; Sept. 8.
Measuring instrument. E. O. Loeber and G. B. Gallasch. 1,822,740; Sept. 8.
Measuring instrument, Electrical. S. Aronoff. 1,822,075; Sept. 8.
Measuring instrument, Precision. E. Letsch. 1,822,662; Sept. 8.
Measuring the freeness of pulp. F. L. Simons, H. J. Skinner, and R. M. Fuoss. 1,822,604; Sept. 8.
Measuring values into corresponding electrical measuring values, Device for the conversion of mechanical. E. P. G. Wünch. 1,822,184; Sept. 8.
Metal Electrodeposition of. W. H. Hannay and F. E. Lee. 1,821,970; Sept. 8.
Metal stock, Coiling hot. J. R. George and F. P. Dahlstrom. 1,822,589; Sept. 8.
Metal working machine, Sheet. P. R. Hahnemann. 1,822,097; Sept. 8.
Metallic composition and process of preparing the same. Le R. L. Wyman. 1,822,720; Sept. 8.
Meter testing switch. W. H. Schramm. 1,822,113; Sept. 8.
Micrometer. A. D. Mizzy and W. E. Favini. 1,822,413; Sept. 8.
Milk, Manufacture of evaporated. J. M. McClatchie. 1,821,943; Sept. 8.
Milking machine. J. Taylor. 1,822,680; Sept. 8.
Mill: *See*—
Grinding mill
Minerals, Apparatus for grinding and separating. H. F. Dubbert. 1,822,647; Sept. 8.
Model, Dentist's. W. Köhler. 1,822,043; Sept. 8.
Mold: *See*—
Brick mold
Mold for molding central triple reflectors. V. L. Oestnaes. 1,822,451; Sept. 8.
Molded articles, Manufacturing. R. Weitzel. 1,822,762; Sept. 8.
Mononitroanthanthrones, Production of. M. A. Kunz, K. Koeberle, and W. Zerweck. 1,822,045; Sept. 8.
Motor: *See*—
Electric motor Induction motor
Motor frame construction. E. E. Hollander. 1,822,096; Sept. 8.
Mounting bracket. W. C. Keys. 1,822,529; Sept. 8.
Mounting, Flexible journal box. J. Hektner. 1,822,347; Sept. 8.
Mounting for vacuum tubes. G. R. Lum. 1,822,535; Sept. 8.
Mounting, Individual wheel. A. F. Masury. 1,822,159; Sept. 8.
Mower. W. J. Coultas. 1,822,204; Sept. 8.
Muffler and propeller assembly for internal combustion engines. A. M. Decker. 1,822,272; Sept. 8.
Music sheet turner. E. Gustafson. 1,822,523; Sept. 8.
Muzzle, Cattle. R. F. Campbell. 1,822,610; Sept. 8.

Natural air drier. S. W. Bonsall. 1,822,431; Sept. 8.
Necktie rack. J. F. Harrington. 1,822,734; Sept. 8.
Negative holder. C. D. Newton and R. De Silva. 1,822,783; Sept. 8.
Nest, Trap. F. W. Lord. 1,822,048; Sept. 8.
Oat huller. E. Lorenzen. 1,822,741; Sept. 8.
Oil appliance for sleeve-type of internal combustion engines. R. L. Skinner. 1,821,991; Sept. 8.
Oil burner. C. J. Ohlsson. 1,822,540; Sept. 8.
Oil burning apparatus. J. M. Duggan and H. A. Neder. 1,822,518; Sept. 8.
Oil burning system. J. P. Leask. 1,822,047; Sept. 8.
Oil, Cracking. C. L. Smith. 1,822,753; Sept. 8.
Oil fractionating apparatus. C. L. Smith and C. B. Watson. 1,822,755; Sept. 8.
Oil from oil sands, Recovering. G. W. Coggeshall. 1,822,271; Sept. 8.
Oil-pressure regulating device for upholding an even speed of machines. R. Proell. 1,822,667; Sept. 8.
Oil wells, Closing. A. J. Gallaher. 1,822,141; Sept. 8.
Oiler, Air line. E. B. Lear. 1,822,100; Sept. 8.
Oiling device. C. C. Hansen. 1,822,092; Sept. 8.
Oils and apparatus therefor, Distilling hydrocarbon. W. H. Bahlke. 1,822,607; Sept. 8.
Oils and producing same, Core. E. H. McArdle. 1,822,411; Sept. 8.
Oils, Converting. N. E. Loomis and L. Burgess. 1,822,862; Sept. 8.
Oils, Converting hydrocarbon. L. Burgess. 1,822,861; Sept. 8.
Oils, Purification of tar acid-bearing. S. Caplan. 1,822,842; Sept. 8.
Optical printer. F. H. Owens. 1,822,417; Sept. 8.
Optimum current strength in the electro deposition of rubber and other substances, Determining. F. H. Lane. 1,822,226; Sept. 8.
Ore, Treating arsenious. A. R. Lindblad. 1,822,103; Sept. 8.
Ores, Purification of. F. M. Becket. 1,822,266; Sept. 8.
Organic substances, Aqueous dispersion of. A. Szegvari. 1,822,249; Sept. 8.
Ornament, Radiator. V. O. Greene. Des. 85,041; Sept. 8.
Oven, Coke. C. H. Hughes. 1,822,699; Sept. 8.
Package pick-up device for aircraft. M. S. League. 1,822,354; Sept. 8.
Packaging and apparatus therefor. F. L. Darling. 1,822,614; Sept. 8.
Packer for use with overshot, Novel. G. Meyer. 1,822,412; Sept. 8.
Packing. G. B. Cutting. 1,821,964; Sept. 8.
Packing and scraping means, Piston rod. E. N. Fox and E. Hampshire. 1,822,521; Sept. 8.
Packing box for attaching means. W. J. Spiro. 1,822,246; Sept. 8.
Packing for heat exchangers, Baffle. H. W. How. 1,822,698; Sept. 8.
Pad: *See*—
Abrasive pad
Pad or recording device, Writing. J. B. Carroll. 1,822,200; Sept. 8.
Pads, Manufacturing flexible. O. G. Schmitt. 1,822,377; Sept. 8.
Pads, Process and apparatus for manufacturing flexible. O. G. Schmitt. 1,822,376; Sept. 8.
Paper machine. W. Giebeler. 1,822,023; Sept. 8.
Pattern apparatus, Photoelectrically controlled. K. Nakanishi. 1,822,306; Sept. 8.
Patterns from dental molds, Eliminating fusible. H. C. Hagman. 1,822,285; Sept. 8.
Pedal, Gas. A. Næsheim. 1,822,055; Sept. 8.
Pen cap, Fountain. L. J. Most. 1,822,166–7; Sept. 8.
Pen, Combination pocket and desk set, Fountain. L. J. Most. 1,822,168; Sept. 8.
Pen, Fountain. A. H. Swan. 1,822,789; Sept. 8.
Pencil. H. B. Van Dorn. 1,821,994; Sept. 8.
Phenols, Manufacturing alkyl isoalkyl. W. Schoeller and H. Jordan. 1,822,062; Sept. 8.
Phonograph blanks, Treating paper. E. M. Schulz. 1,822,508; Sept. 8.
Phonograph coupling for radioreceivers. A. H. Grebe and P. D. Lowell. 1,822,653; Sept. 8.
Phonograph, Film. G. A. Del Valle. 1,822,727; Sept. 8.
Phonograph records, Pin holder for. A. M. Acheson and G. Ramsey. 1,821,916; Sept. 8.
Phosphate, Manufacture of di-ammonium. B. G. Klugh and W. R. Seyfried. 1,822,040; Sept. 8.
Photographic apparatus. J. S. Greene. 1,822,345; Sept. 8.
Photographic apparatus. G. L. Taylor. 1,822,677; Sept. 8.
Photographic apparatus and more particularly to the focusing mechanism thereof. G. L. Taylor. 1,822,678; Sept. 8.
Photographing apparatus, Automatic focusing device for. G. C. Beidler. 1,821,923; Sept. 8.
Piano. L. Loar. 1,821,977–8; Sept. 8.
Picture apparatus, Motion. F. H. Owens. 1,821,946; Sept. 8.
Pilot, Expansion. W. H. Evans. 1,822,649; Sept. 8.
Pin: *See*—
Rug tag-pin
Pipe connecter, Threadless. E. J. Noble. 1,822,056; Sept. 8.
Pipes, Method and apparatus for lining. J. W. Schade. 1,822,240; Sept. 8.
Piston. H. J. Hater. Re18,178; Sept. 8.
Piston, Engine. R. N. Steele. 1,822,322; Sept. 8.
Piston packing ring. J. C. Lewis. 1,822,101; Sept. 8.
Pitman boxing. H. Goodson. 1,822,807; Sept. 8.
Pitting apparatus, Fruit. A. K. Smith. 1,822,381; Sept. 8.
Pitting machine, Date. A. K. Smith. 1,822,382; Sept. 8.
Pitting machine, Fruit. A. R. Thompson. 1,822,180; Sept. 8.
Plant marker. M. G. Slawson. 1,822,787; Sept. 8.
Plate and making same, Screen. S. B. Stine. 1,822,756; Sept. 8.
Plate assembly for steering gear housings, etc., Closing. R. E. Young and F. F. Chandler. 1,822,637; Sept. 8.
Plate for electric accumulators, Lead. A. Pouchain. 1,822,746; Sept. 8.
Plug for cementing wells. S. O. Barton. 1,822,193; Sept. 8.
Plug for oil wells and apparatus for seating the same. A. J. Gallaher. 1,822,140; Sept. 8.
Plunger, Control valve. E. P. Ericson and W. J. Moyle. 1,822,617; Sept. 8.
Pointer, underliner, and weight. H. R. Thoresen. 1,822,757; Sept. 8.
Post: *See*—
Sand reel post
Power control system. F. O. Wallene. 1,822,071; Sept. 8.
Power plant, Hydraulic. A. V. Geary. 1,822,806; Sept. 8.
Power rectifier system, High. L. A. Gebhard. 1,822,618; Sept. 8.
Power transmission mechanism. A. K. Stohl. 1,822,066; Sept. 8.
Press: *See*—
Garment press Proof press
Pressure control system for gas plants, Remote. G. G. Crane. 1,822,645; Sept. 8.
Pressure responsive device and its manufacture. E. O. Stout and O. M. Summers. 1,821,950; Sept. 8.
Printing device. H. E. Hubbard. 1,822,291; Sept. 8.
Printing of fabrics containing organic derivatives of cellulose. H. Platt. 1,822,453; Sept. 8.
Products from solid carbonizable substances, Recovery of soluble. J. Jannek and O. Göhre. 1,822,349; Sept. 8.
Proof press, Newspaper turtle. J. E. Lee. 1,822,301; Sept. 8.
Propeller. C. H. A. S. dos Santos Gallo. 1,822,867; Sept. 8.
Protecting means for frangible floats. L. Edelmann. 1,822,481; Sept. 8.
Protective device for multi-phase motors. P. Suter. 1,822,713; Sept. 8.
Protector, Brake cylinder. E. G. Bell. 1,822,722; Sept. 8.
Protector, Dress. S. H. Blauner. 1,822,267; Sept. 8.
Protector, Inner tube. E. Eger. 1,822,568; Sept. 8.
Protector, Thread. E. R. and P. S. Brown. Des. 18,184; Sept. 8.
Protectors, Device for forming plant. R. N. Moore. 1,822,818; Sept. 8.
Pull rod clamp. M. T. Archer. 1,822,642; Sept. 8.
Puller: *See*—
Tire puller
Pulley, Automatic expanding belt. F. P. Connors. 1,822,584; Sept. 8.
Pulp, Composition for treating. J. F. King. 1,822,779; Sept. 8.
Pulp, Method and machine for making articles of. E. L. Perry. 1,822,058; Sept. 8.
Pulsator for milking machines. A. F. Plint. 1,821,986; Sept. 8.
Pulverizing material, Process and apparatus for. M. D. Jones. 1,822,221; Sept. 8.
Pump, Evacuating. E. Kobel. 1,822,702; Sept. 8.
Pump for liquids. G. Schongüt. 1,822,242; Sept. 8.
Pumping apparatus. J. B. Sperry. 1,822,546; Sept. 8.
Punch mounting, stripping and lubricating means for stamping presses. G. F. Wales. 1,822,468; Sept. 8.
Purifying agents, Regenerating contaminated. A. Joseph. 1,822,293; Sept. 8.
Rack: *See*—
Display rack Necktie rack
Radial connecting rod. H. O. Elane. 1,822,694; Sept. 8.
Radiocabinet. E. Wuenn. Des. 85,074; Sept. 8.
Radio signaling system. R. D. Bangay. 1,821,921; Sept. 8.
Rail bond. P. P. Pipes. 1,822,059; Sept. 8.
Railroad spreader. H. W. Protzeller. 1,822,312; Sept. 8.
Razor. M. Alland. 1,822,864; Sept. 8.
Razor. A. Leenhouts. 1,821,975; Sept. 8.
Razor and hair cutter, Safety. M. J. Duffy. 1,822,766; Sept. 8.
Razor, Safety. J. T. Scully. 1,822,379; Sept. 8.
Reading machine. B. A. Fiske. 1,822,651; Sept. 8.
Receptacle, Liquid measuring. M. Lumley. 1,822,703; Sept. 8.
Records, Method and apparatus for producing Photographic. T. W. Case. 1,822,865; Sept. 8.
Reel. A. A. Bureau. 1,822,474; Sept. 8.
Reeling machine, High speed. P. J. Thomas. 1,822,790; Sept. 8.
Refrigerating apparatus. F. W. Andrews. 1,822,008; Sept. 8.

Refrigerating apparatus. J. J. Barry. 1,822,121; Sept. 8.
Refrigerating apparatus. C. Birdseye. 1,822,077; Sept. 8.
Refrigerating apparatus. C. Birdseye and B. Hall. 1,822,123; Sept. 8.
Refrigerating apparatus. C. Birdseye. 1,822,124; Sept. 8.
Refrigerating apparatus. H. R. Candor. 1,822,583; Sept. 8.
Refrigerating apparatus. B. Hall. 1,822,080; Sept. 8.
Refrigerating apparatus. D. E. Maccabee. 1,822,052; Sept. 8.
Refrigerating apparatus. O. M. Summers. 1,822,067–8; Sept. 8.
Refrigerating apparatus. C. R. Wayman. 1,821,995; Sept. 8.
Refrigerating apparatus and method. C. L. Jones. 1,822,851; Sept. 8.
Refrigerating apparatus and method. D. H. Killeffer. 1,822,850; Sept. 8.
Refrigerating device. N. Eckles. 1,822,586; Sept. 8.
Refrigerating system for cars. C. A. Moore. 1,822,305; Sept. 8.
Refrigeration. D. B. Knight. 1,822,224; Sept. 8.
Refrigeration. R. S. Taylor. 1,822,250; Sept. 8.
Refrigeration, Method of and apparatus for producing. R. S. Nelson. 1,822,109; Sept. 8.
Registering device. C. W. Kanolt. 1,822,489; Sept. 8.
Regulating device for stock quotation projectors, Tape. A. D. Eitzen. 1,822,769; Sept. 8.
Regulator of the vibrating type, Quick acting. H. Meyer-Berg and R. Keller. 1,822,232; Sept. 8.
Relay, Electrical. B. Lazich. 1,822,496; Sept. 8.
Relay, Fluid pressure. R. Marsland and O. N. Bryant. 1,822,445; Sept. 8.
Relay system. F. B. Kalknor and T. R. Goldsborough. 1,822,086; Sept. 8.
Remote control indicator system. K. Wilde. 1,822,683; Sept. 8.
Respirator. F. Willson. 1,821,996; Sept. 8.
Retarding device for spring suspension, Frictional. E. J. Pilblad. 1,822,236; Sept. 8.
Retort construction. R. B. Parker. 1,822,541; Sept. 8.
Revetment mat. B. A. Ross. 1,822,602; Sept. 8.
Rheostat and switch, Combined. L. Caruso. 1,821,927; Sept. 8.
Ridge burster. W. H. Silver. 1,822,711; Sept. 8.
Rig, Oil well. R. T. Boles. 1,822,268; Sept. 8.
Rig, Rotary drilling. H. Pennington. 1,822,710; Sept. 8.
Ring: *See*—
Finger ring
Piston packing ring
Rod: *See*—
Radial connecting rod
Roof accessory. H. C. Macan. 1,822,410; Sept. 8.
Roofing. R. A. Eckberg. 1,822,134; Sept. 8.
Rope, Wire. R. C. G. Jenkin. 1,822,219; Sept. 8.
Ropes, Reducing the extension of wire. G. Zapf. 1,822,189; Sept. 8.
Rotary machine, Continuous. A. L. De Leeuw. 1,822,690; Sept. 8.
Rotary machine, Fluid pressure operated continuous. 1,822,691; Sept. 8.
Rotary mechanism for the transmission of power at varying speeds. W. Hunt. 1,822,776; Sept. 8.
Rubber product and preparing the same. E. R. Bridgwater. 1,822,561; Sept. 8.
Rubber, Treatment of. W. P. ter Horst. 1,822,548; Sept. 8.
Rug, tag-pin. J. S. Launderville. 1,822,494; Sept. 8.
Runway jack. L. I. Swayne. 1,822,325; Sept. 8.
Safety release, Laundry machine. J. P. Shea. 1,822,752; Sept. 8.
Sand reel post. H. F. Moran. 1,822,819; Sept. 8.
Sash in certain window construction, Mechanism for operating. E. L. Ackerman. 1,822,580; Sept. 8.
Sash operator, Automatic. H. D. Roach. 1,822,504; Sept. 8.
Saw and power attachment, Portable. L. J. Winchell. 1,822,329; Sept. 8.
Saw, Swing. T. R. Landsborough. 1,822,155; Sept. 8.
Scale, Check controlled. B. W. King. 1,822,038; Sept. 8.
Scale, Planter wire. M. N. Laursen. 1,822,352; Sept. 8.
Scale, Weighing. E. G. Thomas. 1,822,549; Sept. 8.
Scale, Weighing. L. S. Williams. 1,822,513; Sept. 8.
Scalp, Apparatus for increasing circulation of the. C. J. Lowen. 1,821,979; Sept. 8.
Screen: *See*—
Vibrating screen
Sea drome. E. G. Smith. 1,822,245; Sept. 8.
Seal. I. W. Miller. 1,821,984; Sept. 8.
Sealing composition. R. L. Jenkins and C. G. Hardy. 1,822,033; Sept. 8.
Sealing compound or stain and producing the same, Surface. F. S. Vivas. 1,822,253; Sept. 8.
Sealing means. W. M. Brooks. 1,822,390; Sept. 8.
Seam for sewed articles. N. V. Christensen. 1,822,799; Sept. 8.
Seat: *See*—
Valve seat
Seat adjuster, Vehicle. L. A. Wenn and W. K. Bishop. 1,822,427; Sept. 8.
Selenium cell door closer. L. J. Kinnard and J. Dunlop. 1,822,152; Sept. 8.
Separation apparatus for food remnants. R. E. Weber. 1,822,469; Sept. 8.
Separator: *See*—
Electric separator
Steam separator
Sewing machine, Multicolor thread. C. A. Dickey. 1,822,765; Sept. 8.
Sewing machine, Portable. B. E. Thompson. 1,822,116; Sept. 8.
Sewing machines, Safety device for. E. B. Allen. 1,822,854; Sept. 8.
Sewing machines, Thread-cutter operating mechanism for. E. B. Allen. 1,822,639; Sept. 8.
Shade or similar article, Light. N. Kopp. Des. 85,049; Sept. 8.
Shearing machine, Seam-controlled. C. G. Richardson. 1,822,374; Sept. 8.
Shears with detachable blades. C. E. Luedtke. 1,822,050; Sept. 8.
Sheets and the like, Fastening corrugated. G. A. Belding. 1,822,558–9; Sept. 8.
Shield, Cable. A. O. Hoeftmann. 1,822,624; Sept. 8.
Ship propulsion system. R. A. Beekman. 1,822,721; Sept. 8.
Ship propulsion system. R. D. Van Nordstrand. 1,822,760; Sept. 8.
Ships, boats, and the like, Construction of. J. R. Klinger. 1,822,223; Sept. 8.
Shirt and drawers, Combination. H. Gussak. 1,822,482; Sept. 8.
Shock absorber and stop for pruning shear handles. G. F. Hickok. 1,822,591; Sept. 8.
Shock absorber, Hydraulic. E. W. Johnson. 1,822,406; Sept. 8.
Shock absorbing device. J. Roumens. 1,822,824; Sept. 8.
Shock absorbing mechanism. W. R. Bull and C. E. Simpson. 1,822,079; Sept. 8.
Shoe. W. Goldstein. Des. 85,040; Sept. 8.
Shoe bag. A. Mansker and D. Baum. 1,822,780; Sept. 8.
Shoe cleaning and polishing machine. V. Raschella. 1,822,419; Sept. 8.
Shoe stiffener. W. O. Herrmann and W. Haschnel. 1,822,526; Sept. 8.
Shoe stiffener and making the same. M. G. Hill and T. H. Bristow. 1,821,939; Sept. 8.
Shoes, Making. W. J. Kelly. 1,822,852–3; Sept. 8.
Sign. W. H. Babcock. 1,822,265; Sept. 8.
Sign. A. M. Ducey. 1,822,084; Sept. 8.
Sign, Movable. T. J. Carroll. 1,822,798; Sept. 8.
Signal system, Electric. F. H. Richterkessing. 1,822,503; Sept. 8.
Signal system, Selective. W. F. Eames. 1,822,085; Sept. 8.
Signaling device. T. J. Scofield and F. W. Billig. 1,822,674; Sept. 8.
Signaling system for railroads. C. F. Estwick. 1,822,572; Sept. 8.
Silk, Delustering artificial. F. C. Nonamaker. 1,822,416; Sept. 8.
Sleeve and making same, Hand grip. R. T. Griffiths. 1,822,212; Sept. 8.
Sleeves, Apparatus for drying. C. Majer. 1,822,158; Sept. 8.
Sliders, Making. G. E. Prentice. 1,822,173; Sept. 8.
Smoking chair, Italian. P. P. Aiello. 1,822,638; Sept. 8.
Snowplow. G. W. Schultz. 1,822,545; Sept. 8.
Snow remover. L. Shappell. 1,822,827; Sept. 8.
Snuffer for candles. J. A. Gluckert. 1,822,052; Sept. 8.
Socket, Electric light. W. T. Brunton. 1,822,434; Sept. 8.
Sostenuto control. J. H. Hammond, jr. 1,822,214; Sept. 8.
Sound, Apparatus and method for producing. H. Hueber and E. C. Horton. 1,822,579; Sept. 8.
Sound photography system. D. A. Whitson. 1,822,183; Sept. 8.
Sound records, Recording photographic. F. H. Owens. 1,822,057; Sept. 8.
Sound regenerating apparatus. R. C. Darnell. 1,821,933; Sept. 8.
Sound reproducing device. M. Nystrom. 1,822,450; Sept. 8.
Spark plug. E. W. Stevens. 1,822,462; Sept. 8.
Spoke straightener and wheel aligning tool, Wire. H. R. Kennedy. 1,822,407; Sept. 8.
Spotter, Flexible vulcanizing. A. W. Gay. 1,822,022; Sept. 8.
Spraying device. L. P. Uphoff and F. A. Sims. 1,822,553; Sept. 8.
Spraying device for spraying paints, varnishes, etc. W. Hermann. 1,822,622; Sept. 8.
Spring equalizer. S. R. McClay. 1,822,499; Sept. 8.
Spring suspension for six wheel vehicles. F. E. Davis. 1,822,131; Sept. 8.
Spring suspension systems, Controlling device for vehicle. E. F. Zaparka. 1,822,185–8; Sept. 8.
Spring testing device. E. E. Essen. 1,822,587; Sept. 8.
Springs, Insert for automobile. A. W. Meier. 1,822,816; Sept. 8.
Stabilizer, High frequency. L. A. Hyland. 1,822,812; Sept. 8.
Stand: *See*—
Display or supporting stand
Starter, Engine. W. L. McGrath. 1,822,163; Sept. 8.
Starting apparatus for motor vehicles with internal combustion engines. R. Schwenke. 1,822,673; Sept. 8.

Starting attachment for motor vehicles. F. O. Koepp. 1,822,041; Sept. 8.
Starting gate, Partitioned. M. Cassidy. 1,822,080; Sept. 8.
Steam separator. J. R. Kruse. 1,822,442; Sept. 8.
Steaming board. H. G. Beede. 1,822,387; Sept. 8.
Steel alloy. D. F. Youngblood. 1,822,792; Sept. 8.
Steering and braking device. J. W. Tatter. 1,822,714; Sept. 8.
Steering device for aeroplanes. H. G. Davis. 1,822,082; Sept. 8.
Stereoprinting block. J. Fricke. 1,822,574; Sept. 8.
Stool, Automatic folding step. R. C. Haynes. 1,822,899; Sept. 8.
Stopper and applicator, Combined. J. E. Keilly. 1,822,296; Sept. 8.
Stove, Barbecue. S. B. Mayhew. 1,822,355; Sept. 8.
Stove construction. C. M. Dibble. 1,822,274; Sept. 8.
Stovepipe heater. O. Andrew. 1,821,920; Sept. 8.
Stretching machine. J. E. McCarthy. 1,822,104; Sept. 8.
Submarines, Life saving and salvage apparatus for. G. Facchin. 1,822,435; Sept. 8.
Sulphite pulp for filaments and films, Preparing. C. A. Blodgett and H. H. Hanson. 1,822,126; Sept. 8.
Sunlight control and concentrating device. W. J. Harvey. 1,822,029; Sept. 8.
Support. B. S. Carr. 1,822,009; Sept. 8.
Support, Arch. O. Hildebrandt. 1,822,080; Sept. 8.
Support, Clothesline. C. T. Moyer. 1,822,364; Sept. 8.
Support for lamp sockets in light signals, Adjustable. J. F. Merkel. 1,822,105; Sept. 8.
Support for lavatory basins or the like. G. Sakier. Des. 85,060; Sept. 8.
Support for measuring instruments. L. F. Muther. 1,822,500; Sept. 8.
Support, Picture frame. C. E. Haines. 1,822,398; Sept. 8.
Support, Trouser. S. L. Caple. 1,822,477; Sept. 8.
Supporter, Athletic. A. S. Callaway. 1,821,962; Sept. 8.
Supporter, Diaper. L. Hendrix. 1,822,524; Sept. 8.
Supporting elements in an electron device. R. Harding, jr. 1,822,731; Sept. 8.
Supporting means for spring suspension devices for vehicles. E. J. Pilblad. 1,822,235; Sept. 8.
Supporting mechanism for straightening rolls of plate straightening machines, Adjustable. F. Ungerer. 1,822,119; Sept. 8.
Suppressor, Telephone echo. A. B. Clark. 1,821,928; Sept. 8.
Surgical table. R. E. Ferguson. 1,822,206; Sept. 8.
Suturing instrument. G. Ainslie. 1,822,330; Sept. 8.
Swimming apparatus. J. Leblanc. 1,821,974; Sept. 8.
Switch: *See*—
Automatic switch
Test switch
Meter testing switch
Thermostat switch
Switch. L. Mayer. 1,822,161; Sept. 8.
Switch. R. E. McGee. 1,822,706; Sept. 8.
Switch particularly for electric sad-iron and similar devices, Control. L. Reichold. 1,822,315; Sept. 8.
Synchronizer, Cone gear. H. J. Murray. 1,822,107; Sept. 8.
Table: *See*—
Surgical table
Tablets of powdery material framed in metal, Producing. H. Pfleumer, F. Kruger, and H. Oexmann. 1,822,172; Sept. 8.
Tabulating machine. C. D. Lake. 1,822,594; Sept. 8.
Tabulator, Printing. W. W. Lasker. 1,822,156; Sept. 8.
Tack puller or pliers. F. R. White. 1,821,953; Sept. 8.
Tag and holder therefor, Price. W. S. Rench. 1,822,421; Sept. 8.
Tag and sign, Price. C. H. Angell. 1,822,641; Sept. 8.
Tagging. M. R. Kondolf. 1,822,660–1; Sept. 8.
Tank: *See*—
Filter tank
Tape, Controlling the movement of a. W. T. Birdsall. 1,821,925; Sept. 8.
Tassel, Shade. C. P. Schlegel. Des. 85,062; Sept. 8.
Tea pot or similar article. W. Lindley. Des. 85,050; Sept. 8.
Telephone stand. G. M. Minton. Des. 85,052; Sept. 8.
Telephone system. A. Tradup. 1,821,993; Sept. 8.
Tension controlling device for knitting machines. R. H. Lawson and A. N. Cloutier. 1,822,870; Sept. 8.
Terminal connection. A. B. Dibner. 1,822,093; Sept. 8.
Test switch. J. E. Baber. 1,822,866; Sept. 8.
Testing gauge. J. L. Monk. 1,822,599; Sept. 8.
Textile fabric. A. A. Ritter. Des. 85,056; Sept. 8.
Textile fabric. H. S. Royle. Des. 85,059; Sept. 8.
Thermostat. A. A. Thomas. 1,822,069; Sept. 8.
Thermostat, Mercury switch. L. R. Teeple. 1,822,605; Sept. 8.
Thermostat switch. A. O. Appelberg. 1,822,191; Sept. 8.
Thermostatic control device. G. J. Zisch. 1,822,001; Sept. 8.
Thread gauge, Cam controlled. J. Hartness. 1,822,027; Sept. 8.
Thread winding machine. H. F. Niogret. 1,822,415; Sept. 8.
Threadless pipe coupling. W. Werner. 1,821,952; Sept. 8.
Threads, Twisting continuously spun artificial. H. Diele. 1,822,018; Sept. 8.
Ticker protecting means. A. D. Eitzen. 1,822,771; Sept. 8.
Tire. B. Barrow. Des. 85,032; Sept. 8.
Tire. M. A. Dreher. Des. 85,034; Sept. 8.
Tire. H. D. Reichard. Des. 85,055; Sept. 8.
Tire. C. M. Sloman. Des. 85,063; Sept. 8.
Tire and rim, Pneumatic. A. H. Shoemaker. 1,822,320; Sept. 8.
Tire Cushion. W. Barber. 1,822,556; Sept. 8.
Tire puller. E. H. Lawrence. 1,822,409; Sept. 8.
Toaster, Electric. F. J. Sprague. 1,822,633; Sept. 8.
Tomatoes, Method and apparatus for skinning. F. P. Ryder. 1,822,875; Sept. 8.
Tool and making same, Well. J. W. Heeter. 1,822,400; Sept. 8.
Tool clamping means. E. P. Bullard. 1,822,514; Sept. 8.
Tool, Cutting. H. W. Porter. 1,822,745; Sept. 8.
Tool or clamping lever, Mechanic's. F. P. Johnson. 1,822,294; Sept. 8.
Tool, Rim. J. Barrett. 1,822,643; Sept. 8.
Tool, Tie twisting. H. B. Foulder. 1,822,136; Sept. 8.
Tools, Producing metal working. W. C. Sproul. 1,822,176; Sept. 8.
Tooth, Artificial. B. W. and S. K. Avery. 1,822,837; Sept. 8.
Toothbrush and nail polisher, Revolving. J. M. Roig. 1,822,631; Sept. 8.
Tower construction, Bubble. O. C. Brewster. 1,822,609; Sept. 8.
Toy. C. J. Gerken. 1,822,283; Sept. 8.
Toy, Electrical. J. L. Cowen and L. Caruso. 1,822,015; Sept. 8.
Toy, String-supported figure. H. W. Graves. 1,821,967; Sept. 8.
Toy, Traveling wheeled gyroscopic. W. Hinsen. 1,821,940; Sept. 8.
Tracing machine, Diagraphic. W. H. Martin. 1,822,664; Sept. 8.
Traction attachment for wheels. F. and D. W. Rivers. 1,822,748; Sept. 8.
Traction device for wheels. T. Zerbi. 1,822,793; Sept. 8.
Tractor. R. O. Hendrickson and T. Nelson. 1,822,093; Sept. 8.
Tractor wheel. T. W. Steele. 1,822,634; Sept. 8.
Train control system, Continuous inductive. W. D. Halles. 1,822,088; Sept. 8.
Traffic controlling apparatus, Railway. A. P. Jackel. 1,822,218; Sept. 8.
Traffic controlling apparatus, Railway. H. S. Loomis. 1,822,497; Sept. 8.
Traffic controlling apparatus, Railway. R. A. McCann. 1,822,498; Sept. 8.
Train dispatching system for railroads. O. H. Dicke. 1,822,083; Sept. 8.
Transmission. C. W. Weiss. 1,822,555; Sept. 8.
Transmitter, Automatic tape. L. L. Young. 1,822,000; Sept. 8.
Trap: *See*—
Ant trap
Tray, Ash. T. S. Fowler. Des. 85,039; Sept. 8.
Tray for bubble towers. W. A. Stover and W. G. Palmer. 1,822,323; Sept. 8.
Tray, Instrument. R. H. Hill. 1,822,487; Sept. 8.
Tribromoalcohols and preparing the same. J. Callser. 1,822,008; Sept. 8.
Trip, Power dipper. A. E. Holcomb. 1,822,403; Sept. 8.
Trolley. E. Körner. 1,822,300; Sept. 8.
Trolley shoe. A. L. Henry. 1,822,620–1; Sept. 8.
Tubes, Process and apparatus for molding. W. H. Watt. 1,822,256; Sept. 8.
Turbine exhauster for locomotives, Air. F. H. C. Coppus. 1,822,081; Sept. 8.
Turbine, Hydraulic. V. Kaplan. 1,822,778; Sept. 8.
Typewriting machine. F. Becker. 1,821,922; Sept. 8.
Typewriting machine. F. A. Greis. 1,822,438; Sept. 8.
Typewriting machine. A. G. F. Kurowski. 1,822,532; Sept. 8.
Undergarment. E. A. Christman. 1,822,515; Sept. 8.
Undergarment, Union. A. J. Krein. 1,822,531; Sept. 8.
Underreamer. E. S. Hartson, 1,822,216; Sept. 8.
Units and apparatus therefor, Machining individual. R. L. Frederick, and T. L. Williams. 1,822,730; Sept. 8.
Vacuum cleaner. B. D. Goldberg. 1,822,522; Sept. 8.
Vacuum distillation of oils. A. E. Harnsberger. 1,822,733; Sept. 8.
Vacuum tube apparatus. A. R. Perry. 1,822,370; Sept. 8.
Vacuum tube construction. F. S. McCullough. 1,822,162; Sept. 8.
Valve. A. F. Cormer and G. W. K. King. 1,821,929; Sept. 8.
Valve. J. R. Hamilton. 1,822,655; Sept. 8.
Valve. K. F. McJilton. 1,822,230; Sept. 8.
Valve. H. F. Stevens. 1,821,992; Sept. 8.
Valve, Check. J. F. Mullaney. 1,822,365; Sept. 8.
Valve, Electromagnetic. H. W. Protzeller. 1,822,668; Sept. 8.
Valve for flush tanks, Siphon. S. L. Powell. 1,822,060; Sept. 8.
Valve for garment presses, Steaming. H. G. Beede. 1,822,388; Sept. 8.
Valve, Locomotive. P. Pascale. 1,822,171; Sept. 8.
Valve, Safety gas. W. D. Antrim. 1,822,794; Sept. 8.
Valve seat. F. E. Smith. 1,822,754; Sept. 8.
Valve seat. J. A. Weiger. 1,822,082; Sept. 8.
Valve, Self-packing. C. A. Olson. 1,822,666; Sept. 8.
Valve, Thermostatic. E. J. Levy. 1,822,863; Sept. 8.
Valve, Tire. H. Hutchinson. 1,822,592; Sept. 8.

Vaporizer, Electrical. J. Robinson. 1,822,456; Sept. 8.
Vehicle, Body construction. A. P. Ball. 1,821,957; Sept. 8.
Vehicle, Gravity dump. L. E. Williams. 1,822,684; Sept. 8.
Vehicle, Land. A. P. Armington. 1,822,795; Sept. 8.
Vehicle, Land. L. H. Thoen. 1,822,178; Sept. 8.
Vehicle, Motor. G. H. Taber. 1,822,464; Sept. 8.
Vehicle suspension. S. L. C. Coleman. Re18,177; Sept. 8.
Ventilator: *See*—
  Crank case ventilator Dust arresting ventilator
Vibrating screen. C. G. A. Schmidt, jr. 1,822,507; Sept. 8.
Vibration indicator. W. E. Trumpler. 1,822,118; Sept. 8.
Vulcanizing apparatus. L. O. Grange. 1,822,590; Sept. 8.
Wagon hitch. H. L. and M. R. Baker. 1,821,917; Sept. 8.
Wall, Water. G. P. Jackson. 1,822,405; Sept. 8.
Warp, Beam. F. Moosberg. 1,822,414; Sept. 8.
Washers, Making lock. C. G. Olson. 1,822,600; Sept. 8.
Washers on heel-mold pins, Apparatus for placing. W. D. Kmentt. 1,822,099; Sept. 8.
Washing machine, Clothes. C. F. Harold. 1,822,215; Sept. 8.
Waste heat boiler. A. M. Harkness. 1,822,483; Sept. 8.
Water heater, Feed. E. L. and C. A. Schellens. 1,822,459; Sept. 8.
Waterproofing composition and preparing same. O. E. Cushman and B. B. Farrington. 1,821,932; Sept. 8.
Weeder. H. A. Shelkofsky. 1,822,675; Sept. 8.
Weight indicator. R. A. Lincoln. 1,822,628; Sept. 8.
Welding. C. A. Bowlus. 1,822,197; Sept. 8.
Welding machine. W. F. Ploch and C. J. Martin. 1,822,371; Sept. 8.
Wheel: *See*—
  Tractor wheel
Wheel. T. A. Davenport. Des. 85,033; Sept. 8.
Wheel. J. W. White. 1,821,954; Sept. 8.
Wheel frame. H. Z. Cobb. 1,822,516; Sept. 8.
Wind driven generator. H. E. Bucklen. 1,822,078; Sept. 8.
Window construction. G. I. Barclay. 1,822,004; Sept. 8.
Window, Double sliding. R. Roese. 1,822,237; Sept. 8.
Window for doors of automobiles, Signal. N. B. Riddle. 1,822,823; Sept. 8.
Window frame and sash construction. R. T. Axe. 1,822,838; Sept. 8.
Windshield heater. E. J. Gallagher. 1,822,774; Sept. 8.
Wire joining. A. L. Rosenmund. 1,822,542–3; Sept. 8.
Wire pocket forming device, Tie. R. M. Thompson. 1,821,951; Sept. 8.
Wire spacing and fastening device. J. McSkimming. 1,822,781; Sept. 8.
Wire twisting device. H. Wilking. 1,822,833; Sept. 8.
Wrench. J. Zilliox. 1,822,428; Sept. 8.
Wringer: *See*—
  Clothes wringer
Wringer. M. M. Kistner. 1,822,299; Sept. 8.
Yarn, Elastic. P. Adamson. 1,822,847; Sept. 8.
Yarn feeding mechanism for straight knitting machines. E. Richter. 1,822,317; Sept. 8.
Yarn winding machine. J. Coley. 1,822,391; Sept. 8.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 8, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

1—	1:	1,822,282	29—155.5:	1,822,037	53—	1:	1,822,257	74—	109:	1,822,101	103—	2:	1,822,287	128—	269:	1,822,567
	18.1:	1,821,966	30—	1:	1,822,262		3:	1,822,238	75—	1:	1,822,426		53:	1,822,242		300:	1,821,979
	32:	1,821,965		11:	1,822,311			1,822,433			1,822,720		162:	1,822,064		334:	1,822,330
2—	8:	1,822,308		12:	1,821,975	56—	15:	1,822,328			1,822,792	104—	52:	1,822,081	129—	1:	1,822,843
	77:	1,822,482			1,822,379		25:	1,822,204		17:	1,822,506	105—	44:	1,822,420		13:	1,822,669
	78:	1,822,515			1,822,766		104:	1,821,985		28:	1,822,306		48:	1,822,429			1,822,670
		1,822,531			1,822,864		126:	R. 18,183		62:	1,822,588		49:	1,822,015		16.5:	1,822,273
	161:	1,822,010		13:	1,822,050	58—	2:	1,822,195		65:	1,822,103		218:	1,822,347		24:	1,822,552
	201:	1,822,488			1,822,591		34:	1,822,145	76—	101:	1,822,176		249:	1,822,836	131—	39:	1,822,316
4—	47:	1,822,060	31—	17:	1,822,869		35:	1,822,144	77—	23:	1,822,691		280:	1,822,835			1,822,466
	69:	1,822,378		61:	1,821,986	59—	80:	1,822,393		32:	1,822,692	106—	8:	1,822,663	133—	4:	1,822,560
	77:	1,822,319		85:	1,822,680	60—	52:	1,822,690		36:	1,822,231		32:	R. 18,180	134—	13:	1,821,932
	191:	1,821,959	32—	9:	1,822,837		54:	1,822,555		62:	1,821,926		34:	1,821,961		35:	1,822,533
8—	5:	1,822,453	33—	1:	1,822,650	61—	38:	1,822,602	81—	15:	1,822,394	107—	14:	1,822,309		39:	1,822,536
9—	2:	1,822,810		23:	1,822,664			1,822,603		58:	1,822,428		58:	1,822,803		49:	1,822,253
	6:	1,822,199		166:	1,822,413		50:	1,822,550		199:	1,822,745	108—	20:	1,822,134		79:	1,822,254
	21:	1,821,974		193:	1,822,599		69:	1,822,435	82—	2:	1,822,805		26:	1,822,410	136—	71:	1,822,746
	22:	1,822,120		199:	1,822,027	62—	19:	1,822,305	83—	9:	1,822,436	112—	67:	1,822,854		182:	1,821,958
10—	27:	1,822,708			1,822,028		91.5:	1,822,626			1,822,647		218:	1,822,765	137—	91:	R. 18,184
	86:	1,822,600		214:	1,822,740			1,822,850		26:	1,822,747		252:	1,822,639		139:	1,822,338
12—	12:	R. 18,179		222:	1,822,340			1,822,851		30:	1,822,741		262:	1,822,799			1,822,668
	145:	1,822,852	34—	9:	1,822,486		95:	1,822,003		94:	1,822,221	114—	0.5:	1,822,245			1,822,777
		1,822,853		12:	1,822,158			1,822,013	84—	216:	1,821,978		67:	1,822,223		144:	1,822,578
13—	26:	1,822,539			1,822,313		104:	1,822,718		218:	1,822,214		219:	1,822,208		156:	1,821,950
15—	8:	1,822,522		34:	1,821,983		114:	1,822,077		219:	1,821,977	115—	17:	1,822,272		162:	1,822,402
	23:	1,822,631	35—	5:	1,822,353			1,822,069		387:	1,822,025		22:	1,822,418	139—	13:	1,822,292
	34:	1,822,419		10:	1,822,200			1,822,121		473:	1,822,457		37:	1,822,573		55:	1,822,334
	105:	1,822,725		16:	1,822,043			1,822,123		516:	1,822,523	116—	142:	1,822,579		101:	1,822,286
	132:	1,822,831		17:	1,822,808			1,822,124	85—	9:	1,822,657			1,822,674		103:	1,822,696
	209:	1,822,395	36—	71:	1,822,030		119.5:	1,822,109		32:	1,822,845	117—	52:	1,822,847		319:	1,822,305
16—	1:	1,822,326		77:	1,822,526			1,822,224	87—	2:	1,822,210		58:	1,822,189		399:	1,822,478
	114:	1,822,102	37—	42:	1,822,545			1,822,250		9:	1,822,108			1,822,219	140—	93:	1,822,137
17—	11:	1,821,972		43:	1,822,827		121:	1,822,788			1,822,449	118—	16:	1,822,415		118:	1,822,542
		1,822,243		105:	1,822,312		126:	R. 18,182		19:	1,822,033		49:	1,822,194			1,822,543
18—	1:	1,822,099		135:	1,822,423		141:	1,822,583	88—	16.8:	1,822,528		69:	1,822,018		119:	1,822,136
	2:	1,822,039		169:	1,822,051		152:	1,822,586		18:	1,821,946	119—	16.5:	1,822,080			1,822,833
		1,822,443		188:	1,822,181		174:	1,822,170		18.4:	1,821,930		17:	1,822,772	141—	11:	1,822,087
	18:	1,822,590	39—	74:	1,822,640	63—	15:	1,822,392		24:	1,821,923		49:	1,822,048	143—	6:	1,822,155
	50:	1,822,548	40—	1:	1,822,098	64—	8:	1,822,584			1,822,220		52:	1,822,302		43:	1,822,329
	53:	1,822,561			1,822,148		17:	1,822,826			1,822,417		53:	1,822,289		125:	1,822,116
	54:	1,822,416		3:	1,822,390		91:	1,822,149			1,822,551		131:	1,822,610	144—	278:	1,822,501
	55:	1,822,172		5:	1,822,641	66—	6:	1,822,024			1,822,678		154:	1,822,822		288:	1,822,270
20—	20:	1,822,729		8:	1,822,213		82:	1,821,982			1,822,769	120—	1:	1,822,757	145—	16:	1,822,520
		1,822,767		17:	1,822,787			1,822,169		39:	1,822,551		38:	1,821,994	146—	17:	1,822,381
		1,822,768		20:	1,822,660			1,822,597		57.5:	1,822,029			1,822,832			1,822,382
	52.1:	1,822,237		21:	1,822,661		129:	1,822,317		195:	1,822,350		42:	1,822,166		28:	1,822,180
	55:	1,822,504		23:	1,822,421		136:	1,822,870	89—	2:	1,822,079			1,822,167		77:	1,822,828
	69:	1,821,964		61:	1,822,798	67—	7.1:	1,822,505	90—	14:	1,822,730			1,822,168		150:	1,822,581
	92:	1,822,217		63:	1,822,537		24:	1,822,652		125:	1,822,649		47:	1,822,789		204:	1,821,971
22—	1:	1,822,229		126:	1,822,511	68—	3:	1,822,364	91—	45:	1,822,553	121—	31:	1,822,248		219:	1,822,375
	10:	1,822,205			1,822,570		9:	1,822,269			1,822,622		32:	1,822,115	148—	9:	1,822,756
	75:	1,822,256			1,822,571			1,822,387			1,822,743		194:	1,822,036	150—	7:	1,822,780
	188:	1,822,411		140:	1,822,265			1,822,613		50:	1,822,014	122—	17:	1,822,871		8:	1,822,190
	196:	1,822,285		146:	1,822,398		18:	1,822,215			1,822,467		166:	1,821,981		40:	1,822,502
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	98:	1,822,266			1,822,493			1,822,299		70:	1,822,484		235:	1,822,405		12:	1,822,592
	107:	1,822,040	43—	3:	1,822,763			1,822,752	92—	9:	1,822,125		301:	1,822,228		14:	1,822,343
	122:	1,822,815		45:	1,822,785	70—	46:	1,822,278			1,822,779		396:	1,822,233			1,822,616
	154:	1,822,372		121:	1,822,307		75:	1,822,611		11:	1,822,126		442:	1,822,459			1,822,748
	168:	1,822,447		140:	1,822,277	72—	29:	1,822,820		13:	1,822,174		448:	1,822,133		20:	1,822,320
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	73:	1,822,333		77:	1,822,448			1,822,860		51:	1,822,363		53:	1,822,750		54:	1,822,119
		1,822,357		80:	1,822,175		82:	1,822,735		54:	1,822,058		97:	1,822,157	154—	1:	1,822,376
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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Abilene Flour Mills Company, The, Abilene, Kans Flour. 287,199; Sept. 15; Serial No. 310,746; published June 30, 1931. Class 46.

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American Chemical Works, Inc., Covington, Ky. Cleaning compound. 287,087; Sept. 15; Serial No. 314,264; published July 7 1931. Class 4.

American Hide and Leather Company, Boston, Mass. Side leather. 287,095; Sept. 15; Serial No. 314,136; published June 23, 1931. Class 1.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Insulated wire and cables. 287,244–5; Sept. 15; Serial No. 314,833–4; published July 7, 1931. Class 21.

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Atlanta Flour & Grain Company, Incorporated, doing business as Puritan Mills, Atlanta, Ga. Flour. 287,200; Sept. 15; Serial No. 311,859; published July 7, 1931. Class 46.

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Barker, Moore, and Mein Co., Philadelphia, Pa. Publication. 287,080; Sept. 15; Serial No. 312,750; published June 30, 1931. Class 38.

Barr & Creelman Co., Rochester, N. Y. Boiler expansion tanks, gasoline blow torches, water storage heaters and tanks, etc. 287,274; Sept. 15; Serial No. 314,035; published July 7, 1931. Class 34.

Bates Thompson, Inc., New York, N. Y. Hats. 287,281; Sept. 15; Serial No. 314,308; published July 7, 1931. Class 39.

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Bernard, Albert, doing business as A. F. Johns Co., New York, N. Y. Hair tonics. 287,142; Sept. 15; Serial No. 311,125; published June 23, 1931. Class 6.

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Bilhuber, E., Inc., Jersey City, N. J. Medicinal preparation. 287,291; Sept. 15; Serial No. 309,302; published June 23, 1931. Class 6.

Böhme, H. Th. A. G., Chemnitz, Germany. Soap preparations. 287,090; Sept. 15; Serial No. 314,550; published July 7, 1931. Class 4.

Booth, F. E., Company, Inc., San Francisco, Calif. Poultry feed. 287,062; Sept. 15; Serial No. 314,681; published June 30, 1931. Class 46.

Borchers, Herman H., doing business as The Mel-Rab Products Co., Baltimore, Md. Concentrated food. 287,202; Sept. 15; Serial No. 313,322; published June 30, 1931. Class 46.

Brillo Manufacturing Co., Brooklyn, N. Y. Pressing pads. 287,256; Sept. 15; Serial No. 314,945; published July 7, 1931. Class 24.

Budge-It Products. (See Burgess, Bessie B.)

Burgess, Bessie B., doing business as Budge-It Products, New York, N. Y. Chemical compound. 287,188; Sept. 15; Serial No. 305,386; published June 30, 1931. Class 4.

Cadd, Lowell E., Albert Lea, Minn. Pastry. 287,201; Sept. 15; Serial No. 312,943; published June 30, 1931. Class 46.

Carbon Products Company, The, Lancaster, Ohio. Dry cells and batteries. 287,155; Sept. 15; Serial No. 313,328; published July 7, 1931. Class 21.

Champion Fibre Company, The, Canton, N. C. Soda pulp. 287,071; Sept. 15; Serial No. 311,595; published June 30, 1931. Class 1.

Chapman Brothers, Chicago, Ill. Rug and carpet cushions. 287,305; Sept. 15. Class 32.

Chic-Tone Company, Inc., The, Angola, Ind. Medicine for poultry. 287,144; Sept. 15; Serial No. 311,718; published June 23, 1931. Class 6.

Clark, Burt J., doing business as Voix D'Or, South Minneapolis, Minn. Medicated chewing gum and tablets. 287,150; Sept. 15; Serial No. 312,840; published July 7, 1931. Class 6.

Clark-Cutler-McDermott Company, Franklin, Mass. Needled felt. 287,265; Sept. 15; Serial No. 312,546; published July 7, 1931. Class 50.

Cleveland Graphite Bronze Company, The, Cleveland, Ohio. Bearings. 287,167; Sept. 15; Serial No. 314,684; published July 7, 1931. Class 23.

Clorox Chemical Co., Oakland, Calif. Bleaching, cleansing, antiseptic, and germicidal compound. 287,293; Sept. 15; Serial No. 309,921; published June 23, 1931. Class 6.

Closet Shop, The. (See Herzog, Mrs. George.)

Cohen, Joseph H., & Sons, Vanity Clothes, Inc., New York, N. Y. Suits. 287,101; Sept. 15; Serial No. 314,790; published July 7, 1931. Class 39.

Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 287,091; Sept. 15; Serial No. 314,599; published June 30, 1931. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. 287,134; Sept. 15; Serial No. 314,040; published July 7, 1931. Class 6.

Colorado Fuel and Iron Company, The, Denver, Colo. Wire fence. 287,254; Sept. 15; Serial No. 315,034; published July 7, 1931. Class 13.

Columbia Steel Equipment Company, Philadelphia, Pa. Portable filing cabinets. 287,304; Sept. 15. Class 32.

Commonwealth Shoe & Leather Company, Whitman, Mass. Boots and shoes. 287,262; Sept. 15; Serial No. 311,825; published July 7, 1931. Class 39.

Consolidated Sewing Machine & Supply Co., New York, N. Y. Furriers' tools, sewing machines and parts thereof and accessories. 287,121; Sept. 15; Serial No. 305,996; published June 16, 1931. Class 23.

Cortez Cigar Co., Savannah, Ga. Cigars. 287,191; Sept. 15; Serial No. 315,035; published July 7, 1931. Class 17.

Crofut & Knapp Co., The, South Norwalk, Conn. Headwear. 287,266; Sept. 15; Serial No. 312,550; published June 30, 1931. Class 39.

Cutler-Hammer, Inc., Milwaukee, Wis. Electrical apparatus, machines, and supplies, etc. 287,074; Sept. 15; Serial No. 310,798; published July 7, 1931. Class 21.

Cutler-Hammer, Inc., Milwaukee, Wis. Starting switches. 287,159; Sept. 15; Serial No. 313,075; published July 7, 1931. Class 21.

Damm, Max, Company, Inc., Newark, N. J. Brief cases. 287,249; Sept. 15; Serial No. 305,605; published Mar. 24, 1931. Class 3.

Dampier, R. H., & Co., San Jose, Calif. Rotating shelf structures. 287,114; Sept. 15; Serial No. 314,101; published July 7, 1931. Class 32.

Daniel Brothers Company, Atlanta, Ga. Clothing. 287,105; Sept. 15; Serial No. 314,640; published July 7, 1931. Class 39.

Davenport Hotel Sport Shop, Spokane, Wash. Hats, berets, gloves, sweaters, etc. 287,180; Sept. 15; Serial No. 298,794; published Mar. 3, 1931. Class 39.

David & Blum Inc., New York, N. Y. Gloves. 287,283; Sept. 15; Serial No. 314,275; published July 7, 1931. Class 39.

Davis & Geck, Inc., Brooklyn, N. Y. Surgical skin sutures. 287,081; Sept. 15; Serial No. 313,772; published July 7, 1931. Class 44.

Day & Night Water Heater Co., Ltd., Monrovia, Calif. Water coolers. 287,193; Sept. 15; Serial No. 315,076; published July 7, 1931. Class 31.

Degner Shoe Mfg. Company, Cudahy, Wis. Boots and shoes. 287,286; Sept. 15; Serial No. 314,232; published July 7, 1931. Class 39.

Delta Electric Company, Marion, Ind. Electric lamps. 287,243; Sept. 15; Serial No. 314,686; published July 7, 1931. Class 21.

Deubener, Walter H., doing business as Deubener Shopping Bag, Indianapolis, Ind. Paper bags. 287,299; Sept. 15. Class 2.

Dewey, Seymour B., jr., Cleveland, Ohio. Cold and grippe capsules. 287,232; Sept. 15; Serial No. 294,714; published June 16, 1931. Class 6.

Diamond Silver Company, Lambertville, N. J. Silver plated table ware. 287,234; Sept. 15; Serial No. 313,077; published June 23, 1931. Class 28.

Dick, A. B., Company, Chicago, Ill. Duplicating machine ink. 287,226; Sept. 15; Serial No. 311,185; published July 7, 1931. Class 11.

Duplan Silk Corporation, New York, N. Y. Textile fabrics. 287,089; Sept. 15; Serial No. 314,402; published July 7, 1931. Class 42.

Du Pont Manufacturing Company, Tiffin, Ohio. Belt dressing. 287,187; Sept. 15; Serial No. 304,609; published Oct. 21, 1930. Class 4.

Dy-O-La Dye Co., Burlington, Vt. Tints. 287,146; Sept. 15; Serial No. 312,141; published June 23, 1931. Class 6.

Eastman Kodak Company, Rochester, N. Y. Slide binders and mounting tape. 287,060; Sept. 15; Serial No. 313,835; published June 23, 1931. Class 5.
Electric Auto-Lite Company, The, Toledo, Ohio. Storage batteries. 287,214; Sept. 15; Serial No. 299,652; published June 30, 1931. Class 21.
Endicott Johnson Corporation, Endicott, N. Y. Boots, shoes, or slippers. 287,183; Sept. 15; Serial No. 302,530; published June 30, 1931. Class 39.
Engelite Products Co., Inc., New York, N. Y. Cleaning and washing powders and metal polishes. 287,288; Sept. 15; Serial No. 309,889; published Apr. 14, 1931. Class 4.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. 287,175; Sept. 15; Serial No. 315,305; published July 7, 1931. Class 22.
Everfresh Butter Corporation, New York, N. Y. Butter. 287,203; Sept. 15; Serial No. 314,327; published June 30, 1931. Class 46.
Ever-Ready Oil Burner Corp., The, New York, N. Y. Oil burners and oil burning equipment. 287,303; Sept. 15. Class 34.
Faulds, T. A., Co., Inc., Boston, Mass. Food product. 287,059; Sept. 15; Serial No. 313,776; published June 23, 1931. Class 46.
Federal Knitting Mills Company, The, Cleveland, Ohio. Bathing suits, sweaters, jersey shirts, etc. 287,282; Sept. 15; Serial No. 314,281; published July 7, 1931. Class 39.
Federal Mill, Inc., Lockport, N. Y. Wheat flour. 287,209; Sept. 15; Serial No. 315,024; published July 7, 1931. Class 46.
Ferguson, Delbert, Des Moines, Iowa. Frozen confections. 287,100; Sept. 15; Serial No. 314,493; published July 7, 1931. Class 46.
Fleron, M. M., & Son, Inc., Trenton, N. J. Radio aerial and ground connectors. 287,301; Sept. 15. Class 21.
Foraline Products Inc., Circleville, Ohio. Depilatory compound. 287,138; Sept. 15; Serial No. 313,962; published July 7, 1931. Class 6.
Forestal Land, Timber & Railways Company Limited, The, London, England. Tanning extracts. 287,145; Sept. 15; Serial No. 311,860; published June 30, 1931. Class 6.
Foster-Grant Co., Inc., Leominster, Mass. Combs, wavers, and hair pins, etc. 287,186; Sept. 15; Serial No. 304,097; published July 7, 1931. Class 40.
Foster-Grant Co. Inc., Leominster, Mass. Chokers, pendants, brooches, etc. 287,222; Sept. 15; Serial No. 304,099; published July 7, 1931. Class 28.
Fresh Aire Chair Company, Rochester, N. Y. Household chairs. 287,174; Sept. 15; Serial No. 314,496; published July 7, 1931. Class 32.
Fundis, William B., doing business as Sallie Sweets, Pittsburgh, Pa. Candy. 287,072; Sept. 15; Serial No. 311,724; published July 7, 1931. Class 46.
Furry, Mrs. Gertrude S., Valdosta, Ga., and Lakeland, Fla. Fresh oranges and grapefruit. 287,110; Sept. 15; Serial No. 313,898; published July 7, 1931. Class 46.
Gemsco, Inc., New York, N. Y. Riding equipment and accessories. 287,057; Sept. 15; Serial No. 313,658; published June 23, 1931. Class 3.
General Baking Company, New York, N. Y. Bread. 287,063; Sept. 15; Serial No. 314,800; published June 30, 1931. Class 46.
General Baking Company, New York, N. Y. Bread. 287,065; Sept. 15; Serial No. 314,801; published June 30, 1931. Class 46.
General Dyestuff Corporation, New York, N. Y. Dyes and dyestuffs. 287,132; Sept. 15; Serial No. 314,201; published July 7, 1931. Class 6.
General Fireproofing Company, The, Youngstown, Ohio. Safes, note cases, etc. 287,258; Sept. 15; Serial No. 314,692; published July 7, 1931. Class 25.
Gibberman Bros. & Co., Chicago, Ill. Coats, vests, trousers, and overcoats. 287,181; Sept. 15; Serial No. 299,438; published July 7, 1931. Class 39.
Gilbert, A. C., Company, The, New Haven, Conn. Humidifiers. 287,129; Sept. 15; Serial No. 308,196; published June 23, 1931. Class 21.
Globe-Union Mfg. Co., Milwaukee, Wis. Golf clubs, roller skates, and ice skates. 287,285; Sept. 15; Serial No. 314,237; published July 7, 1931. Class 22.
Goedrich Chemical Company, Park Ridge, N. J. Disinfectant. 287,117; Sept. 15; Serial No. 314,642; published July 7, 1931. Class 6.
Golden Eagle Milling Co., Petaluma, Calif. Dairy and poultry foods. 287,251; Sept. 15; Serial No. 297,189; published July 7, 1931. Class 46.
Goodier, Elwood J., doing business as Universal Laboratories, Dallas, Tex. Astringents, astringent cerates, bleach creams, beauty creams, etc. 287,116; Sept. 15; Serial No. 314,499; published July 7, 1931. Class 6.
Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 287,271; Sept. 15; Serial No. 313,693; published June 23, 1931. Class 39.
Grant, W. T., Company, Lynn, Mass., and New York, N. Y. Sanitary napkins. 287,082; Sept. 15; Serial No. 313,781; published July 7, 1931. Class 44.
Great Northern Silk Co. Inc., The, New York, N. Y. Textile linings for clothing. 287,076; Sept. 15; Serial No. 311,638; published June 30, 1931. Class 42.
Greater New York Brewery, Inc., The, New York, N. Y. Malt cereal beverage. 287,260; Sept. 15; Serial No. 314,500; published July 7, 1931. Class 48.
Green Oil Soap Company, Chicago, Ill. Shaving cream, paste, soap, sweeping powder, etc. 287,083; Sept. 15; Serial No. 313,913; published June 30, 1931. Class 4.
Haas, John L., Incorporated, Washington, D. C. Hops. 287,205; Sept. 15; Serial No. 314,449; published July 7, 1931. Class 1.
Haggard, Via B., Blackwell, Okla. Medicinal preparation. 287,118; Sept. 15; Serial No. 314,758; published July 7, 1931. Class 6.
Hampden Brewing Company, Chicopee, Mass. Malt beverages. 287,287; Sept. 15; Serial No. 309,562; published July 7, 1931. Class 48.
Headley Emulsified Products Company, Philadelphia, Pa. Asphalt emulsions for waterproofing, etc. 287,123; Sept. 15; Serial No. 306,649; published June 23, 1931. Class 6.
Herzog, Mrs. George, doing business as The Closet Shop, New York, N. Y. Electric lighting fixtures. 287,229; Sept. 15; Serial No. 283,333; published July 7, 1931. Class 21.
Howe & French, Inc., Boston, Mass. Adhesive liquid cement. 287,211; Sept. 15; Serial No. 315,143; published July 7, 1931. Class 5.
Howlett & Hockmeyer Co., Inc., New York, N. Y., Textile fabrics. 287,093; Sept. 15; Serial No. 314,761; published July 7, 1931. Class 42.
Hubbard, Arthur E., Fort Worth, Tex. Golf tees. 287,104; Sept. 15; Serial No. 314,697; published July 7, 1931. Class 22.
Hurlbut Paper Company, South Lee, Mass. Paper. 287,308; Sept. 15. Class 37.
Hurwitz, Aaron A., doing business as A. A. Hurwitz, Boston, Mass. Hat linings. 287,268; Sept. 15; Serial No. 313,084; published June 23, 1931. Class 40.
Indianapolis Medical Glass Works. (See Schnorr, William.)
International Newsreel Corporation, New York, N. Y. Motion picture films. 287,171; Sept. 15; Serial No. 314,621; published July 7, 1931. Class 26.
International Silver Company, Meriden, Conn. Silverplated flat-ware and hollow-ware. 287,235; Sept. 15; Serial No. 313,360; published June 23, 1931. Class 28.
Ippolito, V., & Son, New York, N. Y. Medicinal preparation. 287,149; Sept. 15; Serial No. 312,399; published June 30, 1931. Class 6.
Jaburg Brothers, Inc., New York, N. Y. Electrical machines and apparatus. 287,161; Sept. 15; Serial No. 312,649; published July 7, 1931. Class 21.
Jenkins Television Corporation, Jersey City, N. J. Unitary transmitting and/or receiving aparatus. 287,220; Sept. 15; Serial No. 303,056; published June 23, 1931. Class 21.
Jerolleman, S., New Orleans, La. Flour. 287,196; Sept. 15; Serial No. 309,169; published July 7, 1931. Class 46.
Jewel-Brite Co., The. (See Zeltz, F. Otto.)
Johns, A. F., Co. (See Bernard, Albert.)
Johnson Educator Food Company, Cambridge, Mass. Biscuits. 287,198; Sept. 15; Serial No. 310,679; published June 30, 1931. Class 46.
Johnson Educator Food Company, Cambridge, Mass. Biscuits. 287,212–3; Sept. 15; Serial No. 315,147–8; published July 7, 1931. Class 46.
Kaczander & Daroczi, New York, N. Y. Medicated candy lozenges. 287,143; Sept. 15; Serial No. 311,381; published July 7, 1931. Class 6.
Kambisos, John E., San Francisco, Calif. Cough drops. 287,152; Sept. 15; Serial No. 313,085; published July 7, 1931. Class 6.
Keen Manufacturing Corporation, New York, N. Y. Pads for use in permanent hair waving. 287,086; Sept. 15; Serial No. 314,240; published July 7, 1931. Class 44.
Kenny, C. D., Company, Baltimore, Md. Coffee. 287,164; Sept. 15; Serial No. 315,267; published July 7, 1931. Class 46.
Kepec Company, The, Milwaukee, Wis. Ready mixed paints. 287,263; Sept. 15; Serial No. 312,301; published June 23, 1931. Class 16.
Kingdom Paint Products Company, Inc., Bronx, N. Y. Paints, varnishes, and paint enamels. 287,250; Sept. 15; Serial No. 299,915; published June 23, 1931.
Kitchlew, Mohammed I., Chicago, Ill. Incense. 287,125; Sept. 15; Serial No. 307,979; published July 7, 1931. Class 6.
Klauer Manufacturing Company, Dubuque, Iowa. Snow plows. 287,068; Sept. 15; Serial No. 310,177; published July 7, 1931. Class 23.
Klosters Aktienbolag, Langshyttan, Sweden. Steel. 287,179; Sept. 15; Serial No. 296,350; published July 7, 1931. Class 14.
Korte, Walter, Company, Cincinnati, Ohio. Foot powder and ointment. 287,217; Sept. 15; Serial No. 300,726; published June 30, 1931. Class 6.
Kresge Department Store Corporation, Newark, N. J. Dress shirts, pajamas, socks, etc. 287,184; Sept. 15; Serial No. 303,058; published Nov. 11, 1930. Class 39.
Kridos, Thomas, A., Brooklyn, N. Y. Preparations for treatment of hair and scalp. 287,295; Sept. 15; Serial No. 310,460; published June 23, 1931. Class 6.
La Cle Reve. (See Seligman, Irving.)
Lac-R-Glo Products Co., Seattle, Wash. Transparent refinishing liquid. 287,078–9; Sept. 15; Serial Nos. 312,233–4; published July 7, 1931. Class 16.

Lake Union Dry Dock and Machine Works, The, Seattle, Wash. Power-operated pleasure cruisers. 287,185; Sept. 15; Serial No. 303,481; published Sept. 30, 1930. Class 19.
Lawton, Stanley W., Miami, Fla. Miniature ten-pin golf bowling game. 287,228; Sept. 15; Serial No. 310,544; published July 7, 1931. Class 22.
Leggett, Francis H. & Company, New York, N. Y. Sandwich spreads. 287,112; Sept. 15; Serial No. 313,603; published July 7, 1931. Class 46.
Leyse Aluminum Company, Kewaunee, Wis. Electric percolators. 287,073; Sept. 15; Serial No. 311,242; published July 7, 1931. Class 21.
Little War Creek Coal Company, Charleston and Litwar, W. Va. Coal. 287,070; Sept. 15; Serial No. 311,150; published June 30, 1931. Class 1.
Lucky Kat Stove Polish Company. (See Palais, Saul.)
Mackenzie, Harry, Jamaica Plain (Boston), Mass. Rompers and play suits. 287,270; Sept. 15; Serial No. 313,348; published July 7, 1931. Class 39.
Mahzel, Limited, London, England. Jewelry. 287,238; Sept. 15; Serial No. 313,552; published July 7, 1931. Class 28.
Majestic Leather Goods Co., Inc., New York, N. Y. Traveling bags, luggage, etc. 287,055; Sept. 15; Serial No. 310,729; published June 23, 1931. Class 3.
Majestic Leather Goods Co., Inc., New York, N. Y. Traveling bags, luggage, etc. 287,056; Sept. 16; Serial No. 310,730; published June 30, 1931. Class 3.
Mannings, Inc., doing business as Mannings, San Francisco, Calif. Tea. 287,216; Sept. 15; Serial No. 300,072; published July 7, 1931. Class 46.
Marks Products Co. Inc., Brooklyn, N. Y. Electrical attachment plugs. 287,157–8; Sept. 15; Serial No. 313,195–6; published June 23, 1931. Class 21.
Marquardt Conrpany, Milwaukee, Wis. Davenports and beds. 287,173; Sept. 15; Serial No. 314,506; published July 7, 1931. Class 32.
Marshall Field & Company, Chicago, Ill. Radio receiving sets. 287,236; Sept. 15; Serial No. 313,369; published June 23, 1931. Class 21.
Martini, L. M., Grape Products Co., Kingsburg, Calif. Grape syrup. 287,122; Sept. 15; Serial No. 306,241; published June 30, 1931. Class 46.
Marvel Company, The, New Haven, Conn. Syringes. 287,075; Sept. 15; Serial No. 311,531; published July 7, 1931. Class 44.
Marvin Radio Tube Corp., Irvington, N. J. Radio electron tubes. 287,230; Sept. 15; Serial No. 284,914; published Aug. 27, 1929. Class 21.
May Hosiery Mills, Nashville, Tenn. Hosiery. 287,107; Sept. 15; Serial No. 314,622; published July 7, 1931. Class 39.
McKesson & Robbins, Incorporated, Bridgeport and Fairfield, Conn. Tooth brushes. 287,272; Sept. 15; Serial No. 313,716; published July 7, 1931. Class 29.
McLaren-Consolidated Cone Corporation, Dayton, Ohio. Ice cream cones. 287,113; Sept. 15; Serial No. 313,789; published July 7, 1931. Class 46.
McNeil Boiler Company, The, Akron Ohio. Traction devices for vehicles. 287,069; Sept. 15; Serial No. 311,002; published July 7, 1931. Class 23.
Mel-Rah Products Co., The. (See Borchers, Herman H.)
Metalife, Inc., St. Louis, Mo. Motor lubricating oils. 287,156; Sept. 15; Serial No. 313,249; published July 7, 1931. Class 15.
Michaelson Bros., Inc., Boston, Mass. Sweaters, bathing suits, and hosiery, etc. 287,267; Sept. 15; Serial No. 287,267; Sept. 15; Serial No. 312,996; published June 30, 1931. Class 39.
Miles, Lester H., doing business as Miles Laboratories, Los Angeles, Calif. Bleaching, cleaning, and softening creams. 287,124; Sept. 15; Serial No. 306,657; published June 30, 1931. Class 6.
Miles, Lester H., Los Angeles, Calif. Face creams. 287,224; Sept. 15; Serial No. 304,664; published June 23, 1931. Class 6.
Mint-Julep Chewing Gum Company, The. (See Mueller, Elsa G.)
Mueller Brass Co., Port Huron, Mich. Solder. 287,255; Sept. 15; Serial No. 315,005; published July 7, 1931. Class 14.
Mueller, Elsa G., doing business as The Mint-Julep Chewing Gum Company, Washington, D. C. Candy tablets. 287,166; Sept. 15; Serial No. 314,711; published July 7, 1931. Class 46.
Nährmittelfabrik Julius Pener A.-G., Berlin-Schoneberg, Germany. Medicated plasters and bandages, animal and vegetable exterminating preparations, etc. 287,141; Sept. 15; Serial No. 311,103; published June 23, 1931. Class 6.
Nährmittelfabrik, Julius Pener A.-G., Berlin-Schoneberg, Germany. Medicated bandages, and preservatives for foodstuffs. 287,296; Sept. 15; Serial No. 311,102; published June 23, 1931. Class 6.
National Equipment Corporation, Milwaukee, Wis. Backfillers, bar benders, mixers and placers, etc. 287,162; Sept. 15. Class 23.
New Standard Baking Company, Philadelphia, Pa. Cakes. 287,064; Sept. 15; Serial No. 314,856–7; published June 30, 1931. Class 46.
Norwich Pharmacal Company, The, Norwich, N. Y. Mineral oil. 287,151; Sept. 15; Serial No. 313,052; published June 23, 1931. Class 6.
Nunnally Company, The, Atlanta, Ga. Candies. 287,172; Sept. 15; Serial No. 314,510; published July 7, 1931. Class 46.
O. H. D. Co., Inc., Wilmington, Del. Cough syrup. 287,290; Sept. 15; Serial No. 309,033; published May 26, 1931. Class 6.
Oil Well Supply Company, assignor to Oil Well Supply Company, Pittsburgh, Pa. Machinery and tools used in well drilling. 287,231; Sept. 15; Serial No. 292,823; published July 7, 1931. Class 23.
Olympia Knitting Mills, Inc., Olympia, Wash. Swimming suits and sweaters. 287,103; Sept. 15; Serial No. 314,712; published July 7, 1931. Class 39.
Olympic Forest Products Company, Port Angeles, Wash. Wood pulp. 287,207–8; Sept. 15; Serial Nos. 315,008–9; published July 7, 1931. Class 1.
Olympic Forest Products Company, Port Angeles, Wash. Wood pulp. 287,210; Sept. 15; Serial No. 315,010; published July 7, 1931. Class 1.
Pacific Bone Coal & Fertilizing Co., San Francisco, Calif. Glue. 287,061; Sept. 15; Serial No. 313,967; published June 23, 1931. Class 5.
Paddy's Pup Co., Los Angeles, Calif. Toy animals. 287,280; Sept. 15; Serial No. 314,391; published July 7, 1931. Class 22.
Palais, Saul, doing business as Lucky Kat Stove Polish Company, Peabody, Mass. Stove polish. 287,252; Sept. 15; Serial No. 309,172; published June 30, 1931. Class 4.
Palmer Lime & Cement Company, New York, N. Y. Limestone. 287,215; Sept. 15; Serial No. 299,855; published June 23, 1931. Class 1.
Panther Rubber Manufacturing Company, Stoughton, Mass. Rubber heels. 287,190; Sept. 15; Serial No. 307,986; published July 7, 1931. Class 39.
Parker Pen Company, The, Janesville, Wis. Writing ink. 287,182; Sept. 15; Serial No. 301,123; published July 7, 1931. Class 11.
Penn Valley Refining Company, Dover, Del., and Providence, R. I. Oil and kerosene. 287,307; Sept. 15. Class 15.
Perlman Brothers, Savannah, Ga. Shoes, dresses, and suits. 287,279; Sept. 15; Serial No. 314,578; published July 7, 1931. Class 39.
Phillips & Uppercu, New York, N. Y. Games. 287,261; Sept. 15; Serial No. 311,696; published July 7, 1931. Class 22.
Pierce, Robert J., Inc., New York, N. Y. Prophylactic rubber, tissue, and membraneous articles. 287,194; Sept. 15; Serial No. 314,963; published July 7, 1931. Class 44.
Pitman-Moore Company, Indianapolis, Ind. Vermicide and purgative. 287,139; Sept. 15; Serial No. 313,971; published June 30, 1931. Class 6.
Pitman-Moore Company, Indianapolis, Ind. Medicine for fowls. 287,140; Sept. 15; Serial No. 313,974; published June 23, 1931. Class 6.
Pooley, W. Cyril, Mobile, Ala. Medicine for the relief of hay fever. 287,154; Sept. 15; Serial No. 313,478; published May 26, 1931. Class 6.
Premier Products Corp., Ltd., Los Angeles, Calif. Cleansing powder. 287,119; Sept. 15; Serial No. 314,771; published July 7, 1931. Class 6.
Procter & Gamble Company, The, Cincinnati, Ohio. Soap. 287,289; Sept. 15; Serial No. 309,140; published Feb. 3, 1931. Class 4.
Puritan Mills. (See Atlanta Flour & Grain Company, Incorporated.)
Putnam Spinners Inc., Putnam, Conn. Rayon yarn. 287,085; Sept. 15; Serial No. 314,220; published July 7, 1931. Class 43.
Richmond Glove Corporation, Richmond, Ind. Gloves. 287,102; Sept. 15; Serial No. 314,718; published July 7, 1931. Class 39.
Riggs, Robert L., Daytona Beach, Fla. Canned juices of grapefruit and oranges. 287,099; Sept. 15; Serial No. 314,297; published July 7, 1931. Class 46.
Riley Brothers (Halifax) Limited, Halifax, England. Toffee. 287,109; Sept. 15; Serial No. 313,610; published July 7, 1931. Class 46.
Rin-O-Cur Company, Chicago, Ill. Nasal cream. 287,136; Sept. 15; Serial No. 313,675; published June 16, 1931. Class 6.
Robertson & Co., Inc., Cleveland, Ohio. Kilns. 287,276; Sept. 15; Serial No. 314,249; published July 7, 1931. Class 34.
Rock Island Refining Company, Duncan, Okla. Gasoline. 287,240; Sept. 15; Serial No. 313,611; published July 7, 1931. Class 15.
Ronan, T. J., Co., Inc., Brooklyn, N. Y. Preparation for stamping fabrics containing a dry color. 287,269; Sept. 15; Serial No. 313,095; published July 7, 1931. Class 11.
Ross Manufacturing Company, Kansas City, Mo. Boiler cleaning compound. 287,147; Sept. 15; Serial No. 312,201; published July 7, 1931. Class 6.
Roth, Eugene, Antwerp, Belgium. Keyboard devices for exercising the fingers in teaching music. 287,237; Sept. 15; Serial No. 313,388; published June 23, 1931. Class 36.

Rueping, Fred, Leather Co., Fond du Lac, Wis. Leather. 287,066; Sept. 15; Serial No. 309,788; published June 23, 1931. Class 1.

Russ Manufacturing Company, The, Cleveland, Ohio. Soda fountains and mechanical carbonators. 287,108; Sept. 15; Serial No. 312,313; published July 7, 1931. Class 23.

S-M-S Herb-Nu Remedies. (See Schy-Man-Ski & Sons.)

Sallie Sweets. (See Fundis, William B.)

Saltzman & Bromberg, New York, N. Y. Perfumes, toilet waters, lotions, etc. 287,292; Sept. 15; Serial No. 309,742; published June 30, 1931. Class 6.

Savage Company, W. J., Incorporated, Knoxville, Tenn. Bag closing machines. 287,096; Sept. 15; Serial No. 314,212; published July 7, 1931. Class 23.

Sayles, J. Willis, Wichita, Kans. Face creams. 287,135; Sept. 15; Serial No. 313,512; published June 30, 1931. Class 6.

Scandia-Jourde Corp., New York, N. Y. Cold creams, skin lotions, astringents, etc. 287,153; Sept. 15; Serial No. 313,208; published June 23, 1931. Class 6.

Schneierson, I., & Sons, Inc., New York, N. Y. Chemises, bloomers, step-ins, etc. 287,311; Sept. 15. Class 39.

Schnorr, William, doing business as Indianapolis Medical Glass Works, Indianapolis, Ind. Glass ampoules. 287,247; Sept. 15; Serial No. 315,161; published July 7, 1931. Class 33.

Schorsch, Jacob, New York, N. Y. Necklaces and clasps therefor. 287,242; Sept. 15; Serial No. 313,937; published June 30, 1931. Class 28.

Schweitzer Company, Inc., The, New York, N. Y. Women's undergarments. 287,264; Sept. 15; Serial No. 312,459; published June 30, 1931. Class 39.

Schy-Man-Ski, Helen, & Sons, doing business as S-M-S Herb-Nu Remedies, Chicago, Ill. Imitation coffee. 287,218; Sept. 15; Serial No. 301,066; published July 7. Class 46.

Scutter Johnson Candy Company, Inc., Chicago, Ill. Candy. 287,163; Sept. 15; Serial No. 315,283; published July 7, 1931. Class 46.

Seligman, Irving, doing business as La Cie Reve, New York, N. Y. Face and talcum powder, perfume, nail polish, etc. 287,137 Sept. 15; Serial No. 313,939; published July 7, 1931. Class 6.

Seneca Foods Products Corporation, Utica, N. Y. Malt syrup. 287,111; Sept. 15; Serial No. 314,130; published July 7, 1931. Class 46.

Seymour Troy & Company, Inc., Brooklyn, N. Y. Shoes. 287,278; Sept. 15; Serial No. 314,581; published July 7, 1931. Class 39.

Shapapzian, Nazik, Washington, D. C. Medicinal ointment. 287,130; Sept. 15; Serial No. 315,212; published July 7, 1931. Class 6.

Silver-Marshall, Inc., Chicago, Ill. Radio receiving sets, kits, electric pick-ups for phonographs, etc. 287,246; Sept. 15; Serial No. 314,660; published July 7, 1931. Class 21.

Smith, Kline & French Laboratories, Philadelphia, Pa. Medicinal composition. 287,294; Sept. 15; Serial No. 310,230; published July 7, 1931. Class 6.

Snobali Company, The, St. Louis, Mo. Shaving cream. 287,248; Sept. 15; Serial No. 305,951; published July 7, 1931. Class 4.

Société Anonyme Jean Patou, Paris, France. Perfumes, face and talcum powder, bath salts, etc. 287,306; Sept. 15. Class 6.

Société Anonyme Jean Patou, Paris, France. Perfumes, toilet water, powder, etc. 287,133; Sept. 15; Serial No. 314,083; published June 30, 1931. Class 6.

Soda Lunch Equipment Co., Inc., New York, N. Y. Ginger ale. 287,1[illegible]; Sept. 15; Serial No. 283,764; published July 7, 1931. Class 45.

Sta-Hot Products Co., Oak Park, Ill. Electrically heated water bottles, sterilizers, vaporizers, and parts thereof. 287,302; Sept. 15. Class 44.

Standard Brands Incorporated, New York, N. Y. Coffee and tea. 287,131; Sept. 15; Serial No. 315,115; published July 14, 1931. Class 46.

Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Animal fly sprays, insecticides, repellents. 287,115; Sept. 15; Serial No. 314,430; published July 7, 1931. Class 6.

Stanhope Laboratories. (See Unger, Charles G.)

Stern, I., & Co., New York, N. Y. Alloy. 287,257; Sept. 15; Serial No. 314,933; published July 7, 1931. Class 14.

Sternau, Bernhard, Islip Terrace, N. Y. Game. 287,297; Sept. 15; Serial No. 314,587; published July 7, 1931. Class 22.

Stikarofsky, Frank, Norwood, Mass. Hand cream, catarrh jelly, and face powder, etc. 287,233; Sept. 15; Serial No. 299,527; published July 7, 1931. Class 6.

Stivers, Theo., Milling Company, Rome, Ga. Wheat flour. 287,204; Sept. 15; Serial No. 314,435; published July 7, 1931. Class 46.

Sunbeam Electric Manufacturing Company, Evansville, Ind. Electricity-generating units. 287,298; Sept. 15; Serial No. 280,582; published June 11, 1929. Class 21.

Sunrayed Limeshell Products Company, Boston, Mass. Poultry grit and oyster shells. 287,197; Sept. 15; Serial No. 309,180; published July 7, 1931. Class 1.

Taylor-Long Company, Winston-Salem, N. C. Maltless beverages and the ingredients for making the same. 287,227; Sept. 15; Serial No. 310,666; published July 7, 1931. Class 45.

Tecanical Lubricants Company, Kansas City, Mo. Lubricating oils, greases, and compounds. 287,241; Sept. 15; Serial No. 313,685; published July 7, 1931. Class 15.

Terhune, Yearance & Wolff, Inc., New York, N. Y. Woolen fabrics in the piece. 287,088; Sept. 15; Serial No. 314,383; published July 7, 1931. Class 42.

Theatre Service Corporation, New York, N. Y. Moving picture films. 287,067; Sept. 15; Serial No. 309,790; published July 7, 1931. Class 26.

Unger, Charles G., doing business as Stanhope Laboratories, Brooklyn, N. Y. Shampoo. 287,223; Sept. 15; Serial No. 304,393; published July 7, 1931. Class 6.

United Elastic Corporation, East Hampton, Mass. Elastic webbing. 287,092; Sept. 15; Serial No. 314,665; published July 7, 1931. Class 42.

United States Register Co., Battle Creek, Mich. Grilles or registers. 287,177; Sept. 15; Serial No. 294,097; published July 7, 1931. Class 34.

United States Rubber Company, New York, N. Y. Inner soles. 287,106; Sept. 15; Serial No. 314,629; published July 7, 1931. Class 39.

United States Rubber Company, New York, N. Y. Raincoats. 287,225; Sept. 15; Serial No. 311,402; published July 7, 1931. Class 39.

Verniers', Inc., Atlanta, Ga. Brunswick stew and barbecue sauce. 287,300; Sept. 15. Class 46.

Vino-Sano Company, San Francisco, Calif. Flavoring and preservative for soft drinks. 287,310; Sept. 15. Class 45.

Visual Demonstration System, Inc., Buffalo, N. Y. Apparatus for projecting still pictures from films. 287,097; Sept. 15; Serial No. 314,258; July 7, 1931. Class 26.

Vitamont Sales Company, Butte, Mont. Fish food. 287,168; Sept. 15; Serial No. 314,668; published July 7, 1931. Class 46.

Vitamont Sales Company, Butte, Mont. Fox food. 287,169; Sept. 15; Serial No. 314,667; published July 7, 1931. Class 46.

Vitamont Sales Company, Butte, Mont. Cat food. 287,170; Sept. 15; Serial No. 314,666; published July 7, 1931. Class 46.

Viviny Perfumers, Inc., New Haven, Conn. Astringents, astringent cerates, bleach creams, etc. 287,219; Sept. 15; Serial No. 301,534; published June 23, 1931. Class 6.

Voix D'Or. (See Clark, Burt J.)

Wadhams Oil Company, Milwaukee, Wis. Lubricating oils. 287,239; Sept. 15; Serial No. 313,569; published July 7, 1931. Class 15.

Waldes Koh-I-Noor, Inc., Long Island City, N. Y. Hook and eye tape. 287,309; Sept. 15. Class 40.

Webb Products Company, Inc., San Bernardino, Calif. Household glue, china and glass cement, waterproof cement, etc. 287,058; Sept. 15; Serial No. 313,689; published June 23, 1931. Class 5.

Wells, Chandler, Buffalo, N. Y. Tow frame. 287,275; Sept. 15; Serial No. 314,219; published July 7, 1931. Class 19.

Wilkinson, Gaddis & Co., Newark, N. J. Vinegar, salad oil, and tomato catsup, etc. 287,098; Sept. 15; Serial No. 314,259; published July 7, 1931. Class 46.

Wilson Rubber Company, The, Canton, Ohio. Rubber gloves. 287,094; Sept. 15; Serial No. 314,882; published July 7, 1931. Class 44.

Wilson-Western Sporting Goods Company, Chicago, Ill. Golf clubs. 287,178; Sept. 15; Serial No. 294,371; published July 7, 1931. Class 22.

Woods, H. A. Inc., Evansville, Ind. Complexion powders, cleansing cream, and tissue cream, etc. 287,148; Sept. 15; Serial No. 312,318; published July 7, 1931. Class 6.

Wright, E. T., & Company, Inc., Rockland, Mass. Boots and shoes. 287,189; Sept. 15; Serial No. 306,914; published July 7, 1931. Class 39.

Wright, S. B., doing business as Wright Products, Chicago, Ill. Shoe polisher. 287,192; Sept. 15; Serial No. 315,074; published July 7, 1931. Class 29.

Willing, Johann A., Berlin, Germany. Preparation for internal use. 287,221; Sept. 15; Serial No. 303,077; published June 23, 1931. Class 6.

Zeitz, F. Otto, doing business as The Jewel-Brite Co., Chicago, Ill. Preparation for cleaning jewelry. 287,084; Sept. 15; Serial No. 313,951; published July 7, 1931. Class 4.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Bon Ami Company, The, New York, N. Y. Bon Ami De Luxe. For Cleaning and Polishing Powder. 39,721; Sept. 15.

Brehmer Folding Box, Ltd., London, England. Phyndit. For Game. 39,722; Sept. 15.

Cambridge Paint & Varnish Works. (See Sheldon, Albert K. Co., Inc.)

Candy Kitchens, Inc., Chicago, Ill. Perky. For Milk Chocolate Candy. 39,723; Sept. 15.

Chase Candy Company, doing business as Chase's, St. Joseph, Mo. Tom Henry. For Candy. 39,724; Sept. 15.

Crater Lake Blue Co. (See Shannon, Mrs. Ida M.)

Curtiss Candy Company, The, Chicago, Ill. Real Mint. For Gum. 39,725; Sept. 15.

Drug Products Co., Inc., The, Long Island City, N. Y. Tablets, No. 460, Asalum. For Astringent Douche Tablets. 39,726; Sept. 15.

Drug Products Co. Inc., The, Long Island City, N. Y. Mc 64 Ferro-Cu-Mang. For Medicinal Preparation. 39,727; Sept. 15.

Foege, John, jr., Richmond, Va. The Medium. For Cigars. 39,728; Sept. 15.

Freidson, J., Shoe Co., Boston, Mass. Dr. Chase's Scout Shoes. For Shoes. 39,729; Sept. 15.

Golden Age Corporation, New York, N. Y. Golden Egg Noodles. For Noodles. 39,730; Sept. 15.

Goldman, Sigmund L., doing business as Wisconsin Mercantile Co., Chicago, Ill. Wisconsin's Best. For Malt Syrup. 39,731; Sept. 15.

Goodman, A., & Sons Co., New York, N. Y. Goodman's Fine Matzo Meal. For Matzo Meal. 39,732; Sept. 15.

Goodman, A., & Sons Co., New York, N. Y. Goodman's Pure Matzo Meal. For Matzo Meal. 39,733; Sept. 15.

Grout, Edna L., Ojai, Calif. Home Made Sweet Green Tomato Pickles. For Sweet Green Tomato Pickle. 39,734; Sept. 15.

Harron Hosiery Company, Philadelphia, Pa. Crepe Hosiery Pure Silk Lisle Reinforced. For Hosiery. 39,735; Sept. 15.

Hill Shoe Company. (See Trachtenberg, Philip.)

Holman Paper Box Co., Inc., St. Louis, Mo. Sorority House Footwear. For Footwear. 39,736; Sept. 15.

Hughes, Lloyd L., doing business as Lloyd L. Hughes & Co., Yakima, Wash. Bull Frog. For Malt Syrup. 39,737; Sept. 15.

Leary, Dennis W., Walnut Grove, Calif. Big Game. For Fresh Bartlett Pears. 39,738; Sept. 15.

Maus, William H., doing business as Moss Rose Products Company, Philadelphia, Pa. Moss Rose Lotion. For Lotion for Softening and Whitening the Hands and for Use After Shaving. 39,739; Sept. 15.

McPhail's Chocolates, Inc., Jacksonville, Fla. Russell McPhail Children's Candies—(Old Woman Who Lived in a Shoe Design.) For Candies. 39,740; Sept. 15.

McPhail's Chocolates, Inc., Jacksonville, Fla. Russell McPhail's Children's Candies—(Humpty Dumpty Design). For Candies. 39,741; Sept. 15.

McPhail's Chocolates, Inc., Jacksonville, Fla. Russell McPhail Children's Candies—(Jack and Jill Design). For Candies. 39,742; Sept. 15.

McPhail's Chocolates, Inc., Jacksonville, Fla. Russell McPhail Children's Candies—(Little Boy Blue Design). For Candies. 39,743; Sept. 15.

McPhail's Chocolates, Inc., Jacksonville, Fla. Russell McPhail Children's Candies—(Peter, Peter, Pumpkin Eater Design). For Candies. 39,744; Sept. 15.

McPhail's Chocolates, Inc., Jacksonville, Fla. Russell McPhail Children's Candies—(Cow Jumped Over The Moon Design). For Candies. 39,745; Sept. 15.

Moss Rose Products Company. (See Maus, William H.)

Reid Ice Cream Corporation, Brooklyn, N. Y. Guest Package Reid's "Special" Ice Cream. For Ice Cream. 39,746; Sept. 15.

Scott, W. C. & Co., Inc., Crystal Springs, Miss. Silver Watch Brand. For Tomatoes. 39,747; Sept. 15.

Scott, W. C. & Co., Inc., Crystal Springs, Miss. Gold Watch Brand. For Tomatoes. 39,748; Sept. 15.

Shannon, Mrs. Ida M., doing business as Crater Lake Blue Co., Portland, Oreg. Crater Lake Blue, The Aristocrat of Bluings. For Bluing. 39,749; Sept. 15.

Shannon, Mrs. Ida M., doing business as Crater Lake Blue Co., Portland, Oreg. Crater Lake Blue, The Aristocrat of Inks. For Ink. 39,750; Sept. 15.

Sheldon, Albert K. Co., Inc., doing business as Cambridge Paint & Varnish Works, Cambridge, Mass. House & Cottage. For Mixed Paint. 39,751; Sept. 15.

Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. "X" Boiler Flush. For Liquid for Flushing Boilers. 39,752; Sept. 15.

Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. "X" Radiator Flush. For Liquid for Flushing Radiators. 39,753; Sept. 15.

Trachtenberg, Philip, doing business as Hill Shoe Company, Philadelphia, Pa. Dr. Chapman's Health Shoes. For Shoes. 39,754; Sept. 15.

Treasure Products Co., Amherst, Wis. Treasure Incense. For Incense. 39,755; Sept. 15.

Trojan Hosiery Mills, Inc., Indianapolis, Ind. Beauty Plus. For Hosiery. 39,756; Sept. 15.

Watkins, J. R., Company, The, doing business at Watkins, Winona, Minn. Mary King Face Powder. For Face Powder. 39,757; Sept. 15.

Wisconsin Mercantile Co. (See Goldman, Sigmund L.)

Wolf Brothers & Co., Red Lion, Pa. Mark Twain. For Cigars. 39,758; Sept. 15.

"X" Laboratories. (See Tolfree, Edward R.)

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Cunningham, E. T., Incorporated, New York, N. Y. Radio's Motive Power Since 1915. For Vacuum Tubes. 13,409–10; Sept. 15.

Diamond Braiding Mills, Chicago Heights, Ill. Replace your Laces. For Shoe Laces. 13,411; Sept. 15.

Heinz, H. J., Company, Pittsburgh, Pa. Ah-h! There's a Dish that goes Big With Me! For Cooked Spaghetti. 13,412; Sept. 15.

Heinz, H. J., Company, Pittsburgh, Pa. Heinz Cider Vinegar—The Important Ingredient in a Hundred Delicious Salads. For Cider Vinegar. 13,413; Sept. 15.

Kurfees, J. F., Paint Co. Inc., Louisville, Ky. Kurfees 80 and 20—100% Paint. For Prepared Liquid Paint. 13,414; Sept. 15.

Kurfees, J. F., Paint Co. Inc., Louisville, Ky. Granitoid House Paint. For Prepared Liquid Paint. 13,415; Sept. 15.

Kurfees, J. F., Paint Co. Inc., Louisville, Ky. Kurfees Granitoid. For Prepared Liquid Enamel and Varnish Stain. 13,416; Sept. 15.

Mathews Company, The, Detroit, Mich. Bunny Tot. For Ice Cream. 13,417; Sept. 15.

Mint-Julep Gum Company. (See Mueller, Elsa G.)

Mueller, Elsa G., doing business as Mint-Julep Gum Company, Washington, D. C. Mint-Julep, the Candy Mint. For Candy Mints. 13,418; Sept. 15.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Manufacturing Co., The, Binghamton, N. Y. Spoons, cake turners, forks, etc. 303,081; Sept. 15. Class 23.

A. & J. Manufacturing Co., The, Binghamton, N. Y. Spoons, cake turners, forks, etc. 303,086; Sept. 15. Class 23.

A. & J. Manufacturing Co., The, Binghamton, N. Y. Kitchen tools and utensils. 317,291; Sept. 15. Class 23.

Académie Scientifique de Beauté. (See Gay, Georges.)

Adams Wax Products Mfg. Inc., St. Paul, Minn. Polishing preparation. 315,078; Sept. 15. Class 16.

Agenzia Del Progresso, Inc., New York, N. Y. Medicinal preparation. 316,112; Sept. 15. Class 6.

Allen, S. L., & Co., Inc., Philadelphia, Pa. Hand trowels and weeders. 317,420; Sept. 15. Class 23.

Alpha Chemical Products Co., The, Cincinnati, Ohio. Medicine. 306,795; Sept. 15. Class 6.

Alpha-Lux Company, Inc., The, New York, N. Y. Liquid preparation. 317,265; Sept. 15. Class 6.

American Chemical Paint Company, Lower Gwynedo Township, Pa. Detergent paste, powder, or liquid. 306,550; Sept. 15. Class 6.

American Crayon Company, The, Sandusky, Ohio. Tempera colors and water colors. 317,626; Sept. 15. Class 16.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

American Paint Co., Chicago, Ill. Paint enamels. 313,483; Sept. 15. Class 16.
American Woolen Company, Boston, Mass., and New York, N. Y. Worsteds. 317,884; Sept. 15. Class 42.
Antrim, C. W., & Sons, Richmond, Va. Coffee. 305,260; Sept. 15. Class 46.
Arden, Elizabeth, Inc., New York, N. Y. Lipsticks. 316,867; Sept. 15. Class 6.
Arden, Elizabeth, Inc., New York, N. Y. Lipsticks. 316,869—70; Sept. 15. Class 6.
Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Hosiery. 316,718; Sept. 15. Class 39.
Asbestos Textile Company, The, New York, N. Y. Brake linings. 317,387; Sept. 15. Class 35.
Associated Press, The, New York, N Y. Series of cartoons. 317,237; Sept. 15. Class 38.
Autographic Register Company, Hoboken, N. J. Typewriter paper supports, and attachments in the form of aligning devices and paper lifting devices. 290,926; Sept. 15. Class 23.
Automatic Washer Company, Newton, Iowa. Clothes washing machines. 277,195; Sept. 15. Class 24.
Auto Radiator Mfg. Company, Chicago, Ill. Automobile heaters. 317,498; Sept. 15. Class 19.
Baldwin Beverages, Inc., Long Island City, N. Y. Beverages. 317,449; Sept. 15. Class 45.
Baltimore Butterine Company, The, Baltimore, Md. Sandwich spread. 317,591; Sept. 15. Class 46.
Bear-Stewart Co., Chicago, Ill. Base for the making of chocolate icing. 292,786; Sept. 15. Class 46.
Bear-Stewart Co., Chicago, Ill. Base for making icing. 292,787; Sept. 15. Class 46.
Beatrice Creamery Company, Chicago, Ill. Ice cream bar. 317,789; Sept. 15. Class 46.
Bellingham Canning Co., South Bellingham, Wash. Canned salmon. 317,698; Sept. 15. Class 46.
Berry, F. E., jr. & Co. Inc., Boston, Mass. Window ventilators. 315,484; Sept. 15. Class 34.
Berry, F. E., jr. & Co. Inc., Boston, Mass. Window ventilators. 316,313; Sept. 15. Class 34.
Bianchini, Ferler, Lyon, France. Piece goods of silk and artificial silk. 298,005; Sept. 15. Class 42.
Black Star Coal Company, Louisville, Ky. Coal. 317,299; Sept. 15. Class 1.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 317,756–7; Sept. 15. Class 42.
Bohrer, Isidore, Los Angeles, Calif. Nuts. 302,765; Sept. 15. Class 46.
Bon Ton Beverages, Inc., Chicago, Ill. Beverages, syrups, extracts, etc. 317,549; Sept. 15. Class 45.
Bourjois, Inc., New York, N. Y. Perfume, toilet water, bath crystals, etc. 316,356; Sept. 15. Class 6.
Braun Gear Corporation, Brooklyn, N. Y. Gears, engines, and timing gears. 316,404; Sept. 15. Class 23.
Buffalo Malt Co. Inc., Buffalo, N. Y. Malt extracts. 312,639; Sept. 15. Class 46.
Bulova Watch Company, Inc., New York, N. Y. Watches. 316,761; Sept. 15. Class 27.
Bump Paper Fastener Company, The, Lacrosse, Wis. Mechanical paper fasteners. 317,154; Sept. 15. Class 23.
Bundy Tubing Company, Detroit, Mich. Tubing and tube lengths. 309,605; Sept. 15. Class 13.
Burnett, Sir Robert, & Company, Limited, London, England. Gin. 316,828–30; Sept. 15. Class 49.
Calbar Paint & Varnish Co., Philadelphia, Pa. Plastic caulking and glazing compound. 311,229; Sept. 15. Class 12.
California Packing Corporation, San Francisco, Calif. Edible fish oil. 317,629; Sept. 15. Class 46.
Campbell, J. A., Co., Long Beach, Calif. Liquid and gas separating apparatus. 311,364; Sept. 15. Class 23.
Carson Pirie Scott & Co., Chicago, Ill. Cotton piece goods. 317,704; Sept. 15. Class 42.
Casco Products Corpo ation, Bridgeport, Conn. Fender guides. 317,630; Sept. 15. Class 19.
Chemische Fabrik Eisendrath Gesellschaft mit beschränkter Haftung, Mettman, Germany. Dye for leather. 296,482; Sept. 15. Class 6.
Cheney Brothers, South Manchester, Conn. Booklets. 312,795; Sept. 15. Class 38.
Chicago Granitine Manufacturing Company, Chicago, Ill. Concrete storage boxes. 317,506; Sept. 15. Class 2.
Cinderella Cosmetics. (See Sinykin, Jack L.)
Clark, Will. C., doing business as Coco-Pine Co., St. Petersburg, Fla. Hair tonic and shampoo. 314,895; Sept. 15. Class 6.
Clum Manufacturing Company, Milwaukee, Wis. Battery charge indicators. 315,388; Sept. 15. Class 26.
Coco-Pine Co. (See Clark, Will. C.)
Cohen, Joseph S., and Sons, Co. Inc., New York, N. Y. Dresses, suits, pajamas, etc. 316,767; Sept. 15. Class 39.
Cohn & Rosenberger, Inc., New York, N. Y. Necklaces, bracelets, earrings, etc. 317,705; Sept. 15. Class 28.
Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving soap and shaving sticks. 316,808; Sept. 15. Class 4.
Colombo Extract Co., New York, N. Y. Malt syrup. 317,196; Sept. 15. Class 46.
Colorado Milling & Elevator Co., The, Denver, Colo. Wheat flour. 305,514; Sept. 15. Class 46.
Comstock Canneries, Inc., Newark, N. Y. Canned fruits, vegetables, and berries. 317,198; Sept. 15. Class 46.
Corn Exchange National Bank and Trust Company, Philadelphia, Pa. Blank checks. 310,857; Sept. 15. Class 37.
Coudurier, Fructus & Descher, Lyon, France. Silks and velvets. 317,794; Sept. 15. Class 42.
Cup-Lok Packing Co., Philadelphia, Pa. Packing for pumps, valves, and engines. 317,795; Sept. 15. Class 35.
Curtiss Candy Company, The, Chicago, Ill. Chewing gum. 310,858; Sept. 15. Class 46.
Decorative Plastering Co. Inc., New York, N. Y. Imitation wood products of plaster. 316,556; Sept. 15. Class 12.
"Degewop" Gesellschaft Wissenschaftdicher Organpracparate, A. G., Berlin-Spandau, Germany. Medicaments, chemical products, etc. 314,556; Sept. 15. Class 6.
De Sanno, Albert P., jr., doing business as A. P. De Sanno and Son, Philadelphia, Pa. Abrasive disc or wheel. 313,908; Sept. 15. Class 4.
Devine, Dennis, jr., doing business as Sanitine Products Co., New London, Conn. Disinfectant, deodorant, and cleaner. 316,721; Sept. 15. Class 6.
Dionysus Co. (See Jumes, Demetrios N.)
Dold, Fred, & Sons Pkg. Co., The, Wichita, Kans. Hog and poultry foods. 303,098; Sept. 15. Class 46.
Dominettes Co., The. (See Sachs, Frank S.)
Douglas, W. L., Shoe Company, Montello, Brockton, Mass. Boots, shoes, and slippers, etc. 316,835; Sept. 15. Class 39.
Driver-Harris Company, Harrison, N. J. Carburizing, annealing, and heat-treating boxes, etc. 309,678; Sept. 15. Class 34.
Edmands Coffee Company, Boston, Mass. Coffee and tea. 315,447; Sept. 15. Class 46.
Ellcott Knitting Mills, Inc., Hickory, N. C. Hosiery. 263,078; Sept. 15. Class 39.
Emerson & Stevens Mfg. Co. Inc., Oakland, Me. Scythes. 316,481; Sept. 15. Class 23.
Ernstberger, H., & Co., New York, N. Y. Woolen piece goods. 317,200; Sept. 15. Class 42.
Evangeline Co., Brooklyn, N. Y. Shoe dyes and color remover. 316,322; Sept. 15. Class 6.
Faienceries de Bouffioulx Societe Anonyme, Bouffioulx, Belgium. Tiles and fire brick. 317,429; Sept. 15. Class 12.
Fawcett, Roscoe, Minneapolis, Minn. Magazine section. 312,985; Sept. 15. Class 38.
Flexible Saddles Ltd., Tyseley, England. Saddles. 316,153; Sept. 15. Class 19.
Follmer Clogg & Co., New York, N. Y.; Philadelphia, and Lancaster, Pa.; and San Francisco, Calif. Umbrellas and parasols. 317,430; Sept. 15. Class 41.
Forest Publishing Company, The, Chicago, Ill. Publication. 317,078; Sept. 15. Class 38.
Foster-Grant Company, Inc., Leominster, Mass. Calendars. 304,098; Sept. 15. Class 38.
Frost, Thomas H., Boston, Mass. Safety razors and safety razor blades. 317,555; Sept. 15. Class 23.
Gaby, Inc., Philadelphia, Pa. Face powder, hand lotion, almond cream, etc. 311,030; Sept. 15. Class 6.
Gay, Georges, doing business as Académie Scientifique de Beauté, Colombes, France. Nail polish. 310,761; Sept. 15. Class 6.
General Drafting Co., Inc., New York, N. Y. Bulletin or magazine. 316,637; Sept. 15. Class 38.
Ghose, Satish C., doing business as India Incense Company, Chicago, Ill. Incense. 317,203; Sept. 15. Class 6.
Gilbert Shoe Co., The, Thiensville, Wis. Shoes. 309,201; Sept. 15. Class 39.
Goldman, Aaron J., doing business as Muco-Thesin Laboratory, Philadelphia, Pa. Dental anæsthetic. 316,998; Sept. 15. Class 6.
Gold Medal Folding Furniture Co., Racine, Wis. Couch hammocks, gliders, etc. 316,200; Sept. 15. Class 32.
Goodyear Tire & Rubber Company, The, Akron, Ohio. Accelerators for the vulcanization of caoutchouc. 313,432; Sept. 15. Class 6.
Gordon & Schuval, Inc., New York, N. Y. Step-ins, chemises, panties, etc. 316,235; Sept. 15. Class 39.
Grant, J. H. Robert, New York, N. Y. Tanning extracts. 317,309; Sept. 15. Class 6.
Griswoldville Manufacturing Company, Griswoldville, Mass. Surgical plasters. 309,817; Sept. 15. Class 44.
Hahn Department Stores, Inc., Wilmington, Del., and New York, N. Y. Hosiery. 317,115; Sept. 15. Class 39.
Halversen, Roy A., Niagara, Wis. Preparations for external application for ivy poison. 316,724; Sept. 15. Class 6.
Haymarket Clothing Co., Boston, Mass. Overcoats, topcoats, and suits. 317,395; Sept. 15. Class 39.
Hofmann, Franz, Teplitz-Schonau, Czechoslovakia. Reducing preparations. 316,645; Sept. 15. Class 6.
Holland Mfg. Co., The, Baltimore, Md. Upholster tacks. 317,396; Sept. 15. Class 13.
Hubber, J. M., Inc., Bayonne, N. J., and New York, N. Y. Pigments and fillers. 310,128; Sept. 15. Class 6.
Hulse Manufacturing Company, Inc., Geneva, N. Y. Machines for marking golf balls. 317,642; Sept. 15. Class 23.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

India Incense Company. (See Ghose, Satish C.)
Jewel Oil Co., Inc., Jersey City, N. J. Shampoo. 316,968; Sept. 15. Class 6.
Johanning, Charles, Richmond, Ind. Lubricating motor oils, grease, and gasoline motor fuel, etc. 313,244; Sept. 15. Class 15.
Johnson, Alfred, Skate Company, The, Chicago, Ill. Ice skates. 317,042; Sept. 15. Class 22.
Johnson, John F., Spokane, Wash. Board games. 316,969–70; Sept. 15. Class 22.
Jumes, Demetrios N., doing business as Dionysus Co., Los Angeles, Calif. Beverages. 316,971; Sept. 15. Class 45.
Kallay Bros. Company, The, Painesville, Ohio. Evergreens, shrubs, fruit trees, etc. 315,813; Sept. 15. Class 1.
Kappa Omicron Phi, Home Economics Fraternity, Maryville, Mo. Fraternity badges, lapel buttons, cuff links, etc. 317,606; Sept. 15. Class 28.
Karreth, August, doing business as Luitpold-Werk, Chemisch-Pharmazeutische Fabrik, Munich, Germany. Hemostatic. 316,727; Sept. 15. Class 6.
Kaufmann Department Stores, Inc., Pittsburgh, Pa. Cleaning fluid. 317,120; Sept. 15. Class 4.
Kayser, Julius, & Co., New York, N. Y. Hosiery. 316,491; Sept. 15. Class 39.
Kearney, James R., Corporation, St. Louis, Mo. Switches, choke coils, and choke coils and switches. 307,498; Sept. 15. Class 21.
Keen Manufacturing Corporation, New York, N. Y. Lotion. 312,103; Sept. 15. Class 6.
Keep Klean Cover Co., Inc., St. Louis, Mo. Tire covers. 316,891; Sept. 15. Class 35.
Kempe, Rudolf C., Long Island City, N. Y. Medicinal preparations. 317,043; Sept. 15. Class 6.
Klever-Way Products Company, Cleveland, Ohio. Dry cleaning machines. 317,607; Sept. 15. Class 24.
Knapp-Monarch Company, Belleville, Ill. Electrical heating elements for electric heaters, grill stoves, hot plates, etc. 315,848; Sept. 15. Class 21.
Kollias, Them, Santa Ana, Calif. Malt syrup. 315,102; Sept. 15. Class 46.
Krembs, Walter R., doing business as Pinetex Co., Chicago, Ill. Medicated textile. 317,121; Sept. 15. Class 6.
Laccum, Inc., The, Brooklyn, N. Y. Fermented milk. 312,607; Sept. 15. Class 46.
Lamont, Corliss & Company, New York, N. Y. Prepared edible chocolate. 314,766; Sept. 15. Class 46.
La Societe Polonovski & Nitzberg, Paris, France. Treatment for dyspepsia and related diseases. 316,649; Sept. 15. Class 6.
La Societe Polonovski & Nitzberg, Paris, France. Remedy for the treatment of intestinal pain, etc. 316,652; Sept. 15. Class 6.
Lasting Products Corporation, The, Baltimore, Md. Paints, paint enamels, lacquers, etc. 317,174; Sept. 15. Class 16.
Lewis, Martha, Fruit Products Company, Los Angeles, Calif. Citrus fruit juice powder. 316,042; Sept. 15. Class 46.
Lincoln Oil Refining Company, Robinson, Ill. Bituminous material. 317,280; Sept. 15. Class 12.
Luitpold-Werk, Chemisch-Pharmazeutische Fabrik. (See Karreth, August.)
Luntz, Joseph, Brooklyn, N. Y. Skin beautifying cream. 316,949; Sept. 15. Class 6.
Luxite Silk Products Co., Milwaukee, Wis. Underwear. 317,323; Sept. 15. Class 39.
Mackenzie, Robt. F., Co., Cleveland, Ohio. Candy. 315,854; Sept. 15. Class 46.
Madrina Corporation, New York, N. Y. Castile soap. 314,206; Sept. 15. Class 4.
Mallinson, H. R., & Company, Inc., New York, N. Y. Silk piece goods. 317,816; Sept. 15. Class 42.
Marquardt, John F. D., doing business as J. F. D. Marquardt, Los Angeles, Calif. Preparation for use in cleaning. 310,395; Sept. 15. Class 6.
Martin, Ezra W., Company, East Lampeter, Pa. Butter. 313,665; Sept. 15. Class 46.
Martin, Herbert E., Grafton, W. Va. Medicinal preparation. 317,176; Sept. 15. Class 6.
Mayanart, New York, N. Y. Table linens, spreads and sets for table, bureau runners, etc. 316,369; Sept. 15. Class 42.
Mayflower Mills, Fort Wayne, Ind. Wheat flour. 314,338; Sept. 15. Class 46.
Metro Oil-Burner Co. (See Muszynski, Antoni.)
Midland Paper Company, Chicago, Ill. Paper. 317,213; Sept. 15. Class 37.
Miles, Lester H., Los Angeles, Calif. Creams. 316,844; Sept. 15. Class 6.
Miller Laboratories, Duluth, Minn. Toilet lotion. 316,440; Sept. 15. Class 6.
Mole, S. Amos, Buffalo, N. Y. Germicide, disinfectant, deodorant and bleach. 316,606; Sept. 15. Class 6.
Monad Paint and Varnish Company, Philadelphia, Pa. Colors in oil for paints, paint pastes, or paint pigments. 315,692; Sept. 15. Class 16.
Moore, E. T., Miami, Fla. Laxative. 316,047; Sept. 15. Class 6.
Mosaic Tile Company, The, Zanesville, Ohio. Tiles of baked clay. 285,528; Sept. 15. Class 12.
Muco-Thesin Laboratory. (See Goldman, Aaron J.)
Munsey, Frank A., Company, The, New York, N. Y. Magazine. 316,847; Sept. 15. Class 38.
Museo & Sclafani, New York, N. Y. Dried beans. 316,895; Sept. 15. Class 46.
Muszynski, Antoni, doing business as Metro Oil Burner Co., Easthampton, Mass. Oil burners. 311,505; Sept. 15. Class 34.
National Paper Process Company, Inc., New York, N. Y. Moving picture screens. 311,153; Sept. 15. Class 26.
Nelson, Alma, New York, N. Y. Skin cream. 314,577; Sept. 15. Class 6.
Neutrasol Products Corporation, Jersey City, N. J. Processed oil. 317,181; Sept. 15. Class 6.
Newark Paraffine & Parchment Paper Co., Newark, N. J. Paper bags and cartons. 313,749; Sept. 15. Class 2.
Noblesville Milling Co., Noblesville, Ind. Wheat flour. 317,728; Sept. 15. Class 46.
Northwestern Yeast Company, Chicago, Ill. Chocolate covered caramels. 316,444; Sept. 15. Class 46.
Nourishine Manufacturing Company, Los Angeles, Calif. Liquid shampoo. 317,217; Sept. 15. Class 6.
Nutley, John A., Elk City, Okla. Asthma and cough medicine. 316,781; Sept. 15. Class 6.
Old Southern Delicacies Co. (See Wallace, Roy M.)
Orange Dew Corporation, Hollywood, Calif. Maltiess powder. 316,861; Sept. 15. Class 45.
Orchard Products Company, Chicago, Ill. Syrup and concentrate. 317,048; Sept. 15. Class 45.
Orkin Exterminating Company, Inc., Atlanta, Ga. Insecticides and deodorants. 316,539; Sept. 15. Class 6.
Osborn, Dean H., Marshfield, Oreg. Tonic. 316,373; Sept. 15. Class 6.
Paraffine Companies, Inc., The, San Francisco, Calif. Dry and ready-mixed paints and enamels. 314,169; Sept. 15. Class 16.
Peak Corporation, The, Houston, Tex. Dentifrice. 317,049; Sept. 15. Class 6.
Perkins-Goodwin Company, New York, N. Y. Paper. 316,712; Sept. 15. Class 37.
Philadelphia Malt Extract Co., Philadelphia, Pa. Malt syrup. 311,694; Sept. 15. Class 46.
Philco Trading Co., Inc., Philadelphia, Pa. Emblematic rings, lavallières, etc. 317,050; Sept. 15. Class 28.
Pile Fabric Manufacturing Company (Bradford) Limited, The, Bradford, England. Furnishing fabrics. 304,249; Sept. 15. Class 42.
Pilgrim Food Products Company, Boston, Mass. Relishes or sauces. 316,783; Sept. 15. Class 46.
Pinetex Co. (See Krembs, Walter R.)
Premier Co. Inc., The, New York, N. Y. Razor blades. 316,051; Sept. 15. Class 23.
Prince, L. M., Co., Cincinnati, Ohio. Optical lenses. 317,482; Sept. 15. Class 26.
Putnam Knitting Co., Coboes, N. Y. Knitted dish cloths. 317,285; Sept. 15. Class 42.
Renovene Company, The, doing business as Velmo Company, New York, N. Y. Food powder. 315,607; Sept. 15. Class 46.
Rhea Manufacturing Company, Milwaukee, Wis. Dresses, aprons, and smocks. 317,135; Sept. 15. Class 39.
Rice, James A., Chicago, Ill. Periodical. 316,714; Sept. 15. Class 38.
Roos, Pierre, New York, N. Y. Wigs, transformations, toupees, etc. 316,782; Sept. 15. Class 40.
Rorer, William H., Inc., Philadelphia, Pa. Medicine. 315,928; Sept. 15. Class 6.
Rosenblatt, Samson, New York, N. Y. Dental preparations. 316,851; Sept. 15. Class 6.
Sachs, Frank S., doing business as The Dominettes Co., Detroit, Mich. Table board game. 317,485; Sept. 15. Class 22.
Sanders, Ernest E., Detroit, Mich. Refrigerators. 313,408; Sept. 15. Class 31.
Sanitine Products Co. (See Devine, Dennis, jr.)
Satisfaction Supply Co. Inc., New York, N. Y. Label gum. 315,172; Sept. 15. Class 5.
Saul, William H., doing business as Saul Pharmacal Company, Brooklyn, N. Y. Ointment. 310,352; Sept. 15. Class 6.
Schneiderman Bros., New York, N. Y. Suits, overcoats, and topcoats. 317,288; Sept. 15. Class 39.
Schoedinger, F. O., Columbus, Ohio. Motor vehicle heaters. 317,010; Sept. 15. Class 19.
Schuetze, Gustav P. G., Detroit, Mich. Educational texts. 315,568; Sept. 15. Class 38.
Schulte Optical Co., Chicago, Ill. Lenses for eyeglasses, etc. 317,336; Sept. 15. Class 26.
Sclafani Brothers, Brooklyn, N. Y. Olive oil. 314,215; Sept. 15. Class 46.
Scott Paper Company, Chester, Pa. Tissue, creped, and absorbent papers. 316,943; Sept. 15. Class 37.
Scott, Rufus W., Company, New York, N. Y. Hosiery. 311,490; Sept. 15. Class 39.
Scott, Rufus W., Company, New York, N. Y. Yarn. 311,491; Sept. 15. Class 43.
Seeley, Edna M., doing business as Venetian Art Studios, Minneapolis, Minn. Specially treated fibre, leaves, and perfumes. 310,436; Sept. 15. Class 1.
Seminole Manufacturing Company, McAlester, Okla. Pants and suits. 311,756; Sept. 15. Class 39.

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Service Publishing Co., Washington, D. C. Publication. 317,408; Sept. 15. Class 38.
Sherwin-Williams Company, The, Cleveland, Ohio. Insecticides and fungicides. 317,261; Sept. 15. Class 6.
Silverwood Mineral Springs Co., Inc., Silverwood, Ind. Mineral spring water. 317,411; Sept. 15. Class 45.
Simpson, W. A., Company, The, Baltimore, Md. Lawn grass seed. 313,892; Sept. 15. Class 1.
Singer Manufacturing Company, The, Elizabeth, N. J., and New York, N. Y. Sewing machines, their parts and attachments. 317,097; Sept. 15; Class 23.
Sinykin, Jack L., doing business as Cinderella Cosmetics, St. Paul, Minn. Skin creams, face powders, face lotions, etc. 316,056; Sept. 15. Class 6.
Stamoules, S. & Co., San Francisco and Modesto, Calif. Fresh melons. 302,077; Sept. 15. Class 46.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Insect repellent. 317,137; Sept. 15. Class 6.
Standard Duplicator Co., Pasadena, Calif. Duplicating pads. 314,822; Sept. 15. Class 37.
Sterling Automotive Products Corporation, Buffalo, N. Y. Tire valves. 314,722–3; Sept. 15. Class 13.
Stokes, Orlando W; doing business as Stokes (OK) Laboratory, San Fernando, Calif. Preparation in liquid form. 310,665; Sept. 15. Class 6.
Storck, Louis, doing business as Storck Baking Company, Parkersburg, W. Va. Bread, cakes, and pies. 315,808; Sept. 15. Class 46.
Sturtevant, B. F., Company, Hyde Park, Boston, Mass. Motor generators. 303,663; Sept. 15. Class 21.
Suberit-Fabrik A.-G., Mannheim-Rheinau, Germany. Hockey, cricket, and bowling balls; fishing bobs and corks, etc. 311,939; Sept. 15. Class 22.
Swin Pak Co., New York, N. Y. Metal cigarette cases and humidors. 315,946; Sept. 15. Class 8
Tasty Baking Company, Philadelphia, Pa. Rolls, cinnamon cake, sticky buns, etc. 316,858; Sept. 15. Class 46.
Taylor, E. E., Corporation, Boston, Mass. Boots and shoes. 298,914; Sept. 15. Class 39.
Televator Corporation, The, New York, N. Y. Apparatus for counting persons at a certain point. 316,689; Sept. 15. Class 26.
United Egg Purchasing Corp., New York, N. Y. Eggs. 316,983; Sept. 15. Class 46.
United States Envelope Company, Springfield, Mass. Paper and envelopes. 317,140; Sept. 15. Class 37.
United States Game Corporation, Boston, Mass. Table board games. 317,488; Sept. 15. Class 22.
Upjohn Company, The, Kalamazoo, Mich. Elixir or solution used as an adjunct to the diet of convalescents. 316,789; Sept. 15. Class 6.
Upjohn Company, The, Kalamazoo, Mich. Drugs, medicines, and pharmaceutical preparations. 316,823; Sept. 15. Class 6.
V. J. Chemical Laboratories, Inc., Cedarhurst, N. Y. Intravaginal bacteriostatic jelly. 316,984; Sept. 15. Class 6.
Van Beuren Corporation, The, New York, N. Y. Motion picture films. 317,748–9; Sept. 15. Class 26.
Vanderherchen, Wm. H., Inc., Philadelphia, Pa. Golf bags. 317,015; Sept. 15. Class 22.
Vanderpoel, C. E., Jacksonville, Fla. Cleansers or washing powders. 310,590; Sept. 15. Class 4.
Velmo Company. (See Renovene Company, The.)
Venetian Art Studios. (See Seeley, Edna M.)
Vestal Chemical Company, St. Louis, Mo. Floor preparations. 317,142; Sept. 15. Class 16.
Von Bremen, Asche, De Bruyn, Inc., New York, N. Y. Canned mushrooms, fruits, olive oil, etc. 310,926; Sept. 15. Class 46.
Wallace, Roy M., doing business as Old Southern Delicacies Co., Washington, D. C. Hominy. 317,539; Sept. 15. Class 46.
Wamsutta Mills, New Bedford, Mass. Cotton piece goods, pillow cases, and sheets. 317,263; Sept. 15. Class 42.
Warren Oyster Co. Inc., Warren, R. I. Fresh oysters. 315,710; Sept. 15. Class 46.
Washington, Martha, Candies Company, Chicago, Ill. Chocolate, taffy, and crackers or biscuits. 316,604; Sept. 15. Class 46.
Weinheimer, Carl M., Buffalo, N. Y. Refrigerators. 317,832; Sept. 15. Class 31.
West Coast Kalsomine Co., West Berkeley, Calif. Paint, and wall colors. 312,023; Sept. 15. Class 16.
White & Wyckoff Mfg. Co., Holyoke and Riverside, Mass. Cards. 315,956; Sept. 15. Class 38.
White & Wyckoff Mfg. Co., Holyoke and Riverside, Mass. Paper and envelopes. 316,715; Sept. 15. Class 37.
Williams, Alyce, Tampa, Fla. Cream. 312,211; Sept. 15. Class 6.
Williams, Brown & Earle, Inc., Philadelphia, Pa. Electric pick-ups, unitary electric radio amplifying mechanism, etc. 315,775; Sept. 15. Class 21.
Wilson, E. A., Co., Lowell, Mass. Coal. 313,619; Sept. 15. Class 1.
Wurlitzer, Rudolph, Company, The, Cincinnati, Ohio. Radio receiving sets and component parts thereof, etc. 317,654; Sept. 15. Class 21.
Yeidel, Dorothy R., Chicago, Ill. Hooks. 317,583; Sept. 15. Class 13.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Little War Creek Coal Company. 287,070; Sept. 15; Serial No. 311,150; published June 30, 1931.
Grit and oyster shells, Poultry. Sunrayed Limeshell Products Company. 287,197; Sept. 15; Serial No. 309,180; published July 7, 1931.
Hops. John I. Haas, Incorporated. 287,205; Sept. 15; Serial No. 314,449; published July 7, 1931.
Leather. Fred Rueping Leather Co. 287,066; Sept. 15; Serial No. 309,788; published June 23, 1931.
Leather, Side. American Hide and Leather Company. 287,095; Sept. 15; Serial No. 314,136; published June 23, 1931.
Limestone. Palmer Lime & Cement Company. 287,215; Sept. 15; Serial No. 299,855; published June 23, 1931.
Pulp, Wood. Olympic Forest Products Company. 287,207–8; Sept. 15; Serial Nos. 315,008–9; published July 7, 1931.
Pulp, Wood. Olympic Forest Products Company. 287,210; Sept. 15; Serial No. 315,010; published July 7, 1931.
Soda pulp. Champion Fibre Company. 287,071; Sept. 15; Serial No. 311,595; published June 30, 1931.

CLASS 2

Bags, Paper. W. H. Deubener. 289,299; Sept. 15.
Bottles, Vacuum. American Thermos Bottle Company. 287,277; Sept. 15; Serial No. 314,442; published July 7, 1931.

CLASS 3

Bags, luggage, etc., Traveling. Majestic Leather Goods Co. 287,055; Sept. 15; Serial No. 310,729; published June 23, 1931.
Bags, luggage, etc., Traveling. Majestic Leather Goods Co. 287,056; Sept. 15; Serial No. 310,730; published June 30, 1931.
Cases, Brief. Max Damm Company. 287,249; Sept. 15; Serial No. 305,605; published Mar. 24, 1931.
Riding equipment and accessories. Gemsco, Inc. 287,057; Sept. 15; Serial No. 313,658; published June 23, 1931.

CLASS 4

Chemical compound for cleaning. B. B. Burgess. 287,188 Sept. 15; Serial No. 305,386; published June 30, 1931.
Cleaning and washing powders and metal polishes. Engelite Products Co. 287,288; Sept. 15; Serial No. 309,889; published Apr. 14, 1931.
Cleaning jewelry. F. O. Zeitz. 287,084; Sept. 15; Serial No. 313,951; published July 7, 1931.
Compound, Cleaning. American Chemical Works, Inc. 287,087; Sept. 15; Serial No. 314,264; published July 7, 1931.
Compounds, Cleansing and polishing. A. Baldwin. 287,077; Sept. 15; Serial No. 312,688; published June 30, 1931.
Dressing, Belt. Du Pont Manufacturing Company. 287,187; Sept. 15; Serial No. 304,609; published Oct. 21, 1930.
Polish, Stove. S. Palais. 287,252; Sept. 15; Serial No. 309,172; published June 30, 1931.
Shaving cream. Snoball Company. 287,248; Sept. 15; Serial No. 305,951; published July 7, 1931.
Shaving cream, paste soap, sweeping powder, etc. Green Oil Soap Company. 287,083; Sept. 15; Serial No. 313,913; published June 30, 1931.
Soap. Colgate-Palmolive-Peet Company. 287,091; Sept. 15; Serial No. 314,599; published June 30, 1931.
Soap in comminuted form. Procter & Gamble Company. 287,289; Sept. 15; Serial No. 309,140; published Feb. 3, 1931.
Soap preparations. H. Th. Böhme A. G. 287,090; Sept. 15; Serial No. 314,550; published July 7, 1931.

CLASS 5

Binders and mounting tape and adhesive photographic paste, Slide. Eastman Kodak Company. 287,060; Sept. 15; Serial No. 313,835; published June 23, 1931.
Cement. Howe & French, Inc. 287,211; Sept. 15; Serial No. 315,143; published July 7, 1931.
Glue. Pacific Bone Coal & Fertilizer Co. 287,061; Sept. 15; Serial No. 313,967; published June 23, 1931.

Glue, Household, china and glass cement, waterproof cement, etc. Webb Products Company. 287,058; Sept. 15; Serial No. 313,689; published June 23, 1931.

CLASS 6

Asphalt emulsions for waterproofing, etc. Headley Emulsified Products Company. 287,123; Sept. 15; Serial No. 306,649; published June 23, 1931.
Astringents, astringent cerates, bleach creams, beauty creams, etc. E. J. Goodier. 287,110; Sept. 15; Serial No. 314,499; published July 7, 1931.
Astringents, astringent cerates, bleach creams, etc. Viviny Perfumers, Inc. 287,219; Sept. 15; Serial No. 301,534; published June 23, 1931.
Bleaching, cleansing, antiseptic, and germicidal compound. Clorox Chemical Co. 287,293; Sept. 15; Serial No. 309,921; published June 23, 1931.
Capsules, Cold and grippe. S. B. Dewey, jr. 287,232; Sept. 15; Serial No. 294,714; published June 16, 1931.
Compound, Boiler cleaning. Ross Manufacturing Company. 287,147; Sept. 15; Serial No. 312,201; published July 7, 1931.
Cough drops. J. E. Kambisos. 287,152; Sept. 15; Serial No. 313,085; published July 7, 1931.
Cough syrup. O. H. D. Co. 287,290; Sept. 15; Serial No. 309,033; published May 26, 1931.
Cream, Dental. Colgate-Palmolive-Peet Company. 287,134; Sept. 15; Serial No. 314,040; published July 7, 1931.
Cream, catarrh jelly, and face powder, etc., Hand. F. Stikarofsky. 287,233; Sept. 15; Serial No. 299,527; published July 7, 1931.
Cream, Nasal. Rin-O-Cur Company. 287,136; Sept. 15; Serial No. 313,675; published June 16, 1931.
Creams. L. H. Miles. 287,124; Sept. 15; Serial No. 306,637; published June 30, 1931.
Creams, Face. L. H. Miles. 287,224; Sept. 15; Serial No. 304,664; published June 23, 1931.
Creams, Face. J. W. Sayles. 287,135; Sept. 15; Serial No. 313,512; published June 30, 1931.
Creams, skin lotions, astringents, etc., Cold. Scandia-Jourde Corp. 287,153; Sept. 15; Serial No. 313,208; published June 23, 1931.
Depilatory compound. Foraline Products Inc. 287,138; Sept. 15; Serial No. 313,962; published July 7, 1931.
Disinfectant. Goedrich Chemical Company. 287,117; Sept. 15; Serial No. 314,642; published July 7, 1931.
Dyes and dyestuffs. General Dyestuff Corporation. 287,132; Sept. 15; Serial No. 314,201; published July 7, 1931.
Fly sprays, Animal, Insecticides, repellents. Standard Oil Company of California. 287,115; Sept. 15; Serial No. 314,430; published July 7, 1931.
Incense. M. I. Kitchiew. 287,125; Sept. 15; Serial No. 307,979; published July 7, 1931.
Medicated bandages, and preservatives for foodstuffs. Nährmittelfabrik Julius Penner A.-G. 287,206; Sept. 15; Serial No. 311,102; published June 23, 1931.
Medicated candy lozenges. Kaczander & Daroczi. 287,143; Sept. 15; Serial No. 311,381; published July 7, 1931.
Medicated chewing gum and tablets. C. J. Clark. 287,150; Sept. 15; Serial No. 312,840; published July 7, 1931.
Medicated plasters and bandages, animal and vegetable exterminating preparations, etc. Nährmittelfabrik Julius Penner A.-G. 287,141; Sept. 15; Serial No. 311,103; published June 23, 1931.
Medicinal composition. Smith, Kline & French Laboratories. 287,294; Sept. 15; Serial No. 310,230; published July 7, 1931.
Medicinal preparation. E. Bilhuber. 287,291; Sept. 15; Serial No. 309,302; published June 23, 1931.
Medicinal preparation. V. B. Haggard. 287,118; Sept. 15; Serial No. 314,758; published July 7, 1931.
Medicinal preparation. Ippolito V. & Son. 287,149; Sept. 15; Serial No. 312,399; published June 30, 1931.
Medicine. Pitman-Moore Company. 287,140; Sept. 15; Serial No. 313,974; published June 23, 1931.
Medicine. W. C. Pooley. 287,154; Sept. 15; Serial No. 313,478; published May 26, 1931.
Medicine for poultry. Chic-Tone Company. 287,144; Sept. 15; Serial No. 311,718; published June 23, 1931.
Mineral oil. Norwich Pharmacal Company. 287,151; Sept. 15; Serial No. 313,052; published June 23, 1931.
Ointment, Medicinal. N. Shapapzian. 287,130; Sept. 15; Serial No. 315,212; published July 7, 1931.
Perfumes, face and talcum powder, bath salts, etc. Société Anonyme Jean Patou. 287,306; Sept. 15.
Perfumes, toilet water, powder, etc. Société Anonyme Jean Patou. 287,133; Sept. 15; Serial No. 314,083; published June 30, 1931.
Perfumes, toilet waters, lotions, etc. Saltzman & Bromberg. 287,292; Sept. 15; Serial No. 309,742; published June 30, 1931.
Powder. Premier Products Corp. 287,119; Sept. 15; Serial No. 314,771; published July 7.
Powder and ointment, Foot. Walter Korte Company. 287,217; Sept. 15; Serial No. 300,726; published June 30, 1931.
Powder, skin lotion, perfume, nail polish, etc., Face and talcum. I. Seligman. 287,137; Sept. 15; Serial No. 313,939; published July 7, 1931.
Powders, cleansing cream, and tissue cream, etc., Complexion. H. A. Woods, Inc. 287,148; Sept. 15; Serial No. 312,318; published July 7, 1931.
Preparation for internal use. J. A. Wülfing. 287,221; Sept. 15; Serial No. 303,077; published June 23, 1931.
Preparations for treatment of hair and scalp. T. A. Kridos. 287,295; Sept. 15; Serial No. 310,460; published June 23, 1931.
Shampoo. H. Altrogge. 287,120; Sept. 15; Serial No. 314,832; published July 7, 1931.
Shampoo. C. G. Unger. 287,223; Sept. 15; Serial No. 304,393; published July 7, 1931.
Tanning extracts. Forestal Land, Timber & Railways Company Limited. 287,145; Sept. 15; Serial No. 311,860; published June 30, 1931.
Tints. Dy-O-La Dye Co. 287,146; Sept. 15; Serial No. 312,141; published June 23, 1931.
Tonics, Hair. A. Bernard. 287,142; Sept. 15; Serial No. 311,125; published June 23, 1931.
Vermicide and purgative. Pitman-Moore Company. 287,139; Sept. 15; Serial No. 313,971; published June 30, 1931.

CLASS 11

Ink, Duplicating machine. A. B. Dick Company. 287,226; Sept. 15; Serial No. 311,185; published July 7, 1931.
Ink, Writing. Parker Pen Company. 287,182; Sept. 15; Serial No. 301,123; published July 7, 1931.
Preparation for stamping fabrics containing a dry color. T. J. Ronan Co., Inc. 287,269; Sept. 15; Serial No. 313,095; published July 7, 1931.

CLASS 13

Fence, Wire. Colorado Fuel and Iron Company. 287,254; Sept. 15; Serial No. 315,034; published July 7, 1931.
Traps, Steam. V. D. Anderson Company. 287,259; Sept. 15; Serial No. 314,678; published July 7, 1931.

CLASS 14

Alloy. I. Stern & Co. 287,257; Sept. 15; Serial No. 314,933; published July 7, 1931.
Solder. Mueller Brass Co. 287,255; Sept. 15; Serial No. 315,005; published July 7, 1931.
Steel. Klosters Aktienbolag. 287,179; Sept. 15; Serial No. 296,350; published July 7, 1931.

CLASS 15

Gasoline. Rock Island Refining Company. 287,240; Sept. 15; Serial No. 313,611; published July 7, 1931.
Oil and kerosene. Penn Valley Refining Company. 287,307; Sept. 15.
Oils, greases, and compounds, Lubricating. Technical Lubricants Company. 287,241; Sept. 15; Serial No. 313,685; published July 7, 1931.
Oils, Lubricating. Wadhams Oil Company. 287,239; Sept. 15; Serial No. 313,569; published July 7, 1931.
Oils, Motor lubricating. Metallfe, Inc. 287,156; Sept. 15; Serial No. 313,249; published July 7, 1931.

CLASS 16

Paints. Kepec Company. 287,263; Sept. 15; Serial No. 312,301; published June 23, 1931.
Paints, varnishes, and paint enamels. Kingdom Paint Products Company. 287,250; Sept. 15; Serial No. 299,915; published June 23, 1931.
Varnish. Lac-R-Glo Products Co. 287,078–9; Sept. 15; Serial Nos. 312,233–4; published July 7, 1931.

CLASS 17

Cigars. Cortez Cigar Co. 287,191; Sept. 15; Serial No. 315,035; published July 7, 1931.

CLASS 19

Cruisers, Pleasure. Lake Union Dry Dock and Machine Works. 287,185; Sept. 15; Serial No. 303,481; published Sept. 30, 1930.
Tow frame. C. Wells. 287,275; Sept. 15; Serial No. 314,219; published July 7, 1931.

CLASS 21

Batteries, Storage. Electric Auto-Lite Company. 287,214; Sept. 15; Serial No. 299,652; published June 30, 1931.
Dry cells and batteries. Carbon Products Company. 287,155; Sept. 15; Serial No. 313,328; published July 7, 1931.
Electric lamps. Delta Electric Company. 287,243; Sept. 15; Serial No. 314,686; published July 7, 1931.
Electric power units. Altorfer Bros. Company. 287,126–8; Sept. 15; Serial Nos. 308,807–9; published June 30, 1931.
Electrical apparatus, machines, and supplies, etc. Cutler-Hammer, Inc. 287,074; Sept. 15; Serial No. 310,798; published July 7, 1931.
Electrical attachment plugs. Marks Products Co. Inc. 287,157–8; Sept. 15; Serial Nos. 313,195–6; published June 23, 1931.
Electrical machines and apparatus. Jaburg Brothers, Inc. 287,161; Sept. 15; Serial No. 312,649; published July 7, 1931.

Electricity generating units. Sunbeam Electric Manufacturing Company. 287,298; Sept. 15; Serial No. 280,582; published June 11, 1929.
Humidifiers. A. C. Gilbert Company. 287,129; Sept. 15; Serial No. 308,196 published June 23, 1931.
Lighting fixtures, Electric. Mrs. G. Herzog. 287,229; Sept. 15; Serial No. 283,333; published July 7, 1931.
Percolators, Electric. Leyse Aluminum Company. 287,073; Sept. 15; Serial No. 311,242; published July 7, 1931.
Radio aerial and ground connectors. M. M. Fleron & Son, Inc. 287,301; Sept. 15.
Radio electron tubes. Marvin Radio Tube Corp. 287,230; Sept. 15; Serial No. 284,914; published Aug. 27, 1929.
Radio receiving sets. Marshall Field & Company. 287,236; Sept. 15; Serial No. 313,369; published June 23, 1931.
Radio receiving sets, kits, pick-ups for phonographs, etc. Silver-Marshall, Inc. 287,246; Sept. 15; Serial No. 314,660; published July 7, 1931.
Signs. H. H. Bennett. 287,160; Sept. 15; Serial No. 312,789; published June 23, 1931.
Switches, Starting. Cutler-Hammer, Inc. 287,159; Sept. 15; Serial No. 313,075; published July 7, 1931.
Transmitting and receiving apparatus, etc., Unitary. Jenkins Television Corporation. 287,220; Sept. 15; Serial No. 303,056; published June 23, 1931.
Wire and cables, Insulated. American Steel and Wire Company of New Jersey. 287,244–5; Sept. 15; Serial Nos. 314,833–4; published July 7, 1931.

CLASS 22

Bowling game. S. W. Lawton. 287,228; Sept. 15; Serial No. 310,544; published July 7, 1931.
Fishing reels. Enterprise Manufacturing Company. 287,175; Sept. 15; Serial No. 315,305; published July 7, 1931.
Game. B. Sternau. 287,297; Sept. 15; Serial No. 314,587; published July 7, 1931.
Games. Phillips & Uppercu. 287,261; Sept. 15; Serial No. 311,696; published July 7, 1931.
Golf clubs. Wilson-Western Sporting Goods Company. 287,178; Sept. 15; Serial No. 294,371; published July 7, 1931.
Golf clubs, roller skates, and ice skates. Globe-Union Mfg. Co. 287,285; Sept. 15; Serial No. 314,237; published July 7, 1931.
Golf tees. A. E. Hubbard. 287,104; Sept. 15; Serial No. 314,697; published July 7, 1931.
Toy animals. Paddy's Pup Co. 287,280; Sept. 15; Serial No. 314,391; published July 7, 1931.

CLASS 23

Backfillers, bar benders, mixers and placers, etc. National Equipment Corporation. 287,162; Sept. 15.
Bag closing machines. W. J. Savage Company. 287,096; Sept. 15; Serial No. 314,212; published July 7, 1931.
Bearings. Cleveland Graphite Bronze Company. 287,167; Sept. 15; Serial No. 314,684; published July 7, 1931.
Machinery and tools used in well drilling. Oil Well Supply Company. 287,231; Sept. 15; Serial No. 292,823; published July 7, 1931.
Snow plows. Klauer Manufacturing Company. 287,068; Sept. 15; Serial No. 310,177; published July 7, 1931.
Soda fountains and mechanical carbonators. Russ Manufacturing Company. 287,108; Sept. 15; Serial No. 312,313; published July 7, 1931.
Tools, sewing machines and parts thereof and accessories, Furriers'. Consolidated Sewing Machine & Supply Co. 287,121; Sept. 15; Serial No. 305,996; published June 16, 1931.
Traction devices for vehicles. McNeil Boiler Company. 287,069; Sept. 15; Serial No. 311,002; published July 7, 1931.

CLASS 24

Pressing pads. Brillo Manufacturing Co. 287,256; Sept. 15; Serial No. 314,945; published July 7, 1931.

CLASS 25

Safes, filing safes, note cases, and bond boxes. General Fireproofing Company. 287,258; Sept. 15; Serial No. 314,692; published July 7, 1931.

CLASS 26

Apparatus for projecting still pictures from films. Visual Demonstration System, Inc. 287,097; Sept. 15; Serial No. 314,258; published July 7, 1931.
Films, Motion picture. International Newsreel Corporation. 287,171; Sept. 15; Serial No. 314,621; published July 7, 1931.
Films, Moving picture. Theatre Service Corporation. 287,067; Sept. 15; Serial No. 309,790; published July 7, 1931.

CLASS 28

Chokers, pendants, brooches, etc. Foster-Grant Co. Inc. 287,222; Sept. 15; Serial No. 304,099; published July 7, 1931.
Jewelry. Mabzel Limited. 287,238; Sept. 15; Serial No. 313,552; published July 7, 1931.
Necklaces and clasps therefor. J. Schorsch. 287,242; Sept. 15; Serial No. 313,937; published June 30, 1931.
Silver plated flat-ware and hollow-ware. International Silver Company. 287,235; Sept. 15; Serial No. 313,360; published June 23, 1931.
Silver plated table ware. Diamond Silver Company. 287,234; Sept. 15; Serial No. 313,077; published June 23, 1931.

CLASS 29

Brushes, Tooth. McKesson & Robbins, Incorporated. 287,272; Sept. 15; Serial No. 313,716; published July 7, 1931.
Polisher, Shoe. S. B. Wright. 287,192; Sept. 15; Serial No. 315,074; published July 7, 1931.

CLASS 31

Coolers, Water. Day & Night Water Heater Co. 287,193; Sept. 15; Serial No. 315,076; published July 7, 1931.

CLASS 32

Cabinets, Portable filing. Columbia Steel Equipment Company. 287,304; Sept. 15.
Chairs, Household. Fresh Aire Chair Company. 287,174; Sept. 15; Serial No. 314,496; published July 7, 1931.
Cushions, Rug and carpet. Chapman Brothers. 287,305; Sept. 15.
Davenports and beds. Marquardt Company. 287,173; Sept. 15; Serial No. 314,506; published July 7, 1931.
Shelf structures. R. H. Dampier & Co. 287,114; Sept. 15; Serial No. 314,101; published July 7, 1931.

CLASS 33

Glass, Ampoules. W. Schnorr. 287,247; Sept. 15; Serial No. 315,161; published July 7, 1931.

CLASS 34

Boiler expansion tanks, gasoline blow torches, water storage heaters and tanks, etc. Barr & Creelman Co. 287,274; Sept. 15; Serial No. 314,035; published July 7, 1931.
Burners and oil burning equipment, Oil. Ever-Ready Oil Burner Corp. 287,303; Sept. 15.
Grilles or registers. United States Register Co. 287,177; Sept. 15; Serial No. 294,097; published July 7, 1931.
Kilns. Robertson & Co. 287,276; Sept. 15; Serial No. 314,249; published July 7, 1931.

CLASS 36

Keyboard devices. E. Roth. 287,237; Sept. 15; Serial No. 313,388; published June 23, 1931.

CLASS 37

Paper. Hurlbut Paper Company. 287,308; Sept. 15.

CLASS 38

Publication. Barker, Moore and Mein Co. 287,080; Sept. 15; Serial No. 312,750; published June 30, 1931.

CLASS 39

Apparel. Federal Knitting Mills Company. 287,282; Sept. 15; Serial No. 314,281; published July 7, 1931.
Boots and shoes. Commonwealth Shoe & Leather Company. 287,262; Sept. 15; Serial No. 311,825; published July 7, 1931.
Boots and shoes. Degner Shoe Mfg. Company. 287,286; Sept. 15; Serial No. 314,232; published July 7, 1931.
Boots and shoes. E. T. Wright & Company. 287,189; Sept. 15; Serial No. 306,914; published July 7, 1931.
Boots, shoes, or slippers. Endicott Johnson Corporation. 287,183; Sept. 15; Serial No. 302,530; published June 30, 1931.
Chemises, bloomers, step-ins, etc. I. Schneierson & Sons, Inc. 287,311; Sept. 15.
Clothing. Daniel Brothers Company. 287,105; Sept. 15; Serial No. 314,640; published July 7, 1931.
Coats and neck pieces. J. Appelbaum. 287,284; Sept. 15; Serial No. 314,265; published July 7, 1931.
Coats, vests, trousers, and overcoats. Gibberman Bros. & Co. 287,181; Sept. 15; Serial No. 299,438; published July 7, 1931.
Gloves. David & Blum Inc. 287,283; Sept. 15; Serial No. 314,275; published July 7, 1931.
Gloves. Richmond Glove Corporation. 287,102; Sept. 15; Serial No. 314,718; published July 7, 1931.
Hats. Bates Thompson, Inc. 287,281; Sept. 15; Serial No. 314,308; published July 7, 1931.
Hats, berets, gloves, sweaters, etc. Davenport Hotel Sport Shop. 287,180; Sept. 15; Serial No. 298,794; published Mar. 3, 1931.
Hats, caps, and shoes, etc. Best & Co., Inc. 287,273; Sept. 15; Serial No. 313,765; published July 7, 1931.
Headwear. Crofut & Knapp Co. 287,266; Sept. 15; Serial No. 312,556; published June 30, 1931.
Heels, Rubber. Panther Rubber Manufacturing Company. 287,190; Sept. 15; Serial No. 307,986; published July 7, 1931.
Hosiery. Gotham Silk Hosiery Company. 287,271; Sept. 15; Serial No. 313,693; published June 23, 1931.
Hosiery. May Hosiery Mills. 287,107; Sept. 15; Serial No. 314,622; published July 7, 1931.
Raincoats. United States Rubber Company. 287,225; Sept. 15; Serial No. 311,402; published July 7, 1931.

Rompers and play suits. H. Mackenzie. 287,270; Sept. 15; Serial No. 313,348; published July 7, 1931.
Shirts, pajamas, socks, etc. Kresge Department Store Corporation. 287,184; Sept. 15; Serial No. 303,058; published Nov. 11, 1930.
Shoes. Seymour Troy & Company. 287,278; Sept. 15; Serial No. 314,581; published July 7, 1931.
Shoes, dresses, and suits. Parlman Brothers. 287,279; Sept. 15; Serial No. 314,578; published July 7, 1931.
Soles, Inner. United States Rubber Company. 287,106; Sept. 15; Serial No. 314,629; published July 7, 1931.
Suits. J. H. Cohen & Sons, Vanity Clothes, Inc. 287,101; Sept. 15; Serial No. 314,790; published July 7, 1931.
Suits and sweaters, Swimming. Olympia Knitting Mills, Inc. 287,103; Sept. 15; Serial No. 314,712; published July 7, 1931.
Sweaters, bathing suits, and hosiery, etc. Michaelson Bros., Inc. 287,267; Sept. 15; Serial No. 312,996; published June 30, 1931.
Undergarments, Women's. Schweltzer Company. 287,264; Sept. 15; Serial No. 312,459; published June 30, 1931.

CLASS 40

Combs, wavers, and hair pins, etc. Foster-Grant Co. 287,186; Sept. 15; Serial No. 304,097; published July 7, 1931.
Linings, Hat. A. A. Hurwitz. 287,268; Sept. 15; Serial No. 313,084; published June 23, 1931.
Tape, Hook and eye. Waldes Koh-I-Noor, Inc. 287,309; Sept. 15.

CLASS 42

Elastic webbing. United Elastic Corporation. 287,092; Sept. 15; Serial No. 314,665; published July 7, 1931.
Linings for clothing, Textile. Great Northern Silk Co., Inc. 287,076; Sept. 15; Serial No. 311,638; published June 30, 1931.
Textile fabrics. Duplan Silk Corporation. 287,089; Sept. 15; Serial No. 314,402; published July 7, 1931.
Textile fabrics. Howlett & Hockmeyer Co., Inc. 287,093; Sept. 15; Serial No. 314,761; published July 7, 1931.
Woolen fabrics in the piece. Terhune, Yearance & Wolff, Inc. 287,088; Sept. 15; Serial No. 314,383; published July 7, 1931.

CLASS 43

Yarn, Rayon. Putnam Spinners Inc. 287,085; Sept. 15; Serial No. 314,220; published July 7, 1931.
Yarns. Joseph Benn Corporation. 287,195; Sept. 15; Serial No. 315,127; published July 7, 1931.

CLASS 44

Adhesive sheet or paper to be applied to the wrinkled portions of the face. B & P Company. 287,253; Sept. 15; Serial No. 309,018; published July 7, 1931.
Pads for use in permanent hair waving. Keen Manufacturing Corporation. 287,086; Sept. 15; Serial No. 314,240; published July 7, 1931.
Prophylactic rubber, tissue, and membranous articles. Robert J. Pierce, Inc. 287,194; Sept. 15; Serial No. 314,963; published July 7, 1931.
Rubber gloves for physicians, dentists, etc. Wilson Rubber Company. 287,094; Sept. 15; Serial No. 314,882; published July 7, 1931.
Sanitary napkins. W. T. Grant Company. 287,082; Sept. 15; Serial No. 313,781; published July 7, 1931.
Surgical skin sutures. Davis & Geck, Inc. 287,081; Sept. 15; Serial No. 313,772; published July 7, 1931.
Syringes. Marvel Company. 287,075; Sept. 15; Serial No. 311,531; published July 7, 1931.
Water bottles, sterilizers, vaporizers, and parts thereof, Electrically heated. Sta-Hot Products Co. 287,302; Sept. 15.

CLASS 45

Beverages and the ingredients for making the same, Maltless. Taylor-Long Company. 287,227; Sept. 15; Serial No. 310,666; published July 7, 1931.
Flavoring and preservative for soft drinks. Vino-Sano Company. 287,310; Sept. 15.
Ginger ale. Soda Lunch Equipment Co. 287,176; Sept. 15; Serial No. 283,764; published July 7, 1931.

CLASS 46

Biscuits. Johnson Educator Food Company. 287,198; Sept. 15; Serial No. 310,679; published June 30, 1931.
Biscuits. Johnson Educator Food Company. 287,212–13; Sept. 15; Serial Nos. 315,147–8; published July 7, 1931.
Bread. General Baking Company. 287,063; Sept. 15; Serial No. 314,800; published June 30, 1931.
Bread. General Baking Company. 287,065; Sept. 15; Serial No. 314,801; published June 30, 1931.
Brunswick stew and barbecue sauce. Verners', Inc. 287,300; Sept. 15.
Butter. American Stores Company. 287,206; Sept. 15; Serial No. 314,786; published June 30, 1931.
Butter. Everfresh Butter Corporation. 287,203; Sept. 15; Serial No. 314,327; published June 30, 1931.
Cakes. New Standard Baking Company. 287,064; Sept. 15; Serial No. 314,856; published June 30, 1931.
Candies. Nunnally Company. 287,172; Sept. 15; Serial No. 314,510; published July 7, 1931.
Candy. J. N. Adam & Co. 287,165; Sept. 15; Serial No. 315,079; published July 7, 1931.
Candy. W. B. Fundis. 287,072; Sept. 15; Serial No. 311,724; published July 7, 1931.
Candy. Schutter Johnson Candy Company, Inc. 287,163; Sept. 15; Serial No. 315,283; published July 7, 1931.
Candy tablets. E. G. Mueller. 287,166; Sept. 15; Serial No. 314,711; published July 7, 1931.
Canned juices of grapefruit and oranges. R. L. Riggs. 287,099; Sept. 15; Serial No. 314,297; published July 7, 1931.
Coffee. C. D. Kenny Company. 287,164; Sept. 15; Serial No. 315,267; published July 7, 1931.
Coffee and tea. Standard Brands Incorporated. 287,131; Sept. 15; Serial No. 315,115; published July 14, 1931.
Coffee. Imitation. H. Schy-Man-Ski & Sons. 287,218; Sept. 15; Serial No. 301,066; published July 7, 1931.
Confections, Frozen. D. Ferguson. 287,100; Sept. 15; Serial No. 314,493; published July 7, 1931.
Feed, Poultry. F. E. Booth Company. 287,062; Sept. 15; Serial No. 314,681; published June 30, 1931.
Flour. Abilene Flour Mills Company. 287,199; Sept. 15; Serial No. 310,746; published June 30, 1931.
Flour. Atlanta Flour & Grain Company. 287,200; Sept. 15; Serial No. 311,859; published July 7, 1931.
Flour, Self rising. S. Jerolleman. 287,196; Sept. 15; Serial No. 309,169; published July 7, 1931.
Flour, Wheat. Federal Mill, Inc. 287,209; Sept. 15; Serial No. 315,024; published July 7, 1931.
Flour, Wheat. Theo. Stivers Milling Company. 287,204; Sept. 15; Serial No. 314,485; published July 7, 1931.
Food, Cat. Vitamont Sales Company. 287,170; Sept. 15; Serial No. 314,666; published July 7, 1931.
Food, Concentrated. H. H. Borchers. 287,202; Sept. 15; Serial No. 313,322; published June 30, 1931.
Food, Fish. Vitamont Sales Company. 287,168; Sept. 15; Serial No. 314,668; published July 7, 1931.
Food, Fox. Vitamont Sales Company. 287,169; Sept. 15; Serial No. 314,667; published July 7, 1931.
Food product. T. A. Faulds Co., Inc. 287,059; Sept. 15; Serial No. 313,776; published June 23, 1931.
Foods, Dairy and poultry. Golden Eagle Milling Co. 287,251; Sept. 15; Serial No. 297,189; published July 7, 1931.
Ice cream cones. McLaren-Consolidated Cone Corporation. 287,113; Sept. 15; Serial No. 313,789; published July 7, 1931.
Oranges and grapefruit. Mrs. G. S. Furry. 287,110; Sept. 15; Serial No. 313,898; published July 7, 1931.
Pastry. L. E. Cadd. 287,201; Sept. 15; Serial No. 312,943; published June 30, 1931.
Sandwich spreads. F. H. Leggett & Company. 287,112; Sept. 15; Serial No. 313,603; published July 7, 1931.
Syrup, Grape. L. M. Martini Grape Products Co. 287,122; Sept. 15; Serial No. 306,241; published June 30, 1931.
Syrup, Malt. Seneca Food Products Corporation. 287,111; Sept. 15; Serial No. 314,130; published July 7, 1931.
Tea. Mannings, Inc. 287,216; Sept. 15; Serial No. 300,072; published July 7, 1931.
Toffee. Riley Brothers (Halifax) Limited. 287,109; Sept. 15; Serial No. 313,610; published July 7, 1931.
Vinegar, salad oil, and tomato catsup, etc. Wilkinson, Gaddis & Co. 287,098; Sept. 15; Serial No. 314,259; published July 7, 1931.

CLASS 48

Malt beverages. Hampden Brewing Company. 287,287; Sept. 15; Serial No. 309,562; published July 7, 1931.
Malt cereal beverage. Greater New York Brewery, Inc. 287,260; Sept. 15; Serial No. 314,500; published July 7, 1931.

CLASS 50

Needled felt. Clark-Cutler-McDermott Company. 287,265; Sept. 15; Serial No. 312,546; published July 7, 1931.

ALPHABETICAL LIST OF LABELS

Beauty Plus. For Hosiery. Trojan Hosiery Mills, Inc. 39,756; Sept. 15.
Big Game. For Fresh Bartlett Pears. D. W. Leary. 39,738; Sept. 15.
Bon Ami De Luxe. For Cleaning and Polishing Powder. The Bon Ami Company. 39,721; Sept. 15.
Bull Frog. For Malt Syrup. L. L. Hughes. 39,737; Sept. 15.
Crater Lake Blue, The Aristocrat of Bluings. For Bluing. Mrs. I. M. Shannon. 39,749; Sept. 15.
Crater Lake Blue, The Aristocrat of Inks. For Ink. Mrs. I. M. Shannon. 39,750; Sept. 15.
Crepe Hosiery Pure Silk Lisle Reinforced. For Hosiery. Harron Hosiery Company. 39,735; Sept. 15.
Dr. Chapman's Health Shoes. For Shoes. P. Trachtenberg. 39,754; Sept. 15.

Dr. Chase's Scout Shoes. For Shoes. J. Freidson Shoe Co. 39,729; Sept. 15.
Gold Watch Brand. For Tomatoes. W. C. Scott & Co. 39,748; Sept. 15.
Golden Egg Noodles. For Noodles. Golden Age Corporation. 39,730; Sept. 15.
Goodman's Fine Matzo Meal. For Matzo Meal. A. Goodman & Sons, Co. 39,732; Sept. 15.
Goodman's Pure Matzo Meal. For Matzo Meal. A. Goodman & Sons, Co. 39,733; Sept. 15.
Guest Package Reid's "Special" Ice Cream. For Ice Cream. Reid Ice Cream Corporation. 39,746; Sept. 15.
Home Made Sweet Green Tomato Pickles. For Sweet Green Tomato Pickle. E. L. Grout. 39,734; Sept. 15.
House & Cottage. For Mixed Paint. A. K. Sheldon Co. 39,751; Sept. 15.
Mark Twain. For Cigars. Wolf Brothers & Co. 39,758; Sept. 15.
Mary King Face Powder. For Face Powder. The J. R. Watkins Company. 39,757; Sept. 15.
Me 64 Ferro-Cu-Mang. For Medicinal Preparation. The Drug Products Co. Inc. 39,727; Sept. 15.
Moss Rose Lotion. For Lotion for Softening and Whitening the Hands and for Use After Shaving. W. H. Maus. 39,739; Sept. 15.
Perky. For Milk Chocolate Candy. Candy Kitchens, Inc. 39,723; Sept. 15.
Phyndit. For Game. Brehmer Folding Box Co. Ltd. 39,722; Sept. 15.
Real Mint. For Gum. The Curtiss Candy Company. 39,725; Sept. 15.
Russell McPhail Children's Candies—(Cow Jumped Over The Moon Design) For Candies. McPhail's Chocolates, Inc. 39,745; Sept. 15.
Russell McPhail Children's Candies—(Humpty Dumpty Design). For Candies. McPhail's Chocolates, Inc. 39,741; Sept. 15.
Russell McPhail Children's Candies—(Jack and Jill Design). For Candies. McPhail's Chocolates, Inc. 39,742; Sept. 15.
Russell McPhail Children's Candies—(Little Boy Blue Design). For Candies. McPhail's Chocolates, Inc. 39,743; Sept. 15.
Russell McPhail Children's Candies—(Old Woman Who Lived in a Shoe Design). For Candies. McPhail's Chocolates, Inc. 39,740; Sept. 15.
Russell McPhail Children's Candies—(Peter, Peter, Pumpkin Eater Design). For Candies. McPhail's Chocolates, Inc. 39,744; Sept. 15.
Silver Watch Brand. For Tomatoes. W. C. Scott & Co. 39,747; Sept. 15.
Sorority House Footwear. For Footwear. Holman Paper Box Co. 397,736; Sept. 15.
Tablets, No. 460, Asalum. For Astringent Douche tablets. The Drug Products Co., Inc. 39,726; Sept. 15.
The Medium. For Cigars. J. Foege, jr. 39,728; Sept. 15.
Tom Henry. For Candy. Chase Candy Company. 39,724; Sept. 15.
Treasure Incense. For Incense. Treasure Products Co. 39,755; Sept. 15.
Wisconsin's Best. For Malt Syrup. S. L. Goldman. 39,731; Sept. 15.
"X" Boiler Flush. For Liquid for Flushing Boilers. E. R. Tolfree. 39,752; Sept. 15.
"X" Radiator Flush. For Liquid for Flushing Radiators. E. R. Tolfree. 39,753; Sept. 15.

ALPHABETICAL LIST OF PRINTS

Ah-h! There's a Dish that goes Big with Me! For Cooked Spaghetti. H. J. Heinz Company. 13,412; Sept. 15.
Bunny Tot. For Ice Cream. Mathews Company. 13,417; Sept. 15.
Granitoid House Paint. For Prepared Liquid Paint. J. F. Kurfees Paint Co. 13,415; Sept. 15.
Heinz Cider Vinegar—The Important Ingredient in a Hundred Delicious Salads. For Cider Vinegar. H. J. Heinz Company. 13,413; Sept. 15.
Kurfees 80 and 20=100% Paint. For Prepared Liquid Paint. J. F. Kurfees Paint Co. Inc. 13,414; Sept. 15.
Kurfees Granitoid. For Prepared Liquid Enamel and Varnish Stain. J. F. Kurfees Paint Co. 13,416; Sept. 15.
Mint-Julep, the Candy Mint. For Candy Mints. E. G. Mueller. 13,418; Sept. 15.
Radio's Motive Power Since 1915. For Vacuum Tubes. E. T. Cunningham Incorporated. 13,409–10; Sept. 15.
Replace your Laces. For Shoe Laces. Diamond Braiding Mills. 13,411; Sept. 15.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 15TH DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Rabezzana, Hector, assignor.)
A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
Abbott, Adrian O., jr., Grosse Pointe Park, Mich. Power transmitting apparatus. 1,823,226; Sept. 15.
Ackerman, Emil, and W. Mowers, Chicago, Ill. Air circulating device for warm air furnaces. 1,823,521; Sept. 15.
Ackerman, Fred, deceased, Pineville, S. Ackerman, administratrix, assignor of three-fifths to Kentucky Utilities Company, Louisville, Ky. Steam trap. 1,823,077; Sept. 15.
Ackerman, Sophie, administratrix. (See Ackerman, Fred.)
Acme Machine Tool Company, The. (See Wettig, T. A., and Meier, assignors.)
Adams, Edgar R., Etwardstown, V. A. H. Weber and D. H. Smith, Henley Beach, Australia. Electropneumatic action for the operation and control of musical instruments. 1,823,775; Sept. 15.
Adamson, Allan A., Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio. Manufacture of wrapped boxes. 1,823,578; Sept. 15.
Addler, Joseph H., Brooklyn, N. Y., assignor to Pulilean Manufacturing Corporation, Bridgeport, Conn. Towel bundling machine. 1,823,078; Sept. 15.
Adelsperger, Charles C. and H. D. Fitzgerald, Union City, Ind., assignors to Union City Body Company. Theater chair. 1,823,418; Sept. 15.
Adler, Milton M. (See Reihlen, Hans, assignor.)
Adrian, William M., Chicago, Ill. Lamp base. Des. 85,075; Sept. 15.
Aerocrete Corporation of America, The, (See Billner, Karl P., assignor.)
Ahern, Patrick. (See Beecher, L. B., and Ahern.)
Aiello, Anthony F., Brooklyn, N. Y. Wrist compact. 1,823,814; Sept. 15.
Air Preheater Corporation. (See Dow, H. H., and Cannon, assignors.)
Aktiebolaget Ljungströms Angturbin. (See Zander, Henrik, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Frey, Ernst H., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Gaudenzi, Arthur, assignor.)
Alexander, Margo R., Chicago, Ill. Brassière. 1,822,872; Sept. 15.
All Metal Bottle Cooler Corporation. (See Kilgore, William W., assignor.)
Alland, Maurice, Atlantic City, N. J. Coin container and dispenser. 1,823,227; Sept. 15.
Allen, Edward B., Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Work clamp for sewing machines. 1,823,522; Sept. 15.
Allen, S. L., & Co. (See Mader, Joseph, assignor.)
Allen, Robert C., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elastic fluid turbine. 1,823,309; Sept. 15.
Allen, Robert C., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elastic fluid turbine. 1,823,310; Sept. 15.
Allen, Werdon H., South Montrose, Pa. Clothesrack. 1,823,776; Sept. 15.
Allis-Chalmers Manufacturing Company. (See Nagler, Forrest, assignor.)
Allis-Chalmers Manufacturing Company. (See Ring, Joseph J., assignor.)
Allison, Harry S., assignor to W. D. Allison Company, Indianapolis, Ind. Examining table leg rest. 1,823,248; Sept. 15.
Allison, W. D., Company. (See Allison, Harry S., assignor.)
Almen, John O., Royal Oak, assignor to General Motors Research Corporation, Detroit, Mich. Swedged end pushrod. 1,823,419; Sept. 15.
Altorfer, Alpheus W., Peoria, assignor to Altorfer Bros. Company, East Peoria, Ill. Washing machine. Re18,185; Sept. 15.
Altorfer Bros. Company. (See Altorfer, Alpheus W., assignor.)
Aluminum Company of America. (See Archer, R. S., and Fink, assignors.)
Aluminum Company of America. (See Wentz, Welker W., assignor.)
American Aviation Corporation. (See Sundstedt, Hugo, assignor.)
American Blower Corporation. (See Anderson, Edward L., assignor.)
American Blower Corporation. (See Cahoon, O. B., and Hogan, assignors.)
American Cable Company. (See Conner, Edward A., assignor.)
American Can Company. (See Christmann, L. J., and Falconer, assignors.)
American Can Company. (See Hothersall, John M., assignor.)
American Can Company. (See Magill, Donald G., assignor.)
American Can Company. (See Stollberg, Charles, assignor.)
American Enameled Products Company. (See Smith, August J., assignor.)
American Fibre Corporation. (See Baldwin, Earl F., assignor.)
American Identification Company. (See Harris, Charles, assignor.)
American Kambi Company. (See Wersäll, Karl J., assignor.)
American Piano Corporation. (See Hickman, Clarence N., assignor.)
American Pully Company, The. (See Bowen, Russell H., assignor.)
American Smelting and Refining Company. (See Wagstaff, Richard A., assignor.)
American Steel and Wire Company of New Jersey, The. (See Howe, James F., assignor.)
American Stove Company. (See Stockstrom, Arthur, assignor.)
Ammann, Albert H., assignor to Jostam Manufacturing Co., Chicago, Ill. Recoil pad. 1,822,875; Sept. 15.
Amrad Corporation, The. (See Orswell, Israel C., assignor.)
Andersen Frame Corporation. (See Johnson, Arthur B., assignor.)
Anderson, Edward L., Grosse Ile, assignor to American Blower Corporation, Detroit, Mich. Unit heater and ventilator. 1,823,579; Sept. 15.
Anderson, Morris H., Dwight, Ill. Safety cage for banks. 1,823,580; Sept. 15.
Andersson, Hjalmar, Klippan, Sweden. Paper-rolling machine. 1,823,581; Sept. 15.
Andrew, Thomas E., and M. Langstreth, Rochdale, and J. Bancroft, Accrington, assignors to Dunlop Cotton Mills Limited, Rochdale, England. Machine for spinning, doubling, twisting, and the like, yarns, fibers, and the like. 1,823,638; Sept. 15.
Andrews, Frank W., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,823,079; Sept. 15.
Angell, Frank B., Los Angeles, Calif. Well casing spider. 1,823,183; Sept. 15.
Anibal, Benjamin H., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Engine rear support. 1,823,420; Sept. 15.
Anthony, De Forest, Fall River, and B. M. Stoddard, Dedham, Mass., assignors to Dorothy D. Comstock, Dedham, Mass., doing business as The Kiddie-Rhester Co. Playpen. 1,822,876; Sept. 15.
Apfel, Philip F., Seattle, Wash. Audiphone. 1,823,228; Sept. 15.
Apple, Vincent G., and H. B. Ohmer, Dayton, assignors to Ohmer Fare Register Company, Dayton, Ohio. Electrical operating means. 1,823,523; Sept. 15.
Appleton Electric Company. (See Brachtl, Henry, assignor.)
Appleton Electric Company. (See Goetzelman, William, assignor.)
Archambault, Euchariste P. (See Verna, J. A., and Archambault.)
Archer, Robert S. and W. L. Fink, Cleveland, Ohio, assignors to Aluminum Company of America, Pittsburgh, Pa. Treating aluminum base alloys which are subject to growth. 1,822,877; Sept. 15.
Armour and Company. (See Jordan, Isaac N., assignor.)
Armstrong, Charles H., Chicago, Ill., assignor, by mesne assignments, to J. S. Bemis, trustee, St. Louis, Mo. Fabric bag. 1,822,948; Sept. 15.
Armstrong, Ralph J., Monett, Mo. Insect trap. 1,823,777; Sept. 15.
Associated Telephone and Telegraph Company. (See Paulett, W. H., and Gillings, assignors.)
Astle, William. (See Wightman, R. J., and Astle.)
Ateliers de Constructions-Electriques de Charleroi. (See Cornu, Maurice, assignor.)
Austin, Arthur O., near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Supporting baffles in oil-filled bushings. Re18,189; Sept. 15.

Austin, Arthur O., Barberton, assignor, by mesne assignments to The Ohio Brass Company, Mansfield, Ohio. Pothead for insulated cable terminals. 1,823,674; Sept. 15.

Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Coating and heat treating apparatus. 1,823,675; Sept. 15.

Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Insulator with nested parts. 1,823,676; Sept. 15.

Auto Research Corporation. (See Caldwell, Stuart H., assignor.)

Autocall Company, The. (See Smith, Boyd H., assignor.)

Autokraft Box Corporation. (See Adamson, Allan A., assignor.)

Automatic Fire Extinguisher and Alarm Corporation. (See Pohl, Ernest F., assignor.)

Automatic Lighter Corporation. (See Kappenberg, August, assignor.)

Axe, Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Glazing strip for window sashes. 1,823,020; Sept. 15.

B. O. T. Manufacturing Company. (See Tilden, Bert O., assignor.)

Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)

Babcock & Wilcox Company, The. (See Pratt, Arthur D., assignor.)

Backus, A. jr. & Sons. (See Moure, Ramiro, assignor.)

Bacon, Alfred T., Stevens Point, Wis. Locomotive valve gear. 1,823,639; Sept. 15.

Bailey, Edgar L. (See Potter, F. J., and Bailey.)

Bailey, Lamar, Portsmouth, Ohio. Display card holder. 1,823,778; Sept. 15.

Baker Perkins Company. (See Eggert, Gustav B., assignor.)

Baker, Reuben C., Coalinga, Calif. Cementing and floating device for well casings. 1,823,312; Sept 15.

Baker, Walter R. G., Schenectady, N. Y., assignor to General Electric Company. Remote control system. 1,823,718; Sept. 15.

Baker, William H., assignor to Packard Motor Car Company, Detroit, Mich. Gauging machine. 1,823,719; Sept. 15.

Balbaud, Paul, Paris, France. Separable fastener. 1,823,229; Sept. 15.

Baldwin, Earl F., assignor to American Fibre Corporation, Gardner, Mass. Loom stop mechanism. 1,823,720; Sept. 15.

Balle, Gerhard, H. Lange, and K. Ost, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Formic acid ester of diethyl ether of cellulose and preparing the same. 1,823,847; Sept. 15.

Bamberger, Otto, assignor to Deutsche Maschinen-fabrik Aktiengesellschaft, Duisburg, Germany. Manufacture of seamless tubes. 1,823,080; Sept. 15.

Bancroft, James. (See Andrew, T. E., Langstreth, and Bancroft.)

Bankette Co., The. (See Dugdale, Richard M., assignor.)

Banner Rock Corporation. (See Cooper, Floyd F., assignor.)

Barish, Thomas, assignor to Marlin-Rockwell Corporation, Jamestown, N. Y. Bearing inclosure. 1,823,640; Sept. 15.

Barker Poultry Equipment Company. (See Bruce, Albert W., assignor.)

Barker, Raymond L., Chicago, Ill. Body treating device. Des. 85,076; Sept. 15.

Barker, Robert, Indio, Calif. Supporting structure for fruit pickers. 1,823,385; Sept. 15.

Barnes, Eugene L., Buffalo, N. Y. Automatic valve. 1,822,917; Sept. 15.

Barnes, Eugene L., Buffalo, N. Y. Refrigerating apparatus. 1,822,918; Sept. 15.

Barnes, Wallace Company, The. (See Cook, Raymond W., assignor.)

Barone, Salvatore A., Woodside, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, San Francisco, Calif. Generating three phase high frequency current. 1,823,851; Sept. 15.

Bartels, Edward E., assignor to Standard Oil Company, Whiting, Ind. Producing a slurry of lime in oil. 1,823,582; Sept. 15.

Bartenfeld, Wilford G., Lorain, Ohio. Channel construction for the tops of the tanks of vessels. 1,823,081; Sept. 15.

Barthelemy, René, Fontenay-aux-Roses, Seine, assignor to Compagnie pour la Fabrication les Compteurs et Material d'Usines a Gaz, Montrouge, Seine, France. Electrical synchronous braking device. 1,823,779; Sept. 15.

Bartlett, Edward E., Sapulpa, Okla. Pitcher or similar article. Des. 85,077; Sept. 15.

Bauder, Ray E., Chicago, Ill. Visible file. 1,822,878; Sept. 15.

Bauer, A. G. (See Schori, Fritz, assignor.)

Bauer, George A., Baltimore, Md. Stencil for decorating china ware and pottery. 1,822,986; Sept. 15.

Bauer, Wilhelm. (See Rösch, G., and Bauer.)

Baughn, Samuel C., Springfield, assignor to Eli Trimble, Seymour, Mo. Weightless window. 1,822,949; Sept .15.

Baur, Walter, Cologne-Braunsfeld, Germany. Coating of bodies with metal. 1,823,869; Sept. 15.

Bausman, Alonzo L., Springfield, Mass. Collar and cuff ironing machine. 1,823,482; Sept. 15.

Bausman, Alonzo L., Springfield, Mass. Transfer device. 1,823,483; Sept. 15.

Bay, Charles A., Morristown, N. J. Electrical connecters. 1,823,677; Sept. 15.

Bay State Tool & Machine Co. (See Gaudreau, Charles D., assignor.)

Bayer, Otto. (See Kalischer, G., and Bayer.)

Bayley, John, Lower Withington, Chelford, England. Headlight of automobiles. 1,823,249; Sept. 15.

Baylis, Walter S., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif. Restoring moisture and adding acid to reactivated clay. 1,823,230; Sept. 15.

Beck, Ernest T., assignor to International Silver Company, Meriden, Conn. Plaque or similar article. Des. 85,078; Sept. 15.

Beck, Owen L. (See Williams, D. H., and Beck.)

Becker, George, Manor, assignor to Westmoreland Glass Company, Grapeville, Pa. Goblet or similar article. Des. 85,079; Sept. 15.

Becker, George, Manor, assignor to Westmoreland Glass Company, Grapeville, Pa. Bowl or similar article. Des. 85,080; Sept. 15.

Becker, Nicholas A., Pittsburg, Calif. Toy Christmas tree. 1,823,021; Sept. 15.

Beckwith, Harry H., Brookline, Mass. Shoe stiffener. 1,823,231; Sept. 15.

Beckwith, Harry H., Brookline, Mass. Treating the counter portions of shoes. 1,823,232; Sept. 15.

Beecher, Lewis B., Kensington, and P. Ahern, assignors to The Stanley Works, New Britain, Conn. Spirit level. 1,823,524; Sept. 15.

Beeler, Richard L., Paducah, Ky. Occlusal gauge. 1,823,184; Sept. 15.

Belden, Daniel S., assignor to Filtrol Company of California, Los Angeles, Calif. Purifying used crank case oil. 1,823,185; Sept. 15.

Bell, Frank H., Ferndale, Mich., assignor to Triplex Safety Glass Company of North America, New York, N. Y. Apparatus for sealing laminated glass. 1,823,525; Sept. 15.

Bell, Ivan C., assignor to The Guiberson Corporation, Dallas, Tex. Tubing stripper. 1,823,233; Sept. 15.

Bell, Ivan C., assignor to The Guiberson Corporation, Dallas, Tex. Adapter for casing heads. 1,823,234; Sept. 15.

Bell Telephone Laboratories, Incorporated. (See Bowman, Herman N., assignor.)

Bell Telephone Laboratories, Incorporated. (See Busch, Aloysius J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Campbell, Thaddeus C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Clokey, A. A., and Burton, assignors.)

Bell Telephone Laboratories, Incorporated. (See Dahl, J. F., and Davis, assignors.)

Bell Telephone Laboratories, Incorporated. (See Dowd, A. D., Kerr, and Locke, assignors.)

Bell Telephone Laboratories, Incorporated. (See Hague, Alfred E., assignor.)

Bell Telephone Laboratories, Incorporated. (See Hopkins, Irving L., assignor.)

Bell Telephone Laboratories, Incorporated. (See Horton, Joseph W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Hovland, Henry, assignor.)

Bell Telephone Laboratories, Incorporated. (See Lum, George R., assignor.)

Bell Telephone Laboratories, Incorporated. (See Miller, Robert A., assignor.)

Bell Telephone Laboratories, Incorporated. (See O'Neill, Henry W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Pascarella, Anthony J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Powell, Albert C., assignor.)

Belmonte, Daniel. (See Ducroux, Louis G., assignor.)

Bemis, J. S., trustee. (See Armstrong, Charles H., assignor.)

Bendix Brake Company. (See Dodge, Adiel Y., assignor.)

Bendix Brake Company. (See Dodge, A. Y., and Pollard, assignors.)

Benedict, Edward L., and R. L. Glose, Pittsburgh, Pa., assignors to The Philip Carey Manufacturing Company. Paving joint and making the same. Re18,188; Sept. 15.

Benner, Raymond C., Bayside, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Incorporated. Battery charging system. 1,823,780; Sept. 15.

Bennett, Wallace C., Hingham, Mass. Linings for shoes and the like. 1,823,721; Sept. 15.

Berger Bros. Company. (See Shaw, Herbert, assignor.)

Beringer, Roscoe, assignor to General Motors Corporation, Detroit, Mich. Four speed transmission. 1,823,421; Sept. 15.

Berkshire Knitting Mills. (See Fox, Paul L., assignor.)

Bernheimer, A. L. (See de Malaussene, Henri S., assignor.)

Berry, Robert J. (See Skillman, T. S., Freeth, and Berry.)

Bertsch, Heinrich, assignor to H. Th. Böhme Aktiengesellschaft, Chemnitz, Germany. Production of esters of sulphonic acids. 1,823,815; Sept. 15.

Bicks, Jean W., assignor to C. A. Zoes Manufacturing Co., Chicago, Ill. Bottle or similar article. Des. 85,081; Sept. 15.

Bigelow-Sanford Carpet Co., Inc. (See Stone, Edwin W., assignor.)

Biggert, Florence C., jr., Crafton, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Speed indicator. 1,822,950; Sept. 15.

Bilby, Ernest E., assignor to Hemingray Glass Company, Muncie, Ind. Bottle or similar article. Des. 85,082; Sept. 15.

Billner, Karl P., assignor to The Aerocrete Corporation of America, New York, N. Y. Producing porous concrete. 1,823,343; Sept. 15.

Birkigt, Marc, Bois Colombes, France. Temperature compensated valve. 1,823,781; Sept. 15.

Birtciel, Joseph S., assignor to J. Clark, Fort Worth, Tex. Fire alarm. 1,823,722; Sept. 15.

Bishop, William W. (See Davis, Frank K., assignor.)

Biskamp, Ernest J., San Antonio, Tex. Dishwasher. 1,823,583; Sept. 15.

Black Rock Manufacturing Company, The. (See Messinger, Lester H., jr., assignor.)

Blazich, John, Oakland, Calif. Garment shoulder strap retainer. 1,823,250; Sept. 15.

Blechta, Frantisek, Prague, Czechoslovakia. Bullet for practice cartridges. 1,823,022; Sept. 15.

Bleicher, Charles S. (See Watzka, Otto, assignor.)

Blue Ridge Glass Corporation. (See Shetterly, Fred F., assignor.)

Blue, Sidney, Albany, assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Undergarment. 1,823,527; Sept. 15.

Blum, Karl E., Flat River, assignor of one-half to J. W. Houser, Desloge, Mo. Shaft coupling. 1,825,251; Sept. 15.

Blumenthal, Louis, Brooklyn, N. Y. Collapsible table and seat. 1,823,484; Sept. 15.

Bock, Carl J., assignor to Yellow Truck and Coach Manufacturing Company, Pontiac, Mich. Rear axle wheel bearing lubrication. 1,823,422; Sept. 15.

Boda, Joseph E., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Plow. 1,823,641; Sept. 15.

Bodine, Alfred V., Fairfield, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn. Dictation machine. 1,823,723; Sept. 15.

Boecking, Ewald. (See Frappier, L. S., and Boecking.)

Boedtcher, Franz A., Bergenfield, assignor to Otis Elevator Company, Jersey City, N. J. Magnetically operated switch. 1,823,252; Sept. 15.

Böhme Aktiengesellschaft, H. Th. (See Bertsch, Heinrich, assignor.)

Bollinger, Paul, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Rockerring structure for railway motors. 1,823,313; Sept. 15.

Book, Herbert V. (See de Lugacsevics, Charles, assignor.)

Booth, Earl C., assignor to Noblitt-Sparks Industries, Inc., Indianapolis, Ind. Automobile-body heater. Des. 85,083; Sept. 15.

Booth, Earl C., assignor to Noblitt-Sparks Industries, Inc., Indianapolis, Ind. Automobile-body heater. Des. 85,084; Sept. 15.

Booth, Earl C., assignor to Noblitt-Sparks Industries, Inc., Indianapolis, Ind. Automobile-body heater. Des. 85,085; Sept. 15.

Borden, Arthur G., assignor to The Borden Method, Inc., Washington, D. C. Hair waving apparatus. 1,823,023; Sept. 15.

Borden Method, The. (See Borden, Arthur G., assignor.)

Boucher, Frank, Detroit, Mich. Garage door opener. 1,822,951. Sept. 15.

Bowen, Russell H., assignor to The American Pulley Company, Philadelphia, Pa. Die. 1,823,557; Sept. 15.

Bowman, Herman N., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Cabinet for portable testing apparatus. 1,823,678; Sept. 15.

Bowyer, Horace A., Orwell, assignor of one-half to C. M. Mix, Cleveland, Ohio. Antiskid device for automobiles. 1,823,082; Sept. 15.

Boyce, Charles M., Cedar Rapids, Iowa, assignor, by mesne assignments, to J. R. Ditmars, New York, N. Y. Method of and apparatus for making and finishing prints. Re18,191; Sept. 15.

Boyce, Charles M., Cedar Rapids, Iowa, assignor, by mesne assignments, to J. R. Ditmars, New York, N. Y. Finishing prints. Re18,192; Sept. 15.

Boyce, Harrison H., Jericho, L. I., N. Y. Motor heat indicator. 1,823,344; Sept. 15.

Brachtl, Henry, assignor, by mesne assignments, to Appleton Electric Company, Chicago, Ill. Adjustable service entrance fitting. 1,822,879; Sept. 15.

Braestrup, Carl B., Scarsdale, N. Y. Safety device for electrical apparatus. 1,822,919; Sept. 15.

Brandus, Ernst, Berlin, Germany, assignor to Crawfordsville Seed Company, Crawfordsville, Ind. Magnetic separating composition. 1,823,852; Sept. 15.

Brassert, H. A., & Company. (See Grilli, John P., assignor.)

Braun, Adolf, New York, N. Y. Speed controlling device for vehicles. 1,822,880; Sept. 15.

Braun, Carl, Inc. (See Williams, Lester J., assignor.)

Braunsdorf, Otto. (See Holzapfel, E., Braunsdorf, and Lange.)

Breeden, Edwart T., Fort Dodge, Iowa, assignor of one-half to O. I. Hobson. Creeper construction. 1,823,526; Sept. 15.

Brenner, Carlos, Buenos Aires, Argentina. Picture frame. 1,823,485; Sept. 15.

Brenek, Hans. (See Rothe, F., and Brenek.)

Brewer, Everett C., jr., Oak Park, Ill. Race game. 1,822,873; Sept. 15.

Brewer, Everett C., Los Angeles, Calif. Kitchen appliance machine. 1,823,314; Sept. 15.

Brewer Titchener Corporation. (See Card, Charles S., assignor.)

Britt, James E., Washington, D. C., assignor to Westinghouse Electric & Manufacturing Company. Thermostatic switch. 1,823,345; Sept. 15.

Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Purification of arylamines. 1,823,024; Sept. 15.

Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Purification of arylamines. 1,823,025; Sept. 15.

Britton, Edgar C., W. H. Williams, and M. E. Putnam, assignors to The Dow Chemical Company, Midland, Mich. Purification of arylamines. 1,823,026; Sept. 15.

Brockett, Bluford W., et al. (See Case, Francis M., assignor.)

Broder, Reuben, New York, N. Y. Automobile hand grip. 1,822,881; Sept. 15.

Brooks, John C., Paterson, N. J., assignor to Draper Corporation, Hopedale, Mass. Feeler mechanism. 1,823,423; Sept. 15.

Brookshire, Drake, Galena, Kans. Safety tubing lock. 1,823,186; Sept. 15.

Brown, Charles H., Breckenridge, Tex. Dressing form for underreamer lugs. 1,823,782; Sept. 15.

Brown, Charles S., Syracuse, N. Y. Internal combustion engine. 1,823,027; Sept. 15.

Brown, Claud R., and J. F. Thomas, New London, Wis. Armature commutator resurfacing or cutting machine. 1,823,642; Sept. 15

Brown, Elden E., Hennessey, Okla. Gaseous fuel mixing device. 1,822,952; Sept. 15.

Brown, J. F., by degree of distribution. (See Brown, Lloyd L.)

Brown, Lloyd L., deceased, by decree of distribution to J. F. Brown, Spokane, Wash. Circuit breaker. 1,823,083; Sept. 15.

Bruce, Albert W., assignor to Barker Poultry Equipment Company, Ottumwa, Iowa. Brooder ventilation structure. 1,823,584; Sept. 15.

Bruening, Lee P., Butte, Mont. Thimble. 1,822,953; Sept. 15.

Brune, Rudolf. (See Wagner, H., Hessenland, and Brune.)

Brush Beryllium Company, The. (See Sawyer, C. B., and Kjellgren, assignors.)

Brust, Charles A., Morristown, N. J. Tent frame. 1,823,386; Sept. 15.

Bryant, Joseph E., Los Angeles, Calif. Toilet device. 1,823,253; Sept. 15.

Brydon, Herbert B., Oak Park, assignor to Earnest E. Lee Co., Chicago, Ill. Furnace grate bar. 1,823,235; Sept. 15.

Buchanan, Michael K., and A. G. Horton, Norfolk, Va. Refrigerating tray. 1,823,187; Sept. 15.

Buckle, Horace L. T., Iver Heath, England, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Record magazine for talking machines. 1,823,084; Sept. 15.

Buelna, Guadalupe, and H. E. J. Vacher, Santa Barbara, Calif. Sprinkler. 1,823,315; Sept. 15.

Buelow, Wolfgang, Ludwigshafen-on-the-Rhine, assignor, to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of glycollic acid esters. 1,823,528; Sept. 15.

Burdick, Herbert, East Orange, N. J., assignor to Signal Engineering & Manufacturing Company, New York, N. Y. Code setting device for signal systems. 1,823,585; Sept. 15.

Burdick, Herbert, East Oarnge, N. J., assignor to Signal Engineering & Manufacturing Company, New York, N. Y. Signal code sending device. 1,823,586; Sept. 15.

Burdick, Vincent H., Gardena, Calif. Carburetor attachment. 1,823,346; Sept. 15.

Burgess Battery Company. (See Schulte, Walter B., assignor.)

Burgess, Robert F., Washington, D. C. Luggage carrier for automobiles. 1,823,783; Sept. 15.

Burke, Stephen P., assignor to Combustion Utilities Corporation, New York, N. Y. Purification of tar acid bearing oils. 1,823,558; Sept. 15.

Burman, Frank V., Minneapolis, Minn. Harrow—rotary knife type. 1,822,920; Sept. 15.

Burmeister, Hans, Berlin, Germany assignor to Pyrene-Minimax Corporation. Foam generating apparatus. 1,823,559; Sept. 15.

Burmeister, Hans, Berlin, Germany, assignor to Pyrene-Minimax Corporation. Apparatus for producing foam. 1,823,560; Sept. 15.

Burns, Fred J., assignor to The Columbia Mills, Inc., Saginaw, Mich. Spindle-ferrule bearing. 1,822,874; Sept. 15.

Burns, Fred J., assignor to The Columbia Mills, Inc., Saginow, Mich. Venetian blind. 1,823,236; Sept. 15.

Burton, Everett T. (See Clokey, A. A., and Burton.)

Busch, Aloysius J., Queens Village, assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Call charging telephone exchange system. 1,823,679; Sept. 15.

Bushnell, Lyman S., assignor to The Freeport Sulphur Company, Freeport, Tex. Treating discolored sulphur 1,823,188; Sept. 15.

Cabot Co. (See Duerr, Winslow A., assignor.)

Cagliostro, Antony J., New York, N. Y. Cutting-off device. 1,823,853; Sept. 15.

Cahoon, Ora B., Chicago, Ill., and E. L. Hogan, assignors to American Blower Corporation, Detroit, Mich. Wet process dust collection. 1,823,587; Sept. 15.

Caesar, Orville S., Cleveland, Ohio, assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Vehicle storm sash. 1,823,237; Sept. 15.

Caldwell, Stuart H., Detroit, Mich, assignor to Auto Research Corporation. Joint and making the same. 1,823,028; Sept. 15.

Cairew, Incorporated. (See Prosser, Robert H., assignor.)

Cambridge Rubber Company. (See Crocket, James B., assignor.)

Campbell, Albert W., Bay City, Mich. Body construction. 1,823,643; Sept. 15.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Load discharging car. 1,823,029; Sept. 15.

Campbell, John B., Salem, N. J, assignor by mesne assignments, to Carthage Mills Incorporated, Cincinnati, Ohio. Making flooring and product thereof. 1,823,238; Sept. 15.

Campbell, Samuel J., assignor to Hudson-Sharp Machine Company, Green Bay, Wis. Folding and scalloping machine. 1,822,954; Sept. 15.

Campbell, Thaddeus C., Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Show case. 1,823,085; Sept. 15.

Campbell, Thomas D., Hardin, Mont. Harvesting and thrashing grain. 1,823,387; Sept. 15.

Canfield, Melville W., Los Angeles, Calif. Process and apparatus for inking embossed work. Re18,197; Sept. 15.

Cannon, Guy H. (See Dow, H. H., and Cannon.)

Capital Lighting Fixture Company. (See Schreibman Harry, assignor.)

Card, Charles S., assignor to The Brewer-Titchenor Corporation, Cortland, N. Y. Making conductor clamps. 1,823,561; Sept. 15.

Card, John L., Baltimore, Md., assignor to United States Hoffman Machinery Corporation, New York, N. Y. Clutch. 1,822,955; Sept. 15.

Carey, Philip, Manufacturing Company, The. (See Benedict E. L., and Glose, assignors.)

Carey, Philip, Manufacturing Company, The. (See Crampton, Theodore H. M., assignor.)

Carlson, Wendell L., Camden, N. J., assignor to General Electric Company. Musical instrument. 1,823,724; Sept. 15.

Carney, Samuel C., Tulsa, Okla., assignor to Shell Petroleum Corporation. Refrigerating apparatus. 1,823,725; Sept. 15.

Carpenter, William C., San Francisco, Calif. Drier. 1,823,189; Sept. 15.

Carr, U. U. et al. (See Jones, William R., assignor.)

Carson, Jesse F., assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Bag support for vacuum cleaners. 1,823,726; Sept. 15.

Carthage Mills Incorporated. (See Campbell, John B., assignor.)

Case, Francis M., Cleveland Heights, Ohio, assignor of one-fourth to B. W. Brockett and three-fourths to B. W. Brockett and E. L. Hyde. Golf ball cleaning device. 1,823,347; Sept. 15.

Case, J. I., Company. (See Boda, Joseph E., assignor.)

Case, J. I., Company. (See Hendrickson, Robert C., assignor.)

Cassan, Jean H. F., Paris, assignor to Compagnie Generale de Construction de Fours, Montrouge, Seine, France. Method and apparatus for treating gases. 1,823,784; Sept. 15.

Casse, Edward J., Detroit, Mich. Lawn edging tool. 1,823,254; Sept. 15.

Cathey, Frank H., Dallas, Tex., assignor to Rock Island Plow Company, Rock Island, Ill. Disk attachment for walking cultivators. 1,823,529; Sept. 15.

Central Stamping Company, The. (See Lucius, Albin A., assignor.)

Cervi, Armando, assignor to The Radium Emanation Corporation, New York, N. Y. Emanation seed. 1,823,239; Sept. 15.

Chabrol, Alphonse, Aixe-sur-Vienne, France. Dirigible headlight. 1,822,882; Sept. 15.

Chadderton, Sydney S., assignor to Standard Oil Company of California, San Francisco, Calif. Sign. Des. 85,086; Sept. 15.

Chandler, Homer P., assignor to The Ohio Brass Company, Mansfield, Ohio. Feeder tap. 1,822,883; Sept. 15.

Chapman, Shelby C., Jackson Heights, assignor to Electrical Research Products Inc., New York, N. Y. Sound picture system. 1,823,349; Sept. 15.

Charette, George W., Lemon Grove, Calif. Aeroplane landing. 1,823,086; Sept. 15.

Charles, Maurice, Courbevoie, France. Hydraulic braking system for airplanes. 1,823,255; Sept. 15.

Chase Bag Company, The. (See Cramer, J. D., and Rogers, assignors.)

Chase, Lionel, assignor to The Colson Company, Elyria, Ohio. Mop wringer. 1,823,486; Sept. 15.

Chason, Daniel H., assignor to Diehl Manufacturing Company, Elizabeth, N. J. Electric phonograph stop. 1,823,530; Sept. 15.

Cherry-Burrell Corporation. (See Wightman, R. J., and Astle, assignors.)

Chiapparelli, Albert. (See Penza, Frederick, assignor.)

Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)

Chicago Pump Company. (See McCarthy, Edward F., assignor.)

Chicago Telephone Supply Company. (See Schellenger, Newton C., assignor.)

Chittenden, George I., Lakewood, Ohio. Wheelbarrow. 1,823,816; Sept. 15.

Christ, Xavier, et al. (See Louvier, Marius L., assignor.)

Christensen, Alfred H. L., assignor to Otto H. Drüger, Lubeck, Germany. Device for feeding additional oxygen to freely portable breathing implements. 1,823,785; Sept. 15.

Christensen, Niels A., Cleveland, Ohio. Locking means for fluid pressure brakes. 1,823,588; Sept. 15.

Christensen, Niels A., Cleveland, Ohio. Vehicle brake. 1,823,589; Sept. 15.

Christensen, Niels A., Cleveland, Ohio. Clutch-operating mechanism. 1,823,590; Sept. 15.

Christensen, Norman F., assignor to Union Special Machine Company, Chicago, Ill. Tension release for sewing machines. 1,823,817; Sept. 15.

Christie, Neil, Larder Lake, Ontario, Canada. Power plant. 1,823,190; Sept. 15.

Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Machine tool. 1,823,727; Sept. 15.

Christmann, Ludwig J., Jersey City, and S. A. Falconer, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y. Flotation recovery of minerals. 1,823,316; Sept. 15.

Clark, Edwin M., Clarkston, Mich. Oil tank and storing oil. 1,823,256; Sept. 15.

Clark Equipment Company. (See Mogford, E. C., and Spatta, assignors.)

Clark, Jack. (See Birtciel, Joseph S., assignor.)

Clark, Lee H., Haverford, assignor to The Sharples Specialty Company, Philadelphia, Pa. Purification of oil. 1,823,087; Sept. 15.

Clark, Warren F., Philadelphia, Pa. Combined urn and memorial tablet. Des. 85,087; Sept. 15.

Clarke, Hans T., assignor to Eastman Kodak Company, Rochester, N. Y. Recovery of cellulose acetate from acetic acid solutions thereof. 1,823,348; Sept. 15.

Clarke, Hans T., and C. J. Malm, assignors to Eastman Kodak Company, Rochester, N. Y. Esterifying cellulosic materials with vapors of lower fatty acids. 1,823,350; Sept. 15.

Clarke, Harry A., Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Marking machine. 1,823,030; Sept. 15.

Clear, Edmund H., New York, N. Y. Golf game. 1,823,487; Sept. 15.

Clements, Warren F., Allentown, assignor to Fuller Lehigh Company, Fullerton, Pa. Grinding ball. 1,823,351; Sept. 15.

Cleveland, Don L., et al. (See Johnson, Bert E., assignor.)

Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Rubber compound and preserving it. 1,823,531; Sept. 15.

Clifford Manufacturing Co. (See Clifford, Walter B., assignor.)

Clifford, Walter B., Framingham, assignor, by mesne assignments, to Clifford Manufacturing Co., Boston, Mass. Forming bellows folds. 1,823,532; Sept. 15.

Clokey, Allison A., Rutherford, and E. T. Burton, Millburn, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Submarine cable repeating system. 1,823,088; Sept. 15.

Cluett, Peabody & Co. (See Blue, Sidney, assignor.)

Coalescence Products Company. (See Stout, Harry H., assignor.)

Cobb, Windsor N., San Francisco, Calif. Rotating spherical beacon. 1,823,240; Sept. 15.

Colson Company, The. (See Chase, Lionel, assignor.)

Columbia Mills, Inc., The. (See Burns, Fred J., assignor.)

Combustion Utilities Corporation. (See Burke, Stephen P., assignor.)

Commercial Solvents Corporation. (See Langwell, Herbert, assignor.)

Commercial Solvents Corporation. (See Simms, Carson W., assignor.)

Commercial Solvents Corporation. (See Swallen, Lloyd C., assignor.)

Compagnie Generale de Construction de Fours. (See Cassan, Jean H. F., assignor.)

Compagnie pour la Fabrication des Compteurs et Material d'Usines a Gaz. (See Barthelmey, René, assignor.)

Comstock, Dorothy D. (See Anthony, De F., and Stoddard, assignors.)

Conner, Edward A., Stratford, Conn., assignor to American Cable Company, Inc. Machine for making wire strands, ropes, and cables. 1,823,424; Sept. 15.

Connolly, George E., Oakland, Calif., assignor to Nichols Copper Company, New York, N. Y. Drying and roasting furnace. 1,823,787; Sept. 15.

Consolidated Automatic Merchandising Corporation. (See Du Grenier, Arthur H., assignor.)

Constantin, Cesar J., New York, N. Y. Carburetor. 1,823,818; Sept. 15.

Consumers Tobacco Company. (See Mewborne, Robert G., assignor.)

Continental Diamond Fibre Company. (See Frederick, Louis T., assignor.)

Continental Gin Company. (See Elliott, Thomas, assignor.)

Continental Gin Company. (See Smith, Algernon L., assignor.)

Cook, Raymond W., assignor to The Wallace Barnes Company, Bristol, Conn. Clip. 1,823,317; Sept. 15.

Coons, Burton C., Rochester, N. Y., assignor to Coons Machinery Corporation, Gates, N. Y. Fruit paring machine. 1,823,854; Sept. 15.

Coons Machinery Corporation. (See Coons, Burton C., assignor.)

Cooper, Basil P., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Nail sorting machine. 1,822,921; Sept. 15.

Cooper, Dhanjishah B., Satara, India. Crushing machine. 1,823,437; Sept. 15.

Cooper, Floyd F., Westfield, N. J., assignor by mesne assignments, to Banner Rock Corporation, Alexandria, Ind. Fastening for insulating jackets. 1,822,987; Sept. 15.

Cooper, Leo M., Yonkers, N. Y. Lady's garment. 1,823,257; Sept. 15.

Copper Plate Sheet and Tube Company. (See Watkins, William E., assignor.)

Cornu, Maurice, Marcinelle-lez-Charlerol, assignor to Ateliers de Constructions Electriques de Charlerol, Brussels, Belgium. Alternating current electrical machine. 1,823,089; Sept. 15.

Cossock, Ralph, Providence, R. I. Nailing machine. 1,823,644; Sept 15.

Courtaulds Limited. (See Stokes, William H., assignor.)

Cox, Howard V., Larussel, Mo. Signal switch. 1,822,956; Sept. 15.

Crabbe, Lindsay, T., assignor to Phoenix-Hermetic Company, Chicago, Ill. Jar closure. 1,823,786; Sept. 15.

Craig, Elias W., Wellsville, Kans. Hoe. 1,823,438; Sept. 15.

Craigo, John M., Hartford, Conn. Dental machine. 1,823,090; Sept. 15.

Cramer, Joseph D., and A. J. Rogers, Goshen, Ind., assignors to The Chase Bag Company, New York, N. Y. Spinning and treating paper. 1,823,258; Sept. 15.

Crampton, Theodore H. M., Chicago, Ill., assignor by mesne assignments to The Philip Carey Manufacturing Company. Cable trunking. 1,823,819; Sept. 15.

Crawford, Harry W. (See Ennis, C. E., and Crawford.)

Crawfordsville Seed Company. (See Brandus, Ernst, assignor.)

Creighton, George J., Portland, Oreg. Heater for automotive shields. 1,822,884; Sept. 15.

Crespi, Emilio, Crespi-sur-l'Adda, Italy, and M. P. Otto, Paris, France. Apparatus for bleaching textile fibers with a gaseous current, such as ozonized air. 1,823,252; Sept. 15.

Crockett, James B., assignor to Cambridge Rubber Company, Cambridge, Mass. Floor covering and making same. 1,823,131; Sept. 15.

Cronwall, Carl G., assignor to General Motors Corporation, Detroit, Mich. Kick ventilator for vehicles. 1,823,191; Sept. 15.

Crosby, Fred B., assignor to Morgan Construction Company, Worcester, Mass. Gas producer. 1,822,885; Sept. 15.

Cross, Ellwood V., Washington, D. C. Bell ring. 1,823,820; Sept. 15.

Crouch, Edgar M., et al. (See Ferguson, William T., assignor.)

Crouse & Hinds Company. (See Pearson, John T., assignor.)

Crumpton, Kenneth R., assignor to Kaufmann Department Stores Inc., Pittsburgh, Pa. Horizontal illuminating means. 1,823,728; Sept. 15.

Cuffe, Frederick W., Waynesboro, Va., assignor by mesne assignments, to Edison General Electric Appliance Company, Inc., Chicago, Ill. Stove. Des. 85,088; Sept. 15.

Culver, Charles A., Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y. Amplifying system. 1,822,922; Sept. 15.

Cunningham, John J., assignor of fifty-one per cent to M. G. Kopf, Dayton, Ohio. Apparatus for cleaning polishing wheels. 1,823,645; Sept. 15.

Cunningham, Michael J., Roxbury, Mass. Rotary internal combustion engine. 1,823,132; Sept. 15.

Currier, Osceola L. (See Kern, J. S., and Currier.)

Curtiss, Nathan A., Ridgewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Forming apparatus. 1,823,680; Sept. 15.

Cutler-Hammer, Inc. (See Posselt, Edward J., assignor.)

Dahl, Jack F., West Orange, N. J., and R. C. Davis, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Indicating and recording system. 1,823,091; Sept. 15.

Dalen, John H., Berkeley, Calif. Cutting blade. 1,823,031; Sept. 15.

Dalke, Otto, Hydro, Okla., assignor of two-thirds to J. W. Glass and C. E. Frost. Cotton harvester. 1,823,133; Sept. 15.

Daum, Herbert A., Indianapolis, Ind. Lawn mower. 1,823,821; Sept. 15.

Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Apparatus for refrigeration. 1,823,353; Sept. 15.

Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Actuating mechanism for pressing machines. 1,823,259; Sept. 15.

Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Electric motion transmitting mechanism and controls for pressing machines. 1,823,488; Sept. 15.

Davis, Frank K., assignor of one-half to W. W. Bishop, Muncie, Ind. Invalid lifter and carrier device. 1,823,425; Sept. 15.

Davis, John W., Washington, D. C. and W. L. De Baufre, Lincoln, Nebr. Liquefaction apparatus. 1,823,388; Sept. 15.

Davis, Kenneth, Ebensburg, Pa., assignor by mesne assignments, to Peale-Davis Company, Wilmington, Del. Process and mechanism for separating intermixed divided materials. 1,823,848; Sept. 15.

Davis, Paul A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Treating rubber compounds. 1,823,855; Sept. 15.

Davis, Richard C. (See Dahl, J. F., and Davis.)

Dayton Pump & Mfg. Company, The. (See Eickmeyer, Earl E., assignor.)

Deans, Frank R. (See Keen, J. S., and Deans.)

De Baufre, William L. (See Davis, J. W., and De Baufre.)

De Bussey, Myron, Pasadena, Calif. Smoking pipe rack. 1,823,729; Sept. 15.

Deere & Company. (See Frederiksen, Carl J., assignor.)

Deere & Company. (See Paul, William L., assignor.)

Deere & Company. (See White, Charles H., assignor.)

De Groote, Melvin, St. Louis, assignor, by mesne assignments, to Tretolite Company, Webster Groves, Mo. Flooding process for recovering oil from subterranean oil bearing strata. 1,823,439; Sept. 15.

De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors, by mesne assignments, to Tretolite Company, Webster Groves, Mo. Flooding process for recovering fixed oil from subterranean oil bearing strata. 1,823,440; Sept. 15.

De Lacy-Mulhall, Patrick, Los Angeles, Calif. Quantity control apparatus. 1,822,901; Sept. 15.

De Lavaud, Dimitri S., Paris, France. Differential gear provided with propping rollers. 1,823,389; Sept. 15.

De Lavaud, Dimitri S., Paris, France, assignor to De Lavaud Holdings Corporation, Limited, London, England. Power transmitting device and its application to differential gear. 1,823,092; Sept. 15.

De Lavaud Holdings Corporation. (See de Lavaud, Dimitri S., assignor.)

De Lukacsevics, Charles, assignor to H. V. Book, Detroit, Mich. Lava-earthenware or mineral friction element or lining for railway and other brakes in general. 1,823,591; Sept. 15.

De Malaussene, Henri S., Los Angeles, assignor, by mesne assignments, to A. L. Bernheimer, Santa Monica, Calif. Power supply for radio receiving sets. 1,823,592; Sept. 15.

De Niet, Dirk, Ijmuiden, Netherlands. Device for preventing the sinking and sticking of the ground rope of tow nets. 1,823,593; Sept. 15.

De Ridder, Ernst Bitterfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Method of and apparatus for producing profile strips from sheet magnesium alloys. 1,823,489; Sept. 15.

Desenlss, Max, assignor to A. Feurich, Hamburg, Germany. Stencil for copying purposes. 1,823,260; Sept. 15.

Detroit-Michigan Stove Company. (See Gehrig, Edward F., assignor.)

Detroit-Michigan Stove Company. (See Guenther, William H., assignor.)

Detroit-Michigan Stove Company. (See Maul, Henry C., assignor.)

Deutsch Maschinenfabrik Aktiengesellschaft. (See Bamberger, Otto, assignor.)

De Vileg, Gerard A., Rockford Ill. Tool holder. 1,823,032; Sept. 15.

Dewoitine, Emile J. E., Chatillon-Sous-Bagneux, France. Radiator composed of flat water elements. 1,823,788; Sept. 15.

Dick, Robert, Los Angeles, Calif. Safety swing seat. 1,823,318; Sept. 15.

Dickinson, William N., Long Island, N. Y. Responsive signal system. 1,823,319; Sept. 15.

Dictaphone Corporation. (See Bodine, Alfred V., assignor.)

Dictaphone Corporation. (See Johnson, Arthur A., assignor.)

Dictaphone Corporation. (See Worrell, Howard S., assignor.)
Diehl, Frederick, assignor to Diehl Manufacturing Company, Elizabeth, N. J. Phonograph turntable. 1,823,533; Sept. 15.
Diehl Manufacturing Company. (See Chason, Daniel H., assignor.)
Diehl Manufacturing Company. (See Diehl, Frederick, assignor.)
Diehl Manufacturing Company. (See Naul, James M., assignor.)
Diggs, Sterling H., Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind. Fuel oil. 1,823,594; Sept. 15.
Ditmars, John R. (See Boyce, Charles M., assignor.)
Dobmaier, Karl, Leverkusen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Emulsifying agents. 1,822,957; Sept. 15.
Dodge, Adiel Y., South Bend, Ind., and W. L. Pollard, Chicago, Ill., assignors to Bendix Brake Company, South Bend, Ind. Brake. 1,822,988; Sept. 15.
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,823,822; Sept. 15.
Dohrn, Peter H., Wesselburen, Germany. Transplanting implement. 1,823,789; Sept. 15.
Dominion Electrical Manufacturing Co. (See Gratz, Arline A., assignor.)
Donner, Friedrich O., Chemnitz, Germany. Bathing suit. 1,822,958; Sept. 15.
Dornier, Claude, assignor of one-half to the Firm Dornier-Metallbauten G. m. b. H., Friedrichshafen-on-the-Bodensee, Germany. Float for flying machines. 1,823,730; Sept. 15.
Dornier-Metallbauten G. m. b. H. (See Dornier, Claude, assignor.)
Doughnut Machine Corporation. (See Hunter, Herbert T., assignor.)
Douglas, Harry A. (See Watts, Felix J., assignor.)
Dow Chemical Company, The. (See Britton, Edgar C., assignor.)
Dow Chemical Company, The. (See Britton, E. C., Williams, and Putnam, assignors.)
Dow, Herbert H., and G. H. Cannon, Midland, Mich., assignors, by mesne assignments, to Air Preheater Corporation, New York, N. Y. Method of and apparatus for heat interchange. 1,823,033; Sept. 15.
Dowd, Andrew D., Hoboken, N. J., Glen Cove, M. B. Kerr, Rosebank, Staten Island, and G. A. Locke, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. High speed submarine cable telegraph system. 1,823,354; Sept. 15.
Dowling, Jesse T., et al., trustees. (See Mas, George N.)
Dräger, Otto H. (See Christensen, Alfred H. L., assignor.)
Dragerwerk. (See Schroeder, Hans W. C., assignor.)
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass rolling apparatus. 1,822,959; Sept. 15.
Draper Corporation. (See Brooks, John C., assignor.)
Driggs, Louis L., jr., New Rochelle, and H. B. Faber, New York, N. Y. Ammunition for signal pistols. 1,823,390; Sept. 15.
Dual Motors Ltd. (See Knecht, Emil, assignor.)
Dubilier Condenser Corporation. (See Houck, Harry W., assignor.)
Dubilier Condenser Corporation. (See Nyman, Alexander, assignor.)
Ducart, Guillaume, Paris, France. Closing device for gripping a strand of hair in heating tubes for heating strands of hair. 1,823,391; Sept. 15.
Ducroux, Louis G., Cachan, assignor to D. Belmonte, Paris, France. Steam valve for cooking containers or boilers. 1,823,595; Sept. 15.
Ducroux, Rene, St.-Nazaire, France. Ship's scuttle. 1,823,790; Sept. 15.
Duerr, Winslow A., Breckenridge, Tex., assignor to Cabot Co., Boston, Mass. Apparatus for the compression of packaged substances. 1,822,923; Sept. 15.
Duffy, James F., assignor to Duffy Manufacturing Company, Holland, Mich. Hood corner protector. 1,823,647; Sept. 15.
Duffy Manufacturing Company. (See Duffy, James F., assignor.)
Dugdale, Richard M., Dedham, assignor to The Bankette Co., Boston, Mass. Coin bank. 1,823,646; Sept. 15.
Du Grenier, Arthur H., Ilion, N. Y., assignor by mesne assignments to Consolidated Automatic Merchandising Corporation. Vending machine. 1,823,093; Sept. 15.
Dundas, William A., and L. M. Johnson, Chicago, Ill. Rack screen cleaner. 1,823,823; Sept. 15.
Dunlop Cotton Mills Limited. (See Andrew, T. E., Langstreth, and Bancroft, assignors.)
Dunn, Walter D., Belmont, Mass. Umbrella holder. 1,823,648; Sept. 15.
Du Pont, E. I., de Nemours & Company. (See Lutz, George, assignor.)
Dura Company, The. (See Graff, George, assignor.)
Duysen, Henry B., Elyria, Ohio. Heel for shoes. 1,823,134; Sept. 15.
Dworsky, Harold P., New York, N. Y., and O. S. Lawton, New Bedford, Mass., assignors to Electric Weave Broducts, Inc., New York, N. Y. Rubberless elastic fabric. 1,823,034; Sept. 15.
Dyas, Robert L., and J. Maickel, Butte, Mont. Machine tool for dressing articles on nonparallel surfaces. 1,823,824; Sept. 15.
Dylong, John, Bayonne, N. J. Inhafer. 1,823,094; Sept. 15.
Eastman Kodak Company. (See Clarke, Hans T., assignor.)
Eastman Kodak Company. (See Clarke, H. T., and Malm, assignors.)
Eastman Kodak Company. (See Fuerst, Carl C., assignor.)
Eastman Kodak Company. (See Gray, Harry L., assignor.)
Eastman Kodak Company. (See Hopkins, Roy S., assignor.)
Eastman Kodak Company. (See Martin, Frederick C., assignor.)
Eastman Kodak Company. (See Riddell, William A., assignor.)
Eastman Kodak Company. (See Sauer, Howard A., assignor.)
Eastman Kodak Company. (See Stuber, Adolph, assignor.)
Eastman Kodak Company. (See Wittel, Otto, assignor.)
Eastman Kodak Company. (See Young, Albert A., assignor.)
Eaton Spring Corporation. (See Read, Balfour, assignor.)
Eberhard Faber Pencil Co. (See Huber, Frederick G., assignor.)
Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Variable capacity reservoir. 1,823,731; Sept. 15.
Edgerton, Orlando V., West Branch, Iowa. Road map for automobiles. 1,823,825; Sept. 15.
Edison General Electric Appliance Company. (See Cuffe, Frederick W., assignor.)
Edwards Manufacturing Company, The. (See Myers, G. D., and Richmond, assignors.)
Edwards Manufacturing Company, The. (See Richmond, Samuel, assignor.)
Edwards, O. M. Company, Inc., The. (See Axe, Roy T., assignor.)
Eggert, Gustav B., assignor to Baker Perkins Company, Inc., Saginaw, Mich. Proofer. 1,823,441; Sept. 15.
Egli, Ernst, assignor to Maschinenfabrik Rüti vormals Caspar Honegger, Rüti, Switzerland. Magazine for shuttle bobbins for automatic looms. 1,823,791; Sept. 15.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Converting petroleum oil. 1,822,924; Sept. 15.
Ehrhart, Josef. (See Schneider, E., Ehrhart, and Kreitner.)
Eickmeyer, Earl E., assignor to The Dayton Pump & Mfg. Company, Dayton, Ohio. Lubricating system. 1,822,960; Sept. 15.
Elastic Weave Products, Inc. (See Lawton, Oscar S., assignor.)
Elderkin, Paul N., Los Angeles, Calif. Lubricant and carbon remover. 1,822,886; Sept. 15.
Electric Vacuum Cleaner Company. (See Carson, Jesse F., assignor.)
Electric Weave Products, Inc. (See Dworsky, H. P., and Lawton, assignors.)
Electrical Research Products Inc. (See Chapman, Shelby C., assignor.)
Electrolux Servel Corporation. (See Lenning, Alvar, assignor.)
Elektrotechnische Fabrik Schmidt & Co. Gesellschaft m. b. H. (See Rathmann, Paul, assignor.)
Elger, Joseph, Chicago, Ill. Radiator. 1,823,035; Sept. 15.
Elliott-Fisher Company. (See von Reppert, Richard, assignor.)
Elliott, Thomas, Birmingham, Ala., assignor to Continental Gin Company. Huller gin. 1,823,135; Sept. 15.
Elliott, Wilbert N., and W. G. Milne, assignors to N. Slater Company, Hamilton, Ontario, Canada. Eye for anchor rods, eye bolts, and the like. 1,823,261; Sept. 15.
Elwell-Parker Electric Company. (See Towson, Sheldon K., assignor.)
Emery, Waldo D., Tulsa, Okla. Orifice fitting. 1,822,961; Sept. 15.
Emons, Ernst E., Wilmington, Del., assignor to The Ful-Vue Sales Company, Washington, D. C. Spectacles. Des. 85,089; Sept. 15.
Engel, Anna, Bergamo, Italy. Apparatus for the manufacture of cardboard and the like in continuous webs. 1,823,792; Sept. 15.
Engelhardt, G., & Co., "Chasalla"-Schuhfabrik A.-G. (See Engelhardt, G., and Siebeneichner, assignors.)
Engelhardt, Georg, Cassel-Wilhelmshöhe, and H. G. Siebeneicher, Leipzig, assignors to the Firm G. Engelhardt & Co., "Chasalla" Schuhfabrik A. G., Cassel, Germany. Key operated foot measuring device. 1,823,793; Sept. 15.
English, Athena J., assignor of one-half to S. C. Stamoulis, Chicago, Ill. Cleaning compound. 1,823,192; Sept. 15.
Ennis, Charles E., El Paso, Tex., and H. W. Crawford, Albuquerque, N. Mex. Charge humidifier for explosive engines. 1,822,962; Sept. 15.
Ennis, Charles E., El Paso, Tex., and J. W. Reynolds, Marysville, Kans. Tie plate. 1,822,963; Sept. 15.
Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)

Erie Malleable Iron Company. (See Metcalf, George R., jr., assignor.)
Errera, Attilio, assignor to Societa Italiana Registratori Sir, Turin, Italy. Computing machine. 1,823,262; Sept. 15.
Esau, Abraham, Jena, Germany. Wireless transmission system. 1,823,794; Sept. 15.
Evans, George W., Wilkes-Barre, Pa. Mounting for flyer blocks. 1,823,795; Sept. 15.
Evans, Rhys D., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Fabric manipulating machine. 1,823,856; Sept. 15.
Everedy Company, The. (See Lebherz, Harry J., assignor.)
Everwine, Charles L., Newark, N. J. Attachment for internal combustion engines. 1,823,796; Sept. 15.
Faber, Henry B. (See Driggs, L. L., and Faber.)
Fabry, Julius, Detroit, Mich. Combination hinge and doorcheck. 1,823,263; Sept. 15.
Fairbairn Lawson Combe Barbour Limited. (See Porter, Joseph A., assignor.)
Falconer, Stuart A. (See Christmann, J. L., and Falconer.)
Falk Corporation, The. (See Frentzel, Herman E., assignor.)
Farberei & Oppretur-Gesellschaft (vormals A. Blavel & Fritz Lindenmeyer). (See Jost, Stephen, assignor.)
Farmer, Ada E., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 85,090; Sept. 15.
Faultless Caster Company. (See Noelting, William H., assignor.)
Federal Telegraph Company. (See Barone, Salvatore A., assignor.)
Federal Telegraph Company. (See Hund, August, assignor.)
Federal Telegraph Company. (See Mirick, Carlos B., assignor.)
Federal Telegraph Company. (See Nicolson, Alexander M., assignor.)
Felies, Jacques F., Antwerp, Belgium. Apparatus for converting reciprocating motion into rotary motion or vice versa. 1,823,681; Sept. 15.
Ferguson, William T., assignor of two-thirds to E. M. Crouch and H. J. Thorne, Beckley, W. Va., and one-third to D. E. Lloyd, trustee. Railroad crossing gate. 1,823,596; Sept. 15.
Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Machine wrench. 1,823,426; Sept. 15.
Feurich, Alexander. (See Deseniss, Max, assignor.)
Feussner, Otto, Hanau-on-the-Main, assignor to the Firm W. C. Heraeus Gesellschaft mit beschrankter Haftung, Hanau-on-the-Main, Germany. Instrumental control apparatus. 1,822,989; Sept. 15.
Fiberfraks Inc. (See Holcomb, Harry E., assignor.)
Fillingim, William A., Kountze, Tex. Seed planter. 1,823,392; Sept. 15.
Filtrol Company of California. (See Baylis, Walter S., assignor.)
Filtrol Company of California. (See Belden, Daniel S., assignor.)
Fink, William L. (See Archer, R. S., and Fink.)
Finkel, Scott, Woodside, N. Y. Powder puff. 1,823,797; Sept. 15.
Finley, Sam E., Atlanta, Ga. Making road surfaces. 1,823,682; Sept. 15.
Fischer, Howard L., et al. (See Prawalsky, Frederick P., assignor.)
Fish, Mortimer W. (See Smith, H. R., and Fish.)
Fisk, Ernest T., Sydney, New South Wales, Australia. Sound suppressing ventilator fitting for windows. 1,823,798; Sept. 15.
Fitzgerald, Herber D. (See Adelsperger, C. C., and Fitzgerald.)
Fleetwood Body Corporation. (See Kern, J. S., and Currier, assignors.)
Fletcher, Charles, assignor to Walgreen Company, Chicago, Ill. Drinking glass. Des. 85,091; Sept. 15.
Flood, John A., Minneapolis, Minn. Web holding machine. 1,823,264; Sept. 15.
Florns, George S., Chicago, Ill. Switch structure. 1,823,826; Sept. 15.
Forrest, Thomas W. W., assignor to Sun Maid Raisin Growers of California, Fresno, Calif. Treating dried fruit particularly raisins. 1,823,265; Sept. 15.
Foster, Henry A., Des Moines, Iowa. Flower vase. 1,823,732; Sept. 15.
Foulder, Henry B., Glenbroook, Conn. Bag feeding means. 1,823,442; Sept. 15.
Foulder, Henry B., Glenbrook, Conn. Bag feeding means. 1,823,597; Sept. 15.
Fox, Paul L., Lebanon, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 85,092; Sept. 15.
Frailey, Irvin H., assignor to Sindber Manufacturing Compan, Windber, Pa. Windshield wiper. 1,823,598; Sept. 15.
Fralzer, Frank L. (See Mayo, F., and Fraizer.)
Frankenburger, Walter. (See Mittasch, A., Frankenburger, and Wietzel.)
Frankhart, Inc. (See Underberg, Henry, assignor.)
Franks, Lewis W., Port Neches, Tex. Closure hanger. 1,823,193; Sept. 15.
Franz, Erwin E., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical device. 1,823,827; Sept. 15.
Frappier, Louis S., and E. Boecking, Brooklyn, assignor to International Projector Corporation, New York, N. Y. Telescope framing device. 1,823,355; Sept. 15.
Frazier, Sherman W. (See Wilson, William S., assignor.)
Fredeen, Frank, Minneapolis, Minn. River channel deepening means. 1,822,964; Sept. 15.
Frederick Iron & Steel Company, The. (See Hargis, George R., assignor.)
Frederick, Louis T., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del. Mica splitter. 1,823,136; Sept. 15.
Frederiksen, Carl J., assignor to Deere & Company, Moline, Ill. Grain harvester. 1,823,036; Sept. 15.
Freeport Sulphur Company, The. (See Bushnell, Lyman S., assignor.)
Freeth, Lancelot G. (See Skilliman, T. S., Freeth, and Berry.)
French, Louis O., Milwaukee, Wis. Fuel injection system. Re18,194; Sept. 15.
French, Louis O., Milwaukee, Wis. Fuel injection system. Re18,195; Sept. 15.
Frentzel, Herman E., assignor to The Falk Corporation, Milwaukee, Wis. Slotting machine. 1,823,857; Sept. 15.
Frey, Ernst H., Innertkirchen, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Apparatus for protection of polyphase electrical systems. 1,823,733; Sept. 15.
Friedrich, Louis, Yonkers, N. Y. Safety attachment for aircraft. 1,823,799; Sept. 15.
Frigidaire Corporation. (See Andrews, Frank W., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frigidaire Corporation. (See Smith, H. R., and Fish, assignor.)
Frink, Robert L., Lancaster, Ohio. Refractory article. 1,823,356; Sept. 15.
Frink, Robert L., Lancaster, Ohio. Making sheet glass. 1,823,357; Sept. 15.
Fritzsche, Curt, Leipzig, Germany. Process and apparatus for casting metals and ceramic masses according to the centrifuging method. 1,823,037; Sept. 15.
Frost, C. E., et al. (See Dalke, Otto, assignor.)
Frutkow, Nathaniel, and A. J. Viken, Chicago, Ill. Diagnostic table. 1,823,534; Sept. 15.
Frutkow, Nathaniel, and A. J. Viken, Chicago, Ill. Therapeutic lamp. 1,823,535; Sept. 15.
Fuerst, Carl C., assignor to Eastman Kodak Company, Rochester, N. Y. Camera construction. 1,823,266; Sept. 15.
Fuller Lehigh Company. (See Clements, Warren F., assignor.)
Ful-Vue Sales Company, The. (See Emons, Ernest E., assignor.)
Fundom, Earl H., assignor to The Fundom Hoist & Shovel Co., Lima, Ohio. Power shovel. 1,823,137; Sept. 15.
Fundom Hoist & Shovel Co., The. (See Fundom, Earl H., assignor.)
Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Locking cabinet door. 1,823,536; Sept. 15.
Galle, Ernst. (See Müller, C., Wietzel, and Galle.)
Galloway, Charles W., Baltimore, Md. Cooling passenger cars in stations. 1,823,393; Sept. 15.
Galloway, Robert M., assignor to The National Automatic Tool Company, Richmond, Ind. Machine tool unit. 1,823,038; Sept. 15.
Gamm, Henry F. E., Rutherford, N. J. Adjustable mixer and drive. 1,823,443; Sept. 15.
Gardner, Charles B., jr., Long Beach, Calif. Tone modifying device for the vibrating elements of musical instruments. 1,823,683; Sept. 15.
Garrison, Anna M., administratrix. (See Garrison, Orlando.)
Garrison, Orlando, deceased, Dayton, Ohio; A. M. Garrison, administratrix, assignor to Pratt & Whitney Company, Hartford, Conn. Gear grinder and the like. 1,823,734; Sept. 15.
Gas Research Company, The. (See Smith, Harry F., assignor.)
Gaskins, James H., Nashville, Ga. Convertible boat propelling and steering apparatus. 1,822,965; Sept. 15.
Gaudenzi, Arthur, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rectifying system. 1,823,684; Sept. 15.
Gaudreau, Charles D., Springfield, Mass., assignor to Bay State Tool & Machine Co. Vise. 1,823,537; Sept. 15.
Gehrig, Edward F., Grosse Pointe Park, assignor to Detroit-Michigan Stove Company, Detroit, Mich. Gas stove igniter. 1,823,538; Sept. 15.
Geiger, Hellmut, Bad Soden in the Taunus, Germany. Disk valve. 1,823,394; Sept. 15.
Geller, Frederick C., assignor to Trupar Manufacturing Company, Dayton, Ohio. Compressor-condenser unit. 1,823,858; Sept. 15.
General Aniline Works, Inc. (See Heyna, Hans, assignor.)
General Aniline Works, Inc. (See Holzapfel, E., Braunsdorf, and Lange, assignors.)
General Aniline Works, Inc. (See Kalischer, G., and Bayer, assignors.)
General Aniline Works, Inc. (See Kalischer, G., and Lange, assignors.)
General Aniline Works, Inc. (See Laska, L., and Haller, assignors.)

General Aniline Works, Inc. (See Laska, L., and Werdermann, assignors.)
General Aniline Works, Inc. (See Münz, Ferdinand, assignor.)
General Aniline Works, Inc. (See Wagner, H., Hessenland, and Brune, assignors.)
General Chemical Company. (See Merriam, Henry F., assignor.)
General Electric Company. (See Baker, Walter R. G., assignor.)
General Electric Company. (See Carlson, Wendell L., assignor.)
General Electric Company. (See Eby, Eugene D., assignor.)
General Electric Company. (See Heisler, Charles L., assignor.)
General Electric Company. (See Hilliard, John D., assignor.)
General Electric Company. (See Nordlander, Birger W., assignor.)
General Electric Company. (See Puffer, S. R., and Moss, assignors.)
General Electric Company. (See Rupp, Emil, assignor.)
General Electric Company. (See St. Clair, Byron W., assignor.)
General Electric Company. (See Staehle, Henry C., assignor.)
General Electric Company. (See Taylor, George F., assignor.)
General Electric Company. (See Young, Charles J., assignor.)
General Motors Corporation. (See Anibal, Benjamin H., assignor.)
General Motors Corporation. (See Beringer, Roscoe, assignor.)
General Motors Corporation. (See Cronwall, Carl G., assignor.)
General Motors Corporation. (See Green, John T., assignor.)
General Motors Corporation. (See Jannson, A. J., and Smith, assignors.)
General Motors Corporation. (See Potter, F. J., and Bailey, assignors.)
General Motors Corporation. (See Schjolin, Eric O., assignor.)
General Motors Corporation. (See Tenney, Perry L., assignor.)
General Motors Research Corporation. (See Almen, John O., assignor.)
General Steel Wares Limited. (See Spencer, William J., assignor.)
General Tire & Rubber Company, The. (See Maranville, Harvey F., assignor.)
Gerlach, Leo G. (See Ruchle, Henry J., assignor.)
Gerngross, Otto, Berlin-Grunewald, and K. Rilke, Berlin-Charlottenburg, assignors to Kali-Chemie Aktiengesellschaft, Berlin, Germany. Disinfectant. 1,823,095; Sept. 15.
Getty, Harry S. (See Shea:d, J. H., and Getty.)
Gilardi, Adrian J., Seattle, Wash. Lawn mower. 1,823,267; Sept. 15.
Gilbert, Walter V., New York, N. Y. Water craft. 1,823,096; Sept. 15.
Gillenwater, Warren E., Bellingham, Wash. Child's vehicle. 1,823,138; Sept. 15.
Gillette Rubber Company. (See Krause, Arnold R., assignor.)
Gillette Safety Razor Company. (See Parker, Riley H., assignor.)
Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)
Gillings, Charles. (See Paulett, W. H., and Gillings.)
Glaeser, Christian F., Youngstown, Ohio. Swimming device. 1,822,966; Sept. 15.
Glasby, Jonathan P., Verona, N. J. Airplane. 1,823,735; Sept. 15.
Glass, J. W., et al. (See Dalke, Otto, assignor.)
Gloekler, John E., Pittsburgh, Pa. Refrigerating cabinet. 1,823,444; Sept. 15.
Glose, Robert L. (See Benedict, E. L., and Glose.)
Goetzelman, William, Chicago, Ill., assignor to Appleton Electric Company. Ground connection. 1,823,139; Sept. 15.
Goldberg, Jacob M. (See Goldberg, Louis B., N., W., and J. M.)
Goldberg, Louis B., N., W., and J., Denver, Colo. Folding awning arm. 1,823,649; Sept. 15.
Goldberg, Nathan. (See Goldberg, Louis B., N., W., and J. M.)
Goldberg, William. (See Goldberg, Louis B., N., W., and J. M.)
Goldfinger, Hyman, Brooklyn, N. Y. Window shade bracket. 1,823,490; Sept. 15.
Goldstone, Leroy, assignor to Judsen Rubber Works, Chicago, Ill. Slipper. 1,823,445; Sept. 15.
Gooch, Dennie, Somerset, Ky. Watchmaker's and engraver's eyeglass holder. 1,823,828; Sept. 15.
Goodman, Courtney S., assignor. (See Goodman, Nathan J., assignor.)
Goodman, H., & Sons, Inc. (See Vryn, Victor, assignor.)
Goodman, Nathan J., assignor to C. S. Goodman, St. Louis, Mo. Hosiery. 1,823,736; Sept. 15.
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear Tire & Rubber Company, The. (See Davis, Paul A., assignor.)
Goodyear Tire & Rubber Company, The. (See Evans, Rhys D., assignor.)
Gordon, Harry J., Montreal, Quebec, Canada. Lock mechanism. 1,823,650; Sept. 15.
Gordon, James, Sorrento, Argentina. Stop gauge. 1,823,268; Sept. 15.
Gorsline, Hathaway M., Indianapolis, Ind. Muffler. 1,822,990; Sept. 15.
Gottlieb, David, Chicago, Ill. Ash tray. Des. 85,093; Sept. 15.
Goulet, Henry F., Walpole, Mass. Display stand. 1,823,396; Sept. 15.
Grace, Worthington T., Willoughby, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Purifying technical ammonium chloride liquors. 1,823,097; Sept. 15.
Graebner, Otto F. (See McDowell, L. A., and Graebner.)
Graff, George, assignor to The Dura Company, Toledo, Ohio. Clock case. Des. 85,094; Sept. 15.
Graff, George, assignor to The Dura Company, Toledo, Ohio. Clock case. Des. 85,095; Sept. 15.
Grammes, L. F., & Sons, Inc. (See Weindel, Fred, jr., assignor.)
Granger, Paul H., Los Angeles, Calif. Apparatus for locating leaks. 1,822,925; Sept. 15.
Grasselli Chemical Company, The. (See Grace, Worthington T., assignor.)
Grasselli Chemical Company, The. (See Maguire, Edward J., assignor.)
Gratz, Arline A., assignor to Dominion Electrical Manufacturing Co., Minneapolis, Minn. Electric hot plate. Des. 85,096; Sept. 15.
Gray, Harry Le B., assignor to Eastman Kodak Company, Rochester, N. Y. Making cellulose acetate. 1,823,359; Sept. 15.
Gray, Jesse L., Dallas Tex. Motion controlling attachment for cutting torches. 1,823,194; Sept. 15.
Green, John T., assignor to General Motors Corporation, Detroit, Mich. Striping tool. 1,823,427; Sept. 15.
Greenleaf, Ray, New York, N. Y. Color system for disguising objects. 1,822,926; Sept. 15.
Greenleaf, William H., Hartford, Conn., assignor to Western Clock Company, Peru, Ill. Switch accelerator for clocks. 1,822,927; Sept. 15.
Greenlee Bros. & Co. (See Swanson, Edwin C., assignor.)
Greenlee, Walter R., assignor to Puritan Malt Extract Co., Chicago, Ill. Tape moistener. 1,823,600; Sept. 15.
Gremel, Caroline, executrix. (See Gremel, Frank J., assignor.)
Gremel, Frank J., deceased, Detroit, Mich., C. Gremel, executrix. Braced mold wall. 1,823,195; Sept. 15.
Griffith, Eligy P., Gainesville Tex. Boll weevil exterminator. 1,823,196; Sept. 15.
Grilli, John P., assignor to H. A. Brassert & Company, Chicago, Ill. Gas washer. 1,823,269; Sept. 15.
Grimm, Frank V. (See Lemmon, N. E., and Grimm.)
Gross, John O., Littleton, Colo. Cabinet incubator. 1,823,395; Sept. 15.
Gruber, William R., New York, N. Y. Photographic electric lamp. 1,823,320; Sept. 15.
Gruner, Jay K., assignor to J. K. Gruner Lumber Company, Detroit, Mich. Gas range top. 1,823,539; Sept. 15.
Gruner, J. K. Lumber Company. (See Gruner, Jay K., assignor.)
Guardian Trust Company, The. (See Larkin, Lester U., assignor.)
Guardian Trust Company, The, trustee. (See Replogle, John R., assignor.)
Guenther, Frederick A., La Grange, Ill. Aeroplane propeller. 1,823,107; Sept. 15.
Guenther, William H., assignor to Detroit-Michigan Stove Company, Detroit, Mich. Gas range top. 1,823,539; Sept. 15.
Guenther, William H., assignor to Detroit-Michigan Stove Company, Detroit, Mich. Gas range top. 1,823,540; Sept. 15.
Gulberson Corporation, The. (See Bell, Ivan C., assignor.)
Gunderman, Lester S. (See McMarlin, W. J., and Gunderman.)
Guy, Benjamin A., Paris, France. Level indicator adapted chiefly for high pressure boilers. 1,823,397; Sept. 15.
Hagstedt, Charles H., Valley Stream, N. Y. Pipe coupling. 1,822,887; Sept. 15.
Hague, Alfred E., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Call charging telephone exchange system. 1,823,040; Sept. 15.
Hahn, Robert, Neunkirchen, Germany. Device for the proportionate feeding of mixing ingredients to concrete and mortar mixing machines. 1,823,270; Sept. 15.
Haims, Philip L., Cleveland, Ohio. Hairpin. 1,823,685; Sept. 15.
Hall, Carl R. (See Hall, John G. and C. R.)
Hall, J. Goodwin. (See Payne, Clarence Q., assignor.)
Hall, John G. and C. R., Chicago, Ill. Clinker tongs. 1,823,041; Sept. 15.
Haller, Oskar. (See Laska, L., and Haller.)
Halperin, Herman, and K. W. Miller, Chicago, Ill. Sheath bonding system. 1,823,140; Sept. 15.
Hammond, Bradley B. Yonkers N. Y. Camera plate holder. 1,823,321; Sept. 15.

Hanke, Paul, Bound Brook, N. J. Device for relieving headaches. 1,823,686; Sept. 15.
Hannig, Max. (See Hartmann, O. H., and Hannig.)
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Mounting for rock drills. 1,823,446; Sept. 15.
Hansen, Harry P. (See McMullen, M. W., and Hansen).
Hansen, Julius W. and W. L., and I. N. Hurst, assignors to Hansen Mfg. Company, Inc., Princeton, Ind. Synchronous self starting motor. 1,823,601; Sept. 15.
Hansen Mfg. Company. (See Hansen, Julius W. and W. L., and Hurst, assignors.)
Hansen, William L. (See Hansen, Julius W. and W. L., and Hurst.)
Hanson, Andrew C., Racine, Wis. Controlling device for window shades. 1,823,447; Sept. 15.
Hargis, George R., assignor to The Frederick Iron & Steel Company, Frederick, Md. Gear pump. 1,823,098; Sept. 15.
Hargreaves, William, West Didsbury, Manchester, assignor of one-half to R. L. Ross and Company, Limited, Stockport, England. Safety valve. 1,823,651; Sept. 15.
Harlington & King Perforating Company. (See Schneider, Oscar K., assignor.)
Harris, Charles, Frankfort, assignor to American Identification Company, Winchester, Ky. Key chart. 1,823,602; Sept. 15.
Harris-Seybold-Potter Company, The. (See Wright, Joseph T., assignor.)
Harris-Seybold-Potter Company, The. (See Wright, J. T., and Rowell, assignors.)
Hart, George H., West Hartford, Conn. Thermostatically operated switch mechanism. 1,823,099; Sept. 15.
Hartford-Empire Company. (See Howard, George E., assignor.)
Hartford-Empire Company. (See Peller, Karl E., assignor.)
Hartford-Empire Company. (See Pleukharp, C. W., and Raynes, assignors.)
Hartford-Empire Company. (See Rowe, George E.)
Hartmann, Eliza B., London, England. Collecting tray for rotary duplicators. 1,823,042; Sept. 15.
Hartmann, Otto H., and M. Hannig, assignors to Schmidtsche Heissdampf-Gesellschaft mit beschrankter Haftung, Cassel-Wilhelmshohe, Germany. Heat transferrer. 1,823,800; Sept. 15.
Harvey, Howard J., Detroit, Mich. Emblem. Des. 85,097; Sept. 15.
Hast, William H., assignor to Hayden Miller Company, Minneapolis, Minn. Liquid dispenser. 1,823,652; Sept. 15.
Hast, William H., assignor to Hayden Miller Company, Minneapolis, Minn. Dispenser for oil and other liquids. 1,823,653; Sept. 15.
Hast, William H., assignor to Hayden Miller Company, Minneapolis, Minn. Liquid dispenser. 1,823,654; Sept. 15.
Haven, William A., Youngstown, Ohio. Burner system. 1,823,358; Sept. 15.
Hayden Miller Company. (See Hast, William H., assignor.)
Haynes, Arthur J., Port Haney, British Columbia, Canada. Sound reproducing apparatus. 1,823,603; Sept. 15.
Haysel, Arthur R., assignor of forty-nine one-hundredths to C. Thompson and G. K. Thompson, doing business as Chas. & Geo. K. Thompson, Los Angeles, Calif. Treating oil. 1,822,888; Sept. 15.
Hazard, George E., assignor to Kellogg Manufacturing Co., Rochester, N. Y. Unloader. 1,823,398; Sept. 15.
Hazeltine Corporation. (See MacDonald, W. A., and Johnston, assignors.)
Hazeltine Corporation. (See Murdock, William J., assignor.)
Healy, Edwin S., et al. (See Malone, Adolph W., assignor.)
Hebbeler, George W., St. Louis, Mo. Storage battery. 1,823,448; Sept. 15.
Hedges, Albert E., Taunton, England. Lifting apparatus for motor cars or other vehicles. 1,823,449; Sept. 15.
Heghinian, Garabed G., assignor of one-half to W. W. Varney, Baltimore, Md. Liquid level gauge. 1,823,491; Sept. 15.
Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Wave transmitting and amplifying. 1,823,322; Sept. 15.
Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system. 1,823,360; Sept. 15.
Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. System for frequency translation of electric waves. 1,823,687; Sept. 15.
Heisler, Charles L., Schenectady, N. Y., assignor to General Electric Company. Motion picture sound apparatus. 1,823,737; Sept. 15.
Hele-Shaw, Henry S., and J. A. Pickard, London, England. Filtration. 1,823,171; Sept. 15.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,823,450; Sept. 15.
Helwith, Alfred L., Larchmont, N. Y. Fabric. 1,822,889; Sept. 15.
Hemingray Glass Company. (See Bilby, Ernest E., assignor.)
Hemington, Joseph P., Philadelphia, Pa. Distant liquid level indicating apparatus. 1,823,377; Sept. 15.
Hemmingsen, Torkild V., Copenhagen, Denmark. Scavenging for two-stroke internal combustion engines. 1,823,399; Sept. 15.
Hencken, John K., Brooklyn, N. Y. Soaking drum and conditioning same for use. 1,823,451; Sept. 15.
Hendrickson, Robert O., assignor to J. I. Case Company, Racine, Wis. Curtain device for radiators. 1,823,141; Sept. 15.
Hensley, Charles G., receiver. (See Newmann, John, assignor.)
Heraeus, W. C., Gesellschaft mit beschrankter Haftung. (See Feussner, Otto, assignor.)
Heron, Sam D., Dayton, Ohio. Valve. 1,823,452; Sept. 15.
Herron, Anna L., et al. (See Herron, Ollie L., assignor.)
Herron, Ollie L., assignor, by mesne assignments, of 30/100 to W. M. Zimmers, 30/100 to A. L. Herron, 20/100 to J. B. Zimmers, and 20/100 to O. L. Herron, Chicago, Ill. Trim molding. 1,823,541; Sept. 15.
Hersey Manufacturng Company. (See Winton, Henry D., assignor.)
Hertz, Hjalmar, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Pneumatic cleaner. 1,823,542; Sept. 15.
Herzfeld, Adolph. (See Jacobson, Moses, assignor.)
Hess, John. (See White, H. E., Hess, and Neuhausen.)
Hessenland, Max. (See Wagner, H., Hessenland, and Brune.)
Heugns, Henri A., Paris, France. Jewelry clasp. 1,823,043; Sept. 15.
Hevi Duty Electric Company. (See Smalley, Edwin L., assignor.)
Heymer, James K., assignor to C. M. Warren, guardian of C. W Warren, doing business as Warren Shade Company, Minneapolis, Minn. Supporting means for Venetian blinds. 1,822,890; Sept. 15.
Heyna, Hans, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New vat dyestuffs. 1,822,967; Sept. 15.
Hiatt, William G., assignor to Phillips Petroleum Company, Bartlesville, Okla. Gauging device. 1,823,801; Sept. 15.
Hickman, Clarence N., Jackson Heights, assignor, by mesne assignments, to American Piano Corporation, East Rochester, N. Y. Grand piano action. 1,823,142; Sept. 15.
Hill, Rowland F., assignor to The National Supply Company, Toledo, Ohio. Anchorage device. 1,823,428; Sept. 15.
Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Circuit closing mechanism. 1,823,738; Sept. 15.
Hills Brothers Company, The. (See Smith, Albert K., assignor.)
Hines, Francis J., Brooklyn, N. Y. Electrical receptacle 1,823,143; Sept. 15.
Hirschy Company, The. (See Hirschy, Herman C., assignor.)
Hirschy, Herman C., assignor to The Hirschy Company Duluth, Minn. Washing machine transmission. 1,823,271; Sept. 15.
Hobson, O. L. (See Breeden, Edward T., assignor.)
Hobson, Stanley H., assignor to Geo. D. Roper Corporation, Rockford, Ill. Cover of a household pump unit. Des. 85,098; Sept. 15.
Hodge, Robert J., West Haven, Conn. Razor. 1,823,100; Sept. 15.
Hoffman, John C., Sioux City, Iowa. Trunk support for automobiles. 1,823,101; Sept. 15.
Hoffmann, Hugo. (See Luedtke, M. A. G., and Hoffmann.)
Hogan, Edward L. (See Cahoon, O. B., and Hogan.)
Holbeck, Austin A., Lakewood, Ohio. Preparing metal for pouring. 1,823,604; Sept. 15.
Holcomb, Harry E., Stratford, Conn., assignor to Fiberfraks Inc., New York, N. Y. Apparatus for making sheet material. 1,822,891; Sept. 15.
Holmberg, Elmar O., Wauwatosa, Wis. Speedometer. 1,823,044; Sept. 15.
Holophane Company, Inc. (See Rolph, Thomas, W., assignor).
Holzapfel, Euard, O. Braunsdorf, and H. Lange, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the benzanthrone series. 1,822,968; Sept. 15.
Homey, Gerhard, Cologne, Germany. Producing vessels from pressed wood or plywood. 1,823,102; Sept. 15.
Hommel, Georg, Aldingen, near Spaichingen, Germany. Sliding caliper with automatic locking device. 1,823,045; Sept. 15.
Homolya, Frederick, Kenosha, Wis. Sewer cleaning device. 1,823,144; Sept. 15.
Honeycutt, James L., Mooresville, N. C. Mote and waste cleaner. 1,823,198; Sept. 15.
Hookless Fastener Company. (See Walker, Wallace D., assignor.)
Hoover, Charles P., Columbus, Ohio. Softening water. 1,823,605; Sept. 15.
Hopewell Brothers. (See Wolford, Merl R., assignor.)

Hopewell, Charles F., et al. (See Wolfard, Merl R., assignor.)

Hopewell, Helen C., et al. (See Wolfard, Merl R., assignor.)

Hopkins, Irving L., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Desk telephone set. 1,823,323; Sept. 15.

Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic printing machine. 1,823,145; Sept. 15.

Horst, Ludwig, Berlin-Wilmersdorf, Germany, assignor to Sirius Kleuren-Film-Maatschappij. Boschen, Duin, near Utrecht, Netherlands. Photographic film copying device. 1,823,400; Sept. 15.

Horton, Albert G. (See Buchanan, M. K., and Horton.)

Horton, Joseph W., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. System operating on a marginal current basis. 1,823,739; Sept. 15.

Hosack, Francis A., New York, N. Y. Calculating machine. 1,823,859; Sept. 15.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Container. 1,823,046; Sept. 15.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Method of and apparatus for beading of formed sheet metal articles. 1,823,047; Sept. 15.

Houck, Harry W., assignor to Dubilier Condenser Corporation, New York, N. Y. Condenser testing equipment. 1,823,402; Sept. 15.

Houser, John W. (See Blum, Karl E., assignor.)

Hovland, Henry, Williston Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,823,688; Sept. 15.

Howard, George E., Butler, Pa., assignor to Hartford-Empire Company. Method and apparatus for drawing glass in cylindrical form. 1,823,543; Sept. 15.

Howe, James F., Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey. Cable cutting mechanism. 1823,103; Sept. 15.

Howe, William G., Des Moines, assignor to The Simplex Manufacturing Company, Sioux City, Iowa. Vacuum horn construction for tail-bleeding machines. 1,823,544; Sept. 15.

Hubbard, Norman, Elizabeth, N. J. Belt controller. 1,823,493; Sept. 15.

Huber, Frederick G., West Brighton, N. Y., assignor to Eberhard Faber Pencil Co. Display receptacle. 1,823,324; Sept. 15.

Hudson-Sharp Machine Company. (See Campbell, Samuel J., assignor.)

Hudson, William F., Philadelphia, Pa. Water wave comb. 1,823,361; Sept. 15.

Hueston, Leslie L., et al. (See Johnson, Bert E., assignor.)

Hughes, James H., Primate, Saskatchewan, Canada. Crank case oil heater. 1,823,048; Sept. 15.

Humphris, Frank, Parkstone, England. Sheet of metal or material. 1,823,802; Sept. 15.

Hund, August, Bethesda, Md., assignor, by mesne assignments, to Federal Telegraph Company. Piezo electric plate. 1,823,928; Sept. 15.

Hund, August, Bethesda, Md., assignor by mesne assignments to Federal Telegraph Company. Filter circuit. 1,822,929; Sept. 15.

Hunter, Herbert T., Catonsville, Md., assignors to Doughnut Machine Corporation, New York, N. Y. Cooking apparatus. 1,823,146; Sept. 15.

Hurst, Ira N. (See Hansen, J. W. and W. L., and Hurst.)

Hurt, Samuel N., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. Re18,190; Sept. 15.

Huseby, Edmond A., Chicago, Ill. Aeroplane. 1,823,655; Sept. 15.

Husted, Frank L., and H. C. Husted, Hicksville, Ohio. Burglar alarm for safes. 1,823,740; Sept. 15.

Husted, H. A., Company, The. (See Husted, Harry A., assignor.)

Husted, Harry A., Cleveland, Ohio, assignor to The H. A. Husted Company, Detroit, Mich. Forming steering wheels. 1,823,562; Sept. 15.

Husted, Harry A., Cleveland, Ohio, assignor to The H. A. Husted Company, Detroit, Mich. Steering wheel. 1,823,563; Sept. 15.

Husted, Hugh C. (See Husted, Frank L., and H. C.)

Hutchings, Le Roi E., Buffalo, assignor, by mesne assignments, to Remington Rand, Inc., New York, N. Y. Index record and signal. 1,823,564; Sept. 15.

Hutchings, Le Roi E., Buffalo, assignor to Remington Rand Inc., New York, N. Y. Index file mounting. 1,823,565; Sept. 15.

Huxman, Richard F., Benton Harbor, Mich. Grass clipper. 1,823,199; Sept. 15.

Hyde, Elbert L., et al. (See Case, Francis M., assignor.)

Ielfield, August, Silver Creek, assignor to Ielfield Postal Supply Co., Inc., Forestville, N. Y. Mail distributing machine. 1,823,741; Sept. 15.

Ielfield Postal Supply Co. (See Ielfield, August, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Balle, G., Lange, and Ost, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Buelow, Wolfgang, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See de Ridder, Ernest, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Dobmaier, Karl, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Krauch C., and Müller-Cunradi, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., Frankenburger, and Wietzel, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Pier, Mathias, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Rösch, G., and Bauer, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., Seydel, and Rob, assigors.)

Ingalls Steel Products Company. (See Lucy, Thomas A., assignor.)

Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)

Ingersoll-Rand Company. (See Kirgan, John, assignor.)

International Projector Corporation. (See Frappier, L. S., and Boecking, assignors.)

International Silver Company. (See Beck, Ernest T., assignor.)

Jacobs, Henry C., Wichita, Kans. Combination plier and wrench. 1,823,494; Sept. 15.

Jacobson, Moses, New York, assignor of one-half to A. Herzfeld, Brooklyn, N. Y. Multiple condenser. 1,823,860; Sept. 15.

Jager, Earl F., Chicago, Ill. Door operating and locking device. 1,823,453; Sept. 15.

James, William T., Chicago, Ill. Steering mechanism. 1,823,325; Sept. 15.

Jannson, Axel J., and G. W. Smith, Flint, assignors to General Motors Corporation, Detroit, Mich. Engine mounting. 1,823,429; Sept. 15.

Jardine, Robert, assignor to Rich Tool Company, Detroit, Mich. Making a valve. 1,823,454; Sept. 15.

Jenrich, William A., Chicago, Ill. Envelope. 1,823,362; Sept. 15.

Jett, George C., assignor of two-fifths to W. H. Stiemke, Milwaukee, Wis. Tractor steering control mechanism. 1,822,991; Sept. 15.

Jewett, Joseph E., and S. E. Meyers, Buffalo, assignors to National Aniline & Chemical Co., Inc., New York, N. Y. Gearing. 1,823,147; Sept. 15.

Johnson, Alvin L., Worcester, assignor to W. G. Warren, Holden, Mass. Flexible rack jack for balloon tires. 1,822,969; Sept. 15.

Johnson, Alvin L., Worcester, assignor to W. G. Warren, Holden, Mass. Lifting jack. 1,822,970; Sept. 15.

Johnson, Andrew S., B. M., and A. P., Bedford, Va. Combined clutch and brake pedal for motor vehicles. 1,823,742; Sept. 15.

Johnson, Arthur A., assignor to Dictaphone Corporation, Bridgeport, Conn. Phonograph. 1,822,892; Sept. 15.

Johnson, Arthur B., Minneapolis, assignor to Andersen Frame Corporation, Bayport, Minn. Woodworking machine. 1,823,200; Sept. 15.

Johnson, Arthur B., Minneapolis, assignor to Andersen Frame Corporation, Bayport, Minn. Woodworking machine. 1,823,272; Sept. 15.

Johnson, Aubrey P. (See Johnson, Andrew S., B. M., and A. P.)

Johnson, Bernard M. (See Johnson, Andrew S., B. M., and A. P.)

Johnson, Bert E., assignor of twelve and one-half per cent to D. L. Cleveland, twelve and one-half per cent to L. L. Hueston, and twelve and one-half per cent to R. L. Swarzman, Des Moines, Iowa. Tire casing spreader. 1,823,545; Sept. 15.

Johnson, Edwin W., Nichols, Trumbell Township, Fairfield County, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Roller-presser mechanism for sewing machines. 1,823,546; Sept. 15.

Johnson, Emil M., Gorman, S. Dak. Lock for track doors. 1,823,104; Sept. 15.

Johnson, James H., Indianapolis, Ind., assignor to United States Hoffman Machinery Corporation, New York, N. Y. Machine for shaping and renovating hats. 1,822,971; Sept. 15.

Johnson, James H., San Mateo, Calif. Combination pneumatic and spring support for vehicles. 1,823,401; Sept. 15.

Johnson, John D., Los Angeles, Calif. Sash holder. 1,823,363; Sept. 15.

Johnson, Lloyd M. (See Dundas, W. A., and Johnson.)

Johnston, Fred E. (See MacDonald, W. A., and Johnston.)

Jones, Grinnell, and D. W. Marshall, Cambridge, Mass.; said Marshall assignor to said Jones. Silver cleaning composition. 1,823,402; Sept. 15.

Jones, Homer W., Newark, N. J. and F. S. Miley, Port Washington, N. Y., assignors to National Carbon Company, Inc. Contact means for battery energized devices. 1,823,105; Sept. 15.

Jones, John L., Ensley, Ala. Inspirator. 1,822,992; Sept. 15.

Jones, Laban E. and A. N. Nadeau, Anaconda, Mont. Coin-handling apparatus. 1,823,829; Sept. 15.

Jones, William R., Pittsburgh, assignor of one-third to U. U. Carr, Monongahela, and one-third to W. F. Nanstiel, Pittsburgh, Pa. Apparatus for transferring material. 1,823,148; Sept. 15.

Jordan, Isaac N., assignor to Armour and Company, Chicago, Ill. Meat smoking hanger. 1,823,149; Sept. 15.

Jost, Stephan, assignor to the firm Farberei & Oppretur Gesellschaft (vormals A. Blavel & Fritz Lindenmeyer), Basel, Switzerland. Treatment of silk. 1,823,600; Sept. 15.

Jostam Manufacturing Co. (See Ammann, Albert H., assignor.)

Judsen Rubber Works. (See Goldstone, Leroy, assignor.)

Juneau, Armand, Montreal, Quebec, Canada. Speed responsive device. 1,823,830; Sept. 15.

Jungk, Herbert G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bandwire clip. 1,823,607; Sept. 15.

Kaefer, Martin H., assignor to Western Clock Company, Peru, Ill. Clock case. Des. 85,099; Sept. 15.

Kaefer, Martin H., assignor to Western Clock Company, Peru, Ill. Producing winding keys. 1,823,547; Sept. 15.

Kali-Chemie Aktiengesellschaft. (See Gerngross, O., and Rülke, assignors.)

Kalischer, Georg, and O. Bayer, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthraquinone oxazole series. 1,822,972; Sept. 15.

Kalischer, Georg, Frankfort-on-the-Main, and W. Lange, Dessau-Ziebigk in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Compounds having an affinity for cotton and being diazotizable on the fiber. 1,823,743; Sept. 15.

Kalkanis, James N., Detroit, Mich. Holder for hams or the like. 1,823,608; Sept. 15.

Kanné, Alexander R., Brooklyn, N. Y. Electric plug member. Des. 85,100; Sept. 15.

Kapolkin, Herman, New York, N. Y. Roller shopping bag. 1,822,893; Sept. 15.

Kappenberg, August, Bayside, New York, N. Y., assignor, by mesne assignments, to Automatic Lighter Corporation, Stamford, Conn. Cigarette dispensing and lighting container. 1,823,609; Sept. 15.

Karl-Keen Manufacturing Company. (See Spery, Philmore, F., assignor.)

Karpen, S., & Bros. (See Lofman, Charles, assignor.)

Kateb, George, New York, N. Y. Textile fabric or similar article. Des. 85,101; Sept. 15.

Katz, Herman, Oakland, Calif. Ophthalmic mounting. 1,823,150; Sept. 15.

Kaufmann Department Stores, Inc. (See Crumpton, Kenneth R., assignor.)

Kaupke, Lee H., assignor to The Rock Island Plow Company, Rock Island, Ill. Two-row cultivator. 1,823,548; Sept. 15.

Keen, John S., Philadelphia, and F. B. Deans, Sharon Hill, Pa. Electric locomotive. 1,823,610; Sept. 15.

Keller, Alfred R., assignor to Morgan Construction Company, Worcester, Mass. Method of and apparatus for handling ingots. 1,822,930; Sept. 15.

Kelley, Charles N., Madison, Wis. Apparatus for cleaning type. 1,823,689; Sept. 15.

Kelly, Bert F. (See Winkler, L. G., and Kelly.)

Kellogg Manufacturing Co. (See Hazard, George E., assignor.)

Kelvinator Corporation. (See Replogle, John R., assignor.)

Kelvinator Corporation. (See Spreen, Charles C., assignor.)

Kendall, Ira H., assignor to The Kendall Patents, Inc., Potsdam, N. Y. Sanitary fitting. 1,823,549; Sept. 15.

Kendall Patents, The. (See Kendall, Ira H., assignor.)

Kenerson, Stanley M., assignor to Standard Electric Time Company, Springfield, Mass. Lamp attachment. 1,823,049; Sept. 15.

Keniston, George L., Taft, Calif. Well pumping apparatus. 1,823,273; Sept. 15.

Kentucky Utilities Company. (See Ackerman, Fred, assignor.)

Kern, Jacob S., Fleetwood, and O. L. Currier, Mount Penn, assignors to Fleetwood Body Corporation, Fleetwood, Pa. Top extension. 1,823,201; Sept. 15.

Kern, Jacob S., Fleetwood, and O. L. Currier, Mount Penn, assignors to Fleetwood Body Corporation, Fleetwood, Pa. Clamp for windshields. 1,823,202; Sept. 15.

Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler. 1,823,050; Sept. 15.

Kerr, Mark B. (See Dowd, A. D., Kerr, and Locke.)

Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)

Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Flexible band, chain, or linkage. 1,822,894; Sept. 15.

Keyes, Harmon E., Globe, Ariz. Aeration of liquids. 1,823,831; Sept. 15.

Kiddie-Rhester Co., The. (See Anthony, D., and Stoddard.)

Kiesel, William F., jr., Hollidaysburg, Pa. Truck for rolling stock. 1,822,895; Sept. 15.

Kilburn, Corttis R., Erie, Pa. Joint. 1,823,274; Sept. 15.

Kilgore, William W., assignor to All Metal Bottle Cooler Corporation, Atlanta, Ga. Combination bottle cooler and stand. Des. 85,102; Sept. 15.

King, C. G., & Co. (See Farmer, Ada E., assignor.)

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,823,106; Sept. 15.

King, Joseph F., Brighton, Victoria, Australia. Jogging machine. 1,823,744; Sept. 15.

Kirgan, John, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Centrifugal pump 1,823,455; Sept. 15.

Kirschstein, Morris. (See Oskow, Louis, assignor.)

Kjellgren, Bengt. (See Sawyer, C. B., and Kjellgren.)

Kleinman, Jacob L., New York, N. Y. Tennis racket. 1,823,107; Sept. 15.

Klingler, Paul C., Riverside, N. J. Automatic stop mechanism for knitting machines. 1,822,931; Sept. 15.

Knapp, Walter R., Pelham Manor, N. Y., assignor to Semet-Solvay Company, New York, N. Y. Elimination of waste liquors and the recovery of ammonium salts and phenols from said liquors. 1,823,364; Sept. 15.

Knecht, Emil, Erkner, near Berlin, Germany, assignor, by mesne assignments, to Dual Motors Ltd., London, England. Insulating support for electric motors. 1,823,203; Sept. 15.

Knox, Washington A., Hereford, Tex. Rail coupling. 1,823,745; Sept. 15.

Koch, Jacob M. (See Varner, H. C., and Koch.)

Kockritz, Alfred T., and K. Petrasch, Henderson, Ky.; said Petrasch assignor to said Kockritz. Making excelsior pads. 1,823,832; Sept. 15.

Koucourek, Henry, Chicago, Ill. Arc lamp. 1,823,656; Sept. 15.

Kollath, Francis C., Chicago, Ill., assignor of one-half to D. Woodhead, Detroit, Mich. Electric connector. Re18,193; Sept. 15.

Konzen, John J., San Francisco, Calif. Automobile desk. 1,822,973; Sept. 15.

Kootz, Arthur C., Milwaukee, Wis. Shoe polisher. 1,823,690; Sept. 15.

Kopf, Melrose G. (See Cunningham, John J., assignor.)

Kozlowski, Louis, Hamtramck, Mich. Insect trap. 1,823,365; Sept. 15.

Krauch, Carl, and M. Müller-Cunradi, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of hydrocarbons of high molecular weight. 1,823,495; Sept. 15.

Krause, Arnold R., assignor to Gillette Rubber Company, Eau Claire, Wis. Tire tread cutting machine. 1,823,611; Sept. 15.

Krebs, Ernest J., New Orleans, La. Spike attachment for shoes. 1,823,612; Sept. 15.

Krebs Pigment & Color Corporation. (See Morris, Harold H., assignor.)

Krebs Pigment & Color Corporation. (See Stephens, Thomas G., assignor.)

Kreitner, Johann. (See Schneider, E., Ehrhart, and Kreitner.)

Kressaty, Albert, North Bergen, N. J. Ornamental article and making same. 1,823,613; Sept. 15.

Kronstadt, Max, Brooklyn, N. Y. Wedding ring or similar article. Des. 85,103; Sept. 15.

Krueger, Werner, Miami, Fla. Traveling bag. 1,823,403; Sept. 15.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Combined typewriting and card-perforating machine. 1,823,108; Sept. 15.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Combined typewriter and card-perforating machine. 1,823,550; Sept. 15.

Kyle, Nicholas W., Colfax, Ill. Hoisting device; 1,823,833; Sept. 15.

Lackey, Robert A., Oak Park, Ill., assignor to The Payson Manufacturing Company. Caster. 1,823,657; Sept. 15.

Lamb, Harold T. (See Miller, and Lamb.)

Lang, Gregory, Yuba City, Calif. Bean cutter. 1,823,051; Sept. 15.

Langdon Engineering Corporation. (See Langdon, Jesse D., assignor.)

Langdon, Jesse D., assignor to Langdon Engineering Corporation, Los Angeles, Calif. Indicator; 1,823,746; Sept. 15.

Lange, Hans. (See Balle, G., Gerhard, Lang, and Ost.)

Lange, Hans. (See Holzapfel, E., Braunsdorf, and Lange.)

Lange, Werner. (See Kalischer, G., and Lange.)

Langstreth, Melon. (See Andrew, T. E., Langstreth, and Bancroft.)

Langwell, Herbert, Epsom, England, assignor to Commercial Solvents Corporation, Terre Haute, Ind. Grinding of cellulosic materials. 1,823,691; Sept. 15.

Lanier, Lewis H., Newport, Ky. Machine for baking pastry shells. 1,823,151; Sept. 15.

Lanser, Alfred, Corseaux Vevey, Switzerland. Measuring pump. 1,823,658; Sept. 15.

Larkin, Lester U., Atlanta, Ga., assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio. Mechanical refrigeration unit. 1,823,275; Sept. 15.

Larsen, Anton N., Wauconda, Ill. Smoker's pipe. 1,823,747; Sept. 15.

Larson, Bertha H., San Francisco, Calif. Steam table serving pan cover. 1,823,152; Sept. 15.

Laska, Leopold, and O. Haller, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Naphthylamine carboxylic acid derivatives and making same. 1,823,748; Sept. 15.

Laska, Leopold, and A. Werdermann. Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Meta-hydroxy-diphenylamine compounds and making same. 1,822,974; Sept. 15.

Lava Crucible Company. (See White, H. E., Hess, and Neuhausen, assignors.)

Lawrence, John H. (See Murray, T. E., and Lawrence.)

Lawton, Oscar S. (See Dworsky, H. P., and Lawton.)

Lawton, Oscar S., New Bedford, Mass., assignor to Elastic Weave Products, Inc., New York, N. Y. Rubberless elastic fabric. 1,823,053; Sept. 15.

Lazich, Branko, Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuits. 1,823,052; Sept. 15.

Leake, Arthur G., Bridgeport, Conn. Base for a pen holder stand, paper weight, and the like. Des. 85,104; Sept. 15.

Leake, Arthur G., Bridgeport, Conn. Book end. Des. 85,105; Sept. 15.

Lebhers, Harry J., assignor to The Everedy Company, Frederick, Md. Bottle capper. 1,823,366; Sept. 15.

Lee, Ernest E., Co. (See Brydon, Herbert B., assignor.)

Legg, Joseph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vibration recorder. 1,823,326; Sept. 15.

Lehnert, Henry W. A., New York, N. Y. Valve handle. 1,823,496; Sept. 15.

Leland, Cyrus A., jr., Des Moines, Ia. Water heater. 1,823,803; Sept. 15.

Lemmon, Norman E., assignor to Standard Oil Company, Whiting, Ind. Treatment of naphthenic oils. 1,823,614; Sept. 15.

Lemmno, Norman E., and F. V. Grimm, assignors to Standard Oil Company, Whiting, Ind. Removal of naphthenic acids from hydrocarbon oils. 1,823,615; Sept. 15.

Lenning, Alvar, Jackson Heights, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,823,456; Sept. 15.

Lenning, Alvar, Jackson Heights, assignor to Electrolux Servel Corporation, New York, N. Y. Condenser and rectifier. 1,823,497; Sept. 15.

Leonard, George A., Larchmont, N. Y. Roller skate. 1,822,896; Sept. 15.

Lesher, Samuel E., Marion, Ohio. Shock absorber. 1,823,834; Sept. 15.

Leslie, Freeland H., Chicago, Ill. Stand. 1,823,616; Sept. 15.

Levitt, David D., Rochester, N. Y. Game apparatus. 1,822,946; Sept. 15.

Levy, Arthur S., Birmingham, Ala. Toothbrush holder. 1,823,153; Sept. 15.

Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)

Lindahl, Anders. (See Luttropp, Conrad, assignor.)

Lippert, Leo H. (See Scriven, G. F., and Lippert.)

Lipschutz, Samuel, Brooklyn, N. Y. Ink carrying reservoir. 1,822,897; Sept. 15.

Little, George, Stamford, Conn. Wire stretcher. 1,823,054; Sept. 15.

Lloyd, D. E., trustee, et al. (See Ferguson, William T., assignor.)

Lloyd, William G., Lynn, Mass. Machine for candy making. 1,823,498; Sept. 15.

Locke, George A. (See Dowd, A. D., Kerr, and Locke.)

Locomotive Firebox Company. (See Smith, Emmett F., assignor.)

Lofman, Charles, Chicago, Ill., assignor to S. Karpen & Bros. Textile panel for a mattress cover. Des. 85,106; Sept. 15.

Long, Glen D., Pendleton, Oreg. Automobile radiator work stand. 1,823,204; Sept. 15.

Lorenz, Ernst, Berlin-Wilmersdorf, Germany. Excavating device. 1,823,367; Sept. 15.

Loughridge, Matthew H., Bogota, N. J. System and apparatus for the electric recording and reproducing of sound. 1,822,932; Sept. 15.

Louvier, Alexander, et al. (See Louvier, Marius L., assignor.)

Louvier, Marius L., assignor of twenty-three and three-fourths per cent to S. Louvier, twenty-three and three-fourths per cent to A. Louvier and five per cent to X. Christ, Port Arthur, Tex. Boat propelling unit. 1,823,109; Sept. 15.

Louvier, Sully, et al. (See Louvier, Marius L., assignor.)

Lower, William W. (See Marx, J. A., and Lower.)

Lucius, Albin A., South Orange, assignor to The Central Stamping Company, Newark, N. J. Watering can for filling automobile radiators. 1,823,276; Sept. 15.

Lucy, Thomas A., assignor to Ingalls Steel Products Company, Birmingham, Ala. Apparatus for the manufacture of welded structures. 1,823,551; Sept. 15.

Ludwig, Hans, Homburg vor der Hohe, assignor of one-half to Stempelwerk Gesellschaft mit beschrankter Haftung, Fechenheim-Frankfort-on-the-Main, Germany. Shock absorber. 1,823,835; Sept. 15.

Lueltke, Max A. G., Weehawken, N. J., and H. Hoffmann, New York, N. Y. Embossing machine. 1,823,110; Sept. 15.

Lum, George F., Detroit, Mich. Fire hose nozzle. 1,823,277; Sept. 15.

Lum, George R., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wall mounting for a hand telephone. Des. 85,107; Sept. 15.

Lupton's, David, Sons Company. (See Sheard, J. H., and Getty, assignors.)

Lusse Bros., Inc. (See Lusse, Robert J., assignor.)

Lusse, Robert J., assignor to Lusse Bros., Inc., Philadelphia, Pa. Bumper construction. 1,823,617; Sept. 15.

Luttropp, Conrad, assignor of one-half to Anders Lindahl, Stockholm, Sweden. Calculating machine. 1,823,552; Sept. 15.

Lutz, George, Rocky River, Ohio, assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del. Making the piperidine salt of pentamethylene-dithio-carbamic acid. 1,823,409; Sept. 15.

Lyon Metal Products, Incorporated. (See Petritsch, Joseph, assignor.)

Lyth, John J., Valleyfield, Quebec, Canada. Apparatus for correcting displacement of weft threads in cloth. 1,823,205; Sept. 15.

Mabey, Charles W., Indianapolis, Ind. Peanut dispenser. Des. 85,108; Sept. 15.

MacDonald, William A., Little Neck, and F. E. Johnston, Flushing, N. Y., assignors to Hazeltine Corporation, Jersey City, N. J. Shielding for radio-frequency amplifiers. 1,823,327; Sept. 15.

Mader, Joseph, assignor to S. L. Allen & Co., Inc., Philadelphia, Pa. Leaf guard for rotary cultivators. 1,822,993; Sept. 15.

Madsen, Charles P., New York, N. Y., assignor, by mesne assignments, to W. W. Varney, Baltimore, Md. Wave reproducing device and process concerning the same. 1,823,457; Sept. 15.

Magill, Donald G., Chicago, Ill., assignor to American Can Company, New York, N. Y. Fiber cracker caddy. 1,823,055; Sept. 15.

Magnuson, John J., Waynesboro, Pa. Lubricating tip and employing the same. 1,823,618; Sept. 15.

Maguire, Edward J., Brooklyn, N. Y., assignor to The Grasselli Chemical Company, Cleveland, Ohio. Preparing animal skins for tanning. 1,822,898; Sept. 15.

Maher, Charles A., Tacoma, Wash. Container for paste tubes. 1,823,206; Sept. 15.

Maickel, Joseph. (See Dyas, R. L., and Maickel.)

Maier, George E., Los Angeles, Calif. Fluid induction device. 1,823,154; Sept. 15.

Malls, Harry, Philadelphia, Pa. Safety pad for shipping radio sets and the like. 1,822,899; Sept. 15.

Malm, Carl J. (See Clarke, H. T., and Malm.)

Malone, Adolph W., Fillmore, Utah, assignor of one-third to A. H. Vestal, Anderson, Ind., and one-third to E. S. Healy, New York, N. Y. Pole. Re18,196; Sept. 15.

Mangin, James, New Brunswick, N. J. Hanging fixture connecter. 1,823,619; Sept. 15.

Maranville, Harvey F., assignor to The General Tire & Rubber Company, Akron, Ohio. Forming tires. 1,823,566; Sept. 15.

Marburg, Hans, Berlin-Halensee, assignor to Telephon-Apparate Fabrik E. Zwietusch & Co., G. m. b. H., Berlin-Charlottenburg, Germany. Cartridge separating device for pneumatic tube plants. 1,823,056; Sept. 15.

Marbury, Ralph E., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Self-clearing fused sectionalized capacitor. 1,823,328; Sept. 15.

Marbury, Ralph E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fused sectionalized condenser. 1,823,368; Sept. 15.

Marchant, Guy O., et al. (See Walker, Jay P., assignor.)

Markowitz, Louis M., San Francisco, Calif. Pencil attachment. 1,822,994; Sept. 15.

Markowitz, Louis, Indianola, Pa. Mechanical toy. 1,823,749; Sept. 15.

Marlin-Rockwell Corporation. (See Barish, Thomas, assignor.)

Marrison, Warren A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Piezo electric device. 1,823,329; Sept. 15.

Marshall, Claude. (See Pearson, L. H., and Marshall.)

Marshall, Dorothy W. (See Jones, G., and Marshall.)

Marshall, Hamilton L. J., Montgomery, Ala. Comb. 1,823,850; Sept. 15.

Martin, Frederick C., assignor to Eastman Kodak Company, Rochester, N. Y. X-ray fluorescent screen mounting. 1,823,278; Sept. 15.

Martin, Jacob F., Bellevue, Ohio. Foldable luggage carrier. 1,822,975; Sept. 15.

Martin, John W., Humble, Tex. Bit. 1,823,567; Sept. 15.

Marx, Carl, Berlin, Germany. Lace for footwear. 1,823,057; Sept. 15.

Marx, Julius A., Altoona, and W. W. Lower, Tyrone, Pa. Storm or windproof sign board. 1,823,404; Sept. 15.

Mas, George N., Washington, D. C., assignor, by mesne assignments, to J. T. Dowling and G. R. Sappington, trustees. Bottle. Des. 85,109; Sept. 15.

Maschinenfabrik Rüti vormals Caspar Honegger. (See Egli, Ernst, assignor.)

Mathieson, Carl O., Highland Park, Mich. Combination land and water vehicle. 1,823,207; Sept. 15.

Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Splicer. 1,823,330; Sept. 15.

Matthews, Marian A., Newburgh, N. Y. Bedspring. 1,823,836; Sept. 15.

Manck, Victor, Merion, Pa. Gas burner. 1,823,111; Sept. 15.

Maul, Henry C., assignor to Detroit-Michigan Stove Company, Detroit, Mich. Gas stove. Des. 85,110; Sept. 15.

Maxwell, John S., San Diego, Calif. Airfoil. 1,822,976; Sept. 15.

Mayer China Company. (See Mayer, Walter S., assignor.)

Mayer, Herbert G., Glencoe, assignor to Reliance Manufacturing Company, Chicago, Ill. Child's legging pants. 1,823,458; Sept. 15.

Mayer, Walter S., Beaver, assignor to Mayer China Company, Beaver Falls, Pa. Plate or similar article. Des. 85,111; Sept. 15.

Mayo, Frank, and F. L. Fraizer, Troy, Ohio. Breaker bar for gummed paper and the like. 1,823,620; Sept. 15.

McArdle, Michael W., Chicago, Ill. Sheath for electric warming pads. 1,823,155; Sept. 15.

McCarthy, Edward F., assignor to Chicago Pump Company, Chicago, Ill. Fluid displacement pmup. 1,823,459; Sept. 15.

McCarthy, John J., Malden, Mass. Internal combustion engine. 1,823,500; Sept. 15.

McCulloch, Noble, Oakland, Calif. Suspenders. 1,823,369; Sept. 15.

McDowell, Lamont A., and O. F. Graebner, Detroit, Mich., assignors to The Murray Corporation, of America. Vehicle body construction. 1,823,156; Sept. 15.

McGauley, Walter G., New York, N. Y. Toothbrush. Des. 85,112; Sept. 15.

McGinnis, Basil W., Birmingham, Ala. Flange lubricator. 1,823,157; Sept. 15.

McIntyre, David A., assignor of one-half to E. L. Mueller, Newark, N. J. Page numbering sheets for books. 1,823,692; Sept. 15.

McIntyre, Thomas A., San Francisco, Calif. Automobile actuating mechanism. 1,823,208; Sept. 15.

McLaughlin, Herold L. (See McLaughlin, Wilson L. and H. L.)

McLaughlin, Wilson L. and H. L., assignors of one-fourth to E. L. Twining, Des Moines, Iowa. Fabric separator. 1,823,693; Sept. 15.

McMartin, William J., and L. S. Gunderman, Pittsburgh, Pa. Mechanical exercising device of the motor driven type. 1,823,568; Sept. 15.

McMullen, Maurice W., Waterloo, and H. P. Hansen, Mason City, Iowa. Antirobbery machine. 1,823,750; Sept. 15.

McNeil, James S., Detroit, Mich. Automobile traveling road map device. 1,823,209; Sept. 15.

McRoberts, Donal C., Detroit, assignor to Morgan & Wright, Detroit, Mich. Holland cloth and its manufacture. 1,823,112; Sept. 15.

McWhirter, William C., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Machine for controlling railway traffic governing apparatus. 1,823,058; Sept. 15.

Meem, James C., Brooklyn, N. Y. Conveyer apparatus. 1,823,370; Sept. 15.

Meier, Charles. (See Wettig, T. A., and Meier.)

Meissner, William P., Cuero, Tex. Portable grinding and resurfacing device. 1,823,371; Sept. 15.

Mellano, Aimable V., Thames Ditton, England. Pneumatic seat, cushion and the like. 1,823,569; Sept. 15.

Mercil Plating Equipment Company. (See O'Neill, William J., assignor.)

Merriam, Henry F., West Orange, N. J., assignor to General Chemical Company, New York, N. Y. Recovering sulphur dioxide from exit gas. 1,823,372; Sept. 15.

Merrick, Frank W., Boston, Mass. Sewing machine and the like. 1,823,059; Sept. 15.

Messier, George L. R. J., Montrouge, France. Brake thrust distributor. 1,822,900; Sept. 15.

Messinger, Lester H., jr., assignor to The Black Rock Manufacturing Company, Bridgeport, Conn. Rubber-cutting machine. 1,823,501; Sept. 15.

Messter, Oskar, Dahlen, near Berlin, Germany. Roll-film camera. 1,823,751; Sept. 15.

Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Conduit fittings. 1,823,553; Sept. 15.

Methudy Automatic Lighter Co. (See Methudy, Carl E., assignor.)

Methudy, Carl E., St. Louis, Mo., assignor to Methudy Automatic Lighter Co., East St. Louis, Ill. Gas burner. 1,823,460; Sept. 15.

Methudy, Carl E., St. Louis, Mo., assignor to Methudy Automatic Lighter Co., East St. Louis, Ill. Ignition device for gas burners. 1,823,621; Sept. 15.

Metropolitan Engineering Company. (See Murray, T. E., and Lawrence, assignors.)

Mewborne, Robert G., assignor to Consumers Tobacco Company, Inc., Albuquerque, N. Mex. Treating tobacco material and apparatus therefore. 1,823,554; Sept. 15.

Meyer Mineral Separation Company. (See Meyer, Ralph F., assignor.)

Meyer, Ralph F., Freeport, assignor to Meyer Mineral Separation Company, Pittsburgh, Pa. Metallurgical process. 1,822,995; Sept. 15.

Meyers, Sidney E. (See Jewett, J. E., and Meyers.)

Meyer, Marcus, Philadelphia, Pa. Acoustic material. 1,823,405; Sept. 15.

Michelin, Marcel, Staten Island, assignor to Pinaud Incorporated, New York, N. Y. Container for toilet powder. 1,823,861; Sept. 15.

Michelson, Carl H., Abo, Finland. Refining the soap floating on the waste-liquors obtained in the manufacture of sulphate- or sodium cellulose as well as sulphite waste liquor. 1,823,752; Sept. 15.

Miessner, Benjamin F., South Orange, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Method of and apparatus for changing voltage. 1,823,837; Sept. 15.

Milette, Joseph A., Montreal, Quebec, Canada. Wind musical instrument. 1,823,838; Sept. 15.

Miley, Frank S. (See Jones, H. W., and Miley.).

Miller, Charles A., New York, N. Y. Safety razor. 1,823,839; Sept. 15.

Miller, Dewey M., and G. D. Thomas, Tralee, W. Va.; said Thomas assignor to said Miller. Method and apparatus for testing and truing emergency valves of triple valves. 1,823,279; Sept. 15.

Miller, John M., assignor to Owens Development Corporation, New York, N. Y. Compensating governor. 1,823,280; Sept. 15.

Miller, Kenneth W. (See Halperin, H., and Miller.)

Miller, Paul, Chicago, Ill. Envelope. 1,823,114; Sept. 15.

Miller, Robert A., Plainfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wave transmission system. 1,823,659; Sept. 15.

Miller, William, Dunston-on-Tyne, and H. T. Lam, Newcastle-on-Tyne, England. Free wheel clutch for motor vehicles and the like. 1,823,113; Sept. 15.

Milne, Winford G. (See Elliott, W. N., and Milne.)

Mims, G. L. (See Pope, Turner T., assignor.)

Miner, W. H., Inc. (See O'Connor, John F., assignor.)

Mirick, Carlos B., Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Electrical balance circuit. 1,822,996; Sept. 15.

Mitchell, Donald L., Indianapolis, Ind. Accelerator operating means. 1,823,622; Sept. 15.

Mittasch, Alwin, Mannheim, W. Frankenburger, and G. Wietzel, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of unsaturated hydrocarbons. 1,823,503; Sept. 15.

Mix, Charles M. (See Bowyer, Horace A., assignor.)

Mogford, Edmund C., and G. Spatta, assignors to Clark Equipment Company, Buchanan, Mich. Axle and making the same. 1,823,158; Sept. 15.

Molins, Walter E., London, England. Cigarette making machinery. 1,823,281; Sept. 15.

Monckmeier, Gustav C., Tipton, Iowa. Bearing cap facer. 1,823,461; Sept. 15.

Monson, Louis T. (See De Groote, M., and Monson.)

Moore, Thomas M., Toronto, Ontario, Canada. Three way envelope. 1,822,997; Sept. 15.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,823,694; Sept. 15.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,823,695; Sept. 15.

Mooshy, George, Chicago, Ill. Single control combination hot and cold water supply faucet. 1,823,599; Sept. 15.

Morgan Construction Company. (See Crosby, Fred B., assignor.)

Morgan Construction Company. (See Keller, Alfred R., assignor.)

Morgan & Wright. (See McRoberts, Donal C., assignor.)

Morin, Leon J., Taunton, Mass. Automobile curtain control. 1,823,623; Sept. 15.

Morris, Harold H., Newark, N. J., assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Lithopone manufacture. 1,822,933; Sept. 15.

Morriss, Edward T., Letchworth, England. Perambulator and the like. 1,823,115; Sept. 15.

Morsbach, Kurt, Berlin-Lichterfelde, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Photographic camera. 1,823,462; Sept. 15.

Morse Chain Company. (See Morse, Frank L., assignor.)

Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Chain drive. 1,823,696; Sept. 15.

Moser, Ludwig. (See von Forster, H., and Moser.)

Moss, Sanford A. (See Puffer, S. R., and Moss.)

Moure, Ramiro, Los Angeles, Calif., assignor to A. Backus, jr., & Sons, Detroit, Mich. Baker's peel. 1,823,159; Sept. 15.

Mowers, Walter. (See Ackerman, E., and Mowers.)

Mueller, Emil L. (See McIntyre, David A., assignor.)

Muhlfeld, Henry J., New York, N. Y. Typewriter fastener. 1,823,753; Sept. 15.

Müller, Carl, Mannheim, and G. Wietzel and E. Galle, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Conversion of solid fuels. 1,823,116; Sept. 15.

Müller-Cunradi, Martin. (See Krauch, C., and Müller-Cunradi.)

Munk, Alvin N. (See Wickman, L. A., and Munk.)

Munsingwear Corporation, The. (See Sekey, Margaret, assignor.)

Münz, Ferdinand, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Fatty acid derivatives and making same. 1,822,977; Sept. 15.

Münz, Ferdinand, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Making fatty acid derivatives. 1,822,978; Sept. 15.

Münz, Ferdinand, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Esterfied fatty acid derivatives and preparing same. 1,622,979; Sept. 15.

Murdock, William J., Chelsea, Mass., assignor to Hazeltine Corporation, Jersey City, N. J. Vacuum tube socket. 1,823,331; Sept. 15.

Murray Corporation, The. (See McDowell, L. A., and Graebner, assignors.)

Murray, John F., et al., executors. (See Murray, T. E., and Lawrence.)

Murray, Joseph B., et al., executors. (See Murray, T. E., and Lawrence.)

Murray, Thomas E., jr., et al., executors. (See Murray, T. E., and Lawrence.)

Murray, Thomas E., deceased, Brooklyn, and J. H. Lawrence, New York, N. Y.; said Lawrence assignor to said Murray; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors, assignors to Metropolitan Engineering Company. Furnace. 1,823,117; Sept. 15.

Murrill, Paul I., Plainfield, N. J., assignor to R. T. Vanderbilt Company, Inc., New York, N. Y. Stabilization of fatty acids and their derivatives. 1,822,934; Sept. 15.

Mutscheller, Arthur, New York, N. Y., assignor to Wappler Electric Company, Inc. Constant high potential generator. 1,823,463; Sept. 15.

Myers, Benjamin C., Trenton, N. J. Advertising novelty. Des. 85,113; Sept. 15.

Myers, George D., Cincinnati, and S. Richmond, Batavia, assignors to The Edwards Manufacturing Company, Cincinnati, Ohio. Shank support. 1,823,282; Sept. 15.

Naamlooze Vennootschap Maatschappij tot Veraardiging van Snijmachines volgens Van Berkel's Patent en van andere Wehktuigen. (See Van Buyn, Adrianus, assignor.)

Nachman, Fred A. (See Suckoff, Louis A., assignor.)

Nadeau, Albert N. (See Jones, L. E., and Nadeau.)

Nagler, Forrest, Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic apparatus. 1,823,624; Sept. 15.

Nanstiel, William F., et al. (See Jones, William R., assignor.)

Nash, John M., Milwaukee, Wis. Finishing and polishing machine. 1,823,625; Sept. 15.

National Aniline & Chemical Co. (See Jewett, J. E., and Meyers, assignors.)

National Automatic Doughnut Machine Company. (See Roehl, F. M., and Toews, assignors.)

National Automatic Tool Company, The. (See Galloway, Robert M., assignor.)

National Carbon Company. (See Jones, H. W., and Miley, assignors.)

National Folding Box Company. (See Reichel, Ferdinand, assignor.)

National Laundry Machinery Company. (See Reeps, Charles O., assignor.)

National Supply Company, The. (See Hill, Rowland F., assignor.)

National Supply Company, The. (See Picard, John B., assignor.)

Naugatuck Chemical Company, The. (See Nikitin, Alexander A., assignor.)

Naul, James M., Plainfield, assignor to Diehl Manufacturing Company, Elizabeth, N. J. Electric phonograph motor. 1,823,555; Sept. 15.

Nehin, Harry E., Buffalo, N. Y., assignor of one-half to E. Westbrook, Waco, Tex. Rotary lifting jack and wheel. 1,823,660; Sept. 15.

Neustiehl, Charles H., Huntington Station, N. Y. Handcuffs. 1,823,697; Sept. 15.

Neuhausen, Oscar E. (See White, H. E., Hess, and Neuhausen.)

Neuman, Jacob J., New York, N. Y. Bag filling apparatus. 1,823,283; Sept. 15.

Neureuther, Andrew H., assignor to Western Clock Company, Peru, Ill. Electric driving mechanism. 1,823,556; Sept. 15.

Newe, Robert A., Houston, Tex. Electromechanical annunciator. 1,823,332; Sept. 15.

Newmann, John, Glendale, C. G. Hensley, receiver, New York, N. Y. Radial motor. 1,823,464; Sept. 15.

Newton, Roy S. (See Weller, J. H., and Netwon.)

Nichols Copper Company. (See Connolly, George E., assignor.)

Nicholson, Alexander M., New York, assignor, by mesne assignments, to Federal Telegraph Company. Eccentric drive cone loud speaker. 1,823,118; Sept. 15.

Nikitin, Alexander A., Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Preservation of latex. 1,823,119; Sept. 15.

Nitta, Chojiro, Osaka, Japan. Making leather. 1,823,754; Sept. 15.

Noblitt-Sparks Industries, Inc. (See Booth, Earl C., assignor.)

Noelting, William H., assignor to Faultless Caster Company, Evansville, Ind. Antifriction caster wheel and support. 1,822,998; Sept. 15.

Nolte, Herman L., Terre Haute, Ind. Display fixture. 1,823,840; Sept. 15.

Nordlander, Birger W., Schenectady, N. Y., assignor to General Electric Company. Treating sulphur dioxide gas. 1,823,698; Sept. 15.

Northwest Engineering Corporation. (See Orloff, Arthur, assignor.)

Norton, Harold F., Newport News, and J. W. Owens, Cradock, Va. Structural steel assembly and producing same. 1,823,699; Sept. 15.

Novotny, Johann, Karlsbad, Czechoslovakia. Device for attaching saving means to sunken submarines. 1,823,862; Sept. 15.

Nyman, Alexander, East Orange, N. J., assignor to Dubiller Condenser Corporation. Electrical insulator. 1,823,502; Sept. 15.

O'Brien, Glen, Troy, Kans. Water cooling system. 1,823,661; Sept. 15.

O'Connor, Arthur F., assignor to Union Railway Equipment Company, Chicago, Ill. Hand brake. 1,823,570; Sept. 15.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Door construction. 1,823,755; Sept. 15.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,823,756; Sept. 15.

O'Dell, Arthur. (See Peaden, William H., assignor.)

Ohio Brass Company, The. (See Austin, Arthur O., assignor.)

Ohio Brass Company, The. (See Chandler, Homer P., assignor.)

Ohio Brass Company, The. (See Matthes, Samuel S., assignor.)

Ohio Brass Company, The. (See Rupp, Herbert E., assignor.)

Ohlson, Hjalmar B., Stockholm, Sweden. Page lock for printers' forms. 1,823,060; Sept. 15.

Ohmer, Henry B. (See Apple, V. G., and Ohmer.)

Ohmer Mare Register Company. (See Apple, V. G., and Ohmer, assignors.)

Oilgear Company, The. (See Ferris, Walter, assignor.)

Olson, George E., Hibbing, Minn. Brake beam fulcrum. 1,823,504; Sept. 15.

Oneida Community, Limited. (See Tauschek, Otto, assignor.)

O'Neill, Henry W., Elmhurst, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling and communication system. 1,823,120; Sept. 15.

O'Neill, Thomas, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Ribbon shirring device for sewing machines. 1,823,505; Sept. 15.

O'Neill, William J., River Forest, assignor to Mercil Plating Equipment Company, Chicago, Ill. Clamp. 1,823,465; Sept. 15.

Orloff, Arthur, assignor to Northwest Engineering Corporation, Green Bay, Wis. Excavator. 1,823,662; Sept. 15.

O'Rourke, John F., New York, N. Y. Subway and tunnel. 1,823,757; Sept. 15.

Orswell, Israel C., assignor to The Amrad Corporation, Medford, Mass. Electrical tube. 1,823,373; Sept. 15.

Osborne, Edmund B., Montclair, N. J. Securing register of impressions in web fed printing machines. 1,822,902; Sept. 15.

Oskow, Louis, Brooklyn, assignor of one-half to M. Kirschstein, Brooklyn, N. Y. Wheeled toy. 1,823,663; Sept. 15.

Ost, Karl. (See Balle, G., Lange, and Ost.)

Oswald, William S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Keying punchings. 1,823,333; Sept. 15.

Otis Elevator Company. (See Boedtcher, Franz A., assignor.)

Otto, Carl, Essen-on-the-Ruhr, Germany. Device for sealing coke oven closures. 1,823,121 Sept. 15.

Otto, Marius P. (See Crespi, E., and Otto.)

Owen, Frank J., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,823,284; Sept. 15.

Owens Development Corporation. (See Miller, John M., assignor.)

Owens, Frank R., Beaver Crossing, Nebr. Safety device for aeroplanes. 1,823,758; Sept. 15.

Owens, James W. (See Norton, H. F., and Owens.)

Pacific Pump Works. (See Weis, Arthur R., assignor.)

Packard Motor Car Company. (See Baker, William H., assignor.)

Packard Motor Car Company. (See Christman, John M., assignor.)

Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)

Packard Motor Car Company. (See Tibbetts, Milton, assignor.)

Packard Motor Car Company. (See Vincent, Jesse G., assignor.)

Palme, Josef F., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Looper operating mechanism for sewing machines. 1,823,506; Sept. 15.

Palmer, John, San Francisco, Calif. Holder for neon tubes and the like. 1,822,980; Sept. 15.

Paper Mill Laboratories, Inc. (See Wells, Sidney D., assignor.)

Papouchis, Christ, Far Rockaway, N. Y. Game apparatus. 1,823,507; Sept. 15.

Parker, Riley H., North Eastham, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,822,903; Sept. 15.

Partlow, Howard W., Utica, N. Y. Governor for gas burning heaters. 1,823,122; Sept. 15.

Pascarella, Anthony J., West Englewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Circuit maker and breaker. 1,823,664; Sept. 15.

Paul, William, Beecher, assignor of one-half to William E. Pratt Mfg. Co., Chicago, Ill. Air gun shell. 1,823,160; Sept. 15.

Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Draft attachment for agricultural implements. 1,823,508; Sept. 15.

Paulett, William H., and C. Gillings, Liverpool, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Telephone system. 1,823,665; Sept. 15.

Payne, Clarence Q., Shippan Point, Stamford, Conn., assignor of one-fourth to J. G. Hall, New York, N. Y. Electromagnetic clutch. 1,823,334; Sept. 15.

Payne, Walter B., Rochester, assignor to The Todd Company, Rochester, N. Y. Machine for applying characters to sheets or forms. 1,823,161; Sept. 15.

Payson Manufacturing Company, The. (See Lackey, Robert A., assignor.)

Peaden, William H., assignor of two-thirds to A. O'Dell, Tulsa, Okla. Lubricating oil dispenser. 1,823,406; Sept. 15.

Peale-Davis Company. (See Davis, Kenneth, assignor.)

Pearson, John T., assignor to Crouse-Hinds Company, Syracuse, N. Y. Conduit coupling. 1,823,061; Sept. 15.

Pearson, Laurence H., and C. Marshall, Nottingham, England. Electrical reproduction of sound from records. 1,823,162; Sept. 15.

Peller, Karl E., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn. Two table glass forming machine. 1,823,123; Sept. 15.

Penza, Frederick, assignor of one-half to A. Chiapparelli, Broklyn, N. Y. Manufacture of macaroni. 1,822,904; Sept. 15.

Peskar, Emil, New York, N. Y. Hydraulic friction device for hoisting machines. 1,823,626; Sept. 15.

Peters, Claudius, Hamburg, Germany. Pulverizing mill. 1,822,999; Sept. 15.

Peters, Spencer M., and A. B., Rochester, Springfield, Ill.; said Rochester assignor to said Peters. Replaceable ladder rung. 1,823,509; Sept. 15.

Peters, Spencer M., and A. B. Rochester, Springfield, Ill.; said Rochester assignor to said Peters. Extension ladder hook. 1,823,510; Sept. 15.

Petersen, Svend, Askov, Minn., Mail box attachment. 1,823,759; Sept. 15.

Peterson, Harold O., Riverhead, N. Y., assignor to Radio Corporation of America. Tuning means. 1,823,666; Sept. 15.

Peterson, John E., Irvington, assignor to Van Vlaanderen Machine Company, Paterson, N. J. Button breaker roller. 1,823,627; Sept. 15.

Petrasch, Kurt. (See Kockritz, A. T., and Petrasch.)

Petritsch, Joseph, Chicago Heights, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Drawer construction. 1,823,285; Sept. 15.

Phillips Petroleum Company. (See Hiatt, William G., assignor.)

Phillips, Stephen W., Prompton, Pa. Vehicle jack. 1,823,286; Sept. 15.

Phoenix-Hermetic Company. (See Crabbe, Lindsay T., assignor.)

Picard, John B., assignor to The National Supply Company, Toledo, Ohio. Pumping jack. 1,823,163; Sept. 15.

Pickard, Joseph A. (See Hele-Shaw, H. S., and Pickard.)

Piere, Mathias, Heidelberg, Geormany, assignor to I.-G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Geormany. Manufacture of methyl alcohol and other oxygenated organic compounds. 1,823,468; Sept. 15.

Pierce, Elmer, Brazil, Ind. Chain or cable jack. 1,823,760; Sept. 15.

Pietracatella, Carmine, New York, N. Y. Trouser seam pressing machine. 1,823,628; Sept. 15.

Pinaud Incorporated. (See Michelin, Marcel, assignor.)

Pittoni, Louis E., Jamaica, N. Y., assignor to The Rome Company, Inc. Tufted mattress. 1,823,700; Sept. 15.

Pleukharp, Claude W., and H. Raynes, San Francisco, Calif., assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Glass feeding machine. 1,823,062; Sept. 15.

Pohl, Ernest F., assignor to Automatic Fire Extinguisher and Alarm Corporation, St. Louis, Mo. Combined fire extinguisher and alarm. 1,823,219; Sept. 15.

Pollard, Willard L. (See Dodge, A. Y., and Pollard.)

Pope, Turner T., assignor of one-half to G. L. Mims, Houston, Tex. Chuck for paper rolls. 1,823,164; Sept. 15.

Porter, James F., assignor to The Western Union Telegraph Company, New York, N. Y. Hand tape moistener. 1,823,761; Sept. 15.

Porter, Joseph A., assignor to Fairbairn Lawson Combe Barbour Limited, Hope Foundry, Leeds, England. Doffing mechanism for flyer spinning, doubling, twisting and he like machines. 1,823,374; Sept. 15.

Posselt, Edward J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Phase failure and phase reversal protective devide. 1,823,211; Sept 15.

Potter, Duane L., Dalton, Pa. Police stick. 1,823,407; Sept. 15.

Potter, Floyd J., Detroit, and E. L. Bailey, Birmingham, assignors to General Motors Corporation, Detroit, Mich. Shaper guard. 1,823,375; Sept. 15.

Powell, Albert C., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Trunking system. 1,823,667; Sept. 15.

Powelson, Wilfred V. N., and W. Travell, New York, N. Y. Mooring and housing airships. 1,823,063; Sept. 15.

Powelson, Wilfrid V. N., New York, N. Y., and W. Travell, San Bernardino, Calif. Mooring mast for airships. 1,823,287; Sept. 15.

Powelson, Wilfrid V. N., New York, N. Y., and W. Travell, San Bernardino, Calif. Stabilization of airships. 1,823,288; Sept. 15.

Powelson, Wilfrid V. N., New York, N. Y., and W. Travell, San Bernardino, Calif. Housing equipment for aircraft. 1,823,289; Sept. 15.

Powelson, Wilfrid V. N., New York, N. Y., and W. Travell, San Bernardino, Calif. Handling aircraft. 1,823,466; Sept. 15.

Pratt & Whitney Company. (See Garrison, Orlando, assignor.)

Pratt & Witney Company. (See Thacher, John J., assignor.)

Pratt, Arthur D., short Hills, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler. 1,823,701; Sept. 15.

Pratt, Williams E., Mfg. Co. (See Paul, William, assignor.)

Prawalsky, Frederick P., deceased, Swanville, M. Prawalsky, administratrix, assignor of one-third to P. P. Tyvoll, Minneapolis, and one-third to H. L. Fischer, St. Paul, Minn. Window screen for closed automobiles. 1,823,290; Sept. 15.

Prawalsky, Martha, administratrix. (See Prawalsky, Fredrick P.)

Priori, Marino, Indianapolis, Ind. Illuminable votive device. 1,823,000; Sept. 15.

Proctor, John W., Pittsburgh, Pa. Reel. 1,823,165; Sept. 15.

Prosperity Company Inc., The. (See Davis, Ernest, assignor.)

Prosperity Company, Inc., The. (See Steel, Harry A., assignor.)

Prosperity Company Inc., The. (See Winnewisser, Emil A., assignor.)

Prosser, Robert H., San Francisco, Calif., assignor, by mesne assignments, to Cabrew, Incorporated, Carson City, Nev. Resilient wheel. 1,823,166; Sept. 15.

Prouty, Charles N., Spencer, Mass. Insole. 1,822,981; Sept. 15.

Prunetti, Emilio, Oakland, Calif. Toy. 1,823,064; Sept. 15.

Puffer, Samuel R., and S. A. Moss, Lynn, Mass., assignors to General Electric Company. Liquid tachometer. 1,823,841; Sept. 15.

Pullclean Manufacturing Corporation. (See Addler, Joseph H., assignor.)

Pulliam, Ira L., Huntington Park, assignor to Richfield Oil Company of California, Los Angeles, Calif. Method and apparatus for washing vehicles. 1,823,167; Sept. 15.

Puritan Malt Extract Co. (See Greenlee, Walter R., assignor.)

Putnam, Mark E. (See Britton, E. C., Williams, and Putnam.)

Pym, Arthur F., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Relasting machine. Re18,186; Sept. 15.

Pyrene-Minimax Corporation. (See Burmeister, Hans, assignor.)

Quendt, Barnhard, Essen, Germany. Preliminary tanning process. 1,823,467; Sept. 15.

Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Automatic control attachment. 1,823,430; Sept. 15.

Radio Corporation of America. (See Buckle, Horace L. T., assignor.)

Radio Corporation of America. (See Messner, Benjamin F., assignor.)

Radio Corporation of America. See Peterson, Harold O. assignor.)

Radio Corporation of America. (See Ringel, Abraham, assignor.)

Radio Corporation of America. (See Shapiro, Lazarus, assignor.)

Radio, Inc. (See Trogner, Arthur M., assignor.)

Radium Emanation Corporation, The. (See Cervi, Armando, assignor.)

Raney, Estel C., Columbus Ohio. Thermic control device. 1,823,511; Sept. 15.

Rassier, Frank, Minneapolis, Minn. Razor blade holder. 1,823,001; Sept. 15.

Rathmann, Paul, assignor to firm Elektrotechnische Fabrik Schmidt & Co., Gesellschaft m. b. H., Bodenbach, Czechoslovakia. Electric reflector lamp. 1,823,762. Sept. 15.

Rathmann, Paul, assignor to firm Elektrotechnische Fabrik Schmidt & Co., Gesellschaft M. m. H., Bodenbach A. E., Czechoslovakia. Electric reflector lamp. 1,823,763; Sept. 15.

Raynes, Harry. (See Pleukharp, C. W., and Raynes.)

Read, Balfour, Detroit, Mich., assignor to Eaton Spring Corporation, Massilion, Ohio. Spring construction. 1,823,168; Sept. 15.

Read, Harry, assignor to Read Machinery Company, York, Pa. Mixing machine. 1,823,571; Sept. 15.
Read Machinery Company. (See Read, Harry, assignor.)
Reed, William P., Chicago, Ill. Dispensing container. 1,823,572; Sept. 15.
Reeps, Charles O., Chicago, Ill., assignor, by mesne assignments, to National Laundry Machinery Company, Inc., Wilmington, Del. Ironing machine. 1,823,469; Sept. 15.
Rees, Alice M., Tulsa, Okla. Wheel rim. 1,823,842; Sept. 15.
Reeves, Paul B., assignor to Reeves Pulley Company, Columbus, Ind. Variable speed unit. 1,822,935; Sept. 15.
Reeves Pulley Company. (See Reeves, Paul B., assignor.)
Regan, James J., Los Angeles, Calif. Steam boiler. 1,823,573; Sept. 15.
Reich, Frank F., Rapid City, S. Dak. Hair clipper. 1,823,764; Sept. 15.
Reich, Gustave T., Anaheim, Calif. Apparatus for the dehydration and low temperature carbonization of waste saccharine material. 1,823,408; Sept. 15.
Reichel, Ferdinand, assignor to National Folding Box Company, New Haven, Conn. Mailing carton. 1,822,936; Sept. 15.
Reihlen, Hans, Karlsruhe, Germany, assignor to M. M. Adler, Newark, N. J. Pyrotechnic device. 1,823,376; Sept. 15.
Reliance Manufacturing Company. (See Mayer, Herbert G., assignor.)
Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)
Re Nois Put Bracket Corporation. (See Re Nois, Roy J., assignor.)
Re Nois, Roy J., assignor to Re Nois Put Bracket Corporation, Denver, Colo. Display bracket. 1,822,905; Sept. 15.
Replogle, John R., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating unit. 1,823,002; Sept. 15.
Replogle, John R., Detroit, Mich., assignor, by mesne assignments, to The Guardian Trust Company, trustee, Cleveland, Ohio. Refrigerating unit. 1,823,003; Sept. 15.
Replogle, John R., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating unit. 1,823,004; Sept. 15.
Replogle, John R., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating unit. 1,823,124; Sept. 15.
Reynolds, James W. (See Ennis, C. E., and Reynolds.)
Rhenania-Kunheim Verein Chemischer Fabriken A. G. (See Rothe, F., and Brenek, assignors.)
Rhodes, Charles J., Wakefield, England. Process for drawing sheet metal. 1,822,906; Sept. 15.
Riall, Troy A., Silvis, Ill. Washing machine. 1,823,291; Sept. 15.
Rich Tool Company. (See Jardine, Robert, assignor.)
Richert, Paul H., Berkeley, Calif. Manufacturing sponge rubber. 1,823,335; Sept. 15.
Richfield Oil Company of California. (See Pulliam, Ira L., assignor.)
Richmond, Samuel. (See Myers, G. D., and Richmond.)
Richmond, Samuel, Batavia, assignor to The Edwards Manufacturing Company, Cincinnati, Ohio. Shoe shank support. 1,823,292; Sept. 15.
Riddell, William A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic shutter retarding mechanism. 1,823,293; Sept. 15.
Riddell, William A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic shutter setting mechanism. 1,823,294; Sept. 15.
Riddle, Napoleon B., St. Francisville, La. Curb sign or marker. 1,823,843; Sept. 15.
Riley, Champlain L., North Plainfield, N. J. Nebulizing fluids. 1,823,844; Sept. 15.
Ring, Joseph J., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic machine. 1,823,702; Sept. 15.
Ringel, Abraham, Brooklyn, N. Y., assignor to Radio Corporation of America. Loud speaker. 1,823,512; Sept. 15.
Ritnour, Luther C., Natchez, Miss. Steering rod brake for automobiles. 1,823,765; Sept. 15.
Roberts, Eugene, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah. Driving mount for gyratory centrifugals. 1,823,863; Sept. 15.
Robertson, Harry M., Cleveland, Ohio. Annealing. 1,823,629; Sept. 15.
Robertson, John H., London, England. Variable speed friction gearing. 1,823,125; Sept. 15.
Rochester, Arthur B. (See Peters, S. M., and Rochester.)
Rock Island Plow Company. (See Cathey, Frank H., assignor.)
Rock Island Plow Company, The. (See Kaupke, Lee H., assignor.)
Rodgers, Alfred A., assignor to Scully Bros. Inc., Los Angeles, Calif. Golf club boot. Des. 85,114; Sept. 15.
Roehl, Frank M., and P. J. Toews, assignors to National Automatic Doughnut Machine Company, Minneapolis, Minn. Doughnut machine. 1,823,409; Sept. 15.
Rogers, Albert J. (See Cramer, J. D., and Rogers.)
Roh, Nikolaus. (See Schmidt, O., Seydel, and Roh.)
Roalin, Victor A., Philadelphia, Pa. Separator. 1,823,470; Sept. 15.
Rohrbach Metall-Flugzeugbau G. m. b. H. (See Wagner, Herbert, assignor.)
Roller, Frank W., East Orange, N. J., assignor to Roller-Smith Company. Rail bond tester. 1,823,471; Sept. 15.
Roller-Smith Company. (See Roller, Frank W., assignor.)
Rolph, Thomas W., Newark, Ohio, assignor, by mesne assignments, to Holophane Company, Inc., New York, N. Y. Luminair. Re18,187; Sept. 15.
Rome Company, The. (See Pittoni, Louis E., assignor.)
Röper, Geo. D., Corporation. (See Hobson, Stanley H., assignor.)
Rösch, Georg, Cologne-Mulheim, and W. Bauer, Wiesdorf, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Halogenated naphthalene. 1,822,982; Sept. 15.
Ross, R. L., and Company. (See Hargreaves, William, assignor.)
Ross, William, Surbiton, England. Grizzly and screen for grading materials. 1,823,126; Sept. 15.
Rothe, Fritz, and H. Brenek, assignors to the Firm: Rhenania-Kunheim Verein Chemischer Fabriken A. G., Berlin, Germany. Manufacture of manures. 1,823,849; Sept. 15.
Rowe, George E., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn. Glassware transfer device. 1,823,574; Sept. 15.
Rowell, John T. (See Wright, J. T., and Rowell.)
Ruchie, Henry J., assignor of one-half to L. G. Gerlach, St. Paul, Minn. Hoisting clothesline pole. 1,822,907; Sept. 15.
Ruck, Richard M., Leamington, England. Gear changing apparatus. 1,823,766; Sept. 15.
Rülke, Kurt. (See Gerngross, O., and Rülke.)
Rupp, Emil, Berlin-Frohnau, Germany, assignor to General Electric Company. Light control device. 1,823,703; Sept. 15.
Rupp, Herbert E., assignor to The Ohio Brass Company, Mansfield, Ohio. Thermoelectroresponsive device. 1,823,630; Sept. 15.
Ryder, Frank P., Niagara Falls, N. Y. Double viner. 1,823,410; Sept. 15.
St. Clair, Byron W., Lynn, Mass., assignor to General Electric Company. Indicating instrument. 1,823,707; Sept. 15.
Sappington, G. Ridgely, et al., trustees. (See Mas, George N.)
Sargent & Company. (See Weller, J. H., and Newton, assignors.)
Sauer, Howard A., assignor to Eastman Kodak Company, Rochester, N. Y. Film pack construction. 1,823,295; Sept. 15.
Saunders, William C., Hinton, Iowa. Wire reeler. 1,823,212; Sept. 15.
Sawyer, Charles B., and B. Kjellgren, assignors to The Brush Beryllium Company, Cleveland, Ohio. Obtaining beryllium and aluminum compounds. 1,823,864; Sept. 15.
Scardone, Charles, Elkton, Md. Rocket. 1,823,378; Sept. 15.
Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Metal frame rheostat. 1,823,472; Sept. 15.
Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Rheostat. 1,823,473; Sept. 15.
Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Rheostat. 1,823,474; Sept. 15.
Schjolin, Eric O., Birmingham, assignor to General Motors Corporation, Detroit, Mich. Sleeve valve engine. 1,823,431; Sept. 15.
Schlichting, Frederick R. (See Stohr, Frederick W., assignor.)
Schmidt, Edward T., Blackwell, Okla. Vending pump. 1,823,379; Sept. 15.
Schmidt, Joseph F., assignor to Wheeler Company, Railroad, Pa. Press. 1,823,213; Sept. 15.
Schmidt, Otto, K. Seydel, and N. Roh, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of artificial resins. 1,823,127; Sept. 15.
Schmidtsche Heissdampf-Gesellschaft mit beschrankter Haftung. (See Hartmann, O. H., and Hanna, assignors.)
Schneider, Charles C., St. Louis, Mo. Catching device for cloth laying machines. 1,822,908; Sept. 15.
Schneider, Ernst, Vienna, J. Ehrhart, and J. Kreitner, St. Polten, near Vienna, Austria, assignors to J. M. Voith, Heidenheim-on-the-Brenz, Germany. Blade wheel with movable blade. 1,823,169; Sept. 15.
Schneider, Oscar K., assignor to Harrington & King Perforating Company, Chicago, Ill. Grille panel construction. 1,822,909; Sept. 15.
Schoelch, John W., St. Louis, Mo. Checkbook and record. 1,823,513; Sept. 15.
Schön, Karl, Wuerzburg, Germany. Method of and apparatus for unloading boats, barges, and like vessels. 1,823,172; Sept. 15.
Schori, Fritz, Wetzikon, assignor to firm Bauer A. G., Zurich, Switzerland. Cylinder lock. 1,823,411; Sept. 15.

Scheibman, Harry, Brooklyn, N. Y., assignor to Capital Lighting Fixture Company, Inc. Lighting fixture. Des. 85,116; Sept. 15.
Schroeder, Charles S., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Truck. 1,823,380; Sept. 15.
Schroeder, Hans W. C., assignor to Dragerwerk, Lubeck, Germany. Apparatus for administering anesthetic and nutrient gas under pressure. 1,823,767; Sept. 15.
Schulte, Walter B., assignor to Burgess Battery Company, Madison, Wis. Hand lantern. Des. 85,115; Sept. 15.
Schultz, Edward, Chicago, Ill. Tobacco ash receptacle. Des. 85,117; Sept. 15.
Schultz, H., & Company. (See Tacke, Louis, assignor.)
Schulz, Arthur P. (See Teller, J., and Schulz.)
Schulz, Leo, Los Angeles, Calif. Device for inserting and removing electric lamps to and from sockets. 1,823,170; Sept. 15.
Schumacher, Paul, Magdeburg, Germany. Apparatus for dyeing paper and cardboard during the manufacture on paper making machines. 1,823,845; Sept. 15.
Schwarze, Paul, Munich-Isarhohe, Germany. Detachable head for the free ends of laces. 1,823,412; Sept. 15.
Scott, Joseph E., Kiowa, Kans. Prophylactic brush. 1,823,128; Sept. 15.
Scriven, Guy F., and L. H. Lippert, Sioux Falls, S. Dak. Bed tray. 1,823,214; Sept. 15.
Scruby, Horace F., Beverly Hills, Calif. Machine for truing brake band segments. 1,823,065; Sept. 15.
Scudds, Francis M., Toronto, Ontario, Canada. Paper folding apparatus. 1,823,475; Sept. 15.
Scully Bros. Inc. (See Rodgers, Alfred A., assignor.)
Seal, William D., Des Arc, Mo. Electric lawn mower and hedge trimmer. 1,823,215; Sept. 15.
Sebring Pottery Company, The. (See Smith, Charles O., assignor.)
Secunda, William, Brooklyn, N. Y. Lock for collapsible cots. 1,823,768; Sept. 15.
Sekey, Margaret, New York, N. Y., assignor to The Munsingwear Corporation, Minneapolis, Minn. Undergarment. 1,823,296; Sept. 15.
Semet-Solvay Company. (See Knapp, Walter R., assignor.)
Seydel, Karl. (See Schmidt, O., Seydel, and Roh.)
Shakhnazarov, Armenak I., Baku, Union of Socialist Soviet Republics. Device for measuring deviations of drilled wells. 1,823,336; Sept. 15.
Shapiro, Lazarus, New York, N. Y., assignor to Radio Corporation of America. Power supply means for radio receiving apparatus. 1,823,066; Sept. 15.
Sharples Specialty Company, The. (See Clark, Lee H., assignor.)
Shaw, Arthur M., New Orleans, La. Shore protecting device. 1,823,224. Sept. 15.
Shaw, Herbert, assignor to Berger Bros. Company, Philadelphia, Pa. Gutter hanger circle. 1,823,631, Sept. 15.
Sheard, Joseph H., and H. S. Getty, assignors to David Lupton's Sons Company, Philadelphia, Pa. Window latching device. 1,823,173; Sept. 15.
Sheely, Robert R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Squirrel cage motor. 1,823,337; Sept. 15.
Sheip & Vandegrift, Inc. (See Vandegrift, Nelson M., assignor.)
Shell Petroleum Corporation. (See Carney, Samuel C., assignor.)
Shelledy, James K., Harvey, Ill. Timing device. 1,823,668; Sept. 15.
Sherwood, Carlyle J., Los Angeles, Calif. Fuel burner. 1,823,381; Sept. 15.
Shetterly, Fred F., assignor to Blue Ridge Glass Corporation, Kingsport, Tenn. Sheet glass. Des. 85,118; Sept. 15.
Shimer, Elmer S., assignor to S. J. Shimer & Sons, Inc., Milton, Pa. Cutter head. 1,823,846; Sept. 15.
Shimer, Samuel J., & Sons, Inc. (See Shimer, Elmer S., assignor.)
Shipman, Archie V., Pasadena, Calif. High chair. Des. 85,119; Sept. 15.
Shipman, Archie V., Pasedena, Calif. Table. Des. 85,120; Sept. 15.
Shrauger, Darius E., Atlantic, Iowa. Storm sash construction. 1,823,514; Sept. 15.
Siebeneichner, Hans G. (See Engelhardt, G., and Siebeneichner.)
Siemens & Halske, Aktiengesellschaft. (See Morsbach, Kurt, assignors.)
Siemens & Halske, Aktiengesellschaft. (See Thierbach, Dietwalt, assignors.)
Signal Engineering & Manufacturing Company. (See Burdick, Herbert, assignor.)
Simms, Carson W., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Manufacture of ethers of diacetone alcohol. 1,823,704; Sept. 15.
Simons, Lillius, Social Circle, Ga. Cotton seed cleaner. 1,823,575; Sept. 15.
Simplex Manufacturing Company. (See Howe, William G., assignor.)
Simpson, Frank R., Upper Darby, Pa., assignor to Westinghouse Electric & Manufacturing Company. 1,823,311; Sept. 15.
Sinclair Refining Company. (See Stafford, James G., assignor.)
Singer Manufacturing Company, The. (See Allen, Edward B., assignor.)
Singer Manufacturing Company, The. (See Hertz, Hjalmar, assignor.)
Singer Manufacturing Company, The. (See Johnson, Edwin W., assignor.)
Singer Manufacturing Company, The. (See O'Neill, Thomas, assignor.)
Singer Manufacturing Company, The. (See Palme, Josef F., assignor.)
Sirius Kleuren-Film-Maatschappij. (See Horst, Ludwig, assignor.)
Skillman, Thomas S., L. G. Freeth, and R. J. Berry, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y. Dial switching tool system. 1,823,338; Sept. 15.
Sklenar, Wenzeslaw F., London, England. Reverberatory furnace. 1,823,005; Sept. 15.
Slater, N., Company. (See Elliott, W. N., and Milne, assignors.)
Small, C. T., Manufacturing Company. (See Small, Chesley T., assignor.)
Small, Chesley T., assignor to C. T. Small Manufacturing Company, St. Louis, Mo. Filling machine. 1,823,174; Sept. 15.
Smalley, Edwin L., Whitefish Bay, assignor to Hevi Duty Electric Company, Milwaukee, Wis. Electric heater. 1,823,067; Sept. 15.
Smith, Albert K., West Orange, N. J., assignor to The Hills Brothers Company, Inc. Date pitting machine. 1,823,476; Sept. 15.
Smith, Algernon L., Birmingham, Ala., assignor to Continental Gin Company. Double action hull extractor. 1,823,477; Sept. 15.
Smith, August J., Mount Pleasant, Mich., assignor to American Enameled Products Company, Chicago, Ill. Combination soap dish and handrail. Des. 85,122; Sept. 15.
Smith, Boyd H., assignor to The Autocall Company, Shelby, Ohio. Call and dismissal apparatus. 1,823,221; Sept. 15.
Smith, Charles O., assignor to The Sebring Pottery Company, Sebring, Ohio. Plate or similar article. Des. 85,123; Sept. 15.
Smith, Christine, Des Moines, Iowa. Doll. Des. 85,124; Sept. 15.
Smith, David F., Pittsburgh, Pa. Antifreeze composition. 1,823,216; Sept. 15.
Smith, Donald H. (See Adams, E. R., Weber, and Smith.)
Smith, Earle R., Alhambra, Calif. Comb and hood mounting for carpet sweepers. 1,823,413; Sept. 15.
Smith, Emmett F., St. Louis, Mo., assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler fire box. 1,822,937; Sept. 15.
Smith, George W. (See Jaunson, A. J., and Smith.)
Smith, Harry F., assignor to The Gas Research Company, Dayton, Ohio. Gas generating apparatus. 1,823,382; Sept. 15.
Smith, Harry R., and M. W. Fish, assignors to Frigidaire Corporation, Dayton, Ohio. Clutch. 1,823,129; Sept. 15.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,822,938; Sept. 15.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,823,130; Sept. 15.
Smith, Marion F. (See Wilkins, A. E., and Smith.)
Smith, Winfield D., Peekskill, assignor to E. A. Widmann, New York, N. Y. System of articulate sound reproduction. 1,823,705; Sept. 15.
Sobel, Frank, New York, N. Y. Chair. Des. 85,121; Sept. 15.
Societa Italiana Registratori Sir. (See Errera, Attilio, assignor.)
Soupal, Wilhelm, Matzelsdorf, near Neulengbach, Austria. Valve. 1,823,006; Sept. 15.
Sparkes, Harry P., Pittsburgh, Pa. Igniter. 1,823,217; Sept. 15.
Spatta, George. (See Mogford, E. C., and Spatta.)
Spence, William J., Hamilton, Ontario, assignor to General Steel Wares Limited, Toronto, Ontario, Canada. Railway lantern. 1,822,910; Sept. 15.
Spencer, Frederick A., New York, N. Y. Bumper. 1,823,007; Sept. 15.
Spery, Philmore F., Chicago, Ill., assignor, by mesne assignments, to Kari-Keen Manufacturing Company, Sioux City, Iowa. Extension trunk and luggage carrier. 1,823,515; Sept. 15.
Spreen, Charles C., Detroit, Mich. Compressor bearing seal. 1,823,804; Sept. 15.
Spreen, Charles C., Detroit, Mich. Compressor bearing seal. 1,823,805; Sept. 15.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Ice making and shaving machine. 1,823,806; Sept. 15.
Staehle, Henry C., Boulder, Colo., assignor to General Electric Company. High temperature thermocouple. 1,823,706; Sept. 15.
Stafford, James G., Whiting, Ind., assignor to Sinclair Refining Company, New York, N. Y. Refining hydrocarbons. 1,823,175; Sept. 15.
Stamoulis, Sotir C. (See English, Athena J., assignor.)

Standard Electric Time Company. (See Kenerson, Stanley M., assignor.)
Standard-I. G. Company. (See Müller, C., Wietzel, and Galle, assignors.)
Standard Oil Company. (See Bartels, Edward E., assignor.)
Standard Oil Company. (See Diggs, Sterling H., assignor.)
Standard Oil Company. (See Lemmon, Norman E., assignor.)
Standard Oil Company. (See Lemmon, N. E., and Grimm, assignors.)
Standard Oil Company of California. (See Chadderton, Sydney S., assignor.)
Stanley Works, The. (See Beecher, L. B., and Ahern, assignors.)
Steckler, Nat P., New York, N. Y. Teether. Des. 85,142; Sept. 15.
Steel, Harry A., assignor to The Prosperity Company Inc., Syracuse, N. Y. Spring counterbalance and lock for pressing machines. 1,823,478; Sept. 15.
Stempelwerk Gesellschaft mit beschrankter Haftung. (See Ludwig, Hans, assignor.)
Stephens, Arthur G., London, England. Stocking. Des. 85,125; Sept. 15.
Stephens, Thomas G., Lakewood, Ohio, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Making lithopones of high zinc sulphide content. 1,822,911; Sept. 15.
Stieglitz, John L., Louisville, Ky. Fuel and grate saving plate. 1,823,576; Sept. 15.
Stiemke, Walter H. (See Jett, George C., assignor.)
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Set of range doors. Des. 85,126; Sept. 15.
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Set of range doors. Des. 85,127; Sept. 15.
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Range door. Des. 85,128; Sept. 15.
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Range. Des. 85,129; Sept. 15.
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Range door. Des. 85,130; Sept. 15.
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Range door. Des. 85,131; Sept. 15.
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Range. Des. 85,132; Sept. 15.
Stoddard, Beatrice M. (See Anthony, D., and Stoddard.)
Stohr, Frederick W., assignor of one-half to F. R. Schlichting, South St. Paul, Minn. Vehicle stopping device. 1,823,297; Sept. 15.
Stokes, William H., Coventry, assignor to Courtaulds Limited, London, England. Manufacture and production of artificial threads, filaments, bands and the like. 1,823,769; Sept. 15.
Stollberg, Charles, assignor to American Can Company, New York, N. Y. Spotwelding keys to tearing strip cans. 1,823,068; Sept. 15.
Stone, Edwin W., Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co. Inc., Thompsonville, Conn. Needle loom. 1,823,298; Sept. 15.
Stout, Harry H., Clifton, Ariz., assignor, by mesne assignments, to Coalescence Products Company, Inc. Treating metals. 1,822,939; Sept. 15.
Straus, Harry H., New York, N. Y. Automatic re-fill multiple shaving edge safety razor. 1,823,708; Sept. 15.
Stroop, Robert C., Rome, Ga. Airplane appliance. 1,823,069; Sept. 15.
Structural Products Corporation. (See Witty, George, assignor.)
Struthers, James A., Minneapolis, Minn. Stocking. Des. 85,133; Sept. 15.
Stuber, Adolph, assignor to Eastman Kodak Company, Rochester, N. Y. Camera latch. 1,823,299; Sept. 15.
Suckel, Charles H., Jackson Heights, N. Y. Automatic sash fastener. 1,823,807; Sept. 15.
Suckoff, Louis A., Wilmette, assignor of one-half to F. A. Nachman, Chicago, Ill. Roll-edge mattress. 1,823,669; Sept. 15.
Sun Maid Raisin Growers of California. (See Forrest, Thomas W. W., assignor.)
Sund, Alfred D., Santa Rosa, Calif. Broom bumper. 1,823,300; Sept. 15.
Sundstedt, Hugo, assignor to American Avigation Corporation, New York, N. Y. Wing structure for airplanes. 1,822,940; Sept. 15.
Swallen, Lloyd C., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Hydrogenation of crotonaldehyde. 1,823,865; Sept. 15.
Swanson, Edwin C., assignor to Greenlee Bros. & Co., Rockford, Ill. Hole cutter. 1,823,218; Sept. 15.
Swanson, Selvivor A., Chicago, Ill. Musical instrument. 1,822,941; Sept. 15.
Swanstrom, Frances E., Duluth, Minn. Garment fastener. 1,822,912; Sept. 15.
Swarzman, Roy L., et al. (See Johnson, Bert E., assignor.)
Symmonds, Charles J., Washington, D. C. Holder for safety razor blades. 1,823,577; Sept. 15.
Tacke, Louis, Brooklyn, N. Y., assignor to H. Schultz & Company, Chicago, Ill. Machine for covering irregularly shaped paper box cover plates and the like. 1,823,632; Sept. 15.
Tait, Francis. (See Tait, William, assignor.)
Tait, William, Reading, assignor of one-half to F. Tait, West Lawn, Pa. Combined safety guard and anti-skid device. 1,823,070; Sept. 15.
Tartrais, Eugène H., Montmorency, France. Engine of the two-stroke type. 1,823,770; Sept. 15.
Tauschek, Otto, Munich, Germany, assignor to Oneida Community, Limited, Oneida, N. Y. Dish or similar article. Des. 85,134; Sept. 15.
Tauschek, Otto, Munich, Germany, assignor to Oneida Community, Limited, Oneida, N. Y. Dish or similar article. Des. 85,135; Sept. 15.
Taylor, George F., Niskayuna, N. Y., assignor to General Electric Company. Producing openings through hard metal compositions. 1,823,709; Sept. 15.
Telephon-Apparate Fabrik E. Zwietusch & Co., G. m. b. H. (See Marburg, Hans, assignor.)
Teller Corporation. (See Teller, J. and Schulz, assignor.)
Teller, Jacob, Chicago, and A. P. Schulz, Berwyn, Ill., assignors to Teller Corporation, Chattanooga, Tenn. Gas range top section. Des. 85,126; Sept. 15. Des. 85,126; Sept. 15.
Tenney, Perry L., Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich. Transmission. 1,823,432; Sept. 15.
Test, Skiles E., Indianapolis, Ind. Traffic control system for multifloor garages. 1,823,008; Sept. 15.
Thacher, John J., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Work positioning means for centering machines. 1,823,670; Sept. 15.
Thamm, Gustav J. R., New York, N. Y. Vacuum cleaner brush. 1,823,071; Sept. 15.
Thierbach, Dietwalt, Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Rectifier relay circuits. 1,823,072; Sept. 15.
Thode, William N., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for casting. 1,823,671; Sept. 15.
Thomas, George D. (See Miller, D. M., and Thomas.)
Thomas, Jesse F. (See Brown, C. R., and Thomas.)
Thompson, Charles and G. K. (See Haysel, Arthur R.)
Thompson, Charles, et al. (See Haysel, Arthur R., assignor.)
Thompson, Estelle F., Chicago, Ill. Foldable box. 1,823,710; Sept. 15.
Thompson, George K., et al. (See Haysel, Arthur R., assignor.)
Thompson, Howard A., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuit apparatus. 1,823,176; Sept. 15.
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,823,808; Sept. 15.
Thomsen, Alfred M., San Francisco, Calif. Manufacture of sulphite paper pulp. 1,823,519; Sept. 15.
Thorne, Herman J., et al. (See Ferguson, William T., assignor.)
Thrasher, Lannis E., Haines, Fla. Window stage. 1,823,771; Sept. 15.
Thune, Helmer N., Climax, Minn. Tire gauge. 1,823,414; Sept. 15.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,823,711; Sept. 15.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Shock absorber. 1,823,712; Sept. 15.
Tilden, Bert O., assignor to B. O. T. Manufacturing Company, Trenton, N. J. Water closet flush tank. Des. 85,137; Sept. 15.
Tilden, Burt E., Chicago, Ill. Pruner, fruit picker, and weeder. 1,823,672; Sept. 15.
Toaz, Glenn A., Cleveland, Ohio. Forming valve stem collars. 1,823,009; Sept. 15.
Todd Company, The. (See Payne, Walter B., assignor.)
Toews, Peter J. (See Roehl, F. M., and Toews.)
Toldi, Umberto, Verona, Italy. Advertising. 1,823,772; Sept. 15.
Toledo Scale Manufacturing Company. (See Hurt, Samuel N., assignor.)
Towson, Sheldon K., Cleveland Heights, Ohio, assignor to Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,823,516; Sept. 15.
Travell, Warren. (See Powelson, W. Y. N., and Travell.)
Traver, Harry G., Beaver Falls, Pa. Amusement ride. 1,823,010; Sept. 15.
Treiber Diesel Engine Corporation. (See Treiber, Otis D., assignor.)
Treiber, Otis D., Collingswood, assignor to Treiber Diesel Engine Corporation, Camden, N. J. Fuel feed controlling means for internal combustion engines. 1,823,713; Sept. 15.
Tretolite Company. (See De Groote, Melvin, assignor.)
Tretolite Company. (See De Groote, M., and Monson, assignors.)
Trimble, Ell. (See Baughn, Samuel C., assignor.)
Triplex Safety Glass Company of North America. (See Bell, Frank H., assignor.)
Trogner, Arthur M., East Orange, N. J., assignor to Radio, Inc., New York, N. Y. Transmitting system. 1,823,177; Sept. 15.
Tropic-Aire, Incorporated. (See Caesar, Orville S., assignor.)

Troy, Max, Brooklyn, N. Y. Apparatus for sorting and tagging laundry. 1,823,773; Sept. 15.
Trupar Manufacturing Company. (See Geller, Frederick C., assignor.)
Trussell, Clarence D., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y. Hinged book cover. 1,822,942; Sept. 15.
Trussell Manufacturing Company. (See Trussell, Clarence D., assignor.)
Twining, E. L. (See McLaughlin, Wilson L. and H. L., assignors.)
Underberg, Henry, Brooklyn, N. Y., assignor to Frankart, Inc., New York, N. Y. Ash tray or similar article. Des. 85,138; Sept. 15.
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Union Carbide & Carbon Research Laboratories. (See Benner, Raymond C., assignor.)
Union City Body Company. (See Adelsperger, C. C., and Fitzgerald, assignors.)
Union Railway Equipment Company. (See O'Connor, Arthur F., assignor.)
Union Special Machine Company. (See Christensen, Norman V., assignor.)
Union Switch & Signal Company, The. (See Lazich, Branko, assignor.)
Union Switch & Signal Company, The. (See McWhirter, William C., assignor.)
Union Switch & Signal Company, The. (See Thompson, Howard A., assignor.)
Union Switch & Signal Company, The. (See Vanhorn, James J., assignor.)
United Engineering & Foundry Company. (See Biggert, Florence C., jr., assignor.)
United Shoe Machinery Corporation. (See Clarke, Harry A., assignor.)
United Shoe Machinery Corporation. (See Cooper, Basil P., assignor.)
United Shoe Machinery Corporation. (See Pym, Arthur F., assignor.)
United States Hoffman Machinery Corporation. (See Card, John L., assignor.)
United States Hoffman Machinery Corporation. (See Johnson, James H., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Unsinger, Philip H., Maplewood, N. J. Safety razor blade. 1,823,339; Sept. 15.
Vacher, Henri E. J. (See Buelna, G., and Vacher.)
Van Coppenolle, Gaston, Rochecorbon, France. Spinning apparatus. 1,823,011; Sept. 15.
Vanderbilt, R. T., Company. (See Murrill, Paul I., assignor.)
Van Duyn, Adrianus, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens Van Berkel's Patent en van andere Werktuigen, Rotterdam, Netherlands. Scale. 1,823,415; Sept. 15.
Vanhorn, James J., Pittsburgh, assignor, to The Union Switch & Signal Company, Swissvale, Pa. Remote control apparatus. 1,822,913; Sept. 15.
Van Note, Eugene, Jersey City, N. J. Rudder. 1,823,433; Sept. 15.
Van Vlaanderen Machine Company. (See Peterson, John E., assignor.)
Vance, Vincent O., Colfax, Calif. Fishing tool. 1,823,340; Sept. 15.
Vandegrift, Nelson M., assignor to Sheip & Vandegrift, Inc., Philadelphia, Pa. Top for refrigerator cabinets. 1,823,517; Sept. 15.
Vanica, Pearl R., Akron, Ohio. Wheel aligner. 1,823,983; Sept. 15.
Varner, Howard C., and J. M. Koch, St. Joseph, Mo. Signal switch for use on automobiles. 1,823,809; Sept. 15.
Varney, William W. (See Heghinian, Garabed G., assignor.)
Varney, William W. (See Madsen, Charles P., assignor.)
Venderbush, Ray E., Detroit, Mich. Ventilating theaters and distributing sound. 1,823,479; Sept. 15.
Verna, Joseph A., and E. P. Archambault, Philadelphia, Pa. Automatic choke. 1,823,866; Sept. 15.
Vestal, Albert H., et al. (See Malone, Adolph W., assignor.)
Vetter, Amelia. (See Vetter, Peter G., assignor.)
Vetter, Peter G., assignor to A. Vetter, Berkeley, Calif. Oil burner. 1,823,012; Sept. 15.
Victor, John H., Evanston, assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,823,341; Sept. 15.
Victor, John H., Evanston, assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,823,342; Sept. 15.
Victor Manufacturing & Gasket Company. (See Oven, Frank J., assignor.)
Victor Manufacturing & Gasket Company. (See Victor, John H., assignor.)
Viken, Antonius J. (See Frutkow, N. and Viken.)
Vimtrup, Rigbold J., Downers Grove, Ill. Lawn mower attachment. 1,823,219; Sept. 15.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,823,714; Sept. 15.

Voith, J. M. (See Schneider, E., Ehrhart, and Kreitner, assignors.)
Von Forster, Hermann, Niederursel, near Frankfort-on-the-Main, and L. Moser, Frankfort-on-the-Main, Germany. Metallic structural unit. 1,823,416; Sept. 15.
Von Reppert, Richard, Hartford, Conn., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,823,715; Sept. 15.
Vryn, Victor, Jersey City, N. J., assignor to H. Goodman & Sons, Inc., New York, N. Y. Hair waver. 1,823,434; Sept. 15.
Wagner, Herbert, assignor to the firm Rohrbach Metall-Flugzeugbau G. m. b. H., Berlin, Germany. Plate wall girder. 1,822,943; Sept. 15.
Wagner, Hermann, Bad-Soden-on-Taunus, M. Hessenland, Konigsberg, and R. Brune, Frankfort-on-the Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing phenyl-1-thioglycollic-2-carboxylic acid amides containing halogen. 1,823,073; Sept. 15.
Wagstaff, Richard A., Salt Lake City, Utah, assignor to American Smelting and Refining Company, New York, N. Y. Disappearing feeder for metallurgical furnaces. 1,822,944; Sept. 15.
Walgreen Company. (See Fletcher, Charles, assignor.)
Walker, Jay P., assignor of forty per cent to G. O. Marchant and six per cent to C. G. Wells, Tulsa, Okla. Separating and flowing oil and gas. 1,823,301; Sept. 15.
Walker, Wallace D., assignor to Hookless Fastener Company, Meadville, Pa. Combined stocking protector and overshoe. 1,823,518; Sept. 15.
Wall, Thomas F., Sheffield, England. Electromagnetic testing of steel wire ropes and other articles of magnetizable material. 1,823,810; Sept. 15.
Walsh, Nicholas J., assignor to Weber Electric Company, Schenectady, N. Y. Switch cover. Des. 85,139; Sept. 15.
Walters, Arthur B., Kansas City, Mo., assignor to Western Tool & Equipment Company. Ice storage and discharge apparatus. 1,823,220; Sept. 15.
Walton, Oliver H., Needham Heights, Mass. Surgical stocking. 1,823,178; Sept. 15.
Wantz, Carl W., Los Angeles, Calif. Bed or cot. 1,823,013; Sept. 15.
Wappler Electric Company. (See Mutscheller, Arthur, assignor.)
Warren, Christine M., guardian. (See Heymer, James K., assignor.)
Warren, Clide W. (See Heymer, James K., assignor.)
Warren Shade Company. (See Heymer, James K., assignor.)
Warren, W. Goulding. (See Johnson, Alvin L., assignor.)
Watanabe, Asahi, Nishisugamo-Machi, Kitatoshima-Gori, Tokyo-Fu, Japan. Cap with a clip for fountain pens. 1,823,673; Sept. 15.
Waters, Thornton L., Springfield, Ky. Display stand. 1,823,302; Sept. 15.
Watkins, Leon H., Pasadena, Calif. Supercharger. 1,823,811; Sept. 15.
Watkins, William E., assignor to Copper Plate Sheet and Tube Company, New York, N. Y. Arching mechanism. 1,822,984; Sept. 15.
Watska, Otto, Vienna, Austria, assignor to C. S. Bleicher, New York, N. Y. Automatic contrivance for receiving written messages by telephone. 1,822,914; Sept. 15.
Watts, Felix J., assignor to H. A. Douglas, Bronson, Mich. Electric switch. 1,823,435; Sept. 15.
Way, Charles E., Fairmont, Okla. Gate latch. 1,823,303; Sept. 15.
Weber Electric Company. (See Walsh, Nicholas J., assignor.)
Weber, John D., Upper Lake, Calif. Aircraft. 1,823,417; Sept. 15.
Weber, Victor A. (See Adams, E. R., Weber, and Smith.)
Weindel, Fred, jr., assignor to L. F. Grammes & Sons, Inc., Allentown, Pa. Card novelty. 1,823,241; Sept. 15.
Weis, Arthur R., assignor of one-half to Pacific Pump Works, Huntington Park, Calif. Centrifugal impeller locating and locking means. 1,822,945; Sept. 15.
Weller, Fridolin H., Scranton, Pa. Gas discharge device. 1,823,304; Sept. 15.
Weller, John H., and R. S. Newton, assignors to Sargent & Company, New Haven, Conn. Plane. 1,823,383; Sept. 15.
Wells, Ira M., Oakland, Calif. Road planer. 1,823,305; Sept. 15.
Wells, Joel B., Stratford, Pa. Smoker's device. Des. 85,140; Sept. 15.
Wells, Sidney D., assignor to Paper Mill Laboratories, Inc., Quincy, Ill. Manufacturing alcohol by fermentation. 1,823,014; Sept. 15.
Wentz, Welker W., assignor to Aluminum Company of America, Pittsburgh, Pa. Aluminum type matrix. 1,823,179; Sept. 15.
Werdermann, Arthur. (See Laska, L., and Werdermann.)
Wersäll, Karl J., Stamford, Conn., assignor to American Kambi Company, New York, N. Y. Centrifugal friction clutch. 1,823,074; Sept. 15.
Westbrook, Earle. (See Nehlin, Harry E., assignor.)
Western Clock Company. (See Greenleaf, William H., assignor.)
Western Clock Company. (See Kaefer, Martin H., assignor.)

Western Clock Company. (See Neureuther, Andrew H., assignor.)
Western Electric Company. (See Curtiss, Nathan A., assignor.)
Western Electric Company. (See Franz, Erwin E., assignor.)
Western Electric Company. (See Heising, Raymond A., assignor.)
Western Electric Company. (See Marrison, Warren A., assignor.)
Western Electric Company. (See Skillman, T. S., and Freeth, and Berry, assignors.)
Western Electric Company. (See Thode, William N., assignor.)
Western States Machine Company, The. (See Roberts, Eugene, assignor.)
Western Tool & Equipment Company. (See Walters, Arthur B., assignor.)
Western Union Telegraph Company, The. (See Porter, James F., assignor.)
Westfield, John H., Indianapolis, Ind. Confection freezer. 1,823,633; Sept. 15.
Westinghouse Electric & Manufacturing Company. (See Allen, Robert C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bollinger, Paul, assignor.)
Westinghouse Electric & Manufacturing Company. (See Britt, James E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jungk, Herbert G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Marbury, Ralph E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sheely, Robert R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Simpson, Frank R., assignor.)
Westmoreland Glass Company. (See Becker, George, assignor.)
Weston, Ernest H., East Orange, assignor to The Whitehead & Hoag Company, Newark, N. J. Badge or similar article. Des. 85,141; Sept. 15.
Wettig, Theodore A., and C. Meier, assignors to The Acme Machine Tool Company, Cincinnati, Ohio. Chasing attachment for lathes. 1,823,242; Sept. 15.
Wetzel, Doyle S., Pittsburgh, Pa. Roller shade mounting. 1,823,520; Sept. 15.
Wheeler Company. (See Schmidt, Joseph F., assignor.)
White, Charles E., Penrose, Colo. Convertible ladder. 1,822,947; Sept. 15.
White, Charles E., Butler, Pa. Treating tricalcium phosphate. 1,823,015; Sept. 15.
White, Charles H., assignor to Deere & Company, Moline, Ill. Planter. 1,823,244; Sept. 15.
White, Harold E., Butler, J. Hess and O. E. Neuhausen, Zelienople, assignors to Lava Crucible Company, Pittsburgh, Pa. Method of and apparatus for forming graphite molds or other refractory articles. 1,823,180; Sept. 15.
Whitehead & Hoag Company, The. (See Weston, Ernest H., assignor.)
Whitney, Gary M., Wilmington, Calif. Automatic precision balance. 1,823,306; Sept. 15.
Whitsitt, William B., Baltimore, Md. Apparatus for cleaning railroad cars. 1,823,222; Sept. 15.
Wickman, Lauri A., Albany, and A. N. Munk, Oakland, Calif. Glove. 1,823,307; Sept. 15.
Widman, Joseph, Los Angeles, Calif. Combination rubber mallet and metal hammer. 1,823,016; Sept. 15.
Wildmann, Eugene A. (See Smith, Winfield D., assignor.)
Wiesner, Rose, Jamaica, N. Y. Toy slipper. 1,823,634; Sept. 15.
Wietzel, Gustav. (See Mittasch, A., Frankenburger, and Wietzel.)
Wietzel, Gustav. (See Müller, C., Wietzel, and Galle.)
Wightman, Rolan J. and W. Astle, assignors to Cherry-Burrell Corporation, Little Falls, N. Y. Heat exchange apparatus. 1,822,915; Sept. 15.
Wilkins, Adelbert E., and M. F. Smith, Lansing, Mich. Hood packing. 1,823,812; Sept. 15.
Williams, David H., and O. L. Beck, Apollo, Pa. Finishing roll polisher. 1,823,436; Sept. 15.
Williams, Lester J., assignor to Carl Braun Inc., Canastota, N. Y. Spray nozzle. 1,823,635; Sept. 15.
Williams, Louis R., Los Angeles, Calif. Grooving machine. 1,823,774; Sept. 15.
Williams, William H. (See Britton, E. C., Williams, and Putnam.)
Wills, C. G., et al. (See Walker, Jay P., assignor.)
Wilson, William S., assignor of fifty per cent to S. W. Frazier, Washington, D. C. Advertising apparatus. 1,823,075; Sept. 15.
Windber Manufacturing Company. (See Frailey, Irvin H., assignor.)
Winkler, Louis G., and B. F. Kelly, Indianapolis, Ind. Mounting and support for rear view mirrors. 1,823,636; Sept. 15.
Winnewisser, Emil A., assignor to The Prosperity Company Inc., Syracuse, N. Y. Actuating mechanism for pressing machines. 1,823,181; Sept. 15.
Winton, Henry D., Wellesley, assignor to Hersey Manufacturing Company, Boston, Mass. Meter system. 1,823,308; Sept. 15.
Wired Radio, Inc. (See Culver, Charles A., assignor.)
Wittel, Otto, Rochester, assignor to Eastman Kodak Company, Rochester, N. Y. Method and apparatus for lapping color film embossing rollers. 1,823,243; Sept. 15.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Motion picture film winding device. 1,823,245; Sept. 15.
Witty, George, New York, N. Y., assignor to Structural Products Corporation. Enamel and making same. 1,823,480; Sept. 15.
Wolfard, Merl R., Cambridge, assignor to C. F. Hopewell and H. C. Hopewell, doing business as Hopewell Brothers, Watertown, Mass. Carburetor. 1,823,017; Sept. 15.
Wolfard, Merl R., Cambridge, assignor to C. F. Hopewell and H. C. Hopewell, doing business as Hopewell Brothers, Watertown, Mass. Carburetor. 1,823,018; Sept. 15.
Wolfard, Merl R., Cambridge, assignor to C. F. Hopewell and H. C. Hopewell, doing business at Hopewell Brothers, Watertown, Mass. Carburetor. 1,823,019; Sept. 15.
Wood, George P. and J., Peekskill, N. Y. Beehive. 1,823,076; Sept. 15.
Wood, James. (See Wood, G. P. and J.)
Woodhead, Daniel. (See Kollath, Francis C., assignor.)
Woods, Leonard G., Pittsburgh, Pa. Marker for pavements. 1,822,916; Sept. 15.
Worrell, Howard S., Ardmore, Pa., assignor to Dictaphone Corporation, Bridgeport, Conn. Telephone recording system. 1,823,717; Sept. 15.
Wright, Alfred, Parry Sound, Ontario, Canada. Swivel attachment plug. 1,822,985; Sept. 15.
Wright, Joseph T., Cincinnati, assignor, by mesne assignments, to The Harris-Seybold-Potter Company, Cleveland, Ohio. Sheet feeding machine. 1,823,182; Sept. 15.
Wright, Joseph T., and J. T. Rowell, Cincinnati, assignors, by mesne assignments, to The Harris-Seybold-Potter Company, Cleveland, Ohio. Clutch. 1,823,223; Sept. 15.
Wright, Kirk K., Kenmore, N. Y. Process of and apparatus for pasteurizing. 1,823,637; Sept. 15.
Wright, Orville C., St. Louis, Mo. Control for fluid pressure brakes. 1,823,225; Sept. 15.
Wurster, Oscar H., Chicago, Ill. Extractor. 1,823,813; Sept. 15.
Yale & Towne Manufacturing Company, The. (See Schroeder, Charles S., assignor.)
Yawman & Erbe Manufacturing Company, The. (See Furlong, Roland A., assignor.)
Yellow Truck and Coach Manufacturing Company. (See Bock, Carl J., assignor.)
Young, Albert A., assignor to Eastman Kodak Company, Rochester, N. Y. Tinting film for use in sound reproduction. 1,823,246; Sept. 15.
Young, Charles D., Wayne, Pa. Container handling system. 1,823,384; Sept. 15.
Young, Charles J., Ardmore, Pa., assignor to General Electric Company. System for producing music. 1,823,716; Sept. 15.
Zahn, Adam, Long Island City, N. Y. Protecting or safety seat for window cleaners. 1,823,247; Sept. 15.
Zander, Henrick, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden. Heat exchange device. 1,823,481; Sept. 15.
Zimmers, Joseph B., et al. (See Herron, Ollie L., assignor.)
Zimmers, Wilma M., et al. (See Herron, Ollie L., assignor.)
Zoes, C. A., Manufacturing Co. (See Bicks, Jean W., assignor.)
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Connection of driving means to speedometers. 1,823,867; Sept. 15.
Zubaty, Joseph, Flint, assignor to A C Spark Plug Company, Flint, Mich. Instrument panel illumination. 1,823,868; Sept. 15.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 15TH DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator for clocks, Switch. W. H. Greenleaf. 1,822,927; Sept. 15.
Accelerator operating means. D. L. Mitchell. 1,823,622; Sept. 15.
Acid derivatives and making same, Fatty. F. Münz. 1,822,977; Sept. 15.
Acid derivatives, and making same, Naphthylamine carboxylic. L. Laska and O. Haller. 1,823,748; Sept. 15.
Acid derivatives and preparing same, Esterified fatty. F. Münz. 1,822,979; Sept. 15.
Acid derivatives, Making fatty. F. Münz. 1,822,978; Sept. 15.
Acid ester of diethyl ether of cellulose and preparing the same, Formic. G. Balle, H. Lange and K. Ost. 1,823,847; Sept. 15.
Acids and their derivatives, Stabilization of fatty. P. I. Murrill. 1,822,934; Sept. 15.
Acids from hydrocarbon oils, Removal of naphthenic. N. E. Lemmon and F. V. Grimm. 1,823,615; Sept. 15.
Acoustic material. M. Mazer. 1,823,405; Sept. 15.
Adapter for casing heads. I. C. Bell. 1,823,234; Sept. 15.
Advertising. U. Toldi. 1,823,772; Sept. 15.
Advertising apparatus. W. S. Wilson. 1,823,075; Sept. 15.
Aeroplane. E. A. Huseby. 1,823,655; Sept. 15.
Aeroplane landing. G. W. Charette. 1,823,086; Sept. 15.
Aeroplane propeller. F. A. Guenther. 1,823,197; Sept. 15.
Aeroplanes, Wing structure for. H. Sundstedt. 1,822,940; Sept. 15.
Air circulating device for warm air furnaces. E. Ackerman and W. Mowers. 1,823,521; Sept. 15.
Aircraft. J. D. Weber. 1,823,417; Sept. 15.
Aircraft, Handling. W. V. N. Powelson and W. Travell. 1,823,466; Sept. 15.
Airfoil. J. S. Maxwell. 1,822,976; Sept. 15.
Airplane. J. P. Glasby. 1,823,735; Sept. 15.
Airplane appliance. R. C. Stroop. 1,823,069; Sept. 15.
Airships, Mooring and housing. W. V. N. Powelson and W. Travell. 1,823,063; Sept. 15.
Airships, Stabilization of. W. V. N. Powelson and W. Travell. 1,823,288; Sept. 15.
Alarm: *See*—
Fire alarm.
Alarm for safes, Burglar. F. L and H. C. Husted. 1,823,740; Sept. 15.
Alcohol and other oxygenated organic compounds, Manufacture of methyl. M. Pier. 1,823,468; Sept. 15.
Alcohol by fermentation, Manufacturing. S. D. Wells. 1,823,014; Sept. 15.
Aluminum base alloys which are subject to growth, Treating. R. S. Archer and W. L. Fink. 1,822,877; Sept. 15.
Ammunition for signal pistols. L. L. Driggs, jr., and H. B. Faber. 1,823,390; Sept. 15.
Amplifying system. C. A. Culver. 1,822,922; Sept. 15.
Amusement ride. H. G. Traver. 1,823,010; Sept. 15.
Anchorage device. R. F. Hill. 1,823,428; Sept. 15.
Animal skins for tanning, Preparing. E. J. Maguire. 1,822,898; Sept. 15.
Annealing. H. M. Robertson. 1,823,629; Sept. 15.
Annuncintor, Electro-mechanical. R. A. Newe. 1,823,332; Sept. 15.
Antifreeze composition. D. F. Smith. 1,823,216; Sept. 15.
Anti-robbery machine. M. W. McMullen and H. P. Hansen. 1,823,750; Sept. 15.
Antiskid device for automobiles. H. A. Bowyer. 1,823,082; Sept. 15.
Arching mechanism. W. E. Watkins. 1,822,984; Sept. 15.
Armature commutator resurfacing or cutting machine. C. R. Brown and J. F. Thomas. 1,823,642; Sept. 15.
Arylamines, Purification of. E. C. Britton. 1,823,024–5; Sept. 15.
Arylamines, Purification of. E. C. Britton, W. H. Williams, and M. E. Putnam. 1,823,026; Sept. 15.
Audiphone. P. F. Apfel. 1,823,228; Sept. 15.
Automobile actuating mechanism. T. A. McIntyre. 1,823,208; Sept. 15.
Automobile body heater. E. C. Booth. Des. 85,083–5; Sept. 15.
Awning arm, Folding. L. B., N., W., and J. M. Goldberg, 1,823,649; Sept. 15.
Axle and making the same. E. C. Mogford and G. Spatta. 1,823,158; Sept. 15.
Badge or similar article. E. H. Weston, Des. 85,141; Sept. 15.
Baffles in oil-filled bushings, Supporting. A. O. Austin. Re18,189; Sept. 15.
Bag: *See*—
Fabric bag. Traveling bag.
Shopping bag.
Bag feeding means. H. B. Foulder. 1,823,442; Sept. 15.
Bag feeding means. H. B. Foulder. 1,823,597; Sept. 15.
Bag filling apparatus. J. J. Neunan. 1,823,283; Sept. 15.
Balance, Automatic precision. G. M. Whitney. 1,823,306; Sept. 15.
Ball: *See*—
Grinding ball.
Band, chain, or linkage, Flexible. C. H. Kestenman. 1,822,894; Sept. 15.
Band-wire clip. H. G. Jungk. 1,823,607; Sept. 15.
Bank, Coin. R. M. Dugdale. 1,823,646; Sept. 15.
Bar: *See*—
Furnace grate bar.
Bar for gummed paper and the like, Breaker. F. Mayo and F. L. Fraizer. 1,823,620; Sept. 15.
Base for a pen holder stand, paper weight, and the like. A. G. Leake. Des. 85,104; Sept. 15.
Base, Lamp. W. M. Adrian. Des. 85,075; Sept. 15.
Battery: *See*—
Storage battery.
Battery charging system. R. C. Benner. 1,823,780; Sept. 15.
Beacon, Rotating spherical. W. N. Cobb. 1,823,240; Sept. 15.
Beading of formed sheet metal articles, Method of and apparatus for. J. M. Hothersall. 1,823,047; Sept. 15.
Bean cutter. G. Lang. 1,823,051; Sept. 15.
Bearing cap facer. G. C. Monckmeier. 1,823,461; Sept. 15.
Bearing inclosure. T. Barish. 1,823,640; Sept. 15.
Bearing, Spindle-ferrule. F. J. Burns. 1,822,874; Sept. 15.
Bed or cot. C. W. Wantz. 1,823,013; Sept. 15.
Bedspring. M. A. Matthews. 1,823,836; Sept. 15.
Beehive. G. P. and J. Wood. 1,823,076; Sept. 15.
Bell ringer. E. V. Cross. 1,823,820; Sept. 15.
Bellows folds, Forming. W. B. Clifford. 1,823,532; Sept. 15.
Belt controller. N. Hubbard. 1,823,493; Sept. 15.
Beryllium and aluminum compounds, Obtaining. C. B. Sawyer and B. Kjellgren. 1,823,864; Sept. 15.
Bit. J. W. Martin. 1,823,567; Sept. 15.
Blade, Cutting. J. H. Dalen. 1,823,031; Sept. 15.
Blind, Venetian. F. J. Burns. 1,823,236; Sept. 15.
Board: *See*—
Sign board.
Boat propelling and steering apparatus, Convertible. J. H. Gaskins. 1,822,965; Sept. 15.
Boat propelling unit. M. L. Louvier. 1,823,109; Sept. 15.
Boats, barges, and like vessels, Method of and apparatus for unloading. K. Schöen. 1,823,172; Sept. 15.
Body construction. A. W. Campbell. 1,823,643; Sept. 15.
Body treating device. R. L. Barker. Des. 85,076; Sept. 15.
Boiler: *See*—
Steam boiler.
Boiler. H. J. Kerr. 1,823,050; Sept. 15.
Boll weevil exterminator. E. P. Griffith. 1,823,196; Sept. 15.
Book and record, Check. J. W. Schoelch. 1,823,513; Sept. 15.
Book end. A. G. Leake. Des. 85,105; Sept. 15.
Boot, Golf club. A. A. Rodgers. Des. 85,114; Sept. 15.
Bottle. G. N. Mas. Des. 85,109; Sept. 15.
Bottle cooler and stand, Combination. W. W. Kilgore. Sept. 15.
Bottle or similar article. J. W. Bicks. Des. 85,081; Sept. 15.
Bottle or similar article. E. E. Bilby. Des. 85,082; Sept. 15.
Bowl or similar article. G. Becker. Des. 85,080; Sept. 15.
Box: *See*—
Fire box. Foldable box.
Box attachment, Mail. S. Petersen. 1,823,759; Sept. 15.
Boxes, Manufacture of wrapped. A. A. Adamson. 1,823,578; Sept. 15.
Bracket: *See*—
Display bracket. Window shade bracket.
Brake: *See*—
Hand brake. Vehicle brake.
Brake. A. Y. Dodge. 1,823,822; Sept. 15.

Brake. A. Y. Dodge and W. L. Pollard. 1,822,988; Sept. 15.
Brake for automobiles, Steering rod. L. C. Rithour. 1,823,765; Sept. 15.
Brake thrust distributor. G. L. R. J. Messier. 1,822,900; Sept. 15.
Braking device, Electrical synchronous. R. Barthelemy. 1,823,779; Sept. 15.
Braking system for airplanes, Hydraulic. M. Charles. 1,823,255; Sept. 15.
Brassière. M. R. Alexander. 1,822,872; Sept. 15.
Brooder ventilation structure. A. W. Bruce. 1,823,584; Sept. 15.
Brush, Prophylactic. J. E. Scott. 1,823,128; Sept. 15.
Brush, Vacuum cleaner. G. J. R. Thamm. 1,823,071; Sept. 15.
Buckle, Shoe. A. E. Farmer. Des. 85,090; Sept. 15.
Bullet for practice cartridges. F. Blechta. 1,823,022; Sept. 15.
Bumper. F. A. Spencer. 1,823,007; Sept. 15.
Bumper, Broom. A. D. Sund. 1,823,300; Sept. 15.
Bumper construction. R. J. Lusse. 1,823,017; Sept. 15.
Burner: *See*—
Fuel burner. Oil burner.
Gas burner.
Burner system. W. A. Haven. 1,823,358; Sept. 15.
Button breaker roller. J. E. Peterson. 1,823,627; Sept. 15.
Cabinet for portable testing apparatus. H. N. Bowman. 1,823,678; Sept. 15.
Cabinet, Refrigerating. J. E. Gloekler. 1,823,444; Sept. 15.
Cable, repeating system, Submarine. A. A. Clokey and E. T. Burton. 1,823,088; Sept. 15.
Cable trunking. T. H. M. Crampton. 1,823,819; Sept. 15.
Caddy, Fiber cracker. D. G. Magill. 1,823,055; Sept. 15.
Cage for banks, Safety. M. H. Anderson. 1,823,580; Sept. 15.
Calculating machine. F. A. Hosack. 1,823,859; Sept. 15.
Calculating machine. C. Luttropp. 1,823,552; Sept. 15.
Caliper with automatic locking device, Sliding. G. Hommel. 1,823,045; Sept. 15.
Call and dismissal apparatus. B. H. Smith. 1,823,221; Sept. 15.
Call charging telephone exchange system. A. J. Busch. 1,823,679; Sept. 15.
Camera construction. C. C. Fuerst. 1,823,266; Sept. 15.
Camera, Photographic. K. Morsbach. 1,823,462; Sept. 15.
Camera, Roll-film. O. Messter. 1,823,751; Sept. 15.
Can for filling automobile radiators, Watering. A. A. Lucius. 1,823,276; Sept. 15.
Cap with a clip for fountain pens. A. Watanabe. 1,823,673; Sept. 15.
Capacitor, Self-clearing fused sectionalized. R. E. Marbury. 1,823,328; Sept. 15.
Capper, Bottle. H. J. Lebherz. 1,823,366; Sept. 15.
Car Load discharging. A. Campbell. 1,823,029; Sept. 15.
Carbonization of waste saccharine material, Apparatus for the dehydration and low temperature. G. T. Reich. 1,823,408; Sept. 15.
Carburetor. C. J. Constantin. 1,823,818; Sept. 15.
Carburetor. M. R. Wolfard. 1,823,017–19; Sept. 15.
Carburetor attachment. V. H. Burdick. 1,823,346; Sept. 15.
Cardboard and the like in continuous webs, Apparatus for the manufacture of. A. Engel. 1,823,792; Sept. 15.
Carrier: *See*—
Luggage carrier.
Carrier for automobiles, Luggage. R. F. Burgess. 1,823,783; Sept. 15.
Cars, Apparatus for cleaning railroad. W. B. Whitsitt. 1,823,222; Sept. 15.
Carton, Mailing. F. Reichel. 1,822,936; Sept. 15.
Cartridge separating device for pneumatic tube plants. H. Marburg. 1,823,056; Sept. 15.
Case: *See*—
Show case.
Caster. R. A. Lackey. 1,823,657; Sept. 15
Casting, Method of and apparatus for. W. N. Thode. 1,823,671; Sept. 15.
Catching device for cloth laying machines. C. C. Schneider. 1,822,908; Sept. 15.
Cellulose acetate from acetic acid solutions thereof, Recovery of. H. T. Clarke. 1,823,348; Sept. 15.
Cellulose acetate, Making. H. L. Gray. 1,823,359; Sept. 15.
Cellulosic materials, Grinding of. H. Langwell. 1,823,691; Sept. 15.
Cellulosic materials with vapors of lower fatty acids, Esterifying. H. T. Clarke and C. J. Malm. 1,823,350; Sept. 15.
Cementing and floating device for well casings. R. C. Baker. 1,823,312; Sept. 15.
Chain or cable jack. E. Pierce. 1,823,760; Sept. 15.
Chair: *See*—
Theater chair.
Chair. F. Sobel. Des. 85,121; Sept. 15.
Channel construction for the tops of the tanks of vessels. W. G. Bartenfeld. 1,823,081; Sept. 15.
Chart, Key. C. Harris. 1,823,602; Sept. 15.
Choke, Automatic. J. A. Verna and E. P. Archambault. 1,823,866; Sept. 15.
Chuck for paper rolls. T. T. Pope. 1,823,164; Sept. 15.
Cigarette making machinery. W. E. Mollins. 1,823,281; Sept. 15.
Circuit apparatus, Railway track. H. A. Thompson. 1,823,176; Sept. 15.
Circuit breaker. L. L. Brown. 1,283,083; Sept. 15.
Circuit closing mechanism. J. D. Hilliard. 1,823,738; Sept. 15.
Circuit, Electrical balance. C. B. Mirick. 1,822,996; Sept. 15.
Circuit, Filter. A. Hund. 1,822,929; Sept. 15.
Circuit maker and breaker. A. J. Pascarella. 1,823,664; Sept. 15.
Circuit, Railway track. B. Lazich. 1,823,052; Sept. 15.
Circuit, Rectifier relay. D. Thierbach. 1,823,072; Sept. 15.
Clamp. W. J. O'Neill. 1,823,465; Sept. 15.
Clamp for sewing machines, Work. E. B. Allen. 1,823,522; Sept. 15.
Clamp for windshields. J. S. Kern and O. L. Currier. 1,823,202; Sept. 15.
Clamps, Making conductor. C. S. Card. 1,823,561; Sept. 15.
Clasp: *See*—
Jewelry clasp.
Cleaner: *See*—
Cotton seed cleaner. Pneumatic cleaner.
Mote and waste cleaner. Rack screen cleaner.
Cleaning compound. A. J. English. 1,823,192; Sept. 15.
Cleaning device, Golf ball. F. M. Case. 1,823,347; Sept. 15.
Clip: *See*—
Band-wire clip.
Clip. R. W. Cook. 1,823,317; Sept. 15.
Clipper, Grass. R. F. Huxman. 1,823,199; Sept. 15.
Clock case. G. Graff. Des. 85,094–5; Sept. 15.
Clock case. M. H. Kaefer. Des. 85,099; Sept. 15.
Closing device for gripping a strand of hair in heating tubes for heating strands of hair. G. Ducart. 1,823,391; Sept. 15.
Closure hanger. L. W. Franks. 1,823,193; Sept. 15.
Closure, Jar. L. T. Crabbe. 1,823,786; Sept. 15.
Cloth and its manufacture, Holland. D. C. McRoberts. 1,823,112; Sept. 15.
Clothes rack. W. H. Allen. 1,823,776, Sept. 15.
Clutch. J. L. Card. 1,822,955; Sept. 15.
Clutch. H. R. Smith and M. W. Fish. 1,823,129; Sept. 15.
Clutch. J. T. Wright and J. T. Rowell. 1,823,223; Sept. 15.
Clutch brake pedal for motor vehicles, combined. A. S., B. M., and A. P. Johnson. 1,823,742; Sept. 15.
Clutch, Centrifugal friction. K. J. Wersall. 1,823,074; Sept. 15.
Clutch, Electromagnetic. C. Q. Payne. 1,823,334; Sept. 15.
Clutch for motor vehicles and the like, Free wheel. W. Miller and H. T. Lam. 1,823,113; Sept. 15.
Clutch-operating mechanism. N. A. Christensen. 1,823,590; Sept. 15.
Coating and heat treating apparatus. A. O. Austin. 1,823,675; Sept. 15.
Coating of bodies with metal. W. Baur. 1,823,869; Sept. 15.
Code setting device for signal systems. H. Burdick. 1,823,585; Sept. 15.
Coin-handling apparatus. L. E. Jones and A. N. Nadeau. 1,823,829; Sept. 15.
Color system for disguising objects. R. Greenleaf. 1,822,926; Sept. 15.
Comb: *See*—
Water wave comb.
Comb. H. L. J. Marshall. 1,823,850; Sept. 15.
Compact, Wrist. A. F. Aiello. 1,823,814; Sept. 15.
Composition, Silver cleaning. G. Jones and D. W. Marshall. 1,823,402; Sept. 15.
Compounds having an affinity for cotton and being diazotizable on the fiber. G. Kalischer and W. Lange. 1,823,743; Sept. 15.
Compression of packaged substances, Apparatus for the. W. A. Duerr. 1,822,923; Sept. 15.
Compressor condenser unit. F. C. Geiler. 1,823,858; Sept. 15.
Computing machine. A. Errera. 1,823,262; Sept. 15.
Concrete, Producing porous. K. P. Billner. 1,823,343; Sept. 15.
Condenser and rectifier. A. Lenning. 1,823,497; Sept. 15.
Condenser, Fused sectionalized. R. E. Marbury. 1,823,368; Sept. 15.
Condenser, Multiple. M. Jacobson. 1,823,860; Sept. 15.
Condenser testing equipment. H. W. Houck. 1,823,492; Sept. 15.
Conduit coupling. J. T. Pearson. 1,823,061; Sept. 15.
Connecter, Electric. F. C. Kollath. Re18,193; Sept. 15.
Connecter, Electrical. C. A. Bay. 1,823,677; Sept. 15.
Connecter, Hanging fixture. J. Mangin. 1,823,619; Sept. 15.
Contact means for battery energized devices. H. W. Jones and F. S. Miley. 1,823,105; Sept. 15.
Container. J. M. Hothersall. 1,823,046; Sept. 15.
Container and dispenser, Coin. M. Alland. 1,823,227; Sept. 15.
Container, Cigarette dispensing and lighting. A. Kappenberg. 1,823,609; Sept. 15.
Container, Dispensing. W. P. Reed. 1,823,572; Sept. 15.
Container, for paste tubes. C. A. Maher. 1,823,206; Sept. 15.

Container for toilet powder. M. Michelin. 1,823,861; Sept. 15.
Container handling system. C. D. Young. 1,823,384; Sept. 15.
Contrivance for receiving written messages by telephone, Automatic. O. Watzka. 1,822,914; Sept. 15.
Control apparatus, Instrumental. O. Feussner. 1,822,989; Sept. 15.
Control apparatus, Quality. P. Lacy-Mulhall. 1,822,901; Sept. 15.
Control attachment, Automatic. H. Rabezzana. 1,823,430; Sept. 15.
Control for fluid pressure brakes. O. C. Wright. 1,823,225; Sept. 15.
Controlling device for window shades. A. C. Hanson. 1,823,447; Sept. 15.
Controlling means for internal combustion engines, Fuel feed. O. D. Treiber. 1,823,713; Sept. 15.
Conveyer apparatus. J. C. Meem. 1,823,370; Sept. 15.
Cooking apparatus. H. T. Hunter. 1,823,140; Sept. 15.
Cooling passenger cars in stations. C. W. Galloway. 1,823,393; Sept. 15.
Cotton seed cleaner. L. Simons. 1,823,575; Sept. 15.
Coupling: *See*—
Conduit coupling. Rail coupling.
Pipe coupling. Shaft coupling.
Cover, Hinged book. C. D. Trussell. 1,822,942; Sept. 15.
Cover of a household pump unit. S. H. Hobson. Des. 85,098; Sept. 15.
Cover, Steam table serving pan. B. H. Larson. 1,823,152; Sept. 15.
Cover, Switch. N. J. Walsh. Des. 85,139; Sept. 15.
Creeper construction. E. T. Breeden. 1,823,526; Sept. 15.
Crotonaldehyde, Hydrogenation of. L. C. Swallen. 1,823,865; Sept. 15.
Crushing machine. D. B. Cooper. 1,823,437; Sept. 15.
Cultivator, Two-row. L. H. Kaupke. 1,823,548; Sept. 15.
Current, Generating three phase high frequency. S. A. Barone. 1,823,851; Sept. 15.
Curtain control, Automobile. L. J. Morin. 1,823,623; Sept. 15.
Curtain device for radiators. R. O. Hendrickson. 1,823,141; Sept. 15.
Cutter: *See*—
Bean cutter. Hole cutter.
Cutter head. E. S. Shimer. 1,823,846; Sept. 15.
Cutting mechanism, Cable. J. F. Howe. 1,823,103; Sept. 15.
Cutting-off device. A. J. Cagliostro. 1,823,853; Sept. 15.
Cylinder lock. F. Schori. 1,823,411; Sept. 15.
Dental machine. J. M. Craigo. 1,823,090; Sept. 15.
Desk, Automobile. J. J. Konzen. 1,822,973; Sept. 15.
Diagnostic table. N. Frutkow and A. J. Viken. 1,823,534; Sept. 15.
Dictation machine. A. V. Bodine. 1,823,723; Sept. 15.
Die. R. H. Bowen. 1,823,557; Sept. 15.
Dish and handrail, Combination soap. A. J. Smith. Des. 85,122; Sept. 15.
Dish or similar article. O. Tauschek. Des. 85,134–5; Sept. 15.
Dish washer. E. J. Biskamp. 1,823,583; Sept. 15.
Disinfectant. O. Gerngross and K. Rülke. 1,823,095; Sept. 15.
Disk attachment for walking cultivators. F. H. Cathey. 1,823,529; Sept. 15.
Dispenser for oil and other liquids. W. H. Hast. 1,823,653; Sept. 15.
Dispenser, Liquid. W. H. Hast. 1,823,652; Sept. 15.
Dispenser, Liquid. W. H. Hast. 1,823,654; Sept. 15.
Dispenser, Lubricating oil. W. H. Peaden. 1,823,406; Sept. 15.
Dispenser, Peanut. C. W. Mabey. Des. 85,108; Sept. 15.
Display bracket. R. J. Re Nois. 1,822,905; Sept. 15.
Display fixture. H. L. Nolte. 1,823,840; Sept. 15.
Display stand. H. F. Goulet. 1,823,396; Sept. 15.
Display stand. T. L. Waters. 1,823,302; Sept. 15.
Doffing mechanism for flyer spinning, doubling, twisting, and like machines. J. A. Porter. 1,823,374; Sept. 15.
Doll. C. Smith. Des. 85,124; Sept. 15.
Door construction. J. F. O'Connor. 1,823,755; Sept. 15.
Door, Locking cabinet. R. A. Furlong. 1,823,536; Sept. 15.
Door opener, Garage. F. Boucher. 1,822,951; Sept. 15.
Door operating and locking device. E. F. Jager. 1,823,453; Sept. 15.
Door, Range. A. Stockstrom. Des. 85,128; Sept. 15.
Door, Range. A. Stockstrom. Des. 85,130–1; Sept. 15.
Doors, Set of range. A. Stockstrom. Des. 85,126–7; Sept. 15.
Doughnut machine. F. M. Roehl and P. J. Toews. 1,823,409; Sept. 15.
Draft attachment for agricultural implements. W. L. Paul. 1,823,508; Sept. 15.
Drawer construction. J. Petritsch. 1,823,285; Sept. 15.
Drier. W. C. Carpenter. 1,823,189; Sept. 15.
Drinking glass. C. Fletcher. Des. 85,091; Sept. 15.
Drive, Chain. F. L. Morse. 1,823,696; Sept. 15.
Driving means to speedometers, Connection of. J. Zubaty. 1,823,867; Sept. 15.
Driving mechanism, Electric. A. H. Neureuther. 1,823,556; Sept. 15.
Driving mount for gyratory centrifugals. E. Roberts. 1,823,863; Sept. 15.
Drum and conditioning same for use, Soaking. J. K. Hencken. 1,823,451; Sept. 15.
Drying and roasting furnace. G. E. Connolly. 1,823,787; Sept. 15.
Dust collection, Wet process. O. B. Cahoon. 1,823,587; Sept. 15.
Dyestuffs, New vat. H. Heyna. 1,822,967; Sept. 15.
Dyestuffs of the anthraquinone oxazole series, Vat. G. Kalischer and O. Bayer. 1,822,972; Sept. 15.
Dyestuffs of the banzanthrone series, Vat. E. Holzapfel, O. Braunsdorf, and H. Lange. 1,822,968; Sept. 15.
Elastic fabric, Rubberless. O. S. Lawton. 1,823,055; Sept. 15.
Electric device, Piezo. W. A. Marrison. 1,823,329; Sept. 15.
Electric heater. E. L. Smalley. 1,823,067; Sept. 15.
Electric phonograph motor. J. M. Naul. 1,823,555; Sept. 15.
Electric plate, Piezo. A. Hund. 1,822,926; Sept. 15.
Electric switch. F. J. Watts. 1,823,435; Sept. 15.
Electric waves, System for frequency, Translation of. R. A. Heising. 1,823,687; Sept. 15.
Electrical device. E. E. Franz. 1,823,827; Sept. 15.
Electrical machine, Alternating current. M. Cornu. 1,823,089; Sept. 15.
Electrical operating means. V. G. Apple and H. B. Ohmer. 1,823,523; Sept. 15.
Electrical systems, Apparatus for protection of polyphase. E. H. Frey. 1,823,733; Sept. 15.
Electrical tube. I. C. Orswell. 1,823,373; Sept. 15.
Electropneumatic action for the operation and control of musical instruments. E. R. Adams, V. A. H. Weber and D. H. Smith. 1,823,775; Sept. 15.
Emblem. H. J. Harvey. Des. 85,097; Sept. 15.
Embossed work, Process and apparatus for inking. M. W. Canfield. Re18,197; Sept. 15.
Embossing machine. M. A. G. Luedtke and H. Hoffmann. 1,823,110; Sept. 15.
Emulsifying agent. K. Dobmaier. 1,822,957; Sept. 15.
Enamel and making same. G. Witty. 1,823,480; Sept. 15.
Engine: *See*—
Internal-combustion engine. Sleeve valve engine.
Engine of the two-stroke type. E. H. Tartrais. 1,823,770; Sept. 15.
Engines, Attachment for internal combustion. C. L. Everwine. 1,823,796; Sept. 15.
Envelope. W. A. Jenrich. 1,823,362; Sept. 15.
Envelope. P. Miller. 1,823,114; Sept. 15.
Envelope, Three way. T. M. Moore. 1,822,997; Sept. 15.
Esters of sulphonic acids, Production of. H. Bertsch. 1,823,815; Sept. 15.
Esters, Production of glycollic acid. W. Buelow. 1,823,528; Sept. 15.
Ethers of diacetone alcohol, Manufacture of. C. W. Simms. 1,823,704; Sept. 15.
Excavating device. E. Lorenz. 1,823,367; Sept. 15.
Excavator. A. Orloff. 1,823,662; Sept. 15.
Exercising device of the motor driven type, Mechanical. W. J. McMarlin and L. S. Gunderman. 1,823,568; Sept. 15.
Extractor: *See*—
Hull extractor.
Extractor. O. H. Wurster. 1,823,813; Sept. 15.
Eye for anchor rods, eye bolts and the like. W. N. Elliott and W. G. Milne. 1,823,261; Sept. 15.
Fabric: *See*—
Metallic fabric. Rubberless elastic fabric.
Fabric. A. L. Helwith. 1,822,889; Sept. 15.
Fabric bag. C. H. Armstrong. 1,822,948; Sept. 15.
Fabric manipulating machine. R. D. Evans. 1,823,856; Sept. 15.
Fabric separator. W. L. and H. L. McLaughlin. 1,823,693; Sept. 15.
Fastener, Automatic sash. C. H. Suckel. 1,823,807; Sept. 15.
Fastener, Garment. F. E. Swanstrom. 1,822,912; Sept. 15.
Fastener, Separable. P. Balbaud. 1,823,229; Sept. 15.
Fastener, Typewriter. H. J. Muhlfeld. 1,823,753; Sept. 15.
Fastening for insulating jackets. F. F. Cooper. 1,822,987; Sept. 15.
Faucet, Single control combination hot and cold water supply. M. George. 1,823,599; Sept. 15.
Feeding of mixing ingredients to concrete and mortar mixing machines, Device for the proportionate. R. Hahn. 1,823,270; Sept. 15.
Feeler mechanism. J. C. Brooks. 1,823,423; Sept. 15.
Fibers with a gaseous current such as ozonized air, Apparatus for bleaching textile. E. Crespi and M. P. Otto. 1,823,352; Sept. 15.
File, Visible. R. E. Bauder. 1,822,878; Sept. 15.
Filling machine. C. T. Small. 1,823,174; Sept. 15.
Film copying device, Photographic. L. Horst. 1,823,400; Sept. 15.
Film for use in sound reproduction, Tinting. A. A. Young. 1,823,246; Sept. 15.
Film pack construction. H. A. Sauer. 1,823,295; Sept. 15.
Film winding device, Motion picture. O. Wittel. 1,823,245; Sept. 15.
Filtration. H. S. Hele-Shaw and J. A. Pickard. 1,823,171; Sept. 15.

Finishing and polishing machine. J. M. Nash. 1,823,625; Sept. 15.
Fire alarm. J. S. Birtciel. 1,823,722; Sept. 15.
Fire box, Locomotive boiler. E. F. Smith. 1,822,937; Sept. 15.
Fire extinguisher and alarm. Combined. E. F. Pohl. 1,823,210; Sept. 15.
Fitting, Adjustable service entrance. H. Brachtl. 1,822,879; Sept. 15.
Fitting, Conduit. G. R. Metcalf, jr. 1,823,553; Sept. 15.
Fitting for windows, Sound suppressing ventilator. E. T. Fisk. 1,723,798; Sept. 15.
Fitting, Orifice. W. D. Emery. 1,822,961; Sept. 15.
Fitting, Sanitary. I. H. Kendall. 1,823,549; Sept. 15.
Flange lubricator. B. W. McGinnis. 1,823,157; Sept. 15.
Float for flying machines. C. Dornier. 1,823,730; Sept. 15.
Flooding process for recovering oil from subterranean oil bearing strata. M. De Groote. 1,823,439; Sept. 15.
Flooding process for recovering fixed oil from subterranean oil bearing strata. M. De Groote and L. M. Monson. 1,823,440; Sept. 15.
Floor covering and making same. J. B. Crockett. 1,823,131; Sept. 15.
Flooring and product thereof, Making. J. B. Campbell. 1,823,238; Sept. 15.
Fluid induction device. G. E. Maier. 1,823,154; Sept. 15.
Fluids, Nebulizing. C. L. Riley. 1,823,844; Sept. 15.
Flush tank, Water closet. B. O. Tilden. Des. 85,137; Sept. 15.
Foam, Apparatus for producing. H. Burmeister. 1,823,560; Sept. 15.
Foam generating apparatus. H. Burmeister. 1,823,559; Sept. 15.
Foldable box. E. F. Thompson. 1,823,710; Sept. 15.
Folding and scalloping machine. S. J. Campbell. 1,822,954; Sept. 15.
Form for underreamer lugs, Dressing. C. H. Brown. 1,823,782; Sept. 15.
Forming apparatus. N. A. Curtiss. 1,823,680; Sept. 15.
Frame: *See*—
Picture frame. Tent frame.
Freezer, Confection. J. H. Westfield. 1,823,633; Sept. 15.
Friction device for hoisting machines, Hydraulic. E. Peskar. 1,823,026; Sept. 15.
Fruit, paring machine. B. C. Coons. 1,823,854; Sept. 15.
Fruit, particularly raisins, Treating dried. T. W. W. Forrest. 1,823,265; Sept. 15.
Fuel burner. C. J. Sherwood. 1,823,381; Sept. 15.
Fuel injection system. L. O. French. Re18,194–5; Sept. 15.
Fuel mixing device, Gaseous. E. E. Brown. 1,822,952; Sept. 15.
Fuels, Conversion of solid. C. Müller, G. Wietzel and E. Galle. 1,823,116; Sept. 15.
Fulcrum, Brake beam. G. E. Olson. 1,823,504; Sept. 15.
Furnace: *See*—
Drying and roasting furnace. Reverberatory furnace.
Furnace. T. E. Murray and J. H. Lawrence. 1,823,117; Sept. 15.
Furnace grate bar. H. B. Brydon. 1,823,235; Sept. 15.
Furnaces, Disappearing feeder for metallurgical. R. A. Wagstaff. 1,822,944; Sept. 15.
Game apparatus. D. D. Levitt. 1,822,946; Sept. 15.
Game apparatus. C. Papouchis. 1,823,507; Sept. 15.
Game, Golf. E. H. Clear. 1,823,487; Sept. 15.
Game, Race. E. C. Brewer, jr. 1,822,873; Sept. 15.
Garment, Lady's. L. M. Cooper. 1,823,257; Sept. 15.
Gas burner. V. Mauck. 1,823,111; Sept. 15.
Gas burner. C. E. Methudy. 1,823,460; Sept. 15.
Gas discharge device. F. H. Weller. 1,823,304; Sept. 15.
Gas generating apparatus. H. F. Smith. 1,823,382; Sept. 15.
Gas producer. F. B. Crosby. 1,822,005; Sept. 15.
Gas, Treating sulphur dioxide. B. W. Nordlander. 1,823,698; Sept. 15.
Gas under pressure, Apparatus for administering anesthetic and nutrient. H. W. C. Schroeder. 1,823,767; Sept. 15.
Gas washer. J. P. Grilli. 1,823,269; Sept. 15.
Gases, Method and apparatus for treating. J. H. F. Cassan. 1,823,784; Sept. 15.
Gasket. F. J. Oven. 1,823,264; Sept. 15.
Gasket. J. H. Victor. 1,823,341–2; Sept. 15.
Gate: *See*—
Railroad crossing gate.
Gauge: *See*—
Liquid level gauge. Stop gauge.
Occlusal gauge. Tire gauge.
Gauging device. W. G. Hiatt. 1,823,801; Sept. 15.
Gauging machine. W. H. Baker. 1,823,719; Sept. 15.
Gear changing apparatus. R. M. Ruck. 1,823,766; Sept. 15.
Gear, Locomotive valve. A. T. Bacon. 1,823,639; Sept. 15.
Gear provided with propping rollers, Differential. D. S. de Lavaud. 1,823,389; Sept. 15.
Gearing. J. E. Jewett and S. E. Meyers. 1,823,147; Sept. 15.
Gearing, Variable speed friction. J. H. Robertson. 1,823,125; Sept. 15.
Generator: *See*—
High potential generator.
Gin, Huller. T. Elliott. 1,823,135; Sept. 15.
Girder, Plate wall. H. Wagner. 1,822,943; Sept. 15.
Glass, Apparatus for sealing laminated. F. H. Bell. 1,823,525; Sept. 15.
Glass feeding machine. C. W. Pleukharp and H. Raynes. 1,823,062; Sept. 15.
Glass forming machine, Two table. K. E. Peller. 1,823,123; Sept. 15.
Glass in cylindrical form, Method and apparatus for drawing. G. E. Howard. 1,823,543; Sept. 15.
Glass, Making sheet. R. L. Frink. 1,823,357; Sept. 15.
Glass rolling apparatus, Sheet. J. L. Drake. 1,822,959; Sept. 15.
Glassware transfer device. G. E. Rowe. 1,823,574; Sept. 15.
Glove. L. A. Wickmau and A. N. Munk. 1,823,307; Sept. 15.
Goblet or similar article. G. Becker. Des. 85,079; Sept. 15.
Governor, Compensating. J. M. Miller. 1,823,280; Sept. 15.
Governor for gas burning heaters. H. W. Partlow. 1,823,122; Sept. 15.
Grain, Harvesting and thrashing. T. D. Campbell. 1,823,387; Sept. 15.
Grille panel construction. O. K. Schneider. 1,822,909; Sept. 15.
Grinder and the like, Gear. O. Garrison. 1,823,734; Sept. 15.
Grinding and resurfacing device, Portable. W. P. Meissner. 1,823,371; Sept. 15.
Grinding ball. W. F. Clements. 1,823,351; Sept. 15.
Grip, Automobile hand. R. Broder. 1,822,881; Sept. 15.
Grizzly and screen for grading materials. W. Ross. 1,823,126; Sept. 15.
Grooving machine. L. R. Williams. 1,823,774; Sept. 15.
Ground connection. W. Goetzelman. 1,823,139; Sept. 15.
Guard and antiskid device, Combined safety. W. Talt. 1,823,070; Sept. 15.
Guard for rotary cultivators, Leaf. J. Mader. 1,822,993; Sept. 15.
Guard, Shaper. F. J. Potter. 1,823,375; Sept. 15.
Gutter hanger circle. H. Shaw. 1,823,631; Sept. 15.
Hair clipper. F. F. Reich. 1,823,764; Sept. 15.
Hair pin. P. L. Haims. 1,823,685; Sept. 15.
Hair waver. V. Vryn. 1,823,434; Sept. 15.
Hair waving apparatus. A. G. Borden. 1,823,023; Sept. 15.
Hand brake. A. F. O'Connor. 1,823,570; Sept. 15.
Hand brake. J. F. O'Connor. 1,823,756; Sept 15.
Handcuffs. C. H. Nenstiehl. 1,823,097; Sept. 15.
Handle: *See*—
Valve handle.
Hanger: *See*—
Closure hanger. Meat smoking hanger.
Harvester, Cotton O. Dalke. 1,823,133; Sept. 15.
Harvester, Grain. C. J. Frederiksen. 1,823,036; Sept. 15.
Harrow—rotary knife type. F. V. Burman. 1,822,920; Sept. 15.
Head for the free ends of laces, Detachable. P. Schwarze. 1,823,412; Sept. 15.
Headaches, Device for relieving. P. Hanke. 1,823,686; Sept. 15.
Headlight, Dirigible. A. Chabrol. 1,822,882; Sept. 15.
Headlight of automobiles. J. Bayley. 1,823,249; Sept. 15.
Heat exchange apparatus. R. J. Wightman and W. Astle. 1,822,915; Sept. 15.
Heat exchange device. H. Zander. 1,823,481; Sept. 15.
Heat interchange, Method of and apparatus for. H. H. Dow and G. H. Cannon. 1,823,033; Sept. 15.
Heat transferrer. O. H. Hartmann and M. Hannig. 1,823,800; Sept. 15.
Heater: *See*—
Electric heater. Water heater.
Oil heater.
Heater and ventilator, Unit. E. L. Anderson. 1,823,579; Sept. 15.
Heater for automotive shields. G. J. Creighton. 1,822,884; Sept. 15.
Heel for shoes. H. B. Duysen. 1,823,134; Sept. 15.
Hinge and doorcheck, Combination. J. Fabry. 1,823,263; Sept. 15.
High chair. A. V. Shipman. Des. 85,119; Sept. 15.
High potential generator, Constant. A. Mutscheller. 1,823,463; Sept. 15.
Hoe. E. W. Craig. 1,823,438; Sept. 15.
Hoisting device. N. W. Kyle. 1,823,833; Sept. 15.
Holder, Camera plate. B. B. Hammond. 1,823,321; Sept. 15.
Holder, Display car. I. Bailey. 1,823,778; Sept. 15.
Holder for hams or the like. J. N. Kaikanis. 1,823,608; Sept. 15.
Holder for neon tubes and the like. J. Palmer. 1,822,980; Sept. 15.
Holder for safety razor blades. C. J. Symmonds. 1,823,577; Sept. 15.
Holder, Razor blade. F. Rassler. 1,823,001; Sept. 15.
Holder, Sash. J. D. Johnson. 1,823,363; Sept. 15.
Holder, Tool. G. A. De Flieg. 1,823,032; Sept. 15.
Holder, Toothbrush. A. S. Levy. 1,823,153; Sept. 15.
Holder, Umbrella. W. D. Dunn. 1,823,648; Sept. 15.
Holder, Watchmaker's and engraver's eyeglass. D. Gooch. 1,823,828; Sept. 15.
Hole cutter. E. C. Swanson. 1,823,218; Sept. 15.

Hook, Extension ladder. S. M. Peters and A. B. Rochester. 1,823,510; Sept. 15.
Horn construction for tail-bleeding machines, Vacuum. W. G. Howe. 1,823,544; Sept. 15.
Hosiery. N. J. Goodman. 1,823,736; Sept. 15.
Hot plate, Electric. A. A. Gratz. Des. 85,096; Sept. 15.
Housing equipment for aircraft. W. V. N. Powelson and W. Travell. 1,823,289; Sept. 15.
Hull extractor, Double action. A. L. Smith. 1,823,477; Sept. 15.
Humidifier for explosive engines, Charge. C. E. Ennis and H. W. Crawford. 1,822,962; Sept. 15.
Hydraulic apparatus. F. Nagler. 1,823,624; Sept. 15.
Hydraulic machine. J. J. Ring. 1,823,702; Sept. 15.
Hydrocarbons, Manufacture of unsaturated. A. Mittasch, W. Frankenburger, and G. Wietzel. 1,823,503; Sept. 15.
Hydrocarbons of high molecular weight, Production of. C. Krauch and Mü-Conradi. 1,823,495; Sept. 15.
Hydrocarbons, Refining. J. G. Stafford. 1,823,175; Sept. 15.
Ice making and shaving machine. C. C. Spreen. 1,823,806; Sept. 15.
Igniter. H. P. Sparkes. 1,823,217; Sept. 15.
Igniter, Gas stove. E. F. Gehrig. 1,823,538; Sept. 15.
Ignition device for gas burners. C. E. Methudy. 1,823,621; Sept. 15.
Illuminating means, Horizontal. K. R. Crumpton. 1,823,728; Sept. 15.
Impeller locating and locking means, Centrifugal. A. R. Weis. 1,822,945; Sept. 15.
Incubator, Cabinet. J. O. Gross. 1,823,395; Sept. 15.
Indicating and recording system. J. F. Dahl and R. C. Davis. 1,823,091; Sept. 15.
Indicating instrument. B. W. St. Clair. 1,823,707; Sept. 15.
Indicator: *See*—
Motor beat indicator. Speed indicator.
Indicator. J. D. Langdon. 1,823,746; Sept. 15.
Indicator adapted chiefly for high pressure boilers, Level. B. A. Guy. 1,823,397; Sept. 15.
Ingots, Method of and apparatus for handling. A. R. Keller. 1,822,930; Sept. 15.
Inhaler. J. Dylong. 1,823,094; Sept. 15.
Insect trap. R. J. Armstrong. 1,823,777; Sept. 15.
Insect trap. L. Kozlowski. 1,823,365; Sept. 15.
Insole. C. N. Prouty. 1,822,981; Sept. 15.
Inspirator. J. L. Jones. 1,822,992; Sept. 15.
Instrument panel illumination. J. Zubaty. 1,823,868; Sept. 15.
Insulator, Electrical. A. Nyman. 1,823,502; Sept. 15.
Insulator with nested parts. A. O. Austin. 1,823,676; Sept. 15.
Internal combustion engine. C. S. Brown. 1,823,027; Sept. 15.
Internal combustion engine. J. J. McCarthy. 1,823,500; Sept. 15.
Internal combustion engine. J. G. Vincent. 1,823,714; Sept. 15.
Internal combustion engine, Rotary. M. J. Cunningham. 1,823,132; Sept. 15.
Ironing machine. C. O. Reeps. 1,823,469; Sept. 15.
Ironing machine, Collar and cuff. A. L. Bausman. 1,823,482; Sept. 15.
Jack: *See*—
Lifting jack. Vehicle jack.
Pumping jack.
Jack and wheel, Rotary lifting. H. E. Nehin. 1,823,660; Sept. 15.
Jack for balloon tires, Flexible rack. A. L. Johnson. 1,822,969; Sept. 15.
Jewelry clasp. H. A. Heugas. 1,823,043; Sept. 15.
Jogging machine. J. F. King. 1,823,744; Sept. 15.
Joint. C. R. Kilburn. 1,823,274; Sept. 15.
Joint and making the same. S. H. Caldwell. 1,823,028; Sept. 15.
Joint and making the same, Paving. E. L. Benedict and R. L. Glose. Re18,188; Sept. 15.
Keys, Producing winding. M. H. Kaefer. 1,823,547; Sept. 15.
Keys to tearing strip cans, Spotwelding. C. Stollberg. 1,823,068; Sept. 15.
Kitchen appliance machine. E. C. Brewer. 1,823,314; Sept. 15.
Lace for footwear. C. Marx. 1,823,057; Sept. 15.
Ladder, Convertible. C. E. White. 1,822,947; Sept. 15.
Ladder rung, Replaceable. S. M. Peters and A. B. Rochester. 1,823,509; Sept. 15.
Lamp Arc. H. Kocourek. 1,823,656; Sept. 15.
Lamp attachment. S. M. Kenerson. 1,823,049; Sept. 15.
Lamp, Electric reflector. P. Rathmann. 1,823,762–8; Sept. 15.
Lamp, Photographic electric. W. R. Gruber. 1,823,320; Sept. 15.
Lamp, Therapeutic. N. Frutkow and A. J. Viken. 1,823,535; Sept. 15.
Lamps to and from sockets, Device for inserting and removing electric. L. Schulz. 1,823,170; Sept. 15.
Lantern, Hand. W. B. Schulte. Des. 85,115; Sept. 15.
Lantern, Railway. W. J. Spence. 1,822,910; Sept. 15.
Latch, Camera. A. Stuber. 1,823,299; Sept. 15.
Latch, Gate. C. E. Way. 1,823,303; Sept. 15.
Latching device, Window. J. H. Sheard and H. S. Getty. 1,823,173; Sept. 15.
Latex, Preservation of. A. A. Nikitin. 1,823,119; Sept. 15.
Lathes, Chasing attachment for. T. A. Wettig and C. Meier. 1,823,242; Sept. 15.
Laundry, Apparatus for sorting and tagging. M. Troy. 1,823,773; Sept. 15.
Leaks, Apparatus for locating. P. H. Granger. 1,822,925; Sept. 15.
Leather, Making. C. Nitta. 1,823,754; Sept. 15.
Level indicating apparatus, Distant liquid. J. P. Remington. 1,823,377; Sept. 15.
Level, Spirit. L. B. Beecher and P. Abern. 1,823,524; Sept. 15.
Lifter and carrier device. Invalid. F. K. Davis. 1,823,425; Sept. 15.
Lifting apparatus for motor cars or other vehicles. A. E. Hedges. 1,823,449; Sept. 15.
Lifting jack. A. L. Johnson. 1,822,970; Sept. 15.
Light control device. E. Rupp. 1,823,703; Sept. 15.
Lighting fixture. H. Schreibman. Des. 85,116; Sept. 15.
Lime in oil, Producing a slurry of. E. E. Bartels. 1,823,582; Sept. 15.
Lining for railway and other brakes in general, Lava-earthenware or mineral friction element or. C. De Lukacsevics. 1,823,591; Sept. 15.
Linings for shoes and the like. W. C. Bennett. 1,823,721; Sept. 15.
Liquefaction apparatus. J. W. Davis and W. L. De Baufre. 1,823,388; Sept. 15.
Liquid level gauge. G. G. Heghinian. 1,823,491; Sept. 15.
Liquids, Aeration of. H. E. Keyes. 1,823,831; Sept. 15.
Liquors and the recovery of ammonium salts and phenols from said liquors, Elimination of waste. W. R. Knapp. 1,823,364; Sept. 15.
Liquors, Purifying technical ammonium chloride. W. T. Grace. 1,823,097; Sept. 15.
Lithopone manufacture. H. H. Morris. 1,822,933; Sept. 15.
Lithopones of high zinc sulphide content, Making. T. G. Stephens. 1,822,911; Sept. 15.
Lock: *See*—
Cylinder lock. Safety tubing lock.
Lock for collapsible cots. W. Secunda. 1,823,768; Sept. 15.
Lock for printers' forms, Page. H. B. Ohlson. 1,823,060; Sept. 15.
Lock for track doors. E. M. Johnson. 1,823,104; Sept. 15.
Lock mechanism. H. J. Gordon. 1,823,650; Sept. 15.
Locking means for fluid pressure brakes. N. A. Christensen. 1,823,588; Sept. 15.
Locomotive, Electric. J. S. Keen and F. B. Deans. 1,823,610; Sept. 15.
Loom, Needle. E. W. Stone. 1,823,298; Sept. 15.
Loom stop mechanism. E. F. Baldwin. 1,823,720; Sept. 15.
Loud speaker. A. Ringel. 1,823,512; Sept. 15.
Loud speaker, Eccentric drive cone. A. M. Nicolson. 1,823,118; Sept. 15.
Lubricant and carbon remover. P. N. Elderkin. 1,822,886; Sept. 15.
Lubricating system. E. E. Eickmeyer. 1,822,960; Sept. 15.
Lubricating tip and employing the same. J. J. Magnuson. 1,823,618; Sept. 15.
Lubrication, Rear axle wheel bearing. C. J. Bock. 1,823,422; Sept. 15.
Lubricator: *See*—
Flange lubricator.
Luggage carrier, Foldable. J. F. Martin. 1,822,975; Sept. 15.
Lumber, Jointed. J. K. Gruner. 1,823,039; Sept. 15.
Luminair. T. W. Rolph. Re18,187; Sept. 15.
Macaroni, Manufacture of. F. Penza. 1,822,904; Sept. 15.
Machine for applying characters to sheets or forms. W. B. Payne. 1,823,161; Sept. 15.
Machine for baking pastry shells. L. H. Lanier. 1,823,151; Sept. 15.
Machine for candy making. W. G. Lloyd. 1,823,498; Sept. 15.
Machine for controlling railway traffic governing apparatus. W. C. McWhirter. 1,823,058; Sept. 15.
Machine for covering irregularly shaped paper box cover plates and the like. L. Tacke. 1,823,632; Sept. 15.
Machine for making wire strands, ropes, and cables. E. A. Conner. 1,823,424; Sept. 15.
Machine for shaping and renovating hats. J. H. Johnson. 1,822,971; Sept. 15.
Machine for spinning, doubling, twisting, and the like, yarns, fibers, and the like. T. E. Andrew, M. Langstreth, and J. Bancroft. 1,823,638; Sept. 15.
Machine for truing brake band segments. H. F. Scruby. 1,823,065; Sept. 15.
Machine wrench. W. Ferris. 1,823,426; Sept. 15.
Magazine for shuttle bobbins for automatic looms. E. Ezli. 1,823,791; Sept. 15.
Magnetic separating composition. E. Brandus. 1,823,852; Sept. 15.
Magnetically operated switch. F. A. Boedtcher. 1,823,252; Sept. 15.
Mail distributing machine. A. Ielfield. 1,823,741; Sept. 15.
Mailing machine. R. Cossock. 1,823,644; Sept. 15.
Mallet and metal hammer, Combination rubber. J. Widman. 1,823,016; Sept. 15.

Manures, Manufacture of. F. Rothe and H. Brenek. 1,823,849; Sept. 15.
Map device, Automobile traveling road. J. S. McNeil. 1,823,209; Sept. 15.
Map for automobiles, Road. O. V. Edgerton. 1,823,825; Sept. 15.
Marker for pavements. L. G. Woods. 1,822,916; Sept. 15.
Marking machine. H. A. Clarke. 1,823,030; Sept. 15.
Mast for airships, Mooring. W. V. N. Powelson and W. Travell. 1,823,287; Sept. 15.
Material, Apparatus for transferring. W. R. Jones. 1,823,148; Sept. 15.
Materials, Process and mechanism for separating intermixed divided. K. Davis. 1,823,848; Sept. 15.
Matrix, Aluminum type. W. W. Wentz. 1,823,179; Sept. 15.
Mattress, Roll-edge. L. A. Suekoff. 1,823,669; Sept. 15.
Mattress, Tufted. L. E. Pittoni. 1,823,700; Sept. 15.
Measuring deviations of drilled wells, Device for. A. I. Shakhnazarov. 1,823,336; Sept. 15.
Measuring device, Key operated foot. G. Engelhardt and H. G. Siebeneichner. 1,823,793; Sept. 15.
Meat smoking hanger. I. N. Jordan. 1,823,149; Sept. 15.
Meta-hydroxy-diphenylamine compounds and making same. L. Laska and A. Werdermann. 1,822,974; Sept. 15.
Metal compositions, Producing openings through hard. G. F. Taylor. 1,823,709; Sept. 15.
Metal for pouring, Preparing. A. A. Holbeck. 1,823,604; Sept. 15.
Metal or material, Sheet of. F. Hnmphris, 1,823,802; Sept. 15.
Metallic structural unit. V. Von Forster. 1,823,416; Sept. 15.
Metallurgical process. R. F. Meyer. 1,822,995; Sept. 15.
Metals and ceramic masses according to the centrifuging method, Process and apparatus for casting. C. Fritzsche. 1,823,037; Sept. 15.
Metals, Treating. H. H. Stout. 1,822,939; Sept. 15.
Meter system. H. D. Winton. 1,823,308; Sept. 15.
Mica splitter. L. T. Frederick. 1,823,136; Sept. 15.
Mill: *See*—
Pulverizing mill.
Minerals, Flotation recovery of. L. J. Christmann. 1,823,318; Sept. 15.
Mixer and drive, Adjustable. H. F. E. Gamm. 1,823,443; Sept. 15.
Mixing machine. H. Read. 1,823,571; Sept. 15.
Moisture and adding acid to reactivated clay, Restoring. W. S. Baylis. 1,823,230; Sept. 15.
Mold wall, Braced. F. J. Gremel. 1,823,195; Sept. 15.
Molding, Trim. O. L. Herron. 1,823,541; Sept. 15.
Molds or other refractory articles, Method of and apparatus for forming graphite. H. E. White. 1,823,180; Sept. 15.
Mop wringer. L. Chase. 1,823,486; Sept. 15.
Mote and waste cleaner. J. L. Honeycutt. 1,823,198; Sept. 15.
Motion controlling attachment for cutting torches. J. L. Gray. 1,823,194; Sept. 15.
Motion into rotary motion or vice versa, Apparatus for converting reciprocating. J. F. Felies. 1,823,681; Sept. 15.
Motion transmitting mechanism and controls for pressing machines, Electric. E. Davis. 1,823,488; Sept. 15.
Motor: *See*—
Electric phonograph motor. Self-starting motor.
Radial motor. Squirrel cage motor.
Motor heat indicator. H. H. Boyce. 1,823,344; Sept. 15.
Motors, Rocker-ring structure for railway. P. Bollinger. 1,823,313; Sept. 15.
Mounting and support for rear view mirrors. L. G. Winkler and B. F. Kelly. 1,823,636; Sept. 15.
Mounting, Engine. A. J. Jannson and G. W. Smith. 1,823,429; Sept. 15.
Mounting for a hand telephone, Wall. G. R. Lum. Des. 85,107; Sept. 15.
Mounting for carpet sweepers, Comb and hood. E. R. Smith. 1,823,413; Sept. 15.
Mounting for flyer blocks. G. W. Evans. 1,823,795; Sept. 15.
Mounting for rock drills. C. C. Hansen. 1,823,446; Sept. 15.
Mounting, Index file. L. R. E. Hutchings. 1,823,565; Sept. 15.
Mounting, Roller shade. D. S. Wetzel. 1,823,520; Sept. 15.
Mounting X-ray fluorescent screen. F. C. Martin. 1,823,278; Sept. 15.
Mower and hedge trimmer, Electric lawn. W. D. Seal. 1,823,215; Sept. 15.
Mower attachment, Lawn. R. J. Vimtrup. 1,823,219; Sept. 15.
Mower, Lawn. H. A. Dann. 1,823,821; Sept. 15.
Mower, Lawn. A. J. Gilardi. 1,823,267; Sept. 15.
Muffler. H. M. Gorsline. 1,822,990; Sept. 15.
Music, System for producing. C. J. Young. 1,823,716; Sept. 15.
Musical instrument. W. L. Carlson. 1,823,724; Sept. 15.
Musical instrument. S. A. Swanson. 1,822,941; Sept. 15.
Musical instrument, Wind. J. A. Milette. 1,823,838; Sept. 15.
Nail sorting machine. B. P. Cooper. 1,822,921; Sept. 15.
Napthalene, Halogenated. G. Rosch and W. Bauer. 1,822,982; Sept. 15.
Novelty, Advertising. B. C. Myers. Des. 85,113; Sept. 15.
Novelty, Card. F. Weindel, jr. 1,823,241; Sept. 15.
Nozzle, Fire hose. G. F. Lum. 1,823,277; Sept. 15.
Nozzle, Spray. L. J. Williams. 1,823,635; Sept. 15.
Occlusal gauge. R. L. Beeler. 1,823,184; Sept. 15.
Oil and gas, Separating and flowing. J. P. Walker. 1,823,301; Sept. 15.
Oil burner. P. G. Vetter. 1,823,012; Sept. 15.
Oil, Converting petroleum. G. Egloff. 1,822,924; Sept. 15.
Oil, Fuel. S. H. Diggs. 1,823,594; Sept. 15.
Oil heater, Crank case. J. H. Hughes. 1,823,048; Sept. 15.
Oil, Purification of. L. H. Clark. 1,823,087; Sept. 15.
Oil, Purifying used crank case. D. S. Belden. 1,823,185; Sept. 15.
Oil, Treating. A. R. Haysel. 1,822,888; Sept. 15.
Oils, Purification of tar acid bearing. S. P. Burke. 1,823,558; Sept. 15.
Oils, Treatment of naphthenic. N. E. Lemmon. 1,823,614; Sept. 15.
Ophthalmic mounting. H. Katz. 1,823,150; Sept. 15.
Ornamental article and making same. A. Kressaty. 1,823,613; Sept. 15.
Oven closures, Device for sealing coke. C. Otto. 1,823,121; Sept. 15.
Oxygen to freely portable breathing implements, Device for feeding additional. A. H. L. Christensen. 1,823,765; Sept. 15.
Packing, Hood. A. E. Wilkins and M. F. Smith. 1,823,812; Sept. 15.
Pad: *See*—
Recoil pad.
Pad for shipping radio sets and the like, Safety. H. Malis. 1,822,890; Sept. 15.
Pads, Making excelsior. A. T. Kockritz and K. Petrasch. 1,823,832; Sept. 15.
Page numbering sheets for books. D. A. McIntyre. 1,823,692; Sept. 15.
Panel for a mattress cover, Textile. C. Lofman. Des. 85,106; Sept. 15.
Pants, Child's legging. H. G. Mayer. 1,823,458; Sept. 15.
Paper and cardboard during the manufacture on paper making machines, Apparatus for dyeing. P. Schumacher. 1,823,845; Sept. 15.
Paper, Folding apparatus. F. M. Scudds. 1,823,475; Sept. 15.
Paper-rolling machine. H. Andersson. 1,823,581; Sept. 15.
Paper, Spinning and treating. J. D. Cramer and A. J. Rogers. 1,823,258; Sept. 15.
Pasteurizing, Process of and apparatus for. K. K. Wright. 1,823,637; Sept. 15.
Peel, Baker's. R. Moure. 1,823,159; Sept. 15.
Pencil attachment. L. M. Markowitz. 1,822,994; Sept. 15.
Perambulator and the like. E. T. Morriss. 1,823,115; Sept. 15.
Phenyl-1-thioglycollic-2-carboxylic acid amides containing halogen, Preparing. H. Wagner, M. Hessenland, and R. Brune. 1,823,073; Sept. 15.
Phonograph. A. A. Johnson. 1,822,892; Sept. 15.
Photographic shutter retarding mechanism. W. A. Riddell. 1,823,293–4; Sept. 15.
Piano action, Grand. C. N. Hickman. 1,823,142; Sept. 15.
Picture frame. C. Bremer. 1,823,485; Sept. 15.
Picture sound apparatus, Motion. C. L. Heisler. 1,823,737; Sept. 15.
Picture system, Sound. S. C. Chapman. 1,823,349; Sept. 15.
Pin: *See*—
Hair pin.
Pipe: *See*—
Smoker's pipe.
Pipe coupling. C. H. Hagstedt. 1,822,887; Sept. 15.
Pipe rack, Smoking. M. de Bussey. 1,823,729; Sept. 15.
Pitcher or similar article. E. E. Bartlett. Des. 85,077; Sept. 15.
Pitting machine, Date. A. K. Smith. 1,823,476; Sept. 15.
Plane. J. H. Weller and R. S. Newton. 1,823,383; Sept. 15.
Planer, Road. I. M. Wells. 1,823,305; Sept. 15.
Planter. C. H. White. 1,823,244; Sept. 15.
Planter, Seed. W. A. Fillingim. 1,823,592; Sept. 15.
Plaque or similar article. E. T. Beck. Des. 85,078; Sept. 15.
Plate, Fuel and grate saving. J. L. Stieglitz. 1,823,576; Sept. 15.
Plate or similar article. W. S. Mayer. Des. 85,111; Sept. 15.
Plate or similar article. C. O. Smith. Des. 85,123; Sept. 15.
Play pen. D. Anthony and B. M. Stoddard. 1,822,876; Sept. 15.
Plier and wrench, Combination. H. C. Jacobs. 1,823,494; Sept. 15.
Plow. J. E. Boda. 1,823,641; Sept. 15.
Plug member, Electric. A. R. Kanné. Des. 85,100; Sept. 15.
Plug, Swivel attachment. A. Wright. 1,822,985; Sept. 15.

Pneumatic cleaner. H. Hertz. 1,823,542; Sept. 15.
Pole. A. W. Malone. Re18,196; Sept. 15.
Pole, Hoisting clothesline. H. J. Ruchie. 1,822,907; Sept. 15.
Polisher, Finishing roll. D. H. Williams and O. L. Beck. 1,823,436; Sept. 15.
Polisher, Shoe. A. C. Kootz. 1,823,690; Sept. 15.
Pothead for insulated cable terminals. A. O. Austin. 1,823,674; Sept. 15.
Powder puff. S. Finkel. 1,823,797; Sept. 15.
Power plant. N. Christie. 1,823,190; Sept. 15.
Power shovel. E. H. Fundom. 1,823,137; Sept. 15.
Power supply for radio receiving sets. H. De Malaussene. 1,823,592; Sept. 15.
Power supply means for radio receiving apparatus. L. Shapiro. 1,823,066; Sept. 15.
Power transmitting apparatus. A. O. Abbot, jr., 1,823,226; Sept. 15.
Power transmitting device and its application to differential gear. D. S. de Lavaud. 1,823,092; Sept. 15.
Press. J. F. Schmidt. 1,823,213; Sept. 15.
Presses for drawing sheet metal. C. J. Rhodes. 1,822,906; Sept. 15.
Pressing machines, Actuating mechanism for. E. Davis. 1,823,259; Sept. 15.
Pressing machines, Actuating mechanism for. E. A. Winnewisser. 1,823,181; Sept. 15.
Printing machine, Photographic. R. S. Hopkins. 1,823,145; Sept. 15.
Prints, Finishing. C. M. Boyce. Re18,192; Sept. 15.
Prints, Method of and apparatus for making and finishing. C. M. Boyce. Re18,191; Sept. 15.
Proofer. G. B. Eggert. 1,823,441; Sept. 15.
Protective device, Phase failure and phase reversal. E. J. Posselt. 1,823,211; Sept. 15.
Protector, Hood corner. J. F. Duffy. 1,823,647; Sept. 15.
Pruner, fruit picker, and weeder. B. E. Tilden. 1,823,672; Sept. 15.
Pulp, Manufacture of sulphite paper. A. M. Thomsen. 1,823,519; Sept. 15.
Pulverizing mill. C. Peters. 1,822,999; Sept. 15.
Pump, Centrifugal. J. Kirgan. 1,823,455; Sept. 15.
Pump, Fluid displacement. E. F. McCarthy. 1,823,459; Sept. 15.
Pump, Gear. G. R. Hargis. 1,823,098; Sept. 15.
Pump, Measuring. A. Lanser. 1,823,658; Sept. 15.
Pump, Vending. E. T. Schmidt. 1,823,379; Sept. 15.
Pumping jack. J. B. Picard. 1,823,163; Sept. 15.
Punchings, Keying. W. S. Oswald. 1,823,333; Sept. 15.
Push rod, Swedged end. J. O. Almen. 1,823,419; Sept. 15.
Pyrotechnic device. H. Reihlen. 1,823,376; Sept. 15.
Rack: *See*—
Clothes rack. Pipe rack.
Rack screen cleaner. W. A. Dundas and L. M. Johnson. 1,823,023; Sept. 15.
Racket, Tennis. J. C. Kleinman. 1,823,107; Sept. 15.
Radial motor. J. Newmann. 1,823,464; Sept. 15.
Radiator. J. Elger. 1,823,035; Sept. 15.
Radiator composed of flat water elements. E. J. E. Dewoitine. 1,823,788; Sept. 15.
Rail bond tester. F. W. Roller. 1,823,471; Sept. 15.
Rail coupling. W. A. Knox. 1,823,745; Sept. 15.
Railroad crossing gate. W. T. Ferguson. 1,823,596; Sept. 15.
Range. A. Stockstrom. Des. 85,129; Sept. 15.
Range. A. Stockstrom. Des. 85,132; Sept. 15.
Range top section, Gas. J. Teller and A. P. Schulz. Des. 85,136; Sept. 15.
Razor. R. J. Hodge. 1,823,100; Sept. 15.
Razor, Automatic re-fill multiple shaving edge safety. H. H. Straus. 1,823,708; Sept. 15.
Razor blade, Safety. P. H. Unsinger. 1,823,339; Sept. 15.
Razor, Safety. C. A. Miller. 1,823,839; Sept. 15.
Razor, Safety. R. H. Parker. 1,822,903; Sept. 15.
Razor, Safety. R. E. Thompson. 1,823,808; Sept. 15.
Receptacle, Display. F. G. Huber. 1,823,324; Sept. 15.
Receptacle, Electrical. F. J. Hines. 1,823,143; Sept. 15.
Receptacle, Tobacco ash. E. Schultz. Des. 85,117; Sept. 15.
Recoil pad. A. H. Ammann. 1,822,875; Sept. 15.
Record and signal, Index. L. E. Hutchings. 1,823,564; Sept. 15.
Recorder: *See*—
Vibration recorder.
Recording and reproducing of sound, System and apparatus for the electric. M. H. Loughridge. 1,822,932; Sept. 15.
Rectifying system. A. Gaudenzi. 1,823,684; Sept. 15.
Reel. J. W. Proctor. 1,823,165; Sept. 15.
Refractory article. R. L. Frink. 1,823,356; Sept. 15.
Refrigerating apparatus. F. W. Andrews. 1,823,079; Sept. 15.
Refrigerating apparatus. E. L. Barnes. 1,822,918; Sept. 15.
Refrigerating apparatus. S. C. Carney. 1,823,725; Sept. 15.
Refrigerating apparatus. J. G. King. 1,823,106; Sept. 15.
Refrigerating unit. J. R. Replogle. 1,823,002–4; Sept. 15.
Refrigerating unit. J. R. Replogle. 1,823,124; Sept. 15.
Refrigeration. A. Lenning. 1,823,456; Sept. 15.
Refrigeration, Apparatus for. R. W. Davenport. 1,823,353; Sept. 15.
Refrigeration unit, Mechanical. L. U. Larkin. 1,823,275; Sept. 15.
Register of impressions in web fed printing machines, Securing. E. B. Osborne. 1,822,902; Sept. 15.
Relasting machine. A. F. Pym. Re18,186; Sept. 15.
Remote control apparatus. J. J. Vanhorn. 1,822,913; Sept. 15.
Remote control system. W. R. G. Baker. 1,823,718; Sept. 15.
Reservoir, Ink carrying. S. Lipschutz. 1,822,897; Sept. 15.
Reservoir, Variable capacity. E. D. Eby. 1,823,731; Sept. 15.
Resilient wheel. R. H. Prosser. 1,823,166; Sept. 15.
Resins, Manufacture of artificial. O. Schmidt, K. Seydel, and N. Roh. 1,823,127; Sept. 15.
Reverberatory furnace. W. F. Sklenar. 1,823,005; Sept. 15.
Rheostat. N. C. Schellenger. 1,823,473–4; Sept. 15.
Rheostat, Metal frame. N. C. Schellenger. 1,823,472; Sept. 15.
Rim, wheel. A. M. Rees. 1,823,842; Sept. 15.
River channel deepening means. F. Fredeen. 1,822,964; Sept. 15.
Road surfaces, Making. S. E. Finley. 1,823,682; Sept. 15.
Rocket. S. Scardone. 1,823,378; Sept. 15.
Rod: *See*—
Push rod.
Roller: *See*—
Button breaker roller.
Rollers, Method and apparatus for lapping color film embossing. O. Wittel. 1,823,243; Sept. 15.
Rope of tow-nets, Device for preventing the sinking and sticking of the ground. D. de Niet. 1,823,593; Sept. 15.
Ropes and other articles of magnetizable material, Electromagnetic testing of steel wire. T. F. Wall. 1,823,810; Sept. 15.
Rubber compound and preserving it. A. M. Clifford. 1,823,531; Sept. 15.
Rubber compounds, Treating. P. A. Davis. 1,823,855; Sept. 15.
Rubber-cutting machine. L. H. Messinger. 1,823,501; Sept. 15.
Rubber, Manufacturing sponge. P. H. Richert. 1,823,335; Sept. 15.
Rubberless elastic fabric. H. P. Dworsky and O. S. Lawton. 1,823,034; Sept. 15.
Rudder. E. Van Note. 1,823,433; Sept. 15.
Safety attachment for aircraft. L. Friedrich. 1,823,799; Sept. 15.
Safety device for aeroplanes. F. R. Owens. 1,823,758; Sept. 15.
Safety device for electrical apparatus. C. B. Broestrup. 1,822,919; Sept. 15.
Safety tubing lock. D. Brookshire. 1,823,186; Sept. 15.
Safety swing seat. R. Dick. 1,823,318; Sept. 15.
Salt of pentamethylene-dithio-carbamic acid, Making the piperidine. G. Lütz. 1,823,499; Sept. 15.
Sash construction, Storm. D. E. Schrauger. 1,823,514; Sept. 15.
Sash, Vehicle storm. O. S. Caesar. 1,823,237; Sept. 15.
Scale. A. Van Duyn. 1,823,415; Sept. 15.
Scale, Weighing. S. N. Hurt. Re18,190; Sept. 15.
Scavenging for two-stroke internal combustion engines. T. V. Hemmingsen. 1,823,399; Sept. 15.
Screen for closed automobiles, Window. F. P. Prawalsky. 1,823,290; Sept. 15.
Scuttle, Ship's. R. Ducroux. 1,823,790; Sept. 15.
Seal, Compressor bearing. C. C. Spreen. 1,823,804–5; Sept. 15.
Seam pressing machine, Trouser. C. Pietracatella. 1,823,628; Sept. 15.
Seat: *See*—
Safety swing seat.
Seat, cushion and the like, Pneumatic. A. V. Mellano. 1,823,569; Sept. 15.
Seat for window cleaners, Protecting or safety. A. Zahn. 1,823,247; Sept. 15.
Seed, Emanation. A. Cervi. 1,823,239; Sept. 15.
Self starting motor, Synchronous. J. W. Hansen, W. L. Hansen, and I. N. Hurst. 1,823,601; Sept. 15.
Separator: *See*—
Fabric separator.
Separator. V. A. Rohlin. 1,823,470; Sept. 15.
Sewer cleaning device. F. Homolya. 1,823,144; Sept. 15.
Sewing machine and the like. F. W. Merrick. 1,823,059; Sept. 15.
Sewing machines, Looper operating mechanism for. J. F. Palme. 1,823,506; Sept. 15.
Sewing machines, Ribbon shirring device for. T. O'Neill. 1,823,505; Sept. 15.
Sewing machines, Roller-presser mechanism for. E. W. Johnson. 1,823,546; Sept. 15.
Sewing machines, Tension release for. N. V. Christensen. 1,823,817; Sept. 15.
Shaft coupling. K. E. Blum. 1,823,251; Sept. 15.
Sheath bonding system. H. Halperin and K. W. Miller. 1,823,140; Sept. 15.
Sheath for electric warming pads. M. W. Ardle. 1,823,155; Sept. 15.
Sheet feeding machine. J. T. Wright. 1,823,182; Sept. 15.
Sheet glass. F. F. Shetterly. Des. 85,118; Sept. 15.
Sheet material, Apparatus for making. H. E. Holcomb. 1,822,891; Sept. 15.

Shell, Air gun. W. Paul. 1,823,160; Sept. 15.
Shielding for radio-frequency amplifiers. W. A. MacDonald and F. E. Johnston. 1,823,327; Sept. 15.
Shock absorber. S. E. Lesher. 1,823,834; Sept. 15.
Shock absorber. H. Ludwig. 1,823,835; Sept. 15.
Shock absorber. M. Tibbetts. 1,823,712; Sept. 15.
Shoe stiffener. H. H. Beckwith. 1,823,231; Sept. 15.
Shoes, Treating the counter portions of. H. H. Beckwith. 1,823,232; Sept. 15.
Shopping bag, Roller. H. Kapolkin. 1,822,893; Sept. 15.
Shore protecting device. A. M. Shaw. 1,823,224; Sept. 15.
Shovel: *See*—
Power shovel.
Show case. T. C. Campbell. 1,823,085; Sept. 15.
Sign. S. S. Chadderton. Des. 85,086; Sept. 15.
Sign board, Storm or windproof. J. A. Marx and W. W. Lower. 1,823,404; Sept. 15.
Sign or marker, Curb. N. B. Riddle. 1,823,843; Sept. 15.
Signal code sending device. H. Burdick. 1,823,586; Sept. 15.
Signal switch. H. V. Cox. 1,822,956; Sept. 15.
Signal system, Responsive. W. N. Dickinson. 1,823,319; Sept. 15.
Signaling and communication system. H. W. O'Neill. 1,823,120; Sept. 15.
Signaling system. R. A. Heising. 1,823,360; Sept. 15.
Silk, Treatment of. S. Jost. 1,823,606; Sept. 15.
Skate, Roller. G. A. Leonard. 1,822,896; Sept. 15.
Sleeve valve engine. E. O. Schjolin. 1,823,431; Sept. 15.
Slipper. L. Goldstone. 1,823,445; Sept. 15.
Slotting machine. H. E. Frentzel. 1,823,857; Sept. 15.
Smoker's device. J. B. Wells. Des. 85,140; Sept. 15.
Smoker's pipe. A. N. Larsen. 1,823,747; Sept. 15.
Soap floating on the waste-liquors obtained in the manufacture of sulphate or sodium cellulose as well as sulphite waste liquor, Refining the. C. H. Michelson. 1,823,752; Sept. 15.
Socket, Vacuum tube. W. J. Murdock. 1,823,331; Sept. 15.
Sound from records, Electrical reproduction. L. H. Pearson and C. Marshall. 1,823,162; Sept. 15.
Sound reproducing apparatus. A. J. Haynes. 1,823,603; Sept. 15.
Sound reproduction, System of articulate. W. D. Smith. 1,823,705; Sept. 15.
Spectacles. E. E. Emons. Des. 85,089; Sept. 15.
Speed controlling device for vehicles. A. Braun. 1,822,880; Sept. 15.
Speed indicator. F. C. Biggert, jr. 1,822,950; Sept. 15.
Speedometer. E. O. Holmberg. 1,823,044; Sept. 15.
Speed responsive device. A. Juneau. 1,823,830; Sept. 15.
Speed unit, Variable. P. B. Reeves. 1,822,935; Sept. 15.
Spider, Well casing. F. B. Angell. 1,823,183; Sept. 15.
Spike attachment for shoes. E. J. Krebs. 1,823,612; Sept. 15.
Spinning apparatus. C. Van Coppenolle. 1,823,011; Sept. 15.
Splicer. S. S. Matthes. 1,823,330; Sept. 15.
Spring construction. B. Read. 1,823,168; Sept. 15.
Spring counterbalance and lock for pressing machines. H. A. Steel. 1,823,478; Sept. 15.
Sprinkler. G. Buelna and H. E. J. Vacher. 1,823,315; Sept. 15.
Squirrel cage motor. R. R. Sheely. 1,823,337; Sept. 15.
Stage, Window. L. E. Thrasher. 1,823,771; Sept. 15.
Stand: *See*—
Display stand. Work stand.
Stand. F. H. Leslie. 1,823,616; Sept. 15.
Steam boiler. A. D. Pratt. 1,823,701; Sept. 15.
Steam boiler. J. J. Regan. 1,823,573; Sept. 15.
Steam trap. F. Ackerman. 1,823,077; Sept. 15.
Steel assembly and producing same, Structural. H. F. Norton and J. W. Owens. 1,823,699; Sept. 15.
Steering control mechanism, Tractor. G. C. Jett. 1,822,991; Sept. 15.
Steering mechanism. W. T. James. 1,823,325; Sept. 15.
Steering wheel. H. A. Husted. 1,823,563; Sept. 15.
Stencil for copying purposes. M. Deseniss. 1,823,260; Sept. 15.
Stencil for decorating china ware and pottery. G. A. Bauer. 1,822,986; Sept. 15.
Stick, Police. D. L. Potter. 1,823,407; Sept. 15.
Stocking. P. L. Fox. Des. 85,092; Sept. 15.
Stocking. A. G. Stephens. Des. 85,125; Sept. 15.
Stocking. J. A. Struthers. Des. 85,133; Sept. 15.
Stocking protector and overshoe, Combined. W. D. Walker. 1,823,518; Sept. 15.
Stocking, Surgical. O. H. Walton. 1,823,178; Sept. 15.
Stop, Electric phonograph. D. H. Chason. 1,823,530; Sept. 15.
Stop gauge. J. Gordon. 1,823,268; Sept. 15.
Stop mechanism for knitting machines, Automatic. P. C. Klingler. 1,822,931; Sept. 15.
Stopping device, Vehicle. F. W. Stohr. 1,823,297; Sept. 15.
Storage and discharge apparatus, Ice. A. B. Walters. 1,823,220; Sept. 15.
Storage battery. G. W. Hebbeler. 1,823,448; Sept. 15.
Stove. F. W. Cuffe. Des. 85,088; Sept. 15.
Stove, Gas. H. C. Maul. Des 85,110; Sept 15
Strap retainer, Garment shoulder. J. Blazich. 1,823,250; Sept. 15.
Stretcher, Wire. G. Little. 1,823,054; Sept. 15.
Strip for window sashes, Glazing. R. T. Axe. 1,823,020; Sept. 15.
Strips from sheet magnesium alloys, method of and apparatus for producing profile. E. de Ridder. 1,823,489; Sept. 15.
Submarines, Device for attaching saving means to sunken. J. Novotny. 1,823,862; Sept. 15.
Subway and tunnel. J. F. O'Rourke. 1,823,757; Sept. 15.
Suit, Bathing. F. O. Donner. 1,822,958; Sept. 15.
Sulphur dioxide from exit gas, Recovering. H. F. Merriam. 1,823,372; Sept. 15.
Sulphur, Treating discolored. L. S. Bushnell. 1,823,188; Sept. 15.
Supercharger. L. H. Watkins. 1,823,811; Sept. 15.
Support, Engine rear. B. H. Anibal. 1,823,420; Sept. 15.
Support for automobiles, Trunk. J. C. Hoffman. 1,823,101; Sept. 15.
Support for electric motors, Insulating. E. Knecht. 1,823,203; Sept. 15.
Support for vacuum cleaners, Bag. J. F. Carson. 1,823,726; Sept. 15.
Support for vehicles, Combination pneumatic and spring. J. H. Johnson. 1,823,401; Sept. 15.
Support, Shank. G. D. Myers. 1,823,282; Sept. 15.
Support, Shoe shank. S. Richmond. 1,823,202; Sept. 15.
Suppporting means for Venetian blinds. J. K. Heymer. 1,822,890; Sept. 15.
Supporting structure for fruit pickers. R. Barker. 1,823,385; Sept. 15.
Suspender. N. McCulloch. 1,823,369; Sept. 15.
Swimming device. C. F. Glaeser. 1,822,966; Sept. 15.
Switch: *See*—
Electric switch. Signal switch.
Magnetically operated switch. Thermostatic switch.
Switch for use on automobiles, Signal. H. C. Vagner and J. M. Koch. 1,823,809; Sept. 15.
Switch mechanism, Thermostatically operated. G. H. Hart. 1,823,099; Sept. 15.
Switch structure. G. S. Florus. 1,823,826; Sept. 15.
System operating on a marginal current basis. J. W. Horton. 1,823,739; Sept. 15.
Table: *See*—
Diagnostic table.
Table. A. V. Shipman. Des. 85,120; Sept. 15.
Table and seat, Collapsible. L. Blumenthal. 1,823,484; Sept. 15.
Table leg rest, Examining. H. S. Allison. 1,823,248; Sept. 15.
Tablet, Combined urn and memorial. W. F. Clark. Des. 85,087; Sept. 15.
Tachometer, Liquid. S. R. Puffer, and S. A. Moss. 1,823,841; Sept. 15.
Talking machines, Record magazine for. H. L. T. Buckle. 1,823,084; Sept. 15.
Tank and storing oil, Oil. E. M. Clark. 1,823,256; Sept. 15.
Tanning process, Preliminary. B. Quendt. 1,823,467; Sept. 15.
Tap, Feeder. H. P. Chandler. 1,822,883; Sept. 15.
Tape, Hand moistener. J. F. Porter. 1,823,761; Sept. 15.
Tape, Moistener. W. R. Greenlee. 1,823,600; Sept. 15.
Teether. N. P. Steckler. Des. 85,142; Sept. 15.
Telegraph system, High speed submarine cable. A. D. Dowd, M. B. Kerr, and G. A. Locke. 1,823,354; Sept. 15.
Telephone exchange system. H. Hovland. 1,823,688; Sept. 15.
Telephone exchange system, Call charging. A. E. Hague. 1,823,040; Sept. 15.
Telephone recording system. H. S. Worrell. 1,823,717; Sept. 15.
Telephone set, Desk. I. L. Hopkins. 1,823,323; Sept. 15.
Telephone system. W. H. Paulett and C. Gillings. 1,823,665; Sept. 15.
Telescope framing device. L. S. Frappier and E. Boecking. 1,823,355; Sept. 15.
Tent frame. C. A. Brust. 1,823,386; Sept. 15.
Textile fabric or similar article. G. Kateb. Des. 85,101; Sept. 15.
Theater chair. C. C. Adelsperger and H D. Fitzgerald. 1,823,418; Sept. 15.
Theaters and distributing sound, Ventilating. R. E. Venderbush. 1,823,479; Sept. 15.
Thermic control device. E. C. Raney. 1,823,511; Sept. 15.
Thermocouple, High temperature. H. C. Staehle. 1,823,706; Sept. 15.
Thermoelectricresponsive device. H. E. Rupp. 1,823,630; Sept. 15.
Thermostatic switch. J. E. Britt. 1,823,345; Sept. 15.
Thimble. L. P. Bruening. 1,822,953; Sept. 15.
Threads, filaments, bands and the like, Manufacture and production of artificial. W. H. Stokes. 1,823,709; Sept. 15.
Threads in cloth, Apparatus for correcting displacement of weft. J. J. Lyth. 1,823,205; Sept. 15.
Tie plate. C. E. Ennis and J. W. Reynolds. 1,822,963; Sept. 15.
Timing device. J. K. Shelledy. 1,823,668; Sept. 15.
Tire casing spreader. B. E. Johnson. 1,823,545; Sept. 15.
Tire gauge. H. N. Thune. 1,823,414; Sept. 15.
Tire tread cutting machine. A. R. Krause. 1,823,611; Sept. 15.
Tires, Forming. H. F. Maranville. 1,823,566; Sept. 15.

Tobacco material and apparatus therefor, Treating. R. G. Newborne. 1,823,554; Sept. 15.
Toilet device. J. E. Bryant. 1,823,253; Sept. 15.
Toll system, Dial switching. T. S. Skillman, L. G. Freeth, and R. J. Berry. 1,823,338; Sept. 15.
Tone modifying device for the vibrating elements of musical instruments. C. B. Gardner, jr. 1,823,683; Sept. 15.
Tongs, Clinker. J. G. and C. R. Hall. 1,823,041; Sept. 15.
Tool, Fishing. V. O. Vance. 1,823,340; Sept. 15.
Tool for dressing articles on nonparallel surfaces, Machine. R. L. Dyas and J. Maickel. 1,823,824; Sept. 15.
Tool, Lawn edging. E. J. Casse. 1,823,254; Sept. 15.
Tool, Machine. J. M. Christman. 1,823,727; Sept. 15.
Tool, Striping. J. T. Green. 1,823,427; Sept. 15.
Tool unit, Machine. R. M. Galloway. 1,823,038; Sept. 15.
Toothbrush. W. G. McGauley. Des. 85,112; Sept. 15
Top extension. J. S. Kern and O. L. Currier. 1,823,201; Sept. 15.
Top for refrigerator cabinets. N. M. Vandegrift. 1,823,517; Sept. 15.
Top, Gas range. W. H. Guenther. 1,823,539–40; Sept. 15.
Towel handling machine. J. H. Addler. 1,823,078; Sept. 15.
Toy. E. Prunetti. 1,823,064; Sept. 15.
Toy Christmas tree. N. A. Becker. 1,823,021; Sept. 15.
Toy, Mechanical. L. Markowitz. 1,823,749; Sept. 15.
Toy slipper. R. Wiesner. 1,823,634; Sept. 15.
Toy, Wheeled. L. Oskow. 1,823,663; Sept. 15.
Traffic control system for multifloor garages. S. E. Test. 1,823,008; Sept. 15.
Transfer device. A. L. Bausman. 1,823,483; Sept. 15.
Transmission. P. L. Tenney. 1,823,432; Sept. 15.
Transmission, Four speed. R. Beringer. 1,823,421; Sept. 15.
Transmission system, Wireless. A. Esau. 1,823,794; Sept. 15.
Transmission, Washing machine. H. C. Hirschy. 1,823,271; Sept. 15.
Transmitting system. A. M. Trogner. 1,823,177; Sept. 15.
Transplanting implement. P. H. Dohrn. 1,823,789; Sept. 15.
Trap: *See*—
Insect trap. Steam trap.
Traveling bag. W. Krueger. 1,823,403; Sept. 15.
Tray, Ash. D. Gottlieb. Des. 85,093; Sept. 15.
Tray, Bed. G. F. Scriven and L. H. Lippert. 1,823,214; Sept. 15.
Tray for rotary duplicators, Collecting. E. B. Hartmann. 1,823,042; Sept. 15.
Tray or similar article, Ash. H. Underberg. Des. 85,138; Sept. 15.
Tray, Refrigerating. M. K. Buchanan and A. G. Horton. 1,823,187; Sept. 15.
Tricalcium phosphate, Treating. H. E. White. 1,823,015; Sept. 15.
Truck. C. S. Schroeder. 1,823,380; Sept. 15.
Truck for rolling stock. W. F. Kiesel, jr. 1,822,895; Sept. 15.
Truck, Industrial. S. K. Towson. 1,823,516; Sept. 15.
Trunk and luggage carrier, Extension. P. F. Spery. 1,823,515; Sept. 15.
Trunking system. A. C. Powell. 1,823,667; Sept. 15.
Tube: *See*—
Electrical tube.
Tubes, Manufacture of seamless. O. Bamberger. 1,823,080; Sept. 15.
Tubing stripper. I. C. Bell. 1,823,233; Sept. 15.
Tuning means. H. O. Peterson. 1,823,666; Sept. 15.
Turbine, Elastic fluid. R. C. Allen. 1,823,309–10; Sept. 15.
Turntable, Phonograph. F. Diehl. 1,823,533; Sept. 15.
Type, Apparatus for cleaning. C. N. Kelley. 1,823,089; Sept. 15.
Typewriter and card-perforating machine, Combined. A. G. F. Kurowski. 1,823,550; Sept. 15.
Typewriting and card-perforating machine, Combined. A. G. F. Kurowski. 1,823,108; Sept. 15.
Typewriting and computing machine, Combined. R. von Reppert. 1,823,715; Sept. 15.
Typewriting machine. W. F. Helmond. 1,823,450; Sept. 15.
Typewriting machine. J. A. B. Smith. 1,822,938; Sept. 15.
Typewriting machine. J. A. B. Smith. 1,823,130; Sept. 15.
Undergarment. S. Blue. 1,823,527; Sept. 15.
Undergarment. M. Sekey. 1,823,296; Sept. 15.
Unloader. G. E. Hazard. 1,823,398; Sept. 15.
Valve. S. D. Heron. 1,823,452; Sept. 15.
Valve. W. Soupal. 1,823,006; Sept. 15.
Valve, Automatic. E. L. Barnes. 1,822,917; Sept. 15.
Valve, Disk. H. Geiger. 1,823,394; Sept. 15.
Valve for cooking containers or boilers, Steam. L. G. Ducroux. 1,823,595; Sept. 15.
Valve handle. H. W. A. Lehnert. 1,823,496; Sept. 15.
Valve, Making a. R. Jardine. 1,823,454; Sept. 15.
Valve, Nozzle. F. R. Simpson. 1,823,311; Sept. 15.
Valve, Safety. W. Hargreaves. 1,823,651; Sept. 15.
Valve stem collars, Forming. G. A. Toaz. 1,823,009; Sept. 15.
Valve, Temperature compensated. M. Birkigt. 1,823,781; Sept. 15.
Valves of triple valves, Method and apparatus for testing and truing emergency. D. M. Miller and G. D. Thomas. 1,823,279; Sept. 15.
Vase, Flower. H. A. Foster. 1,823,732; Sept. 15.
Vehicle body construction. L. A. McDowell and O. F. Graebner. 1,823,156; Sept. 15.
Vehicle brake. N. A. Christensen. 1,823,589; Sept. 15.
Vehicle, Child's. W. E. Gillenwater. 1,823,138; Sept. 15.
Vehicle, Combination land and water. C. O. Mathieson. 1,823,207; Sept. 15.
Vehicle jack. S. W. Phillips. 1,823,286; Sept. 15.
Vehicle, Motor. A. Moorhouse. 1,823,694–5; Sept. 15.
Vehicle, Motor. M. Tibbetts. 1,823,711; Sept. 15.
Vehicles, Method and apparatus for washing. I. L. Pulliam. 1,823,167; Sept. 15.
Vending machine. A. H. Du Grenier. 1,823,093; Sept. 15.
Ventilator for vehicles, Kick. C. G. Cronwall. 1,823,191; Sept. 15.
Vessels from pressed wood or plywood, Producing. G. Homey. 1,823,102; Sept. 15.
Vibration recorder. J. W. Legg. 1,823,326; Sept. 15.
Viner, Double. F. P. Ryder. 1,823,410; Sept. 15.
Vise. C. D. Gaudreau. 1,823,410; Sept. 15.
Voltage, Method of and apparatus for changing. B. F. Miessner. 1,823,837; Sept. 15.
Votive device, Illuminable. M. Priori. 1,823,000; Sept. 15.
Washer: *See*—
Dish washer. Gas washer.
Washing machine. A. W. Altorfer. Re18,185; Sept. 15.
Washing machine. T. A. Riall. 1,823,291; Sept. 15.
Water cooling system. G. O'Brien. 1,823,661; Sept. 15.
Water craft. W. V. Gilbert. 1,823,096; Sept. 15.
Water heater. C. A. Leland, jr. 1,823,803; Sept. 15.
Water, Softening. C. P. Hoover. 1,823,605; Sept. 15.
Water wave comb. W. F. Hudson. 1,823,361; Sept. 15.
Wave reproducing device and process concerning the same. C. P. Madsen. 1,823,457; Sept. 15.
Wave transmission system. R. A. Miller. 1,823,659; Sept. 15.
Wave transmitting and amplifying. R. A. Heising. 1,823,322; Sept. 15.
Web holding machine. J. A. Flood. 1,823,264; Sept. 15.
Wedding ring or similar article. M. Kronstadt. Des. 85,103; Sept. 15.
Welded structures, Apparatus for the manufacture of. T. A. Lucy. 1,823,551; Sept. 15.
Well pumping apparatus. G. I. Keniston. 1,823,273; Sept. 15.
Wheel: *See*—
Resilient wheel. Steering wheel.
Wheel aligner. P. R. Vanica. 1,822,983; Sept. 15.
Wheel and support, Antifriction caster. W. H. Noelting. 1,822,998; Sept. 15.
Wheelbarrow. G. I. Chittenden. 1,823,816; Sept. 15.
Wheel with movable blade, Blade. E. Schneider, E. Ehrhart, and J. Kreitner. 1,823,169; Sept. 15.
Wheels, Apparatus for cleaning polishing. J. J. Cunningham. 1,823,645; Sept. 15.
Wheels, Forming steering. H. A. Husted. 1,823,562; Sept. 15.
Window shade bracket. H. Goldfinger. 1,823,490; Sept. 15.
Window, Weightless. S. C. Baughin. 1,822,949; Sept. 15.
Wiper, Windshield. I. H. Frailey. 1,823,598; Sept. 15.
Wire reeler. W. C. Saunders. 1,823,212; Sept. 15.
Woodworking machine. A. B. Johnson. 1,823,200; Sept. 15.
Woodworking machine. A. B. Johnson. 1,823,272; Sept. 15.
Work positioning means for centering machines. J. J. Thacher. 1,823,670; Sept. 15.
Work stand, Automobile radiator. G. D. Long. 1,823,204; Sept. 15.
Wrench: *See*—
Machine wrench.
Wringer: *See*—
Mop wringer.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 15, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Acme Brick Company, Danville, Ill. Brick. 287,362; Sept. 22; Serial No. 314,354; published June 30, 1931. Class 12.

Acoustone Company, Ltd., Los Angeles, Calif. Sound absorbing and acoustical tile. 287,380; Sept. 22; Serial No. 310,405; published June 30, 1931. Class 12.

Alcoa Ore Company, East St. Louis, Ill. Alumina, aluminum fluorides, calcium oxide, etc. 287,312; Sept. 22; Serial No. 313,625; published July 7, 1931. Class 6.

Alka-Septol, Incorporated, Beacon, N. Y. Antiseptic compound. 287,371; Sept. 22; Serial No. 314,222; published June 23, 1931. Class 6.

Allbright Electric Corporation, New York, N. Y. Flash light batteries and other electric dry cells, electric storage batteries, etc. 287,418; Sept. 22. Class 21.

American Bitumuls Company, Wilmington, Del., and Oakland, Calif. Asphalt, pavement materials, asphaltic binders, etc. 287,374–5; Sept. 22; Serial Nos. 311,945–6; published June 23, 1931. Class 12.

American Lecithin Corporation, Wilmington, Del., and Atlanta, Ga. Phosphatide or lecithin and compositions containing same. 287,385; Sept. 22; Serial No. 313,726; published July 7, 1931. Class 6.

American Manufacturing Company. (See Smith, Benjamin D.)

Anti-Cept Co. (See Goldsmith, Joseph, jr.)

Appleton Coated Paper Co., The, Appleton, Wis. Book paper. 287,425; Sept. 22. Class 37.

Autogiro Company of America, Wilmington, Del., and Philadelphia, Pa. Publication. 287,333; Sept. 22; Serial No. 314,977; published July 7, 1931. Class 38.

Bamberger, L., & Co., Newark, N. J. Bunting and blankets. 287,387; Sept. 22; Serial No. 313,826; published June 23, 1931. Class 42.

Barlow, John W., New York, N. Y. Medicinal treatment for consumption. 287,384; Sept. 22; Serial No. 313,691; published June 23, 1931. Class 6.

Bedford, Joan. (See Schmidt, Jay H.)

Boardman, George, doing business as Vermel Company, Sioux Falls, S. Dak. Insecticide. 287,370; Sept. 22; Serial No. 314,228; published June 23, 1931. Class 6.

Böhme A. G. H. Th., Chemnitz, Germany. Chemical dye aids. 287,341–4; Sept. 22; Serial Nos. 314,546–9; published July 7, 1931. Class 6.

Bond Electric Corporation, Jersey City, N. J. Anti-freeze products. 287,394; Sept. 22; Serial No. 314,037; published June 23, 1931. Class 6.

Bonded Materials Co., Louisville, Ky. Aluminum paint. 287,406; Sept. 22. Class 16.

Boston Floral Supply & Snyder Co. Inc., Boston, Mass. Liquid nail polishes, nail polish removers, and liquid cuticle removers. 287,368; Sept. 22; Serial No. 314,267; published July 7, 1931. Class 6.

Brewer & Company, Inc., Worcester, Mass. Tonic. 287,399; Sept. 22; Serial No. 314,139; published June 23, 1931. Class 6.

Burroughs, Incorporated, Los Angeles, Calif. Publication. 287,332; Sept. 22; Serial No. 315,029; published July 7, 1931. Class 38.

Cape Cod Shirt Company, Fall River, Mass. Shirts and pajamas. 287,379; Sept. 22; Serial No. 310,553; published Apr. 21, 1931. Class 39.

Cattell, J. McKeen, doing business as The Science Press, New York, N. Y. Magazine. 287,356; Sept. 22; Serial No. 314,446; published July 7, 1931. Class 38.

Central Press Association, Inc., New York, N. Y. Newspaper section. 287,335; Sept. 22; Serial No. 314,893; published July 7, 1931. Class 38.

Chapman & Dewey Lumber Co., Marked Tree, Ark. Lumber, lime and brick. 287,388; Sept. 22; Serial No. 313,830; published June 30, 1931. Class 12.

Chicago Mill and Lumber Corporation, Chicago, Ill. Lumber. 287,381; Sept. 22; Serial No. 309,803; published June 23, 1931. Class 12.

Cobbs, Ansalem O., doing business as Cobbs Mfg. Co., Des Moines, Iowa. Composition for stopping leaks of internal combustion engine radiators. 287,389; Sept. 22; Serial No. 313,831; published July 7, 1931. Class 6.

Colloidal Products Corporation. (See Hercules Glue Company.)

Dektol Corporation, Kansas City, Mo. Antiseptic mouth wash. 287,369; Sept. 22; Serial No. 314,233; published June 23, 1931. Class 6.

Denton, H. B. & Co., Mount Carmel, Ill. Liquid skin cleaner, face cream, and vanishing cream, etc. 287,378; Sept. 22; Serial No. 310,822; published July 7, 1931. Class 6.

Draun, Simon, doing business as Draun Laboratories, Baltimore, Md. Preparation for the extermination of rats and mice. 287,360; Sept. 22; Serial No. 314,401; published July 7, 1931. Class 6.

Eastern Research Laboratories, Baltimore, Md. Astringent powder. 287,398; Sept. 22; Serial No. 314,104; published July 7, 1931. Class 6.

Edwards, Lemuel E., Pascoag, R. I. Headache capsules. 287,417; Sept. 22. Class 6.

Elder Manufacturing Company, St. Louis, Mo. Shirts, waists, and blouses. 287,423; Sept. 22. Class 39.

Enso-Gutzeit Osakeyhtiö, Kotka, Finland. Paper. 287,327; Sept. 22; Serial No. 302,156; published July 7, 1931. Class 37.

Ephedrine Company, The, University City, Mo. Preparation for relief of catarrh, nasal sinus trouble, hay fever, etc. 287,353–4; Sept. 22; Serial No. 314,491–2; published July 7, 1931. Class 6.

Everedy Company, The, Frederick, Md. Bottle cappers. 287,408; Sept. 22. Class 23.

Fairboil Paint Co. (See Swartz, Milton D.)

Fairchild, Aerial Surveys, Inc., New York, N. Y. Maps and photographs. 287,411; Sept. 22. Class 38.

Ferngren Mestler Manufacturing Company, Toledo, Ohio. Coffee. 287,416; Sept. 22. Class 46.

Feroleum Products, Inc., Irvington, N. J. Liquid coating material. 287,395; Sept. 22; Serial No. 314,053; published June 23, 1931. Class 6.

Foster-Grant Co. Inc., Leominster, Mass. Bridge pads, bridge pencil cases, photo albums, etc. 287,325; Sept. 22; Serial No. 304,100; published July 7, 1931. Class 37.

Gabilla, Incorporated, New York, N. Y. Perfume, toilet water, powder, compacts, etc. 287,376; Sept. 22; Serial No. 311,679; published June 23, 1931. Class 6.

Gernsback Publications, Inc., New York, N. Y. Publication. 287,352; Sept. 22; Serial No. 314,497; published July 7, 1931. Class 38.

Goldsmith, Joseph, jr., doing business as Anti-Cept Co., Los Angeles, Calif. Antiseptic douche powder. 287,359; Sept. 22; Serial No. 314,409; published July 7, 1931. Class 6.

H. B. Co., The, Jersey City, N. J. Cough drops. 287,367; Sept. 22; Serial No. 314,284; published June 23, 1931. Class 6.

Hair Research Laboratories. (See Stein, Hermann.)

Heliotone Reproduction Service, Chicago, Ill. Reproductions in the form of prints. 287,336; Sept. 22; Serial No. 314,849; published July 7, 1931. Class 38.

Hercules Glue Company, doing business as Colloidal Products Corporation, San Francisco, Calif. Chemical spreader for insecticides and the like. 287,321; Sept. 22; Serial No. 307,490; published June 23, 1931. Class 6.

Hicks, William W., San Francisco, Calif., assignor to Wired Heat Co. Ltd. Electric heaters. 287,414; Sept. 22. Class 21.

Hind & Harrison Plush Co., The, New York, N. Y. Pile fabric. 287,409; Sept. 22. Class 42.

Hooks, John S., Yazoo City, Miss. Stuffed figure toy. 287,413; Sept. 22. Class 22.

Howell, H. R., Publishing Co., Inc., New York, N. Y. Periodical. 287,339; Sept. 22; Serial No. 314,617; published July 7, 1931. Class 38.

Hubenthal, Dr. Charles G., doing business as The Lopex Remedies and Products Co., Minneapolis, Minn. Relief and treatment of gall stones and catarrhal jaundice. 287,392; Sept. 22; Serial No. 313,963; published July 7, 1931. Class 6.

Iliff-Bruff Chemical Company, The, Hoopeston, Ill. Anhydrous calcium sulphate. 287,365; Sept. 22; Serial No. 314,314; published July 7, 1931. Class 6.

Illinois Paint Works. (See Sears, Roebuck and Co.)

International Newsreel Corporation, New York, N. Y. Newspaper section. 287,338; Sept. 22; Serial No. 314,763; published July 7, 1931. Class 38.

International Projector Corporation, New York, N. Y. Cameras and parts thereof, combinations of picture recording and sound recording apparatus, etc. 287,315; Sept. 22; Serial No. 313,266; published July 7, 1931. Class 26.

Jensen, James M., Blackfoot, Idaho. Medicinal preparation. 287,393; Sept. 22; Serial No. 314,004; published July 7, 1931. Class 6.

Johnson, Hez K., Chillicothe, Mo. Rock asphalt. 287,358; Sept. 22; Serial No. 314,410; published June 23, 1931. Class 12.

Johnstown Tribune Publishing Company, The, Johnstown, Pa. Newspaper column. 287,391; Sept. 22; Serial No. 313,922; published July 7, 1931. Class 38.

K. D. Chemical Co. (See Webb, J. E.)

Kaline Water Company, Inc., Wilmington, Del., and Washington, D. C. Alkaline medicinal water. 287,361; Sept. 22; Serial No. 314,370; published June 23, 1931. Class 6.

Karroth, August, doing business as Luitpold-Werk. Chemisch-Pharmazeutische Fabrik, Munich, Germany. Hemostatic. 287,419; Sept. 22. Class 6.
Keane-Loffler, Inc., Benning, D. C. Sausage. 287,415; Sept. 22. Class 46.
Kelco Company, San Diego, Calif. Kelp and kelp preparations. 287,318; Sept. 22; Serial No. 312,760; published June 23, 1931. Class 6.
Kozlowski, Zygmunt, New York, N. Y. Preparation for restoring natural color to gray hair. 287,348; Sept. 22; Serial No. 314,502; published July 7, 1931. Class 6.
Kur Trier G. m. b. H., Amshausen, near Steinhagen, Germany. Medicinal preparation. 287,320; Sept. 22; Serial No. 308,018; published July 7, 1931. Class 6.
Lakeside Envelope Co., Chicago, Ill. Paper tablets, envelopes, note paper, letter paper. 287,430; Sept. 22. Class 37.
Letter-Book Co., The, Chicago, Ill. Publication. 287,351; Sept. 22; Serial No. 315,270; July 7, 1931. Class 38.
Lopex Remedies and Producta Co., The. (See Hubenthal, Dr. Charles G.)
Lucky Hit Company, The, Hawarden, Iowa. Preparation for the treatment of eczema. 287,373; Sept. 22; Serial No. 312,521; published July 7, 1931. Class 6.
Luitpold-Werk, Chemische-Pharmazeutische Fabrik. (See Karreth, August.)
Martin, Glenn L., Company, The, Baltimore and Middle River, Baltimore, Md. Compound for sealing the joints of fuel tanks and their accessories. 287,313; Sept. 22; Serial No. 313,505; published June 23, 1931. Class 12.
Marvel Company, The, New Haven, Conn. Hygienic powders and suppositories. 287,377; Sept. 22; Serial No. 311,530; published July 7, 1931. Class 6.
McNaught Syndicate, Inc., The, New York, N. Y. Comic strips. 287,349–50; Sept. 22; Serial Nos. 315,378–9; published July 7, 1931. Class 38.
Medico Products Co. (See Para Drug and Rubber Company, The.)
Metzger, George P., New York, N. Y. Newspaper and/or magazine columns. 287,334; Sept. 22; Serial No. 314,958; published July 7. 1931. Class 38.
Midwest Dairy Products Corporation, Duquoin, Ill. Frozen confections. 287,420; Sept. 22. Class 46.
National Aniline & Chemical Company, Inc., New York, N. Y. Dyes, dyestuffs, and dye colors. 287,316; Sept. 22; Serial No. 313,051; published July 7, 1931. Class 6.
National League of Consumers, Michigan City, Ind. Merchant's trade discount in book form. 287,347; Sept. 22; Serial No. 314,508; published July 7, 1931. Class 38.
Norwich Pharmacal Company, The, Norwich, N. Y. Internal lubricants, laxatives, and a preparation for treating constipation. 287,317; Sept. 22; Serial No. 312,957; published July 7, 1931. Class 6.
O-C Manufacturing Company, The, Jersey City, N. J. Bathing suit belts, athletic headbands, polo shirts, etc. 287,322; Sept. 22; Serial No. 306,064; published July 7, 1931. Class 39.
Oberti, James M., doing business as Oberti Manufacturing Company, San Francisco, Calif. Squeegees and brushes. 287,403; Sept. 22. Class 29.
Ohio and Michigan Paper Company, The, Toledo, Ohio. Wrapping, toilet, bond and book paper and correspondence and mailing envelopes. 287,326; Sept. 22; Serial No. 303,777; published July 7, 1931. Class 37.
Paint Products Laboratories. (See Sickle, Edward B.)
Palmer Lime & Cement Company, New York, N. Y. Lime. 287,329; Sept. 22; Serial No. 299,754; published June 23, 1931. Class 12.
Para Drug and Rubber Company, The, doing business as Medico Products Co., Cleveland, Ohio. Medicinal compound. 287,319; Sept. 22; Serial No. 308,385; published July 7, 1931. Class 6.
Pierce, Robert J., Inc., New York, N. Y. Vaginal jelly. 287,366; Sept. 22; Serial No. 314,294; published June 23, 1931. Class 6.
Pioneer Broom Co., Inc., Amsterdam, N. Y. Whiskbrooms. 287,431; Sept. 22. Class 29.
Provident Chemical Works, St. Louis, Mo. Compound embodying calcium sulphate anhydrous and calcium phosphate pyro. 287,364; Sept. 22; Serial No. 314,315; published July 7, 1931. Class 6.
Radiator Specialty Company, Charlotte, N. C. Composition for stopping leaks in all hot water circulating systems. 287,386; Sept. 22; Serial No. 313,753; published June 23, 1931. Class 6.
Riegel Paper Corporation, Riegelsville, N. J. Wrapping paper. 287,407; Sept. 22. Class 37.
Ryan, Scully & Company, Philadelphia, Pa. Granular mixtures. 287,397; Sept. 22; Serial No. 314,076; published June 23, 1931. Class 6.
Seamless Rubber Company, Inc., The, New Haven, Conn. Rubber recoil cushion or pad for shotguns or rifles. 287,427; Sept. 22. Class 9.
Sears, Roebuck and Co., doing business as Illinois Paint Works, Chicago, Ill. Paints, paint enamel, kalsomines, etc. 287,404; Sept. 22. Class 16.
Sears, Roebuck and Co., Chicago, Ill. Chain hoists. 287,428; Sept. 22. Class 22.
Sears, Roebuck and Co., Chicago, Ill. Wagon goods. 287,429; Sept. 22. Class 19.
Schering & Glatz, Inc., Bloomfield, N. J. Urinary antiseptic. 287,400; Sept. 22; Serial No. 314,214; published June 23, 1931. Class 6.
Schmidt, Jay H., doing business as Joan Bedford, New York, N. Y. Cold and cleansing cream, rouge, lipsticks, and face powder. 287,432; Sept. 22. Class 6.
Science Press, The. (See Cattell, J. McKeen.)
Segalas, Charles, & Co., San Francisco, Calif. Medicinal tonic. 287,412; Sept. 22. Class 6.
Shell Oil Company, San Francisco, Calif. Asphalt. 287,372; Sept. 22; Serial No. 312,533; published June 30, 1931. Class 12.
Sickle, Edward B., doing business as Paint Products Laboratories, Chicago, Ill. Plastic composition material. 287,382; Sept. 22; Serial No. 313,684; published June 23, 1931. Class 12.
Sinaspra Corporation, Columbus, Ohio. Nasal spray. 287,363; Sept. 22; Serial No. 314,346; published June 23, 1931. Class 6.
Smith, Benjamin D., doing business as American Manufacturing Company, Utica, N. Y. Preparation for preventing birds and animals from destroying corn. 287,401; Sept. 22; Serial No. 314,216; published June 23, 1931. Class 6
Societe Anonyme Jean Patou, Paris, France. Perfumes, toilet water, face and talcum powder, etc. 287,396; Sept. 22; Serial No. 314,082; published July 7, 1931. Class 6.
Southern Equipment Company, The, St. Louis, Mo. Lunch counters, back bars, urn stands, etc. 287,421; Sept. 22. Class 32.
Spadaro, Giovanni, Philadelphia, Pa. Mouth wash. 287,330; Sept. 22; Serial No. 299,233; published July 7, 1931. Class 6.
Spiegel, May, Stern Company, Inc., Chicago, Ill. Radio receiving sets and radio electron tubes. 287,402; Sept. 22. Class 21.
Spooner, Inc., New York, N. Y. Face and body powders, talcum powders, perfumes, toilet waters, etc. 287,346; Sept. 22; Serial No. 314,517; published July 7, 1931. Class 6.
Stanhope Laboratories. (See Unger, Charles G., assignor.)
Stedman's Foundry & Machine Works, Aurora, Ind. Hogs, in the nature of power driven crushing and grinding machines. 287,410; Sept. 22. Class 23.
Stein, Hermann, doing business as Hair Research Laboratories, New York, N. Y. Preparations for treating hair. 287,357; Sept. 22; Serial No. 314,432; published June 23, 1931. Class 6.
Swartz, Milton D., doing business as Farbell Paint Co., Baltimore, Md. Paints. 287,422; Sept. 22. Class 16.
Unger, Charles G., doing business as Stanhope Laboratories, Brooklyn, N. Y. Dusting, face, talcum and toilet powder. 287,323; Sept. 22; Serial No. 305,633; published July 7, 1931. Class 6.
United States Gypsum Company, Chicago, Ill. Metallic clips. 287,324; Sept. 22; Serial No. 305,458; published June 30, 1931. Class 12.
United States Radio & Television Corp., Marion, Ind. Radio sending and receiving sets and for television sending and receiving sets. 287,424; Sept. 22. Class 21.
United States Register Co., Battle Creek, Mich. Ventilating and register faces. 287,426; Sept. 22. Class 34.
Vanderbilt, Lucretia, Inc., Bridgeport, Conn. Depilatory powders, fumigating pastilles, hair tonics, hair oils, etc. 287,331; Sept. 22; Serial No. 271,445; published June 9, 1931. Class 6.
Vermel Company. (See Boardman, George.)
Vogel, Joseph A., Wilmington, Del. Cards and folders. 287,337; Sept. 22; Serial No. 314,780; published July 7, 1931. Class 37.
Wahl, Wm. A., St. Louis, Mo. Medicines. 287,390; Sept. 22; Serial No. 313,896; published June 23, 1931. Class 6.
Ware, Elmira, Brooklyn, N. Y. Hair dressing preparation. 287,345; Sept. 22; Serial No. 314,522; published July 7, 1931. Class 6.
Webb, J. E., doing business as K. D. Chemical Co., St. Petersburg, Fla., and Philadelphia, Pa. Dental cream. 287,383; Sept. 22; Serial No. 313,688; published June 23, 1931. Class 6.
Wheeler Lumber Bridge & Supply Company, Des Moines, Iowa. Lumber. 287,314; Sept. 22; Serial No. 313,316; published June 23, 1931. Class 12.
Williamson, Hiram L., Springfield, Ill. Periodical. 287,355; Sept. 22; Serial No. 314,477; published July 7, 1931. Class 38.
Wired Heat Co. Ltd. (See Hicks, William W.)
Wise, J. H., Company, Inc., St. Louis, Mo. Steel plates and steel mesh. 287,340; Sept. 22; Serial No. 314,595; published June 30, 1931. Class 12.
Wright-La Montagne Company, Springfield, Mass. Corsets, girdles, etc. 287,405; Sept. 22. Class 39.
Zizine, Pierre, Paris, France. Liquid preparation for dyspepsia, etc. 287,328; Sept. 22; Serial No. 301,225; published June 23, 1931. Class 6.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Archer Hosiery Mills, Columbus, Ga. Archer. For Hosiery. 39,759; Sept. 22.
Ben Hur Candy Kitchen. (See Horowitz, Benjamin.)
Berkshire & Becket Silk Co. (See Collingbourne Mills Inc.)
Central Waxed Paper Company, Chicago, Ill. Marvel quality. For Bread. 39,760; Sept. 22.
Collingbourne Mills Inc., doing business as Dexter, Virginia Snow Studios, Jap Silk Co. and Berkshire & Becket Silk Co., Elgin, Ill. Collingbourne's 6 Strand Quilt-Embroidery Floss, Art. 711. For Quilt-Embroidery Floss. 39,761; Sept. 22.
Collingbourne Mills Inc., doing business as Dexter, Virginia Snow Studios, Jap Silk Co. and Berkshire & Becket Silk Co., Elgin, Ill. Dexter Orienta Rug-Tex-Yarn, 1 Ounce unit, Art. 221. For Yarn. 39,762; Sept. 22.
Collingbourne Mills Inc., doing business as Dexter, Virginia Snow Studios, Jap Silk Co. and Berkshire & Becket Silk Co., Elgin, Ill. Elgin Maid Kinder-Kit, Lustrous Cotton Embroidery and Crochet for Quilt Blocks, Art. 127. For Lustrous Cotton. 39,763; Sept. 22.
Copps Co., The, Stevens Point, Wis. Upright. For Sweet Variety Peas. 39,764; Sept. 22.
Dawn-Glo Chemical Company, Pittsburgh, Pa. Dawn-Glo Washing Fluid. For Washing Fluid. 39,765; Sept. 22.
Dexter. (See Collingbourne Mills Inc.)
Fairchild, E. E., Corporation, Rochester, N. Y. Polyshine Black Liquid Shoe Polish. For Black Liquid Shoe Polish. 39,766; Sept. 22.
Horowitz, Benjamin, doing business as Ben Hur Candy Kitchen, Philadelphia, Pa. The Virginia Home-Made Honey-Chew. For a Confection Made with Pure Honey. 39,767; Sept. 22.
Jap Silk Co. (See Collingbourne Mills Inc.)
Kemp, E. F., Inc., Boston, Somerville, and Worcester, Mass. Kemp's Half and Half. For Candy and Nuts. 39,768; Sept. 22.
Schleicher, F. J., Paper Box Co., St. Louis, Mo. Fine Candies. For Candies. 39,769; Sept. 22.
Schwartz & Son, New York, N. Y. The Ideal Service Coat. For White Duck and Laboratory Coats. 39,770; Sept. 22.
Sims Malt-O-Wheat Company, St. Paul, Minn. Sims Malt-O-Wheat. For Breakfast Cereal. 39,771; Sept. 22.
Skinner Manufacturing Company, Omaha, Nebr. Raisin-Bran. For Whole Wheat with Raisins, Bran and Salt Added. 39,772; Sept. 22.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Tea Town School—. For Tea Balls. 39,773; Sept. 22.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Tea Town Grocery Store. For Tea Balls. 39,774; Sept. 22.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Tea Town Fire Station. For Tea Balls. 39,775; Sept. 22.
Sterling Products Company, Evansville, Ind. One Buys Three. For Malt Syrup. 39,776; Sept. 22.
Union Bag & Paper Corporation, New York, N. Y. Tea. For Tea. 39,777; Sept. 22.
Virginia Snow Studios. (See Collingbourne Mills Inc.)

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Cream of Wheat Corporation, The, Minneapolis, Minn. We Asked Farm Mothers Then City Mothers. For Wheat Breakfast Food. 13,419; Sept. 22.
Golden State Company, Ltd., San Francisco, Calif. Golden State. For Evaporated Milk. 13,420; Sept. 22.
Heinz, H. J., Company, Pittsburgh, Pa. "The Thrill in every Picnic—." For Peanut Butter, Mustard, Applebutter, Oven-Baked Beans, Salad, Cream, Etc. 13,421; Sept. 22.
Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Juicy Fruit. For Chewing Gum. 13,422; Sept. 22.
Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Pink P. K. For Chewing Gum. 13,423; Sept. 22.
Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's P. K. For Chewing Gum. 13,424; Sept. 22.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Admor Shoe Company Inc. (See Armor Shoe Company Inc.)
Apex Products Corporation, Chicago, Ill. Drain pipe cleaner and solvent. 317,885; Sept. 22. Class 6.
Armor Shoe Company Inc., by change of name to Admor Shoe Company Inc., Boston, Mass. Boots, shoes, and slippers, etc. 313,069; Sept. 22. Class 39.
Atlantic Shell Company, Jacksonville, Fla. Crushed shell. 317,062; Sept. 22. Class J.
Betz, Harry D., doing business as Betz Unit Air Cooler Company, Kansas City, Mo. Air washers, air coolers, etc. 313,276; Sept. 22. Class 34.
Birkmeyer, John F., jr., doing business as John F. Birkmeyer & Sons, Baltimore Md. Candy. 317,548; Sept. 22. Class 46.
Blue Plate Foods, Inc., New Orleans, La. India relish, French dressing, salad oil, etc. 317,189; Sept. 22. Class 46.
Bonide Chemical Co. Inc., Utica, N. Y. Insecticide. 317,194; Sept. 22. Class 6.
Brandt, Chas. H., New York, N. Y. Pins. 316,527; Sept. 22. Class 40.
Budlong & Funchess Motor Products Co., Hanford, Calif. Piston lathes. 308,853; Sept. 22. Class 23.
Bussing-Nag Vereinigte Nutzkraftwagen Aktiengesellschaft, Brunswick, Germany. Self propelled vehicles. 314,145; Sept. 22. Class 19.
Candy Kitchens, Inc., Chicago, Ill. Candy. 314,359; Sept. 22. Class 46.
Carthage Mills Incorporated, Cincinnati, Ohio. Printed felt base floor coverings. 318,039; Sept. 22. Class 20.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 316,406; Sept. 22. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 316,416; Sept. 22. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 318,043–6; Sept. 22. Class 42.
Chon & Rosenberger, Inc., New York, N. Y. Pearls, necklaces, bracelets, etc. 317,706; Sept. 22. Class 28.
Clark, Frank L., doing business as Sunset Bed Works, Oakland, Calif. Foldable beds. 311,047; Sept. 22. Class 32.
Clean Surface Products Company, Chicago, Ill. Waterproof preservative preparations. 317,025; Sept. 22. Class 16.
Cokesbury Press. (See Lamar & Whitmore, Book Agents, Publishing House, M. E. Church, South.)
Colgate-Palmolive-Peet Company, Chicago, Ill. Toilet soap. 316,820; Sept. 22. Class 4.
Columbia Dental & X-Ray Corp., New York, N. Y. Dental casts and forms; models of teeth, gum, and jaw structures, etc. 316,033; Sept. 22. Class 44.
Congoleum-Nairn, Inc., Kearny, N. J. Linoleum and products of a linoleum-like nature. 318,098; Sept. 22. Class 20.
Conine & Millner, Chicago, Ill. Reproductions of photographs. 317,840; Sept. 22. Class 38.
Connecticut-Carolina Manufacturing Company, Inc., New York, N. Y. Twines, bandings, braids, and cords. 316,151; Sept. 22. Class 7.
Cory, Chas., Corporation, New York, N. Y. Electrical audible and visual annunciators, electrical interlocking or safety switches, etc. 310,759; Sept. 22. Class 21.
Daily Graphic Inc., New York, N. Y. Newspaper column. 317,070; Sept. 22. Class 38.
Dodge, Bliss & Perry Co., Inc., Newburyport, Mass. Boots and shoes. 317,797; Sept. 22. Class 39.
Eastman Kodak Company, Rochester, N. Y. Electrical apparatus. 313,836; Sept. 22. Class 21.
Eastman Kodak Company, Rochester, N. Y. Lantern slide boxes and dental film safes and containers. 313,843; Sept. 22. Class 2.
Ely & Walker Dry Goods Company, St. Louis, Mo. Bias tape, hair clips, hooks and eyes, etc. 316,036; Sept. 22. Class 40.
Engel, Maurice J., New York, N. Y. Knives, nailing pliers, scissors, etc. 317,391; Sept. 22. Class 23.
First National Stores Inc., Somerville, Mass. Pure raspberry and strawberry preserves. 316,925; Sept. 22. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Fisher Flouring Mills Company, West Waterway, Harbor Island, Seattle, Wash. Wheat flour. 309,585; Sept. 22. Class 46.
Fitzpatrick Bros. Inc., Chicago, Ill. Soap. 316,995; Sept. 22. Class 4.
Fleisaman, S., & Sons, Philadelphia, Pa. Butter. 317,554; Sept. 22. Class 46.
Foodtown Kitchens, Inc., Chicago, Ill. Cereal breakfast foods. 315,767; Sept. 22. Class 46.
Formfit Company, The, Chicago, Ill. Brassières, girdles, garter belts, etc. 317,845; Sept. 22. Class 39.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 317,924; Sept. 22, Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 317,929; Sept. 22. Class 42.
Forta-Unternehmungen A.-G., Basel, Switzerland. Wearing apparel. 298,161; Sept. 22. Class 39.
Friedman Silver Co., Inc., Brooklyn, N. Y. Table hollow ware. 315,964; Sept. 22. Class 28.
Friedmann Bros. Drawing Instruments Co., New York, N. Y. Drawing instruments and sets. 317,973; Sept. 22. Class 26.
Fullerton Lumber Company, Minneapolis, Minn. Primer and first coat paint. 317,033; Sept. 22. Class 16.
Gardner Company, The, Orange, N. J. Calculating machines. 317,168; Sept. 22. Class 26.
Gates Rubber Company, The, Denver, Colo. Permanent tire repair patches. 314,606; Sept. 22. Class 35.
Gilbert Paper Company, Menasha, Wis. Fine writing paper. 317,715; Sept. 22. Class 37.
Glaser Shoe Company, San Francisco, Calif. Leather shoes. 314,990; Sept. 22. Class 39.
Gray Company Incorporated, Minneapolis, Minn. Lubricating equipment, apparatus, and machinery. 298,989; Sept. 22. Class 23.
Haggie, R. Hood, and Son, Limited, Newcastle-on-Tyne, England. Ropes. 317,933; Sept. 22. Class 7.
Haile, Henry, Co., Newark, N. J. Leather. 316,778; Sept. 22. Class 1.
Hanger, J. E., Inc., Washington, D. C. Artificial limbs. 317,515; Sept. 22. Class 44.
Haskins Fish Company, Boston, Mass. Fresh fillets of haddock, cod, etc. 302,509; Sept. 22. Class 46.
Havay, Paul, Aliquippa, Pa. Eye drops. 317,464; Sept. 22. Class 6.
Hayward Hosiery Company, Ipswich, Mass. Hosiery. 317,557; Sept. 22. Class 39.
Hedley, Thomas, & Company, Limited, Newcastle-on-Tyne, England. Perfumed soap. 313,543; Sept. 22. Class 4.
Height, Stanley V., doing business as Woodcraft Toy Studios, Spring Lake, N. J. Breakfast sets, cradles, rocking chairs, etc. 316,267; Sept. 22. Class 32.
Heller, William, Inc., New York, N. Y. Textiles and woven fabrics. 312,431; Sept. 22. Class 42.
Hollingshead, R. M., Co., The, Camden, N. J. Rubber patch and rubber patch material. 317,467; Sept. 22. Class 35.
Holophane Company, Inc., New York, N. Y. Glass globes and reflectors. 310,291; Sept. 22. Class 33.
Hong Kee and Company, New York, N. Y. Chinese peanut candy. 317,210; Sept. 22. Class 46.
Hubinger Co., The, Keokuk, Iowa. Starch. 316,965; Sept. 22. Class 6.
Huntington Laboratories, Inc., Huntington, Ind. Liquid shampoo. 317,248; Sept. 22. Class 6.
Independent Merchants Service Corporation, Jersey City, N. J. Scalp preparations. 314,029; Sept. 22. Class 6.
International Mutoscope Reel Co. Inc., New York, N. Y. Coin operated vending and amusement machines. 283,277; Sept. 22. Class 23.
International Shoe Co., St. Louis, Mo. Boots and shoes. 317,643; Sept. 22. Class 39.
Jell-X-Cell Company of Illinois, The, Chicago, Ill. Gelatin dessert. 317,980; Sept. 22. Class 46.
Juvenile Wood Products, Inc., Fort Wayne, Ind. Toilet chairs. 307,946; Sept. 22. Class 32.
Kaesbach, Otto, Berlin-Wannsee, Germany. Medicinal preparations. 317,172; Sept. 22. Class 6.
Kenny, C. D., Co., Baltimore, Md. Coffee. 296,349; Sept. 22. Class 46.
Kerma Products Company, The. (See Rigney, William A.)
Lamar & Whitmore, Book Agents, Publishing House, M. E. Church, South, doing business as Cokesbury Press, Nashville, Tenn. Religious periodical. 317,521; Sept. 22. Class 38.
Lawrence Company, The, New York, N. Y. Special post cards. 316,819; Sept. 22. Class 38.
Leach Company, Oshkosh, Wis. Shovels. 290,709; Sept. 22. Class 23.
Leonard, Holden, Company, New York, N. Y. Worsted and woolen fabrics. 318,108; Sept. 22. Class 42.
Livoti, Charles, doing business as Chas. Livoti Co., Roseville, Calif. Olive oils. 317,322; Sept. 22. Class 46.
Love-Me Ice Cream Company, Milwaukee, Wis. Ice cream. 317,474; Sept. 22. Class 46.
Mack's Tackle Workshop. (See McGarraugh, Mary M.)
Macomb Co., The, Oakland, Calif. Pickles. 305,410; Sept. 22. Class 46.
Maiden Form Brassiere Co., Inc., New York, N. Y. Brassières and girdles. 317,945–6; Sept. 22. Class 39.
Malter, George H., Fresno, Calif. Concentrates. 317,256; Sept. 22. Class 45.
Markwell Manufacturing Co., Inc., New York, N. Y. Binding, stapling, and tacking machines. 317,695; Sept. 22. Class 23.
Mayhew Steel Products, Inc., Shelburne Falls, Mass. Rulers, ruler tapes, and holders therefor. 317,477; Sept. 22. Class 26.
McDonald, Marion, Los Angeles, Calif. French dressing. 312,730; Sept. 22. Class 46.
McGarraugh, Mary M., doing business as Muck's Tackle Workshop, San Antonio, Tex. Casting lures for fishing. 317,671; Sept. 22. Class 22.
McMahon, Thomas G., doing business as Thos. G. McMahon & Co., Utica, N. Y. Canned fruits, honey, jelly, etc. 312,192; Sept. 22. Class 46.
Mente & Co., Inc., New Orleans, La. Bags. 305,316; Sept. 22. Class 2.
Mergenthaler Linotype Company, Brooklyn, N. Y. Composition of matter in the nature of a paint. 316,370; Sept. 22. Class 16.
Middlshade Company, Inc., The, Philadelphia, Pa. Suits, overcoats, and topcoats. 316,095. Sept. 22. Class 39.
Miller Printing Machinery Company, Pittsburgh, Pa. Printer's machinery. 317,005; Sept. 22. Class 23.
Millett, J. C., Company, San Francisco, Calif. Malt syrup. 317,851. Sept. 22. Class 46.
Milprint Products Corporation, Milwaukee, Wis. Equipment for use in laundries. 317,723; Sept. 22. Class 24.
Moore, Edward, Holland, Mich. Leather shoes. 317,365; Sept. 22. Class 39.
Mueller Brass Co., Port Huron, Mich. Tools. 315,004; Sept. 22. Class 23.
Munsey, Frank A., Company, The, New York, N. Y. Name for a magazine. 316,845–6; Sept. 22. Class 38.
Nashua Manufacturing Company, Nashua, N. H. Cotton piece goods and blankets and wool blankets. 317,612; Sept. 22. Class 42.
National Home Towners Merchants Association, Chicago, Ill. Magazine. 286,649. Sept. 22. Class 38.
Nelson, Hugh, Columbia Carpet Mills, Inc., Philadelphia, Pa. Textile rugs and carpets. 317,567. Sept. 22. Class 42.
New Jersey Sportsman, Inc., The, Newark, N. J. Periodicals. 317,646; Sept. 22. Class 38.
Nims Cafe, Incorporated, Spokane, Wash. Coffee, tea, bread, etc. 317,327; Sept. 22. Class 46.
Norn Chemical Company. (See Weiner, Philip.)
Nutt Bros., Los Angeles, Calif. Cookies, small cakes, and crackers. 317,866; Sept. 22. Class 46.
O'Sullivan Rubber Company, Inc., New York, N. Y. Rubber heels. 316,165; Sept. 22. Class 39.
Peoples Baking Company, Detroit Mich. Whole wheat bread. 313,212; Sept. 22. Class 46.
Petroleum Rectifying Company of California, Los Angeles, Calif. Tanks. 315,109; Sept. 22. Class 2.
Piel Bros. Inc., Brooklyn, N. Y. Ginger ale. 317,571; Sept. 22. Class 45.
Pilot Radio & Tube Corporation, Lawrence, Mass. Phonographs. 313,150; Sept. 22. Class 36.
Pilot Radio & Tube Corporation, Lawrence, Mass. Cabinets for radio receivers, etc. 313,151; Sept. 22. Class 32.
Pioneer Suspender Company, Philadelphia, Pa. Apparel belts, suspenders, and braces. 318,017; Sept. 22. Class 39.
Platt, Joseph, Detroit, Mich. Steel and wire mesh. 312,266; Sept. 22. Class 13.
Popsicle Corporation of the United States, The, New York, N. Y. Frozen confectionery. 298,357; Sept. 22. Class 46.
Prima Company, Chicago, Ill. Malt beverage. 317,223; Sept. 22. Class 48.
Providence Malt Company, Providence, R. I. Malt extract and dried grains. 312,772; Sept. 22. Class 46.
Quality Products Laboratories, Inc., Richmond, Va. Metal polishes, wax remover preparation, etc. 315,773; Sept. 22. Class 4.
Radcliffe, Harry S., Inc., Hoboken, N. J. Plushes and pile fabrics in the piece. 318,076; Sept. 22. Class 42.
Reingold, Meyer, doing business as The Rubber-All Company, New York, N. Y. Raincoats and waterproof suits. 316,377; Sept. 22. Class 39.
Richardson Company, The, Lockland, Ohio. Dust guards for journal bearings. 287,673; Sept. 22. Class 23.
Rigney, William A., doing business as The Kerma Products Company, East Orange, N. J. Liquid and solid preparations for use as eliminants. 315,328; Sept. 22. Class 6.
Rossie Velvet Company, Mystic, Conn. Pile fabrics. 317,906; Sept. 22. Class 42.
Roto-und Debgo-Werke Aktiengesellschaft Konigslutter, Germany. Addressing machines and parts thereof and addressing stencils. 317,260; Sept. 22. Class 23.
Royal Baking Powder Company, New York, N. Y. Gelatin aspic. 317,483–4; Sept. 22. Class 46.
Royal Oriental Rug Corporation, New York, N. Y. Textile rugs. 316,743–7; Sept. 22. Class 42.
Rubber-All Company, The. (See Reingold, Meyer.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Schoefield, Benjamin, doing business as Ben Schoefield Mfg. Co., New Orleans, La. Soap. 317,136; Sept. 22. Class 4.
Schuckl & Co., Inc., San Francisco, Calif. Canned fruits. 317,854; Sept. 22. Class 46.
Schwarze Elec. Co., Adrian, Mich. Audible signals. 316,663; Sept. 22. Class 23.
Siemens-Planiawerke A. G. fur Kohlefabrikate, Berlin-Lichtenberg, Germany. Electric illuminating, heating, cooking, and drying apparatus, devices, and appliances. 286,342; Sept. 22. Class 21.
Sklaroff Bros., Philadelphia, Pa. Hosiery. 317,445; Sept. 22. Class 39.
Soc. Costr. Apparecchi Elettrerodomestici, Milan, Italy. Electric vacuum cleaners, floor polishers, fans, etc. 295,006–7; Sept. 22. Class 21.
Specialty Cabinet Company. (See Zimmer, Charles W.)
Spiegel, M. J., Co., Inc., New York, N. Y. Suitcases. 317,681; Sept. 22. Class 3.
Squire Dingee Company, Chicago, Ill. Fruit butters. 317,578; Sept. 22. Class 46.
Stein, Oscar, St. Louis, Mo. Ice cream sundaes. 308,134–5; Sept. 22. Class 46.
Stifel, J. L., & Sons, Inc., Wheeling, W. Va. Cotton piece goods. 317,184; Sept. 22. Class 42.
Strohbeck, Chas. W. Inc., Brooklyn, N. Y. Shoes. 317,859; Sept. 22. Class 39.
Sunset Bed Works. (See Clark, Frank L.)
Tangee, Evvy, New York, N. Y. Face cream. 317,373; Sept. 22. Class 6.
Tootal Broadhurst Lee Company Limited, Manchester, England. Cotton piece goods. 310,030; Sept. 22. Class 42.
Triple XXX Root Beer Company, Houston, Tex. Frozen confections. 315,216; Sept. 22. Class 46.
United Scientific Laboratories, Inc., New York, N. Y. Radio receiving sets, condensers, rheostats, etc. 299,631; Sept. 22. Class 21.
United States Spring Bed Company, Springfield, Mass. Springs, day beds, cots, etc. 316,911; Sept. 22. Class 32.
Van Cruller Company. (See Van Wagoner, Wendell A.)
Van Wagoner, Wendell A., doing business as Van Cruller Company, Belleville, N. J. Crullers, doughnuts, cakes, and pastry. 311,293; Sept. 22. Class 46.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Boilers and boiler tubes, radiators, etc. 296,162; Sept. 22. Class 34.
Vogue Silk Hosiery Co., The, Philadelphia, Pa. Underwear. 317,489; Sept. 22. Class 39.
Waldes Koh-I-Noor, Inc., Long Island City, N. Y. Hook and eye tape. 317,863; Sept. 22. Class 40.
Weiner, Philip, doing business as Norn Chemical Company, Baltimore, Md. Metal polish. 317,341; Sept. 22. Class 4.
Western Auto Supply Co., Kansas City, Mo. Bicycles, tricycles. 317,910; Sept. 22. Class 19.
Western Machine Tool Works, Holland, Mich. Machine tools. 317,582; Sept. 22. Class 23.
Woodcraft Toy Studios. (See Height, Stanley V.)
Yates, Giles F., doing business as G. F. Yates & Co., Fultonville, N. Y. Liniment. 317,016; Sept. 22. Class 6.
Zimmer, Charles W., doing business as Specialty Cabinet Company, Detroit, Mich. Restaurant and hotel furniture. 317,584; Sept. 22. Class 32.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 6

Alkaline medicinal water. Kuline Water Company. 287,361; Sept. 22; Serial No. 314,370; published June 23, 1931.
Alumina, aluminum fluorides, calcium oxide, etc. Alcoa Ore Company. 287,312; Sept. 22; Serial No. 313,625; published July 7, 1931.
Anhydrous calcium sulphate. Iliff-Bruff Chemical Company. 287,365; Sept. 22; Serial No. 314,314; published July 7, 1931.
Anti-freeze products. Bond Electric Corporation. 287,394; Sept. 22; Serial No. 314,037; published June 23, 1931.
Antiseptic compound. Alka-Septol, Incorporated. 287,371; Sept. 22; Serial No. 314,222; published June 23, 1931.
Antiseptic douche powder. J. Goldsmith, jr. 287,359; Sept. 22; Serial No. 314,409; published July 7, 1931.
Antiseptic mouth wash. Dektol Corporation. 287,369; Sept. 22; Serial No. 314,233; published June 23, 1931.
Antiseptic, Urinary. Schering & Glatz, Inc. 287,400; Sept. 22; Serial No. 314,214; published June 23, 1931.
Chemical spreader for insecticides and the like. Hercules Glue Company. 287,321; Sept. 22; Serial No. 307,490; published June 23, 1931.
Composition for stopping leaks in all hot water circulating systems. Radiator Specialty Company. 287,386; Sept. 22; Serial No. 313,753; published June 23, 1931.
Composition for stopping leaks of engine radiators. A. O. Cobbs. 287,389; Sept. 22; Serial No. 313,831; published July 7, 1931.
Compound embodying calcium sulphate anhydrous and calcium phosphate pyro. Provident Chemical Works. 287,364; Sept. 22; Serial No. 314,315; published July 7, 1931.
Cough drops. H. B. Co. 287,367; Sept. 22; Serial No. 314,284; published June 23, 1931.
Cream, Dental. J. E. Webb. 287,383; Sept. 22; Serial No. 313,688; published June 23, 1931.
Cream, rouge, lipsticks, and face powder. Cold and cleansing. J. H. Schmidt. 287,432; Sept. 22.
Dye aids, Chemical. H. Th. Böhme A. G. 287,341–4; Sept. 22; Serial Nos. 314,546–8; published July 7, 1931.
Dyes, dyestuffs, and dye colors. National Aniline & Chemical Company. 287,316; Sept. 22; Serial No. 313,051; published July 7, 1931.
Face and body powders, talcum powders, perfumes, toilet waters, etc. Spooner, Inc. 287,346; Sept. 22; Serial No. 314,517; published July 7, 1931.
Granular mixtures. Ryan, Scully & Company. 287,397; Sept. 22; Serial No. 314,076; published June 23, 1931.
Hair dressing preparation. E. Ware. 287,345; Sept. 22; Serial No. 314,522; published July 7, 1931.
Headache capsules. L. E. Edwards. 287,417; Sept. 22.
Hemostatic. A. Karreth. 287,419; Sept. 22.
Insecticide. G. Boardman. 287,370; Sept. 22; Serial No. 314,228; published June 23, 1931.
Kelp and kelp preparations. Kelco Company. 287,318; Sept. 22; Serial No. 312,760; published June 23. 1931.
Liquid coating material. Feroleum Products, Inc. 287,395; Sept. 22; Serial No. 314,053; published June 23, 1931.
Liquid preparation for dyspepsia, etc. P. Zizine. 287,328; Sept. 22; Serial No. 301,225; published June 23, 1931.
Liquid skin cleaner, face cream and vanishing cream, etc. H. B. Denton & Co. 287,378; Sept. 22; Serial No. 310,822; published July 7, 1931.
Lubricants, laxatives, and a preparation for treating constipation, Internal. Norwich Pharmacal Company. 287,317; Sept. 22; Serial No. 312,957; published July 7, 1931.
Medicinal Compound. Para Drug and Rubber Company. 287,319; Sept. 22; Serial No. 308,385; published July 7, 1931.
Medicinal preparation. J. M. Jensen. 287,393; Sept. 22; Serial No. 314,004; published July 7, 1931.
Medicinal preparation. Kur Trier G. m. b. H. 287,320; Sept. 22; Serial No. 308,018; published July 7, 1931.
Medicinal treatment for consumption. J. W. Barlow. 287,384; Sept. 22; Serial No. 313,691; published June 23, 1931.
Medicines. W. A. Wahl. 287,390; Sept. 22; Serial No. 313,896; published June 23, 1931.
Mouth wash. G. Spadaro. 287,330; Sept. 22; Serial No. 299,233; published July 7, 1931.
Nasal spray. Sinaspra Corporation. 287,363; Sept. 22; Serial No. 314,346; published June 23, 1931.
Perfume, toilet water, powder, compacts, etc. Gabilla, Incorporated. 287,376; Sept. 22; Serial No. 311,679; published June 23, 1931.
Perfumes, toilet water, face and talcum powder, etc. Societe Anonyme Jean Patou. 287,396; Sept. 22; Serial No. 314,082; published July 7, 1931.
Phosphatide or lecithin and compositions containing same for use in the textile industry. American Lecithin Corporation. 287,385; Sept. 22; Serial No. 313,726; published July 7, 1931.
Polishes, nail polish removers, and liquid cuticle removers, Liquid nail. Boston Floral Supply & Snyder Co. 287,368; Sept. 22; Serial No. 314,267; published July 7, 1931.
Powder, Astringent. Eastern Research Laboratories. 287,398; Sept. 22; Serial No. 314,104; published July 7, 1931.
Powder, Dusting, face, etc. C. G. Unger. 287,323; Sept. 22; Serial No. 305,633; published July 7, 1931.
Powders and suppositories, Hygienic. The Marvel Company. 287,377; Sept. 22; Serial No. 311,530; published July 7, 1931.
Powders, fumigating pastiles, hair tonics, hair oils, etc., Depilatory. Lucretia Vanderbilt, Inc. 287,331; Sept. 22; Serial No. 271,445; published June 9, 1931.
Preparation for preventing birds from destroying corn. B. D. Smith. 287,401; Sept. 22; Serial No. 314,216; published June 23, 1931.
Preparation for relief of catarrh, nasal sinus trouble, hayfever, etc. Ephedrine Company. 287,353–4; Sept. 22; Serial Nos. 314,491–2; published July 7, 1931.

Preparation for restoring natural color to gray hair. Z. Kozlowski. 287,348; Sept. 22; Serial No. 314,502; published July 7, 1931.
Preparation for the extermination of rats and mice. S. Draun. 287,360; Sept. 22; Serial No. 314,401; published July 7, 1931.
Preparation for the treatment of eczema. Lucky Hit Company. 287,373; Sept. 22; Serial No. 312,521; published July 7, 1931.
Preparation for treating hair. H. Stein. 287,357; Sept. 22; Serial No. 314,432; published June 23, 1931.
Relief and treatment of gall stones and catarrhal jaundice. Dr. C. G. Hubenthal. 287,392; Sept. 22; Serial No. 313,903; published July 7, 1931.
Tonic. Brewer & Company. 287,399; Sept. 22; Serial No. 314,139; published June 23, 1931.
Tonic, Medicinal. Charles Segalas & Co. 287,412; Sept. 22.
Vaginal jelly. Robert J. Pierce, Inc. 287,366; Sept. 22; Serial No. 314,294; published June 23, 1931.

CLASS 9

Recoil cushion or pad for shotguns or rifles, Rubber. Seamless Rubber Company. 287,427; Sept. 22.

CLASS 12

Asphalt. Shell Oil Company. 287,372; Sept. 22; Serial No. 312,533; published June 30, 1931.
Asphalt, pavement materials, asphaltic binders, etc. American Bitumuls Company. 287,374–5; Sept. 22; Serial Nos. 311,945-6; published June 23, 1931.
Brick. Acme Brick Company. 287,362; Sept. 22; Serial No. 314,354; published June 30, 1931.
Clips, Metallic. United States Gypsum Company. 287,324; Sept. 22; Serial No. 305,458; published June 30, 1931.
Compound for sealing the joints of fuel tanks and their accessories. Glenn L. Martin Company. 287,313; Sept. 22; Serial No. 313,505; published June 23, 1931.
Lime. Palmer Lime & Cement Company. 287,329; Sept. 22; Serial No. 299,754; published June 23, 1931.
Lumber. Chicago Mill and Lumber Corporation. 287,381; Sept. 22; Serial No. 309,803; published June 23, 1931.
Lumber. Wheeler Lumber Bridge & Supply Company. 287,314; Sept. 22; Serial No. 313,316; published June 23, 1931.
Lumber, lime, and brick. Chapman & Dewey Lumber Co. 287,388; Sept. 22; Serial No. 313,830; published June 30, 1931.
Plastic composition material. E. B. Sickle. 287,382; Sept. 22; Serial No. 313,684; published June 23, 1931.
Rock asphalt. H. K. Johnson. 287,358; Sept. 22; Serial No. 314,410; published June 23, 1931.
Steel plates and steel mesh. J. H. Wise Company. 287,340; Sept. 22; Serial No. 314,595; published June 30, 1931.
Tile, Sound absorbing and acoustical. Acoustone Company. 287,380; Sept. 22; Serial No. 310,465; published June 30, 1931.

CLASS 16

Paint, Aluminum. Bonded Materials Co. 287,406; Sept. 22.
Paints. M. D. Swartz. 287,422; Sept. 22.
Paints, paint enamels, lacquers, etc. Sears, Roebuck and Co. 287,404; Sept. 22.

CLASS 19

Wagon woods. Sears, Roebuck and Co. 287,429; Sept. 22.

CLASS 21

Batteries and other electric dry cells, electric storage batteries, etc. Flash light. Allbright Electric Corporation. 287,418; Sept. 22.
Electric heaters. W. W. Hicks. 287,414; Sept. 22.
Radio and television sending and receiving sets. United States Radio & Television Corp. 287,424; Sept. 22.
Radio receiving sets and radio electron tubes. Spiegel, May, Stern Company. 287,402; Sept. 22.

CLASS 22

Figure toy, Stuffed. J. S. Hooks. 287,413; Sept. 22.

CLASS 23

Bottle cappers. Everedy Company. 287,408; Sept. 22.
Chain hoists. Sears, Roebuck and Co. 287,428; Sept. 22.
Hogs, in the nature of power driven crushing and grinding machines. Stedman's Foundry & Machine Works. 287,410; Sept. 22.

CLASS 26

Cameras and parts thereof and accessories thereto, combinations of picture recording and sound recording apparatus, etc. International Projector Corporation. 287,315; Sept. 22; Serial No. 313,266; published July 7, 1931.

CLASS 29

Squeegees and brushes. J. M. Oberti. 287,403; Sept. 22.
Whiskbrooms. Pioneer Broom Co. 287,431; Sept. 22.

CLASS 32

Counters, back bars, urn stands, etc., Lunch. Southern Equipment Company. 287,421; Sept. 22.

CLASS 34

Ventilating and register faces. United States Register Co. 287,426; Sept. 22.

CLASS 37

Bridge pads, bridge pencil cases, photo albums, etc. Foster-Grant Co. Inc. 287,325; Sept. 22; Serial No. 304,100; published July 7, 1931.
Cards and folders. J. A. Vogel. 287,337; Sept. 22; Serial No. 314,780; published July 7, 1931.
Paper. Enzo-Gutzeit Osakeyhtiö. 287,327; Sept. 22; Serial No. 302,156; published July 7, 1931.
Paper, and envelopes. Ohio and Michigan Paper Company. 287,326; Sept. 22; Serial No. 303,777; published July 7, 1931.
Paper, Book. Appleton Coated Paper Co. 287,425; Sept. 22.
Paper tablets, envelopes, note and letter paper. Lakeside Envelope Co. 287,430; Sept. 22.
Paper, Wrapping. Riegel Paper Corporation. 287,407; Sept. 22.

CLASS 38

Comic strips. McNaught Syndicate, Inc. 287,349–50; Sept. 22; Serial Nos. 315,378–9; published July 7, 1931.
Magazine. J. M. Cattell. 287,356; Sept. 22; Serial No. 314,446; published July 7, 1931.
Maps and photographs. Fairchild Aerial Surveys, Inc. 287,411; Sept. 22.
Newspaper and/or magazine columns. G. P. Metzger. 287,334; Sept. 22; Serial No. 314,958; published July 7, 1931.
Newspaper column. Johnstown Tribune Publishing Company. 287,391; Sept. 22; Serial No. 313,922; published July 7, 1931.
Newspaper section. Central Press Association, Inc. 287,335; Sept. 22; Serial No. 314,803; published July 7, 1931.
Newspaper section. International Newsreel Corporation. 287,338; Sept. 22; Serial No. 314,763; published July 7, 1931.
Periodical. H. R. Howell Publishing Co. 287,389; Sept. 22; Serial No. 314,617; published July 7, 1931.
Periodical. H. L. Williamson. 287,355; Sept. 22; Serial No. 314,477; published July 7, 1931.
Publication. Autogiro Company of America. 287,333; Sept. 22; Serial No. 314,977; published July 7, 1931.
Publication. Burroughs, Incorporated. 287,332; Sept. 22; Serial No. 315,029; published July 7, 1931.
Publication. Gernsback Publications. 287,352; Sept. 22; Serial No. 314,497; published July 7, 1931.
Publication. Letter-Book Co. 287,351; Sept. 22; Serial No. 315,270; published July 7, 1931.
Reproductions in the form of prints. Heliotone Reproduction Service. 287,336; Sept. 22; Serial No. 314,849; published July 7, 1931.
Trade discount in book form, Merchant's. National League of Consumers. 287,347; Sept. 22; Serial No. 314,508; published July 7, 1931.

CLASS 39

Belts, athletic headbands, polo shirts, etc., Bathing suit. O-C Manufacturing Company. 287,322; Sept. 22; Serial No. 306,064; published July 7, 1931.
Corsets, girdles, etc. Wright-La Montague Company. 287,405; Sept. 22.
Shirts and pajamas. Cape Cod Shirt Company. 287,379; Sept. 22; Serial No. 310,553; published Apr. 21, 1931.
Shirts, waists, and blouses. Elder Manufacturing Company. 287,423; Sept. 22.

CLASS 42

Bunting and blankets. L. Bamberger & Co. 287,387; Sept. 22; Serial No. 313,826; published June 23, 1931.
Pile fabric. Hind & Harrison Plush Co. 287,409; Sept. 22.

CLASS 46

Coffee. Ferngren Mestler Manufacturing Company. 287,416; Sept. 22.
Confections, Frozen. Midwest Dairy Products Corporation. 287,420; Sept. 22.
Sausage. Keane-Lomer, Inc. 287,415; Sept. 22.

ALPHABETICAL LIST OF LABELS

Archer. For Hosiery. Archer Hosiery Mills. 39,759; Sept. 22.
Chase & Sanborn's Tea Town Fire Station. For Tea Balls. Standard Brands Incorporated. 39,775; Sept. 22.
Chase & Sanborn's Tea Town Grocery Store. For Tea Balls. Standard Brands Incorporated. 39,774; Sept. 22.
Chase & Sanborn's Tea Town School—. For Tea Balls. Standard Brands Incorporated. 39,773; Sept. 22.
Collingbourne's 6 Strand Quilt-embroidery Floss, Art. 711. For Quilt-embroidery Floss. Collingbourne Mills Inc. 39,761; Sept. 22.
Dawn-Glo Washing Fluid. For Washing Fluid. Dawn-Glo Chemical Company. 39,765; Sept. 22.
Dexter Orienta Rug-Tex-Yarn, 1 Ounce Unit, Art. 221. For Yarn. Collingbourne Mills Inc. 39,762; Sept. 22.
Elgin Maid Kinder-Kit, Lustrous Cotton Embroidery and Crochet for Quilt Blocks, Art. 127. For Lustrous Cotton. Collingbourne Mills Inc. 39,763; Sept. 22.
Fine Candles. For Candles. F. J. Schleicher Paper Box Co. 39,769; Sept. 22.
Kemp's Half and Half. For Candy and Nuts. E. F. Kemp. 39,768; Sept. 22.
Marvel Quality. For Bread. Central Waxed Paper Company. 39,760; Sept. 22.
One Buys Three. For Malt Syrup. Sterling Products Company. 39,776; Sept. 22.
Polyshine Black Liquid Shoe Polish. For Black Liquid Shoe Polish. E. E. Fairchild Corporation. 39,766; Sept. 22.
Raisin-Bran. For Whole Wheat with Raisins, Bran, and Salt Added. Skinner Manufacturing Company. 39,772; Sept. 22.
Sims Malt-O-Wheat. For Breakfast Cereal. Sims Malt-O-Wheat Company. 39,771; Sept. 22.
Tea. For Tea. Union Bag & Paper Corporation. 39,777; Sept. 22.
The Ideal Service Coat. For White Duck and Laboratory Coats. Schwartz & Son. 39,770; Sept. 22.
The Virginia Home-Made Honey-Chew. For a Confection Made with Pure Honey. B. Horowitz. 39,767; Sept. 22.
Upright. For Sweet Variety Peas. Copps Co. 39,764; Sept. 22.

ALPHABETICAL LIST OF PRINTS

Golden State. For Evaporated Milk. Golden State Company. 13,420; Sept. 22.
"The Thrill in every Picnic—". For Peanut Butter, Mustard, Applebutter, Oven-Baked Beans, Salad Cream, Etc. H. J. Heinz Company. 13,421; Sept. 22.
We Asked Farm Mothers Then City Mothers. For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,419; Sept. 22.
Wrigley's Juicy Fruit. For Chewing Gum. Wm. Wrigley Jr. Company. 13,422; Sept. 22.
Wrigley's Pink P. K. For Chewing Gum. Wm. Wrigley Jr. Company. 13,423; Sept. 22.
Wrigley's P. K. For Chewing Gum. Wm. Wrigley Jr. Company. 13,424; Sept. 22.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 22D DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbe, George C., assignor to American Road Machinery Company, Inc., Kennett Square, Pa. Sand spreading mechanism. 1,824,419; Sept. 22.

Abendroth, Karl W., assignor to General Railway Signal Company, Rochester, N. Y. Track instrument. 1,824,108; Sept. 22.

Abercrombie, James S. (See King, Walter E., assignor.)

Abramson, Richard E. (See Victor B., and Abramson.)

Absmeier, Carl, Maywood, assignor to United States Gypsum Company, Chicago, Ill. Folding device for plaster board machinery. 1,824,420; Sept. 22.

Acheson, Arthur M., Dobbs Ferry, assignor to Durium Products Corporation, New York, N. Y. Phonograph record. 1,824,253; Sept. 22.

Ackerman, Albert A., Westfield, and C. L. Thomson, Newark, N. J., assignors to The Singer Manufacturing Company, Elizabeth, N. J. Centrifugal clutch. 1,823,881; Sept. 22.

Adams, Elmer W., Hammond, assignor to Standard Oil Company, Whiting, Ind. Sulphurized oils. 1,824,523; Sept. 22.

Adams, Frank R., Chicago, Ill. Window screen frame. 1,824,187; Sept. 22.

Adartcraft, Inc. (See Sanders, Rudolph M., assignor.)

Adler, Charles, jr., Baltimore, Md. Traffic signal facing. Des. 85,143; Sept. 22.

Adler, Edward A., Schenectady, N. Y. Method of and apparatus for hydraulic prospecting. 1,823,965; Sept. 22.

Adrian, William M., Chicago, Ill. Lamp base. Des. 85,144; Sept. 22.

Adrian, William M., Chicago, Ill. Combined standard and lamp base. Des. 85,145; Sept. 22.

Advance Pattern & Foundry Company. (See Burlin, Leslie H., assignor.)

Aebly, Hans, Zurich, Switzerland. Producing impregnated irregular paving. 1,824,524; Sept. 22.

Aerocrete Corporation of America. (See Bjorkman, Erik B., assignor.)

Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Schorno, Arthur, assignor.)

Allard, Everette E., and C. R. Berry, Highland Park, Mich. Door operating mechanism. 1,824,109; Sept. 22.

Allen, Albert, Winchester, assignor to Atlantic Precision Instrument Company, Boston, Mass. Measuring characteristics of material. 1,824,745; Sept. 22.

Allen, Albert, Winchester, assignor to Atlantic Precision Instrument Company, Boston, Mass. Measuring mechanism. 1,824,746; Sept. 22.

Allen, Arthur P., San Mateo, Calif. Making products of finely divided vegetable material. 1,824,421; Sept. 22.

Allen, Samuel J. M., Cincinnati, Ohio. Alternating current rectifier. 1,824,004; Sept. 22.

Alpha Tank and Sheet Metal Mfg. Co. (See Fisher, Ernest F., assignor.)

Alter, Dinsmore, Lawrence, Kans. Radio aerial. 1,824,254; Sept. 22.

American Buckle Company, The. (See Hodge, Robert J., assignor.)

American Gasaccumulator Company. (See Oestnaes, Victor L., assignor.)

American Iron & Machine Works, Inc. (See Marr, Rizal M., assignor.)

American Machine & Foundry Company. (See Broekhuysen, William C., assignor.)

American Machine & Foundry Company. (See Bronander, Wilhelm B., assignor.)

American Machine & Foundry Company. (See Bronander, W. B., and Nejedly, assignors.)

American Machine & Foundry Company. (See Chandler, Robert J. A., assignor.)

American Machine & Foundry Company. (See Stein, John A., assignor.)

American Manganese Steel Company. (See Clark, John O., assignor.)

American Road Machinery Company. (See Abbe, George C., assignor.)

American Telephone and Telegraph Company. (See Edwards, William H., assignor.)

American Telephone and Telegraph Company. (See Kittredge, L. E., and Dorff, assignors.)

American Telephone and Telegraph Company. (See McCann, Thomas A., assignor.)

Ames, Harold F., Grand Rapids, Mich. Traction device. 1,824,525; Sept. 22.

Anderson, E. D., Inc. (See Hendry, William F., assignor.)

Anderson, Geo. W. (See Wells, Don W., assignor.)

Anderson, Robert G., Harborcreek, Pa., assignor to General Electric Company. Resilient gear. 1,824,648; Sept. 22.

Andrews, Charles W., assignor to H. A. Brassert & Company, Chicago, Ill. Making coke. 1,824,526; Sept. 22.

Angell, Arnold A., Chicago, Ill. Rotary brush and making same. 1,824,649; Sept. 22.

Anton, Frederick A., Topeka, Kans. Lateral arm awning support. 1,824,188; Sept. 22.

Armstead, Harry E., Indianapolis, Ind. Simultaneous camera exposure and flash. 1,824,030; Sept. 22.

Armstrong Cork Company. (See Emig, John, assignor.)

Armstrong Cork Company. (See Humphreys, C. F., and McCarthy, assignors.)

Ashworth, Fred, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,824,063; Sept. 22.

Ashworth, Fred, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Feeding mechanism. 1,824,064; Sept. 22.

Ashworth, Fred, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shuttle mechanism. 1,824,065; Sept. 22.

Ashworth, Fred, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Take up mechanism. 1,824,066; Sept. 22.

Associated Electrical Industries, Ltd. (See Bailey, Richard W., assignor.)

Astley, John W., assignor to British Insulated Cables Limited, Prescot, England. Connecting device for use with stranded metal cables. 1,824,005; Sept. 22.

Atlantic Precision Instrument Company. (See Allen, Albert, assignor.)

Atlas Powder Company. (See Hill, Roy L., assignor.)

Atlas Powder Company. (See Taylor, A. M., and Chapman, assignors.)

Atwood, William G., trustee. (See Fisher, Alfred, assignor.)

Aull Wilson, jr., Astoria, N. Y. Variable condenser. 1,824,031; Sept. 22.

Avignon, Edouard G., Vitry-sur-Seine, France. Sharpener for razor blades, such as the Gillette and other blades having two cutting edges. 1,823,926; Sept. 22.

Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)

Babcock & Wilcox Company, The. (See Savoye, Charles U., assignor.)

Bach, Charles G., assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Refrigerating system. 1,824,527; Sept. 22.

Bader, Fred W., Hillsdale, N. J., assignor to J. Kridel, Sons & Co. Textile fabric. Des. 85,146; Sept. 22.

Badger, Arthur C., Newton, Mass. Guided expansion joint. 1,824,422; Sept. 22.

Badger, E. G., & Sons Company. (See Lunt, George P., assignor.)

Bahner, Ernest T., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 85,147; Sept. 22.

Bahner, Ernest T., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 85,148; Sept. 22.

Bahner, Ernest T., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 85,148; Sept. 22.

Bailey, Claude B., Wyandotte, assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Gasket. 1,824,386; Sept. 22.

Bailey, Ervin G., Easton, and R. M. Hardgrove, Bethlehem, assignors to Fuller Lehigh Company, Fullerton, Pa. Retaining means for furnace wall blocks contacting with wall tubes. 1,823,870; Sept. 22.

Bailey, Erwin G., Easton, and R. M. Hardgrove, Bethlehem, assignors to Fuller Lehigh Company, Fullerton, Pa. Device for retaining furnace wall blocks against tubes. 1,823,927; Sept. 22.

Bailey, Henry H., and J. L. Thomas, assignors to Mechanical Royalties Corporation, Oklahoma City, Okla. Adjustable gate for conduits. 1,824,189; Sept. 22.

Bailey, Richard W., Altrincham, England, assignor, by mesne assignments, to Associated Electrical Industries, Ltd., of England. Internal combustion engine. 1,824,528; Sept. 22.
Bailey, Thaddeus F., Alliance, Ohio. Making phosphoric acid and cyanamide. Re18,198; Sept. 22.
Bailey, William M., Lynn, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser. 1,824,529; Sept. 22.
Bailey, William M., Lynn, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser. 1,824,530; Sept. 22.
Bailey, William M., Lynn, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser. 1,824,586; Sept. 22.
Bailey, William M., Lynn, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser. 1,824,587; Sept. 22.
Bainbridge, George K., Ripon, Calif. Plastic measuring and cutting machine. 1,824,110; Sept. 22.
Baker, Francis G., Chicago, Ill. Plumb line guide. 1,824,321; Sept. 22.
Baker, Stephen D., New York, N. Y. Soap holder or similar article. Des. 85,150; Sept. 22.
Baker, Stephen D., New York, N. Y. Soap holder or similar article. Des. 85,151; Sept. 22.
Bankers Electric Protective Association. (See Flagg, Clarence L., assignor.)
Banner Rock Corporation. (See Hall, Charles C., assignor.)
Barlow, Lester P., Detroit, Mich. Producing compressed starting charges for engines. 1,824,457; Sept. 22.
Barrett, Joseph M., Fostoria, assignor to The Swartout Company, Cleveland, Ohio. Boiler feed water control system. 1,824,423; Sept. 22.
Barstow, Edwin O., and S. B. Heath, assignors to The Dow Chemical Company, Midland, Mich. Dust layer having improved hygroscopic properties. 1,824,588; Sept. 22.
Bartlett, Joseph W. (See Sillers, D. A., Price, and Bartlett.)
Barton, Loy E., Collingswood, N. J. Sound propagating device. 1,824,650; Sept. 22.
Basquin, Olin H. (See Meyercord, G. R., and Basquin.)
Bastow, Miles E. (See Shaw, W. J., and Bastow.)
Bauer, William C., Evanston, Ill. Fire extinguisher. 1,823,882; Sept. 22.
Baumgartner, Godfrey, Astoria, N. Y., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,824,589; Sept. 22.
Bausch & Lomb Optical Company. (See McCabe, Joseph J., assignor.)
Beall, Isaac N., Eastland, Tex., assignor by mesne assignments, to Research Process Company. Absorption of vapors and liquids. 1,824,458; Sept. 22.
Beardsley & Wolcott Mfg. Co. (See Wolcott, F. E., and Lucia, assignors.)
Beasley, Jessie P., Greenville, Tex. Sawhorse. 1,823,871; Sept. 22.
Beatty, Robert J., assignor to The Federal Glass Company, Columbus, Ohio. Glass tumbler or article of similar nature. Des. 85,152; Sept. 22.
Becker, Harry G., Albany, N. Y. Rail sanding and cleaning device. 1,824,067; Sept. 22.
Becker, Stephen P., Poughkeepsie, N. Y. Wire clamp. 1,824,387; Sept. 22.
Beckwith, Louis I., Dorchester, Mass. Bracket. 1,824,459; Sept. 22.
Bedner, Francis J., Chicago, Ill. Water heater. 1,824,111; Sept. 22.
Bement, Nahum C., Rockford, Ill. Driving mechanism. 1,823,872; Sept. 22.
Benedict, Frank, Rutherford, N. J., assignor to General Railway Signal Company, Rochester, N. Y. Power interlocking system for railroads. 1,824,112; Sept. 22.
Benedict, Frank, Rutherford, N. J., assignor to General Railway Signal Company, Rochester, N. Y. Power interlocking system for railroads. 1,824,113; Sept. 22.
Bender, Sydney E., Brooklyn, assignor to Benze-Perfection Sample Card Co., Inc., New York, N. Y. Sample card. 1,824,460; Sept. 22.
Bendix Brake Company. (See Dodge, A. Y., and Sanford, assignors.)
Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Bennett, Horace M., and S. J. Boman, Margaret, Tex. Clipper sharpener. 1,824,531; Sept. 22.
Benze-Perfection Sample Card Co. (See Bender, Sydney E., assignor.)
Berger, Robert, Paterson, N. J. Automatic pocket cigarette case. 1,824,461; Sept. 22.
Bergerioux, René, Reuilly, France. Distributing device for fertilizer, grain and seed drills. 1,824,532; Sept. 22.
Bergman, Ernest, Long Beach, Calif. Bookmarker. Des. 85,153; Sept. 22.
Bergström, Karl G., and A. F. Zeunström, Paris, France. Treatment of woods for cellulose. 1,824,701; Sept. 22.
Bernard, Marcel, Paris, France. Diaphragm-equipped acoustic apparatus. 1,824,590; Sept. 22.
Berry, Curtis R. (See Allard, E. E., and Berry.)
Berthier, Jules, assignor to Societe Textile Twistok, Chamalieres, France. Apparatus for twisting textile fibers or yarns. 1,824,464; Sept. 22.
Berzelius Metallhuetten-Gesellschaft mit beschrankter Haftung. (See Freise, M. G., and Maschmeyer, assignors.)
Bethenod, Joseph, Paris, France. Amplifier. 1,824,591; Sept. 22.
Bethlehem Steel Company. (See Dorris, H. C., and Pritner assignors.)
Bethlehem Steel Company. (See Little, James E., assignor.)
Bethlehem Steel Company. (See Nieman, H. W., and Madden, assignors.)
Binks Manufacturing Company. (See Hersleb, W., and Bramsen, assignors.)
Birch, George S., Tulsa, Okla. Combination lamp and ventilator. 1,824,388; Sept. 22.
Bird, Theodore, Scranton, Pa. Journal box and bearing. 1,724,702; Sept. 22.
Birmingham Aluminium Casting (1903) Company Limited. (See Pritchard, Percy, assignor.)
Bishop, William K., Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Supplemental engine support means. 1,824,255; Sept. 22.
Bittinger, Charles, Washington, D. C. Ordnance. 1,824,462; Sept. 22.
Bjorkman, Erik B., assignor to The Aerocrete Corporation of America, New York, N. Y. Making insulating tile or brick. 1,823,928; Sept. 22.
Bjorkman, George E., Djursholm, Sweden. Shield for hair curlers. 1,824,006; Sept. 22.
Black, Millard S., Huntington Park, Calif. Spear. 1,824,190; Sept. 22.
Black, Millard S., Huntington Park, and F. M. Brambley, Brea, Calif. Packing overshot. 1,824,191; Sept. 22.
Blackburn, Albert C., Madison, Wis. Detachable heel. 1,824,651; Sept. 22.
Blakeslee, Henry J., Marlboro, Conn. Thermostat. 1,824,114; Sept. 22.
Blakeslee, Henry J., Marlboro, Conn. Safety means for electric circuits. 1,824,115; Sept. 22.
Blaskewitz, William, assignor, by mesne assignments, to Clayton & Lambert Manufacturing Company, Detroit, Mich. Fire pot construction. 1,824,533; Sept. 22.
Bleecker, Maitland B., Hempstead, N. Y., assignor to Wright Aeronautical Corporation. Indicator for internal combusion engines. 1,823,883; Sept. 22.
Bleichert, Adolf, & Co., A. G. (See Müller, Max, assignor.)
Blue Ridge Glass Corporation. (See Pond, L. N., and Lewis assignors.)
Blystone Manufacturing Company. (See Rhodes, B. C., and Conroe, assignors.)
Bock, Wilhelm, Gwynedd, assignor to Dexdale Hosiery Mills, Lansdale, Pa. Reciprocating mechanism. 1,824,754; Sept. 22.
Boemh, Conrad E. (See Drews, I. C., and Boehm.)
Boman, Sidney J. (See Bennett, H. M., and Boman.)
Booth, Earl C., assignor to Noblitt-Sparks Industries, Inc., Indianapolis Ind. Automobile body heater. Des. 85,154; Sept. 22.
Bordeau, Sanford P. (See Early, R. N., and Bordeau.)
Bossard, Gisbert L., assignor to General Kontrolar Company, Inc., Dayton Ohio. Chime cover or similar article. Des. 85,155; Sept. 22.
Bouma, Wikke, assignor of one-fourth to J. Van Nuland, Los Angeles, Calif. Umbrella. 1,824,192; Sept. 22.
Bouwers, Albert, assignor to N. V. Philips Gloeilampenfabrieken Eindhoven, Netherlands. Electric discharge tube. 1,824,755; Sept. 22.
Bovingdon, George E., Hampstead, England. Sliding seat for motor cars and the like. 1,824,193; Sept. 22.
Bowen, William F., assignor to Evana Case Company, North Attleboro, Mass. Smoker's appliance. Des. 85,156; Sept. 22.
Bower, Maxwell, Cambridge, Mass., assignor to Westinghouse Electric & Manufacturing Company. Watt-hour meter. 1,823,929; Sept. 22.
Bowser, S. F., & Company. (See Foley, Charles B., assignor.)
Boyden, John H., Glendale, Md., assignor to H. D. Hudson Manufacturing Company, Minneapolis, Minn. Fountain unit. 1,824,116; Sept. 22.
Boykin Burwell, jr., Beaumont, Tex., assignor, by mesne assignments, to International-Stacey Corporation, Columbus, Ohio. Crown block. 1,824,652; Sept. 22.
Boyle, Michael J., Chicago, Ill. Valve and manufacturing same. 1,824,322; Sept. 22.
Boyle, Michael J., Chicago, Ill. Valve and method of manufacture. 1,824,323; Sept. 22.
Boynton, Arthur J., Winnetka, assignor to H. A. Brassert & Company, Chicago, Ill. Gas cleaning apparatus. 1,824,463; Sept. 22.
Brace, Porter H., Forest Hills, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Induction furnace. 1,823,873; Sept. 22.
Brace, Porter H., Forest Hills, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Induction furnace. 1,823,874; Sept. 22.
Bradford Corporation, The. (See Halder, Charles, assignor.)
Bradford, Frank R. (See Taylor, Joseph H., assignor.)
Bradford, Orla E., Brookville, Kans. Kite. 1,824,324; Sept. 22.
Bradley, Alonzo B., et al. (See Richardson, Henry F., assignor.)
Bradley, Harry L., et al. (See Power, Laurence E., assignor.)
Bradley, Lynde, et al. (See Power, Laurence E., assignor.)

Bradley, S. R., et al. (See Richardson, Henry F., assignor.)
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,824,032; Sept. 22.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brambley, Frederick M. (See Black, M. S., and Brambley.)
Bramsen, Svend. (See Hersleb, W., and Bramsen.)
Brassert, H. A., & Company. (See Andrews, Charles W., assignor.)
Brassert, H. A., & Company. (See Boynton, Arthur J., assignor.)
Brauchli, Ernst, Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J. Stable irradiated ergosterine and manufacture of same. 1,824,653; Sept. 22.
Braunwalder, John, Los Angeles, Calif. Airship. 1,823,875; Sept. 22.
Breguet, Louis, assignor to Societe Anonyme Des Ateliers D'Aviation Louis Breguet, Paris, France. Propelling system for aircraft. 1,824,325; Sept. 22.
Brenek, Hans. (See Rothe, F., and Brenek.)
Brenneman, Rexford B., and W. H. Monaghan, Pittsburgh, Pa. Wheel puller. 1,824,033; Sept. 22.
Bresnahan, William H., Lynn, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y. Outer sole and preparing the same. 1,824,654; Sept. 22.
Brewer-Titchener Corporation, The. (See Bishop, William K., assignor.)
Brewer-Titchener Corporation, The. (See Miller, Robert W., assignor.)
Brinner, Fred, Mason City, Ill. Rope dispenser. 1,824,007; Sept. 22.
British Insulated Cables Limited. (See Astley, John, assignor.)
British Insulated Cables Limited. (See Bullock, Thomas W., assignor.)
Brittain, Richard J., jr., Bloomfield, N. J., assignor to General Motors Corporation, Detroit, Mich. Car frame support and journal box. 1,823,884; Sept. 22.
Brixner, Frederick W., assignor to General Railway Signal Company, Rochester, N. Y. Train dispatching system for railroads. 1,824,117; Sept. 22.
Broadbridge, Walter, E. Edser, and W. W. Stenning, London, England, assignors to Minerals Separation North American Corporation, New York, N. Y. Production of coke. 1,824,326; Sept. 22.
Broadmeyer, Albert, assignor to W. C. Hickok Manufacturing Company, Harrisburg, Pa. Sheet mounting apparatus. 1,823,876; Sept. 22.
Broekhuysen, William C., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Pressure regulating means. 1,824,389; Sept. 22.
Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Duplex wrapping machine. 1,824,390; Sept. 22.
Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Cigarette rod drive for cigarette machines. 1,824,391; Sept. 22.
Bronander, Wilhelm B., Montclair, N. J., and P. M. Nejedly, Brooklyn, N. Y., assignors to American Machine & Foundry Company. Cigarette rod former and paster. 1,824,392; Sept. 22.
Brooks, Charles R., assignor to Reserve Holding Company, Chicago, Ill. Relay control circuit. 1,824,194; Sept. 22.
Brooks, Benjamin T., Greenwich, Conn., and E. J. Cardarelli, Newark, N. J., assignors to Petroleum Chemical Corporation. Esters. 1,824,068; Sept. 22.
Brooks, Benjamin T., Greenwich, Conn., and E. J. Cardarelli, Newark, N. J., assignors to Petroleum Chemical Corporation. Diethyl ester. 1,824,069; Sept. 22.
Brooks, Benjamin T., Greenwich, Conn., and E. J. Cardarelli, Newark, N. J., assignors to Petroleum Chemical Corporation. Dipropyl ester. 1,824,070; Sept. 22.
Brooks, Benjamin T., Greenwich, Conn., and E. J. Cardarelli, Newark, N. J., assignors to Petroleum Chemical Corporation. Diamyl ester. 1,824,071; Sept. 22.
Brooks, Charles A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Remote control system. 1,824,592; Sept. 22.
Brousseau, John H., New York, N. Y. Garter. 1,824,008; Sept. 22.
Brown, William J., Buffalo, Ky. Cheese cutter. 1,824,703; Sept. 22.
Brunswick-Balke-Collender Co. (See de Correvont, Howard P., assignor.)
Bryan, George A., Peru, Ind., assignor to Bryan Steam Corporation. Steam boiler. 1,824,256; Sept. 22.
Bryan Steam Corporation. (See Bryan, George A., assignor.)
Buckeye Twist Drill Company, The. (See Rodman, C. J., and Dunmire, assignors.)
Bueckermann, John V., Denver, Colo. Refinishing device. 1,824,327; Sept. 22.
Bull, Clinton H. M., assignor to Reed Roller Bit Company, Houston, Tex. Tool joint. 1,824,257; Sept. 22.
Bullard, Chipley D., New Orleans, La. Automatic safety valve. 1,824,072; Sept. 22.
Bullock, Thomas W., Rainhill, assignor to British Insulated Cables Limited, Prescot, England. Foundry molding machine. 1,824,009; Sept. 22.
Burdick, Charles L., London, England. Paper folding machine. 1,824,073; Sept. 22.
Burk, Clarence E., Marion, Ohio. Combined reproduction and sending unit. 1,824,656; Sept. 22.
Burlin, Leslie H., Oak Park, Ill., assignor to Advance Pattern & Foundry Company, Chicago, Ill. Chair or similar article. Des. 85,157; Sept. 22.
Burt, William H., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Tube flanging tool. 1,823,966; Sept. 22.
Bushnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Intermittent inductive train control system. 1,824,118; Sept. 22.
Buss Aktiengesellschaft. (See Buss, Walter, assignor.)
Buss, Walter, assignor to Buss Aktiengesellschaft, Basel, Switzerland. Extractor. 1,824,424; Sept. 22.
Butterfield, Arthur W. W. (See Threlkeld, T. G., and Butterfield.)
Butterfield, Percy L. (See Castricum, M., and Butterfield.
Byles, Frank A., Scotia, N. Y., assignor to General Electric Company. Electrical regulating system. 1,824,704; Sept. 22.
C-S Engineering Company. (See Schellens, Engene L., assignor.)
Cadieux, Joseph O., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Wall telephone instrument. 1,824,705; Sept. 22.
Cady, William M., Edgewood, assignor to The Westinghouse Brake Company, Wilmerding, Pa. Automotive brake. 1,824,034; Sept. 22.
Cammann, Oswald, jr., Newton, Mass. Domestic mixing machine. 1,824,328; Sept. 22.
Campbell, John R., Burnaby, Ontario, Canada. Combined floor waxer and polisher. 1,284,534; Sept. 22.
Cannard, William H., Green Bay, Wis. Web converting apparatus. 1,823,877; Sept. 22.
Canton, Rolland J., Worcester, Mass. Can filling machine. 1,824,425; Sept. 22.
Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Signal for photographic apparatus. 1,824,258; Sept. 22.
Caps, Arthur W., and J. S. Greene, Rochester, N. Y., assignors to Photostat Corporation, Providence, R. I. Apparatus for treating photographic prints. 1,824,259; Sept. 22.
Cardarelli, Engene J. (See Brooks, B. T., and Cardarelli.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carley, Leonard R., Watertown, assignor to The Patent Button Company, Waterbury, Conn. Button. Des. 85,158; Sept. 22.
Carley, Leonard R., Watertown, assignor to The Patent Button Company, Waterbury, Conn. Button. Des. 85,159; Sept. 22.
Carr, Arthur F., Los Angeles, Calif. Incinerator. Des. 85,160; Sept. 22.
Cartasso, Giacomo, Oakland, Calif. Aircraft. 1,824,010; Sept. 22.
Carter, Ainslie T., Coldwater, assignor to General Railway Signal Company, Rochester, N. Y. Railway track circuit. 1,824,119; Sept. 22.
Carter, Ainslie T., Coldwater, assignor to General Railway Signal Company, Rochester, N. Y. Railway traffic controlling system. 1,824,120; Sept. 22.
Carter, Ralph B., jr., Haworth, N. J. Pumping system. 1,824,465; Sept. 22.
Carughi, Achille, and C. Paoloni, Brescia, Italy. Manufacturing chloride of lime. 1,824,656; Sept. 22.
Casciotta, Giuseppe, New York, N. Y. Plectrum piano action. 1,824,706; Sept. 22.
Case, J. I., Company. (See Traphagen, Harry R., assignor.)
Casper, Frank T. See Duffy, G. E., and Casper.)
Castricum, Martin, and P. L. Butterfield, Springfield, assignors to The Fisk Rubber Company, Chicopee Falls, Mass. Wind up mechanism. 1,824,593; Sept. 22.
Celanese Corporation of America. (See Eichengrün, Arthur, assignor.)
Celanese Corporation of America. (See Schneider, George, assignor.)
Central Radio Laboratories. (See Stoekle, Erwin R., assignor.)
Central Scientific Company. (See Klopsteg, Paul E., assignor.)
Central United National Bank, The. (See McKee, Willis, assignor.)
Chadbourne, Joseph H., assignor to E. H. Jacobs Mfg. Co., Danielson, Conn. Plug for lug straps and making same. 1,824,707; Sept. 22.
Chain Belt Company. (See Welser, George B., jr., assignor.)
Chain Products Company, The. (See Hodell, Frederick G., assignor.)
Chamberlin, Vern L., Lake Orion, Mich. Advertising device. Des. 85,161; Sept. 22.
Chambers, John C. (See Chambers, Lucile and J. C.)
Chambers, Lucile and J. C., San Francisco, Calif. Eraser cleaning appliance. 1,823,878; Sept. 22.

Chandler, Robert J. A., London, England, assignor to American Machine & Foundry Company. Cigarette cut off. 1,824,393; Sept. 22.
Chapman, Arthur R. (See Taylor, A. M., and Chapman.)
Chappell, Marvin L., Los Angeles, assignor to Standard Oil Company of California, San Francisco, Calif. Producing naphtha from hydrocarbon oils. 1,823,967; Sept. 22.
Charlton, George, Detroit, Mich., assignor to Wilcox-Rich Corporation. Open-bottom furnace organization. 1,824,121; Sept. 22.
Charman, Walter M. (See Hushour, Perry D., assignor.)
Chase Companies, Incorporated, The. (See Burt, William H., assignor.)
Chatham Specialty Corporation. (See Kohn, Koby, assignor.)
Chauvin, Hayes J., Jefferson, La. Spring clip box. 1,823,930; Sept. 22.
Chemical Works, formerly Sandoz. (See Karrer, P., and Wehrli, assignors.)
Cherry, George L., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for handling strand material. 1,823,885; Sept. 22.
Chicago Hardware Foundry Company. (See Elsy, Charles A., assignor.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Childs, William L., assignor to Reed Roller Bit Company, Houston, Tex. Roller cutter. 1,824,329; Sept. 22.
Chillingworth, Rudolph, Brooklyn, N. Y. Helicopter. 1,824,195; Sept. 22.
Christie, Stanley P., London, England. Internal combustion pump and prime mover. 1,824,074; Sept. 22.
Christy, Robert T., New York, N. Y., assignor to The Kurlash Company, Inc., Rochester, N. Y. Holder or appliance for cosmetics or the like. Des. 85,162; Sept. 22.
Cincinnati Bickford Tool Company, The. (See Williamson, Larkin R., assignor.)
Clark, David W., Montreal, Quebec, Canada, assignor to John A. Roebling's Sons Company, Trenton, N. J. Wire rope machine and the like. 1,823,886; Sept. 22.
Clark, Ernest W. (See Schramm, C., and Clark.)
Clark, John O'F., University City, Mo., assignor to American Manganese Steel Company, Chicago, Ill. Replacement link. 1,824,330; Sept. 22.
Clayton & Lambert Manufacturing Company. (See Blaskewitz, William, assignor.)
Cleveland Pneumatic Tool Company, The. (See Scott, Arthur, assignor.)
Clothe, Walter J., Kansas City, Mo. Automatic air lift. 1,824,075; Sept. 22.
Coast Insulating Co. (See Smith, Herbert C., assignor.)
Cogreshall, Allan, et al. (See Richardson, Henry F., assignor.)
Cohen, Simon D., San Francisco, Calif. Knitting machine. 1,824,260; Sept. 22.
Colby, Ora A., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Material container for dental furnaces. 1,823,968; Sept. 22.
Coldwell, John S., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Plug cap for separable attachment plugs. 1,824,657; Sept. 22.
Communication Patents, Inc. (See Nicolson, Alexander M., assignor.)
Compo Shoe Machinery Corporation. (See Bresnahan, William H., assignor.)
Compton, O. W. (See Murrow, William R., assignor.)
Conforto, Michael, Philadelphia, Pa. Pastry. 1,824,594; Sept. 22.
Connecticut Telephone & Electric Corporation. (See Cadienx, Joseph O., assignor.)
Connolly, John L., New York, N. Y. Wheel and brake shoe. 1,823,879; Sept. 22.
Conrad, Nicholas J., Wilmette, assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill. Fused cut out. 1,824,122; Sept. 22.
Conroe, Clarence W. (See Rhodes, B. C., and Conroe.)
Consolidated Steel Corporation. (See Walker, C. P., and Lyons, assignors.)
Continental Motors Corporation. (See Meyer, Andre J., assignor.)
Cook, Stephen C., Brooklyn, assignor to Phinney-Walker Co., Inc., New York, N. Y. Mirror clock combination. Des. 85,163; Sept. 22.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Apparatus for controlling the temperature of unit containers. 1,824,535; Sept. 22.
Coulombe, Joseph C., Kokomo, Ind. Fuel feeding apparatus. 1,823,887; Sept. 22.
Coupier, Marcel, Paris, France. Liquid measuring and delivering apparatus. 1,824,261; Sept. 22.
Crane, Luella D., Portland, Oreg. Liquid dripping device. 1,824,394; Sept. 22.
Cregier, A. M., et al. (See Richardson, Henry F., assignor.)
Crewdson, Henry, Wilmington, Del., assignor to The Viscose Company, Marcus Hook, Pa. Skeining machine. 1,824,658; Sept. 22.
Criley, Wallace K., assignor of one-half to B. C. Travis, Los Angeles, Calif. Rotary well drill centering and guiding device. 1,824,466; Sept. 22.
Cromwell, John C., assignor to The Steel Sanitary Company, Alliance, Ohio. Shower bathtub. 1,824,035; Sept. 22.
Crosby, J. D., Company. (See Locke, Francis, assignor.)
Cross, Louise, assignor to Frankart, Inc., New York, N. Y. Combination cigarette holder and ash tray or similar article. Des. 85,165; Sept. 22.
Cross, Louise, assignor to Frankart, Inc., New York, N. Y. Ash tray or similar article. Des. 85,166; Sept. 22.
Crowe, Samuel L., assignor to Seymour Manufacturing Company, Incorporated, Seymour, Ind. Scythe snath fastener. 1,824,123; Sept. 22.
Crozier, Elmer L. Birmingham, Ala. Airplane. Des. 85,167; Sept. 22.
Crump, Frank H., Los Angeles, Calif. Ledger and index therefor. 1,824,659; Sept. 22.
Cryns, Josef, assignor to The Petersen Oven Company, Chicago, Ill. Oven loader. 1,824,124; Sept. 22.
Cullen, Edward V., and A. G. A. Schmidt, assignors to Cullen-Friestedt Company, Chicago, Ill. Truck for rotatably mounted structures. 1,824,196; Sept. 22.
Cullen-Friestedt Company. (See Cullen, E. V., and Schmidt, assignors.)
Cuming, George W., New York, N. Y., assignor to M. A. Cuming & Co. Inc. Machine for treating hat bodies. 1,823,880; Sept. 22.
Cuming, M. A., & Co. Inc. (See Cuming, George W., assignor.)
Cummings, Bryan Y., jr., Springfield, Mo. Radio receiving apparatus. 1,824,331; Sept. 22.
Cutler-Hammer, Inc. (See Coldwell, John S., assignor.)
Cutler, Henry H., Brookline, Mass. Internal combustion engine. 1,824,536; Sept. 22.
Cutler, Joseph W., assignor to Cutler Mail Chute Co., Rochester, N. Y. Plaque. Des. 85,168; Sept. 22.
Cutler Mail Chute Co. (See Cutler, Joseph W., assignor.)
Dale, George E., Trenton, N. J., assignor to Kalman Steel Co., Chicago, Ill. Structural reenforcing and building member. 1,824,076; Sept. 22.
Dallas Foundry. (See McAfee, Paul, assignor.)
Dantzig, Tobias, and E. C. Peterson, Washington, D. C., dedicated to the Government and the people of the United States of America. Apparatus for the measurement of stiffness of flexible materials. 1,824,395; Sept. 22.
Dapron, Joseph M., St. Louis, Mo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake valve device. 1,824,036; Sept. 22.
Darby, Maurice O., London, and A. A. Sidney, Croydon, England. Fuel pump. 1,824,467; Sept. 22.
Darner, Edgar S., Hagerstown, Md. Bottle capping machine. 1,824,660; Sept. 22.
Darrow, Burgess, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire. Des. 85,169; Sept. 22.
Dashner, William W., assignor to R-B-M Manufacturing Co., Logansport, Ind. Circuit breaker. 1,824,125; Sept. 22.
Dassonville, Michel, Paris, France. Device for curling threads made of celluiosic material at their issue from spinning machines. 1,824,661; Sept. 22.
Davidson & Company Limited. (See Whitmore, John, assignor.)
Davidson, Isaac F., Central Point, Oreg. Snowplow. 1,824,662; Sept. 22.
Davidson, Thomas, and W. F. Dixon; said Dixon assignor to Z. Dixon, Sullivan, Ind. Brake. 1,825,332; Sept. 22.
Davis, Elmer D., and R. T. Payne, El Paso, Tex. Electrical fixture and fan support. 1,824,708; Sept. 22.
Davis, John H., Stockton, Calif. Control structure for plows. 1,823,969; Sept. 22.
Davis, Neville R., Woodcourt, Brooklands, England, assignor to Westinghouse Electric & Manufacturing Company. Induction furnace. 1,823,970; Sept. 22.
Day, Fred A., Cincinnati, Ohio, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Heel breasting machine. Re18,199; Sept. 22.
Daylectric System Ltd. (See Palmer, Henry K., assignor.)
Dean, William E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Air purifier. 1,824,037; Sept. 22.
De Blase, Tancredo, Buenos Aires, Argentina. Automatic feeder for glass molding machines. 1,824,107; Sept. 22.
Debrie, André L. V. C., Paris, France. Apparatus for taking photographic or cinematographic pictures. 1,824,709; Sept. 22.
De Carlo, John, Brooklyn, N. Y., Hat holder. 1,824,710; Sept. 22.
Deck, Mary L., Bellingham, Wash. Game device. Des. 85,170; Sept. 22.
De Coriolis, Ernest G., assignor to Surface Combustion Corporation, Toledo, Ohio. Furnace. 1,824,747; Sept. 22.
De Correvont, Howard P., assignor to The Brunswick-Balke-Collender Co., Chicago, Ill. Articles covered with sheet pyroxyline. 1,824,5347; Sept. 22.
De Cristofaro, Carlo, assignor of one-half to W. F. Scarpelli, St. Louis, Mo. Hard toe ballet slipper. Des. 85,164; Sept. 22.
De Munbrun, Ferdinand D., Indianapolis, Ind. Burglar alarm. 1,824,663; Sept. 22.
Dennis, John A., Edison, Calif. Leverage power lift device. 1,824,077; Sept. 22.
De Noya, Everett A., assignor of one-half to F. Soderstrom, Pawhuska, Okla. Wading boat. 1,824,711; Sept. 22.

De Noya, Everett A., assignor of one-half to F. Soderstrom, Pawhuska, Okla. Oar. 1,824,712; Sept. 22.
De Vry, Q. R. S., Corporation. (See Fitz, Charles D., assignor.)
Dexdale Hostery Mills. (See Bock, Wilhelm, assignor.)
Diamond Machine Company, The. (See Percell, John D.)
Dicke, Oscar H., assignor to General Railway Signal Company, Rochester, N. Y. Signaling system for railroads. 1,824,126; Sept. 22.
Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)
Dillow, George F., Seattle, Wash. Life saving device. 1,824,198; Sept. 22.
Dilts Machine Works, Inc. (See Haskell, John D., assignor.)
Dimick, Daniel B., Birmingham, Ala. Pattern lifting device. 1,824,468; Sept. 22.
Dingman, Glen H., Canastota, N. Y. Protractor. 1,823,931; Sept. 22.
Dixon, H. L., Company. (See Forter, Samuel A., assignor.)
Dixon, Walter F. (See Davidson, T., and Dixon.)
Dixon, Zada. (See Davidson, T., and Dixon, assignors.)
Dodge, Adiel Y., and R. S. Sanford, assignors to Bendix Brake Company, South Bend, Ind. Brake operating means. 1,824,038; Sept. 22.
Dodgson, Frank L., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,824,127; Sept. 22.
Dole Refrigerating and Machine Company. (See Kleist, Herman W., assignor.)
Demkee, John H., New Haven, assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Prong buckle. 1,824,333; Sept. 22.
Donaldson, Edwin B., and W. W. Donaldson, Washington, D. C. Barricade. 1,824,334; Sept. 22.
Donaldson, William W. (See Donaldson, Edwin B., and W. W.)
Donohoe, Philip, Los Angeles, Calif. Identification seal. 1,824,199; Sept. 22.
Donovan, Norman L., Jersey City, N. J., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,824,748; Sept. 22.
Dorff, Louis A. (See Kittredge, L. E., and Dorff.)
Dorris, Henry C., and L. C. Pritner, Johnstown, Pa., assignors to Bethlehem Steel Company. Car brake. 1,823,888; Sept. 22.
Dow Chemical Company, The. (See Barstow, E. O., and Heath, assignors.)
Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wildmerding, Pa. Variable load brakes. 1,824,039; Sept. 22.
Downes, John H. (See Hasley, William G., assignor.)
Downs, George F. (See Fisher, J. P., and Downs.)
Drake, Rollin L., Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Filling and capping apparatus. 1,823,889; Sept. 22.
Draper Corporation. (See Noyes, Ira W., assignor.)
Drews, Irvine C., and C. E. Boehm, Marshfield, Wis. Chicken feeder. 1,824,262; Sept. 22.
Driftmeyer, Hugh W., Boston, Mass. Time controlled switch. 1,824,040; Sept. 22.
Duffy, George E., and F. T. Casper, assignors to General Railway Signal Company, Rochester, N. Y. Signaling system for railroads. 1,824,128; Sept. 22.
Dunham, Orson W., Webb City, Mo. Crown block bearing. 1,824,335; Sept. 22.
Dunmire, Russell P. (See Rodman, C. J., and Dunmire.)
Du Pont, E. I., de Nemours & Company. (See Jordan, Henry, assignor.)
Durham Duplex Razor Company. (See Sheehan, Thomas C., assignor.)
Durium Products Corporation. (See Acheson, Arthur M., assignor.)
Dyche, Howard E., Wilkinsburg, Pa. Camera operating mechanism. 1,824,469; Sept. 22.
Dyer, Horace T., Greenwich, Conn., assignor to Peabody Engineering Corporation, New York, N. Y. Apparatus for preparing pulverized fuel for combustion. 1,823,932; Sept. 22.
Early, Rupert N., and S. P. Bordeau, assignors to Electric Machinery Manufacturing Company, Minneapolis, Minn. Alternating current motor regulation. 1,824,595; Sept. 22.
Eason, Clarence M. (See Reid, F. M., Schon, and Eason.)
Eastburn, David F. (See Phelps, O. J., and Eastburn.)
Eckhard, William K., Dunellen, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Printing machine. 1,824,200; Sept. 22.
Edison General Electric Appliance Company. (See Patten, Raymond E., assignor.)
Edser, Edwin. (See Broadbridge, W., Edser, and Stenning.)
Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Repeater apparatus. 1,823,933; Sept. 22.
Eggert, John, Leipzig, and R. Schmidt, Dessau in Anhalt, assignors to I. F. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Sound box membrane. 1,824,664; Sept. 22.
Ehrlich, Rose, New York, assignor to Lapin Specialty Mfg. Co., Inc., New York, N. Y. Comb. 1,824,665; Sept. 22.
Eichengrün, Arthur, Charlottenburg, Germany, assignor to Celanese Corporation of America. Production of thin and very thin foils and film-like bands from soluble cellulose derivatives. 1,824,337; Sept. 22.
Eisenberg, Henry, New York, N. Y. Pipe clamp. 1,824,596; Sept. 22.
Eisenberg, Isidor, Brooklyn, N. Y. Lift truck. 1,824,201; Sept. 22.
Electric Machinery Manufacturing Company. (See Early, R. N., and Bordeau, assignors.)
Elliott-Fisher Company. (See Pitman, Henry L., assignor.)
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Coating composition. 1,824,757; Sept. 22.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellsberg, Edward, Westfield, N. J. Underwater torch and method therefor. 1,824,397; Sept. 22.
Elsy, Charles A., Glen Ellyn, Ill., assignor to Chicago Hardware Foundry Company, North Chicago, Ill. Picture frame. Des. 85,171; Sept. 22.
Emerson Electric Mfg. Co., The. (See Finch, Herbert I., assignor.)
Emig, John, assignor to Armstrong Cork Company, Lancaster, Pa. Flexible hard surfaced floor covering. 1,824,041; Sept. 22.
Empire Oil & Refining Company. (See Fisher, J. P., and Downs, assignors.)
Engstrom, Eugene A. (See Garno, G. E., and Engstrom.)
Enzenauer, Edward M., Maywood, and R. H. Mitchell, Huntington Park, Calif., assignors to Killefer Manufacturing Corporation. Offset disk harrow. 1,824,011; Sept. 22.
Erhard, Antoinette. (See Erhard, John W. and A.)
Erhard, John W. and A., New York, N. Y. Bathtub seat. 1,824,396; Sept. 22.
Erlandson, Emil M., Los Angeles, Calif. Wedge coupled joint. 1,823,971; Sept. 22.
Esterow, Harry, New York, N. Y. Fountain pen clip. 1,824,012; Sept. 22.
Ettinger, Joe J., assignor to Zimmer Manufacturing Company, Warsaw, Ind. Hospital bed. 1,823,890; Sept. 22.
Ettinger, Joe J., assignor to Zimmer Manufacturing Company, Warsaw, Ind. Surgical splint. 1,823,972; Sept. 22.
Evans Case Company. (See Bowen, William F., assignor.)
Evans Products Company. (See Snyder, Clifford L., assignor.)
Everhart, Audley F., Dunlo, Pa., assignor of one-half to J. Maravalli. Self adjusting brake mechanism. 1,823,973; Sept. 22.
Failor, Charles W., Forest Hills Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,824,597; Sept. 22.
Fanto, Emil C., Fairfield, assignor to McKesson & Robbins, Inc., Bridgeport, Conn. Normal heptyl phenol. 1,824,426; Sept. 22.
Farenwald, Frank A., Chicago, Ill. Intersuppotred disk for furnace conveyers. 1,824,470; Sept. 22.
Farmer, Ada E., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 85,172; Sept. 22.
Farmer, Ada E., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 85,173; Sept. 22.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,824,042; Sept. 22.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Magnetic brake. 1,824,043; Sept. 22.
Farmer, Clyde C., Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,824,044; Sept. 22.
Fedders Manufacturing Company. (See Siagel, Franklin G., assignor.)
Federal Glass Company, The. (See Beatty, Robert J., assignor.)
Fellows Gear Shaper Company, The. (See Miller, Edward W., assignor.)
Fensky, Charles, St. Louis, Mo. Hearing device. 1,824,427; Sept. 22.
Ferguson, William C., St. Louis, Mo. Jointing element for pipe and other tubular members. 1,823,974; Sept. 22.
Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Broaching machine. 1,823,975; Sept. 22.
Fetyk, Joseph, New York, N. Y., assignor to Francis Keil & Son, Inc. Lock construction. 1,824,045; Sept. 22.
Field, Oscar S., Albany, assignor to General Railway Signal Company, Rochester, N. Y. Relay. 1,824,129; Sept. 22.
Field, Oscar S., assignor to General Railway Signal Company, Rochester, N. Y. Relay. 1,824,130; Sept. 22.
Field, Oscar S., assignor to General Railway Signal Company, Rochester, N. Y. Relay. 1,824,131; Sept. 22.
Finch, Herbert I., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo. Support for electric motor. 1,824,202; Sept. 22.
Finn, Edward M., Hoisington, Kans. Safety razor. 1,824,338; Sept. 22.
Firestone Steel Products Company, The. (See Swain, Joseph G., assignor.)
Firth-Sterling Steel Company. (See Schultz, W. J., and Stevick, assignors.)

Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufactu ing Company. Roofing element. 1,824,471; Sept. 22.

Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Roofing element. 1,824,472; Sept. 22.

Fischer, Frederick C., Newark, N. J. Device for removing carbon monoxide from exhaust gases. 1,824,078; Sept. 22.

Fisher, Alfred, Roselle, N. J., assignor to W. G. Atwood, trustee, New York, N. Y. Emulsion suitable for wood preservation and process of wood preservation and product thereof. 1,824,428; Sept. 22.

Fisher, Ernest F., assignor to Alpha Tank and Sheet Metal Mfg. Co., St. Louis, Mo. Filler pipe. 1,824,538; Sept. 22.

Fisher, James P., and G. F. Downs, Bartlesville, Okla., assignors to Empire Oil & Refining Company, Dover, Del. Apparatus for cleaning gas. 1,824,713; Sept. 22.

Fisher, John U., Cleveland, Ohio. Shaving device. 1,824,203; Sept. 22.

Fisk Rubber Company, The. (See Castricum, M., and Butterfield, assignors.)

Fitch, Claude E., Wilmette, assignor to Q. R. S.-De Vry Corporaiton, Chicago, Ill. Sign construction. 1,824,204; Sept. 22.

Fitch, Ellery R., Edgewood, ass'gnor to The Westinghouse Air Brake Company, Wilmerding, Pa. Double check valve device. 1,824,013; Sept. 22.

Fitts, James L., Merchantville, N. J., assignor to Warren Webster & Company. Steam heating. 1,824,046; Sept. 22.

Fitz, Charles L., assignor to Q. R. S.-De Vry Corporation, Chicago, Ill. Combined side member and exposure meter for cameras. Des. 85,174; Sept. 22.

Fitz Gerald, Alan S., Wynnewood, Pa., assignor to General Electric Company. Electrical regulator. 1,824,714; Sept. 22.

Fitzpatrick, William J., Cedarhurst, assignor to R. H. Macy & Co., Inc., New York, N. Y. Display device. 1,824,539; Sept. 22.

Flagg, Clarence L., Atlantic, assignor to Bankers Electric Protective Association, Boston, Mass. Alarm. 1,824,473; Sept. 22.

Fleischhacker, Max, Hanover, Germany. Holder for dentistry work. 1,824,398; Sept. 22.

Fletcher Works. (See Schaum, Fletcher, assignor.)

Foley, Charles B., Fort Wayne, assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Filter. 1,824,079; Sept. 22.

Foradas, Frank D., and T. Hasapes, Homestead, Pa. Hoist 1,824,339; Sept. 22.

Forbes, Jas. H., Tea & Coffee Company. (See Hornaday, Waller C., assignor.)

Formed Steel Products Company, The. (See Priddy, Thomas D., assignor.)

Forter, Samuel A., Bellevue, assignor to H. L. Dixon Company, Pittsburgh, Pa. Making sheet glass. 1,824,474; Sept. 22.

Foster, Peter W. (See Kellogg, J. L., Foster, Poole, and Raymer.)

Fouse, Jacob J., Akron, Ohio. Fireplace. 1,824,263; Sept. 22.

Fox Company. (See Russell, Frederick T., assignor.)

Fraley, George. (See Horton, R. G., and Fraley.)

Francken, Henri J. (See Perquin, J. J., and Francken.)

Frankart, Inc. (See Cross, Louise, assignor.)

Frankfort, Alice. (See Frankfort, Harry and A.)

Frankfort, Harry and A., Brooklyn, N. Y. Adjustable valve lock. 1,823,891; Sept. 22.

Freeman, Benjamin W. (See Messmer, Charles A., jr., assignor.)

Freise, Max G., Angermund, and H. Maschmeyer, Bad Ems, assignor to Berzelius Metallhuetten-Gesellschaft mit beschrankter Haftung, Duisburg-Manheim, Germany. Smelting material containing tin oxide. 1,824,475; Sept. 22.

Friars, Clarence E., Tacoma, Wash. Replaceable porcelain tipped pontic tooth. 1,823,934; Sept. 22.

Friedrich, Hermann. (See Lommel, W., Goost, and Friedrich.)

Frigidaire Corporation. (See Hull, Harry B., assignor.)

Frigidaire Corporation. (See Shew, Walter E., assignor.)

Frigidaire Corporation. (See Smith, Harry F., assignor.)

Frigidaire Corporation. (See Stock, Anthony T., assignor.)

Froelich, Oscar E. H., Queens Village, assignor to Ward Motor Vehicle Company, Mount Vernon, N. Y. Driving mechanism for motor vehicles. 1,824,014; Sept. 22.

Fruehauf Trailer Company. (See Reid, Frederick M., assignor.)

Fruehauf Trailer Company. (See Reid, F. M., Schon, and Eason, assignors.)

Fuller, Frederic B. (See Smith, E. L., and Fuller.)

Fuller Lehigh Company. (See Bailey, E. G., and Hardgrove, assignors.)

Fuller Lehigh Company. (See Jacobus, David S., assignor.)

Furbush, Frank L. (See Sargent, C. G., and Furbush.)

Fyr-Fyter Company, The. (See Iddings, Roscoe C., assignor.)

Gaars, Wilhelm, J. Sorge, and M. Schleicher, Berlin-Charlottenburg, assignors to Siemens & Halske, Aktiengesellschaft., Siemenstadt, near Berlin, Germany. Protection of electric lines or line systems. 1,824,476; Sept. 22.

Gaisman, Henry J., New York, N. Y., assignor by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,823,976; Sept. 22.

Galassi, Pasquale, New York, N. Y. Multiple floor strip. 1,824,715; Sept. 22.

Galbraith, George R., Brewster, Wash. Insect trap. 1,823,892; Sept. 22.

Ganser, George, et al. (See Percell, John D., assignor.)

Gardner, Prince A., jr., St. Louis, Mo. Bill fold. Des. 85,175; Sept. 22.

Garno, George E., and E. A. Engstrom, assignors to The Heald Machine Company, Worcester, Mass. Work head for grinding machines. 1,823,893; Sept. 22.

Garretson, Arthur, Plymouth, Pa. Easy chair radio remote control. Des. 85,176; Sept. 22.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock drilling mechanism. 1,824,477; Sept. 22.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,824,478; Sept. 22.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling apparatus. 1,824,479; Sept. 22.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling apparatus. 1,824,480; Sept. 22.

Gas Research Co., The. (See Smith, Harry F., assignor.)

Geiger, Ernst, Irvington, N. J. Garage elevator. 1,824,340; Sept. 22.

Gelgy, J. R., S. A. (See Richard, Bernhard, assignor.)

General Aniline Works. (See Hentrich, W., and Knoche, assignors.)

General Aniline Works, Inc. (See Kalischer, G., and Schultis, assignors.)

General Aniline Works, Inc. (See Kränzlein, G., and Vollmann, assignors.)

General Electric Company. (See Anderson, Robert G., assignor.)

General Electric Company. (See Byles, Frank A., assignor.)

General Electric Company. (See Fitz Gerald, Alan S., assignor.)

General Electric Company. (See Kellogg, Edward W., assignor.)

General Electric Company. (See McNairy, Jacob W., assignor.)

General Electric Company. (See Moore, Daniel M., assignor.)

General Electric Company. (See Stocker, Arthur C., assignor.)

General Kontrolar Company. (See Bossard, Gisber L., assignor.)

General Motors Corporation. (See Brittain, Richard J., jr., assignor.)

General Motors Corporation. (See Hutchinson, Philip H., assignor.)

General Railway Signal Company. (See Abendroth, Karl W., assignor.)

General Railway Signal Company. (See Benedict, Frank, assignor.)

General Railway Signal Company. (See Brixner, Frederick W., assignor.)

General Railway Signal Company. (See Bushnell, Charles S., assignor.)

General Railway Signal Company. (See Carter, Ainsle T., assignor.)

General Railway Signal Company. (See Dicke, Oscar H., assignor.)

General Railway Signal Company. (See Dodgson, Frank L., assignor.)

General Railway Signal Company. (See Donovan, Norman L., assignor.)

General Railway Signal Company. (See Duffy, G. E., and Casper, assignors.)

General Railway Signal Company. (See Field, Oscar S., assignor.)

General Railway Signal Company. (See Hailes, William D., assignor.)

General Railway Signal Company. (See Henry, William S., assignor.)

General Railway Signal Company. (See Howe, Winthrop K., assignor.)

General Railway Signal Company. (See Johnson, Sidney G., assignor.)

General Railway Signal Company. (See Langdon, Andrew, assignor.)

General Railway Signal Company. (See Lindner, John C., assignor.)

General Railway Signal Company. (See Merkel, Joseph F., assignor.)

General Railway Signal Company. (See Ober, Hermon P., assignor.)

General Railway Signal Company. (See Phinney, Robert M., assignor.)

General Railway Signal Company. (See Reichard, Wade H., assignor.)

General Railway Signal Company. (See Taylor, Herbert B., assignor.)

General Railway Signal Company. (See Wight, Sedgwick N., assignor.)

General Railway Signal Company. (See Willing, Joseph E., assignor.)

Gent y, Frank, Carlsbad, N. Mex. Grain header. 1,824,264; Sept. 22.

George, Ralph D., assignor to A. A. Kramer, Kansas City, Mo. Valve operating mechanism for tanks. 1,823,935; Sept. 22.

Gerry, Emil C. (See Marion, A. M., and Gerry.)

Gesellschaft fur Drahtl se Telegraphie m. b. H. (See Schröter, Fritz, assignor.)

Gibbons, Patrick C., Edina, Mo. Control valve attachment for flush tank faucets. 1,824,716; Sept. 22.

Gill, Walter L., Redlands, Calif. Indelibly writing upon paper and other fabrics. 1,824,341; Sept. 22.

Gillen, Daniel A., and F. W. Seymour, Flushing, N. Y. Automatic cushion for piping systems. 1,824,342; Sept. 22.

Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)

Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)

Gits, Jules P., and E. L. Van Wezemael, Chicago, Ill. Flowerpot holder. 1,824,343; Sept. 22.

Glaenzer, Harry, Philadelpala, Pa. Air pump and power reverse support. 1,824,666; Sept. 22.

Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)

Globe-Wernicke Company. (See Thies, Urban C., assignor.)

Goldberg, Joseph, Los Angeles, Calif. Securing dishes on ships' tables. 1,824,344; Sept. 22.

Goldfinger, Samuel, New York, N. Y. Lamp. 1,824,047; Sept. 22.

Goldstein, Max. (See Kotlicke, Aaron L., assignor.)

Goliath Rubber Company, The. (See Mackey, Albert B. and E. A., assignors.)

Goodrich, B. F., Company, The. (See Karrer, Enoch, assignor.)

Goodrich, B. F., Company, The. (See Sears, Edward M., assignor.)

Goodyear Tire & Rubber Company, The. (See Darrow, Burgess, assignor.)

Gookin, Sylvester L., Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastener-setting machine. 1,823,894; Sept. 22.

Goost, Theodor. (See Lommel, W., Goost and Friedrich.)

Goss, Worth C., Seattle, Wash. Incandescent lamp. 1,824,429; Sept. 22.

Gotham Knitbac Machine Corporation. (See Leavin, William H., assignor.)

Gotham Knitbac Machine Corporation. (See Leavin, William H. and S. B., assignors.)

Gotham Knitbac Machine Corporation. (See Parlini, Alexander C., assignor.)

Government and the people of the United States of America. (See Dantzig, T., and Peterson, assignors.)

Graficus, William E., Moundsville, W. Va. Tack setter. 1,824,399; Sept. 22.

Grand Rapids Bookcase & Chair Company. (See Stem, Kellar, assignor.)

Gray Processes Corporation. (See Gray, Thomas T., assignor.)

Gray, Thomas T., Elizabeth, N. J., assignor to Gray Processes Corporation, Newark, N. J. Apparatus for contacting vapors with solids. 1,823,895; Sept. 22.

Grebe, A. H., & Co. (See Montgomery, Andrew P., assignor.)

Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Mounting for radiator shutter blades. 1,824,015; Sept. 22.

Greene, Bartholomew, Sebring, Ohio. Press. 1,824,132; Sept. 22.

Greene, John S. (See Caps, A. W., and Greene.)

Greene John S., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic print exposing and handling apparatus. 1,824,265; Sept. 22.

Greenhill, Harold, Chicago, Ill. Vending machine. 1,823,896; Sept. 22.

Grönkwist, Oscar R., Katrineholm, Sweden. Apparatus for producing a lubricating oil mist. 1,824,540; Sept. 22.

Grosswege, John B., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake and power interlock. 1,824,048; Sept. 22.

Grosswege, John B., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake and power interlock. 1,824,049; Sept. 22.

Grumpelt, Oskar F. A. E., Berlin, Germany, assignor, by mesne assignments, to Syndicat "Vaproc," Brussels, Belgium. Rotary propeller. 1,824,667; Sept. 22.

Haas, Edward, Brooklyn, N. Y., assignor to Package Machinery Co., Springfield, Mass. Rear tucking mechanism for wrapping machines. 1,824,266; Sept. 22.

Hagerling, Fred J., St. Louis, Mo. Tool. 1,824,133; Sept. 22.

Haglund, Gustaf, assignor to Patentaktiebolaget Grondal-Ramen, Stockholm, Sweden. Cellulose cooking. Re18,200; Sept. 22.

Hailes, William D., assignor to General Railway Signal Company, Rochester, N. Y. Continuous inductive train control system. 1,824,134; Sept. 22.

Hailes, William D., assignor to General Railway Signal Company, Rochester, N. Y. Train dispatching system for railroads. 1,824,135; Sept. 22.

Hailes, William D., assignor to General Railway Signal Company, Rochester, N. Y. Direct current track relay for railway signaling systems. 1,824,136; Sept. 22.

Hailes, William D., assignor to General Railway Signal Company, Rochester, N. Y. Continuous inductive train control system. 1,824,749; Sept. 22.

Haider, Charles, Hawthorne, N. J., assignor to The Bradford Corporation, New York, N. Y. Steam locomotive. 1,824,541; Sept. 22.

Hall, Charles C., assignor, by mesne assignments, to Banner Rock Corporation, Alexandria, Ind. Apparatus and process of treating mineral wool. 1,824,430; Sept. 22.

Hall, Edward W., Portland, Oreg. Propulsion mechanism. 1,824,016; Sept. 22.

Hall, Frank W., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Method and apparatus for fractionating hydrocarbon oils. 1,823,897; Sept. 22.

Hall, Marion M., Port Nelson, Ontario, Canada. Necktie. 1,824,267; Sept. 22.

Haliden, Karl W., Thomaston, Conn., assignor, by mesne assignments, to Steel and Tubes, Inc., Cleveland, Ohio, Clutch. 1,824,431; Sept. 22.

Halloran Frank E., Brooklyn, N. Y., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Combination projection arrangement and support therefor. Des. 85,177; Sept. 22.

Halstead, John F., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Preparing cigar wrappers. 1,824,400; Sept. 22.

Hammerly, Herman J., Wallingford, Conn., assignor to Trumbull Electric Manufacturing Company, Plainville, Conn. Disappearing blade switch. 1,824,137; Sept. 22.

Handy Table Set Company. (See Soltesz, Nick, assignor.)

Hangerud, Earl J., Portland, Oreg. Automatic card distributing device. 1,824,542; Sept. 22.

Harbison-Walker Refractories Company. (See Oeffner, A. A., and Trotta, assignors.)

Hardgrove, Ralph M. (See Bailey, E. G., and Hardgrove.)

Harding, Thomas, Newark, N. J., assignor to J. L. Sommer Manufacturing Company. Beverage spoon or similar article. Des. 85,178; Sept. 22.

Hardwick, Christopher L., assignor to Hardwick Stove Company, Cleveland, Tenn. Stove door. 1,824,345; Sept. 22.

Hardwick Stove Company. (See Hardwick, Christopher L., assignor.)

Harison, William B., Garden City, N. Y. Aeroplane station. 1,824,346; Sept. 22.

Harmor & Co. Inc. (See Harty, W. A., and Moore, assignors.)

Harper, Choice R., assignor of one-third to J. Watkins, Wink, Tex. Underground valve for oil wells. 1,823,936; Sept. 22.

Harshbarger, Asa F. (See Jacobs, C. H., and Harshbarger.)

Hartmann, Georg, Hseder-bei-Peine, Hanover, Germany, assignor to The Charles Taylor Sons Company, Cincinnati, Ohio. Method and apparatus for making curved bodies. 1,824,482; Sept. 22.

Hartson, Earl S., Los Angeles, Calif. Expansion drilling bit. 1,824,268; Sept. 22.

Hartwell, Floyd S., Cleveland, Ohio. Boring bar. 1,824,543; Sept. 22.

Harty, William A., Buffalo, N. Y., and F. W. Moore, Thorold, Ontario, Canada, assignors to Harmor & Co. Inc., Buffalo, N. Y. Drier. 1,824,717; Sept. 22.

Hasapes, Thomas. (See Foradas, F. D., and Hasapes.)

Hasbrouck, Beatrice, Highland, N. Y. Stenographer's appliance. 1,824,718; Sept. 22.

Haskell, John D., assignor to Dilts Machine Works, Inc., Fulton, N. Y. Pulp beater, extractor, and cleaner. 1,824,080; Sept. 22.

Hasley, William G., assignor of one-third to J. H. Downes, Pittsburgh, Pa. Motor vehicle suspension. 1,824,205; Sept. 22.

Hasselkus, John W., and O. G. Hay, London, England. Interferometer for the testing of optical elements. 1,824,668; Sept. 22.

Hatchett, Andrew H., sr., Cleveland, Ohio. Combined fish lure and signal. 1,823,937; Sept. 22.

Hawle, Michael, Greens Farms, Conn. Hose supporter. 1,824,206; Sept. 22.

Hay, Owen G. (See Hasselkus, J. W., and Hay.)

Hazelton, George, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening inserting machine. 1,823,898; Sept. 22.

Hazlitt, Clark J., near Richmond, Ind. Angler packet. 1,824,481; Sept. 22.

Heald Machine Company, The. (See Garno, G. E., and Engstrom, assignors.)

Heald Machine Company, The. (See Jellicoe, Richard H., assignor.)

Healthometer Company. (See Weber, Mathias, J., assignor.)

Heath, Sheldon B. (See Barstow, E. O., and Heath.)

Heimann, Morris A., St. Louis, Mo. Garment hanger. 1,824,138; Sept. 22.

Helbig, Paul. (See Muentener, C., and Helbig.)

Heller, Paul C., La Lima, Honduras. Engine. 1,824,081; Sept. 22.

Hénaux, Jeanne, executrix. (See Vedovelli, Edouard.)

Hendee, Lem E., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Electrical appliance. 1,823,977; Sept. 22.

Hendry, William F., Ossining, assignor to E. D. Anderson, Inc., New York, N. Y. Packing machine. 1,824,432; Sept. 22.

Henke, Gustav, Bremen, assignor to M. H. Wilkens & Söhne Akt.-Ges., Hemlingen, near Bremen, Germany. Production of silver plated metal articles such as table requisites. 1,823,938; Sept. 22.

Henry, William S., assignor to General Railway Signal Company, Rochester, N. Y. Switching means controllable from engine cabs. 1,824,139; Sept. 22.

Hentrich, Winfrid, Wiesdorf-on-the-Rhine, and R. Knoche, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y. New monoazodyestuffs. 1,823,939; Sept. 22.

Hercules Powder Company. (See Johnston, Alan C., assignor.)

Hernandez, Joseph B., Corporation. (See Hernandez, Joseph B., assignor.)

Hernandez, Joseph B., New York, N. Y., assignor to Joseph B. Hernandez Corporation. Metal lathing. 1,824,082; Sept. 22.

Hershey, Harry E. (See Hudd, A. E., and Hershey.)

Hersieb, William, and S. Bramsen, Chicago, Ill., assignors to Binks Manufacturing Company, Chicago, Ill. Touch up spray gun. 1,824,017; Sept. 22.

Hertzberg, Harry, Brooklyn, N. Y. Machine for making twisted brushes. 1,824,140; Sept. 22.

Hess, Charles P., Cleveland, Ohio. Anticreeper for rails. 1,824,544; Sept. 22.

Hibon, Charles, St.-Mande, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Apparatus for grinding, smoothing, and polishing glass. 1,824,347; Sept. 22.

Hickok Manufacturing Company. (See Mix, Edwin S., assignor.)

Hickok, W. C., Manufacturing Company. (See Broadmeyer, Albert, assignor.)

Hicks, Raymond M., East Orange, N. J., assignor to Ward & Crosby, New York, N. Y. Timing apparatus. 1,824,348; Sept. 22.

Hicks, William W. (See Kercher, A. J., and Hicks.)

Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Bag frame. Des. 85,179; Sept. 22.

Hill, Roy L., assignor to Atlas Powder Company, Wilmington, Del. Water tight explosive cartridge 1,824,141; Sept. 22.

Hirsch, Sidney, New York, N. Y., and J. F. Singer, Nutley, N. J., assignors to Photomaton, Inc., New York, N. Y. Positioning device for users of automatic photographic machines. 1,824,269; Sept. 22.

Hodell, Frederick G., Cleveland Heights, assignor to The Chain Products Company, Cleveland, Ohio. Tread member connection for antiskid devices. 1,824,545; Sept. 22.

Hodell, Frederick G., Cleveland Heights, assignor to The Chain Products Company, Cleveland, Ohio. Connecting means for chains. 1,824,546; Sept. 22.

Hodge, Robert J., assignor to The American Buckle Company, West Haven, Conn. Button loop. 1,824,547; Sept. 22.

Hoe, R., & Co. (See Eckhard, William K., assignor.)

Hoe, R., & Co. (See Lamafsch, Frederick, assignor.)

Hoegemeyer, Herman, Winslow, Nebr. Portable hog house. 1,823,940; Sept. 22.

Hoff, Sigurd J., Brooklyn, N. Y. Cotter pin tool. 1,824,083; Sept. 22.

Hoffman-La Roche Inc. (See Brauchli, Ernst., assignor.)

Holder, Edward P., New York, N. Y. Painting chart. 1,824,598; Sept. 22.

Holmes, Richard M., Davenport, Iowa. Switch box. 1,824,548; Sept. 22.

Holstein, Adolph M., Syracuse, N. Y. Clock case. Des. 85,180; Sept. 22.

Holzman, John F., Olcott, N. Y. Illuminating device. 1,824,270; Sept. 22.

Hopkins, Harvey W., Baltimore, Md. Coal truck. 1,823,941; Sept. 22.

Horn, William J., assignor, by mesne assignments, to McKesson & Robbins, Inc., Bridgeport, Conn. Medicinal preparation. 1,824,018; Sept. 22.

Hornaday, Waller C., University City, assignor to Jas. H. Forbes Tea & Coffee Company, St. Louis, Mo. Rack. 1,824,142; Sept. 22.

Hornby, Edgar A. (See Warren, F. A., and Hornby.)

Horton, Rae G., and G. Fraley, Fresno, Calif. Power attachment for saw swages. 1,824,349; Sept. 22.

Hosking, Oakley W., Monroe, N. Y. Sand treating apparatus. 1,824,350; Sept. 22.

Howard, Frank A. (See King, G., and Howard.)

Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Automatic train stop. 1,824,143; Sept. 22.

Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Automatic speed control of vehicles. 1,824,144; Sept. 22.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,824,145; Sept. 22.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,824,146; Sept. 22.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Signaling system for railroads. 1,824,147; Sept. 22.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,824,148; Sept. 22.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,824,149; Sept. 22.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Brake for railroad switch machines. 1,824,150; Sept. 22.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,824,151; Sept. 22.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Switch machine for railroads. 1,824,152; Sept. 22.

Hoyt, Aaron, assignor of one-half to S. L. Worthen, Haverhill, Mass. Tanning hides and skins. 1,824,549; Sept. 22.

Hubmann, Otto, Frankfort-on-the-Main, and F. Voerkel, Hochst-on-the-Main, Germany. Apparatus for operating shaft furnaces in the thermal treatment of granular material. 1,824,483; Sept. 22.

Hudd, Alfred E., Evanston, and H. E. Hershey, Oak Park, Ill., assignors to Reserve Holding Company, Kansas City, Mo. Railway crossing signal control circuits. 1,824,207; Sept. 22.

Hudson, H. D., Manufacturing Company. (See Boyden, John H., assignor.)

Hudson, H. D., Manufacturing Company. (See Johnson, C., and Keating, assignors.)

Hudson, James D., Montreal, Quebec, Canada. Light. 1,824,208; Sept. 22.

Hufferd, George H., Detroit, Mich, assignor to Thompson Products Inc., Cleveland, Ohio. End construction for tie-rods or the like. 1,824,271; Sept. 22.

Hufner, Hermann, New York, N. Y. Aquarium. Des. 85,181; Sept. 22.

Hughes, James R., assignor, to The Studebaker Corporation, South Bend, Ind. Body construction. 1,824,719; Sept. 22.

Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,823,899; Sept. 22.

Hummel, Frederick E. (See Noeth, J. J., and Hummel.)

Humphreys, Charles F., and J. C. McCarthy, assignors to Armstrong Cork Company, Lancaster, Pa. Printing marbleized patterns on floor coverings. 1,824,433; Sept. 22.

Hunt, Guy H., Brookline, Mass. Producing lime. 1,824,351; Sept. 22.

Hushour, Perry D., assignor to W. M. Charman, Youngstown, Ohio. Valve structure. 1,824,434; Sept. 22.

Hutchinson, Philip H., Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich. Gauge switch. 1,823,900; Sept. 22.

I. G. Farbenindustrie Aktiengesellschaft. (See Eggert, J., and Schmidt, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Lommel, W., Goost, and Friedrich, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Luther M., and Wille, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Tochtermann, Hans, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Wild, W., and Wietzel, assignors.)

Iddings, Roscoe C., assignor to The Fyr-Fyter Company, Dayton, Ohio. Fire extinguisher. 1,824,599; Sept. 22.

Igou, Dennis T., et al. (See Stover, Frank E., assignor.)

Industrial Patents Corporation. (See Schulis, Vincent, assignor.)

International Cigar Machinery Company. (See Halstead, John F., assignor.)

International Motor Company. (See Masury, Alfred F., assignor.)

International Motor Company. (See Matthews, Philip E., assignor.)

International-Stacey Corporation. (See Boykin, Burwell, jr., assignor.)

Irsch, Jacob, New York, assignor of one-half to B. E. Jones, Freeport Village, N. Y. Amusement ride. 1,824,720; Sept. 22.

Irvine, James, jr. (See Key, James F., assignor.)

Isaacs, William, Lincoln, Nebr. Gas tank lock. 1,824,352; Sept. 22.

Ivey, Arnold, M. (See Tisdale, James R. M., assignor.)

Jackman, Arthur J., Forest Hills Borough, assignor to Vesuvius Crucible Company, Swissvale, Pa., Ladle stoppel construction. 1,824,019; Sept. 22.

Jackson, Benjamin H. (See Rawson, G. L., and Jackson.)

Jackson, Byron Co. (See Smith, Nelson K., assignor.)

Jackson, Joseph W., assignor to H. Perlmutter, Brooklyn, N. Y. Brake construction. 1,824,484; Sept. 22.

Jacobs, Charles H., San Francisco, and A. F. Harshbarger, Oakland, Calif. Cargo carrier for aircraft. 1,824,550; Sept. 22.

Jacobs, Charles H., San Francisco, and A. F. Harshbarger, Oakland, Calif. Cargo carrier support. 1,824,551; Sept. 22.

Jacobs, E. H., Mfg. Co. (See Chadbourne, Joseph H., assignor.)

Jacobs, Elmer P., Bridgeport, Ala. Door retaining device. 1,824,209; Sept. 22.

Jacobs, Frank M., Tacoma, Wash. Lathing unit. 1,824,210; Sept. 22.

Jacobs, Joseph H., Rochester, N. Y. Height gauge. 1,824,153; Sept. 23.

Jacobus, David S., Montclair, N. J., assignor to Fuller Lehigh Company, Fullerton, Pa. Furnace wall. 1,823,901; Sept. 22.

Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler. 1,824,084; Sept. 22.

Jamison, Charles A., assignor to Pennsylvania Crusher Company, Philadelphia, Pa. Hammer crusher. 1,824,272; Sept. 22.

Jellicoe, Richard H., assignor to The Heald Machine Company, Worcester, Mass. Chuck. 1,823,902; Sept. 22.

Jensen, Rasmus O. J., Copenhagen, Denmark. Screen for showing projected images in lighted rooms and for short exposure photography. 1,824,353; Sept. 22.

Jewell Electrical Instrument Co. (See Miller, John H., assignor.)

Jipp, August, Spandau, near Berlin, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telegraph or teletyper plant. 1,823,978; Sept. 22.

Johke, August F., Pittsburgh, Pa. Rolling mill. 1,824,211; Sept. 22.

Joers, Carl F. and F. D., Beverly Hills, Calif. Brake setting and releasing apparatus. 1,824,050; Sept. 22.

Joers, Fred D. (See Joers, Carl F. and F. D.)

Johns-Manville Corporation. (See Wilbur, Lawrence S., assignor.)

Johnson Brothers Engineering Corporation. (See Johnson, Harry L., assignor.)

Johnson Brothers Engineering Corporation. (See Johnson, Louis J., assignor.)

Johnson Brothers Engineering Corporation. (See Johnson, Louis J. and H. L.)

Johnson, Clarence G., Hartford City, Ind. Movable sealing strip for doors. 1,824,212; Sept. 22.

Johnson, Clement, and M. H. Keating, assignors to H. D. Hudson Manufacturing Company, Minneapolis, Minn., Chicken waterer. 1,824,154; Sept. 22.

Johnson, Harry L. (See Johnson, Louis J. and H. L.)

Johnson, Harry L., assignor to Johnson Brothers Engineering Corporation, South Bend, Ind. Marine motor. 1,824,213; Sept. 22.

Johnson & Johnson. (See L'Hommedieu, Paige B., assignor.)

Johnson, Louis J., assignor to Johnson Brothers Engineering Corporation, South Bend, Ind. Outboard motor. 1,824,735; Sept. 22.

Johnson, Louis J., South Bend, Ind., and H. L. Johnson, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind. Outboard motor. 1,824,736; Sept. 22.

Johnson, Louis J., South Bend, Ind., and H. L. Johnson, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind. Outboard motor assembly. 1,824,737; Sept. 22.

Johnson, Louis J., South Bend, Ind., and H. L. Johnson, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind. Outboard motor assembly. 1,824,739; Sept. 22.

Johnson, Louis J., South Bend, Ind., and H. L. Johnson, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind. Water propulsion device. 1,824,740; Sept. 22.

Johnson, Louis J. and H. L., Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind. Outboard motor assembly. 1,824,738; Sept. 22.

Johnson, Sidney G., Rahway, N. J., assignor to General Railway Signal Company, Rochester, N. Y. Safety device for power operated switches. 1,824,741; Sept. 22.

Johnston, Alan C., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Producing resin esters. 1,824,020; Sept. 22.

Jones, Barabour E. (See Irsch, Jacob, assignor.)

Jones, Charles W., Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y. Chair or similar article. Des. 85,182; Sept. 22.

Jones, Charles W., Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y. Chair or similar article. Des. 85,183; Sept. 22.

Jones, Charles W., Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y. Chair or similar article. Des. 85,184; Sept. 22.

Jones, Forrest R., et al. (See Miller, W. J., and Jones, assignors.)

Jones, Hugh J., Denver, Colo. Display device. 1,824,721; Sept. 22.

Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine. 1,824,722; Sept. 22.

Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine. 1,824,723; Sept. 22.

Jordan, Henry, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Dyeing regenerated cellulose materials. 1,824,273; Sept. 22.

Jordan, Richard H., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Lamination for dynamo-electric machines. 1,823,979; Sept. 22.

Jordboy, Hans C., North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Brake for paper guide rolls. 1,824,669; Sept. 22.

Jourdain, Marie P. R., assignor to Societe Anonyme Freins Jourdain Monneret, Paris, France. Oil removing apparatus. 1,824,485; Sept. 22.

Juneau, Armand, Montreal, Quebec, Canada. Axle drive mechanism. 1,824,670; Sept. 22.

Jung, Albert, Plainfield, N. J. Skate. 1,823,942; Sept. 22.

Kabitzke, John W., Chicago, Ill. Internal combustion engine. 1,823,903; Sept. 22.

Kahn, Frank J., New York, N. Y. Laundry ironer. 1,824,435; Sept. 22.

Kahn, Julius, and H. E. White, assignors to Truscon Steel Company, Youngstown, Ohio. Lath structure. 1,824,274; Sept. 22.

Kaizer, Phyllis C., Beverly Hills, Calif. Thumb sucking preventive. 1,823,904; Sept. 22.

Kalischer, Georg, Frankfort-on-the-Main, and C. Schultis, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works Inc., New York, N. Y. New azodyestuffs and making same. 1,823,943; Sept. 22.

Kalman Steel Co. (See Dale, George E., assignor.)

Kalman Steel Company. (See White, William E., assignor.)

Karfiol, Edward, Brooklyn, N. Y. Dolly. Des. 85,185; Sept. 22.

Karnes, James C., Buffalo, N. Y., and G. J. Kessenich, Madison, Wis. Camera mounting. 1,824,085; Sept. 22.

Karrer, Enoch, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Steering wheel. 1,823,980; Sept. 22.

Karrer, Paul, Zurich, and W. Wehrli, Binningen, near Basel, assignors to the Firm of Chemical Works, formerly Sandoz, Basel, Switzerland. Treatment of cotton and artificial silk. 1,824,671; Sept. 22.

Keating, Maurice H. (See Johnson, C., and Keating.)

Kehler, Adele W., San Francisco, Calif. Combined cigarette and match container. Des. 85,186; Sept. 22.

Keil, Francis, & Son, Inc. (See Fetyk, Joseph, assignor.)

Kellogg Company. (See Kellogg, J. L., Foster, Poole and Raymer, assignors.)

Kellogg, Edward W., Schenectady, N. Y., assignor to General Electric Company. Electromagnetic device. 1,824,724; Sept. 22.

Kellogg, Hosford D., jr., Haverford, Pa. Fountain pen. 1,824,275; Sept. 22.

Kellogg, John L., P. W. Foster, R. S. Poole, and M. Raymer, assignors to Kellogg Company, Battle Creek, Mich. Packaging machine. 1,824,401; Sept. 22.

Kennedy, Julian, Pittsburgh, Pa. Rolling sheets. 1,824,486; Sept. 22.

Kercher, Arthur J., Berkeley, and W. W. Hicks, assignors to Wesix National Company, San Francisco, Calif. Water supply heater. 1,824,155; Sept. 22.

Kessenich, Gregory, J. (See Karnes, J. C., and Kessenich.)

Kesti, Charles J., Hood River, Oreg. Conveyer switch. 1,824,276; Sept. 22

Key, James F., Pasadena, Calif., assignor of sixty-eight per cent to J. Irvine, jr. Toy vehicle and guiding apparatus therefor. 1,824,214; Sept. 22.

Khezarjian, Alexander, Detroit, Mich. Vehicle brake. 1,824,552; Sept. 22.

Killefer Manufacturing Corporation. (See Enzenauer, E. M., and Mitchell, assignors.)

Kimble, Horace G., Brooklyn, N. Y. Bed. 1,824,156; Sept. 22.

King, C. G., & Co. (See Farmer, Ada E., assignor.)

King, Graham, South Orange, and F. A. Howard, Ridgewood, N. J., assignors to Truscon Steel Company, Detroit, Mich. Section door. 1,824,277; Sept. 22.

King, Walter E., assignor to J. S. Abercrombie, Houston, Tex. Valve for well casings. 1,824,157; Sept. 22.

King, Warren A. (See Trenkler, J. H., and King.)

Kinzler, Joseph H., Monaca, Pa. Lamp socket. 1,824,600; Sept. 22.

Kirschbraun, Lester, assignor to Universal Oil Products Company, Chicago, Ill. Treating hydrocarbons. 1,824,215; Sept. 22.

Kittredge, Linus E., Brooklyn, and L. A. Dorff, New York, N. Y., assignors to American Telephone and Telegraph Company. Time recording. 1,823,944; Sept. 22.

Kleist, Herman W., assignor to Dole Refrigerating and Machine Company, Chicago, Ill. Refrigerating apparatus. 1,824,158; Sept. 22.

Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)

Kline, Elmer V., et al. (See Weiss, Albert F., assignor.)

Klingenberg, Wilhelm, assignor to Lamella Roof Syndicate Inc., New York, N. Y. Space covering structure, such as roofs, walls, and the like. 1,823,945; Sept. 22.

Klopsteg, Paul E., assignor to Central Scientific Company, Chicago, Ill. Rotor propelled apparatus. 1,824,487; Sept. 22.

Knickerbocker Stamping Co. (See Large, George, assignor.)

Knight, William W., Evanston, assignor to Roth Rubber Company, Chicago, Ill. Insulating covering for flexible pipe conduits. 1,824,601; Sept. 22.

Knoche, Rudolf. (See Hentrich, W., and Knoche.)

Knox, Harry A., Davenport, Iowa. Suspension for track laying vehicles. 1,824,086; Sept. 22.

Koch, John M., Wyomissing, Pa. Automatic discharge device for grinding machines. 1,824,159; Sept. 22.

Koch, Lydia B. (See Vogelsang, Ludy, assignor.)
Koehring Company. (See Lichtenberg, Erich H., assignor.)
Koehring Company. (See Robb, John F., assignor.)
Koehring Company. (See Tranaas, Emil L., assignor.)
Kohn, Koby, assignor to Chatham Specialty Corporation, New York, N. Y. Covering for toy torpedoes. 1,824,278; Sept. 22.
Kohr, Robert F., assignor to The Studebaker Corporation, South Bend, Ind. Brake operating mechanism. 1,824,725; Sept. 22.
Kolesza, Johann, Berlin, Germany. Fire escape. 1,824,279; Sept. 22.
Kopf, Joseph R., Rockville Center, N. Y. Pad for saddles. 1,824,488; Sept. 22.
Kopp Glass, Incorporated. (See Kopp, Nicholas, assignor.)
Kopp, Nicholas, Pittsburgh, assignor to Kopp Glass, Incorporated, Swissvale, Pa. Making glass cylinders. 1,824,216; Sept. 22.
Koppers Company, The. (See Sperr, Frederick W., jr., assignor.)
Kotlcke, Aaron L., assignor to M. Goldstein, Baltimore, Md. Coin purse. 1,824,354; Sept. 22.
Koun, Young Ho, New York, N. Y. Aircraft. 1,824,280; Sept. 22.
Kovar, John R., and L. W., Owatonna, Minn. Cultivator structure. 1,824,603; Sept. 22.
Kovar, John R. and L. W., assignors to Joseph J. Kovar Company, Owatonna, Minn. Cultivator with three wheels. 1,824,602; Sept. 22.
Kovar, Joseph J., Company. (See Kovar, John R., and L. W., assignors.)
Kovar, Louis W. (See Kovar, John R., and L. W.)
Krag, Grace M., Chicago, Ill. Hair dyeing apparatus. 1,824,087; Sept. 22.
Kramer, Andrew A. (See George, Ralph D., assignor.)
Kramer, Andrew A., Kansas City, Mo. Trailer tank vehicle. Des. 85,187; Sept. 22.
Kränzlein, Georg, and H. Vollmann, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyeing and printing vegetable fibers. 1,823,946; Sept. 22.
Krause, Alexander R., Hollywood, Calif. Wrist watch bracelet. Des. 85,188; Sept. 22.
Krelner, Friedrich, Furth, Germany. Door hinge. 1,824,217; Sept. 22.
Krentzberg, Otto A., Fountain Hill Borough, Bethlehem, Pa. Feeder for pulverized material. 1,823,905; Sept. 22.
Krick, Leonard B., Chicago, Ill., assignor to Popsicle Corporation of the United States, New York, N. Y. Confection. Des. 85,189; Sept. 22.
Kridel, J., Sons & Co. (See Bader, Fred W. assignor.)
Krider, George E., Duncansville, Pa., assignor to McLanahan-Stone Machine Company, Hollidaysburg, Pa. Crusher roll. 1,824,088; Sept. 22.
Kunzer, Louis G., Oak Park, Ill. Locomotive draft inducers. 1,824,355; Sept. 22.
Kurlash Company, Inc., The. (See Christy, Robert T., assignor.)
Kusebauch, Anton K., Bellevue, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Wrist pin locking mechanism. 1,824,021; Sept. 22.
Küstermann, Willy. (See Otto, Franz, assignor.)
La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,824,051; Sept. 22.
La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,824,052; Sept. 22.
Laguzzi, Mario, Long Island City, N. Y. Interlocking member for slide fasteners. 1,824,672; Sept. 22.
Lakewest Corporation, The. (See Patterson, M., and Marresford, assignors.)
Lamatsch, Frederick, Grantwood, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Impression adjusting mechanism. 1,824,436; Sept. 22.
Lambert, Chandley W., Cleveland, Ohio. Knife. 1,824,022; Sept. 22.
Lamella Roof Syndicate, Inc. (See Klingenberg, Wilhelm, assignor.)
Lamplough, Leslie F., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Handling strand material. 1,823,981; Sept. 22.
Landrock, Paul, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic print developing apparatus. 1,824,281; Sept. 22.
Langdon, Andrew, assignor to General Railway Signal Company, Rochester, N. Y. Traffic controlling system for railroads. 1,824,160; Sept. 22.
Lange, George, New York, N. Y., assignor to Knickerbocker Stamping Co., Parkersburg, W. Va. Core filler. 1,824,089; Sept. 22.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Leveling rod. 1,824,023; Sept. 22.
Lapin Specialty Mfg. Co. (See Ehrlich, Rose, assignor.)
Lapworth, Winfield S., Hopedale, Mass. Garment support. 1,824,556; Sept. 22.
Larsen, Arnold L., assignor to Surface Combustion Corporation, Toledo, Ohio. Feeding sheet bars to furnace conveyers. 1,824,742; Sept. 22.
Larsen, Axel L., St. Paul, Minn. Game device. 1,824,553; Sept. 22.
Lathers, Paul, Beloit, Wis. Power saw. 1,824,555; Sept. 22.
Lathers William C., Beloit, Wis. Automatic brake for trailers. 1,824,554; Sept. 22.
Laucirica, Xavier, New York, N. Y. Stuffing material. 1,824,489; Sept. 22.
Leadbetter, Louis L., Portland, Oreg. Treating paper. 1,824,024; Sept. 22.
Leavin, Samuel B. (See Leavin, William H. and S. B.)
Leavin, William H., assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Machine for reparing runs in fabrics. 1,824,437; Sept. 22.
Leavin, William H. and S. B., assignors, by mesne assignments, to Gotham Knitbac Machine Corporation, New York, N. Y. Knitting needle. 1,823,906; Sept. 22.
Lederle, Charles F., Chicago, Ill. Electric swivel connection. 1,824,604; Sept. 22.
Lee, Oliver W., Houston, Tex. Window shade operating device. 1,824,673; Sept. 22.
Leiman, Henry, assignor to Leiman-Weidman Box Company, Tampa, Fla. Box. 1,824,218; Sept. 22.
Leiman-Weidman Box Company. (See Leiman, Henry, assignor.)
Lelong, Lucien, Inc. (See Wakefield, Frank E., assignor.)
Le Mare, Ernest B., St. Helens, and F. B. Waldron, Prescot, assignors to Pilkington Brothers Limited, Liverpool, England. Feeding molten glass to a rolling apparatus for producing a continuous glass strip. 1,824,490; Sept. 22.
L'Enfant, Charles, New York, N. Y. Savings bank. 1,824,438; Sept. 22.
Lethert, John A., St. Paul, Minn. Badge. 1,824,161; Sept. 22.
Lewis, George W., Berlin, Mass. Foldable ironing table. 1,824,025; Sept. 22.
Lewis, Joseph H. (See Pond, L. N., and Lewis.)
Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,824,605; Sept. 22.
L'Hommedieu, Paige B., assignor to Johnson & Johnson, New Brunswick, N. J. Budding and grafting plaster. 1,824,674; Sept. 22.
Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Dipper stick. 1,824,606; Sept. 22.
Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Automatic skip control mechanism. 1,824,607; Sept. 22.
Lindner, John C., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,824,162; Sept. 22.
Line Material Company. (See Hendee, Lem E., assignor.)
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Linn, Royal, Springfield, Ill. Side car frame for bicycles. 1,824,675; Sept. 22.
Lisle Manufacturing Company. (See Olson, Carl A., assignor.)
Little, Bert R., Bellingham, Wash. Tube and pipe bender. 1,824,026; Sept. 22.
Little, James E., Bethlehem, Pa., assignor to Bethlehem Steel Company. Pyrites roasting. 1,823,907; Sept. 22.
Locke, Francis, North Attleboro, Mass., assignor to J. D. Crosby Company, Pawtucket, R. I. Making polished annealed stainless steels. 1,824,608; Sept. 22.
Lodge, Joseph E., Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for handling strand material. 1,823,982; Sept. 22.
Loehr, Charles J., Los Angeles, Calif. Automatic trap nest. 1,824,557; Sept. 22.
Lommel, Wilhelm, Wiesdorf-on-the-Rhine, T. Goost, Leverkusen-on-the-Rhine, and H. Friedrich, Wiesdorf-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, Accelerator for caoutchouc. 1,824,609; Sept. 22.
Long, Thomas H., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Induction furnace. 1,823,908; Sept. 22.
Lord, Hugh C., Erie, Pa. Gear shift lever mechanism. 1,824,090; Sept. 22.
Loughrey, Carl T., Los Angeles, Calif. Distilling solid material containing combustible carbonaceous material. 1,824,282; Sept. 22.
Love Brothers Incorporated. (See Sanderson, Arthur K., assignor.)
Loveless, Fred, Griggsville, Ill. Fence wire crimper. 1,824,219; Sept. 22.
Lowell, Percival D., Jamaica, N. Y. Inductance coil. 1,824,726; Sept. 22.
Lucia, Louis V. (See Wolcott, F. E., and Lucia.)
Lundquist, Alarik, Portland, Oreg. Hoisting sling. 1,824,027; Sept. 22.
Lunt, George P., assignor to E. B. Badger & Sons Company, Boston, Mass. Chlorination of organic compounds. 1,824,558; Sept. 22.
Luther, Martin, Mannheim, and H. Wille, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Oxidation of hydrocarbons and extraction of the oxidized products. 1,823,983; Sept. 22.
Lyford, Chauncey A., East Aurora, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Recovering alcohol from alcoholic caustic fusions. 1,824,610; Sept. 22.
Lyon, Roswell H., Harrisburg, Pa. Bag. Des. 85,190; Sept. 22.
Lyons, Daniel A. (See Walker, C. P., and Lyons.)
Macaulay, Thomas W., and S. Rastelli, Reno, Nev. Window frame construction. 1,823,947; Sept. 22.

Mackey, Albert B., Cleveland Heights, and E. A. Mackey, assignors to The Goliath Rubber Company, Cleveland, Ohio. Composition of matter adapted for the fabrication of battery boxes and other material. 1,824,220; Sept. 22.
Mackey, Edwin A. (See Mackey, Albert B. and E. A.)
Macy, R. H. & Co. (See Fitzpatrick, William J., assignor.)
Madden, James P. (See Nieman, H. W., and Madden.)
Magee, John H., Carthage, Mo. Structural building unit. 1,824,091; Sept. 22.
Maier, William, St. Louis, Mo. Cutting machine. 1,824,163; Sept. 22.
Malaguti, Charles D., Boston, Mass. Counter stiffener. 1,824,358; Sept. 22.
Mannich, Charles, Berlin-Steglitz, Germany. Aldehyde base and manufacture of same. 1,824,676; Sept. 22.
Manning & Co. (See Van Ranst, Cornelius W., assignor.)
Marathon Battery Company. (See Ruhoff, O. E., and Schroeder, assignors.)
Maravalli, Joseph. (See Everhart, Audley F., assignor.)
Marcroft, William, Cranston, and J. A. Molloy, Apponaug, R. I., assignors to Universal Winding Company, Boston, Mass. Creel. 1,824,356; Sept. 22.
Marion, Alexander M., Pittsburgh, and E. C. Gerry, Canonsburg, Pa. Retreating longwall face mining machine. 1,824,727; Sept. 22.
Markon Manufacturing Corporation. (See Wilhelm, John H., assignor.)
Marr, Rizal M., assignor of one-half to American Iron & Machine Works, Inc., Oklahoma City, Okla. Packing offstool. 1,824,283; Sept. 22.
Marresford, Eugene F. (See Patterson, M., and Marresford.)
Martenot, Maurice L. E., Neuilly-sur-Seine, France. Electric musical instrument. 1,824,402; Sept. 22.
Marton, Charles T., Rochester, N. Y. Sign exhibitor. 1,824,284; Sept. 22.
Maschinenfabrik Winkler, Fallert & Co., A. G. (See Winkler, Carl, assignor.)
Maschmeyer, Hermann. (See Friese, M. G., and Maschmeyer.)
Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Process and apparatus for disintegration of fibrous material. 1,824,221; Sept. 22.
Masonite Corporation. (See Mason, William H., assignor.)
Masters, Edwin G., Long Beach, Calif. Toy. 1,824,677; Sept. 22.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Drive for motor vehicles. Re18,206; Sept. 22.
Matson, Carl A., Lynnfield, Mass. Sealing. 1,824,285; Sept. 22.
Matthews, Philip E., Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Bus. Des. 85,191; Sept. 22.
Mauck, Victor, Marion, Pa. Gas water heater. 1,824,357; Sept. 22.
Maurel Henry F., assignor to Maurel Investment Corporation, Providence, R. I. Conveyer bucket. 1,824,611; Sept. 22.
Maurel Investment Corporation. (See Maurel, Henry F., assignor.)
Mayer, Bruce A., et al. (See Stover, Frank E., assignor.)
McAfee, Paul, assignor to Dallas Foundry, Dallas, Tex. Meter box lid and lock therefor. 1,824,092; Sept. 22.
McCabe, Ira E., Chicago, Ill. General utility switch mechanism. 1,824,612; Sept. 22.
McCabe, Joseph J., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Lens surfacing machine. 1,824,559; Sept. 22.
McCann, Thomas A., Orange, N. J., assignor to American Telephone and Telegraph Company. Radio telephone and telegraph system. 1,823,948; Sept. 22.
McCarthy, J. Clarence. (See Humphreys, C. F., and McCarthy.)
McCord Radiator & Mfg. Co. (See Bailey, Claude B., assignor.)
McCoy, Milton B., Pueblo, Colo. Mop wringing device. 1,824,286; Sept. 22.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Straight air emergency valve device. 1,824,053; Sept. 22.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake and door interlock. 1,824,054; Sept. 22.
McGill Manufacturing Company. (See Popp, Rudolf, assignor.)
McInnis, Louis H., Brandon, Tex. Tie holder. 1,823,959; Sept. 22.
McIntire, James F., assignor to United States Radiator Corporation, Detroit, Mich. Radiator. Des. 85,192; Sept. 22.
McKee, Willlis, Cleveland, Ohio, assignor to The Central United National Bank. Apparatus for demagnetizing magnetically conveyed material. 1,824,403; Sept. 22.
McKee, Willis, Cleveland, Ohio, assignor to The Central United National Bank. Hotbed. 1,824,439; Sept. 22.
McKesson & Robbins, Inc. (See Fanto, Emil C., assignor.)
McKesson & Robbins, Inc. (See Horn, William J., assignor.)
McKinney, Bella R., Los Angeles, Calif. Resilient heel. 1,824,287; Sept. 22.
McKinnon, Daniel F., Boston, Mass. Waterproof cover for caps. Des. 85,193; Sept. 22.
McLanahan-Stone Machine Company. (See Krider, George E., assignor.)
McLimans, John P., Duluth, Minn. Repairing furnace roofs. 1,824,222; Sept. 22.
McNairy, Jacob W., Erie, Pa., assignor to General Electric Company. Electroresponsive device and system. 1,824,728; Sept. 22.
McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Pipe joints. 1,824,560; Sept. 22.
Meader, Ralph L., Lynbrook, N. Y. Table for tape printing telegraph. Des. 85,194; Sept. 22.
Mechanical Royalties Corporation. (See Bailey, H. H. and Thomas, assignors.)
Mechetti, Giovanni, Rochester, N. Y. Automatic automobile control. 1,823,950; Sept. 22.
Meier, Hans, New York, N. Y. Adjustable portière hanger 1,823,909; Sept. 22.
Mergott, J. E., Company. (See Hiering, William C., assignor.)
Merkel, Joseph F., assignor to General Railway Signal Company, Rochester, N. Y. Illuminated track diagram. 1,824,164; Sept. 22.
Messmer, Charles A., jr., St. Louis, Mo., assignor to B. W. Freeman, Cincinnati, Ohio. Shoe ornamenting machine. Re18,201; Sept. 22.
Metro-Goldwyn-Mayer Corporation. See Taylor, Alfred T., assignor.)
Meyer, Andre J., assignor to Continental Motors Corporation, Detroit, Mich. Engine construction. 1,824,440; Sept. 22.
Meyer, Lewis J., Tererro, N. Mex. Luggage rack for automobiles. 1,824,288; Sept. 22.
Meyer Mineral Separation Company. (See Meyer, Ralph F., assignor.)
Meyer, Ralph F., Freeport, Pa., assignor to Meyer Mineral Separation Company, Pittsburgh, Pa. Recovery of precious metals from refractory ores. 1,824,093; Sept. 22.
Meyercord, Geo. R., and Associates. (See Meyercord, G. R., and Basquin, assignors.)
Meyercord, George R., Chicago, and O. H. Basquin, Evanston, Ill., assignors to Geo. R. Meyercord and associates. Cotton harvesting machine. 1,824,223; Sept 22.
Michot-Dupont, George F., Vincennes, France. Fluid motor. 1,824,336; Sept. 22.
Middleton, Minnie C., Yeadon, Pa. Breast supporter. 1,824,613; Sept. 22.
Midland Steel Products Company, The. (See Sneed, John, assignor.)
Milhander, Jacob, Los Angeles, Calif. Pedal pad. 1,824,289; Sept. 22.
Miller, Clytus C., Memphis, Tenn. Vending machine. 1,824,441; Sept. 22.
Miller, Edward W., assignor to The Fellows Gear Shaper Company, Springfield, Vt. Truing means for helical cutting tools. 1,824,442; Sept. 22.
Miller, George, North Syracuse, N. Y. Collapsible tripod. 1,824,165; Sept. 22.
Miller, H. H., Industries Company, The. (See Miller, Morris E., assignor.)
Miller, John H., Oak Park, assignor to Jewell Electrical Instrument Co., Chicago, Ill. Balance mechanism for instruments. 1,824,561; Sept. 22.
Miller, John R., Baldwin Park, Calif. Can punch and cover. 1,824,290; Sept. 22.
Miller, Lloyn E., Cleveland Heights, assignor to The Reliance Electric and Engineering Company, Cleveland, Ohio. Winder drive. 1,824,614; Sept. 22.
Miller, Morris E., assignor to The H. H. Miller Industries Company, Canton, Ohio. Packing means for food materials. 1,824,359; Sept. 22.
Miller, Robert W., assignor to The Brower-Titchener Corporation, Cortland, N. Y. Knuckle joint means. 1,824,028; Sept. 22.
Miller, Wm. J., et al. (See Miller, W. J., and Jones, assignors.)
Miller, William J., Sulphur, La. Balanced slide valve for steam engines. 1,824,224; Sept. 22.
Miller, William J., and F. R. Jones, Sulphur, La., assignors of three-fourths to W. J. Miller and one-fourth to F. R. Jones. Wedge key block. 1,824,729; Sept. 22.
Milwaukee Gas Specialty Company. (See Shadrick, Richard H., assignor.)
Minerals Separation North American Corporation. (See Broadbridge, W., Edser, and Stenning, assignors.)
Mitchell, Edward F., Melbourne, Australia. Packing livestock for conveyance in transport vehicles. 1,824,225; Sept. 22.
Mitchell, Rollie H. (See Enzenauer, E. M., and Mitchell.)
Mix, Edwin S., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Strap edge finishing machine. 1,824,678; Sept. 22.
Molins, Walter E., Deptford, London, England. Cigarette container. 1,824,491; Sept. 22.
Molloy, John. (See Marcroft, W., and Molloy.)
Monaghan, William H. (See Brenneman, R. B., and Monaghan.)
Montgomery, Andrew P., Kew Gardens, N. Y., assignor to A. H. Grebe & Co., Inc., Richmond Hill, N. Y. Acoustical device. 1,824,730; Sept. 22.

Moore, Daniel M., East Orange, N. J., assignor to General Electric Company. Picture transmitting system. 1,824,731; Sept. 22.
Moore, Frank W. (See Harty, W. A., and Moore.)
Moorehead, James W., Zelienople, Pa. Lubricant. 1,824,443; Sept. 22.
Moray, Virgil W., New York, N. Y. Apparatus for displacing fluid. 1,823,910; Sept. 22.
Morgan, Harry J., Walnut Park, assignor to P. L. & M. Company, Los Angeles, Calif. Welding method. 1,824,166; Sept. 22.
Moriya, Saburo M., Wilmington, Del. Match book. 1,824,404; Sept. 22.
Morris, George J., Los Angeles, Calif. Wall fixture attaching means. 1,824,492; Sept. 22.
Morris, Howard L., Lakewood, assignor to The Yoder-Morris Company, Cleveland, Ohio. Operating mechanism. 1,824,679; Sept. 22.
Morse, Harry W., Redwood City, Calif. Manufacture of burkeite. 1,824,360; Sept. 22.
Morse, Harry W., Redwood City, Calif. Manufacture of sulphate of potash. 1,824,361; Sept. 22.
Mosler Safe Company, The. (See Robinson, Harry J., assignor.)
Most, Lucifer J., and R. W. Wilson, New York, N. Y. Container. 1,824,029; Sept. 22.
Mueller, Charles C., jr., and D. C. Wendel, assignors to Wendel Co. Inc., Newark, N. J. Sign. 1,824,444; Sept. 22.
Muentener, Christian, and P. Heibig, Bogota, N. J. Embroidery machine. 1,823,911; Sept. 22.
Muhlichen, Rudolf, Hoboken, N. J. Article holder. 1,824,562; Sept. 22.
Müller, Max, Leipzig-Reudnitz, assignor to the firm Adolf Bleichert & Co., A. G., Leipzig, Germany. Car for passenger ropeways. 1,824,291; Sept. 22.
Mulligan, George, Chicago, Ill., assignor to Mulroco, Chicago, Ill. Clock case or similar article. Des. 85,195; Sept. 22.
Mulroco. (See Mulligan, George, assignor.)
Murray Corporation of America. (See Widman, Charles H., assignor.)
Mureau, Charles A., Los Angeles, Calif. Powder puff. 1,824,226; Sept. 22.
Murrow, William R., assignor of one-half to O. W. Compton, Independence, Kans. Speed control device. 1,824,292; Sept. 22.
Myers, Latimer D., Cincinnati, Ohio, assignor to The Twitchell Process Company, St. Bernard, Ohio. Sulphonating mineral oil. 1,824,615; Sept. 22.
N. V. Philips, Gloeilampenfabrieken. (See Bouwers, Albert, assignor.)
National Aniline & Chemical Company. (See Lyford, Chauncey A., assignor.)
National Cash Register Company, The. (See Von Pein, Edward J., assignor.)
National Cash Register Company, The. (See Von Pein, E. J., and Roux, assignors.)
National-Standard Company. (See Pierce, Robert C., assignor.)
Neher, Otto, North Plainfield, N. J. Tool. 1,824,616; Sept. 22.
Neitzel, Ora E., South Bend, Ind. Game board. Des. 85,196; Sept. 22.
Nejedly, Peter M. (See Bronander, W. B., and Nejedly.)
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Pile driving apparatus. 1,824,617; Sept. 22.
Neu, Karl B., Alhambra, Calif. Piston pin tool. 1,824,743; Sept. 22.
New England Wood Heel Co. (See Shaw, W. J., and Bastow, assignors.)
Newton, Jay E., Madison, Wis. Incense burner. 1,824,055; Sept. 22.
Newton, Ora L., Kansas City, Mo. Garment stretcher. 1,824,293; Sept. 22.
Nicolson, Alexander M., assignor to Communication Patents, Inc., New York, N. Y. Cathode for thermionic devices. 1,823,984; Sept. 22.
Nieman, Henry W., and J. P. Madden, Bethlehem, Pa., assignors to Bethlehem Steel Company. Clutch. 1,823,912; Sept. 22.
Noblitt-Sparks Industries, Inc. (See Booth, Earl C., assignor.)
Noeth, John J., and F. E. Hummel, Chicago, Ill. Food toaster. 1,824,362; Sept. 22.
No Frost Clear Vision Shield Company. (See Steinman, Harry H., assignor.)
Norgren, Carl A., Denver, Colo. Spray gun. 1,824,363; Sept. 22.
Norment, Alva S., Richmond, Va. Tire. 1,824,680; Sept. 22.
Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Induction electric furnace. 1,824,618; Sept. 22.
Nottke, Clayton J., Huron, Ohio. Tractor lug. 1,824,227; Sept. 22.
Noyes, Ira W., assignor to Draper Corporation, Hopedale, Mass. Lubricated roll bearing. 1,824,744; Sept. 22.
Nystrom, A. J., & Co. (See Swanson, Frank H., assignor.)
Ober, Hermon P., assignor to General Railway Signal Company, Rochester, N. Y. Connecting means for electric conductors. 1,824,167; Sept. 22.
O'Connor, George W., Grand Rapids, Mich. Greenhouse aerator. 1,824,563; Sept. 22.
Oestnaes, Victor L., Westfield, assignor to American Gas-accumulator Company, Elizabeth, N. J. Reflector signal. 1,824,094; Sept. 22.
Oeffner, Abiram A., and V. Trotta, Mount Union, assignors to Harbison-Walker Refractories Company, Pittsburgh, Pa. Brick molding machine. 1,824,493; Sept. 22.
O'Hagan, Bernard E., Swissvale, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,824,619; Sept. 22.
Oilgear Company, The. (See Ferris, Walter, assignor.)
Oles, Charles M., Unadilla, N. Y. Apparatus for cleaning lubricant cases. 1,824,095; Sept. 22.
Olson, Carl A., assignor to Lisle Manufacturing Company, Clarinda, Iowa. Cylinder edge dressing tool. 1,824,494; Sept. 22.
O'Neil, Edward L., London, Ontario, Canada. Knockdown sectional display shelves. 1,824,682; Sept. 22.
O'Neill, Benjamin A., assignor to Schutz-O'Neill Co., Minneapolis, Minn. Machine for cutting coffee and the like. 1,824,681; Sept. 22.
Oneill, John W., Chicago, Ill. Irrigation tube. 1,823,951; Sept. 22.
Orsett, Coy, Boston, Mass. Vehicle suspension. 1,824,096; Sept. 22.
Orton, Ernest W., Mountain View, Calif., assignor to The Pelton Water Wheel Company, San Francisco, Calif. Butterfly valve. 1,824,168; Sept. 22.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Feeding mechanism. 1,824,495; Sept. 22.
Ott, Harry G., Kenmore, assignor to Spencer Lens Company, Buffalo, N. Y. Microscope slide or counting chamber. 1,824,097; Sept. 22.
Otto, Franz, Magdeburg, assignor of one-half to W. Küstermann, Culbe-on-the-Saale, Germany. Sewing machine attachment for sewing on buttons. 1,824,564; Sept. 22.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman, H., assignor to Owens Development Corporation, New York, N. Y. Sound and picture film matching means. 1,824,294; Sept. 22.
P. L. & M. Company. (See Morgan, Harry J., assignor.)
Package Machinery Co. (See Haas, Edward, assignor.)
Package Machinery Company. (See Smith, Elmer L., assignor.)
Package Machinery Company. (See Smith, E. L., and Fuller, assignors.)
Packard Motor Car Company. (See Paton, C. R., and Sligh, assignors.)
Packard Motor Car Company. (See Short, Charles R., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Palmer, Henry K., Los Angeles, Calif., assignors to Daylectric System Ltd. Illuminated sign. 1,824,620; Sept. 22.
Paolini, Carlo. (See Carughi, A., and Paolini.)
Papapetrou, Nicholas, Chicago, Ill. Advertising folder. Des. 85,197; Sept. 22.
Papke, Paul E., Chicago, Ill. Airplane. Des. 85,198; Sept. 22.
Parlini, Alexander C., Woodside, assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Knitting needle. 1,824,445; Sept. 22.
Parsons, Clinton H., assignor to Swift & Company, Chicago, Ill. Food product and method of making. 1,824,496; Sept. 22.
Partlow, Alfred, Lincoln Park, Mich., assignor, by mesne assignments, to United States Hoffman Machinery Corporation, New York, N. Y. Locking mechanism for extractor covers. 1,824,565; Sept. 22.
Patentaktiebolaget Gröndal-Ramen. (See Haglund, Gustaf, assignor.)
Patent Button Company, The. (See Carley, Leonard R., assignor.)
Paton, Clyde R., assignor to The Studebaker Corporation, South Bend, Ind. Internal combustion engine. 1,824,732; Sept. 22.
Paton, Clyde R., and T. S. Sligh, jr., South Bend, Ind., assignors, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Automobile construction. 1,824,566; Sept. 22.
Paton, Robert J. (See Pollock, Humphrey R., assignor.)
Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc. Waffle iron. Des. 85,199; Sept. 22.
Patterson, Morehead, New York, and E. F. Marresford, Merrick, N. Y., assignors to The Lakewest Corporation. Capping milk bottles and the like. 1,824,405; Sept. 22.
Patzschke, Fritz, Leipzig, Germany. Agricultural machine. 1,824,098; Sept. 22.
Payne, Robert T. (See Davis, E. D., and Payne.)
Peabody Engineering Corporation. (See Dyer, Horace T., assignor.)
Pearson, Edwin L., Minneapolis, Minn. Method of and apparatus for producing motion pictures in color. 1,824,446; Sept. 22.
Peckerman, Charles, New York, N. Y. Imitation Christmas tree. Des. 85,200; Sept. 22.
Pelton Water Wheel Company, The. (See Orton, Ernest W., assignor.)

Pennsylvania Crusher Company. (See Jamison, Charles A., assignor.)
Percell, John D., assignor of sixty per cent to G. Ganser and A. Zimmerman, trading as The Diamond Machine Company, and forty per cent to L. Willig, Philadelphia, Pa. Hair curling appliance. 1,824,497; Sept. 22.
Perlmutter, Harry. (See Jackson, Joseph W., assignor.)
Perquin, Joannus J., and H. J. Francken, The Hague, Netherlands. Marking and sealing tags. 1,824,567; Sept. 22.
Perry, John W., Wheeling, W. Va. Tin-pack handling mechanism. 1,824,228; Sept. 22.
Peters Cartridge Company, The. (See Quayle, Philip P., assignor.)
Petersen Oven Company, The. (See Cryns, Josef, assignor.)
Petersime, Ira M., Gettysburg, Ohio. Folding walker. 1,824,406; Sept. 22.
Peterson, Esther C. (See Dantzig, T., and Peterson.)
Peterson, William E., Sioux Falls, S. Dak. Combined display and storage unit. 1,824,683; Sept. 22.
Petroleum Chemical Corporation. (See Brooks, B. T., and Cardarelli, assignors.)
Pevsner, Joshua, Brooklyn, N. Y. Decorated transparent container. 1,824,229; Sept. 22.
Phelps, Oliver J., and D. F. Eastburn, Salem, Oreg. Spice can rack. 1,824,230; Sept. 22.
Phibbs, Richard P., South Amboy, N. J. Duplicating machine. 1,823,952; Sept. 22.
Phillips, Ellis J. G., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill. Mounting for folding doors. 1,824,621; Sept. 22.
Phinney, Robert M., assignor to General Railway Signal Company, Rochester, N. Y. Train dispatching system for railroads. 1,824,169; Sept. 22.
Phinney-Walker Co. (See Cook, Stephen C., assignor.)
Photomaton, Inc. (See Hirsch, S., and Singer, assignors.)
Photostat Corporation. (See Caps, A. W., and Greene, assignors.)
Photostat Corporation. (See Caps, Arthur W., assignor.)
Photostat Corporation. (See Greene, John S., assignor.)
Photostat Corporation. (See Landrock, Paul, assignor.)
Pierce, Clayton B., and W. C., Chicago, Ill. Lubricating apparatus. 1,824,364; Sept. 22.
Pierce, Robert C., assignor to National-Standard Company, Niles, Mich. Treating wire. 1,824,568; Sept. 22.
Pierce, William C. (See Pierce, Clayton B. and W. C.)
Pietsch, Willy, Pulsnitz, Germany. Zip or lightning fastener. 1,823,913; Sept. 22.
Pilkington Brothers Limited. (See Le Mare, E. B. and Waldron, assignors.)
Pine, William B., Okmulgee, Okla. Apparatus for making vitrified argillaceous products. 1,824,684; Sept. 22.
Pitman, Henry L., Westfield N. J., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Typewriting machine. 1,824,099; Sept. 22.
Pittock, John W., Swarthmore, Pa. Preserving process. 1,824,685; Sept. 22.
Pohl, Albert M. J., and A. A., Spokane, Wash. Overload vehicle spring. 1,824,295; Sept. 22.
Pohl, Arthur A. (See Pohl, Albert M. J. and A. A.)
Polák, Josef, Prague, Czechoslovakia. Casting machine. Re18,202; Sept. 22.
Pollock, Humphrey R., assignor to R. J. Paton, London, England. Direction and movement indicator for vehicles. 1,823,985; Sept. 22.
Pomernacki, Valerius, Chicago, Ill. Aquarium. Des. 85,201; Sept. 22.
Pond, Leander N., assignor to Blue Ridge Glass Corporation, Kingsport, Tenn. Apparatus for the manufacture of wire glass. 1,824,366; Sept. 22.
Pond, Leander N., and J. H. Lewis, assignors to Blue Ridge Glass Corporation, Kingsport, Tenn. Process of and apparatus for the manufacture of wire glass. 1,824,365; Sept. 22.
Poole, Richard S. (See Kellogg, J. L., Foster, Poole, and Raymer.)
Popp, Rudolf, Valparaiso, Ind., assignor to McGill Manufacturing Company. Candle socket. 1,824,231; Sept. 22.
Popsicle Corporation of the United States. (See Krick, Leonard B. assignor.)
Power, Laurence E., assignor, by mesne assignments, of one-half to L. Bradley and one-half to H. L. Bradley, Milwaukee, Wis. Resistor unit and forming the same. 1,824,056; Sept. 22.
Price, Howard W. (See Sillers, D. A., Price, and Bartlett.)
Priddy, Thomas D., assignor to The Formed Steel Products Company, Cleveland, Ohio. Plaster board. 1,823,914; Sept. 22.
Priess, William H., Upper Montclair, N. J., assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser. 1,824,569; Sept. 22.
Priestley, Wilfred E., Seattle, Wash. Packet of firecrackers with sealed band. 1,824,367; Sept. 22.
Pritchard, Percy, Smethwick, Birmingham, assignor of one-half to The Birmingham Aluminum Casting (1903) Company Limited, Smethwick, England. Metal boat. 1,823,986; Sept. 22.
Pritner, Lindsay C. (See Dorris, H. C., and Pritner.)
Puffer, Alvin W., Medford, assignor to Puffer Manufacturing Company, Winchester, Mass. Soda fountain cabinet. 1,824,232; Sept. 22.
Puffer Manufacturing Company. (See Puffer, Alvin W., assignor.)
Q. R. S.-De Vry Corporation. (See Fitch, Claude E., assignor.)
Quayle, Philip P., Lebanon, assignor to The Peters Cartridge Company, Cincinnati, Ohio. Intensity of ignition apparatus. 1,824,407; Sept. 22.
R-B-M Manufacturing Co. (See Dashner, William W., assignor.)
Rachlin, Max, Brooklyn, N. Y. Cutter hanger. 1,824,570; Sept. 22.
Radio Corporation of America. (See Roberts, Walter V., assignor.)
Radio Corporation of America. (See Threlkeld, T. G., and Butterfield, assignors.)
Radio Corporation of America. (See Van Dyck, Arthur F., assignor.)
Ramsey, Joseph H., Albany, N. Y., and C. A. Short, Medford, Mass.; said Short assignor to said Ramsey. Highway guard rail. 1,824,368; Sept. 22.
Ramstad, Jorgen, Stillwater, Minn., assignor to State of Minnesota. Cultivator attachment. 1,824,170; Sept. 22.
Rapp, August, Iserlohn (Westfalen), Germany. Holder with pulley for drawing curtains. 1,824,371; Sept. 22.
Rastelli, Stephenson. (See Macaulay, T. W., and Rastelli.)
Rausch, Gottfried, Ammendorf, near Halle-on-the-Saale, Germany. Loaf forming machine. 1,824,408; Sept. 22.
Rawson, Grant I., Royal Oak, and B. H. Jackson, Center Line, Mich. Vehicle and trailer brake. 1,824,296; Sept. 22.
Raymer, Morris. (See Kellogg, J. L., Foster, Poole, and Raymer.)
Rector, Enoch, New York, N. Y., assignor to Waukesha Motor Company, Waukesha, Wis. Internal combustion engine. 1,824,297; Sept. 22.
Rector, Orland B., Eaton, Colo. Potato planting process and potato planter. 1,824,233; Sept. 22.
Reed Roller Bit Company. (See Bull, Clinton H. M., assignor.)
Reed Roller Bit Company. (See Childs, William L., assignor.)
Reedy, Henry A., St. Paul, Minn. Photo-printing machine. 1,824,622; Sept. 22.
Reel, Herbert W., Hinsdale, assignor to United States Gypsum Company, Chicago, Ill. Roof and floor construction. 1,823,987; Sept. 22.
Reeves, Walter J., Glendale, Calif. Sink supporting frame. 1,823,915; Sept. 22.
Refinery Supply Company. (See Sillers, D. A., Price, and Bartlett, assignors.)
Reichard, Wade H., assignor to General Railway Signal Company, Rochester, N. Y. Train control system for single track railroads. 1,824,171; Sept. 22.
Reichard, Wade H., assignor to General Railway Signal Company, Rochester, N. Y. Train control car element. 1,824,172; Sept. 22.
Reichard, Wade H., assignor to General Railway Signal Company, Rochester, N. Y. Signaling system for railroads. 1,824,173; Sept. 22.
Reichard, Wade H., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,824,174; Sept. 22.
Reichenbecher, Georg, Mulheim-Ruhr, assignor to the firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Reenforced pipe joint. 1,824,499; Sept. 22.
Reichenbecher, Georg, Mulheim-Ruhr, assignor to the firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Reenforced joint for socket pipes. 1,824,500; Sept. 22.
Reid, Frederick M., assignor to Fruehauf Trailer Company, Detroit, Mich. Automobile carrying vehicle. 1,824,370; Sept. 22.
Reid, Frederick M., P. Schon, and C. M. Eason, assignors to Fruehauf Trailer Company, Detroit, Mich. Vehicle for transporting automobiles or the like. 1,824,369; Sept. 22.
Reliance Electric and Engineering Company, The. (See Miller, Lloyd E., assignor.)
Remington, Joseph P., assignor to Remington Manufacturing Company, Philadelphia, Pa. Carburetor. 1,824,750; Sept. 22.
Remington Manufacturing Company. (See Remington, Joseph P., assignor.)
Reo Motor Car Company. (See Shaw, Harry A., assignor.)
Research Process Company. (See Beall, Isaac N., assignor.)
Reserve Holding Company. (See Brooks, Charles R., assignor.)
Reserve Holding Company. (See Hudd, A. E., and Hershey, assignors.)
Rhenania-Kunheim Verein Chemischer Fabriken A. G. (See Rothe, F., and Brenek, assignors.)
Rhodes, Benjamin C., and C. W. Conroe, assignors to Blystone Manufacturing Company, Cambridge Springs, Pa. Truck. 1,824,234; Sept. 22.
Rich, George R., Pasadena, Calif. Gas meter. 1,823,953; Sept. 22.
Richard, Bernhard, assignor to J. R. Geigy S. A., Basel, Switzerland. Manufacture of monoazo-dyestuffs. 1,824,686; Sept. 22.
Richards-Wilcox Manufacturing Company. (See Phillips, Ellis J. G., assignor.)
Richardson, Francis J., New Orleans, La. Folding metallic awning. 1,824,687; Sept. 22.

Richardson, Henry F., assignor of one-fourth to H. F. Richardson, Northport, one-fourth to A. Coggeshall, Pleasantville, one-sixth to S. R. Bradley, Nyack, one-sixth to A. M. Cregier, Orangeburg, and one-sixth to A. B. Bradley, New York, N. Y. Insert for underfloor wiring ducts or the like. 1,824,571; Sept. 22.

Richardson, Henry F., et al. (See Richardson, Henry F., assignor.)

Richter, Emil, assignor to Textile Machine Works, Wyomissing, Pa. Fabric take off device for full fashioned knitting machines. 1,824,501; Sept. 22.

Richter, Henry G., Roselle Park, N. J. Terminal for circuit elements. 1,824,447; Sept. 22.

Rigler, Richard W., Philadelphia, Pa. Washer. 1,824,688; Sept. 22.

Riegel, Guy E., Spokane, Wash. Radiocabinet. Des. 85,202; Sept. 22.

Robb, John F., Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis. Truck mix meter for tiltable trucks. 1,824,625; Sept. 22.

Robbins, Charles E., Santa Cruz, Calif. Vine supporting device. 1,824,689; Sept. 22.

Roberts, Walter Van B., Princeton, N. J., assignor to Radio Corporation of America. Illuminating system for regulating traffic. 1,824,572; Sept. 22.

Robertshaw, Frederick W., Pittsburgh, and G. A. Robertshaw, Greensburg, Pa. Diaphragm valve and operating same. 1,824,057; Sept. 22.

Robertshaw, George A. (See Robertshaw, Frederick and G. A.)

Robertson, Peter L., Milton, Ontario, Canada. Tool holder. 1,824,623; Sept. 22.

Robertson, Peter L., Milton, Ontario, Canada. Screw driver. 1,824,624; Sept. 22.

Robinette, Clyde B., Cleveland, Ohio. Table cover. Des. 85,203; Sept. 22.

Robinson, Harry J., Boston, Mass., assignor to The Mosler Safe Company, Hamilton, Ohio. Night safe depository. 1,824,502; Sept. 22.

Rodman, Clarence J., and R. P. Dunmire, assignors to The Buckeye Twist Drill Company, Alliance, Ohio. Purification of liquids. 1,824,498; Sept. 22.

Roebling's John A., Sons Company. (See Clark, David W., assignor.)

Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Closure retaining device for drums. 1,824,733; Sept. 22.

Rollodor Manufacturing Company. (See Bahner, Ernest T., assignor.)

Roos, Delmar G., assignor to The Studebaker Corporation, South Bend, Ind. Valve spring control for internal combustion engines. 1,824,734; Sept. 22.

Roth Rubber Company. (See Knight, William W., assignor.)

Rothe, Fritz, and H. Brenek, assignors to the firm Rhenania-Kunheim Verein Chemischer Fabriken A. G., Berlin, Germany. Obtaining barium-ortho-silicate or barium-tri-silicate by the decomposition of barium carbonate. 1,824,298; Sept. 22.

Rountree, Harry B., Santa Barbara, Calif. Device for disposing of small articles. 1,824,299; Sept. 22.

Roux, William S. (See Von Pein, E. J., and Roux.)

Rowland, William L., Mosier, Oreg. Valve tappet adjusting tool. 1,824,300; Sept. 22.

Rudd, Frank E., Louisville, Ky. Textile fabric. Des. 85,204; Sept. 22.

Ruhoff, Otto E., and G. H. Schroeder, assignors to Marathon Battery Company, Wausau, Wis. Treating dry cell containers. 1,824,626; Sept. 22.

Russell, Frank A., assignor to Unit Lock Company, Tulsa, Okla. Padlock. 1,824,301; Sept. 22.

Russell, Frederick T., Utica, N. Y., assignor, by mesne assignments, to Fox Company, Philadelphia, Pa. Toy gun. 1,824,503; Sept. 22.

Russell, Frederick T., Utica, N. Y., assignor, by mesne assignments, to Fox Company, Philadelphia, Pa. Toy gun of the repeater type. 1,824,504; Sept. 22.

Rutherford, Herbert E., Uvalde, Tex. Convertible bailer bottom. 1,824,235; Sept. 22.

Ruthman, Edward J., Cincinnati, Ohio. Reversible centrifugal pump. 1,824,409; Sept. 22.

Sailer, Rudolph J., Townley, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Hem folder for sewing machines. 1,823,954; Sept. 22.

Sams, Albert J., Chicago, Ill. Roller contact oiler. 1,824,302; Sept. 22.

Sanders, Rudolph M., assignor to Adartcraft, Inc., New York, N. Y. Display device. 1,823,988; Sept. 22.

Sanderson, Arthur K., assignor to Love Brothers Incorporated, Aurora, Ill. Wire polishing machine. 1,823,989; Sept. 22.

Sanderson, Arthur K., assignor to Love Brothers Incorporated, Aurora, Ill. Wire take off mechanism. 1,823,990; Sept. 22.

Sanford, Roy S. (See Dodge, A. Y., and Sanford.)

Santee, Edwin J., St. Louis County, Mo. Desk. 1,824,236; Sept. 22.

Sargent, Charles G., and F. L. Furbush, assignors to C. G. Sargents' Sons Corporation, Graniteville, Mass. Machine for feeding mixed stock. 1,823,955; Sept. 22.

Sargents', C. G., Sons Corporation. (See Sargent, C. G., and Furbush, assignors.)

Satow, Teikichi, Tokyo, Japan. Waterproof glue. 1,824,448; Sept. 22.

Savoye, Charles U., Hackensack, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Superheater. 1,824,627; Sept. 22.

Saxe, Van Rensselaer P., Baltimore, Md. Metal connection for building frames. 1,824,631; Sept. 22.

Scarpelli, William F. (See De Cristofaro, Carlo, assignor.)

Schaum, Fletcher, assignor to Fletcher Works, Philadelphia, Pa. Washing machine and automatic control therefor. 1,824,237; Sept. 22.

Schellens, Eugene L., Millburn, assignor to C-S Engineering Company, Englewood, N. J. Method of and apparatus for cleaning feed water heaters. 1,824,505; Sept. 22.

Schlaich, Herman, Long Island City, N. Y. Indicating device responsive to temperature and pressure for internal combustion engines. 1,824,372; Sept. 22.

Schlayer, Felix, Madrid, Spain. Axial thrashing and straw reducing machine. 1,824,632; Sept. 22.

Schleicher, Frank J., St. Louis, Mo. Box. Des. 85,205; Sept. 22.

Schleicher, Manfred. (See Gaarz, W., Sorge, and Schleicher.)

Schlötter, Max, Berlin, Germany. Electrolytic deposit of heavy metals. 1,824,100; Sept. 22.

Schmalz, Bertha L., Brooklyn, N. Y. Telephone directory and pad. 1,824,628; Sept. 22.

Schmid, Walter, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Variable speed governor. 1,824,373; Sept. 22.

Schmidt, Albert G. A. (See Cullen, E. V., and Schmidt.)

Schmidt, Richard. (See Eggert, J., and Schmidt.)

Schneider, George, Cumberland, Md., assignor to Celanese Corporation of America. Coating fabrics with cellulose derivatives. 1,824,690; Sept. 22.

Schoij, Herman, Chicago, Ill. Wrapping machine. 1,824,374; Sept. 22.

Schon, Pierre. (See Reid, F. M., Schon, and Eason.)

Schorno, Arthur, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Safety brake apparatus. 1,824,303; Sept. 22.

Schramm, Carl, West Hartford, and E. W. Clark, assignors to The Smyth Manufacturing Company, Hartford, Conn. Machine for back lining books. 1,824,506; Sept. 22.

Schroeder, George H. (See Ruhoff, O. E., and Schroeder.)

Schroeder, Richard, Berlin-Weissensee, Germany. Sectional mandrel. 1,823,956; Sept. 22.

Schröter, Fritz, assignor to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Photo-electric tube. 1,824,573; Sept. 22.

Schulis, Vincent, assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Brine retaining and discharge valve mechanism. 1,824,175; Sept. 22.

Schulse, Herman E., Wilmington, Del., assignor to Uniclox Corporation. Combined terrestrial globe frame and support therefor. Des. 85,206; Sept. 22.

Schulse, Herman E., Wilmington, Del., assignor to Uniclox Corporation. Combined terrestrial globe frame, clock casing and support therefor. Des. 85,207; Sept. 22.

Schultis, Carl. (See Kalischer, G., and Schultis.)

Schultz, Edward, Chicago, Ill. Tobacco ash receptacle. Des. 85,208; Sept. 22.

Schultz, William J., and R. S. Stevick, assignors to Firth-Sterling Steel Company, McKeesport, Pa. Apparatus for shearing flanges from ingots. 1,823,991; Sept. 22.

Schünemann, Emil, Hamburg, Germany. Device for increasing the water circulation and for decreasing boiler resistances to flow in central heating plants. 1,824,574; Sept. 22.

Schutz-O'Neill Co. (See O'Neill, Benjamin A., assignor.)

Schwaar, René, Bienne Switzerland. Device for adjusting the pallet stones in escapement levers. 1,824,691; Sept. 22.

Schwarz, Theo., Gomez Palacio, Mexico, assignor to Wurster & Sanger, Inc., Chicago, Ill. Treating glycerine liquors. 1,824,507; Sept. 22.

Schweitzer & Conrad, Inc. (See Conrad, Nicholas J., assignor.)

Scoates, Daniels, College Station, Tex. Novelty map. 1,823,916; Sept. 22.

Scofield, Theodore J., Jackson, Mich., assignor to The Sparks-Withington Company. Bearing for electrical condensers. 1,824,304; Sept. 22.

Scott, Allen N., Montreal West, Quebec, Canada. Vehicle chain. 1,824,633; Sept. 22.

Scott, Arthur, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Remote control for fluid motors. 1,824,058; Sept. 22.

Scott, James E., Stockholm, Saskatchewan, Canada. Window fastener. 1,823,957; Sept. 22.

Scott, William O., Walnut Park, Calif. Oil sand bit. 1,824,238; Sept. 22.

Sears, Edward M., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tire. Des. 85,209; Sept. 22.

Seymour, Frederick W. (See Gillen, D. A., and Seymour.)

Seymour Manufacturing Company. (See Crowe, Samuel L., assignor.)

Shadrick, Richard H., Minneapolis, Minn, assignor, by mesne assignments, to Milwaukee Gas Specialty Company, Milwaukee, Wis. Thermostatic control. 1,824,239; Sept. 22.

Shallcross Company, The. (See Shallcross, Herbert L., assignor.)

Shallcross, Herbert L., Collingdale, Pa., assignor to The Shallcross Company, Philadelphia, Pa. Stencil sheet. Re18,205; Sept. 22.

Shand, Errol B., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Balance transformer connection for rectifiers. 1,823,917; Sept. 22.

Sharples Specialty Company, The. (See Jones, Leo D., assignor.)

Shaw, Harry A. East Lansing, assignor to Reo Motor Car Company, Lansing, Mich. Radiator. Des. 85,210; Sept. 22.

Shaw, Wesley J., Haverhill, and M. E. Bastow, Groveland, assignors to New England Wood Heel Co., Haverhill, Mass. Guard for wood-heel turning machines. 1,824,375; Sept. 22.

Sheehan, Thomas C., Upper Montclair, N. J., assignor to Durham Duplex Razor Company. Heat treating razor blade strips. 1,824,410; Sept. 22.

Sherfy, Rolland F., Washington, D. C. Variable condenser. 1,824,629; Sept. 22.

Shew, Walter E., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Valve mechanism. 1,823,918; Sept. 22.

Shinn, Albert E., East Las Vegas, N. Mex. Beet harvester. 1,824,376; Sept. 22.

Shipman, Emanuel F., Philadelphia, Pa. Bag. 1,824,508; Sept. 22.

Shively, John J., Brookville, Pa. Thermostatic electrical control switch. 1,824,377; Sept. 22.

Short, Charles R., Dayton, Ohio, assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,824,630; Sept. 22.

Short, Cleo A. (See Ramsey, J. H., and Short.)

Sidney, Arthur A. (See Darby, M. O., and Sidney.)

Siemens & Halske, Aktiengesellschaft. (See Gaarz, W., Sorge, and Schleicher, assignors.)

Siemens & Halske, Aktiengesellschaft. (See Jipp, August, assignor.)

Sillers, Donald A., Dallas, H. W. Price, Breckenridge, and J. W. Bartlett, Houston, Tex., assignors, of Refinery Supply Company, Tulsa, Okla. Recording gravitometer for gases. 1,824,305; Sept. 22.

Simmonds, Harry L., San Diego, Calif. Fire prevention device for oil wells. 1,824,411; Sept. 22.

Singer, John F. (See Hirsch, S., and Singer.)

Singer Manufacturing Company, The. (See Ackerman, Albert A., and Thomson, assignors.)

Singer Manufacturing Company, The. (See Sailer, Rudolph J., assignor.)

Singer Manufacturing Company, The. (See Webb, Irving F., assignor.)

Siskin, Harry, Los Angeles, Calif. Furniture upholstery. 1,824,306; Sept. 22.

Sjoberg, Agnes, Upper Montclair, N. J., Cane. 1,824,449; Sept. 22.

Skinkle, William B., Coraopolis, Pa. Electric power system. 1,824,692; Sept. 22.

Slagel, Franklin G., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Cooling unit for refrigerators. 1,824,575; Sept. 22.

Sligh, Tom S., Jr. (See Paton, C. R., and Sligh.)

Smith, Clement, Topeka, Kans. Automatic egg weighing and sorting machine. 1,824,693; Sept. 22.

Smith, Elmer L., Longmeadow, assignor to Package Machinery Company, Springfield, Mass. Wrapping machine. 1,824,378; Sept. 22.

Smith, Elmer L., Longmeadow, and F. B. Fuller, assignors to Package Machinery Company, Springfield, Mass. Electrically heated twister. 1,824,307; Sept. 22.

Smith, George F., Urbana, Ill. Strontium perchlorate composition and preparing the same. 1,824,101; Sept. 22.

Smith, Harry F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,823,919; Sept. 22.

Smith, Harry F., assignor to The Gas Research Co., Dayton, Ohio. Method of and apparatus for preparing fuel and generating gas therefrom. 1,824,576; Sept. 22.

Smith, Herbert C., Los Angeles, Calif., assignor to Coast Insulating Co. Acoustical material. 1,824,240; Sept. 22.

Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,824,102; Sept. 22.

Smith, Lloyd A., Davenport, Iowa. Pressing and steaming iron. 1,824,379; Sept. 22.

Smith, Nelson K., assignor to Byron Jackson Co., Los Angeles, Calif. Side door elevator. 1,824,412; Sept. 22.

Smith, Ray S., Modesto, Calif. Golf tee container and retriever. 1,823,992; Sept. 22.

Smith, Ulysses J., Cleveland, Ohio. Disinfecting apparatus. 1,824,380; Sept. 22.

Smyth Manufacturing Company, The. (See Schramm, C., and Clark, assignors.)

Snader, Ira J., Paterson, N. J. Rotary tool coupling. 1,824,509; Sept. 22.

Sneed, John, Ferndale, Mich. Link. 1,824,450; Sept. 22.

Sneed, John, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio. Brake. 1,824,510; Sept. 22.

Snyder, Clifford L., assignor to Evans Products Company, Detroit, Mich. Temporary hub extension. 1,824,634; Sept. 22.

Societe Anonyme Des Ateliers D'Aviation Louis Breguet. (See Breguet, Louis, assignor.)

Société Anonyme des Manufactures des Glaces & Products Chimiques de Saint-Gobain, Chauny & Cirey. (See Hibon, Charles, assignor.)

Societe Anoyme Freins Jourdain Monneret. (See Jourdain, Marie P. R., assignor.)

Societe Textile Twistok. (See Berthier, Jules, assignor.)

Soderstrom, Floyd. (See De Noya, Everett A., assignor.)

Solar Refining Company, The. (See Werkenthin, Theodore A., assignor.)

Soltesz, Nick, Toledo, Ohio, assignor to Handy Table Set Company, West Allis, Wis. Article of furniture. Des. 18,207; Sept. 22.

Sommer, J. L., Manufacturing Company. (See Harding, Thomas, assignor.)

Sons-Cunningham Reed & Rattan Co. (See Jones, Charles W., assignor.)

Sorensen, Andrew P., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,824,577; Sept. 22.

Sörensen, Einar F., Stockholm, and N. E. E. Sorensen, Savenas Per Gottenborg, Sweden. Lumber positioning mechanism. 1,824,381; Sept. 22.

Sorensen, Niels E. E. (See Sörensen, Einar F. and N. E. E.)

Sorge, Joachim. (See Gaarz, W., Sorge, and Schleicher.)

Sorrells, Hettie J., Wichita, Kans. Numeral plate for dial telephones. 1,823,958; Sept. 22.

Soss, Joseph, Brooklyn, N. Y. Hinge. 1,824,451; Sept. 22.

Southern Wood Preserving Company. (See White, William E., assignor.)

Sparks-Withington Company, The. (See Scofield, Theodore J., assignor.)

Spencer Lens Company. (See Ott, Harry G., assignor.)

Sperr, Frederick, W., jr., assignor to The Koppers Company, Pittsburgh, Pa. Gas purification process. 1,824,103. Sept. 22.

Sperr, Frederick W., jr., assignor to The Koppers Company, Pittsburgh, Pa. Aeration and gas purification process. 1,824,104; Sept. 22.

Spieser, Walter, Zurich, Switzerland. Rotary slide valve. 1,824,511; Sept. 22.

Standard Oil Company. (See Adams, Elmer W., assignor.)

Standard Oil Company of California. (See Chappell, Marvin L., assignor.)

Stanford, George I., Milford, Conn., assignor to The Universal Pipe and Radiator Company, New York, N. Y. Sheet metal radiator. 1,823,993; Sept. 22.

State of Minnesota. (See Ramstad, Jorgen, assignor.)

Stave, Abraham, Brooklyn, N. Y. Submarine salvage apparatus. 1,824,694; Sept. 22.

Steel Sanitary Company, The. (See Cromwell, John C., assignor.)

Steel and Tubes, Inc. (See Hallden, Karl W., assignor.)

Stein, John A., New York, N. Y., assignor to American Machine & Foundry Company. Double belt cigarette collector. 1,824,413; Sept. 22.

Stein, John A., New York, N. Y., assignor to American Machine & Foundry Company. Drum type cigarette collector. 1,824,414; Sept. 22.

Steinman, Harry H., St. Paul, Minn., assignor to No Frost Clear Vision Shield Company, Inc. Antifrost shield. 1,824,751; Sept. 22.

Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Tool for shaping the ends of conduits. 1,823,959; Sept. 22.

Stelling, Franz R., Roseville, Sydney, New South Wales, Australia. Apparatus for the manufacture of boxes of cardboard and the like. 1,824,241; Sept. 22.

Stem, Kellar, assignor to Grand Rapids Bookcase & Chair Company, Hastings, Mich. Cabinet. Des. 85,221; Sept. 22.

Stemmons, Clarence H., Kansas City, Mo. Sock liner. 1,824,176; Sept. 22.

Stenning, William W. (See Broadbridge W., Edser, and Stenning.)

Stevick, Robert S. (See Schultz W. J., and Stevick.)

Stock, Anthony T., Dayton, Ohio, assignor, by mesne assignments to Frigidaire Corporation. Gasket. 1,823,920; Sept. 22.

Stocker, Arthur C., Audubon, N. J., assignor to General Electric Company. Synchronization in television and facsimile transmission system. 1,824,635; Sept. 22.

Stoekle, Erwin R., assignor to Central Radio Laboratories, Milwaukee, Wis. Variable resistance. 1,824,242; Sept. 22.

Stone, Jesse, Pittsburgh, Pa. Safety fuse device. 1,824,415; Sept. 22.

Storer, Richard M., Denver, Colo. Mold for frozen substances. 1,824,308; Sept. 22.

Storer, Richard M., Denver, Colo. Mold for freezing liquids. 1,824,309; Sept. 22.

Stout, William B., Detroit, Mich. Airplane. Des. 85,212; Sept. 22.

Stout, William B., Detroit, Mich. Fuselage for airplanes. Des. 85,213; Sept. 22.
Stover, Frank E., assignor of one-third to B. A. Mayer and one-third to D. T. Igou, Springfield, Ohio. Humidifier. 1,824,416; Sept. 22.
Stratford, William M., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Treating hydrocarbon oil. 1,823,994; Sept. 22.
Straussler, Nicholas, London, England. Folding vehicle. Re18,203; Sept. 22.
Straussler, Nicholas, London, England. Collapsible structure such as pontoons and seaplane floats, divisible into boats. Re18,204; Sept. 22.
Streby, Ray D., assignor to The Timken Roller Bearing Company, Canton, Ohio. Automatic feed device. 1,823,995; Sept. 22.
Struthers, James A., Minneapolis, Minn. Hosiery or the like. Des. 85,214; Sept. 22.
Studebaker Corporation, The. (See Hughes, James R., assignor.)
Studebaker Corporation, The. (See Kohr, Robert F., assignor.)
Studebaker Corporation, The. (See Paton, Clyde R., assignor.)
Studebaker Corporation, The. (See Roos, Delmar G., assignor.)
Stutzman, Ira E. (See Wilgus, J. S., and Stutzman.)
Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)
Sullivan Machinery Company. (See Osgood, Charles F., assignor.)
Suppiger, Gerhart S., and H. G. Wegener, Collinsville, Ill. Apparatus for dispensing flavoring tablets. 1,824,695; Sept. 22.
Surface Combustion Corporation. (See de Coriolis, Ernest G., assignor.)
Surface Combustion Corporation. (See Larsen, Arnold L., assignor.)
Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Dual wire wheel. 1,824,752; Sept. 22.
Swan Metallic Seal & Cap Company. (See Tevander, Swan N., assignor.)
Swanson, Frank H., Chicago, Ill., assignor to A. J. Nystrom & Co. Apparatus for map display and preservation. 1,823,996; Sept. 22.
Swartwout Company, The. (See Barrett, Joseph M., assignor.)
Swift & Company. (See Parsons, Clinton H., assignor.)
Syndicat "Vaproc". (See Grunpelt, Oskar F. A. E., assignor.)
Szamier, Vicenty, Bristol, Conn. Diving apparatus. 1,824,512; Sept. 22.
Tabulating Machine Company, The. (See Tripp, Charles A., assignor.)
Taylor, Alfred T., Beverly Hills, assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif. Treating sound records and records produced thereby. 1,824,417; Sept. 22.
Taylor, Arnold M., and A. R. Chapman, Stamford, Conn., assignors to Atlas Powder Company, Wilmington, Del. Production of pigmented pyroxylin compositions. 1,824,177; Sept. 22.
Taylor, Charles, Sons Company, The. (See Hartmann, George, assignor.)
Taylor, Herbert B., assignor to General Railway Signal Company, Rochester, N. Y. Relay operating mechanism. 1,824,178; Sept. 22.
Taylor, Joseph H., assignor to F. R. Bradford, Benton, Tenn. Mechanical computer. 1,824,382; Sept. 22.
Taylor, William L., Cincinnati, Ohio. Paper bag machine. 1,824,383; Sept. 22.
Tevander, Swan N., Maywood, Ill., assignor to Swan Metallic Seal & Cap Company. Power machine for sealing caps to jars and cans. 1,824,384; Sept. 22.
Texas Company, The. (See Drake, Rollin L., assignor.)
Texas Company, The. (See Hall, Frank W., assignor.)
Texas Company, The. (See Stratford, William M., assignor.)
Texas Company, The. (See Watson, Claude W., assignor.)
Textile Machine Works. (See Richter, Emil, assignor.)
Thake, Henry G., Great Bend Township, Cottonwood County, Minn. Removable sign supporting device. 1,824,578; Sept. 22.
Thies, Urban C., Dayton, assignor, by mesne assignments, to The Globe-Wernicke Company, Cincinnati, Ohio. Knock-down furniture structure. 1,824,243; Sept. 22.
Thomas, George, Rahway, N. J. Safety device for gas burners and the like. 1,824,696; Sept. 22.
Thomas, Jack L. (See Bailey, H. H., and Thomas.)
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automatic train control. 1,824,059; Sept. 22.
Thomas, Thomas H., Edgewood, and U. A. Whitaker, assignors to Westinghouse Air Brake Company, Wilmerding, Pa. Valve mechanism for automatic train pipe couplings. 1,824,060; Sept. 22.
Thompson, Nat, Chicago, Ill. Dental porcelain electric furnace. 1,824,310; Sept. 22.
Thompson Products Inc. (See Hufferd, George H., assignor.)
Thompson, Ralph E., Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,824,753; Sept. 22.
Thomson, Charles L. (See Ackerman, A. A., and Thomson.)
Thomson, Peter, Wilmington, Del. Rotary valve internal combustion engine. 1,824,697; Sept. 22.
Threlkeld, Tom G., and A. W. W. Butterfield, Manchester, England, assignors to Radio Corporation of America. Aerial receiving system for wireless signalling. 1,824,579; Sept. 22.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Writing surface for recording instruments. 1,824,513; Sept. 22.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Painting device. 1,824,514; Sept. 22.
Tideman, Selim N., Wilmette, Ill. Catenary rod bender. 1,824,244; Sept. 22.
Tilles, Roy E., New Rochelle, N. Y. Hosiery. 1,824,636; Sept. 22.
Timken Roller Bearing Company, The. (See Streby, Ray D., assignor.)
Timken Roller Bearing Company, The. (See Vine, Howard L., assignor.)
Timken Roller Bearing Company The. (See Weckstein, Samson M., assignor.)
Timperio, Carmino, New Geneva, Pa. Rail joint. 1,824,637; Sept. 22.
Tisdale, James R. M., Vancouver, British Columbia, assignor to A. M. Ivey, Toronto, Ontario, Canada. Recording device. 1,824,179; Sept. 22.
Tochtermann, Hans, Manheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Coloring rubber. 1,823,921; Sept. 22.
Towers, Augustus R., Richmond, Va. Ice melting device. 1,824,638; Sept. 22.
Tracy, Michael J., St. Louis County, Mo. Floor construction. 1,824,180; Sept. 22.
Tranaas, Emil L., assignor to Koehring Company, Milwaukee, Wis. Control mechanism for concrete paving machines. 1,824,580; Sept. 22.
Trans-Lux Daylight Picture Screen Corporation. (See Halloran, Frank E., assignor.)
Traphagen, Harry R., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Lever detent mechanism. 1,824,515; Sept. 22.
Trautvetter, William G., Paterson, N. J. Adjustable loom warp beam. 1,824,639; Sept. 22.
Travis, B. C. (See Criley, Wallace K., assignor.)
Trenkler, John H., and W. A. King, Hornell, N. Y. Extension table. 1,824,640; Sept. 22.
Tripp, Charles A., Indianapolis, Ind., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y. Punched card accounting machine. 1,824,581; Sept. 22.
Trotta, Vincent. (See Oeffner, A. A., and Trotta.)
Troutman, Ferdinand B., Elmhurst, Ill. Totalizing counter. 1,823,960; Sept. 22.
Truax, Charles C., Detroit, Mich. Treating furs. 1,824,105; Sept. 22.
Trumbull Electric Manufacturing Company. (See Hammerly, Herman J., assignor.)
Truscon Steel Company. (See Kahn, J., and White, assignor.)
Truscon Steel Company. (See King, G., and Howard, assignor.)
Tusis, Soter B., New York, N. Y. Hair waving device. 1,824,641; Sept. 22.
Twitchell Process Company, The. (See Myers, Latimer D., assignor.)
Tyvand, Raymond E., Chicago, Ill. Vein retainer. 1,824,516; Sept. 22.
Uber, Harold L., Jamestown, N. Y., assignor of one-third to C. R. Womer, Eldred, Pa., and one-third to O. D. Underwood, Olean, N. Y. Pipe union. 1,824,642; Sept. 22.
Ufert, Ewald, Trenton, N. J. Combined lamp and radio-cabinet. Des. 85,215; Sept. 22.
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Underwood, O. D., et al. (See Uber, Harold L., assignor.)
Uniclox Corporation. (See Schulse, Herman E., assignor.)
Union Switch & Signal Company, The. (See Baumgartner, Godfrey, assignor.)
Union Switch & Signal Company, The. (See Brooks, Charles A., assignor.)
Union Switch & Signal Company, The. (See Failor, Charles W., assignor.)
Union Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)
Union Switch & Signal Company, The. (See O'Hagan, Bernard E., assignor.)
Union Switch & Signal Company, The. (See Sorensen, Andrew J., assignor.)
Unit Lock Company. (See Russell, Frank A., assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred, assignor.)
United Shoe Machinery Corporation. (See Day, Fred A., assignor.)
United Shoe Machinery Corporation. (See Gookin, Sylvester L., assignor.)
United Shoe Machinery Corporation. (See Hazelton, George, assignor.)
United States Gypsum Company. (See Absmeier, Carl, assignor.)
United States Gypsum Company. (See Reel, Herbert W., assignor.)
United States Gypsum Company. (See Utzman, Clarence W., assignor.)

United States Hoffman Machinery Corporation. (See Partlow, Alfred, assignor.)
United States Radiator Corporation. (See McIntire, James F., assignor.)
Universal Oil Products Company. (See Kirschbraun, Lester, assignor.)
Universal Pipe and Radiator Company, The. (See Stanford, George I., assignor.)
Universal Winding Company. (See Marcroft, W., and Molloy, assignors.)
Utzman, Clarence W., Chicago, Ill., assignor, by mesne assignments, to United States Gypsum Company. Plaster board. 1,824,245; Sept. 22.
Van Dnam, Gerrit, Kenmore, N. Y. Tire removing machine. 1,824,246; Sept. 22.
Van Daam, Gerrit, Buffalo, N. Y. Mop wringer. 1,824,311; Sept. 22.
Van Dyck, Arthur F., Yonkers, N. Y., assignor to Radio Corporation of America. Radio receiving apparatus. 1,824,517; Sept. 22.
Van Nuland, John. (See Bouma, Wikke, assignor.)
Van Ranst, Cornelius W., Auburn, Ind., assignor to Manning & Co., Chicago, Ill. Automobile construction. 1,823,997; Sept. 22.
Van Wezemael, Edward L. (See Gits, J. P., and Van Wezemael.)
Vedovelli, Edouard, deceased, by Mrs. E. Vedovelli, née J. Hénaux, executrix, Paris, France. Water displaying and illuminating device. 1,824,518; Sept. 22.
Venzie, Frederick M., Philadelphia, Pa. Plaster board building construction. 1,823,998; Sept. 22.
Vereinigte Stahlwerke Aktiengesellschaft. (See Reichenbecher, Georg, assignor.)
Vesuvius Crucible Company. (See Jackman, Arthur J., assignor.)
Victor, Alexander F., New York, N. Y. Reel mounting for motion picture projectors. 1,824,519; Sept. 22.
Victor, Benjamin, and R. E. Abramson, Bronx, N. Y. Safety device for gas ranges. 1,824,312; Sept. 22.
Vilter Manufacturing Company, The. (See Bach, Charles G., assignor.)
Vine, Howard L., assignor to The Timken Roller Bearing Company, Canton, Ohio. Gauging machine. 1,823,999; Sept. 22.
Viscose Company, The. (See Crewdson, Henry, assignor.)
Voerkel, Franz. (See Hubmann, O., and Voerkel.)
Vogelsang, Ludy, East Orange, N. J., assignor to L. B. Koch, New York, N. Y. Bottle cap forming dies. 1,823,961; Sept. 22.
Vogler, Frank D., Milwaukie, Oreg. Aerating the underskin of vessels automatically. 1,824,313; Sept. 22.
Vollmann, Heinrich. (See Kränzlein, G., and Vollmann.)
Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,824,248; Sept. 22.
Von Pein, Edward J., and W. S. Roux, assignors, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,824,247; Sept. 22.
Vordermark, George, Indianapolis, Ind. Cushioned vehicle wheel. 1,824,520; Sept. 22.
Wakefield, Frank E., Elgin, Ill., assignor to Lucien Lelong Inc., Chicago, Ill. Powder container or similar article. Des. 85,216; Sept. 22.
Walker, Arthur W., Malden, Mass., assignor to Walker & Pratt Manufacturing Co., Boston, Mass. Range. Des. 85,217; Sept. 22.
Walker, Cranford P., and D. A. Lyons, assignors to Consolidated Steel Corporation, Los Angeles, Calif. Elevator door operator. 1,823,962; Sept. 22.
Wamser, Charles J., Milwaukee, Wis. Luminescent tube. 1,824,452; Sept. 22.
Walker & Pratt Manufacturing Co. (See Walker, Arthur W., assignor.)
Waldron, Frederic B. (See Le Mare, E. B., and Waldron.)
Wallace, Joseph, Cedarhurst, N. Y. Fountain pen. 1,824,249; Sept. 22.
Walter, Otto, Perrysville, Ind. Tile cutting machine. 1,824,000; Sept. 22.
Ward & Crosby. (See Hicks, Raymond M., assignor.)
Ward Motor Vehicle Company. (See Froelich, Oscar E. H., assignor.)
Warren, Frederick A., and E. A. Hornby, Flandreau, S. Dak. Yardage indicator or marker for football gridirons. 1,824,643; Sept. 22.
Warth, Nathaniel G., Gallipolis, Ohio. Airship. 1,824,453; Sept. 22.
Watkins, Jack. (See Harper, Choice R., assignor.)
Watson, Claude W., Port Arthur, Tex., assignor to The Texas Company, New York N. Y. Converting hydrocarbons. 1,823,922; Sept. 22.
Waukesha Motor Company. (See Rector, Enoch, assignor.)
Wean Engineering Company, The. (See Wean, Raymond J., assignor.)
Wean, Raymond J., assignor to The Wean Engineering Company, Incorporated, Warren, Ohio. Method and apparatus for rolling sheets. 1,824,001; Sept. 22.
Webb, Irving F., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Power transmitting device. 1,823,963; Sept. 22.
Webb, John R., Parkersburg, W. Va. Ice tongs. 1,824,644; Sept. 22.
Weber, Mathias J., assignor to Healthometer Company, Chicago, Ill. Combined lever and coil spring type of scale. 1,824,698; Sept. 22.
Webster, Warren, & Company. (See Fitts, James L., assignor.)
Weckstein, Samson, M., Canton, assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing construction. 1,824,002; Sept. 22.
Wegener, Henry G. (See Suppiger, G. S., and Wegener.)
Wehrli, Walter. (See Karrer, P., and Wehrli.)
Weiss, Albert F., assignor, by mesne assignments, of one-half to A. F. Weiss and one-half to E. V. Kline, University City, Mo. Safety razor blade sharpener. Des. 85,218; Sept. 22.
Weiss, Albert F., et al. (See Weiss, Albert F., assignor.)
Wells, Don W., assignor of one-half to G. W. Anderson, Los Angeles, Calif. Airship. 1,824,250; Sept. 22.
Wendel Co. Inc. (See Mueller, C. C., jr., and Wendel, assignors.)
Wendel, Daniel C. (See Mueller, C. C., jr., and Wendel.)
Wendt, Adolf, Hohenselchow, Germany. Safety packing stick. 1,824,314; Sept. 22.
Wenzel, Karl E., Hamborn-on-the-Rhine, Germany. Slidable block rail brake. 1,823,964; Sept. 22.
Werkenthin, Theodore A., assignor to The Solar Refining Company, Lima, Ohio. Separating alcohols from oil. 1,824,521; Sept. 22.
Wesix National Company. (See Kercher, A. J., and Hicks, assignors.)
Wesler, George B., jr., assignor to Chain Belt Company, Milwaukee, Wis. Conveyer. 1,824,756; Sept. 22.
Western Electric Company. (See Cherry, George L., assignor.)
Western Electric Company. (See Lamplough, Leslie F., assignor.)
Western Electric Company. (See Lodge, Joseph E., assignor.)
Western Union Telegraph Company, The. (See Wheeler, Evan R., assignor.)
Westinghouse Air Brake Company, The. (See Cady, William M., assignor.)
Westinghouse Air Brake Company, The. (See Dapron, Joseph M., assignor.)
Westinghouse Air Brake Company, The. (See Dean William E., assignor.)
Westinghouse Air Brake Company, The. (See Down, Sidney G., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See Fitch, Ellery R., assignor.)
Westinghouse Air Brake Company, The. (See Grosswege, John B., assignor.)
Westinghouse Air Brake Company, The. (See Kusebauch, Anton K., assignor.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, T. H., and Whitaker, assignors.)
Westinghouse Air Brake Company, The. (See Winter, Harry J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bower, Maxwell, assignor.)
Westinghouse Electric & Manufacturing Company. (See Brace, Porter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Colby, Ora A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Davis, Neville R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jordan, Richard, assignor.)
Westinghouse Electric & Manufacturing Company. (See Long, Thomas H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schmid, Walter, assignor.)
Westinghouse Electric & Manufacturing Company. (See Shand, Errol R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Woodson, James C., assignor.)
Wheeler, Evan R., North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Automatic tape-controlled transmission for tickers. Re18,208; Sept. 22.
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
Whitaker, Uncas A. (See Thomas, T. H., and Whitaker.)
White, Herbert E. (See Kahn, J., and White.)
White, William E., assignor to Kalman Steel Company, Chicago, Ill. Lath clip and installing the same. 1,824,315; Sept. 22.
White, William E., assignor to Southern Wood Preserving Company, Atlanta, Ga. Highway guard fence. 1,824,454; Sept. 22.
Whitmore, John, assignor to Davidson & Company Limited, Belfast, Ireland. Dust collector or separator. 1,824,455; Sept. 22.
Widman, Charles H., assignor to Murray Corporation of America, Detroit, Mich. Vehicle body. Des. 85,219; Sept. 22.
Wietzel, Gustav. (See Wild, W., and Wietzel.)
Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,824,181; Sept. 22.

Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Train dispatching system for railroads. 1,824,182; Sept. 22.
Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Train dispatching system for railroads. 1,824,183; Sept. 22.
Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Signaling system for railroads. 1,824,184; Sept. 22.
Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Railway traffic controlling system. 1,824,185; Sept. 22.
Wilbur, Lawrence S., Evanston, Ill., assignor to Johns-Manville Corporation. Bituminous concrete flooring. 1,824,418; Sept. 22.
Wilcox-Rich Corporation. (See Charlton, George, assignor.)
Wild, Wilhelm, and Gustav Wietzel, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of steam in the manufacture of phosphorus acids from phosphorus and steam. 1,823,923; Sept. 22.
Wilgus, James S., and I. E. Stutzman, Norfolk, Va. Floor surfacing machine. 1,824,456; Sept. 22.
Wilhelm, John H., Long Island, assignor, by mesne assignments, to Margon Manufacturing Corporation, New York, N. Y. Doll. 1,824,316; Sept. 22.
Wilhelm, John H., Long Island, assignor, by mesne assignments, to Margon Corporation, New York, N. Y. Doll. 1,824,317; Sept. 22.
Wilkens, M. H., & Sohne Akt.-Ges. (See Henke, Gustav, assignor.)
Wille, Hans. (See Luther, M., and Wille.)
Williams, Arthur A., Holliston, Mass. Armored shoe. 1,823,944; Sept. 22.
Williams, Harrison R., New York, N. Y. Packing. 1,824,061; Sept. 22.
Williams Oil-O-Matic Heating Corporation. (See Williams, Walter W., assignor.)
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Refrigerating machine. 1,824,699; Sept. 22.
Williamson, Larkin R., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Hydraulically operated reversing mechanism. 1,824,700; Sept. 22.
Willig, Lena, et al. (See Percell, John D., assignor.)
Willing, Joseph E., assignor to General Railway Signal Company, Rochester, N. Y. Light signal system for railroads. 1,824,186; Sept. 22.
Willing, Joseph E., assignor to General Railway Signal Company, Rochester, N. Y. Signaling system for railroads. 1,824,251; Sept. 22.
Wilson, James H., Falls Creek, Pa. Plate. Des. 85,220; Sept. 22.
Wilson, Kenneth W., St. Louis, Mich. Airplane ornament for motor cars. 1,824,003; Sept. 22.
Wilson, Ralph W. (See Most, L. J., and Wilson.)
Wilson, Stephen G., Philadelphia, Pa. Broom tensioning device. 1,824,582; Sept. 22.
Wind, Peter S., San Francisco, Calif. Snap on milk can cover. 1,824,318; Sept. 22.
Wine, William E., Toledo, Ohio. Railway hopper car door frame. 1,824,645; Sept. 22.
Winkler, Carl, assignor to Maschinenfabrik Winkler, Fullert & Co., A. G., Bern, Switzerland. Late news device for rotary printing machines. 1,824,646; Sept. 22.
Winkler, Richard G., Springfield, Mass. Razor. 1,824,252; Sept. 22.
Winter, Harry J., London, England, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake for airplanes. 1,824,062; Sept. 22.
Wintrob, Jacob M., Philadelphia, Pa. Drapery fixture. 1,824,385; Sept. 22.
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wireless Specialty Apparatus Company. (See Bailey, William M., assignor.)
Wireless Specialty Apparatus Company. (See Priess, William H., assignor.)
Witte, Isadore O., Los Angeles, Calif. Font of type. Des. 85,221; Sept. 22.
Wolcott, Frank E., West Hartford, and L. V. Lucia, Hartford, Conn., assignors, by mesne assignments, to The Beardsley & Wolcott Mfg. Co. Electric heating device. 1,824,585; Sept. 22.
Womer, C. R., et al. (See Uber, Harold L., assignor.)
Wood, Bert B., Oakland, Calif. Steam turbine. 1,824,106; Sept. 22.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Half speed sheet inserting mechanism. 1,824,583; Sept. 22.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Printing couple supporting means. 1,824,584; Sept. 22.
Wood Newspaper Machinery Corporation. (See Jordhoy, Hans C., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodson, James C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Electric heating unit. 1,823,925; Sept. 22.
Worthen, Spencer L. (See Hoyt, Aaron, assignor.)
Wright Aeronautical Corporation. (See Bleecker, Maitland B., assignor.)
Wright, Edward L., Chicago, Ill. Roulette wheel. 1,824,647; Sept. 22.
Wurster & Sanger, Inc. (See Schwarz, Theo., assignor.)
Wyndham, James N. and S. L., Cardiff, Wales. Heat exchanger. 1,824,107; Sept. 22.
Wyndham, Stephen L. (See Wyndham, James N. and S. L.)
Yacovone, John B., Pawtucket, R. I. Lease rod for warping machines. 1,824,522; Sept. 22.
Yoder-Morris Company, The. (See Morris, Howard I., assignor.)
Young, Ralph P., Marlboro, N. Y. Handle for wooden baskets. 1,824,319; Sept. 22.
Zennström, Arthur F. (See Bergström, K. G., and Zennström.)
Zimic, Michael, Ridgewood, N. Y. Knitting machine. 1,824,320; Sept. 22.
Zimmer Manufacturing Company. (See Ettinger, Joe J., assignor.)
Zimmerman, August, et al. (See Percell, John D., assignor.)
Zorc, Ludwig F., Chicago, Ill. Radiator shell. Des. 85,222; Sept. 22.
Zorc, Ludwig F., Chicago, Ill. Radiator shell. Des. 85,223; Sept. 22.
Zorc, Ludwig F., Chicago, Ill. Radiator shell. Des. 85,224; Sept. 22.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 22D DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator for caoutchouc. W. Lommel, T. Goost, and H. Friedrich. 1,824,609; Sept. 22.
Accounting machine, Punched card. C. A. Tripp. 1,824,581; Sept. 22.
Acid and cyanamide, Making phosphoric. T. F. Bailey. Re18,198; Sept. 22.
Acoustic apparatus, Diaphragm equipped. M. Bernard. 1,824,590; Sept. 22.
Acoustical device. A. P. Montgomery. 1,824,730; Sept. 22.
Acoustical material. H. C. Smith. 1,824,240; Sept. 22.
Advertising device. V. L. Chamberlin. Des. 85,161; Sept. 22.
Aeration and gas purification process. F. W. Sperr, jr. 1,824,104; Sept. 22.
Aerator, Greenhouse. G. W. O'Connor. 1,824,563; Sept. 22.
Aerial receiving system for wireless signaling. T. G. Threlkeld and A. W. W. Butterfield. 1,824,579; Sept. 22.
Aeroplane station. W. B. Harison. 1,824,346; Sept. 22.
Agricultural machine. F. Patzschke. 1,824,098; Sept. 22.
Aircraft. G. Cartasso. 1,824,010; Sept. 22.
Aircraft. Y. H. Koun. 1,824,280; Sept. 22.
Aircraft, Propelling system for. L. Breguet. 1,824,325; Sept. 22.
Air lift, Automatic. W. J. Cluthe. 1,824,075; Sept. 22.
Airplane. E. L. Crozier. Des. 85,167; Sept. 22.
Airplane. P. E. Papke. Des. 85,198; Sept. 22.
Airplane. W. B. Stout. Des. 85,212; Sept. 22.
Air purifier. W. E. Dean. 1,824,037; Sept. 22.
Airship. J. Braunwalder. 1,823,875; Sept. 22.
Airship. N. G. Warth. 1,824,453; Sept. 22.
Airship. D. W. Wells. 1,824,250; Sept. 22.
Alarm: *See*—
Burglar alarm.
Alarm. C. L. Flagg. 1,824,473; Sept. 22.
Alcohol from alcoholic caustic fusions, Recovering. C. A. Lyford. 1,824,610; Sept. 22.
Alcohols from oil, Separating. T. A. Werkenthin. 1,824,521; Sept. 22.
Aldehyde base and manufacture of same. C. Mannich. 1,824,676; Sept. 22.
Amplifier. J. Bethenod. 1,824,591; Sept. 22.
Amusement ride. J. Irsch. 1,824,720; Sept. 22.
Angler packet. C. J. Hazlitt. 1,824,481; Sept. 22.
Anticreeper for rails. C. P. Hess. 1,824,544; Sept. 22.
Aquarium. H. Hufner. Des. 85,181; Sept 22.
Aquarium. V. Pomernacki. Des. 85,201; Sept. 22.
Articles covered with sheet pyroxyline. H. P. de Correvont. 1,824,537; Sept. 22.
Articles, Device for disposing of small. H. B. Rountree. 1,824,299; Sept. 22.
Automobile body heater. E. C. Booth. Des. 85,154; Sept. 22.
Automobile construction. C. R. Paton and T. S. Sligh, jr. 1,824,566; Sept. 22.
Automobile construction. C. W. Van Ranst. 1,823,997; Sept. 22.
Automobile control, Automatic. G. Mechetti. 1,823,950; Sept. 22.
Automotive brake. W. M. Cady. 1,824,034; Sept. 22.
Awning, Folding metallic. F. J. Richardson. 1,824,687; Sept. 22.
Azo dyestuffs and making same, New. G. Kalischer and C. Schultis. 1,823,943; Sept. 22.
Badge. J. A. Lethert. 1,824,161; Sept. 22.
Bag. R. H. Lyon. Des. 85,190; Sept. 22.
Bag. E. F. Shipman. 1,824,508; Sept. 22.
Bag frame. W. C. Hiering. Des. 85,179; Sept. 22.
Bailer bottom, Convertible. H. E. Rutherford. 1,824,235; Sept. 22.
Balance mechanism for instruments. J. H. Miller. 1,824,561; Sept. 22.
Bank, Savings. C. L'Enfant. 1,824,438; Sept. 22.
Bar: *See*—
Boring bar.
Barium-ortho-silicate or barium tri-silicate by the decomposition of barium carbonate, Obtaining. F. Rothe and H. Brenck. 1,824,298; Sept. 22.
Barricade. E. B. and W. W. Donaldson. 1,824,334; Sept. 22.
Bars to furnace conveyers, Feeding sheet. A. L. Larsen. 1,824,742; Sept. 22.
Base, Combined standard and lamp. W. M. Adrian. Des. 85,145; Sept. 22.
Base, Lamp. W. M. Adrian. Des. 85,144; Sept. 22.
Bathtub seat. J. W. and E. Erhard. 1,824,396; Sept. 22.
Bathtub, Shower. J. C. Cromwell. 1,824,035; Sept. 22.
Bearing construction, Roller. S. M. Weckstein. 1,824,002; Sept. 22.
Bearing, Crown block. O. W. Dunham. 1,824,335; Sept. 22.
Bearing, Lubricated roll. I. W. Noyes. 1,824,744; Sept. 22.
Bearings for electrical condensers. T. J. Scofield. 1,824,304; Sept. 22.
Beater, extractor and cleaner, Pulp. J. D. Haskell. 1,824,080; Sept. 22.
Bed. H. G. Kimble. 1,824,156; Sept. 22.
Bed, Hospital. J. J. Ettinger. 1,823,890; Sept. 22.
Bit: *See*—
Drilling bit. Oil sand bit.
Block: *See*—
Crown block. Wedge key block.
Board: *See*—
Plaster board.
Boat, Metal. P. Pritchard. 1,823,986; Sept. 22.
Boat, Wading. E. A. De Noya. 1,824,711; Sept. 22.
Bodies, Method and apparatus for making curved. G. Hartmann. 1,824,482; Sept. 22.
Body construction. J. R. Hughes. 1,824,719; Sept. 22.
Boiler: *See*—
Steam boiler.
Boiler. D. S. Jacobus. 1,824,084; Sept. 22.
Bookmarker. E. Bergman. Des. 85,153; Sept. 22.
Boring bar. F. S. Hartwell. 1,824,543; Sept. 22.
Bottle capping machine. E. S. Darner. 1,824,660; Sept. 22.
Bottles and the like, Capping milk. M. Patterson and E. F. Marresford. 1,824,405; Sept. 22.
Box: *See*—
Spring clip box. Switch box.
Support and journal box.
Box. H. Leiman. 1,824,218; Sept. 22.
Box. F. J. Schleicher. Des. 85,205; Sept. 22.
Boxes of cardboard and the like, Apparatus for the manufacture of. F. R. Stelling. 1,824,241; Sept. 22.
Bracelet, Wrist watch. A. R. Krause. Des. 85,188; Sept. 22.
Bracket. L. I. Beckwith. 1,824,459; Sept. 22.
Brake: *See*—
Automotive brake. Magnetic brake.
Car brake. Rail brake.
Fluid pressure brake. Vehicle and trailer brake.
Load brake. Vehicle brake.
Brake. T. Davidson and W. F. Dixon. 1,825,332; Sept. 22.
Brake. L. E. La Brie. 1,824,051–2; Sept. 22.
Brake. J. Sneed. 1,824,510; Sept. 22.
Brake and door interlock. J. C. McCune. 1,824,054; Sept. 22.
Brake and power interlock. J. B. Grossweger. 1,824,048–9; Sept. 22.
Brake apparatus, Safety. A. Schorno. 1,824,303; Sept. 22.
Brake construction. J. W. Jackson. 1,824,848; Sept. 22.
Brake for airplanes, Fluid pressure. H. J. Winter. 1,824,062; Sept. 22.
Brake for paper guide rolls. H. C. Jordhoy. 1,824,069; Sept. 22.
Brake for railroad switch machines. W. K. Howe. 1,824,150; Sept. 22.
Brake for trailers, Automatic. W. C. Lathers. 1,824,554; Sept. 22.
Brake mechanism, Self adjusting. A. F. Everhart. 1,923,973; Sept. 22.
Brake operating means. A. Y. Dodge, and R. S. Sanford. 1,824,038; Sept. 22.
Brake operating mechanism. R. F. Kohr. 1,824,725; Sept. 22.
Brake setting and releasing apparatus. C. F. and F. D. Joers. 1,824,050; Sept. 22.
Brake valve device. J. M. Dapron. 1,824,036; Sept. 22.
Brick molding machine. A. A. Oeffner and V. Trotta. 1,824,493; Sept. 22.
Broaching machine. W. Ferris. 1,823,975; Sept. 22.
Broom tensioning device. S. G. Wilson. 1,824,582; Sept. 22.
Brush and making same, Rotary. A. A. Angell. 1,824,649; Sept. 22.
Bucket, Conveyer. H. F. Maurel. 1,824,611; Sept. 22.
Buckle, Prong. J. H. Domkee. 1,824,333; Sept. 22.
Buckle, Shoe. A. E. Farmer. Des. 85,172–3; Sept. 22.
Building unit, Structural. J. H. Magee. 1,824,091; Sept. 22.
Burglar alarm. F. D. De Munbrun. 1,824,663; Sept. 22.
Burkeite, Manufacture of. H. W. Morse. 1,824,360; Sept. 22.
Burner: *See*—
Incense burner.

Bus. P. E. Matthews. Des. 85,191; Sept. 22.
Button. L. R. Carley. Des. 85,158–9; Sept. 22.
Button loop. R. J. Hodge. 1,824,547; Sept. 22.
Cabinet. K. Stern. Des. 85,211; Sept. 22.
Cabinet, Soda fountain. A. W. Puffer. 1,824,232; Sept. 22.
Camera exposure and flash, Simultaneous. H. E. Armstead. 1,824,030; Sept. 22.
Camera operating mechanism. H. E. Dyche. 1,824,469; Sept. 22.
Cameras, Combined side member and exposure meter for. C. L. Fitz. Des. 85,174; Sept. 22.
Can filling machine. R. J. Canton. 1,824,425; Sept. 22.
Cane. A. Sjoberg. 1,824,449; Sept. 22.
Cap forming die, Bottle. L. Vogelsang. 1,823,961; Sept. 22.
Car brake. H. C. Dorris and L. C. Pritner. 1,823,888; Sept. 22.
Car element, Train control. W. H. Reichard. 1,824,172; Sept. 22.
Car for passenger ropeways. M. Müller. 1,824,291; Sept. 22.
Carbon monoxide for exhaust gases, Device for removing. F. C. Fischer. 1,824,078; Sept. 22.
Carburetor. J. P. Remington. 1,824,750; Sept. 22.
Card distributing device, Automatic. E. J. Hangerud. 1,824,542; Sept. 22.
Card, Sample. S. E. Bender. 1,824,460; Sept. 22.
Carrier for aircraft, Cargo. C. H. Jacobs and A. F. Harshbarger. 1,824,550; Sept. 22.
Cartridge, Water tight explosive. R. L. Hill. 1,824,141; Sept. 22.
Case: *See*—
Cigarette case.
Cash register. E. J. Von Pein. 1,824,248; Sept. 22.
Cash register. E. J. Von Pein and W. S. Roux. 1,824,247; Sept. 22.
Casting machine. J. Polak. Re18,202; Sept. 22.
Cathode for thermionic devices. A. M. Nicolson. 1,823,984; Sept. 22.
Cellulose cooking. G. Haglund. Re18,200; Sept. 22.
Cellulose materials, Dyeing regenerated. H. Jordan. 1,824,273; Sept. 22.
Centrifugal machine. L. D. Jones. 1,824,722–3; Sept. 22.
Chain, Vehicle. A. N. Scott. 1,824,633; Sept. 22.
Chair or similar article. L. H. Burlin. Des. 85,157; Sept. 22.
Chair or similar article. C. W. Jones. Des. 85,182–4; Sept. 22.
Chair radio remote control, Easy. A. Garretson. Des. 85,176; Sept. 22.
Chart, Painting. E. P. Holder. 1,824,598; Sept. 22.
Cheese cutter. W. J. Brown. 1,824,703; Sept. 22.
Christmas tree, Imitation. C. Peckerman. Des. 85,200; Sept. 22.
Chuck. R. H. Jellicoe. 1,823,902; Sept. 22.
Cigarette case, Automatic pocket. R. Berger. 1,824,461; Sept. 22.
Cigarette collector, Double belt. J. A. Stein. 1,824,413; Sept. 22.
Cigarette collector, Drum type. J. A. Stein. 1,824,414; Sept. 22.
Cigarette cut-off. R. J. A. Chandler. 1,824,393; Sept. 22.
Cigarette rod former and paster. W. B. Bronander and P. M. Nejedly. 1,824,392; Sept. 22.
Circuit breaker. W. W. Dashner. 1,824,125; Sept. 22.
Circuit, Railway track. A. T. Carter. 1,824,119; Sept. 22.
Circuit, Relay control. C. R. Brooks. 1,824,194; Sept. 22.
Circuits, Railway crossing signal control. A. E. Hudd and H. E. Hershey. 1,824,207; Sept. 22.
Clamp: *See*—
Pipe clamp.
Wire clamp.
Clip: *See*—
Pen clip.
Clock case. A. M. Holstein. Des. 85,180; Sept. 22.
Clock case or similar article. G. Mulligan. Des. 85,195; Sept. 22.
Closure retaining devices for drums. C. H. Rollason. 1,824,733; Sept. 22.
Clutch. K. W. Hallden. 1,824,431; Sept. 22.
Clutch. H. W. Nieman and J. P. Madden. 1,823,912; Sept. 22.
Clutch, Centrifugal. A. A. Ackerman and C. L. Thomson. 1,823,881; Sept. 22.
Coating composition. C. Ellis. 1,824,757; Sept. 22.
Coil, Inductance. P. D. Lowell. 1,824,726; Sept. 22.
Coke, Making. C. W. Andrews. 1,824,526; Sept. 22.
Coke, Production of. W. Broadbridge, E. Edser, and W. W. Stenning. 1,824,326; Sept. 22.
Comb. R. Ehrlich. 1,824,665; Sept. 22.
Composition of matter adapted for the fabrication of battery boxes and other articles. A. B. Mackey and E. A. Mackey. 1,824,220; Sept. 22.
Computer, Mechanical. J. H. Taylor. 1,824,382; Sept. 22.
Concrete flooring, Bituminous. L. S. Wilbur. 1,824,418; Sept. 22.
Condenser, Electrical. W. M. Bailey. 1,824,529–30; Sept. 22.
Condenser, Electrical. W. M. Bailey. 1,824,586–7; Sept. 22.
Condenser, Electrical. W. H. Priess. 1,824,569; Sept. 22.
Condenser, Variable. W. Aull, jr. 1,824,031; Sept. 22.
Condenser, Variable. R. F. Sherfy. 1,824,629; Sept. 22.
Confection. L. B. Krick. Des. 85,189; Sept. 22.
Connecting device for use with stranded metal cables. J. W. Astley. 1,824,005; Sept. 22.
Connecting means for chains. F. G. Hodell. 1,824,546; Sept. 22.
Connecting means for electric conductors. H. P. Ober. 1,824,167; Sept. 22.
Connection, Electric swivel. C. F. Lederle. 1,824,604; Sept. 22.
Connection for antiskid devices, Tread member. F. G. Hodell. 1,824,545; Sept. 22.
Connection for building frames, Metal. Van R. P. Saxe. 1,824,631; Sept. 22.
Connection for rectifiers, Balance transformer. E. B. Shand. 1,823,917; Sept. 22.
Container. L. J. Most and R. W. Wilson. 1,824,029; Sept. 22.
Container and retriever, Golf tee. R. S. Smith. 1,823,992; Sept. 22.
Container, Cigarette. W. E. Molins. 1,824,491; Sept. 22.
Container, Combined cigarette and match. A. W. Kehler. Des. 85,186; Sept. 22.
Container, Decorated transparent. J. Pevsner. 1,824,229; Sept. 22.
Container for dental furnaces, Material. O. A. Colby. 1,823,968; Sept. 22.
Container or similar article, Powder. F. E. Wakefield. Des. 85,216; Sept. 22.
Containers, Treating dry cell. O. E. Ruhoff and G. H. Schroeder. 1,824,626; Sept. 22.
Control mechanism, Automatic skip. E. H. Lichtenberg. 1,824,607; Sept. 22.
Control mechanism for concrete paving machines. E. L. Tranaas. 1,824,580; Sept. 22.
Control structure for plows. J. H. Davis. 1,823,969; Sept. 22.
Control switch, Thermostatic electrical. J. J. Shively. 1,824,377; Sept. 22.
Conveyer. G. B. Welser, jr. 1,824,756; Sept. 22.
Conveyer switch. C. J. Kestl. 1,824,276; Sept. 22.
Cooling unit for refrigerators. F. G. Siagel. 1,824,575; Sept. 22.
Core filler. G. Lange. 1,824,089; Sept. 22.
Cotton and artificial silk, Treatment of. P. Karrer and W. Wehrli. 1,824,671; Sept. 22.
Cotton harvesting machine. G. R. Meyercord and O. H. Basqu'in. 1,824,223; Sept. 22.
Counter stiffener. C. D. Malaguti. 1,824,358; Sept. 22.
Counter, Totalizing. F. B. Troutman. 1,823,960; Sept. 22.
Coupling: *See*—
Tool coupling.
Cover for caps, Waterproof. D. F. McKinnon. Des. 85,193; Sept. 22.
Cover or similar article, Chime. G. L. Bossard. Des. 85,155; Sept. 22.
Cover, Table. C. B. Robinette. Des. 85,203; Sept. 22.
Covering, Flexible hard surfaced floor. J. Emig. 1,824,041; Sept. 22.
Covering for toy torpedoes. K. Kohn. 1,824,278; Sept. 22.
Creel. W. Marcroft and J. A. Molloy. 1,824,356; Sept. 22.
Crown block. B. Boykin, jr. 1,824,652; Sept. 22.
Crusher: *See*—
Hammer crusher.
Crusher roll. G. E. Krider. 1,824,088; Sept. 22.
Cultivator attachment. J. Ramstad. 1,824,170; Sept. 22.
Cultivator structure. J. R. and L. W. Kovar. 1,824,603; Sept. 22.
Cultivator with three wheels. J. R. and L. W. Kovar. 1,824,602; Sept. 22.
Current motor regulation, Alternating. R. N. Early and S. P. Bordeau. 1,824,595; Sept. 22.
Current rectifier, Alternating. S. J. M. Allen. 1,824,004; Sept. 22.
Cushion for piping systems, Automatic. D. A. Gillen and F. W. Seymour. 1,824,342; Sept. 22.
Cut out, Fused. N. J. Conrad. 1,824,122; Sept. 22.
Cutter: *See*—
Cheese cutter.
Roller cutter.
Cutting machine. W. Maier. 1,824,163; Sept. 22.
Cylinders, Making glass. N. Kopp. 1,824,216; Sept. 22.
Desk. E. J. Santee. 1,824 236; Sept. 22.
Die: *See*—
Cap forming die.
Dipper stick. E. H. Lichtenberg. 1,824,606; Sept. 22.
Disappearing blade switch. H. J. Hammerly. 1,824,137; Sept. 22.
Dishes on ships' tables, Securing. J. Goldberg. 1,824,344; Sept. 22.
Disinfecting apparatus. U. J. Smith. 1,824,380; Sept. 22.
Disk for furnace conveyers, Intersupported. F. A. Farrenwald. 1,824,470; Sept. 22.
Disk harrow, Offset. E. M. Enzenauer and R. H. Mitchell. 1,824,011; Sept. 22.
Dispenser, Rope. F. Brinner. 1,824 007; Sept. 22.
Display and storage unit, Combined. W. E. Peterson. 1,824,683; Sept. 22.
Display device. W. J. Fitzpatrick. 1,824,539; Sept. 22.
Display device. H. J. Jones. 1,824,721; Sept. 22.
Display device. R. M. Sanders. 1,823,988; Sept. 22.
Diving apparatus. V. Szamier. 1,824,512; Sept. 22.
Doily. E. Karfiol. Des. 85,185; Sept. 22.

Doll. J. H. Wilhelm. 1,824,316–7; Sept. 22.
Door elevator, Side. N. K. Smith. 1,824,412; Sept. 22.
Door frame, Railway hopper car. W. E. Wine. 1,824,645; Sept. 22.
Door operating mechanism. E. E. Allard and C. R. Berry. 1,824,109; Sept. 22.
Door operator, Elevator. C. P. Walker and D. A. Lyons. 1,823,962; Sept. 22.
Door retaining device. E. P. Jacobs. 1,824,209; Sept. 22.
Door, Section. G. King and F. A. Howard. 1,824,277; Sept. 22.
Door, Stove. C. L. Hardwick. 1,824,345; Sept. 22.
Drapery fixture. J. M. Wintrob. 1,824,385; Sept. 22.
Drier. W. A. Harty and F. W. Moore. 1,824,717; Sept. 22.
Drill centering and guiding device, Rotary well. W. K. Criley. 1,824,466; Sept. 22.
Drilling apparatus. E. G. Gartin. 1,824,479–80; Sept. 22.
Drilling bit, Expansion. E. S. Hartson. 1,824,268; Sept. 22.
Drilling mechanism. E. G. Gartin. 1,824,478; Sept. 22.
Drills, Distributing device for fertilizer, grain, and seed. R. Bergerioux. 1,824,532; Sept. 22.
Drive for cigarette machines, Cigarette rod. W. B. Bronander. 1,824,391; Sept. 22.
Drive for motor vehicles. A. F. Masury. Re18,206; Sept. 22.
Drive mechanism, Axle. A. Juneau. 1,824,670; Sept. 22.
Drive, Winder. L. E. Miller. 1,824,614; Sept. 22.
Driving mechanism. N. C. Bement. 1,823,872; Sept. 22.
Driving mechanism for motor vehicles. O. E. H. Froelich. 1,824,014; Sept. 22.
Dual wire wheel. J. G. Swain. 1,824,752; Sept. 22.
Duplicating machine. R. P. Phibbs. 1,823,952; Sept. 22.
Dust collector or separator. J. Whitmore. 1,824,455; Sept. 22.
Dust layer having improved hygroscopic properties. E. O. Barstow and S. B. Heath. 1,824,588; Sept. 22.
Electric discharge tube. A. Bouwers. 1,824,755; Sept. 22.
Electric furnace, Dental porcelain. N. Thompson. 1,824,310; Sept. 22.
Electric furnace, Induction. E. F. Northrup. 1,824,618; Sept. 22.
Electric power system. W. B. Skinkle. 1,824,692; Sept. 22
Electrical appliance. L. E. Hendee. 1,823,977; Sept. 22.
Electrical fixture and fan support. E. D. Davis and R. T. Payne. 1,824,708; Sept. 22.
Electrical regulating system. F. A. Byles. 1,824,704; Sept. 22.
Electrical regulator. A. S. Fitz Gerald. 1,824,714; Sept. 22.
Electrical translating apparatus. A. J. Sorensen. 1,824,577; Sept. 22.
Electromagnetic device. E. W. Kellogg. 1,824,724; Sept. 22.
Electroresponsive device and system. J. W. McNairy. 1,824,728; Sept. 22.
Elevator: *See*—
Door elevator.
Garage elevator.
Embroidery machine. C. Muentener and P. Helbig. 1,823,911; Sept. 22.
Emulsion suitable for wood preservation and process of wood preservation and product thereof. A. Fisher. 1,824,428; Sept. 22.
End construction for tie rods or the like. G. H. Hufferd. 1,824,271; Sept. 22.
Engine: *See*—
Internal-combustion engine.
Engine. P. C. Heller. 1,824,081; Sept. 22.
Engine construction. A. J. Meyer. 1,824,440; Sept. 22.
Engine support means, Supplemental. W. K. Bishop. 1,824,255; Sept. 22.
Eraser cleaning appliance. L. and J. C. Chambers. 1,823,878; Sept. 22.
Ergosterine and manufacture of same, Stable irradiated. E. Brauchli. 1,824,653; Sept. 22.
Ester, Diamyl. B. T. Brooks and E. J. Cardarelli. 1,824,071; Sept. 22.
Ester, Diethyl. B. T. Brooks and E. J. Cardarelli. 1,824,069; Sept. 22.
Ester, Dipropyl. B. T. Brooks and E. J. Cardarelli. 1,824,070; Sept. 22.
Esters. B. T. Brooks and E. J. Cardarelli. 1,824,068; Sept. 22.
Expansion joint, Guided. A. C. Badger. 1,824,422; Sept. 22.
Extension table. J. H. Trenkler and W. A. King. 1,824,640; Sept. 22.
Extractor. W. Buss. 1,824,424; Sept. 22.
Fabrics with cellulose derivatives, Coating. G. Schneider. 1,824,690; Sept. 22.
Facing, Traffic signal. C. Adler, jr. Des. 85,143; Sept. 22.
Fastener, Scythe snath. S. L. Crowe. 1,824,123; Sept. 22.
Fastener, setting machine. S. L. Gookin. 1,823,894; Sept. 22.
Fastener, Window. J. E. Scott. 1,823,957; Sept. 22.
Fastener, Zip or lightning. W. Pletsch. 1,823,913; Sept. 22.
Fastening inserting machine. G. Hazelton. 1,823,898; Sept. 22.
Feed device, Automatic. R. D. Streby. 1,823,995; Sept. 22.
Feeder, Chicken. I. C. Drews and C. E. Boehm. 1,824,262; Sept. 22.
Feeding mechanism. F. Ashworth. 1,824,004; Sept. 22.
Feeding mechanism. C. F. Osgood. 1,824,495; Sept. 22.
Fence, Highway guard. W. E. White. 1,824,454; Sept. 22.
Fence wire crimper. F. Loveless. 1,824,219; Sept. 22.
Fibers, Dyeing and printing vegetable. G. Kränzlein and H. Vollmann. 1,823,946; Sept. 22.
Fibrous material, Process and apparatus for disintegration of. W. H. Mason. 1,824,221; Sept. 22.
Filler pipe. E. F. Fisher. 1,824,538; Sept. 22.
Filling and capping apparatus. R. L. Drake. 1,828,889; Sept. 22.
Film matching means, Sound and picture. F. H. Owens. 1,824,294; Sept. 22.
Filter. C. B. Foley. 1,824,079; Sept. 22.
Fire escape. J. Kolesza. 1,824,279; Sept. 22.
Fire extinguisher. W. C. Bauer. 1,823,882; Sept. 22.
Fire extinguisher. R. C. Iddings. 1,824,599; Sept. 22.
Fireplace. J. J. Fouse. 1,824,263; Sept. 22.
Fire pot construction. W. Blaskewitz. 1,824,533; Sept. 22.
Fire prevention device for oil wells. H. L. Simmonds. 1,824,411; Sept. 22.
Fish lure and signal, Combined. A. H. Hatchett, sr. 1,823,937; Sept. 22.
Flanges from ingots, Apparatus for shearing. W. J. Schultz and R. S. Stevick. 1,823,991; Sept. 22.
Flavoring tablets, Apparatus for dispensing. G. S. Suppiger and H. G. Wegener. 1,824,695; Sept. 22.
Floor construction. M. J. Tracy. 1,824,180; Sept. 22.
Floor surfacing machine. J. S. Wilgus and I. E. Stutzman. 1,824,456; Sept. 22.
Fluid, Apparatus for displacing. V. W. Moray. 1,823,910; Sept. 22.
Fluid motor. G. F. Michot-Dupont. 1,824,336; Sept. 22.
Fluid pressure brake. C. C. Farmer. 1,824,042; Sept. 22.
Fluid pressure brake. C. C. Farmer. 1,824,044; Sept. 22.
Foils and film like bands from soluble cellulose derivatives, Production of thin and very thin. A. Eichengrün. 1,824,337; Sept. 22.
Fold, Bill. P. A. Gardner, jr. Des. 85,175; Sept. 22.
Folder, Advertising. N. Papapetrou. Des. 85,197; Sept. 22.
Food product and method of making. C. H. Parsons. 1,824,496; Sept. 22.
Foundry molding machine. T. W. Bullock. 1,824,009; Sept. 22.
Fountain unit. J. H. Boyden. 1,824,116; Sept. 22.
Frame: *See*—
Door frame.
Sink supporting frame.
Screen frame.
Frame and support therefor, Combined terrestrial globe. H. E. Schulse. Des. 85,206; Sept. 22.
Frame, clock casing and support therefor, Combined terrestrial globe. H. E. Schulse. Des. 85,207; Sept. 22.
Frame construction, Window. T. W. Macaulay, and S. Rastelli. 1,823,947; Sept. 22.
Frame for bicycles, Side car. R. Linn. 1,824,675; Sept. 22.
Fuel and generating gas therefrom, Method of and apparatus for preparing. H. F. Smith. 1,824,576; Sept. 22.
Fuel feeding apparatus. J. C. Coulombe. 1,823,887; Sept. 22.
Fuel for combustion, Apparatus for preparing pulverized. H. T. Dyer. 1,823,932; Sept. 22.
Furnace: *See*—
Electric furnace.
Induction furnace.
Furnace. E. G. de Coriolis. 1,824,747; Sept. 22.
Furnace organization, Open bottom. G. Charlton. 1,824,121; Sept. 22.
Furnace wall. D. S. Jacobus. 1,823,901; Sept. 22.
Furnace wall blocks against tubes, Device for retaining. E. G. Bailey and R. M. Hardgrove. 1,823,927; Sept. 22.
Furnaces in the thermal treatment of granular material, Apparatus for operating shaft. O. Hubmann and F. Voerkel. 1,824,483; Sept. 22.
Furniture, Article of. N. Soltesz. Re18,207; Sept. 22.
Furniture structure, Knock-down. U. C. Thies. 1,824,243; Sept. 22.
Furs, Treating. C. C. Truax. 1,824,105; Sept. 22.
Fuse device, Safety. J. Stone. 1,824,415; Sept. 22.
Fuselage for airplanes. W. B. Stout. Des. 85,213; Sept. 22.
Game board. O. E. Neitzel. Des. 85,196; Sept. 22.
Game device. M. L. Deck. Des. 85,170; Sept. 22.
Game device. A. L. Larsen. 1,824,553; Sept. 22.
Garage elevator. E. Geiger. 1,824,340; Sept. 22.
Garment hanger. M. A. Heimann. 1,824,138; Sept. 22.
Garter. J. H. Brousseau. 1,824,008; Sept. 22.
Gas, Apparatus for cleaning. J. P. Fisher and G. F. Downs. 1,824,713; Sept. 22.
Gas cleaning apparatus. A. J. Boynton. 1,824,463; Sept. 22.
Gas meter. G. R. Rich. 1,823,953; Sept. 22.
Gas purification process. F. W. Sperr, jr. 1,824,103; Sept. 22.
Gas tank lock. W. Isaacs. 1,824,352; Sept. 22.
Gas water heater. V. Mauck. 1,824,357; Sept. 22.
Gasket. C. B. Bailey. 1,824,386; Sept. 22.
Gasket. A. T. Stock. 1,823,920; Sept. 22.
Gate for conduits, Adjustable. H. H. Bailey and J. L. Thomas. 1,824,189; Sept. 22.

Gauge: *See*—
Height gauge.
Gauge switch. P. H. Hutchinson. 1,823,900; Sept. 22.
Gauging machine. H. L. Vine. 1,823,999; Sept. 22.
Gear, resilient. R. G. Anderson. 1,824,648; Sept. 22.
Glass, Apparatus for grinding, smoothing and polishing. C. Hibon. 1,824,347; Sept. 22.
Glass, Apparatus for the manufacture of wire. L. N. Pond. 1,824,366; Sept. 22.
Glass, Making sheet. S. A. Forter. 1,824,474; Sept. 22.
Glass molding machines, Automatic feeder for. T. De Blase. 1,824,197; Sept. 22.
Glass, Process of and apparatus for the manufacture of wire. L. N. Pond, and J. H. Lewis. 1,824,365; Sept. 22.
Glass to a rolling apparatus for producing continuous glass strip, Feeding molten. E. B. LeMare, and F. B. Waldron. 1,824,490; Sept. 22.
Glue, Waterproof. T. Satow. 1,824,448; Sept. 22.
Glycerine liquors, Treating. T. Schwarz. 1,824,507; Sept. 22.
Governor, Variable speed. W. Schmid. 1,824,373; Sept. 22.
Gravitometer for gases, Recording. D. A. Sillers, H. W. Price, and J. W. Bartlett. 1,824,305; Sept. 22.
Grinding machines, Automatic discharge device for. J. M. Koch. 1,824,159; Sept. 22.
Grinding machines, Work head for. G. E. Garno and E. A. Engstrom. 1,823,893; Sept. 22.
Guard for wood-heel turning machines. W. J. Shaw, and M. E. Bastow. 1,824,375; Sept. 22.
Gutter hanger. M. Rachlin. 1,824,570; Sept. 22.
Hair curling appliance. J. D. Percell. 1,824,497; Sept. 22.
Hair dyeing apparatus. G. M. Krag. 1,824,087; Sept. 22.
Hair waving device. S. B. Tusis. 1,824,641; Sept. 22.
Hammer crusher. C. A. Jamison. 1,824,272; Sept. 22.
Handle for wooden baskets. R. P. Young. 1,824,319; Sept. 22.
Hanger: *See*—
Garment hanger. Portière hanger.
Gutter hanger.
Harvester, Beet. A. E. Shinn. 1,824,376; Sept. 22.
Header, Grain. F. Gentry. 1,824,264; Sept. 22.
Hearing device. C. Fensky. 1,824,427; Sept. 22.
Heat exchanger. J. N. and S. L. Wyndham. 1,824,107; Sept. 22.
Heater: *See*—
Gas water heater. Water supply heater.
Water heater.
Heaters, Method of and apparatus for cleaning feed water. E. L. Schellens. 1,824,505; Sept. 22.
Heating device, Electric. F. E. Wolcott and L. V. Lucia. 1,824,585; Sept. 22.
Heating plants, Device for increasing the water circulation and for decreasing boiler resistances to flow in central. E. Schunemann. 1,824,574; Sept. 22.
Heating unit, Electric. J. C. Woodson. 1,823,925; Sept. 22.
Heel breasting machine. F. A. Day. Re118,199; Sept. 22.
Heel, Detachable. A. C. Blackburn. 1,824,651; Sept. 22.
Heel, Resilient. B. R. McKinney. 1,824,287; Sept. 22.
Height gauge. J. H. Jacobs. 1,824,153; Sept. 22.
Helicopter. R. Chillingworth. 1,824,195; Sept. 22.
Hides and skins, Tanning. A. Hoyt. 1,824,549; Sept. 22.
Hinge. J. Soss. 1,824,451; Sept. 22.
Hinge, Door. F. Kreiner. 1,824,217; Sept. 22.
Hog house, Portable. H. Hoegermeyer. 1,823,940; Sept. 22.
Hoist. F. D. Foradas and T. Hasapes. 1,824,339; Sept. 22.
Hoisting sling. A. Lundquist. 1,824,027; Sept. 22
Holder and ash tray or similar article, Combination cigarette. L. Cross. Des. 85,165; Sept. 22.
Holder, Article. R. Muhlichen. 1,824,562; Sept. 22.
Holder, Flowerpot. P. Gits and E. L. Van Wezemael. 1,824,343; Sept. 22.
Holder for dentistry work. M. Fleischhacker. 1,824,398; Sept. 22.
Holder, Hat. J. De Carlo. 1,824,710; Sept. 22.
Holder or appliance for cosmetics or the like. R. T. Christy. Des. 85,162; Sept. 22.
Holder or similar article, Soap. S. D. Baker. Des. 85,150–1; Sept. 22.
Holder, Tie. L. H. McInnis. 1,823,949; Sept. 22.
Holder, Tool. P. L. Robertson. 1,824,623; Sept. 22.
Holder with pulley for drawing curtains. A. Rapp. 1,824,371; Sept. 22.
Hosiery. R. E. Tilles. 1,824,636; Sept. 22.
Hosiery or the like. J. A. Struthers. Des. 85,214; Sept. 22.
Hotbed. W. McKee. 1,824,439; Sept. 22.
House: *See*—
Hog house.
Hub extension, Temporary. C. L. Snyder. 1,824,634; Sept. 22.
Humidifier. F. E. Stover. 1,824,416; Sept. 22.
Hydraulic prospecting, Method of and apparatus for. E. A. Adler. 1,823,965; Sept. 22.
Hydrocarbons and extraction of the oxidized products, Oxidation of. M. Luther, and H. Wille. 1,823,983; Sept. 22.
Hydrocarbons, Converting. C. W. Watson. 1,823,922; Sept. 22.
Hydrocarbons, Treating. L. Kirschbraun. 1,824,215; Sept. 22.
Ice melting device. A. R. Towers. 1,824,638; Sept. 22.
Ignition apparatus, Intensity of. P. P. Quayle. 1,824,407; Sept. 22.
Illuminating device. J. F. Holzman. 1,824,270; Sept. 22.
Illuminating system for regulating traffic. W. V. Roberts. 1,824,572; Sept. 22.
Impression adjusting mechanism. F. Lamatsch. 1,824,436; Sept. 22.
Incense burner. J. E. Newton. 1,824,055; Sept. 22.
Incinerator. A. F. Carr. Des. 85,160; Sept. 22.
Indicating device responsive to temperature and pressure for internal combustion engines. H. Schlaich. 1,824,372; Sept. 22.
Indicator for internal combustion engines. M. B. Bleecker. 1,823,883; Sept. 22.
Insert for underfloor wiring ducts or the like. H. F. Pollock. 1,823,985; Sept. 22.
Indicator or marker for football gridirons, Yardage. F. A. Warren and E. A. Hornby. 1,824,643; Sept. 22.
Induction furnace. P. H. Brace. 1,823,873–4; Sept. 22.
Induction furnace. N. R. Davis. 1,823,970; Sept. 22.
Induction furnace. T. H. Long. 1,823,908; Sept. 22.
Insect trap. G. R. Galbraith. 1,823,892; Sept. 22.
Insert for underfloor wiring ducts or the like. H. F. Richardson. 1,824,571; Sept. 22.
Insulating covering for flexible pipe conduits. W. W. Knight. 1,824,601; Sept. 22.
Interferometer for the testing of optical elements. J. W. Hasselkus and O. G. Hay. 1,824,068; Sept. 22.
Interlocking member for slide fasteners. M. Laguzzi. 1,824,072; Sept. 22.
Interlocking system for railroads. F. L. Dodgson. 1,824,127; Sept. 22.
Interlocking system for railroads. N. L. Donovan. 1,824,748; Sept. 22.
Interlocking system for railroads. W. K. Howe. 1,824,146; Sept. 22.
Interlocking system for railroads. W. K. Howe. 1,824,148–9; Sept. 22.
Interlocking system for railroads. W. K. Howe. 1,824,151; Sept. 22.
Interlocking system for railroads. J. C. Lindner; 1,824,162; Sept. 22.
Interlocking system for railroads. S. N. Wight. 1,824,181; Sept. 22.
Internal combustion engine. R. W. Bailey. 1,824,528; Sept. 22.
Internal combustion engine. H. H. Cutler. 1,824,536; Sept. 22.
Internal combustion engine. J. W. Kabitzke. 1,823,903; Sept. 22.
Internal combustion engine. C. R. Paton. 1,824,732; Sept. 22.
Internal combustion engine. E. Rector. 1,824,297; Sept. 22.
Internal combustion engine. C. R. Short. 1,824,630; Sept. 22.
Internal combustion engine, Rotary valve. P. Thomson. 1,824,697; Sept. 22.
Ironer, Laundry. F. J. Kalin. 1,824,435; Sept. 22.
Ironing table, Foldable. G. W. Lewis. 1,824,025; Sept. 22.
Irrigation tube. J. W. Oneill. 1,824,951; Sept. 22.
Joint: *See*—
Expansion joint. Tool joint.
Pipe joint. Wedge coupled joint.
Rail joint.
Joint for socket pipes, Reenforced. G. Reichenbecher. 1,824,500; Sept. 22.
Joint means, Knuckle. R. W. Miller. 1,824,028; Sept. 22.
Jointing element for pipe and other tubular members. W. C. Ferguson. 1,823,974; Sept. 22.
Journal box and bearing. T. Bird. 1,824,702; Sept. 22.
Kite. O. E. Bradford. 1,824,324; Sept. 22.
Knife. C. W. Lambert. 1,824,022; Sept. 22.
Knitting machine. S. D. Cohen. 1,824,260; Sept. 22.
Knitting machine. M. Zimic. 1,824,320; Sept. 22.
Knitting machines, Fabric take-off device for full fashioned. E. Richter. 1,824,501; Sept. 22.
Ladle stopper construction. A. J. Jackman. 1,824,019; Sept. 22.
Lamination for dynamo-electric machines. R. H. Jordan. 1,823,979; Sept. 22.
Lamp. S. Goldfinger. 1,824,047; Sept. 22.
Lamp and radiocabinet, Combined. E. Ufert. Des. 85,215; Sept. 22.
Lamp and ventilator, Combination. G. S. Birch. 1,824,388; Sept. 22.
Lamp, Incandescent. W. C. Goss. 1,824,429; Sept. 22.
Ledger and index therefor. F. H. Crump. 1,824,659; Sept. 22.
Lens surfacing machine. J. J. McCabe. 1,824,559; Sept. 22.
Leveling rod. A. Langsner. 1,824,023; Sept. 22.
Lever detent mechanism. H. R. Traphagen. 1,824,515; Sept. 22.
Lever mechanism, Gear shift. H. C. Lord. 1,824,090; Sept. 22.
Lid and lock therefor, Meter box. P. McAfee. 1,824,092; Sept. 22.
Life saving device. G. F. Dillow. 1,824,198; Sept. 22.
Light. J. D. Hudson. 1,824,208; Sept. 22.
Light signal system for railroads. J. E. Willing. 1,824,186; Sept. 22.

Lime, Manufacturing chloride of. A. Carughi and C. Paoloni. 1,824,656; Sept. 22.
Lime, Producing. G. H. Hunt. 1,824,351; Sept. 22.
Line guide, Plumb. F. G. Baker. 1,824,321; Sept. 22.
Link. J. Sneed. 1,824,450; Sept. 22.
Link, Replacement. J. O'F. Clark. 1,824,330; Sept. 22.
Liquid dripping device. L. D. Crane. 1,824,394; Sept. 22.
Liquids, Purification of. C. J. Rodman and R. P. Dunmire. 1,824,498; Sept. 22.
Livestock for conveyance in transport vehicles, Packing. E. F. Mitchell. 1,824,225; Sept. 22.
Lath clip and installing the same. W. E. White. 1,824,315; Sept. 22.
Lath structure. J. Kahn and H. E. White. 1,824,274; Sept. 22.
Lathing, Metal. J. B. Hernandez. 1,824,082; Sept. 22.
Lathing unit. F. M. Jacobs. 1,824,210; Sept. 22.
Load brake, Variable. S. G. Down. 1,824,039; Sept. 22.
Loaf forming machine. G. Rausch. 1,824,408; Sept. 22.
Lock: *See*—
Gas tank lock. Valve lock.
Lock construction. J. Fetyk. 1,824,045; Sept. 22.
Locking mechanism for extractor covers. A. Partlow. 1,824,565; Sept. 22.
Locking mechanism, Wrist pin. A. K. Kusebauch. 1,824,021; Sept. 22.
Locomotive draft inducer. L. G. Kunzer. 1,824,355; Sept. 22.
Locomotive, Steam. C. Halder. 1,824,541; Sept. 22.
Loom warp beam, Adjustable. W. G. Trautvetter. 1,824,689; Sept. 22.
Lubricant. J. W. Moorehead. 1,824,443; Sept. 22.
Lubricant cases, Apparatus for cleaning. C. M. Oles. 1,824,095; Sept. 22.
Lubricating apparatus. C. B. and W. C. Pierce. 1,824,364; Sept. 22.
Lumber positioning mechanism. E. F. and N. E. E. Sorensen. 1,824,381; Sept. 22.
Luminescent tube. C. J. Wamser. 1,824,452; Sept. 22.
Machine for back lining books. C. Schramm and E. W. Clark. 1,824,506; Sept. 22.
Machine for cutting coffee and the like. B. A. O'Neill. 1,824,681; Sept. 22.
Machine for feeding mixed stock. C. G. Sargent and F. L. Furbush. 1,823,955; Sept. 22.
Machine for making twisted brushes. H. Hertzberg. 1,824,140; Sept. 22.
Machine for repairing runs in fabrics. W. H. Leavin. 1,824,437; Sept. 22.
Machine for treating hat bodies. G. W. Cuming. 1,823,880; Sept. 22.
Magnetic brake. C. C. Farmer. 1,824,043; Sept. 22.
Mandrel, Sectional. R. Schroeder. 1,823,956; Sept. 22.
Map display and preservation, Apparatus for. F. H. Swanson. 1,823,996; Sept. 22.
Map, Novelty. D. Scoates. 1,823,916; Sept. 22.
Marine motor. H. L. Johnson. 1,824,213; Sept. 22.
Match book. S. M. Moriya. 1,824,404; Sept. 22.
Material, Apparatus for demagnetizing magnetically conveyed. W. McKee. 1,824,403; Sept. 22.
Material containing combustible carbonaceous material, Distilling solid. C. T. Loughrey. 1,824,282; Sept. 22.
Material, Feeder for pulverized. O. A. Kreutzberg. 1,823,905; Sept. 22.
Material, Measuring characteristics of. A. Allen. 1,824,745; Sept. 22.
Materials, Apparatus for the measurement of stiffness of flexible. T. Dantzig and E. C. Peterson. 1,824,395; Sept. 22.
Measuring and cutting machine, Plastic. G. K. Bainbridge. 1,824,110; Sept. 22.
Measuring and delivering apparatus, Liquid. M. Coupler. 1,824,261; Sept. 22.
Measuring mechanism. A. Allen. 1,824,746; Sept. 22.
Medicinal preparation. W. J. Horn. 1,824,018; Sept. 22.
Metal articles such as table requisites, Production of silver plated. G. Henke. 1,823,938; Sept. 22.
Metals, Electrolytic deposit of heavy. M. Schlotter. 1,824,100; Sept. 22.
Metals from refractory ores, Recovery of precious. R. F. Meyer. 1,824,093; Sept. 22.
Meter: *See*—
Gas meter. Watt-hour meter.
Meter of tiltable trucks, Truck mix. J. F. Robb. 1,824,625; Sept. 22.
Microscope slide or counting chamber. H. G. Ott. 1,824,097; Sept. 22.
Mill: *See*—
Rolling mill.
Mining machine, Retreating longwall face. A. M. Marion and E. C. Gerry. 1,824,727; Sept. 22.
Mirror clock combination. S. C. Cook. Des. 85,163; Sept. 22.
Mixing machine, Domestic. O. Cammann, jr. 1,824,328; Sept. 22.
Mold for freezing liquids. R. M. Storer. 1,824,309; Sept. 22.
Mold for frozen substances. R. M. Storer. 1,824,308; Sept. 22.
Monoazo-dyestuffs, Manufacture of. B. Richard. 1,824,686; Sept. 22.
Monoazodyestuffs, New. W. Hentrich and R. Knoche. 1,823,989; Sept. 22.
Mop wringer. G. Van Daam. 1,824,311; Sept. 22.
Mop wringing device. M. B. McCoy. 1,824,286; Sept. 22.
Motor: *See*—
Fluid motor. Outboard motor.
Marine motor.
Mounting, Camera. J. C. Karnes and G. J. Kessenich. 1,824,085; Sept. 22.
Mounting for folding doors. E. J. G. Phillips. 1,824,621; Sept. 22.
Mounting for motion picture projectors, Reel. A. F. Victor. 1,824,519; Sept. 22.
Mounting for radiator shutter blades. L. B. Green. 1,824,015; Sept. 22.
Musical instrument, Electric. M. L. E. Martenot. 1,824,402; Sept. 22.
Naphtha from hydrocarbon oils, Producing. M. L. Chappell. 1,823,967; Sept. 22.
Necktie. M. M. Hall. 1,824,267; Sept. 22.
Needle, Knitting. W. H. Leavin and S. B. Leavin. 1,823,906; Sept. 22.
Needle, Knitting. A. C. Parlini. 1,824,445; Sept. 22.
Nest, Automatic trap. C. J. Loehr. 1,824,557; Sept. 22.
News device for rotary printing machines, Late. C. Winkler. 1,824,646; Sept. 22.
Oar. E. A. De Noya. 1,824,712; Sept. 22.
Oil mist, Apparatus for producing a lubricating. O. R. Gronkwist. 1,824,540; Sept. 22.
Oil removing apparatus. M. P. R. Jourdain. 1,824,485; Sept. 22.
Oil sand bit. W. O. Scott. 1,824,238; Sept. 22.
Oil, Sulphonating mineral. L. D. Myers. 1,824,615; Sept. 22.
Oil, Treating hydrocarbon. W. M. Stratford. 1,823,994; Sept. 22.
Oiler, Roller contact. A. J. Sams. 1,824,302; Sept. 22.
Oils, Method and apparatus for fractionating hydrocarbon. F. W. Hall. 1,823,897; Sept. 22.
Oils, Sulphurized. E. W. Adams. 1,824,523; Sept. 22.
Operating mechanism. H. J. Morris. 1,824,679; Sept. 22.
Ordnance. C. Bittinger. 1,824,462; Sept. 22.
Organic compounds, Chlorination of. G. P. Lunt. 1,824,558; Sept. 22.
Ornament for motor cars, Airplane. K. W. Wilson. 1,824,003; Sept. 22.
Outboard motor. L. J. Johnson. 1,824,735; Sept. 22.
Outboard motor. L. J. and H. L. Johnson. 1,824,736; Sept. 22.
Outboard motor assembly. L. J. and H. L. Johnson. 1,824,737–9; Sept. 22.
Oven loader. J. Cryns. 1,824,124; Sept. 22.
Packaging machine. J. L. Kellogg, P. W. Foster, R. S. Poole, and M. Raymer. 1,824,401; Sept. 22.
Packet of firecrackers with sealed band. W. E. Priestley. 1,824,367; Sept. 22.
Packing. H. R. Williams. 1,824,061; Sept. 22.
Packing machine. W. F. Hendry. 1,824,432; Sept. 22.
Packing means for food materials. M. E. Miller. 1,824,359; Sept. 22.
Packing overshot. M. S. Black and F. M. Brambley. 1,824,191; Sept. 22.
Pad: *See*—
Pedal pad.
Pad for saddles. J. B. Kopf. 1,824,488; Sept. 22.
Padlock. F. A. Russell. 1,824,301; Sept. 22.
Painting device. M. Tibbetts. 1,824,514; Sept. 22.
Pallet stones in escapement levers, Device for adjusting the. R. Schwaar. 1,824,691; Sept. 22.
Paper bag machine. W. L. Taylor. 1,824,383; Sept. 22.
Paper folding machine. C. L. Burdick. 1,824,073; Sept. 22.
Paper, Treating. L. L. Leadbetter. 1,824,024; Sept. 22.
Pastry. M. Conforto. 1,824,594; Sept. 22.
Pattern lifting device. D. B. Dimick. 1,824,468; Sept. 22.
Patterns on floor coverings, Printing marbleized. C. F. Humphreys and J. C. McCarthy. 1,824,433; Sept. 22.
Paving, Producing impregnated irregular. H. Aebly. 1,824,524; Sept. 22.
Pedal pad. J. Milhander. 1,824,289; Sept. 22.
Pen clip, Fountain. H. Esterow. 1,824,012; Sept. 22.
Pen, Fountain. H. D. Kellogg, jr. 1,824,275; Sept. 22.
Pen, Fountain. J. Wallace. 1,824,249; Sept. 22.
Phenol, Normal heptyl. E. C. Fanto. 1,824,426; Sept. 22.
Phonograph record. A. M. Acheson. 1,824,253; Sept. 22.
Photo-electric tube. F. Schröter. 1,824,573; Sept. 22.
Photographic print developing apparatus. P. Landrock. 1,824,281; Sept. 22.
Photographic print exposing and handling apparatus. J. S. Greene. 1,824,265; Sept. 22.
Photographic prints, Apparatus for treating. A. W. Caps and J. S. Greene. 1,824,259; Sept. 22.
Photo-printing machine. H. A. Reedy. 1,824,622; Sept. 22.
Piano action, Plectrum. G. Casciotta. 1,824,706; Sept. 22.
Picture frame. C. A. Elsy. Des. 85,171; Sept. 22.
Pictures, Apparatus for taking photographic or cinematographic. A. L. V. C. Debrie. 1,824,709; Sept. 22.
Pictures in color, Method of and apparatus for producing motion. E. L. Pearson. 1,824,446; Sept. 22.
Pipe: *See*—
Filler pipe.
Pile driving apparatus. G. M. Nell. 1,824,617; Sept. 22.
Pipe clamp. H. Eisenberg. 1,824,596; Sept. 22.
Pipe joint. J. R. McWane. 1,824,560; Sept. 22.
Pipe joint, Reenforced. G. Reichenbecher. 1,824,499; Sept. 22.

Pipe union. H. L. Uber. 1,824,642; Sept. 22.
Plaque. J. W. Cutler. Des. 85,168; Sept. 22.
Plaster board. T. D. Priddy. 1,823,914; Sept. 22.
Plaster board. C. W. Utzman. 1,824,245; Sept. 22.
Plaster board building construction. F. M. Venzie. 1,823,998; Sept. 22.
Plaster board machinery, Folding device for. C. Absmeier. 1,824,420; Sept. 22.
Plaster, Budding and grafting. P. B. L'Hommedieu. 1,824,674; Sept. 22.
Plate. J. H. Wilson. Des. 85,220; Sept. 22.
Plug cap for separable attachment plugs. J. S. Coldwell. 1,824,657; Sept. 22.
Plug for lug straps and making same. J. H. Chadbourne. 1,824,707; Sept. 22.
Pontoons and seaplane floats, devisible into boats, Collapsible structure such as. N. Straussler. Re18,204; Sept. 22.
Portière hanger, Adjustable. H. Meier. 1,823,909; Sept. 22.
Positioning device for users of automatic photographic machines. S. Hirsch and J. F. Singer. 1,824,269; Sept. 22.
Potato planting process and potato planter. O. B. Rector. 1,824,233; Sept. 22.
Powder puff. C. A. Mureau. 1,824,226; Sept. 22.
Power actuator. C. S. Bragg and V. W. Kliesrath. 1,824,032; Sept. 22.
Power attachment for saw swages. R. G. Horton and G. Fraley. 1,824,349; Sept. 22.
Power interlocking system for railroads. F. Benedict. 1,824,112–3; Sept. 22.
Power lift device, Leverage. J. A. Dennis. 1,824,077; Sept. 22.
Power machine for sealing caps to jars and cans. S. N. Tevander. 1,824,384; Sept. 22.
Power transmitting device. I. F. Webb. 1,823,963; Sept. 22.
Preserving process. J. W. Pittock. 1,824,685; Sept. 22.
Press. B. Greene. 1,824,132; Sept. 22.
Pressing and steaming iron. L. A. Smith. 1,824,379; Sept. 22.
Pressure regulating means. W. C. Broekhuysen. 1,824,389; Sept. 22.
Printing machine. W. K. Eckhard. 1,824,200; Sept. 22.
Products, Apparatus for making vitrified argillaceous. W. B. Pine. 1,824,684; Sept. 22.
Products of finely divided vegetable material, Making. A. P. Allen. 1,824,421; Sept. 22.
Projection arrangement and support therefor, Combination. F. E. Halloran. Des. 85,177; Sept. 22.
Propeller, Rotary. F. A. E. Grumpelt. 1,824,667; Sept. 22.
Propulsion mechanism. E. W. Hall. 1,824,016; Sept. 22.
Protection for electric lines or line systems. W. Gaarz, J. Sorge, and M. Schleicher. 1,824,476; Sept. 22.
Protractor. G. H. Dingman. 1,823,931; Sept. 22.
Puller: *See*—
Wheel puller.
Pump and power reverse support, Air. H. Glaenzer. 1,824,666; Sept. 22.
Pump and prime mover, Internal combustion. S. P. Christie. 1,824,074; Sept. 22.
Pump, Fuel. M. O. Darby and A. A. Sidney. 1,824,467; Sept. 22.
Pump, Reversible centrifugal. E. J. Ruthman. 1,824,409; Sept. 22.
Pumping system. R. B. Carter, jr. 1,824,465; Sept. 22.
Punch and cover, Can. J. R. Miller. 1,824,290; Sept. 22.
Purse, Coin. A. L. Kotlicke. 1,824,354; Sept. 22.
Pyrites roasting. J. E. Little. 1,823,907; Sept. 22.
Pyroxylin compositions, Production of pigmented. A. M. Taylor, and A. R. Chapman. 1,824,177; Sept. 22.
Rack: *See*—
Splice can rack.
Rack. W. C. Hornaday. 1,824,142; Sept. 22.
Rack for automobiles, Luggage. L. J. Meyer. 1,824,288; Sept. 22.
Radiator. J. F. McIntire. Des. 85,192; Sept. 22.
Radiator. H. A. Shaw. Des. 85,210; Sept. 22.
Radiator, Sheet metal. G. I. Stanford. 1,823,993; Sept. 22.
Radio aerial. D. Alter. 1,824,254; Sept. 22.
Radiocabinet. G. E. Riegel. Des. 85,202; Sept. 22.
Radio receiving apparatus. B. Y. Cummings, jr. 1,824,331; Sept. 22.
Radio receiving apparatus. A. F. Van Dyck. 1,824,517; Sept. 22.
Radio telephone and telegraph system. T. A. McCann. 1,823,948; Sept. 22.
Rail brake, Foldable block. K. R. Wenzel. 1,823,964; Sept. 22.
Rail, Highway guard. J. H. Ramsey, and C. A. Short. 1,824,368; Sept. 22.
Rail joint. C. Timperio. 1,824,637; Sept. 22.
Rail sanding and cleaning device. H. G. Becker. 1,824,067; Sept. 22.
Range. A. W. Walker. Des. 85,217; Sept. 22.
Razor. R. G. Winkler. 1,824,252; Sept. 22.
Razor blade strips, Heat treating. T. C. Sheehan. 1,824,410; Sept. 22.
Razor, Safety. E. M. Finn. 1,824,338; Sept. 22.
Razor, Safety. H. J. Gaisman. 1,823,976; Sept. 22.
Razor, Safety. R. E. Thompson. 1,824,753; Sept. 22.
Receptacle, Tobacco ash. E. Schultz. Des. 85,208; Sept. 22.
Reciprocating mechanism. W. Bock. 1,824,754; Sept. 22.
Recording device. J. R. M. Tisdale. 1,824,179; Sept. 22.
Refinishing device. J. V. Bueckermann. 1,824,327; Sept. 22.
Reflector signal. V. L. Oestnaes. 1,824,094; Sept. 22.
Refrigerating apparatus. H. B. Hull. 1,823,899; Sept. 22.
Refrigerating apparatus. H. W. Kleist. 1,824,158; Sept. 22.
Refrigerating apparatus. H. F. Smith. 1,823,919; Sept. 22.
Refrigerating machine. W. W. Williams. 1,824,099; Sept. 22.
Refrigerating system. C. G. Bach. 1,824,527; Sept. 22.
Register: *See*—
Cash register.
Regulator: *See*—
Electrical regulator
Relay. O. S. Field. 1,824,129–31; Sept. 22.
Relay for railway signaling systems, Direct current track. W. D. Halles. 1,824,136; Sept. 22.
Relay operating mechanism. H. B. Taylor. 1,824,178; Sept. 22.
Remote control for fluid motors. A. Scott. 1,824,058; Sept. 22.
Remote control system. C. A. Brooks. 1,824,592; Sept. 22.
Repeater apparatus. W. H. Edwards. 1,823,933; Sept. 22.
Reproduction and sending unit, Combined. C. E. Burk. 1,824,655; Sept. 22.
Resin esters, Producing. A. C. Johnston. 1,824,020; Sept. 22.
Resistor unit and forming the same. L. E. Power. 1,824,056; Sept. 22.
Retaining means for furnace wall blocks contacting with wall tubes. E. G. Bailey and R. M. Hardgrove. 1,823,870; Sept. 22.
Reversing mechanism. Hydraulically operated. L. R. Williamson. 1,824,700; Sept. 22.
Rock drilling mechanism. E. G. Gartin. 1,824,477; Sept. 22.
Rod: *See*—
Leveling rod.
Rod bender, Catenary. S. N. Tideman. 1,824,244; Sept. 22.
Rod for warping machines, Lease. J. B. Yacovone. 1,824,522; Sept. 22.
Roller cutter. W. L. Childs. 1,824,329; Sept. 22.
Rolling mill. A. F. Jobke. 1,824,211; Sept. 22.
Roof and floor construction. H. W. Reel. 1,823,987; Sept. 22.
Roofing element. A. C. Fischer. 1,824,471–2; Sept. 22.
Roofs, Repairing furnace. J. P. McLimans. 1,824,222; Sept. 22.
Rotor propelled apparatus. P. E. Klopsteg. 1,824,487; Sept. 22.
Roulette wheel. E. L. Wright. 1,824,647; Sept. 22.
Rubber, Coloring. H. Tochtermann. 1,823,921; Sept. 22.
Safe depository, Night. H. J. Robinson. 1,824,502; Sept. 22.
Safety device for gas burners and the like. G. Thomas. 1,824,696; Sept. 22.
Safety device for ranges. B. Victor and R. E. Abramson. 1,824,312; Sept. 22.
Safety device for power operated switches. S. G. Johnson. 1,824,741; Sept. 22.
Safety means for electric circuits. H. J. Blakeslee. 1,824,115; Sept. 22.
Sand spreading mechanism. G. C. Abbe. 1,824,419; Sept. 22.
Sand treating apparatus. O. W. Hosking. 1,824,350; Sept. 22.
Sawhorse. J. P. Beasley. 1,823,871; Sept. 22.
Saw, Power. P. Lathers. 1,824,555; Sept. 22.
Scale, Combined lever and coil spring type of. M. J. Weber. 1,824,698; Sept. 22.
Screen for showing projected images in lighted rooms and for short exposure photography. R. O. J. Jensen. 1,824,353; Sept. 22.
Screen frame, Window. F. R. Adams. 1,824,187; Sept. 22.
Screw driver. P. L. Robertson. 1,824,624; Sept. 22.
Seal, Identification. P. Donohoe. 1,824,199; Sept. 22.
Sealing. C. A. Matson. 1,824,285; Sept. 22.
Seat: *See*—
Bathtub seat.
Seat for motor cars and the like, Sliding. G. E. Bovingdon. 1,824,193; Sept. 22.
Sewing machine. F. Ashworth. 1,824,063; Sept. 22.
Sewing machine attachment for sewing on buttons. F. Otto. 1,824,564; Sept. 22.
Sewing machines, Hem folder for. R. J. Sailer. 1,823,954; Sept. 22.
Shade operating device. Window. O. W. Lee. 1,824,673; Sept. 22.
Sharpener, Clipper. H. M. Bennett and S. J. Boman 1,824,531; Sept. 22.
Sharpener for razor blades, such as the Gillette and other blades having two cutting edges. E. G. Avignon. 1,823,926; Sept. 22.
Sharpener, Safety razor blade. A. F. Weiss. Des. 85,218; Sept. 22.
Shaving device. J. U. Fisher. 1,824,203; Sept. 22.
Sheet inserting mechanism, Half speed. H. A. W. Wood. 1,824,583; Sept. 22.
Sheet mounting apparatus. A. Broadmeyer. 1,823,876; Sept. 22.

Sheets, Method and apparatus for rolling. R. J. Wean. 1,824,001; Sept. 22.
Sheets, Rolling. J. Kennedy. 1,824,486; Sept. 22.
Shell, Radiator. L. F. Zorc. Des. 85,222–4; Sept. 22.
Shelves, Knockdown sectional display. E. L. O'Neil. 1,824,682; Sept. 22.
Shield, Antifrost. H. H. Steinman. 1,824,751; Sept. 22.
Shield for hair curlers. G. E. Bjorkman. 1,824,006. Sept. 22.
Shoe, Armored. A. A. Williams. 1,823,924; Sept. 22.
Shoe ornamenting machine. C. A. Messmer, jr. Re18,201; Sept. 22.
Shuttle mechanism. F. Ashworth. 1,824,065; Sept. 22.
Sign. C. C. Mueller, jr., and D. C. Wendel. 1,824,444; Sept. 22.
Sign construction. C. E. Fitch. 1,824,204; Sept. 22.
Sign exhibitor. C. T. Marton. 1,824,284; Sept. 22.
Sign, Illuminated. H. K. Palmer. 1,824,620; Sept. 22.
Signal: *See*—
Reflector signal.
Signal for photographic apparatus. A. W. Caps. 1,824,258; Sept. 22.
Signaling system for railroads. O. H. Dicke. 1,824,126; Sept. 22.
Signaling system for railroads. G. E. Duffy and F. T. Casper. 1,824,128; Sept. 22.
Signaling system for railroads. W. K. Howe. 1,824,147; Sept. 22.
Signaling system for railroads. W. H. Reichard. 1,824,173; Sept. 22.
Signaling system for railroads. S. N. Wight. 1,824,184; Sept. 22.
Signaling system for railroads. J. N. Willing. 1,824,251; Sept. 22.
Sink supporting frame. W. J. Reeves. 1,823,915; Sept. 22.
Skate. A. Jung. 1,823,942; Sept. 22.
Skeining machine. H. Crewdson. 1,824,658; Sept. 22.
Slipper, Hard toe ballet. C. De Cristofaro. Des. 85,164; Sept. 22.
Smelting material containing tin oxide. M. G. Freise and H. Maschmeyer. 1,824,475; Sept. 22.
Smoker's appliance. W. F. Bowen. Des. 85,156; Sept. 22.
Snap on milk can cover. P. S. Wind. 1,824,318; Sept. 22.
Snowplow. I. F. Davidson. 1,824,662; Sept. 22.
Sock liner. C. H. Stemmons. 1,824,176; Sept. 22.
Socket, Candle R. Popp. 1,824,231; Sept. 22.
Socket, Lamp. J. H. Kinzler. 1,824,600; Sept. 22.
Sole and preparing the same, Outer. W. H. Bresnahan. 1,824,654; Sept. 22.
Sound box membrane. J. Eggert, and R. Schmidt. 1,824,664; Sept. 22.
Sound propagating device. L. E. Barton. 1,824,650; Sept. 22.
Sound records and records produced thereby, Treating. A. T. Taylor. 1,824,417; Sept. 22.
Space covering structure, such as roofs, walls and the like. W. Klingenberg. 1,823,945; Sept. 22.
Spear. M. S. Black. 1,824,190; Sept. 22.
Speed control device. W. R. Murrow. 1,824,292; Sept. 22.
Speed control of vehicles, Automatic. W. K. Howe. 1,824,144; Sept. 22.
Spice can rack. O. J. Phelps and D. F. Eastburn. 1,824,280; Sept. 22.
Spoon or similar article, Beverage. T. Harding. Des. 85,178; Sept. 22.
Spray gun. C. A. Norgren. 1,824,363; Sept. 22.
Spray gun, Touch up. W. Hersleb and S. Bramsen. 1,824,017; Sept. 22.
Spring: *See*—
Vehicle spring.
Spring clip box. H. J. Chauvin. 1,823,930; Sept. 22.
Spring control for internal combustion engines, Valve. D. G. Roos. 1,824,734; Sept. 22.
Starting charges for engines, Producing compressed. L. F. Barlow. 1,824,457; Sept. 22.
Steam boiler. G. A. Bryan. 1,824,256; Sept. 22.
Steam heating. J. L. Fitts. 1,824,046; Sept. 22.
Steam in the manufacture of phosphorous acids from G. Wietzel. 1,823,923; Sept. 22.
Steels, Making polished annealed stainless. F. Locke, phosphorous and steam, Production of. W. Wild and 1,824,608; Sept. 22.
Steering wheel. E. Karrer. 1,823,908; Sept. 22.
Stencil, sheet. H. L. Shallcross. Des. 18,205; Sept. 22.
Stenographer's appliance. B. Hasbrouck. 1,824,718; Sept. 22.
Stick, Safety packing. A. Wendt. 1,824,314; Sept. 22.
Stop, Automatic train. H. W. Howe. 1,824,143; Sept. 22.
Strand material, Handling. L. F. Lamplough. 1,823,981; Sept. 22.
Strand material, Method of and apparatus for handling. G. L. Cherry. 1,823,885; Sept. 22.
Strand material, Method of and apparatus for handling. J. E. Lodge. 1,823,982; Sept. 22.
Strap edge finishing machine. E. S. Mix. 1,824,678; Sept. 22.
Stretcher, Garment. O. L. Newton. 1,824,293; Sept. 22.
Strip for doors, Movable sealing. C. G. Johnson. 1,824,212; Sept. 22.
Strip, Multiple floor. P. Galassi. 1,824,715; Sept. 22.
Strontium perchlorate composition and preparing the same. G. F. Smith. 1,824,101; Sept. 22.
Structural reenforcing and building member. G. E. Dale. 1,824,076; Sept. 22.
Stuffing material. X. Laucirica. 1,824,489; Sept. 22.
Submarine salvage apparatus. A. Stave. 1,824,694. Sept. 22.
Sulphate of potash, Manufacture of. H. W. Morse. 1,824,361; Sept. 22.
Superheater. C. U. Savoye. 1,824,627; Sept. 22.
Support and journal box, Car frame. R. J. Brittain, jr. 1,823,884; Sept. 22.
Support, Cargo carrier. C. H. Jacobs, and A. F. Harshbarger. 1,824,551; Sept. 22.
Support for electric motor. H. I. Finch. 1,824,202; Sept. 22.
Support, Garment. W. S. Lapworth. 1,824,556; Sept. 22.
Support, Lateral arm awning. F. A. Anton. 1,824,188; Sept. 22.
Supporter, Breast M. C. Middleton. 1,824,613; Sept. 22.
Supporter, Hose. M. Hawie. 1,824,206; Sept. 22.
Supporting device, Removable sign. H. G. Thake. 1,824,578; Sept. 22.
Supporting means, Printing couple. A. W. Wood. 1,824,584; Sept. 22.
Surgical splint. J. J. Ettinger. 1,823,972; Sept. 22.
Suspension for track laying vehicles. H. A. Knox. 1,824,080; Sept. 22.
Switch: *See*—
Control switch. Gauge switch.
Conveyer switch. Time controlled switch.
Disappearing blade switch.
Switch box. R. M. Holmes. 1,824,548; Sept. 22.
Switch machine for railroads. W. K. Howe. 1,824,152; Sept. 22.
Switch mechanism, General utility. I. E. McCabe. 1,824,612; Sept. 22.
Switching means controllable from engine cabs. W. S. Henry. 1,824,139; Sept. 22.
Table: *See*—
Extension table. Ironing table.
Table for tape printing telegraph. R. I. Meader. Des. 85,194; Sept. 22.
Tack setter. W. E. Graffious. 1,824,399; Sept. 22.
Tag, Marking and sealing. J. J. Perquin and H. J. Francken. 1,824,567; Sept. 22.
Take up mechanism. F. Ashworth. 1,824,066; Sept. 22.
Telegraph or teletyper plant. A. Jipp. 1,823,978; Sept. 22.
Telephone directory and pad. B. L. Schmalz. 1,824,628; Sept. 22.
Telephone instrument, Wall. J. O. Cadieux. 1,824,705; Sept. 22.
Telephones, Numeral plate for dial. H. J. Sorrells. 1,823,958; Sept. 22.
Television and facsimile transmission system, Synchronization in. A. C. Stocker. 1,824,635; Sept. 22.
Temperature of unit containers, Apparatus for controlling the. L. G. Copeman. 1,824,535; Sept. 22.
Terminal for circuit elements. H. G. Richter. 1,824,447; Sept. 22.
Textile fabric. F. E. Rudd. Des. 85,204; Sept. 22.
Textile fabric or similar article. F. W. Bader. Des. 85,146; Sept. 22.
Textile fibres or yarns, Apparatus for twisting. J. Berthier. 1,824,464; Sept. 22.
Thermostat. H. J. Blakeslee. 1,824,114; Sept. 22.
Thermostatic control. R. H. Shadrick. 1,824,239; Sept. 22.
Thrashing and straw reducing machine, Axial. F. Schlayer. 1,824,632; Sept. 22.
Threads made of cellulosic material at their issue from spinning machines, Device for curling. M. Dassonville. 1,824,661; Sept. 22.
Thumb sucking preventive. P. C. Kaiser. 1,823,904; Sept. 22.
Tile cutting machine. O. Walter. 1,824,000; Sept. 22.
Tile or brick, Making insulating. E. B. Bjorkman. 1,823,928; Sept. 22.
Time controlled switch. H. W. Driftmeyer. 1,824,040; Sept. 22.
Time recording. L. E. Kittredge and L. A. Dorff. 1,823,944; Sept. 22.
Timing apparatus. R. M. Hicks. 1,824,348; Sept. 22.
Tin pack handling mechanism. J. W. Perry. 1,824,228; Sept. 22.
Tire. B. Darrow. Des. 85,169; Sept. 22.
Tire. A. S. Norment. 1,824,680; Sept. 22.
Tire. E. M. Sears. Des. 85,209; Sept. 22.
Tire removing machine. G. Van Daam. 1,824,246; Sept. 22.
Toaster, Food. J. J. Noeth and F. E. Hummel. 1,824,302; Sept. 22.
Tongs, Ice. J. R. Webb. 1,824,644; Sept. 22.
Tool. F. J. Hagerling. 1,824,133; Sept. 22.
Tool. O. Neher. 1,824,616; Sept. 22.
Tool, Cotton pin. S. J. Hoff. 1,824,083; Sept. 22.
Tool coupling, Rotary. I. J. Snader. 1,824,509; Sept. 22.
Tool, Cylinder edge dressing. C. A. Olson. 1,824,494; Sept. 22.
Tool for shaping the ends of conduits. A. G. Steinmayer. 1,823,959; Sept. 22.
Tool joint. C. H. M. Bull. 1,824,257; Sept. 22.
Tool, Packing off. R. M. Marr. 1,824,283; Sept. 22.
Tool, Piston pin. K. B. Neu. 1,824,743; Sept. 22.
Tool, Tube flanging. W. H. Burt. 1,823,966; Sept. 22.

Tool, Valve tappet adjusting. W. L. Rowland. 1,824,300; Sept. 22.
Tools, Truing means for helical cutting. E. W. Miller. 1,824,442; Sept. 22.
Tooth, Replaceable porcelain tipped pontic. C. E. Friars. 1,823,934; Sept. 22.
Torch and method therefor, Underwater. E. Elisberg. 1,824,307; Sept. 22.
Toy. E. G. Masters. 1,824,677; Sept. 22.
Toy gun. F. T. Russell. 1,824,503; Sept. 22.
Toy gun of the repeater type. F. T. Russell. 1,824,504; Sept. 22.
Toy vehicle and guiding apparatus therefor. J. F. Key. 1,824,214; Sept. 22.
Track diagram, Illuminated. J. F. Merkel. 1,824,164; Sept. 22.
Track instrument. K. W. Abendroth. 1,824,108; Sept. 22.
Traction device. H. F. Ames. 1,824,525; Sept. 22.
Tractor lug. C. J. Nottke. 1,824,227; Sept. 22.
Traffic controlling apparatus, Railway. G. Baumgartner. 1,824,589; Sept. 22.
Traffic controlling apparatus, Railway. C. W. Fallor. 1,824,597; Sept. 22.
Traffic controlling apparatus, Railway. L. V. Lewis. 1,824,605; Sept. 22.
Traffic controlling apparatus, Railway. B. E. O'Hagan. 1,824,619; Sept. 22.
Traffic controlling system for railroads. A. Langdon. 1,824,160; Sept. 22.
Traffic controlling system, Railway. A. T. Carter. 1,824,120; Sept. 22.
Traffic controlling system, Railway. S. N. Wight. 1,824,185; Sept. 22.
Train control. W. K. Howe. 1,824,145; Sept. 22.
Train control. W. H. Reichard. 1,824,174; Sept. 22.
Train control, Automatic. T. H. Thomas. 1,824,059; Sept. 22.
Train control system, Continuous inductive. W. D. Hailes. 1,824,134; Sept. 22.
Train control system, Continuous inductive. W. D. Hailes. 1,824,749; Sept. 22.
Train control system for single track railroads. W. H. Reichard. 1,824,171; Sept. 22.
Train control system, Intermittent inductive. C. S. Bushnell. 1,824,118; Sept. 22.
Train dispatching system for railroads. F. W. Brixner. 1,824,117; Sept. 22.
Train dispatching system for railroads. W. D. Hailes. 1,824,135; Sept. 22.
Train dispatching system for railroads. R. M. Phinney. 1,824,169; Sept. 22.
Train dispatching system for railroads. S. N. Wight. 1,824,182–3; Sept. 22.
Transmission for tickers, Automatic tape-controlled. E. R. Wheeler. Re18,208; Sept. 22.
Transmitting system, Picture. D. M. Moore. 1,824,731; Sept. 22.
Trap: *See*—
Insect trap.
Tray, Ash. E. T. Bahner. Des. 85,147–9; Sept. 22.
Tray or similar article, Ash. L. Cross. Des. 85,166; Sept. 22.
Tripod, Collapsible. G. Miller. 1,824,165; Sept. 22.
Truck. B. C. Rhodes and C. W. Conroe. 1,824,234; Sept. 22.
Truck, Coal. H. W. Hopkins. 1,823,941; Sept. 22.
Truck for rotatably mounted structures. E. V. Cullen and A. G. A. Schmidt. 1,824,196; Sept. 22.
Truck, Lift. I. Eisenberg. 1,824,201; Sept. 22.
Tube: *See*—
Electric discharge tube. Luminescent tube.
Irrigation tube. Photo-electric tube.
Tube and pipe bender. B. R. Little. 1,824,026; Sept. 22.
Tumbler or article of similar nature, Glass. R. J. Beatty. Des. 85,152; Sept. 22.
Turbine, Steam. B. B. Wood. 1,824,106; Sept. 22.
Twister, Electrically heated. E. L. Smith and F. B. Fuller. 1,824,307; Sept. 22.
Type, Font of. I. O. Witte. Des. 85,221; Sept. 22.
Typewriting machine. H. L. Pitman. 1,824,099; Sept. 22
Typewriting machine. J. A. B. Smith. 1,824,102; Sept. 22.
Umbrella. W. Bouma. 1,824,192; Sept. 22.
Underskin of vessels automatically, Aerating the. F. D. Vogler. 1,824,313; Sept. 22.
Upholstery, Furniture. H. Siskin. 1,824,306; Sept. 22.
Valve and manufacturing the same. M. J. Boyle. 1,824,322; Sept. 22.
Valve and method of manufacture. M. J. Boyle. 1,824,323; Sept. 22.
Valve and operating same, Diaphragm. F. W. Robertshaw and G. A. Robertshaw. 1,824,057; Sept. 22.
Valve attachment for flush tank faucets, Control. P. C. Gibbons. 1,824,716; Sept. 22.
Valve, Automatic safety. C. D. Bullard. 1,824,072; Sept. 22.
Valve, Butterfly. E. W. Orton. 1,824,168; Sept. 22.
Valve device, Double check. E. R. Fitch. 1,824,013; Sept. 22.
Valve device, Straight air emergency. J. C. McCune. 1,824,053; Sept. 22.
Valve for oil wells, Underground. C. R. Harper. 1,823,936; Sept. 22.
Valve for steam engines, Balanced slide. W. J. Miller. 1,824,224; Sept. 22.
Valve for well casings. W. E. King. 1,824,157; Sept. 22.
Valve lock, Adjustable. H. and A. Frankfort. 1,823,891; Sept. 22.
Valve mechanism. W. E. Shew. 1,823,918; Sept. 22.
Valve mechanism, Brine retaining and discharge. V. Schulle. 1,824,175; Sept. 22.
Valve mechanism for automatic train pipe couplings. T. H. Thomas and U. A. Whitaker. 1,824,060; Sept. 22.
Valve operating mechanism for tanks. R. D. George. 1,823,935; Sept. 22.
Valve, Rotary slide. W. Spieser. 1,824,511; Sept. 22.
Valve structure. P. D. Hushour. 1,824,434; Sept. 22.
Vapors and liquids, Absorption of. I. N. Beall. 1,824,458; Sept. 22.
Vapors with solids, Apparatus for contacting. T. T. Gray. 1,823,895; Sept. 22.
Variable resistance. E. R. Stoekle. 1,824,242; Sept. 22.
Vehicle and trailer brake. G. I. Rawson and B. H. Jackson. 1,824,296; Sept. 22.
Vehicle, Automobile carrying. F. M. Reid. 1,824,370; Sept. 22.
Vehicle body. C. H. Widman. Des. 85,219; Sept. 22.
Vehicle brake. A. Khezarjian. 1,824,552; Sept. 22.
Vehicle, Folding. N. Straussler. Re18,203; Sept. 22.
Vehicle for transporting automobiles or the like. F. M. Reid, P. Schon, and C. M. Eason. 1,824,369; Sept. 22.
Vehicle spring, Overload. A. M. J. and A. A. Pohl. 1,824,295; Sept. 22.
Vehicle suspension. C. Orsett. 1,824,096; Sept. 22.
Vehicle suspension, Motor. W. G. Hasley. 1,824,205; Sept. 22.
Vehicle, Trailer tank. A. A. Kramer. Des. 85,187; Sept. 22.
Vehicle wheel, Cushioned. G. Vordermark. 1,824,520; Sept. 22.
Vein retainer. R. E. Tyvand. 1,824,516; Sept. 22.
Vending machine. H. Greenhill. 1,823,896; Sept. 22.
Vending machine. C. C. Miller. 1,824,441; Sept. 22.
Vine supporting device. C. E. Robbins. 1,824,689; Sept. 22.
Waffle iron. R. E. Patten. Des. 85,199; Sept. 22.
Walker, Folding. I. M. Petersime. 1,824,406; Sept. 22.
Wall fixture attaching means. G. J. Morris. 1,824,492; Sept. 22.
Washer. R. W. Rigler. 1,824,688; Sept. 22.
Washing machine and automatic control therefor. F. Schaum. 1,824,237; Sept. 22.
Water control system, Boiler feed. J. M. Barrett. 1,824,423; Sept. 22.
Water displaying and illuminating device. E. Vedovelli. 1,824,518; Sept. 22.
Water heater. F. J. Bedner. 1,824,111; Sept. 22.
Water propulsion device. L. J. and H. L. Johnson. 1,824,740; Sept. 22.
Water supply heater. A. J. Kercher. 1,824,155; Sept. 22.
Waterer, Chicken- C. Johnson and M. H. Keating. 1,824,154; Sept. 22.
Watt-hour meter. M. Bower. 1,823,929; Sept. 22.
Waxer and polisher, Combined floor. J. R. Campbell. 1,824,534; Sept. 22.
Web converting apparatus. W. H. Cannard. 1,823,877; Sept. 22.
Wedge coupled joint. E. M. Erlandson. 1,823,971; Sept. 22.
Wedge key block. W. J. Miller and F. R. Jones. 1,824,729; Sept. 22.
Weighing and sorting machine, Automatic egg. C. Smith. 1,824,693; Sept. 22.
Welding method. H. J. Morgan. 1,824,166; Sept. 22.
Wheel: *See*—
Dual wire wheel. Steering wheel.
Roulette wheel. Vehicle wheel.
Wheel and brake shoe. J. L. Connolly. 1,823,879; Sept. 22.
Wheel puller. R. B. Brenneman and W. H. Monaghan. 1,824,033; Sept. 22.
Wind up mechanism. M. Castricum and P. L. Butterfield. 1,824,593; Sept. 22.
Wire clamp. S. P. Becker. 1,824,387; Sept. 22.
Wire polishing machine. A. K. Sanderson. 1,823,989; Sept. 22.
Wire rope machine and the like. D. W. Clark. 1,823,886; Sept. 22.
Wire take off mechanism. A. K. Sanderson. 1,823,990; Sept. 22.
Wire, Treating. R. C. Pierce. 1,824,568; Sept. 22.
Woods for cellulose, Treatment of. K. G. Bergström and A. F. Zennström. 1,824,701; Sept. 22.
Wool, Apparatus and process of treating mineral. C. C. Hall. 1,824,430; Sept. 22.
Wrappers, Preparing cigar. J. F. Halstead. 1,824,400; Sept. 22.
Wrapping machine. H. Scholj. 1,824,374; Sept. 22.
Wrapping machine. E. L. Smith. 1,824,378; Sept. 22.
Wrapping machine, Duplex. W. B. Bronander. 1,824,390; Sept. 22.
Wrapping machines, Rear tucking mechanism for. E. Haas. 1,824,266; Sept. 22.
Wringer: *See*—
Mop wringer.
Writing surface for recording instruments. M. Tibbetts. 1,824,513; Sept. 22.
Writing upon paper and other fabrics, Indelibly. W. L. Gill. 1,824,341; Sept. 22.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 22, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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California Corrugated Culvert Co., Berkeley, Calif. Metal pipe and tubing. 287,654; Sept. 29; Serial No. 313,281; published July 14, 1931. Class 13.
Call, D. W., doing business as Soonite Company, San Francisco, Calif. Powdered cleansing preparation. 287,459; Sept. 29; Serial No. 313,957; published July 21, 1931. Class 4.
Celanese Corporation of America, New York, N. Y. Fabrics made wholly or partially of cellulose derivatives. 287,583; Sept. 29; Serial No. 314,981; published July 14, 1931. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 287,593; Sept. 29; Serial No. 315,629; published July 21, 1931. Class 42.
Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Copper downspouts, metal dividing strips, brass railings, etc. 287,530; Sept. 29; Serial No. 312,042; published July 21, 1931. Class 12.
Clayton Tablet Company. (See Livezey, Henry N.)
Cleveland Graphite Bronze Company, The, Cleveland, Ohio. Plain machinery bearings. 287,670; Sept. 29. Class 23.
Clicquot Club Company, Millis, Mass. Beverages, syrups, extracts, etc. 287,512; Sept. 29; Serial No. 315,898; published July 21, 1931. Class 45.
Closet Shop, The. (See Herzog, Mrs. George.)
Coe, Frederick E., Twickenham, England. Chemical substances. 287,518; Sept. 29; Serial No. 314,149; published July 14, 1931. Class 6.
Cohn & Rosenberger, Inc., New York, N. Y. Display trays. 287,434; Sept. 29; Serial No. 311,128; published July 21, 1931. Class 2.
Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. 287,482; Sept. 29; Serial No. 314,982; published July 14, 1931. Class 6.
Columbia River Packers Association, Inc., Astoria, Oreg. Canned salmon. 287,552; Sept. 29; Serial No. 295,068; published July 7, 1931. Class 46.
Columbian Art Works, Inc., Milwaukee, Wis. Calendar pads and stands. 287,549; Sept. 29; Serial No. 280,541; published July 14, 1931. Class 37.
Commander-Larabee Corporation, Minneapolis, Minn. Wheat flour. 287,525; Sept. 29; Serial No. 313,905; published June 23, 1931. Class 46.
Corwin, David S., Greenport, N. Y. Combination game of croquet and pool. 287,495; Sept. 29; Serial No. 314,792; published July 14, 1931. Class 22.
Cramerton Mills, Incorporated, Cramerton, N. C. Cotton piece goods. 287,592; Sept. 29; Serial No. 315,487; published July 21, 1931. Class 42.
Curtis, David, doing business as De-Ce Products Co. of New York, New York, N. Y. Anæsthetics, preparations for sterilizing and preserving dental and surgical instruments, eugenol, etc. 287,622; Sept. 29; Serial No. 313,332; published June 9, 1931. Class 6.
Daltroff, E., & Cie., doing business as Parfumerie Caron, Paris, France. Perfumery. 287,517; Sept. 29; Serial No. 314,841; published July 14, 1931. Class 6.
Davies & Sullivan Company, New York, N. Y. Coffee. 287,433; Sept. 29; Serial No. 310,162; published July 21, 1931. Class 46.
Davis, Bernard E., doing business as Dav-O-Lin Company, New York, N. Y. Medicinal preparation. 287,614; Sept. 29; Serial No. 313,585; published July 14, 1931. Class 6.
Dav-O-Lin Company. (See Davis, Bernard E.)
Dean Rubber Manufacturing Company, North Kansas City, Mo. Prophylactic rubber articles. 287,568–9; Sept. 29; Serial Nos. 314,486–7; published July 14, 1931. Class 44.
De Bevoise, Charles R., Company, Newark, N. J. Elastic fabrics. 287,594; Sept. 29; Serial No. 315,675; published July 21, 1931. Class 42.
De-Ce Products Co. of New York. (See Curtis, David.)
De Lisser Extract Co. Inc., New York, N. Y. Maltless beverages and sirups and extracts for making the same. 287,503; Sept. 29; Serial No. 315,676; published July 14, 1931. Class 45.
Delson, John, doing business as The John Delson Drug Co., New York, N. Y. Toilet articles. 287,571; Sept. 29; Serial No. 311,564; published July 14, 1931. Class 6.
Detroit Daily Mirror, Inc., Detroit, Mich. Newspaper. 287,463; Sept. 29; Serial No. 314,400; published July 7, 1931. Class 38.
Detroit Waste Works. (See Gallagher, John C.)
Dolge, C. B., Company, The, Westport, Conn. Chlorine disinfectant. 287,564; Sept. 29; Serial No. 309,420; published July 14, 1931. Class 6.
Downey, T. P., Birmingham, Ala. Medicinal preparation. 287,613; Sept. 29; Serial No. 311,234; published July 21, 1931. Class 6.
Dunham, James H., & Co., New York, N. Y. Fabrics 287,579; Sept. 29; Serial No. 314,103; published July 21, 1931. Class 42.
Duplan Silk Corporation, New York, N. Y. Piece goods. 287,617; Sept. 29; Serial No. 311,268; published July 14, 1931. Class 42.
Eagle Pencil Company, New York, N. Y. Lead pencils. 287,472; Sept. 29; Serial No. 315,345; published July 14, 1931. Class 37.
Eastern Outfitting Co. of Los Angeles, Calif., Los Angeles, Belvedere, and Huntington Park, Calif. Gas ranges. 287,650; Sept. 29; Serial No. 313,949; published July 14, 1931. Class 34.
Eau de Cologne- & Parfümerie-Fabrik ("Glockengasse No. 4711") gegenüber der pferdepost von Ferd. Mülhens. (See Mülhens, Paul P.)
Elite Import Co. Inc., New York, N. Y. Glassware. 287,588; Sept. 29; Serial No. 315,194; published July 21, 1931. Class 33.
Etablissements Schaeffer & Cie., Pfastatt-le-Chateau, France. Piece goods of cotton, linen, hemp, etc. 287,630; Sept. 29; Serial No. 315,306; published July 21, 1931. Class 42.

Etablissements Schaeffer & Cie. Pfastatt-le-Chateau, France. Piece goods. 287,631; Sept. 29; Serial No. 315,307; published July 21, 1931. Class 42.
Evansville Tool Works, Inc., Evansville, Ind. Handled axes, hatchets, and hammers. 287,491; Sept. 29; Serial No. 311,089; published Apr. 28, 1931. Class 23.
Everlastik, Inc., Chelsea, Mass. Narrow elastic webbing. 287,625; Sept. 29; Serial No. 314,046; published July 14, 1931. Class 40.
Fairfacts Company, The, New York, N. Y. Bath-room accessories. 287,656; Sept. 29; Serial No. 309,337; published July 21, 1931. Class 13.
Fay, Loyola J., doing business as Par-Plus Laboratories, Spokane, Wash. Anæsthetic. 287,600; Sept. 29; Serial No. 313,844; published July 14, 1931. Class 6.
Feltes, Henry, Chicago, Ill. Paints, paint enamels, varnishes, etc. 287,496; Sept. 29; Serial No. 314,605; published July 21, 1931. Class 16.
Fisher, Jessie M., Salisbury, N. C., and Brigantine Beach, N. J. Toilet preparations. 287,662; Sept. 29. Class 6.
Fishkin, Samuel, doing business as Samuel Fishkin & Co., New York, N. Y. Overcoats, topcoats, and suits. 287,674; Sept. 29. Class 39.
Floraderm Laboratories, Long Island City, N. Y. Face creams, lotions, toilet waters, etc. 287,490; Sept. 29. Serial No. 314,049; published July 21, 1931. Class 6.
Foremost Fabrics Corporation, New York, N. Y. Fabrics. 287,560; Sept. 29; Serial No. 307,887; published July 14, 1931. Class 42.
Forest City Rubber Company, Cleveland, Ohio. Pads, foot straighteners, and bandages. 287,640; Sept. 29; Serial No. 313,732; published July 21, 1931. Class 44.
Formfit Company, The, Chicago, Ill. Corsets, corsetwaists, brassières, etc. 287,676; Sept. 29. Class 39.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 287,448–9; Sept. 29; Serial Nos. 315,734–5; published July 21, 1931. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 287,450–1; Sept. 29; Serial Nos. 315,727–8; published July 21, 1931. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 287,452; Sept. 29; Serial No. 315,740; published July 21, 1931. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 287,531; Sept. 29; Serial No. 315,743; published July 21, 1931. Class 42.
Fox, T. C., & Sons, Newfield, N. J. Medicinal poultry preparations. 287,533; Sept. 29; Serial No. 313,110; published July 21, 1931. Class 6.
Gallagher, John C., doing business as Detroit Waste Works, Detroit, Mich. Golfers' towels. 287,580; Sept. 29; Serial No. 314,236; published July 14, 1931. Class 42.
Gairee Products Co., Inc. (See Regal Products Co., assignor.)
General Silk Corporation, New York, N. Y. Thread. 287,629; Sept. 29; Serial No. 315,392; published July 14, 1931. Class 43.
Globe Machine & Stamping Company, The, Cleveland, Ohio. Automobile radiator grilles. 287,645; Sept. 29; Serial No. 314,953; published July 14, 1931. Class 19.
Godman, The H. C., Company, Columbus, Ohio. Shoes. 287,673; Sept. 29. Class 39.
Golbur, Inc., Chicago, Ill. Potato chips. 287,442; Sept. 29; Serial No. 314,940; published July 21, 1931. Class 46.
Goldsmith, Jeanne V., doing business as Terri Cosmetics, New York, N. Y. Astringents. 287,477; Sept. 29; Serial No. 314,644; published July 14, 1931. Class 6.
Gruen, Paul R., Chicago, Ill. Periodical magazine. 287,457; Sept. 29; Serial No. 313,471; published July 14, 1931. Class 38.
Guarantee Shoe Company, The, San Antonio, Tex. Shoes. 287,616; Sept. 29; Serial No. 311,188; published July 21, 1931. Class 39.
Haas Brothers Fabrics Corporation, New York, N. Y. Silk, cotton, etc., piece goods. 287,586; Sept. 29; Serial No. 315,095; published July 21, 1931. Class 42.
Haggard, Via B., Blackwell, Okla. Medicinal preparation. 287,478; Sept. 29; Serial No. 314,759; published July 14, 1931. Class 6.
Hair Research Laboratories. (See Stein, Hermann.)
Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. 287,663; Sept. 29. Class 42.
Hertz, Max, Leather Company, Newark, N. J. Leather. 287,524; Sept. 29; Serial No. 314,993; published July 14, 1931. Class 1.
Herzog, Mrs. George, doing business as The Closet Shop, New York, N. Y. Bed and bath linens, cloths, and napkins, etc. 287,550; Sept. 29; Serial No. 283,334; published July 21, 1931. Class 42.
Hill, Thos. G., & Co. Limited, Manchester, England. Cotton piece goods. 287,581; Sept. 29; Serial No. 314,865; published July 14, 1931. Class 42.
Hillsboro Woolen Mill Co., Inc., Hillsboro, N. H. Wool fabrics. 287,589; Sept. 29; Serial No. 315,231; published July 14, 1931. Class 42.
Hiltebrandt, Dr., Zahnfabrik Aktiengesellschaft, Essen, Germany. Artificial teeth. 287,565; Sept. 29; Serial No. 309,778; published July 21, 1931. Class 44.
Hindustan Art Co., Inc., New York, N. Y. India prints of cotton or linen. 287,513; Sept. 29; Serial No. 309,080; published July 21, 1931. Class 42.
Hodgson, Millard B., doing business as George W. Brady & Company, Chicago, Ill. X-ray film packets. 287,637; Sept. 29; Serial No. 315,357; published July 14, 1931. Class 44.
Holland, Joshua, doing business as Vernon Laboratories, Chicago, Ill. Anti-pain preparation. 287,474; Sept. 29; Serial No. 314,439; published July 14, 1931. Class 6.
Hollstein, George, San Francisco, Calif. Electrical apparatus for the treatment of patients. 287,660; Sept. 29. Class 44.
Hope Construction & Refining Company, Pittsburgh, Pa. Hydrocarbon gases. 287,486; Sept. 29; Serial No. 314,051; published July 14, 1931. Class 6.
Hope Construction & Refining Company, Pittsburgh, Pa. Hydrocarbon gases. 287,492; Sept. 29; Serial No. 314,052; published July 14, 1931. Class 6.
Houbigant, Inc., New York, N. Y. Perfume, toilet water, powder, etc. 287,604; Sept. 29; Serial No. 314,614; published July 21, 1931. Class 6.
Houbigant, Inc., New York, N. Y. Perfume, toilet water, powder, etc. 287,605; Sept. 29; Serial No. 314,613; published July 21, 1931. Class 6.
Houbigant, Inc., New York, N. Y. Perfume, toilet water, powder, etc. 287,606–8; Sept. 29; Serial Nos. 314,609–11; published July 21, 1931. Class 6.
Hygienic Tube and Container Company, Newark, N. J. Containers in tube like formation, cylindrical cans, collapsible tubes, etc. 287,652; Sept. 29; Serial No. 313,600; published July 14, 1931. Class 2.
Ilg Electric Ventilating Company, Chicago, Ill. Heating systems. 287,651; Sept. 29; Serial No. 313,784; published July 14, 1931. Class 34.
Indianapolis Paint & Color Co., Indianapolis, Ind. Paints, paint enamels, wood stains, etc. 287,469; Sept. 29; Serial No. 315,200; published July 14, 1931. Class 16.
Indianapolis Paint & Color Co., Indianapolis, Ind. Paint cleaners. 287,470; Sept. 29; Serial No. 315,201; published July 21, 1931. Class 4.
International Compositions Company, Inc., New York, N. Y. Paints. 287,497; Sept. 29; Serial No. 314,203; published July 14, 1931. Class 16.
J. H. Specialty Manufacturing Corp., New York, N. Y. Coil springs. 287,647; Sept. 29; Serial No. 314,516; published July 21, 1931. Class 13.
Kelley, Maude T., Mount Vernon, N. Y. Washing devices. 287,649; Sept. 29; Serial No. 314,057; published July 14, 1931. Class 24.
Keplar, James M., Elkhart, Ind. Card index. 287,462; Sept. 29; Serial No. 314,241; published July 14, 1931. Class 37.
Kestenman Bros. Mfg. Co., Providence, R. I. Wrist-watch bracelets. 287,677; Sept. 29. Class 28.
Kirkman & Son, Brooklyn, N. Y., assignor, by mesne assignments, to Kirkman & Son, Inc. Preparation for washing windows, porcelain fixtures, painted walls, etc. 287,659; Sept. 29. Class 4.
Kress, S. H., & Co., New York, N. Y. Playing cards. 287,494; Sept. 29; Serial No. 314,918; published July 21, 1931. Class 22.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Canned fruits and fruit preserves, canned vegetables, meats, etc. 287,548; Sept. 29; Serial No. 279,479; published June 30, 1931. Class 46.
Kuhns & Allen, Kansas City, Mo. Sheet glass and products. 287,626; Sept. 29; Serial No. 314,163; published July 14, 1931. Class 33.
Lambert Marketing Company, Sacramento, Calif. Fresh vegetables and fruits. 287,439; Sept. 29; Serial No. 314,372; published July 14, 1931. Class 46.
Lamireaud, Omer, New York, N. Y. Instructive educational games. 287,508; Sept. 29; Serial No. 315,150; published July 21, 1931. Class 22.
Lane Bros. Co., Boston, Mass. Boots and shoes. 287,584; Sept. 29; Serial No. 315,151; published July 21, 1931. Class 39.
Lanteen Laboratories, Inc., Chicago, Ill. Applicators. 287,639; Sept. 29; Serial No. 313,300; published July 21, 1931. Class 44.
Le Doyen Co., Frank J., Baltimore, Md. Dressing and polish for all finished white leather. 287,454; Sept. 29; Serial No. 312,921; published July 21, 1931. Class 4.
Lemke, Dr. H. C., Medicine Co., Chicago, Ill. Mixtures of herbs, compounds for constipation, etc. 287,522; Sept. 29; Serial No. 301,955; published July 14, 1931. Class 6.
Levy, S. J., & Sons, New York, N. Y. Hosiery. 287,675; Sept. 29. Class 39.
Livezey, Henry N., doing business as Clayton Tablet Company, Los Angeles, Calif. Medicines. 287,572; Sept. 29; Serial No. 310,019; published July 14, 1931. Class 6.
M and M Wood Working Company, Portland, Oreg. Doors and other mill work and ply wood. 287,598; Sept. 29; Serial No. 308,260; published July 21, 1931. Class 12.
Maiden Form Brassiere Co. Inc., New York, N. Y. Girdles. 287,679; Sept. 29. Class 39.
Malitone, Inc. (See Richardson, James R.)
Markillie, Walter T., San Francisco, Calif. Maltless flavor bases. 287,500; Sept. 29; Serial No. 312,810; published July 14, 1931. Class 45.
Martin-Senour Company, The, Cleveland, Ohio. Paints, enamels, varnishes, etc. 287,467; Sept. 29; Serial No. 314,853; published July 14, 1931. Class 16.

Matthews, Paul P., doing business as Salvador Products Co., Cleveland, Ohio. Ointment. 287,483; Sept. 29; Serial No. 314,336; published July 14, 1931. Class 6.
Matzka, Zoya, Rye Hill, Monroe, N. Y. Fruit juices. 287,553; Sept. 29; Serial No. 298,581; published July 21, 1931. Class 45.
McGrew and Nye, Payne, Ohio. Belt dressing. 287,453; Sept. 29; Serial No. 311,411; published July 14, 1931. Class 4.
Meade, Harry E., doing business as Mo-Ja Company, Tulsa, Okla. Beverages. 287,502; Sept. 29; Serial No. 315,856; published July 21, 1931. Class 45.
Menuen Company, The, Newark, N. J. Powder. 287,514; Sept. 29; Serial No. 314,455; published July 14, 1931. Class 6.
Met Cleaning Products Company. (See Aron, Michael.)
Meyer, Carl W., Toledo, Ohio. Preparations for the treatment of hemorrhoids. 287,638; Sept. 29; Serial No. 313,506; published July 14, 1931. Class 6.
Miller Products Company, Portland, Oreg. Insecticide preparation. 287,501; Sept. 29; Serial No. 312,678; published July 7, 1931. Class 6.
Mme. Céleste Better Form Foundation Garment, New York, N. Y. Corselets. 287,619; Sept. 29; Serial No. 312,281; published July 21, 1931. Class 39.
Mo-Ja Company. (See Meade, Harry E.)
Monarch Shoe Co., Inc., Chicago, Ill. Baby shoes. 287,541; Sept. 29; Serial No. 313,887; published July 14, 1931. Class 39.
Mülhens, Paul P., doing business as Eau de Cologne- & Parfümerie-Fabrik ("Glockengasse No. 4711") gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany. Eau de Cologne water, perfumery, shampoo, etc. 287,515; Sept. 29; Serial No. 311,017; published July 14, 1931. Class 6.
Muscle Shoals Laboratories, Inc., New York, N. Y. Toilet preparations. 287,610; Sept. 29; Serial No. 314,390; published July 21, 1931. Class 6.
National Enameling & Stamping Co., Milwaukee, Wis. Kitchenette sets. 287,486–7; Sept. 29; Serial Nos. 313,145–6; published July 14, 1931. Class 2.
New Standard Corporation, Mount Joy, Pa. Ice-cream freezers. 287,511; Sept. 29; Serial No. 314,924; published July 14, 1931. Class 31.
Newton Manufacturing Company, Newton, Iowa. Bat and ball game. 287,493; Sept. 29; Serial No. 314,925; published July 14, 1931. Class 22.
New York Hair Co., Inc., New York, N. Y. Permanent wave machines for human hair, and parts therefor. 287,566; Sept. 29; Serial No. 314,820; published July 21, 1931. Class 44.
Oesterling, P. J., & Son, Inc., Butler, Pa. Eggs. 287,667; Sept. 29. Class 46.
Orange Cove Citrus Association, Orange Cove, Calif. Fresh citrus fruits. 287,680; Sept. 29. Class 46.
Pacific Commercial Company, San Francisco, Calif. Canned fish. 287,561; Sept. 29; Serial No. 308,750; published July 14, 1931. Class 46.
Palmer, S. A., Limited, Leeds, England. Herbal medicine. 287,523; Sept. 29; Serial No. 301,358; published July 21, 1931. Class 6.
Pantex Pressing Machine, Inc., Pawtucket, R. I. Garment steaming and pressing machines and parts thereof. 287,655; Sept. 29; Serial No. 310,067; published July 21, 1931. Class 24.
Parker, Kate E., Santa Rosa, Calif. Mineral water. 287,504; Sept. 29; Serial No. 315,603; published July 14, 1931. Class 45.
Parfumerie Caron. (See Daltroff, E., & Cie.)
Par-Plus Laboratories. (See Fay, Loyola J.)
Patterson Publishing Company, Chicago, Ill. Magazine. 287,460; Sept. 29; Serial No. 314,071; published July 14, 1931. Class 38.
Paul, Samuel A., doing business as The Paul Proprietary Co., Auckland, New Zealand. Preparation for the treatment of consumption, etc. 287,520; Sept. 29; Serial No. 313,933; published July 14, 1931. Class 6.
Pearl, Theodore, doing business as Pearl Handkerchief Company, New York, N. Y. Handkerchiefs. 287,576; Sept. 29; Serial No. 313,609; published July 14, 1931. Class 42.
Peek and Velsor, Inc., New York, N. Y. Botanical drugs. 287,532; Sept. 29; Serial No. 313,668; published July 21, 1931. Class 6.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Paints. 287,505; Sept. 29; Serial No. 315,501; published July 21, 1931. Class 16.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Pyroxylin lacquers. 287,545; Sept. 29; Serial No. 315,500; published July 14, 1931. Class 16.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Paints. 287,546; Sept. 29; Serial No. 315,499; published July 14, 1931. Class 16.
Planters Mfg. Co., Inc., Portsmouth, Port Norfolk, West Norfolk, Pughs, and Churchland, Va. Baskets made of wood. 287,665–6; Sept. 29. Class 2.
Priester, Maximilian I., Brooklyn, N. Y. Checks. 287,461; Sept. 29; Serial No. 314,012; published July 14, 1931. Class 37.
Protex Corporation of America, Springfield, Mass. Insecticide. 287,488; Sept. 29; Serial No. 314,377; published July 21, 1931. Class 6.
Queen Anne Candy Company, Inc., Seattle, Wash. Candy. 287,669; Sept. 29. Class 46.
Quigley Company, Inc., New York, N. Y. Cleaning compound. 287,468; Sept. 29; Serial No. 314,964; published July 21, 1931. Class 4.
Reau, Paul O. A., Glenay, par St. Varent, France. Paint. 287,456; Sept. 29; Serial No. 313,205; published July 21, 1931. Class 16.
Regal Products Co., San Francisco, Calif., and New York, N. Y., assignor to Gairee Products Co., Inc., New York, N. Y. Preparations for destroying of moth larvæ and eggs. 287,526; Sept. 29; Serial No. 311,246; published July 14, 1931. Class 6.
Reliance Pencil Corporation, New York, N. Y. Pencils. 287,471; Sept. 29; Serial No. 315,276; published July 14, 1931. Class 37.
Rentschler, Dr., & Co., Laupheim, Germany. Medicinal preparations. 287,516; Sept. 29; Serial No. 311,073; published July 21, 1931. Class 6.
Richardson, James R., doing business as Malitone, Inc., Los Angeles, Calif. Alkaline laxative and antiseptic solution. 287,519; Sept. 29; Serial No. 311,886; published July 14, 1931. Class 6.
Richardson, James R., doing business as Adelanto Cider Mill, Los Angeles, Calif. Beverages. 287,595; Sept. 29; Serial No. 301,511 published July 21, 1931. Class 45.
Rockhill, Malcolm E., doing business as Universal Glass-Spra Company, Tulsa, Okla. Glass cleaning preparation. 287,556; Sept. 29; Serial No. 301,127; published July 14, 1931. Class 4.
Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk piece goods. 287,582; Sept. 29; Serial No. 314,464; published July 14, 1931. Class 42.
Ross, Chester W., Medford, Mass. Portable practice device for golf. 287,562; Sept. 29; Serial No. 308,641; published July 21, 1931. Class 22.
Rossen-Nessor Company, The, Akron, Ohio. Prophylactic rubber articles. 287,574; Sept. 29; Serial No. 310,351; published July 21, 1931. Class 44.
Rubin, Samuel, New York, N. Y. Order books, form blanks, desk pads. 287,634; Sept. 29; Serial No. 315,419; published July 14, 1931. Class 37.
Sakowitz Brothers, Houston, Tex. Wearing apparel. 287,563; Sept. 29; Serial No. 308,765; published July 14, 1931. Class 39.
Salvador Products Co. (See Matthews, Paul P.)
Sanozym, Incorporated, New York, N. Y. Preparation consisting of salineaqueous solution. 287,485; Sept. 29; Serial No. 314,303; published July 14, 1931. Class 6.
Sauer, John W., doing business as Secure-Lab, San Francisco, Calif. Cleaning compound and a metal preparation. 287,455; Sept. 29; Serial No. 312,928; published July 21, 1931. Class 4.
Schaaf & Good Company, The, Fremont, Ohio. Manicure files. 287,635–6; Sept. 29; Serial Nos. 315,291–2; published July 14, 1931. Class 44.
Schering & Glatz, Inc., Bloomfield, N. J. Medicinal preparation. 287,480; Sept. 29; Serial No. 314,867; published July 14, 1931. Class 6.
Schering & Glatz, Inc., Bloomfield, N. J. Analgesics, anæsthetic, anodynes, etc. 287,481; Sept. 29; Serial No. 314,866; published July 14, 1931. Class 6.
Schnefel Bros., Inc., Newark, N. J. Cuticle remover, finger nail enamel and polish, etc. 287,475; Sept. 29; Serial No. 314,467; published July 14, 1931. Class 6.
Schnefel Bros., Inc., Newark, N. J. Tweezers, nippers, scissors, etc. 287,570; Sept. 29; Serial No. 314,465; published July 14, 1931. Class 44.
Schrafft's Stores. (See Shattuck Frank G., Company.)
Secure-Lab. (See Sauer, John W.)
Shattuck, Frank G., Company, doing business as Schrafft's Stores, New York, N. Y. Candy. 287,446; Sept. 29; Serial No. 315,432; published July 14, 1931. Class 46.
Shepard-Niles Crane & Hoist Corporation, Montour Falls, N. Y. Electrically operated cranes and hoisting machinery. 287,672; Sept. 29. Class 21.
Shiraishi Kogyo Kabushiki Kaisha Inben Gun, Miye Ken, Japan. Chalk crayons, school chalk, and pencils. 287,558; Sept. 29; Serial No. 307,538; published July 14, 1931. Class 37.
Shiraishi Kogyo Kabushiki Kaisha Inben Gun, Miye Ken, Japan. Chalk crayons and school chalk. 287,559; Sept. 29; Serial No. 307,539; published July 14, 1931. Class 37.
Sigler, Charles T., New York, N. Y. Piece goods. 287,578; Sept. 29; Serial No. 314,078; published July 14, 1931. Class 42.
Sodini, Jacob, Pittsburgh, Pa. Beverages, sirups, and extracts for making the same. 278,658; Sept. 29. Class 45.
Solvay Process Company, The, Syracuse, N. Y. Inorganic chemicals. 287,476; Sept. 29; Serial No. 314,582; published July 14, 1931. Class 6.
Somarco, Lucile, Brassiere, New York, N. Y. Brassières, corsets, bandeaux, etc. 287,537; Sept. 29; Serial No. 314,525; published July 21, 1931. Class 39.
Soonite Company. (See Call, D. W.)
Sperl, Anna, doing business as The Anna Sperl Mfg. Co., New York, N. Y. Mange ointment. 287,573; Sept. 29; Serial No. 310,268; published July 14, 1931. Class 6.
Spriggs', Jos. M., Sons, Inc., Washington, Pa. Canned fruits and vegetables. 287,443; Sept. 29; Serial No. 314,932; published July 14, 1931. Class 46.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Liquid preparation. 287,557; Sept. 29; Serial No. 305,289; published July 21, 1931. Class 4.

Standard Brands Incorporated, New York, N. Y. Tea. 287,435; Sept. 29; Serial No. 312,271; published June 23, 1931. Class 46.

Standard Brands Incorporated, New York, N. Y. Coffee. 287,440; Sept. 29; Serial No. 314,518; published July 7, 1931. Class 46.

Standard Brands Incorporated, New York, N. Y. Coffee and tea. 287,441; Sept. 29; Serial No. 314,662; published July 7, 1931. Class 46.

Standard Brands Incorporated, New York, N. Y. Coffee and tea. 287,444–5; Sept. 29; Serial Nos. 315,115–16; published July 14, 1931. Class 46.

Standard Brands Incorporated, New York, N. Y. Tea. 287,447; Sept. 29; Serial No. 315,471; published July 14, 1931. Class 46.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton and rayon yarn. 287,623; Sept. 29; Serial No. 313,568; published July 21, 1931. Class 43.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread and yarn. 287,624; Sept. 29; Serial No. 313,941; published July 14, 1931. Class 43.

Standard Register Company, The, Dayton, Ohio. Manifolding assemblies of record and carbon material. 287,544; Sept. 29; Serial No. 315,580; published July 14, 1931. Class 37.

Star Expansion Bolt Company, New York, N. Y. Bolt anchors. 287,642; Sept. 29; Serial No. 315,428; published July 21, 1931. Class 13.

Stark, John H., Miami, Fla. Heel pads. 287,540; Sept. 29; Serial No. 313,893; published July 14, 1931. Class 39.

Stein, Hermann, doing business as Hair Research Laboratories, New York, N. Y. Preparations for treating and waving the human hair. 287,473; Sept. 29; Serial No. 314,434; published July 14, 1931. Class 6.

Steinberger Bros. Glove Corp., San Francisco, Calif., and New York, N. Y. Gloves. 287,542; Sept. 29; Serial No. 313,811; published July 14, 1931. Class 39.

Steinberger Bros. Glove Corp., San Francisco, Calif. Leather and fabric gloves. 287,678; Sept. 29. Class 39.

Stephan Bros., Shelbyville, Ind. Heel upper pads. 287,618; Sept. 29; Serial No. 312,021; published July 14, 1931. Class 39.

Sterilek Company Inc., The, Brooklyn, N. Y. Sanitary napkins. 287,567; Sept. 29; Serial No. 314,663; published July 21, 1931. Class 44.

Sterling Products (Incorporated), Wheeling, W. Va. Analgesic. 287,602–3; Sept. 29; Serial Nos. 314,774–5; published July 21, 1931. Class 6.

Stevens, J. P., & Co. Inc., New York, N. Y. Broadcloth in the piece. 287,577; Sept. 29; Serial No. 313,613; published July 14, 1931. Class 42.

Straub, W. F., Laboratories, Inc., Chicago, Ill. Dry-cleaning cylinder. 287,661; Sept. 29. Class 24.

Strawbridge & Clothier, Philadelphia, Pa. Shoes. 287,535; Sept. 29; Serial No. 314,824; published July 21, 1931. Class 39.

Street, R. R., & Co., Inc., Chicago, Ill. Dry cleaning soap. 287,466; Sept. 29; Serial No. 314,724; published July 21, 1931. Class 4.

Stuart, Henry, Company, Incorporated, Milford, Conn. Boning for wearing apparel. 287,628; Sept. 29; Serial No. 314,823; published July 14, 1931. Class 40.

Syndicate Poster & Equipment Co., Chicago, Ill. Ball projecting and teeing devices used in the game of golf. 287,506; Sept. 29; Serial No. 315,215; published July 21, 1931. Class 22.

Syndicate Poster & Equipment Co., Chicago, Ill. Board games and puzzles. 287,507; Sept. 29; Serial No. 315,214; published July 21, 1931. Class 22.

Syrup of Sicilian Manna Company, The, Dayton, Ohio. Syrup laxative. 287,599; Sept. 29; Serial No. 308,757; published July 14, 1931. Class 6.

Tar-Rid Chemical Co., The, Frankford, Philadelphia, Pa. Tar remover and cleanser. 287,554; Sept. 29; Serial No. 300,689; published Sept. 9, 1930. Class 4.

Taub, Leon, Inc., New York, N. Y. Medicinal and pharmaceutical preparations. 287,609; Sept. 29; Serial No. 314,470; published July 21, 1931. Class 6.

Taylor, Alex, & Co. Inc., New York, N. Y. Tennis and squash racquets, canoe paddles and oars, baseball bats, etc. 287,499; Sept. 29; Serial No. 313,454; published July 14, 1931. Class 22.

Terri Cosmetics. (See Goldsmith Jeanne V.)

Thum, O. & W. Company, The, Grand Rapids, Mich. Gummed cloth and paper tape. 287,464; Sept. 29; Serial No. 314,520; published July 14, 1931. Class 37.

Timberlake, J. B., & Sons, Inc., Jackson, Mich. Frames used in the drying of stockings, etc. 287,648; Sept. 29; Serial No. 314,218; published July 21, 1931. Class 24.

Toland & Julien, Ventura, Calif. Fried potato chips. 287,551; Sept. 29; Serial No. 293,164; published July 21, 1931. Class 46.

Townsend, W. C., & Company, Zanesville, Ohio. Quarried dressed stone. 287,529; Sept. 29; Serial No. 318,481; published July 21, 1931. Class 12.

Travers, Owen, Savannah, Ga. Embrocation for muscular pain and soreness. 287,611; Sept. 29; Serial No. 311,804; published July 21, 1931. Class 6.

Truscon Steel Company, Youngstown, Ohio. Structural units of metal. 287,596; Sept. 29; Serial No. 302,358; published July 21, 1931. Class 12.

Tubize Chatillon Corporation, New York, N. Y. Artificial silk (rayon) yarn. 287,627; Sept. 29; Serial No. 314,664; published July 14, 1931. Class 43.

Ulrich, George C., doing business as Ven-Zol Co., Portland, Oreg. Pile and household ointment. 287,489; Sept. 29; Serial No. 314,347; published July 21, 1931. Class 6.

Universal Glass-Spra Company. (See Rockhill, Malcolm E.)

Utica Steam & Mohawk Valley Cotton Mills, Utica, N. Y. Sheets and pillow cases. 287,585; Sept. 29; Serial No. 315,070; published July 14, 1931. Class 42.

V. P. O. Company of America. (See Wilke, Rose.)

Ven-Zol Co. (See Ulrich, George C.)

Vernon Laboratories. (See Holland, Joshua.)

Vital Food Company of California. (See Wilke, Rose.)

Voogt, Vornelius E., doing business as C. E. Voogt Candy Co., Chicago, Ill. Candy. 287,664; Sept. 29. Class 46.

Vreeland Corporation, New York, N. Y. Radio receiving sets. 287,671; Sept. 29. Class 21.

Vulcan Manufacturing Co., Kansas City, Mo. Washing machines. 287,543; Sept. 29; Serial No. 311,011; published July 14, 1931. Class 24.

Vulcan Manufacturing Co., Kansas City, Mo. Laundry washing machines. 287,597; Sept. 29; Serial No. 304,743; published Oct. 28, 1930. Class 24.

Wagner Bros. Feed Corp., Brooklyn, N. Y. Deodorizer, disinfectant, bird and poultry tonic, etc. 287,458; Sept. 29; Serial No. 313,875; published July 21, 1931. Class 6.

Washington Leather Goods Co. Inc., New York, N. Y. Pocketbooks. 287,498; Sept. 29; Serial No. 313,943; published June 16, 1931. Class 3.

Weingarten Bros., New York, N. Y. Women's undergarments. 287,621; Sept. 29; Serial No. 312,872; published July 14, 1931. Class 39.

West, Ruth, New York, N. Y. Educational blocks. 287,510; Sept. 29; Serial No. 315,072; published July 21, 1931. Class 22.

Western Blower Company, Seattle, Wash. Heater units. 287,555; Sept. 29; Serial No. 300,842; published July 14, 1931. Class 34.

Wexler, Joseph, doing business as Atlas Paint and Varnish Co., New York, N. Y. Inside paint. 287,465; Sept. 29; Serial No. 314,669; published July 14, 1931. Class 16.

Whitehead, William C., Hopson, Tenn. Snake bite medicines. 287,612; Sept. 29; Serial No. 311,580; published July 21, 1931. Class 6.

Wilke, Rose, doing business as Vital Food Company of California and V. P. O. Company of America, Los Angeles, Calif. Powder, lotions, packs, etc. 287,479; Sept. 29; Serial No. 314,742; published July 14, 1931. Class 6.

Williams, Edward A., jr., Lima, Ohio. Rust removing preparations. 287,487; Sept. 29; Serial No. 314,024; published July 14, 1931. Class 6.

Winchell Shoe Manufacturing Co., Natick and Boston, Mass. Shoes. 287,539; Sept. 29; Serial No. 314,089; published July 14, 1931. Class 39.

Worcester Salt Company, New York, N. Y. Salt. 287,601; Sept. 29; Serial No. 313,620; published July 14, 1931. Class 6.

Wortham, Richard F., doing business as Kell-Worth Company, Boston, Mass. Ventilators. 287,643; Sept. 29; Serial No. 315,123; published July 14, 1931. Class 34.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Alatol Company, The, Philadelphia, Pa. Alatol. For a Preparation for Renewing Slate or Composition Blackboard. 39,778; Sept. 29.

Banana Pie Co., New York, N. Y. Banana Pie. For Frozen Banana Pie Confection. 39,779; Sept. 29.

Birdsall, Victor. (See Severson, Frederick W., and Birdsall.)

Birk Manufacturing Company, Owensboro, Ky., and New Albany, Ind. Birk's Shaving Cream. For Shaving Cream. 39,780; Sept. 29.

Burnett's, Inc., Newark, N. J. Burnett's Inc., Natural Fish Food. For Fish Food. 39,781; Sept. 29.

Buttenheim, Henry, doing business as Trex Manufacturing Company, Brooklyn, N. Y. Cleans Polishes Trex Wonderful Furniture Polish. For Preparation for Polishing and Cleaning Pianos, Furniture, Etc. 39,782; Sept. 29.

Casco Products Corporation, Bridgeport, Conn. Casco Onyxoid Electric Cigar Lighter. For Electric Cigar Lighters. 39,783; Sept. 29.

Casco Products Corporation, Bridgeport, Conn. Casco Pendant-Lite. For Electric Cigar Lighters. 39,784; Sept. 29.

Cornell Seed Company, St. Louis, Mo. Kal-Ar-Stik. For an Adhesive Calcium Arsenate Dusting Compound used as an Insecticide. 39,785; Sept. 29.

Crosse & Blackwell, Inc., Baltimore, Md. 3 Fruits Preserve. For Preserves. 39,786; Sept. 29.

Crowe, John C., Los Angeles, Calif. For Callouses. For Preparation for Treating Callouses, Corns, and Bunions. 39,787; Sept. 29.

Devitt, William M., Memphis, Tenn. Jitney Circus. For Potato Chips. 39,788; Sept. 29.

Ehrhardt Bros., New York, N. Y. Ehrhardt's Razor King. For Sharpening Compound. 39,789; Sept. 29.

Empire Malt Products Co. (See Rubin, Henry.)

F & F Laboratories, Omaha, Nebr. F & F Cough Lozenges. For Cough Lozenges. 39,790; Sept. 29.

Fred and Vick. (See Severson, Frederick W., and Victor Birdsall.)

French-Wolf Paint Products Corp., doing business as Research Paint Products Co., Bristol, Pa. Stantest Paint Stands the Test. For Paints. 39,791; Sept. 29.

Harper, James A., Supply Company, The, Kansas City, Mo. Dixie Butter Biscuit. For Butter Biscuits. 39,792; Sept. 29.

Holman Paper Box Co., Inc., St. Louis, Mo. The May Co. Footwear. For Footwear. 39,793; Sept. 29.

It Products, Ltd., Los Angeles, Calif. The Magic Cleaner. For Household Cleaner. 39,794; Sept. 29.

Lamboov Label and Wrapper Co., Kalamazoo, Mich. CB—361. For Butterscotch Cake. 39,795; Sept. 29.

Lamboov Label and Wrapper Co., Kalamazoo, Mich. CB—353. For Chocolate Layer Cake. 39,796; Sept. 29.

Lamboov Label and Wrapper Co., Kalamazoo, Mich. CB—360. For Strawberry Layer Cake. 39,797; Sept. 29.

Lambrecht Creamery, Milwaukee, Wis. Lambrecht Butter "Famous for its Flavor." For Butter. 39,798; Sept. 29.

Luckel, King & Cake Soap Company, Portland, Oreg. Luckel's Steam Refined Borax Soap Granulated. For Soap. 39,799; Sept. 29.

Midway Chemical Company, Chicago, Ill. Mothded. For Liquid Insecticide. 39,800; Sept. 29.

Miller and Hart, Inc., Chicago, Ill. Moneysworth. For Sliced Bacon. 39,801; Sept. 29.

Mills, Thomas, Inc., High Point, N. C. His First Christmas. For Hosiery. 39,802; Sept. 29.

My-T-Fine Corporation, Dover, Del., and Brooklyn, N. Y. My-T-Fine—D & C—For Making Lemon Flavored Desserts. For Mixture of Ingredients to be Used for Making Lemon-Flavored Desserts. 39,803; Sept. 29.

Penny, Geo. T., doing business as Penny's Chemical Co., Greensboro, N. C. Hep-U-Rub. For Medicinal Preparation Intended for Colds. 39,804; Sept. 29.

Phillips, Dr. P., Company, Inc., Orlando, Fla. Dr. P. Phillips. For Pure Orange Juice. 39,805; Sept. 29.

Pilzner Products Co. (See Poust, Abraham.)

Pioneer Suspender Company, Philadelphia, Pa. Firmfit. For Men's Garters. 39,806; Sept. 29.

Poust, Abraham, doing business as Pilzner Products Co., New York, N. Y. Blue Diamond Barley Malt Syrup. For Barley Malt Syrup. 39,807; Sept. 29.

Pratt-Low Preserving Company, Santa Clara, Calif. Prattlow. For Sliced Hawaiian Pineapple. 39,808; Sept. 29.

Quandt, A., & Sons, San Francisco, Calif. Quandt Core Oil. For Core Oil, an Oil Used in Foundry Work. 39,809; Sept. 29.

Real Silk Hosiery Mills, Inc., Indianapolis, Ind. Mar-Vay Lingerie. For Lingerie. 39,810; Sept. 29.

Research Paint Products Co. (See French-Wolf Paint Products Co.)

Rex Research Corporation, The, Toledo, Ohio. Fly-Tox. For Insecticide. 39,811–12; Sept. 29.

Rubin, Henry, doing business as Empire Malt Products Co., Brooklyn, N. Y. Red Ribbon Malt Syrup. For Malt Syrup. 39,813; Sept. 29.

Sacks-Sons Carton Co., Inc., Brooklyn, N. Y. Murrayknit. For Fashion and fit. For Knitted Sportswear. 39,814. Sept. 29.

Severson, Frederick W., and V. Birdsall, doing business as Fred and Vick, Battle Creek, Mich. Pride of Michigan Butter. For Butter. 39,815; Sept. 29.

Soft-Lite Lens Co., Inc., New York, N. Y. Warranty of Satisfaction. For Ophthalmic Lenses. 39,816; Sept. 29.

Special Paper Manufacturing Co., New York, N. Y. Frenchvel. For Rolls of Prepared Tracing Paper. 39,817; Sept. 29.

Special Paper Manufacturing Co., New York, N. Y. Vellux. For Rolls of Prepared Tracing Paper. 39,818; Sept. 29.

Trex Manufacturing Company. (See Buttenheim, Henry.)

Wallace, Mrs. Esther, Cincinnati, Ohio. My Wife's Favorite Salad Dressing. For Salad Dressing. 39,819; Sept. 29.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Continental Lacquer Corporation, Baltimore, Md. A Genuine Van Dyne Color Creation. For Furniture Finish. 13,425; Sept. 29.

Cream of Wheat Corporation, The, Minneapolis, Minn. There's Something About Mary Roberts Rinehard II. For Wheat Breakfast Food. 13,426; Sept. 29.

Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's Special Cakes. For Cake Used as Food. 13,427; Sept. 29.

Dugan Brothers, Inc., Brooklyn, N. Y. Quality and Variety in Dugan Products. For Bakery Products. 13,428; Sept. 29.

Kildall Company, The, Minneapolis, Minn. Genuine Old Style Ludefisk. For Fish. 13,429; Sept. 29.

Liquid Olive Co., The, New York, N. Y. Liquid Olive. For a Hair Preparation. 13,430; Sept. 29.

National Dairy & Food Bureau, Chicago, Ill. Strawberry Sundae. For Sundaes. 13,431; Sept. 29.

National Dairy & Food Bureau, Chicago, Ill. Brick Ice Cream. For Ice Cream. 13,432; Sept. 29.

True's Oil Company, Spokane, Wash. The Rainbow Girl. For Gasoline. 13,433; Sept. 29.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Acheson Oildag Company, Port Huron, Mich. Mixtures or compounds. 316,952; Sept. 29. Class 6.

Acheson Oildag Company, Port Huron, Mich. Colloidal graphited water. 317,659; Sept. 29. Class 6.

Acheson Oildag Company, Port Huron, Mich. Colloidal graphited oil. 317,660; Sept. 29. Class 6.

Adams, William H., Kenyon, R. I. Strand material. 318,185; Sept. 29. Class 42.

Airport Publishers, Inc., Buffalo, N. Y. Maps. 278,081; Sept. 29. Class 38.

Air-Way Electric Appliance Corporation, Toledo, Ohio. Refrigerating apparatus and parts thereof. 300,556; Sept. 29. Class 31.

Alatol Company, The. (See Gardner, Robert T.)

American Chicle Company, Long Island City, N. Y. Chewing gum. 316,801; Sept. 29. Class 46.

American Display Company, The, Dayton, Ohio. Artificial fish lures. 317,590; Sept. 29. Class 22.

American Foundry Equipment Company, The, Mishawaka, Ind. Room heating device. 317,343; Sept. 29. Class 21.

American Nicoton Corporation, New York, N. Y. Liquid preparation to neutralize injurious effects of nicotine. 317,543; Sept. 29. Class 6.

Amodine Co., The. (See Jacobi, Francis J.)

Arden, Elizabeth, Inc., New York, N. Y. Face powder. 317,545; Sept. 29. Class 6.

Arfal Chemical Company, Anniston, Ala. Ointment. 316,030; Sept. 29. Class 6.

Asbury Mills, The, New York, N. Y. Dresses. 317,296; Sept. 29. Class 39.

Associated Timber Exporters of British Columbia Limited, Vancouver, Canada. Lumber in all forms. 314,744; Sept. 29. Class 12.

Barker-Miller Distributing Co., Phoenix, Ariz. Fresh vegetables. 298,484; Sept. 29. Class 46.

Bartels, William, Company, New York, N. Y. Canary bird food. 313,587; Sept. 29. Class 46.

Bear Brand Hosiery Co., Kankakee, Ill. Hosiery. 316,990; Sept. 29. Class 39.

Beech-Nut Packing Company, Canajoharie, N. Y. Chewing gum. 318,188; Sept. 29. Class 46.

Benn, Joseph, Corporation, Greystone, R. I. Woolen piece goods. 315,128; Sept. 29. Class 42.

Bennington Wax Paper Company, Bennington, Vt. Paper impregnated with oil and cleaning and polishing composition. 317,699; Sept. 29. Class 4.

Bennington Wax Paper Company, Bennington, Vt. Oiled paper to be used as a cleaning, polishing, and dusting tissue. 317,700; Sept. 29. Class 4.

Berlin, Ezril, doing business as Berlin Shoe Shop, New York, N. Y. Shoes. 317,346; Sept. 29. Class 39.

Birdsong, H. W., doing business as Fermolax Chemical Company, Athens, Ga. Medicine. 317,020; Sept. 29. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Black Flag Company, The, Baltimore, Md. Insecticides. 317,269; Sept. 29. Class 6.
Bogart, Edward M., doing business as Fax Products Co., East Lansing, Mich. Water softener. 315,438; Sept. 29. Class 6.
Bottler's Chocolate Supply Corporation, Brooklyn, N. Y. Chocolate milk food drink. 316,680; Sept. 29. Class 46.
Breakstone Bros. Inc., New York, N. Y. Butter. 317,628; Sept. 29. Class 46.
Brownstein-Louis Company, Los Angeles, Calif. Woolen piece goods. 316,255; Sept. 29. Class 42.
California Medicinal Wine Co., Los Angeles, Calif. Medicinal and pharmaceutical preparations. 301,570; Sept. 29. Class 6.
Chapman Health Products Co., The, Cleveland, Ohio. Medicinal preparation. 316,862; Sept. 29. Class 6.
Chemisch-Pharmazeutische A. G. Bad Homburg Werk Frankfurt, A. M., Frankfort-on-the-Main, Germany. Diet and cooking salt. 306,767; Sept. 29. Class 6.
Clapp, Otis, & Son, Inc., Boston, Mass. Laxative. 317,712; Sept. 29. Class 6.
Clean Surface Products Company, Chicago, Ill. Waterproof wax finish. 317,022; Sept. 29. Class 16.
Cramerton Mills, Incorporated, Cramerton, N. C. Piece goods of cotton and silk or combinations thereof. 315,486; Sept. 29. Class 42.
Crawford, O. N., doing business as Searchlight Products Company, Memphis, Tenn. Poultry medicines. 310,821; Sept. 29. Class 6.
Crawford, McGregor and Canby Company, The, Dayton, Ohio. Golf clubs. 318,051; Sept. 29. Class 22.
Crawford, McGregor and Canby Company, The, Dayton, Ohio. Golf clubs. 318,053; Sept. 29. Class 22.
Creocarb Co. (See Zingler, Paul.)
Cross, Henry H., Company, Chicago, Ill. Lubricating oils. 317,974; Sept. 29. Class 15.
Crystal Growers Exchange, Inc., Crystal City, Tex. Vegetables. 315,039; Sept. 29. Class 46.
Daniels, Claude H., Boston, Mass. Boots, shoes, and slippers. 318,054; Sept. 29. Class 39.
Deane Plaster Co., The, Yonkers, N. Y. Adhesive bandage dressing. 314,044; Sept. 29. Class 6.
De Pree Company, The, doing business as Knickerbocker Products, Holland, Mich. Emollient or skin powder. 317,975; Sept. 29. Class 6.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Wire ropes and cables. 318,200; Sept. 29. Class 7.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Spun yarn fibres. 318,212; Sept. 29. Class 43.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Porcelain or real china. 318,224; Sept. 29. Class 30.
Ditchek, David N., doing business as Sani-Re Chemical Co., Brooklyn, N. Y. Gelatinous or semi-solid preparation for rectal troubles. 317,708; Sept. 29. Class 6.
Dow Chemical Company, The, Midland, Mich. Cleaning compositions and compounds. 270,311; Sept. 29. Class 4.
Drug Products Co., Inc., The, Long Island City, N. Y. Manganese gluconate colloidal solution. 317,709; Sept. 29. Class 6.
Eclipse Machine Company, Elmira Heights, N. Y. Automatic starting mechanism. 317,633; Sept. 29. Class 23.
El Rey Products Co., Los Angeles, Calif. Composition shingles. 313,498-9; Sept. 29. Class 12.
El Rey Products Co., Los Angeles, Calif. Felt and asphalt roofing, composition shingles and siding material. 313,501; Sept. 29. Class 12.
Erf Company, Incorporated, The, New Haven, Conn. Medical compound. 316,259; Sept. 29. Class 6.
Farber, Louis, doing business as Farber Brothers, New York, N. Y. Silver and silver plated ware. 317,913; Sept. 29. Class 28.
Fax Products Co. (See Bogart, Edward M.)
Federal Envelope Manufacturing Co., Omaha, Nebr. Correspondence and mailing envelopes. 317,711; Sept. 29. Class 37.
Fermolax Chemical Company. (See Birdsong, H. W.)
Fernandes, Antonio, doing business as Perfection Bottling Works, New Bedford, Mass. Bleaching water. 319,289; Sept. 29. Class 6.
Frigid Fruit Corporation, Hollywood and Miami, Fla. Solidified combination of fruits congealed in bar form. 315,680; Sept. 29. Class 46.
Gardner, Robert T., doing business as The Alatol Company, Philadelphia, Pa. Blackboard dye. 317,556; Sept. 29. Class 6.
Gasset, McKinley, Washington, D. C. Laxative. 317,398; Sept. 29. Class 6.
Gin's Products Co. (See Ginsberg, Ruth.)
Ginsberg, Ruth, doing business as Gin's Products Co., Easton, Pa. Malt syrup. 317,308; Sept. 29. Class 46.
Gove Pharmacal Products, Ltd., Brooklyn, N. Y. Preparation to relieve colds, coughs, etc. 317,599; Sept. 29. Class 6.
Gray, William S., & Co., New York, N. Y. Pigments used in paints. 317,932; Sept. 29. Class 16.
Grove Pharmacy, The. (See Jacobi, Francis J.)
Guidici, Pauline, Lindenhurst, L. I., N. Y. Tomato sauce. 316,464; Sept. 29. Class 46.
Gulbenkian, K., New York, N. Y. Bleaching compound. 315,614; Sept. 29. Class 6.
Harlem Chemical Company. (See Hecht, Samuel.)
Hasbrouck, John E. R., New York, N. Y. Automatic weighing scales and weighing machines. 317,516; Sept. 29. Class 26.
Hauser Laboratory, Minneapolis, Minn. Preparation for skin diseases. 317,892; Sept. 29. Class 6.
Health-O-Quality Product Co., The. (See Milson Company, The.)
Healy, J. Henry, doing business as The Sanistak Company, Philadelphia, Pa. Lipsticks. 316,886; Sept. 29. Class 6.
Hecht, Samuel, doing business as Harlem Chemical Company, Long Island City, N. Y. Lighting fluid. 317,435; Sept. 29. Class 6.
Heinemann, Albert W., Independence, Kans. Chart check and indicator. 316,007; Sept. 29. Class 26.
Heit, L., New York, N. Y. Coats, vests, pants, etc. 316,591; Sept. 29. Class 39.
Herberts Machinery Company, Ltd., Los Angeles, Calif. Lathes, shapers, milling machines, etc. 306,736; Sept. 29. Class 23.
Hibner, Ole, Cleveland, Ohio. Permanent wave pads, sachets, and solutions. 315,635; Sept. 29. Class 44.
Holmes, T. J., Co., Inc., Chartley, Mass. Antiseptic compound. 317,768; Sept. 29. Class 6.
Homberger-Rauschenbach, Ernst, formals International Watch Co. (Ernst Homberger-Rauschenbach, Cl-Devant International Watch Co.), Schaffhouse, Switzerland. Watch movements, cases, dials, etc. 313,708; Sept. 29. Class 27.
Huston, Tom, Frosted Foods, Inc., Columbus, Ga. Frozen confection. 317,278; Sept. 29. Class 46.
Huth, John A., Natrona, Pa. Electrode for diathermy treatments. 317,914; Sept. 29. Class 44.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Threads and yarns. 317,769; Sept. 29. Class 43.
Ideal Novelty & Toy Co., New York, N. Y., and Brooklyn, N. Y. Dolls. 317,979; Sept. 29. Class 22.
Illinois Paper Company, Chicago, Ill. Stencils and stencil correction varnish. 304,374; Sept. 29. Class 37.
Jacobi, Francis J., doing business as The Grove Pharmacy and The Amodine Co., Tonawanda, N. Y. Preparation for headaches, etc. 318,110; Sept. 29. Class 6.
Jaffee-Cohen & Lang, Inc., New York, N. Y. Clothing and wearing apparel. 314,012; Sept. 29. Class 39.
Jarman Shoe Company, Nashville, Tenn. Boots and shoes. 314,239; Sept. 29. Class 39.
Jenkins, H. V., Inc., Knoxville, Tenn. Permanent waving solutions and hair oils. 317,086; Sept. 29. Class 6.
Kemp, Edward F., Somerville, Mass. Paper bags. 288,198; Sept. 29. Class 2.
Kendall Company, The, Boston, Mass., and Chicago, Ill. Gauze bandage and adhesive plaster. 317,436; Sept. 29. Class 44.
Klopstock, Paul, jr., doing business as The Suave Company, New York, N. Y. Crystal water softener. 316,734; Sept. 29. Class 6.
Knickerbocker Products. (See De Pree Company, The.)
Knox Chemical Company. (See Webb, James E.)
Kress, S. H., & Co., New York, N. Y. Writing tablets, albums, paper towels, etc. 316,273; Sept. 29. Class 37.
Kress, S. H., & Co., New York, N. Y. Rubber gloves, absorbent cotton, sanitary belts, etc. 316,366; Sept. 29. Class 44.
Kroger Grocery & Baking Co., doing business as Wesco Foods Co., Cincinnati, Ohio. Domestic ammonia and liquid bluing. 317,358; Sept. 29. Class 6.
Lacassian Laboratories Corporation, doing business as Salfene Chemical Co., St. Louis, Mo. Antipyretic and anodyme powders and tablets. 317,562; Sept. 29. Class 6.
Levin, Ben A., doing business as Mitzi Hat Shops, Decatur, Springfield, Danville, and Champaign, Ill., and St. Louis, Mo. Ladies' hats. 316,780; Sept. 29. Class 39.
Levin, Benjamin, doing business as Vigorol Laboratories, St. Albans, L. I., N. Y. Reconstructed tonic. 317,942; Sept. 29. Class 6.
Lilly, Eli, and Company, Indianapolis, Ind. Liquid liver extract. 317,943; Sept. 29. Class 6.
Lily Mill and Power Company, Shelby, N. C. Sewing thread. 317,523; Sept. 29. Class 43.
Linda Baking Company, St. Louis, Mo. Edible cups. 317,127; Sept. 29. Class 46.
Locke & Company, Rochester, N. Y. Wagons, carriages, automobiles, etc. 297,021; Sept. 29. Class 19.
Los Angeles Soap Company, Los Angeles, Calif. Water softener. 317,363; Sept. 29. Class 6.
Lublin, Kora M., New York, N. Y. Cosmetics. 317,565; Sept. 29. Class 6.
Magnus, S. W., Hdkf. Co., New York, N. Y. Handkerchiefs and linen piece goods. 317,476; Sept. 29. Class 42.
Marinello Company, New York, N. Y. Tissue cream. 316,973; Sept. 29. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Marschall, Adolph J., doing business as Marschall Dairy Laboratory, Madison, Wis. Disinfectant. 316,933; Sept. 29. Class 6.
Marvio Mills, Inc., New York, N. Y. Cotton, linen, etc., goods. 317,044; Sept. 29. Class 42.
Mayehoff, Incorporated, Norwalk, Conn. Dresses, shirtwaists, blouses, etc. 316,563; Sept. 29. Class 39.
McLaren-Consolidated Cone Corporaton, Dayton, Ohio. Ice-cream cones. 313,790; Sept. 29. Class 46.
Midway Chemical Company, Chicago, Ill. Insecticide. 313,574; Sept. 29. Class 6.
Mifflin Chemical Corporation, Philadelphia, Pa. Cream deodorant. 315,915; Sept. 29. Class 6.
Milson Company, The, doing business as The Health-O-Quality Product, Co., Cincinnati, Ohio. Laxative wafers. 317,898; Sept. 29. Class 6.
Mitzi Hat Shops. (See Levin, Ben A.)
Monroe Auto Equipment Company, Monroe, Mich. Remote control devices for shock absorbers. 318,068; Sept. 29. Class 19.
Moth-No-Mor Corporation, Chicago, Ill. Insecticide. 312,743; Sept. 29. Class 6.
Myer, Leo, Co., The, Akron, Ohio. Cleaning compound. 317,478; Sept. 29. Class 4.
National Acme Co., The, Cleveland, Ohio. Gasoline pumps. 317,673; Sept. 29. Class 26.
National Gut String Mfg. Co., Inc., Chicago, Ill. Gut string. 269,306; Sept. 29. Class 22.
Naugatuck Chemical Company, The, New York, N. Y. Condensation product of butyraldehyde and aniline. 317,725; Sept. 29. Class 1.
Naugatuck Chemical Company, The, New York, N. Y. Condensation product of heptaldehyde and aniline. 317,726; Sept. 29. Class 1.
Naylin, Michael F., doing business as Nayoli Co., Kemmerer, Wyo. Hair restorer. 316,862; Sept. 29. Class 6.
Nayoli Co. (See Naylin, Michael F.)
New England Confectionery Company, Cambridge, Mass. Candy. 312,766; Sept. 29. Class 46.
New Era Optical Co., Chicago, Ill. Optical lenses. 317,131; Sept. 29. Class 26.
O-C Manufacturing Company, The, Little Falls, N. J. Jock straps, suspensories, athletic supporters, etc. 315,757; Sept. 29. Class 44.
Oak Rubber Company, The, Ravenna, Ohio. Toy rubber balloons. 318,069; Sept. 29. Class 22.
Orphan Annie Greaseless Doughnut Shop, Clearwater, Fla. Doughnuts, cakes, pies, etc. 317,439; Sept. 29. Class 46.
Osmun, Ralph H., doing business as Petro-Mal Laboratories, Wheeling, W. Va. Pharmaceutical preparations. 317,369; Sept. 29. Class 6.
Pacific Wire Rope Company, Los Angeles, Calif. Wire strand. 317,988; Sept. 29. Class 7.
Peo Manufacturing Corporation, Rochester, N. Y. Game. 316,822; Sept. 29. Class 22.
Perfection Bottling Works. (See Fernandes, Antonio.)
Petro-Mal Laboratories. (See Osmun, Ralph H.)
Phillfuels Company, Bartlesville, Okla. Liquefied natural gas. 318,114; Sept. 29. Class 6.
Pioneer Maple Products Company, The, St. Paul, Minn. Peanut butter, jellies, and jams. 316,017; Sept. 29. Class 46.
Pioneer Paper Company, Los Angeles, Calif. Bituminous emulsion. 317,734; Sept. 29. Class 12.
Pittsburgh Food Products Co. (See Stewart, Jesse C. Co.)
Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections. 318,166-7; Sept. 29. Class 46.
Pratt Food Company, Philadelphia, Pa. Disinfectant. 317,953; Sept. 29. Class 6.
Press-On Co., The, Miami, Fla. Fruit press or fruit juice extractor. 314,928; Sept. 29. Class 28.
Pyramid Rubber Company, The, Ravenna, Ohio. Rubber nursing nipples. 316,613; Sept. 29. Class 44.
Ralston Purina Company, St. Louis, Mo. Dog soap. 318,169; Sept. 29. Class 4.
Red River Lumber Company, The, Minneapolis, Minn. Door and window frames, doors, etc. 310,302; Sept. 29. Class 12.
Ribelastic Company Inc., Needham Heights, Mass., and Central Falls, R. I. Knitted elastic fabrics. 317,872; Sept. 29. Class 42.
Rice, Alexander C., doing business as Rice Laboratories, Chicago, Ill. Liquid treatment. 318,178; Sept. 29. Class 6.
Rowsey, William C., Shawmut, Mont. Compound for use in treating sweating armpits and feet. 317,573; Sept. 29. Class 6.
Runkel Brothers, Inc., New York, N. Y. Chocolate candy. 314,251; Sept. 29. Class 46.
Russell Playing Card Company, Jersey, City, N. J. Playing cards. 318,254; Sept. 29. Class 22.
Russo, Joseph D., Philadelphia, Pa. Canned tomatoes and tomato paste. 316,572; Sept. 29. Class 46.
Rust-Ban Company. (See Searles, Robert M.)
Salfene Chemical Co. (See Lacassian Laboratories Corporation.)
Sani-Re Chemical Co. (See Ditchek, David N.)
Sanistik Company, The. (See Healy, J. Henry.)
Schering Corporation, New York, N. Y. Antiseptic. 317,818; Sept. 29. Class 6.
Schering-Kahlbaum, A. G., Berlin, Germany. Alkamine derivatives. 316,221; Sept. 29. Class 6.
Scovill Manufacturing Company, Waterbury, Conn. Lawn sprinklers. 315,609; Sept. 29. Class 13.
Searchlight Products Company. (See Crawford, O. N.)
Searles, Robert M., doing business as Rust-Ban Company, Philadelphia, Pa. Liquid preparation for preventing rust. 317,537; Sept. 29. Class 6.
Sexauer, J. A. Mfg. Co., Inc., New York, N. Y. Screws, nuts, bolts, etc. 314,253; Sept. 29. Class 13.
Sociedad Anonima Mackinnon & Coelho, Limitado Companía Yerbatera, Buenos Aires, Argentina. Yerba mate. 310,143; Sept. 29. Class 46.
Society of Chemical Industry in Basle, Basel, Switzerland. Chemical products. 313,681; Sept. 29. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Insect repellent. 317,188; Sept. 29. Class 6.
Stanco Incorporated, New York, N. Y. Lubricating oils. 317,785; Sept. 29. Class 15.
Standard Brands Incorporated, New York, N. Y. Tea. 318,178-81; Sept. 29. Class 46.
Stewart, Jesse C. Co., doing business as Pittsburgh Food Products Co., Pittsburgh, Pa. Gelatin dessert mixture. 313,010; Sept. 29. Class 46.
Sauve Company, The. (See Klopstock, Paul, jr.)
Sun Printing & Publishing Association, The, New York, N. Y. Column printed daily. 316,855; Sept. 29. Class 38.
Superdent Dentist's & Chemist's Corporation, New York, N. Y. Tooth paste and mouth antiseptic. 315,120; Sept. 29. Class 6.
Sweeney, John A., Cleveland, Ohio. Cleansing mouth wash and tissue stimulant. 316,452; Sept. 29. Class 6.
Teakwood, Inc., Chicago, Ill. Candy. 316,617; Sept. 29. Class 46.
U. S. Government Advertiser, Washington, D. C. Journal. 287,630; Sept. 29. Class 38.
Ulrich, Carl J., Minneapolis, Minn. Humidity controlled electric switches. 317,588; Sept. 29. Class 21.
United Laboratories Inc., Chicago, Ill. Liquid and greaseless preparations. 315,021; Sept. 29. Class 6.
Vaculette Co., Not Inc., Chicago, Ill. Vacuum massaging machines. 318,085; Sept. 29. Class 44.
Vigorol Laboratories. (See Levin, Benjamin.)
Wallerstein Company, Inc., New York, N. Y. Enzymatic material. 316,392; Sept. 29. Class 6.
Watson Company, The, Attleboro, Mass. Sterling silver hollow ware and flat ware. 317,750; Sept. 29. Class 28.
Webb, James E., doing business as Knox Chemical Company, St. Petersburg, Fla., and Knoxville, Tenn. Tonic for kidneys. 316,515; Sept. 29. Class 6.
Weil-Kalter Mfg. Company, St. Louis, Mo. Knitted rayon fabric. 317,864; Sept. 29. Class 42.
Wesco Foods Co. (See Kroger Grocery & Baking Co.)
Wilkinson, McCoy, St. Louis, Mo. Lenses. 314,672; Sept. 29. Class 26.
Wolverine-Empire Refining Company, Wilmington, Del., and New York, N. Y. Lubricating oils and greases. 310,315-16; Sept. 29. Class 15.
Zingler, Paul, doing business as Creocarb Co., Brooklyn, N. Y. Cough and cold medicine. 317,017; Sept. 29. Class 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Leather. Max Hert Leather Company. 287,524; Sept. 29; Serial No. 314,993; published July 14, 1931.

CLASS 2

Baskets made of wood. Planters Mfg. Co. 287,665-6; Sept. 29.

Boxes, Cardboard. B. & B. Shoe Company. 287,653; Sept. 29; Serial No. 313,484; published July 14, 1931.

Containers in tube like formation, cylindrical cans, collapsible tubes, etc. Hygienic Tube and Container Company. 287,652; Sept. 29; Serial No. 313,600; published July 14, 1931.

Kitchenette sets. National Enameling & Stamping Co. 287,436-7; Sept. 29; Serial Nos. 313,145-6; published July 14, 1931.

Trays, Display. Cohn & Rosenberger. 287,434; Sept. 29; Serial No. 311,128; published July 21, 1931.

CLASS 3

Pocketbooks. Washington Leather Goods Co. Inc. 287,498; Sept. 29; Serial No. 313,943; published June 16, 1931.

CLASS 4

Cleaners, Paint. Indianapolis Paint & Color Co. 287,470; Sept. 29; Serial No. 315,201; published July 21, 1931.
Cleaning compound. Quigley Company. 287,468; Sept. 29; Serial No. 314,964; published July 21, 1931.
Cleaning compound and a metal preparation. J. W. Sauer. 287,455; Sept. 29; Serial No. 312,928; published July 21, 1931.
Cleaning preparation, Glass. M. E. Rockhill. 287,556; Sept. 29; Serial No. 301,127; published July 14, 1931.
Cleansing preparation, Powdered. D. W. Call. 287,459; Sept. 29; Serial No. 313,957; published July 21, 1931.
Dressing and polish. Frank J. Le Doyen Co. 287,454; Sept. 29; Serial No. 312,921; published July 21, 1931.
Dressing, Belt. McGrew and Nye. 287,453; Sept. 29; Serial No. 311,411; published July 14, 1931.
Liquid preparation. Stanco Incorporated. 287,557; Sept. 29; Serial No. 305,289; published July 21, 1931.
Preparation for cleaning metal and woodwork and removing paint, tar, etc. M. Aron. 287,547; Sept. 29; Serial No. 315,434; published July 21, 1931.
Preparation for washing windows, porcelain fixtures, painted walls, etc. Kirkman & Son. 287,659; Sept. 29.
Soap, Dry cleaning. R. R. Street & Co. 287,466; Sept. 29; Serial No. 314,724; published July 21, 1931.
Tar remover and cleaner. Tar-Rid Chemical Co. 287,554; Sept. 29; Serial No. 300,689; published Sept. 9, 1930.

CLASS 6

Anæsthetic. L. J. Fay. 287,600; Sept. 29; Serial No. 313,844; published July 14, 1931.
Anæsthetics, preparations for sterilizing and preserving dental and surgical instruments, eugenol, etc. D. Curtis. 287,622; Sept. 29; Serial No. 313,332; published June 9, 1931.
Analgesic. Sterling Products (Incorporated). 287,602–3; Sept. 29; Serial Nos. 314,774–5; published July 21, 1931.
Analgesics, anæsthetics, anodynes, etc. Schering & Glatz, Inc. 287,481; Sept. 29; Serial No. 314,866; published July 14, 1931.
Anti-pain preparation. J. Holland. 287,474; Sept. 29; Serial No. 314,439; published July 14, 1931.
Astringents. J. V. Goldsmith. 287,477; Sept. 29; Serial No. 314,644; published July 14, 1931.
Chemical substances. F. E. Coe. 287,518; Sept. 29; Serial No. 314,149; published July 14, 1931.
Chemicals, Inorganic. Solvay Process Company. 287,476; Sept. 29; Serial No. 314,582; published July 14, 1931.
Creams, lotions, toilet waters, etc., Face. Floraderm Laboratories. 287,490; Sept. 29; Serial No. 314,049; published July 21, 1931.
Cuticle remover, finger nail enamel and polish, etc. Schnefel Bros., Inc. 287,475; Sept. 29; Serial No. 314,467; published July 14, 1931.
Dental cream. Colgate-Palmolive-Peet Company. 287,482; Sept. 29; Serial No. 314,982; published July 14, 1931.
Deodorizer, disinfectant, bird and poultry tonic, etc. Wagner Bros. Feed Corp. 287,458; Sept. 29; Serial No. 313,875; published July 21, 1931.
Disinfectant, Chlorine. C. B. Dolge Company. 287,564; Sept. 29; Serial No. 309,420; published July 14, 1931.
Disinfectants. Aktiebolaget Probat. 287,521; Sept. 29; Serial No. 313,822; published July 14, 1931.
Drugs, Botanical. Peek and Velsor, Inc. 287,532; Sept. 29; Serial No. 313,668; published July 21, 1931.
Eau de Cologne water, perfumery, shampoo, etc. P. P. Millhens. 287,515; Sept. 29; Serial No. 311,017; published July 14, 1931.
Embrocation. O. Travers. 287,611; Sept. 29; Serial No. 311,804; published July 21, 1931.
Ergot, Liquid. Burrough Brothers Manufacturing Company. 287,484; Sept. 29; Serial No. 314,321; published July 14, 1931.
Gases, Hydrocarbon. Hope Construction & Refining Company. 287,486; Sept. 29; Serial No. 314,051; published July 14, 1931.
Herbs, compounds for constipation, etc., Mixtures of, Dr. H. C. Lemke Medicine Co. 287,522; Sept. 29; Serial No. 301,955; published July 14, 1931.
Hydrocarbon gases. Hope Construction & Refining Company. 287,492; Sept. 29; Serial No. 314,052; published July 14, 1931.
Insecticide. Protex Corporation of America. 287,488; Sept. 29; Serial No. 314,377; published July 21, 1931.
Insecticide preparation. Miller Products Company. 287,501; Sept. 29; Serial No. 312,678; published July 7, 1931.
Laxative and antiseptic solution, Alkaline. J. R. Richardson. 287,519; Sept. 29; Serial No. 311,886; published July 14, 1931.
Laxative, Syrup. Syrup of Sicilian Manna Company. 287,599; Sept. 29; Serial No. 308,757; published July 14, 1931.
Medicinal and pharmaceutical preparations. Leon Taub. 287,609; Sept. 29; Serial No. 314,470; published July 21, 1931.
Medicinal poultry preparations. T. C. Fox & Sons. 287,533; Sept. 29; Serial No. 313,110; published July 21, 1931.
Medicinal preparation. B. E. Davis. 287,614; Sept. 29; Serial No. 313,585; published July 14, 1931.
Medicinal preparation. T. P. Downey. 287,613; Sept. 29; Serial No. 311,234; published July 21, 1931.
Medicinal preparation. V. B. Haggard. 287,478; Sept. 29; Serial No. 314,759; published July 14, 1931.
Medicinal preparation. Schering & Glatz, Inc. 287,480; Sept. 29; Serial No. 314,867; published July 14, 1931.
Medicinal preparations. Dr. Rentschler & Co. 287,516; Sept. 29; Serial No. 311,073; published July 21, 1931.
Medicine, Herbal. S. A. Palmer Limited. 287,523; Sept. 29; Serial No. 301,358; published July 21, 1931.
Medicines. H. N. Livezey. 287,572; Sept. 29; Serial No. 310,019; published July 14, 1931.
Medicines, Snake bite. W. C. Whitehead. 287,612; Sept. 29; Serial No. 311,580; published July 21, 1931.
Ointment. P. P. Matthews. 287,483; Sept. 29; Serial No. 314,336; published July 14, 1931.
Ointment, Mange. A. Sperl. 287,573; Sept. 29; Serial No. 310,268; published July 14, 1931.
Ointment, Pile and household. G. C. Ulrich. 287,489; Sept. 29; Serial No. 314,347; published July 21, 1931.
Perfume, toilet water, powder, etc. Houbigant, Inc. 287,604–5; Sept. 29; Serial No. 314,613–4; published July 21, 1931.
Perfume, toilet water, powder, etc. Houbigant, Inc. 287,606–8; Sept. 29; Serial No. 314,609–11; published July 21, 1931.
Perfumery. E. Daltroff & Cie. 287,517; Sept. 29; Serial No. 314,841; published July 14, 1931.
Powder. Mennen Company. 287,514; Sept. 29; Serial No. 314,455; published July 14, 1931.
Powder, lotions, packs, etc. R. Wilke. 287,479; Sept. 29; Serial No. 314,742; published July 14, 1931.
Preparation designed as a hygienic lotion for nose and throat. Sanozym, Incorporated. 287,485; Sept. 29; Serial No. 314,303; published July 14, 1931.
Preparation for consumption, etc. S. A. Paul. 287,520; Sept. 29; Serial No. 313,933; published July 14, 1931.
Preparation, Rust removing. E. A. Williams, Jr. 287,487; Sept. 29; Serial No. 314,024; published July 14, 1931.
Preparations for destroying of moth larvæ and eggs. Regal Products Co. 287,526; Sept. 29; Serial No. 311,246; published July 14, 1931.
Preparations for the treatment of hemorrhoids. C. W. Meyer. 287,638; Sept. 29; Serial No. 313,506; published July 14, 1931.
Preparations for treating and waving hair. H. Stein. 287,473; Sept. 29; Serial No. 314,434; published July 14, 1931.
Salt. Worcester Salt Company. 287,601; Sept. 29; Serial No. 313,620; published July 14, 1931.
Toilet articles. J. Delson. 287,571; Sept. 29; Serial No. 311,564; published July 14, 1931.
Toilet preparations. J. M. Fisher. 287,662; Sept. 29.
Toilet preparations. Muscle Shoals Laboratories, Inc. 287,610; Sept. 29; Serial No. 314,390; published July 21, 1931.

CLASS 12

Asphalt, pavement materials, asphaltic binders, etc. American Bitumuls Company. 287,528; Sept. 29; Serial No. 313,525; published July 21, 1931.
Buildings. J. C. Burke. 287,527; Sept. 29; Serial No. 313,645; published July 21, 1931.
Copper downspouts, metal dividing strips, brass railings, etc. Chase Brass & Copper Co. Incorporated. 287,530; Sept. 29; Serial No. 312,042; published July 21, 1931.
Doors. M and M Wood Working Company. 287,598; Sept. 29; Serial No. 308,260; published July 21, 1931.
Metal, Structural units of. Truscon Steel Company. 287,596; Sept. 29; Serial No. 302,358; published July 21, 1931.
Stone, Quarried dressed. W. C. Townsend & Company. 287,529; Sept. 29; Serial No. 313,481; published July 21, 1931.

CLASS 13

Bath-room accessories. Fairfacts Company. 287,656; Sept. 29; Serial No. 309,337; published July 21, 1931.
Bolt anchors. Star Expansion Bolt Company. 287,642; Sept. 29; Serial No. 315,428; published July 21, 1931.
Holders, Hose. C. K. Beyrer. 287,641; Sept. 29; Serial No. 315,341; published July 21, 1931.
Pipe and tubing, Metal. California Corrugated Culvert Co. 287,654; Sept. 29; Serial No. 313,281; published July 14, 1931.
Springs, Coil. J. H. Specialty Manufacturing Corp. 287,647; Sept. 29; Serial No. 314,516; published July 21, 1931.

CLASS 16

Lacquers. Pittsburgh Plate Glass Company. 287,545; Sept. 29; Serial No. 315,500; published July 14, 1931.
Paint. P. O. A. Reau. 287,456; Sept. 29; Serial No. 313,205; published July 21, 1931.
Paint, Inside. J. Wexler. 287,465; Sept. 29; Serial No. 314,669; published July 14, 1931.
Paints. International Compositions Company. 287,497; Sept. 29; Serial No. 314,203; published July 14, 1931.
Paints. Pittsburgh Plate Glass Company. 287,505; Sept. 29; Serial No. 315,501; published July 21, 1931.

Paints. Pittsburgh Plate Glass Company. 287,546; Sept. 29; Serial No. 315,499; published July 14, 1931.
Paints, enamels, varnishes, etc. Martin-Senour Company. 287,467; Sept. 29; Serial No. 314,853; published July 14, 1931.
Paints, paint enamels, varnishes, etc. H. Feltes. 287,496; Sept. 29; Serial No. 314,605; published July 21, 1931.
Paints, paint enamels, wood stains, etc. Indianapolis Paint & Color Co. 287,469; Sept. 29; Serial No. 315,200; published July 14, 1931.

CLASS 19

Radiator grills. Automobile. Globe Machine & Stamping Company. 287,645; Sept. 29; Serial No. 314,953; published July 14, 1931.

CLASS 21

Cranes and hoisting machinery, Electrically operated. Shepard-Niles Crane & Hoist Corporation. 87,672; Sept. 29.
Radio receiving sets. Vreeland Corporation. 287,671; Sept. 29.

CLASS 22

Ball projecting and teeing devices used in the game of golf. Syndicate Poster & Equipment Co. 287,506; Sept. 29; Serial No. 315,215; published July 21, 1931.
Bat and ball game. Newton Manufacturing Company. 287,493; Sept. 29; Serial No. 314,925; published July 14, 1931.
Cards, Playing. S. H. Kress & Co. 287,494; Sept. 29; Serial No. 314,918; published July 21, 1931.
Educational blocks. R. West. 287,510; Sept. 29; Serial No. 315,072; published July 21, 1931.
Game, Instructive educational. O. Lamlreaud. 287,508; Sept. 29; Serial No. 315,150; published July 21, 1931.
Game of croquet and pool, Combination. D. S. Corwin. 287,495; Sept. 29; Serial No. 314,792; published July 14, 1931.
Games and puzzles, Board. Syndicate Poster & Equipment Co. 287,507; Sept. 29; Serial No. 315,214; published July 21, 1931.
Golf clubs and balls. James H. Boye Manufacturing Co. 287,509; Sept. 29; Serial No. 315,084; published July 21, 1931.
Practice device for golf, Portable. C. W. Ross. 287,562; Sept. 29; Serial No. 308,641; published July 21, 1931.
Tennis and squash racquets, canoe paddles and oars, baseball bats, etc. Alex Taylor & Co. Inc. 287,499; Sept. 29; Serial No. 313,454; published July 14, 1931.

CLASS 23

Axes, hatchets, and hammers, Handled. Evansville Tool Works. 287,491; Sept. 29; Serial No. 311,089; published Apr. 28, 1931.
Bearings, Plain machinery. Cleveland Graphite Bronze Company. 287,670; Sept. 29.
Garment steaming and pressing machines. Pantex Pressing Machine, Inc. 287,655; Sept. 29; Serial No. 310,067; published July 21, 1931.

CLASS 24

Frames used in the drying of stockings, etc. J. B. Timberlake & Sons, Inc. 287,648; Sept. 29; Serial No. 314,218; published July 21, 1931.
Washing devices. M. T. Kelley. 287,649; Sept. 29; Serial No. 314,057; published July 14, 1931.
Washing machines. Vulcan Manufacturing Co. 287,543; Sept. 29; Serial No. 311,011; published July 14, 1931.
Washing machines, Laundry. Vulcan Manufacturing Co. 287,597; Sept. 29; Serial No. 304,743; published Oct. 28, 1930.

CLASS 28

Bracelets, Wrist-watch. Kestenman Bros. Mfg. Co. 287,677; Sept. 29.

CLASS 29

Cylinders, Dry-cleaning. W. F. Straub Laboratories, Inc. 287,661; Sept. 29.

CLASS 31

Freezers, Ice-cream. New Standard Corporation. 287,511; Sept. 29; Serial No. 314,924; published July 14, 1931.

CLASS 33

Crystals, Watch. American Perfit Crystal Corp. 287,615; Sept. 29; Serial No. 309,113; published July 14, 1931.
Glass and products, Sheet. Kuhns & Allen. 287,626; Sept. 29; Serial No. 314,163; published July 14, 1931.
Glassware. Elite Import Co. Inc. 287,588; Sept. 29; Serial No. 315,194; published July 21, 1931.

CLASS 34

Heater units. Western Blower Company. 287,555; Sept. 29; Serial No. 300,842; published July 14, 1931.
Heating apparatus. Automatic Florzone Heating Company. 287,644; Sept. 29; Serial No. 314,544; published July 21, 1931.
Heating apparatus. Automatic Florzone Heating Company. 287,646; Sept. 29; Serial No. 314,543; published July 21, 1931.
Heating systems. Ilg. Electric Ventilating Company. 287,651; Sept. 29; Serial No. 313,784; published July
Ranges, Gas. Eastern Outfitting Co. of Los Angeles, Cal. 287,650; Sept. 29; Serial No. 313,949; published July 14, 1931.
Ventilators. R. F. Wortham. 287,643; Sept. 29; Serial No. 315,123; published July 14, 1931.
14, 1931.

CLASS 37

Books, form blanks, desk pads, Order. S. Rubin. 287,634; Sept. 29; Serial No. 315,419; published July 14, 1931.
Card index. J. M. Keplar. 287,462; Sept. 29; Serial No. 314,241; published July 14, 1931.
Checks. M. I. Priester. 287,461; Sept. 29; Serial No. 314,012; published July 14, 1931.
Crayons and school chalk, Chalk. Shiraishi Kogyo Kabushiki Kaisha. 287,559; Sept. 29; Serial No. 307,539; published July 14, 1931.
Crayons, school chalk, and pencils, Chalk. Shiraishi Kogyo Kabushiki Kaisha. 287,558; Sept. 29; Serial No. 307,538; published July 14, 1931.
Pads and stands, Calendar. Columbian Art Works, Inc. 287,549; Sept. 29; Serial No. 280,541; published July 14, 1931.
Pencils. Reliance Pencil Corporation. 287,471; Sept. 29; Serial No. 315,276; published July 14.
Pencils, Lead. Eagle Pencil Company. 287,472; Sept. 29; Serial No. 315,345; published July 14, 1931.
Record and carbon material, Manifolding assemblies. Standard Register Company. 287,544; Sept. 29; Serial No. 315,580; published July 14, 1931.
Tape. O. & W. Thum Company. 287,464; Sept. 29; Serial No. 314,520; published July 14, 1931.

CLASS 38

Magazine. P. R. Gruen. 287,457; Sept. 29; Serial No. 313,471; published July 14. 1931.
Magazine. Patterson Publishing Company. 287,460; Sept. 29; Serial No. 314,071; published July 14, 1931.
Newspaper. Detroit Daily Mirror. 287,463; Sept. 29; Serial No. 314,400; published July 7, 1931.

CLASS 39

Apparel, Wearing. Sakowitz Brothers. 287,563; Sept. 29; Serial No. 308,765; published July 14, 1931.
Boots and shoes. S. Bearman Shoe Company. 287,538; Sept. 29; Serial No. 314,138; published July 14, 1931.
Boots and shoes. Lane Bros. Co. 287,534; Sept. 29; Serial No. 315,151; published July 21, 1931.
Brassières, corsets, bandeaux, etc. Lucile Somarco Brassiere. 287,537; Sept. 29; Serial No. 314,525; published July 21, 1931.
Collars. Aetna Shirt Co. 287,681; Sept. 29.
Corselets. Mme. Céleste Better Form Foundation Garment. 287,619; Sept. 29; Serial No. 312,281; published July 21, 1931.
Corsets and brassières. E. A. Besançon. 287,620; Sept. 29; Serial No. 312,359; published July 21, 1931.
Corsets, corsetwaists, brassières, etc. Formfit Company. 287,676; Sept. 29.
Girdles. Maiden Form Brassiere Co. Inc. 287,679; Sept. 29.
Gloves. Steinberger Bros. Glove Corp. 287,542; Sept. 29; Serial No. 313,811; published July 14, 1931.
Gloves, Leather and fabric. Steinberger Bros. Glove Corp. 287,678; Sept. 29.
Hosiery. S. J. Levy & Sons. 287,675; Sept. 29.
Overcoats, topcoats, and suits. S. Fishkin. 287,674; Sept. 29.
Pads, Heel. J. H. Stark. 287,540; Sept. 29; Serial No. 313,893; published July 14. 1931.
Pads, Heel upper. Stephen Bros. 287,618; Sept. 29; Serial No. 312,021; published July 14, 1931.
Shoes. Ansonia Bootery, Inc. 287,536; Sept. 29; Serial No. 314,743; published July 21, 1931.
Shoes. H. C. Godman. 287,673; Sept. 29.
Shoes. Guarantee Shoe Company. 287,616; Sept. 29; Serial No. 311,188; published July 21, 1931.
Shoes. Strawbridge & Clothier. 287,535; Sept. 29; Serial No. 314,824; published July 21, 1931.
Shoes. Winchell Shoe Manufacturing Co. 287,539; Sept. 29; Serial No. 314,089; published July 14, 1931.
Shoes, Baby. Monarch Shoe Co., Inc. 287,541; Sept. 29; Serial No. 313,887; published July 14, 1931.
Stockings. Ajax Hosiery Mills. 287,657; Sept. 29; Serial No. 311,768; published July 7, 1931.
Undergarments, Women's. Weingarten Bros. 287,621; Sept. 29; Serial No. 312,872; published July 14, 1931.

CLASS 40

Boning for wearing apparel. Henry Stuart Company. 287,628; Sept. 29; Serial No. 314,823; published July 14, 1931.
Elastic webbing, Narrow. Everlastik, Inc. 287,625; Sept. 29; Serial No. 314,046; published July 14, 1931.

CLASS 42

Broadcloth in the piece. J. P. Stevens & Co. Inc. 287,577; Sept. 29; Serial No. 313,613; published July 14, 1931.

Carpets, Textile. Hardwick & Magee Company. 287,663; Sept. 29.
Cotton piece goods. Cramerton Mills, Incorporated. 287,592; Sept. 29; Serial No. 315,487; published July 21, 1931.
Cotton piece goods. Thos. G. Hill & Co. Limited. 287,581; Sept. 29; Serial No. 314,365; published July 14, 1931.
Fabrics. James H. Dunham & Co. 287,579; Sept. 29; Serial No. 314,103; published July 21, 1931.
Fabrics. Foremost Fabrics Corporation. 287,560; Sept. 29; Serial No. 307,887; published July 14, 1931.
Fabrics. T. Gaines Amery, Inc. 287,575; Sept. 29; Serial No. 313,115; published July 14, 1931.
Fabrics, Elastic. Charles R. De Bevoise Company. 287,594; Sept. 29; Serial No. 315,675; published July 21, 1931.
Fabrics made wholly or partially of cellulose derivatives. Celanese Corporation of America. 287,583; Sept. 29; Serial No. 314,981; published July 14, 1931.
Fabrics of cellulose derivatives. Celanese Corporation of America. 287,593; Sept. 29; Serial No. 315,629; published July 21, 1931.
Handkerchiefs. T. Pearl. 287,576; Sept. 29; Serial No. 313,609; published July 14, 1931.
Linens, cloths, napkins, etc. Mrs. G. Herzog. 287,550; Sept. 29; Serial No. 283,334; published July 21, 1931.
Piece goods. Burton Brothers & Co. Inc. 287,584; Sept. 29; Serial No. 315,030; published July 14, 1931.
Piece goods. Duplan Silk Corporation. 287,617; Sept. 29; Serial No. 311,268; published July 14, 1931.
Piece goods. C. E. Sigler. 287,578; Sept. 29; Serial No. 314,078; published July 14, 1931.
Piece goods of cotton, linen, hemp, etc. Etablissements Schaeffer & Cie. 287,630–1; Sept. 29; Serial Nos. 315,306–7; published July 21, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 287,587; Sept. 29; Serial No. 315,188; published July 14, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 287,590–1; Sept. 29; Serial Nos. 315,436–7; published July 21, 1931.
Prints of cotton or linen. India. Hindustan Art Co. 287,513; Sept. 29; Serial No. 309,080; published July 21, 1931.
Rugs, Seamless Wilton. Artloom Corporation. 287,632–3; Sept. 29; Serial Nos. 315,423–4; published July 21, 1931.
Sheets and pillow cases. Utica Steam & Mohawk Valley Cotton Mills. 287,585; Sept. 29; Serial No. 315,070; published July 14, 1931.
Silk, cotton, etc., piece goods. Haas Brothers Fabrics Corporation. 287,586; Sept. 29; Serial No. 315,095; published July 21, 1931.
Silk piece goods. Louis Roessel & Co. 287,582; Sept. 29; Serial No. 314,464; published July 14, 1931.
Towels, Golfer's. J. C. Gallagher. 287,580; Sept. 29; Serial No. 314,236; published July 14, 1931.
Wool fabrics. Hillsboro Woolen Mill Co. 287,589; Sept. 29; Serial No. 315,231; published July 14, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 287,448–9; Sept. 29; Serial Nos. 315,734–5; published July 21, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 287,450–1; Sept. 29; Serial Nos. 315,737–8; published July 21, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 287,452; Sept. 29; Serial No. 315,740; published July 21, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 287,531; Sept. 29; Serial No. 315,743; published July 21, 1931.

CLASS 43

Thread. General Silk Corporation. 287,629; Sept. 29; Serial No. 315,392; published July 14, 1931.
Thread and yarn, Cotton. Standard-Coosa-Thatcher Company. 287,624; Sept. 29; Serial No. 313,941; published July 14, 1931.
Yarn, Artificial silk (rayon). Tubize Chatillon Corporation. 287,627; Sept. 29; Serial No. 314,664; published July 14, 1931.
Yarn, Cotton and rayon. Standard-Coosa-Thatcher Company. 287,623; Sept. 29; Serial No. 313,568; published July 21, 1931.

CLASS 44

Applicators. Lanteen Laboratories, Inc. 287,639; Sept. 29; Serial No. 313,300; published July 21, 1931.
Electrical apparatus for the treatment of patients. G. Hollstein. 287,660; Sept. 29.
Manicure files. Schaaf & Good Company. 287,635–6; Sept. 29; Serial Nos. 315,281–2; published July 14, 1931.
Pads, foot straightheners, and bandages. Forest City Rubber Company. 287,640; Sept. 29; Serial No. 313,732; published July 21, 1931.
Permanent wave machines for human hair. New York Hair Co. 287,566; Sept. 29; Serial No. 314,820; published July 21, 1931.
Prophylactic rubber articles. Dean Rubber Manufacturing Company. 287,568–9; Sept. 29; Serial Nos. 314,486–7; published July 14, 1931.
Prophylactic rubber articles. Rossen-Nessor Company. 287,574; Sept. 29; Serial No. 310,351; published July 21, 1931.
Sanitary napkins. Sterilek Company Inc. 287,567; Sept. 29; Serial No. 314,663; published July 21, 1931.
Teeth, Artificial. Dr. Hiltebrandt Zahnfabrik Aktiengesellschaft. 287,565; Sept. 29; Serial No. 309,778; published July 21, 1931.
Tweezers, nippers, scissors, etc. Schnefel Bros., Inc. 287,570; Sept. 29; Serial No. 314,465; published July 14, 1931.
X-ray film packets. M. B. Hodgson. 287,637; Sept. 29; Serial No. 315,357; published July 14, 1931.

CLASS 45

Beverages. H. E. Meade. 287,502; Sept. 29; Serial No. 315,856; published July 21, 1931.
Beverages. J. R. Richardson. 287,595; Sept. 29; Serial No. 301,511; published July 21, 1931.
Beverages and sirups and extracts for making the same, Maltless. De Lisser Extract Co. Inc. 287,503; Sept. 29; Serial No. 315,676; published July 14, 1931.
Beverages, sirups and extracts for making the same. J. Sodini. 287,658; Sept. 29.
Beverages, syrups, extracts, etc. Clicquot Club Company. 287,512; Sept. 29; Serial No. 315,898; published July 21, 1931.
Flavor bases, Maltless. W. T. Markillie. 287,500; Sept. 29; Serial No. 312,810; published July 14, 1931.
Fruit juices. Z. Matzka. 287,553; Sept. 29; Serial No. 298,581; published July 21, 1931.
Water, Mineral. K. E. Parker. 287,504; Sept. 29; Serial No. 315,603; published July 14, 1931.

CLASS 46

Candy. Queen Anne Candy Company. 287,669; Sept. 29.
Candy. Frank G. Shattuck Company. 287,446; Sept. 29; Serial No. 315,432; published July 14, 1931.
Candy. C. E. Voogt. 287,664; Sept. 29.
Canned fish. Pacific Commercial Company. 287,561; Sept. 29; Serial No. 308,750; published July 14, 1931.
Canned fruits and fruit preserves, canned vegetables, meats, etc. Kroger Grocery & Baking Co. 287,548; Sept. 29; Serial No. 279,479; published June 30, 1931.
Canned fruits and vegetables. Jos. M. Spriggs' Sons, Inc. 287,443; Sept. 29; Serial No. 314,932; published July 14, 1931.
Canned olives. Albers Packing Company. 287,668; Sept. 29.
Canned salmon. Columbia River Packers Association, Inc. 287,552; Sept. 29; Serial No. 295,068; published July 7, 1931.
Canned shrimp meat. Alaskan Glacier Sea Food Company. 287,438; Sept. 29; Serial No. 313,948; published July 14, 1931.
Coffee. Davies & Sullivan Company. 287,433; Sept. 29; Serial No. 310,162; published July 21, 1931.
Coffee. Standard Brands Incorporated. 287,440; Sept. 29; Serial No. 314,518; published July 7, 1931.
Coffee and tea. Standard Brands Incorporated. 287,441; Sept. 29; Serial No. 314,662; published July 7, 1931.
Coffee and tea. Standard Brands Incorporated. 287,444–5; Sept. 29; Serial Nos. 315,115–16; published July 14, 1931.
Eggs. P. J. Oesterling & Son, Inc. 287,667; Sept. 29.
Flour, Wheat. Commander-Larabee Corporation. 287,525; Sept. 29; Serial No. 313,905; published June 23, 1931.
Fruits, Fresh citrus. Orange Cove Citrus Association. 287,680; Sept. 29.
Potato chips. Golbur, Inc. 287,442; Sept. 29; Serial No. 314,940; published July 21, 1931.
Potato chips, Fried. Toland & Julien. 287,551; Sept. 29; Serial No. 293,164; published July 21, 1931.
Sugar, Refined. José Arrechabala, S. A. 287,682; Sept. 29.
Tea. Standard Brands Incorporated. 287,435; Sept. 29; Serial No. 312,271; published June 23, 1931.
Tea. Standard Brands Incorporated. 287,447; Sept. 29; Serial No. 315,471; published July 14, 1931.
Vegetables and fruits, Fresh. Lambert Marketing Company. 287,439; Sept. 29; Serial No. 314,372; published July 14, 1931.

ALPHABETICAL LIST OF LABELS

Alatol. For a Preparation for Renewing Slate or Composition Blackboard. Alatol Company. 39,778; Sept. 29.
Banana Pie. For Frozen Banana Pie Confection. Banana Pie Co. 39,779; Sept. 29.
Birk's Shaving Cream. For Shaving Cream. Birk Manufacturing Company. 39,780; Sept. 29.
Blue Diamond Barley Malt Syrup. For Barley Malt Syrup. A. Poust. 39,807; Sept. 29.
Burnett's Inc., Natural Fish Food. For Fish Food. Burnett's, Inc. 39,781; Sept. 29.
CB—353. For Chocolate Layer Cake. Lambooy Label and Wrapper Co. 39,796; Sept. 29.
CB—360. For Strawberry Layer Cake. Lambooy Label and Wrapper Co. 39,797; Sept. 29.
CB—361. For Butterscotch Cake. Lambooy Label and Wrapper Co. 39,795; Sept. 29.

Casco Onyxoid Electric Cigar Lighter. For Electric Cigar Lighters. Casco Products Corporation. 39,783; Sept. 29.
Casco Pendant-Lite. For Electric Cigar Lighters. Casco Products Corporation. 39,784; Sept. 29.
Cleans Polishes Trex Wonderful Furniture Polish. For Preparation for Polishing and Cleaning Pianos, Furniture, Etc. H. Buttenheim. 39,782; Sept. 29.
Dixie Butter Biscuit. For Butter Biscuits. James A. Harper Supply Company. 39,792; Sept. 29.
Dr. P. Phillips. For Pure Orange Juice. Dr. P. Phillips Company. 39,805; Sept. 29.
Ehrhardt's Razor King. For Sharpening Compound. Ehrhardt Bros. 39,789; Sept. 29.
F & F Cough Lozenges. For Cough Lozenges. F & F Laboratories. 39,790; Sept. 29.
Firmfit. For Men's Garters. Pioneer Suspender Company. 39,806; Sept. 29.
Fly-Tox. For Insecticide. Rex Research Corporation. 39,811–12; Sept. 29.
For Callouses. For Preparation for Treating Callouses, Corns, and Bunions. J. C. Crowe. 39,787; Sept. 29.
Frenchvel. For Rolls of Prepared Tracing Paper. Special Paper Manufacturing Co. 39,817; Sept. 29.
Hep-U-Rub. For Medicinal Preparation Intended For Colds. G. T. Penny. 39,804; Sept. 29.
His First Christmas. For Hosiery. Thomas Mills. 39,802; Sept. 29.
Jitney Circus. For Potato Chips. W. M. Devitt. 39,788; Sept. 29.
Kal-Ar-Stik. For an Adhesive Arsenate Dusting Compound Used as an Insecticide. Cornell Seed Company. 39,785; Sept. 29.
Lambrecht Butter "Famous for its Flavor". For Butter. Lambrecht Creamery. 39,798; Sept. 29.
Luckel's Steam Refined Borax Soap Granulated. For Soap. Luckel, King & Cake Soap Company. 39,799; Sept. 29.
Mar-Vay Lingerie. For Lingerie. Real Silk Hosiery Mills. 39,810; Sept. 29.
Moneysworth. For Sliced Bacon. Miller and Hart. 39,801; Sept. 29.
Mothded. For Liquid Insecticide. Midway Chemical Company. 39,800; Sept. 29.
Murrayknit. For Fashion and fit. For Knitted Sportswear. Sacks-Sons Carton Co. 39,814; Sept. 29.
My-T-Fine—D & C—For Making Lemon Flavored Desserts. For Mixture of Ingredients to be Used for Making Lemon Flavored Desserts. My-T-Fine Corporation. 39,803; Sept. 29.
My Wife's Favorite Salad Dressing. For Salad Dressing. Mrs. Esther Wallace. 39,819; Sept. 29.
Prattlow. For Sliced Hawaiian Pineapple. Pratt-Low Preserving Company. 39,808; Sept. 29.
Pride of Michigan Butter. For Butter. F. W. Severson and V. Birdsall. 39,815; Sept. 29.
Quandt Core Oil. For Core Oil, an Oil used in Foundry Work. A. Quandt & Sons. 39,809; Sept. 29.
Red Ribbon Malt Syrup. For Malt Syrup. H. Rubin. 39,813; Sept. 29.
Stantest Paint Stands the Test. For Paints. French-Wolf Paint Corp. 39,791; Sept. 29.
The Magic Cleaner. For Household Cleaner. It Products, Ltd. 39,794; Sept. 29.
The May Co. Footwear. For Footwear. Holman Paper Box Co. 39,793; Sept. 29.
3 Fruits Preserve. For Preserves. Crosse & Blackwell, Inc. 39,786; Sept. 29.
Vellux. For Rolls of Prepared Tracing Paper. Special Paper Manufacturing Co. 39,818; Sept. 29.
Warranty of Satisfaction. For Ophthalmic Lenses. Soft-Lite Lens Co. 39,816; Sept. 29.

ALPHABETICAL LIST OF PRINTS

A Genuine Van Dyne Color Creation. For Furniture Finish. Continental Lacquer Corporation. 13,425; Sept. 29.
Brick Ice Cream. For Ice Cream. National Dairy & Food Bureau. 13,432; Sept. 29.
Dugan's Special Cakes. For Cake Used as Food. Dugan Brothers. 13,427; Sept. 29.
Genuine Old Style Ludefisk. For Fish. Kildall Company. 13,429; Sept. 29.
Liquid Olive. For a Hair Preparation. The Liquid Olive Co. 13,430; Sept. 29.
Quality and Variety in Dugan Products. For Bakery Products. Dugan Brothers. 13,428; Sept. 29.
Strawberry Sundae. For Sundaes. National Dairy & Food Bureau. 13,431; Sept. 29.
The Rainbow Girl. For Gasoline. True's Oil Company. 13,433; Sept. 39.
There's Something About Mary Roberts Rinehart II. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,426; Sept. 29.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 29TH DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Rabezzana, Hector, assignor.)
Acheson, Albert R., assignor to E. C. Stearns & Co., Syracuse, N. Y. Incinerator. 1,824,974; Sept. 29.
Adam, Isalé C. F., Paris, and René A. Ragody, Le Perreux, assignors to Compagnie Francaise des Appareils Adam, Paris, France. Apparatus for the permanent waving of the hair. 1,824,799; Sept. 29.
Adams, Lytle S., New York, N. Y. Airplane article pick up shock absorbing means. 1,825,829; Sept. 29.
Advance Stamping Company. (See Nolan, Nicholas J., assignor.)
Ahlm, Charles E. F., Cleveland, and G. L. Elmslie, East Cleveland, assignors to Continuous Torque Transmission Company, Cleveland, Ohio. Motor vehicle mechanism. 1,824,975; Sept. 29.
Akron Equipment Company, The. (See Schmidt, Richard J., assignor.)
Aktiebolaget Carba. (See Tandberg, John G., assignor.)
Aktiebolaget Gotaverken. (See Johansson, Johan E., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Jungblut, Ferdinand, assignor.)
Aktiengesellschaft Brown, Boveri and Cie. (See Meyer, Adolf, assignor.)
Aktiengesellschaft fur Tiefbohrtechnik und Maschinenbau vormals Trauzl Co. (See Schmidt, Adam, assignor.)
Alemite Corporation. (See Murphy, Howard J., assignor.)
Alfred Teves Maschinen-und Armaturen-Fabrik Gesellschaft mit beschrankter Haftung. (See Stern, Nathan, assignor.)
Alinder, Henry, and G. B. Shipley, Pittsburgh, Pa., assignors by mesne assignments, to The International Nickel Company, Inc., New York, N. Y. Annealing furnace. 1,825,380; Sept. 29.
Allan, John E., and S. B. Freeman, Birkenhead, England. Method of and apparatus for manufacturing insulated electric cables. 1,825,570; Sept. 29.
Allbright-Nell Company, The. (See Reynoldson, R. G., assignor.)
Alleman, Gellert, Swarthmore, assignor to Sun Oil Company, Philadelphia, Pa. Colored gasoline. 1,824,977; Sept. 29.
Allen, Grace T., St. Joseph, Mo. Hair waving comb. 1,825,170; Sept. 29.
Allen, Robert C., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Packing gland. 1,824,863; Sept. 29.
Altfather, John C., et al. (See Altfather, Lewis F., assignor.)
Altfather, Lewis F., assignor of one-third to J. C. Altfather and one-third to R. M. McTaylor, Berlin, Pa. Potato cutter. 1,824,798; Sept. 29.
Altgelt, Herman E., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Agricultural implement. 1,824,976; Sept. 29.
Ambrose, Antone J., Westville, Ill. Bedstead or similar article. Des. 85,225; Sept. 29.
American Buckle Company, The. (See Salisbury, Jessup, assignor.)
American Cyanamid Company. (See Barsky, G., and Walker, assignors.)
American Foundry Equipment Company, The. (See Peik, Louis D., assignor.)
American Neon Light Corporation. (See Kayatt, Phillip J., assignor.)
American Road Machinery Company. (See Char, Isaac, assignor.)
American Sealcone Corporation. (See Jones, Ellis L., assignor.)
American Show Case & Mfg. Co. (See Kaufman, Jacob M., assignor.)
American Slicing Machine Company. (See Campbell, William J., assignor.)
American Slicing Machine Co. (See Milligan, Abner L., assignor.)
American Telephone and Telegraph Company. (See Bouton, Lewis L., assignor.)
American Telephone and Telegraph Company. (See Brehman, Luther W., assignor.)
American Telephone and Telegraph Company. (See Martin, De Loss K., assignor.)
American Telephone and Telegraph Company. (See McCurdy, Ralph G., assignor.)
American Telephone and Telegraph Company. (See Wintringham, William T., assignor.)
American Tri-Ergon Corporation. (See Vogt, H., Massolle, and Engl, assignors.)

Amiesite Asphalt Company of America. (See Sadtler, Samuel S., assignor.)
Anderson, John W., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Engine. 1,824,800; Sept. 29.
Anderson, Martin J., assignor to Mathews Conveyer Company, Ellwood City, Pa. Conveying apparatus. 1,825,037; Sept. 29.
Anderson, Martin J., assignor to Mathews Conveyer Company, Ellwood City, Pa. Conveying apparatus. 1,825,038; Sept. 29.
Anderson, William. (See Beggren, Eric N., assignor.)
Anode Rubber Company Limited. (See Forrer, Max, assignor.)
Anthracite Separator Company. (See Pardee, Frank, assignor.)
Archer, Wesley L., Rutland, Vt. Ventilator for buildings. 1,825,297; Sept. 29.
Arends, Herman T., Highland Park, Mich. Magazine binder. 1,825,257; Sept. 29.
Argust, Warren C. (See Ruffing, John, sr., assignor.)
Arnold, Jean F., Paris, France. Automatic screw-threading machine. 1,825,171; Sept. 29.
Asire, Horace W., assignor to General Motors Research Corporation, Dayton, Ohio. Multiple carburetor charge forming device. 1,825,381; Sept. 29.
Aspden, Frank, Vancouver, British Columbia, Canada, assignor to Ransome Concrete Machinery Company, Dunellen, N. J. Water supply means for concrete mixers. 1,825,039; Sept. 29.
Associated Telephone and Telegraph Company. (See Kessler, F., and Forster, assignors.)
Atlantic Carton Corporation. (See Whitehead, Earl B., assignor.)
Atlas Tack Corporation. (See Jacques, George W., assignor.)
Austin, Frank A., Syracuse, N. Y. Fuel grate. 1,825,040; Sept. 29.
Austin Manufacturing Co. (See Wilson, Fred D., assignor.)
Automatic Coal Burner Co. (See Warner, Edgar T., assignor.)
Automatic Electric Inc. (See Ray, A. J., and Lomax, assignors.)
Awbrey, Samuel C., assignor to Floor Accessories Company, Inc., Kansas City, Mo. Threshold plate or similar article. Des. 85,226; Sept. 29.
Babare, George, Tacoma, Wash. Sawing machine. 1,825,041; Sept. 29.
Babcock & Wilcox Company, The. (See Prentice, John, assignor.)
Babcock & Wilcox Company, The. (See Smith, Herman B., assignor.)
Bainbridge, George K., Ripon, Calif. Plastic rolling machine. 1,824,759; Sept. 29.
Baker, Benjamin P., Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arc extinguishing means. 1,825,298; Sept. 29.
Baker, Bert F. (See Knox, H. A., and Baker.)
Baker Brothers, Inc. (See Hallenbeck, George E., assignor.)
Baker, Charles R., Wood River, Ill., assignor to Standard Oil Company, Whiting, Ind. Filtering. 1,825,330; Sept. 29.
Baker, Henry S., Niagara Falls, Ontario, Canada, assignor, by mesne assignments, to A. K. Kempton, Jackson Heights, N. Y. Magnetic clock escapement. 1,825,382; Sept. 29.
Baker, Thomas W. (See Magee, Frederick W., assignor.)
Baldwin, John D., jr., assignor to A. J. Weatherhead, jr., Cleveland, Ohio. Making cocks or valves. 1,825,042; Sept. 29.
Ballard, Francis D., Flushing, and F. S. Buck, Wellsville, N. Y. Carrying case for currency. 1,824,765; Sept. 29.
Baltz, Charles A., jr., Ruxton, Md. Automatic window closing device. 1,825,043; Sept. 29.
Bangerter, Jakob, Burgdorf, Switzerland. Pressure oil governor for turbine wheels. 1,825,611; Sept. 29.
Banker, William C., Chapin, Iowa. Windmill. 1,825,500; Sept. 29.
Banta, Clifford, and F. W. Hightower, Philadelphia, Pa., assignors to The Barrett Company New York, N. Y. Treating tar acids. 1,824,864; Sept. 29.
Barber-Greene Company. (See Barber, Harry H., assignor.)
Barber, Harry H., Aurora, Ill., assignor to Barber-Greene Company. Excavator. 1,825,258; Sept. 29.

Barreaux, Alphonse, Loury, and G. Sarrazin, Orleans, France. Rotary internal combustion engine. 1,825,571; Sept. 29.
Barret, William M., Sh veport, La. Balance indicator. 1,825,172; Sept. 29.
Barrett & Company. (See Robinson, Karl D., assignor.)
Barrett Company, The. (See Banta, C., and Hightower, assignors.)
Barrett, Harold G., Wilmette, Ill., assignor to Pyratone Products Co poration, Chicago, Ill. Rubbing and grinding machine. 1,825,299; Sept. 29.
Barrow, George M., Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator. 1,824,766; Sept. 29.
Barrow, George M., Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator connecter. 1,824,767; Sept. 29.
Barrows, Alford C., J. H. McLean, and G. W. Langford, assigno s to Economy Baler Company, Ann Arbor, Mich. Baling press. 1,825,173; Sept. 29.
Barry-Wehmiller Machinery Company. (See Herold, J. L., and Dawson, assignors.)
Barsky, George, New Yo k, N. Y., and G. B. Walker, Roselle, N. J., assignors to American Cynnamid Company. Floating ores. 1,825,501; Sept. 29.
Bartlett, F. W., et al. (See Collom, C. B., and Horton, assignors.)
Barton, Edward D., Fountain, Colo. Fender rope fastener. 1,825,612; Sept. 29.
Bastian-Morley Company. (See Morley James P., assignor.)
Bates, Mortimer F., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Regulating system. 1,825,139; Sept. 29.
Baxenden, Thomas G., Watford, and J. R. Collyear, Bushey, England. Metal spool. 1,825,044; Sept. 29.
Bay State Optical Company. (See Siddall, Wilbur H., assignor.)
Baylis, Walter S., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif. Decolorizing oils by filtration through paper. 1,825,300; Sept. 29.
Bear Manufacturing Company. (See Wochner, Henry, assignor.)
Beatty, W. Henry. (See Beatty, William H., assignor.)
Beatty, William H., assignor of three-eighths to W. H. Beatty, Birmingham, Ala. Centrifugal molding apparatus. 1,825,302; Sept. 29.
Becker, Burt, Philadelphia, Pa. Rebounding hammer. 1,825,331; Sept. 29.
Becker, Charles M., Brooklyn, N. Y. Lamp or analogous article. Des. 85,227; Sept. 29.
Behringer, Karl. (See Pungs, W., and Behringer.)
Behrman, Abraham S., Chicago, Ill. Separator plate. Re18,214; Sept. 29.
Beisel, Rex B., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Aeroplane. 1,825,301; Sept. 29.
Belden, Hugh A. (See Smith, W. A., and Belden.)
Bell, Louis N., Saulte Ste. Marie, Mich. Pontoon house boat. 1,825,613; Sept. 29.
Benbow, David F., assignor to Yocum Brothers, Inc., Reading, Pa. Display box. 1,825,332; Sept. 29.
Bennett Box Co. (See Bennett, Wallace C., assignor.)
Bennett, Wallace C., Hingham, assignor to Bennett Box Co., Boston, Mass. Stiffening member for boots and shoes. 1,825,625; Sept. 29.
Berger, Knute, Seattle, Wash. Guy line and sheave means for use in connection with hoisting and hauling machines. 1,824,978; Sept. 29.
Berggren, Eric N., assignor to W. Anderson, Chicago, Ill. Spray gun. Des. 85,228; Sept. 29.
Berlinerblau, Joseph, Warsaw, Poland. Driving spindles in textile spinning machines. 1,825,472; Sept. 29.
Berthold, Kenneth F., North Attleboro, assignor to The Mason Box Company, Attleboro Falls, Mass. Box fastener machine. 1,825,140; Sept. 29.
Bethlehem Steel Company. (See Ely, Harold M.)
Bettendorf Company, The. (See Hamilton, Karl M., assignor.)
Bettlen, Richard. (See Nichols, K., and Bettlen.)
Bibb Manufacturing Company. (See Woodruff, William A., assignor.)
Bigelow-Sanford Carpet Co. (See Coyle, Joseph A., assignor.)
Bigelow-Sanford Carpet Co. (See Simonson, George H., assignor.)
Bird, Lester F., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J. Alternating current vapor electrical device. 1,824,760; Sept. 29.
Bischoff, Elmer O. (See Cannon, Charles F., Jr., assignor.)
Black, Albert J., Whittier, Calif. Fruit packer's bench. 1,824,979; Sept. 29.
Blagoeff, Pando, Brooklyn, N. Y. Water wings. 1,824,761; Sept. 29.
Blickhahn, George R., Chicago, Ill. Belt buckle. 1,825,045; Sept. 29.
Block, Joseph, Brooklyn, N. Y. Electric display device. 1,824,942; Sept. 29.
Bloom, David, Berkeley, Calif. Container. 1,824,762; Sept. 29.
Bloom, Seth W., Du Bois, Pa. Coffeepot. 1,825,174; Sept. 29.
Bock, Wilhelm, assignor to Dexdale Hosiery Mills, Lansdale, Pa. Yarn tensioning device. 1,825,626; Sept. 29.
Boddie, Clarence A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio transmitting system. 1,825,303; Sept. 29.
Boehringer, C. H., Sohn Aktiengesellschaft. (See Scheuing, G., and Walach, assignors.)
Boger, John E., Holsington, Kans. Conveyer. 1,825,572; Sept. 29.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Machine for riveting lugs to a tire carrying rim. 1,825,175; Sept. 29.
Bouton, Lewis L., Leonia, N. J., assignor to American Telephone and Telegraph Company. Electrical potentiometer. 1,824,801; Sept. 29.
Bowden, James J., Warren, Ohio. Heat-treating metal. 1,824,865; Sept. 29.
Bowen, Kenneth H., assignor to Henry and Allen, Auburn, N. Y. Heater for water cooled engines. 1,825,627; Sept. 29.
Bowman, Henry V. (See Woolsey, C. A., and Bowman.)
Boyd, Thomas A. (See Lovell, W. G., and Boyd.)
Bradford, John, Winslow, Ill. Clamp for wire fence structures. 1,825,176; Sept. 29.
Bradley Pulverizer Company. (See Catlin, Arthur W., assignor.)
Bradley Pulverizer Company. (See Gibson, William A., assignor.)
Braga, Eduardo de A., Sao Paulo, Brazil. Resilient tire. 1,825,502; Sept. 29.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake actuating mechanism. 1,824,980; Sept. 29.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brake-Testing Equipment Corporation. (See Patton, Harry H., assignor.)
Brand, Harry R., New York, N. Y. Computing and recording mechanism. 1,825,141; Sept. 29.
Braselmann, Eugene, Delle, near Breckerfeld, Germany. Car jack. 1,824,768; Sept. 29.
Brassert, Herman A., Kenilworth, Ill. Apparatus for heating air and other gases for industrial uses. 1,825,259; Sept. 29.
Brehman, Luther W., Detroit, Mich., assignor to American Telephone and Telegraph Company. Insulation testing system. 1,824,802; Sept. 29.
Bridgham, Barton C., San Francisco, Calif. Percolator. 1,824,763; Sept. 29.
Brierly, Laurence L., et al. (See Woods, Robert G., assignor.)
Brill, J. G., Company, The. (See Latshaw, Elmer, assignor.)
Brintnall, Frank W., and F. N. Ross, Detroit, Mich., assignors, by mesne assignments, to National Automotive Fibres, Inc., Wilmington, Del. Upholstery machine. 1,825,573; Sept. 29.
Bristol, Cyrus J., assignor to Globe Machinery & Supply Company, Des Moines, Iowa. Safety latch device. 1,824,866; Sept. 29.
Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Purifying a phenol by distillation. 1,824,867; Sept. 29.
Broden, Edwin N., Roxbury, Mass. Centering device for lathes. 1,824,769; Sept. 29.
Broge, Adolph A. (See Brosius, G. A., and Broge.)
Brookins, William L., Cleveland, Ohio. Transmission mechanism. 1,824,868; Sept. 29.
Brosius, George A., Lewistown, and A. A. Broge, Burnham, Pa. 1,825,177; Sept. 29.
Brotz, Frank G., assignor to Kohler Company, Kohler, Wis. Closet seat hinge. 1,824,770; Sept. 29.
Browand, Benjamin T., Cleveland, Ohio. Tool holder. 1,825,046; Sept. 29.
Brown, Charles S., Syracuse, N. Y. Safety clutch means for implements of motor driven agricultural machines. 1,825,574; Sept. 29.
Brown Company. (See Richter, George A., assignor.)
Brown Company. (See Root, Bertwell, C., assignor.)
Brown, Newton N., assignor to Gold Medal Folding Furniture Company, Racine, Wis. Folding table. 1,824,981; Sept. 29.
Bruce, William M., Springfield, Ohio. Method and apparatus for receiving wireless signals. 1,824,803; Sept. 29.
Brunberg, Bennie N., assignor of thirty-five per cent to C. G. Wood and twenty per cent to A. Johnson, Proctor, Minn. Switch. 1,825,260; Sept. 29.
Bruno, William A., Astoria, assignor to C. W. Fuller, Yonkers, N. Y. Motion picture film magazine. 1,825,142; Sept. 29.
Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y. Synchronizing clock. 1,825,575; Sept. 29.
Buchel, Jules, assignor of one-half to the estate of Charles Louque, New Orleans, La. Burner. 1,825,047; Sept. 29.
Buck, Frederick S. (See Ballard, F. D., and Buck.)
Budd, Edward G. Manufacturing Co. (See Ledwinka, Joseph, assignor.)
Buffington, Harry C. (See Weaver, G. E., and Buffington.)
Bull Dog Electric Products Company. (See Frank, H. J. L., and Jenkins, assignors.)
Burns, Jabez & Sons. (See Burns, W. G., and Kirkland, assignors.)

Burns, William G., and A. D. Kirkland, assignors to Jabez Burns & Sons, Inc., New York, N. Y. Mixing apparatus. 1,825,261; Sept. 29.
Burnside, Carrol J., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Telephone lines. 1,825,304; Sept. 29.
Butterick, Naason Z., Miami, Fla. Interlocking shingle. 1,825,576; Sept. 29.
Butterworth, H. W., & Sons Company. (See Rowley, W. S., and Butterworth, assignors.)
Butterworth, Harry W., jr. (See Rowley, W. S., and Butterworth.)
Buxton, Warner R., Longmeadow, Mass. Flexible pocket receptacle. 1,824,943; Sept. 29.
C-S Engineering Company. (See Schellens, Christopher A., assignor.)
Carbo-Oxygen Company. (See Ricker, George A., assignor.)
Camel Company. (See Tobin, K. J., and Darrow, assignors.)
Campbell, John B., Salem, N. J., assignor, by mesne assignments, to Carthage Mills Incorporated, Cincinnati, Ohio. Producing rug and other patterns on felt base fabrics. 1,824,758; Sept. 29.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,824,869; Sept. 29.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Knife guard for slicing machines. 1,824,870; Sept. 29.
Canaday, Miron S., Rochester, Minn., assignor to Reid, Murdoch & Co., Chicago, Ill. Apron retort crate loader. 1,825,048; Sept. 29.
Cannon, Charles F., jr., assignor of 45% to E. O. Bischoff, Milwaukee, Wis. Golf tee. Des. 85,229; Sept. 29.
Carnelli, Francis J., New York, N. Y. Chain wrench. 1,824,944; Sept. 29.
Carow, Thomas H., assignor of one-half to R. J. Kieffer, San Antonio, Tex. Eyeglass frame. 1,825,503; Sept. 29.
Carr, Ernest R., assignor to The Collis Company, Clinton, Iowa. Poultry coop gate latch. 1,825,504; Sept. 29.
Carr, Walter J., assignor, by mesne assignments, of one-half to Paramount Aircraft Corporation and one-half to G. C. Willcox, Saginaw, Mich. Brake control for aircraft landing wheels. 1,825,577; Sept. 29.
Carraine, Eugene, Philadelphia, Pa. Display and decorating device. 1,825,505; Sept. 29.
Carrier Engineering Corporation. (See Stacey, Alfred E., jr., assignor.)
Carthage Mills Incorporated. (See Campbell, John B., assignor.)
Cartlidge, Frank, Cincinnati, Ohio, assignor to Sullivan Machinery Company. Mining apparatus. 1,824,945; Sept. 29.
Cartlidge, Frank, Chicago, Ill., assignor to Sullivan Machinery Company. Mining machine. 1,824,946; Sept. 29.
Cashwell, Lacy A. (See Hewitt, John C., assignor.)
Caterpillar Tractor Co. (See Grothe, Walter, assignor.)
Catlin, Arthur W., Chicago, Ill., assignor to Bradley Pulverizer Company, Allentown, Pa. Tube mill. 1,825,333; Sept. 29.
Causey, Daniel W., Norfolk, Va. Cover and protector for shades. 1,825,334; Sept. 29.
Cawley, Aloysius J., Pittston, Pa., assignor to Radio Corporation of America. Photo-electric sound recording or reproducing. 1,825,438; Sept. 29.
Cawley, Aloysius J., Pittston, Pa., assignor to Radio Corporation of America. Sound recording or reproducing apparatus. 1,825,439; Sept. 29.
Cawley, Aloysius J., Pittston, Pa., assignor to Radio Corporation of America. Sound recording or reproducing apparatus. 1,825,440; Sept. 29.
Cawley, Aloysius J., Pittston, Pa., assignor to Radio Corporation of America, New York, N. Y. Sound recording apparatus and process. 1,825,441; Sept. 29.
Celanese Corporation of America. (See Dreyfus, C., and Schneider, assignors.)
Celanese Corporation of America. (See Dreyfus, C., Whitehead, and Platt, assignors.)
Cernuda, Antonio, Habana, Cuba. Airplane. 1,825,578; Sept. 29.
Chadwick & Carr Company. (See Cross, Edmund R., assignor.)
Chamberlain, Alfred J., Milwaukee, Wis. Can closing machine. Re18,209; Sept. 29.
Chamberlain, George L., and G. H. Gneiss, Chicago, Ill. Locating conduit outlets. 1,825,049; Sept. 29.
Chambon, Marius, Paris, France, assignor to Etablissements L. Chambon, Paris, France. Driving device employing Maltese cross wheels. 1,825,442; Sept. 29.
Chance Brothers and Co. Limited, Glass Works. (See English, John, assignor.)
Chaplin, William, Paris, France. Nut lock. 1,825,050; Sept. 29.
Chapman-Stein Company, The. (See Culbertson, Albert L., assignor.)
Char, Isaac, assignor to American Road Machinery Company, Kennett Square, Pa. Motor grader tractor steering device. 1,825,220; Sept. 29.
Chase, Reyburn T., Camden, N. J. Can opener. 1,825,383; Sept. 29.
Cheatham Electric Switching Device Co. (See Milton, John L., assignor.)
Cheatham Electric Switching Device Company. (See Stolp, Samuel S., assignor.)
Chevalier, John M., Tacoma, Wash., assignor of one-half to O. A. Rhode, Seattle, Wash. Log rafting device. 1,824,982; Sept. 29.
Chicago Forging & Manufacturing Co. (See Hynes, Dibrell P., assignor.)
Chicago Forging & Manufacturing Co. (See Mears, Norton A., assignor.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chicago Pneumatic Tool Company. (See Stevens, Edward W., assignor.)
Chillingworth, Rudolph, New York, N. Y. Aeroplane. 1,825,305; Sept. 29.
Chormann, Otto I., Rochester, N. Y., and J. N. Jacobsen, Alameda, Calif., assignors to The Pfaudler Co., Rochester, N. Y. Liquid-treating apparatus. 1,825,443; Sept. 29.
Chrisman, Charles S., West Chester, assignor to The United Gas Improvement Company, Philadelphia, Pa. Gas generator. 1,824,764; Sept. 29.
Christensen, Norman V., assignor to Union Special Machine Company, Chicago, Ill. Oiling system for sewing machines. 1,825,506; Sept. 29.
Christie, Stanley P., London, England. Liquid piston internal combustion pump for liquids. 1,825,507; Sept. 29.
Christoff, Vaska, Detroit, Mich. Brassière. 1,825,579; Sept. 29.
Chrysler Corporation. (See Henderson, Herbert V., assignor.)
Ciglia, Ernesto F., Scarsdale, and L. F. Pelletier, East Bronx, N. Y., assignors of one-fourth to W. W. Irwin, New York, and one-fourth to V. von Schlegell, White Plains, N. Y. Carburetor. 1,825,384; Sept. 29.
Clark, John M., New York, N. Y. Radiator. 1,825,306; Sept. 29.
Clark, Walter J., assignor to Coe Laboratories, Inc., Chicago, Ill. Dental flask. 1,825,051; Sept. 29.
Clarke, John A., jr., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Pantograph. 1,824,871; Sept. 29.
Clayburgh, Harry C., assignor to Dawson Manufacturing Company, Oakland, Calif. Can holder. 1,824,872; Sept. 29.
Clayton, James L. (See Kelley, P. M., and Clayton.)
Cleveland, Edgar L., Mobridge, S. Dak. Hot bearing indicating means. 1,825,052; Sept. 29.
Cleveland Folding Machine Company, The. (See Hitchcock, Reuben, assignor.)
Cleveland Folding Machine Company, The. (See Olson, Andrew, assignor.)
Cleveland Folding Machine Company. (See Tufts, L. R., and Olson, assignors.)
Cloverdale Spring Company. (See Fuerst, Edwin W., assignor.)
Coe Laboratories, Inc. (See Clark, Walter J. assignor.)
Coghill, Robert D., Roslyn Dunedin, New Zealand. Treatment of fibres or fibrous materials. 1,825,178; Sept. 29.
Cole, George H., assignor to Line Material Company, Milwaukee, Wis. Lighting fixture. 1,824,873; Sept. 29.
Cole, John M. (See Wolarsky, Isadore, assignor.)
Coleman, Roy E., Meriden, assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn. Colored cold molded insulation. 1,825,620; Sept. 29.
Collingham, Robert H., Rugby, England, assignor to General Electric Company. Elastic fluid turbine. 1,825,580; Sept. 29.
Collins, Fred J., assignor to Collins Loom Works, Inc., Amsterdam, N. Y. All metal spool. 1,825,508; Sept. 29.
Collins, Glenville A., San Marino, Calif. Boiler construction. 1,824,874; Sept. 29.
Collins, Horatio J., London, England. Causing solids to be penetrated by or impregnated with liquids or solutions of various substances. 1,925,509; Sept. 29.
Collins Loom Works, Inc. (See Collins, Fred J., assignor.)
Collis Company, The. (See Carr, Ernest R., assignor.)
Collom, Clarence B. and D. Horton, assignors of fifty percent to W. L. Thornton and F. W. Bartlett, Dallas, Tex. Grappling tongs. 1,825,179; Sept. 29.
Collyear, John R. (See Baxenden, T. G., and Collyear.)
Comerford, William, Buffalo, N. Y. Resilient seat. 1,825,581; Sept. 29.
Compagnie Francaise des Appareils Adam. (See Adam, I. C. F., and Ragody, assignors.)
Compagnie Nationale de Matieres Colorantes et Manufactures de Produits Chimiques du Nord, Reunies, Etablissements Kuhlmann. (See Mirocourt, Henry, assignor.)
Conard, Frederick U., Bridgeport, Conn., assignor by mesne assignments to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1 825,143; Sept. 29.
Conduit Electrical Manufacturing Corporation. (See Greenwood, Talma T., assignor.)
Conduit Electrical Manufacturing Corporation. See Jansson, Gustav E., assignor.)
Conduit Electrical Manufacturing Corporation. See Pinkham, Henry P., assignor.)
Connelly, Benjamin P., Raleigh, N. C. Device for flushing drain pipes. 1,825,582; Sept. 29.

Connolly, James E., Baltimore, Md. Safety razor. 1,825,335; Sept. 29.
Consolidated Car-Heating Company. (See Hynes, Lee P., assignor.)
Continental Can Company. (See Kronquest, Alfred L., assignor.)
Continental Can Company. (See Punte, William F., assignor.)
Continental Motors Corporation. See Judson, Ross W., assignor.)
Continental Motors Corporation. (See Niven, Archie, assignor.)
Continuous Torque Transmission Company. (See Ahlm, C. E. F., and Elmslie, assignors.)
Copony, Alfred, Mount Clemens, Mich., assignor to Copony Auto Loading Company, Detroit, Mich. Decking device. 1,824,983; Sept. 29.
Copony Auto Loading Company. (See Copony, Alfred, assignor.)
Copp, Earle M., San Juan, Porto Rico, assignor to Petree & Dorr Engineers, Inc., to New York, N. Y. Sugar cane process and apparatus. 1,824,875; Sept. 29.
Copple, Dwight E., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Apparatus for forming spoke holes in rim members of vehicle wheels. 1,825,180; Sept. 29.
Cornstalk Products Company. (See Darling, Elton R., assignor.)
Corse, Gaston, assignor to Etablissements L. Chambon, Paris, France. Method and apparatus for printing variable letterpress. 1,825,510; Sept. 29.
Cox, Anthony B., Wilkinsburg, Pa. Standard gear tooth form. 1,825,621; Sept. 29.
Cox, Edwin P., Edgewood Arsenal, Md. Coating composition. 1,824,771; Sept. 29.
Coyle, Joseph A., Amsterdam, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Pile fabric loom. 1,825,110; Sept. 29.
Crago, Paul H., Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,825,221; Sept. 29.
Creveling, John L., Oracle, Ariz., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Power transmitting means. 1,825,053; Sept. 29.
Crocker-Wheeler Electric Manufacturing Company. (See Mug, Edward T., assignor.)
Cross, Edmund R., Arlington, assignor to Chadwick & Carr Company, Boston, Mass. Weighing scale. 1,825,336; Sept. 29.
Cross, Roy, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Wilmington, Del. Conversion of petroleum oil. 1,825,337; Sept. 29.
Cross, Walter M., Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Process and apparatus for converting hydrocarbons. 1,825,338; Sept. 29.
Culbertson, Albert L., assignor, by mesne assignments, to The Chapman-Stein Company, Mount Vernon, Ohio. Recuperative soaking pit. 1,824,876; Sept. 29.
Cullin, Jasper F., assignor to W. J. Hartwig, Detroit, Mich. Carburetor attachment. 1,825,262; Sept. 29.
Curry, Dora R. (See Curry Taylor R., assignor.)
Curry, Taylor R., assignor of one-half to D. R. Curry, Prophetstown, Ill. Mechanical spader. 1,825,222; Sept. 29.
Curtiss Aeroplane & Motor Company. (See Beisel, Rex B., assignor.)
Curtiss-Reid Aircraft Company Limited. (See Reid, Wilfrid T., assignor.)
Cusack, George C., West New York, N. J., assignor, by mesne assignments, to Dryice Equipment Corporation. Refrigerative apparatus. 1,825,054; Sept. 29.
Cutler-Hammer, The. (See Evans, Clarence T., assignor.)
Cutler-Hammer. (See Hunter, Richard B., assignor.)
Cutler-Hammer. (See Millermaster, R. A., and Petersen, assignors.)
Cutler-Hammer. (See Mortensen, N. L., and Seeger, assignors.)
Daisy Manufacturing Company. (See Lefever, Charles F., assignor.)
Darling, Elton R., assignor to Cornstalk Products Company, Inc., Danville, Ill. Producing material rich in xylan. 1,825,307; Sept. 29.
Darrow, William W. (See Tobin, K. J., and Darrow.)
Dassonville, Michel, Paris, France. Collecting artificial wool. 1,824,772; Sept. 29.
Davenport, Arthur T., Washington, D. C. Dosing device. 1,825,339; Sept. 29.
Davis & Furber Machine Company. (See Owen, Henry A., assignor.)
Davis, Clarence D., Los Angeles, Calif. Internal combustion engine. 1,825,263; Sept. 29.
Davis, Harold S., Belmont, and W. J. Murray, Reading, Mass., assignors, by mesne assignments, to Petroleum Chemical Corporation, New York, N. Y. Apparatus for fractionation of certain hydrocarbons. 1,824,947; Sept. 29.
Dawson, Joseph W. (See Herold, J. L., and Dawson.)
Dawson Manufacturing Company. (See Clayburgh, Harry C., assignor.)
Day, Fred J., Los Angeles, Calif. Apparatus for preripening or retarding perishable food products. 1,825,385; Sept. 29.
De Bataafsche Petroleum Maatschappij. (See Loebel, Albert, assignor.)
De Bretteville, Maude L., Coronado, Calif. Day-bed, chaise longue, and chair. 1,825,055; Sept. 29.
Deck, Howard S., Dover, N. J. Cutting machine. 1,825,223; Sept. 29.
Deisch, Noel, Washington, D. C. Electrooptic cell. 1,825,340; Sept. 29.
De Laval Steam Turbine Company. (See Kennedy, Frank W., assignor.)
Delco Products Corporation. (See Hunt, John H., assignor.)
Delco-Remy Corporation. (See Fitzsimmons, John T., assignor.)
Delco Remy Corporation. (See Michel, Clarence A., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Seabury, Ralph L., assignor.)
Delco-Remy Corporation. (See Shippy, Leo C., assignor.)
Denton, James E., assignor of one-fourth to J. A. and B. A. Wallace, Irvine, Ky. Adjusting or tuning device for variable condensers. 1,825,511; Sept. 29.
De Roo, William C., assigner to The Fosdick Machine Tool Company, Cincinnati, Ohio. Drill head safety mechanism. 1,824,894; Sept. 29.
De Roo, William C., assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio. Electrically operated column clamp for radial drills. 1,825,181; Sept. 29.
De Tar, Donald R., Schenectady, N. Y., assignor to General Electric Company. Adjustable electric device. 1,825,583; Sept. 29.
Detroit Lubricator Company. (See Weber, Walter H., assignor.)
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Tool. 1,825,111; Sept. 29.
Dexdale Hosiery Mills. (See Bock, Wilhelm, assignor.)
Dexter, Lucien A., assignor to National Brass Company, Grand Rapids, Mich. Door handle structure. 1,825,264; Sept. 29.
Dick, A. B., Company. (See Hill, Edward W., assignor.)
Diemolding Corporation. (See Ross, Wallace B., assignor.)
Dietrich, Alfons, Glendale, Long Island, N. Y. Ellipsograph. 1,825,444; Sept. 29.
Dobbs, Albert R., East Detroit, Mich. Combined goggles for grinding and welding. 1,825,386; Sept. 29.
Dodge Manufacturing Corporation. (See Van Derhoef, George N., assignor.)
Donley, Robert W., Philadelphia, Pa. Washing and drying machine. 1,825,584; Sept. 29.
Donovan, B., et al., trustees. (See Donovan, Bernard S., assignor.)
Donovan, Bernard S., assignor to B. Donovan and H. F. Fisher, trustees of The National Chemical Products Company, Denver, Colo. Moth killer hygienic garment protector. 1,825,144; Sept. 29.
Doornbos, Jay F. (See Leach, E. C., and Doornbos.)
Dorogi Dr., Es Tarsa Gummigyar, R. T. (See Dorogi, Istvan and L., assignors.)
Dorogi, Istvan and L., Budapest, Hungary, assignors of one-half to Dr. Dorogi Es Tarsa Gummigyar, R. T., Budapest-Albertfalva, Hungary. Inflatable hollow rubber body. 1,825,308; Sept. 29.
Dorogi, Lajos. (See Dorogi, Istvan and L.)
Dose, Frederick W., Bexley, New South Wales, Australia. Machine for the manufacture of airscrews. 1,825,182; Sept. 29.
Douglas, Harry A., Bronson, Mich. Electric lamp. 1,824,804; Sept. 29.
Dow Chemical Company, The. (See Britton, Edgar C., assignor.)
Dressler, Karl, Gross Schonau, assignor to I. M. Lerch, Leipzig, Germany. Securing bundles of bristles in the bodies of brushes. 1,825,145; Sept. 29.
Drew, Harold, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich. Overgear transmission. 1,824,341; Sept. 29.
Dreyfus, Camille, New York, N. Y., and G. Schneider, East Orange, N. J., assignors to Celanese Corporation of America. Cellulose propionate and making same. 1,824,877; Sept. 29.
Dreyfus, Camille, New York, N. Y., and W. Whitehead and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Printed fabric and making the same. 1,825,342; Sept. 29.
Drissner, Alfred E., assignor to The National Acme Company, Cleveland, Ohio. Chuck operating mechanism. 1,824,878; Sept. 29.
Drissner, Alfred E., assignor to The National Acme Company, Cleveland, Ohio. Mechanical movement. 1,825,056; Sept. 29.
Dropulich, Joseph, Houston, Pa. Check holder for mine dump cars. 1,825,057; Sept. 29.
Dryice Equipment Corporation. (See Cusack, George C., assignor.)
Dryice Equipment Corporation. (See Howell, Arthur B., assignor.)
Dryice Equipment Corporation. (See Jones, C. L., and McIlvain, assignors.)
Dryice Equipment Corporation. (See Killeffer, David H., assignor.)

Dryice Equipment Corporation. (See Martin, James W., jr., assignor.)
Dubilier Condenser Corporation. (See Dubilier, William, assignor.)
Dubilier Condenser Corporation. (See Houck, Harry W., assignor.)
Dubilier Condenser Corporation. (See Nyman, Alexander, assignor.)
Dubilier, William, New Rochelle, N. Y., assignor to Electrical condenser. 1,824,805; Sept. 29.
Dubilier Condenser Corporation, New York, N. Y.
Dubilier, William, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,824,806; Sept. 29.
Dubois, Robert, Dreux, France. Replaceable resistance. 1,825,585; Sept. 29.
Duftschmid, Franz. (See Schlecht, L., Schubardt, and Duftschmid.)
Duplate Corporation. (See Lytle, William O., assignor.)
Dumas, Maxwell G., Pittsburgh, Pa. Hot top for ingot molds. 1,825,445; Sept. 29.
Dumas, Maxwell G., Pittsburgh, Pa. Hot top for ingot molds. 1,825,446; Sept. 29.
Du Pont, E. I., de Nemours & Company. (See Frei, John, assignor.)
Du Pont, E. I., de Nemours & Company. (See Lawson, Walter E., assignor.)
Du Pont, E. I., de Nemours & Company. (See Nieuwland, Julius A., assignor.)
Dupuy, Arthur O., Beacon, N. Y., assignor to New York Brick Handling Corporation, New York, N. Y. Pallet conveyer. 1,825,447; Sept. 29.
Durham, Herbert W., and C. M. Rucker, Louisville, Ky. Valve. 1,825,512; Sept. 29.
Duro Metal Products Company. (See McNaught, Norris F., assignor.)
Duvall, William J., assignor to Smith & Davis Manufacturing Company, St. Louis, Mo. Folding davenport or bed. 1,824,773; Sept. 29.
Ebinger, D. A., Sanitary Mfg. Co. (See Ebinger, David H., assignor.)
Ebinger, David H., assignor to The D. A. Ebinger Sanitary Mfg. Co., Columbus, Ohio. Heat exchanger for mechanical refrigerating units. 1,825,265; Sept. 29.
Eclipse Machine Company. (See Lansing, Raymond P., assignor.)
Eclipse Machine Company. (See Marcus, Charles, assignor.)
Economy Baler Company. (See Barrows, A. C., McLean, and Langford, assignors.)
Eddy, Harold C., assignor to Petroleum Rectifying Company of California, Los Angeles, Calif. Removing a salt from oil. 1,825,309; Sept. 29.
Edelman, Philip E., Chicago, Ill. Electrical carburetor starter. 1,824,985; Sept. 29.
Edo Aircraft Corporation. (See Korvin-Kroukovsky, B. V., and Vosler, assignors.)
Effenare Manufacturing Company, The. (See Reichart, William M., assignor.)
Eggerss, Hans A., Van Wert, Ohio. Container. 1,824,986; Sept. 29.
Eggert, Joseph, assignor to The Jaeger Machine Company, Columbus, Ohio. Cover for the discharge openings of concrete mixing drums. 1,825,614; Sept. 29.
Egry Register Company, The. (See Pfeiffer, Frank E. and W. C., assignors.)
Eiermann, Emanuel, Rosedale, N. Y. Lawn edge trimmer. 1,825,146; Sept. 29.
Eisenstadt, Abraham H., New York, N. Y., assignor to Pacific Mills. Textile fabric. Des. 85,230; Sept. 29.
Electrolock Manufacturing Company, The. (See Kulicke, Frederick W., assignor.)
Elliott-Fisher Company. (See Conard, Frederick U., assignor.)
Ellsworth, Henry E., assignor to The Ensign-Bickford Co., Simsbury, Conn. Safety fuse. 1,825,224; Sept. 29.
Elmslie, George L. (See Ahlm, C. E. F., and Emslie.)
Ely, Harold M., deceased, Harrisburg, Pa., by Bethlehem Steel Company, Bethlehem, Pa., assignee. Rail turning device. Re15,210; Sept. 29.
Engi, Josef. (See Vogt, H., Massolle, and Engi.)
Engle, James J., et al. (See Woods, Robert G., assignor.)
English, John, assignor to Chance Brothers and Co. Limited, Glass Works, Smethwick, England. Removal of impurities from sand, clay, and the like materials. 1,824,807; Sept. 29.
Engstrom, Carl O., Sacramento, Calif. Photographic film support. 1,825,310; Sept. 29.
Ensign-Bickford Co., The. (See Ellsworth, Henry E., assignor.)
Erbach, Frederick R., assignor to Kelvinator Corporation, Detroit, Mich. Circuit control mechanism for mechanical refrigerating apparatus. 1,824,774; Sept. 29.
Ericsson, Arvid, assignor to Union Special Machine Company, Chicago, Ill. Loop retainer for sewing machines. 1,825,513; Sept. 29.
Erie City Iron Works. (See Tsagaris, John G., assignor.)
Ernst, Alfred F. (See La Mont, W. D., and Ernst.)
Eschholz, Otto H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Oil circuit breaker. 1,825,311; Sept. 29.
Esnault-Pelterie, Robert, Paris, France. Apparatus for testing physical properties of materials. 1,825,387; Sept. 29.
Etablissements L. Chambon. (See Chambon, Marius, assignor.)
Etablissements L. Chambon. (See Corse, Gaston, assignor.)
Evans, Alan S. (See Wilson, F. J., and Evans.)
Evans, Clair O., Plainfield, N. J. Extrusion and apparatus therefor. 1,825,343; Sept. 29.
Evans, Clarence T., Wauwatosa, Wis., assignor, by mesne assignments, to The Cutler-Hammer, Inc. Circuit controller. 1,825,312; Sept. 29.
Fageol, William B., assignor to Twin Coach Company, Kent, Ohio. Flexible guard for road vehicles. 1,825,344; Sept. 29.
Fairbanks, Morse & Co. (See Kapp, Leonard B., assignor.)
Falcon Bronze Company, The. (See Nesselbush, Louis M., assignor.)
Farber, Joseph C., Cleveland Heights, assignor to The Friedman-Blau-Farber Company, Cleveland, Ohio. Fabric and making the same. 1,825,586; Sept. 29.
Farmer, Ada E., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 85,231; Sept. 29.
Farmer, Ralph E. (See Petersen, R., and Farmer.)
Farmers' National Bank of Greenville, Ohio. (See French, C. A., and Waterman, assignors.)
Farquharson, Irving W., Media, Pa. Combination spoon and scraper or similar article. Des. 85,232; Sept. 29.
Fassmann, Marshall W., Monroe, La. Lock actuated electrical switch. 1,825,448; Sept. 29.
Ferguson, William W. (See Glenn, R. C., and Ferguson.)
Ferris, Warren R. (See Rockwood, A. C., and Ferris.)
Ferry, John M., jr. (See Graham, D. P., and Ferry.)
Fields, Francis X., Queens Village, N. Y. Cigarette wrapper and package. 1,824,870; Sept. 29.
Fields, Francis X., Queens Village, Long Island, N. Y. Cigarette wrapper and package. 1,824,948; Sept. 29.
Fieux, Jean, assignor to Schneider & Cie., Paris, France. Compensated gyroscopic device for the determination of planes or directions of reference. 1,825,345; Sept. 29.
Figg, George B., New York, N. Y. Necktie. 1,825,313; Sept. 29.
Filtrol Company of California. (See Baylis, Walter S., assignor.)
Findley, Lester L., Los Angeles, Calif. Powder placing syringe. 1,824,808; Sept. 29.
Finsen, Eyvind, assignor to Gleason Works, Rochester, N. Y. Gear generating machine. 1,825,112; Sept. 29.
Firth, David, assignor to Marvel Carbureter Company, Flint, Mich. Thermostatic heat control. 1,825,225; Sept. 29.
Fischer, Arthur A., Bensenville, Ill. Combination rule and compass. 1,825,266; Sept. 29.
Fisher, H. F., et al, trustees. (See Donovan, Bernard S., assignor.)
Fisk, Ernest T., Sydney, New South Wales, Australia. Pivotal sash window. 1,825,587; Sept. 29.
Fitz Gerald, Alan S., Wynnewood, Pa., assignor to General Electric Company. Apparatus for measuring direct currents. 1,825,514; Sept. 29.
Fitzsimmons, John T., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,825,388; Sept. 29.
Flammer, Ernst, and C. Kelber, Heilbronn, Germany. Manufacture of soap. 1,824,809; Sept. 29.
Floor Accessories Company. (See Awbrey, Samuel C., assignor.)
Floyd, Carol, assignor to Dr. P. Phillips Company, Orlando, Fla. Machine for dividing fruit. 1,825,629; Sept. 29.
Floyd, Carol, and D. M. Smalle, Orlando, assignors to Dr. P. Phillips Company, Orlando, Fla. Machine for coring and slicing citrous fruits. 1,825,628; Sept. 29.
Fluga Aktien-Gesellschaft. (See Heylandt, Christian W. P., assignor.)
Fogel, Clifford A. (See Nelson, F. O., and Fogel.)
Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Multiple speed mechanism for slicing machines. 1,824,949; Sept. 29.
Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Power drive mechanism for slicing machines. 1,824,950; Sept. 29.
Forbes, Bruce L., New Martinsville, W. Va. Straw holder and dispenser. 1,824,880; Sept. 29.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Forming control rod ball joints. 1,824,810; Sept. 29.
Ford, James G., Wilkinsburg, and W. C. Wilharm, Edgewood, Pa., assignors to Westinghouse Electric and Manufacturing Company. Deoxidizer. 1,825,226; Sept. 29.
Ford Motor Company. (See Ford, Henry, assignor.)
Forrer, Max., Paris, France, assignor to Anode Rubber Company Limited, Guernsey, England. Production of highly viscous aqueous dispersions of rubber, gutta percha, and balata. 1,825,515; Sept. 29.
Forster, Albert G. (See Kessler, F., and Forster.)
Fosdick Machine Tool Company, The. (See De Reo, William C., assignor.)
Foss, Benjamin F., Portland, Me. Mail-receiving device for doors. 1,824,881; Sept. 29.
Foster, Thomas J., Ridgewood, N. J. Building slab and wall construction. 1,825,346; Sept. 29.
France, Norman E., Lima, Ohio. Fuel saver for locomotives. 1,824,812; Sept. 29.
Francyk, George, Akron, Ohio. Sawing machine. 1,825,516; Sept. 29.

Frank, Harrison J. L., and P. S. Jenkins, assignors to Bull Dog Electric Products Company, Detroit, Mich. Switching device. 1,825,267; Sept. 29.
Frederics, E., Inc. (See Frederics, Ernest O., assignor.)
Frederics, Ernest O., assignor to E. Frederics, Inc., New York, N. Y. Hair curling device. 1,824,775; Sept. 29.
Freeman, Benjamin W., Cincinnati, Ohio. Hand guard for shoe ornamenting devices. 1,824,987; Sept. 29.
Freeman, Sterry B. (See Allan, J. E., and Freeman.)
Frei, John, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Making alkyl chlorides. 1,824,951; Sept. 29.
French, Charles A., and R. R. Waterman, Long Beach, Calif., assignors to Farmers' National Bank of Greenville, Ohio, trustee, Greenville, Ohio. Water level indicator apparatus for steam power plants. 1,824,988; Sept. 29.
French & Hecht, Incorporated. (See Hecht, Joseph L., assignor.)
Friedemann, Matthew M., New York, N. Y. Display stand. 1,824,813; Sept. 29.
Friedman-Blau-Farber Company, The. (See Farber, Joseph C., assignor.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frine, George F., Sodus, N. Y. Fruit washing machine. 1,824,814; Sept. 29.
Frisby, William A., Houston, Tex. Tourist's outfit. 1,825,183; Sept. 29.
Frisch, Morris A., Brooklyn, and L. V. Rosenberg, Bronx, N. Y.; said Rosenberg assignor to said Frisch. Adhesive applying device. 1,825,389; Sept. 29.
Fritz, Clifford, Milwaukee, Wis. Mounting the propeller and its prime mover on an aircraft. 1,824,882; Sept. 29.
Fuchs, Fritz, Vienna, Austria. Preventing the sliding or skidding of vehicles. 1,824,815; Sept. 29.
Fuerst, Edwin W., Toledo, Ohio, assignor to Cloverdale Spring Company, Baltimore, Md. Bottle. Des. 85,233; Sept. 29.
Fulford Mfg. Co. (See Saccoccia, Nicholas, assignor.)
Fuller, Clarence W. (See Bruno, William A., assignor.)
Fulton, Nell, New York, N. Y. Hair curler. 1,824,883; Sept. 29.
Fundom, Earl H., Kenton, Ohio. Excavating scoop. 1,824,989; Sept. 29.
G & G Atlas Systems. (See Stoetzel, Joseph J., assignor.)
Gabriel Steel Company. (See Zabriskie, William F., assignor.)
Gade, Harcourt F., Brooklyn, N. Y. Electrical target toy. 1,824,811; Sept. 29.
Gardner, George C., Richmond, Va. Projectile. 1,825,517; Sept. 29.
Garfinkel, Mayer. (See Goldstein, A. M., and Garfinkel.)
Gasoline Products Company. (See Cross, Roy, assignor.)
Gasoline Products Company. (See Cross, Walter M., assignor.)
Gelb, Victor. (See Lynde, Willis L., assignor.)
General Aniline Works, Inc. (See Nawiasky, P., and Krause, assignors.)
General Electric Company. (See Collingham, Robert H., assignor.)
General Electric Company. (See De Tar, Donald R., assignor.)
General Electric Company. (See Fitz Gerald, Alan S., assignor.)
General Electric Company. (See Gordon, Theodore W., assignor.)
General Electric Company. (See Hutt, Leonard P., assignor.)
General Electric Company. (See Kamada, Rinpei, assignor.)
General Elect ic Company. (See Nickle, Clifford A., assignor.)
General Electric Company. (See Peek, Frank W., jr., assignor.)
General Electric Company. (See Rockwood, A. C., and Ferris, assignors.)
General Electric Company. (See Serrell, Robert, assignor.)
General Electric Company. (See Shindledecker, Roy C., assignor.)
General Motors Corporation. (See Drew, Harold, assignor.)
General Motors Corporation. (See Jansson, Axel J., assignor.)
General Motors Research Corporation. (See Asire, Horace W., assignor.)
General Motors Research Corporation. (See Lovell, W. G., and Boyd, assignors.)
General Raincoat Co. (See McGinnis, Herbert P., assignor.)
General Rubber Company. (See Rose, Reed P., assignor.)
General Steel Castings Corporation. (See Pfiager, Harry M., assignor.)
General Steel Castings Corporation. (See Sheehan, W. M., and Pfiager, assignors.)
Gény, Paul, Nancy, France. Protecting device for alternating current three-phase motors. 1,825,518; Sept. 29.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Locking handwheels. 1,825,390; Sept. 29.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Steering wheel. 1,825,391; Sept. 29.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Molded steering wheel. 1,825,392; Sept. 29.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Steering wheel. 1,825,393; Sept. 29.
Gibson, William A., assignor to Bradley Pulverizer Company, Allentown, Pa. Adjustable screen diaphragm for tube mills, etc. 1,825,347; Sept. 29.
Gillette Safety Razor Company. (See Isdale, John S., assignor.)
Gilligan, George H., assignor to U. S. Ring Traveler Company, Providence, R. I. Ring traveler. 1,825,113; Sept. 29.
Gilman, Charles, Plainfield, N. J., assignor to Massey Concrete Products Corporation, Chicago, Ill. Cribbing. 1,824,990; Sept. 29.
Gilmore, John L., Kansas City, Mo. Spare tire carrier. 1,825,268; Sept. 29.
Glanschnig, Ignatz, assignor of one-half to A. Hazlawski, Gary, Ind. Aeroplane propeller. 1,825,184; Sept. 29.
Gleaner Combine Harvester Corporation. (See Worthington, Wayne H., assignor.)
Gleason Works. (See Finsen, Eyvind, assignor.)
Glenn, Robert C., and W. W. Ferguson, Rich Hill, Mo. Cigarette package. 1,824,884; Sept. 29.
Globe American Corporation. (See Hill, Dewey H., assignor.)
Globe Machinery & Supply Company. (See Bristol, Cyrus J., assignor.)
Glover, H. B., Company. (See Karberg, Peter K., assignor.)
Gnaegy, Albert, Chester, Ill. Convertible tractor wheel. 1,825,394; Sept. 29.
Gneiss, Guss H. (See Chamberlain, G. L., and Gneiss.)
Gockeler, George. (See Roesch, Christian, assignor.)
Goddard, Alvin C., Forest Hills, N. Y. Friction pivot hinge. 1,825,147; Sept. 29.
Gold Medal Folding Furniture Company. (See Brown, Newton N., assignor.)
Goldsmith, Max S., and B. Harig, assignors to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Mounting for removable tile. 1,824,817; Sept. 29.
Goldsmith Metal Lath Company, The. (See Goldsmith, William M., assignor.)
Goldsmith Metal Lath Company, The. (See Goldsmith, M. S., and Harig, assignors.)
Goldsmith, William M., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Support lug for domes. 1,824,816; Sept. 29.
Goldstein, Albert M., New York, and M. Garfinkel, Brooklyn, N. Y.; said Garfinkel assignor to said Goldstein. Machine for packaging straws and the like. 1,825,058; Sept. 29.
Golje, Nils G., Stockholm, Sweden. Device for printing on long webs of paper, cloth, or the like in platen-presses. 1,825,395; Sept. 29.
Goodrich, B. F., Company, The. (See L'Hollier, Leslie H., assignor.)
Goodrich, B. F., Company, The. (See Rehak, James, assignor.)
Goodrich, B. F., Company, The. (See Taylor, Bert S., assignor.)
Goodrich, B. F., Company, The. (See Williams, Warren K., assignor.)
Goodyear's India Rubber Glove Mfg. Company, The. (See Zonino, Frederick, assignor.)
Gordon, Theodore W., Schenectady, N. Y., assignor to General Electric Company. Thrust bearing. 1,825,519; Sept. 29.
Grady, Robert F., jr., Chicago, Ill. Method and apparatus for producing decorative effects by spotting or mottling. 1,825,227; Sept. 29.
Graham, David P., and J. M. Ferry, jr., New York, N. Y., assignors to Peabody Engineering Corporation. Oil burning system. 1,824,952; Sept. 29.
Greenidge, Samuel M., Thurber, Tex. Packing for pistons and the like. 1,825,185; Sept. 29.
Greenwood, Talma T., East Templeton, assignor to Conduit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and arc extinguishing method. 1,825,228; Sept. 29.
Gribbie, John M., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock-washer. 1,824,991; Sept. 29.
Groniger, Holmes B. (See Hobart, Joseph N., assignor.)
Gross, Benjamin & Edward J., Co. (See Gross, Edward J., assignor.)
Gross, Edward J., New Rochelle, N. Y., assignor to Benjamin & Edward J. Gross Co., Inc., New York, N. Y. Finger ring or article of similar nature. Des. 85,234; Sept. 29.
Gross, Edward J., New Rochelle, N. Y., assignor to Benjamin & Edward J. Gross Co., Inc., New York, N. Y. Finger ring or article of similar nature. Des. 85,235; Sept. 29.
Gross, Edward J., New Rochelle, N. Y., assignor to Benjamin & Edward J. Gross Co., Inc., New York, N. Y. Finger ring or article of similar nature. Des. 85,236; Sept. 29.
Gross, Edward J., New Rochelle, N. Y., assignor to Benjamin & Edward J. Gross Co., Inc., New York, N. Y. Finger ring or article of similar nature. Des. 85,237; Sept. 29.
Grothe, Walter, assignor to Caterpillar Tractor Co., San Leandro, Calif. Furnace. 1,825,059; Sept. 29.
Grunewalds Registrator Co. Akt. Ges. (See Rengmann, Thure, assignor.)

Grünfeld, Franz V., Berlin, Germany. Robe. 1,825,520; Sept. 29.
Guido, Edward, New York, N. Y. Display fountain or similar article. Des. 85,238; Sept. 29.
Gunderman, Lester C., Pittsburgh, Pa. Portable vibrating machine. 1,825,588; Sept. 29.
Gurnsey, Harold, Seminole, Okla. Sanitary milk bottle holder. 1,825,348; Sept. 29.
Haberern, John. (See Pudlo, Martin, assignor.)
Hadley, Homer M., Seattle, Wash. Railway crosstie. 1,824,776; Sept. 29.
Hagiwara, Tetsudo, Kitatoshima Gun Tokyo Fu, Japan, assignor to R. Miura, Tokyo, Japan. Manufcturing paper pulp from bagasse and other graminem plants. 1,825,349; Sept. 29.
Halfvarson, Gustaf A., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Safety device for elevators. 1,825,269; Sept. 29.
Hall, Robert W. (See Johnson, Carl W., assignor.)
Hallenbeck, George E., assignor to Baker Brothers, Inc., Toledo, Ohio. Revolving holder machine tool. 1,825,060; Sept. 29.
Haller, Frank J., assignor to Stover Manufacturing & Engine Co., Freeport, Ill. Windmill sucker rod connection. 1,825,449; Sept. 29.
Halse, Edwin, New York, N. Y. Culinary agitator. 1,825,450; Sept. 29.
Hamilton, Karl M., Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa. Car truck. 1,825,396; Sept. 29.
Hamilton, Karl M., Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa. Car truck. 1,825,451; Sept. 29.
Hamilton, Karl M., Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa. Car truck. 1,825,630; Sept. 29.
Hamilton-Wade Company. (See Howard, Albert L., assignor.)
Hammond, Anning S., Los Angeles, assignor to Western Waxed Paper Company, Oakland, Calif. Wax paper. 1,824,885; Sept. 29.
Hanna, Howard. (See Heckman, Homer H., assignor.)
Hanovia Chemical and Manufacturing Company. (See Bird, Lester F., assignor.)
Harding, Harry C., Wilkesbarre, Pa. Typewriter pad. Des. 85,240; Sept. 29.
Hargrove, John, Monifieth, Angus, Scotland. Drag arrangement for spinning and other textile frames. 1,825,061; Sept. 29.
Harig, Benjamin. (See Goldsmith, M. S., and Harig.)
Harnsberger, Harry H., Croton-on-Hudson, assignor to The Turnapage Company, Inc., New York, N. Y. Book supporting device. 1,825,521; Sept. 29.
Harnsberger, Harry H., Croton-On-Hudson, assignor to The Turnapage Company, Inc., New York, N. Y. Notebook holder. 1,825,522; Sept. 29.
Harris, Edgar P., Triplett, Mo. Adjustable car partition. 1,825,452; Sept. 29.
Harrison, Jamison R., Pittsburgh, Pa., assignor to Wired Radio, Inc., New York, N. Y. Piezo electric crystal system. 1,824,777; Sept. 29.
Harroun, Ray W., Detroit, Mich. Internal combustion engine. 1,824,902; Sept. 29.
Harry, Joshua B., Philadelphia, Pa. Cooling tower. 1,825,453; Sept. 29.
Harsem, Peter A., Oslo, assignor to Imperator Hestesko A/S., Tonsberg, Norway. Horseshoe. 1,825,186; Sept. 29.
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, then, N. Y. Typewriting machine. 1,825,148; Sept. 29.
Hart, Walter H., assignor to The Stanley Works, New Britain, Conn. Hinge construction. 1,824,886; Sept. 29.
Hartwig, William J. (See Cullin, Jasper F., assignor.)
Harvey, James W., Falmouth Foreside, Me. Motor boat installation. 1,824,887; Sept. 29.
Hase, Rudolf, Hanover, Germany. Optical pyrometer. 1,825,229; Sept. 29.
Haskin, Joseph J., Stockton, Calif. Oil burner. 1,825,230; Sept. 29.
Hüussler, Ernst, assignor to Union Special Maschinenfabrik, G. m. b. H., Stutgart, Germany. Overedging sewing machine. 1,825,454; Sept. 29.
Hawes, Charlie L., Ashtabula, Ohio. Polishing and grinding machine. 1,825,455; Sept. 29.
Hazel-Atlas Glass Company. (See Kirkpatrick, John, assignor.)
Heaton, Herman C., Kenilworth, W. H. Neubeck and L. Reisfeld, Chicago, Ill., assignors to Sargent and Lundry, Incorporated. Pipe joint. 1,825,062; Sept. 39.
Hecht, Joseph L., Davenport, Iowa, assignor to French & Hecht, Incorporated. Tension wheel and making the same. 1,824,888; Sept. 29.
Heckman, Homer H., assignor to H. Hanna, Detroit, Mich. Electrode holder. 1,825,314; Sept. 29.
Heckman, Homer H., assignor to T. Heckman, Detroit, Mich. Goggles attachment. 1,825,615; Sept. 29.
Heckman, Theophila. (See Heckman, Homer H., assignor.)
Hedeen, Elmer, assignor to C. F. Michael, Bucyrus, Ohio. Burial vault latch. 1,825,397; Sept. 29.
Henderson, Herbert V., assignor to Chrysler Corporation, Detroit, Mich. Sun visor. Des. 85,241; Sept. 29.
Hendrickson, Claud A., Denver, Colo. Ventilating fan. 1,825,114; Sept. 29.
Henn, William A., assignor to Peerless Tank and Seat Works, Inc., Evansville, Ind. Hinge for water closet seats and covers. 1,825,456; Sept. 29.
Henry and Allen. (See Bowen, Kenneth H., assignor.)
Herold, James L., and J. W. Dawson, assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo. Washing bottles. 1,824,993; Sept. 29.
Herold, James L., and J. W. Dawson, assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo. Bottle-washing brush. 1,824,994; Sept. 29.
Hess-Bright Manufacturing Company, The. (See Runge, Robert F., assignor.)
Hevi Duty Electric Company. (See Stevenson, Cary H., assignor.)
Hewitt, John C., Timmonsville, S. C., assignof of one-half to L. A. Cashwell, Stamford, Conn. Insecticide applying apparatus. 1,825,648; Sept. 29.
Heylandt, Christian W. P., Lankwitz, Germany, assignor to Fluga Aktien-Geselischaft, St. Moritz, Switzerland. Method and apparatus for producing compressed gases from liquefied gases. 1,824,889; Sept. 29.
Hicks, Joseph J., Los Angeles, Calif. Aircraft. 1,825,115; Sept. 29.
Hicks, Nellie K. Maywood, Calif. Instruction chart. 1,825,063; Sept. 29.
Higgins, Michael, Mercer, Auckland, New Zealand. Distributor for manure and other material. 1,825,523; Sept. 29.
Hightower, Frank W. (See Banta, C., and Hightower.)
Hill, Dewey H., Macomb, Ill., assignor to Globe American Corporation, Kokomo, Ind. Thermostatically controlled oil-burner. 1,824,890; Sept. 29.
Hill, Earl V., Chicago, Ill. Air cleaning and conditioning apparatus. 1,824,891; Sept. 29.
Hill, Edward W., assignor to A. B. Dick Company, Chicago, Ill. Ink. 1,824,995; Sept. 29.
Hill, Herman, assignor to Syracuse Washington Machine Corporation, Syracuse, N. Y. Ironer. 1,825,350; Sept. 29.
Himmell, Samuel S., New York, N. Y. Educational toy. 1,825,231; Sept. 29.
Hintz, John F., Brillion, Wis. Poultry feeder. 1,825,524; Sept. 29.
Hitchcock, Reuben, Bratenahl, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Paper handling machine. 1,825,398; Sept. 29.
Hitt, Thomas G., Seattle, Wash. Firecracker. 1,825,589; Sept. 29.
Hobart Bros. Co., The. (See Hobart, Edward A., assignor.)
Hobart, Edward A., assignor to The Hobart Bros. Co., Troy, Ohio. Electric welder. 1,825,064; Sept. 29.
Hobart, Joseph N., New Cumberland, Pa., assignor to H. B. Groniger, Pittsburgh, Pa. Railroad tie. 1,824,778; Sept. 29.
Hoffman, Herbert F., Memphis, Tenn. Swing. 1,825,457; Sept. 29.
Hoffman, Peter L., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill. Combined trolley track and hanger. 1,825,315; Sept. 29.
Hoffman, Walter C., Maywood, Ill. Display holder for cards. 1,825,458; Sept. 29.
Hoke, Harry A., Altoona, Pa. Lever for shaking grates. 1,824,892; Sept. 29.
Holden, Eugene H., Arlington, Mass. Heating and humidifying unit. 1,825,116; Sept. 29.
Hollister, Lester R., Hall, Mont. Portable staging. 1,825,590; Sept. 29.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,824,953; Sept. 29.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine; 1,824,954; Sept. 29.
Holzwarth Gas Turbine Co. (See Holzwarth, Hans, assignor.)
Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Explosion turbine. 1,824,893; Sept. 29.
Hopkin, Alfred, jr., Philadelphia, Pa., assignor to Pittsburgh Reflector Company, Pittsburgh, Pa. Color screen for reflectors. 1,824,894; Sept. 29.
Horton, Dwight. (See Collom, C. R., and Horton.)
Horvath, Anthony G., Dayton, Ohio, assignor, by mesne assignments, to Uniflow Manufacturing Company, Erie, Pa. Water softening. 1,825,631; Sept. 29.
Hosier, Charles A. Toronto, Ontario, Canada. Skull for fur neckpieces. 1,824,996; Sept. 29.
Hotchner, Fred, Los Angeles, Calif. Flat tubeless ionization conductor device. 1,825,399; Sept. 29.
Houck, Harry W., Mount Vernon, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical filter. 1,824,819; Sept. 29.
Howard, Albert L., asignor to Hamilton-Wade Company, Brockton, Mass. Lubricating welt and system of using the same. 1,824,997; Sept. 29.
Howell, Arthur R., assignor to Dryice Equipment Corporation, New York, N. Y. Treatment and preservation of cut plants. 1,825,065; Sept. 29.
Hubbell, Harvey, jr., Bridgeport, Conn. Adjustable candle socket mounting. 1,824,955; Sept. 29.
Hubbell, Harvey, jr., Bridgeport, Conn. Electric receptacle. 1,824,956; Sept. 29.
Hubner, Hugo, Moshach, Germany. Automatic fuel mixture regulator. 1,825,187; Sept. 29.

Hudson, Richard D., Upper Montclair, N. J., assignor to Newark Concrete Pipe Co., Newark, N. J. Coupling agitators to concrete pouring forms and molds. 1,825,117; Sept. 29.

Humphreys, Cecil Jackson Heights, N. Y., assignor to Prisme Holding Corporation. Sign. 1,825,149; Sept. 29.

Hunt, John H., Detroit, Mich., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,825,400; Sept. 29.

Hunter, Richard B., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Illumination control system. 1,825,316; Sept. 29.

Hupp Motor Car Corporation. (See Ornberg, Ivan, assignor.)

Hussey, Richard H. (See Wolfard, M. R., Morton, and Hussey.)

Hutchings, Le Roi E., Buffalo, assignor to Remington Rand Inc., New York, N. Y. Loose leaf book. 1,825,351; Sept. 29.

Huth, Walter H., and B. B. Minnium, assignors to Story & Clark Radio Corp, Chicago, Ill. Radioreceiving loud speaker. 1,825,232; Sept. 29.

Hutt, Leonard P., Schenectady, N. Y., assignor to General Electric Company. Thermostatic switch. 1,825,591; Sept. 29.

Hydraulic Brake Company. (See Loughead, Malcolm, assignor.)

Hygienic Tube Co. (See Lermer, Herman B., assignor.)

Hynes, Dibrell P., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,824,895; Sept. 29.

Hynes, Lee P., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Bus heating system. 1,824,820; Sept. 29.

I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., and Schlecht, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Mond, Albert L., assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Pungs, W., and Behringer, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schlecht, L., Schubardt, and Duftschmid, assignors.)

Imperator Hestesko A/S. (See Harsem, Peter A., assignor.)

Independent Oil Well Cementing Company. (See Trouth, John E., assignor.)

Industrial Associates, Inc. (See Jones, Arthur B., assignor.)

Industrial Associates, Incorporated. (See Riley, Champlain L., assignor.)

Industrial Welded Alloys Inc. (See Johnson, Wallace C., assignor.)

Ingraham, E., Company, The. (See Ingraham, Edward, assignor.)

Ingraham, Edward, assignor to The E. Ingraham Company, Bristol, Conn. Clock dial. Des. 85,239; Sept. 29.

Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)

International Nickel Company, The. (See Allinder, H., and Shipley, assignors.)

International Nickel Company, The. (See Pilling, Norman B., assignor.)

International Silver Company. (See Kintz, Alfred G., assignor.)

International Time Recording Company of New York. (See Bryce, James W., assignor.)

Irwin, Herbert G., Amarillo, Tex. Carbide feed for acetylene generators. 1,825,066; Sept. 29.

Irwin, Walter W., et al. (See Ciglia, E. F., and Pelletier, assignors.)

Isaacson, William O., Chicago, Ill. Buck support. 1,824,998; Sept. 29.

Isdale, John S., Meriden, Conn., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,824,779; Sept. 29.

Jackson, Byron Co. (See Smith, Nelson K., assignor.)

Jackson, George B., Three Rivers, Mich. Propeller. 1,825,401; Sept. 29.

Jacobsen, Jens N. (See Chormann, O. I., and Jacobsen.)

Jacques, George W., New Bedford, Mass., assignor to Atlas Tack Corporation, Fairhaven, Mass. Duplex fastener setting machine. 1,824,957; Sept. 29.

Jaeg, Joseph, Bern, Switzerland. Device for keeping warm and damp compresses for local bodily treatment. 1,825,118; Sept. 29.

Jaeger, Alphons O., Chicago, Ill. assignor to The Selden Company, Pittsburgh, Pa. Producing reduction products of carbon monoxide. 1,824,896; Sept. 29.

Jaeger Machine Company, The. (See Eggert, Joseph, assignor.)

Jaenichen, Louis, Springfield Township, Oakland County, Mich., assignor to The Standard Computing Scale Company, Detroit, Mich. Scale. 1,825,317; Sept. 29.

James, Edward J. (See McDougall, Edward J., assignor.)

Jansson, Axel J., Flint, assignor to General Motors Corporation, Detroit, Mich. Rubber spring shackle. 1,825,352; Sept. 29.

Jansson, Gustav E., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Synchronizing switch. 1,825,150; Sept. 29.

Jarmusz, Pauline, Gary, Ind. Bathtub. 1,825,188; Sept. 29.

Jenkins, Paul S. (See Frank, H. J. L., and Jenkins.)

Jenkins, Vance N., and C. P. Wilson, jr., Port Arthur, Tex., assignors by mesne assignments to The Texas Company, New York, N. Y. Treating hydrocarbons. 1,825,270; Sept. 29.

Jipp, August, Berlin-Spandau, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Synchronizing device. 1,824,999; Sept. 29.

Johansson, Johan E., assignor to Aktiebolaget Gotaverken, Gottenborg, Sweden. Gas generating combustion engine. 1,825,525; Sept. 29.

Johnson, Axel, et al. (See Brunberg, Bennie N., assignor.)

Johnson, Carl W., assignor to one-half to R. W. Hall, Los Angeles, Calif. Vibrator. 1,825,353; Sept. 29.

Johnson, Joseph E., Roslindale, Mass. Window screen. 1,824,897; Sept. 29.

Johnson, Otho, W., Baltimore, Md. Flying boat. 1,825,592; Sept. 29.

Johnson, Sven A., Brooklyn, N. Y., and F. C. Risselt, Tenafly, N. Y. Air relief valve for heating systems. 1,825,459; Sept. 29.

Johnson, Wallace C., East Orange, N. J., assignor to Industrial Welded Alloys Inc., Newark, N. J. Lined tanks or pressure vessels. 1,824,898; Sept. 29.

Johnson, Walter C., Jamestown, N. Y. Adjustable die. 1,825,067; Sept. 29.

Jones, Arthur B., assignor to Industrial Associates, Inc., New York, N. Y. Separation of oil. 1,824,780; Sept. 29.

Jones, Charles L., Pelham, N. Y., and H. S. McIlvain, Belleville, N. J., assignors to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus, package, and method. 1,825,068; Sept. 29.

Jones, Ellis L., Long Island City, N. Y., assignor by mesne assignments to American Sealcone Corporation, New York, N. Y. Receptacle filling apparatus. 1,824,899; Sept. 29.

Jones, Homer W., Jackson Heights, N. Y., assignor to National Carbon Company, Inc. Focusing hand lamp. 1,825,354; Sept. 29.

Jones, John L., Weymouth, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Gauge mechanism for fastening inserting machines. 1,824,958; Sept. 29.

Joyce, Bryan P., Dover, N. J. Fluid brake mechanism. 1,825,233; Sept. 29.

Judson, Ross W., assignor to Continental Motors Corporation, Detroit, Mich. Vibration damper. 1,825,402; Sept. 29.

Jungblut, Ferdinand, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Machine drive control. 1,825,403; Sept. 29.

Kamada, Rinpei, Yokohama, Japan, assignor to General Electric Company. Fluid operated prime mover dynamo-electric plant. 1,825,526; Sept. 29.

Kammerer, Clemens, New York, N. Y. Combined purse mirror and pouch. Des. 85,242; Sept. 29.

Kanter, Edward, Cleveland Heights, Ohio. Vending machine casing. Des. 85,243; Sept. 29.

Kapp, Leonard B., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Pump. 1,825,318; Sept. 29.

Kappner, Max, Cincinnati, Ohio. Arch support adjuster. 1,825,460; Sept. 29.

Karberg, Peter K., assignor to H. B. Glover Company, Dubuque, Iowa. Garment. 1,825,271; Sept. 29.

Kaufman, Jacob M., assignor to American Show Case & Mfg. Co., Detroit, Mich. Corner joint. 1,824,900; Sept. 29.

Kavle, Oscar C., Syracuse, N. Y. Stamping machine. 1,825,069; Sept. 29.

Kawneer Company, The. (See Plym, Francis J., assignor.)

Kayatt, Phillip J., Yonkers, N. Y., assignor to American Neon Light Corporation, New York, N. Y. Insulator. 1,825,319; Sept. 29.

Kayser, Bruno, Reading, Pa. Fabric of crepe thread and making same. 1,825,071; Sept. 29.

Kayser, William J., Little Rock, Ark. Radio receiving set. 1,825,070; Sept. 29.

Kazlawski, Anton. (See Glanschnig, Ignatz, assignor.)

Keasler, Joel H., Brooklyn, N. Y. Violin attachment. 1,824,901; Sept. 29.

Keefe, John J., San Antonio, Tex. Shower bath. 1,825,355; Sept. 29.

Kelber, Christian. (See Flammer, E., and Kelber.)

Keller, Charles, Eau Claire, Wis. Hammering tool. 1,825,072; Sept. 29.

Keller-Dorian Colorfilm Corporation. (See Oswald, André, assignor.)

Kelley, Paul M., New York, N. Y., and J. L. Clayton, Coytesville, N. J. Fuse. 1,825,527; Sept. 29.

Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)

Kelsey-Hayes Wheel Corporation. (See Copple, Dwight E., assignor.)

Kelvinator Corporation. (See Erbach, Frederick R., assignor.)

Kemp, Alfred V., Pinner, England, assignor to The Wellman Engineering Company, Cleveland, Ohio. Gas producer air sleeve. 1,825,404; Sept. 29.

Kemnf, Walter E., Stamford, Conn. Artificial denture. 1,825,593; Sept. 29.

Kempton, Arthur K. (See Baker, Henry S., assignor.)

Kennedy, Frank W., assignor to De Laval Steam Turbine Company, Trenton, N. J. High speed blower. 1,825,622; Sept. 29.

Kennedy, James V. (See Watters, Gordon I., assignor.)

Kent, Arthur A., Ardmore, Pa. Cabinet for radio receiving apparatus. Des. 85,244; Sept. 29.

Keoleian, Souren, assignor of twenty-five per cent to H. Y. Yardumian, Philadelphia, Pa. Melting compound. 1,825,151; Sept. 29.

Kesselring, Fritz. (See Kühns, A., and Kesselring.)

Kessler, Frank, and A. G. Forster, Liverpool, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Telephone system. 1,825,000; Sept. 29.

Kieffer, Russel J. (See Carow, Thomas H., assignor.)

Kiesel, William F., jr., Hollidaysburg, Pa. Hopper car. 1,825,234; Sept. 29.

Kiesel, William F., jr., Hollidaysburg, Pa. Hopper car. 1,825,235; Sept. 29.

Kiesel, William F., jr., Altoona, Pa. Boiler. 1,825,594; Sept. 29.

Killeffer, David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Apparatus and method for refrigerating. 1,825,073; Sept. 29.

King, C. G., & Co. (See Farmer, Ada E., assignor.)

Kintz, Alfred G., Wallingford, Conn., assignor to International Silver Company, Meriden, Conn. Spoon or other article of tableware. Des. 85,245; Sept. 29.

Kirkland, Archibald D. (See Burns, W. G., and Kirkland.)

Kirkpatrick, John, Clarksburg, W. Va., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Drinking glass. Des. 85,246; Sept. 29.

Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)

Knapp, Frederick H., Kelso, Wash. Cable splicing and clamping device. 1,825,074; Sept. 29.

Knauf, Paul W., Cynwyd, Pa., assignor to Schutte and Koerting Company, Philadelphia, Pa. Valve. 1,824,902; Sept. 29.

Knepper, Shelby V., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Jar. Des. 85,247; Sept. 29.

Knowlton, Norwood H., Rockport, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in the manufacture of boots and shoes. 1,824,959; Sept. 29.

Knox, Harry A., and B. F. Baker, Davenport, Iowa. Flexible track for track laying vehicles. 1,825,075; Sept. 29.

Knudsen, Fritz W., assignor to A. D. Loffler, jr., Washington, D. C. Producing skinless sausage. 1,825,528; Sept. 29.

Koch, Lydia B., New York, N. Y., assignor to Reinforced Paper Bottle Corporation, Chicago, Ill. Paper bottle. 1,825,001; Sept. 29.

Kohl, Paul, Wausau, Wis. Storm sash or screen hanger. 1,825,595; Sept. 29.

Kohler Company. (See Brotz, Frank G., assignor.)

Kohler, Donald D., Amsterdam, Ohio. Power attachment for ice cream freezers. 1,825,356; Sept. 29.

Koller, Robert, Baden, Switzerland. Reproduction of sound films. 1,825,529; Sept. 29.

Koopmans, Lambert C., Chicago, Ill. Adjustable brake rod jaw. 1,824,821; Sept. 29.

Koppers Company, The. (See Schulte, Johannes, assignor.)

Korvin-Kroukovsky, Boris V., Beechhurst, and K. D. Vosler, College Point, Long Island, N. Y., assignors to Edo Aircraft Corporation. Percussive tool. 1,825,682; Sept. 29.

Kradolfer, Ernesto, Mexico, Mex. Support for typewriter or other office appliance. 1,824,822; Sept. 29.

Kratzer, Herbert J., St. Louis, Mo. Electric air-break switch. 1,825,002; Sept. 29.

Krause, A. (See Nawiasky, P., and Krause.)

Kronmiller, Carl G., Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Cutting and delivery apparatus for bag lengths. 1,825,405; Sept. 29.

Kronquest, Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Interior collar can. 1,825,596; Sept. 29.

Kuerts, Ernst, Stettin, Germany. Block paving machine and the like. 1,825,320; Sept. 29.

Kühns, Alexander, Berlin-Charlottenburg, and F. Kesselring, Berlin-Hermsdorf, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Switching equipment controlling high-voltage distributing lines. 1,824,903; Sept. 29.

Kulicke, Frederick W., Philadelphia, Pa., assignor, by mesne assignments, to The Electrolock Manufacturing Company, Vicksburg, Miss. Preventing the stretching of flexible armor for electric conductors. 1,824,904; Sept. 29.

Kump, Ferdinand, Glendale, N. Y. Aquarium heater. 1,824,823; Sept. 29.

Kupper, Herman C. (See Lindley, Walter, assignor.)

Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Crib lock. 1,824,905; Sept. 29.

La Bar, Bert G., Union, N. J., assignor to Westinghouse Electric & Manufacturing Company. Meter device. 1,824,781; Sept. 29.

Laird, George S., assignor to Laird, Schober & Co., Philadelphia, Pa. Shoe. Des. 85,248; Sept. 29.

Laird, Schober & Co. (See Laird, George S., assignor.)

La Mont Corporation. (See La Mont, W. D., and Ernst, assignors.)

La Mont, Walter D., Colebrook, Conn., and A. F. Ernst, Rutherford, N. J., assignors to La Mont Corporation, New York, N. Y. Effecting heat exchange. 1,825,321; Sept. 29.

Lang, Andreas, Astoria, N. Y. Dumb waiter guard carriage. 1,825,461; Sept. 29.

Lange & Co., Gesellschaft mit beschrankter Haftung. (See Lange, Erik, assignor.)

Lange, Erik, assignor to firm Lange & Co., Gesellschaft mit beschrankter Haftung, Starnberg, Germany. Flag truck. 1,825,076; Sept. 29.

Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Rail joint. Re18,213; Sept. 29.

Langford, George W. (See Barrows, A. C., McLean, and Langford.)

Langston, Katherine G., St. Louis, Mo. Garment box. 1,825,272; Sept. 29.

Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Electrical apparatus. 1,824,824; Sept. 29.

Lasselsberger, Leopold, Niederndorf, Austria. Disengageable coupling device. 1,825,357; Sept. 29.

Latshaw, Elmer, assignor to The J. G. Brill Company, Philadelphia, Pa. Mounting for car axles. 1,825,530; Sept. 29.

Lauer, William E. (See Rumble, Alex C., assignor.)

Laukel, Arthur K., Detroit, Mich. Electrodeposited pattern. 1,825,189; Sept. 29.

Lawaczeck, Franz, Munich, Germany, assignor to firm Lawaczeck Gesellschaft mit beschrankter Haftung, Berlin, Germany. Metallurgical process and apparatus. 1,824,960; Sept. 29.

Lawaczeck Gesellschaft mit beschrankter Haftung. (See Lawaczeck, Franz, assignor.)

Lawrence, Edward B. T., Burbank, Calif. Burnintool. 1,825,077; Sept. 29.

Lawson, Walter E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Cellulose derivative compositions. 1,824,961; Sept. 29.

Leach Company. (See Leach, E. C., and Doornbos, assignors.)

Leach, Elbert C., and J. F. Doornbos, assignors to Leach Company, Oshkosh, Wis. Peavey socket. 1,824,906; Sept. 29.

Leach, Vernon G., assignor to Modern Coal Burner Company, Chicago, Ill. Underfeed mechanical stoker. 1,825,273; Sept. 29.

Leach, Vernon G., assignor to Modern Coal Burner Company, Chicago, Ill. Dust recovery device. 1,825,274; Sept. 29.

Ledoux, Joseph A., Worcester, Mass. Traffic marker. 1,825,003; Sept. 29.

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Pressed metal body construction. 1,825,275; Sept. 29.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Pressed metal sedan body. 1,825,322; Sept. 29.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Combined body and chassis construction. 1,825,323; Sept. 29.

Lefever, Charles F., assignor to Daisy Manufacturing Company, Plymouth, Mich. Combined shooting and magazine barrel for spring air guns. 1,825,190; Sept. 29.

Leffel, Howard Z., Brooklyn, N. Y. Motor. 1,825,531; Sept. 29.

Lerch, Israel M. (See Dressler, Karl, assignor.)

Lermer, Herman B., assignor to Hygienic Tube Co., Newark, N. J. Container. 1,824,907; Sept. 29.

L'Hollier, Leslie H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Overshoe and making the same. 1,825,276; Sept. 29.

Liebetruth, A., & Co. G. m. b. H. (See Liebetruth, Hugo, assignor.)

Liebetruth, Hugo, assignor to A. Liebetruth & Co. G. m. b. H., Nuremberg, Germany. Drawing slate. 1,825,532; Sept. 29.

Lindemuth, Lewis B., New York, N. Y. Reclaiming stainless steel scrap. 1,825,463; Sept. 29.

Lindley, Walter, Stoke-on-Trent, England, assignor to Herman C. Kupper, Inc., New York, N. Y. Covered dish or similar article. Des. 85,249; Sept. 29.

Line Material Company. (See Cole, George H., assignor.)

Link, Edwin A., jr., Binghamton, N. Y. Combination training device for student aviators and entertainment apparatus. 1,825,462; Sept. 29.

Lipham, Harvey J., Creamery, Pa. Electric cooking appliance. 1,825,406; Sept. 29.

Little, Edwin G., Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa. Housing for dual control switch and lock movement assembly for railways. Des. 85,250; Sept. 29.

Livergood, Gerald R., Houston, Tex., assignor of one-fourth to W. L. Pearson, Harris County, Tex.; Marie E. Livergood, administratrix. Packing rods and the like. 1,825,004; Sept. 29.

Livergood, Marie E., administratrix. (See Livergood, Gerald R.)

Loebel, Albert, Amsterdam, assignor to De Batsafsche Petroleum Mnatschappij, The Hague, Netherlands. Producing high-melting paraffin and ceresine. 1,825,533; Sept. 29.

Loffler, Andrew D., jr. (See Knudsen, Fritz W., assignor.)

Lomax, Clarence E. (See Ray, A. J., and Lomax.)

Lopez, Peter, West Tampa, Fla. Display table top. 1,825,464; Sept. 29.
Loughead, Malcolm, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Attaching fittings to the ends of high pressure hose. 1,825,005; Sept. 29.
Louque, Charles. (See Buchel, Jules, assignor.)
Lovell, Wheeler G., and T. A. Boyd, assignors to General Motors Research Corporation, Detroit, Mich. Removing carbon deposits. 1,825,358; Sept. 29.
Lower, Nathan M., Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y. Locomotive stoker. 1,825,152; Sept. 29.
Lumbard, Henry G., Auburn, Me. Tempering shoe uppers. 1,825,191; Sept. 29.
Luttbeg, Max B., St. Louis, Mo. Accordion. 1,825,407; Sept. 29.
Lutz, Friedrich. (See Maier, K., and Lutz.)
Lynde, Willis L., assignor of one-half to V. Gelb, West Bend, Wis. Paint brush. Des. 85,251; Sept. 29.
Lytle, William O., New Kensington, Pa., assignor to Duplate Corporation. Cutting disks from glass plates. 1,825,277; Sept. 29.
MacDonald, Mary J., Kansas City, Mo. Sound-controlling means. 1,825,465; Sept. 29.
Mace, John J., York, Pa. Window ventilator for autos. 1,825,192; Sept. 29.
MacGregor & King Limited. (See MacGregor, Robert, assignor.)
MacGregor, Robert, assignor to MacGregor & King Limited, London, England. Steel hatch cover for ships. 1,824,910; Sept. 29.
Maddox, John W., Marion, Md. Trap. 1,825,193; Sept. 29.
Magee, Frederick W., assignor of one-half to T. W. Baker, London, Ontario, Canada. Motorist's eye shield. 1,824,908; Sept. 29.
Maier, Karl, and F. Lutz, assignors to Union Special Machinenfabrik, G. m. b. H., Stuttgart, Germany. Sewing machine for joining edge portions of fabric sections. 1,825,597; Sept. 29.
Maier, Karl, and F. Lutz, assignors to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Blindstitch sewing machine. 1,825,642; Sept. 29.
Mallie, Michael, Philadelphia, Pa. Train stop. 1,825,408; Sept. 29.
Mains, Gerald H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Molded laminated gear blank. 1,824,825; Sept. 29.
Mamarcheff, Dimiter. (See Shopis, K., and Mamarcheff.)
Manley Manufacturing Company. (See Manley, Robert E., assignor.)
Manley, Robert E., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Treating hydrocarbon oils. 1,825,324; Sept. 29.
Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Light wrecking crane. 1,825,359; Sept. 29.
Mantonya, John. (See Paul, E., and Mantonya.)
Marcum, Arthur L., Oakland, Calif. Road vehicle. 1,825,194; Sept. 29.
Marcus, Charles, New York, assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,824,826; Sept. 29.
Marette, Jacques, assignor to Pathé Cinéma Anciens Établissements Pathé Frères, Paris, France, Incandescent electric lamp for projection apparatus. 1,825,078; Sept. 29.
Markel Electric Products. (See McFadden, Glenn E., assignor.)
Marks, George A., Chicago, Ill. Combined lamp arm and base. Des. 85,252; Sept. 29.
Martin, De Loss K., West Orange, N. J., assignor to American Telephone and Telegraph Company. Radio signaling system. 1,824,827; Sept. 29.
Martin, James W., jr., Yonkers, assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus and method. 1,825,643; Sept. 29.
Martin, James W., jr., Yonkers, assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y. Refrigerative dish or utensil. 1,825,644; Sept. 29.
Martin, James W., jr., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Treatment of milk and other liquids. 1,825,645; Sept. 29.
Martin, James W., jr., Yonkers, assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y. Crystallization. 1,825,646; Sept. 29.
Martin, James W., jr., Yonkers, assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y. Storage, transportation, and distribution of frozen carbon dioxide. 1,825,647; Sept. 29.
Martin, Otis C., Los Angeles, Calif. Electric motor. 1,824,909; Sept. 29.
Marvel Carbureter Company. (See Firth, David, assignor.)
Marvin, Jane S. (See Marvin, Ward W., assignor.)
Marvin, Ward W., assignor, by mesne assignments, to Jane S. Marvin, Royal Oak, Mich. Internal combustion engine. 1,825,278; Sept. 29.
Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft, The. (See Riehm, Wilhelm, assignor.)
Mason Box Company, The. (See Berthold, Kenneth F., assignor.)
Massey Concrete Products Corporation. (See Gilman, Charles, assignor.)
Massolle, Joseph. (See Vogt, H., Massolle, and Engl.)
Mathews Conveyer Company. (See Anderson, Martin J., assignor.)
Matsuno, Mitsuo, New York, N. Y. Aquarium or similar article. Des. 85,253; Sept. 29.
Maurer, Georg, Berlin-Charlottenburg, Germany. System for controlling electric switches. 1,824,828; Sept. 29.
Mavrogenis, Aristote, Milwaukee, Wis. Tube base adapter. 1,825,534; Sept. 29.
May Hosiery Mills. (See Smith, William L., jr., assignor.)
Maynard, Merlin T. R., San Jose, Calif. Cork. 1,825,006; Sept. 29.
McAninch, J. E., et al. (See Woods, Robert G., assignor.)
McAvoy, Charles F., and D. E. McAvoy, Long Island City, N. Y. Unit-system building construction. 1,825,195; Sept. 29.
McAvoy, Daniel E. (See McAvoy, Charles F. and D. E.)
McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuits. 1,825,236; Sept. 29.
McCann, William, New York, N. Y. Check protecting device. 1,825,153; Sept. 29.
McCleary Hydraulic Brake Co. (See Price, William G., assignor.)
McCurdy, Ralph G., Englewood, N. J., assignor to American Telephone and Telegraph Company. Cable testing system. 1,824,829; Sept. 29.
McDaniel, Alex S., Bradford, Pa. Hand truck. 1,825,196; Sept. 29.
McDermott, Stephen T., assignor to Universal Oil Products Company, Chicago, Ill. Metallic lining for high temperature vessels. 1,825,154; Sept. 29.
McDougall, Allan J., assignor of one-half to E. J. James, Denver, Colo. Automatic hog feeder and grinder. 1,825,633; Sept. 29.
McFadden, Glenn E., assignor to Markel Electric Products, Inc., Buffalo, N. Y. Shade for an electric light fixture. Des. 85,254; Sept. 29.
McFadden, Glenn E., assignor to Markel Electric Products, Inc., Buffalo, N. Y. Shade for an electric light fixture. Des. 85,255; Sept. 29.
McFadden, Glenn E., assignor to Markel Electric Products, Inc., Buffalo, N. Y. Shade for an electric lamp. Des. 85,256; Sept. 29.
McGinnis, Herbert P., assignor to General Raincoat Co., Parkersburg, W. Va. Garment. 1,825,197; Sept. 29.
McHorney, Selma T. (See Reis, Marion O., assignor.)
McIlvain, Howard S. (See Jones, C. L., and McIlvain.)
McKay, George G., Youngstown, Ohio, assignor to The Ohio Corrugating Company, Warren, Ohio. Machine for expanding cylinders. 1,825,081 Sept. 29.
McKenna Process Company of Illinois. (See Langford, George, assignor.)
McLean, John H. (See Barrows, A. C., McLean, and Langford.)
McMillan Book Company. (See McMillan, John L., assignor.)
McMillan, John L., assignor to McMillan Book Company, Syracuse, N. Y. Loose leaf binder. 1,825,360; Sept. 29.
McNaught, Norris F., assignor to Duro Metal Products Company, Chicago, Ill. Valve seat reconstruction tool. 1,825,007; Sept. 29.
McNish, Alexander F., assignor of one-half to J. Moncrieff Limited, Perth, Scotland. Rotary machine for manufacturing glass hollow-ware and other molded articles of glass. 1,825,082; Sept. 29.
McNutt, Joseph D., assignor to Winchester Repeating Arms Company, New Haven, Conn. Priming mixture. 1,825,466; Sept. 29.
McWilliams, Jane C., executrix. (See McWilliams, Rowland.)
McWilliams, Rowland, deceased, New York, N. Y.; J. C. McWilliams, executrix, assignor to Republic Fireproofing Company, Inc., New York, N. Y. Fireproof floor construction. 1,825,237; Sept. 29.
Mead, Richard R., Queens Village, N. Y., assignor to Mergenthaler Linotype Company. Typographical composing machine. 1,824,911; Sept. 29.
Mears, Norton A., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,824,912; Sept. 29.
Meek, Carl J., St. Louis, Mo., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon soles. 1,824,962; Sept. 29.
Meffert, Hermann. (See Pink, Leonhard, assignor.)
Mercadante, Joseph. (See Thomson, Alfred M., assignor.)
Mergenthaler Linotype Company. (See Mead, Richard R., assignor.)
Merrill, Frank W., Fort Wayne, Ind. Electrical regulator. 1,825,079; Sept. 29.
Merritt, Ericsson H. (See Meyers, Sidney E., assignor.)
Meyer, Adolf, Zurich, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Turbine rotor disk fastening means. 1,825,239; Sept. 29.
Meyer, George J., Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Bottle cleaning apparatus. 1,825,008; Sept. 29.
Meyer, Geo. J., Manufacturing Company. (See Meyer, George J., assignor.)
Meyers, Sidney E., assignor of one-half to E. H. Merritt, Lockport, N. Y. Consistency controlling device. 1,825,155; Sept. 29.

Michael, Charles F. (See Hedeen, Elmer, assignor.)
Michel, Clarence A., Cleveland, Ohio, assignor to Delco Remy Corporation, Dayton, Ohio. Reflector for automobile headlamps. 1,825,084; Sept. 29.
Miescher, Karl, assignor to the firm Society of Chemical Industry in Basle, Basel, Switzerland. Derivative of quinoline carboxylic acids and making same. 1,825,623; Sept. 29.
Miller, Dale O., Detroit, Mich. Automatic regulator for stokers. 1,825,279; Sept. 29.
Miller, Edward M., assignor to J. B. Miller Keyless Lock Company, Kent, Ohio. Keyless lock. 1,825,467; Sept. 29.
Miller, Everett, Blackfork, Ohio. Apple picker. 1,825,599; Sept. 29.
Miller, J. B., Keyless Lock Company. (See Miller, Edward M., assignor.)
Miller, John A., Homewood, Ill. Pleasure railway structure. 1,825,468; Sept. 29.
Milton, John L., assignor to Cheatham Electric Switching Device Co., Louisville, Ky. Switch throwing device. 1,825,469; Sept. 29.
Miller, Lavon D., Hicksville, Ohio. Bent wood handle manufacture. 1,825,409; Sept. 29.
Miller, Lloyd P., Allerton, Mass. Steering device for outboard motor boats. 1,825,240; Sept. 29.
Miller, Mary A., Lancaster, Pa. Support for baking crust. 1,825,535; Sept. 29.
Millermaster, Ralph A., and C. Petersen, assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Key operated electric switch. 1,825,325; Sept. 29.
Milligan, Abner L., Atlanta, Ga., assignor to American Slicing Machine Co., Chicago, Ill. Stacker. 1,824,913; Sept. 29.
Mineral Felt Insulating Company, The. (See Russell, F. C., and Savidge, assignors.)
Minnium, Byron B. (See Huth, W. H., and Minnium.)
Mirocourt, Henry, Sotteville-Lez-Rouen, assignor to Compagnie Nationale de Matieres Colorantes et Manufactures de Produits Chimiques du Nord Reunies, Etablissements Kuhlmann, Paris, France. Manufacture of chromed complexes of azo and ortho-hydroxy-azo dyestuffs. 1,824,914; Sept. 29.
Mishelevich, Benjamin, Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,825,238; Sept. 29.
Mitchell, Allister S., Detroit, Mich. Bat reeling machine. 1,824,782; Sept. 29.
Mitchell, John N. Strathfield, near Sydney, New South Wales, Australia. Apparatus for separating grain or seed or the like. 1,824,915; Sept. 29.
Mittasch, Alwin, Mannheim, and L. Schlecht, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of metals from their carbonyls. 1,825,241; Sept. 29.
Miura, Ryoji. (See Hagiware, Tetsudo, assignor.)
Miyake, Masao, Yehime-Ken, Japan. Reducing the quantity of sulphurous acid gas set free from copper glance on its roasting. 1,825,536; Sept. 29.
Modern Coal Burner Company. (See Leach, Vernon G., assignor.)
Molleson, Isabelle C., Baldwin, N. Y. Egg or pancake turner. 1,824,783; Sept. 29.
Monar, Fred B., Washington, D. C. Communication system. 1,824,784; Sept. 29.
Monckmeier, Gustav C., Tipton, Iowa. Automatic take up bearing. 1,825,410; Sept. 29.
Moncrieff, John Limited. (See McNish, Alexander F., assignor.)
Mond, Albert L., London, England, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Process of producing castings of magnesium and high grade magnesium alloys. 1,825,242; Sept. 29.
Mono-Spar Company, The. (See Stieger, Helmut J., assignor.)
Monowatt Electric Corporation, The. (See Coleman, Roy E., assignor.)
Moody, Lewis F., Philadelphia, Pa. Valve. 1,824,916; Sept. 29.
Moorman Manufacturing Company. See Pfeiffer, Grover F., assignor.)
Moosherr, John, New York, N. Y. Lace. Des. 85,257; Sept. 29.
Moosherr, John, New York, N. Y. Lace. Des. 85,258; Sept. 29.
Morford, Arthur R., Kokomo, Ind. Plasterer's float. 1,825,080; Sept. 29.
Morley, James P., Michigan City, Ind., assignor to Bastian-Morley Company, Laporte, Ind. Water heater. 1,825,326; Sept. 29.
Morris, George D., assignor to New Castle Refractories Company, New Castle, Pa. Kiln car construction. 1,824,917; Sept. 29.
Morris Paper Mills. (See Powell, Henry K., assignor.)
Morse, Samuel, New York, N. Y. Speed reducing mechanism for training cycles. 1,825,083; Sept. 29.
Mortensen, Niels L., Milwaukee, and E. W. Seeger, Wauwatosa, Wis., assignors, by mesne assignments, to Cutler-Hammer Inc., Milwaukee, Wis. Controller for electric motors. 1,825,009; Sept. 29.
Morton, Avery A. (See Wolfard, M. R., Morton, and Hussey.)
Moss, Rosco, assignor to Roscoe Moss Company, Los Angeles, Calif. Seam locator for casing perforators. 1,825,243; Sept. 29.
Moss, Roscoe Company. (See Moss, Roscoe, assignor.)
Mouchly, Jacques, Haifa, Palestine. Valve and valve gear for locomotives and other engines. 1,824,830; Sept. 29.
Mountain Chemical Company. (See Patton, Arthur L., assignor.)
Mug, Edward T., Pittsburgh, Pa., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. Individual motor drive for roller conveyer rolls. 1,825,119; Sept. 29.
Muhlfeld, Frank J., New York, N. Y. Felt hat and making it. 1,824,785; Sept. 29.
Müller-Hillebrand, Dietrich, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. High tension apparatus. 1,824,818; Sept. 29.
Murphy, Daniel H., West Hartford, assignor to The Wiremold Company, Hartford, Conn. Electrical conduit. 1,825,010; Sept. 29.
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Suction motor. 1,825,411; Sept. 29.
Murray, Wallace J. (See Davis, H. S., and Murray.)
Musselman, John, Orrtanna, Pa. Seed ceiling machine. 1,825,470; Sept. 29.
Myers, Walter, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine. 1,825,634; Sept. 29.
Myers, Walter, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Pile fabric article and producing the same. 1,825,635; Sept. 29.
Naamlooze Vennootschap De Bataafsche Petroleum, Maatschappij. (See Straatman, Alphons G. H., assignor.)
Nakkerud, Trygve B., Seattle, Wash. Expressman's truck. 1,824,786; Sept. 29.
National Acme Company, The. See Drissner, Alfred E., assignor.)
National Automotive Fibres. (See Brintnall, F. W., and Ross., assignors.)
National Brass Company. (See Dexter, Lucien A., assignor.)
National Brass Manufacturing Company. (See Wray, Charles F., assignor.)
National Carbon Company. (See Jones, Homer W., assignor.)
National Cellulose Corporation. (See Wandel, Kurt, assignor.)
National Chemical Products Company, The. (See Donovan, Bernard S.)
National Cold Steam Company. (See Shepherd, John E., assignor.)
National Pneumatic Company. (See Rowntree, Harold, assignor.)
Naugatuck Chemical Company, The. (See Roberts, Elmer, assignor.)
Navratiel, Hans, Flint, Mich., assignor to Vacuumsschmelze G. m. b. H., Frankfort-on-the-Main, Germany. Metallurgical furnace. 1,825,011; Sept. 29.
Nawiasky, Paul, and A. Krause, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y. Production of blue dyestuffs of the halogenated anthracene series. 1,824,831; Sept. 29.
Needlman, Louis, Chicago, Ill. Clamp. 1,825,327; Sept. 29.
Negrini, Bruno, Bologna, Italy. Truck and guide member for roller blinds. 1,825,198; Sept. 29.
Neill, Charles W., Syracuse, N. Y. Reading lamp. 1,825,085; Sept. 29.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid pressure tool. 1,825,328; Sept. 29.
Nelson, Fred O., and C. A. Fogel, Pittsburgh, Pa. Price card display holder. 1,824,918; Sept. 29.
Nelson, Jabez C., Syracuse, N. Y. Combined wringer and casing for a washing machine. Des. 85,259; Sept. 29.
Nero, John J., Hartford, Conn. Golf club. 1,825,244; Sept. 29.
Nesselbush, Louis M., assignor to The Falcon Bronze Company, Youngstown, Ohio. Tuyère. 1,824,919; Sept. 29.
Netherland, Nita G., Ballsville, Va. Hose protector and advertising novelty. 1,824,832; Sept. 29.
Neubeck, William H. (See Heaton, H. C., Neubeck, and Reisfeld.)
Newark Concrete Pipe Co. (See Hudson, Richard D., assignor.)
Newby, Walter, Aliquippa, Pa. Mechanical pack carrier for furnaces. 1,825,537; Sept. 29.
New Castle Refractories Company. (See Morris, George D., assignor.)
New York Brick Handling Corporation. (See Dupuy, Arthur O., assignor.)
Nichols, Eugene D., Fortuna, Mo. Baling press. 1,825,600; Sept. 29.
Nichols, Katherine, and R. Bettlen, Chicago, Ill.; said Bettlen assignor to said Nichols. Telephone. 1,825,471; Sept. 29.
Nickle, Clifford A., Schenectady, N. Y., assignor to General Electric Company. Electrical power transmission. 1,825,624; Sept. 29.
Nieuwland, Julius A., Notre Dame, Ind., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Acetals of alkyl ethers of polyethylene glycols. 1,824,963; Sept. 29.

Nitka, Albert, Milwaukee, Wis. Ventilator hat for stoves. 1,825,245 ; Sept. 29.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve valve actuating mechanism. 1,825,412 ; Sept. 29.
Nolan, Nicholas J. assignor to Advance Stamping Company, Detroit, Mich. Roller bearing and making same. 1,824,787 ; Sept. 29.
Nord, Swan E., Seattle, Wash. Nonsplash and self-draining can. 1,825,120 ; Sept. 29.
Nordberg, Bruno V. E., and R. Wintzer, assignors to Nordberg Manufacturing Company, Milwaukee, Wis. Power plant. 1,824,833 ; Sept. 29.
Nordberg Manufacturing Company. (See Anderson, John W., assignor.)
Nordberg Manufacturing Company. (See Nordberg, B. V. E., and Wintzer, assignors.)
Northern Equipment Company. (See Veenschoten, Vincent V., assignor.)
Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Antitheft device. 1,825,413 ; Sept. 29.
Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Electric switch. 1,825,414 ; Sept. 29.
Novak, Leon, Cleveland, Ohio. Exercising device. 1,824,920 ; Sept. 29.
Nyman, Alexander, assignor to Dubilier Condenser Corporation, New York, N. Y. Electric terminal. 1,824,834 ; Sept. 29.
Obstler, Jacob, New York, N. Y. Form filler. 1,825,246 ; Sept. 29.
Ohlendorf, Emil F., Moline, Ill. Bumper mechanism. 1,825,086 ; Sept. 29.
Ohio Corrugating Company, The. (See McKay, George G., assignor.)
Ohio Corrugating Company, The. (See Vaughn, Harold G., assignor.)
Ohio Sanitary Engineering Corporation, The. (See Travers, John T., assignor.)
Oishei, John R., assignor to Trico Products Corporation, Buffalo, N. Y. Vehicle heater. 1,824,921 ; Sept. 29.
Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)
Olson, Andrew. (See Tufts, L. R., and Olson.)
Olson, Andrew, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Sliding deflector. 1,825,247 ; Sept. 29.
Ornberg, Ivan, assignor to Hupp Motor Car Corporation, Detroit, Mich. Running board assembly. 1,825,012 ; Sept. 29.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,824,964 ; Sept. 29.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,824,965 ; Sept. 29.
Oswald, André, Paris, France, assignor, by mesne assignments, to Keller-Dorian Colorfilm Corporation, New York, N. Y. Objective for color photography. 1,825,122 ; Sept. 29.
Otten, Lawrence F., Fort Thomas, assignor to The Wadsworth Watch Case Company, Dayton, Ky. Bracelet extension device. 1,825,156 ; Sept. 29.
Otto, Carl, Essen-Ruhr, Germany. Regenerative coke oven. 1,824,922 ; Sept. 29.
Outlet Industries Inc. (See Schutt, Emmett J., assignor.)
Overmiller, Roy A., Sharon Hill, Pa. Railway switch. 1,825,415 ; Sept. 29.
Owen, Henry A., Foxboro, assignor to Davis & Furber Machine Company, North Andover, Mass. Spindle rail lifting mechanism. 1,824,788 ; Sept. 29.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Lamp-holder. 1,825,121 ; Sept. 29.
Owens-Illinois Glass Company. (See Knepper, Shelby V., assignor.)
Owens-Illinois Glass Company. (See Owens, Michael J., assignor.)
Owens, Michael J., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Delivering charges of molten glass. 1,825,416 ; Sept. 29.
Ozer, George C., New York, N. Y. Locating points of leakage in conduits. 1,825,280 ; Sept. 29.
Ozabal, Rudolph M. (See Thybony, N. W., and Ozabal.)
Pace, Linwood A., Shreveport, La. Screen. 1,825,538 ; Sept. 29.
Pacific Mills. (See Eisenstadt, Abraham H., assignor.)
Palmbush, Andrew H., Conrad, Mont. Fruit picker. 1,825,601 ; Sept. 29.
Paramount Aircraft Corporation. (See Carr, Walter J., assignor.)
Pardee, Frank, assignor to Anthracite Separator Company, Hazleton, Pa. Method and apparatus for hydraulically separating materials. 1,825,157 ; Sept. 29.
Park, Linn K., Houston, Tex. Power unit. 1,825,087 ; Sept. 29.
Parkersburg Rig and Reel Company, The. (See Schwemlein, William, assignor.)
Parsons, Fred A., Milwaukee, Wis. Furniture shoe. 1,824,923 ; Sept. 29.
Parsons, Philip D., Swarthmore, Pa., assignor to Scott Paper Company. Registering device. 1,825,281 ; Sept. 29.
Patent Button Company, The. (See White, Franklin R., assignor.)
Pathé Cinéma Anciens Établissements Pathé Frères. (See Marette, Jacques, assignor.)
Patiño, José A., Paramus, N. J. Waterproofing. 1,825,199 ; Sept. 29.
Patterson, John L., assignor to Richmond Beverage Machine Corporation, Richmond, Va. Measuring device for liquids. 1,825,200 ; Sept. 29.
Patton, Arthur L., assignor to Mountain Chemical Company, Denver, Colo. Method and apparatus for flushing and filling hydraulic brake systems. 1,825,013 ; Sept. 29.
Patton, Harry H., Oakland, assignor to Brake-Testing Equipment Corporation, San Francisco, Calif. Method and apparatus for testing vehicle brakes. 1,825,539 ; Sept. 29.
Paul, Edwin, and J. Mantonya, Albuquerque, N. Mex. Guide for pipe cleaning rods. 1,824,924 ; Sept. 29.
Pausser, Arnaud E., Philadelphia, Pa. Winder and clip for hair waving apparatus. 1,825,540 ; Sept. 29.
Payne, Lambert M., Detroit, Mich. Thermostatic construction. 1,824,789 ; Sept. 29.
Peabody Engineering Corporation. (See Graham, D. P., and Ferry, assignors.)
Pearson, W. L. (See Livergood, Gerald R., assignor.)
Peek, Frank W., jr., Pittsfield, Mass., assignor to General Electric Company. Protecting electrical apparatus. 1,825,541 ; Sept. 29.
Peelle, Willis J., Chicago, Ill. Apparatus for manufacturing rubber products. 1,825,282 ; Sept. 29.
Peerless Tank and Seat Works, Inc. (See Henn, William A., assignor.)
Pelk, Louis D., Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y. Down draft room. 1,825,542 ; Sept. 29.
Pelletier, Louis F. (See Ciglia, E. F., and Pelletier.)
Pemsl, George, Dubuque, Iowa. Propeller. 1,825,473 ; Sept. 29.
Perkin, Joe, Bayonne, N. J. Doorlock marker. 1,825,474 ; Sept. 29.
Peters, Stanley E., Chicago, Ill. Check protector. 1,825,014 ; Sept. 29.
Petersen, Carsten. (See Millermaster, R. A., and Petersen.)
Petersen, Reinholdt, Fairlawn, and R. E. Farmer, Akron, Ohio ; said Farmer assignor to said Petersen. Self-locking paper slide box. 1,825,158 ; Sept. 29.
Peterson, Adolphe C., Minneapolis, Minn. Multiple cylinder engine. 1,825,417 ; Sept. 29.
Peterson, John, St. Paul, Minn. Boxing toy. 1,824,790 ; Sept. 29.
Petree & Dorr Engineers, Inc. (See Copp, Earle M., assignor.)
Petroleum Chemical Corporation. (See Davis, H. S., and Murray, assignors.)
Petroleum Iron Works Co. of Ohio, The. (See Shanor, Edgar E., assignor.)
Petroleum Rectifying Company of California. (See Eldy, Harold C., assignor.)
Pfaudler Co., The. (See Chormann, O. I., and Jacobsen, assignors.)
Pfeiffer, Frank E. and W. C., assignors to The Egry Register Company, Dayton, Ohio. Motor control and drive. 1,825,418 ; Sept. 29.
Pfeiffer, Grover F., Quincy, Ill., assignor to Moorman Manufacturing Company, Chicago, Ill. Preparation of mineral feeds. 1,825,475 ; Sept. 29.
Pfeiffer, William C. (See Pfeiffer, Frank E. and W. C.)
Pflager, Harry M. (See Sheehan, W. M., and Pflager.)
Pflager, Harry M., St. Louis, Mo., assignor to General Steel Castings Corporation, Granite City, Ill. Railway car structure. 1,825,476 ; Sept. 29.
Phillips, Dr., P., Company. (See Floyd, C., assignor.)
Phillips, Nathan C., assignor to Russia Cement Company, Gloucester, Mass. Bottle. Des. 85,260 ; Sept. 29.
Phipps, John T., Huntington Park, assignor to H. C. Smith Manufacturing Company, Whittier, Calif. Core catcher construction. 1,825,123 ; Sept. 29.
Pierce, Frederick J., Saranac Lake, N. Y. Foot impression mold. 1,824,835 ; Sept. 29.
Pierret, Victor E., Los Angeles, Calif. Emergency valve operating mechanism. 1,825,124 ; Sept. 29.
Piggot, Charles S., Washington, D. C. Bonnet for rectifying columns. 1,824,886 ; Sept. 29.
Pilling, Norman B., Elizabeth, N. J., assignor, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y. Alloys and process for improving workability of same. 1,824,966 ; Sept. 29.
Pink, Leonhard, Berlin, assignor to H. Meffert, Hamburg, Germany. Reaction product of salicylic acid and hexamethylenetetramine and producing same. 1,825,636 ; Sept. 29.
Pinkham, Henry P., Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Multipole electric switch and operating mechanism therefor. 1,825,159 ; Sept. 29.
Pittoni, Angelo, Lynbrook, assignor to The Rome Company, Inc., Rome, N. Y. Folding bed. 1,824,925 ; Sept. 29.
Pittsburgh Reflector Company. (See Hopkin, Alfred, jr., assignor.)

Platt Brothers and Company Limited. (See Wilkinson, Henry, assignor.)
Platt, Herbert. (See Dreyfus, C., Whitehead, and Platt.)
Plym, Francis J., assignor to The Kawneer Company, Niles, Mich. Screw. 1,825,419 ; Sept. 29.
Pokorny, Frank, Mamaroneck, N. Y. Control means for heating fuel mixtures supplied to internal combustion engines. 1,824,926 ; Sept. 29.
Polanyi, Michael, Berlin-Zehlendorf-Mitte, and S. von Bogdandy, Berlin-Dahlem, Germany. Producing an intimate mixture of mutually insoluble substances. 1,825,125 ; Sept. 29.
Pond's Extract Company. (See Young, Lloyd V., assignor.)
Powell, Edwin T. (See Powell, John T. and E. T.)
Powell, Henry K., assignor to Morris Paper Mills, Chicago, Ill. Folding carton. 1,824,927 ; Sept. 29.
Powell, John T. and E. T., Washington, D. C. Combined safety light and illuminating lamp. 1,825,088 ; Sept. 29.
Powers, Frank T., Douglaston, N. Y. Fluid handling device. 1,825,126 ; Sept. 29.
Powers, Frank T., Douglaston, N. Y. Etching machine. 1,825,127 ; Sept. 29.
Pratt, John A., Nashville, Tenn. Tension device. 1,825,089 ; Sept. 29.
Prentice, John, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Door latch. 1,825,283 ; Sept. 29.
Price, William G., deceased, by McCleary Hydraulic Brake Co., Seattle, Wash., assignee. Hydraulic and band brake operating means. Re18,217 ; Sept. 29.
Prince-Smith, William, and D. Waterhouse, Keighley, England. Facilitating doffing in flyer spinning, twisting, and similar machines. 1,825,201 ; Sept. 29.
Prismo Holding Corporation. (See Humphreys, Cecil, assignor.)
Pritchard, Reuben L., Hampstead, London, England. Process and apparatus for degumming, washing, and drying fibers. 1,824,928 ; Sept. 29.
Pritchard, Willam C., Columbia, Pa., assignor to Toddy, Inc., New York, N. Y. Drink mixer. 1,824,929 ; Sept. 29.
Pudin, Martin, assignor of forty per cent to J. Haberern, Coplay, Pa. Removable heel. 1,825,202 ; Sept. 29.
Pungs, Wilhelm, Ludwigshafen-on-the-Rhine, and K. Behringer, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Products resembling natural waxes. 1,825,248 ; Sept. 29.
Pungs, Wilhelm, Ludwigshafen-on-the-Rhine, and K. Behringer, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Products resembling natural waxes. 1,825,249 ; Sept. 29.
Punte, William F., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Scored container with breaking tab. 1,825,602 ; Sept. 29.
Pyratone Products Corporation. (See Barrett, Harold G., assignor.)
Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Gaseous fuel mixing device. 1,825,361 ; Sept. 29.
Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Spark plug with sleeve-constrictive bushing. 1,825,362 ; Sept. 29.
Rach, Carl, New York, N. Y. Making dextrose and dextrose compounds. 1,825,603 ; Sept. 29.
Radio Corporation of America. (See Cawley, Aloysius J., assignor.)
Ragody, René A. (See Adam, Isalé C.)
Ramapo Ajax Corporation. (See Strong, James B., assignor.)
Rand, George M., Barre, Vt. Method of and apparatus for cutting forms from stone slabs. 1,825,420 ; Sept. 29.
Raney, Estel C., Columbus, Ohio. Automatically operated circuit breaker. 1,825,015 ; Sept. 29.
Ransome Concrete Machinery Company. (See Aspden, Frank, assignor.)
Ray, Arthur J. and C. E. Lomax, assignors, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Street traffic regulating system. 1,825,284 ; Sept. 29.
Ray, Robert L., Elizabethton, Tenn. Reel. 1,825,604 ; Sept. 29.
Redding, Harry B., assignor to The Valve Equipment Company, Columbus, Ohio. Valve for high pressure and high temperature purposes. 1,825,543 ; Sept. 29.
Redding, Harry B., Cleveland, assignor to The Valve Equipment Company, Columbus, Ohio. Gate valve structure. 1,825,544 ; Sept. 29.
Reed, Martin L., Wilson, Okla. Combination thread protector and sucker rod stripper. 1,825,605 ; Sept. 29.
Rehak, James, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Bias cutter. 1,825,250 ; Sept. 29.
Reibel, Jean F. J., Chatellerault, France, assignor to Société des Armes Lewis, Paris, France. Contrivance or device for throwing projectiles or the like. 1,825,203 ; Sept. 29.
Reichart, William M., assignor to The Effenare Manufacturing Company, Cleveland, Ohio. Scale-prevention in boilers or the like. 1,825,477 ; Sept. 29.
Reid, Murdoch & Co. (See Canaday, Miron S., assignor.)
Reid, Wilfrid T., St. Laurent, Quebec, assignor to Curtiss-Reid Aircraft Company Limited, Montreal, Quebec, Canada. Skew lever. 1,825,285 ; Sept. 29.
Reinforced Paper Bottle Corporation. (See Koch, Lydia B., assignor.)
Reis, Marion, O., assignor of one-half to S. T. McHorney, San Diego, Calif. Combination pen cap and blotter. 1,825,090 ; Sept. 29.
Reisfeld, Louis. (See Heaton, H. C., Neubeck, and Reisfeld.)
Rengmann, Thure, Berlin-Charlottenburg, Germany, assignor of one-half to Grunewalds Registrator Co. Atk. Ges., Berlin, Germany. Paper file. 1,824,791 ; Sept. 29.
Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)
Remington Rand Inc. (See Sibley, Edward W., assignor.)
Remington Typewriter Company. (See Hart, Frederick A., assignor.)
Republic Fireproofing Company. (See McWilliams, Rowland, assignor.)
Reure, Francois L. R., Paris, France. Metallic pipe coupling. 1,824,792 ; Sept. 29.
Revelle, George H., Seattle, Wash. Memorandum-pad holder for desk telephones. 1,825,204 ; Sept. 29.
Reynoldson, R. G., Madison, Wis., assignor to The All-bright-Nell Company, Chicago, Ill. Meat trimming apparatus. 1,825,205 ; Sept. 29.
Rhode, Otto A. (See Chevalier, John M., assignor.)
Richmond Beverage Machine Corporation. (See Patterson, John L., assignor.)
Richter, George A., assignor to Brown Company, Berlin, N. H. Papermaking composition. 1,824,837 ; Sept. 29.
Richards-Wilcox Manufacturing Company. (See Hoffman, Peter L., assignor.)
Ricker, George A., Coraopolis, Pa., assignor to Carbo-Oxygen Company, Pittsburgh, Pa. Pressure regulating valve. 1,825,637 ; Sept. 29.
Riehm, Wilhelm, assignor to the firm Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft, Augsburg, Germany. Internal combustion engine. 1,825,545 ; Sept. 29.
Riise, John, Doylestown, Ohio. Rear axle construction. 1,824,793 ; Sept. 29.
Riker Company, The. (See Whitehouse, Herbert G., assignor.)
Riley, Champlain L., North Plainfield, N. J., assignor to Industrial Associates, Incorporated, New York, N. Y. Nebulizer. 1,825,546 ; Sept. 29.
Risselt, Frank C. (See Johnson, S. A., and Risselt.)
Rivas, Charles A., St. Louis, Mo. Shoe and making same. 1,825,206 ; Sept. 29.
Roberts, Elmer, Montclair, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Denture. 1,825,286 ; Sept. 29.
Roberts, John F., West Palm Beach, Fla. Clamp. 1,825,207 ; Sept. 29.
Robertson, Russell J., Oakland, assignor of one-half to M. S. Robertson, Alameda, Calif. Water plane. 1,825,363 ; Sept. 29.
Robertson, Milton S. (See Robertson, Russell J., assignor.)
Robinson, Karl D., New York, N. Y., assignor to Barrett & Company. Leather or similar article. Des. 85,272 ; Sept. 29.
Rockwell, Edward A., New York, N. Y. Pressure indicating tire valve. 1,825,160 ; Sept. 29.
Rockwell, Herbert S., assignor to H. A. Smith Machine Company, Hopewell, N. J. Toy boat with outboard motor. 1,825,547 ; Sept. 29.
Rockwood, Alan C., and W. R. Ferris, Schenectady, N. Y., assignors to General Electric Company. Tube testing apparatus. 1,825,548 ; Sept. 29.
Roesch, Christian, assignor of one-half to himself and one-half to G. Gockeler, Brooklyn, N. Y. Slicing machine. 1,825,421 ; Sept. 29.
Rogers, Claude H., Peterboro, Ontario, Canada. Boat joint construction. 1,825,091 ; Sept. 29.
Rohlfes, Clemens, San Francisco, Calif. Price marking device. 1,824,794 ; Sept. 29.
Rome Company, The. (See Pittoni, Angelo, assignor.)
Root, Bertwell C., assignor to Brown Company, Berlin, N. H. Conduit joint and making the same. 1,824,838 ; Sept. 29.
Rose, Reed P., Jackson Heights, N. Y., assignor to General Rubber Company, New York, N. Y. Manufacture of sheet material. 1,825,422 ; Sept. 29.
Rosefield, John B., Piedmont, Calif. Spraying device. 1,825,092 ; Sept. 29.
Rosenberg, Leo V. (See Frisch, M. A., and Rosenberg.)
Ross, Clyde P., Chicago, Ill. Combined coal and cinder handling plant. 1,824,930 ; Sept. 29.
Ross, Frederick N. (See Brintnall, F. W., and Ross.)
Ross, Malcolm D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Ventilation of dynamo electric machines. 1,824,839 ; Sept. 29.
Ross, Wallace B., Syracuse, assignor to Diemolding Corporation, Canastota, N. Y. Valve operating handle. 1,825,364 ; Sept. 29.
Rottinghaus, Oscar, Norwood, Ohio. Reflector for warm air furnace registers. 1,825,423 ; Sept. 29.
Rowley, William S., and H. W. Butterworth, jr., Philadelphia, Pa., assignors to H. W. Butterworth & Sons Company. Treating textile fabrics. 1,825,478 ; Sept. 29.
Rowntree, Harold, Scarsdale, N. Y., assignor to National Pneumatic Company, New York, N. Y. Automatically operated door for passageways. 1,825,128 ; Sept. 29.

Rowntree, Harold, Scarsdale, N. Y., assignor to National Pneumatic Company, New York, N. Y. Door operating mechanism. 1,825,129; Sept. 29.
Royal Railway Improvements Corporation. (See Sauvage, William H., assignor.)
Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)
Rucker, Charles M. (See Durham, H. W., and Rucker.)
Ruffing, John, sr., Nokomis, Ill., assignor of one-half to W. C. Argust, Taylorville, Ill. Miner's cap. 1,824,840; Sept. 29.
Rumble, Alex C., Sierra Madre, Calif., assignor of one-half to W. E. Lauer, Los Angeles, Calif. Automatic disconnecting pothead. 1,825,208; Sept. 29.
Runge, Robert F., Forest Hills Gardens, Long Island, assignor to The Hess-Bright Manufacturing Company, Philadelphia, Pa. Cage for ball bearings. 1,825,365; Sept. 29.
Rupp, Guy A. (See Snelling, W. O., and Rupp.)
Russell, Frank C. and C. L. Savidge, assignors to The Mineral Felt Insulating Company, Toledo, Ohio. Pipe insulation. 1,825,424; Sept. 29.
Russia Cement Company. (See Phillips, Nathan C., assignor.)
Sacco, Luigi A., Genoa, Italy. Torpedo. 1,825,161; Sept. 29.
Saccoccia, Nicholas, Cranston, R. I., assignor to Fulford Mfg. Co. Identification marker. 1,825,649; Sept. 29.
Sadtler, Samuel S., Chestnut Hill, Springfield Township, Montgomery County, Pa., assignor to Amiesite Asphalt Company of America, Philadelphia, Pa. Coating damp or wet stone. 1,824,931; Sept. 29.
Safford, Clarence E., Cleveland, Ohio. Heat exchange device. 1,825,209; Sept. 29.
St. Regis Paper Company. (See Krommiller, Carl G., assignor.)
Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Slide buckle. 1,825,016; Sept. 29.
Salomon, Emil, Tulsa, Okla. Salesman's commercial buttonhole emblem. Des. 85,261; Sept. 29.
San Diego Consolidated Gas and Electric Company. (See Volk, Wolfe, assignor.)
Sanford, Hugh W., Knoxville, Tenn. Mine car. 1,824,841; Sept. 29.
Sansburn, Alexander W., Pilares De Nacozari, Sonora, Mexico. Shock absorbing spring for motor trucks. 1,825,093; Sept. 29.
Sargent and Lundry, Incorporated. (See Heaton, H. C., Neubeck, and Reisfeld, assignors.)
Sarrazin, Georges. (See Barreaux, A., and Sarrazin.)
Saubiac, B., & Son. (See Sellier, Georges, assignor.)
Sauvage, William H., assignor by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y. Regulator for brake rigging. 1,825,366; Sept. 29.
Savidge, Clinton L. (See Russell, F. C., and Savidge.)
Sawyer, Frank M., Richmond, Va. Concrete window sash. 1,825,162; Sept. 29.
Scannell, Albert T., Chicago, Ill. Clamp. 1,825,425; Sept. 29.
Scheilens, Christopher A., Marblehead, Mass., assignor to C-S Engineering Company, Englewood, N. J. Packing for centrifugal pumps. 1,825,251; Sept. 29.
Schermer, Nathan H., Youngstown, Ohio. Pickling of stainless steel. 1,824,932; Sept. 29.
Scheuber, James M., Bairoil, Wyo. Air lift device. 1,825,094; Sept. 29.
Scheuing, Georg, and B. Walach, assignors to C. H. Boehringer Sohn Aktiengesellschaft, Nieder-Ingelheim-on-the-Rhine, Germany. 3-ethyl-4-cyclohexyl-1, 2, 4-triazole. 1,825,549; Sept. 29.
Schilling, Charles E., assignor of one-half to E. A. Schilling, Willcox, Ariz. Float controlled valve. 1,825,367; Sept. 29.
Schilling, E. A. (See Schilling, Charles E., assignor.)
Schlafly, Julius H., Canton, Ohio. Article feeding and stripping machine. 1,825,287; Sept. 29.
Schlecht, Leo. (See Mittasch, A., and Schlecht.)
Schlecht, Leo, W. Schubardt, Ludwigshafen-on-the-Rhine, and F. Duftschmid, Heidelberg, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of metals and metal compounds soluble in ammoniacal liquors. 1,825,211; Sept. 29.
Schmidt, Adam, Strebersdorf, assignor to the Firm Aktiengesellschaft fur Tiefbohrtechnik und Maschinenbau vormals Tranzl & Co., Vienna, Austria. Cutting and welding machine. 1,825,606; Sept. 29.
Schmidt, Richard J., assignor to The Akron Equipment Company, Akron, Ohio. Vulcanizing press. 1,825,616; Sept. 29.
Schneider, Adolf, Brooklyn, N. Y., assignor of one-half to A. A. Schneider, East Orange, N. J. Binding post. 1,825,130; Sept. 29.
Schneider, Arthur A. (See Schneider, Adolf, assignor.)
Schneider & Cie. (See Fleux, Jean, assignor.)
Schneider, George. (See Dreyfus, C., and Schneider.)
Schneider, Herman S., Chicago, Ill. Dish washing device. 1,825,095; Sept. 29.
Scholtz, Ferdinand J., Watertown, S. Dak. Thermostatic alarm. 1,824,933; Sept. 29.
Schubardt, Walter. (See Schlecht, L., Schubardt, and Duftschmid.)
Schulte, Johannes, Essen-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa. Settling tank. 1,825,550; Sept. 29.
Schutt, Emmett J., Ramsey, N. J., assignor to Outlet Industries Inc., Buffalo, N. Y. Wall or floor receptacle. 1,825,638; Sept. 29.
Schutte and Koerting Company. (See Knauf, Paul W., assignor.)
Schwemlein, William, assignor to The Parkersburg Rig and Reel Company, Parkersburg, W. Va. Rocker bearing for walking beams. 1,825,096; Sept. 29.
Schweter, Erich, Bornstedt, Germany. Device for altering the clearance space in piston machines. 1,825,163; Sept. 29.
Sciallis, Jasper, Staten Island, N. Y. Extension former. 1,825,607; Sept. 29.
Scott Paper Company. (See Parsons, Philip D., assignor.)
Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Vulcanization of rubber. 1,825,288; Sept. 29.
Scottish Dyes, Limited. (See White, Gerald N., assignor.)
Scully, Alexander D., New York, N. Y., assignor, by mesne assignments, to R. T. Tyner, jr., Allendale, N. J. Nest of chairs. 1,825,368; Sept. 29.
Seabury, Ralph L., Toledo, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind. Granular body and making same. 1,824,795; Sept. 29.
Seeger, Edwin W. (See Mortensen, N. L., and Seeger.)
Seelig, Bertha, Kansas City, Mo. Toothbrush. 1,824,967; Sept. 29.
Seely, Thomas H., Melrose, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Tack handling mechanism. 1,825,210; Sept. 29.
Seguin, Augustin. (See Seguin, Laurent and A.)
Seguin, Laurent and A., Paris, France. Construction of internal combustion engines. 1,825,097; Sept. 29.
Seguin, Laurent and A., Paris, France. Automatic calling apparatus for automatic telephones. 1,825,098; Sept. 29.
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Sellier, Georges, Park Ridge, N. J., assignor to B. Saubiac & Son, Inc., New York, N. Y. Bedspread. Des. 85,262; Sept. 29.
Serrell, Robert, Haddon Heights, N. J., assignor to General Electric Company. Electrical recording. 1,825,551; Sept. 29.
Seymour, Charles, Little Rock, Ark. Exhaust nozzle. 1,825,479; Sept. 29.
Shaefer, Aaron W., administrator. (See Wert, Cyrus S.)
Shakeproof Lock Washer Company. (See Gribbie, John M., assignor.)
Shanor, Edgar E., Sharon, assignor to The Petroleum Iron Works Co. of Ohio, Sharon, Pa. Floating roof seal. 1,825,639; Sept. 29.
Shaukis, Arthur J., Haverhill, Mass. Atomizer. 1,825,608; Sept. 29.
Shaw, John S., Fazakerley, Liverpool, England. Speed changing and reversing gear. 1,825,552; Sept. 29.
Sheehan, William M., Merion, Pa., and H. M. Pflager, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill. Locomotive driving wheel structure. 1,825,480; Sept. 29.
Shepard, James A., assignor to Shepard-Niles Crane & Hoist Corporation, Montour Falls, N. Y. Electrical conductor. 1,824,934; Sept. 29.
Shepard-Niles Crane & Hoist Corporation. (See Shepard, James A., assignor.)
Shepherd, John E., assignor to National Cold Steam Company, Charlottesville, Va. Power unit and method of creating energy. 1,825,131; Sept. 29.
Shindledecker, Roy C., Erie, Pa., assignor to General Electric Company. Assembling resistance units. 1,825,481; Sept. 29.
Shipley, Grant B. (See Allnder, H., and Shipley.)
Shippy, Leo C., assignor to Delco-Remy Corporation, Anderson, Ind. Instrument case. 1,825,426; Sept. 29.
Shoe Form Co. (See De Witt, William J., assignor.)
Shope, Thomas H., assignor of one-half to W. B. Shope, Southgate, Calif. Growing vegetables and fruit. 1,825,099; Sept. 29.
Shope, W. B. (See Shope, Thomas H., assignor.)
Shopis, Kiriaco, New York, N. Y., and D. Mamarcheff, West Norwalk, Conn. Multiple knife fur-cutting machine. 1,825,132; Sept. 29.
Sibley, Edward W., Kenmore, assignor to Remington Rand Inc., Buffalo, N. Y. Typewriter desk. 1,825,369; Sept. 29.
Siddall, Wilbur H., assignor to Bay State Optical Company, Attleboro, Mass. Making eyeglass parts. 1,825,427; Sept. 29.
Siemens & Halske, Aktiengesellschaft. (See Jipp, August, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Kühns, A., and Kesselring, assignors.)
Simmons Company. (See Kusterle, Frank, assignor.)
Simonson, George H., Springfield, Mass., assignors to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Machine for trimming the tuft yarns of tube frames. 1,825,617; Sept. 29.
Simplex Equipment Company. (See Creveling, John L., assignor.)

Singer, Fritz, Nuremberg, Germany. Extrusion press. 1,825,017; Sept. 29.
Singer Manufacturing Company, The. (See Myers, Walter, assignor.)
Sisco, Peter, Chicago, Ill. Confection forming machine. 1,824,796; Sept. 29.
Skillman, Clarence, Swingley, Mont. Portable saw. 1,825,164; Sept. 29.
Sleeper, Harvey P., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Temperature indicating device. 1,824,842; Sept. 29.
Smalle, Daniel M. (See Floyd, C., and Smalle.)
Smiley, Orvall, Indianapolis, Ind. Bottle. Des. 85,263; Sept. 29.
Smith, Arthur E., Los Angeles, Calif. Container closure. 1,825,553; Sept. 29.
Smith & Davis Manufacturing Company. (See Duvall, William J., assignor.)
Smith, H. A., Machine Company. (See Rockwell, Herbert S., assignor.)
Smith, H. C., Manufacturing Company. (See Phipps, John T., assignor.)
Smith, Herman B., Plainfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Waste heat boiler. 1,825,289; Sept. 29.
Smith, Nelson K., assignor to Byron Jackson Co., Los Angeles, Calif. Rotary and casing hook. 1,825,018; Sept. 29.
Smith, Paul, Farmingdale, N. Y. Door operating device. 1,824,968; Sept. 29.
Smith, Walton S., Hillside, N. J. Making stannous chloride. 1,825,212; Sept. 29.
Smith, William A., and H. A. Belden, Sherman, Tex. Flexible material grip. 1,825,165; Sept. 29.
Smith, William L., jr., assignor to May Hosiery Mills, Nashville, Tenn. Knitting machine. 1,825,370; Sept. 29.
Snelling, Walter O., and G. A. Rupp, Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Seismometer. 1,825,554; Sept. 29.
Snider, John W., Franklin, Ind. Tomato peeling machine. 1,825,428; Sept. 29.
Snyder Engineering Corporation. (See Snyder, Frank, assignor.)
Snyder, Frank, Huntington, W. Va., assignor, by mesne assignments, to Snyder Engineering Corporation, Wilmington, Del. Washing machine. 1,825,019; Sept. 29.
Snyder, John L., assignor to Standard Churn Company, Wapakoneta, Ohio. Centrifugal honey extractor. 1,825,020; Sept. 29.
Société des Armes Lewis. (See Reibel, Jean F. J., assignor.)
Society of Chemical Industry in Basle. (See Miescher, Karl, assignor.)
Somajni, Giacomo, Milan, Italy. Electric control apparatus. 1,825,100; Sept. 29.
Sosinski, Paul P., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electromagnet. 1,825,482; Sept. 29.
Souders, William E., Cincinnati, Ohio. Window shade roller and curtain bracket. 1,825,101; Sept. 29.
South Bend Current Controller Company. (See Wescott, Dana E., assignor.)
Spacsek, Frank A., Utica, N. Y. Sled attachment for automobiles. 1,825,133; Sept. 29.
Sperry Gyroscope Company. (See Bates, Mortimer F., assignor.)
Spofford, Robert W., New York, N. Y. Coloring rattan. 1,825,102; Sept. 29.
Sprague, Frank E., Bakersfield, Calif. Pump plunger. 1,825,483; Sept. 29.
Stacey, Alfred E., jr., Essex Falls, assignor to Carrier Engineering Corporation, Newark, N. J. Conduit. 1,825,103; Sept. 29.
Staeheli, Charles A., Spokane, Wash. Saw table. 1,825,104; Sept. 29.
Standard Churn Company. (See Snyder, John L., assignor.)
Standard Computing Scale Company, The. (See Jaenichen, Louis, assignor.)
Standard Oil Company. (See Baker, Charles R., assignor.)
Standard Oil Company. (See Thiele, Ernest W., assignor.)
Standard Oil Company. (See Watts, George W., assignor.)
Standard Oil Company. (See Wilson, Robert E., assignor.)
Standard Stoker Company. (See Surdykowski, Charles J., assignor.)
Standard Stoker Company, Inc., The. (See Lower, Nathan M., assignor.)
Standard Stoker Company, Inc., The. (See Turner, Edwin A., assignor.)
Standard Stoker Company, The. (See Turner, E. A., and Surdykowski, assignors.)
Staley, Earl B., Seattle, Wash. Tow hook. 1,824,843; Sept. 29.
Stanley Works, The. (See Hart, Walter H., assignor.)
Stearns, E. C., & Co. (See Acheson, Albert R., assignor.)
Stern, Nathan, assignor to Alfred Teves Maschinen-und Armaturen-Fabrik Gesellschaft mit beschrankter Haftung, Frankfort-on-the-Main, Germany. Brake. 1,825,555; Sept. 29.
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Throttle handle. 1,825,290; Sept. 29.
Stevenson, Cary H., Chicago, Ill., assignor to Hevi Duty Electric Company, Milwaukee, Wis. Corrugated pot. 1,825,556; Sept. 29.
Stieger, Helmut J., Wimbledon, assignor to The Mono-Spar Company, Limited, London, England. Wing and aileron construction for aircraft. 1,825,371; Sept. 29.
Stoetzel, Joseph J., Queens Village, assignor to G & G Atlas Systems, Inc., New York, N. Y. Pneumatic dispatch control valve. 1,825,618; Sept. 29.
Stolp, Samuel S., Louisville, Ky., assignor to Cheatham Electric Switching Device Company. Trolley contactor. 1,824,844; Sept. 29.
Stoner, Abraham D., New Windsor, Md. Rabbit hutch. 1,825,557; Sept. 29.
Stoner, Abraham D., New Windsor, Md. Rabbit hutch. 1,825,558; Sept. 29.
Storms, Earl W., Huntington Park, Calif. Radiator closing means for automobiles. 1,825,134; Sept. 29.
Story & Clark Radio Corp. (See Huth, W. H., and Minnium, assignors.)
Stout, Roy L., Oakland, Calif. Trailer brake operating mechanism. 1,824,845; Sept. 29.
Stover Manufacturing & Engine Co. (See Haller, Frank J., assignor.)
Straatman, Alphons G. H., The Hague, assignor to Naamlooze Vennootschap De Bataafsche Petroleum Maatschappij. The Hague, Netherlands. Recording the inclination and the angular position of cores in bore holes. 1,825,213; Sept. 29.
Strand, Andrew, Minneapolis, Minn. Floor separator. 1,825,021; Sept. 29.
Straus, Harry H., New York, N. Y. Magazine safety razor. 1,825,429; Sept. 29.
Strong, James B., assignor to Ramapo Ajax Corporation, New York, N. Y. Rail switch. Re18,216; Sept. 29.
Stukenborg, Louis C., Memphis, Tenn. Brake testing means and method for automobiles. 1,825,484; Sept. 29.
Sullivan, Joseph P., Edmonton, Alberta, Canada. Sound amplifier. 1,825,166; Sept. 29.
Sullivan Machinery Company. (See Cartlidge, Frank, assignor.)
Sullivan Machinery Company. (See Holmes, Morris P., assignor.)
Sullivan Machinery Company. (See Osgood, Charles F., assignor.)
Summers, Otto M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,825,022; Sept. 29.
Sumner, William, Liverpool, England. Apparatus for manufacturing small articles such as pills or the like from plastic material. 1,825,559; Sept. 29.
Sun Oil Company. (See Alleman, Gellert, assignor.)
Surdykowski, Charles J. (See Turner, E. A., and Surdykowski.)
Surdykowski, Charles J., Erie, Pa., assignor to The Standard Stoker Company, Incorporated. Locomotive furnace. 1,825,135; Sept. 29.
Swank, George G., Crawfordsville, Ind. Wire transfer apparatus. 1,825,214; Sept. 29.
Swensen, Sigurd M., Minneapolis, Minn. Mechanical vibrator. 1,825,430; Sept. 29.
Swezey, William F., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Refrigerating apparatus. 1,825,291; Sept. 29.
Sykes, Wilfred, Chicago, Ill. Regenerative-furnace-controlling apparatus. 1,825,372; Sept. 29.
Sylvester, Pascal, Chicago, Ill. Cementitous flooring. 1,825,023; Sept. 29.
Syracuse Washing Machine Corporation. (See Hill, Hermann, assignor.)
Tadgell, George, Tottenham, England. Locking means for stringed instrument tuning pins. 1,825,560; Sept. 29.
Taliaferro, William R., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,824,846; Sept. 29.
Tamny, Samuel, New York, N. Y. Sanitary cuspidor. 1,825,485; Sept. 29.
Tandberg, John G., Lund, assignor to Aktiebolaget Carba, Stockholm, Sweden. Gas measuring and indicating device. 1,825,024; Sept. 29.
Tate, Alfred O., Toronto, Ontario, Canada. Scanning disk. 1,825,486; Sept. 29.
Tate, Alfred O., Toronto, Ontario, Canada. Scanning device. 1,825,487; Sept. 29.
Taylor, Bert S., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Decorating rubber. 1,825,252; Sept. 29.
Taylor, Ralph M., et al. (See Altfather, Lewis F., assignor.)
Tea, Peter L., Yonkers, N. Y. Apparatus for investigating experimentally the laws of moving bodies. 1,825,136; Sept. 29.
Teagaris, John G., West Millcreek Township, Erie County, Pa., assignor to Erie City Iron Works, Erie, Pa. Feeding mechanism. 1,825,431; Sept. 29.
Teller Corporation. (See Teller, Jacob, assignor.)
Teller, Jacob, Chicago, Ill., assignor to Teller Corporation, Chattanooga, Tenn. Safety device for gas stoves and ranges. 1,825,373; Sept. 29.
Terman, Frederick E., Stanford University, Calif. Inductance coil for radio frequencies. 1,825,105; Sept. 29.
Tew, Frederick S., Chevy Chase, Md. Badge. Des. 85,264; Sept. 29.
Texas Company, The. (See Jenkins, V. N., and Wilson, assignors.)

Texas Company, The. (See Manley, Robert E., assignor.)
Texas Company, The. (See Wolcott, Edson R., assignor.)
Thiele, Ernest W., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Coking petroleum residues from the distillation of petroleum oils. 1,825,374; Sept. 29.
Thiele, Ernest W., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Apparatus for coking liquid petroleum residues. 1,825,373; Sept. 29.
Thomas, Howard J., Brooklyn, N. Y. Set of playing cards. Des. 85,265; Sept. 29.
Thomas, Idris, Whittier, Calif. Casing spear. 1,825,026; Sept. 29.
Thomas, Idris, Whittier, and E. I. Tibbet, Huntington Park, Calif. Fishing tool. 1,825,025; Sept. 29.
Thompson, George H., Selly Oak, Birmingham, England. Percussion mechanism for tools. 1,824,935; Sept. 29.
Thomson, Alfred M., Newark, N. J., assignor to J. Mercadante, New York, N. Y. Refrigerating apparatus. 1,825,215; Sept. 29.
Thornton, W. L., et al. (See Collom, C. B., and Horton, assignors.)
Thybony, Nels W., and R. M. Ozabal, assignors, by mesne assignments, to Klaas Van Wyngaarden, Chicago, Ill. Can opener. 1,825,216; Sept. 29.
Tibbet, Ernest I. (See Thomas, I., and Tibbet.)
Timmons, John S., assignor to J. S. Timmons, Incorporated, Philadelphia, Pa. Cone-type loud speaker. 1,825,561; Sept. 29.
Timmons, J. S., Incorporated. (See Timmons, John S., assignor.)
Tobin, Kenneth J., and W. W. Darrow, assignors to Camel Company, Chicago, Ill. Door operating means. 1,825,027; Sept. 29.
Tobin, William H., Boston, Mass. Method of and apparatus for handling fire hose. 1,825,488; Sept. 29.
Toddy, Inc. (See Pritchard, William C., assignor.)
Tostenson, Hans T., Nicollet, Minn. Repeating air gun. 1,825,489; Sept. 29.
Townill, Ervin A., Lockport, Ill. Valve. 1,825,028; Sept. 29.
Traub, Emil, Newark, N. J. Automatic phonograph stop. 1,824,847; Sept. 29.
Travers, John T., assignor to The Ohio Sanitary Engineering Corporation, Columbus, Ohio. Purifying industrial waste liquors. 1,824,936; Sept. 29.
Tremblay, Maria V., Willimantic, Conn. Cigarette holder. 1,825,490; Sept. 29.
Trico Products Corporation. (See Oishei, John R., assignor.)
Trojan Powder Company. (See Snelling, W. O., and Rupp, assignors.)
Trouth, John E., assignor to Independent Oil Well Cementing Company, Oklahoma City, Okla. Sack severing device. 1,824,937; Sept. 29.
Trüb, Fritz, Rorschach, Switzerland. Button. 1,825,029; Sept. 29.
Tsuchiya, Konosuke, Sausalito, Calif. Liquid container. Re18,215; Sept. 29.
Tulchin, David, New York, N. Y. Turnstile. Re18,211; Sept. 29.
Tufts, Lesley R., East Cleveland, and A. Olson, assignors to The Cleveland Folding Machine Company, Cleveland, Ohio. Sheet deflector. 1,825,217; Sept. 29.
Tura, Paolo, Treviglio, near Milan, Italy, assignor to the Firm Vereinigte Thuringer Metallwarenfabriken, A. G., Zella-Mehlis, Germany. Valve key. 1,825,562; Sept. 29.
Turek, Oldřich, Pizen, Czechoslovakia. Blasting cartridge, percussion cap, detonator, detonating fuse and the like. 1,824,848; Sept. 29.
Turnapage Company, The. (See Harnsberger, Harry H., assignor.)
Turner, Edwin A., Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y. Locomotive stoker. 1,825,106; Sept. 29.
Turner, Edwin A., and C. J. Surdykowski, Pittsburgh, Pa., assignors, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y. Locomotive stoker. 1,825,137; Sept. 29.
Tuteur, Charles, Chicago, Ill. Stand for smoker's and similar articles. Des. 85,266; Sept. 29.
Twin Coach Company. (See Fageol, William B., assignor.)
Tyner, Ralph T., jr. (See Scully, Alexander D., assignor.)
Uniflow Manufacturing Company. (See Horvath, Anthony G., assignor.)
Union Special Machine Company. (See Christensen, Norman V., assignor.)
Union Special Machine Company. (See Ericsson, Arvid, assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Häussler, Ernst, assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, K., and Lutz, assignors.)
Union Switch & Signal Company, The. (See Crago, Paul H., assignor.)
Union Switch & Signal Company, The. (See Little, Edwin G., assignor.)
Union Switch & Signal Company, The. (See McCann, Ronald A., assignor.)
Union Switch & Signal Company, The. (See Mishelevich, Benjamin, assignor.)
Union Switch & Signal Company, The. (See Sosinski, Paul P., assignor.)
United Gas Improvement Company, The. (See Chrisman, Charles S., assignor.)
United Shoe Machinery Corporation. (See Jones, John L., assignor.)
United Shoe Machinery Corporation. (See Knowlton, Norwood H., assignor.)
United Shoe Machinery Corporation. (See Meck, Carl J., assignor.)
United Shoe Machinery Corporation. (See Seely, Thomas H., assignor.)
U. S. Ring Traveler Company. (See Gilligan, George H., assignor.)
U. S. Slicing Machine Company. (See Folk, Joseph, assignor.)
Universal Oil Products Company. (See McDermott, Stephen T., assignor.)
Vacuumschmelze G. m. b. H. (See Navratiel, Hans, assignor.)
Vallaguzza, Gisberto, Milan, Italy. Case-bearer buckle for bathing belt. Des. 85,267; Sept. 29.
Valve Equipment Company, The. (See Redding, Harry B., assignor.)
Van Auken, Marwood D., New York, N. Y., assignor to Van-Au-Matic Rifle Target Co., Inc. Rifle target and frangible disk. 1,825,292; Sept. 29.
Van-Au-Matic Rifle Target Co. (See Van Auken, Marwood D., assignor.)
Van Derhoef, George N., Mishawaka, Ind., assignor to Dodge Manufacturing Corporation. Shaft support. 1,825,293; Sept. 29.
Van Hook, Charles F., assignor to Watson Machine Company, Paterson, N. J. Cable reel stand. 1,825,218; Sept. 29.
Van Wyngaarden, Klaas. (See Thybony, N. W., and Ozabal, assignors.)
Vaughn, Harold G., Warren, Ohio, assignor to The Ohio Corrugating Company. Machine for expanding cylinders. 1,825,030; Sept. 29.
Vaughn, Sidney P., U. S. Navy, Ackerman, Miss. Wiper blade for cleaning devices. 1,825,376; Sept. 29.
Veenschoten, Vincent V., assignor to Northern Equipment Company, Erie, Pa. Fluid regulating system. 1,824,969; Sept. 29.
Veenschoten, Vincent V., assignor to Northern Equipment Company, Erie, Pa. Feed water regulator. 1,824,970; Sept. 29.
Veenschoten, Vincent V., assignor to Northern Equipment Company, Erie, Pa. Feed water regulator. 1,824,971; Sept. 29.
Vereinigte Thuringer Metallwarenfabriken A. G. (See Tura, Paolo, assignor.)
Victor, Alexander F., New York, N. Y. Motion picture apparatus. 1,825,253; Sept. 29.
Victor, Alexander F., New York, N. Y. Intermittent feed for motion picture apparatus. 1,825,254; Sept. 29.
Vischer, Alfred, jr., Floral Park, N. Y. Electrical apparatus. 1,824,972; Sept. 29.
Vogt, Hans, Berlin-Wilmersdorf, J. Massolle and J. Engel, Berlin-Grunewald, Germany, assignors, by mesne assignments, to American-Tri-Ergon Corporation, New York, N. Y. Producing combined sound and picture films. 1,825,598; Sept. 29.
Volk, Wolfe, assignor to San Diego Consolidated Gas and Electric Company, San Diego, Calif. Fluid cleaner. 1,825,031; Sept. 29.
Von Bogdandy, Stephen. (See Polanyi, M., and von Bogdandy.)
Von Schlegell, Viator, et al. (See Ciglia, E. F., and Pelletier, assignors.)
Voorhees, Gardner T., Boston, Mass. Piston process and apparatus. 1,824,938; Sept. 29.
Vosler, Kenneth D. (See Korvin-Kroukovsky, B. V., and Vosler.)
Wadsworth Watch Case Company, The. (See Otten Lawrence F., assignor.)
Walach, Bruno. (See Scheuing, G., and Walach.)
Wald, Charles, Freeport, N. Y. Airplane control. 1,825,609; Sept. 29.
Walker Dishwasher Corporation. (See Walker, Forrest A., assignor.)
Walker, Forrest A., Syracuse, N. Y., assignor to Walker Dishwasher Corporation, Chicago, Ill. Combined mechanical dishwasher and cabinet therefor. 1,825,033; Sept. 29.
Walker, Godfrey B. (See Barsky, G., and Walker.)
Wallace, Betty A., et al. (See Denton, James E., assignor.)
Wallace, John A., et al. (See Denton, James E., assignor.)
Walling, George C., assignor to Walling's Syndicated Services, Inc., Washington, D. C. Toy money bank. Des. 85,268; Sept. 29.
Walling's Syndicated Services. (See Walling, George C., assignor.)
Walter, Maurice, New York, N. Y. Lifting mechanism for snowplows for motor vehicles. 1,824,849; Sept. 29.
Walters, Frank E., Chicago, Ill. Key pressure gauge. 1,825,491; Sept. 29.
Walts, Gordon R., New Albany, Ind. Gauge for sheet metal punching machines. 1,825,563; Sept. 29.
Wandel, Kurt, New York, N. Y., assignor to National Cellulose Corporation. Machine for making absorbent pads. 1,825,492; Sept. 29.
Wander, Frederick, jr., New York, N. Y. Rotary wing for aeroplanes. 1,825,493; Sept. 29.

Ward, William R., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Cable connecter. 1,824,850; Sept. 29.
Warner, Edgar T., assignor, by mesne assignments, to Automatic Coal Burner Co., Seattle, Wash. Coke breaker for coal stokers. 1,825,432; Sept. 29.
Warner, Harry C., Kansas City, Mo. Hair trimming attachment for safety razors. 1,825,494; Sept. 29.
Wasselin, Gaston, Calais, France. Lace. Des. 85,269; Sept. 29.
Waterhouse, David. (See Prince-Smith, W. and Waterhouse.)
Waterman, Russell R. (See French, C. A., and Waterman.)
Watson Machine Company. (See Van Hook, Charles F., assignor.)
Watters, Gordon I., Knoxville, assignor to J. V. Kennedy, Jacksonville, Ill. Vending machine. 1,824,851; Sept. 29.
Watts, George W., assignor to Standard Oil Company, Whiting, Ind. Centrifugal separator. 1,825,377; Sept. 29.
Wean Engineering Company, The. (See Wean, Raymond J., assignor.)
Wean, Raymond J., assignor to The Wean Engineering Company, Inc., Warren, Ohio, Furnace conveyer. 1,825,107; Sept. 29.
Weatherhead, Albert J., jr. (See Baldwin, John D. jr., assignor.)
Weatherhead, Albert J., jr., Cleveland, Ohio. Sectional pipe coupling. 1,825,034; Sept. 29.
Weaver, Gallard E., and Harry C. Buffington, assignors to Weaver Manufacturing Company, Springfield, Ill. Jack. 1,825,495; Sept. 29.
Weaver Manufacturing Company. (See Weaver, G. E. and Buffington, assignors.)
Weber, Robert, Los Angeles, Calif. Chuck. 1,825,219; Sept. 29.
Weber, Walter H., assignor to Detroit Lubricator Company, Detroit, Mich. Carburetor. 1,924,852; Sept. 29.
Webster, George C., Los Angeles, Calif. Trimming knife and blade holder. 1,825,108; Sept. 29.
Weeks, Virgil E., Kansas City, Mo. Billfold. 1,825,496; Sept. 29.
Wehner, Michael, Kansas City, Mo. Directional signal for motor vehicles. Des. 85,270; Sept. 29.
Welcome, Arthur W., Los Angeles, Calif. Timing control for circuit breakers. 1,825,138; Sept. 29.
Wellman Engineering Company, The. (See Kemp, Alfred V., assignor.)
Wells, Glen R., Fort Wayne, Ind., assignor to The Western Gas Construction Company. Charging device. 1,824,853; Sept. 29.
Wensauer, Kreszenzia. (See Wensauer, Maximilian, assignor.)
Wensauer, Maximilian, assignor of one-half to Kreszenzia Wensauer, Sheboygan, Wis. Vacuum cleaner. 1,825,255; Sept. 29.
Wert, Cyrus S., deceased, Kendallville, Ind.; A. W. Shaefer, administrator. Lawn sprinkler. 1,825,040; Sept. 29.
Westcott, Dana E., South Bend, Ind., assignor to South Bend Current Controller Company. Unitary traffic control. 1,824,973; Sept. 29.
Western Gas Construction Company, The. (See Wells, Glen R., assignor.)
Western Waxed Paper Company. (See Hammond, Anning S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Allen, Robert C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Baker, Benjamin P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Barrow, George M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Boddie, Clarence A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Burnside, Carrol J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Clarke, John A., jr., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eschholz, Otto H., assignor.)
Westinghouse Electric and Manufacturing Company. (See Ford, J. G., and Wilharm, assignors.)
Westinghouse Electric & Manufacturing Company. (See Halfvarson, Gustaf A., assignor.)
Westinghouse Electric & Manufacturing Company. (See La Bar, Bert G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mains, Gerald H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Müller-Hillebrand, Dietrich, assignor.)
Westinghouse Electric & Manufacturing Company. (See Ross, Malcolm D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sleeper, Harvey P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Swezey, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Taliaferro, William R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ward, William R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Whittaker, Charles C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Williams, Harold W., assignor.)
White, Franklin R., assignor to The Patent Button Company, Waterbury, Conn. Button. 1,824,939; Sept. 29.
White, Franklin R., assignor to The Patent Button Company, Waterbury, Conn. Button. 1,824,940; Sept. 29.
White, Gerald N., London, England, assignor of one-half to Scottish Dyes, Limited, Grangemouth, Scotland. Employment of cement and the like. 1,824,854; Sept. 29.
White, John W., Buffalo, N. Y. Heater. 1,825,433; Sept. 29.
Whitehead, Earl B., assignor to Atlantic Carton Corporation, Norwich, Conn. Display container. 1,825,619; Sept. 29.
Whitehead, William. (See Dreyfus, C., Whitehead, and Platt.)
Whitehouse, Herbert G., Newark, N. J., assignor to The Rike Company. Shoe buckle. Des. 85,271; Sept. 29.
Whitlow, Joe B., Johnson City, Tenn. Revolving sign. 1,825,564; Sept. 29.
Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective means for railway vehicle motors. 1,824,855; Sept. 29.
Wilfred, Thomas, Forest Hills, N. Y. Light projection display apparatus. 1,825,497; Sept. 29.
Wilharm, William C. (See Ford, J. G., and Wilharm.)
Wilkinson, Henry, assignor of one-half to Platt Brothers and Company Limited, Oldham, England. Controlling mechanism for machines for cleaning and opening cotton and forming the same into laps. 1,825,167; Sept. 29.
Wilkinson, Henry, assignor of one-half to Platt Brothers and Company Limited, Oldham, England. Controlling and controlling mechanism for machines for cleaning and opening cotton and forming the same into laps. 1,825,168; Sept. 29.
Willcox, George C., et al. (See Carr, Walter J., assignor.)
Williams, Harold W., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,824,856; Sept. 29.
Williams, Warren K., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Conveyer apparatus. 1,824,858; Sept. 29.
Willrodt, Fred L., assignor to The Willrodt Tractor Guide Campany, Omaha, Nebr. Steering attachment for tractors. Re18,212; Sept. 29.
Willrodt Tractor Guide Company, The. (See Willrodt, Fred L., assignor.)
Wilson, Charles P., jr. (See Jenkins, V. N., and Wilson.)
Wilson, Frank J., Alturas, and A. S. Evans, Los Angeles, Calif.; said Wilson assignor to said Evans. Treating metals and treating agent therefor. 1,825,565; Sept. 29.
Wilson, Fred D., Harvey, Ill., assignor to Austin Manufacturing Co., Chicago, Ill. Bank sloper. 1,825,434; Sept. 29.
Wilson, Robert E., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Valve. 1,825,378; Sept. 29.
Winchester Repeating Arms Company. (See McNutt, Joseph, D., assignor.)
Winder, Francis J. (See Winder, William A., assignor).
Winder, William A., assignor of one-third to F. J. Winder, Portland, Oreg. Hook. 1,824,941; Sept. 29.
Winquist, Sven G., Gottenborg, Sweden. Hydraulic power transmission. 1,825,435; Sept. 29.
Wintringham, William T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Electrical switching device. 1,824,857; Sept. 29.
Wintzer, Rudolph. (See Nordberg, B. V. E., and Wintzer.)
Wired Radio, Inc. (See Harrison, Jamison R., assignor.)
Wiremold Company, The. (See Murphy, Daniel H., assignor.)
Wochner, Henry, assignor to Bear Manufacturing Company, Rock Island, Ill. Automobile axle press. 1,825,436; Sept. 29.
Wogan, Selmer F., Montevideo, Minn. Unit for heating, cooling, and ventilating system. 1,825,498; Sept. 29.
Wolarsky, Isidore, Mount Vernon, assignor of one-fourth to J. M. Cole, New York, N. Y. Socket support for lighting fixtures. 1,825,641; Sept. 29.
Wolcott, Edson R., Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Treating hydrocarbons. 1,825,294; Sept. 29.
Wolfard, Merl R., Cambridge, A. A. Morton and R. H. Hussey, Watertown, Mass. Lubricant for hot surfaces. 1,825,256; Sept. 29.
Wollny, Karl, Weissenfels, Germany. Polishing roll for shoes. 1,825,566; Sept. 29.
Wood, Charles G., et al. (See Brunberg, Bennie N., assignor.)
Wood, Fernando J., Pampa, Tex. Counterbalance. 1,825,610; Sept. 29.
Woodford, Watson H., Bridgeport, Conn. Color display apparatus. 1,824,859; Sept. 29.
Woodruff, William A., assignor to Bibb Manufacturing Company, Macon, Ga. Bobbin marking device. 1,825,567; Sept. 29.
Woods, Robert G., assignor of one-half to J. E. McAninch, L. L. Brierly, and J. J. Engle, Newton, Iowa. Coating machine. 1,824,860; Sept. 29.
Woolsey, Charles A., and H. V. Bowman, Minneapolis, Minn. Crate. 1,825,032; Sept. 29.

Worthington, Charles C., Dunfield, N. J., assignor to Worthington Mower Company. Lawn mowing apparatus. 1,825,109; Sept. 29.
Worthington Mower Company. (See Worthington, Charles C., assignor.)
Worthington, Wayne H., Battle Creek, Mich., assignor to Gleaner Combine Harvester Corporation, Independence, Mo. Tilting mechanism for harvesters. 1,824,861; Sept. 29.
Wray, Charles F., assignor to National Brass Manufacturing Company, Rochester, N. Y. Valve structure. 1,825,568; Sept. 29.
Wright, Arthur, Upper Montclair, and F. W. Young, Verona, N. J. Filter. 1,825,295; Sept. 29.
Wyckoff, Munro, Seattle, Wash. Fish guard for irrigation ditches. 1,825,169; Sept. 29.
Yardumian, Haig Y. (See Keoleian, Souren, assignor.)
Yeagle, Cyrus E., Toledo, Ohio. Window ventilator. 1,825,437; Sept. 29.
Yocum Brothers, Inc. (See Benbow, David F., assignor.)
Young, Edgar B., Newman, Ill. Dropper valve for corn planters. 1,825,035; Sept. 29.
Young, Frank W. (See Wright, A., and Young.)
Young, Fred M., Racine, Wis. Vehicle heater. 1,825,036; Sept. 29.
Young, Lloyd V., Glenbrook, Conn., assignor to Pond's Extract Company, New York, N. Y. Dispensing carton. 1,824,862; Sept. 29.
Zabriskie, William F., assignor to Gabriel Steel Company, Detroit, Mich. Cross bracing and bridging for metallic joists. 1,824,797; Sept. 29.
Zink, Clifford J., Cleveland, Ohio. Brake. 1,825,296; Sept. 29.
Zolleis, John G., Germantown, Pa. Check valve. 1,825,569; Sept. 29.
Zonino, Frederick, assignor to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn. Assembling rubber footwear elements. 1,825,379; Sept. 29.
Zorn, Frank, New York, N. Y. Nonslipping stopper for sinks and the like. 1,825,499; Sept. 29.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 29TH DAY OF SEPTEMBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accordion. M. B. Luttbeg. 1,825,407; Sept. 29.
Acetals of alkyl ethers of polyethylene glycols. J. A. Nieuwland. 1,824,963; Sept. 29.
Acid gas set free from copper glance on its roasting, Reducing the quantity of sulphurous. M. Miyake. 1,825,536; Sept. 29.
Acids and making same, Derivative of quinoline carboxylic. K. Miescher. 1,825,623; Sept. 29.
Acids, Treating tar. C. Banta and F. W. Hightower. 1,824,864; Sept. 29.
Adhesive applying device. M. A. Fritsch and L. V. Rosenberg. 1,825,389; Sept. 29.
Adjustable die. W. C. Johnson. 1,825,067; Sept. 29.
Adjusting or tuning device for variable condensers. J. E. Denton. 1,825,511; Sept. 29.
Aeroplane. R. B. Beisel. 1,825,301; Sept. 29.
Aeroplane. R. Chillingworth. 1,825,805; Sept. 29.
Aeroplane propeller. I. Glanschnig. 1,825,184; Sept. 29.
Agitator, Culinary. E. Halse. 1,825,450; Sept. 29.
Agitators to concrete pouring forms and molds, Coupling. R. D. Hudson. 1,825,117; Sept. 29.
Agricultural implement. H. E. Altgelt. 1,824,976; Sept. 29.
Air and other gases for industrial uses, Apparatus for heating. H. A. Brassert. 1,825,259; Sept. 29.
Air cleaning and conditioning apparatus. E. V. Hill. 1,824,891; Sept. 29.
Aircraft. J. J. Hicks. 1,825,115; Sept. 29.
Air gun, Repeating. H. T. Tostenson. 1,825,489; Sept. 29.
Air lift device. J. M. Scheuber. 1,825,094; Sept. 29.
Airplane. A. Cernuda. 1,825,578; Sept. 29.
Airplane control. C. Wald. 1,825,609; Sept. 29.
Alarm: *See*—
Thermostatic alarm.
Alloys and process for improving workability of same. N. B. Pilling. 1,824,966; Sept. 29.
Amplifier, Sound. J. P. Sullivan. 1,825,166; Sept. 29.
Annealing furnace. H. Allinder and G. B. Shipley. 1,825,380; Sept. 29.
Antitheft device. H. E. Norviel. 1,825,413; Sept. 29.
Apple picker. E. Miller. 1,825,599; Sept. 29.
Aquarium heater. F. Kump. 1,824,823; Sept. 29.
Aquarium or similar article. M. Matsuno. Des. 85,253; Sept. 29.
Arc extinguishing means. B. P. Baker. 1,825,298; Sept. 29.
Arch support adjuster. M. Kappner. 1,825,460; Sept. 29.
Armor for electric conductors, Preventing the stretching of flexible. F. W. Kulicke. 1,824,904; Sept. 29.
Article feeding and stripping machine. J. H. Schlafly. 1,825,287; Sept. 29.
Articles such as pills or the like from plastic material, Apparatus for manufacturing small. W. Sumner. 1,825,559; Sept. 29.
Atomizer. A. J. Shaukis. 1,825,608; Sept. 29.
Axle construction, Rear. J. Riise. 1,824,793; Sept. 29.
Axle press, Automobile. H. Wochner. 1,825,436; Sept. 29.
Badge. F. S. Tew. Des. 85,264; Sept. 29.
Balance indicator. W. M. Barret. 1,825,172; Sept. 29.
Baling press. A. C. Barrows, J. H. McLean, and G. W. Langford. 1,825,173; Sept. 29.
Baling press. E. D. Nichols. 1,825,600; Sept. 29.
Ball joints, Forming control rod. H. Ford. 1,824,810; Sept. 29.
Bank sloper. F. D. Wilson. 1,825,434; Sept. 29.
Bat reeling machine. A. S. Mitchell. 1,824,782; Sept. 29.
Bath: *See*—
Shower bath.
Bathtub. P. Jarmusz. 1,825,188; Sept. 29.
Bearing and making same, Roller. N. J. Nolan. 1,824,787; Sept. 29.
Bearing, Automatic take up. G. C. Monckmeier. 1,825,410; Sept. 29.
Bearing for walking beams, Rocker. W. Schwemlein. 1,825,096; Sept 29.
Bearing, Thrust. T. W. Gordon. 1,825,519; Sept. 29.
Bed, Folding. A. Pittoni. 1,824,925; Sept. 29.
Bedspread. G. Sellier. Des. 85,262; Sept. 29.
Bedstead or similar article. A. J. Ambrose. Des. 85,225; Sept. 29.
Bench: *See*—
Fruit packer's bench.
Bias cutter. J. Rehak. 1,825,250; Sept. 29.
Billfold. V. E. Weeks. 1,825,496; Sept. 29.
Binder, Loose leaf. J. L. McMillan. 1,825,360; Sept. 29.
Binder, Magazine. H. T. Arends. 1,825,257; Sept. 29.
Binding post. A. Schneider. 1,825,130; Sept. 29.
Blinds, Truck and guide member for roller. B. Negrini. 1,825,198; Sept. 29.
Block paving machine and the like. E. Kuerts. 1,825,320; Sept. 29.
Blower High speed. F. W. Kennedy. 1,825,622; Sept. 29.
Boat, Flying. O. W. Johnson. 1,825,592; Sept. 29.
Boat installation, Motor. J. W. Harvey. 1,824,887; Sept. 29.
Boat joint construction. C. H. Rogers. 1,825,091; Sep.. 29.
Boat, Pontoon house. L. N. Bell. 1,825,613; Sept. 29.
Bobbin marking device. W. A. Woodruff. 1,825,567; Sept. 29.
Body and chassis construction, Combined. J. Ledwinka. 1,825,323; Sept. 29.
Body construction, Pressed metal. J. Ledwinka. 1,825,275; Sept. 29.
Boiler: *See*—
Waste heat boiler.
Boiler. W. F. Kiesel, jr. 1,825,594; Sept. 29.
Boiler construction. G. A. Collins. 1,824,874; Sept. 29.
Boilers or the like, Scale-prevention in. W. M. Reichart. 1,825,477; Sept. 29.
Bonnet for rectifying columns. C. S. Piggot. 1,824,836; Sept. 29.
Book, Loose leaf. Le R. E. Hutchings. 1,825,351; Sept. 29.
Bottle. E. W. Fuerst. Des. 85,233; Sept. 29.
Bottle. N. C. Phillips. Des. 85,260; Sept. 29.
Bottle. O. Smiley. Des. 85,263; Sept. 29.
Bottle cleaning apparatus. G. J. Meyer. 1,825,008; Sept. 29.
Bottle, Paper. L. B. Koch. 1,825,001; Sept. 29.
Bottles, Washing. J. L. Herold. 1,824,993; Sept. 29.
Box: *See*—
Display box. Paper slide box.
Garment box.
Box fastener machine. K. F. Berthold. 1,825,140; Sept. 29.
Bracelet extension device. L. F. Otten. 1,825,156; Sept. 29.
Bracing and bridging for metallic joints, Cross. W. F. Zabriskie. 1,824,797; Sept. 29.
Brake. N. Stern. 1,825,555; Sept. 29.
Brake. C. J. Zink. 1,825,296; Sept. 29.
Brake actuating mechanism. C. S. Bragg and V. W. Kliesrath. 1,824,980; Sept. 29.
Brake control for aircraft landing wheels. W. J. Carr. 1,825,577; Sept. 29.
Brake mechanism, Fluid. B. P. Joyce. 1,825,233; Sept. 29.
Brake operating means, Hydraulic and band. W. G. Price. Re18,217; Sept. 29.
Brake operating mechanism, Trailer. R. L. Stout. 1,824,845; Sept. 29.
Brake rod jaw, Adjustable. L. C. Koopmans. 1,824,821; Sept. 29.
Brake systems, Method and apparatus for flushing and filling hydraulic. A. L. Patton. 1,825,013; Sept. 29.
Brake testing means for automobiles. L. C. Stukenborg. 1,825,484; Sept. 29.
Brakes, Method and apparatus for testing vehicle. H. H. Patton. 1,825,539; Sept. 29.
Brassière. V. Christoff. 1,825,579; Sept. 29.
Bristles in the bodies of brushes, Securing bundles of. K. Dressler. 1,825,145; Sept. 29.
Brush, Bottle-washing. J. L. Herold and J. W. Dawson. 1,824,994; Sept. 29.
Brush, Paint. W. L. Lynde. Des. 85,251; Sept. 29.
Buckle, Belt. G. R. Blickhahn. 1,825,045; Sept. 29.
Buckle for bathing belt, Case-bearer. G. Vallaguzza. Des. 85,267; Sept. 29.
Buckle, Shoe. A. E. Farmer. Des. 85,231; Sept. 29.
Buckle, Shoe. H. G. Whitehouse. Des. 85,271; Sept. 29.
Buckle, Slide. J. Salisbury. 1,825,016; Sept. 29.
Building construction, Unit system. C. F. and D. E. McAvoy. 1,825,195; Sept. 29.
Bumper mechanism. E. F. Ohlendorf. 1,825,086; Sept. 29.
Burner: *See*—
Oil burner.
Burner. J. Buchel. 1,825,047; Sept. 29.
Burnishtool. E. B. T. Lawrence. 1,825,077; Sept. 29.
Button. F. Trub. 1,825,029; Sept. 29.
Button. F. R. White. 1,824,939–40; Sept. 29.
Cabinet for radio receiving apparatus. A. T. Kent. Des. 85,244; Sept. 29.
Cable connecter. W. R. Ward. 1,824,850; Sept. 29.
Cable reel stand. C. F. Van Hook. 1,825,218; Sept. 29.
Cable splicing and clamping device. F. H. Knapp. 1,825,074; Sept. 29.
Cable testing system. R. G. McCurdy. 1,824,829; Sept. 29.

Cables, Method of and apparatus for manufacturing insulated electric. J. E. Allan and S. B. Freeman. 1,825,570; Sept. 29.
Cage for ball bearings. R. F. Runge. 1,825,365; Sept. 29.
Can: *See*—
Interior collar can. Nonsplash and self-draining can.
Can closing machine. A. J. Chamberlain. Re18,209; Sept. 29.
Cap, Miner's. J. Ruffing, sr. 1,824,840; Sept. 29.
Car construction, Kiln. G. D. Morris. 1,824,917; Sept. 29.
Car, Hopper. W. F. Kiesel, jr. 1,825,234–5; Sept. 29.
Car jack. E. Braselmann. 1,824,768; Sept. 29.
Car, Mine. H. W. Sanford. 1,824,841; Sept. 29.
Car structure, Railway. H. M. Pflager. 1,825,476; Sept. 29.
Carbide feed for acetylene generators. H. G. Irwin. 1,825,066; Sept. 29.
Carbon deposits, Removing. W. G. Lovell and T. A. Boyd. 1,825,358; Sept. 29.
Carbon monoxide, Producing reduction products of. A. O. Jaeger. 1,824,896; Sept. 29.
Carburetor. E. F. Ciglia and L. F. Pelletier. 1,825,384; Sept. 29.
Carburetor. W. H. Weber. 1,824,852; Sept. 29.
Carburetor attachment. J. F. Cullin. 1,825,262; Sept. 29.
Carburetor charge forming device, Multiple. H. W. Asire. 1,825,381; Sept. 29.
Cards, Set of playing. H. J. Thomas. Des. 85,265; Sept. 29.
Carrier: *See*—
Tire carrier.
Carrier for furnaces, Mechanical pack. W. Newby. 1,825,537; Sept. 29.
Carton, Dispensing. L. V. Young. 1,824,862; Sept. 29.
Carton, Folding. H. K. Powell. 1,824,927; Sept. 29.
Cartridge, percussion cap, detonator, detonating fuse, and the like, Blasting. O. Turek. 1,824,848; Sept. 29.
Case: *See*—
Instrument case.
Case for currency, Carrying. F. D. Ballard and F. S. Buck. 1,824,765; Sept. 29.
Casing, Vending machine. E. Kanter. Des. 85,243; Sept. 29.
Castings of magnesium and high grade magnesium alloys, Producing. A. L. Mond. 1,825,242; Sept. 29.
Cellulose derivative compositions. W. E. Lawson. 1,824,961; Sept. 29.
Cellulose propionate and making the same. C. Dreyfus and G. Schneider. 1,824,877; Sept. 29.
Cement and the like, Employment of. G. N. White. 1,824,854; Sept. 29.
Centrifugal separator. G. W. Watts. 1,825,377; Sept. 29.
Chain wrench. F. J. Carnelli. 1,824,944; Sept. 29
Chairs, Nest of. A. D. Scully. 1,825,368; Sept. 29.
Charging device. G. R. Wells. 1,824,853; Sept. 29.
Chart, Instruction. N. K. Hicks. 1,825,063; Sept. 29.
Check protecting device. W. McCann. 1,825,153; Sept. 29.
Check protector. S. E. Peters. 1,825,014; Sept. 29.
Chloride, Making stannous. W. S. Smith. 1,825,212; Sept. 29.
Chlorides, Making alkyl. J. Frei. 1,824,951; Sept. 29.
Chuck. R. Weber. 1,825,219; Sept. 29.
Chuck operating mechanism. A. E. Drissner. 1,824,878; Sept. 29.
Cigarette package. R. C. Glenn and W. W. Ferguson. 1,824,884; Sept. 29.
Cigarette wrapper and package. F. X. Fields. 1,824,879; Sept. 29.
Cigarette wrapper and package. F. X. Fields. 1,824,948; Sept. 29.
Circuit breaker, Automatically operated. E. C. Raney. 1,825,015; Sept. 29.
Circuit breaker, Oil. O. H. Eschholz. 1,825,311; Sept. 29.
Circuit control mechanism for mechanical refrigerating apparatus. F. R. Erbach. 1,824,774; Sept. 29.
Circuit controller. C. T. Evans. 1,825,312; Sept. 29.
Circuits, Railway track. R. A. McCann. 1,825,236; Sept. 29.
Clamp. L. Needlman. 1,825,327; Sept. 29.
Clamp. J. F. Roberts. 1,825,207; Sept. 29.
Clamp. A. T. Scannell. 1,825,425; Sept. 29.
Clamp for radial drills, Electrically operated column. W. C. De Roo. 1,825,181; Sept. 29.
Clamp for wire fence structures. J. Bradford. 1,825,176; Sept. 29.
Cleaner: *See*—
Fluid cleaner. Vacuum cleaner.
Clock dial. E. Ingraham. Des. 85,239; Sept. 29.
Clock escapement, Magnetic. H. S. Baker. 1,825,382; Sept. 29.
Clock, Synchronizing. J. W. Bryce. 1,825,575; Sept. 29.
Clutch means for implements of motor driven agricultural machines, Safety. C. S. Brown. 1,825,574; Sept. 29.
Coating machine. R. G. Woods. 1,824,800; Sept. 29.
Cocks or valves, Making. J. D. Baldwin, jr. 1,825,042; Sept. 29.
Coffeepot. S. W. Bloom. 1,825,174; Sept. 29.
Coil for radio frequencies, Inductance. F. E. Terman. 1,825,105; Sept. 29.
Coke breaker for coal stokers. E. T. Warner. 1,825,432; Sept. 29.
Color display apparatus. W. H. Woodford. 1,824,859; Sept. 29.
Comb: *See*—
Hair waving comb.
Communication system. F. B. Monar. 1,824,784; Sept. 29.
Composition, Coating. E. P. Cox. 1,824,771; Sept. 29.
Compound, Melting. S. Keolelan. 1,825,151; Sept. 29.
Compresses for local bodily treatment, Device for keeping warm and damp. J. Jaeg. 1,825,118; Sept. 29.
Computing and recording mechanism. H. R. Brand. 1,825,141; Sept. 29.
Condenser, Electrical. W. Dubilier. 1,824,805–6; Sept. 29.
Conductor device, Flat tubeless ionization. F. Hotchner. 1,825,399; Sept. 29.
Conductor, Electrical. J. A. Shepard. 1,824,934; Sept. 29.
Conduit. A. E. Stacey, jr. 1,825,103; Sept. 29.
Conduit, Electrical. D. H. Murphy. 1,825,010; Sept. 29.
Conduit joint and making the same. B. C. Root. 1,824,838; Sept. 29.
Conduit outlets, Locating. G. L. Chamberlain, and G. H. Gneiss. 1,825,049; Sept. 29.
Conduits, Locating points of leaking in. G. C. Oxer. 1,825,280; Sept. 29.
Confection forming machine. P. Sisco. 1,824,796; Sept. 29.
Consistency controlling device. S. E. Meyers. 1,825,155; Sept. 29.
Container. D. Bloom. 1,824,762; Sept. 29.
Container. H. A. Eggerss. 1,824,986; Sept. 29.
Container. H. B. Lermer. 1,824,907; Sept. 29.
Container closure. A. E. Smith. 1,825,553; Sept. 29.
Container, Display. E. B. Whitehead. 1,825,619; Sept. 29.
Container, Liquid. K. Tsuchiya. Re18,215; Sept. 29.
Container with breaking tab, Scored. W. F. Punte. 1,825,602; Sept. 29.
Control means for heating fuel mixtures supplied to internal combustion engines. F. Pokorny. 1,824,926; assignor.)
Control system. W. R. Tallaferro. 1,824,846; Sept. 29.
Controller for electric motors. N. L. Mortensen and E. W. Seeger. 1,825,009; Sept. 29.
Controlling and controlling mechanism for machines for cleaning and opening cotton and forming the same into laps. H. Wilkinson. 1,825,168; Sept. 29.
Controlling mechanism for machines for cleaning and opening cotton and forming the same into laps. H. Wilkinson. 1,825,167; Sept. 29.
Conveyer. J. E. Boger. 1,825,572; Sept. 29.
Conveyer apparatus. W. K. Williams. 1,824,858; Sept. 29.
Conveyer, Furnace. R. J. Wean. 1,825,107; Sept. 29.
Conveyer, Pallet. A. O. Dupuy. 1,825,447; Sept. 29.
Conveying apparatus. M. J. Anderson. 1,825,037–8; Sept. 29.
Cooling tower. J. B. Harry. 1,825,453; Sept. 29.
Core catcher construction. J. T. Phipps. 1,825,123; Sept. 29.
Cores in bore holes, Recording the inclination and the angular position of. A. G. H. Straatman. 1,825,213; Sept. 29.
Cork. M. T. R. Maynard. 1,825,006; Sept. 29.
Corner joint. J. M. Kaufman. 1,824,900; Sept. 29.
Corrugated pot. C. H. Stevenson. 1,825,556; Sept. 29.
Counterbalance. F. J. Wood. 1,825,610; Sept. 29.
Coupling: *See*—
Pipe coupling.
Coupling device, Disengageable. L. Lasselsberger. 1,825,357; Sept. 29.
Cover and protector for shades. D. W. Causey. 1,825,334; Sept. 29.
Cover for ships, Steel hatch. R. MacGregor. 1,824,910; Sept. 29.
Cover for the discharge openings of concrete mixing drums. J. Eggert. 1,825,614; Sept. 29.
Crane, Light wrecking. R. E. Manley. 1,825,359; Sept. 29.
Crate. C. A. Woolsey and H. V. Bowman. 1,825,032; Sept. 29.
Crib lock. F. Kusterle. 1,824,905; Sept. 29.
Cribbing. C. Gilman. 1,824,990; Sept. 29.
Crystal system, Piezo electric. J. R. Harrison. 1,824,777; Sept. 29.
Crystallization. J. W. Martin, jr. 1,825,646; Sept. 29.
Current vapor electrical device, Alternating. L. F. Bird. 1,824,760; Sept. 29.
Currents, Apparatus for measuring direct. A. S. Fitz Gerald. 1,825,514; Sept. 29.
Cuspidor, Sanitary. S. Tamny. 1,825,485; Sept. 29.
Cutter: *See*—
Bias cutter. Potato cutter.
Cutting and delivery apparatus for bag lengths. C. G. Kronmiller. 1,825,405; Sept. 29.
Cutting and welding machine. A. Schmidt. 1,825,606; Sept. 29.
Cutting machine. H. S. Deck. 1,825,223; Sept. 29.
Cycles, Speed reducing mechanism for training. S. Morse. 1,825,083; Sept. 29.
Damper, Vibration. R. W. Judson. 1,825,402; Sept. 29.
Davenport or bed, Folding. W. J. Duvall. 1,824,773; Sept. 29.
Day-bed, chaise longue, and chair. M. L. De Bretteville. 1,825,055; Sept. 29.
Decking device. A. Copony. 1,824,983; Sept. 29.
Decorative effects by spotting or mottling, Method and apparatus for producing. R. F. Grady, jr. 1,825,227; Sept. 29.
Deflector, Sliding. A. Olson. 1,825,247; Sept. 29.
Dental flask. W. J. Clark. 1,825,051; Sept. 29.

Denture. E. Roberts. 1,825,286; Sept. 29.
Denture, Artificial. W. E. Kempf. 1,825,593; Sept. 29.
Deoxidizer. J. G. Ford and W. C. Wilbarm. 1,825,226; Sept. 29.
Desk, Typewriter. E. W. Sibley. 1,825,369; Sept. 29.
Dextrose and dextrose compounds, Making. C. Rach. 1,825,603; Sept. 29.
Die: *See*—
Adjustable die.
Dish or similar article, Covered. W. Lindley. Des. 85,249; Sept. 29.
Dish or utensil, Refrigerative. J. W. Martin, jr. 1,825,644; Sept. 29.
Dishwasher and cabinet therefor, Combined mechanical. F. A. Walker. 1,825,033; Sept. 29.
Dish washing device. H. S. Schneider. 1,825,095; Sept. 29.
Disk, Scanning. A. O. Tate. 1,825,486; Sept. 29.
Disks from glass plates, Cutting. W. O. Lytle. 1,825,277; Sept. 29.
Display and decorating device. E. Carraine. 1,825,505; Sept. 29.
Display box. D. F. Benbow. 1,825,332; Sept. 29.
Display stand. M. M. Friedemann. 1,824,813; Sept. 29.
Distributor for manure and other material. M. Higgins. 1,825,523; Sept. 29.
Door for passageways, Automatically operated. H. Rowntree. 1,825,128; Sept. 29.
Door operating device. P. Smith. 1,824,968; Sept. 29.
Door operating means. K. J. Tobin and W. W. Darrow. 1,825,027; Sept. 29.
Door operating mechanism. H. Rowntree. 1,825,129; Sept. 29.
Dosing device. A. T. Davenport. 1,825,339; Sept. 29.
Drill head safety mechanism. W. C. De Roo. 1,824,984; Sept. 29.
Drink mixer. W. C. Pritchard. 1,824,929; Sept. 29.
Drinking glass. J. Kirkpatrick. Des. 85,246; Sept. 29.
Drive control, Machine. F. Jungblut. 1,825,403; Sept. 29.
Drive for roller conveyer rolls, Individual motor. E. T. Mug. 1,825,119; Sept. 29.
Drive mechanism for slicing machines, Power. J. Folk. 1,824,950; Sept. 29.
Driving device employing Maltese cross wheels. M. Chambon. 1,825,442; Sept. 29.
Dumbwaiter guard carriage. A. Lang. 1,825,461; Sept. 29.
Dust recovery device. V. G. Leach. 1,825,274; Sept. 29.
Dyestuffs of the halogenated anthracene series, Production of blue. P. Nawiasky and A. Krause. 1,824,831; Sept. 29.
Dyestuffs, Manufacture of chromed complexes of azo and ortho-hydroxy-azo. H. Mirocourt. 1,824,914; Sept. 29.
Electric air-break switch. H. J. Kratzer. 1,825,002; Sept. 29.
Electric control apparatus. G. Somajni. 1,825,100; Sept. 29.
Electric cooking appliance. H. J. Lipham. 1,825,406; Sept. 29.
Electric device, Adjustable. D. R. De Tar. 1,825,583; Sept. 29.
Electric display device. J. Block. 1,824,942; Sept. 29.
Electric motor. O. C. Martin. 1,824,909; Sept. 29.
Electric switch. H. E. Norviel. 1,825,414; Sept. 29.
Electric switch, Key operated. R. A. Millermaster and C. Petersen. 1,825,325; Sept. 29.
Electric terminal. A. Nyman. 1,824,834; Sept. 29.
Electric welder. E. A. Hobart. 1,825,064; Sept. 29.
Electrical apparatus. R. P. Lansing. 1,824,824; Sept. 29.
Electrical apparatus. A. Vischer, jr. 1,824,972; Sept. 29.
Electrical apparatus, Protecting. F. W. Peek, jr. 1,825,541; Sept. 29.
Electrical recording. R. Serrell. 1,825,551; Sept. 29.
Electrical regulator. F. W. Merrill. 1,825,079; Sept. 29.
Electrical switch, Lock actuated. M. W. Fassmann. 1,825,448; Sept. 29.
Electrical translating apparatus. P. H. Crago. 1,825,221; Sept. 29.
Electromagnet. P. P. Sosinski. 1,825,482; Sept. 29.
Electrooptic cell. N. Deisch. 1,825,340; Sept. 29.
Elevator control system. H. W. Williams. 1,824,856; Sept. 29.
Ellipsograph. A. Dietrich. 1,825,444; Sept. 29.
Emblem, Salesman's commercial buttonhole. E. Solomon. Des. 85,261; Sept. 29.
Engine: *See* —
Gas generating combustion engine.
Multiple cylinder engine. Internal-combustion engine.
Engine. J. W. Anderson. 1,824,800; Sept. 29.
Engines, Construction of internal combustion. L. and A. Seguin. 1,825,097; Sept. 29.
Etching machine. F. T. Powers. 1,825,127; Sept. 29.
Excavator. H. H. Barber. 1,825,258; Sept. 29.
Exercising device. L. Novak. 1,824,920; Sept. 29.
Extension former. J. Sciallis. 1,825,607; Sept. 29.
Extractor: *See*—
Honey extractor.
Extrusion and apparatus therefor. C. O. Evans. 1,825,343; Sept. 29.
Extrusion press. F. Singer. 1,825,017; Sept. 29.
Eyeglass frame. T. H. Carow. 1,825,503; Sept. 29.
Eyeglass parts, Making. W. H. Siddall. 1,825,427; Sept. 29.
Fabric and making the same. J. C. Farber. 1,825,586; Sept. 29.
Fabric and making the same, Printed. C. Dreyfus, W. Whitehead, and H. Platt. 1,825,842; Sept. 29.
Fabric of crepe thread and making same. B. Kayser. 1,825,071; Sept. 29.
Fabrics, Treating textile. W. S. Rowley, and H. W. Butterworth, jr. 1,825,478; Sept. 29.
Fan, Ventilating. C. A. Hendrickson. 1,825,114; Sept. 29.
Fastener, Fender rope. E. D. Barton. 1,825,612; Sept. 29.
Fastener setting machine, Duplex. G. W. Jacques. 1,824,957; Sept. 29.
Fastening means, Turbine rotor disk. A. Meyer. 1,825,239; Sept. 29.
Feed water regulator. V. V. Veenschoten. 1,824,970-1; Sept. 29.
Feeder and grinder, Automatic hog. A. J. McDougall. 1,825,633; Sept. 29.
Feeder, Poultry. J. F. Hintz. 1,825,524; Sept. 29.
Feeding mechanism. J. G. Tsagaris. 1,825,431; Sept. 29.
Feeds, Preparation of mineral. G. F. Pfeiffer. 1,825,475; Sept. 29.
Fibers or fibrous materials, Treatment of. R. D. Coghill. 1,825,178; Sept. 29.
Fibers, Process and apparatus for degumming, washing, and drying. R. L. Pritchard. 1,824,928; Sept. 29.
File, Paper. T. Rengmann. 1,824,791; Sept. 29.
Film magazine, Motion picture. W. A. Bruno. 1,825,142; Sept. 29.
Films, Producing combined sound and picture. H. Vogt, J. Massolle, and J. Engl. 1,825,598; Sept. 29.
Films, Reproduction of sound. R. Koller. 1,825,529; Sept. 29.
Filter. A. Wright and F. W. Young. 1,825,295; Sept. 29.
Filter, Electrical. H. W. Houck. 1,824,819; Sept. 29.
Filtering. C. R. Baker. 1,825,330; Sept. 29.
Firecracker. T. G. Hitt. 1,825,589; Sept. 29.
Fish guard for irrigation ditches. M. Wyckoff. 1,825,160; Sept. 29.
Fittings to the ends of high pressure hose, Attaching. M. Loughead. 1,825,005; Sept. 29.
Flask: *See*—
Dental flask.
Floor construction, Fireproof. R. McWilliams. 1,825,237; Sept. 29.
Floor separator. A. Strand. 1,825,021; Sept. 29.
Flooring, Cementitious. P. Sylvester. 1,825,023; Sept. 29.
Fluid cleaner. W. Volk. 1,825,031; Sept. 29.
Fluid handling device. F. T. Powers. 1,825,126; Sept. 29.
Fluid regulating system. V. V. Veenschoten. 1,824,969; Sept. 29.
Folding table. N. N. Brown. 1,824,981; Sept. 29.
Food products, Apparatus for preripening or retarding perishable. F. J. Day. 1,825,385; Sept. 29.
Foot impression mold. F. J. Pierce. 1,824,835; Sept. 29.
Footwear elements, Assembling rubber. F. Zonino. 1,825,379; Sept. 29.
Form filler. J. Obstler. 1,825,246; Sept. 29.
Form, Standard gear tooth. A. B. Cox. 1,825,621; Sept. 29.
Forms from stone slabs, Method of and apparatus for cutting. G. M. Rand. 1,825,420; Sept. 29.
Fountain or similar article, Display. E. Guido. Des. 85,238; Sept. 29.
Frame: *See*—
Eyeglass frame.
Fruit packer's bench. A. J. Black. 1,824,979; Sept. 29.
Fruit picker. A. H. Palmbush. 1,825,601; Sept. 29.
Fruit washing machine. G. F. Frine. 1,824,814; Sept. 29.
Fuel mixing device, Gaseous. H. Rabezzana. 1,825,361; Sept. 29.
Fuel mixture regulator, Automatic. H. Hübner. 1,825,187; Sept. 29.
Fuel saver for locomotives. N. E. France. 1,824,812; Sept. 29.
Furnace: *See*—
Annealing furnace. Metallurgical furnace.
Locomotive furnace.
Furnace. W. Grothe. 1,825,059; Sept. 29.
Furnace controlling apparatus, Regenerative. W. Sykes. 1,825,372; Sept. 29.
Furniture, Shoe. F. A. Parsons. 1,824,923; Sept. 29.
Fuse. P. M. Kelley and J. L. Clayton. 1,825,527; Sept. 29.
Fuse, Safety. H. E. Ellsworth. 1,825,224; Sept. 29.
Garment. P. K. Karberg. 1,825,271; Sept. 29.
Garment H. P. McGinnis. 1,825,197; Sept. 29.
Garment box. K. G. Langston. 1,825,272; Sept. 29.
Gas generating combustion engine. J. E. Johansson. 1,825,525; Sept. 29.
Gas generator. C. S. Chrisman. 1,824,764; Sept. 29.
Gas measuring and indicating device. J. G. Tandberg. 1,825,024; Sept. 29.
Gas producer air sleeve. A. V. Kemp. 1,825,404; Sept. 29.
Gases from liquified gases, Method and apparatus for producing compressed. C. W. P. Heylandt. 1,824,889; Sept. 29.

Gasoline, Colored. G. Alleman. 1,824,977; Sept. 29.
Gauge: *See*—
Key pressure gauge.
Gauge for sheet metal punching machines. G. R. Walts. 1,825,563; Sept. 29.
Gauge mechanism for fastening inserting machines. J. L. Jones. 1,824,958; Sept. 29.
Gear blank, Molded laminated. G. H. Mains. 1,824,825; Sept. 29.
Gear generating machine. E. Finsen. 1,825,112; Sept. 29.
Gear, Speed changing and reversing. J. S. Shaw. 1,825,552; Sept. 29.
Generator: *See*—
Gas generator.
Glass, Delivering charges of molten. M. J. Owens. 1,825,416; Sept. 29.
Goggles attachment. H. H. Heckman. 1,825,615; Sept. 29.
Goggles for grinding and welding, Combined. A. R. Dobbs. 1,825,386; Sept. 29.
Golf club. J. J. Nero. 1,825,244; Sept. 29.
Golf tee. C. F. Cannon, jr. Des. 85,229; Sept. 29.
Governor for turbine wheels, Pressure oil. J. Bangerter. 1,825,611; Sept. 29.
Grain or seed or the like, Apparatus for separating. J. N. Mitchell. 1,824,915; Sept. 29.
Granular body and making same. R. L. Seabury. 1,824,795; Sept. 29.
Grate, Fuel. F. A. Austin. 1,825,040; Sept. 29.
Guard for road vehicles, Flexible. W. B. Fageol. 1,825,344; Sept. 29.
Guard for shoe ornamenting devices, Hand. B. W. Freeman. 1,824,987; Sept. 29.
Guide for pipe cleaning rods. E. Paul and J. Mantonya. 1,824,924; Sept. 29.
Guns, Combined shooting and magazine barrel for spring air. C. F. Lefever. 1,825,190; Sept. 29.
Gyroscopic device for the determination of planes or directions of reference, Compensated. J. Fleux. 1,825,345; Sept. 29.
Hair, Apparatus for permanent waving of the. I. C. F. Adam and R. A. Ragody. 1,824,799; Sept. 29.
Hair curler. N. Fulton. 1,824,883; Sept. 29.
Hair curling device. E. O. Frederics. 1,824,775; Sept. 29.
Hair waving comb. G. T. Allen. 1,825,170; Sept. 29.
Hammer, Rebounding. B. Becker. 1,825,331; Sept. 29.
Handle: *See*—
Throttle handle.
Handle manufacture, Bent wood. L. D. Miller. 1,825,409; Sept. 29.
Handle structure, Door. L. A. Dexter. 1,825,264; Sept. 29.
Handwheels, Locking. H. D. Geyer. 1,825,390; Sept. 29.
Harvesters, Tilting mechanism for. W. H. Worthington. 1,824,861; Sept. 29.
Hat and making it, Felt. F. J. Muhlfeld. 1,824,785; Sept. 29.
Hat bearing indicating means. E. L. Cleveland. 1,825,052; Sept. 29.
Heat control, Thermostatic. D. Firth. 1,825,225; Sept. 29.
Heat exchange device. C. E. Safford. 1,825,209; Sept. 29.
Heat exchange, Effecting. W. D. La Mont. 1,825,321; Sept. 29.
Heat exchanger for mechanical refrigerating units. D. H. Ebinger. 1,825,265; Sept. 29.
Heater: *See*—
Aquarium heater. Water heater.
Vehicle heater.
Heater. J. W. White. 1,825,433; Sept. 29.
Heater for water-cooled engines. K. H. Bowen. 1,825,627; Sept. 29.
Heating and humidifying unit. E. H. Holden. 1,825,116; Sept. 29.
Heating system, Bus. L. P. Hynes. 1,824,820; Sept. 29.
Heel, Removable. M. Pudin. 1,825,202; Sept. 29.
Hinge, Closet seat. F. G. Brotz. 1,824,770; Sept. 29.
Hinge construction. W. H. Hart. 1,824,886; Sept. 29.
Hinge for water closet seats and covers. W. A. Henn. 1,825,456; Sept. 29.
Hinge, Friction pivot. A. C. Goddard. 1,825,147; Sept. 29.
Holder and dispenser, Straw. B. L. Forbes. 1,824,880; Sept. 29.
Holder, Can. H. C. Clayburgh. 1,824,872; Sept. 29.
Holder, Cigarette. M. V. Tremblay. 1,825,400; Sept. 29.
Holder, Electrode. H. H. Heckman. 1,825,314; Sept. 29.
Holder for cards, Display. W. C. Hoffman. 1,825,458; Sept. 29.
Holder for desk telephones, Memorandum pad. G. H. Revelle. 1,825,204; Sept. 29.
Holder for mine dump cars, Check. J. Dropulich. 1,825,057; Sept. 29.
Holder, Lamp. F. H. Owens. 1,825,121; Sept. 29.
Holder, Notebook. H. H. Harnsberger. 1,825,522; Sept. 29.
Holder, Price card display. F. O. Nelson and C. A. Fogel. 1,824,918; Sept. 29.
Holder, Sanitary milk bottle. H. Gurnsey. 1,825,348; Sept. 29.
Holder, Tool. B. T. Browand. 1,825,046; Sept. 29.
Holder, Trimming knife and blade. G. C. Webster. 1,825,108; Sept. 29.
Honey extractor, Centrifugal. J. L. Snyder. 1,825,020; Sept. 29.
Hook: *See*—
Rotary and casing hook. Tow hook.
Hook. W. A. Winder. 1,824,941; Sept. 29.
Horseshoe. P. A. Harsem. 1,825,186; Sept. 29.
Hose, Method of and apparatus for handling fire. W. H. Tobin. 1,825,488; Sept. 29.
Hot top for ingot molds. M. G. Dumas. 1,852,445–6; Sept. 29.
Housing for dual control switch and lock movement assembly for railways. E. G. Little. Des. 85,250; Sept. 29.
Hutch, Rabbit. A. D. Stoner. 1,825,557–8; Sept. 29.
Hydrocarbons, Apparatus for fractionation of certain. H. S. Davis and W. J. Murray. 1,824,947; Sept. 29.
Hydrocarbons, Process and apparatus for converting. W. M. Cross. 1,825,338; Sept. 29.
Hydrocarbons, Treating. V. N. Jenkins and C. P. Wilson, jr. 1,825,270; Sept. 29.
Hydrocarbons, Treating. E. R. Wolcott. 1,825,294; Sept. 29.
Identification mark. N. Saccoccia. 1,825,649; Sept. 29.
Ignition apparatus. J. T. Fitzsimmons. 1,825,388; Sept. 29.
Illumination control system. R. B. Hunter. 1,825,316; Sept. 29.
Incinerator. A. R. Acheson. 1,824,974; Sept. 29.
Indicator: *See*—
Balance indicator.
Indicator apparatus for steam power plants, Water level. C. A. French and R. R. Waterman. 1,824,988; Sept. 29.
Ink. E. W. Hill. 1,824,995; Sept. 29.
Insecticide applying apparatus. J. C. Hewitt. 1,825,648; Sept. 29.
Instrument case. L. C. Shippy. 1,825,426; Sept. 29.
Insulation, Colored cold molded. R. E. Coleman. 1,825,620; Sept. 29.
Insulation testing system. L. W. Brehman. 1,824,802; Sept. 29.
Insulator. G. M. Barrow. 1,824,766; Sept. 29.
Insulator. P. J. Kayatt. 1,825,319; Sept. 29.
Insulator connecter. G. M. Barrow. 1,824,767; Sept. 29.
Interior collar can. A. L. Kronquest 1,825,596; Sept. 29.
Internal combustion engine. C. D. Davis. 1,825,263; Sept. 29.
Internal combustion engine. R. W. Harroun. 1,824,992; Sept. 29.
Internal combustion engine. W. W. Marvin. 1,825,278; Sept. 29.
Internal combustion engine. W. Riehm. 1,825,545; Sept. 29.
Internal combustion engine, Rotary. A. Barreaux and G. Sarrazin. 1,825,571; Sept. 29.
Ironer. H. Hill. 1,825,350; Sept. 29.
Jack: *See*—
Car jack.
Jack. G. E. Weaver and H. C. Buffington. 1,825,495; Sept. 29.
Jar. S. V. Knepper. Des. 85,247; Sept. 29.
Joint: *See*—
Ball joint. Pipe joint.
Corner joint.
Key pressure gauge. F. E. Walters. 1,825,491; Sept. 29.
Keyless lock. E. M. Miller. 1,825,467; Sept. 29.
Knife fur-cutting machine, Multiple. K. Shopis and D. Mamarcheff. 1,825,132; Sept. 29.
Knitting machine. W. L. Smith, jr. 1,825,370; Sept. 29
Lace. J. Moosherr. Des. 85,257–8; Sept. 29.
Lace. G. Wasselin. Des. 85,269; Sept. 29.
Lamp arm and base, Combined. G. A. Marks. Des. 85,252; Sept. 29.
Lamp, Electric. H. A. Douglas. 1,824,804; Sept. 29.
Lamp, Focusing hand. H. W. Jones. 1,825,354; Sept. 29.
Lamp for projection apparatus, Incandescent electric. J. Marette. 1,825,078; Sept. 29.
Lamp or analogous article. C. M. Becker. Des. 85,227; Sept. 29.
Lamp, Reading. C. W. Neill. 1,825,085; Sept. 29.
Latch, Burial vault. E. Hedeen. 1,825,397; Sept. 29.
Latch device, Safety. C. J. Bristol. 1,824,866; Sept. 29.
Latch, Door. J. Prentice. 1,825,283; Sept. 29.
Latch, Hood. D. P. Hynes. 1,824,895; Sept. 29.
Latch, Hood. N. A. Mears. 1,824,912; Sept. 29.
Latch, Poultry coop gate. E. R. Carr. 1,825,504; Sept. 29.
Lathes, Centering device for. E. N. Broden. 1,824,769; Sept. 29.
Lawn edge trimmer. E. Elermann. 1,825,146; Sept. 29.
Lawn sprinkler. C. S. Wert. 1,825,640; Sept. 29.
Leather or similar article. K. D. Robinson. Des. 85,272; Sept. 29.
Letterpress, Method and apparatus for printing variable. G. Corse. 1,825,510; Sept. 29.
Lever for shaking grates. H. A. Hoke. 1,824,802; Sept. 29.
Lever, Skew. W. T. Reid. 1,825,285; Sept. 29.
Light and illuminating lamp, Combined safety. J. T. and E. T. Powell. 1,825,088; Sept. 29.
Light projection display apparatus. T. Wilfred. 1,825,497; Sept. 29.
Lighting fixture. G. H. Cole. 1,824,873; Sept. 29.

Line and sheave means for use in connection with hoisting and hauling machines, Guy. K. Berger. 1,824,978; Sept. 29.
Lining for high temperature vessels, Metallic. S. T. McDermott. 1,825,154; Sept. 29.
Liquid treating apparatus. O. I. Chormann and J. N. Jacobsen. 1,825,443; Sept. 29.
Liquors, Purifying industrial waste. J. T. Travers. 1,824,936; Sept. 29.
Loader, Open retort crate. M. S. Canday. 1,825,048; Sept. 29.
Lock: *See*—
Crib lock. Nut lock.
Keyless lock.
Lock-washer. J. M. Gribbie. 1,824,991; Sept. 29.
Locking means for stringed instrument tuning pins. G. Tadgell. 1,825,560; Sept. 29.
Locomotive furnace. C. J. Surdykowski. 1,825,135; Sept. 29.
Log rafting device. J. M. Chevalier. 1,824,982; Sept. 29.
Loom, Pile fabric. J. A. Coyle. 1,825,110; Sept. 29.
Loud speaker, Cone-type. J. S. Timmons. 1,825,561; Sept. 29.
Lubricant for hot surfaces. M. R. Wolfard, A. A. Morton, and R. H. Hussey. 1,825,256; Sept. 29.
Lug for domes, Support. W. M. Goldsmith. 1,824,816; Sept. 29.
Machine for coring and slicing citrus fruits. C. Floyd and D. M. Smalle. 1,825,628; Sept. 29.
Machine for dividing fruit. C. Floyd. 1,825,629; Sept. 29.
Machine for expanding cylinders. G. G. McKay. 1,825,081; Sept. 29.
Machine for expanding cylinders. H. G. Vaughn. 1,825,030; Sept. 29.
Machine for making absorbent pads. K. Wandel. 1,825,492; Sept. 29.
Machine for operating upon soles. C. J. Meek. 1,824,962; Sept. 29.
Machine for packaging straws and the like. A. M. Goldstein and M. Garfinkel. 1,825,058; Sept. 29.
Machine for riveting lugs to a tire carrying rim. W. N. Booth. 1,825,175; Sept. 29.
Machine for the manufacture of airscrews. F. W. Dose. 1,825,182; Sept. 29.
Machine for trimming the tuft yarns of tube frames. G. H. Simonson. 1,825,617; Sept. 29.
Machine for use in the manufacture of boots and shoes. N. H. Knowlton. 1,824,959; Sept. 29.
Mail-receiving device for doors. B. F. Foss. 1,824,881; Sept. 29.
Marker, Doorlock. J. Perkin. 1,825,474; Sept. 29.
Marker, Traffic. J. A. Ledoux. 1,825,003; Sept. 29.
Material grip, Flexible. W. A. Smith and H. A. Belden. 1,825,165; Sept. 29.
Material, Manufacture of sheet. R. P. Rose. 1,825,422; Sept. 29.
Material rich in xylan, Producing. E. R. Darling. 1,825,307; Sept. 29.
Materials, Apparatus for testing physical properties of. R. Esnault-Pelterie. 1,825,387; Sept. 29.
Materials, Method and apparatus for hydraulically separating. F. Pardee. 1,825,157; Sept. 29.
Measuring device for liquids. J. L. Patterson. 1,825,200; Sept. 29.
Meat trimming apparatus. R. G. Reynoldson. 1,825,205; Sept. 29.
Mechanical movement. A. E. Drissner. 1,825,056; Sept. 29.
Metal, Heat-treating. J. J. Bowden. 1,824,865; Sept. 29.
Metallurgical furnace. H. Navratiel. 1,825,011; Sept. 29.
Metallurgical process and apparatus. F. Lawaczeck. 1,824,960; Sept. 29.
Metals and metal compounds soluble in ammoniacal liquors, Recovery of. L. Schlecht, W. Schubardt, and F. Duftschmid. 1,825,211; Sept. 29.
Metals and treating agent therefor, Treating. F. J. Wilson and A. S. Evans. 1,825,565; Sept. 29.
Metals from their carbonyls, Production of. A. Mittasch and L. Schlecht. 1,825,241; Sept. 29.
Meter device. B. G. La Bar. 1,824,781; Sept. 29.
Milk and other liquids, Treatment of. J. W. Martin, jr. 1,825,645; Sept. 29.
Mill: *See*—
Tube mill.
Mining apparatus. F. Cartlidge. 1,824,945; Sept. 29.
Mining machine. F. Cartlidge. 1,824,946; Sept. 29.
Mining machine. M. P. Holmes. 1,824,953–4; Sept. 29.
Mining machine. C. F. Osgood. 1,824,964–5; Sept 29.
Mirror and pouch, Combined purse. C. Kämmerer. Des. 85,242; Sept. 29.
Mixer: *See*—
Drink mixer.
Mixing apparatus. W. G. Burns and A. D. Kirkland. 1,825,261; Sept. 29.
Mixture of mutually insoluble substances, Producing an intimate. M. Polanyi and S. Von Bogdandy. 1,825,125; Sept. 29.
Mold: *See*—
Foot impression mold.
Molded steering wheel. H. D. Geyer. 1,825,392; Sept. 29.
Molding apparatus, Centrifugal. W. H. Beatty. 1,825,302; Sept. 29.
Motor: *See*—
Electric motor. Suction motor.
Motor. H. Z. Leffel. 1,825,531; Sept. 29.
Motor control and drive. F. E. and W. C. Pfeiffer. 1,825,418; Sept. 29.
Mounting, Adjustable candle socket. H. Hubbell, jr. 1,824,955; Sept. 29.
Mounting for car axles. E. Latshaw. 1,825,530; Sept. 29.
Mounting for removable tile. M. S. Goldsmith and B. Harig. 1,824,817; Sept. 29.
Moving bodies, Apparatus for investigating experimentally the laws of. P. L. Tea. 1,825,136; Sept. 29.
Mowing apparatus, Lawn. C. C. Worthington. 1,825,109; Sept. 29.
Multiple cylinder engine. A. C. Peterson. 1,825,417; Sept. 29.
Necktie. G. E. Figg. 1,825,313; Sept. 29.
Nebulizer. C. L. Riley. 1,825,546; Sept. 29.
Neckpieces, Skull for fur. C. A. Hosier. 1,824,996; Sept. 29.
Nonsplash and self-draining can. S. E. Nord. 1,825,120; Sept. 29.
Nozzle, Exhaust. C. Seymour. 1,825,479; Sept. 29.
Nut lock. W. Chaplin. 1,825,050; Sept. 29.
Objective for color photography. A. Oswald. 1,825,122; Sept. 29.
Oil burner. J. J. Haskin. 1,825,230; Sept. 29.
Oil-burner, Thermostatically controlled. D. H. Hill. 1,824,890; Sept. 29.
Oil burning system. D. P. Graham and J. M. Ferry, jr. 1,824,952; Sept. 29.
Oil, Separation of. A. B. Jones. 1,824,780; Sept. 29.
Oiling system for sewing machines. N. V. Christensen. 1,825,506; Sept. 29.
Oils by filtration through paper, Decolorizing. W. S. Baylis. 1,825,300; Sept. 29.
Oils, Treating hydrocarbon. R. E. Manley. 1,825,324; Sept. 29.
Opener, Can. R. T. Chase. 1,825,383; Sept. 29.
Opener, Can. N. W. Thybony and R. M. Ozabal. 1,825,216; Sept. 29.
Ores, Floating. G. Barsky and G. B. Walker. 1,825,501; Sept. 29.
Oven, Regenerative coke. C. Otto. 1,824,922; Sept. 29.
Overshoe and making the same. L. H. L'Hollier. 1,825,276; Sept. 29.
Packing for centrifugal pumps. C. A. Schellens. 1,825,251; Sept. 29.
Packing for pistons and the like. S. M. Greenidge. 1,825,185; Sept. 29.
Packing for rods and the like. G. R. Livergood. 1,825,004; Sept. 29.
Packing gland. R. C. Allen. 1,824,863; Sept. 29.
Pantograph. J. A. Clarke, jr. 1,824,871; Sept. 29.
Paper handling machine. R. Hitchcock. 1,825,398; Sept. 29.
Papermaking compositions. G. A. Richter. 1,824,837; Sept 29.
Paper pulp from bagasse and other gramineæ plants, Manufacturing. T. Hagiwara. 1,825,349; Sept. 29.
Paper slide box, Self locking. R. Petersen and R. E. Farmer. 1,825,158; Sept. 29.
Paper, Wax. A. S. Hammond. 1,824,885; Sept. 29.
Paraffin and ceresine, Producing high-melting. A. Loebel. 1,825,533; Sept. 29.
Partition, Adjustable car. E. P. Harris. 1,825,452; Sept. 29.
Pattern, Electrodeposited. A. K. Laukel. 1,825,189; Sept. 29.
Pen cap and blotter, Combination. M. O. Reis. 1,825,090; Sept. 29.
Percolator. B. C. Bridgham. 1,824,763; Sept. 29.
Petroleum, Conversion of oil. R. Cross. 1,825,337; Sept. 29.
Petroleum residues, Apparatus for coking liquid. E. W. Thiele. 1,825,375; Sept. 29.
Petroleum residues from the distillation of petroleum oils, Coking. E. W. Thiele. 1,825,374; Sept. 29.
Phenol by distillation, Purifying a. E. C. Britton. 1,824,867; Sept. 29.
Picker: *See*—
Apple picker. Fruit picker.
Picture apparatus, Intermittent feed for motion. A. F. Victor. 1,825,254; Sept. 29.
Picture apparatus, Motion. A. F. Victor. 1,825,253; Sept. 29.
Pile fabric article and producing the same. W. Myers. 1,825,635; Sept. 29.
Pipe coupling, Metallic. F. L. R. Reure. 1,824,792; Sept. 29.
Pipe coupling, Sectional. A. J. Weatherhead, jr. 1,825,034; Sept. 29.
Pipe insulation. F. C. Russell and C. L. Savidge. 1,825,424; Sept. 29.
Pipe joint. H. C. Heaton, W. H. Neubeck, and L. Reisfeld. 1,825,062; Sept. 29.
Pipes, Device for flushing drain. B. P. Connelly. 1,825,582; Sept. 29.
Piston machines, Device for altering the clearance space in. E. Schweter. 1,825,163; Sept. 29.
Piston process and apparatus. G. T. Voorhees. 1,824,938; Sept. 29.
Pit, Recuperative soaking. A. L. Culbertson. 1,824,876; Sept. 29.
Plane, Water. R. J. Robertson. 1,825,363; Sept. 29.
Plant, Combined coal and cinder handling. C. P. Ross. 1,824,930; Sept. 29.

Plant, Fluid operated prime mover dynamo-electric. R. Kamada. 1,825,526; Sept. 29.
Plants, Treatment and preservation of cut. A. B. Howell. 1,825,065; Sept. 29.
Plasterer's float. A. R. Morford. 1,825,080; Sept. 29.
Plastic rolling machine. G. K. Bainbridge. 1,824,759; Sept. 29.
Plug with sleeve constrictive bushing, Spark. H. Rabezzana. 1,825,362; Sept. 29.
Plunger, Pump. F. E. Sprague. 1,825,483; Sept. 29.
Polishing and grinding machine. C. L. Hawes. 1,825,455; Sept. 29.
Polishing roll for shoes. K. Wollny. 1,825,566; Sept. 29.
Post: *See*—
Building post.
Pot: *See*—
Corrugated pot.
Pothead. Automatic disconnecting. A. C. Rumble. 1,825,208; Sept. 29.
Potato cutter. L. F. Altfather. 1,824,798; Sept. 29.
Potentiometer, Electrical. L. L. Bouton. 1,824,801; Sept. 29.
Power attachment for ice cream freezers. D. D. Kohler. 1,825,356; Sept. 29.
Power plant. B. V. E. Nordberg and R. Wintzer. 1,824,833; Sept. 29.
Power transmission, Electrical. C. A. Nickle. 1,825,624; Sept. 29.
Power transmission, Hydraulic. S. G. Wingquist. 1,825,435; Sept. 29.
Power transmitting means. J. L. Creveling. 1,825,053; Power unit. L. K. Park. 1,825,087; Sept. 29.
Power unit and method of creating energy. J. E. Shepherd. 1,825,131; Sept. 29.
Press: *See*—
Axle press. Extrusion press.
Baling press. Vulcanizing press.
Price marking device. C. Robles. 1,824,794; Sept. 29.
Priming mixture. J. D. McNutt. 1,825,466; Sept. 29.
Printing on long webs of paper, cloth, or the like in platen-presses, Device for. N. G. Golje. 1,825,395; Sept. 29.
Products resembling natural waxes. W. Pungs and K. Behringer. 1,825,248–9; Sept. 29.
Projectile. G. C. Gardner. 1,825,517; Sept. 29.
Projectiles or the like, Contrivance or device for throwing. J. F. J. Reibel. 1,825,203; Sept. 29.
Propeller. G. B. Jackson. 1,825,401; Sept. 29.
Propeller. G. Pemsl. 1,825,473; Sept. 29.
Propeller and its prime mover on an aircraft, Mounting the. C. Fritz. 1,824,882; Sept. 29.
Protecting device for alternating current three-phase motors. P. Gény. 1,825,518; Sept. 29.
Protective means for railway vehicle motors. C. C. Whittaker. 1,824,855; Sept. 29.
Protector and advertising novelty, Hose. N. G. Netherland. 1,824,832; Sept. 29.
Protector, Moth killer hygienic garment. B. S. Donovan. 1,825,144; Sept. 29.
Pump. L. B. Kapp. 1,825,318; Sept. 29.
Pump for liquids, Liquid piston internal combustion. S. P. Christie. 1,825,507; Sept. 29.
Pyrometer, Optical. R. Hase. 1,825,229; Sept. 29.
Radiator. J. M. Clark. 1,825,306; Sept. 29.
Radiator closing means for automobiles. E. W. Storms. 1,825,134; Sept. 29.
Radioreceiving loud speaker. W. H. Huth and B. B. Minnum. 1,825,232; Sept. 29.
Radio receiving set. W. J. Kayser. 1,825,070; Sept. 29.
Radio signaling system. De K. Martin. 1,824,827; Sept. 29.
Radio transmitting system. C. A. Boddie. 1,825,303; Sept. 29.
Rail joint. G. Langford. Re18,213; Sept. 29.
Railroad tie. J. N. Hobart. 1,824,778; Sept. 29.
Rail switch. J. B. Strong. Re18,216; Sept. 29.
Rail turning device. H. M. Ely. Re18,210; Sept. 29.
Railway crosstie. H. M. Hadley. 1,824,776; Sept. 29.
Railway structure, Pleasure. J. A. Miller. 1,825,468. Sept. 29.
Railway switch. R. A. Overmiller. 1,825,415; Sept. 29.
Rattan, Coloring. R. W. Spofford. 1,825,102; Sept. 29.
Razor, Magazine safety. H. H. Straus. 1,825,429; Sept. 29.
Razor, Safety. J. E. Connolly. 1,825,335; Sept. 29.
Razor, Safety. J. S. Isdale. 1,824,770; Sept. 29.
Razors, Hair trimming attachment for safety. H. C. Warner. 1,825,494; Sept. 29.
Reaction product of salicylic acid and hexamethylnetetramine and producing same. L. Pink. 1,825,636; Sept. 29.
Receptacle, Electric. H. Hubbell, jr. 1,824,956; Sept. 29.
Receptacle filling apparatus. E. L. Jones. 1,824,899; Sept. 29.
Receptacle, Flexible pocket. W. R. Buxton. 1,824,943; Sept. 29.
Receptacle, Wall or floor. E. J. Schutt. 1,825,638; Sept. 29.
Reel. R. L. Ray. 1,825,604; Sept. 29.
Reflector for automobile headlamps. C. A. Michel. 1,825,084; Sept. 29.
Reflector for warm air furnace registers. O. Rottinghaus. 1,825,423; Sept. 29.
Refrigerating apparatus. O. M. Summers. 1,825,022; Sept. 29.
Refrigerating apparatus. W. F. Swezey. 1,825,291; Sept. 29.
Refrigerating apparatus. A. M. Thomson. 1,825,215; Sept. 29.
Refrigerating apparatus and method. J. W. Martin, jr. 1,825,643; Sept. 29.
Refrigerating, Apparatus and method for. D. H. Killeffer. 1,825,073; Sept. 29.
Refrigerating apparatus, package and method. C. L. Jones and H. S. McIlvain. 1,825,068; Sept. 29.
Refrigerative apparatus. G. C. Cusack. 1,825,054; Sept. 29.
Registering device. P. D. Parsons. 1,825,281; Sept. 29.
Regulating system. M. F. Bates. 1,825,139; Sept. 29.
Regulator: *See*—
Electrical regulator. Fuel mixture regulator.
Feed water regulator.
Regulator for brake rigging. W. H. Sauvage. 1,825,366; Sept. 29.
Regulator for stokers, Automatic. D. O. Miller. 1,825,279; Sept. 29.
Relay, Electrical. B. Mishelevich. 1,825,238; Sept. 29.
Resilient seat. W. Comerford. 1,825,581; Sept. 29.
Resistance, Replaceable. R. Dubois. 1,825,585; Sept. 29.
Resistance units, Assembling. R. C. Shindledecker. 1,825,481; Sept. 29.
Ring or article of similar nature, Finger. E. J. Cross. Des. 85,234–7; Sept. 29.
Ring traveler. G. H. Gilligan. 1,825,113; Sept. 29.
Robe. F. V. Grilfeld. 1,825,520; Sept. 29.
Roller and curtain bracket, Window shade. W. E. Souders. 1,825,101; Sept. 29.
Room, Down draft. L. D. Pelk. 1,825,542; Sept. 29.
Rotary and casing hook. N. K. Smith. 1,825,018; Sept. 29.
Rotary machine for manufacturing glass, hollow ware and other molded articles of glass. A. F. McNish. 1,825,082; Sept. 29.
Rubber body, Inflatable hollow. I. and L. Dorogi. 1,825,308; Sept. 29.
Rubber, Decorating. B. S. Taylor. 1,825,252; Sept. 29.
Rubber, gutta percha and balata, Production of highly viscous aqueous dispersions of. M. Forrer. 1,825,515; Sept. 29.
Rubber products, Apparatus for manufacturing. W. J. Peelle. 1,825,282; Sept. 29.
Rubber, Vulcanization of. W. Scott. 1,825,288; Sept. 29.
Rubbing and grinding machine. H. G. Barrett. 1,825,209; Sept. 29.
Rug and other patterns on felt base fabrics, Producing. J. B. Campbell. 1,824,758; Sept. 29.
Rule and compass, Combination. A. A. Fischer. 1,825,266; Sept. 29.
Running board assembly. I. Ornberg. 1,825,012; Sept. 29.
Sack severing device. J. E. Trouth. 1,824,937; Sept. 29.
Safety device for elevators. G. A. Halfvarson. 1,825,269; Sept. 29.
Safety device for gas stoves and ranges. J. Teller. 1,825,373; Sept. 29.
Salt from oil, Removing a. H. C. Eddy. 1,825,309; Sept. 29.
Sand, clay, and the like materials, Removal of impurities from. J. English. 1,824,807; Sept. 29.
Sash, Concrete window. F. M. Sawyer. 1,825,162; Sept. 29.
Sash or screen hanger, Storm. P. Kohl. 1,825,595; Sept. 29.
Sausage, Producing skinless. F. W. Knudsen. 1,825,528; Sept. 29.
Saw, Portable. C. Skillman. 1,825,164; Sept. 29.
Saw table. C. A. Stachell. 1,825,104; Sept. 29.
Sawing machine. G. Babare. 1,825,041; Sept. 29.
Sawing machine. G. Francyk. 1,825,516; Sept. 29.
Scale. L. Jaenichen. 1,825,317; Sept. 29.
Scale, Weighing. E. R. Cross. 1,825,336; Sept. 29.
Scanning device. A. O. Tate. 1,825,487; Sept. 29.
Scoop, Excavating. E. H. Fundom. 1,824,989; Sept. 29.
Screen: *See*—
Window screen.
Screen. L. A. Pace. 1,825,538; Sept. 29.
Screen diaphragm for tube mills, etc., Adjustable. W. A. Gibson. 1,825,347; Sept. 29.
Screen for reflectors, Color. A. Hopkin, jr. 1,824,894; Sept. 29.
Screw. F. J. Plym. 1,825,410; Sept. 29.
Screw threading machine, Automatic. J. F. Arnold. 1,825,171; Sept. 29.
Seal, Floating roof. E. E. Shanor. 1,825,639; Sept. 29.
Seam locater for casting perforators. R. Moss. 1,825,243; Sept. 29.
Seat: *See*—
Resilient seat.
Sedan body, Pressed metal. J. Ledwinka. 1,825,322; Sept. 29.
Seed celling machine. J. Musselman. 1,825,470; Sept. 29.
Seismometer. W. O. Snelling and G. A. Rupp. 1,825,554; Sept. 29.
Separator: *See*—
Centrifugal separator. Floor separator.
Separator plate. A. S. Behrman. Re18,214; Sept. 29.
Settling tank. J. Schulte. 1,825,550; Sept 29.
Sewing machine. W. Myers. 1,825,634; Sept. 29.

Sewing machine, Blindstitch. K. Maier and F. Lutz. 1,825,642; Sept. 29.
Sewing machine for joining edge portions of fabric sections. K. Maier and F. Lutz. 1,825,597; Sept. 29.
Sewing machine, Overedging. E. Häussler. 1,825,454; Sept. 29.
Sewing machines, Loop retainer for. A. Ericsson. 1,825,513; Sept. 29.
Shackle, Rubber spring. A. J. Jansson. 1,825,352; Sept. 29.
Shade for an electric light fixture. G. E. McFadden. Des. 85,254–6; Sept. 29.
Sheet deflector. L. R. Tufts and A. Olson. 1,825,217; Sept. 29.
Shield, Motorist's eye. F. W. Magee. 1,824,908; Sept. 29.
Shingle, Interlocking. N. Z. Butterick. 1,825,576; Sept. 29.
Shock absorber. J. H. Hunt. 1,825,400; Sept. 29.
Shock absorbing means, Airplane article pick up. L. S. Adams. 1,825,329; Sept. 29.
Shoe. G. S. Laird. Des. 85,248; Sept. 29.
Shoe and making same. C. A. Rivas. 1,825,206; Sept. 29.
Shoe uppers, Tempering. H. G. Lumbard. 1,825,191; Sept. 29.
Shower bath. J. J. Keefe. 1,825,355; Sept. 29.
Sign. C. Humphreys. 1,825,149; Sept. 29.
Sign, Revolving. J. B. Whitlow. 1,825,564; Sept. 29.
Signal for motor vehicles, Directional. M. Wehner. Des. 85,270; Sept. 29.
Signals, Method and apparatus for receiving wireless. W. M. Bruce. 1,824,803; Sept. 29.
Slab and wall construction, Building. T. J. Foster. 1,825,346; Sept. 29.
Slate, Drawing. H. Liebetruth. 1,825,532; Sept. 29.
Sled attachment for automobiles. F. A. Spacsek. 1,825,133; Sept. 29.
Slicing machine. W. J. Campbell. 1,824,869; Sept. 29.
Slicing machine. C. Roesch. 1,825,421; Sept. 29.
Slicing machines, Knife guard for. W. J. Campbell. 1,824,870; Sept. 29.
Snowplows for motor vehicles, Lifting mechanism for. M. Walters. 1,824,849; Sept. 29.
Soap, Manufacture of. E. Flammer and C. Kelber. 1,824,809; Sept. 29.
Socket, Peavey. E. C. Leach and J. F. Doornbos. 1,824,906; Sept. 29.
Solids to be penetrated by or impregnated with liquids or solutions of various substances, Causing. H. J. Collins. 1,825,509; Sept. 29.
Sound-controlling means. M. J. MacDonald. 1,825,465; Sept. 29.
Sound recording or reproducing apparatus. A. J. Cawley. 1,825,439–40; Sept. 29.
Sound recording or reproducing, Photo-electric. A. J. Cawley. 1,825,438; Sept. 29.
Sound recording, process and apparatus. A. J. Cawley. 1,825,441; Sept. 29.
Spader, Mechanical. T. R. Curry. 1,825,222; Sept. 29.
Spear, Casting. I. Thomas. 1,825,026; Sept. 29.
Speed mechanism for slicing machines, Multiple. J. Folk. 1,824,949; Sept. 29.
Spindle rail lifting mechanism. H. A. Owen. 1,824,788; Sept. 29.
Spindles in textile spinning machines, Driving. J. Berlinerblau. 1,825,472; Sept. 29.
Spinning and other textile frames, Drag arrangements for. J. Hargrove. 1,825,061; Sept. 29.
Spinning, twisting, and similar machines, Facilitating doffing in flyer. W. Prince-Smith and D. Waterhouse. 1,825,201; Sept. 29.
Spoke holes in rim members of vehicle wheels, Apparatus for forming. D. E. Copple. 1,825,180; Sept. 29.
Spool, All metal. F. J. Collins. 1,825,508; Sept. 29.
Spool, Metal. T. G. Baxenden and J. R. Collyear. 1,825,044; Sept. 29.
Spoon and scraper or similar article, Combination. I. W. Farquharson. Des. 85,232; Sept. 29.
Spoon or other article of tableware. A. G. Kintz. Des. 85,245; Sept. 29.
Spray gun. E. N. Berggren. Des. 85,228; Sept. 29.
Spraying device. J. B. Rosefield. 1,825,002; Sept. 29.
Spring for motor trucks, Shock absorbing. A. W. Sansburn. 1,825,093; Sept. 29.
Sprinkler: *See*—
Lawn sprinkler.
Stacker. A. L. Milligan. 1,824,913; Sept. 29.
Staging, Portable. L. R. Hollister. 1,825,590; Sept. 29.
Stamping machine. O. C. Kavle. 1,825,069; Sept. 29.
Stand: *See*—
Cable reel stand. Display stand.
Stand for smokers' and similar articles. C. Tuteur. Des. 85,266; Sept. 29.
Starter, Electrical carburetor. P. E. Edelman. 1,824,985; Sept. 29.
Starter, Engine. C. Marcus. 1,824,826; Sept. 29.
Steel, Pickling of stainless. N. H. Schermer. 1,824,932; Sept. 29.
Steel scrap, Reclaiming stainless. L. B. Lindemuth. 1,825,463; Sept. 29.
Steering attachment for tractors. F. L. Willrodt. Re18,212; Sept. 29.
Steering device for outboard motor boats. L. P. Miller. 1,825,240; Sept. 29.
Steering wheel. H. D. Geyer. 1,825,891; Sept. 29.
Steering wheel. H. D. Geyer. 1,825,893; Sept. 29.
Stiffening member for boots and shoes. W. C. Bennett. 1,825,625; Sept. 29.
Stoker, Locomotive. N. M. Lower. 1,825,152; Sept. 29.
Stoker, Locomotive. E. A. Turner. 1,825,106; Sept. 29.
Stoker, Locomotive. E. A. Turner and C. J. Surdykowski. 1,825,137; Sept. 29.
Stoker, Underfeed mechanical. V. G. Leach. 1,825,273; Sept. 29.
Stone, Coating damp or wet. S. S. Sadtler. 1,824,931; Sept. 29.
Stop, Automatic phonograph. E. Traub. 1,824,847; Sept. 29.
Stop, Train. M. Maile. 1,825,408; Sept. 29.
Stopper. G. A. Brosius and A. A. Broge. 1,825,177; Sept. 29.
Stopper for sinks and the like, Nonslipping. F. Zorn. 1,825,499; Sept. 29.
Storage, transportation, and distribution of frozen carbon dioxide. J. W. Martin, jr. 1,825,647; Sept. 29.
Suction motor. H. J. Murphy. 1,825,411; Sept. 29.
Sugar cane process and apparatus. E. M. Copp. 1,824,875; Sept. 29.
Support, Buck. W. O. Isaacson. 1,824,998; Sept. 29.
Support for baking crust. M. A. Miller. 1,825,535; Sept. 29.
Support for lighting fixtures, Socket. I. Wolarsky. 1,825,641; Sept. 29.
Support for typewriters or other office appliances. E. Kradolfer. 1,824,822; Sept. 29.
Support, Photographic film. C. O. Engstrom. 1,825,310; Sept. 29.
Support, Shaft. G. N. Van Derhoef. 1,825,293; Sept. 29.
Supporting device, Book. H. H. Harnsberger. 1,825,521; Sept. 29.
Swing. H. F. Hoffman. 1,825,457; Sept. 29.
Switch: *See*—
Electric air-brake switch. Railway switch.
Electric switch. Synchronizing switch.
Electrical switch. Thermostatic switch.
Switch. B. N. Brunberg. 1,825,260; Sept. 29.
Switch and arc extinguishing method, Electric. T. T. Greenwood. 1,825,228; Sept. 29.
Switch and operating mechanism therefor, Multipole electric. H. P. Pinkham. 1,825,159; Sept. 29.
Switch throwing device. J. L. Milton. 1,825,469; Sept. 29.
Switching device. H. J. L. Frank and P. S. Jenkins. 1,825,267; Sept. 29.
Switching device, Electrical. W. T. Wintringham. 1,824,857; Sept. 29.
Switching equipment controlling high-voltage distributing lines. A. Kuhns and F. Kesselring. 1,824,903; Sept. 29.
Switches, System for controlling electric. G. Maurer. 1,824,828; Sept. 29.
Synchronizing device. A. Jipp. 1,824,999; Sept. 29.
Synchronizing switch. G. E. Jansson. 1,825,150; Sept. 29.
Syringe, Powder placing. L. L. Findley. 1,824,808; Sept. 29.
Table: *See*—
Folding table. Saw table.
Table top, Display. P. Lopez. 1,825,464; Sept. 29.
Tack handling mechanism. T. H. Seely. 1,825,210; Sept. 29.
Tank or pressure vessel, Lined. W. C. Johnson. 1,824,898; Sept. 29.
Target and frangible disk, Rifle. M. D. Van Auken. 1,825,292; Sept. 29.
Telephone. K. Nichols and R. Bettien. 1,825,471; Sept. 29.
Telephone lines. C. J. Burnside. 1,825,804; Sept. 29.
Telephone system. F. Kessler and A. G. Forster. 1,825,000; Sept. 29.
Telephones, Automatic calling apparatus for automatic. L. and A. Seguin. 1,825,098; Sept. 29.
Temperature indicating device. H. P. Sleeper. 1,824,842; Sept. 29.
Tension apparatus, High. D. Müller-Hillebrand. 1,824,818; Sept. 29.
Tension device. J. A. Pratt. 1,825,089; Sept. 29.
Tension wheel and making the same. J. L. Hecht. 1,824,888; Sept. 29.
Textile fabric. A. H. Eisenstadt. Des. 85,230; Sept. 29.
Thermostatic alarm. F. J. Scholtz. 1,824,938; Sept. 29.
Thermostatic construction. L. M. Payne. 1,824,789; Sept. 29.
Thermostatic switch. L. P. Hutt. 1,825,591; Sept. 29.
Thread protector and sucker rod stripper, Combination. M. L. Reed. 1,825,605; Sept. 29.
3-ethyl-4-cyclohexyl-1,2,4-triazole. G. Sscheuing and B. Walach. 1,825,549; Sept. 29.
Threshold plate or similar article. S. C. Awbrey. Des. 85,226; Sept. 29.
Throttle handle. E. W. Stevens. 1,825,290; Sept. 29.
Tie: *See*—
Railroad tie.
Timing control for circuit breakers. A. W. Welcome. 1,825,138; Sept. 29.
Tire carrier, Spare. J. L. Gilmore. 1,825,268; Sept. 29.
Tire, Resilient. E. de A. Braga. 1,825,502; Sept. 29.

Tomato peeling machine. J. W. Snider. 1,825,428; Sept. 29.
Tongs, Grappling. C. B. Collon and D. Horton. 1,825,179; Sept. 29.
Tool. W. J. De Witt. 1,825,111; Sept. 29.
Tool, Fishing. I. Thomas and E. I. Tibbet. 1,825,025; Sept. 29.
Tool, Fluid pressure. G. M. Nell. 1,825,328; Sept. 29.
Tool, Hammering. C. Keller. 1,825,072; Sept. 29.
Tool, Percussive. B. V. Korvin-Kroukovsky and K. D. Vosler. 1,825,632; Sept. 29.
Tool, Revolving holder machine. G. E. Hallenbeck. 1,825,060; Sept. 29.
Tool, Valve seat reconstruction. N. F. McNaught. 1,825,007; Sept. 29.
Tools, Percussion mechanism. G. H. Thompson. 1,824,935; Sept. 29.
Toothbrush. B. Seelig. 1,824,967; Sept. 29.
Torpedo. L. Sacco. 1,825,161; Sept. 29.
Tourist's outfit. W. A. Frisby. 1,825,183; Sept. 29.
Tow hook. E. B. Staley. 1,824,843; Sept. 29.
Toy boat with outboard motor. H. S. Rockwell. 1,825,547; Sept. 29.
Toy, Boxing. J. Peterson. 1,824,790; Sept. 29.
Toy, Educational. S. S. Himmell. 1,825,231; Sept. 29.
Toy, Electrical target. H. F. Gade. 1,824,811; Sept. 29.
Toy money bank. G. C. Walling. Des. 85,268; Sept. 29.
Track for track laying vehicles, Flexible. H. A. Knox and B. F. Baker. 1,825,075; Sept. 29.
Tractor steering device, Motor grader. I. Char. 1,825,220; Sept. 29.
Tractor wheel, Convertible. A. Gnaegy. 1,825,394; Sept. 29.
Traffic control, Unitary. D. E. Wescott. 1,824,973; Sept. 29.
Traffic regulating system, Street. A. J. Ray and C. E. Lomax. 1,825,284; Sept. 29.
Training device for student aviators and entertainment apparatus, Combination. E. A. Link, jr. 1,825,462; Sept. 29.
Transmission mechanism. W. L. Brookins. 1,824,868; Sept. 29.
Transmission, Overgear. H. Drew. 1,824,341; Sept. 29.
Trap. J. W. Maddox. 1,825,193; Sept. 29.
Trimmer: *See*—
Lawn edge trimmer.
Trolley, contactor. S. S. Stolp. 1,824,844; Sept. 29.
Trolley track and hanger, Combined. P. L. Hoffman. 1,825,315; Sept. 29.
Truck, Car. K. M. Hamilton. 1,825,396; Sept. 29.
Truck, Car. K. M. Hamilton. 1,825,451; Sept. 29.
Truck, Car. K. M. Hamilton. 1,825,630; Sept. 29.
Truck, Expressman's. T. B. Nakkerud. 1,824,786; Sept. 29.
Truck, Flag. E. Lange. 1,825,076; Sept. 29.
Truck, Hand. A. S. McDaniel. 1,825,196; Sept. 29.
Tube base adapter. A. Mavrogenis. 1,825,534; Sept. 29.
Tube mill. A. W. Catlin. 1,825,333; Sept. 29.
Tube testing apparatus. A. C. Rockwood and W. R. Ferris. 1,825,548; Sept. 29.
Turbine, Elastic fluid. R. H. Collingham. 1,825,580; Sept. 29.
Turbine, Explosion. H. Holzwarth. 1,824,893; Sept. 29.
Turner, Egg or pancake. I. C. Molleson. 1,824,783; Sept. 29.
Turnstile. D. Tulchin. Re18,211; Sept. 29.
Tuyère. L. M. Nesselbush. 1,824,919; Sept. 29.
Typewriter pad. H. C. Harding. Des. 85,240; Sept 29.
Typewriting and computing machine, Combined. F. U. Conard. 1,825,143; Sept. 29.
Typewriting machine. F. A. Hart. 1,825,148; Sept. 29.
Typographical composing machine. R. R. Mead. 1,824,911; Sept. 29.
Unit for heating, cooling, and ventilating system. S. F. Wogan. 1,825,498; Sept. 29.
Upholstery machine. F. W. Brintnall and F. N. Ross. 1,825,573; Sept. 29.
Vacuum cleaner. M. Wensauer. 1,825,255; Sept. 29.
Valve. H. W. Durham and C. M. Rucker. 1,825,512; Sept. 29.
Valve. P. W. Knauf. 1,824,902; Sept. 29.
Valve. L. F. Moody. 1,824,916; Sept. 29.
Valve. E. A. Townill. 1,825,028; Sept. 29
Valve. R. E. Wilson. 1,825,378; Sept. 29.
Valve actuating mechanism, Sleeve. A. M. Niven. 1,825,412; Sept. 29.
Valve, Check. J. G. Zolleis. 1,825,569; Sept. 29.
Valve, Float controlled. C. E. Schilling. 1,825,367; Sept. 29.
Valve for corn planters, Dropper. E. B. Young. 1,825,035; Sept. 29.
Valve for heating systems, Air relief. S. A. Johnson and F. C. Risselt. 1,825,459; Sept. 29.
Valve for high pressure and high temperature purposes. H. B. Redding. 1,825,543; Sept. 29.
Valve key. P. Tura. 1,825,562; Sept. 29.
Valve operating handle. W. B. Ross. 1,825,364; Sept. 29.
Valve operating mechanism, Emergency. V. E. Pierret. 1,825,124; Sept. 29.
Valve, Pneumatic dispatch control. J. J. Stoetzel. 1,825,618; Sept. 29.
Valve, Pressure indicating tire. E. A. Rockwell. 1,825,160; Sept. 29.
Valve, Pressure regulating. G. A. Ricker. 1,825,637; Sept. 29.
Valve structure. C. F. Wray. 1,825,568; Sept. 29.
Valve structure, Gate. H. B. Redding. 1,825,544; Sept. 29.
Valves and valve gear for locomotives and other engines. J. Mouchly. 1,824,830; Sept. 29.
Vegetables and fruit, Growing. T. H. Shope. 1,825,099; Sept. 29.
Vehicle heater. J. R. Olshel. 1,824,921; Sept. 29.
Vehicle heater. F. M. Young. 1,825,036; Sept. 29.
Vehicle mechanism, Motor. C. E. F. Ahlm and G. L. Elmslie. 1,824,975; Sept. 29.
Vehicle, Road. A. I. Marcum. 1,825,194; Sept. 29.
Vehicles, Preventing the sliding or skidding of. F. Fuchs. 1,824,815; Sept. 29.
Vending machine. G. I. Watters. 1,824,851; Sept. 29.
Ventilation of dynamo electric machines. M. D. Ross. 1,824,839; Sept. 29.
Ventilator: *See*—
Window ventilator.
Ventilator for autos, Window. J. J. Mace. 1,825,192; Sept. 29.
Ventilator for buildings. W. L. Archer. 1,825,297; Sept. 29.
Ventilator hat for stoves. A. Nitka. 1,825,245; Sept. 29.
Vibrating machine, Portable. L. C. Gunderman. 1,825,588; Sept. 29.
Vibrator. C. W. Johnson. 1,825,353; Sept. 29.
Vibrator, Mechanical. S. M. Swensen. 1,825,430; Sept. 29.
Violin attachment. J. H. Kessler. 1,824,901; Sept. 29.
Visor, Sun. H. V. Henderson. Des. 85,241; Sept. 29.
Vulcanizing press. R. J. Schmidt. 1,825,616; Sept. 29.
Washer: *See*—
Lock washer.
Washing and drying machine. R. W. Donley. 1,825,584; Sept. 29.
Washing machine. F. Snyder. 1,825,019; Sept. 29.
Waste heat boiler. H. B. Smith. 1,825,289; Sept. 29.
Water heater. J. P. Morley. 1,825,326; Sept. 29.
Waterproofing. J. A. Patiño. 1,825,199; Sept. 29.
Water softening. A. G. Horvath. 1,825,631; Sept. 29.
Water supply means for concrete mixers. F. Aspden. 1,825,039; Sept. 29.
Water wings. P. Blagoeff. 1,824,761; Sept. 29.
Welt and system of using the same, Lubricating. A. L. Howard. 1,824,907; Sept. 29.
Wheel: *See*—
Molded steering wheel. Tractor wheel.
Steering wheel.
Wheel structure, Locomotive driving. W. M. Sheehan and H. M. Pflager. 1,825,480; Sept. 29.
Winder and clip for hair waving apparatus. A. E. Pausser. 1,825,540; Sept. 29.
Windmill. W. C. Banker. 1,825,500; Sept. 29.
Windmill sucker rod connection. F. J. Haller. 1,825,449; Sept. 29.
Window closing device, Automatic. C. A. Baltz, jr. 1,825,043; Sept. 29.
Window, Pivotal sash. E. T. Fisk. 1,825,587; Sept. 29.
Window screen. J. E. Johnson. 1,824,897; Sept. 29.
Window ventilator. C. E. Yeagle. 1,825,437; Sept. 29.
Wing and aileron construction for aircraft. H. J. Stieger. 1,825,371; Sept. 29.
Wing for aeroplanes, Rotary. F. Wander, jr. 1,825,493; Sept. 29.
Wiper blade for cleaning devices. S. P. Vaughn. 1,825,376; Sept. 29.
Wire transfer apparatus. G. H. Swank. 1,825,214; Sept. 29.
Wool. Collecting artificial. M. Dassonville. 1,824,772; Sept. 29.
Wrench: *See*—
Chain wrench.
Wringer and casing for a washing machine, Combined. J. C. Nelson. Des. 85,259; Sept. 29.
Yarn tensioning device. W. Bock. 1,825,626; Sept. 29.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 29, 1931

NOTE.—First number = class, second number = subclass, third number = patent number

1— 6: 1,825,210
19: 1,824,958
2— 13: 1,824,908
14: 1,825,386
1,825,615
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4— 145: 1,825,355
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Total	1,427		

Disclaimers

1,705,809.—*William N. Davis*, Oakland, *William H. Hampton*, Berkeley, and *Edwin H. Klemgard*, Albany, Calif. Process of Removing Sulphur Compounds from Petroleum Oils. Patent dated March 19, 1929. Disclaimer filed August 10, 1931, by the assignee, *Standard Oil Company of California*.

Hereby does disclaim from the scope of claims 1, 2, 3, 4, and 5 of said Letters Patent any and all processes of treating petroleum oils, except processes of treating petroleum oils in which the major part of the unsaturated constituents of the petroleum oils is retained in the treated oil.

1,770,189.—*Albert L. Abbott*, Canton, Ohio. Vault Construction. Patent dated July 8, 1930. Disclaimer filed August 12, 1931, by the assignee, *Diebold Safe and Lock Company*.

Hereby enters this disclaimer and disclaims as follows: Disclaims from claims 1 and 2 all vault constructions which do not utilize or include a hollow metal jam filled with fireproofing material and set in an enlarged opening, or rabbeted seat, in the wall at the outer end of the door opening which extends through the wall.

And disclaims further from claim 2 all structures in which the jamb does not extend wholly about the door opening, including top, bottom, and sides.

1,479,991.—*Robert W. King*, New York, N. Y. Electron Discharge Device. Patent dated January 8, 1924. Disclaimer filed August 8, 1931, by the assignee, *Western Electric Company, Incorporated*.

Hereby enters this disclaimer relative to claims 5 and 6 of said Letters Patent to wit: To the combination of elements set forth in claims 5 and 6 of said Letters Patent, except as the same are embodied in a vacuum tube wherein the insulating material is separated by an intervening space from the edge of the plate electrode or anode by which it is supported.

1,798,652.—*Morris F. Booth*, Chicago, Ill. Cooling Unit for Refrigerating Systems. Patent dated March 31, 1931. Disclaimer filed August 8, 1931, by the assignee, *Mullins Manufacturing Corporation*.

Hereby enters this disclaimer to claim No. 5 in the said patent, the said claim being here quoted as follows, to wit:

"A sheet metal evaporator comprising an outer one-piece shell having an arcuate portion and laterally extending side walls bent to form a sharp freezing chamber or chambers, an inner one-piece shell having an oppositely formed arcuate portion, and laterally extending walls cooperating with the side walls of the outer shell, said two arcuate portions registering complementally to form a substantially cylindrical header, one of said laterally extending walls being embossed to provide passageways leading from said header."

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,779,747, A. McLean Nicolson, Method and apparatus for television and the like, decided August 8, 1931, claims 1, 3, 6, 7, 12, 13, 14, 16, 17, and 18.

Pat. 1,650,475, Gustav Trefz and Friedrich Trefz, Free jet turbine, decided August 1, 1931, claims 1 and 2.

Condition of Applications Under Examination at Close of Business August 15, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 92,558; Trade-Mark Division, 999. Oldest new case, Dec. 15, 1930; oldest amended, Dec. 16, 1930. The dates given are 1931 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting first office action	Oldest amended application awaiting action by applicant	No. of applications awaiting action
		New	Amended	
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Apr. 6	Apr. 10	838
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Feb. 21	Feb. 25	1,384
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 10	Apr. 24	896
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Mar. 20	Apr. 1	798
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Feb. 24	Mar. 5	743
318	6. LEWERS, A. M., Carbon Chemistry	Jan. 9	Jan. 10	2,087
106	7. JARBOE, C. G., Optics; Photography	Jan. 23	Jan. 27	2,021
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Jan. 21	Jan. 29	1,662
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Mar. 7	Mar. 7	1,320
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 19	Apr. 2	1,106
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 18	Mar. 25	763
380	12. HENRY, C. C., Machine Elements	Jan. 2	Feb. 10	1,246
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Feb. 19	Feb. 25	1,162
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Feb. 16	Mar. 20	1,121
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Jan. 26	Jan. 27	2,533
242*	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 28	Apr. 23	814
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Jan. 19	Jan. 27	1,521
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Feb. 20	Feb. 24	1,094
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	†Dec. 15	†Dec. 27	2,072
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Apr. 13	Apr. 17	934
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Feb. 15	Mar. 26	983
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 20	Apr. 14	751
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	†Dec. 23	†Dec. 19	1,046
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 5	Mar. 2	1,011
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Feb. 18	Feb. 19	1,581
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Feb. 23	Feb. 28	979
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Feb. 14	Feb. 18	1,121
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 12	Feb. 9	1,694
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Apr. 8	Apr. 23	577
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 16	May 11	877
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	†Dec. 15	†Dec. 16	2,642
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 16	Mar. 18	1,254
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Feb. 16	Feb. 16	2,390
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Apr. 16	Apr. 15	893
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 2	June 1	829
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Jan. 3	Dec. 26	2,250
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Feb. 2	Feb. 5	1,501
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 20	May 8	537
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 5	Mar. 10	1,579
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Jan. 16	Jan. 27	3,161
125	11. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Mar. 30	Mar. 24	749
223*	42. CUTTING, H. O., Electric Signaling	Feb. 3	Feb. 2	1,441
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Feb. 19	Feb. 24	1,530
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Dec. 18	†Dec. 29	2,143
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Jan. 14	Jan. 14	2,114
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Mar. 4	Mar. 15	1,173
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Feb. 17	Feb. 17	2,129
212*	48. ROEPKE, O. B., Electricity, General Applications	Feb. 16	Feb. 17	1,129
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 15	Mar. 15	1,451
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 6	Jan. 6	2,550
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Jan. 6	Jan. 7	2,175
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Feb. 27	Feb. 28	1,449
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 9	Mar. 20	728
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	†Dec. 26	†Dec. 26	2,861
102	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	June 22	June 22	209
	55. BOWEN, S. T.—Designs	July 28	Aug. 1	213
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 20	Jan. 17	1,511
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Feb. 6	Feb. 28	821
270*	58. DOWELL, E. F., Abrading; Typewriting	Jan. 16	Jan. 16	1,560
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Mar. 4	Mar. 9	1,696
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Jan. 16	Jan. 22	1,880
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	†Dec. 30	Jan. 2	2,072
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers.	†Dec. 20	†Dec. 20	2,583
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 10	Jan. 15	2,300
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	July 18	Aug. 7	961
	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Labels and Prints	Aug. 7	Aug. 12	38

* Refers to room numbers in the annex.

CARNEGIE LIBRARY OF ATLANTA

DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

Ex parte Holmes

Decided May 28, 1928

Division—Electric Motors for Mining Machines and Mining Machines.

Division *Held* properly required between claims which, while mentioning a mining machine in the preamble, recite as elements only motor structure of general application and features of construction provided for preventing sparks produced by the motor from igniting surrounding gas, and claims which include not only the motor and its protective means, but also the cutting and feeding mechanism of the mining machine and frame structure of special use only with such a machine.

[This application has resulted in Patent No. 1,720,364, July 9, 1929.]

Appeal from Examiners in Chief.

Mr. H. H. Bliss and *Messrs. Cushman, Bryant & Darby* for the appellant.

Kinnan, *First Assistant Commissioner:*

Applicant has appealed from the decision of the Examiners in Chief affirming that of the Examiner requiring division between the group of claims 1 to 9, inclusive, and 16, directed to an electric motor structure and the group of claims 10 to 15, inclusive, drawn more specifically to a mining machine.

The following claims are illustrative of the two groups:

7. A mining machine having an electric motor, an enclosure therefor having flame-proof inlets and outlets communicating with the atmosphere, a main frame secured to said enclosure, power transmission means carried by said main frame and driven by said motor, enclosing chambers in said main frame disposed on opposite sides of said motor and communicating with said enclosure, a controller for said motor in one of said chambers, a resistance for the motor in another of said chambers, and conductors for said controller, resistance and motor.

10. A flame proof electric mining machine comprising an electric motor, control means therefor, cutting and feeding mechanism including transmission mechanism connected to said motor, said elements being so disposed and enclosed as to produce a substantially smooth surfaced machine body of substantially the cross section of the motor casing, and means for rendering said motor and said control means flame proof located substantially within the cross sectional limits of said body.

The history of this application reveals an unusual delay in its progress through this Office since it has been pending over thirteen years. It is thought the applicant should seek to promptly bring its prosecution to a close.

The disclosure of the application relates to a flame proof mining machine. It is to be observed that claim 7 and the other claims in the first group, although mentioning a mining machine in the preamble, recite as elements only motor structure of general application and those features of construction which are provided to prevent sparks produced by the motor from igniting gas which may surround the motor in the place where it is used, whereas claim 10 and the other claims of the second group recite not only the motor and its protective means, but also include the cutting and feeding mechanism of the mining machine and recite frame structure which is of special use only in a mining machine where it is desirable to confine the limits of the frame structure within the cross sectional area bounded by the coal cutting mechanism.

Appellant admits that the second group of claims contains limitations which might limit the field of search of these claims more narrowly than the first group, and that in such case a requirement for division so as to make it more convenient for the Office in searching such claims is quite proper where no injury may come to the applicant as a result thereof. However, appellant contends that in the present case the two groups of claims are so closely related that there is grave danger of a holding of double patenting should two applications be submitted and two patents issue.

Nevertheless, the additions of the elements and features of the second group of claims to those covered by the first group either do or do not involve invention. If they do involve invention that invention is sufficient to support a second patent and if they do not, applicant is not entitled to claims therefor over the allowable claims of the first group either in a separate application or in the present application. The patentability of the two groups of claims should accordingly be determined in separate applications more particularly as the structures claimed are separately classified in the Office and may well be said to have attained a distinct status in the art. It seems obvious the manufacturer of electric motors would not be likely to manufacture mining machines and the manufacturer of the latter would be quite likely to obtain the electric motors to be used with the mining machines from a separate manufacturer. It is fair to hold, therefore, the subject matter of the two groups of claims are structures of separate manufacture and sale.

The decision of the Examiners in Chief is affirmed.

U. S. Court of Customs and Patent Appeals

In re Schneider

No. 2,657. Decided March 31, 1931

Patentability—Adjustable Window Weight.

Claims for an adjustable window weight *Held* unpatentable over the prior art.

Appeal from the Patent Office. Affirmed.

Mr. Wallace R. Lane, Mr. William S. Hodges, and *Mr. Louis A. Bisson* for Schneider.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Bland, *J.:*

This is an appeal from the decision of the Board of Appeals of the Patent Office affirming that of the Examiner, rejecting claims 6 to 13 inclusive, being all of the claims in the application. The claims

were rejected for lack of invention over the prior art. Claims 7 and 10 are regarded as illustrative and follow:

7. A window sash weight comprising an elongated rectangular hollow body having an open top and having two sides with integral upper extensions, a pulley rotatably mounted across the open end of said body in said extensions, the opposite end of said body being open and having integral opposed extensions forming weight ledges and provided with means for the attachment of an extra weight thereto, one of the sides of said body having an elongated opening therein which is of less length and width than the corresponding dimensions of such side whereby to provide weight-retaining flanges extending longitudinally of the body, and said opening being of sufficient width with relation to the weights to be inserted to permit one or more of such weights to be angularly inserted through said opening and turned so as to rest horizontally upon the ledges or on preceding weights and to be retained in position with their opposed ends behind the retaining flanges.

10. A window sash weight comprising a hollow body having an opening in a vertical wall thereof, retaining flanges at the sides of said opening, weight elements adapted to be placed in said body through said opening, said elements being longer than the width of said opening whereby the ends of the weight elements extend behind said retaining flanges.

The references relied upon are: Dickinson, 1,463,877, August 7, 1923; Schneider, Reissue, 15,634, June 26, 1923; Reich, French, 385,916, April 2, 1908.

Appellant's application is for a patent for window weights which consists of a structure which is for the most part a hollow rectangular body, the top portion of which contains a wheel and pulley device. On one side of the rectangular body is an opening with flanges on the side of the same into which opening may be inserted the weight elements of different sizes. The object of the invention is to provide a means by which additional weights can be added to a window weight in order that it may be adjusted to sashes of different weights.

We agree with the decision of the Board that appellant's disclosure does not show invention over the prior art. The Dickinson and Schneider patents disclose everything disclosed by appellant except the retaining flanges and they are disclosed in the French patent to Reich.

Appellant complains because the Patent Office relied on Reich as a reference for the rejection of the flange feature of the claims. Reich's patent is for a box for the transportation or storage of briquettes. Appellant contends that the rejection of his claim upon Reich, which he regards as nonanalogous art, is contrary to the rule, and cites several authorities, discussion of which is not necessary here, and also cites *Potts* v. *Creager*, 155 U. S. 597, 70 O. G. 494. No point is made of the fact that Reich is a foreign patent, since it clearly discloses the flanges.

The applicant's device and the device of Reich are both containers for flat-sided, weighty articles. Both structures disclose a flange for facilitating the placing of objects in the container, and taking them out, and for holding them securely in position when in use. Both devices use the same kind of flange for the same purpose. The test here as to whether Reich is an objectionable reference under the nonanalogous-art rule would seem to be, is the patentable conception in Reich in an art so remote and nonanalogous to the concept in applicant's art as to require invention to make the necessary substitution. See *In re Voorhees*, 17 C. C. P. A. (Patents) 1162, 40 F.(2d) 773, 399 O. G. 7; *In re Burrows*, 17 C. C. P. A. (Patents) 1254, 40 F.(2d) 1011, 406 O. G. 564. The question also involves a consideration of how much change, if any, would be required in making the substitution.

In *Potts* v. *Creager*, supra, relied upon by the appellant, the Supreme Court of the United States said:

As a result of the authorities upon this subject, it may be said that, if the new use be so nearly anologous to the former one, that the applicability of the device to its new use would occur to a person of ordinary mechanical skill, it is only a case of double use, but if the relations between them be remote, and especially if the use of the old device proudce a new result, it *may* at least involve an exercise of the inventive faculty. Much, however, must still depend upon the nature of the changes required to adapt the device to its new use. (Italics quoted).

We conclude that no new and useful result is obtained by the substitution of the flanges of Reich in the window weight device of applicant and that such substitution involved no patentable invention.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE PROSSER

No. 2,669. Decided April 15, 1931

PATENTABILITY—HOSIERY DRYING AND SHAPING MACHINE. Claims for a hosiery drying and shaping machine *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Morrison, Kennedy & Campbell and *Mr. Harold Olsen* for Prosser.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

Appellant's alleged invention involved in this ex parte appeal from the decision of the Board of Appeals of the Patent Office, which decision affirmed the decision of the Examiner, relates to a hosiery drying and shaping machine in which drying forms are internally heated by steam coming through a conduit at the base of the form. The object of the invention is to facilitate "boarding" hose, after they have been knit and washed, so that they will dry while in the proper shape and be properly creased.

It has long been the general practice to "board" hose upon drying forms which were either directly heated by conducting heat into the forms or by heating the forms and stockings in a drying box.

The forms were so arranged that their sides were in alignment in the same vertical plane, that is to say, the toe of the form pointed in the direction of the conduit which presented the side of the foot of the stocking to the operator whose duty it was to place said wet stocking on the form, smooth out the creases and wrinkles and remove the stocking when dry.

The inventive feature claimed for appellant's device is in twisting the form about an axis passing through the form and its base. When applicant's device is used, the operator may easily see the front and back of the stocking and will have more room and less chance of being burned by the adjacent hot form while manipulating the stocking.

The drawing of the application indicates that the toe of the stocking projects outwardly from the drying frame, and the case is argued in this court as if this feature were part of the invention. The specification and claims, however, do not require that appellant's structure have the toe pointing outwardly. In view of our conclusion we regard this as being an immaterial matter.

The rejected claims all are drawn to cover the relative turn or twisting feature of the hose drying structure and claims 1 and 4 are regarded as illustrative and follow:

1. A hosiery-drying structure including a coupling-component and a drying and shaping-component, one component being turned relative to the other about an axis passing through both components.

4. A device of the class described including a hosiery-drying instrumentality twisted about its longitudinal axis.

The references relied upon by the board are Anthony, 550,470, November 26, 1895; Pease, 568,874, October 6, 1896; Upp, 1,106,260, August 4, 1914; Collis, 1,114,966, October 27, 1914; Reeps, 1,464,539, August 14, 1923. Anthony and Collis were the references relied upon by the Examiner.

We have very carefully considered the pertinency of the references and no useful purpose could be served by here describing and discussing them. It is sufficient to say that it is our opinion that the combined references disclose everything claimed or disclosed by applicant including the projection of the toe of the form outwardly. While it may be plausibly argued that no one reference discloses the entire disclosure of applicant, it is not thought that there was any patentable invention in taking certain features out of certain patents and combining them into another device.

We are, therefore, of the opinion that the references cited fully and completely anticipate applicant's claimed invention and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE LAVINTHAL

No. 2,598. Decided March 31, 1931

1. PATENTABILITY—PROCESS AND ARTICLE. It does not follow from the fact that an article is new and patentable that the process for making such article is also patentable.

2. SAME—METHOD OF MAKING RUBBER HEEL BLANKS. A method of making rubber heel blanks *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. H. C. Bierman for Lavinthal.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals affirming the decision of the Primary Examiner rejecting claims Nos. 1 to 5, inclusive, in appellant's application for a patent for an alleged invention relating to a method of making rubber heel blanks.

The claims are as follows:

1. A method of making rubber heel blanks which comprises placing a sheet of unvulcanized rubber composition in a mold, and vulcanizing under heat and pressure to form a unitary sheet having a plurality of heel blanks thereon.

2. A method of making rubber heel blanks which comprises placing a sheet of unvulcanized rubber composition in a two-part mold, and vulcanizing under heat and pressure to form a unitary sheet having a plurality of heel blanks thereon.

3. A method of making rubber heel blanks which comprises placing a sheet of unvulcanized rubber composition in a two-part mold, one of the parts having closely spaced heel blank cavities, and vulcanizing under heat and pressure to form a unitary sheet having a plurality of heel blanks thereon.

4. A method of making rubber heel blanks which comprises placing a sheet of unvulcanized rubber composition in a two-part mold, one of the parts having closely spaced heel blank cavities, and vulcanizing under heat and pressure to form a unitary sheet having a plurality of heel blanks thereon, said heel blanks projecting up from one side of said sheet.

5. A method of making rubber heel blanks which comprises placing a sheet of unvulcanized rubber composition in a two-part mold, one of the parts having closely spaced heel blank cavities, and vulcanizing under heat and pressure to form a unitary sheet having a plurality of heel blanks thereon, said heel blanks projecting up from both sides of said sheet.

The references are: Schweinert et al., 1,177,902, April 4, 1916; Lewis, 1,255,099, January 29, 1918.

Appellant's application discloses a method of manufacturing a plurality of shoe heel blanks from a sheet of unvulcanized rubber composition in a two-part mold. The method is stated concisely in the involved claims.

The patent to Schweinert et al., discloses a method for the manufacture of sheets of rubber washers in a two-part mold, and applying them to valves. The patentees stated in their specification that it was better to partially vulcanize the sheets of washers in the molds and to finish the vulcanizing process when the washers had been attached to the valve mechanisms.

The patent to Lewis discloses a process for manufacturing sheets of rubber articles. The process is not limited to any particular article. We quote from the patent:

An object of the invention is to provide an improved method of molding rubber goods, which involves applying a layer of uncured rubber to the peripheral face of a drum, which is provided with a plurality of shallow molds separated by relatively thin dividing walls, in applying pressure by windings of fabric, wire, or the like to the layer to force it into the molds, and in vulcanizing the rubber while thus held to the drum, the method being particularly characterized in that the layer of uncured rubber is heavily scored on its under face only as it is forced into said molds.

In affirming the decision of the Primary Examiner, the Board of Appeals said:

This application discloses a method of manufacturing sheets of multiple shoe heels of rubber. A sheet of sufficient thickness to form shoe heels is laid over and pressed into a multiple cavity mold plate, each cavity being of proper shape to mold one shoe heel. The molded sheet is then vulcanized in the multiple cavity mold. The thickness of the sheet of rubber is such as to finally leave a thin web of rubber extending over all the cavities, which web serves to connect all the molded heels in a convenient way for handling and shipping as a group.

Within the past few years the rubber heel industry has grown to be an important part of the rubber industry and it is shown by applicant in the record that sheets of connected rubber heels as prepared by his method are re-

garded as an advance in the art. As to this contention the question is presented, however, whether the actual invention is not fully represented by the article—a sheet of connected heels claimed elsewhere—rather than by a process of molding.

After careful consideration we find the method considered as a series of steps and as broadly set forth to be identical with the same steps disclosed in Schweinert and in Lewis. Lewis presses a sheet of rubber onto and into a multiple cavity mold by pressure applied to the rubber sheet. He vulcanizes it there and provides enough rubber so that all the articles are connected by a thin web into a self-sustaining sheet of articles. The articles produced are bodies for the tire patches and they are afterward to be separated into individual articles for use. They are flat articles not greatly different in form from a shoe heel. It is immaterial that an adhesive layer is afterward placed on the back of the sheet by Lewis. Schweinert follows the same series of broad steps.

The limitation in claim 5 that the heels project partly on both sides up from the sides of the connecting sheet is considered to be a matter of choice of design not involved in the method.

It may be, as argued by counsel for appellant, that the claimed method of manufacturing rubber heels has greatly reduced the cost of manufacture and is, therefore commercially successful. However, we are of opinion that the involved method was fully disclosed in the references and that appellant has done nothing more than to apply an old method to the manufacture of rubber shoe heels.

[1] Our attention has been called to the fact that appellant has been issued a patent for "heel-blank sheets" produced by the involved process. It is argued that, as appellant has produced a new and patentable article, he is entitled to a patent for the process by which that new article is manufactured. We are unable to agree with counsel for appellant in this respect.

[2] All that was necessary for appellant to do, and, in our opinion, all that he did do, in order to produce rubber shoe heels by the process disclosed in the references, was to design two-part molds of the size and shape desired. The old process, functioning substantially as it did in the references, has been put to a new use and has produced a new product. In view of these facts, appellant is not entitled to a patent for the involved process. *Brown et al.* v. *Piper*, 91 U. S. 37, 10 O. G. 417; *Lovell Mfg. Co.* v. *Carey*, 147 U. S. 623, 62 O. G. 1821; *In re Braselton*, 51 App. D. C. 31, 273 Fed. 759, 288 O. G. 431.

We concur in the views expressed by the Board of Appeals and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MURRAY

No. 2,643. Decided March 31, 1931

PATENTABILITY—BOILER WALL.

Claims for a boiler wall *Held* unpatentable as not involving invention over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Usina & Rauber and *Messrs. Milans & Milans* and *Mr. Benjamin T. Rauber* for Murray.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

The patent here sought is for alleged improvements in boiler structure. There are two claims at issue, Nos. 5 and 6, which read as follows:

5. A boiler wall structure of the character described comprising a multiplicity of rolled structural channel beams arranged flange to flange alongside one another and having separately formed U-shaped caps united to the edges of the channel flanges and nipples in the flanges of the channels adapted to establish communication between the chambers formed by said members.

6. A boiler wall structure of the character described comprising a multiplicity of rolled structural beams each having a rigid web and integral flanges substantially perpendicular thereto and separately formed caps united to the edges of the flanges and nipples establishing communication between the chambers formed by said members.

The claims were rejected by the Examiner whose decision was affirmed by the Board of Appeals of the Patent Office. Appeal was then taken to this court.

The references to prior art cited are: McClellon, 764,753, July 12, 1904; McClellon, 963,627, July 5, 1910; Murray, 1,186,222, June 6, 1916.

In its decision the board said:

Claims 5 and 6 are objectionable for the reason that they involve the limitation of an article claim by the method of making it. The article, as claimed, differs from the boiler fire wall disclosed in the patents to McClellon only in the fact that the tubes are made by welding together at their edges two forms of rolled structural material, such as a channel bar and a semitubular section. When so welded together the tube is no different from one which is formed from a tube having its sides flattened to produce abutting surfaces when brought together to form the fire wall. Such tubes are used in McClellon No. 963,627 (see page 1, lines 83 to 85) and it is stated in No. 764,753 that the tubes 12 may be made of various shapes in cross-sectional contour though it is preferred that this be square exteriorly. (See page 3, lines 11 to 14.)

If a claim were drawn to the method of making a tube by welding together the edges of two rolled structural elements it would be met by appellant's Patent No. 1,186,222, cited by the Examiner.

It is observed that McClellon in Patent No. 764,753 discloses a locomotive boiler with flat sided water tubes composing the sides of the fire box. The specifications state that the tubes "may assume various shapes in cross-sectional contour, although I prefer the tubes that are square exteriorly". A figure of the drawings shows tubes which are square both exteriorly and interiorly.

McClellon's Patent No. 963,627 is for a fire box for boilers which shows sections having curved sides joined by flattened sides. These are fitted together to form the walls. Nipples are shown which permit the water freely to circulate through the connected sections.

The reference patent to Murray relates to a method of electrical welding. In view of the fact that the claims in the present case do not mention welding this reference is not thought to have any particular pertinency here, but we are unable to see any error in the holding of the Board of Appeals which, in effect, is that appellant's tubes, when finished by having the separately formed U-shaped caps united to the edges of the channel flanges, do not present any differences of a patentable nature from McClellon's tubes flattened to produce abutting surfaces.

The decision of the board is, therefore, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE SYMONDS

No. 2,649. Decided March 31, 1931

PATENTABILITY—TRAWL DOOR.

Certain claims for a trawl door *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Mr. H. W. Kenway for Symonds.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

In this appeal is involved the right of appellant to a patent on five claims numbered 3, 8, 9, 10 and 11, for "improvements in trawl doors."

The claims being rejected by the Board of Appeals of the Patent Office, by an affirmance of the decision of the Examiner, appeal was taken to this court.

Two claims numbered 6 and 7 seem to have been allowed by the Examiner, and are not before us.

The alleged invention relates to doors such as are used for keeping the mouths of trawl nets open, and the principal feature here involved appears to be that of a door—

reversible in the sense that it can be readily adapted for use either as the right-hand or the left-hand door of a pair.

The claims read as follows:

3. A trawl door comprising a body portion having provisions for attaching a net thereto at either of its ends, and towing connections located on the front face of the body portion, said connections being reversible with respect to the ends of the door.

8. A trawl door comprising a body portion, a reinforcing structure secured to its back face, a towing bracket located on the front face of the body portion and connected through the latter to the reinforcing structure, said towing bracket being reversible with respect to the ends of the door, and provisions for attaching a net to the door at either of its ends.

9. A trawl door comprising a body portion, a reinforcing structure secured to its back face and extending to each of the four corners thereof, a towing bracket located on the front face of the body portion and connected through the latter to the reinforcing structure, said towing bracket being reversible with respect to the ends of the door, and provisions for attaching the net to the reinforcing structure at either of its ends.

10. A trawl door comprising a body portion, a reinforcing structure secured to its back face and including longitudinally-extending members located between the center line of the body portion and its upper and lower edges, respectively, and diagonal members diverging towards adjacent corners of the body portion, means for attaching a net to the diagonal members, and towing connections located on the front face of the body portion and attached directly to the longitudinal members of the reinforcing structure by connections passing through the body portion.

11. A trawl door provided with a shoe consisting of a metal plate attached at its upper edge to the lower edge of the door and having a cross-sectional curvature such that the greater portion of the shoe is located behind the rear face of the door, with its convex side presented to the direction of the forward movement of the door.

Three references are cited from the prior art: Halliwell et al., British, 15,501, Dec. 28, 1895; Fairweather et al., British, 2,455, Aug. 14, 1913; Waldie et al., British, 174,251, Jan. 26, 1922.

It is the contention of appellant that he is the first to devise and construct a trawl net door which may be used upon either the right or the left of the mouth of the net, with the necessary reinforcing structure properly arranged and attached to the door in a manner that enables the towing cable to be fastened to the bracket or brackets in whichever position (left or right) the door may be placed; that by so doing he has developed a device both useful and patentably novel; that, until the creation of his reversible doors, trawl doors have always been made in pairs, one for the left and one for the right; that in operation, the net being towed in such a manner as that it drags upon the sea bottom, there is rough usage which frequently causes one door of a pair to be torn away and lost; that this necessitates there being carried upon trawl using fishing vessels, as spares, a number of extra doors to replace any that may be lost; that they have heretofore had to be carried in pairs, but that now, by reason of his invention, it is necessary to carry, as spares, only half the number formerly essential; and that the arrangement of the shoe as provided in claim 11 "adapts the door to tip forward and ride over obstructions on the sea bottom"; all these things to the manifest advantage of the art.

The allowed claims are set out in appellant's brief and, from an examination of these, it does not appear that any patent has been granted upon the reversible feature of his doors, or the arrangement of the elements essential to render such reversal practical. The tribunals of the Patent Office held that the patent to Waldie:

shows a trawl door similar to appellant's but no extra holes were provided nor is any suggestion found in the specification that the cable connection could be shifted to the other end of the door to permit it to be employed on the opposite side of the net. There is no question but that this simple expedient is advantageous. We agree with the Examiner, however, that it is not a patentable difference.

This same patent shows longitudinal reinforcing ribs but these are upon the face of the door rather than upon the back, as called for by appellant's claim 10. Diagonal ribs also called for by claim 10, appear to be shown by Halliwell, but these also are on the front rather than the back.

The tribunals of the Patent Office felt that the peculiar, or particular, structure of the runners disclosed in claim 11 does not constitute invention, or, as the board expresses it, requires nothing "more than mechanical skill".

There can be no doubt, we think, about appellant having conceived and devised an arrangement of parts which has contributed a device of great value to the art of fishing. Its commercial success we understand to be virtually conceded.

It is true that these elements alone do not render the claims patentable. Invention must be present.

The Solicitor for the Patent Office cites us to the case of *In re Iwan*, 17 App. D. C. 566, 95 O. G. 441, wherein it was held that making a handle for a hay knife reversible on the head of the shank to which the blade is attached did not involve invention, the court saying:

The claims for which those patents [the references] were granted are substantially, though not in every particular, the same in mechanical construction, as the device described in claims 1, 2, 3, and 5 of this case. It is true there is some difference in form, and, in the two patents referred to it is not stated that the handle attachment is reversible. But to make the handle reversible on the head of the shank to which the blade of the knife is attached it is only necessary to * * *, and this

does not require anything more than ordinary mechanical ingenuity. * * *

* * *. There is nothing, therefore, patentable in the device of readjustment and reversible attachment of the handle on the shank of the knife so as to affect the manner of its operation as described by the appellant.

The Solicitor's brief then continues:

The only change in the Waldie et al. device necessary to make it completely anticipate claims 3 and 8 is to drill a few holes on the opposite side of the center line. The towing and the net attaching connections then became reversible with respect to the ends of the door because these connections are merely made by bolts through holes in the appropriate places.

This may be true, but the fact remains that appellant did drill the holes at the proper places and thereby made the doors reversible thus contributing a new arrangement which created a valuable device for use in a very ancient art.

It is quite simple, it is true, but many problems are simple after they have been solved.

In *Murphy Wall Bed Co. et al.* v. *Rip Van Winkle Wall Bed Co.*, 295 Fed. 748, 753, the validity of a patent to Murphy for a disappearing bed was upheld, the court saying:

His *lateral shift* was the simple improvement which revolutionized the art. (Italics ours.)

In *H. D. Smith & Company* v. *Peck, Stow & Wilcox Co.*, 262 Fed. 415, 416, 417, the Circuit Court of Appeals of the Second Circuit approved a patent for a screwdriver on account of "a particular structure and a particular shape" which "provided a firm grasp, while facilitating a nice control by pressure of the finger and thumb upon the shank of the tool".

In that case the court said:

Whether the structure involves invention is a question of fact, and the determining factor is not whether the achievement is difficult or easy, but whether it has, in point of fact, given the world something of real value, that it did not have—a benefit conferred upon mankind. *O'Rourke Engineering Const. Co.* v. *McMullen et al.*, 160 Fed. 933, 88 C. C. A. 115.

A quotation from the *O'Rourke* case is:

Has the patentee added anything of value to the sum of human knowledge; has he made the world's work easier, cheaper, and safer; would the return to the prior art be a retrogression? When the court has answered this question, or these questions, in the affirmative, the effort should be to give the inventor the just reward of the contribution he has made.

It must, of course, be understood, in construing the language last quoted that invention must be present. We understand the court to have laid down the quoted doctrine as a partial test of whether invention was present.

In *Kurtz et al.* v *Belle Hat Lining Co., Inc.*, 280 Fed. 277, 282, a patent for a hat lining "in which", as stated in the syllabus, "an uncovered cord is sewed between the crown piece and the side piece to produce an ornate seam," was upheld, "in view of its commercial success".

The court there said:

If we viewed this hat lining, or any hat lining, in the light of our own experience, it would appear trivial and unworthy the dignity of patent protection; but, looking at it through the evidence and (we hope) with the eyes of the hat lining trade, this patent represents a large and successful business. It is, in the minds of all those who deal in hat linings, of the utmost importance. No one ever made a lining of such simplicity, cheapness, and general adaptability as has Kurtz, and he has done it by mechanical means of winning simplicity * * *.

In *General Electric* v. *Sangamo*, 174 Fed. 246, 251, 98 C. C. A. 154, 159, the court said:

Invention, in the nature of improvements, is the double mental act of discerning, in existing machines or processes or articles, some deficiency, and pointing out the means of overcoming it.

It seems to us that what appellant here has done to aid in the art of trawl fishing meets the tests laid down in the several cases from which we have quoted, supra. Expressions in other cases might be cited, such as *Cincinnati Milling Machine Co.* v. *Oakley Machine Tool Company*, 268 Fed. 257; *Matrix Contrast Corporation et al.* v. *Kellar*, 34 F.(2d) 510, and cases therein referred to. Also *Eibel Co.* v. *Paper Co.*, 261 U. S. 45, 310 O. G. 3.

The features in claim 9, not shown in claims 3 and 8, are the arrangement of the towing brackets in reversible positions with respect to the ends of the doors, and also the arrangement of reinforcing means on the back face of the door, rather than the front, and connecting said reinforcing means with the towing bracket which latter is on the front face. Claim 10, as will be observed, also relates to reinforcing means with diagonal members, on the back rather than the front face of the door. All these arrangements seem to be necessary or, at least, important features in accomplishing the end sought—that is the creation of the reversible door.

Claim 11 relates solely to the shoe or runner with which the lower edge of the door is equipped. We agree with the tribunals of the Patent Office that this feature is more one of mechanical skill than of invention. The other features, we think, involve invention.

The decision of the Board of Appeals is modified, being reversed as to claims 3, 8, 9 and 10 and affirmed as to claim 11.

Modified.

U. S. Court of Customs and Patent Appeals

THE J. B. WILLIAMS COMPANY *v.* ERNEST W. WILLIAMS

No. 2,659. Decided March 31, 1931

1. TRADE-MARKS—FACSIMILE SIGNATURE—LIKELIHOOD OF CONFUSION.

"We do not think it can properly be held that the mere differentiation in the appearance of a name wrought by individual characteristics of handwriting can eliminate the confusion likely to arise by applying that written name, or a facsimile thereof, to goods of the same descriptive properties as those of another person to which the same name has been or is being applied."

2. SAME—SAME—WHEN REGISTRABLE.

"It seems to us that where one elects to make a technical trade-mark use of his own name, that name, for that purpose, becomes dissevered, as it were, from its owner's personality, and when he seeks to register it under a statutory enactment, it must be tested by precisely the same rules and principles which apply to all other technical trade marks."

3. SAME—SAME—LIKELIHOOD OF CONFUSION.

The facsimile signature of "E. W. Williams" *Held* not registrable as a trade-mark for soap in view of the prior use of the name "Williams" and "J. B. Williams" by the J. B. Williams Company.

APPEAL from the Patent Office. Reversed.

Mr. Arthur B. Jenkins, *Mr. Hubert Howson*, and *Mr. Theodore K. Bryant* for The J. B. Williams Co.

Mr. Clarence A. O'Brien, *Mr. Charles E. A. Smith*, and *Mr. Thomas E. Turpin* for Ernest W. Williams.

GARRETT, *J.*:

This appeal involves the right of appellee to register a facsimile of his own autographically produced name as a technical trade-mark under the Trade Mark Registration Act of 1905 as amended.

His application is to register "E. W. Williams", in the form of a facsimile produced from his own signature, for use as a mark on a cream, or lotion, to be used after shaving. Use of the mark is claimed since January 1, 1928.

Opposition is made by appellant who claims to have been engaged, through itself and predecessors, in the manufacture and distribution of "Williams'" shaving soap since about 1840, and of other lotions or articles used in connection with shaving for many years antedating appellee's entry into the field. Appellant alleges many registrations of the word "Williams'", the first being for shaving soap as far back as March 25, 1873.

The last registration cited is one for "After-Shaving Preparations" dated April 10, 1928.

It is stated that, in all, appellant has procured 21 registrations; that two of these embody the full name, "The J. B. Williams Company"; one shows the name of the Company in the possessive sense; seven are for the word "Williams" alone as a trade-mark, and that all the "Williams" marks "are applied in the possessive case as a name for the goods". Some of appellant's registrations appear to have been obtained under the "ten year" provision of the 1905 act.

The notice of opposition contains the usual allegations as to advertising, large sales, etc., and charges probability of confusion and injury to appellant.

The Examiner of Interferences sustained the opposition. Upon appeal his decision was reversed by the Assistant Commissioner and the matter is before us upon an appeal from the decision of the latter.

Admittedly, the goods are of the same descriptive properties.

In view of the fact that the respective marks of both parties have the word "Williams" as the clearly dominant and peculiarly noticeable part thereof, we take it there would be little or no hesitation in holding them to be similar, in the sense of the statute, except for two features:

First, the fact that appellee, E. W. Williams, creates his mark as a facsimile of one written with his own hand, thus giving to it a certain distinctiveness, or characteristic, not present in the mark of appellant; and,

Second, the fact that it is appellee's own name which he seeks to register.

As for the first there is this to be said:

A proviso of section 5 of the Registration Act of 1905 reads, in part:

* * * no mark which consists merely in the name of an individual, * * * not written, * * * in some particular or distinctive manner, * * * shall be registered under the terms of this act.

There is also a further proviso, reading:

That nothing herein shall prevent the registration of a trade-mark otherwise registrable because of its being the name of the applicant or a portion thereof.

The Assistant Commissioner held that in view of the fact that applicant's mark is a facsimile signature it is not deceptively similar to the mark of appellant, stating that a facsimile signature is regarded by the Patent Office as being the writing of an applicant "in some particular and distinctive manner."

The individuality inherent in the handwriting of each person is evidently regarded by the tribunals of the Patent Office as meeting the "particular or distinctive manner" requirement of the first proviso above quoted. *Ex parte Cross Co.* 1903 C. D. 23 and *Ex parte John H. Wilkins Co.*, 128 MS. Dec. 409, are cited.

Under the view which we take of this case it is not necessary here to pass upon the soundness of this position of the Patent Office tribunals. We incline to the opinion that it is correct and that the autographic forming of a name overcomes the general negation of the quoted proviso. But in cases like this we must look beyond that immediate question, and hence do not pass upon it here, as a matter standing alone.

The statute must be considered as a whole, and all parts of section 5 must be so construed together as to give them their proper force and effect.

We must, therefore, consider the provisos, already quoted, supra, not only in connection with each other, but in connection with that language of the section which relates to the resemblance of the marks. The text necessary for consideration here is accurately arranged in the Assistant Commissioner's decision and we take it therefrom.

That trade-marks * * * which so nearly resemble a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers shall not be registered: *Provided*, That no mark which consists merely in the name of an individual * * * not written * * * in some particular or distinctive manner * * * shall be registered under the terms of this act: * * * *Provided further*, That nothing herein shall prevent the registration of a trade-mark otherwise registrable because of its being the name of the applicant or a portion thereof.

[1] We do not think it can properly be held that the mere differentiation in the appearance of a name wrought by individual characteristics of handwriting can eliminate the confusion likely to arise by applying that written name, or a facsimile thereof, to goods of the same descriptive properties as those of another person to which the same name has been or is being applied.

The first proviso quoted, supra, is, of course, not limited to an applicant's own name. Any individual's name written in "some particular or distinctive manner" may be registered unless forbidden by other provisions of the law.

It is the last quoted proviso which deals specifically with the registration of an applicant's name, and that proviso contains the significant words, "otherwise registrable."

Obviously, these words imply that Congress did not intend to permit a person to register his own name under any and all circumstances.

We really assume that in order to register it under the general provisions of the Act of 1905 (not taking the "ten year" clause into account) it must be "written, printed, impressed, or woven in some particular or distinctive manner * * * ". Whether this

be true or not, we feel certain that it must not so nearly resemble a registered or known trade-mark, owned or used by another, as to cause confusion when applied to goods of the same descriptive properties.

No question is here made as to the validity of appellant's mark.

In considering cases like this we must bear in mind the legal distinction between the common law right of a person to use his own name in his own business and the statutory right to register it as a technical trade-mark.

Even the common law right of use has limitations as the courts have frequently declared.

A person may not use his own name in a manner which will deprive another of the same name of the goodwill of a business which the latter has established. *Rogers* v. *Rogers*, 11 F. 495.

Many authorities might be cited upon this point, but it is deemed unnecessary unduly to lengthen this opinion by so doing.

[2] It seems to us that where one elects to make a technical trade-mark use of his own name, that name, for that purpose, becomes dissevered, as it were, from its owner's personality, and when he seeks to register it under a statutory enactment, it must be tested by precisely the same rules and principles which apply to all other technical trade-marks.

[3] The goods of appellant and appellee being of the same descriptive properties and their marks of such close resemblance, appellant, as the prior user, has the right to oppose appellee's registration, and since we are sure confusion must inevitably result from appellee's use of his mark, its registration must be denied.

The decision of the Assistant Commissioner is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE COGSWELL

No. 2,662. Decided March 31, 1931

1. REISSUE—NEW MATTER.
   In determining whether certain amendments presented in a reissue application cover new matter the applicant may not rely upon a prior patent not specifically referred to in the original application.
2. SAME—SAME.
   "The statute has been so often construed, and its construction is so well understood, as that it is not deemed necessary to quote numerous authorities holding that a reissue must be limited to the same invention, and that new matter may not be introduced into a reissue specification."
3. SAME—SAME.
   Claims presented in a reissue application *Held* properly refused on the ground that they cover matter not disclosed in the original application for patent.

APPEAL from Patent Office. Affirmed.

Mr. Robert Cushman and *Mr. A. L. Bryant* for Cogswell.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

The Board of Appeals of the Patent Office sustained the action of the Examiner in denying the petition of appellant for the reissue of a patent and he has appealed to this court.

The application relates to improvements claimed to have been made in machinery for grading soles, taps, heel lifts, counters and other leather blanks used in the manufacture of shoes. It seems that such blanks are graded or classified according to the thickness of the thinnest part or spot.

Lacene Manufacturing Company is the assignee of appellant, who has died since his assignment of the claims in issue, and the application is being prosecuted in its behalf. This company is also the assignee of several patents heretofore issued to one E. A. Nichols, including one numbered 1,130,321, issued March 2, 1915, to which it is stated in the reissue application there were applied certain new features embodied in Patent 1,366,889 issued to Cogswell January 25, 1921.

It is this latter patent which it is sought to surrender and have reissued under petition filed October 24, 1921.

The several patents heretofore issued to Nichols and to Cogswell are for machines for grading the leather blanks referred to above, and some, at least, of them, as stated in the brief for appellant, contain the following elements:

(1) Detecting mechanism at the ingoing end of the machine for measuring successive blanks as they are fed through the machine and determining the thickness of their thinnest spots; (2) grading mechanism at or near the outgoing end of the machine for performing some grading operation upon the blanks in accordance with the thinness measurements determined by the detecting mechanism; and (3) setting or transmitting mechanism by which the thinnest measurements of the detecting mechanism are preserved and transmitted to the grading mechanism.

These elements are all present in the patent to Cogswell, reissue of which is here sought, and the essential feature for which the reissue is so sought is a claimed improvement which will admit a succeeding blank into the machine before the preceding blank has left the machine. Twenty-three claims are presented of which No. 1 may be taken as being fairly typical:

1. A machine of the kind described comprising grade detecting mechanism for detecting the grade of successive blanks of stock according to thickness; grading mechanism controlled in response to said grade detecting mechanism for utilizing the grade detection, means governing the admission of stock to said grade detecting mechanism; and *means to operate said admission governing means to admit a piece of stock to the detecting mechanism before a preceding piece of stock has left the grading mechanism.* (Italics ours.)

The matter alleged to have been in the patent but not covered by the claims thereof, and now claimed by the reissue application, is embraced in the clause which we have italicized.

In its decision the Board of Appeals said:

The claims on appeal are drawn to a machine having an essentially different mode of operation. They require a construction in which the succeeding piece of stock is admitted to the detecting mechanism before the preceding piece of stock has left the grading mechanism. They define an invention which not only is not disclosed in the patent but which is inconsistent with the patent disclosure. The rejection on the ground of new matter is deemed well founded.

The machine, improvements upon which are here involved, is a complicated one and difficult, if not impossible, of description, in a nontechnical manner.

The patent to Cogswell, reissue of which is sought so as to include the feature italicized in our quotation of claim 1, supra, which appellant insists was disclosed but not claimed in said patent, contains

in its specifications certain statements relating to the operation of the device as there patented, which is quoted in the brief of the Solicitor for the Patent Office, as follows:

As the marking devices and evening knives were at the rear of the machine, while the feeling and setting mechanism was at the front of the machine, it was most important that the gate actuating devices be accurately controlled so as to prevent a successive blank from entering the machine, until in the cycle of operations, the machine was ready to receive it and in condition to reset the marking and evening mechanism according to the grading of the new blank. My present invention accomplishes the result above briefly explained, and I provide means cooperating with the feeler mechanism to maintain the gate closed even after the blank has passed out of contact with the feelers, thus preventing the gate opening devices to be actuated to open the gate until the proper time and until the machine is ready to receive a successive blank.

* * * * * * *

It is important that this gate be maintained closed, after a piece of stock has been fed into the machine, *until the cycle of the machine including the setting of the marking of stamping mechanism and in case of an evening machine of the cutting knives as well, be allowed to perform their respective functions before the succeeding sole is fed into the machine.*

* * * * * * *

The gate controlling mechanism, as above described depends for opening and closing, as well as for the extent of throw or lift in the opening and closing action, upon the action of the shoe 44, and as it is desirable to adjust this shoe, longitudinally on the arm 34, for particular work, it frequently happens that, when short stock particularly is being fed through, the stock will be fed past the position of the shoe 44, permitting said shoe to drop and thereby opening the gate, before said stock has traversed the rest of the machine and received its stamping or grade marking, its cutting action, i. e., before the cycle of the machine has been completed, which cycle has been set by the action of the detector mechanism and the pawls and rack wheel in this type of machine. Under such circumstances, therefore, *the danger exists that a successive piece of stock being fed in as soon as the gate is opened, would strike the mechanism and detector while the preceding piece of stock was still being acted upon, and therefore the proper operation and function of the machine would be negatived or the parts damaged and broken.* To obviate this difficulty, and to enable the machine to operate upon short stock, thus making it more automatic and with the capacity for larger range of work, *I provide a device independent of the shoe 44 to control the gate opening operation.* (Italics ours.)

The Solicitor for the Patent Office urges before us that the feature of the claims in the reissue application, relating to "means to admit a piece of stock to the detecting mechanism *before* a preceding piece of stock has left the grading mechanism" (italics ours) is entirely inconsistent with, in fact directly contrary to, the statements which we have italicized in the quotation from the specifications, supra.

That the inconsistency so pointed out by the Solicitor for the Patent Office exists admits of no doubt. This appellant concedes. Also it is true that no claim of the patent is broad enough to include the feature now sought in the reissue application.

Appellant insists, however, that since the above quoted statements of the patent appeared in the *specifications* and not in the *claims* thereof, and were, in fact, erroneous, he is entitled, under the reissue statute, to have the alleged error of the specifications corrected and make the claim now presented.

It is admitted, as indeed it must be, that the Cogswell patent per se does not disclose the structure claimed in the application for reissue. However, that patent makes reference to certain patents for evening, grading and marking machines granted to Elmer P. Nichols, "such for example as Reissue No. 12,288, dated November 22, 1904, and No. 841,809, dated January 22, 1907." Also it states:

The object of the invention is to improve and perfect machines of this type, particularly with reference to the gate controlling and marker or stamp tripping mechanism, as shown in E. P. Nichols Patent, No. 1,104,378, dated July 31, 1914.

The Board, in its opinion, indicated, and the Solicitor for the Patent Office, in his brief and in oral argument, concedes that the reference to the Cogswell *patent* to the Nichols patents may be treated as bringing into the former such disclosures as were contained in the latter "to the extent that the original [Cogswell] patent gave an intimation of intention to include anything disclosed by Nichols". This includes the skiving, evening and marking devices as disclosed in these Nichols patents specifically referred to by their numbers in the Cogswell patent.

But Nichols patent, 1,130,321, was not mentioned in the Cogswell patent; it was brought into this proceeding for the first time in the reissue application. It is, therefore, insisted that it may not be treated as a part of the disclosures of the Cogswell patent for reissue purposes.

The brief of the Solicitor for the Patent Office says:

Of course, an inaccurate description of operation of a structure clearly disclosed in the original patent might be corrected in a reissue. Appellant now attempts to argue (brief p. 31–34), as to an alleged error in the Board's decision as to a "supposed *positive connection*" whereas the application now discloses a "yielding connection" taken from the Nichols patent No. 1130321, which disclosure was not in the original application for patent sought to be reissued and which Nichols patent was not mentioned therein. Had the original patent disclosed the structure now disclosed in the reissue, or not disclosing it, had it referred to Nichols patent No. 1130321 there might be some point to appellant's argument as to the difference between yielding and positive connections. If such structure [Cogswell] had been disclosed directly in the application, or indirectly by reference to a patent by number, a mere inaccurate description of its operation might be cured. But here the original patent neither directly nor indirectly disclosed what is in Nichols patent No. 1130321, and the "connection" therefrom which appellant has introduced into the present case to make it operate as he would now claim is, as stated by the Board of Appeals (R. p. 115), "inconsistent with the disclosure in appellant's patent."

That the feature of Nichols patent 1130321 now sought to be incorporated into this reissue application is inconsistent with the disclosure of appellant's patent is in harmony with the fact that appellant's patent mentions by number at least three Nichols patents upon which appellant's patent is supposed to be an improvement, but does not mention Nichols 1130321 now attempted to be incorporated as part of the disclosure of the reissue application.

Without the Nichols patent, 1,130,321, it seems obvious that the Cogswell patent does not make a disclosure sufficient to support the reissue claim as to the feature particularly sought.

[1] Assuming, without deciding, that if said patent, 1,130,321, has been specifically referred to in the Cogswell patent, it would be a sufficient disclosure to support the reissue claims, the specifications and drawings being altered, as the reissue application proposes, the question is presented, does the reissue statute admit of it now being introduced and considered for the purposes desired.

We are unable to see upon what theory this can be held permissible.

The pertinent portion of section 4916 of the Revised Statutes, 35 U. S. C. A., section 64, reads:

Whenever any patent is wholly or partly inoperative or invalid, by reason of a defective or insufficient specification * * * if the error has arisen by inadvertence, accident, or mistake and without any fraudulent or deceptive intention, the Commissioner shall * * *

cause a patent for the same invention and in accordance with the corrected specification to be reissued * * * but no new matter shall be introduced into the specification, nor in the case of a machine patent shall the model or drawings be amended except each by the other.

The patent, 1,366,889, granted to Cogswell, in so far as it relates to the feature of feeding stock by the impulse or impulses of the detecting mechanisms, was confined to admitting a piece after, and only after, a preceding piece had passed from the skiving, evening and marking parts of the machine.

We do not understand that this patent per se is claimed or conceded to be either "inoperative or invalid." In this proceeding, at least, it must be treated as complete and in exact accordance with the specifications, which are supported by the drawings, and the claims, all of which constitute its parts.

Had the Nichols patent, 1,130,321, been in the Cogswell application, and had it been given the construction now asked for it in this proceeding, obviously the patent into which said application would have ripened would of necessity have been different from that into which it did ripen. It could not have been for the *same invention*.

[2] The statute has been so often construed, and its construction is so well understood, that it is not deemed necessary to quote numerous authorities holding that a reissue must be limited to the same invention, and that new matter may not be introduced into a reissue specification. A decision of this court in *Morgan* v. *Drake et al.* 17 C. C. P. A. (Patents) 729, 36 F.(2d) 511, 393 O. G. 250, and cases therein cited, are in point.

Learned counsel for appellant has cited us to certain decisions of the Supreme Court of the United States, to wit: *Rubber Co.* v. *Goodyear* (9 Wall.) 76 U. S. 788, and *Eames* v. *Andrews*, 122 U. S. 40, 39 O. G. 1319.

These decisions are cited in support of appellant's proposition—

> that an invention which was inherent in the structure of the original patent, although not explicitly described, may be covered by reissue (*Rubber Co.* v. *Goodyear*); and that a structural and functional condition of common knowledge, although not described in the original patent, may be covered by reissue (*Eames* v. *Andrews*).

Accepting, without holding, these principles to be correct as abstract statements, nevertheless we cannot agree with counsel as to their applicability here.

[3] There is nothing in the Cogswell patent to show that the element now contended for was "inherent" therein, except upon the assumption that (*a*) Nichols, 1,130,321, showed it and that (*b*) Nichols, 1,130,321, was embraced in Cogswell by his general references. But, as has been stated, even if the assumption and the admission of the Nichols patent were proper, then that which would have been inherent would have been something different from what was patented and would not constitute the same invention.

As for the second phase of the proposition, that of common knowledge, surely there is nothing in this record to show that the principle of feeding a piece of stock, in the manner described, before the preceding piece had passed from the skiving operation was "a structural and functional condition of common knowledge." The device for doing this is the very thing upon which appellant here seeks patent and, so far as we are aware, was for the first time fully, specifically and definitely disclosed to the art in his reissue application.

The decision of the Board of Appeals being, in our opinion, without error is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

757,109, G. Gullbranson, Manufacture of new color lakes, D. C., S. D. N. Y., Doc. E 24/126, *The Chemical Foundation, Inc.*, v. *Ultro Chemical Corp. et al.* Decree for plaintiff (notice July 17, 1931).

1,025,170, C. D. Trussell, Loose leaf binder, appeal filed Feb. 4, 1931, C. C. A., 2d Cir., Doc. ——, *Trussell Mfg. Co.* v. *Wilson-Jones Co. et al.*

1,112,643, L. Muther, Device for setting eyelets in flexible material, D. C. Mass., Doc. E 743, *L. Muther* v. *United Shoe Machinery Co.* Mandate of C. C. A. received, case dismissed July 17, 1928.

1,122,011, J. E. Lilienfeld, Process and apparatus for producing Roentgen rays, D. C., S. D. N. Y., Doc. E 22/323, *The Chemical Foundation, Inc.*, v. *General Electric Co. et al.* Decree affirmed May 20, 1931.

1,140,299, C. M. Conradson, Automatic multiple spindle lathe, D. C., E. D. Wis. (Milwaukee), Doc. 1399, *J. T. Ryerson & Son* v. *Harley-Davidson Motor Co. et al.* Decree for plaintiff (notice June 29, 1931).

1,170,790, A. M. Weston, Serving device for eating-houses, filed July 13, 1931, D. C., S. D. Ohio, W. Div., Doc. E 766, *Mapleton Corp.* v. *The Smith-Kasson Co.*

1,180,159, I. Langmuir, Incandescent electric lamp, filed June 4, 1931, D. C., E. D. Pa., Doc. 6585, *General Electric Co.* v. *R. E. Tongue & Bros. Co., Inc.*

1,202,441, C. W. Small, Protective mat for use with automobiles, D. C. Mass., Doc. E 1887, *C. W. Small* v. *S. S. Kresge Co.* Dismissed, rule 57, Sept. 28, 1925.

1,206,044, D. G. Smart, Rope clamp, filed July 10, 1931, D. C., S. D. N. Y., Doc. E 60/400, *J. R. Kearney Corp.* v. *Burndy Engineering Co., Inc.*

1,213,401, F. A. Neveu, Radiator supporting frame, D. C., S. D. Calif., C. Div., Doc. E R–95–J, *F. A. Neveu* v. *Chrysler Corp. et al.* Decree for defendant July 2, 1931.

1,258,423, F. Lowenstein, Variable electrical apparatus, filed July 11, 1931, D. C., S. D. N. Y., Doc. E 60/401, *Scovill Mfg. Co.* v. *General Instrument Corp.*

1,264,740. G. L. Young, Frying apparatus, C. C. A., 1st Cir., Doc. 2453, *A. & E. Pitman Mfg. Co., Inc.*, v. *J. C. Pitman et al.* Decree affirmed (notice June 30, 1931).

1,273,635, I. L. Long, Transmission for automobiles, filed June 22, 1931, D. C. Ill. (Peoria), Doc. E 1024, *I. L. Long* v. *W. W. Ingram.*

1,274,480, O. F. Werner, Fuel product and process of making, filed June 29, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2954, *O. F. Werner* v. *East Bay Coal Co.*

1,277,750, J. A. Pearce, Flotation process and apparatus, D. C. Colo. (Denver), Doc. 9178, *J. P. Ruth, jr.*, v. *Sterns-Rogers Mfg. Co.* Claims 1 and 2 held infringed July 2, 1931.

1,331,884, G. Sundback, Sheet metal forming and setting machine, filed July 30, 1931, D. C. Conn. (New Haven), Doc. E 2134, *Hookless Fastner Co.* v. *G. E. Prentice Mfg. Co.*

1,371,413, W. P. Devine, Spectacle, D. C. Mass., Doc. E 1763, *G. E. Hills* v. *Federal Optical Co.* Dismissed Dec. 5, 1923.

1,373,748, N. M. Lower, Screw conveyer, filed July 9, 1931, D. C., E. D. Va. (Norfolk), Doc. 233, *The Standard Stoker Co., Inc.*, v. *Berkley Machine Works & Foundry Co., Inc.*

1,377,040, J. Whitaker, Check printing and scarifying machine, filed Aug. 10, 1930, D. C. Conn. (New Haven), Doc. E 2074, *Safe Guard Corp.* v. *Victor Check Writer Mfg. Co.*

1,398,481, C. C. Worthington, Gang lawn mower, filed Mar. 20, 1931, D. C., E. D. Pa., Doc. 6471, *Worthington Mower Co.* v. *T. L. Gustin (Philadelphia Toro Co.).*

1,423,956, Mitchell and White, Tipless incandescent lamp, filed June 9, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U–19–H, *General Electric Co.* v. *International Trading Co. et al.* Same, filed June 3, 1931, D. C., E. D. N. Y., Doc. 5523, *General Electric Co.* v. *Eagle Electric Co., Inc.*

1,426,143, E. J. Bliss, Device for measuring feet, D. C. Mass., Doc. E 1765, *Regal Shoe Co.* v. *Clarke-Emerson Mfg. Co.* Decree affirmed Dec. 31, 1928.

1,447,090, J. E. Langsdorf, Necktie, D. C., S. D. N. Y., Doc. E 60/232, *Franc Stohmenger & Cowan, Inc.*, v. *H. Spiegel et al.* (*Spiegel Bros.*). Consent decree for plaintiff (notice July 9, 1931).

1,475,980, O. Zerk, Lubricating apparatus, D. C. Mass., Doc. E 2854, *The Bassick Mfg. Co.* v. *U. S. Screw & Stamping Co.* Consent decree for injunction July 9, 1928.

1,507,892, C. D. Parks, Treated fur and art of treating same, appeal filed July 1, 1931, C. C. A., 2d Cir., Doc. 11,575–6–7, *American Hatters & Furriers Co., Inc.*, v. *Danbury & Bethel Fur Co. et al.*

1,517,018, C. R. Seaborne, Paper making machine, filed July 14, 1931, D. C., W. D. Wis. (Madison), Doc. E 1823, *American Lakes Paper Co.* v. *Nekoosa-Edwards Paper Co.*

1,526,982, E. W. Hill, Stencil sheet, filed May 28, 1931, D. C., E. D. Pa., Doc. 6575, *A. B. Dick Co.* v. *Rapid Stencil Co. et al.* Same, filed Aug. 10, 1929, D. C. Conn. (New Haven), Doc. E 2019, *A. B. Dick Co.* v. *Whitlock's Book Store, Inc.* Doc. E 2020, *A. B. Dick Co.* v. *The Gustave Fisoher Co.*

1,529,912, J. V. Peacock, Pulling machine, D. C., S. D. Ohio, W. Div., Doc. E 432, *The Houston Mfg. Co. et al.* v. *Clyde Iron Works Sales Co.* Claims 1, 2, and 5 held valid and infringed, claims 4 and 7 held invalid and, by consent of parties, cause dismissed (notice July 1, 1931).

1,533,858, L. A. Hazeltine, Method and means for neutralizing capacity coupling in audions, filed May 5, 1931, D. C., E. D. Pa., Doc. 6549, *Hazeltine Corp.* v. *A. Atwater Kent.*

1,538,128, J. G. Maclaren, Power control device for pneumatic despatch system, D. C. Mass., Doc. E 2451, *The Lamson Co.* v. *G. & G. Atlas Systems, Inc.* Consent decree dismissing bill without prejudice Mar. 18, 1930.

1,577,752, J. T. Price, Elastic garment, filed May 25, 1931, D. C., E. D. Pa., Doc. 6563, *Horn Surgical Co.* v. *Hastings & McIntosh Truss Co.*

1,605,144, C. F. Reuter, Grouser for tractors, filed July 13, 1931, D. C. Mass., Doc. E 3436, *C. F. Reuter* v. *P. I. Perkins Co.*

1,648,820, F. E. Phillips, Reversing mechanism for machine tools, D. C., S. D. Ohio, W. Div., Doc. E 741, *F. E. Phillips* v. *Cisco Machine Tool Co.* Consent decree for dismissal July 1, 1931.

1,666,015, G. W. Land, Tank cleaning apparatus, filed June 24, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2952–L, *G. W. Land et al.* v. *H. D. Southwick* (*Pyrate Products Co.*) *et al.*

1,690,723, M. S. Frankle, Deflector for motor vehicle hot-air heaters, filed June 17, 1931, D. C., S. D. Iowa (Des Moines), Doc. E 4400, *N. C. Barnes et al.* v. *Sears, Roebuck & Co.*

1,694,702, B. B. Deitel, Vanity case, D. C., E. D. N. Y., Doc. 5511, *B. B. Deitel* v. *M. Seiderman.* Consent decree for plaintiff June 11, 1931.

1,696,954, F. L. Hayes, Tank truck, appeal filed June 27, 1931, C. C. A., 2d Cir., Doc. 11,574, *C. H. Bickell et al.* v. *Smith-Hamburg-Scott Welding Co.*

1,708,878, M. Goldberg, Bed spring guard, filed June 4, 1931, D. C., E. D. N. Y., Doc. 5527, *M. Goldberg* (*Safety Edge Spring Bed Co.*) v. *I. Fishman et al.*

1,710,906, F. L. Van Weenen, Guide cover for slicing machines, filed July 6, 1931, D. C., S. D. Ohio, W. Div., Doc. E 763, *U. S. Slicing Machine Co.* v. *A. H. Sheff.*

1,712,722, C. C. Worthington, Gang lawn mower, filed Mar. 20, 1931, D. C., E. D. Pa., Doc. 6473, *Worthington Mower Co.* v. *T. L. Gustin* (*Philadelphia Toro Co.*).

1,717,760, W. J. Charnley, Feed mixer, filed July 11, 1931, D. C., M. D. Pa., Doc. 837, *W. J. Charnley* v. *Sprout, Waldron & Co., Inc.*

1,728,924, M. Buchsbaum, Hosiery, filed June 26, 1931, D. C., S. D. N. Y., Doc. E 60/280, *Gotham Silk Hosiery Co., Inc.*, v. *Bonwit Teller & Co., Inc.* Same, filed July 2, 1931, D. C., S. D. N. Y., Doc. E 60/316, *Gotham Silk Hosiery Co., Inc.*, v. *Wise Shoes, Inc.* Doc. E 60/317, *Gotham Silk Hosiery Co., Inc.*, v. *Shoecraft Shops, Inc.* Same, filed July 15, 1931, D. C., S. D. N. Y., Doc. E 61/30, *Gotham Silk Hosiery Co., Inc.*, v. *Arnold Constable & Co.* Same, filed July 16, 1931, D. C., S. D. N. Y., Doc. E 61/44, *Gotham Silk Hosiery Co., Inc.*, v. *C. Weill et al.* (*Weill & Hartman*).

1,737,885, M. Hirschman, Light-proof window closure, filed June 10, 1931, D. C., E. D. N. Y., Doc. 5542, *M. Hirschman* v. *Bar-Ray Products, Inc.*

1,749,055, G. W. Ackerman, Door attachment, filed June 26, 1931, D. C., S. D. N. Y., Doc. E 60/279, *G. W. Ackerman* v. *Home Protector Device Corp.*

1,753,310, H. O. Costello, Exercising ball and support therefor, D. C. R. I., Doc. 365, *H. O. Costello et al.* v. *The Shepard Co.* Decree for injunction July 9, 1931. Same, filed July 16, 1931, D. C. Mass., Doc. E 3438, *H. O. Costello et al.* v. *M. M. Israel* (*Ace Leather Goods Co.*).

1,753,634, L. C. Wolfe, Carburetor, filed Apr. 1, 1931, D. C., E. D. Pa., Doc. 6497, *American Carburetor Improvement Co.* v. *Buick Motor Co. et al.*

1,768,715, Hopp & Hopp, Price ticket holder, filed June 3, 1931, D. C., E. D. N. Y., Doc. 5522, *The Hopp Press, Inc.*, v. *J. Freeman, Inc., et al.*

1,769,836, W. G. Holmes, Water feed control, filed June 25, 1931, D. C., E. D. N. Y., Doc. 5549, *Kny-Scheerer Corp.* v. *American Sterilizer Co. et al.*

1,773,146, H. F. Kellogg, Wing nut, filed July 9, 1931, D. C. Conn. (New Haven), Doc. E 2136, *Central Screw Co.* v. *Carling Tool & Machine Co., Inc.* Doc. E 2187, *Central Screw Co.* v. *The Gerdis Corp., Inc.*

1,776,637, J. Ostermeier, Flash lamp, filed June 3, 1931, D. C., E. D. N. Y., Doc. 5524, *Hauser & Co.* v. *Eagle Electric Mfg. Co., Inc.*

1,778,196, W. S. Nutter, Pile fabric and method of making, filed May 29, 1931, D. C., E. D. Pa., Doc. 6579, *Sanford Mills* v. *Collins & Aikman Corp.*

1,780,515, H. Berlin, Braided waved braid, D. C., S. D. N. Y., Doc. E 57/49, *H. Berlin* v. *Neidich Cel-Lus Tra Corp.* Dismissed July 20, 1931.

1,786,969, C. Van Der Heuel, Hair drying apparatus, D. C., E. D. N. Y., Doc. 5413, *C. Van Der Heuel* v. *M. Hirschfeld et al.* Decree for plaintiff June 8, 1931.

1,787,186, J. A. Barkelj, Inlet manifold for straight-eight internal-combustion engines, filed July 2, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U–38–C, *J. A. Barkelj* v. *E. C. Anthony, Inc., et al.* Same, filed July 16, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U–50–C, *J. A. Barkelj* v. *Howard Automobile Co. et al.*

1,791,175, W. E. Tomlinson, Feeding device, filed July 14, 1931, D. C., E. D. Mich., S. Div., Doc. 4871, *W. E. Tomlinson v. Sears, Roebuck Co.*

1,795,772, J. C. Goosman, Dual effect compression method and apparatus for producing carbon dioxide snow, filed Apr. 30, 1931, D. C., E. D. Pa., Doc. 6531, *Solid Carbonic Co., Ltd.*, v. *Publicker Commercial Alcohol Co. et al.*

1,796,600, E. H. Hammond, Fender curtain for automobiles, filed May 27, 1931, D. C., E. D. Pa., Doc. 6573, *Persons Majestic Mfg. Co. v. Vatco Mfg. Co., Inc.*

1,800,335, S. Battilani, Shoe tree, filed June 26, 1931, D. C., S. D. N. Y., Doc. 60/281, *S. Battilani v. Saks & Co., Inc.*

1,801,545, G. A. Dunn, Jogging mechanism for tying machine, filed July 1, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2956–S, *Eby Mfg. Co. v. International Wood Products Co.*

1,807,697, G. A. Lyon, Cover for spare tires for automobiles, filed July 7, 1931, D. C., N. D. Ohio, E. Div., Doc. E 3876, *Lyons, Inc., et al. v. Wheeler Metal Products Co.* Doc. 4847, *Lyon, Inc., et al. v. Herron-Zimmers Moulding Co.* Doc. 4848, *Lyon, Inc., et al. v. Ryerson & Haynes.*

1,831,967, L. J. Antonsen, Paper excelsior machine, filed July 14, 1931, D. C., N. D. Ohio, E. Div., Doc. 3880, *L. J. Antonsen et al. v Winter Paper Stock Co.*

Re. 17,213, H. W. Carlogh, Hair waving pad, filed June 29, 1931, D. C., S. D. N. Y., Doc. E 60/292, *Keen Mfg. Corp. v. Chaney Products, Inc., et al.* Ssme filed July 17, 1931, D. C. R. I., Doc. E 372, *Keen Mfg. Corp. v. Ruth Mfg. Co.*

Re. 17,323, R. D. Davies, Process of facing the cutting edges of drilling tools, D. C., S. D. Calif. (Los Angeles), Doc. E T–104–J, *P. L. & M. Co. v. F. A. Bell.* Decree pro confesso, injunction issued June 26, 1931.

Re. 17,672, W. O. Prouty, Display sign, D. C., S. D. Calif. (Los Angeles), Doc. E U–24–J, *Metlox Corp., Ltd.*, v. *Neon Sign Co. et al.* Patent held valid and infringed July 10, 1931.

Des. 80,389, M. M. Michelin, Container for powder, filed July 20, 1931, D. C., S. D. N. Y., Doc. E 61/67, *Pinaud, Inc.*, v. *Pierre Dumonde, Inc., et al.*

Des. 83,403, H. N. Kirschner, Cap, filed July 14, 1931, D. C., S. D. N. Y. Doc E 61/27, *New York Advertising Cap Co. v. Advertising Cap Co.*

Des. 83,706, I. D. Stokes, Textile fabric, filed July 9, 1931, D. C. Mass., Doc. E 3434, *Otis Co. v. Royal Textile Co., Inc.*

Interference Notices

U. S. PATENT OFFICE, *Washington, Aug. 6, 1931.*

Michael Nicoletti, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of Albert L. Raven, care of Raven Screen Corporation, 1476 Broadway, New York, N. Y., and Michael Nicoletti, 147 South Street, Plainville, Mass., and the Office having been unable to secure service upon said Nicoletti, notice is hereby given that unless said Nicoletti, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 18, 1931.*

Joseph B. Lievre, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted March 20, 1928, No. 1,663,345, to Joseph Benjamin Lievre, of Probador de Maquinas, Aviacion Nacional, Mexico-D. F., Mexico, and an application for patent filed by Calvin C. Williams, of Asylum Pike, East of Rising Sun Avenue, Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Lievre at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Lievre, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Aug. 5, 1931.*

Samuel B. Abbott, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, 63 Leon Street, Boston, Mass., to effect the cancellation of the trade-mark registration of Samuel B. Abbott, of 1115 Third Avenue North, Columbus, Miss., No. 178,387, dated January 8, 1924, and the notice of such proceeding sent by registered mail to the said Abbott at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Abbott, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 5, 1931.*

Theodore H. Froehlich, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Bourjois, Inc., of 35 West 34th Street, New York, N. Y., to effect the cancellation of the trade-mark registration of Theodore H. Froehlich, of 256 West 73d Street, New York, N. Y., No. 86,398, dated May 7, 1912, and the notice of such proceeding sent by registered mail to the said Froehlich at the said address having been returned by the post-office as undeliverable notice is hereby given that unless said Froehlich, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 8, 1931.*

The Golf Ball Corporation of America, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The General Tire & Rubber Company, of Akron, Ohio, to effect the cancellation of the trade-mark registration of The Golf Ball Corporation of America, of 79 Wall St., New York, N. Y., No. 203,500; dated September 22, 1925, and the notice of such proceeding sent by registered mail to The Golf Ball Corporation of America, at the said address, and also at Wilmington, Del., another address of record, having been returned by the post office as undeliverable, notice is hereby given that unless said The Golf Ball Corporation of America, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 1, 1931

[VOL. 410. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 316,434. WILLIAM C. KINO, San Antonio, Tex. Filed June 29, 1931.



For Flowers, Plants, Shrubs, and Trees.
Claims use since Dec. 19, 1928.

Ser. No. 316,859. HERCULES POWDER COMPANY, Wilmington, Del. Filed July 10, 1931.

HERCULES

For Purified Cotton Linter Pulp Whether in Loose Form or Sheet Form, Also Known as Cottonseed Hull Shavings Pulp, and as Bleached Cotton Linter Pulp.
Claims use since Apr. 2, 1931.

Ser. No. 316,860. HERCULES POWDER COMPANY, Wilmington, Del. Filed July 10, 1931.



For Purified Cotton Linter Pulp, Whether in Loose Form or Sheet Form, Also Known as Cottonseed Hull Shavings Pulp, and as Bleached Cotton Linter Pulp.
Claims use since Apr. 2, 1931.

Ser. No. 317,328. OLD BEN COAL CORPORATION, Chicago, Ill. Filed July 25, 1931.

HAWKEYE

For Coal.
Claims use since May 15, 1931.

Ser. No. 317,401. THE OHIO LEATHER COMPANY, Girard, Ohio. Filed July 28, 1931.

WASHETTE

For Leather.
Claims use since June 25, 1931.

CLASS 2

Receptacles

Ser. No. 305,086. PEERLESS STAMPING COMPANY, Detroit, Mich. Filed Aug. 27, 1930.

THE "UNIK" CAN

The words "The" and "Can" are expressly disclaimed except in the association shown.
For Metallic Cans for Containing Liquids.
Claims use since Mar. 8, 1930.

Ser. No. 314,847. STANLEY E. GUNNISON, New York, N. Y. Filed May 21, 1931.

TUBE TRAY

Applicant disclaims the use of the words "Tube Tray" apart from the mark as shown.
For Collapsible Tube Trays.
Claims use since May 7, 1931.

Ser. No. 316,334. THOMAS M. ROYAL & Co., Philadelphia, Pa. Filed June 26, 1931.

"Sell-O-face"

For Bags of Paper and Other Cellulosic Material.
Claims use since Nov. 1, 1930.

Ser. No. 316,335. THOMAS M. ROYAL & Co., Philadelphia, Pa. Filed June 26, 1931.

"Display-O"

For Bags of Paper and Other Cellulosic Material.
Claims use since Nov. 1, 1930.

Ser. No. 316,555. CYCLONE FENCE COMPANY, Waukegan, Ill. Filed July 2, 1931.

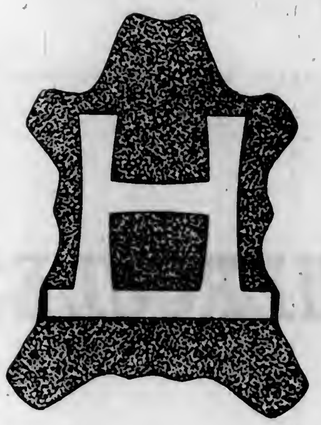
Burnit Basket

No exclusive trade-mark right is claimed for the word "Basket" separate and apart from the combination shown.
For Wire Baskets.
Claims use since May 18, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 313,849. HAGERSTOWN LEATHER CO., INC., Hagerstown, Md. Filed Apr. 27, 1931.



For Leather Bill Folds, Leather Key Cases, Visiting Card Cases, Leather Brief Cases, Leather Portfolios, Leather Wallets, Leather Pass Cases, and Leather Purses.
Claims use since Feb. 1, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 275,946. DIXIE CHEMICAL PRODUCTS CO., INC., Birmingham, Ala. Filed Nov. 28, 1928.

DIXICO

For Non-Saponifying Washing Powder.
Claims use since 1925.

Ser. No. 307,141. GILDARDO MAGANA, Mexico, D. F., Mexico. Filed Oct. 24, 1930.



Applicant disclaims the right to the exclusive use of the words "Jabon Para el Cabello" apart from the trade-mark as shown in the drawing, and the applicant disclaims the representation of a label appearing on the drawing. The representation of a male figure appearing on the drawing is fanciful.
For Toilet Soap.
Claims use since Aug. 29, 1929.

Ser. No. 316,057. FREDERICK STEARNS & COMPANY, Detroit, Mich. Filed June 19, 1931.

STEARNIZE

For Germicidal Detergent Soap for Rendering the Hands Surgically Sterile.
Claims use since June 10, 1931.

Ser. No. 317,186. EDWARD A. WELTERS, doing business as Welters Mfg. Co., Jacksonville, Fla. Filed July 21, 1931.

LOV-KIS

For Soap.
Claims use since Oct. 1, 1929.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 290,148. ST. LOUIS CARBONIC ICE CO., St. Louis, Mo. Filed Sept. 23, 1929.

IMPORICE

For Liquid and Solid Carbon Dioxide.
Claims use since Sept. 6, 1929.

Ser. No. 310,179. KOPPERS PRODUCTS COMPANY, Pittsburgh, Pa. Filed Jan. 20, 1931.

KOPPERS
FLOTATION SULPHUR

No claim is made to the exclusive use of the words "Flotation" and "Sulphur" apart from the mark shown in the drawing. Applicant is the owner of registered Trade-Mark No. 270,852.
For Sulphur.
Claims use since Jan. 24, 1930.

Ser. No. 315,390. THE C. B. DOLGE COMPANY, INC., Westport, Conn. Filed June 4, 1931.

DIWORMA

For Chemical Prepared Especially for Use on Putting Greens to Banish the Worm Nuisance.
Claims use since October, 1930.

Ser. No. 315,916. GEORGE E. MILLIMAN, doing business as Lunnette Products Co., Rochester, N. Y. Filed June 16, 1931.

Lunnette

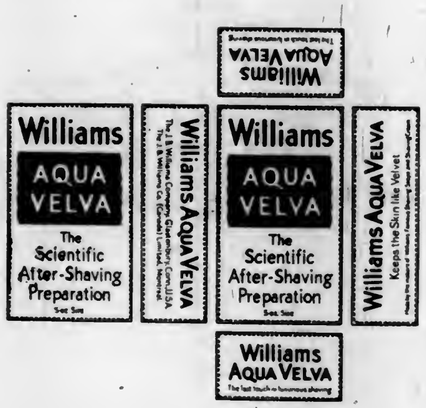
For Cold Cream, Vanishing Cream, Hand Lotion, and Massage Cream.
Claims use since May 12, 1931.

Ser. No. 316,266. HART DRUG CORPORATION, Miami, Fla. Filed June 25, 1931.

CutAseptTo

For Ointment for Skin Infections.
Claims use since May 29, 1931.

Ser. No. 316,307. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn. Filed June 25, 1931.



Applicant is the owner of registered Trade-Mark No. 240,746. The drawing herein represents the several sides of a carton, the front and back sides bearing a panel in red color with the words "Aqua Velva" in white thereon. A narrow white line extends around the panel with dashes in white at each end of the panel. A straight line around each side of the carton at the margin is of red color and the lines of scallops adjacent the straight line are also of a red color. The words "5-oz. size" on the front and back faces are also of the same red color. The entire lettering on the several faces of this carton is of blue with the exception of the letters comprising the words "Aqua Velva." The background of the entire carton is of a cream color. Without waiving any common-law or statutory rights no claim is hereby made to the exclusive use of the representation of the carton or any wording, with the exception of the color in which the lettering and panel are displayed, and with the exception of the words "Williams Aqua Velva," and "The J. B. Williams Company," and "The J. B. Williams Co. (Canada) Limited" apart from the mark shown in the drawing.
For After-Shaving Preparations.
Claims use since Dec. 20, 1923.

Ser. No. 316,349. VITALAIT LABORATORY OF CALIFORNIA, LTD., Pasadena, Calif. Filed June 26, 1931.

GASTRICON

For Preparation of Whole Stomach Tissue for Use in the Treatment of Anemia.
Claims use since Jan. 30, 1931.

Ser. No. 316,380. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed June 27, 1931.

CERANINE

For Dyestuffs, Lakes, and Chemical Products Suitable for Dyeing Purposes.
Claims use since Apr. 19, 1929.

Ser. No. 316,381. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed June 27, 1931.

PRINTOGEN

For Dyestuffs, Lakes, and Chemical Products Suitable for Dyeing Purposes.
Claims use since Nov. 26, 1926.

Ser. No. 316,382. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed June 27, 1931.

RESOLINE

For Dyestuffs, Lakes, and Chemical Products Suitable for Dyeing Purposes.
Claims use since June 20, 1931.

Ser. No. 316,383. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed June 27, 1931.

THIOTAN

For Dyestuffs, Lakes, and Chemical Products Suitable for Dyeing Purposes.
Claims use since June 6, 1930.

Ser. No. 316,435. LAMBERT CHEMICAL COMPANY, INC., Washington, D. C. Filed June 29, 1931.

PHOS-PHANE

For Preparation for the Treatment of Constipation.
Claims use since September, 1930.

Ser. No. 316,439. M. & M. PHARMACAL CO., Philadelphia, Pa. Filed June 29, 1931.

MODET

For Preparation for Relieving Menstrual Pain.
Claims use since Jan. 12, 1931.

Ser. No. 316,487. HOSPITAL PRODUCTS CORPORATION OF AMERICA, Pleasantville, N. J. Filed June 30, 1931.

MEN-KOL

For Salve for Treatment of Rheumatism, Arthritis, Lumbago, Backache, Sciatica, Sprains, Swollen Joints, Sore Muscles, Aching Feet, Chilblains, Sunburn, Burns and Scalds, Cuts and Wounds, Varicose Veins.
Claims use since March, 1929.

Ser. No. 316,495. MARINE CHEMICALS COMPANY, LTD., San Francisco, Calif. Filed June 30, 1931.

M·C·

For Antacid Laxative Comprising a Suspension of Hydrate of Magnesia in Water and Having a Milk White Appearance and also known Pharmaceutically as Magnesia Magma.
Claims use since March, 1931.

Ser. No. 316,552. CENTRAL CHEMICAL COMPANY, INC., Hagerstown, Md. Filed July 2, 1931.

BARFLOX

For Insecticide.
Claims use since June 2, 1931.

Ser. No. 316,612. MARIANO PICARDI, doing business as Gastom Chemical Company, Newark, N. J. Filed July 3, 1931.

GASSUP

For Digestant, Antacid, and Laxative Compound.
Claims use since May 1, 1931.

Ser. No. 316,628. CHAMPION SOAP CO. INC., New York, N. Y. Filed July 6, 1931.

CHAMPION

For Anti-Freeze Compounds.
Claims use since May 1, 1931.

Ser. No. 316,642. HANCE BROTHERS & WHITE, INC., Philadelphia, Pa. Filed July 6, 1931.

ARCOHOL

For Alcohol Preparation for Rubbing, Bathing, Massaging, or Other External Purposes.
Claims use since Apr. 23, 1931.

Ser. No. 316,700. HOWSON REMEDY CO., Red Mountain, Calif. Filed July 7, 1931.

Howson

The trade-mark is the surname in the hand writing of John Howson, a member of the applicant firm.
For Medicine in Powder and Liquid Form for the Treatment of Diseases of the Respiratory Organs—Namely, Asthma, Hayfever, and Bronchitis.
Claims use since June 23, 1931.

Ser. No. 316,774. JACOB R. FAIN, doing business as The Acme Disinfectant Company and A A A Exterminating Service, Washington, D. C. Filed July 9, 1931.

A A A

For Insect, Vermin, and Rodent Exterminating Preparation, Insecticide, and Deodorant.
Claims use since July 1, 1928.

Ser. No. 316,850. SAMSON ROSENBLATT, New York, N. Y. Filed July 11, 1931.

PEROXODYNE

For Hand and Finger Nail Cleanser and Antiseptic and Stain Remover.
Claims use since July 1, 1931.

Ser. No. 316,081. S & B CHEMICAL CO., Asheville, N. C. Filed July 15, 1931.

S and B

For Antiseptic Solution.
Claims use since Nov. 2, 1930.

Ser. No. 317,080. HAROLD H. FRIES, New York, N. Y. Filed July 18, 1931.

CRESOPHAN

For Antiseptic and Disinfectant.
Claims use since Apr. 27, 1931.

Ser. No. 317,091. PARIS LABORATORIES, INC., New York, N. Y. Filed July 18, 1931.

Mildred Jolson

The trade-mark of the application is the autographic signature of Mildred Jolson, permission granted.

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Apr. 1. 1931.

CLASS 7

Cordage

Ser. No. 317,304. ENTERPRISE MANUFACTURING COMPANY, Coleridge, N. C. Filed July 25, 1931.



The words "Cotton Twine" are disclaimed apart from the other features of the mark.
For Cord and Twine Used as Such and Also in the Manufacture of Carpets, Belting, and Insulation, and in the Manufacture of Rope or Larger Cord.
Claims use since June 8, 1931.

CLASS 10

Fertilizers

Ser. No. 315,348. THE ELECTRIC SPRAYIT COMPANY, South Bend, Ind. Filed June 3, 1931.

SPRAYIT
PLANTILIZER

For Filled Fertilizer Cartridges.
Claims use since May 21, 1931.

CLASS 12

Construction Materials

Ser. No. 301,731. TOCH BROTHERS, INC., New York, N. Y. Filed May 29, 1930.



For Waterproofing Compounds for Use in Conjunction with Cement Mixtures.
Claims use since January, 1027.

Ser. No. 307,714. GLADDING, MCBEAN & CO., Los Angeles, Calif. Filed Nov. 10, 1930.

★ ★ ★

For Fire Brick, Refractory Brick, Tile, and Molded Bodies.
Claims use since 1905.

Ser. No. 315,668. JAMES F. ARTHUR, Dickson, Pa. Filed June 11, 1931.

ASBESTOSEAL

For Plumber's Wax Used in Setting Closet Bowls and Like Uses.
Claims use since Aug. 25, 1930.

Ser. No. 316,084. CONCRETE REINFORCING STEEL INSTITUTE, Chicago, Ill. Filed June 20, 1931.



For Structural Steel Bars.
Claims use since June 8, 1931.

Ser. No. 316,088. ELECTRIC TAMPER & EQUIPMENT CO., Chicago, Ill. Filed June 20, 1931.

VIBRO-CAST

The word "Cast" is disclaimed apart from the mark.
For Concrete Forms, Concrete Pipes, Concrete Conduits and Paving Materials of Concrete.
Claims use since December, 1929.

Ser. No. 316,449. CHARLES S. REED, Davenport, Iowa. Filed June 29, 1931.

MARBLOX

For Artificial Stone Made in the Form of Blocks, Slabs, Panels, Cornices, and Other Forms.
Claims use since Apr. 17, 1931.

Ser. No. 316,982. THE UNION PRODUCTS COMPANY, Cleveland, Ohio. Filed July 15, 1931.

FOREX

For Asphalt Compounds for Use as a Floor Covering, Roofing, Wall Protection, Surface Protection, Bonding Material and Caulking Compound and to be Incorporated with Portland Cement and the Like for Use as a Flooring Material, Etc.
Claims use since Nov. 22, 1929.

Ser. No. 317,003. METAL DOOR & TRIM COMPANY, La Porte, Ind. Filed July 16, 1931.

Ajusto

For Elevator Enclosures Including Framework and Doors.
Claims use since July 1, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 303,414. THE BASTIAN-BLESSING COMPANY, Chicago, Ill. Filed July 12, 1930.



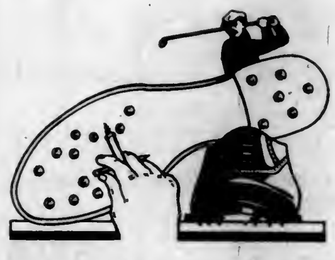
For Pressure Regulators for Welding and Cutting Apparatus and Other Equipment.
Claims use since May 15, 1930.

Ser. No. 315,881. JAMES M. TEAHEN, Detroit, Mich. Filed June 15, 1931.

T N

For Water Closets.
Claims use since June 22, 1922.

Ser. No. 316,565. NORTH & PFEIFFER MFG. CO., doing business as North & Pfeiffer, Hartford, Conn., and Providence, R. I. Filed July 2, 1931.



No claim is made to the representation of the goods apart from the mark as shown.

For Removable Hob-Nails and Spikes for Shoes.
Claims use since June 1, 1929.

Ser. No. 316,739. NORTH & PFEIFFER MFG. CO., Hartford, Conn., and Providence, R. I. Filed July 8, 1931.

"GRIP-RITE"

For Removable Hob-Nails and Spikes for Shoes.
Claims use since June 1, 1929.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 316,118. EDWARD C. BOWERS and CHARLES L. FELDMAN, receivers for Wickwire Spencer Steel Company, New York, N. Y. Filed June 22, 1931.

CROSCANE

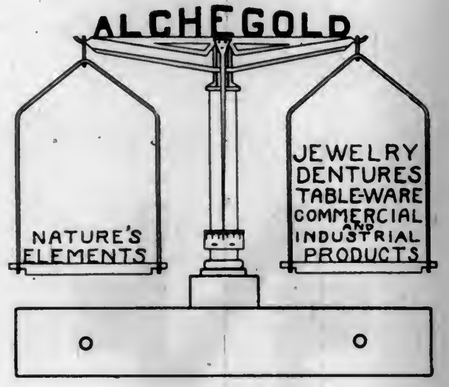
For Perforated Sheet Metal to be Used for Industrial and Ornamental Purposes and of Nonprecious Composition.
Claims use since Jan. 1, 1930.

Ser. No. 316,244. ALUMINUM INDUSTRIES, INC., Cincinnati, Ohio. Filed June 25, 1931.

PERMITE

For Alloy Castings, Consisting Principally of Aluminum and Copper, Aluminum and Silicon, Aluminum and Zinc.
Claims use since Oct. 1, 1930.

Ser. No. 316,358. JOHN COWLES, doing business as The John Cowles Metal Laboratories, Pasadena, Calif. Filed June 27, 1931.



No claim is made to the words "Nature's Elements", "Jewelry", "Dentures", Tableware", and "Commercial and Industrial Products" apart from the mark shown.

For Metals, Metal Alloys, Metallic Compounds and Synthetic Metals Which Include Copper, Aluminum, Silver, Platinum, Magnesium, Chromium, and Tungsten.
Claims use since June 15, 1931.

Ser. No. 316,551. A. M. CASTLE & CO., Chicago, Ill. Filed July 2, 1931.



For Welding Wire.
Claims use since June 1, 1931.

Ser. No. 316,624. AMERICAN ZINC INSTITUTE, INCORPORATED, New York, N. Y. Filed July 6, 1931.



For Zinc-Coated Ferrous Sheets and Sheet Roofing.
Claims use since June 29, 1931.

Ser. No. 317,242. BATTERIUM METAL AND VISLOK LIMITED, London, England. Filed July 23, 1931.

BATTERIUM

For Non-Ferrous Metals in Rods, Tubes, Sheets, Castings, Stampings, and Forgings.
Claims use since February, 1929.

CLASS 15

Oils and Greases

Ser. No. 315,569. SHELL OIL COMPANY, San Francisco, Calif. Filed June 8, 1931.



No claim is made to the word "Gasoline" apart from the mark shown in the drawing.

For Gasoline.
Claims use since May 15, 1930.

Ser. No. 315,804. SIMON OIL CO., INC., Niagara Falls, N. Y. Filed June 18, 1931.



For Gasoline and Furnace Fuel Oil.
Claims use since Aug. 1, 1930.

Ser. No. 316,795. WARR-PENN REFINING COMPANY, Warren, Pa. Filed July 7, 1931.

WARR-PENN
MOTOR OIL

No claim is made hereinto the words "Motor Oil" apart from the mark shown in the drawing.

For Motor Lubricating Oils.
Claims use since Oct. 1, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 309,434. T. M. E. JOHNSON, doing business as Johnson Company, Mulberry, Kans. Filed Dec. 29, 1930.

Win-a-Way

For Floor, Furniture, Wood-Work, Automobile and Linoleum Polishes and Waterproofing Finish Renewers Comprising Polishes Having Water Repelling Ingredients for Automobiles and Painted or Varnished Surfaces.
Claims use since November, 1930.

Ser. No. 309,759. DIAMOND SURFACING PRODUCTS CO., Rhode Hall, R. F. D. #1, Jamesburg, N. J. Filed Jan. 8, 1931.

DIAMONDIZE GLOSS

The descriptive word "Gloss" appearing on the drawing is hereby disclaimed apart from the other features of the mark as shown.

For Wax Polishing Compound for Furniture, Automobiles and Floors and All Painted and Varnished Surfaces Generally.

Claims use since Jan. 15, 1930.

Ser. No. 315,761. SALUBRA S. A., Basel, Switzerland. Filed June 12, 1931.

Tekko

For Oil Paints.
Claims use since Aug. 1, 1900.

Ser. No. 315,763. SALUBRA S. A., Basel, Switzerland. Filed June 12, 1931.

Salubra

For Oil Paints.
Claims use since Apr. 5, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 317,234. THE YALE & TOWNE MFG. CO., Stamford, Conn. Filed July 22, 1931. Under section 5b of the act of 1905, as amended in 1920.

YALE

For Lift Trucks and Skid Platforms.
Claims use since June 25, 1930, on skid platforms, and since July 1, 1930, on lift trucks.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 298,124. WHITE STAR BATTERIES, INC., New York, N. Y. Filed Mar. 29, 1930.

WHITE STAR BATTERY

No claim is made herein to the word "Battery" apart from the mark shown in the drawing.
For Storage Batteries.
Claims use since Jan. 7, 1930.

Ser. No. 302,628. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio. Filed June 20, 1930.



The lining within the shield is for indicating contrasting colors but no claim is made to the particular colors shown.
For Radio Receiving Sets and Parts Thereof.
Claims use since June 1, 1929.

Ser. No. 308,892. KOOPERATIVA FÖRBUNDET FÖRENING U. P. A., Stockholm, Sweden. Filed Dec. 12, 1930.

Luma

For Incandescent Lamps.
Claims use since November, 1929.

Ser. No. 311,085. THE CUNO ENGINEERING CORPORATION, Meriden, Conn. Filed Feb. 16, 1931.

ICY-FREE

For Electrical Cigar Lighters; Electrical Trouble Lamps, and Electrical Defrosters for Windshields and Parts Thereof.
Claims use since Oct. 10, 1930.

Ser. No. 312,929. SILVER-MARSHALL, INC., Chicago, Ill. Filed Apr. 3, 1931.

SILVER—MARSHALL

For Radio Receiving Sets, Kits for Radio Receiving Sets, Electric Pick-Ups for Phonographs, Accessories and Parts Consisting of Aerials, Battery Eliminators; Binding Posts, Chokes, Coils, Coil Sets, Condensers, Dials, Grid Leaks, Jacks, Loud Speakers, Panel Boards, Potentiometers, Radio Amplifying Units, Radio Rectifying Units, Rheostats, Shields, Transformers, Electron Tubes, Tube Sockets, Tuning Units, Choke Coils, and Wire and Cable for Radio Sets, and Apparatus.
Claims use since June 1, 1924.

Ser. No. 314,186. ZENITH RADIO CORPORATION, Chicago, Ill. Filed May 4, 1931.

MAGNAVISION

For Radio and Television Receiving Sets and Parts Thereof.
Claims use since Apr. 20, 1931.

Ser. No. 314,187. ZENITH RADIO CORPORATION, Chicago, Ill. Filed May 4, 1931.

MAGNAVISION

For Radio and Television Receiving Sets and Parts Thereof.
Claims use since Apr. 20, 1931.

Ser. No. 316,018. ROCKBESTOS PRODUCTS CORPORATION, New Haven, Conn. Filed June 18, 1931.

A. V. C.

For Electric Cables and Other Electric Conductors Insulated with Asbestos and Varnished Cambric.
Claims use since Sept. 13, 1927.

Ser. No. 316,133. RAY BURNER COMPANY, San Francisco, Calif. Filed June 22, 1931.



For Electrical Apparatus, Particularly Automatic Electrical Control Units for Oil and Gas Burners and Oil and Gas Furnaces.
Claims use since April, 1931.

Ser. No. 316,311. AMERICAN WATER HEATER COMPANY, St. Louis, Mo. Filed June 26, 1931.



The words "Never Failing Hot Water Service" are disclaimed apart from the mark shown in the drawing.
For Water Heaters Having Electric Heating Units.
Claims use since June 8, 1931.

CLASS 22
Games, Toys, and Sporting Goods

Ser. No. 283,812. OSCAR SCHEFLOW, Elgin, Ill. Filed May 10, 1929.

EDUCATOY

For Toy—Namely, an Educational and Amusement Device for Children.
Claims use since Jan. 1, 1929.

Ser. No. 313,357. WALKER PRESS, LIMITED, Paris, Ontario, Canada. Filed Apr. 14, 1931.

WINK

For Spinning Top Game.
Claims use since Feb. 15, 1931.

Ser. No. 316,443. NOMA ELECTRIC CORPORATION, New York, N. Y. Filed June 29, 1931.

KRISTOLITE

For Reflectors for Miniature Electric Lamps Used as Christmas Tree Ornaments and for the Like Decorative Purposes.
Claims use since May 15, 1931.

Ser. No. 316,815. EDGAR E. JARRETT, New York, N. Y. Filed July 10, 1931.

WILLIAM TELL

For Toy Bows and Arrows and Bow-and-Arrow Games.
Claims use since May 1, 1931.

Ser. No. 316,972. HARRY C. LEE & COMPANY, INC., New York, N. Y. Filed July 15, 1931.

Good Shot!

For Tennis Rackets, Golf Clubs, Tennis Balls, and Golf Balls.
Claims use since Mar. 1, 1929.

Ser. No. 317,229. U. S. GOLF BALL CORPORATION, Chicago, Ill. Filed July 22, 1931.

Personalized

TALLY-HO

For Golf Balls.
Claims use since July 1, 1931.

Ser. No. 317,410. THE SHELTON TACK CO., Shelton, Conn. Filed July 28, 1931.

Super

For Golf Tees.
Claims use since Nov. 1, 1930.

Ser. No. 317,432. THE GENERAL TIMBER & LUMBER COMPANY, Cleveland, Ohio. Filed July 29, 1931.

PLA-M-WEL

For Poker Chips, Checkers, and Counters or Pieces Used in Playing Games.
Claims use since July 25, 1931.

CLASS 23
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 301,099. PROBAK CORPORATION, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 29, 1930.



The mark consists of an oblique band of colors in which the border is green, the lower field is blue, and the upper field is red, the word "Probak" and a small irregular geometric design appearing in the red field, as shown by the linings used in the drawing. The exclusive use of the irregular geometrical design in the red field is disclaimed in itself.
For Razor Blades and Safety Razors.
Claims use since Apr. 26, 1929.

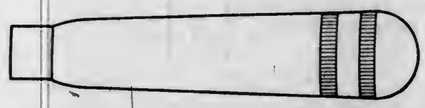
Ser. No. 303,079. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



The trade-mark consists of a narrow blue colored band around the handle of the goods and near the free end thereof, as indicated by the lining shown in the drawing. The representation of the handle is disclaimed.

For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers, Egg Beaters, Covers and Bowls (Sets), Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 303,085. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



The trade-mark consists of two narrow blue colored bands around the handles of the goods and near the free ends thereof, as indicated by the lining shown in the drawing.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers, Egg Beaters, Covers and Bowls (Sets), Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 313,442. THE JOHN A. MCKAY MANUFACTURING CO., Dunn, N. C. Filed Apr. 16, 1931.

McK
STURDYBILT

No claim is made to the word "Sturdy" or the word "Bilt" apart from the mark as shown.
For Farm Implements—Namely, Stalk Cutters, Fertilizer Distributors, Corn Planters, Cotton Planters, and Disc Harrows.
Claims use since Mar. 1, 1931.

Ser. No. 313,975. THE ROESSLER & HASSLACHER CHEMICAL COMPANY, New York, N. Y. Filed Apr. 29, 1931.

R&H

For Systems of Kiers, Vats and the Like Circulating Apparatus for Bleaching and Dyeing Textile Materials.
Claims use since Mar. 24, 1927.

Ser. No. 314,421. NATIONAL AERATING PROCESS COMPANY, Pittsburgh, Pa. Filed May 11, 1931.

AIR-WHIP

No claim is made to the use of the word "Whip" alone.
For Machine for Aerating Cream to Produce Cream Akin to Whipped Cream.
Claims use since May 1, 1931.

Ser. No. 316,087. ELECTRIC TAMPER & EQUIPMENT CO., Chicago, Ill. Filed June 20, 1931.

VIBRO-CAST

For Tamping or Vibrating Machines Used in Handling or Placing Concrete.
Claims use since December, 1929.

Ser. No. 316,402. AUTOGRAPHIC REGISTER COMPANY, Hoboken, N. J. Filed June 29, 1931.

AUTO-ALIGNER

No claim is made to the exclusive right to use the word "Aligner," apart from the mark shown.
Manifolding Attachment for Typewriting Machines.
Claims use since May 15, 1931.

Ser. No. 316,476. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Filed June 30, 1931.

TARGET

For Cigarette Rolling Devices or Machines.
Claims use since Feb. 9, 1931.

Ser. No. 316,964. JAMES C. GORDON, Los Angeles, Calif. Filed July 15, 1931.



For Auxiliary Air Intake for Engines.
Claims use since Jan. 17, 1931.

Ser. No. 317,180. ANNA FRANCIS NAUMAN, St. Helens, Oreg. Filed July 21, 1931.

HANDY ANN

For Food Chopper.
Claims use since July 1, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 305,392. CONSOLIDATED FILM INDUSTRIES, INC., New York, N. Y. Filed Sept. 6, 1930.

MAGNACOLOR

For Motion Picture Films.
Claims use since July 3, 1930.

Ser. No. 310,644. GRAYSON HEAT CONTROL, INC., Lynwood, Calif. Filed Feb. 2, 1931.

G

For Thermostatically Controlled Gas Valves.
Claims use since May 18, 1928.

Ser. No. 316,345. TITMUS OPTICAL COMPANY, INC., Petersburg, Va. Filed June 26, 1931.

BONVUE
FULL VISION LENS

The words "Full Vision Lens" are disclaimed except as in combination with the remainder of the trade-mark.
For Optical Lenses.
Claims use since November 1, 1930.

Ser. No. 316,842. KEUFFEL & ESSER COMPANY, Hoboken, N. J. Filed July 11, 1931.

EVER-THERE

For Slide Rules.
Claims use since Apr. 25, 1931.

Ser. No. 317,066. CALIBRON PRODUCTS, INC., East Orange, N. J. Filed July 18, 1931.

CALIBRON

For Perspective Drawing Charts.
Claims use since July 16, 1931.

Ser. No. 317,425. CONTINENTAL OPTICAL COMPANY, Indianapolis, Ind. Filed July 29, 1931.

ASCOT
SOLOFLEX

For Frames and Mounts for Ophthalmic Lenses.
Claims use since May 25, 1931.

CLASS 27

Horological Instruments

Ser. No. 317,129. MANHEIMER WATCH COMPANY, Chicago, Ill. Filed July 20, 1931.

OPERA

For Watches, Watch Cases and Watch Movements.
Claims use since July 2, 1931.

Ser. No. 317,251. ILLINOIS ZINC COMPANY, Chicago, Ill. Filed July 23, 1931.

ERAYDO

For Electric Clocks and Parts Thereof.
Claims use since Mar. 17, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 315,586. THE WOOSTER BRUSH COMPANY, Wooster, Ohio. Filed June 8, 1931.

CUCKOO

For Paint and Varnish Brushes.
Claims use since January, 1927.

CLASS 31

Filters and Refrigerators

Ser. No. 317,362. LEONARD REFRIGERATOR COMPANY, Detroit, Mich. Filed July 27, 1931.

CHILL-OM-ETER

For Refrigerators, Electrical Refrigerators, and Parts Thereof.
Claims use since Oct. 1, 1930.

CLASS 32

Furniture and Upholstery

Ser. No. 316,595. THE HOLMQUIST-SWANSON COMPANY, Chicago, Ill. Filed July 3, 1931.

The National Champion

For Folding Porch Gates, Baby Play Yards and Nursery Chairs.
Claims use since 1916.

Ser. No. 316,775. FALCONER PLATE GLASS CORPORATION, Falconer, N. Y. Filed July 9, 1931.

FALCONER
DUREVER
MIRRORS

No claim is made to the words "Falconer" and "Mirrors" apart from the mark as shown in the drawing.
For Mirrors.
Claims use since Apr. 29, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 282,354. IDEAL LIQUID HEAT MACHINE CORP., St. Louis, Mo. Filed Apr. 13, 1929.

LIQUID
IDEAL
HEAT

For Oil Burners.
Claims use since Aug. 1, 1925.

Ser. No. 316,711. COPPER BOILERS INCORPORATED, New York, N. Y. Filed July 7, 1931.

CopperKing

The applicant disclaims any use of the word "Copper" apart from the mark as shown.
For Hot Water Storage Systems.
Claims use since June 1, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 313,012. SUPERIOR PISTON RING CO., INC., Detroit, Mich. Filed Apr. 6, 1931.

SPEED
SUPERIOR
ENDURANCE
mor-POWER

The representation of a piston ring, and the words "Speed", "Endurance", "Mor-Power" and "Superior" being disclaimed apart from the mark shown.
For Piston Rings.
Claims use since Feb. 28, 1930.

CLASS 37

Paper and Stationery

Ser. No. 312,343. KELLER-DORIAN PAPER CO., INC., New York, N. Y. Filed Mar. 20, 1931.

HER MAJESTY'S LINE

For Box Cover Papers, Box Wraps, Box Labels, Envelope Lining Papers, Greeting Card Papers, Book and Brochure Cover Papers; Coated Papers Having a Clay, Flock, Metallic, or Other Coating, Whether Plain, Embossed, Printed, or Decorated, for Printing, Catalog, Covering, Program and Menu Covers; Decorated Papers for Books, Catalog and Brochure Covers; Metal Leaf Coated Papers, Metal Powdered Coated Papers, Aluminum Foil Coated Papers, Completely and Partly Manufactured.
Claims use since Mar. 10, 1931.

Ser. No. 313,842. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931. Under section 5b of the act of 1905 as amended in 1920.

Eastman

For Albums and Cardboard Mounts, Cash Books and Card and Loose Leaf Register Systems, and Photogravure Tissue (Non-Sensitized).
Claims use since 1899 on albums and mounts, 1912 on cash books and register systems, 1917 on photogravure tissue (non-sensitized). Applicant is owner of registrations No. 67,012 renewed and No. 67,137 renewed effected on the ground of actual and exclusive use by applicant for 10 years next preceding Feb. 20, 1905.

Ser. No. 316,110. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed June 20, 1931.

OLD FAITHFUL TUNED PALETTE COLOR PRODUCTS

Applicant disclaims the words "Color Products" apart from the mark shown.
For Wax Crayons, Pressed Crayons, Pastel Crayons, Colored Chalk Crayons.
Claims use since Feb. 10, 1931.

Ser. No. 316,111. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed June 20, 1931.

TUNED PALETTE

For Wax Crayons, Pressed Crayons, Pastel Crayons, Colored Chalk Crayons.
Claims use since Feb. 10, 1931.

Ser. No. 317,027. COPY PAPERS INC., Chicago, Ill. Filed July 17, 1931.

DUROBRITE

For Book Paper, Bond Paper, Index Paper, Ledger Paper, Writing Paper, Off-Set Paper, Enamel Book Paper, Coated Bond Paper and Coated Manila Paper.
Claims use since June 29, 1931.

Ser. No. 317,074. A. B. DICK COMPANY, Chicago, Ill. Filed July 18, 1931.

PARITY

For Paper (Consisting of Sheets Adapted to Receive Copy, Writing, or Impressions).
Claims use since 1930.

Ser. No. 317,141. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed July 20, 1931.



For Correspondence Paper and Envelopes.
Claims use since Apr. 14, 1931.

Ser. No. 317,305. FLETCHER PAPER COMPANY, Alpena, Mich. Filed July 25, 1931.

WOLVERINE



For Wrapping Paper.
Claims use since Jan. 1, 1931.

Ser. No. 317,393. W. T. GRANT COMPANY, Lynn, Mass., and New York, N. Y. Filed July 28, 1931.

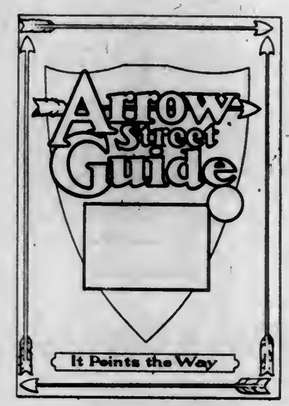
LYN CREST

The lining on the drawing is for shading purposes.
For Writing Paper.
Claims use since July 15, 1931.

CLASS 38

Prints and Publications

Ser. No. 305,596. ASSOCIATION OF NORTH AMERICAN DIRECTORY PUBLISHERS, Toronto, Ontario, Canada. Filed Sept. 11, 1930.



For Guide Books Published from Time to Time.
Claims use since Oct. 30, 1929.

Ser. No. 316,619. WAKEFIELD ITEM COMPANY, Wakefield, Mass. Filed July 3, 1931.

ITEM PRESS

For Pamphlets, Timetables, Whist Scores, and Printed Forms and Booklets Issued from Time to Time.
Claims use since 1872.

Ser. No. 316,625. THE AUTOMOBILE CLUB OF MICHIGAN, Detroit, Mich. Filed July 6, 1931.

MICHIGAN MOTOR NEWS

For Periodical.
Claims use since May 1, 1931.

Ser. No. 316,698. ELECTRO SUN COMPANY, INC., New York, N. Y. Filed July 7, 1931.

CLEAROPRINT

For Prints Made by Photographic Processes.
Claims use since June 1, 1931.

Ser. No. 316,820. THE ROBERT MORRIS ASSOCIATES, Lansdowne, Pa. Filed July 10, 1931.

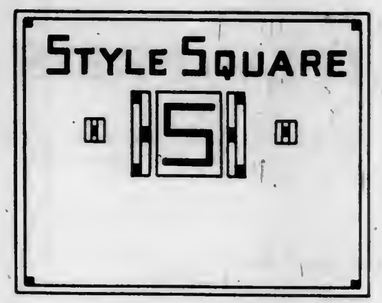


For Monthly Bulletin.
Claims use since June 30, 1923.

CLASS 39

Clothing

Ser. No. 312,958. PEOPLE'S OUTFITTING COMPANY, Detroit, Mich. Filed Apr. 4, 1931.



For Men's and Boys' Clothing—Namely, Overcoats, Top Coats, Suits, Coats, Vests, and Trousers.
Claims use since Mar. 18, 1931.

Ser. No. 314,643. A. H. GEUTING COMPANY, Philadelphia, Pa. Filed May 16, 1931.



For Men's, Women's, and Children's Boots and Shoes Made of Leather, Fabric, Rubber, or Any Combination of One or More of said Materials, and Children's Wash Suits, Sweaters, Sweater Dresses, Berets, Hosiery, Blouses, Leather Coats, Rain Coats, Bathing Suits, Sun Suits, and Neckties.
Claims use since May 21, 1930.

Ser. No. 315,708. STERN BROTHERS, New York, N. Y. Filed June 11, 1931.

Pamela

For Women's, Misses' and Junior Misses' Raincoats, Rubbers, Overshoes of Rubber or Fabric and/or Combinations Thereof, Sandals of Rubber, Riding Boots of Leather, Puttees, Gloves of Fabric and/or Combinations of Leather and Fabric, Leggings, Lumberjackets of Leather or Wool and/or Combinations Thereof, Overgaiters and Spats, Sweaters, Collar and Cuff Sets, Neckties, Belts for Outer-Wear, Frocks, Sandals of Leather and Straw, Negligees, Aprons, Nightgowns, Pyjamas, Riding Habits, Sport Coats, Bathing Suits and Robes, Beach Overalls and Pyjamas, Caps, Shawls, Wraps, Coolie Coats, Fur Coats and Fur Scarfs, Nurses' Uniforms, Scarfs, and Women's and Junior Misses' Trimmed and Untrimmed Hats, Misses' and Junior Misses' Shoes Made of Leather or Fabric and/or Combinations Thereof, Women's Shoes Made of Fabric and/or Combinations of Leather and Fabric, Women's and Junior Misses' Blouses, Junior Misses' Coats and Dresses and Suits, Misses' and Junior Misses' Skirts for Outer and Under Wear.
Claims use since Jan. 9, 1928.

Ser. No. 316,183. BEAR BRAND HOSIERY CO., Kankakee, Ill. Filed June 24, 1931.

Red Thred

For Knitted Articles—Namely, Hosiery.
Claims use since June 13, 1931.

Ser. No. 316,304. TWEEDIE FOOTWEAR CORPORATION, Jefferson City, Mo. Filed June 25, 1931.

Tweedettes

For Ladies' and Misses' Shoes of Leather, Fabric, and Rubber and Combinations of Said Materials.
Claims use since Jan. 7, 1931.

Ser. No. 316,367. LOUIS H. MANKO, doing business as L. H. Manko & Company and National Summer Clothing Company, Philadelphia, Pa. Filed June 27, 1931.

Miami Beach

Applicant disclaims the exclusive right to the use of the words "Miami Beach" apart from the trade-mark shown in the drawing.
For Men's and Boys' Outer Garments—Namely, Suits, Coats, Vests, and Trousers.
Claims use since May 26, 1931.

Ser. No. 316,492. JULIUS KAYSER & CO., New York, N. Y. Filed June 30, 1931.

Marvel Mesh

The word "Mesh" is disclaimed apart from the mark as shown on the drawing.
For Hosiery.
Claims use since Mar. 1, 1931.

Ser. No. 316,658. PHOENIX HOSIERY COMPANY, Milwaukee, Wis. Filed July 6, 1931.

"Darkest Africa"

For Hosiery.
Claims use since June 25, 1931.

Ser. No. 316,659. PHOENIX HOSIERY COMPANY, Milwaukee, Wis. Filed July 6, 1931.

Jungle Shades

No claim is made to the word "Shades" apart from the mark as shown in the drawing.
For Hosiery.
Claims use since June 25, 1931.

Ser. No. 316,898. ELLIS A. ROSENGARTEN, doing business as R. H. B. Garment Company, Dallas, Tex. Filed July 13, 1931.



For Wash Dresses and Silk Dresses for the Use of Women, Misses, and Children.
Claims use since July, 1930.

Ser. No. 316,932. MAY HOSIERY MILLS, INC., Burlington, N. C. Filed July 14, 1931.

Willow Dale

For Hosiery.
Claims use since July 9, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 309,532. MAURICE F. SAVAGE, Manchester, N. H. Filed Dec. 31, 1930.

Sanicot

For Covers for Mattresses, Pillows, and Cushions, Said Covers Being Made of Textile Fabric.
Claims use since Dec. 19, 1930.

Ser. No. 313,960. THE J. G. COMFORT CO., New York, N. Y. Filed Apr. 29, 1931.

SLEEPY TYME

For Comforts, Blankets, Bedspreads, Curtains, and Drapes of Cotton, Linen, Silk, or Wool.
Claims use since Sept. 1, 1930.

Ser. No. 315,872. RIVERSIDE & DAN RIVER COTTON MILLS, INC., Danville, Va. Filed June 15, 1931.

BROADWEAR

For Broadcloth in the Piece.
Claims use since January, 1925.

Ser. No. 315,873. RIVERSIDE & DAN RIVER COTTON MILLS, INC., Danville, Va. Filed June 15, 1931.

WEARMOOR

For Broadcloth in the Piece.
Claims use since January, 1925.

Ser. No. 316,548. BLOOMINGDALE BROS., INC., New York, N. Y. Filed July 2, 1931.

BLOOMCRAFT

For Floor Coverings of Textile Material.
Claims use since June 8, 1931.

Ser. No. 316,549. BLOOMINGDALE BROS., INC., New York, N. Y. Filed July 2, 1931.

REVERSART

For Floor Coverings of Textile Material.
Claims use since May 6, 1931.

Ser. No. 317,040. HOWLETT & HOCKMEYER CO., INC., New York, N. Y. Filed July 17, 1931.

SPORTUROY

For Textile Fabrics—Namely, Corduroys and Velveteens, All in the Piece.
Claims use since June 16, 1931.

Ser. No. 317,175. MADISON WOOLEN COMPANY, Madison, Me. Filed July 21, 1931.

Moroda

For Woolen Piece Goods.
Claims use since Mar. 12, 1925.

Ser. No. 317,283. OTIS COMPANY, Three Rivers, Mass. Filed July 24, 1931.

H_2O-BAR

For Cotton Piece Goods.
Claims use since July 14, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 312,504. ALEXANDER J. BUCHL, New York, N. Y. Filed Mar. 24, 1931.

Ido

For Permanent Wave Machines.
Claims use since Feb. 10, 1931.

Ser. No. 312,987. HARRISON-NOYES CHEMICAL CORP., Long Beach, Calif. Filed Apr. 6, 1931.

KE-2-OL

For Dental Impression Material, Artificial Denture Material, Dental Plastics and Investment Compounds.
Claims use since Mar. 1, 1930.

Ser. No. 317,185. UNITED DRUG COMPANY, Boston, Mass. Filed July 21, 1931.

Electrex

For Therapeutic Lamps, Vibrators, and Hair Driers.
Claims use since Nov. 8, 1923.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 312,756. THE J. F. GIERING BOTTLING CO., INC., Youngstown, Ohio. Filed Mar. 31, 1931.

Silver Knight

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks—Viz., Ginger Ale.
Claims use since Mar. 25, 1931.

Ser. No. 316,831. MILK-MAID CHOCOLATE COMPANY, Milwaukee, Wis. Filed June 26, 1931.

CHOC-LIT BABY

For Nonalcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since Dec. 10, 1930.

Ser. No. 316,622. HAROLD C. WYLIE, Harvey, Ill. Filed July 3, 1931.



Applicant makes no claim to the exclusive use of the expression "Root Beer" or the notation "It Can't B Beat." The picture forming a feature of the mark is purely fanciful.
For Root Beer.
Claims use since May 11, 1931.

Ser. No. 316,772. JOSEPHINE EATON, doing business as J. E. Distributor, New York, N. Y. Filed July 9, 1931.

KOLAPAGNE

For Nonalcoholic, Maltless Syrup Used in the Preparation of Soft Drinks.
Claims use since Apr. 6, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 304,165. STANDLEE & BRYANT, Brawley, Calif. Filed Aug. 2, 1930.

HIGH LINE

For Fresh Vegetables, Fresh Melons—Namely, Fresh Honeydew Melons.
Claims use since Mar. 23, 1930.

Ser. No. 304,757. EET-RITE PRODUCTS COMPANY, Fort Washington, Pa. Filed Aug. 19, 1930.

EET-RITE PRODUCTS COMPANY

For Compound of Grains, Fruits, Nuts, and Vegetables Used as a Food to Eat and a Compound of Grains, Fruits, Nuts, and Vegetables Used for Making a Food Drink.
Claims use since June 30, 1930.

Ser. No. 304,838. TYSON & COMPANY, INC., doing business as Johnson Products Company, Paris, Tenn. Filed Aug. 20, 1930.



The lining on the drawing is used for shading purposes only.
For Meringue Powder, Cake Icing, Prepared Cake Flour, Prepared Pie Crust, Pie Filling, Gelatin Desserts, Pepper, and Food Flavoring Extracts.
Claims use since Jan. 2, 1930.

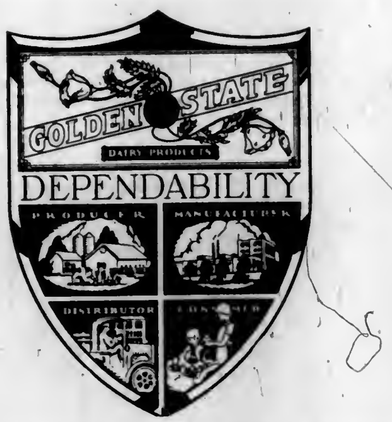
Ser. No. 306,926. J. M. BERLOS, doing business as Cowcream Specialty Shops, Denver, Colo. Filed Oct. 20, 1930.

COWCREAM



The word "Cowcream is disclaimed apart from the mark as shown in the drawing. The portrait forming a part of the trade-mark depicted in the drawing is an india ink drawing reproduced from a photograph of the applicant.
For Malted Milk.
Claims use since Apr. 23, 1928.

Ser. No. 307,975. GOLDEN STATE COMPANY, LTD., San Francisco, Calif. Filed Nov. 17, 1930.



No claim is made to the words appearing in the trade-mark except in the association shown in the drawing.
For Milk, Cream, Butter, Eggs, Cheese, Powdered Milk, and Ice Cream.
Claims use since Jan. 1, 1930.

Ser. No. 308,390. BETSY ROSS MINT CO., Philadelphia, Pa. Filed Nov. 28, 1930.



For Candies.
Claims use since July 15, 1921.

Ser. No. 311,486. PRODUCTOS SELECTOS DEL CERDO, S. A., Manlleu, Province of Barcelona, Spain. Filed Feb. 26, 1931.



The words "Marca Registrada" appearing upon the mark are hereby disclaimed.
For Foods Deriving from Pork—Namely, Sausages, Ham, Martadelds, Lard, Bacon.
Claims use since Sept. 3, 1928.

Ser. No. 312,293. EARL FRUIT COMPANY, Wenatchee, Wash. Filed Mar. 19, 1931.

HI - FUL - PAK

For Fresh Deciduous Fruits.
Claims use since Mar. 12, 1931.

Ser. No. 312,562. ICYEAST COMPANY, Dayton, Ohio. Filed Mar. 20, 1931.

ICYEAST

The word "Yeast" is disclaimed except in the association and arrangement shown.
For Frozen Confection Containing Yeast.
Claims use since Feb. 26, 1931.

Ser. No. 312,587. B. D. SINGLETARY & SONS, Thomasville, Ga. Filed Mar. 23, 1931.

UNCLE BILL'S BEST



Sugar and Georgia Cane
SYRUP

The portrait is that of B. D. Singletary, a member of the firm. No claim is made to the words "Best" or "Sugar and Georgia Cane Syrup" except in the association and arrangement shown in the drawing.
For Canned and Bottled Table Syrup.
Claims use since Mar. 15, 1926.

Ser. No. 313,686. TRAVERSE CITY CANNING CO., Traverse City, Mich. Filed Apr. 22, 1931.

MICHIGAN QUEEN

For Canned Fruits.
Claims use since Feb. 2, 1931.

Ser. No. 314,339. MAYFLOWER MILLS, Fort Wayne, Ind. Filed May 8, 1931.



The lining in the drawing indicates shading only, and the picture forming part of the mark is fanciful.
For Wheat Flour and Self-Rising Flour.
Claims use since July 19, 1930.

Ser. No. 315,106. NATIONAL DAIRY PRODUCTS CORPORATION, Wilmington, Del. Filed May 27, 1931.

"NATIONAL DAIRY"

For Frozen Citrus Juice.
Claims use since Apr. 1, 1931.

Ser. No. 315,448. FROSTYEAST, INCORPORATED, Rochester, N. Y. Filed June 5, 1931.



The drawing is lined for blue. The words "Scoops of Vitamins" are disclaimed. The word "Yeast" is disclaimed except in association and arrangement shown.
For a Mixture of Ice Cream and Yeast, the Ingredients Being Mixed Before the Freezing is Completed.
Claims use since May 29, 1931.

Ser. No. 315,931. SIMONS & FRENCH COMPANY, INC., New York, N. Y. Filed June 16, 1931.

GOLD-PAN

For Fresh Vegetables, Fresh Deciduous Fruits, and Fresh Citrus Fruits.
Claims use since Apr. 30, 1931.

Ser. No. 316,328. KLEIN-LERNER, Brooklyn, N. Y. Filed June 26, 1931.

ParnusaMozel

For Wheat Flour.
Claims use since June 5, 1931.

Ser. No. 316,790. JOHN C. VERNIER, doing business as Johnny-Bite Ice Cream Co., Cleveland, Ohio. Filed July 9, 1931.



For Ice Cream Confection.
Claims use since May 11, 1930.

Ser. No. 316,852. SCRIBBANS & COMPANY LIMITED, Smethwick, England. Filed July 11, 1931.

SCRIBONA

For Cakes, Biscuits, Puddings, Mincemeat, Jams and Fruit Preserves, All Being Substances Used as Food or as Ingredients in Food.
Claims use since Mar. 13, 1931.

Ser. No. 316,882. FLUFF-O MANUFACTURING COMPANY, St. Louis, Mo. Filed July 13, 1931.

FLUFF-O
WAFERS

No claim being made to the word "Wafers" apart from the mark as shown in the drawing.
For Candy Confections.
Claims use since Jan. 15, 1931.

Ser. No. 316,088. AMERICAN BAKERIES COMPANY, Atlanta, Ga. Filed July 16, 1931.



For Bread.
Claims use since June 1, 1931.

Ser. No. 317,061. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y. Filed July 18, 1931.

Worthmore BRAND CANDY

No claim being made to the exclusive use of the words "Brand Candy" apart from the mark as shown in the drawing.
For Candy.
Claims use since June 1, 1931.

Ser. No. 317,167. E. L. FRENCH CO., INC., Vancouver, Wash. Filed July 21, 1931.

Happy Breakfast

For Dried Prunes.
Claims use since October, 1930.

Ser. No. 317,286. THE QUAKER OATS COMPANY, Chicago, Ill. Filed July 24, 1931.

Crystal Wedding

For Rolled Oats.
Claims use since June 23, 1931.

Ser. No. 317,370. RAY B. PALMORE, Baltimore, Md. Filed July 27, 1931.

MAMYS OWN ROCKS

For Cookies and Sweetmeats—Namely, a Cakelike Product.
Claims use since Mar. 1, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 302,737. MORLEY BUTTON MANUFACTURING COMPANY, Portland, Me., and Portsmouth, N. H. Filed June 23, 1930.

MORLEY Reliable

No registration rights are claimed for the word "Reliable" apart from the mark shown in the drawing. Applicant is the owner of Trade-Mark No. 144,010, registered June 21, 1921, under the 10-year clause of the 1905 act.
For Dry Mats for Use in the Stereotyping Process of Printing.
Claims use since June 9, 1930.

Ser. No. 310,994. GRAPHILIUM CORPORATION, Newark, N. J. Filed Feb. 12, 1931.

Babolite

For Artificial Graphite in Which a Resinous Bond is Employed in the Process of Manufacture.
Claims use since Aug. 1, 1930.

Ser. No. 310,995. GRAPHILIUM CORPORATION, Newark, N. J. Filed Feb. 12, 1931.

Graphilium

For Artificial Graphite in Which a Resinous Bond is Employed in the Process of Manufacture.
Claims use since Jan. 20, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

SEPTEMBER 1, 1931

286,486. MEDICINAL PREPARATION USED IN THE TREATMENT OF GOUT, RHEUMATISM, AND SIMILAR AILMENTS WITH INFLAMMATORY PAINFUL MANIFESTATIONS. SCHERING & GLATZ, INC., New York, N. Y.
Filed June 6, 1929. Serial No. 285,178. PUBLISHED MARCH 11, 1930. Class 6.

286,487. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. K. HEINRICHS, Albany, N. Y.
Filed March 21, 1930. Serial No. 297,668. PUBLISHED JUNE 23, 1931. Class 45.

286,488. FRUIT JUICES SOLD AS SOFT DRINKS AND GINGER ALE. CALIFORNIA PACKING CORPORATION, San Francisco, Calif.
Filed October 28, 1930. Serial No. 307,254. PUBLISHED JUNE 23, 1931. Class 45.

286,489. WOMEN'S, MISSES' AND CHILDREN'S DRESSES, COATS, SWEATERS, SKIRTS, SMOCKS, MIDDIES, AND BLOUSES. JAMES A. HEARN & SON, INC., New York, N. Y.
Filed April 8, 1930. Serial No. 298,536. PUBLISHED MAY 27, 1930. Class 39.

286,490. CANNED TOMATOES. EUGENE J. PETROSEMOLO, New York, N. Y.
Filed April 17, 1930. Serial No. 299,014. PUBLISHED JUNE 23, 1931. Class 46.

286,491. IRON AND WOOD HEAD GOLF CLUBS. THE SHALER COMPANY, Waupun, Wis.
Filed May 1, 1930. Serial No. 299,803. PUBLISHED JUNE 23, 1931. Class 22.

286,492. IRON AND WOOD HEAD GOLF CLUBS. THE SHALER COMPANY, Waupun, Wis.
Filed May 1, 1930. Serial No. 299,804. PUBLISHED JUNE 23, 1931. Class 22.

286,493. GOLF CLUBS. THE KROYDON COMPANY, Maplewood, N. J.
Filed May 12, 1930. Serial No. 300,353. PUBLISHED JUNE 23, 1931. Class 22.

286,494. MEDICINAL PREPARATION. PIERRE ZIZINE, Paris, France.
Filed May 24, 1930. Serial No. 301,226. PUBLISHED JUNE 16, 1931. Class 6.

286,495. LADIES', MEN'S, AND CHILDREN'S HOSIERY. KNIT PRODUCTS CORPORATION, Belmont, N. C.
Filed November 5, 1930. Serial No. 307,554. PUBLISHED JUNE 16, 1931. Class 39.

286,496. TOY VEHICLES FOR CHILDREN. JOYTOYS, INCORPORATED, Chicago, Ill.
Filed November 7, 1930. Serial No. 307,624. PUBLISHED JUNE 23, 1931. Class 22.

286,497. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed November 28, 1930. Serial No. 308,406. PUBLISHED JUNE 23, 1931. Class 22.

286,498. FISHING RODS. MONTAGUE ROD AND REEL COMPANY, Montague City, Mass.
Filed December 9, 1930. Serial No. 308,789. PUBLISHED JUNE 23, 1931. Class 22.

286,499. LADIES' CHEMISES, PRINCESS SLIPS, BLOOMERS, STEP-INS, NIGHTGOWNS, PAJAMAS, AND STEP-IN DRAWERS OF A TEXTILE FABRIC. I. SCHNEIERSON & SONS, INC., New York, N. Y.
Filed December 9, 1930. Serial No. 308,799. PUBLISHED FEBRUARY 3, 1931. Class 39.

286,500. PLEASURE CRUISERS. ELECTRIC BOAT COMPANY, Bayonne, N. J.
Filed May 20, 1930. Serial No. 300,862. PUBLISHED JUNE 9, 1931. Class 19.

286,501. MEN'S, WOMEN'S AND CHILDREN'S UNDERWEAR. THE VISCOSE COMPANY, Marcus Hook, Pa.
Filed May 2, 1930. Serial No. 299,877. PUBLISHED JUNE 16, 1931. Class 39.

286,502. WETTING-OUT AGENTS AND PRESERVATIVES. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed April 15, 1930. Serial No. 298,895. PUBLISHED JUNE 9, 1931. Class 6.

286,503. RAILROAD TRACK SPIKES. BYRON M. CHENEY, Chicago, Ill.
Filed April 16, 1930. Serial No. 298,934. PUBLISHED JUNE 9, 1931. Class 13.

286,504. ORNAMENTAL AND CHAIN LINK METAL FENCING. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio.
Filed April 19, 1930. Serial No. 299,109. PUBLISHED JUNE 10, 1931. Class 13.

286,505. DRIED, PRESERVED, CANDIED, AND CRYSTALLIZED FRUITS, VEGETABLES, AND PEELS. CHUTNEYS, AND FRUIT AND VEGETABLE SAUCES. TOMANGO LIMITED, Mataffin, Eastern Transvaal, South Africa.
Filed April 24, 1930. Serial No. 299,418. PUBLISHED JUNE 16, 1931. Class 46.

286,506. TEXTILE RUGS. LANDESHUTER LEINEN-UND GEBILDWEBEREI F. V. GRÜNFELD, Berlin, Germany.
Filed May 9, 1930. Serial No. 300,209. PUBLISHED JUNE 16, 1931. Class 42.

286,507. PHARMACEUTICAL PREPARATION IN CAPSULES INTENDED TO RELIEVE HEAD COLDS. F. W. KARWACKI, doing business as Mighty Midgets Drug Co., Baltimore, Md.
Filed December 16, 1930. Serial No. 309,031. PUBLISHED JUNE 9, 1931. Class 6.

286,508. OINTMENTS, SALVES, AND HEALING SOLUTIONS FOR USE ON THE SKIN OR MUCOUS MEMBRANES AS A LOCAL APPLICATION FOR RELIEF OF COLDS, IRRITATIONS AND ITCHING. CHARLES A. WOODRUFF, doing business as Woodruff's Chemicals, Detroit, Mich.
Filed December 18, 1930. Serial No. 309,156. PUBLISHED JUNE 9, 1931. Class 6.

286,509. OIL BURNING BROODER STOVES. W. C. HOPSON COMPANY, doing business as Simplex Brooder Stove Co., Grand Rapids, Mich.
Filed January 19, 1931. Serial No. 310,141. PUBLISHED JUNE 16, 1931. Class 34.

286,510. HEAT RADIATING AND HUMIDIFYING SYSTEMS AND APPARATUS. BON-AIR RADIATOR CORPORATION, Boston, Mass.
Filed February 24, 1931. Serial No. 311,361. PUBLISHED JUNE 9, 1931. Class 34.

286,511. TOOTH PASTE AND MOUTH WASH. LONGINOS PADILLA, Los Olmos, Santiago De Cuba, Cuba.
Filed March 12, 1931. Serial No. 312,061. PUBLISHED JUNE 16, 1931. Class 6.

286,512. RADIANT GAS HEATERS AND PARTS THEREOF. ADAMS BROS. MFG. CO. INC., Pittsburgh, Pa.
Filed March 20, 1931. Serial No. 312,327. PUBLISHED JUNE 16, 1931. Class 34.

286,513. FITTINGS AND SUPPLIES USED IN PLUMBING AND HEATING SYSTEMS. GLENN ANDERSON, Galesburg, Ill.
Filed March 30, 1931. Serial No. 312,685. PUBLISHED JUNE 16, 1931. Class 13.

286,514. OIL BURNERS. THE BEACON BURNER MANUFACTURING CORPORATION, Boston, Mass.
Filed March 30, 1931. Serial No. 312,689. PUBLISHED JUNE 9, 1931. Class 34.

286,515. PASTILLES USED FOR HOARSENESS, DRYNESS OF THE THROAT, AND SORE THROAT. AMERICAN DRUGGISTS SYNDICATE, INC., New York and Long Island City, N. Y.
Filed March 30, 1931. Serial No. 312,734. PUBLISHED JUNE 16, 1931. Class 6.

286,516. CAST PAPER PULP CUPS. AMERICAN LACE PAPER COMPANY, Milwaukee, Wis.
Filed April 8, 1931. Serial No. 313,112. PUBLISHED JUNE 9, 1931. Class 2.

286,517. HEADACHE MEDICINE. FREDERICK STEARNS & COMPANY, Detroit, Mich.
Filed April 9, 1931. Serial No. 313,158. PUBLISHED JUNE 9, 1931. Class 6.

286,518. SHOCK ABSORBERS FOR AUTOMOBILES AND OTHER SELF-PROPELLED VEHICLES. DELCO PRODUCTS CORPORATION, Dayton, Ohio.
Filed April 9, 1931. Serial No. 313,125. PUBLISHED JUNE 16, 1931. Class 19.

286,519. MALT BEVERAGE CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. CHARLES SCHALLITZ, Milwaukee, Wis.
Filed March 30, 1931. Serial No. 312,742. PUBLISHED JUNE 23, 1931. Class 48.

286,520. FRESH CITRUS FRUITS, FRESH VEGETABLES. SUPERIOR PRODUCE DISTRIBUTORS, Los Angeles, Calif.
Filed April 3, 1931. Serial No. 312,932. PUBLISHED JUNE 23, 1931. Class 46.

286,521. PREPARATION USED IN THE TREATMENT OF INFLUENZA, COLDS, HEADACHE, CHILLS, FEVER, AND ALL OTHER PAINS, PUT UP IN CAPSULE FORM. CHARLES B. WHITWORTH, doing business as Service Drug Company, Nashville, Tenn.
Filed April 15, 1931. Serial No. 313,402. PUBLISHED JUNE 9, 1931. Class 6.

286,522. TABLE GAMES, TABLE BOARD GAMES PLAYED WITH PIECES AND CARDS AND TOY FIGURES. ALL FAIR INCORPORATED, Churchville, N. Y.
Filed April 20, 1931. Serial No. 313,524. PUBLISHED JUNE 23, 1931. Class 22.

286,523. GOLF CLUBS. THE BURKE GOLF COMPANY, Newark, Ohio.
Filed April 10, 1931. Serial No. 313,622. PUBLISHED JUNE 23, 1931. Class 22.

286,524. CANDIES AND ASSORTED CHOCOLATES. THE VONEIFF-DRAYER COMPANY, Baltimore, Md.
Filed April 27, 1931. Serial No. 313,874. PUBLISHED JUNE 23, 1931. Class 46.

286,525. CHEWING GUM. ORBIT LISTERATED GUM COMPANY, Chicago, Ill.
Filed May 1, 1931. Serial No. 314,068. PUBLISHED JUNE 23, 1931. Class 46.

286,526. FRESH APPLES. JOHN L. PRATT, New York, N. Y., and Fredericksburg, Va.
Filed May 7, 1931. Serial No. 314,295. PUBLISHED JUNE 23, 1931. Class 46.

286,527. MINIATURE AIRCRAFT, NAMELY TOY GLIDERS. THE CANTON MINIATURE AIRCRAFT CORPORATION, Canton, Ohio.
Filed May 14, 1931. Serial No. 314,553. PUBLISHED JUNE 23, 1931. Class 22.

286,528. WIRE ROPE. HAZARD WIRE ROPE COMPANY, Wilkes-Barre, Pa.
Filed May 16, 1931. Serial No. 314,646. PUBLISHED JUNE 23, 1931. Class 7.

286,529. NONALCOHOLIC, MALTLESS, NONCEREAL BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS, EXTRACTS, AND CONCENTRATES USED IN PREPARING THE SAME. LOS ANGELES BREWING CO., Los Angeles, Calif.
Filed May 18, 1931. Serial No. 314,702. PUBLISHED JUNE 28, 1931. Class 45.

286,530. FISHING RODS AND FISHING POLES. THE FRED D. DIVINE COMPANY, Utica, N. Y.
Filed May 19, 1931. Serial No. 314,751. PUBLISHED JUNE 23, 1931. Class 22.

286,531. NONALCOHOLIC, NONCEREAL, MALTLESS, CARBONATED BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS FOR MAKING SAME. SILURIAN WAUKESHA WATER DISTRIBUTING CO., Milwaukee, Wis.
Filed May 19, 1931. Serial No. 314,778. PUBLISHED JUNE 23, 1931. Class 45.

286,532. CANDY. G L E CANDY CORPORATION OF AMERICA, Chicago, Ill.
Filed February 9, 1931. Serial No. 310,863. PUBLISHED JUNE 23, 1931. Class 46.

286,533. GOLF BALLS. NATIONAL BELLAS HESS COMPANY, INC., New York, N. Y.
Filed February 25, 1931. Serial No. 311,442. PUBLISHED JUNE 23, 1931. Class 22.

286,534. TOY AIRPLANES AND GLIDERS AND PARTS THEREOF. AMERICAN JUNIOR AIRCRAFT COMPANY, Portland, Oreg.
Filed March 9, 1931. Serial No. 311,904. PUBLISHED JUNE 23, 1931. Class 22.

286,535. CANNED APPLE SAUCE. LYNDONVILLE CANNING COMPANY, INC., Lyndonville, N. Y.
Filed March 23, 1931. Serial No. 312,441. PUBLISHED JUNE 23, 1931. Class 46.

286,536. WEATHER STRIPS. CHAMBERLIN METAL WEATHER STRIP COMPANY, Detroit, Mich.
Filed April 1, 1931. Serial No. 312,794. PUBLISHED JUNE 16, 1931. Class 12.

286,537. WALL PANELS. STANDARD WALL COVERING COMPANY, INC., Philadelphia, Pa.
Filed April 2, 1931. Serial No. 312,877. PUBLISHED JUNE 16, 1931. Class 12.

286,538. FILLER COMPRISING A MIXTURE OF AN ABRASIVE MATERIAL AND A BINDER IN PLASTIC FORM FOR FILLING GROOVES IN MARBLE, STONE, TERRAZZO, WOOD, TILE, ETC., AS USED IN STAIR TREADS, RAMPS, AND FLOORS AND IN WHICH THE MIXTURE IS ALLOWED TO HARDEN, AND SLABS HAVING RECESSES FILLED WITH THE FILLER MIXTURE. THE SAFETY PROCESSING COMPANY, Youngstown, Ohio.
Filed April 7, 1931. Serial No. 313,056. PUBLISHED JUNE 16, 1931. Class 12.

286,539. BRICK. NEW ENGLAND BRICK COMPANY, Boston, Mass.
Filed April 8, 1931. Serial No. 313,089. PUBLISHED JUNE 16, 1931. Class 12.

286,540. LADIES' FROCKS. TABIN-PICKER AND COMPANY, Chicago, Ill.
Filed April 8, 1931. Serial No. 313,099. PUBLISHED JUNE 16, 1931. Class 39.

286,541. HOSIERY. THE SIMONS CO., INC., New York, N. Y.
Filed April 9, 1931. Serial No. 313,156. PUBLISHED JUNE 9, 1931. Class 39.

286,542. CEMENT FOR JOINTING WATER MAINS. MICHAEL HAYMAN & CO., INC., Buffalo, N. Y.
Filed April, 9, 1931. Serial No. 313,168. PUBLISHED JUNE 16, 1931. Class 12.

286,543. COATS, VESTS, PANTS, AND OVERCOATS FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed April 10, 1931. Serial No. 313,183. PUBLISHED JUNE 9, 1931. Class 39.

286,544. COATS, VESTS, PANTS, AND OVERCOATS, FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed April 10, 1931. Serial No. 313,184. PUBLISHED JUNE 9, 1931. Class 39.

286,545. MEN'S NECKTIES AND CRAVATS. W. O. HORN & BROTHER, INC., New York, N. Y.
Filed April 10, 1931. Serial No. 313,189. PUBLISHED JUNE 9, 1931. Class 39.

286,546. MEN'S AND BOYS' WORK SHIRTS. RELIANCE MANUFACTURING COMPANY, Chicago, Ill.
Filed March 16, 1931. Serial No. 312,199. PUBLISHED JUNE 16, 1931. Class 39.

286,547. PAJAMAS. VALCO MANUFACTURING CO., INC., New York, N. Y.
Filed April 13, 1931. Serial No. 313,315. PUBLISHED JUNE 16, 1931. Class 39.

286,548. HOSIERY. S. H. KRESS & Co., New York, N. Y.
Filed April 16, 1931. Serial No. 313,438. PUBLISHED JUNE 16, 1931. Class 39.

286,549. FUR SCARFS. HERBERT GRAY COMPANY, INC., Lincoln, Me.
Filed April 15, 1931. Serial No. 315,867. PUBLISHED JUNE 9, 1931. Class 39.

286,550. MISSES', WOMEN'S, AND CHILDREN'S DRESSES. MAYEHOFF, INCORPORATED, Norwalk, Conn.
Filed April 16, 1931. Serial No. 313,444. PUBLISHED JUNE 16, 1931. Class 39.

286,551. MEN'S PAJAMAS. EXCELSIOR VARSITY UNDERWEAR CORPORATION, Baltimore, Md.
Filed April 21, 1931. Serial No. 313,594. PUBLISHED JUNE 16, 1931. Class 39.

286,552. COATS, VESTS, PANTS, AND OVERCOATS FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed April 21, 1931. Serial No. 313,595. PUBLISHED JUNE 16, 1931. Class 39.

286,553. HOSIERY FOR WOMEN AND GIRLS. THE HOSIERY MILLS CO., Chicago, Ill.
Filed April 27, 1931. Serial No. 313,852. PUBLISHED JUNE 16, 1931. Class 39.

286,554. COATS, VESTS, TROUSERS, KNICKERBOCKERS, TOP COATS, AND OVERCOATS FOR MEN, YOUTHS, AND BOYS. J. SCHOENEMAN, INCORPORATED, Baltimore, Md.
Filed April 27, 1931. Serial No. 313,868. PUBLISHED JUNE 16, 1931. Class 39.

286,555. FABRIC-BACKED WOOD VENEER. THE FLEXWOOD COMPANY, Chicago, Ill.
Filed April 27, 1931. Serial No. 313,884. PUBLISHED JUNE 16, 1931. Class 12.

286,556. COMPOSITION TO MODIFY OR DECREASE THE COLOR TONE OF OIL PAINTS. JOHN G. MARSHALL, Brooklyn, N. Y.
Filed January 24, 1931. Serial No. 310,343. PUBLISHED JUNE 16, 1931. Class 16.

286,557. LIQUID TEA SYRUP. BOSTON TEA PARTY, INC., Troy, Ala.
Filed February 26, 1931. Serial No. 311,467. PUBLISHED JUNE 16, 1931. Class 46.

286,558. COMPOUNDS FOR USE AS DRIERS IN PAINTS, VARNISHES, ENAMELS, ETC. THE RESINOUS PRODUCTS & CHEMICAL COMPANY, Philadelphia, Pa.
Filed March 12, 1931. Serial No. 312,064. PUBLISHED JUNE 16, 1931. Class 16.

286,559. CANNED FRUITS AND VEGETABLES. O. B. ANDREWS COMPANY, Chattanooga, Tenn.
Filed February 6, 1931. Serial No. 310,791. PUBLISHED JUNE 16, 1931. Class 46.

286,560. PREPARATION IN THE NATURE OF A VARNISH TO BE USED ON PHOTOGRAPHS. JOHN G. MARSHALL, Brooklyn, N. Y.
Filed March 13, 1931. Serial No. 312,107. PUBLISHED JUNE 16, 1931. Class 16.

286,561. ASBESTOS ROOF COATING IN THE NATURE OF PAINT AND ROOF PAINT. THE GIBSON-HOMANS COMPANY, Cleveland, Ohio.
Filed March 18, 1931. Serial No. 312,283. PUBLISHED JUNE 9, 1931. Class 16.

286,562. INDUSTRIAL PAINT ENAMELS. THE MORGAN COMPANY, Chicago, Ill.
Filed March 23, 1931. Serial No. 312,445. PUBLISHED JUNE 9, 1931. Class 16.

286,563. PROTECTIVE READY MIXED PAINT. THE MORGAN COMPANY, Chicago, Ill.
Filed March 23, 1931. Serial No. 312,446. PUBLISHED JUNE 16, 1931. Class 16.

286,564. TELEGRAPH RECORDING INSTRUMENTS. MORSEGRAPH MANUFACTURING CORPORATION, New York, N. Y.
Filed March 24, 1931. Serial No. 312,487. PUBLISHED JUNE 9, 1931. Class 21.

286,565. GASOLINE AND KEROSENE. PACIFIC COMMERCIAL CO., New York, N. Y.
Filed March 30, 1931. Serial No. 312,719. PUBLISHED JUNE 9, 1931. Class 15.

286,566. TOUCH-UP ENAMEL, TIRE PAINT, AND AUTOMOBILE AND WOOD POLISHES. FIDELITY MANUFACTURING CO., INC., doing business as Airite Mfg., Co., Zionsville, Pa.
Filed March 31, 1931. Serial No. 312,753. PUBLISHED JUNE 16, 1931. Class 16.

286,567. OIL FOR USE IN POPPING CORN AND POP CORN SEASONING. AMERICAN POP CORN COMPANY, Sioux City, Iowa.
Filed March 31, 1931. Serial No. 312,748. PUBLISHED JUNE 16, 1931. Class 46.

286,568. OIL FOR USE IN POPPING CORN AND POP CORN SEASONING. AMERICAN POP CORN COMPANY, Sioux City, Iowa.
Filed March 31, 1931. Serial No. 312,749. PUBLISHED JUNE 9, 1931. Class 46.

286,569. GELATIN DESSERTS. NIKOL JELL COMPANY, Portland, Oreg.
Filed March 31, 1931. Serial No. 312,767. PUBLISHED JUNE 16, 1931. Class 46.

286,570. FROZEN CONFECTION CONSISTING PRINCIPALLY OF MILK, HONEY, AND FRUIT. W. S. MACGILLIVRAY, San Antonio, Tex.
Filed April 3, 1931. Serial No. 312,924. PUBLISHED JUNE 16, 1931. Class 46.

286,571. COMPOUND IN THE NATURE OF PAINT OR VARNISH FOR FLOORS, ETC. THE STAMINITE CORPORATION, New Haven, Conn.
Filed April 7, 1931. Serial No. 313,059. PUBLISHED JUNE 16, 1931. Class 16.

286,572. BANJO. THE BACON BANJO CO., INC., Groton, Conn.
Filed April 10, 1931. Serial No. 313,175. PUBLISHED JUNE 9, 1931. Class 36.

286,573. SILVER FLATWARE AND HOLLOW-WARE FOR TABLE USE. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y.
Filed April 11, 1931. Serial No. 313,257. PUBLISHED JUNE 9, 1931. Class 28.

286,574. CERTAIN NAMED PAINT PRODUCTS. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.
Filed April 11, 1931. Serial No. 313,260. PUBLISHED JUNE 16, 1931. Class 16.

286,575. SAXOPHONES, TRUMPETS, CORNETS, ETC. THE H. N. WHITE CO. OF NEW YORK, New York, N. Y.
Filed March 18, 1931. Serial No. 312,277. PUBLISHED JUNE 9, 1931. Class 36.

286,576. CANNED VEGETABLES, FRUITS, FISH, ETC. GEO. RASMUSSEN CO., Chicago, Ill.
Filed April 13, 1931. Serial No. 313,317. PUBLISHED JUNE 16, 1931. Class 46.

286,577. PIPE COATING ENAMEL OF THE NATURE OF PAINT. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed April 17, 1931. Serial No. 313,480. PUBLISHED JUNE 9, 1931. Class 16.

286,578. READY MIXED PAINT. HARPOON PAINT PRODUCTS, INC., Long Island City, N. Y.
Filed April 20, 1931. Serial No. 313,541. PUBLISHED JUNE 16, 1931. Class 16.

286,579. MALT SYRUP. PURITAN MALT EXTRACT COMPANY, Chicago, Ill.
Filed April 20, 1931. Serial No. 313,559. PUBLISHED JUNE 16, 1931. Class 46.

286,580. GREEN COFFEE. J. ARON & COMPANY, INC., New York, N. Y.
Filed April 27, 1931. Serial No. 313,824. PUBLISHED JUNE 9, 1931. Class 46.

286,581. YEAST. KAPSI-KON YEAST CORPORATION, Baltimore, Md.
Filed April 27, 1931. Serial No. 313,853. PUBLISHED JUNE 16, 1931. Class 46.

286,582. CERTAIN NAMED PAINT PRODUCTS. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.
Filed April 27, 1931. Serial No. 313,870. PUBLISHED JUNE 9, 1931. Class 16.

286,583. POLISH FOR FLOORS, FURNITURE, AND AUTOMOBILE BODIES. CONSOLIDATED PRODUCTS CORPORATION, Plainfield, N. J.
Filed May 1, 1931. Serial No. 314,041. PUBLISHED JUNE 16, 1931. Class 16.

286,584. UNDERLINING FOR FLOOR COVERINGS SUCH AS CARPETS AND LINOLEUM. AMERICAN HAIR & FELT COMPANY, Chicago, Ill.
Filed January 23, 1931. Serial No. 310,277. PUBLISHED JUNE 16, 1931. Class 50.

286,585. FOOT WEAR CONSISTING OF RUBBER, LEATHER, AND/OR FABRIC SANDALS, SHOES, AND SLIPPERS. WILLIAM GREILICH & SONS, INC., Brooklyn, N. Y.
Filed February 5, 1931. Serial No. 310,763. PUBLISHED JUNE 9, 1931. Class 39.

286,586. FIRE ESCAPE ROPE APPARATUS. CARL ROMSON, Stockholm, Sweden.
Filed February 14, 1931. Serial No. 311,074. PUBLISHED JUNE 16, 1931. Class 50.

286,587. FLY CATCHERS. PYRAMIDEN-FLIEGENFÄNGER-FABRIK MAX DAMETZ M. B. H., ZEITZ, Germany.
Filed March 16, 1931. Serial No. 312,198. PUBLISHED JUNE 16, 1931. Class 50.

286,588. APPAREL BELTS, SUSPENDERS, BRACES, AND GARTERS. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed April 10, 1931. Serial No. 313,202. PUBLISHED JUNE 9, 1931. Class 39.

286,589. APPAREL BELTS, SUSPENDERS, BRACES, AND GARTERS. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed April 10, 1931. Serial No. 313,203. PUBLISHED JUNE 9, 1931. Class 39.

286,590. ROLLED STEEL BARS, STEEL FORGINGS, AND STEEL CASTINGS. LUDLUM STEEL CO., Watervliet, N. Y.
Filed April 14, 1931. Serial No. 313,347. PUBLISHED JUNE 9, 1931. Class 14.

286,591. MEDICINE IN AMPUL FORM ADMINISTERED HYPODERMICALLY TO PROMOTE CONTRACTIONS IN CHILD BIRTH. WILLIAM H. ROREB, INC., Philadelphia, Pa.
Filed January 10, 1931. Serial No. 309,879. PUBLISHED JUNE 16, 1931. Class 6.

286,592. ENZYMATIC PREPARATION USED IN THE TREATMENT OF HIDES AND SKINS. WALLERSTEIN COMPANY, INC., New York, N. Y.
Filed January 15, 1931. Serial No. 310,001. PUBLISHED JUNE 16, 1931. Class 6.

286,593. MEDICINES FOR RELIEVING CONSTIPATION, INDIGESTION, KIDNEY AND LIVER TROUBLES, HIGH BLOOD PRESSURE, SOUR ACID STOMACH AND BOWELS, RHEUMATISM, NEURITIS, BLOOD AND SKIN DISEASES. MICHAEL ANGEL CRISP, Los Angeles, Calif.
Filed February 10, 1931. Serial No. 310,914. PUBLISHED JUNE 16, 1931. Class 6.

286,594. METAL PLATING AND POLISHING COMPOUND. CHEMICAL UTILITIES, INC., New York, N. Y.
Filed March 14, 1931. Serial No. 312,139. PUBLISHED JUNE 16, 1931. Class 6.

286,595. MEDICINE FOR GENERAL COLDS, ROUP, PNEUMONIA, INFECTIONS, BRONCHITIS AND RESPIRATORY DISEASES IN RABBITS AND CAVIES. THE CHIC-TONE COMPANY, INC., Angola, Ind.
Filed April 2, 1931. Serial No. 312,835. PUBLISHED JUNE 16, 1931. Class 6.

286,596. MATERIAL IN POWDER OR LIQUID FORM CONTAINING ENZYMES USED FOR TREATING PLANT JUICES AND EXTRACTS FOR THE PURPOSE OF AIDING CLARIFICATION. RÖHM & HAAS COMPANY, Philadelphia, Pa.
Filed April 10, 1931. Serial No. 313,207. PUBLISHED JUNE 16, 1931. Class 6.

286,597. MEDICINAL PREPARATIONS FOR TREATMENT OF INTESTINAL INDIGESTION AND FUNCTIONAL DISORDERS OF THE PANCREAS. REED & CARNRICK, Jersey City, N. J.
Filed April 17, 1931. Serial No. 313,479. PUBLISHED JUNE 16, 1931. Class 6.

286,598. MINERAL OIL USED AS AN INTESTINAL LUBRICANT. C. E. JAMIESON & COMPANY, Detroit, Mich.
Filed April 20, 1931. Serial No. 313,547. PUBLISHED JUNE 16, 1931. Class 6.

286,599. SHAMPOO. DAN J. HEALY, doing business as Healoil Laboratories, Detroit, Mich.
Filed April 21, 1931. Serial No. 313,599. PUBLISHED JUNE 16, 1931. Class 6.

286,600. OINTMENT FOR TREATING ACUTE MAMMITIS. PITMAN-MOORE COMPANY, Indianapolis, Ind.
Filed April 29, 1931. Serial No. 313,970. PUBLISHED JUNE 16, 1931. Class 6.

286,601. MEDICINE FOR TREATING NECROTIC INFLAMMATION FOR THE GASTRO-INTESTINAL TRACT IN SWINE. PITMAN-MOORE COMPANY, Indianapolis, Ind.
Filed April 29, 1931. Serial No. 313,972. PUBLISHED JUNE 16, 1931. Class 6.

286,602. ANIMAL INSECTICIDE. PITMAN-MOORE COMPANY, Indianapolis, Ind.
Filed April 29, 1931. Serial No. 313,973. PUBLISHED JUNE 16, 1931. Class 6.

286,603. PREPARATION FOR THE TREATMENT OF DIABETES. SANOVAPOR LABORATORIES, INC., Huntington, W. Va.
Filed April 29, 1931. Serial No. 313,976. PUBLISHED JUNE 16, 1931. Class 6.

286,604. MEDICINES FOR TREATING PULMONARY INFECTIONS AND GASTRO-INTESTINAL FERMENTATION IN HORSES AND CATTLE. PITMAN-MOORE COMPANY, Indianapolis, Ind.
Filed April 29, 1931. Serial No. 313,988. PUBLISHED JUNE 16, 1931. Class 6.

286,605. PYROPHORIC POCKET LIGHTER. LÖWENTHAL & WEISSBERGER G. M. B. H., Frankfort-on-the-Main, Germany.
Filed August 14, 1930. Serial No. 304,621. PUBLISHED JUNE 9, 1931. Class 34.

286,606. FRUIT PRESERVES, PIE AND PASTRY FILLINGS. H. A. JOHNSON COMPANY, Boston, Mass.
Filed July 24, 1930. Serial No. 303,769. PUBLISHED JUNE 16, 1931. Class 46.

286,607. FACE AND HAIR LOTION. CHARLES W. STENGEL, Philadelphia, Pa.
Filed August 23, 1930. Serial No. 304,977. PUBLISHED JUNE 9, 1931. Class 6.

286,608. CLEANSING CREAM, TISSUE BUILDING CREAM, COLD CREAM, ETC. SECRETS, INC., Ottawa, Ill.
Filed August 25, 1930. Serial No. 305,017. PUBLISHED JUNE 16, 1931. Class 6.

286,609. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, BEAUTY CREAMS, ETC. ELWOOD J. GOODIER, doing business as Universal Laboratories, Dallas, Tex.
Filed October 1, 1930. Serial No. 306,265. PUBLISHED JUNE 9, 1931. Class 6.

286,610. BURNED CLAY BRICK AND TILE. ALBERT ARMSTRONG, Seattle, Wash.
Filed October 21, 1930. Serial No. 306,991. PUBLISHED JUNE 16, 1931. Class 12.

286,611. METAL AND COMBINATION GLASS AND METAL GLOBES AND REFLECTORS. HOLOPHANE COMPANY, INC., New York, N. Y.
Filed October 18, 1930. Serial No. 306,890. PUBLISHED JUNE 9, 1931. Class 34.

286,612. FLAVORING EXTRACTS FOR FOOD FLAVORING PURPOSES. ADOLPH FRIEDBERG, Montreal, Quebec, Canada.
Filed October 30, 1930. Serial No. 307,351. PUBLISHED JUNE 16, 1931. Class 46.

286,613. LADIES' VESTS, BLOOMERS, PANTIES, CHEMISES, BANDEAUX, NIGHTGOWNS, PAJAMAS, AND PAJAMA ENSEMBLES. M. S. SIEGEL & COMPANY, INC., New York, N. Y.
Filed October 31, 1930. Serial No. 307,433. PUBLISHED JUNE 16, 1931. Class 39.

286,614. PICKLE RELISH, BUTTER, AND COOKING COMPOUND. THE BALTIMORE BUTTERINE COMPANY, Baltimore, Md.
Filed November 3, 1930. Serial No. 307,471. PUBLISHED MARCH 17, 1931. Class 46.

286,615. AUTOMOBILES AND STRUCTURAL PARTS THEREOF. REO MOTOR CAR COMPANY, Lansing, Mich.
Filed November 7, 1930. Serial No. 307,630. PUBLISHED JUNE 9, 1931. Class 19.

286,616. ARTICLES OF JEWELRY. SEIDMAN & COHAN, INC., New York, N. Y.
Filed November 11, 1930. Serial No. 307,791. PUBLISHED JUNE 9, 1931. Class 28.

286,617. METAL CABLE CLAMPS, DEVICES FOR PREVENTING VIBRATION OF ELECTRIC CABLES, NON-FERROUS TUBING, RIVETS, AND NAILS. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,875. PUBLISHED JUNE 16, 1931. Class 13.

286,618. METAL CABLE CLAMPS, DEVICES FOR PREVENTING VIBRATION OF ELECTRIC CABLES, NON-FERROUS TUBING, RIVETS AND NAILS. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed November 14, 1930. Serial No. 307,876. PUBLISHED JUNE 16, 1931. Class 13.

286,619. SILK HOSIERY. EDWIN A. LEE, Philadelphia, Pa.
Filed November 21, 1930. Serial No. 308,165. PUBLISHED JUNE 16, 1931. Class 39.

286,620. CERTAIN NAMED FOOTWEAR. WOHL SHOE COMPANY, St. Louis, Mo.
Filed August 20, 1930. Serial No. 304,844. PUBLISHED JUNE 9, 1931. Class 39.

286,621. WASHABLE WATER-PROOF WINDOW SHADE FABRIC OR MATERIAL SOLD IN THE PIECE OR CUT TO SIZE. OTTO F. WEIGAND, doing business as C. A. Weigand, Philadelphia, Pa.
Filed October 2, 1930. Serial No. 306,333. PUBLISHED JUNE 16, 1931. Class 42.

286,622. FLANGES, FORGINGS, STEEL BILLETS, ETC. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa.
Filed October 7, 1930. Serial No. 306,502. PUBLISHED JUNE 9, 1931. Class 14.

286,623. CANVAS SHOES HAVING RUBBER SOLES AND LEATHER STRAPS. CHARLES B. BARNDOLLAR, Oakland, Calif.
Filed October 27, 1930. Serial No. 307,198. PUBLISHED JUNE 9, 1931. Class 39.

286,624. WOOLENS—NAMELY, PIECE GOODS. SAMEK BROTHERS, Brno-Brunn, Czechoslovakia.
Filed November 13, 1930. Serial No. 308,317. PUBLISHED JUNE 16, 1931. Class 42.

286,625. HOSIERY. AJAX HOSIERY MILLS, Phoenixville, Pa.
Filed January 20, 1931. Serial No. 310,148. PUBLISHED JUNE 16, 1931. Class 39.

286,626. LADIES' AND CHILDREN'S UNDERWEAR. O'BRYAN BROTHERS, Chicago, Ill.
Filed March 19, 1931. Serial No. 312,306. PUBLISHED JUNE 9, 1931. Class 39.

286,627. MEN'S, WOMEN'S, AND CHILDREN'S UNDERWEAR AND PYJAMAS MADE OF KNITTED, NETTED, AND/OR TEXTILE FABRICS. STERN BROTHERS, New York, N. Y.
Filed April 7, 1931. Serial No. 313,061. PUBLISHED JUNE 9, 1931. Class 39.

286,628. FLAG STONES. AMERICAN BLUE STONE CO., New York, N. Y.
Filed March 10, 1931. Serial No. 311,947. PUBLISHED JUNE 16, 1931. Class 12.

286,629. COMPOSITION SHINGLES. H. B. CLIFFORD ROOFING COMPANY, Detroit, Mich.
Filed March 30, 1931. Serial No. 312,696. PUBLISHED JUNE 16, 1931. Class 12.

286,630. COD LIVER OIL. PIERRE ZIZINE, Paris, France.
Filed May 24, 1930. Serial No. 301,223. PUBLISHED JUNE 16, 1931. Class 6.

286,631. POWDER USED IN DISEASES OF THE STOMACH AND INTESTINES, FOR DYSPEPSIA, AND GASTROINTESTINAL TROUBLES. PIERRE ZIZINE, Paris, France.
Filed May 24, 1930. Serial No. 301,224. PUBLISHED JUNE 16, 1931. Class 6.

286,632. COD LIVER OIL. PIERRE ZIZINE, Paris, France.
Filed May 24, 1930. Serial No. 301,227. PUBLISHED JUNE 16, 1931. Class 6.

286,633. POWDER AND TABLETS USED FOR DISEASES OF THE STOMACH. PIERRE ZIZINE, Paris, France.
Filed May 24, 1930. Serial No. 301,228. PUBLISHED JUNE 16, 1931. Class 6.

286,634. MEN'S COATS, VESTS, PANTS, OVERCOATS, SUITS, TOP COATS, RIDING BREECHES, GOLF KNICKERS, AND UNIFORMS. S. H. CHURCHILL & COMPANY, Chicago, Ill.
Filed June 5, 1930. Serial No. 302,178. PUBLISHED JUNE 16, 1931. Class 39.

286,635. GALVANIZED RIDGE ROLL FOR ROOFING, CORRUGATED AND WALL FLASHING. RAUB SUPPLY CO., Lancaster, Pa.
Filed July 9, 1930. Serial No. 303,299. PUBLISHED JUNE 16, 1931. Class 12.

286,636. FIREPROOF PAINTS. COLARDO PRODUCTS LIMITED, Reading, England.
Filed October 26, 1929. Serial No. 291,606. PUBLISHED JUNE 16, 1931. Class 16.

286,637. MALT SYRUP. ALTOONA MALT COMPANY, Altoona, Pa.
Filed March 19, 1930. Serial No. 297,506. PUBLISHED SEPTEMBER 16, 1930. Class 46.

286,638. PARAFFINE OIL AND FLUX OIL—NAMELY, A LUBRICATING OIL AND A SKID OIL, RESPECTIVELY. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed March 22, 1930. Serial No. 297,769. PUBLISHED JUNE 9, 1931. Class 15.

286,639. ELECTRIC COOK STOVES. FLORENCE STOVE Company, Boston and Gardner, Mass.
Filed March 25, 1930. Serial No. 297,862. PUBLISHED JUNE 9, 1931. Class 21.

286,640. MEDICINAL PREPARATION FOR STOMACH ANTACID, GAS ELIMINANT, LAXATIVE, MUCOUS TISSUE SEDATIVE. AARON GARD BURNETT doing business as A. G. Burnett Pharmacal Co., Belleville, Ill.
Filed March 28, 1930. Serial No. 298,011. PUBLISHED JUNE 16, 1931. Class 6.

286,641. CANNED BERRIES AND VEGETABLES, CANNED AND PRESERVED FRUITS, ETC. ZOYA MATZKA, Rye Hill, Monroe, N. Y.
Filed April 9, 1930. Serial No. 298,582. PUBLISHED JUNE 9, 1931. Class 46.

286,642. POLISHING WAXES AND LACQUER POLISHES FOR AUTOMOBILE FINISHES, ETC. MINNESOTA MINING & MANUFACTURING COMPANY, Wilmington, Del.
Filed September 25, 1929. Serial No. 290,220. PUBLISHED JUNE 16, 1931. Class 16.

286,643. PERIODICAL. FRANK G. MENKE, New York, N. Y.
Filed March 10, 1930. Serial No. 297,092. PUBLISHED APRIL 14, 1931. Class 38.

286,644. WIRE GAUZE, WIRE SIEVES AND STRAINERS, SHEET METAL CASTINGS, ETC. HUGO JUNKERS, Dessau, Germany.
Filed February 26, 1929. Serial No. 279,931. PUBLISHED JUNE 9, 1931. Class 13.

286,645. FIRE BRICK, BRICK SPECIALTIES SUCH AS TILE, AND FIRE BRICK CEMENT AND GROUND REFRACTORY OF GROUND BRICK. SAYRE & FISHER BRICK COMPANY, Sayreville, N. J.
Filed December 20, 1929. Serial No. 293,933. PUBLISHED JUNE 16, 1931. Class 12.

286,646. BOTTLE CAPS. SAMUEL MALLINGER, Pittsburgh, Pa.
Filed April 17, 1931. Serial No. 313,475. PUBLISHED JUNE 16, 1931. Class 50.

286,647. CIGARS, CHEROOTS, CIGARETTES, AND LITTLE CIGARS. M. TRELLES & COMPANY, New Orleans, La.
Filed April 21, 1931. Serial No. 313,614. PUBLISHED JUNE 9, 1931. Class 17.

286,648. GRANITE MONUMENTS AND MEMORIALS. ARON GUSTAFSON, doing business as Johnson & Gustafson, Barre, Vt.
Filed April 22, 1931. Serial No. 313,659. PUBLISHED JUNE 16, 1931. Class 50.

286,649. SHOES MADE OF LEATHER, CLOTH, CANVAS, OR COMBINATIONS THEREOF. BROWN SHOE COMPANY, INC., St. Louis, Mo.
Filed April 24, 1931. Serial No. 313,729. PUBLISHED JUNE 16, 1931. Class 39.

286,650. WOMEN'S HATS MADE OF WOVEN PAPER SIMULATING STRAW. FARRINGTON & EVANS, INC., New York, N. Y.
Filed April 24, 1931. Serial No. 313,731. PUBLISHED JUNE 16, 1931. Class 39.

286,651. SQUEEGEES AND SPOTTING BRUSHES. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed April 27, 1931. Serial No. 313,840. PUBLISHED JUNE 9, 1931. Class 29.

286,652. CIGARS. PENLO CIGAR CO., INC., Philadelphia, Pa.
Filed April 29, 1931. Serial No. 313,968. PUBLISHED JUNE 9, 1931. Class 17.

286,653. PRINTING INKS. STANDARD PIGMENT COMPANY, INC., Schuylerville, N. Y.
Filed April 27, 1931. Serial No. 313,872. PUBLISHED JUNE 16, 1931. Class 11.

286,654. NON-STAINING, NON-TARNISHING OR BRIGHT ALLOY STEELS IN CAST, FORGED, AND ROLLED FORM. MARINE STEEL CORPORATION, New York, N. Y.
Filed May 7, 1931. Serial No. 314,290. PUBLISHED JUNE 16, 1931. Class 14.

286,655. PILE FABRICS FOR THE MANUFACTURE OF JACQUETTES, IN THE PIECE. SIDNEY BLUMENTHAL & Co., INC., New York, N. Y.
Filed April 11, 1931. Serial No. 313,230. PUBLISHED JUNE 16, 1931. Class 42.

286,656. SILK PIECE GOODS. KATTERMAN AND MITCHELL COMPANY, New York, N. Y.
Filed April 15, 1931. Serial No. 313,371. PUBLISHED JUNE 16, 1931. Class 42.

286,657. LACE DOILIES, LACE RUNNERS, LACE BED SPREADS, LACE TABLE CLOTHS. PERLMANN, SCHAL AND STERN, INC., New York, N. Y.
Filed April 17, 1931. Serial No. 313,477. PUBLISHED JUNE 16, 1931. Class 42.

286,658. LADIES' BELTS MADE OF LEATHER OR SIMILAR MATERIALS. SLOTE & KLEIN, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,697. PUBLISHED JUNE 16, 1931. Class 39.

286,659. WOOLEN OVERCOATINGS. HUDSON RIVER WOOLEN MILLS, New York, N. Y.
Filed April 16, 1931. Serial No. 313,433. PUBLISHED JUNE 16, 1931. Class 42.

286,660. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co., New York, N. Y.
Filed April 18, 1931. Serial No. 313,488. PUBLISHED JUNE 16, 1931. Class 42.

286,661. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed April 18, 1931. Serial No. 313,489. PUBLISHED JUNE 16, 1931. Class 42.

286,662. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed April 18, 1931. Serial No. 313,490. PUBLISHED JUNE 16, 1931. Class 42.

286,663. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed April 18, 1931. Serial No. 313,491. PUBLISHED JUNE 16, 1931. Class 42.

286,664. TEXTILE RUGS AND CARPETS. A. & M. KARAGHEUSIAN, INC., New York, N. Y.
Filed April 27, 1931. Serial No. 313,854. PUBLISHED JUNE 16, 1931. Class 42.

286,665. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed April 29, 1931. Serial No. 313,954. PUBLISHED JUNE 16, 1931. Class 42.

286,666. TEXTILE FABRIC CURTAINS. FAIRCLOUGH & GOLD, INC., Boston, Mass.
Filed January 9, 1931. Serial No. 309,772. PUBLISHED JUNE 16, 1931. Class 42.

286,667. SILK PIECE GOODS. C. G. ASCHMANN & Co., New York, N. Y.
Filed January 28, 1931. Serial No. 310,464. PUBLISHED JUNE 16, 1931. Class 42.

286,668. PIECE GOODS OF SILK, LINEN, WOOL, OR PILE FABRICS OR COMBINATIONS THEREOF USED FOR DRESS GOODS OR WEARING APPAREL. S. SLATER & SONS, INC., New York, N. Y.
Filed February 11, 1931. Serial No. 310,958. PUBLISHED JUNE 16, 1931. Class 42.

286,669. COTTON, WOOLEN, SILK, ARTIFICIAL SILK, AND RAYON PIECE GOODS. ARGUS KNITTING MILLS, INC., Brooklyn, N. Y.
Filed March 9, 1931. Serial No. 311,907. PUBLISHED JUNE 16, 1931. Class 42.

286,670. CANOPIES FOR BABY CARRIAGES, BEDS, CHAIRS. JACOB M. BRAMNICK, doing business as BA-BEE-NET MANUFACTURING Co., Philadelphia, Pa.
Filed March 10, 1931. Serial No. 311,950. PUBLISHED JUNE 16, 1931. Class 42.

286,671. WOOL OR WORSTED CLOTHS AND STUFFS IN THE PIECE. BROOKLANDS KNITTING INDUSTRY LIMITED, Altrincham, England.
Filed March 11, 1931. Serial No. 312,028. PUBLISHED JUNE 16, 1931. Class 42.

286,672. SHOE LACES. COMPRESSION ANCHOR COMPANY, INC., New York, N. Y.
Filed March 13, 1931. Serial No. 312,125. PUBLISHED JUNE 9, 1931. Class 40.

286,673. LADIES' SHOES MADE FROM LEATHER, RUBBER, OR FABRIC OR COMBINATIONS OF THOSE MATERIALS. SEYMOUR TROY & COMPANY, INC., Brooklyn, N. Y.
Filed March 26, 1931. Serial No. 312,575. PUBLISHED JUNE 16, 1931. Class 39.

286,674. CORSETS AND COMBINATION CORSETS AND BRASSIÈRES. INTERNATIONAL CORSET COMPANY, Aurora, Ill.
Filed March 4, 1931. Serial No. 311,785. PUBLISHED JUNE 16, 1931. Class 39.

286,675. HAND MADE HOOKED RUGS. S. J. CRAIG, Greenville, S. C.
Filed March 20, 1931. Serial No. 312,332. PUBLISHED JUNE 16, 1931. Class 42.

286,676. CERTAIN NAMED WEARING APPAREL. COHEN, GOLDMAN & Co., INC., New York, N. Y.
Filed April 2, 1931. Serial No. 312,887. PUBLISHED JUNE 16, 1931. Class 39.

286,677. KNITTED PIECE GOODS MADE OF RAYON AND SILK. ROYAL RAYON CORPORATION, Brooklyn, N. Y.
Filed April 6, 1931. Serial No. 313,006. PUBLISHED JUNE 16, 1931. Class 42.

286,678. CERTAIN NAMED TABLE LINENS AND BED LINENS AND LINEN PIECE GOODS. THE FAIR, Chicago, Ill.
Filed April 8, 1931. Serial No. 313,078. PUBLISHED JUNE 16, 1931. Class 42.

286,679. SLIPPERS AND SHOES MADE OF LEATHER, FELT, AND CANVAS AND A COMBINATION OF FELT, LEATHER, AND CANVAS. GLY-DERS FOOTWEAR, INC., Racine, Wis.
Filed April 9, 1931. Serial No. 313,131. PUBLISHED JUNE 16, 1931. Class 39.

286,680. YARNS. ADAMSON BROS. COMPANY, New York, N. Y., assignor to United States Rubber Company, New York, N. Y., a Corporation of New Jersey.
Filed April 9, 1931. Serial No. 313,213. PUBLISHED JUNE 16 1931. Class 43.

286,681. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed April 11, 1931. Serial No. 313,226. PUBLISHED JUNE 16, 1931 Class 42.

286,682. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed April 11, 1931. Serial No. 313,227. PUBLISHED JUNE 16, 1931. Class 42.

286,683. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed April 11, 1931. Serial No. 313,228. PUBLISHED JUNE 16, 1931. Class 42.

286,684. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed April 11, 1931. Serial No. 313,229. PUBLISHED JUNE 16, 1931. Class 42.

286,685. BEDSPREADS. W. K. HILL, doing business as W. K. Hill & Co., Greer, S. C.
Filed December 27, 1930. Serial No. 309,380. PUBLISHED JUNE 16, 1931. Class 42.

286,686. MEDICINAL PREPARATIONS IN TABLET AND LIQUID FORM FOR THE TREATMENT OF INTESTINAL PUTREFACTION. THE FERMENT COMPANY, New York, N. Y.
Filed April 9, 1931. Serial No. 313,127. PUBLISHED JUNE 9, 1931. Class 6.

286,687. PREPARATION FOR CLARIFYING BLACK, SOOTY CISTERN WATER. LELAND L. FRANK, doing business as The Settlesit Company, Decatur, Ind.
Filed April 9, 1931. Serial No. 313,129. PUBLISHED JUNE 9, 1931. Class 6.

286,688. COMPOUND TO BE USED FOR MEDICINAL PURPOSES, AS A STOMACHIC AND TONIC-LAXATIVE. GEORGE L. BALDAUF, doing business as The Borolatum Company, Milwaukee, Wis.
Filed April 10, 1931. Serial No. 313,176. PUBLISHED JUNE 16, 1931. Class 6.

286,689. PERFUME, TOILET WATER, FACE POWDER, TALCUM POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, LIPSTICK, DUSTING POWDER, SACHET, COLD CREAMS, LOTION FOR THE SKIN AND HAIR, POWDER AND ROUGE COMPACTS, AND VEGETAL. L. T. PIVER, INC., Wilmington, Del., and New York, N. Y.
Filed April 10, 1931. Serial No. 313,204. PUBLISHED JUNE 9, 1931. Class 6.

286,690. MEDICINE FOR THE TREATMENT OF STOMACH DISORDERS, GALL STONES, NERVOUSNESS, CONSTIPATION, LOSS OF ENERGY, GAS OR BLOATED CONDITIONS, LIVER COMPLAINTS AND HEADACHES. FRANK H. ARISMAN, Chicago, Ill.
Filed April 11, 1931. Serial No. 313,219. PUBLISHED JUNE 16, 1931. Class 6.

286,691. LAUNDRY WASHING MACHINES. GRINNELL WASHING MACHINE CORPORATION, Grinnell, Iowa.
Filed April 11, 1931. Serial No. 313,242. PUBLISHED JUNE 16, 1931. Class 24.

286,692. SIZING STARCH. THE HURON MILLING COMPANY, Harbor Beach, Mich.
Filed April 13, 1931. Serial No. 313,295. PUBLISHED JUNE 9, 1931. Class 6.

286,693. PERFUME. ELIZABETH ARDEN, INC., New York, N. Y.
Filed April 14, 1931. Serial No. 313,321. PUBLISHED JUNE 16, 1931. Class 6.

286,694. TUBULAR CONTAINERS FOR MORTUARY RECORDS. JOHN MARSELLUS CASKET COMPANY, Syracuse, N. Y.
Filed April 15, 1931. Serial No. 313,378. PUBLISHED JUNE 16, 1931. Class 2.

286,695. SALVE. CARTER & MOORE CHEMICAL CO., Waycross, Ga.
Filed April 17, 1931. Serial No. 313,464. PUBLISHED JUNE 9, 1931. Class 6.

286,696. ELECTRIC LAUNDRY WASHING MACHINES AND ELECTRIC IRONING MACHINES OR MANGLES. THE BLACK & DECKER MANUFACTURING COMPANY, Towson, Md.
Filed April 22, 1931. Serial No. 313,643. PUBLISHED JUNE 16, 1931. Class 24.

286,697. STERILIZING MATERIAL. THE J. B. FORD COMPANY, Wyandotte, Mich.
Filed April 22, 1931. Serial No. 313,656. PUBLISHED JUNE 9, 1931. Class 6.

286,698. PAPER BOXES AND CARTONS. SHUTTLEWORTH CARTON CO. INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,678. PUBLISHED JUNE 16, 1931. Class 2.

286,699. CHEMICAL PRODUCT FOR USE AS AN AUXILIARY AGENT IN THE TEXTILE INDUSTRY. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed April 22, 1931. Serial No. 313,679. PUBLISHED JUNE 9, 1931. Class 6.

286,700. CARDIOTONIC. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed April 22, 1931. Serial No. 313,680. PUBLISHED JUNE 9, 1931. Class 6.

286,701. ANTISEPTIC PASTE. ABSOSURE PRODUCTS, INC., Royal Oak, Mich.
Filed April 23, 1931. Serial No. 313,700. PUBLISHED JUNE 9, 1931. Class 6.

286,702. WASHBOARDS. FREDERIC MARTIN, Jr., doing business as Columbus Washboard Company, Columbus, Ohio.
Filed April 24, 1931. Serial No. 313,742. PUBLISHED JUNE 9, 1931. Class 24.

286,703. CHEMICAL PREPARATION USED IN THE TREATMENT OF TREES AND SHRUBS TO PREVENT CHEWING BY RABBITS AND AN INSECTICIDE. HUFFMAN & HULSEBUS, Harlan, Iowa.
Filed April 25, 1931. Serial No. 313,783. PUBLISHED JUNE 9, 1931. Class 6.

286,704. ENZYMIC PRODUCT USED IN TREATING FABRICS. RÖHM & HAAS COMPANY, Philadelphia, Pa.
Filed April 25, 1931. Serial No. 313,800. PUBLISHED JUNE 9, 1931. Class 6.

286,705. STAPLES USED IN STAPLING MACHINES FOR FASTENING PAPERS, CARDBOARD, METAL, ETC. ON TO WOOD, ETCETERA. WYRSTAPES, INC., New York, N. Y.
Filed April 25, 1931. Serial No. 313,880. PUBLISHED JUNE 16, 1931. Class 13.

286,706. SENSITIZED PHOTOGRAPHIC PAPER. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed May 27, 1930. Serial No. 301,327. PUBLISHED JUNE 23, 1931. Class 26.

286,707. ROTARY PRINTING PRESSES, ROTARY FOLDERS AND STEREOTYPE EQUIPMENT. DUPLEX PRINTING PRESS CO., Battle Creek, Mich.
Filed June 9, 1930. Serial No. 302,274. PUBLISHED JUNE 9, 1931. Class 23.

286,708. PHOTOGRAPHIC CAMERAS. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed May 27, 1930. Serial No. 301,324. PUBLISHED JUNE 23, 1931. Class 26.

286,709. PHOTOGRAPHIC CAMERAS. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed May 27, 1930. Serial No. 301,323. PUBLISHED JUNE 23, 1931. Class 26.

286,710. CARD SETS, SPINNING MACHINERY, FINISHING PRESS ACCESSORIES, AND PARTS THEREOF. DEHLER-SIGNORET CORPORATION, New York, N. Y.
Filed May 24, 1930. Serial No. 301,163. PUBLISHED JUNE 9, 1931. Class 23.

286,711. LOG AND TIMBER CUTTER FOR USE IN SAWING WOOD, LOGS, AND TIMBER ON FARMS, IN WOODS, OR IN MILLS. JOSEF KALAS, doing business under the firm name of Josef Kalas, North Judson, Ind.
Filed February 15, 1930. Serial No. 296,062. PUBLISHED JULY 1, 1930. Class 23.

286,712. MACHINES FOR SHAKING OUT THE CORES FROM CAST IRON PIPE. ESSEX FOUNDRY, Newark, N. J., and New York, N. Y.
Filed November 1, 1929. Serial No. 292,240. PUBLISHED JUNE 23, 1931. Class 23.

286,713. CALCULATING AND ADDING MACHINES. RALPH C. COXHEAD CORPORATION, New York, N. Y.
Filed May 2, 1931. Serial No. 314,100. PUBLISHED JUNE 23, 1931. Class 26.

286,714. REFRIGERATORS. THE ILLINOIS MOULDING COMPANY, Chicago, Ill.
Filed May 14, 1931. Serial No. 314,566. PUBLISHED JUNE 23, 1931. Class 31.

286,715. OFFICE, STORE, HOSPITAL, AND BANK FURNITURE. THE GENERAL FIREPROOFING COMPANY, Youngstown, Ohio.
Filed May 18, 1931. Serial No. 314,691. PUBLISHED JUNE 23, 1931. Class 32.

286,716. OPTICAL LENSES. THE WALMAN OPTICAL CO., Minneapolis, Minn.
Filed May 14, 1931. Serial No. 314,593. PUBLISHED JUNE 23, 1931. Class 26.

286,717. TWEEZERS, SCISSORS, DESK SETS, ETC. SCHNEFEL BROS., INC., Newark, N. J.
Filed May 12, 1931. Serial No. 314,466. PUBLISHED JUNE 23, 1931. Class 23.

286,718. LUBRICATING DEVICES FOR INTERNAL COMBUSTION ENGINES. OUTING MANUFACTURING COMPANY, Elkhart, Ind.
Filed May 2, 1931. Serial No. 314,125. PUBLISHED JUNE 23, 1931. Class 23.

286,719. BAKERY MACHINERY—NAMELY, CUP AND LAYER CAKE DOUGH DROPPER. RICHARDSON & HOLLAND, INC., Seattle, Wash.
Filed April 28, 1931. Serial No. 313,935. PUBLISHED JUNE 9, 1931. Class 23.

286,720. MACHINES FOR PUMPING CEMENTITIOUS AGGREGATES. NATIONAL EQUIPMENT CORPORATION, Milwaukee, Wis.
Filed April 27, 1931. Serial No. 313,864. PUBLISHED JUNE 16, 1931. Class 23.

286,721. ROLLERS, PRINT TRIMMERS, PRINT PADDLES, ETCHING KNIVES, AND TACKING IRONS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed April 27, 1931. Serial No. 313,839. PUBLISHED JUNE 23, 1931. Class 23.

286,722. LITTER GATHERING IMPLEMENTS—NAMELY, LAWN RAKES. THE SABIN MACHINE COMPANY, Cleveland, Ohio.
Filed April 24, 1931. Serial No. 313,755. PUBLISHED JUNE 23, 1931. Class 23.

286,723. ENGINES. THE GLENN L. MARTIN MOTORS COMPANY, Middle River and Baltimore, Md.
Filed April 24, 1931. Serial No. 313,745. PUBLISHED JUNE 23, 1931. Class 23.

286,724. GLASS CUTTERS. ABRAHAM SELSKY, Coney Island, N. Y.
Filed April 22, 1931. Serial No. 313,696. PUBLISHED JUNE 23, 1931. Class 23.

286,725. PHOTOGRAPHIC FILM. DU PONT-PATHÉ FILM MANUFACTURING CORPORATION, New York, N. Y.
Filed April 22, 1931. Serial No. 313,652. PUBLISHED JUNE 2, 1931. Class 26.

286,726. TRAILERS OF ALL KINDS. FRUEHAUF TRAILER COMPANY, Detroit, Mich.
Filed April 20, 1931. Serial No. 313,539. PUBLISHED JUNE 23, 1931. Class 19.

286,727. EVAPORATED MILK. NESTLÉ'S MILK PRODUCTS, INC., New York, N. Y.
Filed April 15, 1931. Serial No. 313,383. PUBLISHED JUNE 23, 1931. Class 46.

286,728. SANITARY NAPKINS. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed April 17, 1931. Serial No. 313,472. PUBLISHED JUNE 23, 1931. Class 44.

286,729. SANITARY NAPKINS. KOTEX COMPANY, Chicago, Ill.
Filed April 13, 1931. Serial No. 313,299. PUBLISHED JUNE 23, 1931. Class 44.

286,730. AUTOMATIC OIL BURNERS. SUN HEAT AUTOMATIC OIL BURNER CORP., New York, N. Y.
Filed April 11, 1931. Serial No. 313,251. PUBLISHED JUNE 23, 1931. Class 34.

286,731. BUILDERS' HARDWARE—NAMELY, HINGES, CASEMENT AND TRANSOM OPERATORS, DOOR CHECKS, DOOR HOLDERS, DOOR AND CASEMENT PIVOTS, CASEMENT HOLDERS, STAYS, AND PARTS THEREOF. THE OSCAR C. RIXSON CO., Chicago, Ill.
Filed April 10, 1931. Serial No. 313,206. PUBLISHED JUNE 23, 1931. Class 13.

286,732. CERAMIC DECORATING COLORS. HANOVIA CHEMICAL & MANUFACTURING COMPANY, Newark, N. J.
Filed April 10, 1931. Serial No. 313,186. PUBLISHED JUNE 9, 1931. Class 16.

286,733. METALLIC DECORATING PAINTS; LIQUID, DRY, AND PASTE LUSTRE COLORS; AND OVERGLAZE AND UNDERGLAZE COLORS. HANOVIA CHEMICAL & MANUFACTURING COMPANY, Newark, N. J.
Filed April 10, 1931. Serial No. 313,187. PUBLISHED JUNE 16, 1931. Class 16.

286,734. LAUNDRY WASHING MACHINES AND IRONING MACHINES. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed April 9, 1931. Serial No. 313,130. PUBLISHED JUNE 23, 1931. Class 24.

286,735. RADIATORS FOR USE IN CONNECTION WITH STEAM, HOT-WATER, VAPOR, VACUUM, OR OTHER HEATING SYSTEMS. RICHMOND RADIATOR COMPANY, New York, N. Y.
Filed April 6, 1931. Serial No. 313,004. PUBLISHED JUNE 23, 1931. Class 34.

286,736. ATTACHMENT OR CLASP FOR DENTAL PLATES AND MOULD BOXES FOR INLAYS. HARRISON-NOYES CHEMICAL CORP., Long Beach, Calif.
Filed April 6, 1931. Serial No. 312,988. PUBLISHED JUNE 23, 1931. Class 44.

286,737. MEN'S AND BOYS' SUITS, OVERCOATS, AND TOPCOATS. PAUSON & COMPANY, San Francisco, Calif.
Filed April 1, 1931. Serial No. 312,813. PUBLISHED JUNE 16, 1931. Class 39.

286,738. NAILS. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo.
Filed March 30, 1931. Serial No. 312,697. PUBLISHED JUNE 23, 1931. Class 13.

286,739. ARTIFICIAL DENTURES. NATIONAL DENTAL LABORATORY, Baltimore, Md.
Filed March 18, 1931. Serial No. 312,284. PUBLISHED JUNE 23, 1931. Class 44.

286,740. COPPER ALLOY WIRE AND UNFINISHED COPPER ALLOY RODS AND SHEETS. ANACONDA WIRE & CABLE COMPANY, New York, N. Y.
Filed February 24, 1931. Serial No. 311,355. PUBLISHED JUNE 9, 1931. Class 14.

286,741. CERTAIN NAMED EAR PROTECTION DEVICES, ETC. MAX NEOWER, Potsdam, Germany.
Filed February 13, 1931. Serial No. 311,041. PUBLISHED JUNE 23, 1931. Class 44.

286,742. ICE CREAM CONFECTION. I. C. PARKER, Fort Worth, Tex.
Filed April 22, 1931. Serial No. 313,667. PUBLISHED JUNE 23, 1931. Class 46.

286,743. GROUND GLASS SUBSTITUTE IN THE NATURE OF VARNISH, LANTERN SLIDE VARNISH, AND SPOTTING COLORS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed April 27, 1931. Serial No. 313,837. PUBLISHED JUNE 23, 1931. Class 16.

286,744. CALCIMINE OR DECORATIVE WALL COATING. THE MURALO COMPANY, INC., New Brighton, N. Y.
Filed April 29, 1931. Serial No. 314,026. PUBLISHED JUNE 9, 1931. Class 16.

286,745. SANITARY STEP-INS, SANITARY BLOOMERS, SANITARY APRONS, SANITARY BELTS. JULIUS W. GOLDSMITH, doing business as Empire Shield Company, New York, N. Y.
Filed April 21, 1931. Serial No. 313,596. PUBLISHED JUNE 23, 1931. Class 44.

286,746. RAISINS, HONEY, VINEGAR, ETC. THE INTER-STATE GROCER COMPANY, Joplin, Mo.
Filed June 25, 1930. Serial No. 302,824. PUBLISHED JUNE 23, 1931. Class 46.

286,747. AUTOMOBILE POLISHER. CHARLES M. DAVIS, doing business as Scientific Research Products, Long Beach, Calif.
Filed July 31, 1930. Serial No. 304,041. PUBLISHED JUNE 23, 1931. Class 16.

286,748. AVOCADO PULP AS A BASE FOR SHORTENING OR FLAVORING FOODS. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif.
Filed October 10, 1930. Serial No. 306,593. PUBLISHED JUNE 23, 1931. Class 46.

286,749. WOMEN'S HATS. WYLE HAT COMPANY, Chicago, Ill.
Filed October 29, 1930. Serial No. 307,342. PUBLISHED JUNE 16, 1931. Class 39.

286,750. LIQUID SOAP DISPENSERS. BOBRICK MANUFACTURING CORPORATION, Los Angeles, Calif.
Filed November 25, 1930. Serial No. 308,286. PUBLISHED JUNE 23, 1931. Class 13.

286,751. CANNED FRUITS, VEGETABLES AND MILK, CANNED SOUPS, CANNED AND DRIED FRUITS, ETC. P. PASTENE & CO., INC., Boston, Mass.
Filed November 26, 1930. Serial No. 308,389. PUBLISHED JUNE 23, 1931. Class 46.

286,752. AIRCRAFT—NAMELY, LAND AND HYDRO-AIRPLANES AND STRUCTURAL PARTS THEREOF. CHANCE VOUGHT CORPORATION, Hartford, Conn.
Filed May 2, 1931. Serial No. 314,098. PUBLISHED JUNE 23, 1931. Class 19.

286,753. PAINT ENAMELS AND VARNISHES. KEYSTONE VARNISH COMPANY, Brooklyn, N. Y.
Filed May 2, 1931. Serial No. 314,117. PUBLISHED JUNE 23, 1931. Class 16.

286,754. BARBED WIRE FENCING AND WIRE NETTING AND FENCING. BRITISH ROPES LIMITED, London, England.
Filed May 4, 1931. Serial No. 314,143. PUBLISHED JUNE 23, 1931. Class 13.

286,755. SPIKES AND BOLTS. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo.
Filed May 4, 1931. Serial No. 314,150. PUBLISHED JUNE 23, 1931. Class 13.

286,756. RELIEF VALVES. IRA I. NELSON, doing business as The Stack Heater Company, Boston, Mass.
Filed May 11, 1931. Serial No. 314,422. PUBLISHED JUNE 23, 1931. Class 13.

286,757. CHOW MEIN, CHOP SUEY, CHINESE RICE CAKES, ETC. PUBLIC SERVICE COMMUNITY KITCHENS, INC., New York, N. Y.
Filed May 18, 1931. Serial No. 314,677. PUBLISHED JUNE 23, 1931. Class 46.

286,758. BATH ROBES, BATHING SUITS, SWEATERS, ETC. LEVY, FORMAN & CO., INC., New York, N. Y.
Filed May 1, 1931. Serial No. 314,061. PUBLISHED JUNE 16, 1931. Class 39.

286,759. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 2, 1931. Serial No. 314,095. PUBLISHED JUNE 23, 1931. Class 42.

286,760. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 2, 1931. Serial No. 314,096. PUBLISHED JUNE 23, 1931. Class 42.

286,761. RAZOR BLADES. PROBAK CORPORATION, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware.
Filed December 10, 1929. Serial No. 293,485. PUBLISHED JANUARY 28, 1930. Class 23.

286,762. AUTOMOBILE POLISH. MIDWAY CHEMICAL COMPANY, Chicago, Ill.
Filed September 8, 1930. Serial No. 305,464. PUBLISHED JUNE 23, 1931. Class 16.

286,763. PNEUMATIC TUBE PATCHES FOR AUTOMOBILE TIRES. OTTO W. HOELBINGER, doing business as O. H. Rubber Company, Folsom, Ridley Township, Delaware County, Pa.
Filed June 27, 1930. Serial No. 302,896. PUBLISHED JUNE 16, 1931. Class 35.

286,764. PACK SADDLES IN THE NATURE OF HUMAN CARRYING HARNESS, KNAPSACK TANKS COMPRISING PUMP, TANK, HOSE, AND NOZZLE, FOR FIRE FIGHTING PURPOSES, PORTABLE PUMPERS, FIXED PUMPERS. PACIFIC MARINE SUPPLY COMPANY, Seattle, Wash.
Filed July 7, 1930. Serial No. 303,205. PUBLISHED JUNE 23, 1931. Class 23.

286,765. VEGETABLE PEELING MACHINES AND SLICING MACHINES. JOSIAH ANSTICE & CO., INC., Rochester, N. Y.
Filed July 10, 1930. Serial No. 303,310. PUBLISHED JUNE 9, 1931. Class 23.

286,766. TIRE PATCHES. THOMAS BELL, doing business as Bell Supply Co., Richmond, Va.
Filed July 30, 1930. Serial No. 303,990. PUBLISHED JUNE 9, 1931. Class 35.

286,767. TYPEWRITING MACHINES, COPYING MACHINES, FASTENING MACHINES, AND POLYGRAPHS. RUDOLF VON HOLZER, doing business as Firm Rudolf von Holzer, Frankfort-on-the-Main, Germany.
Filed July 21, 1930. Serial No. 303,705. PUBLISHED JUNE 23, 1931. Class 23.

286,768. HELICOID CONVEYORS, SECTIONAL FLIGHT CONVEYORS, AND ALL TYPES OF SPIRAL CONVEYORS AND SCREW CONVEYORS FOR CONVEYING MATERIALS IN CHUTES. BAILEY-BURRUSS MANUFACTURING COMPANY, Atlanta, Ga.
Filed October 7, 1930. Serial No. 306,483. PUBLISHED JUNE 9, 1931. Class 23.

286,769. KNIVES MADE ONLY OF BASE METAL. FOSTER BROS. & CHATILLON CO., Fulton, N. Y.
Filed November 6, 1930. Serial No. 307,591. PUBLISHED JUNE 23, 1931. Class 23.

286,770. TIME STAMPS. INTERNATIONAL TIME RECORDING COMPANY OF NEW YORK, Endicott, N. Y.
Filed November 19, 1930. Serial No. 308,070. PUBLISHED JUNE 23, 1931. Class 26.

286,771. CANNED VEGETABLES AND FRUITS, SPICES, TOMATO CATSUP, ETC. M. E. HORTON, INC., Washington, D. C.
Filed February 26, 1931. Serial No. 311,478. PUBLISHED JUNE 23, 1931. Class 46.

286,772. FRESH MILK AND LIVE CATTLE. LYNN A. HAWKINS, doing business as The Silver-Forest Fruit and Stock Farms, Silver Creek and Forestville, N. Y.
Filed March 3, 1931. Serial No. 311,683. PUBLISHED JUNE 23, 1931. Class 46.

286,773. FISHHOOKS. O. MUSTAD & SÖN, Oslo, Norway.
Filed March 18, 1931. Serial No. 312,264. PUBLISHED JUNE 23, 1931. Class 22.

286,774. MEN'S HATS. ADAM HAT STORES, INC., New York, N. Y.
Filed April 11, 1931. Serial No. 313,218. PUBLISHED JUNE 16, 1931. Class 39.

286,775. SAMPLE LENGTHS OF VARIOUS YARDAGE, HALF PIECES, AND FULL PIECES OF WORSTED CLOTH. LEXINGTON WORSTED MILLS, INC., Central Falls, R. I.
Filed April 24, 1931. Serial No. 313,740. PUBLISHED JUNE 23, 1931. Class 42.

286,776. PIECE GOODS OF COTTON AND RAYON AND MIXTURES OF THESE MATERIALS. TRIPPE, BARKER & CO., New York, N. Y.
Filed April 28, 1931. Serial No. 313,942. PUBLISHED JUNE 23, 1931. Class 42.

286,777. HANDKERCHIEFS. RAPHAEL WEILL & COMPANY, San Francisco, Calif.
Filed April 28, 1931. Serial No. 313,944. PUBLISHED JUNE 23, 1931. Class 42.

286,778. LAWN MOWERS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed June 16, 1930. Serial No. 302,487. PUBLISHED JUNE 9, 1931. Class 23.

286,779. FLEXIBLE FLUID CONDUITS. CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y.
Filed April 28, 1931. Serial No. 313,904. PUBLISHED JUNE 9, 1931. Class 35.

286,780. CO-AXIAL DISC SPECTRUM SELECTORS AND TRANSFORMERS FOR THE SAME. MAJOR BERTRAND DE JARNETTE, doing business as Chromoclast Laboratories, Nebraska City, Nebr.
Filed April 4, 1931. Serial No. 312,944. PUBLISHED JUNE 9, 1931. Class 26.

286,781. TEMPERATURE INDICATING DEVICES FOR ROASTING MACHINES. JABEZ BURNS & SONS, INC., New York, N. Y.
Filed April 3, 1931. Serial No. 312,900. PUBLISHED JUNE 9, 1931. Class 26.

286,782. DEVICE FOR TESTING AND RECORDING THE TIME OF DRYING. ALFRED M. PARKS, doing business as Parks Equipment Company, Philadelphia, Pa.
Filed March 31, 1931. Serial No. 312,771. PUBLISHED JUNE 9, 1931. Class 26.

286,783. PHOTOGRAPHIC FILM. DU PONT PATHÉ FILM MANUFACTURING CORPORATION, New York, N. Y.
Filed April 22, 1931. Serial No. 313,651. PUBLISHED JUNE 9, 1931. Class 26.

286,784. DEVICE FOR TESTING AND RECORDING THE TIME OF DRYING. ALFRED M. PARKS, doing business as Parks Equipment Company, Philadelphia, Pa.
Filed March 31, 1931. Serial No. 312,770. PUBLISHED JUNE 9, 1931. Class 26.

286,785. STATIONARY LUBRICATING APPARATUS OF AUTOMATIC AND SEMI-AUTOMATIC TYPE FOR GREASING MACHINERY COMPRISING PUMPS, LUBRICANT INJECTORS, SUPPLY TANKS, AND AUXILIARIES THEREFOR. LINCOLN ENGINEERING COMPANY, St. Louis, Mo.
Filed April 3, 1931. Serial No. 312,922. PUBLISHED JUNE 23, 1931. Class 23.

286,786. MACHINE FOR WASHING, DRYING, AND POLISHING TUMBLERS, CUPS, AND LIKE HOLLOW-WARE. KLEENGLAS (1929) LTD., London, England.
Filed April 1, 1931. Serial No. 312,806. PUBLISHED JUNE 23, 1931. Class 23.

286,787. MATERIAL TREATING APPARATUS. THE TAYLOR VIBRATOR COMPANY, Denver, Colo.
Filed March 30, 1931. Serial No. 312,724. PUBLISHED JUNE 9, 1931. Class 23.

286,788. CUTLERY, MACHINE TOOLS AND PARTS THEREOF, SCOOPS, SHOVELS, ETC. JABURG BROTHERS, INC., New York, N. Y.
Filed March 28, 1931. Serial No. 312,648. PUBLISHED JUNE 16, 1931. Class 23.

286,789. MACHINE FOR PRINTING SIGNS AND DISPLAY CARDS. REYNOLDS PRINTASIGN CORPORATION, Chicago, Ill.
Filed March 24, 1931. Serial No. 312,496. PUBLISHED JUNE 9, 1931. Class 23.

286,790. RUBBER TIRES AND TUBES FOR AUTOMOBILES, AUTOMOBILE TRUCKS, AND TRAILERS. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed March 14, 1931. Serial No. 312,145. PUBLISHED JUNE 9, 1931. Class 35.

286,791. APPARATUS FOR USE IN ARRANGING PAPERS, CARDS, AND THE LIKE FOR FILING OR DISTRIBUTION. MULTISORT COMPANY, Boston, Mass.
Filed March 13, 1931. Serial No. 312,112. PUBLISHED JUNE 9, 1931. Class 32.

286,792. HAND TOOLS, PARTICULARLY BLACKSMITH'S SLEDGES, WOOD CHOPPERS WEDGES, MAULS, DRILLING HAMMERS, HAMMER HEADS, TURNBUCKLES AND CLEVICES. THE CLEVELAND CITY FORGE COMPANY, Cleveland, Ohio.
Filed March 6, 1931. Serial No. 311,822. PUBLISHED JUNE 9, 1931. Class 23.

286,793. SEWAGE AND WATER SCREENS, SETTLING TANKS, COLLECTORS, ETC. LINK-BELT COMPANY, Chicago, Ill.
Filed February 13, 1931. Serial No. 311,038. PUBLISHED JUNE 23, 1931. Class 23.

286,794. FIRE EXTINGUISHING MACHINES (EXTINCTEURS). SOUT FIRE APPLIANCES LTD., London, England.
Filed January 9, 1931. Serial No. 309,789. PUBLISHED JUNE 9, 1931. Class 23.

286,795. HOSE OF FABRIC AND RUBBER. EUREKA FIRE HOSE MANUFACTURING COMPANY, New York, N. Y.
Filed December 24, 1930. Serial No. 309,307. PUBLISHED JUNE 16, 1931. Class 35.

286,796. OLIVE OIL. BLUM BROS., Jersey City, N. J.
Filed March 11, 1930. Serial No. 297,120. PUBLISHED JUNE 23, 1931. Class 46.

286,797. PAINTING MACHINES. NEW PROCESS PAINTING CO., Greenwich, Conn.
Filed April 18, 1931. Serial No. 313,580. PUBLISHED JUNE 16, 1931. Class 23.

286,798. PHOTOGRAPHIC FILM. DU PONT PATHÉ FILM MANUFACTURING CORPORATION, New York, N. Y.
Filed April 22, 1931. Serial No. 313,650. PUBLISHED JUNE 9, 1931. Class 26.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

286,799. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) STAR EXPANSION BOLT COMPANY, New York, N. Y. Filed Nov. 19, 1928. Serial No. 275,509.

SPRINGIN

For Toggle Bolts and Parts Thereof.
Claims use since Aug. 6, 1928.

286,800. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) THE ANCHOR PACKING COMPANY, Philadelphia, Pa. Filed June 27, 1929. Serial No. 286,219.

"SLUSHTITE"

For Machinery Packing, More Particularly Made of Flax.
Claims use since Dec. 1, 1928.

286,801. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THOMAS L. DICKEY, doing business as Dickey Baking Company, Tulsa, Okla. Filed May 7, 1930. Serial No. 300,054.

"TULSA BAKED"

For Bread, Cakes, Cookies, and Doughnuts.
Claims use since Jan. 1, 1930.

286,802. (CLASS 15. OILS AND GREASES.) GLENN A. SMITH, also doing business as Export Petroleum Company of California, Los Angeles, Calif. Filed May 8, 1930. Serial No. 300,152.

GOLDEN STATE

For Petroleum and Products of Petroleum with or without Admixture of Other Materials for Illuminating, Heating, Power, Burning, Lubricating, Greasing, Tempering, Quenching, Slushing, and Flushing; Mineral Wax, Candles, Penetrating Oil, Road-Dressing Oil, and Absorbing Oil for Benzol Vapors Obtained in the Distillation of Coal.
Claims use since Apr. 1, 1930.

286,803. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE HYDRAULIC PRESS MANUFACTURING COMPANY, Mount Gilead, Ohio. Filed July 22, 1930. Serial No. 303,716.

FASTRAVERSE

For Hydraulic Presses.
Claims use since July 11, 1930.

286,804. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GULF STATES CHEMICAL CO., INC., Harlingen, Tex. Filed Aug. 7, 1930. Serial No. 304,322.

GULF STATES BRAND

For Agricultural Insecticides—Namely, Bordeaux Mixture, Tomato Dust, Oil Emulsion, Lime Sulphur (Solution), Paris Green, and Sulphur.
Claims use since May 1, 1930.

286,805. (CLASS 48. MALT BEVERAGES AND LIQUORS.) CANADIAN PALE PRODUCTS ASSOCIATION, Harrisburg, Pa. Filed Aug. 8, 1930. Serial No. 304,364.

Canadian Pale

For Malt Beverages Containing Less Than One-Half of 1 Per Cent Alcohol by Volume.
Claims use since July 5, 1930.

286,806. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PINKHAM HOLDINGS CO., Los Angeles, Calif. Filed Oct. 3, 1930. Serial No. 306,364.

PINKHAM

For Fresh Deciduous Fruits.
Claims use since June 28, 1930.

286,807. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE DUBOREL CORPORATION, Jersey City, N. J. Filed Dec. 22, 1930. Serial No. 309,235.

DUNLOP

For Mouth Wash and Paste for Use in the Treatment of Mouth Diseases.
Claims use since Mar. 1, 1930.

286,808. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) REAL-OIL-HEAT BURNER COMPANY, Winona, Minn. Filed Mar. 27, 1931. Serial No. 312,626.

REAL OIL HEAT BURNER

For Oil Burners.
Claims use since October, 1928.

286,809. (CLASS 39. CLOTHING.) SARNOFF-IRVING HAT STORES, INC., New York, N. Y. Filed June 26, 1931. Serial No. 316,339.

BROCK

For Leather and Fabric Shoes.
Claims use since May 1, 1929.

LABELS

REGISTERED SEPTEMBER 1, 1931

39,635.—*Title:* BURGESS RADIOVISOR BRIDGE. For Light Sensitive Cells. BURGESS BATTERY COMPANY, Madison, Wis. Published July 2, 1931.

39,636.—*Title:* CHAMPAGNETTE. For Bottled Beverages. CHAMPAGNETTE CORP., OF NEW YORK, New York, N. Y. Published March 21, 1931.

39,637.—*Title:* CHRISTIE'S SAUCE. For Sauce. STEPHEN P. CHRISTIE, doing business as Christie Sauce Co., New York, N. Y. Published June 1, 1931.

39,638.—*Title:* D'ANGELO'S BEST BRAND HIGHEST GRADE MACARONI. For Macaroni. ANTONIO D'ANGELO, Avon, N. Y. Published June 15, 1931.

39,639.—*Title:* DUGAN'S CRUMB BUNS. For Crumb Buns. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published February 18, 1931.

39,640.—*Title:* DUGAN'S COFFEE RING. For Coffee Rings. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published May 1, 1931.

39,641.—*Title:* DUGAN'S FRESH APPLE BUTTER. For Apple Butter. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published April 16, 1931.

39,642.—*Title:* DUTCH MAID NOODLES. For Fresh Egg Noodles. DUTCH MAID PRODUCTS CO., Seattle, Wash. Published September 1, 1930.

39,643.—*Title:* BRUNSWICK. For Cigars. ABRAHAM A. GREENWALD, doing business as Jacob Stahl, Jr., & Co., New York, N. Y. Published June 10, 1931.

39,644.—*Title:* HOT COPS. For Frankfurters. "HOT COPS" FOOD CORPORATION, Nashville, Tenn. Published June 16, 1931.

39,645.—*Title:* HOLLYWOOD. For Soda Crackers. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published July 15, 1931.

39,646.—*Title:* ZIRCON. For Ginger Ale. MT. ZIRCON SPRING WATER COMPANY, Rumford, Me. Published May 1, 1931.

39,647.—*Title:* HIGH GLOSS IDEAL BRAND DESIGN PATTERN. For Glossed Paper. NATIONAL CONSUMERS PAPER CORP., New York, N. Y. Published May 11, 1931.

39,648.—*Title:* YEAST. For Yeast. NATIONAL YEAST COMPANY, Pittsburgh, Pa. Published July 1, 1931.

39,649.—*Title:* FROZEN DRUMSTICK. For Ice Cream Product Consisting of an Ice Cream Cone Dipped in Candy, etc. I. C. PARKER, Fort Worth, Tex. Published April 18, 1931.

39,650.—*Title:* OVER THE BAR. For Ginger Ale. PIEL BROS., INC., Brooklyn, N. Y. Published July 29, 1931.

39,651.—*Title:* QUALITY THRU AND THRU. For Bread. POLLOCK PAPER & BOX COMPANY, Dallas, Tex. Published November 10, 1930.

39,652.—*Title:* OK-SA-CO. For Sausages. C. A. POTTS, doing business as Okmulgee Sausage Co., Okmulgee, Okla. Published June 3, 1931.

39,653.—*Title:* SOLID GOLD HANDS. For Bananas. SCHAPER PRODUCTS COMPANY, INC., St. Louis, Mo. Published May 29, 1931.

39,654.—*Title:* SAF-T-NITE-LITES. For Devices to Eliminate Glare for Automobile Head Lights. HARRY STALLINGS, doing business as Non Glare Light Co., Boston, Mass. Published June 16, 1931.

39,655.—*Title:* TOM SAWYER PAINTING SET. For Painting Sets. STANDARD SOLOPHONE MFG. CO., INC., New York, N. Y. Published April 10, 1931.

39,656.—*Title:* TOM SAWYER NUART POSTER COLORS For Poster Colors. STANDARD SOLOPHONE MFG. CO., INC., New York, N. Y. Published April 10, 1931.

39,657.—*Title:* SURE BLOOMING. For Narcissus Bulbs. TALMAGE GARDENS COMPANY, Deland, Fla. Published September 1, 1930.

39,658.—*Title:* BLUE RIBBON POTATO CHIPS. For Potato Chips. A. A. WALTER & CO., Albany, N. Y. Published July 9, 1931.

PRINTS

REGISTERED SEPTEMBER 1, 1931

13,392.—*Title:* BIRK'S SHAVING CREAM. For Shaving Cream. BIRK MANUFACTURING COMPANY, Owensboro, Ky., and New Albany, Ind. Published May 23, 1931.

13,393.—*Title:* BIRK'S SHAVING CREAM. For Shaving Cream. BIRK MANUFACTURING COMPANY, Owensboro, Ky., and New Albany, Ind. Published May 23, 1931.

13,394.—*Title:* CURTIS AERO IGNITION CO. INC. For Spark Plugs. CURTIS AERO IGNITION CO. INC., Collingswood, N. J. Published July 20, 1931.

13,395.—*Title:* HYDROGEN PEROXIDE. For Hydrogen Peroxide. PARKE, DAVIS & COMPANY, Detroit, Mich. Published June 15, 1931.

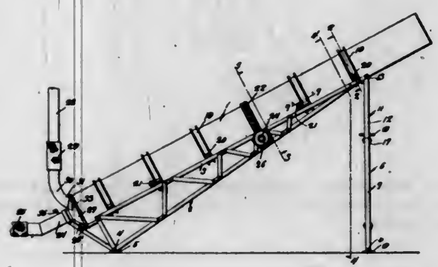
13,396.—*Title:* SCHAFER'S BIG SHOT 5¢ CIGAR. For Cigars. THE GEORGE SCHAFER-H. C. PFAFF CIGAR COMPANY, Baltimore, Md. Published June 24, 1931.

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REISSUES

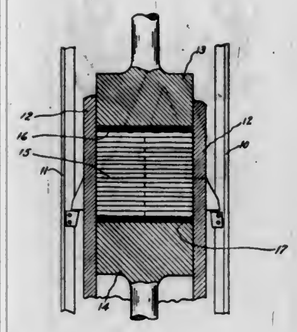
SEPTEMBER 1, 1931

18,172. DRYING APPARATUS. SHERWOOD GREEN, Berkeley, Calif., assignor to American Cotton Machinery Co., Berkeley, Calif., a Corporation of Nevada. Original No. 1,695,652, dated Dec. 18, 1928, Serial No. 246,568, filed Jan. 13, 1928. Application for reissue filed May 14, 1930. Serial No. 452,414. 13 Claims. (Cl. 34—6.)



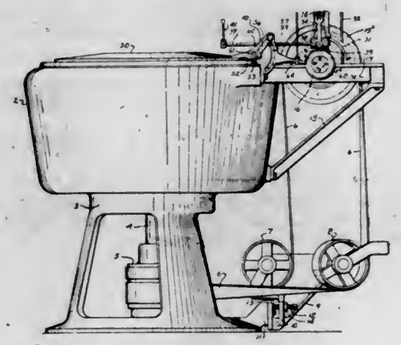
1. In drying apparatus, a rotary inclined drying chamber, means for delivering the material to be dried to the lower portion of the chamber, and means for delivering a blast of air into the chamber in a direction to provide for a current of air flowing longitudinally within the chamber toward the upper end thereof.

18,173. PROCESS FOR PRESSING AND PACKING MANUFACTURED TOBACCO. HENRY P. TAYLOR, Winston-Salem, N. C. Original No. 1,720,015, dated July 9, 1929, Serial No. 331,768, filed Jan. 11, 1929. Application for reissue filed June 26, 1931. Serial No. 547,169. 8 Claims. (Cl. 131—11.)



8. That process of packing plug tobacco which comprises compressing layers of plug tobacco in a caddy with dummy pads of comminuted fibrous material having thick and thin spots therein between the tobacco and the ends of the caddy.

18,174. CENTRIFUGAL EXTRACTOR. TANDY A. BRYSON and FRANK I. WILLIAMS, Troy, N. Y., assignors to Tolhurst Machine Works, Inc., a Corporation of New York. Original No. 1,640,978, dated Aug. 30, 1927, Serial No. 713,468, filed May 15, 1924. Application for reissue filed Aug. 22, 1929. Serial No. 387,775. 14 Claims. (Cl. 192—136.)

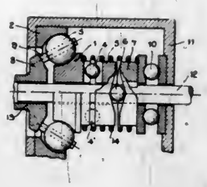


4. A centrifugal extractor including in combination a basket, a driving shaft, a safety cover, a safety lock including a member movable with the cover and a member rotating with the shaft and being rotatable in the same direction relatively thereto only when said shaft is stationary to pass out of the path of said first-mentioned member, and means cooperating with said rotatable member for preventing starting of the shaft while the cover is open.

18,175. GEARING FOR TRANSMITTING ROTARY MOTIONS. RICHARD ERBAN, New York, N. Y., assignor to Erban Patents Corporation, New York, N. Y., a Corporation of New York. Original No. 1,585,140, dated May 18, 1926, Serial No. 603,418, filed Nov. 27, 1922. Application for reissue filed May 12, 1928. Serial No. 277,346. 13 Claims. (Cl. 74—34.)

1. In a friction gear, a driving shaft, a driven shaft, races and rolling bodies interposed between said shafts, operative connections between said rolling bodies and one of said shafts, one of said races being mounted on said driving shaft, a fixed race against which said rolling bodies

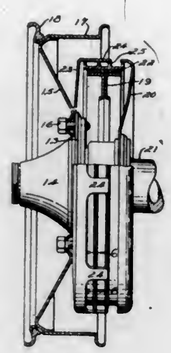
bear, and a pressure device interposed between the drive shaft and driving race adapted to produce the required



pressure between said races and rolling bodies, and acting directly only on the race mounted on said driving shaft, transmitting its entire pressure to said race.

18,176. BRAKE DRUM CONSTRUCTION. EMIL A. NELSON, Detroit, Mich. Original No. 1,750,682, dated Mar. 18, 1930, Serial No. 270,179, filed Apr. 16, 1928. Application for reissue filed Sept. 23, 1930. Serial No. 483,961. 39 Claims. (Cl. 188—218.)

11. In combination, a brake drum construction comprising a generally circular member, an open ended ring positioned in concentric relation thereto, fingers fixed to said member and projecting therefrom towards said ring, the



outer ends of said fingers being joined together, and said ring being supported independently of its edges through said fingers.

DESIGNS

SEPTEMBER 1, 1931

84,971. BOOK COVER OR SIMILAR ARTICLE. CURTIS A. BELL, Edmond, Okla. Filed Apr. 6, 1931. Serial No. 39,386. Term of patent 3½ years.



The ornamental design for a book cover, or similar article, as shown and described.

84,972. EMBLEM. JOSEPH BLOOM, Los Angeles, Calif. Filed Aug. 28, 1929. Serial No. 32,565. Term of patent 14 years.



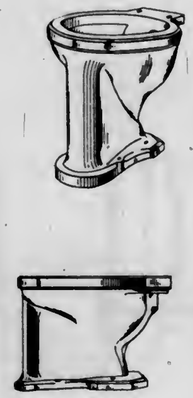
The ornamental design for an emblem substantially as shown and described.

84,973. WATER CLOSET BOWL. GEORGE BRAIN, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 18, 1931. Serial No. 40,590. Term of patent 7 years.



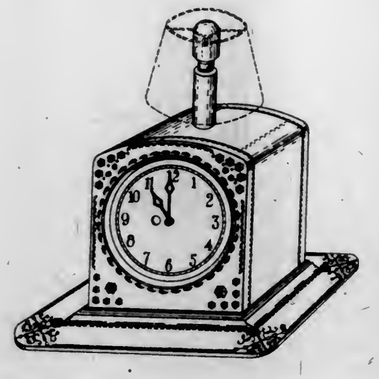
The ornamental design for a water closet bowl, substantially as shown.

84,974. WATER CLOSET BOWL. GEORGE BRAIN, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 18, 1931. Serial No. 40,591. Term of patent 7 years.



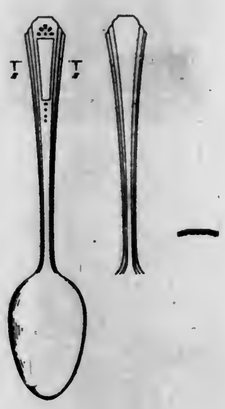
The ornamental design for a water closet bowl, substantially as shown.

84,975. COMBINATION CLOCK AND LAMP. FRANK BROWN, Malden, Mass. Filed Jan. 8, 1931. Serial No. 38,244. Term of patent 3½ years.



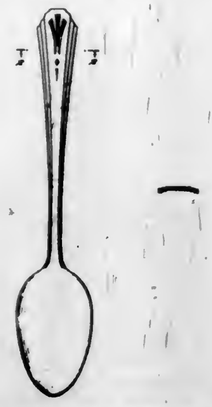
The ornamental design for a combination clock and lamp substantially as shown and described.

84,976. SPOON OR OTHER ARTICLE OF TABLEWARE. LESLIE A. BROWN, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Apr. 2, 1931. Serial No. 39,338. Term of patent 7 years.



The ornamental design for a spoon or other article of table-ware substantially as shown.

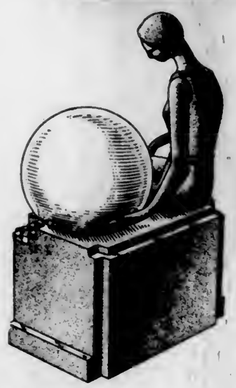
84,977. SPOON OR OTHER ARTICLE OF TABLEWARE. LESLIE A. BROWN, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Apr. 2, 1931.. Serial No. 39,339. Term of patent 7 years.



The ornamental design for a spoon or other article of table-ware, as shown and described.

84,978. LAMP OR SIMILAR ARTICLE. LOUISE CROSS, New York, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed July 6, 1931. Serial No. 40,428. Term of patent 3½ years.





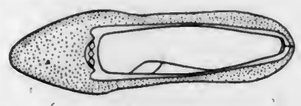
The ornamental design for a lamp or similar article, substantially as shown.

84,979. SHOE. VINCENT DE LISO, Astoria, N. Y., assignor to Saks & Co., New York, N. Y., a Corporation of New York. Filed May 14, 1931. Serial No. 39,846. Term of patent 3½ years.



The ornamental design for a shoe as shown.

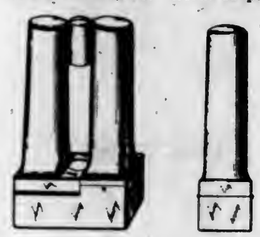
84,980. SHOE. VINCENT DE LISO, Astoria, N. Y., assignor to Saks & Co., New York, N. Y., a Corporation of New York. Filed May 16, 1931. Serial No. 39,869. Term of patent 3½ years.





The ornamental design for a shoe as shown.

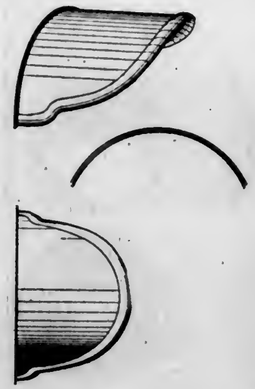
84,981. CONTAINER FOR TOILET ACCESSORIES. GERHARD FLINTERMANN, West Orange, N. J. Filed July 1, 1931. Serial No. 40,395. Term of patent 14 years.





The ornamental design for a container for toilet accessories, as shown.

84,982. AUTOMOBILE HEAD LAMP VISOR. AUGUSTUS J. FRAME, Columbus, Ohio, assignor to Columbus Auto Brass Company, Columbus, Ohio, a Corporation of Ohio. Filed May 18, 1931. Serial No. 39,881. Term of patent 14 years.



The ornamental design for an automobile head lamp visor substantially as shown and described.

84,983. ROCKER CHAIR. BENJAMIN B. FRIEND, Burbank, Calif. Filed Apr. 13, 1931. Serial No. 39,465. Term of patent 14 years.



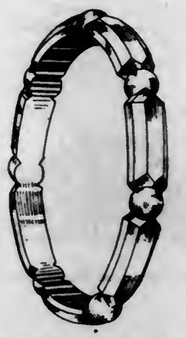
The ornamental design for a rocker chair, as shown.

84,984. BADGE. DANA T. GALLUP, Cambridge, Mass. Filed June 17, 1931. Serial No. 40,234. Term of patent 14 years.



The ornamental design for a badge as shown.

84,985. FINGER RING. JOSEPH GRANAT, San Francisco, Calif. Filed May 19, 1931. Serial No. 39,902. Term of patent 3½ years.



The ornamental design for a finger ring substantially as shown.

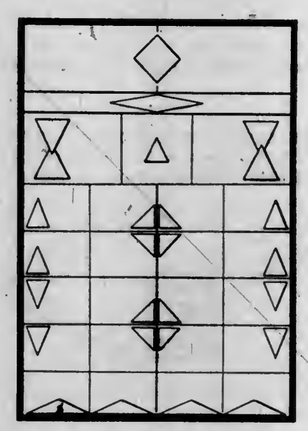
84,986. CONTAINER CAP. ELMER CAMERON HAWLEY, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed May 29, 1931. Serial No. 40,031. Term of patent 7 years.





The ornamental design for a container cap as shown.

84,987. PRINTING PLATE OR SIMILAR ARTICLE. MAE HUSEBOE and REUBEN W. PORTER, Los Angeles, Calif. Filed Sept. 17, 1930. Serial No. 37,005. Term of patent 14 years.



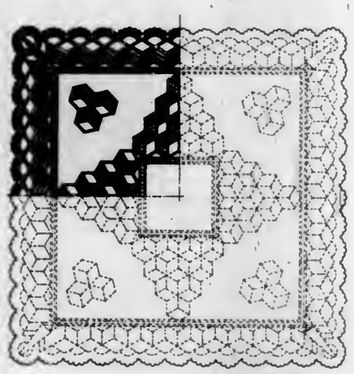
The ornamental design for a printing plate or similar article, as shown and described.

84,988. BADGE, PIN OR EMBLEM. LIDA S. ISAACS, Eagle Rock, Calif., assignor to Mrs. George D. Gilmore, Mrs. Elaine A. Dudley, and Mrs. Ed C. Magauran, Los Angeles, Calif., doing business under the fictitious firm name of The California Women of The Golden West. Filed Mar. 13, 1931. Serial No. 39,073. Term of patent 14 years.



The ornamental design for a badge, pin or emblem as shown.

84,989. DOILY. EDWARD KARFIOL, Brooklyn, N. Y. Filed May 7, 1931. Serial No. 39,748. Term of patent 14 years.



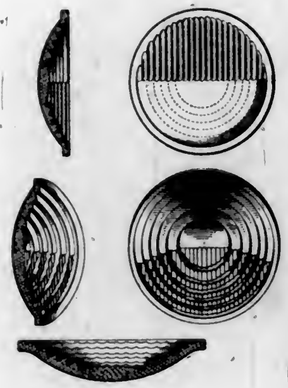
The ornamental design for a doily as shown and described.

84,990. EMBLEM PLATE OR SIMILAR ARTICLE. MAX KUPFERSTOK, New York, N. Y. Filed Apr. 22, 1931. Serial No. 39,594. Term of patent 3½ years.



The ornamental design for an emblem plate or similar article, as shown and described.

84,991. COVER GLASS LENS FOR HEADLIGHTS. GUSTAVE ALPHONSE MARIE LAMBLIN-PARENT, Lille, France. Filed Dec. 1, 1930. Serial No. 37,844. Term of patent 14 years.



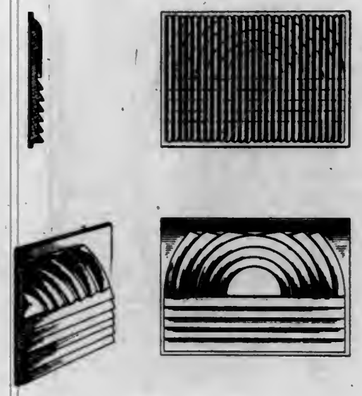
The ornamental design for a cover glass lens for headlights, substantially as shown.

84,992. COVER GLASS LENS FOR HEADLIGHTS. GUSTAVE ALPHONSE MARIE LAMBLIN-PARENT, Lille, France. Filed Dec. 1, 1930. Serial No. 37,845. Term of patent 14 years.



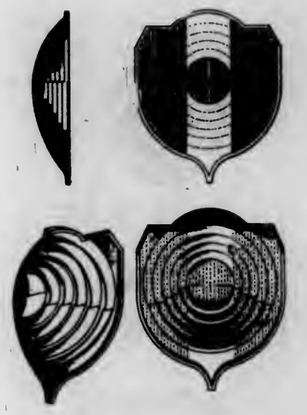
The ornamental design for a cover glass lens for headlights, substantially as shown.

84,993. COVER GLASS LENS FOR HEADLIGHTS. GUSTAVE ALPHONSE MARIE LAMBLIN-PARENT, Lille, France. Filed Dec. 1, 1930. Serial No. 37,846. Term of patent 14 years.



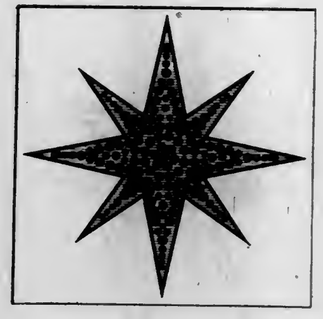
The ornamental design for a cover glass lens for headlights, substantially as shown.

84,994. COVER GLASS LENS FOR HEADLIGHTS. GUSTAVE ALPHONSE MARIE LAMBLIN-PARENT, Lille, France. Filed Dec. 1, 1930. Serial No. 37,850. Term of patent 14 years.



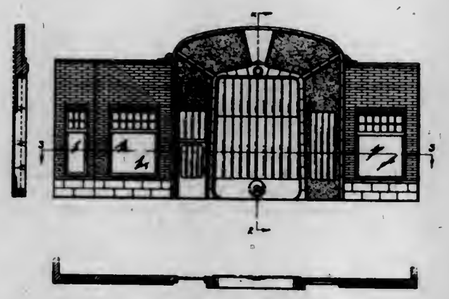
The ornamental design for a cover glass lens for headlights, substantially as shown.

84,995. LIGHT SCREEN. HARRY W. LAWRENCE, Denver, Colo. Filed Apr. 4, 1931. Serial No. 39,374. Term of patent 7 years.



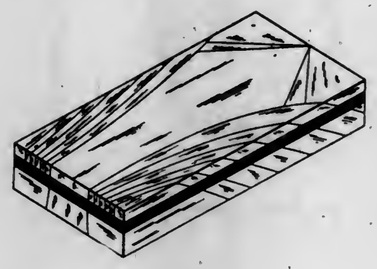
The ornamental design for a light screen as shown and described.

84,996. BUILDING FRONT. WILLIAM R. MATTHEWS and ETHELBERT JONES, Spokane, Wash. Filed Nov. 19, 1930. Serial No. 37,726. Term of patent 14 years.



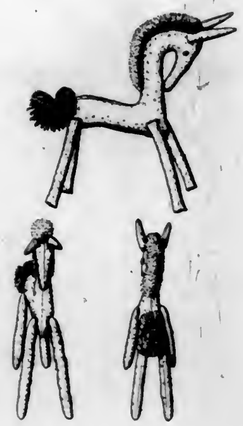
The ornamental design for a building front substantially as shown and described.

84,997. BOX. HARRY J. MILLER, Reading, Pa. Filed July 3, 1931. Serial No. 40,414. Term of patent 3½ years.



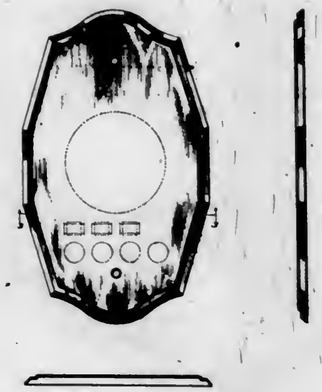
The ornamental design for a box as shown and described.

84,998. TOY OR SIMILAR ARTICLE. LOUISE MOREL, Altadena, Calif., assignor of forty per cent to Barbara Colman, Altadena, Calif. Filed June 20, 1931. Serial No. 40,278. Term of patent 7 years.



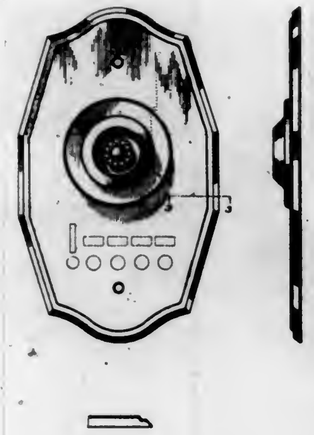
The ornamental design for a toy or similar article as shown.

84,999. FRONT PLATE FOR FLUSH TELEPHONES. ARCHIE T. MORRISON, South Braintree, Mass., assignor to S. H. Couch Company, Inc., Quincy, Mass., a Corporation of Massachusetts. Filed July 8, 1931. Serial No. 40,454. Term of patent 14 years.



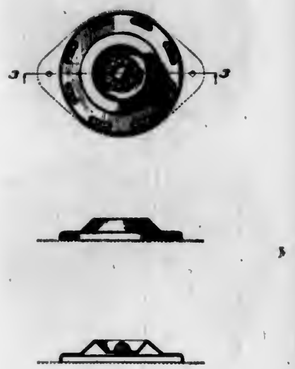
The ornamental design for a front plate for flush telephones, substantially as shown.

85,000. COMBINED FRONT PLATE AND MOUTHPIECE FOR SUITE TELEPHONES. ARCHIE T. MORRISON, South Braintree, Mass., assignor to S. H. Couch Company, Inc., Quincy, Mass., a Corporation of Massachusetts. Filed July 8, 1931. Serial No. 40,455. Term of patent 14 years.



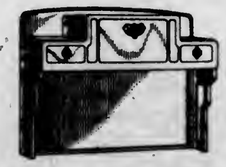
The ornamental design for a combined front plate and mouthpiece for suite telephones, substantially as shown.

85,001. TRANSMITTER MOUTHPIECE FOR CONCEALED SPEAKER CORDLESS TELEPHONES. ARCHIE T. MORRISON, South Braintree, Mass., assignor to S. H. Couch Company, Inc., Quincy, Mass., a Corporation of Massachusetts. Filed July 8, 1931. Serial No. 40,456. Term of patent 14 years.



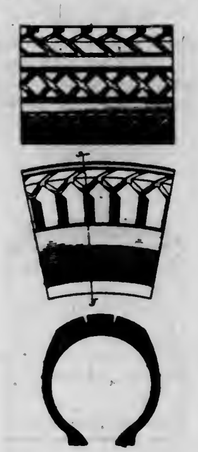
The ornamental design for a transmitter mouthpiece for concealed speaker cordless telephones, substantially as shown.

85,002. WARMING CLOSET FOR COOK STOVES. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed May 9, 1931. Serial No. 39,788. Term of patent 7 years.



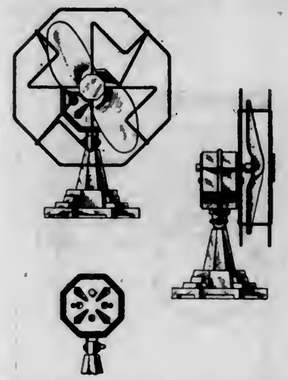
The ornamental design for a warming closet for cook stoves, substantially as shown and described.

85,003. TIRE CASING. BERT R. PRALL, Chicago, Ill., assignor to Montgomery Ward & Co., Incorporated, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1928. Serial No. 27,204. Term of patent 14 years.



The ornamental design for a tire casing, substantially as shown.

85,004. PORTABLE ELECTRIC FAN. EDWARD S. PRESTON, Chicago, Ill., assignor to Chicago Electric Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed June 27, 1931. Serial No. 40,349. Term of patent 7 years.



The ornamental design for a portable electric fan, substantially as shown.

85,005. BOTTLE. MAYNARD ROSENBERGER, Los Angeles, Calif., assignor to Adohr Stock Farms, Reseda, Calif., a Corporation of California. Filed June 8, 1931. Serial No. 40,119. Term of patent 14 years.



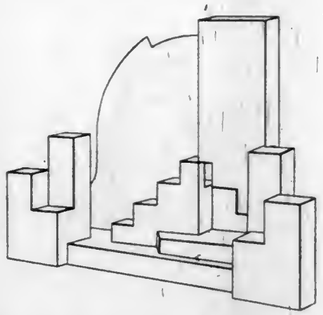
The ornamental design for a bottle, as shown.

85,006. BUILDING. CHESTER A. SANBORN, Lynn, Mass. Filed Feb. 17, 1930. Serial No. 34,574. Term of patent 7 years.



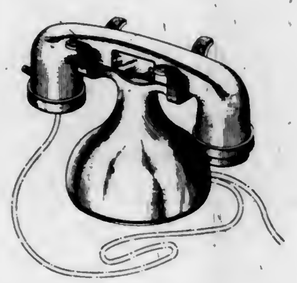
The ornamental design for a building as shown.

85,007. WINDOW DISPLAY STAND. JACK L. SINYKIN, St. Paul, Minn. Filed June 19, 1931. Serial No. 40,271. Term of patent 7 years.



The ornamental design for a window display stand substantially as shown.

85,008. CIGARETTE LIGHTER. JULIUS C. SPECK, Cleveland, Ohio. Filed July 10, 1931. Serial No. 40,481. Term of patent 14 years.



The ornamental design for a cigarette lighter as shown.

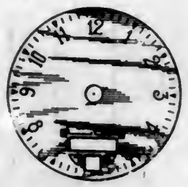
85,009. ICE SKATE. ETTA M. SQUIRES, Amityville, N. Y. Filed June 6, 1931. Serial No. 40,102. Term of patent 7 years.





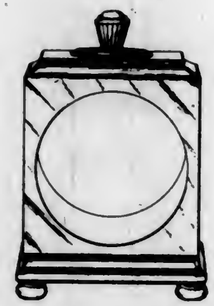
The ornamental design for an ice skate substantially aa shown.

85,010. CLOCK DIAL. GEORGE H. STEPHENS, Northbrook, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed June 29, 1931. Serial No. 40,361. Term of patent 14 years.



The ornamental design for a clock dial, as shown.

85,011. CLOCK CASE. GEORGE H. STEPHENS, Northbrook, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed June 29, 1931. Serial No. 40,363. Term of patent 14 years.



The ornamental design for a clock case, as shown.

85,012. FINGER RING OR SIMILAR ARTICLE. ABRAHAM SUDEROV, New York, N. Y. Filed Apr. 6, 1931. Serial No. 39,375. Term of patent 3½ years.





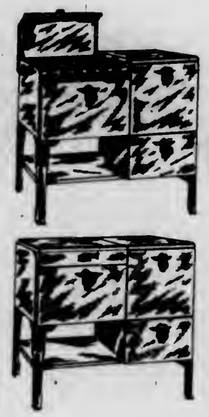
The ornamental design for a finger ring or similar article, substantially as shown.

85,013. GAS OR ELECTRIC RANGE TOP. JACOB TELLER, Chicago, and ARTHUR P. SCHULZ, Berwyn, Ill., assignors to Teller Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Apr. 6, 1931. Serial No. 39,387. Term of patent 7 years.



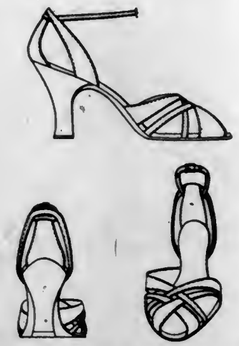
The ornamental design for a gas or electric range top, as shown.

85,014. GAS OR ELECTRIC RANGE. JACOB TELLER, Chicago, and ARTHUR P. SCHULZ, Berwyn, Ill., assignors to Teller Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Apr. 7, 1931. Serial No. 39,396. Term of patent 7 years.



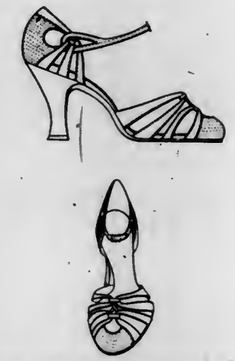
The ornamental design for a gas or electric range, as shown and described.

85,015. WOMAN'S SHOE. SEYMOUR TROY, New York, N. Y. Filed June 30, 1931. Serial No. 40,886. Term of patent 14 years.



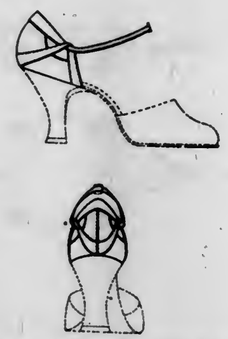
The ornamental design for a woman's shoe substantially as shown and described.

85,016. WOMAN'S SHOE. SEYMOUR TROY, New York, N. Y. Filed July 8, 1931. Serial No. 40,467. Term of patent 14 years.



The ornamental design for a woman's shoe substantially as shown and described.

85,017. WOMAN'S SHOE. SEYMOUR TROY, New York, N. Y. Filed July 8, 1931. Serial No. 40,468. Term of patent 14 years.



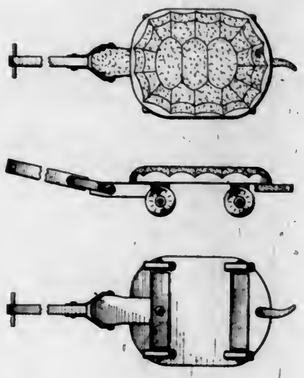
The ornamental design for a woman's shoe substantially as shown and described.

85,018. WOMAN'S SHOE. SEYMOUR TROY, New York, N. Y. Filed July 8, 1931. Serial No. 40,469. Term of patent 14 years.



The ornamental design for a woman's shoe substantially as shown and described.

85,019. TOY. HOMER J. VETTER, Newton, Kans. Filed June 13, 1931. Serial No. 40,203. Term of patent 7 years.



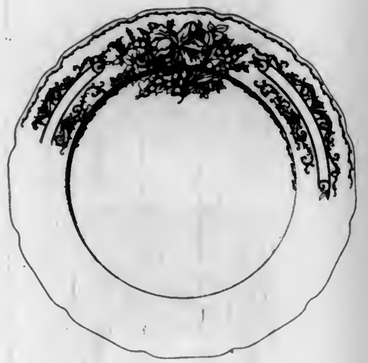
The ornamental design for a toy as shown.

85,020. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 40,126. Term of patent 7 years.



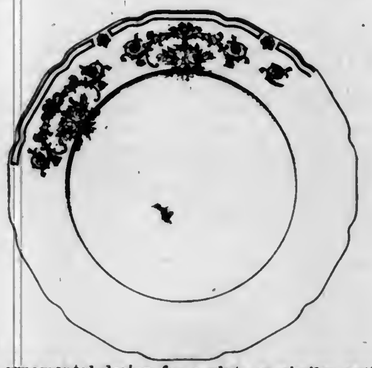
The ornamental design for a plate or similar article as shown and described.

85,021. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 40,127. Term of patent 7 years.



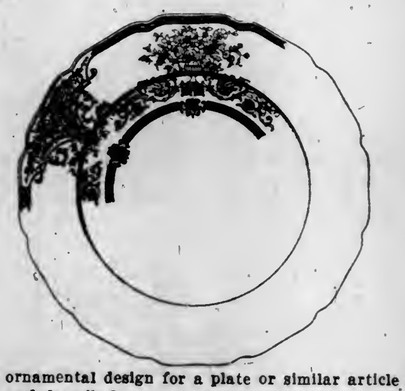
The ornamental design for a plate or similar article as shown and described.

85,022. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 40,128. Term of patent 7 years.



The ornamental design for a plate or similar article as shown and described.

85,023. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 40,129. Term of patent 7 years.

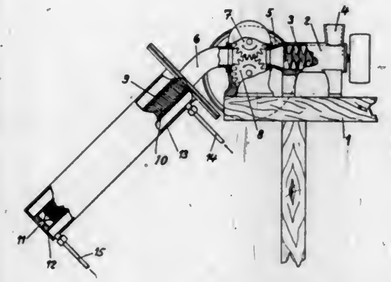


The ornamental design for a plate or similar article as shown and described.

PATENTS

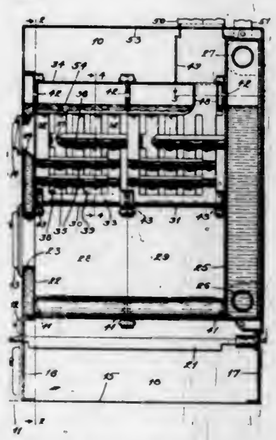
GRANTED SEPTEMBER 1, 1931

1,820,900. MEANS FOR MELTING CHEESE. ALEXANDER AXELROD, Zurich, Switzerland. Filed Feb. 27, 1928, Serial No. 257,426, and in Germany Mar. 3, 1927. 1 Claim. (Cl. 99—2.)



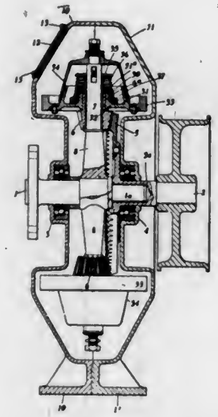
A device to melt cheese comprising a tube of circular cross-section, a cylindrical core of less diameter within said tube, means forming a hollow chamber surrounding said tube adapted to receive a heating agent, and intermeshing toothed gears adapted to feed comminuted cheese through the annular space between said tube and said core.

1,820,901. BOILER. JOHN B. BERNHARD, Stoneleigh, Md. Filed Apr. 18, 1929. Serial No. 356,198. 7 Claims. (Cl. 122—223.)



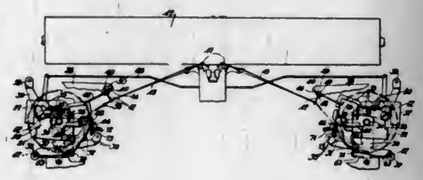
2. A boiler having a series of water containing sections arranged side by side, each section comprising upright end and upright intermediate ducts, and transverse ducts placing the upright and intermediate ducts in communication, some of the upright ducts being of uniform cross-sectional area throughout and the remaining upright ducts of progressively increasing cross-sectional area, and a water reservoir communicating with said sections only at the upper and lower ends thereof.

1,820,902. TRANSMISSION GEARING. HOWARD WILLIAM BULLOCK, Harrow, England. Filed Oct. 10, 1929, Serial No. 398,707, and in Great Britain Oct. 15, 1928. 8 Claims. (Cl. 74—34.)



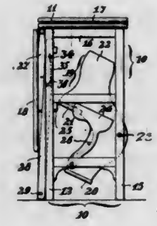
1. Transmission gearing comprising a driving member and a driven member, transverse arms fixed to said driving member, bevel pinions freely revoluble on said transverse arms, bevel teeth on said driven member engaged by said bevel pinions, a clutch member fixed relatively to a transverse arm, and a clutch member fixed relatively to the pinion on said arm, said clutch members being adapted to be forced into engagement at relatively high speed.

1,820,903. TYPEWRITING MACHINE. HENRY ALLEN AVERY, Groton, N. Y., assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 29, 1930. Serial No. 448,262. 17 Claims. (Cl. 197—165.)



5. In a typewriting machine having a ribbon and a key actuated universal bar, the combination of a pair of ratchet wheels rotatable about upstanding axes, a pair of ribbon feeding spools held to the ratchets to rotate therewith, a pair of upstanding levers vibratable by the universal bar about axes extending transversely of the machine, a pair of ratchet-driving pawls pivotally held to said upstanding levers to vibrate fore and aft of the machine in unison with the levers and to rock relatively to said levers about axes extending fore and aft of the machine, a pair of springs connecting each pawl with its supporting lever to normally rock the pawls about their pivots on the levers into yielding engagement with their associated ratchets, a pair of detents normally yieldably urged to the ratchets to prevent reverse rotation of the ratchets, a pair of cams oscillatable about upstanding axes and interconnected for simultaneous positioning of the cams to hold the driving pawl and detent for one ratchet out of operative relation with the ratchet and allowing the driving pawl and detent for the other ratchet to yieldably coact with the latter ratchet, a pair of interponents mounted on the cams for alternate striking thereof by the adjacent upstanding levers to reverse the positions of the cams, and controlling devices for the respective interponents normally holding said interponents out of operative relation with the upstanding levers and each operable by the ribbon upon substantial exhaustion of the ribbon from the adjacent spool to permit striking of its controlled interponent by the adjacent lever.

1,820,904. CONVERTIBLE FURNITURE. ELMER B. BECK, Lititz, Pa. Filed May 1, 1930. Serial No. 448,868. 9 Claims. (Cl. 68—10.)



6. An article of convertible furniture comprising a main component in the form of a pedestal provided with a flat top and an open substructure; a step component normally nested within the pedestal component with capacity for being projected to enable use of the article as a step ladder; supplemental leaves extendable at opposite sides of the pedestal top to adapt the device as an ironing board, one of said leaves being supported when extended, by a bearer pivoted to, the step component; and projectable means normally collapsed within the confines of the pedestal top to support the other supplemental leaf when extended.

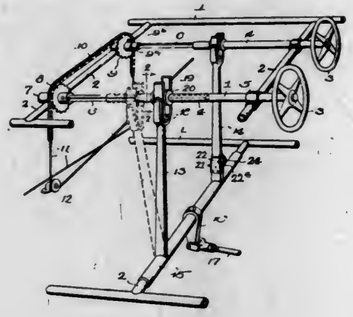
1,820,905. NURSERY TOY. HERMAN W. BLOCK, New York, N. Y. Filed June 28, 1930. Serial No. 464,680. 3 Claims. (Cl. 46—46.)

1. In a toy, the combination with a watch movement of a casing therefor, and a holder for the casing, comprising a sectional handle and a rotary head portion embracing the casing and means in one section of the handle



and operatively connected with the watch movement to wind up the same by rotary movement of the head portion, casing and movement.

1,820,906. CONTROL DEVICE FOR AEROPLANES. CHARLES R. BOWERS, South Bend, Ind., assignor to Charles T. Stedman, South Bend, Ind., as trustee. Filed June 7, 1930. Serial No. 459,638. 7 Claims. (Cl. 244—29.)

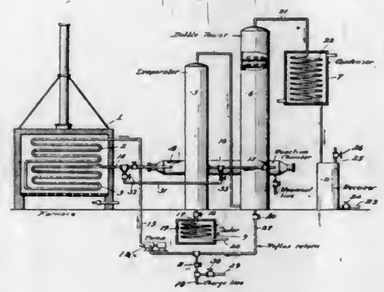


1. In a control apparatus for aeroplanes, the combination of a pair of parallel rotative shafts, each comprising an axially shiftable section having a wheel mounted at the free end thereof, control devices operatively connected with each shiftable and non-shiftable sections of said shafts, and manually controlled by one or both of said wheels, and means for disconnecting said controls from one of said shafts without affecting their operation through the other shaft.

1,820,907. PROCESS FOR SEPARATION OF OXYGEN-CONTAINING MATERIALS FROM THEIR SOLUTIONS IN HYDROCARBONS. HYYM E. BUC, Roselle, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 349,942. 12 Claims. (Cl. 260—156.)

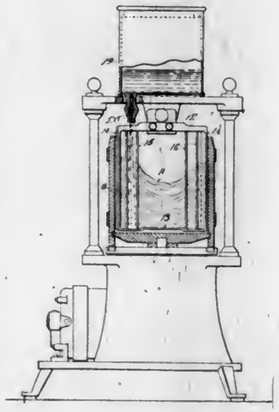
1. An improved process for removal of oxygen-containing hydrocarbon derivatives from their solutions in hydrocarbons which comprises contacting the solutions with a solvent comprising concentrated phosphoric acid, and separating a layer consisting principally of hydrocarbons from the concentrated phosphoric acid layer containing the removed oxygen containing hydrocarbon derivatives.

1,820,908. PROCESS FOR OBTAINING PHENOLS FROM COAL TAR DISTILLATES. ROY CROSS, Kansas City, Mo. Filed May 2, 1925. Serial No. 27,491. 3 Claims. (Cl. 260—154.)



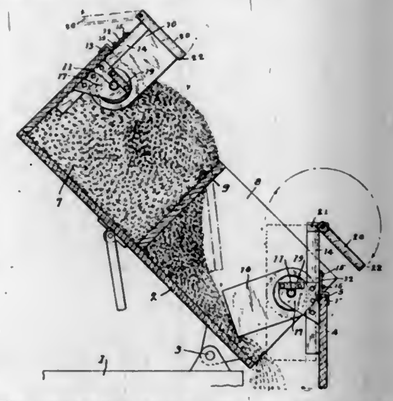
1. A process of producing coal tar phenols comprising the steps of adding an alcohol to a coal tar distillate, and then subjecting the distillate to cracking temperatures and pressures, condensing the evolved vapors, collecting the distillates, and recovering the phenols therefrom.

1,820,909. METHOD OF MAKING MAYONNAISE. SAMUEL B. DRUCKER, Brooklyn, N. Y. Filed Apr. 8, 1922, Serial No. 550,681. Renewed Dec. 10, 1926. 7 Claims. (Cl. 99—11.)



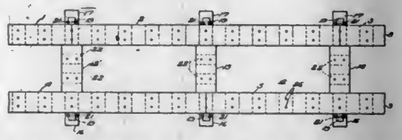
3. In the manufacture of mayonnaise, the process which consists in mixing together mayonnaise forming ingredients to form a batch, then producing whirling, interweaving cross currents in the body of the batch and simultaneously adding an oil ingredient whereby to crush and break up the particles of the oil ingredient and to distribute the same uniformly throughout the said body to effect thorough emulsification thereof.

1,820,910. CEMENT CHARGER. GEORGE O. HARM, Warren, Ohio. Filed July 20, 1929. Serial No. 379,607 11 Claims. (Cl. 298—8.)



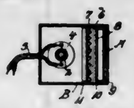
1. The combination with a tilting truck body having a discharge gate, of a supporting frame mounted on said body, a receptacle having an opening at the top thereof, trunnions below its center of gravity journaled in said frame within the side walls of the truck body and at a height over the floor of the body greater than the distance from the trunnions to the top of the receptacle, and a lid pivoted to said frame and engageable with the top of said receptacle to releasably hold the same in upright position.

1,820,911. RAILWAY TRACK SYSTEM. ALBERT HENDERSON, Pittsburgh, Pa., assignor to Henderson and Hatcher, Inc., Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 24, 1929. Serial No. 402,032. 21 Claims. (Cl. 238—7.)



1. In a track system, spaced rails and precast concrete cross ties assembled together to form a substantially continuous supporting surface for said rails, said cross ties having corresponding recesses in their sides to provide an opening for the introduction of lifting means.

1,820,912. ILLUMINATED SIGN. JOHN W. KELLY, Erie, Pa. Filed Sept. 26, 1929. Serial No. 395,339. 16 Claims. (Cl. 40—133.)



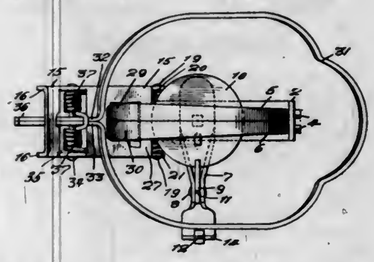
10. As a new article of manufacture, a light refracting member having on one surface a plurality of parallel ribs and light intensifying and dispersing means on the opposite surface, the said intensifying and dispersing means comprising a series of bead-like projections having spherical surfaces, the projections being in substantially uniform contact with each other.

1,820,913. ILLUMINATED SIGN. JOHN W. KELLY and DANIEL J. KELLY, Erie, Pa. Filed Mar. 6, 1930. Serial No. 433,789. 17 Claims. (Cl. 40—130.)



1. A sign apparatus comprising the combination with a light source, of a hollow member comprising an indicia carrying member and a light intensifying and dispersing member positioned between the light source and the indicia carrying member, the light source being located at one side of the hollow member, the light intensifying and dispersing member comprising a transparent surface which is provided with a plurality of transparent substantially spherical members uniformly distributed thereover in continuous relationship.

1,820,914. GAME TRAP. ALBERT E. KINSLEY, Oneida, N. Y. Filed June 20, 1929. Serial No. 372,274. 5 Claims. (Cl. 43—90.)



1. In a trap of the class described, in combination, a base plate provided with a pair of jaws, a spring actuating member for operating said jaws, and an auxiliary gripping member mounted upon said actuating member.

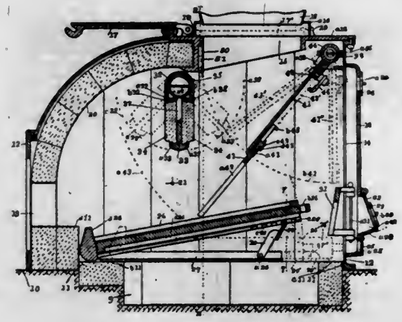
1,820,915. HEEL AND METHOD OF MAKING AND COVERING THE SAME. NORWOOD H. KNOWLTON, Rockport, and WILLIAM H. NUTT, Beverly, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 23, 1930. Serial No. 470,032. 40 Claims. (Cl. 36—24.5.)



1. That improvement in methods of covering heels having cover-receiving grooves in the lateral margins of their breast faces which comprises tucking marginal portions of side cover members into said grooves below the upper portion of the breast of a heel, and laying marginal portions of said side cover members upon the lateral margins of the breast face without tucking at the upper portion of the heel breast.

1,820,916. FUEL BURNER. DAVID E. LAIN, Bellingham, Wash. Filed June 17, 1929. Serial No. 371,545. 7 Claims. (Cl. 110—18.)

1. In a fuel burner in combination, a firebox having a fuel-chute opening therein, a baffle plate mounted for oscillation on one side of said fuel opening in said firebox, means external to said firebox connected with said baffle plate to control the movements thereof, a fuel-chute valve mounted within said firebox for oscillation

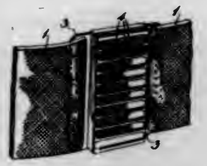


on the other side of said fuel opening, and means external to said firebox connected with said valve to control the movements thereof.

1,820,917. METHOD FOR SEPARATING BITUMEN FROM BITUMINOUS SANDS AND SIMILAR BITUMINOUS MATERIALS. CECIL T. LANGFORD and ABRAHAM J. TEPLITZ, Ponca City, Okla., assignors, by mesne assignments, to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Apr. 29, 1927. Serial No. 187,696. 3 Claims. (Cl. 196—14.)

2. A process for removing bitumen from bituminous sands comprising abrasively mixing the sand in the presence of an alkaline solution of sodium hydroxide, drawing off the mixture and adding water thereto to effect separation of the bitumen and sand.

1,820,918. MEANS FOR SUPPORTING TROUSERS. CHARLES S. MACKENZIE, Bound Brook, N. J. Original application filed May 17, 1928, Serial No. 278,425. Divided and this application filed Mar. 12, 1930. Serial No. 435,049. 5 Claims. (Cl. 241—9.)

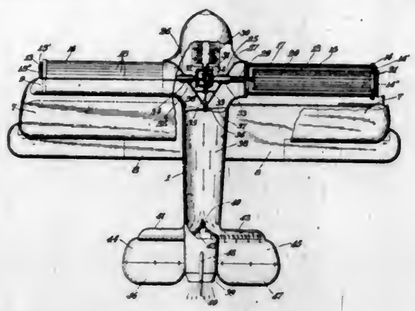


1. A trousers-supporting device comprising a supporting element adapted to be carried on a belt worn underneath the trousers having its two terminal portions offset and slotted to receive the belt and be supported by it, and having its central portion spaced from the outer side of the belt and consisting of a vertical series of horizontal crossbars equally spaced from one another forming intervening slots and an attachment element on the inner side of the waistband of trousers having a head adapted to enter any of said slots.

1,820,919. AIRCRAFT. HENRY P. MASSEY, Montclair, N. J. Filed May 31, 1930. Serial No. 457,907. 10 Claims. (Cl. 244—14.)

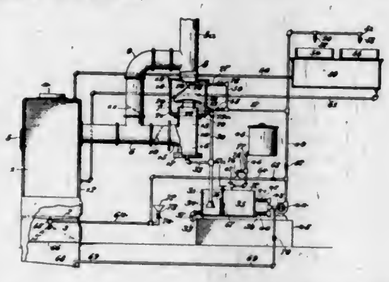
1. In an aircraft the combination of a body provided with air conduit means, transversely extending rotatable

means for moving air exteriorly of and into said body, means for impelling air in said conduit means, and lifting



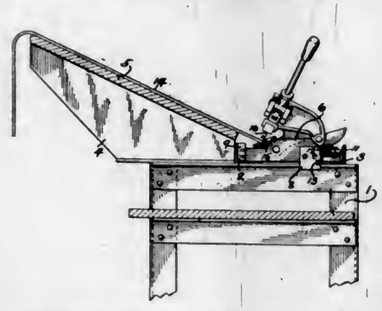
and sustaining surfaces carried by said body and acted upon by said moving air.

1,820,920. METHOD OF TREATING NITROGENOUS WASTE MATERIALS. FRANK N. MOERK, Philadelphia, Pa., assignor of one-half to Emily Q. Landreth, Philadelphia, Pa. Filed June 1, 1923. Serial No. 642,761. 4 Claims. (Cl. 71—6.)



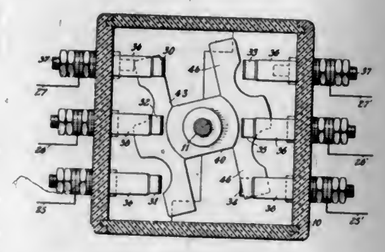
2. The process which comprises incinerating nitrogenous material, bringing an absorptive liquid into contact with the resulting gases to simultaneously scrub said gases and absorb soluble constituents therefrom, and passing said absorptive liquid through the resulting ash while laden with material absorbed from said gases.

1,820,921. APPARATUS FOR JOINING STRIP MATERIALS. ADOLPH POTDEVIN, Garden City, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed June 27, 1930. Serial No. 464,251. 2 Claims. (Cl. 1—49.4.)



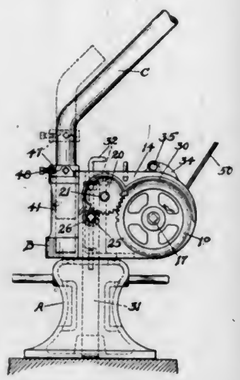
1. In an apparatus for applying fastening devices to the edge of a strip of material, the combination of a support for the material, a fastener-applying machine, said support being inclined toward said machine, and a combined support and guideway for the machine for supporting the machine adjacent the edge of the material and for guilding the machine adjacent to and parallel with the edge of the material being operated upon.

1,820,922. RELAY AND METER TESTING AND CALIBRATING SWITCH. PHILIP SPORN, Brooklyn, and HENRY D. FREITAG, Lynbrook, N. Y., assignors to Electric Progress Company, Inc., New York, N. Y., a Corporation of New York. Filed June 13, 1930. Serial No. 460,823. 3 Claims. (Cl. 200—15.)



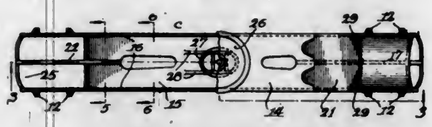
1. In a switch of the class described, two sets of three oppositely disposed contact fingers each, the fingers of each set lying in a common plane and corresponding fingers of the opposite sets lying in a common plane at right angles thereto, an oscillatable shaft mounted between the sets of fingers and in the plane of the intermediate fingers, and two triple-contact blades rigidly carried by the shaft on opposite sides to move therewith, the said blades being adapted thereby for alternative wiping engagement with the juxtaposed outer fingers of the set located on the corresponding side of the shaft and for continuous engagement with the intermediate finger of said set but unattached thereto.

1,820,923. BOAT EQUIPMENT. PERLEY C. STURGES, Bronxville, N. Y. Filed Jan. 13, 1930. Serial No. 420,306. 3 Claims. (Cl. 114—218.)



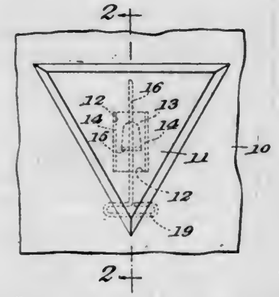
1. In a hoist for motor driven cruisers and the like, the combination with a mooring post, of a housing mounted on the mooring post and freely removable therefrom, a shaft rotatably secured in said housing, a reel secured to said shaft within the housing, a capstan secured to the shaft outside the housing, and means for driving the shaft at different speeds.

1,820,924. CAR TRUCK BOLSTER. HOWARD D. TAYLOR, New York, N. Y., assignor to Flexible Truck Corporation, Reading, Pa., a Corporation of Delaware. Filed Feb. 14, 1930. Serial No. 428,255. 10 Claims. (Cl. 105—230.)



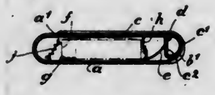
1. A car-truck bolster comprising top, bottom, and opposite side walls, the top wall having arched end portions, and said walls otherwise forming a structure substantially rectangular in cross section, substantially as described.

1,820,925. NAME PLATE ATTACHING MEANS. MILLARD H. TONCRAY, Detroit, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 5, 1929. Serial No. 411,809. 9 Claims. (Cl. 40—20.)



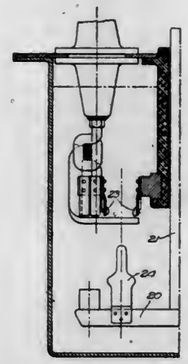
1. The combination with a wall having an aperture therein, of an object having a projection extending through said aperture, and a bowed resilient locking member having its ends engaging the inner face of said wall, said projection and locking member having interengaging means rendered operative by relative movement in a direction substantially parallel to said wall to secure said object to said wall and to hold said member under tension.

1,820,926. POCKET CASE. HENRI VASTICAR, Paris, France, assignor to Schwob-Freres & Cie. S. A., La Chaux-de-Fonds, Switzerland, a Company of Switzerland. Filed Nov. 19, 1929, Serial No. 408,197, and in Belgium Dec. 20, 1928. 4 Claims. (Cl. 206—37.)



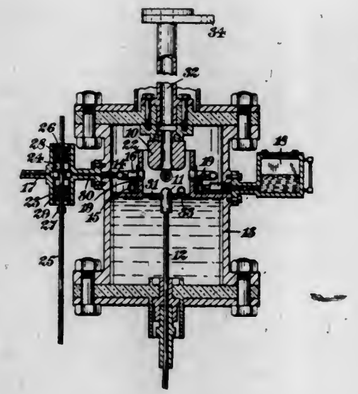
1. In a casing having a bottom and side walls and a cover pivoted on the upper portion of said side walls near one end thereof, which cover has a projection rigidly depending from the hinged end thereof forming a substantial closure for that end of the casing when the cover is in closed position, the combination, with said above described apparatus, of yielding pressure means tending to force said cover into closed position; whereby said casing is normally maintained in closed condition but may be opened by an inwardly directed external pressure on said depending projection.

1,820,927. MEANS FOR BREAKING ELECTRIC CIRCUITS. WILLIS BEVAN WHITNEY and EDMUND BASIL WEDMORE, Westminster, London, England, assignors to The British Electrical and Allied Industries Research Association, London, England, a British Association. Filed Apr. 28, 1925, Serial No. 26,390, and in Great Britain Sept. 5, 1924. 12 Claims. (Cl. 200—150.)



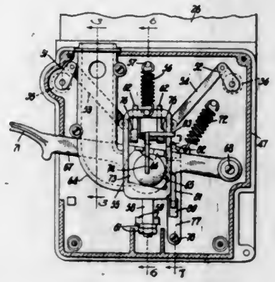
1. An alternating current circuit breaker comprising electrodes which are bridged by an arc on breaking circuit and of which at least one has a surface transverse to the length of the arc which prior to breaking circuit extends a substantial distance on at least one side thereof, means for producing a locally concentrated magnetic field situated to the opposite side of the arc and directed so as to oppose entry of the arc into said field, and means for producing movement of said electrode relatively to said field so that the arc bearing surface moves towards the latter so as to move the arc root on said electrode continuously to a cool surface thereof.

1,820,928. CIRCUIT-BREAKER. WILLIS BEVAN WHITNEY and EDMUND BASIL WEDMORE, London, England, assignors to The British Electrical and Allied Industries Research Association, London, England, a British Association. Filed May 15, 1929, Serial No. 363,344, and in Great Britain June 2, 1928. 23 Claims. (Cl. 200—150.)



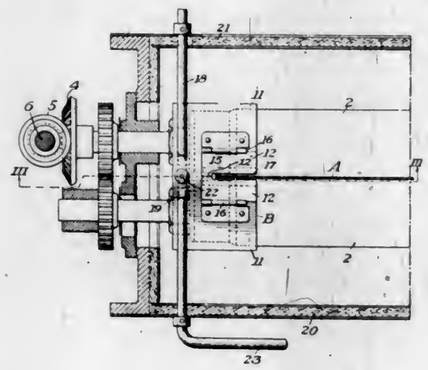
1. A circuit-breaker or switch having means for introducing cooling medium into the arc or arc-path in the form of a fine spray.

1,820,929. VENDING MACHINE. HARRISON R. WILLIAMS, New York, N. Y. Filed Feb. 19, 1929. Serial No. 341,236. 4 Claims. (Cl. 194—75.)



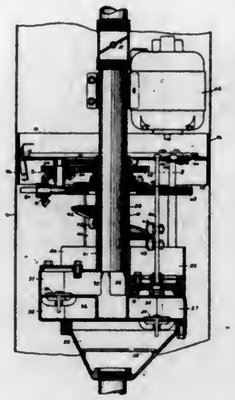
1. In a vending machine, comprising a casing, and movable means in said casing to support a stack of articles to be dispensed, the combination of coin controlled means to actuate said movable means to deliver said articles one at a time, including a manually-operated lever, a coin chute and operating means connected to said movable means, said chute delivering the coin to form an operative mechanical connection between said lever and operating means, and a finger to hold said coin in correct operative position until the article has been released from the stack, means for moving said finger to accomplish the ejection of said coin, and means independent of said coin to move said finger out of its ejecting position.

1,820,930. GLASS DRAWING MACHINE. HOWARD ZEH, Belle Vernon, Pa., assignor to Window Glass Machine Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 23, 1929. Serial No. 349,349. 6 Claims. (Cl. 49—17.)



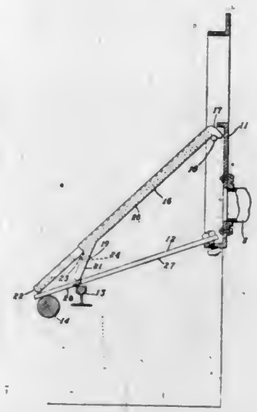
1. A flag for Fourcault sheet glass drawing machines, comprising a body portion having flaps pivoted thereto and arranged to deflect particles of glass away from the sheet, supporting means secured to the flag, said supporting means being rotatably mounted whereby upon rotation of said means the flag is rotated to dispose it for introducing a bait between the drawing rolls.

1,820,931. LIQUID DISPENSING APPARATUS. CHARLES H. ARNOLD, Dayton, Ohio. Filed Jan. 7, 1929. Serial No. 330,821. 17 Claims. (Cl. 221—103.)



1. In a liquid dispenser, a motor, a pump driven thereby, and means for simultaneously disconnecting the motor from the pump, stopping the pump and stopping the flow of liquid to the discharge pipe.

1,820,932. GRATE STRUCTURE. JOHN B. BLEWETT, Wellsville, Ohio, assignor to McLain Fire Brick Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 7, 1927. Serial No. 189,602. 6 Claims. (Cl. 126—163.)



5. In a combustion device, a supporting plate therein, a grate section having supporting portions resting on said plate and openings between said portions for discharging air and ashes from the space between said plate and the grate section.

1,820,933. WALL BOARD AND THE LIKE FOR COVERING WALLS. FRIEDRICH A BRASSARD, Bad Godesberg, Germany, assignor to Theodore Hemeke, as trustee, Hicksville, Long Island, N. Y. Filed Jan. 21, 1929, Serial No. 334,119, and in Germany Sept. 9, 1926. 3 Claims. (Cl. 154—45.9.)

2. The herein described wallboard comprising a body consisting of cement and fibre, mother of pearl or fish

scales incorporated therewith, and a plain protective coating unglazed, unpainted and non-enameled, covering the entire surface of said body and consisting of a cellulose-ester softening agent resistant to hot and cold water and water-proof.

1,820,934. MOLDED TRIMMING. HENRY W. BUHLER, Gloucester, Mass. Filed June 15, 1928. Serial No. 285,640. 19 Claims. (Cl. 96—26.)



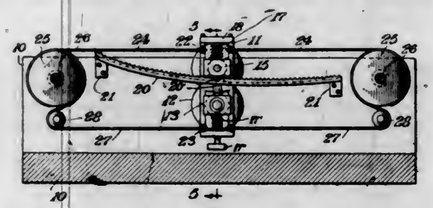
1. Molded trimming which is strong, flexible and capable of bending sharply without breaking and of retaining its shape after bending comprising an aggregate of longitudinally extending stuffer strands and a surrounding cover of concatenated strands, the strands of each set being characterized by uniformity of mass, tensile elongation and lateral compressibility, concatenated to conform to a non-circular cross section.

1,820,935. MOLDED TRIMMING. HENRY W. BUHLER, Gloucester, Mass. Filed June 15, 1928. Serial No. 285,641. 13 Claims. (Cl. 117—53.)



1. Molded trimming having a shaped core comprising longitudinal strands each of uniform mass per unit length, held together by a wound wrapping of a suitable binding filament.

1,820,936. METHOD AND APPARATUS FOR SHAPING CURVED SHEETS. EDMUND BURKE CARNS, New York, N. Y., assignor to Cairns Development Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 11, 1927. Serial No. 174,454. 9 Claims. (Cl. 153—54.)

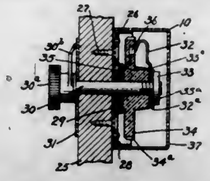


1. The method of forming crowning sheets with compound curves having intersecting arcs which comprises fixing a sheet at a margin thereof, subjecting the sheet to the action of complementary opposed rollers shaped to represent one curve and at the same time moving the rollers bodily along the sheet in a path representing another curve.

6. A machine of the kind described comprising a pair of shaping rollers, means for moving the rollers in a curved path, and means disposed along said curved path for turning the rollers.

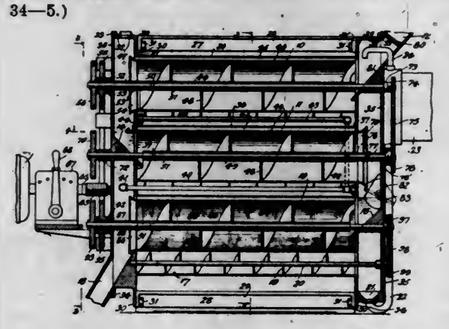
1,820,937. BURGLAR ALARM SWITCH DEVICE. MICHAEL J. CAWLEY, New York, N. Y., assignor to Mildred M. Daniels, New York, N. Y. Filed Jan. 9, 1928. Serial No. 245,355. 8 Claims. (Cl. 200—43.)

1. A switch device of the class described comprising a rotatable member, a dial, a pointer on said member, an electric contact on said member, a disk mounted on and insulated from said member and having an insulated surface over which said contact passes, a contact point on



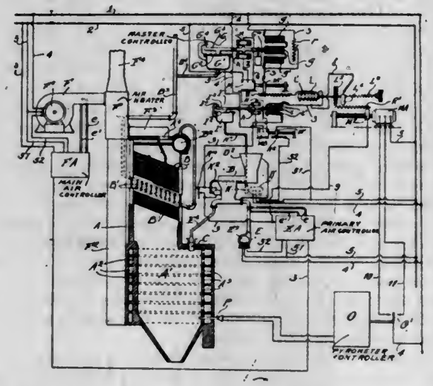
said disk in the path of movement of said contact and said disk being adjustable to vary the position of said contact point with relation to said dial.

1,820,938. APPARATUS FOR ROASTING BEANS AND SEED. FRANK F. CLANDROW, New York, N. Y. Filed Jan. 4, 1929. Serial No. 330,217. 17 Claims. (Cl. 34—5.)



1. A roaster for purposes described, comprising a frame, superposed heating jackets, a roasting cylinder in each jacket and spaced therefrom, a feed worm in and revoluble with respect to each cylinder, shafts supporting the worms, sleeves revoluble on the shafts and connected to corresponding cylinders, and means for driving the worm shafts and cylinder sleeves.

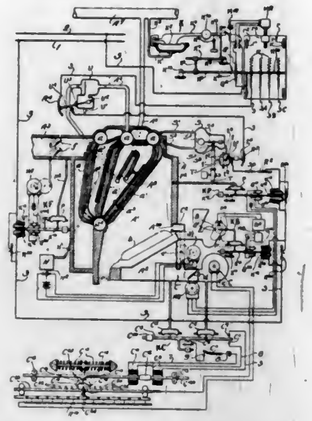
1,820,939. COMBUSTION REGULATION. GEORGE H. GIBSON, Upper Montclair, N. J. Filed Aug. 4, 1926. Serial No. 126,954. 10 Claims. (Cl. 236—14.)



1. In a boiler furnace combustion control system, the combination with means for creating a control force varying in a predetermined manner with changes in the boiler load, of a fuel feeder, means actuated by and

responsive to the rate of fuel delivery by said feeder, and control means for the fuel feeder jointly responsive to the action of said second mentioned means and to said control force for making the rate at which fuel is delivered proportional to said control force.

1,820,940. COMBUSTION CONTROL. GEORGE H. GIBSON, Upper Montclair, N. J. Filed May 9, 1928. Serial No. 276,278. 15 Claims. (Cl. 122—449.)



1. The combination with steam generating apparatus and piping receiving steam generated thereby, of a combustion control system including a master controller including an element moving in response to changes in steam pressure at a point in said piping at which the steam pressure varies in response to changes in steam load and in response to changes in boiler steam pressure, means for establishing an electrical combustion controlling force including a rheostat element cooperating with the first mentioned element to vary said force as the first mentioned pressure changes, by amounts which are greater or less, accordingly as the steam load prior to said change was relatively light or relatively heavy.

4. The combination with a steam generator and its steam outlet, of mechanism for regulating the supply of heat to the generator including means tending primarily to vary the supply of heat in proportion to the steam outflow through said outlet, and means responsive to the amount of water passing with the steam out of the generator through said outlet for adjusting said mechanism to diminish the ratio of heat supplied to the steam outflow as the amount of water carried out of the boiler increases.

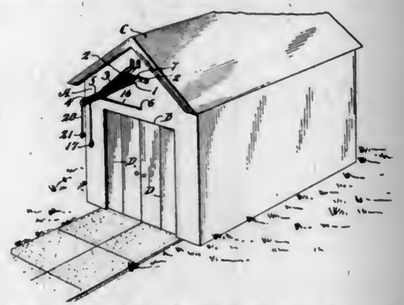
8. The combination with a steam generator, of means including a feed pipe for supplying feed water to said generator, means responsive to the height of water level in the generator for throttling said feed pipe when the water level rises to a predetermined level, and pressure responsive means associated with said pipe for regulating the rate at which heat is supplied to said generator in accordance with the degree of throttling of said pipe.

11. The combination with a furnace having separate primary and secondary air inlets, of means for supplying air under pressure in regulated aggregate amounts to said inlets, and means responsive to the CO_2 content of the gases of combustion for variably throttling the supply of air to the secondary air inlet so as to maintain said CO_2 content approximately constant.

13. In a combustion control system, the combination with a draft creating motor, a speed controller for said motor, a draft regulating damper, and means responsive to the draft pressure drop past said damper for effecting one or more definite step adjustments of said controller when said pressure differential approaches either of predetermined desirable minimum and major values.

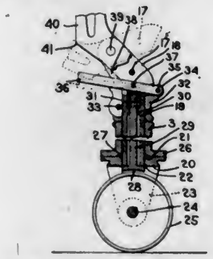
15. The combination with a battery of steam generating boilers and piping receiving steam generated thereby, of a combustion control system including a master controller including an element responsive to changes in steam pressure at a point in said piping at which the steam pressure varies in response to changes in the steam load and in response to changes in boiler steam pressure, means for establishing an electrical battery combustion controlling force, said means including a rheostat element, cooperating with the first-mentioned element to vary said force as the first-mentioned pressure changes, means for maintaining boiler electrical combustion controlling forces corresponding to the rates of combustion in the several boilers of the battery, and means for automatically adjusting one or more of the last mentioned forces while holding the other or others at a constant value as required to maintain the aggregate value of said boiler forces proportional to said battery force.

1,820,941. DOOR AND DOOR OPERATING DEVICE. MILES W. HAWKS, Hayesville, Ohio. Filed Dec. 22, 1927. Serial No. 241,957. 3 Claims. (Cl. 268—48.)



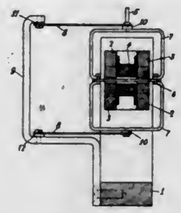
1. Door operating mechanism of the class described, comprising, in combination, a building structure, supports on the building structure, tracks pivoted intermediate their ends on the supports, guides for the free ends of the tracks, doors operable along the tracks under gravity action, and means for inclining the tracks, the doors coacting with the said guides upon inclination of the tracks in both directions, the guiding means having attached thereto instrumentalities to impart initial movement to the doors adjacent their contacting edges.

1,820,942. HAND TRUCK WITH TONGUE OPERATED BRAKING MECHANISM. DANIEL E. HENNESSY, Watertown, Mass., assignor to Lewis-Shepard Company, Watertown, Mass., a Corporation of Massachusetts. Filed June 12, 1929. Serial No. 370,408. 8 Claims. (Cl. 254—9.)



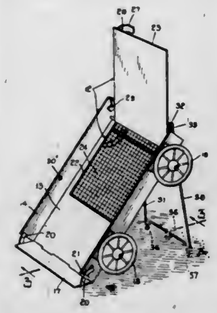
1. A hand truck comprising load supporting means and steering mechanism including a steering wheel and a tongue mounted to swing vertically, braking mechanism for said steering wheel, and power multiplying means intermediate of said tongue and said brake operable by the weight of said tongue when lowered in any steering position to apply said brake to said steering wheel.

1,820,943. DEVICE FOR CONVERTING ELECTRIC OSCILLATIONS INTO MECHANICAL VIBRATIONS. GILLES HOLST, AREND THOMAS VAN URK, and ROELOF VERMEULEN, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 16, 1927, Serial No. 240,571, and in the Netherlands Feb. 18, 1927. 11 Claims. (Cl. 175—339.)



1. A device for converting electrical oscillations into mechanical vibrations comprising an element having a normal position of equilibrium and adapted to move therefrom in response to said electrical oscillations, spring means for supporting said element, additional spring means not operatively associated with said element at its normal position of equilibrium, and means for operatively associating said additional spring means with said element after said element has moved a predetermined distance from its position of equilibrium, whereby said additional spring means influences the movement of said element only after a predetermined displacement of said element from its position of equilibrium.

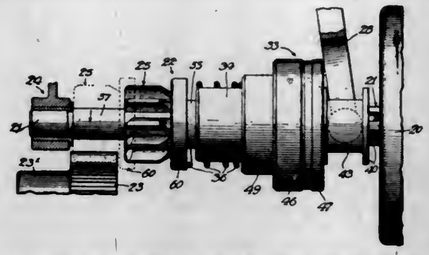
1,820,944. COMBINED LOADING CART AND SIFTER SCREEN. LOUIS MARX, Brooklyn, N. Y. Filed Nov. 29, 1927. Serial No. 236,462. 11 Claims. (Cl. 209—420.)



1. A combined loading cart and sifter screen structure comprising a cart or truck body adapted for receiving and holding a load, the said truck body having a floor provided with an opening, a closure for said opening substantially flush with said floor and a sifter screen for said opening, said sifter screen being located below said closure, said closure being movable from a closed position resting on the sifter screen to an open position for converting the structure from a loading cart to a sifter screen.

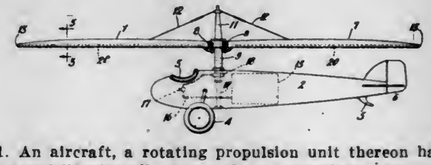
1,820,945. ENGINE STARTER. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Apr. 5, 1928. Serial No. 267,717. 23 Claims. (Cl. 74—7.)

1. An engine starter including a shaft, a one-way clutch longitudinally shiftable relative to and rotarily actuated by said shaft, a pinion adapted to engage when advanced a gear of the engine to be started, and operative connections between said clutch and pinion adapted and arranged to advance said pinion with and forwardly rotate it from said clutch and to effect rotary, registry-insuring adjustment of the pinion if said advancement of said pinion is stopped by non-meshing abutment thereof against said engine-gear,



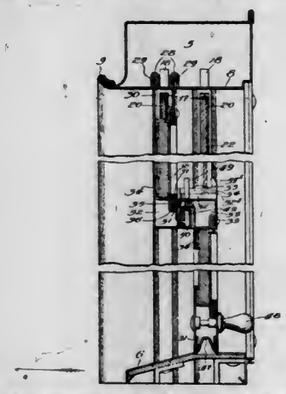
said connections including parts respectively associated with the pinion and the clutch for effecting relative rotation between the pinion and the clutch incidentally to relative longitudinal movement between them and setting the clutch on advancement of the clutch relative to the pinion.

1,820,946. AIRCRAFT. HAROLD F. PITCAIRN, Bryn Athyn, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 8, 1927. Serial No. 231,858. 3 Claims. (Cl. 244—19.)



1. An aircraft, a rotating propulsion unit thereon having aerofoils pivotally mounted, an impelling nozzle carried by each aerofoil, and mechanism for delivering a fluid under pressure to said nozzles including a fluid-conveying means intercommunicating between the aircraft and the aerofoils constructed to permit free pivotal movement of the aerofoils and rotative movement of the unit.

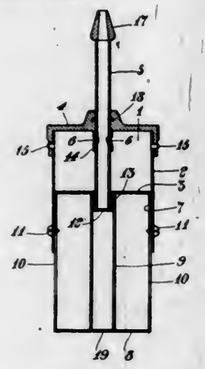
1,820,947. WINDOW CONSTRUCTION. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Original application filed June 21, 1923, Serial No. 646,716. Divided and this application filed June 24, 1927. Serial No. 201,058. 15 Claims. (Cl. 189—76.)



1. A window construction comprising two sashes forming opposed meeting rails, each rail comprising an integral sheet of metal bent to provide a hollow main rail portion

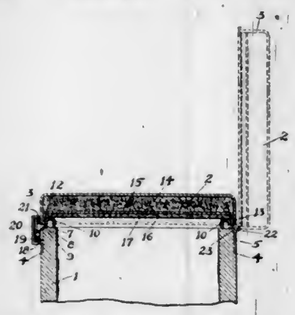
and having a double fold forming a projection and a reentrant fold forming a seat spaced from the projecting fold whereby to receive between said projections and reentrant folds the edge of the window glass, said reentrant fold receiving a window strip therein and said strip being arranged to cooperate with the projecting fold to secure the window glass in position on said rail, and said rail having an extension formed to provide an upstanding portion spaced from the main portion of the rail and forming an intervening well or seat adapted to receive a downwardly extending projection upon the adjacent meeting rail.

1,820,948. PRESSURE CAN. HARRY JOHAN HJALMAR NATHORST, Stockholm, Sweden, assignor to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden, a Company registered in Sweden. Filed Feb. 27, 1929, Serial No. 343,001, and in Sweden Feb. 28, 1928. 4 Claims. (Cl. 221—47.4.)



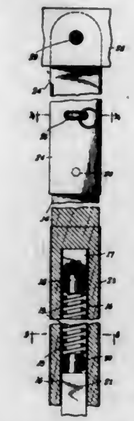
1. In a pressure can, the combination of a can for receiving lubricant or other paste, a bottom slidable in said can, and a substantially tubular spout slidably mounted in said can as well as in said bottom in such manner that said spout may be pulled out to project beyond said can and may be pushed into the can, said spout being provided with at least one opening within said can located in such manner that in the pulled-out position of said spout said opening affords communication between the interior of said can and said spout while in the pushed-in position of said spout said opening is covered by said bottom so that the interior of said can is shut off from communication with said spout.

1,820,949. COSMETIC CONTAINER. PHILIP A. REUTTER, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 20, 1928. Serial No. 313,672. 2 Claims. (Cl. 215—37.)



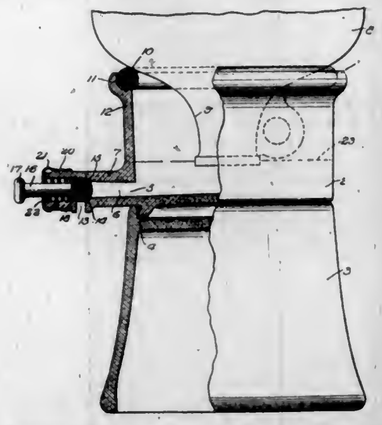
1. A container for cosmetics comprising a holding receptacle and a cover therefor, a metal rim extending above the edge of the receptacle and having a ledge below the top of the rim on which the cover seats, a flange depending from the rim, a resilient packing, a metal sheet over the packing and other resilient packing over the sheet all held within the flange of the cover and compressed by the rim when the cover is closed, and means for locking the cover and receptacle together.

1,820,950. ADJUSTABLE PROP. HUGO G. SCHULSTADT, Maplewood, N. J. Filed Apr. 10, 1928. Serial No. 268,849. 2 Claims. (Cl. 248—2.)



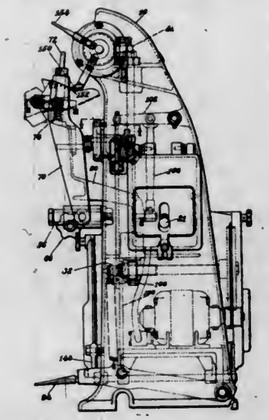
1. An adjustable prop comprising a beam of rectangular cross-section having a recess in its lower portion provided with guides, a casing rigidly secured to the lower portion of the beam, a bar slidable between said guides and extending outwardly below the beam at its bottom, said bar having a spur at its extremity, means in the recess to press the beam and bar in opposite directions, a casing adjustably mounted on the upper portion of said beam, and a block pivotally mounted in the upper end of said casing, said casing being provided with a recessed portion at the upper end thereof to receive one end of the block and limit the movement thereof.

1,820,951. DISPENSING APPARATUS. EDWIN E. SLICK, Pittsburgh, Pa. Filed Mar. 13, 1929. Serial No. 346,614. 4 Claims. (Cl. 251—137.)



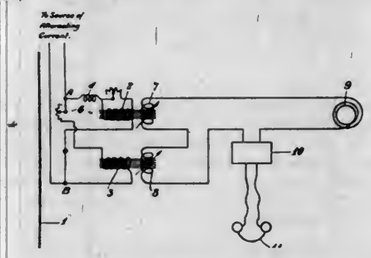
4. A spigot of vitreous material having a collar at its inner end and an outlet opening intermediate its ends, the collar being externally threaded, a coupling screwed on the collar and adapted for connection with the outlet of a dispensing apparatus, the outer end of the spigot being externally threaded, a valve consisting of a metallic bushing having a casing of resilient material, said bushing being internally threaded, a vitreous valve stem having its inner end screwed into said bushing, a cap on the threaded outer end of the spigot, and a spring surrounding the valve stem and having its ends abutting the cap and valve.

1,820,952. MACHINE FOR EFFECTING RELATIVE MOVEMENTS BETWEEN SHOES AND THEIR LASTS. JOHN M. WHELTON, Peabody, and ARTHUR F. PYM, Swampscott, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 22, 1928, Serial No. 321,227. Renewed Aug. 15, 1930. 48 Claims. (Cl. 12—15.)



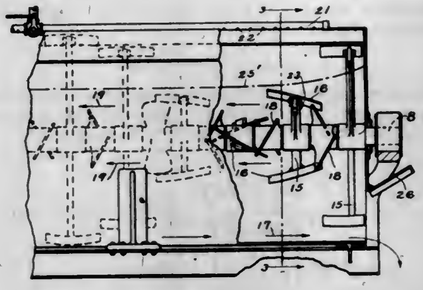
1. A machine for operating on shoes comprising a support for a last with a shoe thereon, a roll, means for moving said last support to bring the counter portion of the shoe into engagement with said roll, and means for rotating said roll to effect relative movement between the shoe and the last.

1,820,953. METHOD AND APPARATUS FOR SUBSOIL INVESTIGATING. KARL SUNDBERG and ERIK DAVID LINDBLOM, Stockholm, Sweden, assignors to Aktiebolaget Elektrisk Malmletning, Stockholm, Sweden, a Company of Sweden. Filed Feb. 16, 1927, Serial No. 168,527, and in Sweden May 26, 1926. 10 Claims. (Cl. 175—182.)



1. The method of discovering, and determining the position, configuration, and nature of ores, solutions of salts, or other bodies, which consists in producing an electromagnetic field, and determining said electromagnetic field at different points and in any desired directions as regards strength and phase by compensating said field by means of another field.

1,820,954. TRANSIT CONCRETE MIXER. CLARENCE M. TUCK, Seattle, Wash., assignor to Morris & Boogher, Inc., Seattle, Wash., a Corporation. Filed Jan. 26, 1927, Serial No. 163,660. Renewed Jan. 23, 1931. 8 Claims. (Cl. 83—73.)



1. A concrete mixer embodying a fixed mixer drum, a horizontal driven shaft operatively mounted within said drum, a center set of mixing and propelling blades secured to said driven shaft, said central blades disposed to rotate in a region adjacent the axis of the drum, radially disposed arms secured to the driven shaft, outer mixing and propelling blades of opposite pitch to the central blades pivotally secured to said arms, the pivot axis being displaced sufficiently from the axis of the blade as to cause the blade to partially revolve when it meets with resistance on its face, resilient means causing the outer blades, to normally present their maximum working face.

1,820,955. PACKING MATERIAL. JAMES N. VANDERGRIFT, New York, N. Y. Filed Mar. 8, 1929. Serial No. 345,337. 1 Claim. (Cl. 154—45.5.)



A packing material composed of steel wool twisted into resilient compressible strands and impregnated with a solution of graphite and heavy oil.

1,820,956. LOUD SPEAKER. GEORG VON ARCO, Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Nov. 27, 1925, Serial No. 71,615, and in Germany Dec. 24, 1924. 7 Claims. (Cl. 181—32.)

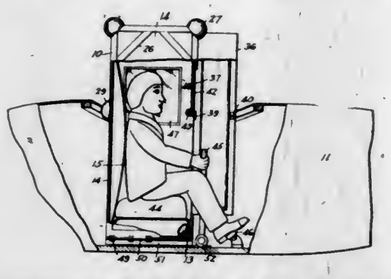


1. In a loud speaker, a plurality of vibrating diaphragms, and a plurality of curved disks, said diaphragms being centrally disposed therein and said disks and diaphragms being positioned to oppose each other and form a trumpet-like acoustic chamber therebetween.

1,820,957. METHOD OF PRESERVING ENZYME SOLUTIONS. LEO WALLERSTEIN, New York, N. Y., assignor to Wallerstein Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 6, 1928. Serial No. 310,911. 1 Claim. (Cl. 195—32.)

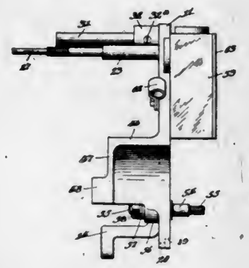
The method of preserving enzyme solutions which consists in the addition to the solution of pine oil in the proportion of one-half of one percent by weight of the solution to be preserved.

1,820,958. AIRPLANE SAFETY DEVICE. JACOB ZINKOWETSKY, New York, N. Y. Filed Mar. 26, 1930. Serial No. 438,919. 16 Claims. (Cl. 244—21.)



1. The combination with an airplane, of an independent normally open compartment for the reception of an occupant, comprising a frame having elongated laterally spaced rigid members, inflatable cushioning means secured at their edges to said members, and forming the walls of the compartment to said members, and doors arranged to be closed for substantially sealing the compartment.

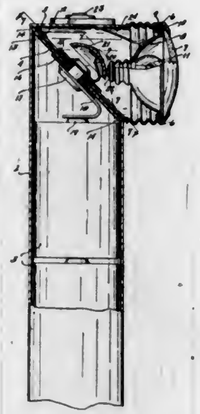
1,820,959. UNITARY SAFETY DEVICE FOR MOTION PICTURE PROJECTING MACHINES. THOMAS TWADDEL ALLEN, Philadelphia, Pa., assignor to Sentry Safety Control Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,376. 1 Claim. (Cl. 88—17.)



A unitary mounting for cooperative elements for actuating a safety device for a motion picture projecting machine, comprising a cast metal member spaced from and secured to the framing plate, a shaft supported at one end in said member for mounting a film switch thereon, a hood having a bearing for mounting the rotatable part of a centrifugal switch, and means for mounting an idle gear for meshing with said rotatable part and an operative gear of the film feeding mechanism.

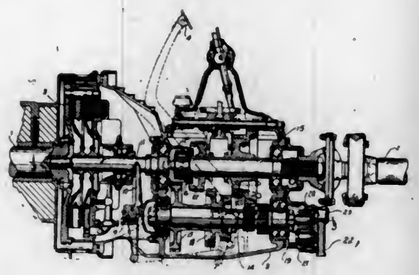
1,820,960. FLASH LIGHT. JOSEPH D. CHAMPAGNE and GORDON R. CUNNINGHAM, Portland, Oreg. Filed July 22, 1930. Serial No. 469,676. 2 Claims. (Cl. 240—10.67.)

1. A device of the class described, comprising a body element for dry cells, a cap closing one end of the body element having a recess disposed in its outer surface, a reflecting head hingedly secured centrally of the cap, insulating disks disposed centrally of the cap of the body element and of the reflecting head, a journal rivet disposed therethrough about which the head is adapted for being swiveled, and means for conducting electricity from the



battery disposed within the body element through the journal rivet connecting the head of the body element and the electric light bulb disposed in the outer end of the reflecting head, said means including a spring switch having a domed shaped segment thereon upon which the electric bulb rides and a second spring switch, both springs secured to the insulated rivet.

1,820,961. CLUTCH BRAKE. HAROLD D. CHURCH, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1927. Serial No. 170,478. 9 Claims. (Cl. 192—13.)

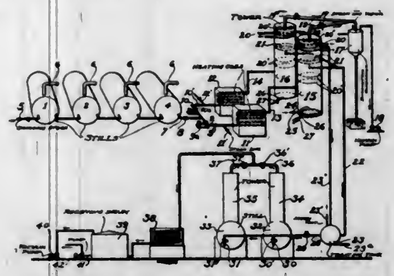


1. A power transmission device comprising a drive shaft, a driven shaft, a clutch, power transmission gearing between said clutch and driven shaft, a pump driven by said power transmission gearing, and normally freely circulating fluid, a valve for restricting the flow of said fluid, and means for automatically actuating said valve when the clutch is disengaged,

1,820,962. PAPER MANUFACTURE. ALBERT L. CLAPP, DANVERS, Mass. Filed Sept. 26, 1928. Serial No. 308,581. 7 Claims. (Cl. 92—21.)

1. A process which comprises incorporating a water-swollen but water-insoluble gel into paper pulp, sheeting the mixture, and subjecting the sheet to high pressure with the gel in a highly hydrated condition.

1,820,963. PROCESS FOR MANUFACTURING LUBRICATING OIL. EDGAR M. CLARK, New York, N. Y., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 22, 1927. Serial No. 162,727. 1 Claim. (Cl. 196—41.)



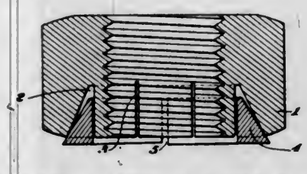
In the manufacture of lubricating oils, the improvement that comprises heating a lubricating oil fraction to a vaporizing temperature, passing the hot oil into a fractionating zone maintained at an absolute pressure corresponding to about 25 mm. of mercury, injecting steam into the lower portion of said zone, condensing lubricating oil constituents vaporized in said zone, withdrawing such constituents, subsequently treating them while hot with an alkaline solution in a separate zone, and distilling the treated oil at an absolute pressure or partial pressure corresponding to about 15 mm. of mercury.

1,820,964. SIGN. JOSEPH T. COCHRAN, Chicago, Ill. Filed Mar. 22, 1929. Serial No. 349,057. 12 Claims. (Cl. 40—141.)



1. A sign comprising letters and characters each formed of transparent material forming a lens and having a portion of its surface at the rear of the lens covered with reflecting media and having portions angularly related to each other but with the lens portion common to all.

1,820,965. LOCK-NUT. AUDOIN D'HALLOY, Paris, France, assignor to International Safety Lock Nut Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 6, 1927, Serial No. 211,236, and in France Feb. 9, 1927. 16 Claims. (Cl. 151—19.)

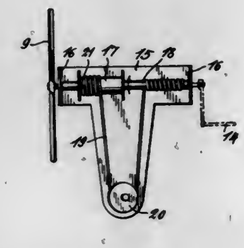


16. A nut and bolt assembly in operative relation to a work piece comprising a nut having a split surface engaging the bolt, and a split helicoidal washer so positioned and associated with the nut and the work piece that when the assembly is subjected to vibrational forces one free edge of the washer at the split tends to penetrate into the surface of the work piece with which it engages and another free edge at the split tends to penetrate further into a cavity in the nut provided for this purpose whilst the walls of the cavity are so shaped as to resist such tendency to penetrate.

1,820,966. METALLIC REFRACTORY MATERIAL. JOSEPH G. DONALDSON and HENRY L. COLES, Hamilton, Ohio, assignors to Guardian Metals Company, Hamilton, Ohio, a Corporation of Delaware. Filed Dec. 21, 1926. Serial No. 156,105. 6 Claims. (Cl. 75—1.)

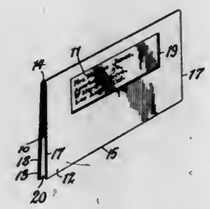
1. An alloy including tungsten in amount between 95–48%, silicon .5–45%, and nickel between 1–5%, the nickel content being substituted for an equal amount of the silicon.

1,820,967. TOY MOTOR. JAMES F. ENYEART, Denver, Colo. Filed Nov. 24, 1930. Serial No. 497,660. 1 Claim. (Cl. 185—37.)



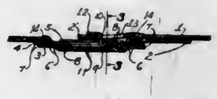
A motor comprising a single elongated rotor mounted for rotation about its longitudinal axis, said rotor having two cylindrical sections, an elastic band having its ends connected with the cylindrical sections, one end to each section, and a pulley located to one side of the rotor and mounted for rotation about an axis substantially perpendicular to the axis of the rotor, the elastic band passing over the pulley which serves to guide it from one cylindrical section to the other.

1,820,968. STENCIL SHEET HOLDER. GUY J. EVANS, Buffalo, N. Y. Filed May 23, 1929. Serial No. 365,427. 6 Claims. (Cl. 41—3.5.)



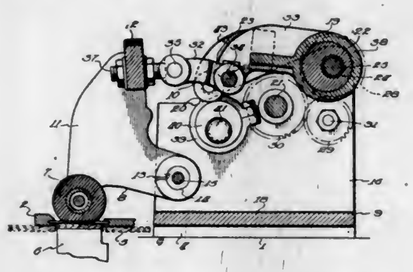
1. A holder for a stencil sheet having front and rear leaves between which the sheet is received, the front leaf having a window through which the sheet is exposed to permit of cutting an address on the same and the rear leaf being continuous and providing a support for the stencil while being cut.

1,820,969. BUCKLE. LEON J. FRIEDHEIM, St. Louis, Mo. Filed Apr. 15, 1929. Serial No. 355,205. 4 Claims. (Cl. 24—194.)



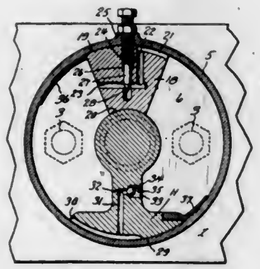
2. A buckle including a plate comprising spaced pairs of inner and outer slot-forming cross-bars and adapted at said slots for threaded engagement with a strap, and a T-shaped hook whose shank projects from one of said inner cross-bars and whose bill is presented toward the opposite inner cross-bar and extends transversely of the plate intermediate said inner cross-bars in a plane offset laterally from and approximately parallel with the plane of the plate for securing engagement with a co-operating strap.

1,820,970. PRINTING MECHANISM FOR ADDRESSING MACHINES. PAUL A. GOLLNICK and FRANK W. BRODERICK, Chicago, Ill., assignors, by mesne assignments, to Selectograph Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 21, 1929. Serial No. 348,782. 3 Claims. (Cl. 101—48.)



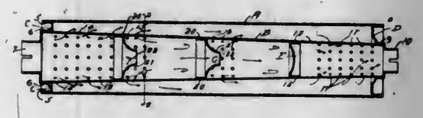
1. A device of the class described comprising a bed adapted to support a form, an oscillating carriage on one side of said bed, an ink applying member supported on said carriage, a toggle arranged to oscillate said carriage between predetermined positions, a driven shaft, an eccentric on said shaft, and a strap embracing said eccentric and connected to said toggle for extending said toggle so as to extend the stroke of said carriage.

1,820,971. SHOCK ABSORBER. EMIL GRUENFELDT, Cleveland, Ohio. Filed Mar. 13, 1929. Serial No. 346,510. 7 Claims. (Cl. 188—89.)



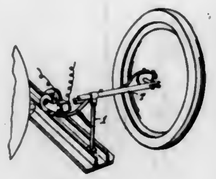
1. A shock absorber comprising, in combination, a casing, a shaft rotatable in said casing, a vane on said shaft, an abutment opposed to said vane and interposed between the shaft and the inner wall of the casing, there being a passage of normally constant cross-sectional area for the flow of liquid due to the movement of the vane toward the abutment in one direction and a passage of variable cross-sectional area opposing the movement of the vane in the opposite direction, and means operated by the approach of the vane toward the abutment in one direction for progressively reducing the cross-sectional area of the first mentioned passage.

1,820,972. MUFFLER. LUCIEN L. HAAS, Buffalo, N. Y., assignor to Buffalo Pressed Steel Company, Buffalo, N. Y. Filed July 5, 1929. Serial No. 376,011. 1 Claim. (Cl. 137—160.)



A muffler having an outer substantially cylindrical shell and an inner tapering shell having its larger end arranged at the inlet end of the muffler, both of said shells extending throughout the length of the muffler, a baffle in said inner shell dividing the same into a gas receiving chamber and a gas discharge chamber, a series of restricting nozzles in said receiving chamber, said tapering shell forming with said outer shell an outer chamber which increases in cross sectional area toward the discharge end of the muffler, discharge openings arranged at intervals in the portion of said inner shell surrounding said receiving chamber, some of said discharge openings being arranged immediately beyond said nozzles, and additional openings in the portion of said iner shell surrounding said discharge chamber for conducting gas from said outer chamber to said discharge chamber.

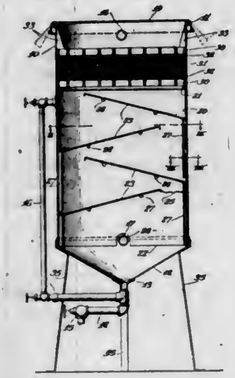
1,820,973. ELECTRIC AUTOMOBILE. ARTHUR R. HAUFE, Cincinnati, Ohio. Filed June 18, 1929. Serial No. 371,922. 10 Claims. (Cl. 191—49.)



1. The combination with an electrically propelled vehicle having a tie-rod for steering said vehicle, of means for conducting electric current, a steering staff having connection with said tie-rod and adapted to engage said conducting means, and means for conducting electric current from said electric-current-conducting means to the electric means for propelling said vehicle.

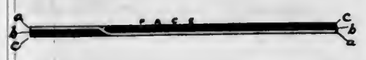
1,820,974. FILTER. JOHN H. HILLS, Grand Rapids, Mich., assignor to Bousman Mfg. Co., a Corporation of Michigan. Filed Mar. 6, 1929. Serial No. 344,673. 7 Claims. (Cl. 210—45.)

7. In a filter adapted to separate liquids of different specific gravities as the main body of the liquid flows upwardly through the filter, an enclosing casing having a liquid inlet and a drainage pocket below the inlet, inclined baffle means in the casing arranged to alternately direct and to alternately restrict and enlarge the path of the body of liquid as it flows upwardly, and conduit means connected with the baffles in the path of the body of fluid at substantially a point where the path is of greatest en-



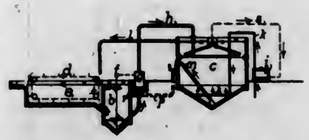
largement, the said conduits being arranged to guide the separated heavier constituents of the liquid to the said drainage pocket.

1,820,975. KNITTED FABRIC AND PROCESS OF MAKING SAME. WILBUR L. HOUSEMAN, Somerton, Pa., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 20, 1929. Serial No. 341,374. 18 Claims. (Cl. 66—201.)



1. A knitted fabric composed of three threads and comprising stitched loops, in some of which all three threads are in plating relation with the threads arranged in a certain order, in others of which all three threads are in plating relation with the threads arranged in the reverse order, in others of which two threads are in normal plating relation while the third thread floats and in others of which the same two threads are in reverse plating relation while the said third thread floats.

1,820,976. SEWAGE TREATMENT. KARL IMHOFF, Essen, Germany. Filed Nov. 9, 1927, Serial No. 232,168, and in Germany Oct. 8, 1927. 3 Claims. (Cl. 210—2.)



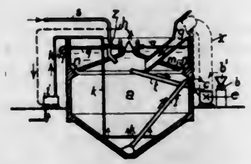
1. Apparatus for treating sewage having, with a combined two-chambered settling basin in which the water contents intermix, the second chamber being of greater depth than the first to enable a regular supply of good digesting sludge to move from the bottom of the first chamber and mix through the contents of the second chamber keeping the contents therein in alkaline fermentation, a separate secondary sludge basin for carrying through alkaline methane fermentation, and conduits for effecting an interchange of contents between the second chamber and secondary basin to enable good sludge in alkaline methane fermentation to be mixed with the mixture in the second chamber.

1,820,977. COMPLETE SEWAGE TREATMENT PLANT WITH SUBMERGED CONTACT AERATORS. KARL IMHOFF, Essen, Germany. Filed Nov. 9, 1927. Serial No. 232,169. 5 Claims. (Cl. 210—8.)



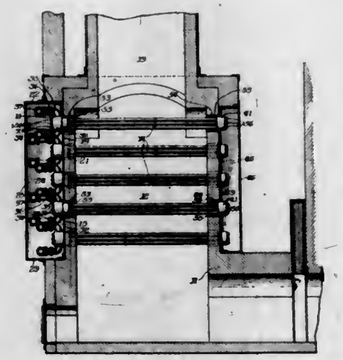
1. In a sewage treatment plant, a presettling basin having an inflow and a separate final settling basin, a tank having submerged contact aerators, pipe connections between said basin and tank including a connection for delivering sludge from the presettling basin to the tank and a connection for delivering sludge from the tank to the final settling basin, a sludge digestion chamber and means for conducting sludge thereto from the pre-settling basin, and means for delivering biological sludge from the final settling basin to the inflow of the presettling basin there to be mixed with the sludge of the pre-settling basin prior to delivery to the digestion chamber.

1,820,978. DIGESTION OF COARSE SUBSTANCES LEFT ON SEWAGE SCREENS IN THE SEWAGE TREATMENT. KARL IMHOFF, Essen, Germany. Filed Nov. 9, 1927, Serial No. 232,170, and in Germany Sept. 30, 1927. 3 Claims. (Cl. 210—2.)



1. The combination of a digesting chamber to receive sludge, a movable vessel for receiving screening, a pipe in said chamber for conveying sludge to said vessel to mix with the contents therein, and a hopper through which the intermixed contents of said vessel can be discharged into the chamber.

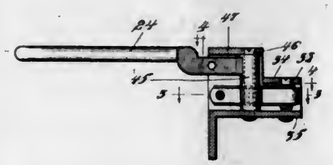
1,820,979. WATER HEATER. ADOLPH T. JOHANSON, Chicago, Ill. Filed Jan. 13, 1930. Serial No. 420,350. 3 Claims. (Cl. 257—255.)



1. In a heater having a passage for hot combustion gases with opposite walls apertured in register, the combination of a metal-plate on the outer face of one of such

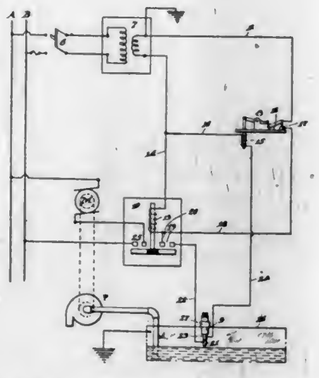
walls and having an aperture therethrough in register with the corresponding wall aperture, a second metal-plate on the outer face of the other wall apertured in register with its aperture, a water-heating unit consisting of a connector mounted in the aperture of and supported in substantial measure by said second plate, a second connector mounted in the aperture of and supported in material measure by said first plate, said second connector having an external shoulder adapted to engage the outer face of the correlated plate, a plurality of tubes uniting said connectors, means to admit water into and to permit its discharge from one of said connectors, and packing in and filling the otherwise unoccupied space of said wall apertures, said unit being capable of withdrawal as a unitary structure through said second plate aperture.

1,820,980. GUIDER. FRANK A. LANE, Providence, R. I., assignor to The Textile-Finishing Machinery Company, a Corporation of Rhode Island. Filed Jan. 13, 1931. Serial No. 508,459. 14 Claims. (Cl. 26—66.)



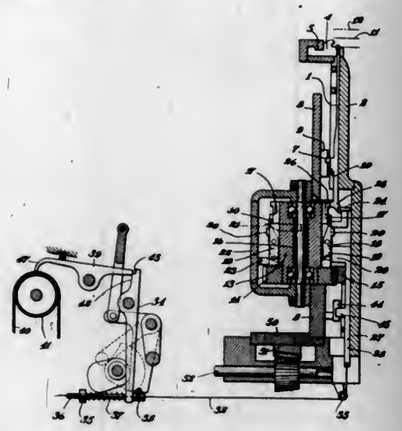
1. In a stretching and guiding apparatus, a pair of units, each unit comprising a pair of rolls arranged to engage the work on opposite surfaces thereof, said rolls being mounted to be relatively moved to and from work nipping position, electromagnetic means for relatively moving said rolls to control nipping position, means connecting said electromagnetic means in an energizing circuit, separable contact means in said circuit, yielding means for causing engagement of said contact means, means independent of said contact means for controlling engagement of said contact means, and a feeler member positioned to be engaged by the edge of the work and operatively connected to said contact controlling means.

1,820,981. APPARATUS FOR CONTROLLING LIQUID LEVELS. HARRY M. LE FEVER, Philadelphia, Pa. Filed Mar. 7, 1928. Serial No. 259,892. 2 Claims. (Cl. 137—68.)



1. An installation for controlling the level of electrically conductive liquid within a container, comprising a liquid eductor, electrically responsive means controlling the eductor including a circuit and switch, a second circuit normally open closed by said switch and including spaced electrodes effective at the minimum liquid level, a third circuit including spaced electrodes effective at the maximum liquid level, a fourth circuit including a relay, and means in the third circuit for closing the relay, said fourth circuit also including magnetic means for closing the switch, said magnetic means being included also in said second circuit.

1,820,982. KNITTING MACHINE. VINCENT-LOMBARDI, Brooklyn, N. Y. Original application filed Nov. 17, 1928, Serial No. 320,111. Divided and this application filed Dec. 9, 1929. Serial No. 412,722. 12 Claims. (Cl. 66—40.)

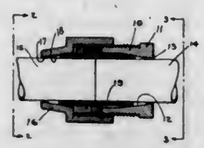


1. A knitting machine comprising a stationary needle cylinder, a row of needles mounted on said cylinder, a pattern drum mounted for rotation around said cylinder and rotating on its own axis in response to said rotation for controlling said needles, said drum being mounted with its axis substantially parallel to the axis of said cylinder, and stationary pattern mechanism for varying and controlling the pattern determining actuations of said drum.

1,820,983. HEAVY OIL FUEL. NATHANIEL E. LOOMIS, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 15, 1926. Serial No. 88,482. 3 Claims. (Cl. 44—8.)

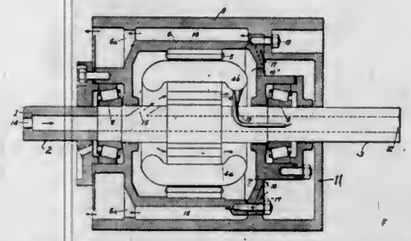
1. A fuel oil for Diesel engines and the like, and consisting essentially of a heavy petroleum oil and less than 5% by volume of a substance selected from the class of nitro-paraffin and alkyl nitrite compounds, and which induces knocking or detonation when used in combination with a gasoline fuel for internal combustion engines.

1,820,984. CONNECTER. WILLIS MCKEE, Cleveland, Ohio, assignor to The Central-United National Bank, a Corporation of the United States. Filed Mar. 10, 1926. Serial No. 93,632. 2 Claims. (Cl. 285—126.)



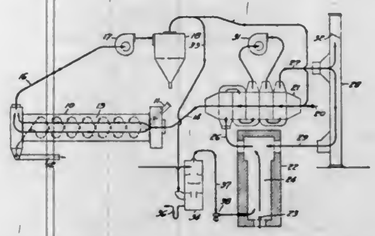
2. A coupling for connecting two aligned smooth-surfaced tubes comprising a helix of inherently non-plastic, non-compressible material freely rotatable around the adjacent ends of the tubes, and relatively rotatable parts around the helix and having interengaging screw threads tapering inner walls on said rotatable parts, the said inner walls engaging intimately and frictionally with the opposite ends of the helix and serving when rotated relatively to create a frictional engagement at the ends of the helix sufficient to contract the helix axially into substantially liquid tight contact of the turns of the helix with each other and radially into similar contact of the helix with the tubes.

1,820,985. TEMPERATURE CONTROLLED MOTOR DRIVEN ROLLER. WILLIS MCKEE, Cleveland, Ohio, assignor to The Central United National Bank, a Corporation of the United States. Filed July 1, 1927. Serial No. 202,830. 6 Claims. (Cl. 198—127.)



1. A motor driven roller comprising a non-rotating shaft having a cooling gas passage therein and carrying a motor stator, a motor rotor, means for housing the stator and rotor, an article conveying shell disposed outwardly about the said means to provide a cooling fluid space therebetween, and means for passing a cooling fluid through the said passage in the shaft and through said space.

1,820,986. ODORLESS DESICCATING METHOD AND SYSTEM. DAVID D. PEEBLES, Eureka, Calif., assignor to F. E. Booth Company, Inc., San Francisco, Calif., a Corporation of Nevada. Filed Mar. 18, 1929. Serial No. 347,836. 2 Claims. (Cl. 34—24.)



1. An odorless method of desiccating fish meal to produce a dried product valuable as a stock feed, comprising the steps of continually introducing a fluid medium containing superheated steam into a chamber, continually feeding wet fish meal into one part of said chamber, continually removing desiccated fish meal from another part of said chamber, the fluid medium within the chamber contacting with the fish meal to heat and dry the same, continually removing a fluid medium from said chamber consisting of the introduced fluid medium together with water vapor and odorous gases evolved from the fish meal, diverting a portion of the removed fluid medium, condensing water from the diverted portion, burning the uncondensed concentrated odorous gases of said diverted portion to destroy the objectionable odor thereof, heating the remainder of said removed fluid medium to effect a substantial degree of superheat, and utilizing said heated medium for effecting the first mentioned step of the method, thus forming a closed cycle from which air is excluded.

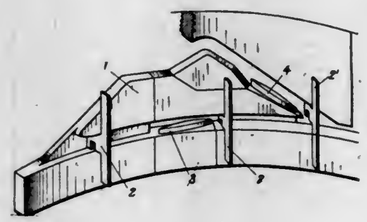
1,820,987. METHODS OF PRECIPITATING TITANIUM COMPOUNDS. LONNIE W. RYAN, Niagara Falls, N. Y., assignor to Titanium Pigment Company, Inc., New York, N. Y., a Corporation of Maine. Filed Mar. 27, 1928. Serial No. 265,213. 15 Claims. (Cl. 23—202.)

3. In the precipitation of titanium compounds by hydrolysis from a mineral acid solution containing titanium, the step which consists in mixing said titanium solution and a solution of an organic acid compound at an elevated temperature.

1,820,988. METHOD OF PRECIPITATING TITANIUM COMPOUNDS. LONNIE W. RYAN, Niagara Falls, N. Y., assignor to Titanium Pigment Company, Inc., New York, N. Y., a Corporation of Maine. Filed Mar. 27, 1928. Serial No. 265,214. 15 Claims. (Cl. 23—202.)

4. In the precipitation of titanium compounds by hydrolysis from a mineral acid solution containing titanium, the step which consists in mixing said titanium solution and a solution of a phosphoric acid compound and an organic acid compound at an elevated temperature.

1,820,989. CIRCULAR KNITTING MACHINE. PAUL ERICH BAUNO SANDER, Chemnitz, Germany, assignor to Chemnitzer Strickmaschinenfabrik A. G., Chemnitz, Germany, a Corporation of Germany. Filed July 16, 1929, Serial No. 378,597, and in Germany July 18, 1928. 3 Claims. (Cl. 66—36.)

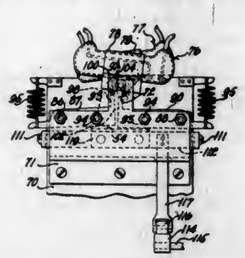


1. A needle cylinder for a circular knitting machine, having, with successive cams, a plain groove for jacks and successive cam grooves for jacks, each of said cam grooves including an upward incline from the plain groove and a downward incline thereto, means in the plain groove below each of the cams for moving the jacks which pass in such groove, laterally outwardly therein into a position in which they will engage the upward incline of the next succeeding cam groove, and means on the downward incline of each cam groove for moving the jacks which pass in such groove, laterally inwardly therein into a position in which they will escape engagement with the upward incline of the next succeeding cam groove.

1,820,990. INDICATOR SWITCH. CLAUDE THEODORE SIEBS, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1927. Serial No. 183,304. 5 Claims. (Cl. 200—56.)

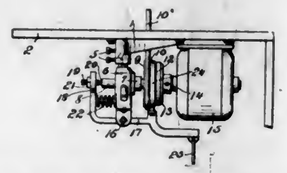
1. In an electrical control system, a circuit controlling mechanism comprising a fluid contact switch rotatable about a fixed pivot into a plurality of circuit controlling

positions, a reciprocating carriage, a pivoted member actuated by the carriage for rotating the switch into one



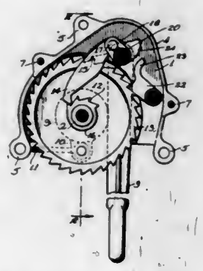
of said positions, and a second pivoted member actuated by the carriage for rotating the switch into another of said positions.

1,820,991. CLUTCH MECHANISM. WILLIAM U. SNYDER and WILLIAM T. HESS, Kansas City, Mo. Filed May 17, 1928. Serial No. 278,361. 1 Claim. (Cl. 192—17.)



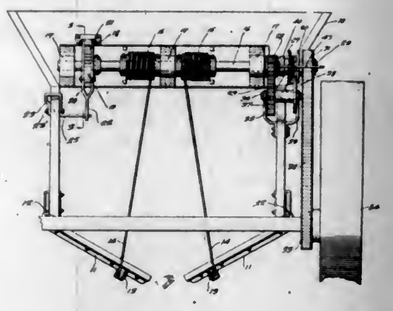
In a clutch mechanism the combination with a support, a rotary driving clutch member, and means supporting said driving member on said support, of bearing means adjustable on said support lengthwise of and circumferentially on an axis intersecting the axis of said driving member, a shaft rotatable and slidable on said bearing means independently of and adapted for alinement axially with said driving member, a driven clutch member carried by said shaft, and means carried by said bearing means adapted to engage and force said shaft lengthwise so as to operatively engage said driven clutch member with said driving clutch member.

1,820,992. INTERMITTENT OPERATOR FOR WINCHES. FRITIOF STONEBERG, Chicago, Ill. Filed Dec. 29, 1930. Serial No. 505,380. 4 Claims. (Cl. 74—54.)



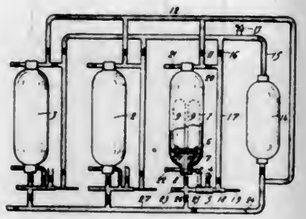
1. A device of the class described comprising a power transmitting element, a pair of racks on said element, one of said racks being mutilated, an operating lever, and a pair of pawls on said lever, one of said pawls being adapted to engage said mutilated rack for effecting a predetermined throw of said element, the other of said pawls being adapted to engage the other rack for effecting a shorter throw of said element without changing the stroke of said lever.

1,820,993. DUMP WAGON DOOR OPERATING DEVICE. FREDERICK A. STREICH, Oshkosh, Wis., assignor to A. Streich & Bro. Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Jan. 29, 1930. Serial No. 424,203. 3 Claims. (Cl. 298—35.)



1. In a vehicle having a body portion provided with a dump door, means in connection with said body for closing said door, driving mechanism for said means propelled by movement of the vehicle, a pair of relatively movable clutch members, between one of said members being carried by said closing means and the other of said members being carried by said driving mechanism, and an automatically operated timed clutch throw out disk rotatable adjacent said clutch members and having a cam portion for moving one of said clutch members to cause disengagement of said driving mechanism from said closing means when said door has been fully closed.

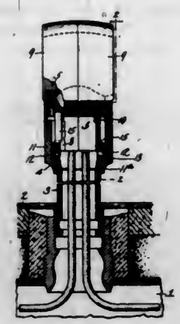
1,820,994. PROCESS OF AND APPARATUS FOR TREATING FIBROUS MATERIALS FOR PULPING PURPOSES. JOHAN HUGO WALLIN, Bengtsfors, Sweden. Filed June 22, 1929, Serial No. 372,996, and in Sweden Jan. 31, 1929. 9 Claims. (Cl. 92—7.)



1. The process of treating fibrous materials in a digester for pulping purposes by digestion, consisting in injecting the digesting liquor into the digester by means of a mixture of steam and gas produced by the digestion operation, and effecting circulation of said digesting liquor through the fibrous material in said digester.

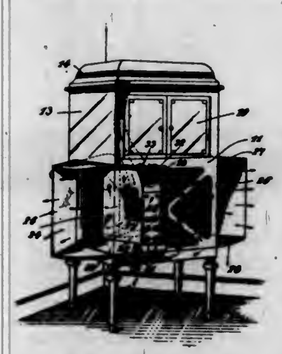
1,820,995. HOUSED OUTLET. FREDERICK G. WEHMAN, West Nyack, N. Y., assignor to The Fibre Conduit Company, Orangeburg, N. Y., a Corporation of New York. Filed Nov. 18, 1930. Serial No. 496,402. 7 Claims. (Cl. 247—6.)

1. An outlet floor riser comprising in combination, a tubular supporting member, a sleeve slidably mounted on the supporting member, interlocking means between the sleeve and the supporting member, a metallic casing divided vertically into two halves and having lower portions adapted to engage the sleeve and be held together thereby,



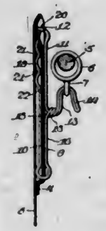
and an insulating fitting between the two halves of the said casing and clamped in position by the engaging of the lower portion of the casing with the sleeve.

1,820,996. SOUND AMPLIFYING SYSTEM. MAXIMILIAN WEIL, New York, N. Y. Filed Dec. 8, 1925. Serial No. 74,031. 20 Claims. (Cl. 274—2.)



6. A sound amplifying system including a horn delivering in a direction opposite to that in which the sound is to emanate from the system, a reflector facing and straddling the mouth of said horn, said reflector having a mouth formed by diverging extensions adjustable to vary the area of said mouth.

1,820,997. DRAPERY SUPPORTING DEVICE. DOROTHY ROSE YEIDEL, Chicago, Ill. Filed Sept. 3, 1929. Serial No. 389,896. 2 Claims. (Cl. 156—21.)



2. A unitary device for attachment to the vertically-wide multiple-ply heading normally extending horizontally in its longitudinal direction at the top of a vertically-hanging drapery of the character described, said device comprising an elongated body proportioned to the vertical width of the heading with which it is to be used and having an inner member and an outer member of wire-like material, said members being substantially coextensive with each other and also with the heading in the vertical direction of the heading, said members extending side by side substantially from one end of the device to the other end thereof, the inner member being pin-like and having a free end portion whereby it may pass within the heading near one vertical extremity thereof and emerge from the heading near the other vertical extremity thereof, at least one of said members having a broken line formation at its upper portion and the springiness of the wire-like material being such as to indent the material of the heading and hold the upper portion of the heading from substantial sagging, means intermediate the ends of the outer member for pendent connection of the device with a fixed support, said inner and outer members being spaced apart at the lower portion of the device to provide freedom of clamping spring action at the upper portion of the device when in normal use.

1,820,998. SMELTING OF ORES. FREDERICK M. BECKET, New York, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Apr. 13, 1928. Serial No. 269,879. 3 Claims. (Cl. 75—17.)

1. The process of recovering a metal of the group having atomic weights between 50 and 55 which comprises preparing a charge of at least several thousand pounds comprising an oxygen compound of said metal, silicon and a solid oxidizer which reacts more energetically with silicon than does the lowest natural oxide of said metal, the components of the charge being of such fineness that a large proportion will pass a 100 mesh screen and being intimately mixed and so proportioned as to adapt the charge to self-propagating reaction in an initially unheated environment with the production of commercially silicon-free metal; locally igniting the charge; collecting the metallic product; separately collecting the slag; and smelting the latter with electrical power to form a silicon alloy adapted to provide the silicon required in the first stage.

1,820,999. SANITARY CAP REMOVER. FRED BERGMANN, Philadelphia, Pa. Filed Apr. 10, 1930. Serial No. 443,175. 2 Claims. (Cl. 215—55.)

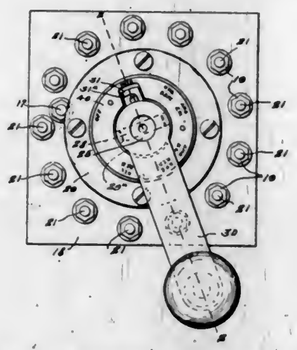


1. A device for the removal of the paper cap of a milk bottle comprising a cup-shaped casing adapted to be positioned over the end of the bottle, a rotatable handle member journaled in the depending wall of said casing, a hook secured to and rotatable with said handle member adapted to puncture through and retain the paper cap when said handle member is rotated in one direction and a leaf spring bent upon itself, one portion of said leaf spring being bent around said handle member within the casing for retaining the leaf spring in position, the other end of said spring being slotted for the passage of said hook therethrough whereby the paper cap is ejected from said casing after removal from the bottle by reverse rotation of said handle member.

1,821,000. TRAFFIC SIGNAL SWITCH. CARL H. BISSELL, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 19, 1928. Serial No. 307,022. 8 Claims. (Cl. 200—8.)

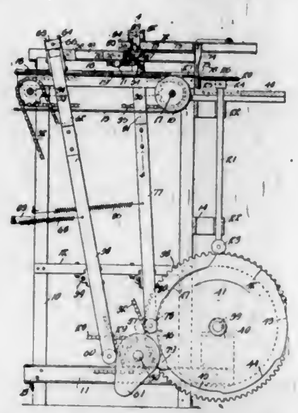
1. In a switch, the combination of a series of contacts, a movable switch arm having a conductor movable along

the series to bridge any two adjacent contacts in the series and also shiftable at an angle to the former movement, and means operated by the movement of the switch arm to shift the conductor in the angular direction out of con-



tact with one of the intermediate contacts during movement of the switch arm in one direction along the series and to shift said conductor out of engagement with another intermediate contact during the movement of the switch arm in the reverse direction.

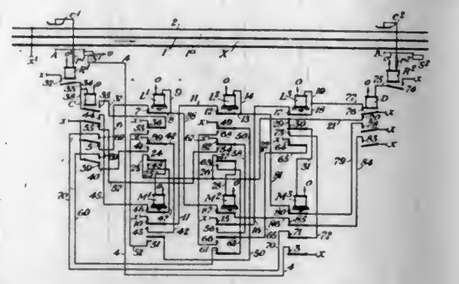
1,821,001. TILE HANDLING MACHINE. JAMES A. BOWER, Anderson, Ind., assignor to National Tile Company, Anderson, Ind., a Corporation of Ohio. Filed Apr. 13, 1929. Serial No. 354,904. 5 Claims. (Cl. 214—6.)



2. In a tile handling machine the combination of a conveyor, a table for receiving tile from the conveyor, means for transferring the tile from the conveyor to the table, a continuously revolving variable cam having its periphery cut into a plurality of tracks, each track being closer to the center of the cam than the one next preceding it to provide step-down surfaces, the table having a depending post having its lower end resting upon the said cam for lowering the table in step-by-step manner as the tile are deposited thereon, substantially as set forth.

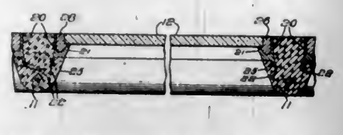
1,821,002. RAILWAY TRAFFIC GOVERNING APPARATUS. CHARLES A. BROOKS, Swissvale, and HENRY S. YOUNG, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1930. Serial No. 476,756. 6 Claims. (Cl. 246—77.)

1. In combination, a stretch of electric railway track adapted to contain a predetermined number of cars, a conductor for supplying propulsion current to cars operating over said stretch, a series of successively dependent instumentalities, a control relay operable by the propulsion current supplied by said conductor for controlling the operation of said instrumentalities, a contact device operable by a car upon entering said stretch for causing



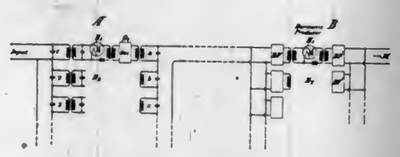
said relay to control one of said instrumentalities so as to render a succeeding dependent instrumentality controllable by a succeeding car, and means controlled by the last of said series of instrumentalities for indicating when said stretch contains such predetermined number of cars.

1,821,003. SKYLIGHT CONSTRUCTION. ROBERT W. BRUNER, St. Louis, Mo., and ALBERT GRAUER, Detroit, Mich. Filed June 6, 1929. Serial No. 368,903. 3 Claims. (Cl. 94—29.)



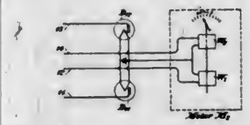
1. A frame for supporting the lens of glass sections of skylights or transparent pavement comprising a metal frame adapted to be embedded in concrete and showing in cross section a comparatively thin upright vertical portion having at its lower part a thickened inwardly extending gutter member for supporting the glass, and a downward extension curved outwardly from said vertical portion and forming an obtuse angle therewith, to serve as an anchor in the concrete material, said gutter member having a beveled portion, adapted to form a continuation of the surface of the concrete material.

1,821,004. COMPRESSION OF FREQUENCY RANGE. ALLEN CARPE, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 2, 1929. Serial No. 375,404. 6 Claims. (Cl. 178—44.)



1. The method of reducing the width of the frequency band required for signaling, which consists in breaking the message into narrow frequency bands, replacing each band by a related lower frequency, superposing and transmitting these frequencies to the receiving station, separating the components and translating each to its related higher frequency position.

1,821,005. GAIN MEASURING APPARATUS. FRANK A. COWAN, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 1, 1930. Serial No. 432,505. 1 Claim. (Cl. 179—175.)



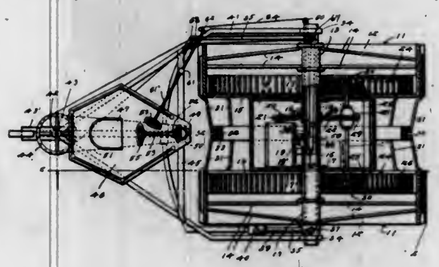
In a system for determining changes in the gain of a repeater, the combination of two amplifiers connected respectively to the input and output circuits of the repeater, said amplifiers having high impedance input circuits, the amplifier connected to the input circuit of the repeater magnifying the current transmitted thereby to a greater extent than the current transmitted by the amplifier connected to the output circuit, two potentiometers, two vacuum tube detectors coupled respectively to said amplifiers through said potentiometers, and a measuring device connected to both rectifiers simultaneously acted upon by the currents derived from said rectifiers.

1,821,006. MEASUREMENT OF NEGATIVE RESISTANCE. GEORGE CRISSON, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 10, 1928. Serial No. 298,851. 4 Claims. (Cl. 179—175.)



1. In the measurement of the magnitude of a negative resistance, the method which consists in inserting a series positive resistance in circuit with a negative resistance annulling the reactance of the negative resistance and adjusting the positive resistance to a valve equal to the negative resistance.

1,821,007. TRACTOR. JOHN DE BOER, Corsica, S. Dak. Filed July 24, 1929. Serial No. 380,671. 3 Claims. (Cl. 180—25.)



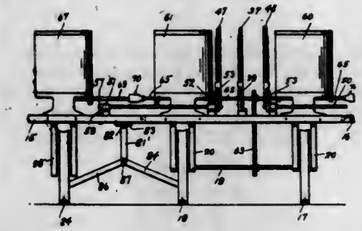
1. A tractor including an axle, ground wheels on the ends of the axle whereby said wheels are spaced apart, an exteriorly grooved ring of slightly smaller diameter than the wheels disposed therebetween and in parallel relation thereto, a series of arms carried by the rim of each wheel extending in the direction of said ring, and a ring carried by each set of arms slidably engaged in the groove of said ring whereby to maintain the wheels in spaced parallel relation.

1,821,008. DRY CELL BATTERY. CLARENCE H. DITTRICK and NEWCOMB K. CHANEY, Lakewood, Ohio, assignors to National Carbon Company, Inc., a Corporation of New York. Filed Jan. 13, 1927. Serial No. 160,961. 4 Claims. (Cl. 136—111.)



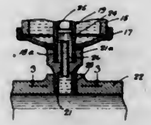
1. A dry cell of the flat type comprising opposed zinc and carbon electrodes, depolarizer mix therebetween, a bibulous spacer between the mix and the zinc electrode, a depression in the mix cake defining an air space adjacent the spacer and said spacer being provided with an opening opposite the air space.

1,821,009. EXTENSION ATTACHMENT FOR TWO ROW CORN PLANTERS. MERRITT S. DRAPER, Upland, Ind. Filed Apr. 17, 1930. Serial No. 445,073. 1 Claim. (Cl. 111—57.)



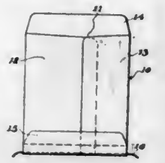
A planter of the class described comprising an elongated wheeled frame, an elongated central drill frame hingedly connected to the wheeled frame, an extension frame hingedly connected to each end of the drill frame, manually operated means supported on the wheeled frame for raising and lowering the central drill frame, manually operated means on the wheeled frame for raising and lowering each of the extension frames, feeding means on said central frame and on each of the extension frames, each of said means including a drill boot, and means for holding the boots of the extension frames in a vertical position as such extension frames are being raised and lowered.

1,821,010. LUBRICATOR. LESLIE C. DUTRO, Long Beach, Calif. Filed Sept. 12, 1925, Serial No. 56,048, and in South Africa Oct. 16, 1924. 3 Claims. (Cl. 184—84.)



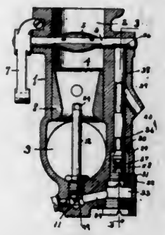
1. A lubricator comprising a lubricant reservoir, means for mounting the reservoir on a bearing, means responsive to the expansive action of air in the reservoir to feed lubricant from the reservoir to the bearing and to return the lubricant in the expansion responsive means to the reservoir when the air in the reservoir contracts to its normal pressure by admitting air thereto from the bearing, and means for admitting to the expansion responsive means atmospheric air other than that from the bearing should the latter be sufficiently tight to prevent the admission of air to the expansion responsive means.

1,821,011. RIP STRING ENVELOPE. BURPEE D. GREENLAW, Fitchburg, Mass., assignor to The Brown Bag Filling Machine Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed June 13, 1931. Serial No. 544,211. 4 Claims. (Cl. 229—86.)



1. An article for the purposes described comprising a fabric container having front and back walls in contact at a line of fold and extending beyond said line, a flexible rip strand cemented to the outside of one wall of the container at said line and having a part for manipulation, the wall parts extending beyond said line, being folded over the strand and secured to the wall of the container immediately thereadjacent, whereby the strand is held immediately against the container wall at one boundary, and when pulled will sever both front and back walls of the container at the line of fold.

1,821,012. CARBURETOR. WILLIAM S. GUTHRIE, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Indiana. Filed Apr. 9, 1923. Serial No. 630,721. 5 Claims. (Cl. 261—51.)



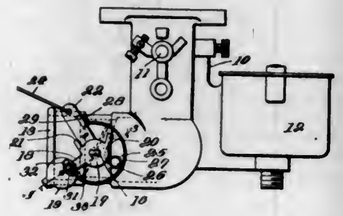
2. In a carburetor having a body with a mixing chamber therein and a fuel passage terminating in a vertically disposed fuel nozzle normally supplying fuel to said mixing chamber, means for supplying fuel and air to said fuel passage, said nozzle having a depending end extending into said fuel passage provided with horizontal air ports in the wall thereof adapted to distribute said air supply to the fuel while the latter flows through said nozzle, an auxiliary fuel supply and means controlled by the throttle valve for automatically supplying fuel to said fuel nozzle when the throttle valve is in position for the engine to idle and for high speeds of the engine.

1,821,013. EXHAUST GAS SILENCER. FRANCIS F. HAMILTON, Indianapolis, Ind., assignor to Hamilton Muffler Company, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 7, 1929. Serial No. 338,085. 8 Claims. (Cl. 137—160.)



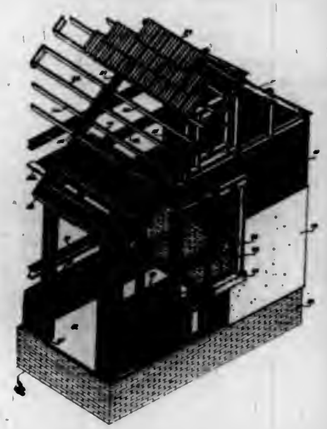
1. In an exhaust gas silencer, a shell having a forward end and a rear end, an intake pipe entering through the forward end and extending for a substantial distance to within the shell, a tube surrounding and spaced outwardly from the intake pipe for an appreciable length within the shell, said tube being closed at its rear end and open at its forward end to discharge to within said shell, and a tail pipe fixed in said shell rear end, said intake pipe having a plurality of perforations along its length surrounded by said tube, said perforations comprising a series of holes arranged longitudinally along one side of said intake pipe, and a second series of holes smaller in diameter than that of said first holes arranged around the pipe.

1,821,014. CARBURETOR. FRANK H. HEITGER, Flint, Mich. Filed July 21, 1927. Serial No. 207,487. 6 Claims. (Cl. 123—124.)



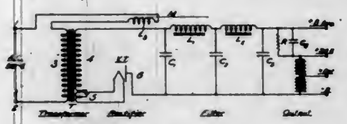
1. In a carburetor, an air intake, a valve located in said inlet opened in response to the pressure of incoming air, a manually operable member movable independently of the valve, and spring means connecting said member with said valve and normally tending to close the latter.

1,821,015. FIREPROOF BUILDING CONSTRUCTION. ALVA M. HULL, Detroit, Mich., assignor of one-fifth to Francis D. Hardesty and four-fifths to Harry G. Westfall, trustee for Norma M. Hull, Thelma M. Hull Westfall, and Mabel G. Pickett, Detroit, Mich. Filed Oct. 4, 1927. Serial No. 223,884. 2 Claims. (Cl. 72—16.)



1. Wall construction for fire-proof buildings comprising a channel member opening upwardly, a series of independent rectangular units abutting together in said channel and secured together by interlocking members, a second channel member extending over said series of units and secured thereto, and metal lath secured to the outer and inner faces of said units.

1,821,016. ELECTRICAL FILTERING SYSTEM. HAROLD W. KA DELL, Lakewood, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed Oct. 14, 1927. Serial No. 226,209. 2 Claims. (Cl. 175—363.)



1. An electrical filtering system for obtaining substantially constant direct current from an alternating current source, comprising, in combination, a transformer having a primary winding adapted to be connected to an alternating current source and a secondary winding, a filter connected to said secondary winding and including a series choke coil, a rectifier connected between said secondary winding and said filter, and a coil electrically associated with said transformer primary and arranged in inductive relation with said filter choke coil, whereby alternating currents are introduced into said filter tending to neutralize unfiltered alternating components therein.

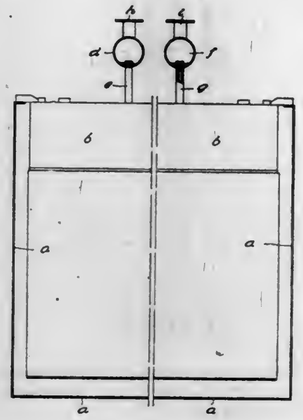
1,821,017. TUBE SEAL. ALFRED W. KATH, Detroit, Mich., assignor to Arthur Colton Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 10, 1930. Serial No. 427,130. 8 Claims. (Cl. 221—60.)



1. A collapsible tube sealed by loop folding in a direction away from one side of the tube the ends of the collapsed walls, and then folding back in a direction away from the other side of the tube the fold thus produced, said folding back being on a line at substantially the middle of the first loop fold, the sealing folds extending completely transversely of the tube.

1,821,018. ELECTROLYTIC APPARATUS. ALBERT EDGAR KNOWLES, Heswall, England. Filed May 27, 1930, Serial No. 456,047, and in Great Britain July 6, 1929. 6 Claims. (Cl. 204—5.)

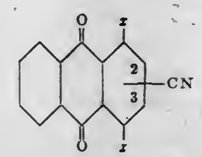
6. Apparatus for the electrolytic production of gases by the decomposition of an electrolyte comprising in combination means for receiving the gases, gas off-take means thereon, main collecting means in communication with said off-take means and means for collecting liquid or froth which may be carried over with the gas up the off-take means in said main collecting means, means preventing return of such liquid or froth to said off-take means and



means for returning said liquid to said apparatus and for blowing said froth out of said collecting means.

1,821,019. ANTHRAQUINONE DYESTUFFS. MAX KUGEL, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1929, Serial No. 342,947, and in Germany Feb. 29, 1928. 7 Claims. (Cl. 260—60.)

1. The process which comprises heating to boiling a compound of the general formula:

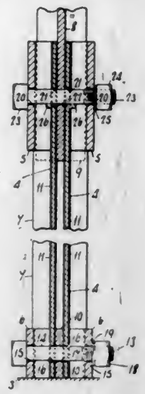


wherein one x stands for hydrogen or a substituent of the group consisting of the amino, alkylamino and arylamino groups, and the other x stands for a halogen atom and wherein the cyanogen group stands in one of the positions 2 and 3 with at least the equimolecular quantity of a primary aromatic amine, and treating the reaction product with a sulfonating agent at a temperature below 20° C.

1,821,020. FOOT ATTACHMENT FOR PIT PROPS OR STEEL ARCHES EMPLOYED AS COLLIERY OR MINING ROOF SUPPORTS. THOMAS MENSFORTH, Middleton St. George, England. Filed July 8, 1930, Serial No. 466,895, and in Great Britain June 17, 1929. 4 Claims. (Cl. 248—2.)

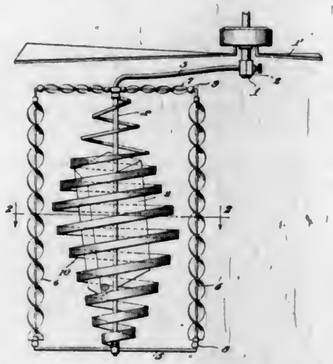
1. An end attachment for the leg portion of steel props and arches used as supports for the roofs of collieries and mines, each attachment being composed of a plurality of portions, namely, a pair of flanged U-shaped shearing

members and four U-shaped clamping plates, the said plates being arranged in pairs at the ends of the shearing members which are afterwards attached respectively to the



prop and to a footpiece formed of steel, the shearing members bridging and overlapping a gap between the end of the prop and the footpiece.

1,821,021. ADVERTISING DEVICE. JOSEPH RUSSELL MOISE, Houma, La. Filed Apr. 23, 1930. Serial No. 446,646. 2 Claims. (Cl. 40—39.)



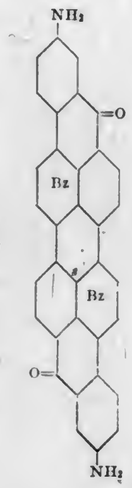
1. In an advertising device, a frame, a vertical shaft on which the frame is centrally journaled and said shaft having an upper offset arm to be fixed on a support for an over-head fan, helicoidal members journaled on the frame and an open article holder journaled on the shaft.

1,821,022. RESISTOR BLOCK AND PROCESS OF MAKING. STEARNE MORSE, Cleveland Heights, Ohio. Filed Sept. 24, 1927. Serial No. 221,819. 4 Claims. (Cl. 201—75.)

3. The process of making carbonaceous bodies having predetermined characteristics, which comprises mixing powdered carbonaceous material with a binder dissolved in a solvent to form a mass of plastic consistency, evaporating the solvent from the mass, pressing the residue into cakes, breaking the cakes into coarse solid granules, sorting the granules into classes according to predetermined sizes, pressing a predetermined quantity of said granules of a predetermined size under great pressure into a body, mixing said body with carbonaceous conductive material, and baking said body and conductive material in a furnace to completely carbonize said binder and produce a homogeneous body of predetermined characteristics.

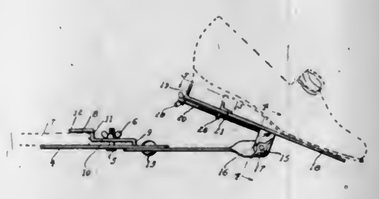
1,821,023. VAT DYESTUFFS OF THE BENZANTHRONE SERIES AND A PROCESS OF MAKING SAME. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, and EDUARD HOLZAPFEL and OTTO BRAUNSDORF, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation. Filed Oct. 10, 1925, Serial No. 61,775, and in Germany Oct. 20, 1924. 4 Claims. (Cl. 260—61.)

1. As a new product, 6.6'-diamino-isodibenzanthrone of the following formula:



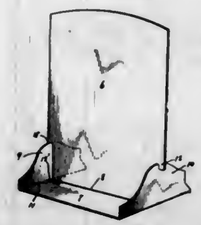
being a dark blue violet powder soluble in concentrated sulfuric acid with a green color, yielding a blue vat from which cotton is dyed violet-blue.

1,821,024. SHOE DISPLAYER. MARK NOBLE, Oakland, Calif. Filed July 22, 1930. Serial No. 469,690. 5 Claims. (Cl. 211—34.)



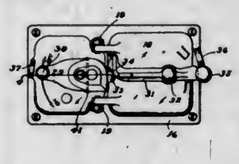
2. In a shoe support, a body element consisting of an elongated plate, including means at one end of said body element for clasping the edge of a shelf, adapted for supporting it in a projecting horizontal position, a link pivotally connected to the other end of said body element, a shoe support carried by said link capable of movement about a horizontal axis, a bracket at one end of said support extending substantially above and below, there being an elongated slot in said support, a second bracket provided with a lug extending through said slot movable therealong, and a shaft extending through the downwardly extending portion of the first bracket threaded through the aforesaid lug whereby rotation and counter rotation thereof will cause the said second bracket to move to and from the first bracket.

1,821,025. SELF-SUPPORTING DISPLAY CARD. ALBERT J. OHLSON, Freehold, N. J., assignor to Bakeries Service Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 21, 1930. Serial No. 476,850. 16 Claims. (Cl. 40—149.)



1. A collapsible display card comprising a horizontal foot portion, a plurality of vertically extending portions hinged to the foot portion on intersecting axes, said vertically extending portions being provided with means disengageably engaging each other whereby said vertically extending portions support each other in upright position and against displacement in either direction about their respective hinging axes, one of said vertically extending portions having considerable height and breadth as compared to the other to afford space for the reception of display matter.

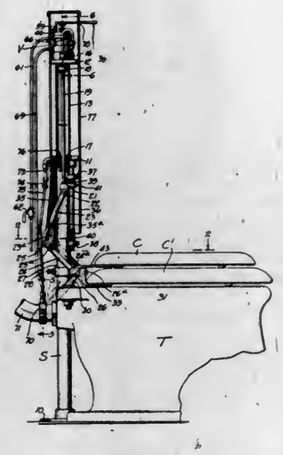
1,821,026. SWITCH OPERATING MECHANISM. RAYMOND H. OLLEY, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Nov. 7, 1927. Serial No. 231,585. 5 Claims. (Cl. 200—50.)



1. The combination of a box having switch and fuse portions, a cover for the box, the cover having an opening leading to the fuse portion, and a door closing said opening, switch operated mechanism carried by the cover including motion transmitting portion located on the inner side of the cover and connected to the switch mechanism located in the switch portion, and an actuating portion mounted on the face of the cover, means for locking the door in closed position located on the outer side of the cover, the actuating portion of the switch mechanism and a portion of the door locking means projecting into each other's paths whereby operation of the door locking mechanism to unlock the door when the switch is "on" actuates the switch mechanism to throw the switch to "off" position, and actuation of the switch mechanism from "off" position to "on" position actuates the door locking mechanism to locked position.

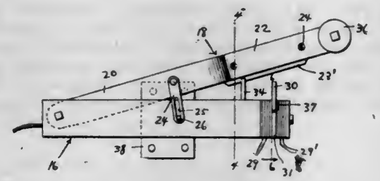
1,821,027. SEAT AND SEAT COVER ACTUATING MECHANISM FOR TOILETS. JOHN A. OYA, Honolulu, Territory of Hawaii. Filed July 1, 1930. Serial No. 465,178. 11 Claims. (Cl. 4—251.)

2. In combination, a toilet having a seat, a seat cover, means for mounting the seat and seat cover for movement to lowered and raised positions with respect to the bowl of the toilet, a pair of piston and cylinder units, means for operatively connecting the piston of one unit to the seat cover to raise the latter in response to movement of the piston to one extreme position under the action of fluid pressure, means for operatively connecting the piston of the other unit to the seat to raise the latter in response to movement of the piston to one extreme position



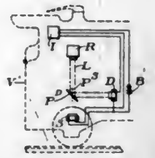
under the action of fluid pressure, means common to both units for controlling the admission of fluid pressure to, and the relief of fluid pressure from the cylinder of one unit or the other, and means for lowering the seat or seat cover according as fluid pressure is relieved from the cylinder of one unit or the other.

1,821,028. AUTOMATIC FIRE ALARM. AXEL H. PEARSON, Ceresco, Nebr. Filed July 6, 1929. Serial No. 376,444. 2 Claims. (Cl. 200—142.)



1. A switch adapted to be arranged in a signal circuit and comprising a frame, an attaching plate carried by the frame, a contact member fixed to the frame at one end thereof and insulated from the frame, a fork comprising a pair of duplicate members pivoted at one end to the frame at the end of the frame remote from said contact member, a contact plate arranged between the members of said fork, said contact plate having one edge thereof projecting beyond the corresponding edge of said fork members, a bracket on that end of the frame adjacent the contact on said frame, a fusible block carried by said bracket, said block having a grooved edge normally receiving the extended edge of said second mentioned contact plate, whereby upon fusing of said block said contacts are engaged one with the other for closing the circuit, and a weight member on said fork remote from the pivoted end of the fork.

1,821,029. RAILWAY SIGNALING APPARATUS. BERNARD HARTLEY PETER, London, England, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 19, 1929, Serial No. 400,830, and in Great Britain Nov. 20, 1928. 3 Claims. (Cl. 246—29.)



1. Railway signaling apparatus comprising two vehicle carried elements sensitive to radiation, a source of radiation on the vehicle normally acting on one of said elements, trackway means effective under certain traffic conditions to intercept the radiation from said source and to direct it upon the other of said elements, and indicating means controlled by said elements.

1,821,030. PULL SWITCH CANDELABRUM SOCKET. CARL M. PETERSEN, Trenton, N. J., assignor to Circle F Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Filed Apr. 20, 1928. Serial No. 271,518. 4 Claims. (Cl. 173—354.)



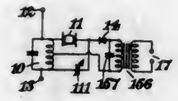
1. A pull switch candelabrum socket, including a separable two-part body, a screw shell having a direct interlocking engagement with the two sections of the body at one end, a combined fixture attaching bracket and body section holding means engaged with the sections of the body at the opposite end, and a switch carried by the body.

1,821,031. FLUSH RECEPTACLE. CARL M. PETERSEN, Trenton, N. J., assignor to Circle F Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Filed Apr. 25, 1929. Serial No. 358,050. 3 Claims. (Cl. 173—330.)



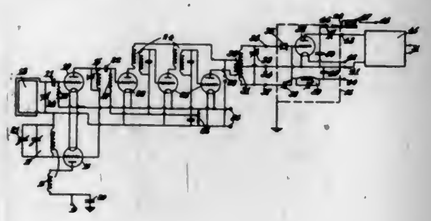
2. A plug receptacle comprising a body recessed from its rear face to provide a contact chamber, a backing for closing the rear face of said body, a member secured to the backing, a wall plate for cooperation with the front of the body, and a screw extending through said wall plate and threaded into said member to detachably secure the wall plate in assembly with the body.

1,821,032. WAVE-SIGNALING SYSTEM. JAMES ROBINSON, London, England. Filed Nov. 21, 1929, Serial No. 408,889, and in Great Britain Sept. 9, 1929. 33 Claims. (Cl. 250—6.)



1. A wave signaling system including a transmitting station for transmitting a carrier wave modulated by a wanted signal, and a receiving station provided with selective receiving means, the selectivity of said means being such that there is no response to interfering signals whereof the carrier frequency of such interfering signals lies outside the resonance curve of said means, but differs from the frequency of the wanted carrier wave by an amount less than the highest modulation frequency of the wanted signal, whereby the relative amplitude of different modulation frequencies is altered, yet modulations of the carrier wave of the wanted signal corresponding to the whole of the required modulation range may be reproduced, and means at one of said stations for altering the relative amplitude of different modulation frequencies in the opposite sense.

1,821,033. RADIO RECEIVING APPARATUS. JAMES ROBINSON, London, England. Filed July 15, 1930, Serial No. 468,142, and in Great Britain July 26, 1929. 8 Claims. (Cl. 250—20.)

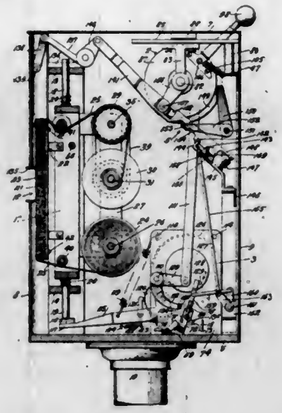


1. A receiver for wave signals including a resonant circuit for wanted incoming signal energy, such as is constituted by a modulated carrier wave, a local generator of oscillations of variable frequency to combine with the incoming energy to produce energy of a constant frequency, a resonant device for this constant frequency energy, said resonant device having such high selectivity that the receiver provides no response to interfering signals whereof the carrier frequency of such interfering signals lies outside the resonance curve of the receiver, but differs from the wanted carrier wave by an amount less than the highest modulation frequency of the wanted signal, whereby the amplitude of wave-form energy corresponding to different modulation frequencies is varied; yet modulations of the carrier wave of the wanted signal corresponding to the whole of the required modulation range may be reproduced, and means for altering the amplitude of wave-form energy corresponding to different modulation frequencies in the opposite sense.

1,821,034. COIN-IN-THE-SLOT MACHINE FOR THE POLISHING OF FINGER NAILS. LOUIS W. SCHAAFF, Weehawken, N. J. Filed Feb. 10, 1928. Serial No. 253,339. 35 Claims. (Cl. 194—84.)

1. In an apparatus of the character described, the combination with an operation surface, means for reciprocating

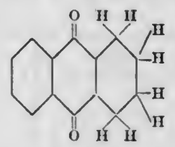
said surface, coin control mechanism for throwing said reciprocating means into operation and control means for



throwing said reciprocating means out of operation after a predetermined number of reciprocations of said surface.

1,821,035. COMPOUNDS OF THE ANTHRACENE SERIES AND PROCESS OF PREPARING THEM. KARL SCHIRMACHER, Frankfort-on-the-Main-Hochst, and HANS SCHLICHENMAIER, Bad-Soden-am-Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 2, 1928, Serial No. 297,104, and in Germany Aug. 18, 1927. 9 Claims. (Cl. 260—57.)

1. The process of preparing nitro compounds of 1.2.3.4-tetrahydroanthraquinones containing the nitro groups in the non-hydrogenated nucleus which consists in treating a 1.2.3.4-tetrahydroanthraquinone of the general formula:



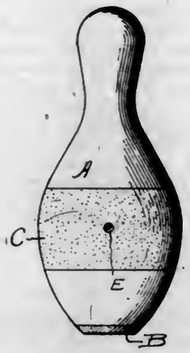
the aromatic nucleus may be substituted in any manner, but at least one carbon atom of which must be occupied by hydrogen, with nitric acid.

1,821,036. PREPARATION FOR REPELLING GNATS AND SIMILAR INSECTS. ALBRECHT SCHMIDT, Hochst-on-the-Main, Germany, assignor, by mesne assignments, to Winthrop Chemical Company, New York, N. Y., a Corporation of New York. Filed Sept. 20, 1927, Serial No. 220,847, and in Germany Sept. 20, 1926. 3 Claims. (Cl. 167—25.)

3. Preparations for repelling gnats and similar insects consisting of an ointment containing at least 8% of at least one essential oil selected from the group consisting of cedar-oil, juniper-oil, templin-oil and thuja (arbor vitæ)-oil, the remainder being a mucilage obtained from gum tragacanth as ointment basis.

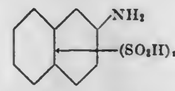
1,821,037. BOWLING PIN. WILLIAM HOWARD SOUDER, Washington, D. C. Filed June 20, 1929. Serial No. 372,464. 2 Claims. (Cl. 273—82.)

2. A bowling pin comprising in combination, a wood body and an integral one piece seamless reinforcing ring of hard fiber embracing the medial portion only of said body at the zone of the ball impact, and means for securing said ring to the body to prevent separation therefrom in the direction of the longitudinal axis of the pin under ball impact.



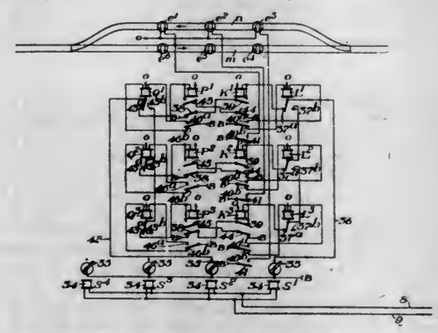
1,821,038. PROCESS FOR MANUFACTURING 1-HALOGEN-2-AMINO-NAPHTHALENE-SULPHONIC ACIDS. NORBERT STEIGER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 6, 1929, Serial No. 338,032, and in Germany Feb. 11, 1928. 3 Claims. (Cl. 260—129.)

1. A process which comprises replacing one hydrogen atom of the NH_2 group of a 2-amino-naphthalene sulphonic acid of the general formula



wherein n means the number 1 or 2 by a carboxylic acid residue, treating the 2-acyl-amino-compound thus obtained with a halogenating agent in an aqueous medium, leaving the product of halogenation to the influence of a strong mineral acid and finally splitting off the carboxylic acid residue by saponification.

1,821,039. TRAIN INDICATING APPARATUS. PAUL P. STOKER, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 16, 1930. Serial No. 421,144. 11 Claims. (Cl. 246—77.)



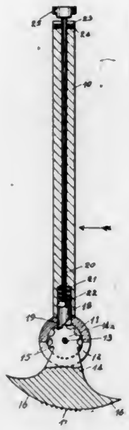
1. In combination, a railway passing siding connected at each of its ends with a main track by means of a track switch, a track circuit for said siding including a track

relay, a switch track circuit including the first of said switches and a track relay, an approach track circuit adjoining said switch track circuit and including a track relay, a slow-release relay controlled by a front contact of said switch track relay and by a front contact of said approach track relay, a stick relay, a pick-up circuit for said stick relay controlled by a front contact of said slow-release relay and by a back contact of said switch track relay, a stick circuit for said stick relay controlled by a back contact of said switch track relay, an indication means, means controlled by a back contact of said stick relay and by a back contact of said siding track relay as well as by a front contact of said switch track relay for energizing said indication means, a second switch track circuit including the second of said switches, and means controlled by said second switch track circuit for deenergizing said indication means.

1,821,040. NEW NITROARYLAMINOANTHRAQUINONE COMPOUND. HEINRICH TESCHE and ALBERT JOB, Elberfeld, near Cologne, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 12, 1925, Serial No. 62,154, and in Germany Nov. 6, 1924. 11 Claims. (Cl. 260—60.)

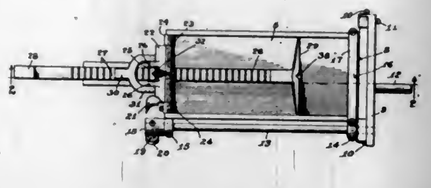
7. In the process of producing nitroarylaminoanthraquinone compounds, the steps which comprise reacting with a nitrous acid compound, at a temperature below about 40° C., upon an arylaminoanthraquinone compound dissolved in an organic acid, and then heating this solution at a temperature above 70° C.

1,821,041. SPIKE PULLER. JOHN H. TURNER, Los Angeles, Calif. Filed July 12, 1930. Serial No. 467,505. 2 Claims. (Cl. 254—27.)



1. A device for the purpose described consisting of a tubular handle, a bifurcated terminal formed upon the handle, said handle being formed with a counterbore immediately above said terminal, a longitudinal rod passing thru the tubular handle and projecting therebeyond, a cap on the outer end of the rod, a dog carried by the rod and movably mounted in said counterbore, a spring in said counterbore between the dog and the inner part of the counterbore, a spike puller member having a central stem formed with a circular series of ratchet teeth engaged by the dog under pressure from said spring, whereby when the handle moves adjustably around the stem of the member the dog slips over the ratchet teeth against the tension of the spring, a pivot pin connecting the stem of the member in the bifurcated terminal of the handle, and means holding the dog against rotation in the counterbore.

1,821,042. BUTTER CUTTER. ELMER F. UNDERHILL and LOUIS R. VIDLER, Seattle, Wash. Filed Sept. 8, 1930. Serial No. 480,300. 1 Claim. (Cl. 31—24.)

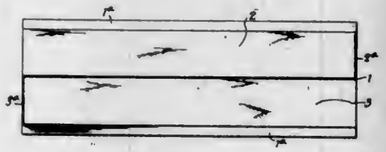


A butter cutter having in combination a casing, clamp means for the casing, a butter cutting element revolubly disposed at the forward end of the casing, a vertical cutting wire centrally fixed at the forward end of said casing, a rack bar slidably disposed within the casing and adapted to project rearwardly thereof, an abutment on the forward end of the rack bar, a door pivoted to the rear end of the casing, a spring arranged to normally retain the door in a pivotally retracted position, a cam on said door, a pawl pivoted to the door and in engagement with the rack bar, a shaft fixed to the revoluble cutting element and extending rearwardly to a point adjacent the door, a finger on the rear end of the shaft, and a disc on said finger arranged to engage the cam on the door at each revolution of the butter cutting element whereby the pawl is caused to advance the rack bar a distance equal to the width of one of its teeth between each passage of the cutting element across the forward end of the casing.

1,821,043. HYDROARYL AMINO ANTHRAQUINONE COMPOUNDS AND PROCESS OF MAKING THE SAME. KLAUS WEINAND, Flittard, near Cologne-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 18, 1926, Serial No. 130,111, and in Germany Nov. 23, 1925. 9 Claims. (Cl. 260—60.)

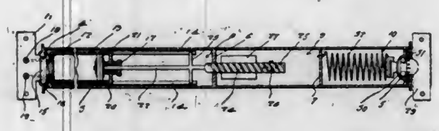
1. As new products amino-anthraquinone compounds, the distinctive characteristic of which is that one of the amine hydrogens is substituted by a hydroaryl radicle.

1,821,044. POSTAGE INDICIA STAMP PAD. WALTER H. WHEELER, Jr., and AUGUSTUS K. VIELE, Stamford, Conn., assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,629. 7 Claims. (Cl. 281—16.)



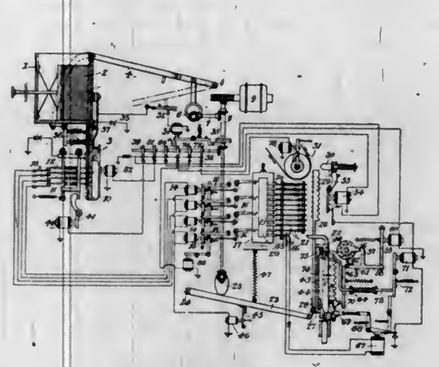
6. A pad for use in connection with machines for printing postage indicia and the like; comprising a base and a pile of superposed strips detachably attached to each other and to the base, the side edge of the base projecting at the side of the strip; said pad being adapted to be passed through the machine like an ordinary envelope so that the topmost strip may be printed and thereafter detached, the projecting edge of the base guiding and properly positioning the pad relative to the printing die.

1,821,045. SHADE ROLLER. GEORGE J. WRIGHT, Brookline, Mass., assignor to Mary Wright, Quincy, Mass. Filed Mar. 26, 1928. Serial No. 264,880. 6 Claims. (Cl. 156—28.)



4. In a shade roller of the class described, an elongated tubular member about which a shade is adapted to wind, partitions dividing the tubular member into a plurality of compartments, one of said partition members being provided with a toothed aperture formed therein, a cylinder located in one of said compartments, said cylinder merging at one end into an attaching portion, extending exteriorly from one end of the tubular member, whereby said cylinder may be held stationary with respect to the tubular member, a reciprocating piston within the cylinder, a feed screw operatively associated with the piston and extending through the two opposite partitions and having its threads cooperating with said teeth, and distance control means for operating said pistons.

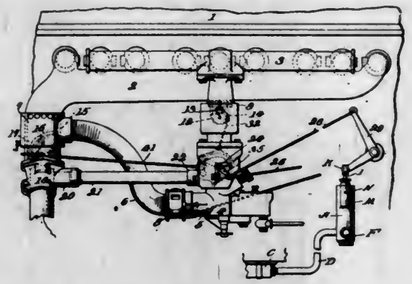
1,821,046. TABULATING MACHINE. JOHN EDWARD WRIGHT, New York, N. Y., assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 28, 1920. Serial No. 420,128. 12 Claims. (Cl. 235—58.)



11. A tabulating machine including analyzing mechanism for analyzing combinational hole records, a translator for converting analyzed readings into linear differential equivalents, accounting devices controlled by the translator for receiving the converted equivalent readings, total taking mechanism for the accounting devices and means controlled by the translator for initiating operation of the operating mechanism of said total taking mechanism.

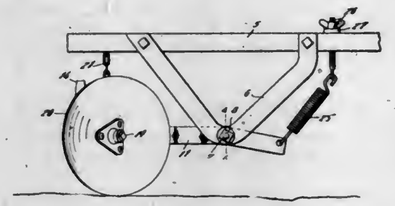
1,821,047. HEAT CONTROLLING MEANS FOR CHARGE FORMING DEVICES. REA P. WRIGHT, Washington, D. C., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed Aug. 15, 1929. Serial No. 386,127. 15 Claims. (Cl. 123—122.)

1. The combination with an internal combustion engine having a forced feed lubricating system, of valves arranged to throttle the exhaust gases and explosive charges, means for connecting said valves, means determining the path of travel of said connecting means to vary the effect of movement of the charge controlling valve on



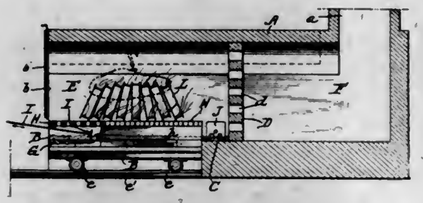
the exhaust controlling valve and means controlled by the pressure of the lubricating system for adjusting said means.

1,821,048. FERTILIZER DISK MIXER. HARRY P. WRIGHT, Caribou, Me., assignor of one-half to Maurice Daniels, Caribou, Me. Filed Aug. 28, 1929. Serial No. 389,008. 1 Claim. (Cl. 97—225.)



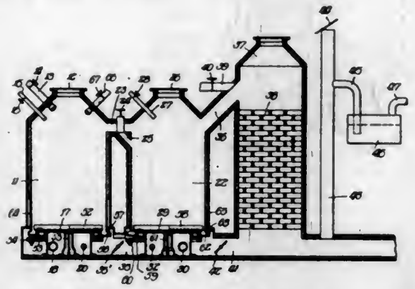
In an apparatus of the class described, a frame, hangers depending from the frame, a rod mounted across the lower portions of the hangers, a pair of bars rockable on the rod at the ends thereof and converging rearwardly toward each other, a pair of disks, means on the outer side of each bar for mounting a disk so that they converge forwardly toward each other, a lever connected at one end to the said rockable bars and fulcrumed at its intermediate portion on the center of the rod and spring means connected with the other end of the said lever to normally urge the disks downwardly, means for tensioning the spring, and an inverted U-shaped member having its ends secured to the outer ends of the rockable bars for flexibly connecting the same.

1,821,049. METHOD OF AND APPARATUS FOR THE RECOVERY OF MATTER FROM WASTE RUBBER TIRES. JAMES W. AMES, Jersey City, N. J. Filed July 16, 1927. Serial No. 206,155. 20 Claims. (Cl. 252—1.)



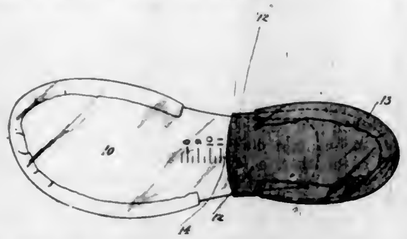
1. In the art of recovering mineral substances from rubber cement and compounds, the process which comprises burning a massed rubber cement and compound to consume the combustible components thereof, and separating the mineral substances from the burning mass.

1,821,050. METHOD OF MANUFACTURING MIXED WATER GAS AND OIL GAS. CHARLES W. ANDREWS, Duluth, Minn., and HERMAN A. BRASSERT, Chicago, Ill.; assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 18, 1926. Serial No. 129,866. 2 Claims. (Cl. 48—200.)



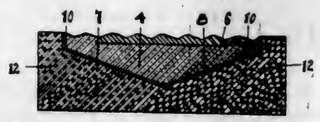
1. The method of manufacture of mixed water gas and oil gas, which comprises utilizing a plurality of generators having solid fuel beds therein, agitating the fuel bed in one generator and making water gas therein, gasifying liquid hydrocarbons in a second generator, making producer gas in said second generator, carrying out said gasified liquid hydrocarbons with said gas made in the second generator, mixing the gases made in the first and second generators, and passing the mixed gas directly through a superheater to fix the volatiles therein.

1,821,051. SHOE FITTING APPARATUS. CHARLES H. BROWN, Flushing, N. Y., assignor of one-half to Charles B. Brown, Flushing, N. Y. Filed May 14, 1928. Serial No. 277,486. 1 Claim. (Cl. 36—1.)



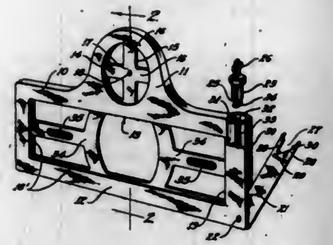
An apparatus as characterized comprising a transparent receptacle for the forward portion of a foot; a receptacle for receiving the heel of a foot; and means cooperatively related on said receptacles for determining the proper size of the shoe to be worn on the foot being fitted, said means embodying calibrations on the first mentioned receptacle and an extension of the other of said receptacles, said receptacles being independently movable for determining the length of the shoe to be fitted.

1,821,052. BLOCK FOR ROAD SURFACE MARKINGS. DANIEL BRYN DAVIES, Llanishen, Cardiff, and WILLIAM DANIEL GRIFFITHS, Cardiff, Wales. Filed Oct. 29, 1930, Serial No. 492,068, and in Great Britain Oct. 3, 1929. 1 Claim. (Cl. 88—1.)



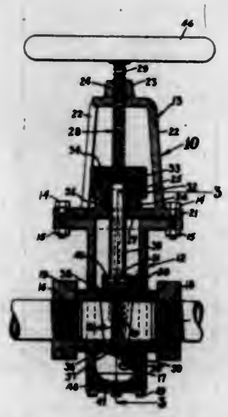
A block for road surface and other markings comprising in combination a transparent portion, the underside of said transparent portion being formed as outwardly extending inclined planes, a recess formed in the upper surface of said transparent portion, an opaque filling disposed in said recess to form markings, reflectors disposed on said inclined planes of the transparent portions and a concrete surround in which the transparent portion and reflectors are embedded to form a block.

1,821,053. LICENSE PLATE HOLDER. HAROLD M. DIETZ and SAMUEL E. KARY, Chicago, Ill. Filed Apr. 16, 1931. Serial No. 530,570. 6 Claims. (Cl. 40—125.)



1. A license plate holder comprising a substantially rectangular frame structure providing channels along three frame members thereof adapted to receive the edge portions of a license plate and having an open slot provided by the remaining frame member thereof, a member adapted to removably engage in said slot to obstruct passage therethrough when said plate is mounted in said frame structure, a web provided by the frame structure and disposed to the rear of said plate when said plate is mounted in said frame structure and having slots formed therein for the passage of connecting elements whereby to connect said frame structure to a fixed support, and means for removably connecting said member to said frame structure in slot obstructing position.

1,821,054. BALANCED GATE VALVE. GLENN A. DOUGHTY and HERBERT A. JOHNSTON, Anaheim, Calif. Filed May 3, 1930. Serial No. 449,438. 12 Claims. (Cl. 251—59.)



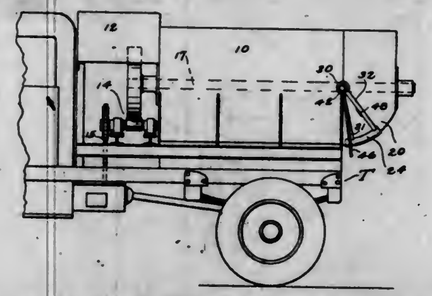
3. In a valve device, a body having a chamber and having an inlet and an outlet leading to said chamber, an inlet valve seat and an outlet valve seat therein, a reciprocable valve member movable towards and from said valve seats, said inlet valve seat being of greater area than said outlet valve seat, said member having a conduit to direct fluid from said inlet side through said valve member to said chamber to produce balanced pressure on opposite faces of said valve.

1,821,055. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed June 10, 1924. Serial No. 719,114. 10 Claims. (Cl. 175—41.)



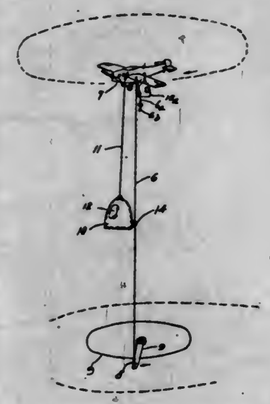
2. In a condenser structure a body comprising electrically conductive elements separated by dielectric material, and elastic means in contact with said stack for maintaining pressure directly on the stack over substantially the entire area thereof, whereby the condenser body is maintained in a state of uniform compression.

1,821,056. DISCHARGE OPENING AND CLOSURE FOR CONCRETE MIXERS. KENNETH P. DURHAM, Seattle, Wash., assignor to Morris & Boogher, Inc., a Corporation of Washington. Filed July 22, 1929. Serial No. 380,002. 3 Claims. (Cl. 33—73.)



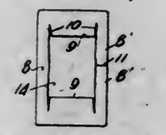
1. In a transit concrete mixer, a curved rear section, a discharge opening in said curved section, a similarly curved cover for said opening, a support for said cover and means adapted to tightly seat the cover when in closed position.

1,821,057. MEANS AND METHOD FOR LOADING AIRCRAFT. ALEXANDRE F. GODEFROY, Los Angeles, Calif. Filed Jan. 13, 1931. Serial No. 508,418. 2 Claims. (Cl. 244—2.)



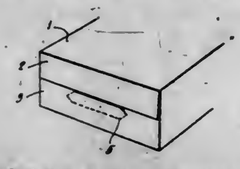
1. A method for loading aircraft which consists in providing an airplane with a conveyor adapted to be carried thereby, furnishing to said airplane a suspending cable and a guide line for said conveyor, lowering one end of said guide line to the ground, then anchoring the lower end of said guide line to a carrier which is adapted to travel in a circle, then putting said carrier into motion in a circle in the same direction that the airplane is circling, then by means of the aforesaid cable and guide line lowering said conveyor from said airplane to said carrier.

1,821,058. METHOD OF MAKING BRACELET LINKS. ART HADLEY, Providence, R. I., assignor to The Hadley Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Jan. 24, 1931. Serial No. 510,985. 4 Claims. (Cl. 59—35.)



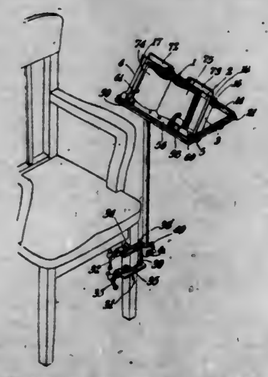
1. A method of making a bracelet link which comprises cutting longitudinally spaced recesses in one side of a metal strip to provide spaced projections disposed intermediate the ends of the strip, and bending the strip transversely about the said projections to bring the ends of the strip into opposed relation at one side of an open-centered link.

1,821,059. INTERFITTING LOCK FOR CONTAINERS. HARRY H. HONIGBAUM, New York, N. Y. Filed Mar. 28, 1928. Serial No. 265,352. 5 Claims. (Cl. 229—45.)



1. An interfitting lock for containers embodying two relatively movable parts, one of which has therein a slot which is deflected laterally for a distance intermediate its ends to form a tab of appreciably less width than the length of the slot, and the other of which parts is provided with a tongue adapted to extend through the slot to overlie the tab in face abutting relation therewith, and said tab being of a width to underlie the greater portion of the width of the tongue.

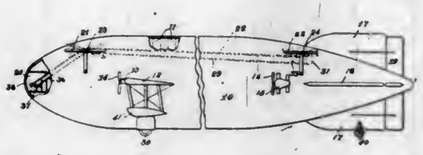
1,821,060. ADJUSTABLE BOOKREST. MORRIS ISAACSON, Brooklyn, N. Y. Filed Dec. 9, 1929. Serial No. 412,735. 9 Claims. (Cl. 45—82.)



1. In an adjustable book rest, a frame containing a plurality of uprights, a horizontally disposed polyhedral supporting bar of pentagonal cross section, two adjacent

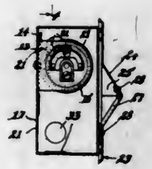
sides thereof being adapted to support the lower portions of a book, a third side being adapted to support the said uprights, and one of the longitudinally disposed edges of said supporting bar being adapted to rest upon a suitably positioned table.

1,821,061. SEMIBUOYANT AIRCRAFT. GEORGE A. JENKINS, Philadelphia, Pa. Filed Mar. 29, 1930. Serial No. 439,926. 6 Claims. (Cl. 244—5.)



1. A semi-buoyant aircraft comprising a body having buoyant chambers, mechanical means for lifting and sustaining the weight in excess of the buoyant lift and fins adjacent the bow and stern simultaneously manually adjustable relative to the horizontal plane, in reverse directions and different amplitudes.

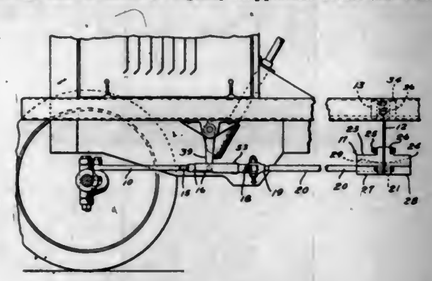
1,821,062. WALL LIGHT. JOSEPH B. KAUSAL, Chicago, Ill. Filed June 18, 1928. Serial No. 286,160. 2 Claims. (Cl. 240—73.)



1. A wall light of the flush type adapted to be imbedded in a building wall structure, comprising a casing having an open side, a lamp mounted within said casing, a closure plate for the open side of said casing and adapted to extend vertically with the edges substantially flush with the wall surface, said closure plate having an outwardly pressed portion arranged to form a downwardly and outwardly inclined light directing hood and the frame of a substantially rectangular light emitting opening, the remaining face of said plate being substantially flat, said light emitting opening extending substantially from the face of said closure plate to the forward edge of said hood, a plurality of parallel louver members disposed transversely across said opening to conceal the source of light when viewed at any angle except directly, and means for attaching said casing to said wall structure rearwardly of said wall surface.

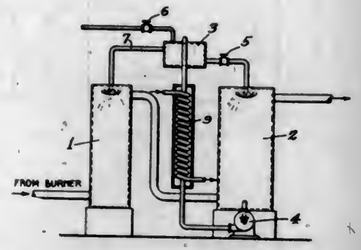
1,821,063. STEERING APPARATUS FOR MOTOR VEHICLES. CHARLES Y. KNIGHT, Pasadena, Calif., assignor, by mesne assignments, to Chester H. Braselton Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Apr. 7, 1926. Serial No. 100,210. 8 Claims. (Cl. 280—89.)

2. Vehicle steering apparatus which comprises a connecting rod, a steering element, a connection between said steering element and said connecting rod comprising a spring, and a mass swingably supported from the vehicle



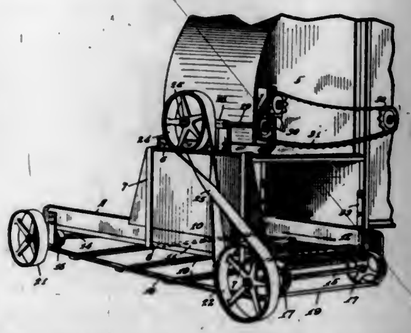
frame and connected with the connecting rod rigidly as to operative effect so that said mass moves with said rod when said steering apparatus is operated.

1,821,064. METHOD FOR THE PURIFICATION OF GASES. JOHN SKOGMARK and MARCH F. CHASE, New York, N. Y. Filed June 30, 1927. Serial No. 202,493. 6 Claims. (Cl. 23—178.)



2. The process of purifying gases which comprises washing the same with fluid which is repeatedly circulated and maintained at a temperature substantially different from that of the gases as supplied, slowly and continuously withdrawing a part of said fluid and permitting a substantial transfer of heat to take place between such withdrawn fluid and the supply of gases to be washed.

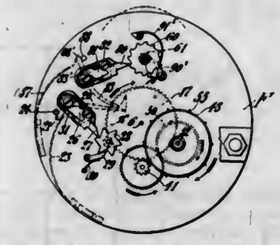
1,821,065. COMBINATION HARVESTER-THRASHER. WALLACE F. MACGREGOR, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Feb. 3, 1930. Serial No. 425,381. 7 Claims. (Cl. 56—20.)



2. The combination, with a harvester, of a straw carrier comprising a shifting frame, a guideway for the frame, an endless conveyer mounted on the frame, means positioned

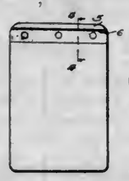
rearwardly of the frame for deflecting material to the conveyer, means for actuating the conveyer to deposit straw at a predetermined distance from the harvester when the frame has been projected laterally, and means for reversing the movement of the conveyer to discharge straw at a predetermined distance from the opposite side of the harvester when the frame has been projected accordingly.

1,821,066. CLOCK. HERMAN I. MARMORSTEIN, New York, N. Y. Filed Sept. 27, 1927. Serial No. 222,258. 4 Claims. (Cl. 58—125.)



1. In a time indicating device, the subcombination of an hour register, a ten-minute register, levers located one under the other and respectively associated with the said registers, springs respectively associated with the said levers and adapted to hold them in pre-determined position, and a turnable member having six laterally projecting and equally spaced pins at the periphery thereof, said pins being out of the plane of and within the periphery of said turnable member, five of said pins being of substantially the same height and being shorter than the sixth pin, the said five pins being adapted to intermittently actuate the lever associated with the ten-minute register, and the sixth and longer pin being adapted to simultaneously actuate both said levers.

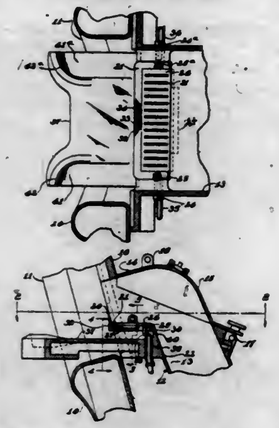
1,821,067. REENFORCED PAPER AND PROCESS AND MACHINE TO BE EMPLOYED IN THE MANUFACTURE OF THE SAME. JOHN W. MARSHALL, deceased, New York, N. Y., by Fred J. Seaman and Ralph Hastings, administrators, Tupper Lake, N. Y., assignors to Helen Hood Marshall, Baltimore, Md. Filed Sept. 8, 1925. Serial No. 55,006. 11 Claims. (Cl. 154—2.)



1. The process of reenforcing paper which comprises applying a penetrative liquid constituting a solvent for the reenforcing material to the paper, then applying a reenforcing material in liquid form over the penetrative solvent, and allowing the reenforcing material to solidify on the paper.

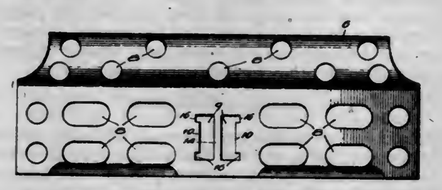
1,821,068. FUEL DISTRIBUTING SYSTEM FOR STOKERS. GUY M. MYERS, Clarendon, Va., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed July 25, 1929. Serial No. 380,799. 10 Claims. (Cl. 110—101.)

1. In a fuel distributing system for scattering fuel in aerial paths over a fire comprising a riddle and a fuel directing member beneath said riddle, said riddle having perforations to permit separation of the fine from the coarse fuel, the fine fuel dropping through the riddle on to said directing member and the coarse fuel passing over said riddle, a nozzle beneath said riddle rearward of the perforations and adapted to issue a blast of pressure fluid across said fuel directing member, and a second blast



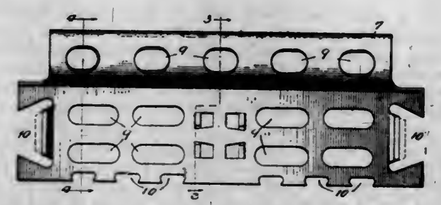
in a plane above the first named blast forward of the point of separation of fine and coarse fuel for receiving and projecting the fuel passing over said riddle continuously over the entire firebed.

1,821,069. BRAKE SHOE. ALBERT NELSON, Chicago, Ill., assignor of The American Brake Shoe & Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed June 9, 1930. Serial No. 460,035. 3 Claims. (Cl. 188—258.)



1. A brake shoe comprising a body having a reenforce back embedded therein, said back having parallel slots extending transversely thereof and an integral bar separating said slots, and a lug strap having slotted legs engaging said slots and bar in the back, the lower ends of said legs being bent angularly beneath the back to make interlocking engagement therewith.

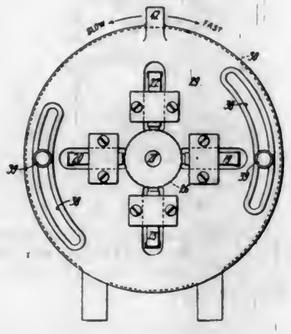
1,821,070. BRAKE SHOE. ALBERT NELSON, Chicago, Ill., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed June 9, 1930. Serial No. 460,037. 4 Claims. (Cl. 188—258.)



1. A brake shoe comprising a body having a reenforce back embedded therein, spaced support lugs struck up from the back in pairs extending transversely of the back and

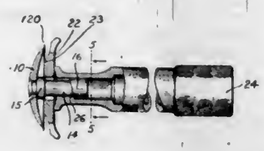
leaving openings in the back, and a lug strap having parts projecting through said openings and engaged with the under side of the back and also having shoulders engaged with said lugs.

1,821,071. ELECTRIC MOTOR. ALFRED E. OSWALD, Hackensack, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed Sept. 12, 1925, Serial No. 55,943. Divided and this application filed Jan. 25, 1927. Serial No. 163,516. 9 Claims. (Cl. 172—36.)



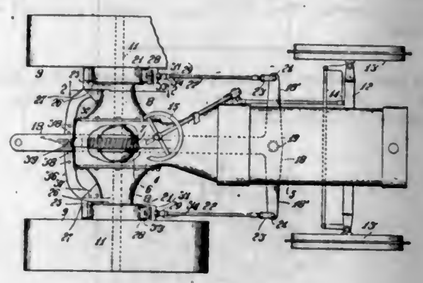
2. An electric motor having an armature, a field-structure, a casing for said field-structure, a pair of heads for said casing in which opposite ends of said armature are journaled, one of said heads being mounted for angular movement, a handle on said head for manual movement thereof, a commutator, and commutator brushes mounted on said movable head for movement therewith.

1,821,072. SAFETY RAZOR. WILLIAM H. PARRY, Malden, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 15, 1929. Serial No. 363,247. 2 Claims. (Cl. 30—12.)



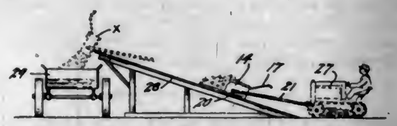
1. A safety razor comprising a guard plate having a blade shaping surface and a stud receiving hole, a cooperating cap having a concaved surface with substantially parallel longitudinal edges, a tubular handle having a guard engaging end and a rib on its inner surface extending substantially flush with said guard engaging face, and a stud projecting from the concaved surface of said cap having at its outer end an enlarged slotted collar fitting the inside surface of said tubular handle and provided with an angular inner face, a second collar adjacent the fixed end of said stud fitting within the hole in said guard plate, said collar extending beyond a line joining the longitudinal edges of said cap, and said stud having a neck of reduced diameter connecting said collars.

1,821,073. TRACTOR. WILLIAM L. PAUL, Berkeley, Calif., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 6, 1926. Serial No. 146,586. 6 Claims. (Cl. 180—18.)



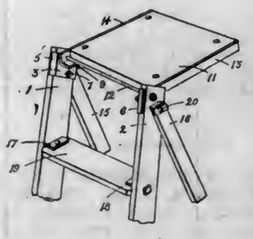
1. In a tractor, the combination of steering wheels, power driven traction elements, a differential operatively connected to said traction elements, a swinging draw bar, brake devices adapted to retard said traction elements, and means operatively connecting said draw bar to said brake devices to brake the traction element on the side to which the tractor is turned.

1,821,074. MANURE LOADER. CARL A. PETERS, Mead, Colo. Filed Apr. 26, 1930. Serial No. 447,658. 4 Claims. (Cl. 37—120.)



1. A manure loading device comprising: a series of relatively flat teeth; cross pieces securing said series in spaced relation; side boards arranged at the extremities of said cross pieces; and an A-shaped pushing frame pivoted at its two extremities to said side boards; and a plate at the apex of said A-shaped frame for attachment to a tractor.

1,821,075. STEPLADDER JOINT AND SHELF SUPPORT. SPENCER M. PETERS and ARTHUR B. ROCHESTER, Springfield, Ill.; said Rochester assignor to said Peters. Filed Mar. 27, 1929. Serial No. 350,339. 2 Claims. (Cl. 228—58.)



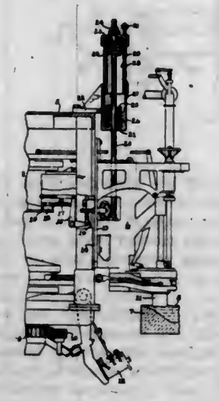
2. In a stepladder having stiles and supporting legs pivoted thereto a pair of stepladder joints each respectively engaging the inner face and forward edge of the stile; said joints each being formed in the shape of a Z-bar and provided with a pair of spaced bolt holes, a bolt securing each of said joints to said stile respectively through one of said holes in each joint and a relatively long rod extending through both of said stiles and through both of said joints; said joints each having an inwardly extending integral plate portion adjacent its upper end; and a pivotally mounted shelf secured to said rod and adapted to be operatively supported on said inwardly extending integral plates of said joint members.

1,821,076. AMPLIFYING SYSTEM. EUGENE PETERSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 28, 1929. Serial No. 343,530. 13 Claims. (Cl. 179—171.)



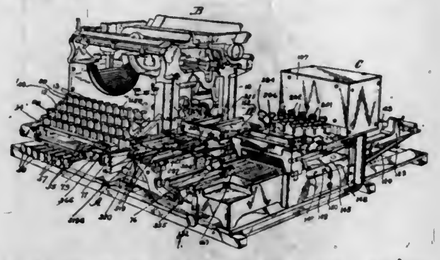
12. The method of operating an electric space discharge device, which comprises causing amplitude variations from a given value in waves applied to the input circuit of said device, producing a variable negative resistance in the device in response to said amplitude variations, and varying the voltage applied to the input terminals of the device in response to said resistance variation.

1,821,077. GLASSWARE FORMING MACHINE. HAROLD A. ROHRICH, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 6, 1929. Serial No. 352,975. 4 Claims. (Cl. 49—5.)



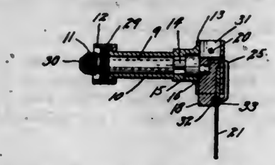
1. In a glassware forming machine, the combination of a mold carriage, a dipping frame mounted for vertical sliding movement on said carriage, means to move said dipping frame downward relative to the mold carriage at regular time intervals, a guide member mounted at the upper end of the mold carriage, a connector rod carried by the dipping frame and extending upwardly thru said guide member, a coil spring encircling the rod above the guide member, and means for confining said spring between the guide member and the upper end of the rod.

1,821,078. PUNCH AND TYPEWRITER CONTROLLING MEANS THEREFOR. JOHN T. SCHAAFF, Washington, D. C., assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 14, 1924. Serial No. 731,980. 126 Claims. (Cl. 164—113.)



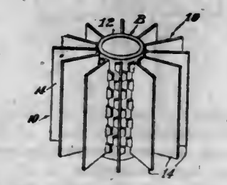
1. In combination in a punching machine, card punching mechanism, card feeding mechanism, means for directly receiving a card from said feeding mechanism and for carrying and moving said card completely through the punching mechanism for a punching operation thereon, and means for advancing said carrying and moving means toward the card to receive the same as it is fed into punching position by the feeding means.

1,821,079. DENTAL INSTRUMENT. CHARLES E. SCHULTZE, Denver, Colo. Filed July 20, 1929. Serial No. 379,701. 3 Claims. (Cl. 32—10.)



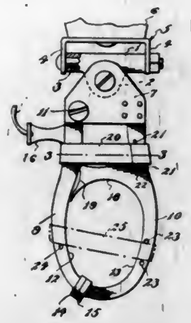
1. In a dental instrument having a reciprocating member, means for detachably engaging a blade in said member comprising: a socket extending into said member to receive said blade; a spring secured at its one extremity to said member and extending at its other extremity inwardly into said member across said socket so as to swing laterally into an indentation in the edge of said blade, there being a second socket at right angles to said first socket so as to allow space for the latter extremity of said spring to move away from and into contact with the edge of said blade.

1,821,080. RADIATOR. SEVERN D. SPRONO, Brooklyn, N. Y., assignor to Engineering Products Corporation, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 15, 1930. Serial No. 488,713. 1 Claim. (Cl. 257—262.)



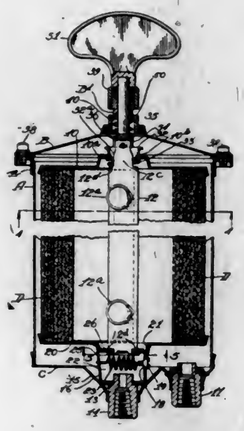
A radiator comprising a pipe, a plurality of fins extending substantially longitudinally thereof, said fins having ears seated against and curved to fit the pipe and a thin film of metal bonding the ears to the pipe, the ears on said fins being bent outwardly from opposite surfaces thereof, the ears on a given fin being staggered with respect to those on an adjacent fin.

1,821,081. ARTIFICIAL HAND. HERBERT C. STARKEY, Chadron, Nebr. Filed July 12, 1929. Serial No. 377,777. 4 Claims. (Cl. 3—12.)



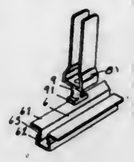
4. In an artificial hand, a pair of parallel plates, a transverse pivot about which the plates swing as an axis, a pair of relatively movable arms carried by the plates on opposite sides of the pivot and coacting with the plates in forming a closed loop, a cross bar carried by one arm and extending across the space between the arms for cooperation with the other arm in gripping articles, and an elastic band connecting the arms adjacent to said cross bar for normally holding the arms closed and coacting with the cross bar in gripping articles.

1,821,082. OIL FILTER. HARVEY E. TYLER, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Feb. 7, 1929. Serial No. 338,103. 10 Claims. (Cl. 210—183.)



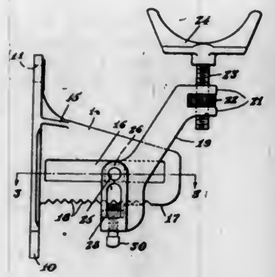
1. A construction for the purpose indicated comprising a casing having positioned centrally at the bottom an upwardly open cup member protruding upwardly in the casing cavity, an inlet connection to the casing leading in through the bottom of the casing and the bottom of said cup member, the casing having an outlet connection leading from the annular space of the casing cavity around said cup member; a filtering unit comprising a filter roll and heads between which it is held mounted in the casing having a central cavity for receiving the liquid to be filtered, and an aperture in the lower head for access to said cavity of the liquid to be filtered, said filtering unit being for affording said access, lodged on the upper open end of the cup member, the casing having a removable upper end closure, and means associated therewith for holding the filtering unit securely lodged on the cup member when the upper closure member is in case-closing position.

1,821,083. COUNTER BIN. AUGUST C. VISEL, Bronson, Mich. Filed Dec. 7, 1927. Serial No. 238,304. 2 Claims. (Cl. 312—140.)



1. The combination with a counter display bin, of a metal reinforced channel in the bottom of said bin having longitudinal slots therein, broadest at the bottom, forked supports, the sides of which are of thin blades, said supports having depending shanks and crossheads detachably and adjustably inserted in said slots of said channel, and partitions detachably supported by said forked supports.

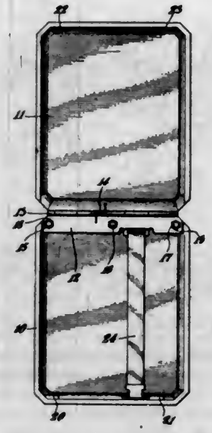
1,821,084. RADIATOR BRACKET. SAUL C. APPEL, Medford, Mass. Filed Nov. 8, 1929. Serial No. 405,685. 3 Claims. (Cl. 248—17.)



1. In a device of the kind described, the combination of a base, a bracket member formed integral therewith and extending laterally outward therefrom and at right angles thereto, said bracket member being provided with an elongated slot extending perpendicularly to the plane of the base, a plurality of parallelly arranged serrations formed on the lower edge or surface of said bracket and lying transversely of, but parallel to, said slot, a supporting arm extending upwardly and laterally with respect to the base, an adjustable radiator supporting means mounted on the upper end of said arm, means for mounting said arm on said bracket, and adjustable means independent of said mounting for rigidly securing the upwardly and outwardly extending arm on the laterally extending bracket.

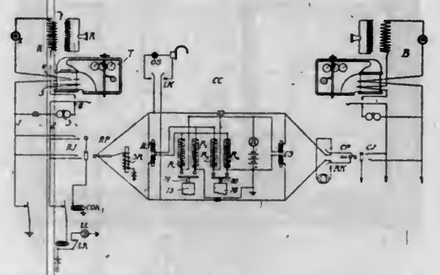
1,821,085. PLURAL-SECTION CASING AND LATCHING MECHANISM THEREFOR. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Feb. 16, 1929. Serial No. 340,472. 6 Claims. (Cl. 206—41.)

1. A casing comprising sections movable toward and from casing-closing position about a pivotal axis, one of said sections being pivoted with respect to another of said sections for movement in a direction substantially at right angles to that taken thereby during movement



toward or from casing-closing position, means for biasing said sections toward open position, and means for locking said sections in casing-closing position.

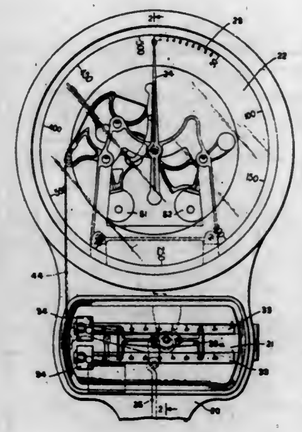
1,821,086. TELECHRONOMETER. GARRISON BABCOCK, Seattle, Wash., assignor to American Telechronometer Company, Seattle, Wash., a Corporation of Washington. Original application filed Oct. 15, 1921, Serial No. 508,037, Patent No. 1,747,210, dated Feb. 18, 1930. Divided and this application filed Apr. 6, 1929. Serial No. 352,983. 8 Claims. (Cl. 179—11.)



1. In combination, a telephone station having a pair of line wires, adapted to lead to central, an electro-magnetic device at said station, said electro-magnetic device including a pair of coils connected serially each in a limb of the telephone line and a permanent magnet adapted to be actuated by said coils.

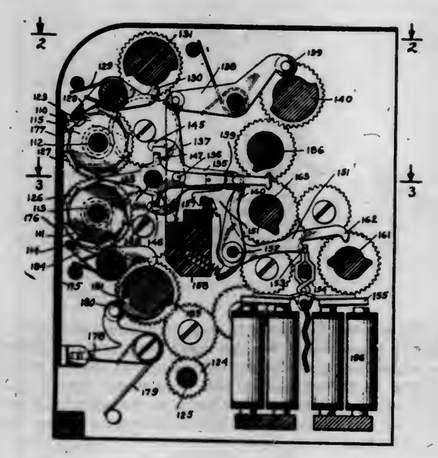
1,821,087. WEIGHING SCALE. JAMES W. BRYCE, Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Continuation of application Serial No. 150,735, filed Nov. 26, 1926. This application filed June 22, 1927. Serial No. 200,531. 16 Claims. (Cl. 265—62.)

1. A weighing scale including a load support, a scale beam, a pair of load counterbalancing pendulums, means comprising a flexible tape for driving one of said pendulums from said beam, an indicator and means for conjointly operating the same and for driving the other pendulum from the first said means comprising a pivotally mounted



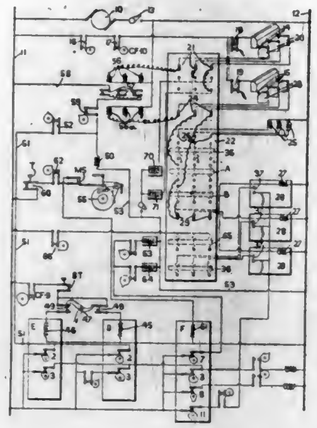
member with movement multiplying connections intermediate the same and the first pendulum and other movement decreasing connections intermediate said member and the other pendulum, and means for driving the indicator from said member.

1,821,088. GROUP INDICATING FLASH MECHANISM. FRED M. CARROLL, Yonkers, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Apr. 22, 1927. Serial No. 185,712. 20 Claims. (Cl. 235—92.)



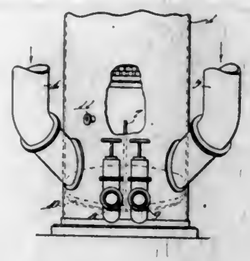
3. In an accounting machine, record analyzing means and means controlled thereby for manifesting data entered in certain record columns and means controlled by the record for indicating group indicating data entered in other record columns prior to the manifesting of any data in the first named columns.

1,821,089. SELECTIVE COLUMN TABULATING MACHINE. FRED M. CARROLL, Yonkers, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Aug. 13, 1927. Serial No. 212,690. 8 Claims. (Cl. 235—58.)



1. In a record controlled accounting machine, an accumulating device, a plurality of record controlled entering devices and record controlled means for selectively connecting the several entering devices one at a time with said accumulating device.

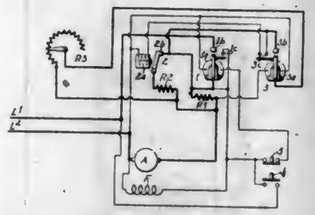
1,821,090. GAS PURIFICATION APPARATUS. CARROLL B. COLLINS, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed May 2, 1929. Serial No. 359,737. 5 Claims. (Cl. 261—109.)



1. In a scrubbing tower having a liquid spray therein, a plurality of gas inlets for the tower each having a portion thereof inclined downwardly to form a seal, the seals being arranged to fill with liquid from the spray, and a liquid outlet for each seal, each seal being so arranged that when its liquid outlet is closed the water will overflow into adjacent seals.

1,821,091. MOTOR CONTROLLER. WILLIAM E. DATE, East Orange, N. J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,759. 7 Claims. (Cl. 172—179.)

1. In a motor controller, the combination with a resistor included in the motor circuit during starting and running, a second resistor, means for establishing a paralleling connection between said resistors during starting and for interrupting such connection during running, a

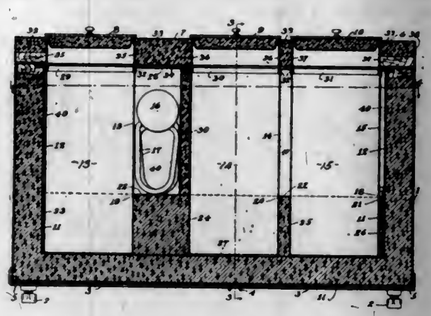


variable resistor, and means for establishing a paralleling connection between said first mentioned resistor and said variable resistor during running.

1,821,092. PROCESS OF OBTAINING BORAX FROM BRINES. MAURICE A. DEBEAU and HOMER L. ROBSON, Westend, Calif., assignors to Burnham Chemical Company, Reno, Nev., a Corporation of Nevada. Filed Feb. 6, 1928. Serial No. 252,420. 15 Claims. (Cl. 23—39.)

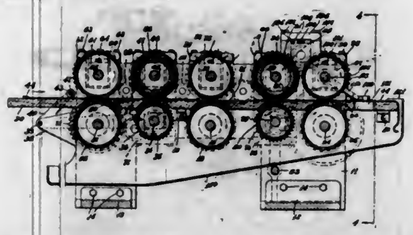
1. The process of obtaining borax from brine such as Searles Lake brine which consists in concentrating the brine, reducing the sulfate and carbonate concentration of the concentrated brine and contacting the resultant brine with an acid reagent.

1,821,093. REFRIGERATING CABINET. DAVID JOHN GREILING, Cleveland Heights, Ohio, assignor to The Bishop & Babcock Manufacturing Co., Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 11, 1927. Serial No. 232,558. 1 Claim. (Cl. 62—75.)



In a refrigerating cabinet for refrigerating the contents of ice cream cans or the like, an outer and an inner tank portion, the inner being adapted to be telescopically nested in the outer and adapted to be removed therefrom as a unit for inspection purposes, the outer tank portion comprising an outer and inner bottom wall in spaced relation and a plurality of outer and inner side walls in spaced relation, the space between the walls and between the bottoms being filled with heat insulating material; and the inner tank portion comprising a bottom wall and a plurality of side walls, a plurality of receptacles each adapted to receive a can, the receptacles being disposed within the inner tank portion in spaced relation to each other and to the side walls of the tank, a horizontal partition surrounding the receptacles and dividing that portion of the space within the inner tank portion and outside of the receptacles into upper and lower fluid tight compartments, the upper compartment being adapted to contain a fluid refrigerant and the lower compartment being adapted to be filled with heat insulating material.

1,821,094. FLESHING MACHINE. DANA E. HARDING, Melrose, Mass., assignor to Harding Engineering Company, East Boston, Mass., a Corporation of Massachusetts. Filed Oct. 11, 1928. Serial No. 311,836. 9 Claims. (Cl. 149—16.)

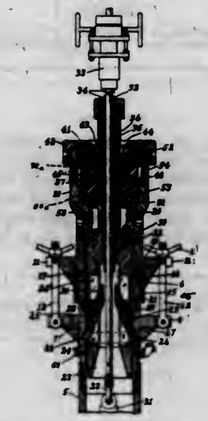


3. In an improved fleshing machine, the combination of a plurality of fleshing rolls, a cylinder associated with each roll and normally out of operative association therewith, a tubular covering of relatively soft material fixed on each cylinder and constituting an anvil, and means for bringing each of said rolls into operative position with respect to its associated anvil.

1,821,095. COMPOSITION AND METHOD OF MAKING THE SAME. MORTIMER T. HARVEY, East Orange, N. J., assignor to The Harvel Corporation, Newark, N. J., a Corporation of New Jersey. Filed Feb. 19, 1929. Serial No. 341,271. 17 Claims. (Cl. 134—26.)

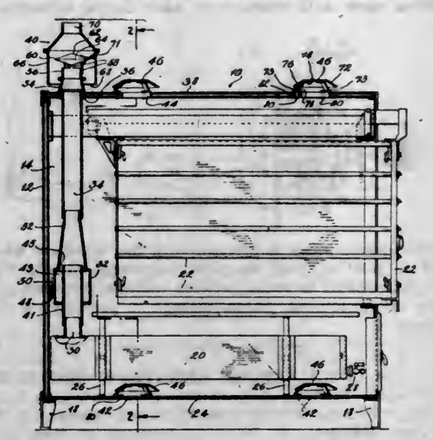
1. In the process of preparing a product from cashew nut shell liquid and formaldehyde, the step which consists in pretreating the cashew nut shell liquid with heat before said liquid and the formaldehyde are brought together.

1,821,096. DRILLING AND SWABBING HEAD. JOHN N. HICKS, Los Angeles, and CLAYTON SEVERNS, Long Beach, Calif. Filed Oct. 16, 1929. Serial No. 400,014. 7 Claims. (Cl. 166—14.)



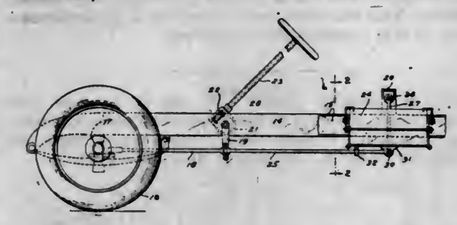
1. An oil saving device comprising a cable adapted to support well tools, a plunger through which said cable extends and together with which it reciprocates, a guide around said plunger in spaced relation thereto, a packing in the space between said plunger and the interior surface of said guide and forming a fluid tight fit across said space, a rubber body surrounding said guide and vulcanized thereto, a support having a chamber into which said rubber body is fitted, said body being adapted to sustain said guide and to permit lateral deviation thereof, and means to secure said support to the top of a well casing to form a closure therefor.

1,821,097. DRIER. JULIUS JUDELSON, New York, N. Y., assignor to Judelson Dryer Corporation, Moundsville, W. Va., a Corporation of West Virginia. Filed Feb. 9, 1928. Serial No. 253,014. 3 Claims. (Cl. 34—19.)



1. A clothes drier comprising a casing having a top wall and a bottom wall, a clothes rack in said casing, a gas heater mounted within said casing adjacent said bottom wall and beneath said rack, conduit means adjacent one end of said casing and communicating with said heater for removing the burnt gases therefrom, said conduit means extending to the top wall of said casing, a back draft preventer mounted on said conduit, said bottom and top walls having openings therein above and below said rack respectively, said openings being located adjacent the end of said casing opposite said conduit means, and an extractor interposed in said conduit means having openings disposed within said casing for removing air from said casing and inducing currents of air thru said opening in the bottom wall around said heater.

1,821,098. VIBRATION ABSORBING MECHANISM. CHARLES Y. KNIGHT, Pasadena, Calif., assignor, by mesne assignments, to Chester H. Braselton Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Nov. 27, 1925. Serial No. 71,526. 10 Claims. (Cl. 280—89.)

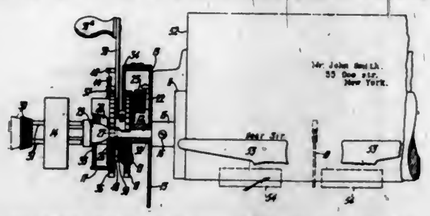


1. Apparatus of the type described which comprises a steering knuckle; an operating and moving rod for said steering knuckle; a stabilizing mass; a pivot support and straps for swinging said stabilizing mass from said pivot support to permit said mass to swing back and forth; and a connecting rod fixedly connecting said mass to said operating rod.

1,821,099. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,774. 13 Claims. (Cl. 197—114.)

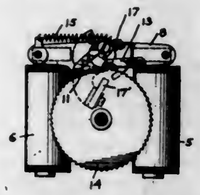
1. In a typewriting machine having a platen, a platen-shaft rotatable by a finger-wheel, a line-space wheel,

and a clutch mounted upon said shaft for disconnecting at will said line-space wheel from said shaft to independently position a work-sheet with the finger-wheel, a pawl-and-ratchet device to sweep the platen for certain entries upon said work-sheet, said device including a



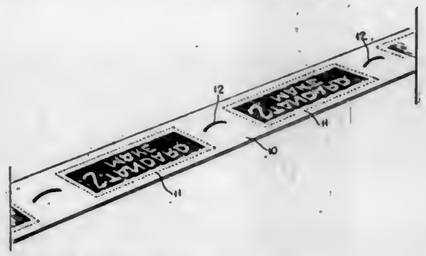
ratchet-wheel which is integral with the line-space wheel, and a pawl-carrying sweep-arm arranged loosely upon the platen-shaft to swing between limits and reversely rotate the reclutched platen through a plurality of line-spaces.

1,821,100. OSCILLATING ARMATURE SECONDARY CLOCK. CLINTON E. LARRABEE, Binghamton, N. Y., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Sept. 25, 1928. Serial No. 308,227. 1 Claim. (Cl. 58—26.)



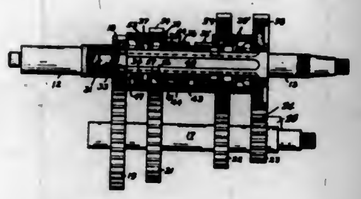
In an electrically operated clock mechanism, a two core magnet unit, a Z-shaped armature mounted on a shaft between the cores of said unit and so disposed to be rotated into substantially parallel relationship with lines of magnetic flux when said magnet is energized free of contact with the cores of said magnet, a disk rigidly fixed to the end of said shaft, a helical spring fixed to the periphery of said disk for retracting the armature when said magnet is deenergized, a pawl for advancing the clock mechanism pivotally mounted on said disk midway between the periphery and the shaft, and a yielding stop member coacting with said armature to limit the angular displacement of said armature when retracted.

1,821,101. LABEL STRIP. WALTER B. LASHAR, Fairfield, Conn., assignor to The American Fabrics Company, a Corporation of Connecticut. Filed Jan. 2, 1930. Serial No. 418,006. 5 Claims. (Cl. 139—407.)



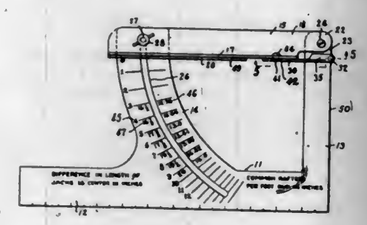
1. A strip of fabric formed with label markings arranged in successive spaced relation and a loop of thread overlying one face of the fabric in each space between markings, said loop forming a constituent part of the fabric.

1,821,102. TRANSMISSION DEVICE. WILLIAM H. LONG, Berkeley, Calif. Filed Sept. 6, 1927. Serial No. 217,607. 6 Claims. (Cl. 192—48.)



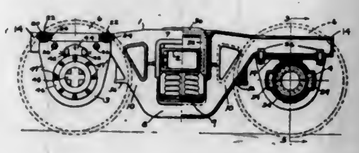
1. Axially aligned shafts, a member fixedly disposed on one of said shafts in encircling relation thereto and provided with a radial perforation arranged for registration with a socket provided in the other shaft, a free clutch member movable radially in said perforation for partial disposal in said socket and normally disposed out of the socket, a sleeve member slidably mounted on said second shaft and arranged to be projected axially and against said member to move it inwardly into said socket means for locking the sleeve for rotation with said second shaft and a gear splined to said sleeve and arranged for rotation about the axis of the second named shaft in a fixed plane.

1,821,103. ROOF FRAMING TOOL. ELIAS LUGINBUHL, Norwood, Ohio. Filed Jan. 21, 1929. Serial No. 333,874. 6 Claims. (Cl. 33—90.)



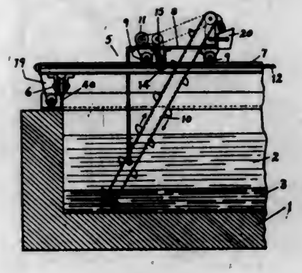
1. In a device of the character described, comprising a body-member, angle members pivoted to said body-member, wing members pivoted to said body-member and having slide connection with said angle members, whereby movement of said angle member will cause movement of said wing members therewith and in a transverse plane thereto.

1,821,104. TRUCK FOR RAILWAY CARS. JOHN J. McBRIDE, Bayonne, N. J. Filed May 2, 1929. Serial No. 359,872. 15 Claims. (Cl. 105—220.)



1. In a truck for railway cars, a side frame having pedestals hingedly secured to the ends thereof on an axis parallel to the longitudinal axis of the side frame.

1,821,105. METHOD OF CLEANING GALVANIZING POTS. FRANK L. MCMEANS, Apollo, Pa., assignor of one-half to Philip B. Doverspike, Vandergrifts, Pa. Filed Aug. 9, 1929. Serial No. 384,767. 2 Claims. (Cl. 75—17.)



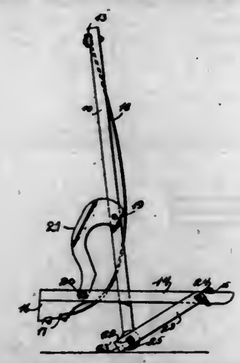
1. In the maintenance of a molten bath of hot galvanizing metal, the method of eliminating dross which lies in a stratum beneath said galvanizing metal, which method comprises the steps of lowering an endless conveyor through the bath of galvanizing metal and into said stratum of dross, causing actuation of said endless conveyor and effecting a progressive removal of the dross with included galvanizing metal upwardly through said bath, and effecting, during such progressive removal of dross, movement of the lower terminus of said endless conveyor over the area of said stratum, conveying such progressively removed dross away from said bath and depositing it in a confined mass, and subjecting such confined mass, before the dross has cooled below a temperature at which the galvanizing metal ceases to be fluid, to an expressing action for separation of said included galvanizing metal from the confined dross.

1,821,106. METHOD OF PRESERVING FOOD PRODUCTS. EDWARD MILANI, San Francisco, Calif. Filed Jan. 12, 1925. Serial No. 1,925. 2 Claims. (Cl. 99—8.)

1. The method of storing fresh fruit and vegetable food products against normal deterioration which consists in depositing the same within a container, drawing a vacuum within the container, admitting an inert gas into the container, sealing the container with the gas contained therein against the admission of the outside air and permitting the product to remain therein until about the time when the same generates a gas within the container, and then puncturing the wall of the container to release the generated gas contained therein and permitting said puncture to remain open.

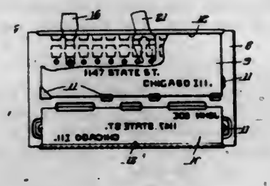
1,821,107. CHAIR. THOMAS J. MILES, Buechel, Ky. Filed Sept. 16, 1929. Serial No. 392,855. 4 Claims. (Cl. 155—56.)

3. In a folding chair, a back frame, a seat frame crossing the back frame and slidable and tiltable relative thereto, rigid connecting arm supporting bars pivoted directly to and connecting the sides of the back and seat frames above their points of intersection, other rigid connecting bars pivoted to the sides of the back and seat frames below their points of intersection, the pivotal connections between the last mentioned bars and the sides of the back frame constituting roller axles, ground engaging rollers mounted on said axles, and ground engaging ex-



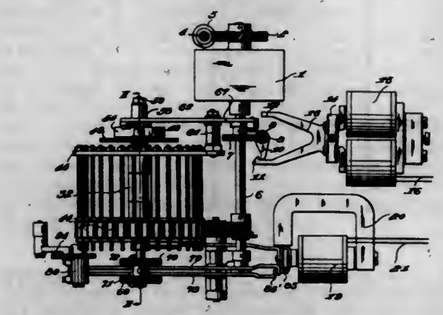
tensions on the forward ends of the last mentioned bars projecting forwardly of the rollers to engage the ground upon the chair being tilted forwardly.

1,821,108. PRINTING DEVICE. VALENTINE J. MOHLER, River Forest, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 1, 1929. Serial No. 404,182. 11 Claims. (Cl. 129—16.8.)



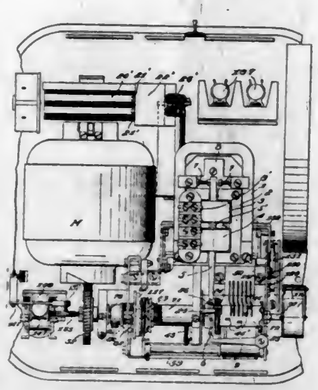
1. A printing device tab having a stem, and an integral shoulder at one edge of the stem extending substantially at right-angles to the face of the stem.

1,821,109. SELECTIVE SYSTEM AND APPARATUS. STERLING MORTON and HOWARD L. KRUM, Chicago, Ill., assignors to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 9, 1928. Serial No. 260,411. 55 Claims. (Cl. 178—4.)



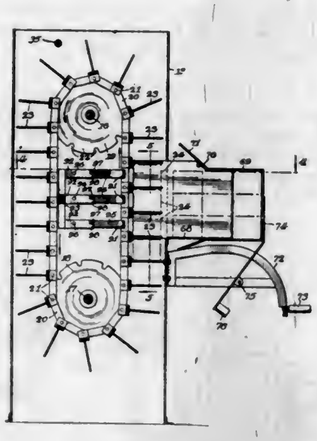
1. In a printing telegraph system, a rotatable receiver, a signalling line, means responsive to received code combinations of impulses received over said signalling line for operating said receiver, a synchronizing line, and means responsive to impulses received over said synchronizing line in timed relation with said signalling impulses for maintaining said rotatable receiver in synchronism with said code of impulses.

1,821,110. SELECTING AND PRINTING MECHANISM. STERLING MORTON, Chicago, HOWARD L. KRUM, Kenilworth, and EDWARD E. KLEINSCHMIDT, Park Ridge, Ill., assignors to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 20, 1929. Serial No. 348,612. 58 Claims. (Cl. 173—33.)



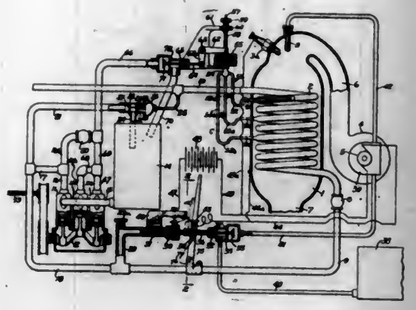
1. A selector mechanism comprising a cam drum, means for rotating said cam drum, and means whereby said first mentioned means also operates said cam drum longitudinally.

1,821,111. PACKAGING MACHINE. GARRETT W. MUDD, Chicago, Ill., assignor, by mesne assignments, to Standard-Knapp Corporation of New York. Filed June 28, 1928, Serial No. 288,957. Renewed Nov. 11, 1930. 7 Claims. (Cl. 226—14.)



1. A packaging machine including an endless conveyor, an article support connected with the conveyor, means for intermittently advancing the support, means for supplying the articles to the support, an ejector arranged adjacent the path of movement of the support for ejecting the articles from the support, said ejector projecting over the support, said support being movable in a direction transverse to the operative movement of the ejector, and means operating to permit the ejector to be engaged and moved by the support and in the direction of movement of the support.

1,821,112. AUTOMATICALLY REGULATED SEMI-FLASH BOILER SYSTEM. ALBERT L. MUREN, Dearborn, Mich. Filed Aug. 25, 1928. Serial No. 301,968. 6 Claims. (Cl. 122—448.)

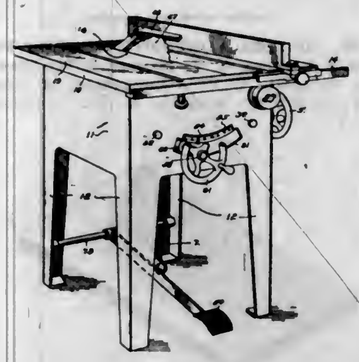


1. In an arrangement of the character described, the combination of a boiler having a generator coil therein, a steam line from said coil and a feed water pipe to said coil, a plurality of water pumps, means for operating said pumps, the latter being adapted to maintain a pressure in said feed pipe and deliver water to said coil, heating means in said boiler, means for delivering fuel to said heating means, means for rendering said fuel delivery means inoperative when pressure in the feed water pipe ceases, means for regulating the flow of water from said pumps so that when the temperature in said coil is above a predetermined maximum the water discharged by all the pumps is delivered through said feed water pipe to the coil, and when the temperature in said coil is below said predetermined maximum the water discharged by one pump only is delivered through said feed water pipe to said coil, and means for stopping the flow of all water discharged by said pumps to said coil when the pressure in said steam line reaches a predetermined limit.

2. In an arrangement of the character described, the combination of a boiler having a generator coil therein, an oil burner in said boiler, an oil tank, an oil pump to deliver oil from said tank to said burner through a pipe line a water pumping system, a feed water line from said water pumping system to said coil, a branch from said feed water line, a plunger in said branch extending through the end thereof, a valve body in said oil pipe line, a valve in said body operated by said plunger and held in open position by the latter as long as water pressure is maintained in said feed water line, means for moving said plunger and valve to closed position when said water pressure ceases, and means on said plunger for causing said oil pump to operate as long as said oil valve is open and to stop said oil pump when the oil valve is closed.

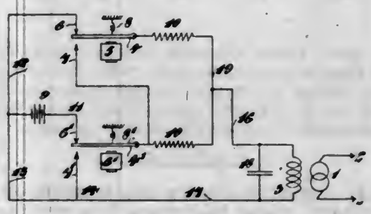
5. In an arrangement of the character described, the combination of a boiler having a generator coil therein, a feed water line to said coil, a steam line from said coil, pumping means for maintaining pressure in said feed line, auxiliary pumping means for increasing the pressure in said feed line, a plurality of tubes each extending into said coil at a different level, each tube having a fluid therein adapted to boil at a different temperature, a regulating valve through which water from the auxiliary means is adapted to pass, and a valve control mechanism actuated by boiling fluid in any one of the tubes adapted when actuated to close the regulating valve so that then the water discharged by the auxiliary pumping means passes to the water feed line.

1,821,113. MOUNTING FOR ROTARY MITER SAWS. WILBUR S. NEIGHBOUR, Hackettstown, N. J., assignor to American Saw Mill Machinery Company, Hackettstown, N. J., a Corporation of New Jersey. Filed Oct. 31, 1928. Serial No. 316,170. 6 Claims. (Cl. 143—6.)



1. In a device of the character described, a tiltable tool appliance comprising a frame, a base member of substantial height having a rail at its lower part in the form of a segment of a circle, slidably mounted on the frame and having an upper medial part stopping short of but near the axis of the circle and formed with a bearing face presented laterally with respect to its path of movement, said frame having an opposed bearing face engaging therewith, a tool swingingly mounted on the said base member at the side next said bearing faces in a plane coincident with said axis, means to drive the tool, means to swing the tool, means to move the base member on said axis and means to fix the base member in its adjustment around said axis.

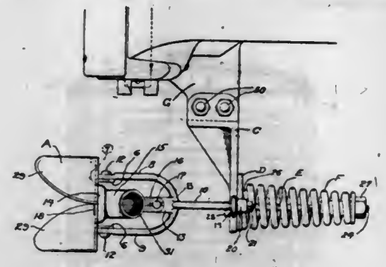
1,821,114. ALTERNATING CURRENT SIGNALING SYSTEM. FREDERICK EUGENE PERNOT, London, England. Filed Sept. 8, 1926, Serial No. 134,198, and in Great Britain Sept. 12, 1925. 11 Claims. (Cl. 178—66.)



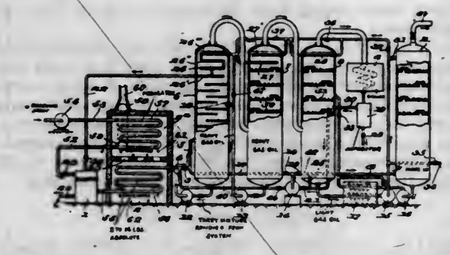
1. In an alternating current signaling system, a generator or generators of alternating currents supplying said system and automatic means for varying the excitation of the generator or generators independently of the frequency of the alternating current generated thereby, and receiving devices operated in different directions by the alternating current impulses of different intensity, which respond at a distant station to the varying intensity of the successive waves or parts of waves of the alternating current.

1,821,115. AUTOMATIC TRAIN PIPE COUPLING. JOSEPH ROBINSON, Morristown, N. J. Filed Oct. 20, 1920. Serial No. 418,233. 12 Claims. (Cl. 285—58.)

1. In an automatic train pipe coupling, the combination of a base, a coupling head, a member for supporting said head on said base, an abutment engaging the rear side of the base, means for detachably securing said member to said abutment, a spring at the rear of said base and acting upon said abutment for extending the head, and means for maintaining said spring in position.



1,821,116. APPARATUS FOR TREATING HYDROCARBON VAPORS. WILLIS F. SIMS and VENUS U. CLOER, Wichita Falls, Tex., assignors to Panhandle Refining Company, Wichita Falls, Tex., a Corporation of Texas. Filed May 7, 1929. Serial No. 361,015. 7 Claims. (Cl. 196—60.)

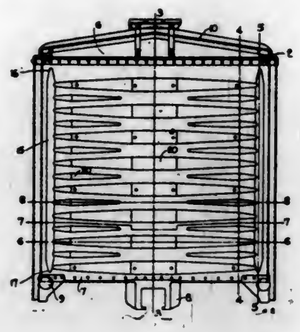


1. Apparatus for the treatment of hydrocarbon oils comprising in combination an initial heater adapted to retain pressure, an expansion chamber or flashpot, means for releasing initially heated oils from said heater into said expansion chamber or flashpot, a still having an open connection to said flashpot adapted to receive the oils therefrom and means to heat the oils in the vapor phase in said still to cracking temperature, cooling and separating means connected to receive the cracked vapors, and suction means connected so as to create and maintain a constant vacuum or subatmospheric pressure on the oil vapors in said cracking still and through its open connection with the flashpot on the content of said flashpot, together with means to receive condensed oils from the cooling and separating means, and means to pass the same back under pressure to the flashpot for retreatment, without passing through the initial heater.

1,821,117. PROCESS FOR PRODUCING HIGHLY ACTIVE CARBON. AENNE SCHREINER, Frankfort-on-the-Main, Germany. Filed June 20, 1928, Serial No. 287,039, and in Germany June 22, 1927. 6 Claims. (Cl. 252—3.)

1. In the production of highly active carbon, the herein described process which comprises impregnating solid carbonaceous material with a solution containing a compound cyanide of an alkali-forming metal, heating the impregnated product under substantially complete exclusion of air, sufficiently to carbonize the material, and thereafter leaching the product.

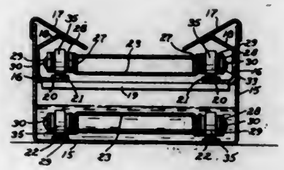
1,821,118. CORRUGATED METALLIC PLATE. VINTON E. SISSON, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 27, 1930. Serial No. 491,522. 11 Claims. (Cl. 105—410.)



1. A metallic plate formed with embossments positioned adjacent opposite sides of the plate, and a plurality of major corrugations extending substantially normal to the embossments having their opposite ends merging into the embossments, said plate also formed with a plurality of minor corrugations positioned between the major corrugations which spring from the plate and merge into the embossments.

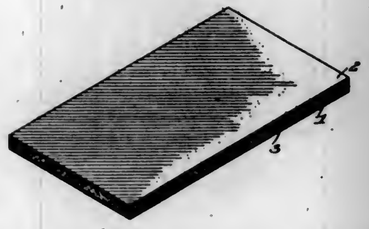
2. A metallic plate formed with embossments positioned adjacent opposite sides of the plate with their ends terminating within the plate, and a plurality of major corrugations extending substantially normal to the embossments having their opposite ends merging into the embossments, said plate also formed with a plurality of minor corrugations positioned between the major corrugations which spring from the plate and merge into the embossments.

1,821,119. CONVEYER. CHARLES E. SORENSEN, Detroit, Mich., assignor to Ford Motor Company, Fordson, Mich., a Corporation of Delaware. Filed Feb. 18, 1929. Serial No. 341,021. 1 Claim. (Cl. 210—197.)



In a portable conveyer adapted to separate solids from liquids, a channel shaped trough formed from a single sheet of metal the edges of which are bent upwardly to form side members integral with the bottom of the trough, a pair of longitudinally extending angle irons fixedly secured within the trough to the intermediate portions of the side members, a rail secured to the upper face of each of the inwardly projecting legs of said angles to thereby form a conveyer track, a plurality of transverse braces extending between each of said angle irons and secured to the lower faces thereof, a second pair of rails extending within said trough and secured to the bottom thereof to form a return track below the first mentioned track, a continuous conveyer disposed within said trough having perforated trays thereon adapted to retain solid material and allow liquids to filter therethrough, said conveyer having a plurality of rollers secured along the edges thereof adapted to operate upon said tracks, an inwardly and downwardly inclined plate secured to each upper edge of said side members, whereby liquid deposited into said trough will be conducted into the perforated trays from which it will filter therethrough into the liquid-tight trough, and an outlet pipe for said liquid disposed in one end of said trough.

1,821,120. MOLDED COMPOSITION. HUGH MCCURDY SPENCER, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Apr. 5, 1929. Serial No. 352,852. 5 Claims. (Cl. 154—2.)



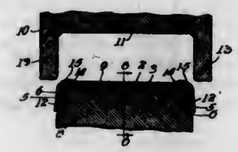
5. The method of making wallboard which comprises placing a mixture of relatively finely divided inorganic material and sulfite liquor pitch between two layers of sheet material, and heating the resulting assembly of mixture and sheet material to cause said mixture to intumesce into a porous mass having a multitude of cells interspersed therein.

1,821,121. TORPEDO SHAPED SUSPENDED RAILWAY VEHICLE FOR HIGH SPEEDS. CURT STEDEFELD, Heidelberg, Germany. Filed Apr. 27, 1928, Serial No. 273,348, and in Germany Apr. 30, 1927. 15 Claims. (Cl. 105—2.)



1. Torpedo shaped suspended railway vehicles for high speeds adapted to be formed into trains, in which an end of each vehicle is removable in such a manner that the vehicles can be arranged close behind one another with shortened ends of substantially equal cross section.

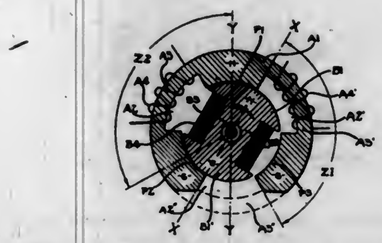
1,821,122. BEARING SLEEVE AND METHOD OF MAKING SAME. BERGER STOCKFLETH, Niles, Mich., assignor to Hydraulic Pressed Bearing Company, Wilmington, Del., a Corporation of Delaware. Filed July 17, 1929. Serial No. 378,927. 3 Claims. (Cl. 29—149.5.)



2. In the process of making flanged bearing sleeves by the pressure method, the step of providing a sleeve back with deep clearance grooves in its ends, and later reducing the size of said grooves in suitable dies.

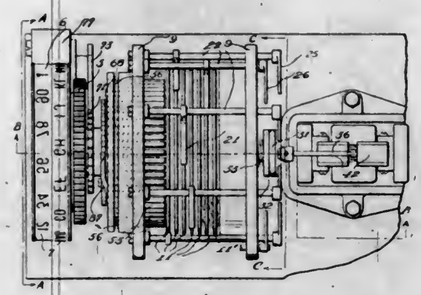
3. A blank flanged back for a bearing sleeve, the back having circumferential grooves at the juncture of the flanges and body of greater cross-section than desired in the finished shell.

1,821,123. OSCILLATING MOTOR. HARVE R. STUART, Springfield, Ohio. Filed July 21, 1928. Serial No. 294,482. 14 Claims. (Cl. 172—126.)



3. An electric actuating device comprising two members mounted for relative oscillatory movement, complementary electromagnetized pole faces for one of said members which faces are circumferentially disposed and respectively parted by interpolar gaps to constitute a relatively short pole face span length and a relatively long pole face span of not less than semi-circular length, and pole face means for the other of said members adapted to magnetically cooperate with the aforesaid unequal face span lengths and thereby obtain the maximum amount of oscillatory movement.

1,821,124. SELECTING APPARATUS. CARL W. SWAN, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 12, 1929. Serial No. 332,136. 64 Claims. (Cl. 178—34.)



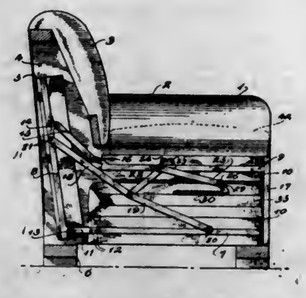
1. In combination, a rotatable arm, a plurality of elements circumferentially arranged around the path of movement of said arm whereby said arm moves past each of said elements in succession and means responsive to received code combinations of signaling conditions for shifting said arm in and out of alignment with said elements as said arm approaches each said element in its rotation.

1,821,125. FENCE AND POST ANCHOR. MICHAEL C. THOM, Carey, Ohio. Continuation of application Serial No. 420,189, filed Jan. 11, 1930. This application filed Oct. 9, 1930. Serial No. 487,601. 7 Claims. (Cl. 189—92.)

1. An anchor of the class described including a relatively stiff strip, a head having a transverse depression constituting a bearing seat for one end portion of the strip, a strap struck from the depressed portion and working in the strip and pivot means carried by the strip and extending between said strap and the depressed portion.



1,821,126. CONVERTIBLE FURNITURE. JOSEPH R. THOMAS, Fort Madison, Iowa, assignor of one-half to The Rome Company, Inc., a Corporation of New York. Filed Aug. 3, 1927. Serial No. 210,415. 19 Claims. (Cl. 5—12.)

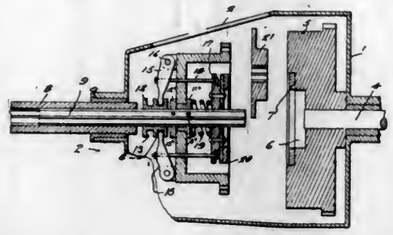


1. Convertible furniture comprising a chair like body portion, a plurality of bed frame constituting sections, links pivotally interconnecting said bed frame sections and permitting of relative swinging and pivotal movement therebetween, the back of said body portion having a fixed chamber formed therein adapted to receive, at times, one of said frame sections therein in substantially vertical position and the lower portion of said body portion being adapted to receive the remaining frame sections therein in superposed relation, guide means upon the opposite sides of said body portion for directing one of said frame sections into said chamber, pivotally interconnected motion transmitting and converting levers adjacent the opposite sides of the body portion having certain of their ends pivoted to portions of certain of said frame sections and their remaining ends pivoted to the inner sides of said body portion, toggle levers mounted adjacent the opposite sides of said body portion having certain of their ends pivoted thereto and the remaining ends thereof pivoted to one of said frame sections, and mattress sections carried by each of said frame sections.

1,821,127. CLUTCH. PERRY VANDEVEER, Louisville, Ky., assignor of one-half to Austin E. Walsh, Louisville, Ky. Filed June 11, 1928. Serial No. 284,628. 12 Claims. (Cl. 192—110.)

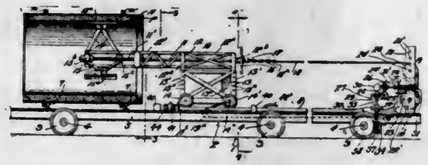
1. In a clutch construction and in combination, a casing, a shaft section journaled in one portion of the casing, a tubular shaft section journaled in an opposite por-

tion of the casing and aligned with the first-named shaft section, a shaft section splined and movable endwise in said tubular shaft section, and also aligned with the first-named shaft section, a clutch portion carried by the first-named shaft section and disposed in the casing, a clutch portion detachably connected with the first-named clutch portion and loose on the third-named shaft section, and a clutch portion splined on and removable from



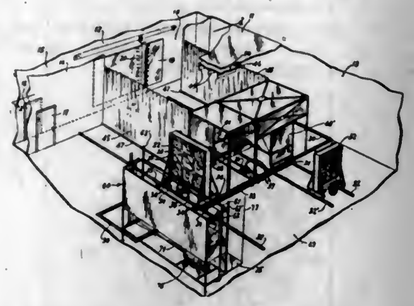
the third-named shaft section and interposed between the other clutch portions, whereby when the second-named clutch portion is disconnected from the first-named clutch portion and moved away from the same; and the third-named shaft section is moved away from the first-named shaft section, the third-named clutch portion is rendered accessible and can be removed from the third-named shaft section.

1,821,128. APPARATUS FOR STRIPPING MOLDS FROM PIPES. ROBERT M. WEIR, Montreal, Quebec, Canada, assignor to Asphalto Concrete Corporation, a Corporation of New York. Filed Oct. 26, 1928. Serial No. 315,162. 17 Claims. (Cl. 25—1.)



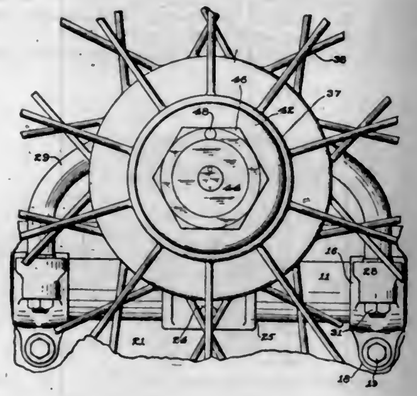
17. Apparatus for stripping molds from pipes embodying, in combination, a portable truck, a pair of transverse section tracks extending transversely on said truck and adapted to receive a mold containing the pipe, means on the mold for preventing a longitudinal movement in relation to the said tracks, a second pair of transverse sectional tracks on said structure extending parallel to the first-mentioned tracks, a third pair of tracks on said structure extending longitudinally thereof, a pipe-stripping mechanism embodying a gripping device movable within the pipe and having arms expansible into contact with the interior surface of the pipe, means for exerting a pull horizontally on said gripping device to separate the pipe from its mold and to rest the same upon said second pair of tracks, a movable support operable to contact, move with and support the pipe during its movement out of the mold, means for moving said movable support into contact with the mold near the beginning of its outward movement from the mold, means for releasing said movable support from contact with the mold when the pipe has reached its outward limit of movement, a carriage on which said gripping device is mounted, and means operable automatically by the carriage for moving said movable supporting element into contact with the pipe near the beginning of its outward movement, and means for releasing said movable support from contact with the pipe near the outward limit of said separating movement.

1,821,129. PHOTOGRAPHIC COPYING APPARATUS. ELLIS WEISKER, New York, N. Y. Filed Feb. 18, 1927. Serial No. 169,198. 26 Claims. (Cl. 88—24.)



5. Photographic copying apparatus, comprising a light-sealed room, a copyholder, means to illuminate copy held thereon, a camera embodying a combined movable lens support and light-sealing partition, light-excluding means movable with said partition to exclude light of the copy-illuminating means from a portion of the room, and an independently adjustable focusing screen mounted in the darkened portion of the room, the said lens support and focusing screen being also movable as a whole relatively to the copyholder.

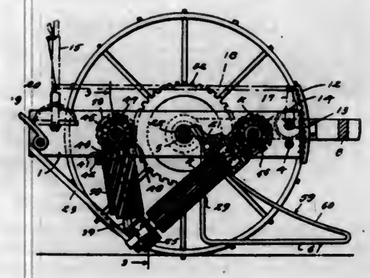
1,821,130. LOCK. JOHN J. WHARAM, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Sept. 3, 1929. Serial No. 389,895. 1 Claim. (Cl. 70—90.)



In a lock, a hub supporting member, a hub securing nut threaded on said member, an annular groove in said nut, a wrench ring rotatably mounted on the nut enclosing said groove, a shear pin normally holding the wrench ring from rotation relative to the nut, and a retaining pin extending from said ring into said groove permitting rotary movement and preventing axial movement of the nut relative to the wrech ring, and means for locking said nut from rotation relative to said hub supporting member.

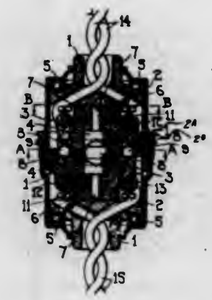
1,821,131. MACHINE FOR PULLING AND GRINDING STALKS. JAMISON B. BAILEY, Van Alstyne, Tex. Filed July 17, 1930. Serial No. 468,715. 8 Claims. (Cl. 55—118.)

1. A machine of the character stated, comprising a wheel supported frame, stalk pulling rollers rotatably supported in an upwardly and forwardly inclined position from the frame, stalk grinding means supported from the frame rearwardly of the pulling rollers and adapted



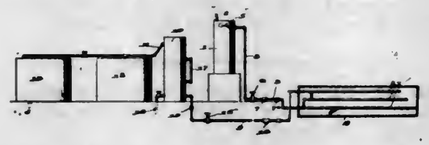
to receive the stalks therefrom, and means connecting the rollers and said first means to the wheels for operation thereby.

1,821,132. SWIVEL CONNECTION FOR ELECTRIC CABLES AND THE LIKE. CHARLES GOATER BAKER, Timaru, New Zealand. Filed Jan. 26, 1928, Serial No. 249,702, and in New Zealand Oct. 31, 1927. 1 Claim. (Cl. 173—324.)



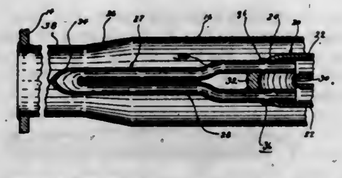
A swivel connection for electric cables, comprising a casing formed in abutting halves threaded one upon another in such manner that they are adjustable as to length; a lock nut on one of the said casing halves, and adapted to coact with the edge of the said other half of the casing; substantially cylindrical members of insulating material mounted within the said casing and in substantial axial alinement with each other, and rotatable independently of and with respect to each other and to the casing; grooved metal rings mounted in the adjacent ends of the said cylindrical members; metallic balls mounted between the said grooved rings; cables leading into the casing through the respective ends thereof; lugs on the said metal rings for connecting the latter to the said cables; a metal ball of relatively large diameter; metallic cups mounted substantially at the axial center of the said cylindrical members, the said cup retaining the metal ball between their adjacent faces; the said cylindrical members having recesses along their axial centers; stems mounted on said metallic cup and seated in said recesses; spring washers in said recesses around the stems, and acting on the said metallic cups to hold the latter in contact with the ball mounted between them; and lugs on the stems of the said metallic cups whereby the latter are connected to the said cables.

1,821,133. APPARATUS FOR TREATING EMULSIFIED OIL. FRANK C. BAKER, ROGER J. FLECKENSTEIN, and LESTER M. LANDMAN, Fort Worth, Tex., assignors to Texas Pacific Coal and Oil Company, Fort Worth, Tex., a Corporation of Texas. Filed Nov. 16, 1927. Serial No. 233,699. 3 Claims. (Cl. 196—5.)



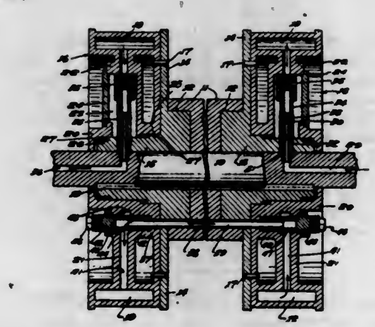
3. In an oil separating device, the combination of a source of supply and of a pipe line connected therewith, for conducting oil to a heating unit, a heating unit, a coil of pyramidal form located therein, said coil consisting of a series of tiers of loops of different sizes, graduated so that the largest loop is on the bottom, with means for separating, spacing and supporting the adjacent tiers of loops from each other, said supporting means running transverse of the longest dimension of each loop of the coil, and extending outside of the heating unit, with means for playing the products of combustion on the coil and its supporting means to heat the oil contained within the coil.

1,821,134. SUPERHEATER UNIT AND BOILER USING SAME. JOHN A. BARNES, Chappaqua, N. Y., assignor to The Superheater Company, New York, N. Y. Filed May 31, 1930. Serial No. 457,998. 5 Claims. (Cl. 122—462.)



4. The combination in a heat absorbing element of a main unit comprising a pair of parallel pipe lengths connected at one end by a return bend, an auxiliary unit adapted to withdraw the central core of steam out of one of said lengths adjacent said bend and to return it to the other of said lengths adjacent said bend.

1,821,135. CIRCULATING SYSTEM FOR BRAKE FLANGES. LEE J. BLACK, Beaumont, Tex. Filed June 6, 1929. Serial No. 368,916. 12 Claims. (Cl. 188—264.)



1. A winding drum having a brake flange formed to provide a cooling chamber extending around its periphery, a shaft upon which the drum and brake flange is mounted

and having a bore, the brake flange having a chamber formed between the shaft and the periphery of the brake flange, means for communicatively connecting the bore of the shaft to the peripheral chamber including a nipple extending out from the shaft, a packing surrounding the nipple, a gland surrounding the nipple and bearing against the packing, and a sleeve nut engaging the gland and bearing against the inside wall of the peripheral chamber and communicating with the interior of the chamber.

1,821,136. HINGE. VINCENT J. BOLAKOWSKI, South Chicago, Ill. Filed Aug. 20, 1930. Serial No. 476,684. 3 Claims. (Cl. 16—163.)



1. A hinge of the character described comprising an intermediate leaf and a pair of end leaves hingedly connected to the opposite ends of the intermediate leaf, one of the end leaves adapted to be mounted on a door frame, the other of the end leaves adapted to be secured to the door, a spring operatively engaged with the last named end leaf, in a manner to yieldingly urge the same in one direction, relative to the intermediate leaf, and a stop strip mounted on one side of the intermediate leaf for abutting engagement with the door, in a manner to limit the swinging movement of the last named end leaf, under the impulse of the spring.

1,821,137. HOLDER FOR MIRRORS. CHARLES FREDERICK BOSTOCK, Little Silver, N. J., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Apr. 11, 1930. Serial No. 443,315. 4 Claims. (Cl. 45—98.)



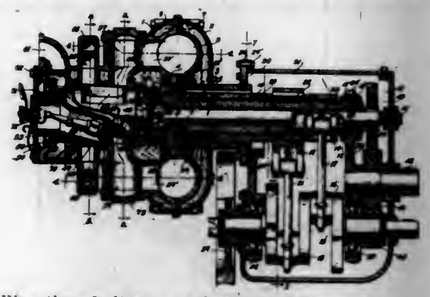
1. An article of the class described having, in combination, a frame having its front and back open with its rear portion provided with a forwardly directed shoulder, a mirror for the front of the frame, a bezel having projections adapted to be snapped back of the inner edge of the front part of said frame so as to cause the bezel to be held by said projections and a body portion thereof engaging the opposite side of said edge of the frame, a back for the frame, and a resilient cushion interposed between said back and the mirror for holding the back against said shoulder and the mirror against said bezel.

1,821,138. TREATMENT OF BLACK LIQUOR. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Filed May 19, 1921, Serial No. 470,962. Renewed Oct. 25, 1930. 9 Claims. (Cl. 23—49.)

1. The method of treating black liquor, which comprises adding thereto an aluminum compound capable of combining with the free caustic alkali to form alkali metal aluminate, and precipitating aluminum hydroxide substantially free from inorganic impurities from the resulting solution.

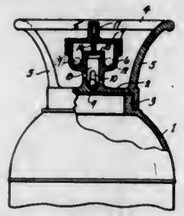
1,821,139. INTERNAL COMBUSTION ENGINE. FRANK A. BULLINGTON, Kansas City, Mo. Filed Aug. 24, 1925, Serial No. 52,070. Renewed Nov. 12, 1930. 39 Claims. (Cl. 123—18.)

1. In a four cycle internal combustion engine, a stator having an annular passage therein, pairs of pistons mounted for oscillation in said passage and defining working chambers therebetween, and positively operated means con-



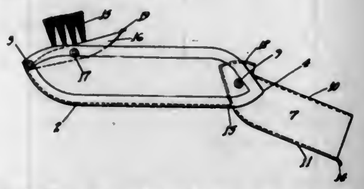
trolling the admittance of fuel to and the exhaust of the products of combustion from said working chambers whereby each thereof has a four stroke cycle of operation.

1,821,140. FIRE EXTINGUISHER. JOHN T. CARROLL, Tacoma, Wash., assignor of forty-nine one-hundredths to Samuel B. Hunter, Tacoma, Wash. Filed Nov. 4, 1929. Serial No. 404,611. 3 Claims. (Cl. 116—114.)



1. In a device of the character described, an indicator comprising a receptacle fixed to a part of the device and formed with a base socket and having a channel encircling the socket, a ball adapted to be contained within the socket when the device is in upright position and to be displaced therefrom by its inversion and to then be contained within the channel of the receptacle when the device is returned to upright position and a valve member arranged to overlie the socket and to move by gravity from and against the entrance to the socket.

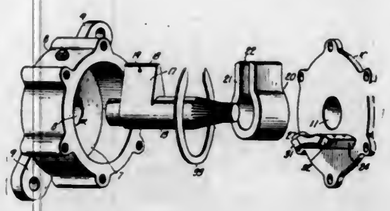
1,821,141. HOLDER OR APPLIANCE FOR COSMETICS AND THE LIKE. ROBERT T. CHRISTY, New York, N. Y., assignor to The Kurlash Company, Inc., Rochester, N. Y. Filed Nov. 22, 1929. Serial No. 409,012. 3 Claims. (Cl. 132—79.)



3. A holder for cosmetics and the like, said holder comprising a substantially deep channel-like casing open along one edge, a member pivoted adjacent one end of said casing and extending more than half the length of said casing, said member being adapted to swing into said casing between the side walls thereof, an extensible support for a piece of cosmetic material, carried by said member, a second member pivoted in the open portion of said casing adjacent its upper edge and adapted to swing into and out of said casing, a stop to limit the movement of said second member in its open or closed position, and a brush carried by said second member.

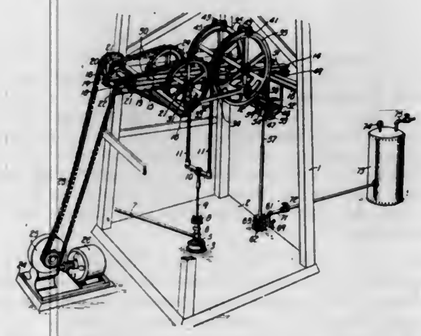
CARNEGIE LIBRARY OF ATLANTA

1,821,142. SHOCK ABSORBER. FREDERICK W. DAVIS, Kansas City, Mo.; Rebecca A. Davis administratrix of said Frederick W. Davis, deceased. Filed Sept. 26, 1929. Serial No. 395,302. 11 Claims. (Cl. 188—89.)



1. In a shock absorber, a liquid containing housing, a blade rotatable in the housing, a yoke mounted on the blade having limited free movement relative to the blade and adapted to move the liquid, a partition dividing the housing into opposite portions and provided with an aperture for flow of liquid from one portion to the other, and means movable by said yoke for controlling the effective area of said aperture.

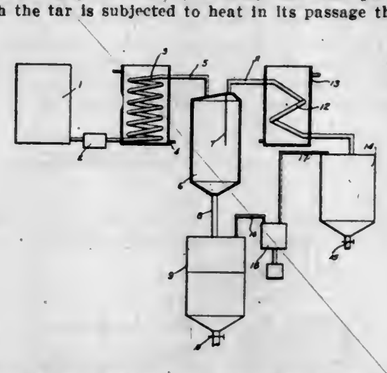
1,821,143. PUMPING APPARATUS. ARCHIE N. DAWLEY, Tonkawa, Okla. Filed Aug. 24, 1928. Serial No. 301,775. 5 Claims. (Cl. 74—71.)



1. In a pumping apparatus, a support, oscillating members mounted on the support, drive members rotatably mounted on the support, connecting rods between the drive members and the oscillating members to impart an oscillating movement to the oscillating members upon rotation of the drive members, flexible connections attached to the oscillating members and to the support, pulleys engaging the flexible connections, a yoke for rotatably mount the pulleys, and counterbalance means engaging the yoke for the purpose set forth.

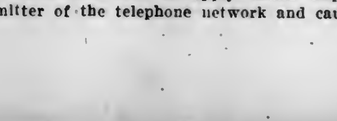
1,821,144. DISTILLATION PROCESS. JOHN V. E. DICKSON, Woodcliff-on-Hudson, N. J., assignor to The Barrett Company, a Corporation of New Jersey. Filed Feb. 13, 1923. Serial No. 618,772. 7 Claims. (Cl. 196—76.)

4. In a process of distilling coal tar to recover volatile oils therefrom and produce a pitch residue, wherein the tar is heated to distillation temperature while confined in and flowing through a heated zone and vaporization of the volatile oils is thereafter effected by discharging the heated tar into a chamber of low pressure relative to that of said heated zone, the improvement which comprises passing said tar through said heated zone at an increased rate of flow amounting to not less than one-tenth of the cubical capacity of said zone per minute, and supplying heat to the tar while passing through said zone at a rate sufficient to elevate it to distillation temperature prior to its discharge therefrom, whereby the time period to which the tar is subjected to heat in its passage through



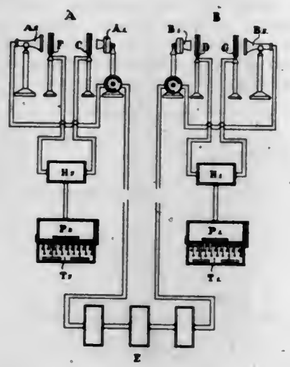
the zone is diminished thereby lowering the extent of thermal decomposition of the tar and increasing the oil yield, and recovering separately the volatile oil content of the tar liberated in the vaporization chamber and the residual pitch.

1,821,145. SEALING DEVICE. FRANK J. DION, Boston, Mass. Filed Aug. 8, 1929. Serial No. 384,439. 4 Claims. (Cl. 70—122.)



1. The combination of a drive shaft, an operative device, coupling means for holding said shaft and device in operative relation, and a protective means to prevent manipulation of said coupling means by unauthorized persons, said protective means consisting of an integral body having one part permanently attached to said operative device and another part engaging said coupling to prevent manipulation thereof.

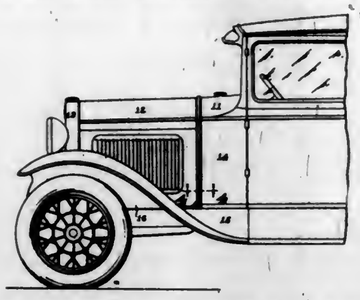
1,821,146. TELEGRAPHIC COMMUNICATING SYSTEM. JOHN VICTOR FOLL, Croydon, England. Filed Dec. 17, 1929, Serial No. 414,698, and in Great Britain Dec. 21, 1928. 9 Claims. (Cl. 179—4.)



1. The method of passing telegraphic impulses over a telephone network which consists in causing a buzzer which emits a distinctive note to apply sound impulses to a transmitter of the telephone network and causing the

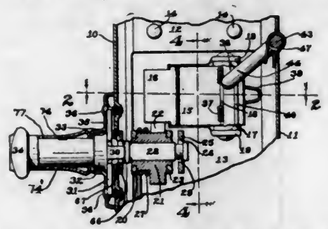
impulses reproduced at the telephonic receiver to be picked up by a microphone which is tuned to be sensitive only to the distinctive transmitted buzzer note.

1,821,147. COWL MOLDING. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Jan. 16, 1930. Serial No. 421,200. 4 Claims. (Cl. 296—29.)



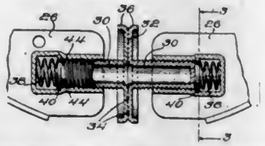
1. In a vehicle, a vehicle chassis having a cowl member mounted thereon, an inverted U-shaped ornamental cowl molding disposed around said cowl, one end of which is anchored thereto adjacent to said chassis, and tensioning means secured to said molding at a point spaced from its other end, said tensioning means extending through the cowl in position spaced from the bottom thereof, whereby actuation thereof from above the chassis will draw the molding into engagement with the full periphery of the cowl.

1,821,148. DOOR LATCH. JOSEPH GALAMB, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Aug. 31, 1929. Serial No. 389,658. 6 Claims. (Cl. 292—196.)



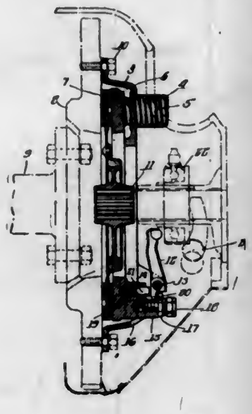
1. In a door latch for sheet material doors, an outside door handle comprising a barrel having a shank extending inwardly through the outside door panel, a key-operated lock adapted to be inserted into said barrel from the outer end thereof, and means made inaccessible by locking the device for securing said lock in said barrel.

1,821,149. BRAKE SHOE CONNECTING MEANS. DAVID L. GALLUP, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 12, 1928. Serial No. 260,858. 9 Claims. (Cl. 188—79.5.)



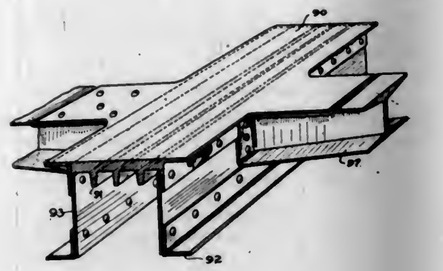
4. A connecting device comprising two generally cup-shaped elements including flat flanges secured together to form a collar and including exteriorly-threaded tubular coaxial bosses.

1,821,150. FRICTION CLUTCH. DAVID E. GAMBLE, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 19, 1929. Serial No. 386,854. 1 Claim. (Cl. 192—68.)



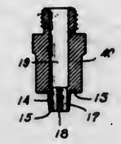
In a friction clutch, the combination of a cover plate having openings therein, a pressure ring having posts projecting outwardly through said openings, lugs on the cover plate adjacent said openings, wear plates removably secured on the outer ends of the posts and projecting inwardly beyond the posts, levers pivotally mounted in said lugs, projections on the outer ends of said levers, and spring-pressed studs in the posts bearing against the said projections and holding said projections in contact with the wear plates.

1,821,151. CAR CONSTRUCTION. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed May 16, 1929, Serial No. 363,550. Divided and this application filed Oct. 30, 1930. Serial No. 492,230. 4 Claims. (Cl. 105—414.)



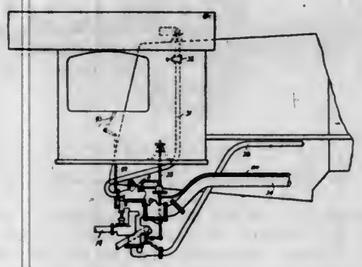
1. A center construction for a railway car comprising rolled steel center sills, and a cast metal cover plate.

1,821,152. PUNCHING AND FASTENER-INSERTING APPARATUS. SYLVESTER L. GOOKIN, Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 3, 1928. Serial No. 297,197. 19 Claims. (Cl. 218—15.)



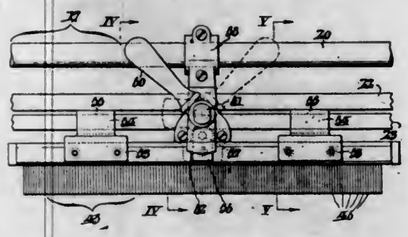
10. A punching machine comprising, in combination, a solid flat punch-bed, a blunt tubular punch arranged to cooperate therewith, and mechanism arranged to effect relative punching movement of said punch and said punch-bed, said punch having a non-circular perimeter and one or more circular chip-ducts.

1,821,153. EXHAUST STEAM INJECTOR. JOSEPH F. GRIFFIN, Teaneck, N. J., and ARTHUR WILLIAMS, Flushing, N. Y., assignors to The Superheater Company, New York, N. Y. Filed Sept. 6, 1929. Serial No. 390,817. 29 Claims. (Cl. 103—265.)



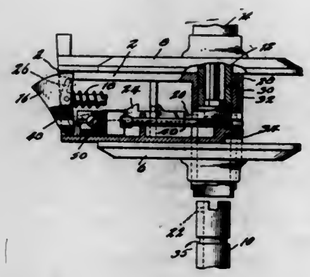
1. In an exhaust steam injector comprising a water supply valve and a main live steam supply valve, mechanical means for operating said water valve, said means comprising a single manually operable control means, and means associated with said water valve operating means for causing said main steam valve to be opened after said water valve is opened.

1,821,154. WELT CLOSING MECHANISM FOR FULL FASHIONED HOSIERY MACHINES. JOSEPH HAINES, Jr., Meadowbrook, Pa., assignor to Haines Hosiery Mills Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 12, 1930. Serial No. 443,708. 4 Claims. (Cl. 66—96.)



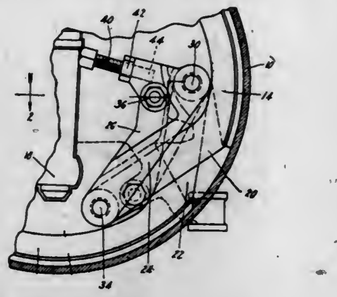
1. The combination in a full fashioned hosiery knitting machine embodying a series of needles, and narrowing mechanism capable of dipping movement toward and away from the needles; of welt closing mechanism comprising a welt bar adapted for application to the narrowing mechanism, means for horizontally and vertically allocating the welt bar on said narrowing mechanism, and a handle with a cam swingable over the welt bar to releasably clamp it in place so that the fabric loops thereon may be automatically transferred to the needles by dipping movement of the narrowing mechanism to close the welts of stockings knit on the machine.

1,821,155. LOCK. WILLIAM FREDERICK HAUSMANN, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 15, 1929, Serial No. 347,321. Renewed Nov. 8, 1930. 5 Claims. (Cl. 70—29.)



1. A lock having, in combination, a face plate, a knob having a shank, a member in engagement with said shank for holding the shank from outward movement but permitting turning movement thereof and adapted to be retracted to permit removal of the knob and shank, and means accessible through said face plate for moving said member into and out of such holding engagement with said shank comprising a screw having its inner end in swivel connection with said member and its head adapted to be engaged by a screw-driver inserted through the face plate.

1,821,156. BRAKE. ERIK J. HIRVONEN, Pontiac, Mich., and WALLACE W. TUTTLE, deceased, Putnam, Conn., by Henry A. Tuttle, administrator, Upton, Mass., assignors, by mesne assignments, to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Apr. 26, 1923, Serial No. 634,855. Divided and this application filed Sept. 29, 1927. Serial No. 222,899. 20 Claims. (Cl. 188—194.)



1. A brake comprising shoes overlapping at their anchored ends, in combination with a separate reinforcing member to which said shoes are separately pivotally anchored.

1,821,157. METHOD OF MAKING CONTAINER CLOSURES. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed June 23, 1928. Serial No. 287,862. 5 Claims. (Cl. 113—121.)

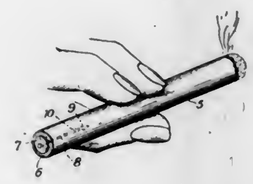


1. The method of producing a multipart closure for containers from a one-piece blank without spoilage or waste, which consists in subjecting a flat blank to a forming operation whereby the blank is altered into a form which contains the closure elements, ultimately to be produced, in partially formed condition, then subjecting this altered blank to a cutting operation resulting in an unfinished closure element and a finished closure element, then subjecting the unfinished closure element to another forming operation to produce a second finished closure element.

1,821,158. DIRIGIBLE CONSTRUCTION. LEVI S. HOWARD, Oakland, Calif. Filed Sept. 27, 1927. Serial No. 222,239. 9 Claims. (Cl. 244—6.)

1. In a dirigible, a hull, frames yieldably and resiliently mounted on and extending from the hull, and a plurality of power units pivotally mounted on the extended ends of the frames, said power units having under-carriages to facilitate the landing and taking off of the dirigible.

1,821,159. ATTACHMENT FOR CIGARETTES. JAMES F. HUGHES, New York, N. Y. Filed Mar. 26, 1930. Serial No. 439,167. 3 Claims. (Cl. 131—52.)



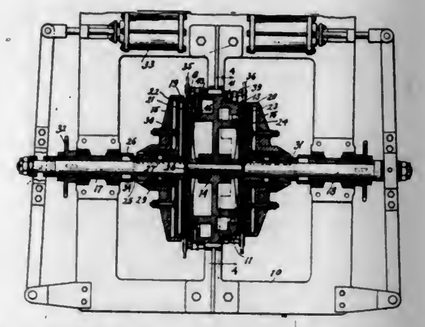
1. The combination with a cigarette, of a disc member partially closing an end thereof, and a pin penetrating the cigarette body and having a substance thereon adapted to extinguish the fire at a predetermined point, said disc member adapted to prevent the tobacco fibres from entering the mouth, substantially as set forth.

1,821,160. MOUTHPIECE FOR CIGARETTES. JAMES F. HUGHES, New York, N. Y. Filed July 19, 1930. Serial No. 469,167. 4 Claims. (Cl. 131—52.)



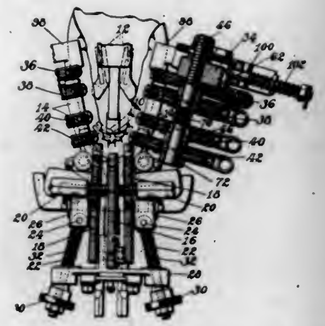
4. A cigarette mouth-piece comprising a disc member disposed against an end thereof, and a prong member having serrated edges penetrating the cigarette tobacco and holding the disc member in position, substantially as set forth.

1,821,161. BEAD FORMING MACHINE. WALTER E. HUMPHREY, Jeannette, Pa., assignor to The Mason Tire & Rubber Corp., Kent, Ohio, a Corporation of Ohio. Filed Mar. 18, 1930. Serial No. 436,756. 10 Claims. (Cl. 154—9.)



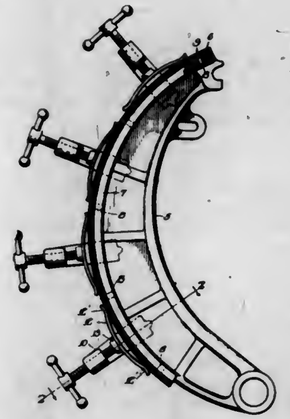
3. In apparatus of the character described, a mandrel comprising a plurality of rotatable drums having work-receiving surfaces upon which material may be wound to form ring-shaped structures of different diameters, said drums being arranged in telescopic relation for axial relative movement whereby the ring-shaped structure formed on one of said drums may be stripped therefrom by another of said drums.

1,821,162. PULLING-OVER MACHINE. BERNHARDT JORGENSEN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 23, 1928. Serial No. 314,480. 28 Claims. (Cl. 12—4.)



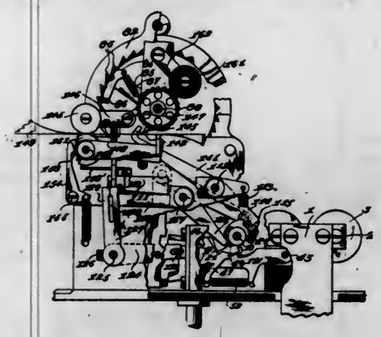
1. In a machine of the class described, the combination with means for pulling an upper over a last, of upper-fastening means movable relatively to said upper-pulling means laterally of the shoe into position to drive a plurality of fastenings at each side of the forepart to fasten the upper over the bottom of the last, said fastening means comprising parts adjustable to vary the positions lengthwise of the shoe of the foremost side fastenings relatively to the positions of other side fastenings driven by said means.

1,821,163. CLAMP. HOWARD E. KING, Buffalo, N. Y., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1929. Serial No. 408,647. 2 Claims. (Cl. 144—304.)



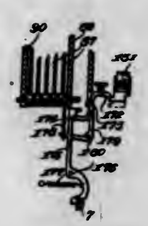
1. A C-clamp having a jaw at one end thereof and a bearing portion at the other end thereof offset from alignment with the jaw, a screw operating through the bearing portion movable toward, away from or past the jaw, and a yieldable pressure member at the inner end of said screw adapted to cooperate with said jaw and lying transversely of the plane of the C beam and having yielding downward projecting arms with upturned ends to press and hold longitudinally stretched the brake band.

1,821,164. PRINTING TELEGRAPHS. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 16, 1928. Serial No. 270,387. 68 Claims. (Cl. 178—34.)



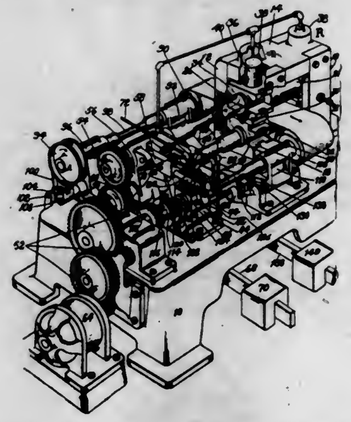
1. In a printing telegraph, a typewheel, a typewheel stop, a plurality of selector rings operated in accordance with code combinations of impulses for conditioning said typewheel stop to bring said typewheel to a stop position and a stop ring cooperating with said typewheel stop to bring said typewheel to a stop.

1,821,165. SELECTIVE SIGNALING AND APPARATUS. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1928. Serial No. 270,389. 64 Claims. (Cl. 178—4.1.)



1. In a printing telegraph receiver, a motor, a normally open circuit therefor, selector apparatus, an electromagnet responsive to received code combinations of impulse conditions for operating said selector apparatus, said magnet being responsive to the first received impulse for closing said motor circuit and said selector apparatus being operative in response to a predetermined code combination of conditions for opening said motor circuit and means operative following the opening of said motor circuit for locking said circuit open.

1,821,166. ART OF MAKING SHEET MATERIAL. CUTLER D. KNOWLTON, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 21, 1925. Serial No. 45,080. 57 Claims. (Cl. 80—32.)

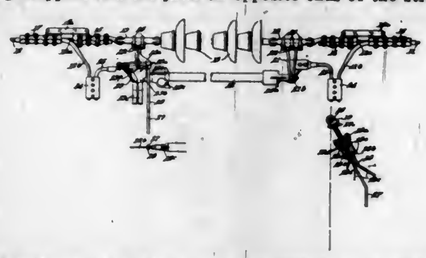


57. An apparatus for operating upon sheet-material comprising a pair of reducing rolls between which the material may pass, means under the influence of the material for controlling the relation between the rolls, a material-supplying reel situated at the incoming side of the rolls, a material-receiving reel situated at the outgoing side of the rolls, means for applying at the reels forces effective to draw the material, and means governed by movement of the reels for controlling the forces which they exert.

1,821,167. STRAIN-TYPE DISCONNECTING SWITCH. CARL G. KOPPITZ, Greensburg, Pa., assignor to Railway and Industrial Engineering Company, Greensburg, Pa., a Corporation of Pennsylvania. Filed Jan. 13, 1926. Serial No. 81,117. 5 Claims. (Cl. 200—48.)

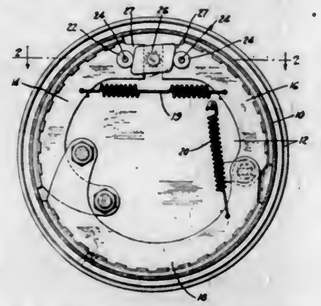
1. The combination with a string of strain insulators for mechanically interconnecting two sections of a high-

tension line, of a switch including an arm, a hinge support therefor and jaws and means for supporting the hinge support and the jaws on opposite ends of the string



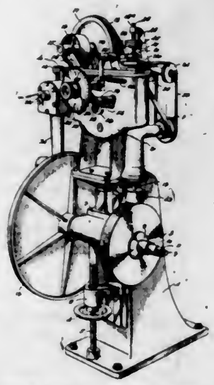
of insulators, said means including means for angularly adjusting the position of the hinge support and the jaws about the string of insulators as axis.

1,821,168. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Feb. 14, 1927, Serial No. 168,044. Divided and this application filed Apr. 1, 1929. Serial No. 351,569. 13 Claims. (Cl. 188—78.)



1. A brake shoe having a stiffening web and rollers on opposite sides of said web a short distance from its end, in combination with a slotted cam straddling the end of the stiffening web and engaging the rollers.

1,821,169. ABRASIVE TESTING MACHINE. HARLEY H. LA VERCOMBE, Detroit, Mich., assignor to Abrasive Engineering Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 28, 1925. Serial No. 52,974. 5 Claims. (Cl. 73—51.)

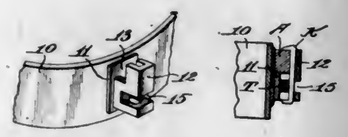


1. In a machine for testing abrasive wheels, means for rotatably supporting an abrasive wheel, means for supporting a test piece in contact with the periphery of said wheel, and a variable speed driving mechanism through which the wheel supporting means is rotated, means for adjusting said mechanism according to the distance of said test piece from the center of said wheel, whereby said supporting means is rotated at speeds varying inversely as the diameter of the wheel.

1,821,170. PROCESS FOR FRACTIONATION OF COKE OVEN GAS. RICHARD LINDE, Munich, Germany, assignor to Gesellschaft fur Linde's Eismaschinen A. G., Hollriegelskreuth, Germany, a Corporation of Germany. Filed Apr. 23, 1928, Serial No. 272,355, and in Germany May 2, 1927. 3 Claims. (Cl. 183—115.)

d. A preliminary treatment preparatory to the fractionation of coke oven gases at low temperatures which comprises separating from said gas hydrocarbons containing triple bonds, before any portion of the gases are liquefied, to such an extent that the said hydrocarbons are not deposited in solid form in the subsequent liquefaction and fractionation.

1,821,171. ORTHODONTIC APPLIANCE. SPENCER R. ATKINSON, Pasadena, Calif. Filed Oct. 28, 1929. Serial No. 402,954. 7 Claims. (Cl. 32—19.)



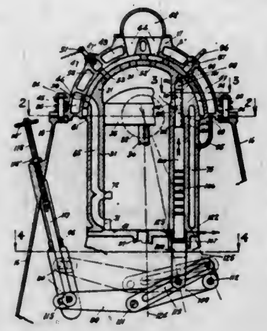
1. An orthodontia appliance, comprising a bracket, there being an arch-bow receiving notch formed in the upper inner portion of said bracket, the lower front portion of said bracket being provided with a wire receiving opening and said bracket being provided with a vertically disposed opening that intersects said arch receiving notch and said wire receiving opening.

1,821,172. TOY AIRPLANE. ROBERT M. BAYLIS, Dayton, Ohio. Filed Jan. 27, 1930. Serial No. 423,689. 15 Claims. (Cl. 46—50.)



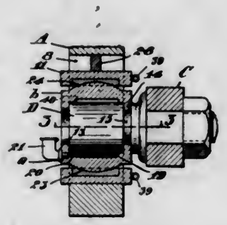
1. In a toy airplane, a longitudinal member, a pair of wings pivoted one to each side of said member, said wings being normally in an extended position, and an air pressure operated means to releasably hold said wings in a folded position.

1,821,173. FUEL INJECTION APPARATUS FOR INTERNAL COMBUSTION ENGINES. LEO BERNER, South Milwaukee, and PAUL LOHR, Milwaukee, Wis. Filed June 13, 1929. Serial No. 370,583. 11 Claims. (Cl. 123—139.)



1. In an internal combustion engine, the combination with an oscillatory cylinder provided with a pump casing, of a pump plunger working in said casing for delivering charges of liquid fuel into said cylinder, and means cooperating with said cylinder for producing relative reciprocatory motion between said cylinder and pump plunger.

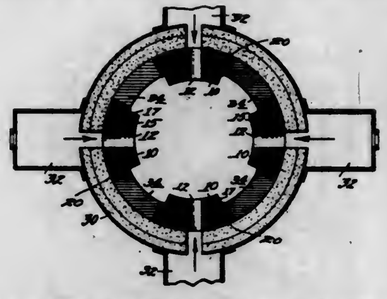
1,821,174. PITMAN CONNECTION. PEARL J. BOWMAN, Bell, and WILLIAM F. BOWMAN, Ocean Park, Calif., assignors of one-third to Warren B. Eberhart, Bell, Calif. Filed Mar. 14, 1928. Serial No. 261,641. 7 Claims. (Cl. 308—72.)



1. The combination of a pitman, a crank, a wrist-pin on the crank formed with a peripheral channel, a pair of journal box members, each including an end flange projecting into the channel on the wrist-pin, a dome on each journal box member, a pair of bearings having sockets in which said domes seat to form a ball and socket joint, and means for affixing said bearing on said pitman.

1,821,175. TUYÈRE BLOCK FOR METALLURGICAL FURNACES. DANIEL CUSHING, Cambridge, Mass. Filed Nov. 11, 1929. Serial No. 406,266. 1 Claim. (Cl. 266—41.)

A tuyère block adapted to form an integral part of a metallurgical furnace wall and comprising a single piece of refractory material having a tuyère opening formed therethrough and having inner portions of the side walls of said block substantially radial of the furnace when the block is in position for use and the outer portions

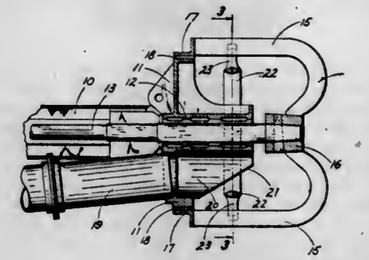


of the side walls being parallel and permitting inward and outward adjustment of said block relative to the axis of the furnace.

1,821,176. METHOD OF PREPARING RARE REFRACTORY METALS. FRANK H. DRIGGS, Bloomfield, and JOHN W. MARDEN, East Orange, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 1, 1928. Serial No. 309,682. 14 Claims. (Cl. 204—19.)

1. The method of preparing the rare refractory metals of the group known as tungsten, molybdenum, chromium and uranium, which comprises electrolytically decomposing a fused bath containing dissociable compounds of the rare refractory metal, said bath being comprised in major part of a chemical compound having a solubility towards the oxygen carrying compounds of said rare refractory metals to form compounds therewith substantially dissociable by the electric current.

1,821,177. AGITATING CUTTER FOR DREDGES. WILLIAM ROGER ELLIS, Washington, D. C. Filed Aug. 22, 1930. Serial No. 477,047. 9 Claims. (Cl. 37—67.)

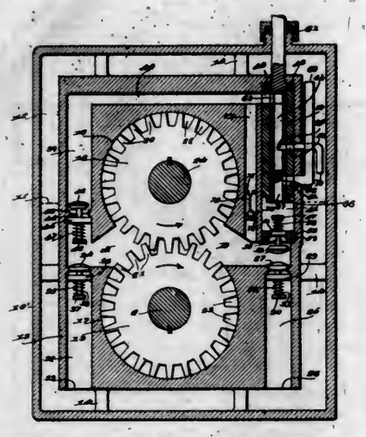


1. In a dredging apparatus, in combination, a suction pipe having an open end, a cutter rotatable about an axis spaced from the axis of said pipe and passing around the open end of said pipe, and means positioned across the open end of said pipe and spaced from the edge thereof in such a manner as to continuously restrict the effective opening thereof sufficiently to prevent the passage into the pipe of pieces of material sufficiently large to clog the same, said means being continuously movable with said cutter.

1,821,178. HYDRAULIC BRAKE. MARTIN M. FISHER, Seattle, Wash., assignor, by mesne assignments, to Hassett Brake Company, Yakima, Wash., a Corporation of Washington. Filed June 20, 1927. Serial No. 200,206. 5 Claims. (Cl. 188—92.)

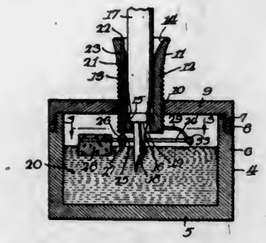
1. A hydraulic brake mechanism including pressure chambers and vehicle driven gears interposed between said

chambers causing either to act as a suction or pressure chamber dependent upon the direction of rotation of said gears, each chamber having a non-return oil supply de-



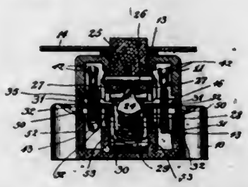
vice opening to suction and closing to pressure, and one of said chambers having a non-return air supply device opening to suction and closing to pressure.

1,821,179. COMBINED INKWELL AND PEN SUPPORT. JOHN F. GAIL, Evanston, Ill. Filed Nov. 22, 1928. Serial No. 321,117. 8 Claims. (Cl. 120—71.)



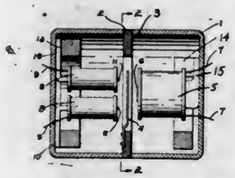
1. In an inkstand of the class described, the combination of a reservoir for containing a supply of ink, a cover removably mounted on said reservoir and provided with an apertured part adapted to support a penholder in position to close the aperture, said part being vertically adjustable relative to said reservoir so as to maintain a pen point carried by said penholder immersed in the ink in said reservoir between wide limits of ink level, and means carried by said part and controlled by the level of ink in said reservoir for indicating the proper position of vertical adjustment of said part.

1,821,180. ELECTRIC SWITCH. ARTHUR C. GAYNOR, Stratford, Conn. Filed Aug. 8, 1928. Serial No. 298,218. 17 Claims. (Cl. 200—67.)



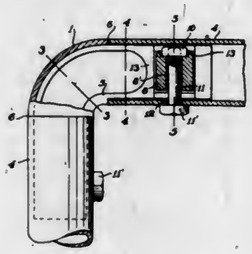
1. In an electric switch, a rocker; a crank; a spring interposed between the rocker and crank and adapted to cause the latter to oscillate with a snap action from one position of rest to another when the spring is carried by the rocker across the axis of oscillation of the crank; and a non-flexing, substantially rigid switch arm mounted on said crank for oscillation therewith and freely mounted on the crank for limited lateral swaying movement thereon.

1,821,181. METHOD AND APPARATUS FOR TRANSFORMING ELECTRICAL ENERGY. ROSS GUNN, Washington, D. C. Filed Mar. 6, 1929. Serial No. 344,802. 8 Claims. (Cl. 175—356.)



1. In a coupling device, the combination of a casing, a partition having an opening therethrough and disposed within said casing, a reed of magnetic material having a predetermined vibrational period disposed within the opening, an input coil having a core of magnetic material disposed on one side of said reed, and an output coil having a core of magnetic material disposed on the opposite side of said reed, said reed forming a part of the magnetic paths of both coils.

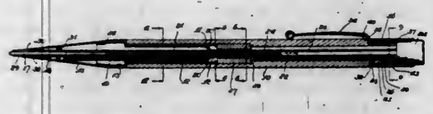
1,821,182. COUPLING DEVICE. CHARLES E. HOPPES, Springfield, Ohio, assignor to The Everwear Manufacturing Company, Springfield, Ohio, a Corporation of Ohio. Filed Nov. 8, 1926. Serial No. 146,949. 4 Claims. (Cl. 287—124.)



4. In a coupling of the character described, a tubular member to be coupled, a fitting provided with a pair of integral spaced-apart shanks for insertion in the end of said tubular member, the body of said fitting being formed with a slot terminating in the space between said shanks, a wedge insertable between said shanks prior to the insertion of the shanks in said tubular member to permit the wedge to lie wholly within said tubular member, and means operable from the exterior of said tubular member for actuating the wedge and thus forcing the shanks against the interior wall of said tubular member to clamp the same to the shanks.

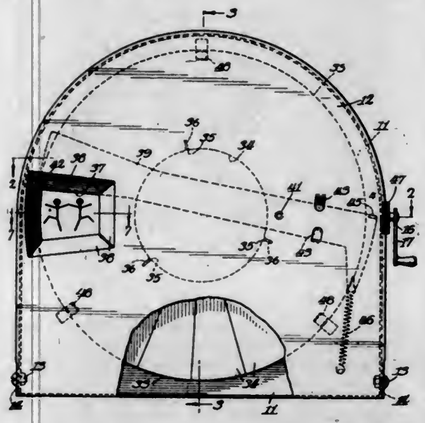
1,821,183. MECHANICAL PENCIL. CHARLES R. KEERAN, Evanston, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1927. Serial No. 197,793. 6 Claims. (Cl. 120—18.)

2. In a mechanical pencil, a tip comprising a tapered shell and a guide tube extending substantially throughout the length of said shell formed with a terminal portion exposed beyond the smaller end of the shell, said portion being larger than the remainder of the tube and providing



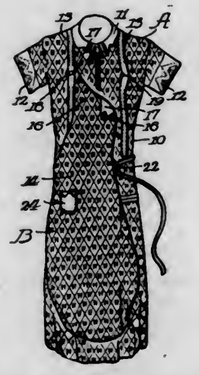
a shoulder abutting said end of the shell and the shell having an opening at its upper end adjacent the end of the guide tube for admitting a lead thereto.

1,821,184. MUSICAL TOY. OTTO A. LANGOS, Chicago, Ill. Filed Dec. 30, 1929. Serial No. 417,321. 13 Claims. (Cl. 46—46.)



1. In a toy of the character described, a casing, a plurality of reeds mounted in said casing, a rotatable drum in said casing having projections for actuating said reeds, intermittently operable means mounted on the casing, a shaft for rotating said drum and actuating said intermittently operable means, a disc removably mounted on said intermittently operable means, and means for exposing to view a portion of said disc at a time.

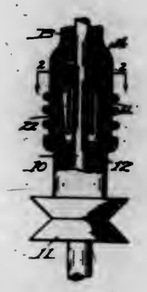
1,821,185. GARMENT. MICHAEL LUERY, Chicago, Ill. Filed Nov. 28, 1928. Serial No. 322,311. 2 Claims. (Cl. 2—74.)



1. In a combination garment dress, a pair of ornamental straps extending from the shoulder to the waistline and being attached to the dress at the shoulder and waistline

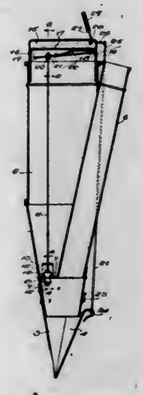
leaving unattached intermediate portions, a fastening device secured to the dress under each of said intermediate portions, an apron having a pair of straps extending laterally underneath said unattached portions and having cooperating fastening means for attachment to said fastening devices.

1,821,186. BOBBIN CLUTCH. GEORGE H. MAGRATH, Whitinsville, Mass. Filed July 25, 1928. Serial No. 295,212. 3 Claims. (Cl. 242—46.6.)



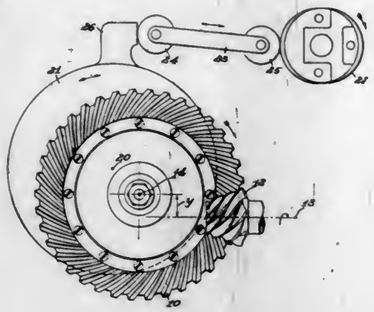
1. A bobbin clutch for a spindle having a blade and whirl, said clutch comprising a cap mounted on said blade and having a recess and an annular groove in its lower face, a bobbin driving and centering member comprising a band seated on said whirl and two sets of up-standing fingers alternately disposed on said band, one set of fingers being effective to center the bobbin and having their upper offset ends seated in said annular groove, and the other set of fingers being effective to drive the bobbin and having their upper offset ends yieldingly but unobstructably movable inward in said recess but limited as to outward movement by the peripheral flange of said recess, and means on said whirl to center said band thereon.

1,821,187. PLANT SETTER. EDWIN L. MASTERS, Chicago, Ill. Filed Jan. 3, 1928. Serial No. 244,265. 10 Claims. (Cl. 111—6.)



1. In a plant setter of the kind described, a reservoir having a discharge opening in the lower end thereof, a valve member for said discharge opening, said valve member having a closure portion on each side of said discharge opening, means for carrying said plant setter, and means adjacent said last mentioned means and operable by the natural grasping and releasing thereof for operating said valve member.

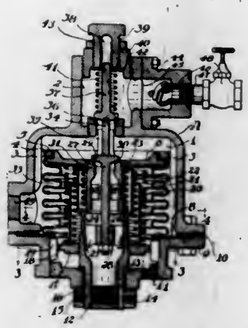
1,821,188. METHOD OF FINISHING GEARS. FREDERICK B. MCMULLEN, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed June 28, 1929. Serial No. 374,543. 13 Claims. (Cl. 29—90.)



1. The method of finishing one of a pair of gears that mesh with angularly disposed intersecting axes, which consists in meshing the gear with a gear cut to mesh with said gear with its axis offset from and angularly disposed to the axis of said gear, rotating the two last named gears in mesh and simultaneously rotating one of said gears about an axis parallel to and eccentric of the axis of said gear.

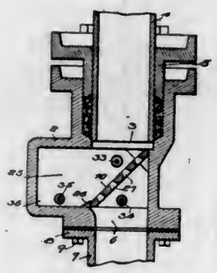
8. The method of finishing one of a pair of gears that mesh with their axes intersecting and angularly disposed to each other, which consists in selecting a gear adapted to mesh with said gear with its axis offset from and angularly disposed to the axis of said gear, bringing the two last named gears into mesh under considerable pressure and while holding said gears in said position resiliently, rotating the two gears together and simultaneously rotating one of said gears about an axis parallel to and eccentric of its own axis.

1,821,189. RELIEF VALVE. JOHN MEINKEN, St. Paul, and EMIL E. JOHNSON, Minneapolis, Minn. Filed June 3, 1927. Serial No. 196,248. 4 Claims. (Cl. 277—1.)



1. A combined pressure regulating and relief valve, comprising a two compartment chamber, a valve mounted between said compartments, a spring mounted to normally close said valve, a diaphragm mounted in said second compartment and having a valve opening in alinement with said first valve, a valve mounted in said valve opening, a projection from said second valve toward said first valve to open said first valve on a predetermined movement of said diaphragm, an adjustable valve stop mounted to limit the movement of said second valve, spring means mounted between said second valve and said diaphragm, an adjustable spring supporting member threadedly mounted on a rotatable member mounted in said chamber, spring means mounted on said adjustable spring supporting member and engaging said adjustable spring supporting member and engaging said diaphragm to exert pressure thereon.

1,821,190. SCREEN BOX. THOMAS RAY and JOSHUA R. RAY, Manistee, Mich. Filed Dec. 19, 1927. Serial No. 241,051. 5 Claims. (Cl. 210—167.)



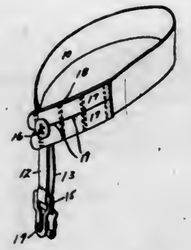
1. In a screen box of the kind described, a removable screening member therefor, means within said screen box comprising a closed corner in said screen box, and a cut-away corner on said screening member for causing said screening member to assume a predetermined position when placed in said screen box.

1,821,191. GOLF CLUB. ROY H. ROBINSON, Chicago, Ill. Filed Apr. 22, 1926. Serial No. 103,773. 7 Claims. (Cl. 273—80.)



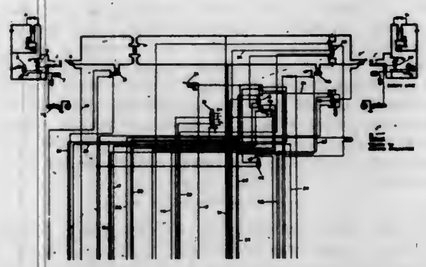
1. In a golf club, a tubular plastic shaft of tapered formation, a reinforcing frame in the shaft and a head on the shaft, the reinforcements on the hitting front or tensile side being greater than on the opposite side.

1,821,192. GARTER. FRITS W. H. SEGELCKE, Tulsa, Okla. Filed May 19, 1930. Serial No. 453,607. 2 Claims. (Cl. 241—6.)



1. A garter comprising an elastic body portion having one end beveled, a tape secured to the front face of said body adjacent to said beveled edge and depending therefrom, said tape having an upwardly extending underlapping portion terminating back of said body, a second depending tape secured to the back of said body and back of the first said tape, one member of a gripping device being secured to one of said tapes and a coacting gripping member secured to the other one of said tapes, the free end of said body being provided with a pair of soft and pliable tapes placed with their inner edges adjoining, a series of spaced groups of transversely arranged rows of stitches connecting said strips to form button holes, a button secured to the front face of the junction of said depending tapes and said body portion.

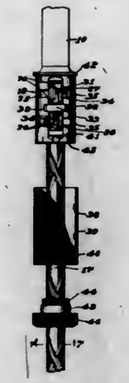
1,821,193. TELEPHONE SYSTEM. WILLIAM J. VINCENT, Rochester, N. Y., assignor to The Rochester Telephone Corporation, Rochester, N. Y., a Corporation of New York. Filed May 5, 1930. Serial No. 450,047. 10 Claims. (Cl. 179—51.)



1. In a telephone system, a telephone exchange, telephone lines terminating at said exchange, a plurality of cord circuits, at said exchange, means including one of said cord circuits for interconnecting one of said telephone lines as a calling line and another of said telephone lines as a called line, means for characterizing said telephone lines as busy or idle, a source of busy tone, and means including a busy back key common to said cord circuits for transmitting a busy tone to a calling telephone line when the called telephone line is busy.

1,821,194. AUTOMATIC SCREW DRIVER. GEORGE R. WILCOX, Greenfield, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Dec. 1, 1930. Serial No. 499,165. 6 Claims. (Cl. 145—54.)

1. In a spiral ratchet screw driver, in combination, a tubular holder provided with a body portion having dog positioning slots, a tool carrying spindle slidable in the holder and provided with oppositely extending spiral grooves, a spiral ratchet nut for each groove rotatably mounted in said body portion, a dog for each ratchet nut, a projection upon each dog extending into a positioning slot to support the dog for rocking movement in a plane extending



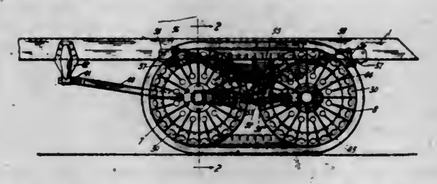
transversely of the screw driver, a pair of prongs upon each dog and positioned to straddle the ratchet portion of its spiral nut and adapted to help hold the dog in place, and manually operable means for holding either dog out of engagement with its ratchet nut.

1,821,195. GAS PURIFICATION. JOHN C. WOODHOUSE, Wilmington, Del., assignor to Du Pont Ammonia Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 17, 1930. Serial No. 461,856. 9 Claims. (Cl. 23—210.)

1. The process of removing carbon dioxide from a gaseous mixture containing the same which comprises contacting said gaseous mixture at an elevated temperature with magnesium oxide prepared by calcination of artificially precipitated magnesium carbonate.

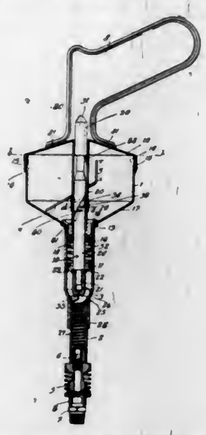
7. The process of removing carbon dioxide from a gaseous mixture containing carbon dioxide and hydrogen which comprises contacting said gaseous mixture, together with steam corresponding to a volume ratio of steam to other gases within the range of from 0.2 to 1.7, and at an elevated temperature with magnesium oxide.

1,821,196. TRACTOR ATTACHMENT FOR TRUCKS. GEORGE I. WORLEY, Willoughby, Ohio, assignor to The McNeil Boiler Company, Akron, Ohio, a Corporation of Ohio. Filed May 28, 1925, Serial No. 33,433. Renewed Aug. 19, 1929. 12 Claims. (Cl. 305—3.)



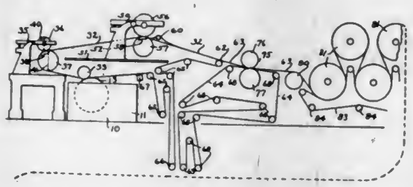
5. In combination with a truck frame a tractor unit comprising a pair of substantially parallel axles, one of said axles being stationary, wheels journaled at the ends thereof, spaced sub-members connecting said axles, sleeves on said sub-members, said sleeves being pivotally connected to the frame of the truck, links pivotally connecting one end of the sub-members to the frame, and additional strengthening means comprising a pair of radius rods flexibly connecting the ends of the stationary axle to the frame through the agency of a dumb-bell link, the ends of which are held in sockets on the frame and rods respectively.

1,821,197. LUBRICATING GUN. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,281. 12 Claims. (Cl. 221—47.4.)



1. A grease gun comprising a grease containing reservoir, a rod extending substantially axially thereof, an impeller comprising a blade journaled on the rod and rotatable thereabout with lateral edges thereof adapted to sweep contiguously to lateral walls of the reservoir, a tubular extension extending longitudinally from the reservoir, a high pressure cylinder telescopable into said tubular extension over said rod, the end of said rod comprising a piston for said cylinder, and means responsive to a telescoping movement of the cylinder to rotatably move the impeller.

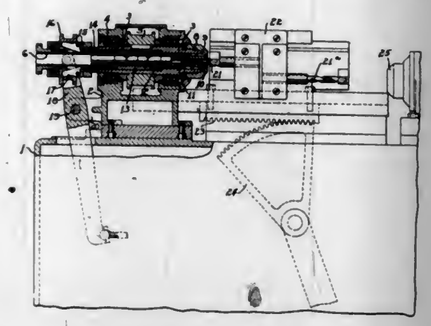
1,821,198. PAPER MANUFACTURE. WALTER J. ZIMMERMAN, Dayton, Ohio, assignor to Mead Paperboard Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,563. 19 Claims. (Cl. 92—38.)



1. Apparatus of the character described adapted for forming a fibrous sheet from stock of the described characteristics, comprising in combination, a cylinder mold machine for forming a paper web, a single traveling felt in web receiving engagement with said cylinder mold for receiving the web formed at said cylinder mold forming machine on the under surface thereof, and means for driving said felt and for turning the felt with web carried thereby over including a suction press, whereby the felt conveys the web through said suction press with the web supported on the then upper side of said felt.

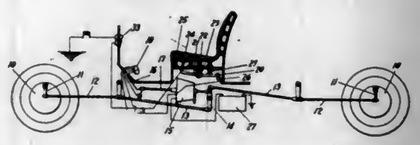
1,821,199. MACHINE FOR MANUFACTURING BUSHINGS. GEORGE F. YAGER, Toledo, Ohio, assignor to The Bunting Brass & Bronze Company, Toledo, Ohio, a Corporation. Filed Sept. 18, 1929. Serial No. 393,558. 1 Claim. (Cl. 77—5.)

In a machine for coring slugs, a rotatable hollow spindle, a slug engaging chuck slidable in said spindle and having an axial bore, a tubular member in said spindle, spring means in the spindle for moving said member toward the chuck, a chuck actuating sleeve in the spindle abutting said tubular member so as to be operated by the latter, independent spring means in the spindle engaging



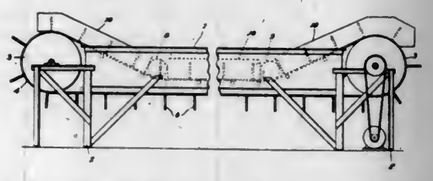
the sleeve for moving the chuck to release the slug, and a longitudinally reciprocal drill axially alined with the chuck and sleeve.

1,821,200. ELECTRIC CONTROL MECHANISM FOR VEHICLE BRAKES. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 8, 1928. Serial No. 298,149. 30 Claims. (Cl. 188—109.)



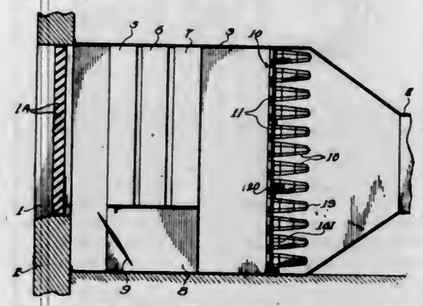
18. A vehicle having brakes, power means adapted to be coupled therewith to apply the brakes, a seat spring supported in a position of elevation and depressible under the weight of an occupant, control means operable to couple the power means with the brakes to apply the brakes when the seat is in said position of elevation and adapted to break said power connection when the seat is depressed and auxiliary control means operable when the seat is depressed to couple the power means with the brakes to apply the brakes.

1,821,201. MEANS FOR WASHING AND BRINING FISH. JAMES JOFFREE BARRY, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Mar. 17, 1927. Serial No. 175,971. 4 Claims. (Cl. 17—6.)



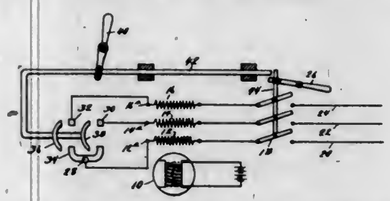
1. An apparatus for brining fish, comprising a tank, a continuous conveyor having one reach thereof extending downwardly thereinto and extending in a substantially horizontal direction throughout a portion of the tank and in spaced relation from the bottom thereof, and a plurality of relatively spaced and upwardly extending flights carried by the conveyor and extending transversely thereof into close proximity to the opposite sides of the tank, the conveyor and flights being of perforate construction whereby brining liquid and relatively small particles can pass therethrough and the flights being of a height to permit a substantial brining depth of liquid on the conveyor without entirely submerging the flights.

1,821,202. RENEWABLE CAPSULE FILTER. HANS E. BIRKHOLZ, Chicago, Ill., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Aug. 10, 1927. Serial No. 211,947. 4 Claims. (Cl. 183—51.)



1. In an air cleaner, a sheet metal plate having an aperture formed therein, with a flange around the aperture, the flange having protuberant tongues, a wire basket having a ring in one end set over the flange, the tongues being bent around said ring for retaining said basket.

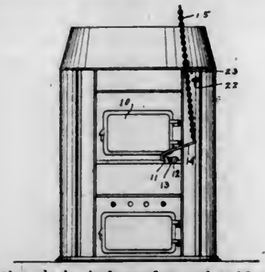
1,821,203. MULTIPHASE ELECTRICAL GENERATING AND SWITCHING SYSTEM. GEORGE A. BURNHAM, Saugus, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 6, 1928. Serial No. 252,184. 2 Claims. (Cl. 172—237.)



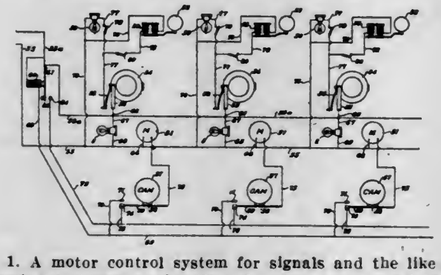
1. An alternating current electric generating and distributing system including the combination of a multiphase distributing circuit, a multi-phase generator having electrically separate phase windings, a disconnecting switch for connecting similar terminals of said windings each to a separate phase conductor of the circuit, a circuit interrupter for interconnecting the other similar terminals of said windings, means for opening the interrupter to interrupt the current in the windings and in the circuit, and means for preventing the opening of the disconnecting switch until after the circuit interrupter has opened.

1,821,204. FURNACE DAMPER CONTROL. CLARK LD BURROUGHS, Indianapolis, Ind., assignor to Hall-Neal Furnace Company, Indianapolis, Ind., a Corporation. Filed Nov. 29, 1930. Serial No. 499,042. 3 Claims. (Cl. 126—287.)

1. A damper control for a furnace having a fire-box door and a shiftable damper normally returning to a closed position, comprising a cam lever rockably mounted adjacent said door and a chain connected to said lever and carried and connected to said damper whereby the closing of the damper shifts said chain to pull the lever into the path of the door upon its being opened and the opening of the door rocks said lever to pull the chain in the opposite direction to open said damper, and means associated with the chain independent of said door for holding said damper open, the opening of said door releasing said means.

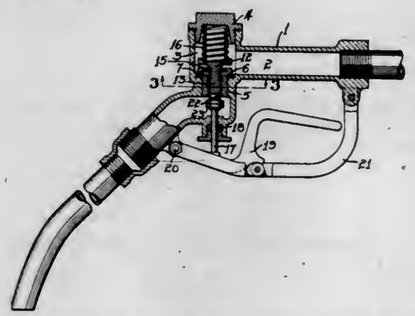


1,821,205. ELECTRIC MOTOR CONTROL SYSTEM. LEO A. CARVER, Cleveland, Ohio, assignor, by mesne assignments, to The Paramount Fire Alarm Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Aug. 21, 1926, Serial No. 130,604. Divided and this application filed Apr. 16, 1927. Serial No. 184,320. 6 Claims. (Cl. 172—239.)



1. A motor control system for signals and the like including a circuit, a plurality of motors connected in parallel in the circuit, means controlled by the operation of each motor for opening the circuit to said motor at a predetermined time, and means operated by the opening of the last motor circuit to be opened for simultaneously closing the circuit to all of the motors.

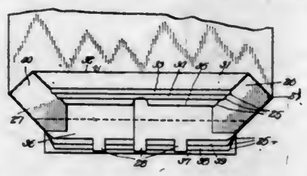
1,821,206. ADJUSTABLE VARIABLE FLOW LIQUID DISPENSING NOZZLE. MYRON J. CASWELL, Sandusky, Ohio. Filed Oct. 23, 1929. Serial No. 401,916. 1 Claim. (Cl. 277—43.)



The combination with a liquid nozzle casing having a discharge conduit therethrough, and a valve chamber in said conduit with an opening in its bottom forming a valve seat at its open marginal edge, of a main valve seating on the valve seat within said chamber and having a stem portion projecting through said opening, said stem portion being spaced from the opening wall and having por-

tions in guiding co-action with the opening wall, said valve and stem having a central opening axially therethrough and the stem having side discharge ports from said axial opening and into the space between it and the bottom opening wall, a secondary valve disposed within said chamber and seating against the upper edge wall of the valve opening and having a stem portion projecting downward through the valve and stem opening and thence through a side of the nozzle casing, said stem having a reduced portion at its upper end which, when the secondary valve is unseated, permits the flow of liquid through the opening of the primary valve to said discharge ports, means adjustably carried by the stem of the secondary valve in predetermined spaced relation to the stem of the primary valve for co-action therewith to open it when the secondary valve has been opened a predetermined extent, a spring acting on the secondary valve to normally effect a seating of both valves, and manually operable means without the nozzle casing for imparting an opening movement to the stem of the secondary valve.

1,821,207. BAG. JOHN E. CORNELL, Chicago, Ill., assignor, by mesne assignments, to Cornell Bag Corporation, a Corporation of Delaware. Filed Jan. 2, 1929. Serial No. 329,864. 14 Claims. (Cl. 229—55.)



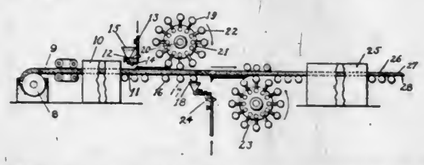
2. A bag having multi-ply opposed portions folded inwardly toward and in overlapping relation with each other to form a bag end, the engaging surfaces of each portion having its individual plies in stepped relation with each ply of such length that corresponding plies of the two portions are in substantially end to end abutting relation.

1,821,208. BARIUM SILICO-FERRITE AND PROCESS OF PREPARING THE SAME. HENRY W. DAHLBERG, Denver, Colo. Filed July 12, 1929. Serial No. 377,916. 9 Claims. (Cl. 23—50.)

3. As a new product of manufacture, barium silicoferrite corresponding substantially to the formula $4BaO.Fe_2O_3.2BaO.SiO_2$.

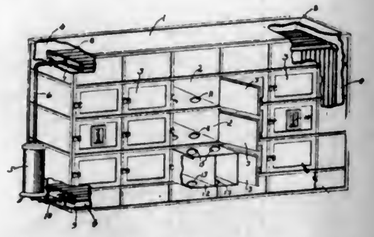
8. The process of producing a furnace product consisting chiefly of barium silicoferrite, which process consists in heating in a furnace at a temperature of at least 1100° C. a mixture of a barium salt having a volatilizable acid radical, iron oxide and silica.

1,821,209. APPARATUS AND PROCESS FOR MAKING BOARDS. WILLIAM A. DARRAH, Chicago, Ill. Filed Mar. 23, 1929. Serial No. 349,395. 19 Claims. (Cl. 92—39.)



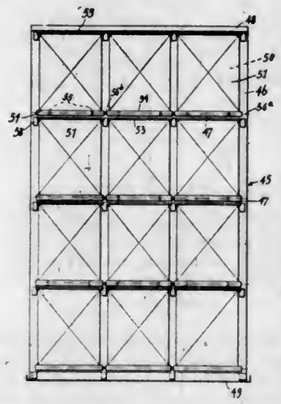
1. The process of making board which consists in first forming the sheet of substantial thickness with a substantially uniform structure throughout, second removing a portion of water from said sheet, third moistening the surface portion of said sheet for a limited depth only and finally pressing said sheet while said surface is moistened.

1,821,210. LEATHER MELLOWING CABINET. IRVING H. ELLSWORTH, Orrville, Ohio. Filed May 21, 1930. Serial No. 454,312. 2 Claims. (Cl. 69—1.)



1. A leather mellowing cabinet comprising outer walls, series of compartments arranged in tiers within the cabinet so as to leave a chamber extending across the top, side and bottom of the cabinet between the compartments and said outer walls, and means for supplying heat to the upper part of said chamber, the compartments of each tier having openings in their top and bottom walls which normally provide for a continuous interchange of convectional currents through all of the compartments in the tier.

1,821,211. DOUBLE PASSAGE FILTER AND CLOSURE FOR THE SAME. CHARLES H. GAGEN, New York, N. Y., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed June 20, 1928. Serial No. 286,771. 18 Claims. (Cl. 183—79.)



1. In a filter the combination of a filter unit having its opposite ends open to permit passage of a cleansing medium therethrough during cleaning operation and in a direction at right angles to the normal direction of an air stream therethrough during filtering operation, and movable means for closing said open ends during normal air filtering operation.

1,821,212. IMPACT BIT. PAUL H. GRANGER, Los Angeles, Calif. Filed Sept. 11, 1928. Serial No. 305,190. 2 Claims. (Cl. 255—61.)

1. A drill for well holes comprising a percussion core bit, a rotatable operating head including a tubular shell adapted to be connected to a drill pipe, a hollow tool stem on said bit reciprocably mounted in said shell and held against rotation in relation thereto, a cam member on said tool stem, a thrust bearing in said shell, a hollow drive stem rotatably mounted in said shell having a slip joint connection with said tool stem, a cam sleeve on said drive stem having a cam plate interposed between

said bearing and said cam member, said cam member and cam plate having coacting projections extending axially of said stems with inclined approach faces and drop-off



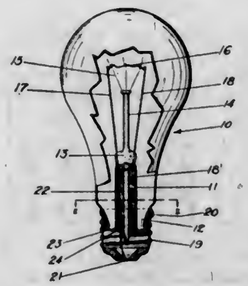
faces, and a spring tending to project said tool stem and bit on its cutting stroke, said tool stem and drive stem forming a core barrel.

1,821,213. PIGSKIN INNERSOLE. HAROLD M. GUSDORF, Indianapolis, Ind. Original application filed June 20, 1929, Serial No. 372,271. Divided and this application filed May 24, 1930. Serial No. 455,189. 2 Claims. (Cl. 36—43.)



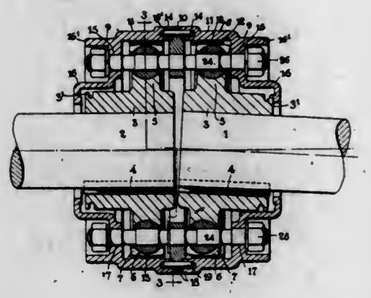
1. An inner sole composed of pigskin material with its fibers so disposed as to be flexible longitudinally and laterally but which will substantially resist any transverse stretching.

1,821,214. ARC QUENCHING DEVICE. DANIEL SNYDER GUSTIN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 11, 1928. Serial No. 245,821. 1 Claim. (Cl. 176—24.)



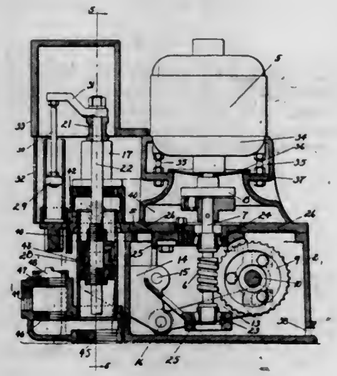
An electric incandescent lamp comprising a bulb containing nitrogen, leading in wires supported within said lamp, a filament mounted on said leading in wires and a quantity of finely divided magnesium carbonate disposed between and in contact with leading in wires whereby gases evolved from the magnesium carbonate upon the formation of an arc between the lead wires cooperate with the nitrogen filling to terminate the arc.

1,821,215. FLEXIBLE COUPLING. CLARENCE J. HAHN, Buffalo, N. Y. Filed Mar. 8, 1930. Serial No. 434,379. 6 Claims. (Cl. 64—91.)



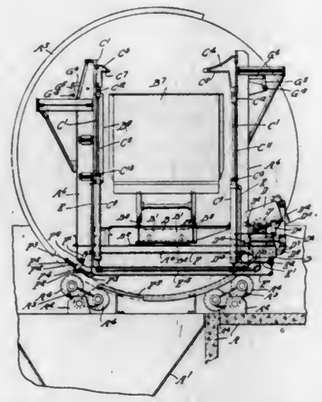
1. A coupling comprising hubs adapted to be secured to adjacent ends of driving and driven shafts, each hub having a circular flange provided with a curved peripheral face, said flange containing spaced slots extending inwardly from said face having arcuate walls forming a seat therein, a housing enclosing said hubs and having a cylindrical inner wall, bushings slidably mounted in said inner wall of said housing, each bushing slidably receiving the peripheral face of one of said flanges, means connected to said housing extending through the slots in said flanges, and spherical bushings slidably mounted on said means and engaging said seats in said flanges.

1,821,216. PUMP. WILLIAM C. HEATH and FRANKLIN G. HOBART, Beloit, Wis., assignors to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1924. Serial No. 733,083. 18 Claims. (Cl. 74—14.)



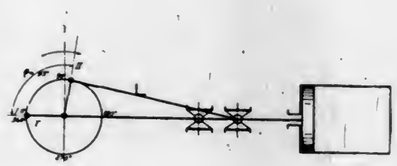
1. In a pump power head, an enclosing chamber therefor, a structure comprising a cover for said chamber, and pump-operating mechanism depending below the cover into the chamber, said mechanism being supported by, and removable with the cover structure, and including a driving member and a pump-actuating member, said members extending through the cover.

1,821,217. HYDRAULIC CLAMP FOR ROTARY CAR DUMPERS. HERMAN C. HEATON and FRANK H. ARMSTRONG, Chicago, Ill., assignors to Link Belt Company, Chicago, Ill., a Corporation of Illinois. Filed May 7, 1928. Serial No. 275,594. 3 Claims. (Cl. 214—55.)



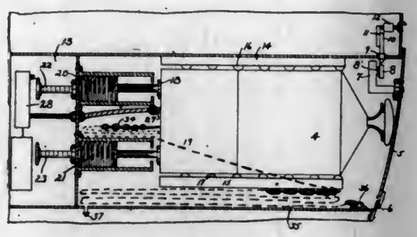
1. In a car dumper, a cradle and means for rotating it, a plurality of car holding clamps thereon and hydraulic means for moving them toward and from the car and for holding them in car clamping and in released positions, said hydraulic means including a separate hydraulic cylinder and piston for each clamp and a pump, a distribution valve, a pressure conduit leading from pump to valve, conduits leading from the valve to both ends of the cylinders and means responsive to the position of the cradle for operating the valve to displace it to distribute fluid under pressure to one end of the pistons, and permit flow of exhaust fluid from the other ends of the pistons to move the clamps and the valve operating means comprising a fixed cam track adjacent the cradle and a valve displacing means adapted to be engaged by the cam track during a portion of the cradle movement and means for automatically centering the valve when the valve displacing means are out of engagement with the cam.

1,821,218. PUMP AND METHOD OF PUMP CONSTRUCTION AND OPERATION. FRANKLIN G. HOBART, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1927. Serial No. 169,923. 10 Claims. (Cl. 103—205.)



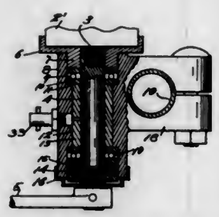
1. In a reciprocating pump having a pair of adjacent cylinders and a pair of pistons, means including successively operating cranks each operatively connected with one of said pistons, said cranks being relatively disposed with respect to each other and to the pistons to produce resultant pump discharge periods of unequal duration.

1,821,219. SUBMARINE RESCUING DEVICE. ISAIAH S. KELLEY, New York, N. Y. Filed Mar. 13, 1929. Serial No. 346,558. 4 Claims. (Cl. 114—16.5.)



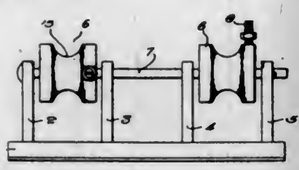
1. The combination with a submarine, of a chamber, a water-tight and hinged cover therefor, means for retaining said cover closed, a hollow hook member for allowing water to pass into said chamber and an air escape from said chamber to equalize the pressure exterior thereto, said hook and said air escape means serving as a locking means for said closure.

1,821,220. STEERING WHEEL OPERATED HEADLIGHT. VINCENT KRICK, Los Angeles, Calif. Filed Sept. 29, 1930. Serial No. 485,151. 1 Claim. (Cl. 240—62.52.)



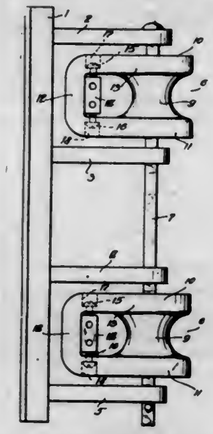
The combination with a road vehicle having a draft-link for its pilot wheels and a set of headlights which are mounted to swing on vertical axes, of springless means to support and to turn the headlights and including a box bearing for each headlight, a turntable with a boss counter sunk and fitting in the top of the box, a ball bearing wholly sunk in said box top and supporting the boss, a rock-shaft having a steadying bearing in the box to eliminate side wobble and having an operating arm on its lower end, means connecting the base of the headlight to said shaft, a ball bearing countersunk in the bottom of the box, a fiber packing ring under the bearing, and lock nuts on the shaft to draw the base onto said turntable and the latter thereby onto the upper ball bearing; said nuts reacting on the lower bearing through the fiber packing ring.

1,821,221. INSULATOR AND TERMINAL. WILLIAM D. KYLE, Milwaukee, Wis., assignor to Line Material Company, Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,248. 5 Claims. (Cl. 173—28.)



5. A secondary rack construction comprising a metallic supporting base having a pair of arms extending therefrom, a combined insulator and terminal mounted between said arms, said insulator comprising a spool of insulating material having a peripheral groove formed therein for receiving an insulated power conductor, said groove being provided with well rounded edges to prevent injury to insulation on the conductor, and a terminal member carried by said insulator and spaced from the groove and from the arms of the rack.

1,821,222. INSULATOR. WILLIAM D. KYLE, Milwaukee, Wis., assignor to Line Material Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Dec. 30, 1929, Serial No. 417,436. Divided and this application filed May 23, 1930. Serial No. 454,959. 16 Claims. (Cl. 173—28.)



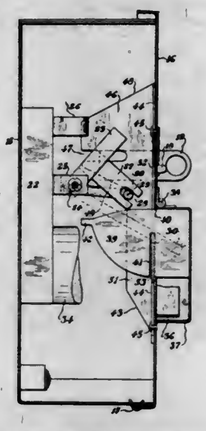
3. A secondary rack having a pair of upstanding arms, an insulator mounted between said arms and comprising a unitary piece of insulation, said insulator having a terminal therein entirely within the body of insulation to prevent accidental contact therewith.

1,821,223. VENDING MACHINE. WILLIAM H. LARAWAY, Grand Rapids, Mich., assignor of one-half to Leonard De Vos, Grand Rapids, Mich. Filed Nov. 18, 1929. Serial No. 407,914. 1 Claim. (Cl. 194—75.)



A coin controlled vending machine including means for the vertical storage of a plurality of small articles to be dispensed, a horizontal slidable vending block located below the said means and having a well for receiving a single article to be dispensed, friction means engaging the vending block and exerting a constant restraining action on the same throughout the entire movement thereof, an oscillatory coin carrying member having a coin receiving passage, a stop spaced from the vending block and arranged to limit outward movement of the coin carrying member and provided with a pin extending into the said coin passage for supporting a coin when the said coin carrying member is at the limit of its outward movement, and means arranged to be engaged by the said coin for actuating the vending block.

1,821,224. SWITCH AND FUSE BOX. JOSEPH C. LEWIS, Minerva, Ohio, assignor to Charles W. Keplinger, receiver of The American Electric Switch Corporation, Minerva, Ohio, a Corporation of Delaware. Filed Mar. 12, 1928. Serial No. 260,951. 4 Claims. (Cl. 200—50.)



1. A switch and fuse box, a door upon the box, a switch within the box, a crank bar operatively associated with the switch, a fuse in the box, a cover upon the door for normally preventing access to the fuse, a locking plate mounted on the door and entirely within the box and operatively associated with the crank bar for being moved to open or closed position when the crank bar is operated to move the switch to open or closed position, a segmental plate carried by the cover and having a notch, and means on said locking plate engaging said notch when the locking plate is in closed position.

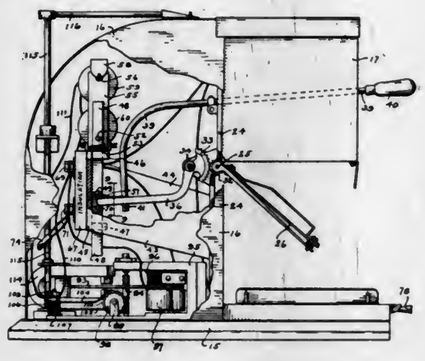
1,821,225. COAT. CASPER J. LUBIN, San Francisco, Calif. Filed Mar. 25, 1930. Serial No. 438,811. 1 Claim. (Cl. 2—93.)



A coat having front pleats at the sides thereof, there being an elongated slit beneath and concealed by each pleat, a belt extended through the upper portions of the

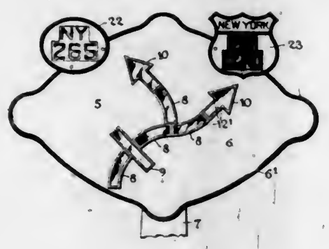
slits and exposed at the sides back of the pleats, facings at the front of the coat, and pockets concealed between the front of the coat and the facings and opening through the lower portions of the respective slits, a portion of each pleat concealing the pockets, portions of the pleats being stitched down adjacent to the pocket and belt.

1,821,226. AUTOMATIC DISCHARGING TOASTER. CHARLES W. MABEY, Indianapolis, Ind., assignor to Mabey Electric Manufacturing Company, Indianapolis, Ind. Filed Mar. 7, 1928. Serial No. 259,680. 13 Claims. (Cl. 319—19.)



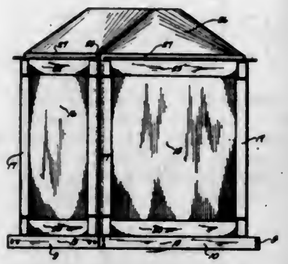
1. In a toaster, a toasting oven having a passage narrower in one dimension than the other extending vertically therein open at the bottom, an electrical heating element on each side of the passage, a door hinged at the narrow end of the passage adapted to close the lower end of the passage normally remaining in a position to leave the passage open, an electric timing motor set in operation by the closing of the said door, and electro-magnet means for releasing the door set in operation following a predetermined period of running of the said motor.

1,821,227. ROAD SIGN. CLARENCE H. MACKEY, Lancaster, and STEPHEN E. PREBLE, Orchard Park, N. Y. Filed Jan. 4, 1930. Serial No. 418,629. 2 Claims. (Cl. 40—125.)



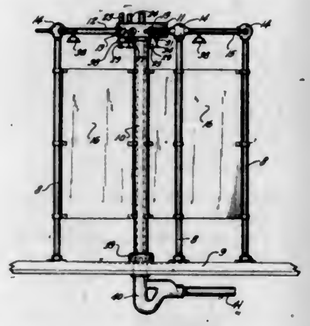
1. A road indicator comprising a baseboard, a plurality of sections assembled on said baseboard in contacting relation to each other to form a continuous road layout, each section having a reflective face bordered by a non-reflective margin to reflect light projected thereto whereby such faces adumbrate the border portions of the assembled sections to both indicate separate road hazards and the road layout as a whole.

1,821,228. BOLTLESS CASING. ROY L. MEYERS, Janesville, Wis. Filed Dec. 7, 1928. Serial No. 324,415. 7 Claims. (Cl. 220—75.)



1. A boltless, sheet metal casing, comprising a plurality of base, body and top sections, the adjacent portions of said sections having interlocking tongue and slot joint connections with one another whereby said sections are connected together and serve to support and lock each other in position to form a rigid unitary structure, said interlocking tongue and slot joint connections between adjacent portions of said sections being the sole means of connection between said section portions.

1,821,229. COMPARTMENT SHOWER BATH. HOWARD A. MULLETT and HERMAN E. HEINE, Milwaukee, Wis., assignors to Bradley Washfountain Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 20, 1930. Serial No. 489,809. 7 Claims. (Cl. 4—148.)

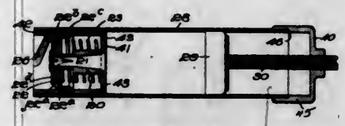


3. In a shower bath apparatus, a central column, a frame-work arranged around the column to form a plurality of bath compartments, a fitting associated with the upper end of the column and having a plurality of valve controlled mixing chambers and hot and cold water chambers common to said mixing chambers, and a spray pipe extending from a portion of said fitting into each compartment.

1,821,230. LUBRICATING APPARATUS. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Continuation of application Serial No. 313,087, filed July 24, 1919. This application filed July 31, 1920. Serial No. 400,314. 16 Claims. (Cl. 221—47.4.)

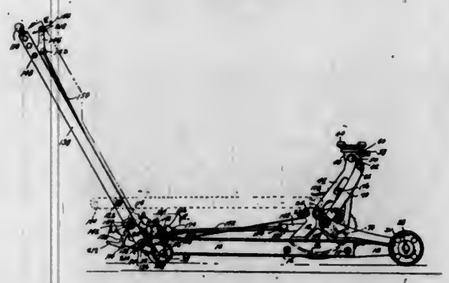
10. In a pressure lubricating system for injecting grease or oil under relatively high pressure into machine bearings through nipples associated with said bearings, a lubricant-expelling gun providing a nozzle adapted to receive the outer end of said nipples, said nipples and nozzle having co-operating cam means for translating rotary movement

of said gun into reciprocatory movement thereof during passage of said nozzle over a nipple, a sealing part in said nozzle for providing a tight seal with said nipples,



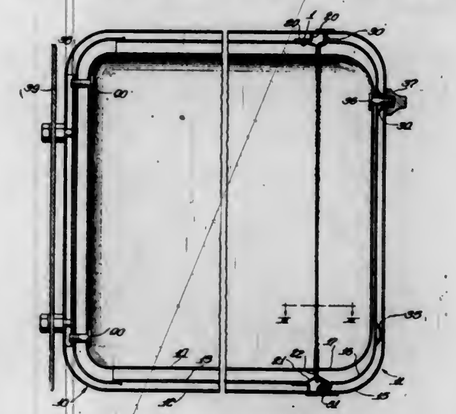
and a valve in said nozzle openable to admit lubricant to the nipple only pursuant to the provision of such tight seal.

1,821,231. PLANETARY OPERATING MECHANISM FOR LIFTING JACKS. LEONARD D. NILSON, Wayzata, Minn. Filed Oct. 27, 1927. Serial No. 229,117. 6 Claims. (Cl. 254—6.)



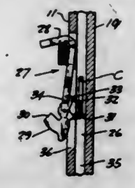
1. A lifting jack comprising a frame, a downwardly curved rack bar thereon, having its ends in a substantially horizontal plane, a lifting arm pivoted to said frame, a ratchet wheel and a pinion journaled on said lifting arm, means for actuating said ratchet wheel for rotating said pinion and an intermediate pinion associated with said first pinion and with said curved rack bar for causing pivotal movement of said lifting arm upon such actuation.

1,821,232. OVEN CONSTRUCTION AND HINGE THEREFOR. WARREN NOBLE, Detroit, Mich. Filed July 7, 1930. Serial No. 466,130. 8 Claims. (Cl. 126—194.)



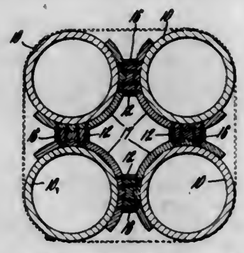
1. In combination in an oven construction, an oven composed of a plurality of nested shells and a door therefor formed of a plurality of nested shells, the innermost shell of the oven and the innermost shell of the door being extended to define cooperating hinge portions of a hinge for connecting the door to the oven.

1,821,233. REJECTION MEANS FOR PERFORATED COINS. JAMES E. OLVIS, Los Angeles, Calif. Filed Feb. 7, 1930. Serial No. 426,531. 3 Claims. (Cl. 194—97.)



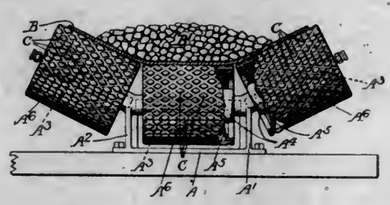
1. In a coin selector, a coin chute having a rejection exit for perforated coins and a passage for genuine coins, said exit and passage being offset, a perforated coin classifier at the offset comprising a pallet having spread fingers and means urging said pallet with one of said fingers across the chute in the path of coins, the other of said fingers being so disposed as to be projected laterally into said chute as the first finger is pushed out, said other finger having a hook to engage the marginal edge of the perforation in a coin and suspend the latter on said hook whereby to swing said pallet and deflect the perforated coin to said rejection exit, and a release finger to arrest the deflection movement of said coin at said exit and cause release of said perforated coin from said hook.

1,821,234. MULTIPLE CONDUIT. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Oct. 29, 1927. Serial No. 229,738. 9 Claims. (Cl. 247—32.)



2. A spacer for multiple conduit, comprising a pair of sectors of not over 180° of short-length oversize conduit, arranged with convex faces opposed, said convex faces each having a flat portion defining a plane at a predetermined distance from the center of curvature of its respective sector regardless of the wall thickness of the sector, a connecting piece arranged between said flat portions, and means for securing said sectors to said connecting piece.

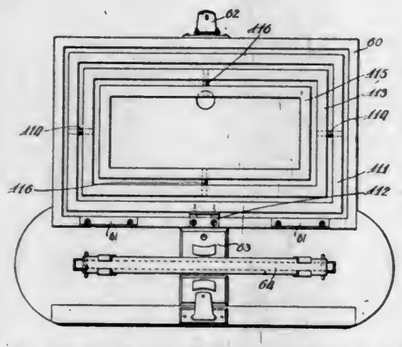
1,821,235. ROLL FOR BELT IDLERS. WILLIAM E. PHILIPS, Chicago, Ill., assignor to The Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 13, 1928. Serial No. 269,782. 1 Claim. (Cl. 198—191.)



In combination, a conveyor belt, a plurality of troughing idlers having their faces in different planes and adapted to engage the underside of the belt and support the belt

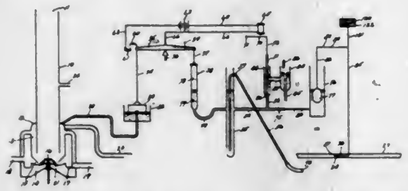
in a trough shaped position, the belt engaging surfaces of the idlers in said different planes being provided with a plurality of diamond-shaped corrugations defining a plurality of intersecting diagonal channels inclined to the axis of rotation of the roll and to the direction of movement of the belt, all sides of the diamond-shaped projections being equally sharp.

1,821,236. RADIO VANITY CASE. HARRY PRESTON PRATT, Chicago, Ill., assignor, by mesne assignments, to Harry Preston Pratt, William Frederick Grower, Henry Asa Allen, Howard Thompson Ballard, and George Squires Herrington, trustees of Pratt Radio Trust. Filed Sept. 8, 1925. Serial No. 54,916. 2 Claims. (Cl. 250—14.)



1. An article of manufacture comprising a case, a radio set in said case, a hinged cover for said case, said radio set including an antenna positioned within said cover and adapted to be swung therefrom, said antenna comprising a plurality of coils each rotatable in relation to the other when swung from the cover.

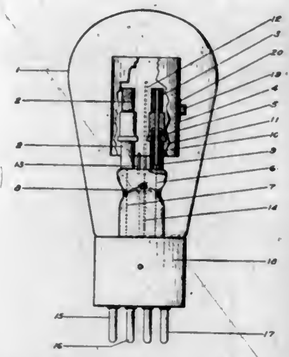
1,821,237. CONTROL MECHANISM. FRANCIS G. RAWLING, Chillicothe, Ohio, assignor to The Mead Pulp and Paper Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 27, 1928. Serial No. 273,268. 30 Claims. (Cl. 137—78.)



1. Apparatus of the character described, comprising a pressure chamber, a pipe therefor, means for controlling fluid flow through said pipe, means responsive to pressure within said chamber for translating and magnifying pressure fluctuations into weight differences, means for translating said weight differences into liquid level variations, and means controlled by said liquid level variations for regulating said flow-controlling means.

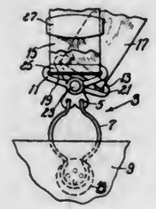
1,821,238. RECTIFIER. HARVEY C. RENTSCHLER, East Orange, and WILLIAM W. MERRYMON, Glen Ridge, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 20, 1927. Serial No. 207,073. 5 Claims. (Cl. 250—27.5.)

3. The method of producing and maintaining a deposit of an electro-positive metal on the cathode of a gaseous conduction device, comprising forming the anode of thorium, coating said anode with a compound of the electro-positive metal decomposable by said anode and



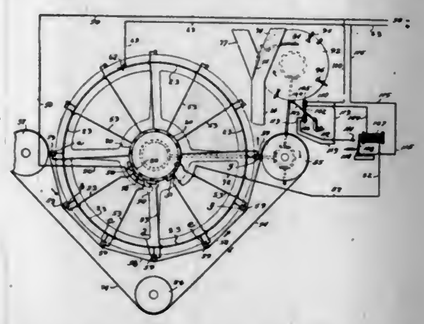
passing a discharge through the device to decompose the compound, liberate the electro-positive metal and vaporize the same from the anode onto the cathode.

1,821,239. SUSPENDERS. MARIE B. SCOTT, St. Louis, Mo. Filed Nov. 23, 1928. Serial No. 321,322. 1 Claim. (Cl. 241—12.)



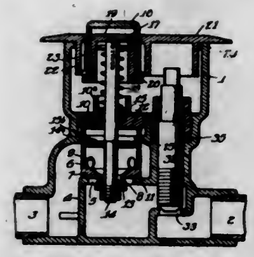
A joint for suspenders which comprises a base portion, a metal loop movably and directly attached thereto adapted to engage a trouser button, and supports rotatably riveted to said base portion adapted to receive in attachment suspender webs, the plane of movement of said loop being at right angles to the plane of rotation of said supports.

1,821,240. MACHINE FOR TESTING ELECTRIC LAMPS. ANATOLI C. SELETZKY, Baltimore, Md., assignor to The Westinghouse Lamp Company, New York, N. Y., a Corporation of Pennsylvania. Filed Jan. 15, 1927. Serial No. 161,336. 8 Claims. (Cl. 209—81.)



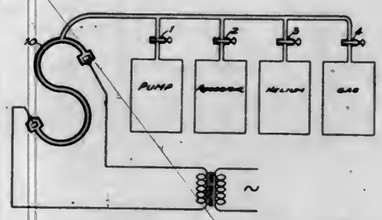
1. In a testing machine for electrically operated articles the combination with an endless carrier to convey the articles to be tested, a series of devices along the carrier each having two contact devices for engaging the two electric contacts of the said article, a series of movable contacts traveling with the carrier and each of the latter contacts having connection with one of the two contacts which engage the article to be tested, a contact with which the series of contacts successively engage and said latter contact being connected to a source of current whereby a circuit will be formed through the article when the one contact engages any one of the series of contacts provided the article is electrically good and means coacting with said series of contacts in succession to separate the defective articles from those which are good.

1,821,241. VALVE. WILLIAM E. SLOAN, Chicago, Ill. Filed Nov. 20, 1925. Serial No. 70,824. 7 Claims. (Cl. 137—93.)



1. A floor valve comprising a casing, an inlet and an outlet therefor, a valve member controlling the passage of the liquid through said casing, a stem connected with said valve member, a spring for normally holding the valve member closed, a cover for said casing having an opening therethrough, a push button in said opening, an adjustable connection between said push button and said valve stem for rocking the push button with relation to the stem, which adjustment permits the top of the push button and the top of the cover to be substantially parallel with the surface of the floor when the valve stem is inclined to the vertical a predetermined amount.

1,821,242. GASEOUS CONDUCTION APPARATUS. PERCY L. SPENCER, Medford, Mass., assignor, by mesne assignments, to Old Colony Trust Company, trustee, a Corporation of Massachusetts. Filed Aug. 18, 1928 Serial No. 300,573. 6 Claims. (Cl. 176—2.)



1. The method of freeing a soft glass vessel from occluded and adsorbed impurities, which consists of heating said glass vessel and exposing the hot surface thereof to the action of carbon monoxide.

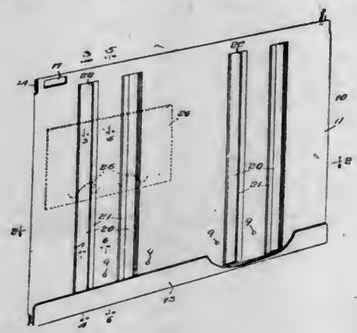
1,821,243. FACIAL CHANGE DEVICE FOR DOLLS. WILSON R. SPRINGER, Oskaloosa, Iowa. Filed Mar. 24 1930. Serial No. 438,450. 3 Claims. (Cl. 46—40.)

1. For use with a doll head having a plurality of openings therein, a facial change device comprising movable members, each provided with a plurality of variously expressed features thereon and discernible through said openings, means to move one of said members and an



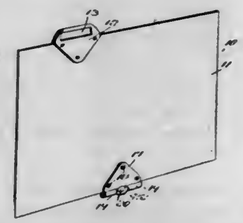
operative connection between said last mentioned member and another of said members comprising pinions associated with said members and a gear meshing with said pinions.

1,821,244. FILING CARD SUPPORT. FREDERICK L. G. STRAUBEL, Green Bay, Wis., assignor to The Automatic File & Index Company, Green Bay, Wis., a Corporation of Wisconsin. Filed Mar. 3, 1930. Serial No. 432,751. 9 Claims. (Cl. 129—16.7.)



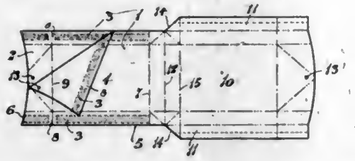
1. A card support of the kind described comprising a panel having a pair of parallel elongated channels in one face and corresponding projections on the other face, one edge of each of said channels having a shelf projecting thereover.

1,821,245. SPACER GUIDE. FREDERICK L. G. STRAUBEL, Green Bay, Wis., assignor to The Automatic File & Index Company, Green Bay, Wis., a Corporation of Wisconsin. Filed Mar. 3, 1930. Serial No. 432,752. 10 Claims. (Cl. 129—16.7.)



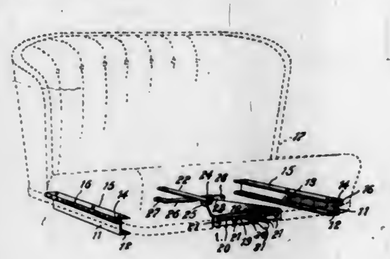
4. In a device of the kind described, a sheet of material, and means for pivotally and slidably fastening said sheet on a rod, said means comprising a pair of aligned tubular members projecting downwardly from the sheet on opposite sides of the rod, and a pin mounted in the tubular members with its mid portion looped underneath to cooperatively engage said rod.

1,821,246. MULTIPLEX BAG. WILLIAM L. TAYLOR, Cincinnati, Ohio. Filed June 17, 1927. Serial No. 199,540. 4 Claims. (Cl. 229—61.)



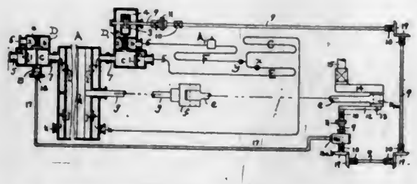
1. As an article of manufacture, a tobacco bag, the blank of which is folded intermediate its ends, one side of the blank being narrower than the other side, a transverse score-line provided on the wider side the longitudinal edges of the wider side being inturned to form securing flaps, a portion of each flap being cut away on a line extending from said score-line to said fold and said flaps being adhesively secured to the longitudinal edges of the narrow side of the blank.

1,821,247. ADJUSTABLE SEAT. ARVINE N. THOMAS, Canton, Ohio. Filed Oct. 26, 1929. Serial No. 402,634. 3 Claims. (Cl. 155—14.)



1. An adjustable seat including a fixed frame, a horizontally movable frame mounted thereon, a seat carried by said movable frame, a segment pivoted upon the movable frame, a link pivoted at one end to the segment and at its other end to the fixed frame, a channel formed upon the segment, and a lever located in said channel for moving the segment upon its pivot to horizontally move the movable frame.

1,821,248. MULTIPLE EFFECT GAS COMPRESSING APPARATUS. GARDNER TUFTS VOORHEES, Boston, Mass. Filed Dec. 4, 1922. Serial No. 604,917. 21 Claims. (Cl. 230—222.)



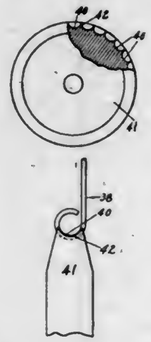
1. A multiple effect compressor device for gas compressors comprising a main chamber and two pressure chambers, an opening in each chamber for connection of a suction conduit thereto, each of said pressure chambers having a port opening therefrom into the main chamber, a valve governing one port, a piston actuated valve governing the other port, a spring causing said piston actuated valve to cover its port, a cylinder for said piston actuated valve's piston and an opening in the cylinder for connection of a conduit thereto.

1,821,249. WIRE-BENDING DIE. STEN WADSTEN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 11, 1929. Serial No. 369,970. 5 Claims. (Cl. 153—65.)



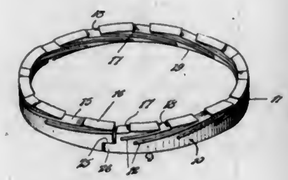
2. A coil-winding die comprising a body having a flat face bounded on one side by an inclined surface, a cavity formed adjacent to the opposite side to provide a lip, and a notch connecting said inclined surface with said cavity.

1,821,250. WIRE-COILING DIE. STEN WADSTEN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 28, 1929. Serial No. 417,185. 6 Claims. (Cl. 153—65.)



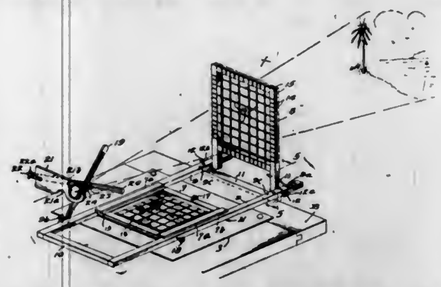
1. A coil-winding die having an arcuate edge and with the perimeter thereof provided with coil-winding depressions of substantially the same pitch as the coil to be produced.

1,821,251. PISTON RING. JOHN WILLIAMS, Philadelphia, Pa. Filed Apr. 4, 1930. Serial No. 441,653. 7 Claims. (Cl. 74—109.)



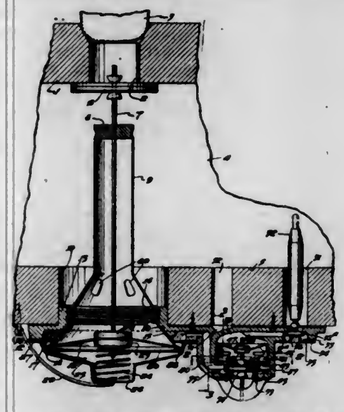
1. A piston ring provided with obliquely disposed slots extending through one face of the ring, said slots producing spring tongues connected integrally with the body of the ring and providing obliquely disposed oil spaces separating the tongues, each tongue terminating in substantially a feather edge and having a shoulder spaced from said edge, the tongue presenting a substantially rectangular flat contact face between said shoulder and said edge, said ring being formed with a beveled seat on the inner face thereof extending substantially to the bottom of the tongues.

1,821,252. DRAWING APPARATUS. REUBEN E. WOODS, Owatonna, Minn. Filed Feb. 15, 1928. Serial No. 254,453. 1 Claim. (Cl. 33—64.)



In drawing apparatus, a base including a pair of parallel guides, an open frame slidably disposed between said guides, means dividing the space within said frame into a plurality of transparent zones, a second frame provided with means dividing the space therewithin into a plurality of transparent zones, means for supporting said last mentioned frame in a plurality of different angular positions with respect to said base, said second frame being connected with said base to be positioned between said guides in a plane substantially coincident with said first mentioned frame.

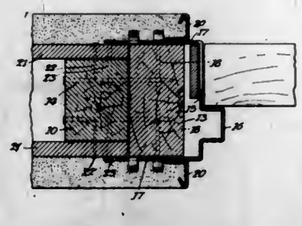
1,821,253. PIPE ORGAN VALVE ACTION. DONALD S. BARROWS, Rochester, N. Y. Original application filed Oct. 16, 1928, Serial No. 312,871. Divided and this application filed Jan. 28, 1930. Serial No. 424,002. 11 Claims. (Cl. 84—339.)



2. In an organ, the combination with the wind chest, of a valve action including, secondary, relay and electromagnetically operated valves, operating elements for the respective valves of the valve action, and a mounting for supporting the entire valve action and its operating elements in a position exteriorly of the chest, and including separate removable closures for said operating elements.

1,821,254. DOOR FRAMING. ISAAC A. BAUM, Chicago, Ill. Filed Dec. 2, 1929. Serial No. 411,136. 4 Claims. (Cl. 20—11.)

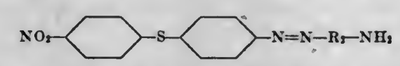
1. In building construction the combination of a wood stud extending from floor to ceiling, a second wood member of less length and greater width extending parallel and secured to the stud, a metal frame of channel shape snugly fitted over and secured to the shorter wood member,



and plaster board secured to the stud, the thickness of the board being substantially equal to the difference in width between the stud and shorter member.

1,821,255. MANUFACTURE OF AZO DYESTUFFS. RAINALD BRIGHTMAN, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed Mar. 15, 1928, Serial No. 262,048, and in Great Britain Apr. 22, 1927. 14 Claims. (Cl. 260—90.)

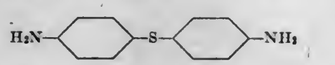
8. New monoazo dyes which are also useful as intermediates in the production of other azo dyes, having the probable structure



where R_2 represents a naphthalene residue containing a sulphonic acid group, the said dyes being powders which vary in shade from orange to red, brown, dark brown and black and are soluble in water in the form of their sodium salts.

1,821,256. NEW AZO DYESTUFFS AND THEIR APPLICATION. RAINALD BRIGHTMAN and PERCY CHORLEY, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Filed Apr. 16, 1928, Serial No. 270,572, and in Great Britain Apr. 22, 1927. 15 Claims. (Cl. 260—77.)

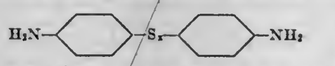
1. The process for the manufacture of new azo dyes which comprises tetrazotizing a diamine of the formula



and coupling the tetrazo compound so produced with two molecular proportions of an amino naphthol sulphonic acid.

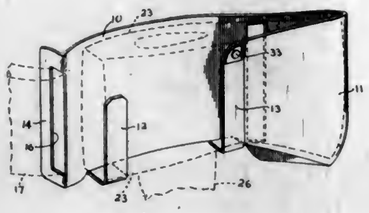
1,821,257. MANUFACTURE OF AZO DYESTUFFS. RAINALD BRIGHTMAN and PERCY CHORLEY, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Original application filed Apr. 16, 1928, Serial No. 270,572, and in Great Britain Apr. 22, 1927. Divided and this application filed Aug. 24, 1929. Serial No. 388,261. 16 Claims. (Cl. 260—77.)

1. In the manufacture of new azo dyes the process which comprises tetrazotizing a diamine of the formula



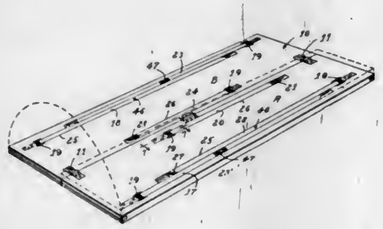
wherein x is an integer greater than 0 and less than 4, and coupling the tetrazo compound so produced with one molecular proportion of salicylic acid and one molecular proportion of an aminonaphthol sulphonic acid.

1,821,258. AX SCABBARD. OTA A. CLARK, Jens, Mont. Filed Aug. 22, 1929. Serial No. 387,726. 4 Claims. (Cl. 224—2.)



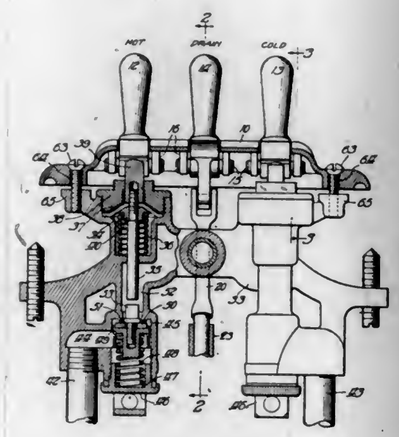
1. An ax scabbard comprising a back body portion, a cover portion supported at one end of the body portion and extending in spaced relation to the front thereof for enclosing a blade of an ax, a retaining arm carried by and substantially parallel to the face of the body portion remote from said cover portion, a second retaining arm carried by and substantially parallel to the face of the body portion and adjacent the cover portion, said retaining arms spaced to accommodate the handle of the ax therebetween, and means for fastening the cover portion and the second mentioned retaining arm together.

1,821,259. FOLDING TABLE AND BENCH. GUY C. DAVIS, Rockford, Ill., and DONALD G. GRISWOLD, Los Angeles, Calif., assignors of forty per cent to said Guy C. Davis, Rockford, Ill., and sixty per cent to Harold L. Offenhiser, Pearl City, Ill. Filed Feb. 28, 1929. Serial No. 343,313. 16 Claims. (Cl. 45—116.)



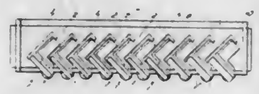
2. An article of folding furniture, such as a table or bench, comprising a top, a pair of legs at each end thereof each having a universal joint connection with the underside of the top so as to permit folding of each of the legs separately alongside the top and unfolding as well as crisscrossing thereof, a strut for each end of said top having a pivotal connection with the underside thereof so as to permit folding thereof alongside the top and unfolding to an operative position extending toward the intersection of the criss-crossed legs, each pair of legs having holes provided therein arranged to be brought into register at the points of intersection when the legs are criss-crossed, and studs pivotally mounted on the free ends of the struts and arranged to be extended through the registering holes whereby to fasten the struts to the criss-crossed legs at the points of intersection of the latter.

1,821,260. WASH BASIN FIXTURE. AUGUST C. DOBRICK, Chicago, Ill., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 19, 1929. Serial No. 400,765. 4 Claims. (Cl. 4—292.)



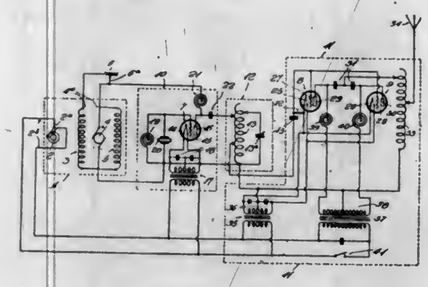
1. In a device of the class described, the combination with a basin, of a top plate resting on the top of the basin at one edge thereof and having a spout projecting therefrom over said edge, a lever journaled in said top plate, a valve casing located on the under side of the edge of the basin directly beneath the top plate, an inlet pipe opening into said valve casing, an outlet passage from said valve casing, a spring-controlled valve in said casing between the inlet pipe opening and the outlet passage, connections from the lever to said spring-controlled valve, an elbow connecting the outlet passage and the inlet to the spout, and means for securing the top plate to the valve casing and making a water-tight connection between the upper end of the elbow and the spout inlet.

1,821,261. SIEVE. AUGUST EMIL ERIKSSON, Dals Lerdal, Sweden. Filed Apr. 24, 1929, Serial No. 357,824, and in Sweden Dec. 17, 1926. 4 Claims. (Cl. 209—304.)



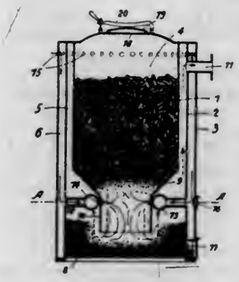
1. A sieve, comprising a frame; a plurality of laths pivoted in said frame in parallel spaced relation; a plurality of roof-shaped laths connected to the first-mentioned laths; a partition between each two adjacent parallel laths to divide the openings made by the laths; a pair of wedge frames adapted to slide in the frame and having slot openings between the two wedge frames; and a shaft in each roof-shaped lath and projecting into a slot opening whereby movement of the wedge frames will increase or decrease the openings between the adjacent parallel laths.

1,821,262. POWER SUPPLY FOR THERMIONIC TUBES. LAWRENCE A. HYLAND, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,865. 14 Claims. (Cl. 250—27.)



2. A power supply system for thermionic tubes wherein the anode circuits of said tubes are energized by the field excitation energy of an alternator, said alternator being connected for energizing the cathodes of said tubes.

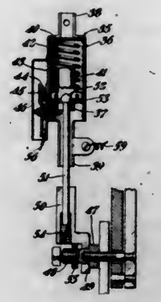
1,821,263. GAS PRODUCER. GEORGES IMBERT, Diemeringen, France. Filed Oct. 15, 1927, Serial No. 226,470, and in Germany Oct. 25, 1926. 1 Claim. (Cl. 48—76.)



A gas producer having in combination, a producer gas generating chamber having an upper portion to which fuel is admitted and a lower portion from which the generated gas is drawn off, an outer air admission jacket, an inner gas outlet jacket surrounding the upper fuel portion, said jackets having sheet metal walls, the inner wall of the gas outlet jacket forming the wall of the upper fuel portion, said inner wall having a frusto-conical section and a bottom neck section attached to and below the frusto-conical portion, an annular pipe surrounding the neck section and connected to the air jacket, radial pipes extending into the fuel bed and connected to the annular pipe for conducting air thereto, and a producer gas outlet pipe connected to the upper portion of the gas outlet jacket.

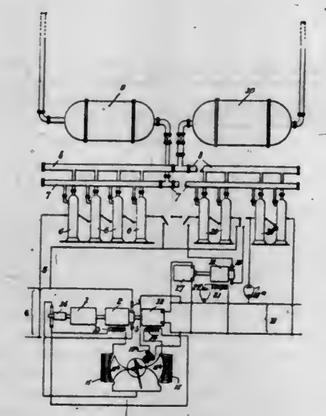
1,821,264. SEAT INDICATING SYSTEM. WILLIAM J. KING, East Orange, N. J., assignor to Bilmarjac Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,177. 13 Claims. (Cl. 200—85.)

1. In a seat-indicating system, the combination of a frame, a seat pivotally mounted thereon, a casing secured to said seat, a piston in said casing, a spring interposed between one end of said casing and said piston, an electrical contact insulatingly supported by said casing and



adapted to be engaged by said piston when in one position and a plunger having one end pivotally supported by said frame and the other end engaging said piston.

1,821,265. OPERATION OF POWER PLANTS. FRANZ LAWACZECK, Munich, Germany, assignor to Firm: Lawaczeck Gesellschaft mit beschrankter Haftung, Berlin, Germany. Original application filed Mar. 16, 1927, Serial No. 175,855, and in Germany Dec. 28, 1922. Divided and this application filed Dec. 8, 1927. Serial No. 238,687. 6 Claims. (Cl. 290—1.)

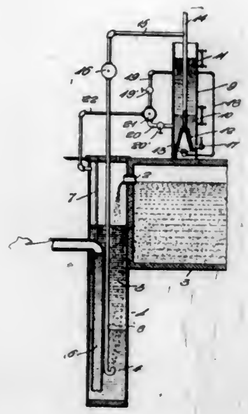


1. Electric power station comprising a power engine, means whereby said power engine is enabled to generate both alternating and direct current, and an electrolyzer for the generation of gas under pressure connected in parallel to said direct current generating means.

1,821,266. WATER TREATING APPARATUS AND METHOD. EDWARD DUDLEY LEWIS, Elmira, N. Y., assignor of one-half to Herschel L. Gardner, Elmira, N. Y. Filed Feb. 20, 1929, Serial No. 341,441. 4 Claims. (Cl. 210—2.)

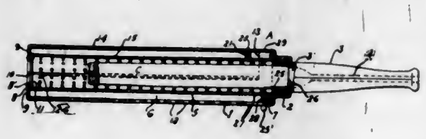
1. In a liquid purification apparatus, a liquid container, a gas line discharging into the liquid containing portion of said container; a retort to contain a column of water and a superposed column of low-grade oil, fuel-consuming

means for boiling the water in said retort and thereby directing steam upwardly through the oil, oil-conducting



means from said retort to said container, and means for forcing products of combustion from said fuel-consuming means to and through said gas line.

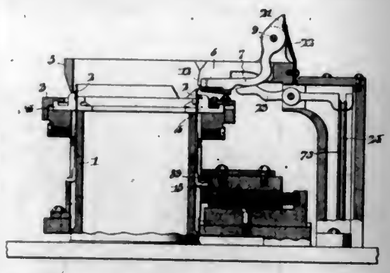
1,821,267. CIGARETTE OR CIGAR HOLDER. CHRISTIAN W. LOESCH, St. Louis, Mo. Filed Aug. 30, 1928. Serial No. 302,955. 1 Claim. (Cl. 131—51.)



A holder for cigarettes and the like comprising a housing, a shell within said housing, the wall of said shell being spaced from a wall of said housing to provide an air space between said walls, means for receiving an end portion of a cigarette, said means being so arranged with respect to said shell that a cigarette supported thereby will be disposed within said shell, the walls of said housing and said shell being provided with adjacently arranged cut-out portions extended longitudinally of the cigarette holder substantially from end to end thereof through which a cigarette is passed on introduction thereof into the interior of said shell, and means for closing said cut-out portions, said means for closing the aperture in the wall of said housing comprising a member slidable with respect to said housing.

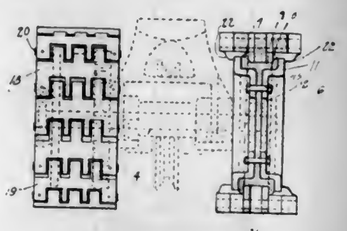
1,821,268. YARN FEEDING DEVICE FOR CIRCULAR KNITTING MACHINES. WILLIAM J. LONGTIN, Norristown, Pa., assignor to Wildman Mfg. Co., Norristown, Pa., a Corporation of Pennsylvania. Original application filed Jan. 25, 1915, Serial No. 4,090. Divided and this application filed Apr. 24, 1918. Serial No. 230,390. 19 Claims. (Cl. 66—49.)

1. In a circular knitting machine, a stitch cam operating all the needles during round and round knitting, the combination of a device for feeding auxiliary yarn; adjacent said stitch cam means for moving said device into operative position, to introduce thread to the needles, and to move said device to withdraw thread from position to be engaged by the needles; and means whereby a



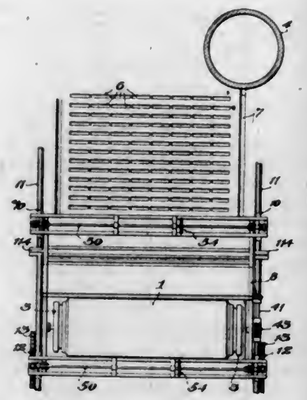
plurality of successive needles are caused to travel at different heights from other needles in relation to said device, at the points of such introduction or withdrawal.

1,821,269. ATTACHMENT FOR WHEELS. THOMAS MCNALLY, Pittsburg, Kans. Filed Mar. 16, 1928. Serial No. 262,146. 4 Claims. (Cl. 74—31.)



1. The combination of a wheel comprising a web having a rim provided with spaced-apart circumferential flanges, and a toothed member mounted on each side of the web and formed for receiving the rim and flanges therebetween whereby the teeth of the toothed members may be positioned in close proximity to the flanges.

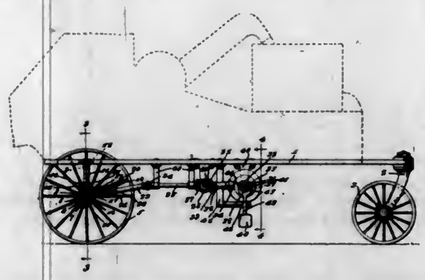
1,821,270. APPARATUS FOR MOLDING IN SAND. WILLIAM A. MILES, Salisbury, Conn. Filed Apr. 25, 1929. Serial No. 358,058. 13 Claims. (Cl. 22—22.)



1. An apparatus of the type set forth comprising a carriage adapted to transverse the casting floor, means on said carriage for forming unconnected molds arranged

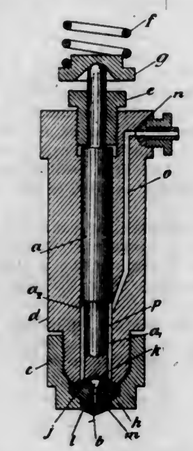
transversely with respect to the direction of movement of the carriage, a conveyor on said carriage arranged parallel to said molds, means for lifting castings from said molds to said conveyor and means for driving said carriage, and operating said lifting means synchronously.

1,821,271. AUTOMATIC STABILIZER. CHARLES A. MUSGROVE and FRED F. BENSON, Chinook, Mont. Filed Apr. 18, 1930. Serial No. 445,434. 1 Claim. (Cl. 280—6.)



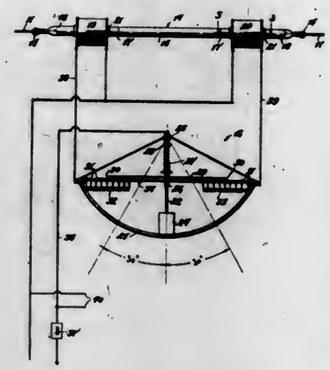
An automatic stabilizer including a frame having a ground wheel pivoted to the forward end thereof and a power shaft carried by the frame, an arcuate shaped bolster having the ends thereof secured to the under side of the frame and adjacent the rear end thereof, a channeled rear axle receiving the bolster and having spaced openings, spaced lugs on the bolster and engageable with the openings, wheels for the axle, an internally threaded sleeve pivoted to the frame adjacent one end of the bolster, a bearing secured to the axle, a threaded stem journalled in the bearing and threaded to the sleeve, a shaft journalled to the frame, a stub shaft journalled to the axle, means to rotate the stem by the rotation of the stub shaft, universal and telescopic means between the stub shaft and the second named shaft, a counterbalance control clutch on the power shaft and frame, and means connecting the clutch with the second mentioned shaft.

1,821,272. FUEL VALVE WITH ANNULAR SEAT. OVE PETERSEN, Hellerup, near Copenhagen, Denmark. Filed Aug. 25, 1927, Serial No. 215,484, and in Denmark July 9, 1927. 9 Claims. (Cl. 299—133.)



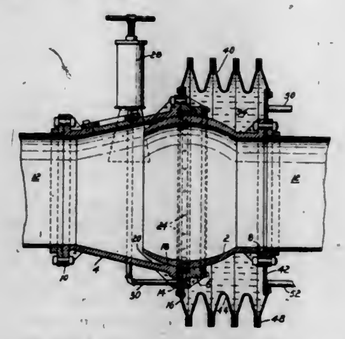
9. An improved fuel valve for internal combustion engines of the type operating with direct injection of fuel, comprising a housing, a valve spindle movable longitudinally in said housing and provided on its inner annular end face with a centrally arranged recess, a fixed member arranged at the end of the housing for cooperating with said valve spindle, a central fuel-passage in said member and said fixed member having a recess corresponding to and coacting with the recess of the valve spindle, the diameter of said recess in said fixed member being substantially greater than the diameter of the central fuel-passage.

1,821,273. STABILIZER FOR AIRPLANES. FREDERICK J. PIKE, Buffalo, N. Y. Filed July 1, 1929. Serial No. 375,078. 7 Claims. (Cl. 244—29.)



1. A device of the character described for an airplane having at least one horizontal, movable airfoil element for controlling the horizontal position of the airplane while in flight, comprising dual electro-magnetic means the opposing forces of which move said element in opposite directions, a rheostat constantly energizing and controlling the electrical energy through said dual electro-magnetic means and means responsive to the tilting of said airplane from its normal horizontal flying position to move said rheostat and vary the relative electrical energy delivered to the two parts of said electromagnetic means and restore the normal horizontal flying position of said airplane.

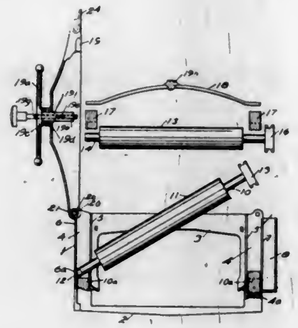
1,821,274. FLEXIBLE PIPE-JOINT. HENRY G. PLUMMER, Oakland, Calif., assignor to Pacific Const Engineering Company, Oakland, Calif., a Corporation of California. Filed July 1, 1926. Serial No. 119,931. 10 Claims. (Cl. 285—91.



1. In a ball-and-socket joint comprising a ball-ended pipe, a socket-ended pipe in mating contact therewith, and packing compressedly engaged by and between the engaged pipe to provide a barrier to leakage past the joint, a liquidtight bellows enclosing said joint, and means

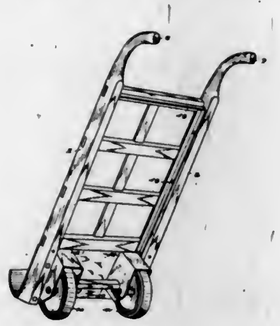
for conducting liquid under pressure to the space within said bellows whereby the ball-and-socket joint may be submerged in liquid at a pressure determinable relative to the pressure within said joint.

1,821,275. WRINGER. WILLIAM ROBERTSON, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed July 6, 1925. Serial No. 41,568. 1 Claim. (Cl. 68—32.)



In a wringer, the combination of a frame comprising side stiles and a bottom bar, the side stiles having guideways, one of said side stiles having the upper part of the outer face of the guide-way closed and provided with a shaft perforation; and wringer rolls mounted in the frame, one of said rolls having a driving rod extending through the perforation in the side stile in the assembled wringer, said rolls being insertable from the top of the wringer.

1,821,276. HAND TRUCK. DE FOREST ROE, Elyria, Ohio, assignor to The Colson Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,667. 12 Claims. (Cl. 280—56.)



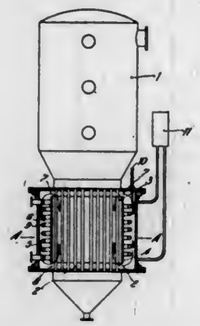
1. In a hand truck, a frame comprising a pair of spaced parallel side members and a plurality of laterally extending connecting cross members disposed intermediate said side members, a pair of the ends of said side members being formed to furnish hand grips for an operator, the other ends supporting thereon an angular plate, adapted to form a support for articles carried on the truck, a pair of wheel supports attached to said plate and a pair of wheels journalled in said supports, each of said supports being of hood form and comprising a pair of wheel bearing supports and a wheel shed portion disposed in the general direction of the wheel axis and at an angle to the plate.

1,821,277. CONVEYER FOR GRAIN BINDERS. CHRISTIAN F. ROUTHE, Redwood Falls, Minn. Filed Dec. 16, 1929. Serial No. 414,528. 5 Claims. (Cl. 24—32.)



4. A tightening means for a conveyer belt, said means including a tube secured transversely of one end of the belt, a spring in said tube, means for connecting an end of said spring with the other end of said belt, a slat secured transversely of the belt and spaced from said tube, and coil springs having their respective ends secured adjacent the top of said tube and adjacent the bottom of said slat.

1,821,278. VACUUM EVAPORATING APPARATUS. ERNST SCHUSTER, Bremen, Germany. Filed Aug. 12, 1929, Serial No. 385,166, and in Germany Mar. 5, 1928. 4 Claims. (Cl. 159—27.)

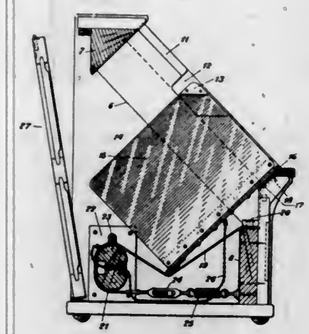


1. A vacuum evaporating apparatus in which the solution to be treated is evaporated by means of a heating liquid, comprising in combination a heating chamber, a circulatory system disposed in the said heating chamber for the circulation of the said solution, a preheating space for heating the heating liquid, which is divided off from the said heating chamber, heating means in said preheating space and communicating openings at the top and bottom between the preheating space and the heating chamber, such that the heating liquid can circulate without being conducted in piping in a positive manner along the walls of the circulating system, as and for the purpose set forth.

2. A vacuum evaporating apparatus in which the solution to be treated is evaporated by means of a heating liquid, comprising in combination a heating chamber, a circulatory system disposed in the said heating chamber for the circulation of the said solution, a preheating space for heating the heating liquid, surrounding the said circulatory system, a container surrounding the circulatory system and the preheating space for the heating liquid, a hollow cylinder surrounding the circulatory system, a heating coil in the annular space between the wall of the container and the hollow cylinder and communicating openings at the top and bottom between the preheating space and the heating chamber, such that the heating liquid can circulate without being conducted in piping in a positive manner along the walls of the circulating system, as and for the purpose set forth.

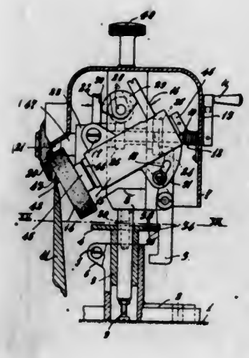
CARNEGIE LIBRARY OF ATLANTA

1,821,279. BOOKHOLDER. EDWARD J. SITHENS, Cynwyd, Pa., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 26, 1929. Serial No. 358,261. 1 Claim. (Cl. 312—34.)



A book holder including a casing having an enclosed substantially rectangular bottom portion and a cut away partially open upper portion, partitions in said casing forming compartments to receive books or the like, said partitions having inclined edges and extending across the open portion in a direction perpendicular to and connecting the upper and lower edges of the cut away portion, a pivotal member affixed to the casing and adapted to be attached to a bottom corner of a book and on which the book may be rotated outwardly, and panel members secured to the sides of the casing and extending in a plane parallel to the edges of the partitions to form with the partition edges an inclined support for a book when withdrawn from a compartment and opened, the book when closed being adapted to fall back in its compartment by gravity.

1,821,280. DEVICE FOR SHARPENING THE ROTARY CIRCULAR KNIVES OF SLICING AND OTHER MACHINES. CORNELIS FRANCISCUS MARIA VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed July 9, 1925, Serial No. 42,553, and in Great Britain July 9, 1924. 12 Claims. (Cl. 51—248.)



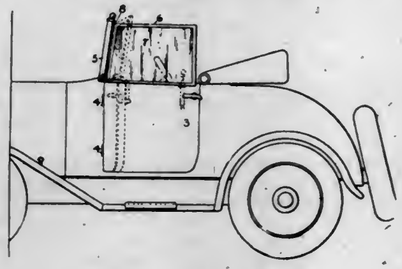
11. A sharpener for rotary slicing machine knives comprising a pair of grinders one for major operation and the other for removing the burr, means for moving said grinders into and out of operative positions relative to a rotary slicing machine knife to be sharpened, and mechanism for compelling a predetermined cycle of movements of said grinders while reversal thereof is prevented, such cycle of movements including movement of the major grinder into engagement with the knife followed by the movement of the burr grinder into engagement with the knife and after an interval while both grinders are in engagement with the knife movement of the major grinder away from the knife leaving the burr grinder in engagement therewith for an interval after which upon continued operation the same cycle must be repeated.

1,821,281. MANUFACTURE OF DIAZO-TYPES. KAREL VAN DER GRINTEN and LOUIS VAN DER GRINTEN, Venlo, Netherlands, assignors to Frans van der Grinten, trading as Chemische Fabriek L. van der Grinten, Venlo, Netherlands. Filed June 6, 1927, Serial No. 196,993, and in the Netherlands Dec. 11, 1926. 81 Claims. (Cl. 95—6.)

1. The process of rendering the back-ground of the diazo type prints substantially stable against discoloration which comprises including therein a reducing agent capable of arresting under normal conditions the discoloration of the components forming the back-ground of said prints.

40. As a new product, a base having a sensitive layer thereon containing a diazo compound bleaching upon exposure to light, and a reducing agent capable of arresting under normal conditions the discoloration of the components forming the back-ground of the finished print.

1,821,282. WINDGUARD FOR AUTOMOBILES. ROBERT C. WALL, Philadelphia, Pa. Filed Apr. 12, 1930. Serial No. 443,656. 7 Claims. (Cl. 296—84.)

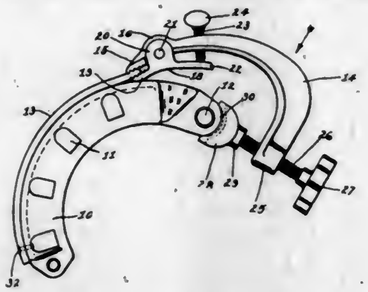


1. The combination in an automobile of a side door thereof with a windguard hinged to the automobile in general alignment with the position of the hinge of the door and normally positioned above the door on an independent hinge having an axis at an angle to the axis of the door so that the windguard and door may be simultaneously swung into open and closed positions and a mechanical connection between the windguard and the side door arranged at a distance from the hinge points thereof, said connection comprising a flexible link connected to the door on the inside and extending upwardly and over the upper part of the door to a point outside thereof and mechanically connected thereat to the lower part of the windguard so as to hold it spaced from the door, said link providing a universally flexible attachment between the door and windguard whereby they both may be opened and closed while connected.

1,821,283. BRAKE LINING STRETCHER. ANDREW OSCAR WISTI, Minneapolis, Minn. Filed Aug. 31, 1929. Serial No. 389,768. 11 Claims. (Cl. 29—84.)

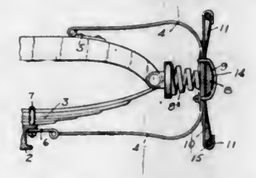
1. In means for stretching brake lining to a brake shoe or the like to which one end of the lining is adapted to be

secured, the combination of a clamp adapted to be secured to the other end of said brake lining, an arm rigid with one of the jaws of said clamp and extending past the free



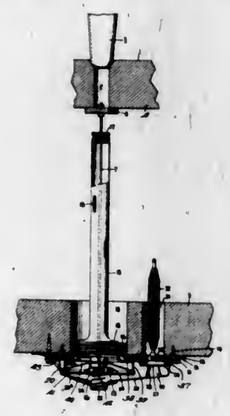
end of said brake shoe, a screw threaded in the outer end of said arm, a swivelled clamping head upon the end of said screw adjacent said last named end of said brake shoe and means whereby said screw may be turned.

1,821,284. BUFFER. EDWARD A. BANSCHBACH, Madison, Wis. Original application filed Apr. 17, 1922, Serial No. 553,462, Patent No. 1,647,766, dated Nov. 1, 1927. Divided and this application filed Nov. 30, 1928. Serial No. 323,589. 10 Claims. (Cl. 293—55.)



1. In a buffer, a pair of spaced supports and a plurality of bumper bars attached at the front of the supports and extensible laterally with respect thereto.

1,821,285. REMOVABLE PIPE ORGAN VALVE. DONALD S. BARROWS, Rochester, N. Y. Filed Oct. 16, 1928. Serial No. 312,871. 30 Claims. (Cl. 84—339.)



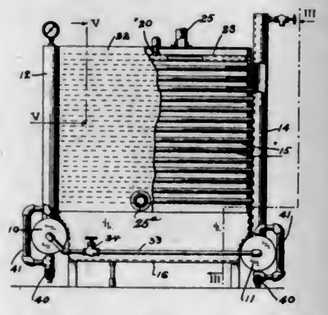
3. In a pipe organ having a wind chest at its top provided with an opening receiving the foot of a pipe and having its bottom formed with an opening in coaxial relation to the first named opening, a valve mechanism including a frame removably mounted upon the bottom of the wind chest, a valve assembly detachably connected with the frame at the second named opening and projecting therethrough, said assembly including a diaphragm chamber, an intermediate portion connected with the frame and an upstanding apertured tubular portion, a spindle connected with the diaphragm and carrying a valve element for controlling communication through the first named opening, a removable cover having air tight connection with the frame, and means for controlling the air pressure at opposite sides of the diaphragm, said means comprising an electro-magnetically opened relief port.

1,821,286. ADJUSTABLE PIPE ORGAN VALVE. DONALD S. BARROWS, Rochester, N. Y. Filed Oct. 26, 1928. Serial No. 315,223. 13 Claims. (Cl. 84—339.)



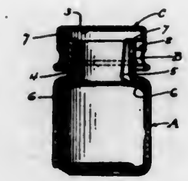
4. A valve for controlling communication between an organ wind chest and a pipe mounted thereon, the wind chest having a hole leading to the pipe, said valve comprising a tubular member carrying a chamber, a diaphragm covering the chamber, a valve element connected with the diaphragm and adapted to cover or uncover, said hole, means for establishing communication between the interior of the tubular member and the atmosphere, means operable from the exterior of the wind chest for adjusting said tubular member and consequently the valve element, and means other than said communication establishing means for permitting exhaust of air within the tubular member and diaphragm chamber.

1,821,287. AMMONIA CONDENSER. JACOB HENRY BECKMAN, Oakland, Calif. Filed Dec. 17, 1929. Serial No. 414,704. 4 Claims. (Cl. 257—35.)



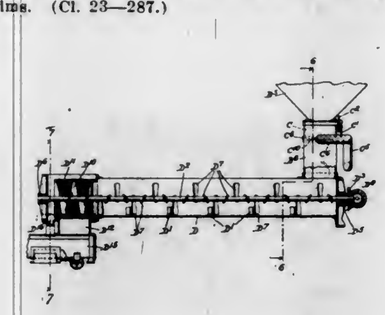
1. In an ammonia condenser, a plurality of heat exchanging tubes, means causing a flow of cooling liquid over said tubes, baffles directing the liquid toward the tubes, means for causing a current of air to pass over said tubes in a counter direction to the cooling liquid, and baffling means for causing the current of air to impinge against the tubes and the first named baffles.

1,821,288. BAIT BOTTLE. SAMUEL H. BEETEM, Benicia, Calif., assignor to Rex Research Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Nov. 13, 1928. Serial No. 319,117. 3 Claims. (Cl. 43—131.)



1. A device of the character described comprising a container having a neck and being open at its upper end; a head member forming a substantial closure for the upper end of the neck, but spaced vertically therefrom to permit free entrance of ants and the like; and a pair of legs secured to the head member and extending downwardly into the neck to retain the head member against removal.

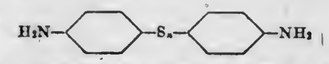
1,821,289. APPARATUS FOR MORTAR MANUFACTURE. CHRISTIAN P. BERG, Chicago, Ill. Original application filed Feb. 8, 1926, Serial No. 86,700, now Patent No. 1,679,149, dated July 31, 1928. Divided and this application filed Feb. 9, 1928. Serial No. 252,963. 9 Claims. (Cl. 23—287.)



2. A hydrating installation including a mixing chamber, means for projecting a substantially continuous sheet of water thereacross, and means for delivering relatively finely divided material through said sheet of water.

1,821,290. MANUFACTURE OF DISAZO DYES. RAINALD BRIGHTMAN, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, London, England. Filed June 17, 1929, Serial No. 371,730, and in Great Britain June 27, 1928. 14 Claims. (Cl. 260—77.)

2. In the manufacture of disazo dyestuffs the process which comprises tetrazotizing a diphenyl sulphide represented by the probable formula



in which n equals 2 or 3, and coupling with a sulphonated phenyl pyrazolone.

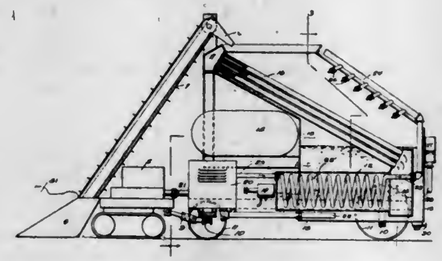
1,821,291. MANUFACTURE OF DYED PRODUCTS. RAINALD BRIGHTMAN and PERCY CHORLEY, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Original application filed Apr. 16, 1928, Serial No. 270,572, and in Great Britain Apr. 22, 1927. Divided and this application filed Aug. 24, 1929. Serial No. 388,262. 26 Claims. (Cl. 8—5.)

1. The process of dyeing regenerated cellulose materials in even level shades which comprises applying to said regenerated cellulose materials dyestuffs having the general formula

$$R_1-N=N-R-S_x-R-N=N-R_2$$

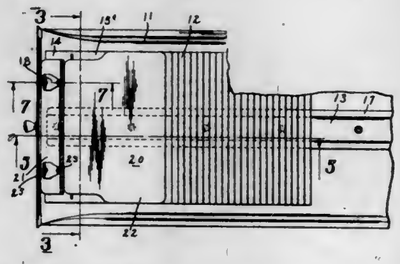
wherein R represents a divalent phenyl residue, x is an integer greater than 0 and less than 4 and R_1 represents a coupling component of the benzene, naphthyl or pyrazolene series, and R_2 represents an aminonaphthol sulphonic acid, and in which the $-N=N-$ groups are connected to the phenyl residue in the position para to the S atom.

1,821,292. SNOW MELTER. CURTIS D. CHASE, Allston, Mass., assignor to Chase Holding Corporation, a Corporation of Pennsylvania. Filed Oct. 19, 1927. Serial No. 227,342. 5 Claims. (Cl. 126—343.5.)



1. In an apparatus of the character described, in combination, a supporting frame, a tank mounted thereon, a combustion chamber operatively related to the tank, a source of heat therefor, flues in the tank extending upwardly and in inclined relation from the combustion chamber, means for depositing snow on said flues, means for conducting water from said tank through said combustion chamber, whereby to heat the same, a plurality of sprinkler elements disposed in inclined relation above the flues, and means for supplying the sprinkler elements with the heated water.

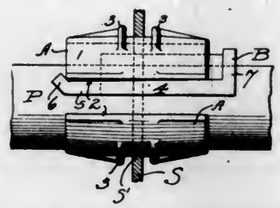
1,821,293. INDEX OR FILE. WILLIAM H. DAY, East Haven, Conn., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed July 27, 1925. Serial No. 46,335. 8 Claims. (Cl. 129—16.)



4. In an index or file, an index element carrying member having means to retain a plurality of index elements therein, a plurality of index elements slidingly engaged by

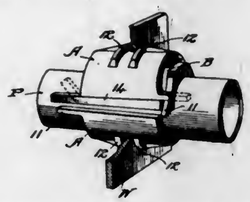
said means, a part associated with said carrying member adapted to prevent accidental slippage of said index elements from said retaining means, and an index element support connected to said carrying member by said part, said element support having a portion swingable into one position to retain said elements flatwise upon said carrying member and into another position to support said elements flatwise upon itself.

1,821,294. PIPE ANCHOR AND CLAMP. PAUL W. DIETER, New York, N. Y. Filed Nov. 6, 1929. Serial No. 405,248. 2 Claims. (Cl. 248—31.)



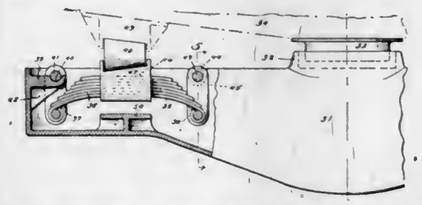
1. A device of the class described adapted for use with a pipe which passes through a support, including, a pair of anchor members adapted to engage with the support, and a locking wedge member having laterally projecting side flanges, said wedge member having a bearing engagement throughout its underside with the pipe, and inclined bearing faces on the upper sides of the bearing flanges adapted to engage with the edge portions of the adjacent anchoring member.

1,821,295. PIPE ANCHOR AND CLAMP. PAUL W. DIETER, New York, N. Y. Filed Feb. 17, 1930. Serial No. 429,139. 3 Claims. (Cl. 248—31.)



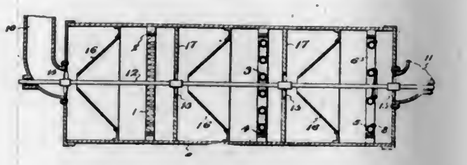
2. A pipe clamping device comprising an anchoring member adapted to cooperate with a support, a wedge adapted to be driven between the pipe and said anchoring member, and means on the anchoring member arranged on the side from which the wedge is driven adapted to be bent into locking engagement with the wedge when the same has been driven in place.

1,821,296. TRUCK BOLSTER WITH SPRING SUPPORTED SIDE BEARINGS. PERCY R. DRENNING, Baltimore, Md., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Oct. 7, 1926, Serial No. 140,184. Renewed Jan. 14, 1931. 23 Claims. (Cl. 308—226.)



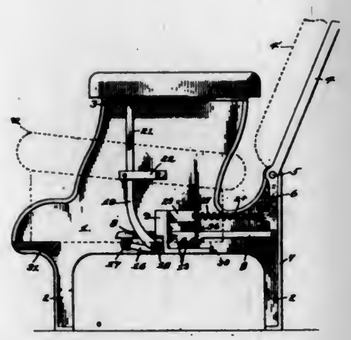
1. In combination, a body bolster having a center plate and side bearing elements, a truck bolster having an upstanding guide receiving the center plate, bearing members mounted within the ends of the truck bolster, rollers located between said bearing elements and said bearing members, and a bank of plate springs located within the truck bolster and connected with each bearing member for sustaining the load.

1,821,297. COOLING, HEATING, VENTILATING, AND HUMIDIFYING SYSTEM. ARTHUR DRISCOLL, Tucson, Ariz. Filed Oct. 1, 1928. Serial No. 309,429. 1 Claim. (Cl. 257—9.)



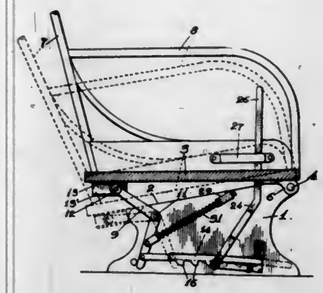
Air treating apparatus comprising a casing, having an air inlet and an air outlet at opposite ends, partitions within the casing dividing the interior thereof into a plurality of compartments and having central openings, a shaft passing through the casing, fans rotatable with the shaft and associated with the inlet and outlet of the casing and the openings of the partitions, a flared baffle adjacent the inlet to spread the air in all directions toward the wall of the casing, similar baffles adjacent the several partitions, and an air treating unit in each of said compartments.

1,821,298. RECLINING CHAIR. CHARLES E. FERREIRA, Oakland, Calif. Filed Nov. 26, 1928. Serial No. 321,910. 5 Claims. (Cl. 155—163.)



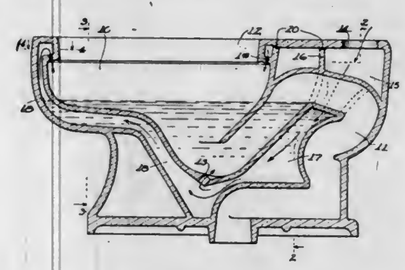
4. In a reclining chair the combination with a seat and a pivoted back movable to reclining positions relative to the seat by the weight of an occupant imposed upon the back, of securing means for normally holding the back against rearward pivotal movement and normally permitting free forward movement of said back, said means being operable to release the back for rearward movement thereof to a desired reclining position; a spring guide rod connected at one end to the back independently of the securing means; a stationary guide mounted upon the chair and engaging the opposite end of the rod; and a compression spring mounted upon the rod, said spring being compressed against the guide by a rearward movement of the back to a reclining position to automatically return said back to normal upright position when relieved from the weight of an occupant.

1,821,299. RECLINING SEAT. CHARLES E. FERREIRA, Oakland, Calif. Filed May 8, 1929. Serial No. 361,856. 9 Claims. (Cl. 155—116.)



1. A reclining seat comprising a base; a seat frame pivotally connected adjacent the forward edge thereof to the base; a back mounted upon the seat frame and movable therewith; a supporting member pivoted at a point intermediate its ends upon the base and having one end thereof engaging the seat frame adjacent the rearward edge to support the seat frame and back; an adjusting member pivotally connected to the opposite end of the supporting member and provided with a plurality of detents; a stop secured upon the base adjacent the adjusting member to be engaged by any of said detents to releasably secure the supporting member in a desired position; and means for moving the adjusting member to be disengaged from the stop whereby the seat may be tipped rearwardly from a normal upright position to a desired inclined position.

1,821,300. SIPHON JET CLOSET. GORDON P. GAVIN, Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Filed Aug. 11, 1930. Serial No. 474,463. 4 Claims. (Cl. 4—73.)



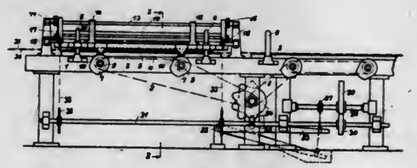
1. A siphon jet closet comprising a bowl having a siphon discharge way with a siphon jet nozzle and a flushing rim, a chamber above the siphon having a supply opening, and a passageway from the chamber around the opposite sides of the siphon bend to the space between the legs of the siphon and to the siphon jet nozzle and from the siphon jet nozzle upward and forward along the bottom of the bowl to the front of the flushing rim.

1,821,301. PIN FOR ARTIFICIAL TEETH. ALBERT E. GIBSON, Springfield, Pa., assignor to The Dentists' Supply Company of New York, a Corporation of New York. Original application filed Sept. 24, 1924, Serial No. 739,574. Divided and this application filed Sept. 15, 1928. Serial No. 306,116. 1 Claim. (Cl. 32—9.)

As an article of manufacture, a pin for an artificial tooth having a headless end, combined with a cup-shaped body of solder of thick mass abutting directly against the end of the pin, said solder having a very thin annular flange portion of substantially uniform thickness mechanically stretched and die shaped about and cold compressed upon the pin so as to be firmly set and frictionally held thereto in accurate alignment.

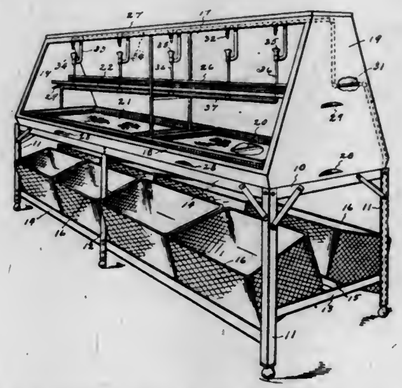


1,821,302. APPARATUS FOR PRINTING COLORED PATTERNS ON PLUSH FABRICS OR THE LIKE. ARTHUR GÖRNER, Grefrath, near Krefeld, Germany, assignor to the Firm: Plüschweberei Grefrath Aktiengesellschaft, Grefrath, near Krefeld, Germany. Filed June 28, 1928, Serial No. 288,897, and in Germany July 1, 1927. 4 Claims. (Cl. 101—126.)



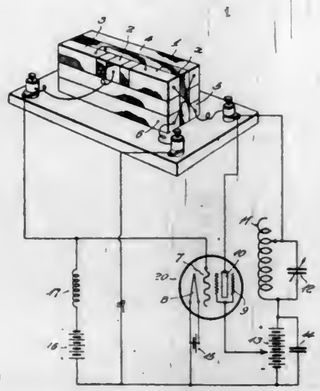
1. In a device for printing colored patterns on plush and like fabrics, a stencil or permeable fabric, means for spreading the coloring material over the entire surface of said stencil and simultaneously exerting a pressure upon said stencil to thereby create an air-tight seal between the stencil and web to be colored, means for abruptly stripping the stencil from the web to be colored, an impermeable support for the web to be colored, and means for applying an adbesive between said support and said web, said adhesive having the characteristic of creating an adhesion between the web and support which is greater than the adhesion between the stencil and web created by the air-tight seal.

1,821,303. SPRAY STAND. TOM M. HAMILTON, Jr., Dallas, Tex., assignor to Lane Vegetable Spray Company, Dallas, Tex., a Corporation of Texas. Filed Apr. 19, 1929. Serial No. 356,458. 5 Claims. (Cl. 211—127.)



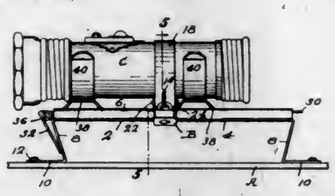
1. In a display stand, a frame, legs supporting the frame, a drip pan mounted on the frame and provided with supporting means adjacent its upper edges, and an open mesh basket supported by said means above the bottom of the pan.

1,821,304. CRYSTAL MOUNTING AND CIRCUIT ARRANGEMENT. JAMISON R. HARRISON, Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 4, 1929. Serial No. 330,276. 19 Claims. (Cl. 250—36.)



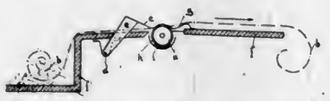
1. A mounting for a piezo electric element comprising in combination a plurality of electrodes spacially positioned immediately adjacent to opposite sides of said element at least three of said electrodes being positioned on the same side of said crystal element and two of said electrodes on said side which are not adjacent being conductively connected together.

1,821,305. FLASHLIGHT SUPPORT AND BRACKET THEREFOR. JOHN HAUENSTEIN, Kansas City, Mo. Filed Jan. 16, 1931. Serial No. 509,073. 2 Claims. (Cl. 240—52.5.)



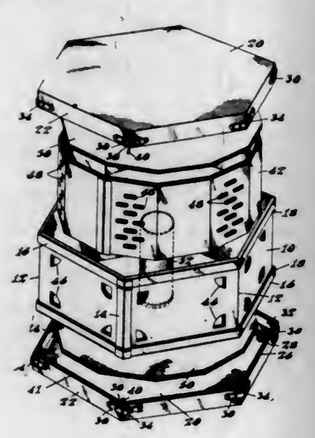
1. In combination, a flashlight holder having a base member and a rearwardly inclined leg fixed to the front end of said base member, and a bracket consisting of a body, means on said body to coact therewith in forming a sheath for the reception of the base member, and legs for said body which converge towards their lower ends and one of which is arranged in the path of the leg on the base member to check the latter when inserted in said sheath.

1,821,306. APPARATUS FOR APPLYING THIN EVEN LAYERS OF LIQUIDS ON SURFACES. ALBERT KARL GOTTHELF HINGST, Venlo, Netherlands, assignor to Frans van der Grinten, Venlo, Netherlands. Filed Apr. 20, 1929, Serial No. 356,779, and in the Netherlands Dec. 8, 1928. 2 Claims. (Cl. 95—94.)



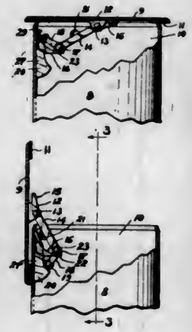
1. Apparatus for developing phototypes comprising a roller for applying a developing liquid to the surface of a sheet to be developed, means for supplying developing liquid to the surface of said roller, an elongated non-rotating device having a plurality of spaced toothed members for pressing the sheet against said roller, and means for mounting said device in operative relation with said roller so that said members bear against the sheet with a pressure sufficient to cause the sheet to follow part of the periphery of said roller in such manner that the developing liquid is spread upon the surface of the sheet to be developed in a thin even layer.

1,821,307. BOX. CARROLD D. HOWLAND, Plymouth, Mass. Filed Mar. 31, 1930. Serial No. 440,322. 9 Claims. (Cl. 229—23.)



1. A box comprising an outer polygonal wall, and an inner polygonal wall having a greater number of sides than the outer wall, a side of the inner wall extending across an apex of the outer wall to form a space.

1,821,308. FILL CAP. GEORGE HUGHES, Trout Mills, Ontario, Canada. Filed Dec. 10, 1930. Serial No. 501,274. 8 Claims. (Cl. 220—35.)

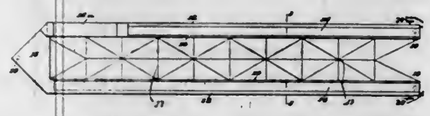


1. In a device of the class described, a follower plate for pivotal attachment to the fill cap, supporting means for attachment to the interior of a filling tube, said supporting means being pivoted to said follower plate in the vicinity of the plate's free end, and a cam for attachment to the interior of the filling tube to present a guiding surface engaged with the free end of the follower plate, said supporting means and said cam being relatively resilient so as to retain the free end of the follower plate in engagement with the guiding surface.

1,821,309. PROCESS OF MANUFACTURING COMPOUND FERTILIZERS. ERLING JOHNSON, Odda, Norway, assignor to the Firm: Odda Smelteverk A/S., Odda, Norway. Original application filed Sept. 9, 1929, Serial No. 391,507, and in Norway Nov. 24, 1928. Divided and this application filed Dec. 26, 1930. Serial No. 505,004. 3 Claims. (Cl. 71—7.)

1. Process of manufacturing compound fertilizers from the solution which is obtained by treating phosphate rock and similar phosphate material with nitric acid and crystallizing the greater part of the calcium nitrate contained in said solution, comprising adding mineral phosphates and potassium sulphate to the mother liquor from the crystallization of calcium nitrate and removing the surplus of water.

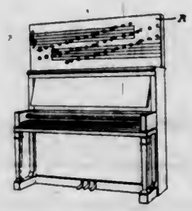
1,821,310. FLOATING HARBOR. CLARENCE W. KING, Shreveport, La. Filed Apr. 14, 1930. Serial No. 444,257. 7 Claims. (Cl. 144—0.5.)



1. A long floating harbor comprising a system of long spaced-apart hulls and plates which form the two sides of the harbor and whose ends are connected together in front to form a suitable breakwater, said hulls and plates being rigidly connected throughout their lengths by cross-braces arranged some distance below the water-line, combined with means for checking the pitching movements of the floating harbor.

5. A long floating harbor comprising a system of long spaced-apart hulls forming the sides of the harbor and connected together throughout their lengths by cross braces arranged below the water line, combined with caissons arranged toward or near the opposite ends of the harbor and having closed tops, and means for causing air to enter the air spaces in the upper parts of said caissons alternately, so as to check pitching movements of the harbor.

1,821,311. APPARATUS FOR TEACHING SIGHT-SINGING. CHARLES J. LAMP, San Francisco, Calif. Filed Nov. 26, 1930. Serial No. 498,383. 2 Claims. (Cl. 84—478.)



2. In an apparatus of the character described a panel having a plurality of perforations formed therein, said panel having a staff displayed on one side thereof, the perforations being positioned on and between the lines of the staff, plugs insertable in the perforations, a head member on each plug and displaying notes, a chromatically tuned sounding instrument, a spring actuated arm, one for each plug and cooperating therewith to normally maintain the plugs in the partially extended position, means whereby depression of a plug imparts movement to the co-operating spring arm, means whereby movement of a cooperating spring arm closes an electric circuit, and means energized by the closing of said circuit whereby the sounding instrument is actuated.

1,821,312. LOCK WASHER. NICHOLAS RICHARD LILLIG, Portland, Oreg., assignor to Tice Lock-Washer Manufacturing Co., Portland, Oreg., a Corporation of Oregon. Filed Feb. 28, 1931. Serial No. 519,188. 5 Claims. (Cl. 151—35.)



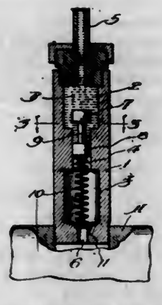
4. A lock washer comprising a metal disk having a central bolt hole encircled by a continuous annular body having undulations, the axes of which lie transversely of the body, said body having a peripheral recess at the peak of one undulation and another peripheral recess at the valley of a second undulation.

1,821,313. COOKY DISPLAY STAND. HENRY MARSH, Chicago, Ill., assignor to Grennan Bakeries, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 3, 1930. Serial No. 465,665. 1 Claim. (Cl. 211—72.)



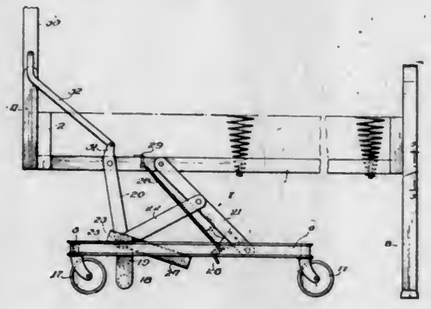
Collapsible display stand comprising a front wall member and side wings hinged thereto and provided with terraced steps for supporting articles thereon, a rear wall member provided with slots, tongues on said wings removably engageable in said slots for maintaining the stand in upright position, and a reenforcing strip hinged to said front wall and provided with slots for the reception of the upper edge portions of said wings.

1,821,314. MEASURING UNIT FOR LUBRICATING SYSTEMS. GEORGE L. MOORE, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 18, 1926. Serial No. 82,075. 3 Claims. (Cl. 184—7.)



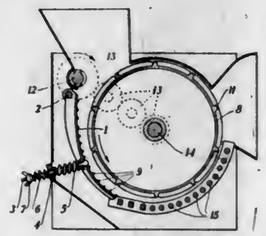
1. A measuring device having an inlet and an outlet, a shuttle in said device having a pocket to receive lubricant from the inlet and deliver it to the outlet, said shuttle having ends of equal cross-section, a spring tending constantly to hold said shuttle in a position in which said pocket communicates with the inlet and is out of communication with the outlet, and said shuttle being adapted to be moved by fluid pressure at the inlet to close communication between the pocket and the inlet and place said pocket in communication with the outlet.

1,821,315. FOLDING BED. LEON MUCHLINSKI, Kenosha, Wis. Filed Oct. 2, 1926. Serial No. 139,106. 6 Claims. (Cl. 5—142.)



1. In a folding bed, a base, a bed frame, a bar pivotally connected at the respective ends to said base and said frame, a strut pivoted to said frame near the pivoted frame connection of said bar, the lower end of said strut slidably engaged with the base, and a link between said lower end of the strut and the mid portion of said bar.

1,821,316. BEATER DRUM MECHANISM FOR SHELLING MAIZE. GEORGE CLIFTON OAKES, Njoro, Kenya Colony, Africa. Filed Aug. 27, 1930, Serial No. 478,184, and in Great Britain Aug. 15, 1929. 3 Claims. (Cl. 130—6.)

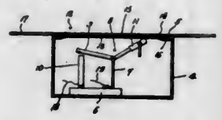


1. A beater drum mechanism comprising a beater drum mounted for rotation, a shaft supported in parallelism to the axis of the drum, a plurality of independent breast sections swingingly supported at one end on said shaft and depending therefrom at right angles to the axis of the drum and for cooperation with the surface of the drum, a bar mounted below the shaft, means whereby the bar may be adjusted relative to the axis of the drum, and means carried by the bar and cooperating with each of the breast sections for supporting the sections in independent yieldable relation with respect to the drum.

1,821,317. PROCESS FOR FIREPROOFING AND WATERPROOFING TEXTILES. HAROLD R. OFFORD and NICHOLAS T. MIROV, Berkeley, Calif. Filed July 24, 1929. Serial No. 380,742. 1 Claim. (Cl. 91—68.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

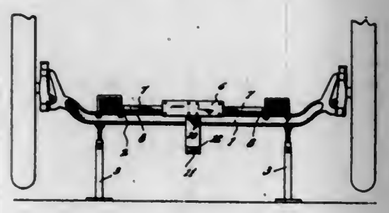
A process for fireproofing and waterproofing fibrous and other materials consisting of immersing the materials in a 45° Tw. solution of sodium stannate, squeezing and drying the materials, soaking the said materials in a 15° Tw. solution of ammonium sulphate, squeezing and drying the said materials, removing the soluble sodium sulphate by dipping in cold water, drying and then thoroughly soaking the said materials in a proportionate solution of not more than 1 gr. of gilsonite in 100 cc. of benzene, and squeezing and air drying the said materials until the excess solvent has volatilized.

1,821,318. ALARM SWITCH. CARL O. PETERSON, Essex, Iowa. Filed Jan. 21, 1930. Serial No. 422,361. 2 Claims. (Cl. 200—142.)



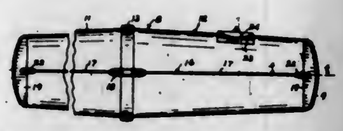
1. A circuit closer of the character described comprising a box having an open side, an inturned flange on said open side of the box, a switch mounted in the box, resilient means yieldingly urging the switch toward circuit closing position, and a fusible closure mounted in the open side of the box and engaged with the switch in a manner to retain said switch open position, said cover comprising inner and outer laminations secured together adjacent their marginal edges, the free marginal portions of the laminations embracing the flange therebetween in a manner to retain the closure in position on the box.

1,821,319. AXLE LEVEL. CLYDE H. PHELPS, Binghamton, N. Y., assignor, by mesne assignments, to Accurometer Mfg. Co., Inc., a Corporation of New York. Filed Aug. 7, 1928. Serial No. 298,007. 1 Claim. (Cl. 33—207.)



A gage for the purpose set forth comprising upper and lower parallel frame bars, plates connecting said bars in fixed relation, slides mounted between said bars and plates to project beyond the ends of the same and be supported at their outer ends by an axle, a hanger depending centrally from the frame bars at a right angle thereto, a level carried by the lower end of the hanger parallel with the frame bars, and supporting studs on the under sides of the slides at the outer ends of the same.

1,821,320. PONTOON. SIDNEY G. PLUMMER, Oakland, Calif. Filed Dec. 10, 1929. Serial No. 413,052. 6 Claims. (Cl. 9—11.)



1. A pontoon comprising a shell intermediately divided solely transversely thereof to provide a pair of axially-separable sections of frusto-conical and similar outline for mutually nested engagement.

1,821,321. CELLULOSE FIBER FOR PREPARATION OF ESTERS AND PROCESS OF PRODUCING SAME. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Aug. 28, 1926. Serial No. 132,319. 12 Claims. (Cl. 260—100.)

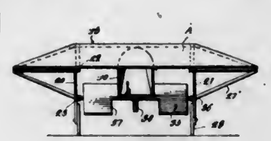
7. Depolymerized cellulose fiber having the following characteristics:

(a) Alpha cellulose content 95% +
(b) Soda solubility (3% caustic soda solution) 1% —
(c) Copper number 2 —

1,821,322. COOKING LIQUOR FOR THE PRODUCTION OF SULPHITE PULP. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 1, 1926. Serial No. 145,708. 2 Claims. (Cl. 92—11.)

1. A composite base acid sulphite liquor having a combined SO_2 content in the form of alkaline earth metal bisulphite and alkali metal bisulphite, the alkaline earth metal bisulphite being present substantially to the limit of its solubility and at least 1% combined SO_2 being in the form of alkali metal bisulphite.

1,821,323. AEROPLANE. DANIEL C. ROBERTS, Trenton, N. J. Filed Mar. 17, 1930. Serial No. 436,572. 2 Claims. (Cl. 244—12.)



1. In an aeroplane, a longitudinally extending fuselage, a sustaining wing connected with the fuselage; and extending substantially the full length thereof, longitudinally extending vertically disposed wings secured to and depending from the sustaining wing on opposite sides of the fuselage in spaced relation thereto, a vane arranged between the vertical wings, a horizontal pivot for said vane arranged intermediate the ends thereof, whereby said vane can be swung to a vertical position or at an angle to the vertical and to the horizontal, and means for operating said vane.

1,821,324. METHOD OF PRODUCING ACETONE. KOLOMAN RÓKA, Konstanz, Baden, Germany, assignor, by mesne assignments, to the Firm of Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 17, 1925, Serial No. 44,367, and in Germany July 21, 1924. 8 Claims. (Cl. 260—234.)

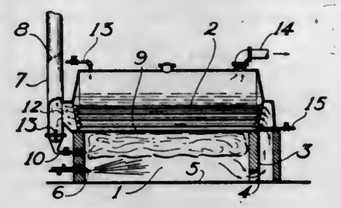
1. A method for making acetone which consists in reacting acetaldehyde with water vapor at temperatures from 250° C. to 660° C. in the presence of a catalyst comprising a basic, inorganic, oxygen-containing compound of a heavy metal.

1,821,325. RAIL COUPLING. ARTHUR A. SCHAUBHUT, Thibodaux, La., assignor of one-fifteenth to Lawrence H. Pugh, Thibodaux, La. Filed Aug. 25, 1930, Serial No. 477,716. Renewed July 24, 1931. 2 Claims. (Cl. 238—193.)



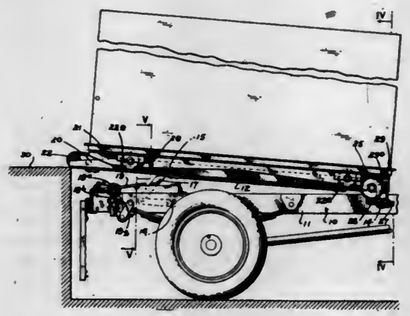
2. A rail coupling comprising a pair of members having overlapping inturned flanges for engagement beneath the bases of rail ends, and provided on the flanges with interlocking tongues for drawing the members together against the opposite sides of the rails upon the relative longitudinal shifting of the members, pins carried by one member engaging through the webs of the rails, the other member having interlocking means for engaging the pins upon the relative longitudinal shifting of the members, a spring bar seated lengthwise in the bottom of one of the members and having a toothed dog near its outer end and ratchet teeth arranged longitudinally in the bottom of the other member and in line with the teeth of said dog for interlocking the members when adjusted.

1,821,326. PROCESS FOR HEATING DECOMPOSABLE MATERIALS. JACKSON R. SCHONBERG, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed June 11, 1927. Serial No. 198,134. 5 Claims. (Cl. 196—116.)



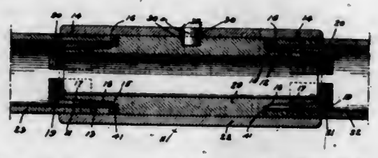
1. The method for protecting heat absorption surfaces of a still from local overheating by radiation, comprising maintaining a relatively cool layer of a semi-opaque gas between such surfaces and the source of radiation.

1,821,327. AUTOMOBILE TRUCK. WILLIAM P. SCOTT, Oakland, Calif., assignor to Drayage Service Corporation, Oakland, Calif., a Corporation of California. Filed Nov. 4, 1929. Serial No. 404,737. 2 Claims. (Cl. 214—65.)



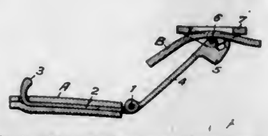
1. In combination with a truck frame, a sub-frame overlying the same, a pivotal connection between the forward end of said sub-frame and said truck frame whereby the rearmost end of the sub-frame may be raised and lowered, said sub-frame having tracks extending longitudinally thereof, a wheeled carriage adapted to be moved longitudinally of said tracks, transverse axles on said carriage carrying wheels adapted to roll on the sub-frame tracks, a pair of transverse shafts carried by the sub-frame and arranged one at each end thereof, a sprocket on each shaft arranged centrally of the sub-frame, an endless chain carried by said sprockets, means on said chain for engaging an axle of the carriage whereby movement of the chain will impart movement to the carriage.

1,821,328. TOOL JOINT. AUGUST L. SEGELHORST, Huntington Beach, Calif. Filed Oct. 29, 1927. Serial No. 229,606. 8 Claims. (Cl. 285—161.)



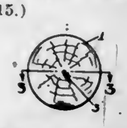
1. A tool joint comprising: tubing members having aligned projections therein; an expanding member adapted to externally engage said projections; and a coupling member having annular recesses formed in the external ends thereof adapted to receive said tubular member and said expanding member, said coupling member recesses and said expanding member being provided with cooperating threaded surfaces for effecting the advancement and expansion of said expanding member relatively thereto.

1,821,329. BELT BUCKLE. CARL SPINNLER, Liestal, Switzerland. Filed July 10, 1930, Serial No. 467,079, and in Switzerland July 16, 1929. 4 Claims. (Cl. 24—71.)



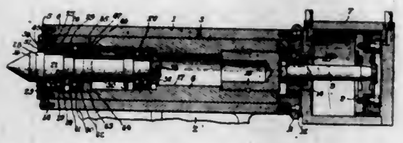
1. In a belt buckle of the type described, in combination, two coupling members pivotally connected to each other, a clasp frame pivotally mounted on the outer end of its correlated coupling member, means on the outer end of the coupling member correlated to the said clasp frame providing a cross-bar for the said frame for clamping the free belt portion to the frame when the two coupling members approach each other, and locking means on the outer end of each coupling member for securing the coupling members in their closed position.

1,821,330. TARGET. ARTHUR R. STOWELL, Greenwood, Me. Filed Nov. 28, 1930. Serial No. 498,846. 1 Claim. (Cl. 124—15.)



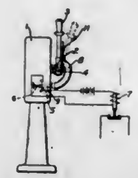
Target comprising a thin wooden plate cut cross grain with the edges of the grain presented in its front face, and a headless pin imbedded part way only in the thickness of said plate having a portion projecting from the rear face of said plate of a length just sufficient to give the target a slight hold when the pin is stuck into a vertical surface.

1,821,331. TAILSTOCK. ERNEST J. SVENSON, Rockford, Ill., assignor to Sundstrand Machine Tool Co., Rockford, Ill., a Corporation of Illinois. Filed Mar. 19, 1928. Serial No. 262,672. 11 Claims. (Cl. 82—31.)



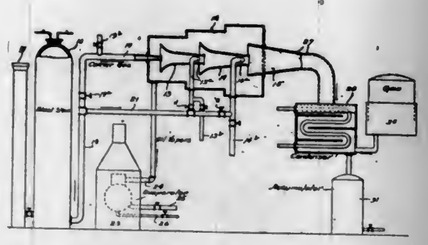
1. A lathe tailstock comprising, in combination, a supporting frame having a bore, a plunger reciprocably mounted therein, means for reciprocating said plunger, a center in the forward end of said plunger, and bearing means for rotatably supporting said center comprising a ball bearing having an inner race mounted near the rear end of said center and having an outer race arranged for sliding movement on said plunger, a pair of single row ball bearinga mounted adjacent each other on said center near its forward end, means to clamp the two inner races thereof together axially so as to place the balls in said bearings under a constant pressure tending to maintain said outer races abutting each other, an antifriction thrust bearing comprising a forward race fixed on said center, a rear race loosely surrounding said center and balls interposed between said races, a thrust washer mounted in said plunger and adapted to abut said rear race, and resilient means interposed between said washer and said rear race tending to urge said rear race towards said forward race so as to prevent displacement of said balls.

1,821,332. CONTROL SYSTEM. WALTER E. THAU, South Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 24, 1927. Serial No. 242,349. 3 Claims. (Cl. 200—59.)



1. In a controller, in combination, a frame for supporting the controller, a shaft for operating the controller, a manually operable handle pivotally secured to said shaft for actuating the controller to different operating positions and to a neutral position, an auxiliary switch mounted on the controller, an unbalancing member supported on the handle and disposed to normally bias the handle towards actuating engagement with the auxiliary switch, and guide members disposed on the controller frame for preventing the handle from actuating the auxiliary switch when the handle is in a position other than the neutral position.

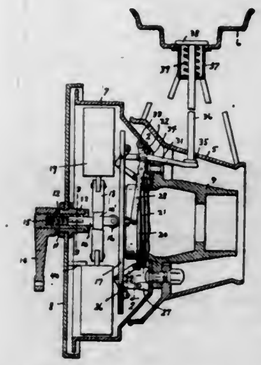
1,821,333. METHOD OF AND APPARATUS FOR HEATING AND MINGLING FLUIDS. CHARLES P. TOLMAN, Kew Gardens, N. Y., assignor to Petroleum Conversion Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 3, 1927. Serial No. 158,723. 6 Claims. (Cl. 196—62.)



1. Apparatus for heating fluids comprising a chamber, means for admitting a fluid to be heated thereto, injector means in said chamber for admitting the heating fluid whereby to create a stream of said mixed fluids of relatively high velocity, injector means in the path of said stream utilizing the velocity thereof to draw into said stream additional quantities of the fluid to be heated and auxiliary injector means in line with said means last mentioned for admitting additional quantities of heating fluid into said stream, said injector means last mentioned being disposed so as to augment the injector action of said stream.

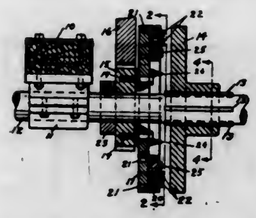
2. The method of cracking hydrocarbon compounds which consists in injecting into a body of said compound by means of an injector device a gaseous heat carrier fluid having a temperature in excess of the desired cracking temperature whereby to create a moving stream of the fluid mixture, immediately employing the velocity of the said stream in a further injector device to draw into said stream further quantities of the compounds to be cracked, thereby accomplishing the heating of said compounds to the optimum cracking temperature before substantially any cracking can take place below said optimum temperature.

1,821,334. SAFETY DEVICE. CLARK ELLIOT E. VAN ALLEN, Fort Payne, Ala. Filed Aug. 11, 1930. Serial No. 474,473. 11 Claims. (Cl. 180—82.)



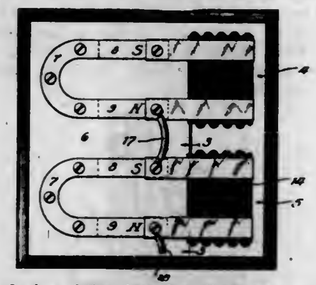
1. A vehicle wheel brake comprising in combination a drum, radially movable brake shoes for movement into and out of engagement with the drum, cam means for controlling the movement of the brake shoes, and means operable upon a decrease in pressure in the tire of the vehicle wheel for moving said cam means out of brake effecting engagement with said shoes, whereby to render the brake ineffective with respect to the wheel upon application of the brake lever.

1,821,335. FRICTION CLUTCH. GEORGE W. BEAL, Winston-Salem, N. C., assignor of one-half to Samuel R. Glass, Forsyth County, N. C. Filed Dec. 7, 1928. Serial No. 324,454. 1 Claim. (Cl. 192—107.)



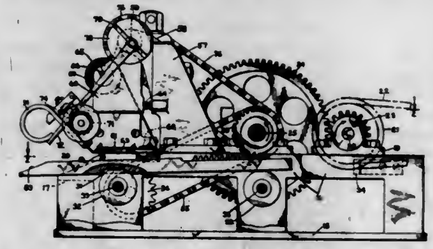
In a friction clutch, a shaft, a disk, a gear wheel loosely mounted on said shaft, an enlarged annular member secured to one side of said gear wheel, a sectional annular member secured to the first-named annular member and being divided into quadrants wedges between the quadrants, the said quadrants being adapted to have inserted therein circular cork members, said quadrants being adapted to be secured to the first-named annular member by means of suitable bolts.

1,821,336. STATIC ELIMINATOR. ELMER E. BISHOP and FRED J. BROOK, Indianapolis, Ind. Filed Feb. 25, 1929. Serial No. 342,436. 8 Claims. (Cl. 250—16.)



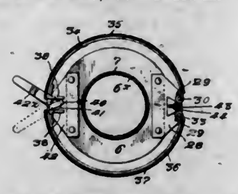
1. In a device of the class described the combination of a horseshoe shaped permanent magnet, equal numbers of laminations of magnetic material projecting from and secured to the polar surfaces of said magnet, tubular shields of magnetic material extending between corresponding laminations projecting from opposite magnetic poles, a conductor for radio frequency currents threaded through the tubular magnetic shields in sequence, and a ground connection to the magnet, substantially as described.

1,821,337. APPARATUS FOR AND METHOD OF PRINTING OR EMBOSSING PENCILS. WALTHER FRIEDLAENDER, Ridgewood, N. J. Filed Dec. 18, 1929. Serial No. 414,860. 7 Claims. (Cl. 41—7.)



1. In an apparatus of the character described, the combination of a support for the work, a heated die, a reciprocating member for feeding pencils and the like to the work support adjacent the die, and means comprising a cam rotating on an axis parallel to the line of movement of the reciprocating member for effecting movements of said member.

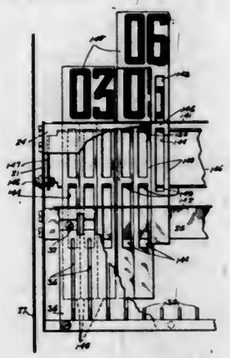
1,821,338. BRAKE CONTROL FOR TURRET CRANES. THORVALD N. GARSON, New Brighton, N. Y. Filed June 21, 1928. Serial No. 287,067. 1 Claim. (Cl. 188—78.)



In devices of the character described, including a standard and a turret rotatable about the standard, of brake mechanism comprising arms projected laterally from the

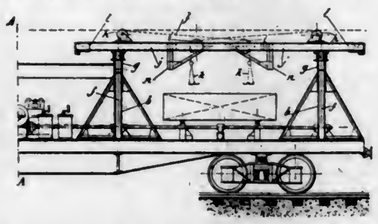
turret, a channel-ring depending from said arms, a plate carried by the standard below said arms, opposed studs carried by one of said plates, brake segments each having a connection with one of said pivot studs, a second plate carried by the standard below said arms, a cam supported by said plate and means for actuating said cam into operative engagement with the brake segments.

1,821,339. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Original application filed Apr. 13, 1927, Serial No. 183,392. Divided and this application filed Nov. 10, 1928. Serial No. 318,390. 14 Claims. (Cl. 235—23.)



1. In a cash register, the combination of a plurality of indicators having lifting stems, a pair of slots formed in each of said indicator stems, said slots in each stem being separated by an integral portion, and a supporting member shiftable into cooperation with the integral portions of the stems of those indicators which have been lifted to retain the indicators in exposed positions.

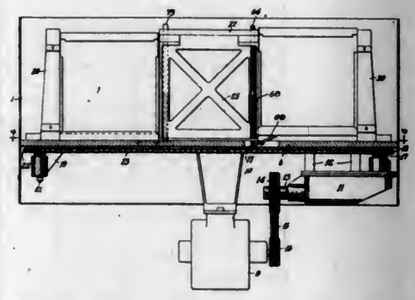
1,821,340. SPECIAL MOTOR DRIVEN CAR WITH SEVERAL CRANES DRIVEN FROM ONE POINT FOR THE MECHANICAL LAYING AND REMOVING OF THE ELEMENTS OF RAILROAD TRACKS. PAUL GUILBERT, Rouen, and JULES LEGRAND, St. Mande, France. Filed Oct. 2, 1929, Serial No. 396,855, and in France Jan. 26, 1929. 6 Claims. (Cl. 104—3.)



1. A special car preferably automotive for the mechanical laying and removing of track elements fitted complete, comprising in combination a driving shaft extending along the car in longitudinal direction, drums on said shaft, and cranes on said car suitably spaced from one another, adapted to lift a track element fitted complete and further adapted to be swung out over the track to be laid or dismantled.

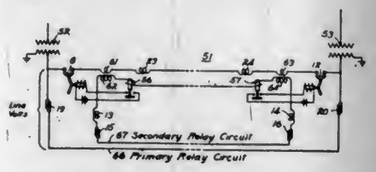
1,821,341. SLIDE SHIFTING DEVICE. AUSTIN K. HANKS, Greensboro, N. C., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 15, 1926. Serial No. 102,112. 12 Claims. (Cl. 88—28.)

1. A slide-shifting device having a base, means to support a slide on said base in image projecting position, retaining means for a stack of slides on both sides of said position, a chain supported on said base, a dog on



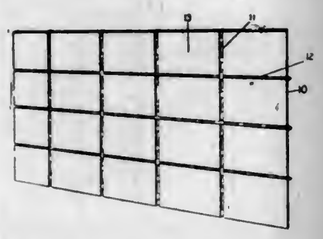
said chain adapted to engage a slide in said stacks, and means for moving the chain so that the slides are consecutively shifted into image projecting position.

1,821,342. RELAY SYSTEM FOR HIGH-SPEED CIRCUIT BREAKERS. RUDOLF E. HELLMUND, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1927. Serial No. 227,452. 14 Claims. (Cl. 175—294.)



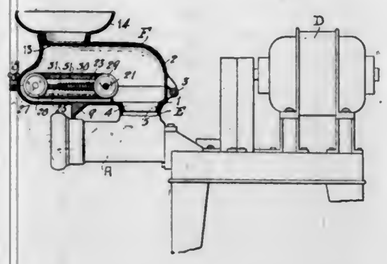
1. An electrical power conductor having a source of power therein and forming a portion of a primary closed oscillatory circuit responsive to oscillations set up by a fault, isolating devices therefor, means for tuning the primary oscillatory circuit to a frequency different from that of the source comprising an inductance and a capacity near each end of the power conductor, transformers normally opposed near each end of the power conductor for transforming additively the oscillations into a secondary closed control circuit upon the occurrence of a fault said secondary circuit comprising a pilot conductor associated with the power conductor, a capacity and an inductance near each end of the pilot conductor for tuning to resonance with the primary circuit oscillations and means for controlling the isolating devices.

1,821,343. SHEET METAL WALL TILE CONSTRUCTION. HENRY HONER, Los Angeles, Calif. Filed Aug. 14, 1929. Serial No. 385,867. 4 Claims. (Cl. 72—18.)



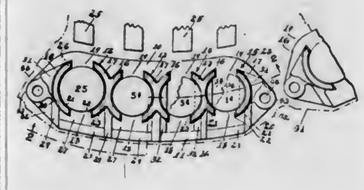
1. A faced wall construction, comprising vertical supports, a plaster surface carried by said supports, a facing thereon comprising a section of sheet metal grooved horizontally and vertically to simulate tile, inwardly punched portions extending from the bottom of the grooves, forming prongs which extend into and bond with the plaster surface, nails extending through said apertures into the vertical supports, and a grouting material within the horizontal and vertical grooves and extending through the apertures whereby an effective anchor is obtained.

1,821,344. FEEDING DEVICE FOR MEAT CHOPPERS AND THE LIKE. JOHN W. KAUTZMAN, East Orange, and JOHN H. PARKER, Newark, N. J., assignors to John W. Kautzman, Trading as Sander Mfg. Co. Filed May 29, 1929. Serial No. 366,817. 3 Claims. (Cl. 146—182.)



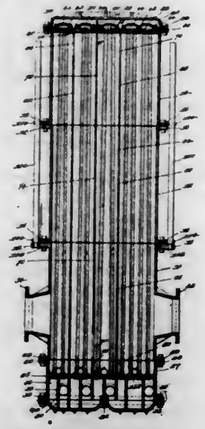
1. A feeding apparatus of the character described comprising a casing including a body part having an outlet opening and a removable cover having a charging opening in offset or non-alined relation to said outlet opening, a conveyor within said casing including a frame pivotally mounted at one end on said body part to be capable of bodily movement in said casing for cleaning and inspection, an endless conveyor belt mounted on said frame to receive pieces of material from said charging opening and convey them to said outlet opening, and means for driving said conveyor belt.

1,821,345. CHANGE-HOLDING UNIT. LOUIS H. LARSEN, Union City, N. J., and CLIFTON W. NIXON, New York, N. Y. Filed June 21, 1928. Serial No. 287,296. 4 Claims. (Cl. 133—1.)



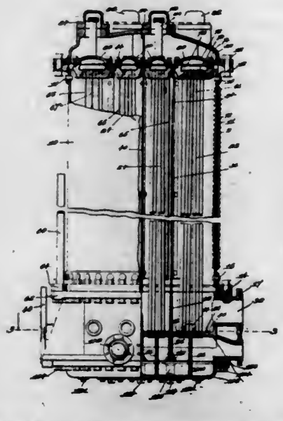
1. A coin-holding accessory for a vending or change-making machine having a shelf support, said accessory comprising a base plate adapted to be placed upon and secured to said support, a plurality of sections upstanding from the base plate and joined thereto at their lower ends, said sections being arranged in complementary pairs for retaining columns of coins upon the base plate, the members of each pair being spaced from each other to provide front and rear gaps and consisting of relatively thin bodies of arcuate transverse form between the gaps, and said members at the base plate and in the front being cut away laterally in opposite directions to provide a common coin discharge opening in communication with the front gap and which is in a plane adjoining the top surface of the base plate.

1,821,346. REFINING APPARATUS. CHARLES H. LEACH, Newton Highlands, Mass. Filed Nov. 10, 1926, Serial No. 147,561. Renewed Jan. 28, 1931. 9 Claims. (Cl. 257—222.)



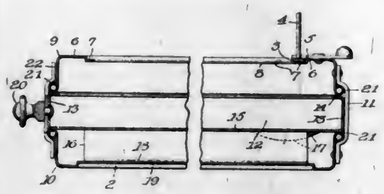
1. The combination, in apparatus having a plurality of banks of tubes with a surrounding shell, with longitudinal partitions connected to the shell to form a series of passes lengthwise of the tubes and disposed in a manner to permit withdrawal of the surrounding shell and connected partitions from about the tube banks without disconnecting the partitions from the shell, and means for guiding and centering the shell with respect to the tube banks during withdrawal.

1,821,347. OIL REFINING APPARATUS. CHARLES H. LEACH, Newton Highlands, Mass. Filed Dec. 31, 1926, Serial No. 158,212. Renewed Feb. 26, 1931. 29 Claims. (Cl. 257—42.)



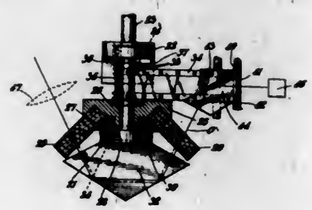
1. Oil refining apparatus comprising a series of banks of condenser tubes, a transverse tube support connected to the tubes at one end, a series of floating heads connected to the opposite ends of the tubes, a shell enclosing the tubes above the support and detachably connected therewith, inlet and outlet nozzles interposed between the shell and tube support, a series of partitions extending longitudinally of the tubes between the floating heads supported to permit removal of the shell from about the tube bundles and providing a series of vapor passes extending longitudinally of the tubes in opposite directions, and means for directing cooling medium through the interior of the tubes.

1,821,348. BIRD CAGE BASE. LEWICKI J. LEON, West Chicago, Ill., assignor to The Andrew B. Hendryx Company, New Haven, Conn. Filed May 2, 1929. Serial No. 359,871. 13 Claims. (Cl. 119—17.)



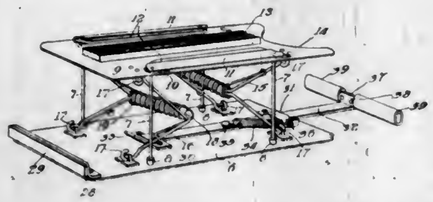
1. A bird cage base comprising upper and lower members vertically spaced apart, means for securing said members together, and a drawer slidably mounted in the base through the space between said members, said drawer having an upright surrounding marginal wall to close said space when the drawer is closed.

1,821,349. OPTICAL COMPENSATOR. JACOB F. LEVENTHAL, New York, N. Y., assignor to The First National Bank of Chattanooga, trustee, Chattanooga, Tenn. Filed Sept. 3, 1927. Serial No. 217,485. 39 Claims. (Cl. 88—168.)



1. In an optical apparatus, optical plane-parallel refracting means, means to rotate said refracting means about an axis inclined thereto to effect varying displacement of a light beam axis in each of two directions perpendicular to each other, means for directing a beam of light with its axis inclined to the axis of rotation of said refracting means, the angle between the axis of rotation and the light beam axis being so correlated with the angle between the axis of rotation and the refracting means that the displacement in one direction effected by said refracting means, when rotated, is substantially proportional to the degree of rotation of the refracting means over a substantial range.

1,821,350. NOTE HOLDER AND DISPENSER FOR CASH DRAWERS. HAROLD LEVY, Chicago, Ill. Filed May 23, 1929. Serial No. 365,249. 5 Claims. (Cl. 129—35.)



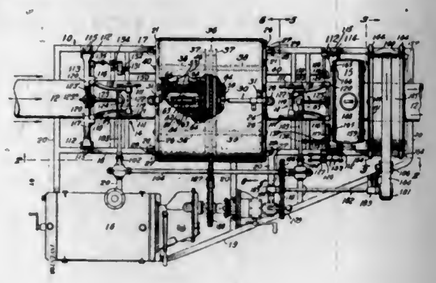
2. In a note holder and dispenser of the class described, confining means on said base plate, a top plate slidably mounted between said confining means for movement toward and away from said base plate, said confining means including flexible strips disposed above the edges of said top plate, and means on said top plate for causing notes placed thereon between said flexible strips to be arched centrally and longitudinally to facilitate their removal.

1,821,351. VACUUM TUBE AND METHOD OF MAKING SAME. BERNHARD LOEWE, Berlin-Friedenau, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 2, 1927, Serial No. 171,937, and in Germany Mar. 15, 1926. 1 Claim. (Cl. 176—7.)



The method of manufacturing vacuum tubes, which comprises forming a tube with three constrictions, sealing at least one of the electrodes to one constriction by closing the said constriction about the electrode, exhausting the tube through the second and third constrictions, sealing the tube between the second and third constrictions, and cutting off the tube between the second and third constrictions.

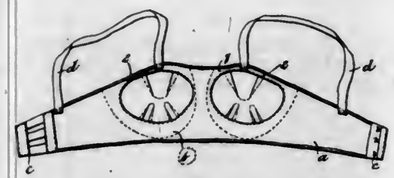
1,821,352. DEVICE FOR CLEANING AND COATING PIPE. FRED MCMANIS, Houston, Tex., assignor to W-K-M Company, Houston, Tex., a Corporation of Texas. Filed Mar. 22, 1928. Serial No. 263,780. 22 Claims. (Cl. 29—81.)



1. In a pipe cleaner, a base, a pair of circular frame members supported thereon, a rod connecting said frame members, a housing of sheet metal hinged to said rod, said frame members being channeled on their inner faces, rollers in said channels and a rotatable cleaning device supported on said rollers.

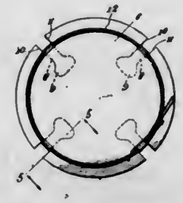
1,821,353. BRASSIÈRE. MARTHA W. MEEKS and ANNE C. ALT, Compton, Calif. Filed May 14, 1928. Serial No. 277,480. 1 Claim. (Cl. 2—42.)

A brassière comprising a fabric body encircling band formed with substantially circularly-shaped breast receiving openings, breast supporting fabric cups stitched to said band entirely around said openings and at points spaced outward from the side and bottom edges of said openings whereby the marginal portions of the body at the sides and bottoms of the openings constitute flesh engaging flange elements, the stitching joining the cups to the band



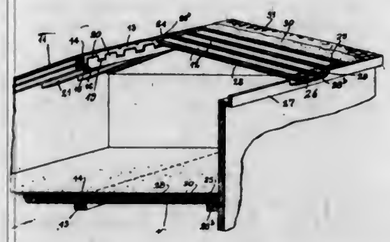
being spaced greater distances from the bottom edges of the openings than from the side edges of the openings and greater distances from the outer side edges of the openings than from the inner side edges thereof, respectively.

1,821,354. CARD MOUNT FOR STRINGS. WILLIAM H. MEYER, Brooklyn, N. Y. Filed Jan. 14, 1929. Serial No. 332,340. 2 Claims. (Cl. 206—59.)



1. A card mount for strings comprising a disc card having at its marginal edge a plurality of radially extending tabs having shanks and laterally enlarged gummed heads on their free ends adapted to be secured to the rear faces of the disc, said disc having an inscribed circle thereon and pairs of slits made at opposite sides of the shanks of the tabs and extending from the outer edge of the disc inwardly of said inscribed circle.

1,821,355. CEILING, FLOOR, AND ROOF CONSTRUCTION. RICHARD MURRAY, New York, N. Y. Filed Oct. 20, 1928. Serial No. 313,799. 3 Claims. (Cl. 108—1.)



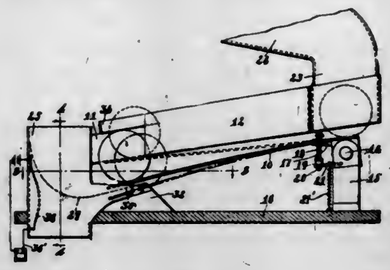
1. A ceiling construction for buildings comprising a plurality of ceiling forming sections arranged side by side and interlocked, said sections being of rib cross sectional form, a body of reinforced concrete adapted to be placed on said sections in forming the upper floor or roof surface to said ceiling, means at the ends of said sections for retaining the body of concrete outwardly of said ends and intermediate the ribbed portions of said sections, and the reinforcement of said concrete involving rod members arranged in a plurality of the ribs of said sections and extending from one rib to an adjacent rib.

1,821,356. PISTON RING SQUEEZER. EDWARD C. NEWTON, Los Angeles, Calif., assignor to E. C. Newton Corporation, Los Angeles, Calif., a Corporation of California. Filed Aug. 10, 1927, Serial No. 211,868. Renewed Feb. 18, 1931. 5 Claims. (Cl. 29—86.4.)



1. In a device of the character described, a contractable sleeve, a flexible band to embrace said sleeve, a member having an opening through which said band is led, and means to draw a portion of said band through said opening to contract said sleeve.

1,821,357. COIN TESTING DEVICE. CLIFTON W. NIXON, New York, N. Y., assignor to Nixon Vending and Change Making Machines, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 10, 1928, Serial No. 253,410, and in Great Britain July 14, 1927. 17 Claims. (Cl. 194—103.)

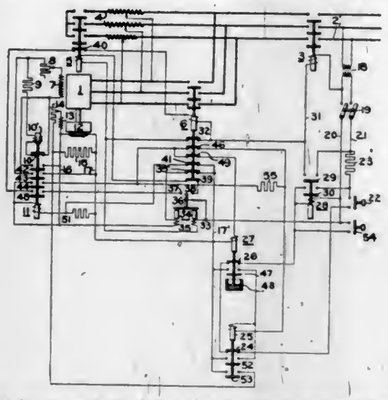


1. A coin testing device comprising a longitudinally projecting downwardly sloping runway down which a coin will travel, the runway being depressible by force of the weight of a coin traveling thereon, and a switch finger arranged in transversely oblique relation to the runway for switching a traveling coin laterally from the runway at a predetermined degree of depession of the runway.

1,821,358. MOTOR STARTING SYSTEM. MAURICE E. REAGAN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 1, 1928. Serial No. 251,035. 8 Claims. (Cl. 172—289.)

3. A system for starting a synchronous motor from a supply source comprising means for applying a reduced voltage to the motor armature from the supply source, means for shunting the motor field winding during starting, an exciter disposed to vary its voltage in accordance with the speed of the motor, means for removing the shunt

from the field winding and applying a low voltage thereto from the exciter responsive to the overbalancing of the induced field current by the exciter voltage, means including a time-delay relay for increasing the voltage of the exciter as the motor attains synchronous speed, and



means for transferring the armature from reduced voltage to full line voltage only when the voltage of the exciter attains a predetermined relation to that of the supply source, said means being disposed to cooperate in the control of the reduced-voltage applying means.

1,821,359. WEHNELT-CATHODE. ENGBERT HARMEN REERINK and JOHANNES GIJSBERTUS WILHELM MULDER, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 4, 1929, Serial No. 352,597, and in the Netherlands Apr. 13, 1928. 1 Claim. (Cl. 250—27.5.)

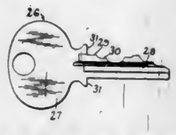
A process of manufacturing a Wehnelt-cathode, in which the core is coated with a suspension of barium carbonate, beryllium carbonate, zirconium oxide and an agglutinant, and is subsequently heated in a vacuum.

1,821,360. PAGE NUMBERING MACHINE. JAMES H. REINHARDT, East Orange, N. J. Filed Aug. 12, 1926. Serial No. 128,780. 2 Claims. (Cl. 101—76.)



1. A machine of the character specified comprising two sets of numbering wheels having non-consecutive numerals, a rotative frame carrying each set of wheels for bodily rotation of the latter, means to rotate the wheels axially, for presenting type successively to printing position, and means for impressing the type upon sheets, whereby a sheet will be printed with non-consecutive numerals by one or more wheels of one set on one face and by one or more wheels of the other set on a different face.

1,821,361. LOCK KEY. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed May 17, 1928. Serial No. 278,543. 6 Claims. (Cl. 70—9.)



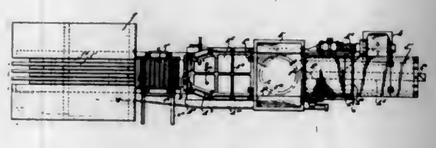
1. A key for a lock having tumblers and a key engageable locking device positioned beyond the tumblers, said key being provided with means for aligning said tumblers in one position thereof and being adapted to be moved to another position without displacing the alignment of said tumblers, and means on the key for operating the key engageable locking device upon movement of the key into the last named position.

1,821,362. ELECTRIC CONDUIT CONNECTER. TONY F. SOVINE, Flint, Mich. Filed May 1, 1929. Serial No. 359,687. 7 Claims. (Cl. 247—25.)



1. In an electric conduit connecter, a tubular body portion, and a clamping member including an arcuate wedge plate movable circumferentially within the tubular body and a cam block projecting laterally of the body portion for moving the wedge plate inwardly when the clamping member is moved circumferentially of the body portion.

1,821,363. BUTTER CUTTING MACHINE. RICHARD F. STEWART, Briarcliff Manor, N. Y. Filed June 19, 1928. Serial No. 286,503. 4 Claims. (Cl. 31—14.)

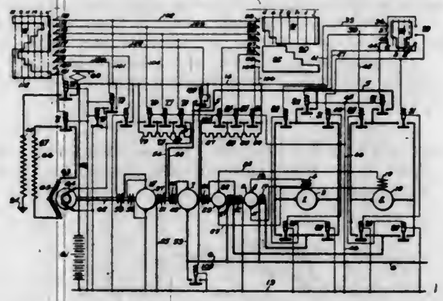


4. In a cutting machine having a hopper, in which an orifice is formed, cutting means carried by the machine adjacent the orifice, means for conveying material from the hopper to the orifice, a power source to drive the conveying means, means to receive the material as it passes through the orifice, means to cut the material while on the receiving means, and spaced stationary plates, a bed comprising a plurality of movable plates between the respective stationary plates, means operated by the power source for reciprocating the bed, tracks upon which the bed reciprocates, triangular shaped dogs pivoted on the bed for riding on the tracks, the heights on one of the bases of the dogs being greater than those on the other of the bases, and notches in the tracks at the ends thereof for engaging the dogs, certain of the notches engaging certain angles of the dogs to cause the bed to be supported at the lesser height of the dogs, and other of said notches engaging other angles to cause the bed to be supported at a greater height.

1,821,364. MOTOR GENERATOR LOCOMOTIVE CONTROL SYSTEM. NORMAN W. STORER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 22, 1928. Serial No. 301,286. 9 Claims. (Cl. 172—239.)

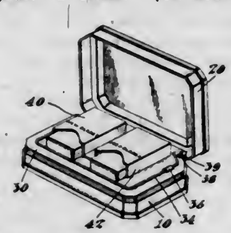
1. In a control system for motor vehicles provided with a plurality of traction motors for driving the several wheels of the vehicle, in combination, a motor-generator set for supplying variable voltage power to the traction motors, excitation-controlling means for the motors including a separate exciter for each motor responsive to their respective motor-load currents for causing the electromotive forces of the motors to be maintained at a substantially constant ratio, regardless of the differences

in the diameters of the wheels, and means for further controlling the excitation and, consequently, the voltage



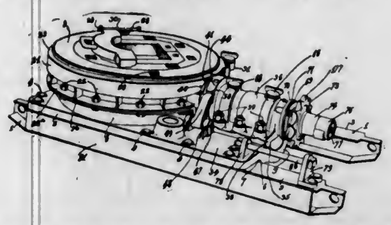
developed by all the exciters, as a group, to control the speed of the motors under light-load conditions and limit the slip speed of any motor in the group.

1,821,365. RAZOR CASE. RALPH E. THOMPSON, Brookline, and RICHARD M. DUGDALE, Dedham, Mass., assignors to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 26, 1927. Serial No. 235,963. 1 Claim. (Cl. 206—16.)



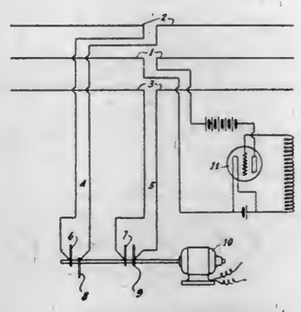
A hinged case comprising connected compartments, one having a cover of sheet material with tongues struck up from it, a wire secured to the cover by said tongues and having oppositely disposed ends disposed parallel to the edge of the cover, said ends being received within sockets formed by tongues struck up from the material of the compartment and forming hinge pintles for the cover.

1,821,366. ROTARY MACHINE FOR WELL DRILLING. EDWARD TIMBS, Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed May 2, 1927. Serial No. 188,109. 9 Claims. (Cl. 255—23.)



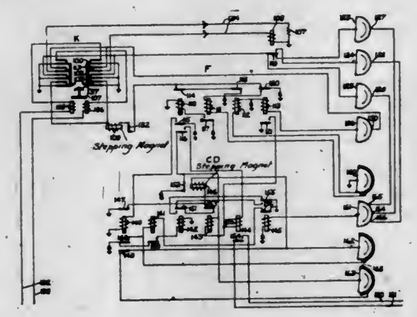
1. In a rotary machine, the combination of a base, a table rotatably supported by the base, means mounted on the base for driving the table, which means preferably comprise a housing removably secured to the base, a shaft journaled in bearings in the housing, a pinion secured to the inner end of the shaft in position to mesh with gear teeth formed on the table, and a rotation lock including an element secured on the hub of the pinion overhanging the end of the housing, and an element mounted on the base and adapted to be engaged with the element mounted on the shaft.

1,821,367. BEAM WOBBLER. GEORGE L. USSELMAN, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 18, 1925. Serial No. 69,817. 11 Claims. (Cl. 250—11.)



11. The method of propagating high frequency energy which includes emitting the energy directively both in azimuth and in elevation, directing the energy towards the receiver, in azimuth, and wobbling the directivity in elevation.

1,821,368. SUPERVISORY CONTROL SYSTEM. ROY J. WENSLEY, Edgewood, and JAMES L. MCCOY, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1923. Serial No. 640,001. 10 Claims. (Cl. 177—353.)

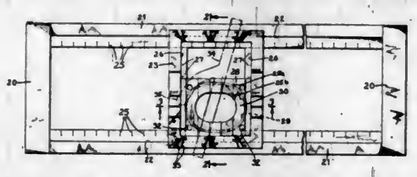


10. In a supervisory control system, a first station, a second station, a plurality of apparatus units at the second station, means at said first station for transmitting a code of impulses to said second station, means at said second station controlled by said impulses, said means at the second station being caused to operate in synchronism with the first station means by said impulses, means for conditioning one of said units for operation responsive to said received code, means for checking the synchronism of said first and second station means, and means whereby said operation is completed only if said means at said first station and said second station have maintained synchronism, said last mentioned means operating automatically in response to the checking of the synchronism of said first and second station means.

1,821,369. GUIDE FOR LETTERING. KNUT O. G. WETTERSTRAND, Summit, N. J. Filed Apr. 25, 1928. Serial No. 272,620. 3 Claims. (Cl. 33—174.)

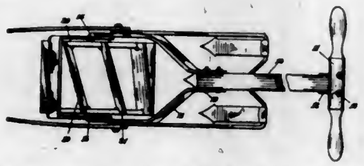
1. A guide for lettering and the like, comprising a main frame, a supplemental frame horizontally slidable therein, said supplemental frame having angularly related

guiding markings and associated character-designating indicia thereon to direct the locating of a rule member with



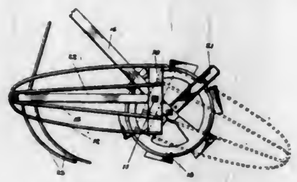
respect thereto and a rule member freely movable over said main and supplemental frames to cooperate with said guiding markings.

1,821,370. CULTIVATOR. CHARLES D. AMMON, Lincoln, Nebr. Filed Mar. 10, 1930. Serial No. 434,782. 3 Claims. (Cl. 97—58.)



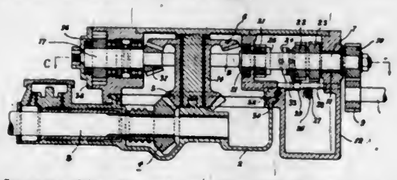
1. An implement including a rotary member adapted to be rolled over the surface of the soil, a push handle having a pair of fork members at the lower end portion thereof, said fork members straddling said rotary member, said rotary member being journalled to said fork members, the extremities of said fork members being inturned, and a U-shaped mulching hoe secured to said fork members and to said rotary member at the axis of the journal thereof, the end portions of said mulching hoe being seated against the inturned end portions of said fork members.

1,821,371. LEAF GUARD. CHARLES D. AMMON, Lincoln, Nebr. Original application filed Mar. 10, 1930, Serial No. 434,782. Divided and this application filed Oct. 13, 1930. Serial No. 488,341. 9 Claims. (Cl. 97—192.)



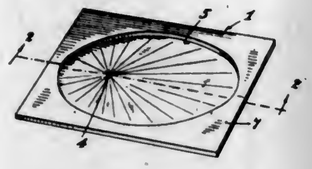
1. A leaf guard comprising a bar adapted for pivotal attachment at the side of an earth working tool and a looped member attached to said bar, said leaf guard being symmetrical about its longitudinal axis.

1,821,372. COAL CUTTING MACHINE AND THE LIKE. WILLIAM CHRISTIE BLACK, Dudley, England, assignor to Matthew Smith Moore, Brussels, Belgium. Filed Dec. 9, 1926, Serial No. 153,643, and in Great Britain Jan. 7, 1926. 5 Claims. (Cl. 74—58.)



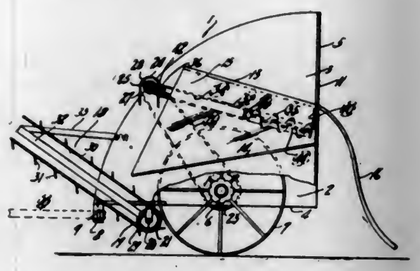
1. In a machine for coal cutting and the like, the combination with a horizontal driving shaft, a gear head including a vertical shaft, and a gear head casing, of a plurality of horizontal shafts in said casing comprising a central shaft rotated by said driving shaft, two countershafts symmetrically arranged on either side of said vertical shaft and driven simultaneously thereby, co-operating gears on said central shaft and countershafts, some of said gears being slidable, and a return mid shaft rotated by said both countershafts and driving said vertical shaft.

1,821,373. LOUD SPEAKER. CHARLES BLIEBERGER, New York, N. Y. Filed Jan. 18, 1930. Serial No. 421,644. 13 Claims. (Cl. 181—31.)



1. An acoustical diaphragm comprising a resonating member having a substantially circular edge of substantially uniform thickness, a thick zone tapering in all directions toward said edge, said thick zone being located on a diameter of said diaphragm and offset from the center of said diaphragm so that the distance from said thick zone measured along said diameter to one edge is incommensurate relative to the distance from said zone along said diameter to the other edge.

1,821,374. CORN HARVESTER. PETER S. BOGATZ, Omaha, Nebr. Filed Oct. 22, 1928. Serial No. 314,068. 2 Claims. (Cl. 56—103.)

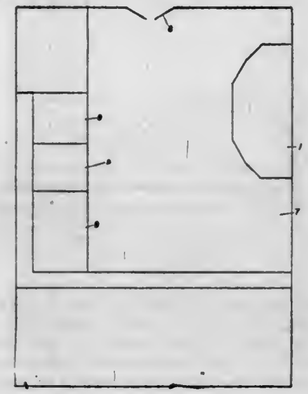


1. In a device of the kind described, a wheel borne frame, a forwardly sloping ear snapping plate mounted in the frame, the said ear snapping plate having a longitudinal stalk receiving slot, a pair of rollers mounted beneath the ear snapping plate adjacent the rear thereof, a spiral conveyor mounted beneath the ear snapping plate forwardly of the said rollers, and means for rotating the spiral conveyor and rollers whereby the conveyor will draw stalks inward into engagement with the rollers.

1,821,375. PROCESS OF TREATING GLASS. YVON BRANCART, Ronquieres, Belgium. Filed Apr. 12, 1930, Serial No. 443,921, and in Belgium Apr. 20, 1929. 2 Claims. (Cl. 49—87.)

1. A process of treating rolled sheet or plate glass consisting of coating the under side of a perforated surface with a combustible material, feeding glass at glowing temperature over said surface, causing said material to be ignited by the glowing glass and, causing the ignited gases given off by said material to flow through the perforations in said surface, thus producing between said surface and the glass a gaseous cushion by the combustion of said material.

1,821,376. SAFETY TOWER. JOHN A. BROWN, Indianapolis, Ind. Filed Mar. 14, 1930. Serial No. 435,772. 2 Claims. (Cl. 89—36.)



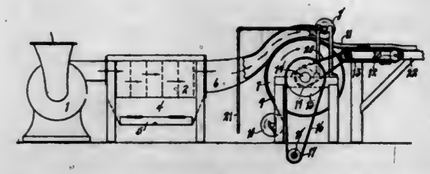
1. In a safety tower for the interior of a building, an upper and a lower compartment, a bullet proof floor separating said compartments, said floor having an entrance opening therethrough, a trap door for closing said opening, said trap door having a port therethrough, means for covering said port, a stairway enclosed within said lower compartment and leading to said floor opening, a door opening by means of which entrance is gained to said upper compartment solely through said lower compartment into said lower compartment forming the sole means for gaining access to said lower compartment from the interior of the building, and means for converting said lower compartment into a clothes closet.

1,821,377. KEY-HOLDER. HYLAND L. CUSICK, Pittsburgh, Pa. Filed Mar. 26, 1931. Serial No. 525,469. 8 Claims. (Cl. 24—3.)



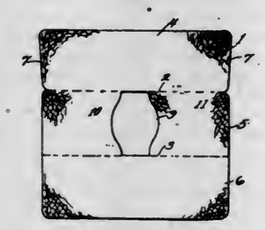
7. In a keyholder of the character described, a clamping member adapted to be positioned on a belt, said clamping member comprising a front portion, a short lower leg disposed in spaced parallel relation rearwardly of the front portion and a longer top leg also disposed rearwardly of the front portion and partly overlapping said lower leg, a stop means positioned inwardly on said top leg adapted to fit a narrower belt than the widest belt accommodated by said clamping member, and an inwardly directed spring feather formed integrally with the top leg and adapted to frictionally engage said belt.

1,821,378. KAPOK PRODUCT AND PROCESS OF MAKING THE SAME. JAMES E. DILLARD, Midlothian, Tex. Filed Feb. 15, 1930. Serial No. 428,686. 8 Claims. (Cl. 154—33.)



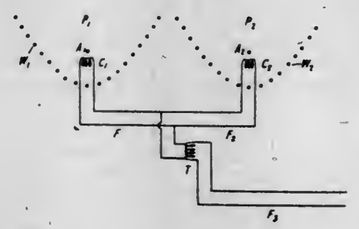
1. The process of working kapok facing against and into permanent association with a backing fabric characterized by moving the kapok facing and backing between pressure elements one of which is heated, the heated pressure element bearing directly against the kapok.

1,821,379. POCKETBOOK. BARNETT EPSTEIN, New York, N. Y. Filed Sept. 24, 1929. Serial No. 394,868. 2 Claims. (Cl. 150—38.)



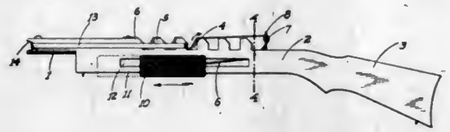
2. A single blank for forming a one piece pocketbook consisting of a front section having a centrally arranged opening, a middle section having one edge portion formed solid with one edge portion of the front section and a back section having one edge portion formed solid with one edge portion of said front section, said back section having its end edges inclining outwardly in relation to the end edges of said front section and said middle section.

1,821,380. TRANSMITTING OR RECEIVING AERIAL SYSTEM FOR WIRELESS TELEGRAPHY OR TELEPHONY. CHARLES SAMUEL FRANKLIN, Buckhurst Hill, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 17, 1926, Serial No. 88,761, and in Great Britain Feb. 24, 1925. Renewed Jan. 31, 1931. 17 Claims. (Cl. 250—11.)



2. A directive aerial system comprising a plurality of parabolic reflectors arranged side by side, an aerial at the focus of each reflector, all of the focal aerials being maintained in the same phase so that the concentration of energy radiated is substantially proportional to the sum of the apertures of the reflectors.

1,821,381. TOY GUN. BERT B. GERKEN, Stockton, Calif. Filed Aug. 23, 1930. Serial No. 477,203. 2 Claims. (Cl. 124—14.)

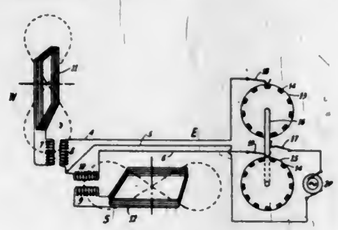


1. A toy gun comprising a rigid body formed in simulation of a firearm, said body intermediate its ends having a row of notches in its upper edge forming lugs therebetween to each engage and hold one end of a stretched band whose opposite end is engaged with the front end of the body, a flexible strap secured at one end on the body and adapted to be depressed into the notches and held against the adjacent walls of the lugs by the stretched bands and a control member slidably mounted in connection with the body and to which the opposite end of the strap is secured.

1,821,382. PROCESS OF ROLLING ALLOY STEEL. HOWARD M. GIVENS, Abington, Pa. Filed Nov. 20, 1929. Serial No. 408,672. 2 Claims. (Cl. 80—60.)

2. The process of rolling steels containing substantial proportions of alloying metals including chromium, aluminum and silicon and which are found to be austenitic on cooling freely from the initial heat of rolling, which comprises rolling the steel while it is cooling to a temperature not substantially under approximately 2050° F., then allowing the steel to cool to approximately 1750° F. without rolling the steel and then completing the rolling while the alloy steel is cooling from the last named temperature.

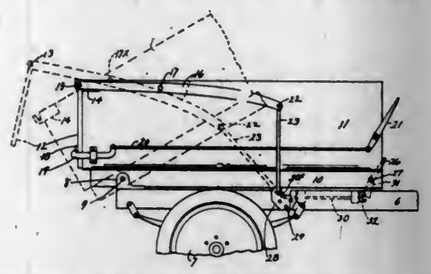
1,821,383. STATISTICAL DIRECTIONAL TRANSMITTER. ALFRED N. GOLDSMITH, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 16, 1925. Serial No. 37,443. 2 Claims. (Cl. 250—11.)



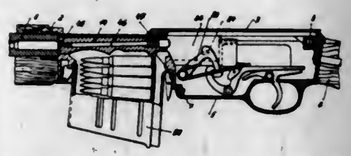
2. A method for eliminating fading during the transmission of intelligence on electromagnetic waves which includes sending out alternately and in right angled directions only linearly polarized waves and varying the polarization plane from one right angled direction to another abruptly and periodically in extremely rapid succession.

1,821,384. TAIL GATE DEVICE FOR DUMP TRUCKS. ALISON B. LARSON, St. Paul, Minn. Filed Mar. 26, 1930. Serial No. 439,062. 3 Claims. (Cl. 298—23.)

1. In a tail-gate opening device for tiltable dump truck bodies of the class described, a tail-gate pivotally suspended from a shaft and normally closing an end of the dump body when the latter is in lowered position, pivot brackets for said shaft mounted at the upper corners of the open end of the dump body, beam lever means pivotally connected with said shaft and extending forwardly therefrom, means connected with the forward parts of said beam levers and extending downwardly to the under side of the dump body, said latter means securable selectively and pivotally to the support frame means of the dump body to make the beam lever means inoperative when the dump body is elevated, or pivotally connected with a stationary object below the dump body to cause downward pull on the said beam lever when the dump body is tilted upwardly, said pivot brackets on the dump bodies provided with upwardly opening grooves for said tail-gate shaft to rest in, said beam levers fulcrumed to the side of the dump body and said means connected with the forward parts of the levers comprising a U-shaped member extending under the dump body, said U-member arranged when in fixed position relative to the dump body to hold the beam levers and the tail-gate shaft in original position with the latter in pivotal position in its brackets.

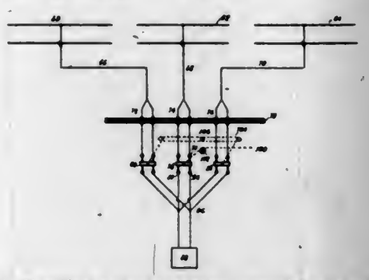


1,821,385. CHARGING DEVICE FOR FIREARMS. EMANUEL HOLEK, Brunn, Czechoslovakia, assignor to the Firm Ceskoslovenska Zbrojovka Akciova Spolecnost V Brne, Brunn, Czechoslovakia. Filed June 18, 1929, Serial No. 371,788, and in Czechoslovakia May 14, 1929. 20 Claims. (Cl. 42—3.)



1. In combination with the breech of a fire-arm, a gas-pressure operated charging device having a breech casing provided with an ejecting and charging aperture and comprising a gas-cylinder, a piston and a piston-rod therefor, the trailing portion of said piston-rod being disposed to carry said breech within the breech casing and having portions to move into position to close the ejecting and charging aperture.

1,821,386. ANTENNA. NILS E. LINDENBLAD, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 28, 1927. Serial No. 229,407. 29 Claims. (Cl. 250—11.)



14. A directive antenna system comprising a plurality of sections located relatively in broadside, each section comprising a plurality of radiators lying in one plane, a branched transmission line system for feeding the sections, and means to vary the phase relations of the sections symmetrically with respect to the direction of radiant action in order to focus the transmitted energy.

1,821,387. ANTENNA. NILS E. LINDENBLAD, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 28, 1927. Serial No. 229,408. 14 Claims. (Cl. 250—33.)



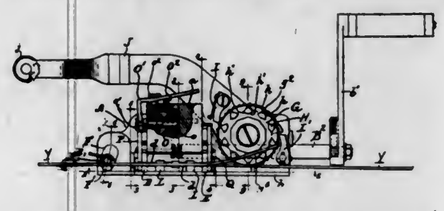
1. Apparatus for propagating high frequency energy which comprises a plurality of spaced radiators spaced in a phase relationship when energized substantially equal to that of a wave in space, and positioned so that the successive radiators are on a line which points towards the receiver, in azimuth, and above the horizontal, in elevation.

1,821,388. DEOXIDIZER. AYLMER H. MAUDE, CLARENCE J. RODMAN, and CHARLES A. STYER, Wilkinsburg, and WILLIAM C. WILHARM, Edgewood, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 21, 1923. Serial No. 682,097. 34 Claims. (Cl. 252—1.)

1. A material for deoxidizing atmospheres comprising copper, an ammonium salt, kieselguhr and water.

16. A material which comprises a metal oxidizable at temperatures below 120° C. and an electrolyte that is non-reactive with said metal in the absence of oxygen, said metal and electrolyte being chemically active toward each other in the presence of oxygen and toward atmospheres at normal atmospheric temperatures, whereby oxidizing gases in said atmospheres are reduced.

1,821,389. PACKAGE WIRING MACHINE. JOHN SHERMAN MCCHESNEY, Chicago, Ill., assignor, by mesne assignments, to The Gerrard Company, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Sept. 6, 1923. Serial No. 661,234. 43 Claims. (Cl. 140—93.)

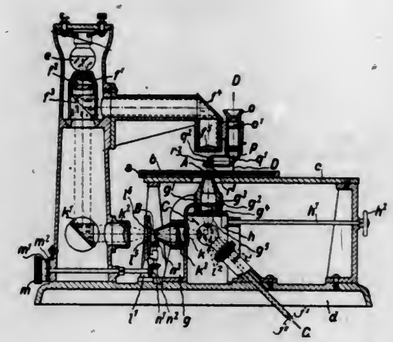


1. In a wire tying machine, a tie holder embodying a jaw provided with a relatively flat face and beveled end faces, and an eccentrically pivoted gripper provided with a smooth annular face in opposing relation to the flat face of said jaw.

1,821,390. COMPOSITION OF MATTER. LEON MCCULLOCH, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 31, 1930. Serial No. 458,895. 13 Claims. (Cl. 92—41.)

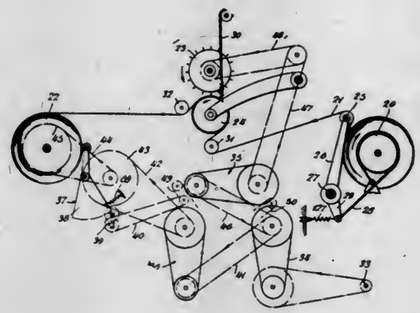
1. A composition of matter comprising asbestos fibers cemented together by a binding agent comprising chromic sulphate that is, at least partially, dehydrated.

1,821,391. DEVICE FOR ASCERTAINING THE OPACITY OF BLACKENED PORTIONS OF PHOTOGRAPHIC PLATES. ROBERT MECHAU, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Mar. 16, 1929, Serial No. 347,699, and in Germany Mar. 15, 1928. 9 Claims. (Cl. 88—14.)



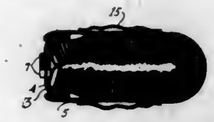
1. In a device for ascertaining the opacity of blackened portions of photographic plates a support, a frame adapted for holding a photographic plate and being movably mounted on the support, a source of light, a lens system adapted to convey to the said plate rays coming from the source of light, means for indicating the quantity of rays that the plate allows to pass, and a rest mounted on the said support, this rest being movable perpendicularly to the plate and bordering the plate at the spot to be examined.

1,821,392. MACHINE FOR PRODUCING MOIRÉ FABRICS. ALEXANDER MILHOMME, Ridgefield Park, N. J., assignor to Progressive Silk Finishing Co., Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 4, 1930. Serial No. 441,566. 13 Claims. (Cl. 26—69.)



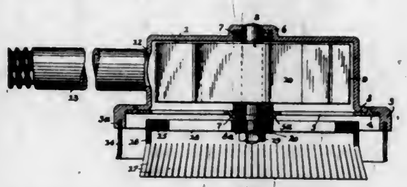
1. In a machine for treating fabrics, feed and take-up rolls, means to treat a fabric as it is fed from the feed to the take-up roll, a variable speed transmission mechanism for driving said means, a second variable speed transmission mechanism for driving said take-up roll, means actuated as the diameter of the roll of fabric increases on said take-up roll for controlling the speed of said second mechanism, and means common to said variable speed transmission mechanisms for driving the same.

1,821,393. POWDER PUFF. EDGAR J. MOORE, Columbus, Ohio. Filed Mar. 7, 1930. Serial No. 434,101. 2 Claims. (Cl. 132—78.5.)



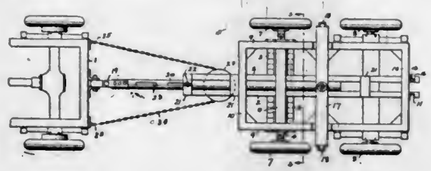
1. A powder puff of the class described, comprising an outer covering of substantially circular formation, a multiple operated fastener secured to the edge of said covering and adapted when operated to unite said edges and fold said covering upon itself, a powder receiving member positioned on the inner side of said covering, and a band carried by said outer covering and situated between said fastener and said powder receiving member, said band extending above said fastener.

1,821,394. ROTARY CLEANER. JOSEPH MOSCHETTO, Paterson, N. J., assignor to Frank Moschetto, Paterson, N. J. Filed Apr. 22, 1930. Serial No. 446,248. 3 Claims. (Cl. 15—98.)



3. A device of the class described including a holder and a revoluble element journaled therein and having a thin dentate flexible wall reaching lengthwise of the axis of rotation of said element and adapted to bear at its free edge against the surface to be treated, said device having passage means for admitting to said surface liquid from an extraneous source.

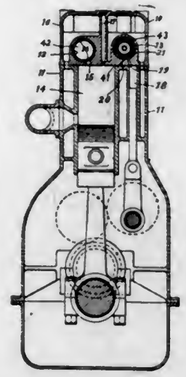
1,821,395. VEHICLE. CLARENCE E. MUSSLEWHITE, Houston, Tex. Filed Apr. 29, 1929. Serial No. 359,011. 6 Claims. (Cl. 280—33.1.)



2. In a vehicle, a trailer having a front and a rear axle, leaf springs whose ends are swung from the front axle said springs thus having limited longitudinal movement relative to said front axle, a supplemental frame mounted on said springs, a main frame whose front end is mounted to pivot on the supplemental frame in substantially a horizontal axis only and whose rear end is mounted on the rear axle and means for limiting the rear end of the supplemental frame to substantially a vertical movement relative to the rear end of the main frame.

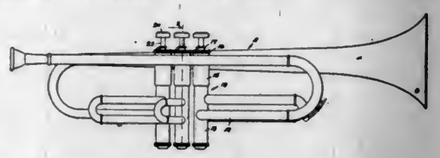
1,821,396. FUEL VALVE. CELESTIN F. NARDIN, Brooklyn, N. Y. Filed Oct. 31, 1927. Serial No. 229,944. 7 Claims. (Cl. 123—33.)

1. The combination in an internal combustion engine of a storage metering rotary and throttle fuel valve, a rotary air valve, and means for supplying compressed burned gases with the fuel from the fuel valve to each



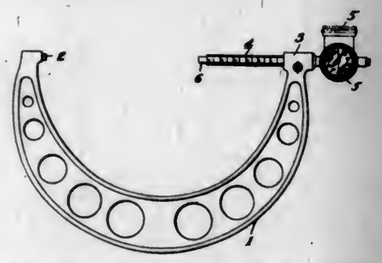
power cylinder, and compressed fresh air from the air valve to each cylinder, for scavenging the cylinders of burnt gases and supercharging the cylinders with pure air.

1,821,397. PISTON VALVE FOR WIND INSTRUMENTS. REGINALD B. OLDS, Los Angeles, Calif., assignor to F. E. Olds & Son, Inc., Los Angeles, Calif., a Corporation of California. Filed Mar. 26, 1930. Serial No. 439,097. 7 Claims. (Cl. 84—392.)



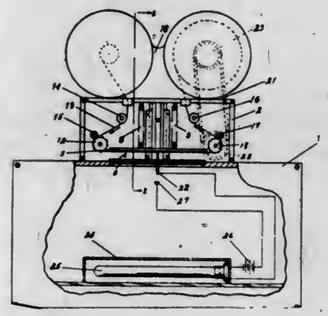
2. A musical instrument having a valve casing, a tubular ballister connected thereto, a cap on the upper end of the ballister, said cap having a guide-neck, a piston in the casing, a barrel connected to the piston, a stem connected to the barrel and sliding through said neck, with a key on the upper end of the stem, a spring coiled on the barrel, means interconnecting the spring to one end of the barrel and to the valve casing, the barrel having a slot with a pin extending therethrough, and means to prevent the pin from rotation.

1,821,398. MICROMETER CALIPERS. ROBERT J. O. SIMPSON, Athol, Mass., assignor to The L. S. Starrett Company, Athol, Mass., a Corporation of Massachusetts. Filed Aug. 21, 1922. Serial No. 583,160. 14 Claims. (Cl. 33—147.)



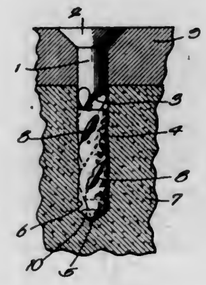
14. In a frame provided with a bearing, a sleeve rotatably mounted in said bearing, a contact element slidable within said sleeve, an indicator carried by said sleeve and adapted to be operated by said contact element, said sleeve extending transversely of said indicator, said indicator being rotatable with said sleeve with respect to said bearing.

1,821,399. APPARATUS FOR INDICATING PRINTING LIGHT VALUES. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,255. 4 Claims. (Cl. 95—75.)



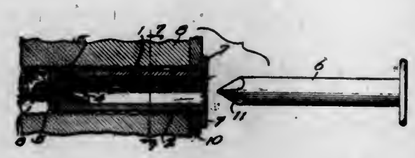
1. Apparatus for indicating printing light values, comprising in combination, a housing having a film inlet slit and an outlet slit, a vertically movable platen disposed in said housing, cooperating means carried by the platen and housing for guiding said platen in its vertical movements, means for retaining a photographic film in contact with the under surface of the platen, a pair of springs for retaining the platen at a predetermined height with relation to the housing, a light station below said platen, means for manually moving the platen against the tension of its springs thereby to carry said film into contact with said light station, an electric printing lamp in alignment with said light station, a fixed contact member in the circuit of said lamp, a second contact member in the circuit of the lamp and movable with the platen into contact with said fixed member thereby to close the lamp circuit when the film is in contact with the light station, and means carried by said light station for modulating the intensity of the light rays to different degrees at different portions of the film.

1,821,400. ANCHORAGE DEVICE. RALPH S. PEIRCE, Hinsdale, Ill. Filed Jan. 28, 1926. Serial No. 84,432. 1 Claim. (Cl. 85—2.4.)



In an anchorage, the combination with a support formed with a receiving opening; of a sleeve within said opening; and an expanding rod within and substantially coaxial with the sleeve and expanding said sleeve into engagement with the support and formed with intertwined threads, portions of the crowns of said threads extending through the sleeve into engagement with the support.

1,821,401. ATTACHING DEVICE. RALPH S. PEIRCE, Hinsdale, Ill. Filed Nov. 16, 1928. Serial No. 319,805. 6 Claims. (Cl. 85—2.4.)



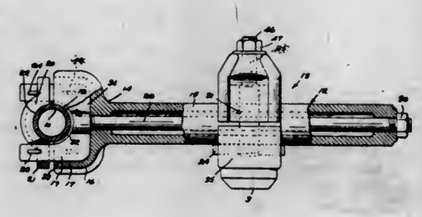
1. An attaching device including two object holding bars placed abreast and each having an object engaging flange at one end that is to be outermost, the inner ends of the bars being connected by a web that is integrally formed therewith; and a hammer driven bolt passed between and forcibly pressing laterally against the opposed sides of said bars to spread the bars apart, wherein the web is folded by being returned upon itself to thicken it and the hammer driven bolt presses laterally against said web where folded.

1,821,402. ANTENNA. HAROLD O. PETERSON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 8, 1927. Serial No. 231,804. 17 Claims. (Cl. 250—33.)



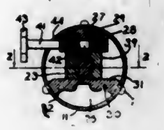
1. A directive receiving antenna for short waves comprising a pair of feeder members and a plurality of transverse pickup wires coupled to the feeder members, said pickup wires being substantially smaller than a half wave in length in order to detune them and to limit their effect on the velocity of energy transfer on the feeder members.

1,821,403. CLAMP AND ARM FOR ROCK DRILLS AND THE LIKE. JOHN PRICCO, Los Angeles, Calif., assignor of one-half to Walter Smith, Los Angeles, Calif. Filed Aug. 8, 1928. Serial No. 298,150. 7 Claims. (Cl. 255—53.)



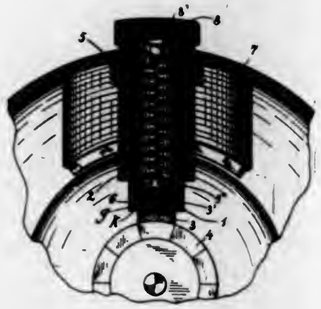
1. A device of the class described comprising a body part adapted to be positioned against a support, a cap part complementary to said body part, a yoke on one of said parts adapted to partially encircle the support, means for detachably connecting the yoke to the other part and means on the part carrying the yoke for drawing the yoke away from the support so as to cause the parts to clamp on the support.

1,821,404. GREASE GUN. RENÉ RAPELLIN, San Gabriel, Calif. Filed June 30, 1930. Serial No. 464,875. 7 Claims. (Cl. 74—40.)



1. In a grease gun having a screw threaded stem with a piston connected thereto, a split nut, a spindle having a screw threaded connection to the parts of said nut, said spindle extending outwardly through the sides of the grease gun, the rotation of the spindle shifting the parts of the split nut in opposite directions to clamp or release the said stem.

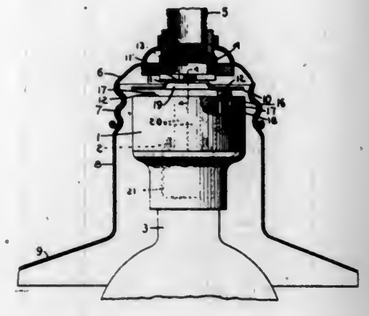
1,821,405. DYNAMO ELECTRIC MACHINE. HEINRICH RIESE, Zurich, Switzerland. Filed May 27, 1930, Serial No. 456,039, and in Germany Oct. 28, 1929. 5 Claims. (Cl. 171—323.)



1. In a dynamo electric machine, the combination of a rotatable contact member, a brush member bearing on said contact member, a conducting member located outward of the brush and normally electrically connected therewith, an insulating portion secured to one of said electrically connected members, a boundary-line being formed thereon between conducting portion and insulating portion, and a fusible member being secured to the insulating portion of said member comprising a conducting and an insulating portion, the fusible member making contact on said boundary-line with the conducting portion of this member and being arranged to conduct the current to the rotatable member when the brush has been worn to a certain point.

1,821,406. SHOCK-ABSORBING ELECTRIC FIXTURE. KENNETH A. SAWIN, Winthrop, Mass., assignor to Wheeler Reflector Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 13, 1929. Serial No. 346,601. 2 Claims. (Cl. 240—90.)

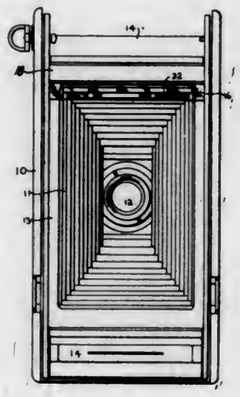
1. In an electric light fixture, the combination with a supporting member, of a lamp socket member, a shock-absorbing member presenting a disk-like body having integral therewith two upwardly-inclined resilient arms and also two downwardly-inclined resilient arms, means for securing the ends of the upwardly-inclined arms to the supporting member, and means to connect the other arms to the lamp socket member.



1,821,407. PROCESS OF DECARBURIZING IRON OR STEEL OR THEIR ALLOYS. WALTER SCHOTTKY, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed June 25, 1929, Serial No. 373,693, and in Germany June 27, 1928. 9 Claims. (Cl. 75—44.)

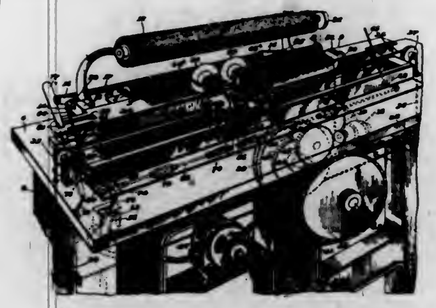
1. In a process of decarburizing iron or steel or their alloys by heating to temperatures corresponding at least to red heat in an atmosphere of hydrogen, the application of a pressure in the treatment chamber of the order of 100 atmospheres.

1,821,408. INSCRIPTION ATTACHMENT FOR CAMERAS. JESSE A. SMURTHWAITE, Helena, Mont. Filed Nov. 18, 1929. Serial No. 408,049. 6 Claims. (Cl. 95—1.1.)



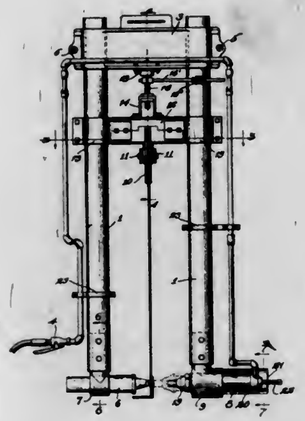
1. A printing attachment adapted for application to a camera in the dark box thereof comprising a transparent envelope, an attaching strip carried by the envelope and having an adhesive coating on its rear side adapted to be applied to an inner portion of the camera, and a removable strip of transparent material bearing characters detachably fitting in the envelope.

1,821,409. MACHINE FOR TRIMMING THE TUFT YARNS OF TUBE FRAMES. EDWIN W. STONE, Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Dec. 18, 1929. Serial No. 414,889. 16 Claims. (Cl. 28—1.)



1. In a tuft yarn trimming machine, the combination of a tube frame support having a trimming table on which the tuft yarns extending from the tube frame rest, a rotating brush for straightening the tuft yarns on said table in position for trimming, and a tuft yarn trimmer movable along said table to trim the tuft yarns at a uniform distance from the tube frame.

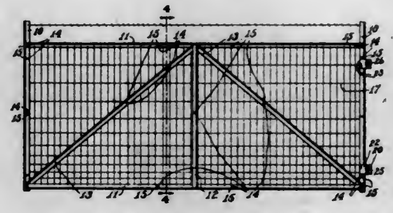
1,821,410. RIVETER. JAMES J. TAYLOR, Wyoming, Ohio, assignor to The Stacey Bros. Gas Construction Company, St. Bernard, Ohio, a Corporation of Ohio. Filed Nov. 27, 1928. Serial No. 322,228. 1 Claim. (Cl. 78—50.)



In a riveter, a carriage constructed for travelling upon an edge of the plates to be riveted, a bolster pivotally mounted upon the carriage, a yoke frame for straddling the plates adjustably mounted upon the bolster, and centered relatively opposing riveter tools mounted upon said frame for operating upon opposite sides of the plates.

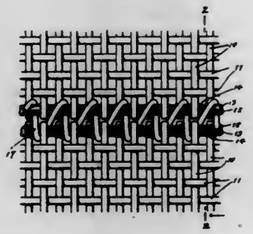
1,821,411. FARM GATE. JAMES E. VAN DEVENTER, Anderson, Ind., assignor, by mesne assignments, to Mid-States Steel & Wire Company, Crawfordsville, Ind., a Corporation of Indiana. Filed Jan. 23, 1928. Serial No. 248,601. 1 Claim. (Cl. 256—73.)

A gate comprising two similar frames, each comprising two end vertical angle irons each having one arm projecting toward an arm of the other in a common plane therewith, means securing said arms of the vertical angle irons of one frame to the corresponding arms of corresponding vertical angle irons of the other frame in parallel relation, top and bottom horizontal angle irons each having an arm projecting toward an arm of the other and lying in a substantially common plane therewith and secured to the facing arms of the end angle irons, whereby the opposite arms of the angles of the frame form an angular extending peripheral flange, a vertical angle iron



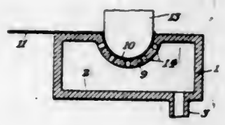
brace placed intermediate of the end irons, extending between the top and bottom angles and secured thereto within the flange, one arm of said brace being parallel with the flange forming arms of said end angle irons, diagonal angle iron braces extending from the top of the vertical brace to each lower corner of the frame and secured within the flange, said diagonal braces abutting against said vertical brace arm at their one end and against said flange at their other ends, and sprender elements arranged at intermediate points between said frames so as to bow the same medially relative to each other.

1,821,412. WOVEN WIRE BELT FOR PAPER-MAKING MACHINES. NELSON W. WEBB, Belleville, N. J., assignor to Eastwood Wire Corporation, Belleville, N. J., a Corporation of New Jersey. Filed Sept. 10, 1929. Serial No. 391,619. 3 Claims. (Cl. 245—10.)



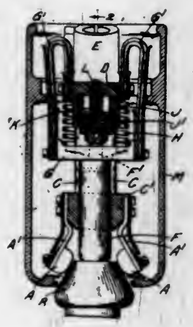
1. In a wire cloth belt, a length of woven wire cloth comprising warp and weft wires, and including a weft strand at each end of elongated cross-section longitudinally of the cloth and adapted to have a lacing wire looped about it, and a lacing wire looped about said end weft wires and including diagonally disposed portions looped from the upper to the under side of one end weft wire and then looped from the upper to the under side of the other end weft wire without passing over warp knuckles and whereby the lacing wire is drawn snugly upon the elongated surfaces of the end weft wires to eliminate gaps.

1,821,413. METHOD OF AND MEANS FOR SHAPING SHEETS OF CELLULOID AND THE LIKE. JOHN N. WHITEHOUSE, New York, N. Y., assignor to Sanite Corporation, Burlington, N. J., a Corporation of New Jersey. Filed July 10, 1929. Serial No. 377,141. 18 Claims. (Cl. 18—3.)



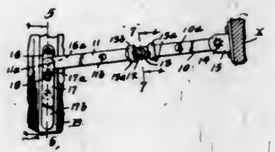
1. A method of shaping sheet material which includes subjecting said material to fluid pressure upon one side thereof, in opposition to a vacuum upon the opposite side thereof, and heating the sheet material during the application of fluid pressure thereto.

1,821,414. ELECTRIC CIRCUIT-BREAKER. ARCHIBALD ALLAN, Tynemouth, England, assignor to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed Jan. 25, 1930, Serial No. 423,443, and in Great Britain Mar. 26, 1929. 5 Claims. (Cl. 200—146.)



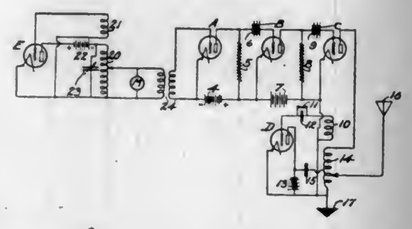
1. In an electric circuit-breaker a contact comprising an arcing contact slidable axially in a guide or support, at least one main contact mounted on said support, a spring acting on said arcing contact, a dashpot in the path of motion of the arcing contact and a piston in said dashpot said piston being separate from the arcing contact so that it is engaged and moved inwards in the dashpot towards the end of the closing movement of the circuit-breaker but permits free movement of the arcing contact during the opening of the circuit-breaker.

1,821,415. STORM SASH HOLDER. LEWIS ASPER, Minneapolis, Minn. Filed Apr. 12, 1930. Serial No. 443,712. 5 Claims. (Cl. 292—263.)



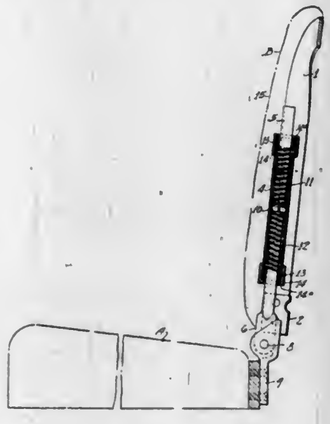
2. In a storm sash holder, a pair of pivoted links connected at their outer ends with a storm sash and a window frame respectively, the inner ends of said links being lapped, a pivot member connecting the said lapped ends, a tension spring clip interposed between one end of said pivot member and one of said links to force the lapped surfaces of said links together, and means for preventing oscillation of said clip with reference to said last mentioned link and said clip having a lateral and angular projection for engaging one of the edges of the other link when the links are swung to a predetermined position.

1,821,416. METHOD OF AND APPARATUS FOR PICTURE TRANSMISSION. EDOUARD BELIN, Paris, France. Original application filed Sept. 3, 1924, Serial No. 735,605, patented Sept. 13, 1927, No. 1,642,637. Divided and this application filed Jan. 26, 1926. Serial No. 83,930. 4 Claims. (Cl. 179—171.)



3. The method of transmitting picture modulations consisting of non-oscillatory electrical variations, on a radio carrier wave to a mechanically operated light varying means which method comprises generating waves of a frequency sufficiently low to actuate the mechanical means in unison therewith, modulating the low frequency waves with the picture modulations, and modulating said low frequency wave onto the radio wave.

1,821,417. AUTOMOBILE SEAT. ORVILLE T. BOUNDS, Centralia, Ill., assignor of one-fourth to George H. Somerville, Chicago, Ill., and one-half to Milton R. Howard, Centralia, Ill. Filed July 27, 1929. Serial No. 381,523. 2 Claims. (Cl. 155—164.)



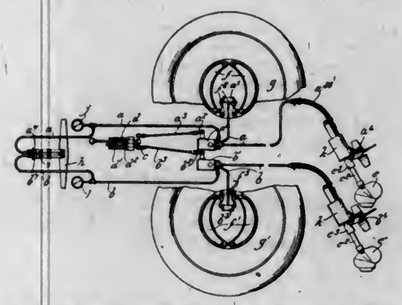
1. A seat comprising, in combination, a seat proper, a back, housings fixed to the back, rods projecting longitudinally through the housings and pivotally attached at an end to and foldable over the seat proper, and springs housed within the housings and engaging said rods for permitting yielding movement of the back relatively to the seat proper.

1,821,418. SEALING MEANS. WINFRED M. BROOKS, West Orange, N. J. Filed Dec. 16, 1930. Serial No. 502,674. 1 Claim. (Cl. 292—325.)



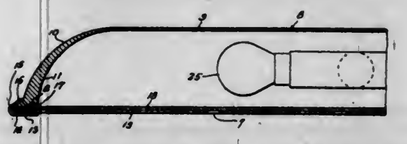
A seal comprising: a body of sheet material composed of two connected members, each of said members having two openings for the reception of a double-strand flexible sealing means, a double-strand flexible sealing means consisting of a cord-like element doubled back upon itself through the openings of one member and having its free ends threaded through the openings of the other member to thereby afford a double loop at one side face of the body of sheet material, said free ends being knotted to prevent unthreading thereof with respect to said other member, whereby when said members are folded together in a direction away from the double loop, said double loop is tightened about the element to be sealed.

1,821,419. HYDRAULIC BRAKE FOR AEROPLANES. EDWARD BISHOP BOUGHTON, WILLIE EMMOTT, DENIS TABOR BROCK, and AUSTIN CUTHBERT BURDON, London, England. Filed Feb. 27, 1930, Serial No. 431,950, and in Great Britain Mar. 5, 1929. 10 Claims. (Cl. 244—2.)



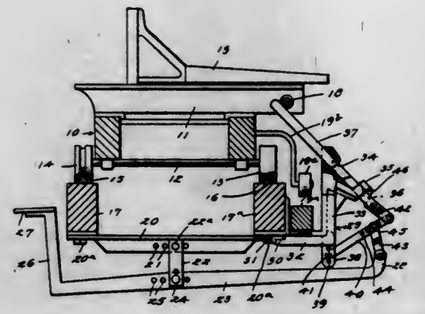
1. A hydraulic braking system for aeroplanes including two separate systems, a pressure producing means for each system, a master pressure controlling device in each system, a pressure adjusting device in each system, brake mechanism controlled by each system, manually operable means for simultaneously governing the master pressure controlling devices of both systems to insure uniform pressure in the respective systems, and manually operable means for controlling the pressure adjusting devices simultaneously and reversely.

1,821,420. ILLUMINATOR FOR LICENSE PLATES. SAMUEL CACCAMO, San Jose, Calif. Filed Oct. 20, 1930. Serial No. 489,989. 1 Claim. (Cl. 40—133.)



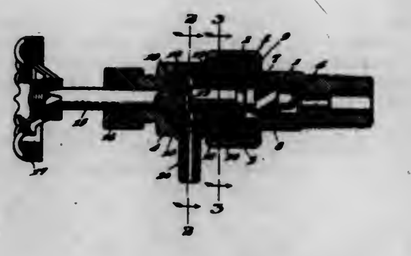
A license plate illuminator of the class described comprising a narrow elongated casing having rounded side walls merging into a rectangular portion defining a rectangular opening extending the greatest length and width of the casing, and provided interiorly with electric lighting means, a translucent sheet closing said opening, and a license plate having a corrugation formed just within its edges, the license plate disposed against the sheet and having its corrugations disposed beyond all sides of the sheet and seated in a groove in the rectangular portion, and a channelled frame for gripping the outer edge of said rectangular portion and the edge portion of the license plate, for clamping the same in position on the casing, said license plate being provided with indicia responsive to the said lighting means, said frame provide with means to removably clamp the same in position on the casing.

1,821,421. ADJUSTING STOP FOR SAWMILL CARRIAGE HEAD BLOCKS. CONRAD A. CARBAUGH, Dickeys Mountain, Pa. Filed Nov. 15, 1930. Serial No. 495,980. 10 Claims. (Cl. 143—105.)



1. A head block adjusting stop, comprising a horizontal bracket arm adapted to be secured in an outwardly extended position to one of the track supporting beams for a saw mill carriage, a vertical bracket arm extended upwardly from the outer end of the horizontal bracket arm, a stop bar, a guide carried by the vertical bracket arm and supporting the stop bar for sliding movement in an upwardly and inwardly inclined plane, a lever pivoted to the supporting beams, and means connecting the lever to the lower end of the stop bar.

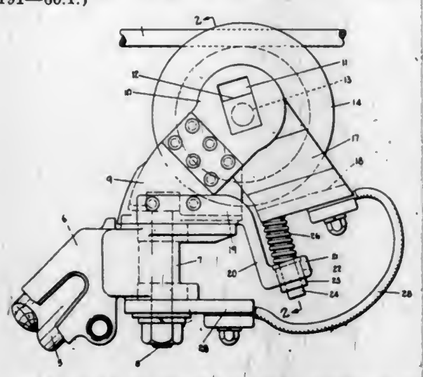
1,821,422. GAUGE COCK. ELMER O. COREY, Norwood, Ohio, assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 9, 1928. Serial No. 298,595. 1 Claim. (Cl. 251—22.)



In a valve of the class described, a valve body, a valve bonnet having a recessed engagement with the head end of the body, forming a metal sealing joint when said members are coupled together, means for coupling said body and bonnet, a removable valve seat fitting within the forward end of the bonnet and adapted to lie adjacent the head end of the body, a valve screw-threaded within the body adapted at one end to engage with a permanent valve seat within the body and at its opposite end provided with

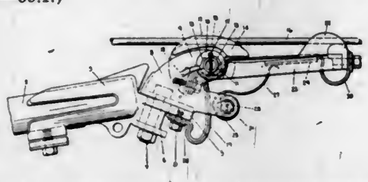
a disk for engagement with said removable seat and a valve stem rotatable within the bonnet and having a socketed non-rotatable engagement with a stem on said valve.

1,821,423. TROLLEY HARP. WALTER J. BAUROTH, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 13, 1929. Serial No. 413,851. 11 Claims. (Cl. 191—60.1.)



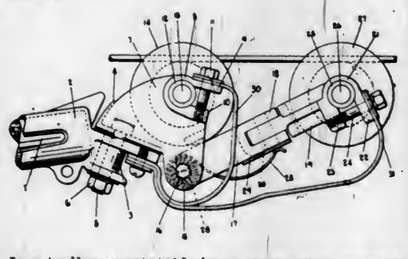
1. In a trolley, an oscillatable harp, supporting means therefor, a wheel movable therein, a contact yoke connected to and movable with said wheel, an arm secured to said harp, and means between said yoke and arm to exert pressure against said yoke.

1,821,424. TROLLEY HARP. FREDERICK C. COSEO, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 21, 1930. Serial No. 422,399. 15 Claims. (Cl. 191—59.1.)



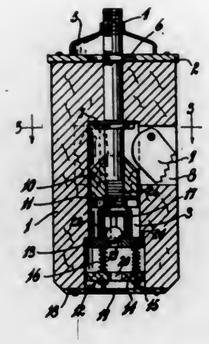
1. In a trolley, a rotatable harp, supporting means therefor, a trolley shoe mounted for oscillation therein, and a second trolley shoe connected therewith.

1,821,425. TROLLEY HARP. FREDERICK C. COSEO, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 430,952. 18 Claims. (Cl. 191—58.)



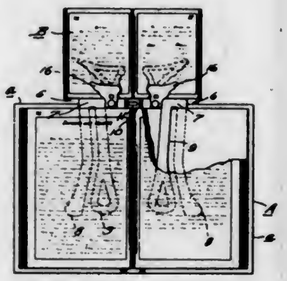
1. In a trolley, a rotatable harp, supporting means therefor, a trolley wheel mounted therein, an arm pivotally connected to said harp below said trolley wheel, a second trolley wheel, and means to connect said second trolley wheel to said arm for transverse movement thereof.

1,821,426. HYDRAULIC PLUG AND WHIPSTOCK. HOWARD DUMM and JAMES R. RUSSELL, Long Beach, Calif. Filed Jan. 13, 1930. Serial No. 420,404. 6 Claims. (Cl. 166—13.)



1. A hydraulic plug comprising a wooden body, said body having a central bore therein, a plurality of wall engaging dogs pivotally mounted in the body, dog engaging means slidably mounted in said bore, and conduit means extending into the bore whereby hydraulic pressure is exerted on the dog engaging means to actuate the same, to move said dogs into engagement with the wall.

1,821,427. REFERENCE HOLDER. ARCHIE G. ELDER, Seattle, Wash. Filed Mar. 24, 1928. Serial No. 264,322. 6 Claims. (Cl. 24—81.)



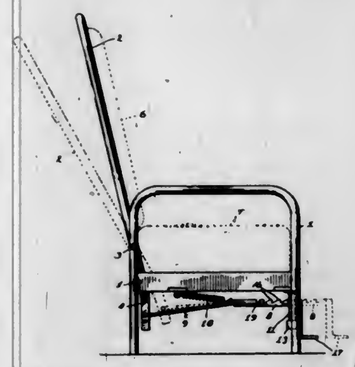
1. In a book supported reference pamphlet holder, a pair of plate members each provided with a head portion and two spaced apart book engaging fingers depending therefrom, clamping plates cooperating with the respective members for clamping a pamphlet to the holder, springs for actuating said clamping plates, screw devices engaging said members for regulating the effective power of said springs, and an extensible link hingedly connected to the head portions of the respective members for retaining the latter in selected spaced apart relation.

1,821,428. ORNAMENT AND ATTACHMENT THEREFOR. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 31, 1930. Serial No. 458,854. 4 Claims. (Cl. 41—10.)



1. An ornament for articles of apparel and the like, comprising an ornament plate, and means for attaching said plate to an article, said attaching means comprising a separable fastener element having a finish cap, said plate interposed between said article and said cap, and said cap forming an ornamental part of the ornament.

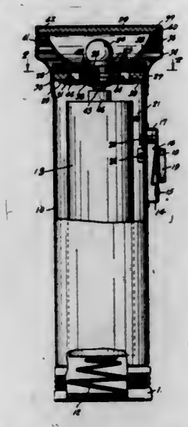
1,821,429. CHAIR FOR MOTOR BUSSES. CHARLES E. FERREIRA, Oakland, Calif. Filed Nov. 2, 1926. Serial No. 145,805. 9 Claims. (Cl. 155—161.)



8. An adjustable chair including a seat frame; a back frame pivoted onto the seat frame; a fixed pawl depending from the seat frame adjacent the front end thereof; a longitudinal ratchet-toothed bar to engage the pawl; means connecting the bar with the back frame; means normally maintaining the bar engaged with the pawl; means for disengaging the bar from the pawl at will; and a spring acting to raise the back frame to a substantially vertical position, the positioning of the ratchet teeth on the bar being such as to cause said bar to automatically move rearwardly with the action of the spring unless said spring is counteracted by a pressure in the opposite direction.

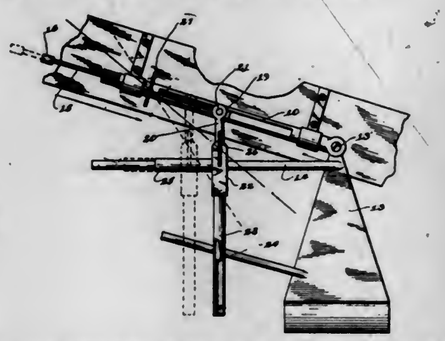
1,821,430. FOCUSING SPOTLIGHT. GILES C. FULLMER, Bridgeport, Conn., assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 2, 1929. Serial No. 359,826. 2 Claims. (Cl. 240—10.68.)

1. In a light of the character described, an open ended casing internally threaded at said open end, a circular insulating plate of compressed fiber threaded on its periphery for direct engagement with the threads of the casing to detachably secure the plate in the casing, a lamp socket mounted in the plate, a metal disc mounted on the inner surface of the plate in contact with the socket, said plate forming the support for the socket and the disc, a switch having relatively movable contacts one of which is grounded on the casing and the other insulated therefrom, a conductor leading from the latter con-



tact and having an end in position to engage said metal disc when the plate is threaded into position in the casing, and said disc having a circular bead projecting laterally therefrom and spaced inwardly from its outer edge in position to limit inward movement of the end of the contact when the plate is threaded to position.

1,821,431. DIVING BOMB SIGHT. GRANDISON GARDNER, Honolulu, Territory of Hawaii. Filed July 31, 1924. Serial No. 729,389. 13 Claims. (Cl. 33—46.5.)

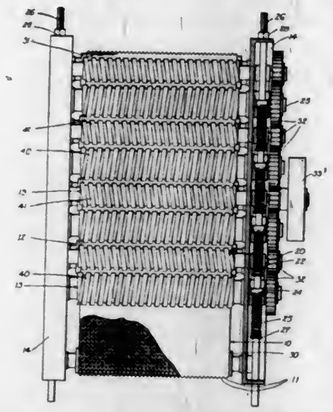


12. In a bomb sight, a support, a rear sight, a bar adjustable on said support toward and away from said rear sight, a pendulum pivoted on said support having a second bar extending therefrom at right angles to said first bar in a horizontal position, a front sight, a guide block carrying the same having openings therein extending at right angles to one another to receive said bars respectively, and means for adjusting the fore and aft positioning of said first bar, comprising an air vane, and means connecting said vane with said first bar.

1,821,432. APPARATUS FOR AND METHOD OF SHRINKING, ETC., FELT ARTICLES. HOMER A. GENEST, Danbury, Conn., assignor to United States Hat Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 29, 1928. Serial No. 309,190. 9 Claims. (Cl. 28—6.)

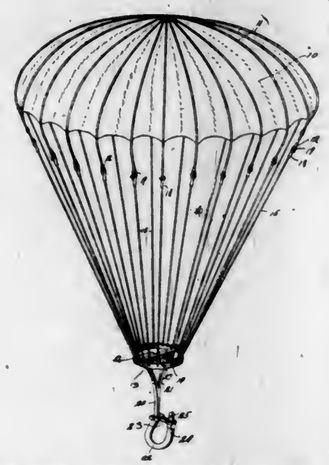
1. In a machine for shrinking hat bats and the like, a bat carrying belt provided on its working face with a

multiplicity of kneading knuckles and arranged to move in a wavy course and without transverse movement, and rolls extending transversely of and adapted to engage the working face of said belt and the bats carried thereby,



alternate rolls being provided with means for shifting portions of the ply of the bat in engagement therewith transversely in one direction anu intervening rolls being provided with means for shifting portions of the ply of the bat in engagement therewith in the opposite direction.

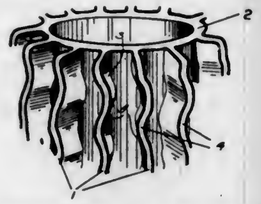
1,821,433. MAIL BAG PARACHUTE. CHARLES M. GRAEFF, Harrisburg, Pa. Filed Mar. 11, 1930. Serial No. 434,909. 3 Claims. (Cl. 244—21.)



1. A mail bag carrying parachute having a plurality of ropes extending downwardly and centrally from the rim of the parachute, a frame supported by the lower end of said ropes and formed to support a mail bag, and means on the frame for supporting an illuminating lamp within the plane of the frame, the frame having a portion extending downward below the lamp to prevent contact of the lamp with the ground.

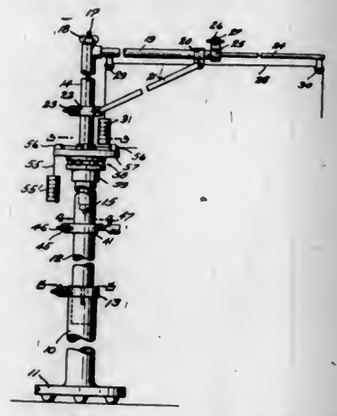
1,821,434. COOLING FIN FOR INTERNAL COMBUSTION ENGINES. ERWIN H. HAMILTON, Riverdale, N. Y. Filed Jan. 27, 1923. Serial No. 615,401. 4 Claims. (Cl. 257—261.)

1. The combination with a cylinder adapted to have currents of air circulating thereover, of a plurality of heat radiating devices on said cylinder having angularly disposed surfaces adapted to direct the currents of air from one cooling surface to another, the surfaces being



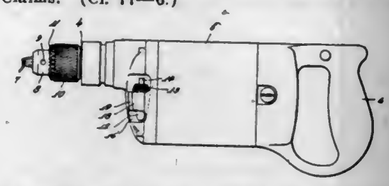
disposed with respect to each other so that the currents of air encounter surfaces inclined in the direction of the movement of the air current whereby the full volume of air engages said cylinder and heat radiating devices.

1,821,435. SURGICAL APPARATUS. ELMER A. HAMLIN, Seattle, Wash. Filed May 4, 1929. Serial No. 360,415. 2 Claims. (Cl. 128—84.)



2. In apparatus of the character described, the combination with a stand member, and a post arranged for vertical adjustments with respect to said stand, of a table mounted on said post and arranged for rotary movement about the axis of said post, said table providing pulleys through which a flexible member adapted for attachment to parts of a person's body in applying horizontal stresses thereto is arranged to pass, a weight suspended from the free end of said flexible member for affording said stress, said pulleys being disposed such as to afford a radial pull of the flexible member from said post.

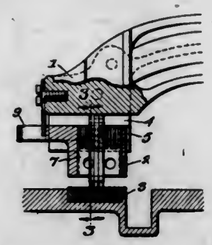
1,821,436. PORTABLE POWER DRIVEN TOOL. JOHN J. HOLLOWAY, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 13, 1928. Serial No. 254,153. 4 Claims. (Cl. 77—6.)



1. A frame for a portable power driven rotary tool having a chuck; a key with a pinion, a shank and a handle extending at an angle from the shank; said frame having

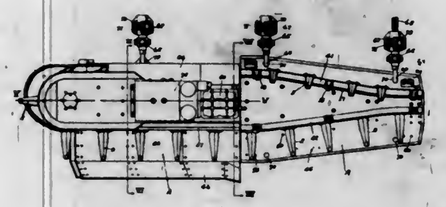
a chamber to receive the handle, a cross-passage to receive the shank and a recess to receive the pinion; said recess and cross-passage opening through the face of the frame, and the chamber opening through an edge and partially through said face; said frame also having at the outer side of the cross-passage an abutment provided with a depression; and a spring in the chamber to engage the handle to urge the shank yieldably into the depression.

1,821,437. TYPE CHASE. FREDERICK KOHNLE, Dayton, Ohio, assignor to The Monarch Marking System Company, Dayton, Ohio, a Corporation of Ohio. Filed July 14, 1930. Serial No. 467,838. 2 Claims. (Cl. 101—393.)



1. A type chase, comprising, a casing having an opening therethrough, sheet metal plates morticed into opposite walls of said casing in definite spaced relation dividing the opening into a plurality of type receiving slots, the edges of the plates upset at several points providing fins for binding the plates within the morticing in the walls of the casing.

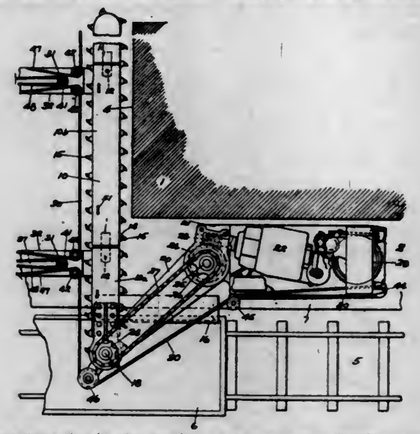
1,821,438. APPARATUS FOR HANDLING COAL. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 21, 1926, Serial No. 82,809. Renewed Jan. 13, 1931. 28 Claims. (Cl. 198—11.)



1. In a machine of the class described, the combination with an elongated frame, an endless chain mounted thereon, means for driving the chain, gathering elements movably mounted on the chain, means for rendering the gathering elements inactive along one side of said frame, the parts being adjustable to place the inactive elements at the preferred side of the frame.

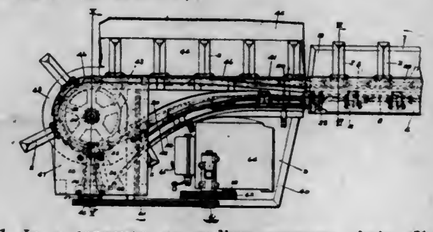
1,821,439. COAL MINING METHOD AND APPARATUS. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 20, 1924, Serial No. 700,632. Renewed Nov. 28, 1930. 46 Claims. (Cl. 262—30.)

1. In a coal mining apparatus, the combination with an elongated frame adapted to rest upon and slide over the mine floor said frame comprising a plurality of longitudinally aligned flexibly connected sections, an endless chain adapted to travel in guideways extending longitudinally of said frame, cutter bits projecting laterally from said chain and adapted to engage the coal to cut it,



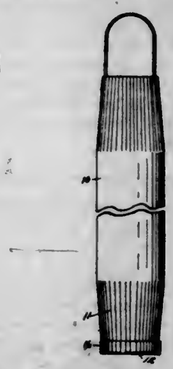
means to actuate the chain, and means to simultaneously apply lateral moving effort to each of said sections as and for the purpose set forth.

1,821,440. APPARATUS FOR LOADING COAL. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 3, 1924. Serial No. 735,583. 52 Claims. (Cl. 198—11.)



1. In a conveyor, an endless conveyor chain, flights pivoted thereto, means for swinging the flights during their travel in planes transverse to the line of the chain for rendering them inoperative, and means for positively moving them toward normal operative position.

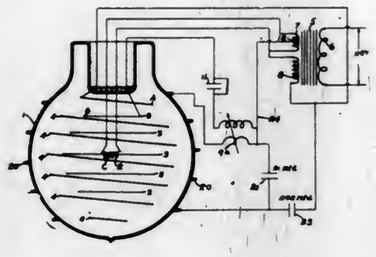
1,821,441. WELL BUCKET BOTTOM. THEOPHILUS H. MCCLINTON, Fort Smith Ark. Filed Oct. 25, 1930. Serial No. 491,282. 3 Claims. (Cl. 294—69.)



1. A metal well bucket having the lower portion of its body longitudinally corrugated to the lower extremity of the body, and a bottom therefor formed to provide an

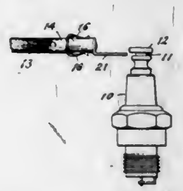
annular pocket within which the lower end of the body is inserted, the outer wall to the bottom of the pocket being corrugated to fit the corrugations at the lower end of the body.

1,821,442. APPARATUS FOR PRODUCING LIGHT WAVES. ORAN T. MCILVAINE, East Cleveland, Ohio, assignor to McIlvaine Patent Corporation, St. Charles, Ill., a Corporation of Delaware. Filed Feb. 23, 1928. Serial No. 256,234. 9 Claims. (Cl. 176—124.)



1. A source of light rays comprising a globe having therein an ionizable gas under low pressure, a filament, an anode and a control electrode surrounding said filament and made of a pattern to facilitate the emission of light rays, a source of current for said filament, high frequency oscillating circuits including said filament and said anode and controlling electrode and connections establishing an external circuit between said filament and anode, said external circuit containing a source of E. M. F.

1,821,443. CABLE TERMINAL. HUBERT C. MOHR, Warren, Ohio, assignor to The Packard Electric Company, Warren, Ohio, a Corporation of Ohio. Filed Oct. 28, 1927. Serial No. 229,346. 1 Claim. (Cl. 173—269.)

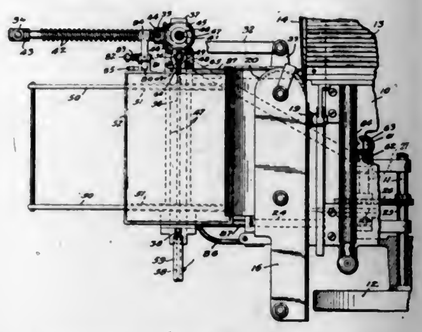


An interposed connector for a spark plug comprising a flat metal strip having a bifurcated end portion adapted to engage in a recess on a spark plug terminal, the other end of the strip being bent at substantially right angles to the first mentioned portion, and an annularly grooved contact stud attached to said last mentioned portion, said contact stud being adapted for releasable engagement in a tubular contact member.

1,821,444. PAINT AND ENAMEL COMPOSITION. ERNEST A. MUNNS, New York, N. Y. Filed Feb. 2, 1927. Serial No. 165,501. 2 Claims. (Cl. 134—39.)

1. A paint composition consisting of a mixture of approximately one thousand pounds of inert pigment the major portion of which consists of relatively coarse asbestos powder, three hundred and seventy-five pounds of linseed oil, one hundred and twenty-five pounds of varnish, and two hundred and fifty pounds of turpentine intermingled to produce a pasty semi-plastic mass which is adapted to be shaped and textured in its application to the surface of an object.

1,821,445. SLICE STACKER. LEONARD NESTOR, Minneapolis, Minn., assignor of one-half to Edward J. Ring, Minneapolis, Minn. Filed Oct. 2, 1926. Serial No. 139,097. 12 Claims. (Cl. 146—94.)



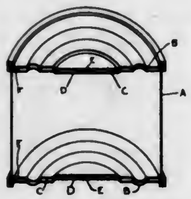
1. In combination a slicing machine, a tray upon which the slices are adapted to be discharged therefrom, a substantially horizontally disposed screw adapted to be intermittently turned and a toothed block secured to said tray and adapted to be releasably engaged with said screw to intermittently move said tray in substantially a horizontal plane whereby slices may be disposed on said tray in such relation that each slice overlaps its adjacent slice.

1,821,446. TRAIN ORDER HOLDER. LAWRENCE PAULSON and ALPHONSE W. ROETTGER, Rothsay, Minn. Filed Apr. 22, 1930. Serial No. 446,380. 3 Claims. (Cl. 258—2.)



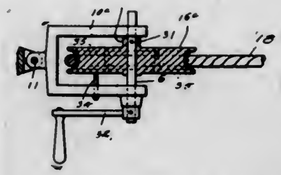
1. A train order holder of the character described comprising a supporting arm, and a pair of double clamps mounted in spaced relation on the arm, each of said clamps comprising a headed bolt mounted on the arm, a pair of opposed bars slidably mounted on the bolt and having their opposed end portions formed to provide co-acting jaws and resilient means engaged with one of the bars in a manner to yieldingly urge the same toward the other bar and further adapted to yieldingly urge said other bar into engagement with the supporting arm.

1,821,447. CAN FOR THE PRESERVATION OF CHEESE. LORE A. ROGERS, Washington, D. C. Filed Sept. 16, 1929. Serial No. 393,051. 1 Claim. (Cl. 220—44.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



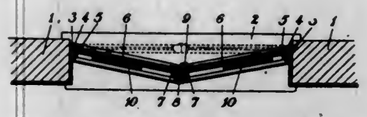
A can for preserving cheese comprising sides and end members, the end members having apertures in their central portions, plates conforming to the shape of said end members affixed inside the can in close proximity to the end members, closure members for the apertures in the end members attached to said plates adapted to prevent the ingress of air into and to permit the egress of excess gas from said can.

1,821,448. CLOTHESLINE PULLEY. GEORGE W. RUMBAUGH, Port Angeles, Wash. Filed May 27, 1930. Serial No. 456,242. 2 Claims. (Cl. 68—3.)



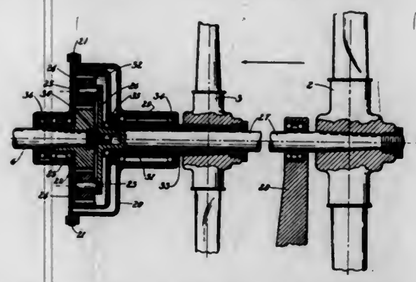
1. A clothesline pulley, comprising a bracket, a forked yoke carried by said bracket, a shaft mounted between the arms of said yoke, a pulley mounted upon and secured to said shaft, said pulley having a plurality of apertures in one face thereof and said shaft being supported for limited longitudinal movement, a crank handle carried by said shaft, and a pin carried by said fork and directed toward said pulley for engagement in one of said apertures when the pulley is shifted the pulley being shifted upon longitudinal movement of said shaft in one direction to engage said pin in one of said apertures.

1,821,449. CASEMENT WINDOW. GEORGE REGINALD SHAW, London, England. Filed Dec. 1, 1930, Serial No. 499,339, and in Great Britain Dec. 9, 1929. 5 Claims. (Cl. 20—53.)



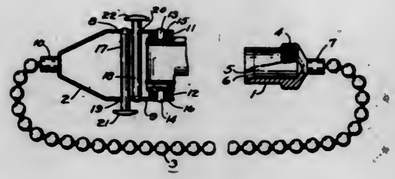
1. A casement window comprising two vertical halves hinged near the outer side of the wall to opposite stiles of a window frame, a mullion fixed centrally of the window frame and near the inner side of the wall and means for opening and closing said window halves.

1,821,450. PROPELLING DEVICE FOR AIRCRAFT AND THE LIKE. WILLIAM STELZER, Chicago, Ill., assignor to American Propeller Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 7, 1928. Serial No. 304,477. 7 Claims. (Cl. 170—165.)



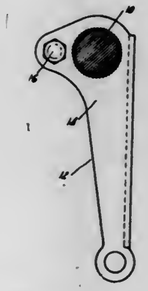
1. In combination, a drive gear, a driven gear coaxial with said drive gear, intermediate revoluble gears at right angles to said drive gear meshing with said drive gear and with said driven gear to transmit power from said drive gear to said driven gear, means for revolubly supporting said intermediate gears, said means for revolubly supporting said intermediate gears being revoluble about the axis of said drive gear, a counter-propeller, means for connecting said counter-propeller with said driven gear to turn therewith, a principal propeller, and means for connecting said principal propeller with said means for revolubly supporting said intermediate gears to turn therewith, substantially as described.

1,821,451. DENTAL HANDPIECE ATTACHMENT SEALER. WALTER JOHN TERRY, Seattle, Wash. Filed Jan. 16, 1930. Serial No. 421,268. 6 Claims. (Cl. 32—10.)



1. In a sterilizing attachment of the character described, a plug adaptable to be inserted in the handle opening of a dental handpiece attachment to seal the same, a spring clip, resilient cup shaped renewable washers mounted in the spring clip and positioned to be placed over the bur openings in the head of a handpiece attachment, pins in the centers of the washers to fit into the bur openings to locate the clip, means for opening the said spring clip, and means for flexibly attaching the said spring clip and plug.

1,821,452. LEVER CONNECTION. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 15, 1927. Serial No. 213,177. 3 Claims. (Cl. 74—33.)

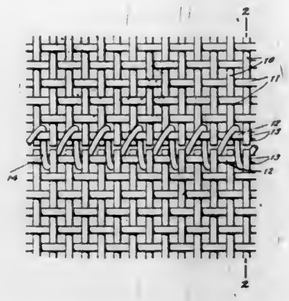


2. In combination, a shaft, an arm having spaced sides formed with openings embracing the shaft, and means for pinching said sides toward each other to cause the walls of said openings to bind on the shaft, to clamp the arm on the shaft.

1,821,453. WOVEN-WIRE BELT FOR PAPER-MAKING MACHINES. NELSON W. WEBB, Belleville, N. J., assignor to Eastwood Wire Corporation, Belleville, N. J., a Corporation of New Jersey. Filed Sept. 10, 1929. Serial No. 391,618. 1 Claim. (Cl. 245—10.)

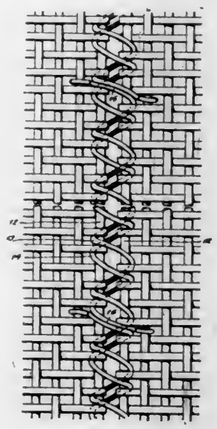
In a wire cloth belt, a length of woven wire cloth comprising warp and weft wires, and including a weft strand

at each end adapted to have a lacing wire looped about it, certain of the warp wire ends passing over said end weft wires and certain other of the warp wire ends passing under said end weft wires, and a lacing wire passing over one of said end weft wires at the opposite side and at points directly opposed to the points at which said warp wires pass under said end weft wire and being carried to



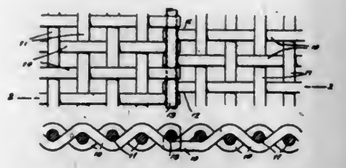
the under side of said end weft wire and extending therefrom to the other end weft wire and passing thereover at the opposite side and thence backwardly thereunder at points directly opposed to the points at which said warp wire ends pass over said end weft wire, said lacing wire being at no point engaged with the upper surface of said warp wires which pass over said end weft wires.

1,821,454. WOVEN-WIRE BELT FOR PAPER-MAKING MACHINES. NELSON W. WEBB, Belleville, N. J., assignor to Eastwood Wire Corporation, Belleville, N. J., a Corporation of New Jersey. Filed Dec. 12, 1929. Serial No. 413,574. 4 Claims. (Cl. 245—10.)



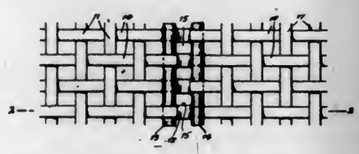
4. In a wire cloth belt, a length of woven wire cloth comprising warp wires and weft wires and having its ends adjacent, and a seam comprising a plurality of lacing wires carried about weft wires and extending between said ends, each of said lacing wires comprising a plurality of sections having ties at their ends, the ties of one wire being disposed at points intermediate the ties of the other wire.

1,821,455. WOVEN-WIRE BELT FOR PAPER-MAKING MACHINES. NELSON W. WEBB, Belleville, N. J., assignor to Eastwood Wire Corporation, Belleville, N. J., a Corporation of New Jersey. Filed Dec. 12, 1929. Serial No. 413,575. 5 Claims. (Cl. 245—10.)



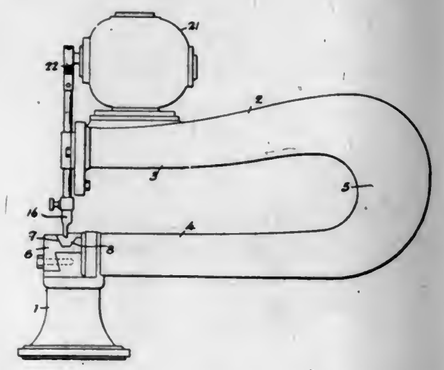
1. In a wire cloth belt, a length of woven wire cloth comprising warp and weft wires and having its ends adjacent, all of the warp wire ends at one end of said length of cloth being disposed in line with each other and engaged at one side of a weft wire at the other end of the cloth, and means connecting said warp wire ends to said weft wire.

1,821,456. WOVEN-WIRE BELT FOR PAPER-MAKING MACHINES. NELSON W. WEBB, Belleville, N. J., assignor to Eastwood Wire Corporation, Belleville, N. J., a Corporation of New Jersey. Filed Dec. 12, 1929. Serial No. 413,576. 4 Claims. (Cl. 245—10.)



1. In a wire cloth belt, a length of woven wire cloth comprising warp and weft wires, the warp wire ends at each end having a space formed by the removal of a weft wire, a solder covered connecting element having portions disposed in said respective end spaces of the warp wire ends, and connected thereto by heat-produced solder joints formed from said solder covering.

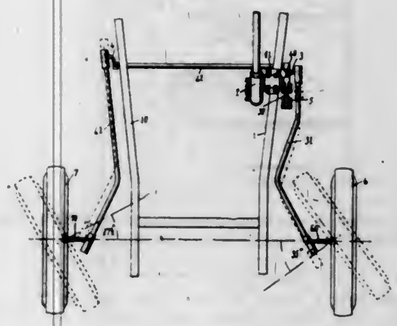
1,821,457. METAL FLANGING OR CUTTING AND FLANGING MACHINE. NED T. WILLIS, New York, N. Y. Filed June 8, 1929. Serial No. 369,416. 7 Claims. (Cl. 153—48.)



1. A machine for flanging the edges of sheet metal plates embodying a stationary die member having surfaces at two different levels, a groove between said surfaces,

a flanging shoulder on one of said surfaces at one side of the groove and a gaging shoulder on the other of said surfaces at the opposite side of the groove, and a reciprocatory die member for delivering hammer blows upon the edge of the metal and to force it down into the groove and against said flanging shoulder.

1,821,458. STEERING MECHANISM. JAMES A. WRIGHT, Montreal, Quebec, Canada. Filed Apr. 29, 1929. Serial No. 359,008. 3 Claims. (Cl. 280—93.)



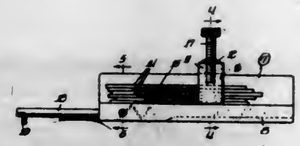
1. In a steering mechanism for motor vehicles, a steering gear, a steering lever operated thereby, a second steering lever mounted on the end of a transverse shaft journalled in the side members of the chassis frame, on the opposite side thereof, a lever on the end of said shaft adjacent the first steering lever and an adjustable linkage between the first steering lever and the adjacent lever on the transverse shaft adapted to rotate the steering levers oppositely and to exert by them differential pivoting of the steering wheels.

1,821,459. CARD INDEX SYSTEM. DENNIS A. CASEY, New Orleans, La. Filed Feb. 19, 1929. Serial No. 341,111. 7 Claims. (Cl. 129—16.1.)



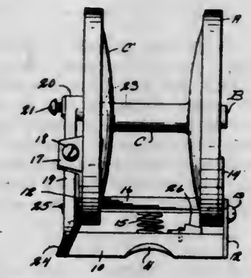
1. A device for selecting a desired card from a group of filed cards comprising a casing having a drawer opening, a drawer slidably mounted in said casing through the opening for receiving the groups of filed cards, a plurality of selective key-bars carried by the drawer for selecting a desired card, operating keys for said bars, the cards being adapted to normally rest upon the selective key-bars, and releasable means for initially raising all of the cards with their upper edges above the drawer opening, said selective key bars adapted when operated to hold the cards other than the selected card above the drawer opening when said means is released.

1,821,460. LOW SLUG ATTACHMENT. EDWARD CHESHIRE, St. Petersburg, Fla. Filed May 16, 1925. Serial No. 30,723. 3 Claims. (Cl. 29—69.)



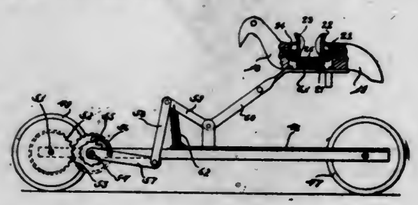
1. In a device of the character described, the combination of a base member, a bracket member secured to one side of said base member and having a portion removed from and extending transversely of said base member, an article clamping means carried by said portion, a downwardly extending article guard secured to said portion and having a transversely disposed stop thereon, and stop means for predeterminingly limiting movement of said device on an operating support.

1,821,461. AUTOMATIC SPOOL CONTROL FOR FISHING REELS. LESLIE J. CHUDLEY, Oceanside, Calif. Filed May 25, 1929. Serial No. 365,928. 7 Claims. (Cl. 242—84.5.)



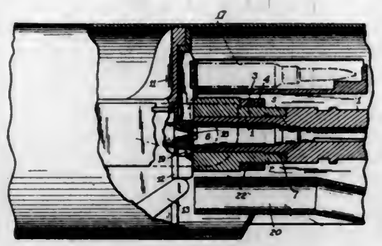
1. As an article of manufacture, a brake for fishing reels comprising a base, means for pivotally mounting and supporting the body of the reel upon the base for fore and aft rocking movement, a spring urging the support for the reel rearward upon its pivot, and means acting to frictionally engage the spool of the reel and retard the motion of said spool when the supporting means is urged rearward, the action of said retarding means being relieved when the reel supporting means is urged forward by the casting of a line from the reel.

1,821,462. RIDING DEVICE. LOUIS COLELLA, Detroit, Mich. Filed Dec. 26, 1928. Serial No. 328,335. 1 Claim. (Cl. 208—36.)



In a device of the class described a seat comprising spaced body members movable relatively to each other; resilient means for normally pressing said members toward each other and resisting relative withdrawal of said members; a seat forming plate movably mounted; and resilient means for normally resisting movement of said plate.

1,821,463. MACHINE GUN. KARL DANTHINE, Bern, Switzerland, assignor to Heinrich Surber, Zurich, Switzerland. Filed Jan. 3, 1930, Serial No. 418,185, and in Germany Jan. 11, 1929. 8 Claims. (Cl. 89—3.)

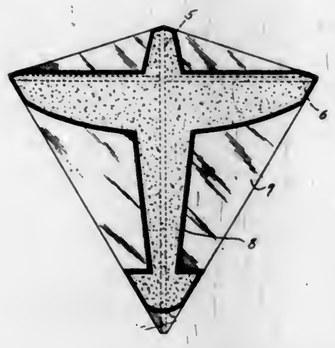


1. A machine gun, comprising a barrel, a carrier for said barrel, and a barrel head securing the barrel to said carrier, said barrel comprising a barrel tube and cartridge chamber, detachably secured to said barrel head, the latter being exchangeably attached to said carrier and allowing either removal of the barrel and the head, or the barrel alone.

1,821,464. TREATMENT OF YARNS, FABRICS, FILMS, AND THE LIKE. HENRY DREYFUS, London, England. Filed Jan. 19, 1927, Serial No. 162,215, and in Great Britain May 26, 1926. 6 Claims. (Cl. 8—13.)

1. Process for treating material comprising artificial filaments of organic derivatives of cellulose, comprising subjecting the material to the action of a swelling agent comprising diacetone alcohol and loading the material by fixing an insoluble metallic compound therein.

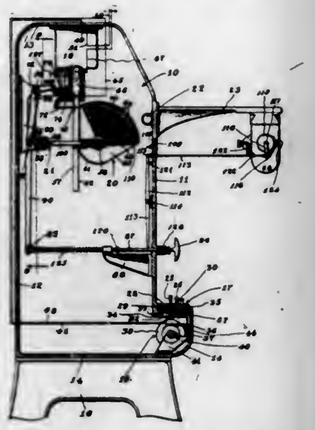
1,821,465. AEROPLANE KITE. CHARLES F. DYSERT, Johnstown, Pa. Filed Oct. 7, 1929. Serial No. 397,966. 1 Claim. (Cl. 244—22.)



In a kite, a transparent body portion completely transparent to the eye, an opaque member outlining a figure, secured to the body portion, and said opaque portion being outlined by a heavy opaque line.

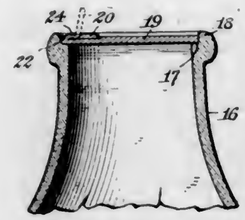
1,821,466. METHOD AND APPARATUS FOR PREPARING LITHOGRAPHIC PRINTING PLATES. WILLIAM GRASS, Roslyn Heights, N. Y. Filed Jan. 13, 1927. Serial No. 160,949. 24 Claims. (Cl. 95—4, 5.)

1. In a method of preparing lithographic printing plates, causing the light to pass into translucent type and to impinge on a reflecting surface within the type, and to be reflected thence out of the type and to a distance



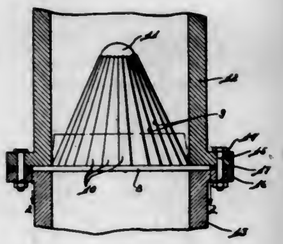
therefrom and to the sensitized surface through a translucent letter outline on another face of the type.

1,821,467. MILK BOTTLE CAP. FERDINAND M. HAMMER, Buffalo, N. Y. Filed Dec. 30, 1927. Serial No. 243,595. 8 Claims. (Cl. 215—51.)



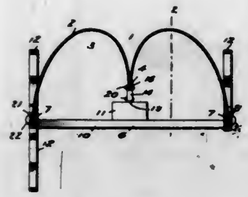
1. A milk bottle cap having a marginal pull-lip and having the pull-lip partly severed from the body portion of the cap at the under side and along a curved line which is a true continuation of the circular edge of the cap, said pull-lip being bent over the upper side of the cap.

1,821,468. MIXING DEVICE. JOHN HANLEY, Detroit, Mich. Filed Apr. 16, 1928. Serial No. 270,225. 3 Claims. (Cl. 48—180.)



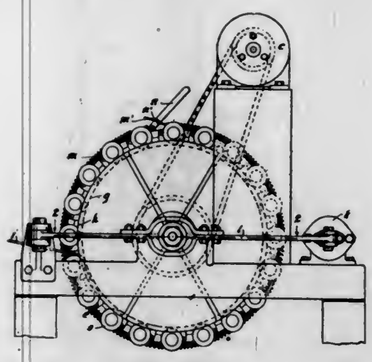
1. A mixing device of the class described adapted for insertion in an intake conduit, comprising: a flange; and a hollow conical body having an open large end and a closed small end and projecting outwardly from one face of said flange, the sides of said body being provided with slits formed therein, the combined area of said slits being equal to the area of the open end of said cone.

1,821,469. SOUND AMPLIFIER. CHESTER W. HICKS, Langley Field, Hampton, Va. Filed Aug. 3, 1928. Serial No. 297,222. 3 Claims. (Cl. 181—31.)



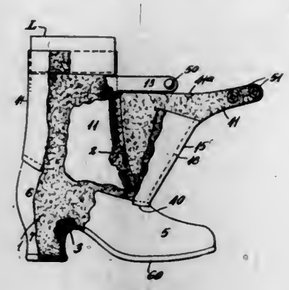
1. A device of the character described including a rectangular shaped frame having vertical sides, a top and a central member, a vibratory diaphragm of flexed blotting paper, the same composed of two substantially semicircularly curved portions having their meeting edges secured together and their outer edges extending to the vertical sides of the frame, a clamping strip on each of the vertical sides for removably clamping the outer edges of the diaphragm to the frame, an actuating unit mounted on the central member of the frame, and a connecting clip for removably connecting the actuating unit to the meeting edges of the two curved portions of the diaphragm.

1,821,470. BEAD FORMING MECHANISM. WALTER E. HUMPHREY, Kent, Ohio, assignor to The Mason Tire & Rubber Corporation, Kent, Ohio, a Corporation of Delaware. Filed Aug. 7, 1926. Serial No. 127,957. 16 Claims. (Cl. 154—9.)



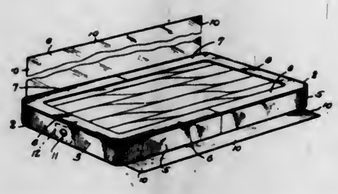
1. In mechanism of the class described, the combination with a rotatable mandrel, of means peripherally associated therewith for resiliently applying pressure radially to material wound upon said mandrel, and associated mechanism for stripping the annulus from the mandrel, substantially as set forth.

1,821,471. ARCTIC, SHOE, OR OVERSHOE. PETER H. MARGULIS, New York, N. Y. Filed Oct. 28, 1926. Serial No. 144,709. 8 Claims. (Cl. 36—5.)



1. An overshoe having at the front thereof a bellows structure formed by integral extensions from the upper, said extensions having the edges remote from the upper secured together in face to face relation to form a thin edge and to bias the extensions to lie face to face, a permanently set crease being provided at the junction of one extension with the upper to bias the structure to normally swing to that side of the overshoe provided with the crease and against the adjacent side of the upper, said structure of a length to extend to the rear of the upper and to lap upon the opposite side, and cooperating complemental fastening means in connection with the structure and the top of the overshoe, one of said means being at the upper outer corner of the bellows structure, and the other so positioned with respect to the upper that when said means are engaged the free thin edge of the structure will be drawn and held close against the upper.

1,821,472. PACKAGE FOR CIGARS, CIGARETTES, AND SMOKING TOBACCO. JOHN T. MCCROSSON, Port Au Prince, Haiti, assignor to Fresh-Keeping Package Corporation, a Corporation of Delaware. Filed Apr. 3, 1928. Serial No. 267,024. 2 Claims. (Cl. 206—46.)

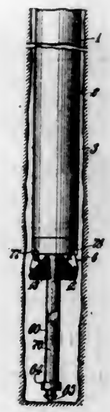


1. A package having in combination separate end sections each formed with top flanges and bottom portions and molded at their angles to retain gas and adapted to be brought together longitudinally to enclose cigars and the like and display the same and having longitudinal shoulders engaging each other edgewise to aid in maintaining said sections in line with each other, and a transparent wrapper surrounding the top, bottom and sides of the end sections and having its edges glued to the same on lines surrounding the end sections, to seal the joint line between said end sections and form a gas-tight display package, said package being charged with inert gas.

1,821,473. BORING TOOL. HENRY H. MERCER, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 26, 1925. Serial No. 65,019. 38 Claims. (Cl. 255—76.)

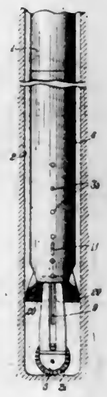
1. An earth cutting tool comprising a cutter carrying arm having a plurality of cam receiving grooves, means

for supporting the same to allow radial movement thereof, and actuating means therefor including a plurality of cams



adapted to cooperate with said plurality of grooves, one of said cams serving to effect initial outward movement of said arm and another to effect final outward movement.

1,821,474. BORING TOOL. HENRY H. MERCER, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 5, 1927. Serial No. 237,927. 19 Claims. (Cl. 255—76.)



1. An earth cutting tool comprising a casing, a unit mounted in the end thereof for limited telescopic movement, a cutter carried by said unit, a plurality of pivoted arms arranged in side by side relation to swing about a common axis and cutters carried thereby, means secured to said casing to provide a relatively fixed bearing for said arms, and means carried by said unit adapted to actuate said arms pivotally about said bearing upon telescopic movement between said unit and said casing.

1,821,475. GOLF TEE. GUSTAVE MILLER, New Haven, Conn., assignor to Carl Miller, New Haven, Conn. Filed May 1, 1929. Serial No. 359,668. 7 Claims. (Cl. 273—33.)

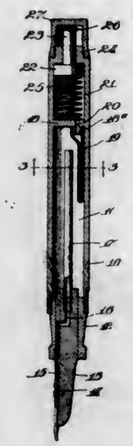


2. A self-righting golf tee comprising a semi-spherical cup-shaped member and a weight within the outlines of the bottom of said member.

1,821,476. DYEING FIBROUS MATERIALS. JOSEPH NUSSLEIN, Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 16, 1925, Serial No. 62,932, and in Germany Oct. 30, 1924. 8 Claims. (Cl. 8—6.)

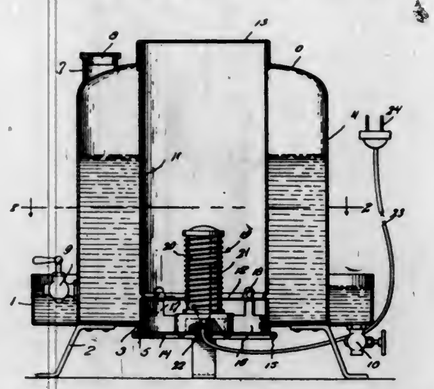
2. A composition of matter suitable for dyeing fibrous materials, comprising an aliphatic alcohol with more than three carbon atoms and a naphthalene sulfonic acid containing at least one alkyl group with more than two carbon atoms.

1,821,477. FILLING MECHANISM FOR FOUNTAIN PENS. KENNETH S. PARKER, Janesville, Wis., assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed Feb. 9, 1929. Serial No. 338,697. 5 Claims. (Cl. 20—147.)



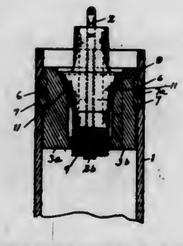
1. In a fountain pen having a barrel within which is an ink reservoir and a piston chamber both of which are of constant size and dimension, a normally collapsed bulb device mounted in said reservoir and expansible to displace air in the reservoir and subsequently collapsible to draw ink into the reservoir, the interior of said bulb communicating with said piston chamber, a piston reciprocably mounted in said chamber for expanding and collapsing said bulb, and spring means opposing movement of said piston in one direction and acting to move the piston in the other direction when pressure is released from the piston for effecting positive predetermined expansion and collapsing movements of said bulb.

1,821,478. DRINKING FOUNTAIN FOR POULTRY. HARRY WILLIAM PLEDGER, Ogden, Utah. Filed May 18, 1929. Serial No. 364,164. 1 Claim. (Cl. 119—73.)



In a drinking fountain, having a trough formed with a central opening in the bottom thereof, and a water supply tank arranged within the trough and provided with a valved outlet opening in the lower portion thereof for supplying water to the trough, the bottom of the tank being formed with a central opening, the top of the tank being formed with a central opening, an open-ended flue extending centrally through the water tank and disposed through the openings in the top and bottom of said tank, removable closure caps for the respective ends of the flue, and a heating unit for disposition within the flue secured on the lower cap, the lower closure cap including a disk for engagement against the lower end of the flue, an upstanding rim formed on the upper face of the disk and having a sliding fit with the inner face of the lower end portion of the flue, and coacting means between the rim and the flue for further securing the lower closure cap in position on the lower end of the flue, said last-mentioned means comprising upstanding spring catches carried by the rim, and an inwardly extending rib formed on the flue with which the catches engage.

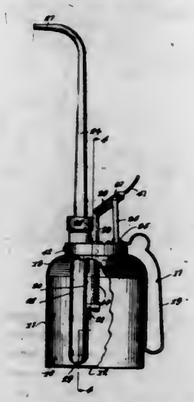
1,821,479. HEAD DEVICE FOR SAND PUMPS AND BAILERS. CLARK F. RIGBY, Butler, Pa. Filed May 21, 1929. Serial No. 364,759. 6 Claims. (Cl. 166—19.)



1. In a device for sand-pumps and bailers the combination of a casing, opposed apertures in said casing, two members having bosses thereon, a U shaped bail arranged to be held between said members, and means for separating said members to move and maintain said bosses in said apertures.

1,821,480. OIL CAN. DUANE LYNN ROBBINS, Sacred Heart, Minn. Filed May 7, 1929. Serial No. 361,140. 1 Claim. (Cl. 221—51.)

An oil can comprising a body, a removable closure cap for the upper end of said body, a handle for the can carried by the cap and extending along the side of said body, a pump barrel carried by the cap and extending into the body and terminating adjacent to the lower end thereof and having a port, an inwardly opening ball valve for controlling said port, a nozzle carried by the upper end of said barrel, a hollow pump plunger slidably mounted in said barrel having a port in its lower end, an inwardly opening ball valve for controlling said port, the barrel having a longitudinally extending guide slot therein, a block removably associated with said plunger extending through the slot, bearing brackets secured to the closure



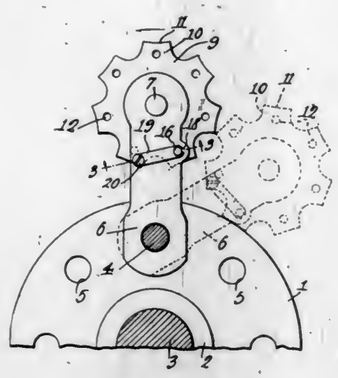
cap, an inverted V-shaped link rockably mounted in said bearing brackets, a manipulating lever rockably mounted on the link at a point intermediate its ends, a manipulating thumbpiece on the outer end of said lever arranged directly above said handle, an inwardly extending pump rod operatively connected to the inner end of said lever and slidable through said cap, means connecting the lower end of the pump rod to the block, and an expansion spring coiled about said rod and interposed between the closure cap and said block.

1,821,481. MOP. ANTON SCHEMPP, New York, N. Y. Filed Mar. 7, 1930. Serial No. 433,968. 1 Claim. (Cl. 15—228.)



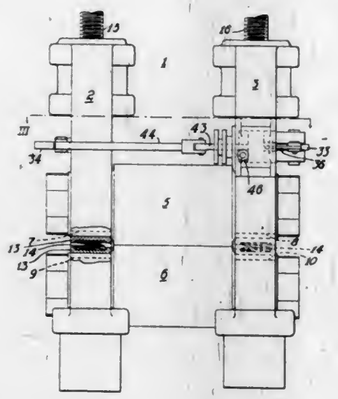
A mop comprising a handle having a longitudinal slot, a ring slidably mounted on said handle, bearings on the inner wall of said ring, a flexible longitudinally extending member mounted in said slot, tenons on the upper end of said member engaging said bearings, a band around the lower end of said handle for clamping the parts of said handle formed by the slot therein on said member, and a cleaning mop movably attached to the lower end of said flexible member.

1,821,482. HAMMER MILL. CHARLES F. SCHUTTE, Buffalo, N. Y. Filed June 18, 1930. Serial No. 462,013. 2 Claims. (Cl. 83—11.)



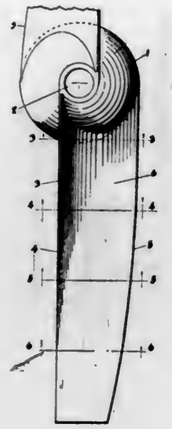
2. A hammer mill comprising a rotary member, a radius arm pivoted to the rotary member, a shaft mounted in the outer end of the radius arm, a hammer having working surfaces, the hammer having an opening receiving the shaft and enabling the hammer to be rotated for adjustment, thereby to present any of said surfaces in operative position, the hammer being provided with seats which are spaced from the opening and are independent thereof, and a latch movable in the radius arm, transversely of the radius arm, and engageable in any of the seats to hold one of the working surfaces in operative position.

1,821,483. ROLLING MILL. BARTON R. SHOVER and FRANK P. TOWNSEND, Pittsburgh, Pa. Filed Nov. 25, 1929. Serial No. 409,514. 11 Claims. (Cl. 80—57.)



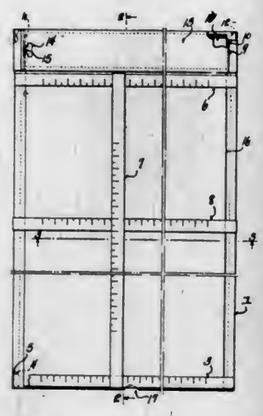
11. In a rolling mill having upper and lower rolls and a screw-down for the upper roll, the combination of upper and lower thrust block members disposed between the screw-down and the upper roll, a wedge between said thrust block members for permitting upward movement thereof in response to an upward thrust upon said upper roll, a pressure cylinder for yieldingly resisting an outward movement of said wedge, said cylinder having an operating lever pivotally connecting thereto, said lever being disposed for cooperation with an end of said wedge, and means cooperating with said lever for adjusting the maximum separation of the rolls.

1,821,484. SPIRAL BLADE FAN. OWEN H. SPENCER, Indianapolis, Ind. Filed Apr. 26, 1929. Serial No. 358,366. 3 Claims. (Cl. 170—159.)



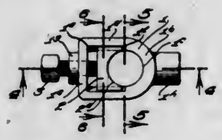
1. In a fan structure, a semi-globular hub, a pair of blades attached thereto with their inner ends conforming to the outer curved surface of the hub, said blades being substantially concavo-convex in cross section throughout their length the concavo-convex curvatures gradually decreasing in extent from the inner to the outer ends of said blades, one edge of the blades extending in a straight line from end to end with the straight edge intersecting said hub substantially at the apex of the hub and the opposite edge of the blade intersecting said hub substantially at the base line thereof, the transverse width of the blades gradually decreasing from their point of connection with the hub to their outer ends.

1,821,485. DRAFTING TABLET. SAMUEL A. STRZELCZYK, Milwaukee, Wis. Filed July 9, 1928. Serial No. 291,455. 1 Claim. (Cl. 33—80.)



A drafting tablet comprising a base plate having laterally projecting marginal flanges along its longitudinal edges, a pair of spaced graduated guides having their ends folded over the said flanges with a portion thereof set into said flanges, said guides being spaced upwardly a slight distance from the base plate to receive a sheet of paper between the guides and the base plate, a transverse graduated rule mounted upon the base plate between the spaced guides and having its ends slidably engaged with the marginal flanges of the base, and a longitudinally extending graduated rule mounted upon the base with its ends slidably engaging the spaced guides and traversing the transverse graduated rule whereby the longitudinal graduated rule may be moved over the plate and cooperate with the graduated guides as well as the transverse rule, the base plate having a notch at one end thereof extending beneath one of the spaced guides whereby a sheet of paper beneath the guide may be engaged by the operator to move the same beneath the guide.

1,821,486. BATTERY TERMINAL CLAMP. CHARLES E. TAYLOR, Los Angeles, Calif., assignor to Taylor Brothers Manufacturing Corporation, Elkhart, Ind., a Corporation of Indiana. Filed June 18, 1928. Serial No. 286,427. 3 Claims. (Cl. 173—259.)



1. In a battery terminal clamp, a clamp member having a longitudinal opening therein and longitudinal recessed guide portions at the opposite lateral sides of said opening and at the opposite sides of the clamp member, and a movable clamp member positioned in said opening transversely therewith and reciprocally longitudinally therewith, the opposite ends of the movable clamp member being provided at the opposite sides thereof with outwardly extending retaining portions adapted to extend into the longitudinally extending recessed guide portions of the first clamp member and positioned substantially flush with the upper and lower sides thereof engaged by the movable clamp member, for preventing removal of the movable clamp member from the latter.

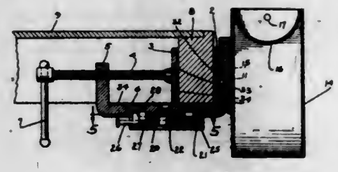
1,821,487. METHOD OF MAKING FRICTION BLOCKS. JAMES S. THOMPSON, New York, N. Y., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 3, 1928. Serial No. 323,310. 6 Claims. (Cl. 188—251.)



1. The herein described method of making friction blocks which consists in placing a supporting back and body material in a mold, applying pressure to mold the body material on the back over one entire side of the back, and then removing portions of the body to uncover corresponding parts of the back.

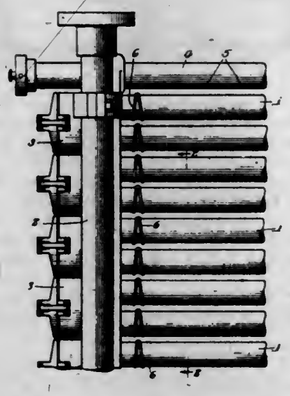
1,821,488. HOLDER AND CLAMP. EARL H. WETHERBEE, St. Paul, Minn. Filed Mar. 29, 1930. Serial No. 439,936. 4 Claims. (Cl. 248—20.)

1. A device of the class described, comprising a plate portion having a fixed jaw at one end thereof and a movable jaw cooperable with said fixed jaw to secure the device to a suitable support, a member mounted on said device and adapted for rotary adjustment, said member having



inclined grooves and tongues adapted to be engaged by correspondingly shaped grooves and tongues provided upon an article, whereby said article may be detachably and rotatably supported upon said device.

1,821,489. LIQUID COOLER. GEORGE W. WILLIAMS, Oak Park, Ill., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 29, 1931. Serial No. 512,013. 4 Claims. (Cl. 257—183.)

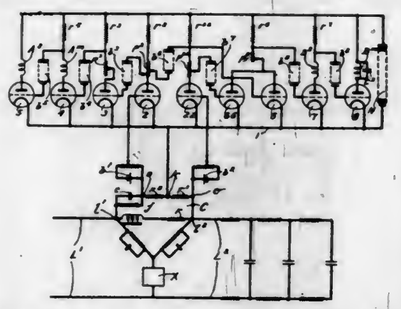


1. In a cooler having a series of tubes arranged in vertically spaced relation and adapted for the flow thereover of liquid, the combination therewith of flow diverting members mounted one above another about the respective tubes, said members having narrow upper edges and downwardly divergent lateral surfaces whereby liquid flowing downwardly over the surfaces of said tubes at either side of said members is prevented from passing to the other side of said members.

1,821,490. QUADRUPLEX AMPLIFIER. ETHELRED ALFRED WILLSON, HAROLD FRANK WOODMAN, and EMILE GREIG, Croydon, England, assignors to Creed and Company, Limited, Croydon, England. Filed Oct. 2, 1929, Serial No. 396,825, and in Great Britain Nov. 2, 1928. 9 Claims. (Cl. 178—55.)

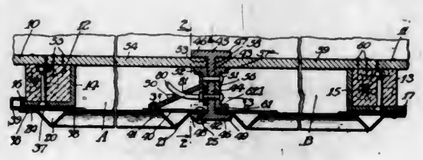
1. Apparatus for the selective reproduction of telegraphic signals comprising two thermionic valves, each having an input and an output circuit, means for applying signals to the input circuit of one of said valves, a connection from the output circuit of said valve to the input

circuit of the other valve, a reproducing relay having two windings and placed in the respective output circuits of the



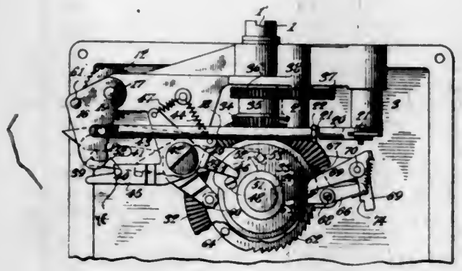
two valves and a condenser connected in parallel to one of said windings for causing a phase shift of a portion of the applied signals.

1,821,491. CAR DOOR. ALLAN S. BARROWS, San Francisco, Calif., assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 10, 1927. Serial No. 212,004. 20 Claims. (Cl. 189—46.)



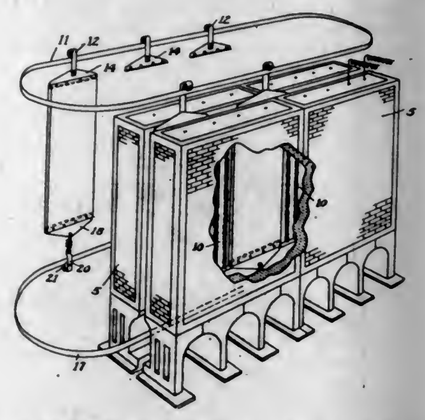
1. In a car, the combination with a main sliding door; of an auxiliary sliding door having the main portion comprised of sheet metal terminating in a marginal flange, the latter having a member associated therewith, said member comprising a web portion extending inwardly of the main plane defined by the body portion of said door, and substantially at right angles thereto, and provided with oppositely extending flanges, one of which is rigidly secured to the forward edge of said auxiliary door on the outer face thereof, whereby said web portion provides an abutment and the rigidly secured flange protects the sheet metal flange.

1,821,492. AERIAL CAMERA CONTROL MECHANISM. AMBROSIUS BRIECHLE, New York, N. Y., assignor to Fairchild Aerial Camera Corporation, New York, N. Y., a Corporation of New York. Filed May 8, 1930. Serial No. 450,672. 8 Claims. (Cl. 95—12.5.)



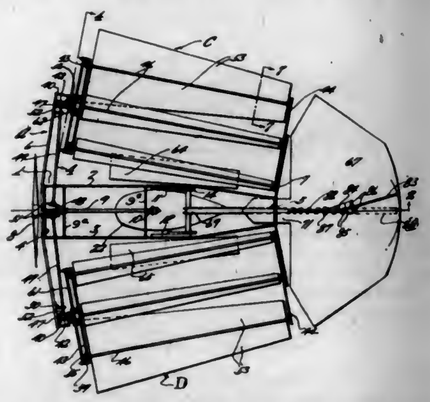
1. In combination with an aerial camera, a control unit comprising a movable camera gripping handle, a shaft rotatable thereby and a gear loosely mounted on said shaft with clutch means between the shaft and gear for operating said gear, said gear being movable relative thereto in the opposite direction, said gear being adapted to drive suitable gears for the operation of shafts for the purpose of setting the shutter and winding the film in said camera, a cam plate carried by said shaft, a shutter release lever arranged adjacent to said handle and adapted for operation without releasing the grip thereon, coacting levers connected to said shutter releasing mechanism and engaging said cam plate for preventing the tripping of said shutter after it had been tripped, until the handle has been fully operated to its limit in one direction and returned to its normal position corresponding to that in which the shutter is ready to be tripped.

1,821,493. ANNEALING. VERE B. BROWNE, Brackenridge, Pa. Original application filed May 28, 1927, Serial No. 194,927. Divided and this application filed Sept. 26, 1929. Serial No. 395,224. 8 Claims. (Cl. 263—8.)



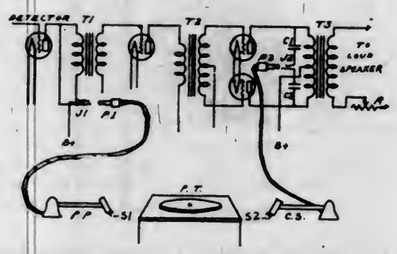
2. An annealing furnace formed of two oppositely positioned sections provided with recesses in their inner faces cooperating to form an annealing chamber, said sections being spaced so as to provide slots extending through the roof and floor of said furance and communicating with said chamber, means associated with the slot in said roof for supporting a sheet to be annealed, and means associated with the slot in the floor to apply a stretching force to said sheet.

1,821,494. AEROPLANE. HORACE L. CAMPBELL, St. Louis, Mo. Filed Aug. 11, 1930. Serial No. 474,342. 7 Claims. (Cl. 244—25.)



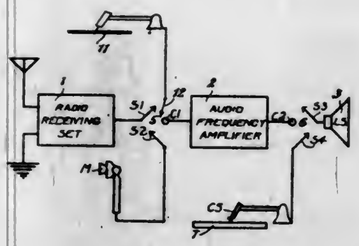
1. In a device of the kind described, a frame, a fuselage means for pivotally supporting the fuselage from the frame, a propeller journaled at the front of the frame, lifting elements journaled at the sides of the frame, means for rotating the said propeller and lifting elements, a tail plane slidably mounted through the rear of the frame and extended rearwardly therefrom, a supporting rod on the tail plane, the said supporting rod being secured to the pivotal supporting means for the fuselage.

1,821,495. COMBINED RADIO PHONOGRAPH RECORDER. PHONOGRAPH, RADIO AND CIRCUIT THEREFOR. DAVID G. COHEN, Brooklyn, N. Y. Filed May 27, 1930. Serial No. 456,126. 1 Claim. (Cl. 179—100.11.)



In combination with a radio receiver, an audio frequency amplifier connected to the radio receiver and having input and output circuits, a loudspeaker connected to said output circuit, a recording device also connected to the output circuit, and a microphone adapted for connection to the amplifier input circuit simultaneously with the radio receiver or independent thereof, whereby said radio receiver, microphone, or either or both, may transmit wave energy for simultaneous reproduction and recording by the loudspeaker and recording device respectively.

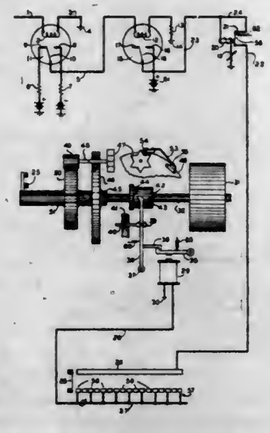
1,821,496. RADIO AND SOUND REPRODUCING AND RECORDING DEVICE. DAVID G. COHEN, Brooklyn, N. Y. Filed Feb. 18, 1931. Serial No. 516,557. 3 Claims. (Cl. 179—100.11.)



1. A device of the class described consisting of means for receiving radio broadcast sounds, an audio amplifier connected to said radio receiving means, a microphone also connected to said amplifier, and a recording device and a loudspeaker connected to the output of the amplifier.

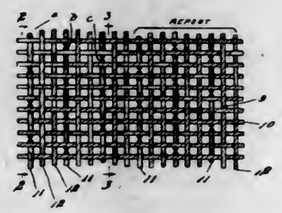
1,821,497. SYNCRONIZER FOR ROTARY DEVICES. ALDER F. CONNERY, Brooklyn, N. Y., assignor to International Communications Laboratories Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1929. Serial No. 397,907. 5 Claims. (Cl. 178—53.)

1. In a synchronous telegraph system, a distributor having a correcting mechanism, a correcting member arranged to actuate said correcting mechanism when said member is in operative position, means constantly tending to move said member into operative position, re-setting means for



moving said member into inoperative position, a latch for holding said member in inoperative position, and electro-magnetc means for releasing said latch.

1,821,498. PLUSH FABRIC. JAMES W. COOPER, Edgewood, R. I., assignor to Pilgrim Plush Company, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 9, 1930. Serial No. 419,579. 2 Claims. (Cl. 139—397.)

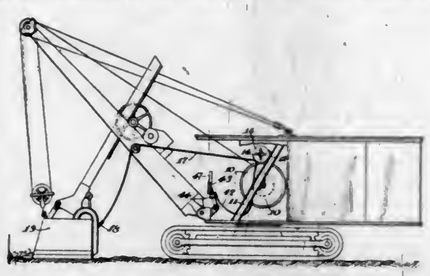


1. A method of weaving pile fabric with two spaced ground fabrics, which consists in interlacing the pile threads of each dent in each ground fabric alternately over and under three successive picks with its ground fabric then leading these pile threads diagonally across and similarly interlacing them with the next three succeeding pick threads in their opposite ground fabrics, threading a pair of backing warp threads and a pile thread as a group in each dent, each warp thread being oppositely and alternately interwoven over one and under two pick threads into each ground fabric, successively advancing the crossing one pick thread, and severing the pile threads extending between the two ground fabrics to form tufts, whereby said tufts are arranged in cycles diagonally across the fabric, the tufts in each succeeding group in each cycle being advanced one pick for each predetermined number of dents before repeating to prevent the forming of continuous lines across the face of the fabric.

1,821,499. DIPPER DOOR LATCH RELEASE. LAGAR R. CULVER, Los Angeles, Calif., assignor of one-half to John W. Prillaman and Ella F. Prillaman, Vista, Calif. Filed May 28, 1930. Serial No. 456,479½. 8 Claims. (Cl. 214—146.)

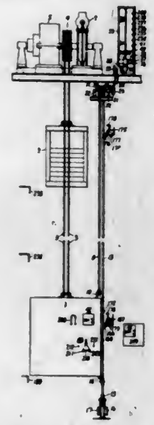
1. In a power shovel dipper door latch release, the combination with a shaft, of a pinion loosely mounted on said shaft, which pinion is in mesh with the main driving gear wheel of the power shovel, a dipper door latch releasing cable carrying drum secured to said shaft, a clutch

member secured to the pinion, a cooperating clutch member secured to said shaft and automatically operating means controlled by the rotation of the clutch member that



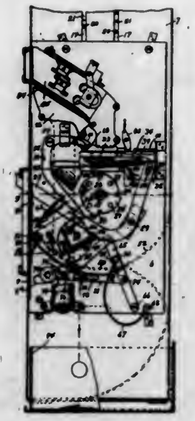
is secured to the pinion for restraining the clutch member that is mounted on the shaft against reverse rotary motion when the main driving gear wheel and pinion are reversely rotated.

1,821,500. INDICATOR FOR ELEVATORS. EDWARD L. DUNN, East Orange, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 14, 1926. Serial No. 141,615. 6 Claims. (Cl. 177—336.)



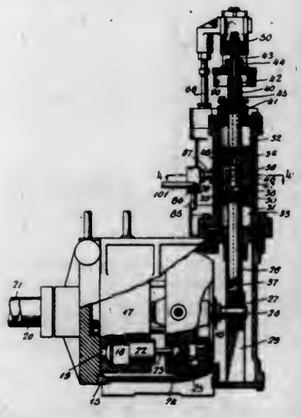
4. In an elevator system; a hatchway; an elevator car movable therein; a plurality of landings served by said car; indicating means carried by said car; a magnet energizable for operating said indicating means in accordance with up car travel; a magnet energizable for operating said indicating means in accordance with down car travel; a plurality of stationary contacts, one for each landing; a movable contact corresponding to up car travel for engaging said stationary contacts to energize said first magnet; a movable contact corresponding to down car travel for engaging said stationary contacts to energize said second magnet; means for preventing energization of said second magnet on up car travel; means for preventing energization of said first magnet on down car travel; and means for moving said movable contacts into engagement with said stationary contacts on movement of said car from landing to landing, said first movable contact engaging said stationary contacts in advance of the engagement and said second movable contact on up travel of said car and after said second movable contact on down travel of the car, and for positioning said movable contacts at opposite sides of and out of engagement with the stationary contact for any landing when the car is positioned within a predetermined zone at said landing, thereby enabling movement of said car in either direction within said zone without effecting operation of said indicating means.

1,821,501. VENDING MACHINE. ARTHUR H. DU GRENIER, Haverhill, Mass. Filed July 13, 1929. Serial No. 377,946. 16 Claims. (Cl. 312—97.)



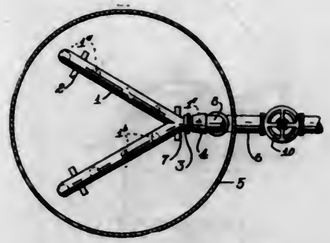
1. In a vending machine an endless carrier having a series of compartments opening at their outer ends, and movable in a vertical plane successively to carry each compartment into a delivery position in which its open end is directed downward, to permit an article therein to pass therefrom by its gravity, a door movable between a closed position in which it will support the article in each compartment when in said delivery position and an open position in which delivery thereof is permitted, locking means for holding said door in closed position and controlling means for said locking means operable to permit said door to be opened.

1,821,502. CONTROLLING APPARATUS FOR VARIABLE SPEED TRANSMISSIONS. ARTHUR L. ELLIS, New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 13, 1930. Serial No. 495,402. 19 Claims. (Cl. 121—41.)



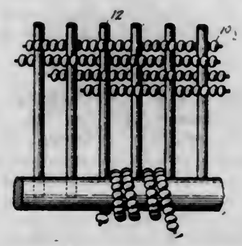
1. The combination of a hydraulic variable speed transmission including adjusting means whereby the operation of the transmission is determined, operating means for actuating said adjusting means to vary said operation, and controlling means whereby said operating means is actuated to positively and accurately restore said adjusting means to its neutral position.

1,821,503. OIL TANK CLEANING DEVICE. PETER M. ERDMAN, Los Angeles, Calif. Filed Mar. 17, 1930. Serial No. 436,477. 5 Claims. (Cl. 210—209.)



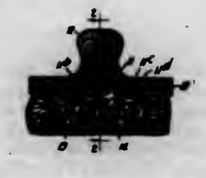
5. In a tank cleaning device, the combination with a tank, of a plurality of conductors connected to a common outlet, said conductors having a multiplicity of openings along their lower sides, the openings near the outlet being smaller than those farthest from the outlet.

1,821,504. WOVEN BODY FOR DECORATIVE ARTICLES AND THE LIKE. SAUL FEILER, New York, N. Y. Original application filed Aug. 22, 1928, Serial No. 301,273. Patent No. 1,745,365, dated Feb. 4, 1930. Divided and this application filed Dec. 26, 1929. Serial No. 416,423. 9 Claims. (Cl. 139—420.)



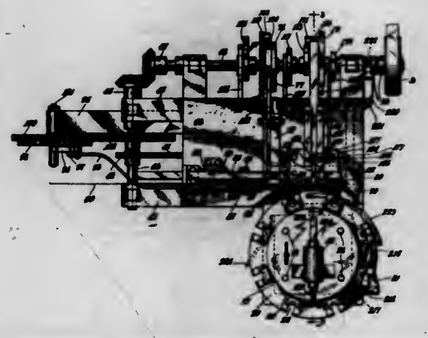
1. A shaped woven body for use in decorative articles including shaped warp members, and weft members of strung beads woven in and out directly across said warp members, and hereby bent into wave form, and transparent sizing for said members whereby the strings of beads are maintained substantially in the shape into which they are woven.

1,821,505. HOLDER FOR METAL WOOL OR THE LIKE. CROSBY FIELD, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., a Corporation of New York. Filed Apr. 10, 1928. Serial No. 268,891. 4 Claims. (Cl. 15—209.)



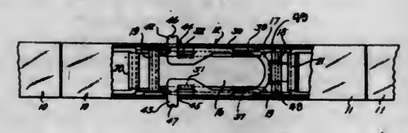
4. A holder for a metal wool scouring pad, said holder having a disc-like body portion of relatively stiff resilient material having in one face a long relatively narrow recess of such depth that the holder may be readily bent lengthwise of said recess to convex the recessed face and diverge the lateral walls of the recess; one of said lateral walls having pad-penetrating members all projecting in the same direction transversely of said recess and substantially bridging said recess, and having their entire length disposed wholly withing said recess when the holder is in normal unflexed position.

1,821,506. BAG-TYING MACHINE. HENRY B. FOULDER, Glenbrook, Conn. Filed Dec. 14, 1928. Serial No. 326,125. 48 Claims. (Cl. 140—93.)



1. In a bag tying machine of the character described, the combination in a single organization, of mechanism for cutting off a length from a continuous wire and for forming loops in the ends of the severed length and for bending the length into U-shape, and means for simultaneously moving a bag into position to be tied.

1,821,507. BRACELET CONSTRUCTION. OVE L. GAMMELL and ROLAND W. WOODWARD, Attleboro, Mass., assignors to Smith & Crosby, Attleboro, Mass., a copartnership composed of Alfred D. Crosby and George H. Crosby. Filed Apr. 13, 1929. Serial No. 354,790. 13 Claims. (Cl. 24—71.)

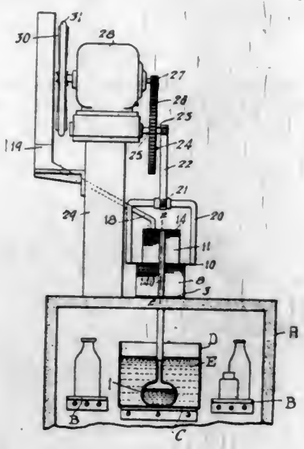


1. In a flexible bracelet, in combination, an extensible device including a plurality of connected sections adapted to fold one upon the other and adapted to move into an unfolded position, spaced latching devices on one section adapted to cooperate with catch devices on another section for retaining said sections in folded position, and means for simultaneously releasing said latching devices.

1,821,508. REFRIGERATING METHOD AND MACHINE. FRAZER W. GAY, Newark, N. J. Filed Mar. 27, 1928. Serial No. 265,134. 18 Claims. (Cl. 62—115.)

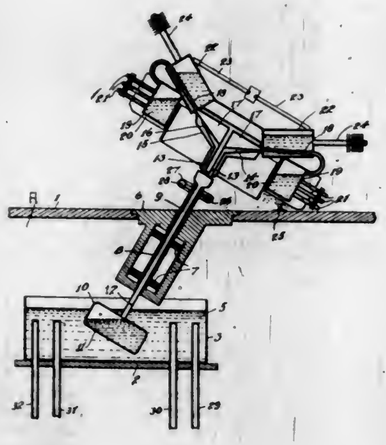
1. The method of transferring heat from a cold body to a relatively hot body, consisting in alternately decreasing and increasing the pressure of a refrigerant in contact with both said cold body and said hot body so that said refriger-

ant in the form of a liquid at a low temperature contacts only with said cold body and boils so as to remove heat



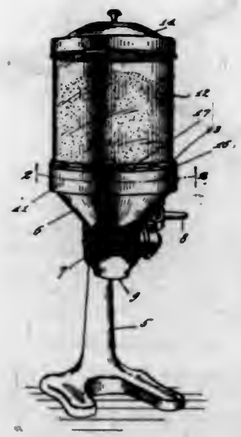
from said cold body, and said refrigerant in vaporous state contacts only with and condenses upon said hot body so that the refrigerant gives up its heat to said hot body.

1,821,509. THERMAL REFRIGERATOR. FRAZER W. GAY, Newark, N. J. Filed Aug. 14, 1928. Serial No. 299,548. 3 Claims. (Cl. 62—118.)



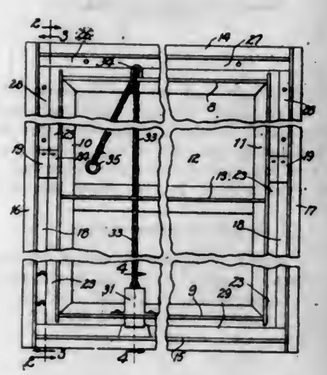
1. In a thermal refrigerating device, a plurality of chambers mounted to rotate about an inclined axis and each chamber containing a refrigerant and so arranged as to empty its entire contents into the lowest portion of the chamber at one point of the rotation, said chamber having two other portions adapted respectively to condense and evaporate said refrigerant during the remaining period of rotation.

1,821,510. DISPENSING MACHINE. SIGVORT HANSON, Racine, Wis., assignor to Racine Dispenser & Manufacturing Company, Racine, Wis., a Corporation. Filed Dec. 22, 1930. Serial No. 503,972. 7 Claims. (Cl. 221—108.)



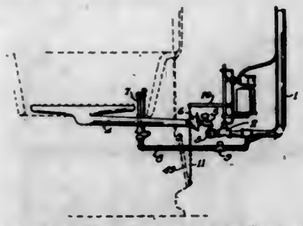
1. In a device of the character described, a bowl, a container mounted in the bowl, and an adjustable ring between the bowl and container for securing them in close fitting relation.

1,821,511. METALLIC WINDOW FRAME AND SASH. HENRY C. HASSELBUSCH, St. Louis, Mo. Filed Oct. 31, 1929. Serial No. 403,702. 4 Claims. (Cl. 189—69.)



1. A device of the class described comprising a metallic sash and frame each provided with longitudinal ribs extending toward each other and abutting along their edges, said ribs having gaps formed therein opposite each other, cylindrical members removably insertable into said gaps, each member having diametrically opposite slots, and a central bore located in said gaps, said ribs slidably entering said slots for holding said cylindrical members in position in said gaps and against rotation, and a pin removably projecting into the central bore of adjacent cylindrical members.

1,821,512. THERMOSTATICALLY CONTROLLED GAS VALVE. ELMER G. HASTING, Dayton, Ohio, assignor of three-fourths to Continental Stone Corporation, Ironton, Ohio, a Corporation of Ohio. Filed Feb. 1, 1930. Serial No. 425,254. 5 Claims. (Cl. 236—1.)



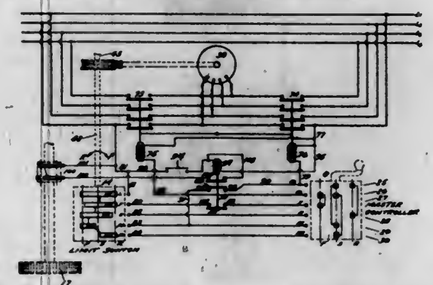
1. In an apparatus of the type described, a gas valve, a seat for said valve, a vertically movable member for raising said valve above its seat, a pivoted catch element carried by the vertical member, a fixed stop engageable by the catch element to hold the valve a predetermined distance above its seat, and thermostatically controlled means engageable with the vertical member for raising the valve still farther to release the catch element from the fixed stop.

1,821,513. ROTARY ENGINE. CYRUS W. HICKS, Waltham, Mass. Filed Mar. 18, 1930. Serial No. 436,711. 6 Claims. (Cl. 121—78.)



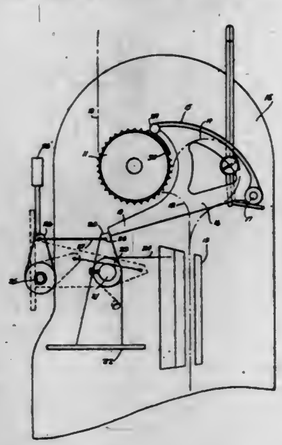
1. In a rotary engine, a tubular cylinder of annular form having a slot throughout the length of its inner periphery, a rotary piston wheel coaxial with said cylinder and having a flange rim adapted to close the space between the sides of said slot, grooved ways at the opposite sides of said slot, said wheel rim engaging with and moving in said ways while maintaining a closure of said slot, one of said ways being formed by a flange member detachably connected with one of the side walls of said slot whereby the wheel is permitted to be readily assembled with and detached from the cylinder.

1,821,514. MECHANISM FOR ELECTRIC CONTROL OF MECHANICAL MOVEMENTS. HENRY E. HINTZ, Moline, Ill., assignor to Williams, White & Co., Moline, Ill., a Corporation of Illinois. Filed June 6, 1927. Serial No. 196,802. 7 Claims. (Cl. 172—179.)



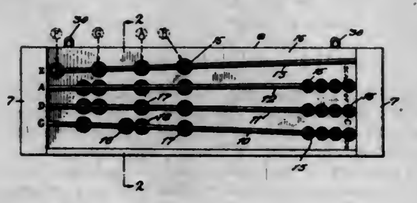
1. The combination with a driving member and a driven member to be connected therewith, of a selectively operated apparatus and a motor for actuating said apparatus to a plurality of positions for controlling the connection between said members, a manually operated means for starting said motor in one direction or the other for controlling the actuation of said selective apparatus, automatic means associated with said motor for controlling the direction of rotation of the motor and for stopping the motor when said selective member has been actuated from one position to another, and means on said driven member effective to cause said motor to actuate the selective apparatus to another position after the driven member has been operated by the driving member a predetermined amount.

1,821,515. DEVICE FOR PROTECTING FILMS AGAINST IGNITION. KURT HOFFMANN, Dresden-A., and MAX ENGELMANN, Lausa at Dresden, Germany, assignors to Zeiss Ikon Aktiengesellschaft Dresden, Dresden, Germany. Filed Mar. 27, 1930. Serial No. 439,353. 2 Claims. (Cl. 88—17.)



2. In a cinematographic projection apparatus including its motor, film band, feed roller and guide therefore, a protecting shield, a two armed lever pivoted intermediate its ends to one end of which said shield is secured, a means for normally holding said shield in its inoperative position, and a motor control switch connected with said shield supporting arm, means operated by the loop formed by a broken film band to release said shield holding means to swing said shield into its operative position between window and light and to operate said switch to stop the motor, a handle on said switch for allowing a resetting of the parts, and a movable protecting plate connected to said loop operated means to prevent the loose ends of a broken film from becoming entangled in the mechanism.

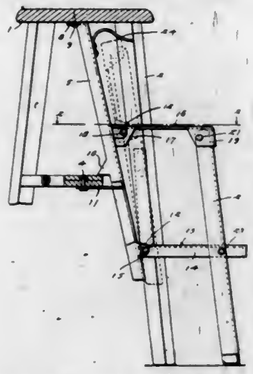
1,821,516. MUSICAL EDUCATIONAL DEVICE. MAIA BANG HOHN, New York, N. Y. Filed May 29, 1930. Serial No. 457,017. 5 Claims. (Cl. 84—485.)



3. A device for teaching music comprising a plurality of elements in representation of a set of strings of a string musical instrument, and means cooperating with said

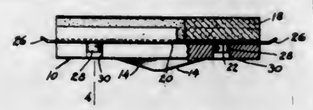
string-representing elements for visually indicating finger positions upon the strings of a string musical instrument, said means comprising a plurality of markers movable along the string-representing elements.

1,821,517. COMBINATION STOOL AND STEPLADDER. CHARLEY T. HYATT, Tulsa, Okla. Filed Mar. 11, 1930. Serial No. 435,003. 10 Claims. (Cl. 228—30.)



1. In a device of the character described, the combination with a structure having a top and supporting legs, of an elongated supporting bar secured at one end to the underside of said top and disposed at a downward and outward inclination therefrom, a pair of steps hingedly connected at longitudinally spaced points on said elongated bar and adapted to swing from a substantially horizontal position to a position against the adjacent face of the supporting bar, and supporting legs pivotally attached to and connecting said steps and adapted to be moved to supported position adjacent the face of said supporting bar, with the steps.

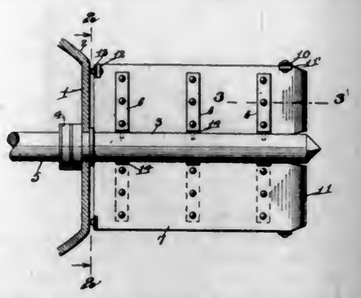
1,821,518. ABRASIVE STONE HOLDER. FRANK J. JESCHKE, Detroit, Mich., assignor to Micromatic Hone Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 30, 1928. Serial No. 289,370. 11 Claims. (Cl. 51—184.1.)



1. An abrasive element for a grinding tool comprising, in combination, a base member having a channel supporting face provided with apertures extending therefrom through the base member, an abrasive stone having a metal back plate adapted to seat within the channel of the base and upon the supporting face thereof and provided with threaded nipples receivable within the apertures of the base, and fastening means extending through the apertures in the base member and engaging said threaded nipples to secure the abrasive stone to the base member.

1,821,519. PROPELLER. JOSEPH KOENIG, Manitowoc, Wis.; Remus Koenig and Ruby K. Ellis administrators of said Joseph Koenig, deceased. Filed June 12, 1929. Serial No. 370,274. 1 Claim. (Cl. 170—156.)

A propeller of the class described including a body, a shaft extending therefrom and disposed in a substantially horizontal plane, a plurality of radially extending arms arranged in spaced relation and supported by said shaft, blade members attached to said arms and arranged parallel with the shaft and extending radially therefrom, and the outer extremities of said blades all being curved in the same general direction and disposed in a plane at an angle with respect to the blades whereby the fluid through which the propeller is passing will not be impeded in its



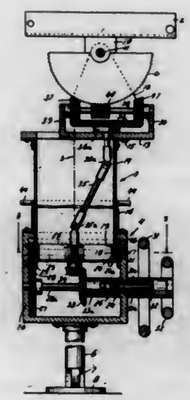
progress when entering between the blades at the forward end thereof, a band encircling the blades adjacent their outer ends, lateral apertured lugs at the outer edges of the blades adjacent the curved ends, and means connecting the band to said lugs.

1,821,520. PIPE THREAD PROTECTOR. FRANZ K. KRAG, Chicago, and JOHN VICTOR NELSON, Elmhurst, Ill., assignors to U. S. Manufacturing Corporation, Decatur, Ill., a Corporation of Illinois. Filed Mar. 29, 1930. Serial No. 439,903. 8 Claims. (Cl. 137—91.)



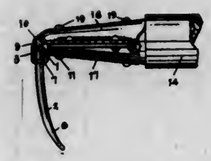
1. A pipe thread protector composed of a plurality of arcuate sections each formed as a true arc of a circle with the material of the device weakened along lines between the sections so that while they may be shipped in substantially extended non-circular condition, they may be readily bent along such lines to form a true circle, each section being provided with an end, laterally extending flange adapted to cover and protect the end of the pipe and the end sections having complementary locking means adapted to be connected together when applied to a pipe.

1,821,521. GUN-MOUNT. WILLIAM L. MACKINE, Baltimore, Md. Filed Mar. 15, 1930. Serial No. 436,091. 9 Claims. (Cl. 89—41.)



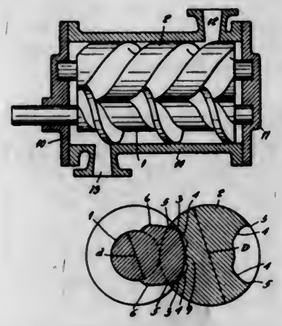
1. In a mount for a gun, in combination, a suitably supported rotatable head upon which the gun is mounted; means for rotating said head and thereby training the gun; and means for elevating the gun, comprising a driving gear and a driven gear operatively supported in mesh with each other by said head, the axis of rotation of the driving gear being eccentric to the rotary axis of the head; operative connecting means between the driven gear and the gun for elevating it; and means for operating the driving gear.

1,821,522. RAKE. FERDINAND H. MACHEN, Toledo, Ohio. Filed Apr. 30, 1930. Serial No. 448,707. 1 Claim. (Cl. 55—114.)



In a rake, a plurality of pairs of prongs of short lengths formed of elastic wire bent U-shape, a sheet metal part shaped to have an oblong portion substantially rectangular in cross section, the top wall of the oblong portion bent to form a semi-cylindrical trough, a portion of the sheet metal part bent semi-cylindrically to enclose the bases of the U-shape prongs within the said semi-cylindrical top wall, the lower wall of the oblong portion having openings through which the prongs extend, a handle member, and means for connecting the handle member to the sheet metal part.

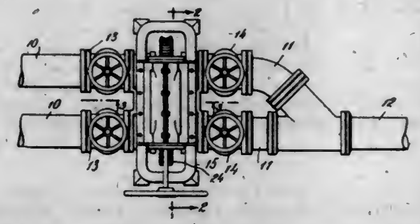
1,821,523. ROTARY PUMP, COMPRESSOR, OR MEASURING DEVICE. CARL OSCAR JOSEF MONTELIUS, Stockholm, Sweden. Filed Jan. 9, 1930, Serial No. 419,583, and in Germany Jan. 16, 1929. 4 Claims. (Cl. 103—128.)



1. In a rotary pump, compressor, motor or meter, at least a pair of intermeshing rotary screws, a casing surrounding said screws and fitting to the outside perimeter thereof, the helical side surfaces of the thread of one screw being convex and those of the other intermeshing screw concave and the outer edge of the thread of one of the screws being shaped as a rolling surface bearing against the root of the thread of the intermeshing screw.

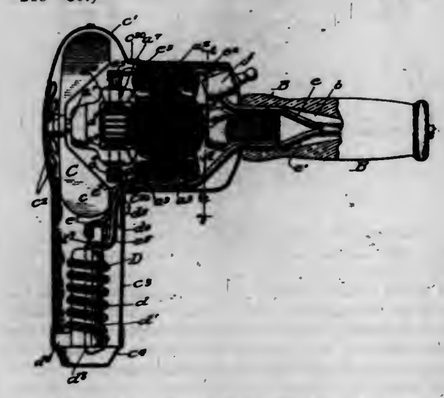
1,821,524. FLUID TRANSMISSION. HORACE D. MUNSON and GREGORY A. PETROE, Ningara Falls, N. Y., assignors to The Mathieson Alkali Works, Inc., New York, N. Y., a Corporation of Virginia. Filed Dec. 17, 1928. Serial No. 326,609. 7 Claims. (Cl. 277—50.)

1. Apparatus for transmitting and distributing fluids comprising a plurality of valve controlled fluid conduits adapted to communicate with different sources of supply of fluid and each having an end disposed adjacent an end



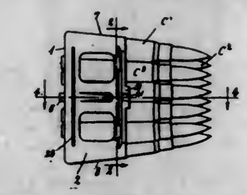
of another fluid conduit in spaced relation thereto, and a pipe section movable into position between the spaced ends of said conduits to form connections therebetween.

1,821,525. HAIR DRIER. EMANUEL NIELSEN, Racine, Wis., assignor to Hamilton Beach Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 11, 1929. Serial No. 399,086. 2 Claims. (Cl. 219—39.)



1. In a drier of the character described, the combination of an electric motor comprising field windings and an armature, a fan consisting of blades mounted on the shaft of the armature, a casing for the fan and the motor embodying at one side of the fan a laterally projecting extension with a discharge opening, a resistance element disposed in the extension and adapted to heat air in transit to the opening from the fan, and electrical conductor means leading from the resistance element through the extension into the casing and connecting electrically the field windings of the motor and the resistance element in series so that the fan and resistance element will be subjected to corresponding speed and heat fluctuations respectively.

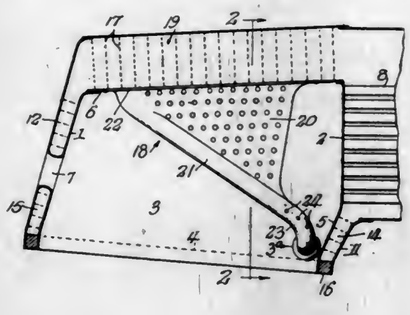
1,821,526. REVERSIBLE EN BLOC CLIP FOR CARTRIDGES. JOHN D. PEDERSEN, Jackson, Wyo. Filed Aug. 13, 1929. Serial No. 385,608. 5 Claims. (Cl. 42—88.)



1. A reversible enbloc clip for holding a double row stack of cartridges arranged in staggered relation, said clip comprising a back and two spring pressed sides ex-

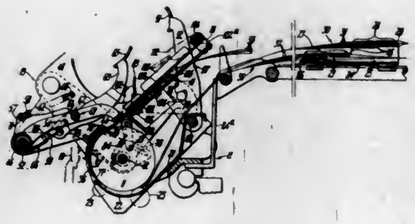
tending forwardly from the back to embrace said stack with a clamping pressure, the opposite sides of said clip each having a cartridge retaining portion at the top and bottom of said clip, together with cartridge holding shoulders, one of said shoulders being located adjacent each of said retaining portions, whereby the stack held in said clip will have the top and bottom cartridges engaged by the retaining portions of opposite sides and the cartridges next to the top and bottom respectively will be engaged by the holding shoulders of opposite sides of said clip.

1,821,527. LOCOMOTIVE BOILER. EDWARD J. REARDON, Chicago, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed May 16, 1928. Serial No. 278,061. 3 Claims. (Cl. 122—68.)



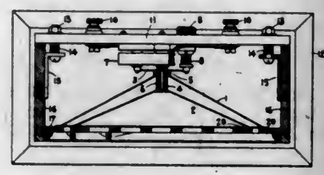
1. A locomotive boiler embodying therein a firebox including side sheets, a crown sheet and front and rear sheets, a substantially rigid water circulating element disposed in the firebox and having an elongated discharge end that opens through the crown sheet and has a tubular inlet neck portion that curves downwardly and laterally to open through one of said side sheets at one of the corners of the firebox near the bottom thereof.

1,821,528. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1927. Serial No. 232,513. 31 Claims. (Cl. 197—126.)



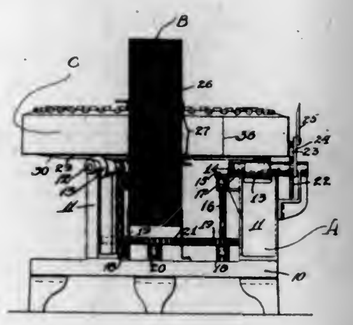
1. In a web-manifolding typewriting machine having means for interleaving carbons between the fan-fold plies of the web, a traveling carrier, a displaceable frame on the carrier and having a platen provided with web-feeding means by which the web and carbons are fed around the platen, the machine being adapted for carrying simultaneously a wide web and a superposed narrow web, and a pair of carbon-packs spaced apart from each other, one pack of carbons interleaved with the plies of the wide web and the other pack of carbons interleaving the plies of the narrow web, with the wide web and its carbons feedable next to the platen and the narrow web feedable over the wide web, the combination of paper tables supported by said displaceable frame at the delivery side of the platen, one table for each web, a pair of clamps pivotally hung from said displaceable frame and effective to clamp the two edges of the wide web to its table while the narrow web and its carbons are adjusted to the wide web and to the typing position of the platen, means for shifting said clamps to and from effective web-clamping positions, a web-severing blade supported from each end of the displaceable frame and effective to sever one web without severing the other web, frame-locking-down means for holding the platen in typing and web-feeding position, a web-releasing lever at one end of said carrier and effective to raise the displaceable frame and disable the web-feeding means, and means mounted upon the displaceable frame and adjacent the web-releasing lever, whereby the fingers of the same hand may jointly release the web-feeding means and lower the position of the web-severing blade to provide a grip for the fingers of the other hand at the leading-in end of the narrow web to draw the narrow web around the clamped wide web to a severing position on said narrow web.

1,821,529. ACOUSTIC DEVICE PROVIDED WITH VIBRATILE DIAPHRAGMS. KENNETH SEBASTIAN SAMUEL SPENCER, Ilford, England, assignor to Gomer H. Rees, London, England. Filed May 31, 1928, Serial No. 281,968, and in Great Britain June 15, 1927. 10 Claims. (Cl. 181—31.)



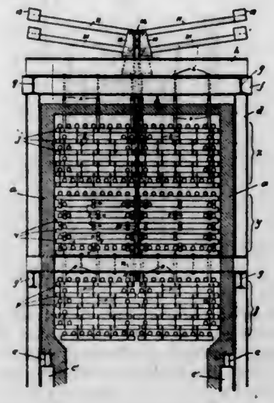
1. In a loud speaker a driving element, a plurality of conical diaphragms of different angularities operatively connected to said driving element, and an opening between the peripheries of said diaphragms.

1,821,530. INDUCTION HEATER. WILLIAM H. SPIRE, Cleveland, Ohio, assignor to Thompson Products, Inc., a Corporation of Ohio. Filed Dec. 1, 1927. Serial No. 236,992. 13 Claims. (Cl. 219—47.)



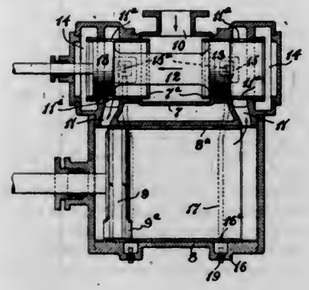
1. In a device of the class described, means for producing a magnetic field, a normally closed circuit circular secondary element of conductive material, a plurality of containers associated with said element and adapted to hold articles, and means for rotating said element and containers through said magnetic field to heat said articles.

1,821,531. TUBE STILL FURNACE. HENRY THOMAS, Ridley Park, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed July 28, 1928. Serial No. 296,051. 10 Claims. (Cl. 122—510.)



1. A furnace comprising walls and a roof enclosing a heating chamber, tubes therein, a lower tube-supporting beam extending within and transversely of the chamber and supported against vertical movement at its ends, an overhead beam, a hanger extending from said overhead beam and supporting the central portion of said lower beam and means, carried by said overhead beam, adapted to movably support the upper end of said hanger and maintain a tension thereon to provide for longitudinal expansion and contraction of the hanger, thereby transmitting a uniform load to, and thus substantially preventing sagging of, the lower beam.

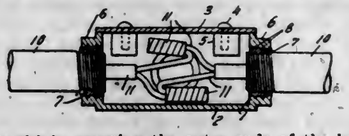
1,821,532. STEAM ENGINE. HUBERT J. TITUS, Paterson, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 22, 1927. Serial No. 214,486. 3 Claims. (Cl. 121—142.)



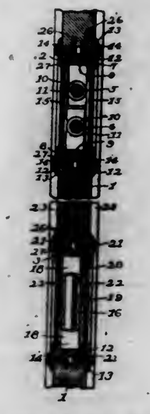
1. In a steam engine, the combination of a cylinder, a piston therein resting on the bottom, a valve chamber, a valve, main port connections between chamber and cylinder, and auxiliary ports of later cut off leading from the chamber to approximately the bottom of the cylinder and governed jointly by the valve and the piston.

1,821,533. ELECTRICAL FIXTURE. JOSEPH A. VOLK, Jr., South Norwalk, Conn. Filed June 19, 1928. Serial No. 286,648. 2 Claims. (Cl. 247—24.)

1. In an electrical fixture, the combination with a molded box of one or more internally screw-threaded bushings molded into the walls of said box with the interior of the bushings open to the interior of the box, the material of said walls thinly covering the outer ends of the bushings so as to be readily broken away preparatory to coupling conduits or the like therewith.

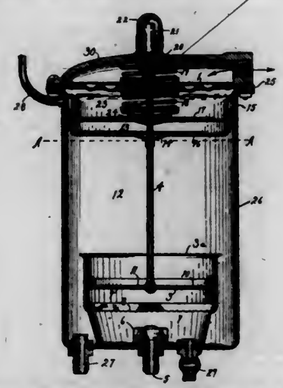


1,821,534. SPIRIT LEVEL. JACOB FRANK WEBER, Sterling, Ill., assignor to The Peerless Level & Tool Company, Sterling, Ill., a Corporation of Illinois. Filed Sept. 6, 1927. Serial No. 217,633. 4 Claims. (Cl. 33—213.)



4. In a level, the combination of a body of metal plates imbedded in the body, each plate having a threaded opening, the openings being alined, glass tubes and tube holders, and alined screws inserted through the tube holders and having threaded engagement with the alined openings of said plates, said material being softer than said plates, and said body having holes for said screws in alignment with the holes of said plates.

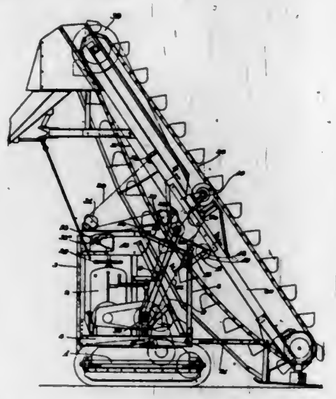
1,821,535. FILTERING PUMP AND THE LIKE. CHARLES A. WINSLOW, Vallejo, Calif. Filed Nov. 8, 1926. Serial No. 147,170. 15 Claims. (Cl. 103—44.)



1. A fluid pumping device comprising an expansible chamber, a flexible diaphragm forming a wall of said chamber, a vented chamber on the opposite side of said dia-

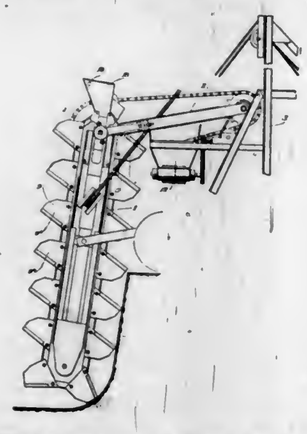
phragm, a rod carried by the flexible diaphragm and slidably extending thru the opposite wall of the vented chamber, means carried by the extended portion of the rod forming with the said opposite wall a dash pot, a piston carried by the rod, check valve means carried by the piston, means forming a cylinder surrounding said piston, an inlet check valve for said cylinder, a self cleaning filter between the last named check valve and the piston, and a drain outlet communicating with said cylinder.

1,821,536. LOADER. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, a Corporation of Illinois. Filed Nov. 11, 1927. Serial No. 232,564. 3 Claims. (Cl. 198—12.)



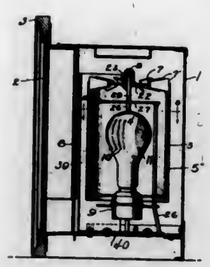
1. In a loader, a vehicle embodying a frame, a pair of radius rods pivoted at their lower ends to said frame, stop means for limiting the swinging movements of said rods, a boom pivotally connected adjacent its medial portion to the upper ends of said rods, and a pair of telescopic thrust bars connecting said frame and boom and extensible upon elevation of said boom.

1,821,537. DITCHING MACHINE. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, a Corporation of Illinois. Filed June 18, 1928. Serial No. 286,097. 7 Claims. (Cl. 198—144.)



4. In a ditching machine, an endless digging chain embodying digging buckets and cleaner plates, a gravity controlled scraper for scraping each plate and means for cushioning said scraper as it descends toward said chain.

1,821,538. METHOD AND MEANS FOR PRODUCING ILLUMINATED MOTION EFFECTS. HARRY B. BARKER, Chicago, Ill. Filed Mar. 10, 1926. Serial No. 93,693. 5 Claims. (Cl. 40—40.)



1. In a device of the character described, a pictorially decorated translucent front wall designed to represent positionally variant motion, a source of light back of said wall, a stationary screen having pictorially arranged lines thereon successively variant horizontally as to inclination and consistent with the decoration and a horizontally movable screen having inclined lines thereon, whereby in pictorial effect combined vertical and horizontal motion is projected on said front wall member.

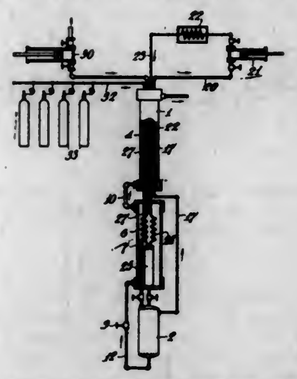
1,821,539. METHOD OF MAKING COMPOSITE CORRUGATED AND SOLID FIBER BOARD. PAUL F. BOEYE, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a Corporation of Minnesota. Filed Mar. 7, 1927, Serial No. 173,484. Renewed Dec. 29, 1930. 10 Claims. (Cl. 154—33.)

6. The process of forming a board from a plurality of sheets, which comprises corrugating one of said sheets, applying liquid adhesive between said sheets, along longitudinal bands, applying adhesive only to the convex portions of other parts of the corrugated sheet, bringing said sheets together with the adhesive upon the abutting surfaces thereof, then while the adhesive is moist, crushing the corrugations containing said longitudinal bands of adhesive and allowing the adhesive to dry to thereby form a board having a corrugated portion and a relatively solid portion extending continuously across said corrugations.

1,821,540. PROCESS FOR THE EXTRACTION OF HELIUM FROM OTHER GASES CONTAINING THE SAME. ROBERT ROGER BOTTOMS, Louisville, Ky., assignor to The Helium Company, Louisville, Ky., a Corporation of Kentucky. Filed Sept. 28, 1928. Serial No. 309,009. 9 Claims. (Cl. 183—115.)

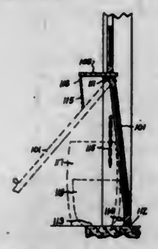
5. The method of continuously separating and purifying helium which includes reducing to the liquid phase substantially all of the non-helium constituents of helium bearing gas at high pressure, reducing the pressure on said liquid to a lower value to release the crude helium from its solution in the other liquid constituents, delivering said liquid constituents to a still lower pressure,

recompressing the crude helium from said second mentioned pressure to a high pressure, liquefying the impurities



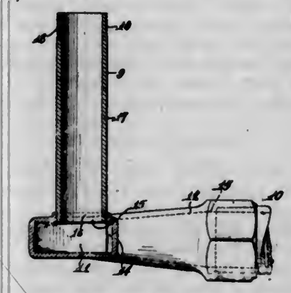
in the crude helium by thermal contact with the liquid constituents under lowest pressure, and withdrawing the purified helium in gaseous form at high pressure.

1,821,541. STORE. JAMES FRANKLIN BROWN, Cincinnati, Ohio. Filed Mar. 19, 1928. Serial No. 262,927. 9 Claims. (Cl. 20—1.6.)



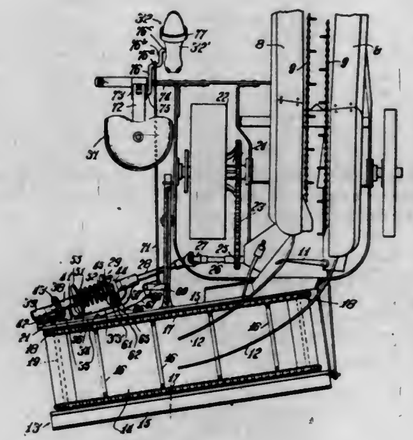
1. In a store structure of the character described, the combination of an outer wall, a floor, a counter thereabove, a show window between said floor and said counter, a goods display compartment beneath said counter, said window being hinged to said counter for movement to the outside or the inside of said goods compartment for exposing goods in said goods compartment to the outside of the wall, protected by said show window, or exposed in open relation at the outside of said wall with said show window at the inside of said goods compartment.

1,821,542. SPRAY NOZZLE OUTLET. LYLE G. CHASE, Plainfield, N. J., assignor to Yarnall-Waring Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 17, 1928. Serial No. 278,483. 6 Claims. (Cl. 299—114.)



1. A spray nozzle having an inlet, a chamber to which the inlet is tangent and an outlet opening smaller in cross-section than the chamber in combination with a pipe in line with the outlet opening and of substantially the same internal diameter as the outlet opening extending the discharge laterally of the nozzle to a distance many times greater than the lateral height of the chamber and there discharging as a spray.

1,821,543. CLUTCH MECHANISM. WILBUR J. COULTAS, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 7, 1926. Serial No. 139,986. 6 Claims. (Cl. 192—56.)

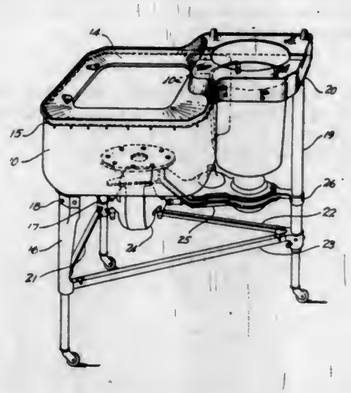


1. In clutch mechanism adapted to control the operation of the bundle carrier of a corn harvester, the combination of axially alined driving and driven shafts, cooperating clutch elements non-rotatably mounted on said shafts, spring means normally tending to shift one of said clutch elements into driving engagement with the other clutch element, said clutch elements each comprising cooperating, sloping surfaces adapted to prevent the transmission of overload torque by camming the spring-pressed clutch element backwardly for relative slippage movement between such clutch elements, a clutch release lever having a one-way motion transmitting relation to said shiftable clutch element, whereby said lever is operable to disengage the clutch but is incapable of holding the clutch engaged in opposition to an overload torque, a pivoted foot pedal comprising means enabling the operator to push or pull said pedal and, operating linkage connecting said foot pedal to said clutch release lever, and swinging to both sides of the pivot of said foot pedal, the spring means which engages said clutch elements transmitting pressure through said linkage for resiliently holding said pedal in either its pushed or pulled position.

1,821,544. WASHING MACHINE. MARK A. DEFIBAUGH, Peoria, Ill., assignor to Altorfer Bros. Company, Peoria, Ill., a Corporation of Illinois. Filed Dec. 22, 1926. Serial No. 156,299. 4 Claims. (Cl. 68.)

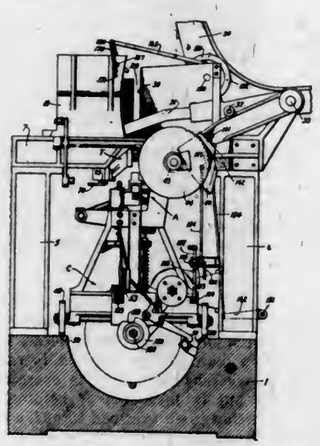
1. In a device of the type set forth, a main receptacle, having a concave seat, a secondary receptacle having a part thereof conformably engaged in said seat, a unitary top plate common to and overlying both of the receptacles and having openings therein for access to the respective receptacles, means to rigidly secure the top plate to each of the receptacles, a pair of legs secured to the

main receptacle, a single third leg secured to top plate beyond the secondary receptacle and at a point diametri-



cally opposite to the seat, and means connected to the main receptacle and to the third leg and connected to the bottom of the secondary receptacle.

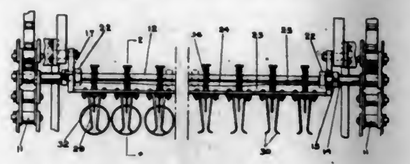
1,821,545. SKEIN LACING MACHINE. RUSSELL P. DRAKE, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed Nov. 7, 1927, Serial No. 231,680. Renewed Feb. 2, 1931. 31 Claims. (Cl. 28—21.)



1. In a skein-lacing machine, the combination of lacing mechanism, manually controlled means for actuating said mechanism to perform a cycle of operations upon a fly, and means controlled by the lacing mechanism for preventing the fly from being removed from the machine while said mechanism is in operation.

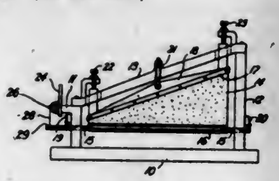
1,821,546. ARTICLE SUPPORTING RACK. JAMES S. GEORGE and ROGER S. SPERRY, Waterbury, Conn., assignors to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed Aug. 11, 1925, Serial No. 49,524. Divided and this application filed Dec. 23, 1926. Serial No. 156,621. 6 Claims. (Cl. 91—62.)

1. An article-supporting rack comprising a supporting bar, a looped wire bent to form two article-engaging fingers, means for rigidly securing the loop portion of said wire to said bar, a second wire forming a third article-



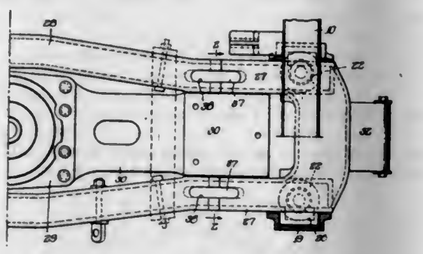
engaging finger, a mounting in which said second wire is slidable, and a spring tending to move said second wire toward normal position.

1,821,547. SOUND RADIATOR. RALPH V. L. HARTLEY, South Orange, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Mar. 31, 1925. Serial No. 19,746. 25 Claims. (Cl. 181—31.)



1. A large direct-acting sound radiator of light weight material, means for tensioning said radiator, and means for driving said sound radiator at substantially every point along an edge thereof.

1,821,548. TRUCK. WILLIAM C. HEDGCOCK, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Oct. 24, 1927. Serial No. 228,180. 37 Claims. (Cl. 105—190.)

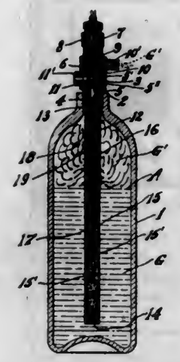


20. In a truck, the combination of side frames having openings therethrough, a transom having its ends extended through said openings and resiliently supported within said openings by the side frames, a bolster, and leaf springs suspended from and lying below said transon and underlying and supporting said bolster, each of said leaf springs extending outwardly through the opening in the proximate side frame and extending beyond the proximate end of the transom.

1,821,549. APPARATUS FOR DEHYDRATING AND PURIFYING GASES. AURELIUS P. HORNOR, Caldwell, and CLYDE B. GARDENIER, Belleville, N. J., assignors to E.-K. Medical Gas Laboratories, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 15, 1927. Serial No. 161,388. 3 Claims. (Cl. 23—240.)

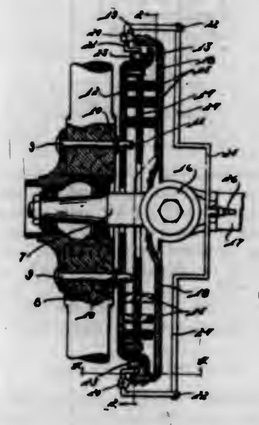
1. A container of the character described, provided adjacent its upper end with a valve-controlled passageway constituting an outlet, and a hollow member communicating at its upper end with said passageway, extending

downwardly into the container, and comprising a lower perforated section and an upper imperforate section, said member being filled with dehydrating material to a point above said perforated section and having organic ab-



sorbent material therein above the dehydrating material and screening or filtering material therein above the organic absorbent material, substantially as described.

1,821,550. VEHICLE BRAKE. WILLIAM F. KILKER, Detroit, Mich. Filed Nov. 12, 1928. Serial No. 318,738. 2 Claims. (Cl. 188—71.)

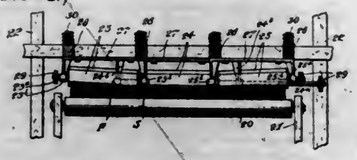


1. A vehicle brake of the class described comprising: a supporting member mounted on and rotatable with and axially movable of a vehicle wheel; a disc mounted on said supporting member; a plurality of spaced yieldable friction members mounted on said disc; a stationary engagement member for engaging said friction members upon movement of said supporting member axially of said wheel in one direction; and rockable means engageable with said supporting member adjacent its periphery for moving said supporting member axially of said wheel in one direction; and means for rocking said rockable means.

1,821,551. TREATMENT OF COFFEE. DANIEL JOSEPH KENNEDY, Vancouver, British Columbia, Canada. Filed Mar. 14, 1929. Serial No. 347,191. 4 Claims. (Cl. 99—11.)

2. The process of treating coffee which consists of taking the green berry and subjecting it to a fruit acid solution and of drying the berry prior to roasting.

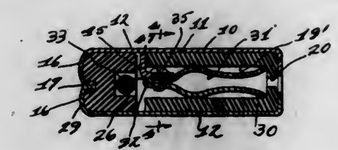
1,821,552. ROOFING AND METHOD OF MAKING SAME. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 19, 1929. Serial No. 348,297. 16 Claims. (Cl. 154—2.)



1. In a method of forming shingles, the steps which comprise supplying one face of a fibrous web with a layer of plastic material and subjecting said plastic material to pressure whereby to cause a substantial portion of said plastic material to move laterally of and beyond the marginal edges of the web.

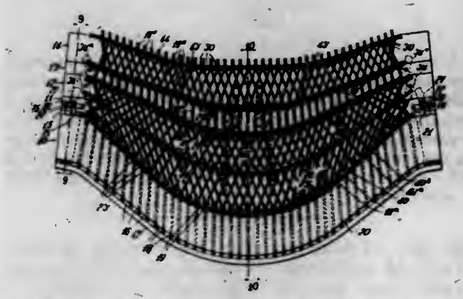
8. In apparatus of the character described means for supporting a web of fibrous material carrying a layer of plastic bituminous material on one of its faces, and means adapted to act upon said plastic material for causing a substantial portion thereof to move laterally of and beyond the marginal edges of said web.

1,821,553. ELECTRIC PLUG. FRANK KUHN and LAURENCE H. THOMAS, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 30, 1928. Serial No. 250,497. 10 Claims. (Cl. 173—332.)



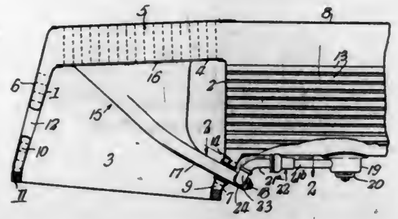
1. In an electric plug, a sectional casing, and an insulator block provided with means for receiving an end of each section of said casing to lock said ends together.

1,821,554. METHOD OF AND MEANS FOR FORMING FITCHED OR FITCH WORK ARTICLES. LEWIS LARSEN, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 10, 1928. Serial No. 325,099. 32 Claims. (Cl. 147—48.)



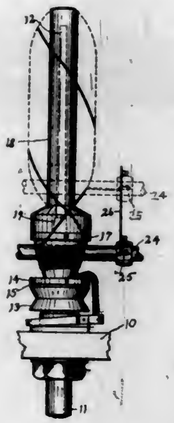
1. The method of forming a stake and strand fitched fabric which consists in providing guide means for the stakes, deflecting the stakes in substantially the plane of the finished fabric and engaging them with said guiding means which deflected stakes are so held thereby and in fitching in the strands upon desired portions of the deflected stakes while so held.

1,821,555. LOCOMOTIVE BOILER. BERT E. LARSON, Chicago, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed May 16, 1928. Serial No. 278,123. 5 Claims. (Cl. 122—68.)



1. A locomotive boiler including a firebox, a hollow tubular water circulating and steaming member disposed in the firebox and having a part connected thereto which extends forwardly of the front water leg of the boiler and means including more than one conduit having a lateral connection at one end with said part and having connection at the other end with the boiler shell at a point forward of said firebox the extremity of said part beyond said lateral connection being plugged to provide a cleanout opening for the siphon.

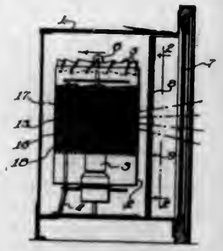
1,821,556. BOBBIN HOLDER OF YARN WINDING SPINDLES. CLYDE B. LAYFIELD, Phenix, Ala., assignor to Whitin Machine Works, Whitinsville, Mass. Filed Sept. 23, 1927. Serial No. 221,476. 2 Claims. (Cl. 242—46.2.)



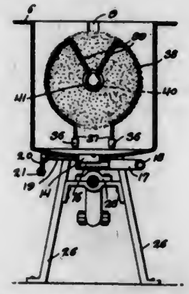
1. In a spindle, a blade, a whirl, a collar frictionally driven by said whirl, a bobbin holder supported on said collar and having a bobbin engaging top portion and a conical yarn receiving body porton tapering continuously downward to said collar, and means for detachably securing the collar and holder, said means being effective to lock said holder to said collar and to prevent axial separation of said parts.

1,821,557. APPARATUS FOR PRODUCING MOTION PICTURE EFFECTS. AUBREY B. LEECH, Los Angeles, Calif. Filed Nov. 12, 1927. Serial No. 232,878. 6 Claims. (Cl. 40—40.)

6. In a device of the character described, a front screen, having a picture thereon, a lamp back of said screen and a plurality of screens composed of light transmitting material interposed between said lamp and said front screen, one of the intermediate screens being movable continuously in one direction and another being stationary, said movable screen having inclined relatively opaque lines to express various speeds and directions vertically, and said stationary screen having a translucent face with relatively transparent lines variously inclined to produce corresponding effects as to speed and direction horizontally, whereby various composite speed and direction effects are produced on different parts of said front screen.

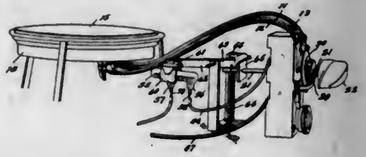


1,821,558. DISHWASHING MACHINE. BERNARD F. LUNDELL, Welch, Minn. Filed Apr. 24, 1928. Serial No. 272,490. 3 Claims. (Cl. 15—74.)



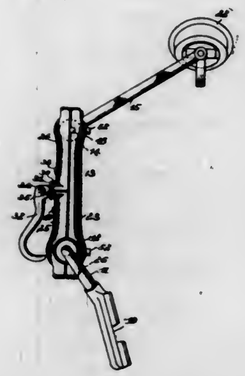
2. In a dish washer, a plate receiving receptacle, a rotary dish cleaning brush mounted within said receptacle, means for rotating said brush and a plate holding means adapted to support a plate in engagement with the brush comprising a wire frame structure having an edge portion thereof extending inwardly to constitute a centrally located positioning ring, a cushion-pad supported by said ring and adapted to hold a dish in engagement with said brush, said wire frame structure constituting a resilient supporting means.

1,821,559. CIRCUIT CONTROLLING MECHANISM. EDWARD A. MAU, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 14, 1925. Serial No. 62,373. 3 Claims. (Cl. 200—7.)



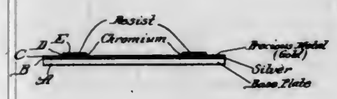
1. In a switch for controlling a circuit the combination of terminals, a movable contactor for contacting with said terminals, a rotatable spindle and a spring connection between the spindle and contactor for operating the latter with a delayed snap action upon rotation of the spindle, and means actuated by said spindle and operable during such delay for causing the circuit to be broken before such operation of the contactor and closed after such operation.

1,821,560. HEADREST. ADAM J. MAY, Rochester, N. Y., assignor to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 342,232. 13 Claims. (Cl. 155—177.)



3. In a head rest structure, the combination of a pair of relatively movable sections, one provided with a socket and the other having a bearing within the socket, releasable holding means for the sections disposed within the bearing and arranged to lock said sections in a predetermined position of adjustment and a manually operable member accessible from the exterior of the socket arranged for movement relative to said holding means to effect release of the holding means.

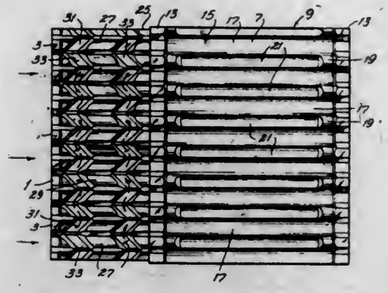
1,821,561. METHOD OF DECORATING WATCH DIALS, ETC. JAMES C. MCFARLAND, Fort Thomas, Ky., assignor to The Wadsworth Watch Case Co., Dayton, Ky., a Corporation of Kentucky. Filed June 22, 1928. Serial No. 287,537. 6 Claims. (Cl. 41—43.)



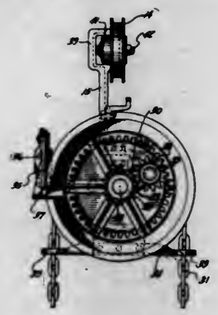
1. The method of producing a decorative design on a metal surface, which comprises: applying to a precious metal surface havng a given color a precious metal plating of another color; applying a chromium plating; applying a suitable resist design to the chromium plating; removing the exposed chromium plating; and removing the first-mentioned plating at the exposed areas and the resist which covers the protected areas of the chromium plating.

1,821,562. RADIATOR CORE. ALBERT BENJAMIN MEDVILLE, Chicago, Ill., assignor to Auto Radiator Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 13, 1929. Serial No. 339,522. 4 Claims. (Cl. 257—130.)

1. In a radiator core a section comprising a web having tortuous edges, joined water retaining walls having complementary tortuous edges separated by said web, said walls and said web having fluting between edges, said fluting and said edges having wave forms of corresponding elevations and depressions, depressions comprising arcuate surfaces in the fluting of the web for engaging certain portions of the fluting of the water retaining walls over substantial areas to conduct heat to the web, the said fluting forming cold air passages, and lateral substantially flat passages formed zigzag fore and aft across said cold air passages, said lateral passages being formed without effecting any opening in said web.

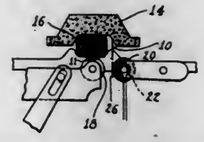


1,821,563. CARRIER. WILLIAM MITCHELL, Milwaukee, and PETER BLINK, West Allis, Wis., assignors to Mitchell Manufacturing Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 9, 1928. Serial No. 268,739. 3 Claims. (Cl. 254—171.)



1. Hoisting mechanism for a carrier including a depended shaft formed with a drum portion, a stationary ring gear, said shaft being revolubly extended therethrough, an operating wheel loosely mounted on said shaft, a small gear loosely mounted on the shaft and engaged by said wheel, a small gear in mesh with said first-mentioned small gear and also with said ring gear, and a lever mounted fast on said shaft and connected with said second small gear.

1,821,564. METHOD OF LABELING AND BANDING. OTTO MULLER, Richmond Hill, N. Y., assignor to Kneher, Muller Company, Inc., New York, N. Y., a Corporation of New York. Original application filed Nov. 12, 1927, Serial No. 232,752. Divided and this application filed May 28, 1929. Serial No. 366,739. 4 Claims. (Cl. 131—61.)

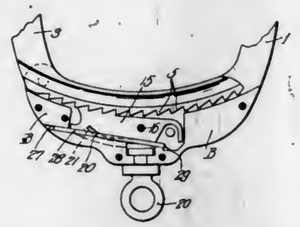


1. The method of labeling articles which comprises wrapping a label having a dry-varnish-like adhesive on one of its ends, with its ends in overlapping relation around the article to be wrapped, fusing said dry adhesive by heat and pressing the ends of the label with the ends and the fused adhesive therebetween firmly into engagement.

1,821,565. SPECIAL MIXED CEMENT OF A HIGH GRADE STRENGTH. SHOICHIRO NAGAI, Hongo-Ku, Tokyo, and KICHIZO KAWAMURA, Kyobashi-Ku, Tokyo, Japan, assignors to Gosuke Imai, Tokyo-Fu, Japan. Filed Feb. 11, 1929, Serial No. 339,260, and in Japan Sept. 21, 1928. 4 Claims. (Cl. 106—25.)

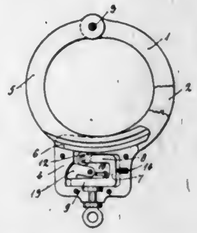
1. A method of manufacturing mixed cement of high degree of strength and of highest hydraulic properties, consisting in mixing and grinding a primary and a secondary ingredient, said primary ingredient comprising material selected from a group consisting of calcined igneous rocks containing granite, liparite, quartz porphyrite and diorite; said secondary ingredient comprising a substance containing colloidal solution components in considerable quantity and selected from a group consisting of silica, alumina and iron oxide, weathered matters of tuff, basalt and andesite, and then adding to said mixture Portland cement clinker, grinding and pulverizing the resultant mass into an intimate mixture of fine powder.

1,821,566. HANDCUFF. ELMER E. NEAL, Coral Gables, Miami, Fla., assignor to Peerless Handcuff Company, Springfield, Mass., a Corporation of Massachusetts Filed June 21, 1927. Serial No. 200,466. 20 Claims. (Cl. 70—24.)



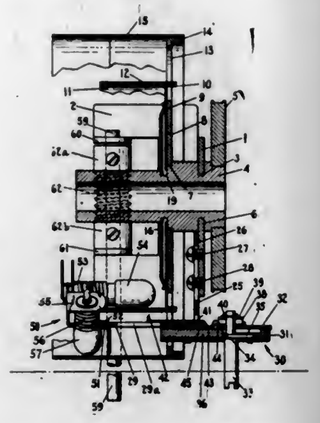
1. A prisoner's cuff for police use including in combination a pair of curved arms pivoted together for clasping movements and locking mechanism on the normally free ends of said arms adapted to prevent unclasping movements of the arms, said locking mechanism comprising teeth on the edge of one arm, a straight latch pivoted on the other arm, provided with one or more teeth near one end to engage the teeth of the first arm, and provided with an engaging part near the other end to tip the latch for unlocking and a bolt operable to prevent the latch tipping, said bolt and latch arranged substantially parallel to each other and to a tangent of the arm to be locked and a key to operate said latch and bolt.

1,821,567. LOCK MECHANISM. ELMER E. NEAL, New Haven, Conn., assignor to Peerless Handcuff Company, Springfield, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1929. Serial No. 402,188. 10 Claims. (Cl. 70—24.)



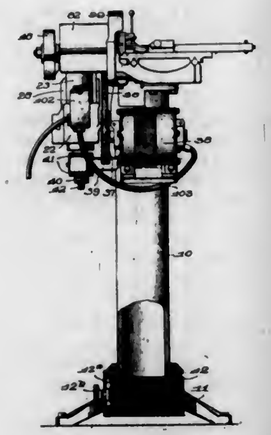
1. A policeman's cuff for prisoners, comprising relatively rotatable arms to form the cuff, lock mechanism on said arms, a roller and wedge members in said lock mechanism arranged to permit relative rotation of the arms in one direction and wedge the arms against rotation in the other direction.

1,821,568. TUNING INDICATOR FOR RADIORECEIVERS. ADOLPH J. NEEF, Brooklyn, N. Y., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Aug. 9, 1930. Serial No. 474,271. 14 Claims. (Cl. 116—124.4.)



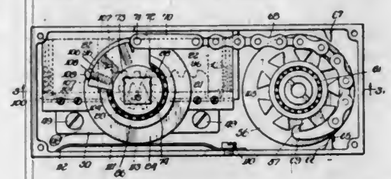
1. A tuning indicator for radio receivers and the like, comprising, in combination, a movable translucent indicating member, a second movable translucent member having an opaque portion which is adapted to be rendered translucent at a selected point, said portion being disposed adjacent and behind said first member, and a source of light disposed behind said portion of said second member.

1,821,569. SAWING-TRIMMING MACHINE. CHRISTIAN B. NELSON, Chicago, Ill. Filed Mar. 19, 1929. Serial No. 348,263. 8 Claims. (Cl. 29—33.)



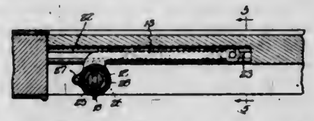
1. In combination, a supporting member comprising a cylinder, a slide movable within said cylinder, a motor driven tool carried by said slide, a support secured to and movable with said slide, a motor carried by said support, and means for operating said slide with reference to said cylinder for raising and lowering said tool.

1,821,570. DOORCHECK, FLOOR TYPE. LEWIS C. NORTON, Altadena, Calif., assignor to Norton-Lasier Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1927. Serial No. 234,783. 19 Claims. (Cl. 16—55.)



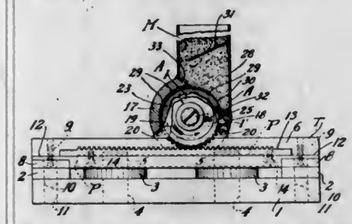
1. A door check comprising a spindle and a fluid checking device operatively connected to said spindle, a second spindle, and a spring mechanism connected to said second spindle to resist rotation thereof in one direction, and means connected to said first spindle and selectively connected to said second spindle at one of a plurality of locations circumferentially disposed relative to said second spindle.

1,821,571. DOOR ARM. LEWIS C. NORTON, Pasadena, Calif., assignor to Norton-Lasier Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1930. Serial No. 443,295. 6 Claims. (Cl. 292—275.)



2. A holding device comprising in combination a pivot member, a collar located on said pivot member, said collar having an outside surface eccentric thereto, an arm adjustably secured to said pivot member, means for regulating said adjustable securement, and an abutment on said arm adapted to have frictional engagement with said outside surface upon rotation of said arm.

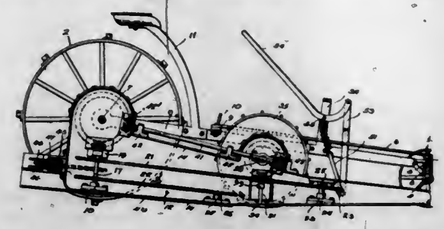
1,821,572. STORAGE BATTERY ELEMENT AND THE PRODUCTION THEREOF. PAUL D. PAYNE, Irvington, N. J., and MORTON IVERSEN, Brooklyn, N. Y., assignors to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed June 4, 1926. Serial No. 113,613. 24 Claims. (Cl. 136—36.)



1. An element for storage battery cells, comprising a support having applied thereto a layer of active material, said layer having an outer surface portion lying substantially in one plane and outwardly of which no part of such layer extends whereby such surface portion is adapted to make close uninterrupted contact with a flat member, that part of said layer which corresponds to said surface portion comprising sections of different but positive densities.

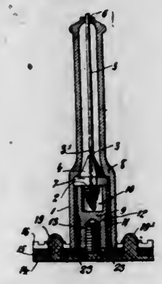
1,821,573. SUGAR BEET TOPPING MACHINE. CHARLES PEER, Brush, Colo. Filed Dec. 30, 1926. Serial No. 158,036. 14 Claims. (Cl. 55—107.)

1. A machine of the character described including a frame, supporting wheels therefor, supporting plates extending longitudinally of said machine, cutting means carried thereby, conveyors associated with said cutting means, resilient means normally tending to hold the supporting plates in their lowered positions, links connected with the supporting plates and extending upwardly therefrom, and a lever mounted on the main frame and connected with the links for raising and lowering the supporting plates out of and into the operative positions.



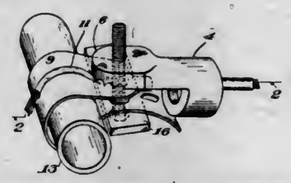
5. A machine of the character described including a frame, cutting disks mounted thereon, rotary disks shafts for supporting and driving said cutting disks, stub shafts mounted in said frame and geared to said cutting disks, gage wheels slidably mounted on said stud shafts, and driving means for the wheels and cutting disks.

1,821,574. RAZOR. PETER NICHOLAS PETERS, Brooklyn, N. Y. Filed May 16, 1928. Serial No. 278,284. 32 Claims. (Cl. 30—12.)



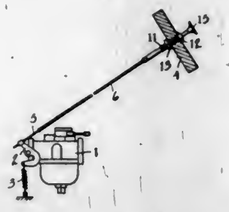
1. A razor comprising a protective covering of negligible heat conductivity over all portions thereof which are adapted to come in contact with the skin operated upon except the cutting edge or edges of the razor blade, means carried by said razor for generating heat, and means for conveying said heat to said blade.

1,821,575. GROUND CONNECTER. JAMES THOMAS POTTER, Quakerhill, Conn., assignor to Gillette-Vibber Company, Incorporated, New London, Conn., a Corporation of Connecticut. Filed May 21, 1929. Serial No. 364,745. 4 Claims. (Cl. 247—1.)



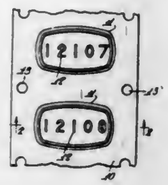
1. An electric ground connecter comprising a water pipe clamping member carrying a wire pocketing socket on its inside face forming a ridge on the outside, a conduit connecter terminating in a radially corrugated dial portion adapted to engage said ridge in any desired position and means for securing said clamp and conduit connecter together.

1,821,576. CONTROL DEVICE. ROSSITER R. POTTER and MONROE SHAKESPEARE, Kalamazoo, Mich., assignors to Shakespeare Products Company, Kalamazoo, Mich. Filed Oct. 15, 1927. Serial No. 226,428. 7 Claims. (Cl. 74—39.)



7. In a carburetor choke control, the combination with an element designed to be connected to the choke valve, of instrumentalities permitting said valve to be fully closed and thereafter to be automatically partly opened, the said instrumentalities comprising a housing providing two ranges of movement for said element, a spring for automatically moving said element through one of its ranges when the said element is in its fully closed position, and means for frictionally holding said element in any position to which it is manually shifted in its other range.

1,821,577. IDENTIFICATION PLATE AND METHOD OF MAKING SAME. BERNARD J. POVALSKI, Jersey City, N. J., assignor to Fedco System, Inc., a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 357,967. 18 Claims. (Cl. 41—24.)

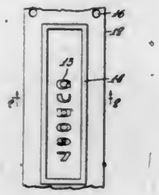


4. In the process of making an identification plate of the character described, the steps which consists in embossing a metal sheet between male and female dies to form a plate with raised indicia thereon and with a down-turned marginal rim, applying a liquid coating on the plate, hardening the coating, removing the coating from the raised portions of the embossing, plating the uncoated surfaces of the plate with a metal of different color from that of the sheet, subjecting the plate to another embossing to roughen the plated surfaces of the indicia and to superpose other indicia in relief over the first named indicia, and removing the rest of the coating.

18. As an article of manufacture an identification plate formed of relatively thin sheet metal with raised indicia thereon, the plate having a welding surface on the underside thereof and a groove in said under-side and surrounding the welding surface to provide a line of weakness thereabout, the plate being further provided with a down-turned marginal rim.

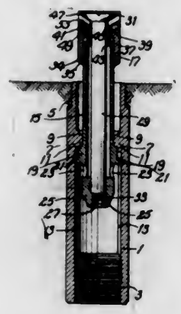
1,821,578. PROCESS OF MAKING IDENTIFICATION PLATES. BERNARD J. POVALSKI, Jersey City, N. J., assignor to Fedco System, Inc., a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 357,970. 7 Claims. (Cl. 41—24.)

1. In the process of making identification plates of the character described, the steps which consist in, providing a strip of sheet metal with a facing of a different metal, the two metals being such as show a marked contrast when subjected to oxidation, embossing the strip to form a plate with raised indicia thereon and a down-turned marginal rim, covering the plate with a protective coating, removing the coating and metal facing from the raised surfaces of the plate, embossing the plate with other indicia superposed on the first, removing the coating, subjecting the plate to oxidation, and burnishing a part of the oxidized portion of the plate to remove the oxide therefrom.



3. In the process of making identification plates of the character described the steps which consist in, plating a strip of sheet metal with a metal of different color, embossing the plate between male and female dies to form a plate with raised indicia thereon and a down-turned marginal rim, covering the plate with a protective coating, removing the coating and metal plating from the raised surfaces of the embossing, and subjecting the plate to a second embossing between male and female dies to form other raised indicia superposed on the first named indicia and to form a flat weld spot on the under-face of the plate and to impress a region of weakness in the under-face of the plate around the weld spot.

1,821,579. LAWN SPRINKLER. HAROLD K. RADER, Port Huron, Mich., assignor to Mueller Brass Co., Port Huron, Mich., a Corporation of Michigan. Filed Nov. 18, 1929. Serial No. 407,971. 14 Claims. (Cl. 299—61.)



5. The sprinkler which comprises a cylindrical casing, a tube adapted to fit into said casing, means for limiting the movement of said tube in said casing, a stem rigidly mounted in said tube, said stem having a conical head above said tube, a supporting sleeve mounted on the top of said tube, and a rotatable sleeve spacedly surrounding said stem and supported by said supporting sleeve.

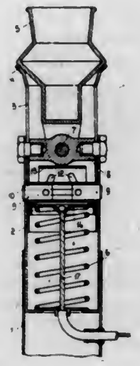
14. A sprinkler comprising a tubular member, an adjustable conical portion thereon, a spaced stem therein having a conical head, a distributor rotatable in the tubular member, said distributor being spaced from the stem and a flange on the distributor located between said conical portion and said conical head.

1,821,580. BASE FOR SIGNS. EARL B. ROGERS, Chicago, Ill., assignor to Mid-West Forging Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 18, 1931. Serial No. 523,624. 3 Claims. (Cl. 40—125.)



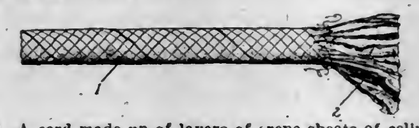
1. A base for a sign, including; an upper substantially flat sheet metal plate with a depending rim; a lower substantially flat sheet metal plate spaced therefrom, the edge of said lower plate being joined to the rim of said upper plate; a socket member carried by the upper plate; and ballast material in the space between the plates.

1,821,581. AEROPLANE CONTROL SWITCH. CELESTINO ROSATELLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Dec. 11, 1930, Serial No. 501,714, and in Italy Oct. 9, 1930. 4 Claims. (Cl. 244—29.)



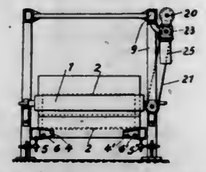
1. Aeroplane control switch comprising in combination, a holder for a control lever, a tubular member fixed coaxially in said holder, a tube telescopically mounted in said tubular member and having a flared outer end, a socket adapted to receive a control lever and connected by a Cardan joint to said tubular member through slits in said tube, a conical annular projection on said socket adapted to fit with the flared end of said tube and means for displacing said tube at will so as to clear said socket from said tube.

1,821,582. PACKING CORD. WADE E. SACKNER, Grand Rapids, Mich. Filed May 9, 1930. Serial No. 451,186. 5 Claims. (Cl. 96—26.)



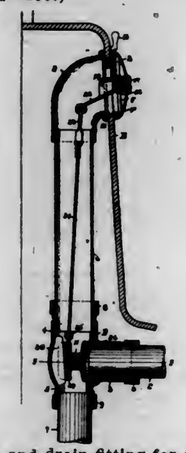
1. A cord made up of layers of crepe sheets of cellulose wadding compressed into cylindrical form and retained by braided wrapping threads.

1,822,583. PAPER MAKING MACHINE. ARTHUR SCHUBERT, Rosslau, Germany. Filed June 20, 1929, Serial No. 372,348, and in Germany Feb. 3, 1928. 6 Claims. (Cl. 74—51.)



1. In an electrically operated apparatus for controlling the path of travel of the endless sieve of paper making machines the combination with an angularly displaceable guide roller over which the endless sieve of the paper machine runs, of a primary screw and nut gear adapted to positively control the position of said guide roller, a reversible electric motor cooperatively associated with said screw and nut gear and with an electric switching device, the latter being responsive to lateral deviations of the sieve, an intermediate screw and nut gear being attached to said electric switching device and having a cross-head, the latter being cooperatively associated with adjustably mounted circuit breakers, a clutch interconnecting the electric motor and both said screw and nut gears, means for throwing said clutch into and out of operation and means for displacing by hand the nut of the primary screw and nut gear independently of the position of the cross-head of the intermediary screw and nut gear.

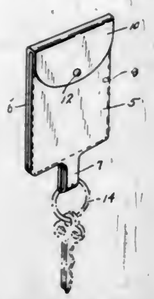
1,821,584. WASTE AND OVERFLOW FITTINGS FOR LAVATORY WASH BASINS, BATHTUBS, KITCHEN SINKS, AND THE LIKE. CHARLES F. SCHULTIS, Cleveland, Ohio. Filed May 24, 1929. Serial No. 365,658. 6 Claims. (Cl. 4—199.)



1. In an overflow and drain fitting for a bath tub, lavatory basin, sink, or like vessel, an overflow elbow having an integral pivot lug within its mouth, an overflow and drain

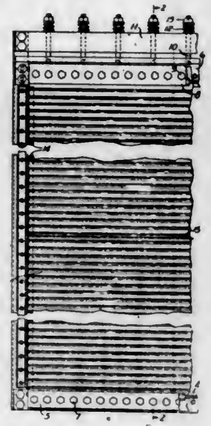
fitting connected with said elbow having a valve therein, and means pivotally supported by said lug for operating said valve.

1,821,585. KEY AND LICENSE HOLDER. CALDWELL A. SMITH, Noroton Heights, Conn. Filed Aug. 25, 1930. Serial No. 477,691. 1 Claim. (Cl. 150—39.)



A device of the class described comprising a sheet of material cut to form a pair of substantially rectangular portions and a narrow portion centrally arranged and connecting together opposite ends of the other portions, one of the said other portions having a flap at its outer end, the central narrow portion being folded at its transverse center to form a loop and to place the rectangular portions together, said rectangular portions being sewn together along their side edges and the end edges to which the narrow part is connected, thereby forming a holder which is closed by the flap.

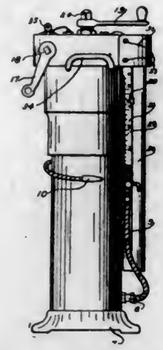
1,821,586. ACOUSTIC DEVICE. EDWIN H. SMYTHE, Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 20, 1929. Serial No. 356,632. 22 Claims. (Cl. 181—31.)



1. An acoustic device comprising a direct acting diaphragm uniformly tensioned to a high degree and having means therein providing regions of special extensibility.

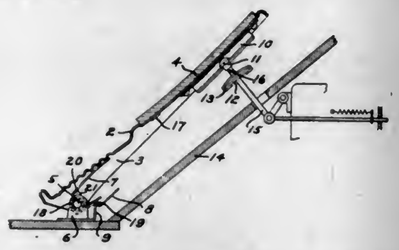
1,821,587. LUBRICANT DISPENSING DEVICE. WALTER S. TABER, Honolulu, Territory of Hawaii. Filed Aug. 7, 1929. Serial No. 384,226. 5 Claims. (Cl. 74—36.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. In a mechanism of the kind described, the combination of a head, a screw threaded shaft journalled in said head and having one end thereof squared and projecting therefrom, a worm-wheel non-rotatably mounted on said shaft, a second shaft having one end thereof squared and a worm mounted thereon meshing with said worm-wheel, a piston having an internally threaded aperture therein



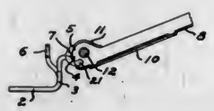
meshing with the threads on said screw threaded shaft, and means for turning the squared ends of said shafts to actuate said worm-wheel on said screw threaded shaft to cause the said piston to travel on said screw threaded shaft.

1,821,588. PEDAL. JOEL R. THORP and CLARENCE FAUSCH, West Allis, Wis., assignors to The Fulton Company, West Allis, Wis., a Corporation of Wisconsin. Filed Oct. 22, 1929. Serial No. 401,431. 10 Claims. (Cl. 74—81.)



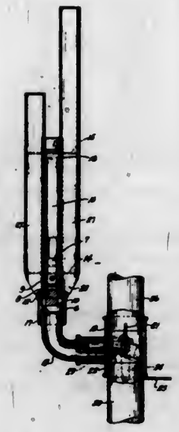
1. In combination, a longitudinally movable rod having an enlarged end portion, a substantially spherical button detachably associated with said rod portion, a pedal swingable over said rod portion, and an element secured to the medial lower portion of said pedal, said element having a recess within which said button is slidable and having side walls extending under the opposite sides of said button.

1,821,589. FOOT PEDAL. JOEL R. THORP, West Allis, Wis., assignor to The Fulton Company, West Allis, Wis., a Corporation of Wisconsin. Filed June 11, 1930. Serial No. 460,349. 14 Claims. (Cl. 74—81.)



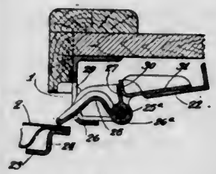
1. In combination, a fixed support having a rearwardly open recess, and a pedal having a transverse pivot pin insertible laterally into said recess when said pedal is inverted, said pedal being formed to interlock with said support adjacent to said recess to maintain said pin within said recess when said pedal is swung to normal position after insertion of said pin.

1,821,590. HORN. JOEL R. THORP, West Allis, Wis., assignor to The Fulton Company, West Allis, Wis., a Corporation of Wisconsin. Filed Aug. 16, 1930. Serial No. 475,708. 14 Claims. (Cl. 116—138.)



1. In combination, a base having a bore, a plate having a series of peripheral recesses coacting with the surface of said bore to form an annular series of orifices, and a plurality of tubular casings each having an opening coacting with one of said orifices to produce a different sound than that produced by the other casings.

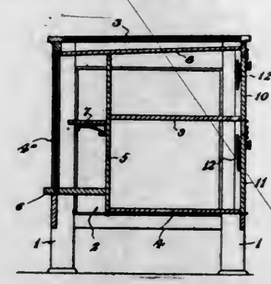
1,821,591. FLUSH CAR DOOR. KENNETH J. TOBIN and AXEL WASBERG, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 2, 1927, Serial No. 188,141. Divided and this application filed Dec. 17, 1928. Serial No. 326,456. 6 Claims. (Cl. 20—23.)



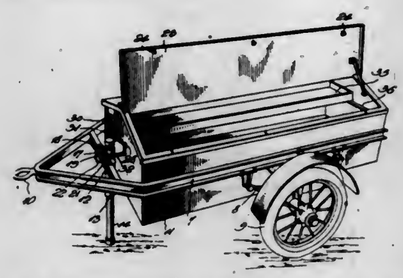
1. In a house car having an inset doorway, a track parallel to the side of the car and adjacent one margin of the doorway, a sliding door for closing said doorway, foldable roller supports between said track and door, a weather proofing member at the rear edge of said doorway and having a slot, an arm hinged to said member and adapted for extending through said slot and means for actuating said arm for moving the door outwardly.

1,821,592. DISPLAY STAND. WILLIAM L. TOLER, Mounds, Ill. Filed Aug. 15, 1928. Serial No. 299,831. 1 Claim. (Cl. 312—118.)

A display and storage case comprising a cabinet having corner posts, and walls carried by said posts, upper and lower strips carried by said posts at the front and rear of the cabinet and an intermediate strip between the rear posts, a transparent top hingedly mounted for opening and closing, a sub-top in said cabinet extending between the upper front and rear strips at a downward incline towards the front and spaced from the transparent top to form a display chamber having a forwardly sloping bottom, a vertical partition extending between said end walls in spaced relation to the front of the cabinet to divide the cabinet into a front display chamber and rear storage chamber, a bottom for the front display chamber extending forwardly from the vertical partition between the end walls and resting upon the lower front strip and projecting forwardly therefrom, transparent front panels supported by the upper front strip and bottom of the front display chamber and slidable longitudinally of the cabinet into and out of a closed position, a bottom for the storage chamber extending rearwardly from the vertical partition to the lower rear strip, a horizontal partition in the storage chamber, and doors for the storage chamber hinged to the lower and intermediate rear strips.



1,821,593. TRAILER. JOHN VAN VORST, Schenectady, N. Y., assignor to Mohawk Asphalt Heater Company, Schenectady, N. Y., a Copartnership composed of John Van Vorst and George M. Baker. Filed Mar. 28, 1930. Serial No. 439,689. 11 Claims. (Cl. 296—1.)

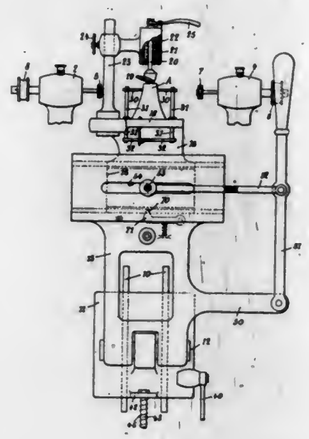


1. In a vehicle having a vertically shiftable, ground-engaging leg and a receptacle provided with a door; fastening means for holding said leg in raised or lowered position, and fastening means being movable to and from operative position, fastening means for said door also movable to and from operative position, fastening means for said door also movable to and from operative position, and master locking means for locking both of said fastening means in operative position.

1,821,594. MACHINE FOR CUTTING GROOVES IN SHOE HEELS. GEORGES ADOLPHE VICHERD, Paris, France, assignor to Larco Del Valle & Cie., Paris, France, a French Company. Filed Sept. 5, 1929, Serial No. 390,501, and in France Sept. 12, 1928. 10 Claims. (Cl. 12—42.)

1. A machine for cutting grooves in the front face of shoe heels, comprising three rotary cutters, a central cutter for cutting a central groove in said heel and two side cutters for cutting lateral recesses merging into said groove, a support for maintaining the heel, means for displacing said

support for bringing the heel adjacent said cutters, successively, means for displacing said support toward and



away from said cutters, and means for displacing said support obliquely with respect to said side cutters and tangentially with respect to said central cutter.

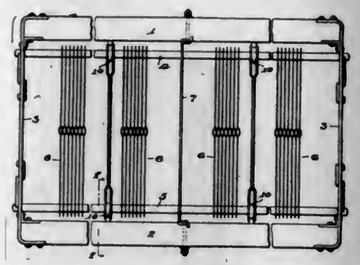
1,821,595. COVER FOR SHIPS' HATCHWAYS. EDWARD ELIAS VON TELL, Gotenborg, Sweden. Filed Jan. 21, 1931, Serial No. 510,245, and in Great Britain Jan. 29, 1930. 10 Claims. (Cl. 114—201.)



1. In cover for ship's hatchways a hatchway coaming of metal plates reinforced with angle bars, a cover of metal plates hinged to the ends of the hatch coaming and subdivided in sections hinged to each other so as to be folded down, packing means between the metal cover sections and the upper edge of the metal hatch coaming, packing means at the crossings between longitudinal joints and transversal joints as well as vertical joints of cover sections and hatch coaming, and means to compress the packing means and secure the cover sections on the hatch coaming so as to ensure full watertightness all around and across the hatchway.

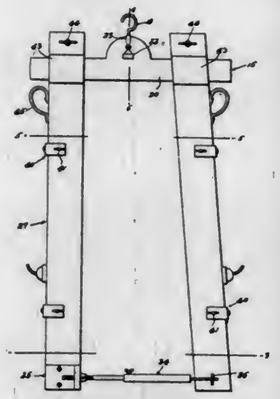
1,821,596. HEDDLE FRAME. JOHN WALKER, Jr., Melrose Park, Pa., assignor to Walker Manufacturing Company, Inc., a Corporation of Pennsylvania. Filed Jan. 8, 1929. Serial No. 331,031. 2 Claims. (Cl. 139—92.)

1. The combination of a heddle frame, comprising spaced parallel rails and heddle bars, with members normally fixed to said rails and engaging said bars, and a laminated member comprising a pair of rods secured together at their central portions and spaced apart at their end portions, whereby the adjacent ends of said rods are adapted to



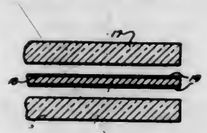
straddle the respective first members and connect with said bars to maintain a predetermined distance between said rails and said bars.

1,821,597. TROUSERS PRESS. OSCAR WANDEN and LEWIS D. WALKER, Milwaukee, Wis. Filed Aug. 2, 1930. Serial No. 472,633. 5 Claims. (Cl. 219—19.)



3. In a press unit of the class described, a longitudinally elongated hollow casing, an electrical heating means therein, a substantially U-shaped clamp carried thereby having its inturned end provided with adjusting and retaining set screws, a pair of presser plates disposed against opposite sides of said casing, and means joining the plates together at one end.

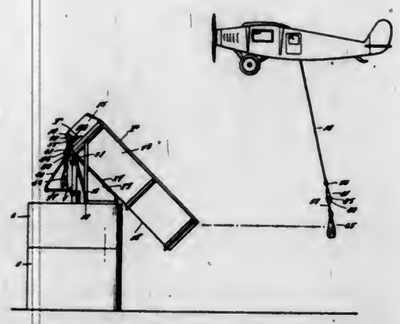
1,821,598. LAMINATED GLASS. GEORGE B. WATKINS, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 5, 1929. Serial No. 376,050. 2 Claims. (Cl. 49—92.)



1. As a new article of manufacture, a sheet of laminated glass consisting of two or more sheets of glass with an interposed non-brittle material treated with an amide having a relatively high boiling point, low vapor pressure, the vapor pressure being sufficiently low that the sheet will not bubble when subjected to varying climatic conditions encountered in actual use.

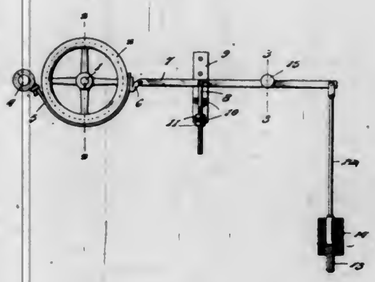
CARNEGIE LIBRARY OF ATLANTA

1,821,599. AIR MAIL UNLOADING AND PICK UP APPARATUS. FREDERICK W. WEIDMAN, Drumright, Okla. Filed June 13, 1929. Serial No. 370,659. 7 Claims. (Cl. 258—1.)



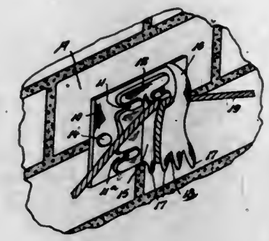
1. In an apparatus of the class described, an unloading device comprising a casing, a tube extending downwardly from the top of the casing, a tube extending upwardly from the bottom of the casing and terminating a distance from the first mentioned tube, a hook having a stem receivable in the tubes and formed with a groove to register with the space between the tubes, and spring catches extending into the space to engage in the groove.

1,821,600. BRAKE. CONNIE W. WHITEHEAD, Chattanooga, Tenn., assignor to New Era Electro Devices, Chattanooga, Tenn., a Corporation of Tennessee. Filed July 17, 1929. Serial No. 379,033. 1 Claim. (Cl. 188—174.)



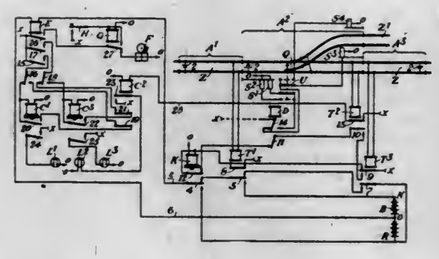
A brake mechanism comprising a brake pulley, a post at one side of the brake pulley, a brake band disposed under and adjacent the periphery of the brake pulley, one end of said band being anchored to the post and the opposite end of the band being disposed at the opposite side of the brake pulley, a guide bracket located at the same side of the brake pulley as the free end of the brake band and spaced therefrom, an adjustable fulcrum screw fitted in said bracket, a lever pivotally mounted upon said screw and having one end connected to the free end of the brake band, a poise fitted to the lever at the side of the fulcrum screw more remote from the brake band, a non-magnetic link pivoted to and depending from the free end of the lever, a weighted core carried by the lower end of said link, and a solenoid cooperating with said core whereby when the solenoid is energized the brake band will be released from the brake pulley.

1,821,601. LINE FASTENER. ALVAH N. ADELSON, and MARTIN T. JOHNSON, Cleveland, Ohio. Filed [illegible], 1930. Serial No. 499,377. 2 Claims. (Cl. 24—130.)



1. A line fastener comprising a plate member adapted to be secured to a stationary support, and a line fastening member adapted to be secured to the plate member, the plate member being provided with a plurality of lugs and the fastening member being provided with means adapted to releasably interlock with the lugs, the fastening member being provided with a shank terminating in an upstanding hook and a series of depending horns, there being wedge-shaped notches between the horns, the fastening member being thereby adapted to secure in locked relation a plurality of turns of line wrapped around the shank, the plate member having means for securing it to a stationary support.

1,821,602. TRAIN INDICATING APPARATUS. EARL M. ALLEN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1930. Serial No. 484,563. 6 Claims. (Cl. 246—124.)

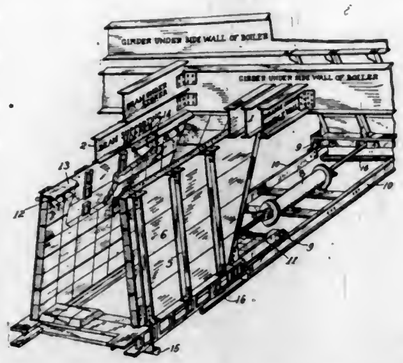


1. In combination, three sections of railway track, a polar relay, means for energizing said relay in one direction or the other according as the first or the third of said sections is occupied by a train, an indicator for each of said sections, means for energizing the indicator for the first or the third section according as said relay is energized in one direction or the other, and means for energizing the indicator for the second section when the second section is occupied.

1,821,603. ASH HANDLING EQUIPMENT. FRANK B. ALLEN, Lower Marion Township, Montgomery County, Pa., assignor, by mesne assignments, to The Allen-Sherman Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1927. Serial No. 170,792. 1 Claim. (Cl. 110—171.)

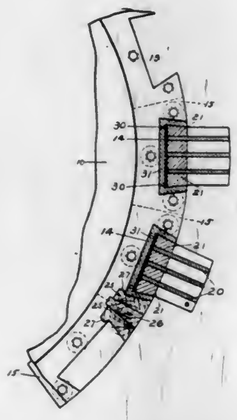
In combination with a furnace for burning ash producing fuel, a metallic hopper having an ash receiving opening at its upper end communicating with said furnace, said hopper being lined with refractory material, and pro-

vided with a discharge opening in its bottom, a liquid collecting gate adapted to close said discharge opening,



and means to spray liquid into the hopper to strike and maintain cool said refractory lining and to strike and cool the entering ash before it contacts with said lining.

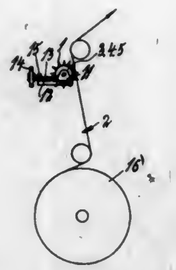
1,821,604. BEATER ROLL CONSTRUCTION. ALBERT J. ALLISON, Dayton, Ohio, assignor to Simonds Worden White Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 3, 1928. Serial No. 323,234. 18 Claims. (Cl. 92—22.)



1. In a beater roll, a series of heads secured on a shaft, said heads having broad recesses in their peripheries, channels connecting the heads and secured in said recesses with their flanges extending outward, fly bars standing on edge in said channels, alternating with spacing members, and plates secured to the outside heads, said plates closing the ends of the channels and being adapted to clamp the fly bars and spacing members endwise therein.

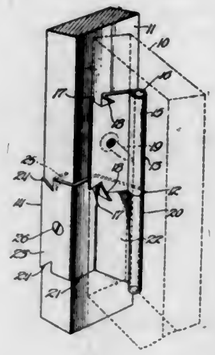
1,821,605. APPARATUS FOR MEASURING THE CONTENTS OF MOISTURE IN CHEMICAL AND MECHANICAL WOOD PULP. AXEL CHRISTIAN ANDERSEN, Borregaard, near Sarpsborg, Norway. Filed Sept. 29, 1927, Serial No. 222,861, and in Norway May 22, 1926. 3 Claims. (Cl. 175—183.)

1. In an apparatus for determining the amount of moisture in webs of cellulose or the like by measuring the electric current passed through a web by means of a contact device, said contact device comprising circularly



alined current conducting needles adapted to be thrust for their entire length through the web so that the surfaces thereof contact with the entire thickness of the web.

1,821,606. HINGE. ANTON ANDERSON, Chicago, Ill. Filed May 16, 1929. Serial No. 363,499. 1 Claim. (Cl. 16—159.)

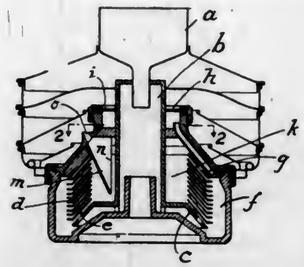


In a hinge formed of a pair of superposed and offset plates, one of said plates bent intermediate its ends to provide frame corner engaging portions substantially at right angles to each other, one of said portions having integral prongs extending parallel to the other portion and of less length than said other portion, whereby said prongs may be guided for insertion into the frame for drawing the right angular portions into supporting engagement with a frame corner, and the second plate having prongs and a pin-receiving eye, said eye serving to guide said last mentioned prongs for drawing the second plate into engagement with a frame corner.

1,821,607. CENTRIFUGE. GUSTAV HARRY ANDERSSON, Stockholm, and SVEN ALFRED BERTIL DAHLGREN, Alsten, Sweden, assignors to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed July 2, 1929, Serial No. 375,413, and in Sweden July 24, 1928. 4 Claims. (Cl. 233—46.)

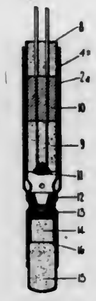
1. A centrifugal bowl comprising a centrifugal separating chamber provided with an outlet for the discharge of the separated substance of greater specific gravity, and comprising also an element adapted to facilitate the travel of the lighter separated substance from the main locus

of separation inwardly toward the axis of the bowl and adapted also to convey the thus inwardly conveyed lighter



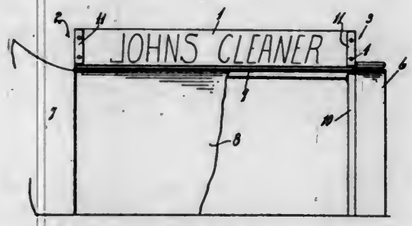
separated substance away from the region near the axis of the bowl in a direction inclined away from the bowl axis.

1,821,608. BLASTING CAP. HENRY K. BABBITT, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 1, 1929. Serial No. 367,805. 2 Claims. (Cl. 102—10.)



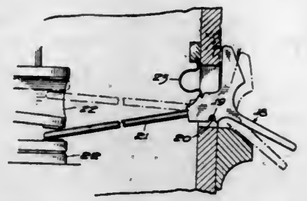
1. A delay electric detonator comprising in combination an ignition head, an explosive load, a retarding means interposed between the ignition head and the load means, a free air-space between the ignition head and the retarding means, a vent in communication with the free air space for exit of the gases formed during initial firing, a filler of low fusible material covering the vent, and a sleeve surrounding the detonator and spaced therefrom, and provided with an inner spiral channel adapted to diffuse and cool the gases and conduct them away from the vent in order to prevent pre-ignition of the detonator charge.

1,821,609. HOOD SIGN. HOWARD A. BAKER, Long Beach, Calif. Filed Oct. 8, 1930. Serial No. 487,156. 4 Claims. (Cl. 40—129.)



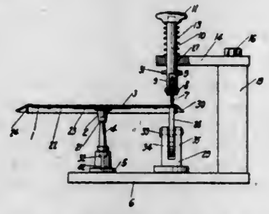
1. A hood sign comprising a strip extending substantially the length of the hood, a fitting on either end of said strip, means detachably securing said fittings to the strip, a foot on the fittings, said foot being adapted to fit under the hood and secured thereby when the hood is in lowered position.

1,821,610. ORGAN STOP OR COUPLER ACTUATING MEANS. DONALD S. BARROWS, Rochester, N. Y. Filed Dec. 1, 1930. Serial No. 499,351. 8 Claims. (Cl. 84—343.)



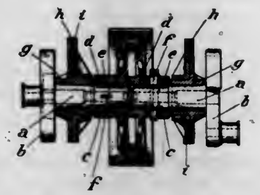
6. An organ control key having a plurality of angularly related finger pressure receiving surfaces whereby to be movable in a selected one of a plurality of directions by the same character of movement.

1,821,611. CUTTER FOR TURNTABLE COVERS. LE BONSIEUR, Elyria, Ohio, assignor to The General Industries Company, Elyria, Ohio, a Corporation of Ohio. Filed Jan. 21, 1929. Serial No. 333,879. 7 Claims. (Cl. 164—63.)



1. In a mechanism for trimming off a surplus border portion from a phonograph turntable cover adhesively secured to the top of the turntable, comprising means for rotatably supporting the turntable by its hub portion, means for non-frictionally supporting the peripheral portion of the turntable, a cutting means comprising a knife cutting edge, adapted to be pressed into cutting engagement with the cloth while the turntable is rotated, said cloth being pressed during cutting between the cutting edge of said knife and the supported peripheral portion of the turntable.

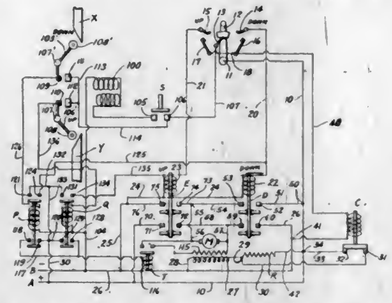
1,821,612. COMPOSITE CRANK AXLE FOR VEHICLES TRAVELING ON RAILS. JACOB BUCHLI, Winterthur, Switzerland. Filed June 19, 1929, Serial No. 372,119, and in Germany June 23, 1928. 4 Claims. (Cl. 105—115.)



1. In a vehicle traveling on rails, a frame having two frame plates, said plates being provided with circular holes, axle boxes fitted in said holes of said frame plates, a composite crank axle comprising two shaft stubs mounted in said bearing, a crank arm on the outer side of each

shaft stub made in one with the latter, a gear wheel arranged intermediate of said axle boxes and having a hub, and means for rigidly securing the inner ends of said shaft stubs in said hub and connecting said shaft stubs to each other as to form a unitary structure.

1,821,613. AUTOMATIC LEVELING DEVICE FOR ELEVATORS. CLARENCE R. CALLAWAY, Honesdale, Pa., assignor to Gurney Elevator Company, Inc., Honesdale, Pa., a Corporation of Pennsylvania. Filed Aug. 25, 1922. Serial No. 584,347. 8 Claims. (Cl. 172—152.)



6. In combination, an elevator car, a motor arranged to drive the car, manually controlled means for causing said motor to operate at predetermined speeds, other mechanism automatically controlled by the movement of the car rendered operative by putting said manually controlled means into neutral position to cause said motor to continue the movement of the car at a slower speed than the slowest speed controlled by said manual means and to discontinue the motor drive, said other mechanism comprising cams and cooperating switches, and means for automatically adjusting said other mechanism in accordance with variations of load on the car to vary the point in relation to a landing at which the motor drive is discontinued, said cams being spaced to permit the car to coast.

1,821,614. FLEXIBLE TYPE BUTTON. LEONARD R. CARLEY, Watertown, and FRANKLIN R. WHITE, Waterbury, Conn., assignors to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 24, 1931. Serial No. 518,009. 3 Claims. (Cl. 24—95.)



1. A flexible type button including a button head having a hollow hub, an eyelet also having a hollow hub, the hub of the button head crimped onto the hub of the eyelet so that the hub may move vertically with respect to the eyelet, an expansible die jammed within said hub, the eyelet provided with an outer downwardly and outwardly sloping wall, and the lower edge of the downwardly and outwardly sloping wall being turned inwardly toward said hub of the eyelet.

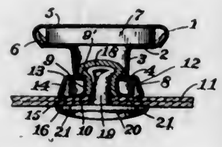
1,821,615. FANCIFUL BUTTON AND METHOD OF MAKING THE SAME. LEONARD R. CARLEY, Watertown, and WALTER T. ADEL, Waterville, Conn., assignors to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 24, 1931. Serial No. 518,010. 12 Claims. (Cl. 24—95.)

1. A button comprising a cap in the form of a shell, the said cap having indentations in its top surface, said indentations extending down into the rim of the cap, a button back the diameter of which is substantially less than



the diameter of the cap, and the cap crimped onto said button back to thereby form a button head of irregular peripheral outline.

1,821,616. FLEXIBLE TYPE BUTTON. LEONARD R. CARLEY, Watertown, and FRANKLIN R. WHITE, Waterbury, Conn., assignors to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 1, 1931. Serial No. 526,934. 8 Claims. (Cl. 24—95.)



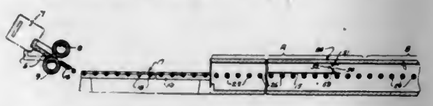
1. A flexible type button comprising a button head having a hollow hub, a base also having a hollow hub, the hub of the button head crimped on the hub of the base so that the button head may move with respect to the base, the base having a bottom portion and a substantially vertically circular wall and a downwardly and outwardly extending wall merging therewith, the last-mentioned wall having an inwardly extending rim terminating short of the substantially vertically circular wall, and the bottom surface of the base being perforate.

1,821,617. APPARATUS FOR FORMING AND ANNEALING SHEET GLASS. CARROLL CONE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 17, 1929. Serial No. 400,394. 8 Claims. (Cl. 198—127.)



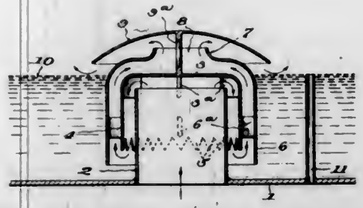
1. In sheet glass apparatus, a conveyor for receiving a newly formed sheet thereupon, including two sets of rolls arranged in the same horizontal plane and adapted to simultaneously engage the sheet and carry it forwardly, the rolls of one set being arranged alternately with the rolls of the other set, and means for positively driving said sets of rolls in the same direction at different speeds.

1,821,618. APPARATUS FOR THE MANUFACTURE OF SHEET GLASS. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 25, 1929. Serial No. 409,530. 9 Claims. (Cl. 198—127.)



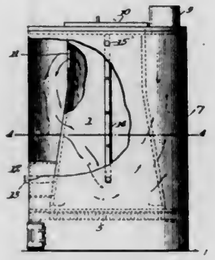
1. In sheet glass apparatus, a conveyor for receiving a newly formed sheet from a sheet forming mechanism at one speed and delivering it to an annealing zone at a relatively slower speed, including two sets of rolls arranged in the same horizontal plane and adapted to simultaneously engage the sheet and carry it forwardly, means for positively driving said sets of rolls in the same direction at different speeds, and means for disconnecting the drive from one set of rolls to cause said rolls to run idle.

1,821,619. BUBBLE-CAP. ROLAND B. DAY, Los Angeles, Calif. Filed Sept. 24, 1929. Serial No. 394,763. 11 Claims. (Cl. 261—121.)



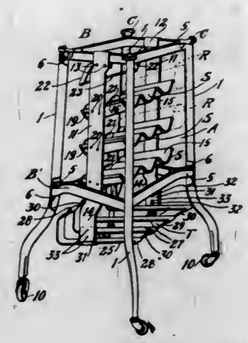
1. In a contact apparatus of the bubble cap type, the combination of a bubble tray having an opening therethrough, a wall of the opening extending upwardly therefrom as a pipe having a passageway therethrough, a primary baffle positioned above the upper end of said pipe and having a downwardly extending flange spaced from the pipe and from the tray, and a second baffle surrounding said primary baffle adjacent the flange thereof and spaced therefrom and from the tray and extending upwardly and inwardly thereabove and having an opening at the top.

1,821,620. GARBAGE INCINERATOR AND PROCESS. HENRY MARK DELACOUR, Albany, N. Y., assignor to New York Power & Light Corporation, Albany, N. Y., a Corporation of New York. Filed Oct. 23, 1929. Serial No. 401,800. 7 Claims. (Cl. 110—18.)



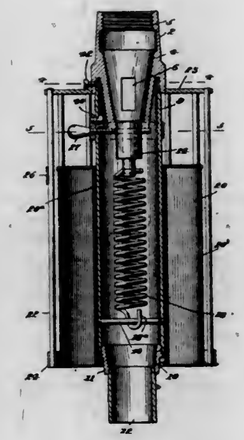
1. In an incinerator, an inner shell provided with a grate, an outer shell, a cover engaging the upper edges of both said shells, diametrically opposed baffles extending from said cover downwardly between and in contact with said shells, a base closing the space between the lower ends of said shells, said baffles terminating short of said base, a burner casing extending through the outer shell and into the inner shell above said grate, said inner shell having an opening in its side wall near the top and directly above said burner casing, said outer shell having an outlet opening at its top diametrically opposite said burner casing whereby the products of combustion will be conducted from the inner shell near its top downwards over the heated portion of said inner shell, under the lower ends of said baffles thence upwardly to said outlet.

1,821,621. COMBINED STAND AND FILING DEVICE. NELSON C. DURAND, East Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Mar. 21, 1929. Serial No. 348,747. 15 Claims. (Cl. 211—126.)



1. The combination with a knock down pedestal comprising corner posts or legs and upper and lower cross frames removably connected to said legs to hold the parts together as a rigid structure, of a filing device disposed within the space defined by said legs, said device comprising spaced vertical members removably secured to said pedestal and a series of vertically spaced trays each having one or more seats for receiving and supporting articles, each of said trays being removably connected to said members so as to be supported by and between the same, substantially as described.

1,821,622. TANK VALVE. WILLIAM K. EDWARDS, Big Spring, Tex. Filed Oct. 25, 1929. Serial No. 402,516. 4 Claims. (Cl. 137—104.)



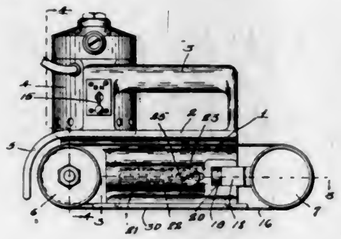
1. In a device of the class described, a combination of a liquid inlet conduit provided with a valve seat, a rotary valve therein, spring means normally acting to close said valve, manual means for opening the valve, a rotary collar actuated by said manual means, a latch constructed to engage and lock said collar when the valve is moved to open position thus storing up power in said spring means, and a float arranged for movements in response to differences in liquid level and to engage said latch upon rise of the liquid and trip the same, permitting the valve to close under the influence of said spring means.

1,821,623. LIGHT CONDENSING OPTICAL SYSTEM. JOHN H. EMMERICH, Rosedale, N. Y., assignor to Harold S. Holmes, New York, N. Y. Filed Apr. 13, 1931. Serial No. 529,837. 8 Claims. (Cl. 88—24.)



1. In a light concentrating system, a hollow body, a condenser lens mounted therein, a pyramidal prismatic lens adjustably mounted in said body in advance of the condenser lens and an objective lens mounted in said body, means for adjusting said pyramidal prismatic lens within said body.

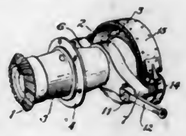
1,821,624. SANDPAPERING MACHINE. ARTHUR N. EMMONS, Nedrow, N. Y., assignor to The Porter-Cable Machine Company, Syracuse, N. Y., a Corporation of New York. Filed June 26, 1926. Serial No. 118,660. 8 Claims. (Cl. 51—135.)



1. In a portable abrading machine, the combination of a frame, a pair of rollers, axles for one of the rollers and mechanism carried by the body for driving one of the axles, an abrading belt movable over the rollers, a carriage carried by the frame between the rollers and movable forwardly and rearwardly to adjust one roller toward and from the other to tighten the belt, the axle upon which the adjustable roller is mounted being pivoted at one end to the carriage on an axis extending at an angle to a plane containing the axes of the rollers in order to permit pivotal movement of the axle in the same direction as the adjusting movment of the carriage, mean for adjusting and holding the carriage in its adjusted position and means carried by the carriage for adjusting the angle of the axle of the adjustable roller forwardly and rearwardly and holding it in its adjusted position.

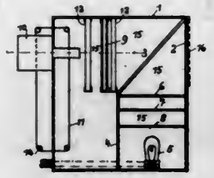
6. In a portable abrading machine, the combination of a frame comprising a portion having means for supporting axles, rollers mounted on the axles and an abrading belt movable over the rollers, the axles being supported entirely at like ends and free at their other ends, the free ends of the axles terminating short of the planes of the free ends of the rollers, the machine being supported entirely on the lower run of the belt.

1,821,625. COMBINED BRAKE AND PULLEY ATTACHMENT FOR VEHICLES. JOHN T. FIGLEAR, Buffalo, N. Y. Filed July 16, 1927. Serial No. 206,313. 5 Claims. (Cl. 180—53.)



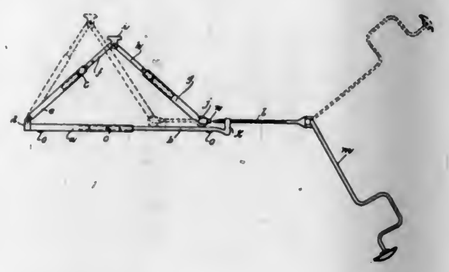
1. In a tractor, the combination of a transverse shaft geared to the tractor drive shaft and carrying a pulley available for power take-off use, a sleeve adapted for attachment to the tractor body and housing said transverse shaft, a brake element cooperating with said pulley and means carried by said sleeve for the operation of said brake element.

1,821,626. PRODUCING PROJECTION PICTURES. FRITZ FLEISCHER, Weimar, Germany. Filed Mar. 4, 1927, Serial No. 172,765, and in Germany Dec. 13, 1926. 4 Claims. (Cl. 88—24.)



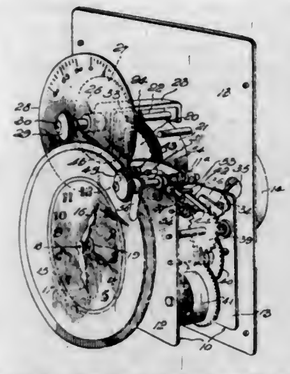
1. In a device for producing delusion pictures in combination, a casing, a window opening in said casing, an inclined transparent reflecting surface opposite said window, a partition extending from said surface to the wall of said casing and forming chambers in said casing on either side of the reflecting surface, a plurality of spacedly parallel transparent picture carrying plates exchangeably disposed on the one side of said reflecting surface in the chamber formed at this side, a source of light adjustably arranged behind said picture plates so as to send its rays through them towards the reflecting surface, a projecting surface for projected pictures substantially disposed at a right angle to said picture carrying plates, cinematographic means for producing moving pictures on said projecting surface and additional reflecting surfaces sideways and transversely disposed with respect to the projecting surface and to the picture carrying plates.

1,821,627. TYPE OF ARTICULATED AND DISMOUNTABLE LIFTING JACK. IGNACIO H. FOTHERINGHAM, Rio Cuarto, Argentina. Filed Feb. 14, 1929. Serial No. 339,807. 1 Claim. (Cl. 254—126.)



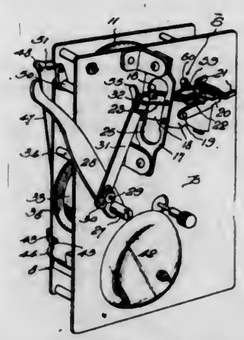
A lifting jack comprising an extensible base, an extensible arm pivoted to said base and extending upwardly at an inclination thereto, a second extensible arm pivoted to the upper end of the first extensible arm and extending downwardly at an inclination from said second pivot, said second named arm having a roller connected to its lower end to travel on the base, a support connected to the last mentioned pivot, a perforated upright secured to one end of the base, a screw threaded through the perforation of said upright, a handle pivotally connected to the screw, a member connected to the lower end of the second named arm and extending towards and adapted to engage the free end of the screw whereby upon rotation of the screw by the handle the member will move the roller over the bar to thereby elevate the arms and the support.

1,821,628. REMINDER CLOCK. CHESTER R. GAINS, Muscatine, Iowa. Filed Apr. 25, 1929. Serial No. 358,087. 8 Claims. (Cl. 58—16.)



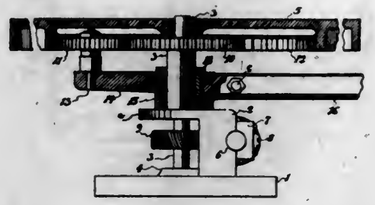
1. In a clock, hand-carrying shafts and a gear train for driving them, an alarm mechanism having a control finger, an additional shaft parallel with the hand shafts, driving means for said additional shaft actuated by said train, a sleeve rotatably mounted upon an end portion of said shaft and having a frictional driving connection therewith, a control disk secured to said sleeve and co-operable with said control finger in controlling the alarm mechanism, a knob secured to the outer end of said sleeve for rotating the latter to set said control disk, and a setting dial secured to said sleeve, said setting dial having numbers for use when setting said control disk.

1,821,629. TIME CONTROLLED SWITCH. CHESTER R. GAINS, Muscatine, Iowa. Filed Apr. 29, 1929. Serial No. 358,963. 6 Claims. (Cl. 200—38.)



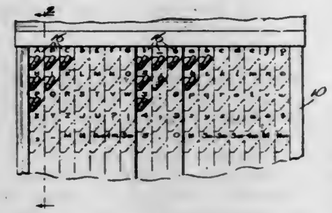
1. A time-controlled circuit controller comprising a snap switch, a manually set member having a lost-motion connection with said switch for imparting pre-snap movement to said switch when said member is moved from its set position, a spring operatively connected with and tensioned by movement of said member to set position, releasable means for holding said manually set member and the tensioned spring against all movement following winding of the latter by means of the former, time-controlled means independent of said spring for releasing said holding means at the expiration of a given period after winding said spring, thereby allowing the spring to move said member from its set position and effect pre-snap movement of said switch, and means operatively connected with and actuated by said switch for utilizing the snap movement thereof to again apply said holding means, preventing further movement of said spring after it has effected switch operation.

1,821,630. REGULATOR FOR SOUND REPRODUCING AND SYNCHRONIZING MACHINES. CHARLES H. GARRETT and BRUNO G. HERBER, Dallas, Tex. Filed Mar. 25, 1929. Serial No. 349,539. 4 Claims. (Cl. 88—16.2.)



1. A regulating device for sound reproducing machines including a turntable having an internal gear ring, a vertically disposed shaft, a driving gear mounted upon and rotated by said shaft, an intermediate gear for transmitting motion from said driving gear to said turntable, a bushing carried by said vertical shaft, a ring having an integral arm tensionally mounted on said bushing and affording a bearing for said intermediate gear and means associated with said arm to relieve the tension of said ring whereby to rotate the latter to move said intermediate gear circumferencially relative to its points of engagement with said driving gear and gear ring.

1,821,631. TYPE STORING AND DELIVERING APPARATUS. JOSEPH W. GEARHART, Chicago, Ill. Filed Oct. 28, 1929. Serial No. 403,016. 9 Claims. (Cl. 276—45.)

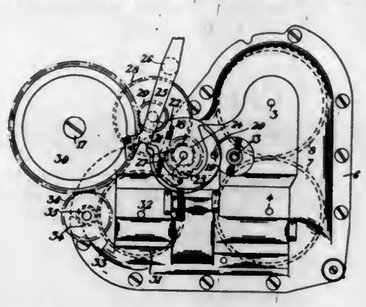


1. In means for storing a font of type, the combination of a narrow elongated tray for each character in the font, means for mounting the trays in inclined closely adjacent positions, means at the discharge end of each tray providing an upwardly curved floor, whereby the type in the tray are progressively displaced from aligned relation and the lowermost type body is projected into a position where substantial areas of its two sides at one end are exposed, and top and end stops at the lower end of the tray for confining the type against removal except by a straight pull longitudinally of the type body.

1,821,632. TALKING MACHINE. JOHN ISAAC GEORGE, Hayes, and EDWARD CHIFFEY, South Harrow, England, assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed May 31, 1929, Serial No. 367,466, and in Great Britain July 11, 1928. 7 Claims. (Cl. 185—39.)

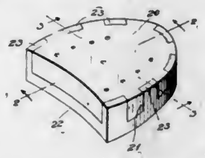
1. In a talking machine of the type embodying a turntable and automatic mechanism for performing operations additional to driving said turntable, the combination of a

motor drivingly connected with said turntable, means for drivingly connecting said motor with said mechanism, and



an auxiliary motor drivingly connected with said mechanism and adding its drive to that of said first named motor when said mechanism is in operation.

1,821,633. COMPOSITE SHOE HEEL. BENJAMIN GILOWITZ, New York, N. Y. Original application filed Aug. 29, 1929, Serial No. 389,236. Divided and this application filed Jan. 31, 1930. Serial No. 424,934. 3 Claims. (Cl. 36—35.)

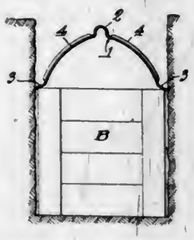


1. A composite shoe heel comprising a heel body having a plurality of vertical grooves in its edge extending upwardly from its lower side, a yieldable tread member secured against the lower side of said body, and vertical tongues integral with said tread member and secured in said grooves.

1,821,634. SEPARATION OF METALS. GERALD U. GREENE, Salt Lake City, Utah, assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 8, 1929. Serial No. 384,474. 7 Claims. (Cl. 75—15.)

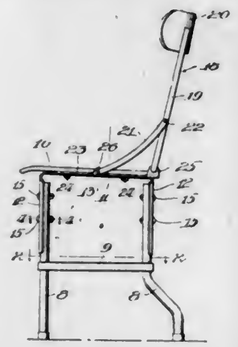
1. Process of treating lead bearing materials for the elimination of bismuth which comprises mixing said material with a small percentage of a chlorine compound and roasting the mixture at a temperature at which the bismuth is volatilized as a chloride without appreciable loss of lead.

1,821,635. GRAVE BOX COVER. JOSEPH P. HARNER, Nevada, Mo., assignor to William F. Norman, Nevada, Mo. Filed Feb. 13, 1929. Serial No. 339,680. 1 Claim. (Cl. 27—30.)



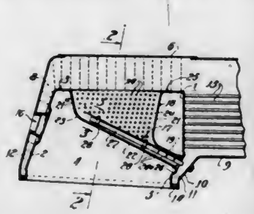
A grave box cover including separate members having superposed end portions forming a lap joint, each of said members including a single plate of metal arched transversely and including longitudinal earth-engaging supporting flanges at the sides of the plate, a transversely arched rib pressed from the plate and extending along the longitudinal center of the plate, and stiffening ribs pressed from the table between the longitudinal rib and the flanges, providing grooves, those portions of the longitudinal rib and stiffening ribs at one end of one plate being nested snugly within the corresponding ribs on the lapping portion of the other plate.

1,821,636. CHAIR CONSTRUCTION. EVAN C. HARTER, Sturgis, Mich. Filed Aug. 22, 1929. Serial No. 387,618. 1 Claim. (Cl. 155—194.)



A chair comprising legs and a seat, a U-shaped member at each side of said seat and including a cross-bar associated with said seat and arms depending from said cross-bar and secured to said legs, a platelike member at each side of said seat disposed between said seat and said members, means securing said seat, U-shaped members and platelike members together, and a chair-back portion connected with said platelike members.

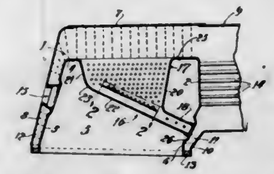
1,821,637. LOCOMOTIVE BOILER. CHARLES G. HAWLEY, Chicago, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed July 13, 1929. Serial No. 378,150. 7 Claims. (Cl. 122—68.)



1. In combination with a locomotive boiler firebox, a thermic siphon disposed in said firebox and having a high velocity inlet end and lower velocity outlet end opening through two different sheets of the firebox there being a pocket in said siphon between said ends, and means in said siphon providing a conduit having inlet end associated with the inlet of the siphon and having an outlet end for directing high velocity water against said pocket in said siphon.

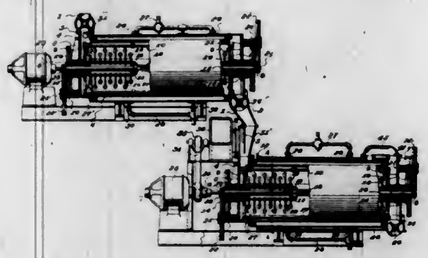
1,821,638. LOCOMOTIVE BOILER. CHARLES G. HAWLEY, Chicago, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed July 13, 1929. Serial No. 378,151. 5 Claims. (Cl. 122—68.)

1. In combination with a locomotive boiler firebox, a thermic siphon disposed in said firebox and having a high velocity inlet end and a lower velocity outlet end opening through two different sheets of the firebox there being a pocket in said siphon between said ends, and a



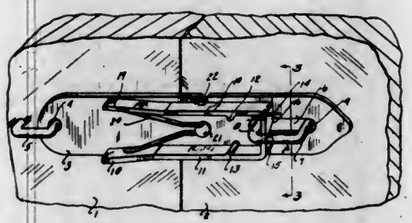
member in said siphon and coacting with a part of the same to direct a portion of the high velocity water entering the inlet end toward said pocket.

1,821,639. RENDERING PROCESS. STANLEY HILLER, Oakland, Calif. Filed May 26, 1923. Serial No. 32,952. 4 Claims. (Cl. 87—13.)



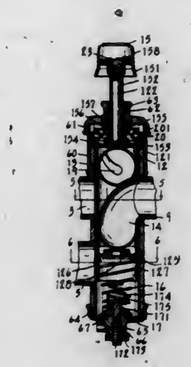
1. In a continuous process of rendering fat containing solid materials in two stages, the step of continuously mechanically dividing and simultaneously digesting the same with steam pressures substantially above atmospheric pressures to melt fats and oils from the solid materials in the first stage, and continuously dehydrating the digested materials by applied heat at atmospheric pressures in the second stage until the solids contained therein have a moisture content below 20%, said steam pressures being developed from moisture, naturally contained in the materials.

1,821,640. SNAPPER HASP. MEDLEY S. HOLMAN, Baker, Oreg. Filed Mar. 17, 1930. Serial No. 436,603. 4 Claims. (Cl. 292—285.)



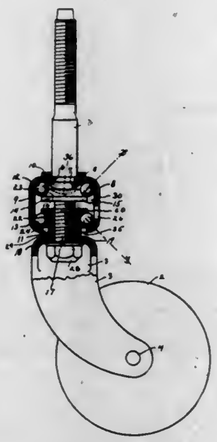
1. In a device of the class described the combination with a pair of staples, of a body element hingedly secured to one of the staples, a slot disposed within the oppositely disposed end of the body element and adapted to having the other of the staples passed thereinto, a pair of locking jaws hingedly secured to the body element, means disposed between the locking jaws for normally maintaining the wing portion of the same spaced apart and stops upwardly extending from the base that are disposed in the line of travel of the locking jaws and are adapted to limit the outward movement of the body elements.

1,821,641. PISTON VALVE STRUCTURE FOR WIND INSTRUMENTS. ALFRED J. JOHNSON, Grand Rapids, Mich., assignor to York Band Instrument Company, Grand Rapids, Mich. Filed Aug. 26, 1929. Serial No. 388,563. 28 Claims. (Cl. 84—388.)



7. In a piston valve structure, the combination of a cylinder with suitable connections for direct air delivery and with a diversion loop tube connected thereto, a spirally rotatable piston valve with suitable air passages and ports cooperating with the said cylinder, a spiral guide slot in the upper wall of the said cylinder, a guide runner on a suitable pivot carried by said piston and having laterally projecting arms to swing into contact with the opposite sides of said guide slot, a cross arm for said guide runner pivot with end loop, a threaded post for engaging said cross arm, a tension spring on the said post reacting on said cross arm, and an adjusting nut on the said post for adjusting the tension thereon.

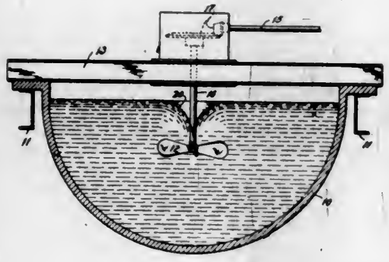
1,821,642. CASTER. WILFRED G. JOHNSON, Elyria, Ohio, assignor to The Colson Company, Elyria, Ohio, a Corporation of Ohio. Filed Sept. 16, 1929. Serial No. 393,077. 6 Claims. (Cl. 16—21.)



1. In a caster, a tubular housing terminated at its ends in inturned annular flanges, providing a pair of longitudinally spaced race ways at the inner surfaces of the adjoining inner lateral and inner end flange walls, a caster

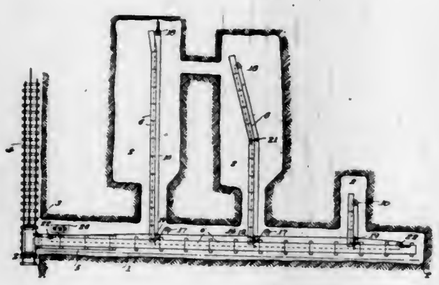
wheel yoke element, a threaded stud projecting outwardly from the intermediate portion of said yoke element, a bearing race cone screw threaded onto said stud and having a radial flange disposed within the tubular casing and a tubular flange extending through an end of the casing, a set of bearing balls disposed in contact with one of said racing faces and cooperating ball race surfaces formed by adjoining portions of said cone radial flange and tubular flange, a second set of bearing balls for the other casing race and a cooperating bearing element having ball bearing race surfaces for the latter set of balls supported by said threaded stud.

1,821,643. REMOVAL OF TIN FROM ANTIMONIAL LEAD AND ALLOY. THOMAS DELBERT JONES, Perth Amboy, N. J., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 31, 1929. Serial No. 389,088. 8 Claims. (Cl. 75—15.)



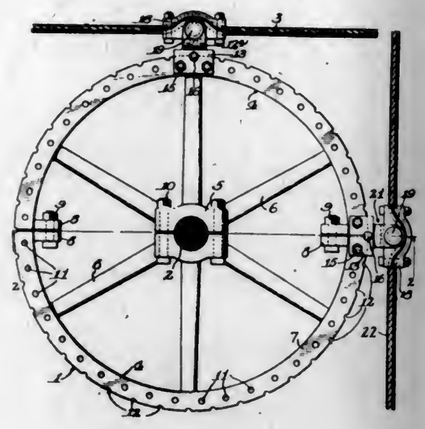
1. The process of removing tin from metals containing tin as an impurity which comprises heating the mixture substantially above the fusion point thereof and stirring air into the bath whereby the tin is oxidized and forms a dross which floats on the surface, removing the dross and recovering tin therefrom, and continuing the operation until the tin content is reduced to the desired point.

1,821,644. FLEXIBLE CONVEYER. GWILYM D. JONES, Oak Creek, Colo., assignor of one-half to Benjamin W. Snodgrass, Denver, Colo. Filed Jan. 20, 1928. Serial No. 248,195. 16 Claims. (Cl. 198—220.)



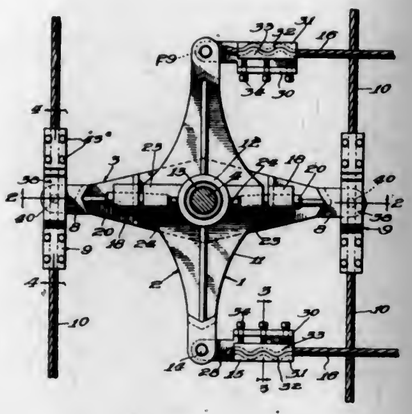
1. A conveyor mechanism comprising an elongated means for carrying and conveying material, said means comprising a series of flights, means for supporting said carrying means and movable over the surface of the ground, and flexible means extending along said conveyer and flights and connected at intervals to each of said flights for longitudinally moving said conveying means and said supporting means.

1,821,645. POWER TRANSFERRING DEVICE. GWILYM DAVID JONES, Oak Creek, Colo., assignor of one-half to Benjamin W. Snodgrass, Denver, Colo. Filed Mar. 25, 1929. Serial No. 349,581. 6 Claims. (Cl. 74—14.)



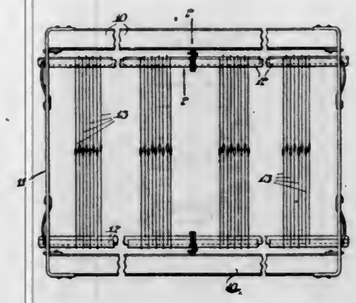
1. A device for transferring power in different directions, comprising a movable member, said member being provided with notches spaced therealong, a clamp support slidably mounted on said member, means connecting said support to said member, means through said support and engaging a notch on said member for rigidly holding said support relative to said member, and a clamp carried by said support for gripping a power transmitting element.

1,821,646. POWER TRANSMITTING DEVICE. GWILYM DAVID JONES, Oak Creek, Colo., assignor of one-half to Benjamin W. Snodgrass, Denver, Colo. Filed July 28, 1930. Serial No. 471,400. 3 Claim. (Cl. 74—14.)



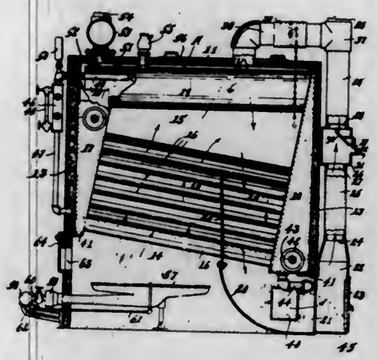
1. A power transmitting device, comprising movable members fulcrumed adjacent on a shaft and having power transmitting elements secured thereto, and means for connecting said members together in different angular relations for simultaneous movement of said elements in various directions.

1,821,647. HEDDLE FRAME. JOHN JACOB KAUFMANN, Elkins Park, Pa., assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1930. Serial No. 430,474. 8 Claims. (Cl. 139—92.)



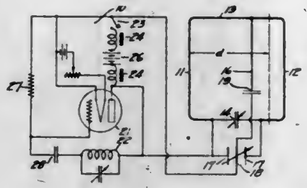
1. In a heddle frame, means for supporting the heddle bars intermediate their ends comprising a bolt member adjustably mounted in the heddle frame rail, said bolt member having a flattened head portion, plates secured on each side of the flattened head portion of the bolt, said plates having recesses in which the heddle bars are adapted to be seated, and a slidable locking member mounted upon the bolt member having leg portions straddling the flattened head portion thereof and guided between the plate members, the leg portions of said slidable locking member having lips extending over the outside of the heddle bars when said member is in the locking position.

1,821,648. SECTIONAL HEATING BOILER. JAMES T. KETCHUM, Chicago, Ill. Filed Dec. 3, 1927. Serial No. 237,443. 2 Claims. (Cl. 122—291.)



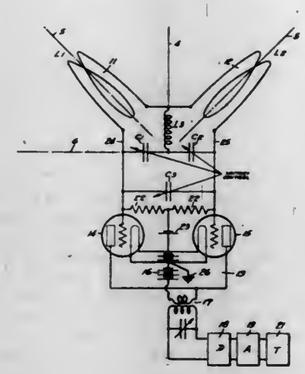
1. A boiler comprising a plurality of portable tubular sections joined to form a single expansible boiler, a common combustion chamber and an individual fuel burner for each of said tubular sections, a pair of head sections joining the ends of each of the tubular sections, a steam dome connecting and communicating with both of said head sections, said steam dome having an integral portion projecting partly into one of the head sections thereby compelling the passage of steam to one side thereof, said integral portion being formed by the cutting off of a front lower portion of said steam dome and serving as a baffle for steam in said dome.

1,821,649. ANTENNA SYSTEM AND METHOD. FREDERICK A. KOLSTER and GEOFFREY GOTTLIEB KRUESI, Palo Alto, Calif., assignors to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Feb. 21, 1928. Serial No. 255,888. 10 Claims. (Cl. 250—11.)



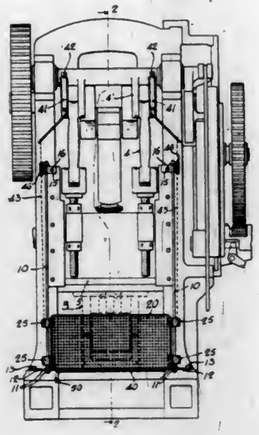
3. The method of securing unidirectional effects from a radio antenna employing a plurality of spaced conductors for effecting an interchange of energy with an absorbing medium, comprising effecting energization of one conductor with oscillatory current of a definite wave length, and producing the effect of an imaginary conductor supplied with oscillatory current of the same wave length but out of phase with the current of the first conductor by an angle substantially equal to $\pi \pm \frac{2\pi d}{\lambda}$ where d is the distance between the real and imaginary conductors and λ is the wave length of the oscillatory current, said last mentioned effect being produced by supplying oscillatory currents of different phases to said aditional real conductors.

1,821,650. RADIO SYSTEM. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed June 20, 1928. Serial No. 288,462. 1 Claim. (Cl. 250—11.)



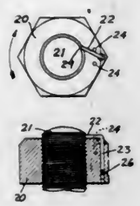
A radio system comprising conjugate loop antennæ having their planes in angular relation, a coil having an inductance equal to the inductance of each loop, said coil having one terminal connected to a terminal of each of said loops, a pair of series connected condensers connected between the other loop terminals, a condenser connected in shunt to said series connected condensers, said condensers all having equal capacitance values, the other terminal of said coil being connected to the connection between said series connected condensers, and a symmetrical signaling circuit coupled to both said loops.

1,821,651. TOGGLE PRESS GUARD. FREDERICK H. KUNKEL, Milwaukee, Wis., assignor to Geuder, Paeschke & Frey Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 3, 1929. Serial No. 360,071. 7 Claims. (Cl. 74—105.)



7. A safety device for use on punch presses and comprising a traveling gate disposed in front of the press, means for constraining the gate to vertical sliding movement, means providing movement of the gate downwardly in advance of the operation of the press, and releasable means for supporting the gate in elevated position.

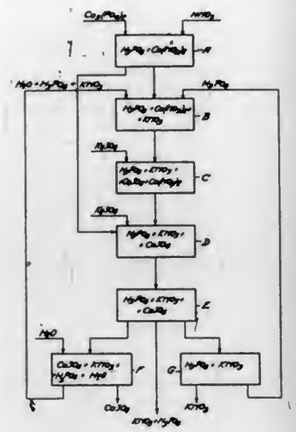
1,821,652. NUT LOCK. JAMES B. LADD, Ardmore, Pa.; Merrill A. Kercher executor of said James B. Ladd, deceased. Filed Dec. 19, 1929. Serial No. 415,211. 3 Claims. (Cl. 151—25.)



1. A device for locking a nut to a bolt or the like comprising a pawl, to one end of which is rigidly attached or integrally formed a pin at a right angle therewith, said pin being free to rotate in a seat formed in the nut with its axis substantially parallel with the axis of the nut, the pawl extending from said pin into the bore of the nut and free to move through a small angle to either side of the radial position, and means coacting with the pawl to limit said free angular movement, said limiting means causing the free end of the pawl to forcibly engage the thread on the bolt when the pawl is moved by rotation of the nut beyond either limit of its free angular motion.

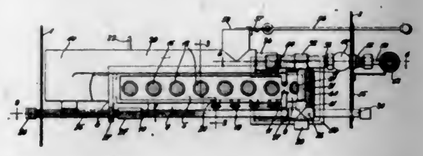
1,821,653. METHOD OF LEACHING PHOSPHATE ROCK. MARKUS LARSSON, Berlin, Germany, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Filed Feb. 20, 1930. Serial No. 430,111, and in Sweden Mar. 7, 1929. 6 Claims. (Cl. 23—165.)

1. Method of treating phosphate rock, which comprises dissolving the phosphate rock in nitric acid, adding phosphoric acid solution to the reaction products, precipitating the lime dissolved as calcium sulphate by means of potassium sulphate, separating the insoluble matters from the solution of phosphoric acid and potassium nitrate



produced, removing potassium nitrate from said solution, and using a part of the remaining phosphoric acid solution as addition to the reaction products of phosphate rock and nitric acid in continuing the process.

1,821,654. OIL BURNER. CHARLES M. LOEPFE, St. Louis, Mo., assignor to Cottonwood Fiber Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 21, 1928. Serial No. 271,690. 9 Claims. (Cl. 158—61.)

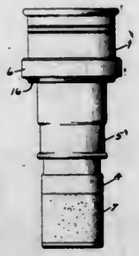


1. In a gas burner, an enclosure having a top wall and inclined side walls, an upwardly extending flange around said top wall having notches therein extending to the surface of said top wall, perforated gas outlet discs secured in one of said inclined side walls below said notches, perforated discs secured in said top wall, a pipe extending adjacent to the perforated discs in said side wall, connections for conducting gas from said pipe into said enclosure, and a valve in said connections controlling the passage of gas from said pipe to said connections.

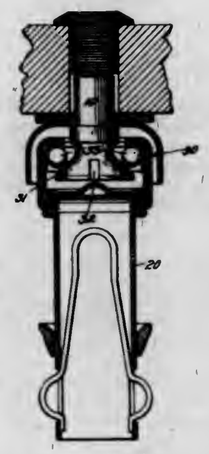
1,821,655. TUNING DEVICE FOR WIND MUSICAL INSTRUMENTS. ALLEN LOOMIS, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed May 17, 1930. Serial No. 453,345. 4 Claims. (Cl. 84—386.)

1. A combined tuning device and joint of the character described comprising a tubular mouthpiece holder, a ring-like guide member provided with a flange which is rigidly mounted on said holder, a tubular slide member rigidly mounted in said guide member, a tubular member slidably encompassing said slide member and slidably connected with said guide member, a complementary spiral connection between said adjusting nut and the tubular slidable member, and a complementary flange and groove connection between

said adjusting nut and the mouthpiece holder to prevent longitudinal movement of said nut when the latter is rotated, said connection including a ring-like thrust member which is connected with the exterior of said mouthpiece holder.



1,821,656. BOBBIN HOLDER FOR CREELS OF SPINNING FRAMES AND THE LIKE. JOHN V. MANN, Elmira, N. Y., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Filed May 20, 1930. Serial No. 453,900. 7 Claims. (Cl. 242—130.)

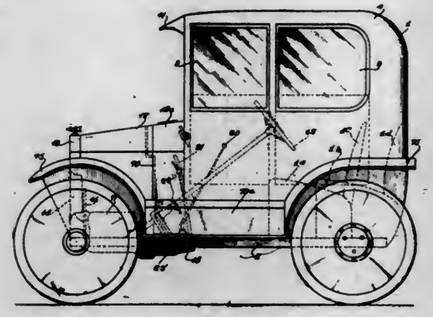


1. A bobbin support, comprising fixed and movable parts connected by a ball bearing, and drag means slightly increasing the normal frictional resistance of the ball bearing to prevent overrunning of a bobbin carried by the support when the draft on the roving is stopped.

1,821,657. AUTOMOBILE STRUCTURE. JAMES V. MARTIN, Garden City, N. Y. Filed Oct. 29, 1925. Serial No. 65,596. 33 Claims. (Cl. 180—1.)

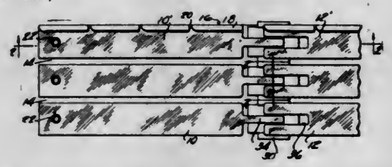
1. An auto vehicle having a drive wheel and a body having each of its side walls inset to form a drive wheel housing, a floor and a seat in said body reinforcing said walls adjacent said housings, a vertical guide bracket attached to a portion of said housing and braced thereby, a drive wheel mounted upon the said guide bracket for yieldable vertical movement relative to the said housing, while being retained in its plane of rotation by the said bracket, and a drive shaft leading from a universal joint attachment on the said wheel to another universal joint moving with the said housing.

9. In combination with a vehicle body, and a vehicle drive wheel having a brake drum attached thereto, a shaft drive for the said wheel from a universal joint located adjacent the vehicle rear center to another universal joint



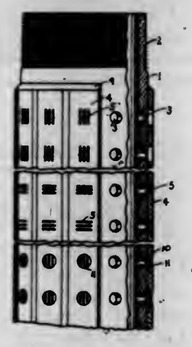
attached to the said wheel, shock-absorber parts positioned intermediate the said joints so that they have relative vertical motion, and means including a radius rod and a brake band to cause a braking effect upon the said drum without cramping said shock-absorber parts.

1,821,658. FURNACE HEARTH. GEORGE C. MCCORMICK, Needham, Mass., assignor to General Alloys Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 30, 1930. Serial No. 448,468. 7 Claims. (Cl. 263—10.)



1. In a furnace hearth, a number of spaced apart horizontally arranged plates set parallel to one another and forming the main floor portion thereof, means for forming a wall at each side of the same, an additional hearth portion also composed of a plurality of spaced apart parallel flanged plates, and side enclosure walls for the last named portion of the hearth, the two sets of said plates being connected by expansion joints.

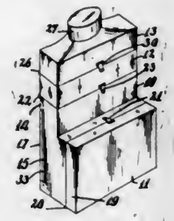
1,821,659. WELL STRAINER. JOSEPH HENRY MCEVOY, Jr., Houston, Tex. Filed Aug. 1, 1930. Serial No. 472,463. 5 Claims. (Cl. 166—5.)



1. A well strainer comprising a pipe having perforations therein, plates fitting longitudinally of said pipe and covering said perforations, said plates being grooved longi-

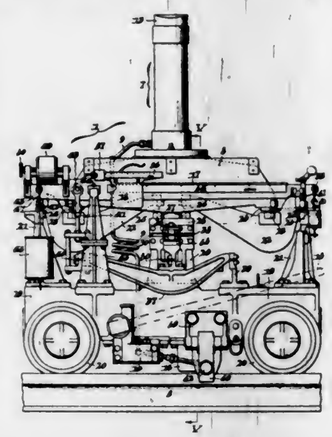
tudinally on their under sides, and having spaced groups of slotted openings therethrough adapted to allow the passage of fluid to said perforations.

1,821,660. COMBINATION CIGARETTE AND VANITY CASE. LOUIS MEYERSON, Brooklyn, N. Y. Filed Apr. 11, 1930. Serial No. 443,306. 7 Claims. (Cl. 132—83.)



1. In a device of the class described, a large case section formed with a recessed portion, two substantially rectangular small case sections connected therewith, an oblong section hinged on the lower end of a side of said large case section, a mirror within said recessed portion hingedly mounted, means for normally moving the mirror outwards, a slide for covering said mirror and for moving to a position in which said mirror is viewable upon assuming a normally extended position, and means for allowing a slight further extension of the slide so that the mirror is free to move outwards.

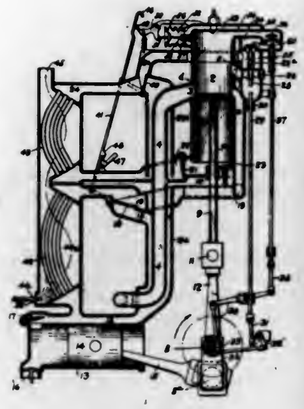
1,821,661. LOCOMOTIVE SCALE. ROBERT N. MILLER, Altoona, Pa. Filed Dec. 28, 1928. Serial No. 328,993. 7 Claims. (Cl. 265—72.)



2. A scale unit for weighing railway vehicles comprising a carriage, weighing mechanism on said carriage including a load platen, and a jack on said load platen, said jack comprising a cylinder and a plunger guided therein having its upper end adapted to contact with a wheel of the vehicle to be weighed and to raise the same from its running rail.

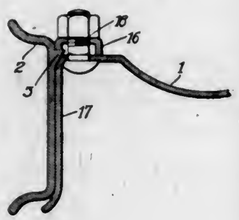
1,821,662. INTERNAL COMBUSTION ENGINE. CHARLES A. MULLER, Brooklyn, N. Y. Filed Jan. 12, 1925. Serial No. 1,822. 18 Claims. (Cl. 123—32.)

1. The method of operating an internal combustion engine, which comprises the steps of compressing a quantity of air; preheating a portion of the compressed air; successively mixing quantities of the preheated air with quantities of the compressed air not preheated, to provide successive charges of compressed air having temperatures varied inversely in response to temperature variations of the walls of the power cylinder; delivering said charges



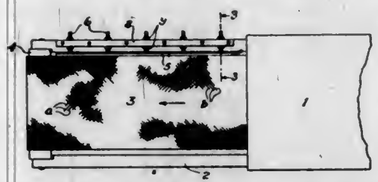
free from fuel successively into the combustion chamber of the cylinder; compressing said charges in the cylinder, thereby producing heat for igniting the fuel charge conjointly with the heat of the cylinder wall; and thereupon delivering a charge of fuel into the cylinder while under an igniting temperature.

1,821,663. PRODUCTION OF VEHICLE WHEELS. THOMAS E. MURRAY, Jr., Brooklyn, and HERBERT H. WILLIAMS, New York, N. Y., said Williams assignor to said Murray, jr. Filed Sept. 17, 1924. Serial No. 738,292. 1 Claim. (Cl. 301—19.)



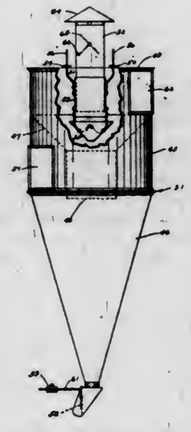
A wheel having a rim with an inward projection having a face transverse to the axis, an inner part welded to said transverse face of the projection, the parts being fused together along a meeting plane transverse to the axis, and a third part bearing in a direction parallel to the axis against said projection and said inner part and held in place by a bolt engaging said third part.

1,821,664. CONVEYER GUIDE. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Aug. 29, 1925. Serial No. 53,417. 2 Claims. (Cl. 74—51.)



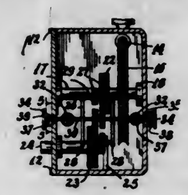
1. The combination with an endless conveyer belt having a tendency to creep laterally with respect to its line of travel, of a flexible bar disposed adjacent to an edge of said belt for opposing such tendency, and a series of independent means for flexing various portions of said bar toward and away from said conveyer belt.

1,821,665. DUST COLLECTOR MECHANISM. WILLIAM B. PROUTY, Evanston, Ill. Filed Dec. 7, 1925. Serial No. 73,582. 10 Claims. (Cl. 183—89.)



1. In combination, a collector comprising an upper section, a lower cone-shaped section, an extensible breather pipe extending down into said upper section, an inlet and an outlet fitting tangentially secured to said upper section, said fittings being arranged to cause the air to revolve about said breather pipe, a valve in said pipe, and means for varying the length of said pipe.

1,821,666. VARIABLE FEED FOR STOKERS. SOLOMON RAPOPORT, Brooklyn, N. Y. Filed Jan. 7, 1931. Serial No. 507,195. 8 Claims. (Cl. 74—58.)

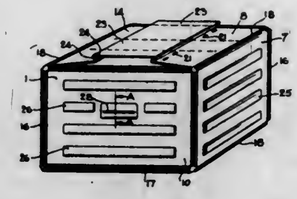


1. A variable feed for stokers, comprising a casing, a worm reduction within said casing, a gear on the shaft of the worm wheel of said reduction, a second gear in a plane adjacent the plane of said first gear and on a driven shaft for connection with the feed screw of a stoker, a frame supporting a plurality of different sized idler reduction gears, means for resiliently urging one set of said idlers into mesh with said gears, stems projecting from said frame and extending through slots in said casing, handles on said stems, and means for holding said frame with said idlers in or out of mesh.

1,821,667. PROCESS OF CONDENSING ALCOHOLS. EBENEZER EMMET REID, Baltimore, Md., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 13, 1928. Serial No. 319,180. 24 Claims. (Cl. 260—156.)

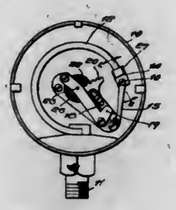
1. A catalytic process for the direct condensation of alcohols to form alcohols of higher molecular weight, which comprises heating alcohol having more than two carbon atoms in the presence of an alkali forming metal salt of a fatty acid.

1,821,668. FOLDING METAL BOX. OSCAR A. ROSS, New York, N. Y. Filed Oct. 26, 1927. Serial No. 228,861. 12 Claims. (Cl. 220—6.)



1. A developed metal sheet for knock down metal boxes, the sheet having uniformly spaced parallel edges, comprising, a plurality of rigid side and end wall panels formed alternately longitudinally of the center portion of the sheet, the panels being integrally joined by corrugated flexible portions formed transversely of the center portion of the sheet, rigid cover panels formed co-extensively of each edge portion of the sheet positioned transversely oppositely each side and end wall panel, the inner longitudinal edge of each cover panel being integrally joined to each longitudinal edge of the side and end wall panels by a corrugated flexible portion formed longitudinally of the sheet, the parallel edges of the sheet solely forming the outer longitudinal edges of the cover panels.

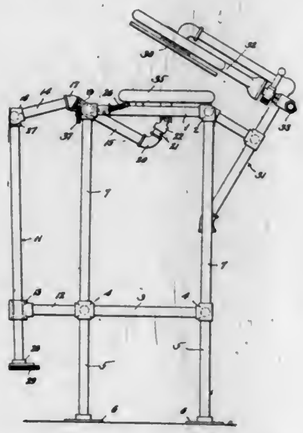
1,821,669. GAUGE CONSTRUCTION. WALTER J. RUDOLPH, Chicago, Ill., assignor to Jas. P. Marsh & Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 19, 1925. Serial No. 70,066. 4 Claims. (Cl. 73—109.)



2. A closure member for the free end of a Bourdon tube, said member comprising a cap having a marginal flange to surround said free end, and apertured ears integral with

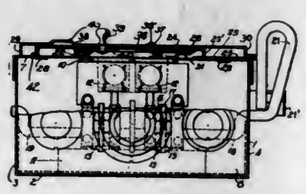
said flange and extending therefrom at opposite sides of the cap, said ears being formed as extensions of said flange and being superimposed upon each other to form a lug whereby the Bourdon tube may be connected to the indicating mechanism of a gauge.

1,821,670. IRONING MACHINE. RALPH MORRIS SARGENT, Franklin Park, Mass. Filed Aug. 4, 1928. Serial No. 297,406. 5 Claims. (Cl. 68—9.)



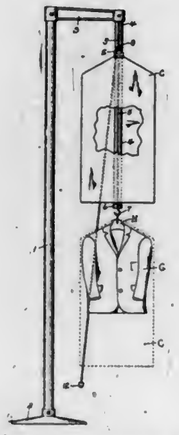
1. A machine of the character described comprising a head and a buck, means for heating said head, means supporting said head in a fixed rearwardly and downwardly inclined position above said buck, supporting levers operable to raise said buck into pressing position against said head, and joints connecting said levers with said buck and functioning to permit said buck to move relatively to said levers to fit itself to said head when brought into engagement with the latter.

1,821,671. INCLOSED FUSED SWITCH. JOSEPH SACHS, West Hartford, Conn. Filed Jan. 23, 1928. Serial No. 248,649. 5 Claims. (Cl. 200—50.)



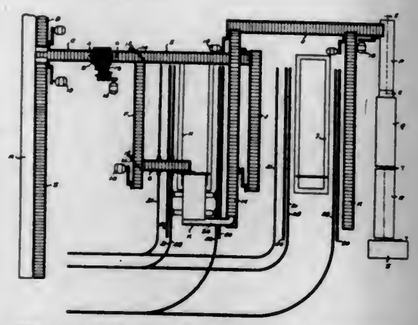
1. In an enclosed fused switch, the combination of a cabinet having an openable main cover with an opening therein, fuse contacts and a switch within the cabinet respectively accessible and inaccessible through the said opening when the cover is closed, a switch operating handle adjacent one side wall of the cabinet and movable parallelly therewith, an auxiliary cover for the main cover opening pivotally mounted for movement about a vertical axis in fixed relation to the main cover, a transversely movable unitary slide on the cover having a normal locking position in which it directly engages the cover to lock it in closed position and in which it is directly obstructed by the handle when in switch closing position and having a laterally projecting cover unlocking position in which it directly obstructs the handle against switch closing movement, means for preventing the movement of the slide from its laterally projecting position to its normal position when the auxiliary cover is open or partly open, and a single means manually operable to successively move the slide to its projecting position and open the auxiliary cover or to successively close the cover and move the slide to its normal position.

1,821,672. MEANS FOR COVERING CLEANED GARMENTS. JOSEPH C. SEIDLER, Wheeling, W. Va. Filed Aug. 2, 1929. Serial No. 382,911. 1 Claim. (Cl. 226—18.)



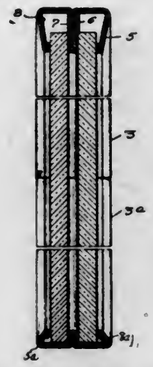
A garment-cover applying apparatus comprising a vertically depending stationarily supported tube having therein a longitudinally extending slot, a cap fixed on the lower end of said tube and closing the lower end of said slot, a hook attached to said cap for supporting a garment hanger, a member vertically shiftable within and adapted normally to occupy lowered position with respect to said tube, a cover support carried by said member, said support being projected outwardly through and movable along said slot in vertical shifting movements of said member, a pulley in the upper end of said tube, and a pull-cord trained over said pulley, one end of said cord being attached to said shiftable member and the other end being disposed exteriorly of the tube and affording means whereby said member may be elevated and lowered relative to the garment supporting hook, and moving a cover borne by said support out of and into enclosing relation to a garment suspended from said hook.

1,821,673. METHOD AND APPARATUS FOR TREATING FIBER-BEARING PLANTS. HERBERT SHAMP, Memphis, Tenn. Filed May 8, 1929. Serial No. 361,408. 20 Claims. (Cl. 92—5.)



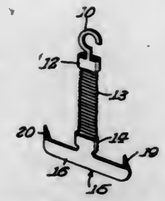
1. The herein described method of recovering a textile fiber, which consists in substantially immersing the fiber bearing substance in a retting medium, in mechanically handling such substance out of the medium, and in decorticating the fiber while still containing a substantial amount of the retting medium.

1,821,674. VENTILATOR. HARRY SHAPIRO, New York, N. Y. Filed June 14, 1929. Serial No. 371,022. 6 Claims. (Cl. 98—99.)



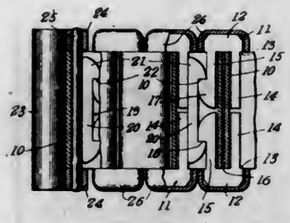
1. A ventilator comprising an upper frame and a lower frame adapted to slidably engage the adjacent ends of a sheet of glass between them, the height of said sheet of glass being less than the distance between the said frames so that the said sheet of glass can be removed from the said frame by raising it and tilting it, said frames extending over the top and bottom edges of said sheet of glass.

1,821,675. RETAINING DEVICE. IRVING SIDEMAN, Chicago, Ill. Filed May 8, 1930. Serial No. 450,744. 3 Claims. (Cl. 24—86.)



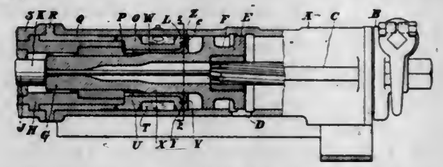
1. A retaining device including a substantially T-shaped connecting member having prongs at the ends of the branches thereof extending substantially parallel to and in spaced relation with the stem, a resilient member, means connecting one end of said resilient member to the stem of said T-shaped connecting member, a hook, and means connecting said hook to the other end of said resilient member.

1,821,676. CHAIN STRAP. HARRISON D. SIMPSON, Newark, N. J., assignor to Krementz & Company, Newark, N. J., a Corporation of New Jersey. Filed Jan. 5, 1929. Serial No. 330,462. 5 Claims. (Cl. 59—80.)



1. A chain comprising a series of flattened tubular links, forked connectors engaging said links progressively and from opposite ends, yokes coupling said connectors, and means on succeeding connectors to retain said yokes in operative position.

1,821,677. PROTECTIVE DEVICE. WILLIAM A. SMITH, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 5, 1928. Serial No. 275,343. 1 Claim. (Cl. 121—13.)



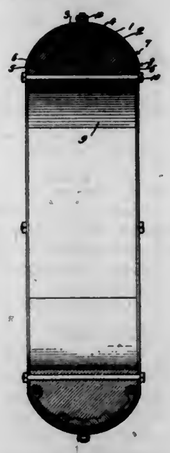
In a rock drill, the combination of a cylinder and a piston, an extension on the piston, a lubricator forming a closure for the front end of the cylinder, said lubricator having a bore comprising a reduced portion and an enlarged portion, a bushing in the reduced portion forming a guide for the extension, a flange on the bushing lying in the enlarged portion of the bore, said flange having a notch in its periphery, a hole in the lubricator registering with said notch, and a pin in the hole engaging said notch for locking the bushing in the lubricator, said pin being retained in the hole by the cylinder.

1,821,678. CONVEYER. BENJAMIN WALTER SNODGRASS, Denver, Colo. Filed July 11, 1927. Serial No. 204,964. 25 Claims. (Cl. 198—7.)



1. In a conveyer, a delivery section comprising a chute, a chain mounted to travel over said chute, conveyer flights pivotally mounted on said chain, said conveyer flights adapted to pass over said chute and to carry their load to the discharge end of the delivery section, and when returning to drop to a vertical position and pass alongside of said chute.

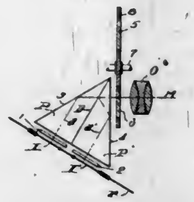
1,821,679. METHOD FOR MOLDING TIRES. IRA TRAUTMAN, Freeport, N. Y., assignor to Air Sealed Tire Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1927. Serial No. 228,555. 1 Claim. (Cl. 18—55.)



The method of making a puncture proof tubeless pneumatic tire which comprises placing a layer of unvulcanized rubber for the outer surface and tread of the tire

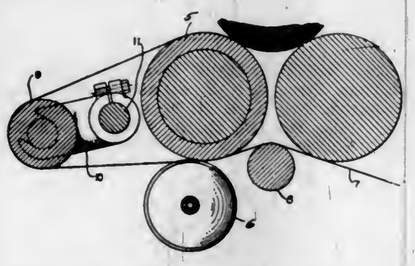
on a convex peripheral core surface, superposing a layer of tire reinforcing material thereon, covering said reinforcing material with a layer of soft rubber intended to form the inner surface of the tire, enclosing the exposed tire material by a vulcanization mould, then vulcanizing the tire, removing the mould from the tire, and reversing the cross-sectional curvature of the tire so formed as to place the inner soft rubber portion of the tire under transverse compression.

1,821,680. MULTIPLEX FILM AND PROCESS OF MAKING. LEONARD T. TROLAND, Cambridge, Mass., assignor to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Filed June 15, 1929. Serial No. 371,151. 20 Claims. (Cl. 88—16.4.)



1. The art of making cinematographic film bearing complemental images of the object-field which comprises exposing different areas through different filters in series, each of two filters functioning alternately in series with each of two other filters.

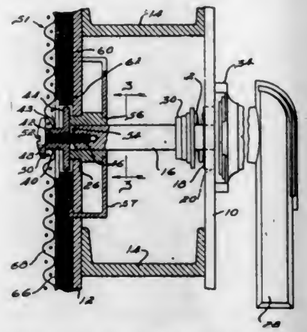
1,821,681. SLITTING MEANS. CHARLES C. VAN STRY, West Englewood, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,755. 3 Claims. (Cl. 164—65.)



1. Slitting means to sever a web of flexible material including: a backing member, a score-cut slitting member to coact therewith, and guiding means to so lead the web of flexible material away from the slitting member as to cause said web to continue in engagement with the score-cut member after said web leaves the backing member to thereby cause said score-cut member to act as a separating member as well as a slitting member.

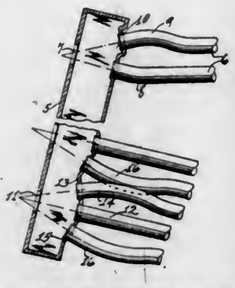
1,821,682. DOOR SPINDLE LOCK NUT. FRED J. WESTROPE, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed Jan. 7, 1931. Serial No. 507,066. 4 Claims. (Cl. 292—350.)

1. In a door of the class described having a finished panel disposed on its inner face, a latch mechanism between its faces, a latch operating spindle extending transversely through said door, a rotatable bushing journaled in the inner face of said door and receiving the end of said spindle, means for retaining the end of said spindle in said bushing comprising a screw member having a head disposed exteriorly of said finished panel and having a threaded shank extending through said finished panel and turned into the end of said spindle, a threaded sleeve



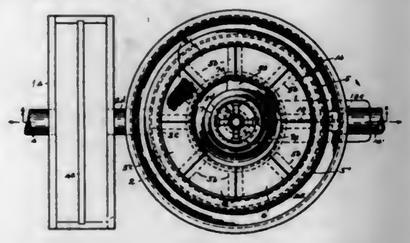
member turned onto said screw shank and interposed between the head on said shank and said bushing and serving to space the said head from injurious contact with said finish panel and also to lock said screw member to said spindle and bushing.

1,821,683. HEADER FOR WATER TUBE BOILERS. BENJAMIN B. WHITTAM, Elizabeth, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 10, 1927. Serial No. 239,059. 6 Claims. (Cl. 122—360.)



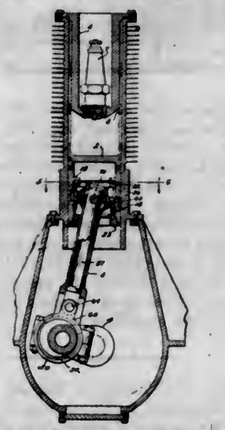
1. A header, handholes provided in one side thereof, tubes entering the opposite side of said header spaced longitudinally along said header from each other, the ends of a plurality of longitudinally spaced tubes being bent in opposite directions and pointing towards each handhole.

1,821,684. ROTARY PULP SCREEN. JOHN A. WIENER, Oswego, N. Y. Filed Jan. 6, 1931. Serial No. 506,909. 6 Claims. (Cl. 92—36.)



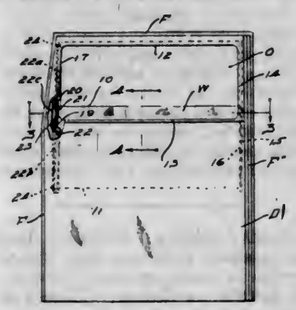
1. A rotary pulp screen, having in combination with an open top vat and an upright shaft journaled in the bottom of the vat, an inverted hollow frustum cone rotated by the shaft comprising a flared open top portion and an imperforate concave bottom portion separated by screen plates, a gravity feed-spout loosely telescoping the shaft and having a flared bottom end adapted to deflect the unscreened stock radially to wash the concave surface of the bottom and supplement the centrifugal force caused by the rotation of the cone to effect the upward movement of the coarse refuse whereby to separate said refuse from the acceptable stock that passes through said plates and to spill said refuse over the top of the cone, and means to drive said shaft.

1,821,685. RECIPROCATING APPARATUS. BUTLER AMES, Lowell, Mass. Filed Apr. 3, 1929. Serial No. 352,248. 19 Claims. (Cl. 123—45.)



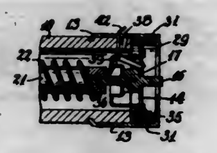
1. Apparatus of the type designated, comprising a cylinder, a piston therein, a crank, a main rod connecting the crank and piston, an extension of the piston providing ports, inlet and outlet openings in the cylinder wall, and means to impart rotary movement to the piston, whereby the ports are brought into registration with the openings, said means comprising an eccentric cylindrical element upon the crank, a secondary rod pivotally connected to said element, and a cam and actuator factor between the upper end of the rod and the rotary piston, said eccentric element being spaced outwardly from the axis of the crank shaft at a greater distance than the crank, whereby the secondary rod has a longer stroke than the main connecting rod and there is relative movement between the upper end of the secondary rod and the piston.

1,821,686. TRAPEZOIDAL SLIDING WINDOW CONSTRUCTION. CLARENCE W. AVERY, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed June 26, 1930. Serial No. 464,035. 14 Claims. (Cl. 296—48.)



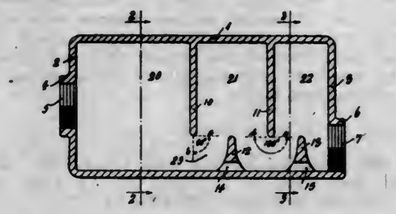
1. In an automotive vehicle door whose upper portion is provided with a trapezoidal window opening for a movable window of like configuration, a front edge of said opening and a front edge of said window being similarly inclined: means, movable relatively to both said window and said door, for so guiding and guarding said edge of said window during a lowering thereof as to maintain said edge concealed in all positions thereof.

1,821,687. WINDOW SHADE ROLLER. HERMAN J. BAUMANN, West New York, N. J. Filed Dec. 5, 1930. Serial No. 500,173. 7 Claims. (Cl. 156—36.)



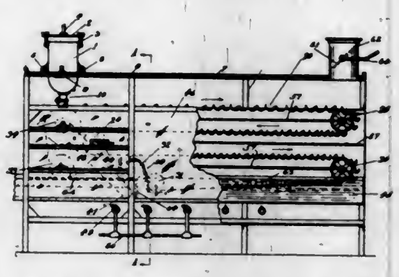
7. A shade roller, comprising a roller with a hollow end, a round peg on the solid end, a cap on the hollow end, a cup supported in the cap, pawls on said cup, a rectangular peg projecting from said cap and having a portion with longitudinal slots for receiving said pawls, a spring rod seat attached on said cup and formed with an opening through which a portion of said peg passes, a spring rod with one end engaging said seat and attached on the inner end of said rectangular peg, a spring on said rod having one end attached on said rod and the other on said seat, and means for normally holding said peg against depression and carried on said seat, comprising a bell crank pivotally mounted intermediately on said seat, a spring urging one arm of said bell crank against said seat and behind a portion of the depressible peg to restrain depression, and the other end of said bell crank extending through openings in said roller and said cap to the exterior.

1,821,688. SILENCER. ROLAND B. BOURNE, Hartford, Conn., assignor to The Maxim Silencer Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 20, 1929. Serial No. 415,576. 6 Claims. (Cl. 137—160.)



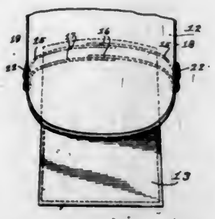
1. A muffler for silencing internal combustion engine exhaust noises, comprising an oblong casing having an inlet opening at one end and an outlet opening at the opposite end for the joint passage therethrough of the exhaust gases and cooling water, said casing having depending from its upper side relatively long depending partition walls spaced apart to form a series of acoustic side chambers, the lower side of said casing having upstanding therefrom relatively short walls serving as weirs for the flow of water thereover, and spaced apart in staggered relation to said partition walls, the upper free edges of said short walls being substantially in the same plane as the lower free edges of said long walls, whereby communicating passages are provided between said chambers the walls of which cause a deflection of the main stream of exhaust gases and water in and out of said chambers, the extent of said main stream deflection being slight as compared with the height of said chambers.

1,821,689. PROCESS AND APPARATUS FOR PREPARING FOOD PRODUCTS. WILLIAM EDWARD BROEG, Chicago, Ill., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 28, 1928, Serial No. 250,246. Renewed Apr. 15, 1930. 14 Claims. (Cl. 107—4.)



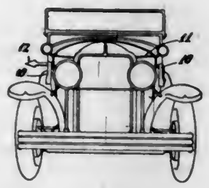
3. A method of producing food products from dough containing yeast, which method comprises passing portions of the dough for a proofing period through an enclosure over a receptacle containing hot grease whence hot vapors are continually released, and then passing them through the grease and cooking them therein.

1,821,690. SPLASH GUARD FOR AUTOMOBILE REAR FENDERS. FREDERIC A. CALKINS, Waterbury, Conn. Filed Oct. 16, 1929. Serial No. 399,972. 9 Claims. (Cl. 280—152.)



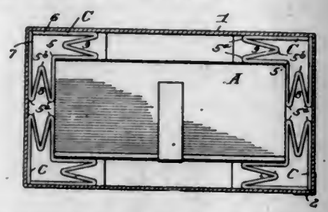
1. In a device for attaching a splash guard to the rear fender of an automobile, a pair of clamping members each having a pair of parallel portions adapted to be slidably inserted within a transverse slot in the splash guard, each of said portions having at their outer ends a resilient clip for detachably engaging one of the depending beads at the sides of the fender.

1,821,691. SIGNAL DEVICE FOR VEHICLES. MIGUEL CLAR, New York, N. Y. Filed Oct. 12, 1929. Serial No. 399,218. 3 Claims. (Cl. 116—54.)



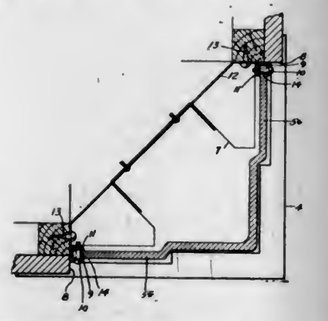
1. In a directional signal for vehicles, a casing for attachment on the side of a vehicle, a semaphore pivotally and movably mounted at one of its ends in the said casing so as to normally fall into a vertical position, a cord for pulling attached above the pivot point for pivoting and extending the semaphore into an extended horizontal indicating position, means for pulling said cord, latching means for preventing the semaphore from swinging when in the said vertical position comprising a portion of said casing in the path of motion of the free end of the semaphore, and means for lifting said semaphore for disengaging the semaphore from said latching means.

1,821,692. PACKING CASE. GEORGE A. COPELAND, Rochester, N. Y. Filed Oct. 2, 1930. Serial No. 485,859. 2 Claims. (Cl. 229—14.)



1. In a shipping box or the like, the combination with a rectangular outer container, of a shock absorbing device fitted into the corner thereof and composed of resilient sheet material having a central reentrant angular portion adapted to form a seat for a corner of the enclosed article, and a folded angular portion constituting a cushion disposed between each wall of said central angular portion and the opposite parallel wall of the container, such cushion comprising a reentrant fold in the material connected by a fold to the said wall of the central portion and by a fold to a portion of the sheet disposed against such opposite parallel wall of the container.

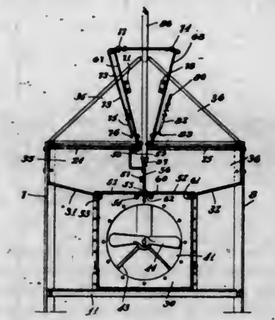
1,821,693. VERTICAL CORNER ILLUMINATING MEANS. KENNETH R. CRUMPTON, Pittsburgh, Pa., assignor to Kaufmann Department Stores, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1930. Serial No. 487,255. 8 Claims. (Cl. 240—1.)



2. Corner illumination construction for a rectangular column or the like provided with an uppermost source of light and divergently disposed panel members at each side of a vertical light cavity and communicating with said source of light, said cavity and said panel members being of a maximum and minimum parallel sided width, a transverse back wall for the cavity, vertical holding channels mounted on the edges of the back wall, along the inner edge of each panel member, springs in said channels, and a series of angle shaped translucent light emission panels mounted in said channels by their opposite edges.

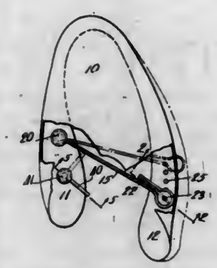
1,821,694. SPRAY TABLE. FRANK G. DENNISON, Newton, Mass., assignor to Spraco, Inc., Somerville, Mass., a Corporation of Massachusetts. Filed Dec. 27, 1929. Serial No. 416,870. 4 Claims. (Cl. 91—60.)

1. In a spray table the combination with a support for supporting the work for the spraying operation, a conduit having a plurality of openings below the support, and means at one end of the conduit for drawing air down through the support and the openings into the conduit, of



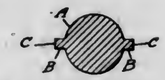
means for varying the sizes of the openings in accordance with their distances from the discharge end of the conduit to obtain a uniform flow of air down through the support over its entire surface.

1,821,695. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 436,998. 10 Claims. (Cl. 12—128.5.)



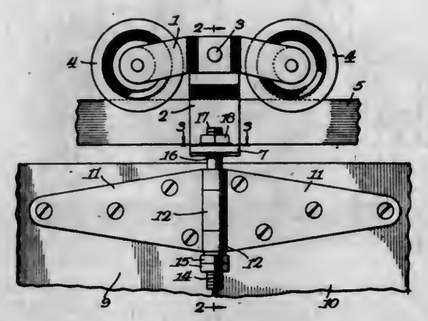
1. A shoe form comprising a hollow toe member, the walls of which terminate in flanges, and a crossbar extending between the walls thereof, one end of the crossbar being pivotally secured to one flange of the member, and the free end extending above the upper face of the other flange and bearing at all times against the wall which terminates in such flange whereby as the cross-bar is swung about its pivot in one direction the walls of the member are separated.

1,821,696. METAL ROD FOR BUILDING CONSTRUCTION, ETC. WALTER S. EDGE, Westfield, N. J. Filed Mar. 6, 1928. Serial No. 259,396. 4 Claims. (Cl. 72—111.)



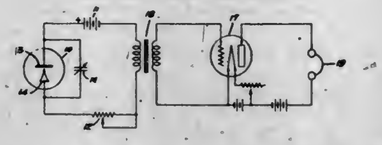
3. A rolled metal rod of the character described having a web formed integral therewith extending longitudinally thereof its entire length, the outer face of the web exposing the raw metal resulting from a sawing or shearing action and the remaining portion being covered by its outer normal covering as it leaves the rolls which form it.

1,821,697. COMBINED DOOR HANGER AND HINGE. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed May 13, 1929. Serial No. 362,597. 1 Claim. (Cl. 16—97.)



In a door hanger, the combination of a wheeled hanger body having a drop strap provided with an outturned lower end portion, a vertically disposed hinge bolt forming a pintle and screw means whereby said pintle is adjustable laterally and horizontally on said outturned lower end portion, toward and away from the plane of the hanger body, said screw means when tightened rendering the pintle rigid with the drop strap, hinge plates having pintle bearings supported on said bolt, said outturned lower end portion having a slot therein extending at right angles to said track, and said bolt having an integral shoulder bearing against the under side of said end portion and having an adjustable nut for exerting clamping pressure upon the upper side of said end portion, thereby to clamp said end portion between said shoulder and nut, said nut when loosened permitting lateral adjustment of the bolt in said slot.

1,821,698. LIGHT INDICATING SYSTEM AND METHOD. GERHARD R. FISHER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed July 13, 1927. Serial No. 205,343. 6 Claims. (Cl. 88—23.)

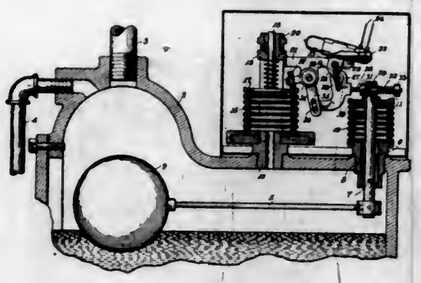


1. A method of operating a gas discharge tube having cold electrodes in order to detect variations in light intensity, the method being characterized by the use of an energizing circuit for the tube including a source of direct current, and a relatively high resistance in series with said source, said method comprising adjusting the values of the circuit so that substantially no oscillatory current flow occurs for a given light intensity falling on the tube, but so that oscillatory current flow occurs for a slightly decreased light intensity.

1,821,699. LOW WATER AND PRESSURE GOVERNOR. PHILIP H. FLECK, Ossining, N. Y., assignor of one-third to Robert M. Akin and one-third to Joseph Royle, Ossining, N. Y. Filed May 25, 1926. Serial No. 111,497. 6 Claims. (Cl. 200—84.)

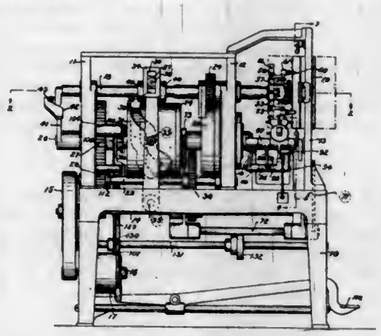
1. In a device of the character described the combination of a chamber, a lever pivoted therein, a float carried by said lever, means for admitting pressure to said cham-

ber, a pivotally mounted switch, a cam on said switch, an arm carrying a roll for rocking said cam and means, including a bellows adapted to be expanded by pressure in



said chamber, having said cam roll arm pivotally mounted thereon, said float lever being operatively connected with said bellows for oscillating the upper end thereof for causing said cam roll to rock said cam.

1,821,700. PAPER BOX MAKING MACHINERY. PAUL W. FLEISCHER, Weehawken, N. J., and MARTIN FEYBUSCH, Brooklyn, N. Y., assignors to New Jersey Machine Corporation, Hoboken, N. J., a Corporation of New Jersey. Filed Feb. 9, 1928. Serial No. 252,968. 11 Claims. (Cl. 93—54.)

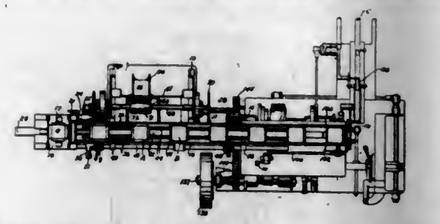


1. In a paper box making machine, a rotatable core, means to rotate said core, a roller for holding a gummed strip of paper in engagement with a box blank on said core as it is rotated, a rod upon which said roller is mounted, means for moving said rod to different longitudinal adjusted positions, and means independent of said last named means to adjust said roller about the axis of said rod.

11. In a box making machine, a core upon which a box blank is adapted to be placed, a plurality of fingers adapted for co-operation with said core, carriers on which said fingers are mounted, said carriers being movable to bring the fingers into and out of engagement with a box blank located on the core, and means for adjusting said fingers on their carriers in a direction laterally of the blank.

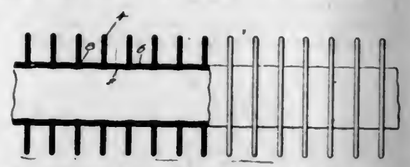
1,821,701. BOX MAKING MACHINERY. PAUL W. FLEISCHER, Wheehawken, N. J., MARTIN FEYBUSCH and FRANZ J. HAMMER, New York, and BERNARD D. DANS, Brooklyn, N. Y., assignors to New Jersey Machine Corporation, Hoboken, N. J., a Corporation of New Jersey. Filed June 7, 1928. Serial No. 283,502. 9 Claims. (Cl. 93—40.)

9. In an apparatus for making covered paper boxes, a conveyer for advancing, in a flat condition, box blanks each having a top and side wings, mechanism for feeding a paper top to a flat box blank at a point of the path given to said blank by said conveyer, means for gumming such top on its way to contact with the flat blank, a setting-up mechanism for folding the side wings of the assembled



box blank and top into box form, and a presser for pressing the box blank and the top together, said presser being located between said setting-up mechanism and the point at which the box blank and the top are brought in contact, whereby the presser will act on the top and on the box blank while the latter is still in its flat condition.

1,821,702. CONDUCTOR FOR HEAT EXCHANGE APPARATUS. ERNEST B. FREEMAN, Newton, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Dec. 24, 1926. Serial No. 156,902. 4 Claims. (Cl. 257—262.)



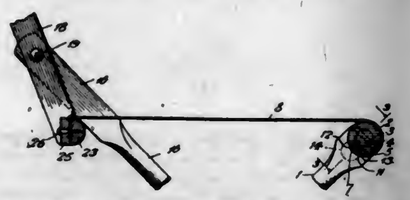
1. A conductor for heat exchange apparatus comprising a metal tube, discs secured to the tube for providing an extended surface, and a tough, continuous and adherent coating of lead on the interior and exterior of the conductor and forming a deposit of greater thickness at the junction of the tube and discs than elsewhere.

1,821,703. GUM-RESIN COMPOUND. ROY S. GOODENOW, Chicago, Ill., assignor of one-half to George L. Curtis, Clinton, Iowa. Filed Aug. 13, 1927. Serial No. 212,839. 8 Claims. (Cl. 106—23.)

2. As a product of manufacture, a potentially cementitious stock sheet, comprising only finely divided fossil gum and coagulated latex in which said gum is uniformly disseminated mechanically, in which sheet the gum contributes inherent adhesive qualities and the latex contributes elastic quality.

7. The process which consists in spraying fine powdered gum of the character described on a fresh film of uncoagulated latex.

1,821,704. FLEXIBLE SEAT FOLDING CHAIR. WALLACE G. GROSSMAN, White Plains, N. Y. Filed Jan. 22, 1929. Serial No. 334,170. 2 Claims. (Cl. 155—147.)

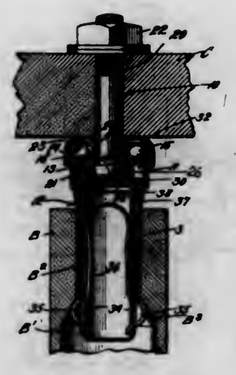


2. In a flexible seat folding chair, the combination of a pair of leg members having upper ends at the front of the chair, a rigid front seat bar permanently and firmly secured to the upper ends of these leg members and having therein a groove running throughout its length along its lower side, a straight rod free in the groove and removably supported at its ends by the leg members, and a flexible seat having a closed loop which removably receives the rod and from which the seat passes upwardly around the front side of the seat bar and thence rearwardly.

1,821,705. BROMINATION PRODUCTS OF 4,4'-DIMETHYL-6,6'-DICHLORO-THIO-INDIGO AND PROCESS OF MAKING THE SAME. IVAN GUBELMANN and JOSEPH B. OESCH, South Milwaukee, and EMERIC HAVAS, Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation, a Corporation of Delaware. Filed June 25, 1927. Serial No. 201,556. 8 Claims. (Cl. 260—53.)

1. A process for preparing brominated 4.4'-dimethyl-6.6'-dichloro-thio-indigo containing substantially less than two bromine atoms to the molecule, which comprises treating 4.4'-dimethyl-6.6'-dichloro-thio-indigo in concentrated sulphuric acid solution with a brominating agent.

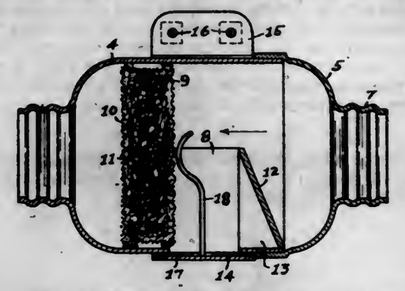
1,821,706. BOBBIN SUPPORT. LOUIS B. HASBROUCK, Elmira, N. Y., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Filed Jan. 12, 1928. Serial No. 246,129. 10 Claims. (Cl. 242—130.)



1. The combination of a bobbin containing a central bore having parts of different diameters connected by a tapering portion, and a member comprising an elongated body adapted to enter the smaller portion of the bore of the bobbin, an expanding spring grip on said body adapted to engage the tapering portion of the bore of the bobbin to urge the bobbin to move longitudinally of said member, and a frusto-conical projection on said body engaging the edge of the smaller portion of the bore in the bobbin and arresting such movement of the bobbin.

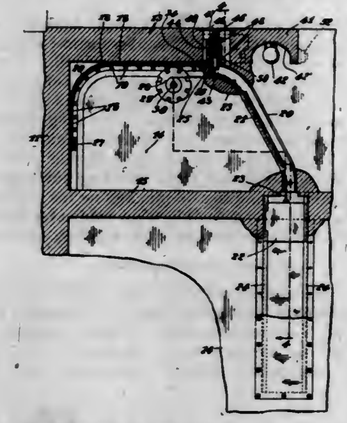
1,821,707. FILTERING APPARATUS. WILLIAM G. HASLEY, Pittsburgh, Pa., assignor of one-third to John H. Downes, Pittsburgh, Pa. Filed Sept. 27, 1929. Serial No. 395,529. 2 Claims. (Cl. 210—165.)

1. In combination, a filtering apparatus of the character described comprising a cylindrical hollow body portion having its ends formed to provide reduced necks, said body portion further provided with a circumferentially extending opening at the lower side thereof, a filtering element mounted in said body portion through said opening and disposed forwardly of the latter, a baffle plate fixed in said body portion rearwardly of said opening and providing a trap between said filtering element and said baffle plate, a removable closure member for covering



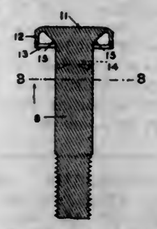
said opening, and means carried by said closure member and engaging said filtering element for maintaining the latter in position in said body portion.

1,821,708. BANK FIXTURE. FREDERIC C. HIRONS, New York, and FREDERIC W. MELLOR, White Plains, N. Y., and DANIEL R. ALVORD, Greenfield, Mass. Filed May 18, 1929. Serial No. 364,244. 11 Claims. (Cl. 20—1.01.)



1. A bank fixture of the character described, including in combination, a teller's compartment having a shelf, a working counter spaced from said shelf, a roll top closure adapted to move between said shelf and said counter to enclose the space therebetween, said counter extending rearwardly of said enclosed space, means normally operative to move said closure into closed position, a device for releasably retaining said closure in open position, and electrical means for releasing said retaining device.

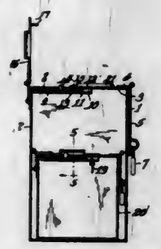
1,821,709. BOLT. LOUIS A. HOERR and FRANK H. PIETZSCH, St. Louis, Mo., assignors to Western Railway Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed July 28, 1930. Serial No. 471,115. 1 Claim. (Cl. 85—9.)



A bolt for the purpose described having a threaded cylindrical body and a head on the periphery of which is

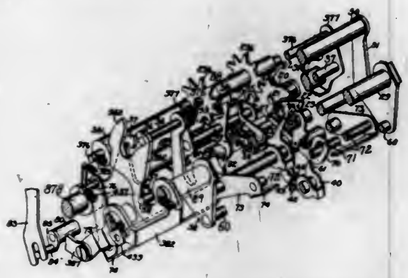
a downwardly extending flange terminating in a cutting edge, said bolt being provided adjacent its head with a non-circular part projecting beyond the body and extending below said flange, the under surface of said head being conical to provide an inclined face extending from said flange to the non-circular part and opposing the inner wall of said flange to compress the material to which the bolt is applied and thereby form a water-tight joint.

1,821,710. BALLOT BOX. THOMAS B. HOLBERT, Worthington, W. Va. Filed July 28, 1930. Serial No. 471,112. 5 Claims. (Cl. 232—2.)



1. A ballot box comprising a box body, a hinged cover for said body, means for securing said cover in closing relation to said body, said cover having therein a ballot-entering slot, means carried on the under side of said cover shiftable to and from closing relation to said slot, a pin carried by said shiftable means and projecting outwardly through the cover whereby movement of said shiftable means may be effected, a flap hinged on said cover and adapted to be moved to and from overlying covering relation both to said slot and to said pin, and means engageable with said flap and accessible only when said cover is raised whereby said flap is secured in such covering relation.

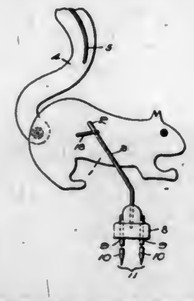
1,821,711. TRANSFER MECHANISM FOR CALCULATING MACHINES. ALLEN A. HORTON, Plymouth, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed May 11, 1927. Serial No. 190,396. 8 Claims. (Cl. 235—137.)



1. In a transfer mechanism, a transfer segment adapted to move a pinion of a multiple pinion counter to effect a transfer, a single actuating means for said segment acting in a fixed direction, a detent for said segment releasable by the counter pinion of next lower order by movement of the latter through its zero position in either direction, and means settable to cause said segment, when released, to be moved by said actuating means either forward or backward to effect a carry or a borrow.

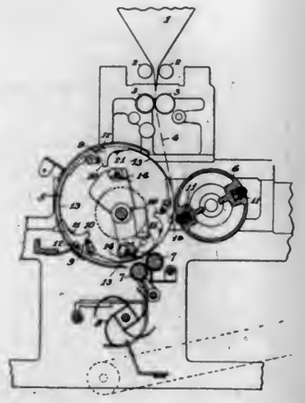
1,821,712. MECHANICAL TOY. CHARLES E. HUDSON, Leominster, Mass. Filed June 25, 1930. Serial No. 463,654. 4 Claims. (Cl. 46—40.)

1. A wind actuated lawn ornament comprising, in combination, a support in the form of a rod, a toy figure pivotally mounted upon said rod, a vane extending transversely with respect to the toy figure whereby the pressure of the wind intercepted by the vane rocks the toy figure about its



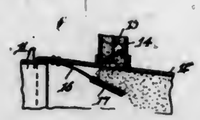
pivoted connection with the rod, and stop means extending laterally from the toy figure at opposite sides of the rod to limit the rocking movement of said toy figure in two directions.

1,821,713. PAPER HANDLING DEVICE. SAMUEL JOHANSEN, Detroit, Mich., assignor to Isabella Scott and David J. Scott, executors of the estate of Walter Scott, deceased, Plainfield, N. J., doing business as Walter Scott & Company. Filed Jan. 17, 1930. Serial No. 421,554. 15 Claims. (Cl. 270—77.)



1. The combination of a rotating cylinder, means to supply, to the surface of said cylinder, one or more layers of paper webs at a given speed, web-taking devices carried by the cylinder to advance said layer or layers of paper webs under tension by rotation of the cylinder, and means to prevent overpulling of said web layer or layers by said web-taking devices.

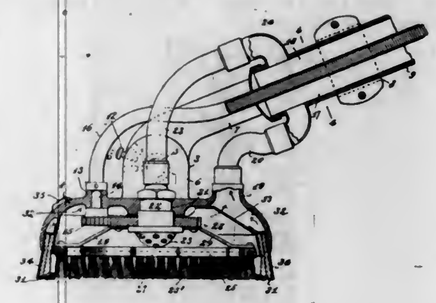
1,821,714. CONVEYER. ANNA KALTENBRUNN, St. Nazianz, Wis. Filed June 10, 1929. Serial No. 369,718. 1 Claim. (Cl. 302—36.)



In a device of the character described, a main pipe section, a tapered pipe section communicating with the main pipe section, a delivery spout disposed laterally of the tapered pipe section and communicating therewith, a

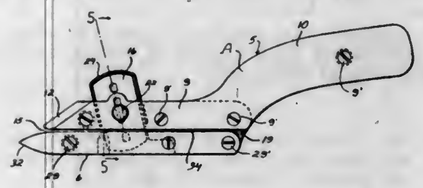
spring arm secured within the tapered pipe section, a disk-like closure at the free end of the arm and adapted to normally close one end of the delivery spout, a spiral conveyer within the delivery spout for forcing grain against the disk-like closure to force the closure to its open position, and means for directing a blast of air through the main pipe and tapered pipe section, to pick up grain and carry grain through the tapered pipe section.

1,821,715. SURFACE WASHING MACHINE. MATTHEW K. KUCHINSKY, Irvington, N. J. Filed Mar. 15, 1929. Serial No. 347,353. 7 Claims. (Cl. 15—50.)



2. A surface washing machine, including a rotary brush, a series of flexible suction tubes arranged around the brush so as to enclose the brush, and means for applying suction through said tubes to the surface engaged by said brush.

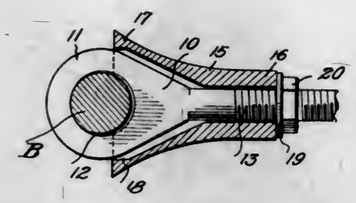
1,821,716. PAPER TRIMMER. JAMES J. KUSIV, Newark, N. J. Filed Jan. 24, 1930. Serial No. 423,148. 12 Claims. (Cl. 164—83.)



1. A paper trimmer comprising a main body portion including an elongated shank, an elongated runner disposed in parallel relation beneath the shank, a thin web connecting the rear portions of the shank and runner in slightly spaced apart relation and providing a narrow guide way, and a cutter traversing the guide way between the shank and runner forwardly of the web and having its side surfaces in alignment with the side surfaces of the web.

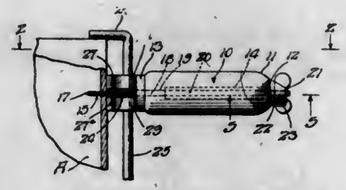
1,821,717. STORAGE BATTERY TERMINAL CONNECTION. DOUGALL C. MARTIN, Paden City, W. Va., assignor of one-half to Everett F. Schaffer, Paden City, W. Va. Filed Aug. 29, 1929. Serial No. 389,256. 1 Claim. (Cl. 173—259.)

A battery connection comprising a screw threaded shank having a socket in one end to receive and have secured thereto an electrical conductor, a head formed on the other end of the shank and having an opening to receive a battery post, said head having oppositely inclined faces between the opening and shank to provide a wedge-shaped portion, a sleeve on said shank and having one end flared and of substantially rectangular shape in cross section and having arcuate shaped cut-out portions in opposite sides thereof to receive the post, inwardly extend-



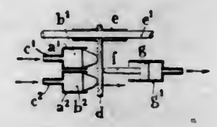
ing projections on the flared end of the sleeve to engage the wedge-shaped portion of the shank, and a fastener threaded on the shank to force the flared end of the sleeve and head of the shank against the post.

1,821,718. CUTTING IMPLEMENT. WALTER P. MELCHES, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,188. 6 Claims. (Cl. 30—3.)



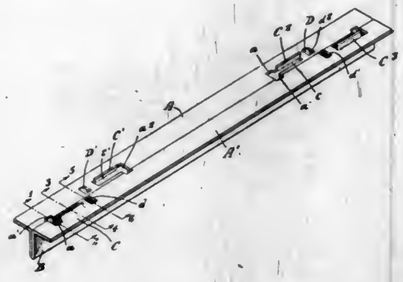
1. A carton opener comprising, a handle having an axial opening extending therethrough, a cutting member having a tang portion extending through said axial opening, guiding means having portions disposed on each side of said cutting member at one end of said handle, said cutting means having an opening therein, locating means extending through said opening, and means arranged at the outer end of said handle and said tang portion for securing said cutting means, guiding means, and locating means to said handle.

1,821,719. BRAKE CONTROLLING DEVICE. GEORGE LOUIS RENÉ JEAN MESSIER, Montrouge, France. Filed Aug. 2, 1929, Serial No. 382,868, and in France Aug. 10, 1928. 4 Claims. (Cl. 244—2.)



1. Brake controlling device, more particularly intended for braking the wheels of airplanes, comprising a compressed fluid supply, a plurality of controlling cylinders in which said fluid under pressure may be admitted, a plurality of pistons working in said cylinders and acting on a common operating member, a multiple ways valve controlling the admission of said fluid under pressure into a chosen number of said cylinders and braking means actuated by said operating member.

1,821,720. DEVICE FOR RAILROAD TIES AND FASTENERS FOR RAILS. JAMES M. MORTON, JR., Fall River, Mass. Filed Oct. 26, 1929. Serial No. 402,758. 5 Claims. (Cl. 238—67.)



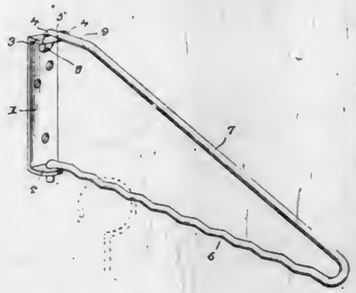
1. A metal railroad tie having on its upper surface a slot with a bent-up side integral with the tie, a fastener adapted to enter said slot and to engage said tie and the rail and hold the two together, said fastener being held in position against the rail by forcing down against it the bent-up side of said slot.

1,821,721. BLADE SHARPENER. DAVID A. MOYER, near Birdsboro, Pa. Filed Aug. 15, 1929. Serial No. 386,108. 6 Claims. (Cl. 175—265.)



2. A blade sharpening device comprising a pair of magnets yieldingly secured together.

1,821,722. GARMENT HANGER SUPPORT. BROWN NEAL, Wichita, Kans. Filed Jan. 20, 1930. Serial No. 422,131. 1 Claim. (Cl. 211—106.)



A garment hanger support comprising a vertical supporting plate having the ends bent and apertured to provide upper and lower ears, a holding member bent upon itself to provide a horizontally disposed arm and an angularly disposed arm and said arms having the ends thereof angularly disposed and positioned through said ears from the upper faces thereof, the angularly disposed end of said angularly disposed arm offset laterally to underlie the lower face of the upper ear, and an upstanding flange on the end of the upper ear and having a depression in its upper edge to receive the angularly disposed arm when in one position, the ends of said flange adapted to act as stops for the angularly disposed arm to engage when the holding member is swung laterally of the supporting plate in either direction.

1,821,723. SPRINKLER. CHARLES H. PERRY, Miami, Fla. Filed May 25, 1929. Serial No. 365,921. 5 Claims. (Cl. 299—126.)



1. A sprinkler head, including an attaching member, an open frame carried thereby, a bearing member carried by the attaching member and provided with a nozzle opening, an adjusting screw mounted in upper portion of the frame concentric with the nozzle opening, and a member rotatable between the nozzle member and the adjusting screw and provided with two bores alined with one another and said nozzle opening, one of said bores serving as a jet nozzle and the other bore leading to the lower end of said screw.

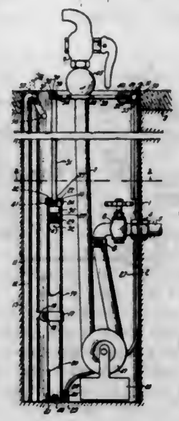
2. A sprinkler head according to claim 1 in which the rotatable member has a plurality of openings extending radially from its nozzle bore.

1,821,724. NONFREEZING WATER FOUNTAIN. CECIL H. RINEHART, Bristow, Okla. Filed May 10, 1930. Serial No. 451,237. 6 Claims. (Cl. 299—77.)



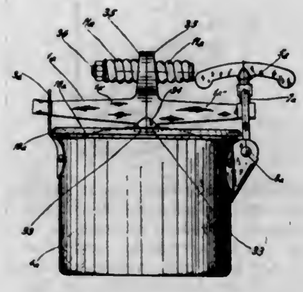
1. In apparatus of the character described, a container, an inlet pipe extending into the container, a movable support in the container, means for selectively retaining the support at different elevations in the container, and a flexible conduit having one end connected to the inlet pipe and the opposite end normally sustained by said support.

1,821,725. HOSE SUPPORT AND ELEVATOR. CECIL H. RINEHART, Bristow, Okla. Filed June 12, 1930. Serial No. 460,698. 8 Claims. (Cl. 299—77.)



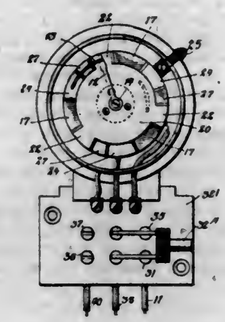
1. In apparatus of the character described, a container, an inlet pipe extending into the container, a movable support in the container, a flexible conduit having one end connected to the inlet pipe and the opposite end normally sustained by the support, and pressure actuated means for elevating the support in the container.

1,821,726. CLOSURE FOR PRESSURE VESSELS. ALBERTO SAPORTA, Milan, Italy. Filed Nov. 22, 1929, Serial No. 409,178, and in Italy Nov. 23, 1928. 8 Claims. (Cl. 220—57.)



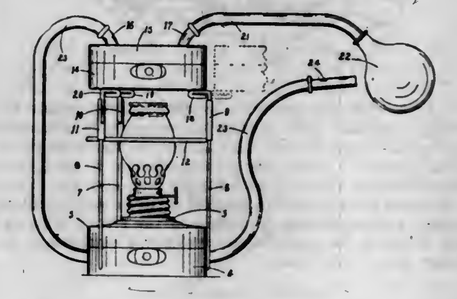
1. In a pressure cooking or like vessel including a closure member, a retaining member normally holding said closure member in closed position said retaining member comprising a plurality of relatively movable parts and spring means normally maintaining said parts from relative movement until the pressure in the vessel overcomes that of the spring means.

1,821,727. CIRCUIT CONTROLLER. ABRAHAM J. SHEKTER, Jamaica, N. Y. Filed May 10, 1929. Serial No. 362,041. 9 Claims. (Cl. 200—37.)



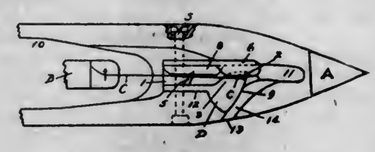
1. In a circuit controller, the combination with a time-controlled arm and contact carried thereby, of a pair of conductors, and means for successively connecting said contact with said conductors, said means including a contact ring, and a plurality of independently movable contact plates electrically insulated therefrom.

1,821,728. VAPORIZER. LUTHER WELLINGTON SHIPMAN, Almonte, Ontario, Canada. Filed Mar. 20, 1930. Serial No. 437,520. 1 Claim. (Cl. 167—3.)



A vaporizer comprising a vaporizing chamber; supporting legs carried in spaced relationship by the bottom of said chamber; a supporting base; a heating medium carried by said base; a frame, supported relative to said base in which one of said legs is swivelly supported and the remaining said legs removably and resiliently retained in said frame.

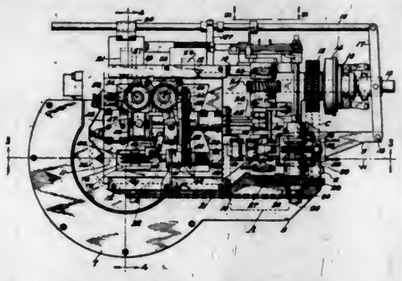
1,821,729. SLANTING HORN SHUTTLE. ISAAC SNOW, Lawrence, Mass. Filed Jan. 10, 1930. Serial No. 419,994. 7 Claims. (Cl. 139—223.)



1. The combination in a shuttle having a bobbin recess, a threading chamber in extension thereof, a shuttle block recess forming part of said threading chamber, a shuttle eye in one side and a slot connecting said eye with the

forward part of the threading chamber; of a shuttle block positioned in the shuttle block recess and formed with a longitudinal block threading chamber in extension of the shuttle threading chamber, said shuttle block having a thread directing top guide plate which at the front extends forward from the side eye and whose front edge forms one side of the shuttle eye slot, and which has another edge extending from a front, downwardly slanting sharp pointed nose back and towards the shuttle eye, there being medially a thread stopping ridge on the side of the threading chamber opposite the shuttle eye, a forwardly and downwardly extending hook positioned in the threading chamber, so as to extend from the wall nearest the eye over beyond said ridge; a horn which extends from behind and under said nose from the side of the shuttle eye down, back and over in the opposite direction beyond the nose, said horn terminating at the bottom in a downwardly projecting guard finger; together with a web which extends back from the top of said finger and merges in a pin socket; and a vertical thread directing guide pin which extends up into said socket.

1,821,730. BARB WIRE MACHINE. WILLIAM H. SOMMER, Peoria, Ill. Filed Nov. 4, 1929. Serial No. 404,763. 18 Claims. (Cl. 140—60.)



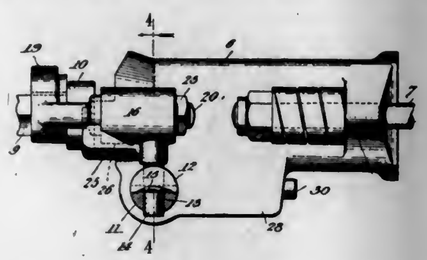
1. In a barb-wire machine, in combination, means for feeding a strand wire, means for successively attaching wire-barbs to said strand wire at spaced distances therealong, means to wrap the barbed wire on a spool, and means between the barb attaching means and said wrapping means for positioning the said barbs in predetermined angular and equidistant positions on the strand wire and then securing the same in predetermined equidistant positions from each other.

1,821,731. FENCE STRUCTURE. WILLIAM H. SOMMER, Peoria, Ill. Filed May 2, 1930. Serial No. 449,311. 1 Claim. (Cl. 256—5.)



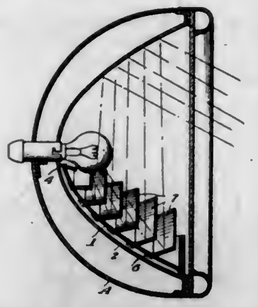
In a fence, including a series of spaced strands and stays, staple-ties for connecting the stays to the strands at the points of intersection thereof, including inclined portions which extend across the stays and clinching portions disposed on opposite sides of the strands and clinched to the stays, the inner faces of the free ends of the clinching portions of the staples being slightly spaced from the stays, and the inclined portions of the staples alternately extending in opposite directions on the various stays thus preventing leaning or canting of said stays.

1,821,732. TOOL RETAINER. EDWARD F. TERRY, Jr., Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Mar. 14, 1929. Serial No. 347,025. 2 Claims. (Cl. 121—32.)



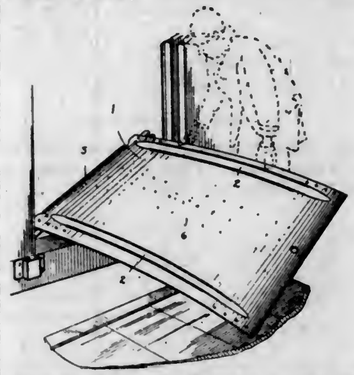
1. The combination with a tool holder having a tool-receiving socket, of a shaft journaled on the holder at one side of the socket, transversely disposed arms carried by the shaft and located on opposite sides of the holder, said arms having transversely disposed openings substantially parallel to and on opposite sides of the socket in the plane therewith, and a tool-retaining yoke in advance of the socket and having side arms extending from points between its upper and lower sides and slidably and yieldingly mounted in the openings.

1,821,733. GLARE DEFLECTOR. RALPH W. THIBODEAU, Quincy, Mass. Filed Oct. 16, 1929. Serial No. 400,052. 1 Claim. (Cl. 240—48.2.)



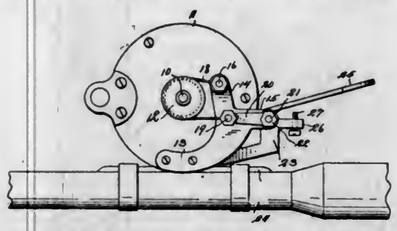
A glare deflector comprising a body tapering gradually from one end to the opposite end thereof and transversely and longitudinally curved to conform to the contour of the lower portion of a reflector, projections formed on the edges of the body and extending angularly thereof to engage the reflector for supporting the body in a slight space relative thereto, an arcuate shaped member formed on the smallest end of the body to engage under the illuminating means of the reflector, said body having relatively spaced rows of slots arranged transversely of said body, arcuately curved reflecting elements arranged transversely of the body and in alignment with the rows of slots, and tongues on the reflecting elements and extending through the slots and bent against one face of said body and spaced from the reflector by the projections.

1,821,734. TOE BOARD. JOSEPH G. VICHE, Duluth, Minn. Filed Nov. 18, 1929. Serial No. 407,905. 8 Claims. (Cl. 14—72.)



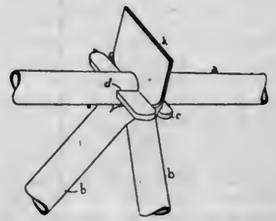
1. The combination with a toe board of the class described having a series of holes adjacent either corner thereof, of a pair of lugs selectively attachable to any of said series of holes for temporary interlocking engagement with stationary means adjacent the passageway at which the toe board is used, said lugs being in the same plane, or in a plane substantially parallel to the plane of the toe board.

1,821,735. BRAKE FOR FISHING REELS. SELVIN T. WHARTON, Columbus, Miss., assignor of one-half to Elbert S. Jones, Columbus, Miss. Filed July 25, 1929. Serial No. 380,999. 2 Claims. (Cl. 242—84.5.)



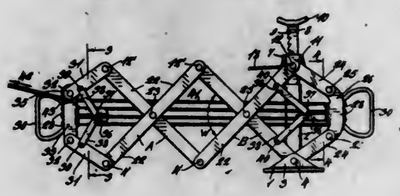
1. In a fishing reel, a reel shaft having a brake drum, a brake band embracing the drum and fixedly supported at one end, a bracket mounted upon the reel, a shaft carried by the bracket and having an arm to which the other end of the brake band is connected, the shaft having a thumb piece whereby it may be depressed and the brake band tightened and adjustable means for limiting the depression of the thumb piece and thereby controlling the tightness of the brake band.

1,821,736. JOINT CONNECTION OF THE RODS IN STRUCTURES, GIRDERS, AND THE LIKE. KAREL BOHÁČ, Prague, Czechoslovakia. Filed Dec. 17, 1927, Serial No. 240,901, and in Czechoslovakia Jan. 7, 1927. 7 Claims. (Cl. 189—36.)



1. Joints for the assembly of the braces and booms of a girder or like structure each comprising eyes on the ends of the braces for the insertion of a boom, and two wedges driven through a slot in said boom on the opposite sides of said eyes for tightening said braces in position on the booms.

1,821,737. LIFTING JACK. EUGENE BOOTZ, Denver, Colo. Filed Mar. 26, 1929. Serial No. 349,934. 3 Claims. (Cl. 254—128.)



1. A lifting jack comprising, in combination, a base having a standard projecting from one side thereof, a bar slidable on the standard, a lifting head secured to the upper end of the bar, a lazy tong structure comprising a plurality of sets of links pivotally connected at their centers and having the adjacent ends of each pair pivotally connected, the links of each end pair being pivotally connected to the ends of shorter links, pulley blocks connecting the other ends of the shorter links, the pivot between one of the long links and one of the shorter links being connected with the base, the opposite corresponding pivot of the lazy tong being connected with the lifting head and a rope cooperating with the pulley blocks to form with the latter a fall and tackle.

1,821,738. MARCEL WAVE WRAPPER CLAMP. NORMAN FRANCIS CLAYBORN, Decatur, Ga. Filed Apr. 12, 1929, Serial No. 354,660. Renewed Feb. 14, 1931. 3 Claims. (Cl. 132—36.1.)

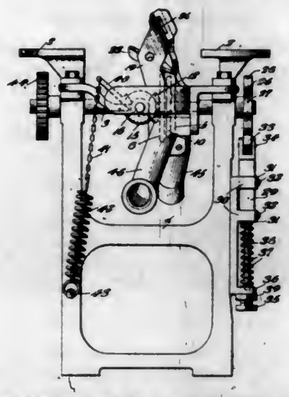


1. A clamp comprising a jaw having a slot therein, a cam member pivoted to the jaw and movable over the slot, and a resilient auxiliary jaw attached to one face of the jaw and bridging the slot and cooperating with the cam in clamping an object when such object is of insufficient cross sectional area to substantially fill the slot.

1,821,739. COIN MECHANISM FOR COIN CONTROLLED VENDING MACHINES. ALBERT M. CRAMER, Philadelphia, Pa., assignor to Horn and Hardart Baking Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Nov. 7, 1927. Serial No. 231,562. 2 Claims. (Cl. 194—85.)

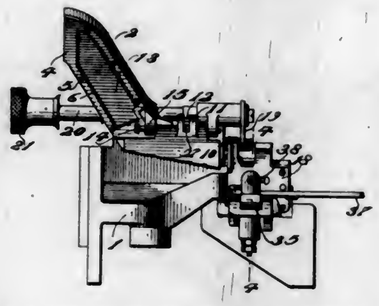
1. Coin mechanism for coin controlled vending machines, comprising a framework, a shaft journalled therein, a coin wheel disc fixed to said shaft and having coin receiving slots which open through the periphery and one side of the disc, a second disc loosely mounted on said shaft in proximity to said coin wheel disc and closing the open sides of said slots, and having means to contact with a coin in a coin receiving slot, a cam wheel on said shaft having at its periphery rounded knobs which merge into curved recesses conforming in number to the number of coin receiving slots, a member having a roller conform-

ing to the periphery of the recesses and movable in a rectilinear path towards said cam wheel, a spring to cause the forward movement of said member, manually actuated



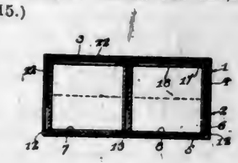
means to turn said second disc, and resilient means to return said second disc to its neutral position after it has been operated.

1,821,740. COIN MECHANISM FOR VENDING MACHINES. ALBERT M. CRAMER, Philadelphia, Pa. Original application filed Oct. 17, 1927, Serial No. 226,674. Divided and this application filed Sept. 28, 1928. Serial No. 308,959. 2 Claims. (Cl. 194—102.)



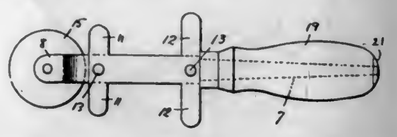
1. In a coin mechanism for coin controlled vending machines, a coin chute having opposite side walls contributing to form a coin slot having converging side walls at its bottom, the depth of said slot at its discharge end being deepened to form a downwardly and forwardly inclined wall to increase the speed of the coin.

1,821,741. CONTAINER. EDWARD DALTON, Alton, Ill., assignor to The Dalton Co., a Corporation of Illinois. Filed Nov. 27, 1929. Serial No. 410,235. 10 Claims. (Cl. 229—15.)



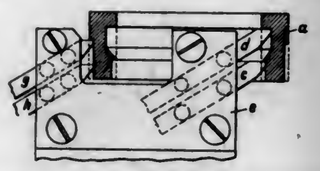
1. A container comprising a body portion formed of a pair of oppositely disposed sections each including a body part having a rim coextensive with the edges thereof, one of said sections providing a removable cover member and the other a stationary bottom member, a plurality of open bottom compartment forming elements secured within and extending above said bottom member and into said cover member, said elements seating on the body part of said bottom member, each of said elements having a normally closed outlet therefor at the top thereof, and a plurality of spaced compartment closure members secured upon the upper face of the body part of said stationary bottom member spaced from the rear of the latter and each extending into a compartment forming element for closing the bottom of the latter.

1,821,742. PUTTY REMOVER. RUFUS RAYMOND DENNING, Pueblo, Colo. Filed May 4, 1929. Serial No. 360,547. 1 Claim. (Cl. 18—3.5.)



A cutting tool of the character described comprising a handle, a shank, one end of the shank being bifurcated, a cutting disk interposed between the furcations, and guide members projecting laterally from the said shank in opposite directions in the same plane with the disk.

1,821,743. METHOD AND DEVICE FOR TURNING OUT THE RINGS OF ROLLER BEARINGS AND SIMILAR GROOVED RINGS. RUDOLF DREYHAUPT, Berlin, Germany. Filed Mar. 15, 1929, Serial No. 347,406, and in Germany Mar. 16, 1928. 7 Claims. (Cl. 38—1.)



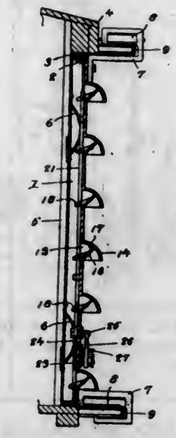
1. A method of turning out rings of U-shaped cross-section in planes through the axis of same, such as roller-bearing-rings and similar bodies, which method consists in moving the turning tool after an obtuse angle, one leg of which is running in a direction parallel to the axis of the work piece and turning the work piece about 180° between a plurality of such working stages.

6. In a device for turning out rings of U-shaped cross-section in planes through the axis of same, such as roller-bearing-rings and similar bodies, a support, a substantially angular guide for moving said support after an obtuse angle, one leg of which is running in a direction parallel to the axis of the work piece, a tool arranged in said support and adapted to successively cut on two faces located at right angles to each other and other tools arranged in the same support and adapted to come into operation when the support commences to move parallelly to the longitudinal axis of the work piece.

1,821,744. VENTILATED DOOR. EDWIN D. DRUMMOND, Jacksonville, Fla. Filed May 9, 1930. Serial No. 451,091. 1 Claim. (Cl. 20—21.)

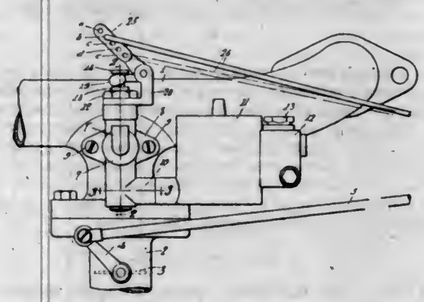
A door for the purpose set forth provided with vertically arranged spaced series of lateral openings arranged in a line, outwardly disposed downwardly extending arched shields covering the openings, bearings in the ends of the shields, shafts journaled in the bearings, flat plates comprising shutter valves fixed on the shafts, angularly arranged slotted arms fixed on the shafts and extending through the openings, a vertically movable bar having headed studs received through the slots of the arms,

guide means for the bar, said bar having a toothed edge, a toothed wheel engaging the teeth of the bar, a shaft on which the wheel is fixed, bearings for the shaft, a swing-



able lever on the shaft, a segmental bracket fixed on the outer face of the door and having spaced pairs of outwardly extending arms between which the lever is swingable.

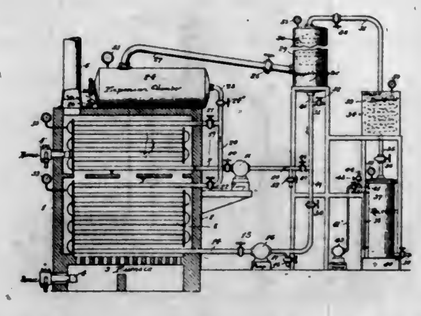
1,821,745. ATTACHMENT FOR INTERNAL COMBUSTION ENGINES. RALPH A. DUFF, Nebraska City, Nebr. Filed July 20, 1929. Serial No. 379,801. 3 Claims. (Cl. 123—25.)



1. A device for attachment to the intake manifold of an internal combustion engine, including a member having an air inlet passage adapted to discharge into the manifold, a nozzle opening into the passage, a water reservoir in communication with the nozzle, a tubular valve controlling the flow of air through the passage, a spring pressed valve in the tubular valve normally engaging the nozzle to shut off the supply of water from the nozzle to the air passage, means for shifting the tubular valve longitudinally to control the flow of air through the passage, and means actuated by the tubular valve when moved past a predetermined point for opening the nozzle controlling valve therein.

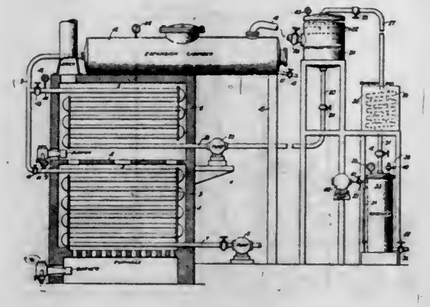
1,821,746. PROCESS AND APPARATUS FOR CRACKING OIL. GUSTAV EGLOFF, Independence, Kans., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 6, 1920, Serial No. 428,788. Renewed Feb. 7, 1930. 3 Claims. (Cl. 196—58.)

1. An apparatus for cracking oil, the combination of a furnace provided with two super imposed interconnected combustion chambers, a coil seated in one chamber for receiving an oil of predetermined gravity, a coil seated in the other chamber for receiving an oil of a different gravity and an expansion chamber to which both coils are con-



nected, a reflux condenser connected with the vapor space of the expansion chamber, and connections between the lower part of the reflux condenser and each of the coils.

1,821,747. PROCESS FOR CRACKING OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Dec. 9, 1920, Serial No. 429,319. Divided and this application filed May 9, 1925, Serial No. 29,142. Renewed Mar. 10, 1931. 6 Claims. (Cl. 196—58.)

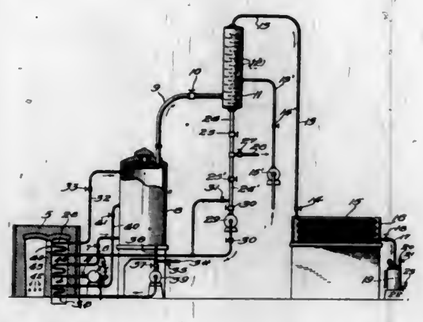


6. A process of oil conversion comprising maintaining a body of heated hydrocarbons in an enlarged zone where substantial vaporization occurs, maintaining the oil in said zone under a pressure below atmospheric, subjecting vapors evolved from the oil to reflux condensation to condense heavier vapors, simultaneously advancing independent streams of relatively heavier and substantially more refractory lighter hydrocarbon oils through a heating zone wherein such heavier and lighter oils are subjected to respectively relatively lower and higher cracking conditions of temperature and superatmospheric pressure, delivering the separately heated streams of relatively heavier and lighter hydrocarbons to the body of oil in said enlarged zone to be commingled therewith.

1,821,748. HYDROCARBON OIL CONVERSION. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 7, 1925. Serial No. 73,592. 8 Claims. (Cl. 196—59.)

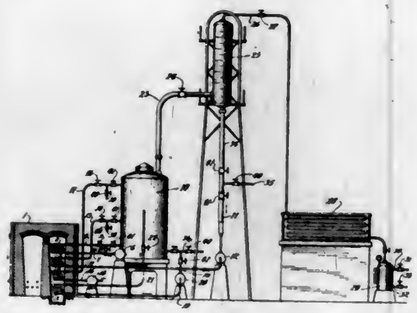
1. A process of hydrocarbon oil conversion, comprising subjecting charging stock to the action of heat and superatmospheric pressure to produce substantial vaporization, separating the vaporized portions from the unvaporized portions, subjecting the vaporized portions to reflux condensation, returning the reflux condensate and subjecting

it to a higher temperature than that to which the charging stock is subjected, in returning the unvaporized residue and subjecting it to a lower temperature than that to



which the charging stock is subjected, and in introducing the heated charging stock, reflux condensate and residue into a common expansion zone.

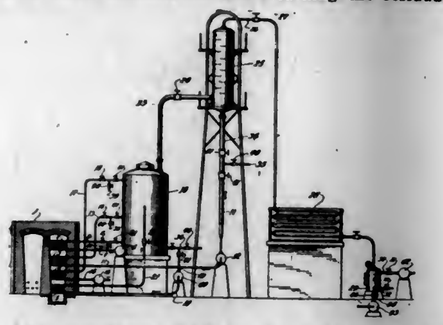
1,821,749 PROCESS OF CRACKING OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 21, 1925, Serial No. 76,638. Renewed Sept. 2, 1930. 2 Claims. (Cl. 196—58.)



1. A process for cracking petroleum oil, consisting in independently heating under pressure charging stock, and residuum and reflux condensate obtained from the cracking of such charging stock, the various cuts above mentioned each being heated separately and to different degrees of temperature, passing such heated cuts under pressure to a suitable expansion chamber where the temperature is equalized, and drawing off vapors therefrom, subjecting them to reflux condensing action, and subjecting the reflux condensate to the initial heating treatment above referred to, likewise drawing off residuum from the expansion chamber and subjecting it to the initial heating treatment above referred to, and maintaining a pressure on the various cuts of oil in the initial heating zone.

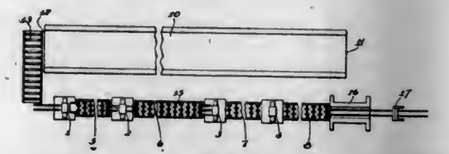
1,821,750. PROCESS OF CRACKING OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 21, 1925, Serial No. 76,639. Renewed July 3, 1928. 2 Claims. (Cl. 196—59.)

1. A process of cracking petroleum oil, consisting in subjecting charging stock, residuum and reflux condensate separately and independently to such cracking conditions of temperature and pressure as are best suited for the conversion of the particular materials, delivering the same to a common expansion chamber, where the various constituents are intermingled, taking off vapors, subjecting them to reflux condensation and returning the residuum



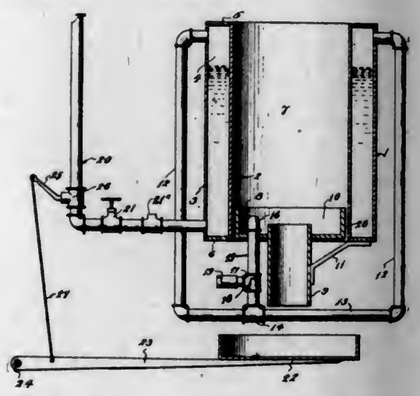
and reflux condensate formed in the process to be again subjected to cracking conditions of temperature and pressure, and maintaining a vacuum on the contents of the expansion chamber.

1,821,751. METHOD OF ROLLING SHEET METAL. JOHN M. FELTON, Wheeling, W. Va., and CLARENCE H. VERWOHLT, St. Clairsville, Ohio, assignors to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed July 12, 1928. Serial No. 292,057. 2 Claims. (Cl. 29—19.)



1. The method of rolling sheet metal to light gages, comprising heating to substantially uniform temperatures single-iron packs of matched singly-rolled sheets, rolling in the same roll passes a plurality of said heated packs singly and in rapid succession, matching the heated and singly-rolled packs into multiple single-iron packs, and rolling said matched packs to thin gage sheet metal, said two rollings of the metal being effected without heating it subsequent to said first-mentioned heating.

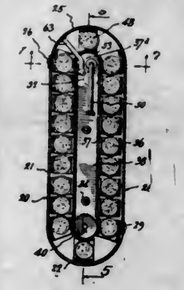
1,821,752. OIL BURNER. LEWIS J. FISHER, Reedsburg, Wis. Filed June 5, 1929, Serial No. 368,660. Renewed Jan. 29, 1931. 3 Claims. (Cl. 158—53.)



1. An oil burner comprising a combustion chamber and an annular liquid fuel receiving chamber, a pan mounted

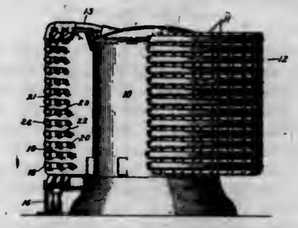
in the lower end of the combustion chamber and annularly spaced from the walls thereof, an air admitting tube extended into the pan, a gaseous fuel discharge nozzle mounted in the pan and disposed tangentially with respect to the combustion chamber, and means for conducting gaseous fuel from the fuel chamber to the nozzle.

1,821,753. COMBINATION CIGARETTE CASE AND LIGHTER. WILLIAM HOVNAN, Bellaire, N. Y. Filed Mar. 18, 1930. Serial No. 436,839. 5 Claims. (Cl. 206—41.4.)



1. A cigarette case and lighter including, in combination, an outer casing, having a cover, a cigarette lighter body within said casing, said lighter body mounted in spaced relation to the outer walls of said casing, a pair of endless mesh belts disposed around said lighter body, at opposite sides thereof, a plurality of individual cigarette containers secured to said endless belts, a shaft within said container, one end of said shaft extending through said outer casing, a pair of toothed wheels mounted on said shaft, said toothed wheels in mesh with said endless belts, a manually operable device for rotating said shaft and hence said endless belts to present said cigarette containers successively at the top of said lighter body, adjacent to said cover, means on said containers to open said cover, a wick at the upper part of said lighter body and means to ignite said wick thereby to light a cigarette positioned in its container above said wick.

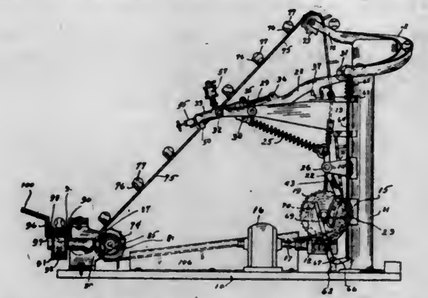
1,821,754. AIR COOLED CONDENSER FOR REFRIGERATING SYSTEMS. KENNETH H. HUYETTE, Bluffton, Ind., assignor to General Electric Company, a Corporation of New York. Filed Apr. 22, 1930. Serial No. 446,387. 5 Claims. (Cl. 257—36.)



1. An air-cooled condenser for refrigerating systems including a plurality of coils, said coils being spaced apart transversely of the flow of air and decreasing in transverse spacing from one end to the other.

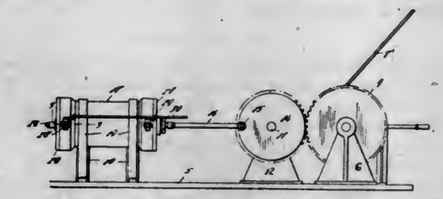
1,821,755. BASEBALL PITCHER. JOHN D. JETER, Salisbury, N. C. Filed Mar. 1, 1929. Serial No. 343,625. 2 Claims. (Cl. 273—107.)

1. In a base ball pitching machine, means for throwing balls at regular intervals, a transversely disposed trough in front of the machine, a sloping floor adapted to cause the thrown balls to return to the said trough, a belt mounted in each end of said trough on pulleys and being adapted to deliver the balls to the central portion of the trough, a gear connection between said pulleys and a transversely disposed shaft, a sprocket wheel on said shaft, a transversely disposed shaft adapted to drive the



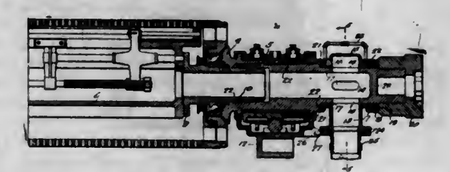
ball throwing arm and having a procket wheel thereon, a sprocket wheel associated with a curved trough into which the balls are adapted to be placed before reaching the throwing arm, a sprocket chain mounted on all of the said sprocket wheels, and being adapted to elevate the balls from the said trough to the said circular trough, and to drive the belts in said trough.

1,821,756. COMPRESSION BRAKE FOR HOISTING DRUMS. CARL E. KENDRICK and BERT W. MOORE, Lithia, Fla; said Moore assignor to said Kendrick. Filed July 13, 1929. Serial No. 378,098. 1 Claim. (Cl. 188—99.)



A compression brake comprising a cylinder, a piston in said cylinder, adapted to be connected to the member to be braked, air intake and outlet pipes communicating with the cylinder adjacent opposite limits of the travel of said piston, a normally open valve in each pipe, an operating rod connecting each valve for simultaneously closing and opening same to regulate the escape and entrance of air from and into said cylinder, and a pressure actuated valve at each end of the cylinder operable to open the cylinder to the atmosphere when the pressure therein exceeds a predetermined amount.

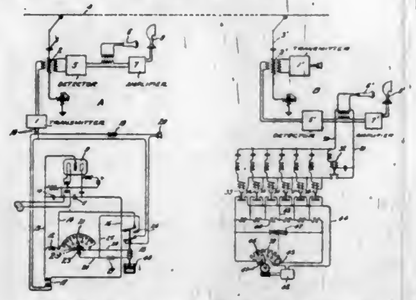
1,821,757. SUCTION ROLL. GEORGE D. KILBERRY, Downingtown, Pa., assignor to Downingtown Manufacturing Company, Downingtown, Pa., a Corporation of Pennsylvania. Filed July 18, 1929. Serial No. 379,237. 9 Claims. (Cl. 92—53.)



1. In a direct-driven roll having a hollow journal, a closure for the outer end of said journal, a suction box

mounted interiorly of said roll and having a hollow journal communicating with the interior of said first-mentioned journal, means in said first-mentioned journal intermediate the ends thereof communicating with the exterior, and a header operatively associated with said means and adapted to be connected to a suction device for exhausting the suction box.

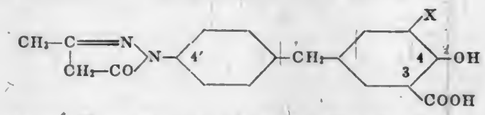
1,821,758. SIGNAL AND CONTROL SYSTEM. FELIX KONN, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed June 29, 1927. Serial No. 202,451. 15 Claims. (Cl. 179—2.5.)



1. In a signal and control system, the combination with a source of high frequency oscillations of means for modulating the output from said source with voice currents, means for selectively modulating the output from said source with control currents having any one of a plurality of frequencies determined in accordance with the operation to be controlled, means for detecting said voice and control currents, a receiver for said voice currents and means responsive to the frequency of said control currents for controlling said operation.

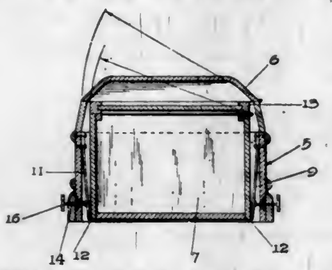
1,821,759. MANUFACTURE OF AZO DYESTUFFS. PAUL LAEUGER, Basel, Switzerland, assignor to the Firm of J. R. Geigy S. A., Basel, Switzerland. Filed June 27, 1929, Serial No. 374,290, and in Switzerland July 30, 1928. 3 Claims. (Cl. 260—87.)

1. A process for the manufacture of azo-dyestuffs, consisting in coupling a diazo-compound of the phenyl series with the methyl pyrazolone from 4'-amino-4-hydroxy-diphenyl menthane-3-carboxylic acid of the formula:



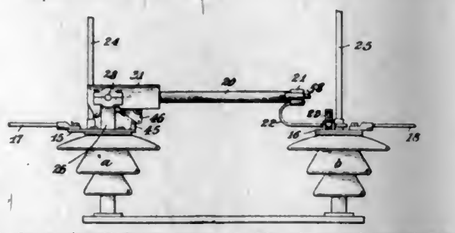
wherein X represents a hydrogen or methyl-group.

1,821,760. CASKET CONSTRUCTION. DAVID C. LEITCH and CHARLES W. HAMILTON, Oakland, Calif. Filed Dec. 20, 1930. Serial No. 503,826. 1 Claim. (Cl. 27—35.)



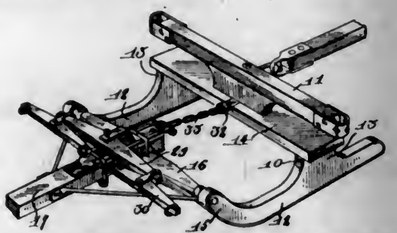
In a device of the character described, a shell adapted to have a casket placed therein, said shell having an opening thru the bottom thereof for the reception of said casket, spring clips secured to the sides of said shell said spring clips having hooked extremities extending beneath said construction, and threaded members extending thru said shell and engaging said spring clips whereby said hooked extremities may be withdrawn from beneath said casket.

1,821,761. AUTOMATIC CIRCUIT BREAKER. GEORGE N. LEMMON, Birmingham, Ala., assignor to Southern States Equipment Co., Birmingham, Ala., a Corporation of Alabama. Filed Feb. 12, 1927. Serial No. 167,688. 25 Claims. (Cl. 200—116.)



1. In a circuit interrupter, a pair of spaced terminals, a fuse housing hinged at one end and adapted to contain a fuse electrically connected between said terminals, and means automatically operative upon the blowing of said fuse to swing said housing upwardly out of the fuse path between said terminals and to completely open the gap therebetween, together with upright arcing horns associated with said terminals to which any arc which forms on rupture of the fuse is transferred from the housing as the latter moves to open-gap position, said swinging means being adapted to put the free end of said housing outside of the space between said horns.

1,821,762. DRAFT CONNECTION. JOSEPH ANTONIN ERNEST MADORE, Montreal, Quebec, Canada. Filed Dec. 7, 1928, Serial No. 324,488, and in Canada Oct. 17, 1928. 1 Claim. (Cl. 280—24.)

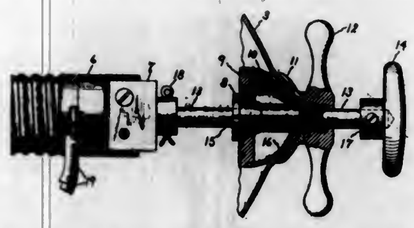


In a draft arrangement for sleds and like vehicles, the combination with a sled having runners, a transverse cross bar connecting the said runners, a transverse pole bar connecting the said runners at the forward end thereof, and a pole fixedly secured to the center of said pole bar, of rigid braces extending from each forward end of the runners to a common point on the pole, a whiffletree bracket mounted on the pole for longitudinal sliding movement, means to limit the movement of the bracket, a king pin for connecting the whiffletree to said bracket, means to securely support said pin at both ends thereof, and a flexible connecting member connecting the whiffletree bracket to the center of the cross-bar of the sled to impart the draft directly thereto.

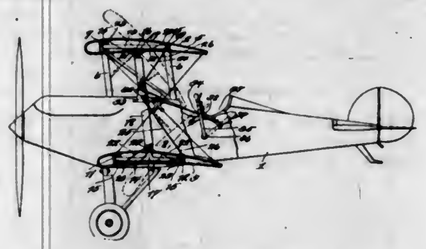
1,821,763. SUPPORTING DEVICE FOR LAMPS. ROY B. MINER, Nahant, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 12, 1929. Serial No. 377,814. 6 Claims. (Cl. 240—44.2)

5. The combination with a casing having an opening, of means for adjustably mounting a lamp on the casing

comprising a shaft which projects through said opening for supporting the lamp, a sleeve on the shaft which forms a bearing for the shaft, said sleeve projecting through said opening and being provided with threads at its outer end, walls surrounding the sleeve on opposite sides of the casing and between which the casing is clamped, means carried by one of said walls for effecting clamping of the inner end of said sleeve on the shaft, and a nut on the threaded end of the sleeve for clamping said walls against the casing and the sleeve on the shaft.

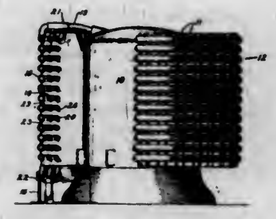


1,821,764. ADJUSTABLE WING SAFETY DEVICE FOR AIRCRAFT. EDWARD J. MUSRAY, Glenside, Pa. Filed Aug. 30, 1929. Serial No. 389,477. 4 Claims. (Cl. 244—12.)



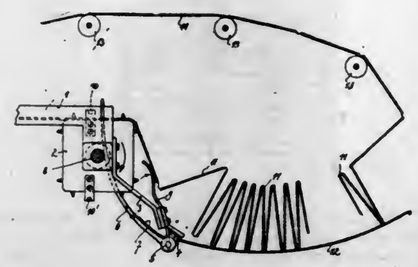
1. In an aircraft, the combination with a fuselage, of a pair of wings comprising end sections, center supports, on which the end sections are pivotally mounted for movement of the end sections to positions crossing the fuselage transversely, whereby the end wing sections may assume positions to form a V, in which the air may be pocketed for breaking the fall of the craft, retainers carried by the end wing sections and keepers carried by the center supports to receive said retainers, and means to actuate the retainers to release said end wing sections.

1,821,765. CONDENSER FOR REFRIGERATING SYSTEMS. DELBERT F. NEWMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 22, 1930. Serial No. 446,388. 6 Claims. (Cl. 257—36.)



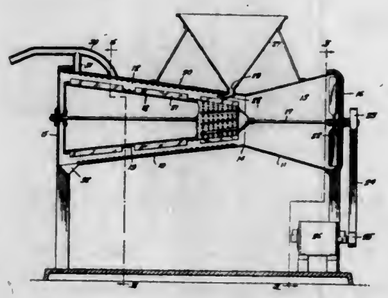
1. A condenser for refrigerating systems including a support having an open slot varying in width, and coils of different sizes each having a plurality of turns and engaging the side walls of said slot to retain them in spaced relation.

1,821,766. JACQUARD APPARATUS. GEORG NOBST and ERNST ULBRICHT, Mittweida, Germany, assignors to Scott & Williams, Incorporated, New York, N. Y. Filed Jan. 21, 1930, Serial No. 422,423, and in Germany Jan. 28, 1929. 3 Claims. (Cl. 139—332.)



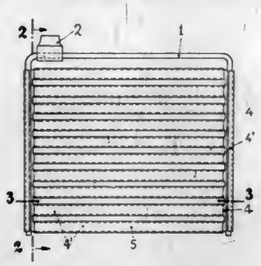
1. In jacquard apparatus, a rotatable cylinder and a chain of pattern cards adapted to pass over the cylinder, in combination with a slide track on which the cards are stored in a folded state and means on the cylinder cooperating therewith for folding the cards onto the track.

1,821,767. CLOVER SEED HULLER AND SCARIFIER. RALPH EDWIN POOLE, Harlan, Iowa. Filed Apr. 20, 1928. Serial No. 271,584. 1 Claim. (Cl. 83—30.)



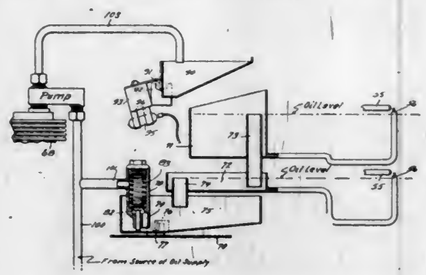
A clover seed huller and scarifier comprising a casing having its opposite end portions cone-shaped, the smaller ends of said cone shaped portions being joined together, one of the said end portions being open at its outer end, a vertical wall closing the outer end of the other portion, a fan located in the open outer end of one of said portions and adapted to discharge a blast of air through the smaller ends of the cone-shaped portion into the portion having the closed outer end, a cone-shaped beater journaled for rotation in that end portion of the casing having the closed outer end and the larger end of said beater being spaced from the outer end wall of said portion, a hopper having a discharge outlet located above the smaller end of the beater, the casing having gust outlet passage-ways located above the larger end of the beater and the casing having a seed outlet opening located below the larger end of the beater and at the lower edge of the end closure wall of that end portion of the casing in which the beater is located.

1,821,768. NEGATIVE ELECTRODE FOR ELECTRIC ACCUMULATORS. ADOLFO POUCHAIN, Turin, Italy. Filed June 4, 1928, Serial No. 282,868, and in Germany Jan. 10, 1928. 8 Claims. (Cl. 136—31.)



1. A negative electrode for zinc electric accumulators comprising a support made of a metal other than zinc, and an adherent layer covering the whole surface of said support, a portion of said layer being of zinc and the remaining portion being of an insulating substance.

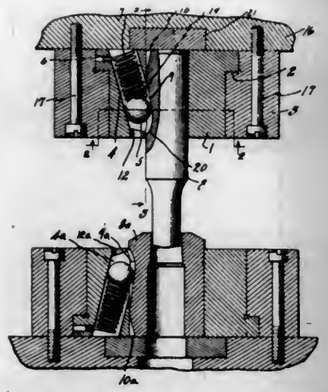
1,821,769. LIQUID SUPPLY SYSTEM AND OIL BURNING APPARATUS INCORPORATING SAME. MARC RESEK, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Oct. 6, 1926, Serial No. 139,877. Divided and this application filed Feb. 15, 1929. Serial No. 340,224. 11 Claims. (Cl. 158—36.3.)



1. In combination, a liquid supply, a chamber having an overflow and wherein liquid is to be maintained at a substantially constant level by said overflow, a movable vessel arranged to receive the overflow liquid, a pump and its connections for drawing liquid from the supply and from said vessel and discharging it into the chamber, and means operated by the vessel to cause the pump to draw liquid from the supply when the level of liquid in the vessel is comparatively low and to draw liquid from the vessel when the liquid level therein is comparatively high.

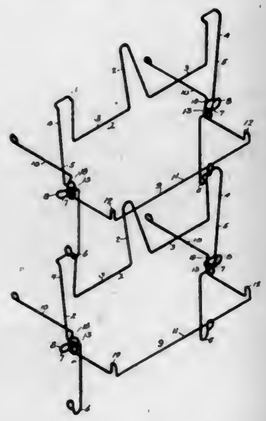
1,821,770. PUNCH AND DIE RETAINER. OTIS K. RICHARD and CLEMENT C. RICHARD, Detroit, Mich., assignors to Allied Products Corporation, Detroit, Mich., a Corporation of Illinois. Filed Oct. 10, 1925. Serial No. 61,818. 4 Claims. (Cl. 279—30.)

1. A retainer for punches, dies and similar tools, a member having a circular aperture into which the cylindrical shank of a tool is to be introduced, a spring-pressed ball having a portion thereof extending into the aperture at a distance from the end through which the tool is to be introduced, the shank of the tool having a portion at a distance from its end shaped to provide a seat for the ball, the said portion being in the nature of a groove extending longitudinally of the tool and at an angle to the axis thereof with the deepest end of the groove at the greatest distance from the end of the shank, the said shank further having an additional groove in the same plane as the first groove and extending longitudinally of the tool and at an angle to the axis thereof with the deepest portion opening through the shank end and extending to the surface of the shank adjacent the point of



the termination of the groove forming the ball seat, the said end groove providing a means enabling the operator through rotation of the shank upon its introduction in the aperture to locate the shank through the seating of the ball in the guide groove whereby on further insertion of the shank the ball rides into the first groove.

1,821,771. SHOE RACK. ELLWOOD WALTER ROBERTS, Germantown, Pa. Filed Jan. 8, 1930. Serial No. 419,331. 5 Claims. (Cl. 211—35.)

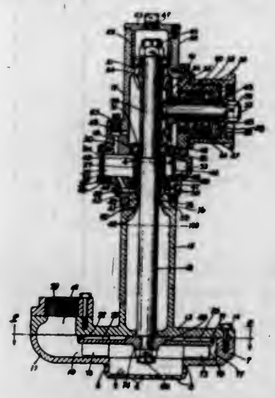


1. The combination in a shoe rack, of a series of identical sections, one section being loosely hung from another section; and a pivoted member mounted on each section, said pivoted member having rearwardly extending arms arranged to rest against the wall of the support and forwardly extending arms connected by a horizontal portion, each section also having a horizontal portion located back of the horizontal portion of the pivoted member, said horizontal portions being arranged to support a shoe.

1,821,772. REVERSIBLE CENTRIFUGAL PUMP. EDWARD J. RUTHMAN, Cincinnati, Ohio. Filed June 4, 1926. Serial No. 113,793. 9 Claims. (Cl. 103—103.)

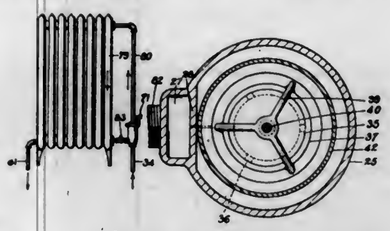
1. In a vertical, packless centrifugal pump structure the combination of a hollow casing having a continuous

inner wall, an impeller disc having a radially perforated upstanding annular lip, depending blades on the lower face of the disc, said blades terminating in a circumference



concentric with and of lesser diameter than the annular lip, a cover for the casing, a shaft secured to the impeller and extending through the casing and means for rotating the shaft.

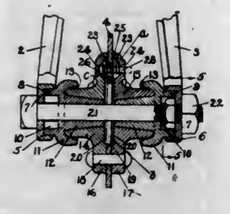
1,821,773. HOT WATER HEATING SYSTEM. OLIVER H. SCHLEMMER, Cincinnati, Ohio. Filed May 11, 1926. Serial No. 108,391. 4 Claims. (Cl. 237—8.)



1. In a hot water heating system the combination with a radiator, of a hot water supply pipe, a riser for feeding hot water under pressure from said supply pipe to the radiator, predetermined portions of the riser and radiator serving as means for containing columns of water of known height in the system, and an automatic regulator communicating with the hot water supply pipe and with the radiator, said regulator comprising a slidable valve to control the flow from the hot water supply pipe to the radiator and means directly connected and movable therewith and subjected to pressures in the system in both directions, said means yielding thereby moving the said supply controlling valve and serving to effect a balance between the pressure resulting from the difference in weight between a known column of hot water in the riser and a known column of relatively cooled water in the radiator, and the pressure controlling the supply of hot water to the radiator.

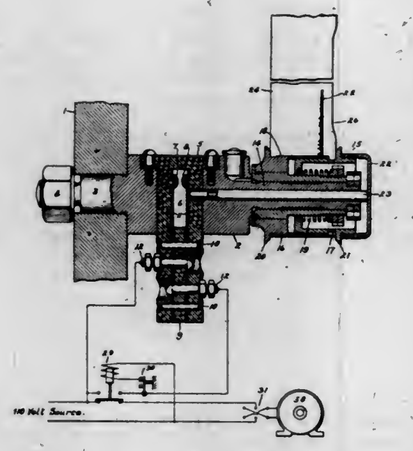
1,821,774. ROLLING COLTER. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 21, 1927. Serial No. 234,735. 1 Claim. (Cl. 308—19.)

In a rolling colter, the combination of a two part hub, recesses in the opposed faces of said parts, a colter blade rigidly secured between the hub parts and having a central opening conforming to said recesses to provide a holding chamber for lubricating material, opposed recesses in the hub parts beyond the limit of the holding chamber to form a receiving chamber, an opening connecting said chambers, alined openings extending exteriorly from the receiving chamber, an opening in the colter blade within the receiving chamber, a stopper supported in one of the openings in the receiving chamber longitudinally movable



therein and projecting through the opening in the colter blade, a head on said stopper normally operating to close the adjacent opening in the receiving chamber, and a coiled spring on said stopper acting expansively thereon through the opening in the colter blade to hold the stopper in normal position.

1,821,775. FILM CONTROLLED SWITCH. HULBERT C. TITTLE, Chicago, Ill., assignor to General Electric Company, a Corporation of New York. Filed Nov. 7, 1929. Serial No. 405,517. 3 Claims. (Cl. 200—52.)

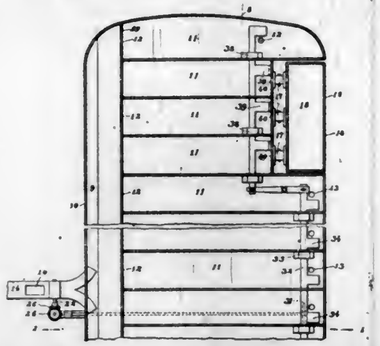


1. In apparatus of the character described, a stud, a roller mounted thereon adapted to support a film of the motion picture type, said roller having flanges adapted to engage the opposite edges of the film, one of said flanges being axially movable, a spring tending to move said flange toward the other flange, a plurality of insulated switch contacts supported by said stud, and a switch operating member connecting one of said contacts with said one flange.

1,821,776. ANTIICE AIRPLANE AND IMPROVED WING CONSTRUCTION THEREFOR. ARCHIE C. VINING, Brooklyn, N. Y. Filed May 9, 1928. Serial No. 276,359. 4 Claims. (Cl. 244—31.)

3. In an airplane including a wing having exhaust gas compartments therein and means for discharging waste gases to said wing, means for controlling the passage of

gases to said wing, and associated means for controlling the discharge of gases from said wing, said first-mentioned

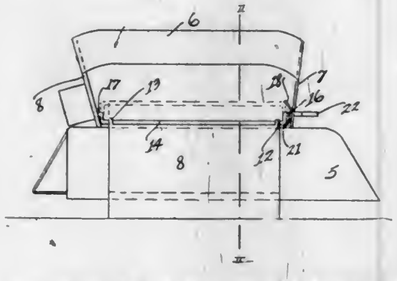


means including a pivoted valve permitting the discharge of gases to the atmosphere, said last-mentioned means including longitudinally slidable shutters.

1,821,777. INKING MEANS. TATSUO WAKABAYASHI, New York, N. Y. Filed July 24, 1929. Serial No. 380,759. 1 Claim. (Cl. 134—34.)

A composition of matter forming an inking pad and resulting from mixing together the following: sponge fibre, one hundred pounds; moxa fibre, ten pounds; alcohol, ten pounds; glycerin, fifty pounds; oil, one pound; and dye, one pound.

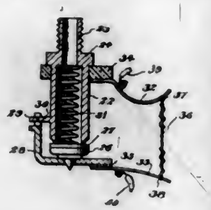
1,821,778. FLATIRON. SIDNEY M. ABBENS, San Francisco, Calif., assignor of one-tenth to Dorothy Kagan, San Francisco, Calif. Filed Mar. 21, 1930. Serial No. 437,894. 1 Claim. (Cl. 68—27.)



In combination with a sad-iron, of a support having ears formed thereon and extending upwardly therefrom, said support straddling the body of the iron, means for raising and lowering the iron relative to the support, said means including a crank extending longitudinally of the iron body and extending thru said ears and having its ends rotatably connected to said iron, a recessed spring clip mounted upon said iron and adapted to engage said crank whereby said support may be held either elevated or depressed, and a crank arm for manually moving said crank into engagement with said spring clip.

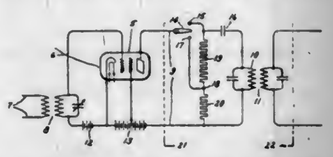
1,821,779. SAFETY DEVICE FOR GAS ENGINES. WILLIAM E. ALBERTSON, Jacksonville, Fla., assignor of one-half to Maxey D. Moody, Jacksonville, Fla. Filed June 16, 1930. Serial No. 461,589. 7 Claims. (Cl. 137—34.3.)

6. An automatic device for emptying liquid from a container comprising a valve housing adapted to be secured to the container and forming an outlet therefor, a valve hinged to said housing, a spring in the housing for opening the valve, a pair of leaf springs one of which is connected to the housing and the other to the valve, a fuse connecting said leaf springs and coacting therewith to normally hold said valve closed against the tension of its spring, and a thermostat controlled switch adapted



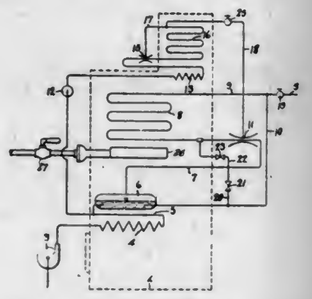
to be closed at a predetermined temperature of said liquid and electrically connected in circuit with said fuse, closing of the switch adapted to blow said fuse and disconnect said leaf springs whereupon said valve is opened by its spring.

1,821,780. LOCAL-DISTANT SWITCH FOR SUPERHETERODYNE RECEIVERS. HORACE C. ALLEN, Merchantville, N. J., assignor to General Electric Company, a Corporation of New York. Filed Oct. 7, 1930. Serial No. 487,049. 8 Claims. (Cl. 250—20.)



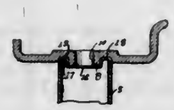
1. In a superheterodyne receiving apparatus, the combination of a signal detector having an output circuit, an amplifier coupling device connected with said output circuit, said coupling device having a predetermined frequency response characteristic, switching means connected between said output circuit and the coupling device for changing the energy transfer from said output circuit to said device, and means arranged to be connected in circuit with said coupling device and said output circuit by said switching means for preventing a change in the frequency response characteristic of said coupling device when said switching means is operated.

1,821,781. STEAM GENERATING PLANT FOR THE GENERATION OF HIGH PRESSURE STEAM. KURT ALLES, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 18, 1929, Serial No. 371,935, and in Germany July 14, 1928. 2 Claims. (Cl. 122—31.)



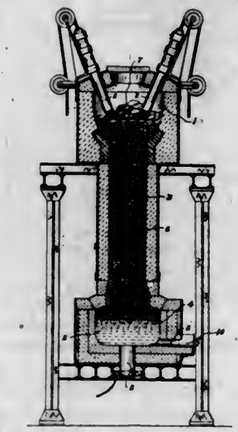
1. In a vapor generating plant, the combination of a vapor generator, means for supplying a liquid to said generator, a superheater, a conduit connecting said generator to said superheater, a jet apparatus provided in said conduit, means for generating and supplying superheated vapor to said jet apparatus whereby vapor is pumped from said generator to said superheater, a second conduit for supplying superheated vapor from said superheater to a consumer, a third conduit between said second conduit and said vapor generator for supplying superheated steam to said vapor generator whereby liquid in said generator is evaporated and means for regulating the amount of vapor supplied to said vapor generator in terms of vapor demand comprising a by-pass between said third and first named conduits which is connected to the latter ahead of said jet apparatus, and a valve means in said by-pass.

1,821,782. METAL WHEEL AND METHOD OF MAKING THE SAME. ERNEST H. ARNOLD, Cleveland, Ohio. Filed Dec. 9, 1925. Serial No. 74,312. 3 Claims. (Cl. 301—67.)



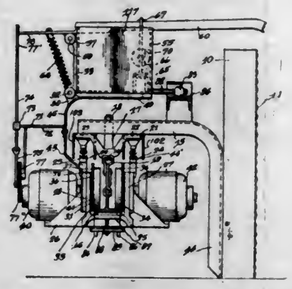
1. In a vehicle wheel, the combination with a rim having a protuberance extending inwardly therefrom and an annular depression surrounding said protuberance, of a spoke having a closed ended tubular metal portion having a depression in said end and an annular raised portion about said depression, whereby the latter may receive said protuberance therein and the raised annular portion rest in the said annular depression of the rim to secure the spoke against lateral displacement.

1,821,783. PROCESS OF MAKING SYNTHETIC PIG IRON. THADDEUS F. BAILY, Alliance, and LAWRENCE G. PRITZ, Canton, Ohio; said Pritz assignor to said Baily. Filed Jan. 28, 1928. Serial No. 250,222. 2 Claims. (Cl. 75—22.5.)



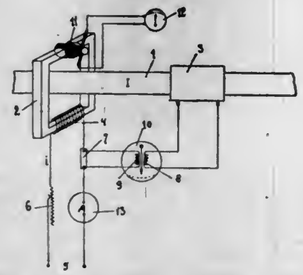
2. That process in the manufacture of synthetic pig iron from scrap steel, which includes mixing a charge of steel scrap with acid and basic slag in such proportions as to produce from the slag the desired contents of manganese and phosphorus, melting the mixture at the top of an electrically resistance heated bed of coke, passing the molten charge downward through the coke reducing all of the manganese and phosphorus to produce the desired quantities of these two elements in the pig iron, partially reducing the silica in the slag to produce the desired quantity of silicon in the pig iron, and collecting the pig iron in molten condition at the bottom of the bed of coke, the heat for reduction being supplied by electric resistance in the bed of coke.

1,821,784. RACING APPARATUS. ELMER L. BALLEW, Chicago, Ill. Filed Sept. 3, 1927. Serial No. 217,499. 10 Claims. (Cl. 272—4.)



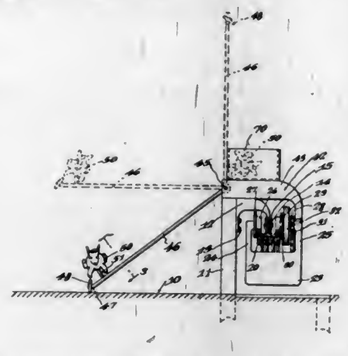
1. In combination with a race course defined by a fence disposed around the edges thereof, said fence including a plurality of fixedly mounted posts, brackets carried by said posts and having a portion thereof extending outwardly from said posts on the side thereof disposed away from said course, a track suspended from said brackets, a carriage adapted to travel along said track, means for driving said carriage, an arm carried by said carriage extending over said fence and directed downwardly toward said course and rearwardly from said carriage, and a lure slidably mounted on said arm and adapted to be carried at the outer end thereof when in operative position.

1,821,785. DEVICE FOR STANDARDIZING SHUNTS. LÉON BAGET, Paris, France, assignor to Compagnie de Produits Chimiques et Electrometallurgiques Alais, Froges et Camarque, Paris, France, a Corporation of France. Filed July 29, 1930, Serial No. 471,570, and in France Oct. 15, 1929. 4 Claims. (Cl. 175—183.)



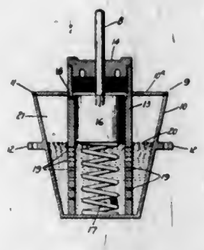
3. The device for standardizing a shunt connected to a conductor through which flows a high intensity direct current, said device comprising a magnetic circuit adapted to be mounted about the conductor to which the shunt to be vertified is connected, a rotatable armature inserted in said circuit, means for measuring the current through said armature, a winding on said magnetic circuit adapted to produce therein a flux opposed to that produced by the conductor, means for feeding said winding, a standard shunt connected in series with said winding, means for regulating the current through said winding, and a differential galvanometer adapted to be connected on the one hand with the standard shunt and on the other hand with the shunt to be standardized.

1,821,786. RACING APPARATUS. ELMER L. BALLEW, Chicago, Ill. Filed July 15, 1927. Serial No. 206,096. 4 Claims. (Cl. 272—14.)



1. In combination with a race course and a fence coextensive therewith, a track structure carried by and coextensive with said fence extraneous said course, means for supporting said track structure from said fence, a carriage adapted to travel along said track structure, means for moving said carriage along said track structure, a lure supporting arm carried by said carriage and adapted for swinging movement in a vertical plane over said course, a second carriage carried by and slidably mounted on said arm, a lure carried by said second carriage, a concealing structure carried by said first-named carriage and adapted to receive and conceal said lure when said arm is disposed in a vertical position with the second carriage adjacent the inner end of said arm, and means for moving said arm in a vertical plane.

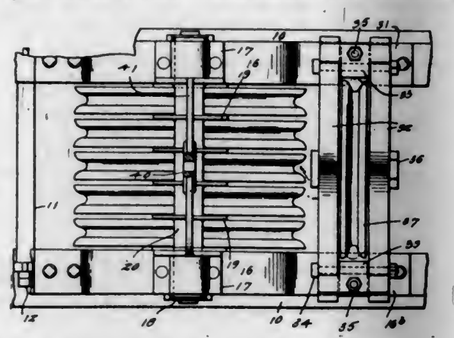
1,821,787. RETARDING DEVICE. CADELLE H. BLACK, Brookline, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 19, 1929. Serial No. 387,036. 6 Claims. (Cl. 188—98.)



1. In a system for dissipating the kinetic energy of a moving structure during its movement to a limiting position, retarding means comprising a substantially cylindrical chamber, a second chamber disposed exteriorly of said cylindrical chamber, said cylindrical chamber provided with apertures communicating with said second chamber, a liquid contained within and partly filling said chambers, said chambers communicating through a restricted vent above the level of said liquid, and a member movable within said cylindrical chamber for transmitting the impact of said moving structure to the liquid within said first-named chamber whereby liquid is forced into the outer chamber to compress the gas above said liquid.

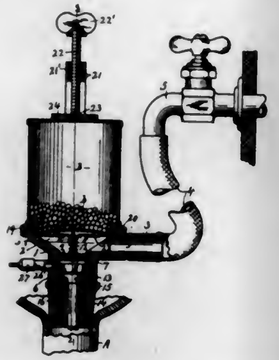
1,821,788. CROWN BLOCK SHEAVE ASSEMBLY. LEE J. BLACK, Beaumont, Tex. Filed Aug. 9, 1930. Serial No. 474,213. 8 Claims. (Cl. 254—190.)

1. A crown block structure including side members, shaft bearings supported thereon, brackets independent but attachable to the side members and overarching the bearings when in place, a shaft mounted in the upper ends of said brackets, a plurality of spacers depending from said



shaft, a second shaft supported by said spacers, and sheaves disposed on the second shaft and between said spacers, the spacers having means whereby the spacers, the two shafts and the sheaves may be lifted as a unit.

1,821,789. APPARATUS FOR CLEANING WASTE PIPES OF SINKS, ETC. CHARLES J. B. BORGESON, Syracuse, N. Y. Filed Mar. 7, 1931. Serial No. 520,990. 8 Claims. (Cl. 15—104.05.)

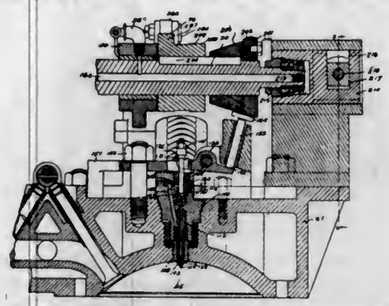


1. An apparatus for cleansing the drainage outlets of sinks, toilet bowls and the like, comprising a valve case having a mixing chamber provided with a fluid inlet and an outlet, said mixing chamber being also provided with an inlet for receiving a solvent adapted to mix the fluid in the mixing chamber so that the mixture may be discharged through the outlet, means for attaching the fluid inlet to a source of fluid supply under pressure, means for attaching the outlet of the valve case to the drainage outlet to be cleansed, and a valve controlling the passage of the mixture from the mixing chamber to the outlet of the valve case.

1,821,790. FUEL INJECTION VALVE. EUGENE A. CANNING, East Cleveland, Ohio, assignor to Frank Ballou Stearns, Cleveland Heights, Ohio. Filed July 9, 1928. Serial No. 291,146. 22 Claims. (Cl. 123—32.)

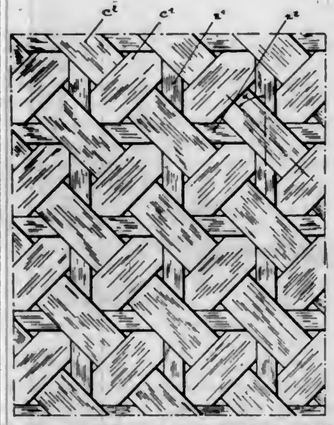
1. In combination with a multi-cylinder internal combustion engine, a fuel injection valve and a charge controlling valve for each cylinder, a rotatable cam shaft common to the cylinders, a plurality of cams rotatable with the cam shaft and disposed thereon in relatively spaced relation, some only of the said cams being longitudinally tapered to have each a generally conical surface, others of said cams having camming surfaces extending

longitudinally in directions parallel to the shaft axis, a cam follower for each of said tapered cams adapted upon rotation of the cam to operate each a fuel injection valve, a mechanical connection between each valve and its associated cam follower to communicate periodic thrust movements of the cam follower to the valve, and means



for axially adjusting the shaft to move all of the tapered cams longitudinally simultaneously to cause the tapered cams to vary the movement imparted by said cams to their associated injection valves, the tapered cams being so formed that the said period of time is increased or decreased at both its beginning and ending proportionally to the amount of said axial adjusting movement.

1,821,791. MALLEABLE JEWEL MOUNTED ON A DEFORMABLE BASKET WORK. LOUIS JOSEPH CARTIER, Budapest, Hungary, assignor to Cartier Societe Anonyme, Paris, France, a Company of France. Filed Dec. 2, 1930, Serial No. 499,607, and in France June 2, 1930. 2 Claims. (Cl. 41—10.)



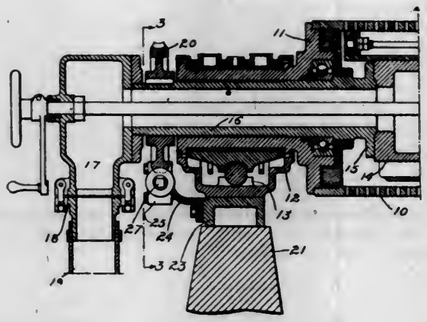
1. A jewel mounted on a deformable metallic basketwork consisting of two textures making between them a certain angle and interwoven.

1,821,792. JEWELRY. LOUIS JOSEPH CARTIER, Budapest, Hungary, and JEANNE TOUSSAINT, Paris, France, assignors to Cartier Societe Anonyme, Paris, France, a Company of France. Filed Apr. 24, 1930, Serial No. 446,958, and in France Feb. 19, 1930. 2 Claims. (Cl. 41—10.)



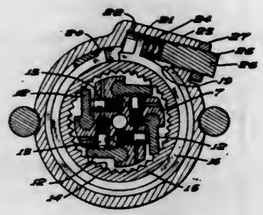
1. A jewel comprising a pliable foundation made of woven metallic elements, and ornamentative elements secured to said foundation.

1,821,793. SUCTION ROLL. CHARLES E. CONLEY, Norwich, Conn., assignor to Downingtown Manufacturing Company, Downingtown, Pa., a Corporation of Pennsylvania. Filed Aug. 29, 1929. Serial No. 389 297. 3 Claims. (Cl. 92—53.)



1. In a suction roll, a support, a bearing above and in spaced relation to the support, a perforated shell having a tubular journal engaged in said bearing, a suction box within the shell and having an extension projecting through said journal at the outer end thereof; a removable block supporting said bearing from the support and means supported from said removable block operatively engaging said extension to rotate the same from which the extension is disengageable by a vertical movement.

1,821,794. SLIP ROTATION FOR ROCK DRILLS. EDWIN J. DOWNING, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed June 7, 1928. Serial No. 283,561. 3 Claims. (Cl. 121—7.)

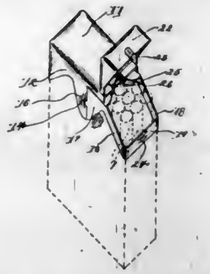


1. In a fluid operated tool of the type stated the combination with a cylinder member having a chambered rear end, of a reciprocatory piston in the cylinder member, a rifle bar engaged with the piston and having a head in the chamber, a ratchet ring surrounding the head and having a ratcheting connection therewith, a housing detachably fitted in the chamber around the ratchet ring, and having an internal groove, a contractile clutch ring in said groove that frictionally engages the ratchet ring, and means for causing the contraction of the clutch ring.

1,821,795. ATTACHMENT FOR CIGARETTE PACKAGES. GEORGE A. GEIB, St. Paul, Minn. Filed Nov. 18, 1929. Serial No. 407,806. 3 Claims. (Cl. 206—41.)

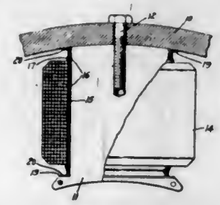
1. An attachment for a cigarette package comprising, a cap member having an end panel and flanges extending on the exterior of sides of said package, a movable closure connected to said cap member and having a pendant por-

tion extending downward upon the exterior of the package, a protective member embracing the package at its junction



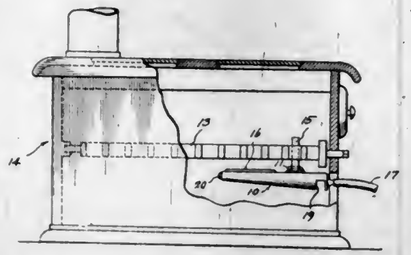
with said closure and means for detachably connecting said protective member and cap to retain the package in engagement with said flanges.

1,821,796. WINDING SPOOL BODY. EVERETT G. GLIDDEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 14, 1929. Serial No. 407,257. 7 Claims. (Cl. 171—252.)



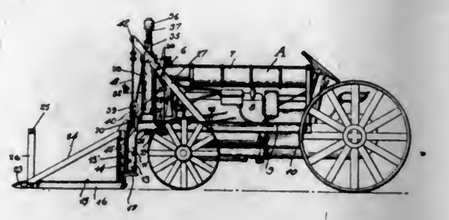
1. A spool body consisting of a single sheet of material having protuberances thereon, and a coil supported on said protuberances, said body having a resilient flange spaced from said coil for firmly retaining the spool on a core structure.

1,821,797. GAS BURNER. JULIO GONZALEZ, Jersey City, N. J. Filed Oct. 1, 1930. Serial No. 485,722. 1 Claim. (Cl. 158—10.)



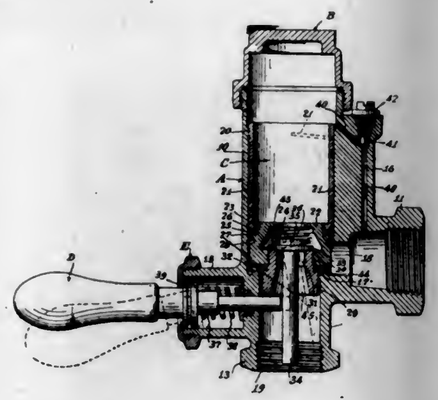
In a fire kindler, the combination of a tapered body portion having a longitudinal compartment extending lengthwise of same, a gas connecting portion at the larger end of said body portion and a hanger structure on the upper side of said body portion and being integral therewith, a spring clip through said hanger structure adapted to detachably secure said body portion to the grates of a stove, said body portion having a cut away portion on the underside thereof to admit air into said compartment, a narrow rectangular opening on the upper side of said body portion, said opening adapted to provide a burner portion for said fire kindler, and a hanger structure at the smaller end of said body portion adapted to provide means for hanging said burner when not in use.

1,821,798. CARRYING FORK ATTACHMENT FOR CLAY PRODUCTS. HENRY F. GOSS, Sacramento, Calif. Filed Oct. 24, 1928. Serial No. 314,744. 2 Claims. (Cl. 254—8.)



1. In combination with a vehicle having hoisting apparatus, an attachment comprising side bars longitudinally arranged, pivoted at their rear ends and having angularly disposed forward ends, upper and lower cross bars connected with the end portions of the side bars, fingers carried by the lower cross bar and braced from the upper cross bar, and means associated with the vehicle for elevating the side bars.

1,821,799. FLUSH VALVE. PETER GRABLER, Rocky River, and WILLIAM GRABLER, Mansfield, Ohio. Filed Nov. 18, 1926. Serial No. 149,154. 5 Claims. (Cl. 137—93.)

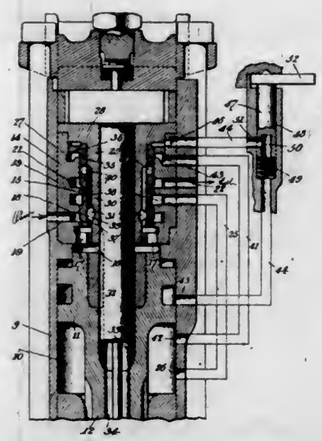


1. A flush valve including a casing formed with an inlet and an outlet and a guideway, a valve member formed with a guide portion operable in said guide-way, said guide portion being formed with a peripheral spiral groove forming a thread-like spiral ridge-structure, said groove terminating short of the ends of the guide portion, and means for unseating said valve member.

1,821,800. PROCESS FOR MAKING PHENOLS. THOMAS GRISWOLD, Jr., Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 29, 1927. Serial No. 216,321. 4 Claims. (Cl. 260—154.)

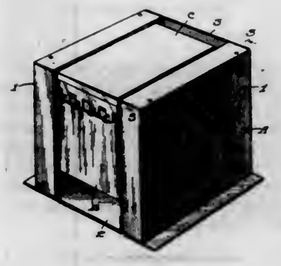
1. In a process of making phenol, the steps which consist in maintaining chlorobenzene and an aqueous alkaline solution at a high temperature and pressure for reaction, releasing into a zone of lower pressure whereby vaporizable constituents flash into vapor and then separately removing such constituents and those which do not vaporize from the zone in question.

1,821,801. FLUID OPERATED TOOL. HJALMER C. GUSTAFSON, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Mar. 3, 1928. Serial No. 258,774. 4 Claims. (Cl. 121—28.)



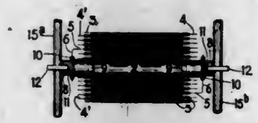
1. In a tool of the character set forth, the combination with a cylinder member having a piston chamber therein, of a reciprocatory piston in the piston chamber, a valve chamber having a supply port and an exhaust port, a plug extending into the valve chamber, a tubular distributing valve surrounding the plug and operating within the chamber said valve having an open end, means controlled by the valve for permitting the fluid to flow from the supply port outside the valve and past its open end to the piston chamber, and means also controlled by the valve for permitting the exhaust to flow from the piston chamber into said open end of the valve and between the plug and valve to the exhaust port.

1,821,802. BOOKSTAND. WALTER E. HASKIN, Flushing, N. Y., assignor to Pressed & Welded Steel Products Co., Long Island City, N. Y., a Corporation of New York. Filed Apr. 6, 1928. Serial No. 267,907. 9 Claims. (Cl. 45—85.)



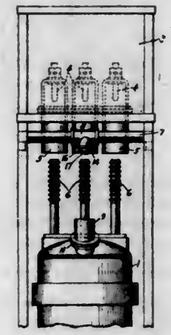
1. In combination with a bookstand, a book holder pivotally mounted between its ends and normally suspended in the stand and adapted to be moved from a closed position in the stand to an open position on the stand, and counterbalancing means operatively connected with the pivot of the bookholder, said pivot of the bookholder being nearer one end of the bookholder than the other whereby a book when contained in said holder will remain at rest by gravity in either its open or closed position.

1,821,803. ELECTRICAL CONDENSER. EMIL HAEFELY, Basel, Switzerland. Filed May 10, 1929, Serial No. 362,055, and in Germany June 16, 1928. 4 Claims. (Cl. 175—41.)



1. An electrical condenser comprising a frame, a number of condenser units, each having connecting leads and metallic head pieces at each end with means for fastening the connecting leads, rails on said frame for carrying the condenser units, constituting at the same time bus-bars for the current, and feather and groove connection means between said condenser unit head pieces and said bus-bars to allow the condenser units to be individually slidden on and off said bus-bars in electrical contact therewith.

1,821,804. ELECTRICAL SWITCH GEAR. CHARLES H. HILL, Drexel Hill, Pa., assignor to General Electric Company, a Corporation of New York. Filed Sept. 29, 1930. Serial No. 484,984. 8 Claims. (Cl. 175—298.)

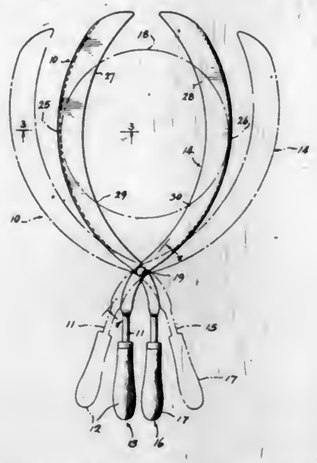


1. Electrical switch gear including a plurality of circuit breaker housings and an exhaust conduit common to said housings for venting gases therefrom, and means for connecting an individual breaker housing to said conduit comprising an exhaust connection communicating with the interior of said housing and a valve disposed in said conduit for controlling the flow of gas, said valve being actuated to its open position by bodily movement of said housing to operative position whereby said exhaust connection is in direct communication with said exhaust conduit.

1,821,805. PLATE LIFTER. FRANK A. HORAN, Brooklyn, N. Y. Filed Apr. 26, 1930. Serial No. 447,680. 2 Claims. (Cl. 294—28.)

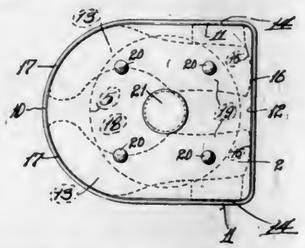
1. A device for lifting plates, comprising a pair of curved relatively movable members, pivot means connect-

ing said members in crossed relation, said members including a pair of handles, and a leg continuous with each of



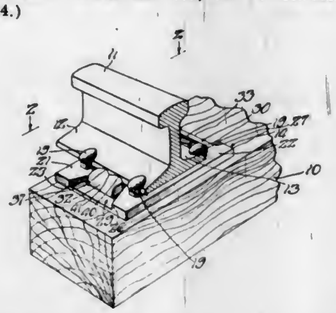
said handles and including a pair of parallel spaced flanges, the flanges of the respective legs adapted to embrace opposite sides of the flange of a plate to be lifted.

1,821,806. BOWLER'S BALL AND SHOE BAG. JOHN K. HOTZE, St. Louis, Mo. Filed Mar. 9, 1928. Serial No. 260,523. 6 Claims. (Cl. 150—52.)



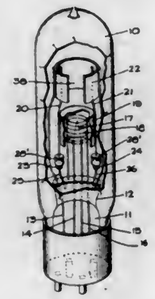
6. A bowling ball bag comprising a flat bottom wall, and a surrounding wall extending upwardly from said bottom wall having an approximately straight transverse portion at one end and a rounded portion at its opposite end.

1,821,807. TIE PLATE. FRED HUFF, Chicago, Ill. Filed Aug. 1, 1930. Serial No. 472,367. 7 Claims. (Cl. 238—304.)



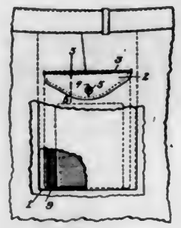
1. In a device of the class described, a base plate having longitudinally extending intersecting converging grooves formed therein providing shelves in said base plate and providing a shoulder in each of said shelves at the point of intersection of said grooves, and a second plate slidably inserted in said grooves and adapted for lateral pivotal movement on said shoulders.

1,821,808. SPACE DISCHARGE DEVICE. ALBERT W. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 31, 1927, Serial No. 216,679. 4 Claims. (Cl. 250—27.5.)



4. In combination, a photo-electric device comprising a receptacle having a reentrant portion provided with a stem, a cathode, anode and control electrode mounted in said device, said control electrode being coated with a highly reactive light-sensitive material, leading-in wires extending through said stem and connected to the anode and cathode, means for supporting the control electrode on said stem and means for preventing electrical leakage about the supporting means.

1,821,809. POCKET PROTECTOR. LOUIS V. JOHNSON, Brooklyn, N. Y. Filed Aug. 19, 1930. Serial No. 476,412. 1 Claim. (Cl. 2—254.)



A safety pocket including a pocket structure having an opening at the top, means for securing the pocket structure to a garment, a sheet having a portion looped over the outer part of the pocket structure and garment to form a flap externally of the pocket structure, and a loose portion extending into the pocket to a point near the bottom o present a protecting sheet, said sheet being coextensive with the interior of the pocket and adapted to cover an article carried by the pocket.

1,821,810. SIGHT DEVICE FOR PRINT MOUNTING. KURT KETZSCHER, Berlin-Tempelhof, Germany. Filed July 6, 1928, Serial No. 290,782, and in Germany Jan. 30, 1928. 3 Claims. (Cl. 33—46.)

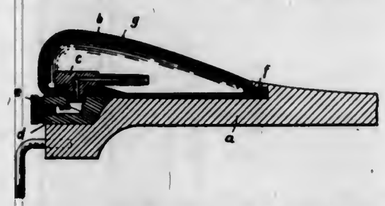
1. An adjusting device for the mounting of colored deep-prints or rotographic prints, comprising a simple sub-

stantially cylindrical tube, which at its upper closed end is equipped with a small central opening, and elements ar-



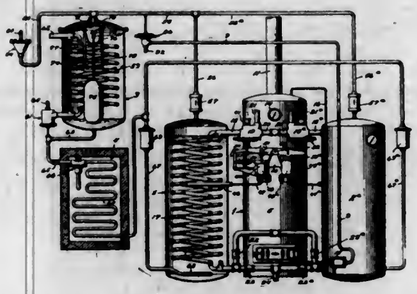
ranged adjacent the lower open end of said tube and adapted to cooperate and register with the arms of a registering cross on a printing plate.

1,821,811. CHIN REST FOR VIOLINS AND SIMILAR MUSICAL INSTRUMENTS. KURT MAI, Stuttgart, Germany. Filed Dec. 20, 1928, Serial No. 327,410, and in Germany Dec. 24, 1927. 5 Claims. (Cl. 84—279.)



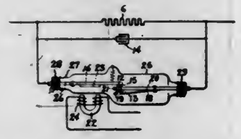
1. A chine rest for stringed musical instruments, comprising a rigid member adapted to be contacted by the chin and an elastic jaw supporting edge, covering part of said rigid member.

1,821,812. ABSORPTION REFRIGERATION APPARATUS AND SYSTEM. THOMAS K. MARBURY, Meridian, Miss. Filed April 21, 1928. Serial No. 271,852. 7 Claims. (Cl. 62—5.)



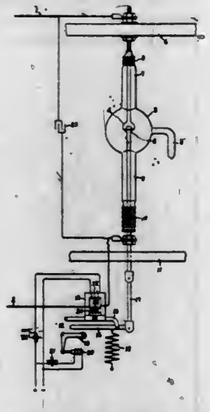
1. In an absorption refrigeration apparatus, the combination of a pair of alternately acting combined generators and absorbers each containing an ammonia solution, a coil within each of said combined generators and absorbers, closed circuit means for passing a heating fluid through said coils in alternation, open circuit means for passing a cooling fluid in the opposite direction through said coils in alternation with the flow of the heating means, a single thermostatically operated valve means for each combined generator and absorber for controlling the flow of said heating means and cooling means, a condenser receiving ammonia gas driven off from said combined generators and absorbers in alternation, an expansion coil located within a refrigeration chamber, an expansion valve between the condenser and expansion coil, and means for returning the expanded ammonia gas to the combined generators and absorbers during cooling thereof and diffusing the gas into the exhausted solution.

1,821,813. CIRCUIT MAKING AND BREAKING DEVICE. CLIFFORD A. NICKLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1928. Serial No. 264,210. 13 Claims. (Cl. 175—294.)



1. In an electric circuit, a circuit interrupter comprising relatively movable contacts, an energy absorbing circuit in parallel relation to said contacts, and means for separating said contacts at such a rate relative to the value of voltage built up in said energy absorbing circuit that at each instant the rupturing voltage of the dielectric between said contacts shall be greater than the voltage built up at the same instant in said energy absorbing circuit.

1,821,814. CIRCUIT INTERRUPTER. CLIFFORD A. NICKLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1928, Serial No. 264,211. Renewed June 5, 1931. 3 Claims. (Cl. 175—294.)

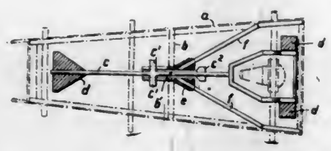


1. A circuit interrupter comprising relatively movable cooperating electrodes, means for strongly biasing one of said electrodes to a predetermined operating position, magnetic means for holding said electrodes in a position opposite to said predetermined position, flux shifting means for effecting a quick release of said holding means, and means for preventing arcing at the electrodes comprising a condenser connected in parallel circuit to said electrodes having a capacity proportioned to the speed of separation of said electrodes so as to absorb substantially all of the stored magnetic energy of the circuit to be interrupted at such a rate that the voltage built up across said electrodes is at any instant just insufficient to cause breakdown of the dielectric between said electrodes.

1,821,815. SEPARATION OF ORTHO-DIHYDROXYBENZENE BODIES. DERIC WILLIAM PARKES, West Bromwich, England, assignor of one-half to Herbert William Robinson, Birmingham, England. Filed July 30, 1928, Serial No. 296,418, and in Great Britain Aug. 5, 1927. 19 Claims. (Cl. 260—154.)

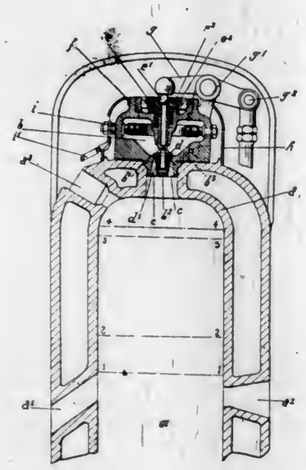
1. A method of treating an ammonia liquor containing tar acids and bodies of the ortho-dihydroxybenzene series which consists in adding to the liquor a reagent comprising inorganic salts of the group consisting of lead, aluminum, zinc, magnesium and manganous salts having the property of reacting with the ortho-dihydroxybenzene bodies to precipitate them as insoluble compounds, removing the precipitate thus formed and treating the remaining liquor for the removal of tar acids.

1,821,816. DEVICE FOR PREVENTING SIDE SLIPS IN MOTOR VEHICLES AND THE LIKE. JOHANNES QUAAS, Erfurt, Germany, assignor to Hans Prinz, Erfurt, Germany. Filed Oct. 22, 1928, Serial No. 314,295, and in Germany Oct. 28, 1927. 4 Claims. (Cl. 280—150.



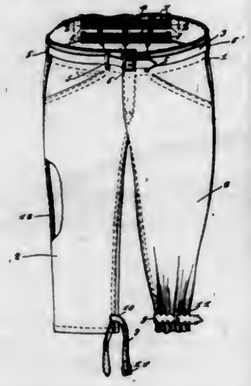
3. A device for preventing side slip in motor vehicles and the like, comprising a pendulum adapted to swing freely within a predetermined angle in a plane substantially parallel to the plane of the vehicle frame and a pivoted connection between said pendulum and the vehicle.

1,821,817. METHOD OF INJECTION OF FUEL FOR INTERNAL COMBUSTION ENGINES. FRANÇOIS ROCHEFORT, Paris, France. Filed May 27, 1927, Serial No. 194,768, and in France June 3, 1926. 2 Claims. (Cl. 123—33.)



1. The method of operating an internal combustion engine which comprises, providing two normally segregated bodies of gaseous nature, one body being located within the compression chamber of the engine, subject to compressive variations incident to the change of capacity of said compression chamber, and the other body being definitely bounded outside the compression chamber, placing said bodies into restricted communication during the compression stroke of the engine, thereby producing a tidal flow from the outside body to the one within the compression chamber on the early phase of the compression stroke, and in contra-direction on the later phase of the compression stroke, admitting liquid fuel under pressure in the form of a film to said bodies at said point of restricted communication during the period of their tidal flow, and controlling the duration of said restricted communication, thoroughly pulverizing said liquid fuel by means of the tidal flow from the outside body to the one within the compression chamber on the early phase of the compression stroke, and in contradistinction on the later phase of the compression stroke trapping the outside body of gaseous matter thus enriched with liquid fuel by positively cutting off said restricted communication just previous to the ignition point in said compression chamber and maintaining it cut off until the beginning of the next compression stroke, and thoroughly vaporizing said trapped body of gaseous matter.

1,821,818. GARMENT. FRANK S. SNYDER, Council Bluffs, Iowa. Filed July 19, 1930. Serial No. 469,157. 1 Claim. (Cl. 2—227.)



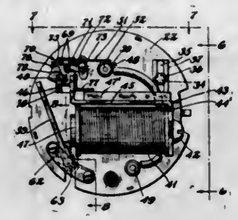
A garment comprising the usual component parts of a pair of trousers, an elastic band secured at its ends to the inner side of the waist band of the trousers and disposed transversely across the rear seam of the trousers, the elastic band holding that portion of the waist band which lies between the ends of the elastic band in a gathered condition and a belt extending around the outer side of the waist band and secured thereto.

1,821,819. CAN HANDLING DEVICE. ERIK A. SODERBERG, Alameda, Calif., assignor of one-half to George Gundersen, Alameda, Calif. Filed Jan. 11, 1929, Serial No. 331,933. Renewed Jan. 19, 1931. 4 Claims. (Cl. 294—87.)



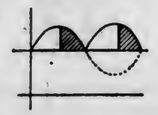
1. In a device of the character described, a pair of parallel strips, corrugated plates secured to said strips, said plates having openings formed therein for the purpose of engaging the article to be carried, a pair of handles pivotally supported on said parallel strips and means carried by said handles for moving said strips toward and away from each other.

1,821,820. ELECTRICALLY OPERATED CLOCK. LEWIS J. STERN, New York, N. Y., assignor to Sterling Clock Co. Inc., a Corporation of New York. Filed Feb. 8, 1926. Serial No. 86,706. 8 Claims. (Cl. 185—40.)



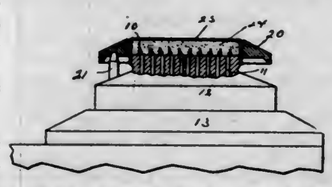
1. Spring motor controlling mechanism comprising in combination an electro-magnet with an armature, means operated by said armature for "winding" the spring motor, and a switch operatively associated with the armature for controlling the electro-magnet, said armature being attracted toward the pole pieces upon energization of the electro-magnet and being relatively free to acquire momentum during the first part of its movement, said spring motor winding means being positioned to be acted upon by said armature only during the latter part of its movement.

1,821,821. FREQUENCY-INCREASING DEVICE EMPLOYING MERCURY VAPOR LAMPS. MARCEL LUCIEN TOULY, Paris, France, assignor to General Electric Company, a Corporation of New York. Filed July 31, 1924, Serial No. 729,382, and in France Aug. 18, 1923. 3 Claims. (Cl. 172—281.)



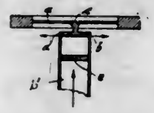
8. A system for increasing the frequency of alternating currents including in combination a device provided with a cathode and a plurality of anodes mounted within a receptacle containing an ionizable medium, said device being provided with a plurality of grids, the number of grids in said device being equal to the number of anodes therein, a phase changer, circuits connecting the anodes and cathode of said device with said phase changer, a load circuit supplied with voltage from the circuit connecting the cathode of said device with the neutral point of the phase changer, circuits connecting the grids of said device to the phase changer so as to obtain a difference in phase of the current in the grid-cathode circuits relative to the current in the anode-cathode circuits to produce an alternating current of higher frequency in said load circuit, and means for varying the phases of the voltages on said grids so as to produce variations in the amplitude of the augmented current.

1,821,822. METHOD OF FORMING ELECTRICAL HEATING ELEMENTS. EDWIN L. WIEGAND, Pittsburgh, Pa. Filed Dec. 31, 1928, Serial No. 329,629. Renewed May 2, 1931. 17 Claims. (Cl. 201—67.)



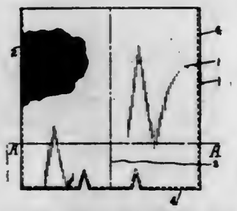
14. The herein described method of making electrical heating units which consists in placing an inverted sheath over a refractory insulating material which in turn envelops a resistor, said resistor being positioned and the refractory mass being held against lateral escape, applying pressure to the sheath with the refractory and resistor therein; withdrawing the resistor form and inverting the sheath with the refractory and resistor therein, arranging a cover plate within the sheath, turning the edges of the sheath over the edges of the cover, repressing and finally drying and baking.

1,821,823. SOUND TRANSMITTING APPARATUS. ERNST WILCKENS, Berlin, Germany. Filed June 18, 1928, Serial No. 286,315, and in Germany June 23, 1927. 2 Claims. (Cl. 116—139.)



1. A sound transmitting device comprising a diaphragm supported under tension, a pipe conducting pressure fluid from the opposed faces of the diaphragm, a plate supported by the diaphragm but spaced therefrom and adapted to move toward or away from the discharge end of the pipe by varying pressure of the fluid, said plate being of the same diameter as the pipe and of a diameter less than the diaphragm.

1,821,824. DUST COLLECTOR. EDGAR F. WOODWARD, Brooklyn, N. Y., assignor to Lewis C. Van Riper, Brooklyn, N. Y. Filed Dec. 24, 1929. Serial No. 416,266. 4 Claims. (Cl. 183—51.)



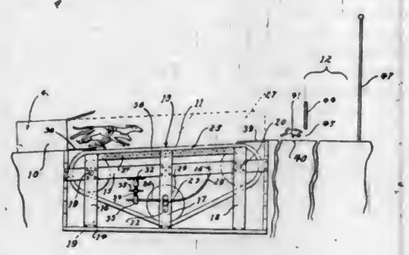
1. A dust collector adapted for use on a pneumatic cleaner, comprising a paper container porous to air, a net-like reinforcing member in contact with said container, and adhesive means applied to the strands only of said member for firmly attaching the latter to said container.

1,821,825. SAFETY RAZOR. JAMES M. ZUMWALT, Miami, Fla. Filed Jan. 10, 1931. Serial No. 507,942. 3 Claims. (Cl. 30—12.)



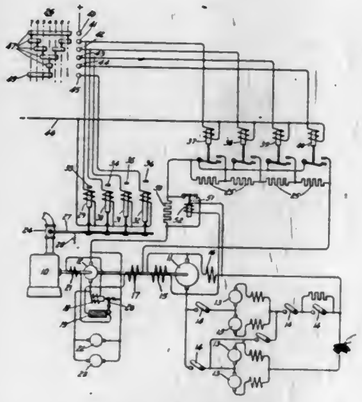
1. A razor of the class described comprising a handle part, a pair of blade supporting members, each of concavo-convex shape for holding a blade placed between them in an arc, means for detachably connecting the supporting members to the handle whereby the members can be attached to the handle with either member innermost to support the blade in a convex manner or in a concaved manner.

1,821,826. PORTABLE MOVING RACING APPARATUS. ELMER L. BALLEW, Chicago, Ill. Filed Sept. 27, 1928. Serial No. 308,738. 7 Claims. (Cl. 272—4.)



1. In a racing device, a starting point, a finishing point, a track portion arranged between said starting point and said finishing point embodying a movable floor, a lure arranged adjacent said finishing point, and means for moving said lure from operating position.

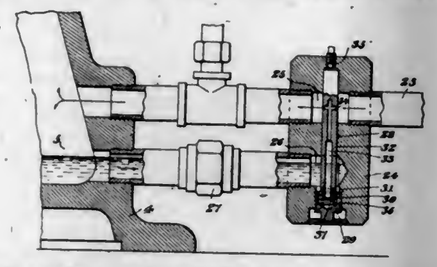
1,821,827. SELF PROPELLED VEHICLE. ERROL W. BRANDENSTEIN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 4, 1928. Serial No. 303,724. 5 Claims. (Cl. 290—17.)



1. A vehicle comprising an engine, a controlling device for varying the torque exerted by said engine, a generator driven by said engine having a motor connected thereto for propelling the vehicle, an excitation system for said generator, means responsive to actuation of said engine controlling device for varying the excitation of said generator and for varying the excitation of said generator independently of said engine controlling device after a predetermined adjustment of the latter, and means controlled by an electrical characteristic of said generator for decreasing the excitation thereof so as to prevent excessive speeding of the vehicle.

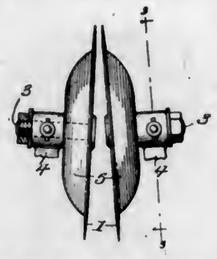
1,821,828. LUBRICATING APPARATUS. IVAN S. CARPENTER, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed June 6, 1930. Serial No. 459,545. 5 Claims. (Cl. 184—55.)

5. In a metal working machine, the combination with a work holding apparatus including a chambered base, said base constituting a reservoir for motive fluid and for lubricant, a conduit for directing the motive fluid from the chamber to the work holding mechanism to operate the latter, valve mechanism controlling the conduit, a motive fluid supply conduit leading to the chamber, a lubricant



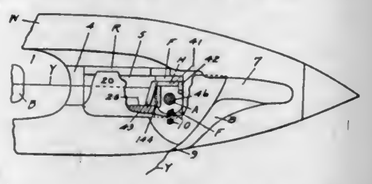
well receiving lubricant from the chamber, and an atomizer stem having a passageway provided with an inlet end in the well and an outlet orifice in the motive fluid supply conduit.

1,821,829. GRAIN DRILL DISK. HARLAN COE, Spokane, and CLIFTON P. COE, Plaza, Wash. Filed May 17, 1930. Serial No. 453,307. 1 Claim. (Cl. 97—217.)



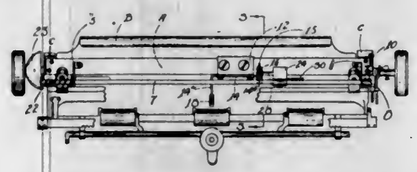
An attachment for the disks of grain drills, and in which the disk is fixed on a squared portion of a spindle bolt on which is journaled a draw bar and comprising a member round in plan and concavo convex in cross section and centrally formed with a squared opening to receive the squared portion of the spindle bolt therethrough, to have its outer face contacted by the draw bar and to have its edge forced by such contact against the face of the disk.

1,821,830. FRICTION DEVICE FOR SHUTTLES. HARRY ALTON DAVOL, Methuen, Mass., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 26, 1928. Serial No. 249,640. 5 Claims. (Cl. 139—217.)



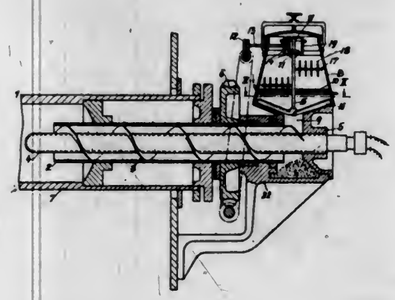
1. The combination in a threading block for shuttles in which is a threading chamber one wall of which is formed with a vertical tongue guide and which has a top guide which slopes downward into said chamber, said top guide having in its under side a tongue recess and said block having in its bottom part a friction block recess and a vertical threaded screw pin head hole positioned above said recess; of a friction block positioned in said block recess and having a pin hole; a friction member formed with a base in which is a pin hole said base resting on the friction block and said friction member having a side wall comprising two upwardly projecting guide tongues, one positioned forward of the screw pin and the other behind it, the top end of the forward tongue entering into the tongue recess and the end of the other being bent over to engage the tongue guide; a screw pin having a threaded head which is screwed into the screw pin head hole and a shank which passes through the pin hole in the base of the friction member and into the hole in the friction block; and a tension spring which surrounds the shank of the screw pin between its head and the base of the friction member.

1,821,831. PAGE-END SIGNALING DEVICE. EWART INGLIS GALE, Markham, Ontario, Canada. Filed June 10, 1929. Serial No. 369,859. 2 Claims. (Cl. 197—189.)



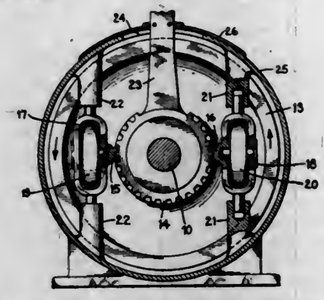
1. In combination with a typewriter, embodying a line space adjustment bar and means for reciprocating the same in a backward and forward direction, of an operating rod; means, operatively actuated by said bar, for rotating said rod backwardly upon actuation of said bar in a backward direction; a trip lever, the operation of which is controlled by a sheet of paper on the paper rest of said machine; said trip lever designed to normally retard the forward rotation of said rod; said trip lever designed to move to non-retarding position when the lower end of said paper is moved passed a pre-determined position on said paper rest; a signal; a means for tensionally retaining said rod to rotate forwardly and said rod having a striker connected therewith for contacting with said signal when said rod is permitted to rotate forwardly when said trip lever is in non-retarding position.

1,821,832. HARDENING FURNACE WITH CONTINUOUSLY OPERATING CHARGING DEVICE. ERNST GOERIG, Mannheim, and HEINRICH LINDHORST, Berlin, Germany. Filed Mar. 28, 1929, Serial No. 350,769, and in Germany Dec. 18, 1928. 9 Claims. (Cl. 263—1.)



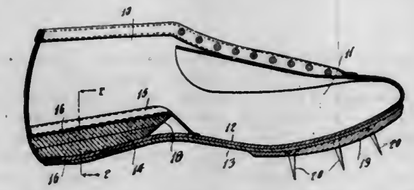
1. In a hardening furnace with continuously operating charging device, a container for cementing powder having a vertical axis and having the form of a truncated cone, the cross-section of which decreases in upward direction, the container also converging slightly at its bottom, a device for conveying the cementing powder into the furnace, and a comparatively narrow channel connecting the said container with the said conveying device.

1,821,833. VARIABLE SPEED POWER TRANSMISSION MECHANISM. FRANK A. HAYES, Middletown, N. J. Filed June 26, 1930. Serial No. 463,876. 10 Claims. (Cl. 74—34.)



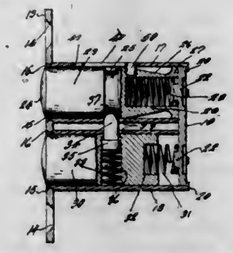
1. In a transmission mechanism, in combination, coaxial friction disks having toroidal grooves in their opposed faces, friction rollers between the disks, cooperating with the grooves in said disks, carriers for the rollers, mounted for adjustment on axes transverse to the axes of the rollers to vary the speed ratio of the mechanism, a gear coaxial with the disks and rotatable independently thereof, and means carried by the roller carriers and cooperating with the said gear to produce speed-varying adjustment of the carriers when the gear is rotated.

1,821,834. ATHLETIC SHOE. FREDERICK L. HETTER, San Diego, Calif. Filed Oct. 25, 1928. Serial No. 315,014. 1 Claim. (Cl. 36—37.)



An athletic shoe having a relatively thin sole, a pad at the heel of the shoe and located within the same, said pad comprising superposed plies of sponge-rubber and extending materially above the upper surface of the forward portion of the sole, said pad at its forward end terminating at the instep and extending upwardly and forwardly substantially at an angle with respect to the sole, the space between the said end and sole being substantially unrestricted, and a pad retaining sheet disposed over the same and secured completely about its margin to the upper and sole of the shoe.

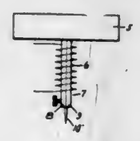
1,821,835. PUSH BUTTON WINDOW LOCK. LOUIS C. HINDERER and WALTER F. HINDERER, Kankakee, Ill. Filed Sept. 10, 1930. Serial No. 480,998. 2 Claims. (Cl. 292—33.)



1. A window lock of the type described comprising a plate for mounting on a window structure, a pair of tubu-

lar casings secured at their front ends in apertures in said plate, and a rearward plate closing the rearward ends of said casings and supporting them in relation to each other; and a bolt closely slidable in one of said casings and adapted to position its forward end flush with the plate, said bolt being formed centrally with a peripheral groove from which extends rearwardly a tapered portion, and a flange on the rearward end of the bolt; and a plunger closely slidable on the other of said tubular casings having a central vertical well, a pin and a spring for projecting the pin from said well, said pin adapted to be projected through registering apertures in said casings to seat frictionally in the said groove in said bolt; and a pair of bosses formed on the inner facing of said rearward plate, a coiled spring on each of said bosses and extended forwardly into recesses in the rearward ends of said bolt and said plunger for maintaining them in operative position in the casings and projecting the said bolt to a position in extension from the said one casing, and means to lock the bolt against unauthorized inward movement.

1,821,836. PICK-UP DEVICE. EDWIN H. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 7, 1930. Serial No. 442,185. 2 Claims. (Cl. 179—100.41.)



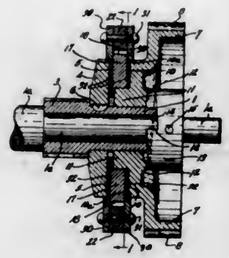
1. In a phonographic reproducing device, a plurality of magnetostrictive members rigidly mounted at one end and connected at their respective other ends by a stylus supporting link, each of said members comprising two metallic elements rigidly attached to each other and possessing opposite magnetostrictive characteristics, current coils arranged to surround each of said members respectively and connected in cooperative relation with each other.

1,821,837. POCKET PROTECTOR. LOUIS V. JOHNSON, Brooklyn, N. Y. Filed May 2, 1931. Serial No. 534,668. 2 Claims. (Cl. 2—254.)



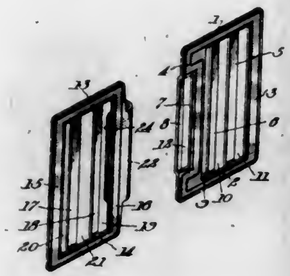
2. A safety pocket including a pocket structure having a pair of parallel substantially coextensive compartments, each compartment having an opening at the top, means for securing the pocket structure to a garment, a sheet having a portion looped over the outer part of the pocket structure at one end of said openings so that a portion thereof will overhang the garment to form a flap externally of the pocket structure, and a loop portion extending into the pocket not covered by said sheet, said loop portion extending to a point near the bottom of the last mentioned compartment to present a protecting sheet substantially coextensive with the interior of the compartment, said sheet being adapted to cover the article carried in said last mentioned compartment.

1,821,838. LOAD BRAKE FOR HOISTS. WINFRED H. JUERGENS, Cleveland, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Nov. 12, 1930. Serial No. 495,118. 2 Claims. (Cl. 192—15.)



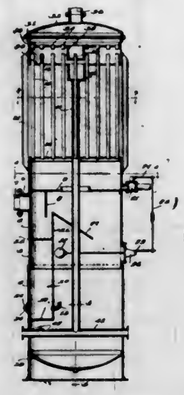
1. Apparatus of the character described and comprising a rotatable driving member having a hub portion and a shoulder concentric therewith, a circular ratchet plate rotatable upon said hub portion, an anchor plate arranged in the plane of said ratchet plate to bear upon the periphery thereof, a side plate secured with said anchor plate with an inner edge portion bearing upon said shoulder, and a friction disk arranged on the face of said ratchet plate and positioned thereon by said side plate, with a central opening to clear said driving member hub portion.

1,821,839. APPAREL BUCKLE. ALLEN H. KERNGOOD, Baltimore, Md., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md., a Corporation of Maryland. Filed Sept. 10, 1930. Serial No. 481,052. 1 Claim. (Cl. 24—75.)



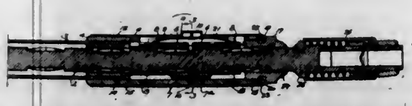
An apparel buckle, composed of a frame, having side bars, front and rear end bars, and cross bars between the end bars, with slots intervening between the end bars and said cross bars, and a hook-engaging cross bar at the front, the intervening cross bars and the hook-engaging cross bar being depressed from the level of the frame, and another frame having a hook at its leading end to engage the hook-engaging cross bar to position the two frames in a common level.

1,821,840. COMBINED FEED WATER HEATER AND STEAM CONDENSER. MEINHARD H. KOTZEBUE, Tulsa, Okla. Filed July 23, 1930. Serial No. 470,172. 4 Claims. (Cl. 257—38.)



1. In combination with a steam power plant or the like, a tank adapted for the reception of exhaust steam from said power plant, vertically positioned steam pipes mounted on the top of said tank and exposed to the atmosphere for radiating the heat from said steam, means positioned at the top of said steam pipes for condensing the steam comprising a casing having a lower chamber and an upper chamber, chimneys positioned above said steam pipes in the wall between said chambers, said chambers being adapted to condense the steam therein, and means conducting said condensed steam from said chambers to the tank for subsequent use in the boiler of said steam power plant.

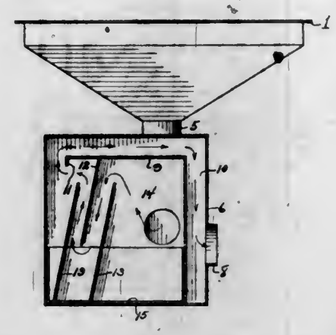
1,821,841. SPIRAL SCREW DRIVER. GEORGE O. LEOPOLD, Philadelphia, Pa., assignor to North Bro's M'f'g Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1930. Serial No. 489,141. 2 Claims. (Cl. 145—54.)



1. The combination in a spiral screw-driver, of a spindle having right and left-hand threads thereon; a casing; a handle connected to the casing; two nuts mounted within the casing and through which the spindle extends; pawls engaging the nuts; a shifter for shifting the pawl, each nut having an extended hub, the internal threads in the nuts extending the full length of each nut; a flanged bushing at the inner end of the casing, the inner nut bearing against the bushing; a shell; a sleeve screwed into the casing; and means for securing the shell to the casing.

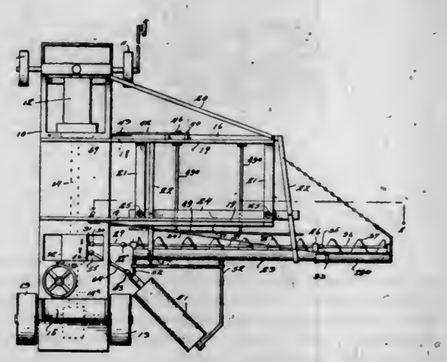
1,821,842. DUST COLLECTOR. MILLARD E. LONG, San Antonio, Tex. Filed Apr. 8, 1930. Serial No. 442,675. 2 Claims. (Cl. 183—75.)

1. A device of the class described comprising a casing, partitions dividing the casing into a chamber and an L-shaped passage, the horizontal limb of the passage being in communication with the top of the chamber, means for introducing the air to be cleaned into the chamber, a suction device connected with the vertical limb of the passage, a short baffle depending from the free edge of



the top partition, a long baffle depending from said partition, a drawer fitting in the chamber, and baffles carried by the drawer and between which the second baffle extends.

1,821,843. SHOULDER LEVELING AND FINISHING MACHINE. EARL S. LUCAS, Avoca, Iowa, assignor of one-half to Frank J. Moran, Omaha, Nebr. Filed June 12, 1930. Serial No. 460,682. 7 Claims. (Cl. 37—108.)

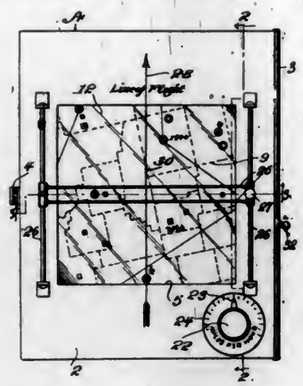


5. A machine of the character described, comprising a motor operated truck, an element extending laterally from the truck, a blade supporting beam mounted below the element, means for vertically adjusting said beam, a leveling blade operatively mounted upon said beam and vertically adjustable therewith, a screw conveyor mounted upon and in front of said blade and acting as a distributor, a driving shaft connected to the shaft of the screw conveyor by flexible, driving connection, and means for driving said shaft from the motor including a clutch whereby the shaft may be disconnected from the motor.

1,821,844. COURSE INDICATOR FOR AIRCRAFT. ARTHUR J. MCGRATH, Washington, D. C. Filed July 17, 1929. Serial No. 379,052. 1 Claim. (Cl. 40—31.)

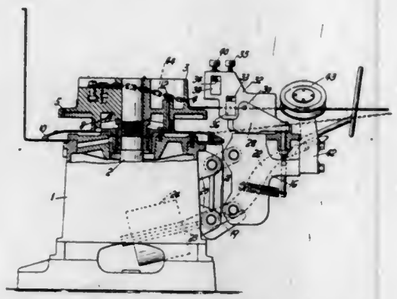
A course indicator for aircraft comprising a casing having a window therein, a pair of rolls in the casing, a map sheet having its ends connected with the rolls, means for holding a portion of the sheet adjacent the window,

a motor for rotating one of the rolls, means for adjusting the speed of the motor and an adjustable position bar



extending over the window, said bar comprising a pair of spaced members and a strip of transparent material between them.

1,821,845. WIRE DRAWING MACHINE AND PROCESS OF THREADING THE SAME. EDWIN J. MCILVRIED, Cleveland, Ohio, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio. Filed July 8, 1929. Serial No. 376,542. 2 Claims. (Cl. 205—2.)



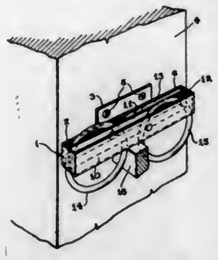
1. The process of threading a wire drawing machine of the double deck type comprising passing the leading end of the wire through the first die, coiling it around the finishing surface of the block, stopping the coiling operation, loosening the coil, shifting the coil bodily to the primary surface of the block, unwinding a sufficient length of wire from the coil to reach from the primary surface through the finishing die to the finishing surface, and passing the leading end through the finishing die and on to the finishing surface of the block.

1,821,846. COOLER. HARRY L. MILLER, Chester, Pa. Filed Nov. 15, 1930. Serial No. 495,968. 2 Claims. (Cl. 257—255.)



1. A cooler comprising a vertical series of horizontally disposed cooling tubes provided near each of their outer ends with inwardly and outwardly inclined guard flanges which are integral with said tubes.

1,821,847. LATCH. ZERO POLAIRE, Salem, Oreg. Filed Dec. 16, 1930. Serial No. 502,806. 3 Claims. (Cl. 292—299.)



1. A latch, comprising a frame having a pair of parallel slots therein, a ring loosely suspended in each of said slots for movement in one direction only, the directions of motion being opposite, whereby said rings will engage and retain an engaging latchbar therebetween, and means for securing said frame in position.

1,821,848. SELECTIVE CONTROL OF WEBHOLDERS. JOHN A. PONS, Valdese, N. C., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Aug. 2, 1929. Serial No. 382,966. 10 Claims. (Cl. 66—108.)



1. In a circular knitting machine having a needle cylinder and a series of radially movable web-holders intercalated among the needles, a resilient means common to said web-holders tending to move them inwardly and a cam means adapted to move them outwardly at a desired point, said cam means and said web-holders being so correlated that at least some web-holders are free to be moved inwardly in advance of the point where others are to be inserted, the combination of means for selectively moving certain of said free web-holders inwardly and means for resisting the effort of said resilient means to move other web-holders in at the same place.

1,821,849. METHOD OF PREVENTING BREAKS ON PAPER MACHINES. HAROLD ROBERT RAFTON. Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Dec. 11, 1928. Serial No. 325,406. 8 Claims. (Cl. 92—21.)

1. In the manufacture of paper filled with alkaline filler, the improvement in a method of running a furnish containing alkaline filler and fibrous material including old paper stock whereby the formation of soft lumps is substantially avoided which comprises including in the furnish only stock which is substantially free from flotation agent.

1,821,850. TAPERED TUBULAR POLE. EDMUND W. RIEMENSCHNEIDER, Canton, Ohio, assignor to The Union Metal Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 24, 1929, Serial No. 394,849, and in Canada Feb. 11, 1929. 12 Claims. (Cl. 189—23.)



1. A one piece tapered, tubular sheet metal pole, having a length of 20 feet and upwards, made of 11 gauge or thicker metal, and having a length of 20 or more times its base diameter.

1,821,851. PHONOGRAPH RECORD DISK. PAUL J. SCHWARZHAUPT, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,836. 11 Claims. (Cl. 274—42.)



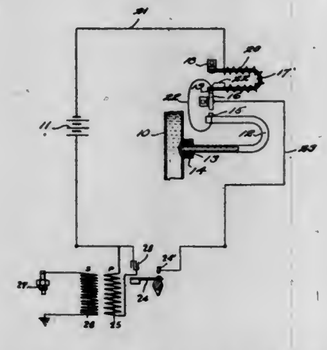
1. A phonograph record disk having embedded therein a needle adapted for use in playing the record.

1,821,852. BRAKE. ERNEST W. SEAHOLM, GUY E. PARKER, and ARTHUR H. STAHLHUTH, Detroit, Mich., assignors to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Original application filed Feb. 13, 1924, Serial No. 692,526. Divided and this application filed Oct. 1, 1926. Serial No. 138,837. 9 Claims. (Cl. 188—194.)



1. A front wheel brake comprising, in combination, a front axle, a knuckle, a king pin connecting the knuckle and axle, a wheel journaled on the knuckle and having a brake drum substantially encircling the king pin, retarding means supported by the knuckle in operative proximity to the drum including a servo device arranged within the space between the top of the king pin and the inner periphery of the drum, and driver-controlled means for operating the servo device which is constructed and arranged to permit swiveling movement of the knuckle and wheel about the king pin.

1,821,853. AUTOMATIC CUT OFF SWITCH. HENRY M. SHOAT, Penn Yan, N. Y. Filed Jan. 12, 1928. Serial No. 246,354. 1 Claim. (Cl. 200—81.)



1. In a circuit controlling switch of the class described, the combination with a conductor for a fluid under pressure, an electro-thermostatic unit comprising a U-shaped core and a winding about the core, connected at one end with one end of the core, a contact in circuit with the said end of the winding and carried by the corresponding end of the core, a fixed contact in juxtaposition to the first mentioned contact and normally engaged thereby, a U-shaped tube connected at one end with the fluid conductor and closed at its other end, a contact upon the last mentioned end of the tube in juxtaposition to and normally spaced from the fixed contact, a conductor wire connecting the last mentioned contact and the contact upon the core of the electro-thermostatic unit, and conductors leading from the fixed contact and from the other terminal of the electro-thermostatic unit.

1,821,854. METHOD OF IMPARTING SUEDE FINISH TO WOVEN PAPER HATS. MAXWELL SILVER, Bronx, N. Y., assignor to Farrington & Evans, Inc., New York, N. Y. Filed Mar. 28, 1931. Serial No. 526,125. 5 Claims. (Cl. 2—192.)

1. A method of transforming a hat formed of inter-engaged paper strands into a hat having a suede-like finish consisting of operating upon the surface of the hat with a coarse abrasive while rotating the hat, then brushing the hat while rotating with a wire brush, then again applying an abrasive of a finer grade to the hat with the hat rotating first in one direction and then in an opposite direction to pick up the nap, and finally again brushing the hat.

1,821,855. TRIMMING AX. VINCENT R. SIVERA, New Britain, Conn. Filed Apr. 6, 1931. Serial No. 528,013. 1 Claim. (Cl. 145—2.)



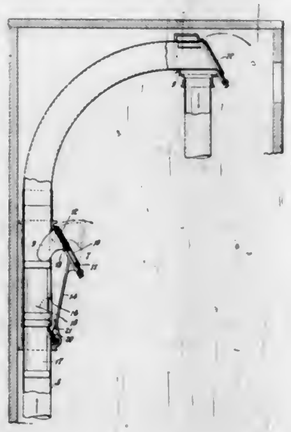
A one-hand trimming ax structure comprising a head having a socket and a handle of wood fitting by one end

in said socket, said head comprising a narrow blade structure that projects in relatively elongated form from said socket with an arcuate outer boundary and terminates in the form of a longitudinally elongated cutting bit-edge, the throat portion of said blade structure being recessed along the rear edge adjacent the junction with said socket to provide clearance for obstructing branches and the like under conditions of use, the rear edge portion of said socket overhanging said recess, a reinforcing lug projecting from said rear edge portion and merging with said rear edge, said handle being of oval form of cross-section and deviating from uniformity in area of cross-section to the extent of an increase in over-all dimensions on all sides of substantially one-thirty second of an inch at the rear end of a length of about twenty inches relatively to such dimensions at the front or socket end, and the wall structure for said socket being confined to a thin uniform thickness extending around the handle portion that is housed therein and merging on the side of the said blade with the thick and narrow inner end portion of said blade and with the said reinforcing lug at the throat portion.

1,821,856. MANUFACTURE OF DISTENDED FIBROUS MASSES. ALLEN L. SPAFFORD, Cloquet, Minn., assignor to Wood Conversion Company, Cloquet, Minn., a Corporation of Delaware. Filed July 28, 1930. Serial No. 471,408. 22 Claims. (Cl. 92—21.)

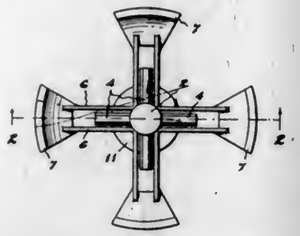
1. A process of treating chemically proofed fibers to produce a fluffy mass, which comprises incorporating with the proofed fibers a chemical solution containing relatively stable air bubbles which solution is compatible with the proofed fibers to maintain the bubbles, and drying the mass, said air bubbles serving to maintain said fibers in separated condition during the drying of said mass.

1,821,857. DISPATCH TUBE APPARATUS. JOSEPH JOHN STOETZEL, Queens Village, N. Y., assignor to G. & G. Atlas Systems, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 4, 1928. Serial No. 310,323. 6 Claims. (Cl. 243—23.)



1. In a pneumatic tube dispatch system, the combination with a dispatch tube of a device for separating two carriers in the dispatch tube comprising a trip member projecting into the path of a carrier and a valve arranged to be opened upon engagement of the trip member by the carrier to admit air between said carriers.

1,821,858. NONFLASHING GAS BURNER. EDMUND J. TE PAS, Lakewood, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Apr. 21, 1928, Serial No. 271,798. Divided and this application filed Apr. 29, 1929. Serial No. 358,770. 7 Claims. (Cl. 158—113.)

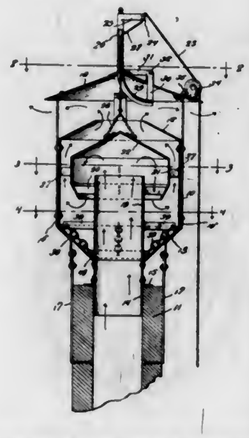


1. In a burner, a hub portion, a pair of vertically arranged laterally extending walls carried by said hub portion, a deflector plate carried by the outer ends of said walls, and a gas nozzle adapted to project a stream of gas between said walls and against said deflector plate.

1,821,859. PRODUCTION OF POTASSIUM NITRATE WITH SIMULTANEOUS OBTAINING OF DIMAGNESIUM PHOSPHATE. THEODOR THORSSELL and AUGUST KRISTENSSON, Kassel, Germany. Filed Nov. 11, 1929, Serial No. 406,505, and in Germany Nov. 28, 1928. 3 Claims. (Cl. 23—102.)

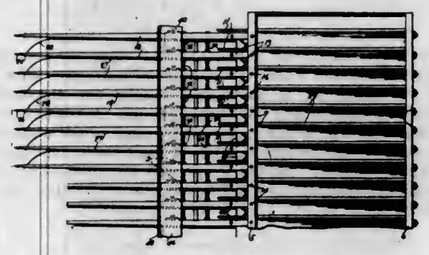
1. In a process for decomposing crude phosphate with nitric acid and potassium sulphate with production of a solution containing potassium nitrate and phosphoric acid, the simultaneous recovery from said solution of the phosphoric acid as magnesium hydrogen phosphate and of the potassium nitrate, comprising the steps of nearly neutralizing the solution with a basic magnesium compound with separation of most of the phosphoric acid as magnesium hydrogen phosphate, and of completely freeing the solution from phosphoric acid by further neutralization with a basic magnesium compound with precipitation of said acid as magnesium orthophosphate.

1,821,860. SOOT EXTRACTOR. WILLIAM H. WERNER and CARL NEUMANN, Brooklyn, N. Y. Filed June 9, 1930. Serial No. 459,982. 2 Claims. (Cl. 183—76.)



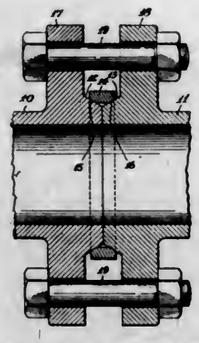
1. A soot extractor of the character described, comprising a soot collecting housing open at both ends and including frusto-conical upper and lower portions, means for supporting the housing above a chimney, a conical-shaped cap supported by said means above the housing in spaced relation thereto, a bottomless receptacle-like baffle movable within the housing, a normally seated hollow tubular valve supported by said baffle, and partly received by the latter, whereby the smoke and gases emitted from the chimney are caused to pursue a circuitous course through the housing, and thereby separate the soot therefrom, said valve controlling communication between the housing and chimney, and adapted to be opened to permit return of the soot from the housing to the chimney, and means for vibrating said baffle and valve as a unit within the housing, incident to the opening of the valve for the purposes specified.

1,821,861. GRAIN HEADER. HENRY H. WILKERSON, Quay, N. Mex. Filed Dec. 2, 1930. Serial No. 499,563. 10 Claims. (Cl. 56—312.)



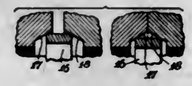
1. A supplemental attachment for grain headers, comprising a series of supplemental guard fingers secured to the cutting bar of a grain header, metallic spring strips having one of their ends rigidly secured to the forward end of each of the supplemental guard fingers and the rear end resiliently supported from the rear portion of the guard fingers.

1,821,862. SEALING RING FOR JOINTS. WYLIE G. WILSON, Elizabeth, N. J. Filed June 24, 1929. Serial No. 373,142. 7 Claims. (Cl. 285—132.)



1. The combination of two elements to be joined, one of which is a solid ring of metal resistant to change of form and possessing ductility and of substantial thickness throughout its length, each element having a substantially circular continuous cooperative contact portion, at least one of which contact portions is a sloping surface along which the other contact portion rides upon contact of the portions and during the drawing together of the elements, means for applying force axially of the elements to draw and hold them together, the distribution of the mass of the ring relative to the length thereof, the internal structure of the ring and the angularity of the sloping surface being such that the force applied is resolved into axial and cross-axial components, to which components the resistance to bending of each and every elemental cross axial section of the ring is greater than the resistance to change of diameter of the ring substantially as a unit, whereby the ring changes in diameter substantially as a unit, making and maintaining a sealed joint between the contact portions.

1,821,863. FLUID TIGHT JOINT AND METHOD OF MAKING. WYLIE G. WILSON, Elizabeth, N. J. Filed Nov. 1, 1929. Serial No. 403,976. 5 Claims. (Cl. 285—141.)



1. The combination of two elements to be joined, one of which is a solid ring of metal resistant to change of form and possessing ductility and of substantial thickness throughout its length, each element having a substantially circular continuous cooperative contact portion, at least one of which contact portions is a sloping surface along which the other contact portion rides upon contact of the portions and during the drawing together of the elements, means for applying force axially of the elements to draw and hold them together, the distribution of the mass of the ring relative to the length thereof, the internal structure of the ring and the angularity of the sloping surface being such that the force applied is resolved into axial and cross-axial components, to which components the resistance to bending of each and every elemental cross-axial section of the ring is greater than the resistance to decrease of diameter of the ring substantially as a unit, whereby the ring decreases in diameter substantially as a unit, making and maintaining a sealed joint between the contact portions.

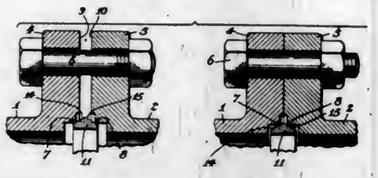
1,821,864. FLUID TIGHT JOINT AND METHOD OF MAKING. WYLIE G. WILSON, Elizabeth, N. J. Filed Nov. 1, 1929. Serial No. 403,977. 2 Claims. (Cl. 285—132.)

1. A fluid tight joint structure comprising two elements to be joined, each element being provided with an exterior annular corner, a sealing ring of resilient material resistant to deformation as a unit and having inclined interior annular surfaces engaging said corners, and means to move the elements toward one another to lap said corners into sealing fit with the ring and to circumferentially expand the ring as a unit to establish permanent sealing pressure on said corners, the ring being of suitable length and thickness and having appropriate inclined surfaces so that the prescribed expansion and lapped sealed joint is effected in the assembly.

1,821,865. FLUID TIGHT JOINT AND METHOD OF MAKING. WYLIE G. WILSON, Elizabeth, N. J. Filed Nov. 1, 1929. Serial No. 403,978. 4 Claims. (Cl. 285—141.

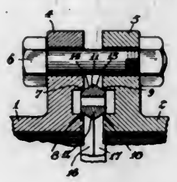
1. A fluid tight joint structure comprising two elements to be joined, each element being formed to provide an outwardly projecting annular corner, a sealing ring of resilient material resistant to distortion, as a unit, and

having inclined annular surfaces engaging said corners, and means to move the elements toward one another to lap said corners into sealing fit with the ring and to circumferentially contract the ring as a unit to establish per-



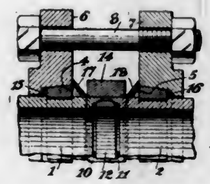
manent sealing pressure on said corners, the ring being of suitable length and thickness and having appropriate inclined surfaces so that the prescribed contraction and lapped sealed joint is effected in the assembly.

1,821,866. FLUID TIGHT JOINT AND METHOD OF MAKING. WYLIE G. WILSON, Elizabeth, N. J. Filed Nov. 1, 1929. Serial No. 403,979. 11 Claims. (Cl. 285—139.)



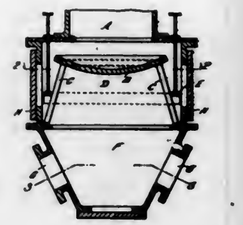
1. A fluid tight joint structure comprising two elements to be joined, the elements being provided with two pairs of annular corners, one pair of which is adapted to expand a sealing ring and the other pair of which is adapted to contract a sealing ring as the said elements are moved toward one another; a sealing ring having inclined annular surfaces contacting with one pair of corners; a second and separate sealing ring having inclined annular surfaces contacting with the other pair of corners; and means to move said elements toward one another to lap the corners into sealing fit with the rings and to expand one ring as a unit and contract the other ring as a unit, each of said rings having such length and thickness and appropriate inclined surfaces, whereby they change in diameter as units, and effect the stated lapped seal joints with the elements in the assembly.

1,821,867. JOINT STRUCTURE FOR PIPES AND THE LIKE. WYLIE G. WILSON, Elizabeth, N. J. Filed Feb. 28, 1930. Serial No. 432,007. 12 Claims. (Cl. 285—137.)



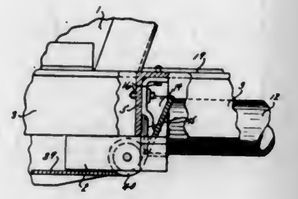
6. In combination with a tubular member, a resilient metal sealing ring having a longitudinally sloping external surface which normally fits within the end of said tubular member, a substantially smooth bored abutment member closely surrounding the end of said tubular member, and means for so moving said tubular member relative to said ring as to cause said ring to decrease in diameter throughout its length and thereby to form a sealed joint with the tubular member.

1,821,868. DISTRIBUTOR FOR PULVERIZED FUEL. HAROLD EDGAR YARROW, Scotstoun, Scotland. Filed Dec. 26, 1929, Serial No. 416,619, and in Great Britain Nov. 13, 1929. 3 Claims. (Cl. 302—28.)



1. A distributor for pulverized fuel, comprising a whirling chamber into which the mixture of pulverized fuel and its conveying air is discharged, means for distributing the fuel substantially uniformly around the outer region of the whirling chamber, fixed deflecting vanes separating the outer from the inner region of the whirling chamber, a receiving chamber located below and communicating with the inner region of the whirling chamber and provided with a plurality of equally spaced discharge outlets.

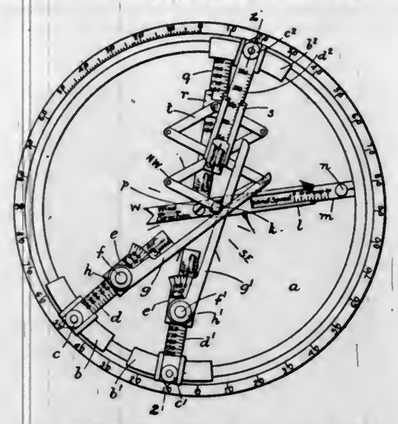
1,821,869. DRAWBAR MEANS. ARTHUR P. ARMINGTON, Willoughby, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Nov. 22, 1929. Serial No. 409,076. 1 Claim. (Cl. 280—33.44.)



In a vehicle of the class described having a frame about a dumping opening and including a transverse member, a pair of doors for said opening mounted for swinging movement about the sides thereof, drawbar means including a tongue member secured with said transverse frame member and extending forwardly therefrom, and rigging for operating said doors and including a line having stretches associated with the free edges of said doors and an intermediate portion passing over said drawbar tongue member.

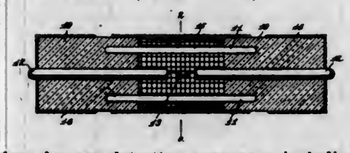
1,821,870. NAVIGATING INSTRUMENT. HERBERT ADDISON, Worthing, and WILLIAM BLAINE LUARD, Falmouth, England. Filed Sept. 6, 1927, Serial No. 217,708, and in Great Britain Sept. 8, 1926. 6 Claims. (Cl. 33—76.)

1. A navigating instrument comprising in combination, a graduated circular base, three graduated arms, means mounting said arms so as to extend radially of but be movable about the centre of the base, a cursor slidable on and along each of the arms respectively, and a pantographic device interconnecting the cursors and pivoted to each whereby the points of connection are maintained in a straight line, a fourth arm radially extending from and rotatable about the common centre, a cursor slidable on and along said fourth arm, a drift scale pivoted on said cursor,



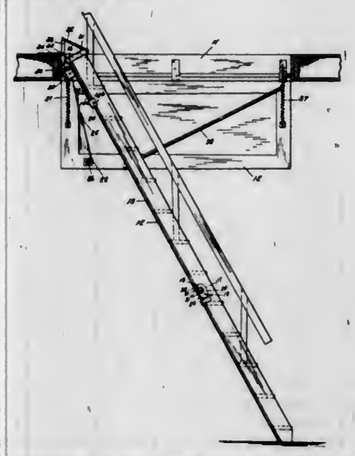
and a link connection between said scale and a pivot point of said pantograph on one of said three first-named cursors.

1,821,871. GAS DETECTION APPARATUS. ADOLPH BAYER, New York, N. Y. Filed Nov. 23, 1927. Serial No. 235,342. 4 Claims. (Cl. 200—113.)



1. A fuse for gas detection apparatus including a pair of spaced blocks of insulating material, terminals mounted therein, a platinum fuse connecting the terminals, a group of rods having the ends embedded in said blocks for holding the blocks in spaced relation and a flame resistant wire mesh cage cooperating with the blocks to house the fuse.

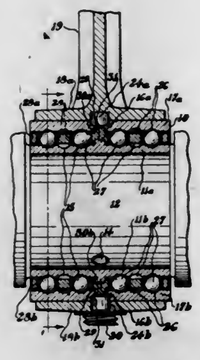
1,821,872. DISAPPEARING STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to the Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 11, 1929. Serial No. 345,928. 18 Claims. (Cl. 228—50.)



12. A disappearing stairway for cooperation with a ceiling opening comprising a stair structure, means pivotally and slidably mounting said stair structure at one end of the ceiling opening, locking means for releasably locking the stair structure against sliding on its mounting means, said locking means being adapted to be released and relocked by reciprocating movement of the stair structure, said stair structure being slightly overbalanced so as normally to be urged upwardly when the stair structure is locked on its mounting means, yielding means for resisting downward swinging of the stair structure after it has been released and moved to a point where the lower portion of the stair structure overbalances the upper portion thereof, a closure panel hinged to the side of the ceiling opening, and toggle linkage connecting said closure panel and said mounting means.

18. A disappearing stairway for cooperation with a ceiling opening between lower and upper floors, comprising a stair structure, a support pivotally secured to the end of the ceiling opening and slidably and pivotally supporting said stair structure, a closure panel hinged to the side of said ceiling opening at the lower side thereof, and means on said panel cooperating with said stair structure to move said panel downwardly upon operation of the stair from above.

1,821,873. SEPARABLE ANTIFRICTION BEARING. CLARENCE E. BEST, Canton, Ohio. Filed Mar. 6, 1928. Serial No. 259,416. 6 Claims. (Cl. 308—179.)

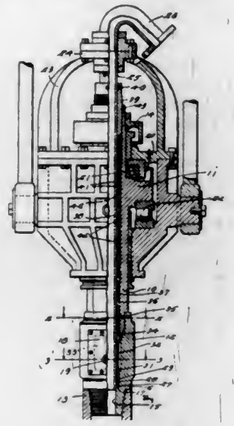


1. An anti-friction bearing including an outer raceway sleeve, separable semi-sleeves comprising an inner raceway sleeve, a flange tongue on each of the semi-sleeves arcuately overlapping the other semi-sleeve, means forming a guideway for the flange tongues, opposed raceways in the sleeves, rolling members rolling in and interposed between the raceways, a separable bearing block securing the outer raceway sleeve, a shaft mounted in the inner raceway sleeve and secured thereto, and means maintaining the joints in the outer raceway sleeve and the joints in the separable bearing block circumferentially spaced from each other.

1,821,874. SWIVEL. LEE J. BLACK, Beaumont, Tex. Filed Aug. 7, 1928. Serial No. 297,991. 4 Claims. (Cl. 285—22.)

3. In a device of the character set forth, inner and outer tubular members, packings located between said members in axially spaced relation, the bore of said outer member being enlarged between said packings and such member being provided in opposite sides thereof with openings registering with said enlarged bore portion, said enlarged bore portion and openings providing access to that portion of said inner member located between said packings and on to which said packings may be moved and then withdrawn through said openings, and said enlarged bore portion and openings permitting a fresh packing to be applied to said

portion of said inner member and then moved to points thereon beyond said enlarged bore portion and openings,



means preventing said packings from moving accidentally onto said enlarged bore portion, and removable closures for said openings.

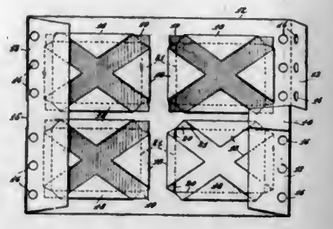
1,821,875. BRUSH HANDLE ATTACHMENT. JACOB BOCHNEK, Brooklyn, N. Y. Filed Mar. 24, 1930. Serial No. 438,434. 1 Claim. (Cl. 306—23.)



In combination with a brush having a brush back and a handle therefor, the top face of said brush back having a rectangular shaped recess therein, a rectangular shaped metal plate seated in said recess and held by fastening screws passing through openings therein and threaded into the bottom of said recess, said plate being flush with the top of said brush back, spaced threaded openings provided in said plate, double headed screws threaded into said thread openings, a socket member fitting onto one end of said handle, a flat plate carried by said socket member and extending transversely of the longitudinal axis thereof, said plate having spaced slots extending inwardly from the outer side edge thereof for receiving the threaded shanks of said screws, while said screws are adapted to be screwed into the threaded openings in said first plate until the lower ends of the double heads of said screws bear against the plate on said socket member to securely connect the brush and handle together.

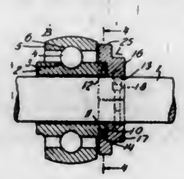
1,821,876. CARD HOLDER. JOHN ERIK BONANDER, Calumet City, Ill. Filed June 25, 1930. Serial No. 463,754. 3 Claims. (Cl. 129—20.)

1. A holder made of a foldable sheet of material, said sheet having portions within the marginal edges thereof which are displaced from the plane of the sheet and which are disposed on the same side of the sheet thereby presenting openings in the sheet, said sheet being folded upon itself between rows of said openings to present sides



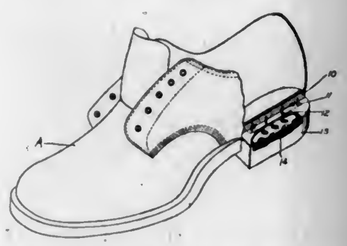
with said portions disposed therebetween, and said portions being folded upon themselves, whereby to engage and retain cards and the like, so as to be visible in groups through openings in said sides.

1,821,877. LOCKING DEVICE FOR ANTIFRICTION BEARING RINGS. RAYMOND WILLIAM BOWNE, Lebanon, N. H., assignor to Split Ballbearing Corporation, Lebanon, N. H., a Corporation of New Hampshire. Filed May 28, 1930. Serial No. 456,493. 17 Claims. (Cl. 308—236.)



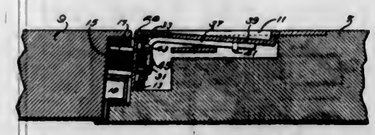
1. In a device of the character described, in combination with a shaft and a bearing race surrounding said shaft, a locking ring, means for clamping said locking ring to said shaft, and a plurality of axially extending interengageable cam surfaces on said race and said ring for locking said race to said ring.

1,821,878. RUBBER HEEL. JAMES F. BRADLEY, Stafford Springs, Conn., assignor of one-half to Victor J. Bissonnette, Stafford Springs, Conn. Filed June 12, 1930. Serial No. 460,635. 1 Claim. (Cl. 36—35.)



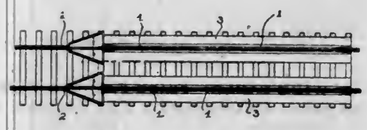
In a heel construction for a shoe, a detachable heel, a plate embedded in said detachable heel and having a portion of its upper surface exposed, a flat plate secured to the shoe and contacting with the exposed surface of the first plate when the detachable heel is in place on the shoe, said first plate having openings therein, said flat plate having screw threaded openings therein lying within the flat surfaces of the flat plate, and screw members passing through the openings in the first plate and threaded into the openings in the flat plate but terminating substantially flush with the inner surface of the flat plate.

1,821,879. LATCH. RAYMOND CALPIN, Everett, Mass., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1927. Serial No. 172,812. 9 Claims. (Cl. 292—65.)



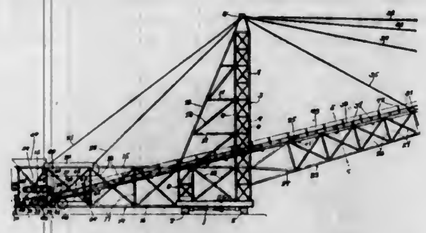
5. In a mechanism for latching together two members a bolt which provides a pinion projecting from one member, a rack on the other member into which the pinion may roll, a member having splined connection with said bolt, means cooperating with said last named member to permit its rotation in one direction only, and means to retract the bolt by sliding movement thereof through said member to withdraw said pinion laterally from the rack.

1,821,880. RERAILER. RAYMOND J. CONNICK, Fairport, N. Y. Filed Sept. 6, 1930. Serial No. 480,158. 8 Claims. (Cl. 104—267.)



1. The combination with a rail and a track retarding mechanism having shoe carriers on opposite sides of the rail projecting above the rail, of a rerailer arranged on opposite sides of the rail in immediate proximity to one end of the retarding mechanism to receive a derailed wheel directly from the shoe carriers of the retarding mechanism.

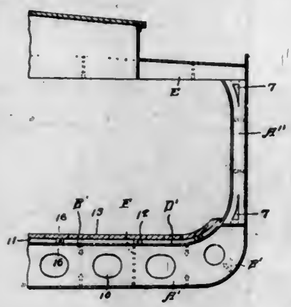
1,821,881. PORTABLE STACKER. FRED D. COPPOCK, Greenville, Ohio. Filed Nov. 13, 1930. Serial No. 495,485. 6 Claims. (Cl. 198—233.)



6. A portable stacker comprising, a travelling carriage, a tower mounted on the carriage, said tower including a relatively tall portion and a relatively short portion spaced from the tall portion, brace means connecting the tower portions, a horizontal frame connected to said carriage and tower portions, a diagonal frame connected to said horizontal frame and tower portions, and a conveyor carried by said frames.

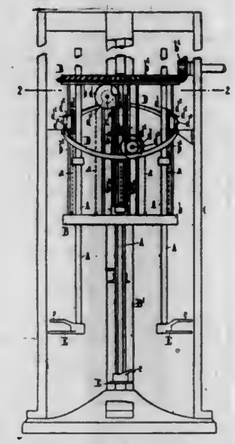
1,821,882. SHIP CONSTRUCTION. ROBERT CURR, Portsmouth, Va. Filed Nov. 14, 1930. Serial No. 495,735. 1 Claim. (Cl. 114—79.)

A ship having its hull composed of a frame comprising transversely extending members, longitudinally extending members formed in sections, the sections being arranged between the transverse members and having their ends welded to said members, certain of the members having



their ends split and separated, with a piece placed between the separated ends at each end of the member and welded thereto.

1,821,883. APPARATUS FOR TRANSFERRING BOTTLES OR CONTAINERS FROM ONE LEVEL TO ANOTHER. ARTHUR GUY ENOCK, Wembley Park, England. Filed Oct. 20, 1930, Serial No. 490,058, and in Great Britain Oct. 5, 1929. 4 Claims. (Cl. 198—22.)

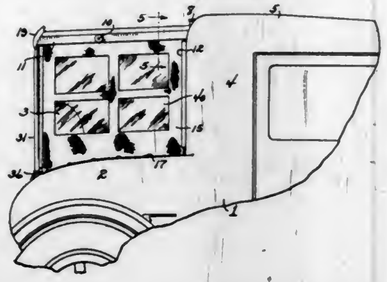


1. Apparatus for transferring containers from one level to another, comprising a frame member and a cam member, said members being relatively rotatable, a plurality of container-supporting pedestals vertically movable relatively to said frame, a plurality of shaft-supporting members each having a shaft journalled therein, a roller and a pulley keyed to each of said shafts, said rollers engaging said cam member, and a plurality of flexible members movable, respectively, over said pulleys, each of said flexible members having one of its ends secured to said frame member and its other end secured to one of said pedestals.

1,821,884. RUMBLE SEAT TOP. JOHN A. FARNIK, St. Louis, Mo. Filed June 7, 1928. Serial No. 283,528. 1 Claim. (Cl. 296—99.)

The combination in a vehicle, of a casing portion having a top and a compartment, open at its rear end in said top, and also having a rumble and threaded sockets at the upper side thereof, fixed longitudinal guides at opposite

sides of said compartment, bars having wheels lateral thereto movable longitudinally in said guides, a top fixed to and movable as a unit with said bars, spring-influenced side rollers and a spring-influenced rear-end roller carried by said bars, curtains on said rollers, curtain-receiving members pivotally connected at ends thereof to the rear



ends of said bars and each having grooves at right angles to each other and movable when folded parallel to the bars into and out of said compartments and also having free end portions of circular cross-section with end enlargements, and nuts turnable about said free end portions and in and out of the sockets on the rumble.

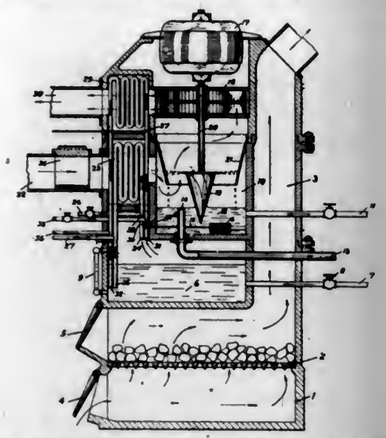
1,821,885. PACKAGING SEALING MEANS FOR CONSTRUCTIONAL MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Mar. 19, 1928. Serial No. 262,782. 10 Claims. (Cl. 94—18.)



1. The method of coating constructional paving material by immersing in liquid bituminous material, and after said bituminous material has set immersing same in a bath of dissolved rubber, withdrawing same and allowing said film to dry upon the surface.

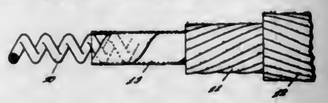
1,821,886. HEATING AND HUMIDIFICATION SYSTEM AND APPARATUS. WALTER L. FLEISHER, New York, N. Y., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 28, 1928. Serial No. 302,519. 4 Claims. (Cl. 261—10.)

1. Apparatus of the character described comprising an inlet duct to the apparatus, a dehydrator in the duct, tempering coils for initially changing the temperature of air entering the apparatus, means for humidifying said air, means for discharging said air through a second set of tempering coils, said coils and humidifying means being automatically controlled to regulate the wet and dry bulb temperatures of the air conditioned by the apparatus, means under summer operating conditions for reducing the temperature of the air entering the apparatus and saturating it at a desired wet bulb temperature, and means operable under winter operating conditions for



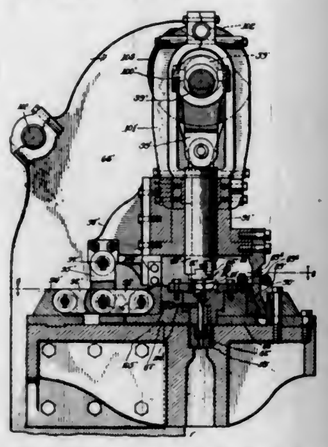
raising the temperature of incoming air by a medium other than that used for lowering the temperature under summer operating conditions, said heating and cooling media circulating in the same apparatus.

1,821,887. WIRE CABLE. FRANK F. FOWLE, Kenilworth, Ill., assignor to Indiana Steel & Wire Company, Muncie, Ind., a Corporation of Indiana. Filed Aug. 25, 1924. Serial No. 733,971. 6 Claims. (Cl. 173—13.)



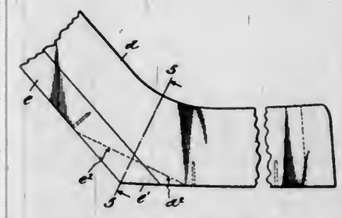
4. A single-conductor wire cable, comprising a hollow core formed of a relatively short-pitch open helix of wire, a metallic sheath of structural-metal tape wound directly on said open helix, and a layer of wire wound helically with relatively long pitch directly upon said sheath.

1,821,888. SPIKE MAKING MACHINE. CLARENCE H. FREDERICK, Kenosha, Wis., assignor to Clayton L. Smythe, Chicago, Ill. Filed Oct. 20, 1928. Serial No. 313,832. 2 Claims. (Cl. 10—57.)



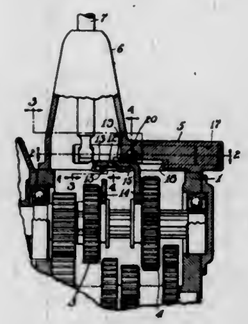
1. A spike making machine including a female die formed with a cavity for receiving a spike blank, said cavity being enlarged into conformity with the shape of a spike head and said die being formed in two separable sections which meet in the plane of said cavity whereby the cavity is opened upon separation of said sections; an upsetting punch positioned to enter the enlarged portion of said cavity; mechanism for reciprocating the punch to insert it within and withdraw it from the enlarged portion of the cavity; a clamp including two jaws between which said female die is disposed, each of said jaws being movable toward and from the other; a wedging member coupled with said punch reciprocating mechanism and adapted for operating it to enable it to operate upon one jaw of the clamp to quickly position this jaw into holding relation with one of said die sections; and mechanism coupled with said punch reciprocating mechanism for moving the second clamping jaw toward the first to clamp the spike blank that is between the die sections, wherein there is a stripping rod that is projectable against a headed spike that is between the sections of the female die and wherein there is also a positioning device for said rod having a dimension enabling it to hold said rod in stripping relation to the spike during the initial part of the withdrawing movement of the second clamping jaw and thereafter to have escaping relation with said rod.

1,821,889. HOCKEY STICK. FRED GLAHE, Chicago, Ill., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Dec. 18, 1929. Serial No. 414,857. 1 Claim. (Cl. 273—67.)



A stick of the character described having a back piece secured thereto adjacent the heel and having a diagonal groove in the back piece and heel of the stick and a reenforcement disposed within the groove and permanently united with the adjacent portions of the stick and back piece, the exposed edge of the reenforcement conforming in outline to the edges of the said adjacent portions.

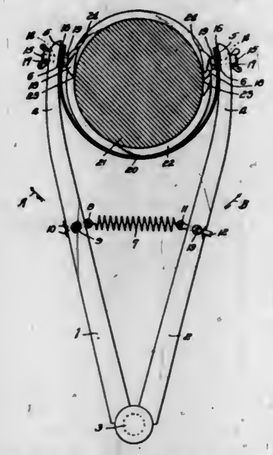
1,821,890. SHIFTER MECHANISM. HARRY J. HECK, Muncie, Ind., assignor to Warner Gear Company, Muncie, Ind., a Corporation of Indiana. Filed Aug. 9, 1930. Serial No. 474,268. 4 Claims. (Cl. 74—56.)



1. In a transmission, the combination with a casing, a cover member therefor having elongated cylindrical bearings therein, transmission shifter rails slidably mounted in said bearings and shifter forks mounted on the under side of said rails, the walls of said bearings being cut away on their under side for a part of their lengths to accommodate said shifter forks.

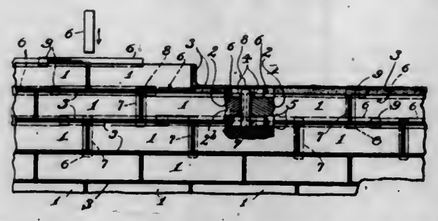
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1,821,891. CARBON REMOVING TOOL. WILLIAM OSCAR JONES, Marissa, Ill., assignor of one-half to Homer W. Presly, Swanwick, Ill. Filed May 9, 1930. Serial No. 451,177. 3 Claims. (Cl. 15—104.01.)



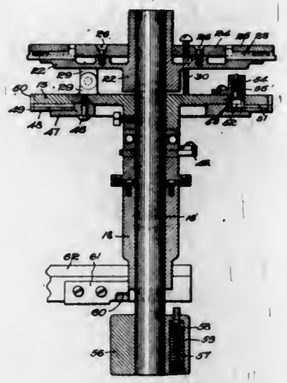
1. A device for removing carbon from piston ring grooves comprising, in combination, a pair of arms pivotally connected at one end thereof, a reversible double edged scraper member fixed to the free end of each arm and so disposed with relation to the groove that but one edge of one scraper at a time will disintegrate carbon deposit in the groove when rotary movement is applied to the device, a curved guide member connecting the arms and engaging the side walls of the piston to which it is applied and resilient means connecting the arms for normally urging the free ends of the arms toward each other.

1,821,892. WALL STRUCTURE. HENRY P. C. KEULS, New York, N. Y., assignor to Sealed Joint Construction Corporation, a Corporation of New York. Filed Feb. 24, 1931. Serial No. 517,803. 5 Claims. (Cl. 72—127.)



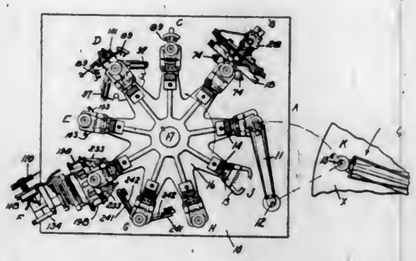
5. In a wall construction, the combination of courses of building blocks disposed one over the other and each block provided with a continuous groove extending entirely around the same, the grooves of adjacent blocks being alined with each other, binder material between the blocks constituting vertical joints between the individual blocks and horizontal joints between the courses of blocks, vertical sealing strips embedded in the binder material of the vertical joints and extending into the grooves in adjacent blocks to seal said vertical joints, and horizontal sealing strips embedded in the binder material of the horizontal joints and extending into the grooves in adjacent blocks to seal said horizontal joints.

1,821,893. DIAL PATTERN MECHANISM FOR EFFECTING REVERSE PLATING. ROBERT H. LAWSON, Pawtucket, and ARTHUR N. CLOUTIER, Lonsdale, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Mar. 21, 1929. Serial No. 348,785. 11 Claims. (Cl. 66—50.)



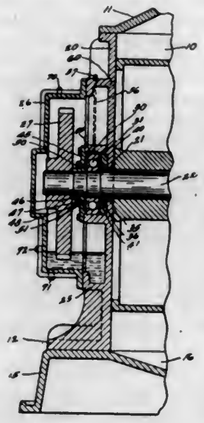
1. In selective mechanism for effecting reverse plating in circular hosiery knitting machines, a supporting disk adapted to receive members respectively individual to the sinkers of the knitting head and adapted to act thereon in effecting changes in plating, a gear having a fixed relation with respect to said disk and driven by the knitting head, and means whereby said gear may be removed from gearing relation with the knitting head while maintaining the proper geared relation of the disk with respect to the knitting head.

1,821,894. AUTOMATIC MOUNT MAKING MACHINE FOR INCANDESCENT LAMPS AND SIMILAR ARTICLES. YOSHIRO OTAKA, Tokyo, Japan, assignor to General Electric Company, a Corporation of New York. Filed Dec. 27, 1928, Serial No. 328,729, and in Japan Jan. 28, 1928. 26 Claims. (Cl. 176—3.)



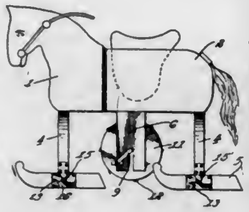
1. A mount making machine for incandescent lamps and similar articles comprising a stem holder bodily movable along a predetermined path, anchoring mechanism at one point of said path for providing the lower end of a stem held in said holder with anchors having books which are below and disposed about said end so as to open toward the axis of said stem, a filament placing mechanism at another point of said path for bending a filament to fit into said hooks and placing it therein, and common actuating means for moving said stem holder into registry with said mechanisms in succession and actuating each mechanism while said stem is in registry with it.

1,821,895. FLUID HANDLING APPARATUS. ROBERT H. OWENS, Connersville, Ind., assignor, by mesne assignments, to International-Stacey Corporation, Columbus, Ohio, a Corporation of Ohio. Filed July 31, 1926. Serial No. 126,318. 4 Claims. (Cl. 286—8.)



1. In a fluid handling apparatus, a casing having a fluid passage therethrough, a rotor shaft mounted within said casing and adapted to cooperate with the fluid passing therethrough, an end-plate closing the end of said casing and having a rotor shaft receiving opening therein, a bearing for said rotor shaft mounted on the exterior of said end plate adjacent said rotor shaft receiving opening, and a housing cooperating with said end plate to form a chamber receiving said bearing, said end plate having a passage therethrough independent of said rotor shaft receiving opening providing connection between said casing and said bearing receiving chamber.

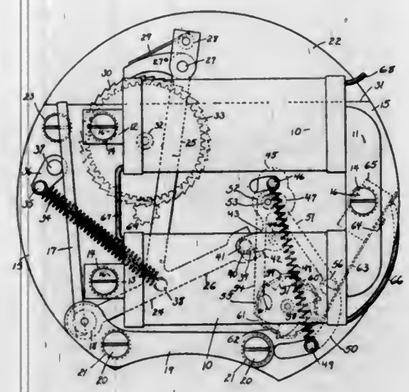
1,821,896. COMBINATION SLED AND WAGON. THOMAS J. PHILLIPS, Pittsburgh, Pa., assignor of one-half to Wilbur F. Orr, New Bethlehem, Pa. Filed Dec. 15, 1930. Serial No. 502,555. 2 Claims. (Cl. 208—161.)



1. A device of the class described comprising a body formed of a front and rear section pivotally connected together, runners supporting each of said sections, wheels adjustably connected with the runners whereby the said wheels can be moved to operative or inoperative position, manually actuated means for retaining the wheels in operative and inoperative positons, and manually operated means for propelling the device.

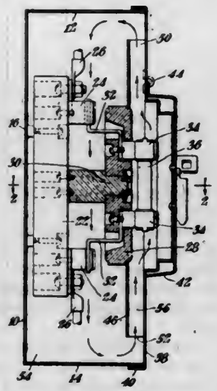
1,821,897. ELECTRIC CLOCK. WILSON E. PORTER, New Haven, Conn., assignor to The New Haven Clock Co., New Haven, Conn., a Corporation. Filed Apr. 23, 1927. Serial No. 185,957. 4 Claims. (Cl. 185—40.)

1. In a contact-operating mechanism for electric clocks of the type in which an armature is moved in one direction by a driving-spring and in the opposite direction by an electro-magnet, the combination with a rotary contact-member having a plurality of segregated contact-points, of a yielding contact-member co-acting therewith, two rocking-members for imparting step-by-step rotary impulses to the said rotary contact member, one of the said rocking-members having a pair of arms, a spring connecting the said



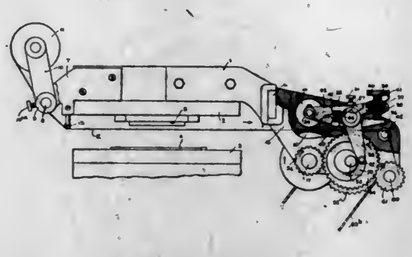
rocking-members and movable by one of them from one side to the other of their dead-center to effect the step-by-step movement of the said rotary contact-member, and loose coupling-means between one of the said rocking-members and the armature of the clock, whereby the said rocking-members may be snapped by the said spring when it passes their dead-center without constraint by the said armature.

1,821,898. VENTILATED SWITCH BOX. ALBERT B. RYPINSKI, Laurelton, Long Island, N. Y., assignor, by mesne assignments, to Metropolitan Device Corporation, a Corporation of New York. Filed Dec. 14, 1928. Serial No. 325,990. 5 Claims. (Cl. 247—9.)



1. A switch box having a carrier therein with a switch blade located on one side and a fuse clip on the other side thereof, and a wall with an opening with which said carrier is interfitted so that said wall and said carrier jointly define separate ventilating chambers for the switch blades and the fuse adapted to be supported on said fuse clip.

1,821,899. STRIP FEED MECHANISM. BERNARD R. SCHNEIDER, Lyndhurst, N. J. Filed Nov. 12, 1928. Serial No. 318,889. 11 Claims. (Cl. 271—2.4.)



1. Strip feed mechanism comprising a main feed roll, a plurality of individual feed units adjustable lengthwise of the roll, each unit including an individual feed roll to cooperate with the main roll, and means for simultaneously moving the individual feed rolls to and from co-operation with the main roll.

1,821,900. AIR PUMP. SAMUEL SILVERS, Waterloo, Iowa. Filed Feb. 3, 1930. Serial No. 425,620. 3 Claims. (Cl. 230—234.)

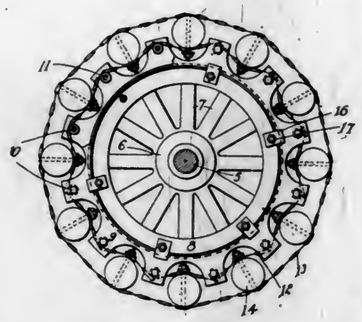


1. In a valve-controlled air-compression chamber, an air-pump mounted removably in said chamber having a manually operable flexibly cupped piston and an air-inlet permitting air to pass the piston on its suction stroke only, said pump comprising a cylinder containing said piston and having an open inner end with a valve-seat, an apertured slide-member fitting the cylinder and having a rigid connection with a valve mounted thereon to control said valve-seat delivery, the valve being without the cylinder, a resilient compression spring engaged between said valve-seat and said slide-member to normally retain the valve against its seat, the other end of said cylinder projecting without the chamber and having an apertured end which provides said air-inlet, and said piston having a handled stem projecting loosely through said inlet.

1,821,901. VEHICLE DRIVING WHEEL. HORACE J. PULLEN, Los Angeles, Calif. Filed May 18, 1926. Serial No. 109,875. 2 Claims. (Cl. 152—9.)

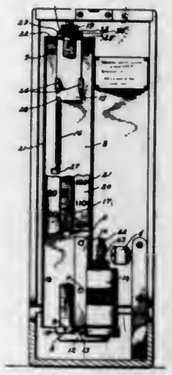
1. In a wheel, a rim U-shaped in cross-section and having portions projecting beyond the other parts and having supporting bolts extending from side to side in said pro-

jecting portions, and a track formed of outer and inner members and spacing members connected to said outer and inner members, said inner track member being mounted



on and supported by the bolts of the rim and prevented from sliding off by the outer projecting parts of said rim and adapted to slide on said bolts.

1,821,902. MANOMETER. WILLIAM A. BAUM, New York, N. Y., assignor to W. A. Baum Co. Inc., New York, N. Y., a Corporation of New York. Filed Mar. 9, 1927. Serial N. 174,022. 31 Claims. (Cl. 73—44.)

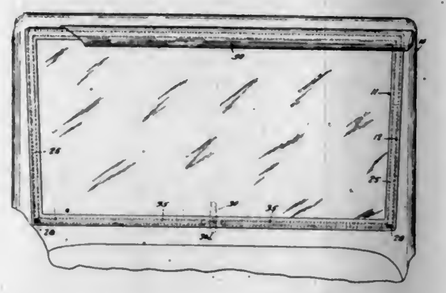


1. In a manometer, the combination of a supporting plate, a fixture carried thereby, a liquid reservoir with which the fixture communicates, a measuring tube having one end detachably connected with the fixture, a slide slidably carried by the supporting plate, means constantly biasing the slide toward the fixture, a cap carried by the slide detachably engaging the other end of the tube and tending to compress such tube between the fixture and cap, and a scale plate interposed between the tube and the supporting plate and overlying the slide.

9. In a manometer, the combination of a reservoir, a fixture affording communication with the reservoir, a washer carried in the fixture, a tube detachably connected with the fixture and bearing against the washer, and a shock absorption band mounted on the tube and disposed between the same and the adjacent wall of the fixture.

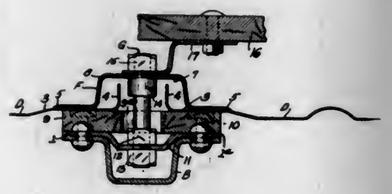
10. In a manometer, the combination of a reservoir, a measuring liquid, a measuring tube for the measuring liquid removable with respect to the reservoir, and an obstruction excluding the measuring liquid from the measuring tube, such obstruction being removable when the tube is removed so that the liquid may enter the measuring tube when the latter has been replaced.

1,821,903. WINDSHIELD. ALBERT B. BEITMAN, Cleveland Heights, Ohio. Filed Aug. 19, 1929. Serial No. 386,780. 24 Claims. (Cl. 296—84.)



23. The combination with a windshield frame of a motor vehicle of a horizontally pivoted windshield mounted therein, a handle connected with the windshield at the lower marginal edge thereof, and movable therewith, securing means cooperating with the windshield for retaining the same in its selected position of adjustment, and a connection between the handle and the securing means for actuating the latter, said handle being provided with a projection engageable with the windshield frame to hold the shield in position.

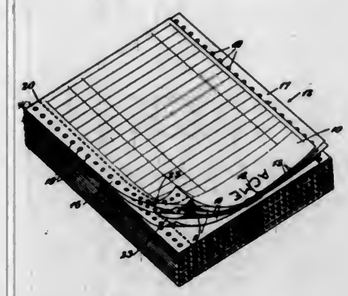
1,821,904. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed July 11. 1930. Serial No. 467,261. 9 Claims. (Cl. 108—5.)



1. A car roof comprising a substructure having frame members, roof sheets spanning from frame member to frame member and provided along their adjacent margins with raised panels located above said frame members, members interposed between the tops of said frame members and the raised marginal panels of the roof sheets for supporting said panels, seam caps connecting adjacent sheets and having base flanges resting on the raised marginal panels thereof, and connections between the said frame members and seam caps for holding the raised marginal panels of the roof sheets down on said supports and the base flanges of the seam caps down on said raised panels.

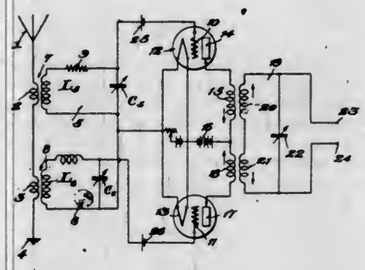
9. A car roof comprising a substructure having frame members, roof sheets spanning from frame member to frame member with their adjacent margins spaced above said frame members, members interposed between the tops of said frame members and the margins of the roof sheets for supporting said margins, seam caps connecting adjacent sheets and having base flanges resting on the margins thereof, and connections between said frame members and the seam caps for holding the margins of the roof sheets down on said supports and the base flanges of the seam caps down on said margins.

1,821,905. MANIFOLDING. CARL W. BRENN, Montclair, N. J., assignor to Autographic Register Company, Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 8, 1931. Serial No. 528,528. 11 Claims. (Cl. 282—12.)



1. A connected pile of superposed record strips and interleaved transfer strips, the latter having at one side only feeding bands projecting beyond the adjacent edges of the record strips, the record strips having at one side only feeding bands projecting beyond the adjacent edges of the transfer strips.

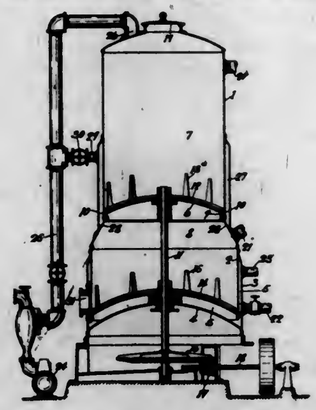
1,821,906. ART OF RADIOSIGNALING. LOUIS COHEN, Washington, D. C. Filed Feb. 27, 1930. Serial No. 431,929. 20 Claims. (Cl. 250—20.)



1. The method of selective signaling which comprises impressing the signal energy on two oscillatory circuits of the same periodicity but each of the circuits having a different ratio of inductance to capacity; opposing the electrical effects produced in the two circuits against each other in their actions on a third circuit, and transmitting the resultant electrical effect produced in the third circuit to a detector and amplifier.

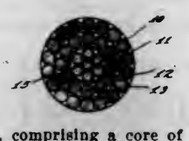
1,821,907. DRIER TANK. CLARENCE P. FOLSOM, Dayton, Ohio, assignor to Dayton Beater and Hoist Company, Dayton, Ohio, a Firm composed of Lee E. Halterman and Clarence P. Folsom. Filed Apr. 7, 1921. Serial No. 459,493. 11 Claims. (Cl. 87—13.)

1. In an apparatus of the character described, a tank having imperforate side walls and a perforate diaphragm dividing the tank into upper and lower compartments, the lower compartment being of greater diameter than the upper compartment, an annular jacket surrounding the lower portion of the upper compartment in spaced relation with the walls thereof forming a concentric chamber surrounding the lower portion of the upper compartment, said chamber having intercommunication with the lower compartment, means for supplying heating medium to the upper compartment to effect the cooking of a mass of refuse in said upper compartment and also for supplying heating medium within the surrounding jacket



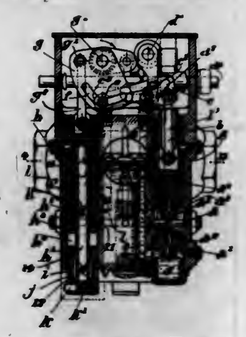
of the upper compartment and means for progressively depositing the cooked material through the perforated diaphragm between said compartments into the lower compartment.

1,821,908. COMPOSITE WIRE CABLE. FRANK F. FOWLE, Kenilworth, Ill., assignor to Indiana Steel & Wire Company, Muncie, Ind., a Corporation of Indiana. Filed June 11, 1924. Serial No. 719,243. 15 Claims. (Cl. 173—13.)



1. A wire cable, comprising a core of zinc-coated steel, a separate metallic sheath surrounding said core and tight upon it, and a layer of wires tight upon said sheath and in direct contact therewith, the surfaces of said layer of wires being of copper, and said sheath having its outer surface of a metal at least as electro-positive as copper and its inner surface of zinc.

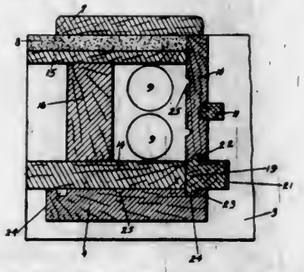
1,821,909. CARBURETOR. ANTOINE GIRAIN, Lyon, France, assignor to Albert M. J. Petronio, Nice, France. Filed Dec. 11, 1923, Serial No. 680,004, and in France Dec. 12, 1922. 2 Claims. (Cl. 261—50.)



1. A carburetor including a fuel inlet, a needle valve to control said inlet, a piston, a cylinder in which said piston operates, a sleeve carried by said piston and in which said needle valve is arranged, a spring in said sleeve bearing on said needle valve, a control shaft, a lever operated by the control shaft and having a floating fulcrum, a rod

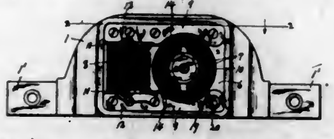
connecting said lever to said piston, and means to vary the position of the floating fulcrum to thereby vary the stroke of the piston.

1,821,910. WINDOW FRAME. WILLIAM S. METLER and HERMAN O. SCHUMACHER, Spokane, Wash., assignors to Home Sash and Manufacturing Company, Spokane, Wash. Filed June 1, 1929. Serial No. 367,701. 1 Claim. (Cl. 20—11.)



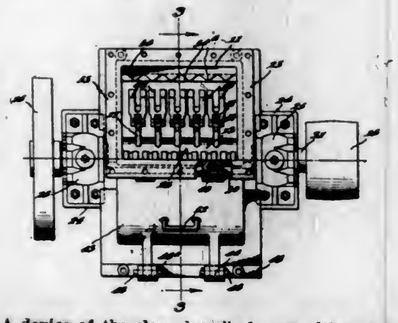
The combination with a blind stop, having tongues of different cross sectional area at opposite sides, of a jamb having a groove complementary to one of the tongues, a face plate having a plurality of spaced grooves for selective co-action with the other tongue, and said face plate at its edge overlapping a portion only of the blind stop whereby a projecting bead is provided.

1,821,911. ELECTRIC MOTOR. ALBERT E. DOMAN, Elbridge, N. Y., assignor to Mando Company Incorporated, Elbridge, N. Y., a Company of New York. Filed May 15, 1929. Serial No. 363,148. 5 Claims. (Cl. 172—36.)



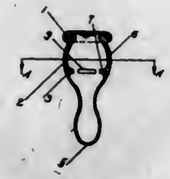
1. In an electric machine having a stator core provided with a field-winding, a revolving armature having a current commutator, in combination with insulator plates saddled upon opposite ends of the core, and brush-holders having corresponding ends attached to their respective plates and their other ends spring-pressed toward each other and provided with brushes for engaging the commutator.

1,821,912. PULVERIZING MILL. ISADORE F. PFEIFFER, Aurora, Ind. Filed May 31, 1929. Serial No. 367,170. 15 Claims. (Cl. 83—11.)



1. A device of the class described, comprising, a casing constituting a pulverizing chamber, a rotary cylinder disposed across said chamber, means for rotating said cylinder, a series of diametrically disposed holder bars extending through the walls of the cylinder within said chamber, and a center rod secured longitudinally of the cylinder and the respective holder bars for securing said bars relative to said cylinder.

1,821,913. NURSING NIPPLE. JOSEPH A. SMITH, Attleboro, Mass. Filed Mar. 17, 1928. Serial No. 262,411. 5 Claims. (Cl. 128—252.)

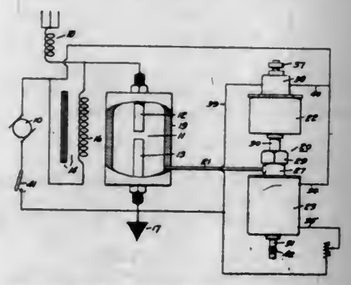


1. An elastic nursing nipple for use on a bottle neck comprising in combination a socket member, a top portion, said socket member having a substantially vertical rib member disposed on its interior, said rib member extending from the base of said socket member a sufficient distance within said socket member to extend beyond the mouth of the bottle, means within said socket member and substantially aligned with the inner extremity of said rib member for engaging the mouth of the bottle whereby the inner extremity of said rib member is not pulled below the mouth of the bottle, said rib member being adapted to form air ducts between the bottle neck and the socket member.

1,821,914. METHOD FOR PRODUCING FOAM FOR FIRE EXTINGUISHING PURPOSES. CLEMENS WAGENER, Berlin, Germany, assignor to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed Apr. 24, 1926, Serial No. 104,368, and in Germany June 8, 1923. 3 Claims. (Cl. 23—11.)

1. The method of producing a fire extinguishing foam which comprises introducing into a flowing stream of water a saponaceous substance by the suction action of said stream, simultaneously introducing into said stream by the suction action a free gas in such a manner as to physically act upon said saponaceous substance to produce foam, and simultaneously adding to said stream an agent to render said foam durable.

1,821,915. OSCILLATING ARC. LEÓ F. PIERCE, San Diego, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Apr. 1, 1926. Serial No. 99,179. 1 Claim. (Cl. 250—38.)



In an oscillating arc system comprising a pair of electrodes in a chamber, a reservoir of suitable hydrocarbon liquid, means for vaporizing liquid from said reservoir and conducting the resultant gas to said chamber, and a valve for supplying liquid from said reservoir to said vaporizing means controlled by the operating potential applied to said arc, whereby liquid is supplied only during operation of the arc.

THE
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Issue of September 8, 1931

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Labels	62—No. 39,659 to No. 39,720,	inclusive.
Prints	12—No. 13,397 to No. 13,408,	inclusive.
Reissues	8—No. 18,177 to No. 18,184,	inclusive.
Designs	51—No. 85,024 to No. 85,074,	inclusive.
Patents	956—No. 1,821,916 to No. 1,822,871,	inclusive.
Total	1,334	

Interference Notices

U. S. PATENT OFFICE, *Washington, Aug. 18, 1931.*

Joseph B. Lievre, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted March 20, 1928, No. 1,663,345, to Joseph Benjamin Lievre, of Probador de Maquinas, Aviacion Nacional, Mexico-D. F., Mexico, and an application for patent filed by Calvin C. Williams, of Asylum Pike, East of Rising Sun Avenue, Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Lievre at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Lievre, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 24, 1931.*

Albert R. Johnson, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Norman B. Geddes, 128 East Thirty-seventh Street, New York, N. Y., and patent granted April 2, 1929, No. 1,707,859, to Albert Richard Johnson, 302 Lexington Avenue, New York, N. Y., and a notice of such declaration sent by registered mail to said Johnson at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Johnson, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Aug. 8, 1931.*

The Golf Ball Corporation of America, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The General Tire & Rubber Company, of Akron, Ohio, to effect the cancellation of the trade-mark registration of The Golf Ball Corporation of America, of 79 Wall St., New York, N. Y., No. 203,500; dated September 22, 1925, and the notice of such proceeding sent by registered mail to The Golf Ball Corporation of America, at the said address, and also at Wilmington, Del., another address of record, having been returned by the post office as undeliverable, notice is hereby given that unless said The Golf Ball Corporation of America, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 27, 1931.*

Skylark Radio Corporation, its assigns or legal representatives, take notice:

A cancellation proceeding has been instituted by this Office upon the application of the Colonial Radio Corporation, 254 Rano Street, Buffalo, N. Y., to effect the cancellation of trade-mark registration No. 167,260, issued April 24, 1923, to The Perry, Desjardins & Temple Co., 15 East Third Street, Cincinnati, Ohio, which registration, the assignment records of the Office show, has been transferred to the Skylark Radio Corporation, 15 East Third Street, Cincinnati, Ohio. The notice of such proceeding sent by registered mail to the said Skylark Radio Corporation at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless the Skylark Radio Corporation, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Condition of Applications Under Examination at Close of Business August 22, 1931

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 93,032; Trade-Mark Division, 1,000. Oldest new case, Dec. 23, 1930; oldest amended, Dec. 22, 1930. The dates given are 1931 except where † indicates 1930.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Apr. 10	Apr. 16	838
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Feb. 28	Mar. 2	1,362
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 10	May 1	954
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 1	Apr. 4	815
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Feb. 24	Mar. 5	744
318	6. LEWERS, A. M., Carbon Chemistry	Jan. 10	Jan. 21	2,125
106	7. JARBOE, C. G., Optics; Photography	Feb. 2	Feb. 2	2,047
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Jan. 23	Feb. 4	1,678
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Mar. 13	Mar. 16	1,301
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 28	Apr. 17	1,136
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 23	Mar. 26	760
380	12. HENRY, C. C., Machine Elements	Jan. 9	Feb. 17	1,243
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 2	Mar. 8	1,155
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Feb. 24	Mar. 17	1,140
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Feb. 2	Feb. 2	2,515
242*	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 28	May 5	857
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Jan. 26	Jan. 27	1,514
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Feb. 24	Feb. 24	1,089
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	†Dec. 23	†Dec. 30	2,103
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Apr. 22	Apr. 23	967
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Feb. 24	Mar. 26	974
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Apr. 4	Apr. 18	775
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	†Dec. 31	†Dec. 26	1,059
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 5	Mar. 4	1,002
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Feb. 26	Mar. 3	1,596
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 2	Mar. 4	1,001
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Feb. 24	Feb. 28	1,121
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 13	Feb. 10	1,740
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Apr. 17	Apr. 27	581
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 2	May 11	873
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	†Dec. 23	†Dec. 22	2,624
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 21	Mar. 26	1,251
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Feb. 23	Feb. 24	2,356
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Apr. 22	Apr. 22	879
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 4	June 11	800
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Jan. 8	Jan. 2	2,268
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Feb. 11	Feb. 18	1,515
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	May 7	May 18	549
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 7	Mar. 12	1,587
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Jan. 16	Feb. 3	3,191
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Mar. 30	Mar. 24	731
223*	42. CUTTING, H. O., Electric Signaling	Feb. 5	Feb. 5	1,451
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Feb. 24	Mar. 2	1,548
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Dec. 27	†Dec. 30	2,143
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Jan. 23	Jan. 23	2,102
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Mar. 4	Mar. 18	1,176
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Feb. 25	Feb. 24	2,154
212*	48. ROEPKE, O. B., Electricity, General Applications	Feb. 25	Feb. 25	1,118
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 19	Mar. 22	1,461
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 12	Jan. 14	2,583
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Jan. 14	Jan. 14	2,168
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Mar. 8	Mar. 15	1,445
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 9	Mar. 20	740
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Jan. 2	Jan. 2	2,876
102	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	June 27	June 27	212
	{Designs	Aug. 5	Aug. 11	174
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 26	Jan. 26	1,846
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Feb. 24	Feb. 28	841
270*	58. DOWELL, E. F., Abrading; Typewriting	Jan. 22	Jan. 22	1,569
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Mar. 5	Mar. 10	1,699
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Jan. 22	Jan. 23	1,904
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	†Dec. 30	Jan. 2	2,077
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Jan. 5	Jan. 5	2,605
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 13	Jan. 15	2,324
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.—{Trade-Marks	July 28	Aug. 11	949
	{Labels and Prints	Aug. 10	Aug. 17	51

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

EX PARTE DOANE

Decided August 17, 1931

1. DIVISION—RULE 41—PRACTICE.

Where an application presents claims for more than one species and claims generic thereto the Examiner, if in his first action he rejects all of the generic claims, should require the applicant to elect which group of specific claims he desires to prosecute. The response to that action, in order to be complete, must include such an election.

2. SAME—SAME—SAME.

Where after response to a rejection of the generic claims and a requirement for election the Examiner, if he is not convinced by the response that some of the generic claims are patentable, should include in his next action an action upon the claims of the elected group.

ON PETITION.

Mr. Joel B. Liberman for the applicant.

ROBERTSON, *Commissioner:*

Applicant petitions that the Examiner be instructed in the proper procedure to be followed in this case.

Inasmuch as the applicant in connection with the petition has stated that he elects to prosecute claims for the species shown in Fig. 1 of the drawings, and it was because of the failure to make such an election that the Examiner held the amendment of July 17, 1931, insufficient, the case is now in condition for action by the Examiner and the petition might well be dismissed.

However, in view of the question which has arisen as to the proper action to be taken where the Examiner rejects generic claims and requires division between claims directed respectively to the species covered by such generic claims, it is thought proper to state what practice should be followed.

Rule 41 was amended so as to provide that where an application discloses two or three species of an invention, claims specific to each specie might be allowed if generic claims are found allowable. An order was subsequently issued (396 O. G. 1) in which it is stated that where, in a case such as above referred to, the Examiner holds the generic claims unpatentable, he should also require the applicant to elect which group of the specific claims he desires to prosecute.

After such an action, the following situations may arise: (*a*) The applicant contests the holding of the Examiner as to the claims being directed to two or more species or argues that the requirement for division is for some other reason improper, or (*b*) he insists upon the patentability of the generic claims as presented, or (*c*) he amends or rewrites them and argues that, as so amended or rewritten, they are patentable and generic to all his species.

[1] In case (*a*), if the Examiner is still of the opinion that division was properly required, the application should, in accordance with the usual practice, be referred to the Examiner of Classification. If the requirement for division is approved, it will then be incumbent upon the applicant to make his election. In cases (*b*) and (*c*), the amendment, in order to be complete, must include an election of the species it is desired to retain in the event that generic claims are not finally found to be allowable.

[2] If the foregoing procedure is followed, the Examiner's next action, if he is not convinced of the patentability of one or more of the generic claims, will include not only an action on the generic claims, but also an action on the claims of the elected group.

If the Examiner holds some or all of the claims to the elected species are not patentable, the applicant of course, on appeal, can carry up that question as well as the patentability of the generic claims. Furthermore, if the applicant decides to drop the generic claims, he can then appeal as to the specific claims which have been rejected. If on appeal the generic claims are found to be patentable, then, under the order above referred to, the question of the patentability of all the claims, subject to possible formal corrections, will have been determined. On the other hand, if the generic claims are found not to be patentable, the decision as to the specific claims will conclude the case so far as action by this Office is concerned.

If the applicant is not required to elect until the patentability of the generic claims is determined then, unless the generic claims are held to be patentable, the final determination of the question of the patentability of the specific claims will be unnecessarily postponed.

In view of the election, which as above noted the applicant has made, the Examiner should proceed with further consideration of the case in the manner above outlined.

U. S. Court of Customs and Patent Appeals

MINTON AND RINGEL *v.* THOMAS

No. 2,686. Decided April 15, 1931

INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Priority *Held* properly awarded to T. on the ground that M. and R. can not make the claims corresponding to the issue.

APPEAL from the Patent Office. Affirmed.

LENROOT, *J.*, did not participate in this case.

Mr. R. C. Grover and *Mr. James G. Norton* for Minton and Ringel.

No appearance for Thomas.

GRAHAM, *P. J.:*

The appellants filed an application on June 9, 1925, for a patent on improvements "in filter systems for loud-speakers." On July 12, 1927, a patent was issued to the appellee upon an invention relating to loud-speakers upon his application filed March 15, 1926. On October 12, 1927, the appellants filed an amendment in the Patent Office, in and by means of

which they amended their specification so that the same would state one of the objects of the appellants' alleged invention to be the same as that set forth in appellee's said patent. In addition the appellants added claims 16 to 23, inclusive, which were copied from appellee's said patent claims 1 to 5, inclusive, and 7 to 9, inclusive. Thereupon an interference was declared by the Patent Office, the counts of the interference being the counts copied by appellants from appellee's said patent.

On February 20, 1928, the appellee made a motion to dissolve the interference, alleging as grounds thereof that the counts of the interference did not read upon the disclosure of the appellants. This matter came on to be heard before the Law Examiner, who granted the motion to dissolve as to counts 4, 5, and 8 of the interference, and denied the same as to counts 1, 2, 3, 6, and 7. No evidence was taken by the parties, and, on October 17, 1928, the Examiner of Interferences awarded priority of invention of the subject matter in issue on renumbered counts 1 to 5, inclusive, of the interference to the appellants, holding that they could make said counts.

On appeal to the Board of Appeals, the Board held that the Examiner of Interferences was in error in his finding, and that the appellants could not make the claims in issue and awarded priority to the junior party, the appellee. The counts in issue, upon which such priority was awarded, were copied from claims 1, 2, 3, 7, and 8 of the said patent to appellee.

As the matter now comes to this court, the only question in issue is whether the said counts of the interference will read upon the disclosure of the appellants.

Counts 2 and 6 of the interference are typical, and here follow:

2. A sound reproducer having a pair of diaphragms arranged to be operated independently of each other, an electromagnetic actuating device associated with each diaphragm, each of said devices including a coil, means for connecting said coils independently with a common circuit of electric impulses representing transmitted sound, and means for dephasing the impulses in one coil with respect to the impulses in the other coil, whereby the impulses in said circuit cause vibration of said diaphragm in dephased relation.

6. In the art of electrically reproducing sound, the improvement which consists in operating one diaphragm to represent direct sound waves and simultaneously operating a second diaphragm in lagging phase relation to the first diaphragm to represent reflected sound waves.

The application of appellants, Minton and Ringel, had as its object the providing of a device by which different bands of frequencies resulting from a composite or complex sound might be separately amplified and thereafter blended, the idea of the alleged inventors being that this method would give a true intensified reproduction of the original sound. In order to effectuate this plan they had in mind in a loud-speaker, a plurality of elements, responsive to different bands of frequencies, with filtering means associated with the several elements to select the band of frequencies appropriate to each element. In order to do this, two electrical units were devised, each connected with a loud-speaker. One of these electric circuits or units was so devised as to prevent the passage of low frequencies and to transmit the high frequencies. The high frequency unit was shunted by a choke coil and had a condenser in series with it. The low frequency unit was so constructed as to freely transmit the low frequencies and to prevent the passage of the high frequencies. This was done by means of a condenser in the circuit.

The specification filed repeatedly calls attention to the fact that the object of the device is to construct a two-part loud-speaker in such a way that one unit will receive the band of high frequencies and the other the band of low frequencies, and that each will have its own band of frequencies selected by means of filters interposed in the circuits for that purpose. The manifest object of the invention is to prevent high frequencies passing over the low-frequency unit and low frequencies passing through the high-frequency unit. It is claimed in the specification that—

the device will therefore give tones of unusual purity and increased intensity which are faithful reproductions of the original sounds.

Some alternative forms of the device are shown and the loud-speakers may be in series or in parallel. It is unnecessary to detail the construction of the remainder of the device, as such construction is not claimed to be anything but what is well known to the art.

The appellee Thomas had obviously a different thought in mind when he filed his application which ripened into his patent. He expressed the idea in his specification that each sound when made under natural surroundings had an echo caused by reflected sound waves. He stated that in all broadcasting studios these reflected sounds were absent, and that the consequent reproduction by the reproducer was not as the sound was made in nature and did not have a pleasing effect. He, therefore, proposed a device by which two reproducing diaphragms would be provided with two separate electric circuits, and to have these two diaphragms operating out of predetermined phase with each other, by a small degree, equal to that which usually exists between the reception of the direct waves of a sound and the reception of its reflected waves.

He proposed to produce this result by having his two diaphragms connected with different circuits, in one of which circuits was located a choke coil and in the other of which was a condenser. The frequencies in one circuit were caused to lag behind the frequencies in the other circuit by means of the choke coil, which said choke coil was adjustable as to its inductance value. The inventor stated that the lagging of the frequencies in one circuit behind those in the other circuit was only a fraction of a second, and should be just sufficient to represent the phase difference between direct and reflected waves of sound.

In Thomas's invention, there was no attempt made to separate bands of frequencies. In fact his specification plainly describes a device wherein the same band of frequencies shall be received and transmitted to both diaphragms. His whole object was to dephase the current transmitted to one diaphragm as related to that received by the other. On the other hand, the idea of Minton and Ringel was to separate the low and high frequencies and to transmit them not in a dephased relation, but in the same relation, to their respective loud-speakers.

The argument made by appellants here is that there is a band of frequencies which will be received by both of their circuits and which will overlap and which can not be filtered out of the respective circuits. It is further argued that in this band of intermediate frequencies there will be, by means of the condensers and choke coils found in their respective circuits, necessarily a dephased relation. It is, therefore, argued that having shown a device which will produce such an effect, and being first in the field, they are entitled to the benefit of any use which may be made of the invention disclosed by them in their application.

We agree with the Board of Appeals that if there is any such band of intermediate frequencies which will pass through the filters of both circuits in the appellants' device, it will be an effect not contemplated by them when they filed their original application herein. No one can read their specification as first filed and consider their original claims, without being led to the conclusion that such an overlapping and intermediate band of frequencies was the one thing which they were trying to prevent by their apparatus. If such overlapping occurs, and if the device which they disclose will operate in a way which they did not seek, and which they were trying to prevent, it is quite apparent that such result was accidental and does not constitute an idea which they should now be permitted to take advantage of to the detriment of the appellee, who was working with this particular thought in mind. It is a reasonable presumption that the amended specification and new claims of appellants were the results of an afterthought, suggested by appellee's patent.

It is well settled that a patent for a mechanical combination is not anticipated by a prior patent which incidentally shows a similar arrangement, which was not described or claimed to perform the function which it performs in the second invention, and in which any result obtained similar to the functions performed by the second, is accidental, and was neither intended nor appreciated by the prior patentee. We had occasion to go into that matter quite fully in *In re Daniel*, 17 C. C. P. A. (Patents) 605, 34 F.(2d), 995, 389 O. G. 270, when Garrett, J., speaking for the court, cited many authorities to the point. Other cases cited, and to the point, are: *Eibel Process Co.* v. *Paper Co.*, 261 U. S. 45, 310 O. G. 3; *Wickelman* v. *Dick*, 88 Fed. 264; *Beckwith* v. *Malleable Iron Range Co.*, 174 Fed. 1001; *General Electric Co.* v. *Sangamo Electric Co.*, 174 Fed. 141; *Vacuum Cleaner Co.* v. *Thompson*, 258 Fed. 239.

The decision of the Board of Appeals is affirmed.

Affirmed.

LENROOT, *J.*, did not participate in this case.

U. S. Court of Customs and Patent Appeals

IN RE PROSSER

No. 2,668. Decided April 15, 1931

PATENTABILITY—COUPLING.

Claims for a coupling for a hosiery stretching and drying form *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Messrs. Morrison, Kennedy & Campbell and *Mr. Harold Olsen* for Prosser.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

Appellant filed an application in the Patent Office for a patent upon an alleged invention relating to hosiery drying and shaping structures. His device, as disclosed, consists of a form to be used for stretching and drying hosiery, which is attached to a pipe by means of which steam, or other heating element, may be introduced into the form. The form is attached to the pipe conveying the heat element by an intermediate coupling. This coupling is disposed in such a way as to cause the form to stand in an angular position with regard to the supporting heat-carrying pipe. The device is particularly for use in manufacturing establishments where hosiery must be stretched and dried in large quantities, and the idea of the inventor is that the operator who attends to placing hosiery on these forms and removing them, will be better able to do this work in an efficient way if the forms carrying the hosiery are disposed in an angular way, so that as the operator proceeds along a row of these forms, the toes of the forms will be inclined in an angle in the direction in which the operator is proceeding.

The only part of the hosiery heating and drying device here involved, is the coupling which unites the form to the heat pipe. Nothing new is claimed as to the form itself. The form has a base consisting of an oblong, rectangular portion, grooved along its bottom surface longitudinally. Recesses above this oblong portion, in the form, are provided for bolts to hold the form to the coupling portion. The coupling member consists of three portions, namely: an upper oblong, rectangular portion, convex upon its upper surface, to fit the said groove in the form; a lower oblong portion grooved on its bottom surface, longitudinally, to fit the heat pipe and convex on its upper surface; a central or connecting portion, oblong in shape, of less length than the two end portions, with its longitudinal axis identical with the upper portion, but angular with the said axis of the lower portion, of the coupling member. This coupling member has openings through it to conduct the heating element, and is provided with bolt holes for attachment to the form and to the heat pipe.

Fourteen claims were filed with the application, all of which were rejected by the Examiner on the following references: Anthony 550,470, November 26, 1895; Collis, 1,114,966, October 27, 1914; Reeps, 1,464,539, August 14, 1923. On appeal this decision was affirmed by the Board of Appeals of the United

States Patent Office and an appeal was taken to this court.

For the purposes of this decision two claims are here given, which seem to be typical of the two classes of claims in the application:

1. A form coupling-device including a form-attaching portion and a conduit-attaching portion, one portion being turned relative to the other about an axis passing through both portions.

8. A form coupling device comprising an elongated form-attaching portion having a semi-cylindrical surface, an elongated pipe-attaching portion provided with a longitudinal groove, and a connecting section between the portions, the device involving a distortion intermediate its extremities by turning one of the portions relative to the other about an axis passing through both, these portions and the section being provided with a plurality of channels.

We have examined with some care the references cited. Anthony shows a steam glove drying and forming apparatus. His apparatus has a connection which is adjustable and is composed of two cylindrical pipe portions, one of which is threaded into the other and which can be turned as desired by the operator.

The reference Collis shows a form which is connected to the heating element by a flanged base piece elliptical in form, and which connection is attached to the form and to the heating element, but which has no distortion intermediate of its end portions.

Reeps shows a two-piece tube connection where the form may be turned by means of turning these tubular section pieces, one within the other.

The Board of Appeals cited, in addition to the other references relied upon by the Examiner, a patent to Upp, No. 1,106,260, of August 4, 1914, and this reference is said by the Board to anticipate all the claims in the application.

The Upp reference shows a hosiery form made in a similar manner to that of appellant here, and disposed on a heating pipe at right angles thereto. The form is in two parts, as is the form of appellant, being divided about midway of the leg portion. The base portion, however, is in one section and has no connecting part with the heat pipe. In fact, the heating element is shown by the drawings to pass through the base of the form. It is quite evident, from an inspection of the drawings and specification, that the base portion of the form of Upp is rigid, is cast in one piece, and has no connecting portion of any kind with the heating pipe, but simply an orifice through which the heating pipe is inserted.

We cannot agree with the Board of Appeals that the references cited anticipate appellant's coupling device. The form of his coupling, as hereinbefore described, especially with regard to the distortion or change of angles, between the lower and upper portions thereof, is not found in any of the references. The twisting of one pipe within another, as in Anthony and Reeps, cannot be said to be "a distortion intermediate its extremities." Appellant's disclosure and claims rest upon a coupling of one member. Anthony and Reeps have two. Collis has one, not distorted. Upp has none. The appellant's device, therefore, is patentable.

The decision of the Board of Appeals is reversed and patent will issue on appellant's claims 1 to 14, inclusive.

Reversed.

U. S. Court of Customs and Patent Appeals

MONTEVALLO COAL MINING COMPANY *v.* LITTLE GEM COAL COMPANY

No. 2,650. Decided April 15, 1931

1. TRADE-MARKS—OPPOSITION—REGISTRATION UNDER 10-YEAR CLAUSE—BURDEN OF PROOF.

"• • • The rule seems to be established that in a trade-mark case in which opposition to registration is made on the ground that the applicant was not the exclusive user of the mark for 10 years prior to February 20, 1905, he, the applicant, must show exclusive use during said 10-year period."

2. SAME—SAME—SAME—SHOWING OF INTEREST.

Where the opposer in a proceeding involving an application for registration under the 10-year clause of the 1905 act has shown that it was using the mark prior to applicant's application for registration, *Held* that it has shown a sufficient interest in the matter from which damage may be inferred although it did not use it during the 10-year period.

3. SAME—SAME—SAME.

Evidence reviewed and *Held* to establish that the applicant for registration of the 10-year clause did not have exclusive use of the mark during the critical 10-year period, and therefore is not entitled to the registration for which it made application.

APPEAL from the Patent Office. Affirmed.

BLAND, *J.*, concurs in the conclusion.

Mr. H. C. Robb, Mr. J. F. Robb, Mr. V. J. Nesbit, Mr. W. M. Sadler, Messrs. Robb & Robb, and *Messrs. Nesbit & Sadler* for Montevallo Coal Mining Company.

Mr. Harry H. Semmes, Mr. Douglas Arant, Messrs. Semmes & Semmes, and *Messrs. Bradley, Baldwin, All & White* for Little Gem Coal Company.

LENROOT, *J.:*

This is an appeal from a decision of the Commissioner of Patents affirming a decision of the Examiner of Trade-Mark Interferences, sustaining the opposition of appellee to the registration of the trade-mark "Montevallo" and denying registration thereof.

The application here in issue was filed on February 2, 1927, and is for registration of said mark under the 10-year proviso of the Trade-Mark Act of February 20, 1905. In said application appellant declared that the name "Montevallo" was in actual and exclusive use as a trade-mark by it or its predecessors for the 10 years next preceding February 20, 1905. Appellant is engaged in mining coal at Aldrich, Ala., from a seam of coal known as the "Montevallo seam" and selling such coal in several States in the South.

The opposition is based upon the lack of exclusive use by appellant of the word "Montevallo" in connection with coal during said 10-year period, it being alleged that others had used this word during said period to identify coal similar to that produced by appellant. It is further alleged in the notice of opposition that appellee itself was using this word to designate its own coal, such use, however, beginning subsequent to said 10-year period during which time appellant claims to have had exclusive use.

The record shows that on December 4, 1923, the mark here in issue was registered pursuant to an application filed by appellant's predecessor, Montevallo Mining Company. This registration was granted under said act of February 20, 1905, but not under the 10-year clause thereof which is here involved. Thereafter, appellee herein petitioned for the cancellation of said mark and on March 10, 1927, the same was cancelled after a decision by the District of Columbia Court of Appeals, affirming a decision by the Commissioner of Patents cancelling the registration of said mark, *Monticello Mining Company* v. *Little Gem Coal Company et al.*, 57 App. D. C. 100, 17 F.(2d) 688, 357 O. G. 3.

Both parties took testimony, and by stipulation of the parties the record in said cancellation proceeding was made a part of the record herein.

On November 3, 1928, the Acting Examiner of Interferences rendered a decision dismissing the opposition and adjudging that appellant was entitled to registration of the mark applied for.

On November 23 following, appellee filed a motion for a rehearing, which was granted. On February 27, 1929, the Acting Examiner of Interferences rendered a decision sustaining the opposition and adjudging that appellant was not entitled to the registration of the mark for which it had made application. Upon appeal to the Commissioner, said decision of the Acting Examiner of Interferences was affirmed, and from said decision the appeal now before us was taken.

In its brief, and upon oral argument, appellant urged several grounds of reversal, one of which was that error was committed in granting the rehearing above referred to. It is conceded that the motion for rehearing was filed within the time provided for by the rules of the Patent Office, and it was clearly within the discretion of the Acting Examiner of Interferences to grant the motion. In the decision of the Acting Examiner of Trade-Mark Interferences upon which a rehearing was sought, it was stated:

• • • While opposer's testimony does establish a limited use of the word Montevallo in connection with coal by certain third parties between the years 1895 and 1905 in a manner to suggest to the public that this coal was a product obtained from the vicinity of the Montevallo coal region, it does not appear from this testimony that any trade-mark rights have been claimed by such third parties in the use of this word, nor does it appear that any one except the applicant herein has actually used the word "Montevallo" as a mark to indicate origin. • • •

We assume that the word "origin", as there used, was meant to indicate origin in the producer and not geographical origin. With this construction it is clear that with the facts found the Examiner made an error of law, for as will hereafter appear, if parties other than appellant had used the name "Montevallo" during said 10-year period to suggest to the public that the coal sold by them was a product obtained from the vicinity of the Montevallo coal region, then the opposition should have been sustained.

The Commissioner committed no error in holding that the granting of the motion for rehearing by the Acting Examiner of Trade-Mark Interferences was proper.

Another contention made by appellant is that, unless appellee can show that during said 10-year period it had actual trade-mark use of the name "Montevallo", or a use analogous to trade-mark use, it cannot prevail in this court.

[1] Appellant cites no authorities holding that an opposer, in order to prevail in a proceeding of the character before us, must show use by him of the mark, either as a trade-mark, or a use analogous to trade-mark use, prior to February 20, 1905, and we have found no such authorities. On the contrary, the rule seems to be established that in a trade-mark case in which opposition to registration is made on the ground that the applicant was not the exclusive user of the mark for 10 years prior to February 20, 1905, he, the applicant, must show exclusive use during said 10-year period. *C. A. Gambrill Manufacturing Company* v. *Waggoner-Gates Milling Company*, 38 App. D. C. 532, 181 O. G. 821; *Worster Brewing Corporation* v. *Rueter & Company*, 30 App. D. C. 428, 133 O. G. 1190. In the case last cited it was held that "an actual use must be shown to have been possessed and enjoyed by the applicant to the sole exclusion of *all others*." (Italics ours.)

In the case of *William Wrigley, Jr., & Company* v. *Norris*, 34 App. D. C. 138, 152 O. G. 488, which involved an opposition to registration under said 10-year clause, it was held, quoting from the syllabus.

Where an application for registration of a trademark is regular in form, the applicant is entitled to registration unless his prima facie case is overcome by the evidence on behalf of one opposing the granting of the application, in which event it is incumbent on the applicant to establish his right to registration by a fair preponderance of testimony.

[2] It was incumbent upon appellee to allege and show an interest in the subject matter of appellant's application from which damage may be inferred. *McIlhenny's Son* v. *New Iberial Extract of Tobasco Pepper Company, Limited*, 30 App. D. C. 337, 133 O. G. 995; *California Cyanide Co.* v. *American Cyanamid Co.*, 17 C. C. P. A. (Patents) 1198, 40 F.(2d) 1003, 399 O. G. 212. This appellee has done; it has shown a use of the mark here in question at the time of the filing of appellant's application, inconsistent with a trade-mark use of the same by appellant, and it was not necessary for it to show such use by it during the 10-year period preceding February 20, 1905. Appellee was entitled to show, if it could, that said mark was not in actual and exclusive use as a trade-mark by appellant or its predecessors during the 10 years next preceding February 20, 1905, and under the decisions heretofore cited, it was necessary only that appellee overcome the prima facie case, arising from appellant's sworn application, that such mark was so used by it. If such prima facie case was rebutted, the burden was upon appellant to establish by a preponderance of the evidence such exclusive use.

This brings us to a consideration of the evidence found in the record upon the question of such use The record is voluminous, comprising nearly 1,000

pages, and no useful purpose would be served by reviewing it in detail.

[3] It appears that in 1823 there was laid out in the State of Alabama a town to which was given the name of Montevallo. Later on, the valley in which the town is situated was known as the Montevallo Valley. Still later, coal was discovered in the neighborhood and, when mined, was shipped from the railroad station at Montevallo. Later, a particular seam of coal, from which both parties herein produce their coal, came to be known as the Montevallo seam, which seam extends through the properties of appellant and appellee and the properties of other parties not connected with this proceeding.

For a number of years appellee has sold its coal under the name of "Montevallo" or "Dogwood Montevallo" coal, but there is no evidence that it or its predecessors were so selling coal prior to February 20, 1905. The testimony introduced by appellee, we think, prima facie established that, during said 10-year period, parties other than appellant sold coal produced from said seam under the name of Montevallo, or under such name coupled with another word, but in a way that would be in conflict with appellant's trade-mark "Montevallo" if it had been a technical trade-mark. If there be any doubt as to this being the proper conclusion from the testimony introduced by appellee, such doubt is removed by the testimony of some of appellant's witnesses.

D. A. Thomas, president of the appellant company, testified upon cross-examination as follows:

Q. You wouldn't testify, would you, that no company other than the company at Aldrich had not sold any coal at Montevallo during the period, say eleven years prior to February, 1905? A. No. I would not.
Q. In fact, you do know that Mr. Hendrix during that period sold coal and called it Dogwood Montevallo, or Montevallo Dogwood? A. Yes.

C. P. Anderson, a witness on behalf of appellant, testified upon cross-examination as follows:

Q. Now, you testified in this cancellation proceeding when the Little Gem Coal Company brought the proceeding against Montevallo Coal Company to cancel the trade mark "Montevallo", didn't you? A. Yes.
Q. I am looking at page 379 of the record of the Court of Appeals of the District of Columbia, which shows your testimony, beginning at page 428, and indicates on page 379 that testimony was taken on August 25, 1924. On page 44 this question was asked, "Q. 153. Go ahead and finish your answer and then I'll ask you another question. A. 153. Something like 20 or 25 years ago, as I stated, Mr. L. W. Hunter, who was living in Montgomery, got into the coal business, and Dogwood not being far from the town of Montevallo, he advertised Montevallo coal. At that time I took it up with Mr. Smith. That was before Molton Smith had anything to do with Dogwood. He had a retail yard in Montgomery. He advertised it that way but they soon stopped him." That is correct? A. Yes.
Q. In other words, that testimony was in 1924, and it was 20 or 25 years before that this man Hunter was selling his coal as Montevallo, back prior to 1905? A. Yes.
Q. That is your best recollection? A. Yes.

The witness further testified on re-direct examination as follows:

Q. He asked you about a man named Hunter advertising coal as Montevallo coal. Hunter was a local dealer in Montgomery, wasn't he? A. Yes.
Q. And he did that a short time and you say he was stopped? A. I don't remember whether he was stopped or not. He didn't stay in business but about a year and a half; I am sure not over two years.
Q. What Mr. Smith did you take it up with? A. I don't know unless it was the State geologist. He is the only one I know of, over at the State University.
Q. And some time following some objection from you, the man either went out of the business, or stopped advertising his coal as Montevallo coal? A. Yes. He was a farmer and came in and went into the coal business, and lost what he had in it.

On re-cross examination, the witness further testified as follows:

Q. The controversy you were having with him was about the name "Montevallo"? A. Yes.
Q. He was using it and you were objecting? A. Yes.
Q. And he wasn't selling coal from Aldrich? A. No.
Q. What year was that, 25 to 30 years ago? A. I don't remember the year.
Q. That was in the town of Montgomery? A. Yes, Montgomery.

Appellant complains that appellee has furnished no documentary evidence in support of its allegations that appellant did not have the actual and exclusive use of said mark during said 10-year period. There is found in the evidence introduced by appellee a letterhead which the witness Duncan, testifying on behalf of appellee, testified was from a letter written to him in 1901 by a Mr. Simmons, connected with the Montevallo-Dogwood Coal Company, not a predecessor of appellant. This letterhead contains, below the name of the company, the following: "The Celebrated Montevallo Red Ash Coal."

We would observe, in this connection, that appellant waited for more than 20 years before seeking registration under said 10-year clause of the Trade-Mark Act. This, of course, it had a right to do. but documentary evidence of happenings 20 years before the time of trial is naturally much more difficult to secure than if so long a period had not intervened.

We are in accord with the findings of the Patent Office tribunals that appellant did not have the exclusive use as a trade-mark of the word "Montevallo" during the 10 years immediately preceding February 20, 1905.

But one question remains to be considered, and that is appellant's contention that the Commissioner erred in refusing to consider the alleged unfair trade practice of appellee following the cancellation proceeding.

This charge that appellee comes into this proceeding with unclean hands is based upon an advertisement which it caused to be inserted in the Birmingham Age-Herald following the cancellation of appellant's mark by the Commissioner of Patents in the cancellation proceeding hereinbefore referred to. We have carefully examined such advertisement and find no material misrepresentation of facts therein. In view of the previous representations of appellant as to its exclusive right to the mark, disclosed by the record, we think appellee had the right to advertise the fact that appellant's mark had been cancelled. We do not believe there is anything in said advertisement to convey the impression that appellee was claiming the *exclusive* right to the use of the word "Montevallo" upon coal which it mined from the Montevallo seam, but only that it had an equal right with others so mining coal to use the word "Montevallo" as indicating the geographical origin of the coal.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

BLAND, *J.*, concurs in the conclusion.

U. S. Court of Customs and Patent Appeals

IN RE SHETTERLY

No. 2670. Decided April 15, 1931

1. DESIGN—PATENTABILITY—SHEET OF GLASS.
A design for a sheet of glass having very slight indentations irregularly placed on one side thereof *Held* not patentable since "we do not think it is the kind of distinctive ornamental design, the invention of which Congress sought to encourage when it enacted the design patent statute."
2. SAME—SAME—SAME.
A design for a sheet of glass *Held* unpatentable as containing no patentable ornamental distinction over the design of a prior patent.

APPEAL from the Patent Office. Affirmed.

Mr. Vernon M. Dorsey for Shetterly.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.*:

This is an appeal from the decision of the Board of Appeals affirming the action of the Examiner in refusing to allow a patent for "the ornamental design for sheet glass as shown."

The so-called design is to be found on one surface of glass such as is ordinarily used in office partitions, etc., and has for one of its purposes the obstruction of the rays of light so as to make the glass translucent rather than transparent.

The reference cited by the Examiner and the Board of Appeals is Burgess (Design) 18,647, October 2, 1888, for wall paper.

In the rejection of the claim of the application by the Examiner, he assigned two reasons: 1. The article fails to present a definite design, citing *Harmon Paper Co.* v. *Kimberly*, 289, F. 501. 2. From an ornamental standpoint it is not sufficiently distinctive over the reference to justify patentability.

The Board of Appeals for the same reasons affirmed the action of the Examiner and in closing its decision said:

We think the article fails to present a definite design and, from an ornamental standpoint we think it is not sufficiently distinctive over the reference to justify patentability.

The fact that it is not a distinctive design makes its description difficult. The applicant describes it in the following language:

A design to be applied to one face of a glass sheet, such as used in office partitions, etc., and which may therefore be seen by transmitted light. It is formed by placing corrugations, more or less sinuous and parallel, on one side of the sheet.

The Examiner, in his attempt to describe it, says:

Applicant's alleged design consists of a series of wavy lines without any definite "motif".

The Board of Appeals describes it as follows:

Appellant's design, as disclosed in his drawing, shows a surface of parallel wavy lines of variable thickness, the thickened portions being irregularly spaced along the lines and frequently being adjacent a thickened portion of the next adjacent lines, thus forming a mottled appearance of light and dark spots of irregular outline.

It is clear from the above descriptions that it is going to be very difficult to set out here by the use of language only such a description of the proposed design as will permit the reader to form a mental picture of the same. The drawing is not very helpful since it shows only heavy black and white nearly parallel lines. There are places where the ends of the lines overlap and short intervening lines are also used to give a mottled effect. This overlapping and the intervening lines give the effect of making a surface with irregular spots.

Fortunately we have before us a piece of the glass which contains the so-called design and which differs in appearance from the drawing. The glass is smooth on one side, and on the other there are very slight indentations, irregularly placed, which make the glass slightly thinner in certain places than it is in others. These indentations are so numerous and irregularly spaced as to be incapable of being definitely described or located. They are, however, apparent to the eye when the glass is turned in certain directions and their presence may be ascertained by passing the hand over one surface of the glass. In addition to the indentations on the surface of the glass above referred to, there is a series of short wavy lines, all running in one general direction and for the most part parallel, giving an impression to the eye similar to that which would result if a stubby brush was passed over the surface of the glass when in a partly molten condition, the brush being raised and again replaced frequently in its movement across the face of the glass.

The record does not disclose how the design is made and agreeable to *Gorham Co.* v. *White*, 14 Wall. 525, we regard this as of no consequence in determining the issue of the case. The fact that the manner of its construction is difficult of determination and that its reproduction would be difficult, if not impossible, by anyone, although skilled in the art, unless he had the models or brush or particular instrumentalities which produced it, has a bearing upon the proposition that the article is lacking in definite design. *In re Stirling*, No. 2620, 18 C. C. P. A. (Patents)——, 47 F.(2d) 809, 409 O. G. 293.

[1] It is not suggested by appellant whether the design is one of configuration of the piece of glass or is an ornamental design applied to the surface of the glass, or is both. In any event, we do not think it is the kind of distinctive ornamental design, the invention of which Congress sought to encourage when it enacted the design patent statute.

[2] In the reference Burgess the lines are more curved than in the drawing of the design at bar. The whole appearance of the Burgess design, although composed of substantially parallel wavy black lines, overlapping at the ends, on a white background, is somewhat different from the appearance of the drawing of the design at bar, and yet we agree with the conclusion of the Board and the Examiner that there is no patentable ornamental distinction between them.

During the argument before this court, it was suggested that appellant's claim could not be allowed for the reason that it called for a structure which performed a function. This question was not considered by the tribunals below and since we agree

with them on their reasons for rejection, it is not necessary for us to consider this question.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE LORD

No. 2,646. Decided March 31, 1931

PATENTABILITY—PASSENGER VEHICLE.

Claims for a passenger vehicle provided with independent means for holding each passenger on the seat *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Geo. R. Hamlin for Lord.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, rejecting all of the claims of appellant's application, six in number, for failure to define invention in view of the prior art.

Claims 1 and 4 are illustrative of the claims in issue and read as follows:

1. A passenger vehicle provided with means for independently holding a plurality of passengers on the same seat thereof, comprising wholly independent flexible connections separately secured in position on the vehicle which are respectively, adapted to be fastened to or around passengers occupying the same seat.

4. A passenger vehicle having a passenger holding device comprising flexible holders arranged on the vehicle to be disposed in general horizontal position around the passengers' waist to retain the passenger on a seat of the vehicle.

The references cited are: Spencer, 942,679, December 7, 1909; Leveau, 331,926, August 11, 1903 (French); Tyler, 1,368,466, February 15, 1921; Albano, 1,230,642, June 19, 1917; De Camp, 944,020, December 21, 1909; Prescott, 139,329, May 27, 1873; Knoll, 91,453, June 15, 1869.

Of these references, Leveau and Spencer were cited by the Examiner and the additional references were cited by the Board of Appeals. Appellant did not ask the Board for reconsideration in view of the additional references cited by it.

In discussing patentability of the claims here involved, the Board stated as follows:

Claim 1 reads directly on Leveau unless it be held that his devices do not *independently* hold a plurality of passengers because the holding devices are secured to a common cross strap *a b*. In our opinion the claim is properly anticipated as there is a fastening device for each passenger and each of these is independently secured to the seat back. We also call attention to the patent to Scott, No. 855,139, May 28, 1907, in which there are independent fastening devices 4 for each passenger, see specification page 1, lines 54–70, which clearly meets this claim.

What we have said as to claim 1 applies also to claims 2 and 3.

Claim 6 specifies in addition that the flexible holding devices are adjustable but this is true of Leveau.

Claims 4 and 5 are slightly more specific in specifying that the holders are disposed in general horizontal position around the passenger's waist. The horizontal strap *a b* of Leveau extends across the machine in front of the passengers but not around their waists. There is nothing novel in such a construction, however, as shown in the patents to Tyler, 1,368,466, Feb. 15, 1921; Albano, 1,230,642, June 19, 1917; De Camp, 944,020, Dec. 21, 1909; Prescott, 139,329, May 27, 1873 and Knoll, 91,453, June 15, 1869. There would be no invention in view of Scott, in using as many of these holding devices as desired on a single vehicle seat.

We find nothing patentable in the claims over the references cited by the Examiner but further rejection is given on the additional references cited under rule 139.

We have carefully examined the references and concur in the conclusion of the Board.

Upon oral argument, appellant's counsel earnestly contended that the court should find that the claims which, by their terms, contain the element of means for independently holding a plurality of passengers on the same seat, are patentable, even though the other claims be held to be unpatentable. We do not think there would be invention in multiplying the number of devices upon the same seat, as set out in claims 1, 2 and 3, for the reason that such use of the devices would be clearly obvious and therefore does not constitute invention.

No useful purpose would be served by entering upon a detailed discussion of the applicability of the references to the claims here in issue.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE DOUGLAS

No. 2,654. Decided March 31, 1931

PATENTABILITY—PECTIN—ARTICLE AND PROCESS OF MAKING.

Claims for a pectin and claims for the process of making the same *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Edward H. Cumpston for Douglas.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming the action of the Examiner in rejecting claims 1, 2, 3, 5, and 6, and 9 to 13, inclusive, of appellant's application as failing to define invention in view of the prior art. Claims 2 and 10 are illustrative of the claims in issue and read as follows:

2. The process of preparing pectin from fruits comprising removing the natural sugar therefrom, processing the remaining pulp in the presence of a solvent to obtain the pectin in solution, converting the starch in the solution by the action of a suitable diastatic enzyme, concentrating the resultant solution, precipitating the pectin therefrom with alcohol and drying the precipitate.

10. A dry pectin, prepared by alcohol precipitation from a pectin solution from which the natural starch has been removed by the action of a suitable enzyme.

Four claims appear to have been allowed, but they are not contained in the record.

The references relied upon are as follows: Douglas, 1,235,666, August 7, 1917; Huber, 1,410,920, March 28, 1922; Crawford, 1,507,338, September 2, 1924; Leo, 1,513,615, October 28, 1924; Beylik, 1,393,660, October 11, 1921; Goldthwaite on Jelly Making, J. Ind. & Eng. Chem. June, 1909, page 239, lines 10 to 14, second column.

Claims 1, 2, 3, 5 and 6 relate to a process for securing dry pectin from fruits, and claims 9 to 13, inclusive, are for the product of that process.

The object of the invention, as stated by the appellant in his specification, is as follows:

My invention relates to jellifying substances and more particularly to dry pectin obtained by alcohol precipitation, and to methods of preparing the same from fruits, the chief object being to provide a dry pectin in a more pure and convenient state, especially as regards the presence of starch, as well as a thoroughly practical and efficient method of preparing the same on a commercial scale.

One of the reference patents, No. 1,235,666, was issued to appellant, and relates to jelly making products and a process for producing the same, in which vegetable material is treated to remove the natural sugar therefrom and the remaining pulp is processed in the presence of a solvent to extract the pectous substances. The pectous liquor is treated to convert the starch by means of a suitable diastatic enzyme. The resulting solution is concentrated in the liquid form. Appellant, in the specification of said patent, states:

If desired all of the moisture may be removed and the pectous liquor reduced to a soluble powder * * *.

The reference Leo, No. 1,513,615, relates to a method of obtaining a dry powder jelly base containing pectin, the object of the invention being "the production of a purified pectin in powdered form which is free from acid or sugar or any other foreign substance." The specification further states:

This dry powder is a pectous body comprising from 95% to 100% of the following ingredients: pectin, pectose, a small amount of pectase, and some calcium pectate.

The pectin is obtained in a solution which may then be concentrated. The specification further states:

This concentrated solution is then treated with alcohol, which results in the precipitation of the pectous bodies. This alcohol may be ethyl or methyl alcohol or a combination of both, as desired. Preferably three gallons of alcohol are added to each gallon of concentrate. The solid pectous bodies precipitated from the solution are separated therefrom, preferably in a centrifugal machine, and are then perfectly dried by the well-known atomizing process, which results in the blowing of the material into a room, whereby it immediately forms into a dry powder, which can be collected and sold.

The reference "Goldthwaite on Jelly Making," discloses the isolation of pectin by making a pectin solution in which the pectin is eventually obtained in solid form by precipitation by alcohol. The process of this precipitation is described as follows:

* * * a given volume of the cold, filtered (previously boiled) fruit-juice was added drop by drop by means of a separatory funnel to an equal volume of alcohol, stirring constantly; the mixture was allowed to stand over night in a cold place and then the precipitated jelly-like mass of pectin was separated from the liquid by filtering off through very fine cotton cloth stretched tightly over the mouth of a 4-liter jar. The liquid was worked out of the mass by means of a spatula. Repeated re-solution and re-precipitation of the pectin improved its purity. The pectin so obtained was a very stable, nearly colorless, transparent solid, * * *

It is not necessary to consider the other references relied upon.

All of the appealed process claims were rejected on the patent to Douglas on the ground that it is not inventive to precipitate, by the use of alcohol, the pectin from the solution there shown, in view of either Leo or Goldthwaite. Claims 9 to 13, inclusive, for the product, were rejected on the ground that they improperly define the product by the process of making it.

Appellant concedes that the process of preparing pectin from fruits, comprising the removal of the natural sugar therefrom and processing the remaining pulp in the presence of a solvent to obtain the pectin solution, which are elements in one form or another in all of the process claims here involved, is fully shown in the Douglas reference. He also concedes that the element of said process claims—"converting the starch in the solution by the action of a suitable diastatic enzyme"—is also disclosed in the Douglas patent, but argues that, as there disclosed, said step of the process was for an entirely different purpose than that involved in the present application. The Douglas patent does not disclose the remaining element of the claims, to wit, "precipitating the pectin therefrom with alcohol and drying the precipitate," as it is stated in claim 2, above quoted.

Appellant contends in his brief as follows:

* * * it was Douglas only who conceived the idea of what may be termed a two-stage purification process involving the production first of a purified solution and the extraction from that solution by precipitation of pure pectin and nothing else. No one else had ever devised this method nor produced the highly purified starch-free pectin which is the product.

The evolution of this process was not the simple, offhand matter which was evidently all that the Examiner saw in it. Many minor problems had to be solved before accomplishing success. One of these was the recognition of the fact that the 10 to 25% starch content would be precipitated along with the pectin. To overcome this difficulty he conceived of the use of fermentation by a diastatic enzyme, not for the purpose of preventing starch from reacting with fruit tannins, but for the different purpose of rendering the starch soluble in alcohol so that it would not be precipitated. Another difficulty was that the addition of the alcohol to the solution, as taught by the prior art, yielded a pectin precipitate of an impracticable form to handle. It was necessary for him then to device the step of adding the solution to the alcohol and below its surface, as well as the subsequent repeated dehydration of the precipitate with alcohol, which the Patent Office has recognized as invention by the allowance of some of the claims. These and many other problems beset the path of the inventor but they passed unnoticed in the superficial consideration of the case by the Patent Office, except for the claims allowed on the final step of dehydration which are by no means commensurable with the invention.

We think that the Douglas patent clearly discloses all of the elements of the process claims here in issue except that which covers the precipitation by means of alcohol. The fact that the disclosure in the Douglas patent of converting the starch in the solution by the action of a suitable diastatic enzyme was for a different purpose than that stated in the present application is, we believe, immaterial, because he showed how the starch in the solution could be converted by the action of a suitable diastatic enzyme, leaving the resultant solution free from starch.

We think the process of precipitation shown by the Leo reference and by the Goldthwaite publication, so far as the claims here in issue are concerned, is essentially the same as the process of precipitation shown in appellant's application, and the question arises whether it constitutes invention to apply, as a further step to the process shown by the Douglas patent, the process of precipitation shown by Leo and Goldthwaite.

Appellant insists that the process of precipitation shown by Leo, applied to the solution obtained by Leo through carrying out the various steps of his process, results in a 10% to 25% contamination by starch, and further that his final product contains not pectin alone, but pectose, pectase, and calcium pectate as well. In this we think appellant is correct, but it is also true that the precipitation process disclosed by Leo, applied to the process disclosed in the Douglas patent, would, so far as the claims here

in issue are concerned, result in a product in all respects comparable to the product produced by appellant. The difference in purity between the product of appellant and that of Leo is due, not to the process of precipitation here involved, but to the character of the respective solutions before the precipitation process is applied. It is our opinion that any skilled chemist, desiring to precipitate to a dry state the pectin in a solution such as shown by the Douglas patent, and having knowledge of the disclosure of the Leo patent and of the Goldthwaite publication, would apply the precipitation method there disclosed to said solution, and that this would not require the exercise of the inventive faculty.

Appellant shows that the validity of appellant's prior patent has been established in the courts and contends that the decision rendered by the Court of Appeals for the Second Circuit in the case of *Douglas Pectin Corporation* v. *Armour & Co.*, 27 F.(2d) 814, shows the patentability of the claims here in issue. We have carefully examined this opinion and it is sufficient to say that the questions before us were in no way involved in said case.

We hold that there is no invention, in view of Leo and Goldthwaite, in adding to the process disclosed by the Douglas patent the precipitation of pectin from the solution there shown by means of alcohol and drying the precipitate.

With regard to the product claims, they are all limited by one or more of the steps of the process involved in the process claims. It is not clear to us that the product secured could not be described without reference to appellant's method; but, however this may be, we agree with the Board of Appeals that the product claims are not patentable.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BYCK

No. 2,671. Decided April 15, 1931

1. PATENTABILITY.

It is elementary that there cannot be more than one valid patent for the same invention.

2. SAME—COPENDING APPLICATIONS OF SAME INVENTOR.

"The cases so cited appear to establish the rule that where two applications by the same inventor are copending, it is a matter of indifference which of the patents is issued first, *provided that the claims are for separate inventions.*"

3. SAME—SAME—FLEXIBLE ELECTRIC CONDUCTORS.

Claims for flexible electric conductors *Held* unpatentable as stating only an obvious use of a composition of matter covered by a patent granted to the applicant on a copending application.

APPEAL from the Patent Office. Affirmed.

Mr. R. L. Scheffler for Byck.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner, rejecting claims 1, 2, 3, 8, 9 and 10 of appellant's application for failure to define anything inventive over the subject matter claimed in appellant's prior patent, in view of the prior art.

Claims 1, 3 and 9 are illustrative of the claims in issue and read as follows:

3. An insulated coil comprising a conductive winding having an insulating coating of infusible, flexible, phenol-fatty oil composition, and an insulating filling for the interstices of said winding.

3. An insulated coil comprising a conductive winding having an insulating coating of infusible, flexible, phenol-fatty oil composition, associated with a fibrous sheet material, and an insulating filling for the interstices of the said winding.

9. As an article of manufacture, a flexible electrical conductor having an adhering insulating coating of an infusible, flexible, phenol-fatty oil composition.

The references are: Baekeland, 1,213,726, January 23, 1917; Byck, 1,590,079, June 22, 1926.

The alleged invention is sufficiently described in the claims quoted.

The Board of Appeals in its decision stated:

The patent to Baekeland discloses the making of an insulated coil by first insulating the conductor in various ways, see page 2, lines 8–10, among which is coating it with an insulating varnish and then impregnating the conductor or coil and filling the interstices between the windings with a fluid and mobile phenolic condensation product and finally transforming said product, in situ, into a solid homogeneous, impervious, insoluble and infusible body.

Appellant carries out the same process but uses both as the insulating varnish and as the impregnating material, a composition for which he has been granted a patent No. 1,590,079.

The Examiner holds that there is no invention in substituting the composition of appellant's patent for the insulating varnish and the impregnating material in the Baekeland method.

It appears that on June 22, 1926, appellant was granted the patent cited as a reference, upon an application filed November 5, 1923. The instant application was filed on February 11, 1926, so that it was copending at the time said patent was issued.

Appellant moved for a rehearing before the Board of Appeals upon the ground that the board had overlooked the fact that his application was copending when said patent was issued. The Board denied the motion, stating:

The ground of our rejection was that appellant had already been granted a patent on the phenolic condensation product which he proposes to use for insulating electric conductors and coils, as claimed in the present application, and that it involved no invention to use such material for this purpose in view of the Baekeland Patent No. 1,213,726. The question is merely whether it involved invention to substitute appellant's patented composition in the Baekeland process and coil. We held that it did not and it is entirely immaterial that the applications were copending. The situation is like that in *Ex parte Isherwood* C. D 1917, page 226; *Ex parte Hammond et al.* C. D. 1922, page 15; *Ex parte Chapman* C. D. 1924, page 143; and *Wilcox and Gibbs S. M. Co.* vs. *The Merrow Mach. Co.* C. D. 1898, page 584.

In appellant's said patent it is stated that his material is adapted for use as a varnish or impregnating solution; it is further stated as follows:

Varnishes and lacquers prepared as above may be applied to wood, metal, fabrics, paper and all other bases, and yield when baked (preferably at about 160°–170° C.) lustrous, adherent, mechanically and chemically resistant, electrically insulating and highly flexible films. They have been found well suited, among other uses, for the manufacture of so-called composite cardboard, or laminated products (U. S. Patent #1,019,406 to L. H. Baekeland) comprising sheets of paper, canvas, etc. coated or impregnated with the phenolic condensation product, and consolidated and transformed by sufficient application of heat.

[1] It is clear to us that the decision of the Board of Appeals must be affirmed unless the fact that appellant's instant application was copending with the application upon which his patent was issued prevents such patent being considered in determining whether appellant has made an invention. It is elementary that there cannot be more than one valid patent for the same invention, and if appellant's claims here in issue have as an element of invention only the use of the composition patented to appellant, it would seen that in view of the Baekeland reference appellant was attempting to secure a patent upon an obvious use of a composition for which he has already received a patent.

[2] Appellant cites many authorities in support of his contention that his said patent is not a bar to the allowance of the claims in issue. The cases so cited appear to establish the rule that where two applications by the same inventor are copending, it is a matter of indifference which of the patents is issued first, *provided that the claims are for separate inventions. Traitel Marble Co.* v. *U. T. Hungerford Brass & Copper Co.*, 22 F.(2d) 259, and cases cited.

In the same case it was held that—

The issuance of the first patent does not abandon the unclaimed matter in its disclosure, the pending of the second application rebutting any such inference.

We think it clear that the application here in issue does not claim a separate invention from that claimed in the issued patent, but only claims an obvious use of the composition there patented. If appellant's position is well taken, then it would seem that any inventor of a new and useful composition of matter may receive a patent for it and he may also, by filing separate applications, secure patents for every use of such composition that he may disclose. An inventor is not entitled to a patent unless his invention is new and useful. It would shock one's sense of justice if an inventor could receive a patent upon a composition of matter, setting out at length in the specification the useful purposes of such composition, manufacture and sell it to the public, and then prevent the public from making any beneficial use of such product by securing patents upon each of the uses to which it may be adapted.

[3] In the case at bar, appellant received a patent upon his composition of matter because he had invented something new and useful. He could not have received such patent unless he had disclosed its utility. Such disclosure of usefulness did not constitute separate inventions, but an essential part of a single invention. Of course he might have disclosed a use of the invention which, together with other elements might have constituted a separate invention for which he would be entitled to a patent. This, we hold, he did not do, in view of the Baekeland reference.

For the reasons stated, there was no error in citing the said patent, not as prior art, but to show that appellant had already received a patent for the only invention that was disclosed in either application.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

986,148, Ehrlich and Bertheim, New derivatives of oxyaryl arsinic acid and process of making same; 1,081,592, 1,081,897, same, Medicinal preparation; 1,116,398, same, Dihydrochlorid of diaminodioxyarsenobenzene; Re. 13,848, Korndorfer and Reuter, Derivatives of diaminodioxyarsenobenzene and process of making, D. C., W. D. N. Y., Doc. 395–C, *Farbwerke vormals Meister Lucius & Bruning* v. *Diarsenol Co., Inc., et al.* Dismissed June 29, 1931. Doc. 392–C, *Chemical Foundation, Inc.*, v. *Diarsenol Co., Inc., et al.* Decree for plaintiff June 29, 1931.

1,081,592. (See 986,148.) 1,081,897. (See 986,148.)

1,086,084, D. Reiser, Feeding mechanism for stitching machines; 1,086,085, 1,114,386, same, Machine for stitching pamphlets, D. C., E. D. Wis. (Milwaukee), Doc. 3103, *S. R. Sague* v. *Christensen Machine Co.* Consent decree for plaintiff July 1, 1931.

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1,105,595, C. Nessler, Hair curler; 1,642,450, W. S. Lewis, Hair waving curler rod; 1,735,254, 1,742,177, same, Hair curler, filed July 15, 1931, D. C., N. D. Ohio, E. Div., Doc. 3881, *The Nestle Le Mur Co.* v. *The Barstell Products Co.*

1,114,386. (See 1,086,084.) 1,116,398. (See 986,148.)

1,168,607, 1,361,143, D. D. Daniel, Attachment for motion picture machine; 1,618,417, Feeney and Goddy, Fire preventing apparatus for motion picture producing machines; 1,658,594, same, Dowser control mechanism for motion picture projecting machine; 1,725,574, same, Dowser unit for motion picture projecting machine; 1,725,556, T. T. Allen et al., same, filed Apr. 21, 1931, D. C., E. D. Pa., Doc. 6515, *Sentry Safety Control Corp.* v. *J. T. Gibson et al.*

1,177,697, L. Gaumont, Developing, fixing, toning, and otherwise treating photographic films and prints; 1,209,696, same, Apparatus for drying photographic films; 1,260,595, F. B. Thompson, Film treating apparatus; 1,209,266, same, Film wiping apparatus; 1,569,156, same, Photographic film drier, filed July 11, 1931, D. C., S. D. N. Y., Doc. E 60/402, *Cinema Patents Co.* v. *Meyer Rieger Corp.*

1,198,860, Lesley and Enz, Circuit controller for mechanically playing instruments; 1,198,861, Lesley and Schoen, Circuit controller, D. C., S. D. Ohio, W. Div., Doc. E 438, *Mills Novelty Co.* v. *The Monarch Tool & Mfg. Co.* Claims 3, 4, and 5 of 1,198,861 held valid and infringed, dismissed as to 1,198,860 (notice July 13, 1931).

1,198,861. (See 1,198,860.) 1,209,696. (See 1,177,697.)

1,214,168, Des. 67,018, Johnson and Benson, Edible container, D. C. Mass., Doc. E 2933, *American Pastry Products Corp.* v. *United Products Corp. et al.* Consent decree for plaintiff Sept. 20, 1928.

1,260,595. (See 1,177,697.) 1,299,266. (See 1,177,697.)

1,307,734, A. V. Gullborg, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus; Re. 14,667, F. D. Winkley, Lubricating system, C. C. A., 2d Cir., Doc. —, *The Bassick Mfg. Co.* v. *Adams Grease Gun Corp.* Decree modified (notice July 14, 1931).

1,336,799. (See 1,511,788.) 1,350,605. (See 1,374,446.)

1,361,143. (See 1,168,607.)

1,374,446, 1,374,500, W. E. Greenawalt, Apparatus for treating liquids with gases; 1,350,605, same, Flotation apparatus, D. C. Colo. (Denver), Doc. 9255, *W. E. Greenawalt* v. *Sterns-Roger Mfg. Co.* Injunction against defendant on claims 9 and 10 of 1,374,446 and claims 10 and 11 of 1,374,500 July 2, 1931.

1,374,500. (See 1,374,446.)

1,388,434, G. V. Johnston, Method and apparatus for butt-welding thin gauge tubing and the product thereby produced; 1,435,306, same, Butt-welded thin-walled tubing; 1,435,751, F. S. Stearns, Electric welding apparatus; 1,722,711, F. L. Sessions, Tube welding machine, D. C., E. D. Mich., S. Div., Doc. 4018, *Steel & Tubes, Inc.*, v. *General Motors Corp. et al.* Dismissed July 7, 1931.

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1,403,475, H. D. Arnold, Vacuum tube circuit; 1,520,994, same, Electron discharge amplifier; 1,448,216, R. A. Heising, Signaling system, filed June 15, 1931, D. C., E. D. N. Y., Doc. 5548, *Radio Corp. of America et al.* v. *Airplane & Marine Direction Finder, Inc.*

1,404,374, 1,404,375, Chappell and Moore, Process for clarifying and improving the color of petroleum oil; 1,564,501, J. W. Weir, Method of manufacturing lubricating oils; 1,572,465, Black and Weir, same; Re. 16,439, P. W. Prutzman, Process for decolorizing oils, D. C., N. D. Okla. (Tulsa), Doc. E 280, *Conta Filtration Co. et al.* v. *Pierce Petroleum Corp.* Dismissed without prejudice Apr. 29, 1931.

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1,444,217, S. Sparks, Method of making oiled paper; 1,593,128, L. L. Leadbetter, Apparatus for the manufacture of oiled paper, D. C., W. D. Wash. (Tacoma), Doc. —, *California-Oregon Paper Mills* v. *Crown-Willamette Paper Co.* Dismissed July 2, 1931.

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1,470,524. (See 1,505,592.) 1,475,980. (See 1,307,734.)

1,479,232, 1,546,170, H. B. Gillette, Wheel; 1,549,863, same, Method of manufacturing wood wheels; and 1,549,145, L. Metzgar, Wheel structure (included in suit to annul), filed July 3, 1931, D. C., W. D. Mich. (Grand Rapids), Doc. E 2455, *G. D. Sisson, jr.*, v. *Metzgar Co., Inc., et al.*

1,498,359. (See 1,526,714.)

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1,549,863. (See 1,479,232.) 1,563,506. (See 1,526,714.)

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1,569,156. (See 1,177,697.) 1,572,465. (See 1,404,374.)

1,593,128. (See 1,444,217.) 1,595,385. (See 1,511,306.)

1,595,426. (See 1,511,306.) 1,598,183. (See Re. 17,437.)

1,618,417. (See 1,168,607.) 1,642,450. (See 1,105,595.)

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1,801,549. (See 1,687,013.) Re. 13,848. (See 986,148.)

Re. 14,667. (See 1,307,734.) Re. 16,439. (See 1,404,374.)

Re. 16,611, L. L. Lewis, Method of and apparatus for cooling and ventilating, filed July 2, 1931, D. C., S. D. N. Y., Doc. E 60/336, *Auditorium Conditioning Corp.* v. *Warner Bros. Pictures, Inc., et al.*

Re. 16,669, S. Kaye, Cooler for bottled goods, filed July 9, 1931, D. C., S. D. Ohio, W. Div., Doc. 765, *Glascock Bros. Mfg. Co.* v. *Gertner Mfg. Co.*

Re. 16,803, E. M. Flaherty, Low-viscosity lacquer and film produced therefrom; 1,710,453, M. V. Hitt, Nitrocellulose coating composition and film made therefrom, filed June 12, 1931, D. C., E. D. N. Y., Doc. 5544, *E. I. du Pont de Nemours & Co.* v. *The Glidden Co.*

Re. 17,437, N. Statham, Fastener operating device; 1,566,996, G. Sundback, Separable fastener slider; 1,598,183, E. M. Whitney, Fastener, filed June 19, 1931, D. C. Conn. (New Haven), Doc. E 2183, *Hookless Fastner Co.* v. *G. E. Prentice Mfg. Co.*

Des. 67,018. (See 1,214,168.)

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,571,900, F. L. Lord, Tuned radio frequency receiving system, decided July 24, 1931, claims 1, 2, and 3.

Pat. 1,634,023, L. H. Thullen, Transformers, decided June 22, 1931, counts 6, 7, 9, 13, 14, 15, 16, 22, and 24.

Pat. 1,754,735, J. C. Barnaby, Internal combustion engine, decided August 8, 1931, claims 1, 2, and 3.

Pat. 1,663,442, G. K. Culp, jr., G. D. Barker, and Wm. J. Sturgis, Liquid fuel-burning heaters, decided July 11, 1931, claims 1, 2, 3, 4, 5, 6, and 10.

Pat. 1,750,631, F. R. Eaglesfield, Closures, decided August 8, 1931, claims 1, 2, 3, and 5.

Pat. 1,775,088, H. J. Murphy, Lubricating system, decided August 14, 1931, claim 14.

Pat. 1,677,021, W. E. Danley, High frequency filament heating means, decided July 20, 1931, claims 1, 2, 6, and 16.

Pat. 1,784,698, Friedrich Merk, Telephone system, decided August 8, 1931, claims 4, 5, and 14.

Pat. 1,791,225, W. A. Rankin, Thermostatic switch decided August 8, 1931, claim 6.

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 8, 1931

[VOL. 410. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 298,808. GONZALO BOZA & CO. INC., New York, N. Y. Filed Apr. 14, 1930.

Charolak

For Tanned Leather.
Claims use since Mar. 25, 1929.

Ser. No. 308,839. FRANCIS C. STOKES & CO., INC., Philadelphia, Pa. Filed Dec. 10, 1930.

GREENPACK

For Cucumber Seeds.
Claims use since Nov. 1, 1930.

Ser. No. 316,275. D. LANDRETH SEED CO., Bristol, Pa. Filed June 25, 1931.

Never Die

For Lawn Grass Seed.
Claims use since 1929.

Ser. No. 317,090. PARAMOUNT NURSERIES, West Grove, Pa. Filed July 18, 1931.



The descriptive words "Evergreens", "Unsurpassed", and "Guaranteed", as well as the representation of an evergreen, are disclaimed apart from the other features of the mark shown on the drawing.

For Plants, Trees, Flowers, Shrubbery, Evergreens and Rose Bushes.
Claims use since December, 1930.

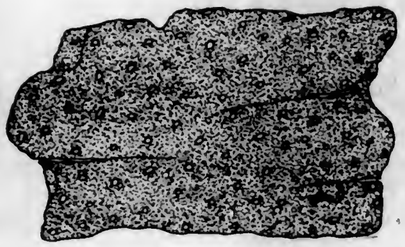
Ser. No. 317,272. CRAB ORCHARD STONE CO., INC., Nashville, Tenn. Filed July 24, 1931.



No claim is made to the word "Quartzite" apart from the marks shown on the drawing.

For Quartzite as Taken from the Quarries.
Claims use since January, 1926.

Ser. No. 317,472. THE KOPPERS COMPANY OF DELAWARE, Pittsburgh, Pa. Filed July 30, 1931.



The drawing is intended to show, by way of example, coke coated or spotted with aluminum flakes substantially the color specified. Applicant disclaims the representation of a lump of coke shown in the drawing.

For Coke.

Claims use since June 27, 1928.

CLASS 2

Receptacles

Ser. No. 313,601. THE KENNEDY CAR LINER & BAG COMPANY, Shelbyville, Ind. Filed Apr. 21, 1931.

X-L-O

For Mothproof Garment Bags.

Claims use since Sept. 1, 1930.

Ser. No. 313,602. THE KENNEDY CAR LINER & BAG COMPANY, Shelbyville, Ind. Filed Apr. 21, 1931.

KENDEX

For Mothproof Garment Bags.

Claims use since Mar. 30, 1931.

Ser. No. 316,999. THE LE MONTREE MANUFACTURING COMPANY, Cincinnati, Ohio. Filed July 16, 1931.

"STOR-RITE"

For Moth-Proof Bag.

Claims use since Jan. 1, 1931.

Ser. No. 317,438. N. V. PHILIPS' GLOEILAMPENFABRIEKEN, Eindhoven, Netherlands. Filed July 29, 1931.

PHILITE

For Boxes, Jars, Perfume Boxes, Jewel Boxes, Plates, Trays Made of Phenol-Formaldehyde Condensation Products.

Claims use since Apr. 17, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 310,137. JOHN PAWLOWSKI, doing business as The Renzep Co., Chicago, Ill. Filed Jan. 19, 1931.

RENZEP

For Leather Cleanser.

Claims use since Apr. 1, 1930.

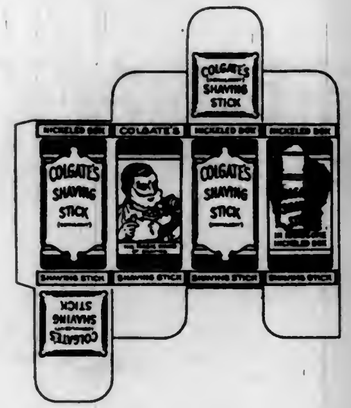
Ser. No. 316,066. JAMES H. OWEN, doing business as Out-Rite Company, East Orange, N. J. Filed June 16, 1931.

Out-Rite

For Preparation for General Cleaning Purposes and for Removing Spots from Clothing, Gloves and the Like, Said Preparation Being in the Nature of a Dry Cleaner.

Claims use since Mar. 1, 1930.

Ser. No. 316,807. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed July 10, 1931.



Applicant makes no claim herein to the exclusive right to the use of the representation of a carton per se appearing on the drawing or to the representation of the goods or to any of the words displayed upon the said trademark other than the word "Colgate's," apart from the mark as shown.

For Shaving Soap and Shaving Sticks.

Claims use since Jan. 1, 1911.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 301,220. THE WEAVER BROTHERS COMPANY, Cleveland, Ohio. Filed May 24, 1930.



The article "A" and the word "Product" not being claimed apart from the other features of the mark.

For Alkali Neutralizers, Pills for Testing Pickling Solutions, Inhibitors Which Are Added to Pickling Tanks in Order to Prevent the Pickling Solution from Over-Pickling the Steel or Other Metal Placed in the Tank, and Fume Eliminators Which Are Added to Pickling Tanks for the Purpose of Forming a Collar Over the Top of the Solution, Which is Foamy, Retaining the Object in the Pickling Tank Instead of Allowing it to Permeate the Air with the Steam that is Exhausted from the Tank.

Claims use since September, 1929.

Ser. No. 303,127. LEO SIEGEL, doing business as Peak Medicine Company, Chicago, Ill. Filed July 3, 1930.



No claim is made to the words "Directions", "Chicago, Ill.", and "None Genuine Without Signature", apart from the mark as shown.

For Medicines for Use as a Regulator and Laxative for the Stomach, Liver, and Bowels.

Claims use since May 1, 1930.

Ser. No. 304,839. TYSON & COMPANY, INC., doing business as Johnson Products Company, Paris, Tenn. Filed Aug. 20, 1930.



The lining on the drawing is used for shading purposes only.

For General Family Liniment, Pine and Honey Compound, a General Tonic, Vegetable Compound, Laxative Liver Syrup and Chill Tonic.

Claims use since Jan. 2, 1930.

Ser. No. 306,924. GEORGE GABRIEL ULMER, doing business as Ulmer Laboratories, Minneapolis, Minn. Filed Oct. 18, 1930.

VARI-CHLOR-OSE TRADE MARK

The word "Trade Mark" is disclaimed.

For Medicinal Preparation for the Treatment of Varicose Veins.

Claims use since June 20, 1930.

Ser. No. 307,140. GILDARDO MAGANA, Mexico, D. F., Mexico. Filed Oct. 24, 1930.



Applicant disclaims the right to the exclusive use of the words "Locion Para El Cabello" apart from the trademark as shown in the drawing. The facsimile signature for which registration is sought is the facsimile of the signature of Jose Esparza. The lines on the drawing indicate shading only. The picture shown in the accompanying drawing is fanciful.

For Hair Lotion of Vegetable Origin.

Claims use since Aug. 29, 1929.

Ser. No. 307,515. WILH. JUL. TEUFEL, Stuttgart, Germany. Filed Nov. 3, 1930.

Elporo

For Medicinal Plaster Bandages Impregnated with a Plaster Mass for Use in Healing Wounds; Medicinal and Surgical Dressings—Namely, Salves and Ointments for the Treatment of Cuts, Wounds, Bruises, and Skin Diseases.
Claims use since Oct. 8, 1909.

Ser. No. 308,469. ISIDORE EMANUEL COVEN, doing business as Sars-A-Tone Herb Health Institute, Chicago, Ill. Filed Nov. 29, 1930.

'SARS-A-TONE'

(RHEUMATICA)

TRADE-MARK REGISTERED

Applicant disclaims the descriptive words "Rheumatica" and "Trade-Mark Registered".
For System Cleanser, Purifier, and Regulator.
Claims use since Oct. 18, 1928.

Ser. No. 308,507. E. C. HALL COMPANY, doing business as Nation-Wide Service Grocers and Nation-Wide Stores Co., Brockton and Hyannis, Mass., and Augusta, Me. Filed Dec. 2, 1930.



The lining in the drawing indicates shading and not color.
For Baking Powder, Bleach Water, and Salt.
Claims use since May, 1930, on baking powder and bleach water, and since June 21, 1929, on salt.

Ser. No. 309,363. TERRY & TERRY, Oak Park, Ill. Filed Dec. 26, 1930.



The words "For Your Feet" appearing on the drawing are hereby disclaimed except as used in connection with the mark. The signature "Thos & Luda Terry" appearing on the drawing is the facsimile signature of one of the members of the firm of Terry and Terry—namely, Thomas Terry.
For External Foot Lotion.
Claims use since October, 1930.

Ser. No. 310,765. ALMENA HARDEE, doing business as Co-Sen Manufacturing Company, Georgetown, S. C. Filed Feb. 5, 1931.



CO-SEN

The portrait being that of applicant.
For Herb Tonic for Use as a Diuretic and Laxative, Face Powder, Hair Dressing, Toilet Cream.
Claims use since Feb. 1, 1930.

Ser. No. 311,525. GABILLA, INCORPORATED, New York, N. Y. Filed Feb. 27, 1931.

MODA

For Perfume, Toilet Water, Talcum Powder, Sachet Powder, and Dusting Powder.
Claims use since 1920.

Ser. No. 311,861. KAVALCO PRODUCTS INC., Nitro, W. Va. Filed Mar. 5, 1931.

KRUMAL

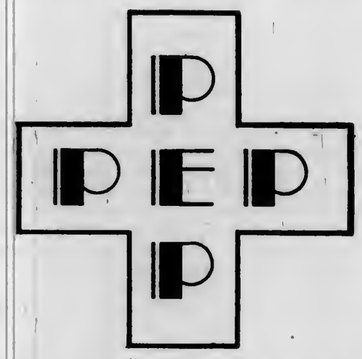
For Aluminum Stearate.
Claims use since Jan. 10, 1931.

Ser. No. 311,937. JACOB RITTER STEGEMAN, doing business as Catherine Laboratories, East St. Louis, Ill. Filed Mar. 9, 1931.

CATHERINE

For Scalp Preparations.
Claims use since Mar. 2, 1931.

Ser. No. 313,437. BENNEY KONVISSER, doing business as The Pep Salt & Liniment Company, Cleveland, Ohio. Filed Apr. 16, 1931.



For Medicinal Preparations Used in the Treatment of Rheumatism, Lumbago, Backache, Neuralgia, Stiffness of Joints, Etc.
Claims use since 1925.

Ser. No. 313,705. WILLIAM EDWARD MELVILLE COOK, doing business as Frank A. Rogers, London, England. Filed Apr. 23, 1931.

Muscatol

ROGERS, LONDON

No claim is made herein to the word "London" apart from the trade-mark shown in the drawing.
For Perfumed Non-Poisonous Harmless and Non-Greasy Insect Specific to Prevent the Bites of Various Insects.
Claims use since Nov. 8, 1906.

Ser. No. 313,886. KENRA LABORATORY COMPANY, INC., Indianapolis, Ind. Filed Apr. 27, 1931.

NO-TWEEZE

For Depilatory.
Claims use since Mar. 15, 1930.

Ser. No. 314,334. LORATE COMPANY, INC., New York, N. Y. Filed May 8, 1931.

LORATE

For Medicinal Preparation for Use as a Vaginal Douche.
Claims use since Apr. 25, 1931.

Ser. No. 314,648. FRED JADEN, doing business as F. Jaden Mfg. Company, Hastings, Nebr. Filed May 16, 1931.

DandeRid

For Preparation for Killing Dandelions.
Claims use since Apr. 17, 1931.

Ser. No. 314,750. DE LOS RIOS & CO., Detroit, Mich. Filed May 19, 1931.

PESTANOLA

For Preparation for Stimulating the Growth of Eyelashes and to be Used as a Make-Up Base.
Claims use since November, 1929.

Ser. No. 315,166. ROSALIND MAYER, doing business as Kleerplex Laboratories, New York, N. Y. Filed May 16, 1931.

KleerpleX

For Cosmetics—Namely, Antiseptic Preparations for the Treatment of Disordered Skins, Blackheads, Oiliness, Large Pores.
Claims use since Apr. 1, 1931.

Ser. No. 315,251. CHARLES A. DEAN, Jr., Detroit, Mich. Filed June 1, 1931.



The words "After the Bath" are disclaimed.
For Skin Lotion.
Claims use since Dec. 1, 1930.

Ser. No. 315,252. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Filed June 1, 1931.

THE DRUG PRODUCTS CO.

For Alteratives, Analgesics, Anaphrodisiacs, Anesthetics, Anodynes, Antacids, Anthelmintics, Antichlorotics, Anti-Emetics, Anti-Epileptics, Antigalactogogues, Antigonorrheics, Antihodrotics, Antilithics, Antineuralgics, Antiparasatics, Antiperiodics, Antiphlogistics, Antipyretics, Antirheumatics, Antisialogogues, Antispasmodics, Antizymotics, Aperients, Aphrodisiacs, Astringents, Cardiac Sedatives, Cardiac Stimulants, Carminatives, Cathartics, Cerebral Depressants and Stimulants, Chologogues, Constructives, Counter-Irritants, Demulcents, Deodorants, Deoxizers, Depilatories, Depressants, Diaphoretics, Digestives, Discutients, Disinfectants, Diuretics, Echolics, Emetics, Emmenagogues, Errhines, Escharotics, Expectorants, Galactagogues, Gastric Tonics, Hemostatics, Hypnotics, Irritants, Laxatives, Motor-Depressants, Motor-Excitants, Mydriatics, Myotics, Narcotics, Nervines, Nutrients, Oxytocics, Ptyalagogues, Purgatives, Pustulants; Refrigerants, Medicinal; Resolvents, Respiratory; Depressants, Respiratory; Stimulants, Restoratives, Rubefacients, Sedatives, Sialaogogues, Soporifics, Sternutatories; Stimulants (Cardiac, Cerebral, Hepatic); Stomachics, Styptics, Sudorifics, Teniafuges, General Tonics, Vasoconstrictors, Vasodilators, Vascular, Sedatives, Vermicides, Vesicants; Chemicals and Drugs—Namely, the Following: Acacia, Acetanilid, Acetone, Acetphenetidin; Acids—Namely, Acetic, Acetic Anhydrid, Glacial Acetic, Acetylsalicylic, Arsenous, Arsenic, Trioxid, Benzoic, Boric, Carbolic Chromic, Citric, Gallic, Hydriodic, Hydrobromic, Hydrochloric, Hydrofluoric, Hypophosphorous, Lactic, Molybdic, Nitric, Nitrohydrochloric, Oleic, Oxalic, Phosphoric, Glacial Phosphoric, Phosphotungstic, Pyrogallic, Salicylic, Stearic, Sulfuric; Sulfuric, Aromatic; Sulfurous, Tannic, Tartaric, Trichloracetic; Aconite-Root, Acontin Crystals, Allspice (Pimenta) for Medicinal Purposes, Aloes, Aloin, Althæa; Aluminum Compounds—Namely, the Following: Alum, Ammonium; Alum, Exsiccated; Alum, Chrome; Alum, Ferric; Aluminum Acetate, Aluminum Nitrate, Aluminum Sulfate; Ammonia and Ammonium Compounds—Namely, Ammonia-Water; Ammonium Benzoate, Bromid, Carbonate, Chlorid, Chromate, Citrate, Hypophosphite, Iodid, Molybdate, Nitrate, Oxalate, Persulfate, Phosphate, Salicylate, Sulfate, Sulfocyanate, Tartrate, Valerate; Amyl Acetate, Amyl Nitrite, Amylopsin, Anise; Antidote Arsenic; Antimony and Potassium Tartrate, Antipyrin, Aqua Ammoniæ, Arnica-Flowers, and Arnica-Root, Aromatized Castor-Oil, Arsenic Iodid, Asbestoswool, Aspirin, Atropin, Atropin Sulfate, Baking-Powder, Balsam Peru; Balsam Tolu; Barium Compounds—Namely, Barium Acetate, Carbonate Chlorid, Dioxid, Hydroxid, Nitrate Sulfate; Belladonna, Benzaldehyde, Benzoin; Benzol (Benzene), Benzonaphthol, Betanaphthol, Betanaphthol Benzoate, Bismuth Citrate, Nitrate, Oxid, Oxychlorid, Oxyiodid, Subcarbonate, Subgallate, Subnitrate, Subsalicylate, Bismuth and Ammonium Citrate; Bloodroot; Borax, Buchu, Burow's Solution, Cacao-Butter for Medicinal Purposes, Cadmium Iodid, Cadmium Nitrate, Cadmium and Potassium Iodid, Cadmium Sulfate, Caffein, Caffein Benzoate; Caffein, Citrated; Caffein Hydrobromid, Caffein and Sodium Benzoate, Caffein and Sodium Salicylate; Calcium Compounds—Namely, Calcium Acetate, Bromid, Carbonate, Chlorid, Glycerophosphate, Hypophosphite, Lactate, Lactophosphate, Oxid, Phenolsulfonate, Phosphate, Sulfid; Calendula, Calisaya-Bark, Calomel, Calumba, Camphor; Camphor, Monobromated; Cantharides, Capsicum, Carbon Disulfid, Carbon Tetrachlorid, Cardamom, Cardomom Compound, Cascara Sagrada, Caustic Potash, Caustic Soda, Cerium Oxalate; Chalk, Precipitated; Chamomile, Charcoal; Chloral, Camphorated; Chloral, Hydrated; Chloramin T, Chlorosane, Chlorinated Eucalyptol, Chloroform, Cinchona, Cinchona Compound; Cinchona, Red; Cinchonidin, Cinchindin Salicylate, Cinchnidin Sulfate, Cinchonin, Cinchonin Sulfate, Cinnamon, Cassia, Cloves, Cobalt Chlorid, Cobalt Nitrate, Cocain and Cocain Salts, Cochineal, Codein and Codein Salts, Colchicin, Cold-Cream, Collodion, Confection Senna, Copper Acetate, Copper Sulfate, Corrosive Sublimate, Creosote (Wood), Creosote Carbonate, Cresol, Cubeb, Cudbear, Diacetylmorphin, Diastase from Malt, Diastase from Pancreas, Dichloramin T, Digitalin, Digitalis, Digitoxin, Eriodictyon, Ether; Ether, Acetic; Ethyl Bromid, Ethyl Chlorid, Eucalyptol, Eucalyptus, Eugenol, Fennel, Food Allergens, Foxglove, Gentian, Gentian Compound, Ginger for Medicinal Purposes, Glycerin, Glycerites; Glycyrrhiza (Licorice-Root), Gold Chlorid, Gold and Sodium Chlorid, Guaiac Resin, Guaiacol Carbonate, Gum-Arabic, Gum-Benjamin, Halazone Tablets; Hellebore, American; Hemoglobin, Henbane, Hexamethylenamin, Hydrastin, Hydrastin Hydrochlorid, Hydrogen Peroxid, Hyoscyamus, Hypodermic Tablets, Iodin, Iodoform, Ipecac; Iron and Iron Compounds—Namely, Iron, Reduced; Iron Albuminate, Arsenate, Cacodylate, Carbonate; Carbonate, Saccharated; Chlorid, Ferric, Ferrocyanid, Glycerophosphate, Hydroxid with Magnesium Oxid, Hypophosphite, Lactophosphate, Oxid, Red, Saccharated; Peptonate, Peptonate with Manganese, Phonol-Sulfate, Phosphate, Pyrophosphate, Subcarbonate, Subsulfate, Sulfate, Iron and Ammonium Citrate, Iron and Ammonium Sulfate, Iron and Ammonium Tartrate, Iron and Manganese Peptonate, Iron and Potassium Tartrate; Iron and Quinin Citrate; Iron, Quinin, and Strychnin Citrate, Jalap; Kaolin, Medicinal; Kaolin Poultice, Krameria, Lanolin; Lard, Benzoinated; Laudanum, Lavender Compound, Lead Acetate, Lead Carbonate, Lead Nitrate, Lead Oxid, Lead Peroxid, Leucocyte, Licorice, Lime for Medicinal Purposes; Lime, Chlorinated; Lime, Hydrated; Lime, Sulfurated; Medicinal Liquid Petroleum, Lithia Tablets, Lithium Benzoate, Lithium Bromid, Lithium Carbonate, Lithium Citrate, Lithium Glycerophosphate, Lithium Salicylate, Lithium Tartrate, Litmus-Paper, Lobelia, Lupulin, Mace, Magma, Bismuth, Magma Magnesia; Magnesium Compounds—Namely, Magnesia; Magnesium Carbonate, Chlorid, Citrate, Glycerophosphate, Hypophosphite, Phosphate, Salicylate, Sulfate, Magnesium and Ammonium Phosphate; Manganese Compounds—Namely, Manganese Chlorid, Citrate, Dioxid, Glycerophosphate, Hypophosphite, Oxid, Sulfate; Marigold, Matricaria, Menthol; Mercury and Mercury Compounds—Namely, Mercury; Mercury, Ammoniated; Mercury Bromid, Chlorid, Iodid, Oleate, Oxid, Salicylate, Subsulfate, Sulfid, Tannate; Mercury and Ammonium Chlorid, Mercury with Chalk; Methyl Acetate, Methyl Salicylate, Methylthionin, Milk of Bismuth, Morphin, Morphin Salts, Mustard for Medicinal Purposes, Myrrh, Nickel Nitrate, Nickel Sulfate, Nickel and Ammonium Sulfate, Nutmeg for Medicinal Purposes, Nux Vomica; Oil Betula, Oil Bitter Almond; Oil, Camphorated; Oil, Castor; Oil, Castor, Aromatized; Oil, Cod-Liver; Oil, Ethereal; Oil Peppermint for Medicinal Purposes, Oil Theobroma, Oleoresin Capsicum, Oleoresin Cubeb, Oleoresin Ginger, Oleoresin Male Fern, Ophthalmic Tablets, Opium, Opodeldoc, Orange-Peel for Medicinal Purposes, Ox-Gall, Pancreatin, Paprika for Medicinal Purposes, Paraldehyde, Paregoric, Pareira, Pepper for Medicinal Purposes, Pepsin; Pepsin, Saccharated; Peptone, Peptonizing-Powder, Peptonizing-Tubes; Petrolatum, Liquid; Phenazone, Phenolphthalein; Phenyl Salicylate (Salol), Phenylacetamid; Physostigmin (Eserin), Physostigmin Salicylate, Physostigmin Sulfate, Philocarpin Hydrochlorid; Pilocarpus (Jaborandi), Pimenta, Podophyllin; Potassium Compounds—Namely, Potassa, Sulfureted; Potassium Acetate, Benzoate, Bicarbonate, Binoxalate, Bisulfate, Bitartrate, Bromate, Bromid, Carbonate, Chlorate, Chlorid, Chromate, Citrate, Dichromate, Ferricyanid, Ferrocyanid, Glycerophosphate, Hydroxid, Hypophosphite, Iodid, Nitrate, Oxalate, Permanganate, Persulfate, Phenolsulfonate, Phosphate, Sulfate, Sulfid, Sulfocarbolate, Sulfocyanate, Tartrate; Potassium and Sodium Tartrate; Protargentum, Pyrogallol, Quinin; Quinin Salts—Namely, Quinin Bisulfate, Dihydrochlorid, Glycerophosphate, Hydrobromid, Hydrochlorid, Hypophosphite, Phosphate, Salicylate, Sulfate, Tannate, Valerate; Quinin and Urea Hydrochlorid, Rennin, Resin Jalap, Resin Podophylum, Resin Scammony, Resorcinol, Rathany, Rhubarb, Saccharin, Salol; Salt, Carlsbad, Artificial; Salt, Kissingen, Artificial; Salt, Vichy, Artificial; Sanguinaria, Santonin, Scopolamin Hydrobromid, Sedlitz-Powder, Senna; Silver, Colloidal; Silver Nitrate, Silver Protein; Sodium Compounds—Namely, Sodium Acetate, Acid Phosphate, Arsenate, Arsenite, Benzoate, Bicarbonate, Biphosphate, Bisulfate, Bisulfite, Bitartrate, Borate, Bromid, Cacodylate, Carbonate, Chlorate, Chlorid, Citrate, Cyanid, Glycerophosphate, Glycerocholate, Hydroxid, Hypophosphite, Iodid, Nitrate, Nitrite, Nitroprussid, Oxalate, Phenolsulfonate, Phosphate, Phosphate Compound, Pyrophosphate, Salicylate, Sulfate, Sulfite, Tartrate, Thiosulfate, Sodium and Ammonium Phosphate; Solargentum, Spartein Sulfate, Squill; Strontium Compounds—Namely, Strontium Acetate, Arsenite, Bromid, Chlorid, Iodid, Lactate, Nitrate, Salicylate; Strophanthin, Strychnin Salts and Compounds, Sugar of Milk, Sulfonethylmethane, Sulfonmethane, Sulfur, Suppositories, Suprarenals, Tartar Emetic, Terpin Hydrate, Theobromin, Theobromin and Sodium Salicylate, Thiosinamin; Thromboplastin, Thymol, Thymol Iodid; Thyroid Gland, Dried; Tin Chlorid, Stannous; Toluol (Toluene), Tragacanth, Uranium Acetate and Nitrate, Urease, Valerian, Vanillin, Veratrum Viride, Whitepine Bark, White-Pine Compound, Wild Cherry, Yerba Santa; Zinc Compounds—Namely, Zince Acetate, Bromid, Carbonate, Chlorid, Iodid Oxid, Phenolsulfonate, Stearate, Sulfate, Sulfid, Valerate; Biological Products—Namely, the Following: Antitoxins, Seriums, Bacterial Vaccins; Smallpox-Virus, Antirabic Vaccin, Leucocyte Extract, Veterinary Products, Ophthalmic Mallein, Mallein Solution. The Above-Mentioned Products May be in Any One or Another of the following Forms: Ampuls, Crude Drugs, Crystals, Elixirs, Extracts, Gases, Liquids, Lozenges, Mixtures, Ointments, Powders, Serums, Solids, Solutions, Spirits, Syrups, Tablets, Pills, Tinctures, Troches, and Vaccins.

Claims use since Feb. 6, 1913.

Ser. No. 315,325. ZIGMUND RAPAPORT, doing business as Hollywood Standard Laboratories Co., Los Angeles, Calif. Filed June 2, 1931.



The expression "Stadry" appearing on the drawing is descriptive and is disclaimed apart from the other features of the mark shown in said drawing. The representation of the bottle and label appearing on the drawing form no part of applicant's mark.
For Deodorant.
Claims use since May 21, 1931.

Ser. No. 315,443. ARLINDO S. CATE, doing business as Merritt Chemical Co. Inc., Greensboro, N. C. Filed June 5, 1931.



The words "Foot Powder" being descriptive are disclaimed apart from the other features of the mark shown in the drawing.
For Foot Powder.
Claims use since Mar. 20, 1931.

Ser. No. 315,488. THE DIVERSEY CORPORATION, Chicago, Ill. Filed June 6, 1931.

SILICO

For Sodium Meta Silicate for Use as a Water Softener and a General Cleanser.
Claims use since May 19, 1931.

Ser. No. 315,492. GROSHUR TONIC COMPANY, INC., New York, N. Y. Filed June 6, 1931.

The NEW YORKER

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since Apr. 16, 1931.

Ser. No. 315,541. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J. Filed June 8, 1931.

Merlay

For Perfume, Face Powder, Massage, Toilet, Cold, Astringent, and Vanishing Creams, Hand and Skin Ointments, Rouge, Lip Sticks, and Tooth Paste.

Claims use since Sept. 1, 1930.

Ser. No. 315,621. WM. R. VAN KOUGHNET, Whitehall, N. Y. Filed June 9, 1931.

EROMINE

For Food Coloring Powder and for Food Purposes.

Claims use since May 1, 1891.

Ser. No. 315,701. ROBINSON CHEMICAL CO. INC., New York, N. Y. Filed June 11, 1931.



For a Pharmaceutical Preparation Containing Phenacetin for Use in the Treatment of Common Colds, Incipient Influenza and Grippe, and as an Antipyretic and Laxative.

Claims use since Feb. 4, 1925.

Ser. No. 315,707. STERN BROTHERS, New York, N. Y. Filed June 11, 1931.

pamela

For Liquid Antiseptics and Disinfectants, Bath Salts; Hair Bleach; Cosmetics—Namely, Face Powder, Cleansing Cream, Skin Lotions, Rouges, Tissue Cream, Skin Tonic, Astringents, Perfumes, Toilet Water, Cold Cream, Vanishing Cream, Hair Tonic, Reducing Cream, Lip Sticks, Nail Polish, Chemical Cuticle Remover, Dentifrices, Deodorants, Hair-Restorer, Hair Pomade, Preparations for Treatment of Hair and Scalp, a Composition of Mud or Clay and Chemicals Known as a Mud-Pack and Used for Beautifying One's Complexion, Shampoo, Talcum Powder, Witch-Hazel, and Sachets for Wave-Setting.

Claims use since Apr. 15, 1931.

Ser. No. 315,714. WORCESTER SALT CO., New York, N. Y. Filed June 11, 1931.



The drawing is lined to indicate yellow color. No claim is made to the representation of the carton per se. No claim is made to the words "Salt" and "It Takes the Best to Make the Best" apart from the mark shown in the drawing.

For Salt.

Claims use since Jan. 17, 1931.

Ser. No. 315,811. VIVINY PERFUMERS, INC., West Haven, Conn. Filed June 13, 1931.

Paul Du Bois

The trade-mark of the applicant is a fac-simile signature of Paul Du Bois, the French sculptor and painter, born in 1829 and died in 1905.

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Powders, Nail Polishes, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes and Toilet Waters.

Claims use since June 8, 1931.

Ser. No. 315,830. CURO PROCESS COMPANY, Bartlesville, Okla. Filed June 15, 1931.

CURO

TREATS BEST FOR LESS

Applicant disclaims exclusive ownership of the words "Treats Best for Less" apart from the mark shown in the accompanying drawing.

For Product for Demulsifying Emulsions of Mineral Oils.

Claims use since May 1, 1931.

Ser. No. 315,841. HARRY D. KOENIG, doing business as Harry D. Koenig & Co., New York, N. Y. Filed June 15, 1931.



The portrait appearing on the drawing is merely fanciful.

For Face Powder, Lip Stick, Face Rouge, Cleansing Cream, Cold Cream, Foundation Cream, Astringent Lotion, Nail Polish, Liquid Nail Polish Remover and Tissue Cream, Mascara, Eye Shadow, Hand Lotion, Cucumber Face Cream, and Muscle Oil.

Claims use since Dec. 9, 1930.

Ser. No. 315,867. NATURALISTIC BEAUTY STUDIOS, INC., Dayton, Ohio. Filed June 15, 1931.

Naturalistic

For Chemical Preparations Used in Waving Hair and for Treating Hair—viz, Hair Lotion, Hair Dressing, Waving Lotion, Shampoos, Permanent Wave Oil.

Claims use since Apr. 1, 1931.

Ser. No. 315,917. MONTANA MINERAL PRODUCTS CO., Billings, Mont. Filed June 16, 1931.



Dr. W. A. ALLENS Mineral Tooth Paste

The words "Mineral Tooth Paste" are disclaimed apart from the other features of the mark shown in the drawing, said words being descriptive. The portrait constituting a part of the drawing is a facsimile drawing of W. A. Allen, named in the application.

For Tooth Paste.

Claims use since Oct. 1, 1930.

Ser. No. 315,918. MYERS REMEDY COMPANY, Philippi, W. Va. Filed June 16, 1931.

PRESCRIPTION A COMPOUND

The words "Prescription" and "Compound" are hereby disclaimed except in combination with the mark as shown, applicant expressly reserving any common law rights he may have therein. The drawing is lined to indicate the color red.

For Medicinal Preparation for Use in Reducing Fever Temperature, and in the Treatment of Colds, Coughs, and Bronchial Irritations Due to Colds.

Claims use since Sept. 15, 1930.

Ser. No. 315,963. HAROLD C. ENGLERT, Newark, N. J. Filed June 17, 1931.

ENGLERT'S OKATONA



Harold C Englert

The portrait being that of the applicant.
For Proprietary Medicine—Namely, a Laxative and Stimulant Diuretic Which Promotes Activity of Bowels and Kidneys.
Claims use since Oct. 1, 1930.

Ser. No. 315,978. FLORENCE R. BEAUMONTE, New York, N. Y. Filed June 15, 1931.

Lady Beau

For Facial Creams.
Claims use since Jan. 29, 1931.

Ser. No. 316,005. EYGLO COMPANY, INC., New York, N. Y. Filed June 18, 1931.



For the purpose of registration the word "Eylid" is disclaimed except in association with the rest of the mark.
For Nourishing Balm for Eye Lids.
Claims use since Apr. 27, 1931.

Ser. No. 316,053. RACE LABORATORIES, INC., New York, N. Y. Filed June 19, 1931.



For Laxatives.
Claims use since Oct. 1, 1929.

Ser. No. 316,054. RACE LABORATORIES, INC., New York, N. Y. Filed June 19, 1931.

Sergeant Mintics -wants you to be a Regular

For Laxatives.
Claims use since Oct. 1, 1929.

Ser. No. 316,175. ALEX SCOTT, Union City, N. J. Filed June 23, 1931.

LaTosca

For Emmenagogue Pill for Female Usage as an Agency for the Stimulation and Favoring of the Menstrual Discharge and Aiding in the Function of Menstruation and the Reproductive Organs.
Claims use since Feb. 1, 1926.

Ser. No. 316,586. WILLIAM E. FOWLER, Portland, Oreg. Filed July 3, 1931.

FOWLER'S WONDER INHALANT

No claim is made to the word "Inhalant."
For Inhalant for Treating Colds and Throat and Bronchial Affections.
Claims use since Jan. 10, 1930.

Ser. No. 316,635. FURST-MCNESS CO., Freeport, Ill. Filed July 6, 1931.

MacNes

For Insecticide.
Claims use since May 1, 1931.

Ser. No. 316,710. SOL BARTH WEINBERG, doing business as S & W Laboratories, Charlottesville, Va. Filed July 7, 1931.

QUIETONE

For Medicinal Preparation for Use in Treating Headache, Nervousness, Sleeplessness, and Aching Accompanying Tonsilitis and Influenza.
Claims use since April, 1924.

Ser. No. 316,725. NANCY HATCH, INC., New York, N. Y. Filed July 8, 1931.

Mary Garden's Secret

The trade-mark consists of the facsimile of the signature and handwriting of Mary Garden.
For Cosmetic Preparations—Namely, a Reducing Cream.
Claims use since May 1, 1931.

Ser. No. 317,207. HARRIS DRUG CO. INC., New York, N. Y. Filed July 22, 1931.

NASULES

For Capsules for Reducing Congestion of the Mucous Membranes of the Nose and for Treating Head Colds, Asthma, and Hay Fever.
Claims use since Apr. 1, 1931.

Ser. No. 317,527. NATIONAL REMEDY CO., New York, N. Y. Filed July 31, 1931.

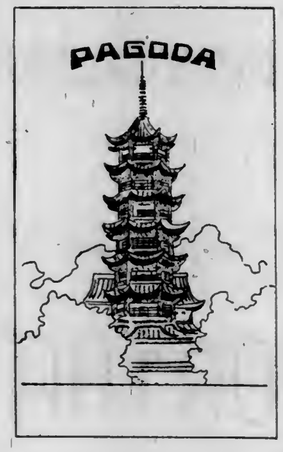
JAPANESE OIL

For External and Internal Medicinal Preparation for Use as a Stomachic and Carmative, and for Use in the Treatment of Sprains, Stiffness and Muscular Aches and Soreness due to Fatigue or Exposure, Simple Neuralgia, Minor Throat and Bronchial Irritations, Abrasions, Bruises, Contusions, Chilblains, Frost Bite, Non-Venomous Insect Bites, and for the Treatment of the Hair and Scalp.
Claims use since 1884.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 317,531. PEKIN FIREWORKS COMPANY, INC., Astoria and Portland, Oreg. Filed July 31, 1931.



For Firecrackers, Salutes, and Flashbombs.
Claims use since June 22, 1928.

CLASS 11

Inks and Inking Materials

Ser. No. 300,374. A. R. TIMBERMAN CORPORATION, Milwaukee, Wis. Filed May 12, 1930.

ARTCO

For Printing Inks.
Claims use since 1929.

CLASS 12

Construction Materials

Ser. No. 308,197. GLADDING, MCBEAN & CO., Los Angeles, Calif. Filed Nov. 22, 1930.

MARINE

For Fire Brick and Refractory or Heat Resisting Formed Clay Bodies.
Claims use since September, 1927.

Ser. No. 310,083. THE BEST BROTHERS KEENE'S CEMENT COMPANY, Medicine Lodge, Kans. Filed Jan. 19, 1931.

FAST FINISH

No claim is made to the exclusive use of the words "Fast Finish" apart from the mark as shown.
For Cement and Plaster.
Claims use since May 14, 1930.

Ser. No. 316,705. THE NEW ENGLAND LIME COMPANY, Pittsfield, Mass. Filed July 7, 1931.

PLASTOLEUM

For Building Material in the Nature of Compositions for the Construction of Flooring and the Like.
Claims use since Feb. 28, 1931.

Ser. No. 317,233. WORTHITE PROCESS COMPANY, Fort Worth, Tex. Filed July 22, 1931.

WORTHITE

For Road Surfacing and Conditioning Materials.
Claims use since Jan. 1, 1931.

Ser. No. 317,254. ILLINOIS ZINC COMPANY, Chicago, Ill. Filed July 23, 1931.

ERAYDO

For Reinforcement Rods and Bars for Construction Purposes, Architectural Sections for Building Purposes; Metal Plates, Strips, and Sheets for Construction Purposes; Interior and Exterior Trim, Roofings, Down Spouts, and Flashings.
Claims use since May 24, 1930.

CLASS 13

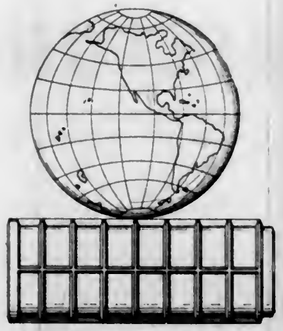
Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 315,965. FRIEDMAN SILVER CO., INC., Brooklyn, N. Y. Filed June 17, 1931.

WINTHROP

For Table Hollow Ware of Base Metal—Namely, Pewter Hollow Ware Unplated with Precious Metal.
Claims use since May 20, 1931.

Ser. No. 316,113. ALABAMA PIPE COMPANY, Anniston, Ala. Filed June 22, 1931.



The representation of the goods and the word "Pipe" are disclaimed apart from the mark as shown in the drawing.
For Metal Pipe.
Claims use since June 15, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 317,585. VEEDER-ROOT INCORPORATED, Hartford, Conn. Filed June 15, 1931.

VR

For Die Castings.
Claims use since May 22, 1931.

CLASS 15

Oils and Greases

Ser. No. 309,257. BENJAMIN M. MARCUS, Olean, N. Y. Filed Dec. 19, 1930.

Navigas

For Gasoline.
Claims use since Sept. 10, 1930.

Ser. No. 309,831. U. S. OIL COMPANY, Providence, R. I. Filed Jan. 10, 1931.



The drawing is lined for orange color. No claim is made to the exclusive use of the words "100% Pennsylvania Oil," "Motor Oil," and "Providence, R. I., U. S. A.," apart from the mark as shown in the drawing.
For Lubricating Oils and Greases.
Claims use since Oct. 1, 1922.

Ser. No. 310,118. CONTINENTAL OIL COMPANY, Ponca City, Okla. Filed Jan. 19, 1931.

TETON

For Lubricating Oil.
Claims use since Aug. 27, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 312,817. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Apr. 1, 1931.



No claim is made to the words "Quality Group" apart from the mark as shown.
For Paint (Liquid, Paste, or Semi-Paste), Paint Enamels, Japans, Varnishes, Stains, Lacquers, Prepared Shellacs, Driers, Primers; Paint Fillers for Wood, Metal, and Other Materials; Waxes Prepared for Wood Finishing, Paint Oils; Color Ingredients for Use in Paints and Like Coating Compositions, Leaded Zinc, Lithopone, White Lead (Dry and in Oil), Red Lead, White Zinc; Dry Pigment Colors for Use in Making Paints, Including Yellows, Greens, Blues, Pulp Colors, and Reds; Paint and Varnish Removers, Paint Coatings for School-Board Slates and the Like, Putty in Paste and Liquid Form for Use in Glazing, Bronzing Liquids, Gold Paint, Gold Enamel, Aluminum Paint, Polishing Oils, Polishing Wax, Size Prepared for Painters' Use, and Calcimines.
Claims use since Mar. 18, 1931.

Ser. No. 313,871. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Apr. 27, 1931.

kem-finishes

The word "Finishes" is disclaimed apart from the mark as shown.
For Paints in Paste, Semi-Liquid, or Ready-Mixed Form; Varnishes, Lacquers, Paint Enamels, and Clear Varnishes.
Claims use since Apr. 15, 1931.

Ser. No. 316,588. THE P. D. GEORGE COMPANY, St. Louis, Mo. Filed July 3, 1931.

PEDIGREE

For Paints in Dry, Paste, or Ready-Mixed Form; Varnishes, Paint Enamels, Lacquers, Japans, and Paint Driers.
Claims use since Jan. 24, 1920.

Ser. No. 316,668. ALBERT K. SHELDON CO., doing business as Cambridge Paint & Varnish Works, Cambridge, Mass. Filed July 6, 1931.

House & Cottage

The words "House & Cottage" are disclaimed apart from the mark shown in the drawing.
For Ready-Mixed Paints, Paint Enamels, Paint Colors in Oil, and Varnishes.
Claims use since Jan. 2, 1919.

CLASS 17

Tobacco Products

Ser. No. 313,918. ABRAHAM A. GREENWALD, doing business as Jacob Stahl Jr. & Co., New York, N. Y. Filed Apr. 28, 1931.



For Cigars.
Claims use since Jan. 1, 1924.

Ser. No. 316,976. MUNSON STEAMSHIP LINE, New York, N. Y. Filed July 15, 1931.



Mundoro Specials

Applicant disclaims the word "Specials" which appears on the drawing apart from the mark shown.
For Cigars.
Claims use since Jan. 1, 1925.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 315,638. INDUSTRIAL STEEL PRODUCTS LTD., Emeryville, Calif. Filed June 10, 1931.

LITE-O-SCOPE

For Headlight Devices Consisting Specifically of an Auxiliary Reflector for Reflecting a Portion of the Light Rearward to Indicate to the Driver Whether or Not the Light is Burning.
Claims use since May 22, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 304,419. MINNEAPOLIS-HONEYWELL REGULATOR COMPANY, Minneapolis, Minn. Filed Aug. 9, 1930.

UNIFAN

For Temperature or Pressure Responsive Switches for Use in the Electrical Control of Heating Plants.
Claims use since Jan. 21, 1930.

Ser. No. 314,863. WILLIAM POLLACK, New York, N. Y. Filed May 21, 1931.

CORODEX

For Ventilating Moisture Preventing Attachment for Storage Batteries.
Claims use since Mar. 24, 1931.

Ser. No. 315,874. SAFE-O-MATIC AUTO SWITCH COMPANY, St. Clair, Mich. Filed June 15, 1931.

SAFE-O-MATIC

Exclusive use of the word "Safe" is disclaimed apart from the mark as shown in the drawing.
For Electric Switch Attachment for Oil Gauges of Internal Combustion Engines for Automatically Controlling the Operation of the Engine upon Non-Operation of the Lubricating System.
Claims use since June 6, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 307,914. ARRANBEE DOLL CO., New York, N. Y. Filed Nov. 15, 1930.



No claim is made to the words "Trade Mark" apart from the mark shown on the drawing. The portrait shown on the drawing is merely fanciful.
For Dolls.
Claims use since Nov. 1, 1930.

Ser. No. 316,504. PROLITE, Cleveland, Ohio. Filed June 30, 1931.

PROLITE

For Golf Clubs, Golf Heads, Grips, Ferrules for Golf Clubs, Golf Balls, and the Like.
Claims use since Jan. 1, 1931.

Ser. No. 316,821. PEO MANUFACTURING CORPORATION, Rochester, N. Y. Filed July 10, 1931.

BARN-YARD GOLF

For Game Played with Balls Adapted to Traverse a Spiral Raceway.
Claims use since Apr. 1, 1931.

Ser. No. 317,637. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Aug. 4, 1931.

Joe Cronin

The trade-mark is the facsimile signature of Joe Cronin.
For Baseball Bats.
Claims use since June 22, 1928.

Ser. No. 317,638. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Aug. 4, 1931.

Chuck Klein

The trade-mark is the facsimile signature of Charles H. Klein, known as Chuck Klein.
For Baseball Bats.
Claims use since Aug. 27, 1926.

Ser. No. 317,639. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Aug. 4, 1931.

Edde Morgan

The trade-mark is the facsimile signature of Edde Morgan.
For Baseball Bats.
Claims use since Sept. 25, 1928.

Ser. No. 317,640. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Aug. 4, 1931.

Wm N (Bill) Terry

The trade-mark is the facsimile signature of Wm. N. (Bill) Terry.
For Baseball Bats.
Claims use since Aug. 17, 1927.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 295,329. THE DALLETT COMPANY, Philadelphia, Pa. Filed Jan. 29, 1930.

PORTFLEX

For Machine for Grinding, Polishing, Buffing, Drilling, Sawing, Sanding, and the Like; Brushes for Attachment to the Machine, Drill Chucks and Pads for the Support of Buffing, Grinding, Sanding, and the Like Media.
Claims use since Mar. 1, 1929.

Ser. No. 298,901. MADISON-KIPP CORPORATION, Madison, Wis. Filed Apr. 15, 1930.



No claim is made to the word "Air" or to the representation of the goods aside from the mark as shown in the drawing.

For Pressure-Fluid Operated Grinding, Cutting, Buffing, Cleaning, and Polishing Tools; Parts, Replacements, and Accessories, Including Cutters; Mounted Wire Brushes, Wire Brush Holders, Abrasive Sleeve Holders, Abrasive Tubes, Mounted Tips, Mounted Grinding Wheels, Mounted Points, Mounted Smoothing Stones, Felt Buffing Tips, Tool Post Adapters, Grinding Wheel Guards, and Diamond Point Wheel Dressers.

Claims use since Feb. 3, 1930.

Ser. No. 300,668. ERNEST REICH, doing business as Ernest Reich & Company, Chicago, Ill. Filed May 16, 1930.



For Flour Sifters, Food Mincers, Food Choppers, Cream Whippers, Egg Beaters.

Claims use since Jan. 16, 1928.

Ser. No. 308,285. BENTLEY-JONES, INC., Montgomery, Ala. Filed Nov. 25, 1930.

AIR-O-MIXER

No claim is made to the word "Mixer" apart from the mark as shown.

For Egg Beaters, Cream Whippers, Mayonnaise Mixers, Drink Mixers, and Like Machines for Mixing, Beating, and/or Aerating Liquids and Semi-Solids.

Claims use since Oct. 15, 1929.

Ser. No. 314,386. WARFIELD GILLILAND DEVELOPMENT CO., Minneapolis, Minn. Filed May 9, 1931.

CENTIPEDE

For Truck Units—Namely, Endless Tread Chains Mounted on Track Frames Used in Place of the Driving Wheels on Vehicles and in the Place of Ground Engaging Wheels of Trailers.

Claims use since Apr. 29, 1931.

Ser. No. 314,760. HOLLYWOOD CAMERETTE CO., North Hollywood, Calif. Filed May 19, 1931.

Hollywood Camerette

For Cigarette Dispensers of the Type Employing a Manually Operable Mechanism for Delivering Cigarettes Singly from a Magazine.

Claims use since Mar. 24, 1931.

Ser. No. 315,463. KNY-SCHEERER CORPORATION, New York, N. Y. Filed June 5, 1931.

AESCULAP

For Steel Knives, Shears, Scissors, Razors, Files, Hair Clippers, Chisels, and Gouges.

Claims use since Nov. 10, 1899.

Ser. No. 315,533. GREAT WESTERN MANUFACTURING COMPANY, Leavenworth, Kans. Filed June 8, 1931.

SUPER SYFON

No claim is made to the exclusive use of the word "Syfon" apart from the mark as shown.

For Feeders, Separators, Aspirators, Pulverizers and Graders Used in the Preparation of Stock and Poultry Feeds.

Claims use since Feb. 25, 1931.

Ser. No. 316,107. S. MORGAN SMITH COMPANY, York, Pa. Filed June 20, 1931.

SMS Co

For Hydraulic Turbine Equipment—Namely, Hydraulic Turbines and Parts Thereof, Power Transmission Machinery and Parts Thereof, Hydraulic Turbine Governors and Control Apparatus; Head Gates, Sluice Gates, Roller Gates, Valves, and Mechanism for Operating the Same; Pumps.

Claims use since March, 1913.

Ser. No. 316,114. AMERICAN UTENSIL CO., Chicago, Ill. Filed June 22, 1931.

SEP-RO-SIV

For Food Grinding, Separating, and Seeding Machines.

Claims use since June, 1927.

Ser. No. 316,211. MERGENTHALER LINOTYPE COMPANY, Brooklyn, N. Y. Filed June 24, 1931.

LINOLITE

For Matrix Storage Magazines Forming a Part of Type Bar Casting Machines.

Claims use since June 3, 1931.

Ser. No. 316,225. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed June 24, 1931.

KOTO

For Devices for Supplying Lubricants to Valves and Upper Cylinders of Internal Combustion Engines.

Claims use since May 29, 1931.

Ser. No. 316,308. GUSTAV WIEDEKE CO., Dayton, Ohio. Filed June 25, 1931.

ACE

For Tube and Flue Cutters, Tube and Flue Expanders, Tube and Flue Beading Tools, and Tube and Flue Flaring Tools.

Claims use since June 19, 1931.

Ser. No. 316,776. HARRY GELBMANN, Redwood City, Calif. Filed July 9, 1931.

"BONE RIGHT"

For Tool for Cleaning Meat Bones.

Claims use since Apr. 9, 1931.

Ser. No. 317,011. THE SWEEPER-VAC COMPANY, Worcester, Mass. Filed July 16, 1931.

PNEUVAC

Applicant claims ownership of registered Trade-Mark Ct. #83,276 issued Aug. 29, 1911.

For Vacuum Cleaners.

Claims use since June 15, 1909.

Ser. No. 317,012. THE SWEEPER-VAC COMPANY, Worcester, Mass. Filed July 16, 1931.

SWEEPER VAC

Applicant claims ownership of trade-mark registration No. 89,873 issued Jan. 14, 1913.

For Vacuum Cleaners.

Claims use since Dec. 1, 1910.

CLASS 24

Laundry Appliances and Machines

Ser. No. 317,113. ELECTRIC HOUSEHOLD UTILITIES CORPORATION, doing business as Hurley Machine Company, Chicago, Ill. Filed July 20, 1931.

GOLDEN BOWL

For Laundry Washing Machines.

Claims use since June 30, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 315,951. CHRISTY WALSH, New York, N. Y. Filed June 16, 1931.

ALL AMERICA BOARD of BASEBALL

For Motion Picture Films Both Silent and Talking, and Films for Use in Television or Otherwise, and Motion Picture Screens.
Claims use since June 13, 1931.

Ser. No. 315,952. CHRISTY WALSH, New York, N. Y. Filed June 16, 1931.

ALL AMERICA BOARD of BASKETBALL

For Motion Picture Films Both Silent and Talking, and Films for Use in Television or Otherwise, and Motion Picture Screens.
Claims use since June 13, 1931.

Ser. No. 315,953. CHRISTY WALSH, New York, N. Y. Filed June 16, 1931.

ALL AMERICA BOARD of FOOTBALL

For Motion Picture Films Both Silent and Talking, and Films for Use in Television or Otherwise, and Motion Picture Screens.
Claims use since June 13, 1931.

Ser. No. 315,954. CHRISTY WALSH, New York, N. Y. Filed June 16, 1931.

ALL AMERICA BOARD of TRACK and FIELD

For Motion Picture Films Both Silent and Talking, and Films for Use in Television or Otherwise, and Motion Picture Screens.
Claims use since June 13, 1931.

Ser. No. 316,585. CONSOLIDATED ASHCROFT HANCOCK COMPANY, New York, N. Y. Filed July 3, 1931.

WASHOGRAPH

For Instruments for Recording a Graphical Record of Water Level and Temperature Changes.
Claims use since May, 1931.

CLASS 27

Horological Instruments

Ser. No. 316,805. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed July 10, 1931.

ROUND THE WORLD WATCH

No claim is made to the exclusive use of the word "Watch" apart from the mark shown.
For Watches.
Claims use since July 3, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 317,041. THE D. JACOBS SONS CO., Cincinnati, Ohio. Filed July 17, 1931.

MISS VANITY

For Jewelry for Personal Wear, Not Including Watches.
Claims use since May 20, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 317,617. A. L. SIEGEL CO. INC., New York, N. Y. Filed Aug. 3, 1931.



For Powder Puffs.
Claims use since October, 1929.

CLASS 31

Filters and Refrigerators

Ser. No. 293,536. MAJESTIC HOUSEHOLD UTILITIES CO., Chicago, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 11, 1929.

Majestic
AUTOMATIC REFRIGERATOR

Applicant makes no claim herein to the words "Automatic Refrigerator."
For Refrigerators.
Claims use since Nov. 8, 1929.

CLASS 32

Furniture and Upholstery

Ser. No. 310,414. THE SEINSHEIMER PAPER CO., Cincinnati, Ohio. Filed Jan. 26, 1931.

CLOPAY

For Window Shade.
Claims use since Jan. 2, 1931.

Ser. No. 315,919. NATIONAL SYNTHETIC WOOD CO., Wilmington, Del. Filed June 16, 1931.

SYNTHETIC WOOD CARVINGS
TOPWOOD
TOPKIS PRODUCE

The expression "Synthetic Wood Carvings" and "Produce" are recognized as descriptive of the goods and therefore disclaimed apart from the other features of the mark shown in the drawing.
For Footstools, Magazine Racks, Lampstands and Pedestals, Smoking Stands, Benches, Household and Office Chairs, Tables, Phonograph and Record Cabinets, Display Cases, and Writing Desks.
Claims use since Apr. 1, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 315,923. PERFECTION STOVE COMPANY, Cleveland, Ohio. Filed June 16, 1931.

IVANHOE

For Liquid Fuel Stoves, Ovens for Liquid Fuel Stoves, Oil Burners, and Wicks for Use with Oil Burners.
Claims use since Aug. 9, 1930.

Ser. No. 316,314. F. E. BERRY JR. & CO. INC., Boston, Mass. Filed June 26, 1931.

QUIETAIRE

For Window Ventilators Adapted for Attachment to the Windows of Buildings to Intercept, Absorb, and/or Deflect Sound Waves.
Claims use since May 30, 1931.

CLASS 35

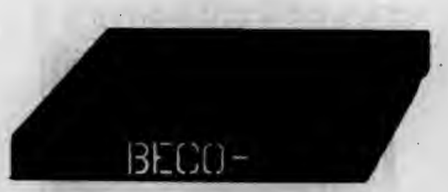
Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 314,399. THE DAYTON RUBBER MFG. COMPANY, Dayton, Ohio. Filed May 11, 1931.

RITZ

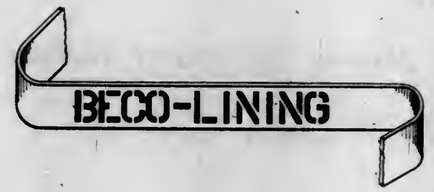
For Pneumatic Rubber Tires for Automobiles.
Claims use since Dec. 1, 1928.

Ser. No. 316,405. BUCYRUS-ERIE COMPANY, South Milwaukee, Wis. Filed June 29, 1931.



On such goods as are light colored, the trade-mark is usually applied in black, and on such goods as are dark colored, the trade-mark is usually applied in white and the representation of the goods is expressly disclaimed, and is shown merely to indicate the most usual method of affixing the mark.
For Friction Blocks of Brakes and Clutches, and for Brake Lining and Clutch Lining.
Claims use since Jan. 1, 1931.

Ser. No. 316,406. BUCYRUS-ERIE COMPANY, South Milwaukee, Wis. Filed June 29, 1931.



On such goods as are light colored, the trade-mark is usually applied in black, and on such goods as are dark colored, the trade-mark is usually applied in white. No claim is made to the word "Lining" apart from the mark shown on the drawing. The representation of the goods is expressly disclaimed, and is shown merely to indicate the most usual method of affixing the mark.
For Brake Lining and Clutch Lining.
Claims use since Jan. 1, 1930.

CLASS 37

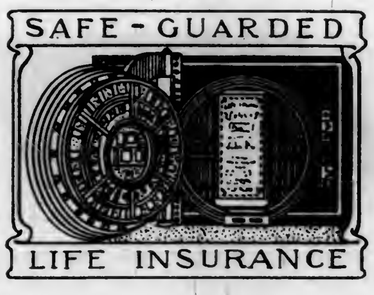
Paper and Stationery

Ser. No. 315,026. JOHN H. HARLAND COMPANY, Atlanta, Ga. Filed May 23, 1931.

SOUTHLAND BOND

No claim being made to the word "Bond" apart from the mark shown.
For Bond Writing Paper.
Claims use since Jan. 1, 1931.

Ser. No. 315,653. UNITED MUTUAL LIFE INSURANCE COMPANY, Indianapolis, Ind. Filed June 10, 1931.



Applicant disclaims the exclusive use of the words "Life Insurance."
For Letter Paper and Envelopes.
Claims use since June 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 300,419. JAMESTOWN METALS ENGINEERING & SUPPLY COMPANY, INC., New York, N. Y. Filed May 13, 1930.

METAL EQUIPMENT SERIES

For Catalogues.
Claims use since Dec. 17, 1929.

Ser. No. 304,944. F. W. DODGE CORPORATION, New York, N. Y. Filed Aug. 23, 1930.

F.W. DODGE CORPORATION

For the purpose of registration only applicant disclaims any exclusive right to the name "F. W. Dodge Corporation" apart from the mark shown on the drawing.
For Magazines or Trade Journals, Daily Construction Reports, Daily Construction Bulletins, Statistical Reports, Architectural Catalogues, and Engineering and Power-Plant Catalogues.
Claims use since June 25, 1930.

Ser. No. 308,753. SAMUEL ROTH, doing business as Federated Purchaser, New York, N. Y. Filed Dec. 8, 1930.

Radio Bargain News

For House Organ Publication Printed from Time to Time.
Claims use since November, 1929.

Ser. No. 312,182. HUGO GERNSBACK, New York, N. Y. Filed Mar. 16, 1931.

TELEVISION News

For Bi-Monthly Publication.
Claims use since Jan. 7, 1931.

Ser. No. 315,165. UNITED STATES RADIO & TELEVISION CORPORATION, Marion, Ind. Filed May 28, 1931.

APEX RADIO

For Bulletins and Pamphlets Published from Time to Time.
Claims use since July 25, 1911.

Ser. No. 316,962. FRIGIDAIRE CORPORATION, Dayton, Ohio. Filed July 15, 1931.

Modern Era

For Periodicals.
Claims use since June 10, 1931.

Ser. No. 316,996. LLOYD E. GATES, Aurora, Colo. Filed July 16, 1931.

"INSTABILITY BILL" THE PILOT.

For Periodically Published Cartoons.
Claims use since June 26, 1931.

Ser. No. 317,009. MELBA E. PAIGE, New York, N. Y. Filed July 16, 1931.

The FUMIGATOR and EXTERMINATOR

For Monthly Publication.
Claims use since Dec. 31, 1930.

Ser. No. 317,083. GIRARD TRUST COMPANY, Philadelphia, Pa. Filed July 18, 1931.

The Girard Letter

For Periodical.
Claims use since May, 1920.

Ser. No. 317,238. THE ASSOCIATED PRESS, New York, N. Y. Filed July 23, 1931.

INTIMATE REVELATIONS

For Series of Cartoons.
Claims use since Mar. 20, 1930.

Ser. No. 317,239. THE ASSOCIATED PRESS, New York, N. Y. Filed July 23, 1931.

MOMENTOUS ERRORS

For Series of Cartoons.
Claims use since Mar. 20, 1930.

Ser. No. 317,240. THE ASSOCIATED PRESS, New York, N. Y. Filed July 23, 1931.

NEIGHBORLY NEIGHBORS

For Series of Cartoons.
Claims use since Jan. 1, 1931.

Ser. No. 317,241. THE ASSOCIATED PRESS, New York, N. Y. Filed July 23, 1931.

SECRETS OF SUCCESS

For Series of Cartoons.
Claims use since Mar. 20, 1930.

Ser. No. 317,352. DETROIT DAILY MIRROR, INC., Detroit, Mich. Filed July 27, 1931.

DETROIT MIRROR

For Daily Newspaper.
Claims use since June 17, 1931.

Ser. No. 317,392. JOHN THOMAS FLANIGAN, Milford, Mass. Filed July 28, 1931.

The New England SPORTSMAN

For Publication Issued Monthly.
Claims use since June 15, 1931.

CLASS 39

Clothing

Ser. No. 283,039. LORENE GAHEN, doing business as The Vermont Company, St. Louis, Mo. Filed Apr. 26, 1929.

OVERALLETTE

For All-Purpose Work and Play Costumes for Women.
Claims use since Feb. 11, 1929.

Ser. No. 287,208. JOHN B. STETSON COMPANY, Philadelphia, Pa. Filed July 16, 1929.



The words "Supreme Quality" are disclaimed apart from the mark as shown on the drawing. The lining on the drawing is used for shading purposes only.
For Men's and Boys' Felt and Straw Hats and Cloth Caps, Men's Silk Hats, and Felt and Straw Hats for Women and Children.
Claims use since Apr. 1, 1929.

Ser. No. 297,999. AMERICAN MAID COMPANY, Chicago, Ill. Filed Mar. 28, 1930.

Comfo-Fit

Applicant disclaims the word "Fit" apart from the trade-mark shown in the drawing.
For Ladies' and Children's Bloomers and Pantalets.
Claims use since Mar. 8, 1930.

Ser. No. 298,162. FORTA-UNTERNEHMUNGEN A.-G., Basel, Switzerland. Filed Mar. 31, 1930.



For Wearing Apparel for Men, Women, and Children—Namely, Underwear—viz: Shorts, Drawers, Union Suits; Corsets, Corset Brassières, Brassières, Corselets, Girdles, Bandeaus in the Nature of Brassières, Slips, Bloomers, Panties, Bloomers and Brassière Combinations, Chemises, Nightgowns, Pajamas, Vests; Suspenders, Jersey Sweaters, Gloves of Fabric and Leather, Basket-Ball and Gymnasium Suits, Waists for Outer Wear, Swimming Suits, Sports Dresses and Pants, Garters, Cravats, Caps; Shirts—Namely, Overshirts, Dress Shirts, Undershirts, Negligee Shirts, Work Shirts, Nightshirts; Hosiery, Suits; Overcoats and Cloaks for Men, Women, and Children; Aprons Other Than for Surgeons' Use; Hats, Caps, and Bonnets for Men, Women, and Children; Collars and Braces.

Claims use since October, 1928.

Ser. No. 309,761. NU WAY SHOE CO., New York, N. Y. Filed Jan. 8, 1931.

WALK-O-PEDIC

For Women's, Children's, and Misses' Shoes, Oxfords, and Pumps of Leather or Fabric.

Claims use since August, 1926.

Ser. No. 309,762. NU-WAY SHOE CO., New York, N. Y. Filed Jan. 8, 1931.

LADYLOVE

For Women's, Children's, and Misses' Shoes, Oxfords, and Pumps of Leather or Fabric.

Claims use since Dec. 3, 1926.

Ser. No. 310,600. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Jan. 31, 1931.

Stein Bloch
Tailors

Applicant owns Reg. No. 60,573 (Renewed) which registration was effected under the ten year proviso of the 1905 law.

For Coats, Vests, Pants, and Overcoats for Men and Boys.

Claims use since Jan. 1, 1890.

Ser. No. 310,645. GEORGE LAGANAS, doing business as Venus Shoe Company, Lowell, Mass. Filed Feb. 2, 1931.

PERFECT ADHESIVE
VENUS
SHOES PROCESS

No claim is made to the exclusive use of the words "Perfect Shoes Adhesive Process" apart from the mark shown.

For Shoes Made of Leather or Leather and Cloth.

Claims use since July, 1930.

Ser. No. 311,788. I. MILLER & SONS, INCORPORATED, Long Island City, N. Y. Filed Mar. 5, 1931.

I. MILLER
TAILOR-TAN

Applicant owns registration No. 179,272 (registered under the 10 years use proviso). Exclusive use of the word "Tan" is hereby disclaimed apart from the mark as shown.

For Ladies' Shoes and Slippers Made of Leather, Fabric, and Combinations of Leather and Fabric.

Claims use since December, 1930.

Ser. No. 311,966. S. H. KRESS & CO., New York, N. Y. Filed Mar. 10, 1931.

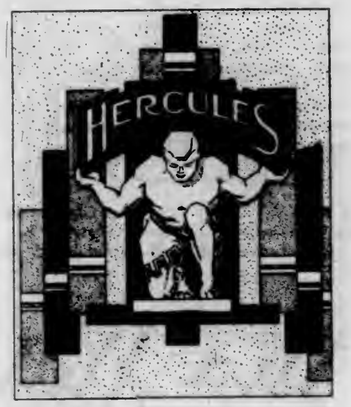


Applicant owns registration No. 274,298 for the word "Hercules".

For Men's Garters.

Claims use since January, 1925.

Ser. No. 311,967. S. H. KRESS & Co., New York, N. Y. Filed Mar. 10, 1931.

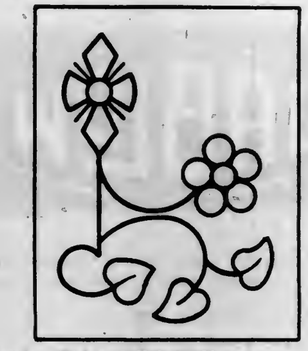


Applicant owns reg. No. 274,298 for the word "Hercules."

For Men's Garters.

Claims use since January, 1925.

Ser. No. 312,240. SHAPIRO GLOVE CO. INC., New York, N. Y. Filed Mar. 17, 1931.



For Leather Kid and Fabric Gloves.

Claims use since December, 1920.

Ser. No. 312,871. ALBERT STEIGER, INC., Springfield, Mass. Filed Apr. 2, 1931.

MANSHEEN

For Men's Negligee Shirts of Textile Fabric.

Claims use since May 27, 1931.

Ser. No. 313,250. MIDDLEMAN & BARG, Philadelphia, Pa. Filed Apr. 11, 1931.

Goldylocks KIDDIES TOGS

The words "Kiddies Togs" are disclaimed apart from the mark as shown on the drawing.

For Infants' and Children's Dresses, Creepers, and Boys' Suits.

Claims use since Feb. 26, 1931.

Ser. No. 313 368. HERBERT GRAY COMPANY, INC., Lincoln, Me. Filed Apr. 15, 1931.



No claim is made to the representation of a fox scarf or of a clasp chain. The trade-mark consists of a silver-colored plate which incidentally serves as a link in the clasp chain used for securing the scarf about the neck of the wearer.

For Fur Scarfs.

Claims use since Mar. 23, 1931.

Ser. No. 313,409. ISIDOR JABLOW, doing business as I. Jablow & Co., Philadelphia, Pa. Filed Apr. 15, 1931.

JABLOW

For Boys' Blouses, Junior Shirts, Button-On Blouses, Youths' Shirts, Pajamas, Athletic Underwear, Wash Suits, and Play Suits.
Claims use since June 15, 1922.

Ser. No. 315 584. THE DANDYLINE COMPANY, Chicago, Ill. Filed June 8, 1931.

Styled JUNIORETTE FROCKS for Young Miss

Applicant hereby disclaims all or any descriptive matter accompanying the word "Juniorette," more particularly described as "Frocks" and "Styled for the Young Miss."
For Children's, Girls', and Misses' Dresses.
Claims use since Apr. 10, 1931.

Ser. No. 316,124. GALLENKAMP STORES CO., San Francisco, Calif. Filed June 22, 1931.

VIGOROUS

For Shoes Made of Leather, Rubber Fabric, and Combinations of Those Materials.
Claims use since Feb. 15, 1931.

Ser. No. 316,465. THE NUBONE COMPANY, INC., Erie, Pa. Filed June 26, 1931.

NuZip

For Supporting Garments and Particularly Girdles and Combinations (Ordinarily Termed Corseleta).
Claims use since Jan. 5, 1931.

Ser. No. 316,676. JACK YOUNG SHOE CORPORATION, Boston, Mass. Filed July 6, 1931.



The picture forming part of the trade-mark is a fanciful representation and not a portrait of any living individual.
For Leather Shoes.
Claims use since Feb. 10, 1931.

Ser. No. 316,728. THE KELLER KNITTING COMPANY, Cleveland, Ohio. Filed July 8, 1931.

"KLIKKIT"

For Knitted Jackets.
Claims use since June 19, 1931.

Ser. No. 316,736. NATIONAL BELLAS HESS CO. INC., New York, N. Y. Filed July 8, 1931.

NATIONAL

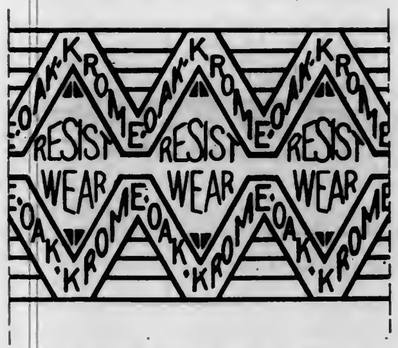
For Dresses, Outer Suits for Women and Children, Cloaks, Coats, Jackets, Dress-Waists for Women and Children, Outer Skirts for Women and Children, Shirt-Waists, Petticoats, Undershirts, Drawers, Union Suits, Corset-Covers, Combination Drawers and Corset-Covers, Underskirts, Combination Corset Covers and Underskirts, Chemises, Slips, Dressing-Sacks, Stockings, Socks, Hosiery, Corsets, Wrappers, Kimonos, Night-Gowns, Trousers, Jerseys, Sweaters, and Bathing-Suits.
Claims use since 1888.

Ser. No. 316,755. VENUS BRASSIERE CO., Chicago, Ill., assignor to Associated Apparel Industries, Inc., Chicago, Ill., a Corporation of Illinois. Filed July 8, 1931.

Dra Flat

Exclusive use of the word "Flat" is disclaimed apart from the mark shown on the drawing.
For Foundation Garments for Women Comprising a Combination Corset and Brassière.
Claims use since May 31, 1929.

Ser. No. 316,773. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed July 9, 1931.



No claim is herein made to the words "Oak Krome" and "Resist Wear" apart from the mark as shown.
For Boots and Shoes of Leather, Rubber, or Fabric, or any Combination Thereof, Having Leather Soles.
Claims use since June 15, 1931.

Ser. No. 316,853. SKLAROFF BROTHERS, Philadelphia, Pa. Filed July 11, 1931.

Lucky Circle

For Hosiery.
Claims use since June 30, 1931.

Ser. No. 316,894. MCPHERSON'S, Baltimore, Md. Filed July 13, 1931.

"PARMAC"

For Dress and Negligee Shirts and Pajamas.
Claims use since February, 1925.

Ser. No. 316,991. BEAR BRAND HOSIERY CO., Kankakee, Ill. Filed July 16, 1931.

Neverglo

For Knitted Articles—Namely, Hosiery.
Claims use since Feb. 27, 1931.

Ser. No. 317,085. HOSTESS FROCKS, INC., New York, N. Y. Filed July 18, 1931.

HO-SANTA FROCKS

No claim being made to the exclusive use of the word "Frocks" apart from the mark as shown on the drawing.
For Women's and Misses' Frocks.
Claims use since July 7, 1931.

Ser. No. 317,173. LARKWOOD SILK HOSIERY MILLS, INC., Charlotte, N. C. Filed July 21, 1931.

MATCHMEND

For Stockings.
Claims use since July 8, 1931.

Ser. No. 317,199. CLAUDE H. DANIELS, Boston, Mass. Filed July 22, 1931.



Applicant disclaims the words "The" and "Shoe" apart from the mark as shown on the drawing.
For Men's, Women's, and Children's Boots, Shoes, and Slippers Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Materials.
Claims use since June 1, 1931.

Ser. No. 317,209. KALAMAZOO PANT COMPANY, Kalamazoo, Mich. Filed July 22, 1931.

HIP-ZIP

For Men's Trousers.
Claims use since May 12, 1931.

Ser. No. 317,232. WOODBURY SHOE MFG. CO., Derry, N. H. Filed July 22, 1931.

FREE WALKING

For Men's, Women's, and Children's Boots, Shoes, Sandals, and Slippers Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Material.
Claims use since June 20, 1931.

Ser. No. 317,339. VANITY FAIR SILK MILLS, Reading, Pa. Filed July 25, 1931.

PECHGLO

For Knitted and Textile Underwear and Hosiery for Women and Children—Namely, Vests, Bloomers, Knickerbockers, Union Suits, Combination Underwear, Step-Ins, Chemises, Corset Covers, Night Gowns, Pajamas, Petticoats, Princess Slips, Bandeaux, Bandeaux Chemises; and Knitted and Textile Underwear for Men—Namely, Union Suits, Shirts, and Drawers.
Claims use since July 16, 1931.

Ser. No. 317,385. THE ADLER-RICHARDS COMPANY, INC., Boston, Mass. Filed July 28, 1931.

ADRICH

For Ladies' Hats.
Claims use since May 12, 1931.

Ser. No. 317,404. DR. A. POSNER SHOES, INC., New York, N. Y. Filed July 28, 1931.

CAMPSTER

For Shoes Made of Leather, Canvas, Rubber, or Combinations Thereof.
Claims use since Mar. 10, 1931.

Ser. No. 317,414. VOGUE BRASSIERE MFG. CO., Newark, N. J. Filed July 28, 1931.

★ ★
★ LACENBELT ★
★ ★

For Corsets, Brassières, Girdles, Foundations—Namely, Corset and Brassière Combinations; Garter Belts, Bandeaux and Combinations—Namely, Girdles and Brassière Combinations, and Sanitary Belts.
Claims use since June 15, 1931.

Ser. No. 317,419. ARONSON-CAPLIN COMPANY, INC., New York, N. Y. Filed July 29, 1931.

"SEAMPRUFE"

For Women's Apparel Comprising Slips, Bloomers, Petticoats, Nightgowns, Pajamas, Chemises, Step-Ins, Panties.
Claims use since Jan. 1, 1930.

Ser. No. 317,459. DRUEDING BROTHERS COMPANY, Philadelphia, Pa. Filed July 30, 1931.

ABSORBO

For Sweat Bands Made of Leather for Hats.
Claims use since July 6, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 314,604. E-Z-ON ELASTIC LACE CO., New York, N. Y. Filed May 15, 1931.

Elastic E-Z-ON Laces
TRADE MARK

No claim is made to the words "Elastic Laces" and "Trade Mark" apart from the mark shown on the drawing.
For Shoe Laces.
Claims use since Apr. 2, 1931.

Ser. No. 316,252. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed June 25, 1931.

FIDULA

For Braid Made of Cellulose.
Claims use since Mar. 26, 1931.

Ser. No. 316,667. PALM SHELBY, New York, N. Y. Filed July 6, 1931.

THE
SMART SET

For Non-Electrical Wavers.
Claims use since June 15, 1931.

Ser. No. 316,690. ALKAHN SILK LABEL CO., INC., New York, N. Y. Filed July 7, 1931.

Labelit

For Woven and Embroidered Labels.
Claims use since June 6, 1931.

Ser. No. 316,975. METAL FINDINGS CORPORATION, New York, N. Y. Filed July 15, 1931.

"Hetl"

For Ornamental Clasps for Personal Wear and Pins with Safety Devices for Personal Wear, Not Made of Precious Metal, and Hooks and Eyes.
Claims use since June 18, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 315,814. SHAGER KNITTING CO. INC., Brooklyn, N. Y. Filed June 13, 1931.

VALET KNIT

Applicant does not claim the right to the exclusive use of the term "Knit" apart from the combination shown in the drawing filed with the application.
For Knitted Wash Cloths. The Wash Cloths Are of Textile Fabric, Knitted or Woven from Cotton and Rayon Silk Materials, and are for Use Generally as a Toilet Article.
Claims use since Apr. 7, 1931.

Ser. No. 316,584. BERKSHIRE FINE SPINNING ASSOCIATES, INC., Adams, Mass. Filed July 3, 1931.



KING
PHILLIP
BROADCLOTH

No claim is made to the exclusive use of the word "Broadcloth" except in association with the mark as shown.
For Textile Fabrics Composed of Cotton.
Claims use since 1877.

Ser. No. 317,475. S. W. MAGNUS HDKF. CO., New York, N. Y. Filed July 30, 1931.

"Ambray"

For Handkerchiefs and Linen Piece Goods.
Claims use since May 15, 1910.

Ser. No. 317,508. DEERING MILLIKEN & CO. INC., New York, N. Y. Filed July 31, 1931.

DEMILCO

For Woolen Piece Goods.
Claims use since July 1, 1931.

Ser. No. 317,514. HAHLO & SOLOMON, INC., New York, N. Y. Filed July 31, 1931.

GOLFESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since July 27, 1931.

CLASS 44

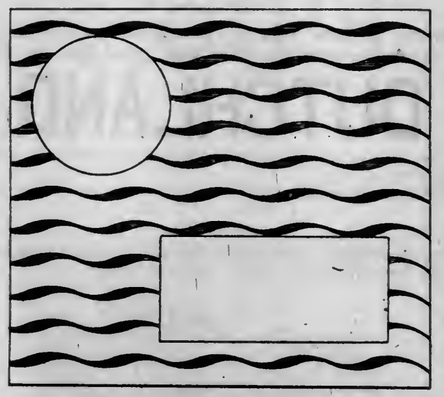
Dental, Medical, and Surgical Appliances

Ser. No. 304,054. KÖSTING & MATHIESEN AKTIENGESELLSCHAFT, Leipzig-Leutzsch, Germany. Filed July 31, 1930.

Kandem-Arc-Sun
by Dr. Mathiesen

The words "By Dr. Mathiesen" are disclaimed apart from the mark shown in the drawing.
For Arc Lamps and Arm Lamp Stands for Therapeutical Purposes, Arc Lamp Carbons for Therapeutical Purposes.
Claims use since June, 1930.

Ser. No. 314,603. ETERNE MANUFACTURING CORPORATION, Newark, N. J., and New York, N. Y. Filed May 15, 1931.



The trade-mark consists of a plurality of waves in blue, on the upper left-hand corner of which is a circle in orange and on the lower right-hand corner of which is an orange rectangle, but the most prominent feature of the mark is in all cases the representation of a series of blue waves.
For Hair Waving Pads.
Claims use since July 31, 1929.

Ser. No. 315,454. WILLIAM J. HEINTZ, Utica, N. Y. Filed June 5, 1931.

UNEEK

For Head Rests and Head Rest Covers for Dental and Like Chairs.
Claims use since June 20, 1930.

Ser. No. 317,441. SAN-NAP-PAK MFG. CO., INC., New York, N. Y. Filed July 29, 1931.

SANI-MAID

For Absorbent Cotton, Absorbent Gauze, and Sanitary Napkins.
Claims use since Nov. 1, 1930.

Ser. No. 317,443. SAN-NAP-PAK MFG. CO., INC., New York, N. Y. Filed July 29, 1931.

ZONAP

For Absorbent Cotton, Absorbent Gauze, and Sanitary Napkins.
Claims use since July 1, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 293,428. HOGUE MERCANTILE CO., Kansas City, Mo. Filed Dec. 9, 1929.

Ideal

For Raw Nut Meats.
Claims use since 1916.

Ser. No. 297,902. FRED F. FIELD HOLSTEINS DUTCHLAND FARMS TRUSTEES, Brockton, Mass. Filed Mar. 26, 1930.

DUTCHLAND

For Milk, Cream, Ice Cream, Butter and Cheese, Candy and Popped Corn.
Claims use since 1903.

Ser. No. 298,648. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn. Filed Apr. 10, 1930.



The pictorial representation of the goods is hereby disclaimed apart from the mark as shown on the drawing.
For Canned Corn.
Claims use since May 3, 1923.

Ser. No. 299,699. GENTILE BROS. COMPANY, Orlando, Fla. Filed Apr. 30, 1930.

"Liberty Bell"



For Fresh Fruits—Namely, Oranges, Lemons, Pears, Grapefruit, Apples, Grapes, Honey Dews, Peaches, and Casabas; and Fresh Vegetables—Namely, Lettuce, Cantaloupes, and Tomatoes.
Claims use since 1905.

Ser. No. 307,152. AMERICAN POP CORN COMPANY, Sioux City, Iowa. Filed Oct. 25, 1930.

GIANT YELLOW

Applicant disclaims the exclusive use of the word "Yellow" apart from the other features of the mark as shown.
For Popping Corn in Its Natural State.
Claims use since Jan. 1, 1930.

Ser. No. 310,270. UNIVERSAL MANUFACTURING COMPANY, Abilene, Tex. Filed Jan. 22, 1931.

LADIES' CLUB

For Coffee, Peanut Butter, Tea, Vinegar, Shelled Nuts, Canned Black Eyed Peas, Canned Chile, Canned Tamales, Pecan Nut-Peanut Butter Blend, Canned Chili Beans, Canned Pork and Beans, Mustard, and Queen Olives.
Claims use since Jan. 1, 1931.

Ser. No. 311,740. LAUREL HOLLAND LAW, doing business as Holland Sandwich Company, Converse, S. C. Filed Mar. 4, 1931.

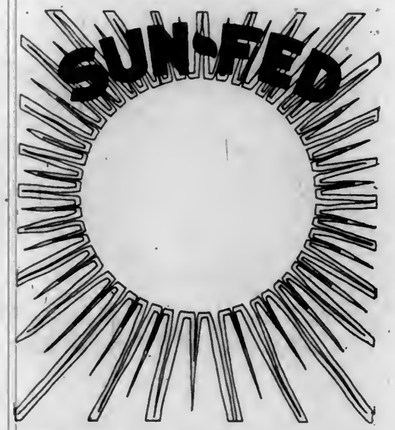
For Sandwiches Made of Peanut Butter and Crackers, Salted Peanuts, Roasted Peanuts, and Parched Peanuts.
Claims use since October, 1929.

Ser. No. 312,557. FREDRIKSSTAD PRESERVING CO., Fredriksstad, Norway. Filed Mar. 26, 1931.

FUNKIS

For Canned and Hermetically Preserved Fish—Namely, Sardines, Brislings, Herrings, Mackerel, Kipper Snacks, Fish Balls, and Anchovies, etc.
Claims use since December, 1930.

Ser. No. 313,354. SAWDEY & HUNT, Los Angeles, Calif. Filed Apr. 14, 1931.



For Fresh Lettuce.
Claims use since Jan. 14, 1931.

Ser. No. 313,355. SAWDEY & HUNT, Los Angeles, Calif. Filed Apr. 14, 1931.



For Fresh Lettuce.
Claims use since Jan. 14, 1931.

Ser. No. 313,876. WAGNER BROS. FEED CORP., Brooklyn, N. Y. Filed Apr. 27, 1931.

WBFC

RAY-DEE-O

For Bird Seed and Bird Foods; Dog, Cat, and Fish Foods, and Wild Animal Foods.
Claims use since Mar. 22, 1931.

Ser. No. 315,439. THE CAPITAL CITY PRODUCTS COMPANY, Columbus, Ohio. Filed June 5, 1931.

HYDRO-KOTE

No claim is made to the word "Kote" apart from the mark shown in the drawing.
For Pressed and Hydrogenized Palm Kernel or Cocoanut Oil to Which is Added Varied Percentages of Hardened Vegetable Oil to Produce a Vegetable Hard Butter for the Manufacture of Coatings for Candies, Cakes, Biscuits, and Other Food Products in Cans and Barrels.
Claims use since Mar. 1, 1931.

Ser. No. 315,895. AUSTIN F. BURDICK, Grand Ledge, Mich. Filed June 16, 1931.



The descriptive word "Cream" is hereby disclaimed apart from the trade-mark as shown on the drawing.
For Milk and Cream.
Claims use since May 18, 1931.

Ser. No. 315,909. ALAN A. GERSTEL, LTD., New York, N. Y. Filed June 16, 1931.

Calfig

For Dried Figs.
Claims use since May 1, 1930.

Ser. No. 316,172. UTAH PRODUCERS SERVICE CORP. OF NEW YORK, New York, N. Y. Filed June 23, 1931.



The drawing is lined to indicate the colors blue, green, red, orange, and yellow. The words "Choice Utah Eggs" and "Brand" are disclaimed apart from the mark shown on the drawing. The reproduction of an egg per se is expressly disclaimed.
For Crated Eggs.
Claims use since Apr. 15, 1931.

Ser. No. 316,232. OSSOLA BROTHERS INC., Pittsburgh, Pa., and New York, N. Y. Filed June 25, 1931.

GRANDE
ITALIA

No claim is made to the word "Italia" apart from the mark shown in the drawing. The lining of the drawing is for shading only.
For Food Products—Namely, Olive Oil, California Tomato Sauce, and Pecorino Romano Cheese.
Claims use since June 15, 1929.

Ser. No. 316,422. E. B. DIERSSEN, Elk Grove, Calif. Filed June 29, 1931.



The descriptive notations "Enjoy the Best" and "Brand" appearing on the drawing as well as the pictorial representation of the container of the goods are hereby disclaimed. The drawing is lined to indicate the color orange.

For Fresh Vegetables.

Claims use since February, 1931.

Ser. No. 316,994. EMERY FOOD COMPANY, Chicago, Ill. Filed July 16, 1931.

MARCA RANCHO

No claim is made to the exclusive use of the descriptive word "Marca" (Mark).

For Canned Sausage.

Claims use since November, 1923.

Ser. No. 317,255. THE KEBS COMPANY, INC., Buffalo, N. Y. Filed July 23, 1931.

KEBS

For Candies.

Claims use since May 1, 1931.

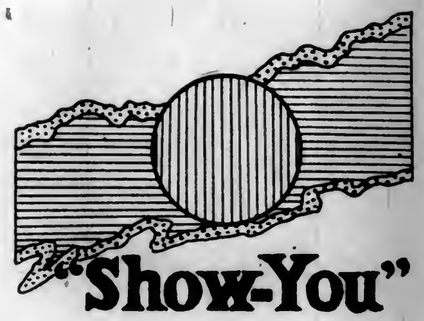
Ser. No. 317,326. MEYER & LANGE, INC., New York, N. Y. Filed July 25, 1931.

Maurice

For Canned Fruits and Vegetables, Anchovies, and Sardines.

Claims use since 1907.

Ser. No. 317,330. ORIENTAL SHOW-YOU COMPANY, Columbia City, Ind. Filed July 25, 1931.



The drawing is lined for the colors blue, red, and gold.

For Canned Foods—Namely, Chop-Suey (with Meat), Vegetable Chop-Suey (without Meat), Chow-Mein Noodles, Bean Sprouts, Mixed Vegetables, Bamboo Shoots, and Water Chestnuts.

Claims use since Mar. 1, 1925, on bean sprouts; since June 15, 1927, on noodles; since Sept. 1, 1927, on mixed vegetables and chop suey (with meat); and since June 1, 1931, on bamboo shoots, water chestnuts, and chop suey (without meat).

Ser. No. 317,357. KELLEY-CLARKE COMPANY, Seattle, Wash. Filed July 27, 1931.



No claim is made to the pictorial representation of the goods shown in the drawing.

For Canned Fish.

Claims use since Apr. 20, 1931.

Ser. No. 317,399. NEW ENGLAND CONFECTIONERY COMPANY, Cambridge, Mass. Filed July 28, 1931.

BOLSTERETTES

For Candy.

Claims use since June 6, 1931.

Ser. No. 317,457. DISTRICT GROCERY STORES, INC., Washington, D. C. Filed July 30, 1931.



For Coffee and Butter.

Claims use since July 1, 1922.

Ser. No. 317,469. JERSEY USEFUL PRODUCTS, Bound Brook, N. J. Filed July 30, 1931.

DATEEN

For Composition of Food Mainly Consisting of Crushed Dates.

Claims use since July 20, 1931.

Ser. No. 317,470. JONES-THIERBACH COMPANY, San Francisco, Calif. Filed July 30, 1931.

Lady Grey

For Coffee.

Claims use since July 13, 1931.

Ser. No. 317,541. GENERAL MILLS, INC., Minneapolis, Minn. Filed July 31, 1931.

BISQUICK

For Biscuit Flour.

Claims use since July 16, 1931.

Ser. No. 317,551. THE ALBERT DICKINSON COMPANY, Chicago, Ill. Filed Aug. 1, 1931.



For Dog Food.

Claims use since May 25, 1931.

Ser. No. 317,596. EISENMAYER MILLING COMPANY, Springfield, Mo. Filed Aug. 3, 1931.

Silver Wing

For Plain and Self Rising Wheat Flour.

Claims use since Jan. 15, 1931.

Ser. No. 317,601. LOUIS HALLER, doing business as Haller's Bird Food Company, Cincinnati, Ohio. Filed Aug. 3, 1931.



For Bird Food.

Claims use since Mar. 1, 1931.

Ser. No. 317,622. THE BECKER PRETZEL BAKERIES, Baltimore, Md. Filed July 31, 1931.

Dutchess

For Pretzels.

Claims use since July, 1928.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 300,217. MERGENTHALER LINOTYPE COMPANY, Brooklyn, N. Y. Filed May 9, 1930.

Metromedium

For Matrices for Type Bar Casting Machines.

Claims use since Mar. 12, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

SEPTEMBER 8, 1931

286,810. SOAPS, INCLUDING TOILET SOAPS AND SHAVING STICKS. PAUL PETER MÜLHENS, doing business as Eau de Cologne-& Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany.
Filed February 12, 1931. Serial No. 311,018. PUBLISHED JUNE 23, 1931. Class 4.

286,811. PAINTS, ENAMELS, KALSOMINE, AND VARNISHES. MONTGOMERY WARD & Co., INC., Chicago, Ill.
Filed January 16, 1931. Serial No. 310,024. PUBLISHED JUNE 30, 1931. Class 16.

286,812. TOOTH POWDER, DENTIFRICES, AND MOUTH WASH. RESEARCH FOUNDATION, INC., New York, N. Y.
Filed January 16, 1931. Serial No. 310,027. PUBLISHED MAY 5, 1931. Class 6.

286,813. GAS AND SOLAR WATER HEATERS, MULTIFLUE WATER HEATING UNITS, AND RANGE BOILERS. DAY & NIGHT WATER HEATER CO., LTD., Monrovia, Calif.
Filed January 20, 1931. Serial No. 310,163. PUBLISHED JUNE 30, 1931. Class 34.

286,814. A DENTAL MATERIAL COMPRISING A MOLDED BASE FOR ARTIFICIAL DENTURES. THE AGALYN CORPORATION, Pittsburgh, Pa.
Filed February 18, 1931. Serial No. 311,169. PUBLISHED JUNE 30, 1931. Class 44.

286,815. CLOSET BOWL CLEANER AND PORCELAIN CLEANER AND POLISH. J. A. SEXAUER MFG. CO., INC., New York, N. Y.
Filed January 23, 1931. Serial No. 310,307. PUBLISHED JUNE 23, 1931. Class 4.

286,816. COATED FABRICS. J. W. GREER COMPANY, Cambridge, Mass.
Filed January 29, 1931. Serial No. 310,514. PUBLISHED JUNE 23, 1931. Class 50.

286,817. PAINT ENAMEL FOR WOOD AND METAL SURFACES. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed February 3, 1931. Serial No. 310,693. PUBLISHED JUNE 30, 1931. Class 16.

286,818. FISH MEAL. CALIFORNIA PACKING CORPORATION, San Francisco, Calif.
Filed February 9, 1931. Serial No. 310,856. PUBLISHED JUNE 30, 1931. Class 10.

286,819. WIRE FENCE AND BARB WIRE. MID-STATES STEEL & WIRE CO., Crawfordsville, Ind.
Filed January 30, 1931. Serial No. 310,566. PUBLISHED JUNE 30, 1931. Class 13.

286,820. POLISHING AND DUSTING CLOTH FOR AUTOMOBILES. JOHN C. GALLAGHER, doing business as Detroit Waste Works, Detroit, Mich.
Filed February 12, 1931. Serial No. 310,992. PUBLISHED JUNE 30, 1931. Class 29.

286,821. CLOTHING CARRIERS, EXTENSION CLOSET RODS, SHOW RACKS, TIE RACKS, METAL WALL HAT HOLDERS, SHOE RACKS, STATIONARY GARMENT BRACKETS. KNAPE & VOGT MANUFACTURING CO., Grand Rapids, Mich.
Filed February 16, 1931. Serial No. 311,098. PUBLISHED JUNE 30, 1931. Class 13.

286,822. METAL COVERS OR HEADS FOR FASTENERS, SUCH AS SCREWS, BOLTS, NUTS, AND THE LIKE. THE RAWLPLUG COMPANY, INC., New York, N. Y.
Filed March 4, 1931. Serial No. 311,751. PUBLISHED JUNE 30, 1931. Class 13.

286,823. A POLISH FOR ARTIFICIAL PLATES AND TEETH. THE ITECO COMPANY, Portland, Oreg.
Filed March 5, 1931. Serial No. 311,784. PUBLISHED JUNE 23, 1931. Class 4.

286,824. CIGARS. LOUIS B. GRABOSKY, Philadelphia, Pa.
Filed March 21, 1931. Serial No. 312,372. PUBLISHED JUNE 23, 1931. Class 17.

286,825. CIGARS. LOUIS B. GRABOSKY, Philadelphia, Pa.
Filed March 21, 1931. Serial No. 312,373. PUBLISHED JUNE 23, 1931. Class 17.

286,826. OIL BURNERS. MILWAUKEE AIR POWER PUMP Co., doing business as Combustion Oil Burner Co., Milwaukee, Wis.
Filed April 9, 1931. Serial No. 313,144. PUBLISHED JUNE 30, 1931. Class 34.

286,827. PADS FOR PERMANENT WAVING OF HAIR. LEWIS METHOD, INCORPORATED, Cleveland, Ohio.
Filed April 22, 1931. Serial No. 313,663. PUBLISHED JUNE 30, 1931. Class 44.

286,828. TOILET SOAP. THE OMEGA CHEMICAL COMPANY, New York, N. Y.
Filed April 24, 1931. Serial No. 313,752. PUBLISHED JUNE 23, 1931. Class 4.

286,829. SOAP POWDERS WITH WATER SOFTENING PROPERTIES. REX PRODUCTS & MANUFACTURING COMPANY, Detroit, Mich.
Filed April 25, 1931. Serial No. 313,798. PUBLISHED JUNE 23, 1931. Class 4.

286,830. WOMEN'S AND MISSES' GOWNS, FROCKS, AND DRESSES. HALF SIZE DRESS COMPANY, INC., New York, N. Y.
Filed December 23, 1930. Serial No. 309,270. PUBLISHED JUNE 30, 1931. Class 39.

286,831. BATHING SUITS. GOODWEAR KNITTING MILLS, Philadelphia, Pa.
Filed December 23, 1930. Serial No. 309,272. PUBLISHED MARCH 10, 1931. Class 39.

286,832. LADIES', MISSES', JUNIORS', AND CHILDREN'S DRESSES, COATS, SUITS, AND SKIRTS. MEYER L. KAPLAN, doing business as Kaplan & Son, Los Angeles, Calif.
Filed January 7, 1931. Serial No. 309,692. PUBLISHED JUNE 23, 1931. Class 39.

286,833. LEATHER FINDINGS—NAMELY, COMPOSITION TAPS, WOOD HEELS, INSOLES, HEEL LININGS, AND HEEL GRIPPERS. AARON GLICKSMAN, doing business as A. Glicksman & Co., Chicago, Ill.
Filed January 26, 1931. Serial No. 310,374. PUBLISHED JUNE 23, 1931. Class 39.

286,834. PLASTIC MONOLITHIC FIRE BRICK. MEXICO REFRACTORIES COMPANY, Mexico, Mo.
Filed March 28, 1931. Serial No. 312,659. PUBLISHED JUNE 16, 1931. Class 12.

286,835. KNITTED SWEATERS, COATS, VESTS, AND JACKETS. BROWN'S BEACH JACKET COMPANY, Worcester, Mass.
Filed April 2, 1931. Serial No. 312,837. PUBLISHED JUNE 2, 1931. Class 39.

286,836. AFTERNOON AND EVENING DRESSES AND DANCE FROCKS. NANTY FROCKS, INC., New York, N. Y.
Filed April 4, 1931. Serial No. 312,956. PUBLISHED JUNE 30, 1931. Class 39.

286,837. CLOTHING—NAMELY, CLOAKS, SUITS, DRESSES, UNDERWEAR, STOCKINGS, AND HATS FOR THE USE OF WOMEN AND YOUNG LADIES. BUFFUMS', Long Beach, Calif.
Filed April 6, 1931. Serial No. 313,106. PUBLISHED JUNE 30, 1931. Class 39.

286,838. CLOTHING—NAMELY, CLOAKS, SUITS, DRESSES, UNDERWEAR, STOCKINGS, AND HATS, FOR USE OF WOMEN AND YOUNG LADIES. BUFFUMS', Long Beach, Calif.
Filed April 6, 1931. Serial No. 313,107. PUBLISHED JUNE 30, 1931. Class 39.

286,839. BOYS', INFANTS', MISSES', LADIES' KNIT OR WOVEN UNDERWEAR, INCLUDING SHIRTS, BANDS, PANTIES, SHORTS, VESTS, UNION SUITS, STEP-IN SUITS, AND PAJAMAS. BOSTON KNITTING MILLS, INC., Newton, Mass.
Filed April 13, 1931. Serial No. 313,279. PUBLISHED JUNE 23, 1931. Class 39.

286,840. WOMEN'S COATS, SUITS AND DRESSES. M. L. PARKER COMPANY, Davenport, Iowa.
Filed April 15, 1931. Serial No. 313,386. PUBLISHED JUNE 23, 1931. Class 39.

286,841. CLOTHING FOR MEN AND YOUNG MEN—NAMELY, TOP COATS AND OVERCOATS. EAGLE CLOTHES, New York, N. Y.
Filed April 23, 1931. Serial No. 313,707. PUBLISHED JUNE 23, 1931. Class 39.

286,842. COATS, VESTS, PANTS, AND OVERCOATS FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed April 30, 1931. Serial No. 313,999. PUBLISHED JUNE 23, 1931. Class 39.

286,843. COATS, VESTS, PANTS, AND OVERCOATS FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed April 30, 1931. Serial No. 314,000. PUBLISHED JUNE 23, 1931. Class 39.

286,844. LADIES' DRESSES. ROSENBLATT & HOLLUB, INC., New York, N. Y.
Filed April 30, 1931. Serial No. 314,018. PUBLISHED JUNE 23, 1931. Class 39.

286,845. WOMEN'S UNDERWEAR MADE OF KNITTED FABRIC. VAN RAALTE COMPANY, New York, N. Y.
Filed April 30, 1931. Serial No. 314,023. PUBLISHED JUNE 23, 1931. Class 39.

286,846. WOMEN'S, MISSES', AND CHILDREN'S DRESSES. PRICE-SCHLESINGER INC., New York, N. Y.
Filed May 1, 1931. Serial No. 314,073. PUBLISHED JUNE 30, 1931. Class 39.

286,847. LADIES' OUTER COATS OF SILK, RAYON, WOOL, AND/OR COMBINATIONS THEREOF, WITH OR WITHOUT FUR TRIMMING. JOSEPH KUPFER, doing business as J. Kupfer & Co., New York, N. Y.
Filed May 4, 1931. Serial No. 314,164. PUBLISHED JUNE 23, 1931. Class 39.

286,848. RUBBER HOSIERY PROTECTOR. OTTO HEIN, New York, N. Y.
Filed May 6, 1931. Serial No. 314,238. PUBLISHED JUNE 23, 1931. Class 39.

286,849. MEN'S, WOMEN'S, AND CHILDREN'S CLOTHING—NAMELY, KNITTED AND TEXTILE UNDERWEAR AND HOSIERY. KIRBY, BLOCK & FISCHER, INC., New York, N. Y.
Filed May 6, 1931. Serial No. 314,242. PUBLISHED JUNE 30, 1931. Class 39.

286,850. GYMNASIUM SUITS, SHORTS, RUNNING TRUNKS, ETC. THE STROUSE-BAER CO., INC., Baltimore, Md.
Filed May 6, 1931. Serial No. 314,256. PUBLISHED JUNE 23, 1931. Class 39.

286,851. HOSIERY. H. C. ABERLE COMPANY, INCORPORATED, Philadelphia, Pa.
Filed May 7, 1931. Serial No. 314,262. PUBLISHED JUNE 30, 1931. Class 39.

286,852. WOMEN'S AND CHILDREN'S DRESSES, FROCKS, APRONS, SERVICE UNIFORMS AND APRONS, SMOCKS; BEACH, LOUNGING, AND HOUSE PAJAMAS; HOUSEDRESSES AND NEGLIGEES. DONNELLY GARMENT COMPANY, Kansas City, Mo.
Filed May 7, 1931. Serial No. 314,278. PUBLISHED JUNE 23, 1931. Class 39.

286,853. MEN'S, WOMEN'S, AND CHILDREN'S HOSIERY. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed May 8, 1931. Serial No. 314,341. PUBLISHED JUNE 23, 1931. Class 39.

286,854. WOMEN'S UNDERWEAR. AUGUSTA KNITTING CORPORATION, Utica, N. Y.
Filed May 9, 1931. Serial No. 314,355. PUBLISHED JUNE 23, 1931. Class 39.

286,855. WOMEN'S, MISSES', AND CHILDREN'S PAJAMAS, PRINCESS SLIPS, NIGHT GOWNS, STEP-IN DRAWERS AND BLOOMERS OF A TEXTILE FABRIC. I. SCHNEIERSON & SONS, INC., New York, N. Y.
Filed May 14, 1931. Serial No. 314,580. PUBLISHED JUNE 30, 1931. Class 39.

286,856. PAPER BAGS. UNION BAG & PAPER CORPORATION, New York, N. Y.
Filed May 13, 1931. Serial No. 314,521. PUBLISHED JUNE 30, 1931. Class 2.

286,857. NASAL AND MOUTH INHALERS. OSCAR FAHLBUSCH, Ridgewood, N. Y.
Filed May 14, 1931. Serial No. 314,559. PUBLISHED JUNE 30, 1931. Class 44.

286,858. PAPER BAGS. UNION BAG & PAPER CORPORATION, New York, N. Y.
Filed May 18, 1931. Serial No. 314,727. PUBLISHED JUNE 30, 1931. Class 2.

286,859. TEXTILE WASH CLOTHS. THOMAS F. BYRNE CORPORATION, Phoenixville, Pa.
Filed May 14, 1930. Serial No. 300,463. PUBLISHED JUNE 30, 1931. Class 42.

286,860. CANDIES, MAYONNAISE, ICE CREAM, BREAD, CAKES, PIES, NOODLES, POTATO CHIPS, AND BOX LUNCHES. THE ROBERT PUTMAN CANDY COMPANY, Cincinnati, Ohio.
Filed April 28, 1930. Serial No. 299,594. PUBLISHED JUNE 30, 1931. Class 46.

286,861. CANNED AND BOTTLED CRUSHED FRUITS, SHELLED NUTS, JAMS, ETC. JOHN MULHERN COMPANY, San Francisco, Calif.
Filed April 28, 1930. Serial No. 299,588. PUBLISHED JUNE 30, 1931. Class 46.

286,862. WOOLEN FABRICS FOR COATS AND SUITS EXCLUDING ALL WOOL TEXTILE PIECE GOODS USED PARTICULARLY TO MAKE INTERLININGS FOR SILK NECKWEAR. WORUMBO MANUFACTURING COMPANY, Bath, Me.
Filed January 8, 1930. Serial No. 294,549. PUBLISHED JUNE 30, 1931. Class 42.

286,863. CERTAIN NAMED LINEN GOODS. ALEX. J. HAMRAH CO. INC., New York, N. Y.
Filed March 16, 1928. Serial No. 263,267. PUBLISHED JUNE 30, 1931. Class 42.

286,864. CERTAIN NAMED LINEN GOODS. ALEX. J. HAMRAH CO. INC., New York, N. Y.
Filed March 16, 1928. Serial No. 263,265. PUBLISHED JUNE 30, 1931. Class 42.

286,865. LOOSE-LEAF MONTHLY MAGAZINE. KROY WEN PUBLISHERS, INC., New York, N. Y.
Filed January 31, 1931. Serial No. 310,626. PUBLISHED JUNE 30, 1931. Class 38.

286,866. CHARTS. MORRIS ENOL, doing business as The International At-A-Glance Chart Co., New York, N. Y.
Filed March 3, 1931. Serial No. 311,653. PUBLISHED JUNE 30, 1931. Class 38.

286,867. BOOKS, MAGAZINES, AND COURSES OF INSTRUCTION. BEVERLY HALL CORPORATION, doing business as The Philosophical Publishing Company, Quakertown, Pa.
Filed April 6, 1931. Serial No. 312,976. PUBLISHED JUNE 30, 1931. Class 38.

286,868. ANIMATED PICTURE BOOKLETS. FLICKERETTE COMPANY, New York, N. Y.
Filed April 7, 1931. Serial No. 313,034. PUBLISHED JUNE 30, 1931. Class 38.

286,869. BUSINESS DIRECTORY AND ROUTING BOOKLET PUBLISHED FROM TIME TO TIME. ELLIOTT RALSTON CORPORATION, Nashville, Tenn.
Filed April 2, 1931. Serial No. 313,067. PUBLISHED JUNE 30, 1931. Class 38.

286,870. RING BINDERS AND FILLER SHEETS FOR SAME. WILSON-JONES COMPANY, Chicago, Ill.
Filed April 18, 1931. Serial No. 313,519. PUBLISHED JUNE 16, 1931. Class 37.

286,871. BOOK PAPER COATED ON TWO SIDES, THE TWO SIDES EACH HAVING DIFFERENT COLORS. THE APPLETON COATED PAPER COMPANY, Appleton, Wis.
Filed April 20, 1931. Serial No. 313,528. PUBLISHED JUNE 16, 1931. Class 37.

286,872. BOND PAPER. SAXON PAPER PRODUCTS INC., New York, N. Y.
Filed April 20, 1931. Serial No. 313,562. PUBLISHED JUNE 30, 1931. Class 37.

286,873. STATIONERY ITEMS—NAMELY, PENCILS, LEADS, AND RUBBER ERASERS. SCRIPTO MANUFACTURING COMPANY, Atlanta, Ga.
Filed April 20, 1931. Serial No. 313,563. PUBLISHED JUNE 23, 1931. Class 37.

286,874. DAILY SCRATCH SHEET. ROBERT A. MASSEY, Washington, D. C.
Filed April 23, 1931. Serial No. 313,713. PUBLISHED JUNE 30, 1931. Class 38.

286,875. COMIC STRIP OR CARTOON. KING FEATURES SYNDICATE, INC., New York, N. Y.
Filed April 28, 1931. Serial No. 313,923. PUBLISHED JUNE 30, 1931. Class 38.

286,876. PENCILS, PENCIL CASES, CRAYONS, ETC. A. W. FABER, INC., Newark, N. J.
Filed May 26, 1930. Serial No. 301,254. PUBLISHED JUNE 16, 1931. Class 37.

286,877. LADIES', MISSES', AND CHILDREN'S HATS. JOSEPH R. MERMELSTEIN, doing business as Blossom Hat Co., New York, N. Y.
Filed May 26, 1930. Serial No. 301,277. PUBLISHED JUNE 23, 1931. Class 39.

286,878. LAWN MOWERS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed June 16, 1930. Serial No. 302,491. PUBLISHED JUNE 30, 1931. Class 23.

286,879. HARD RUBBER COMBS. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn.
Filed July 1, 1930. Serial No. 303,031. PUBLISHED JUNE 23, 1931. Class 40.

286,880. WALL COVERINGS MADE OF PAPER. SALUBRA S. A., Basel, Switzerland.
Filed July 19, 1930. Serial No. 303,657. PUBLISHED JUNE 16, 1931. Class 37.

286,881. WALL COVERINGS MADE OF PAPER. SALUBRA S. A., Basel, Switzerland.
Filed July 19, 1930. Serial No. 303,658. PUBLISHED JUNE 16, 1931. Class 37.

286,882. JOCK STRAPS, SUSPENSORIES, AND ATHLETIC SUPPORTERS FOR BOTH MEN AND WOMEN, ETC. THE O-C MANUFACTURING COMPANY, Jersey City, N. J.
Filed September 16, 1930. Serial No. 305,758. PUBLISHED JUNE 30, 1931. Class 44.

286,883. POWDER COMPOUND USED IN THE PLACE OF SUGAR FOR AGING NONALCOHOLIC, MALTLESS SOFT DRINKS SUCH AS ROOT BEER AND GINGER ALE BY ADDING IT TO THE FLAVORING EXTRACTS. L. E. SILBERMAN, doing business as Colonial Products Company, Des Moines, Iowa.
Filed July 28, 1930. Serial No. 303,926. PUBLISHED JUNE 30, 1931. Class 45.

286,884. LEATHER BOOTS AND SHOES. HOLLAND SHOE COMPANY, Holland, Mich.
Filed October 9, 1930. Serial No. 306,566. PUBLISHED JUNE 23, 1931. Class 39.

286,885. CASTINGS AND ALLOYS. BETTER BEARINGS CORPORATION, Salt Lake City, Utah.
Filed October 23, 1930. Serial No. 307,086. PUBLISHED JUNE 23, 1931. Class 14.

286,886. CERTAIN NAMED FURNISHINGS AND NOTIONS. THE WARREN FEATHERBONE COMPANY, Three Oaks, Mich.
Filed October 25, 1930. Serial No. 307,189. PUBLISHED JUNE 23, 1931. Class 40.

286,887. NECKTIES. FRANC-STROHMENGER & COWAN, INC., New York, N. Y.
Filed November 21, 1930. Serial No. 308,159. PUBLISHED JUNE 23, 1931. Class 39.

286,888. SOAP IN GRANULAR FORM. THE HEWITT BROS. SOAP COMPANY, Dayton, Ohio.
Filed December 10, 1930. Serial No. 308,828. PUBLISHED JUNE 23, 1931. Class 4.

286,889. SHEET MUSIC. IRWIN P. WENER, doing business as Charlotte-Irving and Company, New Haven, Conn.
Filed February 24, 1931. Serial No. 311,406. PUBLISHED JUNE 23, 1931. Class 38.

286,890. PRINTED BOOKS OR PERIODICALS. THE ELECTROCHEMICAL SOCIETY, New York, N. Y.
Filed March 2, 1931. Serial No. 311,713. PUBLISHED JUNE 16, 1931. Class 38.

286,891. COOK BOOKS. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa.
Filed March 9, 1931. Serial No. 311,922. PUBLISHED JUNE 16, 1931. Class 38.

286,892. MONTHLY MAGAZINE. MACFADDEN PUBLICATIONS, INC., New York, N. Y.
Filed March 21, 1931. Serial No. 312,380. PUBLISHED JUNE 23, 1931. Class 38.

286,893. NEWS PAPERS. FRED G. JOHNSTON, doing business as Indiana Clipping Service, Indianapolis, Ind.
Filed April 1, 1931. Serial No. 312,809. PUBLISHED JUNE 16, 1931. Class 38.

286,894. DAILY NEWSPAPER. DAILY TRADE RECORD CO. OF NEW YORK, New York, N. Y.
Filed April 8, 1931. Serial No. 313,076. PUBLISHED JUNE 23, 1931. Class 38.

286,895. LADIES', MISSES', AND CHILDREN'S HATS. CONSOLIDATED MILLINERY COMPANY, Chicago, Ill.
Filed May 26, 1930. Serial No. 301,248. PUBLISHED JUNE 23, 1931. Class 39.

286,896. SAFETY PAPER. FRANKWOOD PROCESS COMPANY, Portland, Me.
Filed May 8, 1931. Serial No. 314,329. PUBLISHED JUNE 30, 1931. Class 37.

286,897. KRAFT PAPER. NEKOOSA-EDWARDS PAPER COMPANY, Port Edwards, Wis.
Filed May 15, 1931. Serial No. 314,625. PUBLISHED JUNE 30, 1931. Class 37.

286,898. PERIODICAL. NORWEGIAN LUTHERAN CHURCH OF AMERICA, Minneapolis, Minn.
Filed May 16, 1931. Serial No. 314,654. PUBLISHED JUNE 23, 1931. Class 38.

286,899. MONTHLY PUBLICATION. AMERICAN ASSOCIATION OF PERSONAL FINANCE COMPANIES, Washington, D. C.
Filed May 18, 1931. Serial No. 314,675. PUBLISHED JUNE 23, 1931. Class 38.

286,900. MONTHLY PUBLICATION. INTERNATIONAL PUBLICATIONS, INC., New York, N. Y.
Filed April 10, 1931. Serial No. 313,190. PUBLISHED JUNE 23, 1931. Class 38.

286,901. CRAYONS. MILTON BRADLEY COMPANY, Springfield, Mass.
Filed April 14, 1931. Serial No. 313,324. PUBLISHED JUNE 16, 1931. Class 37.

286,902. HOUSE ORGANS. CENTRAL SURETY AND INSURANCE CORPORATION, Kansas City, Mo.
Filed April 27, 1931. Serial No. 313,829. PUBLISHED JUNE 9, 1931. Class 38.

286,903. MAGAZINE PUBLISHED BI-MONTHLY. ARMSTRONG CORK COMPANY, Lancaster, Pa.
Filed April 29, 1931. Serial No. 313,952. PUBLISHED JUNE 23, 1931. Class 38.

286,904. CARTOON STRIPS. NICHOLSON & MILLER, Fort Worth, Tex.
Filed April 30, 1931. Serial No. 314,007. PUBLISHED JUNE 23, 1931. Class 38.

286,905. PERIODICAL ISSUED SEMI-MONTHLY. TEXAS COTTON CO-OPERATIVE ASSOCIATION, Dallas, Tex.
Filed May 4, 1931. Serial No. 314,180. PUBLISHED JUNE 23, 1931. Class 38.

286,906. PRINTS, SHOW CARDS, POSTERS, ETC. VITAPRINT PROCESS COMPANY, Chicago, Ill.
Filed May 4, 1931. Serial No. 314,183. PUBLISHED JUNE 23, 1931. Class 38.

286,907. MAGAZINE PUBLISHED MONTHLY. FAWCETT PUBLICATIONS, INC., Minneapolis, Minn.
Filed May 11, 1931. Serial No. 314,403. PUBLISHED JUNE 23, 1931. Class 38.

286,908. PUBLICATION. TIDE, INC., New York, N. Y.
Filed May 12, 1931. Serial No. 314,472. PUBLISHED JUNE 23, 1931. Class 38.

286,909. MAGAZINE PUBLISHED MONTHLY. THE JOURNAL FOR THE PIECE GOODS BUYER, INC., New York, N. Y.
Filed May 16, 1931. Serial No. 314,649. PUBLISHED JUNE 23, 1931. Class 38.

286,910. MANIFOLD FORMS. THE OVERFOLD COMPANY, Chardon, Ohio.
Filed May 16, 1931. Serial No. 314,655. PUBLISHED JUNE 30, 1931. Class 37.

286,911. BLEACHED KRAFT PAPER. NEKOOSA-EDWARDS PAPER COMPANY, Port Edwards, Wis.
Filed May 20, 1931. Serial No. 314,816. PUBLISHED JUNE 30, 1931. Class 37.

286,912. TOILET SEAT COVERS MADE OF PAPER. OSCAR FRADUS, doing business as Setex Distributing Company, New York, N. Y.
Filed May 22, 1931. Serial No. 314,905. PUBLISHED JUNE 30, 1931. Class 37.

286,913. MAGAZINE. J. MCKEEN CATTELL, doing business as The Science Press, New York, N. Y.
Filed April 29, 1931. Serial No. 313,959. PUBLISHED JUNE 30, 1931. Class 38.

286,914. PRINTED CHARTS. JAMES H. GRAVELL, Ambler, Pa.
Filed May 2, 1931. Serial No. 314,111. PUBLISHED JUNE 30, 1931. Class 38.

286,915. EMBOSSED PAPERS. WESTFIELD RIVER PAPER COMPANY, INC., Russell, Mass.
Filed May 7, 1931. Serial No. 314,310. PUBLISHED JUNE 23, 1931. Class 37.

286,916. HOSIERY. LEHIGH SILK HOSIERY MILLS, INC., New York, N. Y.
Filed April 29, 1930. Serial No. 299,663. PUBLISHED JUNE 23, 1931. Class 39.

286,917. FRESH MEAT—NAMELY, PORK BRAINS, PORK LINKS, PORK SAUSAGE, AND BEEF BRAINS, AND SMOKED AND DRIED CHIPPED BEEF. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio.
Filed February 21, 1931. Serial No. 311,337. PUBLISHED JUNE 30, 1931. Class 46.

286,918. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS FOR MAKING THE SAME. LA GRANDE DISTILLERIE E. CUSENIER FILS AINE & CIE., SOCIETE ANONYME, Paris, France.
Filed May 9, 1930. Serial No. 300,208. PUBLISHED JUNE 30, 1931. Class 45.

286,919. GLOVES AND GAUNTLETS MADE FROM FABRICS AND COMBINATIONS OF FABRIC AND LEATHER. THE TOLEDO GLOVE MANUFACTURING COMPANY, Toledo, Ohio.
Filed February 28, 1931. Serial No. 311,578. PUBLISHED JUNE 23, 1931. Class 39.

286,920. SHOES OF LEATHER. PECK SHOE COMPANY, Worcester, Mass.
Filed April 2, 1931. Serial No. 312,861. PUBLISHED JUNE 23, 1931. Class 39.

286,921. SHOES MADE OF LEATHER, FABRIC, OR RUBBER AND COMBINATIONS OF LEATHER, FABRIC, AND RUBBER. EDGAR MOVSESIAN, Haverhill, Mass.
Filed March 21, 1931. Serial No. 312,385. PUBLISHED JUNE 23, 1931. Class 39.

286,922. COMBS NOT MADE OF PRECIOUS METAL. RHEINISCHE GUMMI-UND CELLULOID-FABRIK, Mannheim-Neckarau, Germany.
Filed April 2, 1931. Serial No. 312,862. PUBLISHED JUNE 23, 1931. Class 40.

286,923. WOMEN'S CLOTHING, PARTICULARLY SWEATERS, BLOUSES, OUTER SKIRTS, BLOOMERS, BRASSIÈRES, UNION-SUITS, STEP-IN UNDERDRAWERS, PAJAMAS, BEACH PAJAMAS AND BATHING SUITS. CORBETT & NORTH, INC., New York, N. Y.
Filed April 7, 1931. Serial No. 313,028. PUBLISHED JUNE 23, 1931. Class 39.

286,924. CANDY. AMTORG TRADING CORPORATION, New York, N. Y.
Filed April 8, 1931. Serial No. 313,072. PUBLISHED JUNE 30, 1931. Class 46.

286,925. FUR TRIMMINGS FOR LADIES' WEAR. BIENSTOCK AND LUBELSKY, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,640. PUBLISHED JUNE 30, 1931. Class 40.

286,926. WOMEN'S AND MEN'S SHOES MADE WHOLLY OR IN PART OF LEATHER AND FABRIC. DIAMOND SHOE CORPORATION, New York, N. Y.
Filed April 22, 1931. Serial No. 313,649. PUBLISHED JUNE 23, 1931. Class 39.

286,927. CERTAIN NAMED WEARING APPAREL. NEW IDEA INFANTS WEAR CO., INC., New York, N. Y.
Filed April 24, 1931. Serial No. 313,748. PUBLISHED JUNE 23, 1931. Class 39.

286,928. LABORATORY APRONS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed April 27, 1931. Serial No. 313,841. PUBLISHED JUNE 23, 1931. Class 39.

286,929. CHOCOLATE SIRUP MADE OF COCOA, MALT, CANE SUGAR, AND OTHER INGREDIENTS FOR THE PREPARATION OF A CHOCOLATE FOOD PRODUCT. SOL LENZNER CORP., Buffalo, N. Y.
Filed May 2, 1931. Serial No. 314,118. PUBLISHED JUNE 30, 1931. Class 46.

286,930. CHOCOLATES. F. H. ROBERTS COMPANY, Boston, Mass.
Filed May 7, 1931. Serial No. 314,299. PUBLISHED JUNE 30, 1931. Class 46.

286,931. CANDY. CANDY KITCHENS, INC., Chicago, Ill.
Filed May 13, 1931. Serial No. 314,483. PUBLISHED JUNE 30, 1931. Class 46.

286,932. CANDY. NATIONAL FEATURES INC., Boston, Mass.
Filed May 20, 1931. Serial No. 314,814. PUBLISHED JUNE 30, 1931. Class 46.

286,933. CANNED FRUIT. LIBERTY ORCHARDS COMPANY, Cashmere, Wash.
Filed May 21, 1931. Serial No. 314,852. PUBLISHED JUNE 30, 1931. Class 46.

286,934. CERTAIN NAMED PAINT PRODUCTS. THE BARRETT COMPANY, New York, N. Y.
Filed April 2, 1930. Serial No. 298,266. PUBLISHED JUNE 30, 1931. Class 16.

286,935. BICYCLES. GIMBEL BROTHERS, INC., New York, N. Y.
Filed April 23, 1930. Serial No. 299,313. PUBLISHED JUNE 30, 1931. Class 19.

286,936. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed May 21, 1931. Serial No. 314,874. PUBLISHED JUNE 30, 1931. Class 9.

286,937. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed May 21, 1931. Serial No. 314,875. PUBLISHED JUNE 30, 1931. Class 9.

286,938. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed May 21, 1931. Serial No. 314,876. PUBLISHED JUNE 30, 1931. Class 9.

286,939. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed May 21, 1931. Serial No. 314,877. PUBLISHED JUNE 30, 1931. Class 9.

286,940. REFRIGERATORS OF ALL TYPES, REFRIGERATING APPARATUS AND ICE BOXES, INCLUDING ELECTRIC REFRIGERATORS AND REFRIGERATOR PARTS. THE RUDOLPH WURLITZER COMPANY, Cincinnati, Ohio.
Filed May 21, 1931. Serial No. 314,884. PUBLISHED JUNE 30, 1931. Class 31.

286,941. PLAYING CARDS. S. H. KRESS & CO., New York, N. Y.
Filed May 22, 1931. Serial No. 314,915. PUBLISHED JUNE 30, 1931. Class 22.

286,942. PLAYING CARDS. S. H. KRESS & CO., New York, N. Y.
Filed May 22, 1931. Serial No. 314,917. PUBLISHED JUNE 30, 1931. Class 22.

286,943. BOARD GAME. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed May 22, 1931. Serial No. 314,926. PUBLISHED JUNE 30, 1931. Class 22.

286,944. HEIGHT AND PRESSURE GAUGES. RICHARDSON & BOYNTON COMPANY, New York, N. Y.
Filed May 22, 1931. Serial No. 314,929. PUBLISHED JUNE 30, 1931. Class 26.

286,945. LINOLEUM AND PRODUCTS OF A LINOLEUM-LIKE NATURE ADAPTED FOR USE AS DECORATIVE AND UTILITY MATERIALS FOR WALL OR FLOOR COVERINGS. CONGOLEUM-NAIRN, INC., Kearny, N. J.
Filed May 26, 1931. Serial No. 315,037. PUBLISHED JUNE 30, 1931. Class 20.

286,946. LINOLEUM AND PRODUCTS OF A LINOLEUM-LIKE NATURE ADAPTED FOR USE AS DECORATIVE AND UTILITY MATERIALS FOR WALL OR FLOOR COVERINGS. CONGOLEUM-NAIRN, INC., Kearny, N. J.
Filed May 26, 1931. Serial No. 315,038. PUBLISHED JUNE 30, 1931. Class 20.

286,947. BOOT POLISH. RONUK, LIMITED, Portslade, England.
Filed April 25, 1931. Serial No. 313,801. PUBLISHED JUNE 23, 1931. Class 4.

286,948. CIGARS. WOLF BROTHERS & CO., Red Lion, Pa.
Filed April 25, 1931. Serial No. 313,814. PUBLISHED JUNE 23, 1931. Class 17.

286,949. SHOE FORMS. SHOE FORM CO., INC., Auburn, Ohio.
Filed April 30, 1931. Serial No. 314,020. PUBLISHED JUNE 23, 1931. Class 50.

286,950. SOAP. THOMAS F. GAMAGE, doing business as De Gama Chemical Co., San Francisco, Calif.
Filed May 4, 1931. Serial No. 314,157. PUBLISHED JUNE 23, 1931. Class 4.

286,951. GASOLINE BLOW TORCH. FRANCIS B. CARLETON, Boston, Mass.
Filed May 6, 1931. Serial No. 314,230. PUBLISHED JUNE 30, 1931. Class 34.

286,952. CIGARS. MORRIS J. GOODMAN, doing business as Goodman Cigar Co., Westfield, Mass.
Filed May 7, 1931. Serial No. 314,283. PUBLISHED JUNE 30, 1931. Class 17.

286,953. SOIL CONDITIONER AND SNAIL CONTROL, IN GRANULATED FORM. ROBERTS COMPANY, Burlingame, Calif.
Filed May 8, 1931. Serial No. 314,343. PUBLISHED JUNE 23, 1931. Class 10.

286,954. ARTISTS' WATER-COLOR PAINTS. MILTON BRADLEY COMPANY, Springfield, Mass.
Filed May 12, 1931. Serial No. 314,443. PUBLISHED JUNE 30, 1931. Class 16.

286,955. VENTILATING WINDOW LOCKS. KANKAKEE TOOL & DIE WORKS, Kankakee, Ill.
Filed April 29, 1931. Serial No. 313,964. PUBLISHED JUNE 30, 1931. Class 25.

286,956. DRESS SHIELDS. I. B. KLEINERT RUBBER COMPANY, New York, N. Y.
Filed April 7, 1931. Serial No. 313,041. PUBLISHED JUNE 23, 1931. Class 40.

286,957. MEN'S TOPCOATS, OVERCOATS, AND SUITS JACOB SIEGEL, doing business as Jacob Siegel Company, Philadelphia, Pa.
Filed April 24, 1931. Serial No. 313,756. PUBLISHED JUNE 23, 1931. Class 39.

286,958. GOLF CLUBS. CONDOR MANUFACTURING CO., INC., Long Island City, N. Y.
Filed May 7, 1931. Serial No. 314,272. PUBLISHED JUNE 30, 1931. Class 22.

286,959. CIGARETTE VENDING MACHINES. THE AUTOBACCONIST CORPORATION, Glen Cove, N. Y.
Filed May 6, 1931. Serial No. 314,225. PUBLISHED JUNE 30, 1931. Class 23.

286,960. MOTION PICTURE FILMS. UNIVERSAL PICTURES CORPORATION, New York, N. Y.
Filed May 8, 1931. Serial No. 314,348. PUBLISHED JUNE 30, 1931. Class 26.

286,961. NONALCOHOLIC, MALTLESS BEVERAGES BOTH CARBONATED AND NONCARBONATED SOLD AS SOFT DRINKS. LASH'S PRODUCTS COMPANY, San Francisco, Calif.
Filed May 9, 1931. Serial No. 314,373. PUBLISHED JUNE 30, 1931. Class 45.

286,962. WHISKEY. THE GEO. T. STAGG CO., INC., Frankfort, Ky.
Filed May 9, 1931. Serial No. 314,382. PUBLISHED JUNE 30, 1931. Class 49.

286,963. BRAIDS OF COTTON, LINEN, SILK, AND RAYON. UNITED LACE & BRAID MANUFACTURING CO., Providence, R. I.
Filed April 14, 1931. Serial No. 313,356. PUBLISHED JUNE 23, 1931. Class 40.

286,964. NONALCOHOLIC, MALTLESS CITRUS FRUIT DRINKS. JUCI-SWEET PRODUCTS INC., Howey-in-the-Hills, Fla.
Filed April 16, 1931. Serial No. 313,436. PUBLISHED JUNE 30, 1931. Class 45.

286,965. KITCHEN WARE. THE CLYDE CUTLERY COMPANY, Clyde, Ohio.
Filed April 18, 1931. Serial No. 313,494. PUBLISHED JUNE 30, 1931. Class 23.

286,966. POP GUNS, AIR RIFLES, TOY AIRPLANES, TOY TRUCKS, AND TOY AUTOMOBILES. ALL METAL PRODUCTS COMPANY, Wyandotte, Mich.
Filed May 13, 1931. Serial No. 314,480. PUBLISHED JUNE 30, 1931. Class 22.

286,967. COTTON CORDAGE, ROPE, AND TWINE. CLARK AND JACKSON, Columbia, S. C.
Filed May 20, 1931. Serial No. 314,788. PUBLISHED JUNE 30, 1931. Class 7.

286,968. GOLF BALLS. EDWARDS & WALKER COMPANY, Portland, Me.
Filed May 20, 1931. Serial No. 314,793. PUBLISHED JUNE 30, 1931. Class 22.

286,969. WIRE ROPE, PARTICULARLY GALVANIZED WIRE ROPE USED AS DRILLING LINES. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio, Chicago, Ill., Pittsburgh, Pa., New York, N. Y., Worcester, Mass., Hoboken, N. J.
Filed May 21, 1931. Serial No. 314,835. PUBLISHED JUNE 30, 1931. Class 7.

286,970. SWIMMING BELTS. ANDREW WALUS, Brooklyn, N. Y.
Filed May 21, 1931. Serial No. 314,878. PUBLISHED JUNE 30, 1931. Class 22.

286,971. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed May 21, 1931. Serial No. 314,870. PUBLISHED JUNE 30, 1931. Class 9.

286,972. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed May 21, 1931. Serial No. 314,871. PUBLISHED JUNE 30, 1931 Class 9.

286,973. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed May 21, 1931. Serial No. 314,872. PUBLISHED JUNE 30, 1931. Class 9.

286,974. MATCHES. VULCAN MATCH CO. INC., New York, N. Y.
Filed May 21, 1931. Serial No. 314,873. PUBLISHED JUNE 30, 1931. Class 9.

286,975. SPECTACLES AND EYEGLASSES. TUNSTALL OPTICAL CO. LTD., Croydon, England.
Filed January 12, 1931. Serial No. 309,876. PUBLISHED JUNE 30, 1931. Class 26.

286,976. PERIODICAL IN THE NATURE OF SYNDICATED NEWSPAPER ARTICLES SUPPLIED OVER DEFINITE PERIODS. NEWSPAPER NATURE FEATURES, INC., Cleveland, Ohio.
Filed April 21, 1930. Serial No. 299,219. PUBLISHED JUNE 16, 1931. Class 38.

286,977. PERIODICAL IN THE NATURE OF SYNDICATED NEWSPAPER ARTICLES SUPPLIED OVER DEFINITE PERIODS. NEWSPAPER NATURE FEATURES, INC., Cleveland, Ohio.
Filed April 21, 1930. Serial No. 299,218. PUBLISHED JUNE 16, 1931. Class 38.

286,978. INSULATING BUILDING BOARD. STEWART INSO BOARD COMPANY, St. Joseph and South St. Joseph, Mo.
Filed March 29, 1930. Serial No. 298,122. PUBLISHED MAY 13, 1930. Class 12.

286,979. HOSIERY. LEHIGH SILK HOSIERY MILLS, INC., New York, N. Y.
Filed March 4, 1930. Serial No. 296,813. PUBLISHED JUNE 23, 1931. Class 39.

286,980. DESK PADS HAVING A PYRALINE OR OTHER TRANSPARENT CELLULOSE COVER. WILLIAMS & MARCUS CO., Philadelphia, Pa.
Filed February 14, 1930. Serial No. 296,039. PUBLISHED JUNE 16, 1931. Class 37.

286,981. ENGINE ROOM CLOCKS. CONSOLIDATED ASHCROFT HANCOCK COMPANY, New York, N. Y.
Filed January 3, 1930. Serial No. 294,342. PUBLISHED MARCH 3, 1931. Class 27.

286,982. AUTOMOBILE AND FURNITURE POLISH. R. G. HASKINS CO., Chicago, Ill.
Filed December 27, 1929. Serial No. 294,113. PUBLISHED JUNE 30, 1931. Class 16.

286,983. RAZOR BLADES. PROBAK CORPORATION, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware.
Filed November 25, 1929. Serial No. 292,899. PUBLISHED JANUARY 7, 1930. Class 23.

286,984. RAZOR BLADES. PROBAK CORPORATION, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware.
Filed November 25, 1929. Serial No. 292,898. PUBLISHED JANUARY 7, 1930. Class 23.

286,985. RAZOR BLADES. PROBAK CORPORATION, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware.
Filed November 25, 1929. Serial No. 292,897. PUBLISHED JANUARY 7, 1930. Class 23.

286,986. RAZOR BLADES. PROBAK CORPORATION, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware.
Filed November 25, 1929. Serial No. 292,896. PUBLISHED JANUARY 7, 1930. Class 23.

286,987. RAZOR BLADES. PROBAK CORPORATION, Jersey City, N. J., and New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware.
Filed November 25, 1929. Serial No. 292,895. PUBLISHED JANUARY 7, 1930. Class 23.

286,988. INNER TUBES, TIRE PATCHES, BOOTS AND SLEEVES FOR AUTOMOBILE TIRES ALL MADE WHOLLY OR PARTLY OF RUBBER. THE BADGER RUBBER WORKS, Milwaukee, Wis.
Filed November 14, 1929. Serial No. 292,389. PUBLISHED JUNE 30, 1931. Class 35.

286,989. TACKS. W. W. CROSS & COMPANY, INCORPORATED, Portland, Me.
Filed October 21, 1929. Serial No. 291,326. PUBLISHED JUNE 30, 1931. Class 13.

286,990. TENTS AND AWNINGS. PRICE AWNLOK CORPORATION, Buffalo, N. Y.
Filed October 17, 1929. Serial No. 291,176. PUBLISHED JUNE 30, 1931. Class 50.

286,991. CERTAIN BUILT-IN HOUSEHOLD FURNISHINGS. MRS. GEORGE HERZOG, doing business as The Closet Shop, New York, N. Y.
Filed May 1, 1929. Serial No. 283,332. PUBLISHED JUNE 30, 1931. Class 32.

286,992. STEEL CENTER ABRASIVE WHEELS. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y.
Filed March 21, 1929. Serial No. 281,074. PUBLISHED JUNE 23, 1931. Class 4.

286,993. LEAD PENCILS. KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia.
Filed January 19, 1929. Serial No. 278,176. PUBLISHED JUNE 23, 1931. Class 37.

286,994. MEN'S TOPCOATS AND OVERCOATS. THE ROSENBAUM COMPANY, Pittsburgh, Pa.
Filed June 14, 1928. Serial No. 268,058. PUBLISHED JUNE 30, 1931. Class 39.

286,995. PRINTED RECORDS, BULLETINS, AND REPORTS ON BUSINESS AND ADVERTISING, PUBLISHED PERIODICALLY. MEDIA RECORDS, INC., New York, N. Y.
Filed November 27, 1928. Serial No. 275,905. PUBLISHED JUNE 23, 1931. Class 38.

286,996. MEATS. THE E. KAHN'S SONS COMPANY, Cincinnati, Ohio.
Filed January 21, 1928. Serial No. 260,449. PUBLISHED JUNE 23, 1931. Class 46.

286,997. ARTIFICIAL YARNS MADE OF CELLULOSE. ALGEMEENE KUNSTZIJDE UNIE N. V., Arnhem, Netherlands.
Filed May 22, 1931. Serial No. 314,888. PUBLISHED JUNE 30, 1931. Class 43.

286,998. ICE CREAM. H. P. HOOD & SONS, INC., Boston, Mass.
Filed May 8, 1931. Serial No. 314,332. PUBLISHED JUNE 30, 1931. Class 46.

286,999. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 8, 1931. Serial No. 314,320. PUBLISHED JUNE 30, 1931. Class 42.

287,000. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 8, 1931. Serial No. 314,318. PUBLISHED JUNE 30, 1931. Class 42.

287,001. SILK PIECE GOODS. KATTERMANN AND MITCHELL COMPANY, New York, N. Y.
Filed May 4, 1931. Serial No. 314,160. PUBLISHED JUNE 30, 1931. Class 42.

287,002. MALT SYRUP. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y.
Filed May 2, 1931. Serial No. 314,131. PUBLISHED JUNE 30, 1931. Class 46.

287,003. SUGAR. THE NATIONAL SUGAR REFINING COMPANY OF NEW JERSEY, Jersey City, N. J., and New York, N. Y.
Filed May 2, 1931. Serial No. 314,124. PUBLISHED JUNE 30, 1931. Class 46.

287,004. TEXTILE CARPETS AND RUGS. GEO. WEHN & Co., Pittsburgh, Pa.
Filed April 30, 1931. Serial No. 314,094. PUBLISHED JUNE 30, 1931. Class 42.

287,005. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed April 29, 1931. Serial No. 313,956. PUBLISHED JUNE 30, 1931. Class 42.

287,006. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed April 29, 1931. Serial No. 313,955. PUBLISHED JUNE 30, 1931. Class 42.

287,007. WOOL, COTTON, SILK, RAYON FABRICS AND/OR COMBINATIONS THEREOF IN THE PIECE. THE WOOLEN CORPORATION OF AMERICA, New York, N. Y.
Filed April 27, 1931. Serial No. 313,877. PUBLISHED JUNE 30, 1931. Class 42.

287,008. TEXTILE RUGS AND CARPETS. A. & M. KARAGHEUSIAN, INC., New York, N. Y.
Filed April 24, 1931. Serial No. 313,738. PUBLISHED JUNE 16, 1931. Class 42.

287,009. TEXTILE DIAPERS. W. T. GRANT COMPANY, Lynn, Mass., and New York, N. Y.
Filed April 21, 1931. Serial No. 313,597. PUBLISHED JUNE 30, 1931. Class 42.

287,010. COTTON PIECE GOODS AND MIXTURES OF COTTON AND SILK PIECE GOODS. BURTON BROTHERS & CO. INC., New York, N. Y.
Filed April 21, 1931. Serial No. 313,588. PUBLISHED JUNE 30, 1931. Class 42.

287,011. CERTAIN NAMED PIECE GOODS. VELVERAY CORPORATION OF AMERICA, New York, N. Y.
Filed April 16, 1931. Serial No. 313,456. PUBLISHED JUNE 16, 1931. Class 42.

287,012. ALL-SILK CREPE. CHARLES GOLDMAN, doing business as Atlas Mills, New York, N. Y.
Filed April 16, 1931. Serial No. 313,431. PUBLISHED JUNE 30, 1931. Class 42.

287,013. SILK PIECE GOODS. KATTERMANN AND MITCHELL COMPANY, New York, N. Y.
Filed April 15, 1931. Serial No. 313,372. PUBLISHED JUNE 30, 1931. Class 42.

287,014. COTTON GOODS IN THE PIECE. CAMPBELL COMPANY, New York, N. Y.
Filed April 14, 1931. Serial No. 313,327. PUBLISHED JUNE 30, 1931. Class 42.

287,015. TEXTILE BAGGING MATERIAL IN THE PIECE. MENTE & CO., INC., New Orleans, La.
Filed March 21, 1931. Serial No. 312,382. PUBLISHED JUNE 30, 1931. Class 42.

287,016. WOOLEN BED BLANKETS. CHAS. W. HOUSE & SONS, Unionville, Conn.
Filed February 20, 1931. Serial No. 311,272. PUBLISHED JUNE 30, 1931. Class 42.

287,017. CERTAIN KNITTED PILE FABRICS. DAVID PELTON MOORE, New York, N. Y., assignor to Rextex, Inc., New York, N. Y., a Corporation of Delaware.
Filed February 16, 1931. Serial No. 311,101. PUBLISHED JUNE 30, 1931. Class 42.

287,018. GREEN TEA. MANUEL GOMES VEIGA, Buenos Aires, Argentina.
Filed December 17, 1930. Serial No. 309,102. PUBLISHED JUNE 30, 1931. Class 46.

287,019. CANNED FRUIT AND VEGETABLES, RAISINS, MINCEMEATS, ETC. CALIFORNIA PACKING CORPORATION, San Francisco, Calif.
Filed October 28, 1930. Serial No. 307,257. PUBLISHED JUNE 30, 1931. Class 46.

287,020. OLIVE OIL. BARTON & GUESTIER, Bordeaux, France.
Filed September 30, 1930. Serial No. 306,229. PUBLISHED JUNE 30, 1931. Class 46.

287,021. SHEET GLASS. VITREA COMPANY, INC., Brooklyn, N. Y.
Filed August 11, 1930. Serial No. 304,477. PUBLISHED JUNE 30, 1931. Class 33.

287,022. FISH PASTE, FISH PRODUCTS, ANCHOVIES, ETC. G. VIVIANO, INC., Detroit, Mich.
Filed July 10, 1930. Serial No. 303,356. PUBLISHED MAY 19, 1931. Class 46.

287,023. PIECE DYED GOODS COMPOSED OF ALL SILK, RAYON AND SILK, ACETATE CELLULOSE AND SILK, ALL RAYON, AND ALL ACETATE CELLULOSE. GARDE SILK DYEING COMPANY, Paterson, N. J.
Filed February 20, 1931. Serial No. 311,271. PUBLISHED MAY 12, 1931. Class 42.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

287,024. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JOHN J. WILLINGER, doing business as Willinger Products Co., Minneapolis, Minn. Filed May 2, 1928. Serial No. 265,820.

Dri-Kleen

For a Preparation for Cleaning Windows, Mirrors, and Glassware.
Claims use since Mar. 1, 1926.

287,025. (CLASS 39. CLOTHING.) CARSON PIRIE SCOTT & Co., Chicago, Ill. Filed June 8, 1928. Serial No. 267,693.

MANDALAY

For Women's and Misses' Underwear of Knitted and Textile Material.
Claims use since May 15, 1926.

287,026. (CLASS 39. CLOTHING.) CARSON PIRIE SCOTT & Co., Chicago, Ill. Filed June 8, 1928. Serial No. 267,695.

SANDOWN

For Men's Collars.
Claims use since May 10, 1927.

287,027. (CLASS 39. CLOTHING.) CARSON PIRIE SCOTT & Co., Chicago, Ill. Filed Dec. 29, 1928. Serial No. 277,350.

BERKELEY

For Men's Collars.
Claims use since May 25, 1927.

287,028. (CLASS 39. CLOTHING.) CARSON PIRIE SCOTT & Co., Chicago, Ill. Filed Dec. 29, 1928. Serial No. 277,352.

Kant-Tare

For Underwear of Knitted and Textile Fabric for Men, Women, and Children.
Claims use since 1909.

287,029. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LABORATOIRES DE BIOCHIMIE MEDICALE, Paris, France. Filed Sept. 13, 1929. Serial No. 289,748.

ARSENOSOLVANT

For Pharmaceutical Products in the Form of Solutions Adapted to Ensure Painless Injections of Arsenobenzenes.
Claims use since Apr. 10, 1929.

287,030. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LABORATOIRES DE BIOCHIMIE MEDICALE, Paris, France. Filed Sept. 13, 1929. Serial No. 289,749.

ARSENOS-SOLVANT

For Pharmaceutical Products in the Form of Solutions Adapted to Ensure Painless Injections of Arsenobenzenes.
Claims use since Apr. 10, 1929.

287,031. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) JAMES B. SIPE & Co., Pittsburgh, Pa. Filed Dec. 2, 1929. Serial No. 293,157.

SIPES

For Paints in Dry, Paste, and Ready-Mixed Form; Paint- and Asphaltum-Enamels, Lacquers, Varnishes, Including Asphaltum Varnish, Drying Oils, and Paint Pigments.
Claims use since May 24, 1929.

287,032. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BARRETT BROS., Philadelphia, Pa. Filed Mar. 12, 1930. Serial No. 297,169.

NUMBER ONE MALT SYRUP

For Malt Syrups.
Claims use since Aug. 15, 1929.

287,033. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SUNLAND LABORATORIES, INC., Los Angeles, Calif. Filed Mar. 15, 1930. Serial No. 297,387.

Skin-eze

For Preparation Used in Treating Skin Afflictions and Also for Use as an After-Shaving Lotion.
Claims use since May 1, 1925.

287,034. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES A. POWERS, doing business as Power Live Stock Remedy Co., Bloomfield, Iowa. Filed Mar. 31, 1930. Serial No. 298,202.

Power Live Stock Remedy Co.

For Medicines for Hogs and Sheep.
Claims use since Mar. 12, 1927.

287,035. (CLASS 37. PAPER AND STATIONERY.) BRADNER SMITH & CO., Chicago, Ill. Filed May 8, 1930. Serial No. 300,102.

RITE BOND

For Bond Paper Used for Mimeographing Purposes.
Claims use since Apr. 1, 1930.

287,036. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed July 21, 1930. Serial No. 303,682.

CLINGSWELL

For Ophthalmic Mountings.
Claims use since October, 1906.

287,037. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) APEX PRODUCTS CORPORATION, Chicago, Ill. Filed July 31, 1930. Serial No. 304,032.

KLEEN PUFF

For Powder Puffs.
Claims use since July 18, 1930.

287,038. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) MELVIN HENKIN, INC., New York, N. Y. Filed Sept. 29, 1930. Serial No. 306,181.

"NUKID"

For Leather—Namely, Lamb Skins for Sock Linings in Shoes.
Claims use since July 15, 1930.

287,039. (CLASS 12. CONSTRUCTION MATERIALS.) HAROLD RICHARD HUNT, doing business as H. R. Hunt Putty Mfg. Co., Los Angeles, Calif. Filed Sept. 29, 1930. Serial No. 306,184.

SEA-SEAL

For Caulking Compound.
Claims use since July 1, 1930.

287,040. (CLASS 12. CONSTRUCTION MATERIALS.) BLACK-SIVALLS & BRYSON MANUFACTURING COMPANY, Kansas City, Mo. Filed Oct. 20, 1930. Serial No. 306,927.

SAFWALK

For Steel Walkways and Stairways.
Claims use since June 24, 1930.

287,041. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM E. HINKEL CO., INC., New York, N. Y. Filed Nov. 20, 1930. Serial No. 308,111.

Peggy Lee

For Cosmetics—Namely, Face and Lip Rouges, Face Powders, Eyebrow Pencils, Face Creams, Eye Brow and Eyelash Growers Creams, Astringents, Shampoos, Talcum Powder, Nail Polishes, Nail Liquid, Nail Creams, and Scalp Preparation in Liquid and Ointment Forms.
Claims use since March, 1930.

287,042. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) MET-L-WOOD CORPORATION, Chicago, Ill. Filed Jan. 19, 1931. Serial No. 310,135.

RIBLESS BODY

For Laminate Wood and Metal, Knocked Down Vehicle Bodies and Parts Thereof.
Claims use since November, 1929.

287,043. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MATTHEW W. RYAN SONS & CO. INC., New York, N. Y. Filed Mar. 2, 1931. Serial No. 311,624.

PARISLAWN

For Linen, Cotton, and Silk Piece Goods and Mixtures Thereof.
Claims use since Feb. 14, 1930.

287,044. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AARON KOMAR, doing business as The Health Food Company, Chicago, Ill. Filed Mar. 27, 1931. Serial No. 312,606.

INTESTINO FOOD

For Dietetic Alimentary Substances for Food Purposes Consisting of a Powdered Food for Changing the Intestinal Flora Derived from Milk, Grains, and Yeast.
Claims use since July 1, 1929.

287,045. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PIERRE LEMELAND, doing business as Pharmacie T. Leclerc, Paris, France. Filed Apr. 9, 1931. Serial No. 313,137.

SOLUTION NORMET

For Solution for Intravenous Use for the Treatment of Hemorrhages and for Anemia, Hypotension, Myocarditis, Hemophila, and Infectious Conditions.
Claims use since Sept. 3, 1929.

287,046. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) M. M. GASSER CO., Duluth, Minn. Filed Apr. 16, 1931. Serial No. 313,430.

Gasser's GOOD THINGS TO EAT

For Bread and Wheat Flour.
Claims use since January, 1928.

287,047. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE SHEARIN COMPANY, INC., Atlanta, Ga. Filed Apr. 29, 1931. Serial No. 313,977.

SHEARIN'S

For White Petroleum Jelly, Perfumed White Petroleum Jelly; Salve for External Treatment of Colds, Throat Irritations, Hoarseness, Bruises, Soreness, Chapped Hands, and Sunburn and for Treating Head Colds by Inhalation of the Vapors; Cold Cream, Cleansing Cream, Vanishing Cream, Wave Lotion, Brilliantine, Honey and Almond Lotion, Rose and Glycerine Lotion, Lemon Lotion, Hair Tonic, Hair Pomade, Bay Rum, Witch Hazel, Lilac Vegetal, Tooth Paste, Hair Dressing Preparation, Skin Whitening Preparation, Lemon Vanishing Cream, Massage Cream, Liquid Shampoo, Face Powder, Talcum Powder and Deodorizing Cream, Theatrical Cleansing Cream, and Pore Cleansing Cream.
Claims use since 1926.

287,048. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) PLUMBERS SPECIALTIES MANUFACTURING CORPORATION, Los Angeles, Calif. Filed May 4, 1931. Serial No. 314,171.

DRIPRUF

For Gaskets.
Claims use since November, 1929.

287,049. (CLASS 12. CONSTRUCTION MATERIALS.) GENERAL REFRACTORIES COMPANY, Philadelphia, Pa. Filed May 11, 1931. Serial No. 314,407.

ROCKDALE

For Refractories for Furnace Structures and Linings.
Claims use since Mar. 17, 1930.

287,050. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEFFINGWELL RANCHO COMPANY, Whittier, Calif. Filed May 18, 1931. Serial No. 314,699.

PEST-OIL

For Insecticides.
Claims use since Sept. 13, 1929.

287,051. (CLASS 39. CLOTHING.) ALPERIN, STRAUSS CO. INC., New York, N. Y. Filed May 25, 1931. Serial No. 314,976.

SHRUNK-RITE

For Men's and Boys' Dress, Negligee, and Work Shirts, Underwear and Pajamas, Boys' Blouses, and Ladies' Pajamas.
Claims use since March, 1929.

287,052. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CITY STORES COMPANY, doing business as Dorothy Lee Co., New York, N. Y. Filed June 15, 1931. Serial No. 315,824.

Dorothy Lee

For Cleansing Cream, Tissue Cream, Rejuvenating Cream for the Skin, Foundation Cream, Pore Paste, Astringent, Refining Lotion for the Skin, Cucumber Lotion, Lemon Lotion, Acne Lotion, Eye Wrinkle Lotion, Body Powder, Muscle Oil, Face Powder, Bleaching Cream, Powder Foundation, Liquid Powder, Satin Cream, Brilliantine, Cream Rouge, Eye Shadow, Finger Nail Enamel, Preparation for Removing the Cuticle Around the Finger Nails, Lipstick, Acne Cream, Special Astringent, and Cream Lotion.
Claims use since Jan. 5, 1930.

287,053. (CLASS 12. CONSTRUCTION MATERIALS.) CLEVELAND BRICK & CLAY COMPANY, Cleveland, Ohio. Filed June 27, 1931. Serial No. 316,857.

CLEVELAND BLOCK

For Paving Bricks.
Claims use since March, 1904.

287,054. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) F. D. CARPENTER COAL CO., Chicago, Ill. Filed July 9, 1931. Serial No. 316,766.

ELKRIDGE

For Coal.
Claims use since Apr. 1, 1928.

LABELS

REGISTERED SEPTEMBER 8, 1931

39,659.—*Title:* CARIBBEAN PEPPER SAUCE. For Pepper Sauce. JAMES P. BEST, New York, N. Y. Published July 25, 1931.

39,660.—*Title:* NON-INFLAMMABLE TREX WONDERFUL CLEANING FLUID. For Cleaning Fluid. HENRY BUTTENHEIM, doing business as Trex Manufacturing Company, Brooklyn, N. Y. Published January 10, 1931.

39,661.—*Title:* PURE SILK MENDING AND DARNING, 10 TEX-TONIC COLORS, ART. 54. For Pure Silk for Mending and Darning. COLLINGBOURNE MILLS INC., doing business as Dexter, Virginia Snow Studios, Jap Silk Co. and Berkshire & Becket Silk Co., Elgin, Ill. Published June 15, 1931.

39,662.—*Title:* MAZZINI. For Cigars. JOSEPH DI SANTO, doing business as Di Santo & Company, Duluth, Minn. Published July 23, 1931.

39,663.—*Title:* PRAIRIE MAID. For Butter. DODGE CITY ICE CREAM AND PRODUCE CO., Dodge City, Kans. Published August 6, 1931.

39,664.—*Title:* WHEAT POPS. For Wheat Cereal. FOODTOWN KITCHENS, INC., Chicago, Ill. Published June 4, 1931.

39,665.—*Title:* RICE POPS. For Rice Cereal. FOODTOWN KITCHENS, INC., Chicago, Ill. Published June 4, 1931.

39,666.—*Title:* FRANCES FOX LIQUID HERBAL SHAMPOO. For Liquid Herbal Shampoo. FRANCES FOX, Ridgewood, N. J. Published June 20, 1931.

39,667.—*Title:* FRANCK TABLETS. For Franck Tablets—a Pure Chicory Product. HEINR, FRANCK SONS, INC., Flushing, N. Y. Published July 29, 1931.

39,668.—*Title:* BELL ROCK. For Fresh Vegetables. CHESTER FRANZELL & CO., Pittsburgh, Pa. Published June 12, 1931.

39,669.—*Title:* CAPITOL. For Fresh Vegetables. CHESTER FRANZELL & CO., Pittsburgh, Pa. Published June 12, 1931.

39,670.—*Title:* FROST OLD KING COLE SALAD DRESSING. For Salad Dressing. ALBERT E. FROST, Chicago, Ill. Published July 31, 1931.

39,671.—*Title:* SILVER DUST. For Common Soap and Laundry Soap in Spray Form. GOLD DUST CORPORATION, New York, N. Y. Published May 29, 1931.

39,672.—*Title:* SWEETHEART FROCKS. For Girls', Misses', and Women's Frocks. HAND-DE LANEY CO., INC., New York, N. Y. Published April 24, 1931.

39,673.—*Title:* SWEETHEART FROCKS. For Girls', Misses', and Women's Frocks. HAND-DE LANEY CO., INC., New York, N. Y. Published April 24, 1931.

39,674.—*Title:* BROOKS SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 16, 1931.

39,675.—*Title:* STEP IN STYLE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 20, 1931.

39,676.—*Title:* HARDY-FUT SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 16, 1931.

39,677.—*Title:* THE P & S SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 24, 1931.

39,678.—*Title:* HELTHY FUT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 16, 1931.

39,679.—*Title:* FINE AND DANDY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 25, 1931.

39,680.—*Title:* DR. LAMPERT'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 10, 1931.

39,681.—*Title:* MOLCO SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 10, 1931.

39,682.—*Title:* DR. GILBERT'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 10, 1931.

39,683.—*Title:* JENNIE MAY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 10, 1931.

39,684.—*Title:* SMART STYLES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 10, 1931.

39,685.—*Title:* THE FASHION LINE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 10, 1931.

39,686.—*Title:* ARCH LIBERATOR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 13, 1931.

39,687.—*Title:* FREEDMAN SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 22, 1931.

39,688.—*Title:* ROGERS-STEWART. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published May 15, 1931.

39,689.—*Title:* THE ECONOMY SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 10, 1931.

39,690.—*Title:* MARION SHOE CO. INC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 11, 1931.

39,691.—*Title:* THE DE LUXE LINE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 10, 1931.

39,692.—*Title:* E. Z. KUMFORT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 2, 1931.

39,693.—*Title:* BUTLER'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 3, 1931.

39,694.—*Title:* HOME BAKED. For Bread. HOME BAKING CO., Milwaukee, Wis. Published August 8, 1931.

39,695.—*Title:* HOUSPRAY. For Insecticide. THE HOUSPRAY MANUFACTURING COMPANY, Toledo, Ohio. Published July 28, 1931.

39,696.—*Title:* FANCY-DRESS FAMILY SOAP. For Soap Bars. WALTER R. KIRK, Chicago, Ill. Published August 6, 1931.

39,697.—*Title:* KRANK. For Lemon Cleansing Cream. A. J. KRANK CO., St. Paul, Minn. Published November 17, 1930.

39,698.—*Title:* HER GRACE. For Extract of True Vanilla. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published July 20, 1931.

39,699.—*Title:* DR. HARRIS H. LUNTZ'S FORMULA Q. For Preparation for Beautifying the Skin. JOSEPH LUNTZ, Brooklyn, N. Y. Published April 20, 1931.

39,700.—*Title:* THE HOSTESS PACKAGE. For Ice Cream. W. D. O'DONOGHUE, Augusta, Ga. Published May 20, 1931.

39,701.—*Title:* CRYSTAL THE ORIGINAL GENUINE PLATINUM PLATING (PLATINIZING) SALTS. For Plating (Platinizing) Salts. C. D. PECHIN, St. Petersburg, Fla. Published March 31, 1931.

39,702.—*Title:* HY-SOX HOSE AND GARTERS. For Hose and Hose Supporters. PLATT HOSIERY COMPANY, New York, N. Y. Published July 15, 1931.

39,703.—*Title:* FAMOUS AND HANDY POLISH, RADIO BRAND. For Combination Cleaner and Polish. OLIVER A. REED, INC., Plainfield, N. J. Published June 5, 1931.

39,704.—*Title:* CHILDREN'S KNITTED SPORTSWEAR. For Children's Knitted Sportswear. SACKS-SONS CARTON CO., INC., Brooklyn, N. Y. Published April 1, 1931.

39,705.—*Title:* HAND MADE CARRIAGE COVER SET. For Hand Made Carriage Cover Sets. SACKS-SONS CARTON CO., INC., Brooklyn, N. Y. Published April 1, 1931.

39,706.—*Title:* TWIN-MILKS. For Candy. SCHUTTER JOHNSON CANDY COMPANY INC., Chicago, Ill. Published April 15, 1931.

39,707.—*Title:* SORDILLO EASTER GREETINGS. For Candy. JOSEPH LOUIS SORDILLO, Baltimore, Md. Published April 16, 1931.

39,708.—*Title:* BROWNIE BAR, A FROZEN CONFECTION. For Frozen Confection Containing Fresh Yeast. THE SPRALEY COMPANY, Dayton, Ohio. Published June 1, 1931.

39,709.—*Title:* DOCTOR SUTHERLAND'S TABLETS. For Tablets for Medicinal Purposes. DR. H. H. SUTHERLAND CO., Los Angeles, Calif. Published July 16, 1931.

39,710.—*Title:* LAKE OF THE OZARKS. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published July 30, 1931.

39,711.—*Title:* SWEET CLOVER. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published July 24, 1931.

39,712.—*Title:* BRITTAIN'S. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published July 30, 1931.

39,713.—*Title:* MISSOURI GOLD. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published August 3, 1931.

39,714.—*Title:* SATIN-DUL. For Hosiery. TROJAN HOSIERY MILLS, INC., Indianapolis, Ind. Published July 1, 1931.

39,715.—*Title:* SATIN-GLO. For Hosiery. TROJAN HOSIERY MILLS, INC., Indianapolis, Ind. Published July 1, 1931.

39,716.—*Title:* SATIN-SHEEN. For Hosiery. TROJAN HOSIERY MILLS, INC., Indianapolis, Ind. Published July 1, 1931.

39,717.—*Title:* SATIN-SHEER. For Hosiery. TROJAN HOSIERY MILLS, INC., Indianapolis, Ind. Published July 1, 1931.

39,718.—*Title:* MYSTERY STENCILS WITH PAINTS AND CRAYONS, #650. For Stencils, Crayons, and Paints. THE ULLMAN MANUFACTURING COMPANY, Brooklyn, N. Y. Published May 1, 1931.

39,719.—*Title:* MYSTERY STENCILS NO. 649. For Stencils. THE ULLMAN MANUFACTURING COMPANY, Brooklyn, N. Y. Published May 1, 1931.

39,720.—*Title:* GETZUM GUN GETS EVERY WEED. For Weed Guns Consisting of Hand Tools for Piercing and Impregnating Weeds with a Poisonous Liquid, Etc. WEED DESTROYER CO., INC., Aberdeen, Wash. Published March 10, 1931.

PRINTS

REGISTERED SEPTEMBER 8, 1931

13,397.—*Title:* LIKE ALL MOTHERS MRS. RICHARD H. COBB WANTS HER CHILDREN TO HAVE THE BEST. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published August 10, 1931.

13,398.—*Title:* FANNIE HAMILTON. For Food Products and Household Appliances. DE BOTH HOME MAKERS' SCHOOLS, New York, N. Y. Published May 18, 1931.

13,399.—*Title:* COMFORT COAL. For Coal. THE EASTERBROOK COAL COMPANY, Cleveland, Ohio. Published July 30, 1931.

13,400.—*Title:* FLORIDA POWER & LIGHT COMPANY ICE DEPARTMENT. For Ice. FLORIDA POWER & LIGHT COMPANY, Miami, Coral Gables, Fort Lauderdale, Hollywood, Delray, Etc., Fla. Published March 15, 1929.

13,401.—*Title:* GENERAL LAMINATED PADLOCK NO. 50. For Padlocks. THE GENERAL LOCK CORP., Lancaster, Pa. Published May 15, 1931.

13,402.—*Title:* HY-SOX HOSE AND GARTERS. For Hose and Hose Supporters. PLATT HOSIERY COMPANY, New York, N. Y. Published July 29, 1931.

13,403.—*Title:* JANDHO'S POSTAGRAPH. For Printed Blanks. THE POSTAGRAPH COMPANY, Baltimore, Md. Published July 29, 1931.

13,404.—*Title:* S. S. S. MAKES YOU FEEL LIKE YOURSELF AGAIN. For Medicine. THE S. S. S. COMPANY, Atlanta, Ga. Published February 5, 1930.

13,405.—*Title:* WHEN YOUR FEET HURT YOU HURT ALL OVER! GET RELIEF NOW! For Pads for Treating Callouses, Corns, Bunions, Sore Heels, and Sore Toes. THE SCHOLL MFG. CO., INC., Chicago, Ill. Published January 15, 1931.

13,406.—*Title:* CORNS, PAIN GONE FOR GOOD. For Pads for Treating Callouses, Corns, Bunions, Sore Heels, and Sore Toes. THE SCHOLL MFG. CO., INC., Chicago, Ill. Published January 23, 1931.

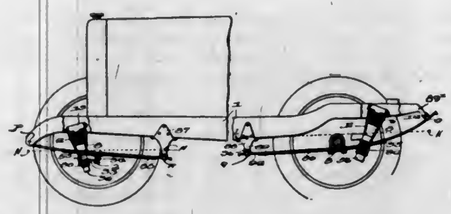
13,407.—*Title:* WHY SOME BRANDS OF SASH CORD COST MORE AND ARE WORTH MORE THAN OTHERS. For Sash Cord. SHAPLEIGH HARDWARE COMPANY, St. Louis, Mo. Published June 15, 1931.

13,408.—*Title:* A COLON CLEARED DAILY IS ESSENTIAL TO HEALTH AND VIGOR. FOR MEDICINAL PREPARATION FOR CLEARING THE CLOGGED COLON SOCIETY OF THE COLONAIDE, INCORPORATED, New York, N. Y. Published June 3, 1931.

REISSUES

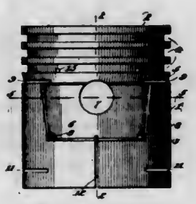
SEPTEMBER 8, 1931

18,177. VEHICLE SUSPENSION. STEPHEN LEONARD CHAUNCEY COLEMAN, Fredericton, New Brunswick, Canada, assignor to Coleman Auto Spring Suspension Company, Limited. Original No. 1,678,847, dated July 31, 1928; Serial No. 646,977, filed June 21, 1923. Application for reissue filed June 5, 1929. Serial No. 368,673. 42 Claims. (Cl. 267—30.)



1. In a vehicle suspension, the combination with a frame and running gear, of front and rear transverse springs, means for yieldably connecting said springs to the frame and running gear, and means for preventing lateral movements and excessive rolling of said frame on the running gear.

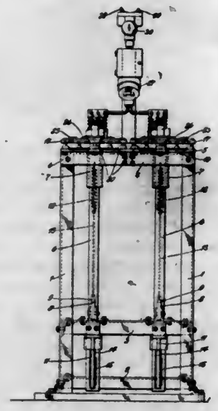
18,178. PISTON. HARRY J. HATER, Cincinnati, Ohio, assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio. Original No. 1,656,482, dated Jan. 17, 1928, Serial No. 588,473, filed Sept. 15, 1922. Application for reissue filed Apr. 28, 1928. Serial No. 274,321. 3 Claims. (Cl. 74—108.)



1. A piston comprising a head and depending skirt, said skirt having piston pin openings therein, said skirt having reliefs around said openings, said skirt having transverse slits therein, one of said transverse slits extending from a point within one relief to a point within the opposite relief, said skirt having a diagonal slit therein connecting said transverse slits and said skirt having a vertical slit therein extending from the bottom of said skirt to a point within said relief.

18,179. MACHINE FOR USE IN THE MANUFACTURE OF SHOES. FRED HUME, St. Louis, Mo., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original No. 1,693,276, dated Nov. 27, 1928, Serial No. 72,140, filed Nov. 30, 1925. Application for reissue filed Nov. 26, 1929. Serial No. 410,010. 37 Claims. (Cl. 12—12.)

1. A machine of the character described comprising a table, a movable plate supported above said table and having a recess in one edge thereof, mechanism for raising and lowering said plate, wipers supported at the sides of

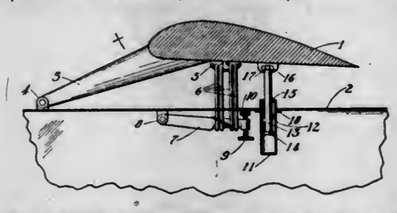


said recess for converging movement, and cams supported by said table for converging said wipers when said plate is lowered.

18,180. MANUFACTURE OF CONCRETE. MARCEL LÉVY, Geneva, Switzerland, assignor, by mesne assignments, to Prodorite S. A., Geneva, Switzerland. Original No. 1,699,705, dated Jan. 22, 1929, Serial No. 598,651, filed Nov. 2, 1922. Application for reissue filed Oct. 3, 1930. Serial No. 486,277. 4 Claims. (Cl. 106—32.)

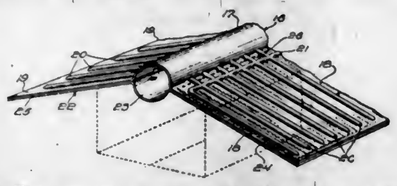
1. As a new article of manufacture, a pitch concrete having mechanical strength substantially equal to that of cement concrete, comprising a brittle pitch dried so as to remain hard at temperatures of 80° C., said concrete also containing an aggregate and a substantial portion of fine powder sufficient to form a thick pasty mass with the pitch ingredient.

18,181. ELASTICALLY MOUNTED SELF ADJUSTING AIRFOIL. WILLIAM STELZER, Chicago, Ill., assignor to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Original No. 1,725,222, dated Aug. 20, 1929, Serial No. 292,358, filed July 13, 1928. Application for reissue filed Aug. 22, 1930. Serial No. 477,152. 10 Claims. (Cl. 244—29.)



1. In an airplane, in combination, a fuselage, an airfoil, means for connecting said airfoil to a transverse pivotal axis that is in fixed relation to the fuselage and substantially in advance of the airfoil, elastic means associating with the fuselage and the said airfoil and tending to increase the angle of incidence of the latter, means for adjustment of the tension of the elastic members, and a damper interposed between the fuselage and the airfoil to prevent vibration of the latter.

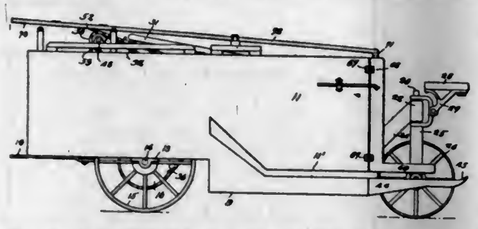
18,182. COOLING UNIT FOR REFRIGERATING SYSTEMS. MORRIS F. BOOTH, Salem, Ohio, assignor to Mullins Manufacturing Corporation, Salem, Ohio, a Corporation of New York. Original No. 1,798,652, dated Mar. 31, 1931, Serial No. 428,021, filed Feb. 13, 1930. Application for reissue filed July 20, 1931. Serial No. 551,816. 23 Claims. (Cl. 62—126.)



21. The process of making an evaporator from two sheets of metal, which consists in first stamping the sheets of metal to form embossed portions at predetermined points in each sheet, an embossed portion in one sheet consisting of a substantially half cylindrical depression adapted to cooperate with the other sheet to form a header portion, forming laterally extending parallel embossed portions in one sheet, said embossed portions opening at one end into said header portion and terminating near the opposite edge of said sheet, superimposing said sheets so that the header portions and flat walls extending therefrom register, welding the sheets together around the edges and on lines between the embossed portion and up to points closely adjacent the header portions, and then bending the sheets thus secured together to form two side walls and a bottom wall of a sharp freezing chamber.

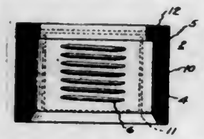
18,183. BEAN HARVESTER. ROBERT LEE PARK, Darden, Tenn. Original No. 1,776,129, dated Sept. 16, 1930, Serial No. 67,640, filed Nov. 7, 1925. Application for reissue filed Jan. 30, 1931. Serial No. 512,326. 7 claims. (Cl. 56—126.)

1. In a machine of the class described, a wheel supported frame, vertically positioned extension members hinged upon the sides of the frame, at the forward portions thereof, outwardly extending wings carried by the lower portions of the extension members, a link pivoted to one of these members and extending inwardly to the center line of the



machine, a lever operable from the rear portion of the machine and extending forwardly to a point between the wings, and a device for connecting the lever with points on the link spaced from the inner end thereof.

18,184. THREAD PROTECTOR. ERNEST R. BROWN and PORTER S. BROWN, Wilkinsburg, Pa. Original No. 1,708,657, dated Apr. 9, 1929, Serial No. 230,489, filed Nov. 2, 1927. Application for reissue filed Mar. 18, 1931. Serial No. 523,608. 12 Claims. (Cl. 137—91.)



6. A thread protector comprising a sheet metal reinforcing and stiffening shell having a flange at one end adapted to overlie the end of the member to be protected and having slits extending inwardly from its other end to form independently movable fingers and a rubber-like cushion enclosing the reinforcing shell on both sides thereof.

DESIGNS

SEPTEMBER 8, 1931

85,024. LANTERN. JOSEPH H. ALLEN, Chicago, Ill., assignor to Inland Glass Works, Inc., Chicago, Ill. Filed May 19, 1931. Serial No. 39,896. Term of patent 14 years.





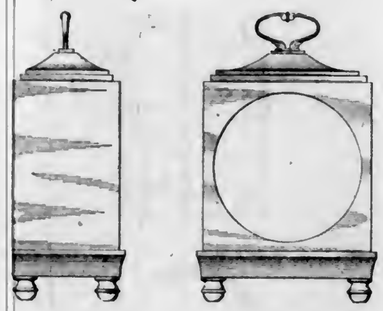
The ornamental design for a lantern as shown.

85,025. SHOE BUCKLE. ERIC YOUNGBERG, Providence, R. I., assignor to The Reynolds Company, Providence, R. I., a Corporation of Rhode Island. Filed Nov. 15, 1930. Serial No. 37,674. Term of patent 7 years.



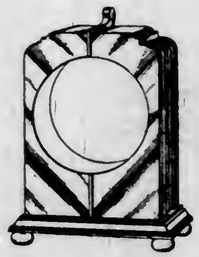
The ornamental design for a shoe buckle substantially as shown.

85,026. CLOCK CASE. ROBERT D. BUDLONG, Chicago, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed June 17, 1931. Serial No. 40,243. Term of patent 14 years.



The ornamental design for a clock case, as shown.

85,027. CLOCK CASE. ROBERT D. BUDLONG, Chicago, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed June 29, 1931. Serial No. 40,359. Term of patent 14 years.



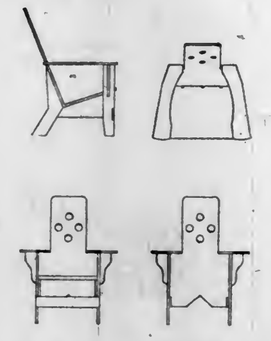
The ornamental design for a clock case, as shown.

85,028. DIAL FOR WATCHES AND CLOCKS. ARDE BULOVA, New York, N. Y., assignor to Bulova Watch Company, Inc., New York, N. Y., a Corporation of New York. Filed June 25, 1931. Serial No. 40,324. Term of patent 3½ years.



The ornamental design for a dial for watches and clocks, as shown and described.

85,029. CHAIR. CLOVIS E. CLARKE and CARLYSLE H. CLARKE, Richmond, Va. Filed May 25, 1931. Serial No. 39,968. Term of patent 14 years.



The ornamental design for a chair, as shown.

85,030. AUTOMATIC INKWELL. JAN P. CLARY, Hartford, Conn. Filed May 6, 1931. Serial No. 39,733. Term of patent 14 years.



The ornamental design for an automatic inkwell, as shown.

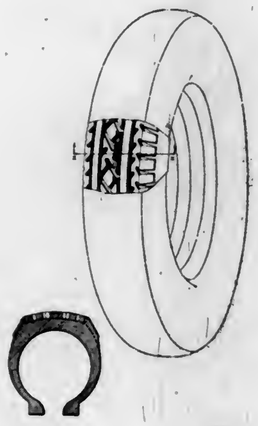
85,031. BADGE. STEPHEN JOHN CONNOLLY, Beverly, Mass., assignor to The Benevolent and Protective Order of Elks of the United States of America, Chicago, Ill., a Corporation of District of Columbia. Filed Jan. 31, 1931. Serial No. 38,508. Term of patent 14 years.





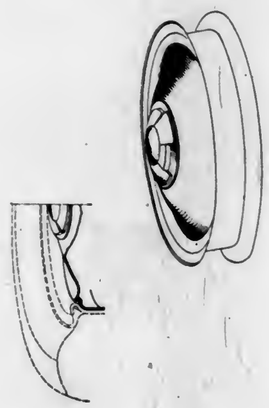
The ornamental design for a badge as shown and described.

85,032. TIRE. BURGESS DARROW, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 27, 1931. Serial No. 38,848. Term of patent 14 years.



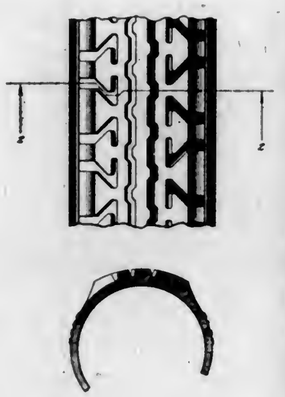
The ornamental design for a tire, as shown.

85,033. WHEEL. TALMON A. DAVENPORT, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 13, 1930. Serial No. 35,630. Term of patent 14 years.



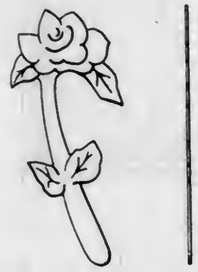
The ornamental design for a wheel as shown.

85,034. TIRE. MYRON A. DREHER, Detroit, Mich., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed Mar. 28, 1929. Serial No. 30,661. Term of patent 3½ years.



The ornamental design for a tire as shown.

85,035. KEY HOLDER. HENRY V. EKSTEDT, East St. Louis, Ill. Filed June 1, 1931. Serial No. 40,038. Term of patent 14 years.



The ornamental design for a key holder substantially as shown and described.

85,036. CRIB. ABRAHAM G. FELDMAN, Chicago, Ill. Filed June 13, 1931. Serial No. 40,182. Term of patent 3½ years.



The ornamental design for a crib, as shown.

85,037. CRIB. ABRAHAM G. FELDMAN, Chicago, Ill. Filed June 13, 1931. Serial No. 40,183. Term of patent 3½ years.



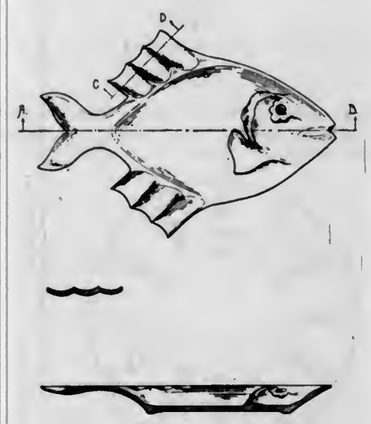
The ornamental design for a crib, aa shown.

85,038. CRIB. ABRAHAM G. FELDMAN, Chicago, Ill. Filed June 13, 1931. Serial No. 40,184. Term of patent 3½ years.



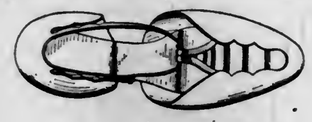
The ornamental design for a crib, as shown.

85,039. ASH TRAY. TRUMAN STEVES FOWLER, Boothbay Harbor, Me. Filed July 3, 1931. Serial No. 40,410. Term of patent 7 years.



The ornamental design for an ash tray, as shown and described.

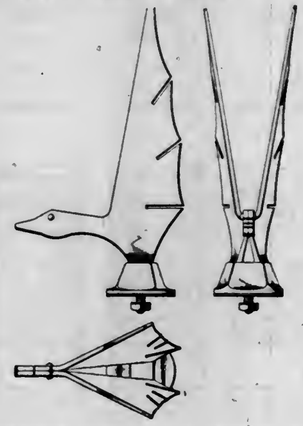
85,040. SHOE. WILLIAM GOLDSTEIN, New York, N. Y. Filed July 2, 1931. Serial No. 40,401. Term of patent 3½ years.





The ornamental design for a shoe, as shown.

85,041. RADIATOR ORNAMENT. VEROIL O. GREENE, Kansas City, Mo. Filed Apr. 29, 1931. Serial No. 39,657. Term of patent 3½ years.



The ornamental design for a radiator ornament, as shown.

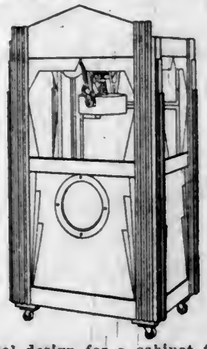
85,042. HUMIDOR. SAMUEL E. GUINN, Johnson City, Tenn. Filed Oct. 30, 1930. Serial No. 37,448. Term of patent 3½ years.





The ornamental design for a humidor, as shown.

85,043. CABINET FOR POP CORN MACHINES. JAMES I. HOLCOMB, Indianapolis, Ind., assignor to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind., a Corporation. Filed June 15, 1931. Serial No. 40,221. Term of patent 7 years.



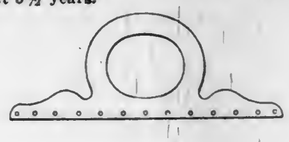
The ornamental design for a cabinet for pop corn machine, as shown.

85,044. BOTTLE. CHAUNCEY W. B. HUGHES, Marion, Ind. Filed July 11, 1931. Serial No. 40,504. Term of patent 14 years.



The ornamental design for a bottle, as shown.

85,045. BAG HANDLE. PEARL INGRAM, Los Angeles, Calif. Filed Dec. 10, 1930. Serial No. 37,936. Term of patent 3½ years.



The ornamental design for a bag handle as shown,

85,046. DRESS. FRANCES A. JACOBS, Chicago, Ill., assignor to The Sterling Company, Chicago, Ill., a Corporation of West Virginia. Filed July 8, 1931. Serial No. 40,470. Term of patent 3½ years.



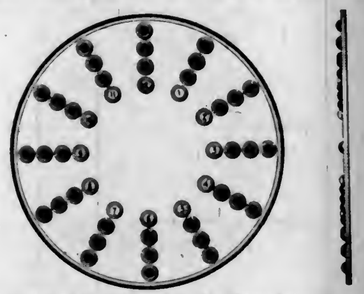
The ornamental design for a dress shown and described.

85,047. FLORAL BASKET. MORRIS KANOFSKY, Chicago, Ill., assignor to Jack Stein, Chicago, Ill. Filed July 10, 1931. Serial No. 40,484. Term of patent 14 years.



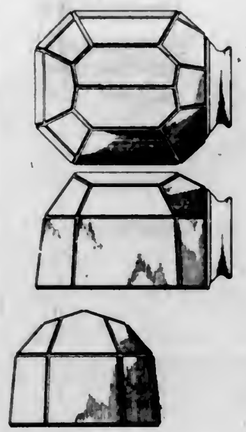
The ornamental design for a floral basket, as shown and described.

85,048. ANNUNCIATOR OR SIMILAR ARTICLE. HAROLD R. KIRKLAND, South Orange, N. J. Filed Sept. 5, 1930. Serial No. 36,880. Term of patent 7 years.



The ornamental design for an annunciator or similar article, substantially as shown.

85,049. LIGHT SHADE OR SIMILAR ARTICLE. NICHOLAS KOPP, Pittsburgh, Pa., assignor to Kopp Glass, Incorporated, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 22, 1930. Serial No. 38,071. Term of patent 7 years.



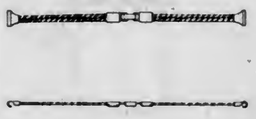
The ornamental design for a light shade or similar article, as shown.

85,050. TEAPOT OR SIMILAR ARTICLE. WALTER LINDLEY, Stoke-on-Trent, England, assignor to Herman C. Kupper, Inc., New York, N. Y., a Corporation of New York. Filed July 6, 1931. Serial No. 40,416. Term of patent 7 years.



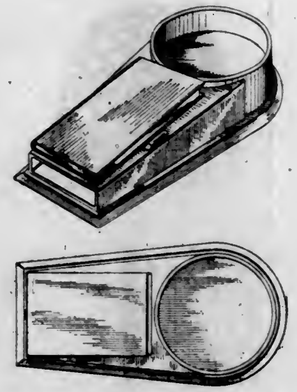
The ornamental design for a teapot or similar article, as shown.

85,051. WATCH BRACELET. CHARLES A. MEALY, West Barrington, R. I., assignor to The Hadley Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Oct. 23, 1930. Serial No. 37,357. Term of patent 3½ years.



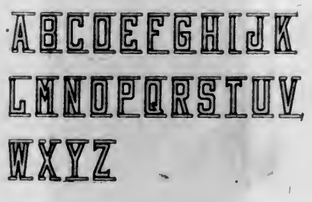
The ornamental design for a watch bracelet as shown.

85,052. TELEPHONE STAND. GUSTAVE M. MINTON, New York, N. Y. Filed Oct. 30, 1930. Serial No. 37,461. Term of patent 7 years.



The ornamental design for a telephone stand as shown.

85,053. FONT OF TYPE. EDWARD J. O'DONNELL, Lowell, Mass. Filed Feb. 16, 1931. Serial No. 38,673. Term of patent 14 years.



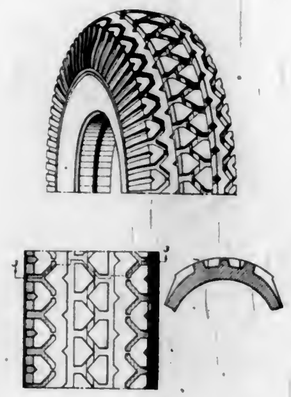
The ornamental design for a font of type, substantially as shown.

85,054. FOUNTAIN PEN HOLDER. JOSEPH B. PLATT, New York, N. Y. Filed Feb. 19, 1931. Serial No. 38,727. Term of patent 3½ years.



The ornamental design for a fountain pen holder, substantially as shown and described.

85,055. TIRE. HAROLD D. REICHARD, Newark, Ohio, assignor to Barnsdall Corporation, Tulsa, Okla., a Corporation of Delaware. Filed June 3, 1931. Serial No. 40,068. Term of patent 7 years.



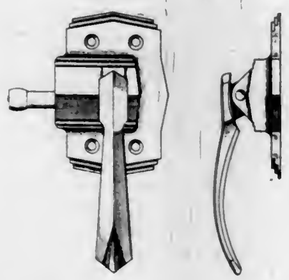
The ornamental design for a tire, as shown.

85,056. TEXTILE FABRIC. ALOIS A. RITTER, Racine, Wis., asignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Dec. 24, 1928. Serial No. 29,401. Term of patent 7 years.



The ornamental design for textile fabric, as shown.

85,057. LATCH. GORDON E. ROEDDING, Grand Rapids, Mich., assignor to Grand Rapids Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed May 27, 1931. Serial No. 40,004. Term of patent 3½ years.



The ornamental design for a latch substantially as shown.

85,058. HINGE. GORDON E. ROEDDING, Grand Rapids, Mich., assignor to Grand Rapids Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed May 27, 1931. Serial No. 40,005. Term of patent 3½ years.



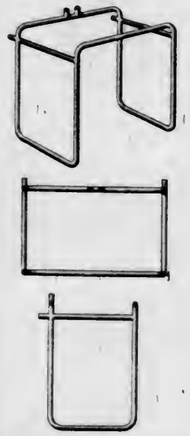
The ornamental design for a hinge, substantially as shown.

85,059. TEXTILE FABRIC. HERBERT S. ROYLE, Philadelphia, Pa. Filed Aug. 16, 1930. Serial No. 36,687. Term of patent 3½ years.



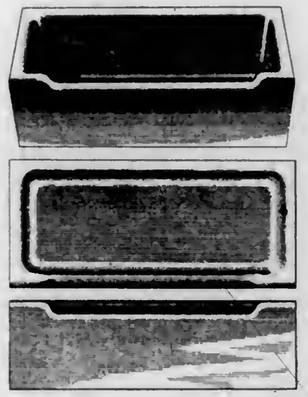
The ornamental design for textile fabric as shown.

85,060. SUPPORT FOR LAVATORY BASINS OR THE LIKE. GEORGE SAKIER, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed June 9, 1930. Serial No. 35,990. Term of patent 14 years.



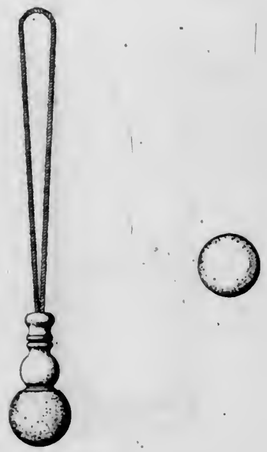
The ornamental design for a support for lavatory basins or the like, as shown.

85,061. BATHTUB. GEORGE SAKIER, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 6, 1930. Serial No. 37,578. Term of patent 14 years.



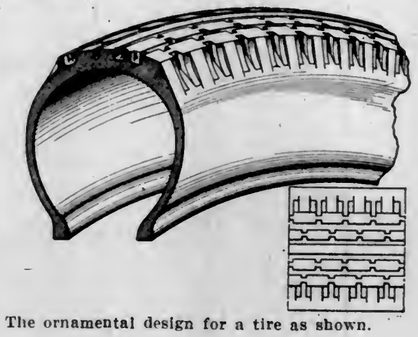
The ornamental design for a bath tub, as shown.

85,062. SHADE TASSEL. CHARLES P. SCHLEGEL, Rochester, N. Y., assignor to The Schlegel Manufacturing Co., Rochester, N. Y., a Corporation of New York. Filed July 1, 1929. Serial No. 31,924. Term of patent 14 years.



The ornamental design for a shade tassel, as shown.

85,063. TIRE. CHERI M. SLOMAN, Detroit, Mich., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed Nov. 21, 1928. Serial No. 28,961. Term of patent 7 years.



The ornamental design for a tire as shown.

85,064. BOWL OR SIMILAR ARTICLE. EUGENE STAHL, Moundsville, W. Va., assignor to Fostoria Glass Company, Moundsville, W. Va., a Corporation of West Virginia. Filed Jan. 21, 1931. Serial No. 38,407. Term of patent 7 years.



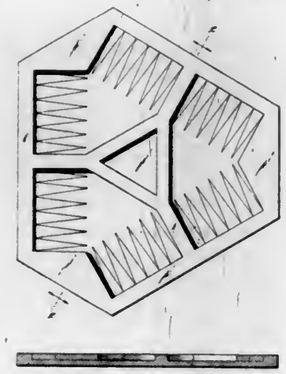
The ornamental design for a bowl or similar article, as shown.

85,065. CANDLESTICK OR SIMILAR ARTICLE. EUGENE STAHL, Moundsville, W. Va., assignor to Fostoria Glass Company, Moundsville, W. Va., a Corporation of West Virginia. Filed Jan. 21, 1931. Serial No. 38,408. Term of patent 7 years.



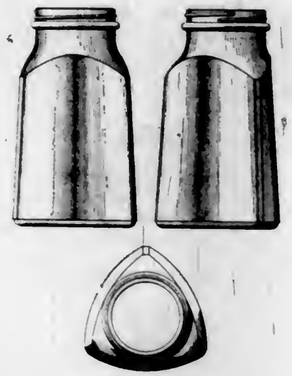
The ornamental design for a candlestick or similar article, as shown.

85,066. GAME BOARD. BERNHARD STERNAU, Islip Terrace, N. Y. Filed May 14, 1931. Serial No. 39,847. Term of patent 3½ years.



The ornamental design for a game board, as shown.

85,067. GLASS JAR. WALTER R. STERRETT, Muncie, Ind., assignor to Ball Brothers Company, a Corporation of Indiana. Filed June 11, 1931. Serial No. 40,168. Term of patent 3½ years.



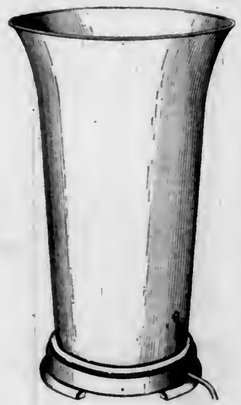
The ornamental design for a glass jar, as shown.

85,068. BOTTLE CAP OR THE LIKE. JOHN V. TARLETON, Jackson Heights, N. Y., assignor to Pond's Extract Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 37,036. Term of patent 14 years.



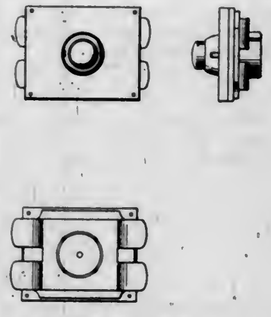
The ornamental design for a bottle cap or the like, as shown.

85,069. LAMP. TOWNER K. WEBSTER, Jr., Winnetka, Ill. Filed May 15, 1931. Serial No. 39,859. Term of patent 14 years.



The ornamental design for a lamp, as shown.

85,070. FASTENER FOR CONTAINERS. HARRY ALPHONSE WIDMER, London, England, assignor to Tuck-Tite Lock and Fastener Company Limited, London, England. Filed May 6, 1931, Serial No. 39,735, and in Great Britain Apr. 27, 1931. Term of patent 14 years.



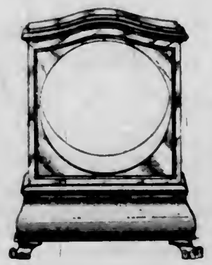
The ornamental design for a fastener for containers substantially as shown.

85,071. CLOCK CASE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed June 29, 1931. Serial No. 40,366. Term of patent 14 years.



The ornamental design for a clock case, as shown.

85,072. CLOCK CASE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed June 29, 1931. Serial No. 40,367. Term of patent 14 years.



The ornamental design for a clock case, as shown.

85,073. CIGAR AND CIGARETTE LIGHTER. EVERETT WORTHINGTON, Chicago, Ill., assignor to Leroy Eschner, Chicago, Ill. Filed July 10, 1931. Serial No. 40,483. Term of patent 3½ years.



The ornamental design for a cigar and cigarette lighter, as shown.

85,074. RADIOCABINET. EDWARD WUENN, Chicago, Ill. Filed Feb. 15, 1930. Serial No. 34,568. Term of patent 3½ years.

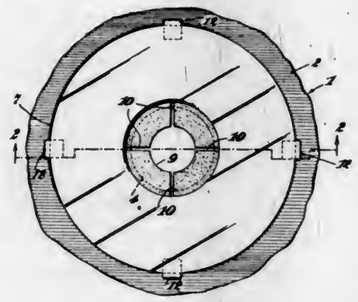


The ornamental design for a radiocabinet substantially as shown.

PATENTS

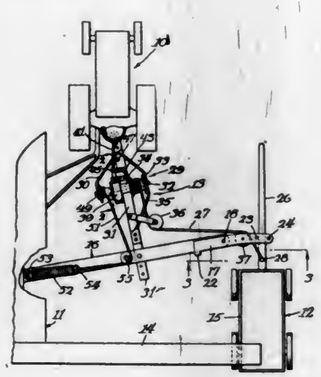
GRANTED SEPTEMBER 8, 1931

1,821,916. PIN HOLDER FOR PHONOGRAPH RECORDS. ARTHUR M. ACHESON, Dobbs Ferry, and GEORGE RAMSEY, Brooklyn, N. Y., assignors to Durium Products Corporation, New York, N. Y., a Corporation of Delaware. Filed July 24, 1930. Serial No. 470,386. 7 Claims. (Cl. 274—42.)



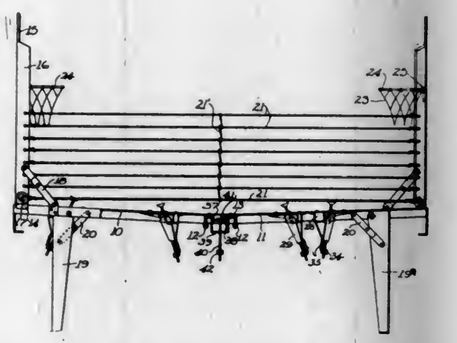
1. A phonograph record comprising a body portion provided with a center opening; and a resilient sheet member secured to said body portion to comprise a laminated structure, with a pin opening in said member having an axis substantially coincident with the axis of the center opening in the body of the record, the opening in said resilient member being slightly smaller than the opening in the body of said record.

1,821,917. WAGON HITCH. HIRAM L. BAKER and MERVIN R. BAKER, Leland, Ill. Filed Oct. 17, 1930. Serial No. 489,246. 8 Claims. (Cl. 280—33.44.)



1. In a device of the class described, a wagon hitch bar, a pulley on one end thereof, a drawbar having its rear end connected to said hitch bar, differential winding mechanism mounted on said drawbar and comprising a brake drum and a pair of winding drums of different diameters, a traction cable having one end wound in one direction on one of said winding drums and having its other end extending about said pulley, a cable wound in an opposite direction about the other winding drum, and a spring having one end anchored and its other end connected to said last-named cable, and means for holding said brake drum in adjusted position.

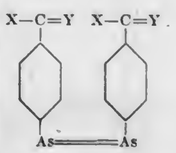
1,821,918. BASKET BALL GAME. ALOIS STANLEY BISHOP, Kohler, Wis. Filed Oct. 2, 1929. Serial No. 396,730. 9 Claims. (Cl. 273—85.)



3. In a game apparatus, the combination of a court floor having a recess therein adapted to receive a ball, a bracket fixedly carried below said floor, a spring-urged plunger disposed below said recess and slidably mounted in said bracket for impelling said ball, and a guide member having a pivotal mounting on said bracket to depend therefrom and slidably receiving said plunger therein, said guide member being swingable about said bracket for adjusting the inclination of said plunger and thereby varying the trajectory of said ball.

1,821,919. PROCESS FOR PRODUCING AN ARSENOBENZENE AND THE PRODUCT THEREOF. AUGUST ALBERT, Munich, Germany, assignor to Winthrop Chemical Company, New York, N. Y., a Corporation of New York. Filed Sept. 24, 1926, Serial No. 137,625, and in Germany Oct. 3, 1925. 8 Claims. (Cl. 260—15.)

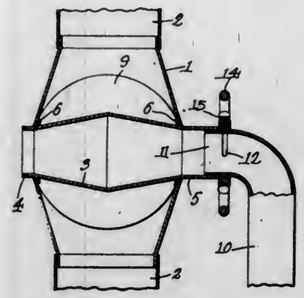
5. As new products, arseno benzenes corresponding to the general formula:



wherein X represents hydrogen or an alkyl group, Y represents oxygen or the group :=N.NH.CO.NH_2 and the benzene nuclei may be substituted, being crystallized, yellow colored and substantially pure products.

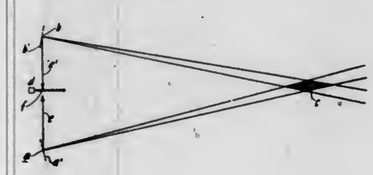
1,821,920. STOVEPIPE HEATER. OREN ANDREW, Watkins, N. Y. Filed Oct. 8, 1927. Serial No. 224,941. 2 Claims. (Cl. 257—171.)

2. In a device of the class described, a body of greatest diameter intermediate its ends and tapered toward its ends, and a flue extended through the body transversely and located at the place where the body is of greatest diameter, the flue being of greatest diameter at a point intermediate its ends and tapering toward its ends within



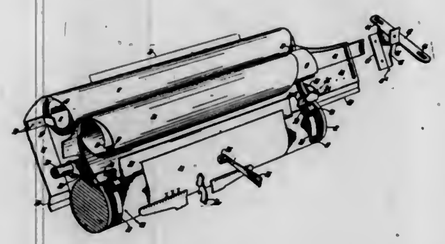
the body, the flue being provided with circumferential flanges which cooperate with oppositely disposed portions of the body.

1,821,921. RADIO SIGNALING SYSTEM. RAYMOND DORRINGTON BANGAY, Brentwood, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 2, 1925, Serial No. 20,033, and in Great Britain Apr. 9, 1924. 5 Claims. (Cl. 250—11.)



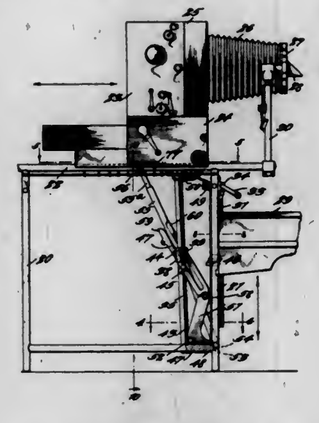
2. A transmission system having a sender connected by land wires to separated directional radiating antennæ which are convergently focused upon a common receiving point.

1,821,922. TYPEWRITING MACHINE. FRED BECKER, Buffalo, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 14, 1927. Serial No. 233,057. 9 Claims. (Cl. 197—128.)



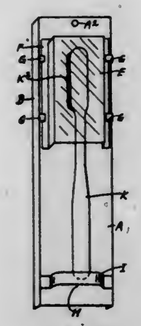
9. A paper-web container mounted upon the platen-carriage of a typewriting machine and including a pair of tubular housings mounted one forwardly of the other over the platen, one tube thereof being adapted to enclose a rolled-up web of paper to be fed around the platen, and the other tube being adapted to receive the same web to be rolled up therein by the sheet-advancing action of the platen, the planes of the ends of the tubes being inclined to the axes thereof and converging forwardly, to expose the side edges of the web rolled up in one housing and to afford a finger-hold upon the rolled-up web in the other housing.

1,821,923. AUTOMATIC FOCUSING DEVICE FOR PHOTOGRAPHING APPARATUS. GEORGE C. BEIDLER, Rochester, N. Y. Filed Feb. 2, 1927. Serial No. 165,416. 5 Claims. (Cl. 88—24.)



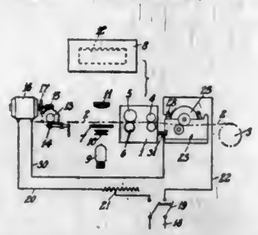
1. In a photographing apparatus, a light projecting means, a copy holder and an exposing chamber, means for moving the copy holder with relation to the light projecting means, a bell crank lever pivotally mounted in operative relation to the copy holder, a lever oscillatively mounted on one arm of the bell crank lever and pivotally connected to the exposing chamber, means moved by the copy holder for imparting motion to the lever, and auxiliary means associated therewith for operating the bell crank lever.

1,821,924. TOOTHBRUSH HOLDER. ALBERT MARCELL BERNIER, St. Paul, Minn. Filed Jan. 9, 1929. Serial No. 331,330. 4 Claims. (Cl. 206—15.1.)



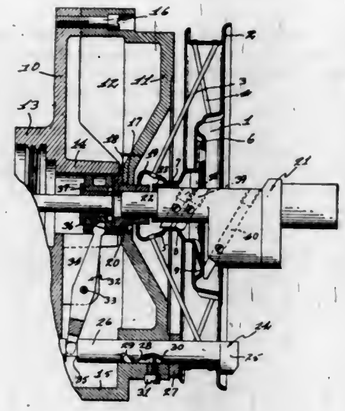
1. A brush holder of the class described comprising an elongated normally upright main channel member and means provided for retaining same in vertical position with its web in spaced relation to a wall, the upper part of said web provided with a group of apertures, an upright casing on the upper part of said web with a wall in spaced relation to said apertured part of the channel web, said casing having a downward opening, to receive the bristle part of a brush inserted upwardly, tooth-brush handle engaging means on said main member in spaced relation below said apertured web part.

1,821,925. METHOD AND MEANS FOR CONTROLLING THE MOVEMENT OF A TAPE. WILFRED T. BIRDSALL, Montclair, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1926. Serial No. 93,979. 11 Claims. (Cl. 178—42.)



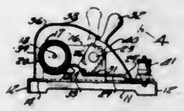
1. In combination, a ticker, a tape-moving device for feeding a tape ejected from said ticker through a projection field, an electric motor to operate said device, and means to supply energy to said motor in small increments and in proportion to the amount of the tape to be moved thereby.

1,821,926. WORK CHUCK. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed May 23, 1927. Serial No. 193,693. 2 Claims. (Cl. 77—62.)



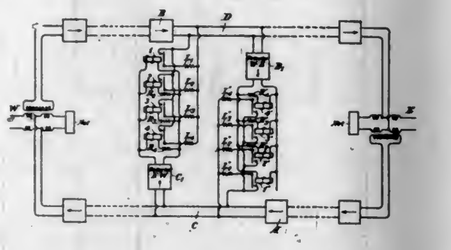
1. In a work chuck, the combination with a head including a body portion and a cover cooperating with the body to form a chamber, of a bushing carried by the cover and having a portion engageable in an aperture formed in the body portion for centering the cover relative to the body portion and having another portion engageable with a cutter holder and forming a pilot therefor, and means for clamping the work to the head including members arranged within the chamber aforesaid.

1,821,927. COMBINED RHEOSTAT AND SWITCH. LOUIS CARUSO, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed May 20, 1926. Serial No. 110,494. 7 Claims. (Cl. 201—62.)



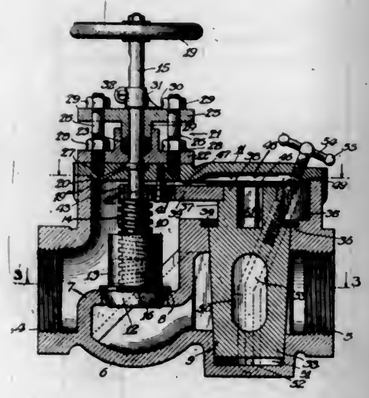
7. In a combined rheostat and switch, a resistance coil, a rod, a slider movable therealong and movable on the rod, a spring plate, a contact on the slider, the slider having such configuration that the spring plate holds the contact against the coil when the slider is moved along the rod in one of its positions and holds the contact away from the coil when the slider is rocked to its other position.

1,821,928. TELEPHONE ECHO SUPPRESSOR. ALVA B. CLARK, Wyoming, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 24, 1928. Serial No. 301,867. 9 Claims. (Cl. 179—170.)



2. In a telephone signaling system, an echo suppressor comprising a voice-operated detector unit, a plurality of control circuits in the output of the unit, and a plurality of parallel resistance shunts each controlled by one of said circuits.

1,821,929. VALVE. ASA F. CORNNER and GEORGE W. K. KING, Coffeyville, Kans., assignors of one-sixth to Plumus P. Haag, Coffeyville, Kans., seven-twelfths to Roy T. Osborn, New York, N. Y., one-sixth to said Cornner, and one-twelfth to said King. Filed May 14, 1926. Serial No. 108,993. 2 Claims. (Cl. 277—31.)



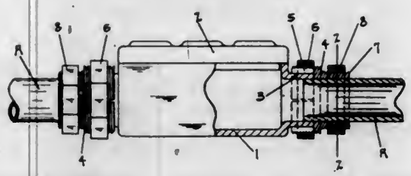
1. In a device of the class described, a main casting having inlet and outlet ports and reciprocating and rotary valve seats intermediate said ports, a reciprocating valve cooperating with the first mentioned seat and a rotary valve with the second, a cover plate, a rotary stem mounted in the cover plate and having a threaded connection with the reciprocating valve, gearing intermediate said stem and the rotary valve for operating the latter, an auxiliary cover plate adapted to replace the first mentioned cover plate, a rotary stem mounted therein having a non-cylindrical end extending beneath said plate, the turning plug having a cavity in its upper end to receive the lower end of the last mentioned stem whereby the rotary valve may be operated.

1,821,930. CINEMATOGRAPHIC PROJECTOR. MAURICE COUADE, Paris, France. Filed July 16, 1927, Serial No. 206,303, and in France July 17, 1926. 3 Claims. (Cl. 88—18.4.)



1. In a cinematographic projector, a film guide having an opening, a member having a claw to operate in said opening and to be projected through and withdrawn from a film, said member being mounted for longitudinal reciprocating movement and also for transverse reciprocating movement and being provided with a transverse slot, a lever mounted for oscillating movement and on which the first named member is slidably mounted, said lever having a cam opening and a driven revoluble element having a pin member operating in said cam opening on cam surfaces presented by the downward wall of said opening, said revoluble element also having a circular projection arranged in said cam opening and forming a stop to limit transverse movements of the oscillating lever, said projection being provided with an eccentrically arranged stud operating in the transverse slot of the claw member.

1,821,931. CONDUIT FITTING. JOHN WILLIAM COX, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Mar. 27, 1925. Serial No. 18,801. 1 Claim. (Cl. 247—25.)

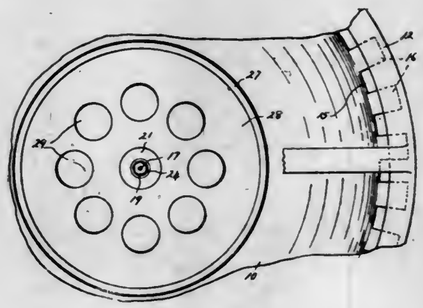


In a conduit fitting, the combination of a body having a threadless conduit extension; a coupling comprising a sleeve having threads extending from each end, the internal diameter of said sleeve at one end being smaller than the internal diameter of the sleeve at the opposite end; slits extending from each end, one end of the coupling extending over the threadless conduit extension; and clamping rings screwed from each end adapted to contract the ends of the coupling, one end into clamping engagement with the extension and the opposite end into clamping engagement with an inserted conduit of a diameter insertable into the extension.

1,821,932. WATERPROOFING COMPOSITION AND METHOD OF PREPARING SAME. ORVILLE E. CUSHMAN and BRUCE B. FARRINGTON, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 225,018. 11 Claims. (Cl. 134—13.)

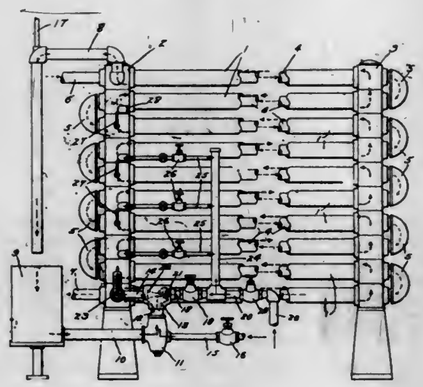
1. The process of making waterproofing compositions comprising plasticizing aluminum palmitate in a mineral oil, heating the resulting mixture with a wax to produce a plastic mass and then incorporating a petroleum thinner in said mass.

1,821,933. SOUND REGENERATING APPARATUS. REX C. DARNELL, Royal Oak, Mich., assignor of one-third to Harold B. Putnam, Detroit, Mich., and one-third to Frank L. Munson, Warren, Mich. Filed Dec. 28, 1925. Serial No. 77,946. 14 Claims. (Cl. 181—31.)



1. In an acoustical device, a tympanum support, a tympanum and spaced peripheral projections on said tympanum and means for rigidly connecting the ends of said projections to said support, the total circumferential width of said projections occupying fifty percent or less of the effective outside periphery of said tympanum.

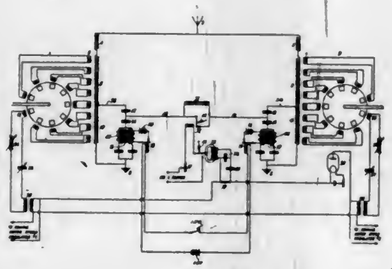
1,821,934. HEAT INTERCHANGER. HARVEY FELDMEIER, Little Falls, N. Y., assignor, by mesne assignments, to Cherry-Burrell Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 27, 1926. Serial No. 157,126. 20 Claims. (Cl. 257—247.)



1. A heat interchanger comprising a conduit having a plurality of stretches of tubes connected in series and draining by gravity towards one end of the series, each tube having therein a smaller tube in spaced relation to its walls, the smaller tubes being also connected in series, whereby separate fluids may be circulated through the

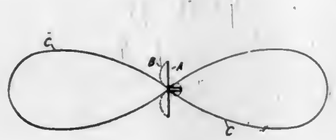
inner and outer tubes, inlet and outlet connections to the upper and lower ends respectively of one of said tubes for circulating downwardly therethrough a fluid to be treated, means for circulating a heat transfer fluid upwardly through the other of said tubes, and means for admitting to said heat transfer fluid, at a selected point in its circulation through said tubes, further heat transfer fluid so as to obtain the desired temperature of the said circulating heat transfer fluid in different stretches of the tubes.

1,821,935. SYSTEM FOR PARALLEL OPERATION OF ALTERNATORS. JAMES L. FINCH, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 16, 1925. Serial No. 9,537. 25 Claims. (Cl. 171—118.)



1. The combination of a plurality of alternators in parallel, a tie circuit between said alternators, means in said tie circuit for damping hunting oscillations in said alternators and means operated by said alternators to control said damping means.

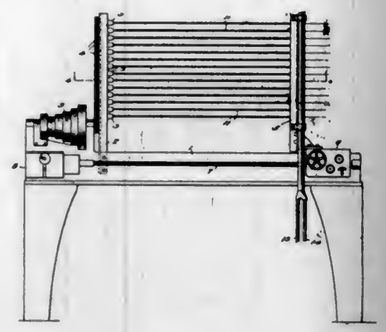
1,821,936. WIRELESS TELEGRAPH AND TELEPHONE AERIAL. CHARLES SAMUEL FRANKLIN, Buckhurst Hill, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 31, 1925, Serial No. 47,232, and in Great Britain Aug. 5, 1924. Renewed May 5, 1930. 23 Claims. (Cl. 250—11.)

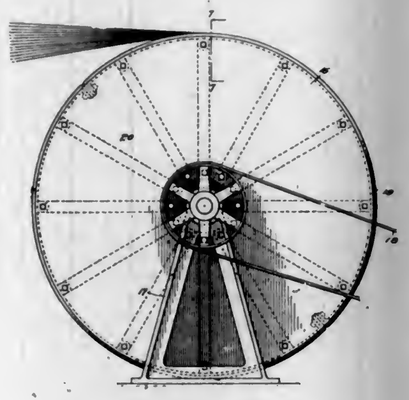


1. In a wireless system for transmission or reception, an antenna electrically long in comparison with the wave length employed and means integral with the antenna to suppress radiation from alternate half wave length portions of the antenna.

1,821,937. APPARATUS FOR SPINNING GLASS FILAMENTS. PAUL O. E. FRIEDRICH, Millville, N. J., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed Jan. 25, 1927. Serial No. 163,388. 7 Claims. (Cl. 49—17.)

1. In a glass spinning machine, the combination with a mechanism comprising a pair of spaced upright headers, a plurality of glass rods supported by one of said headers, means on said other header for rotating said rods at substantially the same speed, means on one of said headers and movable therewith for uniformly heating said rods and a spinning wheel for drawing glass threads from each of





said rods, said wheel being covered on its cylindrical face with a fabric whereby the glass threads may be caused to adhere thereto.

1,821,938. NEW AZO DYESTUFFS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, and EUGEN RIMELE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 30, 1927, Serial No. 223,236, and in Germany Oct. 26, 1926. 6 Claims. (Cl. 260—12A2.)

1. As new products, heavy metal compounds of the azo-dyestuffs obtainable from a diazocompound of a 2-aminobenzene-1-carboxylic acid sulfonamide and any coupling component, which products in the form of their dried and pulverized alkali metal salts are dark powders soluble in water, dye wool various fast shades, and yield upon treatment with stannous chloride and hydrochloric acid a 2-aminobenzene-1-carboxylic acid sulfonamide, an amine and a heavy metal chloride.

1,821,939. SHOE STIFFENER AND METHOD OF MAKING THE SAME. MAURICE GODFREY HILL and THOMAS HAMER BRISTOW, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 20, 1927, Serial No. 220,801, and in Great Britain Oct. 29, 1926. 2 Claims. (Cl. 91—68.)

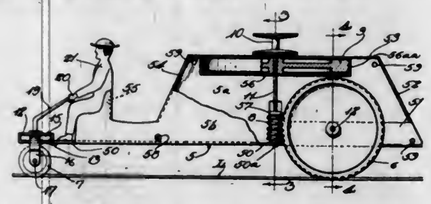
1. A stiffener for uppers of boots and shoes adapted to be softened by heat and conformed to the last at the same time as is the upper, said stiffener consisting of absorbent

sheet material impregnated with a mixture comprising a large amount of thermoplastic substance and an amount of finely divided vulcanized rubber so small as to have



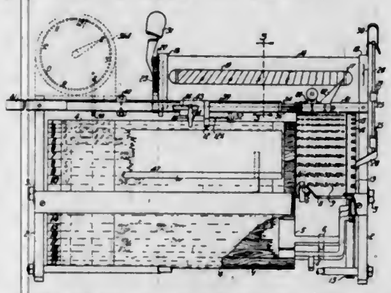
substantially no effect upon the thermoplasticity of the stiffener but sufficient to make the stiffener more resilient than it otherwise would be.

1,821,940. TRAVELING WHEELED GYROSCOPIC TOY. WILLIAM HINSEN, Cat Spring, Tex. Filed July 22, 1927. Serial No. 207,806. 5 Claims. (Cl. 46—45.)



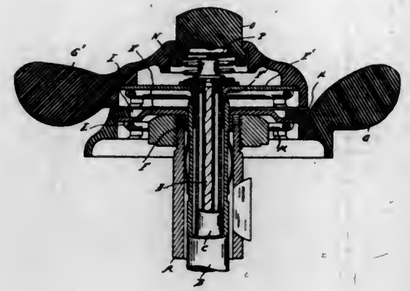
4. In a gyroscopic machine, the combination of a hollow body, two supporting wheels journalled thereto, one of these wheels being in front of the other, one of these wheels constituting a worm gear wheel, a worm meshing with the worm gear wheel within said hollow body, a gyroscope journalled in said hollow body, means outside of the hollow body to impart rotary motion to the gyroscope, and a shaft directly connecting the gyroscope to said worm.

1,821,941. MECHANISM FOR THE MECHANICAL COMPUTATION AND THE RECORDING OF LABOR COSTS. PERCY ROBERT LESLIE, Essendon, Victoria, Australia. Filed Aug. 23, 1928, Serial No. 301,548, and in Australia Aug. 26, 1927. 8 Claims. (Cl. 235—87.)



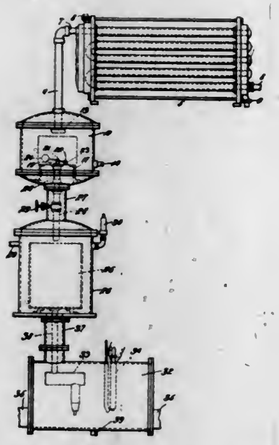
1. In mechanism for the mechanical computation and the recording of labor costs, the combination of an entry blank, means for setting that portion of said entry blank allotted to the particular operative in question and the remainder of the mechanism in working relationship to each other, time-regulated means actuated uniformly with the lapse of time during working hours, conversion means adapted to be set to conform to the rate of pay of any operative for the conversion of the movement of the time regulated means as related to said operative's jobs into equivalent monetary values, and indicating means actuated in relation to said conversion means to an extent equivalent to the actuation of the time regulated means.

1,821,942. ENGINE CONTROL MECHANISM FOR STEERING GEARS. HENRY MARLES, Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 25, 1926. Serial No. 144,121. 7 Claims. (Cl. 74—39.)



1. The combination with a steering stem and a control rod passing therethrough, of a disk head secured to the upper end of said rod, an operating member recessed to receive said disk and a snap ring for locking said disk in said recess.

1,821,943. MANUFACTURE OF EVAPORATED MILK. JOHN M. MCCLATCHIE, New York, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed July 6, 1927. Serial No. 203,762. 7 Claims. (Cl. 99—5.)

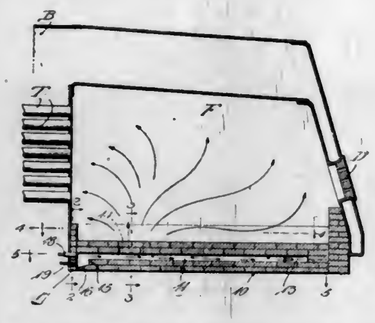


1. The method of preparing evaporated milk for canning which consists in introducing the milk at a predetermined temperature in a finely divided condition into a closed chamber, maintaining in the chamber an atmosphere of steam at a predetermined temperature and pressure to sterilize the milk, feeding the sterilized milk into a second chamber, maintaining in the second chamber an atmosphere of steam at a predetermined pressure to reduce the milk to its first temperature, and then canning the milk at the reduced temperature without exposing it to the air.

1,821,944. OIL-BURNING FIRE-BOX. ROBERT MODELL. Sacramento, Calif. Filed Dec. 7, 1928. Serial No. 324,516. 2 Claims. (Cl. 158—4.5.)

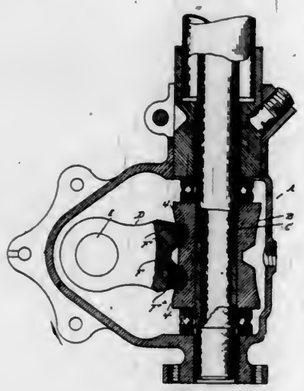
1. A furnace fire box having a refractory bottom, a longitudinal flame flue extending from back to front of said bottom between the upper and lower sides thereof, return flame flues extending longitudinally of said bottom between

its upper and lower sides, a transverse flame flue between the upper and lower sides of said bottom placing the front ends of the longitudinal flame flues in communication with each other, and flame-escape openings from the



rear ends of said flame return flues through the upper side of said bottom; together with a burner mounted at the rear end of the first named flue for directing flame and fuel under pressure into the same.

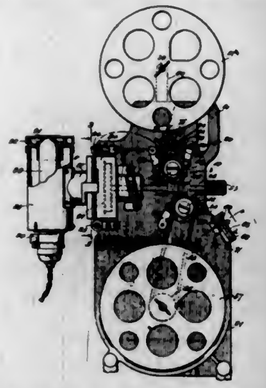
1,821,945. MOTOR VEHICLE STEERING GEAR. WALLACE N. OSBURN, Detroit, Mich., assignor to Gemmer Manufacturing Company, a Corporation of Michigan (1925). Filed June 8, 1925. Serial No. 35,797. 11 Claims. (Cl. 74—41.)



1. In a steering gear, the combination with a rotary steering stem and a rock shaft to be actuated thereby, of a gear mounted on said rock shaft having a single notched tooth, a worm on said stem having a male thread engaging said tooth, and such as would be generated by the simultaneous rotation of said worm and gear about their respective axes, said gear having portions on opposite sides of the notch which are in engagement with the grooves of said worm after disengagement of the male thread from said notch.

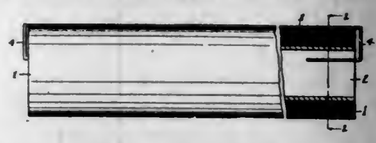
1,821,946. MOTION PICTURE APPARATUS. FREEMAN H. OWENS, New York, N. Y. Original application filed July 2, 1924. Serial No. 723,700. Divided and this application filed May 18, 1926. Serial No. 109,962. 7 Claims. (Cl. 88—18.)

2. A motion picture apparatus for the projection of motion pictures simultaneously with the reproduction of a sound record comprising a frame, a shutter shaft journalled therein, a combined drive wheel and shutter fixed to said shaft adjacent an end thereof, intermittent film moving mechanism, frictional means engaging said drive wheel



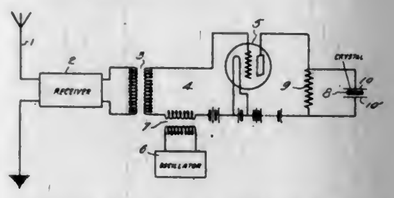
periphery for actuating said shutter and said mechanism, and a finger wheel carried by the shaft at its opposite end for manually rotating the same.

1,821,947. PAPER CUTTER FOR ROLLED PAPER. DON H. ROSS, Kalamazoo, Mich. Filed Feb. 9, 1929. Serial No. 338,701. 3 Claims. (Cl. 242—55.5.)



1. The combination with a roll of paper and a tubular core therefor of substantial diameter, of a cutter in the form of a flat strip of resilient metal having angled arms at its ends loosely engaged and movable radially within the ends of the core so that the cutter is loosely held upon the roll and may be grasped for clamping the paper upon the roll and providing a cutting edge for severing an unrolled portion of paper.

1,821,948. METHOD TO CONTROL LIGHT RELAYS. FRITZ SCHROETER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 18, 1927, Serial No. 184,560, and in Germany May 20, 1926. 1 Claim. (Cl. 250—20.)



In combination with a radio receiving system of the type including a receiving circuit and means for impressing thereon received fluctuating signal energy together with a local means for impressing thereon an electromotive force of a different frequency than the received fluctuating energy for producing a resultant beat note from said received energy and an amplifying means for amplifying the resultant beat note, a crystal light valve connected across the output of the amplifier for producing electric double refraction of polarized light beams passing therethrough in accordance with fluctuating potentials

applied thereto from the amplifier, and a resistance coupling shunting said crystal for connecting a power supply with the plate electrode of the said amplifier, the plate circuit of said amplifier being free of extraneous inductance whereby the characteristics of said amplifier remain substantially uniform.

1,821,949. CONDUIT FITTING. HOWARD A. SELAH, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 24, 1926. Serial No. 111,250. 1 Claim. (Cl. 247—31.)



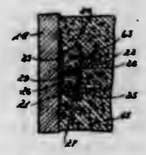
A conduit fitting comprising a body having conduit openings therein and a side opening, the conduit openings making a bend to the side opening leaving a gore between the bends; a web in the gore; and feet extending at right angles to the web having screw-receiving openings, the major portion of the feet being within the cross dimension of the body of the fitting.

1,821,950. PRESSURE RESPONSIVE DEVICE AND ITS MANUFACTURE. ELMER O. STOUT and OTTO M. SUMMERS, Dayton, Ohio, assignors, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed May 31, 1927. Serial No. 195,232. 5 Claims. (Cl. 137—156.)



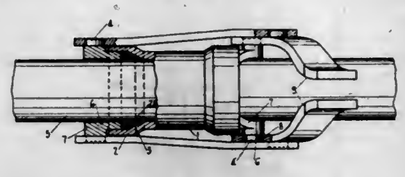
1. A pressure responsive element comprising two diaphragms located in parallel, spaced relation and having telescopically fitting annular flanges, and means for joining the flanges, said means comprising a metal ring fitting around the outer annular flange and curved around one edge thereof and having a portion cooperating with the inner annular flange to define an annular groove, and a bonding material located in the groove.

1,821,951. TIE WIRE POCKET FORMING DEVICE. ROBERT M. THOMPSON, Windsor, Ontario, Canada. Filed Jan. 24, 1927. Serial No. 163,170. 2 Claims. (Cl. 25—131.)



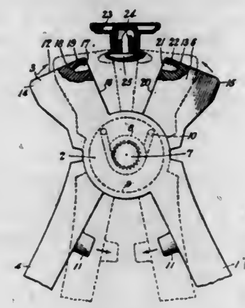
2. In combination with a concrete structure poured into forms connected by retaining members projected through said concrete, a pocket forming form adapted for mounting on the inner side of said form at one side of said retaining member; a co-operating pocket forming form adapted for mounting at the inner side of said concrete form at the opposite side of said retaining member to provide in the concrete structure poured between said concrete forms a pocket on the face of said structure surrounding said retaining member.

1,821,952. THREADLESS PIPE COUPLING. WILLIAM WERNER, Mexia, Tex., assignor of one-half to W. B. Smith, Mexia, Tex. Filed July 5, 1927. Serial No. 203,444. 1 Claim. (Cl. 285—104.)



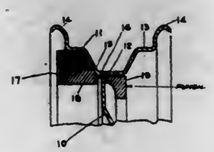
A device for coupling pipe comprising in combination a sleeve, a packing seat in each end thereof, a pair of oppositely disposed slidable ring glands adapted to enter said sleeve and engage said packing, a pair of ears on each gland, links pivoted to one of said pair of ears, levers pivoted to the other said pairs of ears, and pivots carried by said levers to attach said links together.

1,821,953. TACK PULLER OR PLIERS. FRANKLIN R. WHITE, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 26, 1929. Serial No. 373,787. 5 Claims. (Cl. 254—22.)



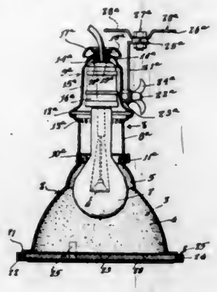
1. A tack puller comprising two cooperating handles each provided with a jaw on its end, the outer faces of said jaws being substantially parallel throughout their length when the jaws are closed and free from protuberances, the inner adjacent face of each jaw having a small chamber formed therein and the said jaws when closed adapted to hold the head of a tack in said chamber.

1,821,954. WHEEL. JOHN WILLIAM WHITE, Buffalo, N. Y., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed June 3, 1925. Serial No. 34,645. 5 Claims. (Cl. 219—10.)



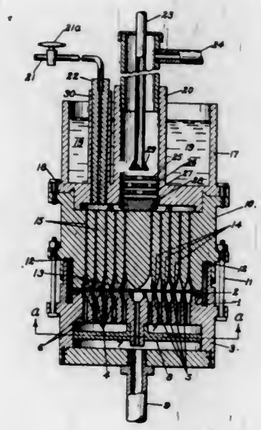
1. Those steps in the method of fashioning a vehicle wheel having a rim member and a disk wheel body member which include positioning the disk and rim in operative relation with the peripheral portions of the disk adapted to overlap portions of the rim, urging the peripheral portion aforesaid of the disk radially outwardly into engagement with the rim, and butt-welding the said portion to the rim.

1,821,955. LAMP. WILLIAM E. WUELKER, San Francisco, Calif. Original application filed Sept. 14, 1925, Serial No. 56,179. Divided and this application filed Aug. 16, 1926. Serial No. 129,585. 2 Claims. (Cl. 240—1.)



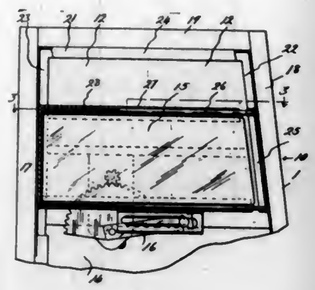
1. In a lamp of the character described, a three-part casing, one part providing a double reflecting surface having a common focal point, the lower end of such part providing an annular flange, a diffusion plate seated against said flange, a rim detachably connected with said member for holding said diffusion plate in place, a second casing part providing the chamber for housing the bulb stem, the last casing member providing a support for the bulb socket and said casings connected together, and means for ventilating the bulb when in said socket through such last two specified casing members.

1,821,956. APPARATUS FOR THE OXIDATION OF AMMONIA. JEW YAM YEE, Washington, D. C. Filed June 30, 1928. Serial No. 289,596. 7 Claims. (Cl. 23—288.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



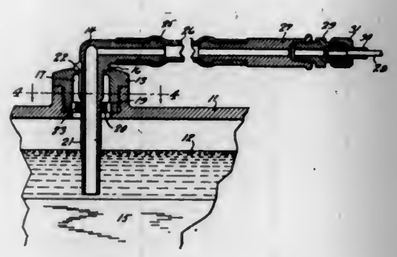
1. In an apparatus for catalyzing reactions of explosive gas mixtures, a catalytic gauze member, roof and base members, said roof and base members being provided with annular, concentric apical rings and grooves, said apical rings being substantially in contact with said gauze member.

1,821,957. VEHICLE BODY CONSTRUCTION. ALBERT P. BALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 6, 1930. Serial No. 486,827. 3 Claims. (Cl. 296—48.)



1. A vehicle body provided with a window opening comprising a rigid frame having its vertical sides diverging, a vertically sliding glass panel having diverging vertical edges adapted to close the opening between the vertical sides of said frame, and extensible means projecting beyond one vertical edge of said glass panel and engaging one vertical side of said frame to prevent lateral edgewise movement of the glass panel when lowered.

1,821,958. LIQUID LEVEL INDICATING MEANS FOR MULTIPLE CELL STORAGE BATTERIES. EUGENE L. BEECHER, Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 18, 1929. Serial No. 347,775. 1 Claim. (Cl. 136—182.)

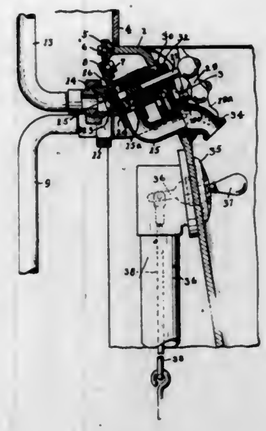


In combination with a closure for the filler opening of a storage battery having an opening therethrough, a dielectric, battery electrolyte resisting conduit fitting projecting a predetermined distance through said closure and rotatably received therein, said closure having a counterbore about the inner portion of the fitting, said fitting having a groove providing an opening from said counterbore to the outer end of the closure, a nut threaded on the inner end of said fitting for securing the same in said closure, said nut and closure together being provided with an opening leading from the lower side of the closure to said counterbore whereby gases may escape through said closure.

1,821,959. BATHTUB. LEON BLOCH, Cleveland, Ohio. Filed Oct. 23, 1929. Serial No. 401,641. 20 Claims. (Cl. 4—91.)

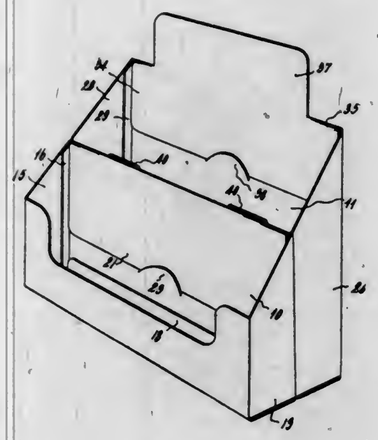
1. A bathroom fixture including a tub and a pair of valves for controlling the supply of hot and cold water, and

a valve for diverting the flow to a tub or to a shower, said fixture being supported on the wall of a bathtub, said tub



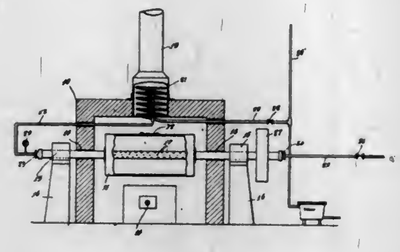
having an opening in the wall thereof through which said valves are accessible, and a removable escutcheon plate covering said opening.

1,821,960. DISPLAY BOX. JOSHUA LORING BROOKS, Jr., Springfield, Mass., assignor to Brooks Bank Note Company, Springfield, Mass., a Corporation of Massachusetts. Filed June 24, 1930. Serial No. 463,385. 3 Claims. (Cl. 206—44.)



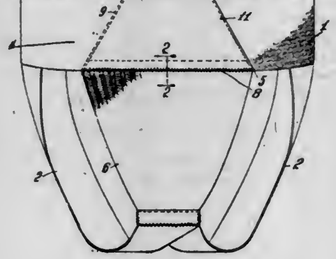
1. A display box of the type having front and rear box sections standing side by side when the box is arranged for display and end to end when the box is arranged for storage, characterized by one or more tabs struck out of the front wall of the rear box section below the upper edge thereof, said tabs being folded up along the rear face of said wall, across the edge of said wall and through slots located in the front box section at substantially the hinge line between the sections, the tabs having foldable wings extending wider than the slots to retain the tabs in place.

1,821,961. PROCESS OF MAKING HYDRAULIC PRODUCTS FROM ANHYDRITE. JOHN E. BUTLER, Redwood City, Calif. Filed Mar. 26, 1929. Serial No. 350,031. 8 Claims. (Cl. 106—34.)



3. A process of making a cementitious product from a material containing substantially anhydrous $CaSO_4$ as a major ingredient comprising, contacting a finely divided material containing substantially anhydrous $CaSO_4$ as a major ingredient with steam while agitating said material under temperature conditions adapted to prevent condensation of steam on the material and then cooling, drying and milling said treated material.

1,821,962. ATHLETIC SUPPORTER. ALFRED S. CALLAWAY, Chicago, Ill., assignor to The Kendall Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 3, 1929. Serial No. 397,005. 2 Claims. (Cl. 128—160.)

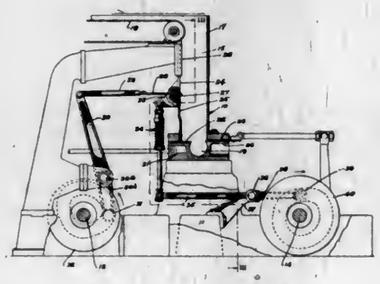


1. An athletic supporter embodying therein an elastic waist band having biased ends disposed in overlapping relation and secured by stitching parallel to said ends and formed to provide a part of a double thickness in said waist band of a greater length at the bottom than at the top of said waist band, and a sack having a folded top margin disposed between said part of greater length of said double thickness and secured thereto by an elastic stitch.

1,821,963. TRANSFER MECHANISM FOR CAN FILLING MACHINES. FREDERICK CLARK, Alameda, Calif., assignor to Alaska Packers Association, San Francisco, Calif., a Corporation of California. Filed Mar. 21, 1928, Serial No. 263,553. Renewed July 13, 1931. 1 Claim. (Cl. 226—101.)

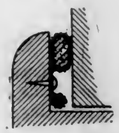
In a machine of the character described, a vertically arranged receptacle for receiving cut portions of fish, a com-

pressing chamber at the lower end of said receptacle and in communication therewith, a vertically reciprocable slide forming a portion of one of the side walls of said receptacle, guide means forming a part of the receptacle for guiding said slide for vertical reciprocation, a transverse roller extending transversely of the slide, said slide having a transverse opening with which the roller aligns, a horizontally disposed fork slidable through said roller whereby it may be projected into the receptacle or withdrawn, a connecting rod connected at one end to the outer end of the fork, an oscillating arm to one end of which the other end of the connecting rod is connected, said arm being pivoted at a point intermediate its ends, a roller fitted to the other end of the arm, a rotatable cam mounted on the



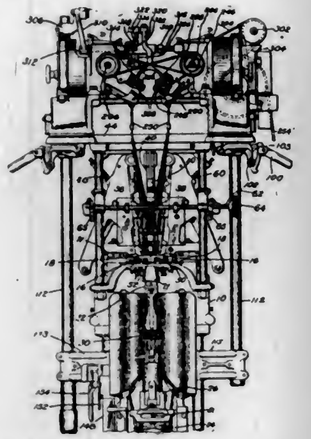
frame and formed with a cam groove to which said roller on the arm is engaged, a second cam carried by the frame and also formed with a cam groove, a pair of oscillating arms arranged horizontally, a transverse shaft carried by the frame and to which said arms are keyed, another arm keyed at one end to said shaft, a roller at the other end of said latter arm engaging the groove of said second cam, vertical connections between the slide and the forward ends of said horizontal arms, said vertical connections being yieldable, said cams operating in synchronism to project the fork into the receptacle when the slide is in its uppermost position and then moving the slide from its upper position to its lower position, withdraw the fork and return the slide to its upper position.

1,821,964. PACKING. GEORGE B. CUTTING, Worcester, Mass. Filed Apr. 6, 1928. Serial No. 268,023. 2 Claims. (Cl. 20—69.)



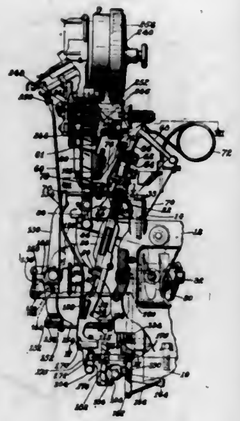
1. As an article of manufacture, a packing for reception between two surfaces, one of which is flat and which are spaced apart, consisting of a piece of narrow fabric woven with a flat single ply central web and a tubular enlargement along each edge constituting the two selvages of the fabric, one enlargement being of larger diameter than the other and both formed entirely on one side of the fabric so that it can be attached to the flat surface, a soft rubber core filling the larger enlargement and a core filling the smaller one, and both enlargements being located directly between said surfaces.

1,821,965. FASTENING-INSERTING APPARATUS. GEORGE GODDU, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 23, 1926. Serial No. 156,580. 87 Claims. (Cl. 1—32.)



1. In a fastening-inserting apparatus, a frame, a support movable thereon, means for moving the support upon the frame, a plurality of tools movable on the support to operate upon the same point in the work while said support is maintained against movement, and means for successively moving the tools into operating position.

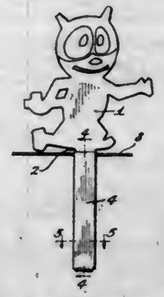
1,821,966. FASTENING INSERTING MACHINE. GEORGE GODDU, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 24, 1927. Serial No. 163,080. 64 Claims. (Cl. 1—18.1.)



1. In a shoe machine, a movable jack, a plurality of yieldable supports co-operating therewith, and a tool movable in each support, each of said supports being arranged to yield longitudinally of the tool and transversely thereof by contact of the jacked work with the supports.

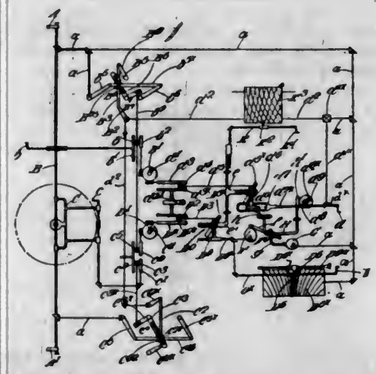
1,821,967. STRING-SUPPORTED FIGURE TOY. HENRY W. GRAVES, Montreal, Quebec, Canada. Filed Apr. 10, 1931. Serial No. 529,094. 13 Claims. (Cl. 46—40.)

1. A toy adapted to slide down an inclined string with intermittent rocking and gliding movements, comprising a generally flat upright toy figure, and means fast upon the said figure for affording a horizontal bore extending parallel to the plane in which the figure is flat-



tened; the bore being disposed near and above the center of gravity of the toy and relatively short with respect to the width of the figure.

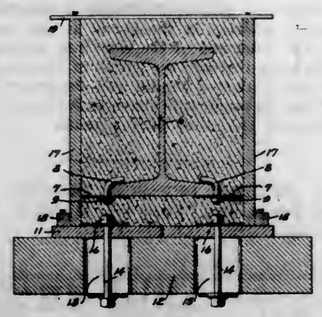
1,821,968. APPARATUS FOR USE IN THE FIRE CONTROL OF ANTIAIRCRAFT GUNS. PERCY WILLIS GRAY, Westminster, England, assignor to Vickers Limited, Westminster, England, a British Company. Filed Feb. 14, 1925, Serial No. 9,180, and in Great Britain Mar. 3, 1924. 21 Claims. (Cl. 235—61.5.)



1. Apparatus for use in the fire control of anti-aircraft guns, comprising an observing sight, a member connected to said sight and movable therewith in accordance with a rate of elevation necessary to keep the line of sight on the moving aerial target, a member associated with and adapted to be moved at the same rate as said former member, infinitely variable speed devices for driving said members, means controlling said devices, and means associated with said latter member for indicating vertical deflection to the guns.

12. Apparatus for use in the fire control of anti-aircraft guns, comprising in combination an observing sight or its equivalent, two movable members, means for moving one of said members in moving said sight in elevation to keep it on the moving aerial target, a variable speed device driving the second movable member, an actuating member for moving the adjustable speed varying element of said variable speed device so as to cause the second movable member to move at the same rate as the first movable member, an element moved in accordance with the time of flight of the shell, and means for multiplying the displacements of the speed varying element and the element moved in accordance with the time of flight of the shell, said multiplying means being situated between said actuating member and said speed varying element whereby when said movable members are moving at the same rate the position of the actuating member is a measure of the vertical deflection for a given time of flight of the shell.

1,821,969. FORM HANGER. GEORGE E. GREENWOOD, San Francisco, Calif. Filed Jan. 30, 1929. Serial No. 336,097. 1 Claim. (Cl. 25—131.5.)

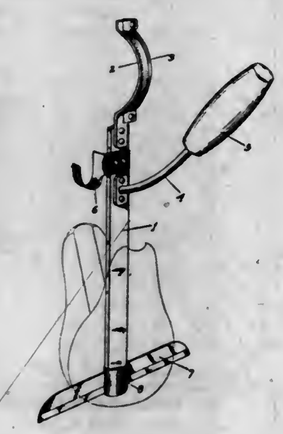


A form hanger for use with any one of a plurality of different beams comprising a form bottom, a spacer interposed between said form bottom and any selected one of said beams, a hooked bolt engaging said selected one of said beams and piercing said spacer, means within the confines of said spacer for clamping said spacer and said bolt on said selected one of said beams, and means for clamping together said spacer and said form bottom.

1,821,970. ELECTRODEPOSITION OF METAL. WILLIAM HENRY HANNAY and FREDERICK ERIC LEE, Tadanac, British Columbia, Canada, assignors to The Consolidated Mining and Smelting Company of Canada, Limited, Montreal, Canada, a Company of Canada. Filed Feb. 21, 1920. Serial No. 341,829. 4 Claims. (Cl. 204—18.)

1. A hydro-metallurgical process for the electrodeposition of zinc from a sulphate solution which comprises, when using a lead anode in the electrolysis, having iron present in the solution as a weak depolarizer, the proportion of iron to the metal in solution ranging from 10 to 100 milligrams of iron per liter to 140 grams of the metal in solution per liter.

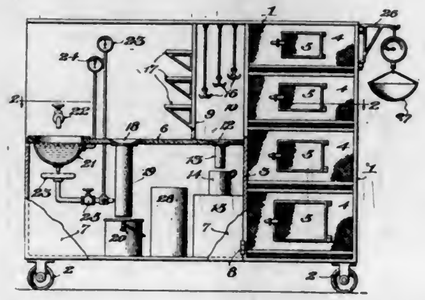
1,821,971. FRUIT CUTTING KNIFE. KURANOSUKE ICHIJYO, Sacramento, Calif. Filed Oct. 19, 1928. Serial No. 313,498. 1 Claim. (Cl. 146—204.)



A fruit cutting knife comprising a rigid shank straight from end to end, of a cutting blade extending transversely of the shank on one end of the same, another cutting blade

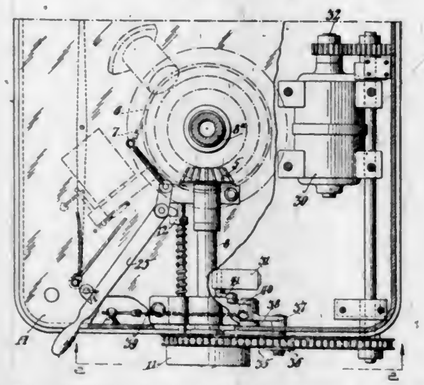
projecting as a longitudinal extension of the shank from the opposite end of the same, a stem secured to and projecting laterally from the shank in a plane at right angles to the plane of the transverse blade and disposed toward the end on which said second blade is mounted and in acute angular relation to the shank at said end; and a handle on the outer end of the stem and forming a longitudinal extension thereof; the length of the shank between its connection with the handle and the transverse blade being sufficient to enable said shank to serve as a handle for the operation of the other cutting blade.

1,821,972. POULTRY DRESSING CABINET. FRED A. KADANE, Dallas, Tex. Filed Oct. 11, 1930. Serial No. 488,130. 4 Claims. (Cl. 17—11.)



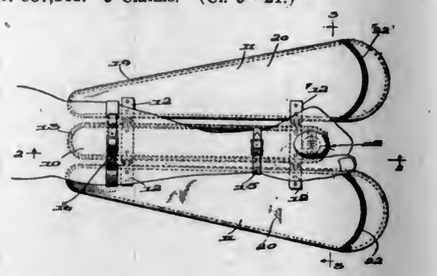
1. A portable poultry dressing cabinet composed of a housing, a work table, a killing compartment associated with the work table, a dressing compartment adjacent the killing compartment, independent means in the killing and dressing compartments for draining refuse from the table to points below the latter, said killing compartment being relatively narrow in width and of substantially greater height than width and being closed on all sides excepting one and said dressing compartment having an open side adjacent the open side of the killing compartment, a live poultry display compartment carried by the housing and traction wheels carried by the housing for mounting same for movement.

1,821,973. AUTOMATIC STOP MECHANISM FOR BRAIDING MACHINES. MAX KRISSIEP, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1930. Serial No. 484,687. 3 Claims. (Cl. 96—19.)



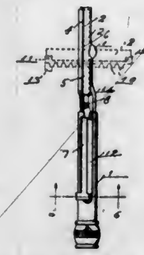
1. In combination with a braiding machine comprising carrier-drive mechanism; a switch-controlled motor operatively connected to said drive mechanism and to said switch and comprising a transmission unit radially swingable by undue driving strains, and a switch lever operated by said swinging unit to automatically stop the motor.

1,821,974. SWIMMING APPARATUS. JOSEPH LEBLANC, Ottawa, Ontario, Canada. Filed May 13, 1931. Serial No. 537,141. 9 Claims. (Cl. 9—21.)



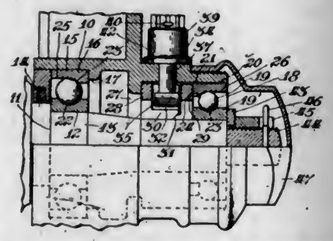
1. A swimming apparatus comprising a body, wings hingedly connected to the body, a transverse reinforcing member for strengthening the body and limiting the movements of the wings in one direction, said member being shaped to partially encase a limb of the wearer and having means by which the device may be secured in applied position.

1,821,975. RAZOR. ABRAHAM LEENHOUTS, Holland, Mich. Filed May 31, 1930. Serial No. 458,551. 4 Claims. (Cl. 30—12.)



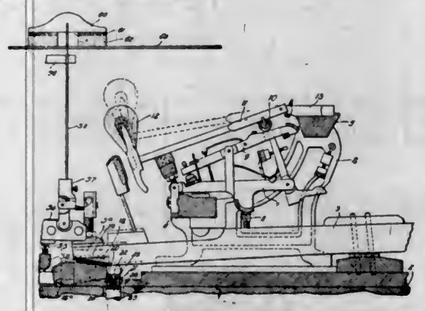
1. In a razor: a handle member having a keeper slot elongated in the longitudinal direction thereof; a blade holding member mounted on the handle member turnably to a position transverse thereof and to a position parallel therewith; a shield member mounted on the blade holding member turnably to a position shielding the razor edge and to a position engaging in the keeper slot to hold the blade holding member in its second-mentioned position.

1,821,976. DEVICE FOR TAKING UP THE WEAR ON ANTIFRICTION BEARINGS. LUDWIG HOLLAND-LETZ, Crown Point, Ind. Filed Oct. 26, 1926. Serial No. 144,292. 31 Claims. (Cl. 308—236.)



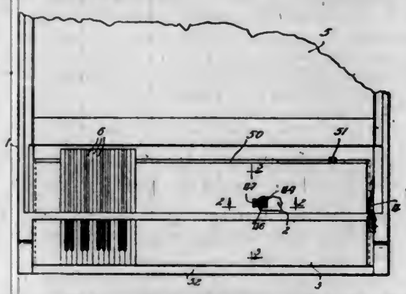
1. In a device of the class described, a support, a shaft, an anti-friction bearing mounted in said support, automatically actuated rotatable means carried by said support and engageable with said anti-friction bearing and means movable radially with respect to said first named means for taking up the wear on said anti-friction bearing as wear ensues.

1,821,977. PIANO. LLOYD LOAR, Chicago, Ill., assignor to Gulbransen Company, Chicago, Ill., a Corporation of Illinois. Filed July 10, 1929. Serial No. 377,189. 3 Claims. (Cl. 84—219.)



1. In combination in a piano comprising a plurality of strings, a key bed supporting base, and a key bed mounted upon said base and associated keys and actions mounted upon the bed, a hingedly mounted bar disposed beneath the inner ends of the keys and movable about its hinge axis for raising and lowering the keys, a pedal, and operating connections between the pedal and the bar, including a lever connected with said key bed supporting base, and adjustable stop means associated with said lever and adapted upon depression of said pedal to contact said key bed supporting base to limit the extent to which said bar may be raised.

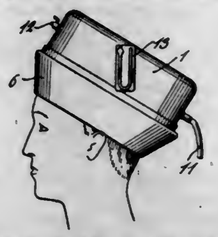
1,821,978. PIANO. LLOYD LOAR, Chicago, Ill., assignor to Gulbransen Company, Chicago, Ill., a Corporation of Illinois. Filed July 10, 1929. Serial No. 377,190. 3 Claims. (Cl. 84—216.)



1. In combination in a piano comprising the strings arranged in unisons each having a plurality of strings, actions comprising hammers normally disposed to strike all of the strings of the respective unisons, said hammers being loosely mounted for limited lateral twisting movement, and means for disposing the hammers to strike one string only of the respective unisons and to one side of the transverse center of the hammer whereby upon contact of the hammer with said string said hammer will be shifted across said string to produce a wiping effect thereon.

1,821,979. APPARATUS FOR INCREASING CIRCULATION OF THE SCALP. CHARLES J. LOWEN, Denver, Colo. Filed Aug. 7, 1930. Serial No. 473,540. 1 Claim. (Cl. 128—300.)

An apparatus for use in treating the scalp by subjecting it to a pressure below atmospheric, comprising a metal container having its open end provided with an external bead and an internal flange, a removable ring having its wall inclined with respect to its axis, the end of the ring having the larger diameter being provided with an inwardly extending flange, means for interconnecting the



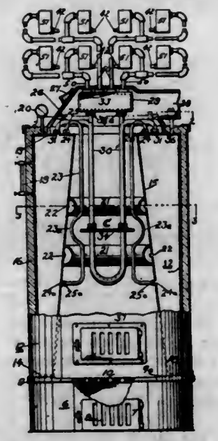
ring and the container so as to prevent relative rotation, and a wide elastic band having one edge located over the outwardly extending bead on the container and having its other edge curved over the lower edge of the ring and terminating within the ring whereby a skirt is formed which is adapted to engage the head of the wearer.

1,821,980. TIGHTENING COLLAR WITH GRADUALLY BRAKED WINDER. ROLAND MACHAT and ARTHUR MATHIEU, Brive, France. Filed July 3, 1930, Serial No. 465,769, and in France July 5, 1929. 3 Claims. (Cl. 24—19.)



1. A hose clamp of the character described comprising a metal girdle, and a cotter pin adapted to receive and to wind upon it one end portion of said girdle, the opposite end of the girdle being fitted with co-axial, resilient wire coils adapted to serve as a bearing for said pin and to grip it with increasing force under the tension.

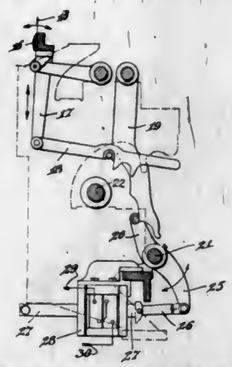
1,821,981. HEATING BOILER. JOHN MARTIN MERZ, Springfield, Ill., assignor, by direct and mesne assignments, to Pearl C. Sutton, Springfield, Ill. Filed May 31, 1928. Serial No. 281,956. 13 Claims. (Cl. 122—166.)



1. A heating boiler comprising: a cylindrical outer shell closed at both ends; a tapered inner shell in the

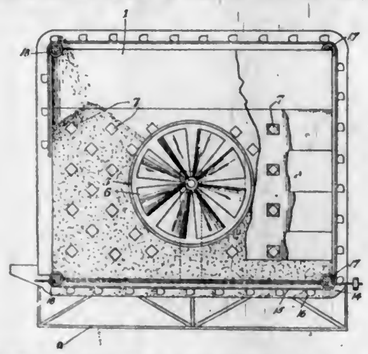
form of a truncated cone, open at both ends and having steam-tight connection with said outer shell at top and bottom of said truncated cone, said inner shell being adapted to form a combustion chamber; a superheated-steam receptacle above the open upper end of said inner shell; a pair of concavo-convex annular deflectors forming water rings in steam-tight juncture with said inner shell and adapted to receive water through holes in said inner shell; and U-shaped superheater tubes, extending through the zone bounded by said deflectors, receiving steam from the boiler and delivering superheated steam to said receptacle.

1,821,982. ELECTRICALLY CONTROLLED LOOP REGULATING MECHANISM FOR FULL FASHIONED KNITTING MACHINES. CHRISTIAN F. MEYER, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Dec. 9, 1929. Serial No. 412,662. 8 Claims. (Cl. 66—82.)



1. In a full-fashioned knitting machine having a thread-feeding mechanism, an electrically operated loop-regulating mechanism, and a pattern controlled switch for said regulating mechanism actuated by said thread-feeding mechanism.

1,821,983. APPARATUS FOR DRYING GRAIN AND THE LIKE. NICOLINO GUIMARÃES MOREIRA, Limeira, Brazil. Filed Nov. 9, 1929, Serial No. 406,080, and in Brazil Sept. 21, 1929. 3 Claims. (Cl. 34—34.)



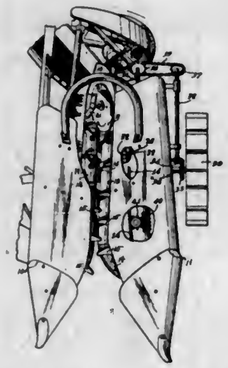
1. Apparatus for drying grain and the like, comprising a central chamber in which the grain is placed and two side chambers, V-shaped struts connecting the two side chambers via the central chamber and a tube connecting the two side chambers directly, said tube containing a fan and crossing the central chamber, without any communication with the latter, the revolving fan generating an air current promoting the circulation of air through said chambers.

1,821,984. SEAL. IMANUEL WILHELM MÜLLER, Neuenburg, Germany. Filed May 24, 1929, Serial No. 365,690, and in Germany Dec. 24, 1928. 5 Claims. (Cl. 292—308.)



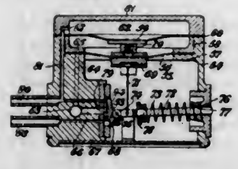
1. A seal of the type set forth, comprising a flexible metal strap, a keeper member at one end of said strap to receive the other end of the strap, means upon said end of the strap and the keeper member for locking said end of the strap in said keeper member, and separate means surrounding said keeper member and adapted to be deformed upon final closing of the seal for holding said locked end of the strap immobile with relation to the keeper member.

1,821,985. ANTICLOGGING DEVICE FOR CORN PICKERS. CHRIST H. PETERSON, Leland, Iowa. Filed Dec. 9, 1929. Serial No. 412,789. 5 Claims. (Cl. 56—104.)



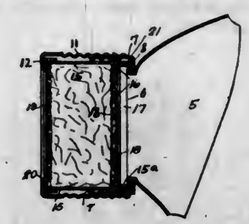
1. In combination with a corn picker having snapping rolls, a disk rotatably mounted above the snapping rolls and cutting a path across the space between said snapping rolls for clearing the same of clogged material, and a means for operatively connecting said disk to the traction power wheel of said corn picker.

1,821,986. PULSATOR FOR MILKING MACHINES. ALEXANDER FREDERICK PLINT, Henley-on-Thames, England, assignor to Stuart Turner Limited, Henley-on-Thames, Oxford, England. Filed Oct. 28, 1929, Serial No. 401,675, and in Great Britain Oct. 29, 1928. 9 Claims. (Cl. 31—61.)



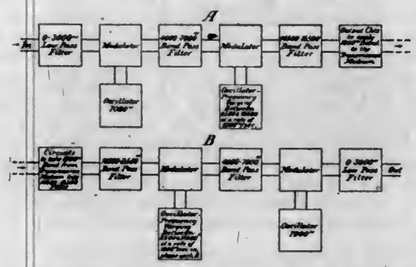
5. A pulsator for milking machines comprising a pair of rigidly spaced diaphragms of different superficial area located in a casing, the smaller being open to atmosphere at one side, a suction conduit in said casing leading to the space enclosed between said diaphragms and maintaining such space evacuated, a second suction conduit communicating with a closed space between the larger diaphragm and the casing and having a connection for the machine, a valve and a cam surface on said valve, a lever connected to said diaphragms and spring urged into engage-

face-engaging member and spaced away from the seating edge of the shell to form an air chamber adjacent said face-engaging member, a supporting screen in said shell



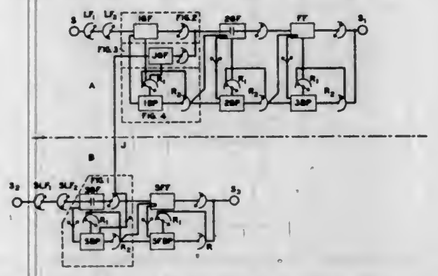
resting on said offset, and a cover screen retained therein by an open shell-engaging cap; and a flanged screw cap on said extension ring for retaining said cartridge in the latter.

1,821,997. COMPRESSION OF FREQUENCY RANGE. WILLIAM T. WINTRINGHAM, Brooklyn, N. Y., assignor to American Telephone & Telegraph Company, a Corporation of New York. Filed July 10, 1929. Serial No. 377,805. 12 Claims. (Cl. 178—44.)



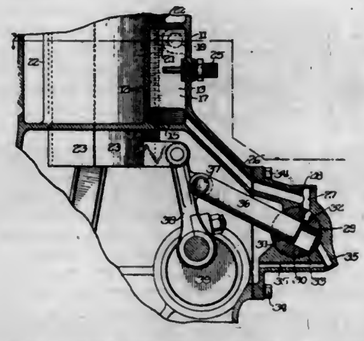
1. The method of signaling, which consists in transmitting a narrow band of frequencies of definite width which represents successively different portions of the original message band and suppressing all other frequencies.

1,821,998. CIRCUIT ARRANGEMENT FOR AUTOMATIC AND SEMIAUTOMATIC TELEPHONE EXCHANGE SYSTEMS. ESMOND PHILIP GOODWIN WRIGHT, Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Filed Mar. 28, 1930, Serial No. 439,727, and in Great Britain May 31, 1929. 21 Claims. (Cl. 179—18.)



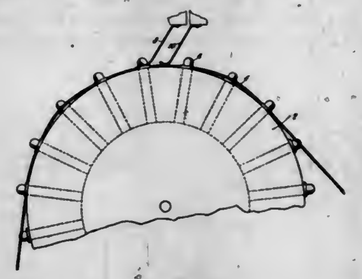
1. In or for an automatic or semi-automatic telephone system one or more conversation selector switches for use at the incoming end of a two wire junction from a distant office, one or more conversation selector switches for completing local connections and one or more common control circuits associated with and arranged to control the operation of both the incoming and local conversation selector switches.

1,821,999. INTERNAL-COMBUSTION ENGINE LUBRICATION SYSTEM. ARTHUR A. WOODWARD, Detroit, Mich., assignor to Skinner Motors, Inc., Detroit, Mich., a Corporation of Delaware. Filed Mar. 13, 1931. Serial No. 522,265. 4 Claims. (Cl. 123—196.)



1. In an internal-combustion engine, the combination of a valve, means to operate said valve, a pump member having an internal bearing and inlet and discharge passages connecting with said bearing, a cylindrical member oscillatory in said bearing and having a cylindrical chamber with inlet and delivery ports co-operating with said inlet and discharge passages, a plunger reciprocatory in said cylindrical chamber, means connecting said plunger with said valve operating means to reciprocate and to rock said plunger, thereby effecting the oscillation of said cylindrical member, said inlet-port being opened and closed by the reciprocations of said plunger and said exhaust-port being opened and closed by the oscillations of said member, and means to withdraw excess oil from the engine and to deliver it into said inlet-passage, whereby the pump will receive the oil through said inlet-port and deliver it through said discharge-port and passage.

1,822,000. AUTOMATIC TAPE TRANSMITTER. LLOYD L. YOUNG, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 27, 1929. Serial No. 350,422. 10 Claims. (Cl. 178—17.)

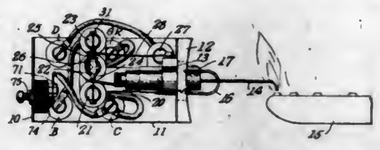


1. A high speed tape transmitter comprising means to move a perforated tape, a plurality of reciprocable plungers for making electrical contact by passing through signalling perforations in the tape carried by said tape moving means, and means to permit the plungers to move with the tape a distance equivalent to the time in which a relatively slow reciprocation of the plungers may take place.

1,822,001. THERMOSTATIC CONTROL DEVICE. GEORGE J. ZISCH, Newark, N. J. Filed Dec. 20, 1928. Serial No. 327,201. 6 Claims. (Cl. 200—138.)

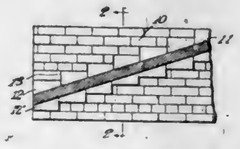
1. A thermostatic switching device comprising a metal casing, a U-shaped support pivotally mounted on the cas-

ing, resilient means normally urging the support in one direction, three terminals mounted on and insulated from one leg of the support, a resilient metal strip fixed to the other leg of the support, said strip being positioned between the first and second terminals to complete an elec-



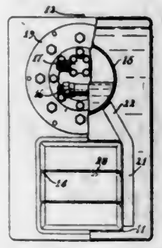
trical circuit, a strip of thermostatic material fixed to the casing and positioned between the second and third terminals and engaging the second terminal when cold, and means associated with the thermostatic strip to break the circuit between the first and second terminals and establish another circuit when the strip is heated.

1,822,002. BAFFLE SLOT BLOCK. GEORGE ALLEN, Jr., New York, N. Y., and FREDERICK C. SIMPSON, West Somerville, Mass., assignors to George Allen & Son, a Firm consisting of Jane Allen, William Allen, and George Allen, jr., New York, N. Y. Filed Feb. 28, 1930. Serial No. 432,057. 3 Claims. (Cl. 72—38.)



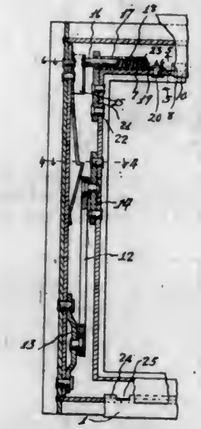
1. Connecting means for a baffle and a brick furnace setting comprising an upper block having a horizontal upper face, a long vertical side and a short vertical side and sloping under face, the ratio between the height of the long vertical face to the length of the upper face and the slope of the under face being such that the height of the long vertical face above an adjacent block is a multiple of a brick course, when adjacent blocks are positioned such that the under sloping surfaces are in the same plane, an under block identical with said upper block but in a reversed position with the sloping face uppermost, and a spacer block between said upper and lower blocks of a lesser width than said upper and lower blocks whereby a recess is formed between the upper and lower blocks.

1,822,003. REFRIGERATING APPARATUS. FRANK W. ANDREWS, Fort Wayne, Ind., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,965. 6 Claims. (Cl. 62—95.)



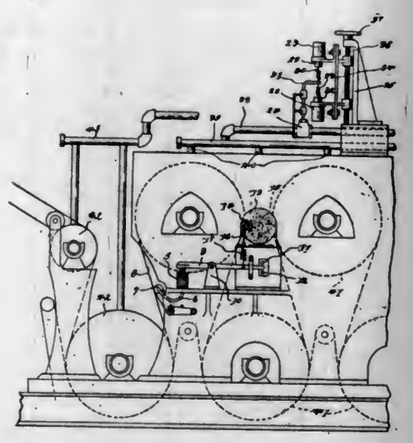
6. A refrigerating device for mechanical refrigerators comprising a container, a support for an ice tray within said container, a cooling element within said container, fins connected with said support and extending in close proximity to the cooling element without touching the same.

1,822,004. WINDOW CONSTRUCTION. GUSTAF IVAR BARCLAY, Park Ridge, Ill., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 18, 1929. Serial No. 348,073. 11 Claims. (Cl. 189—66.)



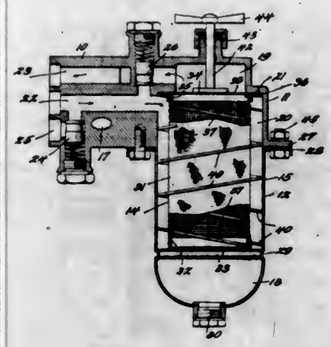
1. In a window construction, the combination with a frame, of a ventilator adapted to move angularly and longitudinally of said frame, and means for connecting said ventilator to said frame including a shoe slidably engaging said frame, a pin connected to said shoe and extending transversely thereof, and a tubular member in substantial axial alignment with and receiving said pin, said tubular member being directly secured to said ventilator.

1,822,005. AUTOMATIC CONTROL ADJUSTING DEVICE. ARTHUR E. BROUGHTON, Minneapolis, Minn. Filed May 19, 1930. Serial No. 453,715. 11 Claims. (Cl. 92—38.)



1. In a control neutralizing device, the combination with a control element movable from a plurality of operative positions to a neutral position between said operative positions, of power-actuated means for moving said element to said neutral position and a single, manually operable control for rendering said power-actuated means operative.

1,822,006. FILTER. ARTHUR A. BULL, Detroit, Mich., assignor to Handy Governor Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 11, 1929. Serial No. 369,950. 7 Claims. (Cl. 210—167.)



1. In a filter, in combination, an outer casing of cylindrical form, means to supply liquid tangentially at one end of said casing, a cylindrical filter element within said casing, a liquid guiding strip of helical form separate from the casing to continuously guide the liquid downwardly over said element from the initial tangential supply, the inner edge of said strip being in scraping engagement with the said element, means to cause relative rotation between said element and edge to clean the filter and an outlet for filtered liquid from within said element.

1,822,007. COMBINED CASE AND DISPLAY DEVICE. JOSEPH S. CABLE, Altoona, Pa. Filed July 2, 1929. Serial No. 375,414. 1 Claim. (Cl. 206—44.)



A device of the class described comprising a box, a lid connected with the box and consisting of a rear flap and a front flap, said flaps being separated by a scored line, a tongue formed by cutting the rear flap, the tongue being connected to the front flap by said scored line, each flap and tongue having a slit therein, the slits in the two flaps registering with each other when the lid is raised and the front flap folded upon the other flap and a tab bent adjacent its ends and adapted to be passed through the two slits in the flaps and the slit in the tongue when the tongue is raised, said ends of the tabs having holes therein for receiving portions of an article.

1,822,008. TRIBROMOALCOHOLS AND PROCESS OF PREPARING THE SAME. JÜRGEN CALLSEN, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 3, 1930. Serial No. 459,117. 7 Claims. (Cl. 260—156.)

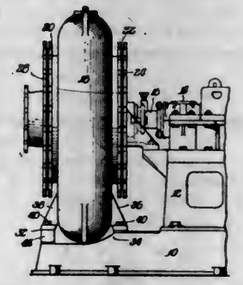
1. The process which comprises reacting upon tribromoacetoaldehyde with an alkyl-magnesium halide in an indifferent organic solvent and decomposing the product thus obtainable by means of water.

5. Products of the probable general formula

$$Br_3C.CH(OH).alk$$

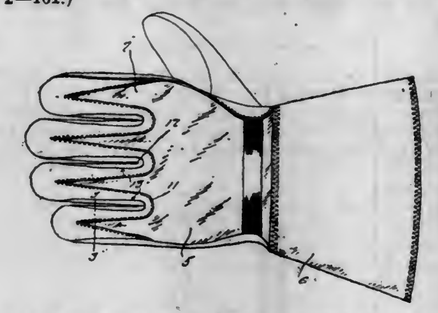
wherein "alk" means an alkyl residue, said products being generally nearly colorless liquids, readily soluble in ether, alcohol and acetone, sparingly soluble in water, being pharmaceutically valuable substances.

1,822,009. SUPPORT. BRADLEY S. CARR, Chicago, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Jan. 4, 1929. Serial No. 330,181. 2 Claims. (Cl. 248—14.)



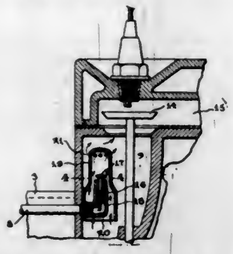
1. In an apparatus of the character described, a shaft, a casing surrounding the shaft, and a base for supporting the casing, said base being provided with a recess for receiving the lower portion of the casing, one of the side walls of said recess being removable to permit removal of the casing lengthwise of the shaft without disturbing the position of the latter.

1,822,010. GLOVE. CHARLIE C. CECIL, Salem, Va., assignor to Rex Manufacturing Co., Roanoke, Va. Filed Jan. 16, 1930. Serial No. 421,220. 1 Claim. (Cl. 2—161.)



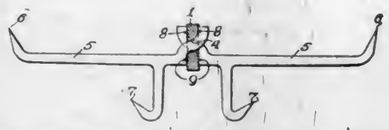
A glove including back and palm portions having finger pieces secured to each other to form individual finger stalls, the finger pieces of the palm being of greater width than the finger pieces of the back whereby to dispose the meeting edges of the fingers along the back of the fingers and reinforcing tips for the back of the finger stalls formed of a single piece of material and having a continuous front edge coextensive with the edges of the finger pieces and connected at the seams of said finger pieces and a continuous rear edge connected to the back of the glove.

1,822,011. FUEL FEEDING MEANS FOR INTERNAL COMBUSTION ENGINES. MILFORD G. CHANDLER, Flint, Mich. Filed Aug. 29, 1928. Serial No. 302,858. 7 Claims. (Cl. 123—119.)



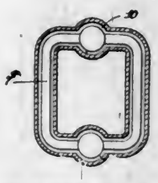
1. In an internal combustion engine, a cylinder, a passageway for feeding fuel and air to the cylinder, a valve for controlling the admission of the fuel mixture to the cylinder, means including a nozzle for forcibly feeding fuel into the passageway, a tubular perforated member in the passageway for mixing the fuel with primary air, and means in the passageway for subsequently admixing said mixture with auxiliary air and admitting said mixture to the cylinder after the control valve has been moved into open position.

1,822,012. HANGER FOR CONTINUOUS ENAMELING FURNACES. JOHN O'FALLON CLARK, University City, Mo., assignor, by mesne assignments, to American Manganese Steel Company, a Corporation of Maine. Filed Aug. 3, 1929. Serial No. 383,204. 3 Claims. (Cl. 198—177.)



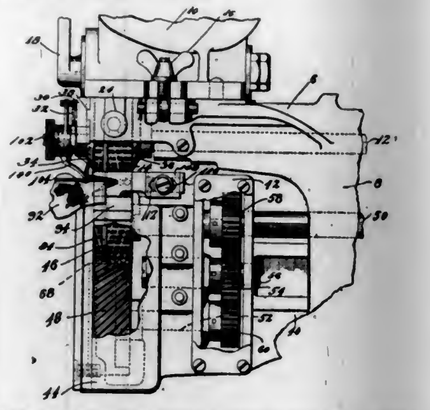
1. A hanger arm for conveyors of the character described, comprising a short inserting portion adapted to pass through an opening in a supporting member, and shoulders on said inserting portion spaced apart to bring them, when the arm is inserted, on opposite sides of and, respectively, above and below the opening, said arm having a portion extending downwardly so low and so close to the inserting portion that a force exerted in a single direction on said downwardly extending portion will dislodge said arm.

1,822,013. UNIT FORMED PARTIALLY OF FIRED CERAMIC MATERIAL. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Jan. 21, 1928. Serial No. 248,314. 12 Claims. (Cl. 62—95.)



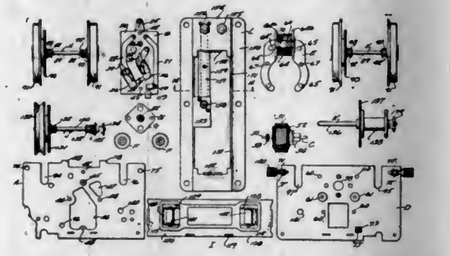
1. A refrigerating apparatus, comprising a cooling unit formed of stone, one or more of the exposed surfaces of said unit being formed of a fired ceramic material, a refrigerant conducting coil positioned in heat conducting relation with said fired ceramic material and held in such position by means of plastically applied material adapted to harden without firing.

1,822,014. CEMENTING MACHINE. JOHN W. COSGROVE, deceased, Medford, Mass., by Caroline E. Cosgrove, administratrix, Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 15, 1928. Serial No. 277,917. 12 Claims. (Cl. 91—50.)



1. In a cementing machine, a cement-applying roll having a circumferential cement-retaining groove therein, and helical rows of spaced teeth forming coacting helical grooves on either side of said groove and communicating therewith.

1,822,015. ELECTRICAL TOY. JOSHUA L. COWEN, New York, N. Y., and LOUIS CARUSO, Irvington, N. J., assignors to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1928. Serial No. 273,025. 10 Claims. (Cl. 105—49.)

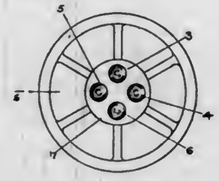


1. A toy locomotive comprising two side plates detachably fastened together in spaced relation, a motor field, motor armature, and brush rigging detachably supported by the plates in operative relation and provided with current connections completed by the assembly of said parts for motor operations, the plates having pairs of aligned slots extending upwardly from the lower edges thereof, a pair of locomotive truck units each including an axle shaft, a driving gear and track wheels, the units being slidable into the aligned slots to dispose the wheels outside the plates, reduction gearing connecting the armature and gears on the truck units, and a detachably mounted base plate unit having flanges which overlie the slots to hold the truck units in place, and carrying insulated collector contacts for cooperation with a third rail between the track wheels.

1,822,016. SEPARATION OF ORGANIC ACIDS. LLOYD C. DANIELS, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,830. 20 Claims. (Cl. 260—122.)

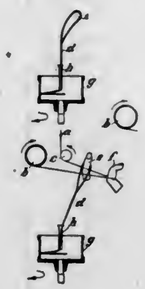
1. A method of separating polycarboxylic acids from monocarboxylic acids, which comprises transforming the polycarboxylic acid into the primary salt while leaving the monocarboxylic acid in the free state and subjecting the mixture thus obtained to the action of at least one organic solvent for the monocarboxylic acid in which the polycarboxylic acid salt is insoluble.

1,822,017. AUTOMOBILE AND AEROPLANE SIGNAL. WILLIAM H. DAVID, Tottenville, N. Y. Filed Jan. 12, 1929. Serial No. 332,153. 3 Claims. (Cl. 177—339.)



1. In a vehicle, the combination with two independent electric circuits, of a steering wheel and its column, a light signal, a battery to light the signal, a horn, motor means for sounding the horn, a push button on the head of said column adapted to close one of said circuits to light the signal and a second push button on said head adapted to be simultaneously operated by the same hand to close the other circuit to sound the horn.

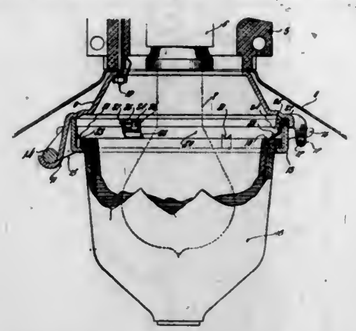
1,822,018. TWISTING CONTINUOUSLY SPUN ARTIFICIAL THREADS. HERMANN DEILE, Berlin-Lichtenberg, Germany, assignor to Aceta G. m. b. H., Berlin-Lichtenberg, Germany, a Corporation of Germany. Filed Mar. 6, 1930, Serial No. 433,695, and in Germany Mar. 28, 1929. 1 Claim. (Cl. 118—69.)



In a process of twisting a continuously spun artificial thread the steps which comprise doubling an auxiliary thread to form a loop, introducing the both ends of the auxiliary thread into the twisting device, pulling out a loop from the main thread to be twisted, setting the twisting device in operation to twist the auxiliary thread, and passing the loop of the main thread through the loop of the auxiliary thread.

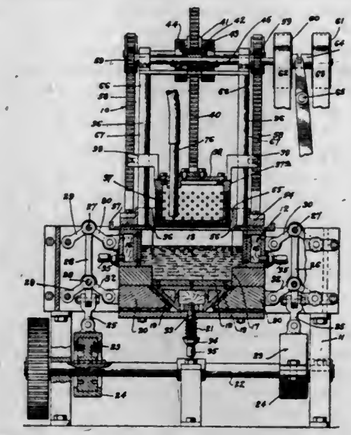
1,822,019. LIGHTING FIXTURE. JOHN J. DESMOND, Hubbard Woods, Ill., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 12, 1928. Serial No. 312,094. 5 Claims. (Cl. 240—147.)

1. In combination with a lighting fixture of the character described, and including a refractor holder and an asymmetrical refractor adapted to direct concentrated rays of light in predetermined directions carried thereby, the holder being hingedly mounted for swinging movement to and from closed position to permit access to the fixture interior, a ring member non-rotatably connected with the refractor, and means adjustably securing the ring member



in the refractor holder to rigidly connect the refractor with the holder, said means enabling the refractor to be adjusted with respect to the fixture.

1,822,020. METHOD AND APPARATUS FOR MAKING CONTAINERS OF VEGETATIVE PULP. WILLIAM H. FULCHER and CHARLES H. WOOD, Oakland, Calif. Filed Apr. 9, 1928. Serial No. 268,502. 9 Claims. (Cl. 92—64.)

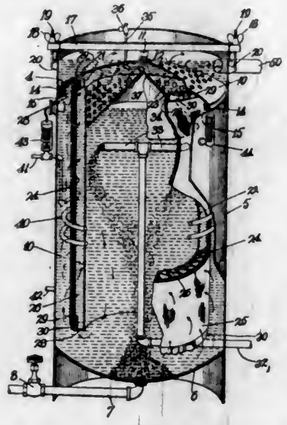


1. An apparatus of the character described comprising a contractile mold having imperforate side, end and bottom walls and open at the top and into which pulp suspended in liquid may be placed, a rectangular foraminous core adapted to be suspended within the mold and movable into and out of the same through the open top thereof, means for contracting the mold about the core to compress the pulp in the spaces intermediate the mold and core to form a container, and means for withdrawing the liquid from the mold and core as the container is formed.

1,822,021. FLUID CLARIFYING APPARATUS. CLARENCE V. FUQUA, Kansas City, Mo. Filed May 17, 1929. Serial No. 363,737. 8 Claims. (Cl. 210—187.)

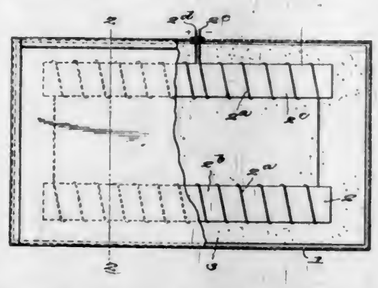
1. Liquid-treating apparatus of the character described comprising a receptacle, a drum suspended within the receptacle in spaced relation to the bottom and sides thereof, filtering cloth surrounding said drum, means for maintaining said cloth in spaced relation to the drum, a closure for the upper end portion of the drum, said drum being imperforate below said closure, and means for con-

ducting the liquid to be treated to the interior of said drum below said closure, thereby confining the flow of the



fluid during the filtering action to an upward inward flow from the exterior of the filtering cloth and through the latter.

1,822,022. FLEXIBLE VULCANIZING SPOTTER. ARTHUR W. GAY, Reno, Nev. Filed Nov. 8, 1929. Serial No. 405,681. 2 Claims. (Cl. 219—46.)



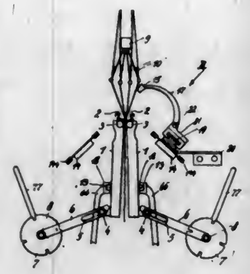
1. A flexible vulcanizing spotter consisting of two opposite layers or sheets of lead fastened together around their edges to constitute an envelope sufficiently flexible to permit the spotter to be shaped at will to fit the contour of the object being vulcanized, a flexible heating element of sufficient size to give vulcanizing temperature within the envelope, supported upon flat fireproof strips between the two outside layers of the same, and flexible insulating sheets between said heating element and said envelope.

1,822,023. PAPER MACHINE. WILHELM GIEBELER, Konigstein-on-the-Elbe, Germany. Filed May 24, 1930, Serial No. 455,305, and in Germany Sept. 21, 1926. 6 Claims. (Cl. 92—44.)



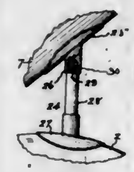
1. A paper machine comprising a slice, a wire adapted to be moved with respect to said slice, hydraulic back-pressure means arranged in the immediate vicinity of said slice, hydraulic back-pressure means extending from said first-mentioned means part way to the rear along said wire, and means for regulating the flow of water in said first- and in said second-mentioned back-pressure means.

1,822,024. KNITTING MACHINE. HEINRICH GÖPFERT, Apolda, Germany. Filed Nov. 1, 1928, Serial No. 316,888, and in Germany Nov. 2, 1927. 1 Claim. (Cl. 66—6.)



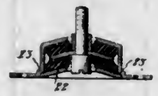
A machine for the production of selvedges in warp knitted fabrics which is adapted to be changed into a machine for weft knitting, comprising a thread guide for operation in connection with the knitting of weft knit hosiery, means for placing said thread guide in a position corresponding to the respective operations of the machine, and movable channel bars adapted to engage the butts of the needles in said machine.

1,822,025. HORN. EDWARD J. GULICK, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed May 6, 1930. Serial No. 450,292. 6 Claims. (Cl. 84—387.)



3. A wind musical instrument of the character described comprising a valve action supporting section made of relatively heavy weight metal, and coacting main branch and bell sections which are made of a relatively light weight metal, and exterior spacers connecting said main branch and valve action sections, said spacers being composite members and including a part thereof which is made of relatively light weight metal.

1,822,026. VIBRATION DAMPER. FREDERICK M. GUY, Detroit, Mich., assignor of one-half to Trevoe G. Murton, Detroit, Mich. Filed Aug. 2, 1929. Serial No. 383,120. 9 Claims. (Cl. 248—14.2.)



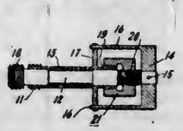
1. A vibration damper including a casing, strata of rubber-like material confined in said casing, an axial anchoring member, and a rigid member on said anchoring member and interposed between said strata, the strata-confining portions of the casing and said member having their respective strata-contacting faces extending angular to the axis of the damper, the opposite faces of the member being parallel.

1,822,027. CAM-CONTROLLED THREAD GAUGE. JAMES HARTNESS, Springfield, Vt. Filed Mar. 2, 1929. Serial No. 348,990. 7 Claims. (Cl. 33—199.)



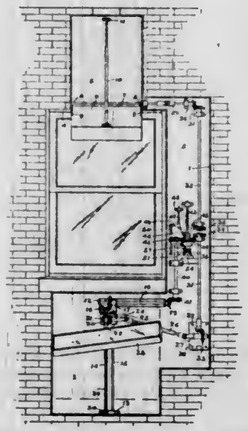
1. A screw thread gauge comprising a pair of relatively rotatable members having gaging threads capable of lying in a common helix, and means connecting said members, said means including a cam of varying pitch and a cam follower for causing relative axial movement of said members when they are relatively rotated.

1,822,028. SCREW THREAD GAUGE AND METHOD OF GAUGING. JAMES HARTNESS, Springfield, Vt. Filed Mar. 20, 1929. Serial No. 348,617. 5 Claims. (Cl. 33—199.)



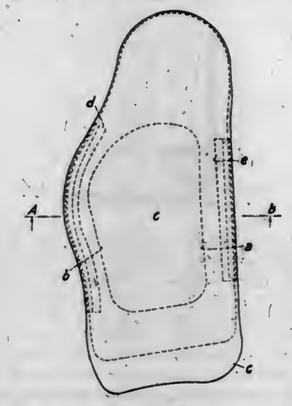
1. A method of gauging a screw thread which comprises engaging said thread with a pair of loosely fitted gauging threads arranged to lie in a common helix, holding said gauging threads against relative rotation, moving said threads axially toward and from each other while so held until they are in binding engagement with the flanks of the thread under test, and measuring the extents of such relative motions in both directions from said position in a common helix.

1,822,029. SUNLIGHT CONTROL AND CONCENTRATING DEVICE. WALTER JAMES HARVEY, Toronto, Ontario, Canada. Filed Feb. 23, 1929. Serial No. 342,043. 12 Claims. (Cl. 88—57.5.)



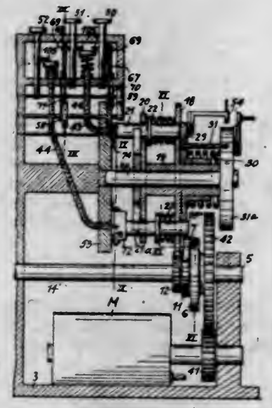
2. A sunlight control and concentrating device, comprising in combination a reflector capable of receiving and reflecting the sun's rays adapted to be tilted in two transverse directions, a reflector arranged above the aforesaid reflector and adjustably mounted and adapted to reflect the sun's rays reflected from the aforesaid reflector and to direct the said reflected rays, and a common operating means adapted to selectively operate each of said reflectors individually.

1,822,030. ARCH SUPPORT. OTTO HILDEBRANDT, Berlin, Germany. Filed Jan. 31, 1929, Serial No. 336,613, and in Germany Feb. 3, 1928. 1 Claim. (Cl. 36—71.)



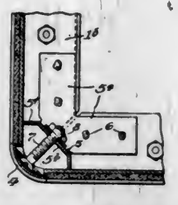
An insertion for boots and shoes, comprising in combination an open metallic frame the inner side of which forms an elastic supporting bow curved upwardly at the side of the foot, a foot supporting layer formed of an inextensible, but pliable material supported by the frame and curved in such a manner that its part fastened to the inner side also lies against the side of the foot, fastening means for attaching said layer to said frame extending along the middle portion only of the sides of the frame, so that when the supporting bow is subjected to the load of the foot it yields elastically inwardly and thus elevates the inner longitudinal arch without spreading the bones thereof.

1,822,031. CALCULATING MACHINE. HERMANN HOFFMEISTER, Gliesmarode, near Brunswick, Germany, assignor to Brunsviga-Maschinenwerke Grimme, Natalis & Co. A.-G., Brunswick, Germany. Filed Dec. 13, 1928, Serial No. 325,878, and in Germany Mar. 29, 1928. 5 Claims. (Cl. 235—62.)



1. In combination with a calculating machine, an electric motor, a commutator for reversing said motor, a circuit connecting said commutator and said motor, two sets of keys, means operatively connected with the keys in each of said sets for reversing said commutator, means also operatively connected with said keys for making and breaking said circuit, and a second circuit breaker also operatively connected with said keys and adapted to make said circuit after a key which had been depressed has returned to its normal position.

1,822,032. FURNITURE TOP CONSTRUCTION. DAVID E. HUNTER, Muskegon, Mich., assignor to Shaw-Walker Company, Muskegon, Mich., a Corporation of Michigan. Filed July 20, 1929. Serial No. 379,679. 8 Claims. (Cl. 45—31.)

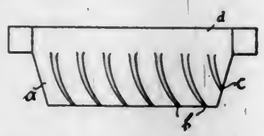


1. A top for furniture comprising a core of sheet metal bent to form projecting marginal portions of substantial thickness having a rounded top edge and flat side faces, a layer of pliable covering material applied over said core and extending around the edges thereof to cover the side faces thereof, said core and covering layer having sections removed at the corners thereof, rounded corner caps mounted at each corner and conforming in vertical section substantially to that of the edge of said core and covering layer, and rails applied to the under side of the marginal portion of said core and having an upturned flange adapted to overlap the edges of said covering material, said caps having a bead about their lower edges abutting the ends of the flange of said rails.

1,822,033. SEALING COMPOSITION. RUSSELL L. JENKINS and CHARLES GLENNON HARDY, Anniston, Ala., assignors to Swann Research, Incorporated, a Corporation of Alabama. Filed Apr. 21, 1930. Serial No. 446,178. 4 Claims. (Cl. 87—19.)

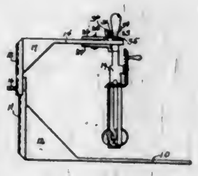
1. A sealing wax base containing a chlorinated diphenyl resin and rosin.

1,822,034. GRATE BAR. THEODOR ADOLPH JESSEN, Husum, Germany. Filed Aug. 17, 1929, Serial No. 386,703, and in Austria Oct. 27, 1928. 1 Claim. (Cl. 126—167.)



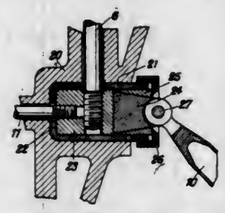
A grate bar having a body at its upper end which constitutes a bearing surface and is of uniform section throughout its effective length, a tapered rib projecting downwardly from said body, and inclined vanes on said rib, one end vane being shorter than the others and the outer edges of said vanes being within the projected horizontal area of said body.

1,822,035. HOLDER FOR EGG BEATERS. EDWARD V. JOHNSON, Gowrie, Iowa. Filed June 11, 1928. Serial No. 284,352. 6 Claims. (Cl. 248—20.)



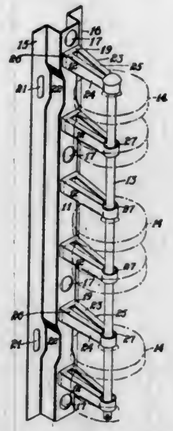
5. In a device of the class described, a base member, a vertical member extending from said base member, a vertical slot in said vertical member, a second vertical member, a bolt extending through said slot and said last mentioned vertical member, a horizontal plate member secured to said last mentioned vertical member, a notch in said plate member designed to receive the handle portion of an egg beater, supporting brackets slidably mounted on said plate member, on each side of said notch and a means for securing said egg beater in said notch and between said two bracket members.

1,822,036. METAL CASING. HUGO JUNKERS, Dessau, Germany. Filed Nov. 13, 1929, Serial No. 406,964, and in Germany Nov. 22, 1928. 14 Claims. (Cl. 121—194.)



1. A metal casing for engines comprising a body, a part adapted to be secured to said body, an anchor block inserted in said body, means for connecting said part to said block, and means for holding said block on said body.

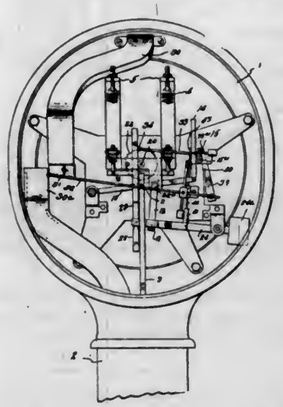
1,822,037. METHOD OF MAKING INSULATOR RACKS. RICHARD M. KERSCHNER, deceased, Pittsburgh, Pa., by Grace Tebay Kerschner, executrix, Zelienople, Pa., assignor to Hubbard & Company, a Corporation of Pennsylvania. Original application filed Feb. 24, 1928, Serial No. 256,577. Divided and this application filed Sept. 27, 1929. Serial No. 395,675. 1 Claim. (Cl. 29—155.5.)



The method of making insulator racks which consists in forming a channel shaped base member having its sides terminating in outwardly extended flanges, spaced openings provided in the channel portion having integral struck-up portions, and in welding pin supports to such struck-up portions.

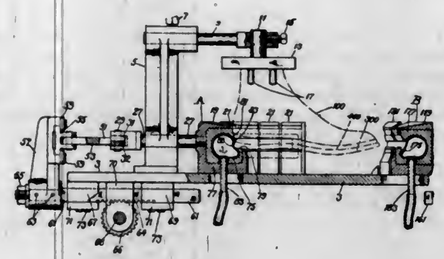
1,822,038. CHECK CONTROLLED SCALE. BERT W. KING, Detroit, Mich., assignor to Barnes Scale Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 30, 1929. Serial No. 336,029. 4 Claims. (Cl. 194—21.)

1. The combination with a scale mechanism movable in the first instance by a load upon the scale, and a follower mechanism for indicating such movement, of a rack and pinion associated with the follower mechanism, coin actuated means comprising a catch adapted to be held in actuated position by the said pinion, means associated with the coin actuating means for locking and unlocking



the follower mechanism, said pinion and catch device being arranged so that rotative movement of the pinion upon relief of the load effects release of the catch whereby the coin actuated means actuates to lock the follower mechanism.

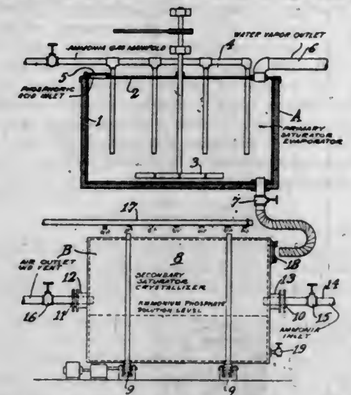
1,822,039. MACHINE FOR APPLYING PRESSURE TO SHOES. FAY D. KINNEY, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 5, 1929. Serial No. 337,674. 17 Claims. (Cl. 18—2.)



9. A machine for applying pressure to a shoe having, in combination, two sectional substantially U-shaped holders, flexible means for fastening the sections of each holder together, a distensible tubular member in each holder, means for alternately moving the sections into contact with and closing them about portions of a shoe, and means for distending the members.

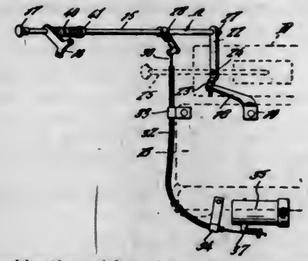
1,822,040. PROCESS FOR MANUFACTURE OF DI-AMMONIUM PHOSPHATE. BETHUNE G. KLUGH, Birmingham, and WARREN R. SEYFRIED, Anniston, Ala., assignors, by mesne assignments, to Swann Research, Inc., Birmingham, Ala., a Corporation of Alabama. Filed July 16, 1928. Serial No. 292,979. 23 Claims. (Cl. 23—107.)

12. A process for the production of di-ammonium phosphate which comprises reacting phosphoric acid with ammonia in a solution of di-ammonium phosphate to form a primary solution of predominately mono-ammonium phosphate while utilizing the heat of the reaction to evaporate the water in the phosphoric acid adding a saturated solution of di-ammonium phosphate to the primary solution to form a secondary solution, and subjecting said secondary



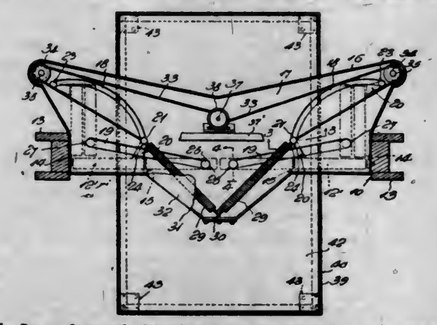
solution to an atmosphere of ammonia until a solution of di-ammonium phosphate is formed while agitating and cooling the same to hasten further absorption of ammonia.

1,822,041. STARTING ATTACHMENT FOR MOTOR VEHICLES. FRIDO O. KOEPP, La Vernia, Tex. Filed July 16, 1929. Serial No. 378,701. 2 Claims. (Cl. 123—179.)



1. In combination with an internal combustion engine of an automobile having a carbureter provided with an air inlet and valve for controlling the same, an electric starter for the engine having a starter button rod, of a single manually operated rod for actuating the valve and starter button rod, and means operatively connecting said manually operated rod to said starter button rod, whereby said starter button rod may be operated independently of said manually operated rod for operating the electric starter.

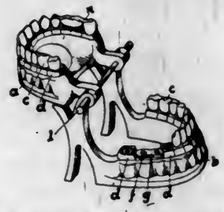
1,822,042. MOTOR OPERATED DOOR. THEODORE G. KOHL and ROY O. GILBURG, Wausau, Wis. Filed Apr. 24, 1930. Serial No. 447,030. 4 Claims. (Cl. 268—33.)



1. In a door of the character described, a door frame, inner and outer door sections hinged together to swing

horizontally, means to hinge the outer door section to the frame, a guide element secured to the outer door section near its free edge, a curved track for the guide element and arranged concentric with the hinge means of the outer door section, a guide element secured to the inner door section near its free edge, an inclined track for the second named guide element, a pulley arranged near the outer end of the curved track, a flexible element engaging the pulley and attached to the door sections near their hinged connection, motor operated means to wind up the flexible element, and separate automatic means to shift the door sections to the closed position.

1,822,043. DENTIST'S MODEL. WALTER KÖHLER, Munich, Germany. Filed June 8, 1929, Serial No. 369,327, and in Germany June 13, 1928. 7 Claims. (Cl. 35—16.)



1. In a dentist's model having an artificial jaw and teeth removably connected with said jaw the combination with said teeth of sectional parts of a gum model, each sectional part being adapted to be interposed between a tooth and said jaw.

1,822,044. AZO DYESTUFFS. HANS KUZIKALLA, Mannheim, and FRANZ BLUEMMEL, Seckenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 3, 1928, Serial No. 317,111, and in Germany Nov. 17, 1927. 4 Claims. (Cl. 260—87.)

1. As new articles of manufacture azo dyestuffs corresponding to the general formula:

$$R-N=N-X$$

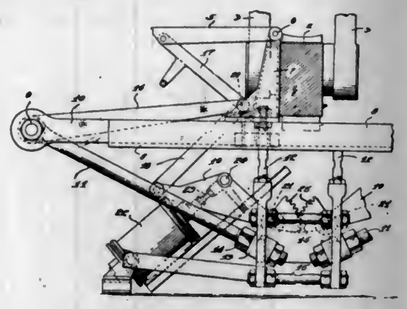
in which R stands for a radicle of a benzoic acid in which the acid group is esterified by butyl alcohol, and X stands for a radicle of a 1-sulfophenyl-3-methyl-5-pyrazolone.

1,822,045. PRODUCTION OF MONONITROANTHANTHRONES. MAX ALBERT KUNZ, Mannheim, KARL KOEBERLE, Ludwigshafen-on-the-Rhine, and WERNER ZERWECK, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 18, 1929, Serial No. 341,056, and in Germany Feb. 24, 1928. 5 Claims. (Cl. 260—61.)

1. A process for the production of mononitro compounds of anthanthrones which comprises acting on an anthanthrone with strong nitric acid in an organic solvent of high boiling point in a proportion of at least 2 parts by weight of solvent per each part by weight of nitric acid.

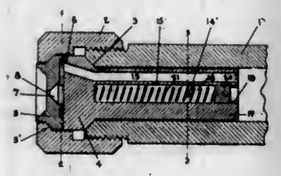
1,822,046. HIGH DENSITY COMPRESS. GEORGE W. LANGFORD, ALFORD C. BARROWS, and JOHN H. MCLEAN, Ann Arbor, Mich., assignors to Economy Baler Company, Ann Arbor, Mich., a Corporation of Michigan. Filed Jan. 23, 1928. Serial No. 248,746. 9 Claims. (Cl. 100—9.)

1. The combination with a compress having upper and lower platens, of a high density attachment, including a support separate from said compress, side doors arranged in operative relation to said compress, pivots, toggle levers between each of said pivots and the adjacent side door for actuating the latter, means including a tie bar for holding said pivots in spaced relation to each other, means for



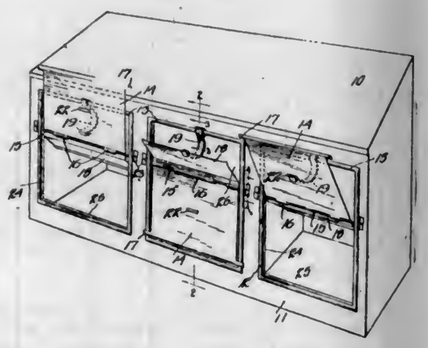
adjusting said pivots, including struts extending downwardly and inwardly from said pivots, and means for suspending the lower ends of said struts from said support.

1,822,047. OIL BURNING SYSTEM. JOHN P. LEASK, Glenbrook, Conn., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed July 21, 1928. Serial No. 294,464. 8 Claims. (Cl. 299—118.)



1. An oil burning system comprising a source of fuel supply, an atomizer having a tip and a plurality of independent oil passages leading thereto, a pipe line connection from the source of supply to the atomizer, and means for successively opening said passages actuated by the pressure of the oil in the pipe line.

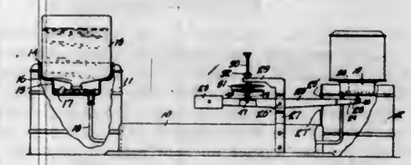
1,822,048. TRAP NEST. FRED W. LORD, Tipton, Ind., assignor to The Oakes Manufacturing Company, Tipton, Ind., a Corporation of Indiana. Filed Dec. 10, 1929. Serial No. 413,078. 3 Claims. (Cl. 119—49.)



1. A closure for trap nests comprising a plate, a door having a slot and pivoted at opposite sides of the plate,

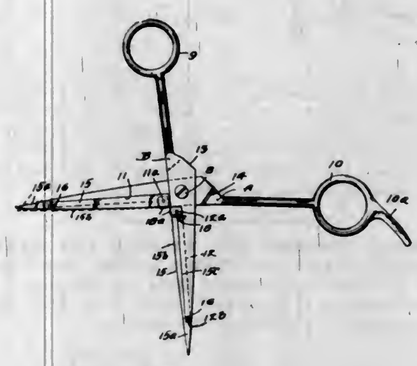
and a hook adapted to engage the slot of the door to hold it in open position and movable to engage the opposite edge to lock it when the door is shut, substantially as set forth.

1,822,049. BROODER HEATER. FRED W. LORD, Tipton, Ind., assignor to The Oakes Manufacturing Company, Tipton, Ind., a Corporation of Indiana. Filed Dec. 10, 1929. Serial No. 413,079. 2 Claims. (Cl. 236—6.)



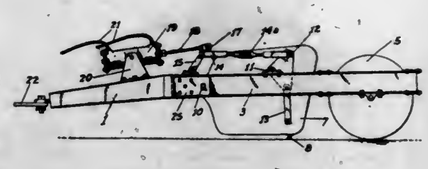
1. A brooder heater comprising a base having a burner cup and an oil cup mounted at its respective ends, said burner cup provided with a plate depending from its bottom, a flexible conduit connecting said cups, a support fixed to said base, a lever pivotally secured to said support provided with a fork-like end adapted to engage said plate, a heat responsive device resiliently positioned between said lever and said support for actuating said lever to raise said burner cup, substantially as set forth.

1,822,050. SHEARS WITH DETACHABLE BLADES. CHARLES E. LUEDTKE, Minneapolis, Minn., assignor of one-half to Forrest Skyhawk, Stewartville, Minn. Filed Mar. 8, 1928. Serial No. 260,012. 1 Claim. (Cl. 30—13.)



Shears comprising a pair of intermediately pivoted blade holding members having longitudinally rabbeted portions on their opposing faces, said rabbeted portions extending in length from the outer ends of said members to points adjacent the pivot of said blade holding members, detachable blades having longitudinal rabbeted portions extending from the tips thereof to their opposite ends, the rabbeted portions of said blades interfitting with the rabbeted portions of said blade holding members to substantially equal the thickness of the unrabbeted portions of each, the extremities of said blade holding members abutting and interlocking with the tips of said blades and spring clips affixed to the outer faces of said blade holding members adjacent the pivot and having free turned ends adapted to yieldingly engage the inner extremities of the cutting edges of the blades to retain the blades against lateral displacement.

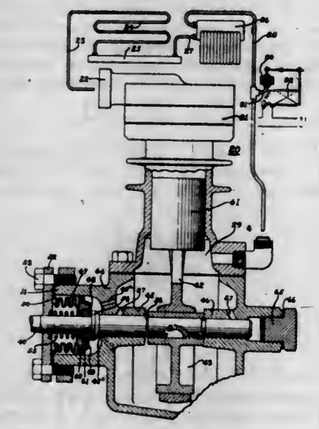
1,822,051. LEVELER. HARRY R. LYTLE, Sacramento, Calif., assignor of one-half to Damon R. Throop, Stockton, Calif. Filed Feb. 21, 1930. Serial No. 430,233. 7 Claims. (Cl. 37—169.)



1. A leveler comprising a frame structure which includes side members, a blade disposed between the side members, means pivoting the blade in connection with the frame at points forwardly of the blade, a transverse shaft mounted on the frame, in front of the blade, means for turning the shaft, and connections between the shaft and the blade pivoting means for raising and lowering the blade with the turning of the shaft.

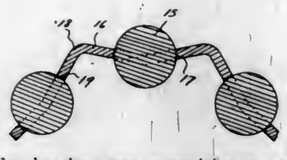
7. In a leveler or like implement, a main frame comprising separate side members, and a unitary tongue and cross-beam structure separate from the side members; the forward ends of the latter being abutted against the ends of the cross-beam, angle straps, one leg of each of which extends along the forward side of and is rigidly secured to the cross-beam while the other leg overlaps and engages the outer face of the corresponding side member, and removable bolts through said strap, side member, and the end of the cross-beam.

1,822,052. REFRIGERATING APPARATUS. DAVID E. MACCABEE, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 30, 1928. Serial No. 266,056. 3 Claims. (Cl. 286—11.)



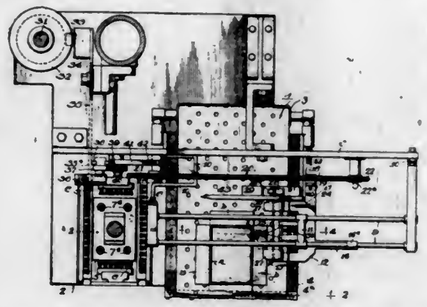
2. In a refrigerating apparatus, a shaft passing through a wall of said apparatus, a seal comprising a flexible wall having hermetic connections with said wall and shaft, with a sliding connection in said seal, and a solid damping member comprising a flexible metallic spider in contact with said seal and said apparatus wall for preventing audible vibrations in said seal.

1,822,053. ROLLER BEARING. HENRY MARLES, Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed May 14, 1928. Serial No. 277,778. 4 Claims. (Cl. 308—217.)



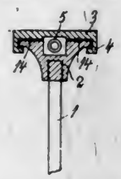
1. A roller bearing cage comprising an annular shell having spaced openings constituting roller receiving pockets and with the edges thereof perpendicular to the outer and inner surfaces, said shell being crimped to arrange said edges in converging relation to each other and in tangential relation to the cylindrical surfaces of the rollers.

1,822,054. BOX WRAPPING MACHINE. HERBERT J. MELVILLE, Chicago, Ill., assignor to Wm. Wrigley, Jr., Company, Chicago, Ill., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,621. 11 Claims. (Cl. 93—54.)



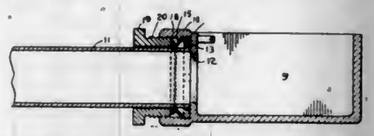
1. In a box wrapping machine, the combination of a feed belt upon which the covering sheets and boxes are assembled, wrapper-applying mechanism adjacent said belt and including a vertically reciprocating plunger head, and means for transferring said assembled boxes from said belt to said wrapper-applying mechanism comprising a reciprocating carriage having gripping devices operative to engage said box during its transfer from said belt.

1,822,055. GAS PEDAL. ALBERT NÆSHEIM, Eidfjord, Norway. Filed Dec. 16, 1929, Serial No. 414,479, and in Norway Dec. 18, 1928. 1 Claim. (Cl. 74—81.)



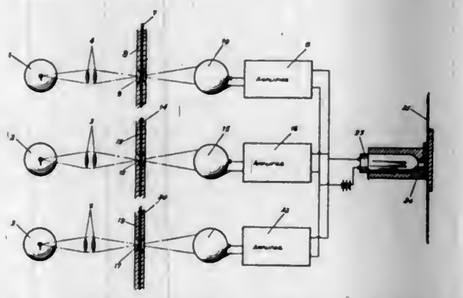
A foot pedal particularly adapted to control the gas supply of motor vehicles, comprising a pedal head having a plurality of slots in the outer face thereof; a plate mounted on the outer face of the head and having inbent sides which extend under the outside edges of the head, said plate having slots therein cooperating with the slots in the head; a spring in one of the cooperating slots secured at one end to the head and the other end to the plate; and balls arranged in the other cooperating slots in the head and plate adapted to permit an easy sliding movement of the plate on the head, the spring being adapted to force the plate to its normal position.

1,822,056. THREADLESS PIPE CONNECTER. EDWARD J. NOBLE, New London, Conn., assignor, by direct and mesne assignments, to Gillette-Vibber Company, Incorporated, New London, Conn., a Corporation of Connecticut. Filed Feb. 7, 1929. Serial No. 338,088. 4 Claims. (Cl. 247—25.)



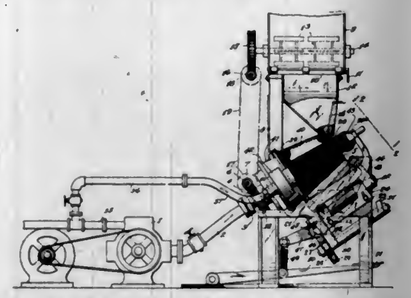
1. In combination a conduit box, an internally threaded neck integral therewith, an outwardly flaring split locking and flexible expansion washer securely held in said threaded neck and engaging a conduit pipe abutting said box in said neck and a lock nut engaging said internally threaded neck whereby the tightening of said lock nut rigidly locks said flexible washer on said conduit pipe and the release of said lock nut releases said washer.

1,822,057. METHOD FOR RECORDING PHOTOGRAPHIC SOUND RECORDS. FREEMAN H. OWENS, New York, N. Y. Filed Sept. 17, 1928. Serial No. 306,496. 8 Claims. (Cl. 179—100.3.)



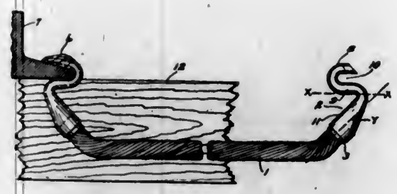
1. The method of making a composite photographic sound record comprising the steps of synchronously converting a plurality of photographic sound records into electric impulses, combining said impulses, modulating the intensity of a single recording lamp by said combined impulses, and photographing the modulated light rays from said lamp on a sensitized film.

1,822,058. METHOD AND MACHINE FOR MAKING ARTICLES OF PULP. EUGENE L. PERRY, West Orange, N. J., assignor to Wilbarton Ware, Inc., Kearney, N. J., a Corporation of New Jersey. Filed Oct. 6, 1928. Serial No. 310,893. 13 Claims. (Cl. 92—54.)



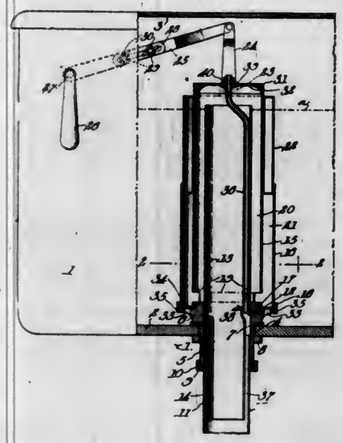
1. Apparatus for forming fibrous pulp into a wall, comprising a hollow foraminated forming roll, means for applying suction to the interior of said forming roll, a hollow foraminated pressure roll, and means for applying pressure to the interior of said pressure roll.

1,822,059. RAIL BOND. PLINY P. PIPES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Nov. 13, 1930. Serial No. 495,310. 6 Claims. (Cl. 173—278.)



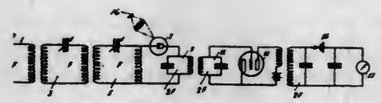
1. A rail bond comprising a body and a terminal on each end and secured to the body, the terminals consisting of a sleeve member extending back along the body for a predetermined distance, the body and terminal being flattened for a part of their length nearest the end and the other part changing to a circular section at the inner end of the terminal, a sleeve of less diameter than that of the inner end of the terminal projecting from the terminal along the body, the body and terminal each being bent upon itself for a part of its linear length and forming a space between its adjacent bent portions to receive a rail base and the balance of the combined body and terminal being bent back relative to the other portion, each end face of the body being exposed at the outer end of the terminal and the end faces of the body and terminals being beveled and concaved to form a receptacle with the rail base to receive molten attaching metal in fused relation to the body, terminal and rail base.

1,822,060. SIPHON VALVE FOR FLUSH TANKS. SAMUEL L. POWELL, Blue Ridge Summit, Md. Filed May 31, 1930. Serial No. 458,683. 8 Claims. (Cl. 4—47.)



3. A siphon valve for flush tanks, including a base member, a siphon tube carried by said base member, a pair of tubes carried by said base member and surrounding said siphon tube and spaced relatively thereto and to each other to provide two intercommunicating chambers in communication with said siphon tube, valved means in said base member affording communication between said flush tank and said chambers whereby liquid from said tank is introduced into said chambers, and a depressible plunger in one of said chambers for displacing the liquid from both of said chambers into said siphon tube for starting the siphon action and emptying said flush tank by way of said valved means.

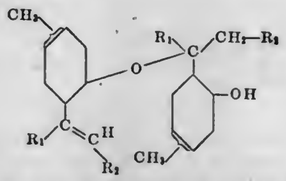
1,822,061. METHOD AND MEANS FOR MEASURING LIGHT INTENSITIES. WALTER VAN BRAAM ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 6, 1929. Serial No. 353,036. 12 Claims. (Cl. 179—171.)



8. A system for measuring light intensity which includes a light sensitive element which passes current in other than direct proportion to applied voltage in the presence of constant illumination, means for applying a frequency of a predetermined value thereto, means for subjecting said light sensitive element to light of unknown intensity, thereby producing currents of a frequency other than that originally impressed, means for amplifying the currents of the frequency produced by said element, and means for indicating the light intensity reaching said element from said amplified currents.

1,822,062. METHOD OF MANUFACTURING ALKYL ISOALKYL PHENOLS. WALTER SCHOELLER, Berlin-Westend, and HANS JORDAN, Berlin-Steglitz, Germany, assignors to the Firm Schering-Kahlbaum Aktiengesellschaft, Berlin, Germany. Filed Oct. 25, 1927, Serial No. 228,687, and in Germany Oct. 26, 1926. 3 Claims. (Cl. 260—154.)

1. The method of producing methyl isoalkyl phenols, comprising first condensing a cresol, in which the methyl and hydroxyl groups are combined with non-adjoining carbon atoms with a ketone in the presence of a condensing agent of acid character at a temperature slightly above room temperature, then heating the condensation product having the formula

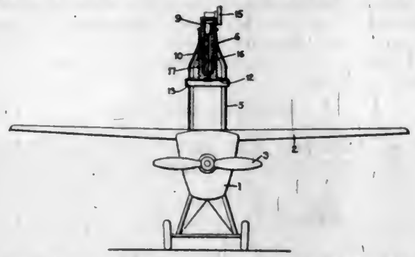


wherein R_1 is an alkyl radical, R_2 a hydrogen atom or an alkyl radical, to about 300° C. to decompose same, thereafter hydrogenating the mixture of the products of decomposition until two hydrogen atoms have entered into combination, and finally separating from the mixture the methyl isoalkyl phenols.

1,822,063. AERIAL MACHINE. JOSEPH SCHULMAN, Brooklyn, N. Y. Filed Mar. 25, 1929. Serial No. 349,557. 1 Claim. (Cl. 244—11.)

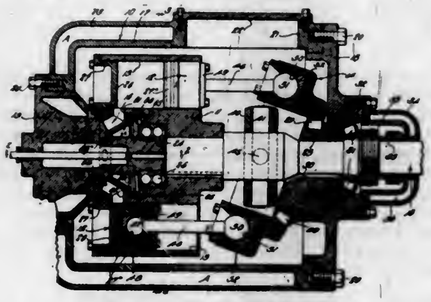
An aircraft propulsion means comprising a magazine of explosive charges and means to cause their ignition seria-

tim, in combination a cylinder carried by the aircraft; a piston within the cylinder, a substantially vertical pis-



ton rod carried with the piston, a horizontal surface carried with the piston rod and being journaled for a reciprocal movement and vertical guides.

1,822,064. COMPRESSOR. CLARENCE S. SORENSEN, Los Angeles, Calif. Filed June 23, 1930. Serial No. 463,134. 16 Claims. (Cl. 103—162.)



3. A mechanism of the character described including, a housing, two elements, one a stationary element carried by the housing, the other a rotatable cylinder block in the housing and rotatably mounted on the stationary element, pistons mounted for reciprocation in the cylinders of the cylinder block, means for causing reciprocation of the pistons upon rotation of the cylinder block, the stationary element having spaced ports, one an inlet port, the other an outlet port, the cylinder block having ports communicating with the inner ends of the cylinders and means for controlling the passage of fluid through the ports of the cylinder block including, a valve ring engaging the stationary element and slidably connected with the cylinder block to rotate therewith, and means holding the ring in engagement with the stationary element, the valve ring having openings communicating with the ports of the cylinder block and adapted to register with the inlet port during the out strokes of the pistons, and adapted to register with the outlet port during the in strokes of the pistons.

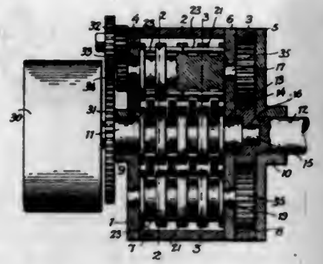
1,822,065. AZO DYESTUFF COMPONENTS AND PROCESS OF PREPARING THEM. EDUARD SPRÖNGERTS, MAXIMILIAN PAUL SCHMIDT, and ROBERT FRANKE, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Filed Oct. 14, 1929, Serial No. 399,714, and in Germany Oct. 19, 1928. 10 Claims. (Cl. 260—125.)

1. Process of preparing azo dyestuff components, which consists in causing a cyanamide to act upon a compound of the following constitution:



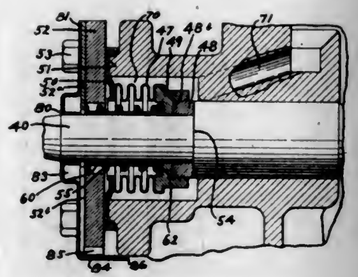
wherein R stands for the naphthalene nucleus non-substituted in ortho- or para-position to the hydroxy group.

1,822,066. POWER TRANSMISSION MECHANISM. ANDREW K. STOHL, Waterbury, Conn., assignor to Stohl Super Power Corporation, Fair Haven, Vt., a Corporation of Vermont. Filed July 25, 1930. Serial No. 470,703. 3 Claims. (Cl. 74—14.)



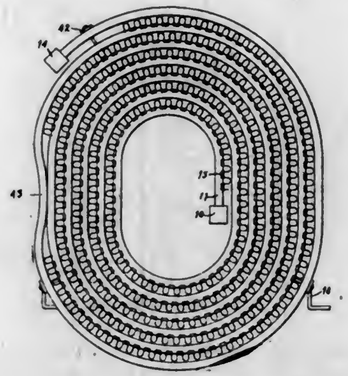
1. In a power transmitting mechanism, driving and driven shafts, and motion transmitting mechanism between said shafts comprising auxiliary shafts grouped about the driving shaft, a set of gears on each of said shafts, and a plurality of cam elements actuated by the driving shaft and associated with each set of gears, the acting portions of the sets of gears and the associated cam elements being operatively arranged to transmit motion to the transmission shafts at different points in the orbit of rotation of the drive shaft.

1,822,067. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 30, 1928. Serial No. 266,077. 3 Claims. (Cl. 286—11.)



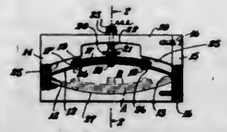
1. A seal for a compressor having an apertured wall, a shaft passing through the aperture in the wall, a seal for said shaft having hermetic connections with said shaft and wall, one of said connections being a sliding connection, wherein there are relatively moving sealing faces, a spring surrounding said shaft urging said sealing faces together, and a single sleeve interposed between said shaft and spring, in contact with the inner surface of said spring and extending throughout the length of said spring.

1,822,068. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 28, 1929. Serial No. 350,735. 8 Claims. (Cl. 257—36.)



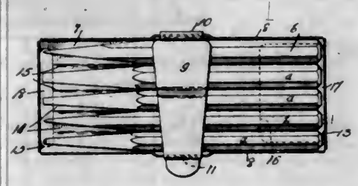
1. A substantially spiral pancake condenser for refrigerating apparatus having a single fin between certain convolutions of said spiral.

1,822,069. THERMOSTAT. ADOLPH A. THOMAS, New York, N. Y. Filed May 31, 1928. Serial No. 281,613. 9 Claims. (Cl. 297—15.)



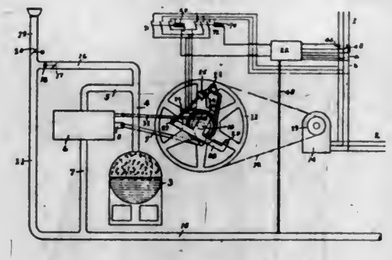
1. A thermostatic buckling member comprising a buckling spring carrying a curved thermostat bar rigidly mounted thereon, so that these two parts always reverse their curvature as one member at predetermined high and low temperatures, and means for so connecting the ends of said bar to said spring as to prevent undue strains or stresses in these parts during the buckling operations.

1,822,070. HOLDER FOR TOOLS OR IMPLEMENTS. CHARLES VALLONE, Buffalo, N. Y., assignor to Barcalo Manufacturing Company, Buffalo, N. Y. Filed Sept. 18, 1928. Serial No. 306,687. 5 Claims. (Cl. 206—16.)



5. A holder for a plurality of relatively slender tools, comprising a body portion having a wall on which said tools rest side by side, said body portion having an aperture at one end of said wall over which an end of each tool extends, whereby, by depressing said ends of said tools into said aperture, the tools are caused to tilt on said end of said wall to raise their other ends off said wall so that said tools can be readily grasped and removed from said holder.

1,822,071. POWER CONTROL SYSTEM. FRANK O. WALLENE, Lakewood, Ohio. Filed Feb. 20, 1928. Serial No. 255,844. 6 Claims. (Cl. 290—2.)



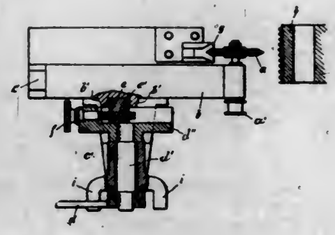
1. The method of controlling a system embodying a primary source of electrical energy, a secondary source of both electrical and heat energy, both sources being connected to a common electrical load, and control means for said secondary source, consisting in operating said control means to cause said secondary source to supply demands for heat energy and incidentally to produce electrical energy, and to supply demands for electrical energy and incidentally to produce heat energy, and in so controlling the said operation of said control means that the ultimate draft of electrical energy upon said primary source will be maintained between predetermined maximum and minimum positive finite values, so long as the total draft of electrical energy upon said system as a whole exceeds said minimum positive finite value.

1,822,072. ELECTRICAL INSULATION. WILLIAM BRYAN WIEGAND, Sound Beach, Conn. Filed Mar. 13, 1930. Serial No. 435,675. 14 Claims. (Cl. 252—1.)

1. In the treatment of hydrocarbon insulating oils to improve their electrical properties, the improvement which comprises subjecting the hydrocarbon oil to treatment with carbon black at a temperature not exceeding about 60° C.

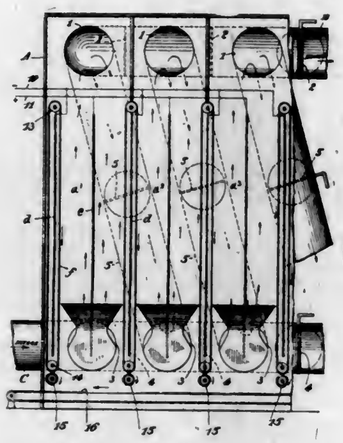
8. A fluid electrical insulating compound comprising a hydrocarbon oil and about 0.005–0.008% by weight of carbon black dispersed therein.

1,822,073. METHOD OF AND APPARATUS FOR TRIMMING GRINDING WHEELS. JOHANNES WILBERZ, Hilden, Germany. Filed Mar. 20, 1928, Serial No. 263,180, and in Germany May 18, 1927. 2 Claims. (Cl. 125—11.)



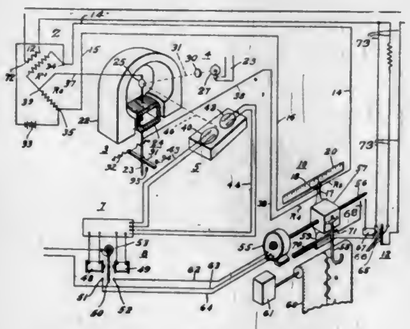
1. An apparatus for trimming grinding wheels comprising a frame, a slide adapted to reciprocate on said frame, a crank carried to rotate in said frame, a crank pin on said crank adapted to impart reciprocation to said slide, means for rotating said crank, means for varying its radius, a grinding wheel on said slide, and a trimming tool arranged on said frame in line with said grinding wheel.

1,822,074. SELF-FREEING ELECTRIC SEPARATOR. WILLIAM E. WINCHESTER, Los Angeles, Calif., assignor to Chem-Electric Engineering Corporation, a Corporation of New York. Filed July 18, 1923. Serial No. 652,286. 6 Claims. (Cl. 183—7.)



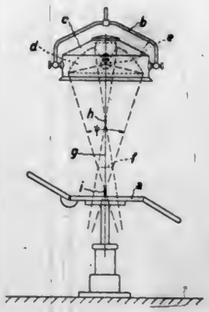
1. In dehydrating apparatus, a desiccating chamber adapted to accommodate the passage therethrough of a stream of desiccating gas with a charge of sprayed liquid to be desiccated; two sets of conducting plates arranged lengthwise of the passage through said chamber; means for oppositely charging said sets of plates; an endless belt having a lap paralleling and overlying one of said plates; and means for driving said endless belt to prevent the collection of desiccated solids upon said plate and to convey said solids away from said plate.

1,822,075. ELECTRICAL MEASURING INSTRUMENT. SAMUEL ARONOFF, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,137. 5 Claims. (Cl. 172—239.)



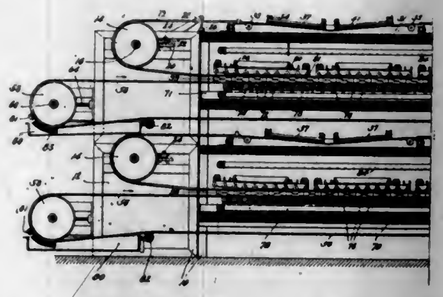
2. In combination, a circuit including means operative in accordance with balance and unbalance of the voltage between points in the circuit, light-responsive means, and means controlled by said first means for controlling light beams to affect said light-responsive means.

1,822,076. ILLUMINATING ARRANGEMENT. WALTHER BAUERSFELD and HANS HARTINGER, Jena, Germany, assignors to the Firm Carl Zeiss, Jena, Germany. Filed Feb. 17, 1928, Serial No. 255,117, and in Germany Mar. 2, 1927. 3 Claims. (Cl. 240—1.4.)



1. Illuminating arrangement containing an operating chair or the like and an illuminating body, the said illuminating body being provided with a casing, a concave mirror fixed in the casing, the reflecting surface of the concave mirror being a surface of rotation having a continuously curved meridional cure, and a source of light disposed in the casing and lying on the axis of rotation of the mirror, the mirror extending in the direction of the axis of rotation beyond the source of light, the points of intersection of the luminous rays projected by the reflecting surface of the mirror with the said axis of rotation covering a finite length of this axis, so that the pencil of reflected luminous rays has above the operating chair a narrow constriction, each element of the cross section of the narrowest place of the said constriction being illuminated by rays emanating from points of at least two meridians of the mirror situated on both sides of the source of light.

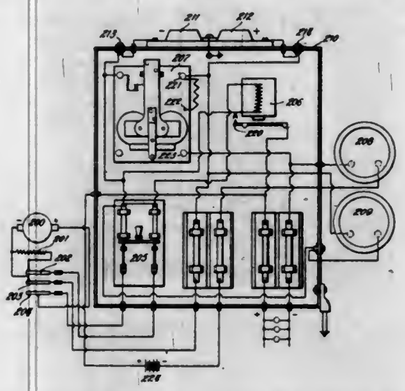
1,822,077. REFRIGERATING APPARATUS. CLARENCE BIRDSEYE, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Feb. 6, 1929. Serial No. 337,858. 39 Claims. (Cl. 62—114.)



1. A refrigerating apparatus comprising separate feeding means for presenting different articles to be refrigerated in different refrigerated zones, and a closed continuously operating system of circulation for delivering liquid cooling medium to all of said refrigerated zones.

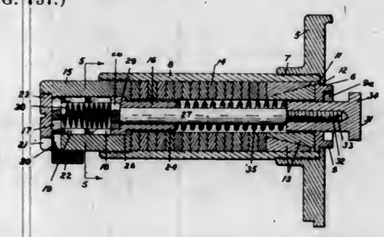
1,822,078. WIND DRIVEN GENERATOR. HERBERT E. BUCKLEN, Elkhart, Ind., assignor to Herbert E. Bucklen Corporation, a Corporation of Indiana. Filed Sept. 30, 1927. Serial No. 222,991. 4 Claims. (Cl. 175—294.)

1. In a control system, the combination with a battery, a generator for charging said battery, a circuit extending from said generator to said battery, of a protective relay in said circuit responsive to a predetermined value of electromotive force, and a reverse current relay connected in said circuit responsive to a predetermined greater value



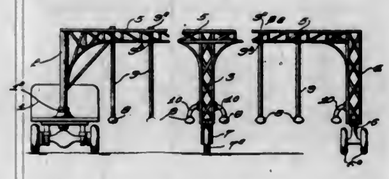
of electromotive force in said circuit, said protective relay maintaining said charging circuit open irrespective of the operation of said reverse current relay until a predetermined voltage is set up in said circuit.

1,822,079. SHOCK ABSORBING MECHANISM. WILLIAM R. BULL, Longmeadow, and CLARENCE E. SIMPSON, Springfield, Mass. Filed May 18, 1931. Serial No. 538,198. 15 Claims. (Cl. 89—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



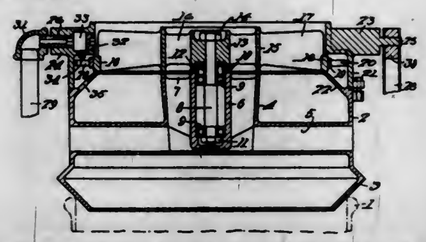
15. In a shock absorbing mechanism, a support, a spring seat, a plunger, a spring confined between the spring seat and plunger, and means for inoperating the spring seat.

1,822,080. PARTITIONED STARTING GATE. MARSHALL CASSIDY, San Diego, Calif. Filed Dec. 24, 1927. Serial No. 242,387. 5 Claims. (Cl. 119—15.5.)



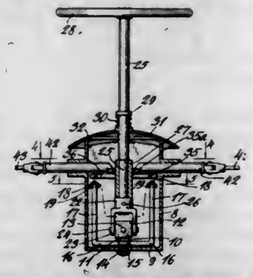
1. In a starting gate, a trackless motor truck, a movable overhead supporting means rotatably supported at its one end on said trackless motor truck and adapted to automatically move from a position extending laterally of the truck into a position in train rearwardly on said truck on forward movement thereof, and a plurality of partition members rigidly suspended from said overhead support whereby said entire gate may be bodily removed from the race track.

1,822,081. AIR TURBINE EXHAUSTER FOR LOCOMOTIVES. FRANS H. C. COPPUS, Worcester, Mass., assignor to Anna M. C. Wechsberg, Vera L. Wood, and Frans H. C. Coppus, trustees, Worcester, Mass. Filed Jan. 27, 1930. Serial No. 423,583. 13 Claims. (Cl. 104—52.)



1. In an exhauster for the purpose described, the combination with an outer casing having an inner casing therein, an inlet for air through the outer casing to the inner casing, a passage for air and products of combustion up through the space between the inner casing and the outer casing, a fan having blades in registration with the outer casing and blades in registration with the inner casing, turbine buckets mounted on the blades of said fan, and means for directing a fluid against the blades to rotate the fan, whereby the fan blades will draw the air and products of combustion up through the space between the outer casing and inner casing to draft a locomotive and the inner blades will draw external air through the inner casing to cool the bearings of the fan.

1,822,082. STEERING DEVICE FOR AEROPLANES. HAROLD G. DAVIS, Denver, Colo. Filed Nov. 4, 1929. Serial No. 404,647. 2 Claims. (Cl. 244—29.)

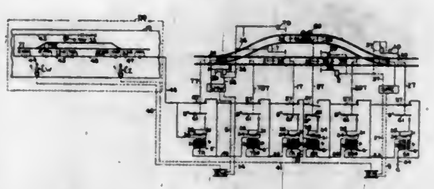


1. A steering mechanism for use with aeroplanes comprising, in combination, a casing having a bottom and sidewalls, a universal joint secured to the bottom of the casing and mounted for rotation about an axis that extends upwardly from the bottom, a steering post connected with the casing by means of the universal joint whereby it may be tilted in any direction and also rotated with respect to the casing, the universal joint having outwardly extending arms, a yoke member having an elongated slot through which the steering post extends, said yoke member having guide rods extending outwardly from each side thereof at right angles to the slot, said rods pasaing through holes in opposite sides of the casing, and a second yoke member surrounding the steering post with the slot at right angles to that of the first whereby the two yoke members may be moved independently or simultaneously by tilting the steering post.

1,822,083. TRAIN DISPATCHING SYSTEM FOR RAILROADS. OSCAR H. DICKE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Apr. 15, 1927. Serial No. 184,013. 9 Claims. (Cl. 246—124.)

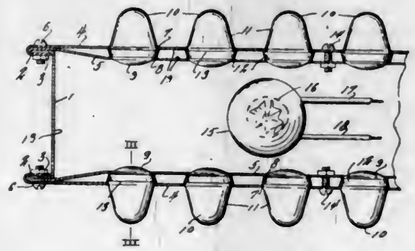
1. In a train dispatching system, the combination with a railway track divided into a plurality of track sections

by insulating joints, a track circuit for each section including a source of energy and a track relay, a local train dispatcher's office, a plurality of indicators at said office each responsive to alternating current having a frequency distinctive from the frequency any other indicator will re-



spond to, a line circuit, a source of alternating current of distinctive frequency at each track section location, and means for feeding alternating current from any one of said sources into said line circuit for rendering the corresponding one of said indicators responsive.

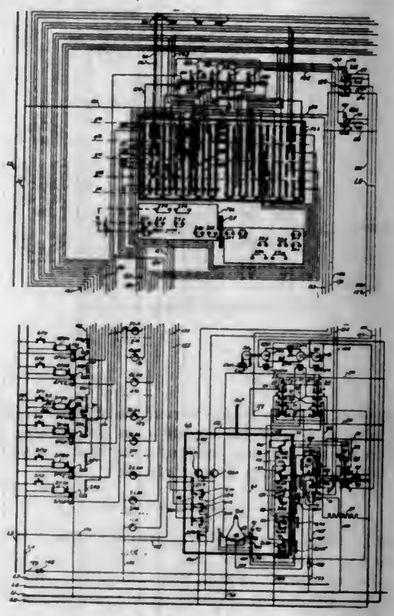
1,822,084. SIGN. ALFRED M. DUCEY, Toledo, Ohio, assignor to Kadon Foundation, Inc., Toledo, Ohio, a Corporation of Delaware. Filed July 31, 1929. Serial No. 382,313. 3 Claims. (Cl. 240—152.)



1. The combination with a plurality of double convex lenses having intermediate enlargements and different lens center common axes perpendicular to said enlargements, of a mounting base comprising a pair of plates having lens seats providing openings in the outer plate for lens protuberance and registering openings in the inner plate for lens protuberance to a different extent, and means for anchoring said lenses for mounting said axes in parallelism, said means being effective for flexing one plate toward the other in this lens holding position.

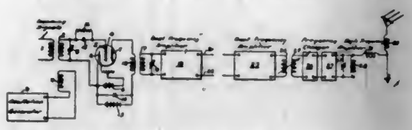
1,822,085. SELECTIVE SIGNAL SYSTEM. WILLIAM F. EAMES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 11, 1929. Serial No. 398,943. 10 Claims. (Cl. 177—336.)

1. In a signaling system for a bank of elevator cars operable past a floor, passenger-operated call-registering means at said floor common to all of said cars for registering calls for service at said floor, call-receiving means individual to each of said cars for receiving said calls for service, electromagnetically operable means individual to each car and operable, upon application of voltage above a predetermined value, to complete a circuit to the call-receiving means for that car, a circuit for said floor having a portion common to all of said cars and including the call-registering means for that floor and having a plurality of branches, one for each of said cars, the branch circuit for each of said cars including the electromagnetically operable means for that car, means individual to each car and operable in correspondence with the position of said car with respect to said floor for completing the branch of said circuit including the electromagnetically operable means for that car when the said car approaches within a predetermined distance in advance of the said floor, and means also in the common portion of said circuit operable upon actuation of the said



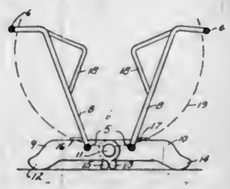
call-registering means, when one of said branch circuits is completed, to render the voltage available to the electromagnetically operable means for the others of said cars below the said predetermined value.

1,822,086. RELAY SYSTEM. FRANK B. FALKNOR and THADDEUS R. GOLDSBOROUGH, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 13, 1926. Serial No. 135,020. 11 Claims. (Cl. 250—15.)



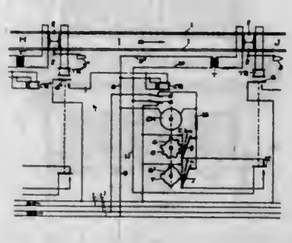
1. In a relay system, means for receiving signals at radio frequency, means for changing said signals to a lower super-audible frequency, and means comprising a frequency changer for raising said super-audible frequency to a radio-frequency for retransmission.

1,822,087. DISH DRAINER. BERNARD FEINGOLD, New York, N. Y. Filed Apr. 25, 1929. Serial No. 357,933. 6 Claims. (Cl. 141—11.)



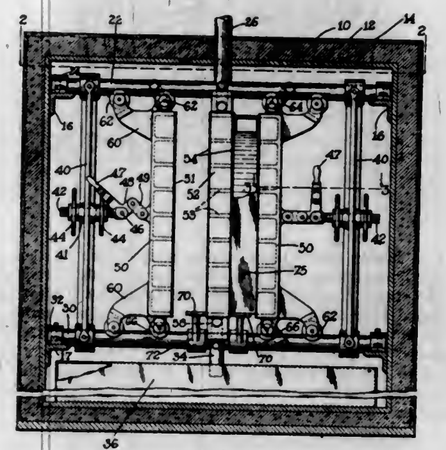
4. A dish drainer comprising a pair of oppositely disposed rack frames, a support for each frame upon which its corresponding frame is pivotally mounted, said supports being pivotally connected to each other, the pivotal axes of said frames and supports being substantially parallel to each other, the pivotal axes of said frames being located on said supports on opposite sides of the pivotal connection of said supports, and laterally projecting lugs carried by the upper part of said supports and located outside of and above the pivotal axes of said frames, said lugs projecting into the path of said frames when said frames are swung away from each other.

1,822,088. CONTINUOUS INDUCTIVE TRAIN CONTROL SYSTEM. WILLIAM D. HAILES, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed May 29, 1929. Serial No. 366,879. 12 Claims. (Cl. 246—34.)



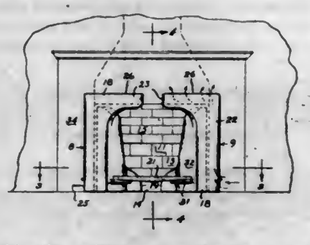
1. In a coded continuous train control system, in combination, a track circuit including a track relay, a source of track circuit energy, current coding means for placing coded current in the form of relatively short current impulses on the track circuit, a source of coding energy, and means to intermittently interrupt the application of coded energy, and apply track circuit energy for a relatively long period, to the track circuit.

1,822,089. REFRIGERATING APPARATUS. BICKNELL HALL, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Aug. 5, 1929. Serial No. 383,710. 20 Claims. (Cl. 62—114.)



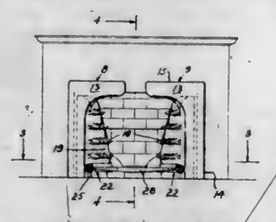
1. A refrigerating apparatus comprising a stationary heat-conductive plate, and members disposed on either side of the stationary plate and movable toward the latter to position articles to be refrigerated against its opposite faces.

1,822,090. FIREPLACE HEATER. ALBERT J. HALLERT, Oakland, Calif. Filed Feb. 25, 1930. Serial No. 431,096. 1 Claim. (Cl. 126—121.)



The combination with an open fireplace of an air-heating and circulating device adapted to be positioned within the fireplace, said device comprising a pair of hollow flat members adapted to be disposed in a vertical position one adjacent each side of the fire-place opening and within the same and substantially parallel to the adjacent side of the fireplace opening, the forward edge of each member projecting beyond the fireplace opening and being expanded laterally to overlie the adjacent side marginal edge of the fireplace opening, the upper end of the projecting portion of each member being expanded laterally inwardly and overlying a portion of the top marginal edge of the fireplace opening, each member being formed with an air inlet opening at the outer side of the projecting portion thereof and adjacent the lower edge of the member, each member being formed with an air outlet opening in the upper edge of its projecting portion whereby to provide a convection flow of air through each of said hollow members, horizontally disposed baffle members arranged in staggered relation within each hollow member to retard the air flow through the hollow member and direct it in a zigzag path therethrough.

1,822,091. FIREPLACE HEATER. ALBERT J. HALLERT, Oakland, Calif. Filed Mar. 17, 1930. Serial No. 436,350. 6 Claims. (Cl. 126—121.)

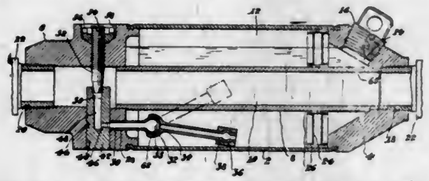


1. In combination with an open fireplace recess, an air heating and circulating means for disposal in said fireplace recess comprising a hollow slab-like member of heat-conducting material arranged for removable and upright placement adjacent a wall of the recess and having inlet and outlet openings for the convectional circulation of air therethrough, a gas burner mounted adjacent the bottom of an exposed face of said member, and baffle elements extending from said face of the member whereby to hinder the convectional flow of heated air from above said burner and direct said air against said face.

1,822,092. OILING DEVICE. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 29,1930. Serial No. 471,518. 3 Claims. (Cl. 184—55.)

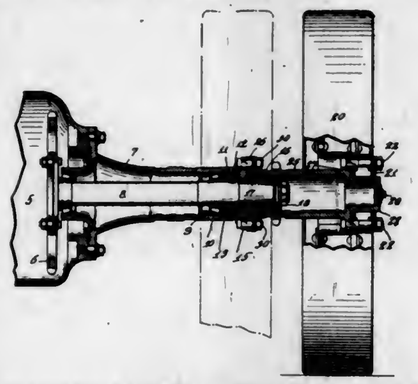
1. An air line oiler comprising a casing having a passage for pressure fluid and a reservoir for oil with communicating means therebetween, said communicating means being adapted to pass pressure fluid from the passage to the reservoir in one position of the oiler and to pass oil from the reservoir to the passage in another posi-

tion thereof, closure means at each end of the reservoir, a member extending from the closure means at one end of the reservoir into the passage and having a passageway therein, an adjustable member in said closure means adapted to control the passageway, and means supported by the said closure means extending from the passageway into the



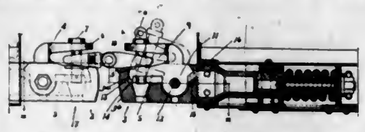
reservoir to convey oil therefrom to the passage in the casing while the communicating means is passing air and to convey air to the reservoir from the passage while the communicating means is passing oil, said means being adapted to oscillate in the reservoir from one position to another upon movement of the oiler to various positions.

1,822,093. TRACTOR. ROBERT O. HENDRICKSON and TOLMAR NELSON, Racine, Wis., assignors to J. I. Case Company, Racine, Wis., a Corporation. Filed Mar. 31, 1930. Serial No. 440,488. 3 Claims. (Cl. 180—75.)



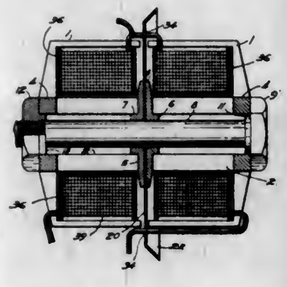
1. In a tractor, a housing, an axle in the housing, a hub extension on the axle, a spacer, means for securing the spacer to the hub extension, a spindle on said spacer, a wheel having a hub mountable on said spindle, and means for securing the wheel-hub to the spindle.

1,822,094. BUFFER AND DRAW HEAD. JOHN R. HICKS, Pittsburgh, Pa., assignor to Howard N. Eavenson & Associates, Mining Engineers, Pittsburgh, Pa., a Co-partnership composed of Howard N. Eavenson, Newell G. Alford and John R. Hicks. Filed May 15, 1929. Serial No. 363,315. 2 Claims. (Cl. 213—188.)



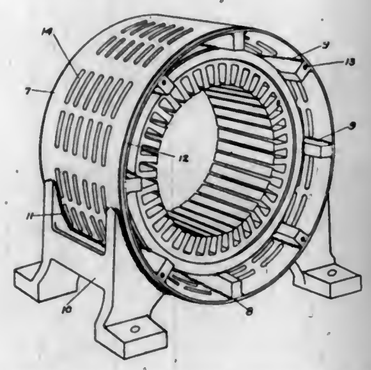
1. In buffer and draw head construction the combination of a massive buffer having the inclusive area of its forward end forming an unbroken buffing face, a coupling head having a lower seating leg an upper extension spaced from the seating leg and a rounded body portion extending below the upper surface of the seating leg, said buffer having a recess behind the unbroken buffing face with a rearward portion extending to a lower level than the forward portion of the recess, the coupling head being so formed that in the assembly its seating leg lies in the forward portion of the recess with its upper surface approximately flush with the upper surface of the buffer and so formed that the body portion of the coupling head lies in the rearward portion of the recess, and horizontal pivotal connection between the buffer and the body portion of the coupling head disposed below the upper surface of the buffer.

1,822,095. ELECTRICAL SOUND PRODUCING DEVICE. JURJEN S. HIGH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 11, 1928. Serial No. 291,858. 13 Claims. (Cl. 179—115.)



3. A disk, securing means at the inner portion thereof, a load attached at the margin thereof, and driving means acting upon an intermediate portion thereof to flex the disk and thereby move the load.

1,822,096. MOTOR FRAME CONSTRUCTION. EMIL E. HOLLANDER, East Orange, N. J., assignor to Star Electric Motor Co., Newark, N. J. Filed July 24, 1929. Serial No. 380,504. 5 Claims. (Cl. 171—252.)



1. A motor frame construction comprising; a stack of stator laminations, bars positioned on the outer periphery of the stator completely outside the boundary thereof and fastened thereto, a metallic plate formed to circumferentially fit over said bars and fastened thereto, support means fastened to opposite sides of said plate, dowel seats provided in the edges of said plate, and means provided in the ends of certain of said bars for drawing rotor bearing housings into rigid engagement with said plate seats.

1,822,097. INTERNAL COMBUSTION ENGINE. HARRY LE-VAN HORNING, Waukesha, Wis. Filed Nov. 13, 1916. Serial No. 130,965. Renewed Apr. 23, 1926. 3 Claims. (Cl. 123—169.)

1. In an internal combustion engine, a cylinder, an opening in the head of said cylinder, an insulating body

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set directly in said opening, a clamping ring threaded directly in said cylinder head and retaining said body in



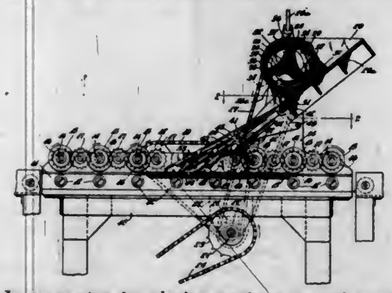
said opening, a filling of tin between said body, said ring and said cylinder head, and a spark gap electrode mounted in said body.

1,822,098. MARKING DEVICE. ERNEST H. HUNTRESS, Melrose, Mass., assignor to Plymouth Cordage Company, Plymouth, Mass., a Corporation of Massachusetts. Filed June 2, 1927. Serial No. 196,138. 16 Claims. (Cl. 40—1.)



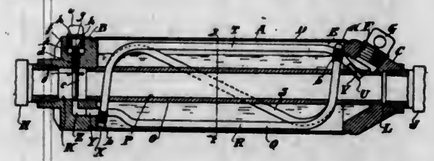
1. An improvement in the art of marking, comprising the combining, with the article which is to be marked, of a substance which fluoresces with a distinctive aspect under light rays which are outside of the range of rays normally visible to the human eye, thereby constituting a mark on said article which becomes distinctive when said outside rays are applied.

1,822,099. APPARATUS FOR PLACING WASHERS ON HEEL-MOLD PINS. WALDEMAR D. KMENTT, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1929. Serial No. 344,281. 15 Claims. (Cl. 18—1.)



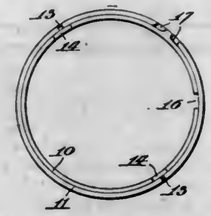
1. In apparatus for placing washers on heel mold pins, the combination of a plurality of washer-placing tools so arranged that their mold-pin-engaging zones normally overlap each other in a series which traverses the course of a heel mold, and means for supplying said tools with washers.

1,822,100. AIR LINE OILER. EARL B. LEAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 21, 1930. Serial No. 430,344. 2 Claims. (Cl. 184—55.)



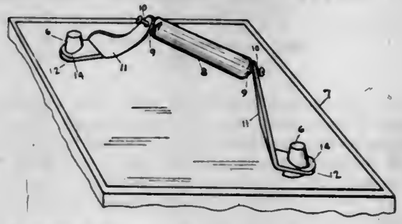
1. In an air line oiler, the combination of a casing forming a reservoir for oil and means forming a passageway for pressure fluid through the casing, a passage in the casing and communicating at its ends with the passageway at points near the ends of the reservoir to bypass a portion of pressure fluid through the passage from one point to another in the passageway, ports affording communication between the passage and the reservoir to convey oil into the passage and pressure fluid into the reservoir, and a value in the casing adjustable from the exterior of the casing and cooperating with one end of the passage to control the flow of pressure fluid and entrained oil from the passage into the passageway.

1,822,101. PISTON PACKING RING. JAMES C. LEWIS, Los Angeles, Calif. Filed Aug. 19, 1930. Serial No. 476,258. 1 Claim. (Cl. 74—109.)



A piston packing ring comprising two resilient split rings, one of which is of inverted L-shape in cross section, the other ring being substantially rectangular in cross section and positioned between the flanges of the L-shaped ring, cooperating means between the two rings for permitting a limited degree of circumferential movement of said rings relative to each other, both rings being provided in corresponding faces with coinciding notches, one of which is larger than the other so that said notches are in registration at all times during relative movement of the rings with respect to each other.

1,822,102. BATTERY LIFTER. WILLIAM F. LIDKE, Omaha, Nebr., assignor, by mesne assignments, of one-half to The Electric Storage Battery Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Sept. 24, 1930. Serial No. 484,094. 3 Claims. (Cl. 16—114.)

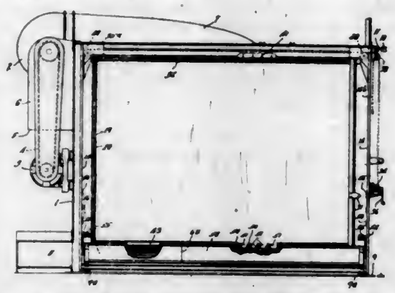


1. A battery lifter comprising a handle, a pair of arms pivotally mounted in the ends of the handle, each arm having an apertured gripping plate extending at approximately right angles therefrom and having an inclination oblique to the longitudinal axis of said arm.

1,822,103. METHOD FOR TREATING ARSENIOUS ORE. AXEL RUDOLF LINDBLAD, Djursholm, Sweden. Filed Apr. 22, 1930, Serial No. 446,417, and in Sweden Apr. 24, 1929. 3 Claims. (Cl. 75—65.)

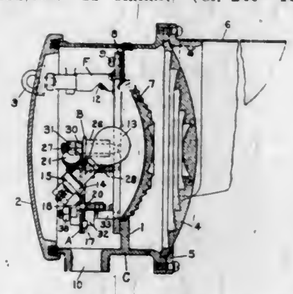
1. The improvement in the art of roasting those ores which yield a plethora of arsenious acid in the form of a soluble powder into a substantially non-friable, non-soluble, removing the said excess of arsenious acid from the zone of operations in a form harmless to living matter by mixing same with substances which bind the air-floating, soluble powder into a substantially non-friable, non-soluble, aggregate, whereby the arsenious acid may be permanently prevented from acting on any living matter.

1,822,104. STRETCHING MACHINE. JOHN E. MCCARTHY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 31, 1927. Serial No. 195,532. 14 Claims. (Cl. 45—24.)



14. Stretching apparatus of the character described, comprising a two-sided generally rectangular frame, means for supporting the same in a vertical plane, holding means on opposite sides of the frame along its vertical and upper horizontal edges, a horizontal return bar along its bottom edge, said bottom return bar being provided with fixed holding means, and movable guards adjustable to two positions to either expose or conceal said fixed holding means.

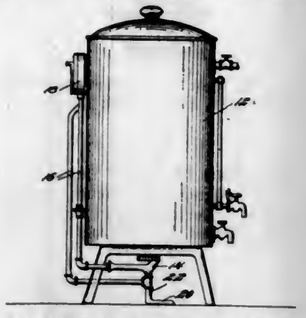
1,822,105. ADJUSTABLE SUPPORT FOR LAMP SOCKETS IN LIGHT SIGNALS. JOSEPH FRED MERKEL, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 25, 1926. Serial No. 131,466. 11 Claims. (Cl. 240—44.26.)



1. In a light signal having a light concentrating device with a focal point, an adjustable support for a lamp socket to permit positioning of the filament of the lamp at said focal point, comprising pivotally connected members movable together in an arc about an axis parallel with the axis of said light concentrating device and rectilineally along said axis.

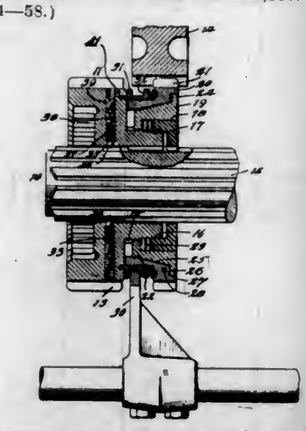
1,822,106. FUEL BURNING MEANS FOR COOKING VESSELS. FREDERICK R. MOTT, Seekonk, Mass. Filed June 4, 1928. Serial No. 282,682. 4 Claims. (Cl. 158—99.)

1. In combination, a normally closed cooking vessel having a heating liquid therein, a gas supply line terminating in the usual end below said cooking vessel, a T-coupling having a T-arm attached to said supply line end, a plug adjustably vertically mounted in the other T-arm, a thermo-responsive valve mechanism attached to said cooking vessel having a burning fluid inlet duct and a burning fluid outlet duct and a thermo-responsive portion extending within said cooking vessel, a line connecting the hollow T-coupling base with said valve inlet duct, a hollow removable annular burner plate mounted in spaced burning relationship to the base of said cooking vessel having radial fuel openings in the side wall thereof, a cylindrical seat on the base thereof for reception of said plug, a Venturi shaped air mixing chamber having the outlet thereof discharging into said annular burner plate, a gas inlet duct at the inlet end of said mixing



chamber and an adjustable air inlet duct at said inlet and a pipe connecting the gas outlet duct in the valve mechanism with the gas inlet to said mixing chamber.

1,822,107. CONE GEAR SYNCHRONIZER. HOWARD J. MURRAY, Brooklyn, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa., a Corporation of Delaware. Filed July 12, 1926. Serial No. 121,887. 14 Claims. (Cl. 74—58.)



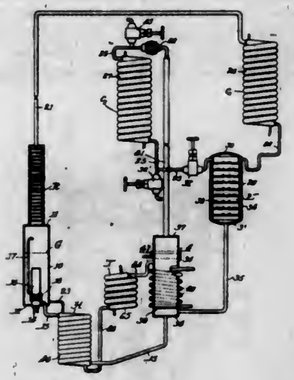
1. In a device of the class described, the combination of a spline shaft, a gear unit slidable thereon, said unit including a power gear having a hub extension, an end ring threaded to the extension and splined to the shaft, a frusto-conical clutch including a relatively fixed member mounted on the end ring and splined to the extension, a spring between the end ring and the fixed member, a synchronizer gear constituting the movable member of said clutch and encircling said fixed member, resilient means tending to maintain the clutch members separated, a cam ring positioned between the power gear and the synchronizer gear and operatively disposed to cause the clutch to be moved into clutching position and a control fork engaging said cam ring.

1,822,108. STABILIZATION OF COMPOUNDS CONTAINING A FATTY ACID RADICAL. PAUL I. MURRILL, Plainfield, N. J., assignor to R. T. Vanderbilt Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 7, 1928. Serial No. 298,135. 12 Claims. (Cl. 87—9.)

1. A stabilized composition comprising chiefly a compound containing a fatty acid radical and a small amount of a compound of the group comprising dialkylene diimines and derivatives thereof.

12. An animal oil or fat containing a fraction of a percent of piperazine.

1,822,109. METHOD OF AND APPARATUS FOR PRODUCING REFRIGERATION. RUDOLPH S. NELSON, Rockford, Ill., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed May 24, 1930. Serial No. 455,211. 17 Claims. (Cl. 62—119.5.)



1. Refrigerating apparatus adapted to produce cooling effect by the evaporation of ammonia and propane including an evaporator in which said ammonia and propane may simultaneously evaporate, an absorber in which the ammonia may be absorbed by an absorption liquid, means for cooling the lower portion of the absorber, and means for heating the upper portion of the absorber to vaporize liquid propane therein.

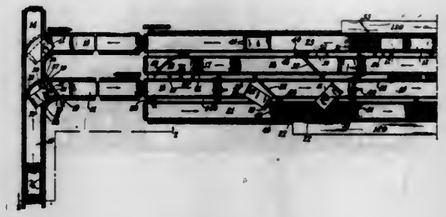
1,822,110. FASTENING DEVICE. HORACE H. RAYMOND, Berlin, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 21, 1929. Serial No. 387,331. 5 Claims. (Cl. 292—60.)



1. In a fastening device of the character described, a casing having rearwardly of its forward end a surface provided with a single recess, a stem slidably and rotatably mounted in said casing, means on the forward end of said stem for manipulating the same, a clamping member fixed to said stem rearwardly of the forward end of the latter and having a portion adapted to engage in said recess when said clamping member is in predetermined angular position, said portion of said clamping member being adapted to engage said surface when said portion is not engaged in said recess, whereby said clamping member is held out of clamping condition in all but one angular position and a spring normally urging said member into clamping position.

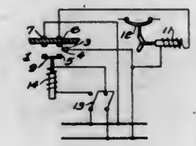
1,822,111. CONVEYER SYSTEM. CHARLES M. RICHARDSON, Akron, and ARTHUR J. HOWE, Cuyahoga Falls, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 3, 1927. Serial No. 188,502. 5 Claims. (Cl. 198—19.)

1. Conveyer apparatus for the manufacture of articles each comprising a plurality of assembled parts, the said apparatus comprising a plurality of conveyances each adapted to support a group of separate stock pieces adapted to constitute parts of one of the articles, supporting means constituting a series of work stations, means for moving the conveyances in succession from station to station, means for automatically lodging the conveyances in work stations not fully occupied, means controlled by the presence of conveyances at the work station for moving the conveyances past fully occupied work stations in an endless-circuit until they are received at a work



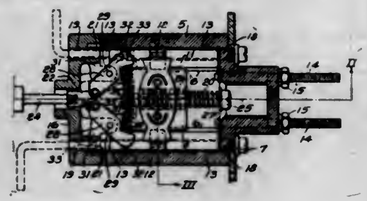
station not fully occupied, and means for diverting conveyances from the endless-circuit when the work thereon has been subjected to all of the operations performed at the work stations.

1,822,112. OIL CIRCUIT BREAKER. STANLEY T. SCHOFIELD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 9, 1927. Serial No. 211,649. 8 Claims. (Cl. 175—294.)



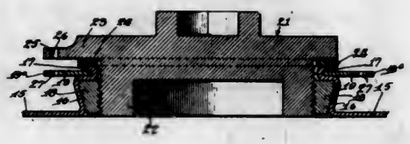
1. In combination with an inductance, a device for disconnecting said inductance from its source of supply, arcing means positioned adjacent to a contact of said device and means for shunting the inductance including the arcing means.

1,822,113. METER TESTING SWITCH. WALTER H. SCHRAMM, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 25, 1928. Serial No. 249,379. 6 Claims. (Cl. 200—50.)



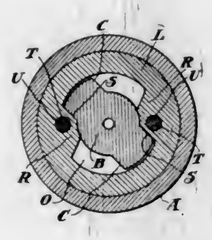
1. The combination with a testing switch having a movable contact for controlling a circuit and operating means therefor, of a test clip interlocked with the operating means for releasably receiving test terminals for shunting the movable contact and for preventing operation of the contact except when the test terminals are in operative relation to the said clip.

1,822,114. BUSHING STRUCTURE. HENRY SCHWARTZ, Chicago, Ill., assignor to Barrel Fitting and Seal Corporation of America, Chicago, Ill., a Corporation of Illinois. Filed Sept. 2, 1927. Serial No. 217,031. 5 Claims. (Cl. 220—39.)



1. A bushing structure for a metal barrel and the like comprising a socket of a non-circular peripheral contour formed from the sheet metal surrounding a hole in a wall of said barrel and extending directly outwardly from the plane of said wall and providing an integral radially inwardly extending annular flange on the outer end of said socket, and an apertured bushing disposed in said socket the opening in said bushing registering with the opening surrounded by said annular flange, said bushing being adapted to receive threaded closure means and having inwardly converging sides against which the side walls of said socket engage to form a contact making area between said bushing and said socket at least a portion of which contact making area lies within the plane of said wall of the barrel.

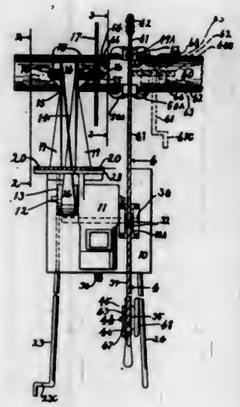
1,822,115. CHUCK FOR ROCK DRILLS. BENJAMIN FRANKLIN SHEPHERD, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 5, 1929. Serial No. 383,702. 2 Claims. (Cl. 121—32.)



1. In a rock drill, the combination of a front head and a drill steel extending into the front head, lugs on the drill steel, a chuck rotatable in the front head and having a cavity to receive the lugs, ribs in the chuck extending into the cavity and having hardened wear resisting surfaces overlying relatively soft interior portions to engage the lugs, and additional wear resisting means inserted in the soft interior portion of the ribs beneath the engaging surfaces and adapted to prevent undue wear of the relatively soft interior portions of the ribs by contacting with the lugs on the drill steel after the hardened surfaces are worn through.

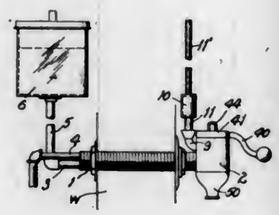
1,822,116. PORTABLE SAWING MACHINE. BENNIE E. THOMPSON, Lakeview, Stillwater, Minn. Filed Apr. 11, 1927. Serial No. 182,645. Renewed Feb. 2, 1931. 2 Claims. (Cl. 143—125.)

1. In a portable sawing machine having a platform tiltably mounted on a suitable vehicle, handle bars projecting rearwardly from the platform, a saw frame mounted on the forward end of said platform, means at the front end of said saw frame for mounting a disc saw in spaced relation to the platform, power means on said platform and operative connection between said power means and the saw for rotating the latter; a log engaging device mounted on the tiltable platform and comprising a beam extending rearwardly and forwardly of the platform, its forward end in spaced horizontal relation to the saw, log hooks depending from and slidable on the



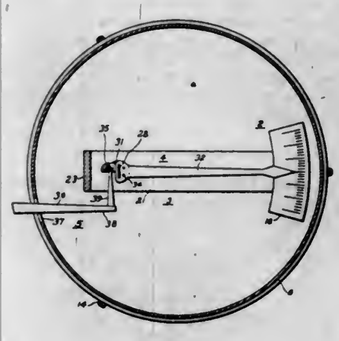
forward end of the beam and toward each other to engage opposite sides of a log simultaneously and means for spreading and closing said log engaging hooks on the beam comprising a pulley at each end of the beam, a continuous cable passing over said pulleys with one bight thereof above and parallel to the beam and one bight likewise parallel but below the beam, one log engaging hook fixed to the upper bight and the other log engaging hook fixed to the lower bight and means for rotating the rear one of said pulleys.

1,822,117. BEVERAGE DISPENSING APPARATUS. JOHN M. TRAVIS, St. Louis, Mo. Filed Mar. 14, 1929. Serial No. 346,945. 3 Claims. (Cl. 225—26.)



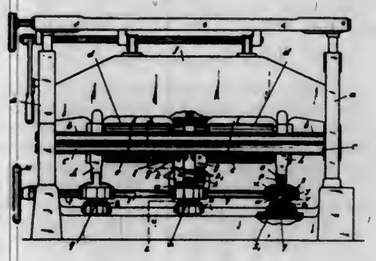
1. A dispensing apparatus comprising in combination with a source of beverage supply, a faucet having a body portion and a handle movably mounted thereon, said body portion having a plurality of beverage valve chambers in communication with the beverage supply, a beverage discharge port leading from each chamber, a measuring receptacle adapted for communication with each of said chambers, and a spring-pressed valve in each chamber between the measuring receptacle and the source of supply, a stem depending from said valve, a perforated spring abutment below the valve adapted to be closed by said stem when the valve is depressed, and means on the handle for depressing the valves and simultaneously therewith opening the discharge ports.

1,822,118. VIBRATION INDICATOR. WILLIAM E. TRUMPLER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 27, 1925. Serial No. 39,995. 8 Claims. (Cl. 73—51.)



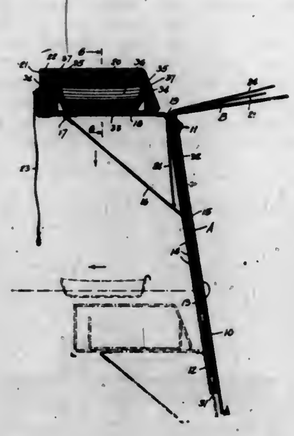
1. A vibration indicator comprising a pivotally-movable indicating member having an intermediate neutral position, a vibration-responsive member movable substantially tangentially to a path of movement of the indicating member adjacent to the pivot point thereof and engaging the same in substantially single-point contact therewith and means for biasing the indicating member toward the actuating member to retain the members in engagement in all positions of the indicating member.

1,822,119. ADJUSTABLE SUPPORTING MECHANISM FOR STRAIGHTENING ROLLS OF PLATE STRAIGHTENING MACHINES. FRITZ UNGERER, Pforzheim, Germany. Filed Mar. 18, 1929, Serial No. 348,078, and in Germany Sept. 19, 1928. 5 Claims. (Cl. 153—54.)



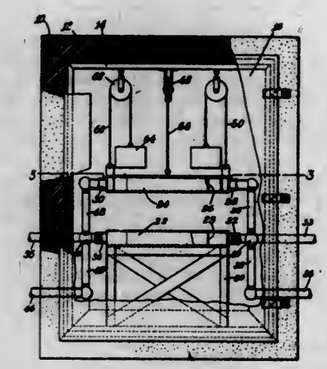
1. An adjustable supporting mechanism for the straightening rolls of plate straightening machines, comprising in combination with said straightening rolls, adjustable means arranged along each straightening roll adapted to deflect said roll towards and away from the work and to perform different lengths of travel in passing into their supporting position according to the desired form of the deflection curve of said straightening rolls.

1,822,120. LIFE SAVING DEVICE. DOUGLAS WARD, Glendale, Calif. Filed Mar. 5, 1930. Serial No. 433,429. 5 Claims. (Cl. 9—22.)



1. Mechanism of the class described comprising a member adapted to be mounted for swinging movement, a tilting platform mounted to travel on said member, means for setting the platform in motion, means for holding the platform against tilting movement, means for tilting the platform, and means for launching a lifeboat from said mechanism.

1,822,121. REFRIGERATING APPARATUS. JAMES J. BARRY, Halifax, Nova Scotia, assignor to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Aug. 12, 1929. Serial No. 385,385. 15 Claims. (Cl. 62—114.)

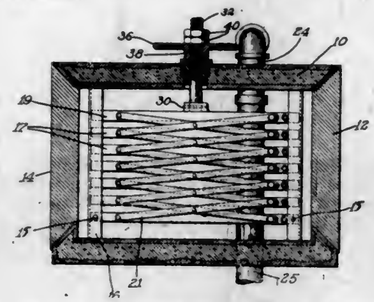


1. Apparatus for freezing food products, comprising a stationary hollow heat conductive plate for supporting the product to be frozen, brine circulating connections for said plate, a cooperating hollow heat conductive plate movably mounted above and in vertical alignment with said first plate, a brine circulating system operatively connected to said second plate in all positions thereof, means for moving said second plate vertically with relation to said first plate to accommodate and compress between said plates products of varied thicknesses, and means, such as counterweights connected to said plate at symmetrically disposed points, for regulating the pressure exerted by said second plate on the product engaged between the two plates.

1,822,122. METHOD FOR MAKING BISULPHITE REACTIONS WITH SULPHUR DIOXIDE ACID SOLUTIONS. FREDERICK W. BINNS, Wollaston, and JOSEPH M. LURIE, Jamaica Plain, Mass., assignors to Virginia Smelting Company, Portland, Me., a Corporation of Maine. Filed Dec. 15, 1926. Serial No. 155,103. 7 Claims. (Cl. 260—129.)

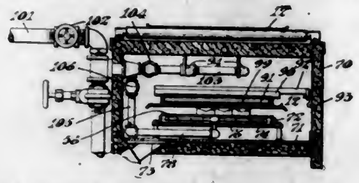
1. A method for the conversion of nitroso betanaphthol into a sulphur dioxide addition derivative, which comprises subjecting the same to alkalization and treating the solution with a stream of sulphur dioxide.

1,822,123. REFRIGERATING APPARATUS. CLARENCE BIRDSEYE and BICKNELL HALL, Gloucester, Mass., assignors, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed July 1, 1929. Serial No. 375,046. 5 Claims. (Cl. 62—114.)



1. A refrigerating apparatus comprising a stationary heat-conductive plate, a similar plate disposed in opposition thereto, means for moving said latter plate toward or from the stationary plate, a series of spaced interposed plates all suspended from said movable plate and movable simultaneously therewith to engage interposed products by gravity, and means for supplying cooling medium to said plates.

1,822,124. REFRIGERATING APPARATUS. CLARENCE BIRDSEYE, Gloucester, Mass., assignor to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Original application filed Feb. 6, 1929, Serial No. 337,858. Divided and this application filed Dec. 31, 1929. Serial No. 417,694. 14 Claims. (Cl. 62—114.)



1. In a refrigerating apparatus, a conveyor band, means for distributing a temperature-regulating fluid on said band and tabs connected to said band for directing said fluid away from the central portion thereof.

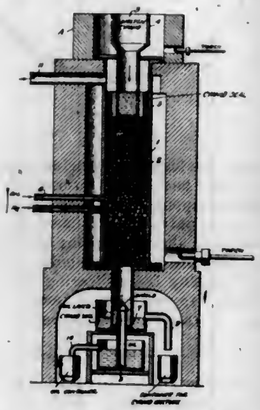
1,822,125. METHOD FOR THE TREATMENT OF CELLULOSIC MATERIALS. CHARLES A. BLODGETT, South Brewer, and HUGO H. HANSON, Bangor, Me., assignors to Eastern Manufacturing Company, South Brewer, Me., a Corporation of Massachusetts. Filed Aug. 6, 1926. Serial No. 127,700. 14 Claims. (Cl. 92—9.)

1. A method for the treatment of cellulosic materials, which comprises reducing the same to the condition of a pulp by a sulfite process, bleaching, and treating the resulting pulp with a reactive compound of sulfur in alkaline solution.

1,822,126. METHOD OF PREPARING SULPHITE PULP FOR FILAMENTS AND FILMS. CHARLES A. BLODGETT, South Brewer, and HUGO H. HANSON, Bangor, Me., assignors to Eastern Manufacturing Company, South Brewer, Me., a Corporation of Massachusetts. Filed Apr. 26, 1927. Serial No. 186,810. 6 Claims. (Cl. 92—11.)

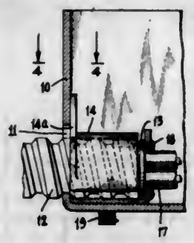
1. A process for the treatment of cellulosic material for rayon manufacture comprising heating wood for several hours at temperatures progressively rising, up to about 290° F. under pressure of 60–70 pounds per square inch, in a closed container with a sulphite liquor containing free sulfur dioxide, in the initial proportion of 1 part air dry wood to about 5 parts liquor until the degree of action desired has taken place, then washing the cellulosic mass, and boiling the product thus obtained in a suitable container with agitation in an aqueous solution containing sodium hydroxide, sodium sulfide and sodium sulphite, at elevated temperature and pressure, washing the cellulose thus obtained free from soluble matters, and removing water therefrom.

1,822,127. TREATMENT OF HYDROCARBONS. JOHN COLLINS CLANCY, Asbury Park, N. J. Filed Apr. 29, 1930. Serial No. 448,413. 12 Claims. (Cl. 196—53.)



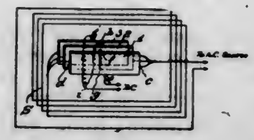
1. A process of treating a hydrocarbon oil which comprises vaporizing the hydrocarbon oil and cracking the vaporized oil by contact with a catalyzer comprising a cyanogen salt of an alkalinous metal in a molten mixture of such a salt and another salt which is capable of preventing the decomposition products of the oil from liberating hydrocyanic acid from such mixture while the latter is decomposing the oil at a cracking temperature.

1,822,128. BOX AND CLAMP THEREFOR. MARTIN M. CLAYTON, Baden, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 5, 1930. Serial No. 441,775. 2 Claims. (Cl. 247—25.)



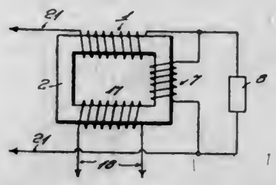
1. An outlet box having wall and bottom portions, a wall of said box being provided with a knockout opening having one edge slightly above the bottom of the box, and means for clamping a bushed armored cable in said box and preserving a correct relation of the cable for proper clamping of the bushing and for visual inspection, comprising an L-shaped plate with one portion underlying the cable and another portion upstanding from the first and provided with an aperture disposed opposite from the knockout opening and through which the cable wires may pass and a clamping element cooperating with the top of the cable having means associated therewith for forcing the cable against the portion of the L-shaped plate which underlies the cable, said clamping element being spaced from the upstanding part of the angle plate to provide for direct visual inspection of a bushing in the cable.

1,822,129. SYSTEM AND APPARATUS EMPLOYING THE HALL EFFECT. PALMER HUNT CRAIG, Cincinnati, Ohio, assignor to Invex Corporation, a Corporation of New York. Filed July 9, 1926. Serial No. 121,394. 13 Claims. (Cl. 250—24.)



1. An electrical apparatus comprising a plurality of rectangular metallic films having major and minor axes, an electrical circuit for creating a magnetic field about said metallic films by a current which passes along the longitudinal axes of said metallic films in parallel for deriving a rectified current in a circuit including the transverse axes of said metallic films in series.

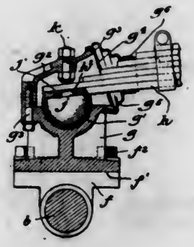
1,822,130. ELECTRICAL CONVERTER. PALMER HUNT CRAIG, Cincinnati, Ohio, assignor to Invex Corporation, a Corporation of New York. Filed Sept. 28, 1927. Serial No. 222,615. 6 Claims. (Cl. 175—363.)



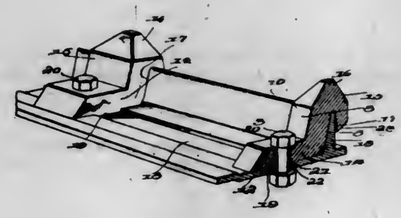
1. In an apparatus for converting direct current into alternating current, a transformer system having a multiplicity of primary windings and a secondary winding, said primary windings being connected in series and means connected in shunt with one of said primary windings for intermittently supplying direct current impulses to said primary winding, for producing alternating current in said secondary winding.

1,822,131. SPRING SUSPENSION FOR SIX-WHEEL VEHICLES. FLOYD E. DAVIS, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,684. 1 Claim. (Cl. 267—54.)

In a spring suspension for motor vehicles, a spring, an axle, means to secure the spring to the vehicle frame, a bracket carried by the axle and formed with a spherical bearing seat, a spherical bearing on the spring, an apertured cover plate carried by the bracket and receiving an end of the spring, and means carried by the cover plate for preventing the bearing from leaving the seat.



1,822,132. ANTISKID CALK FOR TRACTOR BELTS. RALPH E. DAVIS, Baker, Oreg. Filed Mar. 7, 1930. Serial No. 433,998. 1 Claim. (Cl. 305—10.)

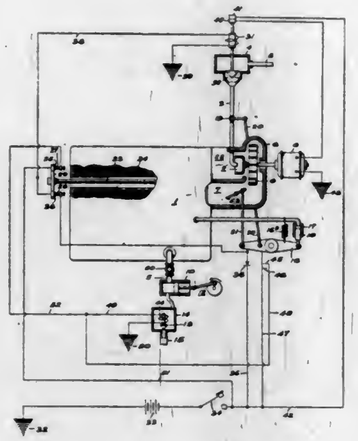


In a track belt for track laying tractors, a non-skid tractor link having a bottom plate provided with a transversely extending angularly shaped channel therein said bottom plate having an aperture therethrough within said channel and an angularly extending transverse rib adjacent one end of the plate, a non-skid calk removably secured to said link comprising a base portion engaging said bottom plate having an angularly projecting ground-engaging portion having a notched portion embracing said rib and provided with a ground-engaging end substantially in alignment with said rib, and a single fastening element extending through said base portion and aperture of said bottom plate for securely fastening said connection to said link, said base portion being provided with a rectangular boss fitting in said channel and preventing tendency of said calk to pivot about said fastening element, whereby bending strains transmitted to said rib through said ground-engaging portions are minimized.

1,822,133. BOILER CONTROL SYSTEM. JESSE W. DOBLE, now by judicial change of name Warren Doble, Berkeley, Calif., assignor to Doble Laboratories, San Francisco, Calif., a Corporation of California. Original application filed Dec. 13, 1919, Serial No. 344,741. Divided and application filed Nov. 20, 1923, Serial No. 675,850. Divided and this application filed Aug. 3, 1925. Serial No. 48,012. 4 Claims. (Cl. 122—448.)

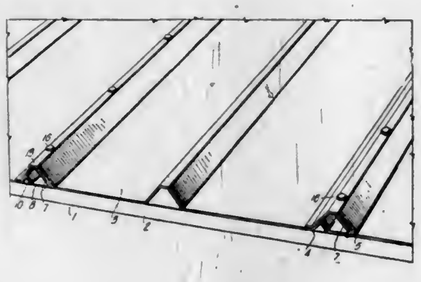
1. In combination, a liquid heater, a pump for supplying liquid to said heater, an electric circuit for disabling said pump, a thermostat responsive to temperatures in said heater below a predetermined minimum for completing said circuit to disable said pump, means for supplying fuel to said heater, a pressure responsive device actuated by pressures in said heater above a predetermined

maximum for completing said circuit to disable said pump and for disabling said fuel supplying means, and means



responsive to said pressure responsive device and to said thermostat in series for abruptly disabling said fuel supplying means.

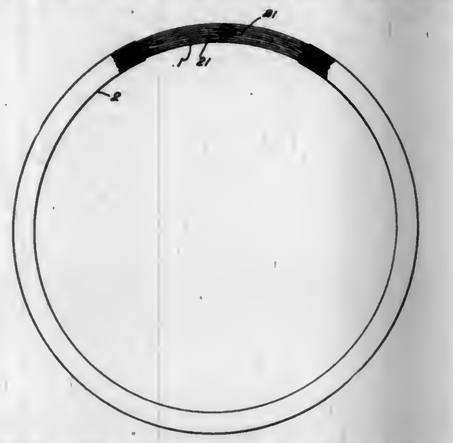
1,822,134. ROOFING. RUDOLPH A. ECKBERG, Kansas City, Mo. Filed Apr. 15, 1929. Serial No. 355,329. 8 Claims. (Cl. 108—20.)



1. In roofing of the character described, comprising metal sheets, a lap joint including an arch-like rib on the edge of one sheet, an upwardly retractively bent flange on the edge of the other sheet presenting the bottom surface of said flange upwardly for face to face engagement with the under surface of said rib, and a rib on said other sheet spaced from the flange and adapted to engage another portion of the under surface of said first named rib.

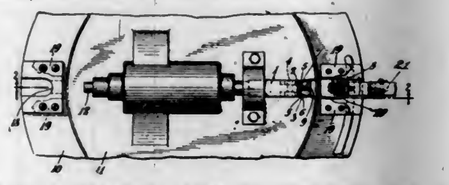
1,822,135. ENDLESS ELASTIC BAND. WILLIAM C. FISHER, Middletown, Conn., assignor to The Russell Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed Nov. 16, 1927. Serial No. 233,648. 3 Claims. (Cl. 267—63.)

1. An elastic band made of a plurality of coils of rubber cord wound in an annulus, with the free extremities of the cord woven into the coils obliquely to the direction of extent of the coils and with a substantial amount of the end-portion of the cord beyond the point of such inter-



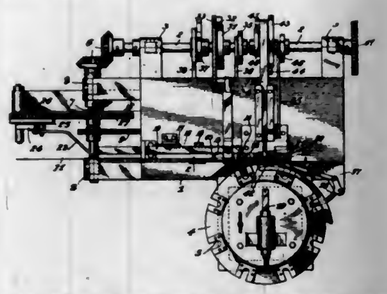
weaving brought again into parallel with the coils and sheathed within the coils, and an extensible fabric covering the whole.

1,822,136. TIE TWISTING TOOL. HENRY B. FOULDER, Glenbrook, Conn. Filed Oct. 10, 1929. Serial No. 398,588. 3 Claims. (Cl. 140—119.)



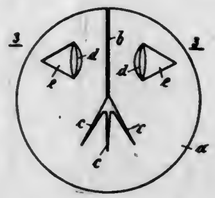
1. In a tie-twisting head, in combination, two cooperating tie gripping surfaces and a stop at the rear of and at all times fully bridging the space between said surfaces adapted to engage and align the ends of a tie entered into the head from the front.

1,822,137. BAG TYING MACHINE. HENRY B. FOULDER, Glenbrook, Conn. Filed Oct. 10, 1929. Serial No. 398,589. 12 Claims. (Cl. 140—93.)



1. In a bag tying machine of the character described, in combination, feeding means adjustable to grip a wire and movable to advance a gripped wire, actuating means normally operable to first adjust said means to grip a wire and then to move said means to advance the gripped wire, and controlling means for preventing said actuating means from adjusting said feeding means to grip a wire until after advancement of said feeding means a predetermined distance, said controlling means being adjustable to permit normal operation of said actuating means.

1,822,138. INSERT FOR PRESERVE TINS FOR SAUSAGES. HERMANN FRICKE, Halberstadt, Germany. Filed Aug. 1, 1930, Serial No. 472,327, and in Germany Mar. 16, 1929. 1 Claim. (Cl. 220—93.)



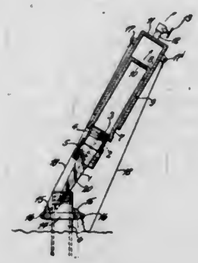
An insert for preserve tins for sausages, consisting of a sheet metal disc having a slot extending to the centre and extended by slots branching from its inner end in different directions, adapted to allow said disc to be bent in funnel-shape, and two finger holes, one at either side of said central slot for the compression of the disc into funnel shape prior to the inserting into the tin, said disc retaining its inverted funnel shape when in position in the tin.

1,822,139. BUTYL ALCOHOL AND ACETONE FERMENTATION PROCESS. FOREST J. FUNK, Wilmington, Del., assignor, by mesne assignments, to The Eastern Alcohol Corporation, Wilmington, Del., a Corporation of Delaware. Filed Oct. 1, 1920, Serial No. 414,087. Renewed Mar. 26, 1925. 34 Claims. (Cl. 260—138.)

16. The process which comprises adding a culture of the hereinbefore described Bacillus Aceto-butylicum to a sterilized mash composed principally of black strap molasses and a small proportion of a vegetable protein, said addition being made with the bacteria mainly in the spore form and while the sterilized mash is at a temperature between 57 and 77° C., and subsequently cooling the inoculated mash to, and maintaining it at, a temperature between 35 and 38° C.

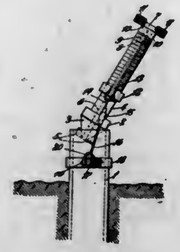
20. In the process of fermenting a sterilized mash of a fermentable carbohydrate with bacteria capable of producing butyl alcohol and acetone, the step which comprises inoculating the final mash with said bacteria while the latter are mainly in the spore form.

1,822,140. PLUG FOR OIL WELLS AND APPARATUS FOR SEATING THE SAME. ANDREW J. GALLAHER, St. Louis, Mo. Filed Apr. 17, 1930. Serial No. 444,912. 6 Claims. (Cl. 166—15.)



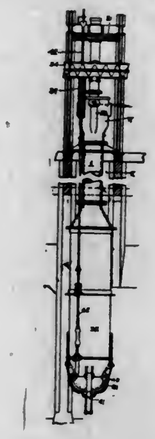
1. A device of the class described comprising a conical plug having a passage therethrough, a fitting adapted to secure the plug to a well casing when in position, and means operable by the pressure of the well to assist in forcing the plug to position.

1,822,141. MEANS FOR CLOSING OIL WELLS. ANDREW J. GALLAHER, St. Louis, Mo. Filed May 26, 1930. Serial No. 455,490. 10 Claims. (Cl. 166—15.)



1. A device of the character described comprising a body adapted to be moved into the open end of an oil well casing and having a longitudinal passage therethrough, a means at the outer end of said passage for utilizing the escaping pressure to rotate said body, and means for moving said body longitudinally into an oil well casing when said body is rotated by said pressure.

1,822,142. METHOD OF EXTRACTING VALUES FROM COAL AND LIKE MATERIAL. FRANK C. GREENE and IRVING F. LAUCKS, Seattle, Wash., assignors to Old Ben Coal Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 21, 1918, Serial No. 218,452. Renewed Apr. 11, 1927. 1 Claim. (Cl. 202—9.)

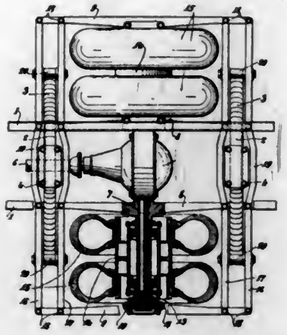


A process for extracting hydro-carbons and products of decomposition from coal comprising crushing the coal, passing the coal out of substantial contact with air in a thin spiral stream through a zone of gradually increasing temperature sufficient to produce substantial decomposition of the coal, and subjecting the particles of material to a continuous rolling action during their passage through the zone.

1,822,143. AXLE AND FINAL DRIVE FOR VEHICLES. ERVING R. GURNEY, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed July 26, 1930. Serial No. 470,812. 3 Claims. (Cl. 280—106.5.)

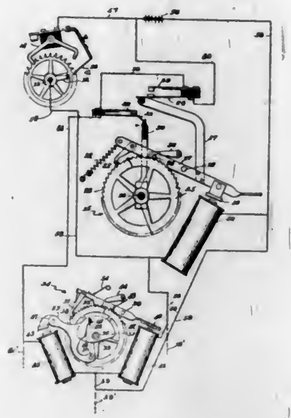
3. A frame, an axle, a wheel mounted upon the axle, spaced springs mounted transversely of the frame, a plurality of spaced supporting members extending transverse-

ly of the frame, means to mount the members on the springs, the springs lying between the respective spaced transverse members, longitudinal supporting members se-



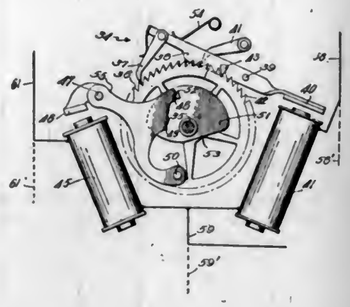
cured to the transverse members, and means to mount the axle on the longitudinal members with the wheel between such members.

1,822,144. ELECTRIC TIME CLOCK CORRECTION. GEORGE F. HARTER, Springfield, Mass., assignor to The Standard Electric Time Company, Springfield, Mass., a Corporation of Connecticut. Filed Oct. 15, 1927. Serial No. 226,317. 6 Claims. (Cl. 58—35.)



2. An electric clock system comprising a master clock, secondary clocks of the impulse type, each secondary clock having a magnet and impulse mechanism, a contact in said master clock for sending out electric impulses at frequent intervals, an impulse circuit connecting said contact and said magnet, each secondary clock having a second magnet and corrective mechanism, a corrective selector having a contact for sending out impulses at infrequent intervals, a magnet for actuating said selector and connected to said impulse circuit, and a corrective circuit connecting said second magnet with the contact of said corrective selector.

1,822,145. ELECTRIC TIME CLOCK CORRECTION. GEORGE F. HARTER, Springfield, Mass., assignor to The Standard Electric Time Company, Springfield, Mass, a Corporation of Connecticut. Original application filed Oct. 15, 1927, Serial No. 226,317. Divided and this application filed July 27, 1928, Serial No. 295,782. Renewed Oct. 6, 1930. 12 Claims. (Cl. 58—34.)



1. A secondary clock of the impulse type comprising a clock train, impulse means, and corrective means having a stop normally preventing the advance of said clock train beyond a predetermined point, said corrective means being operable to simultaneously remove the stop and advance the clock train.

1,822,146. CURTAIN PULL. EUGENE C. HEALY, Melrose, and NICHOLAS D. WHALEN, Attleboro, Mass. Filed May 6, 1931. Serial No. 535,326. 7 Claims. (Cl. 156—40.)

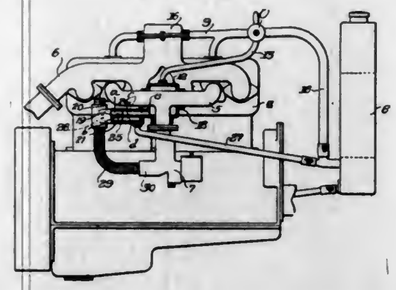


4. In a curtain pull, a knob comprising a body and a vertical centering projection, said body being provided with a cavity, and the body and the projection being provided with a passage extending from the cavity through the body and projection, a conical thimble resting upon the body concentric with the projection provided with an opening in its top and with recesses communicating with the openings, a ring in the recesses, a loop in the opening passing through the ring and including strands traversing the passage, a button in the cavity attached to the strands, and an attaching member supporting the ring.

1,822,147. INTAKE MIXTURE HEATING SYSTEM. HARRY L. HOSNING, Waukesha, Wis., assignor to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed May 19, 1926. Serial No. 110,129. 1 Claim. (Cl. 123—122.)

The combination with an internal combustion engine having a steam cooling jacket, and a carbureter having a mixture outlet connected with the engine inlet manifold, means utilizing the steam to heat the explosive mixture before it reaches the engine cylinder, an air path

to the carbureter and subjected to the heat of the steam exclusively, a direct air path to the carbureter, and means

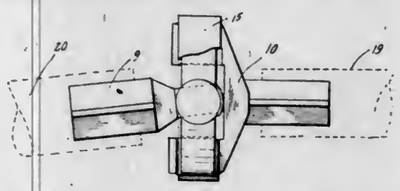


controlled by the suction effect in said carbureter to proportion the amount of direct and heated air flowing to said carbureter.

1,822,148. INCHOATELY MARKED ARTICLES OF MANUFACTURE. ERNEST H. HUNTRESS, Melrose, Mass., assignor to Plymouth Cordage Company, Plymouth, Mass., a Corporation of Massachusetts. Filed Feb. 29, 1928. Serial No. 258,134. 3 Claims. (Cl. 40—1.)

1. A new article of manufacture consisting of an industrial product having incorporated therein, in undeveloped form, a developable naphthoic substance the characteristics of which constitute potential identifying means and include a strong affinity for the material of the product in which it is incorporated, said undeveloped naphthoic substance being capable, despite the lapse of a long period of time, of manifesting its presence by reacting chemically into developed form.

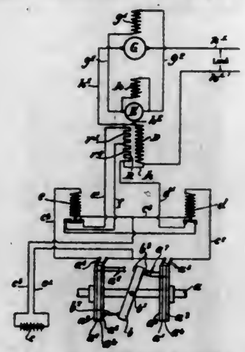
1,822,149. COUPLING. JOHN EDWARD JOHNSON, Chicago, Ill. Filed Jan. 23, 1928. Serial No. 248,811. 4 Claims. (Cl. 64—91.)



1. A device of the type described comprising a cylindrical body portion having recesses extending inwardly from the periphery thereof, said recesses being provided with arcuate-shaped walls, cylindrical bushings carried in said recesses, each of said bushings having an opening therethrough, a fork having a pair of arms arranged to enter certain of said openings, a second fork having arms arranged to enter openings at right angles to the first-named openings, a retaining ring carried by said body portion for holding said bushings in position, locking screws for holding said retaining ring in position, a driving shaft member connected with one of said forks, and a driven shaft member connected with the other fork.

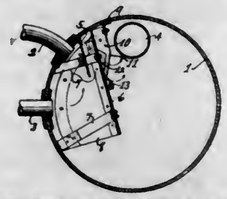
1,822,150. EXCITER DIFFERENTIAL FIELD CONTROL. WILLIAM B. JUPP, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 13, 1929. Serial No. 370,492. 5 Claims. (Cl. 290—8.)

2. In combination with an exciter field and a speed responsive switch, a resistance connected across the field, relays connected across portions of the resistance, opposed contacts cooperating with the switch, means to urge the switch into engagement with one of the contacts, and connections between the contacts and relays.



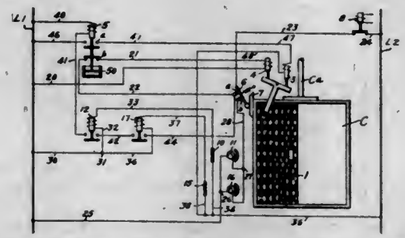
5. In combination with a generator and an engine for driving the same, a generator field, an engine speed responsive device, a resistance across the field, relays across portions of the resistance, and means controlled by the speed responsive device to operate the relays.

1,822,151. BAFFLE. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne N. J., a Corporation of New Jersey. Filed Oct. 8, 1927. Serial No. 224,799. 7 Claims. (Cl. 122—491.)



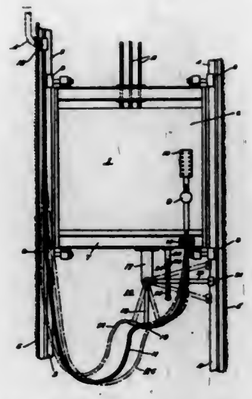
1. In a steam and water drum, a baffle comprising a plate having its upper edge in contact with the wall of said drum and its lower edge above the normal water level in said drum, a second plate spaced from the first mentioned plate and having its upper edge spaced from the upper wall of said drum and its lower edge below the normal water level, and a series of steam and water separators at the upper edge of said second plate extending from the top of said baffle to the top of said drum.

1,822,152. SELENIUM CELL DOOR CLOSER. LUTHER J. KINNARD, Chicago, and JAMES DUNLOP, Park Ridge, Ill., assignors, by mesne assignments, to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed Jan. 18, 1929. Serial No. 333,483. 23 Claims. (Cl. 187—29.)



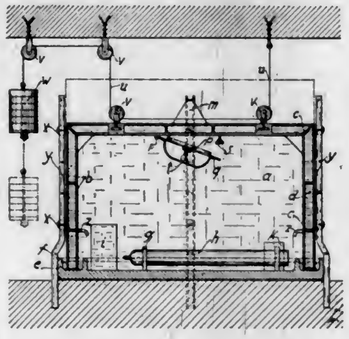
1. The combination with means for operating a closure in a doorway, of means, including a light-sensitive device and a source of light, operably responsive to the presence of a person in the doorway for controlling the closure operating means.

1,822,153. CONTROL CABLE HANGER. LUTHER J. KINNARD, Los Angeles, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1930. Serial No. 453,958. 12 Claims. (Cl. 187—1.)



1. In combination, an elevator car operable in a hatchway, a control cable depending therefrom, means carried by said car and operably responsive to travel thereof for varying the position of a portion of said control cable.

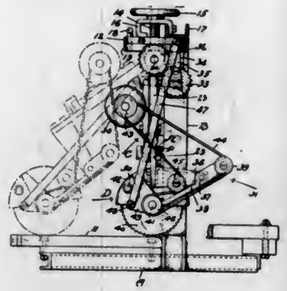
1,822,154. PROTECTION AGAINST POISONOUS GASES. ERNST KRAEMER, Stuttgart, and KARL HÖRRMANN, Ernstmuhl, near Hirsau, Germany. Filed Sept. 11, 1930, Serial No. 481,204, and in Germany Aug. 1, 1930. 2 Claims. (Cl. 167—3.)



1. A protecting device against poisonous gases, comprising in combination a double walled glass bell having a liquid filled into the hollow walls, a glass plate having a groove filled with liquid adapted to support said glass bell, an air discharge in the top portion of said bell, means for tightly closing said air discharge, a rope adapted to raise said bell, and a counter-weight on said rope adapted to facilitate the raising of said bell.

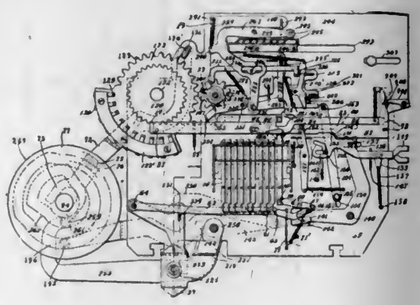
1,822,155. SWING SAW. TOM R. LANDSBOROUGH, Florin, Calif. Filed May 9, 1930. Serial No. 451,006. 4 Claims. (Cl. 143—6.)

2. A swinging saw organization comprising: a supporting frame; a swinging frame mounted upon said supported frame; a saw frame pivotally mounted upon said swinging frame; a saw operably mounted in said saw frame; means for causing the cutting edge of said saw to move in a substantially straight line upon swinging said swinging frame, said means including a pair of gears adapted to be rotated by said swinging frame, one of said gears being mounted on the swinging frame and



the other upon the supporting frame, and a link connected to the last mentioned gear and said saw frame to pivot said saw frame on said swinging frame as said gears are rotated by said swinging frame.

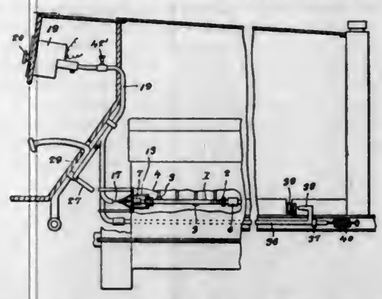
1,822,156. PRINTING TABULATOR. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 28, 1917, Serial No. 158,142. Renewed Feb. 27, 1924. 83 Claims. (Cl. 235—58.)



1. A printing tabulator mechanism comprising printing elements, accumulating elements, reciprocating members operatively associated with the printing elements, driving means for the reciprocating members, latch means for connecting the driving means with the reciprocating members, and a release mechanism for disconnecting the driving means, said release mechanism comprising pivoted levers having their free ends in contact with the latch mechanism, the accumulating elements provided with abutments arranged to contact with the pivoted levers for forcing them downwardly and releasing the latch mechanism.

1,822,157. EMERGENCY STOPPING DEVICE FOR AUTOMOBILES. GEORGE H. E. LYONS, Dayton, Ohio. Filed Mar. 10, 1930. Serial No. 434,801. 1 Claim. (Cl. 123—97.)

In a motor vehicle including its motor, the cam shaft of the motor, the ignition circuit of the motor and the clutch pedal, means for supporting the cam shaft for longitudinal movement, means for holding the shaft in normal position, a plunger, means operated thereby for moving the shaft to a position where its cams will be out of alignment with the tappets, means operated



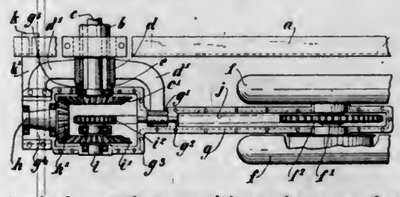
by the plunger for breaking the ignition circuit and means operated by the plunger for preventing movement of the clutch pedal.

1,822,158. APPARATUS FOR DRYING SLEEVES. CHRISTIAN MAJER, Tubingen, Germany. Filed May 22, 1928, Serial No. 279,806, and in Germany May 28, 1927. 2 Claims. (Cl. 34—12.)



1. A sleeve dryer, comprising in combination a ring shaped casing, rings of any convenient cross-section in said casing, means for rotating said rings, chambers of perforated material fixed on said rings adapted to receive and to deliver the paper sleeves to be dried, and nozzles for forcing hot air into and sucking off consumed air from said casing.

1,822,159. INDIVIDUAL WHEEL MOUNTING. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 13, 1929. Serial No. 370,541. 7 Claims. (Cl. 180—72.)

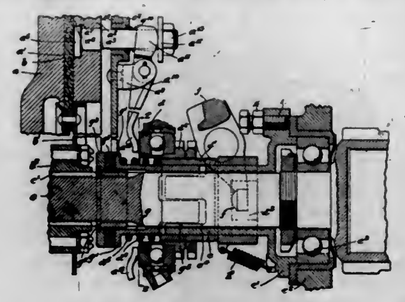


7. A wheel mounting comprising a frame, a wheel, an axle housing, a bracket journaled on the axle housing, a housing journaled on the bracket to permit movement of the housing angularly of the frame, and means to mount the wheel on the housing.

1,822,160. CLUTCH BRAKE. PHILIP E. MATTHEWS, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 14, 1929. Serial No. 407,056. 1 Claim. (Cl. 192—13.)

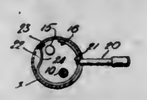
In a clutch brake construction, a rotating clutch element, a shaft mounting the same, a stationary element

mounting the shaft, a sleeve formed on the stationary element, a second sleeve slidable on the first sleeve, means to operate the clutch by the second sleeve, a braking element on the shaft between the second sleeve and clutch, a second braking element slidably mounted on



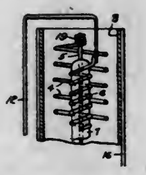
the shaft, means to prevent rotation of the second element, a spring engaging the second element and abutting against the second sleeve normally tending to separate the first sleeve from the second braking element, and an adjustable stop pin carried by the stationary element to limit the movement of the second sleeve.

1,822,161. SWITCH. LEO MAYER, Boston, Mass., assignor to Henry Cole Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 6, 1929. Serial No. 390,720. 6 Claims. (Cl. 176—346.)



6. A lamp socket comprising a substantially tubular shell, an arcuate contact member slidably engaging the inner surface of the shell and rotatable about the longitudinal axis thereof, a conductor fixed within the shell in operative relation to said member, the shell having an opening in its side, and a handle fixed to said member and extending outwardly through said opening for supporting and rotating said member.

1,822,162. VACUUM TUBE CONSTRUCTION. FREDERICK S. MCCULLOUGH, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 7, 1921. Serial No. 520,600. 5 Claims. (Cl. 250—27.5.)

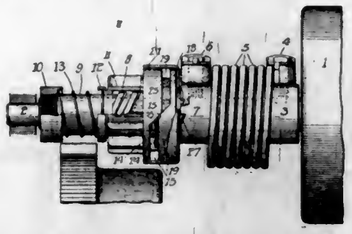


1. A space-discharge device comprising a pair of concentrically disposed co-operating control elements and a filamentary cathode entwined about the inner one only of said elements and subject to the electric field of both.

1,822,163. ENGINE STARTER. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Dec. 24, 1921, Serial No. 524,758. Renewed Aug. 3, 1927. 29 Claims. (Cl. 74—7.)

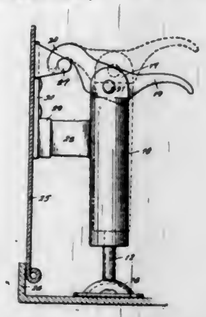
1. An engine starter drive including a rotatable member, a two part driving member mounted thereon, whose parts

have a limited rotary movement one with respect to the other, the first of said parts being operatively connected with the rotatable member for longitudinal movement thereof and rotary movement therewith, and the second



part being movable longitudinally by the first part to engage a member of the engine to be started, and means cooperating with said two parts for causing a slight rotation of said second part with respect to the first part whenever said second part is arrested in its longitudinal movement.

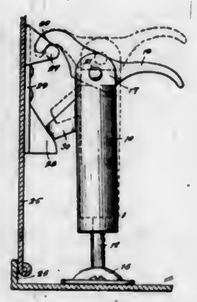
1,822,164. HOOD CATCH. RAYMOND G. MOORE, Bridgeport, Conn. Filed Feb. 21, 1928. Serial No. 255,957. 1 Claim. (Cl. 292—114.)



In a hood catch a hold-down clamp comprising an extensible and contractible pulldown member pivotally secured at its lower end, a side engaging surface at one side of said hold-down member, a keeper engaging member pivotally mounted upon the upper end of said hold-down member relatively movable with respect to said side engaging surface and including a hook portion at one side of the pivot and a handle portion at the other side, stop means on said hold-down member adapted to limit pivotal movement of said pivoted member against lifting pressure on said handle portion to a position in which said hook portion is in substantially horizontal alignment with the pivotal axis and permitting pivotal movement in the other direction, spring means acting on said hold-down member adapted to yieldingly engage said keeper engaging member with said keeper and exerting a downward pressure thereon, said keeper acting as a fulcrum about which said member is adapted to swing downwardly from said horizontal aligned position and whereby said pivotal axis and said hold-down clamp swings inwardly toward the hood, said side engaging surface adapted upon the inward swinging of said hold-down member to exert an inward pressure upon the hood under the action of said spring means.

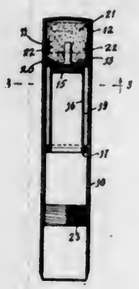
1,822,165. HOOD CATCH. RAYMOND G. MOORE, Bridgeport, Conn. Filed Feb. 21, 1928. Serial No. 255,958. 1 Claim. (Cl. 292—114.)

In a hood catch a hold-down clamp comprising an extensible and contractible pull-down member pivotally secured at its lower end, co-operating cam means at one side of said hold-down member respectively mounted on said hold-down member and said hood and having a cam surface inclined downwardly and outwardly with respect to said hood, a keeper engaging member pivotally mounted upon the upper end of said hold-down member relatively movable with respect to said cam means and including a hook portion at one side of the pivot and a handle portion at the other side, stop means on said hold-down member adapted to limit pivotal movement of said pivotal member against lifting pressure on said handle portion to a position in which said hook portion is in substantially horizontal alignment with the pivotal axis and permitting pivotal



movement in the other direction, spring means acting on said hold-down member adapted to yieldingly engage said keeper engaging member with said keeper and exerting a downward pressure thereon, said keeper acting as a fulcrum about which said member is adapted to swing downwardly from said horizontal aligned position and whereby said pivotal axis and said hold-down clamp swings inwardly toward the hood, said cam means adapted upon the inward swinging of said hold-down member to exert a downward and inward pressure upon the hood under the action of said spring means.

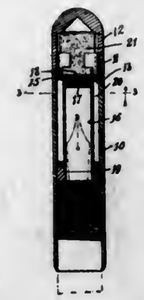
1,822,166. FOUNTAIN PEN CAP. LUCIFER J. MOST, New York, N. Y., assignor to Mabie Todd & Co., New York County, N. Y. Filed Feb. 15, 1930. Serial No. 428,590. 6 Claims. (Cl. 120—42.)



1. A fountain pen cap comprising a tube, a nipple at one end thereof, a tip cap engaging the nipple for closing the tube above the nipple, a pen nib cap within the tube, said nipple having means for engaging the closed end of the nib cap, and means at the open end of the nib cap engaging the tube, said nib cap and tube forming an annular space accessible only through the nipple.

1,822,167. FOUNTAIN PEN CAP. LUCIFER J. MOST, Kearny, N. J., assignor to Mabie Todd & Co., New York County, N. Y. Filed June 4, 1930. Serial No. 459,169. 6 Claims. (Cl. 120—42.)

6. A fountain pen cap comprising a tube, a tip cap at upper end of said tube, a sleeve within the tube, of a diameter to provide lead space between the tube and sleeve, and means for locking said sleeve at the ends thereof in the tube, the locking means at the upper end of the tube



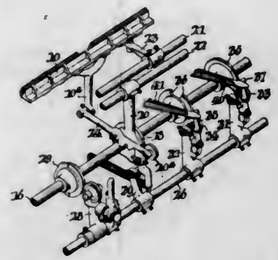
being adapted to provide access to the lead space from the upper end of the tube, said sleeve being protected from corrosion caused by ink.

1,822,168. COMBINATION POCKET AND DESK SET FOUNTAIN PEN. LUCIFER J. MOST, Hudson County, N. J., assignor to Mabie Todd & Co., New York, N. Y. Filed Sept. 20, 1930. Serial No. 483,204. 7 Claims. (Cl. 120—42.)



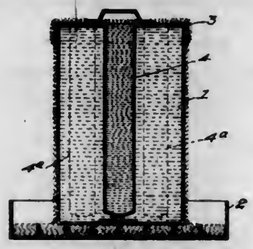
1. In a combination pocket and desk set fountain pen, a fountain pen barrel having means for coupling a section thereto, and means carried by the barrel for hiding the point of said coupling.

1,822,169. AUTOMATIC CONTROL FOR STITCH REGULATING MECHANISMS OF FLAT KNITTING MACHINES. HAROLD F. PAGET, Philadelphia, Pa., assignor to Haines Hosiery Mills Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 21, 1929. Serial No. 401,090. 7 Claims. (Cl. 66—82.)



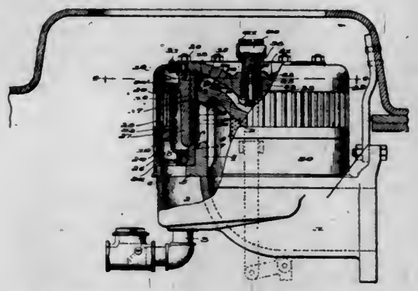
1. The combination in a flat knitting machine embodying a measuring chain; a needle bar and sinkers to cooperate with the needles, a cam shaft and coordinated means to reciprocate the needle bar, and stitch regulating means including a rock shaft with a loose course lever, a roller on the lever shiftable into and out of the plane of a cam on the shaft for varying the position of the needle bar relative to the sinkers for the purpose of knitting loose courses; of automatic means for controlling shifting of the roller aforesaid comprising a lever, an auxiliary shaft with means thereon for actuating said lever, and means governed by the measuring chain of the machine for rotating the auxiliary shaft.

1,822,170. PROCESS OF MAKING, FREEZING AND HARDENING ICE CREAM AND APPARATUS THEREFOR. WILLIAM F. PARADISE, Atchison, Kans. Filed Jan. 21, 1929. Serial No. 333,848. 1 Claim. (Cl. 62—174.)



The process of making ice cream, comprising placing ice cream liquid ingredients in a container, then mixing and chilling said ingredients by agitation, then placing a cover with a depending open-top mould on said container with said mould in said ingredients, then forcing a liquid brine solution of freezing temperature into the open top of said mold and synchronously allowing said brine solution to overflow said cover and run down and entirely around said container for freezing said ingredients, then mixing a liquid thawing solution with said liquid brine solution to enable removal of the open top mold, then pouring an edible liquid into the cavity formed by said mould in said frozen ingredients, and then subjecting the entire ice cream body to a second freezing, substantially as shown and described.

1,822,171. LOCOMOTIVE VALVE. PASQUALE PASCALE, New York, N. Y., assignor to Dri-Steam Valve Corporation, a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,475. 6 Claims. (Cl. 122—459.)



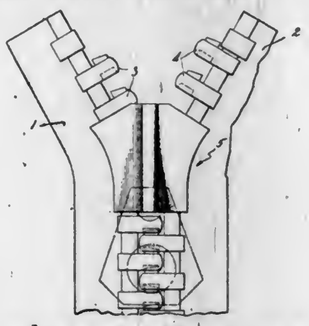
1. In a locomotive valve, in combination, a hollow ported body closed at its top and provided with an annular valve seat, a valve slidable longitudinally of the body to cover and uncover said ports, and adapted to seat on said seat, a multiple casing surrounding the body and forming inner and outer conduits communicating with the ports in the body when the valve is open, means at the entrance of the outer conduit for denuding the steam of moisture and means located at the entrance of the ports to further dry the steam.

1,822,172. METHOD OF PRODUCING TABLETS OF POWDERY MATERIAL FRAMED IN METAL. HERMAN PFLEUMER, Dresden-Loschwitz, FRANZ KRÜGER, Dresden, and HEINRICH OEXMANN, Berlin-Lichterfelde, Germany. Filed Sept. 12, 1928, Serial No. 305,598, and in Germany Sept. 16, 1927. 1 Claim. (Cl. 18—55.)



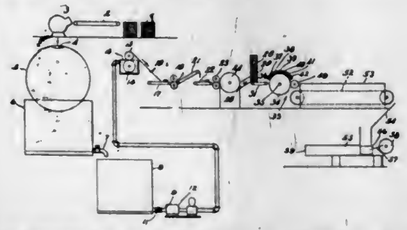
A method of pressing tablets from powderous material, consisting in pressing the powderous material into holes in a perforated metal plate which is higher than the tablets pressed, in removing said metal plate with the powderous material still in the holes, and in submitting the material to further treatment whilst in the holes in the perforated plate.

1,822,173. METHOD OF MAKING SLIDERS. GEORGE E. PRENTICE, Berlin, Conn. Filed June 29, 1928. Serial No. 289,288. 5 Claims. (Cl. 29—148.)



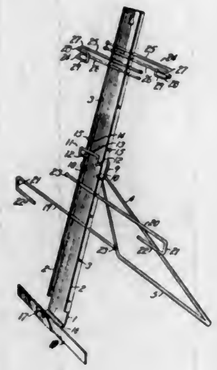
1. That method of making sliders for use in separable fasteners of the class described which comprises as steps preparing a blank roughly approximating the desired slider in shape and size, and cutting away the material of the blank to leave spaced front and rear wings having smooth inner surfaces and a substantially triangular neck integrally uniting the wings adjacent to one end, the neck having smoothly curved lateral surfaces converging toward the other end of the slider.

1,822,174. METHOD FOR THE TREATMENT OF CELLULOSE AND PRODUCT RESULTING THEREFROM. STEWART E. SEAMAN, Bangor, Me., assignor to Eastern Manufacturing Company, South Brewer, Me., a Corporation of Massachusetts. Filed July 3, 1926. Serial No. 120,372. 8 Claims. (Cl. 92—13.)



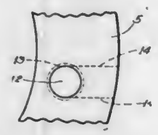
1. A process for the preparation of purified wood pulp which comprises reducing the cellulosic material to the condition of a fibrous pulp, purifying the same by removal of impurities contained therein, partially removing moisture therefrom, forming the same into fibre aggregates of a predetermined order of size, by the operation of picking, and finally drying.

1,822,175. DISPLAY RACK. HARRY L. SNYDER, Kansas City, Mo. Filed Oct. 15, 1928. Serial No. 312,472. 6 Claims. (Cl. 45—80.)



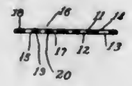
1. In a display rack of the character described, a support having parallel flanges provided with a series of pairs of aligned openings, a book supporting bracket having offset lugs mounted in selected openings on said flanges, and a rod mounted in selected openings on said flanges and provided with a hook for engaging an edge of the book.

1,822,176. METHOD OF PRODUCING METAL WORKING TOOLS. WILLIAM C. SPROUL, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed May 3, 1930. Serial No. 449,425. 3 Claims. (Cl. 76—101.)



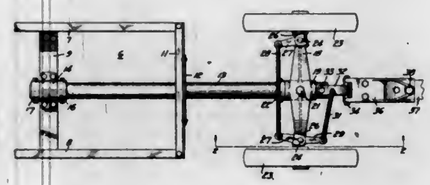
1. In the production of inserted tooth metal working tools wherein a plurality of cutter teeth are interlocked in slots made to receive them in a head member, the method which consists in boring a series of spaced holes in the side of the head member, threading said holes, cutting away the metal of the head member between its periphery and the holes to leave slots of a width substantially that of the diameter of the crests of the threads and cutting thread like serrations on the bottom of the cutter teeth to interlock with the thread like serrations thus produced in the head slots when the teeth are inserted in said slots.

1,822,177. BUCKLE. SALVATORE A. TENUTA, Chicago, Ill. Filed May 12, 1930. Serial No. 451,623. 1 Claim. (Cl. 24—198.)



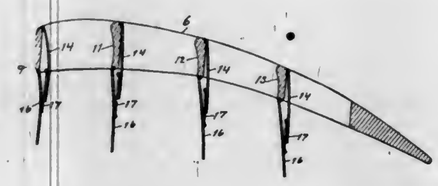
A buckle consisting of a single substantially flat piece of sheet metal and adapted to be formed in a single stamping operation, said piece of metal having a body part provided with an outer transverse slot, an intermediate transverse slot, and an inner transverse slot, the outer slot being of substantially greater width than the other slots, all of the slots being of equal length, said slots defining three parallel crossbars of equal width and length with smooth surfaces, said crossbars being similarly dished in cross-section to present similarly directed curved surfaces, said buckle being adapted to permit the ready threading of a strap therein reversely bent over said crossbars, and to securely retain the strap when it is drawn taut with reversely directed portions thereof entered in the outer slot.

1,822,178. LAND VEHICLE. LOWELL H. THOEN, Stockton, Calif., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Oct. 10, 1927. Serial No. 225,108. 1 Claim. (Cl. 280—33.55.)



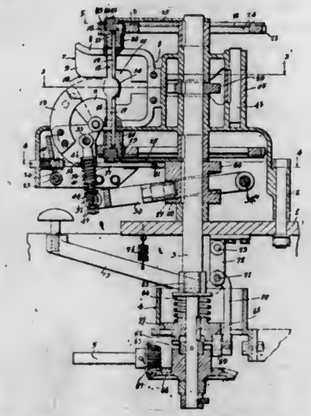
A land vehicle construction comprising a frame, a journal secured to said frame, a rotatable cylindrical beam mounted in said journal, collars secured to said beam and abutting said journal, a cylindrical muff mounted on said beam and spaced from the end thereof, an axle integral with said muff for supporting said beam, a yoke pivotally secured to said beam adjacent said muff, a tongue pivotally secured to said yoke, steering spindles at the extremities of said axle, dirigible wheels rotatably mounted on said spindles to pivot with respect to said axle, and steering linkage operated by relative movement between said tongue and said beam for pivoting said wheels relative to said axle; said steering linkage including steering arms on said spindles, a tie rod connecting said steering arms and a drag link connecting one of said arms and said yoke.

1,822,179. AEROPLANE WING CONSTRUCTION. ARTHUR E. C. THOMAS, San Bruno, Calif. Filed Oct. 15, 1930. Serial No. 488,876. 1 Claim. (Cl. 244—15.)



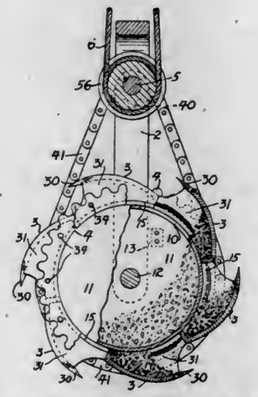
A stream line valve structure for aeroplane wings comprising a strut having a curved cross-sectional area, a curved upper valve pivited to said strut, a curved lower valve pivoted to said strut, a link pivoted to said upper valve and said lower valve, the curved cross-sectional area of the said strut and said valve forming a stream line contour when in open position.

1,822,180. FRUIT PITTING MACHINE. ALBERT R. THOMPSON, San Jose, Calif., assignor to Pacific Machinery Company, San Francisco, Calif., a Corporation of California. Filed Oct. 4, 1927. Serial No. 223,898. 20 Claims. (Cl. 146—28.)



1. In a fruit pitter, the combination of means for halving the flesh of the fruit, a curved pitting knife, means for rotating the knife, means for shifting the pit of the fruit toward the curved knife in one position, and means for arresting the movement of the pit in the opposite direction.

1,822,181. DREDGING BUCKET. EMIL C. WAGNER, Montesano, Wash. Filed Aug. 13, 1930. Serial No. 474,930. 5 Claims. (Cl. 37—189.)

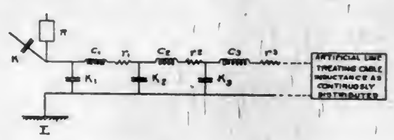


1. A dredging device comprising a cylindrical receiver having an opening in its periphery, buckets revoluble and in contact with the periphery of the receiver, and open at the side next to the receiver, a support for the receiver permitting its free oscillation about its axis, means to revolve the buckets in either direction, and by their frictional engagement with the receiver tending to rotate the same in like directions, and stop means limiting rotary movement of the receiver to positions wherein the opening is uppermost, and lowermost, respectively.

1,822,182. DUPLEX SYSTEM FOR TELEGRAPH CABLES WITH LOADING COILS. KARL WILLY WAGNER, Berlin, Germany. Filed Jan. 16, 1926, Serial No. 81,823, and in Germany Jan. 17, 1925. 3 Claims. (Cl. 178—44.)

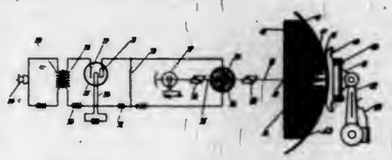
1. Duplex arrangement for telegraph cables having loading coils along the whole cable and comprising an

artificial line, the coils and coil sections of the beginning of the cable being reproduced individually in the artificial



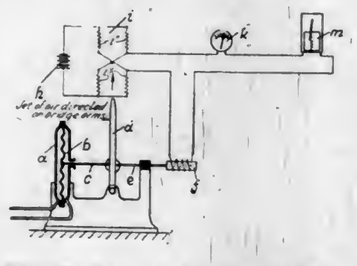
line, whilst the remainder of the cable is reproduced in such a manner as if the inductivity were distributed uniformly over the cable.

1,822,183. SOUND PHOTOGRAPHY SYSTEM. DELMAR A. WHITSON, Los Angeles, Calif., assignor to Whitson Photophone Corporation, Los Angeles, Calif., a Corporation of Nevada. Filed July 10, 1928. Serial No. 291,547. 1 Claim. (Cl. 179—100.31.)



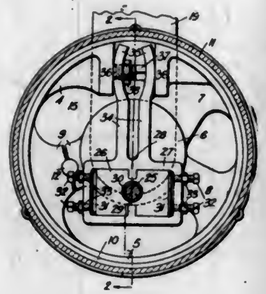
In a slot defining device for a sound photography system, a guide block having a wide slot and a communicating narrow slot, means whereby a sound record strip can be passed over the wide slot, and a lens in the bottom of the wide slot and in contact with the sides and bottom of said slot for focusing radiations that pass through the slots on the strip, said strip being spaced from the lens.

1,822,184. DEVICE FOR THE CONVERSION OF MECHANICAL MEASURING VALUES INTO CORRESPONDING ELECTRICAL MEASURING VALUES. ERICH PAUL GUIDO WÜNSCH, Steglitz, near Berlin, Germany, assignor to Askania-Werke Aktiengesellschaft vormals, Centralwerkstatt Dessau und Carl Bamberg-Friedenau, Berlin-Friedenau, Germany. Filed Dec. 22, 1927, Serial No. 241,087, and in Germany Dec. 21, 1926. 2 Claims. (Cl. 177—35.)



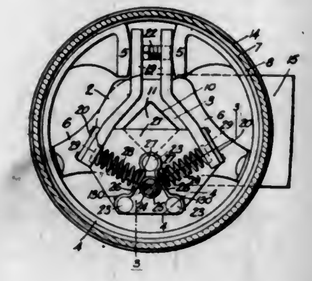
1. A device for the conversion of mechanical measuring values into corresponding electrical measuring values, comprising means influenced by the mechanical measuring values for directing a fluid current, and a Wheatstone bridge having a number of resistances, the temperatures of which are thereby regulated by said fluid current being directed on one of the resistances whereby, at the same time the electric conductivity of said resistances is controlled and the electric current flowing through the Wheatstone bridge is varied, and electro-mechanical means connected to the mid-point of the bridge to act in opposition to the mechanical measuring pressure, and current measuring means in circuit with the electro-mechanical means so that the measuring pressure may be determined from the current strength obtained.

1,822,185. CONTROLLING DEVICE FOR VEHICLE SPRING SUSPENSION SYSTEMS. EDWARD F. ZAPARKA, New York, N. Y., assignor to Leopard Automobile Products Corporation, New York, N. Y., a Corporation. Filed Mar. 30, 1929. Serial No. 351,322. 13 Claims. (Cl. 188—130.)



1. In a controlling device for vehicle spring suspension systems, in combination, two friction elements, a pivoted applicator lever for causing one friction element to exert pressure on the other, a supporting pivot pin for said applicator lever and resilient means inserted between the lever and its pivot for permitting such lever upon being swung to change its fulcrum point to actuate the element coacting therewith.

1,822,186. CONTROLLING DEVICE FOR VEHICLE SPRING SUSPENSION SYSTEMS. EDWARD F. ZAPARKA, New York, N. Y., assignor to Leopard Automobile Products Corporation, New York, N. Y., a Corporation. Filed Mar. 30, 1929. Serial No. 351,323. 7 Claims. (Cl. 188—130.)

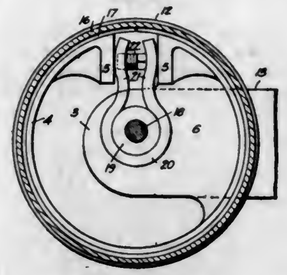


1. In a controlling device for vehicle spring suspension systems, in combination, two friction elements, one of which is movable relatively to the other, means for changing the diameter of one of the friction elements to exert pressure upon the other friction element as said element is moved away from its normal position, said means including an applicator lever operatively connecting one of the friction elements, an abutment on the other friction element, a lever yoke and opposed springs interposed between opposite ends of the lever yoke and the abutment.

1,822,187. CONTROLLING DEVICE FOR VEHICLE SPRING SUSPENSION SYSTEMS. EDWARD F. ZAPARKA, New York, N. Y., assignor to Leopard Automobile Products Corporation, New York, N. Y., a Corporation. Filed Mar. 30, 1929. Serial No. 351,324. 4 Claims. (Cl. 188—130.)

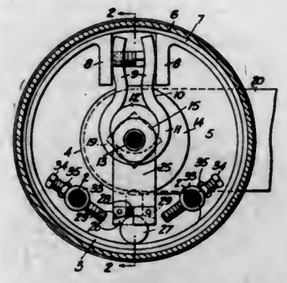
1. In a controlling device for vehicle suspension systems, in combination, a plurality of concentric friction

elements mounted for relative oscillatory rotary movement, means for varying the diameter of one friction element upon relative rotary movements of said elements,



said means including an applicator lever having spaced adjustable spring arms and a supporting pivot pin for said applicator lever mounted eccentrically to the axis of said friction elements.

1,822,188. CONTROLLING DEVICE FOR VEHICLE SPRING SUSPENSION SYSTEMS. EDWARD F. ZAPARKA, New York, N. Y., assignor to Leopard Automobile Products Corporation, New York, N. Y., a Corporation. Filed Mar. 30, 1929. Serial No. 351,325. 12 Claims. (Cl. 188—130.)



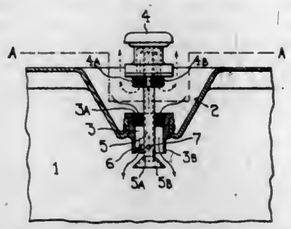
1. In controlling devices for vehicle spring suspension systems, in combination, a drum, an expandible oscillatable friction element in the drum, means including an eccentric operable upon rotation of the friction element in one direction for increasing the diameter of the latter to exert pressure upon the drum, and means between said eccentric and friction element operable upon rotation of the latter in the other direction for effecting a "hang on" of such pressure.

1,822,189. METHOD OF REDUCING THE EXTENSION OF WIRE ROPES. GEORG ZAPF, Riehlerwall Cologne, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft. Cologne-Mulheim, Germany. Filed Apr. 16, 1930. Serial No. 444,820, and in Germany May 1, 1929. 2 Claims. (Cl. 117—58.)



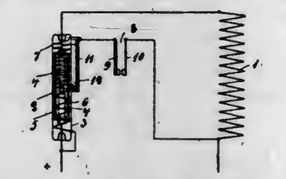
1. A method of reducing the extension of wire ropes formed of stranded wires or wire strands consisting in subjecting the wire ropes to tensile stresses by applying forces thereto and while they are thus subjected to tensile stresses tightly wrapping the ropes with a helical wire bandage, as set forth.

1,822,190. HOT WATER BAG. HERBERT ZIELE, Napier, New Zealand. Filed May 16, 1929, Serial No. 363,656, and in New Zealand Dec. 13, 1928. 6 Claims. (Cl. 150—8.)



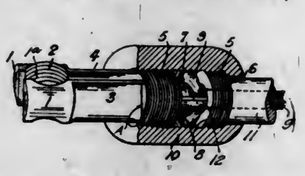
1. A hot water bag which comprises a bag having a funel shaped pocket inserted within the upper edge thereof so as to be disposed within the confines of the bag, a cylindrical metal sleeve secured within the lower portion of said pocket so as to establish direct communication with the interior of the bag, a stopper adapted to engage within the said sleeve to firmly close the bag and a rigid open ended tube attached to and dependent from the stopper and means adapted to lock said stopper in the filling position so that the upper end is disposed above the upper edge of the pocket while not projecting thereabove in closed position.

1,822,191. THERMOSTAT SWITCH. AXEL OSVALD APPELBERG, Stockholm, Sweden, assignor to Aktiebolaget Birka Regulator, Stockholm, Sweden, a Company of Sweden. Filed May 21, 1930, Serial No. 454,899, and in Sweden May 25, 1929. 3 Claims. (Cl. 200—122.)



1. An arrangement in electric apparatus, the current supply of which is controlled by a thermostat switch enclosed in a receptacle and provided with a heating winding disposed outside said receptacle, the circuit of said winding being in turn controlled by an auxiliary or relay switch, characterized in that the heating winding of the thermostat switch consists of several parts which are mutually shiftably connected by means of an auxiliary thermostat switch disposed in thermical communication with the external winding, the shifting of the latter switch under the influence of the heat development in the winding bringing about a reduction of the heat development in said winding.

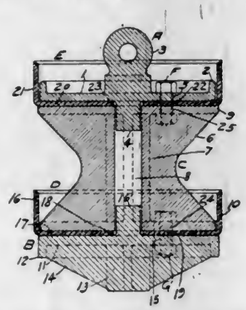
1,822,192. TERMINAL CONNECTER AND THE LIKE. DAVID EGERTON BARNETT, London, England. Filed Sept. 10, 1927, Serial No. 218,714, and in Great Britain Oct. 11, 1926. 3 Claims. (Cl. 173—269.)



1. A terminal connecter comprising a member formed of a single piece of conducting material having spaced end portions and an intermediate reduced portion con-

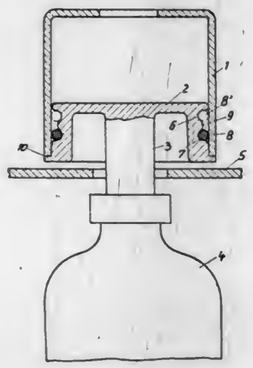
necting the end portions and forming a resultant annular groove, one end portion being formed with article attaching means, the other end portion being provided with an inwardly extending axial passage communicating with said annular groove for receiving the terminal end of a cable, and an insulating sleeve removably mounted on the member and covering said annular groove, said sleeve when so mounted being disposed between the spaced end portions of said member whereby said article attaching means will be adapted for attachment to an article.

1,822,193. PLUG FOR CEMENTING WELLS. SIDNEY O. BARTON, Long Beach, Calif., assignor to Pacific Oil Well Cementing Company, Incorporated, Los Angeles, Calif., a Corporation of California. Filed Mar. 18, 1929. Serial No. 348,074. 2 Claims. (Cl. 166—1.)



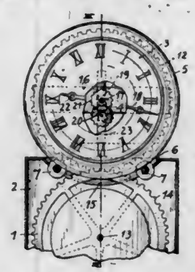
1. In an apparatus for cementing wells, an assembled spool shape frangible metal plug having spaced cup packings and an intermediate perforated ribbed reinforcement member, said ribbed member having at its top an interior disk integral with the ribbed member, an outer disk having an eye on one side and a plug to fit the perforation in said member on the other side of the disk and means to fasten the disks and packings together.

1,822,194. FASTENING DEVICE FOR SPINNING CENTRIFUGES USED IN THE PRODUCTION OF ARTIFICIAL SILK. GOTTHARD BAURIEDEL, Barmen, and WILLI FICHTHORN, Elberfeld, Germany, assignors to the Firm American Bemberg Corporation, New York, N. Y. Filed Dec. 13, 1928, Serial No. 325,681, and in Germany Dec. 19, 1927. 5 Claims. (Cl. 118—49.)



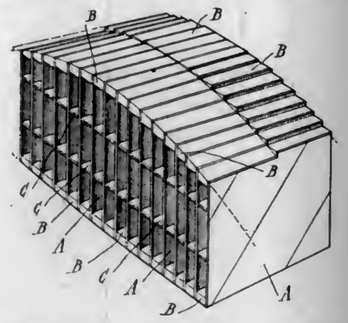
1. The combination with a spinning pot and a driving plate of a fastening for the spinning pot, comprising an elastic ring between a surface of the spinning pot and a concentric surface of a driving plate, and a grooved rolling track upon one of said surfaces, said elastic ring being adapted to be rolled into a groove in said rolling track as the spinning pot is being set up upon the driving plate to secure a good driving connection.

1,822,195. CLOCK. PAUL BAUMGARTEN, Berlin-Halensee, Germany, assignor to "Baga" G. m. b. H., Berlin, Germany. Filed Aug. 2, 1928, Serial No. 297,083, and in Germany Aug. 8, 1927. 3 Claims. (Cl. 58—2.)



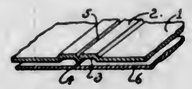
1. A clock of the class described comprising a casing, a motor driven toothed wheel therein, a transparent sphere rotatively supported upon the casing and having a circular series of teeth carried thereby adapted to mesh with the teeth of the wheel, a dial rotatable with respect to the sphere, a dial train associated with the dial, an hour hand and minute hand connected with the dial train, said sphere during rotation controlling the movement of said hands.

1,822,196. AEROPLANE. LOUIS BÉCHEREAU, Paris, France, assignor to Societe Des Avions Bernard, Paris, France. Filed Feb. 4, 1929, Serial No. 337,342, and in Belgium Feb. 9, 1928. 6 Claims. (Cl. 244—31.)



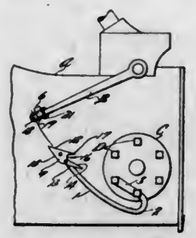
1. A wing structure composed of a series of partitions extending continuously from one wing surface to the other, said partitions being positioned in the direction of the length of the wing, and spacing elements adapted to maintain said partitions at a fixed distance from one another, said spacing elements lying in spaced relation to the wing surfaces.

1,822,197. WELDING. CLAUDE A. BOWLUS, Birmingham, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 6, 1929. Serial No. 412,246. 3 Claims. (Cl. 219—10.)



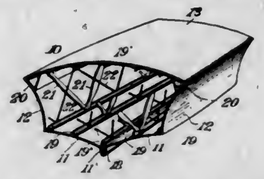
1. In a pair of superimposed metal plates, one plate including a cup shaped chamber having an open side adjacent the other plate and a substantially flat marginal portion surrounding said open side and parallel to the plane of said latter plate, and a projection on one of said plates extending through said chamber in spaced relation to the side walls thereof, said projection being integral at one end with one plate and fused at its opposite end to the other plate.

1,822,198. LOCKING CATCH FOR FOOT PEDALS. BENHARD G. BUSS, Golden, Ill. Filed July 24, 1930. Serial No. 470,391. 1 Claim. (Cl. 74—39.)



In a device of the kind described, in combination with a fixed member and an adjacently mounted movable member adapted for travel in a curved path, a resilient arm secured at one end to the fixed member with the free end thereof directed towards the movable member and disposed laterally of the line of travel of the movable member, a lock pin upon the movable member and projecting laterally therefrom towards the extended axis of the fixed member, and a lock plate rigidly mounted upon the free end of the resilient fixed member, the said plate being so angularly shaped and recessed at its margins as to force the travel of the said pin in one direction over one edge of the said plate and its return over the opposite edge of the said plate.

1,822,199. BOAT HULL. EDMUND B. CAIRNS, New York, N. Y., assignor to Cairns Development Company, Wilmington, Del., a Corporation of Delaware. Filed May 20, 1927. Serial No. 192,880. 10 Claims. (Cl. 9—6.)



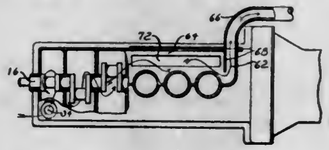
1. A metal boat hull having top, bottom and sides formed of preformed sheets shaped to compound curvature, longitudinal members at the top and bottom parts of the hull, and longerons fitting against the top and side sheets at the junction of said sheets.

1,822,200. WRITING PAD OR RECORDING DEVICE. JOHN B. CARROLL, Oak Park, Ill. Filed May 5, 1930. Serial No. 449,803. 7 Claims. (Cl. 35—10.)



1. In a recording device, the combination of a frame having a window opening therein, a suitably colored back sheet mounted back of said window opening and provided with a coating of adhesive material, a flexible diaphanous sheet mounted on said frame and extending across said window opening and adapted to be pressed by a pointed instrument into adhesive engagement with said coated back sheet, and means in supporting engagement with said back sheet and connected with said first-mentioned frame for moving said diaphanous sheet and its supporting frame to inclined position relatively to said coated back sheet for detaching said sheets from adhesive engagement with each other.

1,822,201. CRANK CASE VENTILATOR. WALTER S. COCHRANE, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed Apr. 20, 1927. Serial No. 185,208. 1 Claim. (Cl. 123—119.)



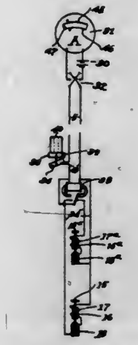
In an engine of the class described, a crankcase chamber, a valve chamber above said crankcase chamber communicating therewith, means for directing an air current into said crankcase at its forward end, and at one side thereof means for directing the air current circularly within said crankcase, and means for exhausting the air current at the rear end of said valve chamber at the opposite side of the inlet opening.

1,822,202. AIRSHIP. DELORES S. COLBY, Waterways, Alberta, Canada. Filed Apr. 3, 1930. Serial No. 441,400. 3 Claims. (Cl. 244—14.)



1. An airship including a boat-shaped body, sustaining flanges extending outwardly and longitudinally from the gunwales thereof, a boat-shaped stabilizer extending from the rear of the first body, and means on the first body for driving the ship.

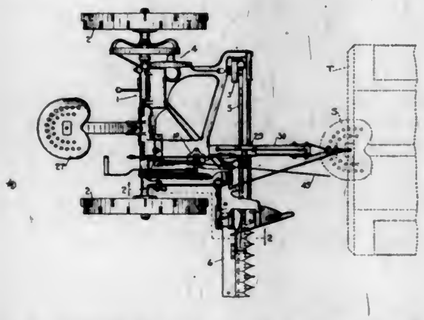
1,822,203. INDICATING MEANS FOR WELLS. FRANK M. COLLINS, Fullerton, Calif. Filed Sept. 26, 1928. Serial No. 308,563. 2 Claims. (Cl. 177—351.)



2. In combination, an electric circuit including an indicator movable responsive to electric current variations,

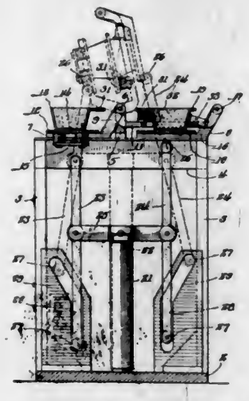
a closed container adapted to be lowered relative to said indicator to determined depths in a body of liquid, the electric circuit extending to the closed container, an expansible device in said container and communicating with the interior thereof for balancing the pressure inside and outside the container, an electric resistance element in the electric circuit and mounted in the closed container, a member in the closed container movable in accordance with pressure variations, means cooperating with said member for varying the resistance element to vary electric current passing through said resistance element in accordance with movement of the member, a normally open switch in the electric circuit, and means carried by the closed container for closing said switch responsive to submergence of said switch closing means in the body of liquid.

1,822,204. MOWER. WILBUR J. COULTAS, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 10, 1929. Serial No. 362,025. 19 Claims. (Cl. 56—25.)



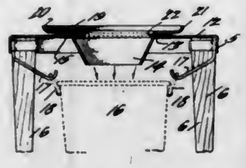
1. In combination in a mowing machine comprising a cutter bar, a lifting lever, and operating connections between the lever and the bar, a second lifting lever, and operating connections between the second lever and the bar, each of the operating connections between the respective levers and the bar including parts having limited relative movement in one direction whereby said connections are adapted to permit independent operation of the levers.

1,822,205. CORE BOOKING APPARATUS. HENRY L. DEMMLER, Kewanee, Ill. Filed Feb. 21, 1927. Serial No. 169,811. 17 Claims. (Cl. 22—10.)



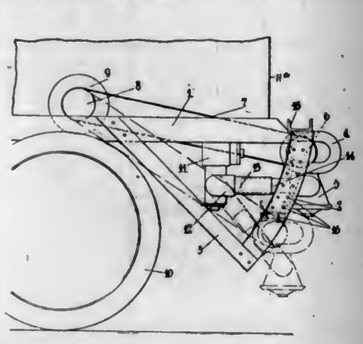
1. In a core booking machine, a stationary support, complementary core box parts pivotally connected to said support for movement with respect to one another into booking position, and means independent of and engageable with said parts for moving said parts when filled into booking position and automatically operative thereafter for moving the booked parts together to a second position.

1,822,206. SURGICAL TABLE. RICHARD E. FERGUSON, St. Joseph, Mo. Filed May 15, 1930. Serial No. 452,690. 4 Claims. (Cl. 45—50.)



1. In a surgical table having a top with an opening therein, a funnel extending through said opening and having a flange resting on the table by which the funnel is supported in the opening, a pan superimposed with relation to the first mentioned funnel and covering the flange thereof, a funnel extending from the pan into the first mentioned funnel, side and end flanges on the said pan, and extensions from the end flanges projecting downwardly and outwardly from the pan and adapted to have their edges resting on the top of the table.

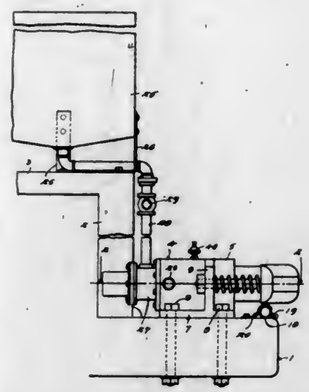
1,822,207. APPARATUS FOR DISTRIBUTING MATERIALS ON ROAD AND OTHER SURFACES. CHARLES GEORGE FOX, London, England. Filed June 12, 1930, Serial No. 460,767, and in Great Britain July 9, 1929. 10 Claims. (Cl. 299—34.)



1. Apparatus for use in distributing material in a fluid condition on the surfaces of roads comprising a vehicle mounted upon road wheels, a rotary distributor associated therewith, means adapted to frictionally engage one of said road wheels in order to actuate the rotary distributor, a driving connection between the first-mentioned means and the rotary distributor, and arcuate members secured to the vehicle and engaging the rotary distributor to permit raising or lowering of the same as a whole to vary its distance from the road surface while maintaining constant the length of the driving connection between the first-mentioned means and the rotary distributor.

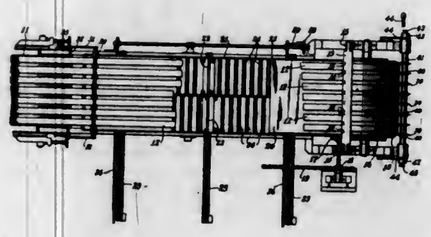
1,822,208. AUTOMATIC PILING LUBRICATOR. FRANK FORREST FULLER, Elizabeth, N. J. Filed Mar. 22, 1930. Serial No. 438,211. 7 Claims. (Cl. 114—219.)

1. A device adapted to be carried by a water craft for automatically lubricating piling, comprising a cylinder adapted to be mounted on the craft, means adapted to supply lubricant to the cylinder, means in communication with the cylinder and adapted to apply the lubricant to the piling, a piston in the cylinder, and means adapted to



cooperate with the piling to effect the operation of the piston in a direction to force the lubricant from the cylinder to said second means.

1,822,209. METHOD AND APPARATUS FOR CUTTING SHEET MATERIAL INTO STRIPS. JOHN R. GAMMETER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1926. Serial No. 140,022. 7 Claims. (Cl. 164—61.)

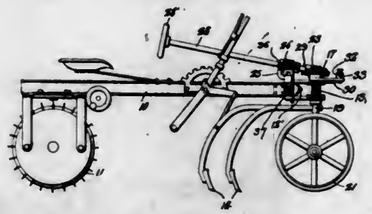


2. Apparatus for cutting a normally distortable sheet of rubber into strips, the said apparatus comprising means for tightly embracing substantial areas of the sheet flatwise on each side of a plurality of lines of cut close to the said lines, a set of nonrotating knives so spaced apart as to cut the sheet along said lines by applying a cutting force wholly edgewise of the sheet, and means for causing relative movement between the knives and the sheet along the said lines of cut, the embracing means being so constructed and arranged as to sustain the cutting force of the knives wholly by frictional engagement with the sheet over areas thereof flanking each knife.

1,822,210. PROCESS FOR THE MANUFACTURE OF PURE COLOPHONY AND OTHER RESINOUS PRODUCTS FROM RESINOUS PLANTS OR WOODS. DANIEL GARDNER, Rueil, France. Filed Mar. 29, 1928, Serial No. 265,821, and in France Apr. 30, 1927. 3 Claims. (Cl. 87—2.)

1. In a process for the extraction of resin, subjecting a dry substantially volatile-free resin-bearing cellulosic powder in a condition approximately to impalpability to treatment with a weak caustic alkaline liquor of not more than 2 per cent. concentration and containing not more than 2 per cent. dissolved reducing agent.

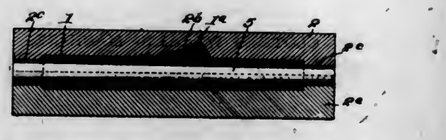
1,822,211. HILLSIDE AGRICULTURAL MACHINE. BENJAMIN F. GRAVELY, Dunbar, W. Va. Filed July 24, 1930. Serial No. 470,472. 5 Claims. (Cl. 97—24.)



1. In a device of the class described, a frame, a member mounted on the frame for transverse rocking adjustment, dirigible wheels supporting said member, and a steering means shiftable into one position to steer said wheels, and shiftable into another position to rock said member.

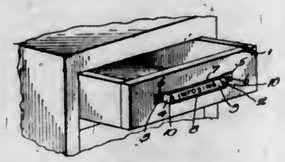
5. In a device of the character described a frame, a transverse beam pivotally mounted on said frame for adjustment in a vertical plane, an adjusting worm on the frame having notches in one end, a worm wheel on the pivot of said beam in operative relation to said adjusting worm, a steering worm on said beam having notches in one end, a worm wheel on said beam in operative relation to said steering worm, dirigible wheels supporting said beam and in operative relation to said steering worm, and a steering column slidable through said worms having a pin for alternate engagement with the notches of said worms, whereby to adjust said beam, at times, and to steer said wheels, at times.

1,822,212. HAND GRIP SLEEVE AND METHOD OF MAKING SAME. RICHARD T. GRIFFITHS, Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Jan. 25, 1929. Serial No. 334,093. 4 Claims. (Cl. 273—81.)



1. As an article of manufacture, a hand grip sleeve of relatively soft resilient material having protuberances of less resilient material resiliently supported thereby and homogeneously united thereto.

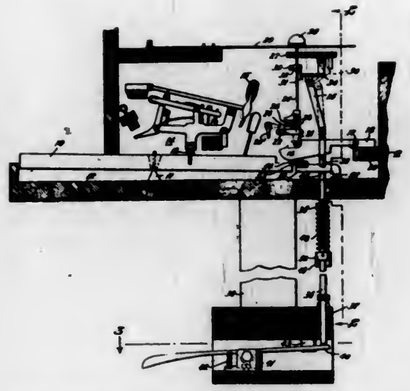
1,822,213. DRAWER PULL. EDWARD P. HAMILTON, Two Rivers, Wis., assignor to Hamilton Manufacturing Company, Two Rivers, Wis., a Corporation of Wisconsin. Filed Mar. 22, 1930. Serial No. 438,059. 2 Claims. (Cl. 40—8.)



1. A label holder having an elongated body portion which is convexedly curved transversely thereof, said label holder being inclusive of label retainers at the longitudinal margins of said body portion and lapping the convexedly curved face of the holder and spaced apart from this face to afford receiving spaces for the longitudinal edge portions of the label, said holder being also

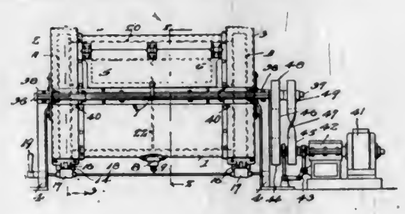
inclusive of stop formations projecting beyond the convexedly curved face of the holder to be coincident with the label, the label facing edges of the stop formations being normal to the surface of the body portion.

1,822,214. SOSTENUTO CONTROL. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Nov. 12, 1929. Serial No. 406,570. 8 Claims. (Cl. 84—218.)



6. In a musical instrument of the percussive type, a string, a damper for said string, means for releasing said damper from engagement with said string, a stem on said damper, a spring catch on said stem, a detent member, spring means for normally holding said detent member in non-co-operative relationship, with said spring catch, a foot pedal, means responsive to the actuation of said foot pedal for positioning said detent member in co-operative relationship with said spring catch so that said detent member permits the release of said damper but prevents the restoration of said released damper.

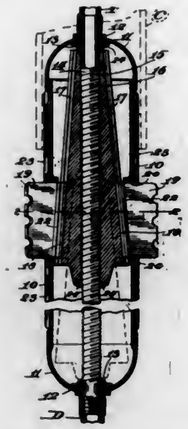
1,822,215. CLOTHES WASHING MACHINE. CHARLES F. HAROLD, Winchester, Va. Filed Oct. 1, 1929. Serial No. 396,532. 4 Claims. (Cl. 68—18.)



1. The combination with a housing having enlarged end-heads and means for introducing a liquid detergent to the housing, and valve-controlled drain openings in said heads, of a rotary-oscillating, perforated carrier having a transverse partition and mounted in the housing, said carrier having enlarged pump-heads in said end-heads, and an oppositely working pump in each of said pump-heads for alternately conveying the detergent from said end-heads to the interior of the carrier.

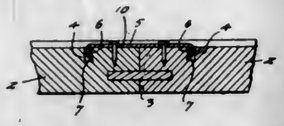
1,822,216. UNDERREAMER. EARL S. HARTSON, Los Angeles, Calif. Filed Feb. 26, 1927. Serial No. 171,212. 8 Claims. (Cl. 255—74.)

1. In an underreamer, a housing, caps removably seated on both ends of said housing, bushings seated in said caps, an externally threaded tubular mandrel extending axially through said housing and arranged for rotation in said bushings, a conical member arranged within the housing and mounted on said threaded mandrel and cutter blades



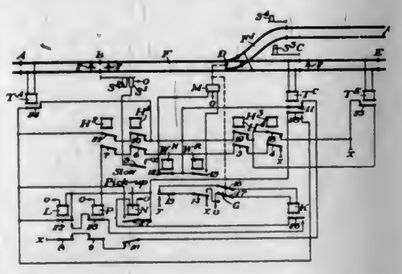
arranged for movement through openings in the wall of the housing, the inner ends of which cutter blades are interengaged with said conical member.

1,822,217. JOINT FASTENER. WALTER LAFAYETTE HUDSON and WILLIAM FREDERICK ECKARDT, Greensboro, N. C. Filed Sept. 26, 1929. Serial No. 395,390. 2 Claims. (Cl. 20—92.)



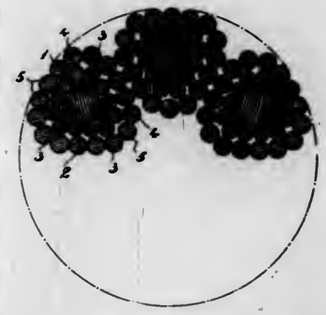
1. A fastener of the character described for joining together contacting edges of two bodies having divergently related kerfs therein and upon opposite sides of said edges, comprising a plate body having divergently related opposed edges, flanges formed integral with said edges and projecting from one face of the plate to be slidably engaged in said kerfs, and means whereby the edges of said flanges will be caused to bite into the adjacent side walls of the receiving kerfs to prevent reverse movement and disengagement of the plate from the bodies.

1,822,218. RAILWAY TRAFFIC CONTROLLING APPARATUS. ARTHUR P. JACKEL, Paducah, Ky., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 21, 1930. Serial No, 422,317. 2 Claims. (Cl. 246—160.)



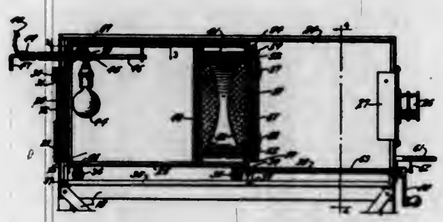
1. In combination, a railway switch, two switch controlling relays governed from a remote point for causing operation of said switch to normal or reverse position according as one or the other of the relays is energized, a circuit controller operated by said switch, an indication relay controlled by said switch controlling relays and said circuit controller and energized or deenergized according as the switch does or does not register with the condition of the switch controlling relays, a signal controlling traffic over said switch and also governed from said remote point, an approach section located in the rear of said signal, approach locking controlled in the usual manner by traffic in said approach section and in accordance with the indication given by said signal for preventing operation of said switch, and means for releasing said approach locking requiring deenergization of said indication relay.

1,822,219. WIRE ROPE. ROBERT CHARLES GEORGE JENKIN, Birmingham, England, assignor to Wrights' Ropes Limited, Birmingham, England, a Company of Great Britain. Filed Feb. 7, 1931, Serial No. 514,225, and in Great Britain Sept. 2, 1930. 6 Claims. (Cl. 117—58.)



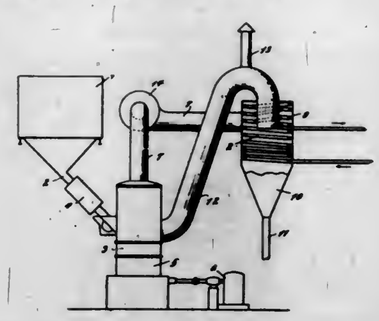
1. A flattened strand for a wire rope comprising a single central wire having three spaced longitudinal grooves, longitudinal wires located in said grooves to produce a composite core of substantially triangular form, and covering wires laid upon the said composite core.

1,822,220. COMBINED ENLARGING PROJECTOR AND PHOTOGRAPHIC CAMERA. JESSE HOYT JOHNSON, Denver, Colo. Filed July 2, 1928. Serial No. 289,961. 6 Claims. (Cl. 88—24.)



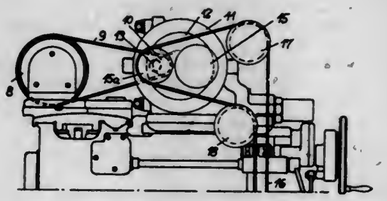
1. A combined camera and projecting mechanism comprising; an outer housing; a lens in one extremity of said outer housing; an inner housing arranged to travel within said outer housing; a light source within said inner housing; means for supportg photographic media on said inner housing between said light source and said lens; means operable from the exterior of said outer housing for moving said inner housing toward or away from said lens; rollers supporting said inner housing and tracks in the bottom of said outer housing to receive said rollers; and means for aligning said inner housing with said outer housing comprising adjusting screws adapted to engage said tracks.

1,822,221. PROCESS AND APPARATUS FOR PULVERIZING MATERIAL. MICHAEL D. JONES, Allentown, Pa., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Oct. 17, 1927. Serial No. 226,543. 10 Claims. (Cl. 83—94.)



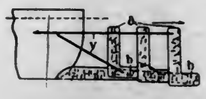
1. The process of pulverizing materials which comprises grinding the material while passing a gaseous fluid through the grinding zone to remove fine particles and thence through a separating zone where the fine particles and gaseous fluid are separated, said separating zone being maintained at an elevated temperature by heating it independently of the material passing therethrough.

1,822,222. INTERIOR GRINDING MACHINE FOR GRINDING OUT BORES ACCURATELY. KARL JUNG, Berlin, Germany. Filed June 3, 1929, Serial No. 368,061, and in Germany May 7, 1927. 3 Claims. (Cl. 51—50.)



1. An internal grinding machine for accurately grinding out bores, comprising a frame; a tool holder mounted on said frame and including a rotatable spindle having a grinding tool mounted thereon; a revolving head mounted on said frame, said head having a chuck for holding the work-piece and a dressing device for the grinding tool; and means for revolving the head so that alternately a dressing of the grinding tool and a grinding of the bore of the workpiece takes place, said holder and head being slidably arranged relatively to each other.

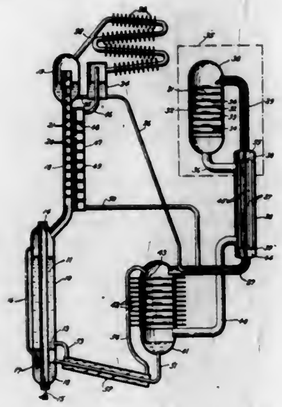
1,822,223. CONSTRUCTION OF SHIPS, BOATS AND THE LIKE. JOHANN RUDOLF KLINGER, Nord-Bohmen, Czechoslovakia. Filed Oct. 15, 1928, Serial No. 312,640, and in Czechoslovakia Oct. 27, 1927. 29 Claims. (Cl. 114—67.)



2. In a ship construction an attachment, at a certain distance in front of the bow of the ship consisting of hollow members in open communication with the ship for the purpose of receiving a supply of a gaseous fluid under pressure and having outlet openings through which the said gaseous

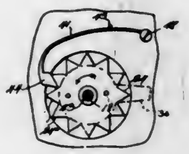
fluid can be blown out in such a direction that the water present between the bow of the ship and the said hollow members is copiously traversed by the gaseous fluid and the whole of the front surface of the ship lying under water comes in contact as uniformly as possible with the said gaseous fluid.

1,822,224. REFRIGERATION. DONALD BRANCH KNIGHT, Brooklyn, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 9, 1930. Serial No. 419,486. 30 Claims. (Cl. 62—119.5.)



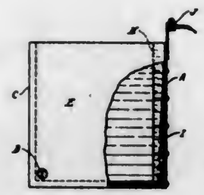
1. That improvement in the art of refrigeration by the aid of a system containing a refrigerant fluid and an additional fluid for equalizing pressure which comprises storing an excess of said additional fluid under normal operating conditions and circulating the stored additional fluid in the system when the pressure in the system increases.

1,822,225. TIME RECORDING CLOCK. AUGUST J. KOEPSELL, Mayville, Wis., assignor of twenty-five per cent to Walter A. Moericke, Mayville, Wis. Filed June 2, 1928. Serial No. 282,410. 2 Claims. (Cl. 234—41.)



1. A time recorder including a record sheet member having radial recording spaces and a member carrying printing stamps disposed above the record sheet member, means for rotating the record sheet member relative to the printing stamp carrying member and means for intermittently stopping the rotation of the record sheet at intervals including a sleeve mounted upon the first named shaft and with which the record sheet is detachably engaged, the sleeve having a wheel mounted thereon formed with V-shaped teeth, a circumferential slot in the sleeve, a pin mounted upon the shaft and extending into said slot, and a spring actuated member having a V-shaped tooth coacting with the teeth on the wheel and adapted when it passes the crest of the tooth to rotate the wheel, the sleeve and the record sheet quickly through a predetermined arc and then hold the wheel and sleeve stationary until the pin has reached the end of the slot.

1,822,226. METHOD FOR DETERMINING OPTIMUM CURRENT STRENGTH IN THE ELECTRODEPOSITION OF RUBBER AND OTHER SUBSTANCES. FREDERICK HENRY LANE, Erdington, Birmingham, England, assignor to American Anode, Inc., Akron, Ohio, a Corporation of Delaware. Filed Apr. 4, 1928, Serial No. 267,348, and in Great Britain Apr. 6, 1927. 3 Claims. (Cl. 204—1.)

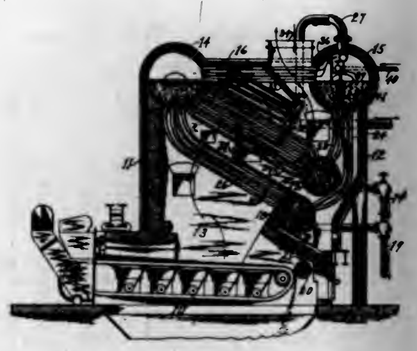


1. A method for determining the optimum current density for the electrodeposition of rubber or rubber-like substances from aqueous dispersions which comprises electrodepositing the said substances from the said dispersions upon a surface over which the current density varies continuously from one end to the other, and determining the current densities on the portions of the depositing surface corresponding to deposits of the desired characteristics.

1,822,227. PROCESS OF IMPROVING COFFEE-BEANS. KARL LENDRICH, Hamburg, Germany; Louise B. P. Lendrich, widow; Ernd C. Wemmering, daughter; and Otto Lendrich, son, heirs at law of said Karl Lendrich, deceased. Filed Nov. 3, 1928, Serial No. 317,123, and in Germany Dec. 21, 1927. 5 Claims. (Cl. 99—11.)

5. A process for improving coffee-beans which comprises treating them with water vapor under a pressure to 1 to 3 atmospheres to the extent that they absorb 6 to 10% by weight of water for at least one hour, whereby the chlorogenic acid is decomposed.

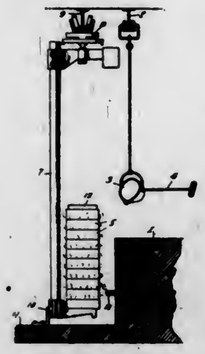
1,822,228. MULTIPLE CIRCULATION BOILER. HENRY JOHN SUTHERLAND MACKAY, London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 12, 1925, Serial No. 61,875, and in Great Britain Dec. 15, 1924. 9 Claims. (Cl. 122—301.)



1. A water tube boiler comprising front and rear steam and water drums, steam and water tubes connecting said drums, at least two lower drums one disposed above the other, sets of uptake tubes and downtake tubes connecting said upper and lower drums, said sets of uptake tubes and downtake tubes being each divided into at least

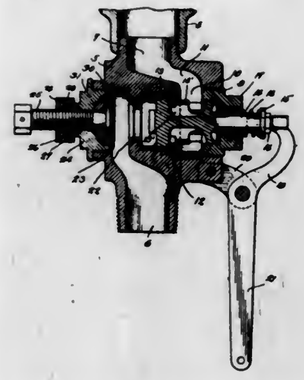
two groups, each of said groups being connected to one of said lower drums, thus affording separate inner and outer circuits, and means for feeding water into the steam space of the rear drum and thence directly into downtake tubes of said inner circuit.

1,822,229. MEANS FOR IGNITING GAS EXPELLED FROM FOUNDRY MOLDS. FRANK E. MCCABE, Cleveland, Ohio, assignor to The Grabler Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Sept. 19, 1925, Serial No. 57,333. Divided and this application filed Mar. 25, 1927. Serial No. 178,250. 1 Claim. (Cl. 22—1.)



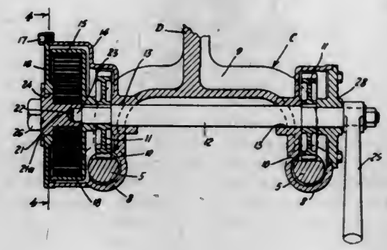
In a foundry conveyor system, a pouring station, a plurality of superposed molds at said pouring station, said molds adapted to permit the escape of combustible gases formed therein during and after pouring, fixed gas igniting means adjacent the lowermost of said superposed molds for burning combustible gases escaping therefrom during and after pouring and, by igniting gases escaping from the lowermost mold, for igniting gases escaping from the molds above it.

1,822,230. VALVE. KARL F. MCJILTON, Moberly, Mo. Filed June 28, 1927. Serial No. 202,055. 1 Claim. (Cl. 277—65.)



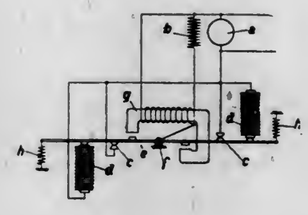
A valve comprising a valve housing having an inlet opening at one side, and an outlet opening at the opposite side, said housing having an enlarged bore providing a valve chamber, said enlarged bore being in communication with the inlet opening and outlet opening, a valve cage removably mounted in the bore and having a valve seat at its inner end, said valve cage being in communication with the inlet and outlet openings, a valve operating in the valve cage and adapted to move against one end of the valve cage to close the valve, said valve having cut away portions providing passageways, and a guide band engaging the valve housing to hold the valve in alignment within the valve housing, when the valve is in its open position, means for operating the valve, and an auxiliary valve for cutting off the passage of steam through the valve.

1,822,231. ADJUSTABLE SPRING COUNTERBALANCE FOR POWER DRILLS. LEON F. MEUNIER, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 15, 1928. Serial No. 254,399. 2 Claims. (Cl. 77—36.)



1. A support for a power tool having a movable frame to which the tool is secured, said frame having spaced slide members, guide sleeves on said support slidably receiving said members and limiting the movement of said frame, rack teeth on said members, a shaft on said support having pinions meshing with the teeth on said members, a drum on said shaft, a casing on said support enclosing said drum, a cover for said casing, a volute spring within said drum having its outer end secured to the latter, and a shaft on said cover projecting within said drum to which the inner end of said spring is secured, said last named shaft being adjustable to vary the torque exerted by said spring upon said pinion shaft, said shafts being axially aligned and having parts in telescoped interengagement to maintain their alignment while permitting independent relative rotation of said shafts.

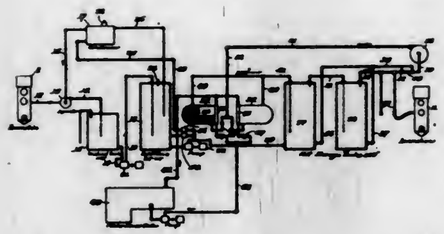
1,822,232. QUICK-ACTING REGULATOR OF THE VIBRATING TYPE. HULDREICH MEYER-BERG, Baden, and ROBERT KELLER, Ennetbaden, Switzerland, assignors to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed May 24, 1928, Serial No. 280,287, and in Germany June 1, 1927. 7 Claims. (Cl. 171—229.)



1. A quick-acting regulator of the vibrating type for maintaining constant the current or voltage of an electric generator including a pair of vibrating contacts in a circuit including the field coils of the generator, a non-inductive resistance shunted across said contacts and a rocking member coacting synchronously with the vibrating contacts, said rocking member being arranged to vary

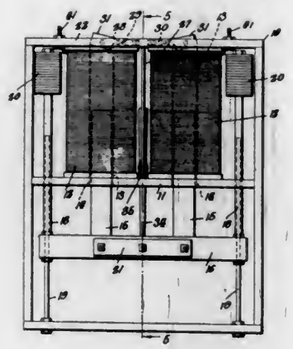
the value of said non-inductive resistance from a minimum to a maximum synchronously with the vibration of the said contacts.

1,822,233. LOCOMOTIVE REFILLING APPARATUS. FRANK W. MILLER, Chicago, Ill. Filed Mar. 28, 1927. Serial No. 178,939. 8 Claims. (Cl. 122—396.)



1. A locomotive boiler refilling system comprising a refill tank and means for conducting thereinto blown off water from locomotives, means for conducting the blow off steam from locomotives into said tank to raise the water temperature therein, a storage tank into which water from the refill tank is pumped, means for distributing water from said storage tank to points of use for refilling locomotives, a heater and means for supplying steam thereto approximately at locomotive boiler pressures, and means for recirculating the water in said storage tank and in said distributing means through said heater to maintain all of said water at temperatures productive of locomotive boiler pressures.

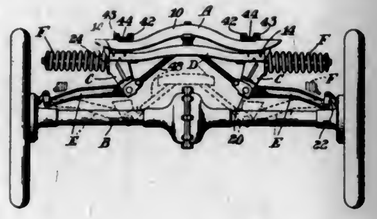
1,822,234. CURRENT CONTROLLER. HAROLD PAYNE, Sacramento, Calif. Filed Apr. 14, 1930. Serial No. 444,268. 7 Claims. (Cl. 171—242.)



4. A current controller for an electrical circuit comprising a device responsive to fluctuations of current in said circuit, and means for retaining the device in the position assumed when the circuit is opened, whereby to prevent an excessive flow of current upon reclosing of said circuit.

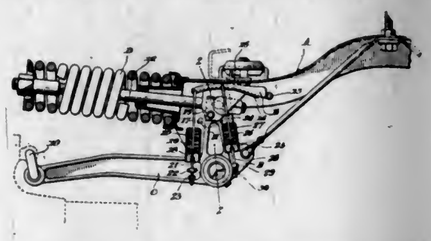
1,822,235. SUPPORTING MEANS FOR SPRING SUSPENSION DEVICES FOR VEHICLES. ERIC JULIUS PILBLAD, Brooklyn, N. Y., assignor, by mesne assignments, to Leopard Automobile Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 17, 1925. Serial No. 50,669. 19 Claims. (Cl. 267—20.)

1. In a device of the character described, in combination, a plurality of spring suspension devices each including a bracket and a spring held rocker arm, a detachable supporting member including a trussed beam constituting a



single supporting means for said suspension devices enabling the latter to be attached or detached as a unit with said trussed beam.

1,822,236. FRICTIONAL RETARDING DEVICE FOR SPRING SUSPENSION. ERIC JULIUS PILBLAD, Rockville Center, N. Y., assignor, by mesne assignments, to Leopard Automobile Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1926. Serial No. 156,709. 12 Claims. (Cl. 267—9.)



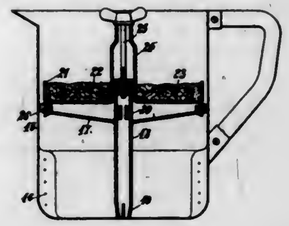
1. In a device of the character described, in combination, a pivoted rocker arm, a pivoted braking member for said rocker arm and means controlled by movements of said rocker arm for applying said braking member to exert restraint to movements of said rocker arm in opposite directions.

1,822,237. DOUBLE SLIDING WINDOW. RUDOLF ROESE, Berlin-Friedenau, Germany. Filed July 11, 1929, Serial No. 377,520, and in Germany July 16, 1928. 2 Claims. (Cl. 20—52.1)



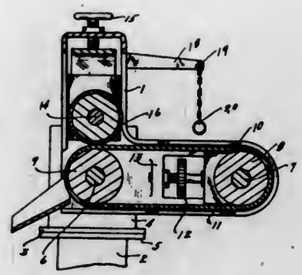
1. In a double sliding window, a window frame having side portions, inner and outer sash frames, an end-board slidably mounted in the sides of the window frame and pivotally mounting the inner sash frame, a bearing pivotally mounting the outer sash frame, a rope connecting the inner and outer sash frames, and pulleys arranged above and below said frames supporting said rope, and a window board mounted in the window frame for movement perpendicularly to the sliding movement of the sash frames for retaining the latter in adjusted positions.

1,822,238. COFFEEPOT. GIUSEPPE SACCO ALBANESE, Paris, France. Filed July 17, 1929, Serial No. 379,039, and in France Aug. 9, 1928. 2 Claims. (Cl. 53—3.)



1. In a receptacle for making coffee, the combination of a container, a removable filter removably mounted in said container intermediate the ends thereof, a plastic joint mounted in said container to prevent passage of liquid from one part of said container to the other save through said filter, a tube located in the lower portion of said container and including openings to permit the liquid to enter and rise up said tube and issue therefrom to pass through said filter, said tube having an extension adapted to bear on said plastic joint, a screw-threaded rod secured to said filter and extending through said tube to screw into a fixed projection of said container, and means for connecting said rod to said tube whereby the latter is caused to descend, consequent to the screwing of said rod, and thereby crush said plastic joint against the wall of said container.

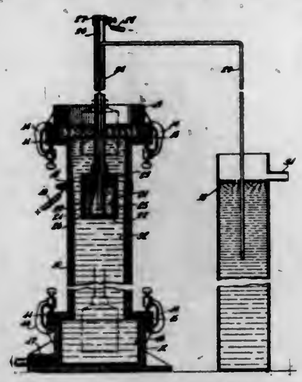
1,822,239. SAFETY CLOTHES WRINGER. ARVID SALMEN, Salem, Oreg. Filed Oct. 24, 1929. Serial No. 402,135. 2 Claims. (Cl. 68—32.)



1. A safety device for clothes wringers comprising a bar disposed in spaced relationship with the clothes wringer and attached thereto, and a plurality of pendent members thereon for indicating a danger line to the operator of the wringer.

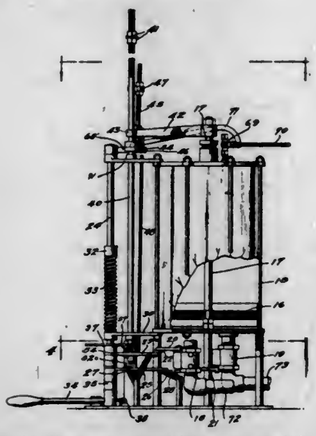
1,822,240. METHOD AND APPARATUS FOR LINING PIPES. JAMES W. SCHADE, Akron, Ohio, assignor to American Anode, Inc., Akron, Ohio, a Corporation of Delaware. Filed Jan. 31, 1930. Serial No. 424,897. 8 Claims. (Cl. 204—5.)

1. The method of lining pipes with rubber by electrodeposition which comprises passing an electric current through a liquid latex between the pipe and a cathode contained within a porous diaphragm within the pipe, while the cathode moves continuously along the axis of the pipe.



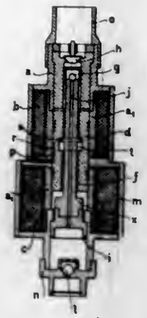
2. An apparatus for lining a cylindrical object with rubber by electrodeposition comprising means for maintaining a supply of latex within the said object, and a cylindrical electrode movable within the said object along its axis, and means for preventing gases evolved at the cathode from escaping into the main body of the latex.

1,822,241. GASOLINE DISPENSER. LOUIS SCHECHTER, Los Angeles, Calif. Filed Sept. 29, 1930. Serial No. 484,960. 7 Claims. (Cl. 194—60.)



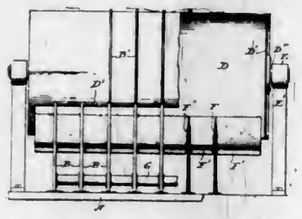
1. A liquid dispenser comprising an upright measuring and delivery cylinder, a floating piston in said cylinder providing a lower pump end, a piston rod extending through the upper head of said cylinder, an inlet and outlet air valve at the upper end of said cylinder, an inlet and an outlet at the pump end of said cylinder, a stem provided with a stop for said rod to limit travel of said piston and determine the volume of liquid to be delivered, said stem being mounted to enable limited travel with said rod and constituting a latch, a valve control lever having a face for disposition under said stem, said stem being positionable by gravity to overlap said lever and lock the latter against swinging movement, a torsion spring tending to hold said lever with its face underlying said stem in release position, means connecting said valve control lever and said air valve to actuate the latter, a coin controlled mechanism to lock and release said lever in its swinging movement, an inlet valve for entrance of liquid to said cylinder and an outlet valve for discharge of liquid therefrom, and linkage connecting said lever and valves to effect alternate opening and closure of the latter, said inlet valve being open in stem locked position of said lever.

1,822,242. PUMP FOR LIQUIDS. GUSTAV SCHÖNGUT, Vienna, Austria. Filed July 26, 1929, Serial No. 381,282, and in Austria July 27, 1928. 7 Claims. (Cl. 103—53.)



1. A liquid pump including an electromagnet and an armature actuated thereby, a pump piston actuated by said armature, and means permitting limited movement of the armature relative to the piston.

1,822,243. FOWL PLUCKING MACHINE. RALPH E. SLAYTON, Brooklyn, N. Y. Filed Jan. 21, 1929. Serial No. 333,919. 10 Claims. (Cl. 17—11.)



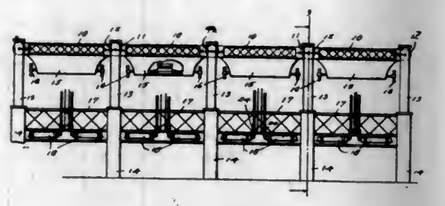
1. A device for removing feathers from fowl, combining a plurality of plucking stations, and means inclined to the horizontal for moving the object from station to station.

1,822,244. MINIATURE GOLF COURSE. BLANCHARD D. SMITH, New Orleans, La. Filed Sept. 2, 1930. Serial No. 479,347. 12 Claims. (Cl. 273—32.)



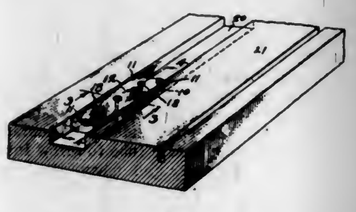
1. A golf game comprising a playing board divided into three sections having a playing surface thereon, a connecting strip of relatively narrow width hingedly connecting the center section with one of the end sections, and a second connecting strip hingedly connecting the center section with the other end section and having a substantially greater width than said first named connecting section, whereby the sections may be folded upon each other, the connecting strips having a playing surface thereon adapted to form a continuation of the playing surface of the sections in operative position.

1,822,245. SEA DROME. EDWARD G. SMITH, deceased, Little Falls, N. Y., by Edward H. Kingsbury, executor, Little Falls, N. Y. Filed Nov. 22, 1930. Serial No. 497,588. 7 Claims. (Cl. 114—0.5.)



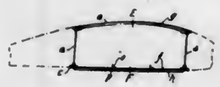
1. A float including a platform, buoyant means for supporting the platform, and movable means on the buoyant means for raising and lowering the platform with respect to the surface of the water.

1,822,246. PACKING BOX FOR ATTACHING MEANS. WALTER J. SPIRO, White Plains, N. Y. Filed Nov. 30, 1928. Serial No. 322,922. 6 Claims. (Cl. 206—47.)



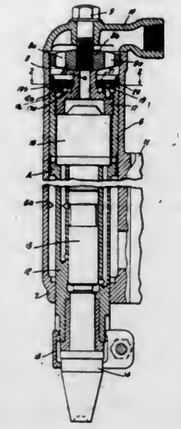
1. The combination with the running board of a vehicle formed in its under surface with a longitudinally ranging slot, of a container housing accessories for said board and removably positioned in said slot, with its free surface positioned to avoid any projection below the bottom surface of the running board, and means for removably securing said container within said slot.

1,822,247. BOX-SHAPED CENTRAL PORTION OF METAL AIRCRAFT WING. LUDWIG STAIGER, Spandau, near Berlin, Germany, assignor to the Firm: Rohrbach Metall-Flugzeugbau, G. m. b. H., Berlin, Germany. Filed Apr. 25, 1927, Serial No. 186,224, and in Germany May 4, 1926. 21 Claims. (Cl. 244—31.)



10. A hollow box girder constituting the base structure of an aircraft wing, the box including lateral spars and upper and lower skin plates connected thereto, said upper and lower skin plates participating in the transmission of forces of the box, cross ties arranged within the box a certain distance from each other, said cross ties being connected with both the spars and the skins, stiffening bars being fixed to the skins and located in the direction of flight between the cross ties and also connected with the spars, certain of the stiffening bars being located on the outer side of the box skins, said exterior bars consisting of a hollow section and having their ends streamlined and formed into lateral edges bent off the hollow section, said edges serving for fixing the stiffening sections to the box wall.

1,822,248. LOCKING DEVICE FOR FLUID PRESSURE TOOLS. EDWARD W. STEVENS, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 24, 1928. Serial No. 272,433. 11 Claims. (Cl. 121—31.)

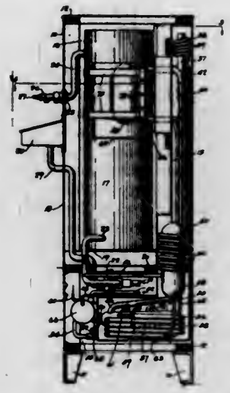


11. A fluid pressure tool comprising a barrel having an open end, a closure member having threaded engagement with said barrel at its open end, and means including a resilient member under tension for automatically tightening said closure member, said closure member and said means being wholly within a radial projection of said barrel.

1,822,249. AQUEOUS DISPERSIONS OF ORGANIC SUBSTANCES. ANDREW SZEGVARI, Akron, Ohio, assignor to American Anode, Inc., Akron, Ohio, a Corporation of Delaware. Filed Apr. 20, 1929. Serial No. 356,871. 8 Claims. (Cl. 252—6.)

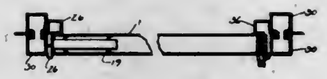
1. The method of preparing aqueous dispersions of organic substances which comprises mixing said substances with rubber oil, and dispersing the mixture in water.

1,822,250. REFRIGERATION. ROBERT SETH TAYLOR, New York, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed July 23, 1928. Serial No. 294,816. 17 Claims. (Cl. 62—119.5.)



1. In a water cooler refrigerated by an absorption refrigerating apparatus, a generator, a condenser, an evaporator, an absorber, means interconnecting said generator, condenser, evaporator and absorber, means to cool said condenser and absorber, a tank in heat exchange relation with said evaporator, means to supply water to said tank at a reduced pressure and means to supply water to said cooling means at the same reduced pressure.

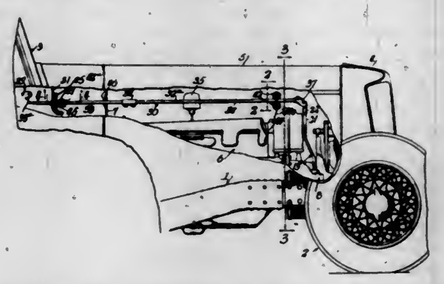
1,822,251. DOOR AND DOORWAY. URBAN C. THIES, Dayton, Ohio, assignor, by mesne assignments, to The Globe-Wernicke Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 28, 1926. Serial No. 125,540. 19 Claims. (Cl. 189—46.)



1. A sheet metal door having detachable hinges and attaching means for detachably securing said hinges in position, said hinges and door having attachment provisions cooperating with said attaching means for the attachment of said hinges in a reversible manner so that the hinge pin may be located on either side of the door.

10. A sheet metal door constructed of similar halves joined together, hinged pieces passing through the door and through each of said halves, and lying inside of the side edge of the door, and means attaching each hinge piece to each of said halves.

1,822,252. GEAR SHIFT MECHANISM FOR AUTOMOBILES. CORNELIUS W. VAN RANST, Auburn, Ind., assignor, by mesne assignments, to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 9, 1929. Serial No. 345,798. 1 Claim. (Cl. 74—39.)



In a front drive automobile, an engine and a transmission forward thereof including a gear shift lever, an instrument board located rearwardly of the engine, a longitudinal rod operatively connected at one end of said shift lever, a pair of grooved rollers adjacent the forward end of the rod between which a portion of said rod extends in a manner providing bearings therefor for both a rocking as well as a longitudinal movement, means for supporting said grooved rollers in a vertical plane, another pair of grooved rollers located at the other end of the rod for providing a similar bearing for that end of the rod, means for supporting said rollers in a horizontal plane, and a handle at the rearward end of the rod.

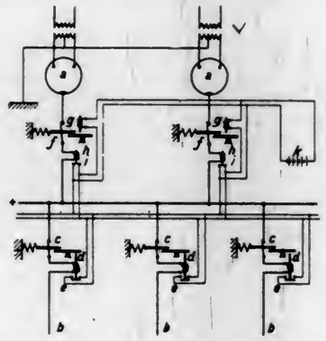
1,822,253. SURFACE SEALING COMPOUND OR STAIN AND PROCESS OF PRODUCING THE SAME. FERNANDO SOMOZA VIVAS, New York, N. Y., assignor to International Fireproof Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 225,034. 6 Claims. (Cl. 134—49.)

1. A surface sealing compound comprising in combination, hexachlorinated naphthalene, rubber and fireproof varnish.

1,822,254. NONEXPLOSIVE, NONINFLAMMABLE SOLUBLE COTTON AND PROCESS OF PRODUCING THE SAME. FERNANDO SOMOZA VIVAS, New York, N. Y., assignor to International Fireproof Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 225,036. 1 Claim. (Cl. 134—79.)

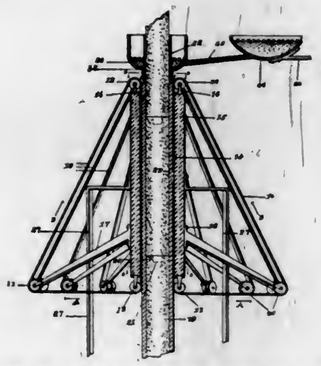
The process which comprises treating nitrocellulose with an alcoholic solution of boric acid and magnesium chloride and removing the alcohol by perchlormethane.

1,822,255. AUTOMATIC SWITCH. WERNER WALTY, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Filed Apr. 24, 1925, Serial No. 25,564, and in Germany Apr. 28, 1924. 5 Claims. (Cl. 175—294.)



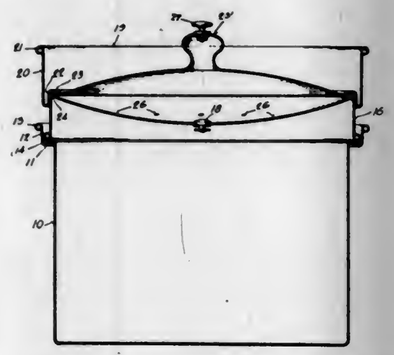
1. In a distribution system, an electrical translating apparatus for supplying electric current, a primary transmission line, a secondary transmission line, a circuit breaker connecting said apparatus to said primary transmission line, a circuit breaker connecting said secondary transmission line to said primary transmission line, each of said circuit breakers having a tripping mechanism independently operated in response to predetermined line conditions for tripping the associated circuit breakers, and interlocking means between said circuit breakers, for rendering the tripping mechanism of said primary circuit breaker inoperative in response to the initiation of the tripping action of said secondary circuit breaker, said interlocking means comprising a circuit for energizing the tripping mechanism of said primary circuit breaker.

1,822,256. PROCESS AND APPARATUS FOR MOLDING TUBES. WILLIAM H. WATT, Haddon Heights, N. J. Filed May 4, 1929. Serial No. 360,349. 9 Claims. (Cl. 22—75.)



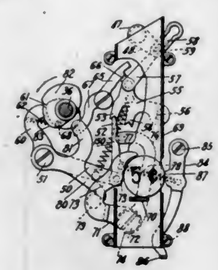
1. Apparatus for casting tubing consisting of a movable lining, confining means embracing the lining, a core uniform throughout, movable co-axial with said lining, and means for supplying molten metal between said lining and core.

1,822,257. COOKER, ROBERT H. WENTORF, West Bend, Wis., assignor to West Bend Aluminum Company, West Bend, Wis., a Corporation of Wisconsin. Filed Dec. 26, 1928. Serial No. 328,474. 3 Claims. (Cl. 53—1.)



1. A condensing cooker comprising a vessel, a closure top for the vessel, a condenser provided with means for holding water positioned upon the closure top with a space constituting a vapor condensing chamber between the two last mentioned parts, and a vapor operated valve in the closure top leading from the vessel to the condensing chamber whereby vapors passing through the valve into the said chamber are condensed in the contact with a water-cooled surface.

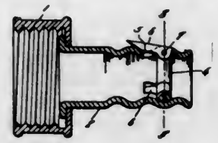
1,822,258. MACHINE FOR VENDING STAMPS AND THE LIKE. ABRAM LOCKHEART ZENT, Dayton, Ohio. Filed Dec. 19, 1929. Serial No. 415,218. 18 Claims. (Cl. 194—71.)



1. In a stamp vending machine, a feeding device to advance a stamp strip, a detent to enter perforations between adjacent stamps and hold said strip against movement, means to move said detent to an inoperative position, an intermediate member operatively connected with said means and having a plurality of contact parts, an actuating member movable into operative relation to any one of said contact parts, coin controlled means to control the position of said actuating member, and means to impart operative movement to said actuating member.

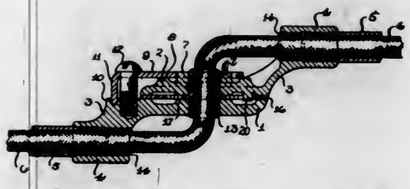
1,822,259. HOSE COUPLING. DOUGLAS ANDERSON, Pocatello, Idaho. Filed Jan. 21, 1931. Serial No. 510,308. 1 Claim. (Cl. 285—76.)

A hose coupling comprising an internally threaded sleeve and a neck on which the sleeve is swiveled, said neck having elongated slots therein, an annular internal rib in the neck and through which the slots extend, a pointed member partly located in each slot and having a perforation in its outer end and a ring passing through



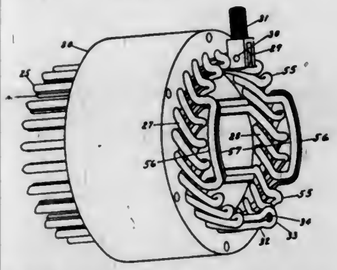
the rib and through the perforations in the members to pivotally connect the members with the neck, the pointed ends of the members extending toward the neck.

1,822,260. COUPLING FOR ELECTRICAL FIXTURES. WALTER A. ADAMS, Rochester, N. Y. Filed Dec. 31, 1926. Serial No. 158,394. 2 Claims. (Cl. 247—31.)



1. The combination of two coupling members pivotally connected for relative turning, one of said members being provided with a plurality of projections arranged concentric with the axis of turning, a stop provided on the other member, and a stop ring having a stop lug extending from its outer periphery to cooperate with the stop on said other member, said stop ring having its inner periphery provided with a plurality of spaced teeth forming recesses between them, the tooth and the recess on the inner periphery of the stop ring, next to a diametric line passing through the ring and the center of the stop lug, having their centers on opposite sides of said diametric line, the stop ring being reversely connectible with the projections on the first mentioned coupling.

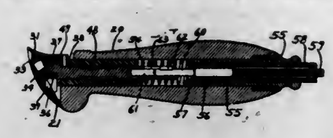
1,822,261. BAR WOUND FIELD ELEMENT. VINCENT G. APPLE, Dayton, Ohio. Filed June 28, 1927. Serial No. 202,138. 13 Claims. (Cl. 171—252.)



1. A two-layer bar winding, the greater part of the turns of which are composed of loops comprising a bar of one layer joined to a spaced apart bar of the other layer by the closed end of the loop, the remaining turns being composed of loops having two bars in the same layer.

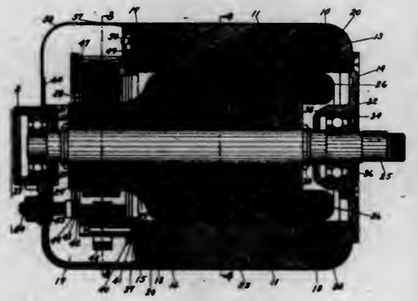
1,822,262. POWER DRIVEN HAIR CUTTING DEVICE. VINCENT G. APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,351. 8 Claims. (Cl. 30—1.)

1. A power driven hair cutting device having in combination, a frame, a fixed toothed blade mounted thereon, a movable toothed blade mounted for reciprocatory movement on the fixed blade, a rotatable shaft for imparting reciprocatory movement to the movable blade, an axially shiftable bearing member surrounding the rotatable shaft



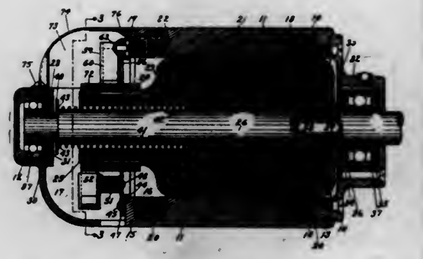
and having one end resting against said reciprocatory blade, and tension means adapted to press said axially shiftable bearing member against said reciprocatory blade.

1,822,263. DYNAMO ELECTRIC MACHINE. VINCENT G. APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,365. 9 Claims. (Cl. 171—252.)



1. The combination, in a dynamo electric machine, of a frame divided into two compartments by a partition therewithin, a metallic terminal carried in fixed relation on and extending thru but electrically insulated from said partition, a field winding in the one compartment electrically connected to said terminal, and a somewhat circular metallic brush carrying member in the other compartment rotatably mounted on said partition but electrically insulated therefrom, the circular member being adapted to contact said terminal to convey current equally well between the said brush and the field winding at any point to which said circular member may be rotated.

1,822,264. DYNAMO ELECTRIC MACHINE. VINCENT G. APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,368. 3 Claims. (Cl. 171—227.)



2. In a dynamo electric machine armature, a shaft, a core mounted for limited rotation on said shaft, a winding on said core, a thread on said shaft at the end of the core, a nut surrounding said thread, a winding head surrounding said nut, and means securing said nut to said armature comprising a single mass of cementitious insulation extending outwardly through and about the turns of the winding head and inwardly about said nut.

1,822,265. SIGN. WADE H. BABCOCK, Cleveland, Ohio. Filed Nov. 17, 1928. Serial No. 320,043. 6 Claims. (Cl. 40—140.)



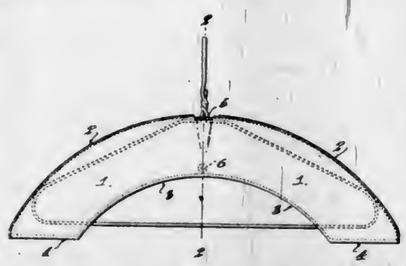
1. In a sign, a vitreous enamel panel member provided with apertures to receive headed members, and characters provided on their back face with headed members to be received in the apertures in said panel, the headed members being arranged in each character on the sign differently and the apertures in the panel being arranged to correspond with the headed members in the characters in the order they appear on said panel, whereby only like characters will fit in any one place on said panel.

1,822,266. PURIFICATION OF ORES. FREDERICK M. BECKET, New York, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Nov. 17, 1928. Serial No. 320,218. 3 Claims. (Cl. 23—98.)

1. The process of separating tin from columbium ores which comprises reducing the tin to the metallic state by heating the ore in the presence of a carbonaceous reducing agent, mixing the product of this step with ammonium chloride and a more volatile chlorine compound; and heating the mixture to volatilize the tin as tin chloride.

2. The process of separating tin from the ores of other metals which comprises reducing the tin to the metallic state by heating the ore in the presence of a carbonaceous reducing agent; mixing the product of this step with ammonium chloride and a more volatile chlorine compound; and heating the mixture to volatilize the tin as tin chloride.

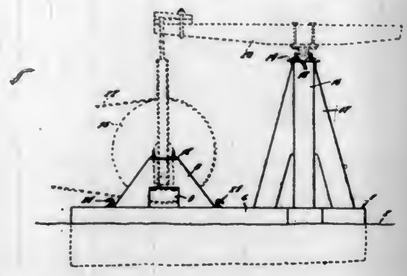
1,822,267. DRESS PROTECTOR. SIDNEY H. BLAUNER, Philadelphia, Pa. Filed July 14, 1930. Serial No. 467,923. 2 Claims. (Cl. 223—61.)



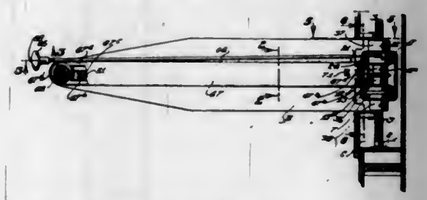
1. A dress protector of the kind described comprising a pair of circular ring segment sheets permanently secured together along the major circumferences and having an eyelet fastened at the approximate center thereof, and a snap fastening means adjacent the minor circumferences of the sheets at the approximate center thereof and connecting the sheets together.

1,822,268. OIL WELL RIG. ROBERT T. BOLES, El Dorado, Ark., assignor of one-half to Harry C. Steinberg, El Dorado, Ark., and one-half to Phillips Petroleum Company, Bartlesville, Okla. Filed Nov. 1, 1929. Serial No. 404,193. 2 Claims. (Cl. 308—25.)

1. In an oil well rig, a foundation comprising substantially parallel side walls, an end wall joining the side walls, a standard on each of the parallel walls, a post on one of the side walls at the point where that wall joins the end wall, and an inclined brace extending from the post downwardly on to the end wall, all of said parts being integral and formed of concrete.

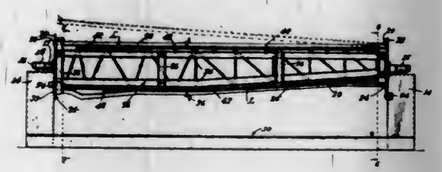


1,822,269. IRONING APPARATUS. FRANK BOOTH, San Diego, Calif. Filed July 11, 1929. Serial No. 377,436. 14 Claims. (Cl. 68—9.)



13. The combination with an ironing board, a boom extendable over said ironing board, a traveler member connected to said boom, an iron connected to said traveler member, mechanical means for shifting said traveler member longitudinally of said boom, and means for shifting said boom transversely relative to said ironing board.

1,822,270. AEROPLANE FUSELAGE JIG. JOEL DANNER BUNCH, Hollywood, Calif., assignor to Earl Aviation Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed July 7, 1930. Serial No. 466,171. 7 Claims. (Cl. 144—288.)



1. A fuselage jig comprising a base, a pair of plates, connected to said base a pair of cradles pivotally connected to said plates, a pair of horizontally disposed members between said plates, said cradles having means adapted to position the members forming the side portions of a fuselage frame said horizontal members having means for positioning the members forming the top and bottom portions of the fuselage frame, said cradles adapted to swing inwardly so that the portions of the frame formed therein may be joined to the members forming the top and bottom portions, and means for pivotally connecting said plates to said base whereby said cradles, horizontal members and plates may be rotated in unison to facilitate inspection and joining of the members forming the fuselage frame by welding operation.

1,822,271. PROCESS OF RECOVERING OIL FROM OIL SANDS. GEORGE W. COGGESHALL, Washington, D. C. Refiled for abandoned application Serial No. 53,442, filed Aug. 29, 1925. This application filed Jan. 21, 1931. Serial No. 510,331. 6 Claims. (Cl. 166—21.)

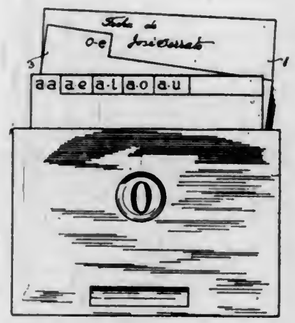
1. Process of recovering oil from oil sands in situ which comprises flowing therethrough an aqueous liquid comprising a highly dispersed colloid material which is physically and chemically stable in the presence of said sands.

1,822,272. MUFFLER AND PROPELLER ASSEMBLY FOR INTERNAL COMBUSTION ENGINES. ABRAM M. DECKER, Red Bank, N. J., assignor of one-half to Amos T. Dwight, Red Bank, N. J. Filed Dec. 3, 1929. Serial No. 411,347. 5 Claims. (Cl. 115—17.)



1. A propeller shaft casing, including a longitudinally extending centrally bored body adapted to receive the propeller shaft, and said body having a longitudinally extending exhaust bore adapted to convey exhaust gases to be discharged from said casing under the surface of the water.

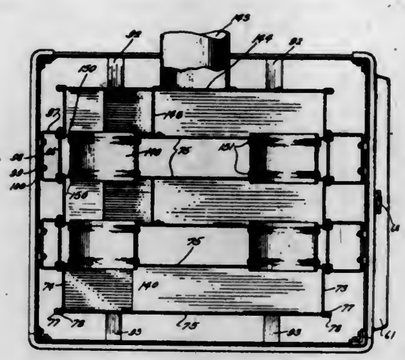
1,822,273. FILING APPLIANCE OF NUMEROUS APPLICATIONS. PEDRO DIAZ, Montevideo, Uruguay. Filed Aug. 28, 1926. Serial No. 132,258. 3 Claims. (Cl. 129—16.5.)



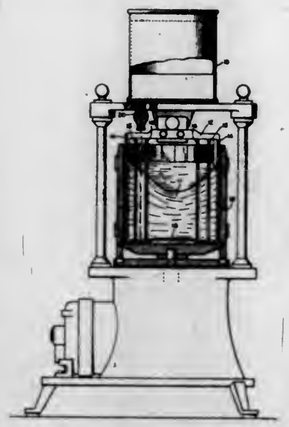
1. A filing cabinet comprising a plurality of drawers, said drawers being divided into a plurality of sections in accordance with the letters of the alphabet, each section comprising a plurality of drawers arranged by vowels and a plurality of guide cards in each drawer indexed according to vowels.

1,822,274. STOVE CONSTRUCTION. CLAUDE M. DIBBLE, Joliet, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Aug. 4, 1928. Serial No. 297,458. 9 Claims. (Cl. 126—90.)

1. In a stove construction, the combination with interconnected heating drums, each provided with its individual heater, of a flue connected with one of the drums, and partitioning elements mounted within said drums, and constructed and arranged to provide passages for the gas flow which force gases in the drum adjacent to the flue to pass through the other drums before discharging into said flue.



1,822,275. APPARATUS FOR MAKING EMULSIONS. SAMUEL B. DRUCKER, Brooklyn, N. Y. Filed Oct. 19, 1928. Serial No. 313,481. 3 Claims. (Cl. 259—88.)

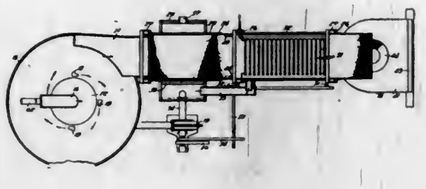


1. In combination with emulsifying apparatus for the manufacture of mayonnaise including a rotatable container for whirling a batch of the ingredients, of a stationary member adapted to be retained within said container during rotation thereof, including an angularly disposed portion adapted to inwardly deflect a portion of the batch from the periphery of the container, an obstructing member rearwardly of said deflecting portion arranged to form a well defined void of the approaching stream of the batch and another obstructing member in advance of said first obstructing member arranged to maintain the void formed by the obstructing member substantially definitely located.

1,822,276. FRUIT TREATMENT MACHINE AND METHOD. MELVILLE E. DUNKLEY, San Francisco, Calif., assignor to Rosenberg Bros. and Co., San Francisco, Calif., a Corporation of California. Filed Sept. 1, 1928. Serial No. 303,428. 5 Claims. (Cl. 209—211.)

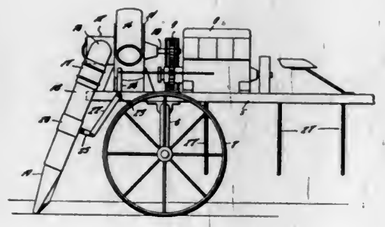
2. A machine for treating partially dehydrated fruit comprising a substantially circular treatment chamber into

which fruit containing heavy and light foreign matter is introduced, a discharge conduit arranged tangentially to the treatment chamber, means for introducing a fluid into said chamber to form a vortex whereby the fruit is whirled



about the chamber and a portion of it is deposited on the discharge conduit, the vertical movement of the fruit freeing the heavy and light foreign matter from the fruit and means for collecting the heavy foreign matter adjacent to the chamber base.

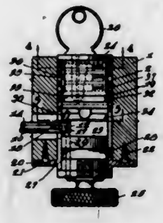
1,822,277. BOLL WEEVIL INSECT-DESTROYER AND GATHERER. ADOLPH J. DUPONT, Rayne, La. Filed Oct. 3, 1929. Serial No. 397,016. 1 Claim. (Cl. 43—140.)



A device of the class described comprising a wheel supported frame, a suction device located thereon, a motor on the frame for operating said device, a rearwardly extending tubular inlet extension connected with the suction device and having its rear end open, a removable cap for closing said extension, a laterally arranged pipe connected to each side of the extension and having an elbow at its outer end depending downwardly and rearwardly, a flexible sleeve connected to each elbow, a pipe connected to the lower end of each sleeve, a laterally arranged flattened nozzle connected to the lower end of each pipe and having its lower end slightly concaved lengthwise of the nozzle, a shaft extending crosswise of the frame, an arm on each end of the shaft, a link connecting the lower end of each arm to the nozzle carrying pipe, and means for rocking the shaft to raise and lower the nozzles.

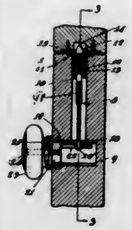
1,822,278. MORTISE LATCH LOCK. ELLING ELLINGSON, San Francisco, Calif. Filed Mar. 3, 1930. Serial No. 432,849. 8 Claims. (Cl. 70—46.)

1. A mortise latch lock comprising the combination with a door having intersecting lock and bolt mortises, of a cylindrical casing secured in the lock mortise, a key-operable cylinder mounted in one end of the casing, a knob shank rotatably mounted in the other end of the said casing and having an actuating member thereon, a bolt slidably mounted within the bolt mortise having means for connecting the same to the actuating member, an extension carried by the cylinder adapted to occupy an inactive position for allowing the bolt to be actuated by



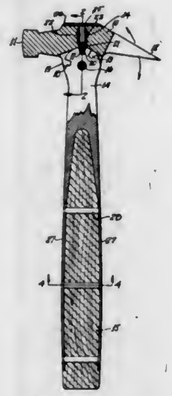
the knob shank and to move the bolt either into locking or into non-locking position and means for locking the cylinder in its inactive position as well as in its active position.

1,822,279. DOOR LATCH. ELLING ELLINGSON, San Francisco, Calif. Filed Mar. 17, 1930. Serial No. 436,624. 5 Claims. (Cl. 292—173.)



1. A latch for a door having intersecting mortises comprising a latch bolt slidably mounted in one of the mortises a casing fixed in the other mortise, a rod extending from the latch bolt into the casing and a bushing revolvable in the casing having an eccentric member rotatably fastened to the rod, the casing having a cut-away section allowing of swinging movement of the rod through an angle of slightly more than 180 degrees.

1,822,280. CARPENTER'S HAMMER. JOHN F. ERVAY, Portland, Oreg. Filed June 26, 1929. Serial No. 373,897. 3 Claims. (Cl. 306—12.)



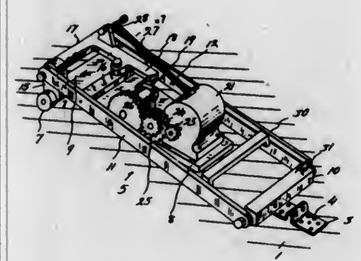
1. In a claw hammer the combination of a head having a slotted socket, a handle pivoted in the slot of said socket, said handle having notches formed therein normally lying within said slot, a spring latch mounted in said head normally projecting into said slot, and a head on said latch forming the fulcrum for the hammer when a nail is being drawn whereby said latch may be withdrawn from engagement with the notches in said handle for the purpose of permitting an alteration of the angular relation between said hammer and handle.

1,822,281. IRONING BOARD. THEODORE EVANOFF, Portland, Oreg. Filed May 29, 1930. Serial No. 457,440. 5 Claims. (Cl. 223—17.)



1. An ironing board comprising two separate boards transversely tapered substantially to feather edges, said boards having their feather edge portions disposed inwardly toward each other and adapted to overlap within a tubular garment member, and connecting means between said boards.

1,822,282. NAILING MACHINE. BERNT GARLLUS, Detroit, Mich., assignor to William W. Blakely, Dexter, Mich. Filed July 8, 1929. Serial No. 376,644. 9 Claims. (Cl. 1—1.)



1. In a nailing machine, a weight serving as a hammer, a rocker at a point remote to said weight, an arm projecting from said rocker, a shaft for said rocker, arms terminally connected to said weight and shaft, a connection between said rocker arm and one of said last mentioned arms, and actuating means for said weight including a rotary element engageable with the rocker arm, and a yieldable element connected to said rocker.

1,822,283. TOY. CHARLES J. GERKEN, South Jacksonville, Fla., assignor of one-fourth to James Craig Phillips, Jacksonville, Fla. Filed Oct. 9, 1930. Serial No. 487,568. 4 Claims. (Cl. 46—37.)



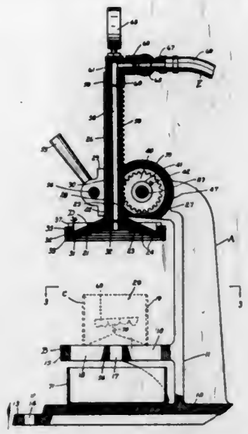
1. A toy comprising a flexible linear carrier having portions marked to define distinct sections, a body slidable along said carrier, the sections being each of only slightly greater length than the body and an element carried by said body and adapted to bear against the carrier and stop movement of the body along the carrier when the carrier is stretched tight.

1,822,284. SHOE FASTENER. MICHAEL G. GRUNDMANN, Vincennes, Ind. Filed Oct. 8, 1930. Serial No. 487,320. 4 Claims. (Cl. 24—140.)



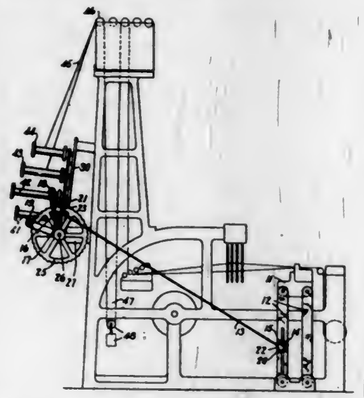
1. A shoe fastener comprising a shoe upper having openings, a strap having openings, a string extended through openings of the upper and passing through openings of the strap, a button having openings to receive the string, said button adapted to force the strap into close engagement with the upper, when the button is moved towards the upper, and the ends of said string adapted to be tied directly over the button to hold the button and strap against movement.

1,822,285. METHOD OF ELIMINATING FUSIBLE PATTERNS FROM DENTAL MOLDS. HARRY C. HAGMAN, Minneapolis, Minn., assignor of one-half to Henry P. Boos, Minneapolis, Minn. Filed Nov. 12, 1928. Serial No. 318,875. 5 Claims. (Cl. 22—196.)



1. The method of eliminating fusible patterns from porous molds which consists in arranging the mold with a downwardly extending drain, and in simultaneously heating and applying a fluid under pressure to the mold from above.

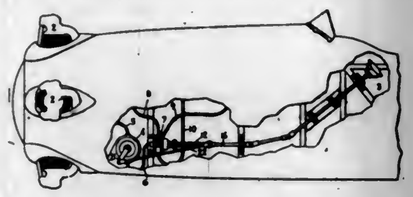
1,822,286. LET-OFF DEVICE FOR LOOMS. CHARLES HAKEMEYER, Paterson, N. J. Filed Mar. 2, 1929. Serial No. 343,861. 2 Claims. (Cl. 139—101.)



1. The combination with a loom having an oscillating batten and spindles for retaining bobbins; of an automatic let-off device for the respective threads of said bobbins, comprising gears rotatably mounted on the respective bobbin spindles adapted to receive and carry the bobbins, and means for positively and intermittently rotating the bobbin-carrying gears, gears for different spindles being of different diameters to afford differing rates of feed from the various bobbins.

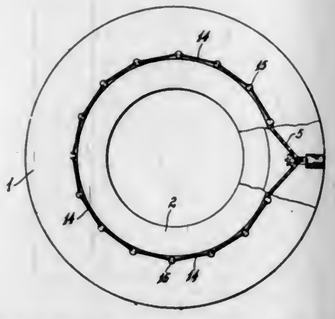
1,822,287. CONTROL DEVICE. JOHN HARDING, Jr., Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed Sept. 15, 1930. Serial No. 481,983. 6 Claims. (Cl. 103—2.)

1. In a device of the class described, in combination with a hand pump and a distributor valve, a shaft rotatably and slidably mounted and in operative engagement with the hand pump and the distributor valve, means formed on said shaft for permitting selective operation of either the said hand pump or said distributor valve, said means including a sliding connection between the



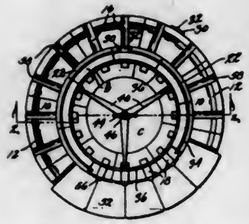
shaft and the distributor valve, and a link interconnecting said shaft with the hand pump by means of a radially extending arm on the shaft, said arm being arranged for reciprocal movement with the shaft but not rotary movement.

1,822,288. SELF-SERVING CAFE OR CAFETERIA. BOOK LLOYD HARKEY, Long Beach, Calif. Filed May 8, 1929. Serial No. 361,291. 3 Claims. (Cl. 186—1.)



1. In a self-serving cafe comprising a central rotary platform, an outer stationary table, a plurality of posts rising from said table, a plurality of panes slidably mounted in said posts, rollers in said posts against which the pane is adapted to bear, and counterweight means secured to said pane whereby the pane is held in raised position, said counterweight means comprising a cable secured to the bottom of the pane, a pulley over which the cable extends, and a counterweight secured to the end of said cable.

1,822,289. SELF-FEEDER CONSTRUCTION. HENRY H. HELMERS, Doon, Iowa. Filed June 3, 1929. Serial No. 368,139. 10 Claims. (Cl. 119—53.)

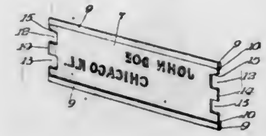


1. In a self feeder construction, a plurality of base blocks of solidified plastic material forming feeder compartments and a plurality of hopper blocks of solidified plastic material forming a hopper compartment, said hopper blocks being supported on said base blocks.

1,822,290. EXPLOSIVE. ARTHUR HOUGH, Passaic, N. J. Filed May 16, 1930. Serial No. 453,114. 5 Claims. (Cl. 52—5.)

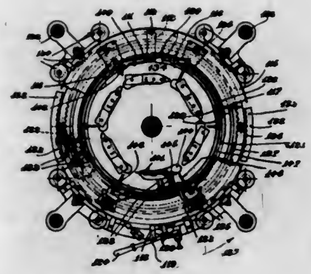
4. A colloided explosive containing nitrated vegetable parchment.

1,822,291. PRINTING DEVICE. HENRY E. HUBBARD, Chicago, Ill., assignor, by mesne assignments, to Addressograph Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 10, 1927. Serial No. 211,962. 2 Claims. (Cl. 101—369.)



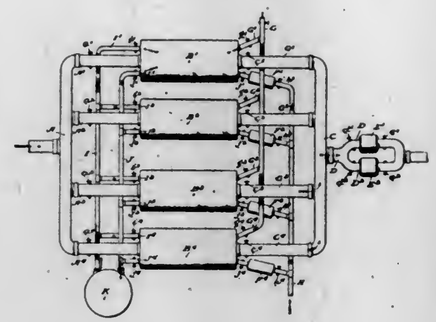
1. As a new article of manufacture, a printing plate for use in addressing machines and adapted to be stored upright in a tray or drawer, said plate being formed of relatively thin sheet metal having opposite marginal portions folded upon themselves to provide inner and outer sections compressed into engagement with each other, the outer of said sections lying substantially in the plane of the intermediate portion of the plate on the front thereof and the inner of said sections being joined to and extended beyond the plane of the intermediate portion of the plate on the back thereof, said portions serving to reenforce and strengthen the plate and to separate the stored plates to prevent injury to faces of type embossed on the intermediate portion and appearing in relief on the front, said plate having oppositely disposed spaced apart recesses in its ends.

1,822,292. CIRCULAR LOOM FOR WEAVING. JOANNY BARTHELEMY JABOULEY, Villeurbanne, France, assignor, by mesne assignments, to Leon Jaloustre, Paris, France. Filed Feb. 4, 1928, Serial No. 251,941, and in France Feb. 16, 1927. 2 Claims. (Cl. 139—13.)



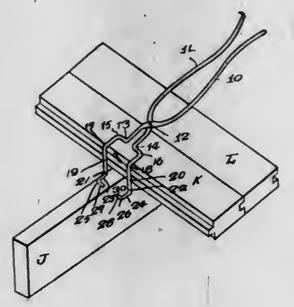
1. A circular loom of the type employing a plurality of stationary shuttles for weaving in combination with means for connecting the shuttles to the rotary portion of the loom in case of accident, a resilient nose being provided on each shuttle, a rod operated by the nose and a carriage upon which the shuttles are mounted freed by the rod to allow the carriage and shuttles to rotate with the loom.

1,822,293. PROCESS FOR REGENERATING CONTAMINATED PURIFYING AGENTS. ALFRED JOSEPH, Enghein, Seine-et-Oise, France, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France, a Limited Joint Stock Company of France. Original application filed May 14, 1928, Serial No. 277,735, and in France Aug. 8, 1927. Divided and this application filed Jan. 20, 1931. Serial No. 509,988. 4 Claims. (Cl. 23—3.)



1. In a process for the purification of gases by means of purifying material adapted to form compounds with the impurities in said gases, the method of regenerating a contaminated purifying agent by subjecting said contaminated agent first to the action of a reducing gas, then to the action of a hot oxygen containing gas, and then to the action of a reducing gas.

1,822,294. MECHANIC'S TOOL OR CLAMPING LEVER. FRANK P. JOHNSON, Martindale, Tex. Filed Feb. 9, 1929. Serial No. 338,794. 6 Claims. (Cl. 254—15.)

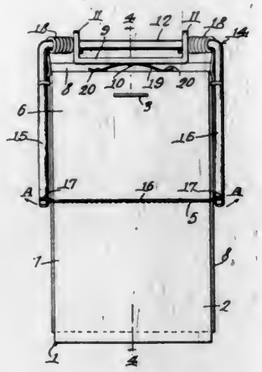


1. A mechanic's tool comprising a pair of levers pivoted intermediate their ends, said levers serving as handles at one end and their other ends each being bent into a plurality of right angles, some of which right angle bends lie in a horizontal plane, others of which right angle bends lie in a vertical plane, as and for the purpose set forth.

1,822,295. SALES SLIP PAD HOLDER. HIRAM W. JOHNSON, Miami, Fla. Filed Sept. 27, 1930. Serial No. 484,873. 5 Claims. (Cl. 281—15.)

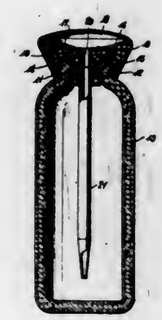
1. A device of the class described, comprising a base, a pad grip carried by the base, and including a sheet-

severing means, spring means for operating the pad grip to cause the severing member to move toward the base,



and means carried by the base for returning a pad to its normal position upon being moved transversely of the severing means.

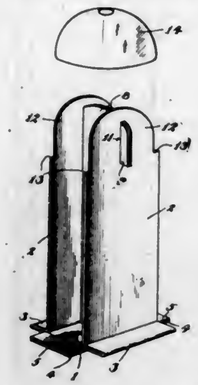
1,822,296. COMBINED STOPPER AND APPLICATOR. JOHN EDWARD KEILLY, Greensboro, N. C., assignor to Vick Chemical Company, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 3, 1930. Serial No. 479,437. 6 Claims. (Cl. 215—58.)



1. A combined stopper and applicator device having a body, a metallic diaphragm secured thereto, and providing an air space between the same and the body, and an applicator extending from the body arranged in communication with said space.

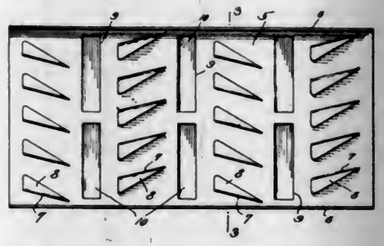
1,822,297. HAT BLOCK AND COLLAPSIBLE STAND. ODD KEMERY, Wichita, Kans. Filed July 31, 1929. Serial No. 382,364. 5 Claims. (Cl. 223—18.1.)

1. In a device of the character described, a stand having a base, arms extending upwardly from said base in transversely spaced relation to each other and adapted to be swung from an upright to a reclining position, the upper ends of the arms being adapted to engage and support a hat, and a web extending longitudinally of



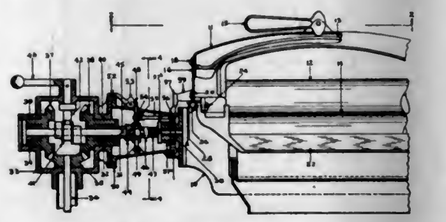
said arms and at one side pivoted to the inner face of one arm, said web having a head at its upper end adapted to engage the other arm and retain the arms upright.

1,822,298. SLATE JIG. STEPHEN JOSEPH KERRIGAN, Mahanoy Plane, Pa. Filed Nov. 8, 1929. Serial No. 405,720. 1 Claim. (Cl. 209—397.)



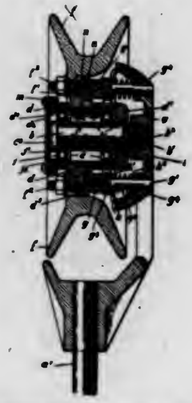
A jig screen comprising a body portion formed of a length of sheet metal material, the longitudinal side edges of the body portion being extended upwardly providing lateral flanges, rows of tongues stamped from the sheet metal and extending upwardly from the body portion and laterally over the openings formed by the stamping operation, said tongues embodying vertical portions connecting the tongues of the body portion, the rows of tongues being spaced apart, said body portion having transversely disposed elongated openings defining downwardly extended tongues, and certain of the ends of the first mentioned tongues being disposed near the last mentioned tongues to direct material thereto.

1,822,299. WRINGER. MERRILL M. KISTNER, Indianapolis, Ind. Filed Nov. 25, 1927. Serial No. 235,406. 1 Claim. (Cl. 68—32.)



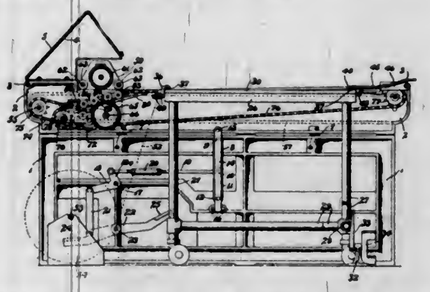
In a wringer, the combination with a lower frame member, a wringer roller mounted therein, an upper frame member, a cooperating wringer roller mounted in the upper frame member, the said upper frame member being pivoted so as to move relatively to the lower frame and release the pressure between the rollers, releasable means for locking the frame member against movement when the rollers are in normal cooperating position, manually operated means for releasing the locking means, driving means for the rollers including a clutch member, and means controlled by the movement of the upper frame during its pivotal movement for disengaging the clutch.

1,822,300. TROLLEY. ERNST KÖRNER, Stuttgart, Germany. Filed Mar. 24, 1930, Serial No. 438,565, and in Germany May 28, 1929. 5 Claims. (Cl. 191—61.)



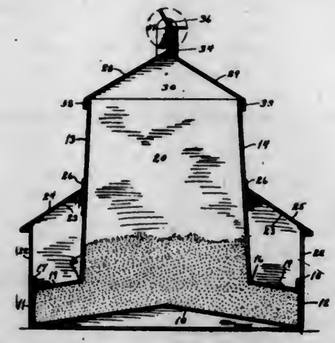
1. A trolley, comprising the head of the trolley pole, a bearing member fixed to said head, a hub rotatable on said bearing member and formed with a flange, a trolley wheel and a ring of conductive material fixed to said flange from opposite sides thereof, and a collector ring in frictional engagement with said ring of conductive material and mounted on said head.

1,822,301. NEWSPAPER TURTLE PROOF PRESS JAMES EDGAR LEE, Grand Haven, Mich., assignor to Challenge Machinery Company, Grand Haven, Mich., a Corporation of Michigan. Filed Feb. 24, 1930. Serial No. 430,470. 22 Claims. (Cl. 101—269.)



1. In a machine of the class described, a lower supporting frame having spaced apart vertical sides, an upper floating frame mounted above the sides of the supporting frame whereby a truck carrying type or the like in a chase may be moved between the sides of the two frames, type inking mechanism movably mounted on said floating frame to traverse the same and pass over and ink the type, a platen roller carriage carrying a platen roller mounted on the floating frame to traverse the same and to press paper against the inked type, and manually operable means for independently moving the type inking mechanism and the platen roller carriage.

1,822,302. POULTRY FEEDER. WILLIAM A. MCCOLLOUGH, Webster City, Iowa. Filed Apr. 9, 1927. Serial No. 182,298. 1 Claim. (Cl. 119—52.)

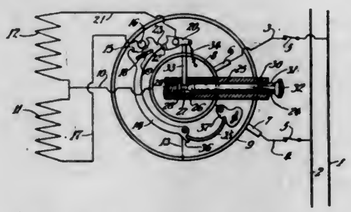


A poultry feeder comprising a trough having bottom and spaced side walls, a hopper having spaced side walls, ledges formed on and extending outwardly from the side walls of said hopper, the marginal portions of said ledges extending upwardly and then over and downwardly in embracing relation to the upper margins of the side walls of the trough, to form downwardly opening hook flanges, whereby the hopper is supported relative to the trough, said ledges being formed with feed openings.

1,822,303. REVIVIFYING ADSORBENT MATERIALS. ERNEST B. MILLER, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed June 7, 1922. Serial No. 566,664. 22 Claims. (Cl. 252—2.)

2. The method of reactivating a solid adsorbent consisting in exteriorly heating it in the presence of a non-oxidizing gas and thereafter in the presence of an oxidizing gas.

1,822,304. SAFETY OVERLOAD GOVERNOR CUT-OUT SWITCH FOR ELECTRIC MOTORS. GEORGE L. MILLER and JOHN MIKULASEK, Newton, Iowa, assignors to The Maytag Company, Newton, Iowa, a Corporation of Delaware. Filed July 21, 1928. Serial No. 294,485. 11 Claims. (Cl. 172—279.)

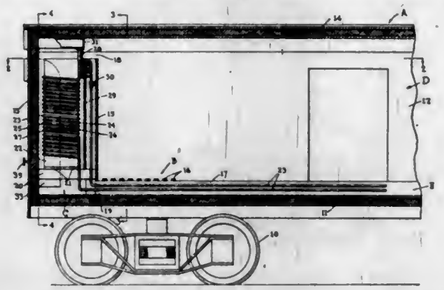


3. In an electric motor provided with a starting and a working winding connected in multiple, terminals therefor, one of said terminals being pivotally mounted, said pivotally mounted terminal provided with an insulated tip and a recessed portion, a centrifugal governor normally contacting said insulated tip for opening the circuit through said windings, and means for moving said pivotally mounted terminal whereby said governor contacts said recessed portion and the other of said terminals to close the circuit.

1,822,305. REFRIGERATING SYSTEM FOR CARS. CHARLES A. MOORE, Edina, Minn. Filed Apr. 24, 1929. Serial No. 357,696. 11 Claims. (Cl. 62—19.)

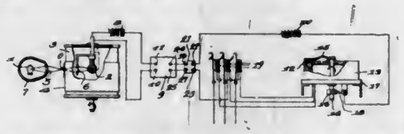
1. In combination, a structure providing a chamber for lading and a compartment adjacent thereto, the chamber

being in communication at its upper portion with the upper portion of the compartment and at its lower portion with the lower portion of said compartment, a circulatory system consisting of a number of pipes arranged to convey a refrigerating liquid from the upper portion of the compartment to the lower portion thereof, thence along the bottom of said chamber and back and, thence upwardly, returning to the upper portion of said compartment, a



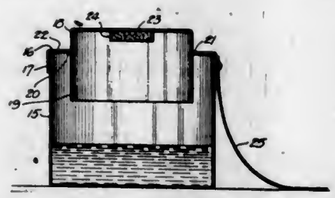
medium in the compartment for refrigerating the air therein and the liquid within said pipes, and two upright ducts within said compartment, one an ingress duct communicating at its upper end with outer atmosphere and at its lower end with the lower portion of said compartment, the other, an egress duct communicating at its upper end with the upper portion of said compartment and at its lower end with the outer atmosphere.

1,822,306. PHOTOELECTRICALLY CONTROLLED PATTERN APPARATUS. KINJIRO NAKANISHI, Fukuoka, Japan. Filed Nov. 5, 1926. Serial No. 146,485. 1 Claim. (Cl. 139—319.)



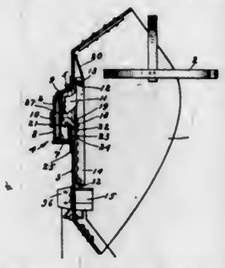
A photoelectrically controlled apparatus for use in looms for weaving figured fabrics and for figured-card cutting machines, comprising a source of light, a photoelectric device, controlled by the light projected through the pattern sheet, a circuit including said photoelectric device, a source of current, an amplifier and a relay, shedding motion hooks, a second circuit including a source of current, said relay, a contact arm arranged to be moved step by step in synchronism with the movement of the pattern, a plurality of electro magnets and contacts with which said contact arm is arranged to successively engage, the said electromagnets being each arranged to pull one of said hooks and means to push the hooks back to their original position.

1,822,307. ANT TRAP. DANIEL NETTEKOVEN, Escondido, Calif. Filed Oct. 30, 1929. Serial No. 403,563. 3 Claims. (Cl. 43—121.)



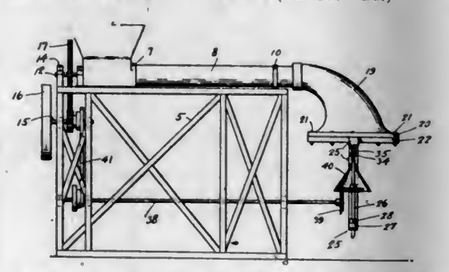
3. An ant trap, comprising a receptacle of cup form and adapted to contain water, a cover for the receptacle including an annulus with a flange on the outer edge of the annulus encircling the top of the receptacle, an inverted cup-shaped member secured within the annulus, the inner edge of the annulus being fluted at circumferentially spaced points and formed with openings between the flutes, a bait container on the under side of said member, and a piece of fabric extending up the outer side of the receptacle to the cover and secured to the latter.

1,822,308. ELECTRICALLY OPERATED WELDER'S HOOD. JOHN S. NORTON, San Francisco, Calif. Filed Nov. 5, 1930. Serial No. 493,618. 4 Claims. (Cl. 2—8.)



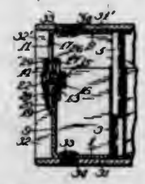
1. The combination with a hood having an eye opening therein, of a window normally covering the eye opening, a solenoid for opening the window, and resistances automatically cut into the circuit as the voltage increases so as to keep the voltage of the current flowing through the solenoid within predetermined limits.

1,822,309. DOUGH CUTTING MACHINE. IGNACIO NUÑEZ, San Luis Potosi, Mexico. Filed July 11, 1930. Serial No. 467,311. 1 Claim. (Cl. 107—14.)



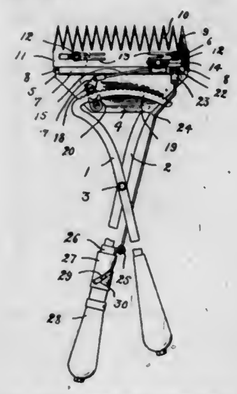
An apparatus of the class described comprising a tubular casing of even diameter throughout its length, an auger feeder in and conforming in size to said casing, means through which dough may be fed to the rear portion of said casing, a nozzle arranged to receive dough from the forward end of said casing and extending forwardly and downwardly therefrom and gradually increased in diameter from the casing to the nozzle discharge, an apertured disk across the discharge of the nozzle, a cutter rotatable against the underside of the disk, an upright shaft on which the cutter is mounted, said shaft having an abutment spaced below the cutter, a coiled extension spring surrounding the shaft and interposed between the said abutment and the cutter, a main frame supporting the tubular casing and the auger feeder in substantially horizontal position, a horizontal drive shaft mounted in said frame, a driving connection intermediate of said shaft and the auger feeder, a second horizontal shaft mounted in the frame and connected by an interposed driving connection with the drive shaft and also connected by gearing with the shaft on which the cutter is mounted, and a shield connected to and carried by the shaft on which the cutter is mounted and flared downwardly and having a lower open end disposed about said gearing.

1,822,310. LOOSE LEAF BINDER. WILLIAM B. OSMAN, Indianapolis, Ind. Filed Aug. 12, 1929. Serial No. 385,387. 4 Claims. (Cl. 281—25.)



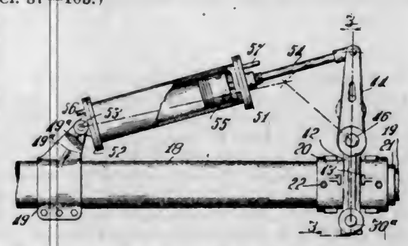
1. A loose leaf binder having two relatively adjustable frame parts with posts thereon to hold leaves together, securing devices to rigidly fasten the frame parts together, two cover parts independently secured rigidly to the frame parts and having cooperating back portions, and sealing devices to conceal the securing devices attachable securely together and to the frame parts.

1,822,311. CLIPPERS. OSCAR F. PETERSON, Duluth, Minn. Filed Sept. 5, 1930. Serial No. 479,903. 1 Claim. (Cl. 30—11.)



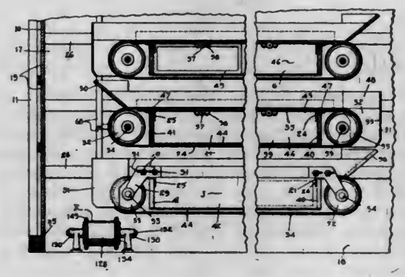
Clippers of the type described comprising a supporting member, cooperative sickle bars pivotally mounted upon the forward end of the supporting member, a pair of operating handles pivotally united intermediate their ends, one of said handles being fixed to the supporting member and the other of said handles carrying an arcuately shaped rack, a pinion mounted upon the support and engageable with the rack, a pitman connected with the pinion and operating one of the sickle bars, and a rotatable handhold upon the fixed handle, and means connected therewith for changing the angularity of the sickle bars.

1,822,312. RAILROAD SPREADER. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed July 26, 1928. Serial No. 295,451. 10 Claims. (Cl. 37—105.)



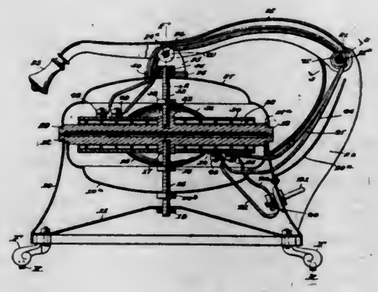
1. In combination with coacting tubular telescopic members, a guide on one of said members, means movable in said guide at a right angle to one of said members and extending at least part way around the other member and conforming to the associated surface thereof and adapted to be moved into engagement therewith to frictionally hold said members against relative movement.

1,822,313. MACHINE FOR DRYING AND CURING MACARONI AND OTHER PRODUCTS MADE FROM A PASTE OF FLOUR AND WATER. ARTHUR W. QUIGGLE and ALEXANDER S. T. LAGAARD, Minneapolis, Minn., assignors to The Creamette Company, Minneapolis, Minn., a Corporation. Filed Dec. 12, 1925. Serial No. 75,027. 9 Claims. (Cl. 34—12.)



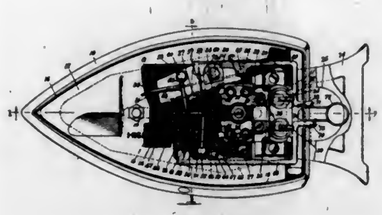
1. A machine for drying macaroni and other alimentary paste products comprising a multiplicity of drying chambers, each having an opening, means for feeding macaroni across said openings successively, means for forcing air independently into each of said chambers and through said openings and macaroni, and means for independently heating the air forced into each chamber and for independently regulating the temperature of the air forced into each chamber.

1,822,314. ELECTRIC COOKING APPARATUS. LUDWIG REICHOLD, Winsted, Conn., assignor to The Fitzgerald Manufacturing Co., Torrington, Conn., a Corporation of Connecticut. Filed Apr. 3, 1929. Serial No. 352,219. 4 Claims. (Cl. 219—19.)



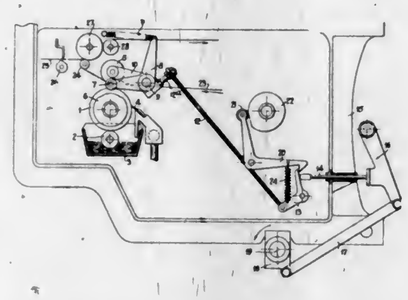
4. In an electric cooking apparatus, an upper heatable plate, an upper heating element, an upper clamping plate, a bolt engaging said heatable plate and holding said clamping plate and element against said heatable plate, a hollow supporting arm, a swivel clip pivoted to said arm and having a passage therethrough, means engaging said bolt to hold the said clip to said heatable plate, and wires connected to the heating element and passing within the hollow arm and through the passage in said clip so that they are not exposed.

1,822,315. CONTROL SWITCH PARTICULARLY FOR ELECTRIC SADIRONS AND SIMILAR DEVICES. LUDWIG REICHOLD, Winsted, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed Dec. 23, 1929. Serial No. 416,126. 11 Claims. (Cl. 200—139.)



1. In a device of the class described, a switch having fixed and movable contacts, first and second toggle linkages, means to produce spring effects upon the toggle linkages to move the same into and hold the same in end positions, said second toggle linkage being connected to the movable contacts to hold the same in open and closed positions, and means connecting said first and second toggle linkages whereby the said first linkage may move the said second linkage between end positions, said first toggle linkage having lost motion with respect to said second toggle linkage.

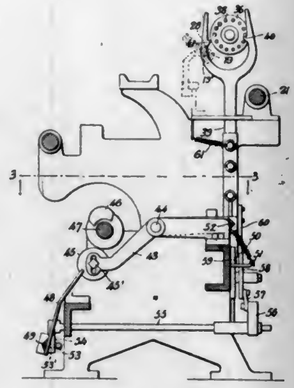
1,822,316. CIGARETTE MAKING MACHINE. FELIX FREDERIC RUAU, Deptford, London, England. Filed July 1, 1929, Serial No. 375,232, and in Great Britain July 9, 1928. 6 Claims. (Cl. 131—39.)



1. An apparatus for applying cork or like tips to a travelling web of cigarette paper which comprises a pressure roller arranged to press a web of cigarette paper into engagement with a gumming roller, means operatively connected to the striking gear of the cigarette making machine arranged to maintain the pressure roller in proximity to the gumming roller whilst the machine is in operation and automatically move the pressure roller out of engagement when the striking gear is operated to stop the said machine.

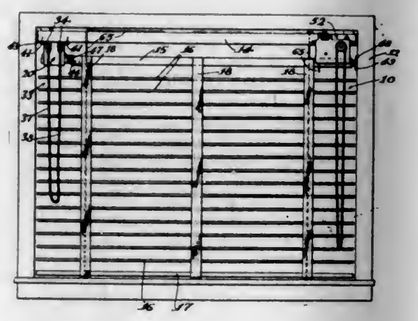
1,822,317. YARN FEEDING MECHANISM FOR STRAIGHT KNITTING MACHINES. EMIL RICHTER, Philadelphia, Pa., assignor, by mesne assignments, to Schletter & Zander, Inc., Holmesburg, Pa., a Corporation of Delaware. Filed Oct. 5, 1927. Serial No. 224,225. 8 Claims. (Cl. 66—129.)

1. In a straight knitting machine of the cotton type having a straight row of fixed needles and a set of parallel yarn guide carrier rods mounted for reciprocation along said row, the combination of, a reversely threaded screw, threaded blocks on the screw, yarn guide carrier rods each end of whose travel is determined by one of said blocks, a main cam shaft, a lever operable by said main cam shaft, a ratchet fast to the screw, a pawl lever for operating the ratchet said lever being pivotally mounted on said first-



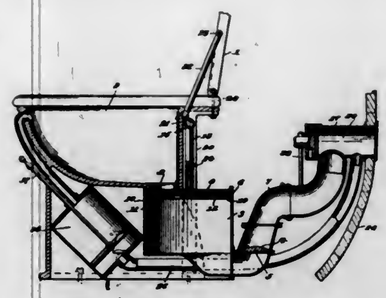
named lever, a stud on said first-named lever, a roller movable along said stud into operative relation with a cam on said cam shaft, pattern-controlled means for moving said roller, a pattern-controlled cam lever for moving said pawl lever into position to rotate the ratchet in one direction, and resilient means for moving the pawl lever into position to rotate the ratchet in the opposite direction.

1,822,318. TILTING AND LOCKING DEVICE FOR VENETIAN BLINDS. JAMES GORDON RUSSELL and EMIL SCHATZ, Los Angeles, Calif. Filed Jan. 9, 1931. Serial No. 507,622. 3 Claims. (Cl. 156—17.)



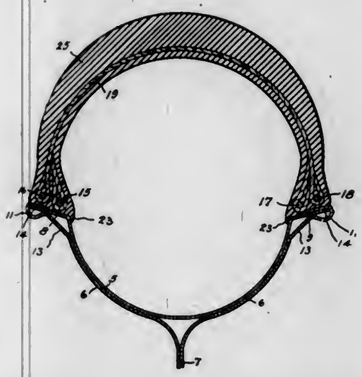
2. In a Venetian blind including a head piece, a top rail and slats, a device for tilting and locking the slats in an adjusted position comprising a housing adapted to be secured to the head piece, a shaft mounted in said housing, a plate having openings formed therein secured to the outer end of said shaft, a bracket secured to the top rail and provided with pins projecting into the openings formed in said plate, a gear secured to said shaft, a second shaft mounted in said housing, a worm secured to said second shaft and meshing with said gear, a sheave secured to said second shaft, and a cord engaging said sheave.

1,822,319. BOAT CLOSET. KARL SCHWARZ, Rostock, Germany. Filed May 8, 1930, Serial No. 450,825, and in Germany June 7, 1929. 6 Claims. (Cl. 4—77.)



1. A closet comprising a bowl having an outlet, a receptacle secured to said bowl at said outlet, a piston in said receptacle having an aperture registering with said outlet, means for closing said aperture at a predetermined point in the stroke of said piston and means for reciprocating said piston to expel the contents of said receptacle.

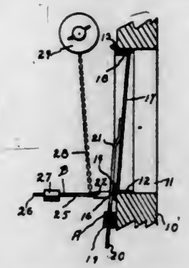
1,822,320. PNEUMATIC TIRE AND RIM. ALVIN H. SHOEMAKER, Seattle, Wash. Filed Mar. 22, 1928. Serial No. 263,661. 6 Claims. (Cl. 152—20.)



1. A pneumatic tire and rim construction embodying an air tight rim having at each edge an annular inclined bead receiving portion comprising an inner cone segment of smaller diameter and an outer cone segment of larger diameter, which cone segments are connected with each other by an annular shoulder of relatively shallow depth, a tire having non-expansible bead portions of elastic material arranged to seat on said cone segments of said inclined bead receiving portions and to be positioned thereon by engagement with said shoulder, and an annular inwardly directed air seal flange formed on the inner edge of each of said tire beads.

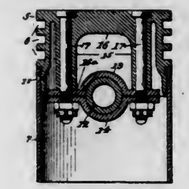
1,822,321. DRAFT CONTROL. IRA E. STEELE, Sioux City, Iowa. Filed Dec. 9, 1929. Serial No. 412,681. 7 Claims. (Cl. 236—45.)

1. In a draft control, in combination with a flue having a draft check opening therein, a closure hinged at its lower extremity to the flue and adapted to move inwardly, a counterweight secured to the closure and projecting below the hinge axis thereof, and adapted to urge the closure toward a position wherein it will close the opening, a variable control comprising an auxiliary weight hinged to the flue and adapted to obstruct the path of upward movement of the counterweight, and an auxiliary



control device for raising the auxiliary weight to any of a series of positions wherein it may allow partial or full swing of the counterweight without interfering therewith.

1,822,322. ENGINE PISTON. RAY N. STEELE, Cedar Rapids, Iowa. Filed Feb. 27, 1928. Serial No. 257,512. 2 Claims. (Cl. 74—108.)



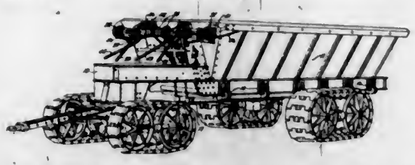
1. An engine piston formed with cylindrical walls and a closed head, and with bearing-supports springing from the head and wholly detached from the side walls, top and bottom bearing-halves, and bolts connecting the bearing with the ends of said posts, all wholly separated from the side walls.

1,822,323. TRAY FOR BUBBLE TOWERS. WILLIAM A. STOVER and WALLACE G. PALMER, Tulsa, Okla. Filed Mar. 6, 1930. Serial No. 433,762. 9 Claims. (Cl. 261—114.)



1. In combination with a tower, a tray in the tower including trough and cap members, the cap portion of one member overhanging the trough portion of an adjacent member, an inlet weir plate connecting one end of the members, and an outlet weir plate connecting the opposite end of the said members.

1,822,324. DUMP BODY DOOR OPERATING MECHANISM. FREDERICK A. STREICH, Oshkosh, Wis. Filed Oct. 25, 1928. Serial No. 314,943. 6 Claims. (Cl. 298—35.)



1. Door operating mechanism for dump bodies having two compartments each provided with a pair of doors, comprising a shaft rotatably mounted on said dump body, a drum loosely surrounding said shaft, flexible members extending along opposite sides of the body and connecting opposite ends of said shaft with the doors of one of said compartments to provide a direct connection with each door from the side of the body on which each door is located, a pair of flexible members connecting said drum with the doors of the other of said compartments, means for rotating said shaft to wind the flexible member thereon to close the doors of one of said compartments, means for rotating said drum independently of the shaft to wind the other flexible member thereon to close the doors of the other of said compartments, and means in connection with said shaft and drum for locking the doors in the closed position.

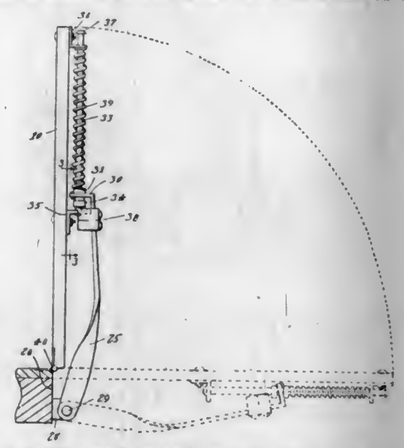
1,822,325. RUNWAY JACK. LOREN I. SWAYNE, Denver, Colo. Filed Aug. 12, 1929. Serial No. 385,216. 11 Claims. (Cl. 254—88.)



1. In a runway jack having a two rail track provided with an inclined portion provided with hook-contacting stirrups and leading up to a level portion, and front and rear four-wheeled carriages mounted on said track to receive the front and rear axles respectively of a vehicle driven upon said jack, a longitudinally movable tractor mounted on the runway jack and operated by contact with said front carriage, a rear carriage movable up the incline to a receiving position by forward movement of the tractor, and composed of front and rear wheeled axles joined by side members, an upwardly extending U-shaped bracket mounted on the front axle, a platform secured to the rear axle and extending between the front axle and said bracket, a spring resiliently holding the forward portion of the platform up in contact with said bracket, levers pivotally mounted upon said side members and upon the front portion of said platform and having rear extensions, a cross piece joining the rear extensions of said levers and normally substantially flush with the upper surface of said platform, stirrup-contacting hooks normally depending from and pivotally mounted on said levers to have forward pivotal movement only with respect to said levers from said normal position, and springs resiliently holding said hooks in said normal position.

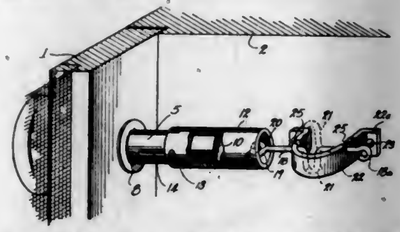
1,822,326. AUTOMATIC DOOR OPENER. WILLIAM SYKES, Rockford, Ill. Original application filed Nov. 26, 1928, Serial No. 321,822. Divided and this application filed Jan. 16, 1930. Serial No. 421,081. 6 Claims. (Cl. 16—1.)

2. In a door opener, means for causing a door, adapted to occupy an open and a closed position, to swing to the open position when unlatched comprising, a compression spring positioned on the inner side of the door substantially parallel thereto, a guide bar arranged to support and guide said spring, brackets arranged to support said guide bar at each end thereof, one end of said spring being arranged to bear against the bracket at the outer end of said guide bar, a swinging arm having one end pivotally supported on the door frame, means for slidably connecting the opposite end of said arm to said guide bar to slide outward thereon when said door is moved to the



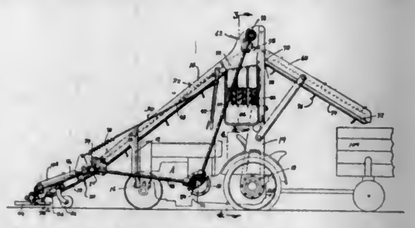
closed position and inward thereon when moved to the open position, the inner end of said spring being arranged to bear against the last mentioned means whereby said spring is compressed when said door is in its closed position and serves to move said door to its open position.

1,822,327. DOOR FASTENER. FRANK S. ULLOM, Renton, Wash. Filed Aug. 20, 1929. Serial No. 387,209. 3 Claims. (Cl. 295—95.)



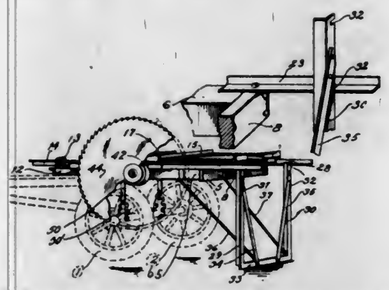
1. A door fastener comprising a supporting shaft adapted to be mounted within a door, a sleeve slidably mounted on the inner end portion of the shaft, a latch member pivotally mounted at the outer end of the sleeve, a clip adapted to be fixed to a door casing to receive the latch and a spring acting against the shaft and sleeve and adapted to be placed under tension and to thereby draw the door tightly against the casing incident to the application of the latch to the clip.

1,822,328. CORN HARVESTER CONSTRUCTION. WILLARD F. WHITAKER, Fairfield, Iowa. Filed Oct. 19, 1929. Serial No. 400,875. 11 Claims. (Cl. 56—15.)



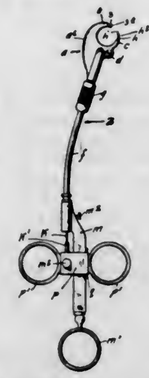
1. In a corn harvester construction, an elevating conveyor, means for mounting the same on a tractor in a position directly thereabove, the forward end of said conveyor extending forwardly and downwardly from the top of the front of the tractor, cornstalk cutting mechanism at the forward end of said conveyor and snapping rolls at the rearward end thereof and positioned above the rearward end of said tractor.

1,822,329. PORTABLE SAW AND POWER ATTACHMENT. LAURENCE J. WINCHELL, Newkirk, Okla., assignor of one-fourth to Ira D. Mollett, Manhattan, Kans. Filed Mar. 23, 1929. Serial No. 349,336. 2 Claims. (Cl. 143—43.)



1. A saw attachment for motor vehicles comprising a frame adapted to be secured to a motor vehicle, a longitudinally sliding carriage carried by the frame, a movable prop for supporting the frame above the ground with the rear wheels of the motor vehicle raised free from the ground, a power shaft carried by the frame, a saw on one end of the power shaft, pulleys on the power shaft to aline with the rear wheels of the motor vehicle, a second shaft mounted on the frame, eccentrics carried by the ends of the second shaft, hook-shaped members supported by the eccentrics and means carried by the hook-shaped members for engaging the rear axle of the motor vehicle so that when the second shaft is rotated in one direction, the rear axle of the motor vehicle will be moved toward the frame to bring the rear wheels into contact with the pulleys on the power shaft.

1,822,330. SUTURING INSTRUMENT. GEORGE AINSLIE, Portland, Oreg. Filed Jan. 13, 1930. Serial No. 420,429. 10 Claims. (Cl. 128—334.)



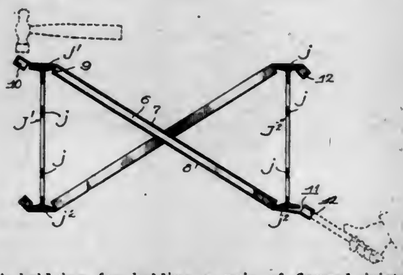
5. In a suturing instrument, a casing consisting of a divided head having a neck and provided with projecting, arcuate, distal and proximal arms arranged to provide a flesh-admitting cavity between them, a guide flange circumscribing said cavity, a curved suture needle slidably mounted on said guide flange within said casing, the distal arm provided at its extremity with a suture holding notch, the needle provided with a notch adjacent its point for engaging the suture, a hollow handle provided with a finger hold secured to the neck of said casing, a rod slidable within said handle and detachably connected to said member, a member located in said head, a ball and socket separable joint connecting said rod with said member and a slide mounted on the handle, said slide provided with a finger hold, and the said rod being connected to said slide.

1,822,331. EXPANDED METAL JOIST. ALBERT J. BATES, Jr., Chicago, Ill., assignor, by mesne assignments, to Bates Expanded Steel Corporation, East Chicago, Ind., a Corporation of Delaware. Filed May 7, 1928. Serial No. 275,563. 2 Claims. (Cl. 189—37.)



1. As a new article of manufacture, a joist comprising a frame made of an I-beam slit and expanded to form an elongated flanged upper member having a longitudinally extending web portion with a straight lower edge, and an elongated flanged lower member having the intermediate part thereof arranged parallel with the upper member and embodying a longitudinally extending web portion with a straight upper edge and its ends extending upwardly and outwardly and formed integrally with the ends of the upper member to form truss-members at the ends of the joist, and a separately formed one-piece zigzag lacing extending between the members and having the apex parts thereof abutting against and welded to the straight edges of the aforesaid web portions.

1,822,332. JOIST BRIDGING. ALBERT J. BATES, Jr., Chicago, Ill., assignor to Bates Expanded Steel Corporation, East Chicago, Ind., a Corporation of Delaware. Filed Sept. 26, 1930. Serial No. 484,564. 4 Claims. (Cl. 189—35.)



1. A bridging for holding a pair of flanged joists in laterally spaced relation, consisting of a strut adapted to extend diagonally between the joists and embodying a flange and a web, said strut being provided at one end with means for connection to one of the joists and having the web coped or cut away slightly inwardly of its other end to form a notch for receiving one of the flanges of the other joist and a locking member outwardly of the notch, said member being adapted to be bent into hooked relation with the aforesaid joist-flange and embodying a web portion for engaging the latter transversely.

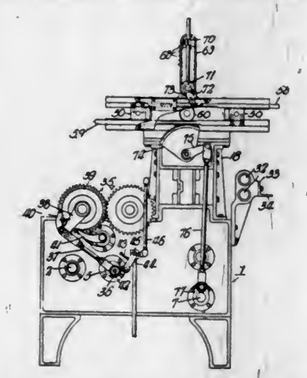
1,822,333. LINGERIE FASTENING DEVICE. ANNA BLUM and ELLA BLUM, Chicago, Ill. Filed Mar. 30, 1931. Serial No. 526,152. 5 Claims. (Cl. 24—73.)



5. A device for retaining lingerie straps against displacement consisting of a plate provided with a flange

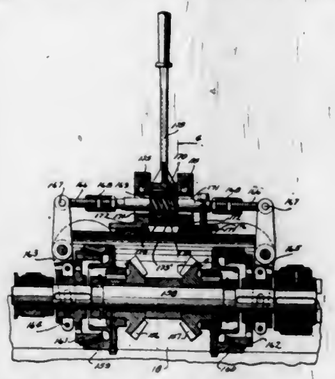
portion, a stud projecting from said plate and having its outer end pointed and arranged intermediate its ends for engagement with a cooperating retaining member, the retaining member constructed to engage said flange portion and receive said stud and engage the same at said intermediate portion, a clasp consisting of a bar looped back upon itself at one end with the free ends detachably secured together, and flexible members extending one from each end of the clasp and secured at their opposite ends to said plate.

1,822,334. LOOM. SIMON BOLIN, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 25, 1929. Serial No. 409,508. 41 Claims. (Cl. 139—55.)



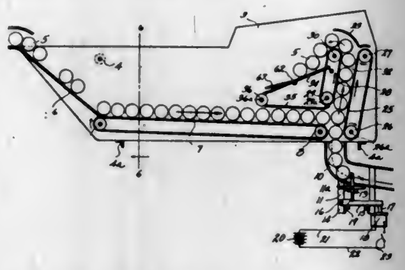
1. In a loom, reciprocable heddle members, alternate ones of which are of one length and intermediate ones of which are of another length, neck bars, means providing a swingable connection between said neck bars and said alternate and intermediate heddle members, the neck bars connected to the intermediate heddle members being of a length greater than those connected to the alternate heddle members whereby the connection between alternate heddle members and the associated neck bars cannot register with the connection between the intermediate heddle members and their associated neck bars in the reciprocation of said heddle members.

1,822,335. OPERATING MECHANISM FOR CLUTCHES. ROBERT L. BROWN, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed July 8, 1927, Serial No. 204,225. Divided and this application filed May 9, 1929. Serial No. 361,566. 4 Claims. (Cl. 192—94.)



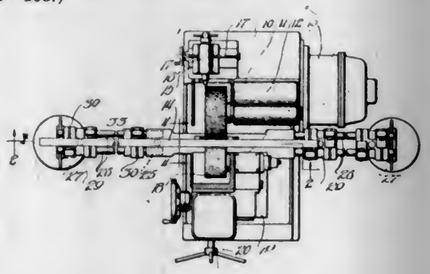
4. Operating mechanism for a pair of clutches comprising a shifter for each clutch, a rod connected to the shifters and held against rotary movement while free to move bodily to impart operative movement to the shifters, a screw fixed to the rod, a nut meshed with the screw, means for preventing axial movement of the nut while leaving it free to rotate, and a single hand lever connected to the nut and operable to rotate the same.

1,822,336. CAN HOPPER. WILFRED E. BURNS, Burlingame, Calif., assignor to M. J. B. Co., San Francisco, Calif., a Corporation. Filed Oct. 16, 1929. Serial No. 399,983. 10 Claims. (Cl. 198—20.)



10. A hopper of the character described having a discharge outlet, means within the hopper for feeding cans to the outlet and means for diverting cans from the outlet, when delivery therethrough is checked, to storage in the hopper for subsequent delivery to the outlet.

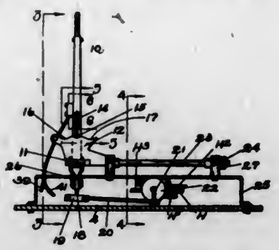
1,822,337. GRINDING MACHINERY. JOHN E. CASTER, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed July 12, 1927. Serial No. 205,219. 7 Claims. (Cl. 51—103.)



1. A centerless grinding machine of the character described, including a grinding wheel, a regulating wheel and a bracket intermediate said wheels, the grinding wheel being adapted to be rotated in the direction of the bracket at a high or grinding rate of speed and the regulating wheel being adapted to rotate with its operative face moving in a direction away from the bracket at its point of opposition to the grinding wheel, said bracket having a central recess to receive a work rest member, a work rest adjustably mounted within the recess, the bracket extending laterally to one side of the wheels and terminating in a socketed portion, guide supports carried by the socketed portion, and work engaging members mounted on said guide supports for supporting and guiding the work piece into the grinding throat.

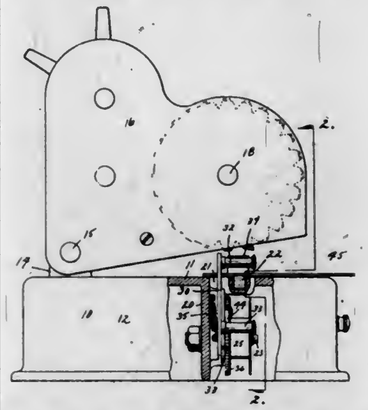
1,822,338. EXCAVATOR. CLINTON A. CLEMENS, Retsil, Wash. Filed Sept. 3, 1929. Serial No. 390,173. 2 Claims. (Cl. 137—139.)

2. The combination with a slotted housing and a rock shaft journaled in bearings thereon, of a crank arm at one end of the shaft and a segment plate rigid with the other end of the shaft, a lever pivoted in the segment plate and a spring pressed detent on the lever for co-action with the segment plate, said lever having a short arm which projects through the slotted housing, an air control



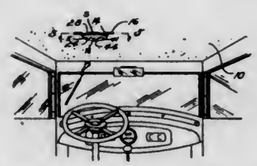
valve within the housing and a valve-arm for the valve, and link connecting said valve arm and the short arm of the lever, a second air control valve, secured to said lever, and a hand grip, also secured to said lever, to operate the same.

1,822,339. RIBBON ACTUATING DEVICE FOR LAUNDRY TAG MARKING MACHINES. CHARLES E. CONSTABLE, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 26, 1930. Serial No. 455,657. 6 Claims. (Cl. 101—96.)



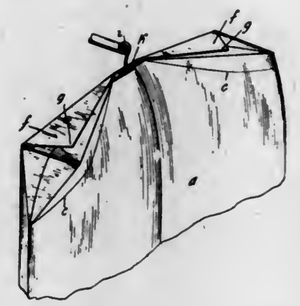
1. In a device of the class described, a base having a platen, a type head pivoted to move toward and from said platen, type carried by said head, means for supporting an inked ribbon normally in an intermediate position between said type and said platen, and means actuated by the movement of said type head for actuating said type supporting means to move said ribbon toward and from said platen.

1,822,340. AUTOMOBILE COMPASS. WEST DODD, Des Moines, Iowa. Filed Mar. 3, 1930. Serial No. 432,703. 6 Claims. (Cl. 33—222.)



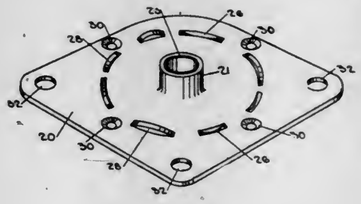
2. In a compass, a transparent casing member having a flat portion and a circumferential upturned flange terminating in a circumferential outwardly projecting shoulder, a frame having flanges for receiving said shoulder, a disc resting against said first flange, a bracket secured to said frame having a cross bar extending across the compass for holding the disc in place, and a compass needle suitably mounted between said casing and disc.

1,822,341. GARMENT BAG. JAMES DUVALL, Camas, Wash. Filed Dec. 23, 1930. Serial No. 504,257. 4 Claims. (Cl. 206—7.)



1. In a garment bag, a tubular body, the opposite lateral wall portions of one end of which are overlapped and arranged and secured to form relatively rigid angular shoulder sections when the bag is opened, said angular sections adapted to constitute transverse spacing elements spacing the opposite wall portions of the shoulders of the bag body apart, whereby to prevent said shoulder wall portions being drawn too firmly over the shoulders of a garment.

1,822,342. FRAME STRUCTURE FOR DYNAMO-ELECTRIC MACHINES. LOUIS B. EHRLICH, Toledo, Ohio, assignor to The Electric Auto-Lite Company, Toledo, Ohio, a Corporation of Ohio. Filed June 4, 1928. Serial No. 282,816. 11 Claims. (Cl. 172—36.)

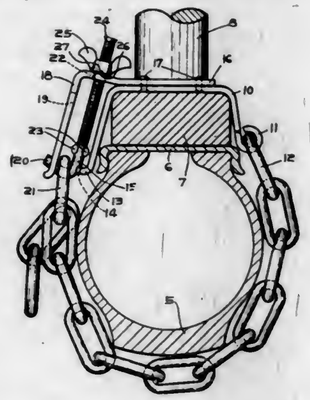


10. In a device of the character disclosed, in combination, a plate; means formed out of said plate for locating the latter with respect to a member, said means comprising a struck up portion, the side walls of said portion lying in substantially parallel planes.

1,822,343. AUTOMOBILE CHAIN ACCESSORY. ALEXIS F. GILLET, Omaha, Nebr., assignor to Jubilee Manufacturing Co., Omaha, Nebr., a Corporation of Nebraska. Filed Sept. 24, 1930. Serial No. 484,016. 6 Claims. (Cl. 152—14.)

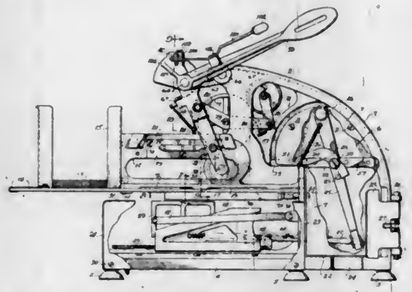
1. In an improved anti-skid device for vehicle wheels having fellys and tires, a saddle engaged detachably with the felly and having one end adapted to receive perma-

nently an end of a cross chain, a screw bolt having axially sliding movement with said saddle having a hook thereon



for engaging with the other end portion of the cross chain, and means carried by the saddle for retaining the cross chain on the hook.

1,822,344. HAND OPERATED ADDRESSING MACHINE. PAUL A. GOLLNICK, FRANK W. BRODERICK, and KURT EMDE, Chicago, Ill., assignors to Selectograph Company, Chicago, Ill., a Corporation of Illinois. Filed June 3, 1929. Serial No. 368,062. 13 Claims. (Cl. 101—51.)

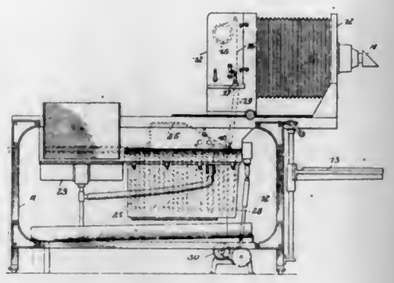


2. A hand operated addressing machine comprising a frame, a horizontal guideway on said frame for stencils, means for intermittently feeding the stencils along said guideway, an oscillating carriage on said frame, an ink applying roller supported on said carriage and movable longitudinally of said guideway for contact with a stencil, the pivotal axis of said carriage being shiftable vertically for moving said roller into and out of contact with the stencils, and a handle for oscillating said carriage.

7. A hand operated addressing machine comprising a frame, a horizontal guideway on said frame, means for intermittently feeding stencils along said guideway, a carriage on said frame, inking means mounted on said carriage for contact with a stencil, an operating handle hinged on said frame, and a selective transmission member adapted to operatively connect said handle with either one separately or both of said means.

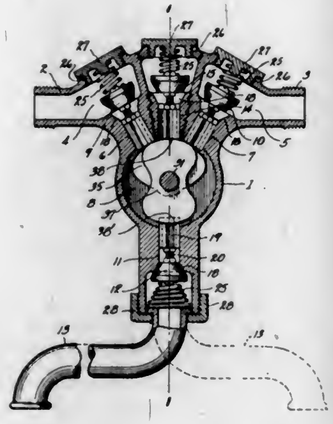
1,822,345. PHOTOGRAPHIC APPARATUS. JOHN S. GREENE, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 2, 1928. Serial No. 289,721. 14 Claims. (Cl. 95—90.)

1. In a photographic apparatus, the combination with sheet conveying means having a path of travel, of means for holding a sheet in a position at an angle to said path of travel to be picked up by said conveying means, said holding means comprising a conduit having one wall de-



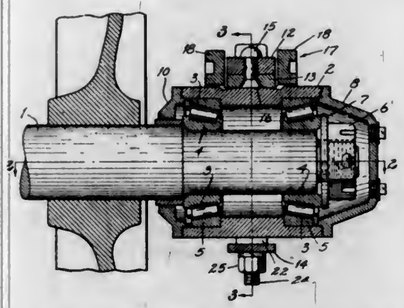
flected near said path of travel to provide an enlargement of said conduit permitting a sheet to bend on a comparatively large radius of curvature as it is withdrawn from the conduit by the conveying means.

1,822,346. FAUCET. DANIEL W. GUILES, Seattle, Wash. Filed Oct. 19, 1927. Serial No. 227,230. 1 Claim. (Cl. 277—7.)



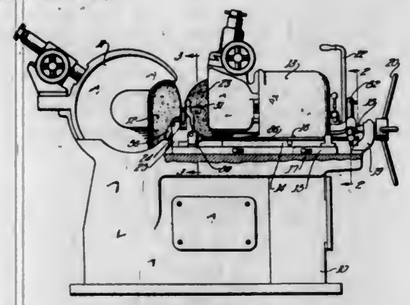
A faucet comprising a housing forming a mixing chamber having upper and lower outlets and having inlets for hot and cold water located, respectively, at opposite sides of one of said outlets and in a plane offset therefrom, valves for the outlets and inlets, yieldable means normally retaining the valves closed, stems for the valves extended into the chamber, a shaft coaxial of the housing, a cam on the shaft for engaging stems of the outlet valves to individually and selectively open the valves, and another cam on the shaft having oppositely disposed cam heads; one of said heads being adapted to engage the stems of the inlet valves to adjustably open one or both valves while the first mentioned cam retains the valve of the upper outlet opened, the other head being adapted to likewise hold the inlet valves open while the first cam opens the valve of the lower outlet.

1,822,347. FLEXIBLE JOURNAL BOX MOUNTING. JOEL HEKTNER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed July 27, 1929. Serial No. 381,462. 4 Claims. (Cl. 105—218.)



4. In a device of the character described, an axle box, an axle journalled in the box, a truck frame bar extending across and resting on the top of the box, and a pedestal structure having side walls embracing the frame bar with cross webs connecting the side walls at opposite sides of the box; substantially as described.

1,822,348. GRINDING MACHINE. CECIL W. HOPKINS, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 19, 1930. Serial No. 445,761. 12 Claims. (Cl. 51—103.)

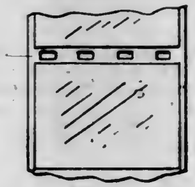


1. In a centerless grinder the combination with a bed, a pair of opposed grinding and regulating wheels carried thereby forming a grinding throat therebetween, of a work supporting mechanism positioned beneath the grinding throat and usable during the performance of an in-feed grinding and a through-feed grinding operation and comprising a supporting bracket, a work rest blade carried by the bracket for supporting a work piece for peripheral rotation, arms pivotally carried by the bracket having a position adjacent the blade and a position remote from the blade, guide members removably carried by the arms, a shiftable plunger supported by the bracket and a detachable ejector mechanism carried by the bracket cooperating with the shiftable plunger for ejecting a work piece from the blade.

1,822,349. RECOVERY OF SOLUBLE PRODUCTS FROM SOLID CARBONIZABLE SUBSTANCES. JOSEF JANNEK and OTTO GÖHRE, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 15, 1928, Serial No. 262,041, and in Germany Mar. 18, 1927. 9 Claims. (Cl. 196—14.)

1. A process for the production of products which are soluble in organic liquids from solid carbonizable substances which comprises heating the said carbonizable substances under a pressure of at least 2 atmospheres at a temperature of at least 100° C. but below the point at which the said carbonizable substances cake, and then treating the products thus obtained by extraction with an adequate amount of a liquid distillable organic solvent at an elevated temperature and under a pressure of more than 2 atmospheres, the conditions of working in both stages of the process being so chosen that, when gases or vapours capable of reacting with the materials under treatment are employed, no substantial reaction with the said gases takes place.

1,822,350. ARRANGEMENT OF PERFORATIONS IN CINEMATOGRAPHIC FILMS. JULIEN HENRI JARNIER, Paris, France. Filed Sept. 22, 1925, Serial No. 57,864, and in France Sept. 27, 1924. 1 Claim. (Cl. 88—19.5.)



A film for motion picture machines having substantially rectangular perforations provided in the transverse spaces between the images, wherein the ratio of the number (N) of transverse perforations to the width (L) of the film, having a specific resistance to rupture by traction λ is determined by the formula:

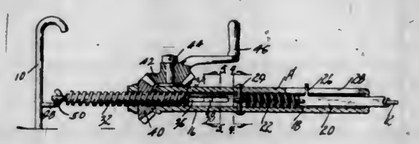
$$N=\frac{L\lambda}{p-a\lambda}$$

in which a is the width of the perforations, p the resistance to rupture for the width a in such a way that the resistance to tearing of the line of perforations engaged is the same as the resistance to rupture by traction of the spaces separating them, this resistance being the maximum.

1,822,351. PURIFICATION OF HYDROGENATION PRODUCTS OF CARBONACEOUS MATERIALS. CARL KRAUCH, Ludwigshafen-on-the-Rhine, and MATHIAS PIER and AUGUST EISENHUT, Heidelberg, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Aug. 13, 1926, Serial No. 129,094, and in Germany Aug. 20, 1925. 2 Claims. (Cl. 196—23.)

1. The process of purifying hydrogenation products of carbonaceous materials of high boiling point which comprises treating the said products with crude synthetic methanol obtained by the catalytic reduction of oxids of carbon with hydrogen.

1,822,352. PLANTER WIRE SCALE. MARIUS N. LAURSEN, O'Brien County, Iowa. Filed May 12, 1930. Serial No. 451,656. 4 Claims. (Cl. 265—18.)



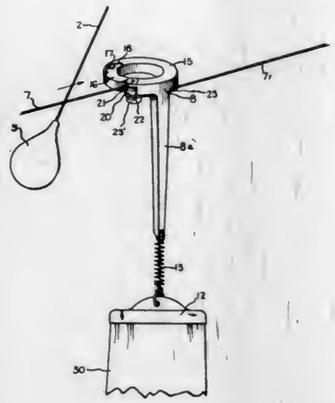
1. In a planter wire scale, a frame, a telescoping bar mounted therein, scale means to indicate the extension of said bar, a screw threaded rod telescopically mounted in said frame, a bevel gear threaded thereon, a second bevel gear meshing with the first one and a crank for rotating the second bevel gear.

1,822,353. GLOBE MOVABLE IN MERIDIAN. ROBERT B. LAWTON, Chicago Heights, Ill., assignor to Weber Costello Company, Chicago Heights, Ill., a Corporation of Illinois. Filed Jan. 4, 1930. Serial No. 418,446. 18 Claims. (Cl. 35—5.)



1. A globe device comprising a standard, a meridian rigidly supported thereon, a globe ball positioned within the meridian, and an axis for the globe ball slidable longitudinally with respect to the inner periphery of the meridian to permit the globe ball and the axis thereof to be adjusted into different positions along the meridian.

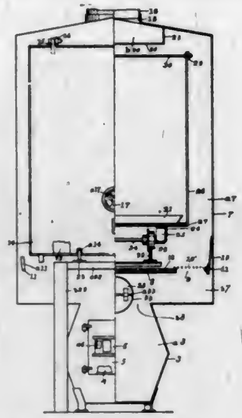
1,822,354. PACKAGE PICK-UP DEVICE FOR AIRCRAFT. MAURICE S. LEAGUE, Tacoma, Wash. Filed Oct. 22, 1928. Serial No. 314,077. 7 Claims. (Cl 258—1.)



1. A package pick-up device for aircraft comprising a guide cable drawn between two stationary points, a bracket removably supported by the guide cable and comprising means for the attachment thereto of an article to be picked up, a grappling cable suspended from the aircraft and adapted to be brought, during flight of the latter, into sliding contact with the guide cable and to be directed thereby into contact with the bracket, and means on the grappling cable adapted to effect a holding connection with the bracket whereby the latter will be displaced from the guide cable.

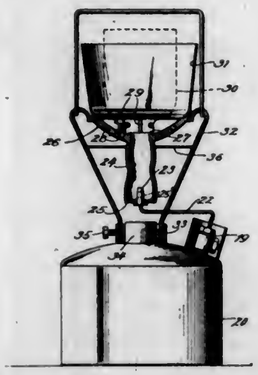
1,822,355. BARBECUE STOVE. SANFORD B. MAYHEW, Marietta Township, Whatcom County, Wash. Filed Aug. 6, 1929. Serial No. 383,920. 1 Claim. (Cl. 99—2.)

A barbecue stove consisting of a fire box having an opening in its top, an oven on top of said firebox communicating therewith through said top opening therein, said oven having a lower outlet opening and an upper outlet opening, a baffle in said oven above said firebox opening and above said lower oven outlet opening having its edges disposed adjacent the walls of said oven providing spaces therebetween, a plurality of removable heat-resisting pads disposed on top of said baffle, dampers mounted in said oven



to close said baffle spaces to divide said oven into lower and upper chambers, a smoke pipe connected with said upper oven outlet, a by-pass smoke pipe connected with said lower oven outlet opening and with said smoke pipe, and a tight damper mounted in said by-pass smoke pipe.

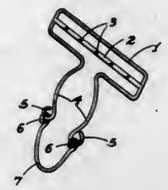
1,822,356. APPARATUS FOR GENERATING AIR. CHARLES E. MCCARTNEY and ROY MILLER, Los Angeles, Calif.; said McCartney assignor to said Miller. Filed May 1, 1929. Serial No. 359,460. 4 Claims. (Cl. 158—32.)



1. A plumber's furnace comprising a fuel tank, a burner disposed thereover, said burner including a vertical venturi, the discharge end of which is surrounded by a combustion bowl, a conduit leading from the lower end of the burner to the tank and detachably connected therewith, a valve for closing the tank when the conduit is disconnected and for regulating the flow of fuel therethrough, a projecting element on the tank, an embracing element carried by the burner and adapted to fit over said projecting element, and means for detachably fastening said elements together whereby fuel tanks may be interchanged upon the burner.

1,822,357. COMBINATION BUCKLE AND FASTENER FOR OVERALLS. JOHN A. MENDOSA, Manteca, Calif. Filed Aug. 30, 1930. Serial No. 478,819. 1 Claim. (Cl. 24—73.)

A combination buckle and fastener for overalls comprising a rectangular frame having transversely spaced extensions from one side thereof, a cross bar midway between the sides of the frame, the back of the frame, extensions and cross bar all lying in a common flat plane, projecting



short prongs on the front edge of the cross bar and a button loop flexibly connected with the free ends of the extensions.

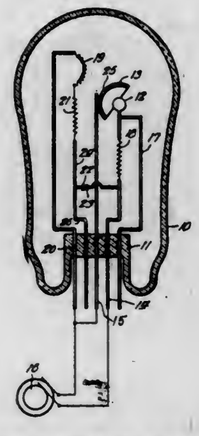
1,822,358. PROCESS OF SEPARATING ETHYLENE FROM THE HIGHER HOMOLOGUES THEREOF IN GASEOUS MIXTURES CONTAINING OLEFINES. RICHARD MICHEL, Uerdingen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 18, 1929, Serial No. 348,146, and in Germany Mar. 23, 1928. 2 Claims. (Cl. 260—170.)

1. Process of separating ethylene from the homologues thereof in gas mixtures containing olefines which comprises reacting the gas mixture upon a dispersion of aluminium halide in an inert diluent at a pressure not essentially exceeding one atmosphere.

1,822,359. HIGH ELECTRON EMISSIVE CATHODE. RICHARD E. MIESSE, Chicago, Ill., assignor to Q. R. S. De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1928. Serial No. 305,122. 10 Claims. (Cl. 176—126.)

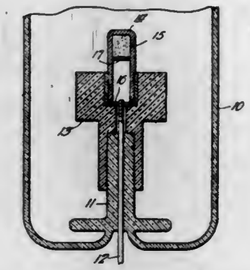
6. An electrode for gaseous conduction devices consisting of a base metal having barium carbide thereon.

1,822,360. PROJECTION LAMP. RICHARD E. MIESSE, Chicago, Ill., assignor to Q. R. S. De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1928. Serial No. 308,080. 2 Claims. (Cl. 176—123.)



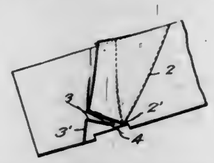
1. A device of the character described comprising a vacuous tube, electrodes therein adapted to be the terminals of a discharge, auxiliary ionizing means in said tube to assist in preliminary ionization of said discharge path, and means in said tube adapted after the initial period of said discharge to render said auxiliary ionizing means inoperative, one of said electrodes being provided with a concave parabolic reflecting surface and the other of said electrodes being at substantially the focus of said concave electrode.

1,822,361. ELECTRODE FOR ELECTRICAL DISCHARGE DEVICES. RICHARD E. MIESSE, Chicago, Ill., assignor to Q. R. S. De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1928. Serial No. 312,302. 2 Claims. (Cl. 176—126.)



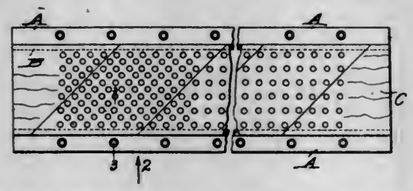
1. In a device of the character described the combination with a vacuous tube, of a hollow electrode therein adapted to serve as a container and having an outlet, an insulating support for said electrode enclosing one end thereof, said electrode being adapted when heated to permit contents thereof to be deposited upon the tube wall, and means extending exteriorly of said tube for conducting current to said electrode.

1,822,362. CONCENTRATION METHOD AND APPARATUS. BIANCA ADAMS MILLER, Ardmore, Pa. Filed Aug. 4, 1925. Serial No. 48,083. 3 Claims. (Cl. 209—458.)



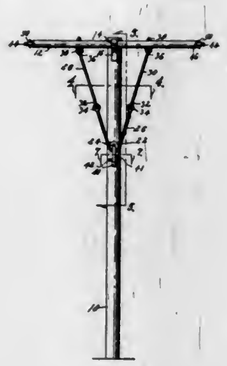
1. The method of hydraulic concentration, which consists in passing material in a relatively dilute condition over a concentrating surface, causing the stream to flow in a form vertically tapered to an apex, violently agitating the stream by an abrupt obstruction and partial reversion of the flow to keep the gangue in suspension until it off-flows, and arresting the bottom flow at a predetermined point.

1,822,363. COVER FOR SUCTION BOXES OF PAPER-MAKING MACHINES. ARTHUR J. MORIN, Auburn, Mass., assignor to Rice, Barton & Fales, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 24, 1930. Serial No. 497,728. 6 Claims. (Cl. 92—51.)



1. A suction box cover for a paper-making machine consisting of wood impregnated with a lubricant.

1,822,364. CLOTHESLINE SUPPORT. CHARLES T. MOYER, Garwin, Iowa. Filed July 3, 1930. Serial No. 465,581. 8 Claims. (Cl. 68—3.)



1. In a clothesline support, a post, a cross arm pivotally supported thereon on a horizontal axis and adapted to carry one end of a line, and means for swinging said arm including a sprocket gear rotatably mounted on the post, a hand crank for rotating said gear, a chain engaging said gear, and connections between the respective ends of said chain and points on said arm on opposite sides of the pivot.

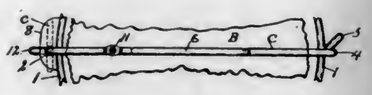
6. In a line support, a tubular member open at its end, a spindle loosely received within and projecting from the end of said member, said member being formed at its end with an inclined notch, a stud on said spindle adapted to enter said motch to prevent reverse rotation of the spindle, and a line attached to said spindle and adapted to be wound thereon.

1,822,365. CHECK VALVE. JOHN F. MULLANEY, Colorado Springs, Colo. Filed Aug. 28, 1926. Serial No. 132,064. 5 Claims. (Cl. 284—18.)



1. An automatic check valve adapted to be inserted into the outlet of the fluid supply pipe of a common fluid fixture from its outer end, and comprising a ring-shaped member adjustably secured to the inner wall of the said supply pipe, a valve seat formed on the inner rear edge of said member, recesses provided in the inner edge of the outer face of said member and adapted to be engaged by a seating tool adapted to seat said member or adjust its position or remove it, a ball-shaped valve adapted to fit tightly into said valve seat and prevent the passage outwardly of fluid, a valve stem integral with said valve and projecting outwardly through said ring-shaped member, and a skeleton pressure disc secured to said stem and extending transversely thereof and parallel with the face of said ring-shaped member and about one fourth inch therefrom and adapted to be engaged by an inserted faucet to force said valve from said seat.

1,822,366. LID FOR RECEPTACLES. JOHN F. MULLANEY, Colorado Springs, Colo. Filed Aug. 27, 1927. Serial No. 215,830. 6 Claims. (Cl. 220—55.)

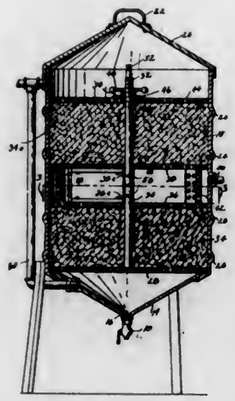


1. In combination with an open top receptacle, a removable cover or lid comprising a disc covering said open top receptacle, a metal rod extending across said disc and projecting therefrom at both ends and rigidly secured to the said disc, a rectangular bracket with its upright face secured to the outer face of said receptacle near its top edge, its horizontally projecting member having a round hole down therethrough, one of the projecting ends of said rod being bent downwardly and extending downwardly through said hole and thus pivotally hinging said cover upon said receptacle, and the opposite projecting end of said rod being bent into the form of an inwardly extending hook adapted to engage a projection at the top edge of said receptacle opposite said bracket.

1,822,367. MANUFACTURE OF VAT DYESTUFFS. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, and OTTO BRAUNSDORF and EDUARD HOLZAPFEL, Hochst-on-the-Main, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 23, 1925, Serial No. 71,021, and in Germany Apr. 6, 1925. 3 Claims. (Cl. 260—61.)

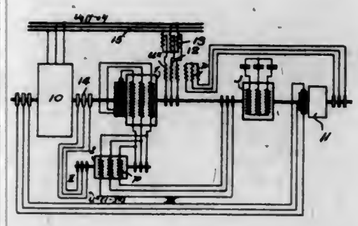
1. The process of manufacturing from violet to blue vat dyestuffs containing halogen which comprises acting on a Bz-1.Bz-1'-benzanthronyl sulfid with a halogenating agent and treating the intermediary product so obtained with an alkaline condensing agent.

1,822,368. LIQUID FILTER. EDGAR A. OHLSON, Ogden, Iowa. Filed Sept. 16, 1929. Serial No. 392,956. 8 Claims. (Cl. 210—31.)



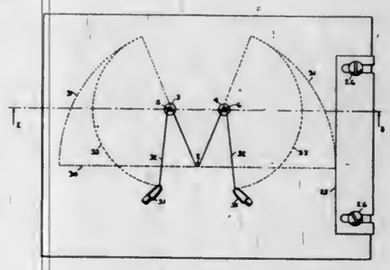
8. In a filter, a container having a portion adapted to receive filtering material and a portion adapted to receive material to be filtered, a foraminous member interposed between said portions, said second portion having an inlet for material to be filtered and spaced therefrom having means for distributing the material to be filtered around such portion, comprising a foraminous wall spaced from the inner face of the wall of the container.

1,822,369. CASCADE CONNECTION FOR COMMUTATOR MACHINES. JOHANN OSSANNA and HANS GRAEBE, Munich, and FRITZ HOFMANN, Munich-Talkirchen, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed June 20, 1928, Serial No. 286,931, and in Germany June 23, 1927. 6 Claims. (Cl. 172—274.)



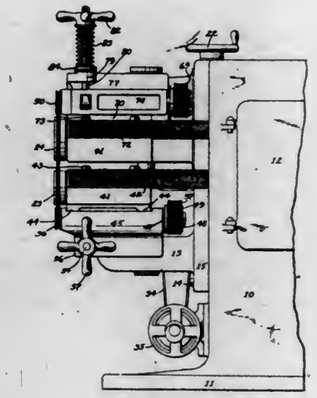
1. In a circuit carrying currents of varying frequency the combination of a commutator machine, having its commutator terminals connected with said circuit carrying varying frequency, a machine coupled with said commutator machine and adapted to affect the speed of the latter so as to deviate from a normal, constant value by an amount proportional to the varying frequency of the commutator machine supply circuit, a compensating winding on the commutator machine, a transformer and connections between the primary circuit of said transformer and the circuit of varying frequency, adapted to supply said primary circuit with the voltage prevailing at the commutator machine terminals, means for introducing a voltage into said circuit of varying frequency, which is proportional to the secondary voltage of said transformer, the value and phase of said introduced voltage being selected so as to compensate the influence of the commutator machine speed variations, which are proportional to the varying frequency, upon the voltage introduced by the commutator machine into the circuit of varying frequency.

1,822,370. VACUUM TUBE APPARATUS. ARTHUR R. PERRY, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 7, 1929. Serial No. 412,428. 9 Claims. (Cl. 250—27.5.)



1. The method of shaping a filament which consists in disposing a predetermined length thereof against a stop bearing at an intermediate portion of said filament, bending the free ends of said filament toward each other around said stop, disposing additional stops in the path of predetermined portions of said filament after said portions have been bent toward each other, and then bending the free ends of said filament toward each other around said additional stops.

1,822,371. WELDING MACHINE. WILLIAM F. PIOCH, Detroit, and CHARLES J. MARTIN, Dearborn, Mich., assignors to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 20, 1929. Serial No. 372,230. 24 Claims. (Cl. 219—4.)



7. In a welding machine, a bracket secured thereto having an electrode roller rotatably mounted therein, a second bracket arranged for vertical reciprocation relative to said machine and having a second electrode roller rotatably mounted therein adjacent to said first mentioned roller, a driving roller rotatably mounted on said first mentioned bracket and resiliently urged against the first mentioned electrode roller, a second driving roller rotatably mounted on said second mentioned bracket and resiliently urged against the second mentioned electrode roller, and means for rotating said driving rollers, the parts being so arranged that vertical reciprocation of said second mentioned bracket will vary the space between the electrode rollers.

1,822,372. REMOVING VOLATILE HYDROCARBON COMPOUNDS FROM AQUEOUS HALOGEN ACIDS. MARK E. PUTNAM, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 27, 1929. Serial No. 366,535. 4 Claims. (Cl. 23—154.)

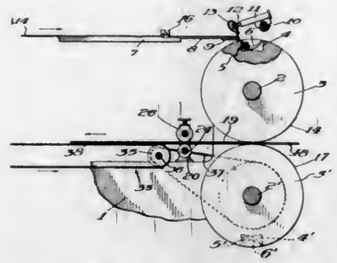
1. The method of preparing a purified hydrogen halide solution which comprises contacting an aqueous solution of a hydrogen halide resulting from the halogenation of an organic compound with a body of activated charcoal, whereby organic impurities therein are adsorbed on such charcoal.

4. The method of preparing a purified hydrochloric acid solution which comprises causing an aqueous solution thereof resulting from the chlorination of an organic compound to flow through a filter bed of activated charcoal, whereby organic impurities contained therein are adsorbed on such charcoal.

1,822,373. MEANS AND METHOD OF PROVIDING MOUNTED LITHOGRAPHS WITH NOTCHES FOR CENTERING. JOSEPH REGENSTEIN, Chicago, Ill., assignor to Arvey Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 9, 1930. Serial No. 459,973. 6 Claims. (Cl. 101—1.)

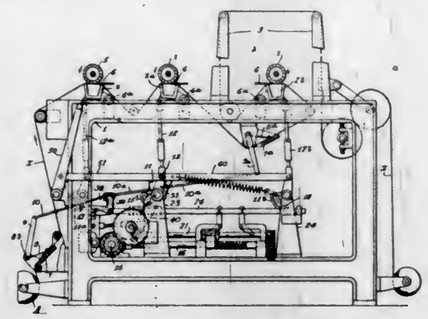
1. A method of notching a relatively stiff multi-ply fibrous structure at a predetermined distance from the edge of one of the plies comprising said multi-ply structure,

which comprises simultaneously adhesively uniting a plurality of plies, maintaining an edge of one of said plies



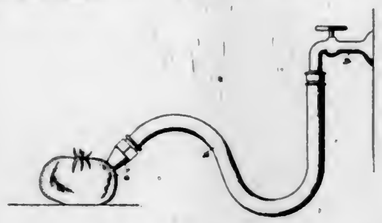
in a predetermined plane, and notching said multi-ply structure adjacent an edge thereof a predetermined distance inwardly from said reference plane.

1,822,374. SEAM-CONTROLLED SHEARING MACHINE. CHARLES G. RICHARDSON, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Dec. 26, 1929. Serial No. 416,447. 12 Claims. (Cl. 26—17.)



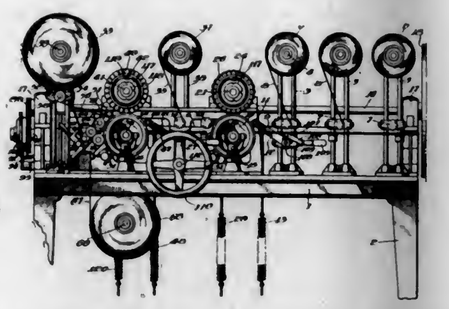
1. The combination with a shearing couple of a pivotal cloth rest formed with a gap extending transversely of the machine in position to support the cloth on both sides of the shearing line, power driven actuating mechanism for moving the cloth rest to and from operative position for shearing, a seam-actuated device by which said actuating mechanism is started in action to move the rest away from operative position, and another seam-actuated device that puts the rest-actuating mechanism into action to restore the rest to normal operative position.

1,822,375. METHOD AND APPARATUS FOR SKINNING TOMATOES. FRANK P. RYDER, Niagara Falls, N. Y. Filed Sept. 12, 1928. Serial No. 305,561. 6 Claims. (Cl. 146—219.)



1. The method of separating the outer skin of a tomato from the body of a tomato which consists in first scalding the tomato, punching the outer skin and forcing fluid through the puncture between the outer skin and the body of the tomato.

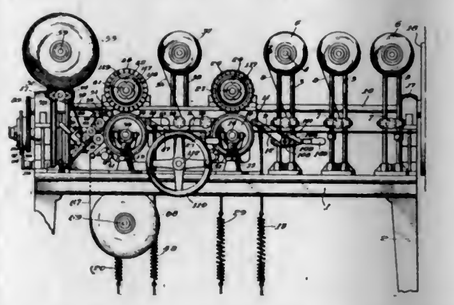
1,822,376. PROCESS AND APPARATUS FOR MANUFACTURING FLEXIBLE PADS. OTTO G. SCHMITT, Chicago, Ill. Filed Mar. 20, 1930. Serial No. 437,503. 10 Claims. (Cl. 154—1.)



1. A machine comprising in combination, a plurality of bed rolls, means for driving same, means for feeding thereto and uniting therewith a continuous strip of adhesive tape, a plurality of rotatable means adapted to act successively on said strip to produce incisions of predetermined outline, including means interposed between said rotatable means to feed and unite another continuous strip of adhesive tape with said first mentioned strip, means for removing the apertured strip to leave separated preformed pads on one of the bed rolls, and means for feeding to and uniting with said separated pads a base of gauze-like material.

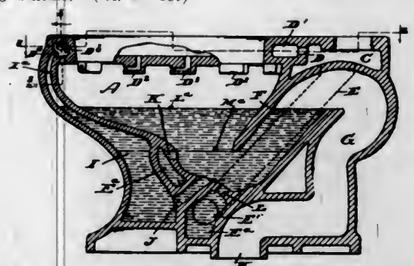
8. In combination, means for aperturing a strip of adhesive material to form pads, comprising a bed roll, means for feeding a strip of adhesive tape to said bed roll, means for adhesively uniting said strip to a portion of the surface thereof, means for acting upon said strip while united to the surface of the bed roll to produce apertures therein, means for removing the apertured strip from the bed roll at a predetermined phase of its rotation, and means for removing the cut-outs from the surface of the bed roll at a subsequent phase of its rotation.

1,822,377. PROCESS FOR MANUFACTURING FLEXIBLE PADS. OTTO G. SCHMITT, Omaha, Nebr. Original application filed Mar. 20, 1930, Serial No. 437,503. Divided and this application filed Jan. 7, 1931. Serial No. 507,070. 6 Claims. (Cl. 154—2.)



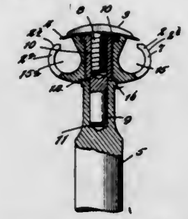
1. A process which comprises uniting a continuously advancing strip of adhesive tape to a rotating surface, acting upon said tape to produce apertures therein, removing the apertured tape from said rotating surface, uniting a second strip of adhesive tape with said apertured strip, uniting said united strip with a rotating surface and acting upon said strip to produce incisions enclosing said first mentioned apertures, and separating the cut-outs thus formed by removing the strip from said rotating surface.

1,822,378. TOILET BOWL. FREDERICK A. SCHOSSOW, Detroit, Mich. Filed July 2, 1930. Serial No. 465,340. 6 Claims. (Cl. 4—69.)



3. In a toilet bowl, a chamber adapted for connection with a source of water supply; an inwardly overhanging rim channel encircling the bowl, having a crenelated lower wall jutting downwardly from the rim provided with substantially horizontal discharge ports adapted to direct the flow of water tangentially over the surface of the bowl below the overhanging rim; an auxiliary water chamber including a conduit adapted to discharge into the basin of the bowl; a passage originating at the top of the rim channel adapted to convey air displaced by flushing water from said channel into said auxiliary chamber, whereby noise due to the escape of entrained air through the rim channel outlets is eliminated.

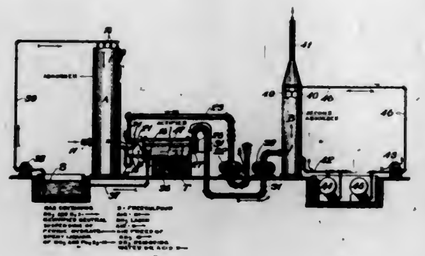
1,822,379. SAFETY RAZOR. JOHN T. SCULLY, New York, N. Y. Filed July 16, 1928. Serial No. 293,064. 3 Claims. (Cl. 30—12.)



2. A safety razor comprising a tranversely-flexible blade having a longitudinal cutting edge, in combination with a blade holder having a blade-supporting member head, a guard formed on a curved inclination and having a free end spaced from said head, a skin-depressing surface included in said curved inclination and lying ahead of said free end, said skin-depressing surface shaped ahead of the free end to curve within the plane of the projected plane through the cutting edge of the blade when flexed, a longitudinally extending lather-catching passage outwardly defined by the curved inclination, means for positioning the blade on said blade-supporting member head, a blade-clamping member overhanging the blade contacting face of the head and shaped to flex the blade transversely, and means for forcing the parts together with the cutting edge of the blade extending lengthwise with and spaced perpendicularly above the said free end of the guard, said forcing means including a handle swivelled to the blade-supporting member.

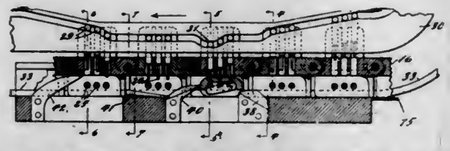
1,822,380. GAS PURIFICATION PROCESS AND APPARATUS. GILBERT E. SEIL, Newark, N. J., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 7, 1926. Serial No. 107,523. 22 Claims. (Cl. 23—225.)

1. A process of removing hydrogen sulphide from gas containing ammonia, consisting in: subjecting the said gas to contact with a wash liquor containing in suspension an iron compound, in such a manner as to cause the said wash liquor to absorb ammonia from the gas, thereby facilitating the removal of said hydrogen sulphide from the gas by the said iron compound; continuously removing the suspension and aerating the said ammoniacal liquid containing the sulphided iron compound out of contact with the gas to liberate free sulphur and drive



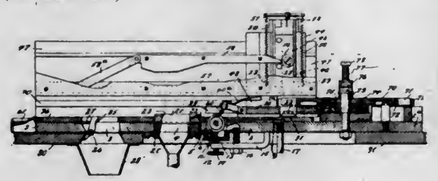
off ammonia therein concurrently; returning the thereby revivified wash liquor containing the revivified iron compound to contact with fresh quantities of gas; and removing the ammonia liberated in the course of said aeration.

1,822,381. FRUIT PITTING APPARATUS. ALBERT K. SMITH, West Orange, N. J., assignor to The Hills Brothers Company, Inc., a Corporation of New York. Filed July 28, 1926. Serial No. 125,358. 27 Claims. (Cl. 146—17.)



1. In a fruit pitting machine, a fruit conveyor, a knife for longitudinally slitting the fruit, a spreader for opening the slit, and an ejector for extracting the pit through the slit, said knife and ejector being independent of one another and disposed at spaced points along the path of travel of the conveyor.

1,822,382. DATE PITTING MACHINE. ALBERT K. SMITH, West Orange, N. J., assignor to The Hills Brothers Company Inc., a Corporation of New York. Filed Nov. 18, 1927. Serial No. 234,082. 26 Claims. (Cl. 146—17.)

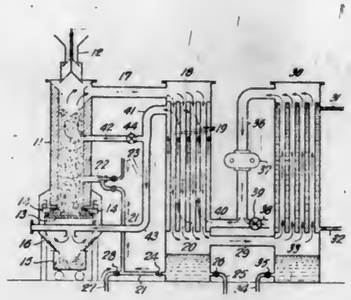


1. In a fruit pitting machine, pit extracting elements including a slitting knife and a pit extractor, a carrier for supporting the fruit while subjecting the fruit to the action of the pit extracting elements, a transfer conveyor for receiving the fruit and conveying it to said carrier, and means for engaging the fruit on said conveyor and moving it therefrom to said carrier.

1,822,383. PROCESS OF MAKING A SOLID FUEL. FREDERICK T. SNYDER, New Canaan, Conn. Filed June 8, 1925. Serial No. 35,805. 14 Claims. (Cl. 202—7.)

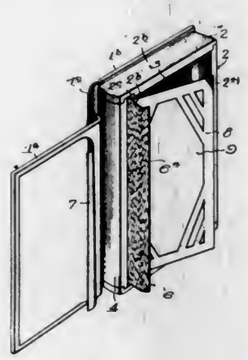
1. A process of making a solid fuel product which comprises distilling a part of the volatiles from coal, wood

or like organic matter by means of a current of warm gas flowing in contact with the organic matter, cooling the gas for condensation of volatiles therein, reheating a portion of the gas with sensible and latent heats previously given up by the whole volume of gas and vapors therein, passing said reheated gas through a mass of solid residue of the distillation heated above the temperature of the gas, and passing vapors of the higher boiling condensates in contact with the hot solid residue with cracking effect and deposition of carbonaceous material on such residue.



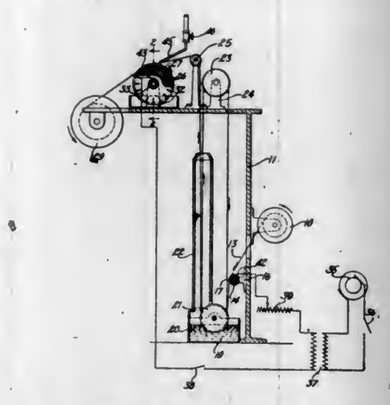
10. A method of distilling coal, wood or like volatile containing organic material, which comprises heating the material to a temperature between the melting and boiling temperatures of a volatile constituent of the material, whereby such volatile tends to be exuded in liquid state, and circulating a current of gas in contact with the material, the volume and temperature of the gas being such that the volatile will evaporate into the gas at the rate of exudation.

1,822,384. BOX CONSTRUCTION. PHILIP V. SPINNER, Wilmette, and ISIDORE SPINNER, Chicago, Ill. Filed May 22, 1930. Serial No. 454,579. 6 Claims. (Cl. 217—5.)



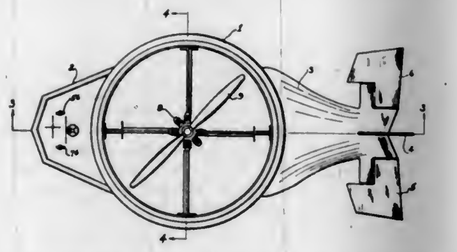
3. A container comprising a frame having walls joined at their ends, one of the opposite pairs of walls being extended at one of their ends beyond the adjacent transverse wall, a back-bone fitting into the space between said extended end portions and having tongue and groove connection at its ends therewith, a cover consisting of top and bottom sections and a back section having hinged connection with said top and bottom cover members and applied over said back-bone, and a strip of reinforcing material having one edge secured between said back-bone strip and the adjacent wall of said frame and secured at its free edge to the top cover section adjacent its hinged edge.

1,822,385. APPARATUS FOR COATING ELECTRICAL CONDUCTORS. KENNETH MERLE WATSON, Madison, Wis., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1926. Serial No. 155,303. 6 Claims. (Cl. 219—11.)



1. In an apparatus for insulating an electrical conductor, means for applying a coating of insulating material to the conductor, a source of electrical current supply associated therewith, and means for passing a low frequency electrical heating current from the source of supply through ever-changing insulated portions of the conductor of constant extent.

1,822,386. AIRCRAFT. ALEX ANDERSEN, Seattle, Wash., assignor of one-half to George Mathesen, Seattle, Wash. Filed Nov. 14, 1930. Serial No. 495,716. 15 Claims. (Cl. 244—15.)



1. An aeroplane of the helicopter type comprising a body including a circular portion, a propeller operating in a horizontal plane within the circular portion, and an annular member concentric with the propeller and adjustable to vary the influence of the propeller on the air within said member.

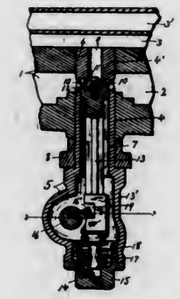
1,822,387. STEAMING BOARD. HERBERT G. BEEDE, Pawtucket, R. I. Filed Nov. 26, 1928. Serial No. 322,011. 22 Claims. (Cl. 68—9.)



1. In a fabric steaming machine, a buck having a steam-heated chamber, a steam-receiving chamber connected to the heating chamber for receiving steam therefrom, and a steam-distributing chamber having steam exits for directing steam to the fabric, a transverse partition dividing the distributing chamber into opposite end compartments having separate inlet ports communicating with the receiving chamber, a valve controlling the passage of steam from the heating chamber to the receiving chamber, and a separate valve controlling one of said ports independently of the first-named valve.

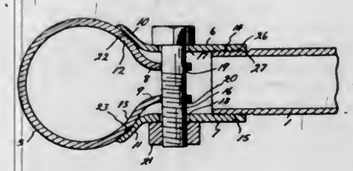
13. The combination with a steaming board arranged to permit the manipulation of the work thereon from opposite sides thereof and provided with a steam distributing chamber having exit openings through its upper wall, a valve controlling the passage of steam to said chamber, pedally operated rock arms extending in opposite directions from their axes toward opposite sides of the steaming board, and means actuated by the operation of either of said arms in the same direction for opening the valve.

1,822,388. STEAMING VALVE FOR GARMENT PRESSES. HERBERT G. BEEDE, Pawtucket, R. I. Filed July 15, 1929. Serial No. 378,384. 1 Claim. (Cl. 251—132.)



A steaming valve for garment pressing machines comprising a tubular valve case having one end closed and provided with a laterally projecting chambered offset, and an opening through its other end and provided with a valve-seat surrounding the inner end of said opening, and branch openings adjacent the valve-seat, a valve controlling communication between the branch openings and end opening and having a stem extended beyond the chambered offset, a spring interposed between the closed end of the valve case and valve stem for closing the valve, said stem having a recess in one side registering with said offset, a rocker-shaft journaled in said offset at right angles to the valve stem and provided with a radially projecting crank arm engaging in said recess for opening the valve, and means for rocking said shaft.

1,822,389. COUPLING. WILLIAM W. BLAKELY, Dexter, Mich. Filed Sept. 30, 1929. Serial No. 396,259. 2 Claims. (Cl. 287—54.)



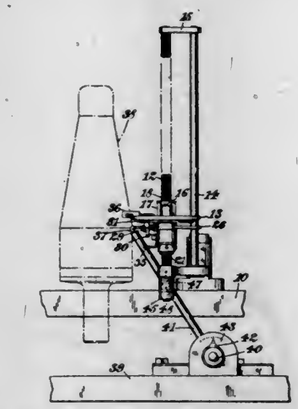
2. A coupling comprising a band of flexible material having substantially parallel arms provided with aligned openings, a pair of arms substantially parallel to the arms aforesaid, said last mentioned arms being provided intermediate their ends with openings in alignment with the openings in the first mentioned arms and provided with diverging portions that are welded to the band in rear of the aligned openings so that the holding strains are not entirely upon the welds, and actuating means for said band and last mentioned arms including a bolt extending through the aligned openings in the first and last mentioned arms.

1,822,390. SEALING MEANS. WINFRED M. BROOKS, West Orange, N. J. Filed Jan. 30, 1931. Serial No. 512,443. 4 Claims. (Cl. 40—3.)



1. A seal including: a strip of sheet material having a bending zone intermediate its ends admitting of said opposed ends being brought toward each other, one end of said strip having an opening the wall of which is curved transversely of the strip to constitute a deflecting member, and the other end of said strip having a resilient locking member of a thickness almost as great as the width of the opening aforesaid, said locking member extending at an angle to the strip and connected thereto by a neck of a length sufficient to permit the locking member to pass completely through the opening, said locking member being curved transversely but on a radius different from that of the wall of the opening constituting the deflecting member, whereby when said strip is bent in the plane of its bending zone the locking member passes through the opening of the deflecting member and in so doing is temporarily deformed transversely, said locking member substantially reassuming its original shape when it has passed completely through said opening thereby preventing its return through said opening but admitting of its neck being bent to cause it to lie flat against that end of the strip having the opening.

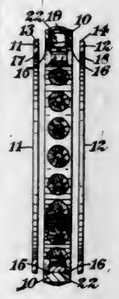
1,822,391. YARN-WINDING MACHINE. JAMES COLEY, Leicester, England, assignor to Wildt and Company Limited, Leicester, England, a British Company. Filed June 29, 1929. Serial No. 374,758, and in Great Britain Mar. 28, 1929. 10 Claims. (Cl. 242—31.)



1. Riser-mechanism of the kind described comprising in combination a rotatable riser-wheel, a ring of ratchet-teeth rotatable with the riser-wheel, an oscillatory pawl for engaging the teeth of the ratchet-wheel and normally held by gravity alone in engagement with the ratchet-teeth, and a let-off device comprising an arm that is pivotally mounted independently of the pawl, is normally held by the running yarn away from the pawl and is so positioned that, when released by breakage or failure of the

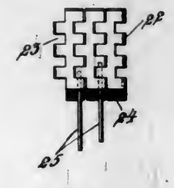
yarn, it will move into engagement with the pawl and will rock the latter on its pivot to disengage the pawl from the ratchet-teeth.

1,822,392. FINGER-RING. JOSEPH ESTERMAN and BARNET GELLMAN, London, England. Filed July 26, 1929, Serial No. 381,179, and in Great Britain June 7, 1929. 5 Claims. (Cl. 63—15.)



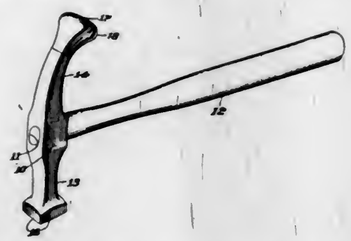
1. A finger ring comprising an outer rim and two exchangeable annular flanges detachably carried by the sides of the rim so as to lie wholly within the width of the rim one towards each side thereof and intended to bear upon a finger inserted through them and constitute the bore of the ring.

1,822,393. FLEXIBLE CHAIN. KARL FASSNACHT and RICHARD GLOSS, Providence, R. I., assignors to Speidel Chain Co., Providence, R. I., a firm composed of Frederic Speidel and Eugen Speidel, Pforzheim, Germany. Filed Sept. 19, 1929. Serial No. 393,701. 3 Claims. (Cl. 59—80.)



1. A sheet metal stamping for a chain link comprising a body portion, spaced openings therein in staggered relation located inwardly from the periphery of the stamping, and an end section at each end thereof adapted to close the ends of said link when the sides are joined in abutting relation.

1,822,394. HAMMER. WILLIAM FERGUSON, Flint, Mich. Filed May 29, 1930. Serial No. 456,885. 2 Claims. (Cl. 81—15.)



1. A hammer for removing indentations from automobile bodies and fenders, comprising an intermediate portion formed with a handle receiving opening and having relatively long oppositely extending shanks one of which curves inwardly over the handle, a cylinder-like peening head formed at the outer end of said curved shank so that it protrudes laterally from the opposite sides of the shank transversely of the handle and provided with ball-like ends, and a head at the outer end of the other shank.

1,822,395. HOLDER FOR STEEL WOOL. JOHN R. FISH, West Springfield, Mass., assignor to Emerson S. Searle, Springfield, Mass. Filed Apr. 3, 1926. Serial No. 99,503. Renewed Jan. 31, 1931. 3 Claims. (Cl. 15—209.)

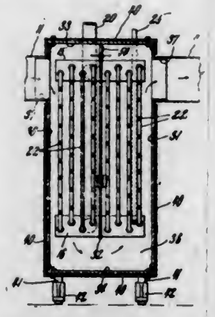


2. A device for the purpose described comprising a handle member formed on its lower face with a pair of substantially parallel grooves which open in divergent relation to each other, a reversible polishing pad of fibrous material, folded metal strips clamping the edges of the reversible pad, said strips being designed to be frictionally inserted in the inclined grooves and temporarily retaining the pad attached to the holder.

1,822,396. METHOD OF DEZINCING MATTES AND SLAGS. MORRIS G. FOWLER and DIMITRY NICONOFF, Clarkdale, Ariz., assignors to United Verde Copper Company, a Corporation of Delaware. Filed Jan. 14, 1929. Serial No. 332,556. 26 Claims. (Cl. 75—28.)

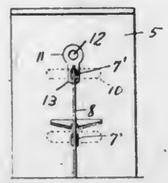
1. The improvement in metallurgical operations for recovering metals from molten mineral baths which comprises injecting a reducing agent into a molten bath containing matte and slag to agitate the bath and reduce one or more of the metal compounds contained therein.

1,822,397. ECONOMIZER. HENRY G. GOSSELIN, Berlin N. H., assignor to Berlin Foundry and Machine Company, Berlin, N. H., a Corporation of New Hampshire. Filed Mar. 11, 1931. Serial No. 521,723. 3 Claims. (Cl. 257—230.)



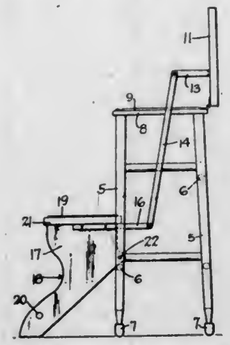
1. A heat-economizer comprising a back plate having an upper and a lower manifold thereon, side plates extending forwardly from said back plate, a smoke pipe connection through the upper portion of each said side plate, removable top, bottom and front plates forming a closed box with said back and side plates a baffle plate within said box having three of its side edges contiguous respectively to said back, front and top plates leaving a clearance between its lower edge and said bottom plate, a plurality of heat-transfer pipe units on either side of said baffle, each said unit being attached at its respective ends to said upper and lower manifolds, and an outside pipe connection on each manifold.

1,822,398. PICTURE FRAME SUPPORT. CLAUDE E. HAINES, Tacoma, Wash. Filed Sept. 15, 1930. Serial No. 482,048. 2 Claims. (Cl. 40—146.)



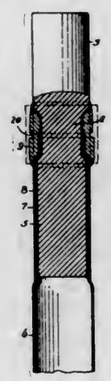
1. A picture frame, comprising a back section, an apertured projection on the back side of the section, an apertured plate, said plate being provided with an additional opening therein for receiving the apertured projection, so that the apertured projection will project through and beyond the said plate, and a pin for disposition through the apertured projection.

1,822,399. AUTOMATIC FOLDING STEP STOOL. ROBERT C. HAYNE, Brooklyn, N. Y. Filed Apr. 10, 1930. Serial No. 443,116. 5 Claims. (Cl. 155—42.)



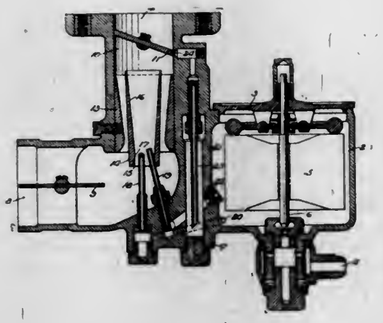
1. A combination ladder and stool comprising a supporting structure including legs, a top step mounted at the upper ends of the legs, a stool top pivoted to the supporting structure, a step pivoted to the supporting structure below said stool top, and means connecting said stool top and the step whereby the latter is automatically extended when the stool top is raised.

1,822,400. WELL TOOL AND METHOD OF MAKING SAME. JOSEPH W. HEETER, Butler, Pa. Filed Feb. 13, 1929. Serial No. 339,585. 4 Claims. (Cl. 29—148.)



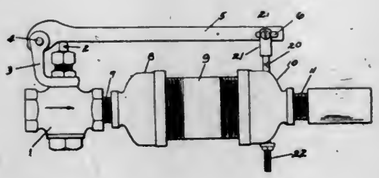
1. The method of uniting the stem and socket of a well tool, consisting in forming the stem with an annular recess, entering the stem in the socket portion and contracting the latter into the recess, swaging a sleeve on said socket and contracting the end thereof into a portion of said recess, encircling the recess with a collar, and welding together the collar, socket and stem.

1,822,401. CARBURETOR. PAUL-EMILE HEFTLER, Detroit, Mich., assignor to Societe Generale Des Carburateur Zenith, Geneva, Switzerland, a Corporation of Switzerland. Filed Jan. 14, 1930. Serial No. 420,730. 3 Claims. (Cl. 261—41.)



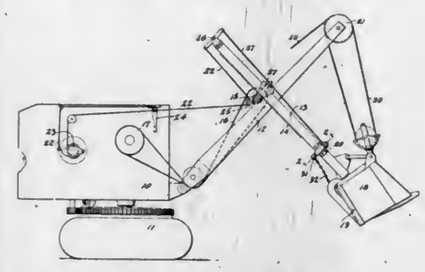
1. In a carburetor, an air system characterized by an air nozzle, a venturi within said nozzle and discharging beyond the outlet of said nozzle, and a common mixture chamber for the discharge from both the nozzle and the venturi in which the discharge from the air nozzle is immediately mixed with the discharge from the venturi.

1,822,402. SAFETY GAS COCK. WILLIAM F. HOELTKE, Journal Square, N. J. Filed Apr. 16, 1929. Serial No. 355,562. 16 Claims. (Cl. 137—162.)



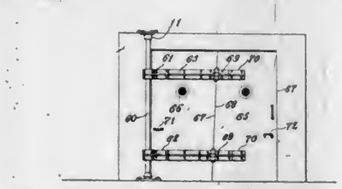
2. A safety gas cock for a gas line comprising a valve and valve housing, a spring adapted to hold the valve closed, a lever pivoted on the housing, a pin extending through the housing between the valve and the lever, said lever being adapted to hold the valve open through said pin against the spring, a second pin adapted to hold said lever in position to hold said valve open, said second pin extending into the gas line and being adapted to be separated intermediate its ends by a rise in temperature in the gas line, thereby releasing the lever and permitting the spring to close the valve.

1,822,403. POWER DIPPER TRIP. ALPHEUS E. HOLCOMB, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Nov. 12, 1927. Serial No. 232,840. 6 Claims. (Cl. 214—146.)



1. In a dipper trip, a boom, a dipper stick mounted thereon for racking movement, cable take up means, a lever at the upper end of the stick, a cable extending from said cable take up means to said lever, and means for operatively connecting the lever and the door of a dipper.

1,822,404. SAND BLAST CHAMBER DOOR. FOSTER J. HULL, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed Nov. 8, 1927. Serial No. 231,867. 2 Claims. (Cl. 189—46.)

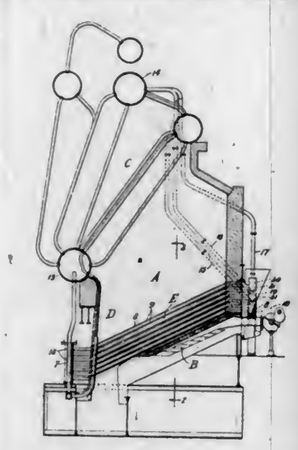


1. The combination with a sand blast chamber having a door opening, of a door for the same, a hinge shaft for the door, a bearing supporting the same at the bottom independently of the chamber structure, a bearing for the shaft at the top, a door having its outer swinging edge inclined downwardly and inwardly toward the shaft in closed position, a panel mounted on the swinging edge of the door, hinges connecting the said panel to the door, the panel being formed with its hinged edge inclined downwardly and inwardly toward the hinge shaft, whereby the panel tends to swing about the door to closed position.

2. The combination with a sand blast chamber having a door opening and a door assembly comprising a swinging sheet metal door to close the opening, of a shaft for each door, the said shaft having a cone bearing at the bottom with the inside conical member of said bearing upwardly disposed to impose the weight of the door on the floor or foundation, means for adjusting this member in all horizontal directions, each door having clamps securing it to the shaft so that it may be adjusted along the shaft, providing means whereby the doors when warped by the peening action of the abrasive may be quickly and easily restored to position in which they close accurately and form a seal at all edges of the opening without removing any part of the assembly.

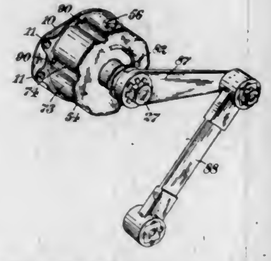
1,822,405. WATER WALL. GEORGE P. JACKSON, Flushing, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed June 28, 1930. Serial No. 464,446. 5 Claims. (Cl. 122—235.)

1. In combination, a boiler, a combustion chamber, a stoker, a tubular water wall located in the combustion chamber and adjacent to the stoker, said water wall comprising a row of substantially horizontal water tubes, upright headers into which the ends of said tubes are connected, and means for dividing one of said headers into a plurality of compartments one above the other, into each



of which tubes of the water wall are connected, upcomer means connecting each of said compartments to the boiler, and downcomer means connecting the other header to the boiler.

1,822,406. HYDRAULIC SHOCK ABSORBER. ERNEST WILLIAM JOHNSON, London, England, assignor of one half to Luvax Limited, London, England, a British Company. Filed Dec. 14, 1928. Serial No. 326,120. 12 Claims. (Cl. 188—89.)

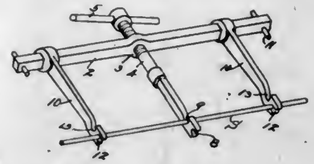


1. A hydraulic shock-absorber comprising an end-plate, an inner casing mounted thereon and constituting a main working chamber for the reception of a working liquid, a vane in said chamber, a spindle secured to said vane and projecting from said chamber, a co-operating abutment secured in said chamber, an outer casing constituting a recuperator chamber, which outer casing is so mounted on said end-plate that the working chamber is nested in the recuperator chamber, and which outer casing has its side walls corrugated to form external depressions therein extending perpendicularly of the end-plate, devices for securing said outer casing to said end-plate, which devices are located in alignment with said depressions, devices for securing said inner casing to said end-plate, which devices are located between said inner and outer casings in staggered relationship to said external depressions, and means for automatically keeping the working chamber charged with working liquid from the recuperator chamber.

1,822,407. WIRE SPOKE STRAIGHTENER AND WHEEL ALIGNING TOOL. HOMER R. KENNEDY, Los Angeles, Calif. Filed Nov. 5, 1930. Serial No. 493,582. 2 Claims. (Cl. 153—38.)

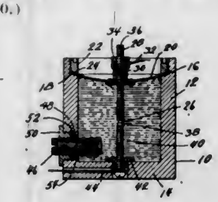
1. A tool for straightening or bending the wire spokes of a wheel, comprising a stock bar on which is slidable

a set of buttress arms and having an intermediate jack-screw having a swivel-jointed, coaxial hooker; said arms and hooker having crotched ends to seat against a wire



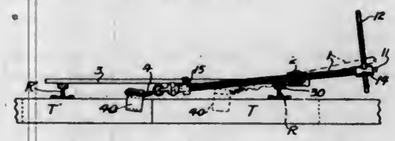
end and having side hook seats to hook onto a wire according to the intended use of the tool; said buttress arms including adjustable shanks.

1,822,408. THERMALLY-ACTUATED CIRCUIT-CONTROLLER. WARREN D. KING, Peabody, Mass.; LOUISE KING, administratrix of said Warren D. King, deceased. Filed Nov. 28, 1927. Serial No. 236,111. 10 Claims. (Cl. 200—140.)



1. A thermally-actuated circuit controller including separable contact members, a diaphragm for operating said contact members, a casing enclosing said contact members, and an electrically-insulating thermally-expansible liquid in which said contact members are immersed, which liquid when hot completely fills said casing and forcibly expands directly against said diaphragm and moves it to operate said contact members.

1,822,409. TIE PULLER. EDWARD H. LAWRENCE, Snohomish County, Wash. Filed July 30, 1930. Serial No. 471,618. 7 Claims. (Cl. 254—43.)



1. In a tie puller, in combination, brace means overlying and adapted to engage a rail, a member pivotally supported thereon upon a substantially horizontal axis, a tension member adapted to engage a tie by one end, its other end being engaged by said pivoted member, and means for producing movement of the tension member relative to the first member transversely of the pivot axis referred to.

1,822,410. ROOF ACCESSORY. HARRY C. MACAN, Rutherford, N. J., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 29, 1928. Serial No. 329,283. 6 Claims. (Cl. 108—26.)

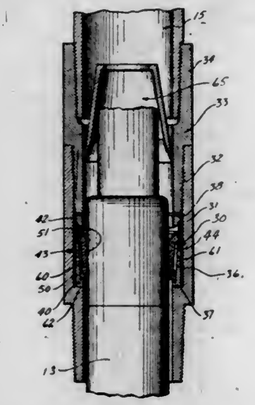


1. A roofing accessory which comprises a metal blank flexible about its longitudinal axis, and a flexible fibrous backing for said blank, said backing being of substantially the same length as the blank and of less width, the lateral edges of the blank and backing being in-folded and the extreme lateral edges of the blank extending around the extreme lateral edges of the backing and concealing them.

1,822,411. CORE OILS AND PROCESS FOR PRODUCING SAME. EDWARD H. MCARDLE, Elizabeth, N. J., assignor to A. Klipstein and Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 14, 1930. Serial No. 435,959. 11 Claims. (Cl. 22—188.)

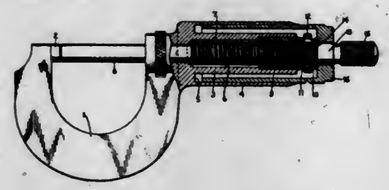
1. The process for the production of core oils which consists in reacting at temperatures between 500° and 580° F. on a fixed oil of any iodine number over one hundred with the glyceryl ester of rosin.

1,822,412. NOVEL PACKER FOR USE WITH OVERSHOT. GERHARD MEYER, Los Angeles, Calif. Filed Oct. 1, 1929. Serial No. 396,450. 16 Claims. (Cl. 294—60.)



1. In a packing device for sealing primary and secondary elements, the combination of: a packing-retaining structure rotatably engaging one of said elements; and a packing member retained in said packing-retaining structure and compressed against the other of said elements.

1,822,413. MICROMETER. ALBERT D. MIZZY, New York, and WILLIAM E. FAVINI, South Ozone Park, N. Y. Filed Mar. 2, 1929. Serial No. 343,872. 13 Claims. (Cl. 33—166.)

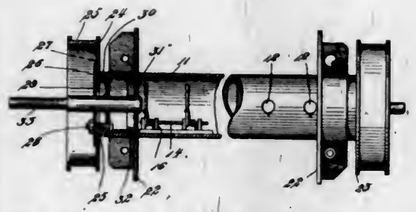


1. A direct reading micrometer having an index member, a cylindrical member, a screw, one of said members being rotatable and advanced by the screw, said cylindrical member having equally spaced axial graduations about its circumference, said graduations being numbered along a spiral having a pitch equal to the pitch of the screw, said numbers being the reading of the graduation indexed by the index member, and being applied to the graduations in arithmetical progression the unit of which progression is greater than one, and the number of said axial graduations being a nonmultiple of the unit.

12. A direct reading micrometer having an index means, a screw, a rotatable barrel which is advanced by the

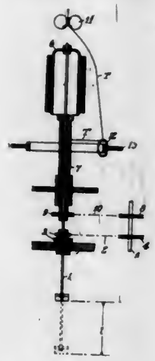
screw, said barrel having equally spaced axial graduations about its circumference, the number of said graduations being a non-multiple of three, said graduations being numbered along a spiral having a pitch equal to the pitch of the screw, and said numbers being the reading of the graduation and being applied to the graduations in arithmetical progression of three.

1,822,414. WARP BEAM. FRANK MOSSBERG, Attleboro, Mass., assignor to Mossberg Pressed Steel Corporation, Attleboro, Mass., a Corporation of Massachusetts. Filed May 21, 1928. Serial No. 279,440. 3 Claims. (Cl. 242—125.)



1. In a warp beam, a barrel about which the warp is wound having a plurality of openings spaced apart along the length thereof, a plurality of independently movable hooks pivotally mounted within said barrel to which the warp threads may be attached, each hook being located adjacent an opening, and independent springs acting upon said hooks to move them relative to said barrel to independently tension the threads.

1,822,415. THREAD WINDING MACHINE. HENRI FRANÇOIS NIOGRET, Lyon, France, assignor to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed May 28, 1929, Serial No. 366,606, and in France June 7, 1928. 5 Claims. (Cl. 118—16.)

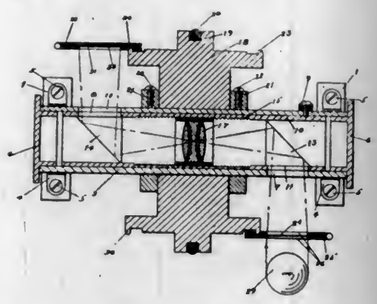


1. In a thread winding machine the combination of means to continuously feed a textile thread, a ring twister, a rotatable spindle adapted to be raised and lowered, a bobbin mounted on said spindle, a rotatable cylinder mounted on said spindle to receive the thread when the spindle and bobbin are in raised position.

1,822,416. ART OF DELUSTERING ARTIFICIAL SILK. FREDERICK C. NONAMAKER, Gloucester City, N. J., assignor to Furness Corporation, Philadelphia, Pa., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,477. 2 Claims. (Cl. 18—54.)

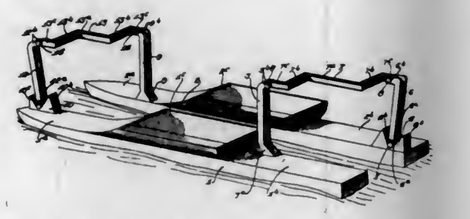
1. The herein described process which consists in mixing a cellulose solution with fine ground cellulose particles having a different index of refraction from the cellulose of the thread, and in spinning the thread from the mixture.

1,822,417. OPTICAL PRINTER. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed May 14, 1929. Serial No. 363,082. 12 Claims. (Cl. 88—24.)



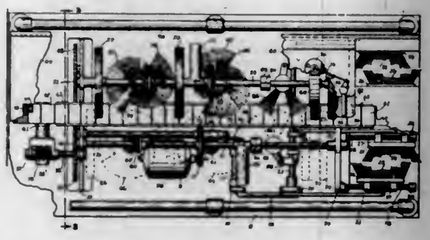
1. An optical printer comprising a single film moving member adapted to engage films in definite spaced relation, means for illuminating one film, and a lens to pass light from the illuminated film to the other film at right angles to said moving member and longitudinally of the axis of rotation thereof.

1,822,418. TWIN CRAFT. MARTIN PHILIP, San Diego, Calif. Filed May 26, 1930. Serial No. 455,566. 3 Claims. (Cl. 115—22.)



1. In a water craft of the class described, a pair of twin boat hulls, a vertical support rigidly secured to each hull, the one toward the bow and the other toward the stern, a similarly positioned horizontally pivoted support on each hull and horizontally offset, link means connecting said rigid supports with said pivoted supports, whereby said boat hulls are retained against movement in yaw, and in roll but permits limited relative vertical movement.

1,822,419. SHOE CLEANING AND POLISHING MACHINE. VINCENT RASCHELLA, Weehawken, N. J., assignor to American Shoe-Polishing Machine Corp., a Corporation of New Jersey. Filed Oct. 5, 1928. Serial No. 310,476. 5 Claims. (Cl. 15—34.)

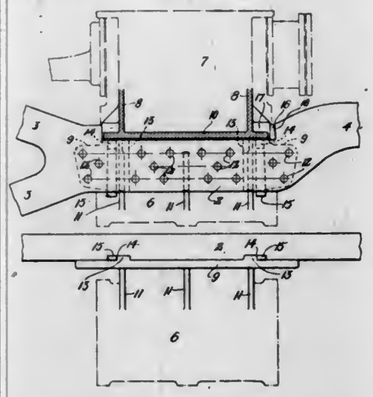


1. In a shoe cleaning and polishing machine, in which the shoes of the user are carried on a travelling conveyor,

the combination of a cover for the sides and ends of said machine, having displaceable sections forming a part of said cover normally closed and disposed over said conveyor substantially enclosing the shoe cleaning and polishing elements of said machine, and adapted to be opened as the user travels with the conveyor, said displaceable sections being flexible and reinforced by spring members forming a part thereof, and adapted to shield the garments of the user against soiling during the shoe cleaning operation.

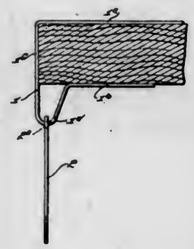
3. In a shoe cleaning and polishing machine, the combination of a traveling conveyor on which the shoes of the user are carried, a series of applicator and shining brushes operatively arranged along the sides of said conveyor, the applicator brushes and some of the shining brushes being mounted on horizontal axes, which are disposed substantially parallel to said travelling conveyor and the other shining brushes being mounted on vertical axes, and means to effect the simultaneous, operative, travelling movement of said conveyor and the operative movement of said brushes to perform the shoe polishing operation.

1,822,420. LOCOMOTIVE CONSTRUCTION. WILLIAM L. REID, Lima, Ohio. Filed Sept. 1, 1928. Serial No. 303,456. 6 Claims. (Cl. 105—44.)



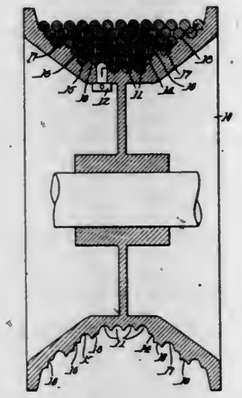
1. Locomotive construction including a main frame member, a cylinder structure having a vertical flange, said frame member being extended along the length of said cylinder and abutting said flange member, bolting means securing said flange against the side of said frame member, and keying means between said structure and said main frame member disposed intermediate the bolting means.

1,822,421. PRICE TAG AND HOLDER THEREFOR. WILLIAM S. RENCH, San Diego, Calif. Filed Aug. 28, 1928. Serial No. 302,531. 2 Claims. (Cl. 40—23.)



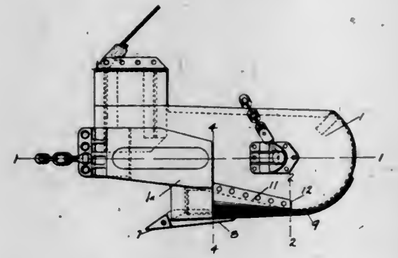
1. In a price tag holder, a flat strip forming a vertical portion securable against a display shelf, with its lower end extended downwardly, forming an open elongated loop portion below said shelf, and further extended against and along the lower side of said shelf, and a flat rectangular price tag with a slot in its main body portion secured by and depending from said loop portion.

1,822,422. WINDING DRUM. HERBERT LEONARD RICHARDSON, Worcester, Mass. Filed Sept. 5, 1929. Serial No. 390,599. 8 Claims. (Cl. 242—117.)



1. As an article of manufacture, a winding drum having grooves formed at the center thereof for the first layer of strands of the cable, and end walls of a general conical shape having grooves formed therein for receiving the end strands of the successive layers thereon, so that in each layer there are more strands than in the layer below.

1,822,423. EARTH HANDLING STRUCTURE. PHILIP T. ROBIN and CARL J. SCHELOSKE, Erie, Pa., assignors to G. H. Williams Company, Erie, Pa., a Corporation of Pennsylvania. Filed Dec. 28, 1929. Serial No. 417,204. 8 Claims. (Cl. 37—135.)

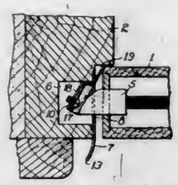


1. In an earth handling structure having a cutting edge, the combination of sides and a bottom forming a gore between their edges adjacent to and extending rearwardly from the cutting edge; and corner pieces inserted in the gores, said corner pieces having flanged edges overlapping the sides and bottom.

1,822,424. LATCH DEVICE. WILLIAM A. SCOTT, Pittsburgh, Pa., assignor to McKinney Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1928. Serial No. 314,655. 5 Claims. (Cl. 292—340.)

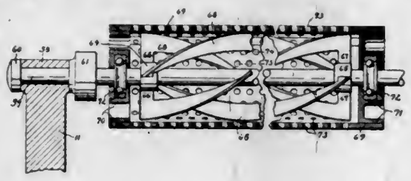
1. Latch structure, comprising a latch bolt strike plate having a latch bolt receiving opening therein, a flange

formed on one of the edges of said opening and extending generally at an angle to the vertical end face of the



door when the door is closed, and a guard plate rigidly secured to said flange and extending into the space between the door and door jamb.

1,822,425. MACHINE FOR AND METHOD OF SIZING TEXTILES. JOHN JOSEPH SUSSMUTH, Fort Lee, N. J. Filed July 22, 1929. Serial No. 380,115. 3 Claims. (Cl. 28—28.)

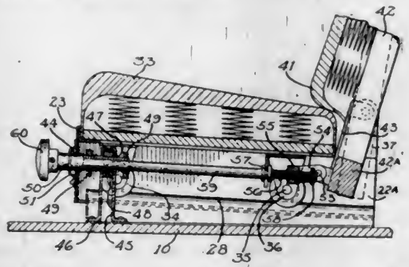


1. In a machine for sizing a warp, a frame, a perforated smooth tube over which said warp passes, rotatably supported upon said frame, said tube being closed at one, and open at the other end, and means sucking air into said tube from its open end.

1,822,426. COMPOSITION OF MATTER AND METHOD OF MAKING THE SAME. ELMER B. WELCH, McKeesport, Pa., assignor to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1929. Serial No. 395,746. 10 Claims. (Cl. 75—1.)

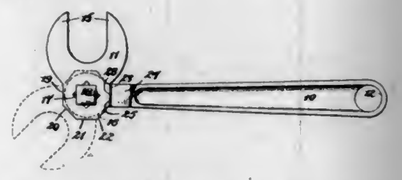
1. The method of making a composition of matter comprising coating finely divided particles of cobalt with copper and then with chromium, mixing the coated particles with finely divided tungsten carbide, and subjecting the mixture to heat and pressure.

1,822,427. VEHICLE SEAT ADJUSTER. LESLIE A. WENN and WILLIAM K. BISHOP, Binghamton, N. Y., assignors to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed Mar. 20, 1929. Serial No. 348,561. 10 Claims. (Cl. 155—14.)



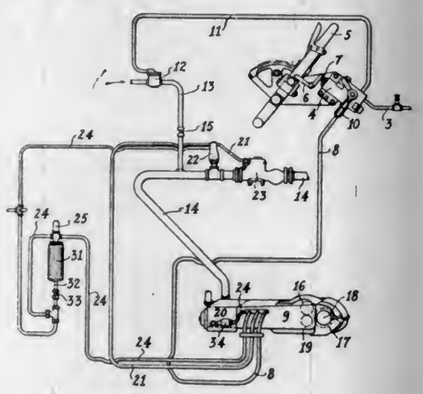
2. In a vehicle seat of the reclining type, the combination of a slidably mounted base frame comprising spaced complementary side-bars, a seat cushion supported upon said frame, fulcrum bracket means carried by each of the complementary bars, a reclinable back structure pivotally mounted between said brackets and providing for a pendant portion reaching below said cushion intermediate the seat ends, a stationary nut-like prop disposed beneath the seat cushion, a seat adjusting screw cooperating with said prop serving to bodily shift said frame, an auxiliary adjusting screw carried to travel in unison with said shiftable frame and adapted to actuate said pendant back portion for tilting purposes, and manipulative means for said auxiliary screw.

1,822,428. WRENCH. JOHN ZILLION, Orchard Park, N. Y. Filed Apr. 14, 1930. Serial No. 444,020. 1 Claim. (Cl. 81—58.)



A wrench comprising a handle having a laterally projecting shoulder at one side and at one end, said shoulder being formed to provide a perpendicular flat face facing the end of said handle, a square stem projecting outwardly from said handle in the same direction as said shoulder and arranged between said shoulder and the end of said handle and a wrench head having jaws and a shank, said shank being provided with a star-shaped opening formed of two superposed square openings, each being the size of said stem whereby said star-shaped opening receives said stem in different angular positions of said head relative to said handle and said head is held in the selected angular position thereby and said shank also being provided with five exterior faces arranged at a 135° angle to one another, one of said faces on said shank engaging the perpendicular face on said shoulder in each selected angular position of said head and additionally holding said head in the selected angular position.

1,822,429. LOCOMOTIVE BOOSTER CYLINDER COCK CONTROLLING MECHANISM. GEORGE H. ZOECK, Orange, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1930. Serial No. 488,730. 5 Claims. (Cl. 105—48.)



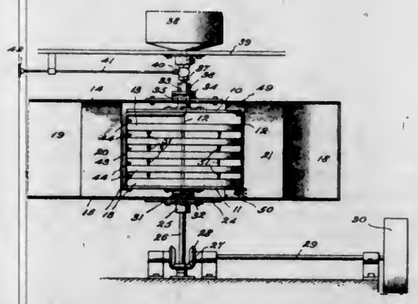
1. The combination of a locomotive booster motor, a cylinder cock, fluid pressure actuated means for controlling said cock, a fluid supply line; a timing reservoir connected to said line, a valve normally closing the fluid pressure supply line to the cock, and means for opening said valve when the pressure in the reservoir builds up to a predetermined point.

1,822,430. FRICTION CLUTCH BLOCK. WILLIAM A. BLUME, Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 3, 1929. Serial No. 352,246. 4 Claims. (Cl. 192—107.)



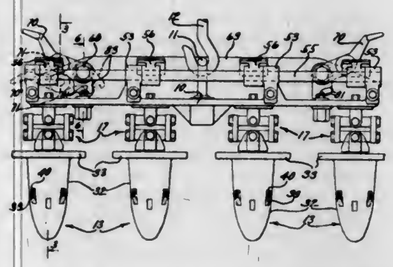
1. A friction clutch block comprising a body transversely tapered on one face thereof and having an elongated rigid insert seated in the opposite face of the body and provided with openings to receive the attaching devices.

1,822,431. NATURAL AIR DRIER. SEYMOUR W. BONSALL, Newark, N. J., assignor, by mesne assignments, to Eugene W. Small and Abraham Benedict, Trustees, New York, N. Y. Filed June 28, 1928. Serial No. 289,004. 14 Claims. (Cl. 159—16.)



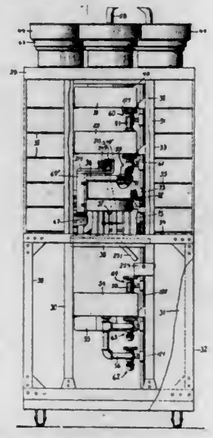
12. A natural air drier comprising at least one receptacle for matter to be dried, means for supporting said receptacle, a rotary casing enclosing said receptacle, and means carried by said rotating casing for directing at lease one current of air over the receptacle, said current of air rotating relatively to the receptacle.

1,822,432. ARTICLE HANDLING APPARATUS. WALTER R. BRADLEY, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,348. 8 Claims. (Cl. 294—87.)



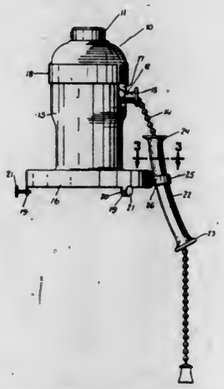
1. In an article handling apparatus, a hollow member for entering a bore of an article, an element movable in said member, pivotal means carried by said element operable to engage said member for controlling the movement of the element with respect to the member, jaws carried by the element movable through openings in the member for gripping the article within the bore thereof when the element is moved in a predetermined direction, and means for actuating said pivotal controlling means to permit said movement of the element.

1,822,433. BEVERAGE PREPARING AND DISPENSING MACHINE. HARRY RUSSELL BRAND, New York, N. Y. Filed May 11, 1928. Serial No. 277,087. 23 Claims. (Cl. 53—3.)



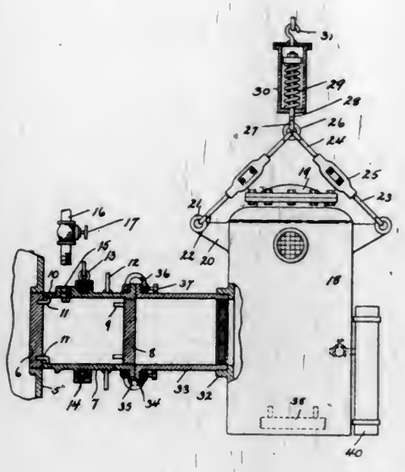
1. A beverage preparing and dispensing machine including mechanism for receiving a beverage-ordering impulse, elements called into action by operation of said mechanism for preparing a beverage, a dispensing device associated with said machine operable to dispense therefrom a measured quantity of beverage, and control mechanism insuring the dispensing only of beverage completely prepared in a predetermined manner.

1,822,434. ELECTRIC LIGHT SOCKET. WALTER T. BRUNTON, New York, N. Y., assignor of one-half to Paul Lessing, New York, N. Y. Filed Oct. 3, 1929. Serial No. 397,090. 8 Claims. (Cl. 240—123.)



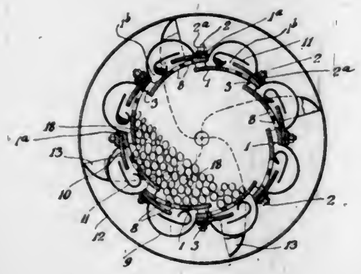
8. In combination with an electric pull chain socket, a shade holding ring mounted upon said socket, and a pull chain normally depending from said socket over the outside of said ring, a chain guide predeterminedly slidably accommodating said chain, disposed substantially in the direction in which said chain normally would depend from said outlet, mounted upon the periphery of said ring, and curved outwardly below said ring, so as to clear a shade which is mounted in said ring.

1,822,435. LIFE SAVING AND SALVAGE APPARATUS FOR SUBMARINES. GIOACHINO FACCHIN, College Point, Long Island, N. Y. Filed Oct. 9, 1929. Serial No. 398,478. 4 Claims. (Cl. 61—69.)



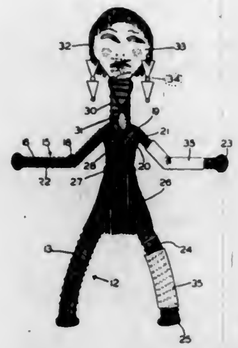
1. A life saving and salvage apparatus for submarines, in combination with a caisson, comprising a cylindrical body open at one end, a removable closure at its opposite end, and independent means in which said cylindrical body is substantially horizontally and freely rotatably suspended, means for simultaneously removing a manhole cover and attaching said open end in the opening of said manhole cover by rotation of said cylindrical body, a second cylindrical body connected at one end to the caisson and means for clamping the opposite ends of said cylindrical sections together.

1,822,436. GRINDING MILL. JOHAN S. FASTING, Valby, near Copenhagen, Denmark, assignor to F. I. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Feb. 15, 1930, Serial No. 428,640, and in Great Britain Sept. 24, 1929. 1 Claim. (Cl. 83—9.)



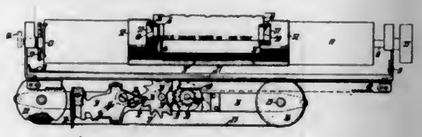
The combination in a tube mill of a shell formed with openings therethrough, grinding plates forming a grinding chamber and secured within the shell and overlapping the openings within the shell, openings being provided for the passage of ground material from the interior of the grinding chamber outwardly through the grinding plates and for the return of the material inwardly into the grinding chamber, screens secured to the shell and overlapping the openings therethrough, said screens permitting the finer material to pass through the same and serving to return the coarser material to the grinding chamber, and guide plates, one within each screen, to direct the material received through the openings of the grinding plates upon the leading portion of the screen.

1,822,437. DOLL. JANET G. FLEMING, Riverside, Calif. Filed Oct. 24, 1929. Serial No. 402,087. 5 Claims. (Cl. 46—40.)



1. In a doll having a frame structure with a torso formed of two blocks of substantially the same diameter, such blocks being connected by a helically coiled spring, such spring extending over the upper end of the lower block and the lower end of the upper block, the spring being at substantially the waist line of the finished doll.

1,822,438. TYPEWRITING MACHINE. FREDERICK A. GREIS, Lynbrook, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1928. Serial No. 309,947. 11 Claims. (Cl. 197—136.)

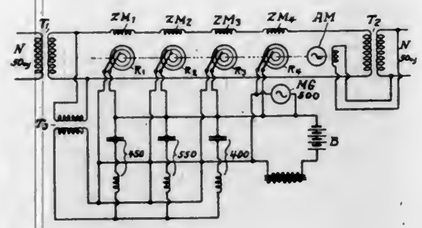


1. In a typewriting machine, the combination with a platen, a platen-carriage and a system of inverted types to strike upon the platen, of means for letter-feeding the carriage in reverse direction, and a gage on said carriage in front of the platen to gage the head edge of an inverted card in printing position.

1,822,439. ALTERNATING CURRENT SYSTEM. WALTER HAHNEMANN, Berlin-Marienfelde, Germany, and KARL RATH, New York, N. Y., assignors to C. Lorenz Aktien Gesellschaft, Berlin-Tempelhof, Germany. Original application filed Mar. 17, 1928, Serial No. 262,461, and in Germany Jan. 31, 1928. Divided and this application filed June 17, 1929. Serial No. 371,597. 8 Claims. (Cl. 171—97.)

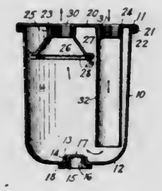
8. In combination with a network carrying currents of a predetermined frequency, means for introducing into said network a plurality of currents having frequencies different from said predetermined frequency, said means comprising a synchronous machine having an exciter circuit, a generator producing a current of a frequency differ-

ent from said predetermined frequency included in said exciter circuit whereby two split frequencies are superimposed upon said net-work, other exciter circuits for said



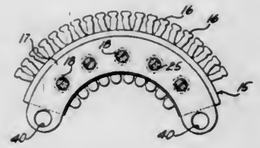
synchronous machine, and means for reintroducing currents of said split frequencies from said network into said other exciter circuits.

1,822,440. GASOLINE FILTER. HARRY JACOBSON, Brooklyn, N. Y. Filed May 17, 1928. Serial No. 278,380. 5 Claims. (Cl. 210—165.)



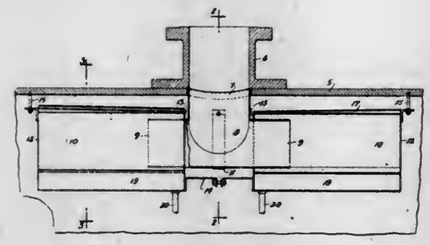
2. In an article of the character described, a permanently closed container including a comparatively thin cover, a one-piece, sheet metal, inverted funnel-shaped screen holder carried by said cover and extending into the container, and bent from thin material, an unthreaded inlet pipe carried by said cover and extending to a point near the bottom of said container, said cover having integral thin extensions of substantially the same thickness as the material of the cover and provided with internally threaded openings at said screen holder and said inlet pipe, for the removable reception of fittings on one face thereof, and for the unthreaded reception thereabout of the screen holder and inlet pipe respectively on the other side thereof.

1,822,441. ASSEMBLING APPARATUS. CHARLES OTTO KNUTI, Berwyn, and CHESTER ALLISON METZGER, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 9, 1929. Serial No. 345,721. 7 Claims. (Cl. 29—84.)



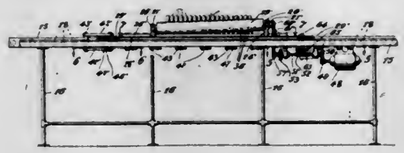
1. In an apparatus for assembling parts, means for retaining the parts, means cooperating therewith for compressing the parts, toggle means connected to the compressing means for actuating the compressing means, and a cam member for actuating the toggle means, said cam member having a plurality of similar lobes for effecting the actuation.

1,822,442. STEAM SEPARATOR. JOHN R. KRUSE, East Orange, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 8, 1929. Serial No. 338,362. 1 Claim. (Cl. 183—84.)



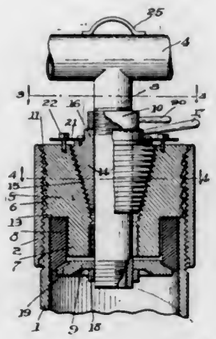
A steam separator comprising, in combination, a pair of spaced cylindrical separating chambers each having a tangential steam inlet, a tangential outlet for discharge of separated water, and an outlet for the cleaned steam; and a steam outlet member located between said chambers and receiving the cleaned steam therefrom, said tangential steam inlets being tapered with their narrower portions toward the outlet member.

1,822,443. BEAD FORMING DEVICE. YERVANT H. KURKJIAN, Hawthorne, N. J., assignor to Carl J. Schmid, Inc., New York, N. Y., a Corporation of New Jersey. Filed Feb. 7, 1929. Serial No. 338,246. 15 Claims. (Cl. 18—2.)



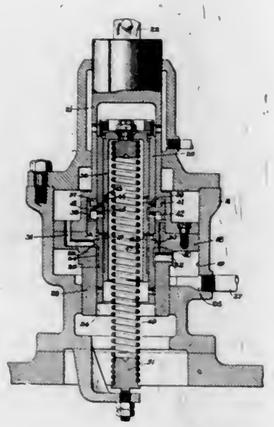
15. In a bead forming device, in combination, a movable platform, a plurality of extended revoluble formers carried by said platform, a run-way within which said platform is movable, a pinion carried by each said former, resilient racks carried by said run-way meshable with said pinions revolving said formers when said platform is moved within said run-way, fixed rack carried by said run-way meshable with said pinions revolving said formers when said platform is moved within said run-way, chain means for moving said platform, tension means for said chain, a revoluble inclined brush abuttable upon said formers during the passage of said platform through said run-way, means for revolving said brush, means for varying the height and inclination of said brush and means for fixing said brush in varying positions of height and inclination.

1,822,444. CEMENTING HEAD. JOHN W. MACCLATCHIE, Compton, Calif. Filed Jan. 20, 1930. Serial No. 421,919. 18 Claims. (Cl. 285—22.)



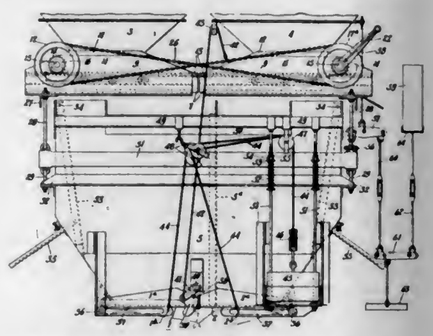
1. A head for casing comprising slips having a shoulder adapted to engage the casing for supporting the slips in the casing, the slips forming a tapering threaded bore, and a tapering threaded mandrel adapted to be screwed into said bore for radially expanding the slips into locking engagement with the casing.

1,822,445. FLUID PRESSURE RELAY. ROLAND MARSLAND, Moylan, and OZRO N. BRYANT, Moores, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1930. Serial No. 438,550. 3 Claims. (Cl. 264—14.)



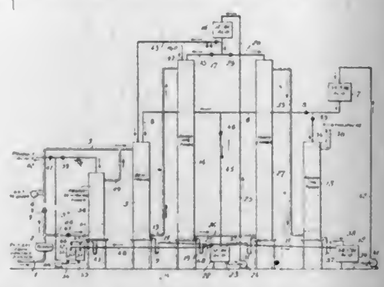
1. In a fluid pressure relay operating in response to a variable fluid pressure, the combination of a main operating piston and a cylinder therefor, a pilot valve controlling the application of fluid pressure to said piston, a piston carried by said pilot valve, a cylinder for the last-mentioned piston, said pilot valve being formed with a cylindrical bore therein, and a second pilot valve within said bore and controlling the application of fluid pressure to the piston carried by the first-mentioned pilot valve, the second pilot valve being subjected to the variable fluid pressure and movable upon variation therein.

1,822,446. MATERIAL MEASURING AND HANDLING APPARATUS. MARION G. MARTIN, Aspinwall, and FRED VOELKER, Jr., Pittsburgh, Pa., assignors to Blaw-Knox Company, a Corporation of New Jersey. Filed Sept. 13, 1928. Serial No. 305,718. 19 Claims. (Cl. 265—27.)



1. Material measuring and handling apparatus including a plurality of material supply devices, a gate for discharging material from each of them, an operating device, and means for clutching said device to any of the gates, together with a subjacent measuring hopper having a separate discharge means and operating device, said operating devices being located at the same side of the apparatus.

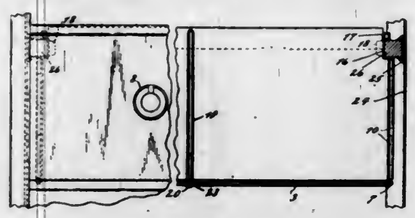
1,822,447. MANUFACTURE OF H_2SO_4 FROM WEAK SO_2 GAS. HENRY F. MERRIAM, West Orange, N. J., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1928. Serial No. 247,049. 11 Claims. (Cl. 23—168.)



1. The process of oxidizing weak sulfur dioxide gas to sulfuric acid which comprises contacting said gas with nitrosyl sulfuric acid of 58.3 to 58.7° Bé. strength and having an initial nitre content of 1.5 to .6%, then contacting said gas with nitrosyl sulfuric acid of a strength of 52 to 54° Bé. and having an initial nitre content of not less than .12% until the gas is free of SO_2, permitting the gaseous products of this treatment to remain mixed until the contained nitrous gases are substantially re-oxidized to absorbable compounds, and then contacting the gas with nitrosyl sulfuric acid of the same composition as that first named to absorb the oxidized nitrous gases.

1,822,448. FURNITURE. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed Jan. 20, 1928. Serial No. 248,101. 7 Claims. (Cl. 45—77.)

2. A knock-down drawer comprising a bottom, a side wall and another wall transverse thereto, both of said walls being hinged to said bottom, one of said walls having its upper edge bent to form a hollow reinforcement the ends of which form grooves and a projection extending rearward from the other wall in position to enter said grooves formed by said reinforcement.

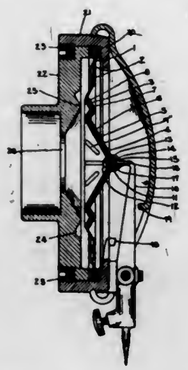


7. A drawer having a sheet metal side wall bent to form a supporting channel in the outer side of the upper portion thereof, and a hollow reinforcement formed along the upper edge of the wall by bending it inward and downward, the lower side of the said hollow reinforcement constituting the upper side of the said channel.

1,822,449. LUBRICATING AND SEALING FLUID. FREDERICK C. NONAMAKER, Gloucester City, N. J., assignor to Welsbach Company, Gloucester City, N. J., a Corporation of New Jersey. Filed Mar. 9, 1927. Serial No. 174,104. 2 Claims. (Cl. 87—9.)

1. In a lubricating compound, a lubricating body comprising glycerol and glycol having sodium thiosulphate in solution therein effective for reducing oxidation.

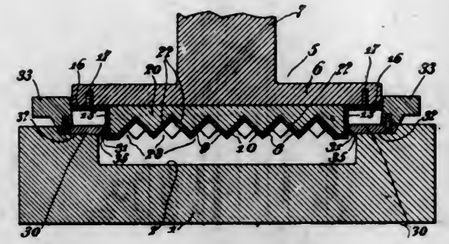
1,822,450. SOUND REPRODUCING DEVICE. MARTIN NYSTROM, Chicago, Ill., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Apr. 10, 1926. Serial No. 101,185. 5 Claims. (Cl. 181—32.)



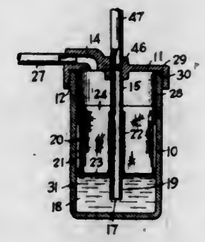
1. A thin diaphragm having a conical center surrounded by an annular deformation the walls of which are oppositely inclined and a relatively narrow outer portion deformed to facilitate flexure thereof and permit the center to move as a piston.

1,822,451. MOLD FOR MOLDING CENTRAL TRIPLE REFLECTORS. VICTOR L. OESTNAES, Westfield, N. J., assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 11, 1927. Serial No. 198,070. 5 Claims. (Cl. 49—72.)

1. A mold for molding masses of glass into plates, one side of which is provided with trihedral projections to produce triple reflectors, which mold comprises a member including a support, a composite metal sheet secured to and mounted upon said support, the said metal sheet being formed to produce upon its outer side matrices of triangular pyramidal shape, means for connecting said metal sheet to said support, and cushioning means interposed between said plate and the said support.



1,822,452. FILTER. HENRY E. PELLETIER, Jersey City, N. J., assignor to Pelco Auto Products, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 9, 1925. Serial No. 7,742. 10 Claims. (Cl. 210—165.)



6. In a filter, a quantity of water for filtering gasoline, and a screen floating in said water and vertically movable thereby for screening said gasoline and for excluding said water from the interior thereof, and extending across the interior of said filter, and means for guiding said screen in the movement thereof.

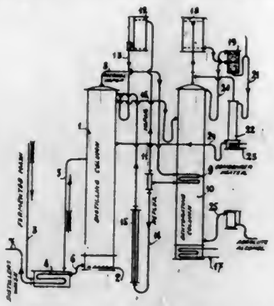
1,822,453. PRINTING OF FABRICS CONTAINING ORGANIC DERIVATIVES OF CELLULOSE. HERBERT PLATT, Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Nov. 2, 1927. Serial No. 230,682. 19 Claims. (Cl. 8—5.)

1. Process of printing fabrics containing organic derivatives of cellulose which comprises treating the fabric with a heated solution containing basic aluminum acetate and then subjecting the fabric to a printing operation.

1,822,454. PROCESS AND APPARATUS FOR THE SIMULTANEOUS DISTILLATION, PURIFYING, AND DEHYDRATION OF ALCOHOL OBTAINED FROM FERMENTED MASH. ELOI RICARD, PAUL SAVARIT, and HENRI MARTIN GUINET, Melle, France, assignors, by mesne assignments, to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed Apr. 16, 1928, Serial No. 270,337, and in France Apr. 21, 1927. 10 Claims. (Cl. 202—72.)

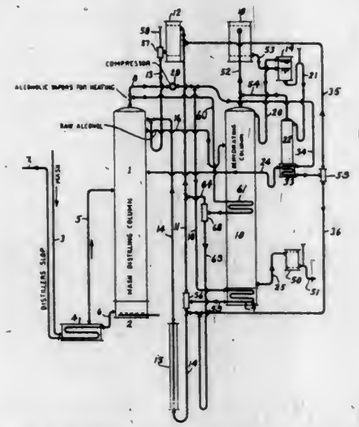
1. A continuous process for the manufacture of absolute alcohol from dilute aqueous alcohol, which comprises

distilling the dilute aqueous alcohol in one apparatus, and dehydrating the alcohol thus obtained in another apparatus, and heating the dehydration apparatus by circulating



alcoholic vapors from the first distilling apparatus so that they condense in indirect heat-exchange relation with the contents of the dehydrating apparatus and return to the first distilling apparatus.

1,822,455. PROCESS FOR THE SIMULTANEOUS DISTILLATION, PURIFYING, AND DEHYDRATION OF ALCOHOL OBTAINED FROM FERMENTED MASH. ELOI RICARD, PAUL SAVARIT, and HENRI MARTIN GUINOT, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed Mar. 28, 1929, Serial No. 350,809, and in France Apr. 3, 1928. 5 Claims. (Cl. 202—75.)



1. In the manufacture of absolute alcohol from fermented mashes containing aqueous alcohol, wherein the mash is distilled in a distilling column and the alcohol thus obtained is conducted to a dehydrating column where it is dehydrated by the azeotropic method, and wherein alcoholic vapors issuing from said distilling column are conducted into the dehydrating column and are there caused to surrender sensible and latent heat in a manner to provide indirect surface heating in said column, the liquid resulting from the condensation of the vapors being returned to the distilling column, the step which comprises compressing such vapors after they leave the distilling column in order to increase their temperature and their heating effect in the dehydrating column.

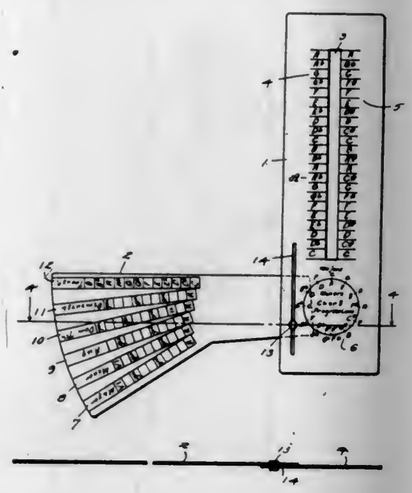
1,822,456. ELECTRICAL VAPORIZER. JOSEPH ROBINSON, New York, N. Y., assignor of one-fourth to Roy M. Wolvin, New York, N. Y. Filed June 2, 1928. Serial No. 282,359. 1 Claim. (Cl. 128—192.)

In a device of the class described, a cylindrical hollow handle containing an enlarged upper end, a suitable electric heating element and switch mounted in said handle with the heating element adjacent said upper end, a thin metallic cap slipped over said upper end, the upper face of the cap being concave, a hollow perforated hood slipped over said cap and removably mounted thereon and having vents



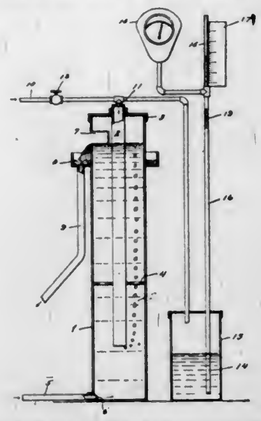
formed in the sides thereof, a chamber or magazine at one side of said hood, the chamber having a small outlet traveling in the direction of the concave upper face of said cap and positioned adjacent thereto, and a part in said chamber for forcing a predetermined amount of said medicament onto said cap for vaporization.

1,822,457. HARMONY CALCULATOR. KENNETH FERGUSON-ROBERTS, Oakland, Calif. Filed July 15, 1930. Serial No. 468,179. 3 Claims. (Cl. 84—473.)



1. A harmony calculator, comprising a front plate having a slot, a chromatic scale with semi-tones indicated in flats and a chromatic scale with semi-tones indicated in sharps on the face of the plate on opposite sides of and parallel to the slot, a rear plate having a series of chord charts each consisting of a line of characters, and means for pivotally and slidably connecting the plates so that they may be arranged to position one of the charts opposite said slots and one of the characters of such chart opposite that character of said first scale corresponding to the root note of the chord.

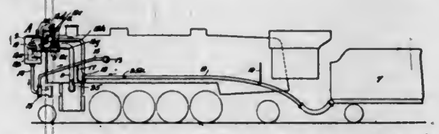
1,822,458. MEASURING APPARATUS. DAVIDGE H. ROWLAND, Baltimore, and JOHN CULLEN ROBERTSON, Annapolis, Md., assignors to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed July 13, 1926. Serial No. 122,121. 7 Claims. (Cl. 265—44.)



2. In an apparatus of the character described, the combination of a conduit adapted to have a column of fluent material of constant height passed therethrough at constant velocity, means for applying pneumatic pressure upon a portion of the area of the column whereby the pressure will be directly proportional to the density of the column, and means for visually indicating variations of pressure.

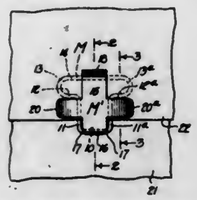
3. The method of determining the density of a constantly moving column of constant length under constant pressure, consisting in opposing pneumatic pressure to the movement of the column, and measuring any variations in the pressure.

1,822,459. FEED WATER HEATER. EUGENE L. SCHELLENS, Milburn, N. J., and CHRISTOPHER A. SCHELLENS, Marblehead, Mass., assignors to C-S Engineering Company, Jersey City, N. J., a Corporation of Delaware. Filed June 11, 1926. Serial No. 115,225. 17 Claims. (Cl. 122—442.)



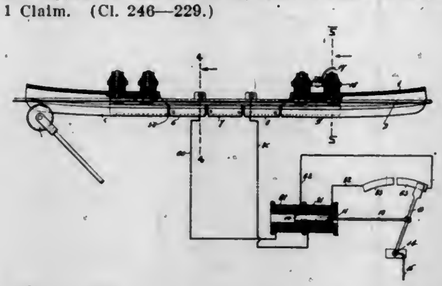
1. In a feed water heater system for boilers, a heater and a source of water supply, means for delivering steam to the heater, a boiler supply pumping means delivering from heater to boiler, and a heater supply pumping means, one of said pumping means being actuated by pressure of the water discharge of the other.

1,822,460. CLASP. WILLIAM P. SPRAGUE, Los Angeles, Calif. Filed Feb. 14, 1931. Serial No. 515,832. 4 Claims. (Cl. 24—248.)



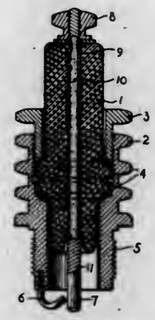
1. A clasp of the character described comprising two members, means on one end of the members for hingedly connecting the latter to occupy a closed position and an open position to permit the insertion of a piece of material between the members, means on the free ends of the members co-acting to clamp the material between the members and to latch the latter closed, and means projecting laterally from opposite sides of the members intermediate their ends, co-acting to clamp the material when the members are latched closed.

1,822,461. CIRCUIT CLOSER. CHARLES W. SQUIRES, Beverly, Mass. Filed June 15, 1927. Serial No. 199,093. 1 Claim. (Cl. 246—229.)



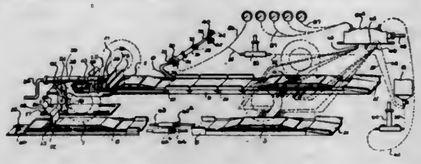
In a trolley system, in combination, a contactor carrying a plurality of contacts adapted to be engaged by the trolley wheel, a switch mechanism and electrical connectors between said switch mechanism and said contactors, whereby when one of said contacts is energized said switch will be thrown to break the connection between the switch mechanism and said contact and to make connection between said mechanism and another of said contacts.

1,822,462. SPARK PLUG. ELBRIDGE WEBSTER STEVENS, Baltimore, Md. Filed Jan. 28, 1931. Serial No. 511,883. 5 Claims. (Cl. 123—169.)



1. A spark plug comprising a metal collar, a glass insulating core, and an electrode passing thru the glass comprising a copper tube having compressed and densified therein magnesium oxide.

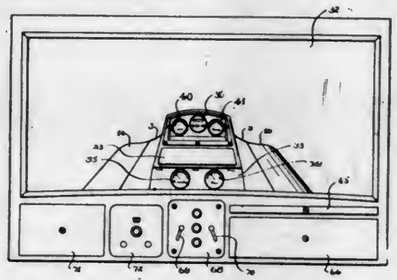
1,822,463. METHOD AND MACHINE FOR TESTING BRAKES OF VEHICLES. GEORGE H. TABER, Binghamton, N. Y. Filed Apr. 18, 1928. Serial No. 271,031. 6 Claims. (Cl. 265—47.)



5. A machine for testing brakes of vehicles comprising means for holding the vehicle against movement, a plu-

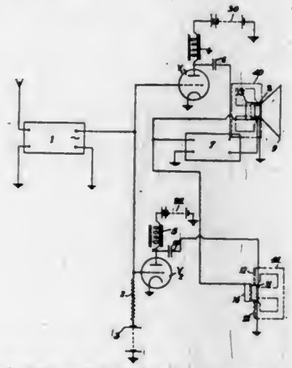
rality of movable members for engaging the wheels respectively held by the braking mechanism of a vehicle, fluid operated devices each for moving one of said members, force pumps each for moving one of said fluid operated devices, and a common operating means for said force pumps.

1,822,464. MOTOR VEHICLE. GEORGE H. TABER, Binghamton, N. Y. Filed Aug. 11, 1928. Serial No. 299,050. 16 Claims. (Cl. 180—1.)



1. In a motor vehicle, the combination with a cowl and a radiator, of a connecting member extending between the cowl and the radiator, and a speedometer mounted on said connecting member.

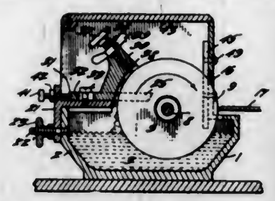
1,822,465. ELECTRICAL VIBRATORY DEVICE SUCH, FOR EXAMPLE, AS A LOUD SPEAKER. MAURICE TROUTON, Cuddington, England, assignor to Wireless Music Limited, a Company of Great Britain. Filed Aug. 7, 1929, Serial No. 384,212, and in Great Britain Aug. 10, 1928. 4 Claims. (Cl. 179—1.)



1. An electro-mechanical vibratory system comprising a first circuit adapted to be energized from a source of electrical oscillations, a device for converting electrical oscillatory energy into mechanical vibratory energy, a second circuit associated electrically with said first circuit and with said device, means for preventing feed back of electrical oscillatory energy from said second circuit to said first circuit, means for deriving corrective electrical oscillations corresponding substantially to the difference between the wave forms of said mechanical vibratory energy and the electrical oscillations in said first circuit, and means for applying said corrective oscillations to said second circuit.

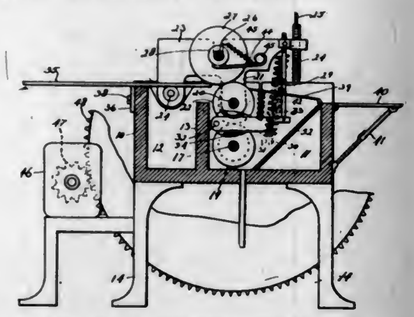
1,822,466. ADHESIVE SUPPLYING MECHANISM. CÉSAR LEANDRO VALDÉS VALDÉS, Habana, Cuba. Filed Sept. 4, 1928. Serial No. 303,835. 2 Claims. (Cl. 131—39.)

1. A mechanism for supplying an adhesive to cigarette paper during the manufacture of cigarettes, comprising a reservoir containing an adhesive, a cylinder mounted for rotation partly immersed in the adhesive, means for turning the cylinder, adjustable means for cleaning the sides of the cylinder of the adhesive, a plate mounted for sliding movement between the side walls of the reservoir, a bracket adjustably mounted on the plate, the face of said



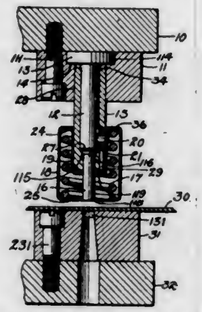
bracket having a longitudinal groove therein, the said face contacting with the periphery of the cylinder and cleaning said periphery of the adhesive except the small amount passing through the groove, means for adjusting the depth of the groove, and a conveyor to receive the adhesive from the cylinder.

1,822,467. LABEL PASTING MACHINE. MARIO VOLI, Philadelphia, Pa. Filed June 16, 1927. Serial No. 199,214. 2 Claims. (Cl. 91—50.)



1. A label pasting machine comprising a tank, two frames pivoted at their forward ends to the upper forward portion of the tank, means to selectively limit the downward movement of said frames, hangers depending from said frames, a coating roll journalled in said hangers, a presser roll journalled in the frames and coacting with the coating roll, a dipping roll journalled within the tank for coaction with the coating roll, and means to transmit motion to the several rolls.

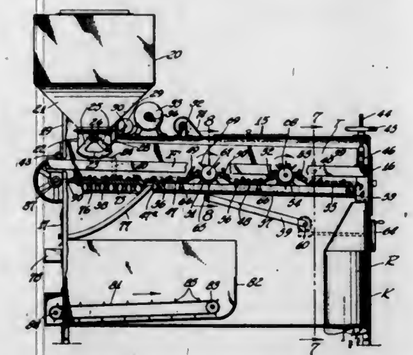
1,822,468. PUNCH MOUNTING, STRIPPING, AND LUBRICATING MEANS FOR STAMPING PRESSES. GEORGE F. WALES, Kenmore, N. Y. Filed Sept. 20, 1928. Serial No. 307,111. 10 Claims. (Cl. 164—110.)



1. A stamping press comprising a punch holder, a punch shoe detachably connected with said holder and

provided with an opening having a narrow lower part and an enlarged upper part, a punch abutment having a lower narrow stem arranged in the lower narrow part of said opening and an upper enlarged head arranged between the enlarged upper part of said opening and said holder, a punch having a head and engaging the lower end of said stem, a centering sleeve which receives the adjacent end portions of said abutment and punch and which has its upper part arranged in the narrow part of said opening and provided in its lower part with an upwardly facing shoulder engaging the underside of said head on the punch and a spring resistance arranged adjacent to said punch and adapted to bear yieldingly against the workpiece and strip the latter from the punch.

1,822,469. SEPARATION APPARATUS FOR FOOD REMNANTS. RALF E. WEBER, Oakland, Calif., assignor to Arthur U. Magnan, Los Angeles, Calif. Filed Jan. 26, 1928. Serial No. 249,672. 19 Claims. (Cl. 209—12.)

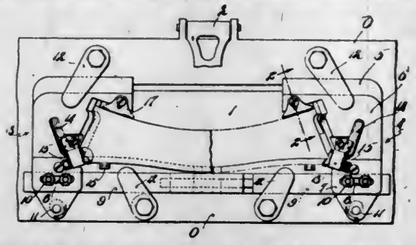


1. An apparatus of the character described comprising a table mounted for vibratory movement and having a food remnant receiving portion and a food remnant discharging portion, means for inclining the table downwardly to its discharging portion, means for vibrating the table to cause food remnants and unrelated matters delivered to the receiving portion to gravitate toward the discharging portion, and means for restraining metal particles against gravitational feeding movement downwardly of the table yet permitting said feed of the food remnants, whereby the metal particles are separated from the food remnants.

3. An apparatus of the character described comprising a table mounted for vibratory movement and having a food remnant receiving portion and a food remnant discharging portion, means for inclining the table downwardly to its discharging portion, means for vibrating the table to cause food remnants and unrelated matters delivered to the receiving portion to gravitate toward the discharging portion, screening means on the table for separating out the small particles of food remnants and the small unrelated particles, and means below the screening means for receiving and separating the food particles from the unrelated particles and finally discharging the former free of the latter.

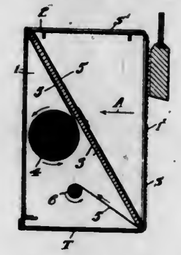
1,822,470. FOLDING MACHINE. THOMAS J. ABBOTT. Troy, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed Dec. 8, 1925. Serial No. 74,030. 6 Claims. (Cl. 223—55.)

1. A folding machine for making mortise-lock folds having a primary fold at a corner of the article and curved secondary folds along at least one of the edges meeting at the corner, the machine having a bed, a presser movable toward and from the bed, means for making a primary fold at the corner of the article, and folder plates movable over the bed to form the secondary folds, abutments



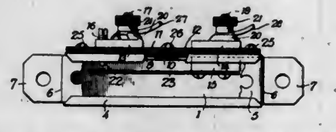
on the said plates for positioning the article, and a ledge on one of said folder plates for distributing the fullness along one of the curved secondary folds.

1,822,471. DUST ARRESTING VENTILATOR. CHARLES R. C. BORDEN, Brookline, Mass. Filed Apr. 6, 1928. Serial No. 267 838. 4 Claims. (Cl. 183—75.)



4. A window ventilator including a casing adapted to be disposed at a window opening and having an air passage therethrough, a deflector member disposed transversely of the window and at an angle to the intake of the passage, and a sheet pack comprising a plurality of successively removable sheets supported on said deflector and each having a surface of tackiness retentive of dirt particles impinged thereon by the incoming air draft.

1,822,472. THERMOSTATIC CIRCUIT CLOSER. GEORGE H. BRADY, Baltimore, Md., assignor to Improved Fire Detection Corporation, Baltimore, Md. Filed Feb. 18, 1929. Serial No. 340,892. 6 Claims. (Cl. 200—138.)

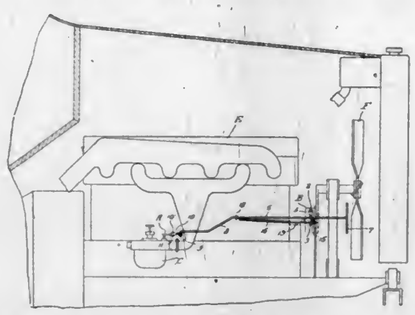


1. A circuit closer embodying a casing having a slotted wall, a bimetallic circuit closing strip disposed upon the interior of the casing, a pair of binding posts one of which is connected to one end of the strip, a contact adapted to be engaged by the other end of the strip to close a circuit including the same and the binding posts, the said binding posts being arranged exteriorly of the casing and the first-named post and contact extending through the slotted wall of the casing, and an insulating support on the exterior of the casing carrying the circuit closing strip, binding posts and contact and forming with said posts a thermostatic switch unitarily applicable to and removable from the casing.

1,822,473. ENGINE GOVERNOR. ALBERT BRANDL and CARL F. WEGNER, Wausa, Nebr. Filed May 28, 1930. Serial No. 456,750. 2 Claims. (Cl. 123—108.)

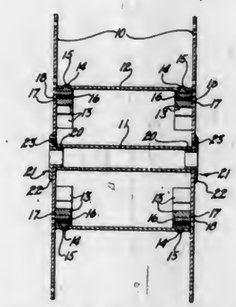
1. An engine governor including in combination with the carbureter of an internal combustion engine, a control

rod constrained to slide in a horizontal plane, said rod at one end being offset and at said offset end being provided with a downwardly depending extension, and a plate adapted to be secured to the crank handle of the throttle



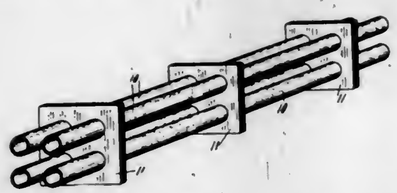
valve of the carbureter, and at one end provided with an aperture for accommodating said depending extension, said plate at its free end having a portion thereof bent downwardly to provide an ear contacting laterally with said crank arm.

1,822,474. REEL. ARTHUR ALFRED BUREAU, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 28, 1927, Serial No. 171,441. Renewed Apr. 17, 1930. 5 Claims. (Cl. 242—77.)



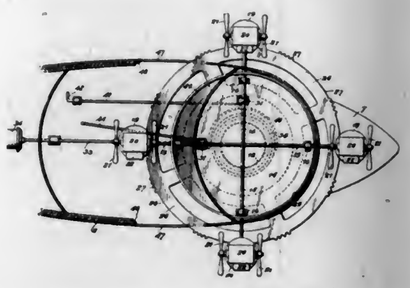
1. A reel comprising a pair of heads, a member positioned therebetween and abutting at either end the inner surfaces of the heads, and a plurality of separate and individual means positioned in spaced relation in the inner angle formed by the abutting surfaces of the heads and said member and secured to the adjacent surfaces of the heads and of said member for uniting the several elements into an assembled reel.

1,822,475. MULTIPLE CONDUIT. EDMUND BURKE, Portland, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Jan. 13, 1927. Serial No. 160,866. 3 Claims. (Cl. 247—32.)



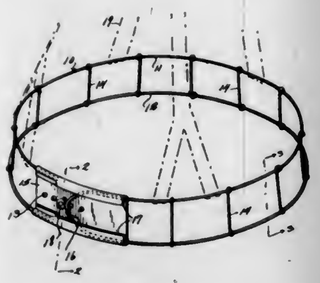
3. A multiple conduit section comprising a plurality of sections of individual pulp conduit in side-by-side relation, collars engaging and supporting said individual sections, said collars each comprising a thick pulp sheet having perforations receiving individual sections with a driving fit, and a waterproofing saturant continuously permeating the entire assembled structure.

1,822,476. AIRCRAFT. LOUIS ALEXANDRE CADORET, Pawtucket, R. I. Filed May 12, 1930. Serial No. 451,674. 16 Claims. (Cl. 244—25.)



1. In an aircraft having a windshield, a plurality of propeller-driving motors, part of said plurality being disposed externally of said shield for craft-propulsion and the remainder of said plurality being disposed at the inner side of said shield in position to receive attention, individual supports carrying said motors, master supporting means upon which said individual supports are mounted on vertical axes, means for moving said master supporting means to move at least one of said motors from the exterior of said shield to the inner side of the latter and to simultaneously move another of said motors from said inner side of the shield to said exterior thereof, and means for turning said individual supports about their vertical axes to properly set the active motors for craft-propulsion after moving said master supporting means.

1,822,477. TROUSER SUPPORT. SHERMAN L. CAPLE, Sheridan, Wyo. Filed Nov. 29, 1930. Serial No. 499,084. 2 Claims. (Cl. 241—9.)

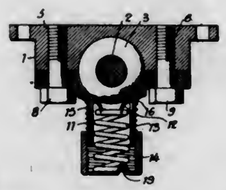


1. A clothing support of the character described, comprising a split looped frame structure adapted to encircle the body of the wearer, a plate secured to one end of the frame, guide means carried by the plate whereby to frictionally receive the opposite end of the frame, said frame comprising an upper resilient frame member, a lower resilient frame member, said lower frame member being relatively larger in circumference than said upper frame member, and a plurality of circumferentially spaced connecting members connecting said upper and lower frame members together whereby to provide a downwardly and outwardly inclined circumferential groove for receiving one end of an article of clothing.

1,822,478. PATTERNED AXMINSTER FABRICS AND METHOD OF MAKING THE SAME. WILLIAM HILL COOPER, Amsterdam, N. Y., assignor, by mesne assignments, to Bigelow-Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed June 27, 1928. Serial No. 288,810. 6 Claims. (Cl. 139—399.)

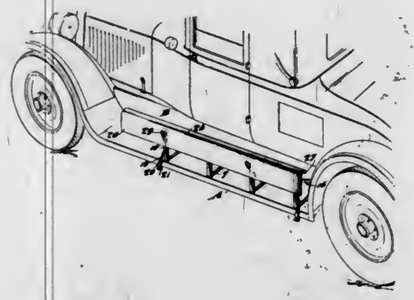
1. In a method of making patterned Axminster fabrics the steps which consist in "wiping-in" the yarn from each spool successively a plurality of times in a unit of fabric advance or take-up, and beating each repeat of the pattern line between each "wiping-in" operation an increased amount to maintain a symmetrical pattern.

1,822,479. BEARING ANTIRATTLER. LEO EDELMANN, Chicago, Ill., assignor to E. Edelmann & Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 15, 1928. Serial No. 261,850. 3 Claims. (Cl. 287—87.)



1. With a bearing member adapted to receive a bearing ball and having a threaded sleeve extending therefrom laterally, a ball seat fitted within the sleeve, a spring bearing against said ball seat to hold the same against the bearing ball and secured against rotation within the sleeve, and a threaded cap turned onto said sleeve to urge the spring against the ball seat and provided with projections and said spring having a portion extending as a pawl to engage with said projections to hold the cap against casual turning.

1,822,480. LUGGAGE CARRIER. LEO EDELMANN and HAROLD W. EDEN, Chicago, Ill., assignors to E. Edelmann & Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1928. Serial No. 329,561. 3 Claims. (Cl. 224—29.)



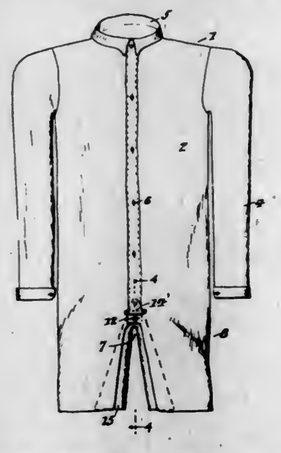
1. A luggage carrier comprising brackets mounted at the point of connection between the splash apron and running board of an automobile, a collapsible rack structure mounted on said brackets to be folded in to lie adjacent the splash apron when not in use and to be extended to rest upon and rise above the running board when in use, a shield to be interchangeably fitted to cover the rack when folded and to be fitted to extend beyond one end and increase the length of the rack when opened for use, and means carried by said shield to detachably mount the same so that it is rigidly held in each of its positions of use.

1,822,481. PROTECTING MEANS FOR FRANGIBLE FLOATS. LEO EDELMANN, Chciago, Ill., assignor to E. Edelmann & Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1929. Serial No. 338,828. 5 Claims. (Cl. 265—45.)



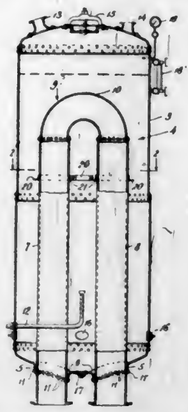
3. A protecting means for float elements comprising a sleeve of elastic cushion material having the body thereof constricted adjacent each end and terminating in an outstanding flange at each end, said sleeve being adapted to be fitted over the float bulb of a hydrometer element with the constricted portions thereof engaging over the end portions of said bulb to hold the sleeve against endwise displacement and one flange projecting to give increased cushioning thickness at the weighted end of the hydrometer element.

1,822,482. COMBINATION SHIRT AND DRAWERS. HYMAN GUSSAK, New York, N. Y. Filed July 9, 1930. Serial No. 466,800. 6 Claims. (Cl. 2—77.)



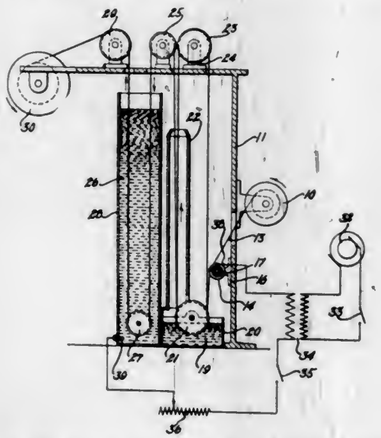
1. A combination shirt and drawers comprising a shirt including a back, and a front, the drawers including front portions forming continuations of the lower portions of the front of the shirt, a back portion forming a continuation of the back of the shirt, and a portion extending forwardly from the back to form inner side portions for legs of the drawers and a crotch portion, the said crotch portion having its front end extending upwardly and releasably secured to the front of the shirt, and tongues overlapping the front end of the crotch portion transversely thereof and secured to each other.

1,822,483. WASTE HEAT BOILER. ANDREW M. HARKNESS, Nyack, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Aug. 24, 1927. Serial No. 215,027. 1 Claim. (Cl. 257—221.)



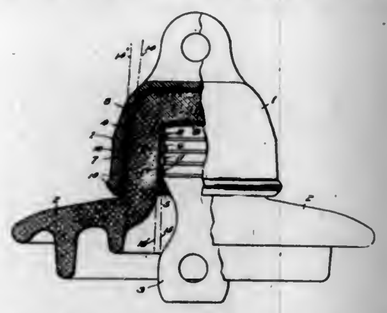
A waste heat boiler for cooling hot dust-laden gases in the contact process of making sulfuric anhydride comprising an enclosing shell adapted to contain water and steam under pressure, said shell having opposing end walls, a plurality of U-shaped gas conduits projecting into said shell through an end wall and attached thereto, and free from the end wall of the shell most remote from the point of attachment of the conduits, said conduits being entirely below the water level in said shell and having an inner contour such as to operate in conjunction with the gas currents passing therethrough against the deposition of substantial amounts of dust on the inner portions of said conduits within the shell, a steam outlet associated with the shell above the liquid level therein, and means including bracing elements loosely engaging the conduits and attached to the shell for maintaining said conduits in substantially the position in which they are secured to said shell.

1,822,484. METHOD OF COATING ELECTRICAL CONDUCTORS. RALPH CLAYTON HARTSOUGH, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1926, Serial No. 155,164. Renewed Feb. 18, 1931. 7 Claims. (Cl. 91—70.)



1. The method of insulating an electrical conductor, which consists in coating the conductor, and then making a direct contact with the conductor through the coating thereof with an electrically conducting liquid electrode to connect the conductor with a source of electrical current supply, thereby heating the conductor to bake the coating.

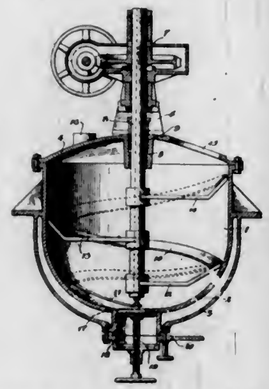
1,822,485. INSULATOR. KENT A. HAWLEY, Victor, N. Y., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed July 15, 1924. Serial No. 726,153. 5 Claims. (Cl. 173—318.)



1. An insulator comprising a dielectric member, a load receiving member in spaced relation to said dielectric member, and a body of material interposed between said members and serving to transmit stress from one to the other, the said load receiving member having a working surface whose distance from said dielectric member at a given point as measured in a direction normal to said working surface is approximately proportional to the sine of the angle subtended between the axis of said load receiving member and the direction of said working surface at said point.

3. An insulator comprising a dielectric member, a load receiving bolt in spaced relation to said dielectric member, and a body of cementitious material interposed between said bolt and said dielectric member and serving to transmit stress from one to the other; said bolt being provided with a plurality of working surfaces for imparting compressive force to said material, and each of said working surfaces being convexly curved and spherical throughout the area thereof by which compressive force is communicated to said material.

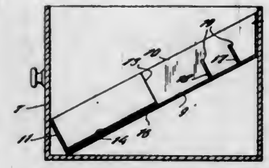
1,822,486. DRIER. CLARK C. HERITAGE, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 19, 1926. Serial No. 89,317. 7 Claims. (Cl. 34—9.)



1. In an apparatus for drying wet or moist material by the removal of liquid therefrom with the aid of heat,

the combination of a vertical cylindrical wall, means for heating said wall to a drying temperature, means for elevating material to be dried into contact with said wall, and means for removing vapors formed in the drying of said material.

1,822,487. INSTRUMENT TRAY. REMMEL H. HILL, Columbia, Mo. Filed Nov. 1, 1929. Serial No. 404,038. 3 Claims. (Cl. 206—72.)



1. In a structure of the class described, in combination, a drawer, a relatively shallow tray arranged in said drawer, and comprising a bottom, end walls, a front wall, and a rear wall, said rear wall being disposed at an approximate obtuse angle with respect to the bottom and being intended to bear against the inner surface of the back wall of the drawer in order to hold the tray in a forwardly and downwardly inclined position, and means in said tray for retaining said instruments separated and readily accessible and removable.

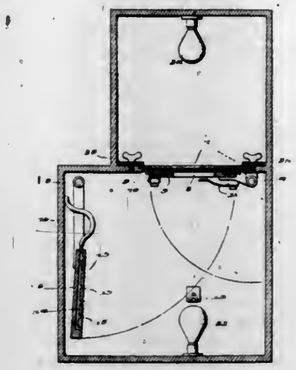
1,822,488. KNITTED HAT AND PROCESS FOR MAKING THE SAME. ELMER N. JOHA, Wauwatosa, Wis., assignor to Reliable Knitting Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 28, 1931. Serial No. 540,536. 10 Claims. (Cl. 2—201.)



1. The method of forming knitted hats consisting in knitting a tube continuously, severing the tube into sections, folding an intermediate portion of each section upon itself to form a double walled band, folding one end portion of the section upon itself, and stretching it laterally to form a brim, gathering and shaping the other end portion to form a crown and dampening and pressing the brim portion while stretching it laterally.

3. A knitted hat having a crown and a double walled brim formed integrally and having, at the junction of the crown and brim, a double walled knitted band on one side and a knitted cylindrical band on the other side, said double walled band and knitted cylindrical band comprising integral extensions of the respective brim walls.

1,822,489. REGISTERING DEVICE. CLARENCE W. KANOLT, New York, N. Y. Filed June 21, 1929. Serial No. 372,738. 16 Claims. (Cl. 95—73.)



1. The process of making changeable pictures including forming ridges on a face of a sheet of material, coating the opposite side with photographically sensitive material, and printing from a negative directly on the sensitized surface.

1,822,490. ACRIDINE DYES AND PROCESS OF MAKING SAME. LUCAS P. KYRIDES, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 25, 1924. Serial No. 734,134. 12 Claims. (Cl. 260—36.)

1. The process of producing coloring matters of the acridine series which comprises subjecting the products obtainable by the action of aliphatic monaldehydes which contain at least two carbon atoms on amino acridines in the presence of mineral acids to the action of zinc in the presence of acids.

1,822,491. SAFETY BRAKE FOR AUTOMOBILES. FRANK C. LAMB, Los Angeles, Calif. Filed Mar. 28, 1929. Serial No. 350,462. 4 Claims. (Cl. 192—4.)



1. The combination with an automobile transmission gearing and its low and reverse sliding gear, a loosely mounted ring gear, the width of which is such that its teeth are in engagement with the low and reverse gear while the same is in neutral position and while enmeshed with the low gear on the counter gear shaft of the transmission, a disc within the ring gear, overrunning clutch members between the ring gear and disc, a shaft on which said disc is mounted, an arm secured to one end of said shaft and yielding pressure means arranged on opposite sides of the free end of said arm.

1,822,492. CARD DISPLAY. FRANKLIN LAMB, New York, N. Y., assignor to Card Display, Inc., a Corporation of New York. Filed Apr. 26, 1929. Serial No. 358,248. 4 Claims. (Cl. 40—148.)



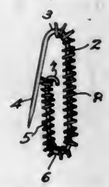
1. A display device including a pedestal and an open frame supported in upright position thereon, said frame having a slot in its top through which a pair of sign cards may be inserted and being internally channeled for the reception of the cards, in combination with a decorative cap piece of greater length than the slot resting at its ends upon the top of the frame and including a pendant tongue adapted to enter the slot and retain the cap piece in applied position, said tongue being disposed between said cards.

1,822,493. CARD DISPLAY. FRANKLIN LAMB, New York. N. Y., assignor to Card Display, Inc., a Corporation of New York. Filed May 15, 1929. Serial No. 363,125. 10 Claims. (Cl. 40—148.)



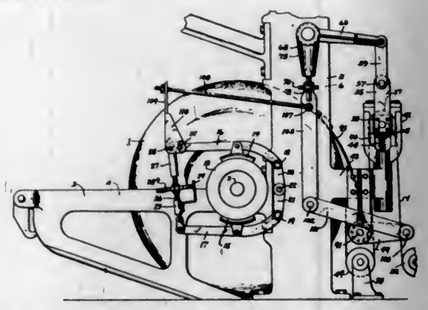
1. A display device including a pedestal and an open frame supported in upright position thereon, said frame including a top piece having a slot therein through which a sign card may be inserted and being internally channeled for the reception of the card, in combination with a removable decorative frame constituting a cap piece resting upon the top of the frame and including a pendant keel adapted to enter the slot, and engaging one face of the card.

1,822,494. RUG TAG-PIN. JOSEPH S. LAUNDERVILLE, Los Angeles, Calif. Filed May 7, 1930. Serial No. 450,484. 1 Claim. (Cl. 24—158.)



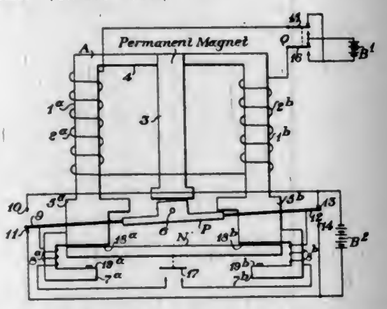
A tag fastener including a length of resilient wire bent to provide a main bar having half-round bends at its ends, one of which has a tangent pin shank and the other of which has a tangent bar with an end hook directed toward the main bar, the hook bar and the shank being of a length to materially overlap when the shank is closed toward the hook bar, and a helical spring which extends from bend to bend along the main bar and has a repressible part encoiling the hook bar and adapted to receive the pin end and retain it in closing position along the hook bar.

1,822,495. METHOD AND MECHANISM FOR CONTROLLING THE FEEDING OF WEBS. KENNETH G. LAYCOCK, Shavertown, Pa., assignor to Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 17, 1928. Serial No. 255,021. 11 Claims. (Cl. 242—75.)



1. The method of controlling the feed of a running web drawn from a roll which comprises applying a variable retardant force to the unwinding roll and regulating same by the tension of the running web and modifying said regulating action on the running web by the gradual diametral diminution of the unwinding web roll.

1,822,496. ELECTRICAL RELAY. BRANKO LAZICH, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,691. 4 Claims. (Cl. 175—335.)

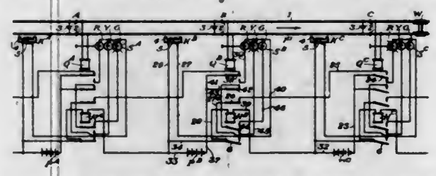


1. A relay comprising an operating winding, a polarized armature responsive to the polarity of the current in said operating winding, a neutral armature responsive to the presence and absence of current in said winding, and means for presenting said neutral armature from closing unless said polarized armature occupies the position corresponding to the polarity of the current being supplied to said winding.

4. A relay comprising a core provided with pole pieces, an operating winding on said core, a polarized armature cooperating with said pole pieces and responsive to the polarity of the current supplied to said winding, an extension on each pole piece forming an auxiliary pole face confronting the face of the pole piece, a neutral armature biased to engage said auxiliary pole faces but movable toward the faces of said pole pieces, a bucking winding on each said extension, means controlled by said polarized armature for supplying current of normal or reverse polarity to said bucking windings according as the polarized armature is in normal or reverse position, and means for opening the circuit for said bucking windings when said neutral armature is closed against said pole pieces, the parts being so arranged that unless the polarized armature occupies the position corresponding to the polarity of the current being supplied to the operating winding, said bucking windings assist the operating winding in holding the neutral armature against the pole piece extensions

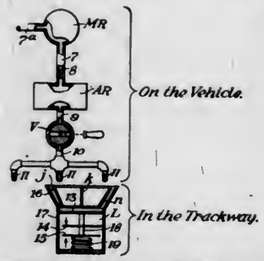
but that when the polarized armature occupies the position corresponding to the polarity of the current being supplied to the operating winding the bucking windings oppose the flow of flux through said extensions so that the neutral armature will be closed against the pole pieces.

1,822,497. RAILWAY TRAFFIC CONTROLLING APPARATUS. HAROLD S. LOOMIS, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1925. Serial No. 11,482. 8 Claims. (Cl. 246—63.)



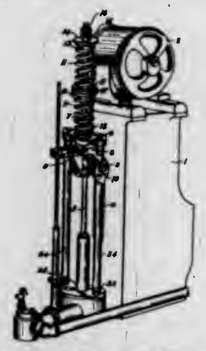
1. In combination along a railway track, a trackway device comprising a core for magnetic co-operation with a train carried receiver which core is provided with a winding, a signal adapted to indicate proceed, caution and stop, and a caution indication circuit for said signal including the signal and said winding.

1,822,498. RAILWAY TRAFFIC CONTROLLING APPARATUS. RONALD A. MCCANN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 11, 1928. Serial No. 305,176. 36 Claims. (Cl. 246—24.)



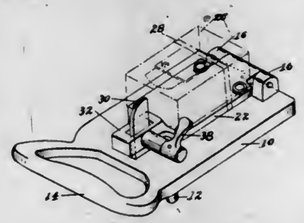
3. In combination, a nozzle, means for at times supplying fluid to said nozle to cause a jet of the fluid to issue from the nozzle, a relay device movable with respect to said nozzle and responsive to said jet, and railway traffic controlling apparatus controlled by said device.

1,822,499. SPRING EQUALIZER. SAMUEL R. MCCLAY, Canton, Ohio. Filed Mar. 28, 1928. Serial No. 265,400. 5 Claims. (Cl. 74—71.)



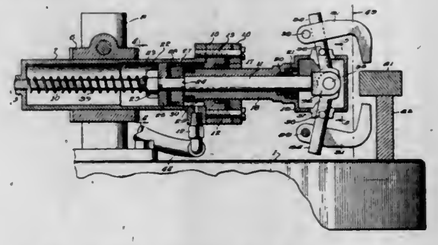
1. An equalizer for pumps including a base, a rod slidably mounted through the base and adapted to be connected to the pump rod, a guide boss upon the base surrounding the rod, a collar at the upper end portion of the rod, a guide boss upon said collar surrounding the rod, a coil spring around the rod having its lower end surrounding the guide boss upon the base, a second spring in alinement with the first spring having its upper end surrounding the guide boss on the collar, and a guide bearing slidably mounted upon the rod between said springs and provided with guide bosses receiving the adjacent ends of the springs.

1,822,500. SUPPORT FOR MEASURING INSTRUMENTS. LORENZ F. MUTHER, Newton Center, Mass. Filed Mar. 24, 1930. Serial No. 438,376. 5 Claims. (Cl. 248—15.)



1. A support for an instrument adapted to be initially set horizontal comprising a base; a plate pivotally mounted at one end on the base and adapted to receive the instrument; means tending to swing the plate about its pivot away from the base; and means near the end of the plate opposite its pivotal mounting whereby the plate can be locked to its base at that angle of swing whereat the instrument is set horizontal.

1,822,501. FLUID ACTUATED GRIPPING AND WORK-POSITIONING MEANS. OSCAR ONSRUD, Chicago, Ill., assignor to Onsrud Machine Works, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 22, 1930. Serial No. 497,470. 6 Claims. (Cl. 144—278.)

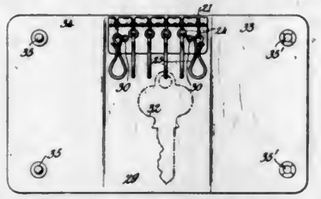


1. A fluid pressure operated device, comprising a cylinder, a piston construction including a pair of piston elements each slidably mounted within said cylinder, means for admitting fluid under pressure to said cylinder and between said pair of elements, one of said piston elements having greater area exposed to the fluid pressure than the other piston element, and a connection between said piston elements whereby the one with greater exposed area may during a portion of its stroke move the other piston element.

1,822,502. KEY HOLDER. DANIEL I. REITER, New York, N. Y. Filed May 8, 1929. Serial No. 361,407. 4 Claims. (Cl. 150—40.)

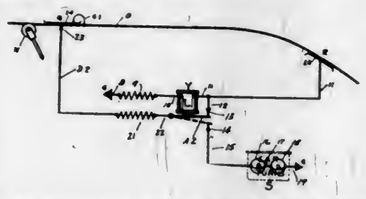
1. A key holder comprising a slotted plate, and a key-attaching link having a stem passing through a slot in said plate and a retaining element of such size as to prevent its withdrawal, said plate having an obstructed opening therein communicating with said slot and of a

size exceeding that of said retaining element, the obstruction of said opening comprising a lip extending inwardly



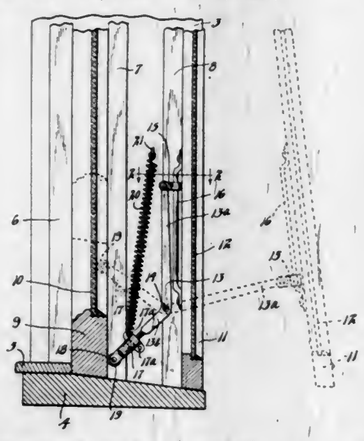
from an adjoining portion of the plate to an extent sufficient to prevent the insertion or withdrawal of the retaining element of a key-attaching link.

1,822,503. ELECTRIC SIGNAL SYSTEM. FRANK H. RICHTERKESSING, Louisville, Ky., assignor to Cheatham Electric Switching Device Co., and Nachod and United States Signal Co., Louisville, Ky. Original application filed Mar. 24, 1928, Serial No. 264,439, now Patent No. 1,783,308, dated Dec. 2, 1930. Divided and this application filed Oct. 2, 1930. Serial No. 486,024. 5 Claims. (Cl. 246—84.)



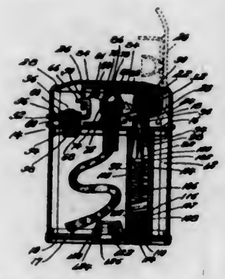
1. In an electrically operated signal system, comprising a source of current, a current conductor, a current collector, contactors mounted on the said conductor having electrical circuits associated therewith, a plurality of signal lamps arranged to illuminate a sign, a normally energized relay, said relay arranged to connect the said lamps to the source of current when deenergized, one of said contactors having a member adapted to be engaged by the said current collector to open the circuit of the normally energized relay, and another contactor having a member adapted to be engaged by the said current collector to close the circuit of the said relay.

1,822,504. AUTOMATIC SASH OPERATOR. HENRY D. ROACH, Minneapolis, Minn. Filed Jan. 17, 1930. Serial No. 421,429. 8 Claims. (Cl. 20—55.)



1. The combination with a sash frame, a sliding sash and a swinging sash mounted therein, of a bell crank lever pivoted between said sashes and having an upper arm normally extending above the pivot of the lever and a lower arm extending below the pivot of the lever, a sliding pivotal connection for securing the upper arm to the swinging sash, the lower arm being adapted to abut the lower portion of the sliding sash when the two sashes are closed and resilient means urging said lower arm upwardly and into the path of said sliding sash.

1,822,505. LIGHTER. EVERETT IRVING ROGERS, Jr., Providence, R. I. Filed Jan. 14, 1928. Serial No. 246,851. 10 Claims. (Cl. 67—7.1.)

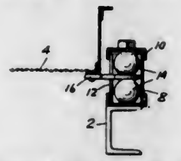


3. An automatic lighter comprising a body portion, an ignitible element mounted on said body portion, a cover for said lighter pivotally mounted thereon, means to urge said cover to open position, a pyrophoric element mounted on said lighter near the ignitible element, a friction element mounted on said lighter in operative contact with said pyrophoric element, means operated by the opening of said cover to cause movement of said friction element against said pyrophoric element and a safety catch for normally securing said cover to said casing, said ignitible, pyrophoric and friction elements being all mounted above the body portion, and a windshield consisting of a wall surrounding these elements mounted on top of said body portion having draft openings in the side walls thereof provided with deflection lips projecting inwards and downwards from the top of said openings and terminating below the normal burning point of and near the ignitible element.

1,822,506. METHOD OF ACCELERATING THE REACTION IN ALUMINOTHERMIC PROCESSES ESPECIALLY IN THEIR APPLICATION TO WELDING. WILHELM SANDER, Essen-Ruhr, Germany, assignor to Firm Th. Goldschmidt A.-G., Essen-Ruhr, Germany. Filed Dec. 23, 1930, Serial No. 504,276, and in Germany Nov. 16, 1929. 2 Claims. (Cl. 75—17.)

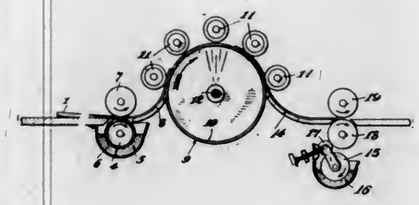
1. The process of improving the properties of ordinary, simple aluminum thermit which consists in admixing with such thermit a few per cent of calcium, sodium, magnesium or equivalent metal.

1,822,507. VIBRATING SCREEN. CARL G. A. SCHMIDT, Jr., Kennett Square, Pa., assignor to American Road Machinery Company, Kennett Square, Pa., a Corporation of Delaware. Filed Sept. 21, 1929. Serial No. 394,168. 5 Claims. (Cl. 209—337.)



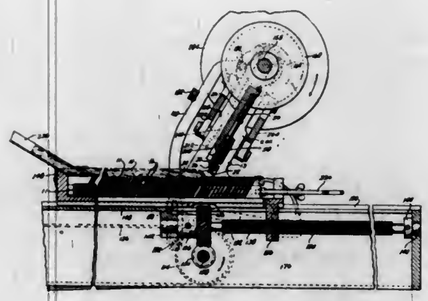
1. In combination, a vibrating screen, an arm carried by the screen, a support, and a plurality of rubber balls carried by the support, the arm being interposed between the rubber balls.

1,822,508. METHOD OF TREATING PAPER PHONOGRAPH BLANKS. EDWIN M. SCHULZ, New York, N. Y., assignor to Durium Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 3, 1930. Serial No. 432,923. 7 Claims. (Cl. 154—2.)



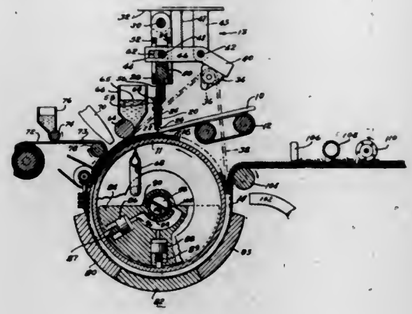
1. In the manufacture of phonograph records from paper stock coated on one side with finished heat hardened resinous phonograph record impressions, the method of preventing curling comprising softening the paper stock, ironing the softened paper stock, and impregnating the paper stock with moisture-proof material.

1,822,509. MACHINE FOR MAKING PILE FABRIC. PAUL S. SMITH, Madison, N. J., assignor, by mesne assignments, to Lea Fabrics Inc., Newark, N. J., a Corporation of Delaware. Filed Sept. 29, 1927, Serial No. 222,756. Renewed May 20, 1930. 28 Claims. (Cl. 223—44.)



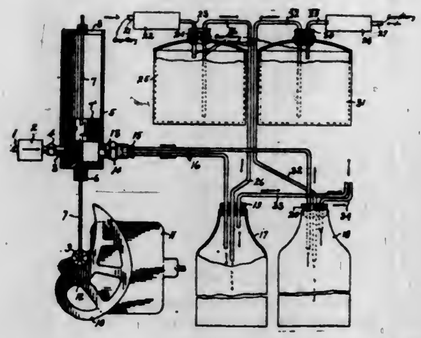
1. In a loop-forming machine, a form comprising a series of equally spaced spacing elements fixed relative to each other, means for continuously and uniformly moving the said form through a predetermined rectilinear path, a loop-forming element for forming loops in a material to be operated upon, means for moving the said loop-forming element with the adjacent spacing elements along a portion of their path of movement during the loop-forming operation and for returning the said loop-forming element to its original position in readiness for the formation of the next loop.

1,822,510. MACHINE FOR THE MAKING OF PILE FABRIC. PAUL S. SMITH, Summit, N. J., assignor to Lea Fabrics Inc., Newark, N. J., a Corporation of Delaware. Original application filed Aug. 9, 1927, Serial No. 211,660, and in Canada July 17, 1928. Divided and this application filed Feb. 5, 1929. Serial No. 337,550. Renewed Nov. 28, 1930. 43 Claims. (Cl. 154—1.)



1. In a machine of the kind described, a curved element, means for forming a succession of folds or pleats upon the surface of said curved element, and means coordinated therewith or cementing a flexible backing to the folded or pleated material while rigidly held upon said surface.

1,822,511. ADVERTISING DEVICE. JOHN STONE STONE and GORDON WILSON, San Diego, Calif. Filed Dec. 13, 1930. Serial No. 502,016. 8 Claims. (Cl. 40—126.)

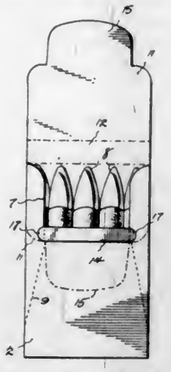


1. In an apparatus of the type described, the combination with a display device, of means for generating gases which when mixed produce a cloud of dense smoke, discharge means connected to said means and means also connected to said first means for causing the gases formed to issue from said discharge means.

1,822,512. CONTAINER FOR MERCHANDISE. ARNOLD J. TANNER, North Haven, Conn. Filed July 2, 1930. Serial No. 465,315. 4 Claims. (Cl. 229—38.)

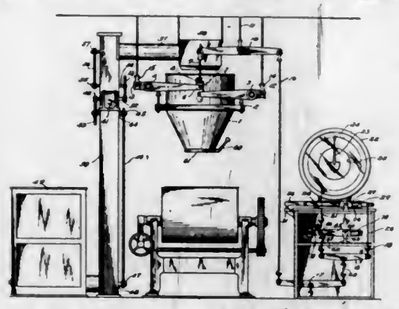
1. A container of the class described composed of a single blank forming a receptacle having front, back and side walls, said front wall having an opening therein, upper and lower flaps extending from said blank providing closure means for the open top and bottom of the container, said upper flap folding over the container

to close the open end and open front, said lower flap closing the bottom folding within the container and



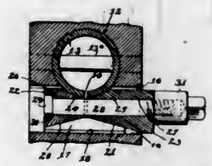
means integral with the lower flap engaging the edge or edges of said opening in said front wall for retentively holding the latter flap in the closing position.

1,822,513. WEIGHING SCALE. LAWRENCE S. WILLIAMS, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Nov. 23, 1928. Serial No. 321,318. 9 Claims. (Cl. 249—45.)



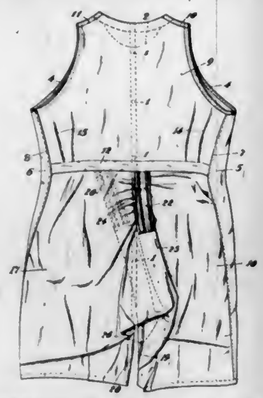
1. In a scale of the type described, in combination, lever mechanism, a commodity-receiver supported thereby, means for supplying said commodity-receiver, a cut-off for said supply means, automatic weighing and load indicating mechanism operatively connected to said lever mechanism, and means connected to said lever mechanism independently of said weighing and indicating mechanism for controlling said cut-off.

1,822,514. TOOL CLAMPING MEANS. EDWARD P. BULLARD, Fairfield, Conn. Filed May 1, 1930. Serial No. 448,943. 4 Claims. (Cl. 29—48.)



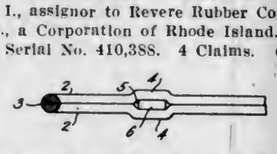
4. In a tool clamp of the class described, the combination with a head having a socket to receive a tool and an opening extending crosswise of the socket, a pair of aligned relatively flat wedges arranged within said opening and crosswise of said socket, said wedges each having a flat top side that aligns with that of the other and a transverse concaved surface, each of said wedges also having inclined under surfaces, and a clamping screw for operating the wedges towards and from each other.

1,822,515. UNDERGARMENT. EDWARD A. CHRISTMAN, Baltimore, Md., assignor to The Faultless Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 18, 1929. Serial No. 414,835. 5 Claims. (Cl. 2—78.)



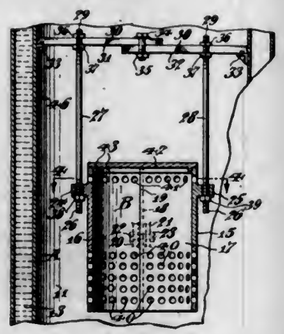
1. An undergarment of the union suit type comprising front portions, a back portion, full length side seams joining said front portions to said back portion, a half belt extending across said back portion and being secured to said side seams, said back portion below said belt comprising overlapping flap members with one of said flap members extending diagonally from said belt to a leg portion of said garment, said flap members having free edges with a portion thereof comprising rubber elastic material.

1,822,516. WHEEL FRAME. HENRY Z. COBB, Providence, R. I., assignor to Revere Rubber Company, Chelsea, Mass., a Corporation of Rhode Island. Filed Nov. 29,1929. Serial No. 410,388. 4 Claims. (Cl. 74—33.)



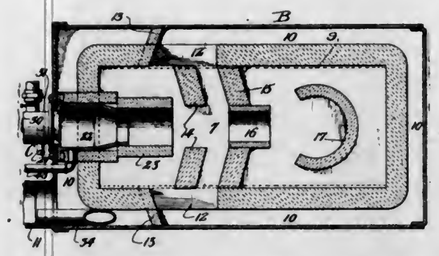
1. A wheel frame having a pair of metal rings juxtaposed to form a solid rim, said rings being bent to provide openings therebetween at intervals spaced around the rim, spokes having extremities fitting into the openings, means for securing the spokes and rim together, and a hub carried by the other extremities of the rim.

1,822,517. FURNACE APPLIANCE. JOHN M. DUFFY. Ventnor, N. J. Filed Feb. 6, 1931. Serial No. 513,839. 3 Claims. (Cl. 126—148.)



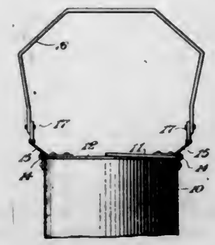
3. A device of the kind described for use in a furnace having a firebox, said device comprising a hollow apertured member, and a vertically and horizontally adjustable supporting frame work attached thereto, whereby said hollow member may be adjusted both vertically and horizontally.

1,822,518. OIL BURNING APPARATUS. JOHN M. DUGAN and HENRY A. NEDER, Woodbridge, N. J. Filed Aug. 13, 1927. Serial No. 212,642. 9 Claims. (Cl. 158—4.)



1. Oil burning apparatus comprising, in combination, a combustion chamber, a burner for supplying atomized oil and part of the air for combustion, means in the chamber for setting up turbulence of the fuel and flame stream, means for admitting additional air for combustion at each of two opposite sides of the chamber at a point adjacent the discharge end of the burner, and baffle means in the chamber so located with reference to the auxiliary air admission means that air is admitted in front and behind the baffle means.

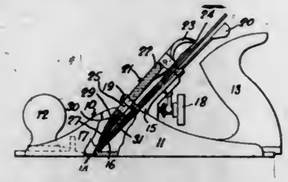
1,822,519. ARTICLE COVER. JOSEPH FLECK. Long Branch, N. J. Filed Nov. 30, 1929. Serial No. 410,824. 3 Claims. (Cl. 220—36.)



1. In combination, a receptacle, a pair of cover members pivoted to the opposite top edges of the receptacle and having adjacent edges when closed, portions of said covers extending beyond and outside the pivot line, a U-shaped handle having its free ends respectively and pivotally connnected to the extensions of the covers whereby the downward movement of the handle will open the cover members and an upward movement of the handle will close the cover members, the mass distribution of the cover members being such that when fully opened they remain open until the handle is lifted.

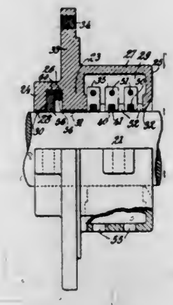
1,822,520. CLAMPING LEVER FOR PLANES. CHARLES H. FOX, Millers Falls, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Aug. 9, 1928. Serial No. 298,469. 1 Claim. (Cl. 145—16.)

A clamping lever for a plane iron including, in combination, a main body portion, a tip portion member partially underlying said lower end of said main body portion member and rockingly mounted with respect thereto, said tip portion member having a bearing edge adapter to exert pressure adjacent the cutting edge of a plane iron and a pair of laterally spaced lugs adapted to exert pressure on said plane iron on a line substantially parallel to but spaced rearwardly from said bearing edge, said tip portion member being secured to said main body portion member by a rivet passing loosely through a hole in one of said members and into the other of said members, said



rivet being substantially centrally located transversely of said members, the underlying portion of said tip portion member being formed with a T-shaped head and the underside of the lower end of said main body portion member being formed with a mating depression adapted to accommodate said T-shaped head.

1,822,521. PISTON ROD PACKING AND SCRAPING MEANS. EDGAR N. FOX and EDMUND HAMPSHIRE, Palmyra, N. Y., assignors to The Garlock Packing Company, Palmyra, N. Y., a Corporation of New York. Filed Sept. 9, 1927. Serial No. 218,438. 6 Claims. (Cl. 286—24.)

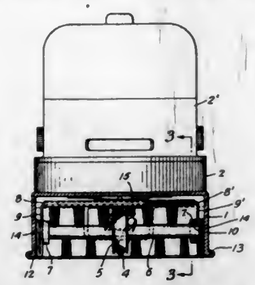


1. A piston rod scraper comprising a sectional metal annulus of which the cross-sectional form is of greater width than depth, said annulus comprising discontinuous complemental rings disposed in a side-by-side broken-joint relationship and separated by a conical joint dividing the inner surface of the annulus along a circumferential line intermediate its margins, the circumferential dimensions of said rings being such as to cause their opposed ends to be slightly separated when in use on a piston rod, a cage for said annulus having spaced annular wall portions between which the rings of the annulus may be confined, said cage being of sufficient internal diameter to provide a free working clearance about the piston rod, and resilient means whereby the ring which is undercut at the conical joint may be contracted and thereby caused to exert a wedge-like action on the complemental ring as a consequence of which the rings will be spread axially and held in close contact with each other and with the confining walls of said cage as well as in scraping contact with the surface of the piston rod, said parts being thus self-adjustable to compensate for wear in such manner as to be held in close contact throughout the life of the scraper.

1,822,522. VACUUM CLEANER. BENJAMIN D. GOLDBERG, Brooklyn, N. Y. Filed Oct. 19, 1927. Serial No. 227,120. 8 Claims. (Cl. 15—8.)

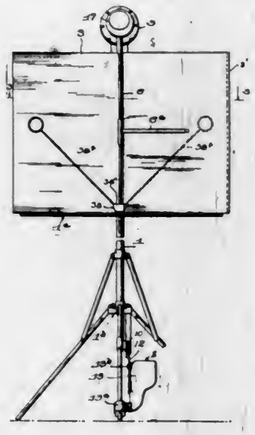
1. In a vacuum cleaner, including a nozzle, a rotary brush comprising a shaft and bristle thereon, a holder frame for said brush mounted in said nozzle, said holder frame being

made in parts telescoping on one another in a direction parallel to the axis of the rotary brush, the said frame



having end sections provided with bearings into which the ends of the shaft slip longitudinally for insertion or removal of the brush.

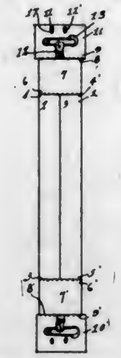
1,822,523. MUSIC SHEET TURNER. EMIL GUSTAFSON, Cicero, Ill., assignor to Charles J. Gustafson, Cicero, Ill. Filed Jan. 18, 1930. Serial No. 421,622. 7 Claims. (Cl. 84—516.)



2. In a turning device for sheet music, the combination of manually operative driving mechanism including a rotative cam member adapted to be advanced in one direction through a predetermined arc with each operation of said driving mechanism, and driven mechanism including a sheet-engaging member and cam levers mounted in the path of said cam member and adapted to be alternately engaged thereby to swing said sheet-engaging member alternately in opposite directions.

1,822,524. DIAPER SUPPORTER. LEROY HENDRIX, Madeira, Ohio. Filed Apr. 16, 1931. Serial No. 530,569. 2 Claims. (Cl. 241—12.)

1. A diaper supporter comprising a shoulder support including a pair of parallel non-elastic straps adapted to be spaced apart at their middle portions and engage the shoulders of a child, the respective ends of said straps being in alignment and having their edges in engagement, resilient means, respectively, having their inner ends secured to the ends of said shoulder support, the outer edges of said resilient means being in alignment with the outer edges of said shoulder support, pads having their inner ends respectively secured to the outer ends of said resilient means and having holes therein, loops secured to said pads respectively, pin fasteners secured to said loops,



respectively, and adapted to be received throuogh said holes and the front and rear portions of a diaper for supporting said diaper.

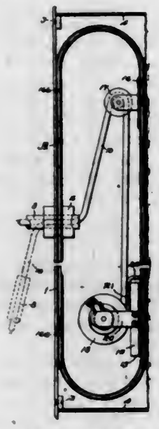
1,822,525. METHOD FOR THE MANUFACTURE OF ESTERS OF VINYL ALCOHOL. WILLY O. HERRMANN, HANS DEUTSCH, and ERICH BAUM, Munich, Germany, assignors to Consortium fur Elektrochemische Industrie, Munich, Bavaria, Germany. Filed Feb. 1, 1928, Serial No. 251,224, and in Germany Feb. 12, 1927. 12 Claims. (Cl. 260—106.)

1. Process for the preparation of esters of vinyl alcohol comprising conducting a mixture of acetylene and the vapor of a carboxylic acid over a heated catalyst at a velocity measured at the reaction temperature of more than 350 liters per hour per liter of reaction space.

1,822,526. SHOE STIFFENER. WILLY O. HERRMANN and WOLFRAM HAEHNEL, Munich, Germany, assignors to Consortium fur Elektrochemische Industrie G. m. b. H., Munich, Germany, a Corporation of Germany. Filed May 31, 1929, Serial No. 367,610, and in Germany June 29, 1928. 2 Claims. (Cl. 36—77.)

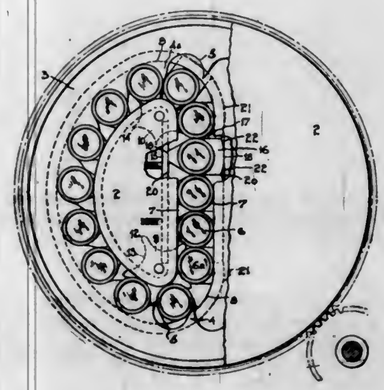
1. A shoe stiffener comprising a sheet of cloth impregnated with alcohol- and benzene-soluble poly vinyl acetate.

1,822,527. LIGHTING FIXTURE. ALFRED J. HIXON, Braintree, Mass. Filed Aug. 2, 1929. Serial No. 382,993. 5 Claims. (Cl. 240—73.)



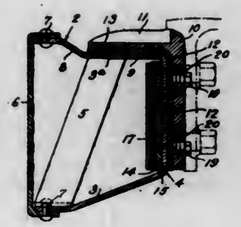
1. A lamp fixture unit comprising a frame constructed to be concealed in and to close a wall pocket, a cover plate with a slot therein for the frame and pocket including a sliding panel covering the slot at all times with a lamp carrying bracket vertically and angularly adjustable thereon, and extensibly secured thereto.

1,822,528. MOVING LENS CINEMATOGRAPH MACHINE. WESLEY ERNEST JOHN, Johannesburg, Transvaal, South Africa. Filed Aug. 14, 1929. Serial No. 385,747. 7 Claims. (Cl. 88—16.8.)



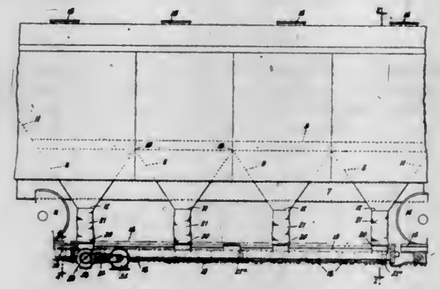
1. In a moving film cinematograph machine, the combination of a series of loose lens carriers, a straight guide in which the lenses are exposed, a curved guide at each end of the straight guide, continuously moving driving means for feeding carriers into one of the curved guides, and receiving them from the other curved guide, the carriers being in close contact with one another in the straight guide and one of the curved guides so that the driving means controls their rate of movement through the straight guide, and an externally toothed wheel so engaging the carriers in the other curved guide as to space said carriers from one another and to accelerate their movement therein.

1,822,529. MOUNTING BRACKET. WALTER C. KEYS, Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Sept. 6, 1928. Serial No. 304,350. 5 Claims. (Cl. 248—14.2.)



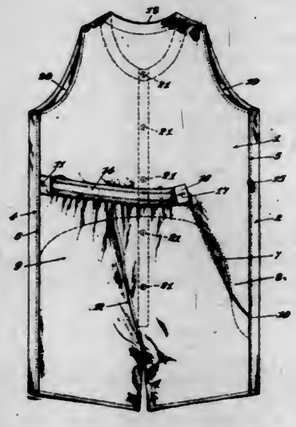
1. A bracket for supporting an engine in a frame comprising in combination a member adapted to be fastened to the frame and having a vertical web and a horizontal face, a second member adapted to be fastened to the engine and having a sleeve surrounding the web and a horizontal face associated with the horizontal face of the first mentioned member, and cushioning material between the horizontal faces and between the web and the sleeve.

1,822,530. APPARATUS FOR HANDLING CEMENT OR LIKE MATERIAL IN BULK. MORRIS KIND, Bryn Mawr, Pa., assignor to Hercules Cement Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 14, 1930. Serial No. 461,156. 28 Claims. (Cl. 214—44.)



1. Mechanism for unloading cement or like material in bulk from a railroad freight car including in combination, a conveyor at each side of the car running longitudinally of the track along the ends of the ties, a transverse conveyor between a pair of ties below the track into which the longitudinal conveyors discharge, and a plurality of inlet openings in the upper side of the longitudinal conveyors distributed at intervals along the length thereof to receive the material from corresponding discharge openings on the car.

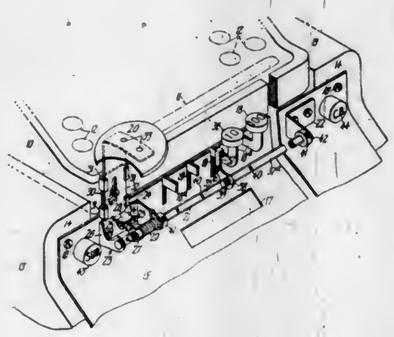
1,822,531. UNION UNDERGARMENT. ANDREW J. KREIN, Baltimore, Md., assignor to The Faultless Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 9, 1929. Serial No. 412,585. 4 Claims. (Cl. 2—78.)



1. An undergarment of the union suit type comprising side members and a back portion, substantially longitudinally extending seams joining said side members to

said back portion, said back portion comprising an upper part terminating at the lower end in an arched edge extending between said side seams, a posterior apron attached throughout its length to one side seam and unattached at the top and the other edge, the arched portion of the back extending below the said unattached portion of the apron, anchoring means carried by one of the side seams adapted to secure said apron in place to cover said arched edge, and an elastic belt member comprising the upper edge of said apron and with the cloth of said apron being gathered where it is attached to said belt member whereby the elastic belt pulls said side seams inward at the back to cause the garment to be body conforming adjacent the waist thereof when said apron is closed.

1,822,532. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1928. Serial No. 313,686. 14 Claims. (Cl. 197—176.)



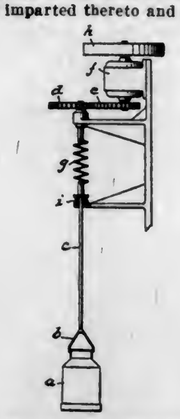
1. In a typewriting machine having decimal tabulating mechanism, the combination with a row of depressible tabulating keys adjacent the front of the machine-frame, including key-levers, of an auxiliary mechanism for selectively actuating one of the tabulating keys when its continued use for special work is required, said auxiliary mechanism including a rock-shaft extending transversely of the machine, outside of the machine-frame, and adjacent the front ends of said tabulating key-levers, means for supporting the shaft upon the machine-frame, means including a palm-piece for rocking the shaft, and means laterally settable upon said shaft and effective to actuate a selected tabulating key when the shaft is rocked, said settable means being supported in a manner to be manipulated from the outside.

1,822,533. PRINTING INK. FREDERICK G. LASHER, Brooklyn, N. Y. Filed Feb. 1, 1929. Serial No. 336,923. 2 Claims. (Cl. 134—35.)

1. In a printing ink, a water in oil type of emulsion containing a water insoluble metallic soap, xylol, gilsonite, water and a pigment.

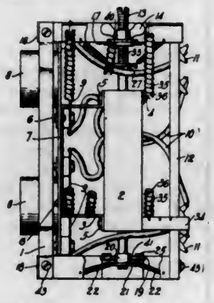
1,822,534. LIQUID COOLER. HANS OLOF LINDGREN, Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 14, 1928, Serial No. 319,411, and in Sweden Nov. 30, 1927. 1 Claim. (Cl. 259—75.)

The combination, with a vessel adapted to contain liquid to be cooled and to be immersed in the cooling liquid, of a motor and driving connections between the motor and said vessel, said driving connections including an element and means by which a variable speed movement in one direction is imparted thereto and a flexible and elastic



device between said driving connections and said vessel which constrains said vessel to have a variable speed movement different from that of said element.

1,822,535. MOUNTING FOR VACUUM TUBES. GEORGE R. LUM, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1929. Serial No. 396,115. 8 Claims. (Cl. 248—30.)



1. A shock-proofing mounting for a vacuum tube comprising a supporting frame, a resilient support therein for said vacuum tube, and means for preventing movement of said support, said means comprising a member having at each extremity rigid means for securing the support to said supporting frame.

1,822,536. COATING AND SEALING COMPOSITION. FREDERICK MAAS, New York, N. Y., assignor, by mesne assignments, to William Mano, Flushing, Long Island, N. Y. Filed Sept. 14, 1926, Serial No. 135,491. Renewed June 10, 1930. 8 Claims. (Cl. 134—39.)

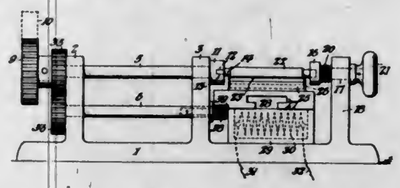
1. A plastic coating and sealing composition, water proof and fire proof when dry and substantially unaffected by common weak acids, salts, oils and gases and particularly drip oil, and particularly adapted for use as a pipe joint compound, comprising aluminum oxide, magnesium chloride, magnesium oxide, dextrine, fluorspar and water.

1,822,537. ADVERTISING DEVICE. CHARLES O. MARSHALL, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Jan. 5, 1928. Serial No. 244,589. 6 Claims. (Cl. 40—63.)

1. In a device of the class described, in combination, weight indicating mechanism, a substantially circular frame, said circular frame surrounding and displaying said weight indicating mechanism; means on said frame for securing advertising matter thereto, means for attaching said frame to said mechanism and a glazed water-tight cover for said frame.

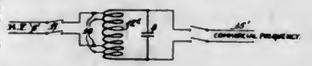


1,822,538. METHOD AND MEANS FOR TREATING ARTICLES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J. Filed Mar. 13, 1929. Serial No. 346,788. 5 Claims. (Cl. 101—23.)



1. The combination with a base frame; of a heater on said frame; and axially alined rotary head and tail stocks above said heater; whereby an article may be engaged between said stocks and contemporaneously turned and heated; wherein a slide is mounted to reciprocate transversely to the axis of said stocks, between said stocks and said heater.

1,822,539. INDUCTION ELECTRIC FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Mar. 9, 1929, Serial No. 345,664. Renewed Feb. 4, 1931. 4 Claims. (Cl. 13—26.)



4. The method of heating and stirring a pool of molten metal which consists in circulating about it successively currents of high frequency to secure the heating effect thereof and currents of very much lower frequency to secure the stirring effect thereof, varying the length of time of application of each and the number of applications of each according to the comparative heating and stirring needs of the pool.

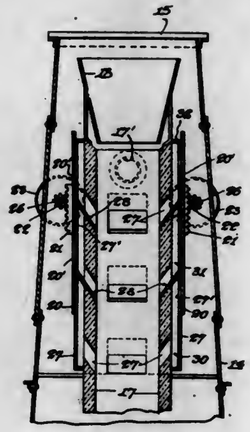
1,822,540. OIL BURNER. CHARLES J. OHLSSON, Brooklyn, N. Y., assignor to Paramount Oil Burners, Inc., New York, N. Y., a Corporation of Delaware. Filed May 8, 1929. Serial No. 361,402. 5 Claims. (Cl. 158—75.)

1. A burner comprising a casing thru which passes a combustible fluid, a conductor for an atomizing fluid axially disposed within said casing, a nozzle, and means for conveying the atomizing fluid from an inner to an outer and



the combustible fluid from an outer to an inner path, thereby interchanging the initial positions of both of said fluids in advance of their issuance.

1,822,541. RETORT CONSTRUCTION. RICHARD B. PARKER, Skaneateles, N. Y., assignor to Samuel E. Darby, trustee, New York, N. Y. Filed Dec. 14, 1926. Serial No. 154,697. 7 Claims. (Cl. 202—221.)



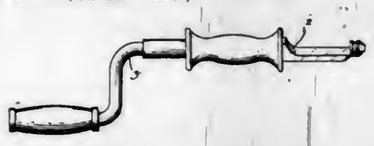
1. In a retort construction, the combination of a retort having openings in the walls thereof near the top and a chamber surrounding the top of the retort, with a plurality of slidable gates in said chamber, a rack on said gates, a gear for engagement with the rack and means for rotating said gear, said gate controlling said openings.

1,822,542. WIRE JOINING. ALFRED L. ROSENMUND, Rockaway Borough, N. J., assignor to Stapling Machines Co., a Corporation of Delaware. Filed Apr. 23, 1929. Serial No. 357,431. 9 Claims. (Cl. 140—118.)



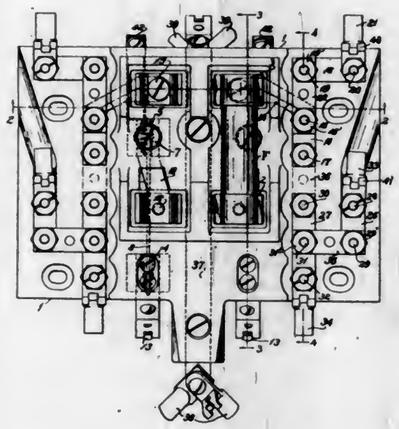
1. A tool for joining package wires by intertwisting comprising a twisting head bored and slotted to receive the wires to be joined, a wire gripping member extending into the bore at either side of the slot to position the wires side by side, and means to close the slotted opening to confine the wires in the bore, whereby rotation of the gripping members about the axis of the wires will cause the wires to be gripped by the gripping members and intertwisted.

1,822,543. WIRE JOINING. ALFRED L. ROSENMUND, Rockaway Borough, N. J., assignor to Stapling Machines Co., a Corporation of Delaware. Original application filed Apr. 23, 1929, Serial No. 357,431. Divided and this application filed June 23, 1930. Serial No. 463,066. 4 Claims. (Cl. 140—118.)



1. A wire joinder for wirebound packages comprising a twist formed by intertwisting the free ends of the package binding wire and located at least partially between the package and the body of the wire binding, whereby the body of the wire binding overlies at least a portion of the twist.

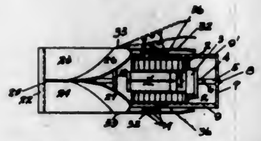
1,822,544. ELECTRIC CIRCUIT CONTROLLING APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed Feb. 25, 1927. Serial No. 170,784. 4 Claims. (Cl. 175—183.)



4. An electric meter service appliance comprising in combination, a unitary insulating base supported in normally fixed spaced relationship with a rear supporting wall, a pair of fuse receiving contacts on the front of the said base, a switch connected with the said base and located between the plane of the rear face thereof and the said supporting wall, means for electrically connecting the said switch in series with the said fuse contacts, meter testing facilities mounted on the front of the said insulating base and transversely spaced from any part of the said fuse contacts, the said meter testing facilities including two links manually operable independently of each other, a transverse conductor located at least in part in a recess at the back of the base and serving to electrically connect one fuse contact with one of the said links means for connecting the said switch, the said fuse contacts and the last said link in series with the meter at the service side thereof, and other means for electrically connecting the other of the said links between the load side of the meter and a load wire.

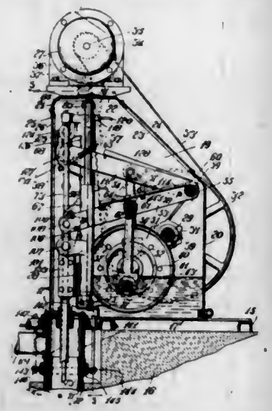
1,822,545. SNOWPLOW. GEORGE W. SCHULTZ, Davenport, Wash. Filed Nov. 4, 1929. Serial No. 404,553. 1 Claim. (Cl. 37—42.)

The combination with a draft frame, a plow frame having spaced runners and pivoted to the draft frame, and means for holding the frames in adjusted position, of a plow comprising flat upwardly inclined plates and a central, upright plate forming a plow share between the flat plates, said flat plates terminating in upwardly curved and



outwardly flared moldboards, fixed landsides carried by the plow frame, hinged landsides at the rear of the fixed landsides, and adjustable links between the draft frame and hinged landsides for holding the latter in adjusted lateral position.

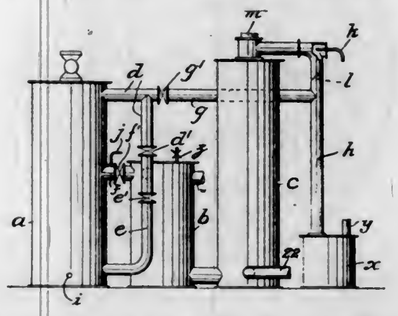
1,822,546. PUMPING APPARATUS. JOHN B. SPERRY, Aurora, Ill., assignor to The American Well Works, Aurora, Ill., a Corporation of Illinois. Filed Aug. 29, 1925. Serial No. 53,274. 19 Claims. (Cl. 184—4.)



9. In a pumping apparatus, the combination with a chamber adapted to contain a body of oil, a crank shaft mounted in said chamber, and means for rotating said crank shaft, of a vertically reciprocating cross-head a guide therefor, a walking beam mounted to swing vertically in said chamber and operatively connected to actuate said cross-head, a pitman connected at its lower end with said crank shaft and at its upper end with said walking beam, and means for forcing oil from said chamber between the cross-head and its guide to the upper bearing of said pitman comprising a duct carried by the walking beam and leading to said bearing from a point adjacent to said cross-head, and means for delivering oil from said cross-head to said duct.

1,822,547. PROCESS OF MANUFACTURING GAS. JAMES CALDWELL STELFOX, Westminster, London, England, assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 14, 1925, Serial No. 75,231, and in Great Britain Dec. 14, 1924. 2 Claims. (Cl. 48—208.)

1. The process of mnufacturing carburetted water gas which, when practiced in a single generator adapted to contain a descending column of fuel having coal at its upper end and coke at its lower end, a single carburetter and a single superheater, comprises a number of successive steps; the first step is air blasting the coke at the bottom of the column of fuel, leading off blast gases from a point beneath the coal in said column, and burning gases in the carburetter and in the superheater to store heat therein; the second step in passing steam through the super-heater and through the carburetter and through the entire fuel column in a direction opposite to the movement thereof forming water gas on the passage through the coke; the third step comprises recirculating a portion of the gas produced in the fuel column together with additional steam through the superheater and carburetter and through the entire fuel column in a direction opposite to the movement of the fuel column; the fourth step is passing sat-



urated steam through the coke and through the coal in a direction opposite to the movement of the fuel column; and the fifth step is introducing saturated steam to the fuel column at a point adjacent the middle thereof and passing it through the coke in the direction of the movement of the fuel column thereby generating blue water gas, passing the water gas through the carburetter, carburetting the gas in the carburetter, then passing through the superheater, and storing the carburetted water gas.

1,822,548. TREATMENT OF RUBBER. WILLEM P. TER HORST, Packanack Lake, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Dec. 4, 1929. Serial No. 411,666. 58 Claims. (Cl. 18—50.)

1. A method of treating rubber which comprises treating rubber with the reaction product of a ketone and a salt of an aromatic amino compound.

1,822,549. WEIGHING SCALE. EDWARD G. THOMAS, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 8, 1929. Serial No. 353,377. 11 Claims. (Cl. 265—61.)



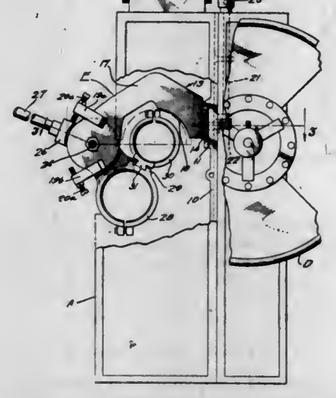
1. In a device of the class described, in combination, a load receiver and load counterbalancing means connected thereto, for offsetting loads, indicating means operatively connected to said offsetting means, a switch adjustably attached to said counterbalancing means and operated by the movement of said indicating means and mechanism controlled by said switch.

1,822,550. FOUNDATION FOR BUILDINGS, BRIDGES, AND THE LIKE. JOSEPH H. THORNLEY, Chicago, Ill. Filed Nov. 19, 1926. Serial No. 149,285. 3 Claims. (Cl. 61—50.)



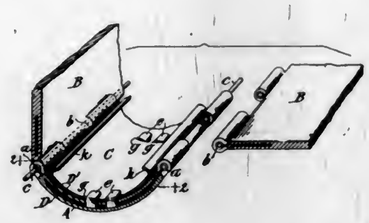
1. A building construction comprising the combination with the steel framework of a building of a load sustaining column forming an extension of the frame to bed rock, the rock having a socket in which the lower end of the column is seated, and a cement filling in the socket, the cement filling engaging the column and the sides of the socket to anchor the column in the rock against tension.

1,822,551. LENS SHIFTING MECHANISM FOR PROJECTING MACHINES. ALBERT TONDREAU, Los Angeles, Calif., assignor to Warner Bros. Pictures, Inc., Los Angeles, Calif., a Corporation. Filed Apr. 13, 1929. Serial No. 354,810. 9 Claims. (Cl. 88—24.)



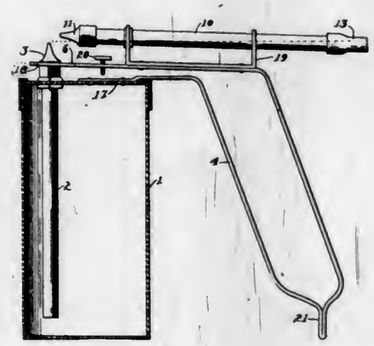
9. A picture projection apparatus comprising a motion head, a lens shifter device comprising a bracket secured to said head, a lens shifter including a first lens shell, a second lens shell having its axis spaced from and parallel to said first lens shell and secured thereto so as to be moved therealong and enable longitudinal adjustment of said shells in relation to one another, a pivotal connection between said shifter and said bracket to enable said shells to be swung to position either lens shell with its axis in alinement with the projected light, a lens shifter handle secured to said shifter and stops to define the limits of swinging movement of said shifter.

1,822,552. COVER FOR LOOSE LEAF BOOKS. CLARENCE D. TRUSSELL, Poughkeepsie, N. Y., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y., a Corporation of New York. Filed Jan. 25, 1928. Serial No. 249,235. 12 Claims. (Cl. 129—24.)



1. A cover for a loose-leaf book of the type comprising a back and sides hinged together, the back being integral from hinge to hinge, characterized in that the back has separate metal stiffening plates overlying each other and fastened together to function as a single plate and united to the back.

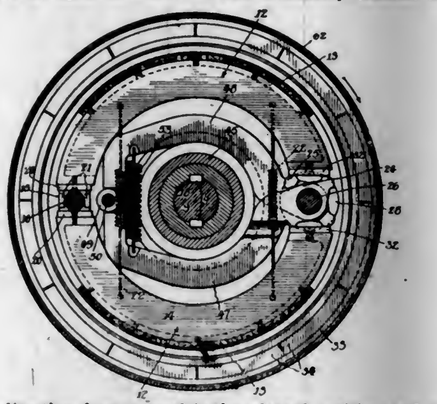
1,822,553. SPRAYING DEVICE. LEO P. UPHOFF and FLOYD A. SIMS, San Jose, Calif., assignors, by direct and mesne assignments, to Liberty Amusement Company, San Jose, Calif., a Corporation of California. Filed Dec. 27, 1928. Serial No. 328,747. 4 Claims. (Cl. 91—45.)



1. A spraying device comprising a receptacle, a discharge nozzle mounted thereon to communicate therewith, a handle mounted on the receptacle and having a resilient part adjacent the nozzle, and an atomizing aspirator mounted on the resilient portion of the handle and movable into and out of operative relation to the nozzle.

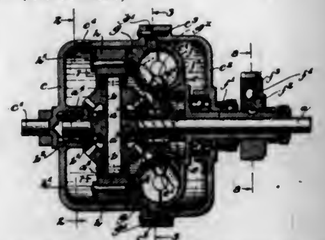
1,822,554. BRAKE. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Mar. 16, 1928. Serial No. 262,122. 24 Claims. (Cl. 188—140.)

2. A vehicle brake of the momentum type comprising, in combination, a rotatable drum, braking means within said drum having adjacent separable end portions, a pair of coaxially arranged expanding cams mounted between said end portions, a pair of independently operable crank arms one rigid with each of said cams, a pair of coacting friction elements adapted for axial gripping engagement, one rotatable with said drum, the other being mounted for oscillatory movement, and connecting means between said oscillatory element and the free ends of said crank arms, said connecting means being operable to actuate one of said arms upon movement of said oscillatory element in



one direction from normal brake-released position and to actuate said other arm upon movement of said oscillatory element in the reverse direction.

1,822,555. TRANSMISSION. CARL W. WEISS, New York, N. Y. Filed Apr. 13, 1928. Serial No. 269,620. 2 Claims. (Cl. 60—54.)



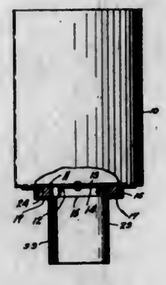
1. In a hydraulic transmission, the combination of a reaction member rotatable freely in one direction and a rotor placed face to face with the reaction member, the reaction member and the rotor forming a chamber between them and being formed with obliquely opposed pockets, an impeller, a driven part in operative relation with the rotor, a driving element, centrifugal bodies carried by the rotor and adapted under the influence of centrifugal action to effect connection between the rotor and the driving element, and torque dividing transmission gearing interposed between the impeller and the rotor, said torque dividing transmission gearing including said driving element.

1,822,556. CUSHION TIRE. WILLIAM BARBER, Brooklyn, N. Y. Filed Aug. 9, 1927. Serial No. 211,836. 14 Claims. (Cl. 152—8.)



1. In a cushion tire structure, a spring element of varying diameter formed into helical coils following the longitudinal and transverse contour of the shoe and imbedded in the body thereof to encircle said shoe body.

1,822,557. DISPENSING APPARATUS. ROWLAND SUTTON BEATTON, Young, New South Wales, Australia. Filed Oct. 19, 1928, Serial No. 313,475, and in Australia Aug. 16, 1928. 4 Claims. (Cl. 221—95.)



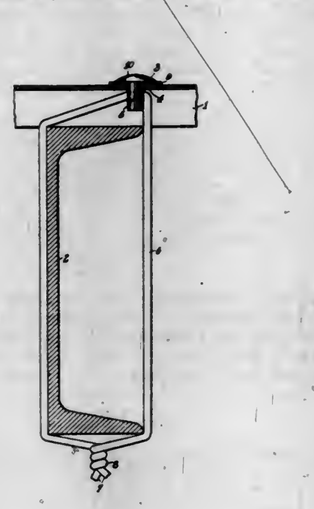
1. An apparatus of the character described, comprising a container having a valve seat in its bottom, a valve mounted for rotation below said seat and provided with oppositely disposed external quadrant lugs, a metal ring disposed about the valve and having oppositely disposed internal quadrant flanges at a lower lever than and projecting horizontally under the valve lugs when the valve is in its closing position, and a receiver provided with oppositely disposed external quadrant lugs adapted to pass vertically between the ring flanges and to be rotated above said flanges.

1,822,558. MEANS FOR FASTENING CORRUGATED SHEETS AND THE LIKE. GEORGE A. BELDING, Pittsburgh, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1929. Serial No. 383,109. 1 Claim. (Cl. 189—35.)



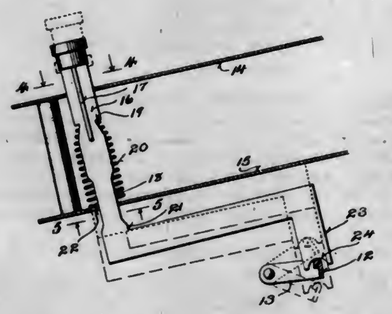
A fastening device for securing sheets to purlins or the like comprising end sections, one of said end sections being adapted to engage the web of the purlin and the other being adapted to engage the under surface of the flange of said purlin, one of said end sections being normally shaped to conform to the part of the purlin which it is adapted to engage, the other being adapted to be forced in position, an intermediate body member adapted to engage the upper surface of the purlin and having a shoulder normally shaped and adapted to contact with the vertical edge of the flange, the body member adjacent said shoulder and the end which engages the under surface of the flange extending laterally and being looped and provided with a hole to receive a single sheet retaining element.

1,822,559. MEANS FOR FASTENING CORRUGATED SHEETS AND THE LIKE. GEORGE A. BELDING, Pittsburgh, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1929. Serial No. 383,110. 1 Claim. (Cl. 189—35.)



A device for fastening a sheet of material to a structural element comprising a headed member passing through said sheet and having a hole in the shank thereof, a wire passing through said hole and around said structural element, said wire having its ends twisted together whereby a strap is formed, said headed member being so disposed as to form the least number of bends in said wire.

1,822,560. KEY FOR COIN DELIVERY MACHINES. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Automatic Cashier Company, Watertown, Wis. Filed Mar. 4, 1926. Serial No. 92,248. 3 Claims. (Cl. 133—4.)



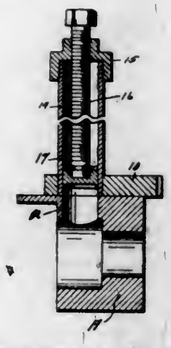
2. In a coin delivery machine, a pair of spaced guide plates arranged in substantially parallel relation, a spring pressed operating key slidable through said plates, the opening in the uppermost of said plates for the key conforming to the transverse configuration thereof, the opening in the lowermost of said plates for the key being of greater length than said cross sectional length of the key portion passing therethrough whereby rocking of the key on the upper plate is permitted during the sliding thereof, and a movable member having a portion constrained to move along a predetermined path, said key and said portion

having companion bearing members one of said members consisting of a rounded bearing surface and the other a concaved receiving socket.

1,822,561. RUBBER PRODUCT AND PROCESS OF PREPARING THE SAME. ERNEST R. BRIDGWATER, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 12, 1929. Serial No. 354,712. 9 Claims. (Cl. 18—53.)

4. The process of treating rubber which comprises subjecting a rubber mix (containing sulfur, an accelerator of the substituted thiurammonosulfide type and a compound of the class consisting of cadmium oxide, cadmium hydroxide, cadmium stearate and cadmium oleate) to conditions which would tend to cause scorching in the absence of said cadmium compound.

1,822,562. STUFFING BOX LOADER. FRANKLIN H. BROWN, Philadelphia, Pa., assignor to Cup-Lok Packing Company, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 6, 1931. Serial No. 506,949. 7 Claims. (Cl. 286—38.)



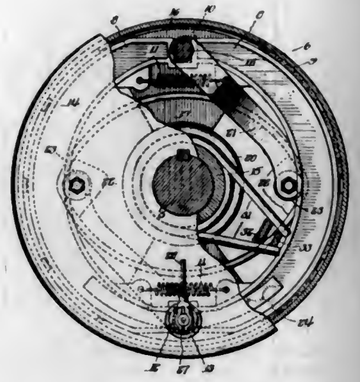
1. The combination with a stuffing box having an opening, of a supporting plate slidably mounted upon the stuffing box, a loading barrel mounted upon the plate and adapted when the plate is shifted into one position to register with the opening in the stuffing box, the plate acting to close the opening in the stuffing box when the barrel is shifted out of a position of registry with said opening, and a plunger mounted within the barrel.

1,822,563. MANUFACTURE OF CELLULOSE ACETATE. LLOYD M. BURGHART, Baltimore, Md., assignor to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed Apr. 30, 1929. Serial No. 359,368. 8 Claims. (Cl. 260—102.)

2. In the manufacture of cellulose acetate, the step of hydrating cellulose acetate in the presence of liquid sulfur dioxid.

1,822,564. BRAKE. ADDI BENJAMIN CADMAN, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Mar. 5, 1928. Serial No. 259,031. 13 Claims. (Cl. 188—140.)

1. A brake of the momentum type comprising, in combination, a rotatable drum, expansible braking means within said drum providing adjacent separable end portions, a cam associated with said end portions and adapted to expand said braking means upon oscillation in either direction from a normal brake-released position, a crank arm rigid with said cam and disposed within the circumference of said drum, a pair of annularly arranged coacting friction elements, one carried by said drum, the other being mounted for oscillatory movement, said elements being adapted for frictional gripping engagement by a force acting axially thereof, and means movable with said oscillatory movement and providing a pair of converging cam



surfaces operatively associated with the free end of said crank arm and positioned to operate said crank arm upon movement of said oscillatory element in opposite directions.

1,822,565. SEPARABLE FASTENER. FRED S. CARR, Newton, Mass.; Moses F. Carr, executor of estate of said Fred S. Carr, deceased, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Nov. 3, 1926, Serial No. 145,958. Renewed Jan. 31, 1931. 1 Claim. (Cl. 24—213.)



A fastener unit for upholstery and like installations comprising a casing having a peripheral wall, a flange extending inwardly from one edge of said wall and terminating at an aperture, a tubular rivet portion extending outwardly from the inner periphery of said flange, a laterally shiftable fastener part surrounded by said wall and adapted to rest against said flange and means extending inwardly from the other edge of said wall a substantially less distance than said flange to provide means for holding said fastener part in assembly with said casing while permitting insertion of a tool into said casing to back-support said flange while said rivet is being set as and for the purposes illustrated and described.

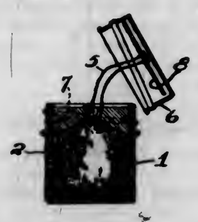
1,822,566. MEDICAMENT APPLICATOR. JOHN B. DAVIES, Crafton, Pa., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 2, 1928. Serial No. 316,710. 3 Claims. (Cl. 128—269.)

1. A medicament applicator comprising a tubular protective casing closed at one end and substantially impervious to liquid, a frangible ampoule containing a medicament enclosed in said casing and breakable in its body portion, and an exposed swab associated with and closing the other end of said casing, said medicament being releasable by compression of the side walls of the casing to break the ampoule in its main body portion without contamination



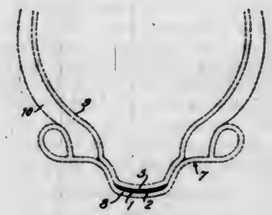
of said swab by the compressing means, and the medicament thus released being then directed within and by the casing to the swab.

1,822,567. MEDICAMENT APPLICATOR. JOHN B. DAVIES, Crafton, Pa., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 23, 1929. Serial No. 380,437. 4 Claims. (Cl. 128—269.)



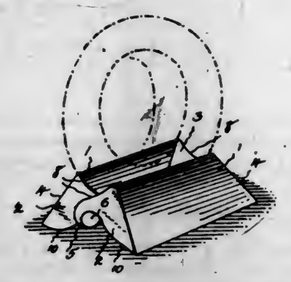
1. A first aid medicament applicator comprising a casing open at one end and impervious to liquid, a fabric sack supplied with and permeable by a fluent medicament removably disposed in the casing, a draw member closing the mouth of said sack, a cap removably closing the open end of said casing, and a disc in said cap connected to said draw member, removal of said cap extending the draw member for withdrawal of said sack, application of the medicament to a body surface being effected by mere contact of said sack with said surface.

1,822,568. INNER TUBE PROTECTOR. ERNST EGER, Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Jan. 30, 1929. Serial No. 336,099. 2 Claims. (Cl. 152—20.)



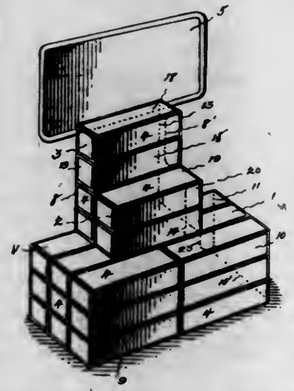
1. As a new article of manufacture, a protective strip adapted to encircle the well of a tire rim, said strip having a coating of uncured non-adhesive gum adapted to face an inflation tube on said rim, said gum being of a plastic composition so that it will flow under the pressure of said tube without adhering thereto.

1,822,569. DISPLAY OR SUPPORTING STAND. MORRIS M. EINSON, Yonkers, N. Y., assignor to Einson-Freeman Co., Inc., Long Island City, N. Y., a Corporation of New York. Filed June 16, 1930. Serial No. 461,408. 1 Claim. (Cl. 211—24.)



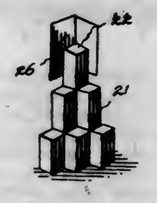
A supporting device of the class described composed of two sheet blanks identically alike, said blanks each having foldable ends, said ends terminating to form hooks, said hooks interlocking together when said device is set up for operation, and said engagement of hooks providing a detachable pivotal connection between said members.

1,822,570. DISPLAY DEVICE. MORRIS M. EINSON, Yonkers, N. Y., assignor to Einson-Freeman Co. Inc., Long Island City, N. Y., a Corporation of New York. Filed July 26, 1930. Serial No. 470,998. 8 Claims. (Cl. 40—126.)



1. A display or advertising device of the class described composed of a single sheet foldable on itself so as to represent a plurality of sections or parts piled one on top of the other and said sheet being folded and having its ends united together so a s to form a structure folding as a single unit into a flat or a collapsed condition.

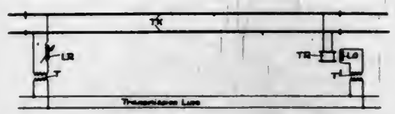
1,822,571. DISPLAY DEVICE. MORRIS M. EINSON, Yonkers, N. Y., assignor to Einson-Freeman Co. Inc., Long Island City, N. Y., a Corporation of New York. Filed Nov. 28, 1930. Serial No. 498,632. 7 Claims. (Cl. 40—126.)



1. A display device of the class described comprising a body composed of a single sheet folded to represent a plu-

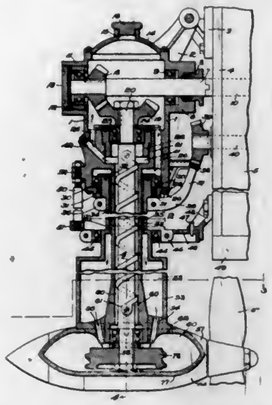
rality of separate individual cartons or containers and an added sheet secured to said body foldable so as to form a filling representation of a carton or container.

1,822,572. SIGNALING SYSTEM FOR RAILROADS. CHARLES F. ESTWICK, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 12, 1929. Serial No. 377,713. 12 Claims. (Cl. 246—40.)



1. The method, in connection with a track relay having a track phase and a local phase and employed in a track circuit, for improving the relay response to shunting, comprising adjusting the two phase circuits relatively to each other so that the track phase current leads the local phase current under unshunted conditions.

1,822,573. OUTBOARD DRIVE FOR MOTOR BOATS. ARTHUR G. FITZ GERALD, West Newton, and ANDERS A. ANDERSON, Waltham, Mass.; said Anderson assignor to said Fitz Gerald. Filed Aug. 7, 1930. Serial No. 473,588. 6 Claims. (Cl. 115—37.)



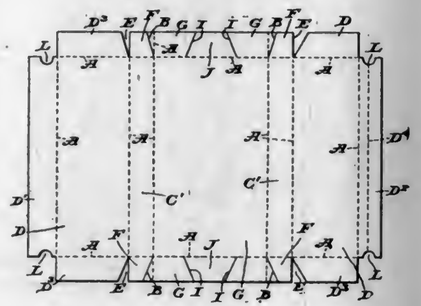
1. Boat propelling mechanism comprising an inboard motor, a hinged inner drive shaft housing, a vertically rotatable outer drive shaft housing, and means for rotating it from the boat, an interlocking two-part drive shaft between the housing and motor, and a plurality of propellers driven thereby synchronously.

1,822,574. STEREOPRINTING BLOCK. JOSEF FRICKE, Dillingen-Saar, Germany. Filed Nov. 12, 1929, Serial No. 406,548, and in Germany May 22, 1929. 3 Claims. (Cl. 101—382.)



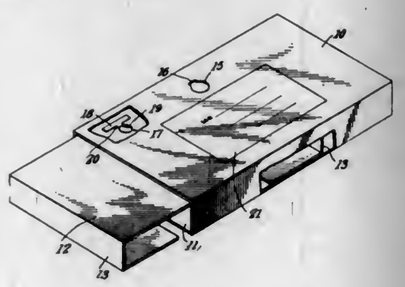
1. A backing for stereotypes, comprising an iron plate provided on its back surface with ribs adapted to rest on a support in a printing press, said ribs being disposed so as to divide the back surface of the plate into a plurality of separated compartments, and a wooden block disposed in each of said compartments in snug engagement with its bounding ribs, said plate being provided throughout its area with a plurality of perforations for the passage of means for securing the stereotypes to the wooden blocks.

1,822,575. CARTON FOR SHIPPING PURPOSES. HERMAN L. GREVE, Hollis, N. Y., assignor to International Mailing Tube and Wrapper Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 16, 1929. Serial No. 340,616. 1 Claim. (Cl. 229—33.)



A carton formed from a single sheet of fibrous material of substantially elongated rectangular form, scored lengthwise and laterally to define a central bottom portion with narrowed transverse walls adjacent thereto and narrowed end walls, cover forming portions having end flaps folded on lines longitudinally of the sheet, narrow flap portions at the outer edges of the cover forming interfolding portions for the cover, the said end walls being slitted to provide flaps between the sides of the bottom portion with the outer free ends of the flaps adapted for attachment to the cover portions.

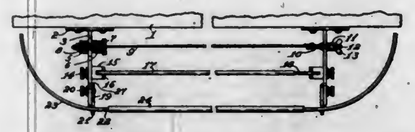
1,822,576. MAILING CARTON FOR BOOKS. HERMAN L. GREVE, Hollis, N. Y., assignor to International Mailing Tube & Wrapper Company, Brooklyn, N. Y. Filed Feb. 4, 1930. Serial No. 425,737. 2 Claims. (Cl. 229—47.)



1. In a mailing carton of the character described, a casing of rectangular form open at each end, a wrapper portion including a side and hinged ends cooperating with the casing to provide end closures for said casing, and an interlockng connection between the casing and wrapper located substantially midway the ends of the wrapper side adjacent a side edge thereof to permit removal of the wrapper from either end of the casing and presenting uninterrupted address areas on both sides of the casing.

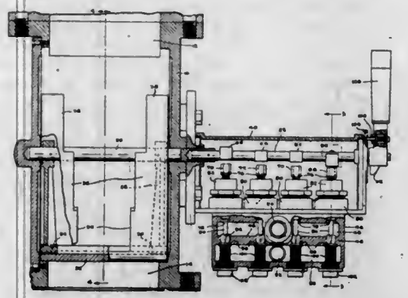
1,822,577. BRACKET DEVICE. JOSEPH S. HATTERY, Waterloo, Iowa, assignor of forty-nine one-hundredths to John Van Liew, Los Angeles, Calif. Filed Aug. 26, 1927. Serial No. 215,671. 3 Claims. (Cl. 156—23.)

1. A device of the character described, comprising an elongated load-supporting flexible body positioned between rigid supports and end-connected to one of them, an element having an interiorly threaded aperture mounter upon the other support, and an axially apertured screw fitted in the said threaded apertured element alined with



said flexible body, said body traversing said axial aperture and end-connected separably to the remote end of the screw.

1,82,578. CONTROL DEVICE FOR FLOW OF FLUIDS. RICHARD M. HORTVET, Minneapolis, Minn., assignor to Mahr Manufacturing Company, Minneapolis, Minn., a Corporation. Filed Mar. 20, 1930. Serial No. 437,392. 2 Claims. (Cl. 137—144.)



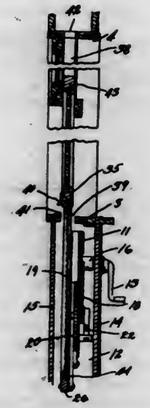
1. A control device for flow of fluids comprising a pipe line for air, a casing in said pipe line, a valve in said casing, a pipe line for oil, a casing in said last mentioned pipe line, a plurality of valves in said last mentioned casing, each of said valves independently controlling the passage of oil through said casing, a rotatable rod, means for turning said rod, a support secured to said rod and to which said air valve is attached, and a plurality of members secured to said rod for independently controlling said oil valves and opening them respectively progressively increasing amounts proportional to the extent of opening of said air valve.

1,822,579. APPARATUS AND METHOD FOR PRODUCING SOUND. HENRY HUEBER, Buffalo, and ERWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Original application filed Oct. 3, 1930, Serial No. 486,228. Divided and this application filed Mar. 21, 1931. Serial No. 524,342. 11 Claims. (Cl. 116—142.)



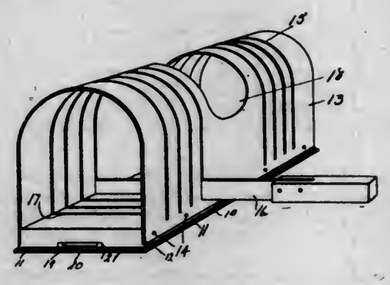
1. An audible signal for automotive vehicles comprising a cone-shaped horn opening through a valve seat, a valve suspended at the apex of said horn to vibrate on the seat, said horn being of size and shape to utilize the surge of an air column to effect a tuned, timed, synchronous movement of the valve in the direction of the surging air, and means for starting and aiding the surging of the air by moving the said valve by atmospheric pressure when the said valve is placed in communication with the intake manifold of an internal combustion engine.

1,822,580. MECHANISM FOR OPERATING SASH IN CERTAIN WINDOW CONSTRUCTION. EDWARD L. ACKERMAN, Detroit, Mich., assignor to Ackerman-Blaesser-Fezzey, Inc., Detroit, Mich., a Corporation of Michigan. Filed Dec. 23, 1929. Serial No. 415,979. 3 Claims. (Cl. 268—126.)



1. In window construction, the combination with a frame having grooves, of a sash slidable therein adapted to open the window and lowered to close the same, said sash consisting of a frame having an upper glazed portion, a lower unglazed portion and a cross rail therebetween, said window frame including a sill and a top cross bar each having a slot formed therein in the plane of the sash in closed relation with which the cross rail of the sash frame is positioned when the window is closed, said window construction including a pocket formed by spaced inner and outer walls below the sill into which the unglazed portion of the frame is positioned when the frame is closed and a pocket above the top cross bar of the window frame into which the glazed portion of the sash frame is movable when the window is opened, and a manually operable sash operating mechanism in the said pocket including an operating member extending through the inner wall thereof, said sash operating mechanism including a clutch device automatically released on operation of the said operating mechanism in raising and lowering the window and automatically locked by the weight of the sash upon release of the said operating mechanism, and a sash counterbalancing spring.

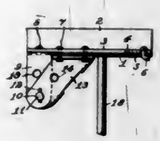
1,822,581. COMBINED BREAD BOX, SLICER, AND KNIFE HOLDER. ALBERT W. BROWN, Hatboro, Pa. Filed June 20, 1929. Serial No. 372,408. 3 Claims. (Cl. 146—150.)



1. As a new article of manufacture, a combined bread box, slicer and knife holder comprising a cutting board,

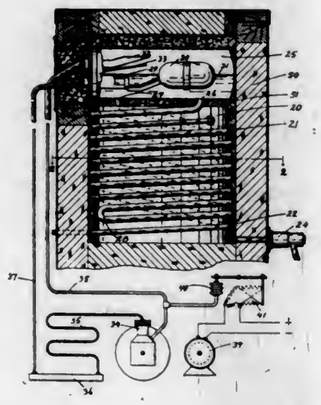
having a groove formed therein for the passage of the knife blade, an arch shaped housing having guide slots therein, said housing being secured to said board, and a cover adapted to fit over the housing, said cover having openings in its end walls for coinciding with the ends of the groove whereby the passage of the knife through said openings and groove will secure the cover in position upon the board.

1,822,582. TRACTION CLEAT FOR VEHICLE WHEELS. STEPHEN D. BROWN and CHARLES E. SHOOK, Waterloo, Iowa; said Shook assignor of one-sixth to said Brown. Filed Nov. 9, 1928. Serial No. 318,226. 2 Claims. (Cl. 301—50.)



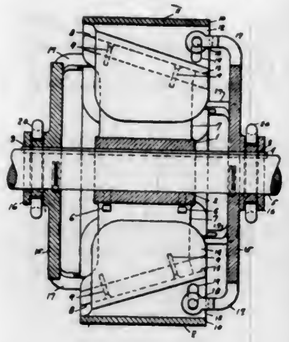
2. The combination with a wheel rim having engaging means fixed on its inner face, of a traction cleat having one end detachably fastened to the rim and having at its opposite end inwardly projecting spaced fixed elements, means for releasably securing said fixed elements to said engaging means when the cleat is in operative position, and other means for releasably securing the fixed elements to said engaging means when the cleat is in a reversed position to its operative position, said engaging means including spaced elements with an apertured connection adapted to receive in its aperture said spaced fixed elements, and means to secure the fixed elements in said aperture.

1,822,583. REFRIGERATING APPARATUS. ROBERT R. CANDOR, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1930. Serial No. 431,760. 5 Claims. (Cl. 62—141.)



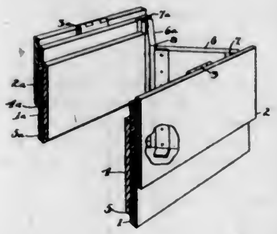
1. A liquid cooling apparatus comprising a metal walled liquid container, a liquid supply means for said container pulley diameter while in motion and used in combination in thermal contact with said wall and connected to said container at its upper portion, means forming a refrigerant passage spirally arranged around said container in thermal contact with said wall and interposed between loops of said liquid supply means, and means for withdrawing liquid from said container at its lower portion.

1,822,584. AUTOMATIC EXPANDING BELT PULLEY. FREDERICK P. CONNORS, Detroit, Mich. Filed July 17, 1929. Serial No. 378,844. 4 Claims. (Cl. 64—8.)



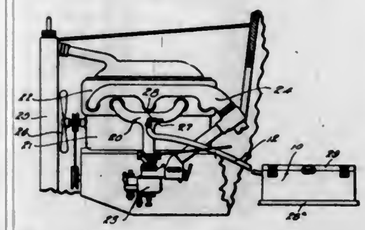
1. An adjustable belt pulley adapted for changing the pulley diameter while in motion and used in combination with a pulley shaft, comprising a hub section formed with a suitable bearing for fixedly mounting some on a pulley shaft, said hub being formed with a series of radially positioned hub ribs arranged along the hub walls lengthwise thereof, said ribs having their outer edges sloped alternately in opposite directions with the hub axis, a pulley rim segment slidably mounted on each of said sloping rib edges, a clutch disc splined to the pulley shaft at each end of the pulley, each clutch disc being connected with one set of alternate rim segments, mechanical means attached to each of said clutch discs capable of displacing same on the pulley shaft simultaneously in opposite directions and thereby changing the pulley diameter.

1,822,585. COLLAPSIBLE BOX. PETER S. DOUGLAS, San Francisco, and JAMES FILSHILL, Cupertino, Calif. Filed May 31, 1928. Serial No. 281,749. 1 Claim. (Cl. 217—14.)



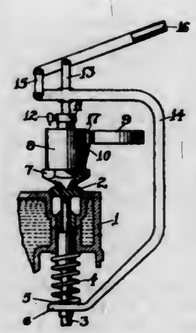
A box comprising two symmetrical complementary portions, each portion consisting of a side supporting member, a top member pivotally mounted thereon to fold into parallel relation therewith against its outer side, a bottom member hinged to said supporting member at the inner plane of said supporting member to fold so as to lie against said inner plane, an end member hingedly mounted on each end of said side supporting member a sufficient distance from said inner plane of said side member to space said end member from said side member when folded inwardly to form a pocket for said bottom member and an inwardly foldable hinge connecting the abutting edges of each pair of end members.

1,822,586. REFRIGERATING DEVICE. NOBLE ECKLES, Los Angeles, Calif., assignor of one-half to John W. Bour, Los Angeles, Calif. Filed Apr. 19, 1930. Serial No. 445,642. 18 Claims. (Cl. 62—152.)



1. A refrigerating device adapted to be operated by an internal combustion engine having an intake manifold including, a suction line communicating with the intake manifold, a chamber in communication with the suction line, and means for discharging an atomized volatile liquid into the chamber.

1,822,587. SPRING TESTING DEVICE. ERIC E. ESSEN, Brooklyn, N. Y. Filed Mar. 9, 1927. Serial No. 174,082. 8 Claims. (Cl. 265—47.)

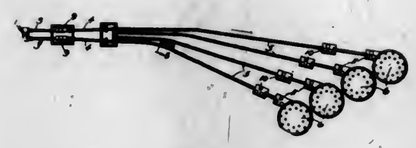


1. A spring tester including the combination with a frame having a portion for engaging a spring, a relatively movable member arranged to approach or recede from said spring engaging portion in order to compress or release said spring, respectively, and a handle for moving said movable member, of means for gaging the pressure applied to said spring upon operation of said handle including a slidable member supported on said movable member and arranged to be retracted or extended therefrom, a liquid pressure gauge, and enclosed means to communicate the movement of said slidable member during extension or retraction to said gauge.

1,822,588. RECOVERING COPPER FROM SLAGS. MORRIS G. FOWLER, OLIVER C. RALSTON, and CHARLES R. KUZELL, Clarkdale, Ariz., assignors to United Verde Copper Company, Clarkdale, Ariz., a Corporation of Delaware. Filed Jan. 14, 1929. Serial No. 332,558. 13 Claims. (Cl. 75—62.)

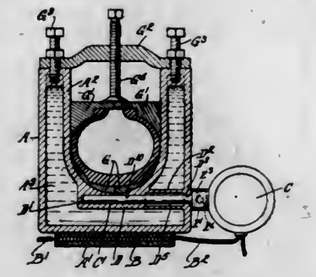
1. The process for recovering copper or other heavy metals from slag which comprises injecting suitable solid, liquid or gaseous reducing agents through a molten bath of slag and matte in contact, the copper or copper matte held in the slag uniting with the bath of matte.

1,822,589. ART OF COILING HOT METAL STOCK. JEROME R. GEORGE and FRANK P. DAHLSTROM, Worcester, Mass., assignors to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 23, 1929. Serial No. 342,223. 25 Claims. (Cl. 242—83.)



1. In apparatus of the class described, a "pouring" reel for the continuous reception and coiling of metal stock whose section other than round would normally approach said reel at an indeterminate and unstable inclination, and means operable on said stock on its way to said reel for establishing and maintaining at the entrance to said reel a predetermined relation between the reel axis and a particular axis of the stock section, thereby to secure its passage onto said reel in a sectional position permissive of the coiling operation.

1,822,590. VULCANIZING APPARATUS. LEO O. GRANGE, Chicago, Ill., assignor to Walter J. Jarratt, Chicago, Ill. Filed Oct. 29, 1929. Serial No. 403,242. 6 Claims. (Cl. 18—18.)

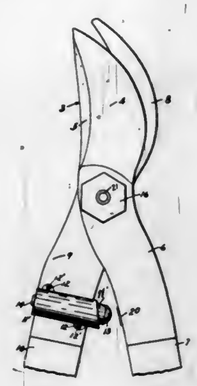


6. In a vulcanizing device, a housing adapted to be filled with a fluid, electric means for heating said fluid, a circuit for said heating means, and a thermostatic control means in said circuit, adapted to make and break said circuit in response to fluctuations in temperature, a shell, forming part of said housing, adapted to be opposed to the article to be vulcanized, said thermostatic control means being positioned to penetrate said shell to a point closely adjacent the work engaging surface of the said shell, the electric heating means being substantially more remote from said shell, the surface of said shell within said housing being provided with an enlarged portion adapted to receive said thermostatic control means, said enlarged portion being in communication with the exterior wall of said housing at a point remote from said shell.

1,822,591. SHOCK ABSORBER AND STOP FOR PRUNING SHEAR HANDLES. GEORGE F. HICKOK, Burlingame, Calif. Filed Apr. 21, 1930. Serial No. 445,907. 2 Claims. (Cl. 30—13.)

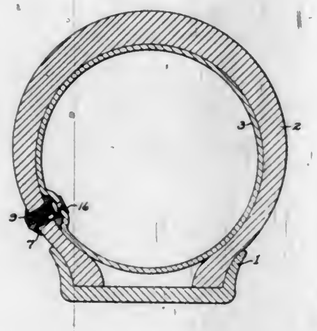
1. An attachment for a pair of shears comprising a casing adapted to be secured to the inner face of one of the hafts of the shears, one end of said casing being open, a plunger slidably mounted in said casing and ex-

tending through the open end thereof, a spring positioned in said casing between said plunger and the opposite end of the casing, means for adjusting the plunger with respect to the casing, said means comprising a rod ad-



justably connected to said plunger, said rod extending through said opposite end of the casing, said rod being provided with means whereby it may be rotated to adjust the position of said plunger.

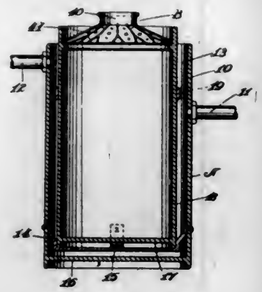
1,822,592. TIRE VALVE. HARRY HUTCHINSON, Absecon, N. J., assignor of one-fourth to Edward W. Griswell and one-fourth to Fred Ardrey, Absecon, N. J. Filed Mar. 8, 1928. Serial No. 260,027. 3 Claims. (Cl. 152—12.)



1. A tire valve comprising a tubular body adapted to extend through a tire casing and having a flange adapted to be interposed between an inflatable tube and the casing, an annulus with a countersink, secured on the outer end of the tubular body, a threaded valve-containing tube in the tubular body, and an interiorly threaded reversible tubular member removably engaged with the valve-containing tube and having an end head to seat in either position of the tubular member in the countersink of the annulus.

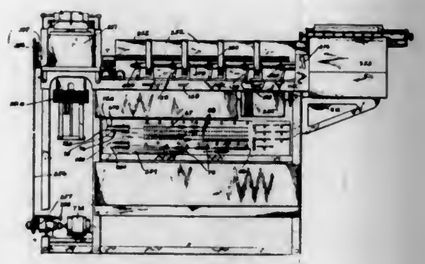
1,822,593. CREAM COOLER. ELLSWORTH W. JOHNSON, Hector, Minn., assignor to Midwest Motor Supply, Hector, Minn., a firm. Filed Apr. 9, 1928. Serial No. 268,497. 7 Claims. (Cl. 257—190.)

4. A cream cooler including, a cream receptacle, a cooler receptacle, means in said cooler receptacle for holding said cream receptacle in a manner to permit a cooling medium to be passed around and under said cream receptacle, and a spreader cover for said cream receptacle having grooves each divided into a multiplicity



of grooves adapted to direct cream over the peripheral edge thereof in thin streams and along the side walls of the cream receptacle.

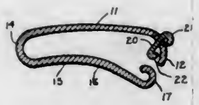
1,822,594. TABULATING MACHINE. CLAIR D. LAKE, Binghamton, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed May 15, 1923. Serial No. 639,153. 34 Claims. (Cl. 235—92.)



6. In a tabulating machine provided with an electrical control device, means for plugging said device with various card columns, and means brought into operation automatically by said machine for preventing short circuits in the control device during plugging operations.

21. In a tabulating machine having an accumulator and printing devices controlled thereby, means for controlling the said devices, comprising a fixed contact blade, a movable arcuate contact element cooperating therewith, another movable blade normally out of contact with said arcuate element but arranged to engage therewith with a wiping action, and means controlled by the amount standing upon the accumulator for bringing about the said engagement for the purpose described.

1,822,595. CLASP. JOSEPH H. LANCOR, Cranston, R. I. Filed May 14, 1931. Serial No. 537,276. 3 Claims. (Cl. 24—259.)



1. In a clasp, an oblong plate, a curved lip upon one end of the plate provided with a slot in its rear portion, a resilient arm integral with the other end of the plate.

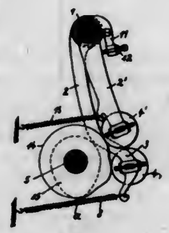
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a loop upon the free end of the arm adapted to be overlapped by the lip adjacent the slot and a detaching member loose in the slot and engageable with the loop.

1,822,596. ABRASIVE COMPOUND. ROBERT S. LEATHER, Waterbury, Conn., assignor to The Lea Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 1, 1930. Serial No. 499,411. 7 Claims. (Cl. 51—280.)

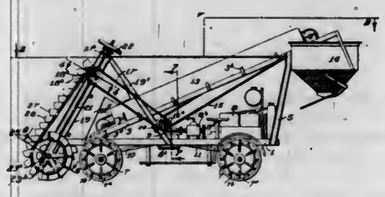
3. A solid abrasive preparation comprising a mixture of glue, water, abrasive, and an agent which is physically associated with said glue for raising the softening temperature of the mixture, said preparation being readily transferable to a buffing or polishing implement by rubbing.

1,822,597. LEVER SHAFT DRIVING DEVICE OF FLAT-FULL FASHIONED MACHINES. PAUL LIEBERKNECHT, Einsiedel, Chemnitz, Germany, assignor of one-half to Maschinenfabrik-Einsiedel Gesellschaft mit beschrankter Haftung, Einsiedel, Chemnitz, Germany. Filed Sept. 19, 1930, Serial No. 483,124, and in Germany July 9, 1930. 1 Claim. (Cl. 66—82.)



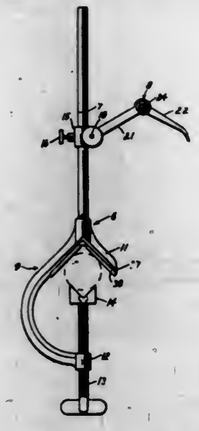
A driving device for the needle bar, facing bar and the like parts actuated by cams and shafts in the cotton machine, wherein the working cam and the narrowing cam act on two separate levers of which one is secured to the lever shaft and the other is mounted loosely on same shaft and transmits motion by means of an abutment secured to the said shaft, whereby the possibility of a separate adjustment is achieved.

1,822,598. MATERIAL LOADING APPARATUS. FOSTER M. MCCLURE, San Diego, Calif. Filed Nov. 22, 1926. Serial No. 149,882. 9 Claims. (Cl. 198—12.)



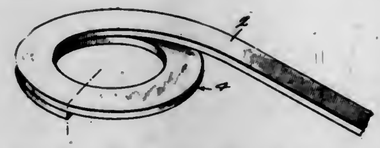
1. In a material handling apparatus for removing loosened materials, a self-propelled carriage, a plurality of rows of bucket diggers and conveyers positioned side by side on the front end of said carriage, the ends of the buckets in the different rows overlapping each other, and wheels provided with angular plates on their periphery revolubly mounted with said conveyers and on the opposite sides thereof.

1,822,599. TESTING GAUGE. JOHN L. MONK, Oakland, Calif. Filed Feb. 13, 1929. Serial No. 339,554. 2 Claims. (Cl. 33—193.)



1. In a gauge of the class described, a rod, an arm hingedly and adjustably carried on said rod for movement solely in planes including the axis of said rod, and means for releasably mounting said rod on a cylindrical element for maintaining a fixed angular relation of the rod axis to the axis of said element.

1,822,600. METHOD OF MAKING LOCK WASHERS. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 28, 1928. Serial No. 257,560. 1 Claim. (Cl. 10—86.)

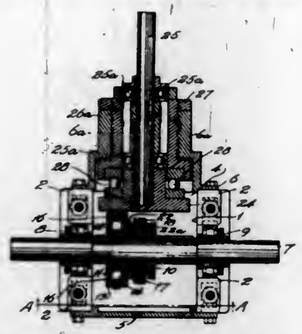


The method of forming pronged lock washers from a strip of flat spring stock, the thickness of which equals the thickness of the washer to be produced and the width conforms to the width of the washer when measured from the inner to the outer rim thereof, said method consisting in coiling said flat strip edgewise, subjecting said strip to a lateral deflection just previous to the coiling thereof and thereby charging the convolutions of the coil so that said convolutions will automatically spring together with the lateral surfaces in contact with each other, severing a complete convolution from said charged coil, the charging of said coil serving in this instance to effect the self-alinement of the severed extremities thereof, and then forming marginal locking teeth in said severed convolution.

1,822,601. FRICTION GEARING. RICHARD SAMUEL PRENDERGAST, London, England, assignor, by direct and mesne assignments, to Keenok Gears Limited, London, England, a Company of Great Britain. Filed May 28, 1927, Serial No. 195,061, and in Great Britain June 1, 1926. 21 Claims. (Cl. 74—26.)

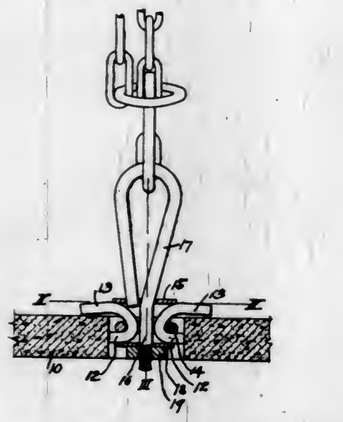
1. In a friction gear, a shaft, a member, comprising an inner part, having thereon a continuous periphery, secured to said shaft and concentrically disposed with regard to the axis of rotation of said shaft, an outer part, having a circular periphery, encompassing said inner part, eccentrically disposed with regard to the center of rota-

tion of said shaft, when in contact with another gear, and having its center on the side of said axis, which is remote from said other gear, peripheral cam surfaces on said inner part and rolls, interposed between said sur-



faces and said outer part, whereby, when in contact with said other gear, said outer part is impelled to tend to return to concentricity with regard to the axis of rotation of said shaft, thereby keeping contact with said other gear.

1,822,602. REVETMENT MAT. BLAIR A. ROSS, Memphis, Tenn. Filed Aug. 7, 1930. Serial No. 473,727. 14 Claims. (Cl. 61—38.)



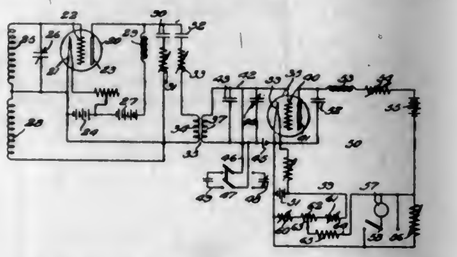
1. In a revetment mat comprising concrete slabs assembled with one corner of each of four slabs adjacent, hooks each projecting from a block corner, a ring engaged by and holding together the four adjacent hooks, a lifting loop having a shank disposed through said ring and hook assembly, and means for securing said loop to said assembly, said attaching means engaging said hooks to prevent opening thereof.

1,822,603. MEANS AND METHOD FOR PLACING REVETMENT MATS. BLAIR A. ROSS, Memphis, Tenn. Filed Aug. 7, 1930. Serial No. 473,728. 19 Claims. (Cl. 61—38.)



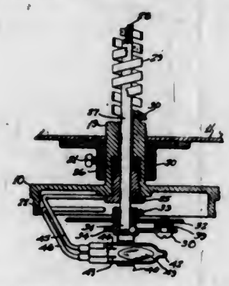
1. The method of building and placing revetment mats, which comprises assembling a mat above water, in successive increments, progressively launching the mat so formed, securing the portion of mat first completed to and supporting same by a series of floats, progressively securing additional portions of such mat as they are completed, to, and supporting same by floats, and on completion of a mat of desired length, releasing the floats along one end of said mat and progressively thereafter releasing additional floats as the previously released portions settle, until all of said floats are released; and allowing said mat to settle to place.

1,822,604. MEASURING THE FREENESS OF PULP. FRANCIS L. SIMONS, Kennebunk, Me., HERVEY J. SKINNER, Wakefield, and RAYMOND M. FUOSS, Cambridge, Mass., assignors to Skinner & Sherman Inc., Boston, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1929. Serial No. 387,773. 9 Claims. (Cl. 92—38.)



1. The method of measuring the freeness of pulp, which consists in measuring its dielectric capacity.

1,822,605. MERCURY SWITCH THERMOSTAT. LAWRENCE R. TEEPLE, Portland, Oreg. Filed May 20, 1929. Serial No. 364,518. 4 Claims. (Cl. 200—137.)



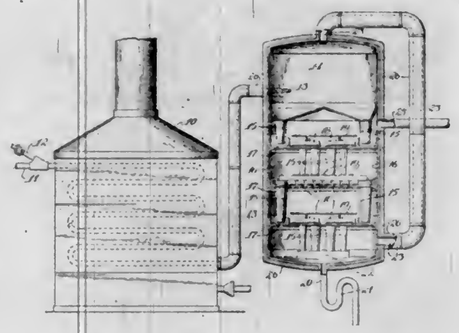
1. A mercury switch thermostat having in combination a rotatably adjustable base, a shaft passing through said base, a helical thermostatic element having one end fastened to said shaft and the other end to said base, a thermometer dial adjustably mounted on said shaft, a switch holder mounted on said dial, means for adjusting said holder with relation to said dial, and a mercury tube on said holder having a pair of electrodes therein.

1,822,606. METHOD OF MANUFACTURING LENSES AND APPARATUS THEREFOR. FRANCIS JOHN GEORGE BAUCE WATSON, Islington, London, EDWARD CULVER, Crouch End, London, and ALFRED HENRY EMERSON, Finchley, London, England, assignors to United Kingdom Optical Company, Limited, of London, England. Filed Nov. 24, 1928. Serial No. 321,602. 4 Claims. (Cl. 49—82.1.)



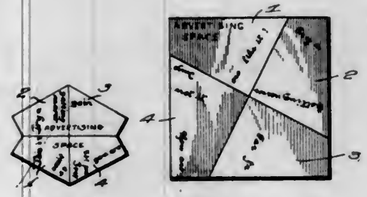
1. In an apparatus for fusing countersinks, a metallic trough, a strip of inert material on the bottom of the trough such as asbestos, and yielding means adapted to be interposed between groups of pieces of glass to be fused into buttons, to force yieldingly said groups outwardly across the side walls of the trough.

1,822,607. ART OF DISTILLING HYDROCARBON OILS AND APPARATUS THEREFOR. WILLIAM H. BAHLKE, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Apr. 4, 1927. Serial No. 180,963. 10 Claims. (Cl. 196—139.)



1. The method of distilling hydrocarbon oils which consists in passing said oil in a confined stream through a heated zone wherein the oil receives the entire and sole heating for the process, delivering the mixed vapors and unvaporized oil into a separating chamber wherein a separation of vapors and unvaporized oil takes place, and passing said unvaporized oil downwardly and said vapors in countercurrent in intimate contact with each other said unvaporized oil and said vapors being brought into contact only with each other, whereby they are brought into equilibrium.

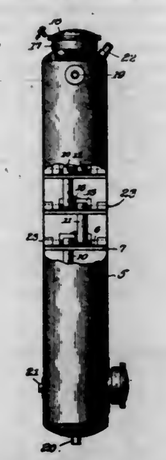
1,822,608. ADVERTISING DEVICE. ARTHUR G. BORDEN, Washington, D. C. Filed Dec. 18, 1929. Serial No. 414,093. 2 Claims. (Cl. 273—157.)



1. In a device of the class described, a flat sheet of material having a square perimeter and divided into four quadrilateral members abutting edge to edge for forming a square geometrical figure, indicia carried on each of said members and arranged to be matched when said members are assembled edge to edge in a plurality of different geometrical outlines.

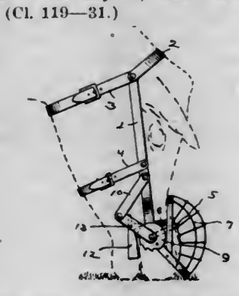
1,822,609. BUBBLE TOWER CONSTRUCTION. OSWALD C. BREWSTER, Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Feb. 23, 1928. Serial No. 256,366. 6 Claims. (Cl. 261—114.)

1. A bubble tower comprising pans provided with openings, flanges adjacent said openings and serving to maintain a pool of oil on said pans, inlet and outlet pipes arranged substantially in juxtaposition, partitions separating said inlet and outlet pipes, said flanges being so shaped as to cause the material flowing from said inlet pipes to said outlet pipes to follow an elongated path, bubble caps



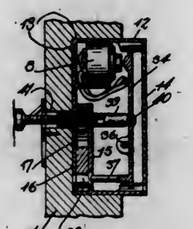
provided with side openings, and adapted to be received over said flanges, and spacers separating the side walls of said bubble caps from said flanges except where the inlet and outlet pipes and partitions are located.

1,822,610. CATTLE MUZZLE. ROBERT F. CAMPBELL, Stuart, Fla. Filed May 15, 1929. Serial No. 363,263. 3 Claims. (Cl. 119—31.)



1. In a cow muzzle a head frame, fastening means for said frame, a hood pivotally mounted on said frame and free to swing when the head of the animal wearing the muzzle is in lowered position, a ratchet keyed to said hood, and a pawl pivotally mounted on said frame adapted to engage said ratchet and hold the hood against movement when the head of the animal wearing the hood is in elevated position.

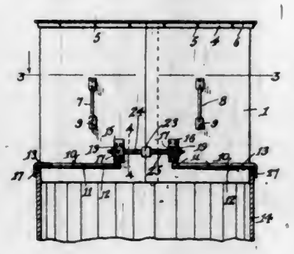
1,822,611. LOCK. CHARLES C. CARTIA, McKeesport, Pa. Filed June 21, 1929. Serial No. 372,715. 3 Claims. (Cl. 70—75.)



1. A lock comprising a casing, a sliding lock bolt therein, key operated means for shifting the bolt to locked po-

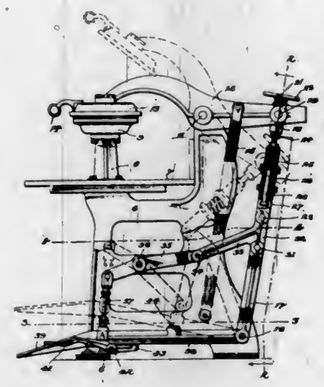
sition, levers pivoted in the casing, each having a pin moving into interlocking engagement with the bolt when projected to locked position, means for moving the levers to separate the pins from the bolt whereby the key operated means may be employed for releasing the bolt, the key operated means including a shaft extending transversely of the casing and engageable with the bolt with an end projecting from the casing and a block keyed on the end of the shaft adapted for the engagement of operating means therewith.

1,822,612. ADJUSTABLE DRUM EXTENSION FOR HOGSHEADS. JOSEPH HUBBARD SAUNDERS and HUGH ANSEL WILLIFORD, Rocky Mount, N. C., assignors to China American Tobacco Company, Rocky Mount, N. C. Filed July 23, 1929. Serial No. 380,398. 12 Claims. (Cl. 226—129.)



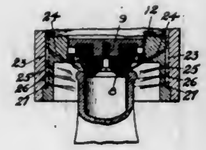
1. An adjustable extension drum for hogsheads comprising an overlapping, split tubular body, a narrow annulus encompassing and secured to the outer end thereof, a pair of spaced supports secured to the periphery of said body in proximity to the inner end thereof, and means carried by said body between said supports and annulus for adjusting the size of said body at its inner end.

1,822,613. GARMENT PRESS. CLARENCE M. CLARKE, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 350,089. 4 Claims. (Cl. 68—9.)



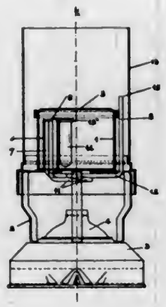
1. In a press, the combination of a fixed frame; a fixed pressing element supported thereby; a second pressing element cooperative therewith; a pivoted supporting member for said second pressing element; a link pivotally connected at one end to the pivoted supporting member; a link pivotally supported on the fixed frame; a thrust member having spaced pivotal connections with the links and having a third pivot displaced from the line connecting its pivot connections with the two links, the four pivotal connections of the two links being substantially aligned when the press is closed; and means for moving the third pivot of the thrust member in a definite path to cause said four pivotal connections of the links to move toward and away from alignment.

1,822,614. METHOD OF PACKAGING AND APPARATUS THEREFOR. FRANK L. DARLING, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 2, 1930. Serial No. 440,879. 10 Claims. (Cl. 226—68.)



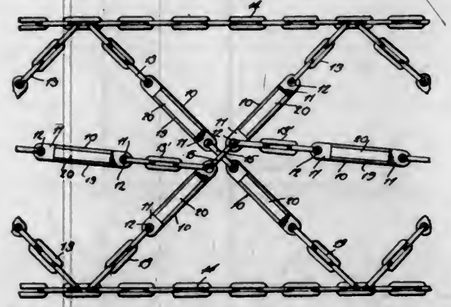
1. The method of packaging food and similar products in vessels of the type having a mouth provided with a narrow top surface around the mouth to form a sealing lip, comprising filling the receptacle, closing the mouth of the receptacle temporarily without abutting the top surface or sealing lip around the mouth whereby to leave the sealing lip thereof entirely exposed, washing the lip while the receptacle is so temporarily closed, removing the temporary closure and applying a permanent closure.

1,822,615. APPARATUS FOR PRODUCING SUDORIFEROUS VAPOR BATHS. JACOB DIENA, Paris, France. Filed May 14, 1930, Serial No. 452,375, and in Belgium May 18, 1929. 3 Claims. (Cl. 167—3.)



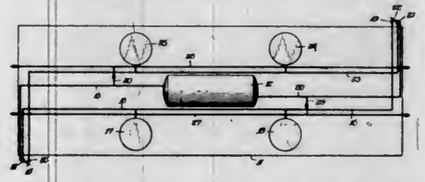
1. Vapor bath apparatus comprising a boiler, a heater for the boiler, a steam duct extending from the steam space in the boiler downwardly through the bottom thereof, across the bottom thereof and upwardly at one side thereof, so that steam from the boiler is superheated as it passes through said conduit below the bottom of the boiler and is then discharged upwardly.

1,822,616. ANTISKID DEVICE. REX J. DUNHAM, Milwaukee, Wis. Filed Apr. 23, 1930. Serial No. 446,668. 2 Claims. (Cl. 152—14.)



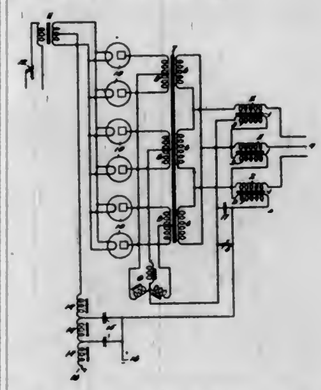
1. An anti-skid device of the character described, comprising an elongated cross link, ears formed on the ends of each cross-link having openings for receiving a retaining member, a hard metal insert carried by the cross-link, whereby the same may be removed or reversed when worn, and means for retaining the removable insert in place.

1,822,617. CONTROL VALVE PLUNGER. ERIC P. ERICSON and WILLIAM J. MOYLE, Hibbing, Minn. Filed Dec. 22, 1927. Serial No. 241,988. 2 Claims. (Cl. 303—6.)



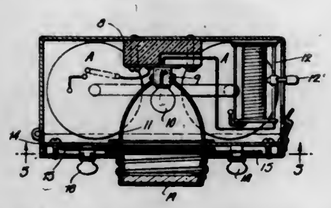
1. In a dump car or the like, air cylinders for dumping the car in one direction, additional air cylinders for dumping the car in another direction, separate control valves for the cylinders operating in each direction, and a plunger operated by air pressure, automatically interposed in the path of one valve operating means when the other valve is opened to operate its cylinders.

1,822,618. HIGH POWER RECTIFIER SYSTEM. LOUIS A. CEBHARD, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Nov. 7, 1927. Serial No. 231,606. 4 Claims. (Cl. 175—363.)



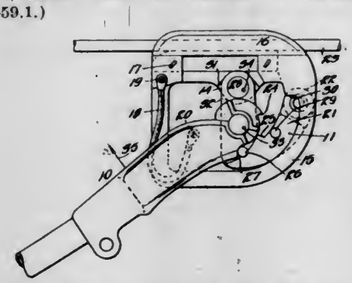
2. A rectifier system including a three phase power supply circuit, a load circuit, a plurality of two-electrode rectifier tubes, a plurality of transfotmers each having primary and secondary windings with the primary windings thereof each supplied with energy from one phase of said power supply circuit, connections between opposite terminals of said secondary windings and one electrode of each of said rectifier tubes, an interphase transformer having one winding thereof connected to a mid point in each of said aforementioned secondary windings, means coupled to each phase of said power supply circuit and a series circuit extending from a common point on each of the windings of said interphase transformer and said load circuit, whereby, variations in the characteristic of said load operate to change the potential impressed across said rectifier tubes.

1,822,619. MULTICOLOR FLASH LIGHT. MORRIS GROSSMAN, New York, N. Y. Filed May 23, 1929. Serial No. 365,473. 2 Claims. (Cl. 240—10.63.)



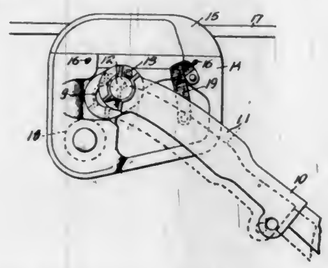
1. A flashlight of the character described comprising a housing having a light emitting opening and a plurality of slots in the front wall thereof, light projecting means mounted in the housing, a partition wall mounted in the housing between the front wall thereof and the light projecting means, said partition wall spaced from the front wall and having an opening therein in registry with the front wall opening, a plurality of overlapping screens mounted for sliding movement in the housing between the partition and the front wall for disposition between the light projecting means and the front wall opening, a slide member rigidly mounted on the forward side of each screen and extending into a slot, a handle connected with the outer face of the slide member, a spring member connected to the inner face of the screen opposite the inner face of the slide member and frictionally engaging the partition wall to yieldingly retain each screen in shifted position in the housing.

1,822,620. TROLLEY SHOE. ANDREW L. HENRY, Indianapolis, Ind., assignor to Trolley Shoe Wheel Company, Indianapolis, Ind., a Corporation of Indiana. Filed May 2, 1930. Serial No. 449,332. 8 Claims. (Cl. 191—59.1.)



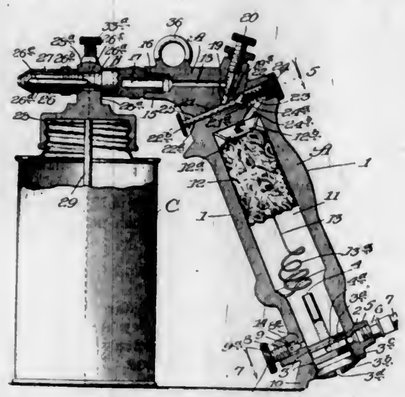
1. A trolley shoe comprising a harp, a spider pivoted to the harp, said spider having two arms diverging upwardly from the pivotal point with respect to said harp, a frame pivotally mounted in one of the arms, said frame carrying a trolley contact shoe detachably secured thereon, the other arm of the spider carrying a roller for contact with the trolley wire when the car is moving backwards, substantially as set forth.

1,822,621. TROLLEY SHOE. ANDREW L. HENRY, Indianapolis, Ind., assignor to Trolley Shoe Wheel Co., Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 23, 1930. Serial No. 490,787. 5 Claims. (Cl. 191—59.1.)



1. A trolley shoe having a tread for contacting with a wire, a carrier for said tread, a harp, a pin carried by said harp for supporting said carrier, the carrier having an elongated slot to provide a channel in which the said pin can travel, thus permitting the said carrier to move obliquely forward and backward on the said pin to aid in the rotation of the shoe in backing up, substantially as set forth.

1,822,622. SPRAYING DEVICE FOR SPRAYING PAINTS, VARNISHES, ETC. WOLFGANG HERMANN, Chicago, Ill., assignor to Metal Specialties Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 28, 1928. Serial No. 273,724. 4 Claims. (Cl. 91—45.)



2. In a spraying device, a handle provided with a chamber and above said chamber with nozzle-attaching means and with a passage leading from the upper portion of said chamber through the nozzle-attaching means; a removable plug connected with the lower end of said chamber and equipped with a drain-valve; an air hose connected with the base-portion of said handle and communicating with said chamber; and a packing in the upper portion of said chamber removable through the lower end thereof when said plug is removed.

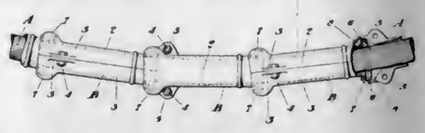
1,822,623. DRIVE EXTENSION FOR TRUCKS. MARION M. HILL, Sioux Falls, S. Dak., assignor of one-fourth to Miles E. Peck and Lucius J. Wall, Sioux Falls, S. Dak. Filed Mar. 4, 1930. Serial No. 433,140. 4 Claims. (Cl. 180—1.)

1. In combination with the drive of a motor vehicle including a driving and a driven member adapted to be engaged in the normal drive, and a torque tube and sleeve also adapted to be coupled by standard connections in the normal drive and to enclose the connection between said driving and driven members; of an extension shaft adapted to be inserted between said driving and driven members having one end corresponding to the end of the driven member and adapted to similarly engage the driving member, and its other end corresponding to the driving member and adapted to similarly engage the driven member; and an extension housing enclosing the extension shaft and having one end corresponding to the standard end



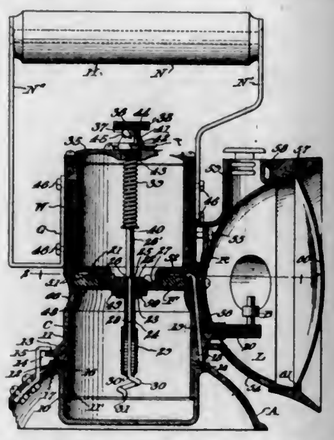
of the sleeve and adapted to similarly engage the end of the torque tube, and its other end corresponding to the standard end of the torque tube and adapted to similarly engage the sleeve; whereby the drive may be extended and the extension drive shaft and extension housing supported by standard connections by and between the original torque tube and sleeve said housing maintaining rigid alinement of the driven and driving members and extension shaft.

1,822,624. CABLE SHIELD. ALEXANDER O. HOEFTMANN, Worcester, Mass. Filed Mar. 7, 1929. Serial No. 345,145. 4 Claims. (Cl. 247—27.)



1. A cable shield comprising a plurality of short length tubular members adapted to be loosely mounted on a cable, said members being divided longitudinally to facilitate their mounting on a cable and connection to each other, means for securing the parts of said members together, and means formed integral with each of said members adapted to cooperate with corresponding means on adjacent members to form universal joints between adjacent members.

1,822,625. ACETYLENE GENERATOR. WILLIAM F. HUNT, New Brighton, and HERMANN C. STELLING, Orangeburgh, N. Y., assignors to Oxweld Railroad Service Company, a Corporation of Delaware. Filed Aug. 10, 1926. Serial No. 128,464. 17 Claims. (Cl. 48—4.)

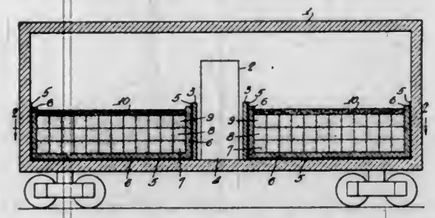


3. An acetylene generator according to claim 1, wherein said receptacle and said base are joined together and a

shoulder is formed at such joint, and a collar on said wall bearing against said shoulder.

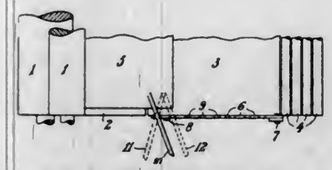
11. An acetylene generator comprising a generating chamber, a water reservoir, a water feed passage leading from said reservoir to said chamber, water feed controlling means comprising a valve for said passage and a rod movable with said valve and extending through said passage into said chamber, a spring tending to hold said valve closed, and means for lifting said valve and rod and for turning the same when the valve is closed.

1,822,626. METHOD OF AND APPARATUS FOR STORAGE AND SHIPMENT OF SOLID CARBON DIOXIDE. CHARLES L. JONES, Pittsburgh, Pa., and JOHN D. SMALL, Douglaston, N. Y., assignors, by mesne assignments, to Dry-rie Equipment Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 6, 1929. Serial No. 353,237. 11 Claims. (Cl. 62—91.5.)



1. A car, truck or the like, having side opening doors and means adapting it for storage of solid carbon dioxide, said means including transverse bulkheads dividing the car into a transverse passage, extending between the doors and storage spaces in the ends of the car, each constituting a bin accessible through the top only and a gas-tight lining for each bin whereby carbon dioxide gas therein, is substantially prevented from escape except through the open top thereof.

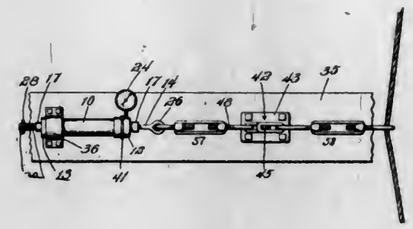
1,822,627. GLASS ROLLING APPARATUS PARTICULARLY APPLICABLE TO THE PRODUCTION OF CONTINUOUS GLASS STRIPS. ERNEST BRISTOW LE MARE, St. Helens, England, assignor to Pilkington Brothers Limited, Liverpool, England, a Company of England. Filed Dec. 18, 1930, Serial No. 503,201, and in Great Britain Dec. 28, 1929. 5 Claims. (Cl. 49—33.)



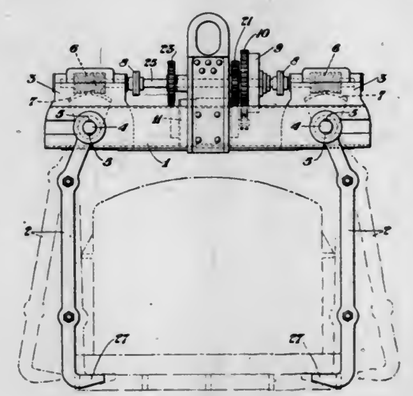
5. In a glass strip rolling apparatus, means for feeding the plastic strip over a flat stationary bed on to a roller bed at the start of the rolling operation, comprising two bars pivotally attached each at one end to the side of the bed and free to be turned upwards about their pivots, said bars being each provided with a series of notches adapted to act as fulcrums with which a lever bar can be successively engaged while one end of said lever bar is engaged with the plastic glass of the strip.

1,822,628. WEIGHT INDICATOR. ROBERT A. LINCOLN, Tonkawa, Okla., assignor of one-half to American Iron & Machine Works, Inc., Tonkawa, Okla., a Corporation of Oklahoma. Filed July 31, 1924, Serial No. 729,340. Renewed Mar. 20, 1928. 9 Claims. (Cl. 265—47.)

1. In a weight indicator for rotary drilling outfits, indicating means, a cylinder, a piston within the cylinder, a fluid within the cylinder between the piston and one end of the cylinder, the piston having a rod projecting through said end of the cylinder, a lever with which said rod is connected, and means adapted to connect said lever with a dead line of hoisting mechanism, said means being adjustable longitudinally of the lever, said lever being pivoted at one end and having a notch formed in one side thereof with which said rod is engaged, the opposite side thereof being provided with a plurality of spaced notches with which the said line is interchangeably connectible.



1,822,629. HOISTING MECHANISM. HOWARD G. MCILVRIED, Gary, Ind., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Apr. 14, 1930. Serial No. 444,304. 5 Claims. (Cl. 294—106.)

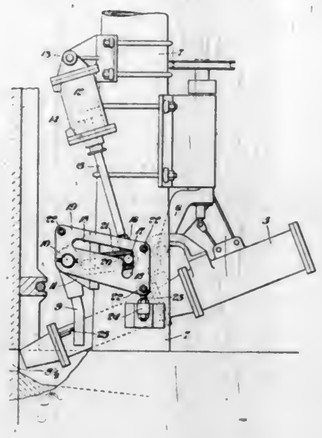


1. In a hoist having opposed jaw members, a jaw member comprising spaced hook members, means for swinging said hook members about a horizontal axis to engage one side of a work-piece, a third hook member hingedly supported between said pair of hook members for movement relative to said hook members, means for normally yieldably urging said third hook member inwardly toward the work-piece, and means for limiting the movement of said third hook member relatively to said pair of hook members.

1,822,630. CLAY GUN CLAMPING MECHANISM. KING H. MCLAUAIN, Duquesne, Pa. Filed Dec. 24, 1930. Serial No. 504,585. 10 Claims. (Cl. 266—42.)

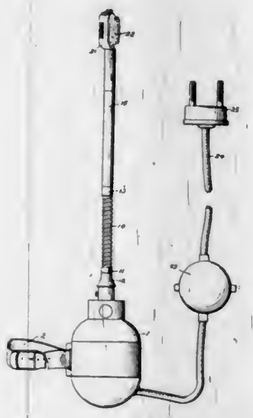
1. Clamping mechanism for clay guns, comprising movable clamping arms movable to and from a position of engagement with the gun, a prime mover for said arms,

and means interposed between said prime mover and said arms for transmitting pressure thereto indirectly while



under no load and direct pressure thereto when the clamping load is applied, the load pressure being applied at substantially right angles to the no-load pressure.

1,822,631. REVOLVING TOOTHBRUSH AND NAIL POLISHER. JOSÉ MEIFREN ROIG, Barcelona, Spain. Filed Apr. 5, 1928, Serial No. 267,758, and in Spain Apr. 5, 1927. 1 Claim. (Cl. 15—23.)



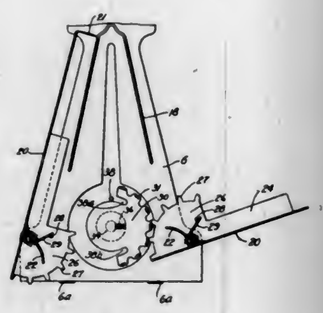
In an apparatus of the character described, a rigid tubular member, a rigid shaft rotatably mounted in the tubular member, an implement support carried by the tubular member and having a longitudinal central cavity constituting a bearing, an implement driving member mounted in the tubular member and having a cavity therein, said driving member being mounted for axial and rotary movement in the tubular member and having driving connection with the rigid shaft, means normally tending to move the driving member outwardly into implement engaging position, the cavity in the driving member being of polygonal form and adapted to engage a correspondingly shaped lug on one end of an implement to impart rotary movement to the latter, the opposite end of the implement being engaged in the cavity of the support.

1,822,632. CABLE DRIVE. ALBERT SPILLMAN, North Tonawanda, N. Y. Filed Mar. 31, 1930. Serial No. 440,609. 6 Claims. (Cl. 272—44.)



1. A cable drive for a device having in combination a continuous undulated track, a plurality of spaced apart wheels running upon the track, sweeps upon which the wheels are mounted, connecting members extending between the sweeps, a plurality of cable carrying jaw members supported by the connecting members, and an endless driving cable extending around the jaw members.

1,822,633. ELECTRIC TOASTER. FRANK J. SPRAGUE, New York, N. Y. Filed Apr. 13, 1929. Serial No. 354,811. 6 Claims. (Cl. 219—19.)

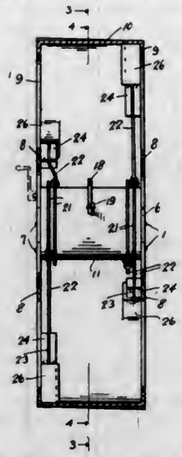


1. In an electric toaster a toast-carrier frame and two side doors hingedly connected thereto, and a manually operated knob to open either of the side doors independently of the other.

1,822,634. TRACTOR WHEEL. THOMAS W. STEELE, Hudson Falls, N. Y. Filed Mar. 18, 1931. Serial No. 523,593. 1 Claim. (Cl. 301—46.)

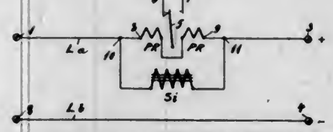
In combination with the hub and rim of a tractor wheel and flat spokes connecting the hub with the rim, a sleeve rotatably arranged on the hub held on the hub by parts of the spokes, said hub having a recess therein and the sleeve having an elongated transversely arranged slot for communicating with the recess, a shaft rotatably arranged in the hub and extending through one end thereof for receiving a handle with its other end located in the recess, a pinion on said end and located in the recess and slot, lugs on the sleeve adjacent the ends of the slot, a segmental rack having its ends connected to the lugs and extending over the slot with its teeth in engagement with the pinion, a pair of flanges on the sleeve adjacent each end thereof, a plurality of links, having their inner ends forked, located at each side of the wheel, some of the forked end at each side of the wheel being

pivoted to one of the flanges of a pair and the forked ends of the other links being pivoted to the other flange of the pair, casings connected with the rim and having



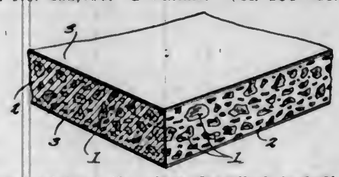
their outer walls formed of parts of the spokes, lugs located therein and having their inner ends pivoted to the outer ends of the links, and said rim having openings therein in communication with the casings.

1,822,635. CIRCUIT ARRANGEMENT FOR THE SENDING OF CURRENT IMPULSES OVER TELEPHONE LINES. ROMAN TRECHCINSKI, Warsaw, Poland, assignor to Telefonaktie Bolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Original application filed Mar. 3, 1927, Serial No. 172,490, and in Poland Apr. 24, 1926. Divided and this application filed May 29, 1930. Serial No. 457,358. 3 Claims. (Cl. 179—16.)



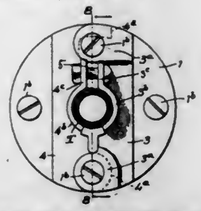
1. A circuit arrangement for transferring selector impulses over telephone lines, especially loaded lines, comprising in combination with an impulse receiving relay, an inductance connected in parallel therewith and having a higher inductivity than that of the relay so that, upon a decrease in the line current, an extra current is induced in the closed circuit formed by the winding of said relay and said parallel connected inductance, said extra current opposing the normal relay current to such an extent that the relay armature is shifted.

1,822,636. INSULATING MATERIAL. HENRY F. WINKELMANN, Nebraska City, Nebr. Filed Mar. 5, 1930. Serial No. 433,396. 2 Claims. (Cl. 154—44.)



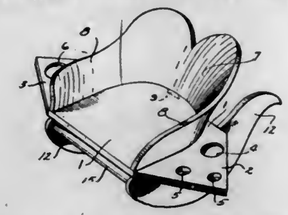
1. A material of the class described including layers of asphalt paper spaced by an adhering mixture consisting of asphalt, vegetable fibre, paraffine oil, and flaked phlogopite.

1,822,637. CLOSING PLATE ASSEMBLY FOR STEERING GEAR HOUSINGS, ETC. RAYMOND E. YOUNG and FRANKLIN F. CHANDLER, La Fayette, Ind., assignors to Ross Gear & Tool Company, La Fayette, Ind., a Corporation of Indiana. Filed Mar. 29, 1928. Serial No. 265,701. 6 Claims. (Cl. 74—39.)



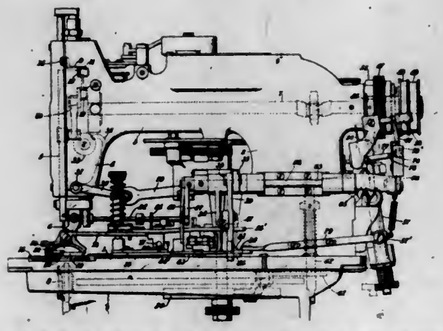
1. A lower closing plate assembly for housings having a tube extending therethrough comprising a base plate having a frusto-conical offset portion on its rear side having an opening therethrough for the tube; means on the outer side of the plate for clamping the tube; comprising movable plates mounted on the base adjacent the opening and having arcuate serrated flanges adapted to engage corresponding serrations on the tube, and means for drawing the plates together, and a gasket around the tube confined within the offset portion by the clamping means.

1,822,638. ITALIAN SMOKING CHAIR. PETER PAUL AIELLO, Shorewood, Wis. Filed Sept. 6, 1928. Serial No. 304,319½. 3 Claims. (Cl. 155—188.)



2. A chair having a seat slab provided with a back and arm rests secured to its upper surface, and a set of rockers secured to its lower surface substantially underneath the arm rests, the seat slab extending laterally at each side beyond the rockers and arm rests and provided in extended portions with article receiving and retaining sockets.

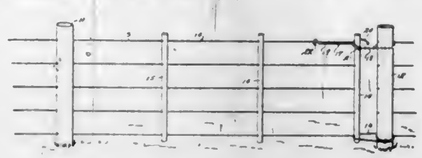
1,822,639. THREAD-CUTTER OPERATING MECHANISM FOR SEWING MACHINES. EDWARD B. ALLEN, Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 27, 1930. Serial No. 464,177. 9 Claims. (Cl. 112—252.)



1. A sewing machine having stitch-forming mechanism, a main-shaft, a stop-motion device including means for

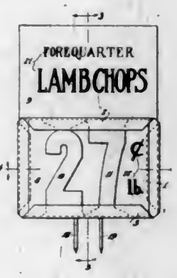
imparting a retrograde motion to the main-shaft before bringing it to a final rest, a thread-cutter, and means actuated by an element of the machine in the retrograde motion of the parts for operating said thread-cutter.

1,822,640. GATE FASTENER. ELI J. ANDERSON, Sheridan, Wyo., assignor of one-half to Laura B. Smith, Sheridan, Wyo. Filed Apr. 7, 1931. Serial No. 528,372. 3 Claims. (Cl. 39—74.)



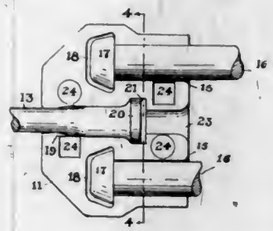
1. A gate fastening device of the character described comprising an elongated body member, an eye secured to and integrally formed with one end of said member, an arcuate extension formed with the eye and adapted to engage about a vertically disposed bar carried by a swinging gate structure, a flexible member secured at one end to the eye and at the opposite end to a fixed post, and a loop secured to the opposite end of said member and engageable with the gate structure whereby to lock the member on the gate.

1,822,641. PRICE TAG AND SIGN. CLIFTON H. ANGELL, Westfield, Mass. Filed Apr. 28, 1930. Serial No. 447,795. 5 Claims. (Cl. 40—5.)



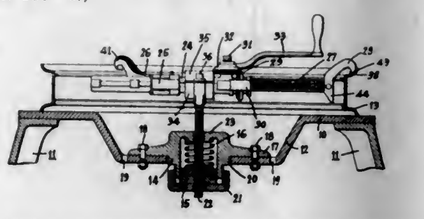
1. The combination in a price tag, of a base piece formed with channels on its opposite faces, the channels on the rear face being designed to receive a card indicating the name of the article, means for retaining the card with a portion above the upper edge of the base piece, and staple means for attaching the tag to an article.

1,822,642. PULL ROD CLAMP. MERTON T. ARCHER, Pittsburgh, Pa., assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 3, 1930. Serial No. 499,699. 6 Claims. (Cl. 287—113.)



1. In a pull rod clamp, a pair of clamp members having longitudinally and centrally an opening, the opening having a seat between its ends to receive a head on a pull rod, and another seat for a head differing from the first head.

1,822,643. RIM TOOL. JAMES BARRETT, New York, N. Y. Filed Mar. 13, 1930. Serial No. 435,410. 2 Claims. (Cl. 157—1.)



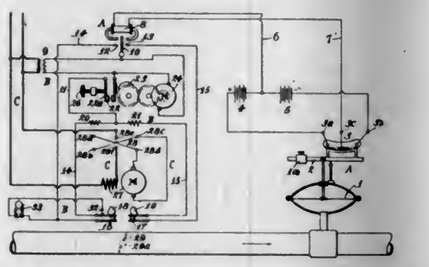
1. In a device for rim-breaking and the like, the combination with a table and a rim-tool having a spider supporting arms extending therefrom, at least one of said arms being longitudinally movable relative to the spider, a screw member fastened to said spider, and means for supporting said screw member from said table, said means comprising a nut, an annular retaining element for the nut, and resilient means cooperatively associated with said nut and annular member for constantly urging the rim-tool to a definite position yet permitting the rim-tool to be moved from such position against the action of the resilient means.

1,822,644. HUMIDIFIER. CLIFFORD J. COWMAN, Mallard, Iowa. Filed Oct. 2, 1930. Serial No. 486,039. 4 Claims. (Cl. 299—20.)



1. In a device of the class described, a frame, a thick sheet of pervious material secured in said frame, a comparatively thin wick member resting on said comparatively thick sheet of pervious material and a container designed to receive liquid and communicating with said comparatively thin sheet of material.

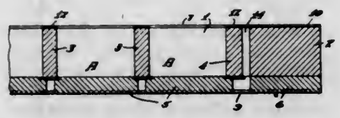
1,822,645. REMOTE PRESSURE CONTROL SYSTEM FOR GAS PLANTS. GUY G. CRANE, Owosso, Mich. Filed May 28, 1930. Serial No. 456,716. 4 Claims. (Cl. 50—10.)



1. A gas pressure-regulating system comprising in combination a source of gas, a main for carrying the gas to a point remote from the source, a valve in said main at said source, a pressure-responsive diaphragm in communication with the main at said remote point, a two-wire circuit extending from said source to said remote point, a source of direct current, a switch operatively connected to said diaphragm and arranged to connect said source of direct current to said two-wire circuit when the gas pressure exceeds or drops below that to be maintained, so

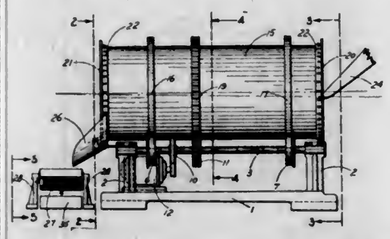
that the current sent over said circuit is of one polarity when the gas pressure at the remote point is too low, and of the opposite polarity when the gas pressure is too high, a polarized relay connected in said two-wire circuit at said source of gas, a control circuit located at said source of gas and having three legs, either of the first two legs being arranged to be closed by the polarized relay, the third leg connected to the first two and serving as a common return lead, a source of electric current connected to a switch arm of said polarized relay and to the third leg of said control circuit, two solenoids, each connected in series with one of said first two legs, a switch in said third leg, automatic means for alternately opening and closing said switch at regular time intervals, an electric motor operatively connected with said valve in the gas main, a power line for said motor, a motor-reversing switch connected between the motor and said power line, said reversing switch arranged to be closed by one of said solenoids in the control circuit to operate the motor to close said valve, and to be closed by the other of said solenoids to operate the motor to open said valve.

1,822,646. BRICK MOLD. J. ADDISON CROWELL, Wallkill, N. Y., assignor to James B. Crowell & Son, Wallkill, N. Y., a Corporation of New York. Filed Sept. 26, 1930. Serial No. 484,567. 2 Claims. (Cl. 25—119.)



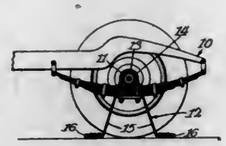
2. A brick mold comprising sides, bottom panels, partitions and end blocks, a metallic plate affixed to the top of each end block, and a panel under each end block, the inner sides of said metallic plate, said end block and said end block panel constituting a continuous flush wall spaced from the adjacent end partition and adjacent bottom panel.

1,822,647. APPARATUS FOR GRINDING AND SEPARATING MINERALS. HERMAN F. DUBBERT, Port Clinton, Ohio, assignor to American Gypsum Company, Port Clinton, Ohio, a Corporation of Ohio. Filed June 13, 1929. Serial No. 370,476. 2 Claims. (Cl. 83—9.)



1. Apparatus for causing relative movement between particles of mineral aggregate comprising a cylindrical shell, means for rotatably supporting said shell with its longitudinal axis disposed at an angle to the horizontal, means for rotating said shell about its longitudinal axis, a cover plate adapted to extend across one end of said cylindrical shell and having an aperture at its center through which said mineral aggregate may be charged into said rotatable cylindrical shell and a cover plate adapted to extend across the other end of said cylindrical shell and having a plurality of circumferentially spaced apart apertures disposed around its periphery but spaced radially inwardly from said shell, and through which said aggregate may be discharged from said shell to a point completely removed from said rotatable shell, the central portion of said last named cover plate being imperforate.

1,822,648. ANCHORING DEVICE. EDWARD S. EVANS, Detroit, Mich., assignor to The Evans Auto Loading Co. Inc., Detroit, Mich., a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,241. 4 Claims. (Cl. 188—32.)



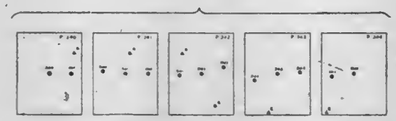
1. A tie-down device for automobiles comprising a metallic strap bent to provide a vehicle-engaging loop and a pair of legs, the end portions of said legs being bent to form feet, the ends of said feet being return-bent, and a plate for each foot extending over and permanently attached thereto, the portion of said foot beneath said plate being imperforate, said plates and feet having openings therethrough.

1,822,649. EXPANSION PILOT. WILLIAM H. EVANS, Chicago, Ill. Filed Oct. 18, 1929. Serial No. 400,593. 3 Claims. (Cl. 90—125.)



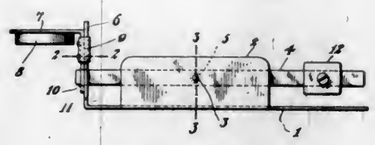
1. In a pilot for a valve seat reamer, a pilot guide including a shell with end slots to form a plurality of tines and a shank threaded into the shell with a cam surface for engaging the tines at a single point to expand them inside a valve stem guide, the tines having single cam engaging points at the ends and having a central longitudinal area below the normal curved surface thereof, whereby a greater frictional engagement exists on the outside of the shell than on the inside.

1,822,650. METHOD OF MAPPING. SHERMAN MILLS FAIRCHILD, New York, N. Y. Filed Apr. 26, 1927. Serial No. 186,706. 3 Claims. (Cl. 33—1.)



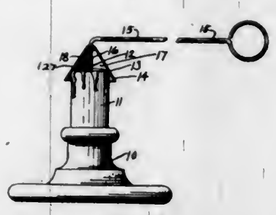
1. The method of constructing an aerial map from a series of overlapping aerial photographs consisting of locating the center of each photograph, locating the point corresponding to each center on each adjacent photograph, drawing a center to center line thru the center of each photograph and thru each located center on the photograph, measuring the distance from the center of each photograph to the point on the photograph corresponding to the center of each adjacent photograph, reducing said measurements to a common scale, plotting a traverse of the center lines of the photographs from the said measurements and from the angle between the center to center lines as shown on the photographs, bringing the photographs to the common scale of the traverse and forming a composite map by orienting and locating said scale photographs according to the plotted traverse.

1,822,651. READING MACHINE. BRADLEY A. FISKE, New York, N. Y. Filed Sept. 23, 1927. Serial No. 221,598. 4 Claims. (Cl. 88—39.)



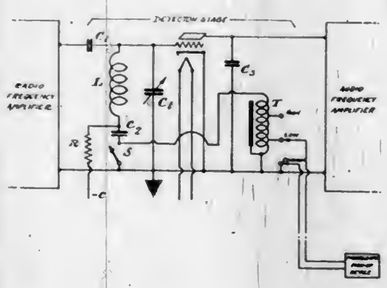
4. In a reading machine the combination with a suitable base and a counterbalancing lever mounted thereon, of a lens or glass supported by said lever so as to be counterbalanced by gravity and means for adjusting said lens or glass with respect to the base.

1,822,652. SNUFFER FOR CANDLES. JOSEPHINE A. GLUCKERT, Philadelphia, Pa. Filed Apr. 6, 1931. Serial No. 528,080. 5 Claims. (Cl. 67—24.)



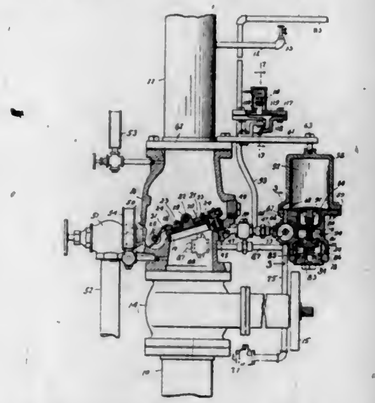
1. In a snuffer having a hood adapted to cap over the top of a burning candle, means fixed to said hood, within the same, positioned to contact the wick of said candle, as said hood envelops the top of said candle.

1,822,653. PHONOGRAPH COUPLING FOR RADIORECEIVERS. ALFRED H. GREBE, Hollis, and PERCIVAL D. LOWELL, Jamaica, N. Y., assignors to A. H. Grebe & Co., Inc., Richmond Hill, N. Y., a Corporation of New York. Filed June 28, 1930. Serial No. 464,584. 4 Claims. (Cl. 179—100.11.)



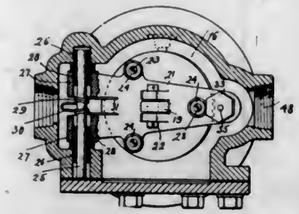
1. In a radio receiver having tuning means, a vacuum tube detector, a transformer arranged for excitation from a phonograph pick-up, and means automatically operated by the adjustment of said tuning means to utilize said detector tube as an amplifier of the signals generated by said phonograph pick-up.

1,822,654. ALARM FOR SPRINKLER SYSTEMS. JOHN R. HAMILTON, Cleveland Heights, Ohio, assignor to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 7, 1927. Serial No. 173,232. 6 Claims. (Cl. 169—23.)



1. In an automatic alarm apparatus for sprinkler systems, the combination with an automatically operated water valve in a water supply pipe of the system, comprising a casing and a valve carrying arm hinged therein, of a pilot valve for controlling the flow of water to the alarm mechanism, carried by said arm, an adjustable seat member with which said pilot valve cooperates, a pipe for conveying water from said pilot valve to the alarm mechanism secured to said casing independently of said seat member, a passage through the wall of said casing for adjusting said seat member without renuering said system inoperative, and means removably closing said passage.

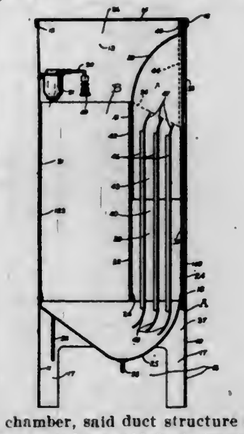
1,822,655. VALVE. JOHN R. HAMILTON, Cleveland, Ohio, assignor to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Original application filed Mar. 7, 1927, Serial No. 173,232. Divided and this application filed Jan. 3, 1928. Serial No. 244,176. 7 Claims. (Cl. 251—123.)



1. In apparatus of the class described, a valve casing, an arm pivotally mounted in said casing, a valve seat in said casing, a clapper valve pivotally mounted on said arm, and a plurality of screws mounted in said arm for engagement with said clapper valve to rigidly and adjustably position the latter relative to said arm and in proper relation with said seat.

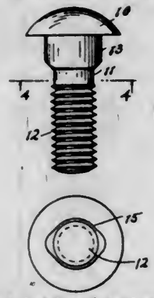
1,822,656. HUMIDIFIER. DANIEL HANDELAN, Minneapolis, Minn. Filed Jan. 16, 1929. Serial No. 332,819. 13 Claims. (Cl. 261—116.)

1. A humidifier comprising a case having an inlet near the bottom thereof and an outlet near the top thereof, a U-shaped duct structure within said case falling short of the top and bottom thereof to provide chambers above and below said duct structure, said lower chamber communicating with said inlet, one leg of said duct structure being connected at the top to said outlet, the other leg of said duct structure being open at the top and communicating



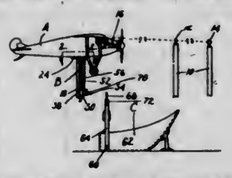
with the upper chamber, said duct structure and said casforming a passageway along said duct structure for bringing said chambers into communication, and means for humidifying the air passing through said duct structure.

1,822,657. BOLT. WILLIAM M. HORTON, Cleveland, Ohio, assignor to The Lamson & Sessions Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 29, 1930. Serial No. 440,123. 4 Claims. (Cl. 85—9.)



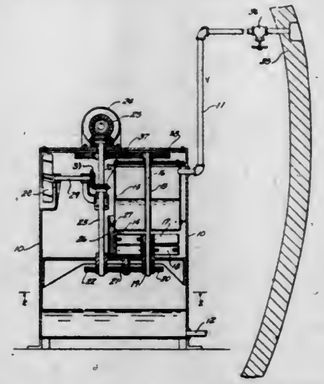
1. A bolt having a head and a threaded portion, and a shoulder between the head and and threaded portion, said shoulder having four longitudinal flat surfaces the opposite ones of which are parallel, and four cylindrical surfaces interposed between the flat surfaces, the common center for two of said cylindrical surfaces lying outside the circles of the two remaining surfaces.

1,822,658. AUTOMATIC EXCHANGER FOR MAIL. FREDERICK E. KAMPMEYER, Sr., Sibley, Iowa, assignor of one-third to Meindert Frick, Sibley, Iowa. Filed Jan. 20, 1930. Serial No. 422,084. 10 Claims. (Cl. 258—1.)



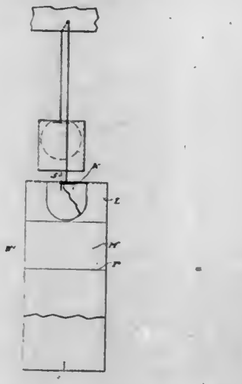
1. In an automatic exchanger for mail and the like, a stationary mail support and a movable mail support, said movable mail support including a chute and a mail pick up means provided with mechanism for releasing mail from said chute upon the pick up means receiving mail from the stationary mail suppo t.

1,822,659. MEANS FOR EXTRACTING AIR FROM WATER. MICHAEL KIRSCH, Milwaukee, Wis. Filed July 5, 1928. Serial No. 290,317. 2 Claims. (Cl. 183—2.5.)



2. In a device of the character described, an apertured compartment provided with a water inlet, a fan in the aperture of said compartment for maintaining a reduced atmospheric pressure therein, a container within the compartment supplied with water from the inlet and provided with an apertured wall section, oppositely rotatable fans adjacent said wall section, and a foraminous shield partially surrounding said fans.

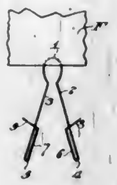
1,822,660. ART OF TAGGING. MATHIAS R. KONDOLF, Lower Merion Township, Montgomery County, Pa., assignor to The Lox Seal Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 20, 1927. Serial No. 185,090. 2 Claims. (Cl. 40—20.)



1. A tag comprising a blank having an apertured end section, and sections bent around opposite sides of said end section to form a pocket, said tag having an aperture leading into said pocket.

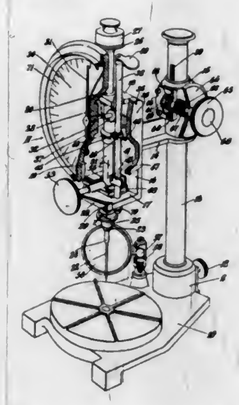
2. The combination with a textile garment of a soft flexible cord threaded through a portion thereof, a tag permanently secured to one end of said cord, a needle secured at substantially its central portion to the other end of said cord, and a second tag provided with a relatively small aperture and an enlarged pocket irremovably housing said needle and communicating with said aperture, said needle having a point for forcing its way through the garment for threading the cord therethrough in the application of the first tag to the garment and for facilitating the entrance of the needle through said aperture into the pocket of the second tag in the application of the latter to the garment.

1,822,661. ART OF TAGGING. MATHIAS R. KONDOLF, Lower Merion Township, Montgomery County, Pa., assignor to The Lox Seal Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 10, 1927. Serial No. 232,242. 1 Claim. (Cl. 40—21.)



A fastening device for unwithdrawable passage through a wall having a relatively minute aperture, said device comprising a wire bent to form legs, each leg being bent back upon itself to form a hook section, each hook section extending in a direction substantially parallel with its associated leg and having its free end bent at an angle to cross its associated leg.

1,822,662. PRECISION MEASURING INSTRUMENT. EUGENE LETSCH, Lynbrook, N. Y., assignor, by mesne assignments, to Precision Scientific Company, a Corporation. Filed Nov. 24, 1926. Serial No. 150,400. 11 Claims. (Cl. 265—12.)



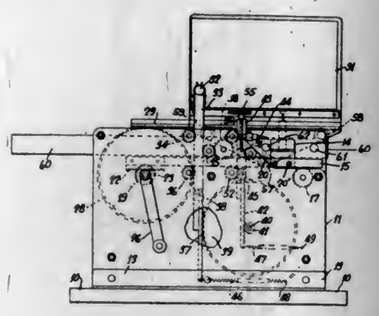
1. A measuring instrument comprising a base, a vertical rod supported thereabove, means to load said rod for effecting depression thereof, a dial, a pointer therefor, and a rod parallel to said first rod, provided with a finger piece for manual actuation thereof, a stop on said first rod for limiting the depression of said second rod and a rack and pinion connection between said second rod and said pointer.

1,822,663. PIPE JOINT COMPOUND. WILLIAM MANO, Flushing, N. Y. Filed Dec. 8, 1927. Serial No. 238,721. 12 Claims. (Cl. 106—8.)

1. A pipe joint composition comprising magnesium chloride, magnesium sulphate, lead acetate, glycerine, magnesium oxide, fluorspar, graphite, dextrine, aluminum oxide and water, and serving to seal a joint while adhering thereto insufficiently to prevent forcible separation thereof without damage.

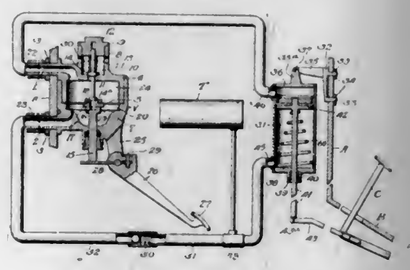
9. A pipe joint composition comprising a magnesium oxychloride base and including a small quantity of graphite, and having the property of sealing pipes together at the joint and adhering thereto sufficiently for that purpose but insufficiently to prevent undamaged separation of the joint.

1,822,664. DIAGRAPHIC TRACING MACHINE. WALTER HENRY MARTIN, Plainfield, N. J., assignor to Carboloy Company, Inc., New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,629. 14 Claims. (Cl. 33—23.)



1. In a diagraphic tracing machine, the combination comprising a frame, a pair of plungers supported by said frame adapted to execute relatively parallel motions related in accordance with a predetermined ratio, a second pair of relatively parallel moving plungers supported by said frame and adapted to have motions related in accordance with a predetermined ratio, said second pair of parallel plungers arranged to move at right angles to the first pair of parallel moving plungers, means for associating the plungers of one set to trace and reproduce one component of the contour in a plane of the form to be traced, and means for associating the remaining plungers to reproduce another component of said form on a scale in accordance with said ratios.

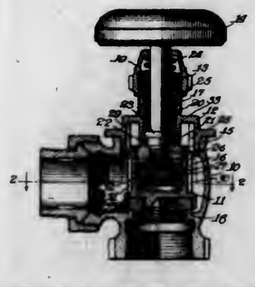
1,822,665. BRAKE SYSTEM. ROBERT E. MITTON, Salt Lake City, Utah. Filed Sept. 4, 1928. Serial No. 303,891. 5 Claims. (Cl. 303—54.)



1. A fluid braking mechanism, the combination of a power chamber with tubular connections at both ends, said chamber secured or hinged to the dashboard of a motor vehicle, an actuation rod slidably operable through a packing gland in one end of said power cylinder, said rod operatively connected to an extension secured upon the conventional brake pedal.

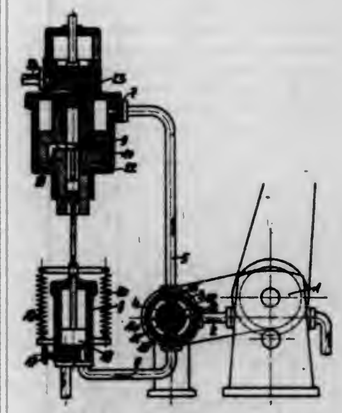
1,822,666. SELF-PACKING VALVE. CHARLES A. OLSON, Geneva, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed May 25, 1929. Serial No. 365,801. 1 Claim. (Cl. 251—48.)

In a valve of the non-rising stem type, the combination of a valve body provided with a stuffing box, a valve stem extending through said box and provided with a collar disposed within said stuffing box, a valve connected with the lower end of said stem, an adjustable stuffing box cap, and a spring interposed between said cap and



the packing adapted to compress the packing and to exert a downward thrust upon the valve stem through said collar for holding said valve against its seat.

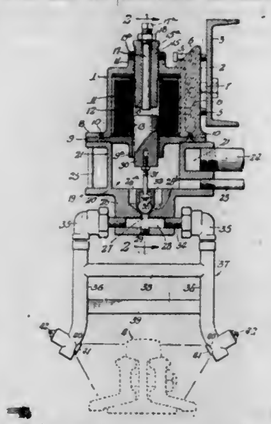
1,822,667. OIL-PRESSURE REGULATING DEVICE FOR UPHOLDING AN EVEN SPEED OF MACHINES. REINHOLD PROELL, Dresden—A., Germany. Filed Jan. 14, 1930, Serial No. 420,746, and in Germany May 3, 1929. 2 Claims. (Cl. 264—14.)



1. In an oil pressure regulating device for upholding an even speed of machines, the combination with an oil pump driven by the machine to be regulated, of a pressure responsive device, a servomotor actuated by said pressure responsive device, said device being provided with an oil regulating screw, a rod forming an operative connection between said device and the servomotor, and distributing means for receiving the oil from the oil pump and feeding it alternately to the servomotor and to the pressure responsive device.

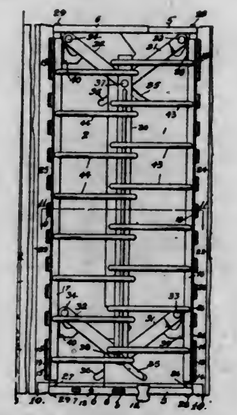
1,822,668. ELECTROMAGNETIC VALVE. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Feb. 23, 1927. Serial No. 170,298. 2 Claims. (Cl. 137—139.)

1. A valve of the kind described, embodying therein a casing having an integral top wall with an annular boss thereon, said boss having a threaded aperture therethrough, an annular electromagnetic coil in said casing, a tubular plug threaded into said boss and extending into the interior of said coil said plug being formed of magnetic material, a non-magnetic member disposed axially within, and longitudinally adjustable of, said plug, both said member and the plug being accessible from without the casing for adjustments relative to each other and within the coil, and an armature movable in said coil



toward and away from said plug and limited in its movement toward said plug by said member disposed axially therein.

1,822,669. VISIBLE INDEX BOOK. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed July 27, 1929. Serial No. 381,411. 6 Claims. (Cl. 129—13.)



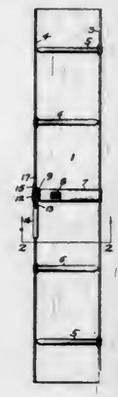
1. A loose leaf book comprising telescoping back plates having arcuate slots and an equalizing mechanism consisting of a floating bar extending lengthwise of said sections, pairs of toggle levers having their outer ends pivoted to said sections, and studs extending loosely through said bar, the inner ends of said levers and said slots, said studs having heads whereby the sections and equalizing mechanism are held in position.

2. A loose leaf book, comprising telescoping back members, elongated side bars and covers pivoted to the outer side edges of said members and leaf-holding posts having their base portions secured to said bars and extending in arcuate form above the latter and merging into straight posts that are parallel to each other and to said members.

1,822,670. LOCK LEVER FOR TELESCOPING ELEMENTS. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed July 10, 1930. Serial No. 466,952. 4 Claims. (Cl. 129—13.)

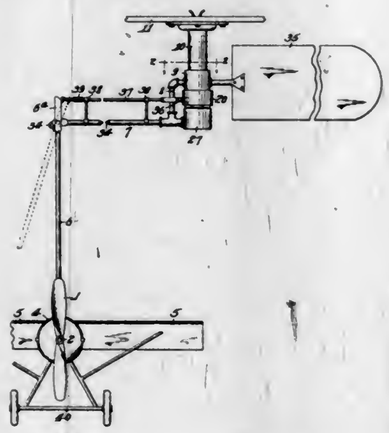
1. A lock for telescoping elements, comprising an elongated tubular female member secured to the side of one

of said elements and having a narrow threaded portion that projects beyond the inner face of said member, a male member swiveled to the side of the other telescoping element and having a groove throughout its length and threaded adjacent said groove, and a finger lever ex-



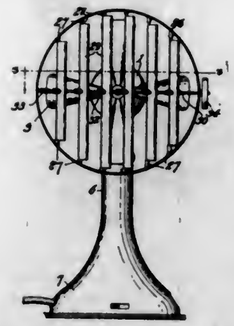
tending rigidly from the lower part of said male member adjacent the last mentioned side and having a lip portion extending therefrom adapted to abut said side and adapted to be manually operated to interlock and release the threads of said members.

1,822,671. AIR AGITATOR. ADOLPH M. SCHICK, Wheeling, W. Va., assignor of one-fourth to E. G. Voltz, Wheeling, W. Va. Filed Feb. 13, 1930. Serial No. 428,073. 3 Claims. (Cl. 230—254.)



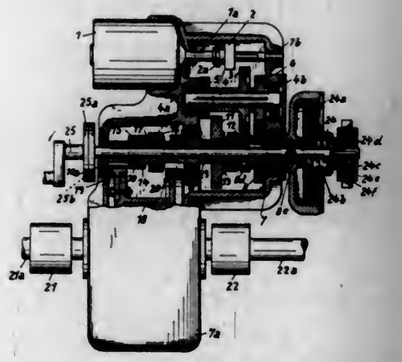
1. Air-agitating apparatus of the character described, comprising a vertical supporting member, a hub mounted for rotation on said member, a laterally directed arm carried in fixed relation to said hub, a suspension rod depending from said arm, an electric motor supported by said rod, a propeller associated with and driven by said motor, said motor and said hub-supported elements being adapted, actuated by said propeller, to travel in a substantially circular path with said hub rotating on said supporting member, and means for limiting the speed of such travel, said means being arranged for actuation by centrifugal force which functions through the medium of said suspension rod.

1,822,672. ELECTRIC FAN. ADOLPH M. SCHICK, Wheeling, W. Va., assignor of one-fourth to E. G. Voltz, Wheeling, W. Va. Filed June 13, 1930. Serial No. 460,869. 4 Claims. (Cl. 230—254.)



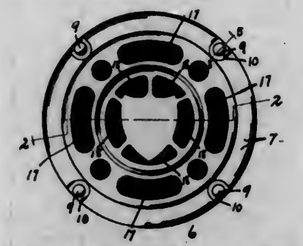
1. The combination with an electric motor and a thereby carried fan, of a shaft adapted for continuous rotation disposed in supporting relation to said motor and fan, a guard carried in enclosing relation to said fan, blades pivotally mounted on said guard in front of said fan, a longitudinally adjustable member mounted on said guard, resilient means tending to hold said member in a retracted position, means for adjusting the position of said members against the tension of said resilient means, and connections between said member and said blades whereby adjustment of the former effects corresponding adjustment of the angle of inclination of said blades relative to the axis of said fan, said connections including spring cushions arranged at opposite sides of said blades.

1,822,673. STARTING APPARATUS FOR MOTOR VEHICLES WITH INTERNAL COMBUSTION ENGINES. ROBERT SCHWENKE, Berlin-Charlottenburg, Germany, assignor to Freiherr Iwan von Stieteneron, Welsede, Germany. Filed July 25, 1929, Serial No. 380,840, and in Germany Feb. 8, 1928. 2 Claims. (Cl. 74—7.)



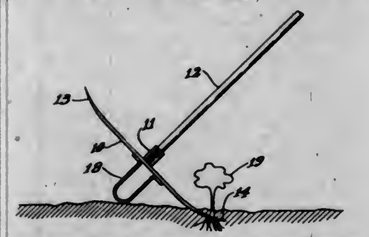
1. In combination, a hollow shaft 10, a second shaft 23 extending through said hollow shaft and adapted to be driven by an internal combustion engine, longitudinally shiftable gears 11 and 15 mounted on said hollow shaft 10 and forming part of a speed-change system, a free gear 8 freely mounted on said second shaft 23 so that said shaft 23 can turn relatively to free gear 8, a clutch device 24 and 9 adapted to connect free gear 8 and second shaft 23 at will, a starting motor having a shaft, a slidable gear 2 mounted on the motor shaft, a gear shaft 4 having a gear 3 adapted to mesh with the slidable gear 2 on the motor shaft, and a gear 6 mounted on said gear shaft and adapted to actuate the free gear 8.

1,822,674. SIGNALING DEVICE. THEODORE J. SCOFIELD and FRED W. BILLIG, Jackson, Mich., assignors to The Sparks-Withington Company, Jackson, Mich., a Corporation of Ohio. Filed Dec. 1, 1930. Serial No. 499,334. 15 Claims. (Cl. 116—142.)



1. A signaling device comprising a diaphragm case, a vibratory diaphragm carried thereby, a front cover for said case and having openings therethrough, means for securing the front cover to the diaphragm case and a screen interposed between the diaphragm and the case and covering the openings in the latter and said screen having an edge portion deflected when the cover is secured in position with respect to the case, to thereby maintain such edge portion under tension and hold the screen in position.

1,822,675. WEEDER. HERMAN A. SHELKOFSKY, Montgomery, Ala., assignor of one-half to Henry C. Stowers, Montgomery, Ala. Filed June 7, 1929. Serial No. 369,165. 1 Claim. (Cl. 254—132.)



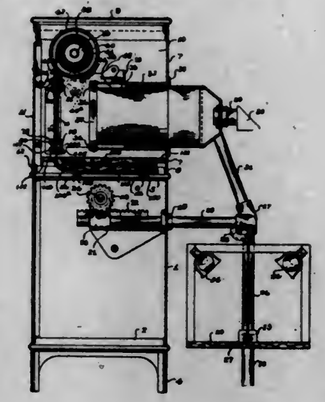
A combination hoe and weeding tool comprising a relatively narrow double ended blade member curved rearwardly at each end thereof, one end of said blade being shaped to form a straight edged hoe, a pair of V-shaped fingers extending from the other end of the blade to form a relatively narrow crotch, a U-shaped fulcrum member secured to the front face of the blade intermediate its ends and extending forwardly therefrom, a threaded socket member secured to the rear face of the blade intermediate its ends and extending rearwardly therefrom, and a handle member fitted into the socket.

1,822,676. TENTER CHAIN LINK. WILLIAM A. STELLING, Providence, R. I., assignor to The Textile-Finishing Machinery Company, a Corporation of Rhode Island. Filed Sept. 8, 1930. Serial No. 480,408. 9 Claims. (Cl. 26—62.)



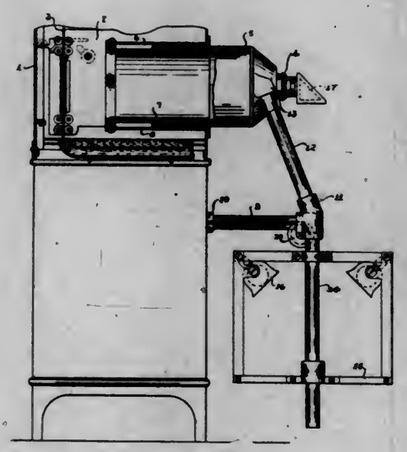
1. In a tenter chain link, a movable jaw having a slot therein, a work engaging blade in said slot having an opening therein, and means extending through said opening shiftable in said opening without removal therefrom for positively and removably holding said blade in said slot.

1,822,677. PHOTOGRAPHIC APPARATUS. GEORGE L. TAYLOR, Rochester, N. Y., assignor, by mesne assignments, to Harold Gouinlock, Batavia, N. Y. Filed Feb. 10, 1927. Serial No. 167,270. 30 Claims. (Cl. 95—13.)



1. In a photographic apparatus, the combination with an exposure chamber having an exposure position for a sheet of sensitized material, of means for supporting a roll of sensitized sheet material, means for feeding the sensitized material from the roll to the exposure position, severing means for the sensitized material situated between the exposure position and the roll and common operating means for the feeding means and the severing means having connection with the severing means for causing the operation of the severing means prior to the feeding operation of the feeding means.

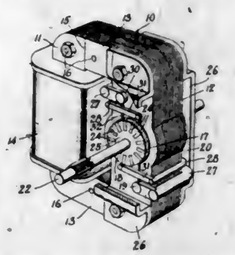
1,822,678. PHOTOGRAPHIC APPARATUS AND MORE PARTICULARLY TO THE FOCUSING MECHANISM THEREOF. GEORGE L. TAYLOR, Rochester, N. Y., assignor, by mesne assignments, to Harold Gouinlock, Batavia, N. Y. Filed Apr. 5, 1927. Serial No. 181,179. 15 Claims. (Cl. 88—24.)



1. A photographic apparatus comprising an exposure field, a work support, a lens optically arranged between the work support and the exposure field, a common support for the lens and the work support movable relatively to the exposure field and having the work support movable thereon, a common operating mechanism for shifting the com-

mon support relatively to the exposure field and the work support relatively to the lens and a compensating means for varying the relative movement between the lens and one of the other two elements to correspond with the lens employed.

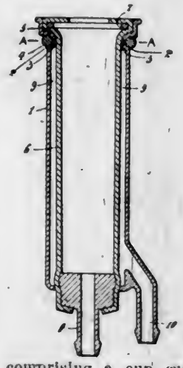
1,822,679. INDUCTION MOTOR. DUNCAN J. STEWART and EDGAR D. LILJA, Rockford, Ill., assignors to Howard D. Colman, Rockford, Ill. Filed Mar. 19, 1931. Serial No. 523,720. 12 Claims. (Cl. 172—278.)



1. In an induction motor, the combination of a field member having a plurality of poles, a rotor exposed to the faces of said poles, and a plurality of shading rings of different sizes mounted on each of said poles adjacent said rotor with all of the rings on each pole enclosing a common pole section and the larger rings enclosing additional sections, the corresponding portions of the rings on each pole being disposed in different closely spaced transverse planes through the pole.

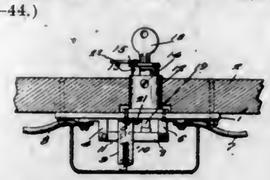
3. An alternating current induction motor combining a stator of the core type providing two poles having opposed concave faces, a rotor of the squirrel cage type between said poles, shading coils enclosing side portions of said poles on diametrically opposite sides of said rotor and dividing said faces into a section from which unshaded flux enters the rotor and a shaded section from which a lagging flux enters the rotor, and magnetic connections between said poles having their opposite ends integral with the shaded and unshaded side tips of the opposite poles and providing inner iron surfaces closely following the rotor contour and enclosing all of the rotor iron between the poles, said rings being of such low resistance that the currents induced therein produce a magnetomotive force strongly opposing the leakage of flux directly between said poles whereby to cause substantially all of the unshaded flux threading said connections to be utilized in the rotor.

1,822,680. MILKING MACHINE. JOSEPH TAYLOR, Eltham, New Zealand. Filed Nov. 13, 1929, Serial No. 406,788, and in New Zealand Aug. 10, 1929. 7 Claims. (Cl. 31—85.)



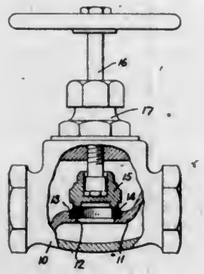
1. A tent cup comprising a cup casing, an inflation element mounted within said cup casing and spaced at its sides from the sides of the casing, means for the connection of a conduit with said casing for exhausting air from the space between the casing and the inflation element, said casing having an opening therein through which a cleaning fluid is adapted to be drawn into said space by exhausting air from said space, and means normally closing said opening and adapted to be manipulated to uncover the same when it is desired to clean the device.

1,822,681. LOCK FOR AUTOMOBILES. ERNEST H. WEBB, Denver, and CLAUD C. BERRY, Montrose, Colo. Filed Mar. 12, 1928. Serial No. 260,975. 1 Claim. (Cl. 200—44.)



A switch lock comprising a casing, a lock casing slidably mounted therein, a key barrel rotatably mounted in the lock casing, a stem extending from the inner end of the key barrel, and provided with a notch, a switch comprising a pivoted contact member and spaced contact members to be bridged thereby when the pivoted member is in one position of its swinging movement, a spring yieldably urging the pivoted contact member to such position, the said stem engaging the upper side of the said pivoted contact member, a latch element yieldably held in contact with the stem and engageable in the notch therein to hold the stem in lowered position and the pivoted member of the switch out of engagement with the spaced members, when the key barrel is lowered in the casing, the stem, at one side of the notch, being engageable against the latch, when the key barrel is rotated to unlocked position, to permit shifting of the key barrel and swinging movement of the pivoted contact member to engagement with the spaced contact members, through the action of the spring.

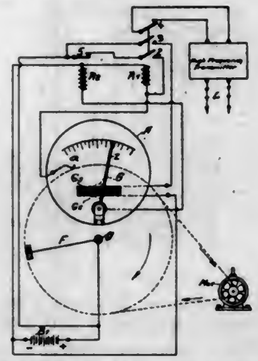
1,822,682. VALVE SEAT. JOSEPH A. WEIGER, Union City, N. J., assignor, by mesne assignments, to P. R. Mallory & Co., Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed June 12, 1928. Serial No. 284,843. 5 Claims. (Cl. 251—158.)



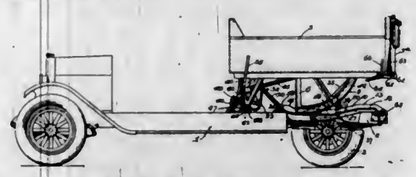
1. A valve seat for use in conduits adapted to convey highly erosive fluids comprising a body of porous tungsten and an impregnating body of noncorrosive, relatively low melting point metal.

1,822,683. REMOTE CONTROL INDICATOR SYSTEM. KURT WILDE, Berlin-Wilmersdorf, Germany, assignor to Deutsche Telephonwerke und Kabelindustrie Aktiengesellschaft, Berlin, Germany, a Corporation. Filed Oct. 22, 1927, Serial No. 227,933, and in Germany Oct. 23, 1926. 4 Claims. (Cl. 177—351.)

1. A system for transmitting the indications of an instrument to a distance, comprising a transmitting measuring instrument, a transmission line and a receiving instrument, the transmitting instrument having a scale and a member positioning itself in correspondence with the magnitude to be measured, a contact arranged at a fixed point of said scale, a movable tester at said instrument, means for moving said tester periodically over said contact and said member, said tester cooperating with said contact and said member to perform two circuit-controlling operations, means for maintaining a current flow over said transmission line during the time interval between the said two controlling operations of the tester, said receiving instrument having a member adapted to be moved so as to indicate the position of the said member of the transmitting instrument, and means for starting said indicating member of the receiving instrument by the first, and for stopping it by the second contact control at the transmitting instrument.

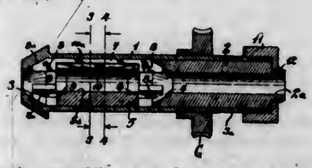


1,822,684. GRAVITY DUMP VEHICLE. LEROY E. WILLIAMS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Apr. 27, 1927. Serial No. 186,836. 3 Claims. (Cl. 298—10.)



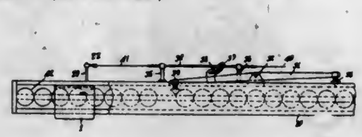
1. The combination of a vehicle frame, a dumping body, rockers on the body and a track for said rockers on the frame, a radius-arm connected to the body near the point of contact of its rockers with the track at the limit of dumping movement and extending toward the other end of said contact to a pivotal connection on the frame together with cooperating stop means associated with said arm and with the frame respectively engageable at the limit of return movement of the body to prevent separation of the rockers from the track.

1,822,685. CHUCK. FRANK C. WILSON, Arcade, N. Y. Filed July 15, 1929. Serial No. 378,345. 6 Claims. (Cl. 279—55.)



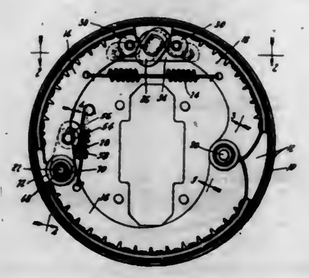
1. A chuck comprising a body member having circumferentially spaced grooves and a central bore, wearing rings mounted at the ends of said bore and extending slightly beyond the ends of said body member, jaw members movably mounted in said spaced grooves, said jaw members having central reduced portions providing laterally projecting gripping members the inner edges of which slidably engage the end extensions of said wearing rings, a casing enclosing said body member, a follower within said casing and engaging said jaw members, means carried by said casing and engaging said follower to move said follower inwardly whereby to effect radial movement of said gripping members toward the axis of said body member.

1,822,686. GAME APPARATUS. JOSEPH ACKERMANN, Brooklyn, N. Y. Filed May 15, 1929. Serial No. 363,181. 1 Claim. (Cl. 312—49.)



Ball delivery apparatus for games comprising an electric motor, an arm pivotally mounted and connected to said motor, a ball tunnel, a walking beam mounted thereover, cut-offs on the ends of the walking beam adapted to enter the tunnel, said walking beam being provided with a cam slot, a link connected to and reciprocable by said pivotally mounted arm, a pin on said link engaging the cam slot and means controlled by the motor for breaking the circuit and stopping the motor after one up and down movement of the walking beam.

1,822,687. BRAKE. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 3, 1927. Serial No. 237,386. 5 Claims. (Cl. 188—78.)

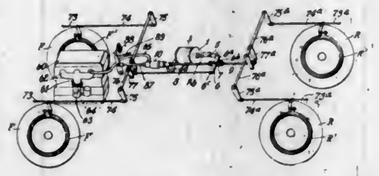


1. A brake comprising, in combination, a drum, friction means within the drum, an anchor for the friction means, and a backing plate at the open side of the drum having a boss projecting within the drum and carrying said anchor and defining a depression on the exterior of the backing plate and being of such a depth that the anchor is arranged entirely within the drum.

1,822,688. BRAKE MECHANISM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Oct. 8, 1927, Serial No. 224,841. Renewed Jan. 15, 1930. 20 Claims. (Cl. 188—152.)

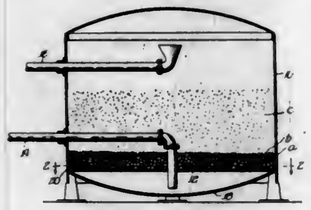
4. In brake mechanism for an automotive vehicle provided with an internal combustion engine having a

throttle controlled suction passage, the combination of brake mechanisms for a plurality of pairs of wheels of the vehicle including the steering wheels, a power actuator comprising a cylinder, a single piston therein, and controlling valve mechanism, means for connecting the cylinder on one side of the piston with the suction passage of the engine, and with a source of higher pressure under the control of said valve mechanism, a power applying lever, connected with said actuator piston, linkages connected at different points longitudinally of said lever, and extending in opposite directions to the steering wheel brake mechanisms and the brake mechanisms for the other wheels, said parts being constructed to apply



the power of the actuator to all the connected brake mechanisms simultaneously to a predetermined extent as to each, an operator operated part connected with the valve mechanism of the actuator, means including linkage connected to said lever in alignment with the connection therefrom to the brake mechanisms other than the steering wheel brake mechanisms to enable the operator to apply his physical force to the brake mechanisms so connected with the operator operated part in addition to that of the actuator to compensate for increasing loads of the vehicle, without applying his physical force to the steering wheel brake mechanisms, or to apply said connected brake mechanisms by physical force alone in case of failure of power.

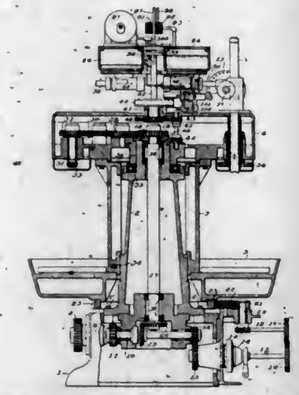
1,822,689. FILTER TANK. ROBERT E. BRESSLER, Hammond, and DOUGLAS V. MOSES, East Chicago, Ind., assignors to Graver Corporation, East Chicago, Ind., a Corporation of Illinois. Filed May 17, 1929. Serial No. 363,803. 5 Claims. (Cl. 210—148.)



3. A tank for filters and the like comprising a bottom plate having a flat upper surface and having apertures therethrough, each of said apertures being covered by a shielding baffle plate spaced therefrom and extending laterally beyond said openings in nearly all directions to such an extent that the available flow area under the edge of the baffle plate is at least twice as large as the minimum flow area through and adjacent to the apertures, the spaces between said baffle plates and said bottom plates being unobstructed in the vicinity of said apertures and the flow area under the said plate at the circumference of said aperture being equal to the flow area through said aperture.

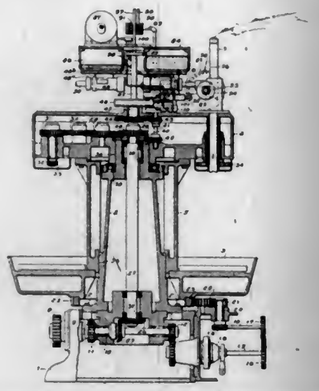
1,822,690. CONTINUOUS ROTARY MACHINE. ADOLPH L. DE LEEUW, Plainfield, N. J. Filed Dec. 7, 1926. Serial No. 153,177. 14 Claims. (Cl. 60—52.)

1. Fluid pressure means for generating mechanical power comprising piston means having two exposed faces of unequal area; means for continuously applying a fluid at constant low pressure to the piston face having the smaller area; means for intermittently supplying a low



pressure fluid to the piston face having the larger area; and other means for supplying a high pressure fluid to the larger piston face.

1,822,691. FLUID PRESSURE OPERATED CONTINUOUS ROTARY MACHINE. ADOLPH L. DE LEEUW, Plainfield, N. J. Original application filed Dec. 7, 1926. Serial No. 153,177. Divided and this application filed May 11, 1928. Serial No. 276,846. 8 Claims. (Cl. 77—23.)

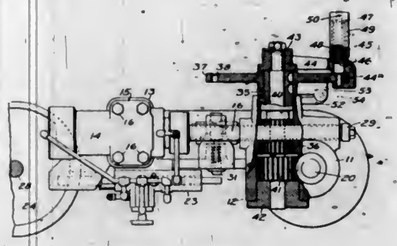


1. A machine tool combining a supporting column; a head rotatably mounted thereon; a machine element mounted on said head and adapted to be translated relative thereto; a fluid motor mounted on said head for causing translation of said element; a stationary gear mounted on the column; cam means mounted on said head for rotation relative thereto; control means for said motor adapted to contact with said cam means as the head rotates; and mechanism carried by said head and connecting said gear with said cam means whereby the cam is maintained stationary while the head and control means rotate thereabout and the fluid motor is caused to actuate said element.

1,822,692. ADJUSTABLE DRIVE FOR SPINDLE FEEDS. ADOLPH L. DE LEEUW, Plainfield, N. J. Original application filed Dec. 7, 1926, Serial No. 153,177. Divided and this application filed May 11, 1928. Serial No. 276,847. 3 Claims. (Cl. 77—32.)

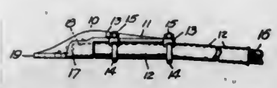
1. A machine tool combining a support; a translatable member carried thereby; a rotary member having a drive

connection to translate said translatable member; a second rotary member concentrically mounted with said first rotary member; a rack; power means for reciprocating said rack; means for oscillating said second member by the reciprocations of said rack; means for connecting said first rotary member to said second member in selective



predetermined angular positions to rotate therewith to thereby vary the limits of the translatory movement of said translatable member without varying the range of said movement; and adjustable stop means adapted to form a finer adjustment than said adjustable connection for determining the limit of translatory movement in one direction.

1,822,693. TERMINAL CONNECTION. ABRAHAM BERNARD DIBNER, Peekskill, N. Y. Filed Dec. 26, 1928. Serial No. 328,510. 3 Claims. (Cl. 173—353.)



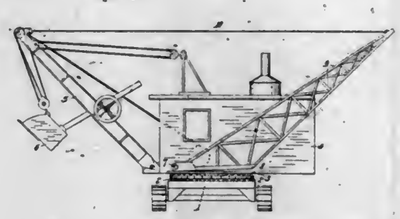
1. A terminal connection for electrical cable installations, comprising an integral member having a bracing arm, a socket and a contacting portion beyond the socket, a clearance sleeve through which the cable is disposed, the end of the cable being secured in said socket, and clamping means spaced apart on the bracing arm and adjustable to clamp over the sleeve to attach it to the bracing arm.

1,822,694. RADIAL CONNECTING ROD. HALVOR OLSEN ELANE, Washington Island, Wis. Filed Dec. 31, 1928. Serial No. 329,395. 3 Claims. (Cl. 74—17.)



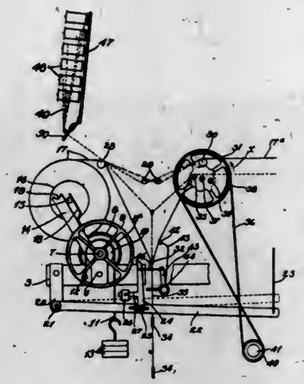
1. In a radial connecting rod assembly, a master connecting rod having split crankpin bearing provided with a pair of circumferential ridges and said ridges provided with joining plates overlapping said split, said joining plates and ridges having holes therethrough adapted for reception of bolts serving the dual purpose of holding said split crank-pin bearing together and providing pivotal connections for a plurality of articulating rods to said master connecting rod.

1,822,695. EXCAVATING MACHINE. ARTHUR B. EUGA, Dover, Ohio. Filed Feb. 28, 1928. Serial No. 257,636. 9 Claims. (Cl. 212—49.)



3. In an excavating machine, a rotary superstructure having a hoisting boom pivoted thereon, a counterbalance boom pivoted on said superstructure, and means fixedly secured at one end to the counterbalance boom and at its opposite end to the hoisting boom so as to effect upward and downward swinging movement of the counterbalance boom about its pivot upon downward and upward movement respectively of the hoisting boom and vice versa.

1,822,696. LET-OFF MECHANISM FOR NOVELTY FABRIC LOOMS. JOACHIM GIARDINO, West New York, N. J. Filed Dec. 24, 1929. Serial No. 416,259. 6 Claims. (Cl. 139—103.)

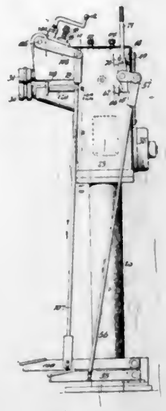


1. A let-off mechanism for weaving machines comprising a pick wheel, a friction feed drum rotatable by said wheel, a warp beam, means for supporting said beam to rest by gravity upon said drum, a lever in operative engagement with the jack of the dobby of the machine, a pawl on said lever and normally in engagement with said wheel whereby in the movement of said lever, intermittent rotary movement is imparted to said wheel and drum to discharge the warp threads from said beam, and tensional means engaging the threads fed from said warp beam.

1,822,697. SHEET-METAL WORKING MACHINE. PAUL R. HAHNEMANN, Buffalo, N. Y., assignor to Niagara Machine & Tool Works, Buffalo, N. Y., a Corporation of New York. Filed Oct. 4, 1929. Serial No. 397,405. 17 Claims. (Cl. 153—9.)

1. A machine of the character described, comprising a frame, a lower roll shaft journaled on said frame, an upper roll shaft; and means for movably mounting said upper roll shaft relatively to said lower roll shaft including a vertically swinging shifting lever upon which

said upper roll shaft is journaled, a yoke which is pivotally connected with said shifting lever and with said



frame, and means for adjusting the angularity of said lever and yoke relatively to one another for shifting the upper roll shaft bodily lengthwise of said lower roll shaft.

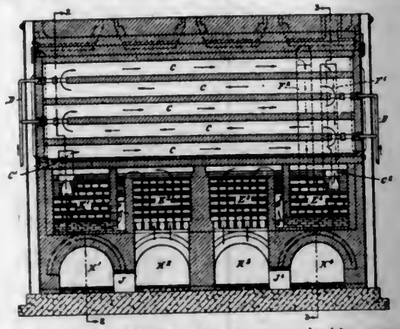
1,822,698. BAFFLE PACKING FOR HEAT EXCHANGERS. HARLAN W. HOW, Warren, Pa., assignor to Struthers-Wells Titusville Corporation, Warren, Pa., a Corporation of Maryland. Filed Sept. 4, 1930. Serial No. 479,659. 6 Claims. (Cl. 257—239.)



1. A heat exchanger comprising a shell having a fluid inlet and a fluid outlet, a plurality of sets of tubes arranged in said shell, tube sheets mounted at opposite ends of said shell and connected with opposite ends of said tubes, a baffle arranged between the sets of tubes and having longitudinal edges arranged adjacent to said shell, and packing means interposed between the longitudinal edges of said baffle and said shell and comprising a packing strip having a web engaging said shell and flanges on opposite longitudinal edges of said web which engage opposite sides of the longitudinal edge portion of said baffle and spring means for holding said packing strip yieldingly in engagement with said shell.

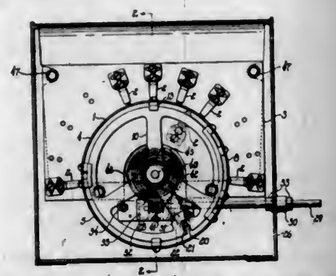
1,822,699. COKE OVEN. CHARLES H. HUGHES, Hackensack, N. J., assignor, by mesne assignments, to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed June 18, 1926, Serial No. 116,764, and in Canada June 19, 1925. 15 Claims. (Cl. 202—146.)

1. A by-product coke oven battery comprising a series of alternate horizontal coking chambers and heating walls therefor arranged side by side in a row, each of said walls comprising a fine system containing zigzag, series-connected, superposed, combustion flues extending horizontally, laterally, and at least from end to end of each coking chamber, regenerators located beneath the coking chambers, the said regenerators having ports therein connected by direct upwardly extending communicating connections with the extreme ends of said combustions flue systems at opposite ends of the coking chambers and passages extending longitudinally of the oven battery and transversely to said coking chambers and beneath the



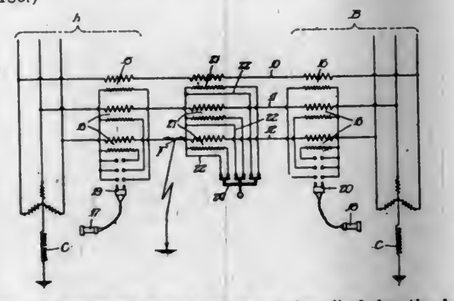
regenerators, the said passages communicably connecting with the lower portions of the regenerators and with a waste gas stack respectively.

1,822,700. ELECTRIC CONTROL DEVICE. RICHARD B. HUNTER, Shorewood, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed July 7, 1930. Serial No. 466,071. 7 Claims. (Cl. 200—8.)



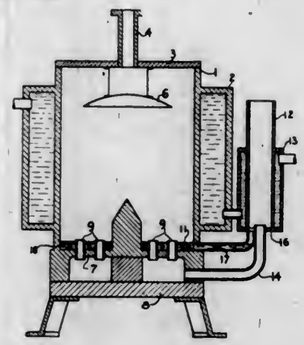
1. In a floor selector device, the combination with a plurality of stationary contacts and a rotatable drum having segments to cooperate with said stationary contacts, each of said segments having an oblique end, of a drive shaft for said drum, and means for holding said drum against rotation with respect to said shaft and for adjusting the same axially with respect thereto.

1,822,701. LOCATING EARTH FAULTS IN ELECTRICAL SYSTEMS. JULIUS JONAS, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Sept. 11, 1926, Serial No. 134,847, and in Germany Oct. 14, 1925. 5 Claims. (Cl. 175—183.)



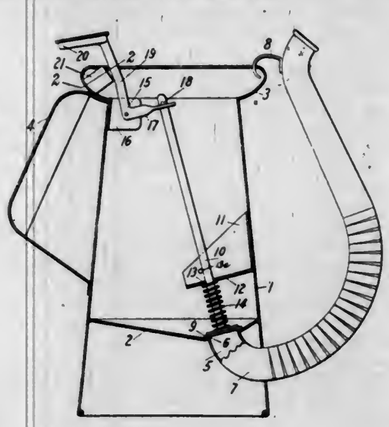
1. In apparatus of the character described for the location of faults, a high tension network, protective earthing inductance associated with said network, polyphase lines forming part of said network, an indicating instrument responsive to harmonic currents, means for coupling the instrument with any one of said lines, and means providing for imposition of impedance on the selected line to which said instrument is coupled.

1,822,702. EVACUATING PUMP. ERNST KOBEL, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Aug. 19, 1929, Serial No. 386,755, and in Germany Aug. 27, 1928. 5 Claims. (Cl. 230—102.)



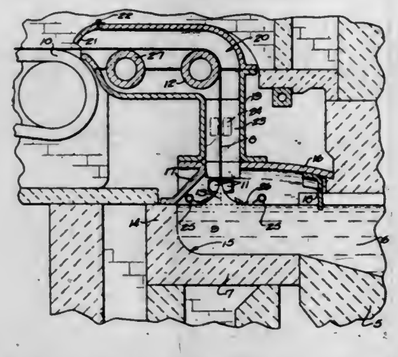
1. In a pump for obtaining a high vacuum, an operating chamber having a space formed therebeneath for receiving fluids from a container to be evacuated, nozzles connecting said operating chamber with the receiving space, a quantity of vaporizable material within said chamber, said nozzles discharging adjacent the upper surface of said vaporizable material, and means for heating said material to cause vaporization thereof.

1,822,703. LIQUID MEASURING RECEPTACLE. MAURICE LUMLEY, Cincinnati, Ohio, assignor to The Huffman Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed July 9, 1928. Serial No. 291,253. 3 Claims. (Cl. 221—16.)



2. In a measuring receptacle, a body portion having a handle on the rear side and near the top thereof, and having a bottom provided with an outlet near the front of said body portion and a valve seat arranged in an inclined plane about said outlet and facing upwardly and rearwardly, a valve to engage said valve seat, a rod directly connected with said valve and extending upwardly and rearwardly therefrom, a bracket supported by said body portion above and adjacent to said bottom and having an opening through which said rod extends, a spring acting on said valve to seat the same, a lever supported on said body portion near the top thereof, operatively connected with said rod and having a part adjacent to said handle, and a resilient clip to engage said lever and retain the same in its retracted position against the action of said spring.

1,822,704. SHEET GLASS PRODUCING APPARATUS. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 20, 1926. Serial No. 136,458. 5 Claims. (Cl. 49—17.)

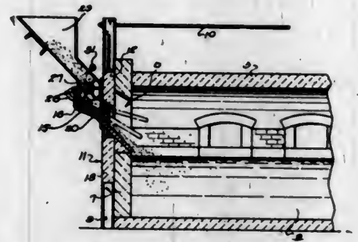


5. In sheet glass apparatus, a tank furnace containing a mass of molten glass, a relatively shallow draw pot connected to and in open communication with said furnace for receiving the molten glass therefrom, means for drawing a sheet vertically from the glass in said draw pot including a horizontally traveling draw table, a rotatable member for deflecting the sheet through an angle of approximately 90° from the vertical into the horizontal plane, hood means arranged over and adapted to cover the molten glass in the draw pot, a closed compartment carried by the hood means and having a vertical portion and a horizontal portion extending at substantially right angles with respect to said vertical portion for enclosing the vertical and horizontal portions respectively of the sheet being drawn, the horizontal portion of said compartment tapering towards its exit end and terminating in advance of but closely adjacent to the draw table, said horizontal portion of the compartment having a movable part for varying the size of the exit end of said compartment, and a depending baffle wall carried by the hood means and dipping downwardly into the mass of molten glass at substantially the juncture of the furnace and draw pot.

1,822,705. MEANS FOR INTRODUCING BATCH INGREDIENTS INTO GLASS MELTING FURNACES. NESTOR MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 14, 1928. Serial No. 305,888. 6 Claims. (Cl. 49—54.)

4. The combination with a glass melting furnace having an opening in its rear vertical wall extending substantially the entire width thereof, and a plurality of spaced vertical buckstays engaging the vertical wall to assist in tying the furnace structure together, of a plurality of inclined plate members carried by the buckstays and arranged between the same and projecting slightly into the furnace through said opening, said members being adapted to receive the batch and feed it into the

furnace throughout substantially the entire width thereof, an adjustable gate associated with each opening and through which said members also project, a hopper asso-



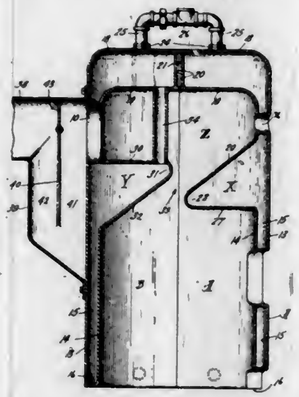
ciated with each member for initially receiving the batch and delivering it thereto, and a rotatable batch feed control member within each hopper.

1,822,706. SWITCH. RUPERT EMERSON MCGEE, Tampa, Fla. Filed June 23, 1930. Serial No. 462,945. 10 Claims. (Cl. 200—1.)



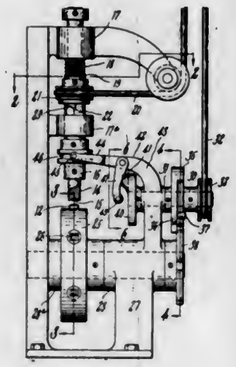
1. A switch comprising a casing, a cover for the casing having a mounting upon the casing permitting pivotal movement and movement of the cover toward and away from the casing, resilient means normally forcing the cover away from the casing at each end, two stationary contacts mounted upon the casing, a movable contact member mounted upon the casing, two bolts each mounted within the casing for sliding movement from an inoperative position to an operative position in which the bolt engages the movable contact member to move it and to hold it in engagement with a stationary contact, a spring to move each bolt into inoperative position, a lever for each bolt movable to cause the bolt to slide into operative position, and means upon the cover to engage either lever at will to cause movement of the bolt to operative position.

1,822,707. SECTIONAL BOILER FURNACE. RUDOLPH W. MENK, Joliet, Ill. Filed Aug. 13, 1926. Serial No. 128,994. 4 Claims. (Cl. 122—230.)



1. A boiler furnace comprising a base, a plurality of hollow-wall sections secured together and mounted thereon to provide a firepot in their lower portions and having an outlet for the products of combustion, overhanging hollow domes abutting each other at the upper ends of said sections, irregular-shaped water chambers projecting inwardly from the respective sections and overhanging the fire-pot, one of which is below said outlet, one of said chambers having a substantially horizontal base wall and the other chamber having an inclined base wall, and tubes disposed in front of said outlet and communicating at opposite ends with the interior of the adjacent water chamber and overhanging dome above the same.

1,822,708. METHOD OF FINISHING HEADS OF SET SCREWS AND OTHER ARTICLES. GEORGE A. MOORE, Boston, Mass. Filed Feb. 3, 1930. Serial No. 425,430. 1 Claim. (Cl. 10—27.)



The method of finishing the cut-off incomplete end or head of a screw-machine product, said end including a previously finished zone and a teat projecting from the center of said zone and interrupting the continuity thereof, said method consisting in displacing the material of the teat by percussion endwise thereof, and radially outward, to mushroom the teat and convert it into a central zone, substantially continuous with the previously finished zone.

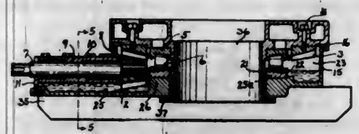
1,822,709. COMPOSITION OF MATTER CONTAINING MERCURY. MICHELANGELO PACELLA, Grays Lake, Ill. Filed Apr. 18, 1929. Serial No. 356,314. 2 Claims. (Cl. 167—71.)

1. The process of making a composition of matter containing mercury having a physiological action non-injurious to cell tissue and tissue organs of the human body and possessing a therapeutic value adapted to antagonize pathological conditions comprising forming a clear alcoholic solution of mercuric chloride, making a clear alcoholic solution of a potassium iodide and iodine, mixing the two solutions and thereby producing a solid reaction product, drying the same until a granular powder light pink in color and having a salty and pungent metallic taste is produced and which is characterized by the property of assuming a greenish yellow color when slowly and gradually heated, subliming into yellow crystals turning red on standing and appearing under the microscope in a multiplicity of crystal forms, and treating the granular pink reaction product in aqueous solution with sodium iodide to form a scarlet red colloidal suspension, the particles of which possess an inherent motility.

1,822,710. ROTARY DRILLING RIG. HARRY PENNINGTON, Houston, Tex. Filed Dec. 8, 1925. Serial No. 73,995. 32 Claims. (Cl. 255—23.)

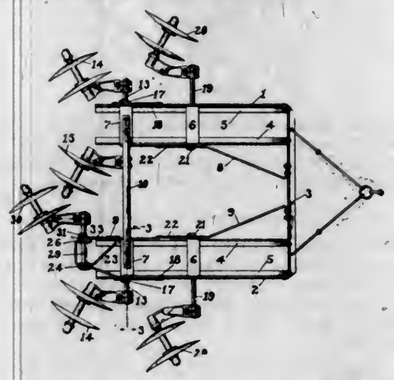
1. In a rotary for well drilling, an annular rotary table, a bed plate upon which said table is supported, said table

having a series of cored recesses in its lower face, a gear ring covering some of said recesses, a bearing ring covering



the remainder of said recesses, a drive pinion engaging said gear ring, and means to lubricate said pinion and bearing ring.

1,822,711. RIDGE BURSTER. WALTER H. SILVER, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 28, 1927. Serial No. 164,238. 6 Claims. (Cl. 97—56.)

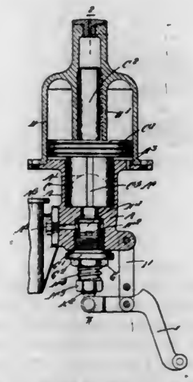


1. In a ridge burster, the combination of a frame including side bars and front and rear bars, sled runners supporting the frame on opposite sides thereof, gangs of earth working devices carried on each side of said frame, means on the frame operable to adjust said gangs vertically, a rock shaft journaled on the rear of the frame and transversely thereof, a gang of earth working devices on each end of said shaft, a gang of similar devices on said shaft adjacent the center thereof, means on the frame operable to rock said shaft and vertically adjust the gangs thereon, a rearward extension to one side of said frame, a gang of earth working devices carried by said extension, and means on said extension operable to raise or lower the gang thereon irrespective of the adjustment of the other gangs.

4. In a ridge burster, the combination of two sets of runners spaced apart and having a forward upwardly curved termination, a bar extended transversely of said runners and secured to the forward ends thereof, an arch mounted intermediate the ends of each set of runners, an arch mounted on the rear of each set of runners, frame bars secured to said arches adjacent the tops thereof and to the forward transverse bar, the frame bars at one side of the implement of greater length than the frame bars at the opposite side, shafts rockably journaled in said arches and extending outwardly therefrom, cultivating devices supported on said shafts, and means on the frame operable to rock said shafts and adjust said devices vertically.

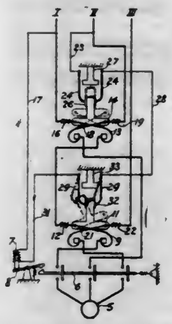
1,822,712. CARBURETOR. GEORGE HERBERT SKINNER, Ealing, London, England, assignor to S. U. Company, Limited, London, England. Filed Apr. 24, 1926, Serial No. 104,254, and in Great Britain Apr. 30, 1925. 4 Claims. (Cl. 261—44.)

1. A carburetor comprising a body having a straight through air and mixture passage, a piston valve vertically movable across said passage, a needle valve on the lower surface of said piston valve, a fuel jet nozzle arranged in the lower part of said passage and controlled by said needle valve, a suction chamber in the upper part of said body, a flange-like portion on the top of said piston valve forming a suction disc working in said chamber, an upwardly extending plunger on said piston valve, a sleeve disposed mainly within said suction chamber and adapted to receive said plunger, and means providing a restricted



egress of air from the upper part of said sleeve when said piston valve is moved upwardly, said piston valve being provided with a duct establishing communication between said suction chamber above said suction disc and the engine side of said passage, and said body being provided with a duct communicating with the atmosphere below said suction disc.

1,822,713. PROTECTIVE DEVICE FOR MULTIPHASE MOTORS. PHILIPP SUTER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Dec. 1, 1928. Serial No. 323,029, and in Germany Dec. 2, 1927. 4 Claims. (Cl. 175—294.)

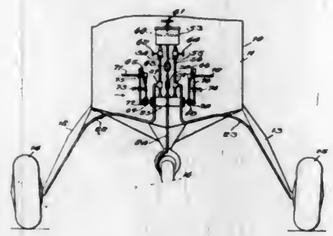


1. In a thermal relay for a circuit having a plurality of phases, a relay circuit and a control device therefor, and bimetallic elements in series with two of said phases respectively for operating said device when an electrical condition in one of said two phases differs from an electrical condition in the other of said two phases and for preventing the operation of said device when said electrical condition changes to the same degree in each of said two phases.

1,822,714. STEERING AND BRAKING DEVICE. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 30, 1929. Serial No. 403,517. 12 Claims. (Cl. 244—2.)

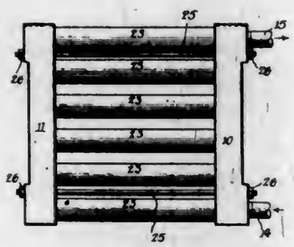
1. In a device of the class described, the combination of a plurality of brake drums, brake elements operatively re-

lated thereto, a plurality of fluid pressure operated means for actuating said elements, a housing having a plurality of cylinders formed therein communicating respectively with said pressure operated means, means for supplying fluid under pressure to said cylinders and pressure operated means, pistons movable longitudinally in said housing and



operatively related to said cylinders, rotatable screw members for actuating certain of said pistons independently of other of said pistons, and manually operated means for selectively rotating one or more of said screw members to actuate one or more of said pistons in a manner to increase the pressure in one or more of said cylinders for actuating one or more of said brake elements.

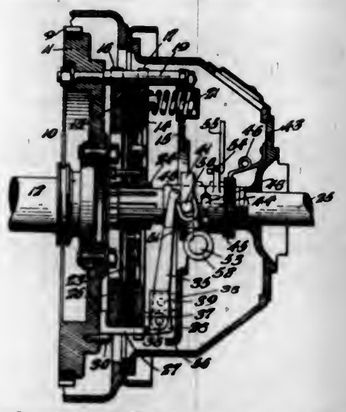
1,822,715. COIL FOR REFRIGERATING AND OTHER APPARATUS. LOUIS N. UDELL, Boston, Mass. Filed Mar. 5, 1928. Serial No. 259,337. 2 Claims. (Cl. 257—255.)



1. A coil of the character described, comprising opposed vertical hollow headers formed with horizontally opposed holes in their respective inner faces, parallel pipes extending between said headers and at their ends registering with said holes, means providing fluid-tight joints between said pipes and headers, integral transverse partitions in said headers dividing the latter into flow chambers connecting the ends of adjacent pipes, said partitions being so located as to cause a zigzag flow of fluid through adjacent pipes in opposite directions, integral hollow bosses extending entirely across the flow passages of the headers, the bosses in one of said headers being formed as integral parts of partitions of said header, and tie-rods extending between said headers and through said hollow bosses; one of said headers being formed with lower and upper lateral openings registering with the lower and upper pipes of the coil for connection of inflow and outflow pipes thereto.

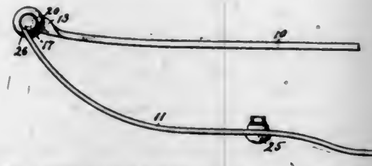
1,822,716. SELECTIVE CLUTCH MECHANISM. HENRY H. VAIL, Camden, N. J., assignor to Automatic Drive and Transmission Company, Gloucester City, N. J., a Corporation of New Jersey. Filed May 22, 1929. Serial No. 364,984. 14 Claims. (Cl. 192—105.)

1. A clutch mechanism comprising a driving member, a driven member and a plurality of friction plates arranged when in contact to transmit motion from one member to the other, in combination with centrifugally controlled means for automatically bringing said plates into contact relation, means for manually controlling said



plates, and means including a selecting device operable to either of two positions at will for setting one of said plates with respect to another whereby said clutch can be operated either automatically or manually.

1,822,717. BUMPER CONSTRUCTION. GEORGE W. VEALE, Cleveland, and EDWARD H. LINDEMAN, Cleveland Heights, Ohio, assignors to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 3, 1930. Serial No. 449,405. 4 Claims. (Cl. 293—55.)



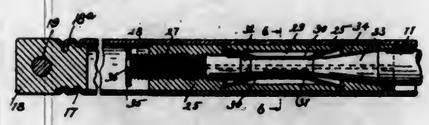
1. In a bumper for automotive vehicles, a combined spacer and cover element having a portion forming internal and external seats surrounding a central aperture, a skirt portion extending therefrom and concealing said internal seat, said skirt portion having a slot forming a transverse recess extending into said element, an edge of said slot being substantially aligned with said internal seat.

1,822,718. FREEZING APPARATUS. MICHEL P. VUCASSOVICH, Gloucester, Mass. Filed May 27, 1930. Serial No. 456,149. 3 Claims. (Cl. 62—104.)



1. In freezing apparatus comprising a horizontal container having a cover and internally partitioned to form an elongated runway, including major portions located side by side, and connecting neck portions, said runway having a loading end and a discharge end, and adapted to conduct from end to end a moving refrigerating liquid and buoyant receptacles floating therein, and means for maintaining the moving liquid at a predetermined level; a longitudinally extending track located in the runway above the bottom thereof and below the predetermined liquid level, in position to support a non-floating receptacle, in the path of a floating receptacle so that a nonfloating receptacle may be propelled to the discharge end by a following floating receptacle.

1,822,719. FRICTION CASEMENT ADJUSTER. GUY A. WELLMAN, Geneva, Ohio, assignor to The Champion Hardware Company, Geneva, Ohio, a Corporation of Ohio. Filed Dec. 17, 1926. Serial No. 155,481. 5 Claims. (Cl. 292—275.)



1. A casement adjuster comprising an outer tubular member rotatably mounted upon an attaching bracket, an inner member slidable within said tubular member and having its extended end mounted upon a second bracket, and friction means carried by said inner member and engaging the outer tubular member, the rotation of said outer tubular member in either direction increasing the friction between the friction means and said outer tubular member.

1,822,720. METALLIC COMPOSITION AND PROCESS OF PREPARING THE SAME. LE ROY L. WYMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 15, 1929. Serial No. 378,587. 8 Claims. (Cl. 75—1.)

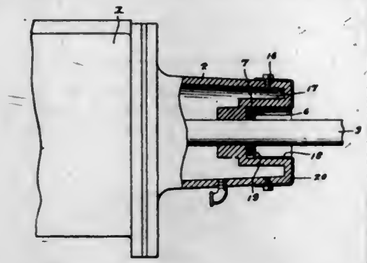
4. A metallic composition comprising mainly tungsten carbide, cobalt up to about 25%, and thoria up to about 3%.

1,822,721. SHIP PROPULSION SYSTEM. ROYCE A. BEEKMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 31, 1928. Serial No. 316,183. 9 Claims. (Cl. 172—8.)

1. A power system including a plurality of series connected generators, means for changing the number of generators connected in series with one another, a load, a plurality of series connected motors mechanically connected to said load, means for connecting said generators, to said motors and means for reversing and varying the field of one of said motors.

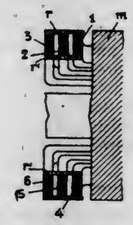
1,822,722. BRAKE CYLINDER PROTECTOR. EUGENE G. BELL, Norfolk, Va. Filed Feb. 17, 1930. Serial No. 429,150. 1 Claim. (Cl. 286—24.)

A protector including a cylinder neck having an inwardly extending socketed member to slidably support a piston rod and having a portion of the bore of a larger diameter than the diameter of said rod, a split packing in the bore, tension means forcing the packing against the rod, a disk engaging one face of the packing and holding the opposite face thereof against the neck, substantially



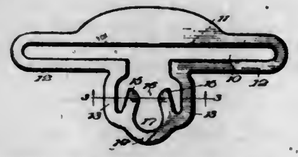
U-shaped members formed on the disk with certain arm portions thereof engaging the wall of the bore of the socket member and the other arm portions engaging the outer face of the neck, and fasteners securing the last named arm portions to the neck.

1,822,723. ROTATING FIELD MAGNET FOR TURBO-GENERATORS. OTTO TITUS BLATHY, Budapest, Hungary. Filed May 17, 1928, Serial No. 278,595, and in Austria Mar. 26, 1928. 5 Claims. (Cl. 171—252.)



1. In a rotating field magnet for turbo generators, an iron core having a plurality of radial slots therein, two collector rings connected therewith, coils wound of metal strips of the breadth of the slots within said slots, metallic wedges closing the circumferential openings of said slots to secure said coils in said slots, said coils being by means of the outermost turns in metallic contact with said iron core, means connecting said coils at one of their turns in multiple and with one of said collector rings, bent cylindrical coil heads projecting beyond said iron core, and metallic rings fitted onto the cylindrical surface of said coil heads and in metallic contact with the end turn of said coils.

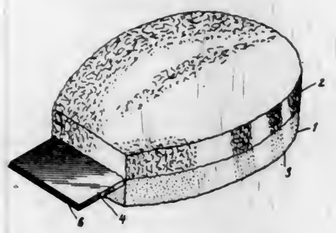
1,822,724. GARMENT LOOP. DANIEL G. BUTTS, Covington, La., assignor to The Faultless Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 21, 1930. Serial No. 476,899. 2 Claims. (Cl. 24—222.)



2. A fastening device for connecting two members comprising a stud having an attaching portion, a straight shank, and an enlarged head, and a stamped clasp member for engagement with said stud having an attaching portion, a stud receiving aperture and a slot or throat

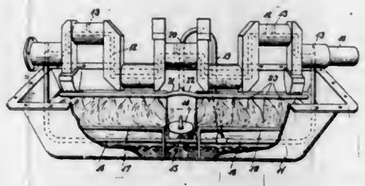
through which said stud is drawn into said aperture, said clasp having its peripheral edge and its internal edge bounding said aperture buffed and rounded over, said slot or throat having a width slightly less than the diameter of said stud shank and the edges of said clasp bounding said slot or throat being square with the adjacent clasp portions and having a complete bearing upon the straight shank of the stud as it is drawn therethrough.

1,822,725. CLEANING BLOCK. HAL S. COOPER and MORRIS L. COOPER, Knoxville, Tenn. Filed Sept. 26, 1930. Serial No. 484,635. 1 Claim. (Cl. 15—105.)



A cleaning device comprising a pair of cleaning elements one positioned upon the other and both tapering toward one of their ends and curved at their opposite ends to permit said elements to be gripped firmly by a person with sufficient portions thereof exposed for rubbing over a surface to be cleaned, and a plate secured between the cleaning elements and projecting slightly beyond the first named ends of the cleaning elements for permitting the surface to be scraped thereby, and said plate having spaced openings to permit portions of the cleaning elements to extend therethrough when the latter are secured together.

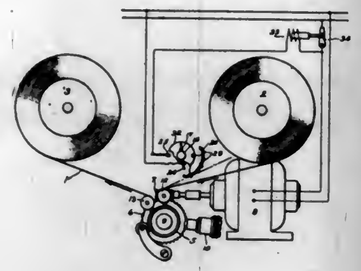
1,822,726. COOLED LUBRICATING SYSTEM. HERBERT V. DALGLIESH, Atlanta, Ga., assignor, by mesne assignments, to Research & Development Corporation, Atlanta, Ga., a Corporation of Georgia. Filed Sept. 23, 1930. Serial No. 483,945. 4 Claims. (Cl. 184—104.)



1. A lubricating system for machines comprising, in combination, means to circulate oil to the bearings of a machine, means to spread a portion of the oil circulated by said first named means in unconfined thin sheets in a position to be directly acted upon by currents of air generated by a moving part of the machine.

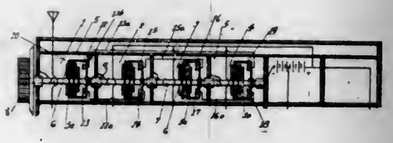
1,822,727. FILM PHONOGRAPH. GUILLERMO A. DEL VALLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 15, 1929. Serial No. 399,830. 6 Claims. (Cl. 274—5.)

2. In a film phonograph adapted to receive a roll of film having a sound track thereon and actuating means at the end of said track, a member arranged to be actuated by said means in response to the linear movement of the film being unwound from said roll, said member being



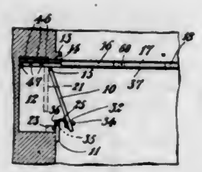
normally out of engagement with the film and arranged to become engaged with the film when the roll has decreased to a predetermined diameter.

1,822,728. CAPACITY STABILIZING DEVICE. PHILIP E. EDELMAN, Chicago, Ill., assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 17, 1927. Serial No. 169,075. 6 Claims. (Cl. 179—171.)



1. In a radio system, a series of amplifiers with tuning condensers for each stage of said series, extra condenser plates inserted in the fields of said condensers, and conductors joining said extra condenser plates from one of said stages to another to feed energy between one stage and another in said series in amount proportioned to the tuning adjustment of said condensers.

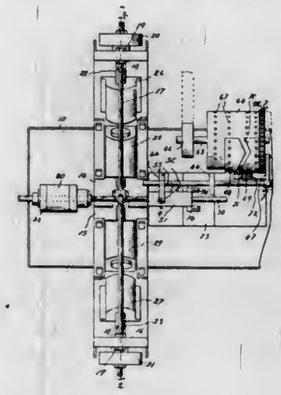
1,822,729. DOOR MOUNTING. JOHN THOMAS FAIRHURST, New York, N. Y., assignor to J. G. Wilson Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 1, 1927. Serial No. 230,249. 3 Claims. (Cl. 20—20.)



1. In a section fold partition having a plurality of doors hinged together in pairs and arranged to move in guides to form a partition and a pocket in which the doors are adapted to fit, when folded together, a swinging door having a beveled edge to close the pocket when the

partition doors are folded within the same, and means for mounting the pocket door to move a portion of the outer face thereof to a position behind the edge of the folding partition and to bring the beveled edge thereof against the jamb and produce a cam movement against the edge of the partition when the partition doors are all in extended edge-to-edge relation.

1,822,730. METHOD OF MACHINING INDIVIDUAL UNITS AND APPARATUS THEREFOR. ROY L. FREDERICK and THOMAS L. WILLIAMS, Detroit, Mich. Filed Apr. 11, 1929. Serial No. 354,331. 9 Claims. (Cl. 90—14.)

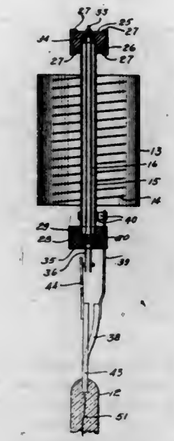


1. The method of machining individual units of closely limited uniformity of contour, from relatively long bar stock, consisting in advancing successive lengths thereof between the temporarily outdrawn members of a holding mechanism, actuating the latter to hold the entire bar, including the section which is next to be worked upon, immobile during a selected phase of each operative period as a whole, applying laterally positioned and axially lengthwise movable cutting members to selected peripherally spaced points about the section of the bar then being worked upon, thereafter effecting the timed retractile movement of said cutting members from further operative proximity to the then completely machined section of the bar, and thereafter effecting the severance of the section thus machined preparatory to the next bar-advancing phase of the mechanism.

8. In combination with a supporting base and a pair of branches hingedly supported thereby and adapted to extend in either direction therefrom, means for adjusting said branches individually to positions of desired angularity with respect to the work to be done, rotatable cutter members supported by said branches, means for automatically effecting the movement of said cutter members lengthwise of their respective axes toward and away from one another in a predetermined time cycle and transversely of the axial extent of the article being worked upon, and means for regulatably and intermittently effecting the movement of a parent stock bar lengthwise of itself and between the operative portions of said cutter members, thereby subjecting successive and similarly sized units of the bar to the controlling action of said machining members.

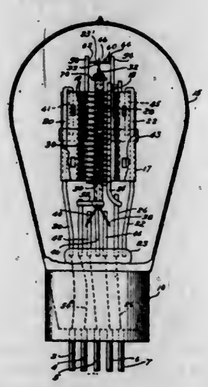
1,822,731. MEANS FOR SUPPORTING ELEMENTS IN AN ELECTRON DEVICE. ROBERT HARDING, Jr., White Plains, N. Y., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Mar. 13, 1930. Serial No. 435,412. 11 Claims. (Cl. 250—275.)

1. In a vacuum tube a tubular cathode, having opposite ends, a filament within said cathode, said filament having opposed parts to be supported, an insulating member at one end of said cathode, means to support said filament at one of said opposed parts upon said insulating member, means to anchor the other of said opposed



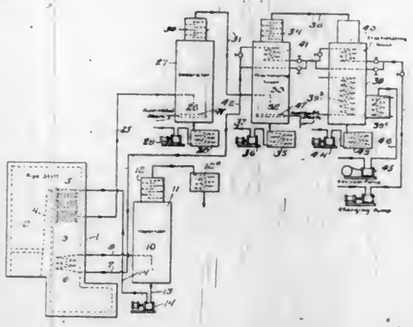
parts of said filament upon the other end of said cathode, and resilient means to urge said insulating member away from said cathode.

1,822,732. ELECTRODE SUPPORTING STRUCTURE. ROBERT HARDING, Jr., White Plains, N. Y., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Mar. 13, 1930. Serial No. 435,413. 1 Claim. (Cl. 250—27.5.)



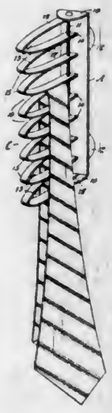
In a thermionic tube having a cathode and a heater therefor extending coaxially therewith, means for supporting the lower end of said cathode and said heater in spaced position with respect to each other, a fixed supporting member in said tube, means connecting said supporting member to the upper end of the heater to support the same, and additional means connecting said fixed member to the upper end of the cathode to support the same in spaced relation with respect to the heater, said first connecting means having engagement with the fixed member at spaced points one on each side of the central transverse axis of the fixed member.

1,822,733. VACUUM DISTILLATION OF OILS. AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Oct. 20, 1927. Serial No. 227,373. 7 Claims. (Cl. 196—77.)



1. In a method of distilling mineral oil, that procedure which consists of passing mineral oil through a heated zone in a stream of restricted cross section and splitting said stream into a plurality of substreams while maintaining the substreams of substantially equal cross section with respect to each other, and of substantially equal cross section with respect to the first named stream.

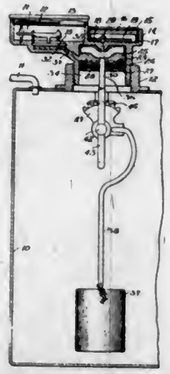
1,822,734. NECKTIE RACK. JEROME FRANCIS HARRINGTON, New York, N. Y. Filed Sept. 3, 1929. Serial No. 390,036. 5 Claims. (Cl. 211—120.)



4. A necktie rack including a base, a rod carried by the base and spaced in parallel relation thereto and a resilient element bent upon itself to provide a plurality of contiguous semi-elliptic loops carried by and projected in one direction from the rod, adjacent pairs of which loops define outwardly divergent gripping jaws.

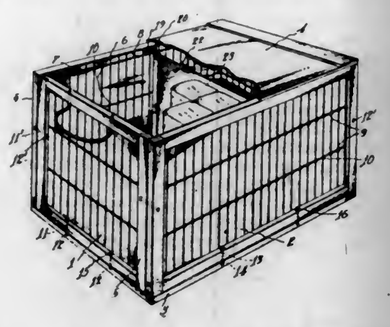
1,822,735. COMBINED LIQUID LEVEL AND PRESSURE INDICATING MECHANISM. HERBERT HASTINGS, Brighton, N. Y., assignor to Rochester Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 27, 1925. Serial No. 71,567. 3 Claims. (Cl. 73—82.)

1. In a gauge, the combination with a casing having a chamber therein, of oil substantially filling said chamber, a pressure transmitting diaphragm forming a wall of said chamber and retaining said oil therein, an indicating device exteriorly of said chamber, and operating means in-



cluding means extending through said diaphragm and movable within said oil filled chamber for operating said indicating device.

1,822,736. PACKING CRATE. JOSEPH J. HENZE, Detroit, Mich., assignor to A. Backus Jr. & Sons, Detroit, Mich., a Corporation of Michigan. Filed June 15, 1928. Serial No. 285,515. 2 Claims. (Cl. 217—7.)



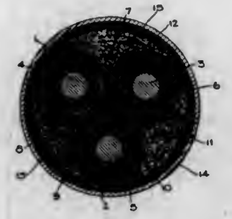
1. A crate comprising bottom, side and end panels secured together, brackets secured to the inner surfaces of certain of said panels, links carried by said brackets, and a partition having brackets adapted to receive the opposite ends of said links.

1,822,737. POLYPHASE INTERSHEATH CABLE. VLADIMIR KARAPETOFF, Ithaca, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 7, 1929. Serial No. 412,499. 8 Claims. (Cl. 171—97.)



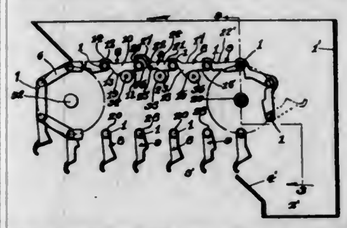
1. In a distribution system, in combination, a three phase cable, a separate intersheath associated with each conductor of said cable, a three phase source of alternating current connected to said cable, and means for raising the potential of each intersheath to a maximum when the instantaneous value of the voltage between the conductor with which it is associated and either of the other conductors is a maximum and for preventing the voltage of said intersheaths from rising above this value.

1,822,738. POLYPHASE INTERSHEATH CABLE. VLADIMIR KARAPETOFF, Ithaca, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 7, 1929. Serial No. 412,500. 12 Claims. (Cl. 171—97.)



1. In combination, a polyphase cable, a source of polyphase current connected thereto, a plurality of intersheaths associated with each conductor thereof, there being at least as many intersheaths associated with each conductor as there are vector line voltages associated with each conductor, and means for impressing an alternating voltage on each intersheath which is in phase with a vector line voltage of the conductor with which each intersheath is associated.

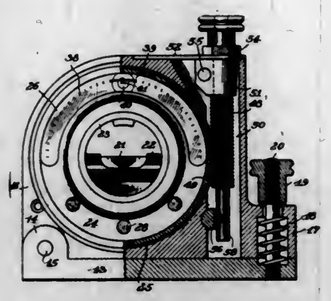
1,822,739. SELF-CLEANING, NON-CLOGGING, TRAVELING GRIZZLY. JONAS LIEN, Port Washington, N. Y. Original application filed July 18, 1929, Serial No. 379,257. Divided and this application filed Dec. 17, 1929. Serial No. 414,747. 14 Claims. (Cl. 209—308.)



1. A grizzly comprising an endless, combined screening and conveying element including simultaneously traveling sets of spaced screen bars, the rows of bars of each of said sets disposed transversely of the line of travel thereof and one set in advance of the other, and means for simultaneously elevating the alternate bars of each set when said set is at the upper stretch of said element on the forward travel of said stretch.

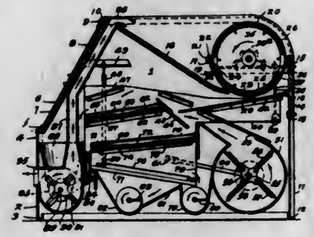
1,822,740. MEASURING INSTRUMENT. EDWARD OSCAR LOESER and GEORGE B. GALLASCH, Rochester, N. Y., assignors to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 10, 1925. Serial No. 22,133. 23 Claims. (Cl. 33—214.)

1. In a measuring instrument, the combination of a base, a casing pivoted to swing thereon, means for adjusting the casing upon the base, a spirit level adjustable to different angles within the casing, indicating means within the casing spaced from and movable with the spirit level for determining the angular position of the latter, an eye piece upon the casing for viewing the indicating means, and a window opposite the eye piece having an indicating mark thereon for cooperation with said indicating means, said eye piece and window being on opposite sides of the spirit level and both said scale and indicating mark being visible through the eye piece.



2. In a measuring instrument, the combination of a frame, a holder rotatably mounted thereon, a spirit level carried by the holder, means for indicating the extent of adjustment of the holder, separate manually adjustable operating devices for rotating the holder and means for rendering one of the operating devices ineffective during operation of the other.

1,822,741. OAT HULLER. EDWARD LORENZEN, Marshalltown, Iowa. Filed Dec. 8, 1927. Serial No. 238,543. 17 Claims. (Cl. 83—30.)

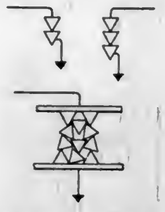


3. In a machine of the character described, in combination, a fixed closed hollow drum having a plurality of alined longitudinal inlet ports and having another plurality of alined longitudinal outlet ports spaced circumferentially from the inlet ports, said drum having on the inner circumferential wall of its lower half containing both sets of ports semi-annular ribs separating the inlet ports from the outlet ports longitudinally and having on the inner circumferential wall of its upper half obliquely disposed ribs arranged in oppositely directed rows to serve both as stripping means by impact for the unhulled grain and as inclined guides for directing the cleaned grain and separated hulls into said outlet ports, and a rotary driving and co-acting structure mounted in said drum to propel the unhulled grain around the interior of the drum along its inner wall to said outlet ports while contactingly stripping by impact the grain of its hulls, in coaction with said ribs.

1,822,742. DISCHARGE DEVICE AND RESISTANCE MATERIAL. KARL B. MCEACHRON, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 13, 1927. Serial No. 198,512. 7 Claims. (Cl. 175—30.)

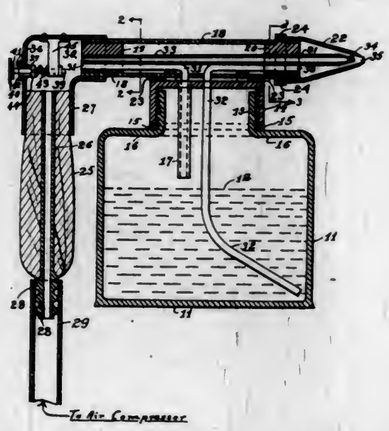
2. A lightning arrester including a mass of assorted crystals, said mass having a hyperbolic resistance-ampere

characteristic which is substantially unaffected by variations in the rate of change of voltage applied to the mass to produce a flow of current therethrough.



4. A granular material having a hyperbolic resistance-ampere characteristic and having free carbon as an ingredient, and means for holding the grains together under pressure, whereby in terms of a unit of the dimensions of the standard unit the material has a constant between 50 and 5000 and an exponent of 0.2 and over when serving as a conductor of current of a density of 5,000 amperes per square inch and under.

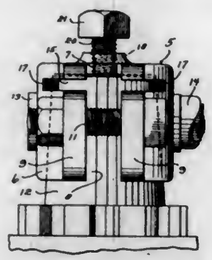
1,822,743. ATOMIZER OR SPRAYER. FREDERICK G. MITCHELL, Ridgefield Park, N. J. Filed Aug. 6, 1927. Serial No. 211,109. 3 Claims. (Cl. 91—45.)



1. In an atomizer or sprayer a closed container for the liquid to be sprayed, a holder for the hand of the operator, distinct from said container, a liquid discharge nozzle, a means for conveying compressed air or gas through said holder to the interior of said container, to press on the surface of the liquid therein, thereby forcing said liquid to be discharged through said nozzle, said holder having therein an opening positioned within reach of said hand, to be controlled by the same, for instantaneously releasing the pressure of said air or gas, thereby discontinuing the discharge of said liquid through said nozzle, a valve, for covering said opening, to be controlled by said operator, a bracket, enclosed by said holder, a stem for said valve, a collar on snid stem and a spring abutting at one end thereof against said bracket and at the other end thereof against said collar, thereby normally keeping said valve open during the intervals between the operation of the atomizer or sprayer.

1,822,744. BATTERY TERMINAL. WALTER E. OTWELL, Linn, Kans. Filed Apr. 25, 1929. Serial No. 358,051. 2 Claims. (Cl. 173—259.)

1. In a battery terminal a cup-shaped body portion having a sleeve portion and a cap portion integrally joined to the sleeve portion, said cap portion being co-extensive with the circumferential extent of the sleeve portion, a screw threaded axially thru the cap portion, a transverse slot between the cap and sleeve portions, the ends of said slot terminating short of a diametrical line of the



cap portion, a longitudinal slot extending thru the sleeve portion from the center of the transverse slot to the inner end of the sleeve portion, clamp arms on the sleeve portion, and a clamp bolt extending thru the arms for contracting the sleeve.

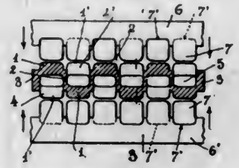
1,822,745. CUTTING TOOL. HENRY W. PORTER, Brookline, Mass., assignor to H. K. Porter, Inc., a Corporation of Massachusetts. Filed Nov. 18, 1930. Serial No. 496,460. 8 Claims. (Cl. 81—199.)



1. A cutting tool comprising, in combination, cooperating cutting jaws, cooperating handle levers therefor, adjusting sections one for each cutting jaw fulcrumed to said handle levers, one end of each of said adjusting sections terminating in a depending arm lying within the side edges of said lever arm and means within said handle lever arm for engaging and adjusting said arm, said means including cooperating cam surfaces, said handle lever arm affording a bearing for said adjusting means opposite the fulcrumed point of said adjusting sections tending to resist downward action upon said adjusting sections caused by said cooperating cam surfaces, said adjusting sections being bifurcated at the ends to embrace said cutting jaw ends and provide rigid support for said adjusting sections and cutting jaws.

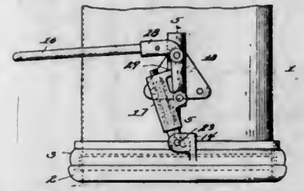
1,822,746. LEAD PLATE FOR ELECTRIC ACCUMULATORS. ADOLFO POUCHAIN, Turin, Italy. Filed June 4, 1928, Serial No. 282,867, and in Germany Jan. 10, 1928. 5 Claims. (Cl. 136—71.)

1. A lead electrode or plate for electric accumulators, having faces and comprising a frame structure, parallel ribs in said structure, and adjacent fins parallel with each other and extending between each set of two adjacent ribs, said fins projecting alternately from said ribs



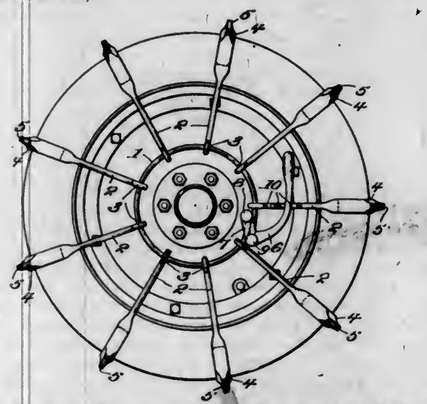
on the opposite plate faces, and the fins of each row intermediate two adjacent ribs alternating with the fins of the rows at the sides thereof.

1,822,747. BAG HOLDER. HENRY RICHARDSON, Passaic, N. J., assignor to Richardson Scale Company, Clifton, N. J., a Corporation of New Jersey. Filed May 26, 1928. Serial No. 280,935. 8 Claims. (Cl. 83—26.)



1. The combination of a filling spout, co-operative bag-holding members supported exteriorly thereon adjacent to its discharge end, one of said members being moved axially of the spout to grip and hold a bag mouth between it and the other member, and yieldable toggle means for actuating said movable member to grip the bag mouth and to lock said member in gripping position.

1,822,748. TRACTION ATTACHMENT FOR WHEELS. FRANK RIVERS and DANIEL W. RIVERS, Soldier, Ky. Filed May 10, 1930. Serial No. 451,390. 1 Claim. (Cl. 152—14.)



A traction attachment for wheels comprising a split resilient ring adapted to encircle the hub of a wheel, a plurality of radially extending arms pivotally and slidably mounted on the ring and having their outer end portions enlarged and bent in hook shape to engage over the tire of the wheel, one of said arms having recesses, and a curved lever having a straight portion disposed angularly thereto and having the ends of said straight portion pivoted to the ends of the ring and adapted when disposed within the ring to expand the latter for applying and removing the hook shaped ends from the tire and when disposed outwardly of the ring within one of the recesses to contract the ring for holding the hook-shaped ends of the arms in engagement with the tire.

1,822,749. SILENT CHAIN. CHARLIE CARL ROTHMAN, Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 6, 1928. Serial No. 324,258. 14 Claims. (Cl. 74—32.)



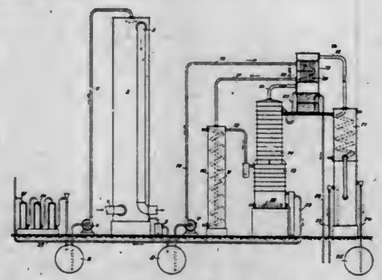
1. An articulating joint for the links of power chains, which comprises a pair of pin elements each having a convex side and adapted for mounting in the links so that the chain stresses are transferred from one adjacent link to another by pressure on said convex sides, at least one of said elements being segmental in form and being mounted in the links with a substantial portion of the concave side unsupported whereby the arc of the segment is permitted to flex inwardly under load and shock.

1,822,750. TWO-STROKE CYCLE INTERNAL COMBUSTION ENGINE. PAUL SCHMALJOHANN, Kiel, Germany, assignor to Centra Handles- & Industrie A.-G., Chur, Switzerland, a Corporation of Switzerland. Filed Jan. 3, 1930, Serial No. 418,317, and in Germany Jan. 5, 1929. 3 Claims. (Cl. 123—53.)



1. A two-stroke cycle internal combustion engine, comprising more than two cylinders disposed radially of one another and having a common central combustion chamber, pistons reciprocating in said cylinders and having gable roof-shaped inner bottoms, and two similar and oppositely located groups of scavenging ports disposed parallel to the ridges or meeting portions of the gable roof-shaped portions of the inner faces of the bottoms of the pistons, said groups being located at the opposite gable sides.

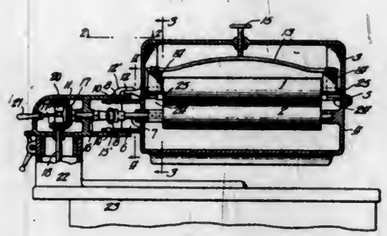
1,822,751. PROCESS OF EXTRACTING BENZENE HYDROCARBONS FROM GASES. THEODOR SCHNEIDER, Recklinghausen, Germany, assignor to the Firm Carl Still, Recklinghausen, Germany. Filed July 6, 1928, Serial No. 290,888, and in Germany July 8, 1927. 2 Claims. (Cl. 196—7.)



1. A process of extracting benzene hydrocarbons from the gases produced by carbonization of solid fuel com-

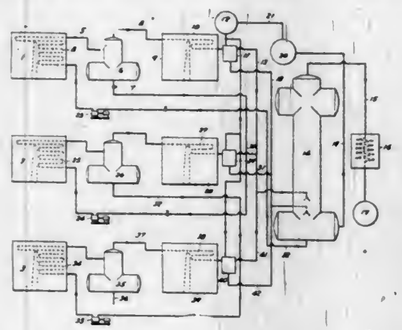
prising the following steps: washing the gases by means of a wash oil containing such an amount of naphthalene that there is practically no absorption of naphthalene from the gases; distilling off the benzol hydrocarbons and a portion of the naphthalene content from the wash oil; fractionating off the naphthalene from the distillation vapors as a liquid condensate and returning the latter into the wash oil undergoing distillation.

1,822,752. LAUNDRY MACHINE SAFETY RELEASE. JAMES P. SHEA, Forest Park, Ill. Filed Sept. 25, 1928. Serial No. 308,235. 5 Claims. (Cl. 68—32.)



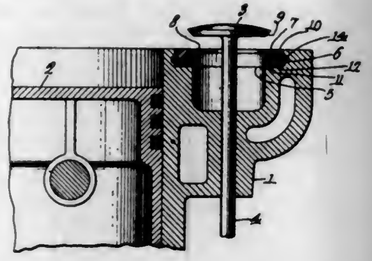
1. In a laundry machine, the combination of a pair of laundering members, one of which is a roller mounted for rotation relatively to the other, for feeding articles therebetween and thus performing a laundering operation on said articles, means for rotating said roller including a drive shaft movable about a fixed axis and a flexible connection permitting pivotal movement of said members, means supporting said members for pivotal movement, and means for holding said members in operative relation, said holding means being releasable on the pivotal movement of said members by an operator.

1,822,753. METHOD FOR CRACKING OIL. CLYDE L. SMITH, Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 25, 1929. Serial No. 335,062. 2 Claims. (Cl. 196—61.)



1. The continuous method of cracking oils in the vapor phase, which comprises passing a charging stock oil having a relatively wide boiling range in the form of an elongated stream of restricted cross-section through a primary distillation zone, in heating the stream of charging stock during its continuous movement through said zone to temperatures sufficiently high to vaporize the lighter constituents of said charging stock, continuously separating the vaporized and unvaporized fractions thereof, continuously passing without interruption the vaporized fraction through a primary conversion zone wherein said vaporized fraction is heated to conversion temperatures in excess of 1000° F., in passing directly the unvaporized fractions in an elongated stream of restricted cross-section through a second distillation zone wherein said fractions are heated to temperatures higher than those prevailing in said primary distillation zone, subjecting the products discharged from said secondary zone of distillation to a second separating step to separate therefrom the vaporized from the unvaporized fractions thereof, and in continuously passing the lighter vaporized fractions through a second converting zone wherein the vapors are heated to a converting temperature in excess of 1000° F. but less than said first named conversion temperature, dephlegmating the combined vapors from the primary and secondary conversion zones, and condensing and collecting the blended distillate.

1,822,754. VALVE SEAT. FRED E. SMITH, Santa Paula, Calif. Filed Oct. 23, 1926. Serial No. 143,660. 4 Claims. (Cl. 251—167.)



1. In an internal combustion engine, a valve housing formed with a recess, a valve seat member adapted for close fit reception within said recess, both said valve seat member and said valve housing being formed with complementary grooves, the valve seat member in its operative position within said recess having contact at its side with the side wall of said recess at both sides of said grooves, and a cement confined between said grooves for locking the seat to the said valve housing.

1,822,755. OIL FRACTIONATING APPARATUS. CLYDE L. SMITH and CORNELIUS B. WATSON, Chicago, Ill. Original application filed Feb. 28, 1928, Serial No. 257,696. Divided and this application filed May 13, 1930. Serial No. 452,069. 3 Claims. (Cl. 299—58.)

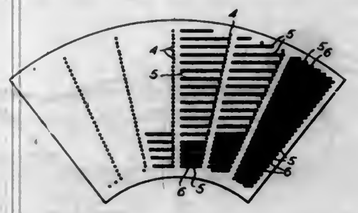


1. A tray for fractionating towers comprising an elongated relatively narrow sheet metal body formed from a single blank of material and having the central portion thereof formed to provide a longitudinally extending liquid-containing trough, the opposite longitudinal edges of said trough terminating in depending supporting walls which are spaced from the walls of said trough and lie beyond the confines thereof to permit ascending heated vapors to contact with the full lower area of said trough, said side walls being so disposed in relation to the upper longitudinal edges of said trough that liquid overflowing from the trough passes as a vertical traveling film over the outer surfaces of said walls.

1,822,756. SCREEN PLATE AND METHOD OF MAKING SAME. SAMUEL BLAINE STINE, Osceola Mills, Pa. Filed Apr. 10, 1929. Serial No. 354,147. 1 Claim. (Cl. 148—9.)

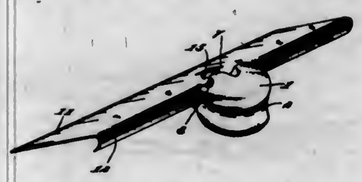
The method of forming screen plates having slots whose longitudinal center lines are spaced apart distances not substantially in excess of one-fourth of an inch, which

comprises heating a metal plate, forming a series of perforations in said plate along lines designating the starting points of laterally-spaced slots, the perforations being spaced apart a distance equal to the slot spacing desired,



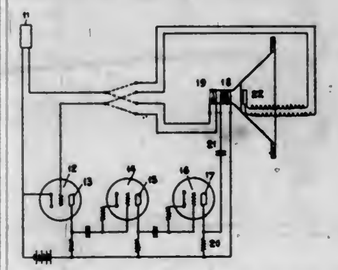
applying a cutting flame to each alternate perforation in succession and moving the cutting flame along the plate to form slots, and thereafter applying the flame to the intermediate perforations and forming the slots intermediate the first-named series of slots.

1,822,757. POINTER, UNDERLINER, AND WEIGHT. HALFDAN R. THORESEN, Brooklyn, N. Y. Filed July 19, 1930. Serial No. 469,158. 2 Claims. (Cl. 120—1.)



1. In a device for the purpose set forth, a weighted block having a rear portion which is round in plan, its sides grooved inwardly and one of its faces formed with an extension whose upper face is arranged at an angle and whose sides are grooved, the upper face of the block, at the juncture of the extension thereof, being formed with an extending lip having depressions to the sides thereof, and outward of the lip being formed with a rounded depression, a blade, having its outer edge provided with a scale, its inner edge rounded, its center cut away from its said inner edge, its under face formed with inwardly directed ribs designed to be received in the grooves of the block extension and an arched spring tongue on said plate adapted to be received in the rounded depression in the block extension for removably holding the plate on the block.

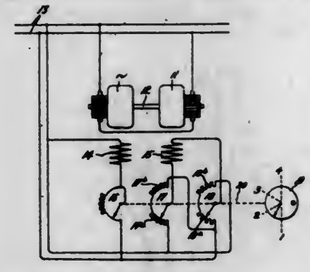
1,822,758. SYSTEM FOR TRANSMITTING AND AMPLIFYING VIBRATORY CURRENTS AND MOVEMENTS. PIERRE MARIE GABRIEL TOULON, Puteaux, France. Filed Sept. 16, 1929, Serial No. 392,907, and in France Sept. 21, 1928. 5 Claims. (Cl. 179—100.4.)



1. Electric transmission device for giving in a receiver an exactly proportional reproduction of the varia-

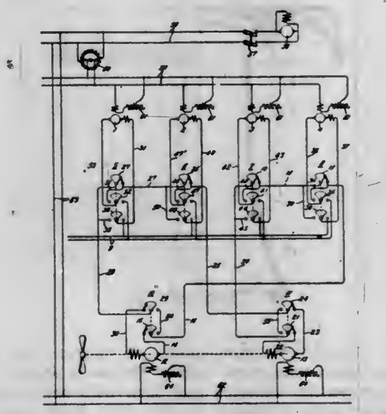
tion of energy impressed to a transmitter comprising: a transmitter transforming said impressed energy into electrical energy, an amplifier of said electrical energy, a receiver, means to connect in series the transmitter the amplifier and to the receiver, means to collect a part of the output energy, means to transform it into electrical energy, means to impress said latter energy on the input circuit of the amplifier in such a way that said circuit be energized by the difference between the energy coming from the transmitter and said latter part of the output energy.

1,822,759. MOTOR CONTROL SYSTEM. LEONID A. UMANSKY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 31, 1928. Serial No. 329,651. 13 Claims. (Cl. 172—179.)



1. The combination with a direct current motor, of a speed regulating dynamo electric machine for said motor having its armature electrically connected in series relation with the armature of said motor and mechanically connected therewith, means for adjusting the field strength of said motor, means for adjusting the field strength of said regulating machine, means for controlling the field of said regulating machine so that said machine may be operated either as a motor or as a generator and a single means for operating both said field adjusting means for said regulating machine and the field controlling means therefor.

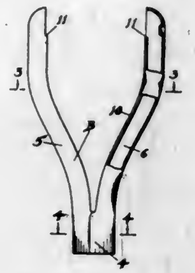
1,822,760. SHIP PROPULSION SYSTEM. ROBERT D. VAN NORDSTRAND, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1928. Serial No. 319,093. 4 Claims. (Cl. 172—8.)



1. The method of operating a power system wherein any predetermined number of generators may be con-

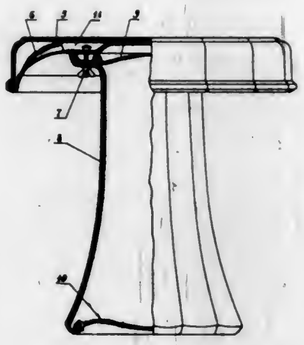
nected in series with a plurality of series connected motors mechanically connected to one another and to a load device whose power demand increases and decreases at a greater rate than its speed, which includes the acts of decreasing the number of generators connected in circuit with said motors, and decreasing the excitation of only one of said motors sufficiently to increase the speed of said motors above that speed at which they would normally operate when connected to said lesser number of generators if left in their previous condition of adjustment to increase the motor load to a value sufficient to fully load said lesser number of generators.

1,822,761. SPLIT-D HANDLE FOR SHOVELS AND OTHER IMPLEMENTS. LEWIS EDMOND WEESTER, Wilkes-Barre, Pa. Original application filed Dec. 4, 1928, Serial No. 323,630. Divided and this application filed Nov. 23, 1929. Serial No. 409,235. 7 Claims. (Cl. 294—57.)



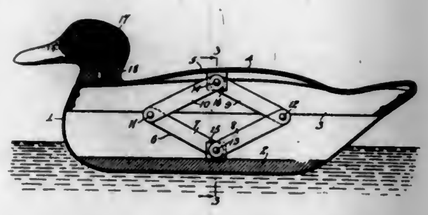
1. In a D-handle construction, a main stem having diverging side arms, a metal casing embracing the body of the stem and said arms, a grip-piece secured to said casing, said casing forming ferrules for the end of said grip-piece, said casing having inturned flanges in embedding relation with the side arms.

1,822,762. METHOD OF MANUFACTURING MOLDED ARTICLES. ROBERT WEITZEL, Paris, France. Filed Feb. 7, 1930, Serial No. 426,751, and in France Feb. 22, 1929. 3 Claims. (Cl. 154—2.)



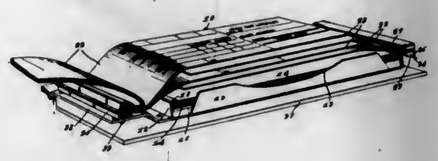
1. A method of molding pieces of furniture or other articles, which comprises coating the mold with a substance preventing adhesion and then with several coats of lacquer paint or sizing, covering the lacquer with a layer of thin cloth, and then covering the whole with several layers of cloth coated with a product adapted to harden in the air.

1,822,763. COLLAPSIBLE DECOY. WILDER H. COOK, Athens, N. Y. Filed Nov. 12, 1930. Serial No. 495,257. 6 Claims. (Cl. 43—3.)



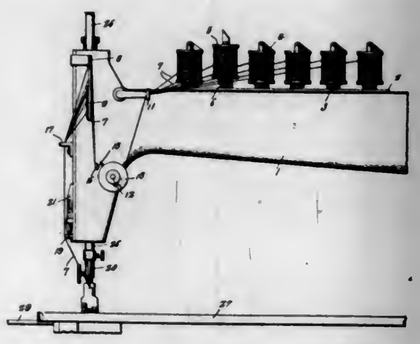
1. A collapsible decoy including a flexible body, a frame structure arranged in said body and formed with top and bottom members, and a toggle positioned in the frame for connecting the top and bottom members.

1,822,764. MANIFOLDING DEVICE. WALTER O. CRITCHFIELD, Shelby, Ohio. Filed Nov. 14, 1930. Serial No. 495,763. 8 Claims. (Cl. 282—9.)



1. In combination, a card holder, cards removably secured within the holder in super-imposed relation, a pad holder secured at one end of the card holder, a pad secured within the pad holder and adapted to have the leaves thereof extending over the cards in the card holder, and a carbon sheet holder secured at the other end of the card holder, carbon sheets within the carbon sheet holder and adapted to be interposed between the leaves of the pad and between said pad leaves and the cards.

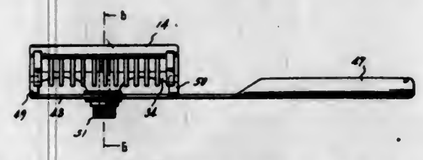
1,822,765. MULTICOLOR THREAD SEWING MACHINE. CARL A. DICKEY, Alto, Tex. Filed Oct. 13, 1930. Serial No. 488,443. 1 Claim. (Cl. 112—218.)



A multi-color thread sewing machine comprising a series of spool carriers mounted on the arm of the machine,

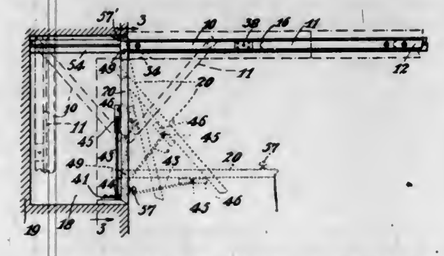
each carrier adapted to receive a spool wound with a distinctive thread, an arm mounted upon the machine and having a recess for the reception of each thread, tension means engaging the threads between said arm and the spool carriers, a rack for retaining the end portions of the thread and means for guiding the thread from said arm to the rack.

1,822,766. SAFETY RAZOR AND HAIR CUTTER. MICHAEL J. DUFFY, Brooklyn, N. Y. Filed Sept. 17, 1930. Serial No. 482,577. 3 Claims. (Cl. 30—12.)



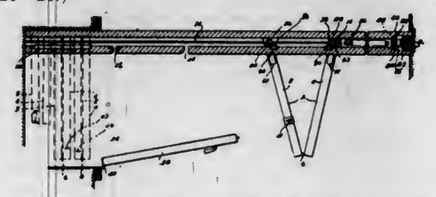
2. In a hair cutting device, holding means, a curved comb and a blade held by said holding means, said blade being adjacent said comb and adjustable means on said curved comb for regulating the length of a hair cut.

1,822,767. DOOR MOVEMENT. WALTER E. DUNCANSON, New York, N. Y., assignor to J. G. Wilson Corporation, New York, N. Y., a Corporation of Virginia. Filed Mar. 16, 1929. Serial No. 347,490. 2 Claims. (Cl. 20—20.)



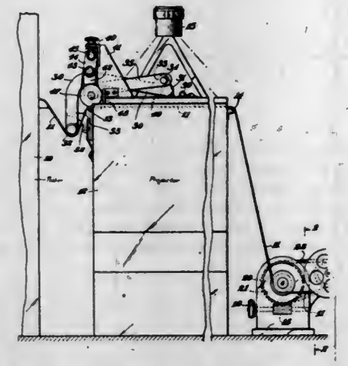
1. In an apparatus of the class described, a movable folding partition adapted to be folded to place in a pocket and to be unfolded to an aligned position wholly outside of the pocket, a spring dam device against which the partition is adapted to bear when outside of the pocket, a door adapted to close the pocket both when the partition lies within the same and when the partition lies wholly outside of the same, and means for mounting the door to swing to open and close the pocket and in closing the pocket when the partition is outside of the same to act as a lever to force the partition to pass against the said spring jam device and to then so maintain the partition while the door is closed.

1,822,768. FOLDING PARTITION. WALTER E. DUNCANSON, New York, N. Y., assignor to The J. G. Wilson Corporation, New York, N. Y., a Corporation of Virginia. Filed Feb. 26, 1930. Serial No. 431,424. 7 Claims. (Cl. 20—20.)



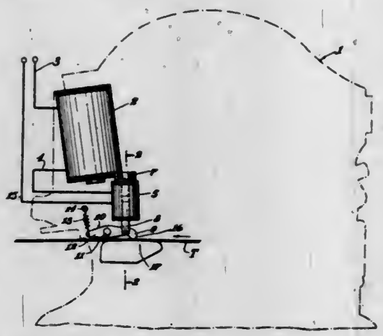
1. A folding partition comprising a track, a pocket, a folding partition section movable into folded position with in said pocket and into aligned position out of said pocket, said section being provided with means for latching the section in a partially folded position outside of said pocket, and a door for said pocket movable between closed and open positions when said partition section is folded outside of said pocket.

1,822,769. TAPE REGULATING DEVICE FOR STOCK QUOTATION PROJECTORS. AUGUST D. EITZEN, New York, N. Y., assignor to News Projection Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 23, 1929. Serial No. 357,448. 15 Claims. (Cl. 88—24.)



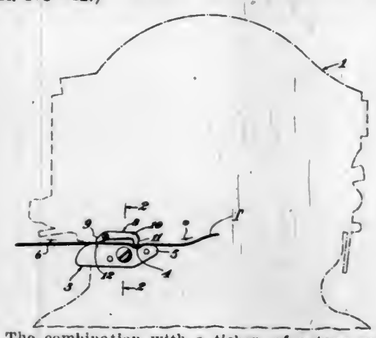
1. In a stock ticker projection machine, the combination with an intermittently operating ticker adapted to discharge marked tape, a projecting device, and a continuously operating mechanism for drawing the tape through said projecting device; a tape-tensioning apparatus comprising a lever pivoted to said projecting device and provided with a head adapted gravitationally to bear on the tape approaching the projecting device, whereby slack take-up caused by stoppage of the ticker will raise said lever, a roller and an abutment between which the tape passes on entering the projecting device, and means operated by said lever when the latter rises and falls for respectively forcing together and separating said roller and abutment.

1,822,770. TICKER TAPE CONTROLLING MEANS. AUGUST D. EITZEN, New York, N. Y., assignor to News Projection Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1929. Serial No. 350,112. 7 Claims. (Cl. 178—42.)



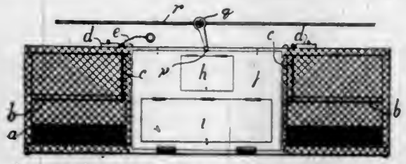
1. The combination with a ticker, of a tape puller, a support, a lever frictionally to impinge the tape against said support for locking the tape against movement by said tape puller when said ticker is at rest, and a magnetic device for actuating said lever when said ticker operates to break said frictional contact.

1,822,771. TICKER PROTECTING MEANS. AUGUST D. EITZEN, New York, N. Y., assignor to News Projection Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 7, 1929. Serial No. 338,064. 5 Claims. (Cl. 178—42.)



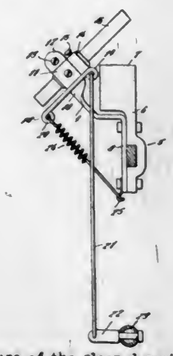
1. The combination with a ticker, of a tape puller for taking up the slack in the tape as it is delivered by the ticker, and means normally out of tension exercising position when slack is formed in the tape and operable for exercising tension on the tape as soon as the slack has been taken up to protect the ticker against injury.

1,822,772. CAGE OR CRATE FOR TRANSPORTING LIVESTOCK. CLARENCE ARNOLD FELL, Etwall, England. Filed Apr. 26, 1929, Serial No. 358,332, and in Great Britain June 12, 1928. 2 Claims. (Cl. 119—17.)



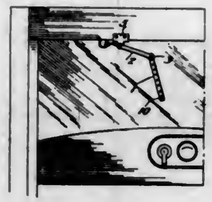
1. A portable cage for the reception and manual transportation of live stock and particularly pigeons, comprising rigid frame members, strips of wire gauze connected to form walls, a movable floor for dividing the cake into a plurality of separate compartments, entry and exit means common to all the compartments and constituted by an opening in one wall and a door hinged thereto, said door being provided with means for access to each compartment separately and said floor being provided with means operative from the outside, for lowering and elevating it.

1,822,773. FLUE FILER. CARY E. FERGUSON and CHARLES E. SHOCKENCY, Lima, Ohio. Filed Feb. 28, 1930, Serial No. 432,275. Renewed July 6, 1931. 4 Claims. (Cl. 29—76.)



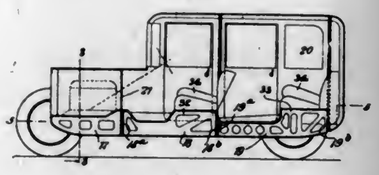
1. In a structure of the class described, in combination, a stationary frame, a clamp on said frame, a collar pivotally mounted on said clamp, a file mounted in said collar, a return spring anchored on said clamp and fastened to said collar, an oscillatory shaft, and an operating connection between the collar and shaft.

1,822,774. WINDSHIELD HEATER. EDWARD J. GALLAGHER, Jr., Baltimore, Md. Filed Apr. 5, 1930. Serial No. 441,951. 1 Claim. (Cl. 219—19.)



A heating device for the transparent panel of a windshield or the like, comprising an arm pivoted at one edge of the panel to lie parallel therewith, an elongated channeled housing open at the side next to the panel and having a perforated opposite side, a pivot connecting the housing to the arm whereby the said housing may be swung independently of the swinging movement of the arm, a handhold on the housing, and an electric heating coil coextensive with and within the housing for confronting relation to the panel through the open side of said housing.

1,822,775. SELF-SUPPORTING CAR BODY OF SHEET-METAL FOR MOTOR CARS. ALBERT BERTHOLDT HENNINGER, Berlin-Halensee, Germany. Filed Sept. 11, 1928, Serial No. 305,268, and in Germany Mar. 18, 1924. 5 Claims. (Cl. 296—28.)

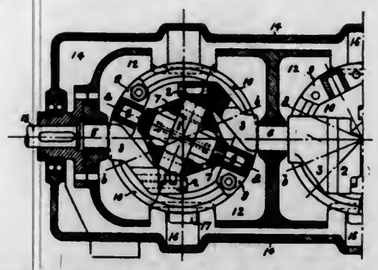


1. A substantially self-supporting car body for automobiles, comprising at least three longitudinal bearers corresponding to the shape of the car body and having substantially horizontal flanges forming the bottom of the car body, certain of said bearers having high vertical webs forming the car sides, vertical members bent off the flanges and integral with the vertical webs and extending into the interior of the car body for stiffening the longitudinal bearers and providing a connection therebetween, and horizontal members bent off the vertical members serving as bearing supports for the motor and seats.

1,822,776. ROTARY MECHANISM FOR THE TRANSMISSION OF POWER AT VARYING SPEEDS. WILFRED HUNT, Glasgow, Scotland. Filed Oct. 11, 1922, Serial No. 593,773, and in Great Britain Nov. 16, 1921. 13 Claims. (Cl. 74—28.)

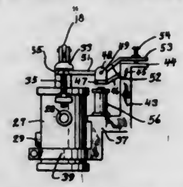
1. A mechanical transformer having a primary member, a secondary member, and an inertia member having an inertia element, all so interconnected that the inertia element is caused to oscillate in accordance with differences in speed between the primary and secondary members, said transformer being provided with means for oscillating

the inertia element, whereby the mean leverage exerted from the primary member towards the inertia element during the acceleration period of the latter's oscillation is



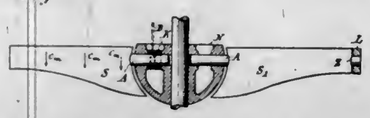
substantially equal to the mean leverage exerted by the element towards the primary member during the retardation period of its oscillation.

1,822,777. IGNITION DEVICE FOR OIL BURNERS AND THE LIKE. CARL JOHNSON, Glencoe, Ill. Filed Dec. 7, 1929. Serial No. 412,511. 2 Claims. (Cl. 137—139.)



1. Actuating mechanism for valves comprising a bracket including a pair of spaced uprights joined at their upper and lower ends to provide an upper and a lower table offset from vertical alignment with each other, electromagnetic means on the lower table, an arm pivotally mounted between said uprights adjacent their upper ends and including a lower end portion providing an armature attractable by energization of said electromagnetic means, a second arm above and pivotally connected to said first named arm, and said second named arm including an end portion projecting above said armature and adapted to engage and depress a valve stem upon attraction of said armature.

1,822,778. HYDRAULIC TURBINE. VICTOR KAPLAN, Brunn, Austria. Filed July 30, 1914, Serial No. 854,149, and in Hungary Feb. 18, 1913. 3 Claims. (Cl. 253—117.)



1. A runner wheel for high speed water turbines provided with guide vanes, said wheel comprising a plurality of angularly adjustable blades, and means to adjust said blades while the wheel is running so as to vary not only the outlet angles and passages but also the inlet angles and passages of the wheel, to correspond to variation in the supply of water and in the power required.

1,822,779. COMPOSITION FOR TREATING PULP. JOSEPH FRANCIS KING, Portland, Me., assignor of one-fourth to Thomas M. Donahue and one-fourth to John E. Donahue, Portland, Me. Filed Jan. 28, 1931. Serial No. 511,931. 3 Claims. (Cl. 92—9.)

1. A composition of the class described comprising sodium perborate, magnesium carbonate, crystals of magnesium sulphate, cocoanut oil soap, sodium hyposulphite, barley malt and sodium bisulphite.

1,822,780. SHOE BAG. ABRAHAM MANSKER, Dorchester, Mass., and DAVID BAUM, Livermore Falls, Me., assignors to Pepperell Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed May 23, 1930. Serial No. 455,100. 5 Claims. (Cl. 150—7.)



1. A flexible fabric bag having a closed end and an open end, a flap adjacent the open end and adapted to be folded over the open end, and a connection permanently secured at one end to the free end of the flap and at its other end to the closed end of the bag.

1,822,781. WIRE SPACING AND FASTENING DEVICE. JAMES MCSKIMMING, Santa Barbara, Calif. Filed Mar. 29, 1930. Serial No. 440,107. 1 Claim. (Cl. 72—118.)

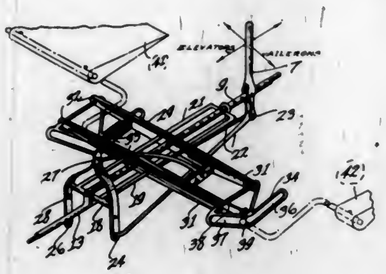


In a plastering construction, a structure to be plastered, an expanded metal lath arranged over the face of the structure, fibre discs between the lath and the structure, each of which having a central opening therethrough, a staple nail which includes a shank having a pointed end and of a length to pass through the disc and through the structure, said shank designed to be received through the opening in the fibre disc and to be partly driven into the structure when the metal lath is drawn taut, the second end of the shank being rounded and merging into a shank which is comparatively short with respect to the first mentioned shank and which short shank has its face cut angularly to provide the same with a sharpened end and said shorter shank when the staple nail is driven home is designed to pass through the fibre disc and to partly enter the structure to compress the portion of the lath engaged by the staple nail into the fibre disc.

1,822,782. AERONAUTIC DEVICE. ANGELO R. NOVO, Guadalupe, Calif. Filed Jan. 26, 1931. Serial No. 511,414. 3 Claims. (Cl. 244—29.)

1. In a device of the character described adapted to be secured to an airplane having a pair of spaced ailerons.

of a shaft rotatably positioned in the vehicle at a point between said ailerons, of a slider movable on said shaft,



means for actuating said slider, a pair of yokes supported from said slider and having slots formed therein for the reception of crank arms secured to said ailerons.

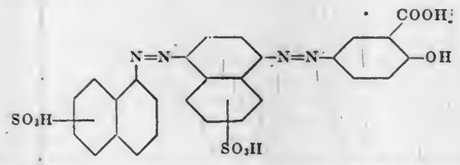
1,822,783. NEGATIVE HOLDER. CARL D. NEWTON and ROBERTO DE SILVA, San Antonio, Tex.; said de Silva assignor to said Newton. Filed Jan. 22, 1930. Serial No. 422,603. 1 Claim. (Cl. 95—73.)



A negative holding frame for a photographic printing apparatus, comprising a lower plate, an upper plate, screws for detachably fastening the upper plate to the lower plate, with a negative clamped between the plates, each plate having an opening therein for exposing portion of the negative, with the opening in the upper plate of larger area than the opening in the lower plate.

1,822,784. MANUFACTURE OF MORDANT DISAZO DYESTUFFS. LEOPOLD OSWALD, Basel, Switzerland, assignor to the Firm of J. R. Geigy S. A., Basel, Switzerland. Filed Feb. 6, 1929, Serial No. 338,033, and in Germany Feb. 20, 1928. 7 Claims. (Cl. 260—83.)

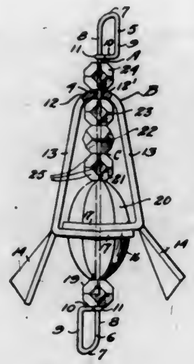
7. As new articles of manufacture, the hereinbefore described mordant disazo dyestuffs having the general formula



said disazo dyestuffs constituting brown powders soluble in water, and yielding brown chromium prints of great fastness to soap, washing and light.

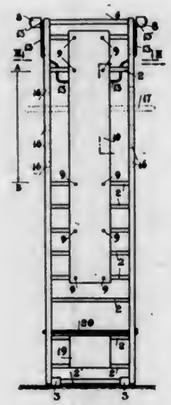
1,822,785. FISHING SPINNER. FRANK N. PETRIE, Klamath Falls, Oreg. Filed June 7, 1930. Serial No. 459,770. 2 Claims. (Cl. 43—45.)

1. A spinner comprising a shank provided with upper and lower abutments at its ends, a series of beads strung on said shank extending from adjacent the lower abutment, a blade revolubly carried by said shank at the end



of said series of beads opposite said lower abutment, and a bead between the pivotal connection of said blade with said shank and the upper abutment.

1,822,786. MULTIPLE GYMNASTIC - INSTRUMENT. ANDREA RAFFO, Chiavari, Italy. Filed Apr. 23, 1929, Serial No. 357,487, and in Germany Aug. 14, 1928. 6 Claims. (Cl. 272—60.)



1. A gymnastic apparatus including a ladder construction having uprights and connecting rungs, boards of less width than the distance between the uprights and secured to the respective surfaces of the rungs, said boards terminating above the lower end of the ladder, brackets carried by the uprights below the lower ends of the boards and extending in parallelism laterally of the uprights, said brackets being formed with a plurality of openings to selectively receive and support a transverse bar.

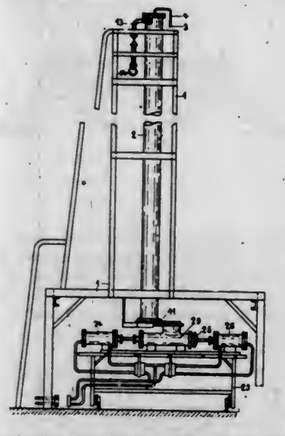
1,822,787. PLANT MARKER. MARION G. SLAWSON, Girard, Kans. Filed Feb. 3, 1931. Serial No. 513,216. 6 Claims. (Cl. 40—17.)

1. A device of the character described, comprising a supporting stake, a forwardly projecting tongue struck therefrom, a card holder secured to said stake and extending transversely thereacross, said card holder having its end walls bent to form channels that are open at the bottom, a glass pane adapted to be inserted in said channels and to protect an identification card placed therebehind, the tongue of said stake underlying said pane and



preventing downward movement of said pane and the lower edge of the card holder being notched for the reception of said tongue.

1,822,788. PROCESS AND APPARATUS FOR PRODUCING SOLID CARBON-DIOXIDE. JOSEF STOFFELS, Esslingen-on-the-Neckar, Germany. Filed Apr. 21, 1930, Serial No. 446,138, and in Germany Apr. 7, 1928. 8 Claims. (Cl. 62—121.)



1. The method of producing solid carbon dioxide, which consists in causing liquid carbon dioxide to expand into a plurality of expansion chambers, to produce carbon dioxide snow in said chambers; repeatedly filling a movable press cylinder with snow from one after another of said expansion chambers, in such a manner as to substantially prevent contact of the outer atmosphere with the snow; compressing the snow in said press cylinder each time it is filled, to form a solid block of carbon dioxide; and discharging each solid block from said press chamber after it is formed.

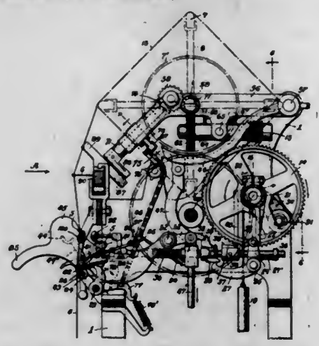
1,822,789. FOUNTAIN PEN. ALFRED H. SWAN, Los Angeles, Calif. Filed June 22, 1929. Serial No. 373,000. 4 Claims. (Cl. 120—47.)

1. In a fountain pen, an inner barrel having a reservoir for fluid therein, an outer barrel spacially positioned coaxially with said inner barrel and having one end formed integral with the corresponding end of said inner barrel, an intermediate barrel mounted to slide between said inner and outer barrels, a writing head carried by the common portion of said inner and outer barrels, said common portion of said barrels and said writing head being each provided with eccentric flow spaces, said writing head being mounted for rotation relative to said common portion of said barrels for selectively causing or preventing the register of said respective flow spaces, the end of said inner barrel remote from said writing head being exteriorly screw threaded, and an adjustable head rotatable from the exterior of said fountain pen and carried by the end of said intermediate barrel remote from said writing head and screw threaded internally for receiving said screw threaded portion of said inner barrel, said adjustable head being adapted to close said screw threaded end of said inner barrel when said screw



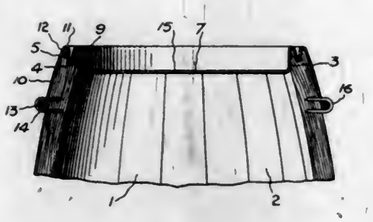
threaded portions are engaged, said intermediate barrel being slidable between said inner and outer barrels without access of any writing fluid from said reservoir in said inner barrel to the sliding space between said inner and outer barrels when the screw threaded portion of said adjustable head is disengaged from said inner barrel, whereby said inner barrel may be filled with fluid and the air from said inner barrel expelled without the pen structure.

1,822,790. HIGH SPEED REELING MACHINE. PACIFIC J. THOMAS, Wyoming, Pa., assignor to U. S. Textile Machine Company, Scranton, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1930. Serial No. 431,798. 12 Claims. (Cl. 242—49.)



1. In a reeling machine, a reel shaft provided with a reeling fly, a power shaft for driving said reel shaft, a counting wheel, a system of gearing for connecting the counting wheel with said reel shaft, cam means for raising and holding the counting wheel in operative connection with said system of gearing, an arm movable with the counting wheel, and means actuated by said arm for moving said cam means to break the connection between the system of gearing and counting wheel, and a brake for stopping the movement of said reel shaft.

1,822,791. BARREL. CHRISTOPHER WINSKILL, Vancouver, British Columbia, Canada. Filed Oct. 26, 1929. Serial No. 402,727. 4 Claims. (Cl. 217—76.)

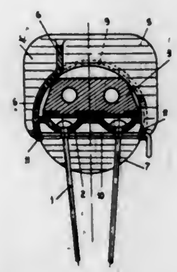


1. A barrel comprising a body portion formed with wooden staves laid with the grain of the wood longitudinally of the body and a barrel head formed of sheet material having a peripheral groove having side walls in which the ends of the body portion are received, and means for spreading the fibres of the wood towards the side walls of the groove.

1,822,792. STEEL ALLOY. DAVID FRANKLIN YOUNGBLOOD, San Antonio, Tex. Filed May 10, 1929. Serial No. 362,147. 2 Claims. (Cl. 75—1.)

2. An alloy steel having the properties described and containing 1.60 to 1.70% carbon, 6.50 to 7.50% manganese, 0.60 to 0.70% silicon, 1.00 to 1.50% chromium, 1.00 to 2.50% nickel and 0.25 to 0.40% molybdenum.

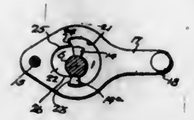
1,822,793. TRACTION DEVICE FOR WHEELS. TRANQUILLO ZERBI, Turin, Italy, assignor to Fiat Societa Anonima, Turin, Italy. Filed Jan. 4, 1930, Serial No. 418,621, and in Italy June 8, 1929. 2 Claims. (Cl. 301—50.)



1. Tractor wheel comprising, in combination with the rim, traction members mounted on the rim and capable of transverse rotation about said rim, each of said members being constituted by a pair of wings, having extensions which partly embrace said rim, a curved wall for connecting said wings and a reinforcing rib on said wall, circular sectors secured to the inner face of said rim and adapted to engage with said extensions for guiding said traction members during their rotation about said rim, and locking means for holding said members in their working position outside the rim and in their position of rest inside the rim.

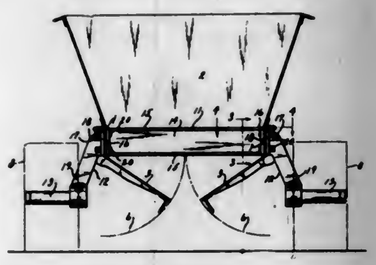
1,822,794. SAFETY GAS VALVE. WILLIAM D. ANTRIM, Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 28, 1931. Serial No. 511,845. 9 Claims. (Cl. 126—42.)

1. The combination of a gas valve structure having two gas passages; a valve arranged to open either gas passage; and a movable plate having stops to limit the movement of the valve, so that when the plate is in one position, one passage can be opened and the valve will



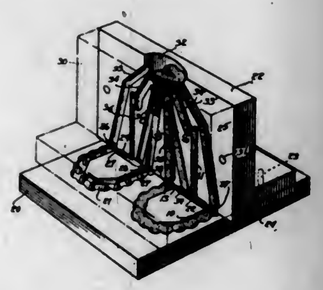
be locked against opening the other passage, and when the plate is moved to its other position the other passage can be opened and the valve locked against opening the first-mentioned passage.

1,822,795. LAND VEHICLE. ARTHUR P. ARMINGTON, Willoughby, Ohio. Filed Mar. 15, 1930. Serial No. 436,069. 6 Claims. (Cl. 298—35.)



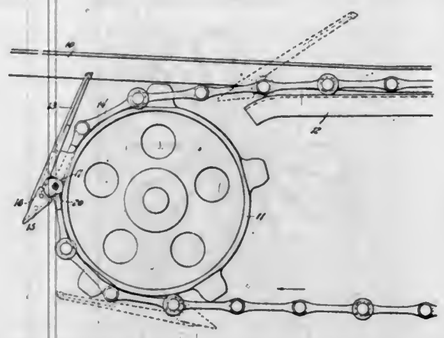
1. In a dump wagon an open-bottom body having side members, a brace member extending across the body between its side members, a bracket member on the outside of each side member and having an arm extending downwardly therefrom and carrying a stub shaft, the portions of said brace and bracket members at each body side member having flanges extending over a substantial area of the body side member and lying in registration with each other on opposite sides of the side member, and securing means connecting said flanges.

1,822,796. BUCKLE AND METHOD OF MAKING THE SAME. MORRIS BELLOCH, Brooklyn, N. Y. Filed Oct. 12, 1929. Serial No. 399,236. 9 Claims. (Cl. 29—3.)



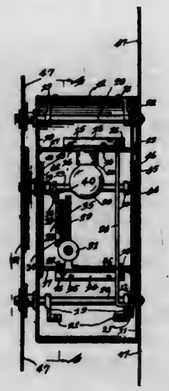
1. The method of making buckles which consists in simultaneously casting a buckle body of low melting point metal forming integral cast lugs about a pivot bar of higher melting point metal, and casting a buckle tongue with an anchorage portion about the pivot bar between the lugs.

1,822,797. FLIGHT CONVEYER. OTTO BIRMANN, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Aug. 21, 1928. Serial No. 301,131. 4 Claims. (Cl. 198—170.)



4. In combination with an endless chain and sprocket therefor, a flight pivotally mounted on the chain; and a spur rigidly secured to the underside of the flight adjacent its pivot and contacting with the sprocket to hold the flight collapsed as it passes around the sprocket.

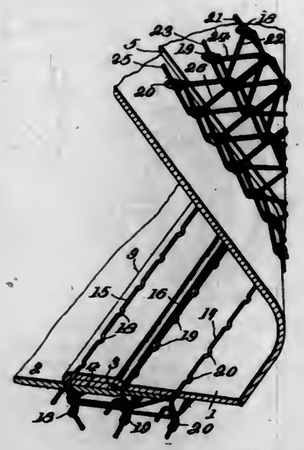
1,822,798. MOVABLE SIGN. THOMAS J. CARROLL, New York, N. Y. Filed Oct. 10, 1927. Serial No. 225,292. 5 Claims. (Cl 40—61.)



1. A device of the character described including a casing having a picture or the like mounted thereon, a plurality of shafts mounted in said casing, movable members mounted on said shafts adapted for simultaneous movement whereby to alternately conceal or disclose said picture, an arm on one of said shafts, a rotating member, a link eccentrically connected to said rotating member and also connected to said arm whereby to impart a reciprocatory movement to said shaft, means for transmitting said reciprocatory movement to the remainder of said shafts whereby to impart said alternate movement to said movable member.

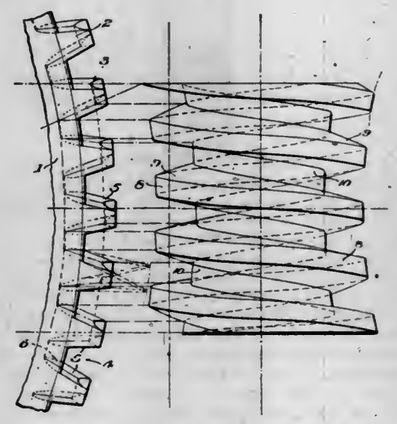
1,822,799. SEAM FOR SEWED ARTICLES. NORMAN V. CHRISTENSEN, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 4, 1930. Serial No. 473,007. 2 Claims. (Cl. 112—262.)

1. A seam for sewed articles comprising fabric sections arranged with their edge portions overlapping each other, the outer fabric section having its edge portion inturned so as to conceal the edge thereof between said fabric sections, a series of needle thread loops passing through both fabric sections adjacent the fold in the inturned fabric section, a series of needle thread loops passing



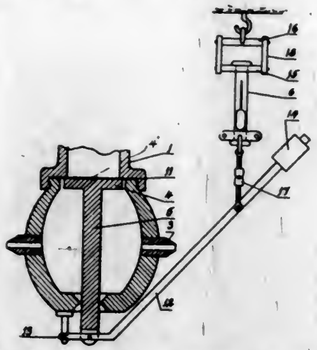
through the outer fabric section only adjacent the edge of the inner fabric section, and looper thread loops securing said needle thread loops and extending across from one series of needle thread loops to the other and covering the edge of the under fabric section.

1,822,800. HINDLEY WORM GEAR. SAMUEL I. CONE, Portsmouth, Va., assignor to Cone Gearing Corporation, Norfolk, Va., a Corporation of Virginia. Filed June 27, 1925. Serial No. 40,113. 7 Claims. (Cl. 74—41.)



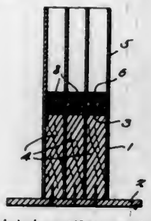
1. The combination of a worm of the hour-glass type having threads generated about an axis coincident with that of the mating wheel and in the axial section of the worm; and a mating wheel having the sides of its teeth generated by lines rotating about the worm axis in planes at right angles to the worm axis, said planes being two in number and each an equal distance from the plane of the wheel axis and in opposing directions therefrom, the same producing surface contact substantially as described.

1,822,801. AUTOMATIC FIRE EXTINGUISHER. MARIE COUTEN, born DOMINGET, Vincennes, France. Filed Aug. 22, 1928, Serial No. 301,376, and in Belgium Oct. 13, 1927. 6 Claims. (Cl. 169—39.)



1. In an automatic fire-extinguisher, a hollow body having one or more nozzles to discharge liquid therefrom; a conduit attached to said body to supply liquid to its interior; a frangible element clamped between said conduit and body and normally closing communication between them; a valve having a head for sustaining the frangible element against breakage by the pressure of the liquid against it, said frangible element being incapable by itself of withstanding said pressure; and means associated with said valve for normally holding it in active position, said valve-holding means embodying a frangible element other than the one clamped between the conduit and hollow body and which will be ruptured at a predetermined high temperature, and also embodying a fusible body.

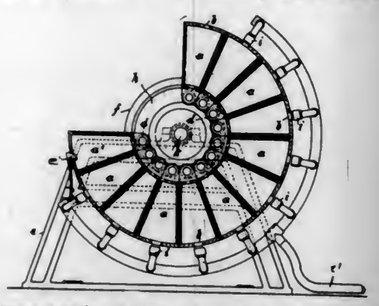
1,822,802. BUILDING BLOCK. DENNIS WILLIAM DALEY, Parkersburg, W. Va. Filed Oct. 8, 1928. Serial No. 311,186. 3 Claims. (Cl. 25—155.)



3. A method of joining tiles, which consists in standing up a first tile in a substantially vertical position, placing a mass of cement in the upper end of the first tile; in a single step, retaining the first tile in a substantially vertical position and holding the mass of cement in spaced relation to the lower end of the first tile whilst the first tile is in the aforesaid position; standing up a second tile on the lower end of the first tile, placing a mass of cement in the lower end of the second tile, permitting the two masses of cement to coalesce and set, and applying a continuous coating to some of the outer surfaces of both tiles, in a single continuous length, whilst the tiles are held in coaxial relation by means of the steps hereinbefore specified.

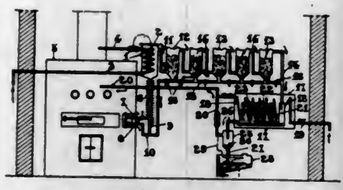
1,822,803. MACHINE FOR AUTOMATICALLY BAKING WAFFLES AND THE LIKE. OTTO GEORG LOUIS DANGER, Hamburg, Germany, assignor to the firm H. Danger, Hamburg, Germany. Filed June 15, 1925, Serial No. 37,330, and in Germany June 18, 1924. 5 Claims. (Cl. 107—58.)

3. In a waffle-baking machine, a series of forms having baking faces on opposite sides, a horizontal axis about which said forms are revoluble, the forms of said series being normally disposed, with their baking faces in contact, through an angular space of less than 360° leaving a gap between the end forms of the series, each form being provided in at least one face with a batter-receiving indentation completely surrounded by walls, which when



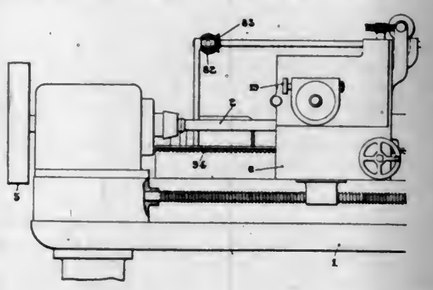
said forms are in contact, cooperates with the adjacent contacting form to constitute a closed waffle-baking chamber, and means for transferring the forms successively across said gap as they assume a predetermined position in the revolution of said series, from closed relation with one end of the series to closed relation with the other end.

1,822,804. APPARATUS FOR THE RECOVERY OF THE ALCOHOL EVOLVED BY BREAD BAKING OVENS. NICOLAS DE NAVROTZKY, Paris, France. Filed Feb. 1, 1929, Serial No. 336,878, and in France Feb. 2, 1928. 6 Claims. (Cl. 202—82.)



1. In combination with a baking oven having a baking chamber and provided with a chimney, a recovery system for alcohol comprising a cooling chamber positioned to receive the gases from the baking chamber of said oven, and an air cooling coil positioned inside said cooling chamber, said coil having one end in communication with the air and the other extremity in communication with said chimney, whereby the draft in the chimney, may operate to draw air through the cooling coil.

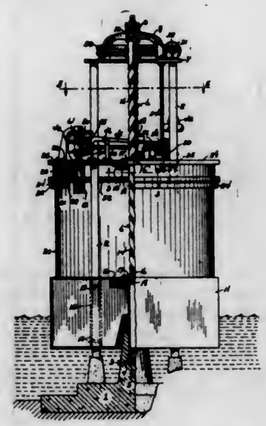
1,822,805. AUTOMATIC LATHE. AUDOIN D'HALLOY, Paris, France. Filed June 19, 1928, Serial No. 286,647, and in France Aug. 5, 1927. 1 Claim. (Cl. 82—2.)



In a lathe, a tool support, rotatable means for displacing said tool support, a first motor connected in

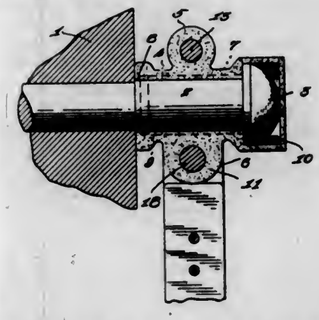
driving relation to said rotatable means, a second motor, a differential interposed between said first and second motors, a third motor driving said differential, a cam, and means operative by said cam to vary the speed of said first motor.

1,822,806. HYDRAULIC POWER PLANT. ALBERT VICTOR GEARY, Westville, N. H. Filed June 15, 1929. Serial No. 371,161. 6 Claims. (Cl. 253—10.)



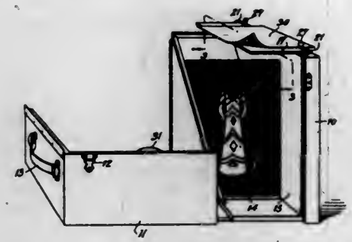
1. A hydraulic power plant comprising a float, a weighted platform movably connected therewith, a shaft having oppositely arranged spirals thereon, means including means engaging one spiral for directly imparting rotary motion in one direction to the shaft on the upward movement of the float and means including means engaging the other spiral for directly imparting rotary motion to the shaft in the same direction on the downward movement of the platform.

1,822,807. PITMAN BOXING. HENRY GOODSON, Clareton, Wyo. Filed Apr. 7, 1930. Serial No. 442,409. 1 Claim. (Cl. 308—67.)



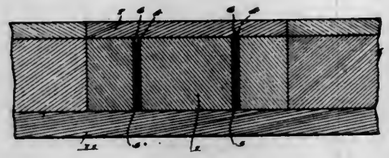
A bearing box for the wrist pin and for the jaws of a pitman comprising a two-part casting that includes a tubular body in which the wrist pin is received, bushings in the body providing bearings for the wrist pin, felt washers around the wrist pin and closing the inner end of the body, the outer end of the body being enlarged to provide a pocket for the head of the wrist pin, shims conforming to the shape of the body and arranged between the confronting faces of the body sections, ears formed on the body at the opposite sides thereof, an adjustable bolt passing through one pair of ears, the second pair of ears having their ends concaved to receive the jaws of a pitman therein, an adjustable bolt securing the jaws in said ears, and a nipple having a normally closed valve screwed in the widened outer end of the body and providing a means for admitting lubricant into such end of the body.

1,822,808. DESIGN PRODUCING DEVICE. MAURICE B. GORDON, Roselle, N. J. Filed June 5, 1930. Serial No. 459,272. 7 Claims. (Cl. 35—17.)



1. A device of the character described, having the combination of reflectors arranged in reflecting relation to each other, a picture forming screen having transparent portions, and means to secure said screen in relation to one of said reflectors, whereby material arranged on the transparent portions of said screen may be adjusted thereon with respect to said reflectors, for the purpose of forming various figures each of which may be reflected in part by one reflector on the other reflector and appear in a completed picture visible in the last mentioned of said reflectors.

1,822,809. PLATE HOLDING DEVICE. SAMUEL B. HARPER, Shreveport, La. Filed Dec. 20, 1929. Serial No. 415,504. 5 Claims. (Cl. 101—382.)



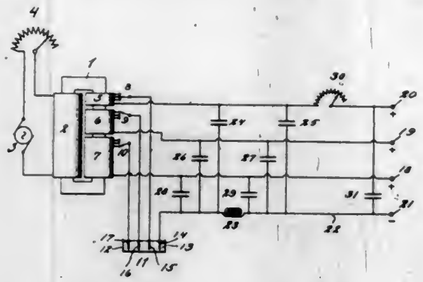
1. A base for mounting plates, cuts and the like having projecting piercing members adapted to piercibly engage the plate positioned thereupon.

1,822,810. DEVICES FOR TAUTENING THE COVER OF FOLDING BOATS. HANS HART, Munich, Germany. Filed July 15, 1930, Serial No. 468,037, and in Germany May 3, 1930. 5 Claims. (Cl. 9—2.)



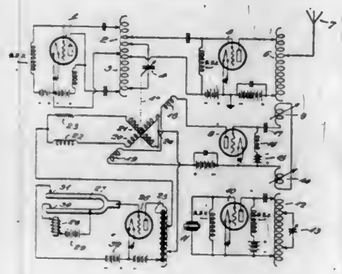
1. A boat comprising an extensible frame, a flexible cover, resilient elements interposed between the members of the frame on opposite sides of the boat, said resilient members being disposed to exert forces in both longitudinal and transverse directions to impart a tautening effect on said flexible cover.

1,822,811. CURRENT CONVERTING SYSTEM. ALBERT S. HUBBARD, Bethel, Conn., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed Mar. 31, 1928. Serial No. 266,243. 3 Claims. (Cl. 175—363.)



1. In a current converting system, means for transforming a single alternating current into a plurality of separate alternating current circuits, means for varying the voltage of said plurality of alternating currents, and a single means for rectifying all of said plurality of currents simultaneously.

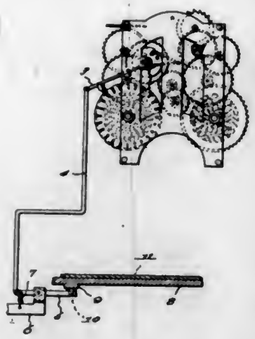
1,822,812. HIGH FREQUENCY STABILIZER. LAWRENCE A. HYLAND, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 350,053. 13 Claims. (Cl. 250—36.)



1. Means for maintaining constant the frequency characteristics of a high frequency circuit, comprising in combination a primary source of high frequency energy in said circuit, an independent standard source of constant frequency energy, a rectifier having an input circuit connected with both of said sources of energy whereby a beat frequency is produced in the output circuit of said rectifier, stationary inductance coils in fixed mutual relative position, connected with said output circuit energized by said beat frequency, movable coils in inductive relation to said stationary coils and energized by an independent source of energy having a low frequency approximately the same as said beat frequency, and frequency adjusting means of said first mentioned circuit mechanically connected with said movable inductance coils.

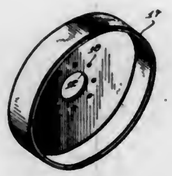
1,822,813. SPEAKING CLOCK. ERICH F. JAHNKE, Appleton, Wis. Filed Nov. 12, 1926. Serial No. 148,044. 1 Claim. (Cl. 192—117.)

A stop mechanism for a phonograph turn table, including a stop lever for controlling the rotary movement of the table, and an arc-shaped rib on the bottom of the turn table for engaging one end of the lever, said rib gradually increasing in thickness from its forward to its rear end, and a depending part on the rear end of the rib, whereby



the engagement of the lever by the rib will check the movement of the turn table, and the engagement of the depending part with the latter will stop the turn table.

1,822,814. METHOD OF MAKING BRAKE DRUMS. JOSEPH W. JOHNSTON, Steubenville, Ohio. Filed Apr. 13, 1927. Serial No. 183,558. 9 Claims. (Cl. 29—152.)



2. The method of making brake drums which consists in superimposing a plurality of metal blanks with the grains thereof running at angles with respect to each other, and forming the outer portions of such superimposed blanks into a cylindrical brake band engaging flange.

1,822,815. PROCESS FOR MANUFACTURING PURE, WHITE AND FINELY DISTRIBUTED SULPHATE OF BARIUM AND SULPHATE OF CALCIUM. THEODOR LICHTENBERGER and LUDWIG KAISER, Heilbronn-on-the-Neckar, Germany. Filed Mar. 22, 1927, Serial No. 177,472, and in Germany Apr. 3, 1926. 10 Claims. (Cl. 23—122.)

1. A process for manufacturing pure, white and finely divided sulphate of barium and sulphate of calcium consisting in dissolving the raw sulphates in molten chlorides of alkali metal, separating the insoluble substances from the solution by settling, freeing the molten mass from the dissolved impurities by blowing air into said molten mass, clarifying again and solidifying said mass and recovering the purified sulphate by extracting the soluble chlorides of alkali metal with water.

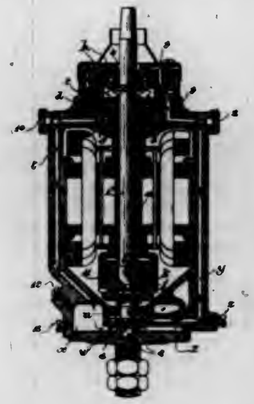
5. A process for manufacturing pure, white and finely divided sulphate of barium and sulphate of calcium consisting in dissolving the raw sulphates in molten chlorides of alkali metal, separating the insoluble substances from the solution by settling, freeing the molten mass from the dissolved impurities by blowing air into said molten mass and adding oxide of calcium, clarifying again and solidifying said mass and recovering the purified sulphate by extracting the soluble chlorides of alkali metal with water.

1,822,816. INSERT FOR AUTOMOBILE SPRINGS. AXEL W. MEIER, Menasha, Wis. Filed July 30, 1930. Serial No. 471,768. 2 Claims. (Cl. 267—49.)



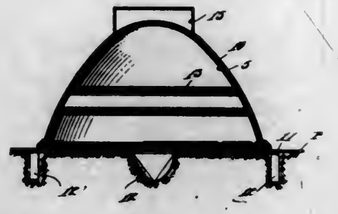
1. An automobile spring insert comprising a laminated spring of conventional type, a resilient body placed between adjacent leaves of said spring and near the end of the lower of said leaves, said insert comprising a flat circular plate, projections in the form of concentrically spaced rings on one side of said plate, a plurality of cylindrical projections placed within the spaces between said rings, said cylindrical projections and the plate having vertical bores therethrough, and ball bearings in the lower part of said bores, and a projecting friction disk formed centrally of said concentric rings, said bores and the spaces between said rings and between said rings and said projections adapted to act as suction cups to maintain the insert in position between said adjacent leaves of the spring.

1,822,817. LURRICATING SYSTEM FOR VERTICAL SHAFTS. AUGUSTE MINET, St.-Etienne, France, assignor to Construction Francaise D'Appareils de Laiterie, Société Anonyme, St.-Etienne, France. Original application filed Mar. 1, 1926, Serial No. 91,631, and in France Sept. 2, 1925. Divided and this application filed Feb. 9, 1927. Serial No. 167,025. 2 Claims. (Cl. 308—168.)



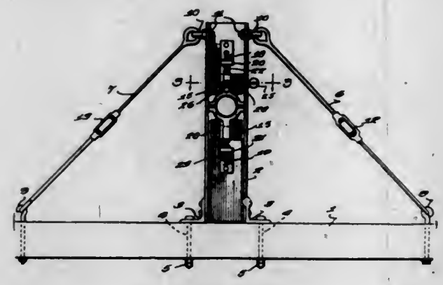
1. Apparatus of the class described, comprising a casing, a revoluble element in the casing and including a vertical tubular shaft having upper and lower bearings, a vertical spindle having its lower portion arranged in said tubular shaft and provided at its lower end with a bearing in said tubular shaft, a bearing in the upper portion of said casing for the upper portions of said spindle, means including a duct to supply lubricating oil to the upper bearing of said spindle, said bearing being arranged to cause oil to descend therefrom into said tubular shaft to lubricate the lower bearing of said spindle when the machine is at rest and to centrifugally throw the lubricant to the upper bearing of the tubular shaft when it is in operation, said casing having a duct leading from below the last named bearing to the lower bearing of said tubular shaft to conduct lubricant to said lower bearing and being further provided with a return duct which leads from the lower bearing of the tubular shaft and which conveys lubricant therefrom to the upper bearing of the spindle, the said tubular shaft being provided near its lower end with means to cause the lubricant to circulate through the lubricating duct and also through the return duct.

1,822,818. DEVICE FOR FORMING PLANT PROTECTORS. ROBERT N. MOORE, Tempe, Ariz. Filed May 7, 1930. Serial No. 450,520. 4 Claims. (Cl. 47—57.



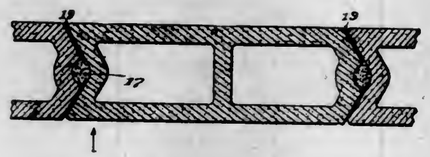
3. In a sheet shaping device, a form adapted to rest upon the ground, ground engaging elements carried thereby for holding the form stationary, a pressing member of the same contour as the form and adapted to be received thereon, and a handle on the pressing member whereby the latter is pressed against and rotated on the form.

1,822,819. SAND REEL POST. HARRY F. MORAN, Wooster, Ohio, assignor to The Parkersburg Rig and Reel Company, Parkersburg, W. Va., a Corporation of West Virginia. Filed June 28, 1927. Serial No. 202,120. 3 Claims. (Cl. 308—25.)



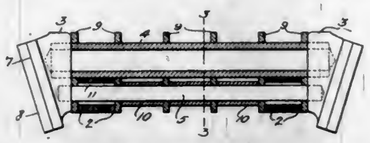
1. A device of the character described comprising a support, an I-beam post rigidly connected to said support, U-bolts adjacent the top of said post, adjustable braces including turnbuckles connected at one end to said U-bolts and at their opposite end to said support at points spaced from the base of said post, and two cooperating bearings adjustably mounted on said post.

1,822,820. BUILDING WALL. LUTHER S. MUNSON, West Riverdale, Md. Filed July 11, 1929. Serial No. 377,503. 2 Claims. (Cl. 72—29.)



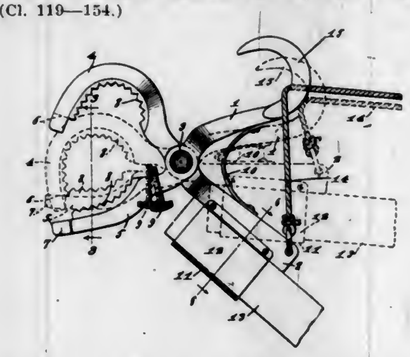
1. In a wall construction formed of interfitting tile elements having complementally formed end portions of substantially V-shaped protrusions and recesses, the apex of each protrusion having a channel therein, a column of mortar positioned in each of said channels and impinging against the adjacent tile element, the remainder of the complementally formed end portions being spaced.

1,822,821. FRICTION CHAIN BELT. HAROLD S. PIERCE, Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1927. Serial No. 214,890. 1 Claim. (Cl. 74—64.)



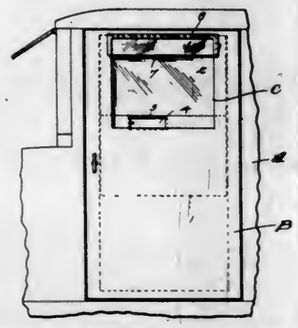
A friction drive chain comprising a plurality of interconnected transverse sections each consisting of a pair of rigid end blocks each having in its inner face a plurality of recesses, friction facing elements having inclined surfaces secured to the outer faces of said end blocks, a plurality of cross bars extending between the blocks with their extremities neatly fitting said recesses, and at least one reinforcing member rigidly uniting the cross bars intermediate the end blocks.

1,822,822. HOG GRIP AND HOOK. CARL HENRY PLADSON, Binscarth, Manitoba, Canada. Filed Aug. 3, 1929, Serial No. 383,284. Renewed Feb. 24, 1931. 5 Claims. (Cl. 119—154.)



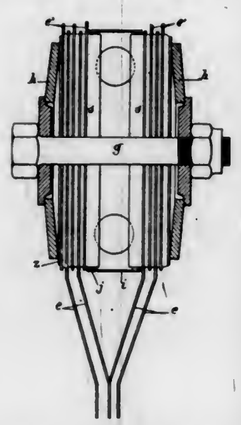
1. A device of the class described comprising two crossed pivotally connected handles, each having one end formed with a jaw, spring means between the handles for sustaining the jaws normally open, a socket on one handle for the reception of a pole, a rope secured to said handle and the second handle having a hooked end over which the rope is directed.

1,822,823. SIGNAL WINDOW FOR DOORS OF AUTOMOBILES. NAPOLEON B. RIDDLE, St. Francisville, La. Filed June 23, 1927. Serial No. 200,947. 1 Claim. (Cl. 296—44.)



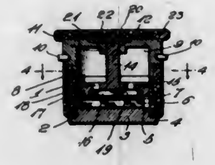
In combination, a hollow vehicle door provided with a sight opening, a frame vertically slidable in the hollow of said door and having a panel adapted to normally close said sight opening, said frame having an opening therethrough below the panel, said latter opening being adapted to register with the sight opening when the panel is in uppermost or closed position whereby a signalling member may be passed therethrough to the exterior of the car, the second mentioned opening being concealed in the lowered position of the frame.

1,822,824. SHOCK ABSORBING DEVICE. JEAN ROUMENS, Paris, France. Filed Nov. 13, 1925, Serial. No. 68,890, and in France Nov. 22, 1924. 7 Claims. (Cl. 188—130.)



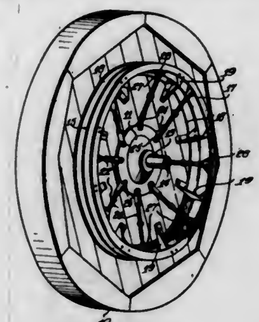
1. In a shock absorber designed to be placed between the chassis and the axle in auto vehicles, means affording surfaces of friction, arranged in relatively movable frictional engaging groups, one associated with the chassis and the other with the axle, means for applying yielding pressure to said friction surfaces of greater value as said spring and axle recede in one direction and the other from their position of repose, said means consisting of balls interposed between two ramps with which said groups of friction surfaces are respectively provided.

1,822,825. PIEZO ELECTRIC CRYSTAL APPARATUS. DENNIS L. RYAN and ALFRED CROSSLEY, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,935. 3 Claims. (Cl. 171—327.)



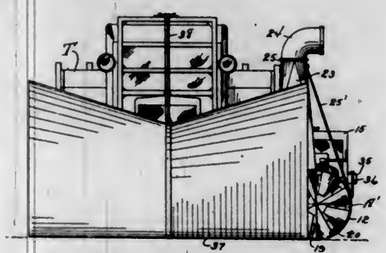
1. In piezo electrical crystal apparatus, in combination, a circular metallic base plate provided with circumferential threads, an annular insulating body structure, a tapped metallic ring secured to one end of said body structure and engaging said threads of said base plate, a centrally tapped metallic cap secured to the opposite end of said body structure, a piezo electric crystal supported upon said base plate, an upper electrode adjacent the upper surface of said crystal, a restraining plate adjacent said upper electrode and provided with a threaded central stud engaging said tapped portion of said cap, whereby the relative positions of said base plate and said restraining plate may be controlled by screw thread adjustments involving only the bearing of metal upon metal.

1,822,826. BRACE MEANS FOR TUG RIMS AND BAND WHEELS. WILLIAM SCHWEMLEIN, Parkersburg, W. Va., assignor to The Parkersburg Rig & Reel Company, Parkersburg, W. Va., a Corporation of West Virginia. Filed Apr. 25, 1928. Serial No. 272,846. 7 Claims. (Cl. 64—17.)



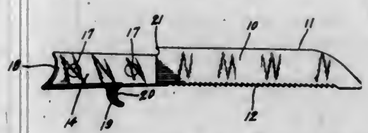
1. The combination with a band wheel and a concentric tug rim secured at one side thereto, of a plurality of brace members each including a shank, engaging members arranged on opposite ends of said shank and adapted to engage the band wheel and tug rim respectively, one end of said shank being threaded in the associated engaging member, and releasable means for preventing rotation of said shank with respect to the other engaging member.

1,822,827. SNOW REMOVER. LEMERT SHAPPELL, Levering, Mich. Filed Nov. 22, 1929. Serial No. 409,137. 1 Claim. (Cl. 37—43.)



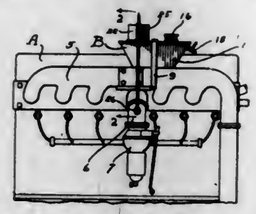
A snow remover comprising a frame, means to movably support the frame, a fan-like member at the forward end of the frame, said member including a circular casing open at each end, a plate mounted for rotation within the casing and having openings therein, scoops carried by one side of the plate adjacent the openings, and vanes extending from the opposite side of the plate adjacent the openings to direct air through the openings into the scoops when the plate is rotated, means to rotate the plate, and a discharge spout in communication with the casing.

1,822,828. CUTTING IMPLEMENT. HERMAN STUECKMAN, Chicago, Ill. Filed Oct. 2, 1929. Serial No. 396,783. 4 Claims. (Cl. 146—77.)



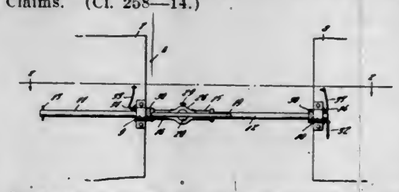
1. A device of the character stated, comprising a blade having a serrated edge providing a saw, and a handle structure for said blade, said handle structure including spaced apart parallel members, said members having an inwardly extending concave recess formed in the rear ends thereof providing a gripping surface adapted to be disposed between the base of the thumb and the index finger in the use of said device, said blade including a portion extending between said members, said blade portion having a portion depending therefrom defining a lug providing a finger gripping surface, and means for securing said blade portion to said handle members.

1,822,829. CARBON REMOVER AND ELIMINATOR. CARL F. SURFACE, Des Moines, Iowa. Filed Apr. 25, 1930. Serial No. 447,282. 4 Claims. (Cl. 123—25.)



1. A humidifier for internal combustion engines comprising an air tight water reservoir to be heated from the exhaust of the engine and having upwardly flaring end and side walls, a chamber arranged above the reservoir in communication therewith, and a feed tube connected with the upper side of the chamber for connection with the intake manifold of the engine.

1,822,830. MAIL BAG HOOK. RAYMOND A. TAYLOR, Frederick, Md. Filed May 14, 1929. Serial No. 362,939. 2 Claims. (Cl. 258—14.)



1. In a structure of the class described, a pair of shaft sections, a body attached to the inner ends of said shaft sections for joining them together, a relatively short shaft mounted in said body and disposed at right angles to said shaft sections, said short shaft being provided with a keeper, a spring pressed latch mounted on said body and engageable with said keeper, and a mail bag hook carried by the outer end of said short shaft.

1,822,831. UTILIZING HYGROSCOPIC PRODUCTS WITH BROOMS. HENRI TRÉPADÉ, Paris, France. Filed Dec. 26, 1928, Serial No. 328,583, and in France Dec. 30, 1927. 4 Claims. (Cl. 15—132.)



1. In a broom or the like, a perforated reservoir; and a solid hygroscopic product consisting of calcium chloride

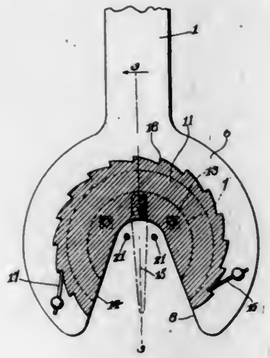
in the reservoir adapted to slowly liquefy by absorbing humidity from the air whereby the broom will be maintained moist.

1,822,832. ADJUSTABLE ERASER ATTACHMENT FOR PENCILS. MAXWELL A. WEST, Portland, Oreg. Filed Aug. 22, 1930. Serial No. 477,174. 3 Claims. (Cl. 120—38.)



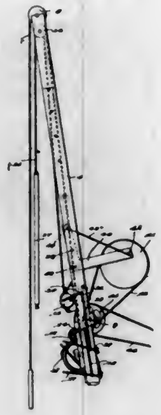
1. An eraser attachment for pencils comprising the combination of an open-ended tubular member adapted to receive in one end thereof one end of a pencil, and an eraser having a relatively enlarged section, said eraser being receivable in the opposite end of the tubular member with said enlarged section in contact with the tubular member, whereby the eraser may be moved to a projecting position in relation to the tubular member, upon the relative adjustment of the tubular member and the pencil, said enlarged section of the eraser in engagement with the tubular member serving to retain the eraser in the projecting position.

1,822,833. WIRE TWISTING DEVICE. HARRY WILKING, Decatur, Ill. Filed June 18, 1930. Serial No. 462,030. 4 Claims. (Cl. 140—119.)



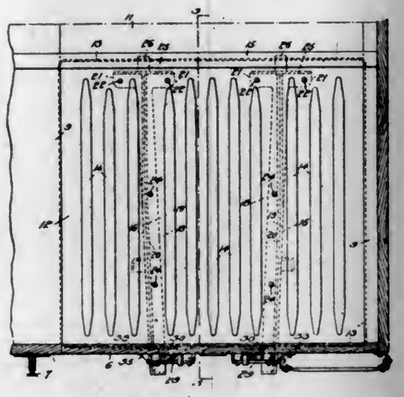
1. A wire twisting device comprising, a rotatable ratchet formed in its periphery with a recess extending inwardly beyond the axis of the ratchet, a pin secured to the ratchet and extending into the recess midway between the side walls of the latter, a pair of handle members rotatably mounted on the ratchet, and a pair of pawls carried by each handle member for engagement with the ratchet on opposite sides of said recess.

1,822,834. DRILLING MACHINE. CARTER A. WILLIS, GORDON J. WILLIS, and REUBEN M. WILLIS, Chanute, Kans., assignors to The Willis Drilling Machine and Manufacturing Company, Chanute, Kans., a Corporation of Kansas. Filed Oct. 30, 1929. Serial No. 403,616. 7 Claims. (Cl. 255—11.)



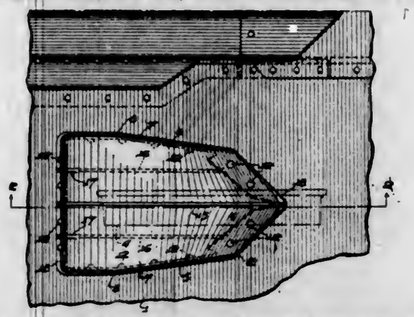
1. In a spudding machine, a derrick, a drill cable supported from the upper end thereof and extended downwardly, a drum supported at the lower end of the derrick upon which the cable is adapted to be wound, a rocker arm movable about a horizontal axis and operable to alternately lift and drop the cable, a rotatable element eccentrically mounted on said arm for continuously actuating the rocking member, and means for rotating said element.

1,822,835. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Aug. 28, 1929. Serial No. 389,016. 7 Claims. (Cl. 105—280.)



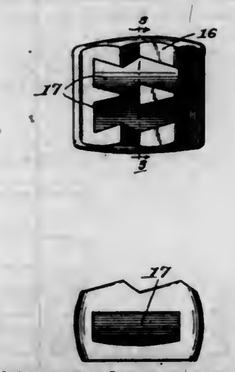
1. In a railway car having a lading discharge opening, the combination with a hinged door for closing said opening, of a plurality of stiffening members secured to said door and extending from adjacent the hinged edge thereof to a point beyond the opposite edge, said members respectively having flanges disposed in a plane parallel with the door, said flanges converging toward each other from adjacent the hinged edge of the door to adjacent the opposite edge thereof.

1,822,836. HOPPER CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Sept. 8, 1930. Serial No. 480,507. 14 Claims. (Cl. 105—249.)



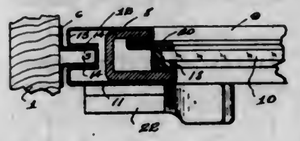
1. A cast metal wheel hood for the slope sheet of a railway hopper car, said hood having a top wall provided on opposite sides of its longitudinal axis with downwardly diverging portions, the divergence of said portions progressively increasing from adjacent one end of the hood toward the other, said top wall being integrally formed with longitudinally extending upwardly projecting flanges adjacent the end of the hood toward which the divergence of the said portions of the top wall increase.

1,822,837. ARTIFICIAL TOOTH. BRUCE W. AVERY, Whiting, and SAMUEL K. AVERY, Goodland, Ind. Filed Feb. 15, 1929. Serial No. 340,142. 1 Claim. (Cl. 32—9.)



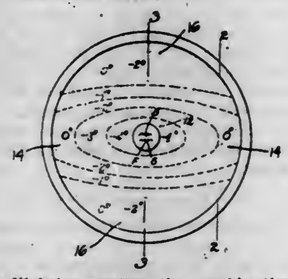
Rear artificial teeth adapted to be arranged upon the plate carrying the anterior teeth, having their respective confronting and grinding surfaces cut at co-engaging angles, said teeth, from their said surfaces having longitudinally arranged oppositely directed angle openings leading from points adjacent the center through the sides thereof and providing sluiceways.

1,822,838. WINDOW FRAME AND SASH CONSTRUCTION. ROY T. AXE, Syracuse, N. Y., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,435. 5 Claims. (Cl. 189—76.)



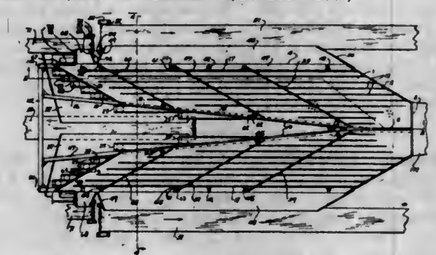
1. A window sash construction comprising a frame provided with an inwardly projecting strip having substantially parallel sides, a sash comprising a hollow sheet metal frame member, the front and rear walls of which are formed with angular inwardly extending flat flanges at the outer edge of said member, the flanges on the sash having resilient re-entrant portions substantially parallel to and spaced apart from each other and from the front and rear walls of the sash member to which they are connected with an open space between them and forming a passage for receiving the strip, the lengthwise edges of the re-entrant portions being free.

1,822,839. LIGHT DIRECTING MEANS. SUMNER E. BROWN, Dedham, Mass., assignor, by mesne assignments, to Guide Lamp Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 3, 1925. Serial No. 20,444. 1 Claim. (Cl. 240—41.25.)



In a headlighting system the combination of a substantially paraboloidal reflector, a source of light adjacent the focus of the reflector and a source of light above the first named source, means for selectively energizing said sources, said reflector comprising top, bottom and central zones extending across the reflector from side to side, said top and bottom zones extending adjacent to and forward of the focal plane so that the rays projected therefrom are but slightly changed in direction upon shifting from one source to the other while the rays projected from the central zone are deflected sharply downwardly upon shifting to the upper source, said central zone comprising side and intermediate portions, said top and bottom zones being formed to project light downwardly approximately two degrees, said side portions of the central zone being formed to project light along the axis of the reflector, and the intermediate portion of the central zone being formed to project light downwardly below the light from said side portions so that the light from said side portions forms the top of the beam when the focal source is energized and the system is rendered substantially insensitive to manufacturing variations in position of the light sources, and whereby, upon shifting to the upper source, the top of the beam is dropped and the light from the top and bottom zones comes toward the top of the beam.

1,822,840. PROCESS AND MECHANISM FOR SEPARATING INTERMIXED DIVIDED MATERIALS. KENNETH DAVIS. Ebensburg, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 26, 1926. Serial No. 104,621. 37 Claims. (Cl. 209—467.)

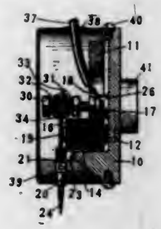


1. A mechanism for stratifying and separating intermixed divided materials varying greatly in size but vary-

ing relatively little in their specific gravities including in combination an air pervious table, the perviousness of which decreases toward the discharge portions thereof, means for passing air upwardly therethrough, means for vibrating the table, and means on the table top for directing the lowermost stratum in a plurality of individual streams to discharge, without intermixture of a plurality of the several streams and means for regularly discharging the streams of heavier materials progressively along the table.

11. The process of separating intermixed divided materials varying relatively greatly in size and varying relatively little in specific gravity which comprises maintaining on an air pervious table a bed of the materials undergoing separation by feeding the materials to the rear thereof, forcing air currents up through the bed to loosen the materials and effect flotant action on a lighter material while permitting a heavier material to come to rest on the table, impelling the heavier settled material forwardly to discharge by friction and inertia and without change of direction, progressively discharging the heavier material as the bed progresses along the table, and decreasing the thickness of the bed of materials by removing the superior flotant lighter material substantially as soon as it rises to the surface of the bed.

1,822,841. MAGNETIC PICK UP. HAROLD P. DONLE, Meriden, Conn., assignor, by mesne assignments, to Radio Inventions, Inc., a Corporation of New York. Filed Apr. 7, 1927. Serial No. 181,760. 10 Claims. (Cl. 179—100.41.)



1. An electromagnetic pick-up having pole pieces, an armature mounted adjacent said pole pieces, a stylus holder secured to said armature, a resilient support for said armature adjacent said stylus holder, said support permitting vibration of said armature toward and from said pole pieces and permitting said armature to move in a plane parallel to the faces of said pole pieces, and means for damping the movement of said armature.

1,822,842. PURIFICATION OF TAR ACID-BEARING OILS. SOLOMON CAPLAN, Brooklyn, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Sept. 22, 1926. Serial No. 137,173. 8 Claims. (Cl. 196—44.)

1. A method of eliminating color-producing compounds from tar acid-bearing oils containing them which comprises agitating the oils with an aqueous borax solution in amounts insufficient to neutralize and remove therefrom tar acids of high germicidal value present in the said oils, settling, and separating the aqueous extract containing the said color-producing compounds from the residual oil still containing tar acids.

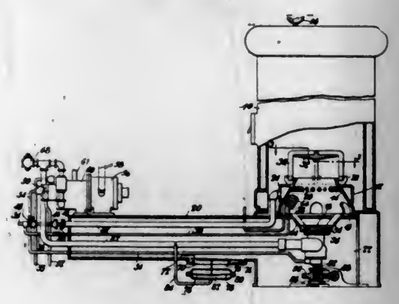
1,822,843. REMOVABLE CARD HOLDER FOR WALLETS. RUDOLPH E. CLARKE, Delanco, N. J., and RAYMOND B. REEVES, Philadelphia, Pa., assignors to Alvah Bushnell Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Sept. 2, 1925. Serial No. 53,963. 7 Claims. (Cl. 129—1.)

1. A card holder for wallets and the like including a cover sheet for attachment to a wall of a wallet and having a sight opening therein, a secondary sheet disposed across the sight opening, inturned flanges at the sides of the secondary sheet, said secondary sheet being



secured along its lower edge and by means of the flanges to the rear face of the cover sheet, and means covering the outer ends of the flanges.

1,822,844. APPARATUS FOR BURNING LIQUID FUEL. ALBERT L. KLEES, New York, N. Y., assignor to Combustion Utilities Corporation of New York, N. Y., a Corporation of Maine. Original application filed Feb. 15, 1926, Serial No. 88,196. Divided and this application filed Dec. 2, 1927. Serial No. 237,187. 7 Claims. (Cl. 158—11.)

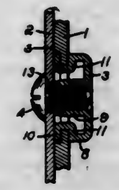


1. The combination with a heating furnace, of a liquid fuel burner, a source of ignition spaced from said burner and arranged to throw a sheet of flame across the flow area of the atomized fuel vented from said burner, and means for adjusting the spacing between the discharge orifice of the burner and said source of ignition to maintain the velocity of the jet of atomized fuel entering the furnace substantially equal to the rate of flame propagation of the air-fuel mixture at the point of ignition.

1,822,845. FASTENING INSTALLATION. WALTER H. PIERCE, Watertown, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 30, 1926. Serial No. 132,402. 3 Claims. (Cl. 85—32.)

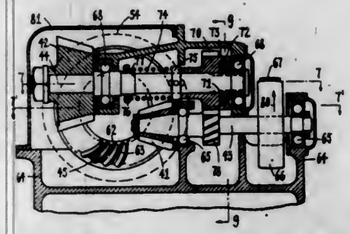
1. A one-piece pressed metal nut fastener comprising a hollow body portion, a screw-receiving portion and a series of attaching prongs relatively closely arranged in

semi-circular relation to said body to provide a relatively larger space between two of said prongs than the other



prongs thereby providing means for securing said nut fastener in non-rotatable relation to a nut-carrying support.

1,822,846. METHOD OF AND DEVICE FOR IMPROVING GEARS. ERNEST WILDHABER, Brooklyn, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Apr. 17, 1929. Serial No. 355,797. 23 Claims. (Cl. 51—278.)



1. The method of improving tapered gears whose pitch surfaces roll without sliding on the pitch surfaces of their mating gears, which consists in providing a tapered gear and a pair of rotary toothed members suited to mesh with the two sides respectively of the teeth of said gear, said toothed members having different numbers of teeth, and in rotating said members in abrasive engagement with said gear on axes angularly disposed to and offset from the axis of said gear.

1,822,847. ELASTIC YARN. PERCY ADAMSON, Rye, N. Y. Filed June 11, 1931. Serial No. 543,737. 17 Claims. (Cl. 117—52.)

1. An elastic yarn capable of being knitted in a knitting machine and having a core of elastic material under tension, and a covering of relatively inelastic fibrous material holding the core elongated, said elastic yarn being limited to a predetermined and substantially uniform degree in its capacity to stretch, a pound of said elastic yarn in its normal condition having a total length of more than 2800 yards.

1,822,848. METHOD OF PREPARING PLURAL GELS. EARLE H. BARCLAY, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Oct. 21, 1929, Serial No. 401,366, and in Germany Oct. 20, 1927. 10 Claims. (Cl. 252—2.)

1. The process of preparing an adsorbent gel comprising titanium oxide and aluminum oxide, which comprises mixing titanium sulphate solution of 10% strength with an equal portion of a solution of aluminum sulphate of 10% strength, maintaining the temperature not higher than about 2° below 0° C., adding slowly with stirring a one to two normal ammonium hydroxide solution until the alkalinity of the mixture is about 0.005 N., drying the solid matter formed thereby and washing it at some stage of its preparation.

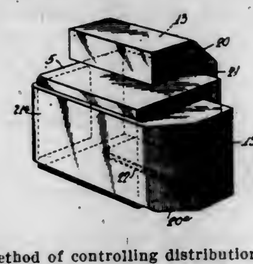
10. A hard, stable, highly porous gel comprising aluminum oxide and titanium oxide, and capable of absorbing water vapor to such an extent as to contain at least 21% of its weight of water when in equilibrium with water vapor at 30° C. and a partial pressure of 22 mm. of mercury.

1,822,849. AIRSHIP. JULIUS B. ELLINGER, Seattle, Wash. Filed Feb. 20, 1929. Serial No. 341,288. 15 Claims. (Cl. 244—6.)



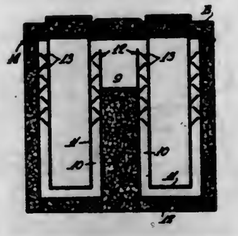
5. An airship of the character described, comprising a frame structure having a laterally flexible continuous central longitudinal member, and a plurality of transverse ribs attached to the said central member.

1,822,850. REFRIGERATING APPARATUS AND METHOD. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,765. 16 Claims. (Cl. 62—91.5.)



1. The method of controlling distribution of refrigerant effects in a container of products refrigerated by solid carbon dioxide, which method includes absorbing heat by solid carbon dioxide to evaporate the same adjacent one portion of said products, confining said gas and forcing its flow to and discharge adjacent an opposite region of said body to protect three sides thereof, and similarly protecting the other three sides by similarly absorbing heat, confining, guiding and discharging the resultant gas in similar relation to the other three sides.

1,822,851. REFRIGERATING APPARATUS AND METHOD. CHARLES L. JONES, Pelham, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 25, 1930. Serial No. 438,704. 26 Claims. (Cl. 62—91.5.)



1. A double walled refrigerator chamber and a container for an intensely cold refrigerant, arranged for circulating cold atmosphere from the refrigerant container between said walls, and circulation impeding baffles arranged substantially transversely to the direction of travel of the cold atmosphere and between said walls.

1,822,852. METHOD OF MAKING SHOES. WILLIAM J. KELLY, Brooklyn, N. Y., assignor of one-half to Arthur D. Basch, Brooklyn, N. Y. Original application filed Mar. 19, 1926, Serial No. 95,853. Divided and this application filed Aug. 12, 1929. Serial No. 385,300. 9 Claims. (Cl. 12—145.)



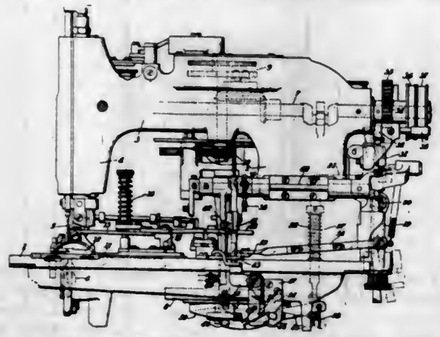
1. In the art of making stitchdown shoes, the process which comprises drawing or pulling an upper downwardly around a last at opposite sides thereof and close to the bottom edges thereof and fastening the upper to the last by tacks driven through the upper and into the sides of the last at the forepart and adjacent the edges thereof, the edges of said upper being free and adapted to be bent laterally, imposing an insole upon the drawn upper and securing the insole to the last so that the free edges of the upper rest upon and are supported by the margins of the insole and at a sharp angle to the upper and last, and securing said insole and upper together by means passing through the upper over the line of tacks while at said sharp angle and at an inclination to the vertical.

1,822,853. METHOD OF MAKING SHOES. WILLIAM J. KELLY, Brooklyn, N. Y., assignor of one-half to Arthur D. Basch, Brooklyn, N. Y. Filed July 8, 1931. Serial No. 549,515. 12 Claims. (Cl. 12—145.)



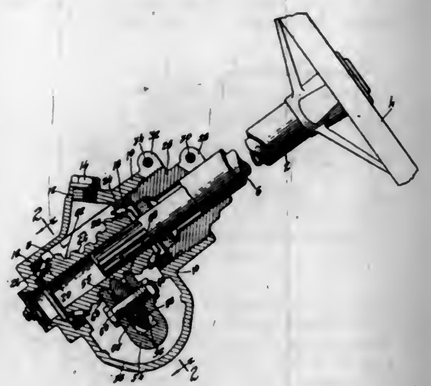
1. In the art of making stitch down shoes, the process which comprises drawing the upper downwardly around a last simultaneously at opposite sides thereof and close to the edges thereof and fastening the upper to the last by means driven through the upper and into the sides of the last adjacent the bottom edges thereof, the edges of said upper being free and adapted to be bent laterally imposing an insole upon the drawn upper and securing the insole to the last so that the free edges of the upper rest upon and are supported by the margin of the insole and at a sharp angle to the upper and last.

1,822,854. SAFETY DEVICE FOR SEWING MACHINES. EDWARD B. ALLEN, Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 28, 1930. Serial No. 464,557. 8 Claims. (Cl. 112—67.)



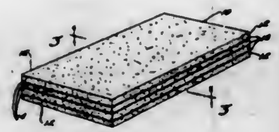
1. A sewing machine having, in combination, stitch-forming mechanism, a work-clamp, a feed-cam and connections for relatively moving the stitch-forming mechanism and work-clamp to group the stitches in accordance with a predetermined pattern, a mainshaft for driving said stitch-forming mechanism and feed-cam, a stop-motion device for controlling the period of operation of said mainshaft, said stop-motion device including a control element movable between running and stopping positions, manually operated means connected to said element and movable in one direction by the operator to shift said control element to running position, and means actuated by said main-shaft for automatically moving said manually operated means in the opposite direction while the sewing operation is in progress.

1,822,855. STEERING GEAR. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 4, 1929. Serial No. 360,483. 8 Claims. (Cl. 74—79.)



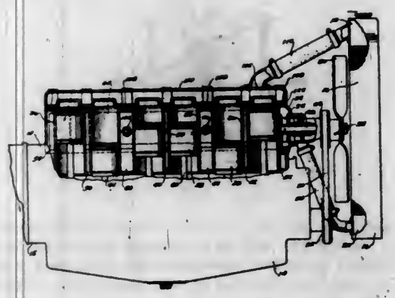
1. In a steering device, a turnable steering tube, a worm rigidly mounted relative to the tube, a shaft, means rotatably mounted on the shaft and mating with the worm and adapted to be moved thereby to operate the shaft, and means on said shaft normally out of engagement with the worm but adapted to be engaged by the worm thread when the first-named means is rendered inoperative.

1,822,856. ABRASIVE PAD. VINCENT M. DIRKES, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,328. 2 Claims. (Cl. 51—185.)



1. An abrasive pad consisting of layers of bonding material having abrasive embedded therein, each of said layers of bonding material being of sufficient thickness to provide a series of wearing surfaces in superposed relation, sheets of spacing material arranged between said layers, said layers and sheets being adhesively secured together to form a unitary pad, said layers being separable at the union between said sheets and layers to provide new friction surfaces when the upper surfaces become worn.

1,822,857. WATER CIRCULATING SYSTEM. CHARLES L. MCCUEN, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,901. 23 Claims. (Cl. 123—170.)



1. In a water cooling system for internal combustion engines, a removable water manifold comprising a plurality of parts and adapted to be secured to the engine block, means intermediate the length of said manifold to allow for the flow of water between the cylinders, and means at the end of the manifold to allow for the flow of water to the cylinders.

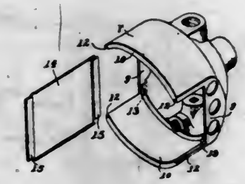
1,822,858. BOBBIN HOLDER. ELTON C. METCALF, Wrentham, Mass., assignor to Murdock & Geb Company, Franklin, Mass. Filed Sept. 10, 1930. Serial No. 480,914. 4 Claims. (Cl. 242—46.7.)



1. In a bobbin holder, a base member of substantially cup-shape, substantially L-shaped jaws having their feet disposed within the base member and provided on their sides with oppositely extending pintles, a fulcrum member common to all of the jaws having socket portions to receive the pintles of the respective jaws and having arms which extend along the sides of the jaws, the arms being provided with upwardly extending projections, and acting to hold the jaws against other than pivotal movement, a washer seated on the upper face of the fulcrum member and overlying the feet of the jaws to prevent upward movement of the jaws out of the base member, a circular coil spring engaged about the outer ends of the jaws to tension same, a bobbin supporting member of substantially cup shape superimposed upon said washer, and a hollow rivet extending through the base member, the fulcrum member, the washer, and the bobbin supporting member and being headed into engagement therewith to rigidly connect said parts.

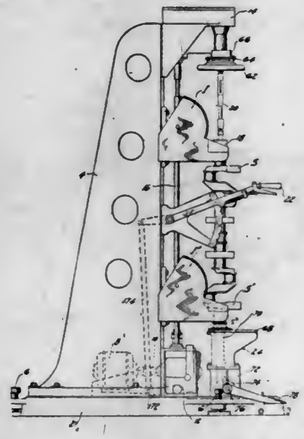
1,822,859. ELECTRIC MOTOR. KENNETH PERKINS, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 29, 1929. Serial No. 374,784. 4 Claims. (Cl. 172—36.)

1. An electric motor having a laminated field-frame flattened at its opposite sides, end-covers of molded heat-resisting insulating material secured to said field-frame and having flanges extending over and completely covering the external portions of the field-frame between the



flat sides of the latter, and flat sheets of insulating material covering the flat sides of the field-frame and dovetailed into the end-cover flanges.

1,822,860. CRANK SHAFT BALANCING MACHINE. CALEB E. SUMMERS and THOMAS C. VAN DEGRIFT, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 6, 1926. Serial No. 127,712. 53 Claims. (Cl. 73—51.)

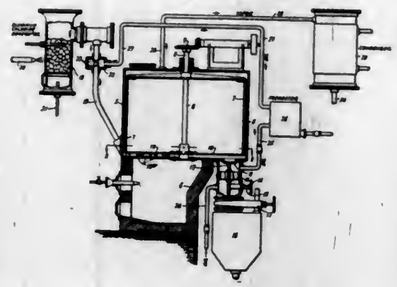


1. The method of locating unbalance in rotating bodies which consists in mounting the body so as to permit displacement of the geometrical axis thereof first at one end and then at the other in any direction perpendicular to the axis in response to unbalanced rotating forces in the body, the opposite end of the body being held, rotating the body, measuring the displacement of the body adjacent the free end and correcting the measurement at each end of the body to remove the effect of the resultant unbalance existing in the plane of removal at the other end.

1,822,861. ART OF CONVERTING HYDROCARBON OILS. LOUIS BURGESS, Roselle, N. J. Filed Apr. 13, 1927. Serial No. 183,285. 6 Claims. (Cl. 196—54.)

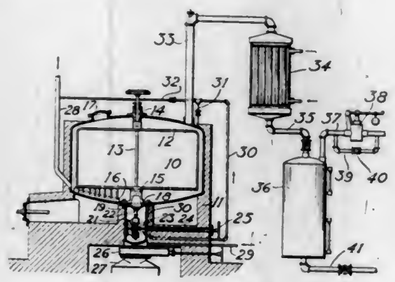
2. Process of converting petroleum oils to lower boiling point products, which comprises maintaining a body of petroleum oil in contact with catalytically active aluminum chloride at a temperature at which distillate vapors

are evolved, maintaining the temperature of said body substantially constant, conducting away the evolved distillate vapors, adding fresh oil to said body at a rate sufficient to maintain the volume thereof substantially constant, and adding to said body catalytically active



aluminum chloride at a substantially continuous and uniform rate, the amount of chloride added during any interval being substantially equal to that reduced to inactivity during said interval at the temperature maintained whereby a substantially constant catalytic activity is maintained.

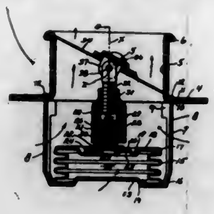
1,822,862. ART OF CONVERTING OILS. NATHANIEL E. LOOMIS, Westfield, and LOUIS BURGESS, Roselle, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed May 7, 1927. Serial No. 189,476. 4 Claims. (Cl. 196—54.)



1. The method of converting oils to lower boiling oil products, which comprises heating the oil to be converted to a temperature above its atmospheric pressure boiling point and between 650° and 750° F., in the presence of active aluminum chloride, distilling the oil while maintaining pressure thereupon greater than its vapor pressure and less than the vapor pressure of the relatively light constituents at that temperature, and withdrawing vapors predominantly composed of the light constituents.

1,822,863. THERMOSTATIC VALVE. EDWARD J. LEVY, (now by judicial change of name Edward Levy Mayo), Cleveland, Ohio, assignor to The Bishop & Babcock Mfg. Co., Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 26, 1929. Serial No. 388,309. 5 Claims. (Cl. 236—34.)

1. In a valve device for controlling the flow of fluid in a conduit and responsive to pressure and temperature conditions of the fluid, a tubular valve seat element through which the fluid may flow, a supporting flange on the tubular element adapted to be sealedly mounted in the joint between two mating elements of the fluid conduit, a valve element mounted to oscillate on an axis transversely of the tubular element to open and close the passageway therethrough, a hanger supported by the flange, a bellows type thermostatic element supported on the hanger, a head on the bellows, a connecting element between the movable valve element and the head, the thermostatic element being adapted to have communicated thereto the pressure and temperature of the fluid to be



controlled, the axis of said valve element being positioned at one side of the tube axis whereby the water pressure may tend to move the valve from closed to open position, and the connecting element having pivotal connection with the valve on an axis spaced from the valve axis and adjacent the said tubular axis.

1,822,864. RAZOR. MAURICE ALLAND, Atlantic City, N. J. Filed Jan. 20, 1930. Serial No. 421,961. 4 Claims. (Cl. 30—12.)



2. In a razor, a blade-supporting portion having a normally depending bored extension constituting a handle section, means pivoted to said portion to secure a blade thereon and provided with a screw-threaded aperture, said pivoted means being curved transversely, said blade supporting portion being shaped in a manner complementary to said pivoted means whereby a blade may be flexed and held in position between said pivoted means and blade supporting portion for shaving, a second handle section in line with and rotatable with respect to said first section, said second handle section having a part journaled in the bore of said extension and having a screw-threaded terminal normally engaged with the screw threads in said aperture, said extension adjacent its lower end having a finger-gripping portion extending outwardly beyond the second handle section, whereby the latter will remain free for rotation by fingers of one hand while the first section is held by fingers of the other hand, operating to permit the tension of the blade upon the release of the clamping member to forcibly oscillate said member outwardly and thereby release the blade.

1,822,865. METHOD AND APPARATUS FOR PRODUCING PHOTOGRAPHIC RECORDS. THEODORE WILLARD CASE, Auburn, N. Y. Filed June 10, 1924. Serial No. 710,098. 8 Claims. (Cl. 176—122.)

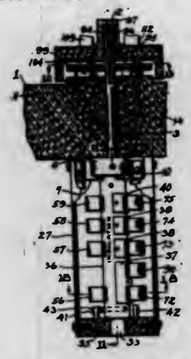
1. A source of light for use in producing a photographic record of light wave variations corresponding to sound wave variations impressed upon a circuit connected to the source of light comprising a bulb, a pair of nonthermionic electrodes within the bulb, the negative one of which comprises an alkaline earth material and an ionizable gas within the bulb at such a pressure that a voltage not substantially greater than 400 volts, direct current across

the electrodes, will produce a glow about the negative electrode separate from the anode glow and suppress the



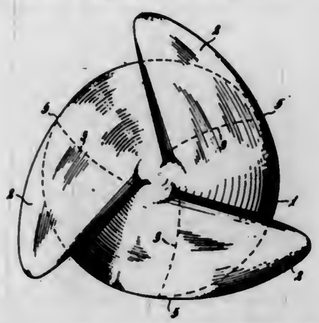
anode glow to such an extent that the concentrated negative glow is the only effective glow during the photographing process.

1,822,866. TEST SWITCH. JAMES EARL BABER, Galesburg, Ill. Filed July 5, 1928. Serial No. 290,579. 17 Claims. (Cl. 175—183.)



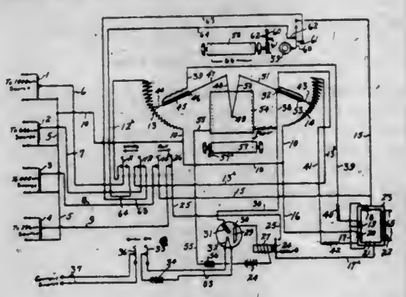
3. A relay, means for operating said relay, a switch rotatable to make and break circuit between said means and relay, stops for limiting the rotation of said switch through a predetermined arc in either direction, a relay testing device, and means rotatable with said switch to prevent connection between said device and relay when the latter is in one of its stopped positions.

1,822,867. PROPELLER. CARLOS HORACIO AMARO SALGUEIRO DOS SANTOS GALLO, Marinha Grande, Portugal. Filed May 22, 1930, Serial No. 454,792, and in Portugal Jan. 21, 1930. 3 Claims. (Cl. 170—156.)



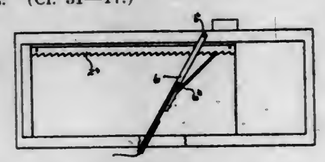
1. In a propeller, a conical hub having a diameter at the base greater than the length, and blades equi-distantly spaced about the same, each blade being of triangular shape with its greatest width at the juncture of the blade with the hub and converging toward the free end and being of a length to extend beyond the contour of the hub, the under surface of the blade being substantially plane and at the juncture thereof with the hub extending at an angle of not more than 45 degrees with respect to the axis of the hub, and the outer surface of the blade being slightly convexed in cross section and extending in a plane tangential to the outer surface of the hub.

1,822,868. METHOD AND APPARATUS FOR MAKING GRAPHICAL REPRESENTATIONS AT A DISTANCE. DAVID GRIMES, Grasmere, N. Y., assignor to Grimes Radio Engineering Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 22, 1928. Serial No. 327,810. 22 Claims. (Cl. 178—19.)



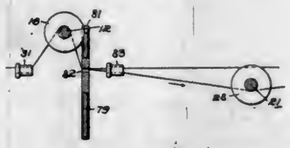
1. In a method of transmitting intelligence in the form of graphical representations to a distant point comprising providing alternating currents of constant amplitudes at two constant frequencies, varying the amplitudes of said currents by and in accordance with the right and left hand components of graphical representations made at the transmitting point, supplying an alternating current of another frequency, controlling said current by and in accordance with the vertical components produced in making the graphical representations, transmitting all of said currents to a distance, and converting said currents into mechanical movements at a receiving point to reproduce the graphical representations at the receiving point.

1,822,869. CHEESE CUTTER. WILEY D. JONES, Jackson, Miss. Filed May 25, 1928. Serial No. 280,561. 4 Claims. (Cl. 31—17.)



2. In a cheese cutter for the cutting of brick cheese, a rectangular base having parallel grooves extending along either inner side lengthwise of said base and adjacent the upper edge thereof, a leaf adapted to fit in said grooves and extending lengthwise of the leaf at the under and rear side thereof a rack bar, in juxtaposition with said rack bar a pawl attached to a lever the end of said lever being hinged to the under rear side of said base, means within said lever to advance and withdraw the pawl from engagement with the rack bar, a pin adapted to slide in a slot in the face of the base adjacent the front side thereof and adapted to fit in predetermined holes disposed in the lower front edge of another slot in the front side of the base below the first named slot and adapted to limit the movement of the lever in one predetermined direction to a variable degree, and hinged to the rear side of the base a knife, said knife adapted to rest on the table leaf.

1,822,870. TENSION CONTROLLING DEVICE FOR KNITTING MACHINES. ROBERT H. LAWSON, Pawtucket, and ARTHUR N. CLOUTIER, Lonsdale, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Aug. 9, 1927. Serial No. 211,734. 19 Claims. (Cl. 66—136.)



1. Thread tension controlling means including two thread tensioning devices one of which acts also as yarn holding means and means for intermittently relieving the thread from tension by one of said devices while permitting it to continue at the other of said devices.

1,822,871. HEATING APPARATUS. JAMES P. MORLEY, Michigan City, Ind., assignor to Bastian-Morley Co., La Porte, Ind., a Corporation of Indiana. Filed Apr. 13, 1927. Serial No. 183,256. 39 Claims. (Cl. 122—17.)

32. A circulation member adapted to be surrounded with water and comprising a pluralify of longitudinally extending elongated passages for products of combustion and water disposed in alternate relation, the side walls of said passages being disposed substantially parallel to each other and transverse to a line cutting said member diametrically the passages for the products of combustion being open



at their lower ends to receive the products of combustion, and an outlet member in communication with the upper ends of the passages for the products of combustion.

THE
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Trade-Marks	257—No.	287,055 to No.	287,311, inclusive.
Labels	38—No.	39,721 to No.	39,758, inclusive.
Prints	10—No.	13,409 to No.	13,418, inclusive.
Reissues	13—No.	18,185 to No.	18,197, inclusive.
Designs	68—No.	85,075 to No.	85,142, inclusive.
Patents	998—No.	1,822,872 to No.	1,823,869, inclusive.
Total	1,384		

Interference Notices

U. S. PATENT OFFICE, *Washington, Aug. 18, 1931.*

Joseph B. Lievre, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted March 20, 1928, No. 1,663,345, to Joseph Benjamin Lievre, of Probador de Maquinas, Aviacion Nacional, Mexico-D. F., Mexico, and an application for patent filed by Calvin C. Williams, of Asylum Pike, East of Rising Sun Avenue, Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Lievre at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Lievre, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Aug. 24, 1931.*

Albert R. Johnson, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Norman B. Geddes, 128 East Thirty-seventh Street, New York, N. Y., and patent granted April 2, 1929, No. 1,707,859, to Albert Richard Johnson, 302 Lexington Avenue, New York, N. Y., and a notice of such declaration sent by registered mail to said Johnson at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Johnson, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Aug. 27, 1931.*

Skylark Radio Corporation, its assigns or legal representatives, take notice:

A cancellation proceeding has been instituted by this Office upon the application of the Colonial Radio Corporation, 254 Rano Street, Buffalo, N. Y., to effect the cancellation of trade-mark registration No. 167,260, issued April 24, 1923, to The Perry, Desjardins & Temple Co., 15 East Third Street, Cincinnati, Ohio, which registration, the assignment records of the Office show, has been transferred to the Skylark Radio Corporation, 15 East Third Street, Cincinnati, Ohio. The notice of such proceeding sent by registered mail to the said Skylark Radio Corporation at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless the Skylark Radio Corporation, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., Aug. 31, 1931.*

Chinook Lumber & Shingle Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Charles E. Putman, 4421 White Building, Seattle, Wash., to effect the cancellation of the trade-mark registration of the Chinook Lumber & Shingle Co., 915 White Building, Fourth Avenue S. E., corner Union, Seattle, Wash., No. 128,650, dated January 13, 1920, and the notice of such proceeding sent by registered mail to the said Chinook Lumber & Shingle Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Chinook Lumber & Shingle Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Condition of Applications Under Examination at Close of Business August 29, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 93,314; Trade-Mark Division, 1,063. Oldest new case, Dec. 29, 1930; oldest amended, Dec. 30, 1930. The dates given are 1931 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Apr. 20	Apr. 20	837
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Mar. 10	Mar. 14	1,333
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 10	May 1	954
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 3	Apr. 13	811
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 4	Mar. 5	755
318	6. LEWERS, A. M., Carbon Chemistry	Jan. 21	Jan. 26	2,164
106	7. JARBOE, C. G., Optics; Photography	Feb. 9	Feb. 10	2,062
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Feb. 3	Feb. 4	1,676
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Mar. 14	Mar. 18	1,277
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 28	Apr. 17	1,161
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 30	Apr. 6	749
380	12. HENRY, C. C., Machine Elements	Jan. 16	Feb. 24	1,223
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 5	Mar. 15	1,121
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 2	Mar. 17	1,151
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Feb. 9	Feb. 9	2,503
242*	16. SPENCER, C. J., Telegraphy; Telephony	May 4	May 15	872
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Feb. 4	Feb. 7	1,545
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 3	Mar. 5	1,081
236	19 KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Jan. 12	Jan. 15	2,115
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Apr. 25	Apr. 25	1,007
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 2	Mar. 27	969
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Apr. 13	Apr. 23	790
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 12	Jan. 3	1,077
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 5	Mar. 7	1,032
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Mar. 2	Mar. 3	1,575
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 2	Mar. 4	1,007
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Mar. 2	Mar. 4	1,118
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 13	Feb. 16	1,768
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Apr. 24	Apr. 29	579
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 4	May 11	870
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	†Dec. 29	†Dec. 30	2,635
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 30	Mar. 30	1,249
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Mar. 4	Mar. 7	2,328
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Apr. 27	Apr. 23	871
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 10	June 16	767
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Jan. 14	Jan. 5	2,249
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Feb. 14	Feb. 21	1,538
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 16	May 20	576
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 13	Mar. 12	1,604
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Jan. 22	Feb. 10	3,180
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Mar. 30	Apr. 9	773
223*	42. CUTTING, H. O., Electric Signaling	Feb. 14	Feb. 16	1,480
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 1	Mar. 6	1,527
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Dec. 30	Jan. 2	2,157
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Jan. 30	Jan. 30	2,129
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Mar. 6	Mar. 21	1,163
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 2	Mar. 3	2,178
212*	48. ROEPKE, O. B., Electricity, General Applications	Mar. 3	Mar. 3	1,108
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 26	Mar. 23	1,470
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 17	Jan. 17	2,609
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Jan. 21	Jan. 21	2,123
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Mar. 15	Mar. 21	1,463
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 9	Mar. 30	739
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Jan. 5	Jan. 7	2,868
102	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	July 3	July 3	228
	—Designs	Aug. 14	Aug. 20	155
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Feb. 2	Feb. 3	1,868
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Mar. 2	Mar. 6	851
270*	58. DOWELL, E. F., Abrading; Typewriting	Jan. 29	Jan. 31	1,571
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Mar. 9	Mar. 13	1,697
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Jan. 23	Jan. 23	1,936
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Jan. 6	Jan. 2	2,077
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Jan. 8	Jan. 6	2,601
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 15	Jan. 15	2,364
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	Aug. 3	Aug. 11	945
	—Labels and Prints	Aug. 14	Aug. 18	118

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE NICKEL AND MARKWITZ

No. 2,679. Decided April 15, 1931

PATENTABILITY—PROCESS OF MANUFACTURING CEMENT AND THE PRODUCT.

Claims for a process of manufacturing cement and for the product of such process *Held* unpatentable over the prior art.

Appeal from the Patent Office. Affirmed.

Messrs. Foster & Codier, Mr. Oscar Codier, and *Mr. Ivan P. Tashof* for Nickel and Markwitz.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

Appellants pray an appeal from the decision of the Board of Appeals of the United States Patent Office, which affirmed the decision of the Examiner in refusing to allow claims 1 to 7, inclusive, of appellants' application for a process and product patent upon furnace slag cement. Two of appellants' claims are as follows:

1. Process for the manufacture of cement from lime and silicates consisting in the employment of solid vitrified silicates technically free from water in admixture with burned unslaked lime, and a small amount of gypsum, the ingredients being reduced to the fineness of cement, substantially as set forth.

3. Cement comprising a mixture of 3 to 20% of burned unslaked lime and 75 to 95% of water-free vitreous silicates and 1 to 5% of gypsum ground to the fineness of ordinary cement substantially as set forth.

The claims were denied on the following references: Bodmer, 70,510, November 5, 1867. Grau, 905,813, December 1, 1908. Bergmann, British, 4,594, April 2, 1898. Eckel's Cements, Limes, and Plasters, published by Wiley & Son, New York, 1st Ed. 1905.

Appellants propose to make their cement by first water cooling and vitrifying their slag, then drying the same, adding unslaked lime and gypsum and grinding these substances together into powder. This process, they state, is new, and the product is new, hence inventive. It will be observed that while claim 1 calls for the use of "solid vitrified silicates technically free from water," no particular method of obtaining the same is claimed.

The reference, English patent to Bodmer, describes a process of making cement from vitrified furnace slag and unslaked lime, heated and dried after mixing and then ground. It also teaches the mixture of such lime with the slag as it comes molten from the furnace. The reference Grau teaches the making of cement by blowing either slaked or unslaked lime into the molten slag as it issues from the furnace and then grinding the same. Grau also recites that gypsum may be mixed with the other components in making the cement.

The reference Bergmann makes the following recitation in the specification:

The production of granulated slag for clinkers or cement stones heretofore, has been by running water directly on to the outflowing hot slag, thereby reducing the same to a foamy glassy wet sand which, for making cement stones, must, previous to grinding undergo an expensive drying process in special furnaces, since it only dries very slowly in the air, and has a tendency to cake into large solid lumps or masses when left for a length of time in a heap.

Bergmann further states that he avoids the disadvantages of the former process and uses furnace slag which is not first granulated but which, while in its solid state, is broken up and ground after having been allowed to cool slowly in the ordinary slag boxes. This slag, he states, is "absolutely free of water," and this he proposes to grind with lime, and which lime, he states, is "intensely hygroscopic."

The case is not free from difficulties, but we are of opinion the application of appellants has been anticipated by the said references. It is not claimed there is anything new in the quality of the cement produced by appellants' process. Certainly there is nothing new in mixing furnace slag, either vitrified or otherwise, with unslaked lime to make cement. The reference fully discloses that this was known to the art many years before appellants made their application. There was, therefore, no invention shown by his application in this respect.

We are also unable to see anything inventive in the particular combination disclosed by appellants in their claims, of which claim 3 is typical. It has been suggested by the Solicitor of the Patent Office that it being once known that gypsum, unslaked lime, and vitrified furnace slag might be mixed to form a cement, the proper proportions of each to be used would naturally and obviously suggest themselves to one skilled in the art.

If it may be claimed that appellants' claims, typified by claim 3, should be allowed because they teach the mixture of the components in certain percentages, it will be observed that the range of percentages for the various components is so wide that no real addition to the art is furnished. It amounts to little more than a statement that a mixture of vitreous slag, unslaked lime and gypsum is used.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE ROWLEY

No. 2,681. Decided April 15, 1931

PATENTABILITY—PORTABLE TYPEWRITER.

Claims for the combination with a portable typewriter of a base, a set of supporting legs, etc., *Held* unpatentable.

APPEAL from the Patent Office. Affirmed.

Mr. B. O. Stickney and *Mr. James T. Newton* for Rowley.

Mr. T. A. Hostetler for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirm-

ing the decision of the Primary Examiner denying all of the claims, 1 to 22, inclusive, in appellant's application for a patent for an alleged invention relating to a portable typewriting machine comprising, generally, a typewriting machine, a base, to which the machine is attached, and collapsible and detachable legs connected to the base by means of clamps.

Claims 3 and 17 are illustrative. They read:

3. The combination with a portable typewriting machine, including a base, of a set of supporting legs, each including a threaded stem, fittings having threaded openings to receive the stems, and movable gripping elements associated with the fittings and engaged and moved by the stems when threaded into the openings, to hold said legs in gripping relation to the base.

17. A set of legs for a portable typewriting machine, including a clamp for connecting each leg to the machine, one of the legs chambered to receive the others, and a handle chambered to receive the clamps and co-operating with the chambered leg to form a closed casing for the legs and clamps, said clamps being held against movement within said chambered handle.

The reference is Evans, 345,290, July 13, 1886.

Claims 1 to 6, inclusive, were rejected on the reference.

Claims 1 to 11, inclusive, 13, 16, 20, 21, and 22 were rejected on the ground that they do not define a patentable combination, but rather an aggregation of old elements incapable of co-operating to produce a unitary result.

Claims 12, 14, 15, 17, 18, and 19 were rejected on the ground that they are misdescriptive in that they state that the legs are attached to the typewriting machine, whereas, they are, in fact, attached to the base, which, it was held, is not a part of the typewriting machine.

The patent to Evans discloses a chair having detachable legs.

In describing appellant's devise, and in rejecting claims 1 to 6, inclusive, on the reference, the Board of Appeals said:

Appellant's device is a stand intended for use with a portable typewriter. It comprises a supporting plate which is the base of the typewriter casing and to which the typewriter is attached. A set of legs is provided and each leg is detachably connected by means of a clamp to a marginal portion of the base member. These legs are so constructed that after separation from the base and clamps they may be telescoped one within the other and connected to a tubular member in which the clamps are placed. A hand grip may be connected to the other end of the tubular member to form a walking stick.

• • • • • • • •

This reference discloses a chair to which legs are detachably connected by the fittings 7. As read on appellant's construction the claims are directed to the feature by virtue of which the act of attaching a leg to its clamp member also causes the clamp member to firmly grip the edge of the base. This is because the threaded portion at the end of the leg forces the jaw member 14 from the position shown in full lines toward the position shown in dotted lines in Figure 5. In the Evans construction relative movement of the fittings 7 and legs 2 to secure the legs to the fittings also causes the legs and fittings to be secured to the base 1. It is believed that the claims of this group do not patentably differentiate appellant's connection from that disclosed by Evans. Since the typewriting machine as included in these claims is a matter of aggregation we deem claims 1 to 6, inclusive, unpatentable over Evans.

It is contended by counsel for appellant that the claimed combination is new; that the base is a part of a portable typewriting machine; that it is so designed as to "coact with the legs and frame to produce a portable typewriter"; that the claims define a patentable combination; that they are not misdescriptive; and that the patent to Evans is not a proper reference.

We are unable to agree with the views expressed by counsel for appellant.

It may be that appellant has produced an article of utility, but it does not necessarily follow that the claims define a patentable combination. The base does not, by attachment, become a part of the typewriting machine. It has the same relation to such machine as any supporting table or desk top. The elements forming appellant's combination are old, and the result obtained by the combination is but an aggregation of the known functions of the various elements. Holding these views, we are unable to say that the tribunals of the Patent Office erred in holding that claims 1 to 11, inclusive, 13, 16, 20, 21, and 22 defined aggregations rather than a true patentable combination, and that claims 12, 14, 15, 17, 18, and 19 were misdescriptive. Furthermore, we are inclined to the opinion that claims 1 to 6, inclusive, were properly rejected on the reference.

For the reasons stated, the decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

CROSS *v.* WILLIAMS OIL-O-MATIC HEATING CORP.

No. 2,676. Decided April 15, 1931

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—COAL FURNACES AND OIL FURNACES.

Devices for feeding pulverized coal to a furnace *Held* to constitute goods of the same descriptive properties as devices for feeding oil to a furnace.

2. SAME—SIMILARITY—"COAL-O-MATIC" AND "OIL-O-MATIC" CONFUSINGLY SIMILAR.

The words "Coal-O-Matic" as applied to a device for feeding coal to a furnace *Held* to be confusingly similar to the term "Oil-O-Matic" as applied to a device for feeding oil to a furnace.

3. SAME—PRACTICE—CONSIDERATION OF REFERENCES.

Where on appeal to the Commissioner the appellant gave notice that under the provisions of rule 154 of the Patent Office he would refer to certain previously granted registrations *Held* that the Commissioner properly refused to consider them.

APPEAL from the Patent Office. Affirmed.

Mr. Thomas E. Scofield and *Mr. Henry H. Snelling* for Cross.

Mr. Langdon Moore and *Mr. James Atkins* for Williams Oil-O-Matic Heating Corporation.

GARRETT, *J.:*

Appellant seeks to register "Coal-O-Matic" as a trade-mark for use on devices for automatically feeding solid fuel, in the form of pulverized coal, to furnaces. Opposition to his application was made by appellee, who alleges ownership, registration and prior use of "Oil-O-Matic" as a trade-mark for application to devices which automatically feed fuel oil to furnaces.

The opposition was sustained and registration denied by decisions of both the Examiner of Interferences and the Commissioner of Patents and the matter is before us on appeal.

Appellant alleges use of his mark since April, 1926. Appellee's registrations pleaded were dated June 16, 1925, and December 28, 1926, respectively. Use was alleged prior to the registrations.

No proof was taken by either party but a stipulation as to facts was filed in lieu thereof.

This stipulation, among other things, shows the volume of business done by appellee over a period of several years, the amount of its advertising, etc.

[1] Appellant insists before us that the goods of the parties are dissimilar. If by this he means that they are not of the "same descriptive properties" we are unable to agree thereto. Both devices are for feeding fuel to furnaces—one feeds oil and the other coal. It is not the particular materials which they feed, however, that must furnish the test in this case; the issue is not whether oil and coal are of the same descriptive properties, but whether the devices that feed them into the furnaces are.

Surely there can be no serious question about this. Obviously, they are of the same class and, being so, they are of the same descriptive properties under the doctrine of *Cheek-Neal Coffee Co.* v. *Hal Dick Mfg. Co.*, 17 C. C. P. A. (Patents) 1103, 40 F.(2d) 106, 395 O. G. 10, and numerous other cases decided by us since jurisdiction in trade-mark registration appeals was transferred to this court. *California Canneries Co.* v. *Bear Glacé Co.*, 18 C. C. P. A. (Patents) ——, 44 F.(2d) 866, 402 O. G. 6, and cases reviewed therein.

[2] We think, too, that the marks are of such close resemblance as that when applied to goods of the same descriptive properties confusion—particularly confusion as to origin—would likely result.

Without being descriptive, both words are suggestive. By the suffix "-matic" it is suggested in each instance that there is something automatic in the device.

The public might easily conclude from the marks, standing alone and nothing further appearing, that the articles were both products of the same manufacturer, since both are in the same field of activity—feeding fuel to furnaces.

We, of course, must consider only the marks and not such other matter as may accompany them in their use upon the products.

[3] After this case had been passed upon by the Examiner of Interferences and the appeal taken to the Commissioner of Patents, appellant gave notice that under the provisions of rule 154 of the Patent Office he would refer to certain registrations which had not been theretofore introduced into the record and set out a list of 33 such registrations which do now appear in the record before us, and which are commented on in appellant's brief filed in this court.

We do not observe any expression in the opinion of the Commissioner which indicates that he gave these any consideration. It was proper that he not do so.

Rule 154 did not authorize their introduction in the manner proposed by appellant. It provides that any official record may be used as evidence at the hearing upon notice given to the opposite party *before the closing of the testimony*. In the interest of orderly procedure and proper practice we once more invite attention to this fact, and refer to what was said and held by us in *Standard Oil Co.* v. *Epley*, 17 C. C. P. A. (Patents) 1224, 40 F.(2d) 997, 398 O. G. 547.

While, as indicated, we are in agreement with the final conclusion reached by the Assistant Commissioner in this case that appellant is not entitled to the registration sought, we deem it proper and necessary to say that we are not wholly in accord with his reasoning.

As we understand his decision, he held that the specific structures of the respective parties are radically different; that the word "'Coal' serves to sharply distinguish from opposer's goods and its trade mark," and that confusion would not be likely, in part, because of the high prices of the articles, but nevertheless denied the registration because—

the applicant has not only adopted the opposer's terminology, but has adopted its precise form "-O-Matic"—the hyphens separating the "O" and giving this peculiar character to the mark.

It may be here said that if the matter turned upon the hyphens, appellee's mark in the record does not show hyphens, but small circles instead.

We do not understand that registration may be denied appellant simply upon the ground that his mark simulates or closely resembles or contains a part, however prominent, of the mark of appellee. There must be the additional feature that the goods to which the marks are applied are of the same descriptive properties so that confusion would likely result when the marks are applied.

Being of the opinion that the latter situation exists, we concur in the Assistant Commissioner's conclusion and same is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

TRUSTEES FOR ARCH PRESERVER SHOE PATENTS *v.* JAMES MCCREERY & COMPANY

No. 2,739. Decided June 1, 1931

1. TRADE-MARKS—OPPOSITION—WHAT MAY BE CONSIDERED.

"In an opposition proceeding, where the goods of the parties possess the same descriptive properties, applicant's right to registration depends upon whether his mark will conflict with one previously adopted and used by opposer, and in the determination of this question prior registrations by others are not to be considered."

2. SAME—SAME—DISCLAIMER—RIGHT TO OPPOSE.

An applicant who has used a trade-mark which included certain words is entitled to oppose the registration of a mark consisting of words which he deems to be confusingly similar thereto even though in a registration of his mark he had disclaimed the right to the exclusive use of the words appearing therein.

3. SAME—SIMILARITY—"ARCH PRESERVER" AND "FOOT PRESERVER" FOR SHOES.

The term "Foot Preserver" as applied to shoes *Held* to be confusingly similar to the previously used term "Arch Preserver" as applied to the same goods.

Appeal from the Patent Office. Reversed.

Mr. E. F. Murdock and *Mr. Charles R. Allen* for Trustees for Arch Preserver Shoe Patents.

Mr. Rudolph L. von Barnuth, *Mr. James McKinley Rose*, and *Mr. Morrell S. Lockhart* for James McCreery & Co.

GARRETT, *J.*:

This is an appeal from a decision of the Commissioner of Patents in a trade-mark registration opposition proceeding.

On September 20, 1927, appellee, James McCreery & Company, filed an application in the United States Patent Office for registration, under the Trade-Mark Registration Act of February 20, 1905, of the words "Foot Preserver" for use as a trade-mark on "boots and shoes of leather, canvas or fabric, or combinations thereof."

The proposed mark having been passed to publication and published in the OFFICIAL GAZETTE, appellant, Trustees for Arch Preserver Shoe Patents, gave notice of intention to oppose the registration, stating:

> The grounds for opposition are as follows:
> That the mark for which application for registration is made, so closely resembles the trade marks filed, and registered, in the United States Patent Office enumerated below:
> Charles H. Brown, trade mark appln. Ser. No. 216,014, filed June 19, 1925; (reg. Mar. 6, 1928, No. 239,510);
> Berenice Brown, trade mark reg. No. 113,556, reg. Oct. 24, 1916;
> Berenice Brown, trade mark reg. No. 161,351, reg. Nov. 7, 1922;
> Berenice Brown, trade mark reg. No. 161,352; reg. Nov. 7, 1922;
> The above trade marks have been acquired by the present opponent as of record. The resemblance is so close as to produce confusion in the minds of the people, which would operate to the detriment of your opponent.

The words of the marks relied upon by appellant are "Arch Preserver" applied also to boots and shoes. The two last registrations of appellant were under the act of 1920 and concededly may not, as registrations, be relied upon as a basis for opposition in this case.

Proof was taken by appellant. On behalf of appellee a stipulation as to certain facts was filed. The Examiner of Interferences rendered a decision in which he dismissed the notice of opposition for reasons hereinafter set forth and discussed, but held, independently of the opposition, that appellee had no right to register the mark because it was deemed to be merely descriptive. Appellee thereupon petitioned for a rehearing, which was granted with the statement that same "is essentially ex parte in its nature."

The decision upon the rehearing reaffirmed the former holding as to the descriptive character of appellee's proposed mark—"Foot Preserver", and again denied the registration.

Both parties thereupon appealed to the Commissioner of Patents and the Commissioner rendered the decision here appealed from, in which he reversed both holdings of the Examiner of Interferences and held that appellant-opposer was entitled to make the opposition, but that the mark was not descriptive, citing upon the latter point, *In re The Irving Drew Co.*, 54 App. D. C. 310, 297 Fed. 889; and further held that appellee was entitled to the registration, notwithstanding the opposition.

The appeal to this court was then taken.

In the course of the decision, the Commissioner says:

> • • • The applicant calls attention to more than one hundred registrations by others of trade-marks of like import and which consist of the word "arch" or the word "foot" combined with some qualifying word, such as Saver, D-Fend-R, Protector, Gard, Ease, and Eazer, which form a part of the marks "Arch Saver", "Foot Saver", "Arch-D-Fend-R", "Arch Protector", "Foot Protector", "Arch Ease", "Foot Eazer", and "Foot Gard", respectively. (See trade-marks listed in applicant's schedules A. and B.) Many of these trade-marks were registered before either of the parties to this proceeding entered the field. In view of the many trade-marks which have been registered comprising like combinations of words with like suggestive meanings, it is evident that neither of the parties to this proceeding is entitled to such broad protection of its mark as to exclude from registration the mark of the other party. The status of the existing marks is such that the public must exercise unusual care in discriminating between them in its endeavor to ascertain the source of ownership of the goods to which the respective marks are appropriated.

The rule which has been applied by us in quite a number of decisions rendered since the date of the decision of the Commissioner in the instant case, is at variance with his foregoing reasoning.

[1] In *American Fruit Growers, Inc.*, v. *Michigan Fruit Growers, Inc.*, 17 C. C. P. A. (Patents) 906, 38 F.(2d) 696, this court, speaking through Judge Hatfield, after reviewing a number of decisions of other courts, stated the rule which we think applicable. It is given in the first syllabus as follows:

> In an opposition proceeding, where the goods of the parties possess the same descriptive properties, applicant's right to registration depends upon whether his mark will conflict with one previously adopted and used by opposer, and in the determination of this question prior registrations by others are not to be considered.

This doctrine we have reiterated and followed in numerous decisions. *Sharp & Dohme* v. *Parke, Davis & Co.*, 17 C. C. P. A. (Patents) 842, 37 F.(2d) 960; *California Packing Corporation* v. *Tillman & Bendel, Inc.*, 17 C. C. P. A. (Patents) 1048, 40 F.(2d) 108; *Standard Oil Co.* v. *Epley*, 17 C. C. P. A. (Patents) 1224, 40 F.(2d) 997; *MacEachen* v. *Tar Products Coproration*, 17 C. C. P. A. (Patents) 1264, 41 F.(2d) 295.

We believe this rule embodies the correct principle of law to be applied relative to the *right of registration*, which is purely statutory.

We are not unmindful of the fact that, in proceedings in courts of equity relating to unfair competition and trade-mark infringement cases, the courts take cognizance of the situations created by numerous uses of resembling marks on similar characters of merchandise and, in adjusting the equities, give consideration to such situations. But *registration* is controlled solely by the statute. Section 5 of the Trade-Mark Registration Act of February 20, 1905, provides that marks:

> • • • which so nearly resemble a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers shall not be registered.

The fact that a proposed mark may simulate many marks does not lessen its resemblance to any one of these many, and, if it be similar to another, in the sense of the law, the fact that it is also similar to several does not render it registrable.

One purpose of the trade-mark registration law being to aid legitimate interstate and foreign commerce, it seems to us that, both in letter and spirit, it requires a construction which will, to the fullest extent possible, prevent confusion, not add thereto. If by inadvertence, or acting under a mistaken construction of the statute, improper registrations have heretofore been granted, such errors are not remedied by supplementing them with still another error, and a mistake of yesterday should not constitute a precedent for the law of today and tomorrow.

There is presented in the instant case an issue which has not heretofore been before this court in an *opposition* proceeding. Appellee denies the right of appellant to appear as an opposer to appellee's registration upon the ground that appellant is not the owner of and is not entitled to the exclusive use of the words "Arch Preserver," by reason of the fact, particularly, that in appellant's registration certificate of October 24, 1916, there was a disclaimer of the words "Arch Preserver," the language of the certificate being, "no claim being made to the words 'Arch Preserver,' apart from the mark shown in the drawing."

The holding by the Examiner of Interferences upon this point was, in effect, that inasmuch as—

> the notice of opposition shows that damage is predicated on the "nature of the mark" • • • registration shall be refused only on the grounds specified in section 5—

of the Trade-Mark Registration Act; that the only statutory ground for refusing registration, applicable under the notice, is the "confusion-in-trade" clause of said section, and that in order to prevent the registration of "Foot Preserver" on account of "Arch Preserver," it must appear that the latter is a mark meeting the statutory requirement of being "owned and used by another."

He further held that, by reason of the disclaimer in appellant's registration above referred to, it was not the owner of "Arch Preserver" and, having no exclusive trade-mark rights in the words, is not in a position in this case to claim damage.

It appears from the record that appellant, or one Chas. H. Brown, who subsequently assigned the mark to appellant, did, on March 6, 1928, cause a mark containing the words "Arch Preserver" to be registered in the Patent Office without any disclaimer of the words, this registration, apparently, being based on an application filed June 19, 1925, and referred to in the notice of opposition as application Ser. No. 216,014. The number of the registration itself is 239,510. This registration was under the act of February 20, 1905.

It is the contention of appellee that appellant may not rely upon the registration last noted (No. 239,510) to establish ownership of the words "Arch Preserver," because of its disclaimer in the original registration of October 24, 1916 (No. 113,556).

In support of this contention appellee cites *Holzpfel's Co.* v. *Rahtjen's Co.*, 183 U. S. 1, 12; *Beckwith* v. *Commissioner of Patents*, 252 U. S. 538, 545; *L. P. Larson, Jr., Co.* v. *Lamont, Corliss & Co.*, 257 Fed. 270, 272; and *Warner-Patterson Co.* v. *Malcomb*, 17 C. C. P. A. (Patents) 984, 39 F.(2d) 274. This contention is not seriously contested by appellant. We think it is correct.

The Warner-Patterson case, supra, was an interference proceeding and we there held, following the rule stated by the Supreme Court of the United States in the Beckwith case, supra, that an applicant having once disclaimed a part of a mark in a registration application filed by him could not thereafter set up any exclusive right to the part so disclaimed. In that case we reversed the decision of the Commissioner of Patents and expressed our disagreement with a former decision of his, therein cited, viz., *Standard Water System Co.* v. *Tripure Water Systems Co.*, 124 MS. Dec. 42, in so far as he held that a "disclaimer may not be urged, by subsequent users of the mark disclaimed, as an estoppel."

The Standard Water System Co. case, as decided by the Commissioner, is cited by him in his decision of the instant case.

Under the rule stated in the Warner-Patterson case, supra, it must, therefore, be held that appellant has not, by its 1925 registration, acquired any rights to oppose which it did not possess under its registration of October 24, 1916.

[2] However, it must be borne in mind that the Warner-Patterson case was an *interference* proceeding, wherens the instant case is one of *opposition*, and the law is well settled that the right to oppose a registration is not limited by the statute to one who possesses a registered mark. Section 6 of the Trade-Mark Registration Act of February 20, 1905, provides that:

> *Any* person who believes he would be damaged by the registration of a mark may oppose the same • • • (Italics ours).

In *Rose Nerenstone Bookman, etc.*, v. *The Oakland Chemical Co.*, 17 C. C. P. A. (Patents) 1213, 40 F.(2d) 1006, following *California Cyanide Co.* v. *American Cyanamid Co.*, 17 C. C. P. A. (Patents) 1146, 40 F.(2d) 1013, we held, as stated in the syllabus of the last mentioned case:

> It is not necessary that one claiming the use of a mark shall have that mark registered in order to oppose registration of another mark alleged to be unregistrable under the statute.

See also *California Cyanide Co.* v. *American Cyanamid Co.*, 17 C. C. P. A. (Patents) 1198, 40 F.(2d) 1003; and *Model Brassiere Co., Inc.*, v. *Bromley-Shepard Co., Inc.*, 18 C. C. P. A. (Patents) 49, F.(2d) 482.

We, therefore, agree with the Commissioner that appellant in the instant case, by *reason of* the *use* shown of "Arch Preserver" and without reference to whether "Arch Preserver" is or is not descriptive as used, has the right to oppose the registration sought, notwithstanding its disclaimer in the certificate of October 24, 1916.

[3] The question then is, whether there is such a resemblance between "Arch Preserver" and "Foot Preserver" as that confusion would likely result from their application to boots and shoes.

We are not in agreement with appellant's contention that the dominant feature of the mark used

by it is the disclaimed word "Preserver," or that the mark should be construed largely by that commonly used English word. The issue must be treated by considering the words "Arch" and "Foot", taken in connection with "Preserver."

When applied to footwear we cannot escape the conviction that confusion would likely result. "Arch" when so applied carries with it a direct suggestion relating to a portion of the human foot. Foot is a term which embraces the arch. It is possible that there are terms relating to other parts of the foot which might not be confusion with "Arch", but if the positions of the respective parties hereto were reversed, and one were seeking to register "Arch Preserver" over the opposition of a prior user of "Foot Preserver," we apprehend the registration would be denied upon the issue of confusion.

The evidence introduced by appellant in the effort to show actual confusion is not strongly impressive. In a proceeding in equity involving an issue of unfair competition *inter partes*, probably most of it, as presented, would be held inadmissible. Generally speaking, we think the usual rules relating to admissibility of evidence should be applied in these statutory proceedings. Where proofs are attempted they should be made with regard to these rules. But a definite ruling here upon the testimony objected to, at the time of its taking, by counsel for appellee, is not necessary—indeed not proper, since there is no specific assignment of error upon that feature.

There is some evidence indicating actual confusion on the part of a newspaper in the preparation and issuance of advertising matter, when, intending to advertise "Foot Preserver" shoes, it caused the advertisement to be inserted for "Arch Preserver" shoes, and then, in subsequently attempting to correct the error, made the advertisement read simply "Preserver" shoes.

Independent of the testimony, however, we have the words themselves before us to be considered in the light of the statute and of numerous decisions of this and other courts.

The first paragraph of section 5 of the Trade-Mark Registration Act reads, in part:

> That no mark by which the goods of the owners of the mark may be distinguished from other goods of the same class shall be refused registration as a trade mark on account of the nature of such mark.

It is required, therefore, that a mark to be registrable shall have the quality of distinguishing the goods upon which it is applied by its owner from other goods of the same class. Obviously, "Foot Preserver," on account of its resemblance to "Arch Preserver," will not serve to distinguish the goods labeled "Foot Preserver" from those labeled "Arch Preserver," and is not, therefore, a mark, registration of which is proper under the statute.

We think the registration sought must be denied upon the ground of likelihood of confusion. This being our view, it is not necessary to discuss the question of descriptiveness.

For the reasons stated, the decision of the Commissioner is reversed and the registration denied.

The costs incident to records furnished in response to præcipe of appellee are adjudged against appellee.

Reversed.

U. S. Court of Customs and Patent Appeals

HEADLEY & THOMPSON *v.* BRIDGES

No. 2,872. Decided April 29, 1931

1. INTERFERENCES—APPEALS—COURT OF CUSTOMS AND PATENT APPEALS—JURISDICTION.

   "• • • We adhere to the doctrine that the only question of which we have jurisdiction in interference cases is that of priority, and that the only appeals that we may entertain in such cases are appeals from decisions of the Board of Appeals of the Patent Office, making a final award thereof."

2. SAME—SAME—SAME—PATENTABILITY OF THE ISSUE NOT REVIEWABLE.

   "We further hold that determination of the patentability or non-patentability in an interference case is an interlocutory proceeding and we have no jurisdiction of an appeal from a decision upon it, no adjudication of priority having been made by the tribunal from which the appeal is taken."

APPEAL from the Patent Office. Dismissed.

Messrs, Byrnes, Stebbins, Parmelee & Blenko, and *Mr. Clarence P. Byrnes* and *Mr. Earl L. Parmelee* for Headley & Thompson.

Messrs. Emery, Booth, Varney & Holcombe, Mr. Amasa M. Holcombe, and *Mr. Charles F. Miller, Jr.*, for Bridges.

GARRETT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Law Examiner, dissolving an interference as to certain counts on the ground of non-patentability.

The cause was advanced upon our docket in order that it might be heard upon the single question of jurisdiction, it being agreed that, if the court finds itself without jurisdiction to determine now the question of patentability, the appeal must be dismissed to the end that proceedings in the Patent Office may be resumed.

The motion to advance is accompanied by a memorandum of facts, agreed to by counsel for the respective parties, from which it appears that 111 counts were tentatively embraced in, or suggested for, the interference.

Of these, 78 are involved in the jurisdictional question. All of these 78, except No. 7, were twice rejected by an Examiner in ex parte proceedings without being suggested for the interference, but, upon appeal in the ex parte cases, the decisions of the Examiner were reversed and the claims, which became the counts, were allowed to Headley & Thompson by that tribunal of the Patent Office, then designated as the "Board of Examiners-in-Chief," the proceedings having been prior to the act of March 2, 1927, which act changed the designation to that of "Board of Appeals".

Following this reversal the interference was declared with Bridges, on September 3, 1927, being interference No. 55,728. The counts not here involved in the jurisdictional question were subsequently added.

Both parties moved to dissolve, Bridges upon the ground of non-patentability. Under the rules of the Patent Office, the motions to dissolve were referred to a Law Examiner. This official sustained the Bridges motion, and appeal was taken to the Board which had then become, by statute (act of March 2, 1927,), the Board of Appeals. That tribunal affirmed the decision of the Law Examiner and it was from the Board's decision that the present appeal was taken to this court.

Therefore, as to the seventy-eight counts, the question of priority has never been before the tribunals of the Patent Office and there has been no adjudication thereon. The effect of holding them non-patentable in the interference proceeding has been to dissolve the interference as to them and it stands dissolved in that respect, unless we should find that we have jurisdiction to review the question here, and should later find them patentable. *Field* v. *Colman*, 47 App. D. C. 189, 247 O. G. 246.

The thirty-three counts that are in the interference have yet to be tried in the Patent Office upon the issue of priority and are not claimed to be involved in the question of jurisdiction now before us.

The recent appeal in *Sundback* v. *Blair and Perrault*, dismissed by us February 25, 1931, 18 C. C. P. A. (Patents) ——, 47 F.(2d)378, the opinion being by Judge Lenroot, involved the question of jurisdiction, but arose upon a state of facts somewhat different from the facts of the instant case.

In the brief for Bridges in the present case, it is said, referring to the Sundback case:

> The decision of the Board of Appeals sustaining the decision of the Examiner in the interference automatically dissolved the interference, the motion being effective as to all of the counts therein. Hence in the appeal to this court Sundback had no standing whatever as a party to an interference because that interference was dissolved in toto with no decision on the issue of priority of invention. He had no standing before this court as an applicant appealing from the decision of the Board of Appeals holding the claims unpatentable, because the Examiner had not twice rejected the claims on that ground.
>
> Thus on comparing the facts in the Sundback v. Blair and Perrault case with those of this appeal, the questions of jurisdiction as presented by the respective records before the court are fundamentally different, and it is not surprising that the court held that it did not have jurisdiction of the Sundback case, because there had not been a second rejection by the Examiner of the claims and there had been no award of priority; but this decision does not control the present case and the reasoning upon which it is based would seem to require an opposite holding as applied to the facts presented upon this appeal.

It will be observed, however, from a reading of it, that our decision in the Sundback case did not rest upon the matter of there not having been two rejections by the Examiner. This element was nowhere mentioned in the opinion, nor was it a factor in deciding the case.

Upon the contrary, under the reasoning of that case, the number of rejections would not have affected our conclusion, which rested solely on the ground that the appeal then before us was not from a decision which the Board of Appeals was required by statute to make, the appeal to the Board being from a decision of a Law Examiner who is not a statutory tribunal. We did not specifically refer to the interlocutory character of the motion to dissolve, nor to the fact that there had been no adjudication of priority.

We did say therein:

> Nothing herein should be construed as intimating that, if the decision of the Board of Appeals had been based upon an appeal to it from a decision of a Primary Examiner or Examiner of Interferences, dissolving an interference, we would entertain jurisdiction. It is unnecessary for us to decide that question.

In the instant case the appeal to the Board of Appeals was also from a decision by a Law Examiner, and hence it might be held to be controlled by the Sundback decision. But arguments are here presented and questions are here raised, which were not there urged or discussed. These lead us to feel that we should here go further than we did in that case and determine whether we have jurisdiction to pass upon and adjudicate the question of patentability in an interference proceeding in which there has been no award of priority by the Board of Appeals of the Patent Office.

Both parties are here insisting that we do have such jurisdiction.

The brief in behalf of Headley & Thompson insists that the language of section 482, Revised Statutes, 35 U. S. C. A., section 7, "precludes construing the word 'Examiners' as applying to jurisdiction 'in interference cases,'" and presents argument on this insistence. The brief further says:

> Appellant has carefully reviewed the decision of this court under date of February 25, 1931, in the case of *Sundback* v. *Blair and Perrault*, patent appeal No. 2,599, interference No. 55,743. It is respectfully submitted, however, that such decision is predicated on a judicial interpretation of sections 4904, 4909 and 4911, without regard to the jurisdiction of the Board of Appeals as expressly set forth in section 482 of the Revised Statutes.
>
> The words "the decision of the Board of Appeals" as used in section 4911 is applicable to any decision which the Board of Appeals has the right by statute to enter in any case. Having been expressly given the statutory right under section 482 to review and determine decisions "in interference cases," the decision of the Board of Appeals in an interference case is subject to appeal to this court.

The full text of section 482 Revised Statutes, 35 U. S. C. A., section 7, as amended by acts of March 2, 1927, and April 11, 1930, respectively as follows:

> The Examiners-in-Chief shall be persons of competent legal knowledge and scientific ability. The Commissioner of Patents, the First Assistant Commissioner, the Assistant Commissioners, and the Examiners-in-Chief shall constitute a Board of Appeals, whose duty it shall be, on written petition of the appellant, to review and determine upon the validity of the adverse decisions of Examiners upon applications for patents and for reissues of patents and in interference cases. Each appeal shall be heard by at least three members of the Board of Appeals, the members hearing such appeal to be designated by the Commissioner. The Board of Appeals shall have sole power to grant rehearings.

Prior to the Act of March 2, 1927, the statutes had provided: first (section 4909 Revised Statutes), for appeals to the Board of Examiners-in-Chief from (*a*) the decisions of "Primary Examiners", twice rejecting applications for a patent, or for the reissue of a patent; (*b*) decisions of the Examiner in charge of interferences, in an interference case; second (section 4910 Revised Statutes), for appeals to the Commissioner in person,

> If such party is dissatisfied with the decision of the Examiners-in-Chief,

and, third (section 4911 Revised Statutes), appeals to the Court of Appeals of the District of Columbia from the decisions of the Commissioner in (*a*) ex parte cases involving applications for patents or re-

issue of patents, and (*b*), in any interference case by "any party aggrieved by" the Commissioner's decision.

The act of March 2, 1927, amended the existing law relating to appeals within the Patent Office by (*a*) providing a tribunal designated as the "Board of Appeals" instead of as theretofore the "Board of Examiners-in-Chief," and (*b*) by repealing 4910 Revised Statutes, thus eliminating appeals to the Commissioner in person. The law relating to appeals within the Patent Office is now embraced in section 4909 Revised Statutes, 35 U. S. C. A., section 57, which reads as follows:

Every applicant for a patent or for the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the Primary Examiner, or of the Examiner in charge of interferences in such case, to the Board of Appeals, having once paid the fee for such appeal.

The act of March 2, 1927, also amended the law relating to appeals to, or proceedings in, the courts by providing that they should be taken directly from the Board of Appeals. The law is now embraced in section 4911 Revised Statutes, 35 U. S. C. A., section 59*a*:

If any applicant is dissatisfied with the decision of the Board of Appeals, he may appeal to the United States Court of Customs and Patent Appeals, in which case he waives his right to proceed under section 63 of this title. If any party to an interference is dissatisfied with the decision of the Board of Appeals, he may appeal to the United States Court of Customs and Patent Appeals, provided that such appeal shall be dismissed if any adverse party to such interference shall, within twenty days after the appellant shall have filed notice of appeal according to section 60 of this title, file notice with the Commissioner of Patents that he elects to have all further proceedings conducted as provided in section 63. Thereupon the appellant shall have thirty days thereafter within which to file a bill in equity under said section 63, in default of which the decisions appealed from shall govern the further proceedings in the case. If the appellant shall file such bill within said thirty days and shall file due proof thereof with the Commissioner of Patents, the issue of a patent to the party awarded priority by said Board of Appeals shall be withheld pending the final determination of said proceeding under said section 63.

It will be observed that section 4911, as quoted, contains the phrase: "* * * If any party to an interference is dissatisfied with the decision * * *, he may appeal * * *". The prior language relating to interference appeals to the court was: "* * * any party aggrieved by a decision * * * may appeal * * *," but as related to ex parte appeals it was "dissatisfied with."

The phrase, "is dissatisfied with," also appeared in the former section 4910 Revised Statutes, which section was repealed, being there used in connection with appeals from the Board of Examiners-in-Chief to the Commissioner. This change in phraseology in section 4911 Revised Statutes is urged to have a significance. It will be hereinafter discussed.

By an act of March 2, 1929, the jurisdiction in patent appeals of the Court of Appeals of the District of Columbia was transferred to this court. By the terms of this act the latter court simply became the successor in jurisdiction of the former and there is no language in the act which in any wise changed the character of such jurisdiction. There was nothing in the amendatory act of April 11, 1930, which is here pertinent.

The jurisdiction conferred upon the Court of Appeals of the District of Columbia in appeals from the Patent Office was embraced in section 9 of the act creating that court, approved February 9, 1893, 27 Stats. 434–436, chapter 74. The section reads:

Sec. 9. The determination of appeals from the decision of the Commissioner of Patents, now vested in the General Term of the Supreme Court of the District of Columbia, in pursuance of the provisions of section seven hundred and eighty of the Revised Statutes of the United States, relating to the District of Columbia, shall hereafter be and the same is hereby vested in the Court of Appeals created by this act; and in addition, any party aggrieved by a decision of the Commissioner of Patents in any interference case may appeal therefrom to said Court of Appeals.

The foregoing section superceded the old provision of section 4911, Revised Statutes, which authorized appeals, except in interference cases, from the decision of the Commissioner of Patents to the Supreme Court of the District of Columbia by a party "dissatisfied with" the Commissioner's decision. This was by the act of July 8, 1870. It seems that until the act of 1893, creating the Court of Appeals of the District of Columbia, there was no tribunal to which parties in interference cases might carry a direct appeal from the Commissioner's decision, and in the act of 1893 the jurisdiction of the said Court of Appeals was limited to two classes of cases, to wit:

(1) Ex parte cases brought by applicants for patents when the claims had been twice rejected.

(2) Interference cases in which the appealing party was "aggrieved by" a decision of the Commissioner.

Prior to the said act creating said court such proceedings as were had by the courts relative to interferences were procdings in quity.

The Court of Appeals of the District of Columbia had occasion quite early in its existence to construe section 9, above quoted, and determine the question of its jurisdiction thereunder, in the case of *Westinghous* v. *Duncan*, reported in 2 App. D. C. 131, 66 O. G. 1009.

From the syllabus of that case, we quote:

1. An appeal does not lie to this court from a mere interlocutory or preliminary order or ruling of the Commissioner of Patents in an interference case, such as a ruling that there is or is not an interference, or an order refusing to investigate an alleged interference; but only from the final decision of the Commissioner in such a case determining the question of the priority of invention;

2. A decision of the Commissioner of Patents from which an appeal will lie to this court, can only be made after the Primary Examiner, and, on appeal from him, the Board of Examiners-in-Chief, have considered the case and made findings therein.

In *Podlesak* v. *McInnerney*, 26 App. D. C. 399, 120 O. G. 2127, the said Court of Appeals held that it would take jurisdiction to determine the question of the right of a party to make a claim, "as an ancillary question to be considered in according priority of invention," because such right "goes to the very foundation of an interference, for, if a party has not such right, the interference falls."

The said court consistently followed its holding in *Westinghouse* v. *Duncan*, supra, throughout the entire period of its jurisdiction over appeals from the Patent Office in interference cases, and again and again reiterated the doctrine that actions upon questions arising under motions to dissolve (except upon that of the right to make the claims which is fundamental) are interlocutory proceedings, when unaccompanied by an adjudication of priority rendered in the manner required by the statutes. It also consistently and uniformly held that the court had jurisdiction, in such cases, only of appeals from the decisions by the statutory tribunals of the Patent Office adjudging priority. A review of the many cases is not deemed necessary here. Among them are *Allen* v. *United States ex rel. Lowry*, 26 App. D. C. 8, 116 O. G. 2253; *In re Fullagar*, 32 App. D. C. 222, 138 O. G. 259; *Cosper* v. *Gold*, 34 App. D. C. 194, 151 O. G. 194; *Carlin* v. *Goldberg*, 45 App. D. C. 540, 236 O. G. 1222; *Parker* v. *Craft et al.*, 49 App. D. C. 88, 265 O. G. 309; *Cowles* v. *Rody*, 49 App. D. C. 135, 270 O. G. 191.

The last three cases arose over the question of whether the appellate court had jurisdiction in appeals in interference cases where the tribunal of the Patent Office, from which the appeal to the court was taken, had held the claims non-patentable without any award of priority. In each instance the court held that the finding of non-patentability was an interlocutory matter and declined ot take jurisdiction.

The case of *Allen* v. *United States*, supra, is worthy of particular note, first, because of the comprehensive review of the patent statutes and Patent Office practice there given by Mr. Justice Duell of the Court of Appeals of the District of Columbia, and, second, because the case found its way to the Supreme Court of the United States and the principle of the issue here involved was there adjudicated. *Lowry* v. *Allen*, 203 U. S. 476, 125 O. G. 365. The concluding portion of the opinion of the Supreme Court is:

The statute is explicit. It limits the declaration of interferences to the question of priority of invention. Section 4904 provides that in case of conflict of an application for a patent with a pending application or with an unexpired patent (as in the case at bar), the Commissioner shall give notice thereof, "and shall direct the Primary Examiner to proceed to determine the question of priority of invention." And it is provided that the Commissioner shall issue a patent to the party adjudged the prior inventor, unless the adverse party appeals from the decision of the Primary Examiner or Examiners-in-chief, as the case may be. The history of the sections and the rules are gone into at length by the Court of Appeals in its opinion. We need not repeat the discussion. It answers the detailed reasoning of plaintiffs in error. We concur with the views expressed, that the statutes provide only for appeals upon the question of priority of invention. Appeals on other questions are left to the regulation of the Patent Office under the grant of power contained in section 483.

It would seem that the doctrine of stare decisis applies in the instant case unless the Congress by subsequent legislation has changed the law.

In the briefs for both parties it is suggested that amendments to section 482 Revised Statutes, by the act of March 2, 1927, when construed with sections 4904 Revised Statutes, 4909 Revised Statutes, and 4911 Revised Statutes confer the jurisdiction it is here sought to have us take.

It is pointed out that in amending the said section 482 the word "review" was substituted for the word "revise", so that the Board is now clothed with authority "to review and determine upon the validity of the adverse decision * * *", whereas the Examiners-in-Chief, before the amendatory act, had the duty "to *revise* and determine * * *." (Italics ours).

We are unable to see wherein the substitution of "review" for "revise" in the section defining the duties of the Board of Appeals affects our jurisdiction, which is the same in all respects as was that of the Court of Appeals of the District of Columbia, defined in section 9, supra, of the act creating that court, and now expressed in section 4811 Revised Statutes, supra.

It is suggested further that section 4911 Revised Statutes now provides that any party to an interference who "*is dissatisfied with* the decision * * * may appeal * * *", whereas it formerly read "* * * any party *aggrieved by* a decision * * * may appeal." (Italics ours).

Here again we fail to see wherein the change in phraseology affects the matter of our jurisdiction. It is not the manner of expressing the state of mind of an appellant relative to a decision which fixes jurisdiction, but the nature of the decision itself and, as of course, the source from which the decision comes.

The phrase "is dissatisfied with" relating to an ex parte appeal received construction by the Court of Appeals of the District of Columbia in *Moore* v. *United States, ex rel. Chott*, 40 App. D. C. 591, 597, 192 O. G. 520, the court saying:

The right of appeal granted by sec. 4911, Rev. Stat. U. S. Comp. Stat. 1901, p. 3391, is very broad, and embraces every applicant for patent, "except a party to an interference", who "is dissatisfied with the decision of the Commissioner." We have held this to include any official action of the Commissioner which was decisive of an applicant's right to a patent, or which, in effect, operated as a rejection of the claims of the application. In the case of *Re Mattullath*, 38 App. D. C. 497, the court, speaking through its chief justice, said: "The right to appeal from a final decision of the Commissioner of Patents is determinable by its substance and effect, rather than its form. *Moore* v. *Heany*, 34 App. D. C. 31–39; *Re Selden*, 36 App. D. C. 428–431.

The action of the Commissioner of Patents, complained of in the foregoing Moore case, was, as has been stated, taken in an ex parte proceeding, and was a holding that an applicant was not entitled to a patent, although the Board of Examiners-in-Chief (now the Board of Appeals) had held otherwise. By reason of it being a final decision by the Commissioner of non-patentability, the court took jurisdiction under the old section 4911 Revised Statutes. The words mean the same, it seems to use, in an interference proceeding, as they do in one ex parte, and the decision, which the party "is dissatisfied with", in order to be appealable to this court, must be a final decision with an award of priority.

We find nothing in the history of the legislation, and no authority has been brought to our attention, indicating that, as used in the statutes under consideration, there is any distinction between the phrases "aggrieved by" and "dissatisfied with" which affects the question of jurisdiction.

Had Congress had it in mind to change the jurisdiction in a matter so important and far-reaching as this, we feel that it would have done so in language so clear as to leave no question relative to its meaning, and would not have attempted to do so merely by changing "revise" to "review" and "aggrieved by" to "dissatisfied with".

The brief for Bridges suggests that in view of certain amendments to section 482 Revised Statutes by

the act of March 2, 1927, (particularly that respecting the provision of former law whereby the Examiners-in-Chief were required to perform such duties as the Commissioner might assign them), the Board of Appeals, as therein created, now has jurisdiction only of appeals, therein provided for, and no longer may take jurisdiction of appeals arising simply under the rules and practice of the Patent Office and not authorized by statute, and says:

Therefore, applying the doctrine of the Sundback case, the jurisdiction of the Board of Appeals under the present statute depends upon what interpretation be given to the words "adverse decisions of Examiners"; and in this respect it is coextensive with that of the Court of Customs and Patent Appeals in appeals from the Patent Office. Accordingly, if the Board of Appeals renders a decision in a matter outside of its statutory jurisdiction, and "if any applicant is dissatisfied with the decision of the Board of Appeals," it would seem to be the duty of this court to take jurisdiction and determine whether or not the Board of Appeals had statutory authority to decide the matter.

It does not seem to us that the decision as to our own jurisdiction in this case requires a determination of or an expression upon, that issue. Whether the Board of Appeals had jurisdiction in the instant case under the theory upon which we are deciding the general issue, is not here material, because it made no adjudication of the question of priority. Had it made such an adjudication we might then have been confronted with, and have found it necessary to determine, the question of whether the proceedings back of it, and its own proceeding, were in accordance with the statute.

[1] Following the long line of authorities cited, and finding no enactments which seem to alter the statutes therein construed, or to render permissible any change in those constructions, we adhere to the doctrine that the only question of which we have jurisdiction in interference cases is that of priority, and that the only appeals that we may entertain in such cases are appeals from decisions of the Board of Appeals of the Patent Office, making a final award thereof.

[2] We further hold that determination of the patentability or non-patentability in an interference case is an interlocutory proceeding and we have no jurisdiction of an appeal from a decision upon it, no adjudication of priority having been made by the tribunal from which the appeal is taken.

We have not found it necessary to a decision of the issue here involved to review the rules and practice of the Patent Office, nor to discuss the respective functions of "Examiners", "Law Examiners", "Primary Examiner" and "Examiners of Interferences."

The appeal is dismissed for lack of jurisdiction, there having been no award of priority by the Board of Appeals.

Dismissed.

U. S. Court of Customs and Patent Appeals

IN RE LA MONTAGNE

No. 2,647. Decided March 31, 1931

1. PATENTABILITY—SELECTION OF OLD FEATURES.

"It is well established that if an applicant has taken one feature from one patented device and another feature from another patented device and combined them, and has produced no results other than were produced by the original devices in their individual operation, then he has invented nothing."

2. SAME—AGGREGATION.

Claims for a stocking *Held* unpatentable as including nothing more than aggregation of elements old in the art.

APPEAL from the Patent Office. Affirmed.

Messrs. Morrison, Kennedy & Campbell and *Mr. Harold Olsen* for La Montagne.

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner in rejecting all of the claims of appellant's application, six in number, as defining nothing patentable over the prior art.

Claim 6 is illustrative of the claims in issue and reads as follows:

6. As a new article of manufacture, a stocking knit from the toe to the top and including a toe-portion of plain-knitting; a sole and a heel of plain-knitting interknit with the toe-portion; an instep-section of rib-knitting interknit with and successively to the knitting of the sole and heel; a relatively short section of plain-knitting adjoining the ribbed instep, looped to the toe-portion, and interknit with the ribbed instep; a leg portion of rib-knitting interknit with the ribbed instep and being a continuation of the ribbing in the instep-section and extending to the top of the stocking; and a top-portion inter-knit with the ribbing of the leg-portion and comprising special rib-knitting, the ribbing, thus, terminating at one end of the short-section of plain-knitting looped to the adjoining toe-portion and at the other end with the top-portion of special knitting; the ribbed instep-section having a degree of stretchability substantially greater than that of the short-section of plain-knitting, and the top-portion of special knitting having a degree of stretchability substantially greater than that of the ribbed instep-section; the stocking, in consequence, being characterized by relatively high extensibility at the top, with no substantial strain at the instep-section, and being comfortable to the wearer and more easily slipped onto the foot and leg.

The references are: La Montagne et al., 1,282,880, Oct. 29, 1918; Murphy et al., 1,626,049, Apr. 26, 1927.

It is conceded by appellant that the reference Murphy shows all of the elements of the claims here in issue except the special ribbed top of the same. The reference La Montagne is a patent to appellant for a knitting machine and it is conceded by him that the top portion of the stocking embodied in his present application is fully disclosed in said patent. Appellant therefore does not claim that any of the elements of the claims here involved are new. On the contrary, he admits that they are old, but does contend that by combining the elements shown in Murphy and in appellant's prior patent he has made a true combination producing a new and useful result that involved invention, and for that reason contends that the claims are patentable.

The Board of Appeals held that the claims cover nothing more than an aggregation consisting of the specific stocking of Murphy and a top of suitable elasticity such as disclosed in appellant's machine patent, and that no invention was involved in making such an aggregation.

[1] It is well established that if an applicant has taken one feature from one patented device and another feature from another patented device and combined them, and has produced no results other than were produced by the original devices in their individual operation, then he has invented nothing. *In re Bayer*, 17 C. C. P. A. (Patents) 614, 35 F.(2d) 66, 390 O. G. 4; *In re Appleburg*, 17 C. C. P. A. (Patents) 820, 37 F.(2d) 620, 394 O. G. 7; *In re Isherwood*, 17 C. C. P. A. (Patents) 1187, 40 F.(2d) 987, 400 O. G. 225.

[2] We are clear that the Board of Appeals was correct in holding that the claims here in issue constitute nothing more than an aggregation of elements disclosed in the prior art. The elements so disclosed operate in the same way, in appellant's present disclosure, as they did in the prior art, and there is no conjoint action between the elements producing a new and useful result. That appellant has produced a useful article which has had great commercial success because of the aggregation of old elements does not of itself establish patentability.

Since it clearly appears that appellant's application does not disclose a combination in a patentable sense, but only an aggregation of old elements, we find no error in the decision of the Board of Appeals and it is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

680,395, J. Pfleger, Indoxyl derivative; 868,294, R. Schmidlin, Process of producing phenylglycine and its homologues; 718,340, O. J. Graul, Process of making cyan-methyl derivatives of aromatic amids, D. C. Del., Doc. E 487, *The Chemical Foundation, Inc.*, v. *E. I. Dupont de Nemours & Co. et al.* Decree upon stipulation for plaintiff May 28, 1931.

718,340. (See 680,395.) 724,789. (See 1,063,173.)

739,145. (See 1,063,173.) 753,659. (See 1,063,173.)

787,859. (See 1,063,173.) 796,393. (See 1,063,173.)

818,992. (See 1,063,173.) 868,294. (See 680,395.)

906,367. (See 1,063,173.)

914,678, F. Skelton, Handle for tools; 1,240,503, same, Reenforced D-handle, appeal filed Aug. 7, 1931, C. C. A., 4th Cir., Doc. 3223, *W. E. Skelton et al.* v. *Baldwin Tool Works.*

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994,437, Aschan & Kempe, Process of preparing camphor, D. C. Del, Doc. E 485, *The Chemical Foundation, Inc.*, v. *H. N. Fraser.* Consent decree dismissing bill July 8, 1931.

1,003,268. (See 1,063,173.) 1,055,701. (See 1,063,173.)

1,063,173, C. Rampini, Producing amino-anthraquinones and derivatives thereof; 724,789, R. Bohn, Blue coloring matter and process relating to same; 753,659, same, Anthracene derivative and process of making; 1,055,701, same, Pigments and process of making; 1,150,863, Just & Eckhard, same; 739,145, R. Bohn, Anthracene dye; 787,859, Scholl & Baily, Anthracene compound and process of producing same; 818,992, Baily & Isler, Coloring matter and process of producing; 796,898, O. Baily, Anthracene coloring matter and process of producing; 906,367, Baily & Wolff, same; 1,003,268, Just & Wolff, same; 961,612, Isler & Wolff, same, D. C. Del., Doc. E 486, *The Chemical Foundation, Inc.*, v. *E. I. Dupont de Nemours & Co. et al.* Decree upon stipulation for plaintiff May 29, 1931.

1,104,589, Ward & Taylor, Gear grinding machine; 1,155,532, F. A. Ward, Machine for grinding splined shafts; 1,271,495, same, Method of grinding splined shafts, etc.; 1,273,016, same, Splined shaft, D. C., E. D. Mich., S. Div., Doc. 448, *The Gear Grinding Machine Co.* v. *Reo Motor Car Co.* Patents 1,104,589, 1,155,532, and 1,271,495 held valid, dismissed without prejudice as to 1,273,016 (notice Aug. 5, 1931).

1,125,476, G. Claude, System of illuminating by luminescent tubes, filed Aug. 4, 1931, D. C., S. D. Calif. (Los Angeles), Doc. U-87-C, *Claude Neon Electrical Products, Inc.*, v. *Tubular Neon Co., Ltd., et al.*

1,150,863. (See 1,063,173.) 1,155,532. (See 1,104,589.)

1,170,790, A. M. Weston, Serving device for eating houses, filed July 7, 1931, D. C., E. D. Pa., Doc. 6617, *Mapleton Corp.* v. *Kugler's Restaurant Co.* Same, filed July 13, 1931, D. C., E. D. Pa., Doc. 6619, *Mapleton Corp.* v. *J. M. Cohen (Helen's Cafeteria).* Discontinued with prejudice to a new action July 28, 1931. Doc. 6621, *Mapleton Corp.* v. *J. Wanamaker.* Same, filed Aug. 5, 1931, D. C., E. D. Pa., Doc. 6647, *Mapleton Corp.* v. *H. Disston & Sons, Inc.* Doc. 6649, *Mapleton Corp.* v. *Gimbel Bros.* Doc. 6651, *Mapleton Corp.* v. *The Esto Real Estate Corp.* Doc. 6653, *Mapleton Corp.* v. *A. M. Collins Mfg. Co.* Doc. 6655, *Mapleton Corp.* v. *Strawbridge & Clothier.* Doc. 6657, *Mapleton Corp.* v. *Aberfoyle Mfg. Co.* Same, filed Aug. 3, 1931, D. C. Minn., 4th Div., Doc. E 2073, *Mapleton Corp.* v. *Wong Hing (Mun Hing Cafeteria).*

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,297,188, I. Langmuir, System for amplifying variable currents; 1,728,879, Rice & Kellogg, Amplifying system, D. C., E. D. Mo., E. Div., Doc. 9412, *Radio Corp. of America et al.* v. *Trav-ler Mfg. Corp.* Consent decree July 27, 1931.

1,195,632. (See 1,173,079.)

1,227,364, W. E. Baker, Rail joint, D. C., N. D. Calif. (San Francisco), Doc. E 2878-L, *W. R. Layne et al.* v. *Steel-Weld Equipment Corp. et al.* Patent held valid and infringed July 29, 1931.

1,231,764, F. Lowenstein, Telephone relay; 1,426,754, R. C. Mathes, Circuits for electron discharge devices; 1,465,332, H. D. Arnold, Vacuum tube amplifier, D. C., E. D. Mo., E. Div., Doc. 9413, *Radio Corp. of America et al.* v. *Trav-ler Mfg. Corp.* Consent decree July 27, 1931.

1,240,503. (See 914,678.) 1,251,377. (See 1,173,079.)

1,271,495. (See 1,104,589.) 1,273,016. (See 1,104,589.)

1,297,188. (See 1,173,079.)

1,299,232, H. Rosenberg, Art of fastening sheets together; 1,411,184, same, Sheet metal structure and fastening therefor; 1,465,148, same, Screw, C. C. A., 2d Cir., Doc. 11455, *Rosenberg et al.* v. *Carr Fastener Co.* Decree affirmed (notice Aug. 6, 1931).

1,344,922, L. J. Mildren, Oil well appliance; 1,729,940, F. J. Hinderliter, Combination casing ring and elevator, D. C., N. D. Okla. (Tulsa), Doc. E 561, *The Hinderliter Tool Co.* v. *Larkin Packer Co.* Decree for plaintiff Aug. 8, 1931.

1,352,506, E. E. Fowler, Filing and indexing equipment, D. C., S. D. Ohio, W. Div., Doc. E 710, *Postindex Co., Inc.*, v. *International Visible Systems Corp.* Consent decree holding patent valid and infringed (notice Aug. 4, 1931).

1,392,629 (*a*), C. P. Dubbs, Process of converting hydrocarbons; 1,764,296, R. Fleming, Method and apparatus for treating hydrocarbons, filed July 7, 1931, D. C. Del., Doc. E 892, *Universal Oil Products Co.* v. *Winkler-Koch Engineering Co. et al.*

1,392,629 (*b*), 1,543,832, C. P. Dubbs, Process of converting hydrocarbons; 1,543,831, same, Apparatus for treating hydrocarbons; 1,764,296, R. Fleming, Method and apparatus for treating hydrocarbons, filed July 7, 1931, D. C. Del., Doc. E 893, *Universal Oil Products Co.* v. *Winkler-Koch Engineering Co. et al.* Doc. E 894, *Universal Oil Products Co.* v. *Winkler-Koch Engineering Co. et al.* Doc. E 895, *Universal Oil Products Co.* v. *Winkler-Koch Engineering Co. et al.*

1,411,184. (See 1,299,232.) 1,426,754. (See 1,231,764.)

1,465,148. (See 1,299,232.) 1,465,332. (See 1,231,764.)

1,543,831. (See 1,392,629 (*b*).)

1,543,832. (See 1,392,629 (*b*).)

1,549,872, Hebeler & Schulenberg, Electric welding apparatus; 1,643,550, Frickey & Kalenborn, Engine controller for welding system; 1,749,133, 1,778,973, same, Arc welding system; 1,772,636, ReGua & Kalenborn, Rail grinding machine, D. C., N. D. Calif. (San Francisco), Doc. E 2877–K, *Welding Service, Inc.*, v. *Steel-Weld Equipment Corp. et al.* Patents held valid and infringed July 29, 1931.

1,551,515, W. K. Howe, Automatic train control system, appeal filed July 9, 1931, C. C. A., 8th Cir. (St. Louis), Doc. 9247, *Great Northern Rwy. Co.* v. *General Rwy. Signal Co.*

1,562,787. I. M. Petersime, Incubator, C. C. A., 10th Cir., Doc. 333, *J. L. Robbins (Robbins Incubator Mfg. Co.)* v. *I. M. Petersime & Son.* Decree reversed July 20, 1931.

1,581,188, C. G. Fink, Process of electrodepositing chromium and preparing baths therefor; 1,802,463, same, Process of producing chromium plated articles with mirror-like scratch finish, filed July 7, 1931, D. C. Del., Doc. E 891, *United Chromium, Inc.*, v. *Chrysler Corp.*

1,606,342, E. A. Bruce, Draining device, filed Aug. 4, 1931, D. C. Nebr. (Omaha), Doc. E 1135, *E. A. Bruce* v. *S. Marino.*

1,620,809, A. H. Fager, Vehicle running gear, filed July 23, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U–63–H, *Fager Hydraulic Hoist & Body Co.* v. *Utility Trailer Mfg. Co. et al.* Doc. E U–66–H, *Fager Hydraulic Hoist & Body Co.* v. *E. R. Clayton (New Comer Trailer Mfg. Co.).*

1,633,739. (See Re. 17,567.) 1,643,550. (See 1,549,872.)

1,660,832, E. Conti, Tube forming machine, C. C. A., 2d Cir., Doc. 11445, *Herz Straw Co., Inc.*, v. *S. Smith et al.* Decree affirmed Aug. 6, 1931.

1,665,715, O. P. Nolsom, Compass indicator for automobiles, C. C. A., 8th Cir. (St. Louis), Doc. 8939, *O. P. Nolsom (Nolsom Auto Compass Co.)* v. *Automatic Auto Compass Co.* Decree modified and affirmed July 28, 1931.

1,684,671, H. P. Hayden, Method of preventing evaporation from cement concrete during curing, filed Aug. 6, 1931, D. C., S. D. Calif. (Los Angeles), Doc. A–34–C, *The Barber Asphalt Co. et al.* v. *S. A. Cummings et al. (Southwestern Curing Co.).*

1,697,459, Dorogi & Dorogi, Process of producing inflated bodies of flat rubber plates without the use of molds, filed Aug. 3, 1931, D. C., S. D. N. Y., Doc E 61/150, *Dr. Dorogi & Co. Rubber Factory, Ltd.*, v. *Katagiri Corp.*

1,728,879. (See 1,173,079.)

1,728,924, M. Buchsbaum, Hosiery, filed July 2, 1931, D C., Del., Doc. E 890, *Gotham Silk Hosiery Co., Inc.*, v. *Artcraft Silk Hosiery Mills, Inc.*

1,729,654, Watson & Culver, Method of making bifocal lense, filed Aug. 5, 1931, D. C., Mass., Doc. E 3446, *United Kingdom Optical Co., Ltd., et al* v. *American Optical Co. et al.*

1,729,940. (See 1,344,922.) 1,749,133. (See 1,549,872.)

1,763,768, A. H. Fager, Vehicle running gear, filed Aug. July 23, 1931, D. C., S. D. Calif. (Los Angeles), Doc. U–69–H, *Fager Hydraulic Hoist & Body Co.* v. *Six Wheels, Inc.*

1,764,296. (See 1,392,629 (*a*) and (*b*).)

1,772,636. (See 1,549,872.) 1,778,973. (See 1,549,872.)

1,797,205, H. W. Houck, Electron tube apparatus, filed July 29, 1931, D. C., Del., Doc. E 898, *Dubilier Condenser Corp.* v. *National Union Radio Corp.* Doc. E 899,, *Dubulier Condenser Corp.* v. *Perryman Electric Co., Inc.* Doc. E 900, *Dubilier Condenser Corp.* v. *Radio Corp. of America.*

1,802,463. (See 1,581,188.)

1,803,549, A. N. Emmons, Surface finishing machine, filed Aug. 4, 1931, D. C., S. D. N. Y., Doc. E 61/171, *The Porter Cable Machine Co.* v. *Superior Floor Surfacing Machine Corp.*

1,807,697, G. A. Lyon, Cover for spare tires of automobiles, filed July 8, 1931, D. C., Del., Doc. E 896, *Lyon Inc., et al.* v. *Tropic-Aire, Inc.*

1,815,745. (See Re. 17,567.)

Re. 17,328, F. J. Schleicher, Paper box, appeal filed Aug. 6, 1931, C. C. A., 8th Cir. (St. Louis), Doc. 9277, *Box Patents, Inc.*, v. *Universal Paper Box Mfg. Co.*

Re. 17,567, 1,633,739, H. J. Gaisman, Safety razor; 1,815,745, R. E. Thompson, same, filed Aug. 7, 1931, D. C., Conn. (New Haven), Doc. E 2142, *Gillette Safety Razor Co.* v. *Hawley Hardware Co.*

Des. 75,501. (See Des. 46,225.)

Des. 82,765, A. Stockstrom, Range, D. C., N. D. Ohio, E. Div., Doc. E 3734, *American Stove Co.* v. *H. P. Kirkland & Co.* Patent held valid and infringed (notice Aug. 8, 1931).

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,707,440, F. A. Kolster, Signal receiving circuits, decided August 22, 1931, claim 1.

Pat. 1,632,767, E. J. Bloom, Chassis lubrication, decided August 5, 1931, claim 1.

Pat. 1,745,109, A. W. Mitchell, Charcoal burners, decided August 22, 1931, claims 1, 2, 3, and 4.

Pat. 1,708,447, F. V. Maloon, Molding apparatus, decided August 5, 1931, claims 1 and 2.

Pat. 1,675,776, S. B. Whiteside, Ice cream dipper, decided July 25, 1931, claim 5.

Pat. 1,779,581, G. E. Behnke, Weight regulator and indicator, decided August 7, 1931, claims 1, 2, and 6.

Adjudicated Patents

(D. C. Ill.) Kaser patent, No. 1,624,490, for method of making pies, claim 3 *Held* invalid. *Kaser Process Pie Co.* v. *Pie Bakeries of America*, 50 F.(2d) 414.

(D. C. Cal.) Swanfeldt patent, No. 1,625,690, for ornamental awning fabric and method of making the same, *Held* valid and infringed. *Swanfeldt* v. *Waldman*, 50 F.(2d) 445.

(D. C. Mo.) Papendick patent, No. 1,722,338, for sliced baked-loaf package and packaging, claims 2, 3, and 4 *Held* valid. *Papendick, Inc.*, v. *Joplin-Purity Baking Co.*, 50 F.(2d) 462.

(D. C. Cal.) Swanfeldt design patent, No. 68,354, for textile fabric, *Held* valid but not infringed. *Swanfeldt* v. *Waldman*, 50 F.(2d) 445.

(D. C. Cal.) Swanfeldt design patent, No. 68,355, for textile fabric, *Held* valid but not infringed. *Id.*

(D. C. Cal.) Swanfeldt design patent, No. 68,356, for textile fabric, *Held* valid but not infringed. *Id.*

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 15, 1931

[VOL. 410. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 310,436. EDNA M. SEELEY, doing business as Venetian Art Studios, Minneapolis, Minn. Filed Jan. 26, 1931.



The word "Petal" is hereby disclaimed apart from the mark as shown in the drawing.

For Specially Treated Fibre, Leaves, and Perfumes, Used in the Manufacture of Artificial Flowers.

Claims use since Oct. 15, 1930.

Ser. No. 313,619. E. A. WILSON CO., Lowell, Mass. Filed Apr. 21, 1931.



The lining of the drawing is to indicate red color.

For Coal.

Claims use since June, 1930.

Ser. No. 313,892. THE W. A. SIMPSON COMPANY, Baltimore, Md. Filed Apr. 27, 1931.



No claim being made to the exclusive use of the words "Lawn Grass."

For Lawn Grass Seed.

Claims use since 1927.

Ser. No. 315,813. THE KALLAY BROS. COMPANY, Painesville, Ohio. Filed June 13, 1931.



Applicant disclaims exclusive use of the words "Painesville, Ohio," "Seeds Plants Trees," and "Trade Mark."

For Evergreens, Shrubs, Shade and Ornamental Trees, Fruit Trees, Rose Bushes, Garden and Flower Plants, Garden and Flower Seeds.

Claims use since 1911.

Ser. No. 317,299. BLACK STAR COAL COMPANY, Louisville, Ky. Filed July 25, 1931.

DIXIE STAR COAL

The exclusive use of the word "Coal" is hereby disclaimed. Applicant is the owner of registration No. 204,972.

For Coal.

Claims use since June 10, 1931.

CLASS 2

Receptacles

Ser. No. 313,749. NEWARK PARAFFINE & PARCHMENT PAPER CO., Newark, N. J. Filed Apr. 24, 1931.

AQUATONE

For Paper Bags and Cartons.

Claims use since Dec. 2, 1929.

Ser. No. 317,506. CHICAGO GRANITINE MANUFACTURING COMPANY, Chicago, Ill. Filed July 31, 1931.

GRANITINE

For Concrete Storage Boxes for Storing Garbage and Ashes.

Claims use since Apr. 1, 1925.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 310,590. C. E. VANDERPOEL, Jacksonville, Fla. Filed Jan. 30, 1931.

V--B

MASTER CLEANER
—AND—
WATER SOFTENER

The words "Master Cleaner and Water Softener" being disclaimed apart from the other features of the mark as shown on the drawing.

For Cleansers or Washing Powders for General Household Use.

Claims use since June 1, 1929.

Ser. No. 313,908. ALBERT P. DE SANNO, Jr., doing business as A. P. De Sanno and Son, Philadelphia, Pa. Filed Apr. 28, 1931.

STONE SAW

The drawing is lined for shading only. The words "Stone Saw" form a part of the mark only in the association shown.

For Abrasive Disc or Wheel.

Claims use since Apr. 17, 1931.

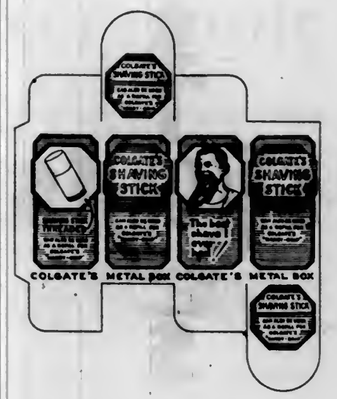
Ser. No. 314,206. MADRINA CORPORATION, New York, N. Y. Filed May 5, 1931.

MADRINA

For Castile Soap.

Claims use since May 15, 1929.

Ser. No. 316,808. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed July 10, 1931.



Applicant makes no claim herein to the exclusive use of the representation of a carton per se appearing on the drawing or to the representation of the goods or to any of the words appearing upon said trade-mark other than "Colgate's, Handy Grip," the exclusive use of the word "Grip" being disclaimed except in connection with the word "Handy". The lining on the drawing is intended to denote the color blue.

For Shaving Soap and Shaving Sticks.

Claims use since Nov. 5, 1926.

Ser. No. 317,120. KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa. Filed July 20, 1931.

sollo

For Cleaning Fluid—Namely, a Dry Cleaning Preparation.

Claims use since June 1, 1931.

CLASS 5

Adhesives

Ser. No. 315,172. SATISFACTION SUPPLY CO. INC., New York, N. Y. Filed May 28, 1931.

"ARKAY"

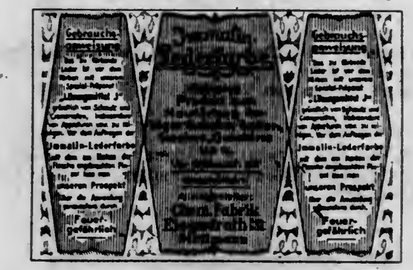
For Label Gum.

Claims use since September, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 296,482. CHEMISCHE FABRIK EISENDRATH GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Mettmann, Germany. Filed Feb. 25, 1930.



The drawing is lined for red, which is an essential feature of the trade-mark. No claim is made to the exclusive use of the wording with the exception of the letter "J", the word "Immalin", and the name of applicant apart from the mark as shown in the drawing. The representation of the label per se is disclaimed.

For Dye for Leather.

Claims use since June 1, 1928.

Ser. No. 306,550. AMERICAN CHEMICAL PAINT COMPANY, Lower Gwynedd Township, Pa. Filed Oct. 9, 1930.

ARIDINE

For Detergent Paste, Powder, or Liquid, with or without Acid Used for Preparing Automobile Bodies for Painting and Like Purposes by Removing Oil, Rust, or Rust Promoters.

Claims use since May 22, 1930.

Ser. No. 306,795. THE ALPHA CHEMICAL PRODUCTS CO., Cincinnati, Ohio. Filed Oct. 15, 1930.

TRADE FOOTEX MARK

Applicant disclaims any exclusive use of the following words and phrases: "Trade Mark" except when used as shown in the mark presented.

For Medicine for All Forms of Ringworm Itching.

Claims use since June 25, 1930.

Ser. No. 310,128. J. M. HUBER INC., Bayonne, N. J., and New York, N. Y. Filed Jan. 19, 1931.

SUPREX

For Pigments and Fillers for Rubber, Paper, Paint, Printing Ink, and Carbon Paper.
Claims use since Feb. 26, 1924.

Ser. No. 310,352. WILLIAM H. SAUL, doing business as Saul Pharmacal Company, Brooklyn, N. Y. Filed Jan. 24, 1931.



The words "Athletes Foot Ointment" are disclaimed apart from the mark shown in the drawing for the purpose of this registration only.
For Ointment for Skin Irritation.
Claims use since Jan. 13, 1931.

Ser. No. 310,395. JOHN F. D. MARQUARDT, doing business as J. F. D. Marquardt, Los Angeles, Calif. Filed Jan. 26, 1931.



The words "The Standard Cleaner" and "For Automobile Radiators" and the representation of the tablet being disclaimed apart from the mark as shown.
For Preparation for Use in Cleaning and Removing Rust, Scale, and Corrosion from Automobile Radiators.
Claims use since Oct. 1, 1930.

Ser. No. 310,665. ORLANDO W. STOKES, doing business as Stokes (OK) Laboratory, San Fernando, Calif. Filed Feb. 2, 1931.



For Preparation in Liquid Form for the Treatment of Infectious Bronchitis and Pneumonia in Poultry.
Claims use since Oct. 1, 1930.

Ser. No. 310,761. GEORGES GAY, doing business as Académie Scientifique De Beauté, Colombes, France. Filed Feb. 5, 1931.

RUBIS
POMPADOUR

The word "Rubis" appearing on the drawing being disclaimed in this application.
For Nail Polish.
Claims use since Sept. 28, 1921.

Ser. No. 311,030. GABY, INC., Philadelphia, Pa. Filed Feb. 13, 1931.

Gaby

For Face Powder, Hand Lotion, Almond Cream, Cleansing Cream, Skin Tonic, Astringent Lotion, Cream Rouge, Mascaro, Eye Shadow, Eyelash Grower, and Lip Sticks.
Claims use since May 22, 1930.

Ser. No. 312,103. KEEN MANUFACTURING CORPORATION, New York, N. Y. Filed Mar. 13, 1931.

Kera-Tonic

No claim is made to the word "Tonic".
For Lotion for Use in Permanent Hair Waving.
Claims use since Feb. 18, 1931.

Ser. No. 312,211. ALYCE WILLIAMS, Tampa, Fla. Filed Mar. 16, 1931.



All the wording apart from the mark shown is hereby disclaimed.
For Cream for Bleaching, Cleaning, and Softening the Skin.
Claims use since Nov. 1, 1931.

Ser. No. 313,432. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Apr. 16, 1931.

ALTAX

For Accelerators for the Vulcanization of Caoutchouc.
Claims use since Dec. 27, 1930.

Ser. No. 314,556. "DEGEWOP" GESELLSCHAFT WISSENSCHAFTLICHER ORGANPRAEPARATE, A. G., Berlin-Spandau, Germany. Filed May 14, 1931.

„Hombreol"

For Medicaments, Chemical Products for Medicinal and Hygienic Uses, Etc.
Claims use since March, 1930.

Ser. No. 314,577. ALMA NELSON, New York, N. Y. Filed May 14, 1931.



The words "Skin Cream" are disclaimed apart from the mark as shown on the drawing.
For Skin Cream.
Claims use since Oct. 9, 1920.

Ser. No. 314,895. WILL C. CLARK, doing business as Coco-Pine Co., St. Petersburg, Fla. Filed May 22, 1931.

Floridol

For Hair Tonic and Shampoo.
Claims use since March, 1930.

Ser. No. 315,928. WILLIAM H. ROHER INC., Philadelphia, Pa. Filed June 16, 1931.



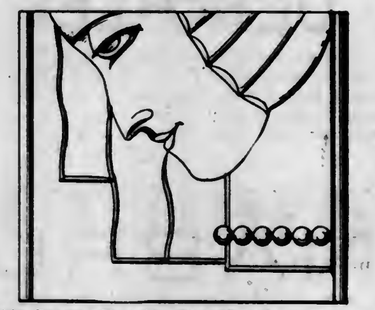
The representation of a capsule and the word "Coated" are hereby disclaimed apart from the mark shown in the drawing.
For Medicine for Treatment of Rheumatism, or Amylaceous Indigestion, Where it is Desirous to Have the Medicine Pass Through the Stomach Unchanged and Subsequently Changed in the Intestines.
Claims use since Feb. 8, 1931.

Ser. No. 316,047. E. T. MOORE, Miami, Fla. Filed June 19, 1931.



The drawing is lined to indicate red color. The words "The Orange Flavored Laxative" are disclaimed apart from the mark shown.
For Laxative.
Claims use since January, 1931.

Ser. No. 316,056. JACK L. SINYKIN, doing business as Cinderella Cosmetics, St. Paul, Minn. Filed June 19, 1931.



For Skin Creams, Face Powders, Face Lotions, Perfumes, Toilet Waters, Rouges, and Lipsticks.
Claims use since Apr. 5, 1931.

Ser. No. 316,112. AGENZIA DEL PROGRESSO, INC., New York, N. Y. Filed June 22, 1931.

ELIXIR MAGISTRALE



The word "Elixir" appearing on the drawing is disclaimed apart from the other features of the mark shown.

The portrait appearing on the drawing is that of an imaginary picture of a Capuchin monk or friar.

For Medicinal Preparation for Purifying the Blood, Invigorating, Overcoming the Low Condition of Health, Digestion, Eruptions, Boils, Pimples, Dizziness, Biliousness, Headaches, Constipation, Dyspepsia, and General Debility.

Claims use since 1911.

Ser. No. 316,322. EVANGELINE CO., Brooklyn, N. Y. Filed June 26, 1931.

Evangeline



For Shoe Dyes for Fabric and Leather, and Color Remover for Fabrics and Leather.

Claims use since June 15, 1931.

Ser. No. 316,356. BOURJOIS, INC., New York, N. Y. Filed June 27, 1931.

ULTRALET

For Perfume, Toilet Water, Face Powder, Dusting Powder, Bath Crystals, Skin Freshener in the Nature of an Astringent Skin Lotion, Cleansing Cream, Tissue Cream, Finishing Cream, and Hair Tonic.

Claims use since June 15, 1931.

Ser. No. 316,373. DEAN H. OSBORN, Marshfield, Oreg. Filed June 27, 1931.

NABRU

For Tonic for Aiding the Appetite, Digestion, and the Nerves and Acting as a Mild Stimulant to Digestive Tract and the Process of Metabolism.

Claims use since May 1, 1931.

Ser. No. 316,440. MILLER LABORATORIES, Duluth, Minn. Filed June 29, 1931.



Applicant hereby disclaims the words "Floral Lotion" and "Duluth, Minn.," apart from the mark shown in the drawing.

For Toilet Lotion.

Claims use since 1890.

Ser. No. 316,494. JOSEPH LUNTZ, Brooklyn, N. Y. Filed June 30, 1931.



The word "Formula" appearing in the drawing is not claimed apart from the mark shown.

For Skin Beautifying Cream.

Claims use since Apr. 20, 1931.

Ser. No. 316,539. ORKIN EXTERMINATING COMPANY, INC., Atlanta, Ga. Filed July 1, 1931.



No claim is made for the words "Creators of Sanitation" apart from the mark as shown in the drawing.

For Insecticides and Deodorants Having Incidental Cleaning Properties.

Claims use since Jan. 4, 1926.

Ser. No. 316,606. S. AMOS MOLE, Buffalo, N. Y. Filed July 3, 1931.



No claim is made to the word "Bottled" apart from the mark shown in the drawing.

For Germicide, Disinfectant, Deodorant, and Bleach.

Claims use since June 29, 1931.

Ser. No. 316,645. FRANZ HOFMANN, Teplitz-Schonau, Czechoslovakia. Filed July 6, 1931.



The lining shown in the drawing indicates shading and not any particular color scheme. No rights are asserted to the exclusive use of the word "Beans" apart from the trade-mark shown in the drawing.

For Reducing Preparations.

Claims use since May 16, 1931.

Ser. No. 316,649. LA SOCIETE POLONOVSKI & NITZBERG, Paris, France. Filed July 6, 1931.

GENESERINE

For Treatment for Dyspepsia and Related Diseases.

Claims use since March, 1923.

Ser. No. 316,652. LA SOCIETE POLONOVSKI & NITZBERG, Paris, France. Filed July 6, 1931.

GENATROPINE

For Remedy Used for the Treatment of Intestinal Pain, Acid Dyspepsia, and in All Conditions Where the Use of Belladonna and Atropine is Indicated.

Claims use since June, 1926.

Ser. No. 316,721. DENNIS DEVINE, Jr., doing business as Sanitine Products Co., New London, Conn. Filed July 8, 1931.

SANITINE

For Disinfectant, Deodorant, and Cleaner.

Claims use since June 1, 1931.

Ser. No. 316,724. ROY A. HALVERSEN, Niagara, Wis. Filed July 8, 1931.

ORTHO-IVY-TOXYL

No claim is made to the right to exclusive use of the word "Ivy" apart from the mark shown in the drawing.

For Preparations for External Application for Ivy Poison.

Claims use since July 27, 1930.

Ser. No. 316,727. AUGUST KARRETH, doing business as Luitpold-Werk, Chemisch-Pharmazeutische Fabrik, Munich, Germany. Filed July 8, 1931.

Asem

For Hemostatic.

Claims use since May 26, 1931.

Ser. No. 316,781. JOHN A. NUTLEY, Elk City, Okla. Filed July 9, 1931.



The portrait appearing on the drawing is a draftsman's reproduction of a photograph of the applicant, John A. Nutley.

For Asthma and Cough Medicine.

Claims use since June 13, 1931.

Ser. No. 316,789. THE UPJOHN COMPANY, Kalamazoo, Mich. Filed July 9, 1931.

Betasaya

For Elixir or Solution Used as an Adjunct to the Diet of Convalescents.

Claims use since Mar. 21, 1931.

Ser. No. 316,823. THE UPJOHN COMPANY, Kalamazoo, Mich. Filed July 10, 1931. Under 10-year proviso.

UPJOHN

For Drugs, Medicines, and Pharmaceutical Preparations—Namely, Acetanilid, Acid Arsenious, Aconite Root, Aconitin, Aloes, Aloes and Asafetida, Aloes and Iron, Aloes and Mastich, Aloes and Myrrh, Aloes and Nux Vomica, Aloes and Nux Vomica and Belladonna, Aloin,

Aloin Compound, Aloin and Strychnine, Aloin and Strychnine and Belladonna, Alteratives, Alterative Cathartics, Alum, Ammonium Chloride, Anodyne, Anthelmintic, Arsenious Acid, Asafetida, Asafetida and Henbane, Asafetida and Iron, Asafetida and Nux Vomica, Atropine, Atropia Sulphate, Atropia and Morphine, Belladonna Extract, Belladonna Leaves, Berberina and Podophyllin, Blue Mass, Calcium Sulphide, Calomel, Calomel and Ipecac, Calomel and Opium, Camphor, Camphor and Opium, Camphor and Opium and Henbane, Camphor and Opium and Tannin, Cannabis Extract, Cantharides, Capsicum, Carminatives, Cascara Sagrada Extract, Cathartic Compounds, Cinchonidia Sulphate, Cinchonidia and Capsicum, Cinchonidia and Arsenic, Cinchonidia Alkaloid, Codeine, Colocynth Compound Extract, Colocynth Compound and Blue Mass, Colocynth and Ipecac and Blue Mass, Colocynth and Henbane, Corrosive Sublimate, Creosote, Digitalin, Digitalis Compound, Digitalis Leaves, Dover's Powders, Diuretics, Elaterium, Emmenagogues, Ergotin, Ferruginous Compounds, Gamboge, Gentian Compound, Gelsemium Root, Henbane Extract, Ipecac, Ipecac and Opium, Iron Arseniate, Iron by Hydrogen, Iron and Quinine Citrate, Iron and Quinine and Zinc, Jalapin, Laxatives, Leptandrin, Manganese Binoxolate, Mercury Biniodide, Mercury Protiodide, Mercury Protiodide and Henbane, Mercury Protiodide and Opium, Mercury with Chalk, Mercury Tannate, Morphine Sulphate, Morphine and Belladonna, Morphine and Tartar Emetic, Nitro-Glycerine, Nux Vomica, Opium, Opium and Lead Acetate, Peppermint Oil, Pepsin Compound, Phenacetine and Salol, Podophyllin, Podophyllin and Belladonna, Podophyllin and Blue Mass, Potassium Bromide, Potassium Chloride and Licorice Extract, Potassium Iodide, Potassium Nitrate, Potassium Permanganate, Quinine Sulphate, Quinine Bromide, Quinine and Blue Mass, Quinine and Capsicum, Quinine Compound, Quinine and Iron Carbonate, Quinine and Iron and Strychnine, Quinine and Strychnine, Rhubarb, Rhubarb and Blue Mass, Salicin, Salicylic Acid, Salol, Santonin, Santonin and Calomel, Strychnine, Strychnine Acetate, Strychnine Sulphate, Tannic Acid, Tartaric Acid, Tartar Emetic, Tonics, Tonic Hematics, Veratrine, Warburg's Tincture, Zinc Phosphide, Zinc Phosphide Compound, Zinc Phosphide and Nux Vomica, and Hepatica; and Medicines for the Treatment of Biliousness, Chills, Constipation, Dyspepsia, Malaria, Aphrodisia, Dipsomania, Gonorrhœa, Migraine, Neuralgia, Night Sweats, and Other Diseases.

Claims use since 1891.

Ser. No. 316,844. LESTER H. MILES, Los Angeles, Calif. Filed July 11, 1931.



GOLF-GRIP

The portrait appears upon the drawing as fanciful.

For Reducing, Bleaching, Cleaning, Softening, and Skin Strengthening Creams.

Claims use since June 30, 1931.

Ser. No. 316,851. SAMSON ROSENBLATT, New York, N. Y. Filed July 11, 1931.

Peroxodent

For Dental Preparations—Namely, Mouth Washes, Dental Creams and Powders.

Claims use since July 1, 1931.

Ser. No. 316,867. ELIZABETH ARDEN, INC., New York, N. Y. Filed July 13, 1931.

CHARIOT

For Lipsticks.

Claims use since May 5, 1930.

Ser. No. 316,869. ELIZABETH ARDEN, INC., New York, N. Y. Filed July 13, 1931.

PRINTEMPS

For Lipsticks.

Claims use since May 5, 1930.

Ser. No. 316,870. ELIZABETH ARDEN, INC., New York, N. Y. Filed July 13, 1931.

VICTOIRE

For Lipsticks.

Claims use since May 5, 1930.

Ser. No. 316,908. JEWEL OIL CO., INC., Jersey City, N. J. Filed July 15, 1931.

SHAMPOL

For Shampoo.

Claims use since June, 1929.

Ser. No. 316,984. V. J. CHEMICAL LABORATORIES, INC., Cedarhurst, N. Y. Filed July 15, 1931.

VAG-JEL

For Intravaginal Bacteriostatic Jelly.

Claims use since June 25, 1931.

Ser. No. 316,998. AARON JOSEPH GOLDMAN, doing business as Muco-Thesin Laboratory, Philadelphia, Pa. Filed July 16, 1931.

MUCO-THESIN

For Dental Anæsthetic.

Claims use since July 1, 1931.

Ser. No. 317,043. RUDOLF CONRAD KEMPE, Long Island City, N. Y. Filed July 17, 1931.

O.H.E.

For Medicinal Preparations for Lung, Stomach, and Intestine Diseases.

Claims use since Mar. 1, 1930.

Ser. No. 317,049. THE PEAK CORPORATION, Houston, Tex. Filed July 17, 1931.

PURIDENT

For Dentifrice.

Claims use since Feb. 16, 1931.

Ser. No. 317,121. WALTER R. KREMBS, doing business as Pinetex Co., Chicago, Ill. Filed July 20, 1931.



For Medicated Textile for the Treatment of the Hair and Scalp.

Claims use since June 30, 1931.

Ser. No. 317,137. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed July 20, 1931.

FLIT

For Insect Repellent.

Claims use since July 6, 1931.

Ser. No. 317,176. HERBERT E. MARTIN, Grafton, W. Va. Filed July 21, 1931.

RHEUMA-SCATTER

For Medicinal Preparation for External Use in Treating Rheumatism.

Claims use since July 11, 1931.

Ser. No. 317,181. NEUTRASOL PRODUCTS CORPORATION, Jersey City, N. J. Filed July 21, 1931.

CASTASOL

For Processed Oil for Use in Dyeing and Finishing Textiles.

Claims use since Feb. 10, 1930.

Ser. No. 317,203. SATISH C. GHOSE, doing business as India Incense Company, Chicago, Ill. Filed July 22, 1931.



For Incense.

Claims use since July, 1930.

Ser. No. 317,217. NOURISHINE MANUFACTURING COMPANY, Los Angeles, Calif. Filed July 22, 1931.

NOURISHINE

For Liquid Shampoo.

Claims use since Sept. 1, 1925.

Ser. No. 317,261. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed July 23, 1931.

ROSE-AID

For Insecticides and Fungicides.

Claims use since July 11, 1931.

Ser. No. 317,265. THE ALPHA-LUX COMPANY, INC., New York, N. Y. Filed July 24, 1931.

LIQUITOL

For Liquid Preparation Used During Metal Casting Operations to Retain the Heat in the Metal.

Claims use since June 25, 1931.

Ser. No. 317,309. J. H. ROBERT GRANT, New York, N. Y. Filed July 25, 1931.

STAR

For Tanning Extracts.
Claims use since July 16, 1931.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 315,946. SWIM PAK CO., New York, N. Y. Filed June 16, 1931.

SWIM PAK

Applicant makes no claim to the words "Swim Pak" apart from the mark as shown.
For Empty Base Metal Cigarette Cases and Humidors.
Claims use since June 1, 1931.

CLASS 12

Construction Materials

Ser. No. 285,528. THE MOSAIC TILE COMPANY, Zanesville, Ohio. Filed June 13, 1929.

VELVETEX FLOOR TILE

Applicant hereby disclaims the exclusive use of the words "Floor Tile" apart from the mark as shown.
For Floor and Wall Tiles of Baked Clay.
Claims use since Sept. 1, 1928.

Ser. No. 311,229. CALBAR PAINT & VARNISH CO., Philadelphia, Pa. Filed Feb. 19, 1931.

CAULK-O-SEAL

For the purpose of registration exclusive use of the word "Caulk" and the word "Seal" is not claimed except in the association shown on the drawing.
For Plastic Caulking and Glazing Compound.
Claims use since June, 1928.

Ser. No. 316,556. DECORATIVE PLASTERING CO. INC., New York, N. Y. Filed July 2, 1931.

~~DECO-WOOD~~ DECORATION

The applicant disclaims the words "Wood" and "Composition."
For Imitation Wood Products of Plaster and Other Plastic Materials for Interior Decorations of Buildings.
Claims use since Aug. 1, 1928.

Ser. No. 317,280. LINCOLN OIL REFINING COMPANY, Robinson, Ill. Filed July 24, 1931.

LINCOLN-ITE

The word "Lincoln" is disclaimed apart from the mark shown on the drawing.
For High Softening Point Bituminous Material.
Claims use since September, 1930.

Ser. No. 317,429. FAIENCERIES DE BOUFFIOULX SOCIETE ANONYME, Bouffioulx, Belgium. Filed July 29, 1931.

EFBE

For Faience Tiles and Fire Brick.
Claims use since April, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 309,605. BUNDY TUBING COMPANY, Detroit, Mich. Filed Jan. 5, 1931.

BUNDYWELD

For Metal Tubing, Shaped Tube Lengths With and Without Fittings for Connecting Purposes Attached, Copper Welded and Coated Tubes.
Claims use since Dec. 29, 1930.

Ser. No. 314,722. STERLING AUTOMOTIVE PRODUCTS CORPORATION, Buffalo, N. Y. Filed May 18, 1931.

"TWIN SEAL" CAP VALVES

The words "Cap Valves" and the representation of the valve are disclaimed apart from the mark shown.
For Tire Valves.
Claims use since Jan. 3, 1931.

Ser. No. 314,723. STERLING AUTOMOTIVE PRODUCTS CORPORATION, Buffalo, N. Y. Filed May 18, 1931.

The representation of the valve is disclaimed apart from the mark as shown.
For Tire Valves.
Claims use since Jan. 3, 1931.

Ser. No. 317,396. THE HOLLAND MFG. CO., Baltimore, Md. Filed July 28, 1931.

SAN-I-TACKS

No claim is made to the word "Tacks" apart from the mark as shown.
For Upholster Tacks.
Claims use since Nov. 1, 1930.

Ser. No. 317,583. DOROTHY ROSE YEIDEL, Chicago, Ill. Filed Aug. 1, 1931.

JIFFY

For Drapery and Curtain Hooks.
Claims use since July 8, 1931.

CLASS 15

Oils and Greases

Ser. No. 313,244. CHARLES JOHANNING, Richmond, Ind. Filed Apr. 11, 1931.

No claim is made to the words "Gas" and "Oils" apart from the trade-mark as shown. The lining on the drawing indicates the colors blue and orange.
For Lubricating Motor Oils, Lubricating Grease, Gasoline Motor Fuel, Kerosene Motor Fuel, Kerosene for Household and Domestic Uses, Distillate Motor Fuel, Distillate Furnace Fuel, Gas Oil Furnace Fuel, Fuel Oil Furnace Fuel, Cleaner's Naphtha for Household Uses, and Cleaner's Naphtha for Dry-Cleaning Plants.
Claims use since Apr. 6, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 312,023. WEST COAST KALSOMINE CO., West Berkeley, Calif. Filed Mar. 11, 1931.

SANITINT

For Cold Water Paint, Stucco Paint, and Wall Colors in the Nature of Paint Pigments and Painter's Wall Size.
Claims use since Nov. 1, 1930.

Ser. No. 313,483. AMERICAN PAINT CO., Chicago, Ill. Filed Apr. 14, 1931.

DIAX

For Paint Enamels.
Claims use since July, 1926.

Ser. No. 314,169. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed May 4, 1931.

GREEN ROOSTER PROTECTIVE INDUSTRIAL COATINGS
PABCO PRODUCTS

The drawing is lined to indicate the color green. No claim is made to the words "Protective Industrial Coatings" and "Products" apart from the mark as shown.
For Dry and Ready-Mixed Paints and Paint Enamels.
Claims use since July 9, 1930.

Ser. No. 315,078. ADAMS WAX PRODUCTS MFG. INC., St. Paul, Minn. Filed May 27, 1931.

TERRAZZINE

For Polishing Preparation for the Treatment of Terrazzo and Cement Floors.
Claims use since March, 1926.

Ser. No. 315,692. MONAD PAINT AND VARNISH COMPANY, Philadelphia, Pa. Filed June 11, 1931.

COL-O-JAR

For Colors in Oil for Paints, Paint Pastes, or Paint Pigment.
Claims use since Apr. 15, 1931.

Ser. No. 317,142. VESTAL CHEMICAL COMPANY, St. Louis, Mo. Filed July 20, 1931.

TRAZ-COTE

No exclusive claim being made to the word "Cote" apart from the mark shown.
For Floor Preparations—Namely, Floor Waxes, Floor Polishes, Floor Paints, and a Preparation in the Nature of a Paint or Varnish for Sealing and Finishing Surfaces of Floors.
Claims use since May 1, 1931.

Ser. No. 317,174. THE LASTING PRODUCTS CORPORATION, Baltimore, Md. Filed July 21, 1931.

Paint Masters

No claim is made herein to the word "Paint" apart from the mark as shown on the drawing.
For Dry, Paste, and Ready-Mixed Paints; Paint Enamels, Prepared Shellacs, Varnishes, Lacquers, Paint Thinners, Paint Oils, Paint Pigments, Putties, and Wood and Metal Fillers.
Claims use since January, 1928.

Ser. No. 317,626. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Aug. 4, 1931.

TUNED PALETTE

For Tempera Colors and Water Colors.
Claims use since Dec. 18, 1930.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 316,153. FLEXIBLE SADDLES LTD., Tyseley, England. Filed June 23, 1931.

DRILASTIC

For Cycle, Motor-Cycle, and Similar Saddles Having Seats Composed Wholly or Chiefly of India-Rubber, or of India-Rubber Compound or of Leather.
Claims use since May, 1923.

Ser. No. 317,010. F. O. SCHOEDINGER, Columbus, Ohio. Filed July 16, 1931.

FOSCO

For Motor Vehicle Heaters Utilizing Hot Fluids Developed by the Operation of Vehicle Engines.
Claims use since Aug. 10, 1929.

Ser. No. 317,498. AUTO RADIATOR MFG. COMPANY, Chicago, Ill. Filed July 31, 1931.

ZESTO

For Automobile Heaters Utilizing Hot Water from the Engine.
Claims use since July 17, 1931.

Ser. No. 317,630. CASCO PRODUCTS CORPORATION, Bridgeport, Conn. Filed Aug. 4, 1931.

CASCO

For Fender Guides for Motor Vehicles.
Claims use since June 15, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 303,663. B. F. STURTEVANT COMPANY, Hyde Park, Boston, Mass. Filed July 19, 1930.

ROTOFORMER

For Motor Generators.
Claims use since Dec. 7, 1928.

Ser. No. 307,498. JAMES R. KEARNEY CORPORATION, St. Louis, Mo. Filed Nov. 3, 1930.

THANDERS

For Fuse Switches, Gang-Operated Switches, Horn-Gap Switches, Choke Coils, and Choke Coils and Switches Manufactured and Sold as Protective and Control Units for Use in Electric Power Transmission and Distribution Lines.
Claims use since Oct. 19, 1928.

Ser. No. 315,775. WILLIAMS, BROWN & EARLE, INC., Philadelphia, Pa. Filed June 12, 1931.

THE ROBBINS Cineola

For Electric Pick-Ups for Use with Phonograph Disc Records, Unitary Electric Audio Amplifying Mechanism, and Unitary Electric Sound Projection Devices.
Claims use since Apr. 9, 1931.

Ser. No. 315,848. KNAPP-MONARCH COMPANY, Belleville, Ill. Filed June 15, 1931.

"ENDURO"

For Electrical Heating Elements for Electric Heaters, Grill Stoves, Hot Plates, Flat Irons, Heat Pads for General Use, Waffle Irons, Corn Poppers, Bread Toasters, Curling Irons, Hair Dryers, Therapeutic Lamps, Infra Red Ray Lamps, Egg Cookers, and Heating Fans.
Claims use since Apr. 15, 1931.

Ser. No. 317,054. THE RUDOLPH WURLITZER COMPANY, Cincinnati, Ohio. Filed Aug. 4, 1931.

WURLITZER

For Radio Receiving Sets and Component Parts Thereof Consisting of Loud Speakers, Transformers, Fixed and Variable Condensers; and Radio Television Receiving Sets.
Claims use since Nov. 1, 1924.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 311,939. SUBERIT FABRIK A.-G., Mannheim-Rheinau, Germany. Filed Mar. 9, 1931.

Suberit

For Hockey, Cricket, and Bowling Balls; Fishing Bobs and Corks, Grips and Handles for Fishing Poles, and Play Balls.
Claims use since Oct. 27, 1900.

Ser. No. 316,969. JOHN FRANK JOHNSON, Spokane, Wash. Filed July 15, 1931.

ST. ANDREWS

For Board Games Played With Pieces.
Claims use since Apr. 15, 1931.

Ser. No. 316,970. JOHN FRANK JOHNSON, Spokane, Wash. Filed July 15, 1931.

SHAUNEE GOLF

No claim is made for the word "Golf" apart from the mark as shown.
For Board Games Played With Pieces.
Claims use since Apr. 15, 1931.

Ser. No. 317,015. WM. H. VANDERHERCHEN, INC., Philadelphia, Pa. Filed July 16, 1931.

VAN

For Golf Bags.
Claims use since Apr. 11, 1929.

Ser. No. 317,042. THE ALFRED JOHNSON SKATE COMPANY, Chicago, Ill. Filed July 17, 1931.

Flash

For Ice Skates.
Claims use since Feb. 16, 1924.

Ser. No. 317,485. FRANK S. SACHS, doing business as The Dominettes Co., Detroit, Mich. Filed July 30, 1931.

DOMINETTES

For Table Board Game Played with Individual Indicia Distinguished Pieces Similar to Dominoes.
Claims use since Jan. 20, 1931.

Ser. No. 317,488. UNITED STATES GAME CORPORATION, Boston, Mass. Filed July 30, 1931.

TOUCHDOWN

For Table Board Games.
Claims use since June 3, 1931.

CLASS 23

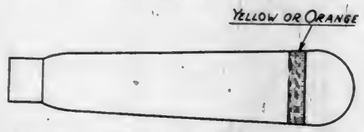
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 290,926. AUTOGRAPHIC REGISTER COMPANY, Hoboken, N. J. Filed Oct. 11, 1929.

AUTOGRAPHIC

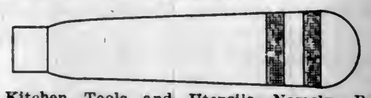
For Typewriter-Paper Supports in the Form of Containers or Boxes Carrying Paper in Rolled or Folded Form to be Led Over the Table of the Typewriter, and Attachments in the Form of Aligning Devices and Paper Lifting Devices Mounted on the Typewriter.
Claims use since Oct. 1, 1926.

Ser. No. 303,081. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 303,086. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 311,364. J. A. CAMPBELL CO., Long Beach, Calif. Filed Feb. 24, 1931.

MIST-D-FIER

For Liquid and Gas Separating Apparatus.
Claims use since Oct. 1, 1928.

Ser. No. 316,051. THE PREMIER CO. INC., New York, N. Y. Filed June 19, 1931.



Applicant claims ownership of trade-marks registered under Certificates No. 152,485, dated Feb. 28, 1922, and No. 284,274, dated June 23, 1931. No claim is made to the exclusive use of the words "Custom Built Blades and Made to Fit Your Beard" apart from the mark as shown in the drawing. No claim is made to the representation of the carton.
For Razor Blades.
Claims use since June 1, 1931.

Ser. No. 316,404. BRAUN GEAR CORPORATION, Brooklyn, N. Y. Filed June 29, 1931.

BRAWNY —GEARS—

No claim is made to the word "Gears" apart from the mark shown in the drawing.
For Transmission and Differential Gears, Engines, and Timing Gears.
Claims use since 1908.

Ser. No. 316,481. EMERSON & STEVENS MFG. CO. INC., Oakland, Me. Filed June 30, 1931.

SMUGGLER SCYTHE

The word "Scythe" is disclaimed apart from the mark shown.
For Scythes.
Claims use since 1890.

Ser. No. 317,097. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., and New York, N. Y. Filed July 18, 1931.



For Sewing Machines, Their Parts and Attachments.
Claims use since July 14, 1931.

Ser. No. 317,154. THE BUMP PAPER FASTENER COMPANY, La Crosse, Wis. Filed July 21, 1931.



The words "La Crosse, Wisconsin" are disclaimed apart from the mark as shown.
For Mechanical Paper Fasteners.
Claims use since June 14, 1911.

Ser. No. 317,291. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 25, 1931.



The trade-mark consists in a silver color band near the free end of the handles of the goods as indicated by the lining shown in the drawing. The representation of the handle, the legend "Silver Color," and the lead lines thereof are disclaimed.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers, Egg Beaters, Covers and Bowls (Sets), Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Mechanical Flour Sifters.
Claims use since May, 1931.

Ser. No. 317,420. S. L. ALLEN & CO., INC., Philadelphia, Pa. Filed July 29, 1931.

Lifetime

For Hand Trowels and Weeders.
Claims use since July 22, 1931.

Ser. No. 317,555. THOMAS H. FROST, Boston, Mass. Filed Aug. 1, 1931.

JACK FROST

For Safety Razors and Safety Razor Blades.
Claims use since July 25, 1931.

Ser. No. 317,642. HULSE MANUFACTURING COMPANY, INC., Geneva, N. Y. Filed Aug. 4, 1931.

HUMCO

For Machines for Marking Golf Balls.
Claims use since July 15, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 277,195. AUTOMATIC WASHER COMPANY, Newton, Iowa. Filed Dec. 26, 1928.

AutoMatic DUO-DISC

The word "Automatic" is disclaimed apart from the mark as shown.
For Clothes Washing Machines.
Claims use since Nov. 1, 1928.

Ser. No. 317,607. KLEVER-WAY PRODUCTS COMPANY, Cleveland, Ohio. Filed Aug. 3, 1931.

KLEVER-WAY

For Dry Cleaning Machines.
Claims use since July 13, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 311,153. NATIONAL PAPER PROCESS COMPANY, INC., New York, N. Y. Filed Feb. 17, 1931.

ORTHO-KROME

For Moving Picture Screens.
Claims use since Nov. 26, 1930.

Ser. No. 315,388. CLUM MANUFACTURING COMPANY, Milwaukee, Wis. Filed June 4, 1931.

TEL-A-CHARGE

For Battery Charge Indicators.
Claims use since May 6, 1931.

Ser. No. 316,689. THE TELEVATOR CORPORATION, New York, N. Y. Filed July 6, 1931.

TELESTILE

For Apparatus for Counting Persons Passing a Certain Point.
Claims use since June 15, 1931.

Ser. No. 317,336. SCHULTE OPTICAL CO., Chicago, Ill. Filed July 25, 1931.



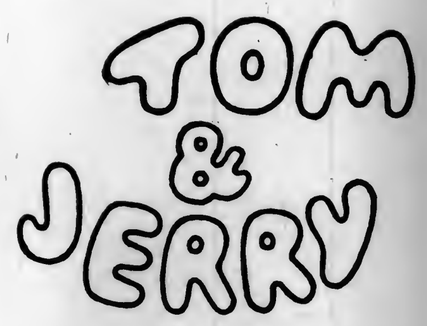
No claim is made to the word "Ray" apart from the mark as shown in the drawing.
For Lenses for Eyeglasses, Goggles, and Spectacles.
Claims use since June 16, 1931.

Ser. No. 317,482. L. M. PRINCE CO., Cincinnati, Ohio. Filed July 30, 1931.

COFLEXIC

For Optical Lenses.
Claims use since Mar. 23, 1931.

Ser. No. 317,748. THE VAN BEUREN CORPORATION, New York, N. Y. Filed Aug. 6, 1931.



For Motion-Picture Films for Use by Motion-Picture Exhibitors.
Claims use since June 25, 1931.

Ser. No. 317,749. THE VAN BEUREN CORPORATION, New York, N. Y. Filed Aug. 6, 1931.



For Motion-Picture Films for Use by Motion-Picture Exhibitors.
Claims use since June 25, 1931.

CLASS 27

Horological Instruments

Ser. No. 316,761. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed July 9, 1931.

WOODSIDE

For Watches.
Claims use since June 1, 1930.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 317,050. PHILCO TRADING CO., INC., Philadelphia, Pa. Filed July 17, 1931.

PHILCO

For Emblematic Rings, Lavallières, Wristlets, Emblematic Bar Pins, Made of or Plated with Precious Metal.
Claims use since June 23, 1931.

Ser. No. 317,606. KAPPA OMICRON PHI, HOME ECONOMICS FRATERNITY, Maryville, Mo. Filed Aug. 3, 1931.

KΟΦ

For Fraternity Badges, Lapel Buttons; Scarf, Lapel, and Breast Pins; Cuff Links, Tie Clasps, Charms, Finger Rings, Belt Buckles, and Ornamental Shields, All of Precious Metal.
Claims use since 1923.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 317,705. COHN & ROSENBERGER, INC., New York, N. Y. Filed Aug. 6, 1931.

ROMANTIC

For Necklaces, Bracelets, Earrings, Finger Rings, Brooches, Barpins, and Ornamental Hatpins; and Pins for Dress Ornaments, Ornamental Pins and Buckles for Decorating Hats, Ornamental Shoe Buckles, and Hair Ornaments Made Wholly or in Part of or Plated with Precious Metal.
Claims use since July 15, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 313,408. ERNEST EGBERT SANDERS, Detroit, Mich. Filed Apr. 14, 1931.

CHILLY BOY

For Refrigerators, Both Storage and Display.
Claims use since Mar. 1, 1928.

Ser. No. 317,832. CARL MEYER WEINHEIMER, Buffalo, N. Y. Filed Aug. 6, 1931.

COMBINATOR

For Refrigerators.
Claims use since May 16, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 316,200. GOLD MEDAL FOLDING FURNITURE CO., Racine, Wis. Filed June 24, 1931. Under section 5b of the act of 1905 as amended in 1920.

"GOLD MEDAL"

Applicant claims ownership of Ct. #101,939 registered Jan. 19, 1915, under the 10-year proviso of the act of Feb. 20, 1905.
For Couch Hammocks, Gliders, Lawn and Porch Swings, and Lawn Hammocks.
Claims use since 1900.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 309,678. DRIVER-HARRIS COMPANY, Harrison, N. J. Filed Jan. 7, 1931.

DENSCAST

For Containers for Heat-Treating—Namely, Carburizing Boxes, Annealing Boxes, Heat-Treating Boxes, and Case Hardening Boxes.
Claims use since Nov. 19, 1930.

Ser. No. 311,505. ANTONI MUSZYNSKI, doing business as Metro Oil Burner Co., Easthampton, Mass. Filed Feb. 28, 1931.

METRO

For Oil Burners.
Claims use since Jan. 15, 1931.

Ser. No. 315,484. F. E. BERRY JR. & CO. INC., Boston, Mass. Filed June 6, 1931.

SOUND

For Window Ventilators Adapted for Attachment to the Windows of Buildings to Intercept, Absorb, and/or Deflect Sound Waves.
Claims use since Apr. 28, 1931.

Ser. No. 316,313. F. E. BERRY JR. & CO. INC., Boston, Mass. Filed June 26, 1931.

SILENTAIRE

For Window Ventilators Adapted for Attachment to Windows of Buildings to Intercept, Absorb, and/or Deflect Sound Waves.
Claims use since May 30, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 316,891. KEEP KLEAN COVER CO., INC., St. Louis, Mo. Filed July 13, 1931.

SPORTEX

For Tire Covers.
Claims use since Mar. 21, 1929.

Ser. No. 317,387. THE ASBESTOS TEXTILE COMPANY, New York, N. Y. Filed July 28, 1931.

AZTEC-FLEXIMOLD

For Brake Linings.
Claims use since June 1, 1929.

Ser. No. 317,795. CUP-LOK PACKING CO., Philadelphia, Pa. Filed Aug. 8, 1931.

CUP LOK

For Packing for Pumps, Valves, and Engines.
Claims use since July 29, 1931.

CLASS 37

Paper and Stationery

Ser. No. 310,857. CORN EXCHANGE NATIONAL BANK AND TRUST COMPANY, Philadelphia, Pa. Filed Feb. 9, 1931.



For Blank Checks.
Claims use since May, 1914.

Ser. No. 314,822. STANDARD DUPLICATOR CO., Pasadena, Calif. Filed May 20, 1931.

THE PRESS-O-GRAPH MAKES CLEAR RAPID COPIES

No claim is made to the words "Makes Clear Rapid Copies" apart from the mark shown.
For Duplicating Pads for Copying Written, Printed, and Typewritten Matter.
Claims use since May 12, 1931.

Ser. No. 316,712. PERKINS-GOODWIN COMPANY, New York, N. Y. Filed July 7, 1931.

TAG-O-LITE

No claim is made for the word "Tag" except when used in conjunction with the mark as shown.
For Paper to be Manufactured into Tags and Envelopes.
Claims use since June 1, 1931.

Ser. No. 316,715. WHITE & WYCKOFF MFG. CO., Holyoke and Riverside, Mass. Filed July 7, 1931.

LAFF-O-GRAMS

For Stationery, Writing and Printing Paper and Mailing Envelopes.
Claims use since June 5, 1931.

Ser. No. 316,943. SCOTT PAPER COMPANY, Chester, Pa. Filed July 14, 1931.



The word "Fibre" appearing on the drawing is hereby disclaimed apart from the mark as shown.
For Tissue, Creped and Absorbent Papers.
Claims use since Nov. 22, 1920.

Ser. No. 317,140. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed July 20, 1931.

"MUTSY"

For Correspondence Paper and Envelopes.
Claims use since May 25, 1931.

Ser. No. 317,213. MIDLAND PAPER COMPANY, Chicago, Ill. Filed July 22, 1931.

ALPHA

For Paper—Namely, Bond, Ledger, and Writing Paper.
Claims use since January, 1913.

CLASS 38

Prints and Publications

Ser. No. 304,098. FOSTER-GRANT COMPANY, INC., Leominster, Mass. Filed Aug. 1, 1930.

PYRALART

For Printed Wall Calendars.
Claims use since January, 1930.

Ser. No. 312,795. CHENEY BROTHERS, South Manchester, Conn. Filed Apr. 1, 1931.

Colormates

For Booklets Published from Time to Time.
Claims use since Feb. 19, 1931.

Ser. No. 312,985. ROSCOE FAWCETT, Minneapolis, Minn. Filed Apr. 6, 1931.

SCREEN ODDITIES

For Magazine Section Published Every Month.
Claims use since Mar. 1, 1931.

Ser. No. 315,568. GUSTAV P. G. SCHUETZE, Detroit, Mich. Filed June 8, 1931.



The words "World Illustrators" and "Detroit, U. S. A." are disclaimed apart from the mark shown on the drawing.
For Educational Texts with Illustrations.
Claims use since Sept. 1, 1929.

Ser. No. 315,956. WHITE & WYCKOFF MFG. CO., Holyoke and Riverside, Mass. Filed June 16, 1931.

DECORATONE

For Greeting and Announcement Cards.
Claims use since Mar. 27, 1931.

Ser. No. 316,637. GENERAL DRAFTING CO., INC., New York, N. Y. Filed July 6, 1931.

TOURS and DETOURS

For Bulletin or Magazine Issued from Time to Time.
Claims use since May 22, 1931.

Ser. No. 316,714. JAMES A. RICE, Chicago, Ill. Filed July 7, 1931.

The COIN MACHINE JOURNAL

For Periodical.
Claims use since June, 1931.

Ser. No. 316,847. THE FRANK A. MUNSEY COMPANY, New York, N. Y. Filed July 11, 1931.

RAILROAD MAN'S MAGAZINE

For Monthly Magazine.
Claims use since Dec. 1, 1929.

Ser. No. 317,078. THE FOREST PUBLISHING COMPANY, Chicago, Ill. Filed July 18, 1931.

THE COIN MACHINE JOURNAL

For Monthly Publication.
Claims use since May 1, 1931.

Ser. No. 317,237. THE ASSOCIATED PRESS, New York, N. Y. Filed July 23, 1931.

DIANA DANE

For Series of Cartoons.
Claims use since Mar. 17, 1931.

Ser. No. 317,408. SERVICE PUBLISHING CO., Washington, D. C. Filed July 28, 1931.

U.S. Navy Review
The National Maritime Newspaper

For Weekly Publication.
Claims use since July 21, 1931.

CLASS 39

Clothing

Ser. No. 263,078. ELLIOTT KNITTING MILLS, INC., Hickory, N. C. Filed Mar. 13, 1928.

SUB-STAN HOSIERY

Applicant disclaims the exclusive right to the use of the word "Hosiery."
For Hosiery.
Claims use since July 2, 1927.

Ser. No. 298,914. E. E. TAYLOR CORPORATION, Boston, Mass. Filed Apr. 15, 1930.

O-SO

For Men's, Women's, and Children's Boots and Shoes Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Material.
Claims use since Jan. 16, 1906.

Ser. No. 309,201. THE GILBERT SHOE CO., Thiensville, Wis. Filed Dec. 20, 1930.

Sun-Ra

For Leather Shoes.
Claims use since Nov. 20, 1930.

Ser. No. 311,490. RUFUS W. SCOTT COMPANY, New York, N. Y. Filed Feb. 26, 1931.

AB-SHEEN

Applicant hereby disclaims the exclusive right to the use of the word "Sheen" except as the same is used in connection with the other features of the mark shown on the drawing.
For Hosiery.
Claims use since Dec. 15, 1930.

Ser. No. 311,756. SEMINOLE MANUFACTURING COMPANY, McAlester, Okla. Filed Mar. 4, 1931.

LINOTEX

For Men's and Boys' Pants and Suits.
Claims use since December, 1930.

Ser. No. 316,235. GORDON & SCHUVAL, INC., New York, N. Y. Filed June 23, 1931.

"GORVAL"

For Undergarments for Women and Girls—Namely, Step-Ins (Underdrawers), Chemises, Panties, Dance Sets (Combining Bandeaux with Step-Ins or Panties), Petticoats, Slips, Nightgowns, and Pajamas.
Claims use since December, 1928.

Ser. No. 316,491. JULIUS KAYSER & CO., New York, N. Y. Filed June 30, 1931.

Demi-Heel

The word "Heel" is hereby disclaimed apart from the mark as shown on the drawing.
For Hosiery.
Claims use since May 1, 1931.

Ser. No. 316,718. ARTCRAFT SILK HOSIERY MILLS, INC., Philadelphia, Pa. Filed July 8, 1931.

"Tri-length"

For Hosiery.
Claims use since April, 1931.

Ser. No. 316,767. JOSEPH S. COHEN AND SONS' CO. INC., New York, N. Y. Filed July 9, 1931.

FOR ALL DAY WEAR
Winnie Mae
FROCKS

No claim is made to the exclusive right to the words "For All Day Wear" nor "Frocks" apart from the mark as shown in the drawing.
For Women's and Children's Dresses, Suits, Pajamas, Overalls, and Smocks.
Claims use since July 2, 1931.

Ser. No. 316,835. W. L. DOUGLAS SHOE COMPANY, Montello, Brockton, Mass. Filed July 11, 1931.

Gloria Gay

For Men's, Women's, and Children's Boots, Shoes, and Slippers Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Material.
Claims use since July 19, 1931.

Ser. No. 317,115. HAHN DEPARTMENT STORES, INC., Wilmington, Del., and New York, N. Y. Filed July 20, 1931.

Ima

For Hosiery.
Claims use since June 20, 1931.

Ser. No. 317,135. RHEA MANUFACTURING COMPANY, Milwaukee, Wis. Filed July 20, 1931.

Dotty Dean Dresses
NON FADE

Applicant hereby disclaims exclusive use of the words "Dresses" and "Non-Fade."
For Dresses, Aprons, and Smocks for Children, Girls, and Women.
Claims use since July 1, 1930.

Ser. No. 317,288. SCHNEIDERMAN BROS., New York, N. Y. Filed July 24, 1931.

Little Brother

For Boys', Infants', Young Men's, and Men's Suits, Overcoats and Topcoats.
Claims use since January, 1928.

Ser. No. 317,323. LUXITE SILK PRODUCTS CO., Milwaukee, Wis. Filed July 25, 1931.

Lux Flex

For Underwear for Men and Women.
Claims use since July 16, 1931.

Ser. No. 317,395. HAYMARKET CLOTHING CO., Boston, Mass. Filed July 28, 1931.

Stormaway

For Men's Overcoats, Topcoats, and Suits.
Claims use since Jan. 27, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 316,782. PIERRE ROOS, New York, N. Y. Filed July 9, 1931.

PIERRE

For Hair Goods—Namely, Wigs, Transformations, Toupees, Braids, and Curls.
Claims use since 1904.

CLASS 41

Canes, Parasols, and Umbrellas

Ser. No. 317,430. FOLLMER CLOGG & CO., New York, N. Y., Philadelphia and Lancaster, Pa., and San Francisco, Calif. Filed July 29, 1931.

NEW ERA

For Umbrellas and Parasols and Attachments and Covers Therefor.
Claims use since Jan. 1, 1901.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 298,005. BIANCHINI, FERIER, Lyon, France. Filed Mar. 28, 1930.

GYPTIANE

For Piece Goods of Silk and Artificial Silk.
Claims use since Oct. 6, 1927.

Ser. No. 304,249. THE PILE FABRIC MANUFACTURING COMPANY, (BRADFORD) LIMITED, Bradford, England. Filed Aug. 5, 1930.



For Furnishing Fabrics Comprising Cloth Made of Wool, Worsted, or Hair.
Claims use since Feb. 25, 1930.

Ser. No. 316,369. MAYANART, New York, N. Y. Filed June 27, 1931.

MAYANART

For Table Linens, Spreads and Sets for Table, Table and Bridge Sets, Bureau Runners, Curtains, Bedspreads, Wall Draperies, Linen Towels, Pillow Cases, Textile Rugs, and Textile Bench Drapes in the Piece.
Claims use since June 17, 1931.

Ser. No. 317,200. H. ERNSTBERGER & CO., New York, N. Y. Filed July 22, 1931.

LUCIA

For Woolen Piece Goods.
Claims use since Oct. 29, 1930.

Ser. No. 317,263. WAMSUTTA MILLS, New Bedford, Mass. Filed July 23, 1931.

SUPERCALE

For Cotton Piece Goods, Pillow Cases and Sheets.
Claims use since July 3, 1931.

Ser. No. 317,285. PUTNAM KNITTING CO., Cohoes, N. Y. Filed July 24, 1931.



Applicant makes no claim to the descriptive expression "Dish Cloths" and "Wash Your Dishes."
For Knitted Dish Cloths.
Claims use since Feb. 5, 1925.

Ser. No. 317,704. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed Aug. 6, 1931.

Tea Time

For Cotton Piece Goods.
Claims use since July 8, 1931.

Ser. No. 317,756. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Aug. 7, 1931.

All-Occasion

For Pile Fabrics in the Piece.
Claims use since July 28, 1930.

Ser. No. 317,757. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Aug. 7, 1931.

Versatility

For Pile Fabrics in the Piece.
Claims use since July 28, 1931.

Ser. No. 317,794. COUDURIER, FRUCTUS & DESCHER, Lyon, France. Filed Aug. 8, 1931.

BAGHEERA

For Silks and Velvets in the Piece.
Claims use since June 4, 1931.

Ser. No. 317,816. H. R. MALLINSON & COMPANY, INC., New York, N. Y. Filed Aug. 8, 1931.

BARBARIC

For Silk Piece Goods.
Claims use since June 15, 1931.

Ser. No. 317,884. AMERICAN WOOLEN COMPANY, Boston, Mass., and New York, N. Y. Filed Aug. 12, 1931.

B..4001

For Worsteds in the Piece.
Claims use since Sept. 22, 1930.

CLASS 43

Thread and Yarn

Ser. No. 311,491. RUFUS W. SCOTT COMPANY, New York, N. Y. Filed Feb. 26, 1931.

AB-SHEEN

Applicant hereby disclaims the exclusive right to the use of the word "Sheen" except as the same is used in connection with the other features of the mark shown on the drawing.
For Yarn.
Claims use since Dec. 15, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 309,817. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass. Filed Jan. 10, 1931.

Filtex

For Surgical Plasters, the Specific Use of Such Plasters Being to Serve as Unmedicated Vehicles or Carriers for Such Medications, Ointment, Salve, or Pharmaceutical Preparations as May be Desired.
Claims use since Dec. 27, 1930.

CLASS 45

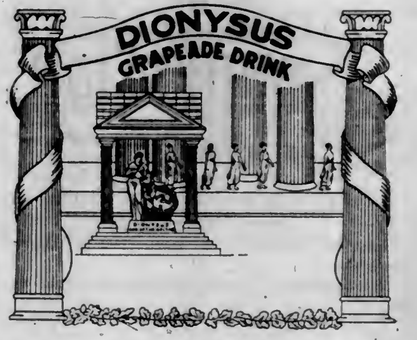
Beverages, Nonalcoholic

Ser. No. 316,861. ORANGE DEW CORPORATION, Hollywood, Calif. Filed July 10, 1931.

O-ran-Gee

For Non-Alcoholic, Maltless Powder for Making Soft Drinks.
Claims use since June 11, 1931.

Ser. No. 316,971. DEMETRIOS N. JUMES, doing business as Dionysus Co., Los Angeles, Calif. Filed July 15, 1931.



No claim is made to the words "Grapeade Drink" apart from the mark as shown.
For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since May 6, 1931.

Ser. No. 317,048. ORCHARD PRODUCTS COMPANY, Chicago, Ill. Filed July 17, 1931.

Sodagood

The drawing is lined for shading only.
For Nonalcoholic, Maltless Flavoring Syrup and Concentrate Used in the Preparation of Soft Drinks.
Claims use since Jan. 26, 1927.

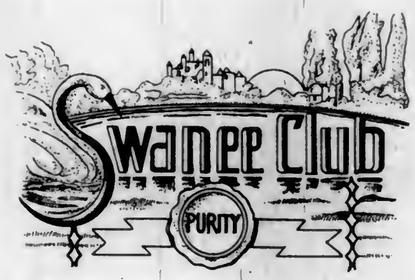
Ser. No. 317,411. SILVERWOOD MINERAL SPRINGS CO., INC., Silverwood, Ind. Filed July 28, 1931.

SILVERWOOD



The drawing is lined for red, green, and blue.
For Mineral Spring Water.
Claims use since June 16, 1931.

Ser. No. 317,449. BALDWIN BEVERAGES, INC., Long Island City, N. Y. Filed July 30, 1931.



No claim being made to the word "Purity" apart from the mark shown.
For Nonalcoholic, Carbonated Beverages Sold as Soft Drinks.
Claims use since July 19, 1930.

Ser. No. 317,549. BON TON BEVERAGES, INC., Chicago, Ill. Filed Aug. 1, 1931.

POP-EYE PUNCH

No claim is made to the word "Punch" except in the association shown on the drawing.
For Nonalcoholic, Maltless Beverage Sold as a Soft Drink and Syrups, Extracts, and Concentrates for Making the Same.
Claims use since July 3, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 292,786. BEAR-STEWART CO., Chicago, Ill. Filed Nov. 23, 1929.

KO-KO-FUDGE

No claim is made to the exclusive use of the word "Fudge" apart from the mark as shown in the drawing.
For Base for the Making of Chocolate Icing for Cakes and Pastries, a Preparation Composed of Cocoa, Cocoa Butter, and Edible Vegetable Fats, Which Added to Sugar Icings, Cake, Pastry, and Cookie Batters, Gives These Products a Natural Chocolate Flavor and Color.
Claims use since Oct. 8, 1929.

Ser. No. 292,787. BEAR-STEWART CO., Chicago, Ill. Filed Nov. 23, 1929.



No claim is made herein to the exclusive use of the words "Likor" and the geographical term "Chicago" apart from the mark shown in the drawing.
For Base for the Making of Icing for Cakes and Pastries, a Preparation Composed of Cocoa, Cocoa Butter, and Edible Vegetable Fats, Which Added to Sugar Icings, Cake, Pastry, and Cookie Batters, Gives These Products a Natural Chocolate Flavor and Color.
Claims use since Jan. 1, 1908.

Ser. No. 302,077. S. STAMOULES & CO., San Francisco and Modesto, Calif. Filed May 31, 1930.

S S BRAND

No claim is made to the word "Brand".
For Fresh Melons—Namely, Cantaloupes, Persian Melons, and Honeyballs.
Claims use since July 26, 1927.

Ser. No. 302,765. ISIDORE BOHRER, Los Angeles, Calif. Filed June 24, 1930.

Bohrer

No claim is made to the representation of the label as such, apart from the mark shown on the drawing.
For Nuts in Their Natural State, Also Shelled, Salted, Roasted, Spiced, and Pickled; Candies and Bonbons, Nut Candies.
Claims use since Feb. 7, 1930.

Ser. No. 303,098. THE FRED DOLD & SONS PKG. CO., Wichita, Kans. Filed July 3, 1930.

MASTER BRAND MEAT KRISPIES

No claim is made to the words "Brand" and "Meat" apart from the mark shown in the drawing.
For Hog and Poultry Foods.
Claims use since Apr. 15, 1930.

Ser. No. 305,260. C. W. ANTRIM & SONS, Richmond, Va. Filed Sept. 3, 1930.

COMO COFFEE

For Coffee.
No claim is made to the word "Coffee" apart from the mark as shown.
Claims use since Mar. 2, 1907.

Ser. No. 305,514. THE COLORADO MILLING & ELEVATOR CO., Denver, Colo. Filed Sept. 10, 1930.

GOLD KING FLOUR



No claim is made herein to the word "Flour" apart from the mark shown in the drawing.
For Wheat Flour.
Claims use since January, 1930.

Ser. No. 310,858. THE CURTISS CANDY COMPANY, Chicago, Ill. Filed Feb. 9, 1931.

Real Mint Baby Ruth Gum

The words "Real Mint Gum" do not form a part of the registration sought apart from the trade-mark shown in the drawing.
For Chewing Gum.
Claims use since May 1, 1930.

Ser. No. 310,926. VON BREMEN, ASCHE, DE BRUYN, INC., New York, N. Y. Filed Feb. 10, 1931.

BANDOR

The drawing is lined for gold. The applicant is the owner of registrations 77,934, dated May 17, 1910, and 78,013, dated May 24, 1910.
For Canned Mushrooms, Canned Fruits, Olive Oil in Tins and Bottles, Anchovies in Tins and Bottles, Canned Pimientos, Canned Sardines, Canned Fish, Preserved Fruit in Glass, Canned Poultry, Canned Vegetables.
Claims use since February, 1909.

Ser. No. 311,694. PHILADELPHIA MALT EXTRACT CO., Philadelphia, Pa. Filed Mar. 3, 1931.

HOLLAND'S MALT

No claim is made to the words "Holland's Malt" except in the association and relation shown.
For Malt Syrup.
Claims use since 1925.

Ser. No. 312,607. THE LACCUM, INC., Brooklyn, N. Y. Filed Mar. 27, 1931.

LACCUM

For Fermented Milk.
Claims use since Mar. 15, 1931.

Ser. No. 312,639. BUFFALO MALT CO. INC., Buffalo, N. Y. Filed Mar. 28, 1931.

GOLDEX

For Malt Extracts.
Claims use since Dec. 31, 1930.

Ser. No. 313,665. EZRA W. MARTIN COMPANY, East Lampeter, Pa. Filed Apr. 22, 1931.



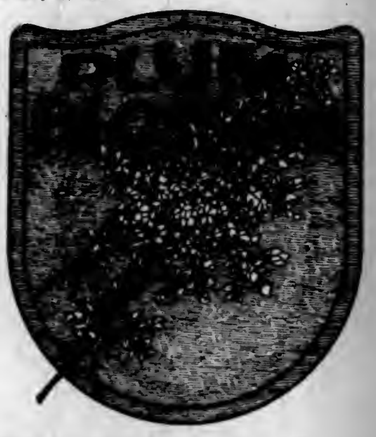
For Butter.
Claims use since Apr. 20, 1931.

Ser. No. 314,215. SCLAFANI BROTHERS, Brooklyn, N. Y. Filed May 5, 1931.



The word "Brand" is disclaimed except in the association shown.
For Olive Oil.
Claims use since 1905.

Ser. No. 314,338. MAYFLOWER MILLS, Fort Wayne, Ind. Filed May 8, 1931.



The lining indicating shading only.
For Wheat Flour.
Claims use since Sept. 11, 1929.

Ser. No. 314,766. LAMONT, CORLISS & COMPANY, New York, N. Y. Filed May 19, 1931.

BRACER

Applicant is the owner of registered marks Nos. 109,613 and 159,194.
For Prepared Edible Chocolate.
Claims use since Mar. 4, 1915.

Ser. No. 315,102. THEM KOLLIAS, Santa Ana, Calif. Filed May 27, 1931.

Hythos

For Malt Syrup for Food Purposes.
Claims use since April, 1929.

Ser. No. 315,447. EDMANDS COFFEE COMPANY, Boston, Mass. Filed June 5, 1931.



For Coffee and Tea.
Claims use since July 1, 1914.

Ser. No. 315,607. THE RENOVENE COMPANY, doing business as Velmo Company, New York, N. Y. Filed June 9, 1931.

VELMO

For Food Powder Made of Chocolate and Other Flavors Used for Making Puddings and Other Desserts.
Claims use since Mar. 1, 1931.

Ser. No. 315,710. WARREN OYSTER CO. INC., Warren, R. I. Filed June 11, 1931.

YANKEE

For Fresh Oysters.
Claims use since Sept. 1, 1930.

Ser. No. 315,808. LOUIS STORCK, doing business as Storck Baking Company, Parkersburg, W. Va. Filed June 13, 1931.



For Bread, Cakes, and Pies.
Claims use since Oct. 15, 1920.

Ser. No. 315,854. THE ROBT. F. MACKENZIE CO., Cleveland, Ohio. Filed June 15, 1931.

"D" LIGHT

For Candy.
Claims use since Jan. 1, 1931.

Ser. No. 316,042. MARTHA LEWIS FRUIT PRODUCTS COMPANY, Los Angeles, Calif. Filed June 19, 1931.

GOLDEN SUNSHINE

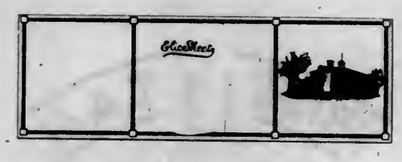
For Citrus Fruit Juice Powder Used as a Food Flavoring Ingredient.
Claims use since June 4, 1931.

Ser. No. 316,444. NORTHWESTERN YEAST COMPANY, Chicago, Ill. Filed June 29, 1931.

YEAST TEASY

The word "Yeast" is disclaimed apart from the mark as shown in the drawing.
For Chocolate Covered Caramels Containing Yeast.
Claims use since June 24, 1931.

Ser. No. 316,604. MARTHA WASHINGTON CANDIES COMPANY, Chicago, Ill. Filed July 3, 1931.



For Chocolate, Taffy, and Crackers or Biscuits.
Claims use since May 26, 1931.

Ser. No. 316,783. PILGRIM FOOD PRODUCTS COMPANY, Boston, Mass. Filed July 9, 1931.

Chow-Mato

For Relishes or Sauces for Food, and Particularly Meats, Fish, Beans, Etc.
Claims use since October, 1930.

Ser. No. 316,858. TASTY BAKING COMPANY, Philadelphia, Pa. Filed July 11, 1931.



For Rolls, Cinnamon Cake, Sticky Buns, Coffee Cakes, and Other Unnamed Small Cakes.
Claims use since July 7, 1931.

Ser. No. 316,895. MUSCO & SCLAFANI, New York, N. Y. Filed July 13, 1931.



For Dried Beans.
Claims use since June 1, 1931.

Ser. No. 316,983. UNITED EGG PURCHASING CORP., New York, N. Y. Filed July 15, 1931.



The representation of the egg as shown on the drawing is hereby disclaimed apart from the mark as shown on the drawing.
For Eggs.
Claims use since Feb. 1, 1931.

Ser. No. 317,196. COLOMBO EXTRACT CO., New York, N. Y. Filed July 22, 1931.



The word "Genuine" is disclaimed apart from the mark shown in the drawing.
For Malt Syrup.
Claims use since July 1, 1926.

Ser. No. 317,198. COMSTOCK CANNERIES, INC., Newark, N. Y. Filed July 22, 1931.

RED RING

For Canned Fruits, Canned Vegetables, and Canned Berries.
Claims use since Oct. 10, 1911.

Ser. No. 317,539. ROY M. WALLACE, doing business as Old Southern Delicacies Co., Washington, D. C. Filed July 31, 1931.

Old Kettle

For Hominy.
Claims use since July 1, 1930.

Ser. No. 317,591. THE BALTIMORE BUTTERINE COMPANY, Baltimore, Md. Filed Aug. 3, 1931.

TASTI-AM

For Sandwich Spread.
Claims use since July 28, 1931.

Ser. No. 317,629. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Aug. 4, 1931.

BIOTOL

For Edible Fish Oil.
Claims use since June 11, 1931.

Ser. No. 317,698. BELLINGHAM CANNING CO., South Bellingham, Wash. Filed Aug. 6, 1931.

Supper time!

For Canned Salmon.
Claims use since July 25, 1931.

Ser. No. 317,728. NOBLESVILLE MILLING CO., Noblesville, Ind. Filed Aug. 6, 1931.

Rexota

For Wheat Flour.
Claims use since June, 1911.

Ser. No. 317,789. BEATRICE CREAMERY COMPANY, Chicago, Ill. Filed Aug. 8, 1931.

Smoozie

For Ice Cream Bar.
Claims use since July 1, 1931.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 316,828. SIR ROBERT BURNETT & COMPANY, LIMITED, London, England. Filed July 11, 1931.



No claim is made to any of the words appearing in the drawing with the exception of applicant's name, signature, and the words "Vauxhall Distillery".
For Gin.
Claims use since June 2, 1920.

Ser. No. 316,829. SIR ROBERT BURNETT & COMPANY, LIMITED, London, England. Filed July 11, 1931.



The lines of the drawing are for shading only. No claim is made to the words appearing on the drawing with the exception of applicant's name, signature, and the words "White Satin" and "Vauxhall Distillery".
For Gin.
Claims use since Dec. 31, 1907.

Ser. No. 316,830. SIR ROBERT BURNETT & COMPANY, LIMITED, London, England. Filed July 11, 1931.



No claim is made to any of the words appearing on the drawing with the exception of applicant's name, signature, and the words "Vauxhall Distillery".
For Gin.
Claims use since Sept. 1, 1898.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

SEPTEMBER 15, 1931

287,055. TRAVELING BAGS, LUGGAGE. MAJESTIC LEATHER GOODS CO., INC., New York, N. Y.
Filed February 4, 1931. Serial No. 310,729. PUBLISHED JUNE 23, 1931. Class 3.

287,056. TRAVELING BAGS; LUGGAGE FOR MEN AND WOMEN COMPRISING OXFORD BAGS, CLUB BAGS, GLADSTONE BAGS, RAILROAD BAGS, PULLMAN BAGS, KIT BAGS, SUIT CASES, SATCHELS, GRIPS, DRESSING CASES, HAT BOXES, AND HAND WARDROBE TRUNKS. MAJESTIC LEATHER GOODS CO., INC., New York, N. Y.
Filed February 4, 1931. Serial No. 310,730. PUBLISHED JUNE 30, 1931. Class 3.

287,057. RIDING EQUIPMENT AND ACCESSORIES—NAMELY, SPURS, SPUR CHAINS AND SPUR STRAPS. GEMSCO, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,658. PUBLISHED JUNE 23, 1931. Class 3.

287,058. HOUSEHOLD GLUE, CHINA AND GLASS CEMENT, WATERPROOF CEMENT, FABRIC SPECIAL CEMENT, LEATHER AND SHOE CEMENT, PLASTIC FILLER, AND FABRIC SPECIAL WATERPROOF CEMENT, ALL OF THESE GOODS BEING ADHESIVE CEMENTS. WEBB PRODUCTS COMPANY, INC., San Bernardino, Calif.
Filed April 22, 1931. Serial No. 313,689. PUBLISHED JUNE 23, 1931. Class 5.

287,059. FOOD PRODUCT FOR THE USE OF BAKERS, CONSISTING OF A MIXTURE OF FLOUR, BAKING POWDER, AND OTHER SUITABLE INGREDIENTS FOR USE IN PRODUCING A VARIETY OF CAKES. T. A. FAULDS CO., INC., Boston, Mass.
Filed April 25, 1931. Serial No. 313,776. PUBLISHED JUNE 23, 1931. Class 46.

287,060. LANTERN SLIDE BINDERS AND MOUNTING TAPE BOTH IN THE NATURE OF ADHESIVE TAPE AND ADHESIVE PHOTOGRAPHIC PASTE. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed April 27, 1931. Serial No. 313,835. PUBLISHED JUNE 23, 1931. Class 5.

287,061. GLUE. PACIFIC BONE COAL & FERTILIZING CO., San Francisco, Calif.
Filed April 29, 1931. Serial No. 313,967. PUBLISHED JUNE 23, 1931. Class 5.

287,062. POULTRY FEED. F. E. BOOTH COMPANY, INC., San Francisco, Calif.
Filed May 18, 1931. Serial No. 314,681. PUBLISHED JUNE 30, 1931. Class 46.

287,063. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,800. PUBLISHED JUNE 30, 1931. Class 46.

287,064. CAKES. NEW STANDARD BAKING COMPANY, Philadelphia, Pa.
Filed May 21, 1931. Serial No. 314,856. PUBLISHED JUNE 30, 1931. Class 46.

287,065. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,801. PUBLISHED JUNE 30, 1931. Class 46.

287,066. LEATHER. FRED RUEPING LEATHER CO., Fond du Lac, Wis.
Filed January 9, 1931. Serial No. 309,788. PUBLISHED JUNE 23, 1931. Class 1.

287,067. MOVING PICTURE FILMS. THEATRE SERVICE CORPORATION, New York, N. Y.
Filed January 9, 1931. Serial No. 309,790. PUBLISHED JULY 7, 1931. Class 26.

287,068. SNOW PLOWS. KLAUER MANUFACTURING COMPANY, Dubuque, Iowa.
Filed January 20, 1931. Serial No. 310,177. PUBLISHED JULY 7, 1931. Class 23.

287,069. TRACTION DEVICES FOR VEHICLES—NAMELY, VEHICLE ENDLESS TRACK AND WHEEL ASSEMBLIES AND PARTS THEREOF. THE MCNEIL BOILER COMPANY, Akron, Ohio.
Filed February 12, 1931. Serial No. 311,002. PUBLISHED JULY 7, 1931. Class 23.

287,070. COAL. LITTLE WAR CREEK COAL COMPANY, Charleston and Litwar, W. Va.
Filed February 17, 1931. Serial No. 311,150. PUBLISHED JUNE 30, 1931. Class 1.

287,071. SODA PULP. THE CHAMPION FIBRE COMPANY, Canton, N. C.
Filed March 2, 1931. Serial No. 311,595. PUBLISHED JUNE 30, 1931. Class 1.

287,072. CANDY. WILLIAM B. FUNDIS, doing business as Sallie Sweets, Pittsburgh, Pa.
Filed March 4, 1931. Serial No. 311,724. PUBLISHED JULY 7, 1931. Class 46.

287,073. ELECTRIC PERCOLATORS. LEYSE ALUMINUM COMPANY, Kewaunee, Wis.
Filed February 19, 1931. Serial No. 311,242. PUBLISHED JULY 7, 1931. Class 21.

287,074. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES, ETC. CUTLER-HAMMER, INC., Milwaukee, Wis.
Filed February 6, 1931. Serial No. 310,798. PUBLISHED JULY 7, 1931. Class 21.

287,075. FOUNTAIN AND DOUCHE SYRINGES. THE MARVEL COMPANY, New Haven Conn.
Filed February 27, 1931. Serial No. 311,531. PUBLISHED JULY 7, 1931. Class 44.

287,076. TEXTILE LININGS FOR CLOTHING IN THE PIECE OR BOLT. THE GREAT NORTHERN SILK CO. INC., New York, N. Y.
Filed February 27, 1931. Serial No. 311,638. PUBLISHED JUNE 30, 1931. Class 42.

287,077. CLEANSING AND POLISHING COMPOUNDS FOR METAL AND GLASS. ADA BALDWIN, Philadelphia, Pa.
Filed March 30, 1931. Serial No. 312,688. PUBLISHED JUNE 30, 1931. Class 4.

287,078. TRANSPARENT REFINISHING LIQUID IN THE NATURE OF VARNISH. LAC-R-GLO PRODUCTS CO., Seattle, Wash.
Filed March 17, 1931. Serial No. 312,233. PUBLISHED JULY 7, 1931. Class 16.

287,079. TRANSPARENT REFINISHING LIQUID IN THE NATURE OF VARNISH. LAC-R-GLO PRODUCTS CO., Seattle, Wash.
Filed March 17, 1931. Serial No. 312,234. PUBLISHED JULY 7, 1931. Class 16.

287,080. PERIODICAL PUBLICATION. BARKER, MOORE AND MEIN CO., Philadelphia, Pa.
Filed March 31, 1931. Serial No. 312,750. PUBLISHED JUNE 30, 1931. Class 38.

287,081. SURGICAL SKIN SUTURES. DAVIS & GECK, INC., Brooklyn, N. Y.
Filed April 25, 1931. Serial No. 313,772. PUBLISHED JULY 7, 1931. Class 44.

287,082. SANITARY NAPKINS. W. T. GRANT COMPANY, Lynn, Mass., and New York, N. Y.
Filed April 25, 1931. Serial No. 313,781. PUBLISHED JULY 7, 1931. Class 44.

287,083. CERTAIN NAMED SOAPS AND CLEANING COMPOUNDS. GREEN OIL SOAP COMPANY, Chicago, Ill.
Filed April 28, 1931. Serial No. 313,913. PUBLISHED JUNE 30, 1931. Class 4.

287,084. PREPARATION FOR CLEANING JEWELRY. F. OTTO ZEITZ, doing business as The Jewel-Brite Co., Chicago, Ill.
Filed April 27, 1931. Serial No. 313,951. PUBLISHED JULY 7, 1931. Class 4.

287,085. RAYON YARN. PUTNAM SPINNERS INC., Putnam, Conn.
Filed May 5, 1931. Serial No. 314,220. PUBLISHED JULY 7, 1931. Class 43.

287,086. PADS FOR USE IN PERMANENT HAIR WAVING. KEEN MANUFACTURING CORPORATION, New York, N. Y.
Filed May 6, 1931. Serial No. 314,240. PUBLISHED JULY 7, 1931. Class 44.

287,087. CLEANING COMPOUND FOR USE IN KITCHEN AND LAUNDRY. AMERICAN CHEMICAL WORKS, INC., Covington, Ky.
Filed May 7, 1931. Serial No. 314,264. PUBLISHED JULY 7, 1931. Class 4.

287,088. WOOLEN FABRICS IN THE PIECE. TERHUNE, YEARANCE & WOLFF, INC., New York, N. Y.
Filed May 9, 1931. Serial No. 314,383. PUBLISHED JULY 7, 1931. Class 42.

287,089. TEXTILE FABRICS—NAMELY, RAYON PIECE GOODS. DUPLAN SILK CORPORATION, New York, N. Y.
Filed May 11, 1931. Serial No. 314,402. PUBLISHED JULY 7, 1931. Class 42.

287,090. SOAP PREPARATIONS. H. TH. BÖHME A. G., Chemnitz, Germany.
Filed May 14, 1931. Serial No. 314,550. PUBLISHED JULY 7, 1931. Class 4.

287,091. SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed May 15, 1931. Serial No. 314,599. PUBLISHED JUNE 30, 1931. Class 4.

287,092. ELASTIC WEBBING. UNITED ELASTIC CORPORATION, Easthampton, Mass.
Filed May 16, 1931. Serial No. 314,665. PUBLISHED JULY 7, 1931. Class 42.

287,093. TEXTILE FABRICS—NAMELY, CORDUROYS AND VELVETEENS, ALL IN THE PIECE. HOWLETT & HOCKMEYER CO., INC., New York, N. Y.
Filed May 19, 1931. Serial No. 314,761. PUBLISHED JULY 7, 1931. Class 42.

287,094. RUBBER GLOVES FOR PHYSICIANS, DENTISTS, ETC. THE WILSON RUBBER COMPANY, Canton, Ohio.
Filed May 21, 1931. Serial No. 314,882. PUBLISHED JULY 7, 1931. Class 44.

287,095. SIDE LEATHER. AMERICAN HIDE AND LEATHER COMPANY, Boston, Mass.
Filed May 4, 1931. Serial No. 314,136. PUBLISHED JUNE 23, 1931. Class 1.

287,096. BAG CLOSING MACHINES. W. J. SAVAGE COMPANY, INCORPORATED, Knoxville, Tenn.
Filed May 5, 1931. Serial No. 314,212. PUBLISHED JULY 7, 1931. Class 23.

287,097. APPARATUS FOR PROJECTING STILL PICTURES FROM FILMS. VISUAL DEMONSTRATION SYSTEM, INC., Buffalo, N. Y.
Filed May 6, 1931. Serial No. 314,258. PUBLISHED JULY 7, 1931. Class 26.

287,098. VINEGAR, SALAD OIL, AND TOMATO CATSUP, ETC. WILKINSON, GADDIS & CO., Newark, N. J.
Filed May 6, 1931. Serial No. 314,259. PUBLISHED JULY 7, 1931. Class 46.

287,099. CANNED JUICES OF GRAPEFRUITS AND ORANGES FOR FOOD PURPOSES. ROBERT LEE RIGGS, Daytona Beach, Fla.
Filed May 7, 1931. Serial No. 314,297. PUBLISHED JULY 7, 1931. Class 46.

287,100. FROZEN CONFECTIONS. DELBERT FERGUSON, Des Moines, Iowa.
Filed May 13, 1931. Serial No. 314,493. PUBLISHED JULY 7, 1931. Class 46.

287,101. YOUNG MEN'S SUITS CONSISTING OF TROUSERS AND COAT AND VEST. JOSEPH H. COHEN & SONS, VANITY CLOTHES, INC., New York, N. Y.
Filed May 20, 1931. Serial No. 314,790. PUBLISHED JULY 7, 1931. Class 39.

287,102. FABRIC AND LEATHER GLOVES. RICHMOND GLOVE CORPORATION, Richmond, Ind.
Filed May 18, 1931. Serial No. 314,718. PUBLISHED JULY 7, 1931. Class 39.

287,103. SWIMMING SUITS AND SWEATERS. OLYMPIA KNITTING MILLS, INC., Olympia, Wash.
Filed May 18, 1931. Serial No. 314,712. PUBLISHED JULY 7, 1931. Class 39.

287,104. GOLF TEES. ARTHUR E. HUBBARD, Fort Worth, Tex.
Filed May 18, 1931. Serial No. 314,697. PUBLISHED JULY 7, 1931. Class 22.

287,105. MEN'S AND BOYS' CLOTHING—VIZ: COATS, PANTS, VESTS AND OVERCOATS. DANIEL BROTHERS COMPANY, Atlanta, Ga.
Filed May 16, 1931. Serial No. 314,640. PUBLISHED JULY 7, 1931. Class 39.

287,106. INNER SOLES OF RUBBER AND FIBRE. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed May 15, 1931. Serial No. 314,629. PUBLISHED JULY 7, 1931. Class 39.

287,107. HOSIERY. MAY HOSIERY MILLS, Nashville, Tenn.
Filed May 15, 1931. Serial No. 314,622. PUBLISHED JULY 7, 1931. Class 39.

287,108. SODA FOUNTAINS AND MECHANICAL CARBONATORS FOR USE IN CONNECTION WITH SODA FOUNTAINS. THE RUSS MANUFACTURING COMPANY, Cleveland, Ohio.
Filed March 19, 1931. Serial No. 312,313. PUBLISHED JULY 7, 1931. Class 23.

287,109. RUM AND BUTTER FLAVOURED TOFFEE. RILEY BROTHERS (HALIFAX) LIMITED, Halifax, England.
Filed April 21, 1931. Serial No. 313,610. PUBLISHED JULY 7, 1931. Class 46.

287,110. FRESH ORANGES AND GRAPEFRUIT. MRS. GERTRUDE S. FURRY, Valdosta, Ga., and Lakeland, Fla.
Filed April 27, 1931. Serial No. 313,898. PUBLISHED JULY 7, 1931. Class 46.

287,111. MALT SYRUP. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y.
Filed May 2, 1931. Serial No. 314,130. PUBLISHED JULY 7, 1931. Class 46.

287,112. SANDWICH SPREADS. FRANCIS H. LEGGETT & COMPANY, New York, N. Y.
Filed April 21, 1931. Serial No. 313,603. PUBLISHED JULY 7, 1931. Class 46.

287,113. BAKERY PRODUCTS—NAMELY, ICE CREAM CONES. MCLAREN-CONSOLIDATED CONE CORPORATION, Dayton, Ohio.
Filed April 25, 1931. Serial No. 313,789. PUBLISHED JULY 7, 1931. Class 46.

287,114. ROTATING SHELF STRUCTURES TO BE MOUNTED IN CABINETS. R. H. DAMPIER & CO., San Jose, Calif.
Filed May 2, 1931. Serial No. 314,101. PUBLISHED JULY 7, 1931. Class 32.

287,115. ANIMAL FLY SPRAYS, INSECTICIDES, INSECT REPELLENTS. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif.
Filed May 11, 1931. Serial No. 314,430. PUBLISHED JULY 7, 1931. Class 6.

287,116. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, BEAUTY CREAMS, ETC. ELWOOD J. GOODIER, doing business as Universal Laboratories, Dallas, Tex.
Filed May 13, 1931. Serial No. 314,499 PUBLISHED JULY 7, 1931. Class 6.

287,117. DISINFECTANT. GOEDRICH CHEMICAL COMPANY, Park Ridge, N. J.
Filed May 16, 1931. Serial No. 314,642. PUBLISHED JULY 7, 1931. Class 6.

287,118. MEDICINAL PREPARATION FOR THE TREATMENT OF THE EYES. VIA B. HAGGARD, Blackwell, Okla.
Filed May 19, 1931. Serial No. 314,758. PUBLISHED JULY 7, 1931. Class 6.

287,119. FACIAL CLEANSING POWDER. PREMIER PRODUCTS CORP., LTD., Los Angeles, Calif.
Filed May 19, 1931. Serial No. 314,771. PUBLISHED JULY 7, 1931. Class 6.

287,120. LIQUID SHAMPOO. HARRY ALTROGGE, Dallas, Tex.
Filed May 21, 1931. Serial No. 314,832. PUBLISHED JULY 7, 1931. Class 6.

287,121. FURRIERS' TOOLS, SEWING MACHINES AND PARTS THEREOF AND ACCESSORIES. CONSOLIDATED SEWING MACHINE & SUPPLY CO., New York N. Y.
Filed September 24, 1930. Serial No. 305,996. PUBLISHED JUNE 16, 1931. Class 23.

287,122. GRAPE SYRUP FOR TABLE USE AND USE IN THE PREPARATION OF FOODS AND INGREDIENTS OF FOODS AS A FLAVORING SYRUP. L. M. MARTINI GRAPE PRODUCTS CO., Kingsburg, Calif.
Filed September 30, 1930. Serial No. 306,241. PUBLISHED JUNE 30, 1931. Class 46.

287,123. ASPHALT EMULSIONS FOR WATERPROOFING. HEADLEY EMULSIFIED PRODUCTS COMPANY, Philadelphia, Pa.
Filed October 11, 1930. Serial No. 306,649. PUBLISHED JUNE 23, 1931. Class 6.

287,124. BLEACHING, CLEANING, AND SOFTENING CREAMS. LESTER H. MILES, doing business as Miles Laboratories, Los Angeles, Calif.
Filed October 11, 1930. Serial No. 306,657. PUBLISHED JUNE 30, 1931. Class 6.

287,125. INCENSE. MOHAMMED I. KITCHLEW, Chicago, Ill.
Filed November 17, 1930. Serial No. 307,979. PUBLISHED JULY 7, 1931. Class 6.

287,126. ELECTRIC POWER UNITS. ALTORFER BROS. COMPANY, East Peoria, Ill.
Filed December 10, 1930. Serial No. 308,807. PUBLISHED JUNE 30, 1931. Class 21.

287,127. ELECTRIC POWER UNITS. ALTORFER BROS. COMPANY, East Peoria, Ill.
Filed December 10, 1930. Serial No. 308,808. PUBLISHED JUNE 30, 1931. Class 21.

287,128. ELECTRIC POWER UNITS. ALTORFER BROS. COMPANY, East Peoria, Ill.
Filed December 10, 1930. Serial No. 308,809. PUBLISHED JUNE 30, 1931. Class 21.

287,129. PORTABLE ELECTRICALLY OPERATED HUMIDIFIERS FOR CONDITIONING THE AIR IN ROOMS. THE A. C. GILBERT COMPANY, New Haven, Conn.
Filed November 22, 1930. Serial No. 308,196. PUBLISHED JUNE 23, 1931. Class 21.

287,130. MEDICINAL OINTMENT FOR BURNS, PIMPLES, SPRAINS, BLISTERS, BLACKHEADS, AND OTHER SKIN AFFECTIONS. NAZIK SHAPAPZIAN, Washington, D. C.
Filed May 29, 1931. Serial No. 315,212. PUBLISHED JULY 7, 1931. Class 6.

287,131. MEDICINE FOR THE TREATMENT OF PYORRHEA. MERRELETE REMEDIES, Chatham, Province of Ontario, Canada.
Filed May 28, 1931. Serial No. 315,155. PUBLISHED JULY 7, 1931. Class 6.

287,132. DYES AND DYESTUFFS. GENERAL DYESTUFF CORPORATION, New York, N. Y.
Filed May 5, 1931. Serial No. 314,201. PUBLISHED JULY 7, 1931. Class 6.

287,133. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, LIP ROUGE, SACHETS, BRILLIANTINE, BATH SALTS, LOTION FOR THE SKIN AND HAIR, FACE CREAM. SOCIÉTÉ ANONYME JEAN PATOU, Paris, France.
Filed May 1, 1931. Serial No. 314,083. PUBLISHED JUNE 30, 1931. Class 6.

287,134. DENTAL CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed May 1, 1931. Serial No. 314,040. PUBLISHED JULY 7, 1931. Class 6.

287,135. FACE CREAMS. J. WILLIS SAYLES, Wichita, Kans.
Filed April 18, 1931. Serial No. 313,512. PUBLISHED JUNE 30, 1931. Class 6.

287,136. NASAL CREAM. RIN-O-CUR COMPANY, Chicago, Ill.
Filed April 22, 1931. Serial No. 313,675. PUBLISHED JUNE 16, 1931. Class 6.

287,137. FACE POWDER, TALCUM POWDER, LIP STICK, SKIN LOTION, PERFUME, TOILET WATER, NAIL POLISH, SHAMPOO, HAIR TONIC, FACE CREAM. IRVING SELIGMAN, doing business as La Cie Reve, New York, N. Y.
Filed April 28, 1931. Serial No. 313,939. PUBLISHED JULY 7, 1931. Class 6.

287,138. DEPILATORY COMPOUND. FORALINE PRODUCTS INC., Circleville, Ohio.
Filed April 29, 1931. Serial No. 313,962. PUBLISHED JULY 7, 1931. Class 6.

287,139. VERMICIDE AND PURGATIVE FOR THE REMOVAL OF ROUND WORMS IN SWINE. PITMAN-MOORE COMPANY, Indianapolis, Ind.
Filed April 29, 1931. Serial No. 313,971. PUBLISHED JUNE 30, 1931. Class 6.

287,140. MEDICINE FOR TREATING ROUND WORMS IN FOWLS. PITMAN-MOORE COMPANY, Indianapolis, Ind.
Filed April 29, 1931. Serial No. 313,974. PUBLISHED JUNE 23, 1931. Class 6.

287,141. MEDICATED PLASTERS AND BANDAGES, ANIMAL AND VEGETABLE EXTERMINATING PREPARATIONS, ETC. NÄHRMITTELFABRIK JULIUS PENNER A.-G., Berlin-Schoneberg, Germany.
Filed February 16, 1931. Serial No. 311,103. PUBLISHED JUNE 23, 1931. Class 6.

287,142. HAIR TONICS. ALBERT BERNARD, doing business as A. F. Johns Co., New York, N. Y.
Filed February 17, 1931. Serial No. 311,125. PUBLISHED JUNE 23, 1931. Class 6.

287,143. MEDICATED CANDY LOZENGES BEING BENEFICIAL IN THE CASES OF COLDS, COUGHING, SORE THROATS, ASTHMA, HOARSE VOICE AND THE LIKE. KACZANDER & DAROCZI, New York, N. Y.
Filed February 24, 1931. Serial No. 311,381. PUBLISHED JULY 7, 1931. Class 6.

287,144. MEDICINE FOR GENERAL COLDS, ROUP, PNEUMONIA, INFECTIONS, BRONCHITIS, AND RESPIRATORY DISEASES IN POULTRY. THE CHIC-TONE COMPANY, INC., Angola, Ind.
Filed March 4, 1931. Serial No. 311,718. PUBLISHED JUNE 23, 1931. Class 6.

287,145. TANNING EXTRACTS. THE FORESTAL LAND, TIMBER AND RAILWAYS COMPANY LIMITED, London, England.
Filed March 5, 1931. Serial No. 311,860. PUBLISHED JUNE 30, 1931. Class 6.

287,146. TINTS. DY-O-LA DYE CO., Burlington, Vt.
Filed March 14, 1931. Serial No. 312,141. PUBLISHED JUNE 23, 1931. Class 6.

287,147. BOILER CLEANING COMPOUND. ROSS MANUFACTURING COMPANY, Kansas City, Mo.
Filed March 16, 1931. Serial No. 312,201. PUBLISHED JULY 7, 1931. Class 6.

287,148. COMPLEXION POWDER, CLEANSING CREAM, AND TISSUE CREAM, ETC. H. A. WOODS, INC., Evansville, Ind.
Filed March 19, 1931. Serial No. 312,318. PUBLISHED JULY 7, 1931. Class 6.

287,149. MEDICINAL PREPARATION FOR TREATING PILES, DIARRHEA, CONSTIPATION, DYSENTERY, AND FOR TREATING THE PROSTATE GLAND. IPPOLITO V. & SON, New York, N. Y.
Filed March 20, 1931. Serial No. 312,399. PUBLISHED JUNE 30, 1931. Class 6.

287,150. MEDICATED CHEWING GUM AND MEDICATED TABLETS FOR RELIEVING UNHEALTHY CONDITIONS OF THE MOUTH AND THROAT AND FOR USE AS AN INTERNAL DISINFECTANT. BURT J. CLARK, doing business as Voix d'Or, Minneapolis, Minn.
Filed April 2, 1931. Serial No. 312,840. PUBLISHED JULY 7, 1931. Class 6.

287,151. MINERAL OIL USED AS AN INTERNAL LUBRICANT AND FOR CONSTIPATION. THE NORWICH PHARMACAL COMPANY, Norwich, N. Y.
Filed April 7, 1931. Serial No. 313,052. PUBLISHED JUNE 23, 1931. Class 6.

287,152. COUGHDROPS. JOHN E. KAMBISOS, San Francisco, Calif.
Filed April 8, 1931. Serial No. 313,085. PUBLISHED JULY 7, 1931. Class 6.

287,153. COLD CREAMS, SKIN LOTIONS, ASTRINGENTS, ETC. SCANDIA-JOURDE CORP., New York, N. Y.
Filed April 10, 1931. Serial No. 313,208. PUBLISHED JUNE 23, 1931. Class 6.

287,154. MEDICINE FOR THE RELIEF OF HAY FEVER. W. CYRIL POOLEY, Mobile, Ala.
Filed April 17, 1931. Serial No. 313,478. PUBLISHED MAY 26, 1931. Class 6.

287,155. DRY CELLS AND BATTERIES, COMPRISING CELLS AND BATTERIES FOR FLASHLIGHTS, DRY "A", "B", "C" BATTERIES FOR RADIO; DRY CELLS FOR RADIO, IGNITION AND TELEPHONES; DRY CELLS OF MULTIPLE TYPES AND BATTERIES OF DRY CELLS CONNECTED EITHER IN SERIES OR PARALLEL. THE CARBON PRODUCTS COMPANY, Lancaster, Ohio.
Filed April 14, 1931. Serial No. 313,328. PUBLISHED JULY 7, 1931. Class 21.

287,156. MOTOR LUBRICATING OILS. METALIFE, INC., St. Louis, Mo.
Filed April 11, 1931. Serial No. 313,249. PUBLISHED JULY 7, 1931. Class 15.

287,157. ELECTRICAL ATTACHMENT PLUGS. MARKS PRODUCTS CO. INC., Brooklyn, N. Y.
Filed April 10, 1931. Serial No. 313,196. PUBLISHED JUNE 23, 1931. Class 21.

287,158. ELECTRICAL ATTACHMENT PLUGS. MARKS PRODUCTS CO. INC., Brooklyn, N. Y.
Filed April 10, 1931. Serial No. 313,195. PUBLISHED JUNE 23, 1931. Class 21.

287,159. STARTING SWITCHES FOR ELECTRIC MOTORS. CUTLER-HAMMER, INC., Milwaukee, Wis.
Filed April 8, 1931. Serial No. 313,075. PUBLISHED JULY 7, 1931. Class 21.

287,160. ELECTRICALLY LIGHTED SIGNS. HAROLD H. BENNETT, Scarsdale, N. Y.
Filed April 1, 1931. Serial No. 312,789. PUBLISHED JUNE 23, 1931. Class 21.

287,161. ELECTRICAL MACHINES AND APPARATUS CONSISTING OF BROILERS, URNS, TOASTERS, WATER HEATERS, MIXERS, GRINDERS, SLICERS, OVENS, DOUGH ROLLERS AND DIVIDERS, PEELERS AND GRATERS, WRAPPING MACHINES FOR BREAD AND THE LIKE, BLOWERS, OVEN ILLUMINATORS, ELECTRIC MOTORS AND TRANSFORMERS. JABURG BROTHERS, INC., New York, N. Y.
Filed March 28, 1931. Serial No. 312,649. PUBLISHED JULY 7, 1931. Class 21.

287,162. CONCRETE MIXERS, MORTAR MIXERS, ETC. NATIONAL EQUIPMENT CORPORATION, Milwaukee, Wis.
Filed July 9, 1931. Serial No. 316,986. Class 23.

287,163. CANDY. SCHUTTER JOHNSON CANDY COMPANY INC., Chicago, Ill.
Filed June 1, 1931. Serial No. 315,283. PUBLISHED JULY 7, 1931. Class 46.

287,164. COFFEE. C. D. KENNY COMPANY, Baltimore, Md.
Filed June 1, 1931. Serial No. 315,267. PUBLISHED JULY 7, 1931. Class 46.

287,165. CANDY. J. N. ADAM & CO., Buffalo, N. Y.
Filed May 27, 1931. Serial No. 315,079. PUBLISHED JULY 7, 1931. Class 46.

287,166. CANDY TABLETS. ELSA G. MUELLER, doing business as The Mint-Julep Chewing Gum Company, Washington, D. C.
Filed May 18, 1931. Serial No. 314,711. PUBLISHED JULY 7, 1931. Class 46.

287,167. CYLINDRICAL AND SEMI-CYLINDRICAL BEARINGS USED FOR CRANK SHAFT BEARINGS. THE CLEVELAND GRAPHITE BRONZE COMPANY, Cleveland, Ohio.
Filed May 18, 1931. Serial No. 314,684. PUBLISHED JULY 7, 1931. Class 23.

287,168. FISH FOOD. VITAMONT SALES COMPANY, Butte, Mont.
Filed May 16, 1931. Serial No. 314,668. PUBLISHED JULY 7, 1931. Class 46.

287,169. FOX FOOD. VITAMONT SALES COMPANY, Butte, Mont.
Filed May 16, 1931. Serial No. 314,667. PUBLISHED JULY 7, 1931. Class 46.

287,170. CAT FOOD. VITAMONT SALES COMPANY, Butte, Mont.
Filed May 16, 1931. Serial No. 314,666. PUBLISHED JULY 7, 1931. Class 46.

287,171. MOTION PICTURE FILMS. INTERNATIONAL NEWSREEL CORPORATION, New York, N. Y.
Filed May 15, 1931. Serial No. 314,621. PUBLISHED JULY 7, 1931. Class 26.

287,172. ALL KINDS OF CANDIES. THE NUNNALLY COMPANY, Atlanta, Ga.
Filed May 13, 1931. Serial No. 314,510. PUBLISHED JULY 7, 1931. Class 46.

287,173. DAVENPORTS AND BEDS INCLUDING FOLDING BEDS, CLOSET BEDS, AND CONVERTIBLE BED-DAVENPORTS. MARQUARET COMPANY, Milwaukee, Wis.
Filed May 13, 1931. Serial No. 314,506. PUBLISHED JULY 7, 1931. Class 32.

287,174. HOUSEHOLD CHAIRS. FRESH AIRE CHAIR COMPANY, Rochester, N. Y.
Filed May 13, 1931. Serial No. 314,496. PUBLISHED JULY 7, 1931. Class 32.

287,175. FISHING REELS. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed June 2, 1931. Serial No. 315,305. PUBLISHED JULY 7, 1931. Class 22.

287,176. GINGER ALE. SODA LUNCH EQUIPMENT CO., INC., New York, N. Y.
Filed May 9, 1929. Serial No. 283,764. PUBLISHED JULY 7, 1931. Class 45.

287,177. GRILLES OR REGISTERS FOR VENTILATING OR HEATING PURPOSES. UNITED STATES REGISTER CO., Battle Creek, Mich.
Filed December 26, 1929. Serial No. 294,097. PUBLISHED JULY 7, 1931. Class 34.

287,178. GOLF CLUBS. WILSON-WESTERN SPORTING GOODS COMPANY, Chicago, Ill.
Filed January 3, 1930. Serial No. 294,371. PUBLISHED JULY 7, 1931. Class 22.

287,179. STEEL IN BARS AND COILS. KLOSTERS AKTIEBOLAG, Langshyttan, Sweden.
Filed February 21, 1930. Serial No. 296,350. PUBLISHED JULY 7, 1931. Class 14.

287,180. CERTAIN NAMED WEARING APPAREL. DAVENPORT HOTEL SPORT SHOP, Spokane, Wash.
Filed April 14, 1930. Serial No. 298,794. PUBLISHED MARCH 3, 1931. Class 39.

287,181. MEN'S AND BOYS' COATS, VESTS, TROUSERS, AND OVERCOATS. GIBBERMAN BROS. & CO., Chicago, Ill.
Filed April 25, 1930. Serial No. 299,438. PUBLISHED JULY 7, 1931. Class 39.

287,182. WRITING INK. THE PARKER PEN COMPANY, Janesville, Wis.
Filed May 23, 1930. Serial No. 301,123. PUBLISHED JULY 7, 1931. Class 11.

287,183. BOOTS, SHOES, OR SLIPPERS CONSTRUCTED OF LEATHER OR PARTLY OF LEATHER AND/OR RUBBER AND/OR FABRIC. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y.
Filed June 18, 1930. Serial No. 302,530. PUBLISHED JUNE 30, 1931. Class 39.

287,184. CERTAIN NAMED WEARING APPAREL. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed July 2, 1930. Serial No. 303,058. PUBLISHED NOVEMBER 11, 1930. Class 39.

287,185. POWER-OPERATED PLEASURE CRUISERS. THE LAKE UNION DRY DOCK AND MACHINE WORKS, Seattle, Wash.
Filed July 14, 1930. Serial No. 303,481. PUBLISHED SEPTEMBER 30, 1930. Class 19.

287,186. CERTAIN NAMED FANCY GOODS AND TOILET ARTICLES. FOSTER-GRANT CO., INC., Leominster, Mass.
Filed August 1, 1930. Serial No. 304,097. PUBLISHED JULY 7, 1931. Class 40.

287,187. BELT DRESSING. DU PONT MANUFACTURING COMPANY, Tiffin, Ohio.
Filed August 14, 1930. Serial No. 304,609. PUBLISHED OCTOBER 21, 1930. Class 4.

287,188. CHEMICAL COMPOUND USED FOR RUG AND CARPET CLEANING, ETC. BESSIE B. BURGESS, doing business as Budge-It Products, New York, N. Y.
Filed September 6, 1930. Serial No. 305,386. PUBLISHED JUNE 30, 1931. Class 4.

287,189. MEN'S AND BOYS' LEATHER AND CANVAS BOOTS AND SHOES. E. T. WRIGHT & COMPANY, INC., Rockland, Mass.
Filed October 18, 1930. Serial No. 306,914. PUBLISHED JULY 7, 1931. Class 39.

287,190. RUBBER HEELS. PANTHER RUBBER MANUFACTURING COMPANY, Stoughton, Mass.
Filed November 17, 1930. Serial No. 307,986. PUBLISHED JULY 7, 1931. Class 39.

287,191. CIGARS. CORTEZ CIGAR CO., Savannah, Ga.
Filed May 26, 1931. Serial No. 315,035. PUBLISHED JULY 7, 1931. Class 17.

287,192. LEATHER SHEEP LINED SHOE POLISHER. S. B. WRIGHT, doing business as Wright Products, Chicago, Ill.
Filed May 26, 1931. Serial No. 315,074. PUBLISHED JULY 7, 1931. Class 29.

287,193. WATER COOLERS. DAY & NIGHT WATER HEATER CO., LTD., Monrovia, Calif.
Filed May 26, 1931. Serial No. 315,076. PUBLISHED JULY 7, 1931. Class 31.

287,194. PROPHYLACTIC RUBBER, TISSUE, AND MEMBRANOUS ARTICLES. ROBERT J. PIERCE, INC., New York, N. Y.
Filed May 23, 1931. Serial No. 314,963. PUBLISHED JULY 7, 1931. Class 44.

287,195. YARNS. JOSEPH BENN CORPORATION, Greystone, R. I.
Filed May 28, 1931. Serial No. 315,127. PUBLISHED JULY 7, 1931. Class 43.

287,196. SELF-RISING FLOUR. S. JEROLLEMAN, New Orleans, La.
Filed December 19, 1930. Serial No. 309,169. PUBLISHED JULY 7, 1931. Class 46.

287,197. POULTRY GRIT AND OYSTER SHELLS. SUNRAYED LIMESHELL PRODUCTS COMPANY, Boston, Mass.
Filed December 19, 1930. Serial No. 309,180. PUBLISHED JULY 7, 1931. Class 1.

287,198. BISCUITS. JOHNSON EDUCATOR FOOD COMPANY, Cambridge, Mass.
Filed February 3, 1931. Serial No. 310,679. PUBLISHED JUNE 30, 1931. Class 46.

287,199. WHEAT FLOUR, SELF-RISING FLOUR, AND PHOSPHATED FLOUR. THE ABILENE FLOUR MILLS COMPANY, Abilene, Kans.
Filed February 5, 1931. Serial No. 310,746. PUBLISHED JUNE 30, 1931. Class 46.

287,200. PLAIN AND SELF RISING FLOUR. ATLANTA FLOUR & GRAIN COMPANY, INCORPORATED, doing business as Puritan Mills, Atlanta, Ga.
Filed March 5, 1931. Serial No. 311,859. PUBLISHED JULY 7, 1931. Class 46.

287,201. PASTRY. LOWELL E. CADD, Albert Lea, Minn.
Filed April 4, 1931. Serial No. 312,943. PUBLISHED JUNE 30, 1931. Class 46.

287,202. CONCENTRATED FOOD FOR DOGS, CATS, FOXES, AND OTHER CARNIVOROUS ANIMALS. HERMAN H. BORCHERS, doing business as The Mel-Rah Products Co., Baltimore, Md.
Filed April 14, 1931. Serial No. 313,322. PUBLISHED JUNE 30, 1931. Class 46.

287,203. BUTTER. EVERFRESH BUTTER CORPORATION, New York, N. Y.
Filed May 8, 1931. Serial No. 314,327. PUBLISHED JUNE 30, 1931. Class 46.

287,204. WHEAT FLOUR. THEO. STIVERS MILLING COMPANY, Rome, Ga.
Filed May 11, 1931. Serial No. 314,435. PUBLISHED JULY 7, 1931. Class 46.

287,205. HOPS. JOHN I. HAAS, INCORPORATED, Washington, D. C.
Filed May 12, 1931. Serial No. 314,449. PUBLISHED JULY 7, 1931. Class 1.

287,206. BUTTER. AMERICAN STORES COMPANY, Philadelphia, Pa.
Filed May 20, 1931. Serial No. 314,786. PUBLISHED JUNE 30, 1931. Class 46.

287,207. WOOD PULP. OLYMPIC FOREST PRODUCTS COMPANY, Port Angeles, Wash.
Filed May 25, 1931. Serial No. 315,008. PUBLISHED JULY 7, 1931. Class 1.

287,208. WOOD PULP. OLYMPIC FOREST PRODUCTS COMPANY, Port Angeles, Wash.
Filed May 25, 1931. Serial No. 315,009. PUBLISHED JULY 1, 1931. Class 1.

287,209. WHEAT FLOUR. FEDERAL MILL, INC., Lockport, N. Y.
Filed May 23, 1931. Serial No. 315,024. PUBLISHED JULY 7, 1931. Class 46.

287,210. WOOD PULP. OLYMPIC FOREST PRODUCTS COMPANY, Port Angeles, Wash.
Filed May 25, 1931. Serial No. 315,010. PUBLISHED JULY 7, 1931. Class 1.

287,211. ADHESIVE LIQUID CEMENT. HOWE & FRENCH, INC., Bostoff, Mass.
Filed May 28, 1931. Serial No. 315,143. PUBLISHED JULY 7, 1931. Class 6.

287,212. BISCUITS. JOHNSON EDUCATOR FOOD COMPANY, Cambridge, Mass.
Filed May 28, 1931. Serial No. 315,147. PUBLISHED JULY 7, 1931. Class 46.

287,213. BISCUITS. JOHNSON EDUCATOR FOOD COMPANY, Cambridge, Mass.
Filed May 28, 1931. Serial No. 315,148. PUBLISHED JULY 7, 1931. Class 46.

287,214. STORAGE BATTERIES. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio.
Filed April 29, 1930. Serial No. 299,652. PUBLISHED JUNE 30, 1931. Class 21.

287,215. LIMESTONE. PALMER LIME & CEMENT COMPANY, New York, N. Y.
Filed May 2, 1930. Serial No. 299,855. PUBLISHED JUNE 23, 1931. Class 1.

287,216. TEA. MANNINGS, INC., doing business as Mannings, San Francisco, Calif.
Filed May 7, 1930. Serial No. 300,072. PUBLISHED JULY 7, 1931. Class 46.

287,217. FOOT POWDER AND OINTMENT FOR EXTERNAL USE FOR CUTS, BURNS, AND THE LIKE, AND ALSO FOR APPLICATION TO THE CHEST IN CONGESTION AND AS AN INHALENT FOR HEAD COLDS AND CATARRH. WALTER KORTE COMPANY, Cincinnati, Ohio.
Filed May 17, 1930. Serial No. 300,726. PUBLISHED JUNE 30, 1931. Class 6.

287,218. IMITATION COFFEE. HELEN SCHY-MAN-SKI & SONS, doing business as S-M-S Herb-Nu Remedies, Chicago, Ill.
Filed May 22, 1930. Serial No. 301,066. PUBLISHED JULY 7, 1931. Class 46.

287,219. ASTRINGENTS, ETC. VIVINY PERFUMERS, INC., New Haven, Conn.
Filed May 28, 1930. Serial No. 301,534. PUBLISHED JUNE 23, 1931. Class 6.

287,220. ELECTRICAL, ELECTRO-OPTICAL, VISUAL, SOUND AND OTHER MESSAGE TRANSMISSION, REPRODUCING AND RECEIVING APPARATUS. JENKINS TELEVISION CORPORATION, Jersey City, N. J.
Filed July 2, 1930. Serial No. 303,056. PUBLISHED JUNE 23, 1931. Class 21.

287,221. PREPARATION FOR INTERNAL USE. JOHANN A. WÜLFING, Berlin, Germany.
Filed July 2, 1930. Serial No. 303,077. PUBLISHED JUNE 23, 1931. Class 6.

287,222. CHOKERS, PENDANTS, NECK CHAINS, BROOCHES, EAR-RINGS, FINGER RINGS, BRACELETS, AND FOBS. FOSTER-GRANT CO. INC., Leominster, Mass.
Filed August 1, 1930. Serial No. 304,099. PUBLISHED JULY 7, 1931. Class 28.

287,223. SHAMPOO. CHARLES G. UNGER, doing business as Stanhope Laboratories, Brooklyn, N. Y.
Filed August 8, 1930. Serial No. 304,393. PUBLISHED JULY 7, 1931. Class 6.

287,224. FACE CREAMS. LESTER H. MILES, Los Angeles, Calif.
Filed August 15, 1930. Serial No. 304,664. PUBLISHED JUNE 23, 1931. Class 6.

287,225. LADIES', MEN'S, GIRLS', AND BOYS' RAINCOATS OF RUBBER AND FABRIC. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed February 24, 1931. Serial No. 311,402. PUBLISHED JULY 7, 1931. Class 39.

287,226. DUPLICATING MACHINE INK. A. B. DICK COMPANY, Chicago, Ill.
Filed February 18, 1931. Serial No. 311,185. PUBLISHED JULY 7, 1931. Class 11.

287,227. NON-ALCOHOLIC, MALTLESS, CARBONATED BEVERAGES AND THE INGREDIENTS FOR MAKING THE SAME. TAYLOR-LONG COMPANY, Winston-Salem, N. C.
Filed February 2, 1931. Serial No. 310,666. PUBLISHED JULY 7, 1931. Class 45.

287,228. MINIATURE TEN-PIN GOLF BOWLING GAME. STANLEY W. LAWTON, Miami, Fla.
Filed January 29, 1931. Serial No. 310,544. PUBLISHED JULY 7, 1931. Class 22.

287,229. ELECTRIC LIGHTING FIXTURES, BOTH WALL AND STANDARD STYLE. MRS. GEORGE HERZOG, doing business as The Closet Shop, New York, N. Y.
Filed May 1, 1929. Serial No. 283,333. PUBLISHED JULY 7, 1931. Class 21.

287,230. RADIO ELECTRON TUBES. MARVIN RADIO TUBE CORP., Irvington, N. J.
Filed June 1, 1929. Serial No. 284,914. PUBLISHED AUGUST 27, 1929. Class 21.

287,231. MACHINERY AND TOOLS USED IN WELL DRILLING. OIL WELL SUPPLY COMPANY, Pittsburgh, Pa., assignor to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey.
Filed November 23, 1929. Serial No. 292,823. PUBLISHED JULY 7, 1931. Class 23.

287,232. COLD AND GRIPPE CAPSULES. SEYMOUR B. DEWEY, Jr., Cleveland, Ohio.
Filed January 13, 1930. Serial No. 294,714. PUBLISHED JUNE 16, 1931. Class 6.

287,233. HAND CREAM, CATARRH JELLY, AND FACE POWDER, ETC. FRANK STIKAROFSKY, Norwood, Mass.
Filed April 26, 1930. Serial No. 299,527. PUBLISHED JULY 7, 1931. Class 6.

287,234. SILVER PLATED TABLE WARE. DIAMOND SILVER COMPANY, Lambertville, N. J.
Filed April 8, 1931. Serial No. 313,077. PUBLISHED JUNE 23, 1931. Class 28.

287,235. SILVER-PLATED FLAT-WARE AND HOLLOW-WARE FOR TABLE AND COUNTER USE AND THE LIKE. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed April 15, 1931. Serial No. 313,360. PUBLISHED JUNE 23, 1931. Class 28.

287,236. RADIO RECEIVING SETS. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed April 15, 1931. Serial No. 313,369. PUBLISHED JUNE 23, 1931. Class 21.

287,237. KEYBOARD DEVICES FOR EXERCISING THE FINGERS IN TEACHING MUSIC. EUGENE ROTH, Antwerp, Belgium.
Filed April 15, 1931. Serial No. 313,388. PUBLISHED JUNE 23, 1931. Class 36.

287,238. ARTICLES OF JEWELRY FOR PERSONAL ADORNMENT—NAMELY, FINGER RINGS, PINS, PENDANTS, BRACELETS, NECKLETS, BANGLES, TIARAS, WATCH CHAINS, AND CUFF LINKS. MAHZEL LIMITED, London, England.
Filed April 20, 1931. Serial No. 313,552. PUBLISHED JULY 7, 1931. Class 28.

287,239. LUBRICATING OILS. WADHAMS OIL COMPANY, Milwaukee, Wis.
Filed April 20, 1931. Serial No. 313,569. PUBLISHED JULY 7, 1931. Class 15.

287,240. GASOLINE. ROCK ISLAND REFINING COMPANY, Duncan, Okla.
Filed April 21, 1931. Serial No. 313,611. PUBLISHED JULY 7, 1931. Class 15.

287,241. LUBRICATING OILS, LUBRICATING GREASES, LUBRICATING OIL COMPOUNDS, AND LUBRICATING GREASE COMPOUNDS. TECHNICAL LUBRICANTS COMPANY, Kansas City, Mo.
Filed April 22, 1931. Serial No. 313,685. PUBLISHED JULY 7, 1931. Class 15.

287,242. NECKLACES AND CLASPS THEREFOR. JACOB SCHORSCH, New York, N. Y.
Filed April 28, 1931. Serial No. 313,937. PUBLISHED JUNE 30, 1931. Class 28.

287,243. ELECTRIC LAMPS. DELTA ELECTRIC COMPANY, Marion, Ind.
Filed May 18, 1931. Serial No. 314,686. PUBLISHED JULY 7, 1931. Class 21.

287,244. INSULATED WIRE AND CABLES AND PARTICULARLY RUBBER COVERED WIRE AND CABLES. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J.
Filed May 21, 1931. Serial No. 314,833. PUBLISHED JULY 7, 1931. Class 21.

287,245. INSULATED WIRE AND CABLES AND PARTICULARLY RUBBER COVERED WIRE AND CABLES. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J.
Filed May 21, 1931. Serial No. 314,834. PUBLISHED JULY 7, 1931. Class 21.

287,246. RADIO RECEIVING SETS, KITS FOR RADIO RECEIVING SETS, ETC. SILVER-MARSHALL, INC., Chicago, Ill.
Filed May 16, 1931. Serial No. 314,660. PUBLISHED JULY 7, 1931. Class 21.

287,247. GLASS AMPOULES. WILLIAM SCHNORR, doing business as Indianapolis Medical Glass Works, Indianapolis, Ind.
Filed May 28, 1931. Serial No. 315,161. PUBLISHED JULY 7, 1931. Class 33.

287,248. SHAVING CREAM. THE SNOBALL COMPANY, St. Louis, Mo.
Filed September 22, 1930. Serial No. 305,951. PUBLISHED JULY 7, 1931. Class 4.

287,249. BRIEF CASES. MAX DAMM COMPANY, INC., Newark, N. J.
Filed September 12, 1930. Serial No. 305,605. PUBLISHED MARCH 24, 1931. Class 3.

287,250. PAINTS, VARNISHES, AND PAINT ENAMELS. KINGDOM PAINT PRODUCTS COMPANY, INC., Bronx, N. Y.
Filed May 3, 1930. Serial No. 299,915. PUBLISHED JUNE 23, 1931. Class 16.

287,251. DAIRY AND POULTRY FOODS. GOLDEN EAGLE MILLING CO., Petaluma, Calif.
Filed March 12, 1930. Serial No. 297,189. PUBLISHED JULY 7, 1931. Class 46.

287,252. STOVE POLISH. SAUL PALAIS, doing business as Lucky Kat Stove Polish Company, Peabody, Mass.
Filed December 19, 1930. Serial No. 309,172. PUBLISHED JUNE 30, 1931. Class 4.

287,253. ADHESIVE SHEET OR WAFER TO BE APPLIED TO THE WRINKLED PORTIONS OF THE FACE. THE B & P COMPANY, Cleveland, Ohio.
Filed December 13, 1930. Serial No. 309,018. PUBLISHED JULY 7, 1931. Class 44.

287,254. WIRE FENCE. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo.
Filed May 26, 1931. Serial No. 315,034. PUBLISHED JULY 7, 1931. Class 13.

287,255. SOLDER. MUELLER BRASS CO., Port Huron, Mich.
Filed May 25, 1931. Serial No. 315,005. PUBLISHED JULY 7, 1931. Class 14.

287,256. PRESSING PADS. BRILLO MANUFACTURING CO., Brooklyn, N. Y.
Filed May 23, 1931. Serial No. 314,945. PUBLISHED JULY 7, 1931. Class 24.

287,257. ALLOY. I. STERN & CO., New York, N. Y.
Filed May 22, 1931. Serial No. 314,933. PUBLISHED JULY 7, 1931. Class 14.

287,258. SAFES, FILING SAFES, NOTE CASES, AND BOND BOXES, SAID NOTE CASES AND BOND BOXES BEING PROVIDED WITH COVERS AND LOCKS. THE GENERAL FIREPROOFING COMPANY, Youngstown, Ohio.
Filed May 18, 1931. Serial No. 314,692. PUBLISHED JULY 7, 1931. Class 25.

287,259. STEAM TRAPS. THE V. D. ANDERSON COMPANY, Cleveland, Ohio.
Filed May 18, 1931. Serial No. 314,678. PUBLISHED JULY 7, 1931. Class 13.

287,260. MALT CEREAL BEVERAGE, CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. THE GREATER NEW YORK BREWERY, INC., New York, N. Y.
Filed May 13, 1931. Serial No. 314,500. PUBLISHED JULY 7, 1931. Class 48.

287,261. TABLE BOARD GAMES OF SKILL PLAYED WITH PIECES AND HAVING GUIDES FOR EFFECTING THE DIRECTION OF SUCH PIECES. PHILLIPS & UPPERCU, New York, N. Y.
Filed March 3, 1931. Serial No. 311,696. PUBLISHED JULY 7, 1931. Class 22.

287,262. BOOTS AND SHOES OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. COMMONWEALTH SHOE & LEATHER COMPANY, Whitman, Mass.
Filed March 6, 1931. Serial No. 311,825. PUBLISHED JULY 7, 1931. Class 39.

287,263. READY MIXED PAINTS. THE KEPEC COMPANY, Milwaukee, Wis.
Filed March 19, 1931. Serial No. 312,301. PUBLISHED JUNE 23, 1931. Class 16.

287,264. WOMEN'S UNDERGARMENTS—NAMELY, NIGHTGOWNS, PAJAMAS, CHEMISES, STEP-INS, PANTIES, BLOOMERS, PETTICOATS, SLIPS, DRESSING SACQUES, AND NEGLIGEES. THE SCHWEITZER COMPANY, INC., New York, N. Y.
Filed March 23, 1931. Serial No. 312,459. PUBLISHED JUNE 30, 1931. Class 39.

287,265. NEEDLED FELT. CLARK-CUTLER-MCDERMOTT COMPANY, Franklin, Mass.
Filed March 26, 1931. Serial No. 312,546. PUBLISHED JULY 7, 1931. Class 50.

287,266. HEADWEAR—NAMELY, HATS AND CAPS FOR MEN AND WOMEN. THE CROFUT & KNAPP CO., South Norwalk, Conn.
Filed March 26, 1931. Serial No. 312,550. PUBLISHED JUNE 30, 1931. Class 39.

287,267. CERTAIN NAMED WEARING APPAREL. MICHAELSON BROS., INC., Boston, Mass.
Filed April 6, 1931. Serial No. 312,996. PUBLISHED JUNE 30, 1931. Class 39.

287,268. HAT LININGS. AARON A. HURWITZ, doing business as A. A. Hurwitz, Boston, Mass.
Filed April 8, 1931. Serial No. 313,084. PUBLISHED JUNE 23, 1931. Class 39.

287,269. PREPARATION FOR STAMPING FABRICS CONTAINING A DRY COLOR—NAMELY, ULTRAMARINE BLUE AND LANUM ANHYDRUS. T. J. RONAN CO. INC., Brooklyn, N. Y.
Filed April 8, 1931. Serial No. 313,095. PUBLISHED JULY 7, 1931. Class 11.

287,270. CHILDREN'S ROMPERS AND PLAY SUITS. HARRY MACKENZIE, Jamaica Plain (Boston), Mass.
Filed April 14, 1931. Serial No. 313,348. PUBLISHED JULY 7, 1931. Class 39.

287,271. HOSIERY. GOTHAM SILK HOSIERY COMPANY, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,693. PUBLISHED JUNE 23, 1931. Class 39.

287,272. TOOTH BRUSHES. MCKESSON & ROBBINS, INCORPORATED, Bridgeport and Fairfield, Conn.
Filed April 23, 1931. Serial No. 313,716. PUBLISHED JULY 7, 1931. Class 29.

287,273. CERTAIN NAMED WEARING APPAREL. BEST & CO., INC., New York, N. Y.
Filed April 25, 1931. Serial No. 313,765. PUBLISHED JULY 7, 1931. Class 39.

287,274. BOILER EXPANSION TANKS, GASOLINE BLOW TORCHES, WATER STORAGE HEATERS AND TANKS, RANGE AND FURNACE BOILERS, BOILER STANDS, GAS WATER HEATERS, LAUNDRY STOVES, WATER TANK HEATING STOVES, AND STEAM AND HOT WATER RADIATORS. BARR & CREELMAN CO., Rochester, N. Y.
Filed May 1, 1931. Serial No. 314,035. PUBLISHED JULY 7, 1931. Class 34.

287,275. TOW FRAME FOR AUTOMOBILES. CHANDLER WELLS, Buffalo, N. Y.
Filed May 5, 1931. Serial No. 314,219. PUBLISHED JULY 7, 1931. Class 19.

287,276. KILNS. ROBERTSON & CO., INC., Cleveland, Ohio.
Filed May 6, 1931. Serial No. 314,249. PUBLISHED JULY 7, 1931. Class 34.

287,277. VACUUM BOTTLES. THE AMERICAN THERMOS BOTTLE COMPANY, Norwich, Conn.
Filed May 12, 1931. Serial No. 314,442. PUBLISHED JULY 7, 1931. Class 2.

287,278. LADIES' SHOES MADE FROM LEATHER, RUBBER, OR FABRIC, OR COMBINATIONS OF THOSE MATERIALS. SEYMOUR TROY & COMPANY, INC., Brooklyn, N. Y.
Filed May 14, 1931. Serial No. 314,581. PUBLISHED JULY 7, 1931. Class 39.

287,279. SHOES MADE OF LEATHER OR PARTLY OF LEATHER, LADIES' AND CHILDREN'S DRESSES, AND MEN'S AND BOYS' SUITS. PERLMAN BROTHERS, Savannah, Ga.
Filed May 14, 1931. Serial No. 314,578. PUBLISHED JULY 7, 1931. Class 39.

287,280. TOY ANIMALS. PADDY'S PUP CO., Los Angeles, Calif.
Filed May 9, 1931. Serial No. 314,391. PUBLISHED JULY 7, 1931. Class 22.

287,281. MEN'S, BOYS', AND WOMEN'S FELT AND STRAW HATS. BATES THOMPSON, INC., New York, N. Y.
Filed May 7, 1931. Serial No. 314,308. PUBLISHED JULY 7, 1931. Class 39.

287,282. WOMEN'S AND CHILDREN'S KNITTED AND WOVEN APPAREL COMPRISING BATHING SUITS, SWEATERS, JERSEY SHIRTS, HATS, BERETS, TURBANS, DRESSES, AND HOSIERY. THE FEDERAL KNITTING MILLS COMPANY, Cleveland, Ohio.
Filed May 7, 1931. Serial No. 314,281. PUBLISHED JULY 7, 1931. Class 39.

287,283. LEATHER GLOVES. DAVID & BLUM INC., New York, N. Y.
Filed May 7, 1931. Serial No. 314,275. PUBLISHED JULY 7, 1931. Class 39.

287,284. FUR AND CLOTH COATS FOR MEN AND WOMEN AND FUR NECK PIECES. JACK APPELBAUM, New York. N. Y.
Filed May 7, 1931. Serial No. 314,265. PUBLISHED JULY 7, 1931. Class 39.

287,285. GOLF CLUBS, ROLLER SKATES, AND ICE SKATES. GLOBE-UNION MFG. CO., Milwaukee, Wis.
Filed May 6, 1931. Serial No. 314,237. PUBLISHED JULY 7, 1931. Class 22.

287,286. BOOTS AND SHOES OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. DEGNER SHOE MFG. COMPANY, Cudahy, Wis.
Filed May 6, 1931. Serial No. 314,232. PUBLISHED JULY 7, 1931. Class 39.

287,287. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. HAMPDEN BREWING COMPANY, Chicopee, Mass.
Filed January 2, 1931. Serial No. 309,562. PUBLISHED JULY 7, 1931. Class 48.

287,288. CLEANING AND WASHING POWDERS FOR GENERAL CLEANING PURPOSES AND FOR PASTE AND LIQUID METAL POLISHES. ENGELITE PRODUCTS CO., INC., New York, N. Y.
Filed January 13, 1931. Serial No. 309,889. PUBLISHED APRIL 14, 1931. Class 4.

287,289. SOAP IN COMMINUTED FORM. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio.
Filed December 18, 1930. Serial No. 309,140. PUBLISHED FEBRUARY 3, 1931. Class 4.

287,290. COUGH SYRUP. O. H. D. CO., INC., Wilmington, Del.
Filed December 16, 1930. Serial No. 309,033. PUBLISHED MAY 26, 1931. Class 6.

287,291. MEDICINAL PREPARATION FOR THE TREATMENT OF THE CARDIOVASCULAR SYSTEM AND THE KIDNEYS. E. BILHUBER, INC., Jersey City, N. J.
Filed December 24, 1930. Serial No. 309,302. PUBLISHED JUNE 23, 1931. Class 6.

287,292. PERFUMES, TOILET WATERS, FACE LOTIONS, HAND LOTIONS, FACIAL CREAMS, HAIR WAVING FLUIDS, ROUGES, BRILLIANTINE, LIPSTICKS, FACE POWDERS, SACHETS, EYEBROW PENCILS, BATH SALTS, TALCUM POWDERS, SHAMPOOS, NAIL POLISHES, AND HAIR TONICS. SALTZMAN & BROMBERG, New York, N. Y.
Filed January 8, 1931. Serial No. 309,742. PUBLISHED JUNE 30, 1931. Class 6.

287,293. BLEACHING, CLEANSING, ANTISEPTIC, AND GERMICIDAL COMPOUNDS. CLOROX CHEMICAL CO., Oakland, Calif.
Filed January 14, 1931. Serial No. 309,921. PUBLISHED JUNE 23, 1931. Class 6.

287,294. MEDICINAL COMPOSITION FOR THE TREATMENT OF OBESITY, CIRCULATORY AND DIGESTIVE DISTURBANCES. SMITH, KLINE & FRENCH LABORATORIES, Philadelphia, Pa.
Filed January 21, 1931. Serial No. 310,230. PUBLISHED JULY 7, 1931. Class 6.

287,295. PREPARATIONS FOR USE IN THE TREATMENT OF THE HAIR AND SCALP. THOMAS A. KRIDOS, Brooklyn, N. Y.
Filed January 27, 1931. Serial No. 310,460. PUBLISHED JUNE 23, 1931. Class 6.

287,296. MEDICATED BANDAGES AND PRESERVATIVES FOR FOODSTUFFS AGAINST DECOMPOSITION OR CHANGE CAUSED BY MICRO-ORGANISMS. NÄHRMITTELFABRIK JULIUS PENNER A.-G., Berlin-Schoneberg, Germany.
Filed February 16, 1931. Serial No. 311,102. PUBLISHED JUNE 23, 1931. Class 6.

287,297. A TABLE BOARD GAME PLAYED WITH PIECES. BERNHARD STERNAU, Islip Terrace, N. Y.
Filed May 14, 1931. Serial No. 314,587. PUBLISHED JULY 7, 1931. Class 22.

287,298. ELECTRICITY-GENERATING UNITS, AND MORE PARTICULARLY THOSE OF THE GASOLINE-DRIVEN TYPE, ADAPTED FOR USE AS INDIVIDUAL POWER OR LIGHTING UNITS FOR RURAL PURPOSES OR THE LIKE. SUNBEAM ELECTRIC MANUFACTURING COMPANY, Evansville, Ind.
Filed March 11, 1929. Serial No. 280,582. PUBLISHED JUNE 11, 1929. Class 21.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

287,299. (CLASS 2. RECEPTACLES.) WALTER H. DEUBENER, doing business as Deubener Shopping Bag, Indianapolis, Ind. Filed July 14, 1928. Serial No. 269,579.

LEATHERLYKE

For Paper Bags.
Claims use since September, 1927.

287,300. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) VERNERS', INC., Atlanta, Ga. Filed Sept. 3, 1929. Serial No. 289,301.

Verners'

For Fresh and Canned Brunswick Stew, and Barbecue Sauce.
Claims used since Apr. 9, 1903.

287,301. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) M. M. FLERON & SON, INC., Trenton, N. J. Filed Apr. 7, 1930. Serial No. 298,493.

DUO TAP

For Radio Aerial and Ground Connectors Used for Connecting Radio Sets.
Claims use since Dec. 16, 1929.

287,302. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) STA-HOT PRODUCTS CO., Oak Park, Ill. Filed May 12, 1930. Serial No. 300,372.

STA-HOT

For Electrically Heated Water Bottles, Sterilizers, Vaporizers, and Parts Thereof, All for Therapeutic Uses.
Claims use since Sept. 1, 1929.

287,303. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE EVER-READY OIL BURNER CORP., New York, N. Y. Filed May 23, 1930. Serial No. 301,096.

EVER READY

For Oil Burners and Oil Burning Equipment.
Claims use since Jan. 20, 1930.

287,304. (CLASS 32. FURNITURE AND UPHOLSTERY.) COLUMBIA STEEL EQUIPMENT COMPANY, Philadelphia, Pa. Filed June 25, 1930. Serial No. 302,810.

PEERLESS

For Portable Filing Cabinets.
Claims use since June 9, 1930.

287,305. (CLASS 32. FURNITURE AND UPHOLSTERY.) CHAPMAN BROTHERS, Chicago, Ill. Filed Sept. 5, 1930. Serial No. 305,343.

ORIENTAL

For Rug and Carpet Cushions.
Claims use since July, 1930.

287,306. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIÉTÉ ANONYME JEAN PATOU, Paris, France. Filed Nov. 19, 1930. Serial No. 308,089.

PATOU'S OWN

For Perfumes, Toilet Waters, Face Powder, Talcum Powder, Sachet, Brilliantine, Bath Salts, Face Cream, Face Lotions, and Lip Rouges.
Claims use since July 11, 1930.

287,307. (CLASS 15. OILS AND GREASES.) PENN VALLEY REFINING COMPANY, Dover, Del., and Providence, R. I. Filed Mar. 4, 1931. Serial No. 311,749.

FYREOIL

For Motor Fuel Oil, Furnace Fuel Oil, and Kerosene.
Claims use since July 30, 1930.

287,308. (CLASS 37. PAPER AND STATIONERY.) HURLBUT PAPER COMPANY, South Lee, Mass. Filed Apr. 24, 1931. Serial No. 313,736.

HURLBUT EXTRA SUPERFINE

For Writing and Printing Paper.
Claims use since November, 1894.

287,309. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) WALDES KOH-I-NOOR, INC., Long Island City, N. Y. Filed May 14, 1931. Serial No. 314,592.

"HOOKS IN A POCKET"

For Hook and Eye Tape.
Claims use since March, 1930.

287,310. (CLASS 45. BEVERAGES, NONALCOHOLIC.) VINO-SANO COMPANY, San Francisco, Calif. Filed June 25, 1931. Serial No. 316,306.

ANTI-SOUR

For Nonalcoholic, Maltless Flavoring and Preservative, for Use in Soft Drinks.
Claims use since Apr. 1, 1929.

287,311. (CLASS 39. CLOTHING.) I. SCHNEIERSON & SONS, INC., New York, N. Y. Filed June 26, 1931. Serial No. 316,343.

LOOMKREPE

For Ladies' Chemises, Princess Slips, Bloomers, Step-Ins, Nightgowns, Pajamas, and Step-in Drawers of a Textile Fabric.
Claims use since July 10, 1929.

LABELS

REGISTERED SEPTEMBER 15, 1931

39,721.—*Title:* BON AMI DE LUXE. For Cleaning and Polishing Powder. THE BON AMI COMPANY, New York, N. Y. Published April 3, 1931.

39,722.—*Title:* PHYNDIT. For Game. BREHMER FOLDING BOX CO. LTD., London, England. Published May 20, 1931.

39,723.—*Title:* PERKY. For Milk Chocolate Candy. CANDY KITCHENS, INC., Chicago, Ill. Published May 1, 1931.

39,724.—*Title:* TOM HENRY. For Candy. CHASE CANDY COMPANY, doing business as Chase's, St. Joseph, Mo. Published July 28, 1931.

39,725.—*Title:* REAL MINT. For Gum. THE CURTISS CANDY COMPANY, Chicago, Ill. Published May 1, 1930.

39,726.—*Title:* TABLETS, NO. 460, ASALUM. For Astringent Douche Tablets. THE DRUG PRODUCTS CO. INC., Long Island City, N. Y. Published July 10, 1931.

39,727.—*Title:* MC 64 FERRO-CU-MANG. For Medicinal Preparation. THE DRUG PRODUCTS CO. INC., Long Island City, N. Y. Published August 3, 1931.

39,728.—*Title:* THE MEDIUM. For Cigars. JOHN FOEGE, Jr., Richmond, Va. Published June 5, 1931.

39,729.—*Title:* DR. CHASE'S SCOUT SHOES. For Shoes. J. FREIDSON SHOE CO., Boston, Mass. Published July 6, 1931.

39,730.—*Title:* GOLDEN EGG NOODLES. For Noodles. GOLDEN AGE CORPORATION, New York, N. Y. Published November 15, 1930.

39,731.—*Title:* WISCONSIN'S BEST. For Malt Syrup. SIGMUND L. GOLDMAN, doing business as Wisconsin Mercantile Co., Chicago, Ill. Published February 23, 1931.

39,732.—*Title:* GOODMAN'S FINE MATZO MEAL. For Matzo Meal. A. GOODMAN & SONS, INC., New York, N. Y. Published June 1, 1931.

39,733.—*Title:* GOODMAN'S PURE MATZO MEAL. For Matzo Meal. A. GOODMAN & SONS, INC., New York, N. Y. Published June 1, 1931.

39,734.—*Title:* HOME MADE SWEET GREEN TOMATO PICKLES. For Sweet Green Tomato Pickle. EDNA LESLIE GAOUT, Ojai, Calif. Published December 1, 1930.

39,735.—*Title:* CREPE HOSIERY PURE SILK LISLE REINFORCED. For Hosiery. HARBON HOSIERY COMPANY, Philadelphia, Pa. Published July 30, 1931.

39,736.—*Title:* SORORITY HOUSE FOOTWEAR. For Foot Wear. HOLMAN PAPER BOX CO., INC., St. Louis, Mo. Published July 13, 1931.

39,737.—*Title:* BULL FROG. For Malt Syrup. LLOYD L. HUGHES, doing business as Lloyd L. Hughes & Co., Yakima, Wash. Published March 8, 1930.

39,738.—*Title:* BIG GAME. For Fresh Bartlett Pears. DENNIS W. LEARY, Walnut Grove, Calif. Published May 13, 1931.

39,739.—*Title:* MOSS ROSE LOTION. For Lotion for Softening and Whitening the Hands and for Use After Shaving. WILLIAM H. MAUS, doing business as Moss Rose Products Company, Philadelphia, Pa. Published July 7, 1931.

39,740.—*Title:* RUSSELL McPHAIL CHILDREN'S CANDIES—(OLD WOMAN WHO LIVED IN A SHOE DESIGN). For Candies. McPHAIL'S CHOCOLATES, INC., Jacksonville, Fla. Published May 23, 1931.

39,741.—*Title:* RUSSELL McPHAIL CHILDREN'S CANDIES—(HUMPTY DUMPTY DESIGN). For Candies. McPHAIL'S CHOCOLATES, INC., Jacksonville, Fla. Published May 23, 1931.

39,742.—*Title:* RUSSELL McPHAIL CHILDREN'S CANDIES—(JACK AND JILL DESIGN). For Candies. McPHAIL'S CHOCOLATES, INC., Jacksonville, Fla. Published May 23, 1931.

39,743.—*Title:* RUSSELL McPHAIL CHILDREN'S CANDIES—(LITTLE BOY BLUE DESIGN). For Candies. McPHAIL'S CHOCOLATES, INC., Jacksonville, Fla. Published May 23, 1931.

39,744.—*Title:* RUSSELL McPHAIL CHILDREN'S CANDIES—(PETER, PETER, PUMPKIN EATER DESIGN). For Candies. McPHAIL'S CHOCOLATES, INC., Jacksonville, Fla. Published May 23, 1931.

39,745.—*Title:* RUSSELL McPHAIL CHILDREN'S CANDIES—(COW JUMPED OVER THE MOON DESIGN). For Candies. McPHAIL'S CHOCOLATES, INC., Jacksonville, Fla. Published May 23, 1931.

39,746.—*Title:* GUEST PACKAGE REID'S "SPECIAL" ICE CREAM. For Ice Cream. REID ICE CREAM CORPORATION, Brooklyn, N. Y. Published July 9, 1931.

39,747.—*Title:* SILVER WATCH BRAND. For Tomatoes. W. C. SCOTT & CO., INC., Crystal Springs, Miss. Published June 8, 1931.

39,748.—*Title:* GOLD WATCH BRAND. For Tomatoes. W. C. SCOTT & CO., INC., Crystal Springs, Miss. Published June 8, 1931.

39,749.—*Title:* CRATER LAKE BLUE, THE ARISTOCRAT OF BLUINGS. For Bluing. MRS. IDA MAY SHANNON, doing business as Crater Lake Blue Co., Portland, Oreg. Published April 16, 1931.

39,750.—*Title:* CRATER LAKE BLUE, THE ARISTOCRAT OF INKS. For Ink. MRS. IDA MAY SHANNON, doing business as Crater Lake Blue Co., Portland, Oreg. Published April 20, 1931.

39,751.—*Title:* HOUSE & COTTAGE. For Mixed Paint. ALBERT K. SHELDON CO., INC., doing business as Cambridge Paint & Varnish Works, Cambridge, Mass. Published January 2, 1919.

39,752.—*Title:* "X" BOILER FLUSH. For Liquid for Flushing Boilers. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Published August 4, 1931.

39,753.—*Title:* "X" RADIATOR FLUSH. For Liquid for Flushing Radiators. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Published August 4, 1931.

39,754.—*Title:* DR. CHAPMAN'S HEALTH SHOES. For Shoes. PHILIP TRACHTENBERG, doing business as Hill Shoe Company, Philadelphia, Pa. Published July 1, 1931.

39,755.—*Title:* TREASURE INCENSE. For Incense. TREASURE PRODUCTS CO., Amherst, Wis. Published May 10, 1931.

39,756.—*Title:* BEAUTY PLUS. For Hosiery. TROJAN HOSIERY MILLS, INC., Indianapolis, Ind. Published July 15, 1931.

39,757.—*Title:* MARY KING FACE POWDER. For Face Powder. THE J. R. WATKINS COMPANY, doing business as Watkins, Winona, Minn. Published May 15, 1931.

39,758.—*Title:* MARK TWAIN. For Cigars. WOLF BROTHERS & CO., Red Lion, Pa. Published February 10, 1931.

PRINTS

REGISTERED SEPTEMBER 15, 1931

13,409.—*Title:* RADIO'S MOTIVE POWER SINCE 1915. For Vacuum Tubes. E. T. CUNNINGHAM INCORPORATED, New York, N. Y. Published June 1, 1931.

13,410.—*Title:* RADIO'S MOTIVE POWER SINCE 1915. For Vacuum Tubes. E. T. CUNNINGHAM INCORPORATED, New York, N. Y. Published June 1, 1931.

13,411.—*Title:* REPLACE YOUR LACES. For Shoe Laces. DIAMOND BRAIDING MILLS, Chicago Heights, Ill. Published June 15, 1931.

13,412.—*Title:* AH-H! THERE'S A DISH THAT GOES BIG WITH ME! For Cooked Spaghetti. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published May 24, 1931.

13,413.—*Title:* HEINZ CIDER VINEGAR—THE IMPORTANT INGREDIENT IN A HUNDRED DELICIOUS SALADS. For Cider Vinegar. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published April 19, 1931.

13,414.—*Title:* KURFEES 80 AND 20=100% PAINT. For Prepared Liquid Paint. J. F. KURFEES PAINT CO. INC., Louisville, Ky. Published June 26, 1931.

13,415.—*Title:* GRANITOID HOUSE PAINT. For Prepared Liquid Paint. J. F. KURFEES PAINT CO., INC., Louisville, Ky. Published June 26, 1931.

13,416.—*Title:* KURFEES GRANITOID. For Prepared Liquid Enamel and Varnish Stain. J. F. KURFEES PAINT CO., INC., Louisville, Ky. Published June 26, 1931.

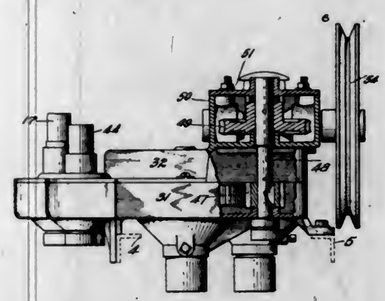
13,417.—*Title:* BUNNY TOT. For Ice Cream. THE MATHEWS COMPANY, Detroit, Mich. Published August 1, 1930.

13,418.—*Title:* MINT-JULEP, THE CANDY MINT. For Candy Mints. ELSA G. MUELLER, doing business as Mint-Julep Gum Company, Washington, D. C. Published June 17, 1931.

REISSUES

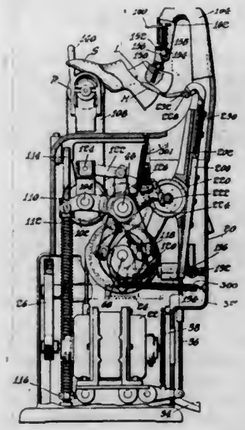
SEPTEMBER 15, 1931

18,185. WASHING MACHINE. ALPHEUS W. ALTORFER, Peoria, Ill., assignor to Altorfer Bros. Company, East Peoria, Ill., a Corporation of Illinois. Original No. 1,574,334, dated Feb. 23, 1926, Serial No. 465,991, filed May 2, 1921. Application for reissue filed Nov. 28, 1927. Serial No. 236,346. 13 Claims. (Cl. 74—14.)



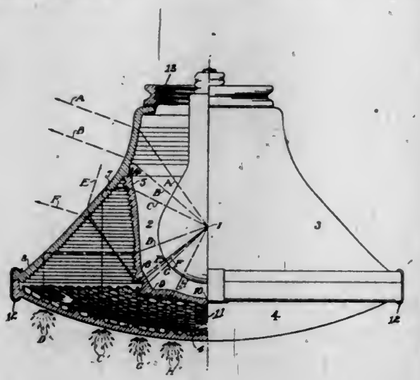
1. In a machine of the character described, in combination, a frame, a casing within and secured to said frame, a housing connected with said casing and formed with axially disposed spaced end bearings, a bracing plate for the housing and casing disposed in horizontal position crosswise of said casing on the outside thereof between said housing and casing and secured to said frame, and a bracing plate connected to the inside of the casing and encircling the inner bearing of said housing.

18,186. RELASTING MACHINE. ARTHUR F. PYM, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original No. 1,678,164, dated July 24, 1928, Serial No. 443,043, filed Feb. 7, 1921. Application for reissue filed July 12, 1930. Serial No. 467,591. 108 Claims. (Cl. 12—15.)



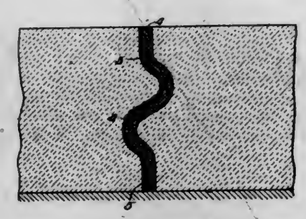
17. In a relasting machine, a support to hold a last stationary, and impositively engaging friction means to push a shoe rearwardly on a last held by said support.

18,187. LUMINAIR. THOMAS W. ROLPH, Newark, Ohio, assignor, by mesne assignments, to Holophane Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Dec. 2, 1927, Serial No. 237,156. Renewed Jan. 16, 1929. Original No. 1,724,726, dated Aug. 13, 1929. Application for reissue filed July 21, 1931. Serial No. 553,020. 11 Claims. (Cl. 240—106.)



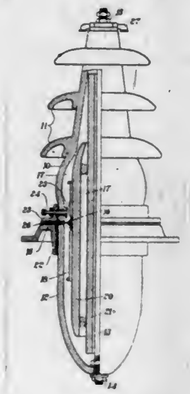
8. A luminair comprising a light source, an outer two part light transmitting glass envelope, external securing means for holding the two parts of the envelope together, a cup-shaped inner glass part, and a compression spring interposed between one of the outer glass parts and the closed bottom of the inner glass part and pressing the edge of the inner part against the other outer part.

18,188. PAVING JOINT AND METHOD OF MAKING THE SAME. EDWARD L. BENEDICT and ROBERT L. GLOSE, Pittsburgh, Pa., assignors, by direct and mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original No. 1,603,506, dated Oct. 19, 1926, Serial No. 372,145, filed Apr. 8, 1920. Application for reissue filed Sept. 17, 1927. Serial No. 220,227. 11 Claims. (Cl. 94—18.)



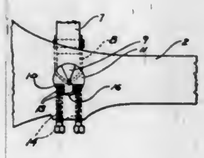
1. The herein described method of making paving joints, which consists in forming a body or strip of fibrous material of proper shape to constitute the desired joint, and then impregnating the same with a filler of permanently elastic character, substantially as described.

18,189. MEANS FOR SUPPORTING BAFFLES IN OIL-FILLED BUSHINGS. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Original No. 1,726,096, dated Aug. 27, 1929, Serial No. 731,503, filed Aug. 11, 1924. Application for reissue filed June 13, 1931. Serial No. 544,248. 22 Claims. (Cl. 175—358.)



1. An insulator comprising a pair of complementary dielectric shells having registering parts, means for clamping said shells together to form a closed casing, a gasket interposed between said registering parts and a supporting device clamped by said registering parts in contact with said gasket, said device having its outermost portion within the outer periphery of said registering parts.

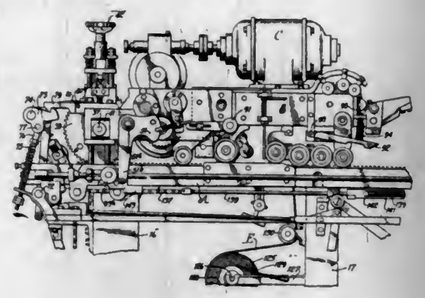
18,190. WEIGHING SCALE. SAMUEL N. HURT, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Original No. 1,732,163, dated Oct. 15, 1929, Serial No. 6,879, filed Feb. 4, 1925. Application for reissue filed Jan. 12, 1931. Serial No. 508,273. 6 Claims. (Cl. 308—2.)



1. In a device of the class described, in combination, a member having a bore therein, a pivot, a pivot retainer mounted in the bore, said pivot retainer having a diametrically opposed recess and projection both within said bore, and means engageable with the retainer on either side of said projection to clamp the pivot in said recess.

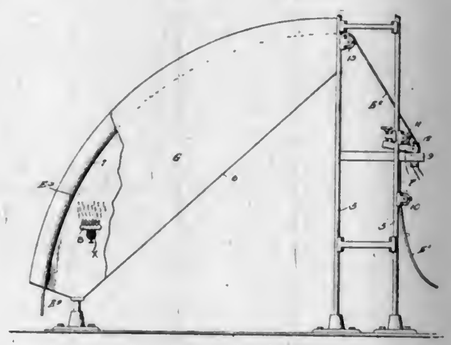
18,191. METHOD OF AND APPARATUS FOR MAKING AND FINISHING PRINTS. CHARLES M. BOYCE, Cedar Rapids, Iowa, assignor, by mesne assignments, to John R. Ditmars, New York, N. Y. Original No. 1,719,796, dated July 2, 1929, Serial No. 320,783, filed Nov. 21, 1928. Application for reissue filed June 3, 1931. Serial No. 541,930. 14 Claims. (Cl. 101—260.)

1. In a printing machine, a frame adapted to hold a printing plate, means for holding a sheet of paper, a carriage movable on said frame and having means for transferring the image from the plate to said sheet, means for inking the printing plate, means for propelling said carriage back and forth on said frame, means for raising and lower-



ing the carriage with respect to said frame during part of the travel of said carriage, and means operable on the reversing of said carriage for stabilizing the return movement thereof.

18,192. METHOD OF FINISHING PRINTS. CHARLES M. BOYCE, Cedar Rapids, Iowa, assignor, by mesne assignments, to John R. Ditmars, New York, N. Y. Original No. 1,725,699, dated Aug. 20, 1929, Serial No. 366,760, filed May 28, 1929. Application for reissue filed Apr. 21, 1931. Serial No. 531,787. 19 Claims. (Cl. 91—67.9.)

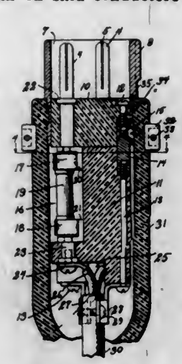


1. The continuous process of producing prints simulating photographs, comprising coating an ink imprinted continuous strip base with a layer of transparent colloidal film-forming solution, the consistency of the film-forming solution being predetermined and controlled for gauging the thickness of film to produce any desired surfaces from matte to gloss.

18,193. ELECTRIC CONNECTER. FRANCIS C. KOLLATH, Chicago, Ill., assignor of one-half to Daniel Woodhead, Detroit, Mich. Original No. 1,743,821, dated Jan. 14, 1930, Serial No. 222,229, filed Sept. 27, 1927. Application for reissue filed Mar. 6, 1931. Serial No. 520,655. 12 Claims. (Cl. 200—115.5.)

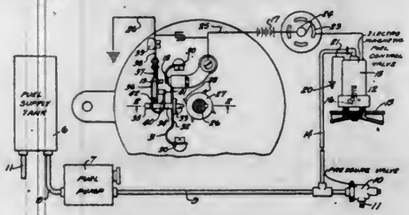
12. An electric connecter comprising a base member, a flexible rubber casing surrounding said base member and causing the base member to be clampingly supported in the casing, contact prongs extending from said base member and beyond the end of the rubber casing, electrical conductors extending into said casing and operatively and electrically connected to said prongs, a fuse operatively and electrically arranged between at least one of said prongs and an end of a conductor, a strain relief member arranged inside of said casing and connected to the base

member and clampingly engaging the conductors for preventing any strain on said conductors to be transmitted



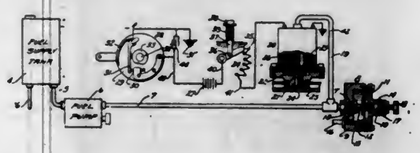
to electrical connections inside of the casing, and a housing extending beyond the casing and protecting the conductors.

18,194. FUEL INJECTION SYSTEM. LOUIS O. FRENCH, Milwaukee, Wis. Original No. 1,664,615, dated Apr. 3, 1928, Serial No. 97,637, filed Mar. 26, 1926. Application for reissue filed Mar. 21, 1930. Serial No. 437,925. 11 Claims. (Cl. 123—32.)



1. In a fuel injection system, the combination of a fuel-metering device, an electro-magnet for controlling said device, and a control circuit for said electromagnet including means influencing the current supply to said magnet to actuate said device to supply substantially constant quantity fuel charges through a predetermined range of engine speeds and thereafter decreasing the amount of fuel above a predetermined engine speed and cutting off said fuel supply at a predetermined maximum speed.

18,195. FUEL INJECTION SYSTEM. LOUIS O. FRENCH, Milwaukee, Wis. Original No. 1,664,614, dated Apr. 3, 1928, Serial No. 88,406, filed Feb. 15, 1926. Application for reissue filed Mar. 21, 1930. Serial No. 437,927. 17 Claims. (Cl. 123—32.)



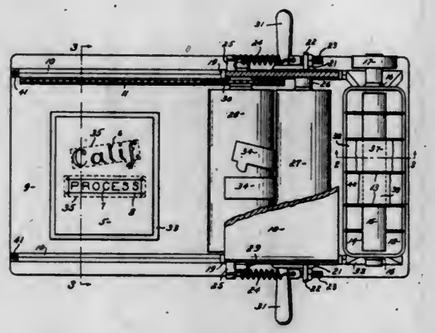
1. In a fuel supply system, the combination with a liquid fuel-metering valve, of an electromagnet for controlling said valve, a control circuit for said electromagnet including engine-controlled switch mechanism for periodically controlling said electromagnet, and a variable resistance for varying the current supplied to said electromagnet and thus vary the duration of lift of said valve and consequently the amount of fuel furnished the engine.

18,196. POLE. ADOLPH W. MALONE, Fillmore, Utah, assignor of one-third to Albert H. Vestal, Anderson, Ind., and one-third to Edwin S. Healy, New York, N. Y. Original No. 1,696,772, dated Dec. 25, 1928, Serial No. 307,981, filed Sept. 24, 1928. Application for reissue filed July 21, 1931. Serial No. 552,273. 9 Claims. (Cl. 189—26.)



7. A pole comprising a series of cast metal sections disposed in end to end abutting relation to each other the abutting ends of the respective sections being provided with inwardly extending transverse web plates or flanges to serve as adjoining contact surfaces, and means within the pole structure for securing said several sections together end to end with the faces of said web plates in supporting contact, each of said sections being formed with openings for access to said securing means.

18,197. PROCESS AND APPARATUS FOR INKING EMBOSSED WORK. MELVILLE W. CANFIELD, Los Angeles, Calif. Original No. 1,797,323, dated Mar. 24, 1931, Serial No. 412,809, filed Dec. 9, 1929. Application for reissue filed Aug. 5, 1931. Serial No. 555,834. 14 Claims. (Cl. 101—208.)

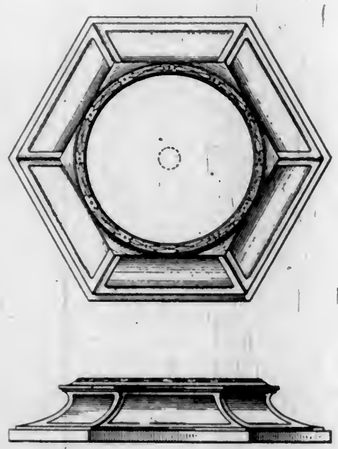


1. The herein described process, comprising; making a pad of a size and shape that is adapted to cover a raised surface to be inked; attaching the pad to the periphery of a roller; inking the face of the thus attached pad; and causing relative lateral movement between the roller and surface with concurrent rotation of the roller, in such manner that the inked pad will come into rolling contact with said surface as a result of said relative movement.

DESIGNS

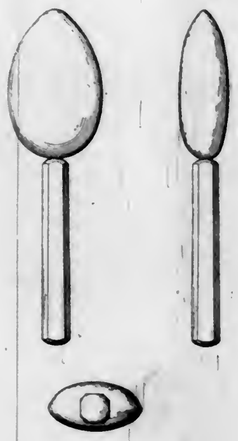
SEPTEMBER 15, 1931

85,075. LAMP BASE. WILLIAM M. ADRIAN, Chicago, Ill. Filed July 15, 1931. Serial No. 40,550. Term of patent 3½ years.



The ornamental design for a lamp base, as shown and described.

85,076. BODY TREATING DEVICE. RAYMOND L. BARKER, Chicago, Ill. Filed June 4, 1930. Serial No. 35,897. Term of patent 14 years.



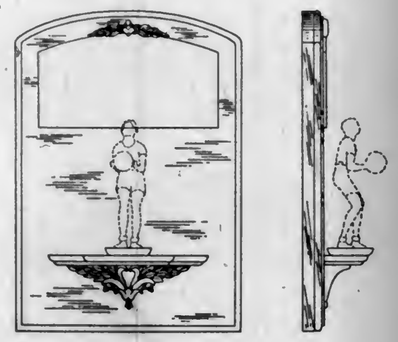
The ornamental design for a body treating device substantially as shown and described.

85,077. PITCHER OR SIMILAR ARTICLE. EDWARD E. BARTLETT, Sapulpa, Okla. Filed June 18, 1931. Serial No. 40,258. Term of patent 14 years.



The ornamental design for a pitcher or similar article, substantially as shown.

85,078. PLAQUE OR SIMILAR ARTICLE. ERNEST T. BECK, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 40,488. Term of patent 7 years.



The ornamental design for a plaque or similar article, substantially as shown.

85,079. GOBLET OR SIMILAR ARTICLE. GEORGE BECKER, Manor, Pa., assignor to Westmoreland Glass Company, Grapeville, Pa., a Corporation of Pennsylvania. Filed May 13, 1931. Serial No. 39,826. Term of patent 7 years.



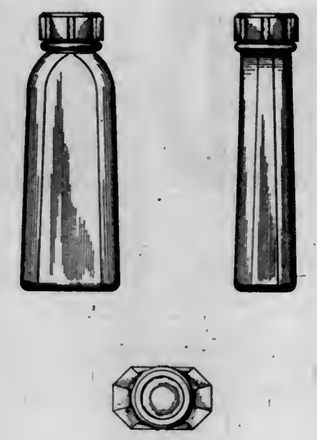
The ornamental design for a goblet or similar article, as shown.

85,080. BOWL OR SIMILAR ARTICLE. GEORGE BECKER, Manor, Pa., assignor to Westmoreland Glass Company, Grapeville, Pa., a Corporation of Pennsylvania. Filed May 13, 1931. Serial No. 39,827. Term of patent 7 years.



The ornamental design for a bowl or similar article, as shown.

85,081. BOTTLE OR SIMILAR ARTICLE. JEAN W. BICKS, Chicago, Ill., assignor to C. A. Zoes Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 22, 1931. Serial No. 38,412. Term of patent 14 years.



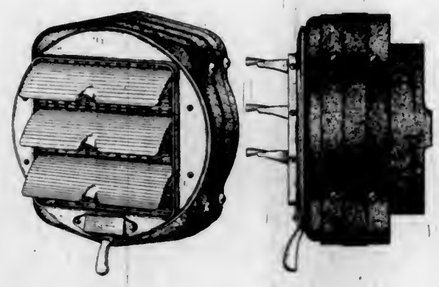
The ornamental design for a bottle, or similar article, as shown.

85,082. BOTTLE OR SIMILAR ARTICLE. ERNEST E. BILBY, Muncie, Ind., assignor to Hemingray Glass Company, Muncie, Ind., a Corporation of Kentucky. Filed Feb. 19, 1931. Serial No. 38,733. Term of patent 14 years.



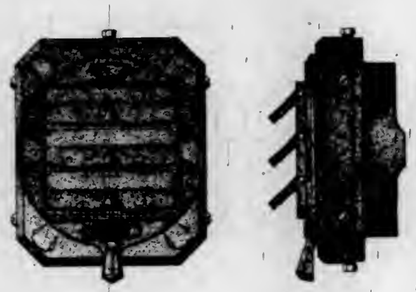
The ornamental design for a bottle or similar article substantially as shown and described.

85,083. AUTOMOBILE-BODY HEATER. EARL C. BOOTH, Indianapolis, Ind., assignor to Noblitt-Sparks Industries, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed July 24, 1931. Serial No. 40,674. Term of patent 7 years.



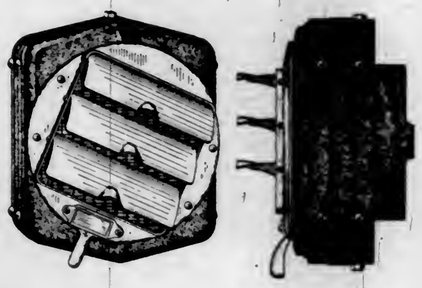
The ornamental design for an automobile-body heater, as shown.

85,084. AUTOMOBILE-BODY HEATER. EARL C. BOOTH, Indianapolis, Ind., assignor to Noblitt-Sparks Industries, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed July 24, 1931. Serial No. 40,675. Term of patent 7 years.



The ornamental design for an automobile-body heater, as shown.

85,085. AUTOMOBILE-BODY HEATER. EARL C. BOOTH, Indianapolis, Ind., assignor to Noblitt-Sparks Industries, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed July 24, 1931. Serial No. 40,676. Term of patent 7 years.



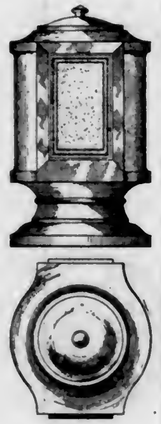
The ornamental design for an automobile-body heater, as shown.

85,086. SIGN. SYDNEY S. CHADDERTON, San Francisco, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed May 27, 1931. Serial No. 40,001. Term of patent 14 years.



The ornamental design for a sign, as shown.

85,087. COMBINED URN AND MEMORIAL TABLET. WARREN F. CLARK, Philadelphia, Pa. Filed Oct. 1, 1930. Serial No. 37,100. Term of patent 7 years.



The ornamental design for a combined urn and memorial tablet as shown.

85,088. STOVE. FREDERICK W. CUFFE, Waynesboro, Va., assignor, by mesne assignments, to Edison General Electric Appliance Company, Inc., Chicago, Ill., a Corporation of New York. Filed July 12, 1928. Serial No. 27,467. Term of patent 14 years.



The ornamental design for a stove as shown and described.

85,089. SPECTACLES. ERNEST E. ENONS, Wilmington, Del., assignor to The Ful-Vue Sales Company, Washington, D. C., a Firm. Filed July 6, 1931. Serial No. 40,418. Term of patent 14 years.



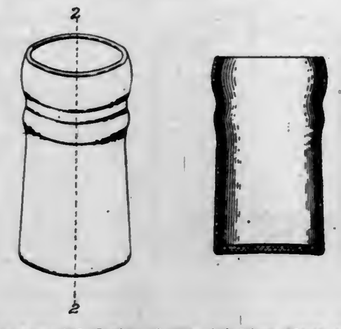
The ornamental design for spectacles, as shown.

85,090. SHOE BUCKLE. ADA E. FARMER, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed July 11, 1931. Serial No. 40,502. Term of patent 7 years.



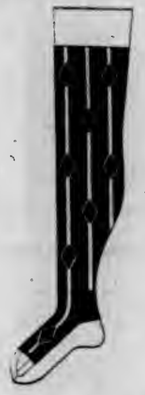
The ornamental design for a shoe buckle as shown.

85,091. DRINKING GLASS. CHARLES FLETCHER, Chicago, Ill., assignor to Walgreen Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1930. Serial No. 36,909. Term of patent 14 years.



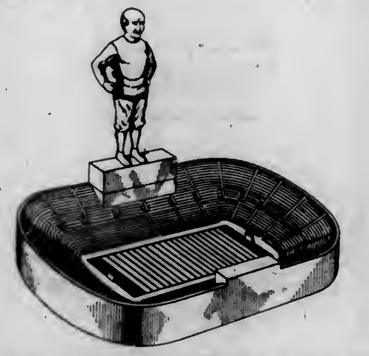
The ornamental design for a drinking glass as shown and described.

85,092. STOCKING. PAUL L. FOX, Lebanon, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 26, 1931. Serial No. 40,339. Term of patent 14 years.



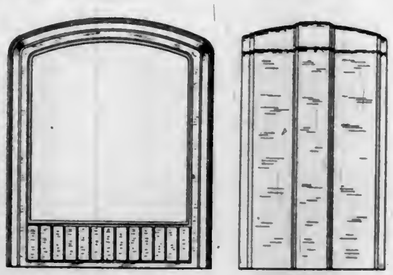
The ornamental design for a stocking, as shown and described.

85,093. ASH TRAY. DAVID GOTTLIEB, Chicago, Ill. Filed June 19, 1931. Serial No. 40,274. Term of patent 3½ years.



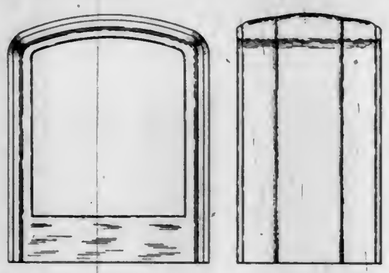
The ornamental design for an ash tray as shown.

85,094. CLOCK CASE. GEORGE GRAFF, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed July 13, 1931. Serial No. 40,524. Term of patent 14 years.



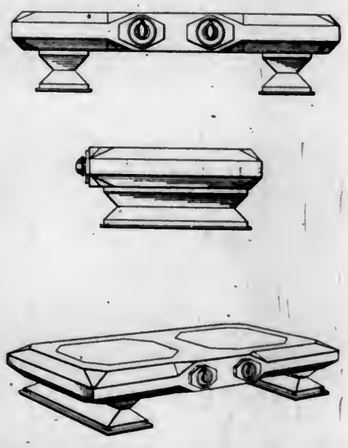
The ornamental design for a clock case substantially as shown.

85,095. CLOCK CASE. GEORGE GRAFF, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed July 13, 1931. Serial No. 40,525. Term of patent 14 years.



The ornamental design for a clock case substantially as shown.

85,096. ELECTRIC HOT PLATE. ARLINE A. GRATZ, Minneapolis, Minn., assignor to Dominion Electrical Manufacturing Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 14, 1931. Serial No. 38,659. Term of patent 7 years.



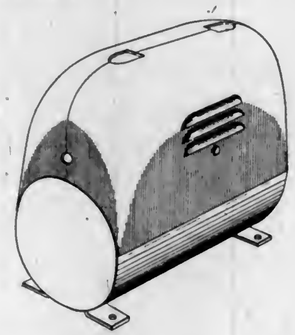
The ornamental design for an electric hot plate, substantially as shown.

85,097. EMBLEM. HOWARD J. HARVEY, Detroit, Mich. Filed July 9, 1931. Serial No. 40,473. Term of patent 14 years.



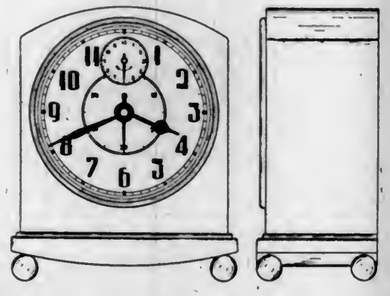
The ornamental design for an emblem, as shown and described.

85,098. COVER OF A HOUSEHOLD PUMP UNIT. STANLEY H. HOBSON, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a Corporation of Illinois. Filed Apr. 22, 1931. Serial No. 39,593. Term of patent 3½ years.



The ornamental design for a cover of a household pump unit as shown and described.

85,099. CLOCK CASE. MARTIN HERMANN KAEFER, Peru, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed May 21, 1931. Serial No. 39,923. Term of patent 14 years.



The ornamental design for a clock case, as shown.

85,100. ELECTRIC PLUG MEMBER. ALEXANDER R. KANNE, Brooklyn, N. Y. Filed June 27, 1931. Serial No. 40,342. Term of patent 7 years.



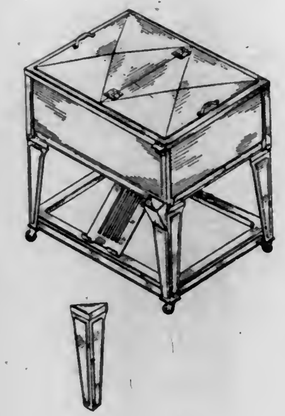
The ornamental design for an electric plug member, substantially as shown.

85,101. TEXTILE FABRIC OR SIMILAR ARTICLE. GEORGE KATEB, New York, N. Y. Filed Apr. 14, 1931. Serial No. 39,476. Term of patent 3½ years.



The ornamental design for textile fabric or similar article, as shown.

85,102. COMBINATION BOTTLE COOLER AND STAND. WILLIAM WALLACE KILGORE, Atlanta, Ga., assignor to All Metal Bottle Cooler Corporation, Atlanta, Ga., a Corporation of Georgia. Filed June 27, 1931. Serial No. 40,348. Term of patent 14 years.



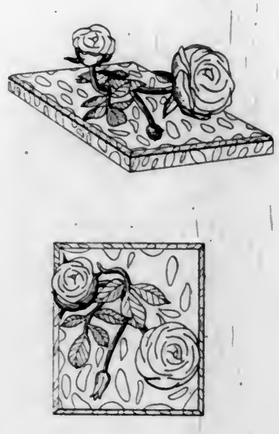
The ornamental design for a combination bottle cooler and stand as shown.

85,103. WEDDING RING OR SIMILAR ARTICLE. MAX KRONSTADT, Brooklyn, N. Y. Filed Apr. 10, 1930. Serial No. 35,205. Term of patent 7 years.



The ornamental design for a wedding ring or similar article, substantially as shown.

85,104. BASE FOR A PEN HOLDER STAND, PAPER WEIGHT, AND THE LIKE. ARTHUR G. LEAKE, Bridgeport, Conn. Filed June 17, 1931. Serial No. 40,241. Term of patent 3½ years.



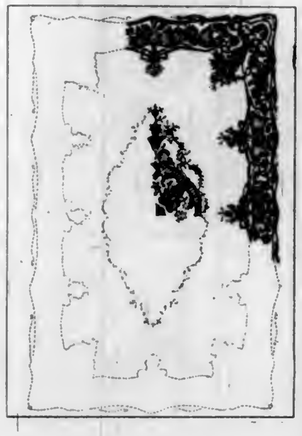
The ornamental design for a base for a pen holder stand, paper weight, and the like, substantially as shown.

85,105. BOOK END. ARTHUR G. LEAKE, Bridgeport, Conn. Filed June 17, 1931. Serial No. 40,242. Term of patent 3½ years.



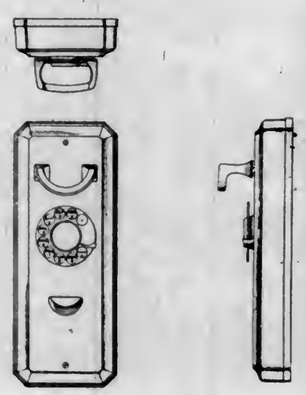
The ornamental design for a book end, substantially as shown.

85,106. TEXTILE PANEL FOR A MATTRESS COVER. CHARLES LOFMAN, Chicago, Ill., assignor to S. Karpen & Bros., a Corporation of Illinois. Filed Apr. 28, 1931. Serial No. 39,645. Term of patent 3½ years.



The ornamental design for a textile panel for a mattress cover, as shown and described.

85,107. WALL MOUNTING FOR A HAND TELEPHONE. GEORGE R. LUM, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1931. Serial No. 40,748. Term of patent 14 years.



The ornamental design for a wall mounting for a hand telephone as shown.

85,108. PEANUT DISPENSER. CHARLES W. MABEY, Indianapolis, Ind. Filed July 17, 1931. Serial No. 40,580. Term of patent 7 years.



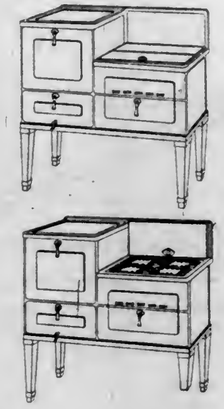
The ornamental design for a peanut dispenser, as shown.

85,109. BOTTLE. GEORGE N. MAS, Washington, D. C.; Jesse T. Dowling and G. Ridgely Sappington, trustees. Filed Dec. 29, 1926. Serial No. 20,221. Term of patent 14 years.



The ornamental design for a bottle, as shown and described.

85,110. GAS STOVE. HENRY C. MAUL, Detroit, Mich., assignor to Detroit-Michigan Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 16, 1931. Serial No. 38,683. Term of patent 14 years.



The ornamental design for a gas stove, substantially as shown and described.

85,111. PLATE OR SIMILAR ARTICLE. WALTER S. MAYER, Beaver, Pa., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed June 27, 1931. Serial No. 40,351. Term of patent 14 years.



The ornamental design for a plate or similar article, as shown.

85,112. TOOTHBRUSH. WALTER G. MCGAULEY, New York, N. Y. Filed July 16, 1931. Serial No. 40,572. Term of patent 14 years.



The ornamental design for a toothbrush, as shown.

85,113. ADVERTISING NOVELTY. BENJAMIN C. MYERS, Trenton, N. J. Filed July 6, 1931. Serial No. 40,434. Term of patent 14 years.



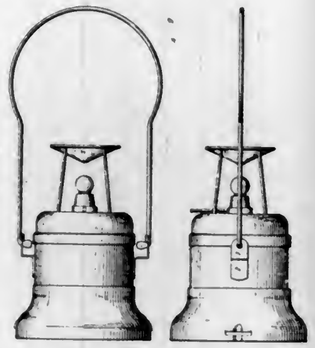
The ornamental design for an advertising novelty, as shown.

85,114. GOLF CLUB BOOT. ALFRED A. RODGERS, Los Angeles, Calif., assignor to Scully Bros. Inc., Los Angeles, Calif., a Corporation of California. Filed Apr. 16, 1931. Serial No. 39,507. Term of patent 7 years.



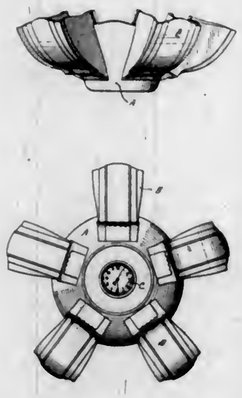
The ornamental design for a golf club boot, as shown.

85,115. HAND LANTERN. WALTER B. SCHULTE, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed July 17, 1931. Serial No. 40,582. Term of patent 14 years.



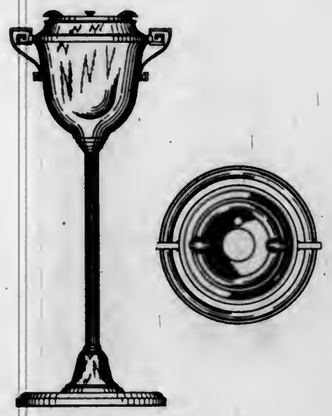
The ornamental design for a hand lantern, as shown.

85,116. LIGHTING FIXTURE. HARRY SCHREIBMAN, Brooklyn, N. Y., assignor to Capital Lighting Fixture Company, Inc., a Corporation of New York. Filed July 21, 1931. Serial No. 40,616. Term of patent 3½ years.



The ornamental design for a lighting fixture substantially as shown and described.

85,117. TOBACCO ASH RECEPTACLE. EDWARD SCHULTZ, Chicago, Ill. Filed July 11, 1931. Serial No. 40,503. Term of patent 7 years.



The ornamental design for a tobacco ash receptacle substantially as shown.

85,118. SHEET GLASS. FRED F. SHETTERLY, Kingsport, Tenn., assignor to Blue Ridge Glass Corporation, Kingsport, Tenn., a Corporation of New York. Filed May 5, 1928. Serial No. 26,575. Term of patent 14 years.



The ornamental design for sheet glass as shown and described.

85,119. HIGH CHAIR. ARCHIE V. SHIPMAN, Pasadena, Calif. Filed July 6, 1931. Serial No. 40,431. Term of patent 3½ years.



The ornamental design for a high chair, as shown.

85,120. TABLE. ARCHIE V. SHIPMAN, Pasadena, Calif. Filed July 6, 1931. Serial No. 40,433. Term of patent 3½ years.



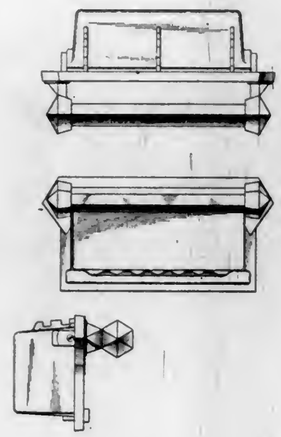
The ornamental design for a table, as shown.

85,121. CHAIR. FRANK SOBEL, New York, N. Y. Filed June 26, 1931. Serial No. 40,338. Term of patent 3½ years.



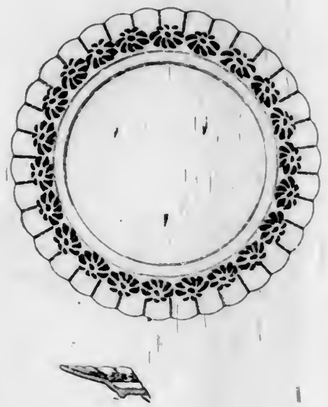
The ornamental design for a chair, as shown.

85,122. COMBINATION SOAP DISH AND HANDRAIL. AUGUST J. SMITH, Mount Pleasant, Mich., assignor to American Enameled Products Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 26, 1930. Serial No. 38,127. Term of patent 7 years.



The ornamental design for a combination soap dish and hand-rail, as shown.

85,123. PLATE OR SIMILAR ARTICLE. CHARLES O. SMITH, Sebring, Ohio, assignor to The Sebring Pottery Company, Sebring, Ohio, a Corporation of Ohio. Filed Nov. 26, 1930. Serial No. 37,798. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown.

85,124. DOLL. CHRISTINE SMITH, Des Moines, Iowa. Filed May 14, 1931. Serial No. 39,852. Term of patent 3½ years.



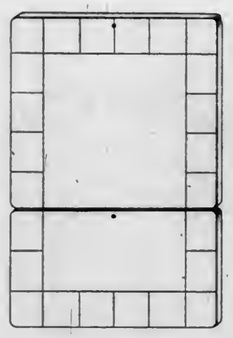
The ornamental design for a doll, as shown.

85,125. STOCKING. ARTHUR GORDON STEPHENS, London, England. Filed Nov. 4, 1929, Serial No. 33,303, and in Great Britain Sept. 20, 1929. Term of patent 14 years.



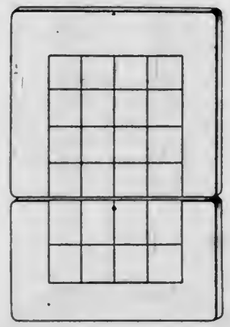
The ornamental design for a stocking as shown.

85,126. SET OF RANGE DOORS. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 40,489. Term of patent 14 years.



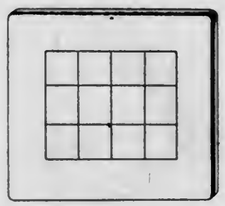
The ornamental design for a set of range doors substantially as shown and described.

85,127. SET OF RANGE DOORS. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 40,490. Term of patent 14 years.



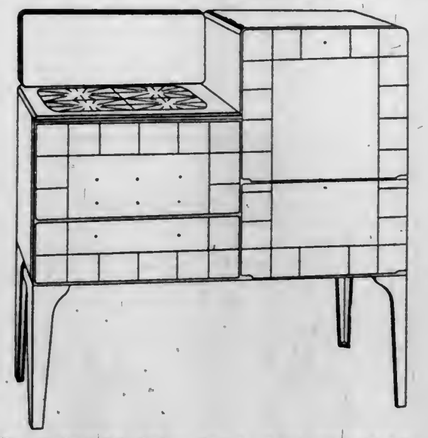
The ornamental design for a set of range doors substantially as shown and described.

85,128. RANGE DOOR. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 40,491. Term of patent 14 years.



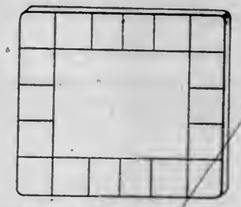
The ornamental design for a range door substantially as shown and described.

85,129. RANGE. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 40,496. Term of patent 14 years.



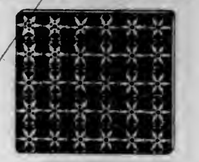
The ornamental design for a range substantially as shown and described.

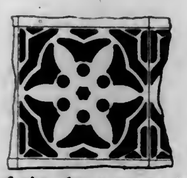
85,130. RANGE DOOR. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 40,492. Term of patent 14 years.



The ornamental design for a range door substantially as shown and described.

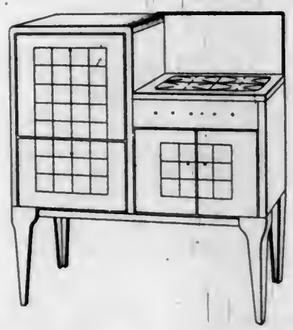
85,131. RANGE DOOR. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 40,493. Term of patent 14 years.





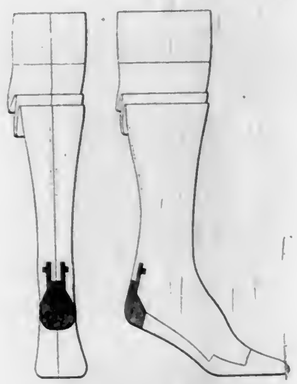
The ornamental design for a range door substantially as shown and described.

85,132. RANGE. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 40,494. Term of patent 14 years.



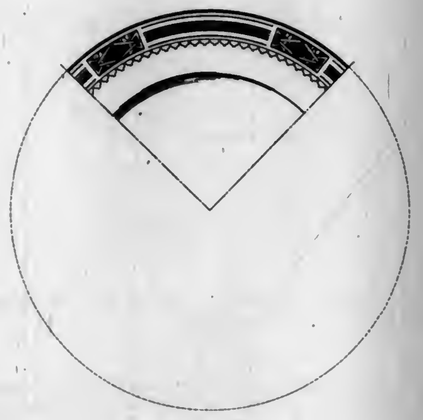
The ornamental design for a range substantially as shown and described.

85,133. STOCKING. JAMES A. STRUTHERS, Minneapolis, Minn. Filed May 12, 1930. Serial No. 35,598. Term of patent 14 years.



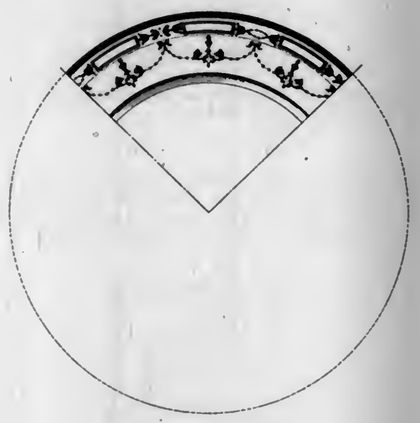
The ornamental design for a stocking, substantially as shown.

85,134. DISH OR SIMILAR ARTICLE. OTTO TAUSCHEK, Munich, Germany, assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed July 15, 1931. Serial No. 40,548. Term of patent 14 years.



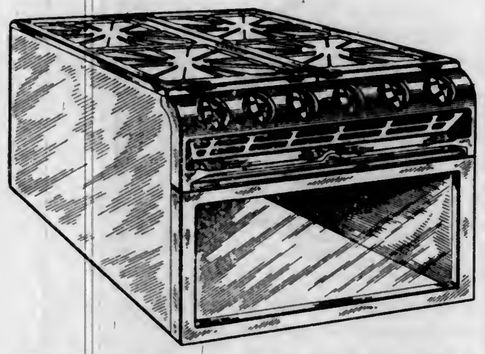
The ornamental design for a dish or similar article as shown and described.

85,135. DISH OR SIMILAR ARTICLE. OTTO TAUSCHEK, Munich, Germany, assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed July 15, 1931. Serial No. 40,549. Term of patent 14 years.



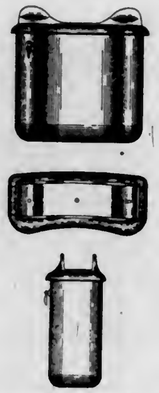
The ornamental design for a dish or similar article as shown and described.

85,136. GAS RANGE TOP SECTION. JACOB TELLER, Chicago, and ARTHUR P. SCHULZ, Berwyn, Ill., assignors to Teller Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Apr. 6, 1931. Serial No. 39,388. Term of patent 7 years.



The ornamental design for a gas range top section, as shown.

85,137. WATER CLOSET FLUSH TANK. BERT O. TILDEN, Trenton, N. J., assignor to B. O. T. Manufacturing Company, Trenton, N. J., a Corporation of New Jersey. Filed May 26, 1931. Serial No. 39,996. Term of patent 14 years.



The ornamental design for a water closet flush tank, as shown and described.

85,138. ASH TRAY OR SIMILAR ARTICLE. HENRY UNDERBERG, Brooklyn, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed June 24, 1931. Serial No. 40,313. Term of patent 3½ years.



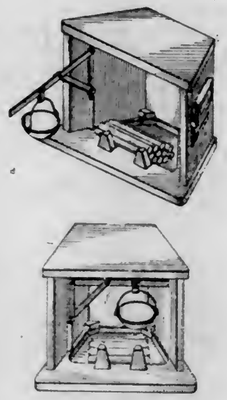
The ornamental design for an ash tray or similar article, substantially as shown.

85,139. SWITCH COVER. NICHOLAS J. WALSH, Schenectady, N. Y., assignor to Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed July 15, 1931. Serial No. 40,562. Term of patent 14 years.



The ornamental design for a switch cover, substantially as shown.

85,140. SMOKER'S DEVICE. JOEL B. WELLS, Stratford, Pa. Filed Oct. 21, 1930. Serial No. 37,337. Term of patent 3½ years.



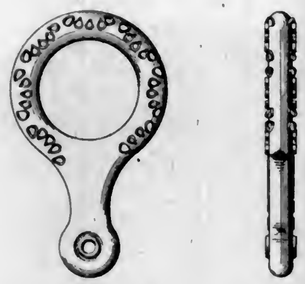
The ornamental design for a smoker's device as shown and described.

85,141. BADGE OR SIMILAR ARTICLE. ERNEST H. WESTON, East Orange, N. J., assignor to The Whitehead & Hoag Company, Newark, N. J., a Corporation of New Jersey. Filed Nov. 22, 1930. Serial No. 87,754. Term of patent 14 years.



The ornamental design for a badge or similar article, as shown.

85,142. TEETHER. NAT P. STECKLER, New York, N. Y. Filed June 16, 1931. Serial No. 40,225. Term of patent 14 years.

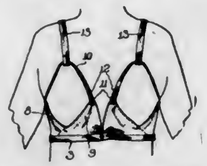


The ornamental design for a teether, as shown.

PATENTS

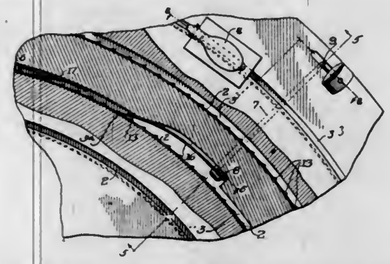
GRANTED SEPTEMBER 15, 1931

1,822,872. BRASSIÈRE. MARGO R. ALEXANDER, Chicago, Ill. Filed Oct. 29, 1930. Serial No. 491,828. 5 Claims. (Cl. 2—42.)



1. A brassière comprising an elongated belt adapted to be fitted snugly around the body of the wearer, a pair of supports carried on the upper edge of the belt at the forward side of the body, said supports having edge portions shaped to engage the lower and side portions of the breasts, and means for exerting upward and lateral pressure on the breasts through the medium of said supports, comprising a pair of suspender straps and shoulder straps having their rear ends connected to the rear portion of the belt and their forward ends adjustably connected to the respective suspender straps intermediate the ends thereof, each of said straps having its opposite ends secured to the opposite sides of its support and one of said ends being removably fastened to the support.

1,822,873. RACE GAME. EVERETT C. BREWER, Jr., Oak Park, Ill. Filed Mar. 21, 1928. Serial No. 263,258. 5 Claims. (Cl. 273—86.)



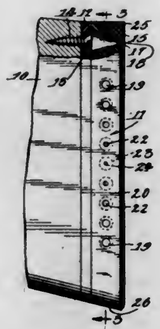
3. In a game device including a baseboard, a series of grooves in said board each having a band therein, a racing element 4 operatively attached to each band; ratchet teeth in each band, a spring pawl 16, mounted for reciprocation, associated with each band for engaging the ratchet teeth thereof, a rock-shaft for each pawl mounted in the bottom of the said board, each rock-shaft having upturned ends, one of said ends operatively connected to the said spring pawl and the other said upturned end having a handle thereon for manually rocking the said shaft, thereby actuating the associated band.

1,822,874. SPINDLE-FERRULE BEARING. FRED J. BURNS, Saginaw, Mich., assignor to The Columbia Mills, Inc., Saginaw, Mich., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 224,894. 4 Claims. (Cl. 156—86.)



3. The combination with a spindle, of a spindle ferrule bearing mounted thereon and comprising a sheet metal barrel provided with a reduced shouldered bearing section at one end thereof, and integral prongs on the opposite open end of said barrel adapted to be forced into engagement with said spindle after assembly to rigidly secure it in position thereon.

1,822,875. RECOIL PAD. ALBERT H. AMMANN, Chicago, Ill., assignor to Jostam Manufacturing Co., Chicago, Ill., a Copartnership consisting of W. D. Stannard and A. H. Ammann. Filed Dec. 12, 1930. Serial No. 501,858. 12 Claims. (Cl. 42—74.)



1. A recoil pad for guns comprising a supporting base, and a resilient rubber member formed with a plurality of air pockets, said pockets having throttling apertures whereby the resiliency of the pad is regulated in its different portions under impact.

1,822,876. PLAY PEN. DE FOREST ANTHONY, Fall River, and BEATRICE M. STODDARD, Dedham, Mass., assignors to Dorothy Dewey Comstock, Dedham, Mass., doing business as The Kiddie-Rhester Co. Filed June 8, 1929. Serial No. 369,299. 10 Claims. (Cl. 256—25.)

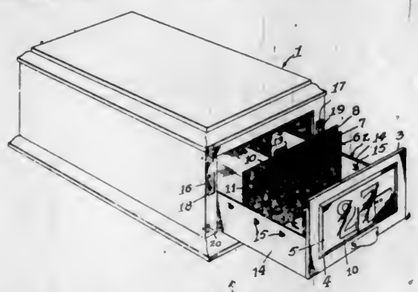


1. In combination with a pen of the type described having foldable sections, bracing means for supporting the extended pen in upright position, comprising legs associated with some of the sections extendible longitudinally of said sections to bear upon the pen supporting surface and movable inwardly thereof to lie substantially within the compass of the pen when the sections are folded together.

1,822,877. METHOD OF TREATING ALUMINUM BASE ALLOYS WHICH ARE SUBJECT TO GROWTH. ROBERT S. ARCHER and WILLIAM L. FINK, Cleveland, Ohio, assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 22, 1928. Serial No. 328,048. 7 Claims. (Cl. 148—21.1)

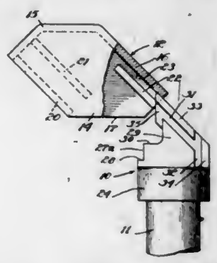
1. The method of developing substantially complete and permanent volume change in an aluminum base alloy which is subject to growth, comprising heating the alloy to a temperature of from about 150° to 265° C. and continuing said heating until the hardness of the alloy has passed through its maximum and the alloy has attained a substantially complete and permanent increase in volume.

1,822,878. VISIBLE FILE. RAY E. BAUDER, Chicago, Ill. Filed Aug. 2, 1930. Serial No. 472,576. 17 Claims. Cl. 129—16.)



1. A folder for use in a filing system, comprising front and rear walls connected together to form a memoranda-receiving pocket, one of said walls being translucent to render visible therethrough the memoranda in the pocket, said wall having indicia thereon.

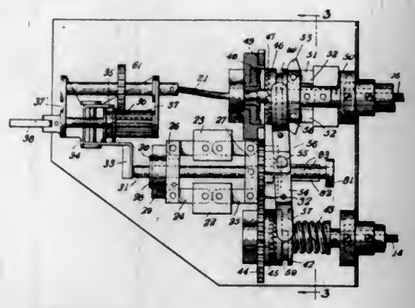
1,822,879. ADJUSTABLE SERVICE ENTRANCE FITTING. HENRY BRACHTL, Chicago, Ill., assignor, by mesne assignments, to Appleton Electric Company, Chicago, Ill., a Corporation of Illinois. Filed July 18, 1928. Serial No. 293,717. 6 Claims. (Cl. 247—6.)



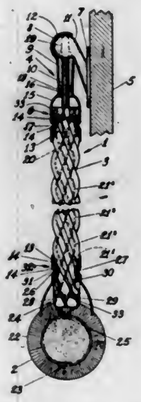
6. A service entrance fitting comprising a cover and a hub member, said hub member having two sets of grooves arranged at an angle to each other, and ribs on said cover adapted to be engaged with the grooves of either set, thereby to position the cover on the hub member in either of two complementary positions of adjustment.

1,822,880. SPEED CONTROLLING DEVICE FOR VEHICLES. ADOLF BRAUN, New York, N. Y. Filed Apr. 28, 1924. Serial No. 709,697. Renewed Aug. 15, 1930. 3 Claims. (Cl. 264—2.)

1. In a device for controlling the speed of automotive vehicles, valve means for controlling the fuel supply to the engine, speed-responsive means for operating the valve, means normally connecting an engine-driven part to the speed-responsive means, and a centrifugal device responsive to movement of the vehicle for disconnecting the engine from the speed-responsive means and connecting the speed responsive means to a moving part on the vehicle.



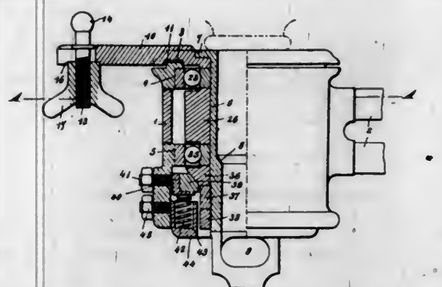
1,822,881. AUTOMOBILE HAND GRIP. REUBEN BRODER, New York, N. Y. Filed June 23, 1930. Serial No. 463,098. 9 Claims. (Cl. 105—354.)



1. In combination, a vehicle hand grip comprising a cord assembly, a clamping member on said cord assembly, a bracket, and a swivelling member connecting the clamping member and cord assembly to said bracket in an upright position and housing an elongated spring therein which extends therethrough at both ends, one end of said spring extending into the bracket and the other end extending longitudinally within the cord assembly, said spring serving to return the swivelling member and the cord assembly to the predetermined upright position relative said bracket when moved from said position.

2. In combination with an upright member of a vehicle body and a bracket affixed to said upright member, a vehicle hand grip comprising a cord assembly attached in an upright position relative said upright body member and in swivelling junction with said bracket to permit angular movement of said cord assembly relative said upright body member, and an elongated spring within said bracket and extending longitudinally within said cord assembly, said elongated spring serving to return the cord assembly to the predetermined upright position relative said upright body member when moved from said position.

1,822,882. DIRIGIBLE HEADLIGHT. ALPHONSE CHABROL, Aixe-sur-Vienne, France. Filed Oct. 9, 1929, Serial No. 398,287, and in France Oct. 9, 1928. 3 Claims. (Cl. 240—62.)



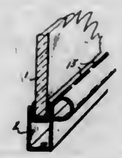
1. A support for a headlight which comprises a stationary part, a rotary part carried by and arranged in said stationary part, ball bearings interposed between said parts, means associated with the rotary part for attaching the headlight, and means for actuating said rotary part, additional means both for keeping said rotary part in place and for absorbing shocks, a lever firmly connected to said rotary part, said lever comprising a removable ball member provided with two projecting flat faces, a nut for adjusting the ball member, said lever also having a recess and a groove to carry the ball member whereby said flat faces engage the said groove to keep the ball member in place and means holding the ball member immovable which comprise a pin and elastic means which engage said pin with the nut immobilizing the latter so that the ball member is rendered immovable and any movement transmitted thereto is imparted to the headlight.

1,822,883. FEEDER TAP. HOMER P. CHANDLER, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Oct. 17, 1929. Serial No. 400,368. 13 Claims. (Cl. 200—115.5.)



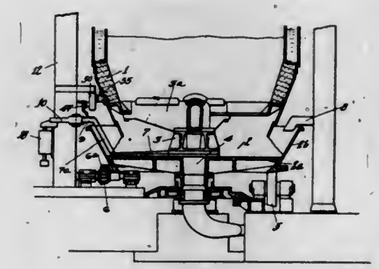
1. A feeder tap comprising an insulating tubular member, plug members closing each end, inwardly projecting means from each plug forming cup-shaped projections to receive and engage the ends of a fuse, a fuse within the tubular member comprising an insulating tube with caps closing the ends and connected by a fusible strip within the insulating tube, the caps inserted in the cup-shaped projections in rotatable relation thereto, means to connect one plug to a source of power and means to connect the other plug to a table, and one of the plugs having means forming a passage from the interior of the said insulating tubular member to the exterior thereof to prevent excessive pressure within the member.

1,822,884. HEATER FOR AUTOMOTIVE SHIELDS. GEORGE J. CREIGHTON, Portland, Oreg. Filed Feb. 19, 1929. Serial No. 341,188. 3 Claims. (Cl. 20—40.5.)



1. In a device of the class described, the combination in a wind shield of a transparent element disposed within a frame, a tubular element disposed adjacent the lower edge of the transparent element and made integral with windshield frame, a plurality of slits disposed in spaced relation with the upper surface of the tubular element and pneumatic means for supplying heated air to the tubular element.

1,822,885. GAS PRODUCER. FRED B. CROSBY, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 29, 1929. Serial No. 359,048. 8 Claims. (Cl. 48—66.)

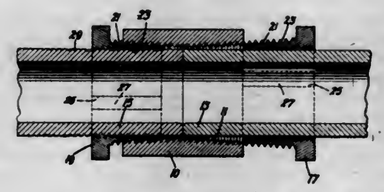


1. In a gas producer, a rotating ash support, an ash removing plow carried by said support, means normally held in the path of said plow to arrest its rotation with said ash support and thereby cause the discharge of ashes from the producer, and automatic means set in operation upon the arrival of said plow in its arrested position for causing said plow arresting means to release said plow after ashes have been discharged from said producer for a predetermined interval.

1,822,886. LUBRICANT AND CARBON REMOVER. PAUL N. ELDERKIN, Los Angeles, Calif. Filed Apr. 6, 1929. Serial No. 353,264. 1 Claim. (Cl. 87—5.)

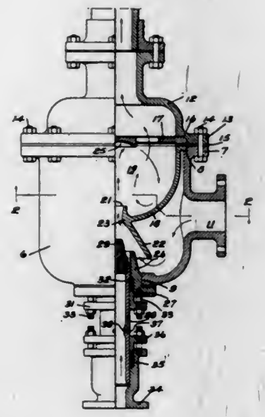
A composition of matter, including a light mineral oil, a thinner for the mineral oil, trichlorethylene and acetone, in admixture, substantially in the proportions by volume of 40 parts Eocene, 12½ parts of mineral oil, 1¼ parts trichlorethylene and 1¼ parts acetone.

1,822,887. PIPE COUPLING. CHARLES H. HAGSTEDT, Valley Stream, N. Y. Filed Oct. 8, 1929. Serial No. 398,144. 5 Claims. (Cl. 247—25.)



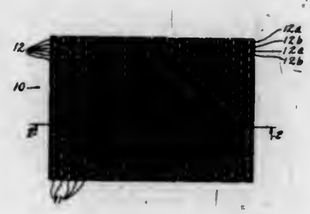
1. A split bushing of the character described of hardened metal, having a tapered exterior and internal and external screw threads of the same pitch and adapted to connect a pipe section to another pipe section or fitting, said screw threads being adapted to cut cooperating threads in the members which they secure.

1,822,888. MEANS FOR TREATING OIL. ARTHUR R. HAYSEL, Los Angeles, Calif., assignor of forty-nine one-hundredths to Charles Thompson and George K. Thompson, Los Angeles, Calif., Copartners doing business as Chas. & Geo. K. Thompson, Los Angeles, Calif. Filed Sept. 17, 1928. Serial No. 306,356. 8 Claims. (Cl. 261—76.)



1. A mixer head comprising a mixer housing, means for creating a vortically moving jet of fluid within said housing, a second and means for entraining a predetermined quantity of a second fluid within said jet and a third means including a channelled baffle plate for effecting an extended turbulent action within the interengaged fluids.

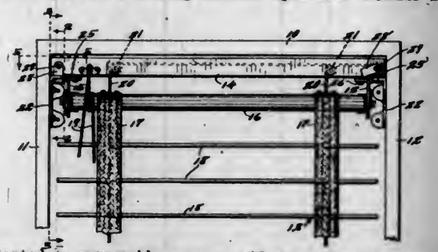
1,822,889. FABRIC. ALFRED L. HELWITH, Larchmont, N. Y. Filed June 10, 1931. Serial No. 543,354. 2 Claims. (Cl. 139—426.)



1. A textile fabric consisting of yarns substantially free of twist tension, said fabric having a filling and a warp, the warp including alternate consecutive yarns of regular and reverse twist, the warp yarns being successively uniformly and more closely spaced than those of the filling, so as to produce a ribbed effect transverse to the warp.

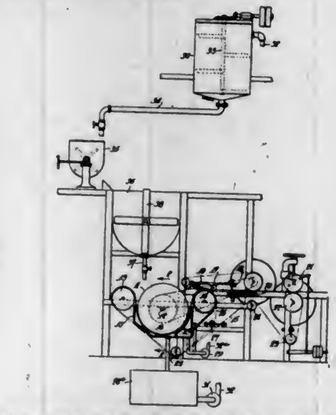
1,822,890. SUPPORTING MEANS FOR VENETIAN BLINDS. JAMES K. HEYMER, Minneapolis, Minn., assignor to Christine M. Warren, guardian of Clide W. Warren, doing business as Warren Shade Company, Minneapolis, Minn. Filed Nov. 12, 1930. Serial No. 495,160. 11 Claims. (Cl. 156—17.)

4. In combination, a supporting element including a portion adapted to be attached upon a structure and a ledge extending from said structure, a member having an end portion adapted to rest upon said ledge, an element providing, together with said member, a horizontal slot, said member adapted to slide upon said ledge rearwardly and forwardly thereof, a stop at a rearward portion of said ledge for limiting movement of said member rearwardly of said ledge, and a locking element upon said member and



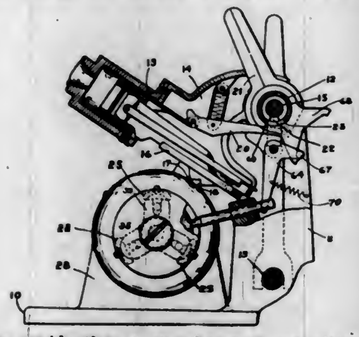
adapted to removably engage said supporting element to fasten said member against lateral movement upon said ledge.

1,822,891. APPARATUS FOR MAKING SHEET MATERIAL. HARRY E. HOLCOMB, Stratford, Conn., assignor to Fiberfraks Inc., New York, N. Y., a Corporation of New York. Filed June 1, 1929. Serial No. 367,798. 9 Claims. (Cl. 92—39.)



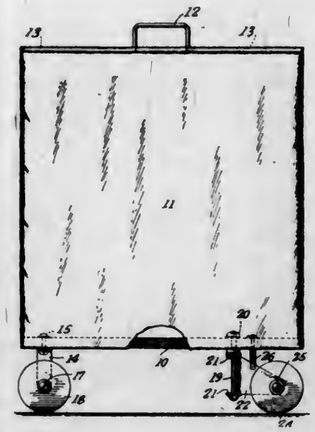
1. An apparatus for forming sheet material, including a pair of coaxially spaced disks, and a conveying and sheet collecting belt engaging the lower portions of the peripheries of the disks and forming therewith a chamber to receive the mixture from which the sheet is to be formed.

1,822,892. PHONOGRAPH. ARTHUR A. JOHNSON, Bridgeport, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Apr. 1, 1924. Serial No. 703,376. 37 Claims. (Cl. 274—17.)



4. In combination, a record-support comprising a plurality of longitudinally disposed rods and movable supports for the rods adapted, upon relative movements between the rods and the supports, to cause the rods to collapse; a manually operated device for moving such supports; and means for preventing operation of the said device.

1,822,893. ROLLER SHOPPING BAG. HERMAN KAPOLKIN, New York, N. Y. Filed Jan. 20, 1930. Serial No. 422,011. 1 Claim. (Cl. 280—36.)



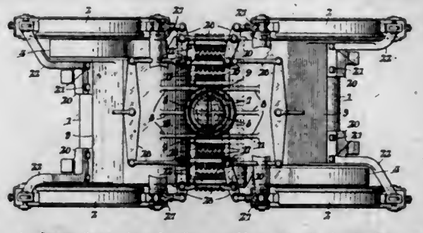
A portable container having a rigid base, pairs of wheels at the front and rear of said base, said front wheels having fixed transverse axes and said rear wheels being dirigible, all of said wheels being alike in diameter and each said pair equally spaced apart, means to limit the angular movement of the dirigible wheels, all of said wheels being within the planes of the base edges and adjacent thereto, and a pair of normally spaced apart rigid handles on the sides of the container by which it is guided and supported, said handle having end extensions embedded in the upper edges of the container side walls.

1,822,894. FLEXIBLE BAND, CHAIN, OR LINKAGE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Feb. 15, 1929. Serial No. 340,227. 8 Claims. (Cl. 59—80.)



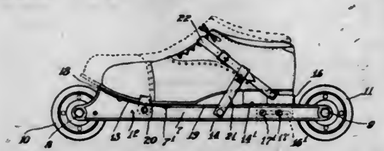
1. In a band, chain or linkage, the combination of a plurality of link-elements, means for connecting said elements in articulated relation comprising bifurcated members inserted into adjoining links in straddled relation with portions thereof, said connecting-members each having means engaging with the next connecting-member in the series, and means for locking certain of the connecting-members in place whereby said members act one against another to hold the whole series of said members from withdrawal.

1,822,895. TRUCK FOR ROLLING STOCK. WILLIAM F. KIESEL, Jr., Hollidaysburg, Pa. Filed June 30, 1930. Serial No. 464,799. 17 Claims. (Cl. 105—167.)



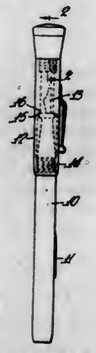
1. A frameless truck for rolling stock including axle supporting members fulcrumed for independent torsional, transverse, and vertical movement about a fixed point.

1,822,896. ROLLER SKATE. GEORGE A. LEONARD, Larchmont, N. Y. Filed May 6, 1930. Serial No. 450,143. 6 Claims. (Cl. 208—178.)



1. A roller skate comprising a chassis having straight side plates with front and rear wheels carried thereby and floor plates below the level of the upper edges of the wheels, an integral web connecting edges of the side plates between the wheels, cleats carried by said floor plates, one of said cleats being adjustable longitudinally of the chassis.

1,822,897. INK CARRYING RESERVOIR. SAMUEL LIPSCHUTZ, Brooklyn, N. Y. Filed Feb. 27, 1929. Serial No. 342,994. 4 Claims. (Cl. 120—57.)

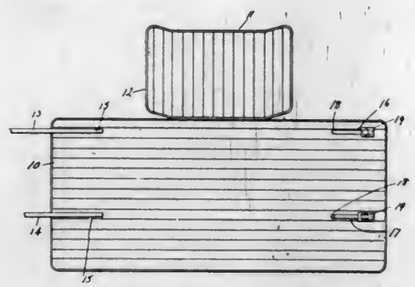


1. In an ink carrying receptacle including a restricted neck arranged to substantially snugly fit a fountain pen and nib, a closure therefor, means for connecting said closure to said receptacle including a sealing joint for said neck comprising complemental snugly interfitting spaced walls on said neck and closure.

1,822,898. PROCESS OF PREPARING ANIMAL SKINS FOR TANNING. EDWARD J. MAGUIRE, Brooklyn, N. Y., assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Jan. 24, 1930. Serial No. 423,268. 7 Claims. (Cl. 149—3.)

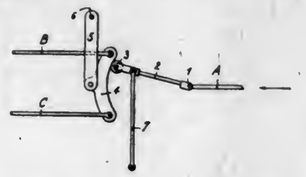
1. In a process of preparing animal skins for tanning the step of steeping said skins in an aqueous solution of tri-sodium phosphate.

1,822,899. SAFETY PAD FOR SHIPPING RADIO SETS AND THE LIKE. HARRY MALIS, Philadelphia, Pa. Filed Jan. 29, 1930. Serial No. 424,229. 4 Claims. (Cl. 150—52.)



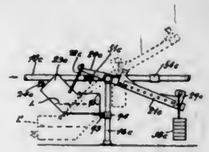
3. A radio shipping pad consisting of a rectangular padded body section and a rectangular padded flap of smaller dimensions than the body, the latter being secured along one of its edges intermediate its ends to one of the edges of the body section leaving the ends of said flap free for folding, the transverse center lines of the body section and flap coinciding with each other and straps carried by the body section.

1,822,900. BRAKE-THRUST DISTRIBUTOR. GEORGE LOUIS RENÉ JEAN MESSIER, Montrouge, France. Original application filed Aug. 2, 1929, Serial No. 382,868, and in France Aug. 10, 1928. Divided and this application filed June 9, 1931. Serial No. 543,064. 4 Claims. (Cl. 244—2.)



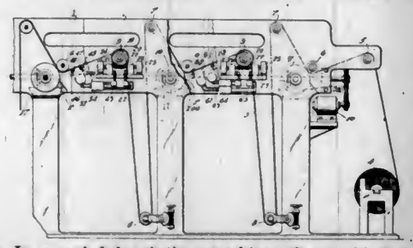
1. Brake-thrust distributor of the divided beam type for wheeled vehicles, comprising a divided beam connected by each of its two ends to the brakes disposed on each side of the vehicle and linked by its middle to a fixed point of the chassis of the vehicle so as to swing around said fixed point in a direction substantially parallel to that of the braking thrust and means controlled by the steering device of the vehicle, for varying the ratio of division of said beam according to the position of said steering device.

1,822,901. QUANTITY CONTROL APPARATUS. PATRICK DE LACY-MULHALL, Los Angeles, Calif. Filed Oct. 10, 1928. Serial No. 311,548. 3 Claims. (Cl. 137—145.)



3. In combination with a pipe line having a control valve: a rotatably mounted shaft connected to operate said valve between open and closed positions by rotation through a given angle; a swinging bucket-arm mounted on and extending from said shaft; a bucket carried by said bucket-arm; means for gradually accumulating in said bucket liquid diverted from flow through said pipe line; means for dissipating liquid accumulated in said bucket; a swinging weight-arm mounted on and extending from the shaft oppositely to the bucket-arm and arranged to swing through substantially equal angles on either side of horizontal as the shaft rotates through the valve operating angle, the relation between the weight-arm and the valve being such that the valve is open when the weight-arm is in its below-horizontal position and closed when the weight-arm is in its above-horizontal position; a weight-stop at each end of a track portion provided on said weight arm, said track portion having straight-line inclines sloping downwardly on the arm from said stops, the straight-line incline associated with the outer stop sloping below horizontal toward said outer stop when the arm is swung to the lower limit of its normal movement, and the straight-line incline associated with the inner stop sloping below horizontal toward said inner stop when the arm is swung to the upper limit of its normal movement; and a weight adapted to run on said track portion of said weight-arm.

1,822,902. MEANS FOR SECURING REGISTER OF IMPRESSIONS IN WEB-FED PRINTING MACHINES. EDMUND B. OSBORNE, Montclair, N. J. Filed June 12, 1929. Serial No. 370,289. 10 Claims. (Cl. 271—2.6.)



1. In a web-fed printing machine, the combination of a web supply, means for printing upon said web, means for conveying the web to said printing means, mechanism including light responsive means for causing lateral movement of said web upon said conveying means, and a source of light arranged with respect to said light responsive means and said web so that lateral movement of said web varies the effect of the light from said source upon said light responsive means.

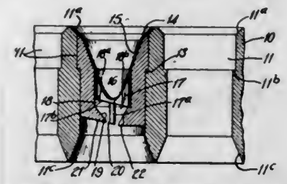
1,822,903. SAFETY RAZOR. RILEY HERBERT PARKER, North Eastham, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 28, 1930. Serial No. 498,788. 7 Claims. (Cl. 30—12.)



1. As an article of manufacture, a cap piece for a safety razor, having means for securing it to the guard and handle portions of the razor, and adapted to serve as a clamping member for a blade placed between it and the guard portion, said cap piece being provided with a slot arranged to permit the edge portion of a blade to be passed through it from above the cap piece.

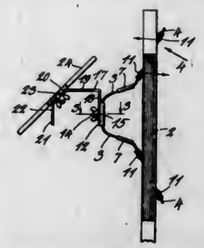
CARNEGIE LIBRARY OF ATLANTA

1,822,904. MANUFACTURE OF MACARONI. FREDERICK PENZA, Brooklyn, N. Y., assignor of one-half to Albert Chiapparelli, Brooklyn, N. Y. Filed Oct. 22, 1930. Serial No. 490,381. 11 Claims. (Cl. 107—14.)



9. A die for machines of the class described comprising a tubular body having a discharge port at the lower end thereof and a narrow discharge passage arranged radially with respect to said port, a die pin disposed in the bore of said body and comprising a substantially semi-circular head and a small depending pin, the lower end of which terminates centrally of said discharge port, the lower surface of the head of said die pin being beveled to form therebelow and around the extending pin a chamber having greater area at one side of the pin than at the other to cause a spiral discharge of a tubular strand of macaroni from said die, said radial passage discharging a relatively straight web of macaroni around which the tubular strand is spiralled, and the lower surface of said tubular body through which the port opens being beveled.

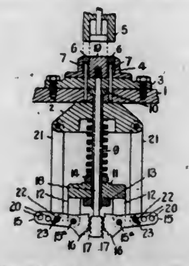
1,822,905. DISPLAY BRACKET. ROY J. RE NOIS, Denver, Colo., assignor to Re Nois Put Bracket Corporation, Denver, Colo., a Corporation of Colorado. Filed Apr. 13, 1931. Serial No. 529,779. 4 Claims. (Cl. 248—3.)



1. A display bracket comprising, in combination, a flexible resilient member, a clamping jaw secured to each end thereof, each jaw having a notch extending inwardly from one side, the opposing sides of the notches having a protective covering and a shelf supporing bracket secured to the flexible resilient member substantially at its center point.

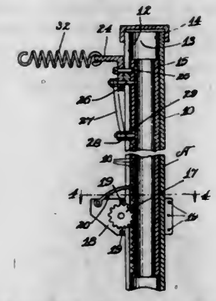
1,822,906. PRESSES FOR DRAWING SHEET METAL. CHARLES JOSEPH RHODES, Wakefield, England. Filed Oct. 29, 1929, Serial No. 403,186, and in Great Britain Dec. 17, 1928. 2 Claims. (Cl. 113—46.)

1. In combination with a press table, a lower die, a pressure table, a pair of links pivoted to each end of said pressure table, a tubular member having a collar at its top, said press table having a recess of a depth to receive the whole of said collar with its upper face flush with the upper face of said table, said tubular member being externally threaded at its lower end; a fixed plate member threaded and supported on said tubular member and having integral downwardly directed perforated lugs; a spindle secured to said lower die and extending through and below said tubular member, a gear rack on the end of said spindle, a mechanical buffer interposed between the pressure table and said plate member, cogged levers



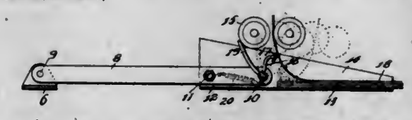
engaging said gear rack and pivoted to the lugs of said fixed plate, said levers each being provided with a series of holes, providing means for pivotal attachment to the lower ends of said links for obtaining variations in the leverage ratio of the apparatus.

1,822,907. HOISTING CLOTHESLINE POLE. HENRY J. RUCHIE, St. Paul, Minn., assignor of one-half to Leo G. Gerlach, St. Paul, Minn. Filed Dec. 19, 1928. Serial No. 327,161. 3 Claims. (Cl. 68—3.)



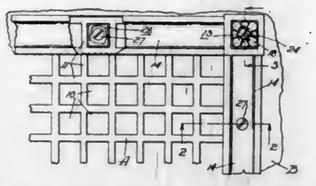
1. A hoisting clothes line pole including, a tubular standard, a slidable member entirely enclosed within said standard having a gear rack formed therein, a bracket adjustably attached to said standard, a longitudinal slot extending in said standard, a pinion supported by said bracket in position to extend through said slot to engage with said rack, means for operating said pinion to raise and lower said slidable member within said standard, a cross head carried by said slidable member adapted to receive the strands of a clothes line to support the same so that the clothes line may be raised and lowered in relation to said supporting standard and braces for said cross head connected to said slidable member through said slot.

1,822,908. CATCHING DEVICE FOR CLOTH LAYING MACHINES. CHARLES C. SCHNEIDER, St. Louis, Mo. Filed Nov. 16, 1929. Serial No. 407,672. 3 Claims. (Cl. 270—31.)



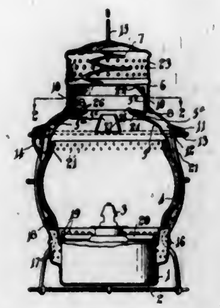
1. A catcher for cloth laying machines comprising a cloth receiving trough tiltingly mounted on a table, a cloth clamping means tiltingly supported within the trough, and a means carried by the clamping means for tilting the same for the admission of the cloth within the clamp, substantially as specified.

1,822,909. GRILLE PANEL CONSTRUCTION. OSCAR K. SCHNEIDER, Chicago, Ill., assignor to Harrington & King Perforating Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 16, 1929. Serial No. 407,597. 9 Claims. (Cl. 189—84.)



1. In a construction of the character indicated, a grille panel of sheet material having formed therein an open work all-over design extending over its entire area; framing members mounted adjacent the marginal edges of said grille panel; corner fittings interposed between the adjacent ends of said frame members, and means for securing said grille panel to a mounting with the frame members and corner fittings assembled in place thereon, said corner fittings having projections adapted to be telescoped into the ends of the adjacent frame members for securing the latter in place.

1,822,910. RAILWAY LANTERN. WILLIAM JOHN SPENCE, Hamilton, Ontario, Canada, assignor to General Steel Wares Limited, Toronto, Ontario, Canada. Filed Nov. 8, 1929, Serial No. 405,686, and in Canada Oct. 14, 1929. 15 Claims. (Cl. 240—38.)

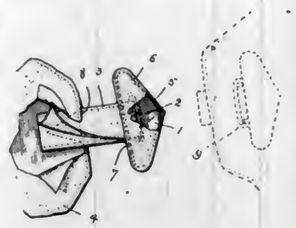


6. In a lantern, a globe; a dome having a horizontal opening in its sides above the globe; an annular imperforate baffle extending into the interior of the dome from the inside wall thereof immediately below said opening; and another annular baffle extending into the interior of the dome from the inside wall thereof immediately above said opening, the outer edge of each baffle being in substantially air tight contact with the inner wall of the dome.

1,822,911. PROCESS OF MAKING LITHOPONES OF HIGH ZINC SULPHIDE CONTENT. THOMAS G. STEPHENS, Lakewood, Ohio, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 20, 1929. Serial No. 372,552. 7 Claims. (Cl. 134—78.)

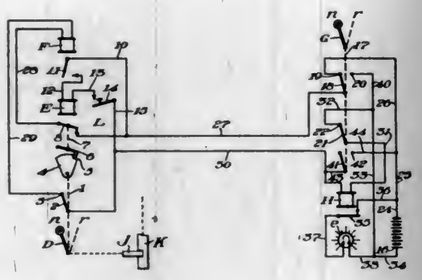
1. In a process of preparing super-lithopones the steps comprising reacting with a barium polysulphide upon an aqueous zinc sulfate solution containing in suspension an insoluble zinc compound which reacts at elevated temperatures with sulfur to form zinc sulphide, separating the precipitate formed from the reaction liquor and calcining said precipitate.

1,822,912. GARMENT FASTENER. FRANCES E. SWANSTROM, Duluth, Minn. Filed Feb. 9, 1931. Serial No. 514,521. 3 Claims. (Cl. 24—20.)



2. In combination, a flat core for the head of a garment fastener of the type described having one major straight side and two minor diagonal straight sides forming a substantially three cornered member, further characterized by having an elongated slot parallel with and adjacent said major side, a strap passing through said slot, folded back upon itself, and attached to the garment, and a covering for said core and strap connection.

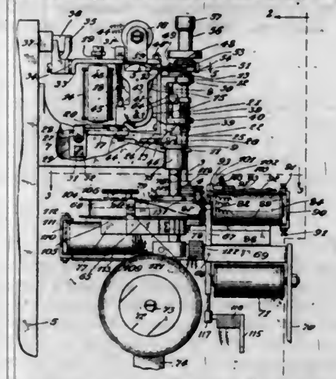
1,822,913. REMOTE CONTROL APPARATUS. JAMES J. VANHORN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1930. Serial No. 436,744. 19 Claims. (Cl. 246—3.)



1. In combination, a lock magnet for controlling the operation of railway traffic governing means, a circuit controller for controlling the operation of said lock magnet, a contact device operated by said lock magnet for controlling the operation of said circuit controller, and manually operable means for controlling the operation of said circuit controller jointly with said contact device.

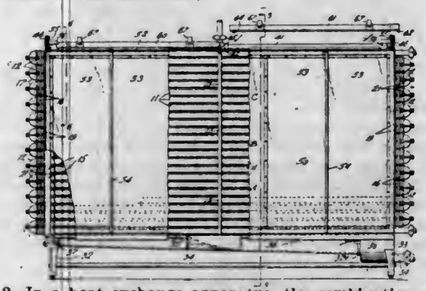
1,822,914. AUTOMATIC CONTRIVANCE FOR RECEIVING WRITTEN MESSAGES BY TELEPHONE. OTTO WATZKA, Vienna, Austria, assignor to Charles S. Bleicher, New York, N. Y. Filed Dec. 6, 1928, Serial No. 324,210, and in Austria Apr. 21, 1928. 9 Claims. (Cl. 179—2.)

1. A remote controlled printing apparatus comprising a type-carrying member with arc-shaped rows of type spaced axially apart on its circumference, a spindle on which said member is mounted, a rack on the spindle consisting of annular teeth one face of which is abrupt and the other face bevelled, a longitudinal slot extending along said row of teeth, a stop having its end projecting into said slot, and means for lifting and turning said member, the turning of said member causing the spindle



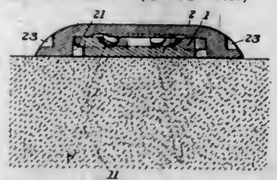
to move the slot out of alignment with said stop to cause the stop to engage the rack and hold the spindle and member in lifted position.

1,822,915. HEAT EXCHANGE APPARATUS. ROLAN JAY WIGHTMAN and WILLIAM ASTLE, Little Falls, N. Y., assignors to Cherry-Burrell Corporation, Little Falls, N. Y. Filed July 24, 1929. Serial No. 380,582. 14 Claims. (Cl. 257—183.)



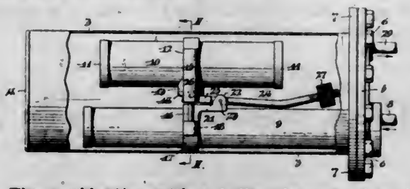
2. In a heat exchange apparatus, the combination of a series of tubes arranged side by side, means for securing the tubes at their mid-length portions, means whereby the relative position of the tubes is maintained while the tubes are left free to expand and contract lengthwise, and connectors which join said tubes end to end in series and are coupled to the tubes so as to permit independent movement of the ends of the tubes relative to the connectors.

1,822,916. MARKER FOR PAVEMENTS. LEONARD G. WOODS, Pittsburgh, Pa. Filed Sept. 12, 1930. Serial No. 481,435. 2 Claims. (Cl. 94—1.5.)



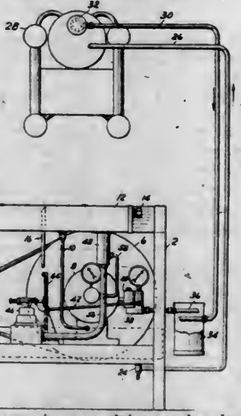
2. A marker for pavements including a disk-shaped anchor member provided with perforations and with peripherally outstanding blocks, a plurality of pins adapted to pass through the perforations in the anchor member and to extend in radiating directions into the substance of a pavement to which the anchor member may be applied, and a cap member provided with a cylindrical recess provided with an interrupted ledge, adapted to be applied to the anchor member, the said blocks upon the anchor member and the ledge upon the cap member being adapted in cooperation to constitute a bayonet joint between the members.

1,822,917. AUTOMATIC VALVE. EUGENE L. BARNES, Buffalo, N. Y. Filed July 24, 1926. Serial No. 124,618. 3 Claims. (Cl. 62—126.)



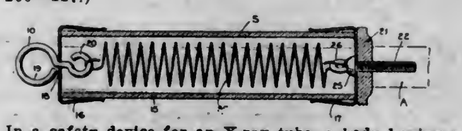
1. The combination with a boiler chamber of a circulatory refrigerating system and a liquid refrigerant supply connection extending horizontally in said chamber, of a gravity receptacle in said chamber above said connection receiving liquid refrigerant therefrom, and means extending upward from said connection at either side of said receptacle for guiding its up and down movements.

1,822,918. REFRIGERATING APPARATUS. EUGENE L. BARNES, Buffalo, N. Y. Filed Feb. 1, 1928. Serial No. 250,977. 3 Claims. (Cl. 62—115.)



1. A lubricant reservoir comprising a chamber, a shell having an open end communicating with said chamber, and a second shell enclosing a heating element and located within said first mentioned shell, whereby the walls of the shells form an annular liquid receiving space about the heating element, said liquid receiving space having an exit whereby liquid may flow from the chamber through said liquid receiving space.

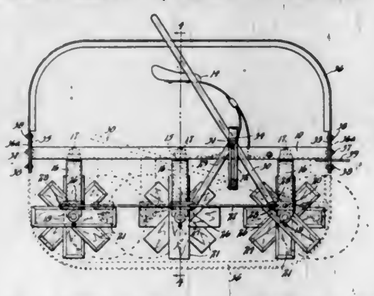
1,822,919. SAFETY DEVICE FOR ELECTRICAL APPARATUS. CARL B. BRAESTRUP, Scarsdale, N. Y. Filed Nov. 25, 1929. Serial No. 409,458. 1 Claim. (Cl. 200—117.)



In a safety device for an X-ray tube, a body having a transparent portion, a fusible link in said body connected into and made part of the electric circuit for carrying the current for the tube, a metallic screw attached to said fusible link and adapted to pass through and project from said safety device so that a considerable portion thereof

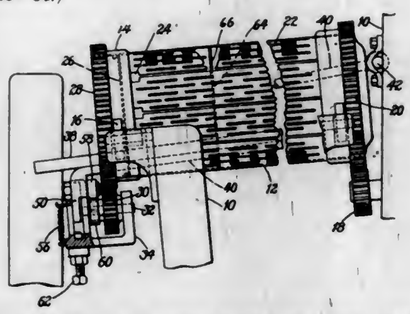
may be screwed into the anode stem of an X-ray tube, a head on said screw having a slot in which the fusible metal of said link may be disposed to produce a close and intimate contact between said metal and screw to facilitate the transmission of heat from the latter to the former, a spring in said body connected to said link and normally maintained under tension and adapted, upon melting of the link, to break the electric circuit and draw an arc across the intermediate space between the broken ends within the transparent body to serve as a signal to the operator of the X-ray machine.

1,822,920. HARROW—ROTARY KNIFE TYPE. FRANK V. BURMAN, Minneapolis, Minn. Filed Nov. 28, 1928. Serial No. 322,367. 5 Claims. (Cl. 55—83.)



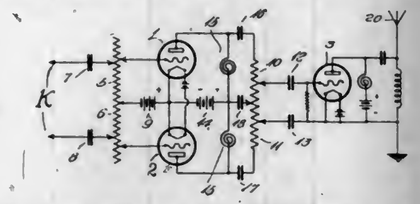
1. In an implement of the class described, a frame having substantially parallel longitudinal sides, a plurality of harrow elements connected with said frame and positioned therebeneath, said harrow elements being adapted to engage the ground when in operation, runners at the longitudinal sides of said frame pivoted to said frame on substantially horizontal axes and means for securing said runners in vertical position below said frame and below said harrow elements to support said frame and means to rigidly secure said runers in vertical position above said harrow elements.

1,822,921. NAIL SORTING MACHINE. BASIL POMEROY COOPER, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 18, 1926, Serial No. 129,989, and in Great Britain Sept. 23, 1925. 8 Claims. (Cl. 209—86.)



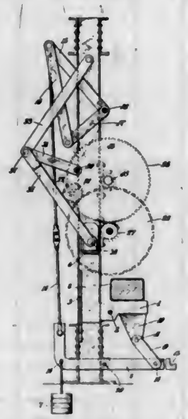
1. A machine for sorting headed fastenings having, in combination, an inclined rotary screen provided with openings arranged to permit the passage of fastenings the heads of which are below a definite size, means for rotating the screen, means for retarding the flow of fastenings through the screen, and a trough inside the screen arranged to receive from the upper part of the screen and to conduct from the screen those fastenings the shanks of which have entered the openings in the screen but the heads of which are incapable of passing through said openings.

1,822,922. AMPLIFYING SYSTEM. CHARLES A. CULVER, Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 3, 1928. Serial No. 297,199. 4 Claims. (Cl. 179—171.)



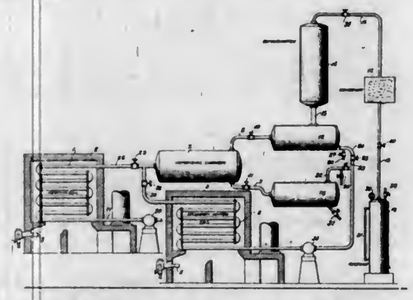
1. In an amplification system, in combination, two electron tubes each having filament, grid and plate electrodes, a source of power connected to said filament electrodes, an aperiodic input resistor, an aperiodic output resistor, each of said resistors being provided with a multiplicity of variable intermediate tap connections, two inductance elements, a source of plate potential, a plurality of condensers, a balanced network wherein said filament electrodes are connected together and to a central tap of said input resistor, said filament electrodes being connected through said source of plate potential and one of said condensers in series to a central tap on said output resistor, said grid electrodes connected to taps on said input resistor on opposite sides of said central tap, each of said plate electrodes being connected through a condenser to a tap on said output resistor, said two plates being connected to opposite sides of said central tap of said output resistor, said inductance elements being connected respectively from a point on said connection from filament to output resistor intermediate said source of plate potential and said condenser respectively to points on said connections from said plate electrodes to said opposite taps on said output resistors intermediate said plate electrodes and said condensers, input connections for said amplifying system connected to taps on said input resistor on opposite sides of said central tap thereof, output connections for said amplifying system connected to taps on said output resistor on opposite sides of said central tap thereof, whereby the energy supplied to said input connections is amplified and delivered to said output connections substantially without distortion.

1,822,923. APPARATUS FOR THE COMPRESSION OF PACKAGED SUBSTANCES. WINSLOW A. DUERR, Breckenridge, Tex., assignor to Cabot Co., Boston, Mass., a Corporation of Massachusetts. Filed Nov. 3, 1927. Serial No. 230,734. 5 Claims. (Cl. 100—9.)



2. A package press comprising a compression chamber having a pivoted L-shaped member forming the bottom and one side wall, said member being oscillatable to carry a package into and remove the same from said chamber, a reciprocating plunger, operating means therefor, and means actuated by said operating means to open said L-shaped member.

1,822,924. PROCESS FOR CONVERTING PETROLEUM OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 559,981, filed May 11, 1922. This application filed June 2, 1927. Serial No. 196,024. 19 Claims. (Cl. 196—49.)



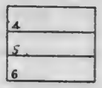
14. A process for cracking hydrocarbon oil, which comprises subjecting the oil to cracking conditions of temperature and pressure and causing vaporization of part of the oil while under such pressure, withdrawing the residuum and subjecting it to flash distillation under reduced pressure, and taking the vapors from such flash distillation and subjecting them to a gasoline-producing vapor phase cracking operation, and condensing the resultant gasoline vapors as a product of the process.

1,822,925. APPARATUS FOR LOCATING LEAKS. PAUL H. GRANGER, Los Angeles, Calif. Filed Mar. 14, 1928. Serial No. 261,467. 5 Claims. (Cl. 137—77.)



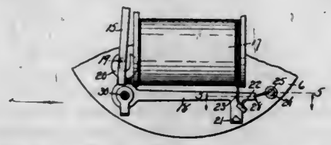
1. Means for locating leaks in well tubing comprising a movable closure plug adapted to be inserted within the tubing and provided at its ends with packing means adapted to make a liquid tight contact with the walls of the well tubing, the said closure plug having a lateral discharge port between said end packing, said plug having a passage placing said port in communication with the space beyond one end of said plug and a normally closed valve for said port adapted to open responsive to fluid pressure in back of the closure plug for permitting discharge of the fluid through the port.

1,822,926. COLOR SYSTEM FOR DISGUISING OBJECTS. RAY GREENLEAF, New York, N. Y. Filed Sept. 8, 1928. Serial No. 304,713. 4 Claims. (Cl. 41—17.)



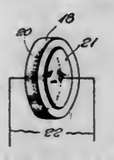
1. A color system for disguising objects comprising a plurality of units, each unit having three divisions of substantially equal area bearing the colors reddish purple, blue, and greenish blue, respectively, arranged in the order named, said units being located side by side and in contact, with the colors in the same sequence, and each color division being located next to a different color division in the adjacent unit.

1,822,927. SWITCH ACCELERATOR FOR CLOCKS. WILLIAM H. GREENLEAF, Hartford, Conn., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed Dec. 30, 1926. Serial No. 158,103. 9 Claims. (Cl. 74—14.)



1. An accelerator including a post having an opening extending lengthwise therein, a pivotally mounted lever, and a U-shaped spring having one branch extending in a direction transverse to the plane of swinging movement of said lever and its other branch freely pivotally mounted in said opening, said spring being under tension to move said branches apart and the branch engaged with the lever being adapted to move on opposite sides of a line passing through the pivots of said spring and lever.

1,822,928. PIEZO ELECTRIC PLATE. AUGUST HUND, Bethesda, Md., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Sept. 30, 1925, Serial No. 59,677. Renewed July 8, 1929. 9 Claims. (Cl. 171—327.)



1. A piezo electric oscillator which comprises a flat circular disk of crystalline material possessing piezo electric properties in which the diameter of the disk is coincident with a plane parallel to the optical axis of the crystalline body from which said disk is formed.

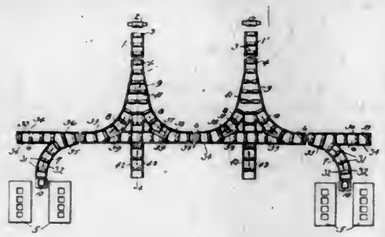
1,822,929. FILTER CIRCUIT. AUGUST HUND, Bethesda, Md., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed May 12, 1927. Serial No. 190,883. 3 Claims. (Cl. 178—44.)



1. A filter system for separating alternating and direct components of current obtained from a source of rectified

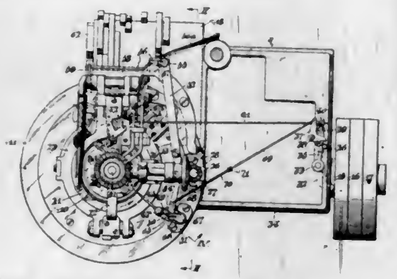
alternating current comprising a transformer having one winding connected in parallel through a condenser with said source of rectified alternating current and another winding of said transformer connected in parallel with a resistance unit the last mentioned winding and resistance unit forming a dissipating circuit for all of the alternating current components from said source.

1,822,930. METHOD OF AND APPARATUS FOR HANDLING INGOTS. ALFRED R. KELLER, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1928. Serial No. 256,902. 23 Claims. (Cl. 80—43.)



5. In the transportation of hot ingots from a plurality of soaking pits to a plurality of rolling mills, the improvement which consists in procuring the gravitational movement of each of the ingots withdrawn from said pits onto a longitudinal conveying means common to all of said pits, and directing the ingots as received on said conveying means selectively to any one or more of said rolling mills.

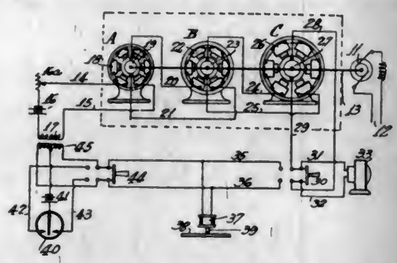
1,822,931. AUTOMATIC STOP MECHANISM FOR KNITTING MACHINES. PAUL C. KLINGLER, Riverside, N. J. Filed July 17, 1926. Serial No. 123,040. 5 Claims. (Cl. 66—157.)



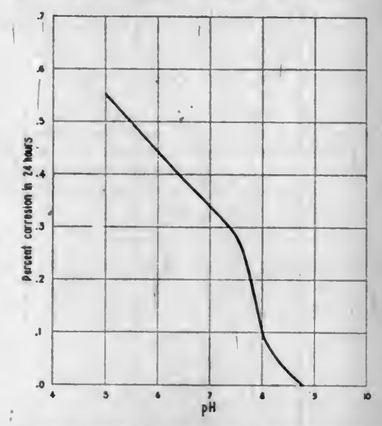
1. In a knitting machine comprising a needle cylinder with means for driving it and automatic stop mechanism, the combination of a detector for broken needle butts, a separate detector for needle latch abnormalities, and means operatively co-ordinating both detectors for capacity to independently actuate the stop mechanism.

1,822,932. SYSTEM AND APPARATUS FOR THE ELECTRIC RECORDING AND REPRODUCING OF SOUND. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Filed Nov. 2, 1928. Serial No. 316,855. 8 Claims. (Cl. 179—100.4.)

1. In a system as described, the combination, a phonograph record, a stylus head having a recording and a reproducing stylus, means whereby said head may be moved to bring either of said recording or reproducing stylus into engagement with said record, an electrically operated device controlling said stylii, an amplifying system having an input circuit and an output circuit and means operated by said head for connecting said device with said input circuit when the reproducing stylus engages the record and for connecting said device with said output circuit when the recording stylus engages the record.



1,822,933. LITHOPONE MANUFACTURE. HAROLD H. MORRIS, Newark, N. J., assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 25, 1927. Serial No. 215,294. 2 Claims. (Cl. 134—78.)



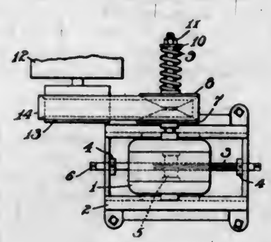
1. In the process of producing a raw lithopone slurry which includes mixing solutions of zinc sulphate and barium sulphide, and involves the use of galvanized equipment, the step which comprises adding to the precipitating mixture an alkaline material in sufficient amount to give said mixture a pH value of about 8.8 and thereby prevent corrosion of said equipment.

1,822,934. STABILIZATION OF FATTY ACIDS AND THEIR DERIVATIVES. PAUL I. MURRILL, Plainfield, N. J., assignor to R. T. Vanderbilt Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 7, 1928. Serial No. 298,134. 10 Claims. (Cl. 87—9.)

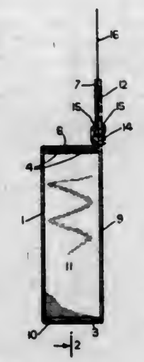
1. A stabilized composition comprising a chemical compound containing a fatty acid radical and a small amount of a compound having the formula $N.(ROH)_x.H_{3-x}$, where R is an alkylene group and the OH is attached to a carbon other than that to which N is attached.

1,822,935. VARIABLE SPEED UNIT. PAUL B. REEVES, Columbus, Ind., assignor to Reeves Pulley Company, Columbus, Ind., a Corporation of Indiana. Filed Mar. 26, 1928. Serial No. 264,819. 5 Claims. (Cl. 64—8.)

1. A speed varying unit comprising a pair of parallel shafts, a pair of cones mounted on one of said shafts, one of said cones being fixed and the other movable relative thereto, means for biasing said movable cone toward the fixed cone, a straight faced pulley on the second shaft, a V-belt having an inner face narrower than the pulley face by an amount at least equal to the axial adjustability of the movable cone for connecting said cones with said pulley, and means moving at right angles to the axes of the shafts for varying the distance between said shafts for varying the effective pulley diameters.



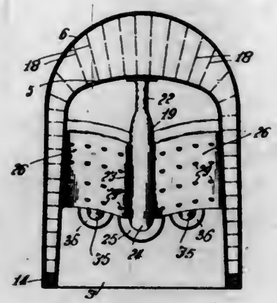
1,822,936. MAILING CARTON. FERDINAND REICHEL, New Haven, Conn., assignor to National Folding Box Company, New Haven, Conn., a Corporation of New Jersey. Filed Oct. 6, 1927. Serial No. 224,296. 4 Claims. (Cl. 229—16.)



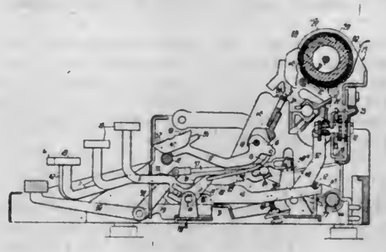
1. A paper board container made from a single blank comprising a front wall, outer side walls connected thereto, a bottom flap and a top flap connected to each outer side wall, said top flaps having overlapping interlocking tongues, a back wall, inner side walls connected thereto, a bottom wall connecting said front and back walls, a top wall secured to said front wall, a top fly secured to said top wall, a second top fly secured to said back wall, said bottom flaps seating over and within said bottom wall, said inner side walls being disposed inside said outer side walls and against said bottom flaps, said top wall overlapping said top flaps when the container is assembled, said top flies having registering apertures near said top wall, and a fastener extending through said apertures.

1,822,937. LOCOMOTIVE BOILER FIRE BOX. EMMETT FRANK SMITH, St. Louis, Mo., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 28, 1928. Serial No. 308,946. 2 Claims. (Cl. 122—68.)

1. In combination with a locomotive firebox including side sheets and a front sheet, a water circulating element connected at one end to said front sheet and extending upwardly and rearwardly therefrom, a hollow water arch member disposed between one of said side sheets and said water circulating element, said arch element being open at one side and being fixed in said side sheet and closed at its other side which is disposed adjacent to but out of engagement with said water circulating element and means connecting the front end of said arch element with and opening through said front sheet.



1,822,938. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 21, 1928. Serial No. 307,361. 15 Claims. (Cl. 197—6.1.)

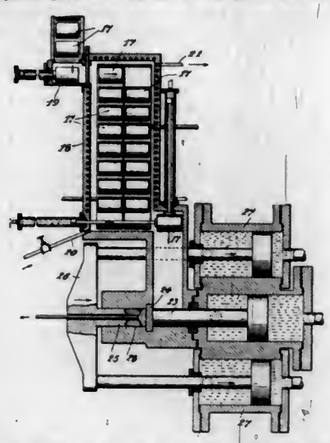


5. In a machine for embossing a work-sheet with characters readable by the blind, the combination of individually movable embossing type-heads having unreversed Braille characters in relief, a sheet-backing cylindrical platen having soft surface to be indented by the unreversed types and form a matrix for the sheet to emboss characters thereon readable by the sense of touch, and a carriage to effect letter-feeding movements between said platen and said type-heads.

1,822,939. PROCESS FOR TREATING METALS. HARRY H. STOUT, Clifton, Ariz., assignor, by mesne assignments, to Coalescence Products Company, Inc., a Corporation of New York. Continuation in part of application Serial No. 111,887, filed May 28, 1926. This application filed Aug. 15, 1928. Serial No. 299,665. 17 Claims. (Cl. 207—2.)

3. That process which comprises treating the surface of a plurality of separate metallic pieces to remove surface impurities, thereafter maintaining the pieces in a non-injurious atmosphere which prevents return of the surface impurities, and subjecting the particles, while

maintained in said non-injurious atmosphere, to mechanically applied pressure sufficient to press surfaces of the



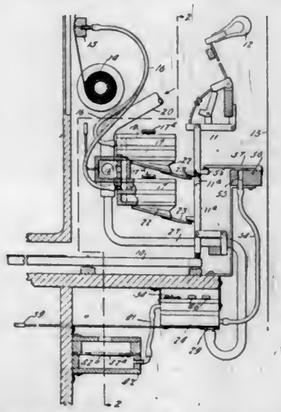
pieces into intimate contact, while subjecting the pieces to a temperature sufficient to cause crystal grain growth across the old surface boundaries.

1,822,940. WING STRUCTURE FOR AIRPLANES. HUGO SUNDSTEDT, New York, N. Y., assignor to American Avigation Corporation, New York, N. Y. Filed Aug. 20, 1928. Serial No. 300,786. 7 Claims. (Cl. 244—31.)



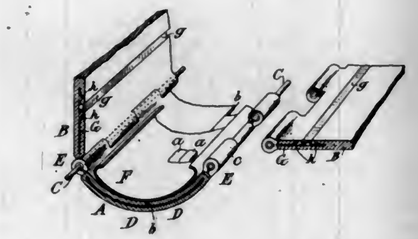
1. An airplane wing construction comprising main longitudinal girders, transverse trusses formed to the wing contour secured at intervals to said girders, connecting channel bars between said trusses and a comparatively rigid covering of balsa wood enclosed by sheet metal secured to said channels.

1,822,941. MUSICAL INSTRUMENT. SELVIYOR A. SWANSON, Chicago, Ill. Filed Mar. 7, 1927, Serial No. 173,277. Renewed Jan. 15, 1931. 11 Claims. (Cl. 84—6.)



1. In a musical instrument, a set of separate selectively operable instrumentalities for producing a series of notes of the musical scale in any desired sequence, a second set of instrumentalities for producing musical notes covering a selected musical range but differing in timbre from those of the first set, and means controlled by the instrumentalities of the first set for causing operation of one instrumentality of the second set concomitantly with any group of one or more of those of the first set, and for preventing the concomitant operation of all the other of said instrumentalities of the said second set.

1,822,942. HINGED BOOK COVER. CLARENCE D. TRUSSELL, Poughkeepsie, N. Y., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y., a Corporation of New York. Filed July 31, 1928. Serial No. 296,487. 4 Claims. (Cl. 129—124.)



1. In a hinged book cover, the cover material formed with a groove on one side and with a pocket communicating with the groove, and a metal plate inserted in said pocket and having a rib entering said groove.

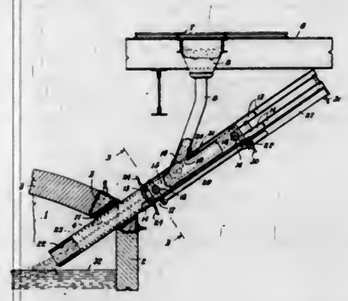
1,822,943. PLATE WALL GIRDER. HERBERT WAGNER, Berlin, Germany, assignor to the Firm Rohrbach Metall-Flugzeugbau G. m. b. H., Berlin, Germany. Filed June 29, 1927, Serial No. 202,422, and in Germany July 9, 1926. 12 Claims. (Cl. 244—31.)



1. A flush plate wall girder as a structural member of air craft or the like, comprising girder members, members disposed between the girder members and transverse thereto, said transverse members being fixedly secured to the girder members and spaced apart so that their distances from each other may vary between limits expressed by one-eighth to three-quarters of the girder depth, and a substantially smooth web plate so thin that it is stressed by transverse forces acting on the girder under normal conditions of service forming a closed tensile diagonal panel with oblique folds which are automatically smoothed out and disappear when the stress is removed.

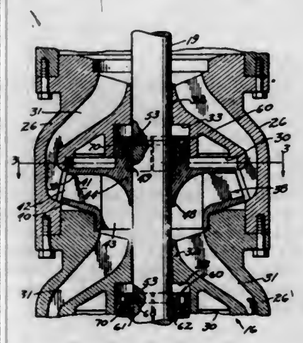
1,822,944. DISAPPEARING FEEDER FOR METALLURGICAL FURNACES. RICHARD A. WAGNTAFF, Salt Lake City, Utah, assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 11, 1927, Serial No. 225,410. Renewed Apr. 12, 1930. 5 Claims. (Cl. 214—18.)

1. In combination, a furnace having a charge opening, a disappearing feeder device comprising a tube in line with said opening, said tube having a mouth, guide means to allow moving said tube into and out of said furnace,



a stationary hopper having a port in register with said mouth when said tube is in said furnace, said mouth being movable transversely to said port.

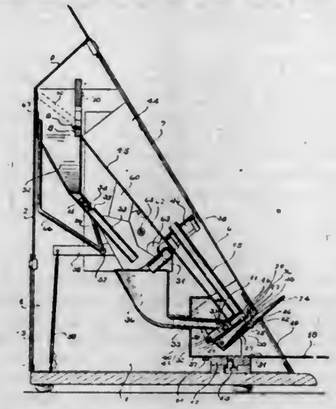
1,822,945. CENTRIFUGAL IMPELLER LOCATING AND LOCKING MEANS. ARTHUR R. WEIS, Huntington Park, Calif., assignor of one-half to Pacific Pump Works, Huntington Park, Calif., a Corporation of California. Filed Dec. 27, 1927. Serial No. 242,908. 4 Claims. (Cl. 103—102.)



1. In a turbine pump, the combination of: a pump bowl having an impeller chamber therein and inner and outer walls forming passages extending from said impeller chamber, there being a shaft opening extending through said inner wall and a counterbore axially aligned with said shaft opening and communicating with said impeller chamber; a shaft extending through said pump bowl; an impeller mounted on said shaft in said impeller chamber, said impeller having a hub extending upwardly into said counterbore, there being a tapered counterbore in said hub; a sleeve around said shaft having a tapered external surface adapted to engage the tapered walls of said counterbore in said hub and having a flange at its outer end adapted to project outwardly over the end of said hub; and means extending through said flange into engagement with said hub for drawing said impeller over said sleeve.

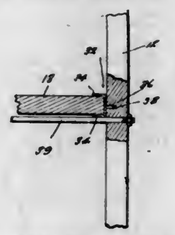
1,822,946. GAME APPARATUS. DAVID D. LEVITT, Rochester, N. Y. Filed June 1, 1931. Serial No. 541,269. 14 Claims. (Cl. 273—101.)

1. In a game apparatus, the combination with a displaceable target having hit registering and set positions, of means for firing a projectile in the direction of the target, a loading device for said means, a collector for the projectiles when fired delivering to the loading device, and check controlled means arranged to normally accumu



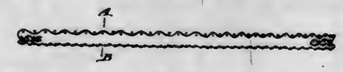
late the projectiles in the collector for permitting their transfer to the loading device and for simultaneously resetting the target when displaced.

1,822,947. CONVERTIBLE LADDER. CHARLES E. WHITE, Penrose, Colo. Filed Jan. 3, 1930. Serial No. 418,289. 1 Claim. (Cl. 228—58.)



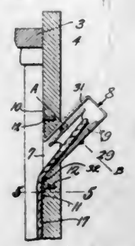
A ladder of the character described comprising, in combination, a pair of side rails having pairs of transverse, elongated notches in their opposed sides, said notches having arcuate inner walls, step boards extending between the rails, and means for mounting the step boards on the rails, said means comprising flat metallic plates disposed in abutting engagement with the ends of the step boards and interposed between said step boards and the rails, said plates having inturned flanges on their marginal edges extending over the end portions of the step boards in a manner to embrace said step boards therebetween, and elongated tongues struck outwardly from intermediate portions of the plates for disposition in the notches, said tongues having arcuate free edges conforming substantially to the curvature of the inner walls of the notches.

1,822,948. FABRIC BAG. CHARLES H. ARMSTRONG, Chicago, Ill., assignor, by mesne assignments, to J. S. Bemis, trustee, St. Louis, Mo. Filed May 31, 1929. Serial No. 367,555. 2 Claims. (Cl. 150—1.)



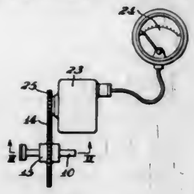
1. A bag composed of two sections constituting opposite sides of the bag, one of the sections being composed of open meshed fabric of relatively coarse texture adapted to permit ventilation and the other section being of closely meshed fabric of relatively fine texture adapted to permit lettering to be imprinted thereon and to resist distortion in the shape of the bag.

1,822,949. WEIGHTLESS WINDOW. SAMUEL C. BAUGHN, Springfield, Mo., assignor to Eli Trimble, Seymour, Mo. Filed Aug. 17, 1928. Serial No. 300,308. 1 Claim. (Cl. 16—196.)



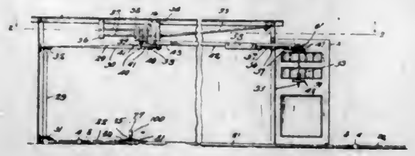
A weightless window structure embodying a frame comprising a vertical stile having an opening which slants downwardly and inwardly, a U-shaped bracket fitting closely in the opening and open at its sides, the lower member of the bracket being supported on the stile at the bottom of the opening, the lower member of the bracket having a convexed guiding portion merging into a depending wing secured to the inner surface of the stile, a pulley journaled in the bracket, sashes slidable in the frame, and a flexible element connected at its ends to the sashes and looped about the pulley, the flexible element being in slidable contact with the convexed, guiding portion of the bracket, the angle of the opening, of the bracket, and of the pulley, being approximately forty-five degrees with respect to the vertical.

1,822,950. SPEED INDICATOR. FLORENCE C. BIGGERT, Jr., Crafton, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 14, 1929. Serial No. 414,201. 4 Claims. (Cl. 175—183.)



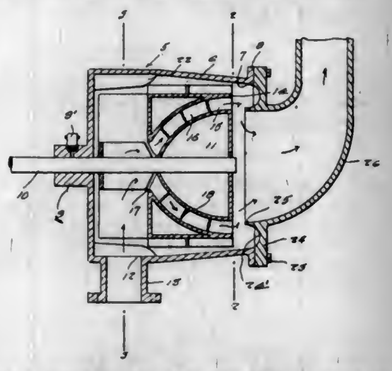
1. In a device for indicating the peak speed attained by a shaft, the combination with a fly wheel mounted to rotate with the shaft in one direction of rotation of the latter and be free of said shaft in the other direction of rotation, said fly wheel being of mass sufficient that it will temporarily continue to rotate at substantially the highest speed at which it may have been driven by said shaft despit reduction of speed of said shaft, of means for indicating the speed of said fly wheel.

1,822,951. GARAGE DOOR OPENER. FRANK BOUCHER, Detroit, Mich. Filed Dec. 18, 1930. Serial No. 503,322. 7 Claims. (Cl. 268—35.)



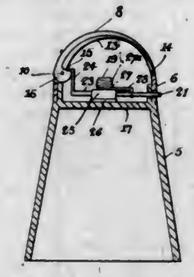
1. In a device of the class described, a door mounted for movement between open and closed positions, a pair of slides mounted for relative right line reciprocation in parallel relation, means for connecting one slide to the door to open the door, means for connecting the other slide to the door to close the door, a first mechanism for connecting the slides operatively together, to cause them to move in opposite directions, when either slide is actuated, a carriage movable longitudinally of the slides and having a vehicle-engaging part, and a second mechanism actuated by the movement of the carriage longitudinally of the slides for coupling the carriage first to one slide and then to the other slide.

1,822,952. GASEOUS FUEL MIXING DEVICE. ELDEN ELMO BROWN, Hennessey, Okla. Filed Aug. 2, 1929. Serial No. 382,901. 11 Claims. (Cl. 48—180.)



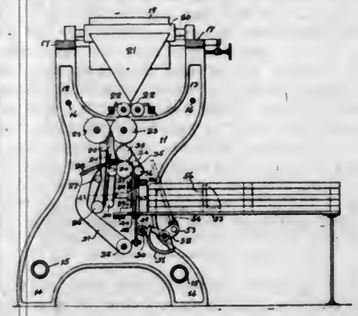
1. In a device of the class described, a casing formed adjacent one end with means for attaching the casing to the discharge port of a carbureter, said casing being formed at its opposite end with means providing a conduit adapted to be connected with the intake of an engine, a member rotatably mounted within the casing, said member comprising a plurality of fuel conducting passages formed therein and extending therethrough, said member at one end being provided with an intake opening common to all of said passages, and blades formed integral with said member and radiating from said intake opening, said blades being disposed in operative relation to the intake end of the casing.

1,822,953. THIMBLE. LEE P. BRUENING, Butte, Mont. Filed Aug. 12, 1930. Serial No. 474,714. 5 Claims. (Cl. 30—14.)



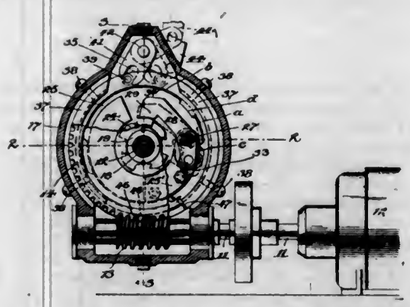
1. A thimble of the type described comprising a hollow body for positioning on a finger while sewing, a hollow cap on the upper end thereof, an elongated opening across the cap having one end below the upper part of the cap, a knife having one end pivoted in said one end of the opening and adapted to close said opening when in retracted position, and a manually operable spring detent in said cap for releasably retaining the knife in retracted position.

1,822,954. FOLDING AND SCALLOPING MACHINE. SAMUEL J. CAMPBELL, Green Bay, Wis., assignor to Hudson-Sharp Machine Company, Green Bay, Wis., a Corporation of Wisconsin. Filed Oct. 30, 1929. Serial No. 403,385. 16 Claims. (Cl. 270—66.)



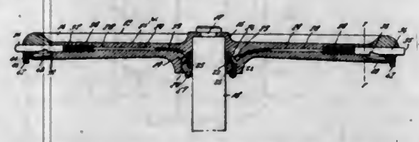
1. In a machine of the class described, the combination of means for folding an article, scalloping dies located at the discharge end of the folding means, and means for actuating the scalloping dies after delivery of the folded article to scallop and discharge the same.

1,822,955. CLUTCH. JOHN L. CARD, Baltimore, Md., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed May 23, 1929. Serial No. 365,404. 6 Claims. (Cl. 192—28.)



1. A clutch comprising in combination a driving element; a driven element; a pawl on one of said elements; a toothed member on the other of said elements and adapted to engage said pawl; shiftable cam means adapted to hold said pawl in disengaged position during a predetermined movement of said driven element; and means for shifting said cam; said pawl and toothed member engaging each other only after said predetermined movement of the driven element and shifting of the cam.

1,822,956. SIGNAL SWITCH. HOWARD VEST COX, Lanussell, Mo. Filed Dec. 30, 1929. Serial No. 417,493. 2 Claims. (Cl. 200—59.)

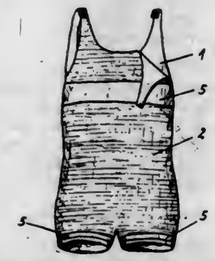


1. In combination with a steering wheel assembly including a column, a steering shaft extending through the column and a steering wheel secured to the shaft receiving the upper end of the column, said wheel having a hub provided with an annular pocket in its lower face and a hollow spoke and a rim provided with a bore communicating with the hollow spoke, of a di-electric supporting body surrounding the column and received wholly within the pocket, a conductor ring on the outer face of the supporting body, and a slide rod mounted in the hollow spoke having its inner end terminating adjacent to the conductor ring for movement into and out of the pocket, an operating handle extending through the bore of the rim and beyond the outer face of the rim of the steering wheel, and spring means on the rod and housed within the hollow spoke normally urging the handle exteriorly of the rim and the rod out of the pocket away from said conductor ring.

1,822,957. EMULSIFYING AGENT. KARL DOBMAIER, Leverkusen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 30, 1928, Serial No. 296,427, and in Germany Aug. 9, 1927. 6 Claims. (Cl. 252—1.)

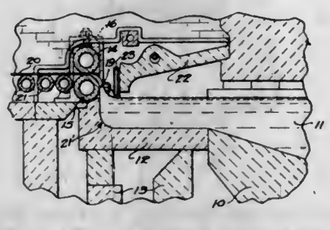
1. As emulsifying agents mixtures of butyl-naphthalene sulfonic acid and isobutyl alcohol.

1,822,958. BATHING SUIT. FRIEDRICH OSWALD DONNER, Chemnitz, Germany. Filed Oct. 18, 1929, Serial No. 400,651, and in Germany Nov. 6, 1928. 3 Claims. (Cl. 2—67.)



1. A bathing suit comprising an inner and an outer surface made from threads of different fibers, the fibers forming the said inner surface being adapted to pass moisture readily to the fibers forming the said outer surface and being interconnected, the fibers of the outer surface being adapted to take up water more readily than the fibers of the inner surface.

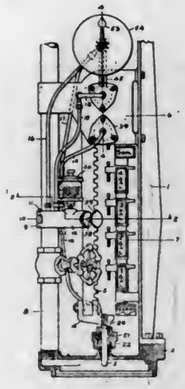
1,822,959. SHEET GLASS ROLLING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 30, 1926. Serial No. 132,851. 11 Claims. (Cl. 49—33.)



1. An apparatus for producing sheet glass, embodying a receptacle containing a mass of molten glass, and a pair of superposed rotatable members arranged above the receptacle at one end thereof, said members being positioned in advance of the mass of molten glass with the lower portion of the periphery of the bottom member being ar-

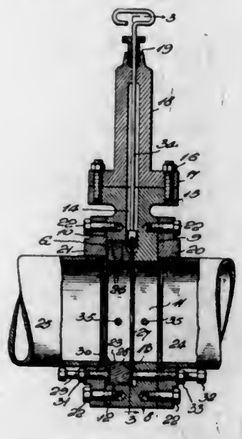
ranged at substantially the level thereof, said rotatable members being adapted to draw a body of glass upwardly from the adjacent end of the receptacle and to reduce the body of glass to a sheet of substantially predetermined thickness.

1,822,960. LUBRICATING SYSTEM. EARL B. EICKMEYER, Dayton, Ohio, assignor to The Dayton Pump & Mfg. Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 14, 1927. Serial No. 233,070. 8 Claims. (Cl. 184—6.)



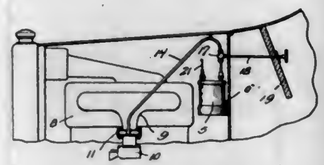
7. In a lubricating system, in combination with a support, a pump having a cylinder, a fixed jaw on said cylinder, and a swinging jaw attached to said fixed jaw and cooperating with the fixed jaw to grip the support, said fixed jaw constituting a manifold having an inlet from said cylinder and a plurality of outlets.

1,822,961. ORIFICE FITTING. WALDO D. EMERY, Tulsa, Okla. Filed Mar. 2, 1929. Serial No. 343,930. 4 Claims. (Cl. 137—75.)



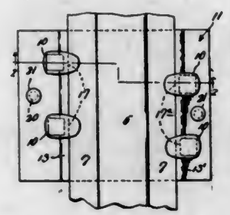
1. An orifice-fitting comprising a one-piece body having two flat external sides disposed in closely spaced parallel planes, said body being formed with a bore from one of said sides to the other, one end of said bore being of one diameter and the other end of greater diameter, providing an annular orifice-plate-seat disposed transversely of and between the ends of said bore, said body being provided with an orifice-plate-removal-passage from said bore to one of its ends, said passage being in substantially the plane of said seat, an orifice-plate contacting with said seat, a ring confined totally within the larger end of said bore, said ring having parallel flat sides, the innermost of which abuts said orifice-plate and holds it against said seat, the outer flat side of said ring being inwardly spaced from one of said flat sides of said body, annular pipe-attaching flanges secured against said flat sides of the body and of less internal diameter than the larger bore end, whereby one of said flanges retains said ring in said larger bore end, screws threaded through the inner edge portion of said one flange and abutting said outer side of the ring for normally holding the latter in orifice-plate clamping position, said screws being of a length to force said ring against said seat upon removal of said orifice-plate, and sealing means in the periphery of said ring fluid-tightly engaging said larger bore end to prevent fluid escape to said orifice-plate-removal-passage.

1,822,962. CHARGE HUMIDIFIER FOR EXPLOSIVE ENGINES. CHARLES EDWARD ENNIS, El Paso, Tex., and HARRY WALLACE CRAWFORD, Albuquerque, N. Mex. Filed July 9, 1929. Serial No. 376,977. 2 Claims. (Cl. 123—25.)



1. A device to supply humidified air to the intake manifold of an explosive engine by inspiration, comprising a closed tank adapted to be partly filled with water, an air intake pipe leading into said tank in proximity to the bottom thereof and below the level of the water, a conduit leading from the tank above the level of said water to said engine intake manifold, and a sheet of capillary material arranged in the tank to float in and near the surface of said water and dividing said tank into upper and lower air and water spaces, respectively, and a perforated float disk fitted for vertical movement in said tank and having said sheet of capillary material attached to the under side thereof.

1,822,963. TIE PLATE. CHARLES EDWARD ENNIS, El Paso, Tex., and JAMES WILLIAM REYNOLDS, Marysville, Kans. Filed June 18, 1930. Serial No. 462,040. 1 Claim. (Cl. 238—298.)



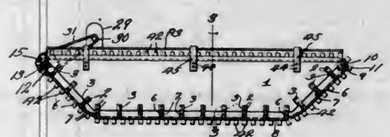
A tie plate provided at the outer side of the rail seat with spike holes and with a rib forming an inwardly-facing shoulder for contact with the adjacent outer base flange of the rail, said spike holes being located entirely outwardly of the plane of said shoulder, said rib being extended across the inner side of said spike holes and being of a height to form elevated bearings to contact and hold the inner side of the adjacent spike heads slightly spaced from and above the adjacent base flange of the rail.

1,822,964. RIVER CHANNEL DEEPENING MEANS. FRANK FREDEEN, Minneapolis, Minn. Filed July 7, 1927. Serial No. 204,048. 19 Claims. (Cl. 37—76.)



11. Means for deepening and otherwise improving channels in rivers characterized by currents, comprising in combination floatable means movable in water, trailing shorewardly disposed plowing ditching devices carried by said means and spaced apart and arranged crosswise of the line of movement of the movable means, and floating means also carried by said movable means for damming and impounding water and permitting water to escape in powerful currents through the spaces between the said shorewardly disposed plowing ditching devices.

1,822,965. CONVERTIBLE BOAT PROPELLING AND STEERING APPARATUS. JAMES HENRY GASKINS, Nashville, Ga. Filed Sept. 22, 1930. Serial No. 483,678. 2 Claims. (Cl. 115—50.)



1. The combination with a barge, of propelling means therefor comprising a pair of chains travelling longitudinally about the barge adjacent each side, propelling members connecting transversely between said chains, roller mountings on the bottom and the ends of the barge engaged by said chains, operating means for the chains, and L shaped shields rising upwardly from the deck of the barge and extending longitudinally thereof and laterally outwardly over the propelling means and having their outer edges openly spaced from the sides of the barge, whereby the drippings or dirt from the propelling means may return to the water from the sides of the barge, and angle bracing brackets secured to the sides of the barge and overlying and secured to the top of the shield for reinforcing the same.

1,822,966. SWIMMING DEVICE. CHRISTIAN F. GLAESER, Youngstown, Ohio. Filed Oct. 23, 1930. Serial No. 490,716. 4 Claims. (Cl. 9—20.)

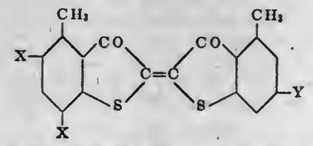
1. A swimming appliance comprising an annular buoyant element of a diameter to fit about a person's body, a carrier for said element adapted to fit about a person's body between the arms and legs and having its lower portion formed with leg openings, the upper portion of said carrier being surrounded by the bouyant element and having portions extending over and about the buoyant element and secured below the same, and shoulder straps having their ends connected to the carrier adjacent the



buoyant element, the straps being sufficiently short to retain the buoyant element in place under a person's arm pit.

1,822,967. NEW VAT DYESTUFFS. HANS HEYNA, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 19, 1930, Serial No. 462,425, and in Germany July 8, 1929. 5 Claims. (Cl. 260—53.)

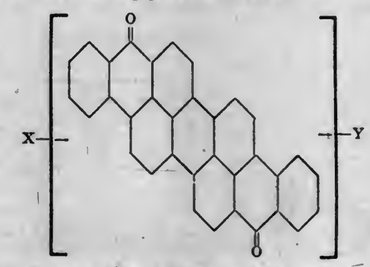
1. As new products the compounds of the following general formula:



wherein X represents halogen and Y stands for methyl or halogen possessing good fastness properties and vivid brilliant red tints.

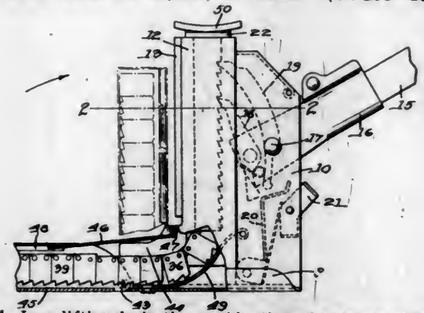
1,822,968. VAT DYESTUFFS OF THE BENZANTHRONE SERIES. EDUARD HOLZAPFEL, OTTO BRAUNSDORF, and HANS LANGE, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 23, 1926. Serial No. 96,871. 5 Claims. (Cl. 260—61.)

1. As new products vat dyestuffs of the benzanthrone series of the following probable formula:



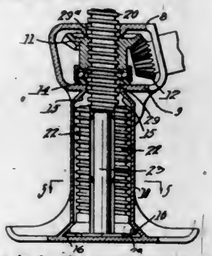
wherein X stands for NH-aryl, O-alkyl, O-aryl, S-alkyl, S-aryl and Y stands for hydrogen or X.

1,822,969. FLEXIBLE RACK JACK FOR BALLOON TIRES. ALVIN L. JOHNSON, Worcester, Mass., assignor to W. Goulding Warren, Holden, Mass. Filed Oct. 12, 1925. Serial No. 61,914. 20 Claims. (Cl. 254—108.)



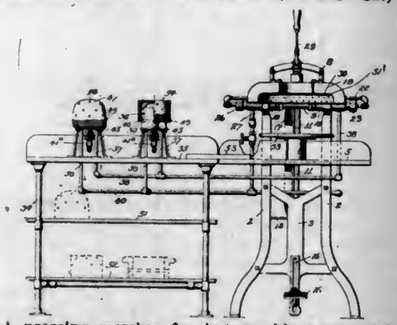
1. In a lifting jack, the combination of a series of telescoping hollow members, and a flexible rack housed in the telescoping hollow members with means for raising the top of the rack above said hollow members.

1,822,970. LIFTING JACK. ALVIN L. JOHNSON, Worcester, Mass., assignor to W. Goulding Warren, Holden, Mass. Filed Nov. 25, 1927. Serial No. 235,583. 21 Claims. (Cl. 254—102.)



1. In a lifting jack, the combination with a casing and an operating mechanism carried thereby, of a lifting member comprising a plurality of parts all adapted to be received in the casing with their lower ends at substantially the same level side by side and in upright position when retracted, and arranged and adapted to be moved directly upwardly through the top of the casing by said operating mechanism one on top of another in vertical alignment.

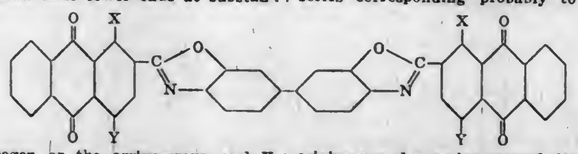
1,822,971. MACHINE FOR SHAPING AND RENOVATING HATS. JAMES H. JOHNSON, Indianapolis, Ind., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed June 13, 1924, Serial No. 719,857, and in Great Britain Dec. 3, 1923. 6 Claims. (Cl. 223—31.)



1. A pressing member for hat machines comprising a head having two chambers, said head having an overhanging horizontal face and a vertical face extending downwardly from the horizontal face, said faces having perforations therein communicating with one chamber combined with a valve controlling the passage of steam from one chamber to the other.

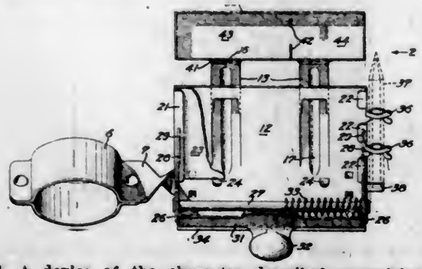
1,822,972. VAT DYESTUFFS OF THE ANTHRAQUINONE OXAZOLE SERIES. GEORG KALISCHER and OTTO BAYER, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 27, 1930, Serial No. 456,278, and in Germany June 1, 1929. 3 Claims. (Cl. 260—44.)

1. As new compound vat dyestuff of the anthraquinone series corresponding probably to the general formula:



wherein X means hydrogen or the amino-group and Y hydrogen or halogen, which dyestuffs dye the vegetable fiber full orange to bluish red shades of a good fastness.

1,822,973. AUTOMOBILE DESK. JOHN J. KONZEN, San Francisco, Calif. Filed Nov. 5, 1929. Serial No. 404,936. 2 Claims. (Cl. 40—10.)



1. A device of the character described comprising a platen having opposed edges folded to form a frame for receiving a card, a spring pressed clamp pivoted on the platen for holding a sheet of material against said platen and having jaws bearing against the outer edges of the frame, said clamp having a thumb piece whereby the clamp may be grasped to open it, and means for securing the platen to a support.

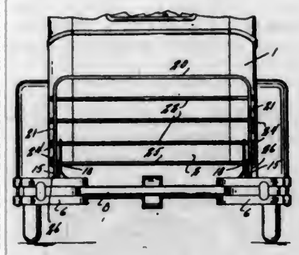
1,822,974. META-HYDROXY-DIPHENYLAMINE COMPOUNDS AND PROCESS OF MAKING SAME. LEOPOLD LASKA and ARTHUR WERDERMANN, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 13, 1930, Serial No. 461,046, and in Germany June 24, 1929. 4 Claims. (Cl. 260—128.)

1. Process which comprises heating 1-methyl-2-amino-4-hydroxyl-benzene with an arylamine of the general formula:



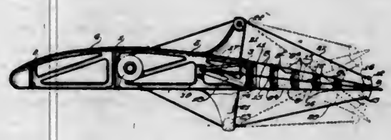
(wherein X stands for hydrogen, methyl or chlorine) in the presence of hydrochloric acid which may be applied in situ.

1,822,975. FOLDABLE LUGGAGE CARRIER. JACOB F. MARTIN, Bellevue, Ohio. Filed May 1, 1929. Serial No. 359,452. 4 Claims. (Cl. 224—29.)



1. A luggage carrier comprising a platform having end portions, said end portions being pivotally connected to a supporting structure and said end portions having extensions beyond the pivotal connection, and a toggle linkage connecting the ends of said extensions to said supporting structure.

1,822,976. AIRFOIL. JOHN S. MAXWELL, San Diego, Calif. Filed July 23, 1929. Serial No. 380,420. 9 Claims. (Cl. 244—29.)



1. In an airfoil, a body portion, a plurality of section members extending longitudinally therewith and joining each other and said body portion at their side margins, means for shifting said section members relative to each other so as to vary the camber of said air-foil, and slot and gate means co-operating with said airfoil sections for bypassing air from the one side to the other side of said airfoil.

1,822,977. FATTY ACID DERIVATIVES AND PROCESS OF MAKING SAME. FERDINAND MÜNZ, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1930, Serial No. 423,881, and in Germany Feb. 7, 1929. 4 Claims. (Cl. 260—106.)

1. A process which comprises acting with an alkylating agent on a water-soluble salt of the sulfuric acid ester of a higher fatty acid containing at least 8 carbon atoms.

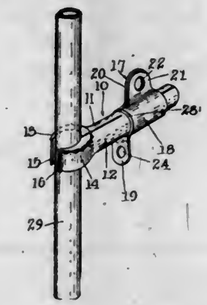
1,822,978. PROCESS OF MAKING FATTY ACID DERIVATIVES. FERDINAND MÜNZ, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1930, Serial No. 423,882, and in Germany Feb. 7, 1929. 4 Claims. (Cl. 260—106.)

1. A process which comprises acting with a lower monohydroxy fatty alcohol on a water soluble salt of the sulfuric acid ester of a higher fatty acid containing at least 8 carbon atoms.

1,822,979. ESTERIFIED FATTY ACID DERIVATIVES AND PROCESS OF PREPARING SAME. FERDINAND MÜNZ, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1930, Serial No. 423,883, and in Germany Feb. 7, 1929. 4 Claims. (Cl. 260—106.)

1. A process which comprises acting with a sulfonating agent and a lower monohydroxy fatty alcohol on an unsaturated fat containing 18 carbon atoms or more in its molecule.

1,822,980. HOLDER FOR NEON TUBES AND THE LIKE. JOHN PALMER, San Francisco, Calif. Filed July 31, 1929. Serial No. 382,503. 1 Claim. (Cl. 248—30.)



A support for neon tubes comprising half tubular matching sections, said sections having shanks and forked neon tube embracing elements, said matching sections consisting of molded glass, clamp-means slidable on said shanks and adapted to be drawn tightly thereabout when adjusted, means carried by said clamp means for drawing the same together, and means on said clamp for attaching said holder to any suitable object.

1,822,981. INSOLE. CHARLES N. PROUTY, Spencer, Mass. Filed Aug. 1, 1928. Serial No. 296,713. 3 Claims. (Cl. 36—22.)



1. A leather insole having a portion of its under side skived to substantially decrease its thickness, a pad positioned in said skived portion, and a layer of fabric extending across said insole beneath said pad, said layer being secured in position and retaining said pad in place and also preventing lateral spreading of the insole at the skived portion, said pad being of substantially greater thickness than the depth of the portion removed by skiving, and said skived portion being of substantially less area than said insole and being displaced outwardly from the tread surface by said pad when the insole is in place in a shoe.

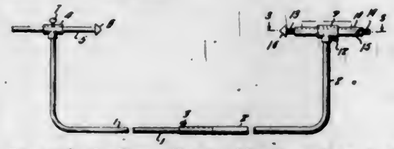
1,822,982. HALOGENATED NAPHTHALENE. GEORG RÖSCH, Cologne-Mulheim, and WILHELM BAUER, Wiesdorf, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 21, 1929, Serial No. 401,361, and in Germany Oct. 24, 1928. 5 Claims. (Cl. 260—161.)

3. The new halogenated naphthalene compounds of the probable general formula:



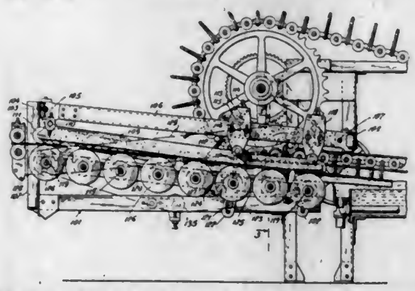
wherein x represents a substituent of the group consisting of chlorine and bromine and y means a substituent of the group consisting of chlorine, bromine and the sulfonic acid group, but x and y not standing simultaneously for chlorine, said compounds forming colorless crystals.

1,822,983. WHEEL ALIGNER. PEARL R. VANICA, Akron, Ohio. Filed Mar. 27, 1928. Serial No. 265,036. 3 Claims. (Cl. 33—203.)



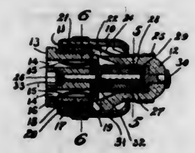
1. In a wheel aliner, the combination of an L-shaped rod and an L-shaped tube telescopically mounted on each other, T-tubes mounted on the free ends of each of said members, a gage rod slidably mounted in one of the T-tubes, said gage rod carrying a straight edge disposed at right angles to the rod, a tube slidably mounted in the other of said T-tubes, and disposed in alinement with said gage rod, a second gage rod slidably mounted in said tube and a straight edge mounted on the end of said second gage rod, the second gage rod having spaced measurement markings near opposite ends thereof, the measurement markings near one end of the rod being intended to designate the extent to which the tire toes out, and the measurement markings near the other end of the gage rod being intended to indicate the extent to which the tire toes in.

1,822,984. ARCHING MECHANISM. WILLIAM E. WATKINS, New York, N. Y., assignor to Copper Plate Sheet and Tube Company, New York, N. Y., a Corporation of New Jersey. Original application filed June 16, 1926, Serial No. 116,486. Divided and this application filed Aug. 9, 1929. Serial No. 384,773. 5 Claims. (Cl. 153—54.)



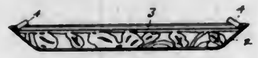
1. An arching mechanism for metal sheets comprising a plurality of shafts, a set of lower rollers mounted on each of said shafts adjacent the center and adapted to engage the lower surface of the sheets, a plurality of sets of upper rollers rotatably supported above said shafts and adapted to engage the upper surfaces of the sheets near each edge, the upper peripheral edge of said first set of lower rollers and the lower peripheral edge of the first set of upper rollers being arranged in substantially the same plane, the distance between the centers of the rollers on each shaft and the adjacent upper rollers decreasing whereby the center of a sheet passed between said rollers will be forced upwardly and the edges held down.

1,822,985. SWIVEL ATTACHMENT PLUG. ALFRED WRIGHT, Parry Sound, Ontario, Canada. Filed June 16, 1930. Serial No. 461,509. 1 Claim. (Cl. 173—324.)



A swivel attachment plug consisting of a casing, an insulation body provided with openings, a pair of contacts disposed in said openings, an anti-friction bearing mounted in said casing, the inner race of said bearing being fixedly secured on the insulation body to swivelly mount it in the casing, a metal spindle firmly secured in said insulation body and axially projecting from its rear face, a metal disc fitted to said rear face of the body, the periphery of said disc constituting a flange for the anti-friction members of said bearing and being secured to the inner race thereof, one of the contacts of the insulation body being secured to said disc, a metal annulus fitted on said spindle and electrically connected to the companion contact thereof, an insulation disc interposed between said metal disc and said annulus, a base supported in the casing and comprising a pair of contacts for establishing an electric connection with a source of supply, a bearing swivelly mounting the spindle in the base, means electrically connecting one of the base contacts with the spindle, and means for similarly connecting its companion with the outer race of the anti-friction bearing.

1,822,986. STENCIL FOR DECORATING CHINA WARE AND POTTERY. GEORGE A. BAUER, Baltimore, Md. Filed May 6, 1929. Serial No. 360,621. 1 Claim. (Cl. 101—127.)



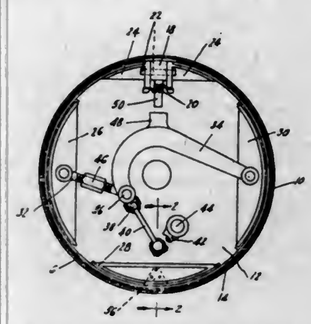
A stencil for decorating china ware and pottery, comprising a pattern formed of lead or other suitable pliable material, a reinforcing ring extending around the entire outer edge of said pattern and lugs projecting upwardly from said ring on opposite sides thereof.

1,822,987. FASTENING FOR INSULATING JACKETS. FLOYD F. COOPER, Westfield, N. J., assignor, by mesne assignments, to Banner Rock Corporation, Alexandria, Ind., a Corporation of Delaware. Filed Dec. 12, 1927. Serial No. 239,503. 2 Claims. (Cl. 154—44.)



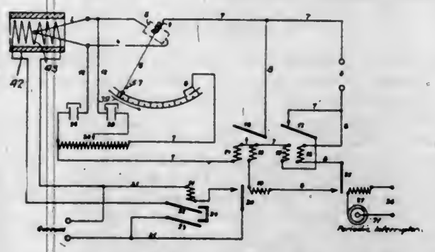
1. In an insulating jacket, the combination of a plurality of sections of insulating material having a metal fabric covering, comprising a plurality of interstices, of means for securing said sections together including hook-like members adapted to be inserted in said interstices, and a wire passing about said hook-like members from one to the other across the seam formed between the abutting edges of said sections for drawing the same together and securing them in position.

1,822,988. BRAKE. ADIEL Y. DODGE, South Bend, Ind., and WILLARD L. POLLARD, Chicago, Ill., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 29, 1927. Serial No. 236,501. 15 Claims. (Cl. 188—78.)



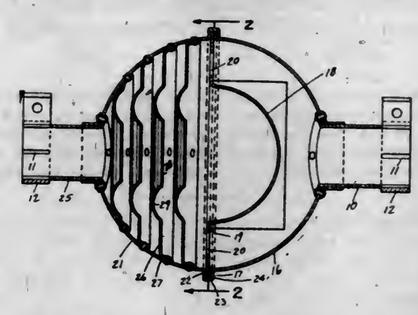
1. A brake comprising, in combination, a drum, a fixed abutment at one side of the drum, a floating expansible band within the drum having said abutment between its ends and arranged to have one end anchor against said abutment when the drum is turning in one direction and to have the other end anchor against said abutment when the drum is turning in the other direction, and a toggle connected to said band on opposite sides of the abutment and arranged to expand the band to apply the brake, said band having means rendering a plurality of segments, each of not more than 180°, substantially rigid, to render the self-energizing action of the band more controllable, while still leaving the band as a whole substantially expansible.

1,822,989. INSTRUMENTAL CONTROL APPARATUS. OTTO FEUSSNER, Hanau-on-the-Main, Germany, assignor to the Firm W. C. Heraeus Gesellschaft mit beschrankter Haftung, Hanau-on-the-Main, Germany, a Society of Germany. Filed Mar. 15, 1928, Serial No. 261,875, and in Germany June 3, 1927. 4 Claims. (Cl. 175—320.)



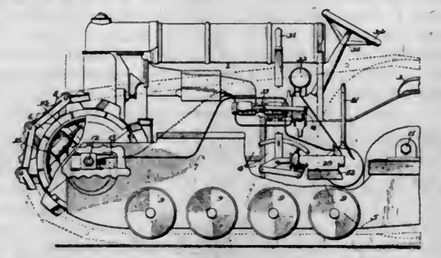
1. In an industrial process control device, electrical instrumental means, including a stationary contact and a movable contact, responsive to energy changes in a given process operation, by variations of the current of said instrumental means, in combination with a source of alternating current power, and a capacity circuit means connected between said instrumental means and said source of power, whereby said variations of said instrumental current, either momentarily augment, or momentarily decrease the control effect of said instrumental current acting through said contacts by superposing said alternating source of power on the instrumental current variation, thereby causing the contact making effect of said instrumental means to be either greatly increased, or practically eliminated.

1,822,990. MUFFLER. HATHAWAY M. GORSLINE, Indianapolis, Ind. Filed June 23, 1930. Serial No. 462,973. 4 Claims. (Cl. 137—160.)



1. In a muffler construction the combination of a hemispherical shell having at its closed end an axially arranged intake, a hemispherical shell at the other end including an axially arranged discharge, a closure plate positioned adjacent the open end of the first-mentioned shell and including a co-axially arranged imperforate, partially spherical baffling portion extending into said first-mentioned shell and an outwardly directed flange extending to the edge of the open end of said first-mentioned shell and including a plurality of peripherally arranged discharge openings, and a plurality of spaced and centrally apertured annular baffle plates extending across the other shell and with the central apertures in axial alignment.

1,822,991. TRACTOR STEERING CONTROL MECHANISM. GEORGE C. JETT, Milwaukee, Wis., assignor of two-fifths to Walter H. Stiemke, Milwaukee, Wis. Filed Sept. 19, 1928. Serial No. 307,033. 9 Claims. (Cl. 180—9.2.)

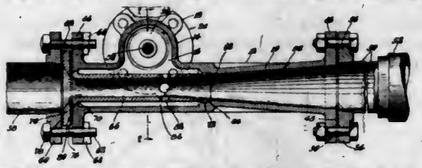


3. A steering and braking mechanism for vehicles having a differentially driven chain tread on each side comprising, a steering wheel, a pair of brakes one for effecting movements of one of said treads and the other for effecting movements of the other tread, hydraulic means operatively connecting both of said brakes to said steering wheel for selective application thereby, and hydraulic means independent of said steering wheel for applying one of said brakes when said steering wheel is operated to apply the other.

1,822,992. INSPIRATOR. JOHN L. JONES, Ensley, Ala. Filed Sept. 11, 1928. Serial No. 305,270. 4 Claims. (Cl. 158—118.)

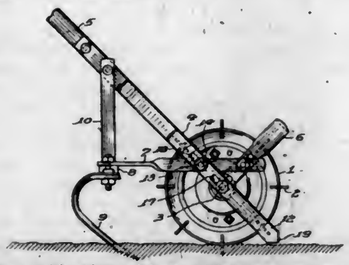
1. An inspirator for mixing and proportioning gases comprising a member forming part of a gas chamber, a

Venturi tube passing through said gas chamber, said tube being provided with openings for the passage of gas from said chamber into said tube, a gas supply pipe communicating with said chamber, a valve and valve stem for regulating the flow of gas from said gas supply pipe



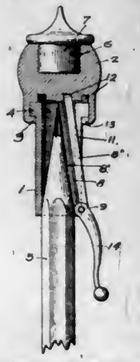
to said chamber, a mounting for said valve and stem, said mounting engaging said member and forming a closure for one end of said chamber, the mounting being removable so that the valve assembly can be removed without disturbing any connections or other parts of the inspirator.

1,822,993. LEAF GUARD FOR ROTARY CULTIVATORS. JOSEPH MADER, Philadelphia, Pa., assignor to S. L. Allen & Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 19, 1931. Serial No. 523,699. 6 Claims. (Cl. 97—192.)



1. The combination with a cultivating implement comprising a rotatable wheel having ground engaging blades, an axle on which the wheel is mounted, handle supports extending from opposite ends of the axle, a handle carried by said supports, auxiliary ground engaging tools respectively occupying different relations to the handle and selectively operable to engage the ground in rear of the wheel by reversing the implement, of a leaf guard disposed on each side of the implement and comprising a rigid bar parallel to the adjacent handle support and projecting on the opposite side of the axle therefrom to a point in advance of the wheel in either operative position of the machine.

1,822,994. PENCIL ATTACHMENT. LOUIS M. MARKOWITZ, San Francisco, Calif. Filed Mar. 17, 1931. Serial No. 523,305. 9 Claims. (Cl. 120—85.)

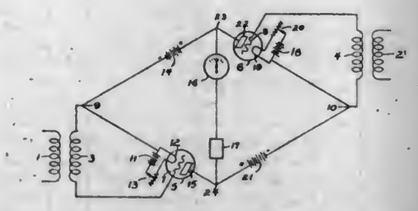


1. An attachment for pencils comprising a cap adapted to fit onto an end of a pencil; a blade pivotally mounted upon the cap, said blade being movable from a normal inoperative position in proximate parallel relation to the pencil to an operative sharpening position inclining toward the axis of the pencil in which position relative rotation of the cap and pencil will operate to sharpen the pencil; and means for moving the blade between its operative and inoperative positions.

1,822,995. METALLURGICAL PROCESS. RALPH F. MEYER, Freeport, Pa., assignor to Meyer Mineral Separation Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,363. 17 Claims. (Cl. 75—67.)

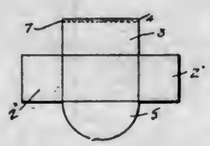
1. The process of solubilizing metal values in ore, comprising bringing a finely-divided mixture of ore and a reagent metal in the form of -ous oxide to quasi-wet condition and treating it with an acidic reagent gas to react with and form soluble compounds of the metal values, while agitating the mixture and maintaining it in quasi-wet condition during the treatment.

1,822,996. ELECTRICAL BALANCE CIRCUIT. CARLOS B. MIRICK, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 3, 1927. Serial No. 237,577. 7 Claims. (Cl. 175—183.)



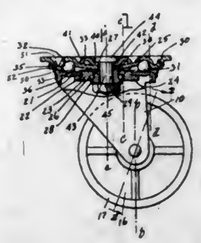
1. In a balanced circuit, the combination of a pair of vacuum tubes having filament heating circuits, grid-filament and plate-filament circuits, an input coil disposed within each of the grid-filament circuits, the plate-filament portion of each vacuum tube forming a leg of a bridge circuit, a source of plate current power for each of said vacuum tubes, each of said sources forming a leg of said bridge circuit and an indicating device connected between the plate electrodes of said vacuum tubes, said indicating device consisting of a relay.

1,822,997. THREE WAY ENVELOPE. THOMAS MITFORD MOORE, Toronto, Ontario, Canada. Filed Oct. 30, 1928. Serial No. 315,962. 4 Claims. (Cl. 229—73.)



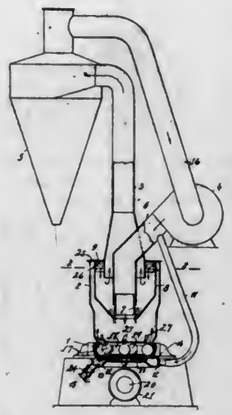
1. A three way envelope comprising a paper sheet having a top flap folded inwardly and having a return address space on the back thereof, a pair of end flaps folded inwardly to overlap each other and overlying the top flap, a bottom flap to receive the primary address folded to cover a portion only of the overlapping portions of said end flaps, and a seal separably connecting said bottom and end flaps leaving the envelope unsealed.

1,822,998. ANTIFRICTION CASTER WHEEL AND SUPPORT. WILLIAM H. NOELTING, Evansville, Ind., assignor to Faultless Caster Company, Evansville, Ind., a Corporation. Filed July 17, 1929. Serial No. 379,011. 8 Claims. (Cl. 16—21.)



1. An anti-friction caster including a load-supporting plate including an inner depressed portion and an annular skirt concentric therewith and forming an annular raceway therebetween, an annularly corrugated washer nested in the depressed portion and having an angularly directed portion bearing angularly on said depressed portion, and a headed pin extending through the plate and washer with its head portion nested within the corrugation defined portion of the washer.

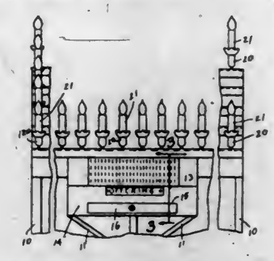
1,822,999. PULVERIZING MILL. CLAUDIUS PETERS, Hamburg, Germany. Filed Sept. 24, 1930, Serial No. 484,011, and in Germany May 10, 1928. 9 Claims. (Cl. 83—45.)



1. In a pulverizing mill, a rotatable pulverizing element, a generally circular track associated therewith, a substantially horizontal member providing openings below said pulverizing element through which fine materials may flow downwardly and through which air may pass upwardly, a material hopper and air supply chamber beneath said circular track, a discharge pipe associated with said hopper, an air lock closing said discharge pipe, but permitting material to pass therethrough and a movable element in said hopper adapted to move materials therein toward said discharge pipe substantially as described.

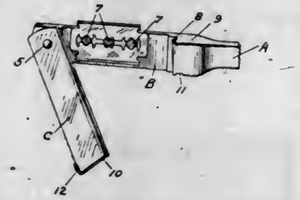
1,823,000. ILLUMINABLE VOTIVE DEVICE. MARINO PRIORI, Indianapolis, Ind. Filed Dec. 9, 1929. Serial No. 412,648. 1 Claim. (Cl. 194—6.)

In an illuminable votive device the combination of a plurality of individual electric lights having a predetermined arrangement, a coin receiving device spaced therefrom but in juxtaposition thereto and including a like number of coin receiving slots and similarly arranged, a like number of coin operable switches in registration with the slots, each of said switches having a pair of coin bridgeable contacts, a single current conducting wire connected to one contact of each of said switches, another single current conducting wire connected to one terminal of each of the lights, individual current conductors connected to the other contacts of said switches and the other terminals of said lights whereby selective illumination of the



lights is obtained by deposition of a coin in the selected slot, the coin bridging the contacts of the slot registering switch and completing the circuit to the desired light, means movably supporting one of each of the switch contacts, manually operable means for moving said last mentioned means to free the coins for opening the circuits, and spring means arranged to return said movable supporting means to coin retaining position and maintaining the same therein until said manually operable means is operative.

1,823,001. RAZOR BLADE HOLDER. FRANK RASSIER, Minneapolis, Minn. Filed Feb. 7, 1931. Serial No. 514,194. 1 Claim. (Cl. 30—25.)

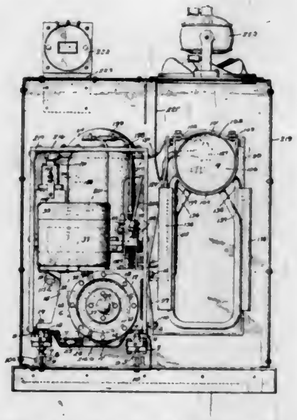


A razor blade holder comprising a main plate member terminating at one end in a handle and having an enlargement at said end, said plate member having a recess therein to receive a razor blade and projecting lugs to engage the blade and hold it in place with one edge only projecting beyond one edge of the plate, a second plate member pivotally secured at one end to the outer end of the main plate member for locking the blade with respect to said lugs and recess, the inner end edge of said second plate member being angularly formed, said enlargement having an angular groove for slidably receiving and securing the said angular inner end edge of the second plate member, and a lug projecting from the inner end of the second plate member to facilitate removal of the same from the groove, said enlargement having a notch adjacent to the groove for receiving said lug of the secondary plate.

1,823,002. REFRIGERATING UNIT. JOHN R. REPLOGLE, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 6, 1921. Serial No. 475,344. 12 Claims. (Cl. 62—4.)

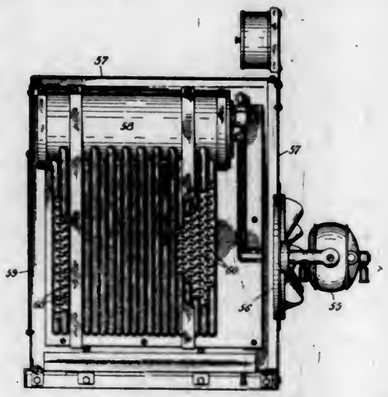
1. In refrigeration apparatus, the combination of a refrigerant compressor, a water cooled condenser to receive the compressed refrigerant, a vaporizer connected with the

condenser and with the suction side of the compressor, an electric motor to drive the compressor, an electro-magnetically actuated valve to control the flow of cooling water through the condenser, the windings of said valve and motor being connected in series, a switch in the elec-



tric circuit through the motor and the valve magnet for opening and closing said circuit, and means for operating said switch comprising a fluid pressure actuated device responsive to changes of the pressure characteristics of the vaporizer.

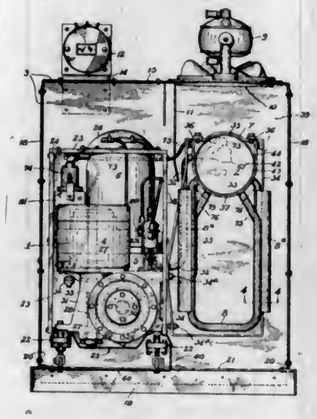
1,823,003. REFRIGERATING UNIT. JOHN R. REPLOGLE, Detroit, Mich., assignor, by mesne assignments, to The Guardian Trust Company, trustee, Cleveland, Ohio. Original application filed June 6, 1921, Serial No. 475,344, and in Canada Feb. 11, 1922. Divided and this application filed May 12, 1927. Serial No. 190,770. 21 Claims. (Cl. 62—95.)



7. In a refrigerating apparatus, a metallic duct adapted to contain refrigerant and having parts thereof disposed in spaced parallel relationship, and spaced heat absorbing fins in thermal contact with said spaced parallel parts, the major portion of said fins being disposed in planes substantially perpendicular to said parallel parts.

15. In a refrigeration unit, a vaporizer comprising a header adapted to contain refrigerant liquid, a tube loop connected at both ends to the header, and a heat conducting fin associated with one of the legs of the loop and projecting in a plane substantially perpendicular to said one of the legs for increasing the heat absorbing capacity thereof.

1,823,004. REFRIGERATING UNIT. JOHN R. REPLOGLE, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed June 6, 1921, Serial No. 475,344, and in Canada Feb. 11, 1922. Divided and this application filed June 10, 1927. Serial No. 197,943. 39 Claims. (Cl. 62—95.)



9. In refrigeration apparatus, a vaporizer comprising a header, and a plurality of tubes extending from said header, the ends of said tubes being secured to and arranged in a plurality of aligned rows on each side of said header.

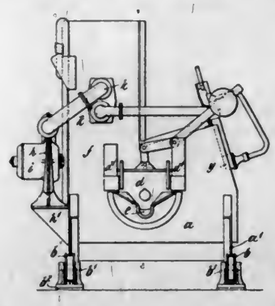
36. In refrigeration apparatus, a refrigerant expansion unit comprising a liquid refrigerant evaporator, and a plurality of parallel rows of fins connected in thermal contact with said evaporator, said fins in said rows being arranged in staggered relation to the fins in the adjacent row.

37. A refrigerating apparatus comprising a heat insulated cabinet arranged for the circulation of air internally thereof, a refrigerant evaporating unit disposed within said cabinet and so constructed and arranged as to divide the latter into a plurality of refrigerating compartments, said evaporating unit comprising a substantially planular solid metallic wall having imperforate side portions, one of said side portions being irregular in cross sectional configuration and embracing depressions extending inwardly of the wall and integrally united with the other side portion for increasing the heat transfer surface of the wall and providing between the said side portions a plurality of passages formed internally of the wall for the distribution and evaporation of refrigerant liquid, the opposite sides of said planular solid metallic wall being so positioned as to absorb heat from different refrigerating compartments, means for supplying refrigerant liquid to said passages in said wall, and a refrigerant condensing unit for exhausting and condensing the fluid evaporated in said passages.

1,823,005. REVERBERATORY FURNACE. WENZESLAW FRANK SKLENAR, London, England. Filed Aug. 15, 1929, Serial No. 386,145, and in Great Britain Oct. 22, 1928. 1 Claim. (Cl. 263—16.)

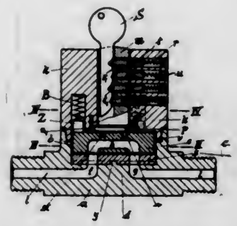
An oil fired reverberatory tilting furnace comprising a metal casing, an inner lining of pre-cast bricks of refractory material formed as large units, so shaped as to be fitted together to form a hollowed bed, a combustion chamber above said bed, a shaft extending upwardly from the combustion chamber, one wall of said shaft forming a baffle to deflect the flame from the burner and combustion chamber down on to the surface of the metal in the hollowed bed, a door closing a charging opening formed in

one side of the shaft, said opening being so arranged that the combustion gases escaping through said shaft pre-heat the metal before the latter passes to the hollowed bed, means for pre-heating the air supplied to the burner and



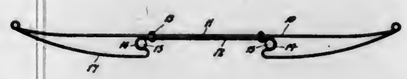
means forming a space in said shaft for pre-heating the receptacles for receiving the metal when tapped by utilizing the heat of the combustion gases escaping through the shaft, as set forth.

1,823,006. VALVE. WILHELM SOUPAL, Matzelsdorf, near Neulengbach, Austria. Filed Aug. 8, 1930, Serial No. 474,022, and in Austria May 28, 1930. 3 Claims. (Cl. 251—6.)



1. The combination of: a fuel conduit; a valve casing portion on said conduit; a resilient valve seat packing in said valve casing portion; a rotary slide valve rotatable upon said resilient packing; a second valve casing portion detachably connected to said first valve casing portion to enable said valve to be inspected; a key operable lock of the tumbler pin type arranged in said detachable casing portion and having a revolving cylinder portion coupled with said valve so as to turn said valve but permit of axial movement of the valve; means for pressing said valve against said packing; and means for preventing detaching of the detachable valve casing portion from the other casing portion in the closed position of the valve.

1,823,007. BUMPER. FREDERICK A. SPENCER, New York, N. Y. Filed Mar. 19, 1931. Serial No. 523,694. 2 Claims. (Cl. 40—130.)



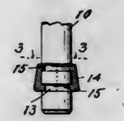
1. A bumper having a rear plate and a front plate fastened thereto and provided with a plurality of arcuate-shaped bumper portions and with illuminating means receiving portions and a license plate fastened to said front plate intermediate said illuminating means receiving portions and in a plane to the rear of said bumper portions.

1,823,008. TRAFFIC CONTROL SYSTEM FOR MULTI-FLOOR GARAGES. SKILES E. TEST, Indianapolis, Ind. Filed Nov. 20, 1926. Serial No. 149,633. 2 Claims. (Cl. 177—337.)



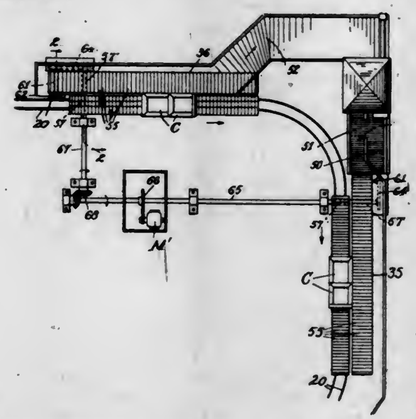
1. In combination, a garage having at least three floors for automobile storage and including ramp means leading from floor to floor and of substantially a single car width and upon which automobiles are driven to and from storage places on the floors, traffic directing means visible substantially from any point on the ramp means and the floor portions immediately adjacent thereto for directing traffic to proceed up the ramp and restrain down traffic and vice versa, and a central station control for manually controlling the traffic directing means.

1,823,009. METHOD OF FORMING VALVE STEM COLLARS. GLENN A. TOAZ, Cleveland, Ohio. Filed Oct. 11, 1929. Serial No. 399,018. 6 Claims. (Cl. 29—148.)



4. A method of manufacturing valve stem collars having non-parallel sides, which consists in forming a metal strip to the desired cross section of the collar, cutting said strip into lengths having diagonal and beveled ends, the diagonal lines converging toward the thinner edge of the strip, and pressing said lengths between dies, the inner die having a cylindrical shape and the outer die having a cooperating conical socket, whereby the collar is provided with a cylindrical inner wall and with ends lying in substantially the same plane.

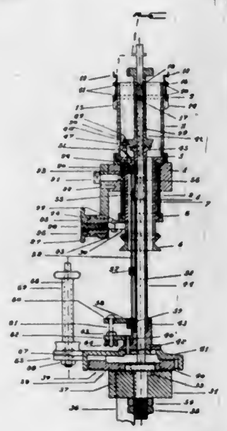
1,823,010. AMUSEMENT RIDE. HARRY G. TRAVER, Beaver Falls, Pa. Original application filed Apr. 11, 1927, Serial No. 182,719, now Patent No. 1,205,266, dated May 12, 1931. Divided and this application filed June 18, 1930. Serial No. 461,911. 14 Claims. (Cl. 104—20.)



1. In a railway, a track embodying parallel rails along which cars are propelled, and a traveling conveyor ar-

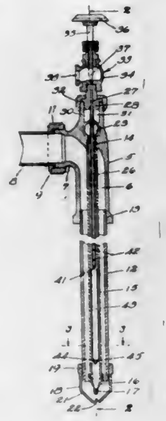
ranged between the track rails of a section of the track and movable in the direction of travel of the cars on the track and upon which conveyor the cars are adapted to ride and be transported thereby along said section of the track and transferred to the track rails at the end of said conveyor.

1,823,011. SPINNING APPARATUS. GASTON VAN COPPENOLLE, Rochecorbon, France. Filed May 2, 1928, Serial No. 274,579, and in France July 13, 1927. 1 Claim. (Cl. 118—55.)



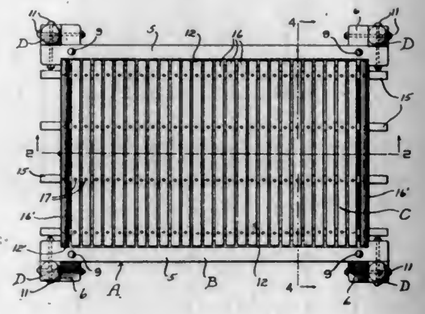
A spinning apparatus of the kind referred to, comprising in combination a flyer or winding tube, yarn guides carried by said flyer, vertical guides on the latter wherein said yarn guides are freely slidable so as to be capable of hanging on the yarn, a bobbin in said flyer, and a freely mounted friction roller engaging said bobbin for dragging same, substantially as set forth.

1,823,012. OIL BURNER. PETER G. VETTER, Berkeley, Calif., assignor to Amelia Vetter, Berkeley, Calif. Filed May 8, 1929. Serial No. 361,411. 5 Claims. (Cl. 158—76.)



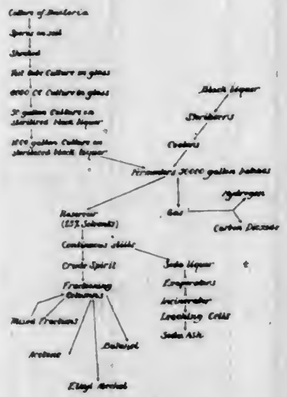
1. An oil burner comprising an air receiving cylindrical body member provided with a tip having an elongated slot at one end, an oil tube within said body member connected in the opposite end and communicating with an oil delivery aperture and having at its opposite end a tip with a restricted aperture, a water delivery tube within said oil tube terminating intermediate the ends thereof and extending through said oil delivery aperture into communication with a valve controlling a water supply the opposite end having a restricted aperture and transverse apertures adjacent the end thereof, and a tube frictionally slidable within said oil tube and having a kerfed restricted tip.

1,823,013. BED OR COT. CARL W. WANTZ, Los Angeles, Calif. Filed Nov. 11, 1929. Serial No. 406,451. 2 Claims. (Cl. 5—236.)



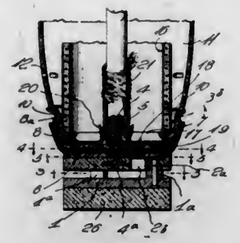
1. A mattress support comprising an open frame including end and side rails, said side rails at their upper edges each being provided with a rabbet terminating inwardly of the ends of the rails and providing a shoulder adjacent each end of each rail, and a rest including longitudinal supporting strips resting upon said end rails, a plurality of cross slats fixed to the upper sides of the strips with their end portions resting in the rabbets of the side rails and with the terminally disposed slats in engagement with said shoulders, and a stiffening strip secured to the upper side of each of the terminally disposed slats.

1,823,014. PROCESS OF MANUFACTURING ALCOHOL BY FERMENTATION. SIDNEY D. WELLS, Quincy, Ill., assignor to Paper Mill Laboratories, Inc., Quincy, Ill., a Corporation of Illinois. Filed May 11, 1927. Serial No. 190,556. 9 Claims. (Cl. 195—20.)



1. The process of manufacturing distillable spirits by fermentation which process comprises fermenting a mash

for receiving the strands of hair in wound formation thereon, means on said closure encircling the exterior of



the end of said heater chamber, and separate means for detachably engaging said aforesaid means with the exterior wall of said heater chamber.

1,823,024. PURIFICATION OF ARYLAMINES. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 15, 1929. Serial No. 340,336. 4 Claims. (Cl. 260—130.5.)

1. In a method of purifying the crude arylamine product of a reaction between a halogenated aromatic hydrocarbon and aqueous ammonia solution, said product also containing a relatively small amount of a phenolic compound, the steps which consist in treating said crude product with barium hydrate in amount sufficient to convert said phenolic compound to phenate, removing water therefrom by distillation, and then distilling said arylamine from the resulting anhydrous mixture.

1,823,025. PURIFICATION OF ARYLAMINES. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 15, 1929. Serial No. 340,337. 8 Claims. (Cl. 260—130.5.)

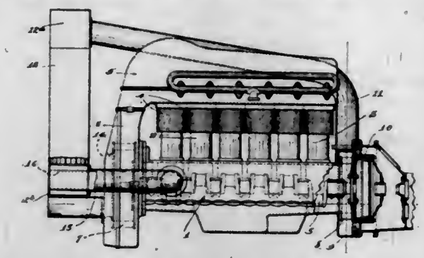
1. In a method of purifying the crude arylamine product of a reaction between a halogenated aromatic hydrocarbon and aqueous ammonia solution, said product also containing a phenolic compound, the steps which consists in treating said crude product with calcium oxide in amount sufficient to convert said phenolic compound to a phenate and to combine with all of the water present, and then distilling said arylamine from the resulting anhydrous mixture.

1,823,026. PURIFICATION OF ARYLAMINES. EDGAR C. BRITTON, WILLIAM H. WILLIAMS, and MARK E. PUTNAM, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 21, 1929. Serial No. 341,828. 6 Claims. (Cl. 260—130.5.)

1. In a method of purifying the crude arylamine product of a reaction between a halogenated aromatic hydrocarbon and aqueous ammonia solution, said product also containing a relatively small amount of a phenolic compound, the steps which consist in converting said phenolic compound into a substantially non-hydrolyzable metallic phenate, removing water therefrom and separating said arylamine by distillation from the resulting anhydrous mixture.

1,823,027. INTERNAL COMBUSTION ENGINE. CHARLES S. BROWN, Syracuse, N. Y. Filed Oct. 13, 1925. Serial No. 62,256. 2 Claims. (Cl. 123—171.)

1. In an internal combustion engine, a crank case, cylinders and a crank shaft, fans mounted on opposite ends of the crank shaft, a casing around the front fan and an air conduit leading from the casing over the cylinders to supply a cooling air current to the cylinders, a casing around the second fan having an inlet communicating with the interior of the crank casing, an outlet conduit leading from the casing, an air cooling radiator in front



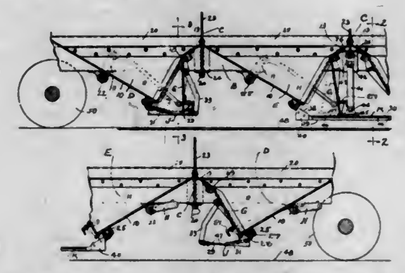
of the engine to which the outlet for the rear fan is connected, the air inlet for the crank case being also connected to the interior of the radiator and the radiator being arranged in juxtaposition to the front fan whereby the air is drawn past the tubes of the radiator by the front fan.

1,823,028. JOINT AND METHOD OF MAKING THE SAME. STUART H. CALDWELL, Detroit, Mich., assignor to Auto Research Corporation, a Corporation of Delaware. Filed Aug. 9, 1927. Serial No. 211,654. 8 Claims. (Cl. 113—116.)

1. The method of attaching a piece to the end of a tube, which consists in flaring said tube end to conform to the shape of said piece, mechanically affixing to said flared end a fusible washer, of volume to make the joint, fusing said washer and retaining said tube and said piece in engagement with said fused metal while the latter congeals.

6. As an article of manufacture, a pipe having cylindrically flared flange at its end and a washer of fusible metal positioned in said flange with its edges bent over the lip of the flange to affix said washer to said flange.

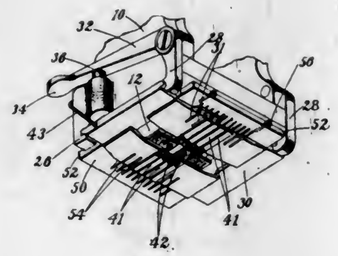
1,823,029. LOAD DISCHARGING CAR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 16, 1930. Serial No. 421,110. 16 Claims. (Cl. 105—249.)



1. In a railway car of the character described, having a discharge opening, the combination with a fixed floor

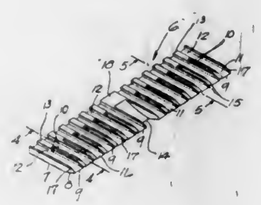
adapted to direct lading towards said discharge opening, a movable closure member adapted to be positioned in said opening, said member extending in a direction generally transverse of the car, a load deflecting element extending from the fixed floor across the plane of the closure member, and supporting means for said deflecting element disposed on opposite sides of the closure member, one of said supporting means cooperating with the fixed floor and the other of said supporting means being located beyond the path of movement of the door.

1,823,030. MARKING MACHINE. HARRY A. CLARKE, Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 19, 1928. Serial No. 293,912. 9 Claims. (Cl. 101—381.)



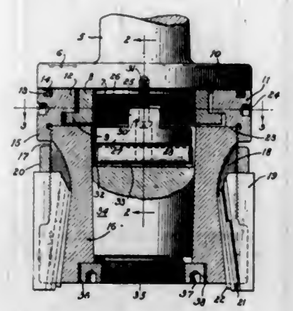
1. In a type head, a separable type plate having supporting ways for a plurality of individual type pieces which have undercut shoulders, each of said ways comprising an undercut shoulder to co-operate with the undercut shoulder of the type piece to limit the inward movement of the type piece and to prevent displacement of the piece away from the surface of the type plate, and separately releasable retaining members to hold said type pieces in said ways.

1,823,031. CUTTING BLADE. JOHN H. DALEN, Berkeley, Calif. Filed Jan. 7, 1929. Serial No. 330,807. 4 Claims. (Cl. 144—136.)



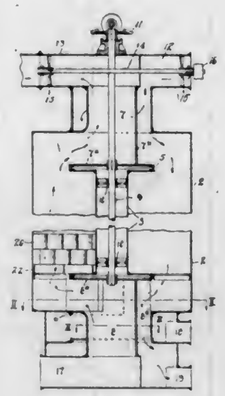
1. A cutter blade having a plurality of ribs, the forward ends of which form spaced incising points, cutting blades extending between the incising points at right angles thereto and at the bottom thereof, the incising points extending beyond the cutting blades.

1,823,032. TOOL HOLDER. GERARD A. DE VLIEG, Rockford, Ill. Filed June 26, 1926. Serial No. 118,039. 8 Claims. (Cl. 279—16.)



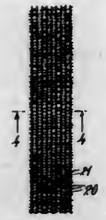
2. A tool holder having, in combination, a face plate, an externally threaded stud on said face plate, an outer collar, an inner collar threaded to said stud and holding said outer collar against said plate, said collars being spaced peripherally to provide clearance permitting lateral and rotary movement of said outer collar, means on said outer collar adapted to receive and support the body of the tool, and a driving connection between said stud and the tool, said driving connection permitting lateral movement of the tool in any direction.

1,823,033. METHOD OF AND APPARATUS FOR HEAT INTERCHANGE. HERBERT H. DOW and GUY H. CANNON, Midland, Mich., assignors, by mesne assignments, to Air Preheater Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 20, 1926. Serial No. 89,616. 5 Claims. (Cl. 257—6.)



5. In a heat exchanger, a chamber containing regenerative material, inlet means for supplying heating fluid; scavenging fluid, and fluid to be heated to said chamber, said means including valves for independently controlling the flow of each of said fluids into said chamber, means for operating said valves to permit successive inlet of said fluids to said chamber, and outlet means for conducting said fluids from said chamber.

1,823,034. RUBBERLESS ELASTIC FABRIC. HAROLD P. DWORSKY, New York, N. Y., and OSCAR S. LAWTON, New Bedford, Mass., assignors to Electric Weave Products, Inc., New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 296,481, filed July 31, 1928. This application filed Nov. 1, 1930. Serial No. 492,782. 13 Claims. (Cl. 28—1.)



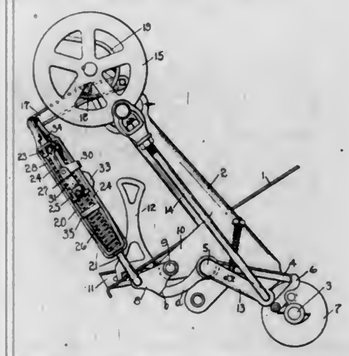
1. As a new article of manufacture, an unsized substantially inelastic but potentially elastic woven fabric having warp and weft groups of threads, the threads of one of said groups being twisted beyond their kinking points but being unkinky and having the fibers thereof set in said condition.

1,823,035. RADIATOR. JOSEPH ELGER, Chicago, Ill. Filed Nov. 10, 1928. Serial No. 318,476. 3 Claims. (Cl. 257—151.)



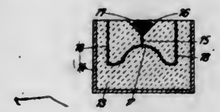
2. A radiator including; a plurality of sections connected together at the top and bottom and including a feed section; and an obstructed device in the bottom outlet of the feed section, said obstructing device being provided with an air outlet opening, and an air circulating pipe connected to said opening and extending at least partway upwardly in the feed section.

1,823,036. GRAIN HARVESTER. CARL J. FREDERIKSEN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 13, 1929. Serial No. 362,561. 15 Claims. (Cl. 56—436.)



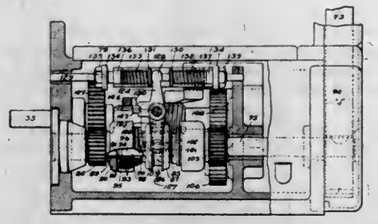
1. In a harvester, the combination of the binding mechanism including a compressor trip arm against which grain is accumulated and compressed to form a bundle, means to hold said arm in receiving position until a normal sized bundle is formed and bound, said means further operating to release said arm to drop for ejection of the bound bundle, and operative to permit said arm to recede while in receiving position when a supernormal quantity of grain is compressed against it.

1,823,037. PROCESS AND APPARATUS FOR CASTING METALS AND CERAMIC MASSES ACCORDING TO THE CENTRIFUGING METHOD. CURT FRITZSCHE, Leipzig, Germany. Filed Mar. 15, 1929, Serial No. 347,413, and in Germany Mar. 21, 1928. 2 Claims. (Cl. 22—65.)



2. An apparatus for carrying out the casting method specified in claim 1, comprising in combination with a centrifuge consisting of a stationary frame and of a rotatable arm, an electric muffle furnace on said arm having a central space, a two part mould arranged on the bottom of the central space concentrically to the center axis of said electric furnace and having in its upper part a central funnel shaped charging aperture adapted to accommodate the material to be melted, electric resistance heating bodies on the bottom, ceiling and side walls of said furnace around said mould adapted to uniformly heat said central space and therefore said mould and the material in the funnel shaped aperture of the upper part of said mould, collector rings on the shaft of said centrifuge, leads connecting said collector rings with said electric heating bodies, a source of current, brushes for supplying current to said collector rings, wires connecting said brushes with said source of current, and an adjustable resistance in said wires.

1,823,038. MACHINE TOOL UNIT. ROBERT M. GALLOWAY, Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed Apr. 14, 1928. Serial No. 270,140. 7 Claims. (Cl. 74—59.)

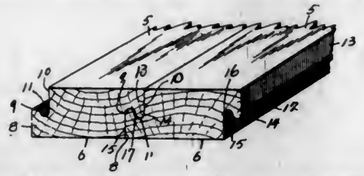


1. A machine tool combining a rotatable member; a power driven mechanism; clutch mechanism for connecting said power driven mechanism to said rotatable member; automatic means for operating said clutch means; means for releasably holding said automatic means in neutral position; and fluid pressure means for tripping said holding means to release said automatic means whereby the clutch is thrown into engagement.

1,823,039. JOINTED LUMBER. JAY K. GRUNER, St. Louis, Mo., assignor to J. K. Gruner Lumber Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 12, 1930. Serial No. 427,759. 1 Claim. (Cl. 20—5.)

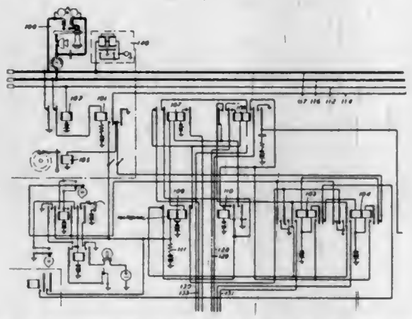
Jointed lumber comprising boards selectively reversible along their longitudinal axes, each having a hook sub-

stantially L-shaped in transverse cross-section extending in mutually opposite directions at the opposite side edges of said boards to form a tongue and an immediately adjacent groove at each of said side edges, said tongues being sufficiently shorter and narrower than said grooves to



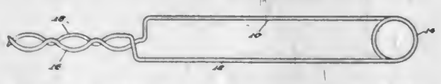
provide play in mutually transverse directions between adjacent boards when said boards are arranged with either tongue of one board in either groove of an adjacent board, said hooks being reduced in transverse cross-section toward their free ends whereby said adjacent boards may be interlocked at an angle.

1,823,040. CALL CHARGING TELEPHONE EXCHANGE SYSTEM. ALFRED E. HAGUE, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 4, 1930. Serial No. 472,998. 12 Claims. (Cl. 179—6.3.)



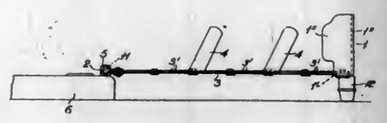
2. In a telephone exchange system, a calling line, a called line, a coin device on said calling line, a link circuit terminating in a selector switch for extending said calling line to said called line, a timing switch associated with said link circuit, a plurality of coin control devices, means responsive to the response of the called subscriber to start said timing switch to measure a prescribed period for conversation, means controlled by said timing switch to cause one of said coin control devices to become associated with said link circuit, and means in said control device to dispose of a coin deposited in said coin device.

1,823,041. CLINKER TONGS. JOHN G. HALL and CARL R. HALL, Chicago, Ill. Filed Apr. 11, 1930. Serial No. 443,474. 1 Claim. (Cl. 294—11.)



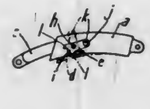
A clinker tongs, including in combination, a pair of joined integral arms, a resilient loop formed at the juncture of the arms and clinker grasping ends at the outer portions of the arms, said clinker grasping ends comprising integral extensions of the arms being provided with integral bends and humps, and inwardly turned clinker supporting elements on the ends, said elements comprising integral lugs, partially cut away from the body of the arm end.

1,823,042. COLLECTING TRAY FOR ROTARY DUPLICATORS. ELIZA BEATRICE HARTMANN, London, England. Filed June 3, 1930, Serial No. 459,078, and in Great Britain June 11, 1929. 3 Claims. (Cl. 271—86.)



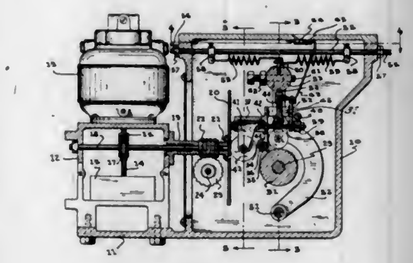
1. A collecting tray for a rotary duplicator comprising an extensible and contractible bottom, an outer end member connected to the front of said bottom and an inner end member connected to the rear of said tray and pivotally mounted on or adapted to be pivotally mounted on the base of the machine, and members on said bottom which serve as the sides of the tray, substantially as described.

1,823,043. JEWELRY CLASP. HENRI AUGUSTE HEUGAS, Paris, France. Filed Sept. 3, 1929, Serial No. 390,182, and in France Sept. 11, 1928. 2 Claims. (Cl. 24—206.)



2. A jewelry clasp comprising a male member having rack teeth formed thereon, a female member formed to receive said male member and having a slot formed therein adapted to take up a position opposite said rack teeth, a resilient tongue secured to said female member and mounted in said slot and adapted to normally engage said rack teeth, a pivotally mounted two-armed lever on said female member adapted to cam said tongue from said slot, and a stop lug on the camming arm of said lever adapted to abut said resilient tongue for limiting the movement of said lever.

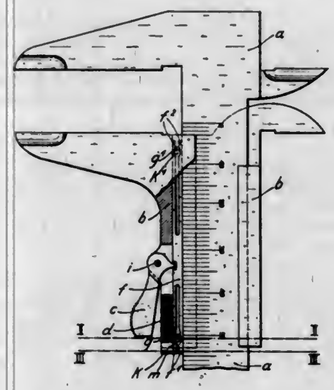
1,823,044. SPEEDOMETER. EINAR O. HOLMBERG, Wauwatosa, Wis. Filed Aug. 1, 1929. Serial No. 382,728. 9 Claims. (Cl. 264—1.)



1. A speedometer comprising a mass adapted to be displaced by changes in acceleration, a traveling member,

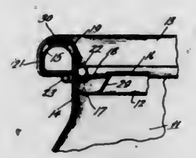
means for moving said traveling member, a mechanical connection between said traveling member and said mass for bringing the traveling member into operative relation with said moving means upon displacement of the mass, and velocity indicating means in connection with said traveling member.

1,823,045. SLIDING CALIPER WITH AUTOMATIC LOCKING DEVICE. GEORG HOMMEL, Aldingen, near Spaichingen, Germany. Filed Mar. 19, 1930, Serial No. 437,221, and in Germany Mar. 11, 1929. 2 Claims. (Cl. 33—143.)



1. A sliding caliper with automatic locking device, comprising in combination with the sliding element, a spring having cut out portions and tapering slots extending from these cut out portions and said spring being adapted to serve for locking said sliding element.

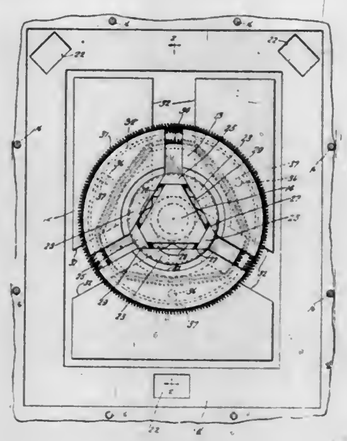
1,823,046. CONTAINER. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1926. Serial No. 145,420. 11 Claims. (Cl. 220—61.)



1. A device for securing covers to containers, comprising a strip formed to provide an annular band of inverted U-shape and of uniform exterior dimensions, the flange of said cover being adapted to be contained within the U-shaped portion of said strip, and a portion of the strip being reinforced by transverse corrugations.

1,823,047. METHOD OF AND APPARATUS FOR BEADING OF FORMED SHEET METAL ARTICLES. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 8, 1926. Serial No. 153,232. 9 Claims. (Cl. 153—48.)

1. The process of forming concavo-convex beads in formed sheet metal can bodies, which comprises, squeezing the can body between internal and external dies and thereby forming interrupted bead portions, and then moving said internal dies to exert pressure about the unbeaded inner surface of the bodies at the end of the bead forming operation.



6. An apparatus for beading formed can bodies with concavo-convex beads, which comprises, internal and external dies, each consisting of a number of die parts having bead forming surfaces, and means for operating certain of said internal die parts later in their movement to beading position than certain other internal die parts.

1,823,048. CRANK CASE OIL HEATER. JAMES HENRY HUGHES, Primate, Saskatchewan, Canada. Filed Apr. 30, 1930. Serial No. 448,758. 2 Claims. (Cl. 219—38.)

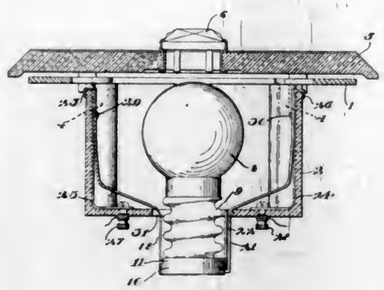


1. A crank case oil heater consisting of a tubular member horizontally disposed in the lower half of the crank case with its ends projecting through openings in opposing walls, a hollow electric heating element mounted in the bore of said tubular member, said heating element having its resistance wire divided into two units, and a thermostatic control fitted in the interior of the heating element and connected to the two units of the heating element.

1,823,049. LAMP ATTACHMENT. STANLEY M. KENERSON, Springfield, Mass., assignor to Standard Electric Time Company, Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 13, 1928. Serial No. 305,811. 9 Claims. (Cl. 173—331.)

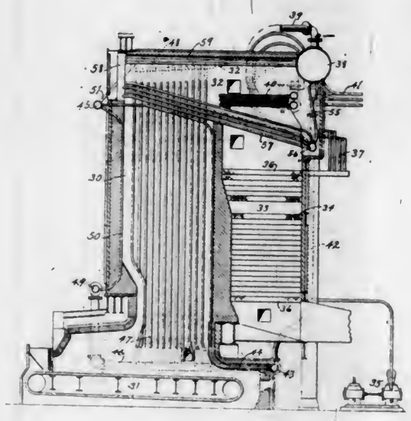
1. A lamp receptacle comprising a housing containing an electrical terminal, a lamp socket to receive a lamp base, and means for detachably mounting said socket in said housing so that the socket may be withdrawn or

inserted through the mouth of the housing with a lamp in the socket, said means including an electrically con-



ductive spring finger on the socket frictionally engaging said terminal, and projecting at the mouth of the housing for releasing said frictional engagement.

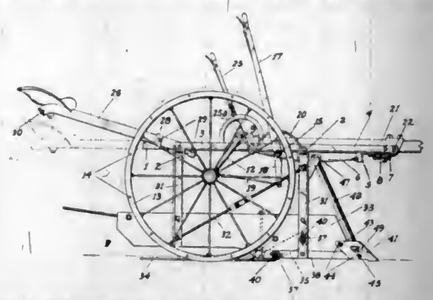
1,823,050. BOILER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 20, 1926. Serial No. 130,369. 15 Claims. (Cl. 122—235.)



1. In combination, a furnace having a source of heat adjacent the bottom thereof, a vertically extending passage through which hot gases from said source may rise, a flue having a downwardly extending portion connected at its top to said passage, steam generating tubes in the walls of said passage and forming part of a natural circulation system, steam generating tubes in said flue, a pump adapted to force steam and water through said flue tubes in a direction counter to the flow of gases through the flue, and a small bank of tubes extending across said passage near the upper end thereof.

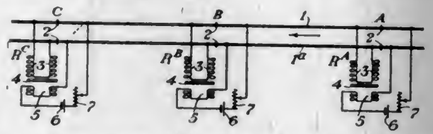
1,823,051. BEAN CUTTER. GREGORY LANG, Yuba City, Calif. Filed Feb. 11, 1930. Serial No. 427,499. 15 Claims. (Cl. 55—60.)

1. In an agricultural implement, a main longitudinal frame member, a seat, transversely spaced longitudinally extending supports on the rear end of which the seat is mounted, and means between said supports and the member for adjustably mounting said supports on said mem-



ber at different points in the length of the latter and so that the seat may be independently disposed at different levels.

1,823,052. RAILWAY TRACK CIRCUITS. BRANKO LAZICH, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 1, 1930. Serial No. 499,168. 3 Claims. (Cl. 246—41.)



1. In combination, a stretch of railway track divided into sections; a relay for each section comprising an armature biased to a released position, a main winding for moving the armature to an operated position and an auxiliary winding for opposing the action of flux due to said main winding on the armature; the main winding of each relay being connected across the rails of the associated section and the auxiliary winding being connected across the rails of the section next in the rear, and a source of track circuit current interposed between each auxiliary winding and one of the track rails.

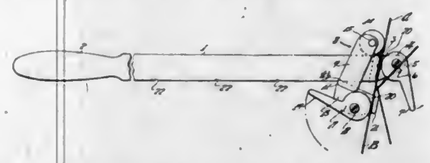
1,823,053. RUBBERLESS ELASTIC FABRIC. OSCAR S. LAWTON, New Bedford, Mass., assignor to Elastic Weave Products, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1930. Serial No. 492,414. 10 Claims. (Cl. 28—1.)



1. The method of making elastic thread from relatively inelastic fibrous yarn which comprises increasing the original count of the yarn by moistening and stretching the yarn, imparting to the yarn while in such condition a greater amount of twist than the yarn was capable of receiving in its original count, drying the yarn in such stretched and highly twisted condition, relieving the tension upon the yarn, and subsequently moistening and drying the yarn in its free state, thereby reducing the count of the yarn but retaining therein the added amount of twist.

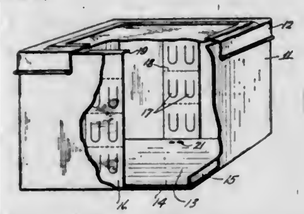
1,823,054. WIRE STRETCHER. GEORGE LITTLE, Stamford, Conn. Filed Sept. 22, 1930. Serial No. 483,450. 1 Claim. (Cl. 254—77.)

In a wire stretcher, an elongated handle having spaced notches along one edge, a depressed attaching ear on one end of the handle, wire gripping means mounted upon the said attaching ear, a carrier comprising spaced fingers slidably embracing the said handle, a roller journaled between the ends of the said fingers and adapted to roll upon one edge of the said handle, the opposite ends of



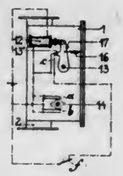
the said fingers being connected by a base adapted to engage the said notches in the handle, an attaching plate extended from one of the said fingers and lying in the same plane as the said depressed ear on the handle, and wire gripping means mounted on the said attaching plate.

1,823,055. FIBER CRACKER CADDY. DONALD G. MAGILL, Chicago, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 22, 1928. Serial No. 263,674. 1 Claim. (Cl. 206—44.)



In combination with a container having straight vertical walls and a main bottom, a false bottom comprising a tray adapted to fit within the main body of the container, and a strip separate from and passing under said tray and secured thereto and supporting and reinforcing the tray, said strip passing vertically upward at each side of the tray to the top edges of said walls, the vertical parts of the strip being composed of removable sections, said sections having cut-out portions normally parallel with and slidable along the inner sides of the container and bendable outward to engage over the top edges of the container.

1,823,056. CARTRIDGE SEPARATING DEVICE FOR PNEUMATIC TUBE PLANTS. HANS MARBURG, Berlin-Halensee, Germany, assignor to Telephon-Apparate Fabrik E. Zwietusch & Co., G. m. b. H., Berlin-Charlottenburg, Germany, a Corporation. Filed Nov. 19, 1929, Serial No. 408,297, and in Germany Nov. 24, 1928. 4 Claims. (Cl. 243—38.)



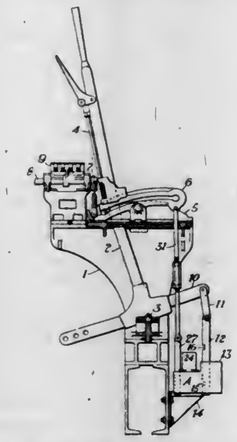
1. An electrically controlled device for pneumatic tube plants for regulating the distance between the cartridges at any desired point of the tube, comprising in combination with the cartridges, an absolutely automatically operating locking device, adapted to lock said cartridges, contacts, and electromagnets controlling said locking device.

1,823,057. LACE FOR FOOTWEAR. CARL MARX, Berlin, Germany. Filed Nov. 20, 1930. Serial No. 496,936. 2 Claims. (Cl. 24—143.)



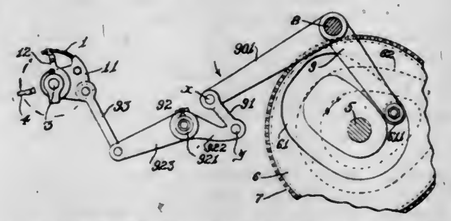
1. A lace for footwear, comprising a flat solid rubber lace having one end widened wedge-shaped and the other end tapered to a point.

1,823,058. MACHINE FOR CONTROLLING RAILWAY TRAFFIC GOVERNING APPARATUS. WILLIAM C. MCWHIRTER, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 4, 1931. Serial No. 520,023. 5 Claims. (Cl. 246—146.)



1. In an interlocking machine comprising a mechanical lever, a latch for said lever, a rocker link controlled by said latch, a control bar controlled by said rocker link and provided with a cam slot, a push bar provided with means which cooperates with said cam slot for operating said push bar, a locking bar operatively connected with said lever and provided with a notch, a dog adapted to enter said notch for at times preventing movement of said lever, an electromagnet, and means controlled jointly by said push bar and said electromagnet for controlling said dog.

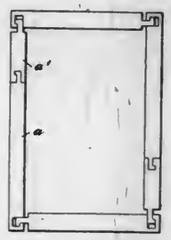
1,823,059. SEWING MACHINE AND THE LIKE. FRANK W. MERRICK, Boston, Mass. Filed Apr. 14, 1925. Serial No. 23,056. 12 Claims. (Cl. 112—35.)



1. In mechanism such as specified, the combination with a tool, a rotating movement-initiating element, a primary lever actuated by said element, and a secondary lever, of a toggle-link connecting said levers together and cooperating with an arm of said primary lever as a toggle-link which as the mechanism completes the stroke of the tool approaches and assumes dwell-relations in which its

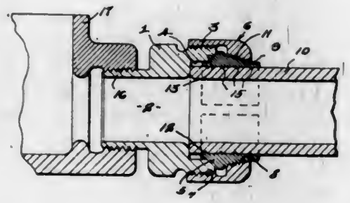
effective length is substantially in line with the center on which said primary lever swings, and a toggle-link connecting the secondary lever with the tool and which at one extreme of the movements of the tool assumes relations in which its effective length is substantially in line with the center on which said secondary lever swings.

1,823,060. PAGE LOCK FOR PRINTERS' FORMS. HJALMAR BERNHARD OHLSON, Stockholm, Sweden. Filed Jan. 11, 1930, Serial No. 420,218, and in Sweden Feb. 9, 1929. 1 Claim. (Cl. 101—404.)



A page lock for printers' forms, comprising in combination side bars having at one end a hook shaped cut out portion, a hook shaped extension at the other end of said side bar of the same size as said cut out portion adapted to loosely engage in the cut out portion of an adjacent bar so that the two bars form a corner, and spring pins adapted to be inserted in the free spaces left between said hook shaped extensions and said hook shaped cut out portions adapted to clamp said bars tightly together during the printing operation.

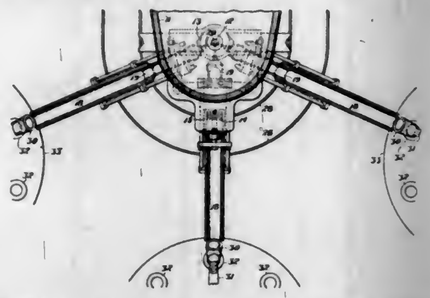
1,823,061. CONDUIT COUPLING. JOHN T. PEARSON, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Oct. 4, 1928. Serial No. 310,343. 5 Claims. (Cl. 285—123.)



1. A pipe connection comprising an externally threaded body having a bore for receiving a pipe end, a nut having threads at one end turning on the body, a contractile sleeve for enclosing the pipe end, the sleeve and the nut having coacting positive interlocking cam means for contracting the sleeve as the nut is turned on the body and locking the sleeve from retrograde movement.

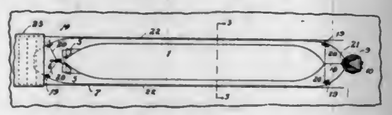
1,823,062. GLASS FEEDING MACHINE. CLAUDE W. PLEUKHARP and HARRY RAYNES, San Francisco, Calif., assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 12, 1922. Serial No. 567,633. 10 Claims. (Cl. 49—5.)

1. In a glass feeding machine, the combination with a charging vessel having a discharge orifice for molten glass, a plurality of delivering devices for delivering measured quantities of molten glass to different stations and comprising each a swinging chute, and means to control said swinging chutes to vary the time of movement of one with relation to the other.



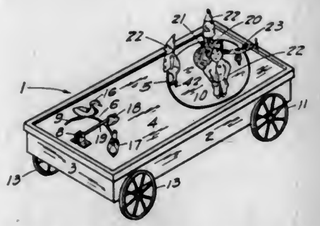
8. The method of producing mold charges of different sizes for making glassware, which comprises discharging molten glass from a container, and severing the discharged glass at regulated unequal intervals of time, adapted to the different sizes to be produced.

1,823,063. MEANS FOR MOORING AND HOUSING AIRSHIPS. WILFRID V. N. POWELSON and WARREN TRAVELL, New York, N. Y. Filed Sept. 21, 1921. Serial No. 502,127. 18 Claims. (Cl. 244—2.)



10. A mooring mast rotatable about its own axis.

1,823,064. TOY. EMILIO PRUNETTI, Oakland, Calif. Filed Mar. 17, 1930. Serial No. 436,488. 11 Claims. (Cl. 46—47.)

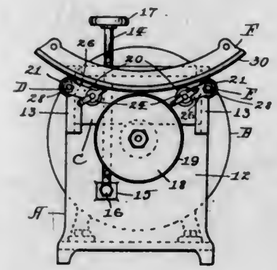


2. A mechanical toy comprising a wheeled body, a platform rotatably supported by said body, a supporting ring concentrically mounted beneath said platform, a plurality of bells equi-angularly mounted on said ring, spring actuated tappers for said bells, intermediately pivoted tapper arms extending vertically the ends thereof being adapted to cooperate with a centrally pivoted triangular plate mounted on a gear fixed on the sleeve pivot of said platform, a stop on said gear adapted to prevent rotation and permit reversal of said plate and a train of gears adapted to cooperate with one axle and said gear.

1,823,065. MACHINE FOR TRUING BRAKE BAND SEGMENTS. HORACE F. SCRUBY, Beverly Hills, Calif. Filed Oct. 8, 1929. Serial No. 398,204. 5 Claims. (Cl. 51—102.)

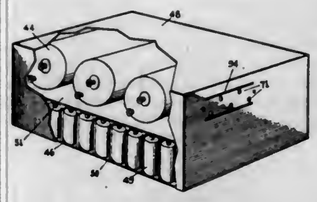
1. A device for truing the surface of brake lining carried by a brake band segment or the like, comprising, in combination, a revoluble trimmer having a cutting periphery, a pair of antifriction rests the members of which are

disposed at opposite sides of said trimmer, adapted to guide said segment with its curved brake surface in an arc about an axis eccentric to said trimmer and with the external surface of its brake lining in coaction with the periphery of said trimmer to trim said surface coincident with the movement of said segment about its axis, said



trimmer being adjustable to and from said rests and each of said rests consisting of a pair of antifriction supports for said segment, movably disposed to be adjusted into different positions, whereby either internal or external brake band segments may be presented for coaction with said trimmer to trim their brake bands.

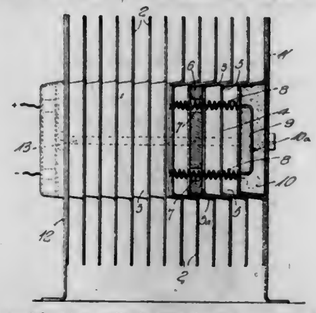
1,823,066. POWER SUPPLYING MEANS FOR RADIO RECEIVING APPARATUS. LAZARUS SHAPIRO, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 9, 1923. Serial No. 611,666. 6 Claims. (Cl. 136—109.)



1. As an article of manufacture for use with a vacuum tube installation such as radio receiving apparatus, a power unit comprising two batteries housed in a single container, one of said batteries consisting of a relatively large number of small cells for delivering a relatively small current at high voltage and the other of said batteries consisting of a relatively small number of relatively large cells for delivering a relatively large current at low voltage, said batteries being so constituted with regard to the size and number of the cells in each battery that, when the power unit is connected in a vacuum tube installation for energizing the plate circuit or circuits of the vacuum tube or tubes of the installation by the first-mentioned battery and heating the filament or filaments of the tube or tubes by the second-mentioned battery, the lives of the two batteries will be substantially the same.

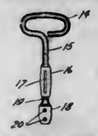
1,823,067. ELECTRIC HEATER. EDWIN L. SMALLEY, Whitefish Bay, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 19, 1929. Serial No. 379,546. 12 Claims. (Cl. 219—34.)

1. In an electric heater, a multiplicity of plate members comprising flange portions and central offset portions, said offset portions being nested one into another, insulation means disposed between selected ones of said offset



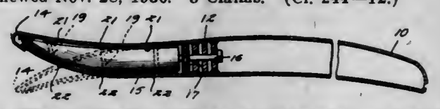
portions, and heater coils insulatingly supported in said insulation means out of contact with the metallic portions of said heater.

1,823,068. METHOD OF SPOTWELDING KEYS TO TEARING STRIP CANS. CHARLES STOLLBERG, New York, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 30, 1926. Serial No. 84,933. 4 Claims. (Cl. 220—52.)



4. A key designed to be attached to a tin can by welding, said key having a shank, a flattened part at one end and a handle at the other end, there being a weakened portion adjacent to the flattened part, said flattened part being provided with a spot-weld tit adjacent said weakened part, and a fulcrum adapted to contact with the surface of the can and arranged adjacent the extremity of the shank of the key and spaced from said tit sufficiently to prevent the breaking of the tin of the can in the operation of detaching the key.

1,823,069. AIRPLANE APPLIANCE. ROBERT C. STROOP, Rome, Ga. Filed Oct. 1, 1929, Serial No. 396,520. Renewed Nov. 28, 1930. 3 Claims. (Cl. 244—12.)

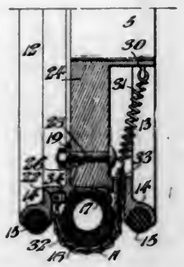


1. The combination with an airplane wing, or the like including upper and lower faces, of means for flexing an edge thereof including arcuate members rotatable within said edge and in contact with said upper and lower faces, means for rotating the arcuate members whereby to curve said edge upwardly or downwardly, and means between and movably connected to said faces whereby to maintain contact between said faces and said arcuate members.

1,823,070. COMBINED SAFETY GUARD AND ANTI-SKID DEVICE. WILLIAM TAIT, Reading, Pa., assignor of one-half to Francis Tait, West Lawn, Pa. Filed Feb. 14, 1931. Serial No. 515,652. 3 Claims. (Cl. 152—14.)

1. A combined safety guard and anti-skid device for the wheels of vehicles comprising inner and outer demountable split rims, each of said rims having an annular seat, annular cushioning bands positioned in said seats, the over-all diameter of said cushioning bands being slightly less than the over-all diameter of an inflated tire positioned on said wheel, tension devices carried by said inner rim, anti-skid chains having their inner ends secured

to the ends of said tension devices, said chains and tension devices being adapted to pass freely through openings in said inner rim, hooks on the free ends of said



chains, said hooks being too large to pass through said openings, means on said outer rim adapted to engage said hooks and means for detachably securing said inner and outer rims in contiguous aligned position.

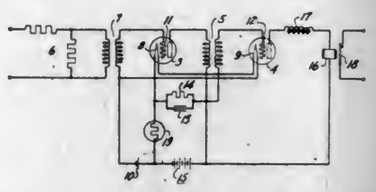
1,823,071. VACUUM CLEANER BRUSH. GUSTAV J. R. THAMM, New York, N. Y. Filed Oct. 24, 1928. Serial No. 314,726. 3 Claims. (Cl. 15—158.)



1. A nozzle having a flattened end, the sides of which are spaced apart and provided with openings, a substantially U-shaped head hollow upon its inner side to snugly embrace the marginal portion of the nozzle and extend across the end and along opposite side edges thereof, and tufts of brush material fitted to and projecting laterally from the said head.

1,823,072. RECTIFIER RELAY CIRCUIT. DIETWALT THIERBACH, Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a German Company. Filed July 31, 1926, Serial No. 126,196, and in Germany Sept. 15, 1925. 3 Claims. (Cl. 250—27.)

1. A rectifier-relay circuit comprising an electron discharge device having an anode, a cathode, a control electrode, and circuits therefor, a circuit-closing electro-magnetic relay connected in the anode circuit of said device, means for positively biasing said control electrode sufficiently to cause substantially saturation current to flow in said anode circuit to energize said relay, a resistance and a condenser in parallel in the control electrode circuit of said device for developing a negative biasing potential on said control electrode when control waves are

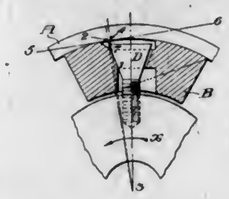


impressed on the control electrode circuit, and high impedance means included in said anode circuit in series with said relay, said parallel resistance and condenser being proportioned with respect to the other elements of the circuit to control the actuating and releasing periods of said relay.

1,823,073. PROCESS OF PREPARING PHENYL-1-THIOGLYCOLLIC-2-CARBOXYLIC ACID AMIDES CONTAINING HALOGEN. HERMANN WAGNER, Bad Soden-on-Taunus, MAX HESSENLAND, Konigsberg, and RUDOLF BRUNE, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 12, 1928, Serial No. 325,642, and in Germany May 5, 1925. 8 Claims. (Cl. 260—108.)

1. The process which comprises subjecting a phenyl-1-thioglycollic-2-carboxylic acid amide to the action of a free halogen of the group consisting of chlorine and bromine in the presence of a diluent.

1,823,074. CENTRIFUGAL FRICTION CLUTCH. KARL JOHAN WERSÄLL, Stamford, Conn., assignor to American Kambi Company, New York, N. Y., a Corporation of Delaware. Original application filed Apr. 23, 1927, Serial No. 185,962, and in Germany Jan. 13, 1927. Divided and this application filed May 4, 1929. Serial No. 360,504. 8 Claims. (Cl. 192—105.)

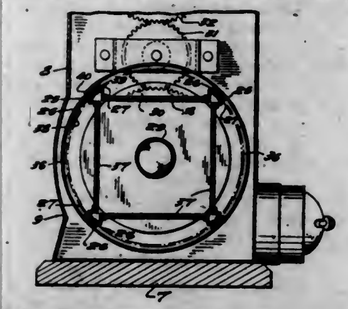


1. In a centrifugal friction clutch, the combination of a driven track member, a shaft-carried driver, and a shoe, the driver having contact with the shoe intermediate the front and rear ends of the shoe, the plane of the contact surface between the shoe and driver being so located with the tangent to the track that at the intersecting point hereof it forms an acute angle pointing in the direction of rotation.

1,823,075. ADVERTISING APPARATUS. WILLIAM SHILOH WILSON, Washington, D. C., assignor of fifty per cent to Sherman W. Frazier, Washington, D. C. Filed Mar. 28, 1929. Serial No. 350,556. 4 Claims. (Cl. 40—33.)

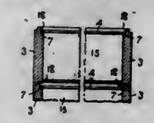
1. A display apparatus, including a casing, a plurality of rotary sign carrying members mounted therein, a motor

to drive said members, two transmission mechanisms interposed between the motor and one of the sign carrying members, one mechanism to impart intermittent and the



other to transmit continuous motion to the sign carrying members, and manually selective means for bringing into operation either of said mechanisms at a time.

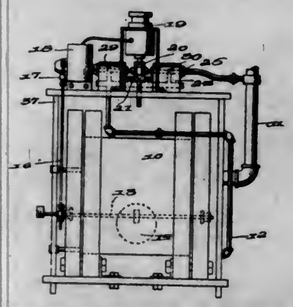
1,823,076. BEEHIVE. GEORGE P. WOOD and JAMES WOOD, Peekskill, N. Y. Filed Feb. 3, 1923. Serial No. 616,856. 6 Claims. (Cl. 6—2.)



2. In a beehive, the combination of two opposite fixed walls, each provided with a rabbeted shelf; two opposite detachable walls; end members for said detachable walls aligned with said fixed walls and each provided with a rabbeted shelf registering with one of the shelves on said fixed walls; a division board mounted upon the shelves on each pair of said members, parallel with said detachable walls; and a cleat positioned on each division board to serve as a shelf for hangers of frames and honey section cases positioned parallel with said fixed walls.

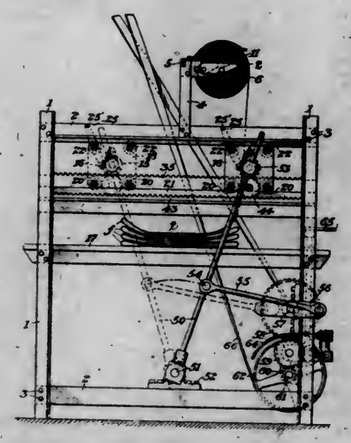
6. In wall structure for a beehive, the combination of a slotted wall; a cover for the slot; and slot-and-pin connections between the wall and the cover.

1,823,077. STEAM TRAP. FRED ACKERMAN, Pineville, Ky.; Sophie Ackerman, administratrix of said Fred Ackerman, deceased, assignor of three-fifths to Kentucky Utilities Company, Louisville, Ky., a Corporation of Kentucky. Filed Jan. 20, 1930. Serial No. 422,143. 8 Claims. (Cl. 137—103.)



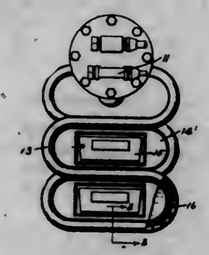
1. A steam trap comprising a tank having inlet and outlet ports, a float within the tank, a pivotal float support extending outside the tank, valve means for controlling the inlet and outlet ports comprising a valve block outside of the tank having oppositely disposed valve stems, a common intermediate base for adjustably mounting the stems, and connections between the float support and valve means.

1,823,078. TOWEL BUNDLING MACHINE. JOSEPH H. ADDLER, Brooklyn, N. Y., assignor to Pullican Manufacturing Corporation, Bridgeport, Conn., a Corporation of Delaware. Filed Nov. 27, 1929. Serial No. 410,131. 5 Claims. (Cl. 270—30.)



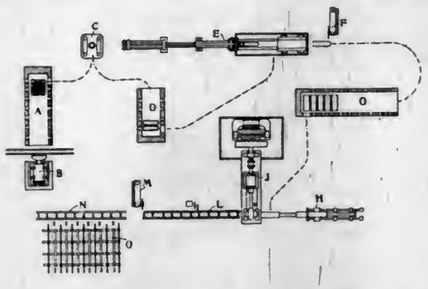
1. In a machine of the class described, a towel holder, means including a pair of cooperating rolls for engaging and pulling the towel from the holder, one of said rolls being a driven roll and the other a secondary spring-pressed one in engagement with the driven one, means for imparting a bodily reciprocating movement to the said rolls, and means for positively rotating the driven roll in the same direction during both strokes of its reciprocation, for the purpose set forth.

1,823,079. REFRIGERATING APPARATUS. FRANK W. ANDREWS, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Mar. 31, 1927. Serial No. 179,988. 1 Claim. (Cl. 62—126.)



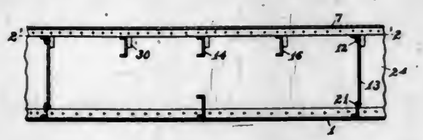
An evaporator comprising header means, a plurality of ducts connected in parallel circuit relation and containing liquid refrigerant and having ends thereof connected with the header means for discharging vaporized refrigerant thereto, portions of said ducts beneath the normal level of the liquid lying substantially horizontal, and means within the ducts for accelerating the formation of gas bubbles in said ducts, said means comprising material having a plurality of sharp corners on which said bubbles will readily form.

1,823,080. MANUFACTURE OF SEAMLESS TUBES. OTTO BAMBERGER, Duisburg, Germany, assignor to Deutsche Maschinenfabrik Aktiengesellschaft, Duisburg, Germany. Filed Mar. 25, 1926, Serial No. 97,328, and in Germany Feb. 20, 1926. 2 Claims. (Cl. 80—62.)



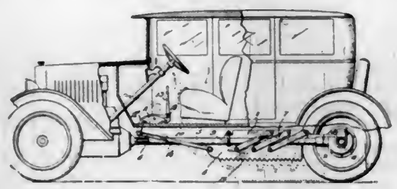
1. A method for the manufacture of seamless tubes of hard metals, such as alloyed steels and so-called special steels, consisting of the following steps in succession: the pressing of the heated blank of hard metal into the form of a thimble, reheating the thimble-like blank thus formed, drawing down the reheated blank and reducing the blank in diameter as well as thickness of wall so as only partially to effect the reduction of diameter and thickness required to produce the finished tube; cutting off the closed end of the blank to produce a cylinder, again reheating the cylindrical blank and then reducing the reheated blank in diameter and thickness to final dimensions in a pilgering mill, substantially as hereinbefore described.

1,823,081. CHANNEL CONSTRUCTION FOR THE TOPS OF THE TANKS OF VESSELS. WILFORD G. BARTENFELD, Lorain, Ohio. Filed May 8, 1929. Serial No. 361,326. 5 Claims. (Cl. 114—79.)



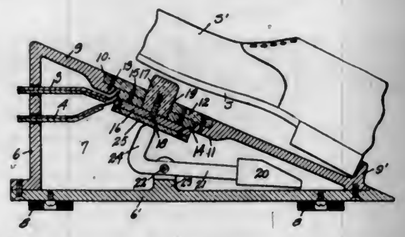
1. In a channel construction for the tops of the tanks of vessels, the combination of channels, the channels being inverted, floor plates, the floor plates extending transversely relative to said channels, the floor plates having continuous upper edges, and said channels having their flanges resting upon the upper edges of said floor plates.

1,823,082. ANTISKID DEVICE FOR AUTOMOBILES. HORACE A. BOWYER, Orwell, Ohio, assignor of one-half to Charles M. Mix, Cleveland, Ohio. Filed Jan. 11, 1928. Serial No. 245,998. 2 Claims. (Cl. 188—5.)



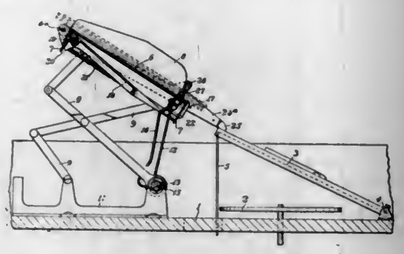
1. Motor vehicle anti-skid means including a beam secured upon the drive shaft housing, an anti-skid member beneath the drive shaft housing links at opposite sides of the beam and anti-skid member, pivoted at their ends to the beam and anti-skid member and forming connecting means therebetween, a block on the floor board of the vehicle extending longitudinally of the vehicle, a lever pivoted intermediate its length to said block intermediate the ends thereof, a link connecting the front end of the lever to the said anti-skid member, a latch bar pivoted near its lower end to the rear end of the lever and having a tooth at its lower end engageable with the said block to hold the anti-skid member inactive, and an arm extending transversely from the rear end of said lever serving as operating means to swing the lever forwardly when the latch bar is released from the block and throw the anti-skid member into action.

1,823,083. CIRCUIT BREAKER. LLOYD L. BROWN, (deceased), Spokane, Wash., by decree of distribution to J. F. Brown, Spokane, Wash. Filed July 12, 1927. Serial No. 205,125. 1 Claim. (Cl. 200—159.)



The combination with a hollow casting having an opening, a fixed, open center insulated plate covering said opening, an open center contact plate attached to the insulated plate within the casting and means for detachably securing the first plate to the casting, of a movable contact plate, an L-shaped lever pivoted within the casting having a short arm for co-action with the movable plate and a weight on the longer arm, a pressure button fixed to the upper side of the movable plate, and said button protruding through the insulated plate and fixed contact plate.

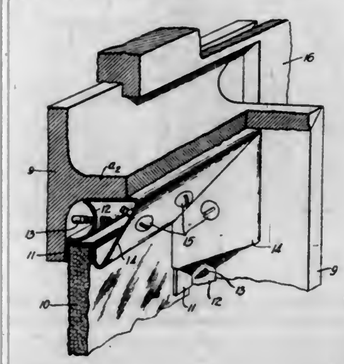
1,823,084. RECORD MAGAZINE FOR TALKING MACHINES. HORACE LEOPOLD TUCKER BUCKLE, Iver Heath, England, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Dec. 28, 1927, Serial No. 243,165, and in Great Britain Jan. 7, 1927. 15 Claims. (Cl. 274—10.)



3. A record magazine of the class described comprising a platform adapted to receive a pile of records, means including yieldingly supported posts upstanding from said platform for retaining records in said magazine, and means for automatically adjusting the height of said posts to release the uppermost record including a bar mounted for movement toward and from said pile of records and

carrying downwardly extending studs engaging and depressing said posts when the bar falls to a position of rest upon the surface of said uppermost record.

1,823,085. SHOW CASE. THADDEUS C. CAMPBELL, Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,675. 3 Claims. (Cl. 189—78.)



1. In combination with a framework, a glass plate mounted therein and a combined clearance take-up and clamping device for holding the glass plate in the framework, the clearance take-up element of said device holding the plate against edgewise motion and the other element holding the plate against flatwise motion in the framework, and a fastening device for each of said elements, each of said fastening devices engaging the clearance take-up element.

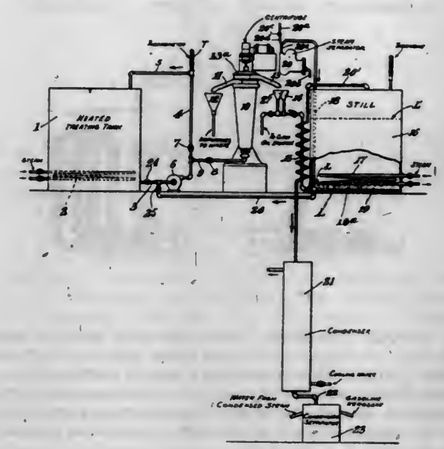
1,823,086. AEROPLANE LANDING. GEORGE W. CHARETTE, Lemon Grove, Calif. Filed Oct. 18, 1930. Serial No. 489,682. 3 Claims. (Cl. 244—2.)



3. A landing device for aeroplanes, comprising a landing surface and runway, a central guiding member extending over the landing surface and runway and one end of the guiding member being wide to engage the tail skid of an aeroplane to guide the skid and aeroplane over the landing surface.

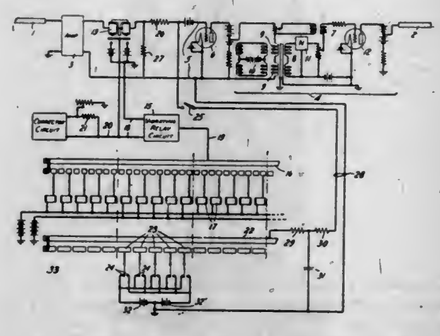
1,823,087. PURIFICATION OF OIL. LEE H. CLARK, Haverford, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 4, 1926. Serial No. 85,876. 11 Claims. (Cl. 196—16.)

9. In the purification of oil that contains products of decomposition, free fatty acids, carbon particles and relatively lower-boiling contaminating liquids in solution, the process comprising mixing and heating the oil with an aqueous alkaline reagent, progressively passing the resulting mixture while still in a heated state to a centrifugal separating operation and thereby separating impurities and the aqueous phase of the resulting mixture from the oil and continuously discharging from the separating operation the oil so purified, continuously passing the oil discharging from the separating operation into a body of similar oil heated to a temperature above the boiling point of water, maintaining a flow of steam in contact with said body of oil and the oil flowing into



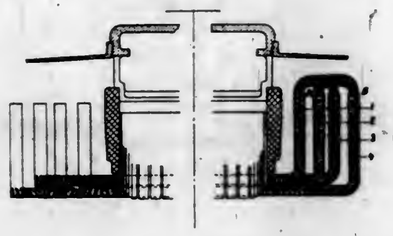
said body and thereby distilling from the oil the contaminating liquids in solution therein, and controlling the rate of flow of mixture to said separating operation and thereby controlling the rate of flow to said body.

1,823,088. SUBMARINE CABLE REPEATING SYSTEM. ALLISON A. CLOKEY, Rutherford, and EVERETT T. BURTON, Millburn, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1928. Serial No. 304,856. 25 Claims. (Cl. 178—70.)



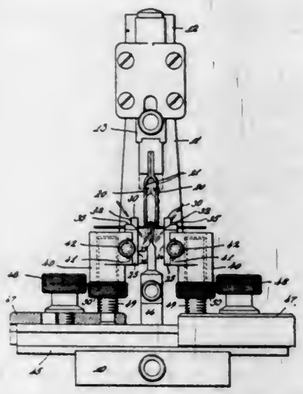
1. In a signaling system comprising a cable and a plurality of terminals interconnected thereby, a repeater station connected in said cable, transmitting means at said repeater station, means for operating said cable over a plurality of channels, characterized in this, that any one of the channels may be arbitrarily selected to terminate at said repeater station without stopping the operation of the system while the others work from one terminal station to the other terminal station directly through said repeater station, and that the line time of the channel terminating at the repeater station may be utilized by the transmitting means at said repeater station to send signals.

1,823,089. ALTERNATING CURRENT ELECTRICAL MACHINE. MAURICE CORNU, Marcinelle-lez-Charleroi, Belgium, assignor to Ateliers de Constructions Electriques de Charleroi, Brussels, Belgium, a Belgian Société Anonyme. Filed Oct. 13, 1928, Serial No. 312,868, and in Belgium Oct. 29, 1927. 2 Claims. (Cl. 171—206.)



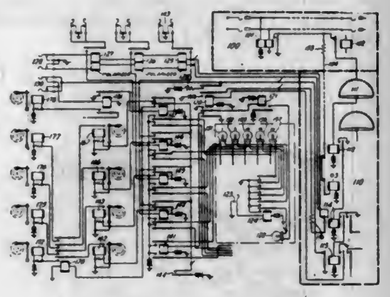
2. In an alternating current electrical machine stator having two conductors in each stator slot, a pair of adjacent end-connectors connecting a pair of conductors in one of said slots with other conductors of corresponding radial positions and subject to slot dispersion fluxes equal to the first mentioned pair of conductors, said end-connectors comprising portions of the insulated laminations constituting the respective conductors, each of said portions projecting from the respective stator slot and being bent up transversely of the laminations in a different plane perpendicular to the stator axis, and the extremities of said portions being bent over towards each other in pairs, and a plurality of insulated and soldered joints between the respective laminations in each of said pairs of bent over extremities, the jointed laminations of each pair of bent over extremities occupying different angular positions relative to the stator axis.

1,823,090. DENTAL MACHINE. JOHN M. CRAIGO, Hartford, Conn. Filed June 13, 1928. Serial No. 285,154. 12 Claims. (Cl. 140—71.)



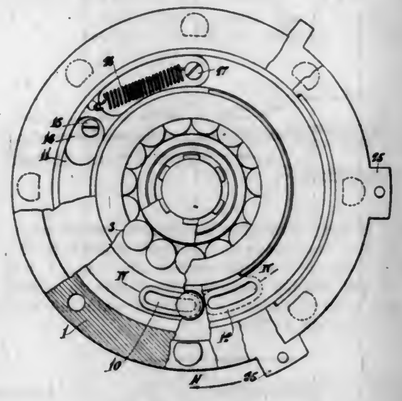
1. In a dental machine of the character described, a member over which the work is to be bent, and a pair of blades opposed to said member and adapted to bend the work thereover, said blades being arranged to automatically move away from each other when brought into engagement with the work and to move towards each other after an initial bend has been formed in the work, said arms being resiliently urged towards each other at all times.

1,823,091. INDICATING AND RECORDING SYSTEM. JACK F. DAHL, West Orange, N. J., and RICHARD C. DAVIS, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1929. Serial No. 397,226. 18 Claims. (Cl. 179—8.)



1. In a signaling system, a plurality of circuits, means for marking said circuits as busy or idle, indicating means, and means to operate said indicating means when a predetermined random number less than all of said circuits are busy whether the remaining circuits are busy or idle.

1,823,092. POWER TRANSMITTING DEVICE AND ITS APPLICATION TO DIFFERENTIAL GEAR. DIMITRI SENSAUD DE LAVAUD, Paris, France, assignor to De Lavaud Holdings Corporation, Limited, London, England, a Corporation of Great Britain. Filed July 12, 1929, Serial No. 377,885, and in France July 27, 1928. 57 Claims. (Cl. 74—7.)



1. Power transmission mechanism comprising a driving member, a driven member, wedging elements adapted to be wedged between surfaces on said members to effect a driving connection between the same in either direction, and means for preventing said elements from assuming a wedging relation with respect to said members when the driven member tends to rotate more rapidly than the driving member in one direction thereby permitting said driven member to rotate freely of said driving member, said means comprising an abutment associated with said elements, a movable abutment associated with one of said members adapted to cooperate with said first abutment, and friction means for controlling said movable abutment.

1,823,093. VENDING MACHINE. ARTHUR H. DU GRENIER, Ilion, N. Y., assignor, by mesne assignments, to Consolidated Automatic Merchandising Corporation, a Corporation of Delaware. Filed Dec. 7, 1927. Serial No. 238,297. 6 Claims. (Cl. 312—97.)



1. In a machine of the character described, a continuous chain comprising links, each link being provided with a link portion and an integral perpendicularly extending shelf, means for joining said links comprising a loop at the free edge of the link portion, a recess adjacent the angle between the link and shelf portions to receive said loop of an adjacent link, integral straps laterally adjacent said recess, and a hinge pin adapted to be received by said loop of one link and between said straps of an adjacent link.

1,823,094. INHALER. JOHN DYLONG, Bayonne, N. J. Filed Jan. 27, 1930. Serial No. 428,798. 1 Claim. (Cl. 128—198.)

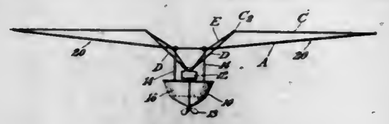


An inhaler comprising a hollow body portion formed with parallel side walls curved to fit within the nostril of the user, one end of the body portion being open, a pocket forming a part of the body portion, the wall of the pocket being curved inwardly at a point where it merges into the body portion, providing a restricted opening, the inner end of said pocket having a plurality of openings to permit air to be drawn through the body portion, and a member formed of absorbent material positioned within the pocket and held in position by the curved wall of the pocket.

1,823,095. DISINFECTANT. OTTO GERNGROSS, Berlin-Grunewald, and KURT RÜLKE, Berlin-Charlottenburg, Germany, assignors to Kali-Chemie Aktiengesellschaft, Berlin, Germany. Filed Oct. 19, 1928, Serial No. 313,640, and in Germany Oct. 20, 1927. 1 Claim. (Cl. 167—30.)

As a new article of manufacture and trade, a solution for dissolving mucus, pus and dirt, and for disinfecting purposes containing sulphocyanates soluble in water besides a small quantity of alkaline substances in such concentration that the pH value of the solution does not exceed the amount of pH=10.

1,823,096. WATER CRAFT. WALTER VILLA GILBERT, New York, N. Y. Filed Mar. 7, 1929. Serial No. 345,034. 7 Claims. (Cl. 114—66.5.)

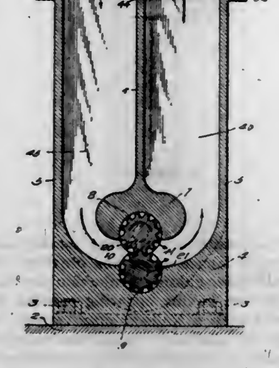


1. A speed boat having a pair of wings extending from opposite sides of the boat and means for adjusting the wings from relatively small camber and upward dihedral to relatively large camber and downward dihedral.

1,823,097. PROCESS OF PURIFYING TECHNICAL AMMONIUM CHLORIDE LIQUORS. WORTHINGTON T. GRACE, Willoughby, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed June 20, 1929. Serial No. 372,539. 5 Claims. (Cl. 23—100.)

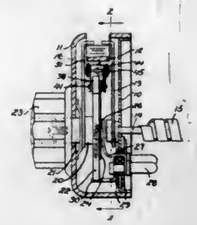
1. The process of removing impurities such as iron compounds from ammonium chloride liquors which comprises adding an oxy compound of lead to said liquors and separating the clear liquors from the precipitate formed.

1,823,098. GEAR PUMP. GEORGE R. HARGIS, Frederick, Md., assignor to The Frederick Iron & Steel Company, Frederick, Md., a Corporation of Maryland. Filed June 12, 1928. Serial No. 284,786. 1 Claim. (Cl. 103—126.)



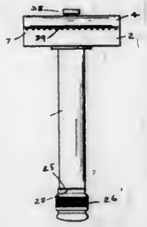
A pump comprising a vertically extending casting having a bowl shaped interior bottom portion, and an open top portion, a detachable plate member having detachable suction and discharge connections therein, a wall dividing said casting into suction and discharge chambers, beneath said suction and discharge connections on said plate member, a central web portion connected to the lower end of said wall above the bowl shaped bottom portion of said casting and projecting on opposite sides thereof and curved according to the contour of the bowl shaped bottom of said casting for establishing a substantially uniform passage extending from and leading to said suction and discharge chambers, said enlarged central portion and said bowl shaped portion having bores extending therethrough, and cooperating gear devices rotatably mounted in said bores and disposed centrally with respect to said chambers and adapted to perform a pumping operation between said suction and discharge chambers.

1,823,099. THERMOSTATICALLY OPERATED SWITCH MECHANISM. GEORGE HEGEMAN HART, West Hartford, Conn. Filed Apr. 18, 1929. Serial No. 356,021. 3 Claims. (Cl. 200—139.)



1. In a thermostatically operated switch mechanism, a thermostatic element, a pointer operated thereby for indicating temperatures; an angularly adjustable switch unit including a pair of pivoted contacts and a contact therebetween, said pivoted contacts being connected together to move in unison, and means for normally urging said pivoted contacts in a direction to engage one of them with the central contact; a member on said pointer adapted to move said movable contacts so as to disengage one and engage the other with said central contact, a pointer associated with said switch unit for indicating the setting thereof, and means for adjusting said unit.

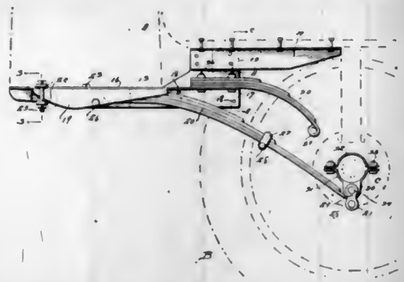
1,823,100. RAZOR. ROBERT J. HODGE, West Haven, Conn. Filed Dec. 7, 1929. Serial No. 412,555. 3 Claims. (Cl. 30—12.)



1. A razor comprising a stationary rectangular plate of which the parallel longer edges are provided with guard teeth; a central blade-guiding projection provided by the plate, the projection having opposing parallel side walls; a blade provided with a blade-guiding central perforation having opposing parallel edges for sliding engagement with the parallel walls of the projection; companion slots provided by the blade, each slot having long and short axes having a center spaced equi-distant from the center of the blade; a detachable plate spaced from and detachably secured to the stationary plate and overlying the mounted blade; and means for imparting a reciprocating movement to the blade along the short axes of the slots, the means comprising rotatable shafts having ends journaled within bores provided by the stationary plate concentric with the centers of the axes of the slots of the mounted blade, both shafts having eccentric extensions each engageable within a slot of the blade to move the blade along the short axes of the slots.

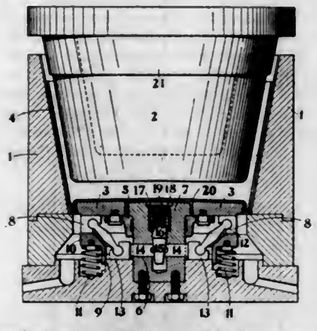
1,823,101. TRUNK SUPPORT FOR AUTOMOBILES. JOHN C. HOFFMAN, Sioux City, Iowa. Filed May 13, 1930. Serial No. 452,038. 7 Claims. (Cl. 224—29.)

1. The combination with an automobile having a body and a rear axle, of a pair of brackets attached to the body and extending rearward therefrom, a set of leaf springs attached adjacent their rear ends to the rear portions



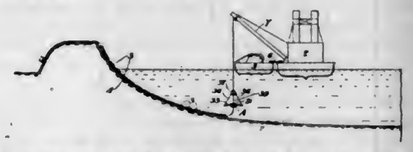
of the brackets and extending downward and forward, and clamps engaging the axle of the automobile and pivotally engaging the forward ends of said springs.

1,823,102. METHOD OF PRODUCING VESSELS FROM PRESSED WOOD OR PLYWOOD. GERHARD HOMEY, Cologne, Germany. Filed Aug. 6, 1927, Serial No. 211,197, and in Germany Aug. 13, 1926. 11 Claims. (Cl. 93—55.)



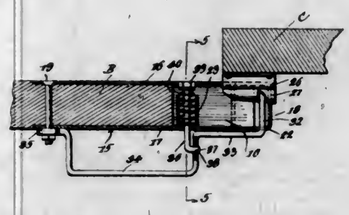
1. A method of producing vessels from pressed wood or plywood by the application of pressure within a mould space within which the respective constituent parts of the vessel are set to be completely enclosed, consisting in the compression and consolidation of the parts forming the peripheral wall of the vessel and the simultaneous application of pressure outwardly from the direction of the centre line of the said mould space to form a joint between the down turned edge of the bottom formed of pressed wood or plywood and the internal face of the parts forming the peripheral wall by pressure of the said down turned edge against the said peripheral wall for the consolidation of the said bottom with the said peripheral wall in a single operation, substantially as hereinbefore described.

1,823,103. CABLE CUTTING MECHANISM. JAMES FORREST HOWE, Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed July 18, 1930. Serial No. 468,978. 8 Claims. (Cl. 114—221.)



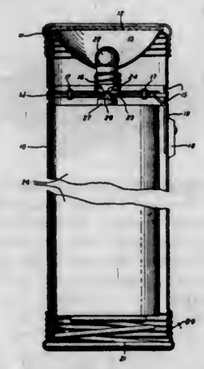
7. A marine type wire rope and cable cutter comprising a body member adapted to be fitted around the rope to be cut, a vertical guideway in said body adapted to receive the rope to be cut so that said body will be guided during its travel along said rope to the point where the cut is to be made, means for supporting said body member, cutters mounted on the body member, and means for operating said cutters from a distant point.

1,823,104. LOCK FOR TRACK DOORS. EMIL M. JOHNSON, Gorman, S. Dak. Filed Sept. 23, 1929. Serial No. 394,574. 2 Claims. (Cl. 292—87.)



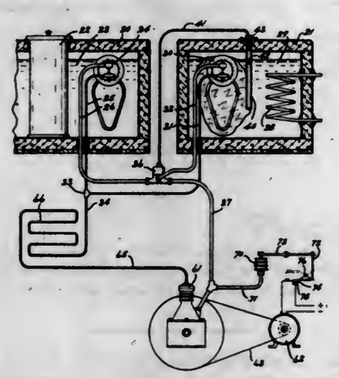
1. A latching mechanism of the class described, comprising a frame adapted to be secured to a door and having a notch formed at one end thereof adapted to receive a keeper, and a second notch formed in said frame opposite said first mentioned notch, a resilient handle secured to said frame and provided with an inwardly extending latch bar passing through said second mentioned notch adapted to engage a keeper, a transversely extending barrel formed upon the inner face of said frame, a spring-pressed rod slidably mounted within said barrel and guided in its movements thereby, said rod engaging said handle and normally holding the same in a locked position and permitting yieldable outward movement of said handle for the purpose of unlocking the same.

1,823,105. CONTACT MEANS FOR BATTERY ENERGIZED DEVICES. HOMER W. JONES, Newark, N. J., and FRANK S. MILBY, Port Washington, N. Y., assignors to National Carbon Company, Inc., a Corporation of New York. Filed Dec. 21, 1927. Serial No. 241,618. 3 Claims. (Cl. 240—10.68.)



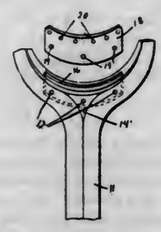
1. In combination, a dry battery cell having a central electrode, a contact member attached thereto, said contact member having a diameter smaller than the diameter of said electrode, and a battery energizable device having a surface adapted to be engaged by said contact member to close a circuit, said surface being located in a cavity having an opening larger than said contact member but smaller than the diameter of said electrode.

1,823,106. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Apr. 29, 1925. Serial No. 26,642. 11 Claims. (Cl. 62—3.)



1. A refrigerating system, comprising in combination, a cooling compartment containing a quantity of liquid, means for cooling said compartment for freezing said liquid, and means responsive to the solidification of the liquid within the compartment for controlling the temperature of said cooling means.

1,823,107. TENNIS RACKET. JACOB L. KLEINMAN, New York, N. Y. Filed July 6, 1929. Serial No. 376,386. 11 Claims. (Cl. 273—73.)

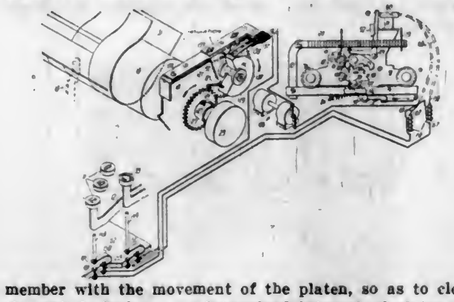


1. A racket comprising a frame including a throat portion, a handle, strings threaded through the frame and forming vertical and horizontal runs, aligned slots in said frame at said throat portion substantially in the plane of said strings, a member fitting within said slots and bridging said throat portion, and fastening elements extending through said frame and member transversely to the plane of said strings, said fastening elements extending substantially to the finished surface of the racket so as to be easily accessible for removal.

1,823,108. COMBINED TYPEWRITING AND CARD-PERFORATING MACHINE. ALFRED G. F. KUAOWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 21, 1928. Serial No. 294,347. 15 Claims. (Cl. 164—113.)

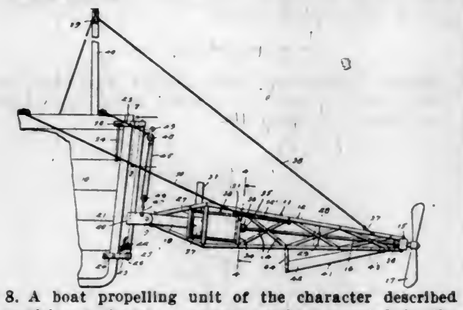
1. In a combined typewriting and card-perforating machine, said typewriting machine having a rotary platen and means for electrically controlling said perforating machine, in combination, a master switch for controlling the working current, while a selected zone of a worksheet crosses the typing line, said switch including a traveling contact member and relatively stationary poles to cooperate therewith to make and break contact as it travels

past the same, means for transmitting movement from the rotary platen to said contact member to operate the same, and means for timing the travel of said contact



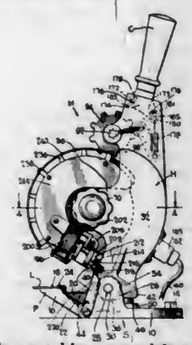
member with the movement of the platen, so as to close the switch during a predetermined interval of platen rotation to coincide with the selected zone upon the worksheet.

1,823,109. BOAT PROPELLING UNIT. MARIUS L. LOUVIER, Port Arthur, Tex., assignor of twenty-three and three-fourths per cent to Sully Louvier, twenty-three and three-fourths per cent to Alexander Louvier and five per cent to Xavier Christ, Port Arthur, Tex. Filed Mar. 19, 1931. Serial No. 523,856. 8 Claims. (Cl. 115—18.)



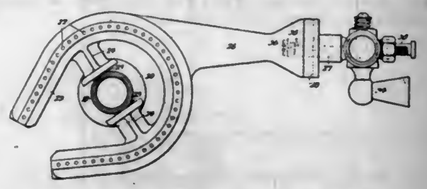
8. A boat propelling unit of the character described comprising a frame, a power member mounted in the frame, a propeller operatively connected with the power member, and means for holding the frame in outstanding relation to a boat, said means including means permitting vertical and horizontal swinging movement of the frame co-active with the vertical adjustment of the frame.

1,823,110. EMBOSSING MACHINE. MAX A. G. LUEDTKE, Weehawken, N. J., and HUGO HOFFMANN, New York, N. Y. Filed Apr. 11, 1928. Serial No. 269,139. 21 Claims. (Cl. 101—21.)



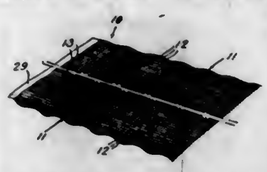
1. An embossing machine comprising a base, a printing device movably supported on said base, heating means for said device pivotally mounted on and movable relative to said base, and to said device, and a border type associated with said heating means.

1,823,111. GAS BURNER. VICTOR MAUCK, Merion, Pa. Original application filed Nov. 24, 1924, Serial No. 752,037. Divided and this application filed Apr. 26, 1928. Serial No. 272,937. 5 Claims. (Cl. 158—99.)



1. A gas burner comprising a horizontally extending hollow, horseshoe-shaped, body; having numerous jet orifices extending through the top thereof; a mixing tube extending horizontally from said body, and having a gas inlet, extending horizontally therein, at the outer end thereof, and below the level of said orifices; and means hermetically closing the other end of said mixing tube around said gas inlet, except for a restricted air inlet at the bottom thereof, more remote from said orifices than said gas inlet; whereby gas supplied through said gas inlet at low pressure and in small volume is properly mixed with air, and subjected to the convection currents in said body, and thereby prevented from escaping from said mixing chamber except through said orifices; wherein the axis of the mixing tube is in eccentric tangential relation to the burner body; has a hollow enlargement at the outer end thereof in concentric relation with said gas inlet, and is reduced in cross sectional area between said air inlet and said orifices; whereby the intimate mixture of the gas and air, and uniform distribution of the mixture to said orifices are facilitated.

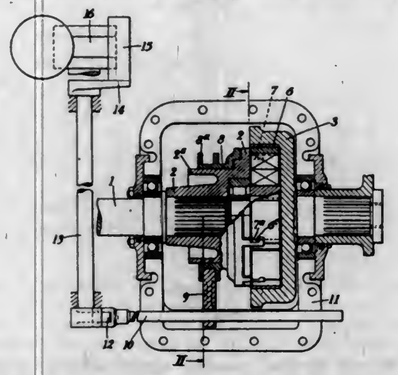
1,823,112. HOLLAND CLOTH AND ITS METHOD OF MANUFACTURE. DONAL C. MCROBERTS, Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed July 31, 1928. Serial No. 296,622. 4 Claims. (Cl. 139—383.)



1. As a new article of manufacture, square-woven cloth sheeting of closely spaced warp and weft threads of substantially the same diameter and having continuous load sustaining warp threads of greater length at the selvage edges than in all other regions of the cloth to produce a flat surface upon the loading of the cloth, and sized and calendered surfaces.

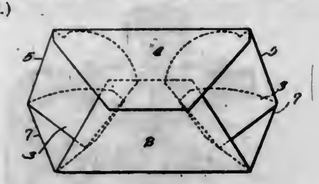
1,823,113. FREE WHEEL CLUTCH FOR MOTOR VEHICLES AND THE LIKE. WILLIAM MILLER, Dunston-on-Tyne, and HAROLD THOMAS LAMB, Newcastle-on-Tyne, England. Filed Jan. 23, 1929, Serial No. 334,461, and in Great Britain Jan. 28, 1928. 6 Claims. (Cl. 192—47.)

1. In a free-wheel clutch for motor vehicles and the like, the combination of two concentric and co-planar cylindrical members, the adjacent faces of which constitute clutch faces, slidable wedging means between the said clutch faces comprising a pair of oppositely inclined wedge surfaces, said wedging means being adapted to contact on one side with one of the clutch faces, rolling means, a common member carrying said rolling means, the said rolling means being adapted to contact with the other



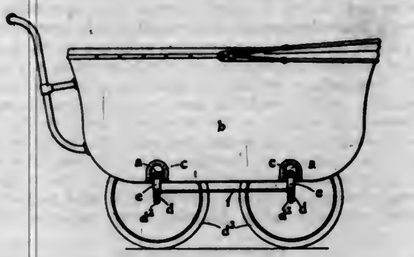
clutch face and with the said oppositely-inclined wedge surfaces of the wedges, and means for controlling the position of the wedging means so as to render the clutch uni- or bi-directional at will.

1,823,114. ENVELOPE. PAUL MILLER, Chicago, Ill. Filed May 3, 1929. Serial No. 360,076. 2 Claims. (Cl. 229—68.)



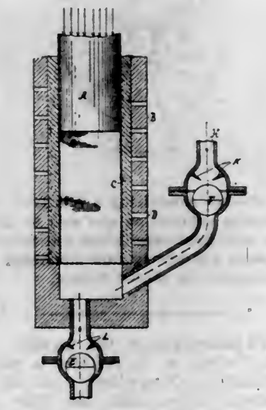
1. An envelope formed from a single piece of material, comprising a main body portion having flaps at each side folded along parallel lines and having at each end a pair of flaps folded along lines forming obtuse angles with the sides of the envelope, the flaps at each end being separated by a space converging to a point at the intersection of said obtuse lines of fold.

1,823,115. PERAMBULATOR AND THE LIKE. EDWARD THOMPSON MORRISS, Letchworth, England. Filed Nov. 10, 1928, Serial No. 318,493, and in Great Britain Jan. 18, 1928. 2 Claims. (Cl. 280—106.5.)



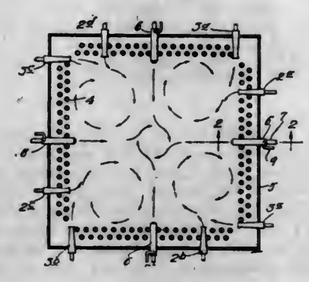
1. In perambulators means for mounting the body upon the axles, comprising the axles, the body, bearing members transversely disposed above and parallel with the axles, massive elastic bearing blocks transversely mounted in the opposite positions in pairs in the body through which the said bearing members pass, and means by which the said bearing members are supported from the axles, substantially as hereinbefore described.

1,823,116. CONVERSION OF SOLID FUELS. CARL MÜLLER, Mannheim, GUSTAV WIETZEL and ERNST GALLE, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Nov. 22, 1926, Serial No. 150,146, and in Germany Nov. 26, 1925. 2 Claims. (Cl. 196—56.)



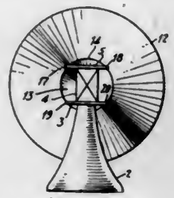
1. In the conversion of moist solid carbonizable fuels into valuable liquid products by destructive hydrogenation, the preliminary step of mixing the fuel in a comminuted state with a distillate recovered from a product obtained by destructive hydrogenation of carbonaceous materials, subjecting the mixture to compression at a pressure of at least 50 atmospheres for removing water therefrom, while avoiding strongly elevated temperatures, and causing the liquid squeezed out to become separated from the mixture.

1,823,117. FURNACE. THOMAS E. MURRAY, Brooklyn, and JOHN H. LAWRENCE, New York, N. Y., said Lawrence assignor to said Murray; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Engineering Company, a Corporation of New York. Filed Nov. 3, 1925. Serial No. 66,616. 6 Claims. (Cl. 122—235.)



5. A boiler furnace fired with jet fuel having a nozzle arranged to direct a jet of fuel into the combustion chamber, a second nozzle arranged to direct a second jet of fuel transversely against the first near the end of the first nozzle so as to deflect the first jet and accelerate the mixing of the fuel with air and its ignition at a point close to its origin, the walls of the combustion chamber in the immediate vicinity of the two jets being composed of steam generating water tubes.

1,823,118. ECCENTRIC DRIVE CONE LOUD SPEAKER. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Mar. 11, 1927. Serial No. 174,493. 8 Claims. (Cl. 181—31.)

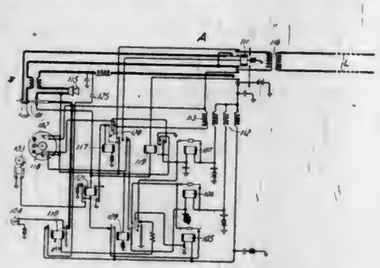


1. A loud speaker comprising a relatively large conical shaped diaphragm exposed on one side to unconfined air, the center of said diaphragm being turned inwardly upon itself, and means for driving said diaphragm from points on opposite sides of the center thereof.

1,823,119. PRESERVATION OF LATEX. ALEXANDER A. NIKITIN, Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 20, 1929. Serial No. 348,674. 14 Claims. (Cl. 18—50.)

2. As a new product, a stable uncoagulated rubber latex having a pH not higher than 7 and containing a glucoside selected from the group comprising saponin, arbutin and salicin.

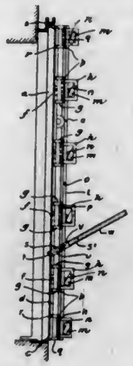
1,823,120. SIGNALING AND COMMUNICATION SYSTEM. HENRY W. O'NEILL, Elmhurst, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 23, 1927. Serial No. 242,023. 19 Claims. (Cl. 179—2.5.)



16. In a telephone system including a power line, a plurality of stations associated with said line, a telephone set and a dial at each of said stations, means responsive to the removal of the receiver from the switchhook at a calling station for preventing the other stations from originating a call, and means responsive to the actuation of the dial at said calling station for establishing a communicative connection with any one of the other stations.

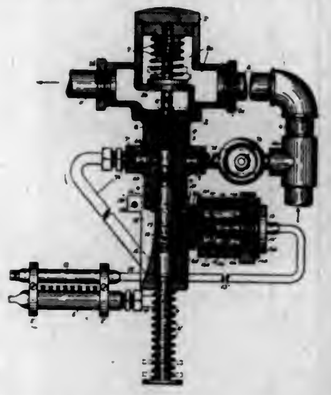
1,823,121. DEVICE FOR SEALING COKE OVEN CLOSURES. CARL OTTO, Essen-on-the-Ruhr, Germany. Filed Dec. 10, 1927, Serial No. 239,047, and in Germany Dec. 17, 1926. 4 Claims. (Cl. 202—248.)

1. A coke oven having an oven chamber, a lateral aperture therein and a closure for said aperture comprising a stationary frame for the chamber aperture, a door adapted to fit in said frame, a packing adapted to seal said door on said frame, a movable frame having a plurality of hingedly interconnected elements adapted to bear



against said packing, pressing means adapted to press said movable frame onto said packing, and an actuating member for said pressing means.

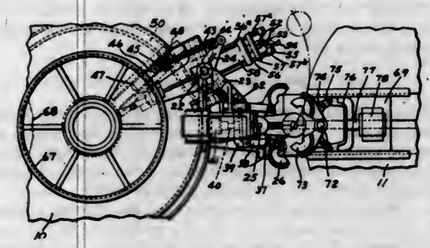
1,823,122. GOVERNOR FOR GAS BURNING HEATERS. HOWARD W. PARTLOW, Utica, N. Y. Filed Feb. 18, 1929. Serial No. 340,841. 7 Claims. (Cl. 158—117.1.)



1. A governor for gas-heaters and the like comprising a hollow body containing a valve to supply gas to the heater and having a barrel formed with coinciding gas ports, a single reciprocatable member in said barrel formed to actuate said valve and control said gas ports, tension means to hold said member in release position, a thermostat comprising a column of mercury, a pilot burner to light the heater receiving gas from said ports, means to move said member to first open said ports to start the pilot burner for heating the mercury, and finally to open said valve to start the heater, and a bolt associated with said reciprocatable member and, operable by the expansion of the mercury to prevent movement of said member for closing said valve while the pilot burner remains lighted.

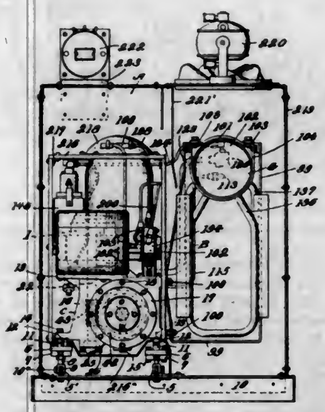
1,823,123. TWO TABLE GLASS FORMING MACHINE. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 18, 1929. Serial No. 333,306. 9 Claims. (Cl. 49—5.)

3. In combination with a bath of molten glass, a continuously rotating two-table glass fabricating machine, a blow mold mounted on one table, a parison mold and neck ring mounted on the other table, means for moving the parison mold about a vertical pivot fixed on said parison mold table to a projected position, means for dipping the parison mold while in such position into



the glass bath, means for gathering a charge from said bath by suction into the parison mold, means for severing the charge so gathered, means for forming a parison in said parison mold, and means for transferring the parison so formed to the blow mold.

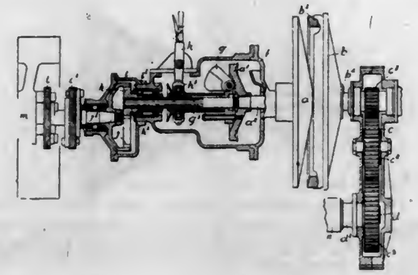
1,823,124. REFRIGERATING UNIT. JOHN R. REPLOGLE, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed June 6, 1921, Serial No. 475,344, and in Canada Feb. 11, 1922. Divided and this application filed Oct. 10, 1927. Serial No. 225,273. 10 Claims. (Cl. 62—116.)



1. In air cooling apparatus, the combination of means comprising a refrigerant vaporizer for absorbing heat from the air to be cooled; a refrigerant compressor; a condenser; said compressor, condenser and vaporizer being operatively connected to form a closed refrigerant system; a motor for driving the compressor; means directly responsive to the temperature of the said heat-absorbing means for controlling the operation of the compressor motor; means comprising a fan for directing the air to be cooled over the said heat-absorbing means; a motor for driving said fan; and means responsive to the temperature of the air to be cooled for controlling the operation of the fan motor.

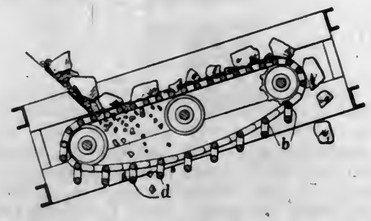
1,823,125. VARIABLE SPEED FRICTION GEARING. JOHN HOGG ROBERTSON, London, England. Filed July 30, 1930, Serial No. 471,767, and in Great Britain Sept. 5, 1929. 4 Claims. (Cl. 74—26.)

1. In an automatic variable speed friction gearing, comprising a driving disc member, a driven member having frictional engagement with said disc member, and a governor device rotating with said disc member, said governor device controlling the transmission ratio of said members, the combination of a driving shaft, a speed-



multiplying mechanism, whereby the speeds of said driv- and means for operating said disc member by said speed-multiplying mechanism, whereby the speeds of said driving disc member and of said governor device are increased relatively to that of said driving shaft.

1,823,126. GRIZZLY AND SCREEN FOR GRADING MATERIALS. WILLIAM ROSS, Surbiton, England. Filed May 29, 1928, Serial No. 281,542, and in Great Britain June 25, 1927. 8 Claims. (Cl. 209—307.)



1. A grizzly or screen comprising endless chains, bars supported by said chains and bars pivoted to said chains, the ends of said first-mentioned bars being eccentrically located in apertures in said chains.

1,823,127. MANUFACTURE OF ARTIFICIAL RESINS. OTTO SCHMIDT, KARL SEYDEL, and NIKOLAUS ROH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 11, 1926, Serial No. 141,026, and in Germany Oct. 21, 1925. 5 Claims. (Cl. 260—2.)

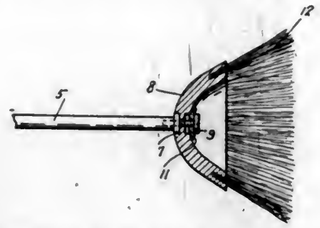
1. The process for producing artificial resins which comprises condensing a mixture of a cyclic ketone with at least one body selected from the group consisting of cyclic ketones other than the aforementioned ketone and cyclic alcohols, by means of a condensing agent.

5. As new articles of manufacture light colored artificial resins which are stable against light, acids and alkalies and soluble in most organic solvents, comprising condensation products of cyclohexanone with a homologue thereof and with at least one body selected from the group consisting of cyclohexanol and its homologues.

1,823,128. PROPHYLACTIC BRUSH. JOSEPH E. SCOTT, Kiowa, Kans. Filed Oct. 14, 1930. Serial No. 488,675. 2 Claims. (Cl. 15—167.)

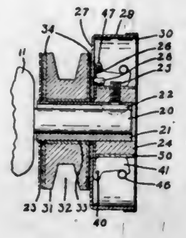
1. In combination with a mandrel, a brush head of substantially cup-shape having an opening in its central portion, means passing through said opening for re-

versibly attaching the head to an end of the mandrel with the bristles extending forwardly or with the bristles extending rearwardly, that edge of the cup-shape head



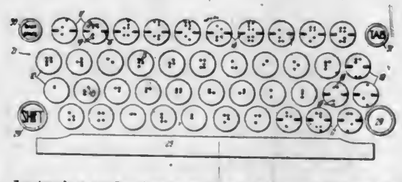
between the mouth of the opening and the exterior wall of the head having an annular groove therein, and bristles fastened in said groove.

1,823,129. CLUTCH. HARRY R. SMITH and MORTIMER W. FISH, Dayton, Ohio, assignors to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 29, 1928. Serial No. 257,991. 6 Claims. (Cl. 192—105.)



1. A clutch comprising in combination rotatable driving means, rotatable driven means, and means for connecting the driving and driven means in power transmitting relation only when the driving means is rotating above a critical speed including a plurality of weights mounted on the driving means and arranged to be rocked by centrifugal force, surfaces on the weights and spring means exerting centripetal force on the surfaces, the parts being so constructed and arranged that the spring means automatically acts upon different portions of the surfaces above and below the critical speed.

1,823,130. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 10, 1928. Serial No. 318,853. 7 Claims. (Cl. 197—98.)

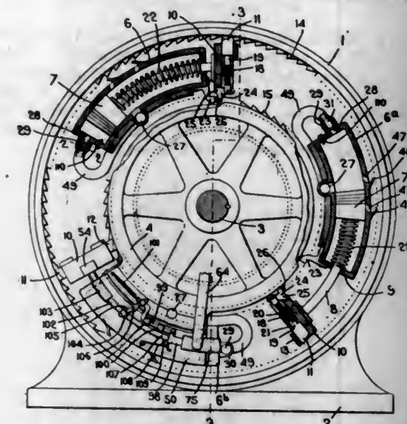


1. In typing and other machines, a group of keys for the use of the blind and which from a keyboard, said keys including platforms and stems, caps having slightly convex top surfaces, there being one cap for each symbolic key, integral annular flanges on said caps, integral extensions on said flanges, forked ends on one of said extensions on each cap, and raised spherical segments or "points" which are integral with said surfaces, said segments positioned, deployed or grouped in different arrangement on each cap to form signs, said caps superposed on and around said platforms, said extensions being bent under the latter, said forked ends engaging the sides of said stems, to hold said caps non-rotational on said platforms, and said segments or "points" to be respectively identical in arrangement with, and confined within, the same areas as the corresponding signs of the Braille system.

1,823,131. FLOOR COVERING AND METHOD OF MAKING SAME. JAMES B. CROCKETT, Cambridge, Mass., assignor to Cambridge Rubber Company, Cambridge, Mass., a Corporation of Massachusetts. Filed June 28, 1927. Serial No. 202,160. 2 Claims. (Cl. 91—68.)

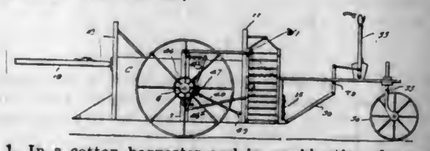
2. A floor covering rug, carpet or the like, having a sizing coat of material adapted to fill the interstices at the back and a deposited vulcanized rubber latex dried to a friction film of vulcanized rubber over said sizing coat.

1,823,132. ROTARY INTERNAL COMBUSTION ENGINE. MICHAEL J. CUNNINGHAM, Roxbury, Mass. Filed June 8, 1927. Serial No. 197,439. 8 Claims. (Cl. 123—43.)



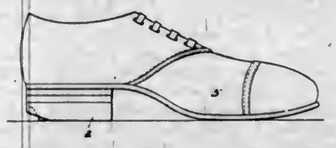
1. In a rotary internal combustion engine, the combination with two members adapted to have a relative rotary movement, one of said members having ratchet teeth, a power cylinder carried by the other member, a piston reciprocable in said cylinder, a piston rod secured to the piston and extending beyond the cylinder, pawls carried by the portion of the piston rod which is located beyond the cylinder, a spring acting on the piston to give the return stroke thereto, means actuated by the final movement of the piston during the return stroke to cause the pawls to engage said ratchet teeth, means to introduce fuel charge into the power cylinder and ignite said charge, whereby the relative movement between the piston and cylinder produces a relative rotary movement between said two members.

1,823,133. COTTON HARVESTER. OTTO DALKE, Hydro, Okla., assignor of two-thirds to J. W. Glass and C. E. Frost. Filed Apr. 19, 1928. Serial No. 271,252. 2 Claims. (Cl. 56—33.)



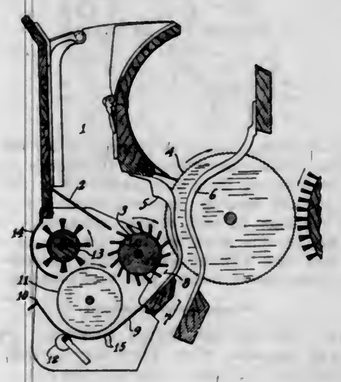
1. In a cotton harvester and in combination, forwardly extending, transversely-spaced guide fingers, having rearwardly converged inner side edges, longitudinal, transversely spaced endless conveyors arranged in rear of and in alignment with the rear portions of said guide fingers, upright walls at the outer sides of said guide fingers and endless conveyors, a transverse bar arranged between and carried by said walls, and longitudinal, transversely-spaced stripper plates tapered forwardly and having transversely curved side portions overhanging said conveyors, said stripper plates connected at their forward ends to said guide fingers and at their rear ends to said transverse bar.

1,823,134. HEEL FOR SHOES. HENRY B. DUYSEN, Elyria, Ohio. Filed May 15, 1930. Serial No. 452,614. 1 Claim. (Cl. 36—70.)



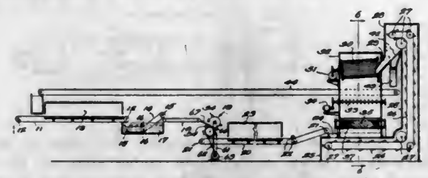
A combined heel and mud-guard comprising a rubber heel having a walking surface and a guard wall spaced apart from and encircling the rear edge of said heel, said guard wall including recessed portions vertically arranged with respect to said surface to induce deformation of said wall on predetermined lines, the rear edge of said wall terminating above said walking surface and approaching said surface on inclined lines.

1,823,135. HULLER GIN. THOMAS ELLIOTT, Birmingham, Ala., assignor to Continental Gin Company, a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,490. 15 Claims. (Cl. 19—56.)



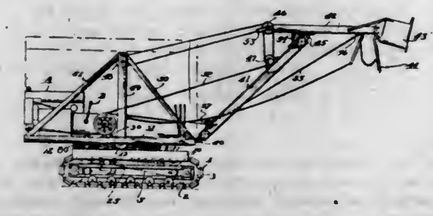
1. In a huller rib gin, the combination with the gin breast having gin saws and a hull board means for delivering the seed cotton to said saws, of reclaiming saws disposed below said hull board means and rotatable in the same direction as the gin saws, means to guide the hulls and cotton escaping between said gin saws and hull board means into engagement with said reclaiming saws, means to accumulate hulls on the upgoing side of said reclaiming saws in position to be engaged and stripped of cotton by said reclaiming saws before being discharged, and means to doff cotton from said reclaiming saws and return it to the gin saws.

1,823,136. MICA SPLITTER. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Sept. 24, 1928. Serial No. 308,043. 12 Claims. (Cl. 125—24.)



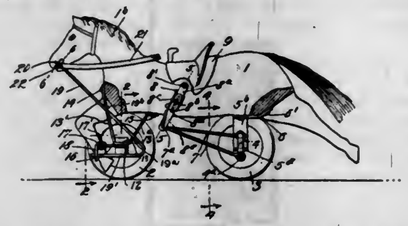
2. In a mica splitter, a pair of spaced cooperating rollers having mica gripping surfaces adapted to frictionally engage the opposed faces of a mica block, means for feeding mica between the rollers, and means for removing the mica from the surfaces of the rollers.

1,823,137. POWER SHOVEL. EARL H. FUNDOM, Lima, Ohio, assignor to The Fundom Hoist & Shovel Co., Lima, Ohio, a Corporation of Ohio. Filed Feb. 24, 1927. Serial No. 170,666. 1 Claim. (Cl. 214—138.)



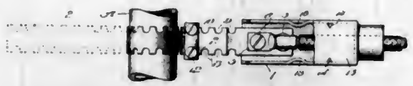
An excavating apparatus including a turntable, a boom pivoted thereto, a standard on said table, a dipper stick pivoted to the end of the boom intermediate the ends of the former, an outwardly directed shovel on the end of the dipper stick, means to limit the upward movement of the dipper stick about its pivot, pulley wheels mounted on the upper end of the standard and dipper stick, a pulley wheel mounted adjacent the free end of the boom, a cable fixed to the upper end of the dipper stick and reeved through said pulley wheels, and a winding drum on the turntable for operating said cable.

1,823,138. CHILD'S VEHICLE. WARREN E. GILLENWATER, Bellingham, Wash. Filed Jan. 30, 1930. Serial No. 424,525. 3 Claims. (Cl. 208—42.)



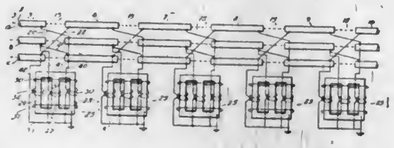
1. A child's vehicle embodying, in combination, a vehicle body in the form of an animal mounted upon wheels and having a mouth and a seat, a rear wheel-mounting shaft, wheel-mounting means at the front and rear of said vehicle, steering mechanism arranged at the front of said vehicle and connected with said front-wheel mounting means, said steering mechanism embodying a rotatable steering shaft connected with the wheel-steering mechanism and extending into the mouth of the animal forming said vehicle body, and means operable to rotate said shaft in the animal's mouth to steer the vehicle.

1,823,139. GROUND CONNECTION. WILLIAM GOETZELMAN, Chicago, Ill., assignor to Appleton Electric Company, a Corporation of Illinois. Filed June 12, 1926. Serial No. 115,419. 3 Claims. (Cl. 173—273.)



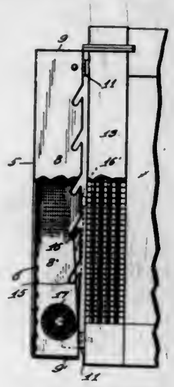
1. A device for fastening a member to a pipe or bar, comprising a strap of bendable metal adapted to be wrapped about the pipe or bar, said strap having in one long edge a series of notches, and a clevis device adapted to embrace two overlying sections of the strap when so wrapped and extend into the notch in each section.

1,823,140. SHEATH BONDING SYSTEM. HERMAN HALPERIN and KENNETH W. MILLER, Chicago, Ill. Filed Apr. 5, 1930. Serial No. 441,906. 15 Claims. (Cl. 171—97.)



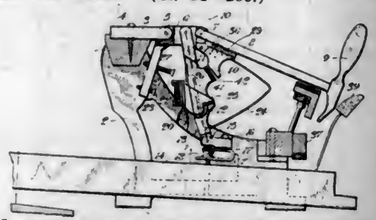
1. An electric power system including a plurality of spaced sheathed cables, the sheaths being divided into a number of spaced insulated lengths and connected together by cross-bonding, and means at the alternate insulating points electromagnetically interlinking the sheath sections of all of the cables.

1,823,141. CURTAIN DEVICE FOR RADIATORS. ROBERT O. HENDRICKSON, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Mar. 31, 1930. Serial No. 440,489. 2 Claims. (Cl. 257—132.)



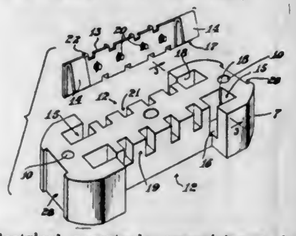
1. In a device of the character described, a frame embodying vertical members having notches therein, a roller mounted in the frame, a curtain secured to the roller adapted to be lengthened or shortened in height in relation to the roller, means for locking the roller in fixed position when the curtain has been adjusted to predetermined heights, and means associated with the free end of the curtain and adapted to engage said notches for maintaining the curtain in extended position.

1,823,142. GRAND PIANO ACTION. CLARENCE N. HICKMAN, Jackson Heights, N. Y., assignor, by mesne assignments, to American Piano Corporation, East Rochester, N. Y., a Corporation of Delaware. Filed July 25, 1928, Serial No. 295,258. Renewed Mar. 19, 1930. 41 Claims. (Cl. 84—239.)



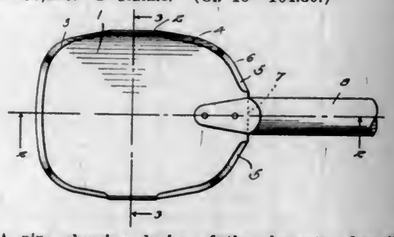
1. In a grand piano action adapted to be operated by a key, in combination, a driver pivotally mounted upon a fixed member of the piano, a hammer pivotally mounted on said driver, a knuckle link pivotally connected to said driver, a second knuckle link pivotally connected to said first knuckle link and pivotally connected to said key, cooperating shoulders on said knuckle links to limit pivotal movement of said links with respect to each other in one direction, whereby a thrust transmitting connection is provided between said key and said driver, a depending arm forming part of said driver and arranged to contact with said knuckle links to break said thrust transmitting connection during the latter portion of hammer actuating movement thereof, means for limiting the motion of said driver toward said string, and a compression spring connected to said driver and to said second knuckle link.

1,823,143. ELECTRICAL RECEPTACLE. FRANCIS J. HINES, Brooklyn, N. Y. Filed Mar. 7, 1928. Serial No. 259,827. 9 Claims. (Cl. 173—330.)



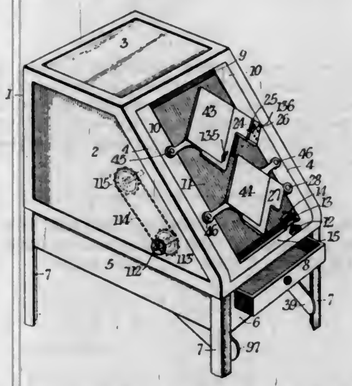
1. An electrical receptacle comprising a body having side recesses with contact recesses at opposite ends thereof, bus bars having their ends supported in the bottoms of said contact recesses, contacts secured to the ends of said bus bars in said contact recesses, a U-shaped hanger having side arms set into recesses in the ends of the body and a cover plate having passages for attachment plug blades in line with said contacts.

1,823,144. SEWER CLEANING DEVICE. FREDERICK HOMOLYA, Kenosha, Wis. Filed May 6, 1930. Serial No. 450,296. 2 Claims. (Cl. 15—104.30.)



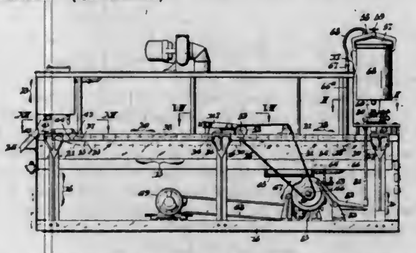
1. A pipe cleaning device of the character described, comprising a plate of substantially semi-circular central cross-section, a portion of each side edge at the transverse center of the plate being straight, a cutting edge extending forwardly and downwardly from the forward end of each straight edge, a curved cutting edge extending downwardly and rearwardly from the rear of each straight side portion, and a handle secured at the rear edge of the plate and substantially on the longitudinal center thereof, said rear cutting edges each merging into a short cutting edge which presents a straight edge line in top plan and is directed obliquely of the longitudinal center of the plate, the cutting edges adjoining said straight cutting edges being directed generally upwardly and forwardly of the device.

1,823,145. PHOTOGRAPHIC PRINTING MACHINE. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 8, 1928. Serial No. 283,888. 14 Claims. (Cl. 95—73.)



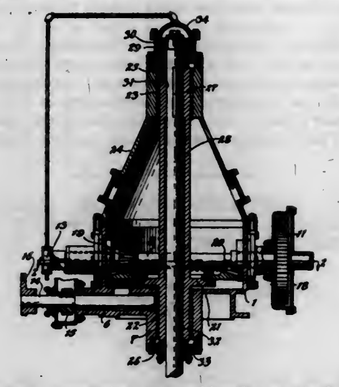
1. In a printing machine the combination with a cabinet, of a slide carried by the cabinet, means for adjusting the slide, a printing panel carried by the slide, and a gauge carried by the cabinet, whereby the relative position of the panel and gauge may be altered by moving the panel.

1,823,146. COOKING APPARATUS. HERBERT T. HUNTER, Catonsville, Md., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed June 13, 1929. Serial No. 370,559. 8 Claims. (Cl. 53—7.)



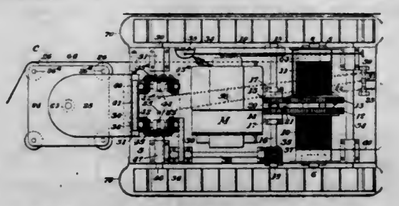
1. In apparatus for cooking flat or annular doughnuts and the like with hot cooking liquor, a pair of aligned conveying elements for progressing the doughnuts afloat but in definite separation in the cooking liquor; means temporarily restraining the doughnuts against continuing flotation at the inner end of the first conveying element; and means in an interval between the contiguous ends of the conveying elements for receiving the doughnuts successively released from the first conveying element to float free in the said interval, and transferring them inverted to the second conveying element.

1,823,147. GEARING. JOSEPH E. JEWETT and SIDNEY E. MEYERS, Buffalo, N. Y., assignors to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 23, 1925. Serial No. 58,057. 13 Claims. (Cl. 74—7.)



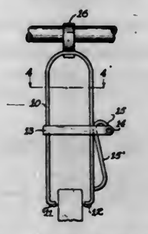
1. Gearing comprising in combination a shaft, a pair of shafts on either side of and in an angular relation to said first named shaft, reduction gearing associating said pair, and bevel gearing connecting said first named shaft and only one of said pair.

1,823,148. APPARATUS FOR TRANSFERRING MATERIAL. WILLIAM R. JONES, Pittsburgh, Pa., assignor of one-third to U. U. Carr, Monongahela, Pa., and one-third to William F. Nanstiel, Pittsburgh, Pa. Filed Dec. 10, 1927. Serial No. 239,155. 9 Claims. (Cl. 37—115.)



1. In a material transfer apparatus of the character described, the combination with a self-contained power driven machine having a pair of rope drums mounted thereon, of a scraper means including a rope haulage leading from the drums, and an angular frame carried at the front of the machine over which the rope haulage is trained, said frame being freely revoluble through travel of the rope haulage thereover.

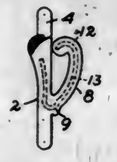
1,823,149. MEAT SMOKING HANGER. ISAAC N. JORDAN, Chicago, Ill., assignor to Armour and Company, Chicago, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 381,803. 3 Claims. (Cl. 17—44.)



1. In combination, a meat smoking hanger having a resilient frame in the form of an inverted U, indenting

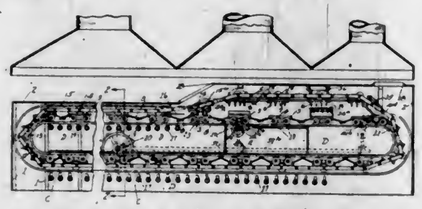
means at the extremity of the said frame for engaging a body inserted between the said extremities by compression, said indenting means including two elongated bars one of which is attached to one of the extremities of said frame and the other being attached to the other extremity of the same frame, the bars being affixed in such a manner that they are opposed to each other so as to engage a body inserted between them, said bars being slightly farther apart at one end than the other, said indenting bars having means thereon for contacting the engaged body, a yoke across said frame, a cam attached to said yoke so as to exert pressure on one side of the frame, and a hook attached to said frame, substantially as described.

1,823,150. OPHTHALMIC MOUNTING. HERMAN KATZ, Oakland, Calif. Filed May 20, 1926. Serial No. 110,418. 4 Claims. (Cl. 88—49.)



1. In an ophthalmic mounting, the combination with a frame including lens rings of cellulose composition and a bridge connecting said rings together, nose-rests of cellulose composition formed integral with said rings, and metal reinforcing means embedded in said rests and extending therefrom and embedded in said rings.

1,823,151. MACHINE FOR BAKING PASTRY SHELLS. LEWIS H. LANIER, Newport, Ky. Filed Oct. 28, 1926. Serial No. 144,831. 17 Claims. (Cl. 107—58.)



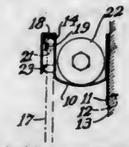
17. A baking machine for pastry shells having a series of baking units composed of mold plates and core plates, each unit being movable through an elliptical path during which each unit is moved throughout the length of the machine in inverted position and then throughout the length of the machine in upright position, said core plates of the series of units being connected together as a non-extendible endless chain, said mold plates of each unit being connected together as an extendible endless chain, means for driving the endless chain composed of core plates, said endless chain composed of core plates providing means for moving the endless chain composed of mold plates.

1,823,152. STEAM-TABLE SERVING-PAN COVER. BERTHA H. LARSON, San Francisco, Calif. Filed Jan. 26, 1929. Serial No. 335,159. 2 Claims. (Cl. 126—33.)



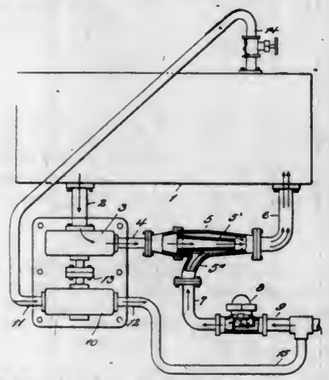
1. In combination, a food steam-table having a top provided with openings for the mounted reception of a plurality of serving pans, serving pans supportedly mounted in said openings to extend downwardly therefrom, and covers for said pans disposable over the open sides of the pans for support solely by said table top and each comprising side walls cooperative to define a top opening, a transparent pane displaceably mounted on said walls and providing a closure for said opening, means guiding said pane for a lateral displacement thereof to uncover said opening, and means permitting the supported engagement of the outer end of a displaced pane on the cover of an adjacent pan.

1,823,153. TOOTHBRUSH HOLDER. ARTHUR S. LEVY, Birmingham, Ala. Filed Aug. 11, 1928. Serial No. 299,094. 3 Claims. (Cl. 248—63.)



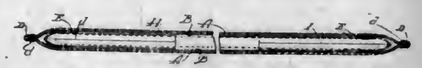
2. A tooth brush holder comprising a body, laterally extending opposed resilient clips provided on the body, a downwardly extending resilient clip provided on the body above the laterally extending clips, and a protuberance provided on the downwardly extending clip adapted to engage in a hole in a tooth brush.

1,823,154. FLUID INDUCTION DEVICE. GEORGE E. MAIER, Los Angeles, Calif. Filed Aug. 21, 1926. Serial No. 130,571. 2 Claims. (Cl. 122—415.)



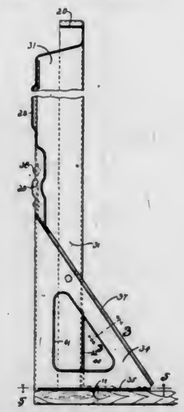
1. In a device of the character described, the combination of a boiler, a fluid circulating pump having its intake communicating with said boiler, an inductor connecting with the discharge side of said pump and communicating with the boiler, a supply pipe connecting with said inductor, a check valve in said pipe, a steam operated engine for actuating said pump, means for supplying steam from said boiler to said engine to actuate the latter, and means whereby the exhaust steam from said engine may be returned to said boiler through said supply pipe, check valve and inductor.

1,823,155. SHEATH FOR ELECTRIC WARMING PADS. MICHAEL W. MCARDLE, Chicago, Ill. Filed Dec. 9, 1927, Serial No. 238,850. Renewed Feb. 2, 1931. 3 Claims. (Cl. 150—1.)



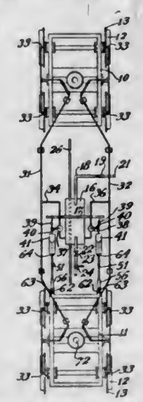
1. A sheath for an electric warming pad and the like consisting of a seamed and lined bag made of sheet material consisting of two fabric layers, the inner lining layer being of water-proof fabric and the seams being formed by marginal areas of the interiorly facing surfaces of the sheet material constituting the opposite sides of the bag, and the seams being covered interiorly of the bag for preventing moisture creeping through seams, the covering consisting of water-proof strips applied spanning the gap between the opposite sides of the bag leading to the seam, with the edges of said strips facing away from the seam, said strips being made adherent to the inner facing surfaces of the water-proof lining layer at short distances inwardly with respect to the bag cavity from the inwardly facing secured-together marginal areas forming the seam.

1,823,156. VEHICLE BODY CONSTRUCTION. LAMONT A. MCDOWELL and OTTO F. GRAEBNER, Detroit, Mich., assignors to The Murray Corporation of America, a Corporation of Delaware. Filed Mar. 29, 1928. Serial No. 265,557. 3 Claims. (Cl. 296—28.)



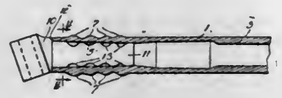
1. In an automobile body, a panel for closing the forward end of the cowl comprising a metal sheet having its side and top edges rearwardly and return bent thereby forming a reinforcing channel and an attaching flange about three sides thereof, and having integral rearwardly extending sill bracing webs disposed in vertical plane, formed from the same sheet adjacent its lower side edges.

1,823,157. FLANGE LUBRICATOR. BASIL W. MCGINNIS, Birmingham, Ala. Filed Jan. 27, 1928. Serial No. 249,992. 10 Claims. (Cl. 184—3.)



9. In a flange oiler for a railway vehicle having a body and a truck movable with respect to the body, a valve controlling the flow of lubricant to the flanges to be lubricated, means responsive to relative movement between the truck and the body for opening the valve means for biasing the valve towards a closed position, and dash pot means for limiting the duration of opening of the valve.

1,823,158. AXLE AND METHOD OF MAKING THE SAME. EDMUND C. MOGFORD and GEORGE SPATTA, Buchanan, Mich., assignors to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Original application filed May 15, 1929, Serial No. 363,362. Divided and this application filed May 10, 1930. Serial No. 451,229. 15 Claims. (Cl. 29—153.)



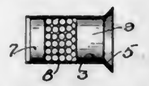
1. In a method of forming a tubular axle, the following steps, viz., tapering the end portions of the tubular blank, upsetting said end portions to increase the wall thickness thereof and to form a tapered socket, upsetting said socket to throw metal outwardly while maintaining the tapered form of the socket, forming a knuckle piece with a tapered shank, forming recesses in said shank, inserting the shank into the socket with the recesses in alignment with the outwardly projected metal of the socket and then pressing the outwardly projected metal of the socket inwardly to fill said recesses in the shank.

1,823,159. BAKER'S PEEL. RAMIRO MOURE, Los Angeles, Calif., assignor to A. Backus Jr. & Sons, Detroit, Mich., a Corporation of Michigan. Filed Nov. 6, 1928. Serial No. 317,609. 12 Claims. (Cl. 107—67.)



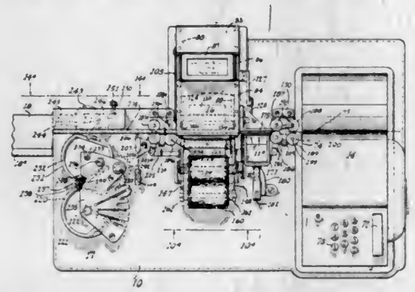
1. A baker's peel including, a blade having a longitudinal notch at one end and a longitudinally facing shoulder at the edge of the blade at each side of said notch, a handle extending into the notch, a U bolt having its ends projecting from said shoulders and its central transverse portion extending through an elongated opening in the handle, and nuts threaded on the said ends of the U bolts clamping the handle inwardly in the notch and the blade against the sides of the portion of the handle in the notch.

1,823,160. AIR GUN SHELL. WILLIAM PAUL, Beecher, Ill., assignor of one-half to William E. Pratt Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1929. Serial No. 386,584. 7 Claims. (Cl. 102—15.)



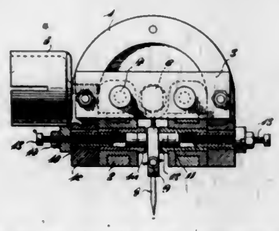
1. An air gun shell comprising a longitudinally split external sleeve, plugs frictionally engaged in said sleeve and separated from one another, and a charge of shot between said plugs adapted to be expanded diametrically when the shell is fired to release the plugs to permit discharge of the charge of shot.

1,823,161. MACHINE FOR APPLYING CHARACTERS TO SHEETS OR FORMS. WALTER B. PAYNE, Rochester, N. Y., assignor to The Todd Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 11, 1927. Serial No. 212,334. 65 Claims. (Cl. 101—47.)



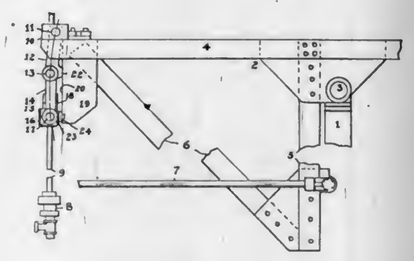
1. In a machine of the class described, the combination of separate marking mechanisms for successively placing characters upon separate sheets at different printing stations, transfer means for individually moving the sheets from a position of rest at one station to another, an actuating mechanism for each of said marking mechanisms, said actuating mechanisms being adapted to operate in proper timed relation to effect successive operation of said marking mechanisms and a driving unit for said transfer means and said actuating mechanisms comprising a constantly driven part and an additional part adapted to be manually coupled with said constantly driven part to effect periodic operation of said actuating mechanisms said transfer means, said unit having means for automatically disconnecting the additional parts from said constantly driven part subsequent to each operation of the marking mechanism last to be actuated.

1,823,162. ELECTRICAL REPRODUCTION OF SOUND FROM RECORDS. LAURENCE HERBERT PEARSON and CLAUDE MARSHALL, Nottingham, England. Filed Feb. 12, 1930. Serial No. 427,764. 5 Claims. (Cl. 179—100.41.)



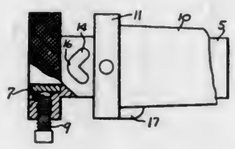
1. A pick up for the electrical reproduction of sound from records, embodying in combination a permanent horseshoe magnet having hollow cylindrical pole pieces, said pole pieces being mounted on bracket members positioned adjacent to the two limbs of the magnet, a coil on each pole piece, a metal reed resiliently suspended between the coils, the length of said reed approximating the diameter of the coils, a screw operating axially within each pole piece, cushion elements for damping the reed located on each side of said reed and said screws functioning adjustably to determine the position of said cushions.

1,823,163. PUMPING JACK. JOHN B. PICARD, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 20, 1930. Serial No. 496,866. 6 Claims. (Cl. 74—14.)



1. In a pumping apparatus, a pumping arm oscillatable on a horizontal axis, a pendent link pivotally supported by the arm, a vertically-reciprocating pump-operating rod, a pivotal connection between the lower end of the link and the upper end of the rod, an outwardly-facing abutment carried by the arm adjacent to and opposite the inner face of the link, and means carried by the lower portion of the link and engaging the abutment and spacing the upper end of the said pivotal connection from the abutment, the spacing means contacting with the outer face of the abutment, only when the arm is above a predetermined position.

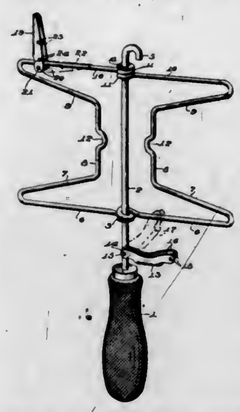
1,823,164. CHUCK FOR PAPER ROLLS. TURNER T. POPE, Houston, Tex., assignor of one-half to G. L. Mims, Houston, Tex. Filed Oct. 25, 1927. Serial No. 228,583. 1 Claim. (Cl. 242—68.)



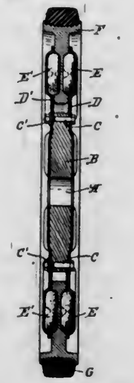
A chuck for securing rolls of paper upon a shaft, comprising a mandrel adapted to fit said shaft, means to fix said mandrel to said shaft, a tapered sleeve on said mandrel, said mandrel having an L-shaped slot therein with the ends thereof inclined forwardly, and a pin on said sleeve fitting within said slot and limiting the rotation of said sleeve thereon in the manner described.

1,823,165. REEL. JOHN W. PROCTOR, Pittsburgh, Pa. Filed June 21, 1929. Serial No. 372,563. 5 Claims. (Cl. 242—96.)

1. A reel, comprising a shank, an H-shaped section rotatably mounted upon said shank, and said shank being freely extended and reversely curved to form a hook, a hollow handle element pivotally connected to said H-section for manually rotating the same, and means carried by said handle and frictionally engageable with the H-section to yieldingly maintain said handle in extended or retracted position.

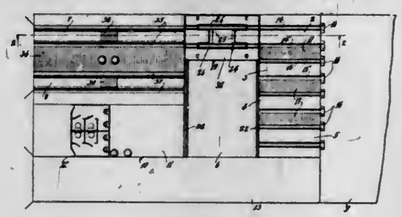


1,823,166. RESILIENT WHEEL. ROBERT H. PROSSER, San Francisco, Calif., assignor, by mesne assignments, to Cairew, Incorporated, Carson City, Nev., a Corporation of Nevada. Filed Feb. 8, 1927. Serial No. 166,636. 1 Claim. (Cl. 152—28.)



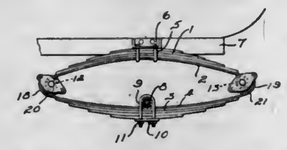
A resilient wheel comprising a pair of substantially circular metal plates mounted on a hub in spaced relation to each other, the outer annular facing portions of said plates being flat, a plurality of depressed seats within the area of said flat annular portions and offset with respect to the general planes of the annular portions leaving flat marginal portions of the plates to extend radially inwardly and outwardly adjacent to each seat, a rim member including a web extending inwardly therefrom and having a pair of flat parallel faces opposing and closely adjacent to but out of contact with the adjacent flat annular portions of said plates, a plurality of depressed seats opposing the seats of the plates on opposite sides of said web within the area of its flat surfaces leaving relatively wide flat marginal portions of the web extending radially inwardly and outwardly adjacent to each seat, the flat marginal portions of the web and of the plates all extending radially to an extent sufficient to maintain overlying relations for the maximum movement between the plates and the web during operation of the vehicle with which the wheel may be associated, and resilient non-metallic disk-like elements positioned in each of the pockets formed by the opposed seats of the web and plates, and maintaining the said spaced relation of said plates and web.

1,823,167. METHOD AND APPARATUS FOR WASHING VEHICLES. IRA L. PULLIAM, Huntington Park, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,474. 13 Claims. (Cl. 104—48.)



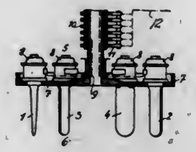
1. A vehicle washing table comprising a vertically immovable support for a vehicle, a platform surrounding said support, and means for moving said platform in a vertical plane.

1,823,168. SPRING CONSTRUCTION. BALFOUR READ, Detroit, Mich., assignor to Eaton Spring Corporation, Massillon, Ohio, a Corporation of Ohio. Filed Mar. 5, 1930. Serial No. 433,202. 8 Claims. (Cl. 267—55.)



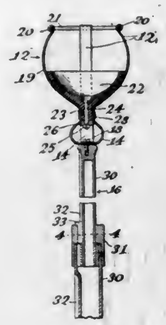
1. In a resilient support, a pair of leaf springs each having a main leaf, a yoke formed of a separate piece of material and rigidly secured on one of said main leaves, a pair of plates one on each respectively opposite side of said yoke, and a pivotal support mounted on said plates, the main leaf of the other leaf spring being journaled on said pivotal support.

1,823,169. BLADE WHEEL WITH MOVABLE BLADE. ERNST SCHNEIDER, Vienna, and JOSEF EHRHART and JOHANN KREITNER, St. Polten, near Vienna, Austria, assignors to J. M. Voith, Heidenheim-on-the-Bronz, Germany, a Corporation of Germany. Filed Aug. 9, 1928, Serial No. 298,463, and in Austria Aug. 11, 1927. 13 Claims. (Cl. 170—150.)



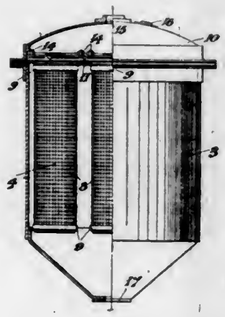
1. In a device of the character described, the combination with a rotary wheel body, of a plurality of independently operable propeller blades, carried thereby and therewith movable, and individual motor means for the blades supported by the wheel body, and connected with the blades for operating the same directly by the motor means and independently of the operation of the wheel body.

1,823,170. DEVICE FOR INSERTING AND REMOVING ELECTRIC LAMPS TO AND FROM SOCKETS. LEO SCHULZ, Los Angeles, Calif. Filed Jan. 9, 1931. Serial No. 507,603. 1 Claim. (Cl. 294—20.)



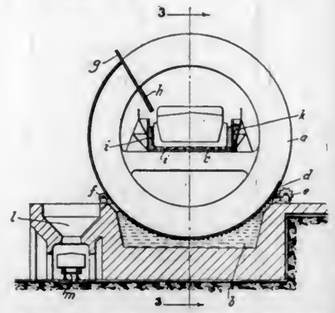
A device of the character described comprising a handle including a plurality of sections telescopically arranged, means to lock said sections together against rotation when extended, a plurality of spring fingers having upper curved portions conforming substantially to the configuration of an electric bulb lamp, the lower portions of said fingers being also curved to form resilient arms, a pad of pliable material having a cup shaped upper portion and a central lug projecting from its lower end, said lug being seated between the curved portions of the spring fingers, means encircling the spring fingers between the curved portions to hold the pad in rigid engagement with the spring fingers, and means to secure the spring fingers to the upper end of the handle.

1,823,171. FILTRATION. HENRY SELBY HELE-SHAW and JOSEPH ALLEN PICKARD, London, England. Filed Oct. 4, 1926, Serial No. 139,525, and in Great Britain Nov. 9, 1925. 1 Claim. (Cl. 210—184.)



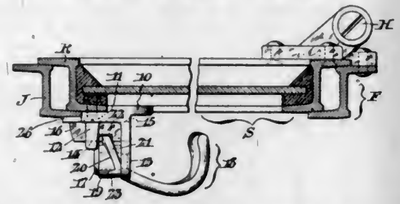
A separator for separating fluids having different degrees of adhesiveness from a mixture, comprising a casing having a mixed fluid inlet and a separated fluid outlet, a plate having a series of openings fixed transversely in the casing between the inlet and outlet, a series of separate units each comprising concentrically disposed tubes of different diameters of perforate material and in the annular space between which are located threads of inorganic material in the manner set forth, each unit being provided at its upper end with a flange and means for bolting it to the transversely arranged and removable plate with the unit extending through one of the openings in the transverse plate, the upper end of the unit being open and its lower end closed so that the mixed fluid will pass against and between the threads of inorganic material.

1,823,172. METHOD OF AND APPARATUS FOR UNLOADING BOATS, BARGES, AND LIKE VESSELS. KARL SCHÖN, Wuerzburg, Germany. Filed Aug. 16, 1927, Serial No. 213,362, and in Germany Apr. 8, 1926. 6 Claims. (Cl. 214—12.)



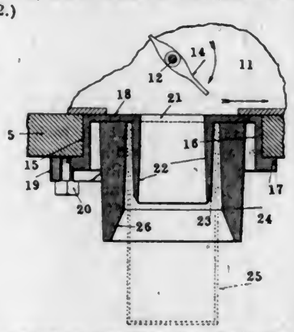
4. Apparatus for unloading vessels comprising a buoyant element adapted to support a vessel, a body of liquid supporting the element, and means to rotate the vessel to an unloading position, while the element is so supported.

1,823,173. WINDOW LATCHING DEVICE. JOSEPH H. SHEARD and HARRY S. GETTY, Philadelphia, Pa., assignors to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 5, 1928. Serial No. 283,005. 4 Claims. (Cl. 292—140.)



1. A latching device for pivoted windows comprising a bracket embodying spaced lateral projections of differing size, a latch bolt slidingly guided by said bracket projections, and an actuating member fulcrumed to the larger of said projections and adapted to follow the direction of sash movement, said actuating member embodying a spiral cam co-operative with the latch bolt.

1,823,174. FILLING MACHINE. CHESLEY T. SMALL, St. Louis, Mo., assignor to C. T. Small Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 3, 1928. Serial No. 244,219. 4 Claims. (Cl. 226—72.)

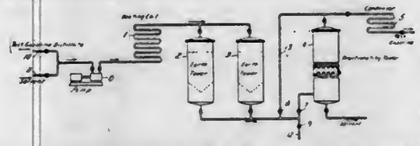


1. In a device of the class described, the combination with a hopper, of a table movable under said hopper, a nozzle carried by said table, said nozzle having a flange

adapted to enter the container to be filled, a sleeve surrounding said flange and projecting below the same, said flange and sleeve cooperating to form a tapered space to position and shape the receptacle to be filled, and a bevel on the part of the sleeve projecting below the flange to guide the container into the space, said flange providing a feed passage for delivering material from the hopper to the container.

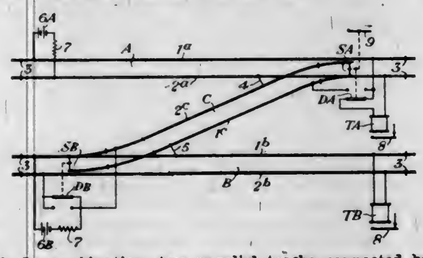
4. In a device of the class described, the combination of a hopper, a disk rotating under said hopper and provided with uniformly spaced discharge openings for the delivery of material from said hopper to containers, a rotary agitator in said hopper provided with a blade whose path of travel lies entirely above the disk and whose width is not less than the width of said discharge openings in the direction transverse to their path of movement, and means for rotating said agitator in such direction that the blade, when in the portion of its path nearest the disk, has a direction of movement opposed to that of the disk, said rotating means being so timed that said blade is moving downwardly toward each discharge opening in the disk as said discharge opening passes under the agitator and that the successive relative positions of blade and discharge opening are the same as to all of said openings.

1,823,175. ART OF REFINING HYDROCARBONS. JAMES G. STAFFORD, Whiting, Ind., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Mar. 30, 1928. Serial No. 265,842. 7 Claims. (Cl. 196—147.)



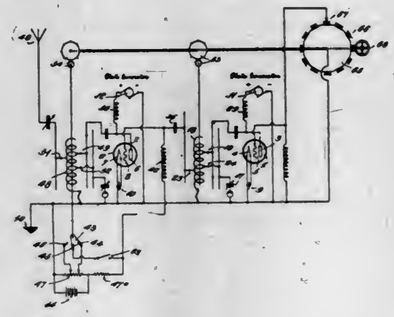
7. An improved method of refining low boiling cracked hydrocarbon distillates comprising admixing with said cracked distillates a liquid hydrocarbon more stable than said cracked distillates under the conditions prevailing in the refining operation and capable of acting as a solvent for the higher boiling reaction products formed during the refining operation, passing a stream if the mixture in intimate contact with a finely divided solid adsorbent material, maintaining the mixture of low boiling cracked distillates and stable liquid hydrocarbons at a temperature lower than that at which substantial cracking will occur but in excess of about 375° F. and at a pressure in excess of that required to prevent substantial vaporization at the temperature employed during contact with said finely divided solid adsorbent material, and subsequently reducing the pressure on the treated mixture to effect vaporization of the low boiling cracked distillates.

1,823,176. RAILWAY TRACK CIRCUIT APPARATUS. HOWARD A. THOMPSON, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 31, 1931. Serial No. 554,244. 4 Claims. (Cl. 246—41.)



1. In combination, two parallel tracks connected by a crossover, a track circuit for each track including a source of current and track relay, and means operating when the switches of said crossover are reversed to disconnect the track relay from one track circuit and the source of current from the other and to connect the rails of said two tracks through the rails of the crossover so that the remaining source and the remaining relay are included in a single track circuit.

1,823,177. TRANSMITTING SYSTEM. ARTHUR M. TAGGNER, East Orange, N. J., assignor to Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 350,010. 11 Claims. (Cl. 250—17.)



1. A transmitting system comprising in combination a thermionic tube having energy supply circuits connected with the electrodes thereof, input and output circuits therefor comprising inductance, means for adjusting the frequency characteristics of said inductance, and contacting means actuated cooperatively with said adjusting means whereby the energy from said supply circuits is varied in accordance with the actuation of said adjusting means.

1,823,178. SURGICAL STOCKING. OLIVER H. WALTON, Needham Heights, Mass. Filed Apr. 7, 1930. Serial No. 442,801. 4 Claims. (Cl. 66—172.)

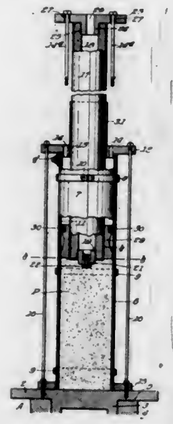


1. A surgical stocking renching from a point above the knee to the instep and having elastic gartering portions above and below the knee, the stocking below the lower gartering portion being formed with elastic material, the lower gartering portion being of heavier gartering material than the upper gartering portion.

1,823,179. ALUMINUM TYPE MATRIX. WELKER WALLACE WENTZ, Pittsburgh, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 9, 1929. Serial No. 391,512. 1 Claim. (Cl. 119—63.)

A type matrix made of aluminum and provided with a hard adherent oxide coating.

1,823,180. METHOD OF AND APPARATUS FOR FORMING GRAPHITE MOLDS OR OTHER REFRACTORY ARTICLES. HAROLD E. WHITE, Butler, and JOHN HESS and OSCAR E. NEUHAUSEN, Zelienople, Pa., assignors to Lava Crucible Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,287. 7 Claims. (Cl. 18—5.)

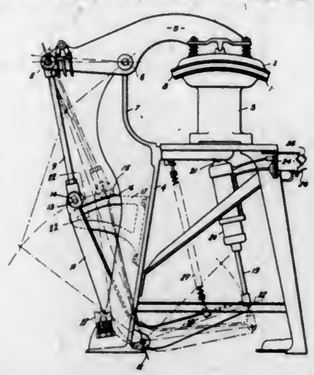


3. The method of making a hollow refractory article which consists in placing an unconsolidated plastic mixture in a container, simultaneously jarring and flowing the mixture in the container while pressure is applied to the upper surface of the mixture characterized in that the mixture is caused to flow upwardly within the container by a gravity operated piercing tool and that pressure is applied to the upper surface of the flowing mixture exterior of the piercing tool by a gravity-operated member, and that the material is subjected to substantially the same pressure during the piercing action by the piercing tool and said member.

7. In apparatus for forming hollow refractory articles, a forming mold into which the article-forming material is deposited, means for positioning the forming mold on a jarring table, a hollow cylindrical gravity operable plunger movable within the mold to pierce and compress the contained material, valve means carried at the lower end of the hollow plunger, and a gravity operable follower associated with the plunger and disposed within the forming mold.

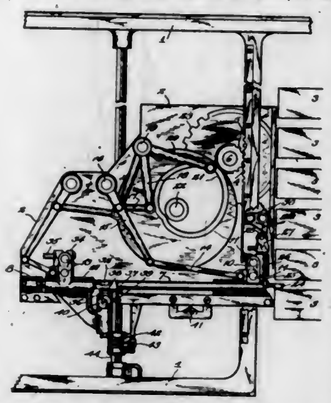
1,823,181. ACTUATING MECHANISM FOR PRESSING MACHINES. EMIL A. WINNEWISSER, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 9, 1929. Serial No. 384,694. 7 Claims. (Cl. 68—9.)

5. In a pressing machine, cooperating pressing elements, one of which is movable toward and from the other, means for actuating the movable element including a prime mover and motion transmitting means between the prime mover and the movable element, a part of said motion transmitting means having a movement in addition to that imparted thereto by the prime mover, means for giving said part said additional movement including a stationary part carried by the frame and arranged in the path of movement of said relatively movable part to engage and move the same in addition to



the movement imparted thereto by the prime mover, one of said parts having a cam for coacting with the other part.

1,823,182. SHEET FEEDING MACHINE. JOSEPH T. WRIGHT, Cincinnati, Ohio, assignor, by mesne assignments, to The Harris-Seybold-Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,927. 12 Claims. (Cl. 271—56.)

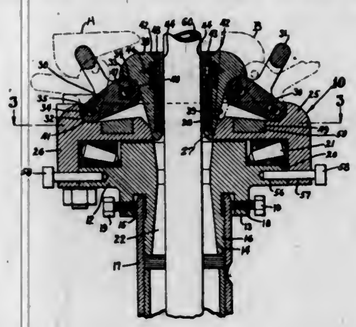


1. In a sheet feeding mechanism, the combination of a plurality of sheet feeding members movable simultaneously in opposite directions to withdraw a sheet from a stack and deliver the same to an objective point, the members movable in juxtaposition for sheet transfer from one to the other, one member gripping the sheet at one side for withdrawal of the topmost sheet of the stack, and the second in cooperation with and at opposite sides of the sheet for detecting sheet transfer failure or the transfer of several adhering sheets.

1,823,183. WELL CASING SPIDER. FRANK B. ANGELL, Los Angeles, Calif. Filed Jan. 20, 1930. Serial No. 422,007. 13 Claims. (Cl. 24—263.)

1. For use with a well casing having a tool therein, a spider, said spider including a body portion and a cap, means on said body to secure said spider to said casing, an aperture in said body coaxial with said casing, said cap being supported on said body and being rotatable relative to said body portion, a conically shaped aperture in said cap coaxial with said body aperture, a plurality of toggles slackly connected to said cap, a slip slackly

connected to each of said toggles, the outer face of each of said slips including a tapered portion adapted to be positioned in said conical aperture of said cap, the inner face of each of said slips having transverse teeth thereon, an annular groove in said cap, a cam ring positioned in said groove and freely rotatable therein, slots in said cap



communicating with said annular groove, means extending through said slots and engaging said cam ring to move said cam ring, said cam ring including raised portions adapted to be moved into engagement with said toggles and elevate said toggles to thereby move said slips out of said conical aperture of said cap.

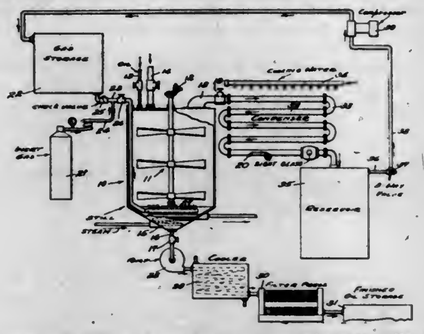
1,823,184. OCCLUSAL GAUGE. RICHARD L. BEELER, Paducah, Ky. Filed June 13, 1929. Serial No. 370,639. 4 Claims. (Cl. 33—174.)



1. An occlusal gauge comprising an inverted U-shaped frame having its side members offset rearwardly at their upper ends and defining an upwardly extending arch to span the nose of a patient with the sides of the frame spaced from the patient and disposed at the sides of the nose, the side members of the frame and the sides of the arch being graduated, measuring elements adjustably mounted upon the sides of the frame, and means for retaining said elements in a set position.

1,823,185. PROCESS OF PURIFYING USED CRANK CASE OIL. DANIEL S. BELDEN, Los Angeles, Calif., assignor to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Filed June 8, 1929. Serial No. 369,303. 16 Claims. (Cl. 196—16.)

5. The process of purifying used lubricating oils which comprises: mixing said oil with a finely divided clay adsorbent and heating the mixture to about 600° F. while passing a lively stream of inert permanent gas there-



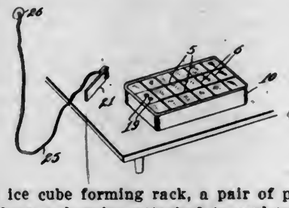
through; distilling from the mixture whatever oils are volatile at the aforesaid temperature; and separating the residual oil from the clay.

1,823,186. SAFETY TUBING LOCK. DRAKE BROOKSHIRE, Galena, Kans. Filed Sept. 6, 1929. Serial No. 390,837. 5 Claims. (Cl. 103—219.)



1. A tubing lock comprising an expansible member mounted for independent movement on the tubing, means slidable on the tubing for expanding said member, means on the tubing for supporting the expansible member in inoperative position, said last named means being operable upon differential movement of the tubing and the expansible member to engage said expanding means to force the latter to expand said expansible member.

1,823,187. REFRIGERATING TRAY. MICHAEL K. BUCHANAN and ALBERT G. HORTON, Norfolk, Va. Filed Feb. 18, 1930. Serial No. 429,378. 2 Claims. (Cl. 62—108.5.)

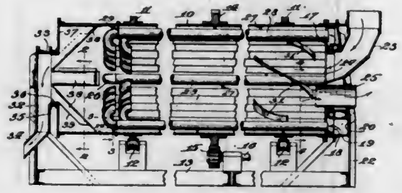


1. In an ice cube forming rack, a pair of parallel partition members, a housing attached to each of the partition members and extending over a substantial area of the same, and a resistance element confined in the housing.

1,823,188. METHOD FOR TREATING DISCOLORED SULPHUR. LYMAN S. BUSHNELL, Freeport, Tex., assignor to The Freeport Sulphur Company, Freeport, Tex. Filed Sept. 3, 1929. Serial No. 390,199. 13 Claims. (Cl. 23—229.)

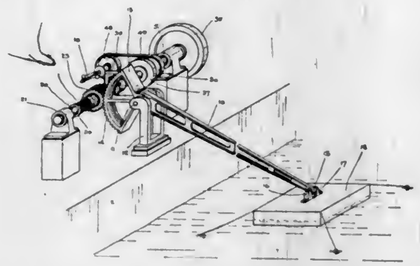
5. A method of treating discolored sulphur including bringing into contact the discolored sulphur and an acid solution composed of sodium nitrate and sulphuric acid.

1,823,189. DRIER. WILLIAM CLARENCE CARPENTER, San Francisco, Calif. Filed Oct. 9, 1929. Serial No. 398,521. 2 Claims. (Cl. 34—5.)



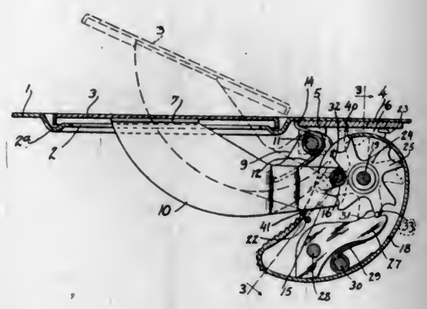
1. In a drier, a rotary drum, a head on the end of said drum, said head being provided with a centrally arranged discharge opening, a series of radially disposed inclined chutes arranged on the interior of the drum adjacent to said head the open outer ends of which chutes terminate at said discharge opening, each chute being substantially U-shape in cross section and a portion of one of the side walls of each chute adjacent to the wall of the drum being cut away for the entrance of material into the chute.

1,823,190. POWER PLANT. NEIL CHRISTIE, Larder Lake, Ontario, Canada. Filed Sept. 12, 1930. Serial No. 481,456. 1 Claim. (Cl. 253—11.)



In a power plant, a pivoted oscillating arm adapted to be attached to a float member, a quadrant gear extending from the pivoted end of said arm and oscillating therewith and coacting with a driving gear loosely mounted on a driving shaft and provided with ratchet teeth on either face, a means for reversing the direction of rotation of one set of said ratchet teeth in relation to the other, ratchet clutches mounted on either side of said driving gear adapted to engage said driving gear ratchets alternately and thereby rotate said driving shaft in a constant direction, a friction clutch mounted on said driving shaft forming a freeable connection between said driving shaft and the driven member, a centrifugal governor mounted on a suitable bracket and operatively connected to said friction clutch by a pivoted arm, a pulley on said governor shaft connected by a belt to a pulley fixedly secured to a shaft extending from said clutch and rotate said governor and cause said clutch to free at a predetermined speed and thereby separate said driving shaft from the driven member.

1,823,191. KICK VENTILATOR FOR VEHICLES. CARL G. CRONWALL, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 15, 1929. Serial No. 363,167. 8 Claims. (Cl. 98—2.)

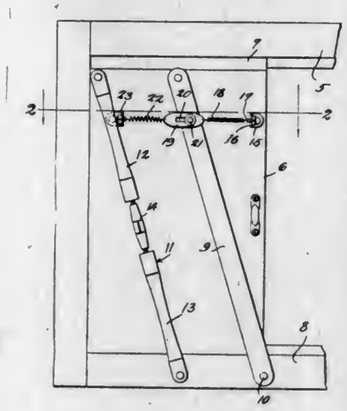


1. In a ventilator for an automotive vehicle, or the like, the combination of a closure seat, of a movable closure, and of means including a lever, a star wheel movable relative to the said lever, and a dog carried by said lever arranged to be operated unidirectionally for moving said movable closure to open or close the said ventilator.

1,823,192. CLEANING COMPOUND. ATHENA J. ENGLISH, Chicago, Ill., assignor of one-half to Sotir C. Stamoulis, Chicago, Ill. Filed Apr. 30, 1929. Serial No. 359,409. 2 Claims. (Cl. 8—20.)

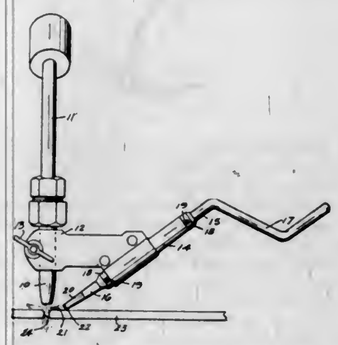
1. The method of delustering fabric by friction of the surface after wetting with the supernatant liquid from a mixture of macerated raw potato and water.

1,823,193. CLOSURE HANGER. LEWIS W. FRANKS, Port Neches, Tex. Filed June 27, 1930. Serial No. 464,317. 2 Claims. (Cl. 16—92.)



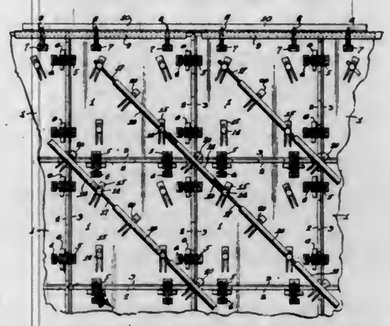
1. In a closure hanger, a main supporting bar, means for pivotally connecting the supporting bar to a closure, a balancing bar connected with the closure, a plate slidably mounted on the main supporting bar, coiled springs connected with the plate, one of said coiled springs being connected with the balancing bar, the opposite coiled spring being connected to the closure, and said coiled springs adapted to move the closure laterally past a vertical line drawn through the pivot points of the main supporting bar.

1,823,194. MOTION CONTROLLING ATTACHMENT FOR CUTTING TORCHES. JESSE L. GRAY, Dallas, Tex. Filed Sept. 2, 1930. Serial No. 479,380. 8 Claims. (Cl. 266—23.)



1. In an attachment for cutting torches, a clamp, a rotatable spindle supported by said clamp at an inclination thereto, and means for manually rotating said spindle.

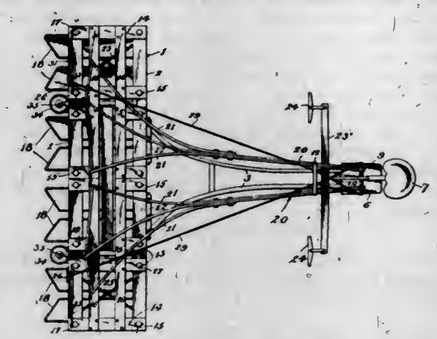
1,823,195. BRACED MOLD WALL. FRANK J. GREMEL, Detroit, Mich.; Caroline Gremel executrix of said Frank J. Gremel, deceased. Filed Jan. 26, 1929. Serial No. 335,213. 3 Claims. (Cl. 25—131.)



3. A braced mold wall comprising a plurality of panels erected and fastened together to form a wall, tie members in said panels and having heads at the outer side of the panels, bracing members having reduced ends passed through said heads, other bracing members aligned with the first named bracing members and having bored ends receiving said reduced ends, certain of said bracing members extending across the edges of said panels, and wedges driven between said panels and the bracing members.

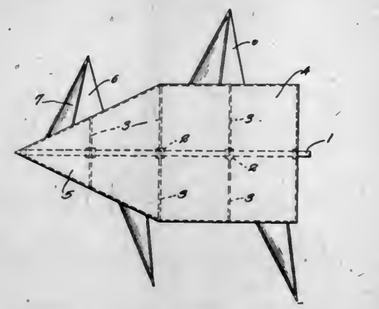
1,823,196. BOLL WEEVIL EXTERMINATOR. ELIGY P. GRIFFITH, Gainesville, Tex. Filed Jan. 23, 1929. Serial No. 334,585. 4 Claims. (Cl. 43—133.)

1. A boll weevil exterminator including a transversely disposed main frame, a longitudinal draft member extending rearwardly from the transverse frame, an auxiliary frame on each end of the main frame, pairs of rods loosely mounted in the main frame and connected to the auxiliary frames for movement vertically therewith, pans at the lower ends of the rods, longitudinal levers mounted on the main frame and extending to a point adjacent the rear end of the longitudinal draft member, each of the



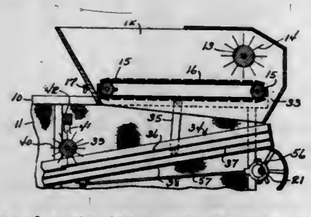
levers comprising a plurality of bars which are forwardly divergent, and links connecting the bars with the auxiliary frames.

1,823,197. AEROPLANE PROPELLER. FREDERICK A. GUENTHER, La Grange, Ill. Filed July 14, 1930. Serial No. 467,769. 1 Claim. (Cl. 170—156).



An aeroplane propeller including a central cylindrical body having a cone shaped outer end, a plurality of hollow fins extending spirally around the body, one of said fins having its outer mouth portion disposed at the apex of the cone shaped end, said fins being disposed on an incline relative to the body with the inclination increasing from one end of each fin to the other whereby the meeting ends of adjacent fins will be offset from one another so that air passing through each fin will strike the inner face of the fin next in order.

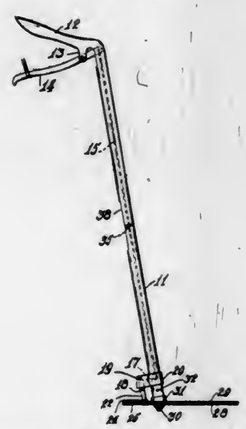
1,823,198. MOTE AND WASTE CLEANER. JAMES L. HONEYCUTT, Mooresville, N. C. Filed Jan. 31, 1930. Serial No. 424,941. 1 Claim. (Cl. 19—72.)



A mote and waste cleaner comprising an elongated and closed frame, a hopper on the top of said frame and located adjacent one end thereof, a power driven shaft on the frame, an endless apron driven in a step by step

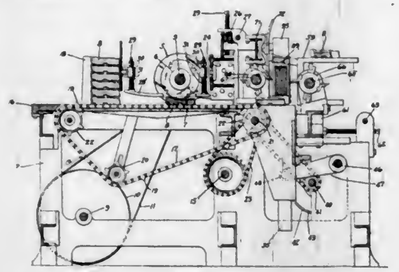
movement from the shaft and located in the hopper to receive matted cotton waste and seeds, a combing roller journalled in the hopper to shed the waste, means driving the roller from the shaft, an inclined reciprocating screen in the frame with its highest end disposed under the hopper and its lowest end disposed at the end of the frame remote to the hopper to receive the waste and seeds from the apron, a combing roller for separating the seeds from the waste, stationary teeth carried by the frame and cooperating with the second named combing roller in separating the seeds from the waste, and a suction means at the lowest end of the screen and at the last named end of the frame to remove cotton lint from the waste.

1,823,199. GRASS CLIPPER. RICHARD F. HUXMAN, Benton Harbor, Mich. Filed Dec. 17, 1928. Serial No. 326,618. 9 Claims. (Cl. 30—11.)



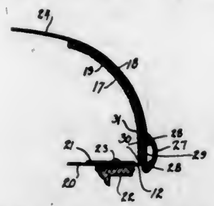
1. In a device of the class described, comprising a pair of pivotally mounted co-operating blades, and a resilient push rod operatively connected therewith for moving said pivoted blades to closed position.

1,823,200. WOODWORKING MACHINE. ARTHUR B. JOHNSON, Minneapolis, Minn., assignor to Anderson Frame Corporation, Bayport, Minn., a Corporation of Wisconsin. Filed Nov. 14, 1927. Serial No. 233,165. 38 Claims. (Cl. 144—3.)



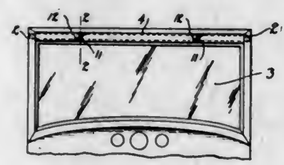
1. In a machine of the class described, the combination with means for feeding the work edgewise in a horizontal direction and revolving cutters for forming dadoes transversely in the surface of the work, means for receiving the work from said dado cutters and moving it vertically, means for placing the work preparatory to its vertical movement and cutter heads for forming transverse notches in the longitudinal edges of the work intersecting the dadoes therein.

1,823,201. TOP EXTENSION. JACOB S. KERN, Fleetwood, and OSCEOLA L. CURRIER, Mount Penn, Pa., assignors to Fleetwood Body Corporation, Fleetwood, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1929. Serial No. 357,908. 1 Claim. (Cl. 296—99.)



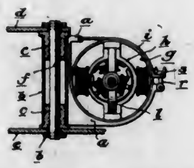
In an automobile body of the brougham type or the like, a top extension comprising a pair of side roof rails, a deck of fabric or the like covering each rail and extending therebetween, an elongated spring metal clip carried longitudinally within each side of the deck adjacent the side roof rails, the decking having a plurality of openings therethrough along each spring clip, and means carried by the side roof rails arranged to project through the openings in the deck whereby the elongated metal clips may be sprung onto the said means to removably secure the deck to the side roof rails.

1,823,202. CLAMP FOR WINDSHIELDS. JACOB S. KERN, Fleetwood, and OSCEOLA L. CURRIER, Mount Penn, Pa., assignors to Fleetwood Body Corporation, Fleetwood, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1929. Serial No. 357,909. 1 Claim. (Cl. 296—92.)



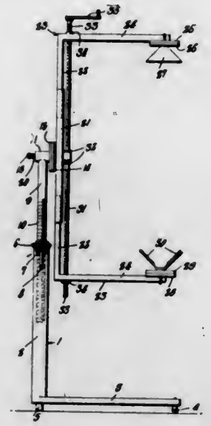
A windshield clamp having in combination a support shaft with a flared recess, a tubular member rotatably mounted on the said shaft and arranged to carry a windshield, one or more wedge blocks for the said recess, a wedge block for slidably engaging the said wedge blocks to force them outwardly along the flared sides of said recess to effect a frictional engagement between the said tubular member and the said wedge blocks.

1,823,203. INSULATING SUPPORT FOR ELECTRIC MOTORS. EMIL KNECHT, Erkner, near Berlin, Germany, assignor, by mesne assignments, to Dual Motors Ltd., London, England. Filed Mar. 26, 1928, Serial No. 264,839, and in Germany Jan. 24, 1928. 3 Claims. (Cl. 248—16.)



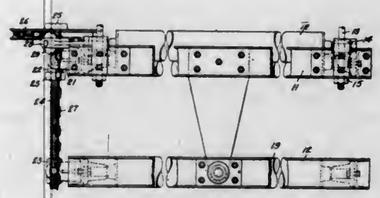
1. In an electric drive for talking machines and the like a motor having a stator and a rotor, a driving gear carrier, means for suspending the motor from the driving gear carrier comprising vibration insulated bolts in said carrier, a seat for the stator of the motor carried on one of said bolts and a swinging connection to one of the bearings of the rotor shaft from the other of said bolts.

1,823,204. AUTOMOBILE RADIATOR WORK STAND. GLEN D. LONG, Pendleton, Oreg. Filed Aug. 31, 1929. Serial No. 389,801. 6 Claims. (Cl. 29—89.)



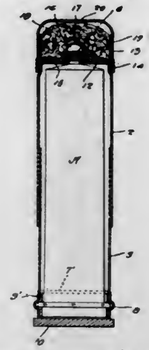
1. A radiator support of the character described, comprising a base including an upright tubular body and a vertically shiftable standard telescoping into the upper end of the body, means for adjustably shifting said standard, a bearing carried upon the upper end of the standard, a beam having a hub intermediate its ends and extending transversely thereof, positioned in the bearing, means to provide a friction connection between the hub and the bearing, resilient means normally drawing said hub into the bearing and maintaining tension on said friction means, adjustable bracket arms mounted for longitudinal movement upon said beam, rotatable holding elements carried by the arms for engaging a radiator placed therebetween, and a control shaft for the arms mounted intermediate its ends upon the beam and having threaded connection at each end with the arm, whereby rotation thereof will cause relative movement of said arms.

1,823,205. APPARATUS FOR CORRECTING DISPLACEMENT OF WEFT THREADS IN CLOTH. JOHN J. LYTH, Valleyfield, Quebec, Canada. Filed Dec. 12, 1929. Serial No. 413,618. 3 Claims. (Cl. 26—63.)



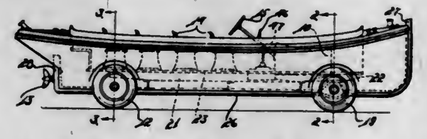
1. Apparatus for correcting displacement of weft threads in cloth comprising a pair of frames, means rigidly supporting one of the frames, brackets carried by said rigidly supported frame pivotally connected to the other frame, a series of rolls mounted in parallelism and in a single plane in each of the frames, said rolls being arranged at right angles to the pivotal axis of the pivotally mounted frame, a bearing pivotally mounted on one of the frames, a nut pivotally mounted on the other frame, a screw co-operating with said nut and journalled in the bearing and means for rotating said screw.

1,823,206. CONTAINER FOR PASTE TUBES. CHARLES A. MAHER, Tacoma, Wash. Filed Mar. 14, 1929. Serial No. 346,983. 2 Claims. (Cl. 221—60.)



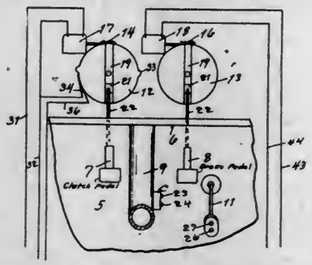
1. A paste tube holder comprising a telescopic cylinder having both ends open and openings in its side walls, a detachable closure for the lower end of the cylinder having a slot therein for receiving the closed end of a tube of paste, a bridge piece having a tubular central portion for engaging the neck of the tube and opposing wings connected with the tubular part, a cup-shaped member detachably connected with the upper end of the cylinder and having an opening at its center for receiving the neck of the tube with a part of said member pressing the wings of the bridge piece against a part of the cylinder.

1,823,207. COMBINATION LAND AND WATER VEHICLE. CARL O. MATHIESON, Highland Park, Mich. Filed July 3, 1930. Serial No. 465,464. 3 Claims. (Cl. 115—1.)



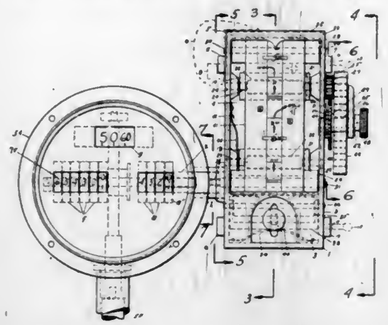
1. In a device of the class described: a body; a keel bar extending longitudinally of said body; a gear box mounted in said body and projecting below said keel bar; an enclosing plate for enclosing said gear box, said enclosing plate being doubled upon itself and clamped on said keel bar for forming a water tight connection.

1,823,208. AUTOMOBILE ACTUATING MECHANISM. THOMAS A. MCINTYRE, San Francisco, Calif. Filed Mar. 21, 1930. Serial No. 437,950. 2 Claims. (Cl. 192—13.)



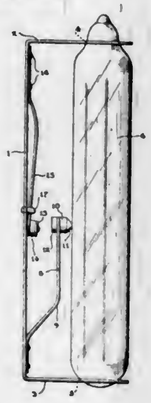
1. In combination with a motor vehicle having a clutch pedal and a brake pedal, a disc mounted adjacent each of said pedals, a sliding block carried in the face of each of said discs, a cable connecting said blocks and said pedals, a motor for individually driving each of said discs, and remote means for actuating said motors.

1,823,209. AUTOMOBILE TRAVELING ROAD MAP DEVICE. JAMES S. MCNEIL, Detroit, Mich. Filed Aug. 10, 1929. Serial No. 385,025. 3 Claims. (Cl. 40—42.)



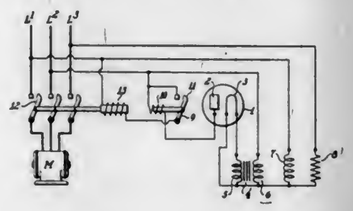
1. A road map device adapted for an automobile tourist's road guide and used in combination with the automobile odometer, comprising a casing frame suitable for fixedly mounting same on an automobile odometer instrument board, said casing being formed with a front window opening, a series of map tape rollers rotatably mounted within said casing with some of said rollers positioned adjacent the front window opening and parallel therewith, a road map tape mounted on said rollers in a manner as to expose a section thereof, visibly, through said frame window opening and having the opposite map ends attached to the end rollers, a feed roller rotatably mounted within said casing positioned to engage the said road map tape for unwinding said tape from one roller, winding means attached to the opposite end roller for winding said map tape thereon as the feed roller is unwinding same from the other roller, said feed roller being connected directly with the automobile odometer end fractional mileage disc in a manner for unwinding said feed roller directly therewith, the road map printed on said tape being drawn to a scale to synchronize the map mileage with the automobile odometer mileage, said casing frame being positioned on the automobile instrument board to expose the said map tape, visibly, through the casing window.

1,823,210. COMBINED FIRE EXTINGUISHER AND ALARM. ERNEST F. POHL, St. Louis, Mo., assignor to Automatic Fire Extinguisher and Alarm Corporation, St. Louis, Mo. Filed June 26, 1930. Serial No. 464,081. 4 Claims. (Cl. 169—26.)



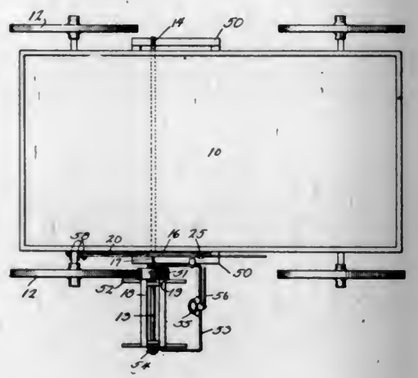
1. A combined fire extinguisher and alarm comprising a bracket, a frangible container supported by the bracket and adapted to contain a fire extinguishing liquid, a movable container-shattering member mounted on the bracket and arranged to engage and shatter the frangible container, a spring also mounted on the bracket and provided with means for carrying an explosive into contact with the shattering member, means for normally restraining the spring to maintain the explosive carrying means of the spring normally out of contact with the shattering member and releasable for operation under the influence of heat to release the spring to fire the said explosive and actuate the shattering member to shatter the said container.

1,823,211. PHASE FAILURE AND PHASE REVERSAL PROTECTIVE DEVICE. EDWARD J. POSSELT, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,133. 12 Claims. (Cl. 175—294.)



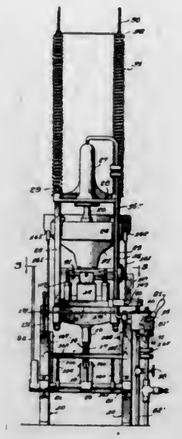
1. A protective device for polyphase circuits comprising a controlling device for said circuit including a space discharge tube, a star connected system of impedances and means whereby said tube is caused to respond to changes in a voltage across certain of said impedances resulting from changes in the electrical conditions of said circuit.

1,823,212. WIRE REELER. WILLIAM C. SAUNDERS, Hinton, Iowa. Filed June 25, 1930. Serial No. 463,688. 8 Claims. (Cl. 242—91.)



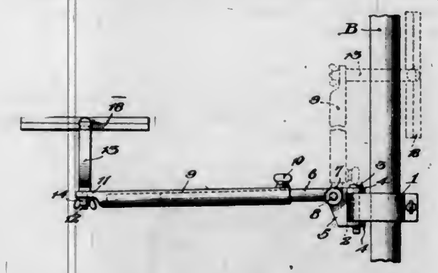
6. In combination with a wagon having rear wheels and a box, a shaft supported by the box for movement toward the wheels, a lever attached to the shaft and having a portion extending upwardly and a portion extending downwardly therefrom, a link attached to the wagon box at a point removed horizontally from the lever and pivoted to said downwardly projecting lever portion, means for securing the lever in any of a series of adjusted and reeling mechanism including a reel and pulley carried by the shaft, the pulley being pulled to engage one of said wheels.

1,823,213. PRESS. JOSEPH F. SCHMIDT, Railroad, Pa., assignor to Wheeler Company, Railroad, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1927. Serial No. 231,208. 10 Claims. (Cl. 25—103.)



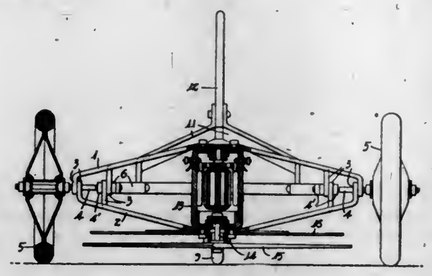
1. In an apparatus of the character described, a mold having a section movable to compress material in the mold, a material hopper, a measuring device movable to a position beneath said hopper to receive material therefrom and to a position over said mold to discharge material thereinto, manual means for effecting movement of said measuring device, and means for locking said manual means in a position with said measuring device removed from proximity to said mold.

1,823,214. BED TRAY. GUY F. SCRIVEN and LEO H. LIPPERT, Sioux Falls, S. Dak. Filed Aug. 16, 1929. Serial No. 386,465. 5 Claims. (Cl. 45—82.)



1. In a bed tray, a clamp formed for attachment to a bed head, a member pivoted to the clamp for horizontal swinging movements, a rod adjustably pivoted to said member for vertical swinging movements, a sleeve telescopically receiving the rod, means to hold the sleeve and rod in adjusted positions, a substantially C-shaped bracket adjustably connected at one end to the sleeve for horizontal pivotal movements, a rod connected at one end to the other end of the bracket, and having its opposite end threaded, a tray having a central longitudinal sleeve to receive the last named rod, and a thumb nut on said threaded end of the rod to hold the tray in adjusted position thereon, said parts being arranged so that in folded position the first rod and sleeve will lie vertically and the tray also vertically and rearwardly of the bed head and the C-shaped bracket will extend about a side of the bed head.

1,823,215. ELECTRIC LAWN MOWER AND HEDGE TRIMMER. WILLIAM D. SEAL, Des Arc, Mo. Filed Sept. 21, 1929. Serial No. 394,226. 3 Claims. (Cl. 56—25.)

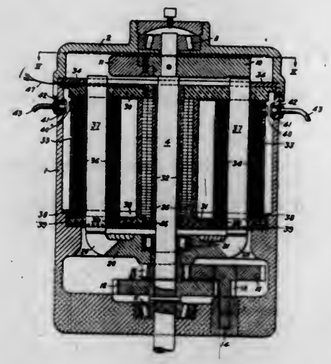


1. A machine of the character described comprising upper and lower transverse plates having downwardly and upwardly extending portions, respectively at their terminals which overlap one another, spindles extending through said overlapping portions, wheels mounted on said spindles, an electric motor secured to and between said plates, and cutting means below said plates driven by said motor.

1,823,216. ANTIFREEZE COMPOSITION. DAVID F. SMITH, Pittsburgh, Pa. Filed July 10, 1928. Serial No. 291,693. 3 Claims. (Cl. 252—5.)

1. An antifreeze composition comprising magnesium chloride, magnesium acetate and magnesium chromate.

1,823,217. IGNITER. HARRY P. SPARKES, Pittsburgh, Pa. Filed June 29, 1929. Serial No. 374,687. 11 Claims. (Cl. 171—252.)

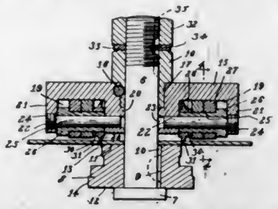


1. In an ignition device, the combination with a winding for supplying an oscillating current to a spark-device and a magnetic core for said winding, of means cooperating with said core to periodically complete a magnetic circuit therethrough, and means for varying the reluctance of said circuit during said period.

1,823,218. HOLE CUTTER. EDWIN C. SWANSON, Rockford, Ill., assignor to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed Mar. 1, 1929. Serial No. 343,592. 13 Claims. (Cl. 164—71.)

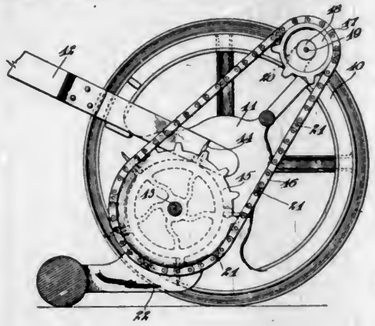
1. A circle cutter comprising a circular disc, supporting means at the center thereof adapted to pass through a hole in the stock and support the disc closely thereto, a cutter arm rotatably mounted upon said supporting means on the opposite side of the stock from said disc, cut-

ter wheels rotatably mounted on the cutter arm and projecting from the bottom side thereof in a position to



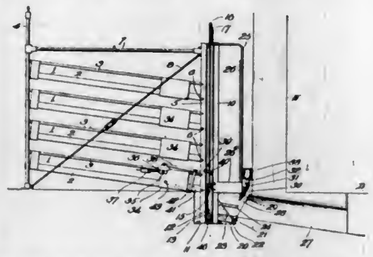
inscribe a circle of the same diameter as the disc below, and means for applying pressure between the cutter arm and the circular disc.

1,823,219. LAWN MOWER ATTACHMENT. RIGBOLD J. VIMTRUP, Downers Grove, Ill. Filed May 2, 1928. Serial No. 274,652. 7 Claims. (Cl. 56—249.)



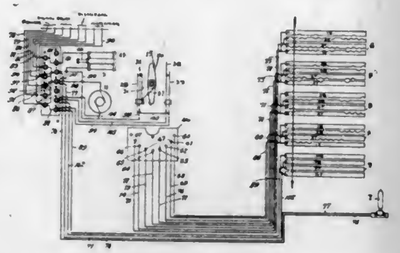
1. A stalk-engaging extension for lawn mowers comprising main sprockets carried by the rotary-cutter shaft, auxiliary sprockets carried by the frame at an elevated frontal site and opposite the main sprockets, chains from the latter to the auxiliary sprockets, and cross-rods between the chains and spanning similarly-positioned runs thereof.

1,823,220. ICE STORAGE AND DISCHARGE APPARATUS. ARTHUR B. WALTERS, Kansas City, Mo., assignor to Western Tool & Equipment Company, a Corporation of Missouri. Filed Sept. 4, 1928. Serial No. 303,634. 20 Claims. (Cl. 214—99.)



1. In apparatus of the character described, an inclined rack down which a block of ice is adapted to travel, means for normally holding the block on the discharge end of the rack, an elevator adapted for automatic upward travel and to trip the said holding means, means to arrest the upward movement of the elevator when it attains a position in alinement with and at the discharge end of the rack, for the reception of the released block of ice and means to withdraw from operative position, the means for arresting the upward movement of the elevator.

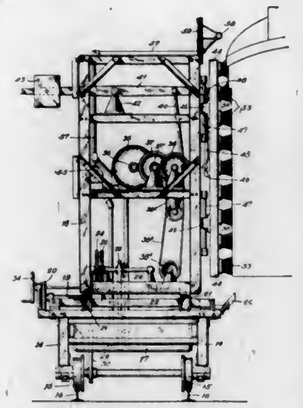
1,823,221. CALL AND DISMISSAL APPARATUS. BOYD H. SMITH, Shelby, Ohio, assignor to The Autocall Company, Shelby, Ohio, a Corporation of Ohio. Filed Oct. 13, 1927. Serial No. 225,897. 10 Claims. (Cl. 177—380.)



2. In an apparatus of the character described, the combination of a switchboard provided with a plurality of conducting plates arranged in parallel groups with sockets therebetween, a conducting plug for insertion selectively in said sockets in varying radial positions of contact to form predetermined circuit connections, a motor, an energizing circuit for said motor, a motor switch actuated by said plug, after making said predetermined circuit connections, to close said energizing circuit, said plug having a portion of its contacting periphery cut away so as to prevent actuation of said motor switch except when said plug is in a given radial position, signal means, and means actuated by said motor, for transmitting a given succession of impulses to said signal means in accordance with said predetermined circuit connections.

10. In a device of the character described, the combination of a switch-board having a plurality of contacts adapted to provide for a variety of circuit connections, a series of motor control contacts associated with each of said first-named contacts, a contact mechanism associated with said switchboard, a motor for driving said contact mechanism, additional mechanism including a code wheel normally declutched from said motor, contact mechanism mounted for cooperation with said code wheel, means for clutching said motor to said code contact mechanism and for energizing said motor, and means associated with said code wheel rendering inoperative said contact mechanism for said switchboard.

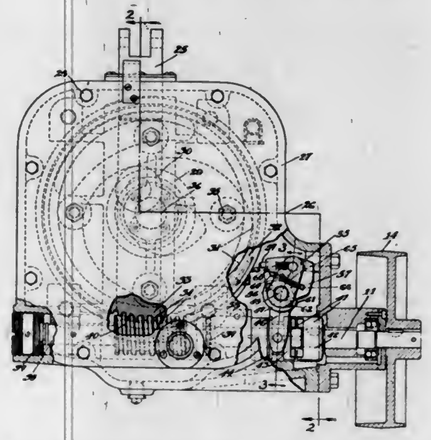
1,823,222. APPARATUS FOR CLEANING RAILROAD CARS. WILLIAM B. WHITSITT, Baltimore, Md. Filed Aug. 19, 1927. Serial No. 214,182. 14 Claims. (Cl. 15—53.)



6. In a car cleaning machine, a frame, a rack reciprocably mounted on the frame, a plurality of superimposed

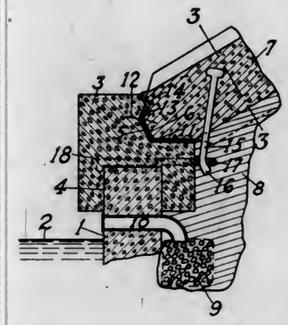
brushes comprising brush bars provided with brush bristles carried by the rack and extending transversely thereof, and means for reciprocating the rack.

1,823,223. CLUTCH. JOSEPH T. WRIGHT and JOHN T. ROWELL, Cincinnati, Ohio, assignors, by mesne assignments, to The Harris-Seybold-Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed July 20, 1925. Serial No. 44,704. 2 Claims. (Cl. 192—82.)



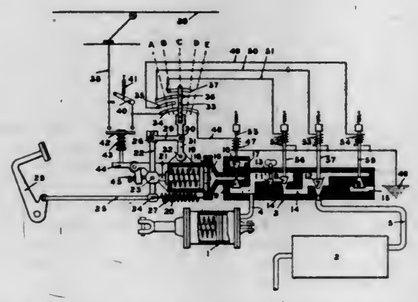
1. A device of the class described, comprising a driven shaft, means actuated thereby including a rotative member having a stud extending therefrom, a power shaft, a clutch between said power shaft and said first mentioned shaft, a rock shaft, a clutch shifting member loosely mounted on said rock shaft, a notch on said clutch shifting member, a lever on said rock shaft, a pawl on said lever adapted to engage said notch and rotatively connect the clutch shifting member to the rock shaft to throw in the clutch, a yieldably mounted pin carried by the pawl, the stud on said rotative member adapted to engage the pin and trip the pawl thereby disengaging the pawl from the notch in the clutch shifting member, a spring between the pawl and clutch shifting member adapted to rotate the clutch shifting member and throw out the clutch when the pawl is tripped, and means for operating said rock shaft.

1,823,224. SHORE PROTECTING DEVICE. ARTHUR MONROE SHAW, New Orleans, La. Filed Sept. 17, 1925. Serial No. 56,862. 3 Claims. (Cl. 61—4.)



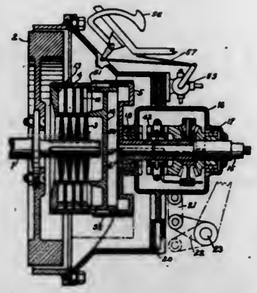
1. A sea wall comprising a vertically disposed wall, a coping disposed on the upper end of said wall, the upper end of said wall being disposed in a longitudinally disposed channel in the under side of the coping, an upwardly and inwardly inclined bank slab, the lower end of said bank slab being rockably disposed in a channel in the inner side of the coping and a positive rocking connection between said slab and coping to the rear of the coping.

1,823,225. CONTROL FOR FLUID PRESSURE BRAKES. ORVILLE C. WRIGHT, St. Louis, Mo. Filed Feb. 7, 1930. Serial No. 426,469. 8 Claims. (Cl. 303—20.)



1. In a device of the class described, the combination with a brake cylinder, of a source of fluid supply therefor, supply and release valves controlling the admission to and exhaust of fluid from said cylinder, a restricting valve interposed between the supply valve and cylinder, a control chamber communicating with said cylinder, a valve controlling said communication, and means governed by the pressure in said control chamber for operating said supply, release and restricting valves.

1,823,226. POWER TRANSMITTING APPARATUS. ADRIAN O. ABBOTT, Jr., Grosse Pointe Park, Mich. Filed Nov. 20, 1926. Serial No. 149,563. 8 Claims. (Cl. 74—26.)

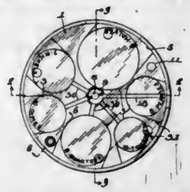


1. In a power transmitting apparatus, the combination of a driving member, a driven member adapted at times to frictionally engage said driving member with linear contact, and a separate clutch device in association with the driven member and operable to reverse the direction in which the power is transmitted, said driven member and said separate clutch device both being movable as a unit relative to the driving member by sliding movement substantially in a straight line to effect speed variations, and guide devices for guiding the driven member and separate clutch device in such movement.

1,823,227. COIN CONTAINER AND DISPENSER. MAURICE ALLAND, Atlantic City, N. J. Filed Oct. 11, 1928. Serial No. 311,832. 2 Claims. (Cl. 133—5.)

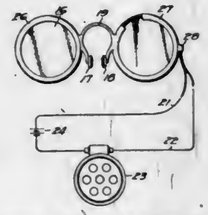
1. A coin dispensing device, comprising a member having a coin holding recess the outer portion of which opens

radially through the circumference of said member, a cap removably inclosing said recess and having a discharge aperture communicating with said recess opening, and a yieldingly positioned reciprocatory member carried by said cap and provided with two projections, the axis of reciprocation of said last-named member being at an angle with the radial direction of the opening of said recess, which is diagonally directed with respect to a radius of



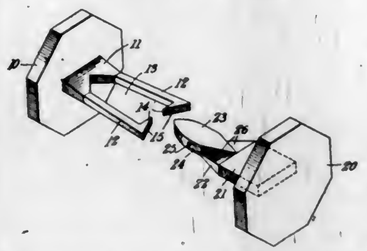
said coin containing member passing through said recess, one of said projections normally obstructing and preventing the escape of coins through said opening and the other projection serving to eject a coin through said discharge opening diagonally with respect to said axis of reciprocation and laterally free from said reciprocatory member, upon the movement of said last-named member and the simultaneous removal of said first projection diagonally from and towards one side of said opening.

1,823,228. AUDIPHONE. PHILIP F. APPEL, Seattle, Wash. Filed Jan. 20, 1931. Serial No. 509,970. 8 Claims. (Cl. 181—23.)



1. In an audiphone of the character described, a frame adapted to be worn before the eyes, a vibratory member mounted on said frame and an electromagnet for vibrating said member, said electromagnet being disposed within said frame.

1,823,229. SEPARABLE FASTENER. PAUL BALBAUD, Paris, France. Filed Aug. 1, 1930, Serial No. 472,461, and in France Mar. 10, 1930. 3 Claims. (Cl. 24—230.)



1. A separable fastener comprising a member composed of a pair of unitary spring arms having opposed inreaching detents provided with inwardly inclined front faces, a second member having a flattened conical head to press said detents apart when forcibly applied, said head having recesses in its side edges to receive said detents thereby to prevent retraction, and ramps on said second member for automatically causing separation of said detents upon the application of further compressive force on said head and detents.

1,823,230. METHOD OF RESTORING MOISTURE AND ADDING ACID TO REACTIVATED CLAY. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Filed Jan. 3, 1928. Serial No. 244,348. 8 Claims. (Cl. 252—2.)

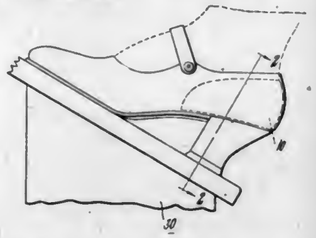
1. A method of adding activating fluids to a reactive clay, comprising: separating the smaller particles from the larger particles of said reactivated clay; and introducing said activating fluids into an air stream carrying said smaller particles.

1,823,231. SHOE STIFFENER. HARRY H. BECKWITH, Brookline, Mass. Filed June 16, 1928. Serial No. 285,993. 4 Claims. (Cl. 36—77.)



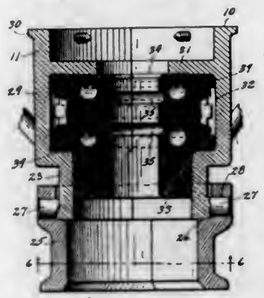
1. A shoe stiffener comprising a single layer of cloth and a single layer of absorbent paper fixed in face to face relation with an adhesive, the whole being saturated with a thermoplastic stiffening agent.

1,823,232. METHOD OF TREATING THE COUNTER PORTIONS OF SHOES. HARRY H. BECKWITH, Brookline, Mass. Filed July 5, 1928. Serial No. 290,310. 2 Claims. (Cl. 12—146.)



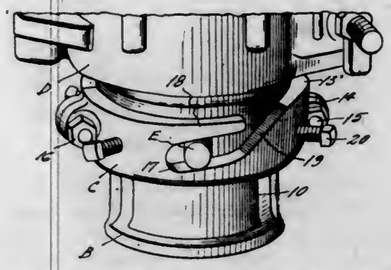
1. The method which comprises forming a shoe having a counter stiffener therein shaped to the general contour of the foot, softening said counter stiffener, molding said counter including said softened stiffener to the foot of the wearer, and permitting said stiffener to rigidify in such molded condition.

1,823,233. TUBING STRIPPER. IVAN C. BELL, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Apr. 29, 1927. Serial No. 187,667. 9 Claims. (Cl. 286—16.)



1. A tubing stripper member comprising a body having a depending flexible apron provided with outwardly and longitudinally spaced reinforcing projections extending throughout the length of said apron, for sustaining the apron throughout its length.

1,823,234. ADAPTER FOR CASING HEADS. IVAN C. BELL, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Nov. 21, 1927. Serial No. 234,703. 3 Claims. (Cl. 285—175.)



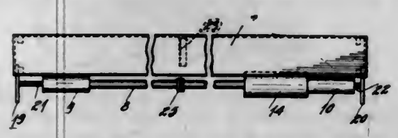
3. In an adapter for an oil saver, an upright axial pedestal having a base for engaging in a casing head, an outwardly directed annular seat extending from the top of the pedestal and overhanging the same, and an annular upright flange extending from the outer margin of the seat and surrounding the same, the flange having bayonet slots provided with inclined guides at their open ends, and set screws penetrating the flange.

1,823,235. FURNACE GRATE BAR. HERBERT BOYD BRYDON, Oak Park, Ill., assignor to Ernest E. Lee Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1928. Serial No. 317,292. 1 Claim. (Cl. 126—167.)



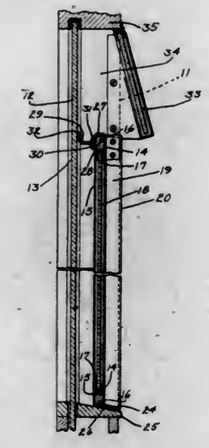
A grate bar substantially M-shape in cross-section providing a pair of air chambers between the legs thereof, said bar having a plurality of transverse openings extending through all of said legs and communicating with said air chambers to form a pair of spaced portions of substantially triangular cross-section of which the bases lie in the same plane, the material of the legs bounding the side of the transverse openings opposite to said spaced triangular portions lying in a single plane subtantially parallel to and having an overlapping relation with the bases of said latter portions whereby air from said chambers may communicate freely with fuel on said grate bar and said fuel will be prevented from falling through said grate bar.

1,823,236. VENETIAN BLIND. FRED J. BURNS, Saginaw, Mich., assignor to The Columbia Mills, Inc., Saginaw, Mich., a Corporation of New York. Filed Sept. 26, 1930. Serial No. 484,565. 11 Claims. (Cl. 156—17.)



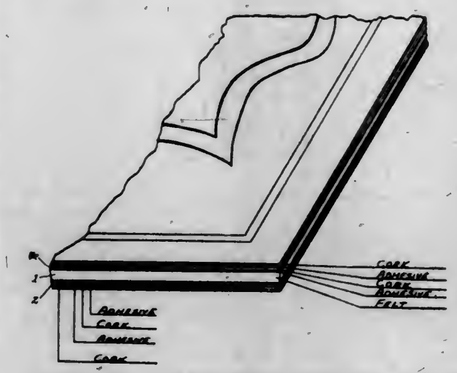
4. A venetian blind mechanism including a supporting member, end plates removably mounted thereon and formed with centrally disposed laterally projecting stub shafts, a transversely shiftable winding roller journaled thereon, said roller being removable as a unit from said supporting member.

1,823,237. VEHICLE STORM SASH. ORVILLE S. CAESAR, Cleveland, Ohio, assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 5, 1927, Serial No. 173,176. Renewed Aug. 1, 1930. 4 Claims. (Cl. 296—44.)



1. In combination, a vehicle sash frame having a glazed panel slidable therein, a storm sash, including a frame having oppositely extending flanges adapted to be seated against the outer surfaces of the vehicle sash frame, said flanges being offset from the medial plane of the storm sash whereby said sash will be positioned within the opening of the vehicle sash frame, a channel member secured to the upper inner portion of the storm sash frame, and flexible means demountably supported in said channel member and adapted to engage the surface of said panel to provide substantially an air-tight joint between the storm sash and said glazed panel.

1,823,238. PROCESS OF MAKING FLOORING AND PRODUCT THEREOF. JOHN B. CAMPBELL, Salem, N. J., assignor, by mesne assignments, to Carthage Mills Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 7, 1926. Serial No. 133,790. 2 Claims. (Cl. 154—49.)

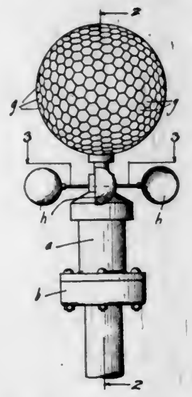


1. A floor covering material formed of a flexible base with a body of floor covering built up thereon, as distinguished from a coating thereof, said body formed of successive built up films of powdered vegetable matter held in place by an adhesive, formed of a cellulose ester.

1,823,239. EMANATION SEED. ARMANDO CERVI, New York, N. Y., assignor to The Radium Emanation Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 16, 1926. Serial No. 81,856. 2 Claims. (Cl. 174—177.)

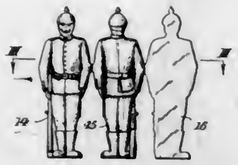
1. As a new article of manufacture, a metal seed containing radium emanation and carrying on its outer surface, agar agar adapted to eliminate the secondary beta radiation.

1,823,240. ROTATING SPHERICAL BEACON. WINDSOR N. COBB, San Francisco, Calif. Filed Apr. 19, 1928. Serial No. 271,253. 1 Claim. (Cl. 88—1.)



In a beacon light of the character described comprising, a unitary spherical rotatable body whose surface bears contiguous polyhedral plane light reflecting facets having common perimeter segments, and the said facets lying in parallel circles whose planes are inclined at an oblique angle with its vertical axis, whereby when the spherical body is rotated light beams will be reflected therefrom continuously in inclined planes sweeping across all points on the horizon.

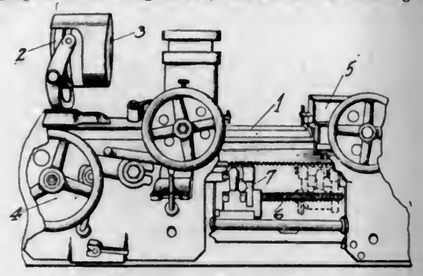
1,823,241. CARD NOVELTY. FRED WEINDEL, Jr., Allentown, Pa., assignor to L. F. Grammes & Sons, Inc., Allentown, Pa., a Corporation of Maryland. Filed Dec. 23, 1930. Serial No. 504,408. 7 Claims. (Cl. 41—18.)



1. The method of fabricating card novelties from thin adhesive-backed metallic sheet material, by forming from such material a blank with unembossed edge-attached profiled sections in series with a pair of similarly profiled edge-attached embossed sections; moistening the adhesive backing of the blank; and infolding the plain sections of the blank between the embossed sections.

1,823,242. CHASING ATTACHMENT FOR LATHES. THEODORE A. WETTIG and CHARLES MEIER, Cincinnati, Ohio, assignor to The Acme Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 18, 1927. Serial No. 184,533. 3 Claims. (Cl. 82—5.)

1. A transferable lead screw engaging device for a turret lathe, having more than one tool carrying unit, comprising in combination a chasing and indicating mechanism, a housing and support for the entire lead screw engaging and indicating device, and means for securing said



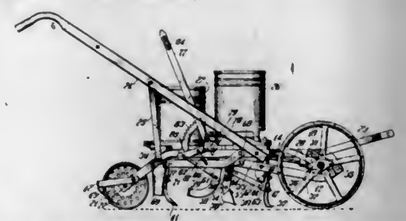
housing in operative position on either of said tool carrying units without removal of the apron from said tool carrying unit.

1,823,243. METHOD AND APPARATUS FOR LAPPING COLOR FILM EMBOSSING ROLLERS. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 29, 1928. Serial No. 315,771. 5 Claims. (Cl. 51—278.)



2. A method of lappng lenticular film embossing rollers which comprises providing a cylinder with a plurality of fine guide lines, turning said cylinder and moving wires under tension over the rotating cylinder, the wires being positioned by the guide lines, and applying a very fine lapping compound between the wires and cylinder.

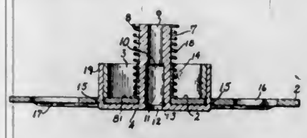
1,823,244. PLANTER. CHARLES H. WHITE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 13, 1927. Serial No. 198,357. 19 Claims. (Cl. 111—80.)



1. The method of distributing fertilizer and planting seed which comprises opening a furrow, mixing fertilizer with the soil turned up from said furrow, refilling the furrow with the mixed fertilizer and soil, opening a second furrow in such mixture, and planting the seed therein.

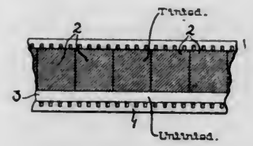
15. The method of distributing fertilizer and planting seed which comprises opening a furrow, mixing fertilizer and soil turned up from the furrow, and planting the seed in the mixed fertilizer and soil replaced in the furrow.

1,823,245. MOTION PICTURE FILM WINDING DEVICE. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 9, 1929. Serial No. 361,693. 3 Claims. (Cl. 242—55.)



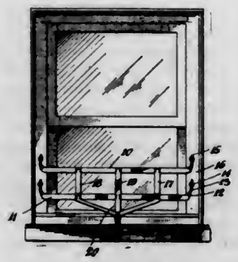
1. In a winding device for motion picture film, the combination with a flange, of a pair of concentric hub members, one hub being slidably carried by the flange, and means for separating the two hub members by sliding the flange on one hub.

1,823,246. METHOD OF TINTING FILM FOR USE IN SOUND REPRODUCTION. ALBERT A. YOUNG, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,404. 2 Claims. (Cl. 88—16.2.)



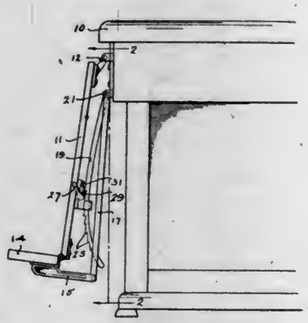
1. The method of tinting the picture areas of a photographic film support in which the sound record portion is preserved untinted while preventing shrinkage of the support which comprises applying to the picture areas of said support a dye dissolved in a solution comprising a solvent for the support and the dye, and a non-solvent for the support which has the property of reducing the rate of evaporation of the solvent whereby the tendency of the support to buckle is eliminated.

1,823,247. PROTECTING OR SAFETY SEAT FOR WINDOW CLEANERS. ADAM ZAHN, Long Island City, N. Y. Filed Mar. 25, 1930. Serial No. 438,716. 4 Claims. (Cl. 304—24.)



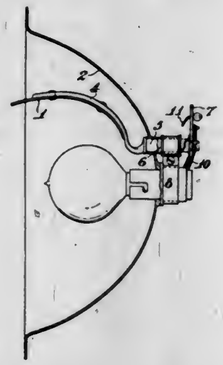
1. A protective device for window cleaners comprising a harness composed of longitudinal, spaced, parallel straps, cross straps connecting the longitudinal straps, braces bracing some of the cross-straps to the median cross-strap, rings at the ends of the longitudinal straps, a ring at the end of the median cross strap, and snap hooks secured in said rings for attachment of the straps to eyes in the window frame.

1,823,248. EXAMINING TABLE LEG REST. HARRY S. ALLISON, Indianapolis, Ind., assignor to W. D. Allison Company, Indianapolis, Ind., a Corporation of Indiana. Original application filed Apr. 30, 1927, Serial No. 185,132. Divided and this application filed Feb. 24, 1930. Serial No. 430,786. 2 Claims. (Cl. 45—50.)



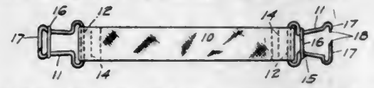
1. The combination with a table, of a leg rest hinged to the table, a foot rest hinged to the leg rest, an arm fixed to the foot rest and extending toward the table, a bar pivotally attached to the arm and to the table, a rack bar hinged by its upper end to the table and slidably attached to the leg rest and otherwise unattached, a pawl automatically engaging the rack bar to maintain the leg rest at selective positions and manually operated means for releasing the bar from the pawl.

1,823,249. HEADLIGHT OF AUTOMOBILES. JOHN BAYLEY, Lower Withington, Chelford, England. Filed Aug. 24, 1929, Serial No. 388,225, and in Great Britain Sept. 3, 1928. 1 Claim. (Cl. 240—45.)



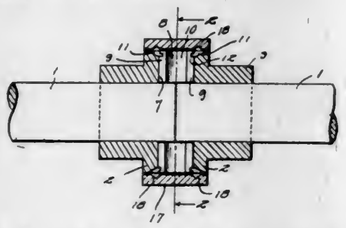
In combination with a headlamp including a reflector and a lamp socket, a lamp carried by said socket, a bearing formed on and extending rearwardly from the reflector, a spindle journaled in said bearing, a screen carried by said spindle, said screen being disposed between the lamp and the reflector and being rotatable by said spindle to different angular positions relative to the lamp and the reflector, a clip including portions embracing the lamp socket and the bearing to reinforce the latter, a lever carried by said spindle, a flexible member connected with said lever for swinging the same to rotate said spindle and said screen, and a spring connected at one end with said lever and at its other end with said clip constantly tending to urge the lever, spindle and screen to a normal position.

1,823,250. GARMENT SHOULDER STRAP RETAINER. JOHN BLAZICH, Oakland, Calif. Filed Mar. 17, 1930. Serial No. 436,504. 4 Claims. (Cl. 24—87.)



1. A shoulder strap retainer, in combination, a strip of fabric, transversely pinning normally expanded resilient clips attached to opposite ends of said strip, and a closing device for said clips adapted to contract said clips by longitudinal movement thereon, said clips having transversely extending arcuate projections formed at both ends adapted to prevent removal of said closing device over the ends thereof.

1,823,251. SHAFT COUPLING. KARL E. BLUM, Flat River, Mo., assignor of one-half to John W. Houser, Desloge, Mo. Filed May 25, 1929. Serial No. 365,932. 1 Claim. (Cl. 287—130.)



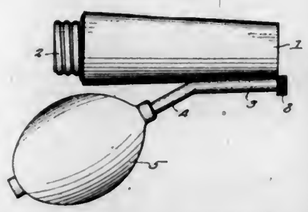
A shaft coupling comprising a pair of plates each designed to be secured upon a shaft end and to be brought into face abutting relation, each of said plates having a series of substantially T shaped key slots cut thereinto from the peripheral face thereof, the stem portions of the slots opening through the abuting faces of the plates, and key members of substantially H shaped design each having each side positioned in a T shaped slot to secure the plates together, each of said plates having the peripheral surface thereof recessed at the inner end of each slot to facilitate the engagement of one side of a key therein for removal of the same and key retaining means spacedly positioned about the peripheries of said plates.

1,823,252. MAGNETICALLY OPERATED SWITCH. FRANZ A. BOEDTCHER, Bergenfield, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 22, 1926. Serial No. 149,886. 15 Claims. (Cl. 200—87.)



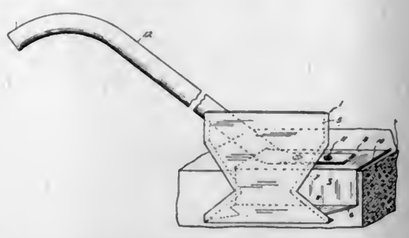
1. In an assembly of the character described, a magnetically operable switch comprising a movable current switching member, a magnet mounted to travel past the current switching member and in proximity thereto, said magnet causing movement of said member to an operated position as it comes opposite thereto, and means for precluding rebound of said member from said operated position as the magnet passes beyond said member.

1,823,253. TOILET DEVICE. JOSEPH ELMER BRYANT, Los Angeles, Calif. Filed Mar. 28, 1930. Serial No. 439,767. 1 Claim. (Cl. 221—61.)



An article of the class described including a container having an outlet, a nozzle fixedly connected to and extending along the outside of the container, said nozzle having an inlet in constant communication with the outlet of the container, air forcing means connected to one end of the nozzle, the other end thereof being open, a tubular valve having open ends, said valve being mounted for rotation in the nozzle and having one end projecting beyond the open end of the nozzle, means on said projecting end for rotating the valve in the nozzle, there being an opening in the valve movable into and out of register with the opening in the nozzle and container to control the flow of material into the valve from the container, and cooperating means on the nozzle and valve for stopping the rotation of the valve in either direction when the container is in communication with the valve and when communication between the valve and container is completely cut off, respectively.

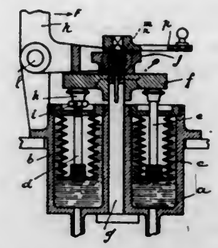
1,823,254. LAWN EDGING TOOL. EDWARD J. CASSE, Detroit, Mich. Filed Oct. 8, 1930. Serial No. 487,169. 2 Claims. (Cl. 97—227.)



1. A lawn edging cutter fashioned from a single metal plate, and comprising a horizontal cuting member having a reentrant V-shaped cutting edge, a vertical cutting member rising from a lateral margin of said horizontal member, and also formed with a substantially V-shaped cutting edge, a guide member rising vertically from the other lateral margin of said horizontal member, and a second guide member laterally projecting from the top margin of the first-mentioned guide member.

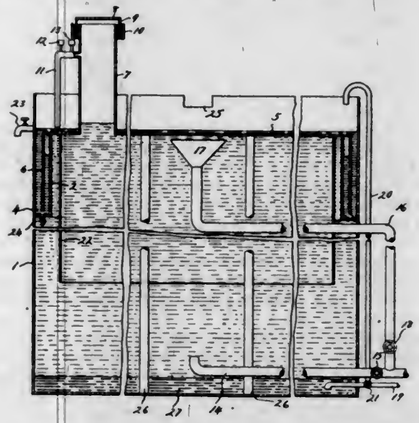
1,823,255. HYDRAULIC BRAKING SYSTEM FOR AIRPLANES. MAURICE CHARLES, Courbevoie, France. Filed June 4, 1931, Serial No. 542,175, and in France June 14, 1930. 9 Claims. (Cl. 244—2.)

1. A hydraulic braking system for airplanes which comprise in combination, two braking pressure generating means, each corresponding to one side of the airplane respectively, two parallel sliding rods, one for each pressure generating means, a plate for operating said rods having a cam shaped under face, means for causing said plate to move in a direction parallel to said rods, and means for



rotating said plate whereby the action exerted by said plate on the two rods is no longer equal, a rudder foot bar, and articulated means for connecting said foot bar to said plate so that the rotary motion of said plate is controlled by said foot bar.

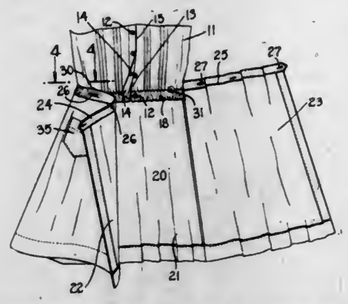
1,823,256. OIL TANK AND METHOD OF STORING OIL. EDWIN M. CLARK, Clarkston, Mich. Filed Sept. 12, 1927. Serial No. 218,995. 17 Claims. (Cl. 220—1.)



1. In a device of the character described, the combination with an open-topped oil storage tank, of a trough extending interiorly upon and around the upper portion of said tank for receiving a sealing volume of water, a vertically movable cover member disposed within the tank above said trough provided with a marginal depending flange freely engaging in said trough, means for discharging water into the tank upon said cover member, an oil discharge pipe having its inlet disposed slightly below the normal level of said cover member, and means within said tank prohibiting a direct flow of water from said trough to the inlet of said discharge pipe.

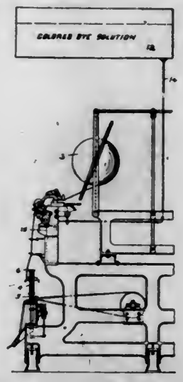
17. The method of storing a body of oil within a tank, consisting in engaging said body by a freely vertically movable cover member, maintaining a cushioning body of water within the tank beneath the oil, maintaining another and relatively raised body of water adjacent to the cover member within the tank, isolated from said cushioning body, limiting down travel of the cover, and discharging water from said raised water body to said cushioning water body through the oil to maintain contact of the oil body with the cover, responsive to a volumetric decrease of the oil body, when the cover is in its lower limiting position.

1,823,257. LADY'S GARMENT. LEO M. COOPER, Yonkers, N. Y. Filed Aug. 28, 1930. Serial No. 478,430. 1 Claim. (Cl. 2—74.)



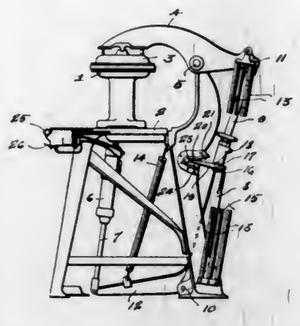
A woman's garment having a waist portion split down the front along a substantially straight median line and having a front lower edge extending to the waistline of the wearer, a plurality of fastening elements on the lower edge of the front of said waist, one of said fastening elements positioned near the side of the waist on one side of the split and another one of said fastening elements positioned near the side of the waist on the opposite side of said split, and a skirt portion permanently fixed to said waist portion only at the rear thereof and having oppositely extending detachable front portions free from said waist portion, each extending from one side of the garment to the other thereby covering substantially the entire lower front part of the wearer's body in reversible overlapping relation with the other front skirt portion independently of the waist portion, each of the upper edges of said front skirt portions terminating substantially at the waist line of the wearer and each of said upper edges having a plurality of complementary fastening elements positioned at opposite sides of the front skirt portion for reversibly attaching said front skirt portions to said first mentioned fastening elements on the lower edge of the front waist portion at the opposite sides thereof.

1,823,258. ART OF SPINNING AND TREATING PAPER. JOSEPH D. CRAMER and ALBERT J. ROGERS, Goshen, Ind., assignors to The Chase Bag Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,110. 1 Claim. (Cl. 117—3.)



A method of producing twisted strands of paper, consisting in spinning a narrow thin strip of paper into a strand and impregnating the strip in the same operation by indirect application with a definite amount of preservative coloring solution having strengthening and water repelling properties.

1,823,259. ACTUATING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Oct. 29, 1928, Serial No. 315,704. Renewed Oct. 29, 1930. 6 Claims. (Cl. 68—9.)

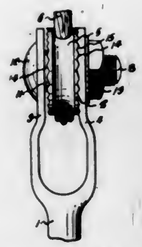


1. A pressing machine including cooperating pressing elements, one of which is movable toward and from the other, mechanism for actuating the movable element including an actuator, motion transmitting means between the actuator and the movable pressing element including a toggle, means for automatically shortening the effective length of the toggle as the movable press element moves from preliminary closed position into final closed position, and means for thereafter increasing the length of the toggle as the toggle passes its dead center line.

1,823,260. STENCIL FOR COPYING PURPOSES. MAX DESENISS, Hamburg, Germany, assignor to Alexander Feurich, Hamburg, Germany. Filed Oct. 26, 1929, Serial No. 402,788, and in Germany July 24, 1928. 2 Claims. (Cl. 41—38.6.)

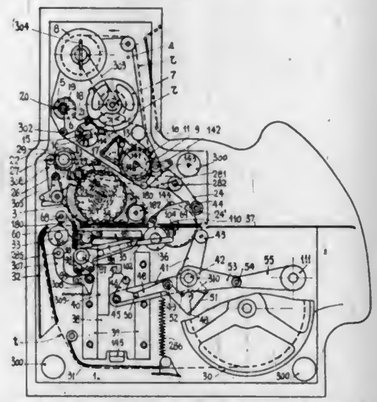
1. The herein described sheet for making stencils for copying purposes, comprising a porous foundation having a coating of a product of chlorination of caoutchouc and a softening agent.

1,823,261. EYE FOR ANCHOR RODS, EYE BOLTS, AND THE LIKE. WILBERT NELSON ELLIOTT and WINFORD GLADSTONE MILNE, Hamilton, Ontario, Canada, assignors to N. Slater Company, Hamilton, Ontario, Canada, a Corporation of Canada. Filed May 25, 1931, Serial No. 539,981, and in Canada June 17, 1930. 6 Claims. (Cl. 24—123.)



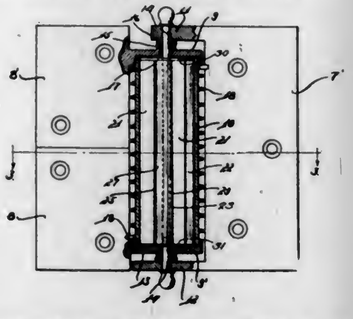
6. An eye for anchor rods and the like comprising a bifid portion carried upon the end of the rod, serrations upon the inner face of one of the legs of the bifid portion, a cable receiving spool contained within the bifid portion, the thickness of said spool being less than the distance between the inner faces of the legs of the bifid portion, serrations upon the side face of the spool adjacent the serrated face of the leg, a bolt extending across the bifid portion and upon which the spool is mounted, and a shoulder formed upon the head end of the bolt and projecting through an orifice in the other leg of the bifid portion to bear against the spool and move it into engagement with the serrated face of the other leg when the bolt is tightened.

1,823,262. COMPUTING MACHINE. ATTILIO ERRERA, Turin, Italy, assignor to Società Italiana Registratori Sir, Turin, Italy, a Company of Italy. Filed Aug. 9, 1927, Serial No. 211,780, and in Italy Aug. 20, 1926. 16 Claims. (Cl. 101—66.)



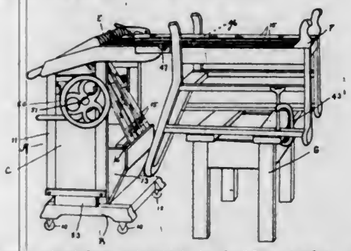
1. A ticket printing and delivering attachment for computing machines, comprising means for supporting a ticket strip, a roller for feeding said strip, means for severing a ticket from the strip, a platen, a roller for ejecting said ticket, said rollers being driven by a shaft of the computing machine, pressure rollers for respective cooperation with said feeding and ejecting rollers, members carrying said pressure rollers, a leading cam on said shaft controlling one of said carrying members, a trailing cam on said shaft controlling the other carrying member, spring means acting on said members to carry them and their pressure rollers into cooperation with their respective feeding and ejecting rollers and cams, means for shifting said platen, a cam on said shaft intermediate said leading and trailing cams and operating said platen shifting means, controlling means for putting said platen shifting means into operative and inoperative condition, means restraining said spring actuated members against motion towards their respective cams, means for putting said restraining means in released and engaged positions.

1,823,263. COMBINATION HINGE AND DOORCHECK. JULIUS FABRY, Detroit, Mich. Filed Apr. 29, 1929. Serial No. 358,814. 2 Claims. (Cl. 16—54.)



1. A combination hinge and door check of the class described comprising: a hinge leaf; a cylinder forming barrel; a pair of sections cooperating to form a cooperating hinge leaf; a threaded projection extending outwardly from one edge of each of said projections, each of said sections being threadable on said barrel for forming a closure therefor; knuckles projecting outwardly from said first mentioned hinge leaf; a pintle projecting through said knuckles and through said closures and extending axially of said barrel for swingably mounting said hinge leaf relatively to said hinge leaf sections, said pintle being rotatable with said first mentioned hinge leaf.

1,823,264. WEB HOLDING MACHINE. JOHN A. FLOOD, Minneapolis, Minn. Filed June 25, 1925. Serial No. 39,629. 2 Claims. (Cl. 254—51.)



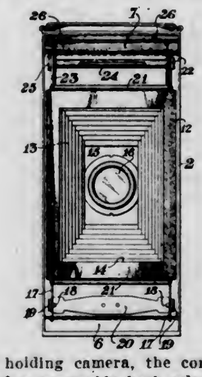
1. A web stretcher adapted to hold a series of webbing rolls, a table over which the webbing is adapted to extend in a manner so that the free end of the webbing can be attached to an article, self-acting gripping members adapted to engage the webbing and pinch the same against said table, means for releasing said members simultaneously and means for rotating said table with said gripping members to stretch the webbing very tight.

1,823,265. METHOD FOR TREATING DRIED FRUIT PARTICULARLY RAISINS. THOMAS W. W. FORREST, Fresno, Calif., assignor to Sun Maid Raisin Growers of California, Fresno, Calif., a Cooperative Association of California. Filed Oct. 6, 1925. Serial No. 60,909. 5 Claims. (Cl. 99—11.)

1. The method of processing dried raisins which includes seeding the same, expressing the oil from the seeds, clarifying the oil and reapplying it with agitation to the raisins.

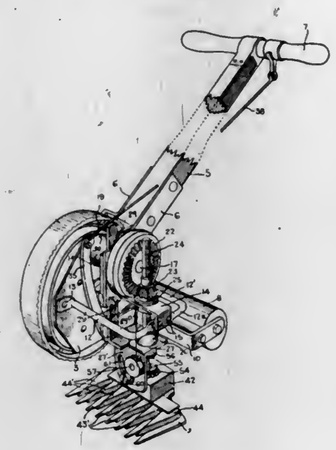
3. A new article of manufacture comprising dried raisins with their exteriors coated with oil of the seeds of raisins.

1,823,266. CAMERA CONSTRUCTION. CARL C. FUERST, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed July 12, 1930. Serial No. 467,448. 13 Claims. (Cl. 95—32.)



1. In a roll holding camera, the combination with a body portion, of a removable back adapted to cooperate therewith, a latch for holding the back on the body of the camera, a winding key carried by the camera and being directly connected to the latch, whereby the latch may be operated by the winding key.

1,823,267. LAWN MOWER. ADRIAN J. GILARDI, Seattle, Wash. Filed Dec. 15, 1928. Serial No. 326,294. 11 Claims. (Cl. 56—271.)



1. A lawn mower comprising a frame having guides thereon, a single ground wheel revolubly mounted on and functionally supporting the frame, a cutter mechanism supported by the frame and vertically adjustable in the guides, and means for retaining the cutter mechanism at different positions of adjustment.

1,823,268. STOP GAUGE. JAMES GORDON, Sorrento, Argentina. Filed June 21, 1930, Serial No. 462,871, and in Great Britain July 5, 1929. 7 Claims. (Cl. 144—84.)

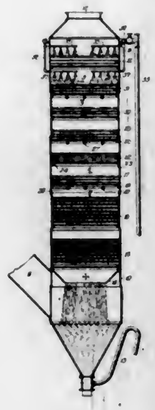


1. A stop gauge comprising a plurality of stops, a support for said stops along which they are adjustable to different relatively spaced positions, each stop having a vertical working face and a locating element supporting surface inclined downwardly and outwardly toward said working face, and a locating element supported on said surface for movement bodily under the influence of gravity to an operative position projecting beyond said working face and for retraction to an inoperative position inwardly with respect to said working face.

1,823,269. GAS WASHER. JOHN PHILIP GRILLI, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1929. Serial No. 369,589. 4 Claims. (Cl. 261—114.)

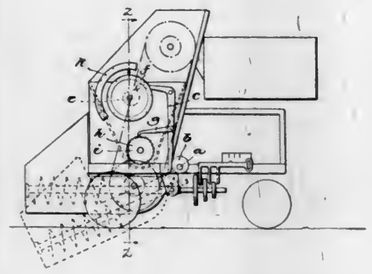
1. A stationary gas washer, comprising in combination a tower having a gas inlet and a gas outlet, water supply means for said tower, hurdles in said tower, and baffles

composed of sheets of wave-like form, some of said sheets having channels extending in a vertical direction and



others in a horizontal direction, the said sheets being placed in side to side relation with each other and extending across the entire cross section of the tower.

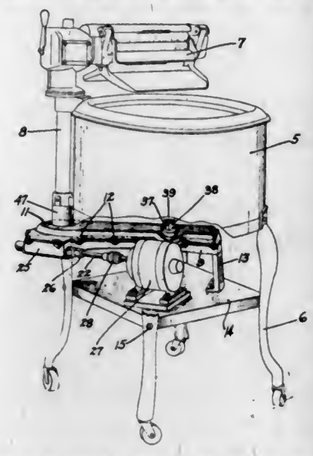
1,823,270. DEVICE FOR THE PROPORTIONATE FEEDING OF MIXING INGREDIENTS TO CONCRETE AND MORTAR MIXING MACHINES. ROBERT HAHN, Neunkirchen, Germany. Filed Aug. 1, 1929, Serial No. 382,795, and in Sweden Aug. 4, 1928. 1 Claim. (Cl. 83—73.)



A device for feeding ingredients to a mixing machine comprising a receptacle, a variable speed feed worm in the receptacle, a fixed scale, a relatively rotatable scale, an eccentric operatively connected with the rotatable scale and mechanism controlled by the rotatable scale for varying the speed of rotation of the worm.

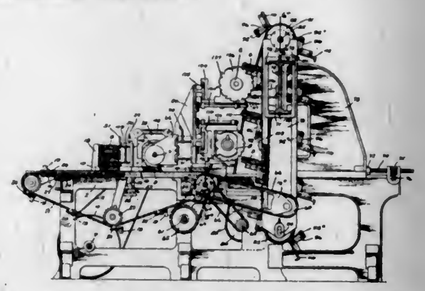
1,823,271. WASHING MACHINE TRANSMISSION. HERMAN C. HIRSCHY, Duluth, Minn., assignor to The Hirschy Company, Duluth, Minn., a Corporation of Minnesota. Filed Aug. 21, 1925, Serial No. 51,612. Renewed Jan. 14, 1929. 14 Claims. (Cl. 68—15.)

1. In combination with a washing machine of the dolly type including a tub having supporting legs, a washer shaft, and a wringer shaft, and a casing arranged beneath the tub and supported at one end by a tub leg and at the opposite end by a platform supported by the tub legs, the



casing having a wringer shaft rotating the washer shaft, oscillating mechanism including stub shafts having loose telescopic connection with respective shafts.

1,823,272. WOODWORKING MACHINE. ARTHUR B. JOHNSON, Minneapolis, Minn., assignor to Andersen Frame Corporation, Bayport, Minn., a Corporation of Wisconsin. Filed Jan. 12, 1931. Serial No. 508,055. 29 Claims. (Cl. 144—5.)

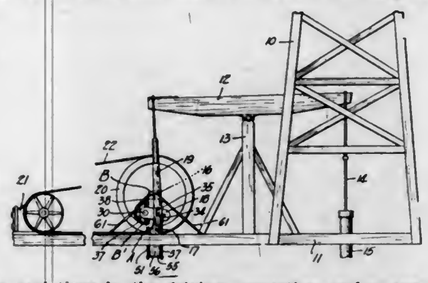


1. In a machine of the class described, the combination with a suitable frame, of a drive shaft mounted thereon, cutter heads adjustably mounted upon said shaft to be driven thereby, skids supported beneath said heads, rack bars extending transversely of said skids, means associated with said skids and engaging said rack bars to adjust said skids to vary the distance between them and to align them with respect to said heads, a hopper wherein the work is placed one piece over another, feed belts mounted in said skids beneath said hopper and having lugs at intervals to engage the bottom piece of work and feed it beneath said cutters the adjustment of said cutter heads and said skids adapting them for varying lengths of the pieces of work.

1,823,273. WELL PUMPING APPARATUS. GEORGE I. KENISTON, Taft, Calif. Filed Nov. 4, 1930. Serial No. 493,437. 7 Claims. (Cl. 255—11.)

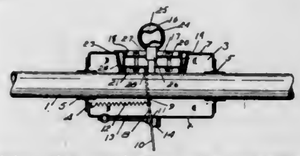
1. In well pumping apparatus, a jack post, a substantially L shaped bracket having one portion provided with a bearing and overlying the top of the jack post and another portion overlying a vertical side of the jack post, a drive shaft journaled in the bearing, a second bearing on the second portion of the bracket, a countershaft journaled in the second bearing, a driving connection between

the shafts, means for slidably mounting the second bearing on the second portion of the bracket parallel to the first bearing for adjustment relative to the latter to compensate



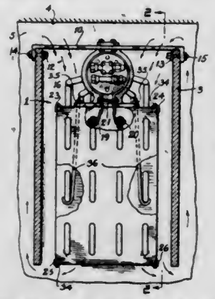
for variations in the driving connection, and means for securing the second bearing in a selected position of adjustment.

1,823,274. JOINT. CORTTIS R. KILBURN, Erie, Pa. Filed Dec. 5, 1929. Serial No. 411,776. 15 Claims. (Cl. 287—14.)



1. In a joint, the combination of a connecting member having two guide sleeves, one of which is movable relatively to the connecting member; bars arranged in said sleeves; and means actuated by a rotation of one of the bars on its axis locking said sleeves relatively to each other.

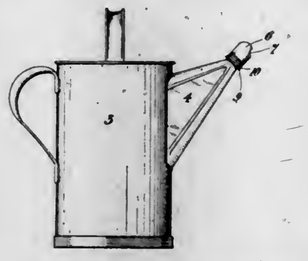
1,823,275. MECHANICAL REFRIGERATION UNIT. LESTER U. LARKIN, Atlanta, Ga., assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio. Filed Mar. 25, 1929. Serial No. 349,859. 11 Claims. (Cl. 62—95.)



2. A refrigerating unit including a plurality of pipes spaced apart and in parallel relation to each other, a plurality of rectangular heat absorbing fins, each of which is in frictional engagement with all of said pipes and extends perpendicularly thereto, and means for protecting the corners of all of said fins and for holding them in spaced relation to each other.

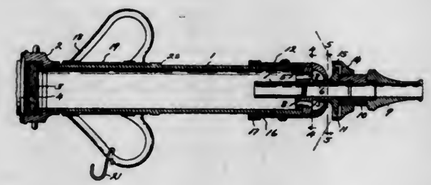
1,823,276. WATERING CAN FOR FILLING AUTOMOBILE RADIATORS. ALBIN A. LUCIUS, South Orange, N. J., assignor to The Central Stamping Company, Newark, N. J., a Corporation of New York. Filed Apr. 22, 1929. Serial No. 357,180. 1 Claim. (Cl. 221—11.)

A watering can for filling automobile radiators including a spout having a dome-shaped cap having a substantially spherical end wall, said cap being closed at the end and having a lateral aperture in said spherical wall below the axis of said cap, said aperture being of less diameter than the diameter of said cap so that the wall of said cap which defines the edge of said aperture is inclined abruptly cir-



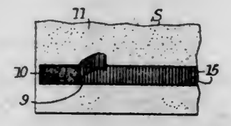
cumferentially to the surface of the stream flowing through said aperture, whereby water flowing along said wall toward said aperture pushes against the column flowing axially through said aperture, reducing its contactive pressure against the edge of said aperture.

1,823,277. FIRE HOSE NOZZLE. GEORGE F. LUM, Detroit, Mich. Filed June 10, 1930. Serial No. 460,218. 5 Claims. (Cl. 299—145.)



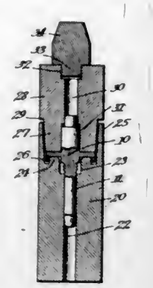
1. A fire hose nozzle comprising an elongated tubular body, a hose coupling member carried by the rear end of said body, a plug inserted in the forward end of said body having a central and an eccentric outlet, a forward tubular extension from said plug in communication with the central outlet of the plug and of lesser exterior diameter than said body, a nozzle tip carried by said extension, a deflector disk upon said extension rearwardly of the nozzle tip, and a sleeve longitudinally adjustable upon said body and having its forward end inturned and apertured to form a passage surrounding said tubular projection and coacting with said deflector disk to regulate the stream deflected thereby.

1,823,278. X-RAY FLUORESCENT SCREEN MOUNTING. FREDERICK C. MARTIN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 21, 1927. Serial No. 221,113. 3 Claims. (Cl. 250—34.)



1. An X-ray intensifying screen including a base, an adhesive area carried by the base, and an adhesive protective layer covering the adhesive area, said protective layer comprising a sheet of roughened metal foil adapted to be removed readily from said adhesive area.

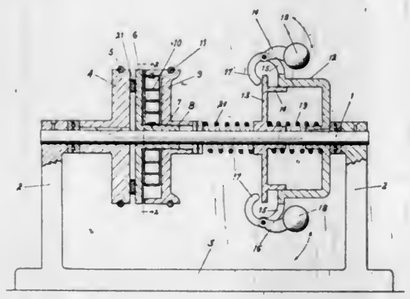
1,823,279. METHOD AND APPARATUS FOR TESTING AND TRUING EMERGENCY VALVES OF TRIPLE VALVES. DEWEY M. MILLER and GEORGE D. THOMAS, Tralee, W. Va.; said Thomas assignor to said Miller. Filed May 1, 1928. Serial No. 274,273. 23 Claims. (Cl. 153—32.)



1. The method of testing and truing double stem valves comprising a pair of stems extending from opposite sides of a valve disk, consisting in passing one of the stems through a truing surface and into a truing bore of a size to receive only true stems, inserting the other valve stem through the second truing surface and into a truing bore of a size to receive only true stems and then moving one truing surface toward the other to engage said valve disk to straighten both of said stems.

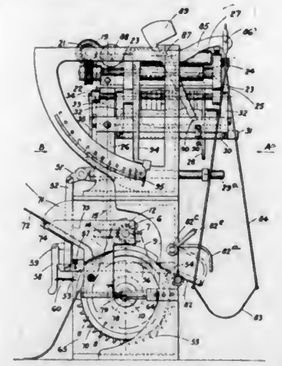
5. A testing and truing device for double stem disk valves comprising a pair of relatively movable dies, each having a truing surface for engagement with opposite sides of the valve disk, each die being provided with a truing bore for the reception of one stem of the double stem valve, said dies being adapted to be pressed together to cause said truing surfaces to move together to straighten said stems and to dispose said disk in proper relationship to said stems.

1,823,280. COMPENSATING GOVERNOR. JOHN M. MILLER, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y. Filed Nov. 6, 1929. Serial No. 405,261. 7 Claims. (Cl. 192—104.)



1. A speed control governor, comprising in combination, a driving member mounted for rotation, a centrifugal governor rotatable with said driving member, a clutch member disposed in juxtaposition to the driving member, a driven member between said clutch member and governor, a tension spring disposed between said governor and driven member and adapted to maintain the clutch member in frictional engagement with the driving member, means controlled by the governor for automatically varying the tension of said spring in accordance with the speed of rotation of the driving member, and cooperating means carried by the clutch member and driven member for varying the tension of said spring in accordance with the load on said driven member.

1,823,281. CIGARETTE MAKING MACHINERY. WALTER EVERETT MOLINS, London, England. Filed Sept. 25, 1926, Serial No. 137,715, and in Great Britain Oct. 8, 1925. 39 Claims. (Cl. 265—13.)



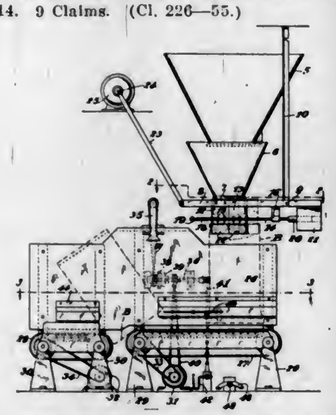
1. An apparatus for periodically checking the consistency of cigarettes produced by a cigarette making machine which comprises in combination a weighing mechanism, means adapted periodically to deliver a constant number of cigarettes to said mechanism, and means operatively connected to said mechanism for effecting a permanent record of each weighing operation.

1,823,282. SHANK SUPPORT. GEORGE DALTON MYERS, Cincinnati, and SAMUEL RICHMOND, Batavia, Ohio, assignors to The Edwards Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 24, 1928. Serial No. 264,391. 6 Claims. (Cl. 36—76.)



6. A sheet metal shank support having its anterior end formed into a dished hollow portion for giving form to an outer sole and an integral member oppositely dished to cover the first mentioned hollow portion for solidly supporting an insole in spaced relation to said first mentioned hollow portion.

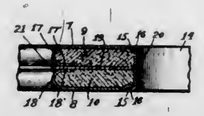
1,823,283. BAG FILLING APPARATUS. JACOB J. NEUMAN, New York, N. Y. Filed Dec. 7, 1929. Serial No. 412,414. 9 Claims. (Cl. 226—55.)



1. In packaging apparatus, means for filling a container, sealing mechanism spaced from the filling means,

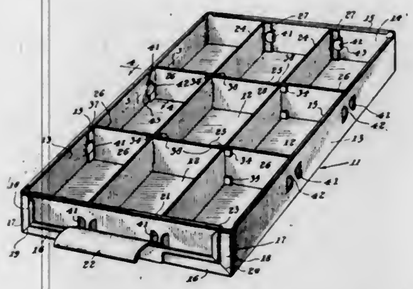
a conveyer for supporting and moving the filled container from the filling means to said sealing means, a common operating motor for the conveyer and sealing means, manually operable means for energizing said motor and operatively connecting the same with the sealing means, and means automatically controlled by the sealed container and operable after the container has been sealed to energize said motor independently of the manually operable means and continue the operation of the conveyer to discharge the sealed container therefrom.

1,823,284. GASKET. FRANK J. OVEN, Chicago, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 17, 1930. Serial No. 502,912. 5 Claims. (Cl. 288—1.)



1. A gasket having port openings therein and comprising two outer metal layers and two interposed layers of gasket material, the metal layers having integral inwardly directed flanges with the flanges of one metal layer reversely bent about the marginal edges of one layer of gasket material at said openings and with the flanges of the other metal layer reversely bent about the marginal edges of the other layer of gasket material at said openings, the free marginal edges of said flanges being disposed in substantial parallelism, and means securing all of said layers together.

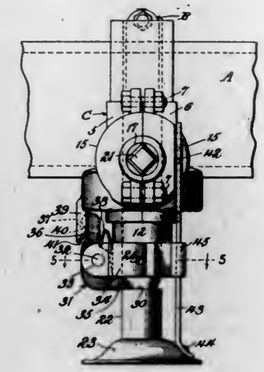
1,823,285. DRAWER CONSTRUCTION. JOSEPH PETRITSCH, Chicago Heights, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed June 20, 1929. Serial No. 372,308. 11 Claims. (Cl. 220—22.)



1. In a drawer construction, the combination of the vertical walls respectively provided at intervals with pairs of positioning ears in-struck from said walls and arranged with their edges in spaced adjacent relationship, and a divider structure made up of mutually engageable and disengageable plate elements adapted at their wall ends to enter the space between companion ears of a pair and provided with flanging to project behind one of said ears.

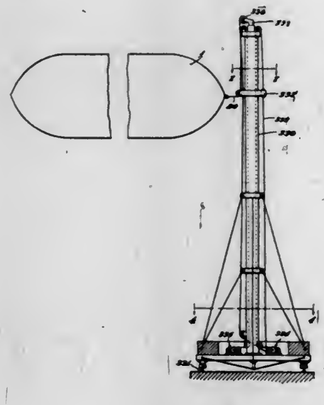
1,823,286. VEHICLE JACK. STEPHEN W. PHILLIPS, Prompton, Pa. Filed Mar. 11, 1929. Serial No. 346,085. 8 Claims. (Cl. 254—86.)

1. The combination with a fixed part of a vehicle, of a jack comprising a housing attached to said fixed part, an exteriorly threaded hollow rod mounted in the housing for vertical movements relative thereto, a driven gear journaled in the housing and meshing with said rod, means including a driving shaft for rotating said driven gear,



a foot, a standard extending from the foot into said hollow rod, and connections between the standard and the driving shaft and separate from the rod for moving the foot and the standard vertically relative to the rod.

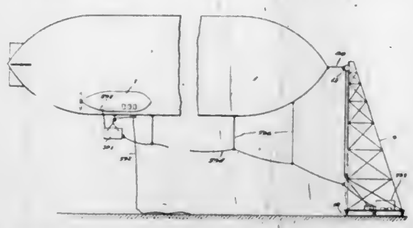
1,823,287. MOORING MAST FOR AIRSHIPS. WILFRID V. N. POWELSON, New York, N. Y., and WARREN TRAVELL, San Bernardino, Calif. Original application filed Sept. 21, 1921, Serial No. 502,127. Divided and this application filed Nov. 25, 1930. Serial No. 499,726. 9 Claims. (Cl. 244—2.)



4. A mooring device for airships comprising a platform, a tower associated therewith, a sliding collar for the airship connected with said tower and adapted to slide vertically along it.

7. A mooring mast comprising an internally trussed structure, a vertically movable member secured to rotate around the outside of the mast, a mooring line coupling cooperating with said member, and means to control vertical movement thereof.

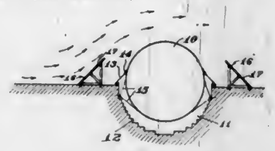
1,823,288. STABILIZATION OF AIRSHIPS. WILFRID V. N. POWELSON, New York, N. Y., and WARREN TRAVELL, San Bernardino, Calif. Original application filed Sept. 21, 1921, Serial No. 502,127. Divided and this application filed Nov. 25, 1930. Serial No. 499,727. 18 Claims. (Cl. 244—2.)



2. Stabilizing apparatus for an airship comprising a chain attached to the airship near one end thereof and depending thence to the ground, said chain at its lower end being supported by the ground.

3. Stabilizing apparatus for an airship comprising a tank attached to said airship, a reservoir beneath the airship, and means for transferring liquid between said reservoir and said tank.

1,823,289. HOUSING EQUIPMENT FOR AIRCRAFT. WILFRID V. N. POWELSON, New York, N. Y., and WARREN TRAVELL, San Bernardino, Calif. Original application filed Sept. 21, 1921, Serial No. 502,127. Divided and this application filed Nov. 25, 1930. Serial No. 499,728. 20 Claims. (Cl. 244—2.)



3. In airship housing equipment, means providing a pit for receiving the lower part of an airship envelope and one or more wind-deflecting surfaces extending obliquely from the ground upward beside the envelope.

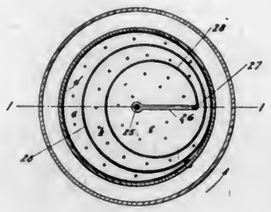
10. In equipment for protecting airships, the combination of a shelter pit of suitable size for containing the lower portion of an airship; a flexible cradle suspended in the pit between the sides thereof; and means for holding said airship in position in said cradle.

1,823,290. WINDOW SCREEN FOR CLOSED AUTOMOBILES. FREDRICK P. PRAWALSKY, Swanville, Minn.; Martha Prawalsky, administratrix of said Fredrick P. Prawalsky, deceased, assignor, by direct and mesne assignments, of one-third to Peter P. Tyvoll, Minneapolis, Minn., and one-third to Howard L. Fischer, St. Paul, Minn. Filed Feb. 5, 1924, Serial No. 690,750. Renewed Mar. 29, 1926. 5 Claims. (Cl. 156—39.)



4. A slide guide for a spring roll screen including a channel member, an inwardly extending flange spaced from the open edges of said channel member on one side of said channel member to provide a screen rod channel and a window pane channel formed by the open edges of said channel member.

1,823,291. WASHING MACHINE. TROY A. RIALL, Silvis, Ill. Filed Apr. 14, 1930. Serial No. 444,188. 8 Claims. (Cl. 68—18.)



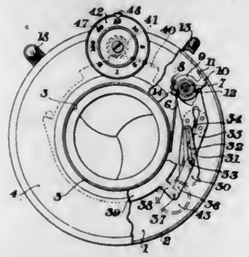
1. In a washing machine, a container, a compressor therein comprising a continuous coil having a plurality of convolutions, and means for causing a movement of said convolutions to and from the center of the container to effect a squeezing operation on articles between the convolutions.

1,823,292. SHOE SHANK SUPPORT. SAMUEL RICHMOND, Batavia, Ohio, assignor to The Edwards Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 24, 1928. Serial No. 264,392. 7 Claims. (Cl. 36—76.)



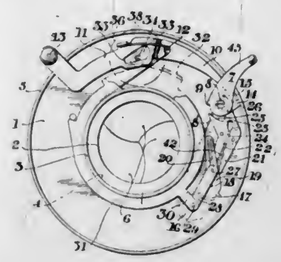
1. An arch supporting shank metal having a dished forward portion and an integral oppositely dished coincident plate spaced therefrom and having a restricted portion connecting therewith.

1,823,293. PHOTOGRAPHIC SHUTTER RETARDING MECHANISM. WILLIAM A. RIDDELL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 20, 1929. Serial No. 415,472. 7 Claims. (Cl. 95—63.)



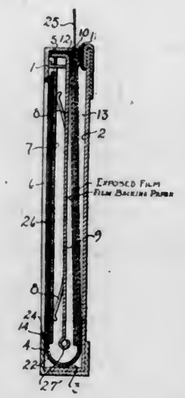
1. In a photographic shutter, the combination with rotatably mounted master member, of a retarding device, and a lost-motion connection between the retarding device and master member including a yoke and a pin adapted to engage the yoke and being adapted to drive the yoke in two directions, said pin being carried by the master member.

1,823,294. PHOTOGRAHIC SHUTTER SETTING MECHANISM. WILLIAM A. RIDDELL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 20, 1929. Serial No. 415,473. 8 Claims. (Cl. 95—63.)



1. In a photographic shutter, the combination with a master member, of a retarding device connected to the master member, said connection including a pair of slotted levers and a pin engaging said slots, one slotted lever having a slot of varying width.

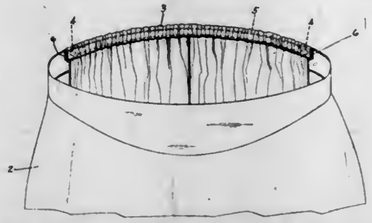
1,823,295. FILM PACK CONSTRUCTION. HOWARD A. SAUER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 18, 1929. Serial No. 407,799. 7 Claims. (Cl. 95—22.)



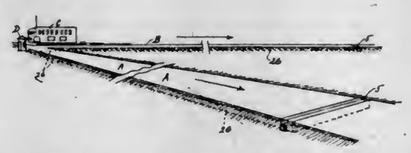
1. In a photographic film pack, the combination with a casing having an exposure frame and a partition therein having an end spaced from the casing, a plurality of films mounted in the casing, tabs on the films extending through the casing and around the partition, a safety cover longer than said films and having a tab extending through the casing and around the partition and cooperating positioning means on the tab and casing for locating the safety cover between the films and the casing with a portion thereof extending around the end of said partition producing a flexible, smooth lining in the casing.

1,823,296. UNDERGARMENT. MARGARET SEKEY, New York, N. Y., assignor to The Munsingwear Corporation, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 23, 1930. Serial No. 490,630. 1 Claim. (Cl. 2—237.)

An undergarment having a band provided with a fold or hem forming a sheath extending partially around the garment and provided with open ends and a series of tucks formed in its walls between said ends, buttons secured to the garment within and adjacent the open ends of said sheath and normally concealed by the tucked walls thereof, and an elastic band loosely fitting within said sheath and having end tabs thereon provided with buttonholes to receive said buttons, said tabs being normally covered by the walls of said sheath but becoming exposed and readily separable from said buttons when said tucked walls are pulled back.

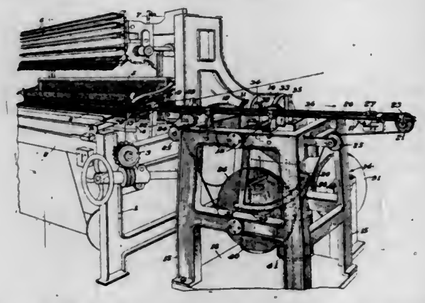


1,823,297. VEHICLE STOPPING DEVICE. FREDERICK W. STOHR, South St. Paul, Minn., assignor of one-half to Frederick R. Schlichting, South St. Paul, Minn. Filed Oct. 16, 1930. Serial No. 489,101. 4 Claims. (Cl. 39—6.)



1. A vehicle stopping device of the class described comprising an elongated mechanism housing fixed transversely of and in a roadway, the top of said housing normally fixed in a common plane with the road surface, hinged lids in said housing normally closing its top, a row of prongs fixed to the lower side of each lid member and directed downwardly and outwardly within the housing when said lids are in closed position, means within the housing operatively connected with said lids and remote control means connected to said lid means to raise the latter and position said prongs in upward and outwardly directed position above the surface of the road, said lids being provided one pair to each housing, hinge means at their adjacent edge parts, to provide for raising the lid members to vertical positions, and back to back.

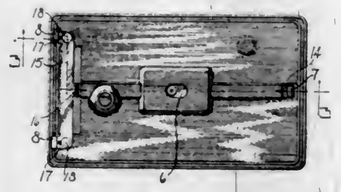
1,823,298. NEEDLE LOOM. EDWIN W. STONE, Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co. Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Apr. 12, 1930. Serial No. 443,657. 29 Claims. (Cl. 139—123.)



1. In a loom, in combination, shed forming mechanism, a weft inserting needle, hydraulic mechanism for oper-

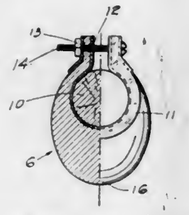
ating the needle to insert weft threads, and means for automatically synchronizing the hydraulic movement of the needle with the movement if the shed forming mechanism, including a controller having cooperating parts, one of which is driven from the loom mechanism and the other from the needle operating mechanism, and means responsive too the movement of one of said parts relative to the other for controlling the operation of the needle.

1,823,299. CAMERA LATCH. ADOLPH STUBER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,402. 4 Claims. (Cl. 292—153.)



1. In a latch for cameras including two relatively movable parts, the combination with a movably mounted latching member, said latching member being slidably mounted on one part, of a complementary latching device on the other part, and means for moving the slidable latching member, including an pivotally mounted handle adapted to slide with the latching member between two positions, a pin and slot on the latching handle and the camera part on which the movably mounted latching member is mounted, said pin and slot being brought into engagement by moving the handle to one extent of its movement, whereby the handle may be turned, engaging the pin in slot and latching the handle in a fixed position.

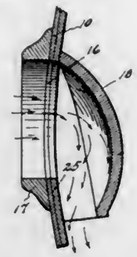
1,823,300. BROOM BUMPER. ALFRED D. SUND, Santa Rosa, Calif. Filed Apr. 15, 1930. Serial No. 444,445. 4 Claims. (Cl. 15—246.)



1. A bumper for brooms comprising a U shaped resilient bumper member having a substantially thick bend portion, and a unitary sheet metal reenforcing clamping member and cooperating clamping bolt.

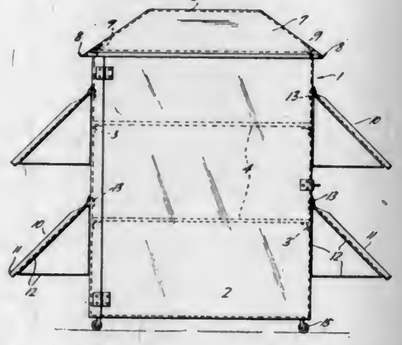
1,823,301. METHOD OF AND MEANS FOR SEPARATING AND FLOWING OIL AND GAS. JAY P. WALKER, Tulsa, Okla., assignor of forty per cent to Guy O. Marchant and six per cent to C. G. Wells, Tulsa, Okla. Filed Mar. 19, 1928. Serial No. 262,954. 6 Claims. (Cl. 183—2.7.)

4. In an oil and gas separator for wells, the combination of an upright tank having an influent opening in its wall, a diverter on the inner side of said tank wall comprising a body having an elongated upright discharge opening at one end of greater area than the tank inlet opening and its other end covering and being opposite the tank inlet opening, said diverter body being connected to the tank wall and closed to the tank except at its discharge end, the body being vertically fan-shaped and turned laterally toward the tank wall in the direction of its discharge end for turning the influent back onto the tank wall at its discharge opening and for primarily segregating the constituents of the influent within the body of the diverter according to their specific gravities, whereby the gas is quickly liberated at a point close to the inlet and the remaining liquids are spread in a thin film beginning close to the inlet and are induced to flow circumferentially on the wall of the tank.



6. The method of separating oil and gas flowing from a well which consists in conducting the stream of oil and gas direct from the well into an upright tank, turning the stream abruptly back upon the upright inner surface of the tank immediately upon its entrance into the tank and co-incident therewith spreading the oil and gas in a vertical direction and thereby segregating the constituents of the stream according to their specific gravities, then directing the constituents in circumferential paths according to their gravities, carrying the gaseous fluids upwardly and spreading the oil in a thin film on the inner wall of the tank and carrying it in a long uninterrupted path over a wide area around said tank wall, whereby the surface contact of the oil globules is enhanced and the entrapped gas is scrubbed out.

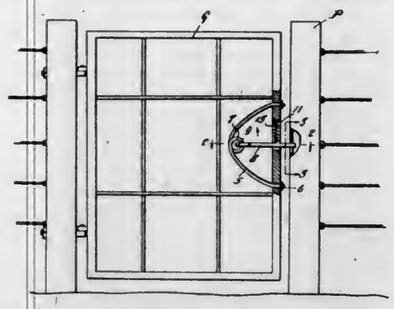
1,823,302. DISPLAY STAND. THORNTON L. WATERS, Springfield, Ky. Filed Mar. 28, 1931. Serial No. 525,975. 2 Claims. (Cl. 312—172.)



1. In a device of the kind described, a cabinet having an open top, and a cover for the top, the said cover being formed with sloping sides having upturned margins for retaining goods displayed thereupon, the said cover being adapted to be reversed at the top of the cabinet to form a tray for holding goods for display.

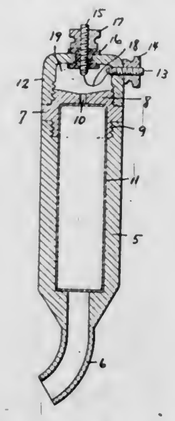
1,823,303. GATE LATCH. CHARLES E. WAY, Fairmont, Okla. Filed July 22, 1930. Serial No. 469,811. 2 Claims. (Cl. 292—228.)

1. A latch for the purpose specified comprising a substantially V-shaped member having the ends thereof capable of being passed through openings provided therefor in a closure, nuts threaded on the said ends for securing the member in position, said member at the apex thereof provided with an eye, a latch bar at one end provided with an eye engaging the first mentioned eye,



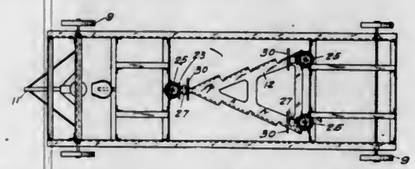
the free end of said latch bar adapted to extend through a slot provided in the closure, and a spring in the slot normally urging the latch bar adjacent one end of the slot.

1,823,304. GAS DISCHARGE DEVICE. FRIDOLIN HERMAN WELLER, Scranton, Pa. Filed Mar. 25, 1931. Serial No. 525,306. 2 Claims. (Cl. 102—1.)



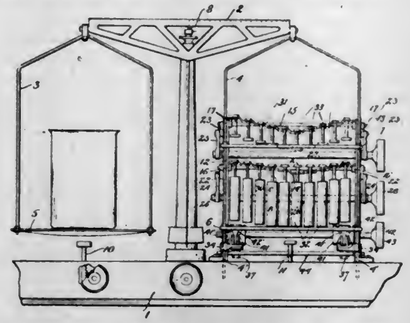
1. A gas gun comprising a barrel, a chamber at one end of the barrel, a small passageway between the chamber and the interior of the barrel, a powder deposit in the chamber, a gas sack in the valve, and electrical ignition means in the said chamber.

1,823,305. ROAD PLANER. IRA M. WELLS, Oakland, Calif. Filed Mar. 4, 1930. Serial No. 433,039. 18 Claims. (Cl. 37—153.)



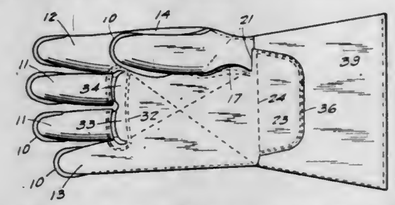
1. A road planer comprising a frame adjustably suspended in substantially parallel relation to a road surface, and provided with a plurality of plate type cutters in overlapping, stepped angular relation to the longitudinal axis of a supporting vehicle.

1,823,306. AUTOMATIC PRECISION BALANCE. GARY M. WHITNEY, Wilmington, Calif. Filed Apr. 1, 1930. Serial No. 440,789. 11 Claims. (Cl. 265—48.)



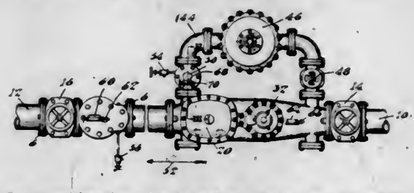
1. An automatic balance of the character disclosed comprising, in combination with the scale pans thereof, a series of weights of equal value, supports in which said weights are loosely and detachably carried, and means to move said supports selectively with respect to one of said pans so that upon the upward movement of said scale pan the weights carried by said supports shall be selectively engaged, said supports being withdrawable out of the path of movement of the scale pan and free of the weights selectively engaged by said pan.

1,823,307. GLOVE. LAURI A. WICKMAN, Albany, and ALVIN N. MUNK, Oakland, Calif. Filed Mar. 11, 1930. Serial No. 434,936. 2 Claims. (Cl. 2—161.)



1. A double palm gauntlet glove provided with a palm with integral index and little finger, an integral flap between said index and little fingers, a flap projecting from and integral with said integral flap, said flap being tacked to the back finger-seam, a thumb adapted to fit the contour of the hand from the thumb joint to the wrist, a gauntlet, the palm side of which has stiffening material with a cut away portion adjacent the wrist and replaced by a flexible material, said palm continuing across the wrist seam and extending beyond said cut away portion providing a continuous unbroken surface across said wrist.

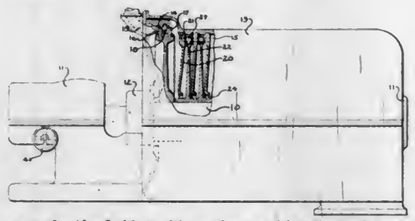
1,823,308. METER SYSTEM. HENRY D. WINTON, Wellesley, Mass., assignor to Hersey Manufacturing Company, South Boston, Mass., a Corporation of Massachusetts. Filed Aug. 20, 1929. Serial No. 387,142. 4 Claims. (Cl. 73—167.)



1. In combination in a water main, a plurality of check valves in series in said main and each opening in

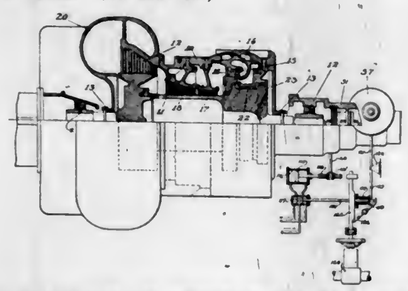
the same direction, one of said check valves being a maximum demand valve constructed and arranged to open only upon substantially maximum demand through said main, a proportional meter in front of said latter check valve, a by-pass around said proportional meter and said maximum demand check valve, said by-pass providing for the flow of moderate quantities of water without opening the latter check valve, a meter of moderate capacity in said by-pass, and a check valve in said by-pass allowing the flow of water only in the direction of flow permitted by said other check valves.

1,823,309. ELASTIC FLUID TURBINE. ROBERT C. ALLEN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 23, 1929. Serial No. 365,482. 1 Claim. (Cl. 253—39.)



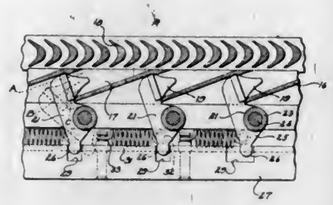
In an elastic fluid turbine, the combination of a casing, a rotor, said rotor including a shaft and blade-carrying discs mounted thereon, diaphragms carried by said casing and interleaving with said discs, said diaphragms and discs being arranged with axial clearances permitting limited axial movement of the rotor relative to the casing, and cooperating radially-extending packing elements carried by the diaphragm and the shaft, said packing elements being in registry in end-to-end relation and providing radial packing clearances when the rotor is in one axial position within its limited axial movement and being out of registry when the rotor is in another axial position within its limited axial movement, the packing elements being axially spaced sufficiently to permit interleaving of the packing elements upon radial deflection of the shaft while in the second mentioned axial position, a thrust bearing determining the axial position of said rotor, and means for adjusting said thrust bearing to bring the rotor to either of said axial positions, whereby said packing elements may provide close radial packing clearances during normal operation of the turbine and be placed out of registry to provide large clearances while starting said turbine so as to avoid rubbing incident to whipping of the shaft while the rotor is passing through a critical speed.

1,823,310. ELASTIC FLUID TURBINE. ROBERT C. ALLEN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 23, 1929. Serial No. 365,483. 12 Claims. (Cl. 253—39.)



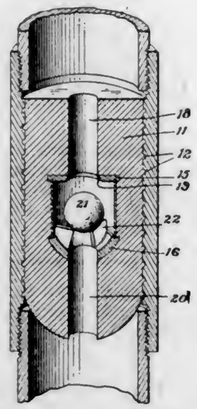
1. In a turbine, the combination of a casing construction; a rotor; elements carried by the rotor and, in a first axial position of the latter, defining minimum clearances with respect to the casing construction and in a second axial position defining larger clearances of a magnitude avoiding rubbing when the rotor is distorted in starting and stopping the turbine; and means responsive to decrease in turbine load below a predetermined load to shift the rotor to said second axial position so as to define larger clearances of said elements with respect to the casing construction.

1,823,311. NOZZLE VALVE. FRANK R. SIMPSON, Upper Darby, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 10, 1929. Serial No. 398,772. 8 Claims. (Cl. 253—78.)



1. In a fluid pressure turbine, the combination of a plurality of nozzles disposed in a row along a circle concentric with the axis of the turbine, valves pivoted in the turbine and adapted to move to and from the entrances of the nozzles to control the flow of fluid therethrough, and a ring having surfaces engaging parts carried by the valves whereby the ring controls the opening and closing movements of the valves.

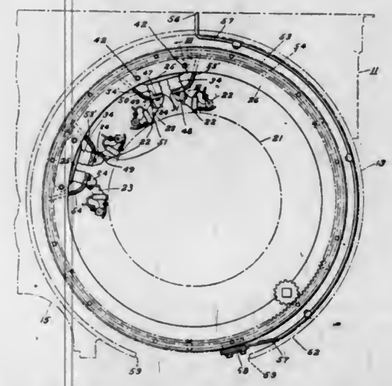
1,823,312. CEMENTING AND FLOATING DEVICE FOR WELL CASINGS. REUBEN C. BAKER, Coalinga, Calif. Filed July 13, 1929. Serial No. 377,961. 2 Claims. (Cl. 166—9.)



1. A device of the character described including a cementitious plug, said plug having a valve chamber formed therein intermediate the ends thereof, nonmetallic discs imbedded in said plug, and defining the ends of said valve chamber, an upper passageway formed from the upper end of said valve chamber through the upper end of the plug, a lower passageway in vertical alignment with the upper passageway formed at the lower end of the valve chamber through the lower end of the plug said passageways forming a single central straight opening extending entirely through the plug, said upper non-

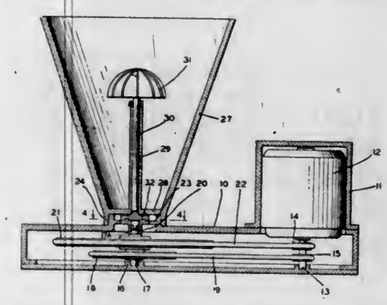
metallic member being formed with a valve seat in alignment with the upper passageway, a buoyant ball valve arranged in said valve chamber for cooperation with said valve seat to prevent the passage of fluid upwardly from said valve chamber through said upper passageway, spaced lugs formed as an integral part of said lower non-metallic part projecting upwardly within the valve chamber and adapted to engage the ball valve and maintain the same space from the lower end of the valve chamber around the lower passageway without constricting the same so as to permit the passage of fluid downwardly through the lower passage.

1,823,313. ROCKER-RING STRUCTURE FOR RAILWAY MOTORS. PAUL BOLLINGER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1930. Serial No. 421,929. 10 Claims. (Cl. 171—324.)



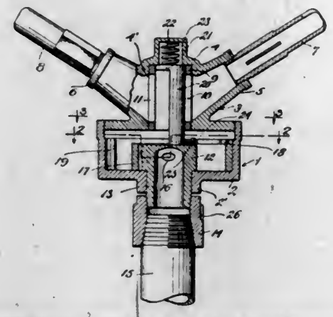
1. A brushholder rocker-ring assembly characterized by having two rocker-rings and a plurality of separate, equally spaced brushholder-supporting blocks, positioning means for independently securing each block in direct contact with said rings in accurate radially and circumferentially spaced position, and brushholders insulatedly carried by said blocks.

1,823,314. KITCHEN APPLIANCE MACHINE. EVERETT C. BREWER, Los Angeles, Calif. Filed Apr. 30, 1930. Serial No. 448,614. 5 Claims. (Cl. 259—108.)



1. A device of the class described comprising a housing, a motor mounted therein, a vertically arranged spindle within the housing, a vertically arranged sleeve within the housing surrounding the spindle, means for driving the spindle at one speed by the motor, means for driving the sleeve at a different speed by the motor, the upper ends of the sleeve and spindle being provided with clutch elements, a seat on the housing surrounding the spindle and sleeve, and an appliance positioned to coact with the seat and provided with a rotary element having a clutch constructed to coact with the clutch element of the spindle to effect rotation of the rotary element.

1,823,315. SPRINKLER. GUADALUPE BUELNA and HENRI EUGENE JEREMIE VACHER, Santa Barbara, Calif. Filed Mar. 17, 1930. Serial No. 436,337. 2 Claims. (Cl. 299—69.)



2. A sprinkler comprising a rotatable chamber provided in the top thereof with opposed outlets, sprinkler nozzles in said outlets, a water distributing head within said chamber and connected to a water supply, a valve loosely mounted upon said head, means yieldingly supporting said chamber from said valve and insuring a water tight joint between the bottom of said chamber and said head, and means to rotate said chamber relatively to said valve thereby to cause the water to be alternately discharged through said nozzles only during approximately a half revolution of said chamber.

1,823,316. FLOTATION RECOVERY OF MINERALS. LUDWIG J. CHRISTMANN, Jersey City, and STUART A. FALCONER, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Jan. 9, 1930. Serial No. 419,733. 7 Claims. (Cl. 209—166.)

1. A method of recovering minerals from ores which comprises subjecting an oxidized ore to a froth flotation operation in the presence of a salt of a cyclohexyl xanthate as a promotor.

1,823,317. CLIP. RAYMOND W. COOK, Bristol, Conn., assignor to The Wallace Barnes Company, Bristol, Conn., a Corporation. Filed Sept. 9, 1930. Serial No. 480,686. 8 Claims. (Cl. 24—259.)



1. As a new article of manufacture, a clip made of resilient sheet metal and consisting of a face-plate having an integral shank originating at the edge thereof and bent reversely to extend behind the same; and an integral gripping-arm originating at another point on the edge of the said face-plate and bent reversely therefrom to extend between the same and the said shank and co-

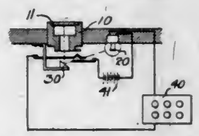
operating with the latter to provide yielding gripping-means, the said arm being pinched upon itself at such bend to form a forwardly-inclined guide-lip and finger-piece.

1,823,318. SAFETY SWING SEAT. ROBERT DICK, Los Angeles, Calif. Filed Oct. 30, 1929. Serial No. 403,467. 6 Claims. (Cl. 155—58.)



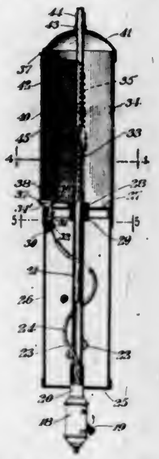
1. A swing seat, comprising a pair of suspension straps formed of metal, a seat band formed of flexible material having its opposite upper ends one secured to each strap, having depending lateral portions and a horizontal seat portion, a back band of flexible material connected at its forward ends to the said straps and to the upper portions of the seat band, the back band having two lateral side portions extending rearwardly and a section to engage a person's back, and a flexible center band connecting the central portions of the back band and the central portion of the seat band.

1,823,319. RESPONSIVE SIGNAL SYSTEM. WILLIAM NOBLE DICKINSON, Long Island, N. Y. Filed Oct. 11, 1927. Serial No. 225,489. 4 Claims. (Cl. 88—1.)



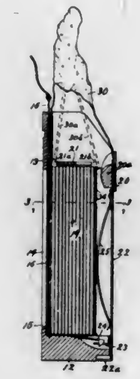
1. In a signal or supervising system, the combination of an actuating member with a translucent portion capable of being illumined from within and an optical system for directing the rays of light to said translucent portion through the actuating member.

1,823,320. PHOTOGRAPHIC ELECTRIC LAMP. WILLIAM R. GRUBER, New York, N. Y. Filed Dec. 17, 1929. Serial No. 414,673. 8 Claims. (Cl. 176—103.)



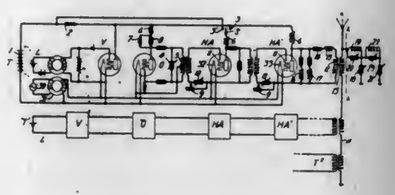
5. In an electric lamp using carbon electrodes, a telescopic casing composed of two members, respectively a handle and a screen carrying shell, said handle being dielectric and provided with fixed heads carrying one electrode, means in said shell to carry the other electrode, and means for conducting an electric current to each of said electrodes simultaneously.

1,823,321. CAMERA PLATE HOLDER. BRADLEY B. HAMMOND, Yonkers, N. Y. Filed Dec. 22, 1927. Serial No. 241,843. 3 Claims. (Cl. 95—30.)



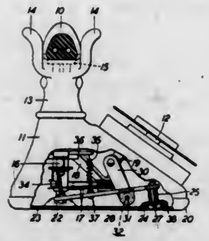
1. In a camera plate-holder, means therein for receiving a set of sensitive plates including a guard-plate in the rear thereof, means for advancing said set for successive exposure of the sensitive plates, means including a transfer-bar adapted to replace said exposed plates in the rear of said guard-plate, the said transfer-bar having a driving lug alined with and disposed to engage and successively displace said sensitive plates and disalined with respect to said guard-plate whereby the latter is rejected by the action of the transfer-bar.

1,823,322. WAVE TRANSMITTING AND AMPLIFYING. RAYMOND A. HEISING, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1921, Serial No. 525,906. Renewed Nov. 6, 1928. 48 Claims. (Cl. 250—9.)



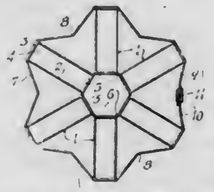
1. A system comprising a thermionic repeater having an input circuit and a plate circuit, a source of waves or impulses other than said repeater connected to said input circuit to be repeated, a modulating device, a source of current common to and with respect to which said modulating device and said repeater are in parallel, and means for applying lower frequency waves or impulses to said modulating device.

1,823,323. DESK TELEPHONE SET. IRVING L. HOPKINS, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1930. Serial No. 491,829. 12 Claims. (Cl. 179—147.)



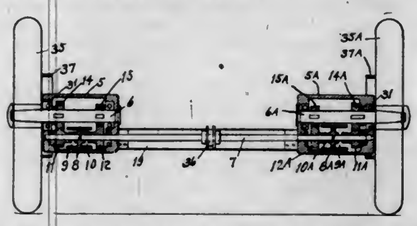
1. A telephone desk set comprising a hand telephone, a desk stand therefor adapted to rest on a substantially horizontal surface, and means automatically operable only when said hand telephone is removed from said desk stand for preventing sliding movement of said desk stand over said surface.

1,823,324. DISPLAY RECEPTACLE. FREDERICK G. HUBER, West Brighton, N. Y., assignor to Eberhard Faber Pencil Co., a Corporation of New York. Filed Oct. 8, 1929. Serial No. 398,124. 2 Claims. (Cl. 206—44.)



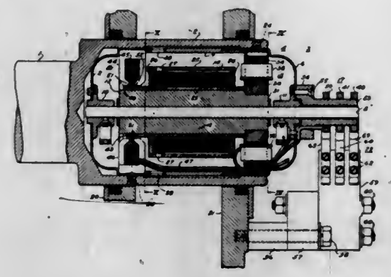
1. A display receptacle comprising a plurality of polygonal container sections, a strip of material connecting one side of each section to the corresponding sides of the next adjacent sections and foldable between said sections with its ends separable, whereby said sections can be arranged in close parallel relation or at angles to each other, a second strip of material connecting the side of each section opposite the first-mentioned side to corresponding sides of the next adjacent sections and being foldable midway between said sections with its ends separable, and separable fastening means for securing said ends of the second strip together.

1,823,325. STEERING MECHANISM. WILLIAM T. JAMES, Chicago, Ill. Filed Dec. 8, 1927. Serial No. 238,692. 6 Claims. (Cl. 280—87.)



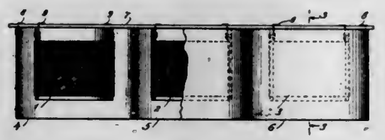
1. A steering mechanism having two wheels each mounted on separate shafts alternately operative as drive and driven shafts, to revolve the said wheels at different speeds, each shaft on each of said wheels having two gears keyed thereon, a countershaft connecting the said wheel shafts with revolubly mounted driving clutches having clutch drive gears thereon in mesh with the said gears on the said wheel shafts, the said clutch members being adapted to operatively engage the said gears on the said wheel shafts, simultaneously, at separate points on the said countershaft.

1,823,326. VIBRATION RECORDER. JOSEPH W. LEGG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1926. Serial No. 116,502. 12 Claims. (Cl. 177—351.)



11. In apparatus for indicating the vibration of a member, means for rotatably mounting said member, a core of magnetic material rigidly connected to said member and having a winding thereon, a heavy magnetized member, means for rotatably mounting said magnetized member with respect to said core, and means for so passing flux through said magnetized member and said core that the flux induces a voltage in said winding when relative movement occurs between said core and said magnetized member.

1,823,327. SHIELDING FOR RADIO-FREQUENCY AMPLIFIERS. WILLIAM A. MACDONALD, Little Neck, and FRED E. JOHNSTON, Flushing, N. Y., assignors to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 24, 1927. Serial No. 242,844. 16 Claims. (Cl. 179—171.)

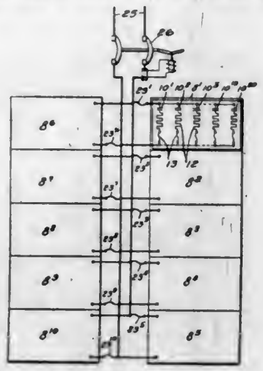


1. In an amplifier, a plurality of stages of radio-frequency amplification, each stage including a coupling coil, and an open-ended fixed tubular metallic shield encircling said coil and effective to restrict the magnetic field thereof.

1,823,328. SELF-CLEARING FUSED SECTIONALIZED CAPACITOR. RALPH E. MARBURY, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1929. Serial No. 366,471. 52 Claims. (Cl. 175—41.)

1. A capacitor unit having a plurality of parallel sections in a single impregnating tank having two terminals, said parallel sections being connected between said two terminals, and said tank being substantially filled with insulating impregnating material, characterized by having individual fuses and resistors within the tank, at least in part immersed in said impregnating material and connected in series with the respective sections, said individual fuses and resistors being of such nature that a fault in any

section is certainly cleared by its fuse, even when said unit is connected to a line of relatively very large short-circuit capacity, whereby the capacitor never fails as a unit, but merely shrinks in capacity as time goes on.



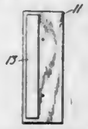
22. A capacitor installation of at least 60,000 volt-ampere capacity comprising a number of parallel paths each of which satisfies the conditions,

$$x > .04E^{1.4} \text{ and } r > .000{,}001E^2,$$

where x = capacitor impedance of one parallel path, in ohms,
r = resistance of the same path, in ohms, and
E = root-mean-square rated voltage of the capacitor, in volts.

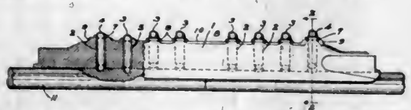
32. A capacitor unit suitable for power-factor correction at commercial power-line frequencies and voltages, comprising a plurality of parallel paths in a single impregnating tank substantially filled with insulating impregnating material, each of said parallel paths having an individual fuse and having such ratio between resistance r and root-mean-square voltage E that r is not much less than some value of the order of .000001 E^2 and such ratio between capacitive impedance x and resistance r that the total capacitor and resistance loss does not exceed 4.9 watts per KVA of the capacitor rating.

1,823,329. PIEZO ELECTRIC DEVICE. WARREN A. MARRISON, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 26, 1924. Serial No. 734,189. 8 Claims. (Cl. 171—327.)



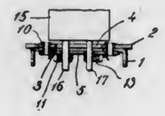
1. A piezo electric device comprising a vibratory element of piezo electric material and conducting plates, subjected to electromotive forces, placed adjacent corresponding portions of opposite sides of said element parallel to its longer axis and unsymmetrically with respect to said axis whereby said element tends to vibrate transversely.

1,823,330. SPLICER. SAMUEL S. MATTHES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed July 6, 1931. Serial No. 548,941. 10 Claims. (Cl. 191—44.1.)



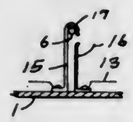
1. A wire splicer comprising an elongated body member, an open groove along one edge of the body to receive wires from both ends and inwardly projecting means to prevent the wires being displaced transversely of the groove, a plurality of means of uniform length slidably mounted in the body member and movable transversely of the axis of the wires to interlock with the wires to prevent the longitudinal movement of the wires in the groove, the said means being arranged in substantially alinement with their axes in a plane coinciding with the axis of the connected wires and means surrounding each extreme end means to limit the insertion of the said end means into the wires to a less amount than the intervening means.

1,823,331. VACUUM TUBE SOCKET. WILLIAM J. MURDOCK, Chelsea, Mass., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 5, 1927. Serial No. 237,748. 5 Claims. (Cl. 173—328.)



1. In a vacuum tube socket structure, a metallic supporting strip, a plate of insulating material secured to one side of said supporting strip, said plate of insulating material having a circular opening of a diameter suitable to closely circumscribe the contact prongs of a vacuum tube, said metallic supporting strip having an opening larger than and substantially concentric with the opening in said plate, a member of insulating material attached to the other side of said metallic supporting strip and disposed opposite said opening therein, said member having a plurality of apertures each of which is designed to receive only a particular one of the prongs of a vacuum tube, and contact springs carried by said member, each of said contact springs being adapted to engage one of the contact prongs of a vacuum tube.

1,823,332. ELECTROMECHANICAL ANNUNCIATOR. ROBERT A. NEWE, Houston, Tex. Filed June 10, 1927. Serial No. 197,850. 2 Claims. (Cl. 200—52.)

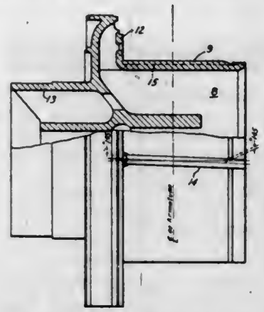


1. In a signal device, a switch arm, pivotally mounted at one end, a pair of spaced switch tongues between which the switch arm works, the free end of one tongue being overturned and formed into a clamp adapted to engage and hold the switch arm, a release rod arranged to actuate said arm into engaged relation with said clamp.

1,823,333. MEANS FOR KEYING PUNCHINGS. WILLIAM S. OSWALD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 17, 1929. Serial No. 414,695. 2 Claims. (Cl. 171—206.)

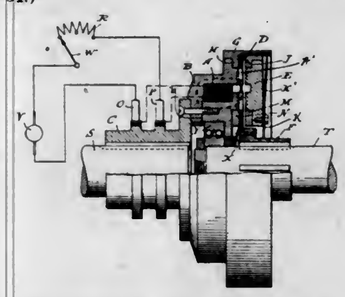
1. A dynamo-electric machine of the type having a laminated rotor core composed of annular steel punchings, peripherally disposed windings extending through peripheral slots on said rotor core, and a rotor spider for supporting said rotor punchings and adapted to transmit rotational torque to or from the same, characterized by the fact that the inner peripheries of the rotor punchings and the corresponding supporting surface of the rotor spider

having a plurality of keyway-slots, the spider keyway-slots being skewed, and a plurality of keys for said slots,



and further characterized by the fact that at least all but one of said keys are made in two wedge-shaped parts disposed so as to wedge in a circumferential direction.

1,823,334. ELECTROMAGNETIC CLUTCH. CLARENCE Q. PAYNE, Shippan Point, Stamford, Conn., assignor of one-fourth to J. Goodwin Hall, New York, N. Y. Filed May 31, 1929. Serial No. 367,415. 7 Claims. (Cl. 192—84.)

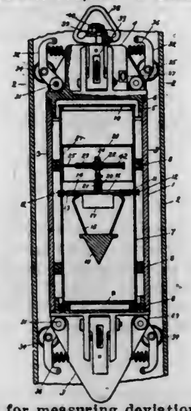


1. An electromagnetic clutch comprising, an electromagnet, an armature, a magnetizable disc-plate between the electromagnet and armature and rotatable relatively to the electromagnet, means for varying the flux density at the pole faces of the electromagnet, and yieldable means tending to hold the armature with its clutch face at a greater distance from the clutch face of the electro-magnet than the thickness of the disc-plate, said yieldable means being so regulated that when the flux density at the pole faces of the electro-magnet is brought to a certain amount the disc-plate will be caused to have forceful contact with the electromagnet to create a slip-torque between the disc-plate and electromagnet and the armature will not be attracted into contact with the disc-plate, and when the flux density at the pole faces of the electromagnet is subsequently increased to a certain greater amount the armature will be attracted into contact with the disc-plate to lock the disc-plate against rotation relatively to the electromagnet.

1,823,335. METHOD OF MANUFACTURING SPONGE RUBBER. PAUL H. RICHERT, Berkeley, Calif. Filed Apr. 29, 1929. Serial No. 359,176. 4 Claims. (Cl. 18—53.)

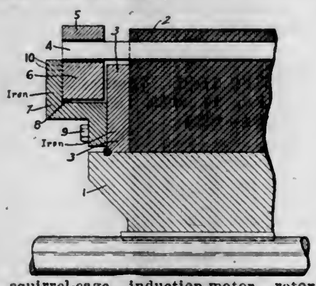
3. The herein described method of forming cells in rubber during vulcanization thereof which consists in introducing into the rubber during plasticization thereof a ground ammonium bi-sulphite, and then subjecting the rubber to sufficient temperature to decompose the bi-sulphite and to vulcanize the rubber.

1,823,336. DEVICE FOR MEASURING DEVIATIONS OF DRILLED WELLS. ARMENAK I. SHAKHNAZAROV, Baku, Union of Socialist Soviet Republics. Filed July 8, 1929. Serial No. 376,766. 2 Claims. (Cl. 234—1.)



1. In a device for measuring deviations of drilled wells, the combination with a tubular chamber, of an inner chamber inside of said first chamber, a pendulum in said inner chamber, a universal suspension for said pendulum, a tubular member on said pendulum at right angle with its axis, a writing implement slidably fitted in said tubular member, means to press said writing implement against the inner wall of said inner chamber, means to support a sheet of paper on said inner wall, a clock mechanism supported by said pendulum, said clock being adapted to move said tubular member in a vertical direction, and means to guide said first chamber in a well.

1,823,337. SQUIRREL-CAGE MOTOR. ROBERT R. SHEELY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1928. Serial No. 326,025. 7 Claims. (Cl. 172—120.)

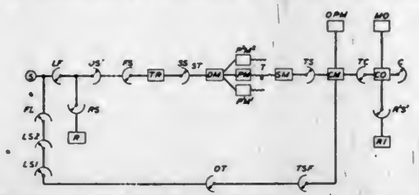


3. A squirrel-cage induction-motor rotor including squirrel-cage bars, a high-resistance end ring connected thereto, a low-resistance end ring connected thereto at the same end of the rotor, an iron end plate disposed at that end of the rotor core, the low-resistance end ring being disposed adjacent to said iron end plate, and a channeled iron ring rigidly clamped to said iron end plate, with the low-resistance end ring disposed in its channel, the high-resistance end ring being spaced from said iron members.

1,823,338. DIAL SWITCHING TOLL SYSTEM. THOMAS SAMUEL SKILLMAN, LANCELOT GERHARD FREETH, and ROBERT JAMES BERRY, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1930, Serial No. 495,199, and in Great Britain Nov. 13, 1929. 18 Claims. (Cl. 179—18.)

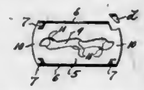
5. In an automatic telephone system, calling lines, called lines, a storing mechanism for recording the designations

of calling and called lines, means controlled by successively calling lines to seize said storing mechanism and to cause said storing mechanism to successively record the designations of said calling lines and the designations of called lines called thereby, a sending mechanism, switching devices for extending connections in opposite directions to



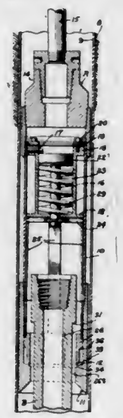
calling lines and called lines called thereby, and means under the control of said sending mechanism for operating said switching devices to establish connections between said calling and called lines in the order in which said line designations have been stored in said storing mechanism.

1,823,339. SAFETY RAZOR BLADE. PHILIP H. UNSINGER, Maplewood, N. J. Filed Apr. 15, 1930. Serial No. 444,380. 4 Claims. (Cl. 30—12.)



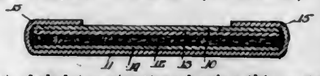
1. A safety razor blade, comprising a body of thin flexible steel having cutting edges along the opposite longitudinal margins thereof, said body having an uninterrupted central perforation extending along the longitudinal median line thereof, the margins of said central perforation being formed to provide diagonally and oppositely exposed holder stud engaging abutments, said central perforation being adapted to form median portions at the ends of the blade body between the longitudinal sections thereof whereby resistance to flexure of the blade is reduced, said body having additional fracture diverting perforations inward of the cutting edges thereof and respectively adjacent to the blade ends.

1,823,340. FISHING TOOL. VINCENT O. VANCE, Colfax, Calif. Filed Feb. 19, 1930. Serial No. 429,619. 9 Claims. (Cl. 294—102.)



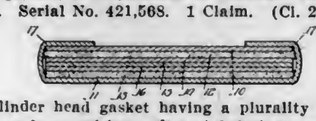
1. A fishing tool comprising a barrel adapted to be lowered in a well, an overshot at the lower end of the barrel, gripping means in the barred, spring means normally urging the gripping means to an expanded position and means for contracting said gripping means.

1,823,341. GASKET. JOHN H. VICTOR, Evanston, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 17, 1930. Serial No. 421,567. 1 Claim. (Cl. 288—1.)



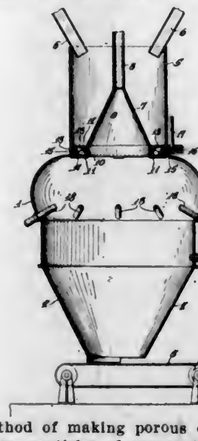
A gasket of skeleton structure having thin metal facings, an intermediate layer of compressible material, a reinforcing layer of ductile metal corresponding in size to the size of the intermediate layer and interposed between the said compressible layer and each facing and contacting with the facing, said facings, intermediate layer, and reinforcing layers having registering openings, and means securing said parts together.

1,823,342. GASKET. JOHN H. VICTOR, Evanston, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 17, 1930. Serial No. 421,568. 1 Claim. (Cl. 288—1.)



A cylinder head gasket having a plurality of openings therein and comprising soft metal facings and an interposed reenforcing core, said core comprising a plurality of centrally disposed relatively hard metal layers arranged in surface contact one upon the other to provide substantial flexibility throughout the area of said gasket and layers of compressible material disposed between the facings and the hard metal layers and in surface contact therewith, all of said layers being compactly secured together.

1,823,343. METHOD OF PRODUCING POROUS CONCRETE. KARL P. BILLNER, New York, N. Y., assignor to The Aerocrete Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1930. Serial No. 431,373. 4 Claims. (Cl. 83—73.)

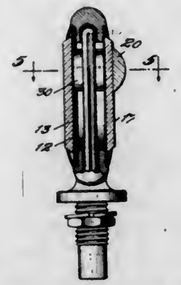


1. The method of making porous concrete, which consists in moving particles of aggregate material to which moisture has been applied with respect to a nozzle, and blowing dry cement into contact with the particles to coat the same and collecting the coated particles, whereby adjacent coatings will coalesce to form air spaces or pockets throughout the mass.

1,823,344. MOTOR HEAT INDICATOR. HARRISON HURLBERT BOYCE, Jericho, N. Y. Filed May 25, 1927. Serial No. 194,009. 3 Claims. (Cl. 116—114.)

1. In a device for indicating the heat condition within an automotive radiator, a heat responsive device having an

indicating element, a chamber having reflecting surfaces embracing the portion of said indicating element corresponding to a dangerous heat condition within said radiator, said chamber being adapted to collect and concen-



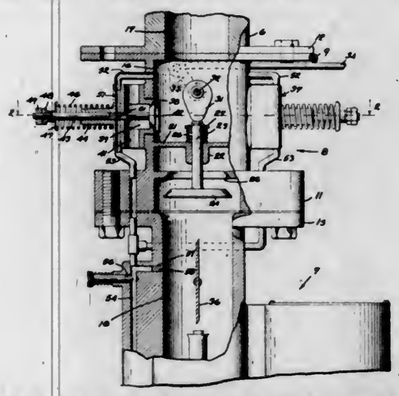
trate light rays upon the indicating element, means at one end of chamber for dispersing the light rays passing thru said chamber and accentuating the reading of the indicating element in the region corresponding to said dangerous indication.

1,823,345. THERMOSTATIC SWITCH. JAMES E. BRITT, Washington, D. C., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1927. Serial No. 209,415. 10 Claims. (Cl. 200—138.)



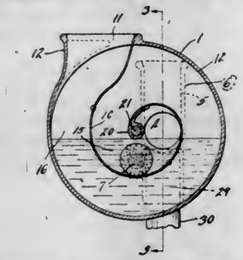
1. A thermostatic circuit-controlling device comprising a support, a resilient member carried thereby, contact members carried by said resilient member and thermostatic means having a snap-action motion characteristic for controlling the position of said resilient member.

1,823,346. CARBURETOR ATTACHMENT. VINCENT H. BURDICK, Gardena, Calif. Filed Feb. 26, 1929. Serial No. 342,731. 2 Claims. (Cl. 123—97.)



1. A device of the character described, comprising a tubular housing adapted to be interposed in the fuel intake between a motor and its carburetor, a valve operable to optionally open or seal the passage through said housing, a valve seat encircling an aperture in the side of said housing, a valve associated with said seat to open inwards and adapted to be opened by atmospheric pressure on the outside of said housing when pressure within the housing is reduced, a spring urging said last mentioned valve closed, a fuel bypass communicating with said housing between said first mentioned valve and said motor, and means for closing said bypass when said last mentioned valve is open.

1,823,347. GOLF BALL CLEANING DEVICE. FRANCIS M. CASE, Cleveland Heights, Ohio, assignor of one-fourth to B. W. Brockett and three-fourths to Bluford W. Brockett and Elbert L. Hyde. Filed Aug. 28, 1926. Serial No. 132,153. 2 Claims. (Cl. 15—21.)



1. A ball cleaning device, comprising a casing having a generally cylindrical liquid-receiving chamber provided with end walls and also having means for supporting it with the cylinder axis horizontal, one of said end walls having an entrance opening near said axis and outside of said chamber being provided with a ball receiving conduit leading from an upper point on the casing to said entrance opening, the inner face of said wall serving as an abutment face along which balls to be cleaned are moved, a manually rotatable disc form brush member journalled in the other end wall near the axis of the cylinder and presenting its bristles endwise as a flat face parallel to said abutment face and spaced therefrom by less than the diameter of a ball to be cleaned, and a spiral ball guiding wall coiled in the space between said brush and abutment faces and forming a circuitous passage leading from the entrance opening to a discharge opening at a high point in the casing.

1,823,348. RECOVERY OF CELLULOSE ACETATE FROM ACETIC ACID SOLUTIONS THEREOF. HANS T. CLARKE, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 6, 1928. Serial No. 245,059. 11 Claims. (Cl. 260—102.)

7. In the process of recovering cellulose acetate from a solution thereof in acetic acid, the step which comprises adding said solution to an aqueous precipitating bath containing initially approximately 33% by weight of acetic acid and maintaining approximately that concentration of acetic acid in the precipitating bath throughout the precipitation.

1,823,349. SOUND PICTURE SYSTEM. SHELBY C. CHAPMAN, Jackson Heights, N. Y., assignor to Electrical Research Products Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 5, 1929. Serial No. 390,470. 2 Claims. (Cl. 274—46.)

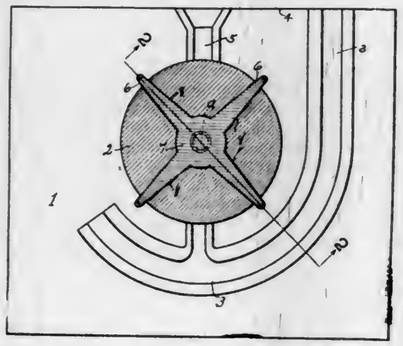


1. The method of modifying the negative film of a photographic sound record characterized by a chemical reduction of the end portions of the sound record progressively varying lengthwise of the film.

1,823,350. PROCESS OF ESTERIFYING CELLULOSIC MATERIALS WITH VAPORS OF LOWER FATTY ACIDS. HANS T. CLARKE and CARL J. MALM, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 21, 1927. Serial No. 200,502. 12 Claims. (Cl. 260—101.)

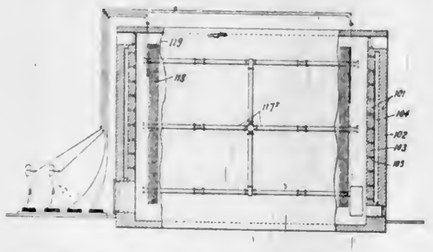
5. In the process of making a cellulose ester of a fatty acid, heating mercerized cellulose in the vapor of a fatty acid having more than one and less than eight carbon atoms at a temperature above 100° C. but below the temperature at which the product is degraded, in the absence of oxygen gas, until the acyl group in the ester thus produced reaches at least 8%, said vapor being the sole acetylating agent.

1,823,351. GRINDING BALL. WARREN F. CLEMENTS, Allentown, Pa., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Mar. 6, 1929. Serial No. 344,700. 4 Claims. (Cl. 83—9.)



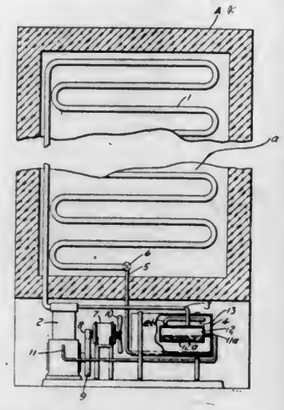
1. A grinding ball having an inside spider of soft iron and the remainder of hard iron, said spider having arms extending into said hard iron.

1,823,352. APPARATUS FOR BLEACHING TEXTILE FIBERS WITH A GASEOUS CURRENT, SUCH AS OZONIZED AIR. EMILIO CRESPI, Crespi-sur-l'Adda, Italy, and MARIUS PAUL OTTO, Paris, France. Original application filed Nov. 30, 1926, Serial No. 151,785, and in France Feb. 2, 1926. Divided and this application filed June 21, 1929. Serial No. 372,700. 2 Claims. (Cl. 8—2.)



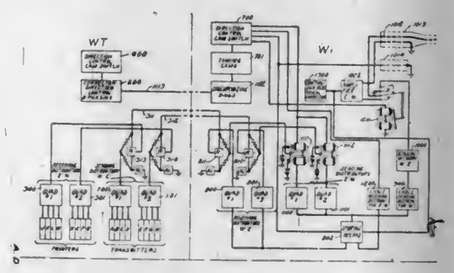
1. In an apparatus for bleaching textiles by a gaseous mixture, such as ozonized air, the combination of a double walled chamber with a free space between said double walls, means in said chamber for supporting the piece of textile to be treated, partitions dividing the free space into two parts, means providing communication between said free space and said chamber, pipes for conveying the gaseous mixture into one of the parts of the free space, and pipes for discharging the gaseous mixture from the second part of said free space whereby the gaseous mixture passes through the chamber and acts on the piece of textile.

1,823,353. APPARATUS FOR REFRIGERATION. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 2, 1927. Serial No. 180,398. 10 Claims. (Cl. 62—115.)



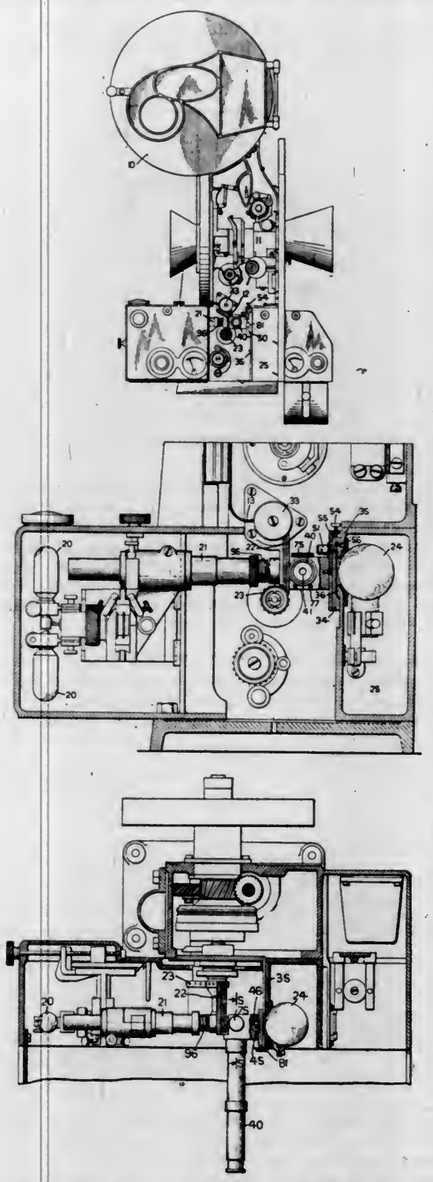
1. Refrigerating apparatus of the compression-expansion type comprising an evaporator, a compressor and a condenser connected together to form a closed cycle system, said condenser being arranged to be externally cooled, said compressor having a lubricating system, and thermal means for separating out lubricant from the working substance and restoring it to the lubricating system of said compressor, at least a part of said means being arranged to be insulated by said condenser against excessive loss of heat to said compressor.

1,823,354. HIGH SPEED SUBMARINE CABLE TELEGRAPH SYSTEM. ANDREW D. DOWD, Hoboken, N. J., and MARK B. KERR, Rosebank, Staten Island, and GEORGE A. LOCKE, Glen Cove, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 19, 1929. Serial No. 386,967. 17 Claims. (Cl. 178—63.)



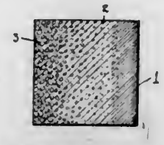
1. A telegraph system comprising a plurality of terminal and repeating stations, a high speed transmission line connecting said repeating stations in series, a plurality of lower speed lines connecting each of said terminal stations to a repeating station, multi-channel rotary distributors at each of said stations for transmitting signals over some of said lower speed lines and repeating said signals over said high speed line to the remainder of said lower speed lines at a steady rate of transmission time.

1,823,355. TELESCOPE FRAMING DEVICE. LOUIS SIMON FRAPPIER and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,761. 9 Claims. (Cl. 179—100.3.)



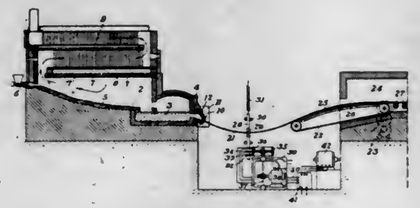
1. In a machine for reproducing sound from a photographic sound record, means for producing a scanning light, a film gate for directing said sound record past said light, a support therefor, and a microscope for facilitating adjustment of said light, means for supporting said microscope comprising a housing having an aperture therein, a prism supporting means mounted adjacent said aperture for changing the angle of the scanning light, and means for mounting said housing upon said film gate support interchangeably with said film gate.

1,823,356. REFRACTORY ARTICLE. ROBERT L. FRINK, Lancaster, Ohio. Filed Nov. 20, 1926. Serial No. 149,604. 1 Claim. (Cl. 72—36.)



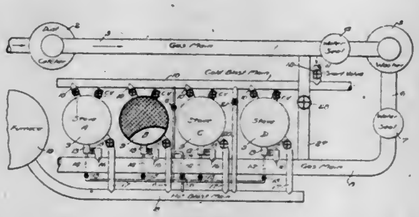
As a new article of manufacture, a body of material adapted to withstand high furnace temperatures, the body having a face portion which is dense and continuous in character and having an integral body extending continuously behind said dense face portion, the body being porous and the porosity of the body increasing toward the face thereof opposite said dense face portion.

1,823,357. MAKING SHEET GLASS. ROBERT L. FRINK, Lancaster, Ohio. Filed July 27, 1927. Serial No. 208,734. 7 Claims. (Cl. 49—17.)



6. The method of making sheet glass which comprises substantially continuously forming a glass sheet, causing the same to travel in an unsupported horizontally-extending path whereby the glass droops in such travel, and thereafter causing flexing of the glass in a direction opposite to the direction in which it is flexed during such drooping.

1,823,358. BURNER SYSTEM. WILLIAM A. HAVEN, Youngstown, Ohio. Filed Dec. 29, 1928. Serial No. 329,135. 11 Claims. (Cl. 263—19.)

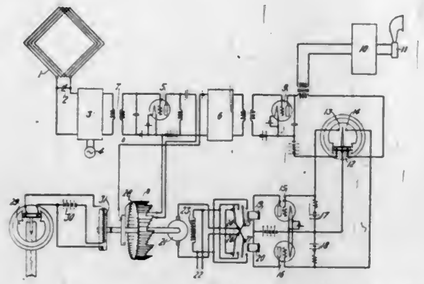


1. In a burner system, a stove, a burner therefor, a cold blast main connected with said stove, a second main connected with said stove, and a fuel controlling connection between one of said mains and said burner.

1,823,359. PROCESS OF MAKING CELLULOSE ACETATE. HARRY LE B. GRAY, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 17, 1927. Serial No. 240,943. 10 Claims. (Cl. 260—101.)

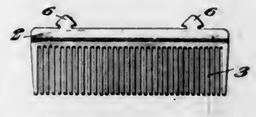
8. In the acetylation of cellulose, the process which comprises acetylating cellulose in the presence of ethylene dichlorid.

1,823,360. SIGNALING SYSTEM. RAYMOND A. HEISING, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 6, 1925. Serial No. 41,708. 7 Claims. (Cl. 234—1.5.)



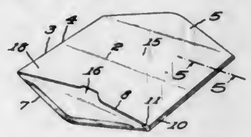
1. In a signaling system, means for receiving a signal, means for subjecting said signal to a variable amount of amplification, means for varying said amplification in response to the strength of the received signal to produce an amplified signal having substantially constant amplitude, and means for indicating the logarithm of the amplitude of the original received signal.

1,823,361. WATER WAVE COMB. WILLIAM F. HUDSON, Philadelphia, Pa. Filed Feb. 18, 1929. Serial No. 340,329. 2 Claims. (Cl. 132—38.)



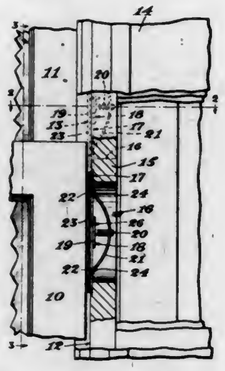
1. As a new article of manufacture, a water wave comb having conventional ribbed and toothed portions formed upon an arc of a circle, and lugs formed integral with said comb near each end thereof to accept and retain an elastic band, said lugs projecting from the outer part of the rib in the same plane with the body of the comb, with each lug extending in parallelism with the teeth of the comb.

1,823,362. ENVELOPE. WILLIAM ALLEN JENRICH, Chicago, Ill. Filed Nov. 21, 1928. Serial No. 320,895. 1 Claim. (Cl. 229—73.)



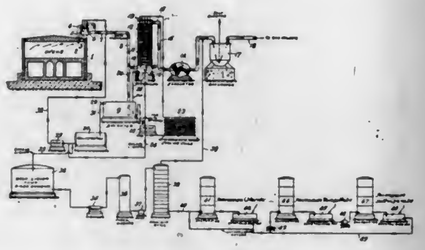
A double envelope comprising a blank having a body portion substantially rectangular in shape and having a longitudinally extending fold line midway its width and a transversely extending fold line midway its length, the said fold line dividing the body into quarter sections, diagonally opposed sections being gummed along their end edges and the other diagonally opposed sections having tongues at their ends and flaps along their sides, the tongues being folded inwardly and the body then folded along its transversely extending fold line to dispose the tongues in position to adhere to the gummed end portions of the first sections and form end closures and dispose the flaps above and below a pocket formed by the folded blank, the blank being then folded along the longitudinally extending fold line between the adjoining ends of said tongues to provide front and rear portions with the flap of the rear portion disposed between the same and the flap of the front portion overlying the outer face of the rear portion and adapted to be secured thereto.

1,823,363. SASH HOLDER. JOHN D. JOHNSON, Los Angeles, Calif. Filed Dec. 17, 1928. Serial No. 326,469. 3 Claims. (Cl. 292—74.)



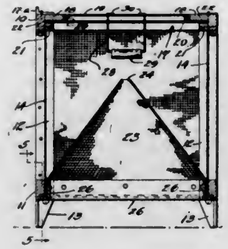
1. A sash holder comprising a slotted anchor disk adapted to be removably seated in a mortised window jamb or sash, an elongated abutment shoe having a load carrying lug extending through said disk, an arcuate plate spring normally abutting the inner face of said shoe, and an adjusting screw rotatively mounted within said anchor disk and threadedly engaging said spring for regulating the same.

1,823,364. PROCESS FOR THE ELIMINATION OF WASTE LIQUORS AND THE RECOVERY OF AMMONIUM SALTS AND PHENOLS FROM SAID LIQUORS. WALTER R. KNAPP, Pelham Manor, N. Y., assignor to Semet-solvay Company, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1926. Serial No. 152,146. 2 Claims. (Cl. 23—196.)



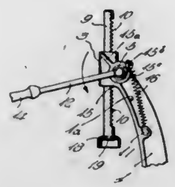
1. The process of eliminating waste liquors from a coal carbonization plant and recovering products therefrom which comprises scrubbing the products of distillation evolved in the carbonization of coal with an aqueous medium which is recirculated to scrub the distillation products, removing tar from the scrubbing liquor during its recirculation, removing excess scrubbing liquor treating the tar-freed scrubbing liquor thus removed with benzol to extract benzol-solubles contained in said liquor, feeding the said tar-freed liquor to an evaporator system, and regulating the evaporation in said system to balance the feed to and the recirculation in said system, whereby salts are successively recovered and a circulation of mother liquor is maintained in the evaporator system.

1,823,365. INSECT TRAP. LOUIS KOZLOWSKI, Hamtramck, Mich. Filed July 1, 1929. Serial No. 375,125. 1 Claim. (Cl. 43—118.)



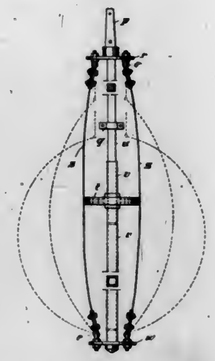
In an insect trap, a series of four vertical corner posts, a series of frame members connecting the corner posts at the top, a series of wood frame members connecting the corner posts at the bottom, a screen panel secured to the sides of the frame thus formed and extending across the inner face of the respective lower frame member, a pyramidal screen positioned within the frame and having an opening at its apex, the screen being provided with outturned flanges at the bottom fitting against the lower faces of the lower frame members and an angle iron member secured to each lower frame member and extending across the lower and inner faces of the respective frame members, the angle iron members extending upwardly into the pyramidal screen and securing the pyramidal screen and screen panels to the respective frame members.

1,823,366. BOTTLE CAPPER. HARRY J. LEBHERZ, Frederick, Md., assignor to The Everedy Company, Frederick, Md., a Corporation of Maryland. Filed Oct. 12, 1929. Serial No. 399,259. 9 Claims. (Cl. 226—84.)



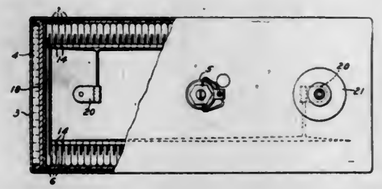
1. A bottle capping tool comprising a standard having a base and a head integrally connected therewith, a plunger passing through said head, gear teeth cut in one side of said plunger, a capping throat carried by the lower extremity of said plunger, a rotary shaft member extending through said head normal to said plunger, a lever for revolving said shaft, said shaft having gear teeth cut throughout one portion of the periphery thereof and being flattened throughout the remaining portion of the periphery thereof, a collar insertable over said shaft, spring means connected between one point on said collar and said standard, and a radially extending stop projecting from another portion of said collar, whereby said lever operates to rotate said shaft against the tension of said spring for effecting a bottle capping operation to a limiting position determined by said stop for moving the teeth on said shaft out of engagement with the teeth on said rack for allowing adjustment in the position of said plunger above said base.

1,823,367. EXCAVATING DEVICE. ERNST LORENZ, Berlin-Wilmersdorf, Germany. Filed Jan. 18, 1929, Serial No. 333,367, and in Germany Dec. 8, 1927. 3 Claims. (Cl. 255—77.)



1. In a device for excavating the earth underneath a bore-hole, resilient steel knife-blades kept in contracted position by their own resiliency, two holders of the knife-blades adapted to be moved at will relatively to each other for bending the said knife-blades outwardly while being underneath the bore-hole, and pivotal connections between the holders and the ends of the knife-blades.

1,823,368. FUSED SECTIONALIZED CONDENSER. RALPH E. MARBURY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1926, Serial No. 116,273. Renewed Feb. 3, 1931. 8 Claims. (Cl. 175—41.)

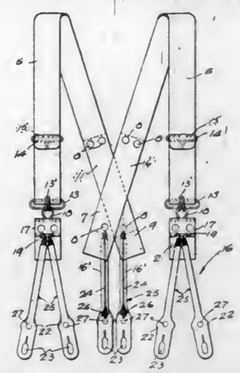


8. A fused, sectionalized, impregnated electrostatic condenser comprising a plurality of sections, an individual fuse for each section, an impregnating fluid surrounding said fuses and said sections, and a single container permanently containing said impregnating fluid and the entire assembly of condenser sections with their individual fuses, the number of sections being somewhat larger than the number of operative sections finally desired to obtain the rated capacity, characterized by the fact that, upon a failure of a relatively small number of sections, the remaining sections provide an operating capacity which does not vary materially from the rating desired.

1,823,369. SUSPENDERS. NOBLE MCCULLOCH, Oakland, Calif. Filed Apr. 3, 1928. Serial No. 266,930. 3 Claims. (Cl. 241—27.)

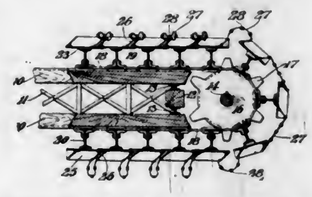
1. In a suspender, shoulder straps slidably connected together at their rear ends and individually movable relative to each other and formed of inelastic material, elastic fastening elements secured to the rear ends of said straps, elastic fastening elements secured to connecting members, at the front ends of said straps, said connecting members each comprising a link member formed

of inelastic material, a loop supported in one end thereof for turnably supporting one end of one elastic fastening



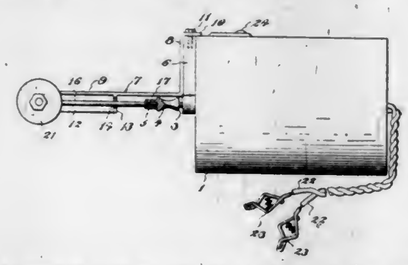
element, a second loop disposed in the other end of said link member for detachably engaging with the front end of one of said straps.

1,823,370. CONVEYER APPARATUS. JAMES C. MEEM, Brooklyn, N. Y. Filed Feb. 21, 1929. Serial No. 341,615. 5 Claims. (Cl. 198—149.)



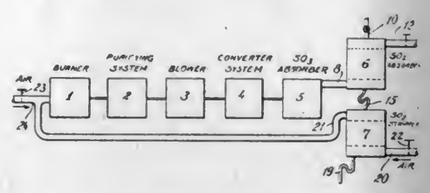
1. In combination with a conveyer provided with adjacent overlapping pans to form a trough-like conveyer, header members extending crosswise of said pans and secured thereto at opposite ends of each pan, flexible material secured to said header members of adjacent pans and adapted to bridge the space between said pans when said overlapping pans separate.

1,823,371. PORTABLE GRINDING AND RESURFACING DEVICE. WILLIAM P. MEISSNER, Cuero, Tex. Filed June 28, 1929. Serial No. 374,575. 1 Claim. (Cl. 51—170.)



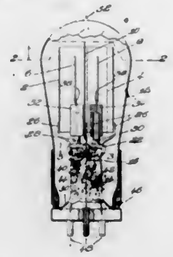
A portable tool for grinding and resurfacing breaker points of a distributer without removing said points from the distributer casing, comprising a casing, a motor in the casing adapted to be operated from the ignition battery of an automobile, a radially disposed rib on one end wall of the casing, an arm extending forwardly from the rib and having a base portion directed along the rib and then terminally bent over the end of the rib, a screw detachably securing said end to the end of the rib, a shaft carried by the arm, a grinder disk supported by the arm and geared to one end of said shaft, and a shaft for the motor projecting through said end of the casing and having a terminal bearing receiving a squared end formed on the first-named shaft whereby removal of said screw permits of disassembly of the arm and driving shaft from said casing and motor shaft.

1,823,372. PROCESS OF RECOVERING SULPHUR DIOXIDE FROM EXIT GAS. HENRY F. MERRIAM, West Orange, N. J., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Aug. 24, 1927. Serial No. 215,026. 4 Claims. (Cl. 23—174.)



1. In a cyclic process for the production of sulfuric acid, the steps of transferring sulphur dioxide in the exit gas from the sulfuric acid system to a solvent liquid, bringing air into contact with the liquid to remove dissolved sulphur dioxide, utilizing the mixture of air and sulphur dioxide thereby obtained for the production of strong sulphur dioxide gas, and utilizing the strong sulphur dioxide gas for the production of sulfuric anhydride.

1,823,373. ELECTRICAL TUBE. ISRAEL C. ORSWELL, Medford, Mass., assignor to The Amrad Corporation, Medford, Mass., a Corporation of Ohio. Filed June 23, 1926, Serial No. 117,991. Renewed Feb. 26, 1930. 3 Claims. (Cl. 250—27.5.)

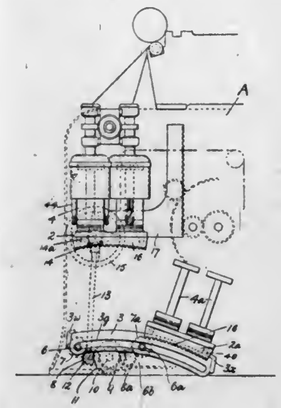


1. An electrical tube comprising an envelope, electrodes, and a re-entrant stem formed with a press having a plurality of angularly disposed wings and a substantially flat top portion connecting and surmounting the wings, supporting means for the electrodes and lead-in wires sealed in the press.

1,823,374. DOFFING MECHANISM FOR FLYER SPINNING, DOUBLING, TWISTING AND LIKE MACHINES. JOSEPH ALFRED PORTER, Hope Foundry, Leeds, England, assignor to Fairbairn Lawson Combe Barbour Limited, Hope Foundry, Leeds, England. Filed May 22, 1929, Serial No. 364,964, and in Great Britain May 31, 1928. 4 Claims. (Cl. 118—18.)

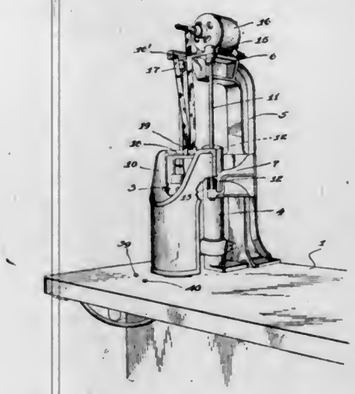
1. Doffing mechanism for spinning machines and the like comprising a plurality of detachable and interchangeable lifter plates, a pair of arcuate supporting members for said plates having curved slots, a pair of parallel

spaced runners extending into said slots, studs carrying said runners, the spacing of said runners being less than the length of the slots, whereby the supporting members



are movable on said runners, and means mounted on said studs and operatively engaging a lifter plate on said members to move said plates forwardly from a horizontal position to a forwardly and downwardly sloping position.

1,823,375. SHAPER GUARD. FLOYD J. POTTER, Detroit, and EDGAR L. BAILEY, Birmingham, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 29, 1929. Serial No. 366,781. 9 Claims. (Cl. 144—251.)

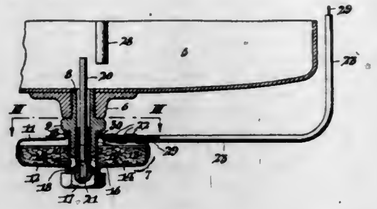


1. The combination with a shaper tool or the like, a guard therefor which is vertically reciprocable to expose and to guard the tool in different positions, a motor having a shaft, a flexible element associated with the guard and shaft, whereby rotation of the shaft winds the flexible element thereon to raise the guard, and a resilient driving connection between the shaft and flexible element.

1,823,376. PYROTECHNIC DEVICE. HANS REIHLEN, Karlsruhe, Germany, assignor to Milton M. Adler, Newark, N. J. Filed Mar. 19, 1927. Serial No. 176,833. 3 Claims. (Cl. 52—23.)

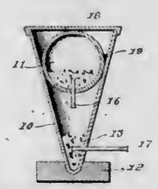
1. Fireworks containing at least a sulphur phosphorus compound and containing chlorate to produce oxygen and using as a binding material, a sorell cement.

1,823,377. DISTANT LIQUID LEVEL INDICATING APPARATUS. JOSEPH P. REMINGTON, Philadelphia, Pa. Filed Aug. 31, 1927. Serial No. 216,719. 11 Claims. (Cl. 73—54.)



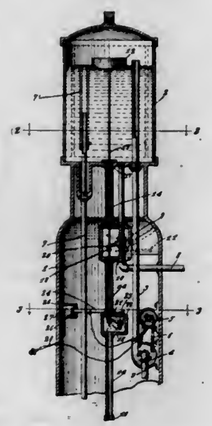
1. A pneumatic attachment for distant liquid level indicating systems comprising a tubular coupler, a shallow expansion chamber seating on the coupler, and a removable stand pipe device securing the expansion chamber to the coupler with provision of a flow choking connection therebetween.

1,823,378. ROCKET. CHARLES SCARDONE, Elkton, Md. Filed Apr. 5, 1929. Serial No. 352,621. 7 Claims. (Cl. 102—23.)



1. A rocket including a hollow conical body open at its base end, and a hollow projectile in the end of the conical body, said body and projectile each having explosive charges therein and means tending to maintain the projectile in its original position.

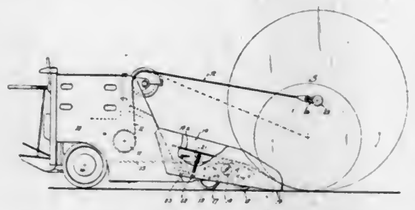
1,823,379. VENDING PUMP. EDWARD T. SCHMIDT, Blackwell, Okla. Filed June 4, 1928. Serial No. 282,646. 8 Claims. (Cl. 221—100.)



1. A liquid dispensing device comprising a tank, a pump for forcing liquid into the tank, a motor for operating the pump, a circuit for the motor, a switch in

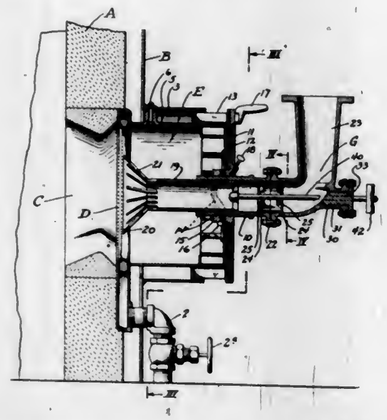
the circuit, a shaft rotatably supported, a first arm connected with the shaft, means for connecting the arm with the movable part of the switch, a second arm on the shaft, a discharge pipe connected with the bottom of the tank, a valve in said pipe, manually operated means for opening the valve, an arm on the valve, a float in the tank, a stem connected with the float, collars on the stem, one of which will strike the second arm on the shaft when the float nears its upward limit of movement to rock the shaft to cause the first arm to open the switch, another collar on the stem acting to strike the arm on the discharge valve to close the valve when the float reaches its downward limit of movement and another collar on the stem acting to strike the second arm on the shaft to close the switch as the float reaches its downward limit of movement.

1,823,380. TRUCK. CHARLES S. SCHROEDER, Stamford, Conn., assignor to The Yale & Towne Manufatcuring Company, Stamford, Conn. Filed May 4, 1929. Serial No. 360,543. 5 Claims. (Cl. 214—94.)



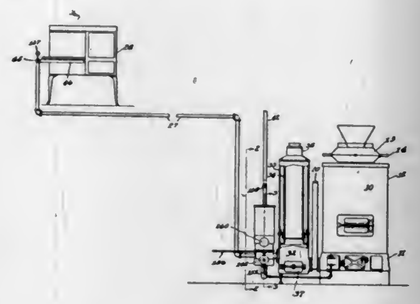
2. In an industrial truck, a truck frame, a single unitary load platform for said truck pivotally mounted relatively to said frame, means arranged to yieldingly urge said platform into a normally horizontal position relatively to said frame, means on said truck for pulling a load on to said platform, said platform being adapted to pivot automatically and rest one end against the ground when initially subjected to the weight and contact of the load, said load and platform being arranged so that the load will tend to move off said platform unless held by a constant pressure of said pulling means.

1,823,381. FUEL BURNER. CARLYLE J. SHERWOOD, Los Angeles, Calif. Filed Sept. 28, 1927. Serial No. 222,492. 3 Claims. (Cl. 110—22.)



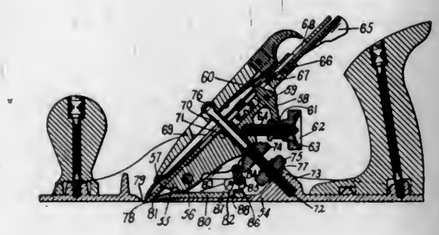
1. In combination with a furnace wall having an opening therein, a cylindrical drum adapted to be disposed in longitudinal central alignment with the opening in a furnace wall, a damper structure disposed over one end of said drum and adapted to regulate the passage of air through the drum and the opening in said furnace wall to the furnace, a bearing tube extending horizontally and being disposed in fixed central longitudinal alignment with the drum, an elbow member in direct communication with the outer end of said bearing tube through which member powdered fuel may be delivered to the bearing tube, a tubular sleeve mounted to telescope within the bearing tube and projecting towards the furnace wall opening, means for adjusting said sleeve longitudinally of the bearing tube within which it is mounted and a frusto conical shield flaring at the opposite end of the bearing tube, said shield being formed with radial openings occurring at equal spaced intervals in the shield and extending for a length in the sleeve whereby air passing around the sleeve and through the drum may pass through the shield and commingle with the powdered fuel being delivered from the bearing tube.

1,823,382. GAS GENERATING APPARATUS. HARRY F. SMITH, Dayton, Ohio, assignor to The Gas Research Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 14, 1925. Serial No. 75,316. 33 Claims. (Cl. 48—87.)



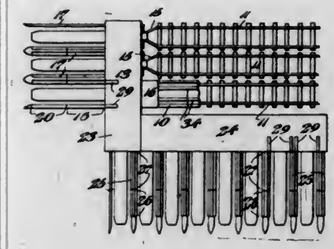
2. Apparatus of the character described, comprising a gas producer adapted to contain a fuel bed of carbonaceous material, motor driven means for blasting said fuel bed to cause the generation of combustible gas and for distributing said gas for use; and means for controlling the operation of said motor driven blasting means during the utilization of gas comprising a motor circuit, pressure responsive means for temporarily opening the motor circuit, and other means for permanently opening the motor circuit.

1,823,383. PLANE. JOHN H. WELLER and ROY S. NEWTON, New Haven, Conn., assignors to Sargent & Company, New Haven, Conn. Filed Jan. 7, 1930. Serial No. 419,054. 9 Claims. (Cl. 145—12.)



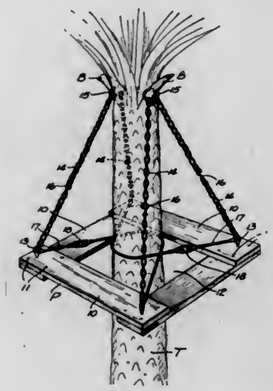
1. In a plane, a bed provided with a work engaging face and an opening extending through the face, a bit extending through said opening, means for adjusting the plane of the bit with respect to the work engaging face, means movable into position behind said bit for preventing chips from passing through the opening behind the bit, and means associated with both of said means for controlling the movement of the second-named means as the first-named means is adjusted.

1,823,384. CONTAINER HANDLING SYSTEM. CHARLES D. YOUNG, Wayne, Pa. Filed Sept. 17, 1928. Serial No. 306,550. 2 Claims. (Cl. 214—38.)



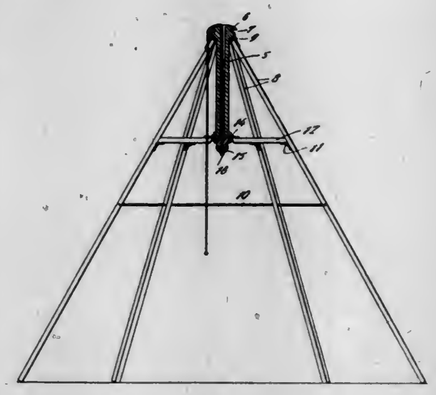
1. A container handling system comprising in combination a terminal of a railroad track, a platform having a portion extending along the side of said track and a portion extending across the end of said track, a plurality of container supporting ramps terminating in close proximity to the side portion of said platform, means for automatically delivering a container from a motor truck to said ramp rails, skids arranged to be aligned respectively with said ramp rails, and motor driven vehicles for conveying containers from said skids along said platform and to a car on said track each of said vehicles having a power operated vertically movable container receiving platform.

1,823,385. SUPPORTING STRUCTURE FOR FRUIT PICKERS. ROBERT BARKER, Indio, Calif. Filed July 22, 1929. Serial No. 380,023. 6 Claims. (Cl. 304—28.)



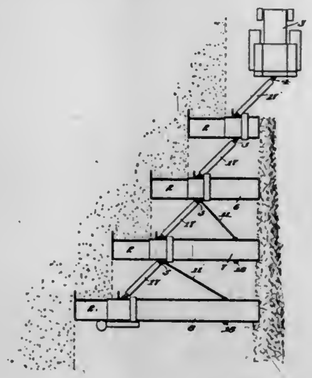
1. A supporting structure of the character described comprising a platform having an opening adapted to receive the trunk of a tree, and suspension members connected at spaced intervals to the platform and having rings adapted to receive branches of the tree to support the platform from the tree.

1,823,386. TENT FRAME. CHARLES A. BRUST, Morristown, N. J. Filed June 20, 1929. Serial No. 372,454. 1 Claim. (Cl. 135—2.)



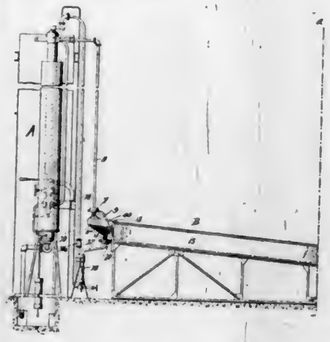
A tent frame of the class described comprising a hollow post, a plurality of ribs hingedly engaged with the upper portion of the post and being longer than the post, a plurality of struts hingedly connected with the intermediate portions of the ribs to extend inwardly therefrom, a block to which the inner ends of the struts are hinged, and a cable attached to the block and threaded through the hollow post so that by pulling upon the cable to move the block in abutment with the lower end of the post, said ribs may be extended and by releasing the cable said block may be moved away from the bottom end of the post to collapse the ribs.

1,823,387. METHOD OF HARVESTING AND THRASHING GRAIN. THOMAS D. CAMPBELL, Hardin, Mont. Filed Nov. 12, 1925. Serial No. 68,575. 3 Claims. (Cl. 56—1.)



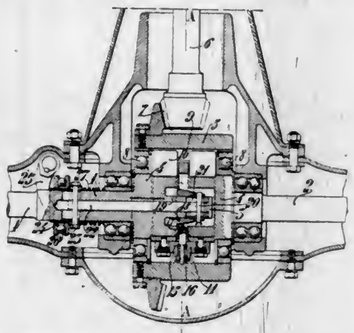
1. A method of harvesting grain consisting of making a plurality of successive and simultaneous cuts, each cut offset longitudinally from the adjacent cut, conveying the cut grain of each cut in a single direction and depositing the grain of the first cut loosely upon the ground and the grain of each cut succeeding loosely upon the grain of the preceding cut to form a single windrow, and leaving the loose grain in such windrow unbound, to ripen and weeds to cure.

1,823,388. LIQUEFACTION APPARATUS. JOHN W. DAVIS, Washington, D. C., and WILLIAM L. DE BAUFRE, Lincoln, Nebr. Filed Dec. 29, 1923. Serial No. 683,273. 29 Claims. (Cl. 62—122.)



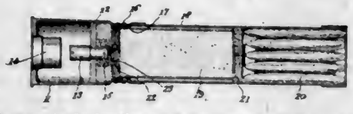
1. In the art of liquefaction, a liquefier casing and a bank of tubes extending therein rectangularly arranged, the tubes being of substantially the same length and arranged in rows, the rows being arranged in stepped relation and a connection header for each tube, the ends of the tubes extending beyond the casing.

1,823,389. DIFFERENTIAL GEAR PROVIDED WITH PROPPING ROLLERS. DIMITRI SENSAUD DE LAVAUD, Paris, France. Filed Jan. 3, 1928, Serial No. 244,284, and in France Oct. 30, 1926. 33 Claims. (Cl. 76—7.)



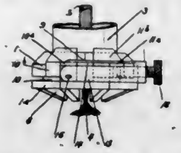
1. A differential gear for transmitting power from a shaft to a pair of axially aligned driven shafts, comprising a driving member, two sets of wedging means, each interposed between the said driving member and one of the driven shafts, means for limiting the movement of the wedging means of one of the sets relatively to the other set, and means for causing at will the driven shafts to simultaneously and freely rotate with respect to the driving member.

1,823,390. AMMUNITION FOR SIGNAL PISTOLS. LOUIS L. DRIGGS, Jr., New Rochelle, and HENRY B. FABER, New York, N. Y. Filed Nov. 25, 1930. Serial No. 498,148. 8 Claims. (Cl. 102—21.)



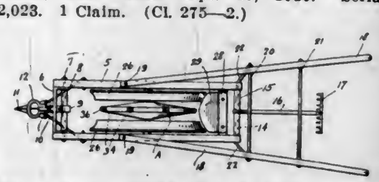
1. A pyrotechnic signal flare comprising a closed projectile case, a pyrotechnic candle therein, a friction ignitable priming composition attached to said candle, and means on one end of said case for detachably securing a member containing a primer and a propelling charge.

1,823,391. CLOSING DEVICE FOR GRIPPING A STRAND OF HAIR IN HEATING TUBES FOR HEATING STRANDS OF HAIR. GUILLAUME DUCART, Paris, France. Filed Oct. 13, 1930, Serial No. 488,486, and in France Oct. 24, 1929. 3 Claims. (Cl. 132—36.1.)



1. A closing device for gripping a strand of hair, adapted to be fitted at the end of tubes in which the strands of hair are treated by heat or otherwise, in particular for obtaining so-called permanent waves, the said closing device being characterized by the feature that it is formed by a rubber block split diametrally over the whole of its height while leaving a solid part forming a hinge, the said rubber block being shaped so as to comprise a recessed part receiving the end of the heating tube, seatings for receiving the action of a clamping member and base provided with projections, ribs or fins reducing the contact surface between the closing device and the head and permitting air to circulate between the closing device and the scalp.

1,823,392. SEED PLANTER. WILLIAM A. FILLINGIM, Kountze, Tex. Filed Sept. 15, 1930. Serial No. 482,023. 1 Claim. (Cl. 275—2.)



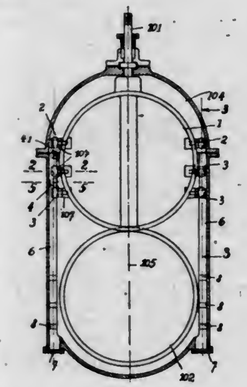
A seed planter comprising a wheeled frame, a seed container rotatably supported in the frame and comprising a hub, a pair of frusto-conical disks connected with the hub at their centers with their peripheries slightly spaced apart, a ring connected with the peripheries of the disks and filling the space between such peripheries, a plurality of radially extending necks integrally connected with the ring, the outer end of each neck being threaded, a disk resting on the outer end of said neck and having a seed outlet opening at its center and a cap threaded to each neck and holding the disk thereon whereby seeds will drop through the outlet opening as the necks are brought to the bottom of the container during the rotation thereof, and means for rotating the container.

1,823,393. METHOD OF AND MEANS FOR COOLING PASSENGER CARS IN STATIONS. CHARLES W. GALLOWAY, Baltimore, Md. Filed Sept. 8, 1930. Serial No. 480,490. 11 Claims. (Cl. 62—24.)



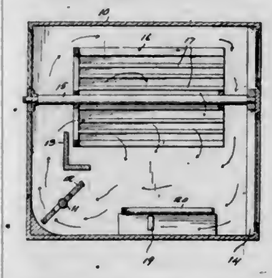
1. The method of temperature-conditioning the interiors of passenger coaches while standing in a station or transportation yard, which consists in drawing air from the atmosphere outside the coach through a cooling course, cooling the air to a temperature lower than the internal temperature of the coach, forcing the cooled air into the coach at one end of the coach for travel in the direction toward the other end of the coach, and positively withdrawing the relatively warm air from the coach at the opposite end of the coach until a desired internal temperature condition is reached.

1,823,394. DISK VALVE. HELLMUT GEIGER, Bad Soden in the Taunus, Germany. Filed Jan. 10, 1930, Serial No. 419,937, and in Germany Dec. 7, 1928. 6 Claims. (Cl. 251—56.)



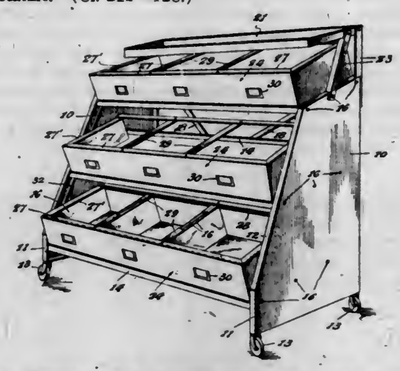
1. In a relatively large gate valve, the combination with a one piece casing disposed transversely of the conduit to be controlled by the valve and providing a guide for the valve disk, of a valve disk within said casing and shiftable transversely of the conduit, said casing being formed at opposite sides with cylindrical bores open at their inner sides and located parallel to the direction of the movement of the valve disk, and said valve disk being provided with supporting members extending into said bores and into engagement with the walls thereof.

1,823,395. CABINET INCUBATOR. JOHN O. GROSS, Littleton, Colo. Filed Dec. 7, 1929. Serial No. 412,400. 2 Claims. (Cl. 119—37.)



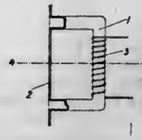
1. An incubator of the character described having at the rear lower portion thereof a longitudinally extending fan shaft extending the whole length of the incubator, fan blades mounted upon said shaft, and a plurality of racks disposed above the fan, each of said racks being mounted on an axle extending from front to rear of the incubator, whereby said racks may be tilted in the longitudinal plane of the incubator, each rack having means extending parallel to the axis of the rack for supporting a plurality of trays therein, each rack being independently tiltable with relation to any other rack.

1,823,396. DISPLAY STAND. HENRY F. GOULET, Walpole, Mass. Filed Aug. 11, 1930. Serial No. 474,575. 5 Claims. (Cl. 211—128.)



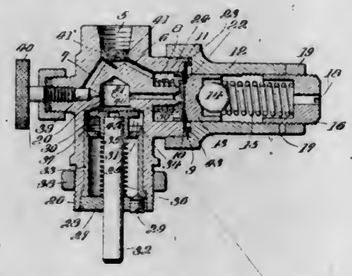
1. A display stand comprising spaced sides, a tray secured to said sides and adapted to hold a row of display boxes, a cover for the tray having walls adapted to conceal the walls of the boxes, and transverse strips carried by the front wall of the cover and adapted to conceal the contiguous top edges of adjoining display boxes.

1,823,397. LEVEL INDICATOR ADAPTED CHIEFLY FOR HIGH PRESSURE BOILERS. BENJAMIN ALFRED GUY, Paris, France. Filed May 16, 1927, Serial No. 191,909, and in France May 26, 1926. 6 Claims. (Cl. 177—311.)



1. A level indicator chiefly for water boilers comprising a substantially vertical container connected with the boiler, a wall of said container the inside of which is bathed by water or steam from the boiler according to the height of the point considered, a series of heat sensitive elements disposed at different heights in heat exchanging contact with the outside of said wall, a supply of energy, means whereby said supply heats the several elements above the highest temperature of the wall at any point and temperature revealing means corresponding to each element.

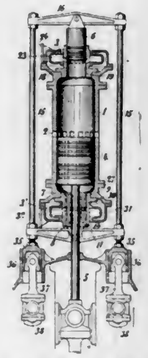
1,823,398. UNLOADER. GEORGE EDGAR HAZARD, Rochester, N. Y., assignor to Kellogg Manufacturing Co., Rochester, N. Y. Filed Dec. 22, 1926. Serial No. 156,421. 6 Claims. (Cl. 137—153.)



1. An unloader adapted for use with air compressors or the like, comprising a casting having therein an air inlet

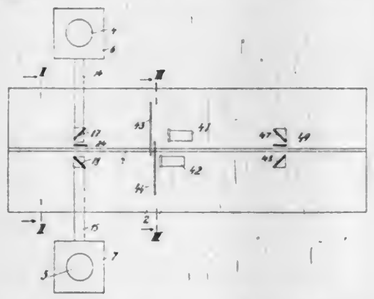
in communication with a chamber, an air outlet from said chamber to a second chamber, a valve arranged in said first chamber and adapted to normally close the outlet pressure, a disc positioned below said second chamber, a carrier for said disc, a guide for said carrier, a plunger having connection with said carrier, and resilient adjustable means for normally holding the valve in a closed position in respect to the outlet opening from the first chamber, whereby a predetermined amount of air is required to unseat said valve to cause the operation of the disc and the plunger.

1,823,399. SCAVENGING FOR TWO-STROKE INTERNAL COMBUSTION ENGINES. TORKILD VALDEMAR HEMMINGSEN, Copenhagen, Denmark. Filed Oct. 8, 1928, Serial No. 311,204, and in Denmark Oct. 28, 1927. 11 Claims. (Cl. 123—51.)



4. In a double acting two-stroke internal combustion engine, the combination of a main cylinder having a plurality of scavening ports therein, being directed tangentially to a cylindrical surface disposed within the inner wall of said cylinder and arranged coaxially therewith, an upper cover on said cylinder, a second cylinder arranged in said cover and having exhaust ports therein a lower cover on said cylinder a third cylinder arranged in said lower cover and having exhaust ports therein, pistons in each of said cylinders in said covers for controlling said exhaust ports, a power piston in said main cylinder adapted to control said scavening ports, and means interconnecting said pistons in said cylinder covers whereby the motion of said pistons are identical.

1,823,400. PHOTOGRAPHIC FILM COPYING DEVICE. LUDWIG HORST, Berlin-Wilmersdorf, Germany, assignor to Sirius Kleurenfilm-Maatschappij, Bosch En Duin, near Utrecht, Netherlands. Filed Mar. 9, 1928, Serial No. 260,398, and in Germany Apr. 8, 1927. 3 Claims. (Cl. 88—24.)



1. In a device of the character described, a support, a plate rising from said support and provided with two apertures, a source of light on each side of said plate opposite a portion of said aperture, means for adjusting each source of light so that the axes of the beams of rays become offset but parallel to each other, mirrors adjacent said first aperture, means for directing light from each of said sources of light onto said mirrors, means for directing said light onto a further set of substantially opposed mirrors and through said second aperture, and means for interrupting said light at predetermined intervals.

1,823,401. COMBINATION PNEUMATIC AND SPRING SUPPORT FOR VEHICLES. JAMES HALVOR JOHNSON, San Mateo, Calif. Filed Mar. 5, 1929. Serial No. 344,444. 7 Claims. (Cl. 280—104.)

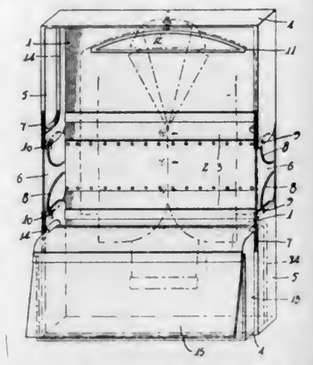


1. A resilient support for a vehicle body comprising a leaf spring for each front wheel, the front of each spring being connected to the vehicle, a leaf spring for each rear wheel having their rear ends connected to the vehicle, an elongated flexible air tube disposed on each side of the vehicle body and a girder for each tube, each girder bearing against its respective tube and having its ends connected to the inner ends of said springs whereby movements of the springs will cause the girders to compress their respective tubes.

1,823,402. SILVER CLEANING COMPOSITION. GRINNELL JONES and DOROTHY WEED MARSHALL, Cambridge, Mass., said Dorothy Weed Marshall assignor to said Jones. Filed Jan. 21, 1930. Serial No. 422,479. 5 Claims. (Cl. 87—5.)

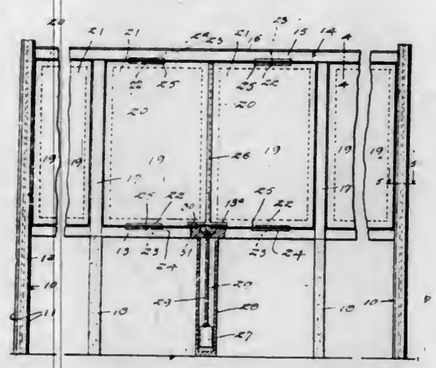
2. A silver cleaning composition of the abrasive type, containing infusorial earth substantially 20%, sodium oleate substantially 20%, an alkali metal halide 5 to 15%, balance water.

1,823,403. TRAVELING BAG. WERNER KSUEGER, Miami, Fla. Filed Dec. 12, 1928, Serial No. 325,540, and in Germany Nov., 1928. 2 Claims. (Cl. 190—41.)



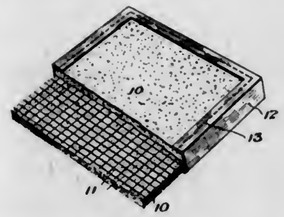
1. A traveling bag comprising sides an a top having their edges spaced apart, flexible strips forming hinge connections between said sides and top, the sides having end walls and bottom portions adapted to move together, plates secured to the top and of a size to close the spaces between said end walls when the sides are swung apart, said plates overlapping said end walls in the closed and open positions of said sides, said plates having arcuate slots, and securing elements carried by said walls and working in said slots, said plates and end walls having rounded corners to accommodate said hinge connections when the bag is closed, said hinge connections permitting the sides and top to be swung into a common plane.

1,823,404. STORM OR WIND-PROOF SIGN BOARD. JULIUS A. MARX, Altoona, and WILLIAM W. LOWER, Tyrone, Pa. Filed May 29, 1930. Serial No. 457,407. 5 Claims. (Cl. 40—138.)



5. A sign board comprising a supporting frame, a panel pivotally supported within said frame for rotation around a vertical axis, the panel being normally positioned in a relation parallel to the frame but being swingable in either direction therefrom, and means urging the panel into such parallel relation but permitting the panel to open in either direction under wind pressure including a weight and a cable connected to the weight and connected directly to a free edge of the panel, the weight being supported by the frame and the frame having a guiding means over which the cable passes, the guiding means being disposed immediately adjacent the edge of the panel to which the cable is attached, the guiding means permitting that portion of the cable immediately adjacent the panel to be pulled out in either direction and exert a direct pull on the edge of the panel in all positions of the panel.

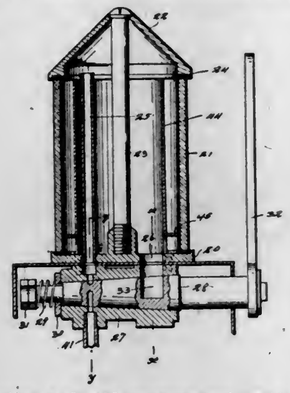
1,823,405. ACOUSTIC MATERIAL. MARCUS MAZER, Philadelphia, Pa. Filed June 7, 1929. Serial No. 369,233. 4 Claims. (Cl. 154—44.)



1. An acoustic material comprising a relatively loosely matted fibrous body portion, and a wire mesh support coextensive therewith and embedded in the body portion to maintain the same against sagging and deformation.

1,823,406. LUBRICATING OIL DISPENSER. WILLIAM H. PEADEN, Tulsa, Okla., assignor of two-thirds to Arthur O'Dell, Tulsa, Okla. Filed July 3, 1929. Serial No. 375,724. 1 Claim. (Cl. 221—74.)

In a liquid dispensing device having a liquid tank, an air pressure tank, pipe means connecting said pressure tank with said liquid tank, discharging means for discharging the liquid from the liquid tank, and a compound valve interposed in the connecting pipe connecting said pressure tank to said liquid tank and also interposed in the discharging means, said valve comprising a casing, a rotatable valve stem mounted in the casing, said casing having an inlet port, an outlet port and an overflow port, said valve stem having an angularly disposed port therethrough whereby to permit intercommunication between selected ports, said valve casing also having a plurality of pairs of oppositely disposed air ports communicating with said pipe connection and said pressure tank, said valve stem having a peripheral, and an angularly disposed port therein permitting communication with selected pairs of air ports upon rotation of the valve stem, said air ports in said casing and said valve stem being disposed in spaced relation to the liquid ports of said casing, said valve stem upon rotation thereof for discharge of liquid through the discharge means being adapted to connect selected air ports together whereby to permit forced discharge of the liquid through the discharge port.

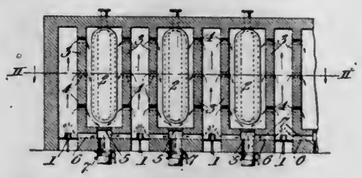


1,823,407. POLICE STICK. DUANE L. POTTER, Dalton, Pa. Filed Apr. 24, 1929. Serial No. 357,803. 6 Claims. (Cl. 273—84.)



1. A police stick comprising a cutting member normally below the surface of the stick, a gripping member integral with said cutting member pivotally connected to said stick for projecting said cutting member, means for returning said cutting member to its normal position.

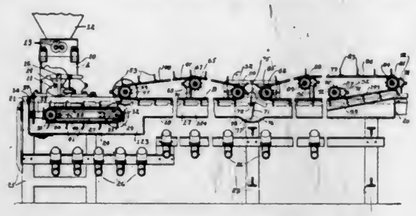
1,823,408. APPARATUS FOR THE DEHYDRATION AND LOW TEMPERATURE CARBONIZATION OF WASTE SACCHARINE MATERIAL. GUSTAVE T. REICH, Anaheim, Calif. Filed May 7, 1927. Serial No. 189,699. 8 Claims. (Cl. 202—124.)



1. Apparatus for the dehydration and low temperature carbonization of waste saccharine material, which com-

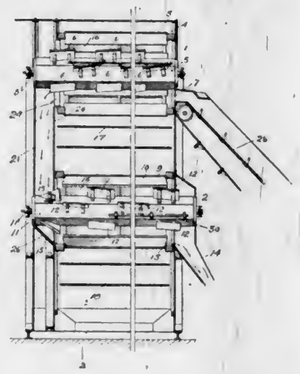
prises a heating chamber, a combustion chamber on each vertical side of said heating chamber and separated therefrom by a partition wall, means for generating hot combustion gases in said combustion chamber, a plurality of rows of port-holes in said partition wall, a substantially horizontal cylindrical retort in said heating chamber, a stack and a flue connecting the lowest portion of said heating chamber with said stack.

1,823,409. DOUGHNUT MACHINE. FRANK M. ROEHL and PETER J. TOEWS, Minneapolis, Minn., assignors to National Automatic Doughnut Machine Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 31, 1928. Serial No. 316,144. 4 Claims. (Cl. 53—7.)



1. A doughnut machine comprising a tank, two conveyors for moving the doughnuts along said tank, a turnover paddle disposed between said conveyors, said paddle including a shaft and a pair of oppositely directed paddle members secured to said shaft in offset relation to one another to form rests on opposite sides of said shaft.

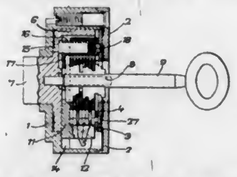
1,823,410. DOUBLE VINER. FRANK PITTIS RYDER, Niagara Falls, N. Y. Filed Dec. 12, 1929. Serial No. 413,556. 13 Claims. (Cl. 130—30.)



1. A chute for conveying vines to a viner having its body portion extending downwardly and having at its delivery end a cone shaped portion provided interiorly with guide ribs and adapted to receive within it the end of the beater cylinder of a viner.

1,823,411. CYLINDER LOCK. FRITZ SCHORI, Wetzikon, Switzerland, assignor to Firm Bauer A. G., Zurich, Switzerland. Filed Feb. 8, 1930, Serial No. 426,914, and in Switzerland May 28, 1929. 6 Claims. (Cl. 70—46.)

1. A cylinder lock, comprising in combination, a locking disk, stop members on the said locking disk, a plurality of disc tumblers, the said stop members on the said locking disk engaging the said tumblers in the locked condition of the lock so as to prevent them from returning into their respective inoperative positions as long as the said locking disk itself is not moved out of its locking position, and a safety disk movable by means of the key for the lock and coupled with the said locking disk so



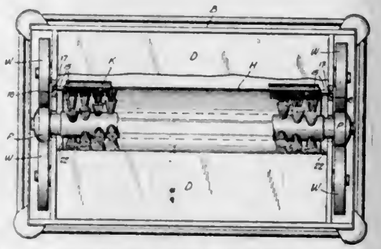
that when the said safety disk is displaced the said locking disk is moved out of its locking position so as to enable the said tumblers to return into their inoperative positions.

1,823,412. DETACHABLE HEAD FOR THE FREE ENDS OF LACES. PAUL SCHWARZE, Munich-Isarhohe, Germany. Filed Oct. 9, 1929, Serial No. 398,448, and in Germany Oct. 11, 1928. 3 Claims. (Cl. 24—143.)



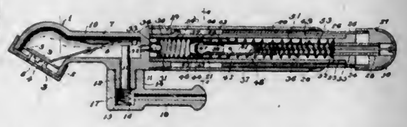
1. A detachable head for the free ends of laces, lace cords and the like, comprising a stiffened end on the lace; and a grip-forming body having a bore therein with two openings, one opening being adapted to receive the stiffened end of the lace and the other opening the soft part thereof whereby a pull on the soft part will automatically retain the lace in the body due to the openings and the stiffened end.

1,823,413. COMB AND HOOD MOUNTING FOR CARPET SWEEPERS. EARLE R. SMITH, Alhambra, Calif. Filed Apr. 15, 1930. Serial No. 444,501. 6 Claims. (Cl. 15—48.)



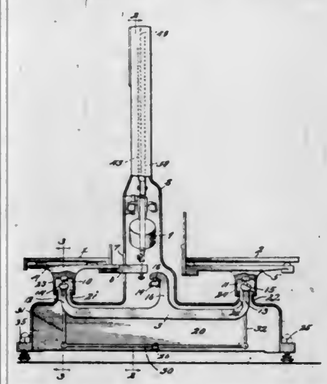
1. A carpet sweeper, comprising a body having a rotary brush therein, a hood covering the brush, sleeves on the hood, and studs secured in the body and extending through the sleeves for supporting the hood in covering relation to the brush.

1,823,414. TIRE GAUGE. HELMER N. THUNE, Climax, Minn. Original application filed July 28, 1927, Serial No. 209,014. Divided and this application filed May 28, 1928. Serial No. 281,308. 3 Claims. (Cl. 284—17.)



1. An air controlling valve comprising an elongated hollow body having a lateral air inlet at one end and a substantially lateral outlet at the opposite end, a valve normally closing the inlet and provided with a stem extending laterally into the body, and a lever within the body pivoted intermediate its ends thereto, one end of the lever terminating opposite the outlet to be acted upon by the valve stem of the tire or other article to be inflated, the other end of the lever extending across the stem of the inlet controlling valve to unseat the latter, and a spring yieldably retaining the lever in its normal position.

1,823,415. SCALE. ADRIANUS VAN DUYN, Rotterdam, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens Van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of the Netherlands. Filed Apr. 11, 1929, Serial No. 354,217, and in Great Britain July 19, 1928. 6 Claims. (Cl. 265—58.)



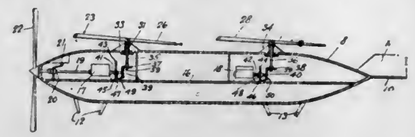
1. In a weighing device, the combination with a pivotally supported weighing beam, of a casing therefor, scale pans outside of the casing pivotally mounted on the weighing beam by means extending through openings in the casing, indicating means for the weighing device enclosed in an extension of said casing, and means for preventing dust, dirt and other foreign matter from entering said casing through said openings, the extension for enclosing said indicating means also enclosing the pivotal support for the weighing beam.

1,823,416. METALLIC STRUCTURAL UNIT. HERMANN VON FORSTER, Niederursel, near Frankfort-on-the-Main, and LUDWIG MOSER, Frankfort-on-the-Main, Germany. Filed Apr. 6, 1929, Serial No. 353,257, and in Germany Apr. 14, 1928. 2 Claims. (Cl. 85—10.)



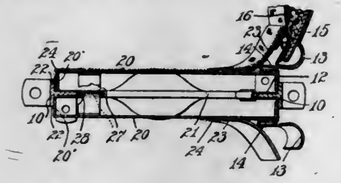
2. As a new article of manufacture, a device for fastening copper rain spouts and gutters to a support comprising a core of relatively hard metal having a high tensile strength as compared to copper, and a covering of copper applied to said fastening device.

1,823,417. AIRCRAFT. JOHN D. WEBER, Upper Lake, Calif. Filed Sept. 16, 1930. Serial No. 482,316. 2 Claims. (Cl. 244—15.)



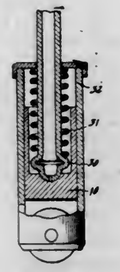
2. An air-craft comprising a fuselage, a propeller rotatably mounted in the forward end of the fuselage, a wing rotatably mounted on the fuselage having its axis of rotation at right angles to the forward propeller, a prime mover mounted in the fuselage and selectively coupled to the wing and the propeller, means supported on the fuselage for locking the wing in selected positions about its axis and means for changing the pitch of the wing, said locking means being simultaneously operable with the selectively coupling of the prime mover.

1,823,418. THEATER CHAIR. CHARLES C. ADELSPERGER and HEBER D. FITZGERALD, Union City, Ind., assignors to Union City Body Company, a Corporation of Indiana. Filed Oct. 29, 1928. Serial No. 315,614. 5 Claims. (Cl. 155—86.)



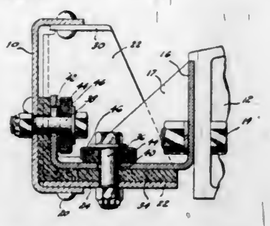
1. In a theater seat the combination of a back unit and a side unit connected together by means permitting horizontal angular adjustment of the side unit relative to the back unit, a forwardly projecting finger carried by a side unit at its rear, a side unit finish element bridging across the side unit from rear to front above the seat plane and engaging the forwardly projecting lip and having a portion projected over the junction between the side unit and back unit.

1,823,419. SWAGED END PUSH ROD. JOHN Q. ALMEN, Royal Oak, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 9, 1930. Serial No. 474,230. 3 Claims. (Cl. 123—90.)



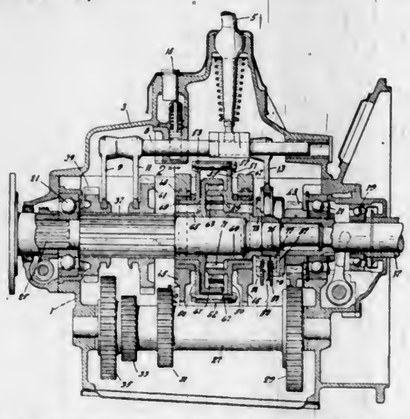
3. A push rod in the form of a hollow cylindrical tube having one end formed outwardly and then inwardly to provide an annular seat, the walls of the tube at the extreme end being converged inwardly to provide a circumferentially continuous spherical end.

1,823,420. ENGINE REAR SUPPORT. BENJAMIN H. ANIBAL, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 27, 1927. Serial No. 208,887. 8 Claims. (Cl. 248—14.2.)



8. A mounting of the class described comprising, a channel shaped frame member, an internal combustion engine having an outwardly extending arm, means for forming a connection between said arm and said frame member, and a resilient pad in continuous contact with two adjacent sides of said frame member, between said frame member and said arm.

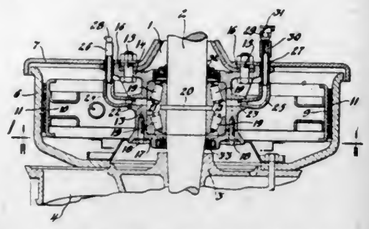
1,823,421. FOUR SPEED TRANSMISSION. ROSCOE BERINGER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 27, 1926. Serial No. 144,471. 1 Claim. (Cl. 74—58.)



In a transmission device, a driving shaft, a driven shaft, two spaced brackets within said housing, said brackets having aligned circular openings eccentrically positioned relative to said aligned shafts, a barrel shaped gear rotatable in said bracket openings, one of the heads of said barrel having an inwardly directed annular flange provided with external teeth and with internal teeth, a gear secured to said driven shaft and within said barrel having a flange with internal teeth engaging the external teeth of the said barrel flange, a sleeve rotatable about said driven shaft having a hub extending within said barrel with external teeth engaging the internal teeth of said eccentric flange, the sleeve externally of said barrel having external teeth, means rotatable with the driving shaft to clutch said driving shaft directly to said driven shaft or to said rotatable sleeve.

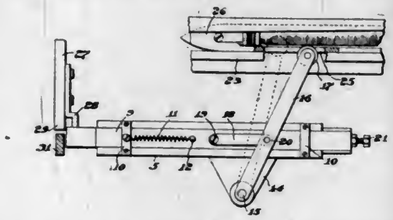
1,823,422. REAR AXLE WHEEL BEARING LUBRICATION. CARL J. BOCK, Pontiac, Mich., assignor to Yellow Truck and Coach Manufacturing Company, Pontiac, Mich., a Company of Maine. Filed Oct. 19, 1927. Serial No. 227,168. 5 Claims. (Cl. 308—187.)

1. Lubricating means for live axle bearings, including in combination a rotating shaft, axially spaced bearing surfaces for the shaft, an axle housing inclosing and supporting said bearing surfaces and providing an annular lubricant cavity surrounding the shaft and intermediate said axially spaced bearing surfaces, an inlet for lubricant



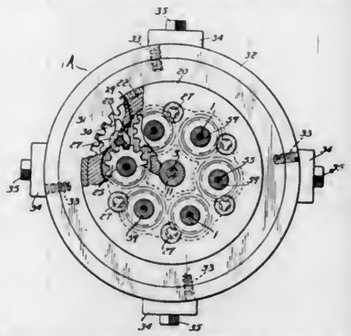
under pressure leading into said cavity and an unobstructed outlet passageway leading directly from the cavity to relieve pressure therein and provide an overflow for excess lubricant.

1,823,423. FEELER MECHANISM. JOHN C. BROOKS, Paterson, N. J., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Nov. 13, 1930. Serial No. 495,322. 10 Claims. (Cl. 139—276.)



1. In a feeler mechanism for looms, the combination of a feeler arm having a filling engaging end adapted to move along the filling in the shuttle on each detecting beat, a support for the feeler, and means independent of the filling for moving the feeler arm frontwardly on each detecting beat to relieve the pressure of the feeler against the filling.

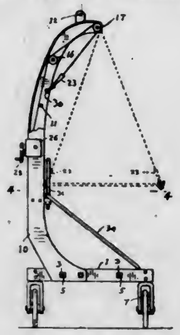
1,823,424. MACHINE FOR MAKING WIRE STRANDS, ROPES, AND CABLES. EDWARD A. CONNER, Stratford, Conn., assignor to American Cable Company, Inc., a Corporation of Delaware. Original application filed Jan. 12, 1927, Serial No. 160,571. Divided and this application filed Dec. 10, 1927. Serial No. 239,186. Renewed Feb. 14, 1931. 5 Claims. (Cl. 140—71.)



1. A preforming device for a wire-stranding machine, of the type in which each component of a strand, rope or cable is preformed to the helical shape which it possesses in the completed structure, said device comprising a frame adapted to be supported rotatably, and provided with a

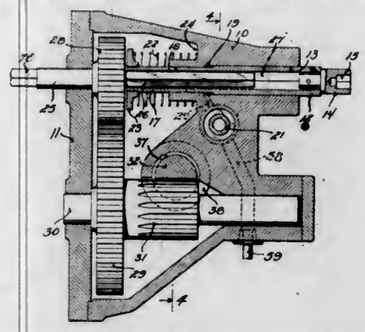
plurality of rolls mounted in series along the path of a component wire, strand, rope or cable, said series of rolls including a roll adapted to bend, the component out of the path in which the component passes between adjacent rolls of the series and co-operating therewith to bend the wire into helical form upon relative rotation between said frame and component as the latter is fed through the series of rolls, and means to rotate said frame to revolve said rolls around said component.

1,823,425. INVALID LIFTER AND CARRIER DEVICE. FRANK K. DAVIS, Muncie, Ind., assignor of one-half to William Webster Bishop, Muncie, Ind. Filed July 24, 1929. Serial No. 380,498. 2 Claims. (Cl. 5—86.)



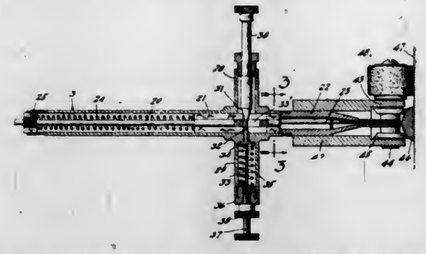
1. A lifter and carrier device of the kind described, comprising a vehicle having a horizontal base portion and which is supported on casters, uprights secured to said base and whose head portions extend to position perpendicularly above the said base, a stretcher having eyelets in the marginal portions of each side thereof, retainer rods on the uprights adapted to be engaged by the eyelets of one side of the stretcher. Stay rods between the said uprights, a longitudinal shaft having its end portions journaled in the uprights, and being provided at each end with a winding drum, sheave pulleys in the head portions of the uprights, a pair of cables wound on each drum and which are trained over said sheaves, hand operable gearing to actuate the said shaft, and hooks on the free ends of said cables.

1,823,426. MACHINE WRENCH. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 20, 1927. Serial No. 199,935. 13 Claims. (Cl. 81—57.)



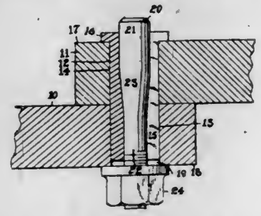
1. In a machine wrench the combination of a driving head, hydraulically actuated head advancing means, an independent hydraulically actuated head rotating means, a fluid pressure source, and control means including means for insuring the advance of said head prior to rotation thereof.

1,823,427. STRIPING TOOL. JOHN THOMAS GREEN, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 6, 1928. Serial No. 310,869. 8 Claims. (Cl. 91—62.6.)



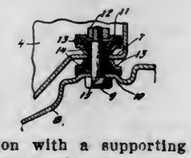
1. A portable striping device including a barrel having a reduced tip portion thru which striping material is adapted to pass, a reciprocatory stem within said barrel having a reduced portion adapted to seat against the nose of the tip and an enlarged body portion bearing against the inner surface of the barrel, said enlarged body portion being provided with openings to permit the striping material to flow past the body, and manually operated means to shift said stem.

1,823,428. ANCHORAGE DEVICE. ROWLAND F. HILL, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 14, 1930. Serial No. 428,363. 1 Claim. (Cl. 85—2.4.)



The combination of two overlapping structures having a continuous hole from the outer face of one structure to the outer face of the other structure, a longitudinally-slotted sleeve in the hole, the sleeve having a flange lying on the outer face of one structure and having its inner wall tapered opposite the joint between the two structures and for some distance at each side thereof, a pin positioned within the hole and having a tapered section cooperating with the said tapered wall, and a nut working on the pin and against the outer face of the structure not engaged by the said flange, to cause the sleeve and nut to clamp the structures together and to cause the sleeve to be expanded opposite the said joint and at each side thereof and making a snug fit with the wall of the hole opposite the said tapered wall, the end of the sleeve not bearing the flange being spaced from the adjacent face of the nut.

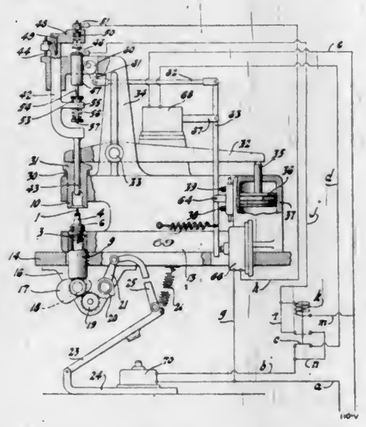
1,823,429. ENGINE MOUNTING. AXEL J. JANSSON and GEORGE W. SMITH, Flint, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,913. 3 Claims. (Cl. 248—14.2.)



1. In combination with a supporting member and a member to be supported, of a pair of cups having ontward-

ly flaring sides, a hollow rivet securing said cups back to back on opposite sides of one of said members, concavo-convex pads of elastic material disposed within said cups, convex elements associated with the other of said members and extending in the pads and a fastening stud extending through said hollow rivet and connecting said elements to each other.

1,823,430. AUTOMATIC CONTROL ATTACHMENT. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Mar. 15, 1930. Serial No. 436,245. 15 Claims. (Cl. 29—33.)

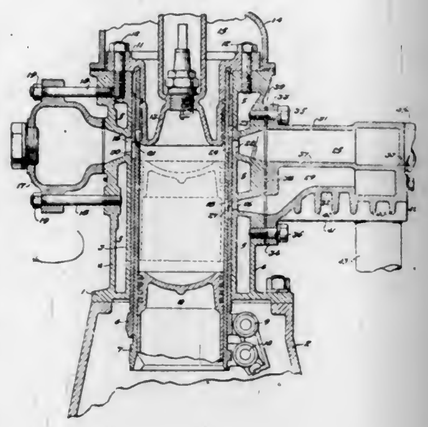


1. A machine for assembling spark plugs of the type wherein a gasket is interposed in compression between the core and shell, including a pressure applying member engageable with a part of the shell to crimp the same over a portion of the core and sink the core in the shell to thereby compress the gasket, means to actuate said member, a follower engageable with the core and movable to follow the sinking thereof, and cooperative control elements for said actuating means at least one of which is movable with the follower in its movement so as to vary the relation of the elements and thereby terminate the action of the actuating means after a predetermined sinking of the core.

15. A machine for bending a portion of a spark plug shell over a part of an insulator core to sink the core on a sealing gasket in the shell and hold the parts assembled, including a main frame, a movable die member engageable with the shell portion to bend the same, a power device for moving said die member, and means to render the power device ineffective, including a pair of contact elements having an initial spacing corresponding to the desired degree of sinking, a follower for the core carrying one contact for movement therewith in both directions and the other contact for movement in one direction, and means to lock the last mentioned contact at one limit of follower movement, whereby the other contact is moved into engagement therewith as the follower moves with core sinking.

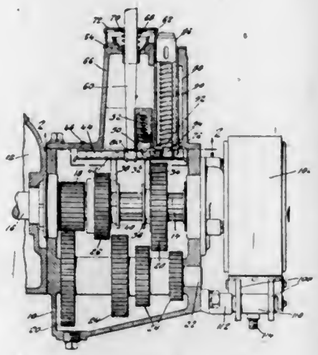
1,823,431. SLEEVE VALVE ENGINE. ERIC OLLE SCHJOLIN, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 8, 1927. Serial No. 218,282. 1 Claim. (Cl. 123—75.)

In an internal combustion engine, a cylindrical casing having an exhaust port opening through the wall thereof, a second exhaust port opening through the wall thereof at a point diametrically opposite the first exhaust port, and an intake port opening through the wall thereof at a point adjacent one of said exhaust ports, a pair of sleeve valves provided with exhaust ports and an intake port within the casing for controlling said casing ports, and means for operating said sleeve valves so as to bring one of the ex-



haust ports therein into registration with one of the exhaust ports in the casing at substantially the same time the other exhaust port therein is brought into registration with the other exhaust port in the casing.

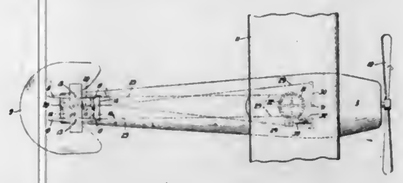
1,823,432. TRANSMISSION. PERRY L. TENNEY, Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 7, 1923. Serial No. 637,230. 15 Claims. (Cl. 74—39.)



9. In a gear shifting device, a housing, a supporting plate spaced from the top of said housing, a pair of gear shifting members each formed as a sheet metal plate slidably on said supporting plate and guided thereby for longitudinal movement.

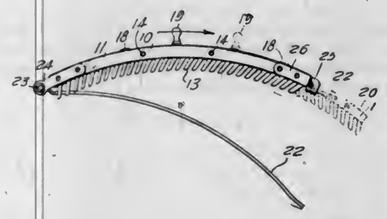
1,823,433. RUDDER. EUGENE VAN NOTE, Jersey City, N. J. Filed Feb. 19, 1930. Serial No. 429,503. 3 Claims. (Cl. 244—29.)

1. In steering mechanism, a plurality of rudder blades mounted to rock intermediate their ends, a plurality of links hingeably connected at their ends to adjacent rudder blades, a control bar hingeably connected to adjacent rud-



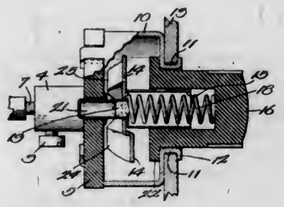
der blades, and means for sliding said control bar in a longitudinal direction and maintaining the rudder blades in a substantially parallel position to each other.

1,823,434. HAIR WAVER. VICTOR VRYN, Jersey City, N. J., assignor to H. Goodman & Sons, Inc., New York, N. Y., a Corporation. Filed May 29, 1930. Serial No. 456,876. 3 Claims. (Cl. 132—28.)



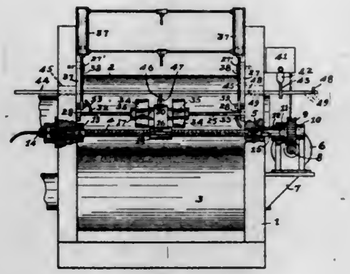
1. A hair waver comprising a supporting member, a pair of combs having downwardly extending teeth fixed in substantially parallel relation on opposite sides of said member, a third comb having downwardly extending teeth slidable on said member between the pair of fixed combs for shifting movement lengthwise relatively thereto, a tongue hinged to said member at one end and extending in its closed position between the movable comb and one of the fixed combs, and a catch on the supporting member for lockingly engaging the free end of the tongue in closed position.

1,823,435. ELECTRIC SWITCH. FELIX J. WATTS, Bronson, Mich., assignor to Harry A. Douglas, Bronson, Mich. Filed Aug. 8, 1930. Serial No. 473,824. 14 Claims. (Cl. 200—63.)



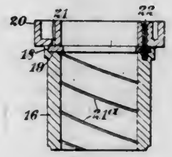
1. An electric switch including two abutments; a member cooperating with said abutments in controlling a circuit, said member and said two abutments being relatively spring pressed into engageability and being relatively rotatable upon an axis passing between the abutments, said member having a recess receiving one of said abutments when the switch is adjusted to circuit opening position and then being tiltable upon the other abutment toward the first; and a stop for limiting the extent of tilting movement of said member to maintain the circuit open.

1,823,436. FINISHING ROLL POLISHER. DAVID H. WILLIAMS and OWEN L. BECK, Apollo, Pa. Filed Aug. 27, 1929. Serial No. 388,706. 1 Claim. (Cl. 51—254.)



In combination, a roll polisher, of the character described, comprising a revolubly mounted tubular feed screw, a removably mounted tubular supporting shaft extending parallel to said feed screw, a slide bearing being longitudinally shiftable on said supporting shaft, a shifter member including a hinged bearing threadedly engaging said feed screw, said shifter member further including a yoke engaging said slide bearing, a removable saddle carried at each end of said slide bearing, a pair of polishing members removably mounted in each of said saddles, suspension arms for said supporting shaft, air operated elements connecting with said suspension arms for imparting pressure to said polishing members, said feed screw and said supporting shaft being provided with inlets and outlets to permit of the passage of a cooling medium through same.

1,823,437. CRUSHING MACHINE. DHANJISHAH BOMONJEE COOPER, Satara, India. Filed Feb. 14, 1929, Serial No. 339,993, and in Great Britain Feb. 22, 1928. 4 Claims. (Cl. 308—240.)

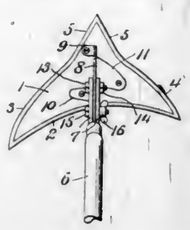


1. A bearing for the roller shafts of crushing machines comprising in combination, a solid bearing bush of polygonal shape externally and having an enlarged bore for a short length at one end thereof, a corresponding internally shaped polygonal seating on the machine, a pad of absorbent packing material adapted to be carried within the said enlarged bore and to closely encircle and engage the roller shaft and an oil well in communication with the said pad.

1,823,438. HOE. ELIAS W. CRAIG, Wellsville, Kans. Filed May 4, 1929. Serial No. 360,510. 2 Claims. (Cl. 97—69.)

1. A hoe having an approximately triangular blade having its three edges cutting edges, one edge being concavely arcuate, the two other edges having straight forward por-

tions meeting at their outer ends to form a point and rearward portions convexly arcuate, a handle, and means



fastening said handle to said blade with the handle disposed in a plane perpendicular to the blade and intersecting said point of meeting and said concavely arcuate edge.

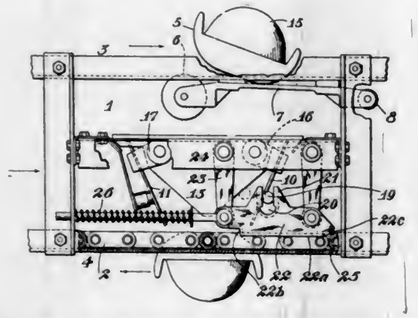
1,823,439. FLOODING PROCESS FOR RECOVERING OIL FROM SUBTERRANEAN OIL-BEARING STRATA. MELVIN DE GROOTE, St. Louis, Mo., assignor, by mesne assignments, to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Apr. 18, 1929. Serial No. 356,306. 12 Claims. (Cl. 166—21.)

1. A flooding process for recovering fixed oil from subterranean oil sands and other oil-bearing strata, which consists in flooding or washing the sand bed with an aqueous treating solution comprising a water-soluble substituted polycyclic sulfonic body of the type X RR' SO_3 Z, wherein X stands for a polycyclic aromatic nucleus; RR' represents one or more alcohol residues derived from an alcohol or alcohols having fewer than 12 carbon atoms each; SO_3 represents the conventional sulfonic acid residue; and Z represents a hydrogen ion equivalent.

1,823,440. FLOODING PROCESS FOR RECOVERING FIXED OIL FROM SUBTERRANEAN OIL BEARING STRATA. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors, by mesne assignments to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Mar. 3, 1930. Serial No. 432,972. 3 Claims. (Cl. 166—21.)

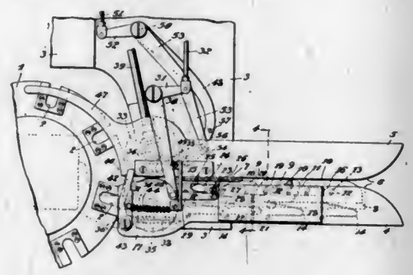
1. A flooding process for recovering fixed oil from subterranean oil sands and other oil-bearing strata, which consists in washing the sand or stratum with an aqueous treating solution containing wood sulfite liquor.

1,823,441. PROOFER. GUSTAV B. EGGERT, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Aug. 5, 1929. Serial No. 383,477. 14 Claims. (Cl. 198—146.)



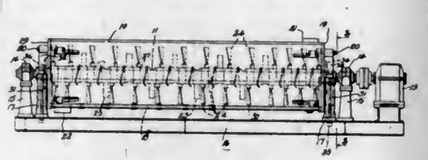
13. In a proofer having two parallel conveyor flights traveling one below the other and tray-emptying means in conjunction with the upper flight, a dough-piece catcher between said flights positioned to receive dough pieces discharged from said upper flight, a trap bottom for said catcher, and a quick-opening mechanism connected with said trap bottom and actuated by said lower conveyor flight.

1,823,442. BAG FEEDING MEANS. HENRY B. FOULDER, Glenbrook, Conn. Filed Mar. 21, 1930. Serial No. 437,690. 9 Claims. (Cl. 226—57.)



1. In an apparatus of the character described, in combination, two guide members providing a guide passage between them, and bag engaging plates slidably carried on one of said members and resiliently pressed edgewise toward the other guide member.

1,823,443. ADJUSTABLE MIXER AND DRIVE. HENRY F. E. GAMM, Rutherford, N. J. Filed Apr. 4, 1930. Serial No. 441,468. 5 Claims. (Cl. 259—9.)

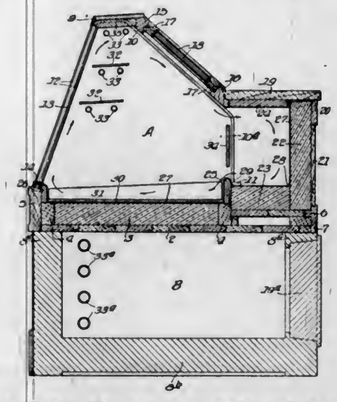


1. A device for mixing materials for manufacture into coal briquettes, including a substantially horizontal normally stationary cylindrical mixer casing, said mixer casing having an upper inlet and lower outlet at opposite ends of the mixer casing for respectively receiving and discharging said materials, said mixer casing having an otherwise closed bottom wall, a heating jacket for the mixer casing extending in a longitudinal and circular direction along the outside thereof, a rotary shaft extending substantially centrally longitudinally through said mixer casing, spaced blades on the shaft having a predetermined clearance with a lower wall portion of said mixer casing, said blades including stirring, feeding means and kneading, crushing means, said mixer casing having a cylinder and removable end closure wall, means for supporting the mixer casing and moving the same bodily upward relative to the blades to adjust the clearance between the same and the lower wall portion of the mixer casing, and bearing means outside of the mixer casing for supporting the shaft at a fixed elevation.

1,823,444. REFRIGERATING CABINET. JOHN EDWARD GLOEKLER, Pittsburgh, Pa. Filed Dec. 3, 1929. Serial No. 411,266. 7 Claims. (Cl. 62—89.6.)

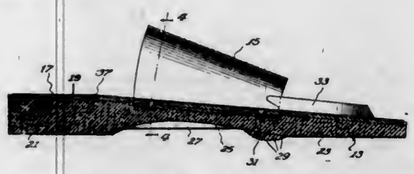
1. In a refrigerating cabinet, the combination of a main base having a front upwardly extending sill, a rear upwardly extending wall, an intermediate upwardly extending fixedly incorporated dividing projection providing a major containing chamber and a minor refrigerating chamber, a series of spaced apart individual supporting strips extending from the dividing projection to the front sill,

a shelf covering the minor refrigerating chamber and resting on the rear wall, a forwardly and upwardly sloping rear wall extending from said shelf over the major chamber to its top, a rearwardly and upwardly sloping front wall of glass extending from the front sill over the major chamber to its top, a covering shelf for the major chamber on



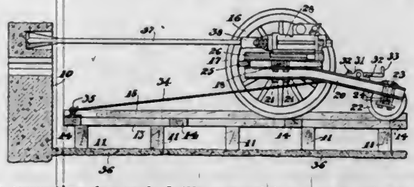
the tops of said rear and front walls, and a continuous sheet metal lining covering the inner rear wall surface and bottom of the refrigerating chamber, rounded upwardly over the dividing projection, and then continued over the bottom surface of the major chamber and the front sill and terminating upwardly against the inner bottom portion of the front wall.

1,823,445. SLIPPER. LEROY GOLDSTONE, Chicago, Ill., assignor to Judsen Rubber Works, Chicago, Ill., a partnership composed of Carl A. Judsen and Leroy Goldstone. Filed Mar. 22, 1929. Serial No. 349,105. 13 Claims. (Cl. 36—11.5.)



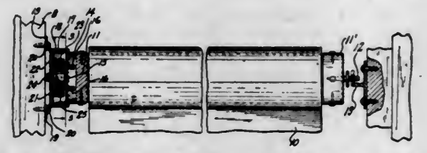
1. A sandal comprising a flexible sole having longitudinal arch supporting flanges and an arch retaining strap forming with the sole a tapered opening into which the foot of the wearer may be inserted whereby when the foot is pressed into the tapered socket the flexible sole will be drawn up against the arch of the wearer to support the same.

1,823,446. MOUNTING FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 9, 1928. Serial No. 311,393. 1 Claim. (Cl. 255—51.)



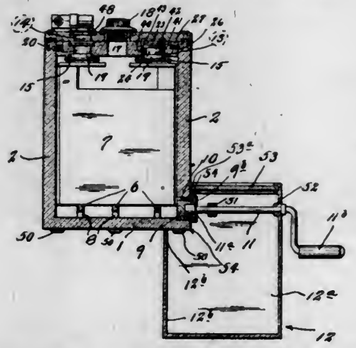
A mounting for rock drills comprising a pair of wheels, an axle operatively connecting the wheels spaced one from the other, a pair of inclined members seated with one end upon the axle and extending therefrom in the form of a trail, bolts extending through the members and the axle to secure the members to the axle, a saddle seated on the axle between said members, bolts extending through the saddle and the axle to secure the saddle fixedly to the axle, a rock drill mounted on the saddle and being fixedly secured thereto, a second pair of wheels at the end of the trail distant from the first, a windlass on the trail intermediate the first and second pairs of wheels, a cable extending from the windlass, and securing means for the cable positioned beyond the first wheels whereby the mounting and rock drill are moved when the windlass is operated.

1,823,447. CONTROLLING DEVICE FOR WINDOW SHADES. ANDREW C. HANSON, Racine, Wis. Filed Feb. 17, 1930. Serial No. 429,106. 7 Claims. (Cl. 156—28.)



7. A curtain roller fixture, comprising a rotatably mounted drum engageable with the end portion of a curtain roller, a flexible member having a portion wound on said drum, operation of said flexible member serving to rotate said drum and roller to raise the curtain, and braking means engageable with an unwound portion of the flexible member to press the latter against a casing portion for holding the curtain in any desired position of adjustment.

1,823,448. STORAGE BATTERY. GEORGE W. HEBBELER, St. Louis, Mo. Original application filed Aug. 15, 1925, Serial No. 50,448. Patent No. 1,712,822, dated May 14, 1929. Divided and this application filed Oct. 31, 1928. Serial No. 316,312. 8 Claims. (Cl. 136—166.)



1. I combination, a battery having a drain opening in one side and a drain closing plug therefor, whereby electrolyte and sediment may be withdrawn from the battery, and a receptacle fitting against said side and bottom of said battery to enclose said drain opening and receive the electrolyte and sediment discharged therethrough, said receptacle having exteriorly projecting means for engaging and removing said plug when so positioned.

1,823,449. LIFTING APPARATUS FOR MOTOR CARS OR OTHER VEHICLES. ALBERT ERNEST HEDGES, Taunton, England. Filed May 9, 1930, Serial No. 450,962, and in Great Britain Feb. 14, 1930. 6 Claims. (Cl. 138—9.)

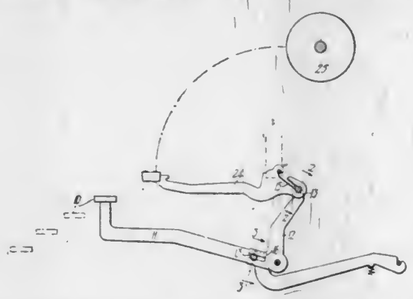
1. A jack for vehicles comprising a cylinder, means upon the vehicle pivotally supporting one end of said cylinder, a

piston, a piston rod, a roller at the outer end of said piston rod, a plate adapted to contact with the ground, means connecting said plate to said piston rod, a track upon said plate engaged by said roller, a rod pivotally connected at one end to the outer end of the piston rod,



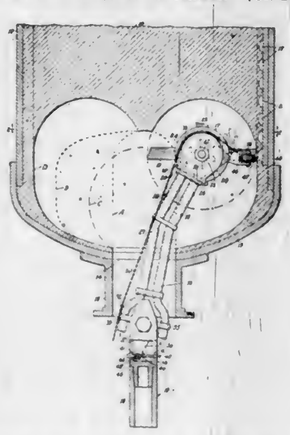
means pivotally connecting the other end of said rod to the vehicle, means connecting the ends of the cylinder with a source of pressure, valves for controlling the admission and exhaust to the cylinder to operate the piston in one or other direction and means actuated by the piston and piston rod for operating said valves.

1,823,450. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 14, 1929. Serial No. 332,433. 1 Claim. (Cl. 197—38.)



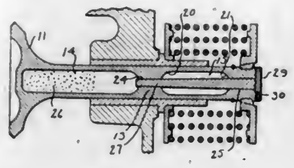
A pivoted lever having an elongated slot therein and a second lever provided with a pin accurately fitted to move in said slot, said pin having a coating thereon of cadmium approximately one ten-thousandth of an inch thick.

1,823,451. SOAKING DRUM AND METHOD OF CONDITIONING SAME FOR USE. JOHN K. HENCKEN, Brooklyn, N. Y. Original application filed Nov. 12, 1927, Serial No. 232,744. Divided and this application filed Jan. 8, 1931. Serial No. 507,327. 5 Claims. (Cl. 196—133.)



1. A soaking drum conditioned for use in an oil-cracking process and having a metallic wall provided on its inner face with a lining of substantial thickness comprising a mass of cohesive carbonaceous material which is the remainder of a larger mass of cohesive carbonaceous material previously deposited on said inner face and of which a portion has been removed.

1,823,452. VALVE. SAM D. HERON, Dayton, Ohio. Filed Apr. 26, 1929. Serial No. 358,303. 7 Claims. (Cl. 123—177.)

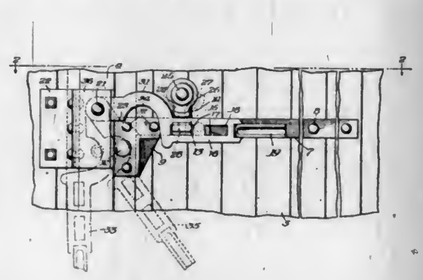


1. A valve for internal combustion engines having a closed chamber in the head end of the valve stem containing a quantity of cooling medium, the valve having a sealed empty chamber of substantial size at the stem end thereof which effectively reduces heat transference from a middle portion of the valve stem to the stem tip.

2. A valve for internal combustion engines having a longitudinally extending closed space in the stem portion extending to a point near the stem tip, a partition in said space spaced from the stem tip dividing said space into two sealed chambers both of substantial size, and a quantity of cooling medium partly filling the chamber at the head end of the valve.

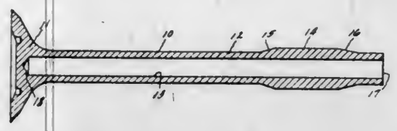
3. A valve for internal combustion engines having a longitudinally extending closed space in the stem portion extending to a point near the stem tip, means insertable through the stem tip partitioning the head end of the space from the stem tip end thereof to divide said space into two separate sealed chambers of about the same length, and a quantity of cooling medium which is a liquid at the normal operating temperature of the valve partly filling the chamber at the head end of the valve.

1,823,453. DOOR OPERATING AND LOCKING DEVICE. EARL F. JAGER, Chicago, Ill. Filed Nov. 16, 1927. Serial No. 233,540. 5 Claims. (Cl. 292—285.)



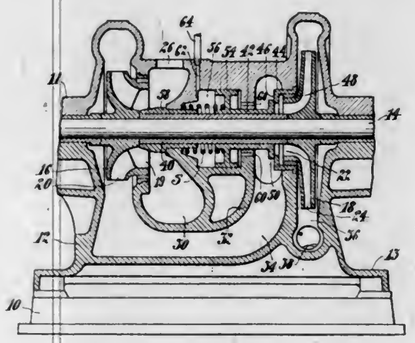
1. The combination with a pair of relatively movable parts such as a door and the jamb therefor, of a hasp pivotally mounted on one of said parts, a hasp receiver mounted on the other of said parts and adapted to be engaged by said hasp, a retainer movable on the second part to hold said hasp against disengagement from the receiver, and a stud projecting from the second part, said hasp and stud being shaped for temporary locking and camming engagement whereby said parts may be forced by means of said hasp toward and away from each other.

1,823,454. METHOD OF MAKING A VALVE. ROBERT JARDINE, Detroit, Mich., assignor to Rich Tool Company, Detroit, Mich., a Corporation of Maine. Filed Mar. 18, 1927. Serial No. 176,448. 9 Claims. (Cl. 29—156.7.)



1. The method of making a valve for internal combustion engines comprising making a metal valve part embodying a valve head and a valve stem formed integrally therewith and having an enlargement adjacent the stem end, machining a hole in the stem from the stem end, and swaging the stem end together.

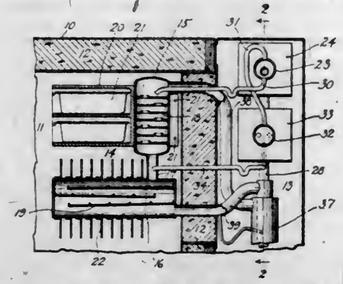
1,823,455. CENTRIFUGAL PUMP. JOHN KIRGAN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 20, 1928. Serial No. 327,393. 2 Claims. (Cl. 103—97.)



1. A two stage pumping system including a first stage impeller and a second stage impeller, each impeller operating to receive fluid from a fluid inlet and to discharge the same with increased head through a fluid outlet, a casing for the impellers having a passage extending from the outlet of the first stage to the inlet of the second, a valve in the casing having one end adapted to close the inlet of the second stage impeller, a piston on the other end of the valve, said casing having ports therein through which a portion of the fluid from the first stage impeller may flow to act upon the piston and move the valve, said movement of the valve opening the inlet of the second stage impeller and being controlled by the pressure developed by the first stage impeller, and resilient means for closing the valve.

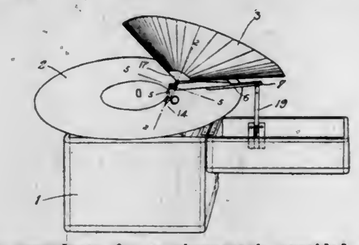
1,823,456. REFRIGERATION. ALVAR LENNING, Jackson Heights, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed June 10, 1929. Serial No. 369,721. 10 Claims. (Cl. 62—119.5.)

1. Refrigerating apparatus comprising an evaporator, said evaporator comprising an ice producing section, a food space cooling section below said ice producing section, an upper condenser member, a lower condenser member, means for conducting liquid refrigerant from the upper condenser



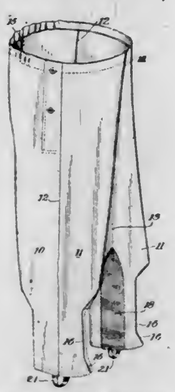
member to the ice producing section and means for conducting liquid refrigerant from the lower condenser member to the food space cooling section.

1,823,457. WAVE REPRODUCING DEVICE AND PROCESS CONCERNING THE SAME. CHARLES P. MADSEN, New York, N. Y., assignor, by mesne assignments, to William W. Varney, Baltimore, Md. Filed Aug. 5, 1924. Serial No. 730,152. 6 Claims. (Cl. 274—16.)



3. A reproducer for a phonograph provided with a carrier mounted to swing over a record to be played, a bell-crank carried by said carrier fulcrumed thereto said bell-crank having secured at one end thereof a stylus and at the other end thereof a vibrating member rigidly secured thereto and wholly supported thereby, said vibrator being substantially of a conoidal shape a side of which is substantially parallel to the disc to be played.

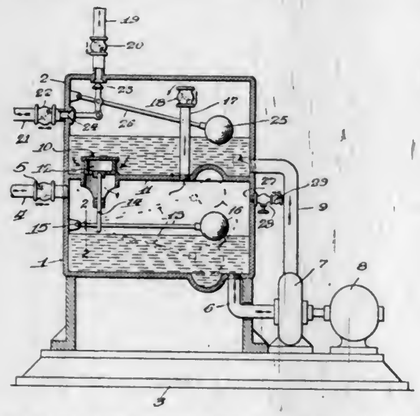
1,823,458. CHILD'S LEGGING PANTS. HERBERT G. MAYER, Glencoe, Ill., assignor to Reliance Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 22, 1931. Serial No. 539,163. 2 Claims. (Cl. 2—227.)



1. The combination with a garment of the type described having a leg slit upwardly and with a longitudinal

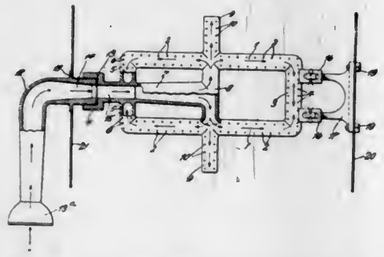
insert of knitted material at the bottom of the leg, with the ribbing of the knitted material running longitudinally, of means for preventing the accumulation of bagginess in the insert by transverse stretching, which comprises an elastic reinforcing tape for the lower end of the knitted insert attached thereto, and interconnecting the goods at the bottom margins of the slit, a stirrup strap for embracing the instep attached at one end to the bottom of the leg at one side and attached at its other end to the elastic reinforcing tape.

1,823,459. FLUID DISPLACEMENT PUMP. EDWARD F. MCCARTHY, Chicago, Ill., assignor to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Refiled for abandoned application No. 293,805, filed July 19, 1928. This application filed Mar. 25, 1930. Serial No. 438,738. 7 Claims. (Cl. 103—6.)



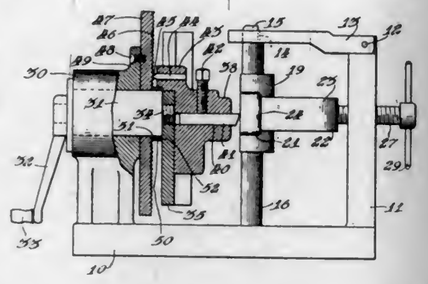
1. A fluid displacement pump comprising upper and lower tanks, there being a fluid inlet to the lower tank and a fluid discharge leading from the upper tank, means for transferring a liquid fluid from the lower tank into the upper tank, intermittently operating means controlled by variations of the volume of liquid in one of said tanks for discharging the liquid back into the lower tank at predetermined intervals, and a gaseous fluid discharge pipe having an upwardly opening check valve and leading from the lower tank into the upper tank.

1,823,460. GAS BURNER. CARL E. METHUDY, St. Louis, Mo., assignor to Methudy Automatic Lighter Co., East St. Louis, Ill., a Corporation of Illinois. Filed Dec. 12, 1929. Serial No. 413,437. 9 Claims. (Cl. 158—104.)



3. A gas burner comprising spaced parallel burner tubes having numerous gas outlet openings, a communicating connection from one end of one of said tubes to the adjacent end of the other tube and having numerous gas outlet openings, an imperforate tube forming a cross connection between medial portions of said parallel tubes and opening into both of said tubes, an imperforate gas supply tube extending between said first named tubes and opening into said imperforate tube forming said cross connection, and a tubular projection extending laterally from each of said first named tubes and having a number of gas outlet openings.

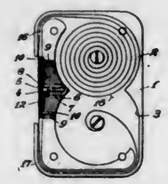
1,823,461. BEARING CAP FACER. GUSTAV C. MONCKMEIER, Tipton, Iowa. Filed Aug. 22, 1928, Serial No. 301,259. Renewed June 18, 1931. 11 Claims. (Cl. 82—1.)



1. A bearing cap facer comprising a frame, means for supporting a bearing cap thereon, a revolving tool mounted on said frame, a member secured to said frame having a guiding groove therein and means engageable with said groove and actuated by the movement of said revolving tool to move said tool transversely across said bearing cap.

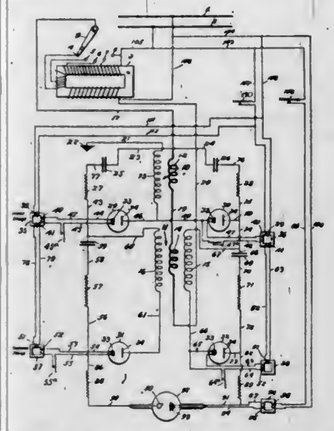
9. A bearing cap facer comprising a frame, a cap supporting member mounted in said frame, means for clamping said bearing cap on said cap supporting member, a shaft journaled on said frame, a disc secured to said frame having a diametral dove-tailed slot formed on one side thereof, a tool block having a complementary dove-tailed projection adapted to be reciprocally mounted in the dovetailed slot formed in said disc, a tool carried by said block, there being a radial slot formed in said disc extending parallel with the dovetailed recess formed therein, a disc secured to said frame having a spirally arranged groove formed on one face thereof, and a pin secured to said block extending through the slot in said disc and engaging the groove in said second named disc for automatically moving said tool across the face of said cap during the revolving movement of said shaft.

1,823,462. PHOTOGRAPHIC CAMERA. KURT MORSBACH, Berlin-Lichterfelde, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 26, 1930, Serial No. 438,946, and in Germany Apr. 2, 1929. 7 Claims. (Cl. 95—34.)



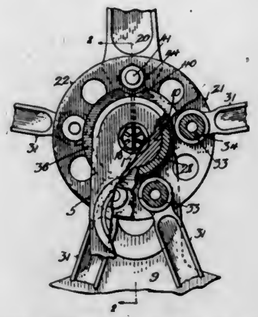
1. In a film camera with interchangeable cassette and a film guide channel located in the interior of the camera behind its objective, a guide plate carrying the window for the image and permanently located behind the objective and in its focus, and a pressure plate independently mounted on said cassette.

1,823,463. CONSTANT HIGH POTENTIAL GENERATORS. ARTHUR MUTSCHELLER, New York, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed Mar. 17, 1924. Serial No. 699,626. 5 Claims. (Cl. 125—363.)



1. A constant high potential generator, having a number of sections, each section containing a condenser, a vacuum tube valve connected with said condenser, a resistance and a source of high potential alternating current separate from said condenser and connected with said condenser and said valve and with said resistance for the purpose of charging said condenser with static electricity of one sign only, and connections between said sections for the purpose of enabling said sections to act cumulatively as a unit.

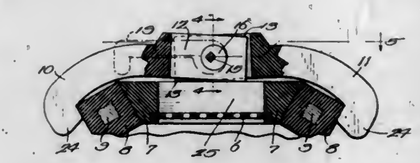
1,823,464. RADIAL MOTOR. JOHN NEWMANN, Glendale, N. Y.; Charles G. Hensley, receiver, New York, N. Y. Filed Feb. 23, 1928, Serial No. 256,146. Renewed Aug. 9, 1929. 16 Claims. (Cl. 74—17.)



2. In a crank construction for motors, the combination of a shaft, a crank thereon having a wrist pin, a connecting member, journaled on said wrist pin, a plurality of connecting rods having knuckle pins journaled in said connecting member, and a revolvable ring member for locking all of said knuckle pins in position, and having an opening adapted to be registered with any of said knuckle pins to permit longitudinal removal thereof.

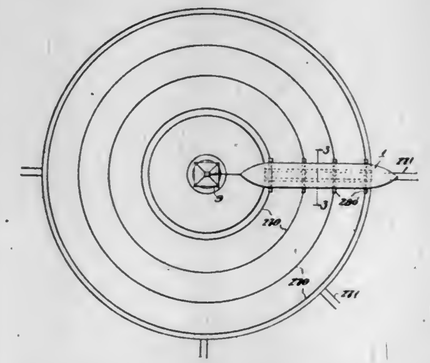
1,823,465. CLAMP. WILLIAM J. O'NEILL, River Forest, Ill., assignor to Mercil Plating Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 15, 1930. Serial No. 436,167. 4 Claims. (Cl. 204—5.)

1. A clamping device inclusive of two arms each having a jaw on one end thereof, one arm having a tongue on the other end thereof and the other arm having a groove upon its other end in which said tongue is snugly received; and a metallic coupling member within said tongue



and the adjacent sides of said groove, the aforesaid arms being made of a non-metallic acid resisting substance which will expand under the influence of liquid to eliminate clearance between said tongue and groove sides.

1,823,466. METHOD OF AND MEANS FOR HANDLING AIRCRAFT. WILFRID V. N. POWELSON, New York, N. Y., and WARREN TRAVELL, San Bernardino, Calif. Original application filed Sept. 21, 1921, Serial No. 502,127. Divided and this application filed Mar. 17, 1931. Serial No. 523,252. 10 Claims. (Cl. 242—2.)



10. Apparatus for mooring airships comprising a mooring mast, means providing for up-and-down movement of an attached airship along said mast, and platform means rotatable about said mast as a center, said platform means being disposed in shallow pit surrounding said mooring mast.

1,823,467. PRELIMINARY TANNING PROCESS. BERNHARD QUENDT, Essen, Germany. Filed Jan. 25, 1929, Serial No. 335,141, and in Germany July 19, 1926. 4 Claims. (Cl. 149—4.)

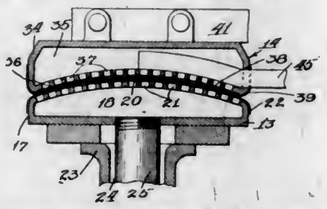
2. Process for promoting the tanning of hides by subjecting the hides, after the usual preparatory processes, to a preliminary treatment with a mixture of neutral salts, and a water soluble non-sulphonated condensation product of an aromatic amine.

1,823,468. MANUFACTURE OF METHYL ALCOHOL AND OTHER OXYGENATED ORGANIC COMPOUNDS. MATHIAS PIER, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the Main, Germany, a Corporation of Germany. Filed Feb. 16, 1924, Serial No. 693,372, and in Germany Feb. 24, 1923. 1 Claim. (Cl. 260—156.)

In the synthetic manufacture of methyl alcohol and other oxygenated organic compounds by the catalytic re-

duction of carbon monoxide at an elevated temperature and pressure, the step of carrying out the reaction in an apparatus having the inner surface of both hot and cold parts consisting of a steel containing a high percentage of chromium.

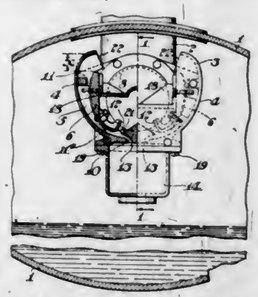
1,823,469. IRONING MACHINE. CHARLES O. REEPS, Chicago, Ill., assignor, by mesne assignments, to National Laundry Machinery Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Feb. 21, 1928. Serial No. 255,946. 9 Claims. (Cl. 68—9.)



1. In combination, in an ironing machine, a pair of relatively movable and cooperable ironing members, means for enabling one of said members to be moved into and out of cooperation with the other of said members, one of said members being provided with a convex ironing surface and the other of said members being provided with a concave ironing surface, said concave ironing surface having a curvature slightly greater than that of the convex surface, whereby an article to be ironed, placed therebetween, will be stretched during the ironing operation.

7. The process of ironing an article which consists in applying pressure thereto and subjecting one side of the article to preheated air to supply heat for cooperating with the pressure to iron the article, and at the same time subjecting the article to suction for drawing the heated air therethrough to effect drying thereof while being ironed.

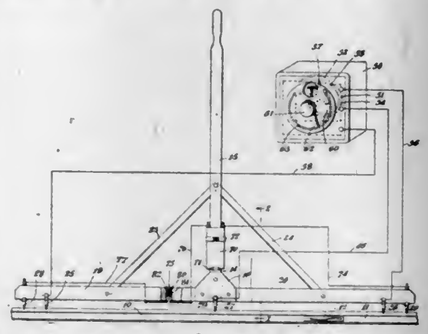
1,823,470. SEPARATOR. VICTOR A. ROHLIN, Philadelphia, Pa. Filed Mar. 26, 1927. Serial No. 178,685. 5 Claims. (Cl. 183—79.)



1. Apparatus for separating moisture from a vapor comprising arcuate members forming fluid passages, each passage having a progressively converging inlet, said arcuate members converging to a narrow slit longitudinally of the axis of said apparatus, and a separating member disposed opposite the discharge ends of said fluid passages and forming with said arcuate members diverging outlets for said vapor and escape outlets for the separated moisture.

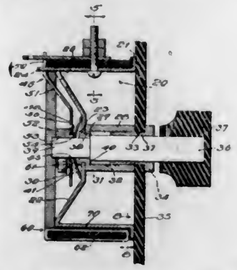
1,823,471. RAIL BOND TESTER. FRANK W. ROLLER, East Orange, N. J., assignor to Roller-Smith Company, a Corporation of New York. Filed Mar. 8, 1926. Serial No. 93,039. 3 Claims. (Cl. 175—183.)

1. In an apparatus for testing the electric resistance of rail bonds, a contact bar arranged to be held pressed against the rail by foot pressure, an electrical measuring instrument, a pair of spaced testing contact members disposed on said bar so as to be brought into engagement with the rail on application of foot pressure to said bar, circuit connections between said testing instrument and said testing contact members whereby upon application of foot pressure to said bar, said testing contact members will be brought into engagement with said rail and cause rail return current flowing through said rail to produce on said instrument an indication of the resistance of a tested rail section between said testing contact members, a pair of auxiliary contact members disposed on said bar outside said spaced testing contact members, an auxiliary



current source associated with said apparatus, a normally open switch disposed on said bar arranged to be closed upon application of foot pressure to a predetermined portion of said bar, and connections between said auxiliary contact members, said auxiliary source, and said switch arranged so that upon application of foot pressure to said predetermined portion of said bar, said testing and auxiliary contact members will be brought into engagement with said rail and simultaneously said switch will be closed, causing a flow of current from said auxiliary source through said rail to produce on said instrument an indication of the resistance of the aforesaid tested rail section in the same terms as when actuating said instrument with rail return current.

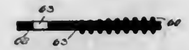
1,823,472. METAL FRAME RHEOSTAT. NEWTON C. SCHELLENGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed June 7, 1926. Serial No. 114,120. 12 Claims. (Cl. 201—55.)



8. In an electrical current control device, a metallic frame comprising a substantially cylindrical hollow body having a concave shaped end, said body having a lateral flange associated with its periphery, a resistance strip disposed about the periphery of the body with an edge adjacent said flange, an insulator intermediate said body and said resistance strip, said insulator having a lateral extension adapted to lie over said flange to insulate it from said resistance strip, a contact arm cooperable with the said resistance strip disposed substantially within the length of said cylindrical body, said arm being connected to said concave shaped end and having a portion adapted to engage an edge of the said resistance strip, and means for actuating the said arm, said resistance strip comprising a plurality of wire windings on an insulator core, the winding adjacent the off point of said contact arm being buried in the strip with its exposed surface flush with the adjacent exposed edge of the insulator core.

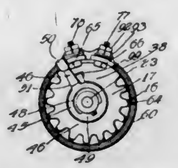
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1,823,473. RHEOSTAT. NEWTON C. SCHELLENGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Oct. 25, 1926. Serial No. 143,905. 5 Claims. (Cl. 201—55.)



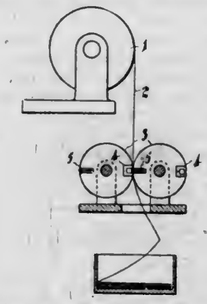
4. In an electric current control device, a frame, contact mechanism associated therewith including a contact arm, and a resistance strip associated with said frame and cooperable with said contact arm, said strip including an insulator core having a plurality of turns of wire thereon, the last few turns of said winding adjacent the off point of said contact arm being distorted and wedged into the strip to increasing depths toward the last turn which is wedged with its exposed surface flush with the adjacent edge of the insulator strip to provide a smooth takeoff for the arm.

1,823,474. RHEOSTAT. NEWTON C. SCHELLINGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Oct. 25, 1926. Serial No. 143,906. 9 Claims. (Cl. 201—55.)



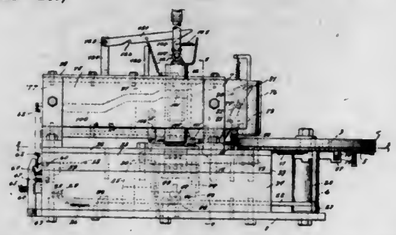
2. In an electric current control device, a base of molded composition substantially arcuate in shape and having a corrugated outer periphery resistance means wound about an annular axis encircling the periphery of the molded base and disposed wholly outside the peaks of the corrugations, the depressed portions of the corrugations opening directly across the periphery of the base to form transverse channels across the periphery of the base from one side to the other between the resistance element and the molded base for cooling purposes.

1,823,475. PAPER FOLDING APPARATUS. FRANCIS MARTIN SCUDDS, Toronto, Ontario, Canada. Filed Feb. 27, 1930. Serial No. 431,776. 6 Claims. (Cl. 270—73.)



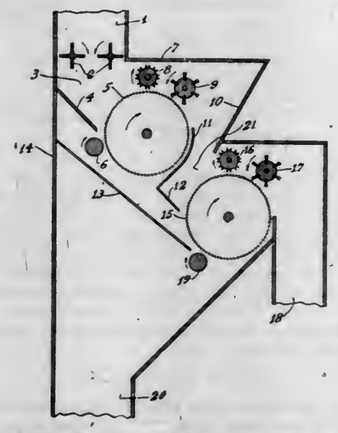
1. In paper folding apparatus, the combination of a pair of creasing and perforating members arranged one at each side of the path along which paper is to pass whereby the paper is creased and perforated from opposite sides, said creasing and perforating members being positioned relative to one another so that the creases and perforations made by one member are alternated with those made by the other member, and grooved members co-operating with and into which said creasing and perforating members project to crease the paper along the lines of perforations, the bottoms of said grooves forming supporting surfaces for the paper while the perforating is being effected.

1,823,476. DATE PITTING MACHINE. ALBERT K. SMITH, West Orange, N. J., assignor to The Hills Brothers Company, Inc., a Corporation of New York. Filed Nov. 25, 1927. Serial No. 235,416. 22 Claims. (Cl. 146—17.)



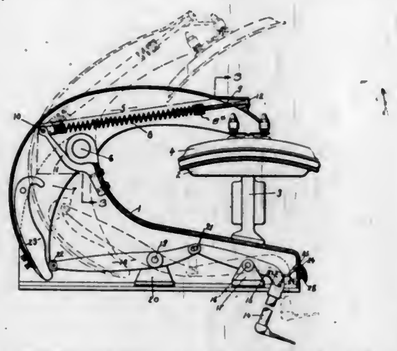
1. In a date pitting machine, a date carrier mounted for movement along a predetermined path, a knife made up of a pair of relatively movable cutting members, means for imparting relative movement between said carrier and said knife in a direction toward said path to cause said knife to slit the date on said carrier, means for moving said members apart after they have entered the date, and an ejector to extract the pit from the date, said ejector being disposed independently of the carrier and beyond said knife in the direction of movement of the carrier.

1,823,477. DOUBLE ACTION HULL EXTRACTOR. ALGERNON L. SMITH, Birmingham, Ala., assignor to Continental Gin Company. Filed Aug. 10, 1929. Serial No. 384,908. 14 Claims. (Cl. 19—37.)



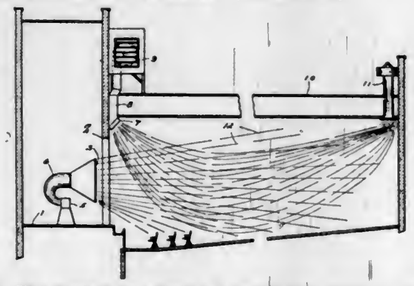
1. A hull extractor for seed cotton and the like, comprising two hull extracting assemblies, means to direct the seed cotton in a stream for successive hull extracting treatment by said assemblies, and means to direct, in a path separate from the seed cotton, hulls and the like extracted by, and discharged from, the first assembly into position to be acted on by the second assembly.

1,823,478. SPRING COUNTERBALANCE AND LOCK FOR PRESSING MACHINES. HARRY A. STEELE, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 27, 1929. Serial No. 395,561. 10 Claims. (Cl. 68—9.)



9. In a pressing machine, a base, a buck mounted on the base, a head movable toward and from the buck, a head carrying lever pivoted to the base, means within the base for actuating the head carrying lever to close the press and means tending to open the press, a latch coacting with a portion of the press closing means within the base to hold the press closed, a portion of the actuating means having ratchet teeth and the latch being pivoted and having a pawl coacting with the ratchet teeth, a spring tending to move the latch out of engagement with the ratchet teeth, and a handle extending through the front of the base for moving the latch against the spring.

1,823,479. METHOD AND MEANS FOR VENTILATING THEATERS AND DISTRIBUTING SOUND. RAY E. VENDERBUSH, Detroit, Mich. Filed Aug. 5, 1929. Serial No. 383,592. 4 Claims. (Cl. 181—30.)



1. The method of utilizing a ventilating current of air to improve sound distribution, consisting in directing sound waves from a stage toward the rear of a theater, and discharging a ventilating current of air from a region adjacent to the stage and overlying the path of the sound waves in a rearward direction and at a downward inclination and in such volume as to materially increase the density of the air through which said sound waves travel to the audience, and venting such air at the rear upper portion of the theater.

1,823,480. ENAMEL AND METHOD OF MAKING SAME. GEORGE WITTY, New York, N. Y., assignor, by direct and mesne assignments, to Structural Products Corporation, a Corporation of Delaware. Filed Apr. 1, 1930. Serial No. 440,867. 2 Claims. (Cl. 134—39.)

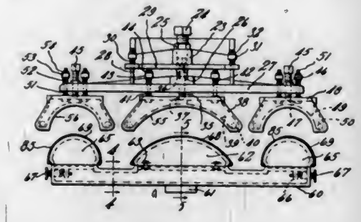
1. An enamel consisting of a mixture of white lead, zinc oxide, barium fluoride, China wood oil, linseed oil, turpentine, gum Manila copal, ethyl alcohol and acetic ether.

1,823,481. HEAT EXCHANGE DEVICE. HENRIK ZANDER, Stockholm, Sweden, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden, a Joint-Stock Company. Filed Oct. 2, 1928, Serial No. 309,707, and in Sweden Oct. 12, 1927. 15 Claims. (Cl. 257—Sub. 6.)



1. A regenerative heat exchange device comprising regenerative material having passages through the same, channels for a fluid to be heated and a fluid giving off heat, means to change communication between different passages and different channels, said passages extending in the general line of flow through the regenerative material and having different cross-sectional areas at different places.

1,823,482. COLLAR AND CUFF IRONING MACHINE. ALONZO LINTON BAUSMAN, Springfield, Mass. Filed Sept. 13, 1929. Serial No. 392,363. 5 Claims. (Cl. 68—9.)

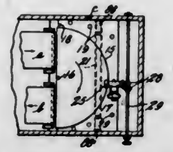


1. In a laundry press of the type having a stationary press head presenting a plurality of ironing surfaces and a movable press head carrying a plurality of ironing surfaces into coaction with the stationary ironing surfaces, that construction of the movable press head comprising a movable operating arm, an equalizing lever pivotally secured to the arm, and a plurality of ironing members each pivotally secured to the equalizing lever.

3. A laundry press comprising a stationary press head presenting a plurality of padded ironing members, a single movable press head carrying a plurality of separate ironing members and movable to bring said members into coaction with the padded ironing members on the stationary press head, separate supply and return air passages in the stationary press head, said passages being common to all of the stationary ironing members, separate supply and return air passages in each of the stationary ironing members connecting with the common passages in the press head, two sets of perforations in each stationary ironing member connecting both of the air passages therein with the padding surrounding the member, and means connected with the common supply and return air passages in the stationary head for circulating air through them.

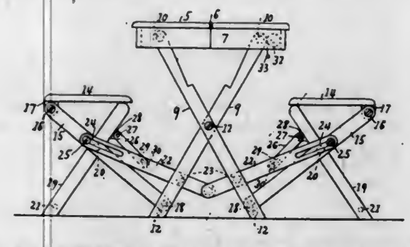
5. A collar and cuff ironing press comprising a stationary jaw presenting a central convex collar ironing surface and a pair of convex cuff ironing surfaces disposed at angles to and projecting in front of the collar ironing surface so that they can readily be reached by an operator standing directly in front of the collar ironing surface, a movable jaw carrying ironing members shaped to conform to the ironing surfaces of the stationary jaw and arranged similarly thereto, and means for moving the movable jaw to bring the ironing surfaces in unison against the stationary ironing members.

1,823,483. TRANSFER DEVICE. ALONZO LINTON BAUSMAN, Springfield, Mass. Original application filed June 10, 1929, Serial No. 369,710. Divided and this application filed Apr. 8, 1930. Serial No. 442,566. 11 Claims. (Cl. 198—25.)



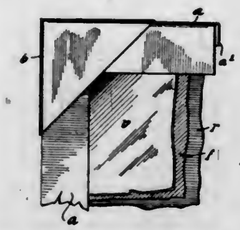
1. A transfer device, comprising, a support presenting a plane upper face and having a straight edge, a rotatable member of flexible material folded about said edge and supported substantially half on said upper face and substantially half below said face said member revolving about an axis which is normal to said face and close to and intermediate the ends of said edge.

1,823,484. COLLAPSIBLE TABLE AND SEAT. LOUIS BLUMENTHAL, Brooklyn, N. Y. Filed Mar. 28, 1930. Serial No. 439,075. 5 Claims. (Cl. 155—123.)



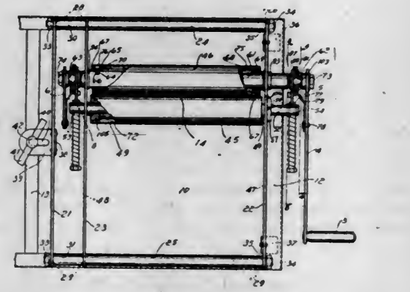
1. In a collapsible table and seat, the combination with a table top comprising a pair of hinged sections, leg members pivotally connected to the sections and pivotally connected to each other, of foldable seats having crossed legs pivotally connected together, each seat being connected at only one end to a seat leg pivoted to a table leg, and link means connecting the legs of the seats to the legs of the table top operated by folding said top to thereby fold the table legs and seats.

1,823,485. PICTURE FRAME. CARLOS BREMER, Buenos Aires, Argentina. Filed July 10, 1930, Serial No. 466,982, and in Argentina May 5, 1930. 1 Claim. (Cl. 40—155.)



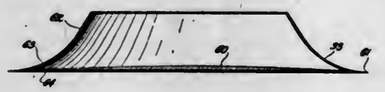
In a picture frame including its long and short channel bars forming the frame for the reception of glass, picture and cardboard backing, corner pieces to hold the channel bars together, each of said corner pieces comprising a substantially triangularly shaped body, triangular wing members formed with two sides of said body and bent upon the same and having grooves formed therein, tongues formed in the bottom of the grooves by perforating the material thereof, and adapted to engage the channels of the frame bars.

1,823,486. MOP WRINGER. LIONEL CHASE, Elyria, Ohio, assignor to The Colson Company, Elyria, Ohio, a Corporation of Ohio. Filed June 11, 1927. Serial No. 198,267. 7 Claims. (Cl. 15—262.)



1. In a wringer, a supporting frame, a wringer roll, mounted for rotation on a fixed axis, a shiftable wringer roll mounted for rotation on a laterally shiftable axis, a handle for rotating the fixed roll, power transmitting means between the handle and the shiftable roll operable by movement of the handle for shifting the shiftable roll toward the fixed roll during rotational movement of the fixed roll.

1,823,487. GOLF GAME. EDMUND H. CLEAR, New York, N. Y. Filed Oct. 9, 1930. Serial No. 487,422. 4 Claims. (Cl. 273—36.)

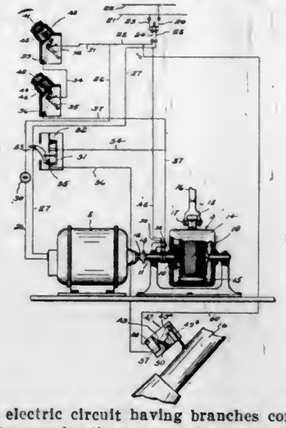


1. A golf-hole simulating device including in combination a base portion of disk form, a relatively thin flexible lip member of conoidal form extending upwardly and inwardly in a curve from the surface of the base and from a junction therewith a substantial distance inward from the periphery thereof, said base portion decreasing in thickness from the junction of the lip member therewith to its periphery to provide a relatively thin edge, said base also tapering in thickness from an interior point outwardly to said junction, the said lip member merging with said base at said junction so as to form a smooth continuous curved surface.

1,823,488. ELECTRIC MOTION TRANSMITTING MECHANISM AND CONTROLS FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Oct. 11, 1929. Serial No. 398,965. 14 Claims. (Cl. 68—9.)

1. A pressing machine comprising cooperating pressing elements, one of which is movable toward and from the other, actuating mechanism comprising an electric motor and motion transmitting means between the electric motor and the movable element including a second electric motor having a rotating armature and a rotatable field, the armature being connected to the rotor of the first

motor to be actuated thereby, and motion transmitting connections between the rotatable field and the movable



element, an electric circuit having branches connected to the motors to energize the same, and a manually operable switch in the branch connected to the second motor.

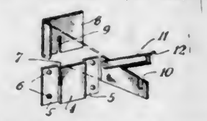
1,823,489. METHOD OF AND APPARATUS FOR PRODUCING PROFILE STRIPS FROM SHEET MAGNESIUM ALLOYS. ERNST DE RIDDER, Bitterfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 28, 1928, Serial No. 250,314, and in Germany Jan. 28, 1927. 6 Claims. (Cl. 153—10.)



1. The method of producing profiled sections of uniform thickness from flat strips of magnesium alloys which comprises drawing said strips and subjecting continuously consecutive cross-sections of said strips to at least two combinations of mechanical stresses simultaneously acting upon cross-sections of the strips having a definite longitudinal distance from each other and effecting a curvature of the cross-section, the points of action of said combinations of curving stresses, with the exception of the ultimate one, being shifted with respect to the direction of drawing, thereby causing a predetermined deflection of the strips between the points of action of two consecutive combinations of stresses.

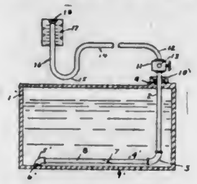
4. A drawbench for drawing profiled sections of uniform thickness from flat strips of magnesium alloys comprising, in operative combination, a fore-die adapted to impart a preliminary curvature to the cross-section of said strips, and a final die placed at a definite distance from said fore-die and adapted to impart the final shape to the preliminary curved cross-section of said strips, said dies being adapted to be inclined at a predetermined angle towards each other.

1,823,490. WINDOW SHADE BRACKET. HYMAN GOLDFINGER, Brooklyn, N. Y. Filed Mar. 29, 1929. Serial No. 350,859. 1 Claim. (Cl. 156—24.)



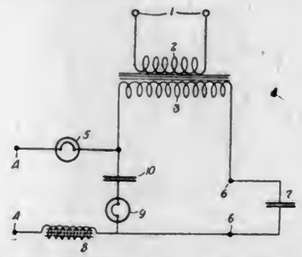
A shade bracket as characterized comprising a member adapted to be fixed to a window sash or the like and a member adapted to be removably supported by the fixed member, said removable member having a flat base portion and an outstanding hanger portion, said fixed member having side flanges in a common plane and an intermediate portion offset from the plane of said flanges by offsetting portions substantially the thickness of the material comprising the removable member, one of said offsetting portions having its upper part cut away for providing a downwardly-extending slot at one side edge of the offset portion between the offset portion and one of the flanges, whereby the flat base portion of the removable member may extend straight through the slot partly beyond the offset portion and partly in front of the flange in flatwise engagement with both the offset portion and the flange, said base portion having an upwardly-extending slot to receive the lower part of the offsetting portion of the fixed member below the downwardly-extending slot of said fixed member and having a width from the upwardly-extending slot to the free end of the base portion substantially the width of the offset portion, whereby the fixed member and removable member may be of substantially the same height and the removable member will be retained against twisting in any direction.

1,823,491. LIQUID LEVEL GAUGE. GARABED G. HEGHINIAN, Baltimore, Md., assignor of one-half to William W. Varney, Baltimore, Md. Filed Dec. 23, 1926. Serial No. 156,639. 5 Claims. (Cl. 73—54.)



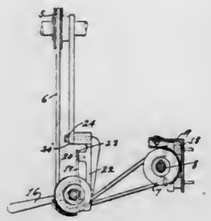
1. A device for indicating the depth or quantity of liquid in a container, comprising a pipe line conduit, enclosing a fluid having negligible weight, which serves as a pressure transmitting medium, one end of said pipe line conduit being connected to an indicator responsive to pressure, the other end being inserted into the liquid in the container to the depth of the liquid to be indicated and running horizontally for a distance then terminating with a downward bend that forms a trap for the fluid in the pipe line conduit, and an indicator responsive to pressure connected to said conduit, said trap forming end insuring that liquid in the container will exert its pressure on the fluid in the conduit and the contact surface between the liquid and the fluid though constantly shifting position due to different depths of liquid or change of temperature, is always confined to the horizontal section of the conduit within the range of operation of the device.

1,823,492. CONDENSER TESTING EQUIPMENT. HARRY W. HOUCK, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1927. Serial No. 170,944. 5 Claims. (Cl. 175—173.)



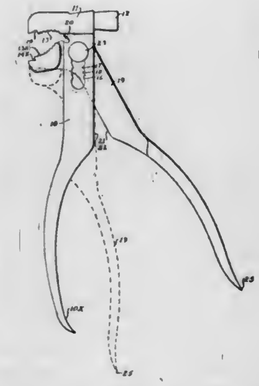
1. Apparatus for testing condensers, comprising a circuit for receiving alternating current, an indicating device to be included in said circuit and to be operated by said alternating current, and connections for supplying direct current to said circuit, with an indicating device in said connections to be energized by said direct current.

1,823,493. BELT CONTROLLER. NORMAN HUBBARD, Elizabeth, N. J. Original application filed Sept. 29, 1925, Serial No. 59,279. Divided and this application filed Jan. 4, 1928. Serial No. 244,424. 7 Claims. (Cl. 64—5.)



1. A belt controller comprising movably mounted idlers and lug engaging means, a fixed support, means on said support comprising a beveled lug to retain said controller at either end of said fixed support.

1,823,494. COMBINATION PLIER AND WRENCH. HENRY C. JACOBS, Wichita, Kans. Filed July 19, 1929. Serial No. 379,526. 1 Claim. (Cl. 7—3.)



In a tool of the class described, a member having a top jaw portion provided with a plurality of transverse grooves on the under side thereof and a transverse notch beyond the grooves adjacent the extreme end of said portion, and a rounded groove in the end of the jaw portion at right angles to and intersecting said notch; and a second member adjustably hinged to the first mentioned member and having a lower jaw portion provided with transverse grooves on its upper face and a transverse notch beyond the grooves and adjacent the extreme end of said jaw portion, and a rounded groove in the end of said jaw portion at right angles to and intersecting said notch; the oppositely positioned paired rounded grooves of the tool functioning to hold a bolt shank with its head portion secured by the oppositely positioned paired notch portions of the tool.

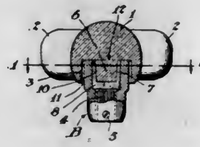
1,823,495. PRODUCTION OF HYDROCARBONS OF HIGH MOLECULAR WEIGHT. CARL KRAUCH and MARTIN MÜLLER-CUNRADI, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 1, 1927, Serial No. 195,858, and in Germany June 5, 1926. 6 Claims. (Cl. 260—161.)

1. The process of producing hydrocarbons of high molecular weight, which comprises destructively hydrogenating carbonaceous materials and polymerizing such of the hydrocarbon products of said reaction consisting substantially of compounds containing at least 4 atoms of carbon in the molecule as give a dark coloured mixture when shaken with concentrated sulphuric acid.

4. The process of producing hydrocarbons of high molecular weight, which comprises destructively hydrogenating carbonaceous materials, dehydrogenating the hydrocarbon products of said reaction containing at least 4 atoms of carbon in the molecule into such unsaturated hydrocarbon products as give a dark coloured mixture when shaken with concentrated sulphuric acid and polymerizing the latter.

6. The process of producing hydrocarbons of high molecular weight, which comprises destructively hydrogenating carbonaceous materials, treating such of the products consisting substantially of compounds containing at least 4 atoms of carbon in the molecule with a dehydrogenating catalyst comprising a compound of a metal occuring in several stages of oxidation, treating the product thus obtained with aqueous hydrochloric acid, passing the product thus obtained over barium chloride, treating the product with chlorine, splitting off hydrogen chloride and polymerizing the resulting hydrocarbon product by treatment with sodium.

1,823,496. VALVE HANDLE. HENRY W. A. LEHNERT, New York, N. Y. Filed Apr. 30, 1928. Serial No. 273,814. 1 Claim. (Cl. 287—53.)

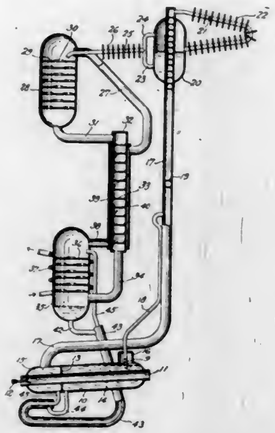


A handle structure for purposes described, comprising a porcelain handle including a hub portion having a socket and an integral lug projecting centrally therein, and a bushing having a portion within the socket and having an aperture in which the lug is located, the lug being of polygonal section and being formed with corners and the bushing aperture being generally cylindrical, providing substantial cement spaces between its wall and the bushing, cement in said spaces, and means in the cylindrical wall of said aperture for receiving said lug corners.

1,823,497. CONDENSER AND RECTIFIER. ALVAR LENNING, Jackson Heights, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed May 28, 1929. Serial No. 366,699. 6 Claims. (Cl. 257—36.)

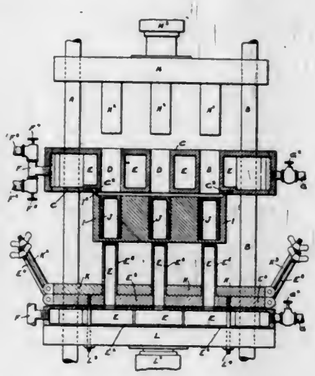
1. Condensing and rectifying means comprising an upwardly extending vapor conduit, means forming a liquid holding chamber in heat exchange relation with said vapor conduit, a first condenser conduit connected between said

vapor conduit and said liquid holding chamber and a second condenser conduit having two branches, one branch



being connected to said chamber at a relatively low point and the other being connected to said chamber at a relatively high point.

1,823,498. MACHINE FOR CANDY MAKING. WILLIAM G. LLOYD, Lynn, Mass. Filed Aug. 12, 1930. Serial No. 474,743. 5 Claims. (Cl. 107—8.)

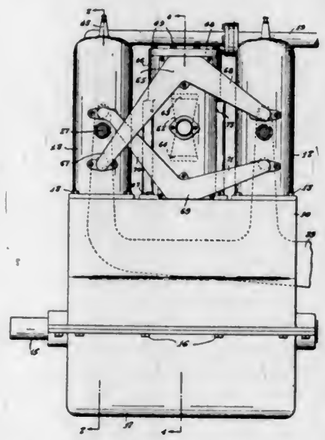


1. In a device of the kind described the combination of a body form, mould holding, plate, parallel uprights with said plate unmovably mounted directly thereon, a stripper plate slidably mounted upon said uprights below said body form plate, adaptable to hold the finished shells within the moulds in said body form plate when the inside formers hereinafter referred to are withdrawn, an inside former plate, with inside formers thereon, slidably mounted on said uprights beneath said stripper plate, means for clamping said stripper plate and inside former plate to said mould holding plate, a heater plate slidably mounted on said uprights below said inside former plate, a table plate slidably mounted on said uprights beneath said heater plate, lifting and lowering means for said table plate, a punch plate with punches mounted thereon slidably mounted on said uprights above said body form plate, lifting and lowering means for said punch plate, and means adaptable to catch said shells as they are forced out of the moulds in said body form plate.

1,823,499. PROCESS OF MAKING THE PIPERIDINE SALT OF PENTAMETHYLENE-DITHIO-CARBAMIC ACID. GEORGE LUTZ, Rocky River, Ohio, assignor, by mesne assignments, to E. I. Du Pont De Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,456. 3 Claims. (Cl. 260—112.)

1. The process of contacting piperidine and carbon-bisulfide in a solvent comprising a hydrocarbon of the group constituted by aliphatic and alicyclic hydrocarbons which are inert with respect to the reactants, liquid at ordinary temperature and boil below about 250° C.

1,823,500. INTERNAL COMBUSTION ENGINE. JOHN J. MCCARTHY, Malden, Mass. Filed June 13, 1930. Serial No. 460,873. 3 Claims. (Cl. 123—59.)

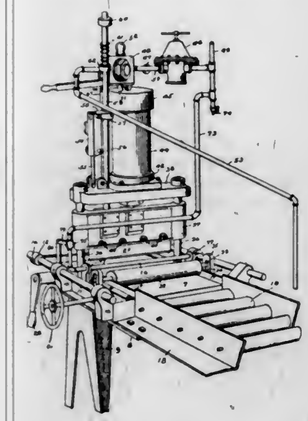


2. In an internal combustion engine, a pair of working cylinders, a pair of pistons axially arranged with respect to each other in each of said cylinders, one of said pistons being slidably mounted in the other piston, a combustion chamber in each cylinder formed by said cylinder and the head of said external piston, a second combustion chamber formed by each of said external pistons and the heads of each of said pistons, a cylinder associated with said pair of working cylinders, a double ended piston reciprocable in said second cylinder and dividing the same into two chambers, means to admit a charge of combustible mixture alternately to the chambers in said second cylinder, a manifold fixed to said second cylinder and adapted to convey a charge of combustible mixture under pressure from one of the chambers in said second cylinder simultaneously to the first combustion chamber in one cylinder and the second combustion chamber in the opposite cylinder, and a second manifold fixed to said second cylinder and adapted to convey a charge of combustible mixture under pressure from the other of said chambers in said second cylinder simultaneously to the second combustion chamber in the first mentioned working cylinder and to the first combustion chamber in the opposite working cylinder when the axinlly arranged pistons in said working cylinders are at the opposite ends of their strokes.

1,823,501. RUBBER-CUTTING MACHINE. LESTER H. MESSINGER, Jr., Bridgeport, Conn., assignor to The Black Rock Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 31, 1928. Serial No. 316,288. 11 Claims. (Cl. 164—56.)

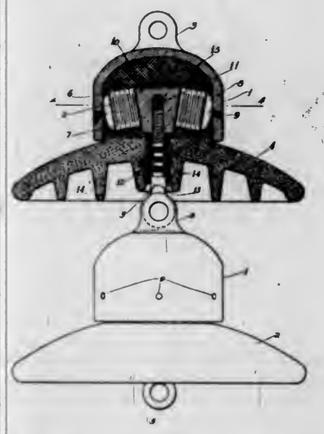
1. In a rubber cutting machine, the combination with a bed, guides mounted thereon, a reciprocatory slide and

knife mounted upon the guides, a compressed air cylinder, a piston and piston rod mounted in the cylinder and connected with and supporting the knife slide, a compressed air supply for the piston and knife, a control valve in the compressed-air supply line, and automatic operating con-



nections with said valve for alternately turning air pressure into opposite ends of the cylinder, means for feeding strips of rubber stock beneath the knife, and means whereby the feeding is performed by compressed-air from the exhaust of the valve.

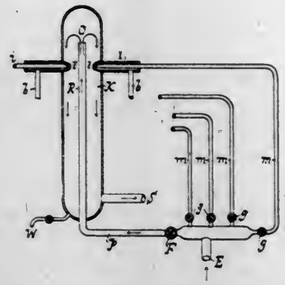
1,823,502. ELECTRICAL INSULATOR. ALEXANDER NYMAN, East Orange, N. J., assignor to Dubilier Condenser Corporation, a Corporation of Delaware. Filed May 17, 1924. Serial No. 714,060. 8 Claims. (Cl. 173—318.)



4. An insulator adapted to form a unit in a series of insulators and to transmit mechanical stress comprising condenser units as compression members composed of alternate sheets of conductive and dielectric material, said units being arranged in arch formation to resist said stress.

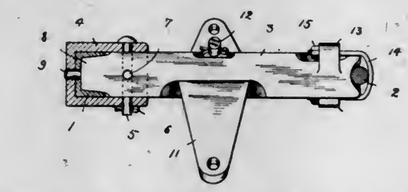
6. An insulator adapted to resist a force, and including an electrical condenser, means to transmit said force to the body of the condenser to maintain a suitable pressure thereon, and an additional means to maintain pressure on the condenser.

1,823,503. MANUFACTURE OF UNSATURATED HYDROCARBONS. ALWIN MITTASCH, Mannheim, and WALTER FRANKENBURGER and GUSTAV WIETZEL, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 19, 1927, Serial No. 162,074, and in Germany Jan. 19, 1926. 4 Claims. (Cl. 260—170.)



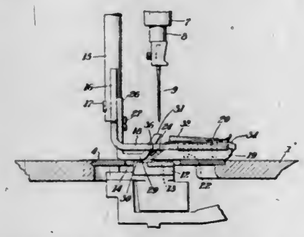
1. The process of producing unsaturated hydrocarbons which comprises passing more saturated hydrocarbons in a finely divided state through a flame disk of high temperature of more than 900° C. produced by combustion.

1,823,504. BRAKE BEAM FULCRUM. GEORGE E. OLSON, Hibbing, Minn. Filed Feb. 13, 1930. Serial No. 428,143. 2 Claims. (Cl. 188—232.)



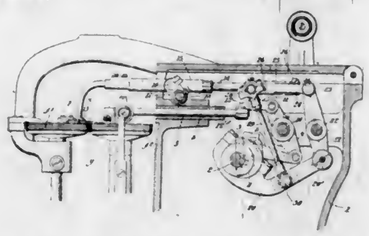
2. The combination with an adjustable brake beam strut, of means at the truss end of the strut comprising an adjustable stable for engagement with the truss member in either of the adjusted positions of the strut.

1,823,505. RIBBON SHIRRING DEVICE FOR SEWING MACHINES. THOMAS O'NEILL, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 15, 1929. Serial No. 378,196. 13 Claims. (Cl. 112—132.)



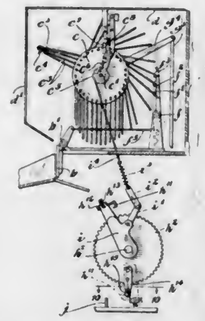
1. In a sewing machine, a work-support, a reciprocatory needle, work-feeding means, guiding means including a fabric-strip guide and a bevelled fabric-strip supporting surface inclined downwardly toward said work-support from substantially the point of penetration of said strip by the needle, and means permitting adjustment of said inclined surface in the direction of feed relatively to said guide.

1,823,506. LOOPER OPERATING MECHANISM FOR SEWING MACHINES. JOSEF F. PALME, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 26, 1928. Serial No. 264,829. 7 Claims. (Cl. 112—16.)



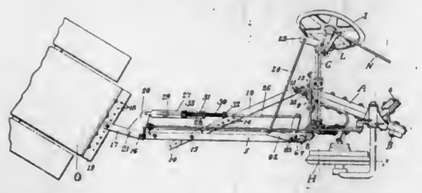
1. In a sewing machine of the fur and glove sewing type, the combination with a horizontally reciprocating needle, a needle-bar, and a cup-feed, of a looper-bar, a looper carried by said bar for cooperation with said needle at opposite sides of the plane of the work, a main-shaft, an eccentric on said shaft, and means including a pitman element having a circular bearing engagement with and actuated by said eccentric for imparting to said looper-bar all of its operative movements.

1,823,507. GAME APPARATUS. CHRIST PAPOUCHIS, Far Rockaway, N. Y. Filed Aug. 25, 1928. Serial No. 302,114. 15 Claims. (Cl. 273—95.)



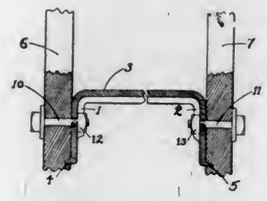
1. In a game apparatus, the combination of a scoring mechanism, a ball actuated device, means to operate the scoring mechanism from the ball actuated device, and ball actuated means for resetting the operating mechanism.

1,823,508. DRAFT ATTACHMENT FOR AGRICULTURAL IMPLEMENTS. WILLIAM L. PAUL, Berkeley, Calif., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 5, 1921, Serial No. 467,107. Renewed Oct. 29, 1926. 44 Claims. (Cl. 97—181.)



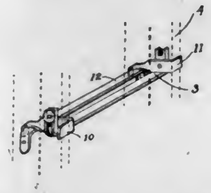
1. The combination with a wheeled frame comprising a dirigible wheel, of draft means, a hitch member in the form of a bar pivotally connected with said draft means and with said frame to swing laterally, means for holding said bar in its different positions of adjustment, and steering means for steering said dirigible wheel by lateral inclination of the line of draft, comprising a power transmitting device connected at its forward end with said draft means, a rocking member pivoted coaxially with the pivotal connection of said hitch member with said frame, and connected with the rear end portion of said power transmitting device, and means connecting said rocking member with said dirigible wheel.

1,823,509. REPLACEABLE LADDER RUNG. SPENCER M. PETERS and ARTHUR B. ROCHESTER, Springfield, Ill.; said Rochester assignor to said Peters. Filed Mar. 27, 1929. Serial No. 350,338. 1 Claim. (Cl. 228—58.)



As a new article of manufacture a ladder rung formed of a U-shaped channel bar whose ends are bent at right angles to the intermediate body so as to bring the sides of the channel on the inside of the curve at the bend; said bent ends forming integral brackets to be secured to ladder stiles and each provided with a bolt hole; said sides of the channel on said brackets adapted to provide holding means to prevent a bolt head or nut from turning when fitted therebetween; said bent ends of said channel bar each provided with an integral outwardly extending terminal spur adapted to pierce the inner face of a ladder stile when in normal use.

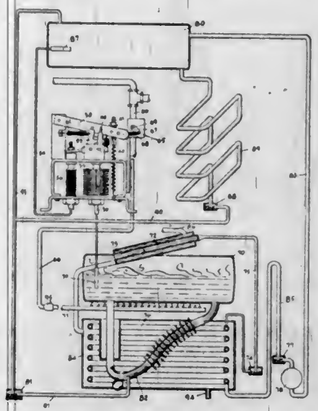
1,823,510. EXTENSION LADDER HOOK. SPENCER M. PETERS and ARTHUR B. ROCHESTER, Springfield, Ill.; said Rochester assignor to said Peters. Filed Mar. 27, 1929. Serial No. 350,343. 2 Claims. (Cl. 228—66.)



1. An extension ladder hook comprising in combination a bar having a U-shaped cross section and bent at the ends to form a U-shaped bar, a pair of angular hook members movably pivoted to the inner face of said bent ends of said bar, each of said hook members having its middle portion in a plane with said bent ends, one of its ends bent outwardly at right angles to said middle portion and a twist in said hook to form the opposite end in a downwardly bent position to form a relatively wide hook for engaging ladder rungs.

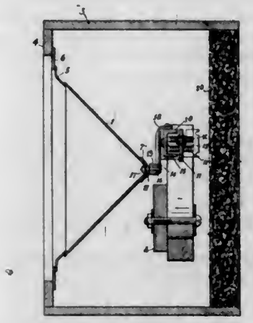
1,823,511. THERMIC CONTROL DEVICE. ESTEL C. RANEY, Columbus, Ohio. Filed Sept. 29, 1928. Serial No. 309,339. 8 Claims. (Cl. 62—5.)

1. In a refrigerating apparatus, a heater for heating a part of the apparatus, a movable member for connecting and disconnecting the heater with a source of supply of that which the heater consumes to produce heat for producing changes in temperature of a part of the apparatus, means for operating the movable member for connecting the heater, a plurality of thermic devices for controlling



the said means in response to changes in the temperature of a plurality of parts of the apparatus, and means interposed between the thermic devices for transferring the control of the operating means from one thermic device to another thermic device.

1,823,512. LOUD SPEAKER. ABRAHAM RINGEL, Brooklyn, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 22, 1927. Serial No. 228,018. 21 Claims. (Cl. 181—31.)

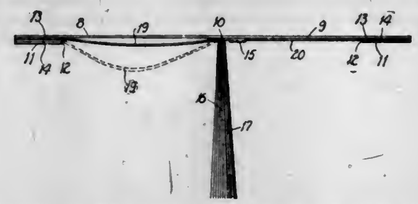


1. The method of reproducing sound by means of a vibrating diaphragm actuated by a driving member, which consists in providing a diaphragm so small that it will not normally reproduce notes of low frequency, in stepping up the movement of the driving member to produce an amplitude of diaphragm movement sufficient to reproduce the desired low notes and in radiating the sound waves from the diaphragm directly to the open air.

1,823,513. CHECKBOOK AND RECORD. JOHN W. SCHOELCH, St. Louis, Mo. Filed Mar. 21, 1929. Serial No. 348,837. 4 Claims. (Cl. 281—34.)

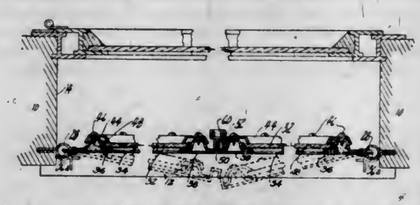
1. In a book comprising a flexible cover hinged at its center, a plurality of leaves carried by said cover, said leaves being of less width than said cover, an auxiliary cover for said first-mentioned cover and of substantially

the same width as the latter, pockets formed on the outer ends of said auxiliary cover and beyond the edges of the



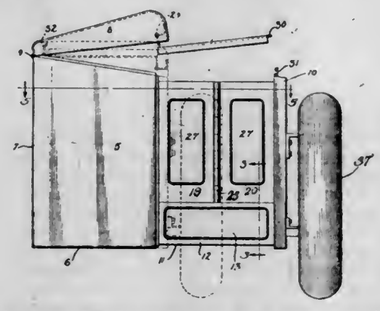
leaves for receiving the ends of said first-mentioned cover, and pockets superimposed on each of said first-mentioned pockets.

1,823,514. STORM SASH CONSTRUCTION. DARIUS E. SHRAUGER, Atlantic, Iowa. Filed Nov. 12, 1930. Serial No. 495,123. 15 Claims. (Cl. 189—64.)



1. In combination with a rolling screen guide having a slit opening facing inwardly relative to a window frame, a storm sash having a flange to fit into said slit opening whereby to support the storm sash relative to the window frame.

1,823,515. EXTENSION TRUNK AND LUGGAGE CARRIER. PHILMORE F. SPERY, Chicago, Ill., assignor, by mesne assignments, to Karl-Keen Manufacturing Company, Sioux City, Iowa. Filed Nov. 1, 1928. Serial No. 316,533. 4 Claims. (Cl. 224—29.)

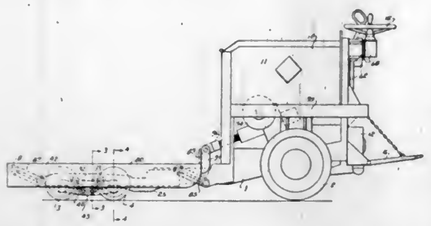


1. A trunk having a main section, a section extensible from the main section, said extensible section having fractional side walls slidable relative to the main section for guiding purposes and also having foldable side walls for supporting purposes and cooperating with the slidable walls to close the sides of said section when extended.

1,823,516. INDUSTRIAL TRUCK. SHELDON K. TOWSON, Cleveland Heights, Ohio, assignor to Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 6, 1930. Serial No. 426,414. 11 Claims. (Cl. 180—22.)

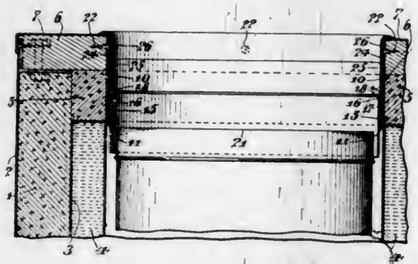
1. In an industrial truck of the character described, the combination of a chassis frame structure having large dirigible driving wheels, there being two pairs of rela-

tively small wheels attached to the truck frame at the opposite end thereof, said last named wheels being mounted upon a sub-frame and the sub-frame and the main frame being connected by a double pivotal connecting means, whereby the wheels and sub-frame may float about trans-



versely extending pivotal axes relative to the main frame when the truck is passing over uneven surfaces, said connecting means including spaced links, one end of each link being pivoted directly to the chassis and the other end being pivoted directly to the sub-frame and adapted to transmit the entire load from the chassis to the sub-frame.

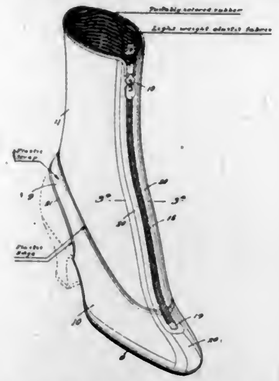
1,823,517. TOP FOR REFRIGERATOR CABINETS. NELSON MARTIN VANDEGRIFT, Philadelphia, Pa., assignor to Sheip & Vandegrift, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 15, 1929. Serial No. 371,117. 6 Claims. (Cl. 217—74.)



1. A lining for an opening through the top of a refrigerator cabinet through which access may be had to a chamber of the said cabinet, comprising a flexible ring member of insulating material located in the said opening, said ring member having a groove upon its inner side which extends entirely around the same, which groove is located in a plane which is substantially at right angles to the axis of the said ring adjacent the lower end thereof, and an integral ring member of thin sheet metal having an outwardly extending flange at its upper edge which projects into the said groove whereby the said integral metal ring member is held in detachable engagement with the said flexible ring member, the lower portion of the said metal ring member projecting a substantial distance below the lower edge of the said flexible ring member.

1,823,518. COMBINED STOCKING PROTECTOR AND OVERSHOE. WALLACE D. WALKER, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Jan. 11, 1926. Serial No. 80,422. 10 Claims. (Cl. 36—6.)

1. A combined stocking protector and overshoe comprising a foot fitting portion, an attached ankle encircling portion, the major part of which is of light weight elastic material and having a longitudinal slit, a plurality of closely spaced fastener elements along each side of said slit, the fastener elements on one side interlocking with the elements on the other whereby, when closed, the edges of the slit are adjacent and the ankle encircling portion is

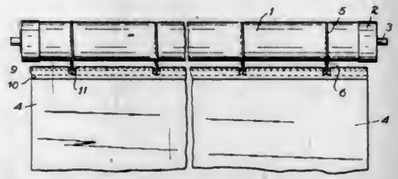


stretched to effect the desired fit, and a reinforcement extending from the end of the slit on to the foot fitting portion to distribute the closing strain and to prevent tearing.

1,823,519. MANUFACTURE OF SULPHITE PAPER PULP. ALFRED M. THOMSEN, San Francisco, Calif. Filed Mar. 25, 1929. Serial No. 349,897. 2 Claims. (Cl. 23—48.)

1. In the process of manufacturing paper pulp the method consisting of decomposing an acid calcium sulphite solution with sodium sulphate, separating the calcium sulphate produced, digesting the chips with the liquor thus produced, separating the pulp from the spent liquor, neutralizing said liquor and removing calcium sulphate from same as calcium carbonate by means of sodium carbonate, separating the sludge of calcium carbonate formed, evaporating the liquor thus obtained to a syrupy consistency, incinerating said liquor under reducing conditions, dissolving the resultant ash in water, separating the contained sodium carbonate from sodium sulphide, and returning the sodium carbonate to the process for neutralizing the above-mentioned liquor.

1,823,520. ROLLER SHADE MOUNTING. DOYLE S. WETZEL, Pittsburgh, Pa. Filed Feb. 18, 1931. Serial No. 516,622. 1 Claim. (Cl. 156—25.)

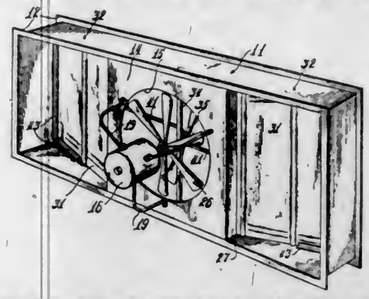


A roller shade mounting comprising a roller, a plurality of attaching rings each preferably formed of wire twisted to form a double loop one of said loops disposed around said roller and secured thereto by twisting the same, and a rod adapted to fit into the hem of the shade and passing through the other of said loops to form a flexible connection with the roller member.

1,823,521. AIR CIRCULATING DEVICE FOR WARM AIR FURNACES. EMIL ACKERMAN and WALTER MOWERS, Chicago, Ill. Filed Oct. 26, 1928. Serial No. 315,300. 12 Claims. (Cl. 126—110.)

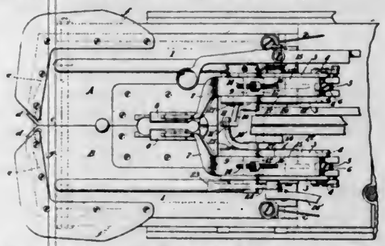
1. In combination with an air circulating device, comprising a frame having a power operated fan and louvres

pivotally mounted therein, means for operating said louvres, said means comprising an oscillatable baffle mounted in the path of the forced draft created by the power



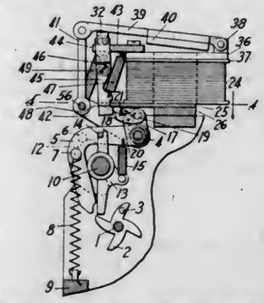
operated fan, and mechanical means flexibly connecting said baffle and louvres whereby said louvres are moved to close position upon starting the power operated fan.

1,823,522. WORK-CLAMP FOR SEWING MACHINES. EDWARD B. ALLEN, Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 15, 1928. Serial No. 319,476. 23 Claims. (Cl. 112—76.)



1. A work-clamp including a work-clamping element having a constant open position and a variable closed position, clamp-closing means, and encompressible means associated with the clamp-closing means for automatically determining the closed position of the work-clamping element in accordance with the thickness of the work.

1,823,523. ELECTRICAL OPERATING MEANS. VINCENT G. APPLE and HENRY B. OHMER, Dayton, Ohio, assignors to Ohmer Fare Register Company, Dayton, Ohio. Filed Mar. 28, 1927. Serial No. 179,135. 11 Claims. (Cl. 235—30.)

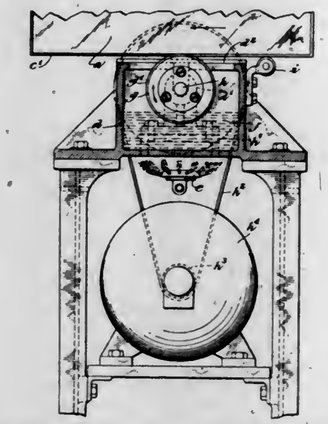


1. In a machine of the type described, a cam, fare drums, electrical means interposed between said cam and drums whereby said drums may be actuated, a lever controlled by said cam, means whereby said lever may be held in inoperative position during the initial rotation of said cam, and means whereby said lever controls said electrical means.

1,823,524. SPIRIT LEVEL. LEWIS B. BEECHER, Kensington, and PATRICK AHERN, New Britain, Conn., assignors to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 16, 1926. Serial No. 95,129. 4 Claims. (Cl. 33—211.)

4. A level stock having a transverse sight opening and a pair of opposed recesses in the peripheral wall of said opening, a lining for the opening having apertures in registry with said recesses, a spirit tube in said sight opening having its extremities extending through the lining apertures and extending into the recesses, and a cementitious material in said recesses and in which the ends of said tube are embedded whereby the tube is fixedly anchored in the stock solely by said cementitious material and independently of said lining, said lining constituting means for confining the cementitious material within said recesses and imparting a pleasing appearance to the peripheral wall of the sight opening.

1,823,525. APPARATUS FOR SEALING LAMINATED GLASS. FRANK H. BELL, Ferndale, Mich., assignor to Triplex Safety Glass Company of North America, New York, N. Y., a Corporation of Delaware. Filed May 1, 1928. Serial No. 274,185. 1 Claim. (Cl. 49—815.)



An apparatus for filling with sealing material the sealing slot at the edge of laminated glass which comprises a pot for the sealing material, a roller support for the glass at one side of the pot a rotating disc arranged to dip into the sealing material and having a thin edge to enter the sealing slot, the sealing disc having shoulders at the sides of the thin edge to support the glass at the level of the roller support, and means to rotate the disc independently of the movement of the glass.

1,823,526. CREEPER CONSTRUCTION. EDWARD T. BREEDEN, Fort Dodge, Iowa, assignor of one-half to O. I. Hobson. Filed Nov. 25, 1929. Serial No. 409,561. 2 Claims. (Cl. 280—61.5.)

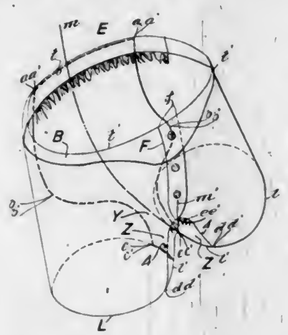
1. In a creeper construction, a frame consisting of side members and end members, each of said members being

bent upwardly adjacent its ends whereby the corner portions of said frame form inverted pockets, casters secured to said frame within said pockets and a sheet covering for



said frame having its corners cut away to accommodate said pockets, said covering having downwardly directed flanges at its sides and ends extending over said frame and secured thereto.

1,823,527. UNDERGARMENT. SIDNEY BLUE, Albany, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed June 8, 1929. Serial No. 369,340. 2 Claims. (Cl. 2—224.)

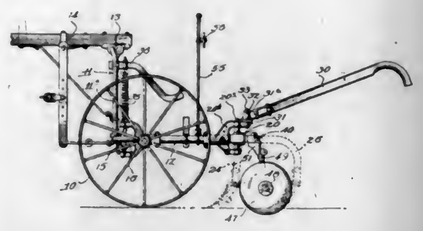


1. A nether garment having its waist, hip and thigh portions formed of three pieces of fabric, including a median member extending from the waist band at the back through the crotch and to the fly opening at the front of the garment, and two lateral members constituting the outer thigh and leg portions of the garment, the median member having a wide seat portion, a substantially narrowed crotch portion and a widened front provided with outwardly branching leg portions, the margins of the seat and crotch portions of said median member being stitched to the rear margins of the respective lateral members and the forward margin of the widened front portion of the median member being stitched to the lower front margins of the respective lateral members by a continuous line of stitching, the upper front margins of the lateral members being joined to form a fly opening, the widened front of the median member being gathered at the lower end of the fly opening to provide fullness at the forepart and crotch of the garment, the continuous line of stitching at the front of the garment extending from its center below said fly opening down each leg of the garment and both the front and rear stitching connecting said members extending down the legs of the garment to a point substantially remote from the crotch, thereby to avoid transverse seams near the crotch.

1,823,528. PRODUCTION OF GLYCOLLIC ACID ESTERS. WOLFGANG BUELOW, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Aug. 19, 1930, Serial No. 476,445, and in Germany Sept. 10, 1929. 6 Claims. (Cl. 260—106.)

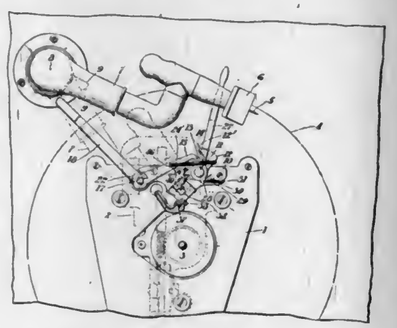
1. The process for the production of glycollic acid esters which comprises heating a dry alkaline salt of mono-chloracetic acid, which is free from water of crystallization, with an aliphatic alcohol in the absence of an esterifying agent.

1,823,529. DISK ATTACHMENT FOR WALKING CULTIVATORS. FRANK H. CATHEY, Dallas, Tex., assignor to Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed July 20, 1929. Serial No. 379,664. 2 Claims. (Cl. 97—54.)



1. In a cultivator a frame, a pair of gangs pivoted on said frame and extending rearwardly therefrom, gang heads pivoted on said gangs, a bar pivotally connected between each of said gang heads, and said frame to maintain said gang heads in parallel relation, a disk shaft having a plurality of disks thereon pivotally adjustable on horizontal axes relative to each of said gang heads, and an arch adjustably connecting said gangs adjacent their ends to take the side thrust of said disks and maintain them in predetermined spaced relation.

1,823,530. ELECTRIC PHONOGRAPH STOP. DANIEL HENRY CHASON, Elizabeth, N. J., assignor to Diehl Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 18, 1929. Serial No. 400,468. 2 Claims. (Cl. 192—119.)

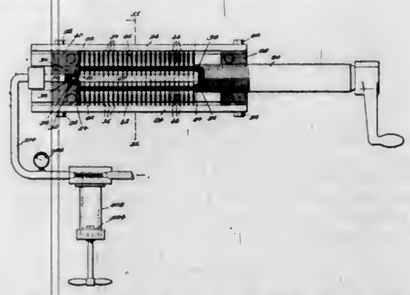


1. In a phonograph stop-mechanism, a base, a spring-energized actuating element pivoted on said base, a trigger-device, a removable and replaceable electric switch-unit distinct from said actuating element and including stationary and movable contacts, a lever carrying said movable contact, said lever being pivotally mounted in and constituting a part of said switch-unit, the pivotal axes of said spring-energized element and switch-lever being laterally spaced apart on said base, and an operative connection between said switch-lever and said spring-energized element.

1,823,531. RUBBER COMPOUND AND METHOD OF PRESERVING IT. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 31, 1927. Serial No. 216,780. 7 Claims. (Cl. 18—50.)

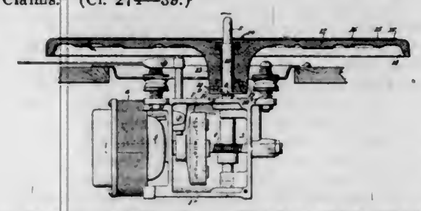
5. A method of preserving rubber which comprises incorporating therein a reaction product of a naphthol with a diamine selected from a group consisting of ethylene diamine and phenylene diamine.

1,823,532. METHOD OF FORMING BELLOWS FOLDS. WALTER B. CLIFFORD, Framingham, Mass., assignor, by mesne assignments, to Clifford Manufacturing Co., Boston, Mass., a Corporation of Delaware. Filed Oct. 4, 1924, Serial No. 741,688. Renewed Apr. 13, 1927. 24 Claims. (Cl. 153—73.)



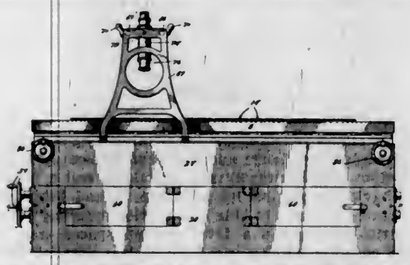
1. The method of forming a corrugated tubular thermostat which consists in forming a flange on the open end of a tubular blank, assembling a two part head about the flange with an opening therethrough for the introduction of liquid, corrugating the tube blank while supported internally by pressure exerted through the fluid introduced through the opening in the head, and finally sealing the opening in the head.

1,823,533. PHONOGRAPH TURNTABLE. FREDERICK DIEHL, Elizabeth, N. J., assignor to Diehl Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 11, 1930. Serial No. 487,935. 3 Claims. (Cl. 274—39.)



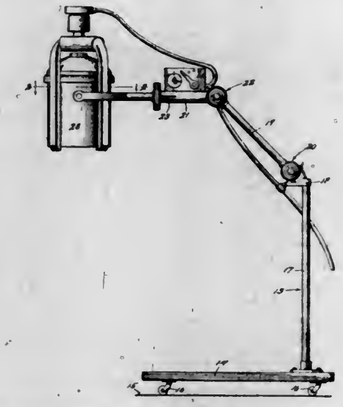
1. In a phonograph, the combination with a turntable shaft, of a turntable disk having a central hub formed with an axial aperture large enough to fit over said shaft without touching the latter, and bushings at the opposite ends of said aperture in engagement with said shaft for holding the turntable true to the shaft, said bushings being formed of a material having poor sound transmission properties and good resistance to deformation under pressure.

1,823,534. DIAGNOSTIC TABLE. NATHANIEL FRUTKOW and ANTONIUS J. VIKEN, Chicago, Ill. Filed Oct. 20, 1928. Serial No. 313,920. 10 Claims. (Cl. 128—2.)



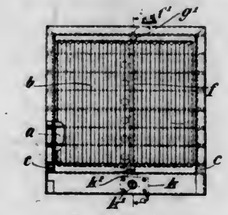
10. A device of the class described, including a patform for the support of a human body and having a light transmitting opening, a lamp element located beneath the platform and adapted to throw a powerful illumination upwardly towards the platform, means for directing a current of cooling air on to the surface of the body at the position so illuminated for cooling purposes, and a suitable viewing device located above the platform in position to examine the portion of the body so illuminated, substantially as described.

1,823,535. THERAPEUTIC LAMP. NATHANIEL FRUTKOW and ANTONIUS J. VIKEN, Chicago, Ill. Filed Oct. 29, 1928. Serial No. 315,785. 5 Claims. (Cl. 174—177.)



1. A therapeutic lamp including in combination a cylindrical shell open at one end and closed at the other end, a lamp socket in the closed end thereof, a plurality of air conduits extending lengthwise of said shell and having discharge orifices adjacent to the open end of the shell for the delivery of a current of air therefrom, there being a series of vent openings around the central portion of the shell for the admission of air therethrough into the body of the shell, a baffle plate secured to and spaced from the outer surface of the shell around the position of said vent openings to thereby cut off direct radiation of light through said openings, a centrifugal blower secured to and mounted upon the upper portion of the shell, air delivery connections from the peripheral portion of said blower to the conduits aforesaid, a driving motor connected to the blower shaft, a centrifugal circuit governor connected to the blower shaft, and electric circuits for supplying current to the motor and for also supplying current to the lamp when the motor speed exceeds a predetermined amount, substantially as described.

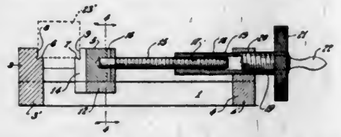
1,823,536. LOCKING CABINET DOOR. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 26, 1929. Serial No. 409,772. 3 Claims. (Cl. 70—29.)



1. The combination of a vertically disposed door hinged along its lower edge to a jamb, a vertically disposed slid-

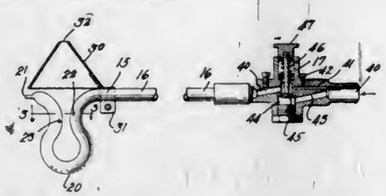
able detent extending between the upper and lower edges of the door and normally engaging the jamb adjacent the upper edge of the door, a spring engaging the detent to oppose its retraction yieldingly and a lock mounted in the jamb with its bolt movable into cooperative relation with the lower end of the detent to prevent positively its retraction.

1,823,537. VISE. CHARLES D. GAUDREAU, Springfield, Mass., assignor to Bay State Tool & Machine Co., a Corporation of Massachusetts. Filed June 21, 1930. Serial No. 462,797. 1 Claim. (Cl. 81—33.)



In combination, in a work holding vise, a pair of side guide members having upper and lower guide surfaces, a fixed and a movable jaw and a fixed end member, the movable jaw being located on the guide members, a plate secured to the movable jaw and located in engagement with the lower guide surface, means for operating the movable jaw comprising two screw threaded members of opposite threads and nested one within the other for imparting a greater travel to the movable jaw than the travel of the external screw threaded member, the fixed jaw and the fixed end member having grooves or channels and a central bearing portion for supporting the vise.

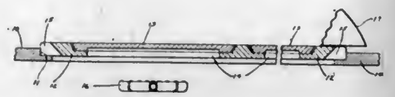
1,823,538. GAS STOVE IGNITER. EDWARD F. GEHRIG, Grosse Pointe Park, Mich., assignor to Detroit-Michigan Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 23, 1929. Serial No. 409,373. 9 Claims. (Cl. 158—115.)



9. In a gas stove having a plurality of spaced substantially co-planar burners connected to a manifold, a device for projecting flames into proximity with all of said burners simultaneously, said device including a tube connected to and projecting from said manifold, the tube having a closed end positioned at the point of intersection of lines connecting the various burners, the closed end being bent in a vertical plane to form a U loop, and having minute pilot apertures on the inside of the loop corresponding in number to the number of burners to be ignited by the igniter, the apertures facing the burners and being arranged at different levels to prevent interference between flames emerging from the apertures, the tube being provided with a valve normally permitting the flow of a small quantity of gas from said manifold thru said tube, but operable to increase the flow, when desired, there being a draft deflector mounted above said loop.

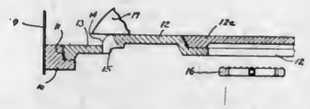
1,823,539. GAS RANGE TOP. WILLIAM H. GUENTHER, Detroit, Mich., assignor to Detroit-Michigan Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 31, 1930. Serial No. 425,042. 1 Claim. (Cl. 126—215.)

In a gas range, a burner section provided with a peripheral top frame 10 having a large central opening therein, a cover 12 for said opening and forming substantially the entire effective top of the burner section and provided with a plurality of relatively small openings 14 for lids, gas burners under said lid openings, the cover having a plurality of notches 15 cut in its side edges to provide



flues for the escape of products of combustion from said burners, the notches extending into the frame opening within the margin of the edge of the frame opening, the cover being provided with a plurality of lids 13 in said lid openings, the top surface of the lids being flush with the top surface of the cover.

1,823,540. GAS RANGE TOP. WILLIAM H. GUENTHER, Detroit, Mich., assignor to Detroit-Michigan Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 10, 1930. Serial No. 427,086. 1 Claim. (Cl. 126—215.)



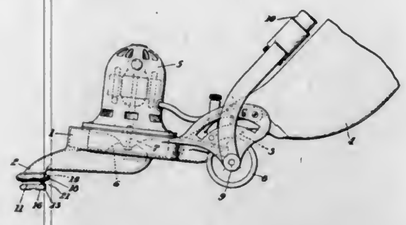
In a gas range, a burner section provided with a peripheral top frame 10 having a large central opening therein, a cover for said opening, seated in the edge of the frame opening and forming substantially the entire effective top of the burner section and provided with a plurality of relatively small openings for the lids, gas burners under said lid openings, said cover having a main top or body portion 12 above the top surface of the frame, and having a narrow edge or ledge 13 disposed below the top portion, there being a substantially vertical wall 14 connecting the ledge and the top portion, said cover being further provided with a plurality of closely spaced apertures 15, extending from the under surfaces of the cover and thru the wall 14 to provide flues for the escape of the products of combustion from said burners, and being also provided with a plurality of lids 12b in said lid openings, the top surface of the lids being flush with the upper surface of the cover body portion.

1,823,541. TRIM MOLDING. OLLIE L. HERRON, Chicago, Ill., assignor, by mesne assignments, of thirty one-hundredths to Wilma M. Zimmers, thirty one-hundredths to Anna L. Herron, twenty one-hundredths to Joseph B. Zimmers, and twenty one-hundredths to Ollie L. Herron, Chicago, Ill. Filed Aug. 31, 1929. Serial No. 389,764. 2 Claims. (Cl. 296—135.)



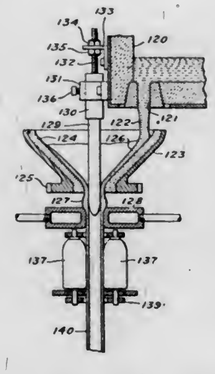
1. A molding including a sheet metal nailing strip having an outturned top flange and a pocket formed by bending its bottom edge outwardly and upwardly, and a finishing strip having a portion lying on top of and behind said outturned top flange to hide it, a portion entering the nailing strip pocket, and a third portion spaced from said pocket entering portion but more or less parallel thereto and concealing that portion of the nailing strip which forms the front wall of the pocket.

1,823,542. PNEUMATIC CLEANER. HJALMAR HERTZ, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 14, 1930. Serial No. 452,203. 2 Claims. (Cl. 15—153.)



1. In a vacuum cleaner, the combination with an air intake nozzle having externally disposed upper and lower grooves and main and secondary air-passages, the latter being disposed in one of said grooves, and an elastic bumper band disposed in one of said grooves and adapted to be readily shifted to the other groove, whereby said secondary air-passage may be opened or closed at the will of the operator.

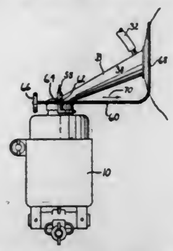
1,823,543. METHOD AND APPARATUS FOR DRAWING GLASS IN CYLINDRICAL FORM. GEORGE E. HOWARD, Butler, Pa., assignor to Hartford-Empire Company, a Corporation of Delaware. Original application filed May 28, 1923, Serial No. 642,021. Divided and this application filed Feb. 8, 1927. Serial No. 166,774. 8 Claims. (Cl. 49—17.1.)



1. The method of drawing glass tubing continuously, that comprises flowing a stream of molten glass upon the inner surface of a hollow receiver, rotating said receiver around a stationary implement contained therein, withdrawing the glass between said implement and the wall of an outlet at one end of said receiver, and forming the withdrawn glass into tubing.

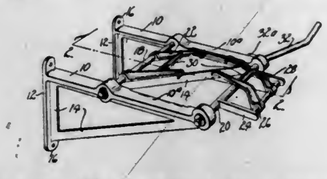
1,823,544. VACUUM HORN CONSTRUCTION FOR TAIL-BLEEDING MACHINES. WILLIAM G. HOWE, Des Moines, Iowa, assignor to Simplex Manufacturing Company, Sioux City, Iowa, a Corporation of Iowa. Filed Oct. 10, 1928. Serial No. 311,629. 2 Claims. (Cl. 128—276.)

1. A vacuum horn device comprising a cap portion to coact with the neck of a bottle, a horn portion thereon adapted to engage an animal and means associated with said device for engaging the animal and preventing too tight an engagement between the horn portion and the animal, said means comprising a ring to substantially encircle the end of the horn portion and an arm extending



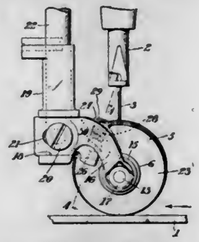
from one side and at right angles to the plane of the ring and means for supporting said arm on said vacuum horn device.

1,823,545. TIRE CASING SPREADER. BERT E. JOHNSON, Des Moines, Iowa, assignor of twelve and one-half per cent to Don. L. Cleveland, twelve and one-half per cent to Leslie L. Hueston, and twelve and one-half per cent to Roy L. Swarzman, Des Moines, Iowa. Filed May 9, 1930. Serial No. 451,071. 4 Claims. (Cl. 154—9.)



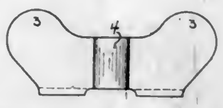
2. In a tire casing spreader, a pair of supporting arms adapted for a tire casing to rest transversely thereon, base members on said arms for attachment to a supporting surface, a shaft between said arms, a bead hook thereon and pivoted relative to said supporting arms, a spreading shaft journaled on said arms, a crank pin carried thereby and a second bead hook pivoted to said crank pin, said bead hooks being adapted to engage the beads of said tire casing and spread the same upon rotation of said spreading shaft.

1,823,546. ROLLER-PRESSER MECHANISM FOR SEWING MACHINES. EDWIN W. JOHNSON, Nichols, Trumbell Township, Fairfield County, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 2, 1929. Serial No. 382,895. 5 Claims. (Cl. 112—235.)



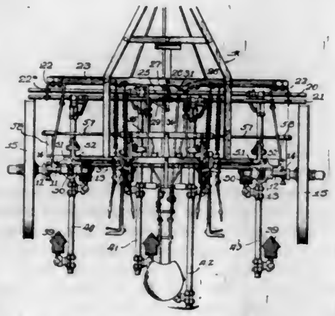
1. A roller-presser mechanism for sewing machines, comprising a supporting bracket, a presser-roller rotatively journaled upon said bracket, and a back-stop member carried by said bracket in position to engage an outer face of said presser-roller, whereby to restrain the presser-roller against rotation in one direction, said back-stop member being bodily yieldable to permit free rotation of the presser-roller in the opposite direction.

1,823,547. PROCESS FOR PRODUCING WINDING KEYS. MARTIN HERMANN KAEFER, Peru, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed Oct. 22, 1928. Serial No. 314,156. 2 Claims. (Cl. 76—110.)



1. The process of producing a winding key comprising taking a piece of sheet material having an elongated aperture and two pairs of projections on its periphery, forming a semi-tubular part adjacent to and on opposite sides of said aperture so that the two semi-tubular parts are in alignment, bending the sheet material along the axis of said aperture to bring the two semi-tubular parts together to form a tubular portion, and forming threads in said tubular portion.

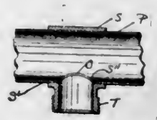
1,823,548. TWO-ROW CULTIVATOR. LEE H. KAUPKE, Rock Island, Ill., assignor to The Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed Apr. 27, 1928. Serial No. 273,209. 5 Claims. (Cl. 97—154.)



1. In a two-row cultivator, a frame having supporting wheels, two draft bars both extending substantially the full width of said frame and movable transversely thereof, and a plurality of pairs of tool carrying gangs interchangeably mounted on one or the other of said draft bars.

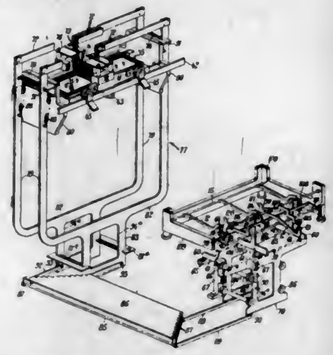
2. In a two-row cultivator, a frame having supporting wheels, two draft bars disposed in overlapping parallel relation extending transversely of said frame, means for shifting said bars in opposite directions, and a plurality of tool carrying gangs interchangeably mounted on one or the other of said draft bars.

1,823,549. SANITARY FITTING. IRA H. KENDALL, Potsdam, N. Y., assignor to The Kendall Patents, Inc., Potsdam, N. Y., a Corporation of New York. Filed Jan. 24, 1928. Serial No. 249,173. 4 Claims. (Cl. 285—105.)



3. A sanitary coupling for a milk-treating device comprising a pipe, a tightly fitting unitary coupling sleeve fitting over the said pipe intermediate the ends of said pipe, said coupling sleeve having an open neck projecting therefrom, said pipe having an opening formed in the wall thereof which is aligned with the inner end of the said neck, said sleeve being secured to said pipe so that said opening remains in alignment with said neck, the inner edge of said neck being connected to the edge of said opening to form a metallic seal.

1,823,550. COMBINED TYPEWRITING AND CARD-PERFORATING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 22, 1926. Serial No. 124,147. 27 Claims. (Cl. 164—112.)



1. In a machine having typing keys and a card-perforating mechanism having rows of stationary punches, the combination with a row of punch-indexing elements, said elements being actuable by the keys to index certain of the punches, means effective subsequently to perforate a card, by all of the indexed punches simultaneously, said punch-indexing elements being mounted in a traveling carriage to register with any row of punches, of a mechanical train of mechanism between said punch-indexing elements and typing keys, including a plurality of parallel bars mounted over, and effective to actuate said elements, whereby the typing of a character indexes certain of said elements to a row of stationary punches, depending on the character typed, said train of mechanism being effective at any letter-space position along the typing line of the card.

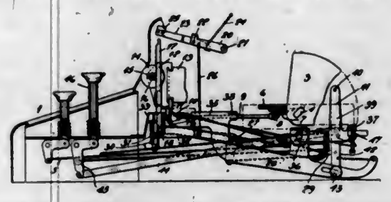
1,823,551. APPARATUS FOR THE MANUFACTURE OF WELDED STRUCTURES. THOMAS A. LUCY, Birmingham, Ala., assignor to Ingalls Steel Products Company, Birmingham, Ala., a Corporation. Filed Sept. 21, 1927. Serial No. 220,935. 18 Claims. (Cl. 219—17.)



1. An apparatus for the manufacture of welded structures, comprising, an elevated elongated rack, clamping means on said rack adapted to hold the parts of the structure in position for welding, and an enclosure for said rack and the work thereon adapted to intercept the light of the welding arc.

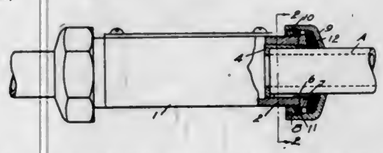
1,823,552. CALCULATING MACHINE. CONRAD LUTTROPP, Stockholm, Sweden, assignor of one-half to Anders Lindahl, Stockholm, Sweden. Filed Mar. 30, 1926, Serial No. 98,611, and in Sweden Mar. 30, 1925. 26 Claims. (Cl. 235—23.)

1. In calculating machines having a selector and a plurality of keys for operating said selector, an indicator for showing the number set up in said selector, said indicator comprising a carriage, a plurality of lengthened members slidably mounted on said carriage, a set of disks provided with figures each arranged to be engaged by a lengthened member, means to operatively connect said selector with said indicator so as to effect stepwise move-



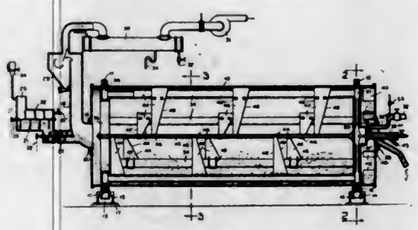
ment of the indicator in conformity with the movement of the selector, means adapted to longitudinally move one of said members at a time, said means being actuated by the keys and comprising a resiliently mounted hammer, and stopping means actuated by the keys for limiting the movement of said member.

1,823,553. CONDUIT FITTING. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1928. Serial No. 314,025. 5 Claims. (Cl. 285—123.)



1. In a conduit fitting, the combination of a body sleeve having a conduit-receiving opening; a slotted sleeve in the opening, the walls of the opening and sleeve having wedging surfaces in engagement operating with the relative endwise movement of the sleeves to contract the contractible sleeve; a ring on the body sleeve; a closure cap screwed on to the ring; and a gasket enclosed and compressed by the cap.

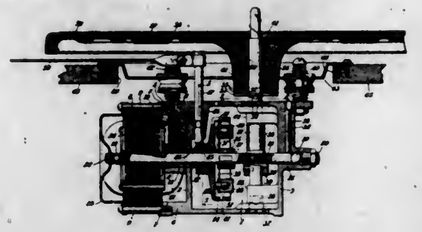
1,823,554. PROCESS FOR TREATING TOBACCO MATERIAL AND APPARATUS THEREFOR. ROBERT GRAHAM MEWBORNE, Albuquerque, N. Mex., assignor to Consumers Tobacco Company, Inc., Albuquerque, N. Mex., a Corporation of Delaware. Filed Dec. 26, 1925. Serial No. 11,711. 17 Claims. (Cl. 87—28.)



1. In the process of treating tobacco material to remove its nicotine content which includes the steps of alternately exposing previously wetted tobacco material in the presence of a vapor extractive agent to heating and cooling, varying from an upper temperature limit sufficient to volatilize a portion of the water content and to a lower limit sufficient to condense and absorb portions of an extractive agent in contact therewith when cooled and maintain it in liquid phase.

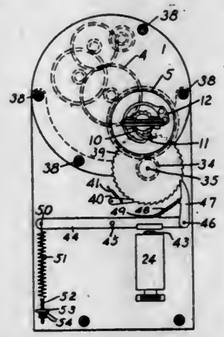
14. In an apparatus for extracting nicotine from tobacco material, a heating chamber provided with heating means substantially peripherally disposed, means for feeding tobacco material progressively through said heating chamber, means for counter-currently feeding an extractive agent including finely dispersed water adjacent the axial portions of said heating chamber forming a cooler axial zone, and cascading means for said tobacco material radially disposed and formed to direct said tobacco material continuously and progressively from the peripherally heated portions of said chamber towards the axial zone across the path of the current of the said extractive agent.

1,823,555. ELECTRIC PHONOGRAPH MOTOR. JAMES M. NAUL, Plainfield, N. J., assignor to Diehl Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 11, 1930. Serial No. 487,951. 8 Claims. (Cl. 172—278.)



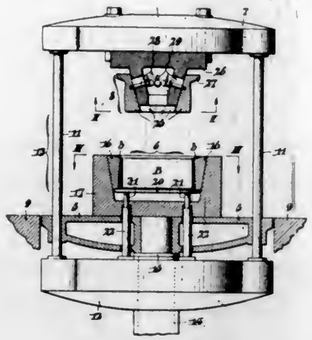
1. A phonograph driving motor comprising, a frame having spaced connected vertical members, a motor-shaft journaled in said members, a vertical turntable shaft journaled in said frame between said members, a worm-and-gear-connection between said shafts, a stationary governor-disk surrounding said motor-shaft between said vertical members, and centrifugally operated weighted arms mounted on said shaft between said disk and said worm-and-gear-connection, said arms being adapted to wipe over the face of said disk.

1,823,556. ELECTRIC DRIVING MECHANISM. ANDREW H. NEUREUTHER, Peru, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed July 5, 1927. Serial No. 203,517. 4 Claims. (Cl. 200—8.)



1. In an electric driving mechanism of the type having a condenser associated with an electromagnet for driving clocks, an electric current changing device comprising a rotatably mounted holding means, a plurality of electrically conducting disks each having an aperture and projecting teeth formed integral therewith mounted on said holding means and electrically insulated therefrom and from each other, a conducting member mounted adjacent to each of said disks contacting with the side thereof and a conducting member mounted adjacent to and contacting with said teeth.

1,823,557. DIE. RUSSELL H. BOWEN, Philadelphia, Pa., assignor to The American Pulley Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 2, 1928. Serial No. 274,394. 2 Claims. (Cl. 113—48.)

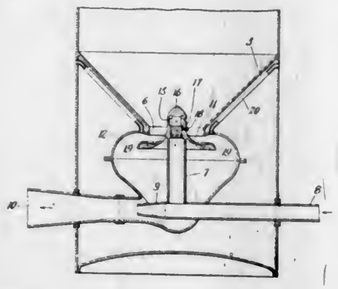


1. In a device for making pulley halves from cylindrical pans with a top flange, the combination of an external die comprising a series of movable segments supported in a conically-walled structure, said segments having their inner surfaces curved in accordance with the crown to be given the pulley, means normally supporting said segments flush with the top of the recess in said structure with capacity for limited descent, and an internal die embodying a greater series of segments supported around and axially movable relative to a conical member, said latter segments having their outer surfaces complementarily curved and being externally shouldered for co-operation with the external die to contract and expand said external and internal dies, respectively, when the latter is forced into the former.

1,823,558. PURIFICATION OF TAR ACID-BEARING OILS. STEPHEN P. BURKE, New York, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Sept. 22, 1926. Serial No. 137,174. 8 Claims. (Cl. 196—44.)

1. The method of removing color-producing compounds from an oil containing monohydric tar acids while conserving the content of the latter, which comprises agitating the oils with an aqueous solution of a non-acidic salt of a heavy metal.

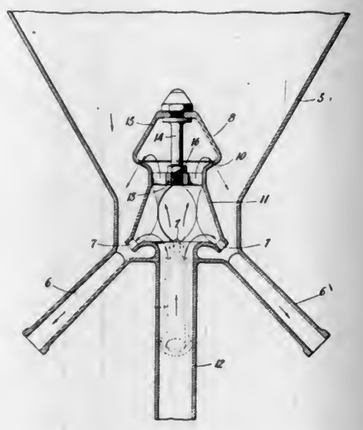
1,823,559. FOAM GENERATING APPARATUS. HANS BURMEISTER, Berlin, Germany, assignor to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed Nov. 12, 1927. Serial No. 232,784. 6 Claims. (Cl. 169—15.)



1. In apparatus for generating foam for fire extinguishing purposes, in combination, a hopper for foam forming powder having an opening in the bottom thereof, a catch plate beneath and close to said opening to sustain the powder therein and means for washing powder over the edge of said catch plate, substantially as and for the purpose described.

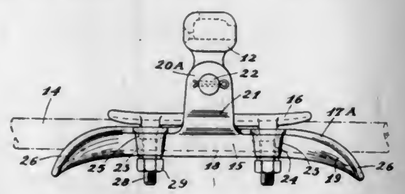
6. In apparatus for generating fire extinguishing foam a container for foam producing powder, a chamber communicating with said container, means for directing a continuous stream of water to wash the powder into said chamber and thereby produce a slurry, means for directly introducing air into said chamber, and means for passing the slurry from said chamber into a continuously flowing stream of water.

1,823,560. APPARATUS FOR PRODUCING FOAM. HANS BURMEISTER, Berlin, Germany, assignor to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed Nov. 12, 1927, Serial No. 232,786, and in Germany Mar. 31, 1927. 3 Claims. (Cl. 169—15.)



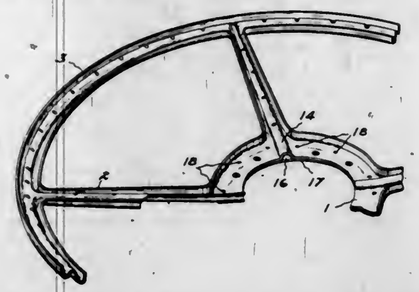
1. In apparatus for producing fire extinguishing foam a hopper for foam forming powder, a water discharge member extending into the hopper through the bottom thereof, a nozzle connected with said member and adapted to discharge a jet of water outwardly through an opening at the bottom of said hopper, and a spray device connected with said member adapted to discharge water into the powder in said hopper and wash the same into the path of said jet.

1,823,561. METHOD OF MAKING CONDUCTOR CLAMPS. CHARLES S. CARD, Cortland, N. Y., assignor to The Brewer-Titchener Corpo ation, Cortland, N. Y., a Corporation of New York. Filed Jan. 23, 1930. Serial No. 422,923. 7 Claims. (Cl. 29—155.5.)



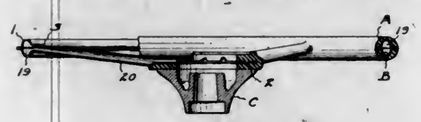
1. The method of forging a one-piece suspension clamp member or the like, which method includes the step of swaging bar-stock into a flattened blank provided with an elongated plate-like part having a suspension forming element extending laterally from a longitudinal edge thereof, and the step of swaging the center region of said plate-like part throughout its length into a cross-sectionally trough shape and simultaneously striking a flared lip at each trough end to form a seated conductor groove having an integral suspension element overhanging one of the groove side-walls between the aforesaid lips.

1,823,562. METHOD OF FORMING STEERING WHEELS. HARRY A. HUSTED, Cleveland, Ohio, assignor to The H. A. Husted Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 7, 1929. Serial No. 330,781. 5 Claims. (Cl. 18—59.)



2. The method of forming a steering wheel, which consists in forming a reinforcing spider with depressions in the hub thereof, bridging said depressions with a plate to restrain said hub against distortion during the subsequent molding operation, and molding composition material around said spider under pressure.

1,823,563. STEERING WHEEL. HARRY A. HUSTED, Cleveland, Ohio, assignor to The H. A. Husted Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 20, 1929. Serial No. 341,287. 5 Claims. (Cl. 74—33.)



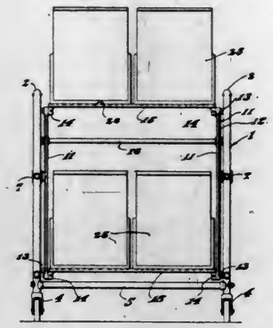
1. A steering wheel comprising a metallic reinforcing spider having rim, spoke and hub portions provided with a central hub opening, a continuous passageway in said rim portion, longitudinal passageways in said spokes continuous with said rim passageway and terminating at such hub opening, and a composition body molded around said spider to embed the same, whereby gases created in said passageways during the process of molding said composition body may be exhausted therefrom at said hub opening.

1,823,564. INDEX RECORD AND SIGNAL. LE ROI EARLE HUTCHINGS, Buffalo, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 14, 1926. Serial No. 141,612. 11 Claims. (Cl. 40—23.)



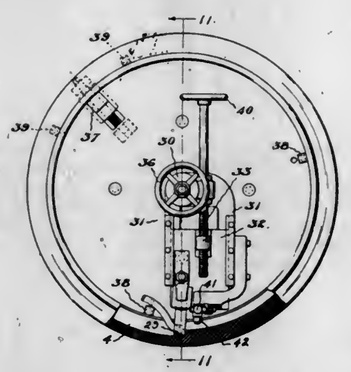
1. In an index signal, a signal member composed of composite material consisting of two differently colored substances attached together, said signal being provided with means for attaching said index signal to the edge of a record card said differently colored substances being adapted to indicate characteristics of record matter on said card.

1,823,565. INDEX FILE MOUNTING. LE ROI E. HUTCHINGS, Buffalo, N. Y., assignor to Remington Rand Inc., New York, N. Y. Filed Sept. 1, 1927. Serial No. 216,897. 4 Claims. (Cl. 211—81.)



1. An index file mounting, comprising a stand having rigidly connected end members, file-supporting members, a plurality of pairs of supporting arms pivotally mounted on said end members and having corresponding ends connected to the same supporting member for mounting said supporting members movable relative to the stand in substantially horizontal relation, and a guide rod connecting one pair of arms and having the free ends guided in slots formed in said end members.

1,823,566. METHOD OF FORMING TIRES. HARVEY F. MARANVILLE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 19, 1929. Serial No. 356,452. 10 Claims. (Cl. 154—12.)

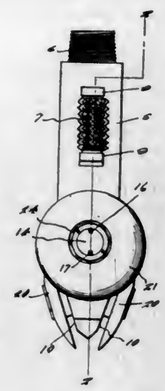


1. The method of forming cushion tires which consists in stitching a tire body of solid stock to a pair of base bands held in spaced relation to each other, forming a cushioning recess in said body after the stitching operation, and vulcanizing said tire body to said base bands.

1,823,567. BIT. JOHN W. MARTIN, Humble, Tex. Filed Apr. 18, 1929. Serial No. 356,078. 3 Claims. (Cl. 255—71.)

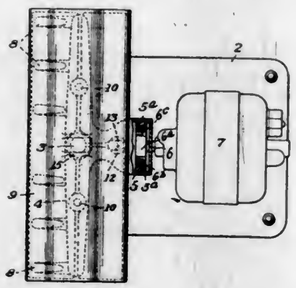
1. A bit of the character described comprising an elongated body, upper and lower sets of cutting discs, the

upper discs being disposed in upwardly converging angular relationship, the lower discs being disposed in downwardly



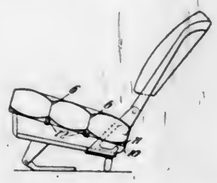
converging angular relationship, said upper discs being positioned on said body with their lower edges at substantially the level of the mid-points of said lower discs.

1,823,568. MECHANICAL EXERCISING DEVICE OF THE MOTOR DRIVEN TYPE. WILLIAM J. MCMARLIN and LESTER S. GUNDERMAN, Pittsburgh, Pa. Filed Oct. 4, 1928. Serial No. 310,224. 9 Claims. (Cl. 128—63.)



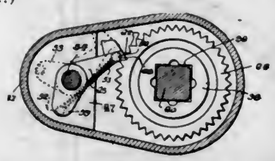
5. In a mechanical exercising device, a horizontally extending arm, a stationary pin about which the bar oscillates, means for oscillating the bar, a footrest supported above the bar having pins thereon slidably received in openings in the bar, and cooperating means on the footrest and said stationary pin for effecting a vertical movement of the footrest upon oscillation of the bar.

1,823,569. PNEUMATIC SEAT, CUSHION, AND THE LIKE. AIMABLE VICTOR MELLANO, Thames Ditton, England. Filed Sept. 17, 1928, Serial No. 306,307, and in Great Britain Sept. 30, 1927. 6 Claims. (Cl. 155—179.)



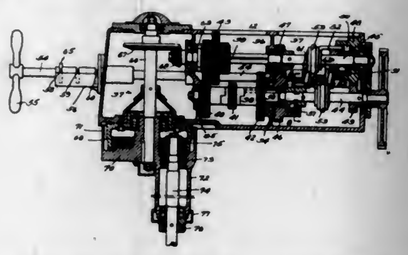
1. A pneumatic cushion, seat or the like comprising an air container, inextensibly held at its outer part or edges, interior restraining means within the said container, a frame that supports the said outer part or edges of the container without the latter overhanging the frame, and at least one supporting member within said frame in contact with the container and in register with the restraining means, the portions of the container between the support afforded by the frame and the said supporting members being extensible so that they can be distended between the frame and the supporting members when the cushion is under load.

1,823,570. HAND BRAKE. ARTHUR F. O'CONNOR, Chicago, Ill., assignor to Union Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed May 26, 1928. Serial No. 280,665. 4 Claims. (Cl. 188—81.1.)



1. In a hand brake mechanism of the character described, the combination with a rotatable ratchet element; of a pivoted pawl; and mechanism for shifting said pawl from operative to inoperative position, said mechanism including yieldable means for urging said pawl in one direction or the other, depending upon its position, and a shiftable operating element for shifting the position of said pawl, said element being operatively connected to said yieldable means whereby movements of said element are transmitted through said yieldable means to said pawl.

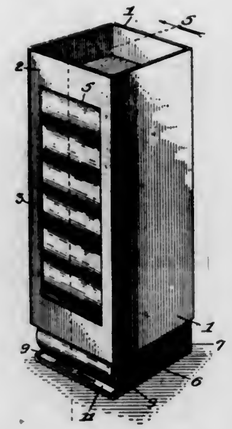
1,823,571. MIXING MACHINE. HARRY READ, York, Pa., assignor to Read Machinery Company, York, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1929. Serial No. 392,452. 3 Claims. (Cl. 74—58.)



1. In combination, a change speed transmission including clutch gearing for effecting speed changes therein, a reversely shiftable clutch-operating element for alternately actuating said clutches, a second transmission receiving the output of the first-named transmission and embodying a shiftable speed changing gear element, a shaft rotatably and longitudinally shiftably directed through said transmissions, connections between said shaft and the clutch-operating element whereby when the shaft is rotated the clutch-operating element is shifted in a direction depending upon the direction of rotation of the shaft and a connection between the shiftable gear element of the second transmission and said shaft permitting independent rotation of the shaft while operatively shifting said gear upon longitudinal shifting movements of the shaft.

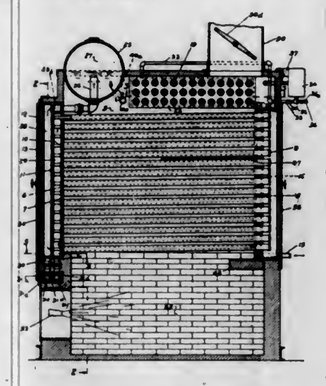
1,823,572. DISPENSING CONTAINER. WILLIAM P. REED, Chicago, Ill. Filed Feb. 26, 1930. Serial No. 431,451. 3 Claims. (Cl. 229—7.)

1. In a device of the character set forth, an inner container provided with an open side, an outer container having a window in one side adapted to register with the open side of said inner container, and a flap formed from a portion of the side removed to provide said window, said flap



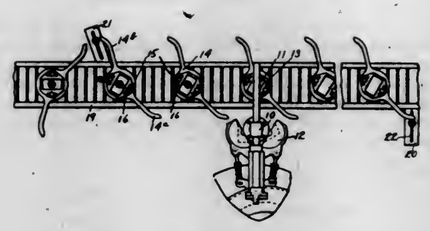
being adapted to engage the top end of said inner container to support it in raised position so that a dispensing aperture is provided between the lower ends of said containers.

1,823,573. STEAM BOILER. JAMES J. REGAN, Los Angeles, Calif. Filed Mar. 12, 1929. Serial No. 346,354. 1 Claim. (Cl. 122—316.)



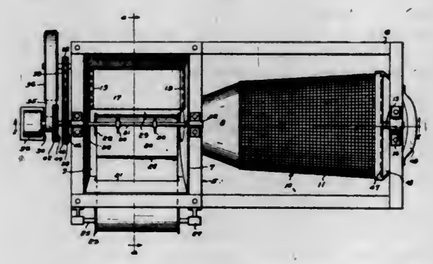
In a boiler construction, a steam and water drum, a main boiler tube section comprising a main series of superposed parallel pairs of water heating tubes, each of said pairs consisting of an outer tube and an inner tube telescoped within said outer tube, all of said tubes having open ends which are located at the same side of the boiler tube section, means to wall off the portion of said chamber which is occupied with the open ends of said tubes to provide two chambers, one of which is in communication with the outer series of tubes and the other of which is in communication with the inner series of tubes, conduits whereby each of said two chambers are separately connected with said steam and water drum, a cooling jacket through which said telescopically arranged tubes project adjacent to the other side of said main boiler tube section, an axially boiler tube section located above said main boiler tube section and consisting of inner and outer tubes having also two chambers into which their open ends discharge and a cooling jacket adjacent to their other ends, there being conduits arranged to conduct the fluid first through the cooling jacket of the main series of tubes and next through the cooling jacket of the auxiliary series of tubes, and conduits leading the fluid thence through the inner and outer tubes of the auxiliary series of tubes and through the last recited two chambers, and means to conduct the water thus heated to the aforementioned steam and water drum.

1,823,574. GLASSWARE TRANSFER DEVICE. GEORGE E. ROWE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 15, 1929. Serial No. 399,757. 2 Claims. (Cl. 198—33.)



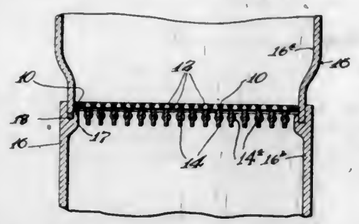
2. A glassware transfer device adapted to receive non-circular articles of glassware in one position and turn said articles of glassware around a vertical axis to a predetermined position while transferring them from one location to another, comprising a conveyor, a frame therefor, plates pivotally mounted thereon, arms on said plates, glassware receiving cups mounted on said plates, an abutment member located to contact with said arms and to turn said plates to one position for receiving said articles of glass, and a second abutment member located to contact with said arms and turn said articles of glassware to another position for delivering them.

1,823,575. COTTON SEED CLEANER. LILLIUS SIMONS, Social Circle, Ga. Filed Sept. 3, 1930. Serial No. 479,440. 3 Claims. (Cl. 209—284.)



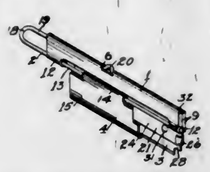
1. In a cotton seed cleaner, a support, a generally horizontal foraminous drum mounted upon the support, a hopper mounted upon the support, a generally horizontal feed belt operating within the lower portion of the hopper, means arranged near the discharge end of the belt, and forming therewith a feed passage, a rotary agitator arranged within the hopper near and above the feed belt, means to drive the belt so that its upper run travels toward the passage forming means, means to rotate the drum, means to rotate the agitator so that it turns toward the discharge end of the belt, and a chute having a bottom which is inclined downwardly toward the drum to feed the divided cotton seed mass to the drum by gravity, the said bottom of the chute being disposed beneath and spaced from the feed belt.

1,823,576. FUEL AND GRATE SAVING PLATE. JOHN L. STIEGLITZ, Louisville, Ky. Filed Oct. 9, 1929. Serial No. 398,473. 3 Claims. (Cl. 126—152.)



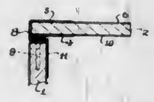
3. In a furnace, a grate movable to dispose its fire bed supporting portion in different horizontal planes, a fuel supporting plate provided with combined draft and ash outlet openings and normally supported by said grate, and a secondary support for said plate within the furnace and disposed in a plane between said aforementioned horizontal planes, substantially as and for the purpose specified.

1,823,577. HOLDER FOR SAFETY RAZOR BLADES. CHARLES J. SYMMONDS, Washington, D. C. Filed Jan. 27, 1931. Serial No. 511,620. 9 Claims. (Cl. 30—10.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A safety-razor-blade holder comprising a handle portion having a blade receiving part, a guide-way on each end of said handle portion, a pin in said guide-ways, and a guard for said blade slidably mounted on said pin.

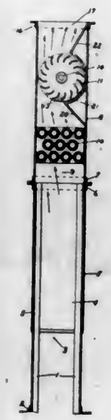
1,823,578. MANUFACTURE OF WRAPPED BOXES. ALLAN A. ADAMSON, Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio, a Corporation of Delaware. Filed Mar. 22, 1929. Serial No. 349,248. 5 Claims. (Cl. 229—44.)



1. In combination with a box body, a lid, a hinging piece formed by two strips adhesively secured to the outer and inner face of the lid adjacent the hinging edge, both strips having overlapping projecting portions secured to the upper edge of the rear wall of the box body and lying between the upper edge of the rear wall and the under face of the lid while the latter is in closed position.

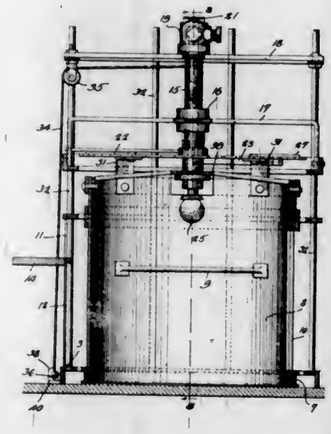
1,823,579. UNIT HEATER AND VENTILATOR. EDWARD L. ANDERSON, Grosse Ile, Mich., assignor to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 16, 1930. Serial No. 461,294. 8 Claims. (Cl. 257—137.)

6. In combination, a casing supported above a floor having an open bottom and an open top, a radiator therein, a line flow fan having horizontal blades adjacent thereto adapted to move air over the radiator and discharge it from said casing, the blades of said fan being so arranged that the air enters one side of the fan and leaves the other side in the same plane, and means to provide a fan free



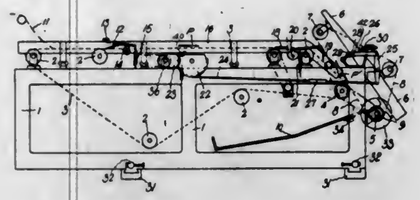
space to one side of the fan adjacent the blades of the fan which are moved from the air inlet to the air outlet position.

1,823,580. SAFETY CAGE FOR BANKS. MORRIS H. ANDERSON, Dwight, Ill. Filed Jan. 3, 1930. Serial No. 418,284. 1 Claim. (Cl. 20—1.01.)



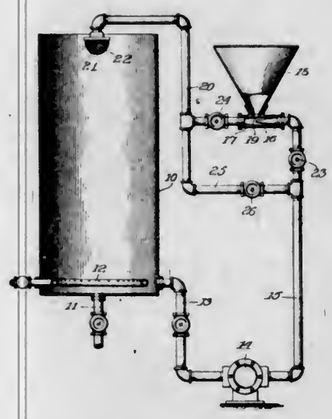
In a device of the class described, a frame, a vertical shaft carried by the upper part of the frame, a cylindrical cage disposed within the frame and suspended at its upper end on the lower end of the shaft, the frame and cage having openings which may be brought into registration when the cage is rotated, a circumferential track on the lower end of the cage, supports carried by the frame and spaced circumferentially about the track, rollers carried by the inner ends of the supports and cooperating with the track, the supports being horizontally adjustable in the direction of their length, to effect a centering of the lower end of the cage with respect to the shaft, means for holding the supports in adjusted positions, and means for locking the cage against rotation at the will of an operator without the cage.

1,823,581. PAPER-ROLLING MACHINE. HJALMAR ANDERSON, Klippan, Sweden. Filed Mar. 18, 1929, Serial No. 347,994, and in Sweden Apr. 21, 1928. 14 Claims. (Cl. 242—55.)



1. In a sheet-rolling machine, a main frame; an endless main belt mounted therein and having a downwardly-inclined portion; an auxiliary frame tiltably mounted in the main frame; an endless auxiliary belt carried by the tiltable frame to tilt therewith and having an inclined portion disposed opposite and at an acute angle to the inclined portion of the main belt and cooperating with the same to form a downwardly-pointing, wedge-shaped working chamber, to receive rolled sheets from said main belt, said chamber being substantially closed at its lower end; independent supporting and driving means for each belt; and means for tilting the auxiliary frame and belt relatively to the main belt in a direction to open said chamber end and discharge a rolled sheet therethrough.

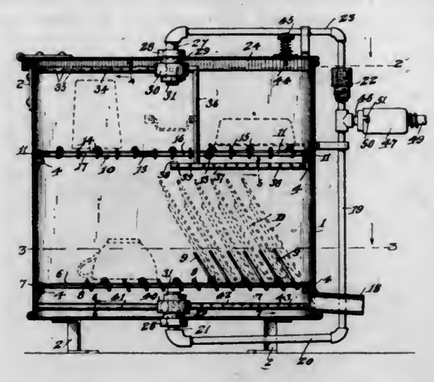
1,823,582. METHOD OF PRODUCING A SLURRY OF LIME IN OIL. EDWARD E. BARTELS, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 9, 1927. Serial No. 204,435. 7 Claims. (Cl. 196—45.)



1. The method of producing a slurry of lime in petroleum oil without the necessity of introducing extraneous fatty acids into the oil which consists in supplying powdered hydrated lime to the oil and mixing it therewith, then supplying a relatively small quantity of water thereto and agitating.

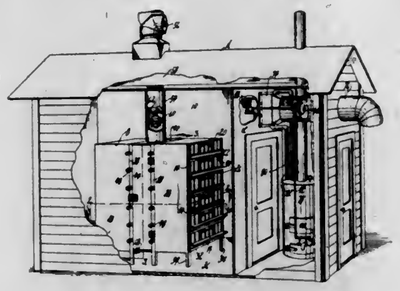
1,823,583. DISHWASHER. ERNEST J. BISKAMP, San Antonio, Tex. Filed Nov. 12, 1929. Serial No. 406,649. 2 Claims. (Cl. 141—9.)

1. A dish washer including a casing, a rack therein, a hub mounted in the casing, upper and lower sprinkler pipes connected to and rotatable with the hub and movable in planes above and below the rack, and means for directing liquid into the hub and sprinkler pipes to rotate the hub and pipes and direct jets of liquid downwardly and



upwardly toward the rack, there being a clearance in the rack for the withdrawal of one of the sprinkler pipes therethrough.

1,823,584. BROODER VENTILATION STRUCTURE. ALBERT W. BRUCE, Ottumwa, Iowa, assignor to Barker Poultry Equipment Company, Ottumwa, Iowa, a Corporation of Iowa. Filed Nov. 12, 1930. Serial No. 495,163. 4 Claims. (Cl. 119—31.)

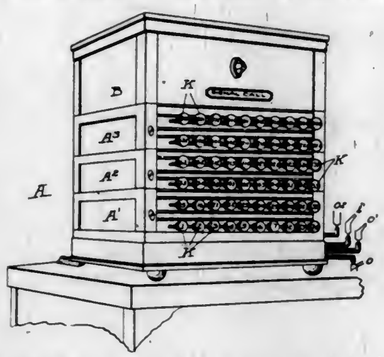


1. In a housing for small animals, a chamber, a tier of compartments therein spaced from the walls of the chamber so as to be substantially insulated from such walls by the air in the chamber and arranged to allow access to the compartments of caretakers inside the chamber, each compartment being adapted to hold a plurality of small animals, pumping means for supplying fresh air to the chamber, an air conductor arranged to receive foul air directly from the small animal compartments and to convey it away so that none of such foul air can return to the chamber or compartments, each compartment communicating with the chamber and serving as a separate passage for air travel from the chamber to the conductor.

1,823,585. CODE SETTING DEVICE FOR SIGNAL SYSTEMS. HERBERT BURDICK, East Orange, N. J., assignor to Signal Engineering & Manufacturing Company, New York, N. Y., a Corporation of Massachusetts. Filed Nov. 15, 1926. Serial No. 148,464. 10 Claims. (Cl. 177—380.)

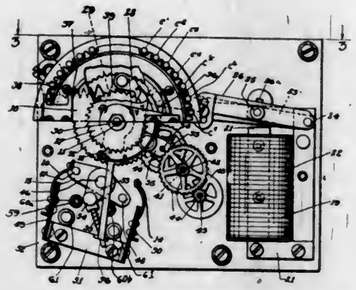
1. A code setting unit comprising an insulating base, a plurality of parallel bus bars thereon, key strips extending transversely across said bus bars, said strips having identical contact plates thereon facing said bus bars, said contact plates having staggered lateral contact lugs, said bus bars having integral spring fingers corresponding to

the code of the associated keys, said fingers free from contact with the key strip contact plates in the normal positions of the keys, the spring fingers of alternate bus bars being arranged for engagement by the lateral lugs



of the key stem contact plates at one edge thereof, and the spring contacts of the intervening bus bars being arranged for engagement by the lateral lugs at the other edge of the key contact plates.

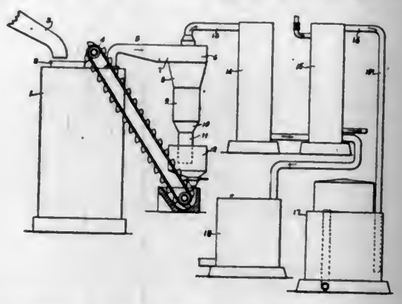
1,823,586. SIGNAL CODE SENDING DEVICE. HERBERT BURDICK, East Orange, N. J., assignor to Signal Engineering & Manufacturing Company, New York, N. Y., a Corporation of Massachusetts. Original application filed Jan. 3, 1927, Serial No. 158,665, Patent No. 1,809,020, dated June 9, 1931. Divided and this application filed Dec. 31, 1928. Serial No. 329,601. 5 Claims. (Cl. 177—380.)



1. A code signalling device including a plurality of commutator contacts, a rotary contactor arm therefor, mechanism for advancing said arm in a stepping movement from contact to contact, a snap switch having arcing contacts connected in series with said contactor arm and thereby inhibiting arcing at all of said commutator contacts, toggle means to control said snap switch, actuating means interlocked with the commutator arm advancing mechanism to cause the toggle means to operate the snap switch to open circuit position prior to each step of advance of the arm, and electromagnetic means under control of said arm advancing mechanism furnishing the energy for re-closing said snap switch preparatory to advancing said contactor arm to a succeeding commutator contact.

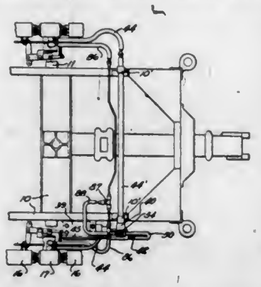
1,823,587. WET PROCESS DUST COLLECTION. ORA B. CAHOON, Chicago, Ill., and EDWARD L. HOGAN, Detroit, Mich., assignors to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Aug. 22, 1927, Serial No. 214,532. Divided and this application filed Sept. 27, 1928. Serial No. 308,727. 2 Claims. (Cl. 183—34.)

1. In combination, a collector for extracting dust from tar-bearing gases in which the tar is held in suspension, a tar precipitator connected at its upper end to the collector for receiving the tar-bearing gas therefrom, a cooler connected at its lower end to the lower end of the



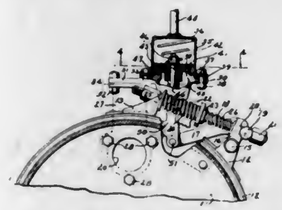
tar precipitator for receiving the separated gas and tar, a tar storage tank connected to the lower end of the cooler, and a gas collector tank connected to the upper end of the cooler.

1,823,588. LOCKING MEANS FOR FLUID PRESSURE BRAKES. NIELS A. CHRISTENSEN, Cleveland, Ohio. Filed June 28, 1926. Serial No. 119,108. 5 Claims. (Cl. 188—152.)



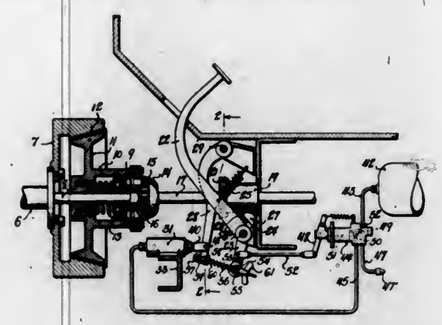
4. In a vehicle brake apparatus, the combination with a fluid-pressure-operated brake, of a manually-operated pump for supplying pressure fluid to operate said brake, mechanical means to lock said brake in applied position, a fluid-pressure motor to actuate said locking means, and a control valve associated with said pump to admit pressure fluid to said motor.

1,823,589. VEHICLE BRAKE. NIELS A. CHRISTENSEN, Cleveland, Ohio. Filed Aug. 9, 1928. Serial No. 298,535. 1 Claim. (Cl. 188—152.)



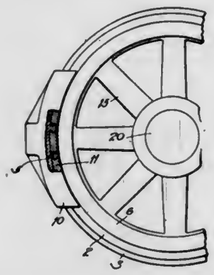
In brake mechanism for automotive vehicles, the combination with a brake drum, an external contracting band brake and a lever for applying the same, of a brake support, a bracket secured to said support and having a laterally offset pad portion, a brake cylinder cover having an offset portion secured to said pad portion, a brake cylinder mounted on said cover, a suction-operated piston working in said cylinder and provided with a rod guided in said cover, and a link connection between said rod and said lever.

1,823,590. CLUTCH-OPERATING MECHANISM. NIELS A. CHRISTENSEN, Cleveland, Ohio. Filed Apr. 15, 1929. Serial No. 355,364. 1 Claim. (Cl. 192—85.)



In an automotive vehicle, the combination with a pivoted clutch-shifting member, of a pivoted clutch pedal having a crank arm, a member connecting said crank arm and the free end of said clutch-shifting member together for manual operation of the latter and having a lost motion connection with said shifting member permitting independent movement of the latter, a fluid-pressure-operated motor having a releasable thrust member also connected to the free end of said shifting member, control valve mechanism for said motor, and an operating connection for said mechanism associated with said crank arm.

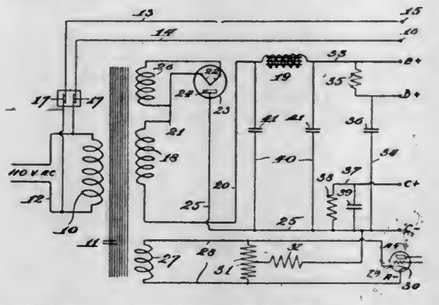
1,823,591. LAVA-EARTHENWARE OR MINERAL FRICTION ELEMENT OR LINING FOR RAILWAY AND OTHER BRAKES IN GENERAL. CHARLES DE LUKACSEVICS, Detroit, Mich., assignor to Herbert V. Book, Detroit, Mich. Filed Dec. 14, 1925. Serial No. 75,455. 10 Claims. (Cl. 188—251.)



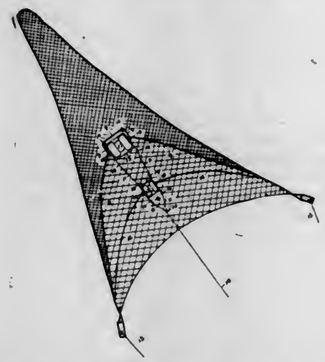
1. In a brake, a brake drum, and a brake shoe, said brake shoe having a frictional surface for cooperation with said drum, said surface containing lava.

1,823,592. POWER SUPPLY FOR RADIO RECEIVING SETS. HENRI S. DE MALAUSSENE, Los Angeles, Calif., assignor, by mesne assignments, to A. L. Bernheimer, Santa Monica, Calif. Filed Nov. 24, 1926. Serial No. 150,535. 2 Claims. (Cl. 250—27.)

1. Means for energizing a receiving set from a source of alternating current comprising a transformer having a primary winding and a plurality of secondary windings, a rectifying tube energized from said transformer and a filter network connected to the output of said tube, said filter network having maximum and intermediate positive output terminals and a negative output terminal, means for producing a grid biasing potential for certain of the tubes of the receiving set comprising a resistance device connected between a fourth output terminal and said negative output terminal and adapted to carry the current delivered to said tubes from said maximum and intermediate positive output terminals, means for energizing the filament of at least one of the tubes of the receiving set with alternating current derived from one of the transformer secondary windings, a resistance connected in shunt with said secondary winding, means for producing a grid biasing potential for said last tube comprising a resistance connected between a point on said shunt resistance and the negative output terminal of the filter network and adapted to carry the plate current of said last tube, whereby different grid biasing potentials for said first tubes and said last tube may be obtained from a common terminal.



1,823,593. DEVICE FOR PREVENTING THE SINKING AND STICKING OF THE GROUND ROPE OF TOWNETS. DIRK DE NIET, Ijmuiden, Netherlands. Filed Aug. 21, 1930, Serial No. 476,858, and in the Netherlands Aug. 7, 1929. 1 Claim. (Cl. 43—9.)



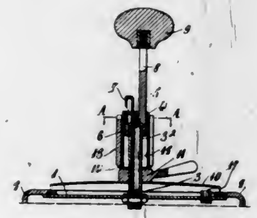
A trawl net having a ground rope, an alarm line arranged in advance of the ground rope, and also having tow lines attached to the net wings; a frame attached to the center of the ground line and provided with revoluble bobbins, a second frame arranged in advance of and spaced from the first-named frame, and having revoluble bobbins, said second frame being attached to the center of the alarm line and thereby connected to the net wings or outer boards, and its rear end being connected to the front end of the first-named frame, and a towing line connected to the front end of the second frame.

1,823,594. FUEL OIL. STERLING H. DIGGS, Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Jan. 16, 1928. Serial No. 247,264. 4 Claims. (Cl. 44—8.)

4. The process of converting acid sludge tar containing insolubilizing oxygen and sulfur compounds into an oil

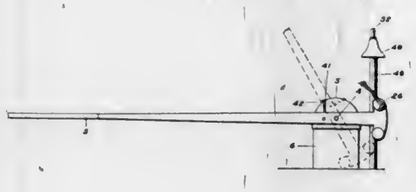
which may be mixed with fuel oils without mutual precipitation of objectionable sludge compounds comprising heating said acid tar above a temperature of about 500° F. and not substantially above 600° whereby said oxygen and sulfur compounds are decomposed and then reducing the viscosity of the resulting oil by adding a small proportion of a low viscosity fuel oil.

1,823,595. STEAM VALVE FOR COOKING CONTAINERS OR BOILERS. LOUIS GEORGES DUCHOUX, Cachan, France, assignor to Daniel Belmonte, Paris, France. Filed Jan. 9, 1930, Serial No. 419,694, and in France Jan. 12, 1929. 4 Claims. (Cl. 53—2.)



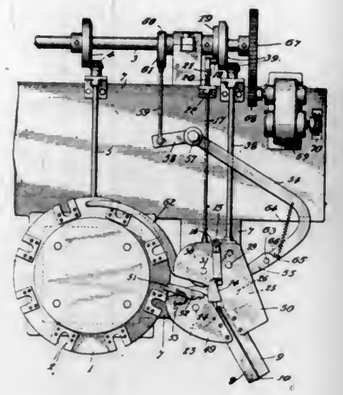
1. In a steam valve arrangement for cooking containers, a tube fastened on a cover of a container, a seat for a valve at the upper end of the said tube, a valve box secured to the latter, an alarm whistle upon the said box, a valve the stem of which passes through the top of the box, a cap engaging the box and resting upon the upper end of the valve stem and sleeve weights shaped for loading the said cap.

1,823,596. RAILROAD CROSSING GATE. WILLIAM T. FERGUSON, Beckley, W. Va., assignor of two-thirds to Edgar M. Crouch and Herman J. Thorne, Beckley, W. Va., and one-third to D. E. Lloyd, trustee. Filed Apr. 15, 1930. Serial No. 444,572. 3 Claims. (Cl. 39—7.)



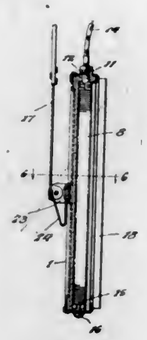
1. In a crossing gate, a hollow housing, a base for said housing, a dome rotatably mounted on said housing, a shaft extending through said dome, a gate structure attached to said shaft, a substantially U-shaped crank attached to said shaft, and an electrically operated impeller pivotally mounted on said base within said housing for controlling the raising and lowering of said gate, said impeller having sliding connection with said U-shaped crank whereby said crank may slide transversely through said connection when the dome is rotated.

1,823,597. BAG FEEDING MEANS. HENRY B. FOULDER, Glenbrook, Conn. Filed Oct. 10, 1929. Serial No. 398,587. 28 Claims. (Cl. 226—57.)



1. Apparatus of the character described, including, in combination, a plurality of members at least one adapted for relative translatory movement with respect to the other to engage a bag therebetween, and at least one member being movable to advance an engaged bag between said members, means for effecting said relative translatory movement, and means for effecting said bag advancing movement.

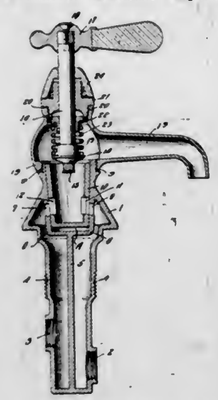
1,823,598. WINDSHIELD WIPER. IRVIN H. FRAILEY, Windber, Pa., assignor to Windber Manufacturing Company, Windber, Pa., a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 416,119. 3 Claims. (Cl. 15—255.)



1. A windshield wiper comprising a casing closed at its ends and open at one side, a wiper element rockably mounted in the casing and having terminal journals engaging openings formed in the closed ends of the casing.

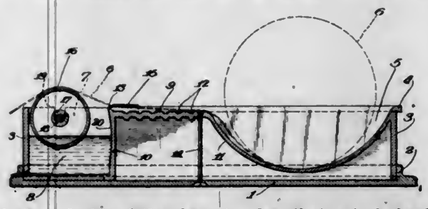
1,823,599. SINGLE CONTROL COMBINATION HOT AND COLD WATER SUPPLY FAUCET. MOOSHY GEORGE, Chicago, Ill. Filed May 26, 1926. Serial No. 111,732. 3 Claims. (Cl. 251—106.)

1. A faucet for dispensing water at varying degrees of temperature comprising a casing longitudinally partitioned to form a plurality of receiving chambers, a rotary frusto conical valve mixing chamber partially seated adjacent the receiving chambers and communicating therewith, and a conical deflector adjacent the mixing



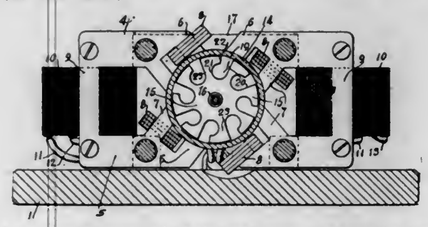
chamber adapted to direct the water against the walls of a supplemental mixing chamber to agitate the liquid issuing therefrom prior to discharge.

1,823,600. TAPE MOISTENER. WALTER R. GREENLEE, Chicago, Ill., assignor to Puritan Malt Extract Co., a copartnership consisting of Joseph E. Magnus, Albert Magnus, jr., and August C. Magnus; and Albert Magnus, jr., and Joseph E. Magnus, trustees of the estate of Albert Magnus, sr., deceased, Chicago, Ill. Filed Aug. 15, 1928. Serial No. 299,726. 2 Claims. (Cl. 91—51.)



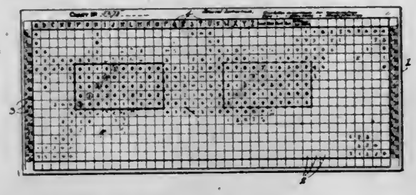
1. In a device of the character described, a body having a liquid chamber and a tape pocket therein, a bridge between said chamber and said pocket, and rotatable means in said chamber for applying liquid therefrom to tape passing thereby, the inner wall of said chamber being inclined upwardly toward said means to withhold from said bridge the liquid expelled by said means.

1,823,601. SYNCHRONOUS SELF STARTING MOTOR. JULIUS W. HANSEN, WILLIAM L. HANSEN, and IRA N. HURST, Princeton, Ind., assignors to Hansen Mfg. Company, Inc., Princeton, Ind., a Corporation of Indiana. Filed May 11, 1929. Serial No. 362,356. 9 Claims. (Cl. 172—278.)



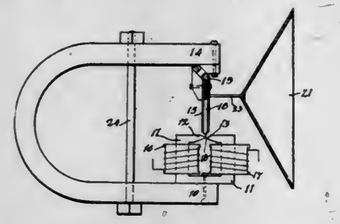
9. A synchronous self-starting motor having, in combination, a stator having means for producing a progressive magnetic field, a stationary bridging ring carried by said stator, and a disk rotor having a slotted periphery revolving in said ring.

1,823,602. KEY CHART. CHARLES HARRIS, Frankfort, Ky., assignor to American Identification Company, Winchester, Ky., a Corporation of Delaware. Filed Sept. 13, 1926, Serial No. 135,152. Renewed June 20, 1930. 3 Claims. (Cl. 283—11.)



1. In a device of the class described, a key chart comprising a body portion having a plurality of horizontal and vertical rows of figures, one of said plurality of rows of figures having the numerals 0 to 9 recurring at intervals, indicia extending along one edge of the block of figures for use in determinating the section of the chart to be used, and a locater comprising a substantially rectangular sheet of material provided with an opening and markings on said sheet spaced to correspond with the spacing of the figures on the chart.

1,823,603. SOUND REPRODUCING APPARATUS. ARTHUR J. HAYNES, Port Haney, British Columbia, Canada. Filed June 28, 1929. Serial No. 374,415. 1 Claim. (Cl. 179—114.)

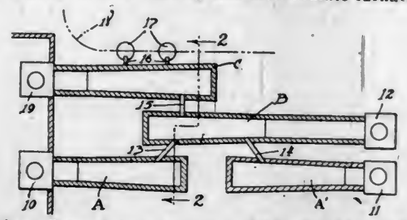


In a sound reproducing apparatus relating to loud speakers and the like the combination with a permanent magnet of substantially horseshoe form and having a dual polar extension on one of its poles thus providing a bifurcated path thereat and having a single polar extension on its other pole, the said magnet construction being characterized by converging pole faces on the extremities of said dual extension, and the said single polar extension being central of said converging pole faces whereby the magnetic circuit is interrupted by a narrow air-gap, convolutions of insulated wire on said dual polar extensions, said wire carrying audiofrequency currents adapted to disturb the symmetrical flow of the magnetic flux in said permanent magnet and to concentrate the flux at either extremity of said air-gap, an armature of relatively thin material and of U-shaped form pivoted at its open end and adapted to vibrate freely around the sides and end of the said single polar extension and to vibrate edgewisely towards either extremity of the said air-gap and with substantially constant clearance between itself and the said polar faces in correspondence with the movement of said flux, a vibrating member adapted to produce sound waves, and means for directly imparting the said vibrational movement of the armature to said vibrating member.

1,823,604. METHOD AND MEANS FOR PREPARING METAL FOR POURING. AUSTIN A. HOLBECK, Lakewood, Ohio. Filed Feb. 15, 1929. Serial No. 340,032. 2 Claims. (Cl. 75—45.)

2. A method of preparing metal for continuous pouring in a casting system comprising melting metal in a plu-

rality of furnaces, tapping off melted metal from one of said furnaces into an intermediate heating furnace, refilling said first named furnace with metal to be melted, bringing the metal in said intermediate furnace up to a predetermined heat above that of the melting furnaces, supplying any ingredients necessary to bring the metal in said intermediate furnace to the desired analysis, tapping off the metal from said intermediate furnace into a heating and holding furnace, refilling said intermediate furnace by



tapping off metal from another of said melting furnaces, supplying any ingredients necessary to bring the metal in the intermediate furnace up to the desired analysis, tapping off metal from said holding furnace a portion at a time and replacing said metal by metal tapped off from said intermediate furnace, continuing this operation until said intermediate furnace is emptied, refilling said intermediate furnace by tapping metal thereinto from another of said melting furnaces, refilling said latter furnace with metal to be melted, and proceeding as before.

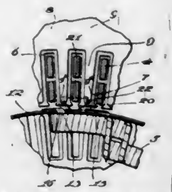
1,823,605. PROCESS OF SOFTENING WATER. CHARLES P. HOOVER, Columbus, Ohio. Filed Jan. 24, 1930. Serial No. 423,270. 2 Claims. (Cl. 210—23.)

1. The process of softening hard water whereby the carbonate hardness is reduced to approximately the theoretical solubility limit of calcium carbonate and magnesium hydroxide which comprises treating the water with 25 to 50 or more parts per million of lime in excess of that theoretically required to combine with the free and half-bound carbon-dioxide and to precipitate the magnesium, permitting the mixture to settle, carbonating the supernatant water with carbon-dioxide gas, mixing therewith calcium carbonate in amount sufficient to accelerate precipitation, and separating the precipitate.

1,823,606. TREATMENT OF SILK. STEPHAN JOST, Basel, Switzerland, assignor to the firm Farberei- & Oppretur Gesellschaft (vormals A. Blavel & Fritz Lindenmeyer), Basel, Switzerland. Filed Jan. 16, 1925. Serial No. 2,938, and in Germany Nov. 8, 1924. 5 Claims. (Cl. 8—13.)

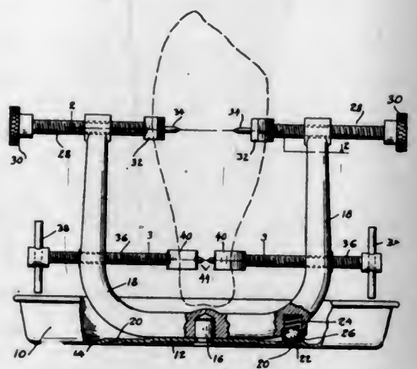
1. A method for increasing the permanence and stability of completely weighted and dyed silk fibre consisting in treating the fibre with a basic bath free from formaldehyde compounds, after the weighting to neutralize any remaining acidity of the fibre.

1,823,607. BAND-WIRE CLIP. HERBERT G. JUNGK, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1930. Serial No. 421,932. 7 Claims. (Cl. 171—206.)



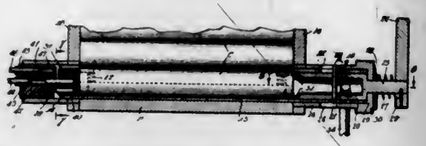
1. An electrical machine having a cylindrical rotor core member having peripherally disposed windings thereon and a multiple-turn band-wire encircling said windings, characterized by having a varying flux traversing said band-wire, and characterized further by having a band-wire clip comprising a piece of sheet-metal having one end bent around one side edge of the band-wire and having the other end bent around the other side edge of the band-wire at a circumferentially removed point.

1,823,608. HOLDER FOR HAMS OR THE LIKE. JAMES N. KALKANIS, Detroit, Mich. Filed Dec. 5, 1928. Serial No. 323,891. 6 Claims. (Cl. 146—218.)



1. A ham holder comprising, in combination, a base, a rigid U-shaped member journalled in an upright position upon the base for rotation, means operable to lock said member in adjusted positions of rotation with respect to the base, a pair of ham-supporting elements one carried by each upright arm of the U member whereby said elements are arranged in opposed relationship and adapted to be moved toward or away from each other to engage a ham positioned between the arms of said U member.

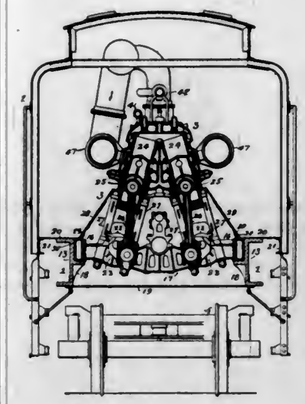
1,823,609. CIGARETTE DISPENSING AND LIGHTING CONTAINER. AUGUST KAPPENBERG, Bayside, N. Y., assignor, by mesne assignments, to Automatic Lighter Corporation, Stamford, Conn., a Corporation of Delaware. Filed Oct. 20, 1925. Serial No. 63,628. 24 Claims. (Cl. 312—86.)



24. A holder and igniting means for cigarettes and the like comprising a receptacle, a rotary cylinder closing the bottom of the receptacle, and having a longitudinal slot in its periphery, a circuit closing contact for said igniting means movable with said cylinder and normally disengaged with respect to said igniting means, and an operating handle for turning said cylinder to isolate a cigarette therein, and for simultaneously moving said contact therewith to close the circuit of said igniting means.

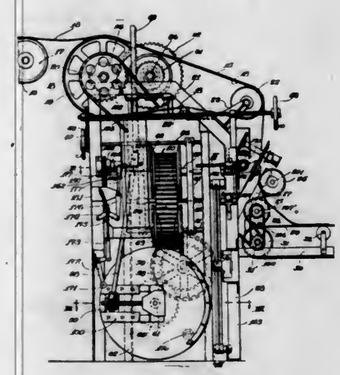
1,823,610. ELECTRIC LOCOMOTIVE. JOHN S. KEEN, Philadelphia, and FRANK B. DEANS, Sharon Hill, Pa. Filed June 29, 1929. Serial No. 374,730. 1 Claim. (Cl. 105—35.)

The combination of an oil engine of the "Diesel" type; a base frame mounted on the frame of a locomotive; cross-bars connecting the side frames of the engine; two crank-axles mounted in the bearings in the cross-bars; two sets of cylinders and connecting rods, said cylinders being ar-



ranged at an incline with respect to the vertical centre line of the engine; and detachable cover plates at each side of the engine so that access may be had to the bearings and connecting rods of the engine.

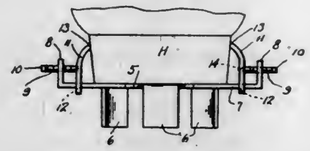
1,823,611. TIRE TREAD CUTTING MACHINE. ARNOLD R. KRAUSE, Eau Claire, Wis., assignor to Gillette Rubber Company, Eau Claire, Wis., a Corporation of Wisconsin. Filed July 17, 1930. Serial No. 468,502. 9 Claims. (Cl. 164—68.)



1. In a device of the character described, a stock feeding mechanism for feeding predetermined lengths of stock, cutting mechanism comprising a carriage arranged to be reciprocated traversely across said stock, upper and lower cutters secured to said carriage, rack gear mechanism operable by the movement of said carriage for intermittently rotating said upper cutter, drive means independent of said rack gear for rotating said lower cutter in synchronism with said upper cutter, and means for operating said carriage in timed relationship to said stock feeding mechanism.

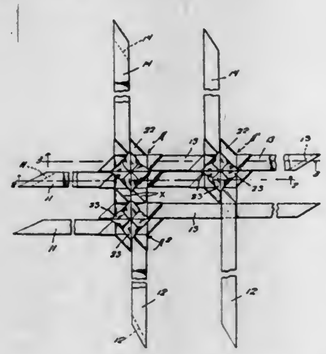
1,823,612. SPIKE ATTACHMENT FOR SHOES. ERNEST JACOB KREBS, New Orleans, La. Filed Apr. 29, 1930. Serial No. 448,287. 1 Claim. (Cl. 36—64.)

In a device of the class described, a triangular plate having ground engaging members depending therefrom at each corner thereof, said plate having projections extending laterally from the opposite sides thereof, apertured upstanding lugs on the free ends of said extensions, sole engaging cleats slidable on said extensions at the



lower portion thereof, and adjusting screws threaded through said lugs and bearing against said cleats for retaining the upper portion of said cleats in engagement with the sole.

1,823,613. ORNAMENTAL ARTICLE AND METHOD OF MAKING SAME. ALBERT KRESSATY, North Bergen, N. J. Filed July 8, 1930. Serial No. 466,510. 5 Claims. (Cl. 41—10.)



1. In an ornamental article, an ornamental object comprising a plurality of doubled, interwoven and folded strips providing a flat body, pairs of radiating points extending from the edges of the body and having corresponding edges inclined, crushed conical members on one flat face of the body, and radiating ends projecting from between the folds of alternate ones of the points.

1,823,614. TREATMENT OF NAPHTHENIC OILS. NORMAN E. LEMMON, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 12, 1928. Serial No. 277,394. 5 Claims. (Cl. 196—147.)

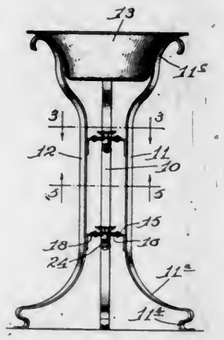
1. The method of treating lubricating oils having a substantial degree of naphthenic acidity which consists in subjecting said oils to a light sulfuric acid treatment, extracting naphthenic acid compounds from said oils with aqueous solution of alkali salts of water soluble sulfonic acids, then treating the sour oils with sulfuric acid and thereafter treating the sour oil with clay, said acid and clay being used in amounts to give a finished oil of desired color and in substantially neutralized condition.

1,823,615. REMOVAL OF NAPHTHENIC ACIDS FROM HYDROCARBON OILS. NORMAN E. LEMMON and FRANK V. GRIMM, Whiting, Ind., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 14, 1928. Serial No. 277,789. 7 Claims. (Cl. 196—147.)

6. The method of removing naphthenic acids from hydrocarbon oils containing same in small quantity, which

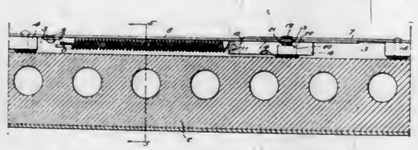
consists in subjecting said oils to a mild sulfuric acid treatment sufficient to convert the naphthenic acids into a form readily removable by contact clay, said sulfuric acid treatment being equivalent in effect to treatment with 0.5 lb. per gallon of oil of sulfuric acid having a strength of from about 80 to 85%, and then subjecting the said oil to treatment with clay, said sulfuric acid treatment being further characterized in that it is insufficient to render the clay ineffective in the removal of the naphthenic acids.

1,823,616. STAND. FREELAND H. LESLIE, Chicago, Ill. Filed Mar. 2, 1931. Serial No. 519,540. 2 Claims. (Cl. 248—41.)



1. A stand including a stationary support carrying a horizontal plate, and a plurality of movable supports each having a horizontally extending part pivoted to said plate, said movable supports adapted to be swung on said pivots away from the stationary support to open position to support said stand, or toward said stationary support to closed position to lie substantially parallel with said stationary support, said plate being provided with mechanism for yieldingly holding the supports in open position, said mechanism including a spring-pressed member and the horizontally extending parts of the movable supports which are pivoted to the plate being pivoted at points inwardly from their extremities and provided beyond the pivot points with parts adapted to be engaged by co-operating parts on the spring-pressed member.

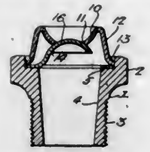
1,823,617. BUMPER CONSTRUCTION. ROBERT J. LUSSE, Philadelphia, Pa., assignor to Lusse Bros., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 26, 1931. Serial No. 525,482. 12 Claims. (Cl. 293—57.)



1. In a device of the type described, the combination of a resilient bumper, a guard band carried by the bumper, and tension means for preventing slack in the band.

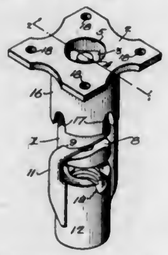
1,823,618. LUBRICATING TIP AND MEANS FOR EMPLOYING THE SAME. JOHN JAMES MAGNUSON, Waynesboro, Pa. Filed Aug. 20, 1928. Serial No. 300,759. 3 Claims. (Cl. 184—105.)

1. In means for accommodating grease guns, an adapter to be secured to a casing surrounding parts to be lubricated and having a central opening therein, means defining an annular seat about said opening, a cap closing said opening, said cap having an arcuately curved central portion overlying the opening of the adapter and provided with an opening concentric with the opening of the adapter and having marginal portions seating upon



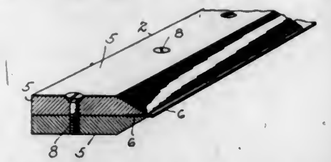
said seat and spacing the central portion from said seat in the direction of the axis of the opening, a valve member closing the opening of the cap, said valve member having a ring-like portion interposed between the marginal portions of the cap and said seat, and means securing the cap to the seat.

1,823,619. HANGING FIXTURE CONNECTER. JAMES MANGIN, New Brunswick, N. J. Filed Dec. 4, 1929. Serial No. 411,530. 8 Claims. (Cl. 240—85.)



1. An electrical hanging fixture connecter, comprising a supporting member, a connecter member co-acting with said supporting member, means for loosely coupling said members comprising a slot in said supporting member for the reception of a connecting portion of said connecter member, and locking means slidable along said supporting member adapted to engage and lock said connecting portion to prevent the de-coupling of said members.

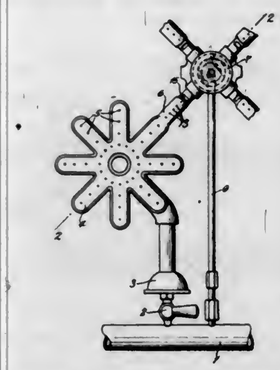
1,823,620. BREAKER BAR FOR GUMMED PAPER AND THE LIKE. FRANK MAYO and FRANK L. FRAIZER, Troy, Ohio. Filed Sept. 19, 1929. Serial No. 393,818. 8 Claims. (Cl. 91—18.)



1. In a breaker bar for breaking the dried coating upon coated flexible sheet material, a bar having angularly disposed faces across which the material is drawn, and a replaceable insert of uniform thickness located at the intersection of said faces and forming a wear strip for the material.

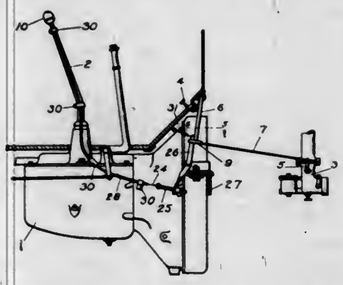
1,823,621. IGNITION DEVICE FOR GAS BURNERS. CARL E. METHUDY, St. Louis, Mo., assignor to Methudy Automatic Lighter Co., East St. Louis, Ill., a Corporation of Illinois. Filed Nov. 11, 1929. Serial No. 406,219. 8 Claims. (Cl. 158—115.)

4. In combination with a gas burner adapted to receive a combustible mixture, means for igniting the same comprising a pilot jet, a housing for said jet, an extension on the burner having a series of spaced minor holes through its wall, and a connecting element between said housing



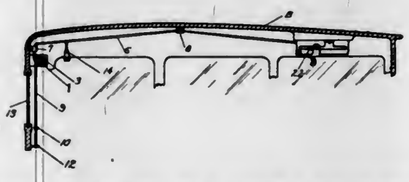
and said extension communicating with the burner through a constricted opening in the end wall of the extension and having a lateral orifice in communication with said opening.

1,823,622. ACCELERATOR OPERATING MEANS. DONALD L. MITCHELL, Indianapolis, Ind. Filed Jan. 29, 1930. Serial No. 424,228. 4 Claims. (Cl. 74—107.)



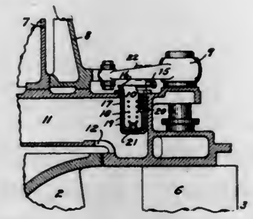
1. The combination with a foot operated accelerating mechanism and a gear shift lever, of a knob attached to said lever, said knob comprising a stationary member and a rotatable member connected therewith, said stationary member having an opening therethrough, a wire extending through said opening and being attached to the rotatable member, said opening being constructed to prevent binding of the wire against any parts thereof, and means to which the opposite end of said wire is connected adapted to operate the accelerator mechanism without applying pressure on the foot operating mechanism when a lengthwise pull is made on said wire.

1,823,623. AUTOMOBILE CURTAIN CONTROL. LEON J. MOHN, Taunton, Mass. Filed Feb. 27, 1930. Serial No. 431,661. 9 Claims. (Cl. 156—28.)



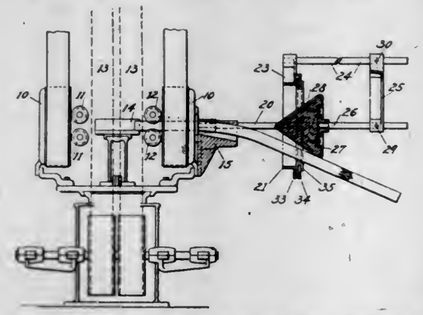
4. In a remote control for a curtain, a flexible member or tape for rolling or unrolling said curtain, means for locking the free end of said flexible member or tape, a slide engaging an intermediate portion of said member, whereby the curtain may be moved by a fractional movement of said slide, and means to lock said slide in the raised position of said curtain.

1,823,624. HYDRAULIC APPARATUS. FORREST NAGLER, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 23, 1923. Serial No. 627,042. 8 Claims. (Cl. 253—122.)



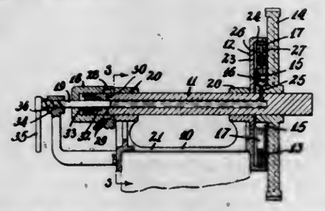
1. In combination, a rotor, movable gate mechanism for varying the quantity of liquid admitted to said rotor, and means operable directly by said gate mechanism for admitting air to said rotor.

1,823,625. FINISHING AND POLISHING MACHINE. JOHN M. NASH, Milwaukee, Wis. Filed Jan. 18, 1929. Serial No. 333,268. 7 Claims. (Cl. 51—135.)



7. An attachment for a finishing and polishing machine, having means for rotating the work, said attachment comprising a guide for engaging the discharging end portion of a crooked piece of work, said guide having work engaging members and adjusting means for adapting it to hold the engaged portion of the work to its natural annular path about the normal axial line of discharge until the work is wholly released from said machine.

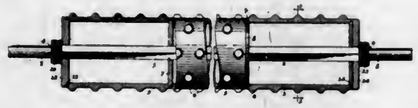
1,823,626. HYDRAULIC FRICTION DEVICE FOR HOISTING MACHINES. EMIL PESKAR, New York, N. Y. Filed Oct. 30, 1929. Serial No. 403,648. 7 Claims. (Cl. 188—151.)



1. A hydraulic friction device for hoisting machines, comprising a frame member rotatively supporting a hol-

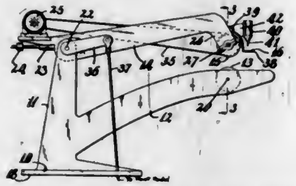
low shaft, a drum fixed on the frame member and having an internal friction surface, a gear fixed on said shaft adjacent said drum, a plurality of hydraulic cylinders fixed on the gear and having pistons supporting friction shoes engageable with said friction surface and hydraulically connected with the hollow of said shaft, a fluid pressure medium supply chamber connected for discharging into the hollow shaft, and a manually operated plunger valve within the hollow of the shaft and capable of cutting the fluid pressure medium supply from the supply chamber and to increase the pressure of the entrapped fluid pressure medium for forcing the brake shoes against the friction surface.

1,823,627. BUTTON BREAKER ROLLER. JOHN E. PETERSON, Irvington, N. J., assignor to Van Vlaanderen Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed July 10, 1930. Serial No. 467,011. 4 Claims. (Cl. 26—1.)



1. A button breaker roller including cup-shaped cylindrical alined cast sections having their closed ends all facing in the same direction and the adjoining ends of each two adjoining sections engaged one in the other with a snug fit, said sections having buttons cast on their peripheries and being rigidly held together.

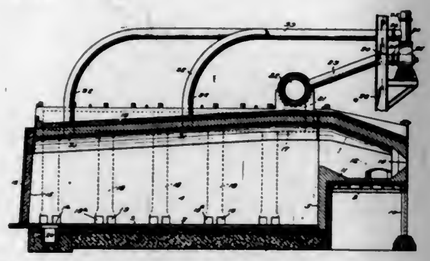
1,823,628. TROUSER SEAM PRESSING MACHINE. CARMINE PIETRACATELLA, New York, N. Y. Filed Dec. 23, 1929. Serial No. 415,989. 3 Claims. (Cl. 68—9.)



1. A trouser seam presser machine, comprising a bracket having a base portion connected with a vertical portion formed with a lateral projecting portion, a presser idler roller mounted on and near the free end of said projecting portion, a counterbalanced lever pivotally mounted on said vertical portion, a heated presser driver roller mounted on said lever in vertical alignment with said idler roller, means for rotating the driver roller, means for moving said lever to bring said rollers into pressing engagement, and means for alternatively turning the driver roller in opposite directions for pressing the seam in several stages and moving the roller forward more than backward so that the seam is moved forwards.

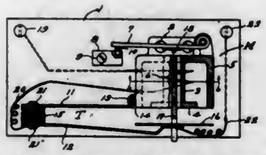
2. A trouser seam presser machine, comprising a bracket having a base portion connected with a vertical portion formed with a lateral projecting portion, a presser idler roller mounted on and near the free end of said projecting portion, a counterbalanced lever pivotally mounted on said vertical portion, a heated presser driver roller mounted on said lever in vertical alignment with said idler roller, means for rotating the driver roller, means for moving said lever to bring said rollers into pressing engagement, and means for alternately turning the driver roller in opposite directions for pressing the seam in several stages and moving the roller forward more than backward so that the seam is moved forwards, said means including a drum loosely mounted on a shaft connected with said driver roller, and means for coupling said drum to said shaft during oscillation of the drum and disconnecting the coupling during part of backward movement of said oscillation.

1,823,629. PROCESS OF ANNEALING. HARRY M. ROBERTSON, Cleveland, Ohio. Original application filed Oct. 22, 1927, Serial No. 228,082. Divided and this application filed Jan. 31, 1930. Serial No. 424,871. 2 Claims. (Cl. 263—1.)



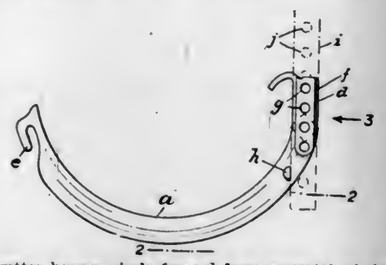
2. The herein disclosed process of annealing which consists in supplying heat to a charged chamber and simultaneously exhausting the products of combustion from the lower portions of the chamber at a plurality of points by forced draft to raise the temperature of the chamber to the desired degree and conducting the products to and discharging them into the upper portion of the chamber to produce a nonoxidizing atmosphere therein, then in reducing the heat supply to the chamber and rate of exhaust therefrom to produce suitable soaking conditions in the chamber, and then slowly cooling the chamber.

1,823,630. THERMOELECTRORESPONSIVE DEVICE. HERBERT E. RUPP, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 20, 1926. Serial No. 110,412. 6 Claims. (Cl. 200—88.)



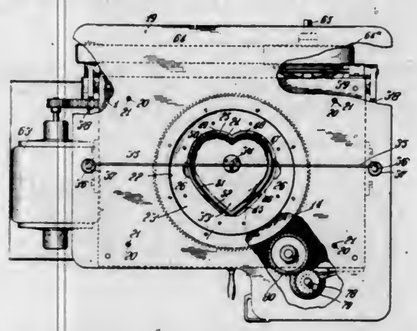
1. A thermo-electro operated switch comprising an electro-responsive device having an energizing coil and a thermo-responsive element normally connected in series and interposed in a circuit, means to control a circuit and to be operated by the electro-responsive device and the thermo-responsive device when the current in the circuit suddenly exceeds a predetermined value and when the current of a lower predetermined value has operated for an interval of time and means to compensate for change in temperature of the surrounding air to maintain the action of the thermo-responsive device constant.

1,823,631. GUTTER HANGER CIRCLE. HERBERT SHAW, Philadelphia, Pa., assignor to Berger Bros. Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 9, 1926. Serial No. 121,317. 1 Claim. (Cl. 108—29.)



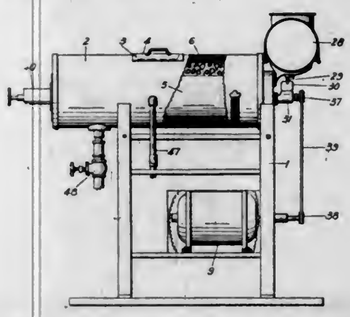
A gutter hanger circle formed from material of channel section and having a portion curved to form a gutter supporting seat and a section extending tangentially to the gutter supporting seat, the web of the tangentially extending section being distorted to form a hanger engaging rib extending in a direction opposite the flanges of the channel, and a projecting boss also extending in a direction opposite the flanges of the channel and formed by punching of the web between said flanges, the boss having a vertically extending flat face of extent less than the distance between the flanges adapted to abut the side of a hanger which is engaged by said rib.

1,823,632. MACHINE FOR COVERING IRREGULARLY SHAPED PAPER BOX COVER PLATES AND THE LIKE. LOUIS TACKE, Brooklyn, N. Y., assignor to H. Schultz & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1929. Serial No. 340,484. 16 Claims. (Cl. 93—54.)



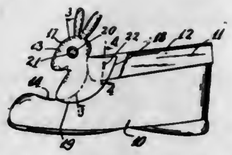
1. A machine of the kind specified including a table element containing a receptacle of substantially the shape and size of a plate to be covered, a plunger for forcing a plate and covering material therefor into said receptacle to thereby upturn the marginal edge of the latter, a series of folding-in cams disposed around said receptacle, a rotatable member associated with said cams for forcing the same successively inwardly to thereby fold the said marginal portion into overlapping relation to the plate, and means associated with said cams for compressing said marginal portion upon said plate following the inward movement of said cams.

1,823,633. CONFECTION FREEZER. JOHN H. WESTFIELD, Indianapolis, Ind. Filed May 14, 1929. Serial No. 363,046. 6 Claims. (Cl. 259—53.)



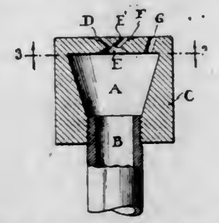
1. In a freezing mechanism, a rotatably mounted drum, a tubular shaft at one end of said drum, through which an ingredient to be frozen is conducted to said drum, a scraper structure mounted in said drum, a spanner coupling fixed to the open end of said tubular shaft for holding said scraper structure stationary and having a bore registering with said tubular shaft for the discharge of the ingredient from the tubular shaft, and means rotatable in said bore for positively feeding the ingredient into said drum.

1,823,634. TOY SLIPPER. ROSE WIESNER, Jamaica, N. Y. Filed Nov. 14, 1930. Serial No. 495,548. 5 Claims. (Cl. 36—1.)



1. An article of footwear, comprising material in the form of a slipper having a top edge, a figure above the vamp of said slipper comprising a pair of silhouette congruent sheets secured together along portions of their edges so that other free portions extend beneath said top edge and on the vamp of said slipper, eyes with movable eyeballs attached on the sides of said figure, and staples engaging through the portions of the figure disposed beneath said top edge for holding the figure against pivoting.

1,823,635. SPRAY NOZZLE. LESTER J. WILLIAMS, Canastota, N. Y., assignor to Carl Braun Inc., Canastota, N. Y., a Corporation of New York. Filed May 4, 1929. Serial No. 360,350. 1 Claim. (Cl. 299—141.)

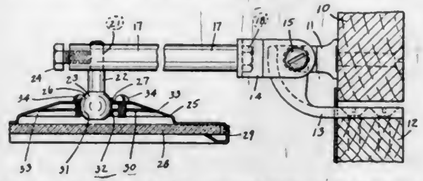


A spray nozzle for washing dairy utensils or milk cans comprising a casing having a nozzle face at one end and a frusto-conical expansion chamber located within the casing and adjacent to the nozzle face, the casing having an inlet orifice at one end of the spray nozzle communicating with said expansion chamber and an auxiliary dished collecting chamber in the nozzle face on the side facing the expansion chamber, the collecting chamber being coaxially located with respect to the inlet and having its concave side facing said inlet, the nozzle face having a plurality of radially disposed orifices, each of said orifices having one end communicating with the collecting chamber and the other end terminating in a spoon-shaped depression formed in the face of the nozzle, the spoon-shaped depression extending outwardly from the center of the nozzle face and a plurality of jet orifices disposed around the periphery of the nozzle face and located between the radially disposed orifices terminating in the spoon-shaped depressions so that the jets thrown upwardly by the last named orifices pass between the jets thrown laterally from the radially disposed orifices terminating in the spoon-shaped depressions.

1,823,636. MOUNTING AND SUPPORT FOR REAR-VIEW MIRRORS. LOUIS G. WINKLER and BERT F. KELLY, Indianapolis, Ind. Filed Feb. 16, 1929. Serial No. 340,599. 1 Claim. (Cl. 45—97.)

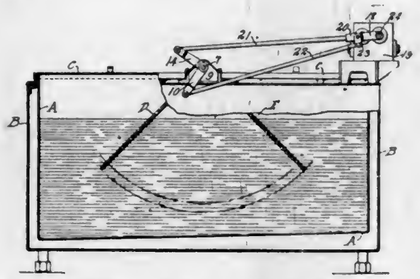
A mirror mounting including a support member having a substantial spherical portion, a backing member adapted to carry and embrace a mirror, said backing member en-

gaging one side of said spherical portion and being shaped to provide a space between said backing member and said mirror into which said spherical portion extends, a plate housed by said backing member and positioned within



said space for engaging the opposite side of said spherical portion, and screw fastenings connecting said member and plate for maintaining the same in clamping relation with said spherical portion.

1,823,637. PROCESS OF AND APPARATUS FOR PASTEURIZING. KIRK K. WRIGHT, Kenmore, N. Y. Filed Jan. 24, 1930. Serial No. 423,133. 10 Claims. (Cl. 99—15.)

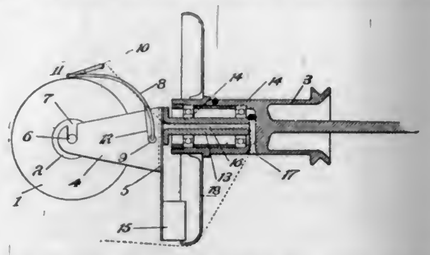


8. A pasteurizer including a tank for the liquid to be pasteurized, means for applying heat to the walls of the tank and means for causing the liquid in the tank to flow in an endless path, said means including a pair of paddles arranged side by side crosswise of the tank, a shaft arranged crosswise of the tank and to which one of said paddles is secured, a hollow shaft arranged about a portion of said first mentioned shaft, and having the other paddles secured thereto, an arm secured to said first shaft at one side of the tank and another arm arranged on the other shaft at the same side of said tank, said arms extending in opposite directions from the axis about which said shafts oscillate, and means for imparting movement to said arms to cause said paddles to swing in opposite directions.

10. A process of pasteurizing liquids in a tank of greater length than width, including applying heat to the walls of the tank, propelling the liquid at two opposite longitudinal walls of the tank in opposite directions to remove films of heated liquid from said opposite walls, and causing the current of liquid from each longitudinal wall to impinge against an end wall to remove films of heated liquid therefrom and to be deflected thereby toward the opposite longitudinal wall to form a current flowing in an etndless path, and intermittently reversing the direction of flow of the liquid to mix all parts of the liquid in said tank.

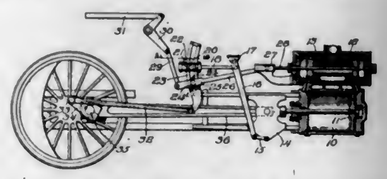
1,823,638. MACHINE FOR SPINNING, DOUBLING, TWISTING, AND THE LIKE, YARNS, FIBERS, AND THE LIKE. THOMAS EDWIN ANDREW and MELON LANGSTRETH, Rochdale, and JAMES BANCROFT, Accrington, England, assignors to Dunlop Cotton Mills Limited, Rochdale, England. Filed Nov. 18, 1927, Serial No. 234,234, and in Great Britain Apr. 13, 1927. 4 Claims. (Cl. 117—23.)

1. An apparatus of the type described which comprises a rotating spindle, a non-rotating bobbin carrier mounted on said spindle and having a yarn passage coaxial with said spindle, a bobbin mounted transversely to the axis of said spindle, tensioning means on said bobbin carrier



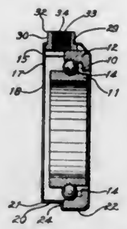
serving to deflect said yarn between said bobbin and said passage and braking means continuously actuated by said deflecting means.

1,823,639. LOCOMOTIVE VALVE GEAR. ALFRED T. BACON, Stevens Point, Wis. Filed Aug. 22, 1924. Serial No. 733,455. 1 Claim. (Cl. 121—163.)



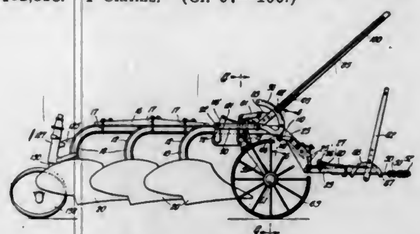
In a device of the class described, a piston, piston rod, cross-head, crank and driving wheel driven thereby, an eccentric rod associated with said driving wheel, a slotted link connected thereto and having a pivotal support, means forming guides for said pivotal support whereby it may reciprocate, a lap and lead lever having a fixed pivot at one end and connected to the cross-head at the other end, a link connecting the pivotal support for said slotted link to a point on said lever between its ends, a block arranged to slide in the slot in said link, a radius rod extending therefrom, a valve rod, a valve on said rod, and means for moving said block to the neutral position of said slotted link whereby at high running speeds the motion of the valve may correspond entirely to the cross-head motion and equal the lap plus the lead.

1,823,640. BEARING INCLOSURE. THOMAS BARISH, Jamestown, N. Y., assignor to Marlin-Rockwell Corporation, Jamestown, N. Y., a Corporation of New York. Filed Sept. 22, 1928. Serial No. 307,639. 5 Claims. (Cl. 308—187.)



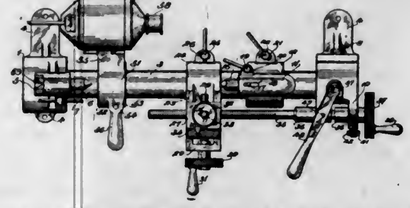
1. A grease retaining inclosure for bearings comprising a cup shaped cover, stepped walls forming the sides of said cover, one of said walls being of greater diameter than the other, a recess in said cover formed by the coincidental divergence of said vertical walls, a grease fitting mounted within said recess and means adapted to removably retain said fitting in place.

1,823,641. PLOW. JOSEPH E. BODA, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation of Wisconsin. Filed Mar. 1, 1930. Serial No. 432,318. 4 Claims. (Cl. 97—100.)



1. In a device of the class described, a plow comprising a frame, a share carried by said frame, a member secured to said frame for hitching said plow to a source of motivation, and means for angularly adjusting said hitching member with respect to said frame whereby said plow may be offset with respect to the line of travel of said source of motivation, said adjusting means comprising a bell crank lever pivotally secured to the inner end of said hitching member, a link connecting one arm of said bell crank lever to said frame, and means mounted on said hitching member and connected to the other arm of said bell crank lever for rotating the latter to various positions of angular adjustment.

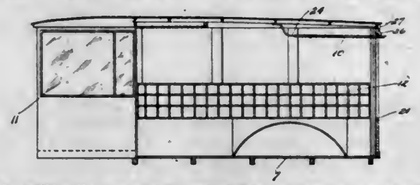
1,823,642. ARMATURE COMMUTATOR RESURFACING OR CUTTING MACHINE. CLAUD R. BROWN and JESSE F. THOMAS, New London, Wis. Filed May 25, 1929. Serial No. 365,983. 2 Claims. (Cl. 82—6.)



1. A machine of the character described, comprising a supporting means, pillars receiving and supporting said means adjacent the opposite ends thereof, a tool carriage slidably mounted upon the supporting means, a tool post bed mounted for sliding movement longitudinally of the carriage at substantially right angles to the supporting means, stocks on the supporting means, one of which is adjustable towards and away from the other, a shaft disposed parallel to the supporting means having screw threaded engagement with a portion of the tool carriage, rotatably and slidably mounted at one end upon one of said pillars, means on the shaft for facilitating manual rotatable adjustment thereof, a lever mounted on the last mentioned pillar engaging with the shaft for imparting sliding movement to the same in a path parallel to the supporting means, that portion of said shaft mounted in said last mentioned pillar having relatively longitudinally spaced annular ways formed therein, and movable locking means mounted on said last mentioned pillar selectively engageable in either one of said ways formed upon the shaft for securing the same against sliding movement under influence of said lever.

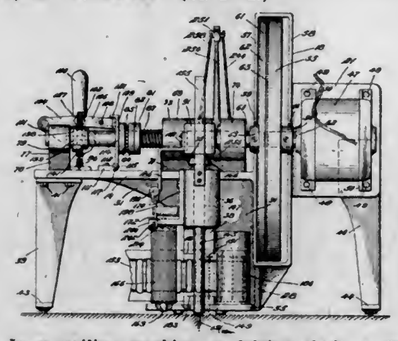
1,823,643. BODY CONSTRUCTION. ALBERT W. CAMPBELL, Bay City, Mich. Filed Oct. 17, 1927. Serial No. 226,599. 1 Claim. (Cl. 296—106.)

In combination with a vehicle body having a door mounted therein and slidable upwardly and inwardly into said body, spaced apart tracks hung from the top of the body, and provided with spaced apart pockets therein, track engaging means on the edge of the door and adapted to nest in said pockets when the door is in raised position,



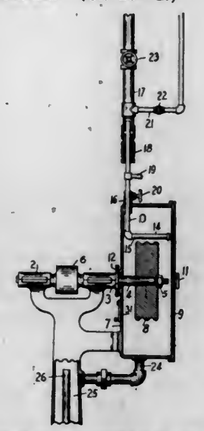
and resiliently mounted means having cam shaped shouldered jaws for engaging said track engaging means when the door is in raised position.

1,823,644. NAILING MACHINE. RALPH COSSOCK, Providence, R. I. Filed Mar. 20, 1931. Serial No. 523,968. 10 Claims. (Cl. 1—1.)



1. In a nailing machine, a driving shaft, a driving clutch member on the shaft, a longitudinally reciprocable rock shaft, a driven clutch member on the rock shaft moving into and out of contact with the driving clutch member, a spring for actuating the rock shaft in one direction, a toggle device for intermittently actuating the rock shaft in the other direction, an oscillatory hammer comprising a helve mounted at one end upon the rock shaft, and a head upon the other end of the helve, and a nailing anvil in the path of the head.

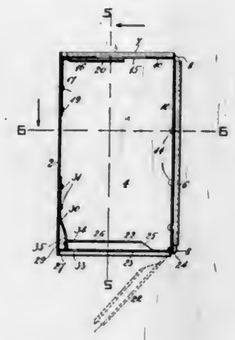
1,823,645. APPARATUS FOR CLEANING POLISHING WHEELS. JOHN J. CUNNINGHAM, Dayton, Ohio, assignor of fifty-one per cent (51%) to Melrose G. Kopf, Dayton, Ohio. Filed Sept. 19, 1922. Serial No. 589,267. 4 Claims. (Cl. 15—1.)



1. In an apparatus for cleaning the cores of polishing wheels and the like, a casing to enclose a wheel having

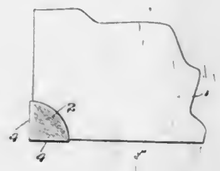
an outer portion which is to be removed, means for heating said article while it is within said casing to soften said outer portion, and means for rotating said wheel within said casing at a high speed to cause the softened portion thereof to be thrown off by centrifugal force.

1,823,646. COIN BANK. RICHARD M. DUGDALE, Dedham, Mass., assignor to The Bankette Co., Boston, Mass., a Corporation of Massachusetts. Filed June 21, 1929. Serial No. 372,559. 8 Claims. (Cl. 232—4.)



1. A bank of the type described comprising in combination a back, and front and back sides bent from a metal plate, said sides of the bank having respectively turned edges along the top and front thereof, a metal strip extended between said sides to form the top and front edges of the bank, said strip having flanges outwardly extending from the opposite sides thereof and onto which flanges said turned edges of the respective sides of the bank are crimped, the portion of said strip forming the top edge of the bank having a slot in it, and a guard for said slot arranged inside the bank and against which guard the top edge-forming portion of said strip has bearing whereby inward displacement thereof will be prevented.

1,823,647. HOOD CORNER PROTECTOR. JAMES FRANCES DUFFY, Holland, Mich., assignor to Duffy Manufacturing Company, Holland, Mich., a Corporation of Michigan. Filed Feb. 16, 1931. Serial No. 515,953. 6 Claims. (Cl. 180—82.)



1. A protector for hood doors comprising, a rubber device having spaced apart sides integrally connected at two edges thereof, and open at a third edge between said sides, one of said sides having a metal plate embedded therein, and a tongue struck at right angles from said plate extending to and through the opposite side, said opposite side having an opening for passage of the tongue.

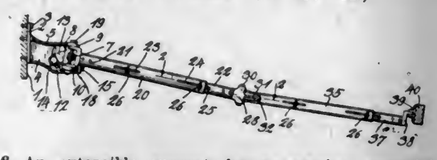
1,823,648. UMBRELLA HOLDER. WALTER D. DUNN, Belmont, Mass. Filed Sept. 26, 1930. Serial No. 484,611. 7 Claims. (Cl. 211—63.)

4. A holder for umbrellas or the like, adapted for attachment to a supporting wall and comprising an elongate receptacle of flexible material having a longitudinal hem extending substantially from top to bottom thereof, a reinforcing rod in said hem, the rod having flat ends, and



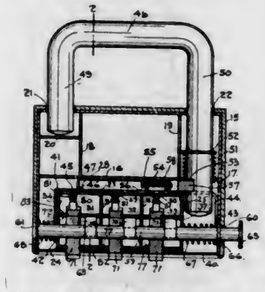
hollow fasteners secured through the hem and the flattened portions of the rod and adapted to receive an attachment for mounting the holder upon the supporting wall.

1,823,649. FOLDING AWNING ARM. LOUIS B. GOLDBERG, NATHAN GOLDBERG, WILLIAM GOLDBERG, and JACOB M. GOLDBERG, Denver, Colo. Filed Jan. 27, 1931. Serial No. 511,534. 7 Claims. (Cl. 156—44.)



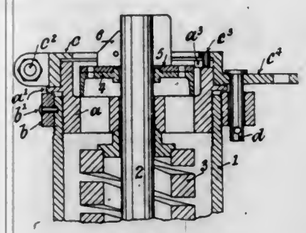
6. An extensible support for an awning, comprising a pivotally mounted arm hinged intermediate its ends for folding the parts on opposite sides of the hinge joint being each formed from two tubular sections of substantially elliptical cross section telescopically connected and means for holding the sections in adjusted position.

1,823,650. LOCK MECHANISM. HARRY JULIUS GORDON, Montreal, Quebec, Canada. Filed Dec. 31, 1928. Serial No. 329,500. 6 Claims. (Cl. 70—113.)



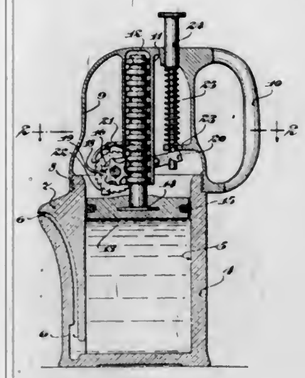
1. In a padlock, a casing and locking mechanism contained therein, and having a plurality of compartments, shackle holes and tumbler slots, a plurality of tumblers extending through said slots and enclosed in separate divisions in one of said compartments and having key slots therein, a push spindle extending through said tumblers, a plurality of slotted key rings encircling said spindle and engaging said tumblers, rotatable keys engaging said rings in chosen positions in relation to said tumblers.

1,823,651. SAFETY VALVE. WILLIAM HARGREAVES, West Didsbury, Manchester, England, assignor of one-half to R. L. Ross and Company Limited, Stockport, England. Filed Nov. 5, 1929, Serial No. 404,927, and in Great Britain Nov. 22, 1928. 5 Claims. (Cl. 137—53.)



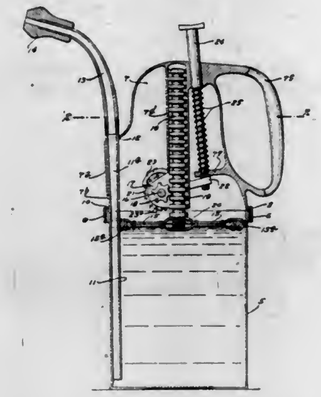
1. An adjustment mechanism for safety valves, comprising in combination, a valve casing, a valve-tension-spring in casing, means for effecting a minor change in the tension of the spring, means for limiting said tension-changing means within predetermined limits, normally inoperative means associated with said tension-changing means and disposed within the casing for effecting a further change of tension within predetermined limits, and means permitting access to said normally inoperative means to enable said further change of tension to be effected but still within predetermined limits.

1,823,652. LIQUID DISPENSER. WILLIAM H. HAST, Minneapolis, Minn., assignor to Hayden Miller Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 15, 1930. Serial No. 488,896. 4 Claims. (Cl. 65—45.)



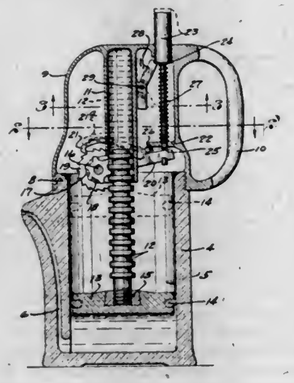
1. A liquid dispensing device comprising a jar having a cylindrical interior and a discharge conduit leading from its lower portion outward and opening at a point high up on said jar, a cap detachably applied to said jar and normally closing same, a sleeve depending axially from the top of said cap and having shaft bearings in its lower portion, a piston working in said jar having a rack toothed stem working in the sleeve of said cap, a short shaft journaled in the bearings of said sleeve, a spur pinion and a ratchet pinion secured to said shaft, the former engaging the teeth of said piston stem, a lever pivoted on said shaft, a pawl pivoted to said lever and normally engaging said ratchet wheel, and a spring-retracted plunger working through the top of said cap and connected to and operating said pawl-equipped lever.

1,823,653. DISPENSER FOR OIL AND OTHER LIQUIDS. WILLIAM H. HAST, Minneapolis, Minn., assignor to Hayden Miller Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 26, 1930. Serial No. 498,316. 8 Claims. (Cl. 221—78.)



1. A dispensing device of the kind described comprising a container having a discharge tube extending from a point near the bottom thereof and projecting far above its top at one side, a cap detachably secured to the top of said container, the upwardly projected portion of said discharge tube being extended through one side of said cap and said cap being capable of rotary and sliding movements on said tube whereby the cap, when disconnected from said container may be raised and swung laterally on said tube, a stem slidably mounted in said cap, a piston secured to the lower end of said stem and working in said container, and a hand-operated mechanism applied on said cap and operative on said stem to impart step by step movements to said piston to cause ejection of material from said container through said discharge tube.

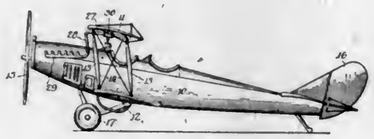
1,823,654. LIQUID DISPENSER. WILLIAM H. HAST, Minneapolis, Minn., assignor to Hayden Miller Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 18, 1931. Serial No. 523,419. 7 Claims. (Cl. 65—45.)



1. A dispensing device of the kind described comprising a jar or container having a discharge conduit leading

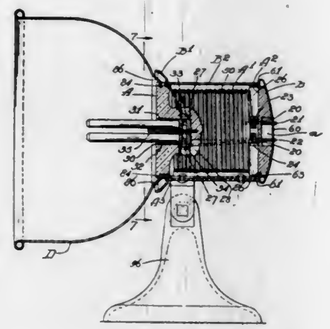
therefrom, a cap applied to the top of said jar, a piston-acting member working in said jar and having a stem mounted for axial movements in said cap, actuating means on said cap operative from the exterior thereof to move said piston-acting member, an automatic lock operative when said jar is upright to lock said piston actuating means against operating movement but to release the same when said jar is tilted to discharging position.

1,823,655. AEROPLANE. EDMOND A. HUSEBY, Chicago, Ill. Filed Jan. 16, 1928. Serial No. 246,936. 5 Claims. (Cl. 244—31.)



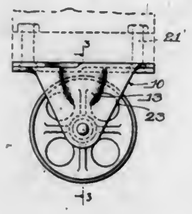
5. The combination with an aeroplane, of a hollow member mounted on a plane thereof formed with holes open above the top surface of the plane, a pipe connecting said hollow member with the air intake manifold of the aeroplane motor, and a valve in said pipe whereby the communication of said hollow member with said pipe may be cut off and said pipe vented directly to the atmosphere.

1,823,656. ARC LAMP. HENRY KOCOUREK, Chicago, Ill. Filed Apr. 22, 1929. Serial No. 357,046. 9 Claims. (Cl. 176—109.)



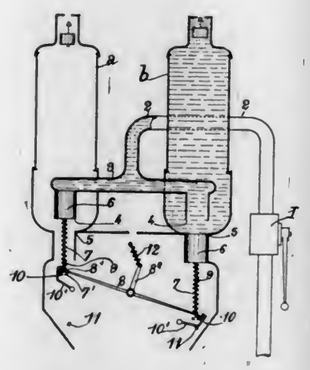
1. In a structure for the purpose indicated in combination with an insulating core body, an enclosing sheath comprising a cylindrical member dimensioned for being fast onto the core for encompassing an intermediate portion of its length; a rear end cap forwardly terminated by a cylindrical flange offset inwardly from the outer circumference of the cap, forming an annular shoulder encompassing said cylindrical flange, the latter being divided into segments of which alternate segments are folded inward for engaging the end cap with the core against endwise displacement, the core being recessed to accommodate the infolded segments and also having a circumferentially extending rabbet in which the cylindrical flange is seated; whereby the cylindrical case member, dimensioned as stated, is adapted to telescope over said cylindrical flange and be stopped against said encompassing shoulder.

1,823,657. CASTER. ROBERT A. LACKEY, Oak Park, Ill., assignor to The Payson Manufacturing Company, a Corporation of Illinois. Filed June 3, 1929. Serial No. 368,010. 3 Claims. (Cl. 16—18.)



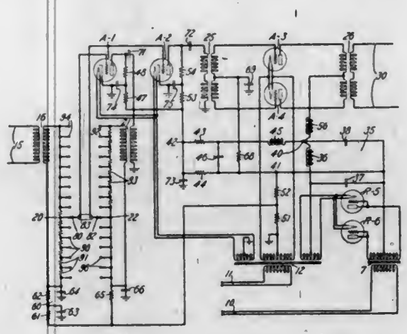
1. A caster comprising a frame formed in two similar sections, each section comprising a base and a depending leg, each base being recessed at one side intermediate the ends and having the portion at one side of said recess offset from the plane of the corresponding portion at the opposite side of said recess whereby said bases can be interfitted with one portion of each base overlying the remaining portion of the other base, and a wheel carried by said legs.

1,823,658. MEASURING PUMP. ALFRED LANSER, Corseaux-Vevey, Switzerland. Filed Jan. 15, 1931, Serial No. 508,934, and in France Jan. 23, 1930. 6 Claims. (Cl. 221—100.)



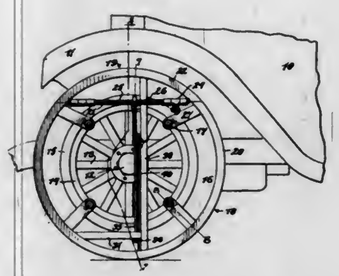
1. In combination, a pair of measuring vessels having upper and lower openings formed therein,—float valves controlling the upper openings in said measuring vessels,—a pump,—a conduit system connected to the delivery side of said pump, said conduit system terminating in a pair of bores positioned inside said measuring vessels in alignment with the lower openings in the latter,—piston valves mounted to slide in said bores and in said lower openings,—and a valve control assembly operative to actuate one of said piston valves only after the other of said piston valves has been displaced through a predetermined portion of its total course.

1,823,659. WAVE TRANSMISSION SYSTEM. ROBERT A. MILLER, Plainfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1929. Serial No. 392,121. 7 Claims. (Cl. 178—44.)



1. A constant ratio of signal strength to noise generated in the stages preceding that in which the attenuation is being obtained is maintained over the attenuation range obtainable in that stage.

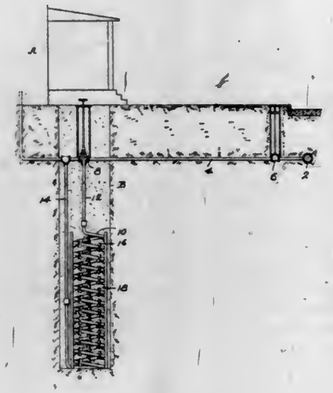
1,823,660. ROTARY LIFTING JACK AND WHEEL. HARRY E. NEHIN, Buffalo, N. Y., assignor of one-half to Earle Westbrook, Waco, Tex. Filed Oct. 13, 1928. Serial No. 312,271. 6 Claims. (Cl. 301—39.)



3. A rotary jack and auxiliary wheel for vehicle wheels or the like, said auxiliary wheel being composed of two segments of unequal sizes, a pivotal connection between said segments permitting said smaller segment to swing laterally relative to said larger segment, means for securing said larger segment to one of the vehicle wheels whereby upon horizontal movement of said vehicle, said vehicle rides up on said larger segment, means for locking said smaller segment against the face of said larger segment including a latch, spring means yieldingly holding said latch in engagement with said smaller segment and means for releasing said smaller segment from said latch through contact with the surface of the road, comprising a member carried by said larger segment, one end of said member extending beyond the periphery of said larger segment and the other end being secured to said latch.

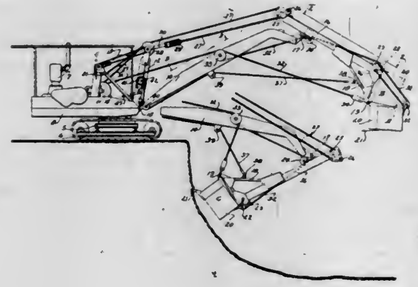
1,823,661. WATER COOLING SYSTEM. GLEN O'BRIEN, Troy, Kans. Filed Aug. 30, 1930. Serial No. 478,924. 1 Claim. (Cl. 257—122.)

In a system of the character described, the combination with a water main and a service pipe leading therefrom, a three-way valve connected to said service pipe, a by-pass connected at one end to the service pipe and at its opposite



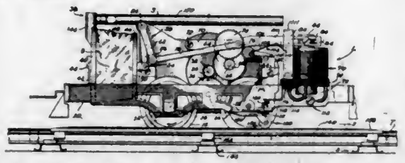
end to said valve and including a coiled pipe, and means for holding the convolutions of said coiled pipe in spaced relation to each other.

1,823,662. EXCAVATOR. ARTHUR OBLOFF, Green Bay, Wis., assignor to Northwest Engineering Corporation, Green Bay, Wis., a Corporation of Wisconsin. Filed Mar. 11, 1929. Serial No. 346,000. 8 Claims. (Cl. 214—138.)



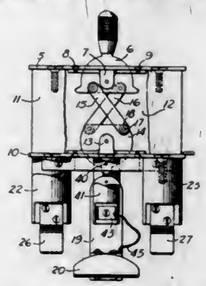
1. In an excavating machine, the combination with a vertically movable boom, of a dipper stick pivotally mounted on the outer end portion of the boom and swinging inwardly during digging, means associated with said boom and dipper stick to raise and lower the same and move the dipper stick outwardly relative to the boom during the operating cycle of the machine, a dipper, means for pivotally connecting the dipper to the lower end of the dipper stick forwardly of its rear end, and a drag cable connected to said dipper stick at one point and to said dipper at another point for moving said dipper stick inwardly and for controlling the angular position of the dipper relative to the stick after loading to avoid spilling the loaded material between the finish of the loading operation and the commencement of the dumping operation.

1,823,663. WHEELED TOY. LOUIS OSKOW, Brooklyn, N. Y., assignor of one-half to Morris Kirschstein, Brooklyn, N. Y. Filed Nov. 14, 1928. Serial No. 319,409. 19 Claims. (Cl. 246—81.)



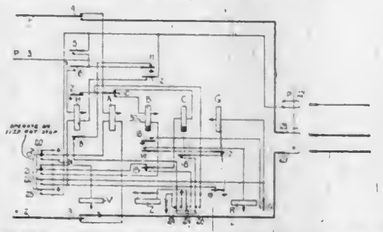
1. In combination, a toy vehicle, signal means including a whistle and bellows mounted thereon, and electromagnetic means for controlling said signal means, said last named means including a member adapted to actuate said bellows.

1,823,664. CIRCUIT MAKER AND BREAKER. ANTHONY J. PASCARELLA, West Englewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 4, 1930. Serial No. 433,000. 4 Claims. (Cl. 200—15.)



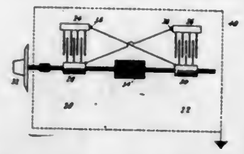
1. In a switching mechanism, a mounting plate, an operating lever pivotally mounted on said mounting plate, a second mounting plate; a contact carrying lever pivotally mounted on said second mounting plate, stationary contacts and a link joining diagonally disposed points on said operating lever and said contact carrying lever and adapted to inpart the movement of said operating lever to said contact carrying lever to cause the latter to engage said stationary contacts.

1,823,665. TELEPHONE SYSTEM. WILLIAM HENRY PAULETT and CHARLES GILLINGS, Liverpool, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 3, 1929, Serial No. 390,155, and in Great Britain Sept. 5, 1928. 21 Claims. (Cl. 179—18.)



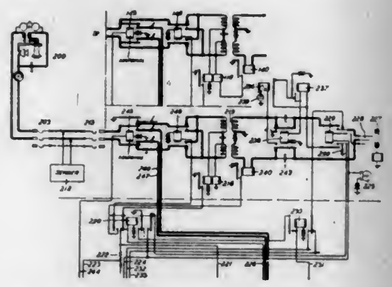
1. In a telephone system, an automatic bunting switch having an incoming test conductor, means in said switch for normally connecting one pole of battery to said test conductor to apply an idle potential, means for siezing said switch if idle, and means in said switch responsive to said seizure for disconnecting said one pole of battery from said conductor and for connecting the opposite pole of battery to said conductor to mark said switch busy with a busy potential.

1,823,666. TUNING MEANS. HAROLD O. PETERSON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 27, 1929. Serial No. 350,149. 11 Claims. (Cl. 179—171.)



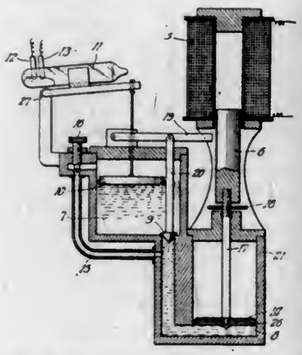
8. A tuning condenser comprising, structurally, two similar condensers arranged for uni-control, and connections of low impedance cross connecting the rotors and stators of the two condensers.

1,823,667. TRUNKING SYSTEM. ALBERT C. POWELL, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1930. Serial No. 485,423. 10 Claims. (Cl. 179—27.)



1. In a telephone system, an incoming trunk line, an operator's position, equipment at said position, automatic switching means for connecting said equipment with said trunk line, means to disconnect said equipment from said trunk line, and means to cause a second connection between said trunk line and said equipment if said first connection is not effective.

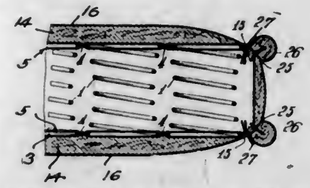
1,823,668. TIMING DEVICE. JAMES K. SHELLEDY, Harvey, Ill. Filed May 1, 1930. Serial No. 449,073. 7 Claims. (Cl. 200—97.)



1. A timing device for alternately opening and closing a point in an electrical circuit comprising a solenoid coil connected in the circuit so as to be energized when the circuit is closed, upper and lower liquid containing chambers, a float in the upper chamber, a switch for controlling

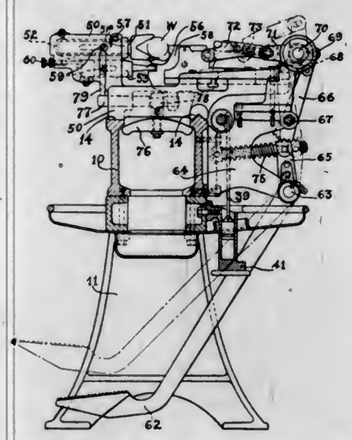
said circuit actuated by said float, separate passages for transferring the liquid from one chamber to the other and back again, means operated by energizing said coil to open one passage thereby removing fluid from the upper to the lower chamber, and lowering said float to actuate the switch, and means operative upon deenergization of said coil to force fluid through the other of said passages into said upper chamber to thereby raise the float and return the switch to its original position.

1,823,669. ROLL-EDGE MATTRESS. LOUIS A. SUEKOFF, Wilmette, Ill., assignor of one-half to Fred A. Nachman, Chicago, Ill. Filed July 12, 1929. Serial No. 377,810. 1 Claim. (Cl. 5—360.)



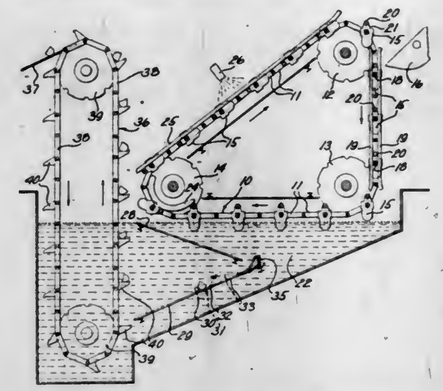
A roll edge mattress including top and bottom wall fabrics having their peripheral edge portions folded over upon their inner faces, and a quilted boxing strip having its longitudinal edge portions folded over upon the inner face of said strip, and a stitch-chain extended through each folded edge portion of said strip and through the folded peripheral edge portions of the respective wall fabrics.

1,823,670. WORK POSITIONING MEANS FOR CENTERING MACHINES. JOHN J. THACHER, Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Original application filed May 3, 1927, Serial No. 188,554. Divided and this application filed Oct. 3, 1928. Serial No. 310,117. 7 Claims. (Cl. 77—18.)



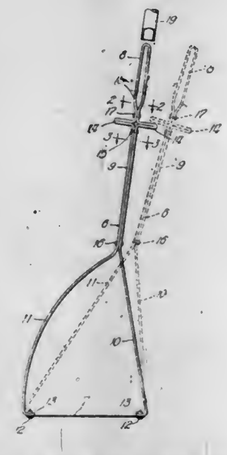
1. Supporting means for work pieces in a drilling machine comprising in combination, a support, oppositely disposed work engaging members on said support, means manually operable to move one of said members toward and from its work engaging position, and means to vary the position of the opposite member, said means including hydraulically connected plungers movable within cylinders in said support, one plunger being engaged by the manually movable work engaging member and the other plunger carrying the work engaging members opposed to said manually movable member, whereby said opposed member will be adjusted and blanks of different diameters may be mounted upon the same axis.

1,823,671. METHOD OF AND APPARATUS FOR CASTING. WILLIAM NICHOLAS THODE, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 2, 1929. Serial No. 329,787. 7 Claims. (Cl. 22—76.)



1. A method of continuously casting parts, which consists in pouring molten material in a succession of molds conforming to the shape of the parts to be cast, simultaneously advancing the succession of molds in a vertical direction, and pivotally suspending each of the molds individually during their vertical advancement to insure a level and upright position thereof.

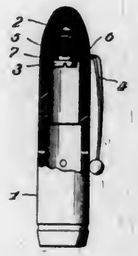
1,823,672. PRUNER, FRUIT PICKER, AND WEEDER. BURT E. TILDEN, Chicago, Ill. Filed Dec. 24, 1928. Serial No. 328,087. 1 Claim. (Cl. 30—9.)



An implement of the character described comprising a metal bar having a rounded surface at one side and a flat surface at the other side, said bar being bent upon itself to form an open loop at the bight in the bar for telescopic engagement with a handle, the opposite sides of the bar at the lower end of the loop being bent out at right angles and doubled to form hand holds at right angles to the handle receiving loop, diverging arms formed by the opposite ends of the bar at the lower end of the implement, an operating member disposed in a plane intersecting the plane of the handle loop and attached at its opposite ends to the lower ends of said diverging arms, said arms being relatively rigid laterally and one of said arms being bendable transversely for adjustment of the angularity

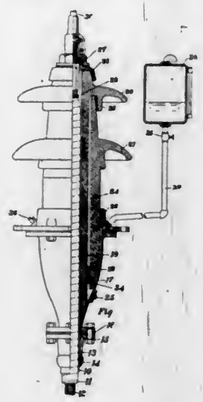
of the operating member relative to the handle loop, and an intermediate connecting portion between the upper ends of said diverging arms and the hand holds and formed by securing the flat surface of the sides of the bar together along said intermediate connecting portion.

1,823,673. CAP WITH A CLIP FOR FOUNTAIN PENS. ASAHI WATANABE, Nishisugamo-Machi, Kitatoshima-Gori, Tokyo-Fu, Japan. Filed Nov. 5, 1930, Serial No. 493,602, and in Japan Sept. 23, 1930. 1 Claim. (Cl. 24—11.)



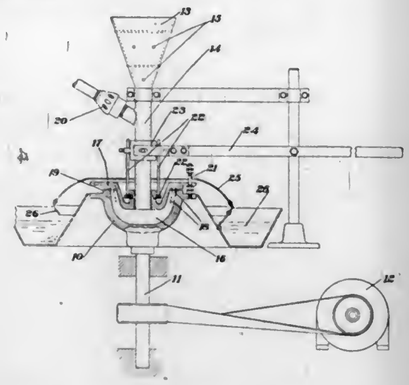
In combination, a cap for fountain pens having at the inner face of its solid closed end a longitudinal tapped hole and a lateral aperture which opens into the interior of the cap; a clip having an offset arm adapted to extend through the lateral aperture and to rest on the inner face of the closed end of the cap, the said arm being flat in cross section and substantially equal in width to that of the lateral aperture and provided with a hole of a diameter at least as large as that of the tapped hole; a screw threaded into the tapped hole through the hole on the offset arm of the clip to secure the clip in position, and a washer inserted between the offset arm and the head of the screw to aid in retaining the offset arm in position.

1,823,674. POTHEAD FOR INSULATED CABLE TERMINALS. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Jan. 16, 1925. Serial No. 2,753. 6 Claims. (Cl. 247—6.)



1. A pothead comprising a metallic casing, a tubular dielectric member extending into said casing and projecting beyond the end thereof, said casing and dielectric member being connected to form a housing, a second tubular dielectric member disposed within but spaced from said first named dielectric member and supported on the top thereof and a conductor extending through said metallic casing into said housing.

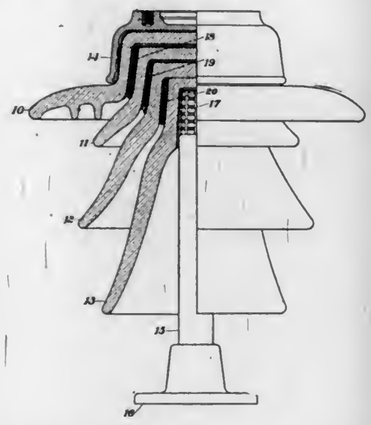
1,823,675. COATING AND HEAT TREATING APPARATUS. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Feb. 12, 1925. Serial No. 8,826. 12 Claims. (Cl. 91—59.)



1. The method of removing excess coating material from articles having substantially flat faces with openings normal to said faces wherein said articles are deposited in a receptacle having upwardly and outwardly directed side walls, the receptacle being rotated while the articles are free to slide upon said walls and to assume a position with said faces disposed against said walls.

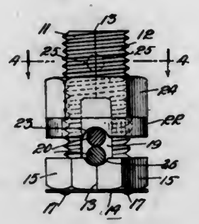
12. A centrifugal device comprising a receptacle having upwardly and outwardly directed side walls, a lid for said receptacle, means for rotating said receptacle to cause articles therein to travel upwardly along said side walls, and means for periodically lifting said lid to permit the escape of articles from the top of said receptacle said lifting means being operable during rotation of said receptacle.

1,823,676. INSULATOR WITH NESTED PARTS. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 25, 1925. Serial No. 32,714. 2 Claims. (Cl. 173—318.)



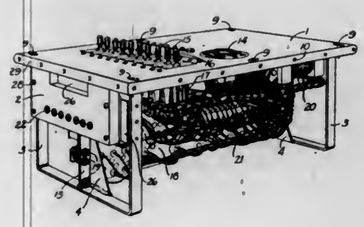
2. An insulator comprising a plurality of nested dielectric members connected by cement interposed between said members and sheet metal, reinforcing members disposed in the joints formed by said cement, an outer reinforcing member being formed of imperforate sheet metal having the surface thereof undulated while an inner reinforcing member is formed of sheet metal having perforations therethrough to permit connecting ties of cement to extend through said inner reinforcing member.

1,823,677. ELECTRICAL CONNECTER. CHARLES A. BAY, Morristown, N. J. Filed Feb. 26, 1930. Serial No. 431,358. 7 Claims. (Cl. 24—124.)



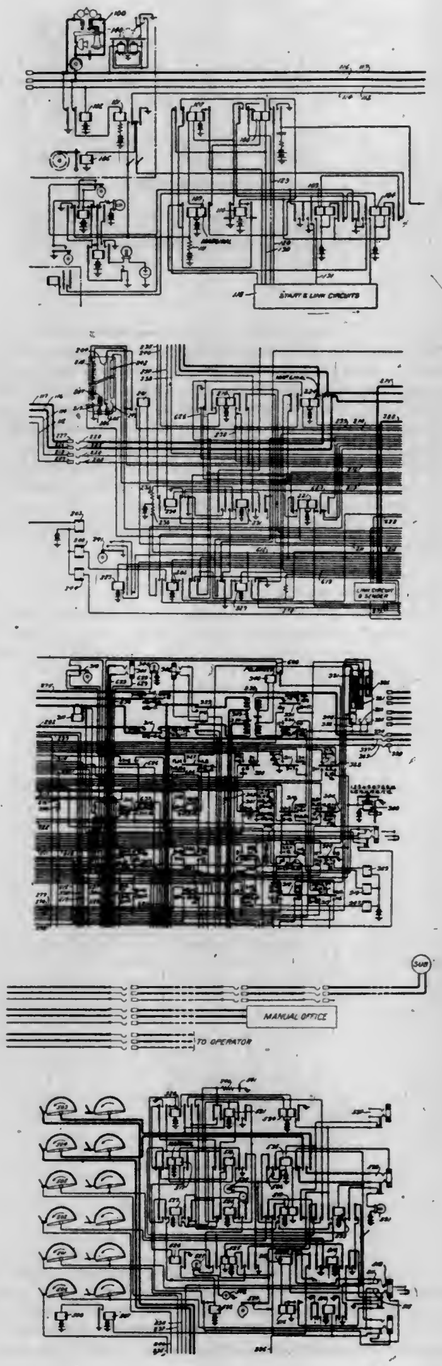
7. A device of the character described comprising a member consisting of two parts having inner contacting faces, one end of the member being formed as a head the inner end of which is non-circular and has sloping faces, resilient means connected with the head for holding the two parts of the member in operative relation, said inner faces of the two parts being provided with an aperture one end of which extends to the sloping inner end of the head, said aperture being adapted to receive a plurality of elements, a washer having a hole with tapered sides corresponding to the tapered sides of the inner end of the head seated on said sloping sides of the head, and means including a washer and a nut carried by the free end of the member for pressing the elements against the first washer and thereby holding the elements in the member.

1,823,678. CABINET FOR PORTABLE TESTING APPARATUS. HERMAN N. BOWMAN, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 27, 1930. Serial No. 423,877. 6 Claims. (Cl. 179—175.)

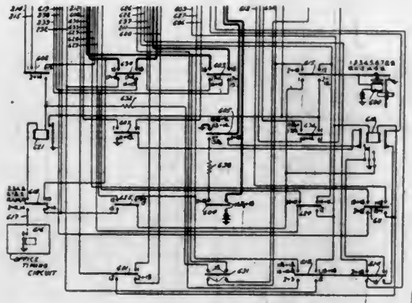


1. In an apparatus cabinet, a cover panel, two inverted E-shaped brackets attached by their outer arms to the under side of said panel, one at each end thereof, one or more apparatus plates supported upon the inner arms of said brackets, and an enclosing casing, said brackets serving as guides for insertion into said casing and as supports when said casing is removed.

1,823,679. CALL CHARGING TELEPHONE EXCHANGE SYSTEM. ALOYSIUS J. BUSCH, Queens Village, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 29, 1930. Serial No. 471,447. 10 Claims. (Cl. 179—6.3.)

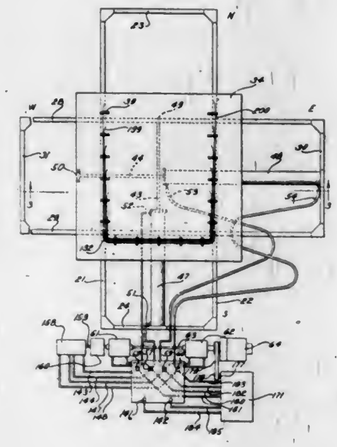


1,823,679—Continued.



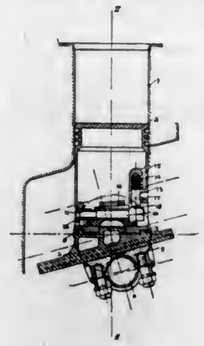
1. In a telephone exchange system, a calling line, a link circuit for extending said calling line, a repeating coil in said link circuit, a talking current supply circuit for said calling line extending over the conductors of said line through the primary windings of said repeating coil and a source of current, a resistance, and means for sequentially inserting said resistance into said supply circuit between the primary windings of said coil, rendering said source of current ineffective to supply talking current to said line and finally opening the connection between the conductors of said line and the primary windings of said coil.

1,823,680. FORMING APPARATUS. NATHAN A. CURTISS, Ridgewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 3, 1929. Serial No. 383,386. 11 Claims. (Cl. 140—71.)



1. A forming apparatus comprising manually controlled means for forming strands into a predetermined shape, means for recording the movement of the manually controlled means, and means for automatically operating the manually controlled means in accordance with the record.

1,823,681. APPARATUS FOR CONVERTING RECIPROCATING MOTION INTO ROTARY MOTION OR VICE VERSA. JACQUES FRANÇOIS FELIES, Antwerp, Belgium. Filed Aug. 2, 1929, Serial No. 382,918, and in the Netherlands Apr. 17, 1929. 6 Claims. (Cl. 74—14.)



1. Apparatus for converting reciprocating motion into rotary motion or vice versa, comprising a piston body, a guide body co-operating therewith, a guide block co-operating with said guide body, a crank pin engaging said guide block and pulling means within said piston body pulling said guide body towards said piston body.

1,823,682. METHOD OF MAKING ROAD SURFACES. SAM EVERETT FINLEY, Atlanta, Ga., Filed Nov. 11, 1929. Serial No. 406,535. 11 Claims. (Cl. 94—23.)

1. The method of making road surfaces, which consists in applying to the road base to be surfaced a coating of cementing material in sufficient quantities to substantially fill the voids of the aggregates to be used in the surface strata of the road, and thereafter depositing upon said coating a layer of mineral aggregates with a volatile liquefier in sufficient quantity to wet the surfaces of the aggregate particles and provide an excess of the liquefier to work down and act upon the cementing material.

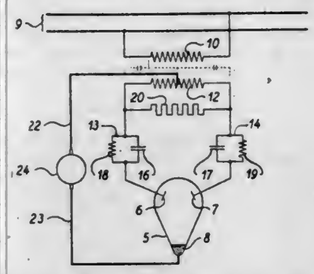
1,823,683. TONE MODIFYING DEVICE FOR THE VIBRATING ELEMENTS OF MUSICAL INSTRUMENTS. CHARLES B. GARDNER, Jr., Long Beach, Calif. Filed Nov. 30, 1928. Serial No. 322,673. 6 Claims. (Cl. 84—318.)



1. A tone-modifying device embodying, in combination, a suitable support, a plurality of sound-producing vibrating elements mounted on said support, a plurality of elements movable relatively along said vibrating elements, and means for operating such elements to produce relative modification of the tones thereof during playing of the instrument.

1,823,684. RECTIFYING SYSTEM. ARTHUR GAUDENZI, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a joint stock Company of Switzerland. Filed Dec. 6, 1928, Serial No. 324,180, and in Germany Dec. 10, 1927. 3 Claims. (Cl. 175—363.)

1. In a current-rectifying system, current-rectifying apparatus having anodes, an alternating voltage supply source for said apparatus, said supply voltage having an over-voltage of high frequency impressed thereon, transformer means having a secondary and providing an operating connection between said source and said apparatus, an oscillation circuit interposed between each terminal of



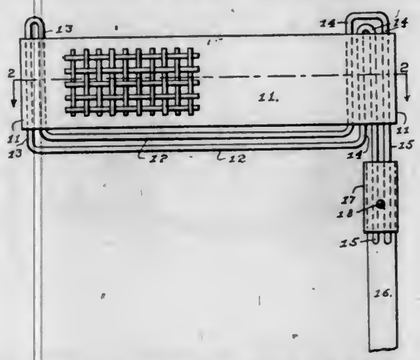
said secondary and each anode and tuned to the frequency of said over-voltage, and a resistance connected in parallel relation with said secondary for equalizing said over-voltage prevented by said resonant circuits from being impressed on the anodes.

1,823,685. HAIRPIN. PHILIP L. HAIMS, Cleveland, Ohio. Filed Mar. 31, 1930. Serial No. 440,285. 1 Claim. (Cl. 132—50.)



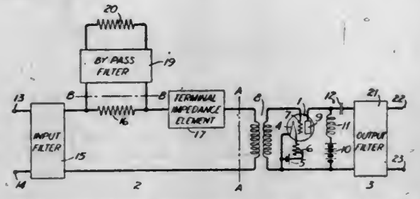
A hair pin comprising a strip of flat spring metal bent to form opposite fingers and a connecting bend, one finger having a series of corrugations, the corrugation nearest the connecting bend resting in contact with the inner side of the other finger, the latter finger being bowed inwardly and forming a fulcrum to open the front ends of the fingers by pressure between said corrugation and the connecting bend.

1,823,686. DEVICE FOR RELIEVING HEADACHES. PAUL HANKE, Bound Brook, N. J. Filed Feb. 27, 1929. Serial No. 343,044. 3 Claims. (Cl. 128—163.)



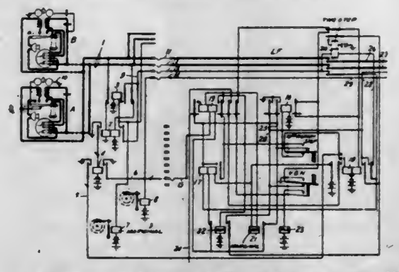
1. In a device for relieving headaches an endless flexible band of a porous fabric, to be moistened by a liquid and cooled by moving the band through the air, whereby it may become cooler than the human body, and a resilient frame, for movably supporting and stretching said band in an extended condition thereof, said frame having thereon parts, to be encompassed by said band, and serve as posts for the same, thereby movably supporting and stretching the same, whereby said band may be so moved through the air, thereby cooling the same, and thereupon applied to the head of a person.

1,823,687. SYSTEM FOR FREQUENCY TRANSLATION OF ELECTRIC WAVES. RAYMOND A. HEISING, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 26, 1928. Serial No. 328,504. 7 Claims. (Cl. 250—27.)



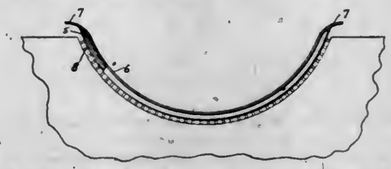
3. The combination comprising a space discharge device having a cathode, an anode and a grid for controlling the discharge, a high impedance in circuit with said grid, a plurality of sources of waves to be amplified by said discharge device, said waves having predetermined frequencies, and a circuit resonant at a plurality of said predetermined frequencies connected in shunt to said high impedance.

1,823,688. TELEPHONE EXCHANGE SYSTEM. HENRY HOVLAND, Williston Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1929. Serial No. 374,358. 11 Claims. (Cl 179—9.)



1. In a telephone system, a line having a plurality of subscribers' stations each of which possesses a distinguishing characteristic, a dial at each of said stations, a trunk, means effective upon the origination of a call at one of said stations for extending said line to said trunk, means associated with said trunk and rendered effective immediately after the dialing of a digit for testing said line to determine which of said stations is the calling station.

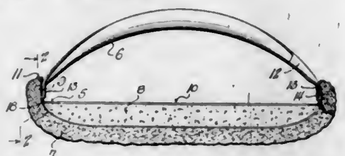
1,823,689. APPARATUS FOR CLEANING TYPE. CHARLES N. KELLEY, Madison, Wis. Filed May 9, 1930. Serial No. 451,049. 1 Claim. (Cl. 15—210.)



In a type-cleaning device, the combination of a strip of plastic, type-cleaning material of a length to extend over

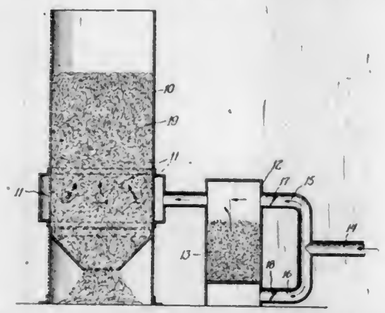
the entire face of the type of a typewriter, and a flexible strip of backing material secured thereto, said backing strip having portions projecting beyond the sides and ends of the plastic material for manipulating the device.

1,823,690. SHOE POLISHER. ALBERT C. KOOTZ, Milwaukee, Wis. Filed Nov. 23, 1929. Serial No. 409,245. 1 Claim. (Cl. 15—235.)



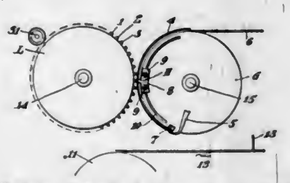
In a shoe polisher, the combination of a pad support formed of sheet metal having an elongated body portion and upwardly extending flanged ends, a handle of sheet metal curved to form a gripping surface and having end portions abutting said flanged ends and provided with tongues in crimped engagement with said flanged ends and spurs projecting through said flanged ends, and a polishing pad clamped to said flanged ends by said spurs.

1,823,691. GRINDING OF CELLULOSIC MATERIALS. HERBERT LANGWELL, Epsom, England, assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed July 9, 1928. Serial No. 291,212. 8 Claims. (Cl. 83—94.)



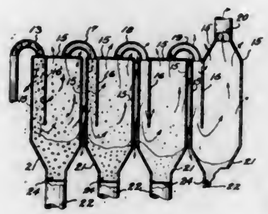
1. A process of grinding cellulosic material which comprises heating the material sufficiently high to expel the moisture therefrom but avoiding substantial charring, and then immediately grinding the said material before substantial cooling thereof.

1,823,692. METHOD OF PAGE NUMBERING SHEETS FOR BOOKS. DAVID A. MCINTYRE, Newark, N. J., assignor of one-half to Emil L. Mueller, Newark, N. J. Filed July 7, 1927. Serial No. 204,108. 3 Claims. (Cl. 101—77.)



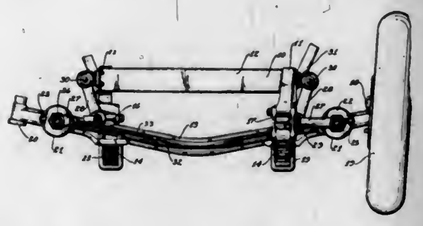
1. The herein described method of page-numbering sheets for books, which method consists in feeding a sheet and printing page numerals on spaced portions of one face of the sheet, continuing to feed the sheet and to print page numerals on spaced portions of the opposite face of the sheet, feeding sufficient other sheets to make up a signature and printing page numerals upon the opposite faces of said other sheets successively in the manner mentioned for the first sheet, placing said sheets in pile formation in the order as they are successively printed, and then folding the pile into signature form, the arrangement of the numerals printed upon the two faces of all of the sheets being such that when the sheets are thus folded in signature form the page numerals appearing upon the signature will be in a predetermined sequence.

1,823,693. FABRIC SEPARATOR. WILSON L. MCLAUGHLIN and HERROLD L. MCLAUGHLIN, Des Moines, Iowa, assignors of one-fourth to E. L. Twining, Des Moines, Iowa. Filed July 16, 1927. Serial No. 206,354. 3 Claims. (Cl. 183—34.)



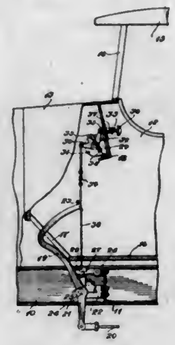
1. In a device of the class described, a fabric chamber having its bottom open, a receiving bin inclosing the bottom of said chamber, a downwardly extending baffle wall from the top of said chamber and completely extending from one side of said chamber to the other side thereof, thereby forming a small compartment open at its bottom and a relatively large compartment open at its bottom, an inlet pipe communicating with the top of the small compartment, an outlet pipe communicaing with the top of the large compartment, said baffle wall being so positioned that the powdered material impregnated air entering through the said inlet pipe will travel rapidly through the said smaller compartment due to its relatively small area and will travel very slowly upwardly through the said larger compartment due to its relatively large area, thereby permitting the material to settle in the receiving bin.

1,823,694. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 17, 1927. Serial No. 233,839. 9 Claims. (Cl. 267—11.)



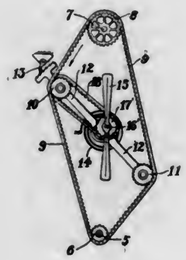
1. In a motor vehicle, the combination with the frame and axle, of two shock absorbers connected between the frame and axle, a pipe connection from each side of one shock absorber to the opposite sides of the other shock absorber, and a check valve controlled by-pass for each absorber of less capacity than the smallest opening through said pipe connections.

1,823,695. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 16, 1927. Serial No. 240,381. 2 Claims. (Cl. 74—39.)



1. In a motor vehicle, in combination with the foot brakes, a lever for operating the brakes, a ratchet carried by the lever, a pawl for operation with the ratchet, a bell crank lever upon the instrument board of the vehicle, means accelerating the movement of the bell crank lever into locked and unlocked positions, a handle connected to one arm of the bell crank lever, a rod connecting the other end of the bell crank lever to the pawl and a coil spring interposed in said rod.

1,823,696. CHAIN DRIVE. FRANK L. MORSE, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Sept. 13, 1928. Serial No. 305,820. 5 Claims. (Cl. 64—5.)



3. In a chain drive, the combination of a driving sprocket, a driven sprocket, a chain connecting the driving and driven sprockets, a pivoted arm mounted diagonally between the two strands of the chain, tightener wheels mounted on opposite ends of the arm and engaging opposite strands of the chain, means to actuate said arm to tighten the chain, a second chain drive driven from one of the tightener wheels and extending along the arm and adapted to swing with it, said second drive including a central wheel mounted eccentrically to the arm pivot, whereby both drives may be tightened simultaneously.

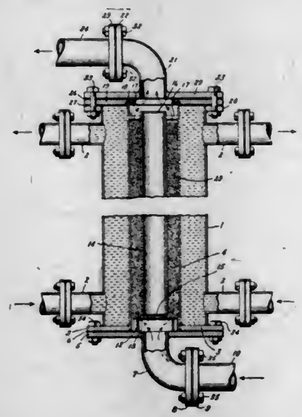
1,823,697. HANDCUFFS. CHARLES H. NENSTIEHL, Huntington Station, N. Y. Filed Oct. 25, 1926. Serial No. 144,064. 1 Claim. (Cl. 70—17.)

In combination, a fixed eye member, a chain, a stop bar carried by the chain, a spring connected to the chain and the eye member, the chain being arranged to pass through a wall opening and being limited in its passage in one direction therethrough by said stop bar, a ring on said



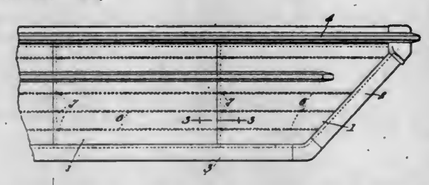
chain and handcuffs secured to said ring, and said ring also acting to prevent complete passage of the chain in the opposite direction through said wall opening.

1,823,698. METHOD FOR TREATING SULPHUR DIOXIDE GAS. BIRGER W. NORDLANDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 1, 1929. Serial No. 375,226. 5 Claims. (Cl. 23—178.)



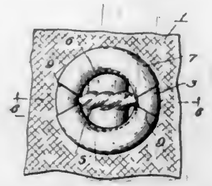
1. The method of removing substantially all but a trace of sulphur trioxide from sulphur dioxide gas, which consists in passing such gas through a body containing active sulphur.

1,823,699. STRUCTURAL STEEL ASSEMBLY AND METHOD OF PRODUCING SAME. HAROLD F. NORTON, Newport News, and JAMES W. OWENS, Cradock, Va. Filed Mar. 28, 1929. Serial No. 350,764. 9 Claims. Cl. 114—79.)



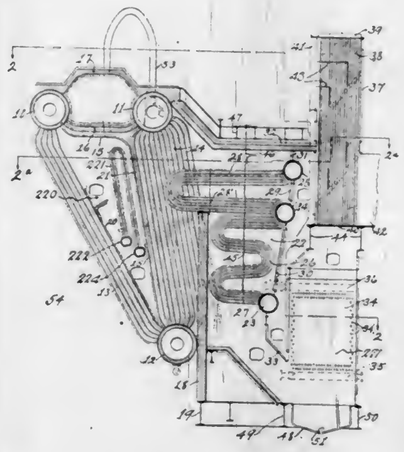
1. The method of securing structural plates together at their meetings edges which comprises securing to each plate a stiffener bar, the ends of the stiffener bars adjacent the meeting edges of the plates being left free, assembling the plates with the stiffener bars overlapping, bending the free ends of the stiffener bars into contacting engagement, and welding the overlapped stiffener bars together.

1,823,700. TUFTED MATTRESS. LOUIS E. PITTONI, Jamaica, N. Y., assignor to The Rome Company, Inc., a Corporation of New York. Filed June 6, 1928. Serial No. 283,444. 8 Claims. (Cl. 5—356.)



7. The combination with a cushion member and a cover therefor, of eyelets distributed over two opposed walls of the cover, grommets movable into and out of the eyelets from the outside, each grommet having an inner part fitting into the corresponding eyelet so as to be frictionally held therein against withdrawal and an outer part too wide to pass through the eyelet, and ties extending through the cushion between said opposed walls and each connected at one end to a grommet in one of said walls and at the opposite end to a grommet in the opposite wall.

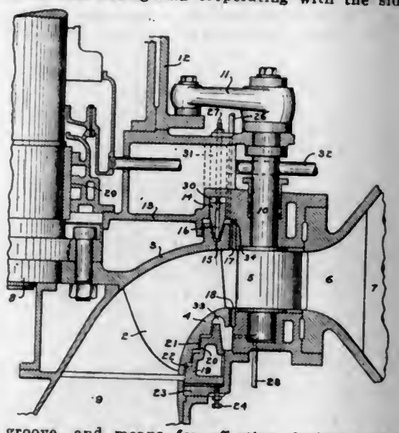
1,823,701. STEAM BOILER. ARTHUR D. PRATT, Short Hills, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 10, 1928. Serial No. 276,554. 10 Claims. (Cl. 122—302.)



1. In combination, a steam boiler and its setting comprising two side by side flues, the gases flowing upwardly in a first flue and downwardly in a second flue, vertically extending boiler tubes located in said first flue, and reheater tubes having portions overlapping with said boiler tubes in said first flue and having other portions extending across said second flue.

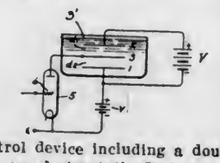
1,823,702. HYDRAULIC MACHINE. JOSEPH J. RING, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 24, 1928. Serial No. 280,174. 8 Claims. (Cl. 253—117.)

1. In combination, a casing, a rotor having an end wall the periphery of which is formed to revolve in close proximity to said casing and the side of which is provided with an annular groove, a sealing ring adjustably associated with said casing and cooperating with the sides of



said groove, and means for effecting drainage of fluid directly from within said groove through said casing to the exterior.

1,823,703. LIGHT CONTROL DEVICE. EMIL RUPP, Berlin-Frohnau, Germany, assignor to General Electric Company, a Corporation of New York. Filed Dec. 26, 1929, Serial No. 416,732, and in Germany Feb. 22, 1929. 5 Claims. (Cl. 88—61.)

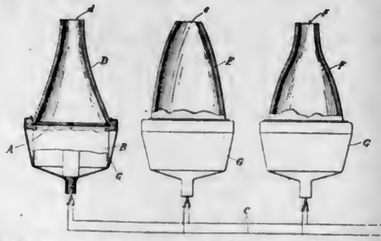


1. A light control device including a doubly refracting liquid affected by an electrostatic field, a cathode and an anode mounted in said liquid, and a control electrode arranged between the cathode and anode to control the position of the cathode drop in said liquid.

1,823,704. MANUFACTURE OF ETHERS OF DIACETONE ALCOHOL. CARSON W. SIMMS, Terre Haute, assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed June 4, 1928. Serial No. 282,890. 9 Claims. (Cl. 260—134.)

1. The process of producing methyl diacetone ether, which comprises reacting mesityl oxide and methyl alcohol in the presence of a caustic alkali catalyst.

1,823,705. SYSTEM OF ARTICULATE SOUND REPRODUCTION. WINFIELD D. SMITH, Peekskill, N. Y., assignor to Eugene A. Widmann, New York, N. Y. Filed Feb. 1, 1930. Serial No. 425,222. 6 Claims. (Cl. 181—31.)



1. A sound reproducing system comprising a plurality of hollow devices, commonly actuable, whose emission

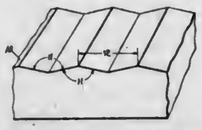
orifices are smaller than their reception orifices, and which respectively possesses different articulating characteristics.

1,823,706. HIGH TEMPERATURE THERMOCOUPLE. HENRY C. STAEHLE, Boulder, Colo., assignor to General Electric Company, a Corporation of New York. Filed Nov. 12, 1929. Serial No. 406,712. 1 Claim. (Cl. 136—5.)



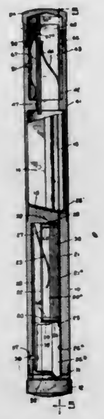
A thermocouple the elements of which are tantalum carbide and graphite, respectively.

1,823,707. INDICATING INSTRUMENT. BYRON W. ST. CLAIR, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 4, 1930. Serial No. 418,644. 4 Claims. (Cl. 88—1.)



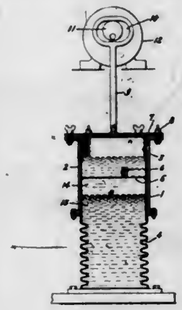
3. In an indicating instrument, a transparent observation window with regularly spaced, smooth surface depressions in the outer face of such window dividing such outer face into a plurality of angularly disposed adjacent surfaces sufficiently close together to scatter reflected light rays so as to reduce glare, the angular disposition of such surfaces being insufficient to cause noticeable image distortion.

1,823,708. AUTOMATIC RE-FILL MULTIPLE SHAVING EDGE SAFETY RAZOR. HARRY H. STRAUS, New York, N. Y. Filed Aug. 24, 1927. Serial No. 215,007. 18 Claims. (Cl. 30—12.)



1. A safety razor comprising a hollow handle, a shaving head pivotally secured thereon, a feed magazine within the handle and adapted to hold a stack of double-edged blades having their opposite edges sharpened, said blades having angular corners, said magazine having a wall extending longitudinally in the direction of length of said blades and perpendicular to the sharpened edges of said blades, reciprocating feeding means for feeding blades successively from the magazine to the shaving head, and ribs at corners of the magazine adjacent said wall thereof to cooperate with said angular blade corners and retain blades in either of two reversible positions in the magazine.

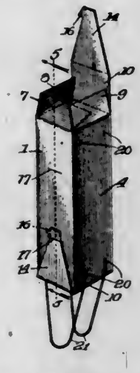
1,823,709. METHOD OF PRODUCING OPENINGS THROUGH HARD METAL COMPOSITIONS. GEORGE F. TAYLOR, Niskayuna, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 22, 1931. Serial No. 510,505. 4 Claims. (Cl. 76—107.)



1. The method of removing a plug embedded in a metallic article, which comprises immersing said article in a reagent capable of dissolving said plug, subjecting said reagent to pressure and then reducing said pressure to form a partial vacuum above said reagent and alternating the two last mentioned steps.

4. The method of forming an opening through a sintered metallic structure made from powdered materials, which comprises forming the powdered materials around a quartz stem, applying pressure and heat to the powdered materials to form them into a hard, dense mass, immersing said mass in a reagent capable of dissolving said quartz stem, applying pressure to said reagent, reducing said pressure to form a partial vacuum above said reagent and slowly alternating the two last mentioned steps until the quartz stem is dissolved.

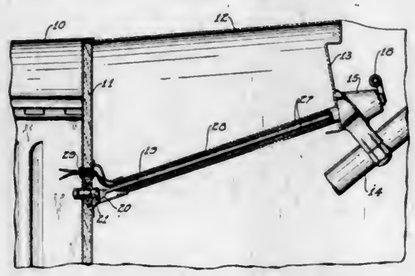
1,823,710. FOLDABLE BOX. ESTELLE FLORENCE THOMPSON, Chicago, Ill. Filed Nov. 16, 1927. Serial No. 233,589. 1 Claim. (Cl. 229—39.)



A box made from a flat blank of sheet material and having foldably connected wall sections, two of which are co-extensive with each other and with the width of the box and overlap to form the front wall of the box, each of the wall sections except the one on the outermost side of the box at the front thereof having end flaps integrally connected therewith at the opposite ends thereof and overlapping when the blank is set up to close

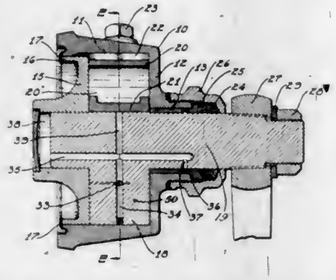
the ends of the box, the end flaps on the wall section constituting the rear wall of the box having tapered extensions which overlap the outermost section of the front wall of the box when set up, the overlapping wall sections constituting the front wall of the box having registering slots therein, whereby the free narrow ends of the extensions may be interlocked with either or both of said sections.

1,823,711. MOTOR VEHICLE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 3, 1927. Serial No. 158,459. 9 Claims. (Cl. 180—82.)



1. In a lock mechanism, a combined bonnet and ignition switch lock comprising means for retaining said bonnet closed, and said switch open, means for releasing said lock upon the insertion of a key, and means preventing said ignition switch from being maintained open while said key remains in the lock.

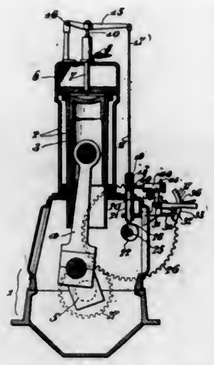
1,823,712. SHOCK ABSORBER. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 30, 1927. Serial No. 243,628. 18 Claims. (Cl. 188—89.)



1. In a shock absorber, a casing, a working chamber in the casing, a piston having a shaft operable in the working chamber, a replenishing reservoir and a direct connection between the suction side of the working chamber and the replenishing reservoir through the piston and shaft while the piston is in certain positions of its movement.

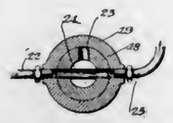
1,823,713. FUEL FEED CONTROLLING MEANS FOR INTERNAL COMBUSTION ENGINES. OTIS D. TREIBER, Collingswood, N. J., assignor to Treiber Diesel Engine Corporation, Camden, N. J., a Corporation of New Jersey. Filed Sept. 13, 1927. Serial No. 219,257. 9 Claims. (Cl. 123—33.)

1. In means for controlling the feed of fuel to the cylinders of a multi-cylinder internal combustion engine structure, the combination of lost motion connecting means having connection with the feeding means of the said cylinders, means for actuating the said connecting means, a rock shaft, a plurality of devices mounted upon the said rock shaft adapted to be adjusted simultaneously toward and from the said connecting means for



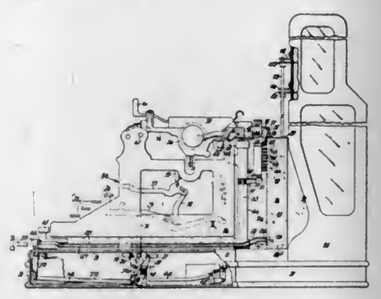
varying the action thereof upon the feeding means, and means upon each of the said devices for adjusting the lost motion controlling means thereof independently of the other of said devices.

1,823,714. INTERNAL COMBUSTION ENGINE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 23, 1925. Serial No. 57,987. 9 Claims. (Cl. 184—6.)



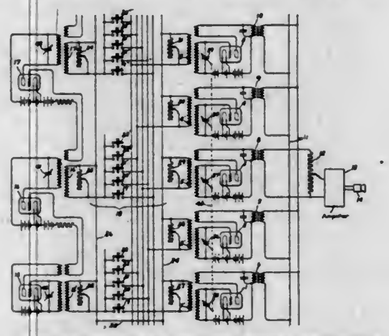
1. In an internal combustion engine, the combination of a bearing, a hollow shaft therein, said bearing having a radial inlet conduit and a directly opposite outlet conduit and said shaft having a radial opening adapted to register with and receive oil from the inlet conduit, and a transversely extending duct in said shaft adapted to simultaneously register with both said radial conduits to carry oil from one to the other.

1,823,715. COMBINED TYPEWRITING AND COMPUTING MACHINE. RICHARD VON REPPERT, Hartford, Conn., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 24, 1926. Serial No. 96,969. 31 Claims. (Cl. 235—60.)



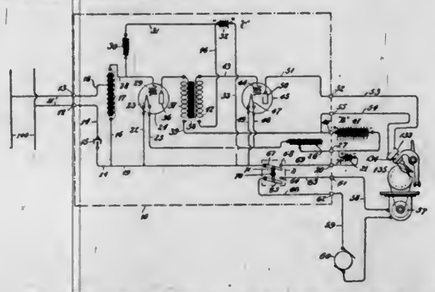
3. In a typewriting machine having a traveling carriage, a computing mechanism including a series of normally inoperative totalizers, and a normally inoperative control-lever connected to each totalizer, a controlling plate on the carriage having a cam to first condition the control-levers to render said levers actuable, said plate also having other cams to actuate the control-levers to render their respective totalizers operative in predetermined order to compute according to a predetermined computing schedule during the normal travel of the carriage.

1,823,716. SYSTEM FOR PRODUCING MUSIC. CHARLES J. YOUNG, Ardmore, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 22, 1930. Serial No. 454,810. 8 Claims. (Cl. 84—1.)



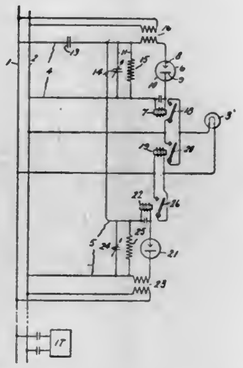
1. In combination, means for producing oscillations of high fundamental frequency and oscillations having frequencies corresponding to certain of the harmonics thereof, means for producing oscillations of a frequency differing from said fundamental by an amount corresponding to a musical tone and for producing oscillations having frequency corresponding to certain of the harmonics thereof, and means for selectively producing a beat frequency between the oscillations of said fundamental frequencies and between corresponding harmonics thereof.

1,823,717. TELEPHONE RECORDING SYSTEM. HOWARD S. WORRELL, Ardmore, Pa., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed July 22, 1926. Serial No. 124,232. 5 Claims. (Cl. 179—6.)



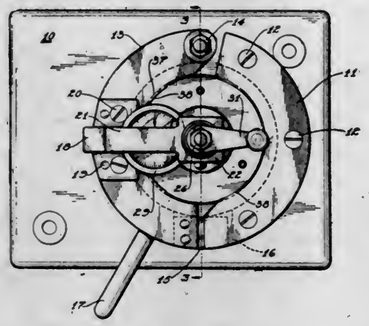
1. An electrical system comprising a commercial telephone line; a coupler connected across said telephone line having in series with it a condenser to permit voice-currents to pass through the coupler but preventing passage of direct and signal operating currents either to or from the telephone line; an output circuit for the coupler; a thermionic device in the output circuit; and an electrically operated phonographic recording device controlled by said thermionic device, said coupler being continuously in circuit with the telephone line, and the output circuit of said coupler being normally open when the system is not in use; and means for rendering said thermionic device operative and thereby electrically completing the output circuit of the coupler.

1,823,718. REMOTE CONTROL SYSTEM. WALTER R. G. BAKER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 14, 1925. Serial No. 56,116. 3 Claims. (Cl. 175—375.)



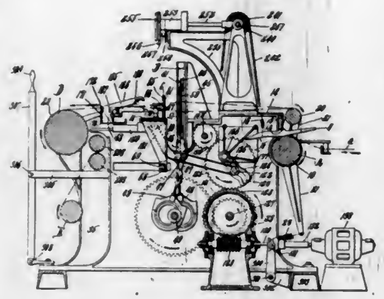
1. In combination, a circuit, means for controlling the closing and opening of said circuit, said means comprising a pair of tuned circuits resonant at different frequencies, each of said circuits including a capacitive element and an inductive element, a space discharge device connected across one of said elements of each of said circuits whereby the potential on said element is supplied to the space discharge device to cause operation thereof, means for supplying electromotive force having corresponding frequency to each of said tuned circuits, means controlled by one of said discharge devices for controlling the closing of said circuit, means for maintaining said circuit closed, and means controlled by the other discharge device for controlling the opening of said circuit.

1,823,719. GAUGING MACHINE. WILLIAM HENRY BAKER, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 31, 1927. Serial No. 243,860. 12 Claims. (Cl. 33—147.)



1. A gauging machine comprising a base, a stationary clamping jaw on the base, a pivotal jaw on the base coacting with the stationary jaw, a yielding support on the base, an indicating instrument and means for supporting and rotating the indicating instrument above the support.

1,823,720. LOOM STOP MECHANISM. EARL F. BALDWIN, Gardner, Mass., assignor to American Fibre Corporation, Gardner, Mass., a Corporation of Massachusetts. Original application filed Feb. 18, 1925, Serial No. 9,958. Divided and this application filed May 28, 1927. Serial No. 194,868. 6 Claims. (Cl. 139—370.)

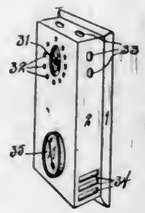


1. In combination in a loom, weaving mechanism including a movable member, a rod having a notch therein axially movable with said member, driving means, a clutch interposed between said driving means and said mechanism, an actuating member for said clutch including a sleeve in which said rod is slidable, a latch in said sleeve movable into engagement with said notch to couple said sleeve and rod for simultaneous motion, means for delivering a strand to said mechanism, and means acting on the parting of said strand to permit said latch to engage in said notch, whereby motion of said movable member after such engagement actuates said clutch to disconnect said drive means from said mechanism.

1,823,721. LININGS FOR SHOES AND THE LIKE. WALLACE C. BENNETT, Hingham, Mass. Filed Apr. 24, 1928. Serial No. 272,566. 2 Claims. (Cl. 167—84.)

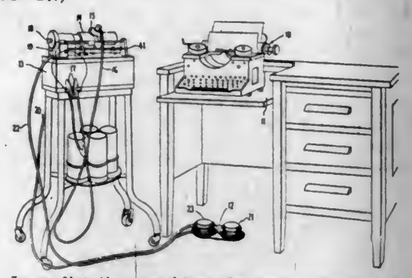
1. As a new article of manufacture, a lining for shoes and the like comprising a sheet of textile fabric impregnated with starch, throughout which is disseminated a solid, astringent salt of stearic acid.

1,823,722. FIRE ALARM. JOSEPH S. BIATCIEL, Fort Worth, Tex., assignor to Jack Clark, Fort Worth, Tex. Filed Apr. 15, 1930. Serial No. 444,415. 3 Claims. (Cl. 116—101.)



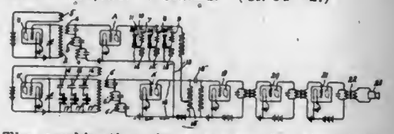
1. A fire alarm comprising sounding devices, a train of gearing, means operatively connecting said gearing to said sounding devices, resilient operating means for driving said gearing, means for creating tension in said gearing ready for operating said sounding devices, a frame provided with a lug engaging one member of said gearing means for holding said gearing against operation until a predetermined temperature is reached, and thermostatic control devices for releasing said holding means.

1,823,723. DICTATION MACHINE. ALFRED V. BODINE, Fairfield, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Sept. 21, 1927. Serial No. 220,939. 10 Claims. (Cl. 274—17.)



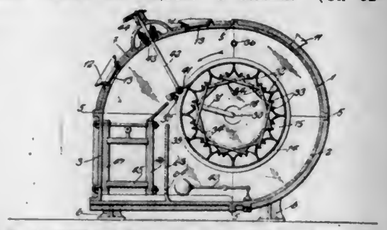
1. In a dictation machine, the combination of a machine frame; stop-and-start mechanism on the frame; reproduction repeating mechanism on the frame; and a control unit located at a point remote from the dictation machine and comprising a base for supporting it on the floor, a pair of separately operable pedals mounted in predetermined positions on said base in close proximity to each other, and flexible connections between said control device and said stop-and-start mechanism and said reproduction repeating mechanism.

1,823,724. MUSICAL INSTRUMENT. WENDELL L. CARLSON, Camden, N. J., assignor to General Electric Company, a Corporation of New York. Filed May 22, 1930. Serial No. 454,788. 7 Claims. (Cl. 84—1.)



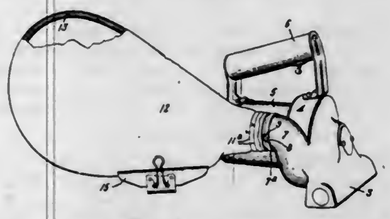
1. The combination, in a system for electrically producing music of an oscillator adapted to produce radio frequency oscillations having frequencies corresponding to a fundamental and certain of the harmonics thereof, a second oscillator adapted to produce radio frequency oscillations having frequencies corresponding to a fundamental and certain of the harmonics thereof, the fundamental of the second oscillator differing in frequency from the fundamental of the first oscillator by an amount corresponding to a desired tone, means for controlling the frequency of one of said oscillators thereby to vary the tone produced, means for producing beat frequencies between oscillations from said oscillators, and means for independently controlling the intensity of the fundamental and of each of said harmonics produced by one of said oscillators thereby to control the quality of the tone produced.

1,823,725. REFRIGERATING APPARATUS. SAMUEL C. CARNEY, Tulsa, Okla., assignor to Shell Petroleum Corporation, a Corporation of Virginia. Filed Dec. 7, 1925. Serial No. 73,851. 8 Claims. (Cl. 62—106.)



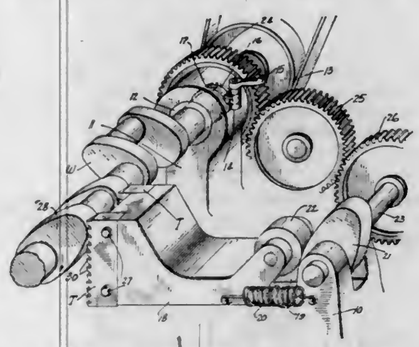
1. In a refrigerating apparatus, the combination of a hermetically sealed housing, a hollow drum adapted to be rotated in the housing, means for admitting a liquid refrigerant to the interior of said drum, means for maintaining a relatively small amount of liquid refrigerant against a relatively large area of the interior wall of the drum, means for admitting a liquid to be frozen to the exterior of said drum, means for removing the frozen liquid from the exterior of the drum, and means for compacting and removing the frozen liquid in cake form from said housing.

1,823,726. BAG SUPPORT FOR VACUUM CLEANERS. JESSE F. CARSON, Cleveland, Ohio, assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio, a Corporation of New York. Filed June 6, 1927. Serial No. 196,744. 6 Claims. (Cl. 183—51.)



1. In a vacuum cleaner having a suction nozzle, a driving motor, a stationary operating handle attached to the cleaner directly above the driving motor, a discharge conduit above the plane of the nozzle, and a relatively long, thin dust bag, a means for supporting the bag and connecting the same with the discharge conduit, said means comprising a fitting secured to the neck of the bag and releasably connecting the latter to the end of the discharge conduit in one definite position with the bag extending rearwardly in the direction of its length, and a spring located within the bag and bent to form a loop which stands in a plane at substantially a right angle to the plane of the nozzle and the ends of which are secured to the fitting, the spring being of such strength and the loop being of such size that the bag is entirely supported thereon from the fitting and held in a distended flat condition away from the handle and wholly above the plane of the nozzle, said spring being secured to and removable with the fitting.

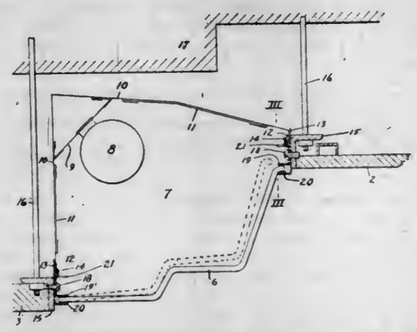
1,823,727. MACHINE TOOL. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 14, 1929. Serial No. 362,961. 16 Claims. (Cl. 82—9.)



1. In a lathe, the combination with a work holder and means for rotating it, of a tool holder mounted to move substantially in a right line toward and from the work and substantially normal to the work rotating axis, means for causing reciprocating movement of the tool holder synchronously with each revolution of the work holder, and a tool mounted on the tool holder and having plural cutting points arranged in line substantially normal to the line of reciprocation of the holder.

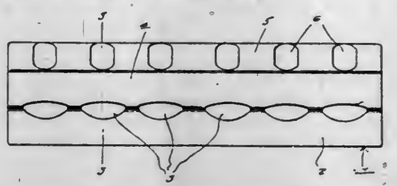
14. In a lathe for machining cams or the like, the combination of a rotary work holder, a tool having a plurality of cutting teeth arranged substantially in line and tangential to the work, a holder for said tool, and means for reciprocating the holder and tool in timed relation to the rotation of the work in a path normal to the line of said teeth whereby the different teeth of the tool engage the work in predetermined sequence in each revolution of the work, one tooth cutting on the work nearest the axis of rotation thereof and teeth on either side of said tooth cutting on the work at points more remote from said axle, whereby an irregular shape is formed.

1,823,728. HORIZONTAL ILLUMINATING MEANS. KENNETH R. CRUMPTON, Pittsburgh, Pa., assignor to Kaufmann Department Stores, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1930. Serial No. 487,254. 4 Claims. (Cl. 240—1.)



1. In ceiling illumination, spaced apart parallel frames at each side of an intervening cavity and a series of lamps therein, mounting means for the several panels in continuous alinement, and means for supporting one of said panels above the series providing for temporary removal of one panel thereof to permit lateral shifting of the others.

1,823,729. SMOKING PIPE RACK. MYRON DE BUSSEY, Pasadena, Calif. Filed Dec. 26, 1929. Serial No. 416,624. 1 Claim. (Cl. 131—51.)



A smoking pipe rack of the character described comprising a flat substantially rectangular elongated base having a rounded corner portion and further having a series of longitudinally spaced substantially oval pockets in its upper face adjacent its forward side, said pockets being deepest at a point remote from the rounded corner of the base and extending to said rounded corner, an integral vertical, upstanding back member on the rear marginal portion of the back, an integral forwardly extending lip on the upper end of the back member, said lip being provided with a series of longitudinally spaced notches for the reception of the stems of the pipes and adapted to coact with the pockets in the base portion for supporting the pipes in an inclined position.

1,823,730. FLOAT FOR FLYING MACHINES. CLAUDE DORNIER, Friedrichshafen-on-the-Bodensee, Germany, assignor of one-half to the Firm Dornier-Metallbauten G. m. b. H., Friedrichshafen-on-the-Bodensee, Germany. Filed Oct. 22, 1928, Serial No. 314,255, and in Germany Jan. 12, 1928. 3 Claims. (Cl. 244—2.)



1. Float for flying machines comprising a substantially rigid hollow float body, a permanently active, highly elastic covering mounted on the outer surface of the bottom and part of the side walls of said float body and means disengageably attached to said float body for holding said covering in contact with said float body.

1,823,731. VARIABLE CAPACITY RESERVOIR. EUGENE D. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 31, 1929. Serial No. 382,462. 12 Claims. (Cl. 137—71.)



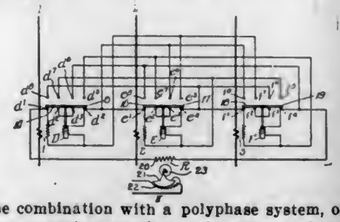
1. A cellular element comprising a pair of disks which are united at their peripheries to form a chamber, each of said disks having a series of concentric corrugations which progressively increase in depth and radius of curvature toward their peripheries, the low portions of the corrugation on one disk being in concentric register with similar portions on the other disk so that when the disks occupy their inner positions the said low portions contact to form a mutual support for the disks, a container which completely encloses the element, and means located within the container with which the high portions of said corrugations engage to limit the outward movements of the walls of the disks.

1,823,732. FLOWER VASE. HENRY A. FOSTER, Des Moines, Iowa. Filed Jan. 19, 1928. Serial No. 247,823. 1 Claim. (Cl. 47—41.)



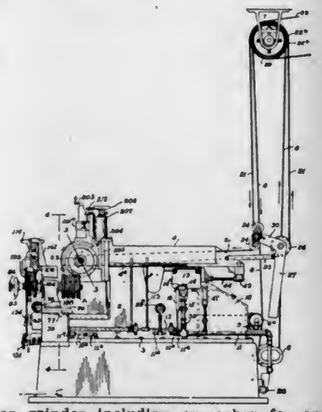
In a device of the class described, a vase, a dove-tailed groove member secured on the side of said vase, a stop member for enclosing the top of said dove-tailed groove, and a flat spike member having one of its ends capable of entering said groove and engaging said stop and its other end designed to be inserted in the ground.

1,823,733. APPARATUS FOR PROTECTION OF POLYPHASE ELECTRICAL SYSTEMS. ERNST HERMANN FREY, Innertkirchen, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company. Filed Sept. 2, 1926, Serial No. 133,276, and in Germany Sept. 7, 1925. 4 Claims. (Cl. 171—119.)



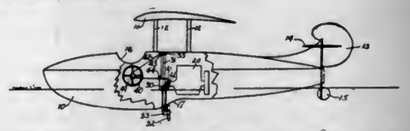
1. The combination with a polyphase system, of a regulator for governing supply to the system, detecting devices operable independently from respective phases of the system for cutting in the regulator, and connections whereby one of the detecting devices cuts out another.

1,823,734. GEAR GRINDER AND THE LIKE. ORLANDO GARRISON, Dayton, Ohio; Anna Marie Garrison, administratrix of said Orlando Garrison, deceased, assignor to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed Apr. 22, 1926, Serial No. 103,801. Renewed Aug. 27, 1930. 30 Claims. (Cl. 51—52.)



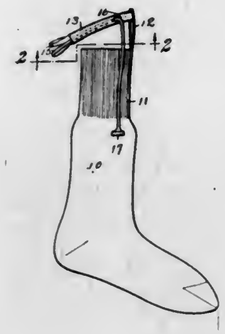
1. A gear grinder including an arbor for supporting gears rotatably, a master gear operably associated with the arbor, a grinder wheel operable reciprocally to traverse the gear teeth in the axial plane of the gear, a carriage for moving the gears at right angles to their axial plane, a primary hydraulic motor for moving the carriage reciprocally, and a secondary hydraulic motor operably associated with the primary motor for indexing the gears upon completion of each reciprocation of the carriage.

1,823,735. AIRPLANE. JONATHAN P. GLASBY, Verona, N. J. Filed Dec. 17, 1927. Serial No. 240,654. 8 Claims. (Cl. 244—2.)



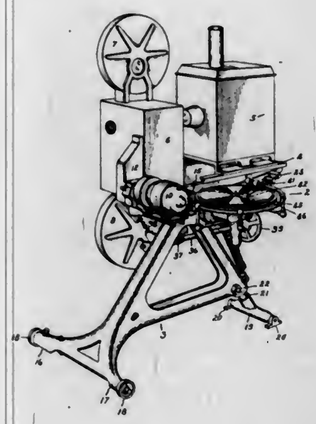
1. An aircraft having a flying boat hull, wings for flying through the air, and a water propeller disposed substantially in the transverse vertical plane of the center of lift of the wings.

1,823,736. HOSIERY. NATHAN J. GOODMAN, St. Louis, Mo., assignor to Courtney S. Goodman, St. Louis, Mo. Filed June 8, 1928. Serial No. 283,950. 4 Claims. (Cl. 2—240.)



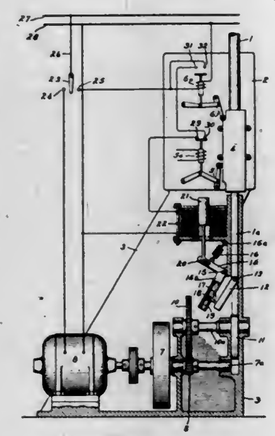
1. A hose comprising a body portion, an extension carried by said body portion at its upper end, a pair of tubular members having flattened ends carried by said extension and each having openings in the walls thereof adjacent said extension, said members being closed for a portion of their length only, the remainder being in the form of a longitudinally open tube, forming supporter members, the end of one of said supporter members being threaded through the opposite tubular member and passing out through the opening in the wall thereof whereby said supporter members will pass twice around the leg of a wearer and the ends tied so as to hold said members in adjusted position on the leg.

1,823,737. MOTION PICTURE-SOUND APPARATUS. CHARLES L. HEISLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1929. Serial No. 350,404. 6 Claims. (Cl. 88—16.2.)



2. In combination, a base having a mounting head, a motion picture projector and a phonograph turntable mounted on said head for separate adjustment on a common axis, a driving motor secured to said projector and a drive shaft connection between the motor and the turntable.

1,823,738. CIRCUIT CLOSING MECHANISM. JOHN D. HILLIARD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 1, 1929. Serial No. 375,140. 14 Claims. (Cl. 175—375.)



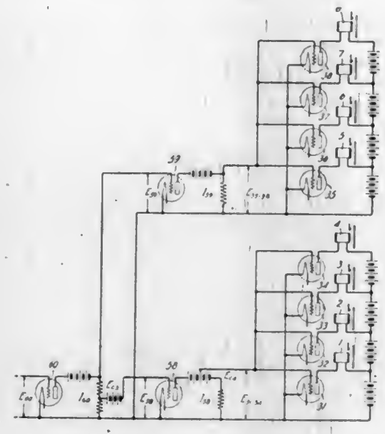
1. A circuit closing system comprising a switch operating member, a rotatable member, means effecting rotation of said member, a disengageable connection between said rotatable member and said switch operating member, and means controlling said connection in accordance with a circuit controlling position of said operating member, the kinetic energy of said rotatable member being effective to actuate said switch operating member through said connection.

12. A circuit closing system comprising in combination, a switch operating member, relay-controlled locking means for restraining said operating member in its open position, a rotatable member, a cam driven by said rotatable member, a thrust-transmitting member interposed between said cam and switch operating member for transmitting motion to said switch member, said thrust-transmitting member normally biased out of engagement with said cam, an electric motor for bringing said rotatable member up to a predetermined speed, an electromagnet for biasing said thrust-transmitting member into a cam-engaging position, and circuit controlling means for sequentially deenergizing said electric motor, releasing said locking means and energizing said electromagnet to bias said thrust-transmitting member into said cam-engaging position, whereby the kinetic energy of rotation of said rotatable member is utilized to cause closing movement of said switch operating member.

1,823,739. SYSTEM OPERATING ON A MARGINAL CURRENT BASIS. JOSEPH W. HORTON, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 31, 1928. Serial No. 266,191. 13 Claims. (Cl. 177—353.)

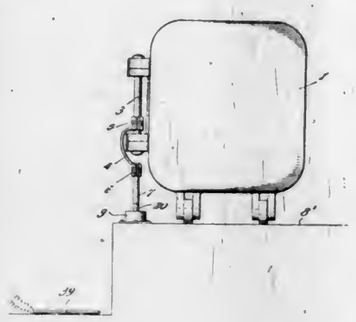
13. A voltage discriminating system which comprises a group of marginally biased electron discharge valves in parallel connection with a variable voltage source, the input circuit of each of said valves connected to an interstage resistance of a different value, other marginally

biased electron valves having their input circuits in parallel connection with the output circuit of each of said



first mentioned valves and means to be controlled connected in the output circuits of each of the said second mentioned valves.

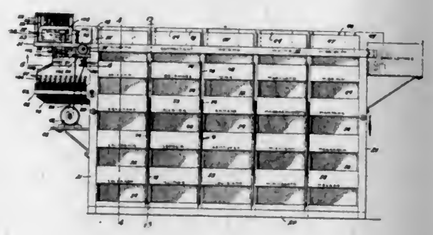
1,823,740. BURGLAR ALARM FOR SAFES. FRANK L. HUSTED and HUGH C. HUSTED, Hicksville, Ohio. Filed June 11, 1927. Serial No. 198,185. 1 Claim. (Cl. 177—316.)



The combination with a safe and its door hinge bolt, a switch located adjacent the safe, a signal in circuit with the switch, a shaft for the switch, a rod, said rod being detachably connected to the shaft, means connecting the bolt and rod in alignment for holding the switch open when the safe door is closed, and yieldable means for operating the shaft to close the switch upon removal of the bolt from engagement with the rod.

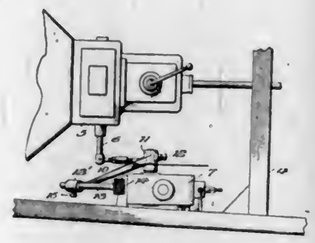
1,823,741. MAIL DISTRIBUTING MACHINE. AUGUST IELFIELD, Silver Creek, N. Y., assignor to Ielfield Postal Supply Co., Inc., Forestville, N. Y., a Corporation of New York. Filed Nov. 19, 1927. Serial No. 234,414. 13 Claims. (Cl. 214—11.)

1. In a mail distributing machine, a continuously movable horizontal belt having an upper and a lower stretch, means for feeding a letter in a vertical position to the upper stretch of said belt, a plurality of guards arranged in spaced relation along opposite sides of the upper stretch of said belt and cooperating to maintain the vertical position of said letter, the rear ends of each of said guards projecting inwardly over said belt, a plurality of primary gates arranged between said guards and pivotally mounted to swing about vertical axes, a vertical chute associated with each of said primary gates, a plurality of receptacles associated with each of said chutes, a second-



ary gate associated with each of said receptacles and adapted to deflect the letter from the chute into the receptacle, the front end of each of said primary gates being normally arranged immediately in rear of the inwardly projecting rear end of one of said guards, and being movable to an open position in which its front end is arranged in rear of the inwardly projecting rear end of a guard on the opposite side of the belt, and means for selectively actuating said gates to effect the discharge of said letter into one or another of said receptacles.

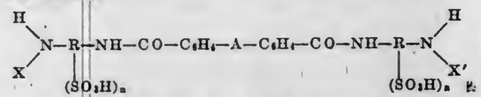
1,823,742. COMBINED CLUTCH AND BRAKE PEDAL FOR MOTOR VEHICLES. ANDREW S. JOHNSON, BERNARD M. JOHNSON, and AUBREY P. JOHNSON, Bedford, Va. Filed Jan. 27, 1930. Serial No. 423,724. 2 Claims. (Cl. 192—13.)



1. In combination with a clutch and hydraulic brake operating mechanism, embodying a master cylinder with a projecting brake controlling shaft, the outer terminal of which is square in cross-section; a brake and clutch operating lever, an intermediate part of which is formed to provide a sleeve, the bore of which complements the master cylinder shaft to permit engagement of the sleeve with the latter, means extending through said sleeve for impingement with the squared end of the shaft, and means for engaging one end of the lever with the clutch.

1,823,743. COMPOUNDS HAVING AN AFFINITY FOR COTTON AND BEING DIAZOTIZABLE ON THE FIBER. GEORG KALISCHER, Frankfort-on-the-Main, and WERNER LANGE, Dessau-Ziebigk in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 16, 1929, Serial No. 340,654, and in Germany Jan. 18, 1928. 20 Claims. (Cl. 260—69.)

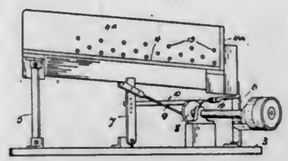
3. As new products, the compounds which have an affinity for cotton, are diazotizable on the fiber and are salts of sulfonic acids probably corresponding to the general formula:



wherein R represents a radicle of a compound of the benzene series or a radicle of the naphthalene series, wherein A represents an atomic linkage of the group consisting of

wherein X and X' stand for hydrogen or, bound to the nitrogen by a ·CO· group, for a radicle of a compound of the benzene series of a radicle of the naphthalene series, said radicle bearing a terminal NH_2 group, and wherein n means the number 1 or a whole number greater than 1.

1,823,744. JOGGING MACHINE. JOSEPH FREEBURY KING, Brighton, Victoria, Australia. Filed June 27, 1928, Serial No. 288,779, and in Australia Mar. 19, 1928. 10 Claims. (Cl. 271—89.)



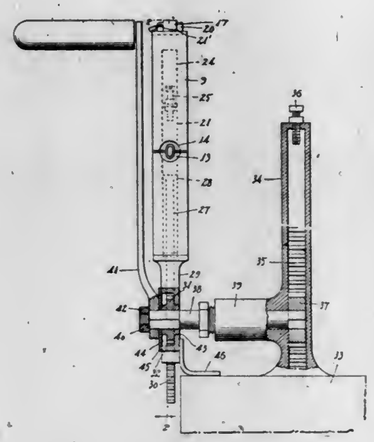
1. In a jogging machine, an inclined tray having two sides, legs of flat spring metal supporting the tray, a pivotally mounted pillar below the tray connected thereto at the rear, and means for rocking the pillar to cause the springy legs to flex and then to react to return the tray to its original position.

1,823,745. RAIL COUPLING. WASHINGTON A. KNOX, Hereford, Tex. Filed Oct. 13, 1930. Serial No. 488,431. 3 Claims. (Cl. 238—221.)



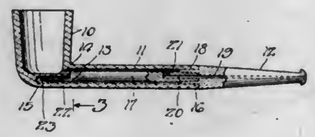
1. A coupling for the confronting ends of railway rails, comprising a sleeve including a base having inwardly directed flanges at the edges thereof which terminate in upstanding plates, the spaces between the flanges and the base of the sleeve being of a size to receive the base flanges of the confronting ends of rails therein, one of the upstanding flanges being of a greater height than the other and designed to contact with the outer faces of the heads of the rails and have its upper edge in a plane with that of the heads of the rails, filler plates filling the fishing spaces of the rails and contacting with the inner faces of the upstanding flanges and means comprising bolts and nuts for securing the rails to the upstanding flanges and filling plates.

1,823,746. INDICATOR. JESSE D. LANGDON, Los Angeles, Calif., assignor to Langdon Engineering Corporation, Los Angeles, Calif. Filed Dec. 15, 1927. Serial No. 240,299. 7 Claims. (Cl. 235—94.)



1. An indicator comprising an elongated case, an indicating slide slidable longitudinally therein, a second slide also slidable longitudinally in the case, said slides having cooperable ratchet means for advancing the indicating slide step by step by the reciprocation of the second slide, and an actuating member entering the case and slidable longitudinally therein, the actuating member and second slide having cooperable portions adapted to contact at the limits of movement of the actuating member to reciprocate the second slide, the second slide having a short and the actuating member having a long reciprocatory movement.

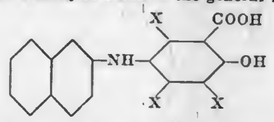
1,823,747. SMOKER'S PIPE. ANTON N. LARSEN, Wauconda, Ill. Filed Feb. 2, 1931. Serial No. 512,954. 2 Claims. (Cl. 131—12.)



1. In a smoker's pipe including a stem and a bowl having a throat leading from the bowl to the stem and having a recess therein below said throat, a mouthpiece, and a member carried by the mouthpiece having a passage therein communicating with the mouthpiece and said throat and including a finger normally disposed in said recess but insertable into said throat to dislodge foreign matter therefrom.

1,823,748. NAPHTHYLAMINE CARBOXYLIC ACID DERIVATIVES AND PROCESS OF MAKING SAME. LEOPOLD LASKA and OSKAR HALLER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1929, Serial No. 345,584, and in Germany Mar. 6, 1928. 7 Claims. (Cl. 260—109.)

3. As new compounds the 1 (2'-naphthylamino)-4-hydroxy-phenyl carboxylic acids of the general formula:



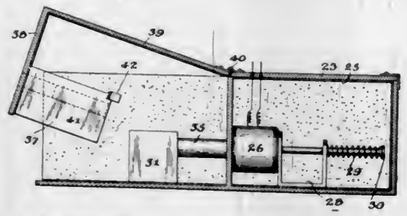
wherein one X means halogen or an alkyl group, the other X's mean hydrogen, which compounds are colorless crystallized substances, having a definite melting point, soluble in alkalies, yielding a reddish to bluish color by mixing their alcoholic solution with ferric chloride.

1,823,749. MECHANICAL TOY. LOUIS MARKOWITZ, Indianola, Pa. Filed Nov. 1, 1930. Serial No. 492,821. 1 Claim. (Cl. 46—40.)



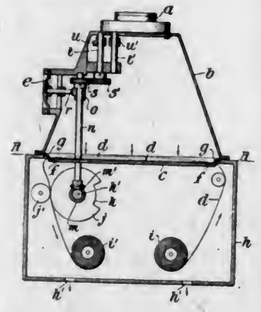
A toy of the class described comprising a casing, figures provided with movable legs and arms arranged on the casing, a crank shaft journaled in the casing, yokes, links connecting the bights of the yokes with the cranks of the shaft, the yokes passing through the top of the casing, means for connecting the limbs of the yokes with the legs and arms of the figures so that vertical movement of the yokes will impart motion to the said legs and arms, a second shaft journaled in the casing, gearing connecting the two shafts together, a fly wheel outside of the casing and on the second shaft and a string connected with the second shaft and wound next to the balance wheel on the shaft, whereby a pull on the string will rotate the shafts and thus motion is imparted to the figures.

1,823,750. ANTIROBBERY MACHINE. MAURICE W. MCMULLEN, Waterloo, and HARRY P. HANSEN, Mason City, Iowa. Filed Dec. 11, 1930. Serial No. 501,743. 5 Claims. (Cl. 102—1.)



1. In a protective device for banks and the like having operating means at various stations throughout the bank, a device for releasing tear gas located in the bank and subject to operation by said operating means and comprising a container, separable interfitting blocks in said container, one of said blocks being movable away from the other block and having a firing chamber therein, a firing pin in the other block, and means in said chamber operated through said operating means for striking said firing pin.

1,823,751. ROLL-FILM CAMERA. OSKAR MESSTER, Dahlen, near Berlin, Germany. Filed Nov. 13, 1929, Serial No. 406,932, and in Germany Dec. 10, 1926. 2 Claims. (Cl. 88—17.)

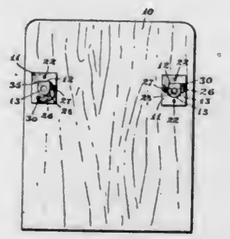


1. In a roll-film camera, a camera body having a lens and a shutter mounted therein, a rear box portion on the camera body, actuating means for periodically advancing and stopping the films before the lens, coordinating means for operating the shutter and creating an air pressure in the camera body while the film is in a halted position, comprising a revoluble shaft in engagement with the film actuating means, a diaphragm having a piston attached thereto, a cam on the shaft making contact with the piston and connecting means between the cam and said shutter.

1,823,752. METHOD OF REFINING THE SOAP FLOATING ON THE WASTE-LIQUORS OBTAINED IN THE MANUFACTURE OF SULPHATE- OR SODIUM CELLULOSIC AS WELL AS SULPHITE WASTE-LIQUOR. CARL HENRIK MICHELSON, Abo, Finland. Filed Apr. 19, 1929, Serial No. 356,619, and in Finland May 9, 1928. 13 Claims. (Cl. 87—2.)

1. In a process of recovering fatty and resinous acids from the so-called "soap" floating on the waste-liquors obtained in the manufacture of sulphate- or sodium cellulose, the step which comprises treating the said "soap" with sulphite waste-liquor.

1,823,753. TYPEWRITER FASTENER. HENRY JOHN MUHLFELD, New York, N. Y. Filed Nov. 19, 1930. Serial No. 496,782. 11 Claims. (Cl. 248—16.5.)

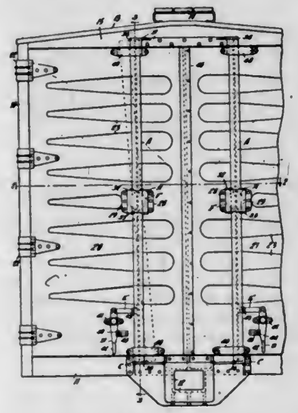


1. In a fastener for typewriters, a plate having an opening with a flange parallel with the body of the plate, there being an opening in the flange over the opening in the body of the plate, a stud adapted to depend from a typewriter and having two flanges for disposal in the openings respectively, and a locking means for movement between the plate and the flange for disposal between the flanges on the stud.

1,823,754. PROCESS OF MAKING LEATHER. CHOJIRO NITTA, Osaka, Japan. Filed Mar. 31, 1930, Serial No. 440,359, and in Japan Nov. 21, 1929. 1 Claim. (Cl. 149—4.)

A process for making leather to be used for the coating of the woolen cloth under surface of rollers for spinning machines, comprising treating the tanned animal skin with its hair side untouched in water with rice bran, drying the skin after the treatment, rubbing the skin after it is dried to soften the same, removing the rough upper layer of the hair side of the skin, calendering the ground surface, and shaving the flesh side of the skin to the required thickness and to make the surface rough so as to be easily adhered to the said woolen cloth.

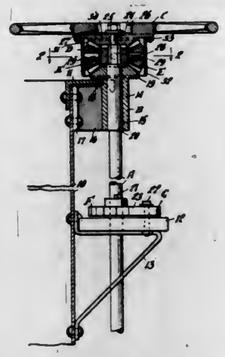
1,823,755. DOOR CONSTRUCTION. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 321,855. 7 Claims. (Cl. 292—214.)



1. In a door construction, the combination with a member having a door opening; of a door hinged along one vertical edge to said member; keepers fixed to said member above and below said door; and a locking bar pivoted on said door to swing in a plane parallel thereto and having the top and bottom edges thereof cooperating with the keepers to lock said door, said bar being disposed parallel to the pivotal axis of the hinged edge of the door when in locking engagement with the keepers, said bar having a vertically extending web and a vertically extending flange, said flange being disposed in a plane parallel to the face of the door and said web being disposed in a plane at an angle to the door to brace said flange.

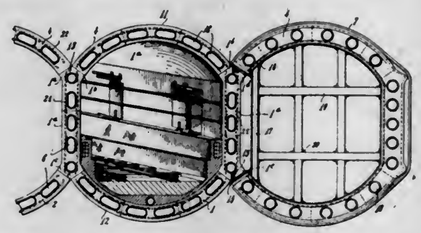
1,823,756. HAND BRAKE. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 18, 1929. Serial No. 407,911. 1 Claim. (Cl. 74—119.)

In a hand brake, the combination with a vertical brake staff; of a supporting bracket having a bearing formed integral therewith, in which said staff is journaled; a hand wheel, said hand wheel having an upper portion which is journaled on the staff; a beveled gear member formed integral with the bracket; a spider fixed to said staff and having radially projecting trunnion means thereon; a beveled gear freely rotatable on each trunnion means and meshing with said first named bevel gear; a beveled gear freely rotatable on each trunnion means and



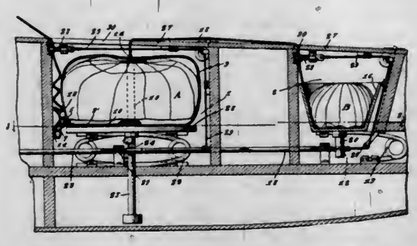
meshing with said first named bevel gear; a beveled gear fixed to said hand wheel hub member and rotatable therewith, and meshing with said second named gears; and a housing fixed to said hub section of the hand wheel and enclosing all of said gears.

1,823,757. SUBWAY AND TUNNEL. JOHN F. O'ROURKE, New York, N. Y. Filed May 13, 1926. Serial No. 108,714. 20 Claims. (Cl. 61—45.)



1. A tunnel located under ground and exterior means thereon for slidably connecting thereto a shield for a parallel contiguous tunnel.

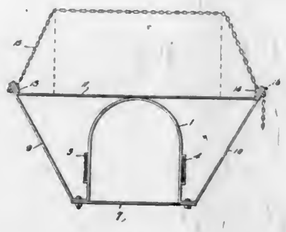
1,823,758. SAFETY DEVICE FOR AEROPLANES. FRANK R. OWENS, Beaver Crossing, Nebr. Filed Nov. 3, 1930. Serial No. 493,148. 2 Claims. (Cl. 244—21.)



1. In combination with an aeroplane having a pair of chambers therein, a large parachute in one chamber, a small parachute in the other chamber, a sack enclosing the large parachute, a cable connecting the small parachute with the top of the sack, a cable connecting the large parachute with the plane, a fastener for closing the bottom of the sack with the parachute enclosed therein, means for connecting the fastener with the cable connected to the

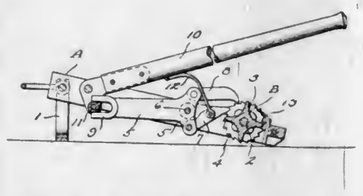
plane whereby said cable will release the fastener when the cable is tightened by the lifting of the sack by the small parachute, manually operated means for throwing the small parachute from the plane and for partly moving the sack from its chamber.

1,823,759. MAIL BOX ATTACHMENT. SVEND PETERSEN, Askov, Minn. Filed Feb. 24, 1930. Serial No. 430,937. 4 Claims. (Cl. 232—33.)



1. A supplementary mail holder for mail boxes including an attaching frame provided with box embracing members, and a parcel supporting frame supported by the attaching frame, the supporting frame being disposed in a position above a box to which the attaching frame is applied, said supporting frame being connected with the embracing members and retaining the latter in spaced relation, said attaching frame including members connecting the embracing members, and having the edges thereof turned over.

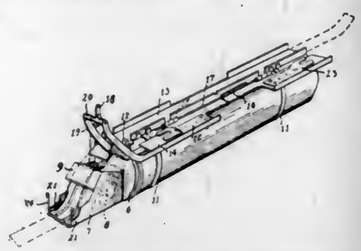
1,823,760. CHAIN OR CABLE JACK. ELMER PIERCE, Brazil, Ind. Filed Mar. 3, 1928. Serial No. 258,971. 4 Claims. (Cl. 254—164.)



1. A device of the class described comprising a frame, a rotary member carried thereby, ratchet wheels carried by the rotary member, a lever having an enlarged end pivoted in the frame, a lower set of dogs pivoted to the enlarged end, an upper set of dogs pivoted to the enlarged end, said dogs engaging the ratchet wheels when the lever is rocked, a hand lever pivoted in the frame and having a part engaging the lever for rocking the same when the hand lever is rocked, a handle connected with the lower set of dogs, and a curved upright member carried by the frame in rear of the rotary member for causing the loose end of a chain to leave the rotary member.

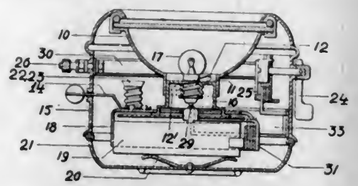
1,823,761. HAND TAPE MOISTENER. JAMES F. PORTER, New York, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1929 Serial No. 410,756. 12 Claims. (Cl. 91—62.5.)

1. A hand tape moistener comprising an elongated water receptacle, a moistening device, a support for said moistening device secured to said receptacle and extending forwardly thereof, a guideway for tape extending longitudinally of said receptacle, said guideway comprising an open trough or channel member, a removable cover adapted to close the same, and means secured to said cover



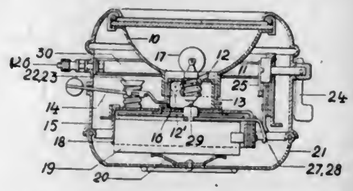
and extending forwardly beyond said moistening device for engagement with the tape to hold the same in contact with said moistening device.

1,823,762. ELECTRIC REFLECTOR LAMP. PAUL RATHMANN, Bodenbach, Czechoslovakia, assignor to Firm Elektrotechnische Fabrik Schmidt & Co., Gesellschaft m. b. H., Bodenbach, Czechoslovakia. Filed May 31, 1930, Serial No. 458,613, and in Czechoslovakia Nov. 27, 1929. 2 Claims. (Cl. 240—10.69.)



1. An electric reflector lamp comprising a reflector having a sleeve, a casing for the said reflector, a slot in said casing, an incandescible lamp adjustable along the axis of the said reflector, and means for adjusting the lamp along the axis of the said reflector, the said means comprising a lamp socket slidably mounted in the said reflector sleeve, a pin and inclined slot connection between the reflector sleeve and the lamp socket, a hand lever secured to the lamp socket and adapted upon actuation to move the lamp socket axially in relation to the reflector sleeve, the said hand lever projecting exteriorly of the casing, and an adjustable abutment for the said hand lever slidably mounted in the slot in the casing through which the hand lever passes.

1,823,763. ELECTRIC REFLECTOR LAMP. PAUL RATHMANN, Bodenbach, Czechoslovakia, assignor to Firm Elektrotechnische Fabrik Schmidt & Co., Gesellschaft m. b. H., Bodenbach, Czechoslovakia. Filed May 31, 1930, Serial No. 458,614, and in Czechoslovakia Nov. 27, 1929. 2 Claims. (Cl. 240—10.69.)

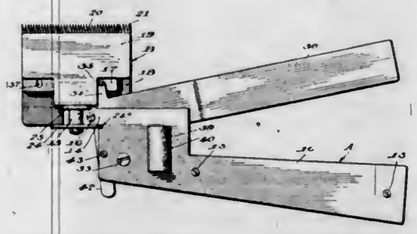


1. An electric reflector lamp, comprising a reflector having a sleeve, a casing for the said reflector, a slot in said casing, an incandescible lamp adjustable along the said axis of the reflector, and means for adjusting the incandescible lamp along the said axis of the reflector, the said means comprising a bush mounted between the lamp

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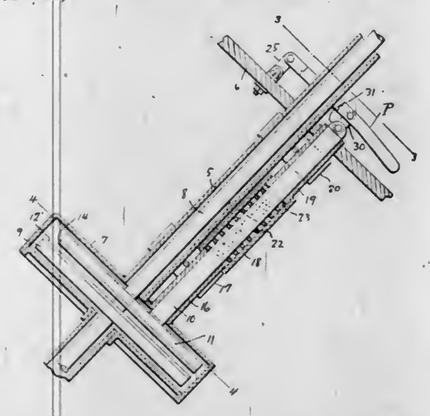
socket and the reflector sleeve, a pin and inclined slot connection between the reflector sleeve and the said bush, the latter being immovable axially but rotatable with respect to the lamp socket, a hand lever secured to the bush and adapted upon actuation to move the lamp socket axially in relation to the said sleeve, the said hand lever projecting exteriorly of the casing, an adjustable abutment slidably mounted in the slot of the casing through which the hand lever passes, the abutment defining that position of the hand lever in which the lamp filament is in the focus of the reflector, and means tending to urge the lamp socket forwardly of the reflector, the said bush tending to resist said last mentioned means.

1,823,764. HAIR CLIPPER. FRANK F. REICH, Rapid City, S. Dak. Filed Jan. 27, 1931. Serial No. 511,599. 12 Claims. (Cl. 30—1.)



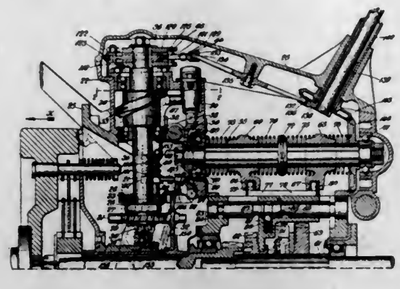
1. In a clipper, a handle having a sleeve carried at the forward end thereof, a clipper head including a guard shoe, spaced upstanding flanges formed rearwardly of said shoe, a pivot bolt extending between said flanges and through said sleeve whereby to pivotally secure said head to said handle, horizontal slots formed at either side of one of said flanges, and a locking detent carried by said handle to engage in a selected one of said recesses whereby to lock said head in fixed relation to said handle.

1,823,765. STEERING ROD BRAKE FOR AUTOMOBILES. LUTHER C. RITNOUR, Natchez, Miss. Filed Mar. 31, 1930. Serial No. 440,429. 1 Claim. (Cl. 74—39.)



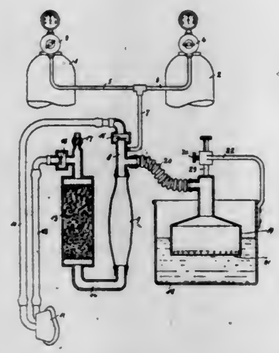
An automobile steering column having a housing incorporated therein, a steering shaft in the column, a disk on the steering shaft within the housing, a second disk within the housing, a rod slidable through the housing and connected with the second disk, and means for operating the rod so that the second disk may be brought into braking engagement with the first disk.

1,823,766. GEAR CHANGING APPARATUS. RICHARD MATTHEWS RUCK, Leamington, England. Filed Mar. 19, 1930, Serial No. 437,189, and in Great Britain Mar. 25, 1929. 7 Claims. (Cl. 74—59.)



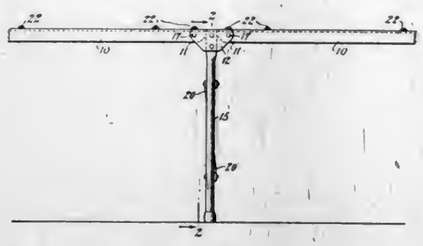
2. Gear-changing mechanism for a vehicle, comprising a plurality of cylindrical cams, a shaft, a pair of pawl-levers each mounted on a rocking-shaft, three arms formed on said pawl-levers, a main-cam fast on a cam-shaft driven continuously by the engine, a star-wheel fast on the shaft on which are mounted said cylindrical cams, a clutch control shaft an arm on said clutch-control shaft, means for rocking the one or the other of said pawl-levers so that, when the one or the other of said pawl-levers is rocked, the first engages the face of said main-cam, the second engages between two adjacent teeth on the star-wheel so that the sliding movement imparted to the pawl-lever by the engagement of the first arm with the main cam imparts a rotational movement to said star-wheel and the third arm engages said arm projecting from said clutch control shaft so that the clutch may be withdrawn automatically immediately before a change in gear is effected.

1,823,767. APPARATUS FOR ADMINISTERING ANESTHETIC AND NUTRIENT GAS UNDER PRESSURE. HANS WILHELM CHRISTIAN SCHROEDER, Lubeck, Germany, assignor to Dragerwerk, Lubeck, Germany. Filed Mar. 22, 1928, Serial No. 263,799, and in Germany May 24, 1927. 5 Claims. (Cl. 128—203.)



1. An apparatus adapted for use in administering anesthetics in substantially gaseous state under pressure, comprising a breathing circuit, a supply of gas under pressure communicating with said breathing circuit, a bell of relatively large size connected with the breathing circuit, a liquid containing receptacle, and means for supporting said bell within the liquid containing receptacle in fixed relation with respect to said receptacle.

1,823,768. LOCK FOR COLLAPSIBLE COTS. WILLIAM SECUNDA, Brooklyn, N. Y. Filed May 8, 1930. Serial No. 450,794. 1 Claim. (Cl. 5—111.)

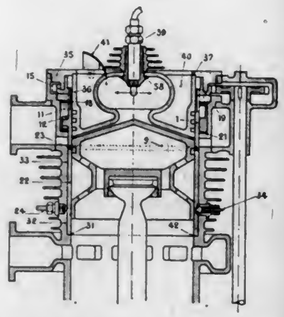


In a collapsible cot, a side rail comprising two aligned and spaced-apart body members, each composed of angle iron with the horizontal flange directed inwardly of the cot, the horizontal flanges of both members cut away near their adjacent ends to form edge abutments perpendicular to the length of the body members and the vertical flanges of both members directed downwardly, an outer bracket overlying the adjacent ends of the vertical flanges on the outer side of the body members consisting of a flat plate having its upper edge flush with the upper surface of the horizontal flanges of the body members, a vertical leg rigidly connected to the inner face of said bracket, the upper connected portion of the leg being flat and equal in thickness to the vertical flanges of the body portions and being abutted on each vertical edge by an end of one of the said vertical flanges, the upper extremity of the leg being flush with the upper edge of said bracket, an inner bracket member lying opposite the outer bracket member and composed of a short length of angle iron with its vertical flange directed downwardly and overlying the inner face of the vertical flanges of the body members and with its horizontal flange in the same plane as the horizontal flanges of the body member and having its ends abutting the said abutment edges of the horizontal flanges, pivot members, one on each side of the leg, each pivot member passing through both bracket members and the interposed vertical flange of a body member whereby said flange is pivoted between the brackets, the adjacent lower corners of such flanges being cut away to permit downward folding only of the body members, the cot adapted to receive a tensioned fabric above the level of the pivots whereby when the cot is extended the end of the vertical flange of each body member will be held resiliently locked against an edge of the flattened part of the leg and the abutments of the horizontal flanges resiliently locked against the horizontal flange of the inner bracket member.

1,823,769. MANUFACTURE AND PRODUCTION OF ARTIFICIAL THREADS, FILAMENTS, BANDS AND THE LIKE. WILLIAM HENRY STOKES, Coventry, England, assignor to Courtaulds Limited, London, England. Filed Nov. 30, 1927, Serial No. 236,880, and in Great Britain Jan. 15, 1927. 5 Claims. (Cl. 18—54.)

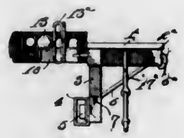
2. In the production of artificial threads, filaments, bands and the like consisting of cellulose or a compound of cellulose, and containing in addition thereto one or more finely divided liquid or solid bodies which are more or less evenly distributed in the cellulose or cellulose compound, a process comprising the following steps: first filtering and removing the air from the spinning solution, then passing the filtered and de-aerated spinning solution towards the spinning machine, and during this passage, while the spinning solution is no longer in bulk, adding the filtered and de-aerated mixture containing the said body and a small quantity of the spinning solution, and then mixing the whole while avoiding any introduction of air into the said solution, and passing the mixture thus obtained to the spinning machine.

1,823,770. ENGINE OF THE TWO-STROKE TYPE. EUGÈNE HENRI TARTRAIS, Montmorency, France. Filed Nov. 26, 1929, Serial No. 409,890, and in France Nov. 26, 1928. 19 Claims. (Cl. 123—65.)



8. In an internal combustion engine of the two-stroke type, whose cylinders are provided with a row of exhaust ports which are uncovered by the piston at the end of its stroke, and with a row of ports for the admission of fresh fuel at the other end of said cylinder, a cylindrical slide valve adapted to open and close said admission ports by a sliding reciprocating motion, a cam having an outlined portion cooperating with rollers in order to produce the sliding motion of said valve, abutment means cooperating with said valve in the closing position, means for the continuous rotation of said valve on its axis, a shoulder on the internal wall of the engine cylinder at a certain distance from said valve, an annular sleeve situated upon said shoulder, an annular flange on the lower part of the valve, and a groove formed in the upper part of said sleeve and adapted to receive the said flange.

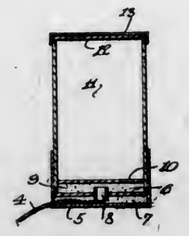
1,823,771. WINDOW STAGE. LANNIS E. THRASHER, Haines, Fla. Filed Aug. 21, 1929. Serial No. 387,457. 3 Claims. (Cl. 304—27.)



1. A frame for supporting the deck of a window stage comprising supporting arms adapted to extend from said frame through the aperture of a window, a supporting bar adapted for engagement with the interior of the walls surrounding the aperture of said window and means for adjustably securing said supporting bar to said supporting arms, consisting of slotted arms pivoted on said supporting arms and latches on said frame for securing said slotted arms in position.

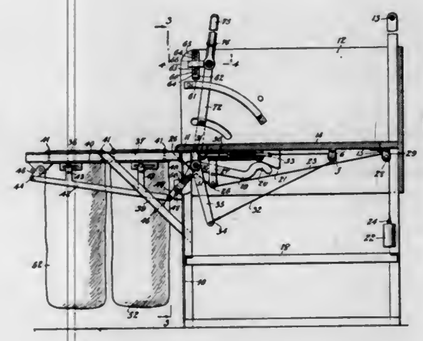
1,823,772. MEANS FOR ADVERTISING. UMBERTO TOLDI, Verona, Italy. Filed Feb. 5, 1930, Serial No. 426,139, and in Italy Feb. 7, 1929. 1 Claim. (Cl. 102—21.)

A bomb adapted to distribute advertising material when projected into the air comprising a main cylindrical body adapted to contain advertising material, a time fuse inserted in the bottom of a cylindrical body, an explosive charge at the bottom of the said body, a partition disk of paper above the said explosive charge, advertising material in the said body above the partition disk, a disk of paper above the advertising material and closing the mouth of the main body, a paper cover for the closing disk, a movable bottom beneath the advertising material, a main body projecting charge between the said



bottom and the movable bottom, and a fuse string leading from the time fuse outwardly, through the projecting charge.

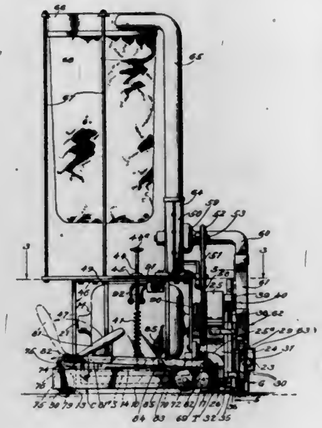
1,823,773. APPARATUS FOR SORTING AND TAGGING LAUNDRY. MAX TROY, Brooklyn, N. Y. Filed June 28, 1929. Serial No. 374,504. 11 Claims. (Cl. 209—122.)



6. In an apparatus for sorting, bagging and tagging laundry, the combination of a lever, a relatively fixed support, a bar adapted to receive numbered tags on bag closing devices, coacting means on said support and said bar to removably hold said bar in place on said support, and means carried by said lever which is engageable with said bar to prevent the removal of said bar until said lever is disengaged.

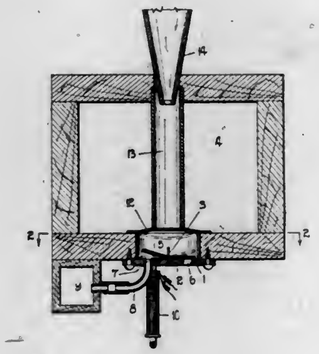
1,823,774. GROOVING MACHINE. LOUIS R. WILLIAMS, Los Angeles, Calif. Filed Jan. 16, 1929. Serial No. 332,923. 6 Claims. (Cl. 51—176.)

1. A grooving machine comprising a carriage, means for guiding the carriage along a predetermined path over a floor, a support pivotally mounted on the carriage for movement vertically, a grooving element rotatably mounted on the support eccentrically of the pivotal mounting of the latter and normally urged by the support into engagement with the floor, to produce a groove in the latter in response to movement of the carriage over the floor, and means for limiting the movement of the support towards the floor to control the depth of the groove produced in the floor by the element, said last means comprising a frame mounted for oscillating movement on the support, and a plurality of gaging rollers journalled one in advance of the other in the frame and adapted to bear



in unison directly upon the floor, the axis of the grooving element being intermediate the axis of the foremost and rearmost rollers.

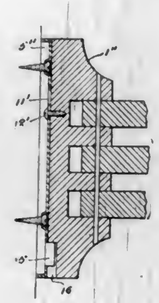
1,823,775. ELECTROPNEUMATIC ACTION FOR THE OPERATION AND CONTROL OF MUSICAL INSTRUMENTS. EDGAR RALPH ADAMS, Edwardstown, and VICTOR ALBERT HENRY WEBER and DONALD HUGH SMITH, Henley Beach, Australia. Filed Feb. 6, 1930, Serial No. 426,359, and in Australia May 21, 1929. 2 Claims. (Cl. 84—339.)



2. In an electropneumatic action for the operation and control of musical instruments comprising a wind chest having a chamber in the lower part thereof, a musical instrument mounted in said wind chest and having the horn portion thereof disposed closely adjacent said chamber, a high pressure air conduit carried by said wind chest, a conduit connecting said chamber and said high pressure conduit and forming an air inlet for said chamber, an air outlet formed in said chamber, an angularly formed metallic plate valve rockably supported between said inlet and outlet, a flexible diaphragm sealing the upper portion of said chamber and adapted to be flexed into sealing engagement with the horn of said instrument,

and an electromagnet disposed adjacent the air inlet of said chamber, whereby upon energization of said electromagnet said valve will be rocked to close said inlet and open said outlet of said chamber.

1,823,776. CLOTHESRACK. WERDON H. ALLEN, South Montrose, Pa. Filed Apr. 7, 1930. Serial No. 442,335. 1 Claim. (Cl. 211—97.)



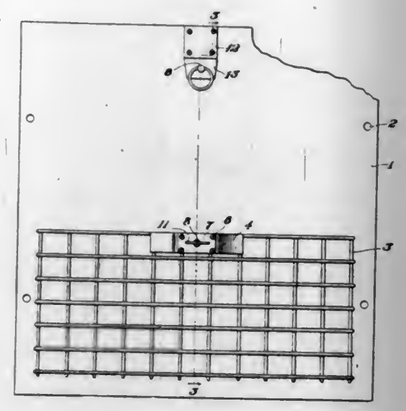
A clothes rack comprising a supporting plate, a base slidably and detachably secured to the plate, said base having notches, rods hinged in said notches, said base having a notch extending inwardly from one end, and a tongue on said plate to engage in the last mentioned notch for holding the base against accidental rotation relative to the plate.

1,823,777. INSECT TRAP. RALPH J. ARMSTRONG, Monett, Mo. Filed Feb. 5, 1931. Serial No. 513,701. 6 Claims. (Cl. 43—121.)



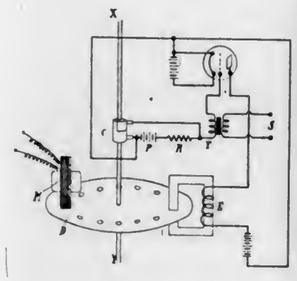
1. An insect trap comprising, a container to contain bait and having openings in opposing walls thereof, a hollow member extending between said walls and having its ends projecting through said openings in spaced relation to the bottom of the container to provide a passageway through the container, means exteriorly of said walls and beneath the projecting ends of said hollow member to facilitate the entrance of insects into the hollow member, said hollow member having its bottom wall formed with an opening interrupting the passage therethrough and providing an entrance to the interior of the container, and means within the container to prevent the return of the insects through the opening in the bottom wall of the hollow member.

1,823,778. DISPLAY CARD HOLDER. LAMAR BAILEY, Portsmouth, Ohio. Filed Nov. 10, 1930. Serial No. 494,736. 3 Claims. (Cl. 40—15.)



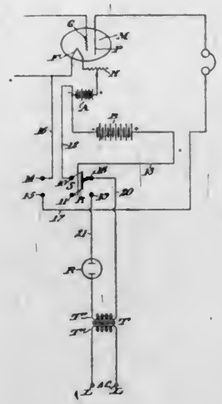
1. A holder comprising a base plate, tray means secured to said base plate, a bracket secured to the tray means and spring pressed means carried by said bracket for securing cards or notice within said tray.

1,823,779. ELECTRICAL SYNCHRONOUS BRAKING DEVICE. RENÉ BARTHELEMY, Fontenay-aux-Roses, Seine, France, assignor to Compagnie pour la Fabrication des Compteurs et Material d'Usines a Gaz, Montrouge, Seine, France, a Joint-Stock Company of France. Filed Oct. 6, 1930, Serial No. 486,768, and in France Apr. 8, 1930. 2 Claims. (Cl. 172—293.)



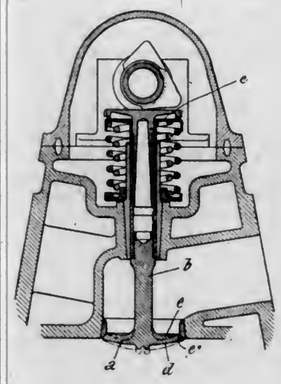
1. In a synchronous device, the combination of a rotatable disc, electromagnetic means for exerting a driving torque on said disc, a source of alternating current for synchronizing said disc, an amplifying valve including a grid on which the synchronizing voltage is applied, electromagnetic means mounted in the plate circuit of said amplifying valve for exerting a braking torque on said disc, a biasing battery, and means controlled by the rotation of said disc for periodically connecting said biasing battery to the grid of said amplifying valve.

1,823,780. BATTERY CHARGING SYSTEM. RAYMOND C. BENNER, Bayside, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Incorporated. Filed June 28, 1924. Serial No. 723,050. 5 Claims. (Cl. 250—27.)



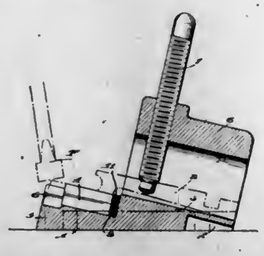
1. The combination of a vacuum tube comprising a filament and a plate, means for electrically heating said filament, a rechargeable B-battery in circuit with said plate, charging means for said B-battery, and means operable to close the B-battery charging circuit only after first interrupting such filament heating means.

1,823,781. TEMPERATURE COMPENSATED VALVE. MARC BIRKIGT, Bois Colombes, France. Filed Dec. 19, 1928, Serial No. 327,151, and in Belgium Oct. 6, 1928. 3 Claims. (Cl. 123—188.)



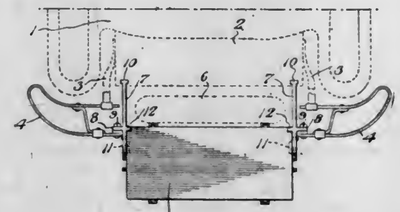
1. In a motor provided with an rotatable cam and a valve seat, a valve adapted to coact with said valve seat and to be actuated by said cam, said valve comprising a stem portion, and a head portion limited by a concave surface on the stem side thereof and a convex surface on the side opposite to the stem side, said stem and head portions being proportioned so that the edge of said head portion remains at a substantially constant distance from the axis of rotation of said cam throughout the normal range of temperature variation of the valve and of the motor elements coacting therewith.

1,823,782. DRESSING FORM FOR UNDERREAMER LUGS. CHARLES HENRY BROWN, Breckenridge, Tex. Original application filed May 28, 1926, Serial No. 112,350. Divided and this application filed Sept. 22, 1927. Serial No. 221,333. 1 Claim. (Cl. 76—90.)



A dressing form for use in connection with reamer blades having shanks with rounded backs; said form including a base having surfaces cooperable with the cutter and shank of the blade to be dressed and having a die against which the cutting edge of the blade may be reformed, said base having a shoulder between the surfaces thereof which supports the cutter and shank of the blade, said shoulder being designed to coact with the shank of the blade of the body thereof, said blade having a shoulder at the junction of its shank and body, said base having its bottom inclined to position the form on a slant to facilitate dressing of the lugs and shims interposable between said shoulder and the shoulder of the blade to cause the cutters to be positioned according to the wear of the material on the cutting edge thereof to insure all the cutters of a set being dressed to the same length to avoid breakage of joints, ruining of bodies, or losing of lugs, incident to one lug only taking the blow in each stroke of the tool.

1,823,783. LUGGAGE CARRIER FOR AUTOMOBILES. ROBERT F. BURGESS, Washington, D. C. Filed May 3, 1929. Serial No. 360,084. 9 Claims. (Cl. 224—29.)

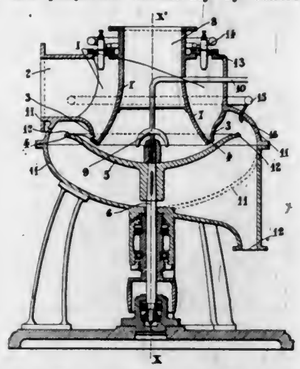


1. A detachable luggage carrier, comprising a frame having a face plate, a pair of oppositely movable rods each having a pair of bolts at its outer end adapted to be extended beyond the sides of the frame, and means for simultaneously projecting and retracting said bolts.

1,823,784. METHOD AND APPARATUS FOR TREATING GASES. JEAN HENRI FRANCOIS CASSAN, Paris, France, assignor to Compagnie Generale De Construction De Fours, Montrouge, Seine, France, a joint stock company of France. Filed Feb. 20, 1930, Serial No. 430,028, and in France Mar. 2, 1929. 7 Claims. (Cl. 261—83.)

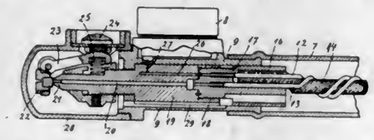
1. A method of treating gases which consists in projecting a jet of gas to be treated against a body of liquid rotated at high velocity to form a film unpuncturable by said gas jet at predetermined velocities of said gas and liquid respectively, whereby the fixed or condensed products issuing from the gas upon impact with the liquid

film which causes them to be dissolved or suspended in said film, are projected outwardly by centrifugal force,



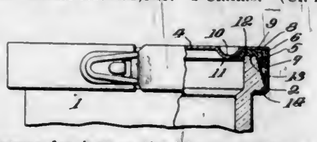
and in causing the treated gases to flow in the opposite direction to that of the fixed or condenser products extracted from said gases.

1,823,785. DEVICE FOR FEEDING ADDITIONAL OXYGEN TO FREELY PORTABLE BREATHING IMPLEMENTS. ALFRED HEINRICH LORENZ CHRISTENSEN, Lubeck, Germany, assignor to Otto Heinrich, Dräger, Lubeck, Germany. Filed June 25, 1929, Serial No. 373,530, and in Germany July 5, 1928. 2 Claims. (Cl. 128—191.)



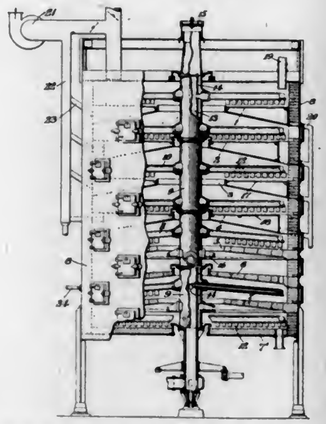
1. The combination with a freely portable breathing implement consisting of a breathing circuit, a source of oxygen, a pressure reducing valve, and means for feeding oxygen into said breathing circuit through said pressure reducing valve, of means for feeding additional oxygen to the breathing circuit and for indicating the pressure of the oxygen supply, said means comprising a by-pass having a low pressure conduit and a high pressure conduit disposed within said low pressure conduit, the high prsesure conduit being in communication with the oxygen source, a push button valve connecting the low pressure conduit and the high pressure conduit of the by-pass, a passageway leading from the said low pressure conduit to the breathing circuit, a pressure gauge mounted on the by-pass, a second high pressure conduit disposed within said low pressure conduit and communicating at one end with the oxygen source and at its other end with said pressure gauge, and a valve adapted to close off said second high pressure conduit from the source of oxygen supply, the high pressure conduit constituting a part of the by-pass being in communication with the oxygen when the last mentioned valve is in closed position.

1,823,786. JAR CLOSURE. LINDSAY THORNE CRABBE, Chicago, Ill., assignor to Phoenix-Hermetic Company, Chicago, Ill., a Corporation of New York. Filed Mar. 24, 1930. Serial No. 438,540. 4 Claims. (Cl. 215—95.)



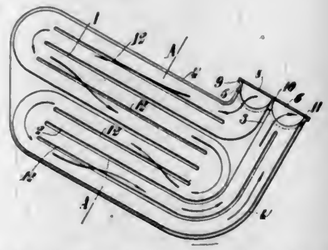
1. A closure for jars or the like comprising a yieldable disc-like cap having a depending flange and a channel for retaining a plastic sealing gasket therein, said cap having a recess for receiving and housing an overlying flange of a sealing band for binding the cap to the jar and sealing the same.

1,823,787. DRYING AND ROASTING FURNACE. GEORGE E. CONNOLLY, Oakland, Calif., assignor to Nichols Copper Company, New York, N. Y., a Corporation of New York. Filed May 1, 1930. Serial No. 448,829. 5 Claims. (Cl. 34—22.)



1. Apparatus for treating sludge mixtures or the like comprising a plurality of superposed hearths substantially circular in outline and surrounded by an enclosing wall, substantial portions of the areas of said hearths having interstices permitting the passage therethrough of the more liquid components of the mixtures being treated, means comprising drip pans suspended beneath each of said hearths between successive hearths for receiving such liquid, conduit means for conveying such liquid from said drip pans to the exterior of the device and rabbling means rotatably mounted in respect to each hearth for stirring the mixture under treatment and gradually advancing the same over the surface of each hearth and from hearth to hearth successively, openings being provided for permitting the material to drop from hearth to heatrh.

1,823,788. RADIATOR COMPOSED OF FLAT WATER ELEMENTS. EMILE JULIEN EUGÈNE DEWOITINE, Chatillon-Sous-Bagneux, France. Filed Sept. 5, 1928, Serial No. 303,992, and in France Sept. 21, 1927. 1 Claim. (Cl. 257—139.)



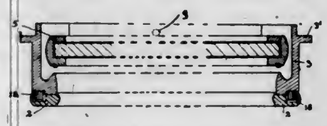
In a radiator of the class described, a double trough constituting the water inlet and the water outlet for the radiator arranged side by side, flat water elements, said double trough having apertures registering with the water elements and soldered thereto, and a closure plate overlying the double trough and presenting two distinct conduits.

1,823,789. TRANSPLANTING IMPLEMENT. PETER HERMANN DOHRN, Wesselburen, Germany. Filed Apr. 16, 1929, Serial No. 355,576, and in Germany Apr. 19, 1928. 9 Claims. (Cl. 55—18.)



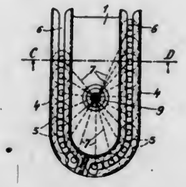
9. The process of transplanting plants laid in rows comprising simultaneously cutting away the soil around the roots and sides of several adjacent plants in a row and mechanically gripping the plants adjacent the sides and bottom thereof, then transferring the plants while so held to their new habitat.

1,823,790. SHIP'S SCUTTLE. RENÉ DUCROUX, St.-Nazaire, France. Filed July 19, 1930, Serial No. 469,126, and in France Aug. 1, 1929. 6 Claims. (Cl. 114—178.)



1. A ship's scuttle comprising a frame fixed to the ship's side, a seating crown of substantially oval formation fixed upon the internal portion of said frame and extending towards the outside of the ship, a pivoting glass holder normally seated upon said crown and arranged to be open from the inner side of the scuttle towards its outer side, said glass holder being of substantially oval formation so that it may be passed from the interior of the ship through the fixed frame along the larger diameter of the oval crown on the internal portion of the frame.

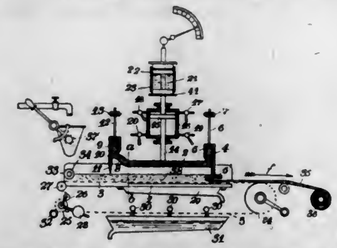
1,823,791. MAGAZINE FOR SHUTTLE-BOBBINS FOR AUTOMATIC LOOMS. ERNST EGLI, Ruti, Switzerland, assignor to Maschinenfabrik Rüti Vormals Caspar Honegger, Ruti, Switzerland. Filed June 5, 1930, Serial No. 459,357, and in Switzerland June 14, 1929. 1 Claim. (Cl. 139—247.)



A magazine for weft bobbins for automatic looms, the bores of the bobbins serving as guides for the weft threads, said magazine including a guide having an opening therein through which the thread ends extend from the heads of the bobbins through the magazine to the thread holder, and which lie in the surface generated by the bobbin, as it gravitates towards transfer position.

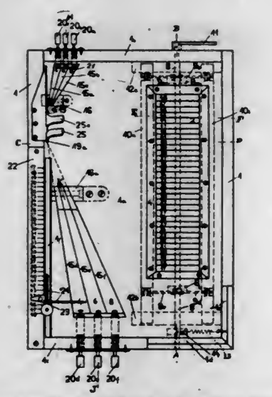
1,823,792. APPARATUS FOR THE MANUFACTURE OF CARDBOARD AND THE LIKE IN CONTINUOUS WEBS. ANNA ENGEL, Bergamo, Italy. Filed Apr. 16, 1930, Serial No. 444,826, and in France Mar. 13, 1929. 7 Claims. (Cl. 92—39.)

1. In an apparatus for producing a continuous and homogeneous web of cardboard from a layer of fluid pulp, a pair of flat opposed pressure plates, a metallic band therebetween carrying the pulp, means for preventing



ridges being formed at the junction of the pressed and unpressed material, as successive portions of the pulp are pressed between the pressure plates.

1,823,793. KEY-OPERATED FOOT-MEASURING DEVICE. GEORG ENGELHARDT, Cassel-Wilhelmshohe, and HANS GEORG SIEBENEICHNER, Leipzig, Germany, assignors to the Firm G. Engelhardt & Co., "Chasalla"-Schuhfabrik A.-G., Cassel, Germany. Filed Nov. 23, 1929, Serial No. 409,252, and in Germany Dec. 29, 1927. 4 Claims. (Cl. 33—3.)



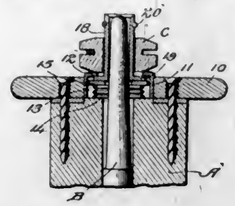
1. A foot-measuring appliance for determining the correct size for shoes, in-soles or other foot-wear, comprising a frame, a row of keys, each individually movable up and down, mounted in the top of the frame, resilient means tending to keep each key in its upper position, a heel stop so located on the frame that the foot to be measured can rest on the row of keys with the heel bearing against the heel stop, thereby depressing a larger or smaller number of keys according to the length of the foot, means for automatically holding every key depressed even after the foot is removed, and means for releasing at will all the keys that are being held down.

1,823,794. WIRELESS TRANSMISSION SYSTEM. ABRAHAM ESAU, Jena, Germany. Filed Oct. 25, 1927, Serial No. 228,528, and in Germany Oct. 29, 1926. 4 Claims. (Cl. 250—11.)



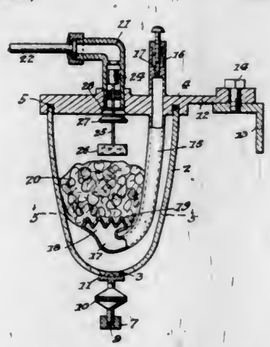
1. The method of transmitting and receiving radio signals which consists in simultaneously transmitting separate signals by differently polarized waves of substantially horizontal polarization and separately receiving and coordinating such waves.

1,823,795. MOUNTING FOR FLYER BLOCKS. GEORGE WILLIAM EVANS, Wilkes-Barre, Pa. Filed Nov. 18, 1929. Serial No. 408,078. 6 Claims. (Cl. 117—23.)



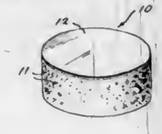
1. In combination with a bobbin having a recess and an annular flange extending into said recess, a tube provided with lateral flanges engageable behind the flange of said bobbin, spring means within said recess pressing the flanges of said tube against said bobbin flange, and a flyer block carried by said tube.

1,823,796. ATTACHMENT FOR INTERNAL COMBUSTION ENGINES. CHARLES L. EVERWINE, Newark, N. J. Filed Dec. 31, 1929. Serial No. 417,797. 5 Claims. (Cl. 261—96.)



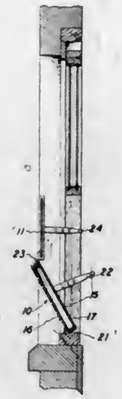
1. In a device of the class described, an open top container, a cover therefor, a chemically treated absorbent material for disposition within the container, an air supply pipe extending through the cover, an air distributor pipe associated with the lower end of the air supply pipe, perforated teeth extending upwardly from the head for supporting the absorbent material and to cause the air to pass through said material, and an outlet nipple for the chemically treated air extending from the cover.

1,823,797. POWDER PUFF. SCOTT FINKEL, Woodside, N. Y. Filed Sept. 26, 1930. Serial No. 484,033. 2 Claims. (Cl. 132—78.5.)



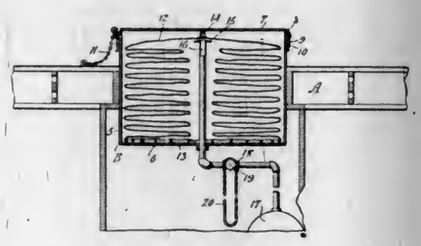
1. A powder puff comprising a body of compressible or expansible moisture proof material having cavities therein for carrying powder, said body adapted on compression thereof to deliver from one of its sides the powder, and a disk of material impervious to powder and carried on the opposite side of said body for distributing the delivered powder, the entire outer surface of said disk being smooth and free from projections so that it may be used to distribute powder uniformly over a surface to which the powder has been applied.

1,823,798. SOUND SUPPRESSING VENTILATOR FITTING FOR WINDOWS. ERNEST THOMAS FISK, Sydney, New South Wales, Australia. Filed June 27, 1928, Serial No. 288,763, and in Australia July 27, 1927. 4 Claims. (Cl. 98—88.)



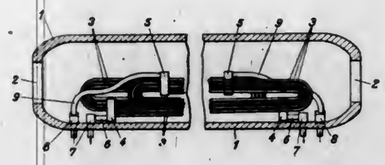
1. In combination, a wall having an aperture and a sill, a sound suppressing ventilator fitting, including a perforate panel at the level of the sill and disposed substantially in a horizontal position, and a second panel arranged above the first panel disposed in substantially a vertical position, and means for securing the second mentioned panel in various adjusted positions to vary the degree of ventilation.

1,823,799. SAFETY ATTACHMENT FOR AIRCRAFT. LOUIS FRIEDRICH, Yonkers, N. Y. Filed Jan. 28, 1930. Serial No. 424,033. 2 Claims. (Cl. 244—21.)



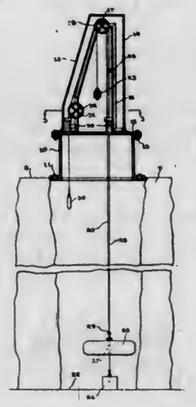
1. In a safety attachment for aircraft, a parachute, a rigid container having an open end, said container being carried by and secured to the craft within which the parachute is arranged in a folded inactive condition with the parachute shrouds anchored therein, a rigid cover telescopically fitting the open end of the container, a flexible element anchoring the cover to the craft, frictional latch means for maintaining the cover in closed relation to the open end of the container, a conduit extending into the container having an outlet disposed within the parachute envelope and adjacent the cover to constitute means for directing a fluid pressure within the envelope and container functioning to simultaneously inflate and open the envelope and to displace the container cover and means centrally and exteriorally of the parachute envelope for facilitating the replacement of the parachute in its container.

1,823,800. HEAT TRANSFERRER. OTTO H. HARTMANN and MAX HANNIG, Cassel-Wilhelmshohe, Germany, assignors to Schmidtsche Heissdampf-Gesellschaft mit beschrankter Haftung, Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Feb. 24, 1930, Serial No. 430,944, and in Germany Apr. 25, 1929. 4 Claims. (Cl. 257—239.)



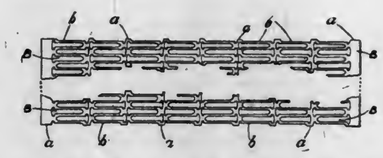
1. A heat transferrer with heating elements arranged lengthwise in a drum or other container, these elements consisting of groups of U-tubes having one set of legs at a higher elevation than the other, their upper legs being connected with upper headers, through which steam is admitted, and their lower legs being connected with lower headers, through which condensate is withdrawn, the lower headers being in rigid association with the drum and the upper headers being connected to the drum by a relatively long tube having one or more bends to give it flexibility, said tube running longitudinally of the drum through a section thereof occupied by the lower legs.

1,823,801. GAUGING DEVICE. WILLIAM G. HIATT, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,364. 13 Claims. (Cl. 73—82.)



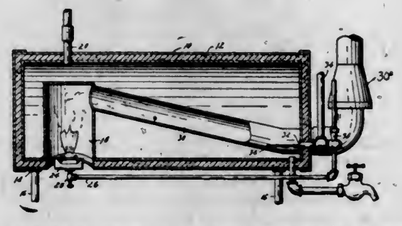
1. A gauging device for a liquid tank having a roof, comprising supporting means supported by the roof, an indicator supported from the supporting means, means for fixing said indicator relatively to the bottom of the tank, but allowing the roof to rise and fall independently of the indicator, and calibrated means cooperating with said indicator and including an element adapted to rise and fall with the liquid in the tank.

1,823,802. SHEET OF METAL OR MATERIAL. FRANK HUMPHRIS, Parkstone, England. Filed Dec. 20, 1928, Serial No. 327,411, and in Great Britain Dec. 10, 1927. 3 Claims. (Cl. 164—17.)



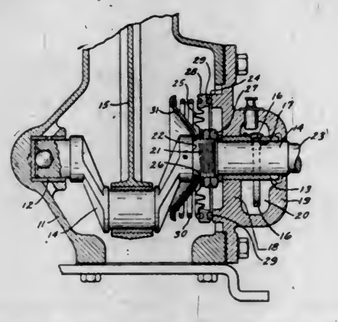
1. Sheet material prepared for use in a blanking press from which parts of the leading edge of the sheet have been cut out to the contour of part of one side of a blank to be cut from the sheet, and parts of the trailing edge of the sheet have been cut out to the contour of part of the opposite side of a blank.

1,823,803. WATER HEATER. CYRUS A. LELAND, Jr., Des Moines, Iowa. Filed Nov. 24, 1930. Serial No. 497,826. 3 Claims. (Cl. 122—233.)



1. In a water heater of the kind described, a horizontally elongated tank, a combustion chamber in one end of the tank wholly received therein except at its bottom, extending close to the top of the tank a flue extending from the upper part of the combustion chamber downwardly through the opposite end of the tank, a means associated with the flue, outside the tank, for providing balanced draft, a burner in the combustion chamber, a pilot burner in the combustion chamber, means for controlling flow of fuel to burner, according to temperature of water near where it enters the tank, the tank having an inlet near the flue exit, and having an outlet, just above the combustion chamber, whereby water in the tank is heated from the top down and quick recovery is afforded.

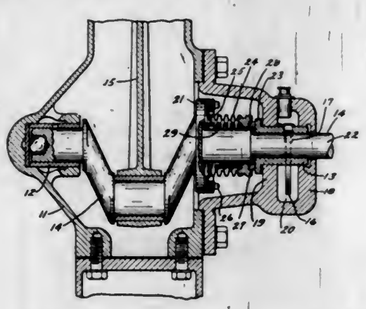
1,823,804. COMPRESSOR BEARING SEAL. CHARLES C. SPREEN, Detroit, Mich. Filed Dec. 27, 1926. Serial No. 157,208. 1 Claim. (Cl. 286—11.)



In a bearing seal, the combination with a compressor casing having an aperture therethrough, a closure plate

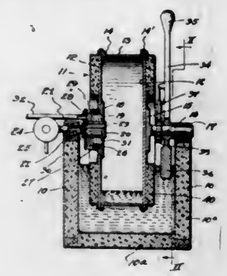
for said aperture provided with a bearing sleeve and an annular seat formed on the interior surface of said plate, and a crankshaft having shoulders interiorly of said casing formed by reduced portions thereof; of a seal structure arranged interiorly of said casing including a flexible annular diaphragm fixedly sealed at the inner edge against one of said crankshaft shoulders and rotatably sealed against said seat at the periphery of said diaphragm, means for fixedly sealing the inner edge of said diaphragm to said shaft, and means for rotatably sealing the periphery of said diaphragm to said seat.

1,823,805. COMPRESSOR BEARING SEAL. CHARLES C. SPREEN, Detroit, Mich. Filed Dec. 27, 1926. Serial No. 157,209. 1 Claim. (Cl. 286—11.)



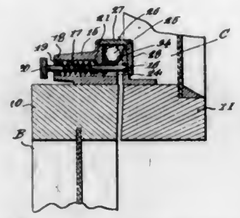
In a bearing seal, the combination with a compressor casing having an aperture, a substantially cylindrical closure for said casing aperture, said closure being provided with an aperture therethrough, a bearing sleeve adapted to fit in said closure aperture, said bearing sleeve being outwardly flanged at the end thereof adjacent the inner surface of said closure to form a seat thereon, and a crank shaft having a circular integral flange adjacent said bearing sleeve; of a seal structure disposed within said cylindrical closure and including a tubular bellows, bases secured to each end of said bellows, one of said bases being fixedly sealed to said crank shaft flange, an anti-friction ring secured to the other of said bases to form a rotatable frictional joint with said bearing flange, and spring means for resiliently maintaining the frictional joint between said seal structure and said bearing sleeve.

1,823,806. ICE MAKING AND SHAVING MACHINE. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 29, 1927. Serial No. 187,544. 6 Claims. (Cl. 62—106.)



1. In a mechanical refrigerating apparatus, a refrigerant evaporator drum, means for rotatably supporting said drum including a rotatable shaft fixed to one end of said drum, and an externally disposed stationary shaft terminating adjacent the opposite end of said drum, said stationary shaft having a refrigerant inlet duct therein leading into said drum, and means associated with said stationary shaft for conducting vaporized refrigerant from said drum.

1,823,807. AUTOMATIC SASH FASTENER. CHARLES H. SUCKEL, Jackson Heights, N. Y. Filed Oct. 14, 1929. Serial No. 399,554. 2 Claims. (Cl. 292—252.)

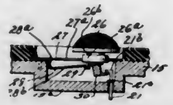


1. A window sash fastener comprising a body for connection with the upper rail of one sash, a keeper plate for connection with the lower rail of the other sash, a bolt slidably carried by the body for engagement with the keeper plate, and a gravity member carried by the body for movement in front of the bolt upon the retraction thereof for preventing further forward movement thereof, said gravity member when in its lowered position in front of the bolt being in the path of the keeper plate, as and for the purpose specified.

1,823,808. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,169. 2 Claims. (Cl. 30—12.)

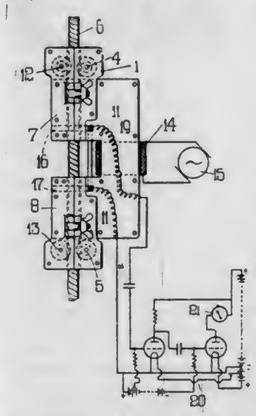
1. A safety razor comprising, in combination, a safety razor blade having a shaving edge consisting of protruding sharpened portions and recessed dull portions, and a flexible guard attached to said blade, said guard member being wider than said blade and having portions extending beyond and between the sharpened portions of said blade.

1,823,809. SIGNAL SWITCH FOR USE ON AUTOMOBILES. HOWARD C. VARNER and JACOB M. KOCH, St. Joseph, Mo. Filed Sept. 3, 1927. Serial No. 217,398. 1 Claim. (Cl. 200—59.)



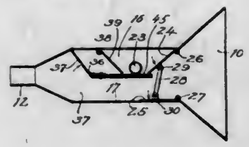
A switch mounting for the stationary tube of a vehicle steering mechanism, comprising a disc fixed at its center to the upper end of the tube and provided beyond the tube with a socket, an angular contact secured within and insulated from the socket, a plate secured to the upper side of the disc over the socket and provided with a slot, a spring in the socket and provided with an angular end secured to the upper side of the disc, said end of the spring holding it in an upwardly inclined position with respect to the plate and the spring being provided with a slot extending in the general direction of the slot of the plate and registering therewith, an angular contact secured to the free end of the spring and extending downwardly therefrom for engagement with said fixed contact, a button having a shank passing through the slot in the plate to support the button for movement toward and away from the free end of the spring and to support the button for upward and downward movement, the shank being located above the spring and when opposite the free end of the spring permitting the spring to move its contact into engagement with said first contact, the button being adapted to be moved downwardly to depress the spring and thus carry the contact on the spring out of engagement with said first contact, the shank being provided with an annular groove adapted to receive an end wall of the slot when the button is depressed and moved away from the free end of the spring to hold the spring depressed and its contact out of engagement with said first contact, a pin extending downwardly from the lower end of the shank and passing through the slot in the spring and provided at a point below the spring with a head.

1,823,810. ELECTROMAGNETIC TESTING OF STEEL WIRE ROPES AND OTHER ARTICLES OF MAGNETIZABLE MATERIAL. THOMAS FREDERICK WALL, Sheffield, England. Filed Dec. 20, 1928, Serial No. 327,301, and in Great Britain Dec. 20, 1927. 8 Claims. (Cl. 175—183.)



1. A device for testing magnetizable articles, consisting of a laminated iron yoke, the arms of which are perforated parallel to the shank, an exciting coil wound on said shank and a search coil wound in symmetrical slots in said perforated arms.

1,823,811. SUPERCHARGER. LEON H. WATKINS, Pasadena, Calif. Filed May 1, 1929. Serial No. 359,543. 10 Claims. (Cl. 123—122.)



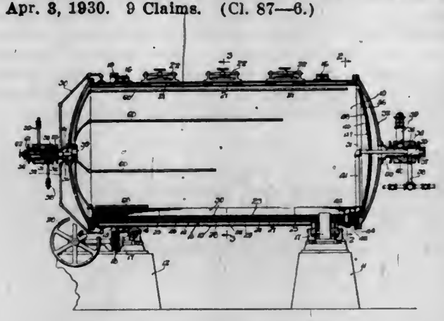
1. In combination with an automobile having an internal combustion motor, means defining a pair of air passages, one of which is disposed within the heating range of the motor's exhaust conduit so as to utilize the heat of the exhaust gases to effect heating of air traversing the passage, the passages having outlets connected to the air intake of the motor's carburetor and inlets directed forwardly of the automobile so that when the latter is in forward motion air will be forced through the passages to the carburetor, means for directing and compressing the entering air into said passages so that the air will be forced into the carburetor under pressure, doors controlling the inlets of the passages, means for actuating the doors to open one inlet and close the other or vice versa, and means for venting the interior of the heated air passage to atmosphere when its respective inlet is closed.

1,823,812. HOOD PACKING. ADELBERT E. WILKINS and MARION F. SMITH, Lansing, Mich. Filed July 23, 1929. Serial No. 380,397. 2 Claims. (Cl. 180—69.)



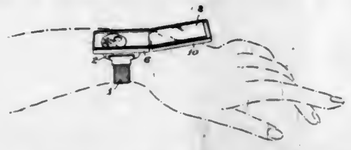
1. The combination with the hood ledge of an automobile, of a one-piece strip of metal bent to provide a centrally located longitudinal channel extending at a right angle to the flanges of the strip, one of said flanges being rigidly secured to said ledge, the other flange overlapping and being spaced from the inner face of the hood, and a packing element covering said flanges and bearing throughout its outer face upon the inner face of said hood, said element having a central integral longitudinal rib rigidly confined in the channel of said strip.

1,823,813. EXTRACTOR. OSCAR H. WURSTER, Chicago, Ill. Filed Mar. 26, 1925, Serial No. 18,364. Renewed Apr. 3, 1930. 9 Claims. (Cl. 87—6.)



1. An extractor comprising a rotary horizontally disposed cylindrical tank, a filter arranged within said tank adjacent a portion of the side wall thereof and curved to follow the curvature of said side wall, and longitudinally extending ribs interposed between said filter and side wall to hold said filter in spaced relation to said side wall, said ribs having transverse openings therethrough to permit circumferential flow of liquid between said filter and side wall.

1,823,814. WRIST COMPACT. ANTHONY F. AIELLO, Brooklyn, N. Y. Filed Mar. 14, 1930. Serial No. 435,944. 4 Claims. (Cl. 132—83.)



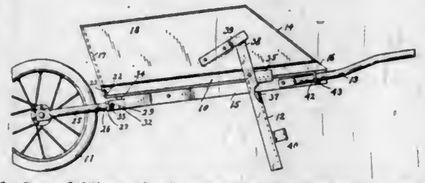
1. A wrist compact, comprising a base having openings therein, and a compact pivotally mounted on said base, said compact having depending members adapted to fit into said openings for substantially locking the compact against swinging movement.

1,823,815. PRODUCTION OF ESTERS OF SULPHONIC ACIDS. HEINRICH BERTSCH, Chemnitz, Germany, assignor to H. Th. Böhme Aktiengesellschaft, Chemnitz, Germany. Filed July 16, 1929, Serial No. 378,818, and in Germany July 19, 1928. 8 Claims. (Cl. 87—12.)

1. The process of producing esters of sulphonic acids which are also carboxylic acids comprising treating a carboxylic acid ester selected from the group consisting of alkyl esters having fewer carbon atoms than cetyl alcohol and aryl esters with a sulphonating compound.

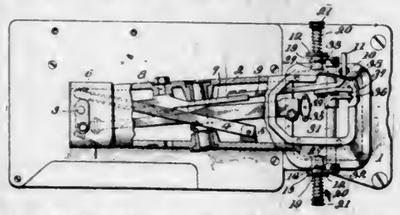
7. The process of producing esters of sulphonic acids which are also carboxylic acids comprising treating a butyl ester of a fatty acid with a sulphonating compound.

1,823,816. WHEELBARROW. GEORGE I. CHITTENDEN, Lakewood, Ohio. Filed Mar. 26, 1930. Serial No. 438,971. 10 Claims. (Cl. 280—36.)



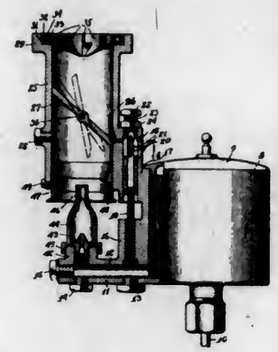
1. In a folding wheelbarrow the combination of a body structure, oppositely curved metal frame elements secured to the bottom of said body with their forward end portions spaced relatively close together, handles for supporting one end of said body structure, a wheel for supporting the other end of said body structure, and movable wheel mounting means whereby said wheel may be swung from a load carrying position to a folded position adjacent the bottom of the body structure, said mounting means including a member pivoted to said forward end portions, and a wheel fork rotatable relative to said member.

1,823,817. TENSION RELEASE FOR SEWING MACHINES. NORMAN V. CHRISTENSEN, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1928. Serial No. 303,282. 6 Claims. (Cl. 112—238.)



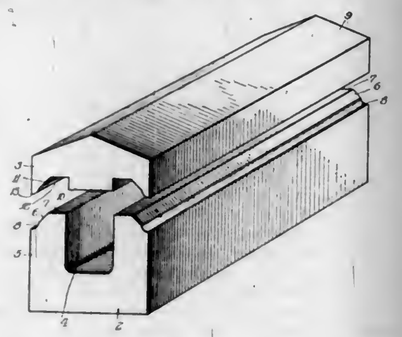
1. In a sewing machine the combination of a series of tensions for the needle threads, a series of tensions for the looper threads, a tension releasing plate associated with the tensions for the needle threads, a tension releasing plate associated with the tensions for the looper threads, means for supporting the respective plates whereby they may be moved vertically, a rock shaft connected to each plate, a presser foot lifting mechanism, means for connecting said rock shaft to the presser foot lifting mechanism whereby when the presser foot is lifted, the releasing plates are actuated for releasing the tensions on all threads.

1,823,818. CARBURETOR. CÉSAR JEAN CONSTANTIN, New York, N. Y. Filed Mar. 19, 1926. Serial No. 95,821. 1 Claim. (Cl. 261—41.)



In a carburetor the combination of a mixing chamber provided with means for admitting air thereinto and for restricting the inflow of said air in order to maintain a partial vacuum therein, and a hollow vaporizing chamber connected with said mixing chamber and provided with a portion formed into a nozzle extending into said mixing chamber, the cross sectional area of said nozzle decreasing toward the outlet thereof, said vaporizing chamber and said nozzle being so formed and proportioned that when filled to different levels the area of said body of liquid fuel, as exposed to vaporization, is varied with the different levels, being greater at the lower levels, and means for delivering into said vaporizing chamber a supply of liquid fuel restricted to barely replenish the liquid fuel therein as actually vaporized.

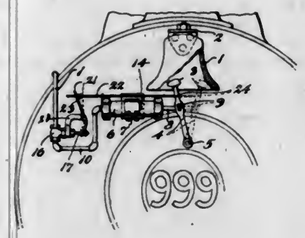
1,823,819. CABLE TRUNKING. THEODORE H. M. CRAMPTON, Chicago, Ill., assignor, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed July 9, 1928. Serial No. 291,354. 5 Claims. (Cl. 247—35.)



1. Cable trunking of fibrated bituminous composition comprising a base section hollowed to provide a chamber

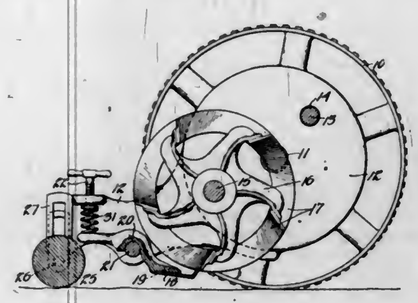
between upstanding sides, inclined faces on the sides terminating in basal grooves, and a cover section provided with faces contoured to engage with the inclined faces and basal grooves on the sides.

1,823,820. BELL RINGER. ELLWOOD V. CROSS, Washington, D. C. Filed July 9, 1929. Serial No. 376,993. 7 Claims. (Cl. 116—151.)



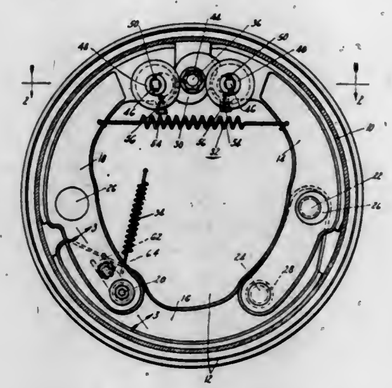
1. In bell ringing apparatus for locomotives, the combination of a pivotally mounted hammer, a piston rod pivotally engaging the hammer for actuating the same, a cylinder into which said piston rod extends, a piston head within the cylinder a spring for effecting return stroke of the piston, retracting the hammer from its bell ringing position, means for delivering fluid under pressure to the cylinder for imparting the outstroke to the piston to cause the hammer to strike the bell, a valve connected to be unseated by parts moved by the piston for delivering intake of fluid under pressure to said cylinder when the hammer is moving to retracted position, and means connected to the hammer for unseating the valve as the hammer is being retracted, the cylinder being provided with an exhaust port located relative to the range of travel of the piston for exhausting substantially at the terminus of the outer stroke, before the hammer strikes the bell, and the valve actuating means being proportioned so that the steam supply valve will be seated prior to attainment by the piston of the position to exhaust.

1,823,821. LAWN MOWER. HERBERT A. DAUM, Indianapolis, Ind. Filed Feb. 10, 1926. Serial No. 87,344. 2 Claims. (Cl. 56—254.)



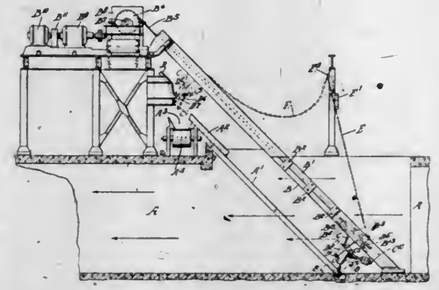
1. In a lawn mower a frame, brace rods connecting opposite sides of the frame for supporting it, a reel rotatably mounted in the frame, the reel having spiral cutting blades mounted thereon, a cutter bar pivoted on one of the said brace rods, and a spring engaging a portion of the frame and a portion of the cutter bar to hold the cutter bar at all times in engagement with at least one of the spiral blades only, substantially as set forth.

1,823,822. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 4, 1926. Serial No. 139,389. 8 Claims. (Cl. 188—18.)



1. A brake having, in combination, a friction device having adjacent ends, a roller on each side of each end, and a rock member extending between said ends having two axially-spaced double cams engaging the four rollers.

1,823,823. RACK SCREEN CLEANER. WILLIAM A. DUNDAS and LLOYD M. JOHNSON, Chicago, Ill. Filed Mar. 5, 1929. Serial No. 344,447. 6 Claims. (Cl. 210—176.)

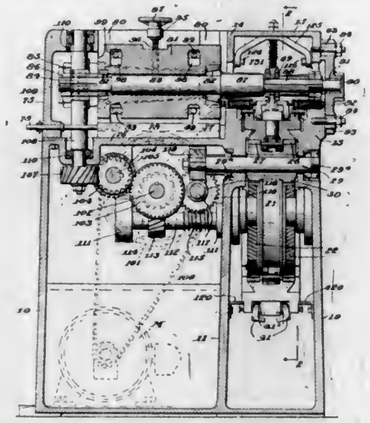


1. In combination with a rack screen, a track parallel therewith, a carriage adapted to run along the track, a rake pivoted on the carriage, automatic means for holding the rake in engagement with the screen, means operative only at the upper end of the carriage excursion for moving the rake out of engagement with the screen, means operative only at the lower end of the carriage excursion for automatically throwing the rake into engagement with the screen, the means for throwing the rake into engagement with the screen comprising a latch associated with the carriage and a limiting member adapted to trip the latch when the carriage reaches the lower end of its excursion.

1,823,824. MACHINE TOOL FOR DRESSING ARTICLES ON NONPARALLEL SURFACES. ROBERT L. DYAS and JOSEPH MAICKEL, Butte, Mont. Filed July 13, 1928. Serial No. 292,556. 12 Claims. (Cl. 90—16.)

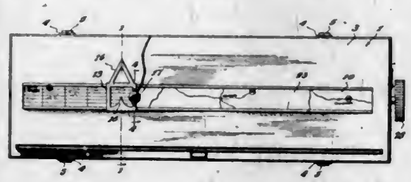
1. In a machine of the class described, a plurality of arbors each having a cutting tool thereon, a chucking table for the article to be dressed, means to cause said chucking table to move past the arbors in a direction sub-

stantially at right angles thereto so that the tools may operate upon the articles, said arbors being located at different angles in planes transverse to the direction of movement of said table, a supporting device for said



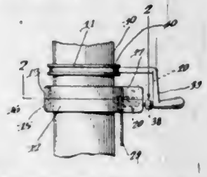
chucking table to permit a rocking movement of the table about an axis substantially at a right angle to the direction of movement of said table and parallel to said planes, and means to hold said chucking table in a definite adjusted position in its passage beneath each arbor.

1,823,825. ROAD MAP FOR AUTOMOBILES. ORLANDO V. EDGERTON, West Branch, Iowa. Filed Apr. 29, 1930. Serial No. 448,387. 6 Claims. (Cl. 40—77.)



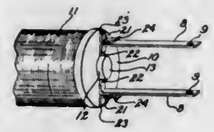
1. In a road map, a casing formed with a sight opening, a map movably mounted in said casing and having movement across the sight opening whereby selected portions of the map may be viewed through the sight opening, a transparent closure for the sight opening and an open frame slidable along said casing in front of said closure and provided with a finger whereby towns upon a portion of the map visible through the sight opening may be easily located.

1,823,826. SWITCH STRUCTURE. GEORGE S. FLORUS, Chicago, Ill. Filed Feb. 8, 1928. Serial No. 252,855. 1 Claim. (Cl. 200—59.)



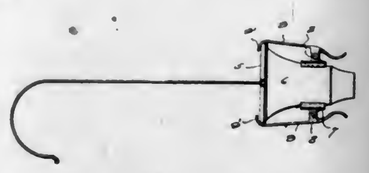
In combination with the steering column of an automotive vehicle, an annular member having an annular opening therein and formed from cooperating sections, said sections including cooperating arms adapted to extend outwardly from said column, the lower of said arms having a recess formed in its upper side, a contact plate mounted in said recess, a second contact plate mounted in said recess, an arm pivotally mounted in said recess, another arm pivotally mounted in said recess, means for electrically connecting said second named contact plate with said pivotally mounted arms, spring means for interconnecting said pivotal arms whereby when one of said pivotal arms is moved the other of said pivotal arms will be moved to and from engagement with said first named contact plate, and annular member adapted to be mounted on said steering column above said ring member and having an annular groove formed in the periphery thereof, a ring slidably mounted in said groove and including a portion projecting outwardly therefrom and downwardly toward said annular member to define a handle member, a stud on said handle member, one of said pivotal arms extending outwardly from said recess and having a notch formed in the outer end thereof whereby when said stud may be disposed therein so that when said ring is moved through said groove by manipulation of said handle member movement will be imparted to said pivotal arms.

1,823,827. ELECTRICAL DEVICE. ERWIN EMIL FRANZ, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1928. Serial No. 289,203. 5 Claims. (Cl. 173—259.)



1. In an electrical device, a mounting plate having a marginal slot and a co-operating opening spaced inwardly therefrom, both the slot and opening extending transversely through the plate, and a terminal member comprising a loop portion and an elongated terminal portion which is disposed at right angles to the plate, said loop portion engaging the slot and opening and extending around the portion of the mounting intermediate the slot and the opening.

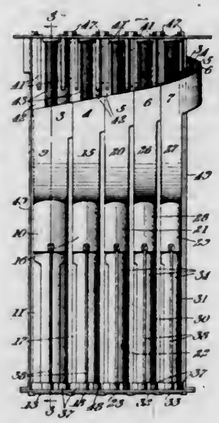
1,823,828. WATCHMAKER'S AND ENGRAVER'S EYE-GLASS HOLDER. DENNIE GOOCH, Somerset, Ky. Filed June 28, 1929. Serial No. 374,572. 3 Claims. (Cl. 88—41.)



1. The combination with a magnifying glass holder of means for attaching the holder to spectacle lens comprising a spring clip removably embracing the holder, spring pressed jaws pivotally mounted on the said clip and engageable with the spectacle lens for maintaining the said holder in position.

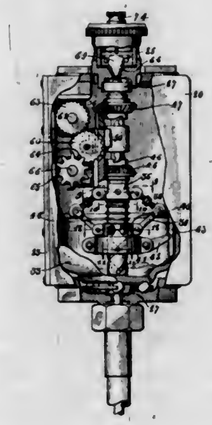
1,823,829. COIN-HANDLING APPARATUS. LABAN E. JONES and ALBERT N. NADEAU, Anaconda, Mont. Filed Nov. 23, 1926. Serial No. 150,344. 16 Claims. (Cl. 133—3.)

1. In a coin-handling apparatus, a coin-serving apparatus comprising a stacking tube in which coins are stacked in uniform order, means for introducing coins into said tube at the central portion thereof, means for moving a stack of coins longitudinally of said tube, means active upon a predetermined longitudinal movement of said stack of coins for resiliently supporting said stack



of coins in said tube, and means fixed relatively to said tube for limiting movement of the stack of coins under the influence of the resilient supporting means.

1,823,830. SPEED RESPONSIVE DEVICE. ARMAND JUNEAU, Montreal, Quebec, Canada. Filed Nov. 22, 1928. Serial No. 321,112. 1 Claim. (Cl. 264—15.)

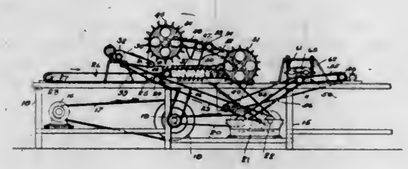


In a speedometer, the combination of a shaft adapted to rotate in any direction, a drum shaped dial adapted to rotate concentrically around the shaft, a sleeve journaled over the shaft and having two diametrically opposed screw threads, said sleeve being integral with the dial and in the center thereof a member secured to the shaft and above the top of the sleeve, a similar member slidable over the sleeve, links on each of said members, each corresponding link of each member terminating in a weighted centrifugal member, a spring between the fixed upper member and the slidable lower one tending to force the lower member in a downward position, a third fixed member journaled over the second member, an arm extending from said third member at right angles to the axis of rotation, guide means mounted exteriorly to the drum for preventing rotation of the third member, and means in said third member for engaging the threads of the sleeve and causing movement of the dial.

1,823,831. AERATION OF LIQUIDS. HARMON E. KEYES, Globe, Ariz. Filed July 13, 1927. Serial No. 205,529. 3 Claims. (Cl. 261—122.)

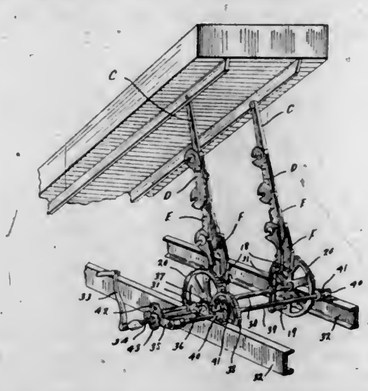
2. A method of increasing the efficiency of a porous medium positioned between a body of gas under pressure and a body of liquid through which the gas is forced, comprising injecting into the gas solid particles of a size sufficient to only partially clog the pores of the porous medium and forcing the prepared gas through the partially clogged pores thereby effecting a more intimate contact between the gas and liquid.

1,823,832. METHOD OF MAKING EXCELSIOR PADS. ALFRED T. KOCKRITZ and KURT PETRASCH, Henderson, Ky.; said Petrasch assignor to said Kockritz. Filed Dec. 11, 1928. Serial No. 325,318. 8 Claims. (Cl. 154—29.)



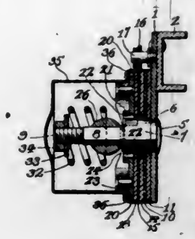
1. The steps in the method of manufacturing uniform pads from excelsior and similar shredded materials, which comprise compressing the material; releasing the compression to permit said material to expand; removing a portion of the expanded material; and forming the remainder into a bat.

1,823,833. HOISTING DEVICE. NICHOLAS W. KYLE, Colfax, Ill. Filed Sept. 10, 1928. Serial No. 305,047. 3 Claims. (Cl. 298—19.)



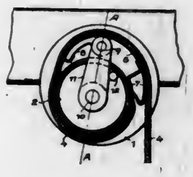
1. In a hoisting device of the character described the combination of a support, a tiltable member, a rotor mounted on said support and including a pair of diametrically opposed pins spaced equidistantly from the axis thereof, a series of toggle levers hinged together end to end, the terminal levers being respectively pivoted at their outer ends to one of said rotor pins and the tiltable member, said hinged points between the levers having slots, the distance between the slots of each joint being equal to the distance between the pins on said rotor, whereby the slots receive and engage the pins on the rotor when the levers are wound upon the rotor, locking arms for holding said toggle levers in extended relation and means associated with said locking arms adapted to be engaged by the pins on said rotor to release said locking arms, so that the toggle levers may be wound upon the rotor.

1,823,834. SHOCK ABSORBER. SAMUEL E. LESHER, Marion, Ohio. Filed Oct. 22, 1929. Serial No. 401,547. 6 Claims. (Cl. 267—9.)



1. In a shock absorber, a spindle, a plate rotatably mounted thereon and having an annular flange encircling the spindle, said flange being notched in its free edge to provide a plurality of spaced legs, a plate-like member having an aperture through which the spindle extends, the wall of said aperture being recessed for the reception therein of said legs, an annular flange formed on said member and having a plurality of depressions having inclined surfaces, a cam element non-rotatably mounted on the spindle and having projecting portions normally seated in said depressions, resilient means pressing the cam element against said inclined surfaces, a stationary plate mounted on the spindle between said rotatable plate and plate-like member, friction discs interposed between the stationary plate, rotatable plate and plate-like member, and means for rotating said plate-like member.

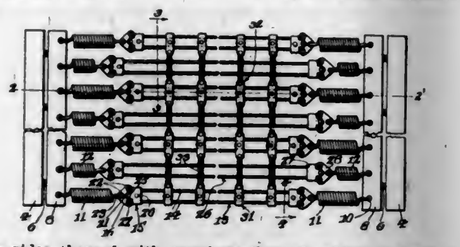
1,823,835. SHOCK ABSORBER. HANS LUDWIG, Homburg vor der Hohe, Germany, assignor of one-half to Stempelwerk Geselischaft mit beschrankter Haftung, Fechenheim, Frankfort-on-the-Main, Germany. Filed Sept. 19, 1928, Serial No. 307,003, and in Germany Oct. 29, 1927. 10 Claims. (Cl. 267—10.)



1. A shock absorber, more particularly for automobile vehicles, comprising a base plate, a drum rotatably mounted on the base plate, a drum spring tending to rotate the drum in one direction, a brake band passing twice round the drum and tending to rotate the drum in the opposite direction, a brake spring interposed between the inner and outer turns of the brake band and means for holding one end of the brake spring in position on the base plate, the free end of the brake spring being bent so as to bear against the inner turn of the brake band, as and for the purpose set forth.

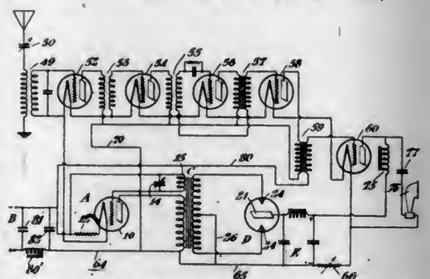
1,823,836. BEDSPRING. MARIAN A. MATTHEWS, Newburgh, N. Y. Filed Feb. 18, 1930. Serial No. 429,423. 4 Claims. (Cl. 5—190.)

1. In a bed spring, a duplex support cable consisting of a pair of wires, a pair of helical springs supporting the cable at the ends thereof, and means for connecting the cable with each of said springs, said means including a clip connected to said wires, and a substantially triangular connecting element connected to the clip and spring, said connecting element being provided adjacent



the sides thereof with openings through which the wires extend, said wires having end portions secured by said clip.

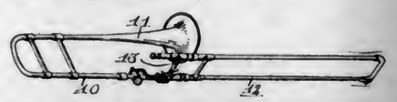
1,823,837. METHOD OF AND APPARATUS FOR CHANGING VOLTAGE. BENJAMIN F. MIESSNER, South Orange, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 21, 1927. Serial No. 176,842. 18 Claims. (Cl. 250—27.)



2. In a signal receiving system, a plurality of vacuum tube repeaters, having plate and filament heating circuits, the plate circuit of one of said repeaters being designed for operation at higher voltage than the plate circuit of another of said repeaters, means for supplying said high voltage plate circuit with direct current from a source of direct current of lower voltage, comprising means energized from said source for producing an oscillatory current, a transformer supplied from said last named means, a rectifier supplied from said transformer, and connections from the output of said rectifier to said high voltage plate circuit, and connections from said source to said filament heating circuit and to the plate circuit of said other repeater for supplying current directly thereto.

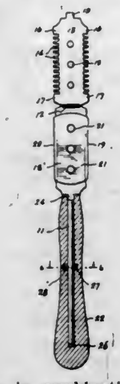
4. In a booster for direct electrical potential, the combination of a source of direct current, a vacuum tube oscillator connected thereto, means for rectifying the output current of said oscillator, and means for adding the potential of the rectified current to the potential of said source.

1,823,838. WIND MUSICAL INSTRUMENT. JOSEPH A. MILETTE, Montreal, Quebec, Canada. Filed July 26, 1929, Serial No. 381,271. Renewed Mar. 11, 1931. 1 Claim. (Cl. 84—395.)



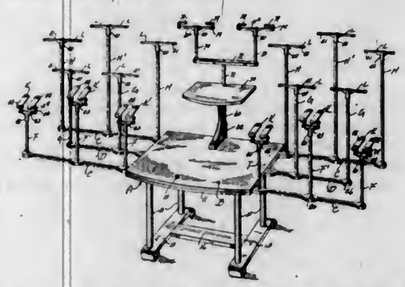
A slide trombone having a rotary wind control valve operatively mounted in the stationary wind tube thereof, a pivoted operating lever, means connecting said lever with the valve whereby the valve will be rotated upon pivoted adjustment of the lever from a normally open to a cut-off position, and spring means tending to normally urge the lever and valve to an open position.

1,823,839. SAFETY RAZOR. CHARLES AUGUSTUS MILLER, New York, N. Y. Filed May 2, 1930. Serial No. 449,252. 1 Claim. (Cl. 30—12.)



In a safety razor, in combination, a toothed guard, a lug on said guard, a blade support having an elongated longitudinally aligned stem rigid therewith, hinge means connecting said support and said guard, a handle portion having an elongated bore to receive said stem; said handle being turnably mounted on said stem and having a recess in its upper portion, said handle having also an internal annular groove about midway thereof, said lug being movable through said recess for engagement with the wall of said handle bore above said stem, whereby on turning said handle said recess is movable out of alignment with said lug thereby releasably engaging said lug, terminal shoulders on said guard at the sides of said hinge means and lug to cover the terminals of the blade edges, and a pin rigid with said stem and disposed in said handle groove for retaining said handle on said stem.

1,823,840. DISPLAY FIXTURE. HERMAN L. NOLTE, Terre Haute, Ind. Filed Sept. 19, 1929. Serial No. 393,754. 3 Claims. (Cl. 211—1.)



1. In a combination display fixture a table, including a table top suitable for supporting a variety of articles of merchandise, a plurality of arms, means on the table top for horizontally supporting said arms at opposite sides of the table, standards vertically supported on said arms, means at the tops of the standards for supporitng articles of merchandise, and means secured to the table top at the rear thereof between the sides for supporting articles of merchandise above the table top.

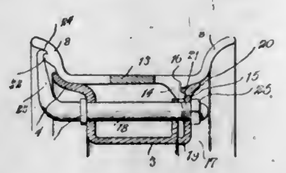
1,823,841. LIQUID TACHOMETER. SAMUEL R. PUFFER and SANFORD A. MOSS, Lynn, Mass., assignors to General Electric Company, a Corporation of New York. Filed Dec. 29, 1926. Serial No. 157,794. 6 Claims. (Cl. 264—19.)

1. In a liquid tachometer, the combination of a shaft, an impeller on the shaft, walls forming a casing for the impeller, journal bearings for the shaft, a discharge chamber, a diffuser connecting the impeller chamber to the discharge chamber, said diffuser comprising an uninterrupted annular passage, a thrust bearing for the



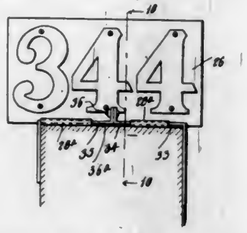
shaft, spring means which holds the shaft against the thrust bearing to prevent end play of the shaft, means for rotating the shaft, means for supplying liquid to the impeller, and a pressure measuring tube which communicates with the discharge chamber.

1,823,842. WHEEL RIM. ALICE M. REES, Tulsa, Okla. Filed Mar. 13, 1928. Serial No. 261,279. 1 Claim. (Cl. 301—11.)



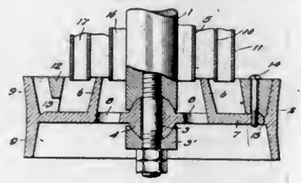
In combination with a wheel felly having a circumferential flange about one side, a rim fitting about said felly and consisting of circumferential sections having their ends abutting, said rim having tire retaining side flanges, abutting lugs at the meeting ends of the rim sections facing transversely thereof between their flanges and extending towards the felly at the unflanged side thereof and having lips projecting outwardly beyond the felly, other abutting lugs at the meeting ends of said tire sections formed upon their flanges at the opposite side of the rim from the first lugs and spaced from but facing the outer side edges of the flanges, bolts passed transversely through said felly at the abutting ends of the rim sections and each having a collar near one end to limit its movement through the felly and its other end portion threaded and projecting from the felly, the first-mentioned end of each bolt having a head formed integral therewith and extending transversely from the bolt beyond the flange of the felly, means on the bolt heads for gripping the lugs upon the flanges of abutting rim sections in bridging relation to the rim sections, cleats fitted upon the threaded ends of said bolts and bearing against the unflanged side of the felly and having hooked ends projecting from the felly in bridging relation to abutting ends of the rim sections and gripping the lips of the first-mentioned lugs, and securing nuts for said cleats threaded upon said bolts.

1,823,843. CURB SIGN OR MARKER. NAPOLEON B. RIDDLE, St. Francisville, La. Filed Apr. 11, 1929, Serial No. 354,346. Renewed Feb. 5, 1931. 6 Claims. (Cl. 40—125.)



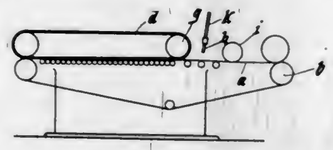
1. In combination with a curb, a sign mounted on the curb, a bracket mounting said sign, said bracket anchored in the ground and arranged in contact with the curb, and a sleeve on the sign engaging said bracket.

1,823,844. MEANS FOR NEBULIZING FLUIDS. CHAMPLAIN L. RILEY, North Plainfield, N. J. Filed Apr. 28, 1928. Serial No. 273,058. 8 Claims. (Cl. 299—63.)



8. A centrifugal nebulizing rotor having a web with discharge lips on the opposite faces of said web in combination with means for delivering to said opposite faces separate bodies of liquid to be nebulized for dispersal in adjacent planes, whereby they may commingle in nebulized form.

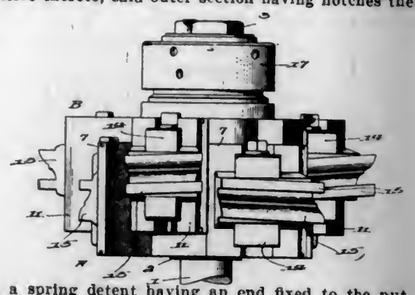
1,823,845. APPARATUS FOR DYEING PAPER AND CARDBOARD DURING THE MANUFACTURE ON PAPER MAKING MACHINES. PAUL SCHUMACHER, Magdeburg, Germany. Filed June 23, 1930, Serial No. 463,295, and in Germany Jan. 20, 1927. 5 Claims. (Cl. 92—40.)



1. An apparatus for coloring paper and cardboard during manufacture on the paper making machine, comprising in combination an Egoutteur cylinder adapted to press the color into the paper mass whilst still in moist condition, and metal grooves on the circumference of said cylinder corresponding to the design adapted to take up liquid color.

1,823,846. CUTTER HEAD. ELMER S. SHIMER, Milton, Pa., assignor to Samuel J. Shimer & Sons, Inc., Milton, Pa., a Corporation of Pennsylvania. Filed Jan. 11, 1930. Serial No. 420,168. 6 Claims. (Cl. 144—224.)

1. A cutter head comprising at least two sections having hubs telescopically connected together, interfitting arms carried by the peripheries of said sections for carrying cutting tools, the inner hub having a peripheral threaded portion, an adjusting nut screwed onto the threaded portion and connected with the other section and rotatable relative thereto, said outer section having notches therein,

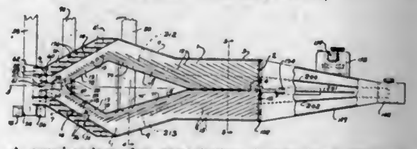


and a spring detent having an end fixed to the nut and having the opposite end in position to engage the notches for normally tending to hold the nut against rotation.

1,823,847. FORMIC ACID ESTER OF DIETHYL ETHER OF CELLULOSE AND THE PROCESS OF PREPARING THE SAME. GERHARD BALLE, HANS LANGE, and KARL OST, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 14, 1929, Serial No. 399,691, and in Germany Oct. 22, 1928. 4 Claims. (Cl. 260—101.)

4. Process of preparing formic acid esters of alkyl ethers of celluloses, which consists in treating these alkyl ethers of celluloses containing free hydroxy groups with formic acid of 90 per cent. strength.

1,823,848. PROCESS AND MECHANISM FOR SEPARATING INTERMIXED DIVIDED MATERIALS. KENNETH DAVIS, Ebensburg, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 19, 1926. Serial No. 102,906. 5 Claims. (Cl. 209—467.)



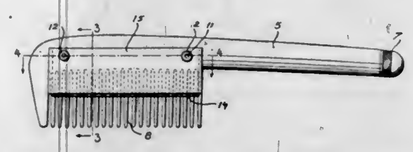
1. A mechanism for separating intermixed divided materials differing relatively greatly in size but differing relatively little in specific gravities, including in combination an air pervious table having a main end portion merging into branch portions which diverge and thereafter converge, defining a central opening into which the lighter materials are discharged, the converging branch portions having discharge openings for the heavier materials on the outside thereof whereby the heavier material discharges straight forwardly in a plurality of streams from the front end of the table, means variably positionable vertically for controlling the discharge of the heavy materials, partitions on the table for guiding the heavier materials toward the outside edges of the table and means for reciprocating the table longitudinally.

5. In a process for separating intermixed divided materials varying relatively greatly in size and relatively little in their specific gravities, such as unsized coal, wherein a bed of the materials of substantial depth is acted upon by lifting air currents and mechanical vibration, the steps of progressing a flotant stratum of lighter material directly forwardly against the action of gravity to discharge, permitting heavier material to settle to an inferior stratum, impelling the settled heavier material laterally out of the bed and then forwardly against the action of gravity to discharge in a plurality of relatively small, regulable streams at the final separating or front portion of the bed in a direction substantially parallel to that of the flotant stratum.

1,823,849. PROCESS FOR THE MANUFACTURE OF MANURES. FRITZ ROTHE and HANS BRENEK, Berlin, Germany, assignors to the Firm: Rhenania-Kunheim Verein Chemischer Fabriken A. G., Berlin, Germany, a Corporation of Germany. Filed Jan. 27, 1927, Serial No. 164,121, and in Germany Feb. 1, 1926. 6 Claims. (Cl. 71—7.)

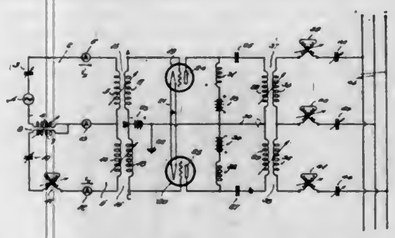
1. A method for making a fertilizer from a raw phosphate containing calcium fluoride or calcium sulfate or both which consists in heating to temperatures of about 1200° C. and in presence of steam a mixture of the raw phosphate, silica and alkali-metal carbonate containing about such amounts of P_2O_5, CaO, SiO_2, and at least such an amount of alkali-metal oxide as would be present in a mixture of Ca_2, Na_2, P_2O_5 with Ca_2 SiO_4, having the same content of P_2O_5 and CaO as the raw phosphate employed.

1,823,850. COMB. HAMILTON L. J. MARSHALL, Montgomery, Ala. Filed May 8, 1930. Serial No. 450,804. 12 Claims. (Cl. 132—13.)



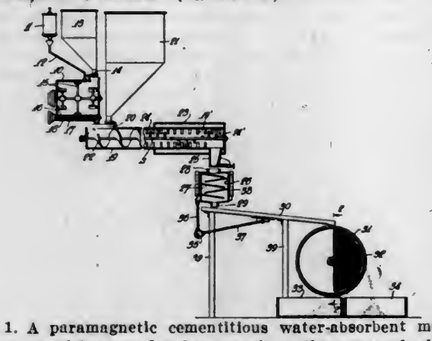
1. A device of the class described comprising an elongated hollow body portion providing a liquid chamber, means for closing one end of the chamber, a series of apertures arranged longitudinally of the body portion in communication with the chamber and opening at one side of the body, comb teeth projecting from the body below the row of apertures, a distributor pad of absorbent material overlying the apertures and a portion of the comb teeth, and retaining means for the pad.

1,823,851. METHOD OF GENERATING THREE PHASE HIGH FREQUENCY CURRENT. SALVATORE A. BARONE, Woodside, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Feb. 17, 1926. Serial No. 88,839. 6 Claims. (Cl. 250—1.)



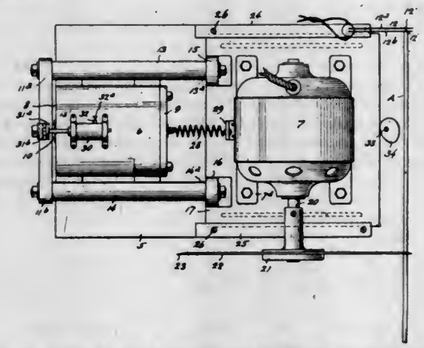
1. A system for generating three phase high frequency current comprising in combination a source of single phase high frequency current, a three phase load, a balanced electron tube amplification system constituted by two electron tubes having input and output circuits, sets of open delta connected transformers arranged in said input and output circuits, a circuit interconnecting said source and the open delta connected transformers in said input circuits for deriving currents displaced in phase substantially 60°, said open delta connected transformers in said input circuits providing means for developing three voltages displaced in phase by substantially 120°, and connections between the open delta connected transformers in said output circuits and said three phase load for delivering three phase high frequency current to said load.

1,823,852. MAGNETIC SEPARATING COMPOSITION. ERNST BRANDUS, Berlin, Germany, assignor to Crawfordsville Seed Company, Crawfordsville, Ind., a Corporation of Indiana. Filed Apr. 29, 1929. Serial No. 359,180. 3 Claims. (Cl. 209—8.)



1. A paramagnetic cementitious water-absorbent medium comprising powdered sponge iron, the pores of which contain an adherent mixture, including calcium carbonate and iron oxide.

1,823,853. CUTTING-OFF DEVICE. ANTONY J. CAGLIOSTRO, New York, N. Y. Filed Aug. 31, 1929, Serial No. 389,797. Renewed Aug. 7, 1931. 6 Claims. (Cl. 164—60.)



1. In combination, a motor driven work engaging tool, a slide upon which the tool is involved to and from work engaging position, ball bearings upon which the slide moves, rods connected with the slide, a solenoid, a rod for the solenoid, a cross bar connected to said rod and to the first named rods, a work actuated circuit closer, and a circuit for the solenoid controlled by the circuit closer.

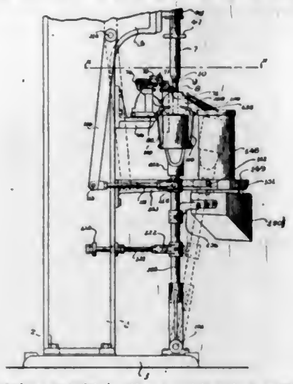
1,823,854. FRUIT PARING MACHINE. BURTON C. COONS, Rochester, N. Y., assignor to Coons Machinery Corporation, Gates, N. Y. Filed Nov. 24, 1928. Serial No. 321,676. 38 Claims. (Cl. 146—39.)

1. In a paring machine, the combination with a rotary support on which the fruit is pared, having a circular portion at one end adapted to enter the fruit to turn therein, and retaining means spaced from the free end of the support for engaging the fruit to cause the latter to turn with the support of a freely rotatable holder on which the fruit is supported while the support enters the fruit to engage said retaining means with the fruit and mechanism for turning the rotary support while the latter is entering the fruit on the rotatable holder.

9. In a paring machine, the combination with a support for the fruit, of a rotatably mounted fruit holder, and movable centering jaws for engaging the opposite sides of the fruit to center the latter on the holder for presentation to the fruit support.

10. In a parting machine, the combination with a rotary support on which the fruit is pared, of a paring

mechanism comprising a knife carrying arm, a swinging carriage on which the knife carrying arm is movably mounted, spring means normally holding said knife carrying arm on the swinging carriage toward the fruit support, a movable carriage on which the first mentioned carriage is mounted to swing, means for swinging the first mentioned carriage on the second mentioned carriage, and means for moving the second mentioned carriage to carry the knife away from the support in a plane perpendicular to and transverse of the axis of rotation of said support.

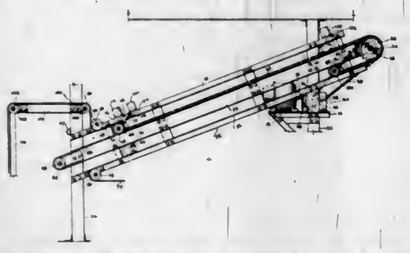


21. In a paring machine, the combination with a rotary and axially movable fruit support, of a pivotally mounted fruit holder movable into and out of alignment with the fruit support, and from which the fruit is removed by the fruit support, a paring mechanism for cooperating with the fruit on the fruit support as the latter moves in an upward direction, a movably mounted receiver moved to receive the fruit from the fruit support when the fruit holder is moved out of alignment with such fruit support, and a push-off moving the fruit off the supporting device to the receiver when the receiver is in receiving position and the fruit support is away from its lowest position.

1,823,855. METHOD OF TREATING RUBBER COMPOUNDS. PAUL A. DAVIS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 8, 1929. Serial No. 353,679. 9 Claims. (Cl. 18—53.)

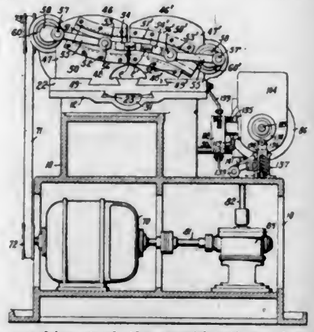
2. A method of treating the surfaces of uncured rubber in order to reduce the tacky character thereof which comprises dusting them with a soap of a metal selected from a group consisting of magnesium and aluminum.

1,823,856. FABRIC MANIPULATING MACHINE. RHYS D. EVANS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 28, 1930. Serial No. 498,536. 10 Claims. (Cl. 26—70.)



1. A machine for inspecting continuously moving sheets of material comprising means for forming a reserve loop, means for stopping a portion of fabric between the reserve loop and the source of supply, and means between the second mentioned means and the source of supply for taking-up fabric from the source of supply while the second mentioned means is in operation.

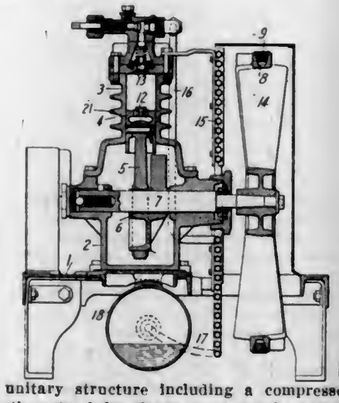
1,823,857. SLOTTING MACHINE. HERMAN E. FRENTZEL, Milwaukee, Wis., assignor to The Falk Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 27, 1926. Serial No. 91,019. 14 Claims. (Cl. 90—38.)



1. In a machine tool the combination of a work support, a pair of oppositely arranged cutting tools for forming the opposite walls of a slot, separate slides for said tools, separate guides for said slides disposed end to end, and means for reciprocating said slides to thereby reciprocate said tools through the same slot and to effect a cutting stroke in each direction of reciprocation.

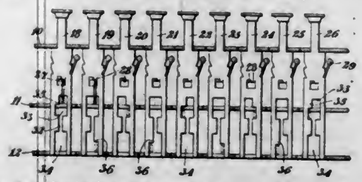
12. In a machine tool or the like the combination of a work support, a tool support, feed mechanism for effecting a relative advance between said supports, indexing mechanism, a power driven shaft, a frictional driving connection between said shaft and indexing mechanism, a stop for rendering said driving connection ineffective to thereby lock said indexing mechanism, means controlled by said feed mechanism for releasing said stop to thereby render said indexing mechanism active, driving connections between said shaft and feed mechanism, and means controlled by said indexing mechanism for controlling said last named connections.

1,823,858. COMPRESSOR-CONDENSER UNIT. FREDERICK CARL GEILER, Dayton, Ohio, assignor to Trupar Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed July 18, 1927. Serial No. 206,534. 2 Claims. (Cl. 62—115.)



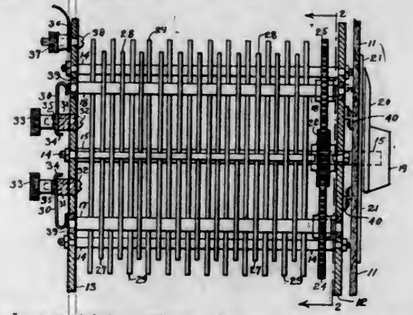
1. A unitary structure including a compressor pump, a supporting stand for the pump, a receiver tank located beneath the supporting stand, a drive shaft for said pump, a fan wheel mounted on said drive shaft, and a condenser coil of evolute form stationarily arranged in a vertical plane intermediate the fan wheel and the compressor pump and substantially concentric with the drive shaft, the inner end of the evolute condenser coil being connected with the compressor and the outer end thereof being connected with the receiver.

1,823,859. CALCULATING MACHINE. FRANCIS A. HOSACK, New York, N. Y. Filed Aug. 11, 1925. Serial No. 49,565. 11 Claims. (Cl. 235—145.)



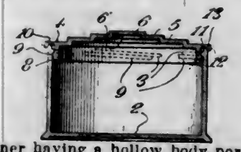
4. In a calculating machine, a row of keys, a slidable actuator bar nested within alined openings defining a guideway therefor in the stems of said keys, said openings being so shaped that guiding contact is provided by each keystem on both sides of said bar both when the keys are in normal and in depressed position.

1,823,860. MULTIPLE CONDENSER. MOSES JACOBSON, New York, N. Y., assignor of one-half to Adolph Herzfeld, Brooklyn, N. Y. Filed Mar. 30, 1925. Serial No. 19,467. 3 Claims. (Cl. 175—41.5.)



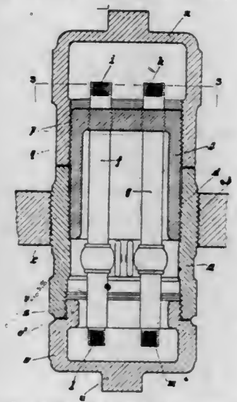
1. In a multiple condenser for tuning multiple circuits multiple sets of rotor plates, a separate electrical lead from each of said sets, for connection in said circuits, a set of stator plates common to said sets of rotor plates, a controller shaft, a fixed mechanical coupling therebetween and said rotor sets, said shaft to be rotated at a higher angular velocity than said rotor sets, a stationary dial, a pointer, secured to said shaft, for accurately indicating on said dial the position of said rotor plates with relation to said stator plates, and another pointer, operatively connected to one of the rotor sets, to indicate on a small scale the angular displacement of said rotor sets.

1,823,861. CONTAINER FOR TOILET POWDER. MARCEL MICHELIN, Staten Island, N. Y., assignor to Pinaud Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1929. Serial No. 402,387. 4 Claims. (Cl. 220—40.)



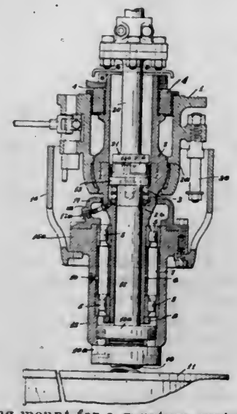
1. A container having a hollow body portion having an upper circular wall portion, a cover member, a flange-like portion fitting over the top edge of said wall portion, a depending flange on said cover member within said circular wall portion and forming with the outer rim of said cover member, in section, a bell-crank lever and means for flexing the said depending flange member diametrically inwardly, at the same time holding the cover member down, when said cover member is moved into place, the cover member having an annular substantially horizontal resilient portion inwardly and above said means.

1,823,862. DEVICE FOR ATTACHING SAVING MEANS TO SUNKEN SUBMARINES. JOHANN NOVOTNY, Karlsbad, Czechoslovakia. Filed Apr. 26, 1930. Serial No. 447,656. 2 Claims. (Cl. 114—16.4.)



1. A device for attaching saving means to sunken submarines of the character described, comprising in combination, a cylinder made of steel, having an external screw-thread adapted to be screwed in position into an internal screw-threaded passage made in the deck of the submarine to communicate with the crew's room; and having an internal screw-thread for engagement with the external screw-thread of a cylindrically shaped member positioned inside the said cylidner, a series of tubes mounted in the cylindrically shaped member, the said tubes being intended for the reception of saving means, and covers for removably closing top and bottom of the said cylinder.

1,823,863. DRIVING MOUNT FOR GYRATORY CENTRIFUGALS. EUGENE ROBERTS, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed July 11, 1929. Serial No. 377,430. 6 Claims. (Cl. 308—142.)



1. A driving mount for a gyratory centrifugal embracing in combination a non-rotary hollow suspension head sup-

ported to gyrate against yielding centralizing resistance and containing an interior anti-friction thrust bearing, said head carrying on its exterior anti-friction radial bearing elements, a rotary basket-carrying shaft having inner and outer concentric upward extensions, the inner extension having suspension support on said interior thrust bearing and serving to transmit rotation from overhead driving means and the outer extension having lateral engagement with the exterior of said radial bearing elements to maintain parallelism between the basket shaft and the suspension head as the centrifugal gyrates.

1,823,864. PROCESS OF OBTAINING BERYLLIUM AND ALUMINUM COMPOUNDS. CHARLES B. SAWYER and BENGT KJELLGREN, Cleveland, Ohio, assignor to The Brush Beryllium Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 14, 1930, Serial No. 488,662, and in Canada Jan. 6, 1927. 16 Claims. (Cl. 23—19.)

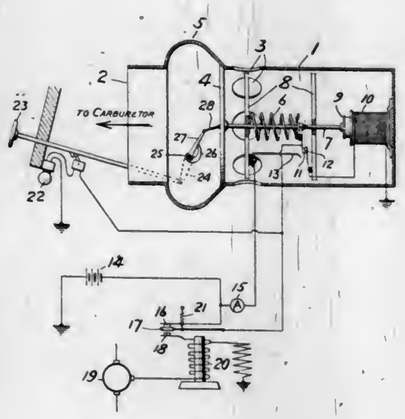
8. In a process of extracting beryllium from beryl, the step which consists in melting the beryl.

15. As a new and useful product, beryl which has been heated at a temperature above 1000° C. and rapidly cooled and thereby had its reactivity substantially increased.

1,823,865. HYDROGENATION OF CROTONALDEHYDE. LLOYD CLAYTON SWALLEN, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Nov. 7, 1927. Serial No. 231,781. 6 Claims. (Cl. 23—236.)

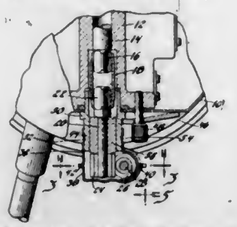
1. A catalyst for the hydrogenation of crotonaldehyde comprising precipitated copper silicate which has been reduced by hydrogen.

1,823,866. AUTOMATIC CHOKE. JOSEPH A. VERNA and EUCHARISTE P. ARCHAMBAULT, Philadelphia, Pa. Filed Jan. 12, 1931. Serial No. 508,359. 3 Claims. (Cl. 123—124.)



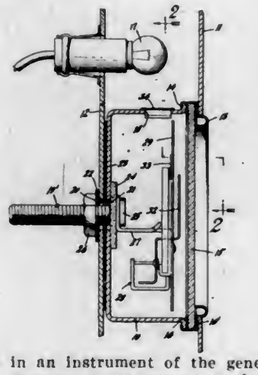
1. An automatic choke for an internal combustion engine comprising a valve controlling the air supply to the carburetter of said engine, means urging said valve to closed position, second means urging said valve to closed position with substantially constant force when said engine is stopped, means for varying the force with which said second means urges said valve to closed position in response to the speed of rotation of said engine, and means for suspending the operation of said second means on said valve.

1,823,867. CONNECTION OF DRIVING MEANS TO SPEEDOMETERS. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Mar. 9, 1928. Serial No. 260,421. 4 Claims. (Cl. 74—56.)



1. In an instrument having driven means, driving means therefor, coupling mechanism for said driving and driven means comprising an upper and a lower stamping secured together, a sleeve secured in said upper stamping, said sleeve being fastened to the instrument, a bearing held in said sleeve, a shaft connected to said driven means and journalled in said bearing, a second shaft located at an angle to the first shaft and geared to it, said second shaft being connected to the driving means, and a bearing for said second shaft clamped between said upper and lower stampings.

1,823,868. INSTRUMENT PANEL ILLUMINATION. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Nov. 30, 1928. Serial No. 322,853. 5 Claims. (Cl. 40—130.)



1. For use in an instrument of the general character described: a translucent dial provided with indicia cut therein and producing a distinctive optical effect by transmitted light, as compared with daylight effects due to reflection of light therefrom,—some of said indicia being outlined in a material more opaque than that of said dial.

1,823,869. COATING OF BODIES WITH METAL. WALTER BAUR, Cologne-Braunsfeld, Germany. Filed Apr. 1, 1929, Serial No. 351,820, and in Germany Sept. 11, 1926. 3 Claims. (Cl. 29—148.)

1. The method of forming a protective coating upon plane metallic work-pieces, consisting in intimately mixing a liquid agglutinant with a pulverulent metal, coating the surfaces to be protected uniformly with said mixture, heating the coated surfaces until the agglutinant commences to harden, introducing the respective work-pieces between rollers, moving each coated work-piece forward between the rollers and subjecting it at the same time to a pressure of such a strength that the thickness of the coating is reduced and a part thereof is forced into the pores and inequalities of the metallic surface coated, substantially as set forth.

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Labels	19—No.	39,759 to No. 39,777, inclusive.
Prints	6—No.	13,419 to No. 13,424, inclusive.
Reissues	11—No.	18,198 to No. 18,208, inclusive.
Designs	82—No.	85,143 to No. 85,224, inclusive.
Patents	888—No.	1,823,870 to No. 1,824,757, inclusive.
Total	1,127	

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,608,324, L. L. Knox, Compound wall structures, decided September 2, 1931, counts 3, 4, 5, 6, and 7.

Pat. 1,646,380, R. C. Holmes, F. T. Manley, and O. Behimer, Treating hydrocarbon oils, decided August 31, 1931, claims 12, 14, and 15.

Pat. 1,658,664, F. F. Brand, Variable ratio transformers, decided July 9, 1931, claim 3.

Pat. 1,682,575, B. Leon and M. Fow, Beetle trap, decided July 13, 1931, claim 5.

Pat. 1,714,843, J. A. Brown and W. J. Handley, Fluid heating device and method of operating same, decided August 10, 1931, claims 3 and 9.

Pat. 1,720,007, H. G. Schuler, Safety clutch mechanism for motor vehicles, decided August 31, 1931, claims 1, 2, and 3.

Pat. 1,741,334, K. F. Pietzsch, Filter, decided August 31, 1931, claims 2, 3, and 4.

Pat. 1,745,528, P. L. Clark, Radiographic apparatus, decided September 1, 1931, claims 5, 6, 16, and 18.

Interference Notice

Albert R. Johnson, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Norman B. Geddes, 128 East Thirty-seventh Street, New York, N. Y., and patent granted April 2, 1929, No. 1,707,859, to Albert Richard Johnson, 302 Lexington Avenue, New York, N. Y., and a notice of such declaration sent by registered mail to said Johnson at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Johnson, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Aug. 27, 1931.*

Skylark Radio Corporation, its assigns or legal representatives, take notice:

A cancellation proceeding has been instituted by this Office upon the application of the Colonial Radio Corporation, 254 Rano Street, Buffalo, N. Y., to effect the cancellation of trade-mark registration No. 167,260, issued April 24, 1923, to The Ferry, Desjardins & Temple Co., 15 East Third Street, Cincinnati, Ohio, which registration, the assignment records of the Office show, has been transferred to the Skylark Radio Corporation, 15 East Third Street, Cincinnati, Ohio. The notice of such proceeding sent by registered mail to the said Skylark Radio Corporation at the said address having been returned by the postoffice as undeliverable, notice is hereby given that unless the Skylark Radio Corporation, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., Aug. 31, 1931.*

Chinook Lumber & Shingle Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Charles E. Putman, 4421 White Building, Seattle, Wash., to effect the cancellation of the trade-mark registration of the Chinook Lumber & Shingle Co., 915 White Building, Fourth Avenue S. E., corner Union, Seattle, Wash., No. 128,650, dated January 13, 1920, and the notice of such proceeding sent by registered mail to the said Chinook Lumber & Shingle Co. at the said address having been returned by the postoffice as undeliverable, notice is hereby given that unless said Chinook Lumber & Shingle Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Condition of Applications Under Examination at Close of Business September 5, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 93,810; Trade-Mark Division, 1,075. Oldest new case, Jan. 5, 1930; oldest amended, Jan. 8, 1930.

DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS

Room No.		Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Apr. 23	Apr. 23	826
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Mar. 18	Mar. 25	1,358
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 16	May 2	972
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 11	Apr. 14	831
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 7	Mar. 7	776
318	6. LEWERS, A. M., Carbon Chemistry	Jan. 21	Jan. 29	2,211
106	7. JARBOE, C. G., Optics; Photography	Feb. 18	Feb. 16	2,069
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Feb. 10	Feb. 10	1,686
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Mar. 23	Mar. 23	1,270
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 4	Apr. 17	1,175
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Apr. 7	Apr. 7	758
380	12. HENRY, C. C., Machine Elements	Jan. 23	Mar. 2	1,183
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 9	Mar. 22	1,096
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 9	Mar. 23	1,167
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Feb. 16	Feb. 16	2,483
242*	16. SPENCER, C. J., Telegraphy; Telephony	May 7	May 15	876
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Feb. 6	Feb. 9	1,530
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 9	Mar. 11	1,087
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Jan. 12	Jan. 26	2,163
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Apr. 29	May 2	1,004
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 9	Mar. 30	978
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Apr. 14	Apr. 23	822
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 16	Jan. 10	1,083
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 5	Mar. 7	1,066
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Mar. 12	Mar. 16	1,588
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 7	Mar. 9	1,017
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Mar. 10	Mar. 10	1,104
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 13	Feb. 16	1,788
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	May 7	May 12	584
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 7	May 11	877
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Jan. 5	Jan. 8	2,634
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Apr. 6	Apr. 6	1,233
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Mar. 9	Mar. 11	2,290
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	May 5	Apr. 29	882
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 24	June 24	709
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Jan. 19	Jan. 16	2,238
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Feb. 21	Feb. 21	1,576
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth-Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	May 20	May 20	588
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 13	Mar. 12	1,640
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Feb. 2	Feb. 12	3,201
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Apr. 11	Apr. 16	799
223*	42. CUTTING, H. O., Electric Signaling	Feb. 16	Feb. 18	1,502
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 5	Mar. 11	1,534
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Jan. 6	Jan. 9	2,160
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Jan. 30	Jan. 30	2,135
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Mar. 18	Mar. 30	1,140
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 7	Mar. 7	2,189
212*	48. ROEPKE, O. B., Electricity, General Applications	Mar. 9	Mar. 9	1,116
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 25	Mar. 26	1,455
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 19	Jan. 26	2,630
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Jan. 22	Jan. 23	2,131
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Mar. 20	Mar. 21	1,478
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 9	Apr. 10	749
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Jan. 16	Jan. 16	2,887
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery	July 10	July 10	269
	{Designs	Aug. 18	Aug. 25	180
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Feb. 2	Feb. 4	1,889
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Mar. 9	Mar. 14	888
270*	58. DOWELL, E. F., Abrading; Typewriting	Feb. 5	Feb. 5	1,581
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Mar. 12	Mar. 13	1,695
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Jan. 30	Feb. 2	1,975
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Jan. 9	Jan. 15	2,043
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Jan. 14	Jan. 14	2,610
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 14	Jan. 22	2,356
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND, {Trade-Marks	Aug. 3	Aug. 12	944
	{Labels and Prints	Aug. 15	Aug. 25	131

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE PEDDRICK, JR., AND LEWIS

No. 2,652. Decided April 15, 1931

PATENTABILITY—PROCESS OF PRODUCING FELDSPATHIC FLUX FOR PORCELAIN.

A claim for a process of producing feldspathic flux for porcelain *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Mr. Theodore K. Bryant for Peddrick and Lewis.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

The invention involved in this appeal from a decision of the Board of Appeals of the Patent Office, which affirmed the action of the Examiner in rejecting appellants' claims 7 and 8 relates to a process for the preparation of feldspathic flux for porcelain Claims 7 and 8 are as follows:

7. The process of producing feldspathic flux for porcelain consisting in separately crushing different batches of feldspathic rock containing mica, analyzing a sample of each of the separately crushed rocks, delivering the crushed rock to different points of storage in accordance with the results of such analyses, combining predetermined quantities of the crushed rock from any selected point of storage with the necessary quantity and kind of material in which said rock is deficient, pulverizing and mixing the combined crushed rock and material, and then removing the mica particles from the pulverized mixture.

8. The process of producing feldspathic flux for porcelain consisting in crushing feldspathic rock containing mica, analyzing a sample of the rock after being crushed, combining predetermined quantities of the crushed rock with the necessary quantity and kind of material in which said rock is deficient, pulverizing and mixing the combined crushed rock and material, and then removing the mica particles from the pulverized mixture.

The references relied upon are: Pohl, 1,103,375, July 14, 1914; Eckel, Cements, Limes & Plasters, 2nd edition, 1922 (Wiley, New York), pages 292, 369–370.

In order that we may understand the ground of rejection on the part of the Board, we quote the main part of its decision:

This application relates to the preparation of stock from feldspathic rock for use in the porcelain industry. The rock is crushed and analyzed after which the material is stored in separate bins, each bin containing material having substantially the same characteristics as indicated by the analysis; also undesirable mica particles are removed from the crushed material.

In this industry it is necessary to furnish feldspathic rock having certain characteristics for certain purposes and in the past it has been the custom, as stated by appellant, to take samples of the rock and then subject it to the usual treatment followed in manufacturing the articles in order to ascertain what the final product will be. Rock material coming from substantially the same source was then presumed to have about the same characteristics. It would appear that there is a great deal of variation in the rock, even when coming from the same mine. By appellants' method it is possible to furnish manufacturers with exactly the kind of material which they desire as the stock may be taken from different bins and mixed to produce a blend which will have the desired characteristics.

The Examiner is unable to show that this has ever been done and appellant urges that it is a great commercial success and much superior to the old methods. We do not doubt appellants' statement in regard to this but in our opinion the industry has been lax in not employing ordinary scientific and engineering skill in handling this material. Certainly it is old in many other arts to blend stock together having different characteristics in order to produce the desired product. As one instance of this the Examiner calls attention to the Eckel publication which describes this manner of handling and preparing cements. It is thought that an engineer trained in the preparation of cement should recognize the analogy in preparing stock of the nature under discussion. In both instances rock is ground up and both relate to the ceramic industry and are therefore quite analogous. Also, as shown in the patent to Pohl, it is old in the magnesite industry to produce mixtures based upon analysis of stored stocks. This is another instance of a practice that is doubtless common in various branches of the art of this general nature. None of the specific details of the claims are regarded as involving patentable distinction.

Appellants here argue that the Board erred in the rejection of the claims for the reason that the method disclosed is new as applied to the preparation of any mineral substance or material and especially is it new in the art of preparing feldspar, and that, since the steps of appellants' method have never been followed, in the order enumerated, in the process of preparing any kind of material in any prior art, and since these steps when so applied have produced a new and highly beneficial result, it necessarily required invention and discovery to produce the method.

Feldspar or "spar," as it is commonly called by feldspar miners, is a crystal rock forming part of certain igneous rock structures found in the United States chiefly east of the Allegheny Mountains, and the feldspar of commerce is obtained from pegmatite dikes which contain feldspar and quartz, mica, and certain other mineral substances. The uses of feldspar are, according to a report of the United States Department of Commerce, Bureau of Mines, enritled "Feldspar in 1928, Mineral Resources of the United States, 1928—Part II, pages 67–80," at page 70, as follows:

Uses

The chief use of feldspar is as a constituent of both body and glaze in pottery, porcelain, white ware, vitrified sanitary ware, and enameled brick. Feldspar constitutes 10 to 35 per cent of the body of vitrified wares, in which it acts as a flux to bind the particles together. Glazes contain 30 to 50 per cent of feldspar. Enamels applied to metals are fused with feldspar. Bath tubs and wash bowls are commonly made of cast iron to which while hot an enamel containing much feldspar is applied.

Glass making is another branch of the ceramic industry in which feldspar is used. * * *

Feldspar is also used as an abrasive in scouring soaps.

The above published report indicates that feldspar has many other uses and that its fitness for all of its uses is for the most part dependent upon its analysis, that is to say, it must contain certain ingredients in different percentages for one use and ingredients of different and varying percentages for other uses; that it has always been very difficult to secure commercial feldspar of the chemical composition desired, and that the manufacturer using this ingredient has had to make his own analysis and mixtures which ofttimes resulted in great loss of time and material.

From the same authority we quote the following:

* * * Potters usually demand a uniform product, the composition of which is constant from day to day. In view of the variations mentioned above this requirement is somewhat difficult to fulfill, and the best thought of the industry is being directed toward means of overcoming these difficulties.

* * * * * * * *

Progressive feldspar producers and grinders are attempting to overcome the inherent lack of uniformity in their raw materials by employing technical control.

It seems to be conceded in this case that the process proposed by appellant solved the problem of technical chemical control, so that now under this

process, which is being used extensively in the production of commercial feldspar, a user of feldspar may order a carload with the assurance that when it arrives it will be uniformly mixed, each portion of it having an analysis exactly in accordance with the order, and that such a mixture, on account of its definitely determined analysis, is found to be suitable for his manufacturing requirements without further mixing the same or making additions thereto.

It will be observed that claim 7 calls for six steps:

1. Separately crushing different batches of feldspathic rock containing mica.
2. Analyzing a sample of each of the separately crushed rocks.
3. Delivering the crushed rock to different points of storage in accordance with the results of such analyses.
4. Combining predetermined quantities of the crushed rock from any selected point of storage with the necessary quantity and kind of material in which said rock is deficient.
5. Pulverizing and mixing the combined crushed rock and material.
6. Removing the mica particles.

Claim 8 does not include the third step and when the case was presented to this court in argument, the impression was given by both sides that the only difference between claim 8 and claim 7 was that in claim 8, step 3 of claim 7 was omitted, and it was argued by appellants that the omission of this step, if the other steps of claim 7 were followed would not render claim 8 unpatentable. An examination of claim 8 discloses that it does not contain the first two steps of claim 7 which provides for separate crushing, and for analyzation of the separately crushed rock. It does provide for "combining predetermined quantities of the crushed rock with the necessary quantity and kind of material [etc.]." We believe claim 8 reads on the prior art and for that reason is objectionable.

From the contention of appellants we conlude that the really important part of the process in separately crushing and analyzing each of the grades of rock, which grades are determined as the rock comes from the mine. Since different rock coming from different parts of the mine has a different analysis, it is important to separately analyze and determine the contents of each class of rock and then, knowing the analysis of each class, a carload of feldspar of a certain analysis, desired by a manufacturer, may be obtained by mixing a sufficient quantity from different separately analyzed batches of material, to make a mixture of the desired percentage. The process is chiefly based upon the proposition that, knowing the percentage of feldspar in each separate batch, a batch of any predetermined analysis may be obtained by means of calculation.

The method most generally employed prior to the method proposed by appellants is set out in appellants' brief. The correctness of the statement is abundantly supported by various authorities cited and is not disputed in the trial of this cause, and follows:

> Heretofore it has been customary to take the material as it comes from the mine in large lumps and hand pick it to remove all visible mica, garnet and other substances undesirable in porcelain, glass, or other ceramic products. Also, the outward appearance of different feldspars differs and a rough sorting out of the undesirable forms of feldspar has also been done by hand. There then remains a mass of feldspar of unknown composition which is assumed, from typical analyses of the kind above mentioned and from the judgment and experience of the mill foreman to require certain amounts of quartz or feldspar or both to bring it to the grade desired. These amounts are added and the mixture is ground. Test cones are then made and fired just as the articles of porcelain are fired in a suitable kiln. From the behavior of these test cones the grade of the mixture is determined and, if not satisfactory an additional quantity of an ingredient or of ingredients may be added as the experience of the operator has found probably desirable. Sometimes attempts are made to check the grade before grinding by picking lumps at random from the feldspar, after it has been picked over to remove mica and the other impurities, and getting an average chemical analysis of these lumps.

The Board concedes the commercial success of appellants' method, which success is represented to be almost revolutionary, and, further, concedes that the Examiner was unable to show that this process had ever been followed before. The Board concluded that it was old in many other arts to blend rocks having different chemical qualities in order to obtain a mixture of a certain analysis and that the particular steps proposed by appellants, even though new in the order of their application, required nothing more than scientific and engineering skill.

The reference Pohl relates to a process of making sintered magnesite and dolomite in which the raw materials are ground to make a powder or mud. The powder or mud is then mixed in silos or settling tanks and left to settle or separate according to its degree of purity and is then divided into different batches of different degrees of purity. Analysis are made of the various powders or muds and from these analyzed batches a combination is made. Then the same is burned and the desired article produced. In Pohl there are but five steps, the first of which is grinding. There is no step of removal of the mica particles. It is urged here that grinding is not practicable as the first step in preparing feldspar and that the process of Pohl could not be satisfactorily applied to the feldspar art in view of the necessity for the removal of the mica particles which, ordinarily, is done magnetically and could not be successfully done after the wetting process had been applied.

In Eckel's book the method of control for maintaining a determined standard of composition in more than one raw material is to analyze both raw materials, mix the two according to analyses, grind the same, and then, if the same is not of the proper composition, add the necessary ingredients. It is at once apparent that this is not the detailed method of appellants nor its equivalent, since the raw material in appellants' method, all coming from one mine, is separated into several different batches before it is analyzed, thus affording, ofttimes, a great number of batches of different chemical analyses which renders mixing to a predetermined analysis a matter of easy computation.

But, it is thought by the Board that the differences in the steps of the processes of the references and those of appellants do not amount to invention. The fact that the feldspar art is an old one and that the method of claim 7, which is so successful, has never been practiced before would at least seem to point in the other direction.

The Solicitor for the Patent Office, citing *McClain* v. *Ortmayer*, 141 U. S. 419, 57 O. G. 1129, argues that commercial success, while evidence of utility is not conclusive as to patentable novelty. While this is a correct statement of the law, in case of doubt commercial success is not only evidence of utility, *In re Husted*, 17 C. C. P. A. (Patents) 1002, 39 F. (2d) 713, 398 O. G. 3, but is persuasive of invention. *In re Schierholtz*, 18 C. C. P. A. (Patents) ——, 45 F. (2d) 283, 402 O. G. 523. In the case at bar we are impressed with the fact that appellants, by their method in claim 7, have contributed to and greatly advanced the art of feldspar production, and while the case is not so clear as to remove all reasonable doubts as to the patentable novelty of the same, we feel constrained to resolve such doubts in favor of the applicants. That this is the correct application of a well-settled rule needs no extended citation of authorities.

It should not be overlooked that claim 7 here calls for a patent for steps in a process and that the authorities have gone far in extending protection to an inventive process even though each of the steps were old, if the steps were so related to each other as to bring about a new and useful result. *German-American Filter Co.* v. *Erdrich*, 98 Fed. 300. The fact that the process may seem very simple is immaterial. *United States Mitis Co.* v. *Midvale Steel Co.*, 135 Fed. 103.

By the foregoing we do not wish to be understood to hold that all methods, the individual steps of which are old but which, by new arrangement, bring about new and useful results, are patentable. The result might be obvious and, therefore, not the result of invention. We do not regard the method of claim 7 at bar as failing with this class.

The decision of the Board of Appeals is reversed as to claim 7 and affirmed as to claim 8.

Modified.

U. S. Court of Customs and Patent Appeals

FESSENDEN *v.* WILSON AND SCHAFER

No. 2,686. Decided April 15, 1931

1. INTERFERENCE—PRIORITY—CONSTRUCTIVE REDUCTION TO PRACTICE.

   The filing of an application from which certain disclosure was canceled and on which patent issued prior to the filing of the application involved in the interference disclosing such canceled matter *Held* not a constructive reduction to practice of the invention claimed in the later application.

2. SAME—SAME—DILIGENCE.

   Evidence reviewed and *Held* insufficient to show that F., who was the first to conceive the invention but the last to reduce it to practice, was diligent at the time W. and S. entered the field and subsequent thereto and priority was properly awarded to the latter.

APPEAL from the Patent Office. Affirmed.

Mr. Francis P. Garland, Mr. Ezekiel Wolf, Mr. Herbert U. Smith, and *Messrs. Hurlburt, Jones & Hall* for Fessenden.

Mr. Franklin T. Woodward, Mr. Hubert A. Pattison, and *Mr. R. R. Adams* for Wilson and Schafer.

BLAND, *J.*:

This is an interference case involving the question of priority between the junior party Fessenden and the senior party, patentees, Wilson and Schafer, and is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner of Interferences, in awarding priority to appellees.

The subject matter of the invention relates to a method and system of secret electric signaling in which a signal wave is divided arbitrarily into different parts which are transmitted over different paths simultaneously and are then recombined to form a signal wave corresponding to the original signal wave.

On June 23, 1915, Fessenden filed his application, Serial No. 35,957, which application contained, according to the decision of the Board, descriptions of 22 inventions which included the subject matter in controversy here and which was later disclosed and claimed by Fessenden in his application filed January 23, 1922, Serial No. 531,166.

The subject matter of this interference, while described in Fessenden's 1915 application, was not shown by drawing nor was it claimed in any claim. In the consideration of Fessenden's 1915 application, the Patent Office required the applicant to "limit the specification to one of these inventions and only one and to present claims to the invention retained." In conformity with this request of the Patent Office, the application was amended on May 18, 1916, so as to be limited to a gun sight, a drawing thereof being supplied and also a supplemental oath to support the claims which were then submitted. All references to any sort of signaling means was then cancelled out of the application. This application so restricted resulted in a patent issued on May 14, 1918, No. 1,265,766.

Wilson and Schafer's application, some of the claims of which are herein involved as counts in the interference, was filed September 29, 1919, which resulted in a patent issued November 1, 1921, No. 1,395,378.

Both tribunals below held that Fessenden's 1915 application would be accepted as evidence of conception but not as evidence of reduction to practice, and that since he was last to file an *allowable* application, claiming the invention, which might be regarded as a reduction to practice, he must show diligence, which they say he did not do. Both tribunals held that the appellant, who was the first to conceive and second to reduce to practice, did not show diligence from immediately prior to the time when Wilson and Schafer entered the field until a final reduction to practice.

Appellant contends first, that the 1915 application must be accepted not only as evidence of conception, but as a reduction to practice of the issues of the count and that since he is, therefore, the first inventor, the Board erred in awarding priority of pellant's 1915 application is not a reduction to invention to appellees; second, that in event appractice, he has shown due diligence from the date of conception to the date of his reduction to practice or has shown facts which would excuse his lack

of diligence. Many authorities are cited by appellant, most of which are not in point and few of which need be considered by us.

In support of appellant's first contention he cites and discusses *Milburn Co.* v. *Davis-Bournonville Co.*, 270 U. S. 390, 344 O. G. 817; *Chapman* v. *Wintroath*, 252 U. S. 126, 272 O. G. 913; *Wagenhorst* v. *Hydraulic Steel Co.*, 27 F.(2d) 27, and other authorities. He contends that the three above cited decisions overrule any prior decisions which may be regarded as holding that a description in an application without a claim is no evidence of priority.

On this phase of the case the appellees point out that the decisions relied upon by appellant do not relate to an application which is not pending and *allowable* at the time reduction to practice becomes important, and cite, among others, the following cases as supporting their position and the position of the Board: *The Corn Planter Patent*, 23 Wall. 181; *Beach* v. *Fowler*, 48 O. G. 821, 1889 C. D. 187; *Carty* v. *Kellogg*, 7 App. D. C. 542, 74 O. G. 657, 1896 C. D. 188; *Hien* v. *Pungs*, 68 O. G. 657, 1894 C. D. 92. Appellees correctly state that "it is well established that for one application to be a division, within the meaning of the law, of another, the two must at some time be co-pending" and cite *Sarfert* v. *Meyer*, 98 O. G. 793, 1902 C. D. 30; *In re Spitteler*, 31 App. D. C. 271, 134 O. G. 1301, 1908 C. D. 374; and *Wainwright* v. *Parker*, 32 App. D. C. 431, 142 O. G. 1115, 1909 C. D. 379.

We agree with the Board's finding as follows:

> Fessenden's earlier application became a patent May 14, 1918, and the patent contained no disclosure of the invention claimed in Fessenden's later application. There was an interim of more than three years between the grant of the patent upon the earlier application and the filing of the later application. The later application cannot have the benefit of the date of the earlier application as a continuation thereof. The proceeding relating to the two must be in fact continuous. *Sarfert* v. *Meyer*, 1902 C. D. 30. An application cannot be considered as a continuance of a patent granted prior to the filing thereof, since after the application has eventuated into a patent there is nothing left pending before the Patent Office upon which it could act or to which the later application could attach. *Spitteler*, 134 O. G. 1301, 31 App. D. C. 271; *Wainwright* v. *Parker*, 142 O. G. 1115, 1909 C. D. 379, 32 App. D. C. 431.

No authority has been cited and we have found none to the effect that an invention described but not claimed in an abandoned application, or an application which did not and could not result in a patent, could be regarded as a reduction to practice of the subject matter described. The converse of this proposition is supported by *In re Spitteler*, supra; *Wainwright* v. *Parker*, supra; *Conover* v. *Downs*, 17 C. C. P. A. (Patents) 587, 35 F.(2d) 59, 389 O. G. 4, and other of the authorities hereinbefore cited.

[1] Appellant contends that the decisions in *Wainwright* v. *Parker*, supra, and *In re Spitteler*, supra, are contrary to the decision in *Milburn Co.* v. *Davis-Bournonville Co.*, supra, and that *Milburn Co.* v. *Davis-Bournonville Co.* supports his contention herein.

It is sufficient to note that *Milburn Co.* v. *Davis-Bournonville Co.* was an infringement case, and the application which was relied upon for reduction to practice was not abandoned but was only delayed by reason of its progress through the Patent Office.

An analogous issue to the one at bar was before this court in *Conover* v. *Downs*, supra, and this court there discussed the Spitteler, Wainwright and Milburn cases and said:

> If the quoted language [in the Milburn case] of the Supreme Court had been employed in an issue such as the one before us, it might be seriously argued that it was intended to establish a rule contrary to the pronouncements contained in the decisions in the cases of *Wainwright* v. *Parker* and *In re Spitteler*, supra, and to change the historic policy of the patent office. However, it must be remembered that this is an interference case; that appellee was the first to conceive the invention; that he was diligent in reducing it to practice; and that a different issue was before the Supreme Court in the Milburn Co. case. We do not believe that the Supreme Court had any intention of denying the correctness of the principles announced in the *Wainwright* v. *Parker* and *In re Spitteler* cases. Surely if such had been the intention, some reference to those decisions would have been made. Undue liberties should not be taken with the language in a court decision. Rather it should be construed and applied in accordance with the precise issue before the court. If this course is followed, much useless litigation may be avoided.

Since Fessenden's 1915 application, as amended, contained no disclosure of the subject matter in issue and was not operable for patentable purposes, for the subject matter in issue, and was, under the facts in this record, and as related to the subject matter at bar, to be regarded in law as an abandoned application, it cannot be relied upon as a reduction to practice.

Appellant argues that if it could not be relied upon as a reduction to practice, it could not be relied upon as evidence of conception, and cites this court's decision in *Harlan* v. *Bergman*, 17 C. C. P. A. (Patents) 949, 39 F.(2d) 494, 396 O. G. 347, in which this court said:

> We can see no good reason for accepting the testimony as proving conception and rejecting it on the question of reduction to practice.

The non-applicability of that case to the issues at bar is at once apparent when it is pointed out that the facts in that case show that those remarks were directed toward a construction and test made of an actual device and not toward a constructive reduction to practice presumed from the filing of an application. The citation of such authorities as this by counsel for appellant on this point and elsewhere in this appeal, without mentioning the points of distinction, has been very misleading to the court and is a practice which, to say the least, is not to be encouraged.

[2] Appellant claims that even if his 1915 application was not to be regarded as a reduction to practice, his lack of diligence in making proper application and reducing to practice the subject matter of this controversy was excusable on account of his secrecy obligations incident to his naval service. The record contains, and the briefs discuss numerous facts bearing upon this question which we do not regard as calling for a detailed statement and discussion here. In this connection the Board said:

> Fessenden has not shown diligence from the time of filing of his original application up to just prior to the appearance of Wilson and Schafer. He neither asked permission of any of the Government officials in authority to file a divisional application for the invention of the issue of this interference nor did he prove that he made an actual reduction to practice of the invention prior to the appearance of Wilson and Schafer. Fessenden alleges that he was deterred from filing an application for a patent for the system for secret signalling by reason of his secrecy orders and his oath to secrecy as an officer in the Navy. However, the disclosure, except for the drawings had been made in his original application No. 35,957. Another divisional application might have been filed for such disclosure of his system of secret signals without disclosing anything more than had been disclosed in the original application on pages 29 to 34 thereof. Such an application claiming the invention would have entitled Fessenden to notice of and an interference with the application of Wilson and Schafer. By not filing such application there was nothing pending in the Patent Office to entitle him to such notice. After learning of the patent to Wilson and Schafer Fessenden did not wait to obtain the consent of the Navy Department but filed his later application in the Patent Office prior to receiving any orders from the Navy Department relieving him from the restraints of such order. He never attempted to obtain relief from such order until after he had filed his later application.
>
> Fessenden asserts that the right to subsequently file the application for the invention in interference had been expressly and in writing reserved by Fessenden, in the response making the division of May 12, 1916. Rule 44 of the Rules of Practice reads:
>
> "A reservation for a future application of subject matter disclosed but not claimed in a pending application will not be permitted in the pending application."
>
> Fessenden should have filed his divisional application claiming the invention when he divided his original application to preserve his rights, by a pending application, to the date of his earlier application.

With respect to the diligence of Fessenden, we agree with the conclusion of the Board.

It is also a contention of the appellant that since a description of the invention was filed in the Patent Office in his 1915 application, appellees are, under the statute, not the first inventor and are not entitled to a patent, and, therefore, are not entitled to priority in this interference. The statute authorizes the granting of a patent under certain conditions if the invention is:

> not known or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, * * *

For obvious reasons, the filing of an application, the description of which is cancelled before it results in a patent or comes to the public notice, is not such a published description of the invention as is within the inhibition of the statute. *Milburn Co.* v. *Davis-Bournonville Co.*, supra.

Agreeable to the decision of the Board, the appellees, though last to conceive, were first to reduce to practice and since appellant showed lack of diligence in reduction to practice, appellees were properly awarded priority of the subject matter of the counts and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

WILLIAMS *v.* HANDSCHIEGL

No. 2,664. Decided April 15, 1931

INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Priority held properly awarded to H on the ground that W had alleged no date of invention prior to H's filing date and had not established that the H application discloses an inoperative process.

APPEAL from the Patent Office. Affirmed.

Mr. Joseph W. Milburn, Mr. Joseph F. Westall, Mr. Ernest L. Wallace, Mr. Roger D. Gessford, and *Messrs. Westall & Wallace* for Williams.

Mr. E. W. Shepard and *Mr. Frank L. A. Graham* for Handschiegl.

HATFIELD, *J.*:

This is an appeal in an interference proceeding from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner of Interferences awarding priority of invention to the senior party, Max Handschiegl.

The invention relates to a method of producing composite pictures, and is fully described in the single count in issue. The count reads:

> The herein described photographic method of producing composite pictures, which consists in photographing upon two strips of sensitized film a component object against a black background to produce a pair of matched photographed impressions, treating one of said strips to produce a silhouette of said component object thereon, projecting a supplemental object on the other strip of raw film through said silhouette film whereby the photographed impression is masked and the supplemental object is photographed on the raw film.

Appellee, Handschiegl, the senior party, filed his application on January 2, 1923.

Appellant, Williams, the junior party, filed his application on March 13, 1924.

Appellant filed a motion to dissolve the interference on the ground that appellee's application did not disclose an operative process.

Although the court is not favored with a copy of his decision, it appears from the record that the Law Examiner denied the motion to dissolve. Thereafter, appellant submitted considerable testimony for the purpose of establishing the inoperativeness of the method disclosed in appellee's application.

It is not contended here that appellant is entitled to an award of priority, if it should be held that the method disclosed in appellee's application is operative. On the contrary, counsel for appellant concedes that the issue of operativeness is the only one this court need consider.

Appellee stated in his specification that his method might be performed—

> with double camera arrangements, but I prefer in the practice of my invention to employ a single lens camera as indicated * * * and to run the films together, one placed upon the other—*—*—*. In this manner, the light impression of the image passes through the film B and is received by the film A, an exact duplication and registering of the light impressions being thereupon obtained.

It is claimed by counsel for appellant that it is evident without experimentation that the Handschiegl method of using superposed film strips will not produce accurately matched photographed impressions; and that, if any portion of a—

> composite negative showed overlapping images or was bordered by an unexposed rim or apparent halation,

it would be defective for both motion picture production and ordinary photographic work.

In his brief, counsel for appellant contends that the Handschiegl method of using superposed film strips is inoperative for the following reasons:

> As is well known, films used in photographic work are covered with a sensitized emulsion of yellow color and of such character that it is to a great extent impervious to light rays (Rec., pp. 101–102). In the first exposure made according to the Handschiegl method, the light rays which fix an impression of the object upon the sensitized coating of the front film must pass through the coating, as well as through the transparent but thicker celluloid base, in order to reach the sensitized coating of the rear film. Because of the diffusion of the light rays, the outline of the rear image will not be clearly defined. That the light rays will be deflected as well as diffused in thus passing through the front film is perfectly apparent, and requires no demonstration or argument. Due to the normal divergence of the light rays and their deflection by reason of the thick

ness of the film, the mask image of the object on the rear film will be larger than the image of the same object on the front film.

The difference in the size of the images is made even more objectionable when the larger mask image is placed in front of the image upon the raw film in the succeeding step. The larger silhouette image, because of the divergence of the light rays, will mask a still larger area on the raw film. The final picture will consequently have a line about the image which will produce an apparent halation.

For the purpose of establishing the inoperativeness of the Handschiegl method, certain tests were made by experienced motion picture cameramen at the Metro-Goldwyn-Mayer studio, at Culver City, California, in the presence of the parties and their counsel.

The cameramen, Ray O. Binger, J. C. Smith, and John J. Mescall, testified in substance that the results of the test indicated to them that the method of using superposed film strips would not be commercially successful in the production of motion pictures.

The witness, Ray O. Binger, said that he could not think of any condition during his experience in which the results obtained by the test in which he participated would benefit him to any extent.

The witness, Smith, in concluding his testimony relative to the test, testified as follows:

Q. Do you consider the experiment a success in the results that you attempted to secure?. A. For a commercial film, no.

The testimony of the witness, Mescall, was brief. After stating how the tests were performed and without describing the condition of the film after exposure, he testified as follows:

Q. Were the films in their finished condition a success for composite pictures? A. No.

Sydney D. Lund testified for appellant. He stated that he had been employed by appellant for about five years. He said that he had made several tests of the method of using superposed film strips, at the direction of appellant; that the method was not commercially successful; that he believed appellant wanted the tests made to show the Patent Office tribunals that the method described in appellee's specification was not commercially practicable; that he was present when the tests were made in the Metro-Goldwyn-Mayer studio; and that—

the final negative was very poor in regards to being used for a commercial product due to the fact that the figure was very transparent when exposed on a background. Also as I stated before, had a bad black fringe all around the figures. I want to state that under no conditions could these pieces of film been finished to make a good looking commercial product.

In his decision, the Examiner of Interferences described the tests in considerable detail. He offered the suggestion that the criticism of appellee's method could be met by placing two sensitive surfaces in contact with each other, and that there was nothing in the record except a general statement by appellant to show that such a "face to face operation would be inoperative." He further called attention to the fact that the tests made at the studio were restricted to motion picture films. He then said:

Even if the process of superposed films should be found inoperative for motion picture work it might be workable for still exposures.

In the field of motion picture photography Williams has by no means demonstrated inoperativeness in the sense in which that word is used in patent law. * * *

The only conclusion to be drawn from the testimony of these three photographers with respect to the Metro-Goldwyn-Mayer tests is that the Handschiegl superposed film process was not a commercial success for motion picture photography. Nothing can be concluded from these tests or from the testimony of the three photographers as to whether the process might have been successful for still photography or as to whether it might have been operative in the patent sense for motion pictures. * * * It is altogether possible that the use of the process even in still pictures would require some touching. From this however, it can not be concluded that the process is inoperative for still photography or even that it is inoperative for motion picture work.

The Examiner made no reference in his decision to the double camera arrangement mentioned in appellee's specification, but concluded his discussion of the issues in the case by holding that appellant had failed to prove conception of the invention prior to the filing date of appellee, and, accordingly, awarded priority of invention to appellee.

The Board of Appeals concluded that there was—

strong doubt of the operativeness of the process if carried out by exposing the two films, one behind the other.

and with reference to the operativeness of the Handschiegl method for still pictures said:

both applications state that their object is to produce motion picture films and we have no information as to whether the results would be useful in still pictures.

Thereupon, the Board referred to the double camera arrangement mentioned in appellee's specification, called attention to the fact that appellee did not intend to be confined to any specific way for making the "two negatives," and stated that if there were any means known to those skilled in the art for carrying out appellee's process, it could not be held to be inoperative. It then said:

There is in Class 95, Photography, a sub-class 18, Cameras, Simultaneous exposure, in which there are many patents disclosing cameras for this purpose. We call attention to a few which were selected to show a construction similar to that disclosed diagramatically in the Williams application, see Brewster, No. 1,222,925, April 17, 1917, Ives, No. 475,084, May 17, 1892, and Ives, No. 703,929, July 1, 1902. It is evident that when the negatives are taken in these cameras one of them would be as well exposed as the other and the method could be carried out without difficulty. We must therefore hold that Handschiegl's process is not inoperative and as Williams has failed to overcome his filing date for either conception or reduction to practice, we affirm the decision of the Examiner of Interferences and award priority of invention to Max Handschiegl, the senior party.

After giving careful consideration to the testimony, we are in accord with the views expressed by the Examiner of Interferences that the witnesses who were present and participated in the tests at the studio, intended to be understood as saying that from the results produced by the tests there made, the method of using superposed film strips was not a commercial success in the production of motion pictures. Lund and Smith both testified squarely to that effect. Binger confined his observations to the proposition that he did not see how the method would be helpful to him. Mescall, alone, testified that the test convinced him that the method was not a success for making composite pictures.

It was incumbent upon appellant to establish that appellee's method of using superposed film strips in the production of composite pictures would not actually perform the functions claimed for it. Proof that it is imperfect in operation, that it performs its functions in a crude way, or that it does not meet commercial requirements, is not sufficient to establish inoperativeness in a patentable sense. *Hildreth* v. *Mastoras*, 257 U. S. 27, 293 O. G. 215.

Furthermore, all of the testimony relating to the tests was limited to the use of the method in the production of motion pictures. There is no testimony in the record to show that the method would not be successful in the production of so-called still pictures.

It is contended by counsel for appellant, and it was suggested in the decision of the Board of Appeals, that the count in issue is limited to a method of producing motion pictures. In our opinion, the count is not so limited. Appellant stated in his specification that—

this invention relates to a process of producing composite pictures whereby two objects may be photographed and superimposed to produce in effect, a unitary picture.

Counsel for appellant also contends that appellee's disclosure of double camera arrangements is vague and insufficient, and that, as the patents referred to in the decision of the Board of Appeals were not introduced in evidence, the Board had no authority to consider them for the purpose of supplementing appellee's disclosure. Holding the views hereinbefore expressed, it is unnecessary for us to consider this issue.

We are in accord with the conclusion reached by the Board of Appeals, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE ANHALTZER

No. 2,672. Decided April 15, 1931

1. APPEAL—WHAT MAY BE CONSIDERED.

Affidavits attached to a brief on appeal to the Court of Customs and Patent Appeals which had not been presented to and considered by tribunals of the Patent Office will not be considered by the court.

2. PATENTABILITY—CONCURRING DECISIONS OF THE PATENT OFFICE.

"In cases involving intricate and highly technical questions, especially in the absence of the evidence of those expert in the art, concurring decisions of the Patent Office tribunals will not be disturbed, unless it appear that they are manifestly wrong."

3. SAME—FOOD PRODUCT AND PROCESS OF MAKING.

Claims for a dry food product and a method of making the same *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. John E. Jackson and *Mr. Edward W. Shepard* for Anhaltzer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting all of the claims in appellant's application for a patent for an alleged invention relating to a food product and a method of making the same.

The involved claims read as follows:

7. A dry food product composed mainly of malt and sugar and having small amounts of cornstarch, casein, sodium chloride, calcium lacto phosphate, calcium sucrate, calcium phospho sucrate, and magnesium phospho sucrate, said product being the result of forming a mixture of from 50 to 60 per cent. malt extract, 25 to 45 per cent. cane sugar, 3 to 4 per cent. cornstarch, .75 to 2.25 per cent. hop extract, .50 to 1.50 per cent. casein, .25 to .75 per cent. calcium sulfate, .25 to .75 per cent. sodium chloride, .125 to .325 per cent. powdered milk, and .03 to .06 per cent. magnesium sulfate, heating said ingredients while they are being mixed, and then drying said mixture by heating said mixture in vacuo.

8. In the manufacture of concentrated food products of the class described, the steps consisting of forming a mixture composed of from 50 to 60 per cent. malt extract, 25 to 45 per cent. cane sugar, 3 to 4 per cent. cornstarch, .75 to 2.25 per cent. hop extract, .50 to 1.50 per cent. casein, .25 to .75 per cent. calcium sulfate, .25 to .75 per cent. sodium chloride, .125 to .375 per cent. powdered milk and .03 to .06 per cent. magnesium sulfate, agitating said mixture while maintaining it at a temperature of not under 30 and not over 60 degrees centigrade so as to cause said calcium sulfate to be dissolved by said sodium chloride and the lactic acid of the malt and milk and thereby react and combine with the sugar contents of said mixture and also with the phosphate of said malt extract and with at least some of the lactic acid to form calcium sucrate, calcium phospho sucrate, and calcium lacto phosphate, and said magnesium sulfate being caused to combine and react with the sugar content of said mixture and with a phosphate of said malt extract to form magnesium phospho sucrate, then desiccating the product resulting from said mixture in vacuo, then cooling the desiccated mixture, and then comminuting the cooled mixture.

The references are Horlick, 278,967, June 5, 1888; Rollheuser, 596,945, January 4, 1898; Dodd, 620,645, March 7, 1898; Elger, 1,100,176, June 16, 1914; Barwell, 1,409,435, March 14, 1922.

The character of the product and the method of producing the same is clearly set forth in the claims.

The Primary Examiner held that the applicant had—

merely selected and assembled substances which are old in the same relation, i. e., as beverage constituents and united them in a single compound; and it does not appear that any unusual or unobvious co-operative relationship exists among the respective ingredients nor does it appear that the steps of the process involve an unobvious procedure for the preparation of a product of the kind herein disclosed.

In affirming the decision of the Primary Examiner, the Board of Appeals, among other things, said:

The patents to Dodd and Horlick show that malt and starch have been used in beverages or foods and that the starch is converted under the action of the heat into dextrin and maltose or grape sugar. The patent to Elger mixes malt extract with casein calcium which prevents hydroscopic action and mold. It is well known that cane sugar, sodium chloride and powdered milk are used in beverages and this leaves only calcium and magnesium sulphate unaccounted for. These ingredients are aded, according to the specification, as antiseptics to destroy bacteria.

The Board further said that it was unable to find any authority to the effect that calcium and magnesium sulphates possessed the properties claimed in appellant's application.

Thereafter, appellant filed a petition for rehearing in which it was pointed out that calcium and magnesium sulphates have antiseptic properties and have been used for such properties in medical and chemical sciences; that "calcium sulfate when dissolved will combine with sugar to form calcium sucrate, and with phosphate and lactic acid to form calcium phospho sucrate and calcium lacto phosphate. * * * That magnesium sulfate will combine and react with sugar and phosphate to form magnesium phospho sucrate"; that "magnesium phosphal sucrate" is a laxative and digestive; that calcium is a bone and tissue builder; and that magnesium phosphate is readily formed in mixtures such as claimed in appellant's application.

In support of the above statement, counsel for appellant cited the following authorities: "Materia

Medica and Therapeutics—fourth edition—Shoemaker—published by the F. A. Davidson Company, Dictionary of Applied Chemistry—Thorpe—vols. 1 and 3, and General and Industrial Chemistry—Molinari."

The petition for rehearing was denied by the Board of Appeals.

It is contended by counsel for appellant that the involved product is new; that it results from the application of a novel method of manufacture, whereby "certain chemical reactions are caused to take place forming calcium sucrate, calcium phospho sucrate, calcium lacto phosphate and magnesium phospho sucrate, all of which are compounds not even suggested by the references and compounds not possible to form by combining any or all of the ingredients of any or all of the references"; and that appellant has produced a bacteria proof product possessing both medical and food values heretofore unknown.

[1] Counsel for appellant attached to his brief copies of affidavits. In view of the fact that they were not presented to, and were not considered by, the tribunals of the Patent Office, this court will not consider them. *In re Fisher*, 17 C. C. P. A. (Patents) 864, 37 F.(2d) 628, 395 O. G. 710.

In his petition for rehearing, filed with the Board of Appeals, counsel for appellant said:

> The chemistry involved in this application is complicated and beyond the grasp of those not skilled in the art as set forth in the specification and claims.

[2] In cases involving intricate and highly technical questions, especially in the absence of the evidence of those expert in the art, concurring decisions of the Patent Office tribunals will not be disturbed, unless it appear that they are manifestly wrong. *Stern et al.* v. *Schroeder et al.*, 17 C. C. P. A. (Patents) 670, 36 F.(2d) 515, 393 O. G. 3; *Stern et al.* v. *Schroeder et al.*, 17 C. C. P. A. (Patents) 690, 36 F.(2d) 518, 393 O. G. 4; *Beidler* v. *Caps*, 17 C. C. P. A. (Patents) 703, 36 F.(2d) 122, 392 O. G. 241; *Clancy* v. *De Jahn*, 17 C. C. P. A. (Patents) 714, 36 F.(2d) 131, 392 O. G. 244; *In re Moulton*, 17 C. C. P. A. (Patents) 891, 38 F.(2d) 359, 396 O. G. 7; *In re Demarest*, 17 C. C. P. A. (Patents) 940, 38 F.(2d) 895, 396 O. G. 4; *In re Weitzel*, 17 C. C. P. A. (Patents) 1079, 39 F.(2d) 669, 400 O. G. 463; *Pengilly* v. *Copeland*, 17 C. C. P. A. (Patents) 1143, 40 F.(2d) 995, 399 O. G. 3.

[3] It is true that the references cited by the tribunals of the Patent Office do not show the use of calcium and magnesium sulphates in combination with other substances for producing food products, nevertheless, the authorities cited by counsel for appellant disclose that the use of calcium and magnesium sulphates in combination with other substances for the precise purposes claimed by appellant is old in the art.

We are in accord with the conclusion reached by the tribunals of the Patent Office and, for the reasons stated, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE RUSSEL

No. 2,673. Decided April 15, 1931

1. PATENTABILITY—PRINTED MATTER.

   "The *mere arrangement* of printed matter on a sheet or sheets of paper, in book form or otherwise, does not constitute 'any new and useful art, machine, manufacture, or composition of matter,' or 'any new and useful improvements thereof,' as provided in section 4886, of the Revised Statutes, 35 U. S. C. A. Sec. 31."

2. SAME—CLAIMS FOR A DIRECTORY.

   Claims for a directory having a part in which surnames are arranged in a particular manner *Held* unpatentable since the subject matter does not come within the provisions of the statute.

APPEAL from the Patent Office. Affirmed.

Mr. Robt. E. Barry, Mr. D. P. Wolhapter, and *Messrs. Seymour & Bright* for Russel.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, Nos. 6 and 7, in appellant's application for a patent for an alleged invention relating to improvements in indexes, particularly to the indexing of names in directories, and is claimed to be applicable to dictionaries, etc.

The method of arranging and grouping the names is sufficiently set out in the involved claims. They read:

> 6. A directory comprising a part in which surnames are arranged phonetically with the given names of the respective surnames arranged otherwise than phonetically, and another part in which the surnames are arranged otherwise than phonetically with reference to the section in the first-mentioned part where surnames are arranged phonetically.
>
> 7. A directory comprising a part in which surnames are arranged in groups phonetically with the given names of the respective surnames arranged alphabetically and a second part in which surnames are aranged in columns alphabetically with references to the pages in the first-mentioned part where surnames are arranged phonetically, the several columns of the second part having at their heads designations of the range of surnames in the respective columns.

It is claimed by appellant that his alleged invention facilitates the finding of names in directories and the like; and that it comprises "finished tangible subject matter bearing specifically arranged data or means, combined to produce a novel result."

It may be observed, however, that the only matter claimed to be new is the alleged novel arrangement of names.

[1] The *mere arrangement* of printed matter on a sheet or sheets of paper, in book form or otherwise, does not constitute "any new and useful art, machine, manufacture, or composition of matter," or "any new and useful improvements thereof," as provided in section 4886, of the Revised Statutes, 35 U. S. C. A. Sec. 31. *Cuthrie* v. *Curlett et al.*, 10 F.(2d) 725; *Flint et al.* v. *Leonard & Co.* 27 F.(2d) 215; *In re Dixon*, 18 C. C. P. A. (Patents) ——, 44 F.(2d) 881, 402 O. G. 3, and cases therein cited.

It is contended by counsel for appellant that the decision in the case of *Cincinnati Traction Co.* v. *Pope*, 210 Fed. 443, supports his contention that the involved claims present patentable subject matter.

In that case, the Circuit Court of Appeals, Sixth Circuit, held that so-called transfer tickets for use by street railway traction companies, etc., involved patentable subject matter, and, in its decision, referred to the case of *Rand-McNally & Co.* v. *Exchange Scripp Book Co.*, 187 Fed. 984, also relied upon by counsel for appellant in this case. The court, however, did not hold that the mere arrangement of the printed text constituted patentable subject matter, but, on the contrary, based its decision upon the patentable novelty of the physical structure of the tickets, and, in this connection, said:

> The specifications describe a distinctive physical structure, viz., a given combination and general arrangement of body and coupon (with the suggestion that the two parts may be printed in different colors), accompanied by "conventional indications" and instructions for the use and interpretation of the ticket. *But the alleged patentable novelty does not reside in the arrangement of the printed text, nor does such text constitute merely a printed agreement.* (Italics ours.)

[2] It is not claimed in the case at bar that appellant has invented a new physical structure, or a method of producing it. It is contended, however, that his alleged novel arrangement of names in directories and dictionaries is patentable subject matter.

The issues at bar are clearly distinguishable from those involved in the *Cincinnati Traction Co.*, case, supra, and other cases relied upon by counsel for appellant.

The decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

DORER v. MOODY

No. 2,665. Decided April 15, 1931

1. INTERFERENCE—APPEAL—WHAT MAY BE CONSIDERED

   The question whether claims are unpatentable to an applicant involved in interference because of the issue of a prior patent to him will not be considered on appeal from award of priority.

2. SAME—RIGHT TO MAKE THE CLAIMS—PRIORITY.

   The invention in issue *Held* to be disclosed in the application of M. involved in interference and in a prior application of his antedating the patent to D. and priority *Held* properly awarded to M.

APPEAL from the Patent Office. Affirmed.

Mr. Cleon J. Sawyer for Dorer.

Mr. Frank Bower and *Mr. Edward A. Hathaway* for Moody.

GARRETT, *J.*:

An interference was declared by the Acting Examiner between Patent No. 1,586,978, granted to Dorer, June 1, 1926, upon an application filed February 3, 1921, and the application (which appears to be a divisional application of a parent case, the latter of which ripened into Patent No. 1,502,865, July 29, 1924), filed June 15, 1923, but relating back to the parent application filed August 21, 1920. By virtue of this latter date Moody became the senior party.

The counts of this interference are two in number as follows:

> 1. In combination with a casing having suction and discharge means, a rotary impeller delivering fluid to the discharge, and means in the suction imparting rotational and axial velocity to the fluid before entering the impeller and separated therefrom by a conversion chamber.
>
> 2. In combination with a casing having suction and discharge means, a double impeller connected at each side with said suction, and means in the suction at each side of said impeller and separated therefrom by conversion chambers for imparting rotational and axial velocity to the fluid before entering the impeller.

Dorer moved to dissolve the interference on the ground that Moody was not entitled to make the counts.

Moody moved to amend by adding certain additional claims from the Dorer patent as new counts.

The Law Examiner denied both motions.

Upon the hearing before the Examiner of Interferences, Dorer raised certain points, to wit: (*a*) Moody's lack of right to make the counts; (*b*) that Moody could take no benefit from his application of August 21, 1920; (*c*) that Moody was estopped by his long delay in presenting claims corresponding to the counts in issue; and (*d*) that there should be a recommendation of dissolution under Patent Office rule 126, because Moody was precluded by his prior Patents 1,321,538 and 1,460,428, from obtaining patent on the counts at issue.

The Examiner of Interferences declined to entertain the matter embraced in contention (*d*), holding that the points thereof might have been presented as fully "before the Law Examiner as they are presented here", but stating that it was not intended to give any intimation that his views upon the matter differed from the views of the Law Examiner. Also the Examiner of Interferences held that rule 130 prohibited him from entertaining points (*a*) and (*b*). He, therefore, considered and passed only upon the question of estoppel holding that Moody was not estopped, and awarding him priority.

Upon appeal to the Board of Appeals of the Patent Office the several points above mentioned were presented to that tribunal and there adjudicated, the decision of the Examiner of Interferences awarding priority to Moody being affirmed.

The case was then appealed to this court and errors embracing appellant's foregoing contention assigned.

We shall deal with these assignments of error somewhat in inverse order.

[1] As for the subject matter embraced in (*d*), supra, the Board said:

> These are matters for ex parte consideration. They furnish no ground for awarding priority in favor of Dorer and under the well-established practice appellant is not entitled to a consideration thereof on an appeal from a decision on priority.

We find no error in this.

While appellant's fourth assignment of error, apparently, relates to the question of estoppel embraced in point (*c*), supra, it does not use the word "estopped" and is not very specific in respect thereto. The subject is not discussed in the brief, nor do we recall any emphasis of it in the oral argument.

The authorities cited in the decisions of the Examiner of Interferences and of the Board of Appeals, *Harbridge* v. *Perrin*, 54 App. D. C. 106, 295 Fed. 927, 321 O. G. 705, 1924 C. D. 237, and *Leonard*

v. *Everett*, 52 App. D. C. 90, 281 Fed. 594, 304 O. G. 142, sustain their holdings upon this issue.

This leaves to be considered only the question of whether Moody is entitled to make the claims embraced in the two counts. This question having been decided in the affirmative by both tribunals of the Patent Office as a result of the examinations there had by the experts it must be clearly shown that their decision was wrong in order to justify this court in reversing their actions.

Appellant's brief argues this issue under two heads: (1) that Moody's application does not disclose a conversion chamber within the meaning of the Dorer patent, and (2) that Moody is not entitled to the date of his 1920 application, now Patent 1,502,865, because, as we understand it, appellant insists that it does not disclose helically inclined stay vanes.

The invention at issue relates to rotary hydraulic pumps, the general object being to control the flow or force of the water in such a manner as that it will have a rotational and axial velocity before entering the impeller which will cause the machinery operated by it to function at high speed.

Both parties rely upon their filing dates, and appellant insists that, since the counts were claims of the Dorer patent, they must be given the meaning to which the Dorer patent is limited, and that they must have been disclosed with this meaning in Moody's parent application of August 21, 1920, and not alone in his later divisional application, in order to give Moody priority, because the divisional date was later than appellant's filing date.

[2] Both parties show certain chambers which separate the impellers from the "means in the suction imparting rotational and axial velocity to the fluid before entering the impeller". Dorer refers to these as "conversion chambers" and in his specifications, describes them as being "for transforming the energy of the fluid into rotational velocity in the same direction of rotation as the impeller", and insists this meaning must be given to the "conversion chambers" of the counts.

Moody does not refer to his chambers as "conversion" chambers, but says of them in the specification that the water "passing through the vane free chambers 21 and 22 is delivered to the impellers 13 and 14 in the form of solid whirling streams".

The contention of appellant is that by reason of the shape of Moody's chambers, as disclosed by his drawings, the outlet points being somewhat expanded and not contracted, as is claimed for Dorer's chambers, the impeller of Moody does not receive the liquid at an increased velocity as does the impeller of Dorer.

It will be observed that the counts do not in themselves call for *increased* velocity. They speak only of "imparting rotational and axial velocity". The word "conversion" is surely broad enough, as was said by the Board—

> to cover the chambers of the respective parties even though they have an effect on the stream of water passing therethrough that differs somewhat in kind or degree.

Even if we give to them the construction contended for by appellant, that is, that under the Dorer specifications the chambers must be so shaped as to bring about increased velocity, then it must be said that, accepting the drawings as accurately representing the dimensions and conformation of the chambers of the respective parties, we are unable to detect therein a sufficient distinction between the respective devices to cause us to feel justified in overruling upon this ground, the conclusion of the tribunals of the Patent Office.

The court was favored by counsel for the parties with enlarged figures of the drawings, different features thereof being shown in different colors. This greatly aided in our efforts to study them which we have endeavored carefully to do.

Upon the issue relating to the "stay vanes" the decision of the Board says:

> Moody's application in interference describes the guide vanes 19 and 20 as "helically inclined." Moody's Patent No. 1,502,865 states (page 2, line 42) that the stay vanes 32 conform to the flow lines and are intended solely for mechanical support. While Moody does not specifically make this statement of his stay vanes 23, under discussion, it is reasonable to suppose that this statement is also applicable thereto. It is unreasonable to assume that Moody would so construct his stay vanes as to take out the whirling motion of the water, the very motion for which he provides a volute casing.
>
> This question was passed upon by the Law Examiner in his decision on the motion to dissolve and by the Examiner of Interferences in his decision on the motion of Dorer to shift the burden of proof. We find no error in their decision that Moody is entitled to the date, August 21, 1920, of filing of the application of his Patent No. 1,502,865, for the invention in issue.

The reasoning of the Board in reaching its conclusion upon this point appears to us to be not fallacious, but sound.

Moody employed a volute for the specific purpose of imparting a whirl or rotation to the fluid. It surely would not accord with sound common sense to assume that having provided this means for a specific purpose he then defeated the purpose by employing other means inconsistent with the first.

We are not convinced that appellant's assignments of error are well taken.

The decision of the board is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,008,864, M. Ruping, The impregnation of wood; Re. 12,707, same, Method of impregnating wood, D. C., S. D. N. Y., Doc. E 24/133, *The Chemical Foundation, Inc.*, v. *Bermuth Lembcke Co., Inc., et al.* Decree for plaintiff (notice July 20, 1931).

1,103,570, A. L. Day, Clutch grip actuating device; 1,124,305, same, Perforating machine, D. C., E. D. Wis. (Milwaukee), Doc. 2743, *American Perforator Co.* v. *Follen-Strom Mfg. Co.* Dismissed July 25, 1931.

1,124,305. (See 1,103,570.)

1,128,145, Inwood & Lavenberg, Means for making box blanks, D. C., S. D. Tex. (Houston), Doc. E 422. *Wirebounds Patents Co. et al.* v. *Continental Wire Bound Box Co.* Dismissed July 13, 1931.

1,140,299, C. M. Conradson, Automatic multiple spindle lathe, filed July 29, 1931, D. C. Conn. (New Haven), Doc. E 2141, *J. T. Ryerson & Son, Inc.*, v. *Bullard Machine Tool Co.*

1,174,008, S. F. Henderson, Art of preserving eggs; 1,177,105, same, Art of preserving and sterilizing eggs, D. C., W. D. Wash., N. Div., Doc. 599, *Kasser Egg Process Co.* v. *Washington Cooperative Egg & Poultry Ass'n.* Dismissed July 27, 1931.

1,177,105. (See 1,174,008.)

1,195,923, R. Gans, Softening of water; Re. 16,497, J. E. Caps, Water softening apparatus, filed July 29, 1931, D. C., S. D. Ohio, W. Div., Doc. E 300, *The Permutit Co.* v *The Duro Co.*

1,223,659, W. S. Barnickel, Treatment of crude oil: 1,467,831, 1,555,818, same, Process for treating petroleum emulsions; 1,531,173, J. D. Brady, Process for the prevention of petroleum emulsions in the well; 1,596,587, M. De Groote, Treatment of water in oil emulsions; 1,596,589, 1,596,593, same, Process for treating petroleum emulsions; 1,596,590, 1,596,591, same, Process for breaking petroleum emulsions, filed July 22, 1931, D. C., N. D. Okla. (Tulsa), Doc. E 661, *Dehydrom, Inc.*, v. *Tretolite Co.*

1,236,533 (*a*), F. A. Black, Axle stretcher, stover and bender; and 1,299,292, S. F. Borkey, Axle-stretching machine; 1,353,987, same, Method of forming axles, to annul, filed July 29, 1931, D. C., W. D. Mich., S. Div., Doc. E 2459, *F. A. Black* v. *S. F. Borkey.*

1,236,533 (*b*), F. A. Black, Axle stretcher, stover and bender, filed July 28, 1931, D. C., E. D. Wis. (Milwaukee), Doc. 3271, *F. A. Black* v. *The Nash Motors Co.*

1,262,860, S. B. Smith, Incubator, filed July 27, 1931, D. C. Minn., 2d Div., Doc. E 295, *S. B. Smith* v. *E. H. Snow et al.*

1,299,292. (See 1,236,533.)

1,317,431 (*a*), L. P. Clutter, Ditching or excavating machine; 1,511,114, 1,543,250, R. R. Downe, Excavating machine; 1,709,466, same, Ditcher scoop assembly; 1,716,432, same, Excavating scoop, D. C., N. D. Ohio, W. Div., Doc. E 964, *Keystone Driller Co.* v. *The General Excavator Co.* Claims 1, 14, 16, and 18 of 1,716,432, claim 4 of 1,317,431, claims 6 to 14, incl., of 1,511,114 held valid and infringed; claims 1 to 6 and 9, and 10 of 1,543,250 held valid but not infringed; claims 1, 2, 8, 10, 11, 12, 13, 15 and 19 of 1,709,466 lack patentable invention July 21, 1931.

1,317,431 (*b*), L. P. Clutter, Ditching or excavating machine; 1,511,114, 1,543,250, R. R. Downe, Excavating machine; 1,709,466, same, Ditcher scoop assembly, D. C., N. D. Ohio (Toledo), Doc. E 965, *Keystone Driller Co.* v. *The Osgood Co.* Claim 4 of 1,317,431, claims 6 to 14, incl., of 1,511,114 held valid and infringed; claims 1 to 6 and 9 and 10 of 1,543,250 held valid but not infringed, claims 1, 2, 8, 10, 11, 12, 13, 15, and 19 of 1,709,466 lack patentable invention July 21, 1931.

1,323,869. (See Re. 14,777.)

1,348,293, S. M. Miller, Hair clipper, filed July 25, 1931, D. C., E. D. Wis. (Milwaukee), Doc. 3270, *Wahl Clipper Corp.* v. *Andis Clipper Co.*

1,353,987. (See 1,236,533 (*a*).)

1,400,171. (See Re. 14,777.)

1,400,539, C. C. Gates, Endless belt, appeal filed July 20, 1931, C. C. A., 10th Cir., Doc. 521, *The B. F. Goodrich Rubber Co.* v. *The Gates Rubber Co.*

1,455,058, N. M. Lower, Locomotive stoker; 1,642,076, Lower & Chalker, Distributor tube for stokers, filed July 9, 1931, D. C., E. D. Va. (Norfolk), Doc. 235, *The Standard Stoker Co., Inc.*, v. *Berkley Machine Works & Foundry Co., Inc.*

1,463,556, 1,518,410, 1,542,412, S. A. Reed, Aeronautical propeller, filed July 17, 1931, D. C., S. D. Ohio, W. Div., Doc. E 767, *The Reed Propeller Co., Inc.*, v. *J. A. Fay et al.*

1,467,831. (See 1,223,659.)

1,511,114. (See 1,317,431 (*a*) and (*b*).)

1,518,410. (See 1,463,556.)

1,526,982, E. W. Hill, Stencil sheet, filed July 23, 1931, D. C., S. D. N. Y., Doc. E 61/98. *A. B. Dick Co.* v. *F. M. Cid (Carola Impression Products Co.).*

1,531,173. (See 1,223,659.) 1,542,412. (See 1,463,556.)

1,543,250. (See 1,317,431 (*a*) and (*b*).)

1,551,069, S. Stanczyk, Automatic blow-torch, D. C. Mass., Doc E 2728. *D. A. Lenk* v. *Lasher Peerblow Co. et al.* Decree for plaintiff Oct. 22, 1928.

1,555,818. (See 1,223,659.)

1,559,520, T. M. Fairbairn, et al., Putting green and similar playing surface, D. C., E. D. Mich., S. Div., Doc. 4262, *National Pipe Products Corp. et al.* v. *National Golf Course Co. et al.* Decree for plaintiff July 22, 1931.

1,596,587. (See 1,223,659.) 1,596,589. (See 1,223,659.)

1,596,590. (See 1,223,659.) 1,596,591. (See 1,223,659.)

1,596,593. (See 1,223,659.)

1,638,415, G. A. Sexton, Text measure, filed July 24, 1931, D. C. Mass., Doc. E 3443, *G. A. Sexton* v. *Dover Stamping & Mfg. Co.*

1,642,076. (See 1,455,058.)

1,690,116, A. M. Hunt, Stoker construction; 1,724,593, same, Stoker conveyor, filed July 9, 1931, D. C., E. D. Va. (Norfolk), Doc. 234, *The Standard Stoker Co., Inc.*, v. *Berkley Machine Works & Foundry Co., Inc.*

1,705,479, S. W. Hayes, Bumper post, filed July 22, 1931, D. C., S. D. N. Y., Doc. E 61/90, *Hayes Track Appliance Co.* v. *Fox Bros. & Co., Inc.*

1,709,466. (See 1,317,431 (*a*) and (*b*).)

1,716,432. (See 1,317,431 (*a*).)

1,724,593. (See 1,690,116.)

1,734,627, J. E. Kalgren, Ironing board, D. C. Minn., 4th Div., Doc. E 2023, *The J. R. Clark Co.* v. *Ericson-Nelson Mfg. Co.* Dismissed without prejudice, on stipulation, July 21, 1931.

1,754,375, A. H. Sturges, Fire escape of sliding type, filed July 24, 1931, D. C. Nebr. (Omaha), Doc. E 1132, *A. H. Sturges* v. *C. S. Coordes (Carter Sheet Metal Co.).* Same, filed Aug. 1, 1931, D. C. Nebr. (Omaha), Doc. E 1134, *A. H. Sturges* v. *L. B. Webster (Lawrence Mfg. Co.).*

1,763,768, A. H. Fager, Vehicle running gear, filed July 23, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U-65-M, *Fager Hydraulic Hoist & Body Co.* v. *T. Weber (Weber Trailer & Mfg. Co.).* Doc. E U-67-J, *Fager Hydraulic Hoist & Body Co.* v. *E. R. Clayton (New Comer Trailer Mfg. Co.).* Doc. E U-68-M, *Fager Hydraulic Hoist & Body Co.* v. *Utility Trailer Mfg. Co. et al.*

1,783,861. (See Re. 17,821.)

1,787,186, J. A. Barkelj, Inlet manifold for straight eight internal combustion engines, filed July 16, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U-52-J, *J. A. Barkelj* v. *W. M. Murphy Motors Co. et al.* Doc. E U-51-H, *J. A. Barkelj* v. *Greer-Robbins Co. et al.*

1,792,950, Welcom & Muff, Orifice fitting, filed July 23, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U-62-M, *Commercial Iron Works* v. *Robinson Orifice Fitting Co. et al.*

1,797,205, H. W. Houck, Electron tube apparatus, filed July 31, 1931, D. C., M. D. Pa., Doc. E 847, *Dubilier Condenser Corp.* v. *Hygrade Sylvania Corp. et al.*

1,807,697, G. A. Lyon, Cover for spare tires of automobiles, D. C., N. D. Ohio, E. Div., Doc. E 3876, *Lyon, Inc., et al.* v. *Wheeler Metal Products Co.* Consent decree holding patent valid and infringed Aug. 1, 1931.

Re. 12,707. (See 1,008,864.)

Re. 14,129, C. F. Lefever, Liquid pistol, filed July 25, 1931, D. C., S. D. N. Y., Doc. E 61/115, *Daisy Mfg. Co.* v. *W. Shaland.*

Re. 14,667, F. D. Winkley, Lubricating system, D. C., E. D. Mich., S. Div., Doc. 4152, *Alemite Corp.* v. *Gresser Mfg. Co.* Decree for plaintiff July 27, 1931.

Re. 14,777, J. L. Kraft, Process of sterilizing cheese and the product produced thereby; 1,323,869, 1,400,171, same, Process for treating cheese; Re. 15,648, E. E. Eldredge, same, filed July 18, 1931, D. C., W. D. Wis. (Madison). Doc. —. *Kraft-Phenix Cheese Corp.* v. *Independent Cheese Co. et al.*

Re. 15,648. (See Re. 14,777.) Re. 16,497. (See 1,195,923.)

Re. 17,248, M. Carter, Fluid holding toy, D. C., S. D. Calif. (Los Angeles), Doc. E P-45-M, *M. Carter* v. *W. J. Voit et al.* Patent held not infringed May 23, 1931.

Re. 17,407, A. J. Lane, Vegetable spray, D. C., S. D. Ohio, W. Div., Doc. E 280, *The Hamilton Mfg. Co.* v. *R. D. Schear.* Patent held infringed June 10, 1931.

Re. 17,733, J. C. Nelson, Combination tie and spreader for concrete mold, filed July 30, 1931, D. C., E. D. Mich., S. Div., Doc. 4913, *Nelson-Spreader Tie Co.* v. *Stoddard-Dick Co. et al.*

Re. 17,780, F. L. Willrodt, Steering attachment for tractor, filed July 23, 1931, D. C. Nebr. (Omaha), Doc. E 1131, *Willrodt Tractor Guide Co.* v. *Duplex Mfg. Co. et al.*

Re. 17,821, H. H. Steinman, Anti-frost device for windows: 1,783,861, E. A. Thiem, Anti-frost device, D. C. Minn., 4th Div., Doc. E 1879, *No Frost Clear Vision Shield Co.* v. *Janney Semple Hill & Co.* Dismissed on stipulation July 20, 1931.

Re. 17,885, J. H. Janowitch, Shirt collar stiffener, filed July 25, 1931, D. C., S. D. N. Y., Doc. E 61/116, *Lakewood's Patents Corp.* v. *Herndorfer, Mayer & Monheit, Inc.* Doc. E 61/117, *Lakewood's Patents Corp.* v. *S. Metzky et al.* Doc. E 61/118, *Lakewood's Patents Corp.* v. *Miller Bros. Co., Inc.*

Re. 18,087, Sprung & Sprung, Sign frame and upright, filed July 28, 1931, D. C., S. D. N. Y., Doc. E 61/121, *Municipal Street Sign Co., Inc.*, v. *Cavanagh Bros. & Co., Inc.*

Des. 81,369, L. E. Baer, Collar holder, filed July 20, 1931, D. C. Mass., Doc. E 3439, *Baer & Wilde Co.* v. *M. Rogers.* Same, filed June 21, 1931, D. C., S. D. N. Y., Doc. E 61/79, *Baer & Wilde Co.* v. *M. S. Goldstein et al.* (*Goldstein & Greenberg*).

T. M. 102,844, Ralston Purina Co., Horse and mule feed, etc., filed July 10, 1931, D. C., W. D. N. C., Doc. E 67, *Ralston Purina Co.* v. *Interstate Milling Co.*

T. M. 194,894, W. Hollingsworth, Medicine in treatment of rheumatism, etc., filed July 29, 1931, D. C., N. D. Tex. (Fort Worth), Doc. E 674, *W. Hollingsworth* (*Vigor Tone Sales Co.*) v. *Dr. J. T. Miller.*

Disclaimers

1,605,299.—*Harold W. Sweatt and Frederick S. Denison*, Minneapolis, Minn. ELECTRICALLY OPERATED BURNER CONTROLLING APPARATUS. Patent dated November 2, 1926. Disclaimer filed August 28, 1931, by the assignee, *Minneapolis-Honeywell Regulator Company.*

Hereby enters this disclaimer to that part of the claim in said specification which is in the following words:

"6. In an electrically operated burner controlling apparatus, the combination of a burner motor, a control motor therefor, an automatically operable control to start the control motor, an instrumentality operable by the control motor and comprising a plurality of contacts adapted to be electrically connected to the automatic control to render said control inoperative after starting of the control motor, and a recycling mechanism also electrically connected with said automatic control and said instrumentality and operable after temporary power failure during normal running operation of the apparatus, to cause said control motor to complete its cycle of operation to start the burner motor."

1,656,364.—*Watson B. Rulon*, Philadelphia, Pa. METHOD FOR FORMING RECONSTRUCTED CARBONACEOUS FUEL. Patent dated January 17, 1928. Disclaimer filed August 29, 1931, by the patentee.

Hereby enters this disclaimer, to wit:

(1) To the method of claim 3, except where the heating of the bars takes place by passing said bars through heat zones of progressively increasing temperature;

(2) To the method of claim 4, except where the heating of the amalgam takes place by passing it through heat zones of progressively increasing temperatures.

1,685,917.—*Thomas Hans*, Chicago, Ill. PROCESS FOR FINISHING AND COLORING PAPER AND PAPER MADE THEREBY. Patent dated October, 2, 1928. Disclaimer filed August 31, 1931, by the assignee, *Container Corporation of America.*

Hereby enters this disclaimer to claims 1, 7, 8 and 9 in said patent, which are in the following words, to-wit:

"1. In the manufacture of paper from fluid, fibrous pulp, the process of applying to the surface of the advancing formed paper sheet, after it has been dried but before it has been calendered, a solution containing an emulsion of paraffin."

"7. In the manufacture of paper in a continuous web or sheet, a process for finishing said sheet which consists in applying a thin solution containing paraffin to the surface of the advancing sheet after it has passed the drying rolls and as or before it enters the calendering rolls.

8. In the manufacture of paper in a continuous web or sheet, a process for finishing said sheet which consists in applying a thin solution or paraffin emulsion to the surface of the advancing sheet after it has passed the drying rolls and as or before it enters the calendering rolls.

9. In the manufacture of paper in a continuous web or sheet, a process for finishing and coloring said sheet, which consists in applying a thin colored solution containing paraffin to the surface of the advancing sheet after it has passed the drying rolls and as or before it enters the calendering rolls."

1,772,133.—*Pieter Wilhelm Dobben*, Eindhoven, Netherlands. DEVICE FOR RECTIFYING ALTERNATING CURRENT. Patent dated August 5, 1930. Disclaimer filed August 25, 1931, by the assignee, *N. V. Philips' Gloeilampenfabrieken.*

Enters the following disclaimer:

In Claims 1 and 2, no claim is made to rectifying devices except those comprising a discharge tube or tubes in combination with a transformer of such a high operating potential at the terminals of the winding that is connected to the tube, e. g., of about 80 volts or more, that a back discharge through the tube or tubes may occur when the circuit of the transformer is opened or the supply voltage fails.

Adjudicated Patent

(D. C. Mich.) Pescatore patent, No. 1,084,820, for system of transporting heavy loads by motor vehicles, claims 1, 2, and 5 *Held* invalid, claims 3 and 4 *Held* not infringed, and claim 6 *Held* valid and infringed. *Lapeer Trailer Corporation* v. *Fruehauf Trailer Co.*, 50 F.(2d) 634.

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 22, 1931

[VOL. 410. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 316,778. HENRY HALLE CO., Newark, N. J. Filed July 9, 1931.

FLOWER CITY

For Leather—Namely, Kid.
Claims use since Apr. 25, 1931.

Ser. No. 317,062. ATLANTIC SHELL COMPANY, Jacksonville, Fla. Filed July 18, 1931.



The right to the exclusive use of the words "Pearly White Brand" apart from the mark shown on the drawing is disclaimed.
For Crushed Shell.
Claims use since July 1, 1927.

CLASS 2

Receptacles

Ser. No. 305,316. MENTE & CO., INC., New Orleans, La. Filed Sept. 4, 1930.

ONIONETTE

For Bags of Burlap, Hemp, Jute, and Cotton.
Claims use since Dec. 30, 1929.

Ser. No. 313,843. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931. Under section 5b of the act of 1905 as amended in 1920.

Eastman

For Lantern Slide Boxes and Dental Film Safes and Containers.
Claims use since 1916 for lantern slide boxes and since April, 1921, for dental film safes and containers.

Ser. No. 315,109. PETROLEUM RECTIFYING COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed May 27, 1931.



The representation of the goods is disclaimed apart from the mark as shown.
For Tanks for Treating Petroleum Products.
Claims use since July 21, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 317,681. M. J. SPIEGEL CO., INC., New York, N. Y. Filed Aug. 5, 1931.

DUPLEX CASE

Applicant disclaims the word "Case" when used apart from the mark shown in the drawing.
For Suitcases.
Claims use since May 20, 1924.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 313,543. THOMAS HEDLEY & COMPANY, LIMITED, Newcastle-on-Tyne, England. Filed Apr. 20, 1931.



For Perfumed Soap.
Claims use since May, 1930.

Ser. No. 315,773. QUALITY PRODUCTS LABORATORIES, INC., Richmond, Va. Filed June 12, 1931.

QP

BRAND

The descriptive word "Brand" is hereby disclaimed apart from the mark as shown on the drawing.

For Metal Polishes, a Wax Remover Preparation, Cleaning Fluid for Dry Cleaning Fabrics of All Kinds, and a Cleaner for Cleaning Marble, Tile, Linoleum, and Other Floor Surfaces as Well as Painted and Natural Woodwork.
Claims use since June 2, 1930.

Ser. No. 316,320. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed June 26, 1931.

PALMOLIVE

For Toilet Soap.
Claims use since 1899.

Ser. No. 316,995. FITZPATRICK BROS. INC., Chicago, Ill. Filed July 16, 1931.

F-B

For Soap.
Claims use since Apr. 15, 1931.

Ser. No. 317,136. BENJAMIN SCHOEFIELD, d ing business as Ben Schoefield Mfg. Co., New Orleans, La. Filed July 20, 1931.

Ridzit

For Soap in Paste Form for the Hands and General Use.
Claims use since June 26, 1931.

Ser. No. 317,341. PHILIP WEINER, doing business as Norn Chemical Company, Baltimore, Md. Filed July 25, 1931.

Spark-glo

For Metal Polish.
Claims use since June 15, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 314,029. INDEPENDENT MERCHANTS SERVICE CORPORATION, Jersey City, N. J. Filed Apr. 30, 1931.

ZARIFA

For Scalp Preparations.
Claims use since Dec. 29, 1930.

Ser. No. 315,328. WILLIAM A. RIGNEY, doing business as The Kerma Products Company, East Orange, N. J. Filed June 2, 1931.



For Liquid and Solid Preparations for Use as Diuretic Laxative, Carminative, and Stomachic Intestinal Eliminants.
Claims use since Apr. 10, 1931.

Ser. No. 316,965. THE HUBINGER CO., Keokuk, Iowa. Filed July 15, 1931.

ELASTIC



Applicant is the owner of registered Trade-Mark No. 205,630. The drawing is lined for shading.
For Starch.
Claims use since 1881.

Ser. No. 317,016. GILES F. YATES, doing business as G. F. Yates & Co., Fultonville, N. Y. Filed July 16, 1931.

BODYSORB

For Liniment for Muscular Rheumatism, Lame Back, Weak Joints, Insect Bites, Bruises, Sprains, Sore Muscles, and Burns.
Claims use since June 1, 1931.

Ser. No. 317,172. OTTO KARSBACH, Berlin-Wannsee, Germany. Filed July 21, 1931.

Walida

For Medicinal Preparations—Namely, Pills for Internal Disorders.
Claims use since Mar. 9, 1923.

Ser. No. 317,194. BONIDE CHEMICAL CO. INC., Utica, N. Y. Filed July 22, 1931.

BONIDE

GREEN TOX 50

No claim is made to the words "Green Tox" apart from the mark as shown.
For Insecticide.
Claims use since July 1, 1931.

Ser. No. 317,248. HUNTINGTON LABORATORIES, INC., Huntington, Ind. Filed July 23, 1931.

Silk Floss

For Liquid Shampoo.
Claims use since May 10, 1921.

Ser. No. 317,373. EVVY TANGER, New York, N. Y. Filed July 27, 1931.

ELSINORE

No claim is made to the exclusive use of the name or term "Elsinore" apart from the mark as shown in the drawing.
For Face Cream.
Claims use since July 1, 1931.

Ser. No. 317,464. PAUL HAVAY, Aliquippa, Pa. Filed July 30, 1931.



Paul Havay

The signature being the autograph and the picture the portrait of the applicant.
For Eye Drops.
Claims use since June 27, 1931.

Ser. No. 317,885. APEX PRODUCTS CORPORATION, Chicago, Ill. Filed Aug. 12, 1931.

PLUNX

For Drain Pipe Cleaner and Solvent.
Claims use since May 18, 1931.

CLASS 7

Cordage

Ser. No. 316,151. CONNECTICUT-CAROLINA MANUFACTURING COMPANY, INC., New York, N. Y. Filed June 28, 1931.

INCA

For Wrapping Twines, Seine Twines, Colored Twines, Glazed and Polished Twines, Braided Bandings and Cords Made of Cotton, and Flat Braids, Twisted Cords, and Tinsel Tubular Braids Made of Rayon, Sold in Balls, Coils, Reels, Cones, and Tubes.
Claims use since January, 1931.

Ser. No. 317,933. R. HOOD HAGGIE AND SON, LIMITED, Newcastle-on-Tyne, England. Filed Aug. 18, 1931.

TITAN

For Ropes Made of Manila Hemp.
Claims use since October, 1929.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 312,266. JOSEPH PLATT, Detroit, Mich. Filed Mar. 18, 1931.

BANDIT
J-A-T-E-X
RESISTING
J. PLATT DETROIT MICH.

Applicant disclaims all the words shown in the drawing except "Ja-Tex" and the applicant's name apart from the mark as shown.
For Steel and Wire Mesh.
Claims use since Feb. 1, 1926.

CLASS 16

Paints and Painters' Materials

Ser. No. 316,370. MERGENTHALER LINOTYPE COMPANY, Brooklyn, N. Y. Filed June 27, 1931.

REPELLO

For Composition of Matter in the Nature of a Paint, Consisting of a Lead Oxide and Beeswax to be Used for Treating Metal Parts Such as the Pump Actuating Rod of the Melting Pot of a Type Bar Casting Machine to Prevent the Adhesion of Molten Metal Thereto.
Claims use since June 12, 1931.

Ser. No. 317,025. CLEAN SURFACE PRODUCTS COMPANY, Chicago, Ill. Filed July 17, 1931.

VAPROLAC
WATERPROOF

The word "Lac" and the words "Waterproof Preservative Liquid" are hereby disclaimed apart from the other features of the mark.
For Waterproof Preservative Preparations in the Nature of Paints, Varnishes, and Lacquers.
Claims use since June 10, 1929.

Ser. No. 317,038. FULLERTON LUMBER COMPANY, Minneapolis, Minn. Filed July 17, 1931.

PRYMO COTE

The drawing is lined for blue color.
For Ready Mixed Primer and First Coat Paint.
Claims use since Apr. 1, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 314,145. BUSSING-NAG VEREINIGTE NUTZKRAFTWAGEN AKTIENGESELLSCHAFT, Brunswick, Germany. Filed May 4, 1931.

BÜSSING NAG

For Self-Propelled Vehicles—Namely, Motor-Lorries and Motor-Omnibuses.
Claims use since January, 1931.

Ser. No. 317,910. WESTERN AUTO SUPPLY CO., Kansas City, Mo. Filed Aug. 12, 1931.

Western Flyer

For Bicycles, Tricycles.
Claims use since June 1, 1931.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 318,039. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio. Filed Aug. 17, 1931.

MARINA

For Printed Felt Base Floor Coverings in Piece Goods and Rug Form.
Claims use since Aug. 1, 1929.

Ser. No. 318,098. CONGOLEUM-NAIRN, INC., Kearny, N. J. Filed Aug. 18, 1931.

VELMURA

For Linoleum and Products of a Linoleum-Like Nature Adapted for Use as Decorative and Utility Materials for Wall Coverings.
Claims use since Aug. 12, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 286,342. SIEMENS-PLANIAWERKE A. G. FUR KOHLEFABRIKATE, Berlin-Lichtenberg, Germany. Filed June 28, 1929.



For Electric Illuminating, Heating, Cooking, and Drying Apparatus, Devices and Appliances, in Particular Electrically Heated Radiators, Electric Air-Heaters of the Portable Reflecting Type, Individual Electric Room-Heaters, Electric Control and Regulating Systems for House-Heating Furnaces, Electrically-Heated Domestic Hot-Water Boilers, Electric Immersion Heaters of Small Size, Electric Flat-Irons, Electric Relays, Electric Switches, Lightning Arresters, Electric Police Alarm Systems, Electric Fire Alarm Systems, Electric Conductors, Electric Fuses, Electric Bell Systems, Fixed and Variable Resistors for Electrical Control Circuits, Rheostats, Heating Resistance Elements for Electric Flat-Irons, Furnaces, and Cooking Apparatus, Industrial Electric-Furnaces, Electrodes for Electric-Furnaces, Carbon Electrodes for Welding and for Electrolytic Purposes, and Products Made of Carbon, Graphite, Bronze Carbon, Copper Carbon, or Silicon Carbide—Namely, Electric Arc-Light Electrodes, Fire-Bars, Slip Contacts, Brush Contacts, Pressure Contacts, Microphone Carbon, Battery Carbon, and Slip Discs.
Claims use since May 11, 1928.

Ser. No. 295,006. SOC. COSTR. APPARECCHI ELETTRODOMESTICI, Milan, Italy. Filed Jan. 21, 1930.



The words "Made in Italy" are disclaimed apart from the mark shown on the drawing.

For Electric Vacuum Cleaners, Electric Floor Polishers, Electric Fans, Electric Coffee-Mills, Electric Washing Machines for Dishes, Electric Machines for Squeezing Lemons and Other Fruits, Electric Beaters for Culinary Purposes.

Claims use since Sept. 13, 1928.

Ser. No. 295,007. SOC. COSTR. APPARECCHI ELETTRODOMESTICI, Milan, Italy. Filed Jan. 21, 1930.



For Electric Vacuum Cleaners, Electric Floor Polishers, Electric Fans, Electric Coffee-Mills, Electric Washing Machines for Dishes, Electric Machines for Squeezing Lemons and Other Fruits, Electric Beaters for Culinary Purposes.

Claims use since Sept. 13, 1928.

Ser. No. 299,631. UNITED SCIENTIFIC LABORATORIES, INC., New York, N. Y. Filed Apr. 29, 1930.

PIERCE AIRO

For Radio Receiving Sets, Condensers, Radio Electron Tubes, Rheostats, Batteries, Radio Tuning Units, and Grounding Devices.

Claims use since Jan. 1, 1926.

Ser. No. 310,759. CHAS. CORY CORPORATION, New York, N. Y. Filed Feb. 5, 1931.



The words "Safety" and "Service" are disclaimed apart from the mark shown in the drawing.

For Electrical Audible and Visual Annunciators, Fixtures for Electric Lighting, Electrical Interlocking or Safety Switches, Electrically Operated Bells, Ships' Electrical Telephone, Telegraph, and Teleseme Systems, and Equipment Therefor.

Claims use since June 24, 1930.

Ser. No. 313,836. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931. Under section 5b of the act of 1905 as amended in 1920.

Eastman

For Electrical Apparatus, Particularly Reflectors for Lighting an Object to be Photographed, Illuminators for Negative Viewing Apparatus.

Claims use since 1911.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 317,671. MARY M. MCGARRAUGH, doing business as Mack's Tackle Workshop, San Antonio, Tex. Filed Aug. 5, 1931.

MACK'S MINNO-BUG

For Casting Lures for Fishing.

Claims use since July 1, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 288,277. INTERNATIONAL MUTOSCOPE REEL CO. INC., New York, N. Y. Filed Apr. 30, 1929.

MUTOSCOPE

For Coin Operated Vending and Amusement Machines—i. e., Fortune-Telling Card Vending Machines, Crane and Bucket Amusement and Candy Prize Vending Machines, Windmill Amusement and Toy Prize Vending Machines.

Claims use since 1897.

Ser. No. 287,673. THE RICHARDSON COMPANY, Lockland, Ohio. Filed July 25, 1929.

Pri-Mex

For Dust Guards for Journal Bearings.

Claims use since June 11, 1929.

Ser. No. 290,709. LEACH COMPANY, Oshkosh, Wis. Filed Oct. 5, 1929.



The words "Oshkosh" and "Nickel Alloy" are disclaimed apart from the mark as shown.

For Shovels.

Claims use since Oct. 1, 1929.

Ser. No. 298,989. GRAY COMPANY INCORPORATED, Minneapolis, Minn. Filed Apr. 17, 1930.



The word "Lubricators" is disclaimed apart from the mark shown.

For Lubricating Equipment, Apparatus, and Machinery—Namely, Manually as Well as Power Operated Grease Guns, Oil Sprayers, Lubricant Dispensing Compressors, Pumps, and Other Devices Used in and About the Lubrication of Automobiles and Other Machinery, and in the Handling of Lubricants Such as Oils and Greases.

Claims use since June 1, 1926.

Ser. No. 308,853. BUDLONG & FUNCHESS MOTOR PRODUCTS CO., Hanford, Calif. Filed Dec. 11, 1930.

NO NOCK

For Piston Lathes.

Claims use since December, 1929.

Ser. No. 315,004. MUELLER BRASS CO., Port Huron, Mich. Filed May 25, 1931.

STREAMLINE

For Tools for Sizing and Flaring Piping and Fittings to Facilitate Jointure.

Claims use since Nov. 26, 1930.

Ser. No. 316,665. SCHWARZE ELEC. CO., Adrian, Mich. Filed July 6, 1931.

TRAFFICAIRE

For Audible Signals of Trumpet, Horn, and Diaphragm Type Either Manually, Mechanically, Electrically, or Pneumatically Operated.

Claims use since April, 1931.

Ser. No. 317,005. MILLER PRINTING MACHINERY COMPANY, Pittsburgh, Pa. Filed July 16, 1931.



The lining in the drawing designates the color red, the words "Pittsburgh, U. S. A., Pioneer Builders High-Speed Automatic Printing Machinery" being disclaimed apart from the mark shown in the drawing.

For Printers' Machinery—Namely, Printing Presses, Feeding Mechanism for Printing Presses, and Machines for Cutting, Trimming, and Otherwise Treating Type Slugs.

Claims use since September, 1928.

Ser. No. 317,260. ROTO- UND DEBGO-WERKE AKTIENGESELLSCHAFT, Konigslutter, Germany. Filed July 23, 1931.

Rotograph

For Addressing Machines and Parts Thereof and Addressing Stencils.
Claims use since June 3, 1929.

Ser. No. 317,391. MAURICE J. ENGEL, New York, N. Y. Filed July 28, 1931.

TRI-FORGED

No claim is made to the word "Tri-Forged" apart from the mark shown in the drawing.
For Knives Made of Base Metal, Nailing Pliers, Nail Pullers, Scissors, Traces; Fur Clipping Shears, Fur Stamp Hammer, Beating Sticks, Fur Combs, Fur Knives and Tweezers.
Claims use since January, 1931.

Ser. No. 317,582. WESTERN MACHINE TOOL WORKS, Holland, Mich. Filed Aug. 1, 1931.

BIG 4

For Machine Tools—Namely, Drills for Tapping Nuts and the Like, Shapers, and Lathes.
Claims use since July 13, 1931.

Ser. No. 317,695. MARKWELL MANUFACTURING CO., INC., New York, N. Y. Filed Aug. 4, 1931.

CHEMISET

For Binding, Stapling, and Tacking Machines Used for Tacking Paper, Metal Cardboard, Wood, Cloth, Fibre, and Similar Materials to Wood and for Fastening Together Papers, Cardboard, Cloth, and Similar Materials.
Claims use since Jan. 2, 1930.

CLASS 24

Laundry Appliances and Machines

Ser. No. 317,723. MILPRINT PRODUCTS CORPORATION, Milwaukee, Wis. Filed Aug. 6, 1931.

SUN-RAY

For Equipment for Use in Laundries for Treating Fabrics with Ultra-Violet Rays and Ozone.
Claims use since Mar. 30, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 307,973. FRIEDMANN BROS. DRAWING INSTRUMENTS CO., New York, N. Y. Filed Nov. 17, 1930.

FRIEDMANN BROS. F.A.B. PRECISION

No claim is made to the word "Precision" or to the representation of the instrument shown in the drawing.
For Drawing Instruments and Sets.
Claims use since March, 1922.

Ser. No. 317,168. THE GARDNER COMPANY, Orange, N. J. Filed July 21, 1931.

GARDNER

Applicant claims ownership of trade-mark registration No. 279,845, dated Jan. 27, 1931. The shade lines in the drawing represent the colors black and gold.
For Calculating Machines.
Claims use since June 15, 1931.

Ser. No. 317,477. MAYHEW STEEL PRODUCTS, INC., Shelburne Falls, Mass. Filed July 30, 1931. Under section 5b of the act of 1905 as amended in 1920.

MAYHEW

Applicant claims ownership of registration No. 76,287 effected Jan. 4, 1910, under 10-year proviso of section 5(b), act of Feb. 20, 1905.
For Rulers, Ruler Tapes and Holders Therefor.
Claims use since September, 1929.

CARNEGIE LIBRARY OF ATLANTA

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 315,964. FRIEDMAN SILVER CO., INC., Brooklyn, N. Y. Filed June 17, 1931.

WINTHROP

For Table Hollow Ware Plated with Precious Metal.
Claims use since May 20, 1931.

Ser. No. 317,706. COHN & ROSENBERGER, INC., New York, N. Y. Filed Aug. 6, 1931.

EMPRESS

EUGENIE

For Strings of Pearls, Necklaces, Bracelets, Earrings, Finger Rings, Brooches, Bar Pins, and Ornamental Hatpins; and Pins for Dress Ornaments, Ornamental Pins and Buckles for Decorating Hats, Ornamental Shoe Buckles, and Hair Ornaments, Made Wholly or in Part of or Plated with Precious Metal.
Claims use since Sept. 1, 1930.

CLASS 32

Furniture and Upholstery

Ser. No. 307,946. JUVENILE WOOD PRODUCTS, INC., Fort Wayne, Ind. Filed Nov. 15, 1930.

TOIDEY One-Step

The word "One-Step" is not claimed apart from the mark shown in the drawing. Applicant is the owner of Reg. No. 195,783 (Little Toidey), dated Mar. 3, 1925, and of No. 255,647 dated Apr. 30, 1929.
For Toilet Chairs for Infants.
Claims use since Nov. 7, 1930.

Ser. No. 311,047. FRANK L. CLARK, doing business as Sunset Bed Works, Oakland, Calif. Filed Feb. 13, 1931.

NARRODOR

For Foldable Beds.
Claims use since Mar. 1, 1929.

Ser. No. 313,151. PILOT RADIO & TUBE CORPORATION, Lawrence, Mass. Filed Apr. 9, 1931.

PILOT

For Cabinets for Radio Receivers and Cabinets for Combination Radio Receivers and Phonographs.
Claims use since 1924.

Ser. No. 316,267. STANLEY V. HEIGHT, doing business as Woodcraft Toy Studios, Spring Lake, N. J. Filed June 25, 1931.

PEGGY ANN

For Breakfast Sets, Cradles, Highchairs, Rocking Chairs, Book Shelves, Miniature Desks and Chairs for Children's Use, and Nursery Book Cabinets.
Claims use since Apr. 16, 1931.

Ser. No. 316,911. UNITED STATES SPRING BED COMPANY, Springfield, Mass. Filed July 13, 1931.

SOMNO

For Bed, Cot, Couch, and Hammock Springs; Box Beds, Day Beds, Cots, Couches, Couch Hammocks, Mattresses and Pillows.
Claims use since June 5, 1931.

Ser. No. 317,584. CHARLES W. ZIMMER, doing business as Specialty Cabinet Company, Detroit, Mich. Filed Aug. 1, 1931.

Commander

For Restaurant and Hotel Furniture—Namely, Tables, Table Tops, Booths, Counters, Counter-Tops, Counter-Stools, and Costumers.
Claims use since October, 1929.

CLASS 33

Glassware

Ser. No. 310,291. HOLOPHANE COMPANY, INC., New York, N. Y. Filed Jan. 23, 1931.

PAGODA

For Glass Globes and Reflectors.
Claims use since Oct. 1, 1901.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 296,162. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed Feb. 17, 1930.



For Boilers and Boiler Tubes, Heating Tubes, Radiators, Water and Gas Heaters Operated by Means of Acetylene, Oxygen, and Hydrogen as Fuel; Heating and Cutting Burners, Soldering Lamps and Industrial Crucibles, Air- and Ventilation Ducts.
Claims use since July 8, 1918.

Ser. No. 313,276. HARRY D. BETZ, doing business as Betz Unit Air Cooler Company, Kansas City, Mo. Filed Apr. 13, 1931.

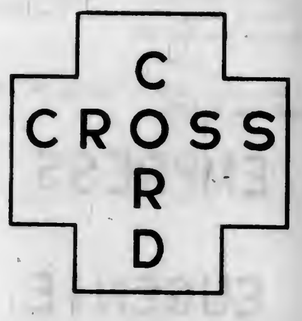


For Air Washers, Air Coolers, Air Dehumidifiers, Air Humidifiers, and Fan-Operated Air Circulators in the Nature of Fan Ventilators.
Claims use since Jan. 9, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 314,606. THE GATES RUBBER COMPANY, Denver, Colo. Filed May 15, 1931.



Applicant disclaims exclusive right to the word "Cord."
For Permanent Tire Repair Patches Composed of Cords Crossed and Rubberized.
Claims use since Jan. 15, 1931.

Ser. No. 317,467. THE R. M. HOLLINGSHEAD CO., Camden, N. J. Filed July 30, 1931.

The trade-mark is a color mark consisting of a color band along the edges of the material, which color band is made up of three contiguous stripes in the order white, green, and white as indicated in the color lining shown in the drawing.
For Rubber Patch, and Rubber Patch Material for Automobile Tires, Tubes and Other Rubber Goods.
Claims use since Jan. 1, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 313,150. PILOT RADIO & TUBE CORPORATION, Lawrence, Mass. Filed Apr. 9, 1931.

PILOT

For Phonographs Adapted for Combination with Radio Receiving Sets.
Claims use since 1924.

CLASS 37

Paper and Stationery

Ser. No. 317,715. GILBERT PAPER COMPANY, Menasha, Wis. Filed Aug. 6, 1931.

Allegro

For Fine Writing Paper.
Claims use since May 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 286,649. NATIONAL HOME TOWNERS MERCHANTS ASSOCIATION, Chicago, Ill. Filed July 5, 1929.

Home-Towner

For Monthly Magazine.
Claims use since June, 1929.

Ser. No. 316,819. THE LAWRENCE COMPANY, New York, N. Y. Filed July 10, 1931.

HOTELEGRAM

For Special Postal Cards.
Claims use since June 10, 1931.

Ser. No. 316,845. THE FRANK A. MUNSEY COMPANY, New York, N. Y. Filed July 11, 1931.

ALL-STORY

For Name for a Fortnightly Magazine.
Claims use since Mar. 21, 1931.

Ser. No. 316,846. THE FRANK A. MUNSEY COMPANY, New York, N. Y. Filed July 11, 1931.

ARGOSY

For Name for a Weekly Magazine.
Claims use since Oct. 5, 1929.

Ser. No. 317,070. DAILY GRAPHIC INC., New York, N. Y. Filed July 18, 1931.

ED SULLIVAN Sees BROADWAY

For Newspaper Column.
Claims use since June, 1931.

Ser. No. 317,521. LAMAR & WHITMORE, BOOK AGENTS, PUBLISHING HOUSE, M. E. CHURCH, SOUTH, doing business as Cokesbury Press, Nashville, Tenn. Filed July 31, 1931.

CHRISTIAN ADVOCATE

For Religious Periodical.
Claims use since 1858.

Ser. No. 317,646. THE NEW JERSEY SPORTSMAN, INC., Newark, N. J. Filed Aug. 4, 1931.

THE NEW JERSEY SPORTSMAN

For Periodicals.
Claims use since Feb. 27, 1931.

Ser. No. 317,840. CONINE & MILLNER, Chicago, Ill. Filed Aug. 10, 1931.

TRAVELOTO

For Reproductions of Photographs.
Claims use since June 22, 1931.

CLASS 39

Clothing

Ser. No. 298,161. FORTA-UNTERNEHMUNGEN A.-G., Basel, Switzerland. Filed Mar. 31, 1930.

Forta

For Wearing Apparel for Men, Women and Children—Namely, Underwear—Viz, Shorts, Drawers, Union Suits,

Corsets, Corset Brassières, Brassières, Corselets, Girdles, Bandeaus in the Nature of Brassières, Slips, Bloomers, Panties, Bloomers and Brassière Combinations, Chemises, Nightgowns, Pajamas, Vests; Suspenders, Jersey Sweaters, Gloves of Fabric and Leather, Basket-Ball and Gymnasium Suits, Waists for Outer Wear, Swimming Suits, Sport Dresses and Pants, Garters, Cravats, Caps; Shirts—Namely, Overhirts, Dress Shirts, Undershirts, Negligee Shirts, Work Shirts, Nightshirts; Hosiery, Suits, Overcoats and Cloaks for Men, Women, and Children; Aprons Other than for Surgeon's Use; Hats, Caps, and Bonnets for Men, Women, and Children; Collars and Braces.
Claims use since October, 1928.

Ser. No. 313,069. ARMOR SHOE COMPANY, INC., by change of name Admor Shoe Company Inc., Boston, Mass. Filed Apr. 8, 1931.

Ethel Ettic

For Boots, Shoes, Slippers Made of Leather, Rubber or Fabric or Combinations of These Materials, and Overshoes Made of Fabric, Rubber, and Combinations of Fabric and Rubber.
Claims use since Feb. 2, 1931.

Ser. No. 314,990. GLASER SHOE COMPANY, San Francisco, Calif. Filed May 25, 1931.

Lily White

Applicant disclaims the right to the exclusive use of the descriptive word "White" except in the particular arrangement and association in which it appears with the rest of the trade-mark as shown in the drawing.
For Leather Shoes.
Claims use since Mar. 31, 1931.

Ser. No. 316,095. THE MIDDISHADE COMPANY, INC., Philadelphia, Pa. Filed June 20, 1931.

Custom-crafted MIDDISHADE CLOTHES
AN ACHIEVEMENT IN SPECIALIZATION

No claim is made to the words "Custom Crafted Clothes" and "An Achievement in Specialization" apart from the mark as shown.
For Men's and Boys' Suits, Overcoats, and Topcoats.
Claims use since June 5, 1931.

Ser. No. 316,165. O'SULLIVAN RUBBER COMPANY, INC., New York, N. Y. Filed June 23, 1931.

O'Sullivan's

No claim is made to the exclusive use of the pictorial representation of a shoe heel or of the expression "Safety Cushion Heel" apart from the other features of the mark. The word "O'Sullivans" is a facsimile of the handwriting of Humphrey O'Sullivan.
For Rubber Heels for Boots and Shoes.
Claims use since October, 1904.

Ser. No. 316,377. MEYER REINGOLD, doing business as The Rubber-All Company, New York, N. Y. Filed June 27, 1931.

RAIN-BREAKER

For Men's, Women's, and Children's Raincoats and Waterproof Suits.
Claims use since Mar. 1, 1931.

Ser. No. 317,365. EDWARD MOORE, Holland, Mich. Filed July 27, 1931.

THE KEY SHOE

The words "The" and "Shoe" are disclaimed.
For Leather Shoes.
Claims use since June 1, 1931.

Ser. No. 317,445. SKLAROFF BROS., Philadelphia, Pa. Filed July 29, 1931.

Golden Ballet

For Hosiery.
Claims use since July 17, 1931.

Ser. No. 317,489. THE VOGUE SILK HOSIERY CO., Philadelphia, Pa. Filed July 30, 1931.

Formalettes

For Women's and Misses' Underwear.
Claims use since May, 1931.

Ser. No. 317,557. HAYWARD HOSIERY COMPANY, Ipswich, Mass. Filed Aug. 1, 1931.

Thread o' Life

For Hosiery.
Claims use since July 23, 1931.

Ser. No. 317,643. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Aug. 4, 1931.

Voguaire
BREATH OF THE BOULEVARDS

For Boots and Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since July 8, 1931.

Ser. No. 317,797. DODGE, BLISS & PERRY CO., INC., Newburyport, Mass. Filed Aug. 8, 1931.

Blissful

For Boots and Shoes of Leather, Rubber, Fabric, and Combinations Thereof.
Claims use since May, 1931.

Ser. No. 317,845. THE FORMFIT COMPANY, Chicago, Ill. Filed Aug. 10, 1931.

Thinette

Brassières, Girdles, Garter Belts, and Foundation Garments.
Claims use since June 1, 1931.

Ser. No. 317,859. CHAS. W. STROHBECK, INC., Brooklyn, N. Y. Filed Aug. 10, 1931.

FORM-O-LDER

For Men's, Women's, and Children's Shoes Made of Leather, Rubber, Fabric, and Combinations Thereof.
Claims use since June 1, 1931.

Ser. No. 317,945. MAIDEN FORM BRASSIERE CO. INC., New York, N. Y. Filed Aug. 13, 1931.

COOL-ETTE

For Brassières and Girdles.
Claims use since June 10, 1930.

Ser. No. 317,946. MAIDEN FORM BRASSIERE CO., INC., New York, N. Y. Filed Aug. 13, 1931.

VISA-VERSA

For Brassières and Girdles.
Claims use since July 5, 1930.

Ser. No. 318,017. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed Aug. 15, 1931.

firmfit

For Apparel Belts, Suspenders, and Braces.
Claims use since May 7, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 316,036. ELY & WALKER DRY GOODS COMPANY, St. Louis, Mo. Filed June 19, 1931.

Lady Fayre



For Bias Tape, Hair Clips, Hooks and Eyes, Pins and Hair Combs, Narrow Elastic Webbing, Dress Shields, Snap Fasteners, Thimbles of Non-Precious Metal, and Elastic Braid.
Claims use since January, 1919.

Ser. No. 316,527. CHAS. H. BRANDT, New York, N. Y. Filed July 1, 1931.

KENWOOD

For Common and Toilet Pins and Safety Pins Made of Non-Precious Metal.
Claims use since May 14, 1930.

Ser. No. 317,863. WALDES KOH-I-NOOR, INC., Long Island City, N. Y. Filed Aug. 10, 1931.

W

For Hook and Eye Tape.
Claims use since March, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 310,030. TOOTAL BROADHURST LEE COMPANY LIMITED, Manchester, England. Filed Jan. 16, 1931.

LOYO

For Cotton Piece Goods.
Claims use since Nov. 24, 1930.

Ser. No. 312,431. WILLIAM HELLER, INC., New York, N. Y. Filed Mar. 23, 1931.

Covetine

For Textiles Known as Jersey and Other Woven Fabrics of Silk, Wool, Rayon, and Mixtures Thereof.
Claims use since Oct. 5, 1930.

Ser. No. 316,408. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

DEBONESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,416. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 29, 1931.

SETANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 26, 1931.

Ser. No. 316,743. ROYAL ORIENTAL RUG CORPORATION, New York, N. Y. Filed July 8, 1931.

ROYAL CHINESE

No claim is made for the exclusive use of the word "Chinese" apart from the mark shown.
For Textile Rugs.
Claims use since May 5, 1931.

Ser. No. 316,744. ROYAL ORIENTAL RUG CORPORATION, New York, N. Y. Filed July 8, 1931.

Royal Persian

"Persian" disclaimed.
For Textile Rugs.
Claims use since May 5, 1931.

Ser. No. 316,745. ROYAL ORIENTAL RUG CORPORATION, New York, N. Y. Filed July 8, 1931.

Royal Kerman-Shah

"Kerman-Shah" disclaimed.
For Textile Rugs.
Claims use since May 5, 1931.

Ser. No. 316,746. ROYAL ORIENTAL RUG CORPORATION, New York, N. Y. Filed July 8, 1931.



No claim is made for the exclusive use of the word "Rugs" apart from the mark as shown.
For Textile Rugs.
Claims use since May 5, 1931.

Ser. No. 316,747. ROYAL ORIENTAL RUG CORPORATION, New York, N. Y. Filed July 8, 1931.

Royal Sarouk

No claim is made for the exclusive use of the word "Sarouk" apart from the mark as shown.
For Textile Rugs.
Claims use since May 5, 1931.

Ser. No. 317,184. J. L. STIFEL & SONS, INC., Wheeling, W. Va. Filed July 21, 1931.



No claim being made to the exclusive use of the word "Fast," apart from the mark as shown in the drawing.
For Cotton Piece Goods.
Claims use since June 5, 1931.

Ser. No. 317,567. HUGH NELSON-COLUMBIA CARPET MILLS, INC., Philadelphia, Pa. Filed Aug. 1, 1931.

MIRISHAH

For Textile Rugs and Carpets.
Claims use since July 24, 1931.

Ser. No. 317,612. NASHUA MANUFACTURING COMPANY, Nashua, N. H. Filed Aug. 3, 1931.

SHERICE

For Cotton Piece Goods, Cotton Blankets, and Wool Blankets.
Claims use since July 17, 1931.

Ser. No. 317,906. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Aug. 12, 1931.

MELOVEL

For Pile Fabrics.
Claims use since July 30, 1931.

Ser. No. 317,924. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Aug. 13, 1931.

Dolma

For Woolen Piece Goods.
Claims use since May 15, 1931.

Ser. No. 317,929. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Aug. 13, 1931.

Ralga

For Woolen Piece Goods.
Claims use since May 15, 1931.

Ser. No. 318,043. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Aug. 17, 1931.

CORDANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Aug. 14, 1931.

Ser. No. 318,044. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Aug. 17, 1931.

GLAMORESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Aug. 14, 1931.

Ser. No. 318,045. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Aug. 17, 1931.

ICENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Aug. 14, 1931.

Ser. No. 318,046. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Aug. 17, 1931.

LONDRENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Aug. 14, 1931.

Ser. No. 318,076. HARRY S. RADCLIFFE, INC., Hoboken, N. J. Filed Aug. 17, 1931.

BALLVET PONIPEL

For Plushes and Pile Fabrics in the Piece.
Claims use since May 21, 1931.

Ser. No. 318,108. HOLDEN LEONARD COMPANY, New York, N. Y. Filed Aug. 18, 1931.

SILVA-CHILLA

For Worsted and Woolen Fabrics.
Claims use since Feb. 10, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 316,033. COLUMBIA DENTAL & X-RAY CORP., New York, N. Y. Filed June 19, 1931.

IVORINE

For Dental Casts and Forms; Models of Teeth, Gum, and Jaw Structures and Display Stands Therefor; Dental Plates, and Dental Bridges.
Claims use since July 1, 1930.

Ser. No. 317,515. J. E. HANGER, INC., Washington, D. C. Filed July 31, 1931.



No claim being made to the words "artificial limbs", nor to the representations of artificial limbs, apart from the mark shown in the drawing.
For Artificial Limbs.
Claims use since Mar. 5, 1928.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 317,256. GEORGE HUGO MALTER, Fresno, Calif. Filed July 23, 1931.



The lining on the drawing indicates the colors gold and royal blue. The word "Brand" is disclaimed apart from said mark.
For Non-Alcoholic, Maltless Concentrates Adapted for Use for the Preparation of Soft Drinks and Beverages Made Therefrom.
Claims use since 1876.

Ser. No. 317,571. PIEL BROS. INC., Brooklyn, N. Y. Filed Aug. 1, 1931.

Chevy Chase

For Ginger Ale.
Claims use since 1927.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 296,349. C. D. KENNY CO., Baltimore, Md. Filed Feb. 21, 1930.



No claim is made to the words "Service Store Coffee" apart from the mark as shown. The drawing is lined for red.
For Coffee.
Claims use since Aug. 21, 1929.

Ser. No. 298,357. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Apr. 8, 1930.

REFRESHO

For Frozen Confectionery.
Claims use since Mar. 11, 1930.

Ser. No. 302,509. HASKINS FISH COMPANY, Boston, Mass. Filed June 17, 1930.



No claim is made to the exclusive use of the words "Fresh Fillets" and "Brand" apart from the other features of the mark as shown.
For Fresh Fillet of Haddock, Cod, Sole, and Mackerel.
Claims use since August, 1927.

Ser. No. 305,410. THE MACOMB CO., Oakland, Calif. Filed Sept. 6, 1930.

AUNT ELLA'S

For Pickles.
Claims use since July 26, 1930.

Ser. No. 308,134. OSCAR STEIN, St. Louis, Mo. Filed Nov. 20, 1930.

KRA-ZEE

For Ice Cream Sundaes.
Claims use since Sept. 20, 1930.

Ser. No. 308,135. OSCAR STEIN, St. Louis, Mo. Filed Nov. 20, 1930.

FUN-NEE

For Ice Cream Sundaes.
Claims use since Sept. 20, 1930.

Ser. No. 309,585. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash. Filed Jan. 3, 1931.



The lining on the drawing indicates shading only, and the picture is fanciful.
For Wheat Flour.
Claims use since Nov. 15, 1930.

Ser. No. 311,293. WENDELL A. VAN WAGONER, doing business as Van Cruller Company, Belleville, N. J. Filed Feb. 20, 1931.



No exclusive claim to the pictorial representation of a doughnut is made apart from the mark as shown.
For Crullers, Doughnuts, Cakes, and Pastry.
Claims use since August, 1930.

Ser. No. 312,192. THOMAS G. McMAHON, doing business as Thos. G. McMahon & Co., Utica, N. Y. Filed Mar. 16, 1931.

TEA TIME

For Canned Fruits, Honey, Food-Flavoring Extracts, Jams, Jellies, Fruit Preserves, Molasses, Edible Vegetable Oils, Corn Starch, Prepared Cocoanut, Breakfast Cereals, Mayonnaise Dressing, Mincemeat, Pickles, Canned Soups, Olives, Coffee, Tea, Dried Fruits, Malt Extract, Prepared Mustard, Canned Pimientos, Table Syrups, Canned Vegetables, Alimentary Pastes, Peanut Butter, and Spices.
Claims use since January, 1927.

Ser. No. 312,730. MARION McDONALD, Los Angeles, Calif. Filed Mar. 28, 1931.

MARION McDONALD
French Orange Dressing
Merci
Jolie Paree
MADE IN HOLLYWOOD, CALIFORNIA

The words "French Orange Dressing Made in Hollywood, Calif." are disclaimed.
For French Dressing.
Claims use since Feb. 16, 1931.

Ser. No. 312,772. PROVIDENCE MALT COMPANY, Providence, R. I. Filed Mar. 31, 1931.

DIMEX

For Malt Extract and Dried Grains for Making Malt Beverages.
Claims use since Apr. 5, 1919.

Ser. No. 313,212. PEOPLES BAKING COMPANY, Detroit, Mich. Filed Apr. 8, 1931.

VEGA-WHEAT BREAD

The descriptive words "Wheat" and "Bread" are disclaimed apart from the mark as shown on the drawing.
For Whole Wheat Bread.
Claims use since Nov. 1, 1930.

Ser. No. 314,359. CANDY KITCHENS, INC., Chicago, Ill. Filed May 9, 1931.

Silver Puff

For Candy.
Claims use since Mar. 27, 1931.

Ser. No. 315,216. TRIPLE XXX ROOT BEER COMPANY, Houston, Tex. Filed May 29, 1931.

FROZEN
BANCHO
A TROPIC TREAT

The word "Frozen" and the representation of the goods apart from the mark as shown in the drawing are disclaimed.
For Frozen Confections.
Claims use since Jan. 16, 1931.

Ser. No. 315,767. FOODTOWN KITCHENS, INC., Chicago, Ill. Filed June 11, 1931.

POPS

For Cereal Breakfast Foods.
Claims use since May 15, 1931.

Ser. No. 316,925. FIRST NATIONAL STORES INC., Somerville, Mass. Filed July 14, 1931.

MIRABEL

For Pure Raspberry and Strawberry Preserves.
Claims use since June 30, 1931.

Ser. No. 317,189. BLUE PLATE FOODS, INC., New Orleans, La. Filed July 20, 1931.

BLUE PLATE

For India Relish, French Dressing, Thousand Island Dressing, Salad Oil, Tartar Sauce, and Salad Dressing.
Claims use since Jan. 1, 1931.

Ser. No. 317,210. HONG KEE and COMPANY, New York, N. Y. Filed July 22, 1931.

FAR SAN

The trade-mark comprises the Chinese words "Far Sun" meaning "Live Flower".
For Chinese Peanut Candy.
Claims use since Oct. 1, 1930.

Ser. No. 317,322. CHARLES LIVOTI, doing business as Chas. Livoti Co., Roseville, Calif. Filed July 25, 1931.

Livoti
BRAND

The words "Livoti" and "Brand" are disclaimed apart from the mark as shown in the drawing.
For Olive Oils.
Claims use since Jan. 10, 1929.

Ser. No. 317,327. NIMS CAFE, INCORPORATED, Spokane, Wash. Filed July 25, 1931.

Nims

For Coffee, Tea, Bread, Pies, Cakes, Spaghetti and Beef, Sandwich Spread, Mayonnaise, Chile, Jams and Jellies, Soups, Bacon, Ham, and Sausage.
Claims use since May 1, 1925.

Ser. No. 317,474. LOVE-ME ICE CREAM COMPANY, Milwaukee, Wis. Filed July 30, 1931.

Love Me

For Ice Cream.
Claims use since May 31, 1931.

Ser. No. 317,483. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed July 30, 1931.

The lining on the drawing indicates the color brown, and the trade-mark consists of a brown rectangle associated with a juxtaposed white rectangle.
For Gelatin Aspic.
Claims use since July 6, 1931.

Ser. No. 317,484. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed July 30, 1931.



For Gelatin Aspic.
Claims use since July 6, 1931.

Ser. No. 317,548. JOHN F. BIRKMEYER, Jr., doing business as John F. Birkmeyer & Sons, Baltimore, Md. Filed Aug. 1, 1931.

Bone Head Suckers

No claim is made to the exclusive right to the use of the word "Suckers" apart from the mark shown in the drawing.
For Candy.
Claims use since July 1, 1931.

Ser. No. 317,554. S. FLEISHMAN & SONS, Philadelphia, Pa. Filed Aug. 1, 1931.



No claim being made under the statute to the exclusive use of the word "Beatsall" and "Brand" excepting in connection with the mark shown in the drawing.
For Butter.
Claims use since Nov. 10, 1930.

Ser. No. 317,578. SQUIRE DINGEE COMPANY, Chicago, Ill. Filed Aug. 1, 1931.



Ma Brown

The portrait forming a part of the mark is fanciful.
For Fruit Butters.
Claims use since Apr. 15, 1931.

Ser. No. 317,851. J. C. MILLETT COMPANY, San Francisco, Calif. Filed Aug. 10, 1931.

Rip Van Winkle

For Malt Syrup.
Claims use since May 21, 1931.

Ser. No. 317,854. SCHUCKL & CO., INC., San Francisco, Calif. Filed Aug. 10, 1931.

Happy Return

For Canned Fruits.
Claims use since July, 1928.

Ser. No. 317,866. NUTT BROS., Los Angeles, Calif. Filed Aug. 7, 1931.

OLYMPIC STARS

For Cookies, Small Cakes and Crackers.
Claims use since July 1, 1931.

Ser. No. 317,980. THE JELL-X-CELL COMPANY OF ILLINOIS, Chicago, Ill. Filed Aug. 14, 1931.

Gelyn

For Gelatin Dessert.
Claims use since Aug. 8, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 317,223. PRIMA COMPANY, Chicago, Ill. Filed July 22, 1931.

"Prima Tonic"



No claim is made to the word "Tonic" except in the association shown. The picture of the damsel is fanciful.
For a Malt Beverage Containing Less Than One-Half of One Per Cent of Alcohol by Volume.
Claims use since 1905.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

287,312. ALUMINA, ACTIVATED ALUMINA, ALUMINUM FLUORIDES, SODIUM FLUOIDES, ZINC FLUORIDES, LEAD FLUORIDES, MAGNESIUM FLUORIDES, VARIUM FLUORIDES, CALCIUM OXIDE, HYDRATED CALCIUM OXIDE, HYDRATED CALCIUM SULFATE, AND BAUXITE ORE CONCENTRATES SUCH AS MONO-HYDRATES OF ALUMINA, DI-HYDRATES OF ALUMINA AND TRI-HYDRATES OF ALUMINA. ALCOA ORE COMPANY, East St. Louis, Ill.

Filed April 22, 1931. Serial No. 313,625. PUBLISHED JULY 7, 1931. Class 6.

287,313. COMPOUND FOR SEALING THE JOINTS OF FUEL TANKS AND THEIR ACCESSORIES. THE GLENN L. MARTIN COMPANY, Baltimore and Middle River, Baltimore, Md.

Filed April 18, 1931. Serial No. 313,505. PUBLISHED JUNE 23, 1931. Class 12.

287,314. LUMBER. WHEELER LUMBER BRIDGE & SUPPLY COMPANY, Des Moines, Iowa.

Filed April 13, 1931. Serial No. 313,316. PUBLISHED JUNE 23, 1931. Class 12.

287,315. CAMERAS AND PARTS THEREOF. INTERNATIONAL PROJECTOR CORPORATION, New York, N. Y.

Filed April 10, 1931. Serial No. 313,266. PUBLISHED JULY 7, 1931. Class 26.

287,316. DYES, DYESTUFFS, AND DYE COLORS. NATIONAL ANILINE & CHEMICAL COMPANY, INC., New York, N. Y.

Filed April 7, 1931. Serial No. 313,051. PUBLISHED JULY 7, 1931. Class 6.

287,317. INTERNAL LUBRICANTS, LAXATIVES, AND PREPARATION FOR TREATING CONSTIPATION. THE NORWICH PHARMACAL COMPANY, Norwich, N. Y.

Filed April 4, 1931. Serial No. 312,957. PUBLISHED JULY 7, 1931. Class 6.

287,318. KELP AND KELP PREPARATIONS FOR USE IN THE TREATMENT OF GOITER AND OTHER DEFICIENCY DISEASES AND AILMENTS. KELCO COMPANY, San Diego, Calif.

Filed March 31, 1931. Serial No. 312,760. PUBLISHED JUNE 23, 1931. Class 6.

287,319. MEDICINAL COMPOUND FOR COUGHS AND SORE THROAT. THE PARA DRUG AND RUBBER COMPANY, doing business as Medico Products Co., Cleveland, Ohio.

Filed November 28, 1930. Serial No. 308,385. PUBLISHED JULY 7, 1931. Class 6.

287,320. MEDICINAL PREPARATION FOR USE AS AN APPETIZER AND STOMACHIC. KUR TRIER G. M. B. H., Amshausen, near Steinhagen, Germany.

Filed November 18, 1930. Serial No. 308,018. PUBLISHED JULY 7, 1931. Class 6.

287,321. CHEMICAL SPREADER FOR INSECTICIDES AND THE LIKE. HERCULES GLUE COMPANY, doing business as Colloidal Products Corporation, San Francisco, Calif.

Filed November 3, 1930. Serial No. 307,490. PUBLISHED JUNE 23, 1931. Class 6.

287,322. CERTAIN NAMED WEARING APPAREL. THE O-C MANUFACTURING COMPANY, Jersey City, N. J.

Filed September 25, 1930. Serial No. 306,064. PUBLISHED JULY 7, 1931. Class 39.

287,323. DUSTING POWDER, FACE POWDER, TALCUM POWDER, AND TOILET POWDER. CHARLES G. UNGER, doing business as Stanhope Laboratories, Brooklyn, N. Y.

Filed September 12, 1930. Serial No. 305,633. PUBLISHED JULY 7, 1931. Class 6.

287,324. METALLIC CLIPS USED FOR SPACING APART STRUCTURAL PARTS SUCH AS CEILINGS, FLOORS, WALLS, MACHINERY BASES, ETC. UNITED STATES GYPSUM COMPANY, Chicago, Ill.

Filed September 8, 1930. Serial No. 305,458. PUBLISHED JUNE 30, 1931. Class 12.

287,325. BRIDGE PADS, BRIDGE PENCIL CASES, PHOTO ALBUMS, ETC. FOSTER-GRANT CO. INC., Leominster, Mass.

Filed August 1, 1930. Serial No. 304,100. PUBLISHED JULY 7, 1931. Class 37.

287,326. WRAPPING PAPER, TOILET PAPER, BOND AND BOOK PAPER, AND CORRESPONDENCE AND MAILING ENVELOPES. THE OHIO AND MICHIGAN PAPER COMPANY, Toledo, Ohio.

Filed July 24, 1930. Serial No. 303,777. PUBLISHED JULY 7, 1931. Class 37.

287,327. PAPER. ENSO-GUTZEIT OSAKEYHTIÖ, Kotka, Finland.

Filed June 4, 1930. Serial No. 302,156. PUBLISHED JULY 7, 1931. Class 37.

287,328. LIQUID PREPARATION FOR DYSPEPSIA, INDIGESTION, AND GASTRO-INTESTINAL TROUBLES. PIERRE ZIZINE, Paris, France.

Filed May 24, 1930. Serial No. 301,225. PUBLISHED JUNE 23, 1931. Class 6.

287,329. LIME FOR BUILDING PURPOSES. PALMER LIME & CEMENT COMPANY, New York, N. Y.

Filed April 30, 1930. Serial No. 299,754. PUBLISHED JUNE 23, 1931. Class 12.

287,330. MOUTH WASH. GIOVANNI SPADARO, Philadelphia, Pa.

Filed April 21, 1930. Serial No. 299,233. PUBLISHED JULY 7, 1931. Class 6.

287,331. DEPILATORY POWDERS, FUMIGATING PASTILLES, HAIR TONICS, HAIR OILS, ETC. LUCRETIA VANDERBILT, INC., Bridgeport, Conn.

Filed August 23, 1928. Serial No. 271,445. PUBLISHED JUNE 9, 1931. Class 6.

287,332. PUBLICATION ISSUED WEEKLY. BURROUGHS, INCORPORATED, Los Angeles, Calif.

Filed May 26, 1931. Serial No. 315,029. PUBLISHED JULY 7, 1931. Class 38.

287,333. MONTHLY PUBLICATION. AUTOGIRO COMPANY OF AMERICA, Wilmington, Del., and Philadelphia, Pa.

Filed May 25, 1931. Serial No. 314,977. PUBLISHED JULY 7, 1931. Class 38.

287,334. NEWSPAPER AND/OR MAGAZINE COLUMNS. GEORGE P. METZGER, New York, N. Y.

Filed May 23, 1931. Serial No. 314,958. PUBLISHED JULY 7, 1931. Class 38.

287,335. NEWSPAPER SECTION. CENTRAL PRESS ASSOCIATION, INC., New York, N. Y.

Filed May 22, 1931. Serial No. 314,893. PUBLISHED JULY 7, 1931. Class 38.

287,336. REPRODUCTIONS IN THE FORM OF PRINTS. HELIOTONE REPRODUCTION SERVICE, Chicago, Ill.

Filed May 21, 1931. Serial No. 314,849. PUBLISHED JULY 7, 1931. Class 38.

287,337. CARDS AND FOLDERS SOLD TO THE TRADE AND PUBLIC AT LARGE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.

Filed May 19, 1931. Serial No. 314,780. PUBLISHED JULY 7, 1931. Class 37.

287,338. NEWSPAPER SECTION. INTERNATIONAL NEWSREEL CORPORATION, New York, N. Y.

Filed May 19, 1931. Serial No. 314,763. PUBLISHED JULY 7, 1931. Class 38.

287,339. PERIODICAL. H. R. HOWELL PUBLISHING CO., INC., New York, N. Y.

Filed May 15, 1931. Serial No. 314,617. PUBLISHED JULY 7, 1931. Class 38.

287,340. STEEL PLATES AND STEEL MESH USED FOR CONSTRUCTING BULLET-PROOF PARTITION WALLS AND COUNTERS. J. H. WISE COMPANY, INC., St. Louis, Mo.

Filed May 14, 1931. Serial No. 314,595. PUBLISHED JUNE 30, 1931. Class 12.

287,341. CHEMICAL DYE AIDS—NAMELY, MOISTENING PREPARATIONS, THREAD AND FIBRE PROTECTING PREPARATIONS, THREAD AND FIBRE PENETRATING PREPARATIONS, SMOOTHING PREPARATIONS, AND TANNING PREPARATIONS. H. TH. BÖHME A. G., Chemnitz, Germany.

Filed May 14, 1931. Serial No. 314,549. PUBLISHED JULY 7, 1931. Class 6.

287,342. CHEMICAL DYE AIDS—NAMELY, MOISTENING PREPARATIONS, THREAD AND FIBRE PROTECTING PREPARATIONS, THREAD AND FIBRE PENETRATING PREPARATIONS, SMOOTHING PREPARATIONS, AND TANNING PREPARATIONS. H. TH. BÖHME A. G., Chemnitz, Germany.

Filed May 14, 1931. Serial No. 314,548. PUBLISHED JULY 7, 1931. Class 6.

287,343. CHEMICAL DYE AIDS—NAMELY, MOISTENING PREPARATIONS, THREAD AND FIBRE PROTECTING PREPARATIONS, THREAD AND FIBRE PENETRATING PREPARATIONS, SMOOTHING PREPARATIONS, AND TANNING PREPARATIONS. H. TH. BÖHME A. G., Chemnitz, Germany.

Filed May 14, 1931. Serial No. 314,547. PUBLISHED JULY 7, 1931. Class 6.

287,344. CHEMICAL DYE AIDS—NAMELY, MOISTENING PREPARATIONS, THREAD AND FIBRE PROTECTING PREPARATIONS, THREAD AND FIBRE PENETRATING PREPARATIONS, SMOOTHING PREPARATIONS, AND TANNING PREPARATIONS. H. TH. BÖHME A. G., Chemnitz, Germany.

Filed May 14, 1931. Serial No. 314,546. PUBLISHED JULY 7, 1931. Class 6.

287,345. HAIR DRESSING PREPARATION. ELMIRA WARD, Brooklyn, N. Y.

Filed May 13, 1931. Serial No. 314,522. PUBLISHED JULY 7, 1931. Class 6.

287,346. FACE AND BODY POWDERS, TALCUM POWDERS, PERFUMES, TOILET WATERS, ROUGE, LIP STICKS, SACHET POWDERS, FACIAL CREAMS, AND SKIN AND HAIR LOTIONS. SPOONER, INC., New York, N. Y.

Filed May 13, 1931. Serial No. 314,517. PUBLISHED JULY 7, 1931. Class 6.

287,347. MERCHANTS' TRADE DISCOUNT IN BOOK FORM. NATIONAL LEAGUE OF CONSUMERS, Michigan City, Ind.

Filed May 13, 1931. Serial No. 314,508. PUBLISHED JULY 7, 1931. Class 38.

287,348. PREPARATION FOR RESTORING NATURAL COLOR TO GRAY HAIR. ZYGMUNT KOZLOWSKI, New York, N. Y.

Filed May 13, 1931. Serial No. 314,502. PUBLISHED JULY 7, 1931. Class 6.

287,349. COMIC STRIPS PRINTED AND PUBLISHED PERIODICALLY IN VARIOUS NEWSPAPERS. THE MCNAUGHT SYNDICATE, INC., New York, N. Y.

Filed June 3, 1931. Serial No. 315,379. PUBLISHED JULY 7, 1931. Class 38.

287,350. COMIC STRIPS PRINTED AND PUBLISHED PERIODICALLY IN VARIOUS NEWSPAPERS. THE MCNAUGHT SYNDICATE, INC., New York, N. Y.

Filed June 3, 1931. Serial No. 315,378. PUBLISHED JULY 7, 1931. Class 38.

287,351. PUBLICATION ISSUED FROM TIME TO TIME. THE LETTER-BOOK CO., Chicago, Ill.

Filed June 1, 1931. Serial No. 315,270. PUBLISHED JULY 7, 1931. Class 38.

287,352. QUARTERLY PUBLICATION. GERNSBACK PUBLICATIONS, INC., New York, N. Y.

Filed May 13, 1931. Serial No. 314,497. PUBLISHED JULY 7, 1931. Class 38.

287,353. PREPARATION FOR RELIEF OF CATARRH, NASAL SINUS TROUBLE, HAY FEVER, HEAD COLDS, AND OTHER CONGESTIONS OF THE NASAL MUCOSA. THE EPHEDRINE COMPANY, University City, Mo.

Filed May 13, 1931. Serial No. 314,492. PUBLISHED JULY 7, 1931. Class 6.

287,354. PREPARATION FOR RELIEF OF CATARRH, NASAL SINUS TROUBLE, HAY FEVER, HEAD COLDS, AND OTHER CONGESTIONS OF THE NASAL MUCOSA. THE EPHEDRINE COMPANY, University City, Mo.

Filed May 13, 1931. Serial No. 314,491. PUBLISHED JULY 7, 1931. Class 6.

287,355. PERIODICAL. HIRAM L. WILLIAMSON, Springfield, Ill.

Filed May 12, 1931. Serial No. 314,477. PUBLISHED JULY 7, 1931. Class 38.

287,356. MAGAZINE. J. MCKEEN CATTELL, doing business as The Science Press, New York, N. Y.

Filed May 12, 1931. Serial No. 314,446. PUBLISHED JULY 7, 1931. Class 38.

287,357. PREPARATIONS FOR TREATING HAIR TO REMOVE STAINS THEREFROM. HERMANN STEIN, doing business as Hair Research Laboratories, New York, N. Y.

Filed May 11, 1931. Serial No. 314,432. PUBLISHED JUNE 23, 1931. Class 6.

287,358. ROCK ASPHALT. HEZ K. JOHNSON, Chillicothe, Mo.

Filed May 11, 1931. Serial No. 314,410. PUBLISHED JUNE 23, 1931. Class 12.

287,359. ANTISEPTIC DOUCHE POWDER. JOSEPH GOLDSMITH, Jr., doing business as Anti-Cept Co., Los Angeles, Calif.

Filed May 11, 1931. Serial No. 314,409. PUBLISHED JULY 7, 1931. Class 6.

287,360. PREPARATION FOR THE EXTERMINATION OF RATS AND MICE. SIMON DRAUN, doing business as Draun Laboratories, Baltimore, Md.

Filed May 11, 1931. Serial No. 314,401. PUBLISHED JULY 7, 1931. Class 6.

287,361. ALKALINE MEDICINAL WATER, ARTIFICIALLY PREPARED FOR THE PURPOSE OF RESTORING AND MAINTAINING A NORMAL OR ALKALINE BALANCE, INDICATED IN SUCH ACID CONDITIONS WHERE ALKALINIZATION IS DESIRED, MAINTAINING A NORMAL DEHYDRATION EMBRACING IN ITS PROPERTIES AN ALTERATIVE ACTION. KALINE WATER COMPANY, INC., Wilmington, Del., and Washington, D. C.

Filed May 9, 1931. Serial No. 314,370. PUBLISHED JUNE 23, 1931. Class 6.

287,362. BRICK. ACME BRICK COMPANY, Danville, Ill.

Filed May 9, 1931. Serial No. 314,354. PUBLISHED JUNE 30, 1931. Class 12.

287,363. NASAL SPRAY. SINASPRA CORPORATION, Columbus, Ohio.

Filed May 8, 1931. Serial No. 314,346. PUBLISHED JUNE 23, 1931. Class 6.

287,364. COMPOUND EMBODYING CALCIUM SULPHATE ANHYDROUS AND CALCIUM PHOSPHATE PYRO TO BE USED AS A CLEANING AND POLISHING AGENT IN DENTIFRICES. PROVIDENT CHEMICAL WORKS, St. Louis, Mo.

Filed May 7, 1931. Serial No. 314,315. PUBLISHED JULY 7, 1931. Class 6.

287,365. ANHYDROUS CALCIUM SULPHATE USED AS A CLEANING AND POLISHING AGENT IN DENTIFRICES. THE ILIFF-BRUFF CHEMICAL COMPANY, Hoopeston, Ill.
Filed May 7, 1931. Serial No. 314,314. PUBLISHED JULY 7, 1931. Class 6.

287,366. VAGINAL JELLY. ROBERT J. PIERCE, INC., New York, N. Y.
Filed May 7, 1931. Serial No. 314,294. PUBLISHED JUNE 23, 1931. Class 6.

287,367. COUGH DROPS. THE H. B. CO., Jersey City, N. J.
Filed May 7, 1931. Serial No. 314,284. PUBLISHED JUNE 23, 1931. Class 6.

287,368. LIQUID NAIL POLISHES, NAIL POLISH REMOVERS, AND LIQUID CUTICLE REMOVERS. BOSTON FLORAL SUPPLY & SNYDER CO. INC., Boston, Mass.
Filed May 7, 1931. Serial No. 314,267. PUBLISHED JULY 7, 1931. Class 6.

287,369. ANTISEPTIC LIQUID MOUTH WASH FOR THE MOUTH, TEETH, AND GUMS. DEKTOL CORPORATION, Kansas City, Mo.
Filed May 6, 1931. Serial No. 314,233. PUBLISHED JUNE 23, 1931. Class 6.

287,370. INSECTICIDE. GEORGE BOARDMAN, doing business as Vermel Company, Sioux Falls, S. Dak.
Filed May 6, 1931. Serial No. 314,228. PUBLISHED JUNE 23, 1931. Class 6.

287,371. ANTISEPTIC COMPOUND. ALKA-SEPTOL, INCORPORATED, Beacon, N. Y.
Filed May 6, 1931. Serial No. 314,222. PUBLISHED JUNE 23, 1931. Class 6.

287,372. ASPHALT. SHELL OIL COMPANY, San Francisco, Calif.
Filed March 25, 1931. Serial No. 312,533. PUBLISHED JUNE 30, 1931. Class 12.

287,373. PREPARATION FOR THE TREATMENT OF ECZEMA. THE LUCKY HIT COMPANY, Hawarden, Iowa.
Filed March 25, 1931. Serial No. 312,521. PUBLISHED JULY 7, 1931. Class 6.

287,374. ASPHALT, PAVEMENT MATERIALS, ASPHALTIC BINDERS, ASPHALTIC EMULSIONS, AND COMPOUNDS. AMERICAN BITUMULS COMPANY, Wilmington, Del., and Oakland, Calif.
Filed March 10, 1931. Serial No. 311,946. PUBLISHED JUNE 23, 1931. Class 12.

287,375. ASPHALT, PAVEMENT MATERIALS, ASPHALTIC BINDERS, ASPHALTIC EMULSIONS, AND COMPOUNDS. AMERICAN BITUMULS COMPANY, Wilmington, Del., and Oakland, Calif.
Filed March 10, 1931. Serial No. 311,945. PUBLISHED JUNE 23, 1931. Class 12.

287,376. PERFUME, TOILET WATER, FACE POWDER, LIQUID POWDER, SACHET POWDER, DUSTING POWDER, COMPACTS, ROUGES, LIP STICKS, BATH SALTS, BRILLIANTINE, EYEBROW PENCILS, EYE SHADOW, MASCARA, TOILET CREAM, FACE CREAM, LIQUID CREAM, LOTIONS FOR THE HAIR, AND TONICS FOR THE HAIR. GABILLA, INCORPORATED, New York, N. Y.
Filed March 3, 1931. Serial No. 311,679. PUBLISHED JUNE 23, 1931. Class 6.

287,377. HYGIENIC POWDERS AND SUPPOSITORIES FOR USE IN FEMININE HYGIENE. THE MARVEL COMPANY, New Haven, Conn.
Filed February 27, 1931. Serial No. 311,580. PUBLISHED JULY 7, 1931. Class 6.

287,378. LIQUID SKIN CLEANSER, FACE CREAM, ETC. H. B. DENTON & Co., Mt. Carmel, Ill.
Filed February 7, 1931. Serial No. 310,822. PUBLISHED JULY 7, 1931. Class 6.

287,379. MEN'S NEGLIGEE, DRESS, AND WORK SHIRTS, MEN'S PAJAMAS, BOYS' NEGLIGEE, DRESS, AND WORK SHIRTS; BOYS' PAJAMAS, LADIES' PAJAMAS. CAPE COD SHIRT COMPANY, Fall River, Mass.
Filed January 30, 1931. Serial No. 310,553. PUBLISHED APRIL 21, 1931. Class 39.

287,380. SOUND ABSORBING AND ACOUSTICAL TILE. ACOUSTONE COMPANY, LTD., Los Angeles, Calif.
Filed January 28, 1931. Serial No. 310,465. PUBLISHED JUNE 30, 1931. Class 12.

287,381. ROUGH AND FINISHED LUMBER. CHICAGO MILL AND LUMBER CORPORATION, Chicago, Ill.
Filed January 10, 1931. Serial No. 309,803. PUBLISHED JUNE 23, 1931. Class 12.

287,382. PLASTIC COMPOSITION MATERIAL. EDWARD B. SICKLE, doing business as Paint Products Laboratories, Chicago, Ill.
Filed April 22, 1931. Serial No. 313,684. PUBLISHED JUNE 23, 1931. Class 12.

287,383. DENTAL CREAM. J. E. WEBB, doing business as K. D. Chemical Co., St. Petersburg, Fla., and Philadelphia, Pa.
Filed April 22, 1931. Serial No. 313,688. PUBLISHED JUNE 23, 1931. Class 6.

287,384. MEDICINAL TREATMENT FOR CONSUMPTION. JOHN WILTON BARLOW, New York, N. Y.
Filed April 22, 1931. Serial No. 313,691. PUBLISHED JUNE 23, 1931. Class 6.

287,385. PHOSPHATIDE OR LECITHIN AND COMPOSITIONS CONTAINING SAME. AMERICAN LECITHIN CORPORATION, Wilmington, Del., and Atlanta, Ga.
Filed April 24, 1931. Serial No. 313,726. PUBLISHED JULY 7, 1931. Class 6.

287,386. COMPOSITION FOR STOPPING LEAKS IN ALL HOT WATER CIRCULATING SYSTEMS. RADIATOR SPECIALTY COMPANY, Charlotte, N. C.
Filed April 24, 1931. Serial No. 313,753. PUBLISHED JUNE 23, 1931. Class 6.

287,387. BUNTING IN THE PIECE AND BLANKETS OF TEXTILE FABRIC. L. BAMBERGER & Co., Newark, N. J.
Filed April 27, 1931. Serial No. 313,826. PUBLISHED JUNE 23, 1931. Class 42.

287,388. LUMBER—NAMELY, FLOORING, DROP SIDING, MOULDING, CONSTRUCTION TIMBERS, ROLL ROOFING, ROLL ROOFING FELT, COMPOSITION SHINGLES, LIME, AND BRICK. CHAPMAN & DEWEY LUMBER CO., Marked Tree, Ark.
Filed April 27, 1931. Serial No. 313,830. PUBLISHED JUNE 30, 1931. Class 12.

287,389. COMPOSITION FOR STOPPING THE LEAKS OF INTERNAL COMBUSTION ENGINE RADIATORS. ANSALEM ORVILLE COBBS, doing business as Cobbs Mfg. Co., Des Moines, Iowa.
Filed April 27, 1931. Serial No. 313,881. PUBLISHED JULY 7, 1931. Class 6.

287,390. MEDICINES USED AS A TONIC AND BLOOD PURIFIER AND TO REGULATE THE LIVER AND BOWELS, USED AS A MEDICINE IN GALL BLADDER TROUBLE, DIABETES, CATARRH, HEADACHE, INDIGESTION, AND DISORDERED KIDNEYS. WM. A. WAHL, St. Louis, Mo.
Filed April 27, 1931. Serial No. 313,896. PUBLISHED JUNE 23, 1931. Class 6.

287,391. NEWSPAPER COLUMN. THE JOHNSTOWN TRIBUNE PUBLISHING COMPANY, Johnstown, Pa.
Filed April 28, 1931. Serial No. 313,922. PUBLISHED JULY 7, 1931. Class 38.

287,392. RELIEF AND TREATMENT OF GALL STONES AND CATARRHAL JAUNDICE. DR. CHARLES G. HUBENTHAL, doing business as The Lopex Remedies and Products Co., Minneapolis, Minn.
Filed April 29, 1931. Serial No. 313,963. PUBLISHED JULY 7, 1931. Class 6.

287,393. MEDICINAL PREPARATION FOR THE RELIEF OF RHEUMATISM. JAMES M. JENSEN, Blackfoot, Idaho.
Filed April 30, 1931. Serial No. 314,004. PUBLISHED JULY 7, 1931. Class 6.

287,394. ANTI-FREEZE PRODUCTS. BOND ELECTRIC CORPORATION, Jersey City, N. J.
Filed May 1, 1931. Serial No. 314,037. PUBLISHED JUNE 23, 1931. Class 6.

287,395. LIQUID COATING MATERIAL TO BE USED BY ITSELF OR AS AN INGREDIENT FOR PAINTS AND THE LIKE FOR PREVENTING RUST AND CORROSION OF METALS AND ROT OR DECAY OF WOOD FOR PRESERVING METALLIC AND WOODEN STRUCTURES AND ARTICLES, AND FOR WATERPROOFING TEXTILE FABRICS. FEROLEUM PRODUCTS, INC., Irvington, N. J.
Filed May 1, 1931. Serial No. 314,058. PUBLISHED JUNE 23, 1931. Class 6.

287,396. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, LIP ROUGE, SACHETS, BRILLIANTINE, BATH SALTS, LOTION FOR THE SKIN AND HAIR, FACE CREAM. SOCIETE ANONYME JEAN PATOU, Paris, France.
Filed May 1, 1931. Serial No. 314,082. PUBLISHED JULY 7, 1931. Class 6.

287,397. GRANULAR MIXTURES FOR THE REDUCTION OF OXYGEN IN HEAT TREATING PROCESSES. RYAN, SCULLY & COMPANY, Philadelphia, Pa.
Filed May 1, 1931. Serial No. 314,076. PUBLISHED JUNE 23, 1931. Class 6.

287,398. ASTRINGENT POWDER FOR USE EXTERNALLY IN GENERAL BODY HYGIENE. EASTERN RESEARCH LABORATORIES, Baltimore, Md.
Filed May 2, 1931. Serial No. 314,104. PUBLISHED JULY 7, 1931. Class 6.

287,399. GENERAL TONIC. BREWER & COMPANY, INC., Worcester, Mass.
Filed May 4, 1931. Serial No. 314,139. PUBLISHED JUNE 23, 1931. Class 6.

287,400. URINARY ANTISEPTIC. SCHERING & GLATZ, INC., Bloomfield, N. J.
Filed May 5, 1931. Serial No. 314,214. PUBLISHED JUNE 23, 1931. Class 6.

287,401. PREPARATION FOR PREVENTING BIRDS AND ANIMALS FROM DESTROYING CORN. BENJAMIN D. SMITH, doing business as American Manufacturing Company, Utica, N. Y.
Filed May 5, 1931. Serial No. 314,216. PUBLISHED JUNE 23, 1931. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

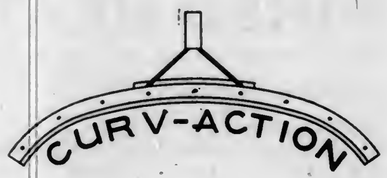
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

287,402. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) SPIEGEL, MAY, STERN COMPANY, INC., Chicago, Ill. Filed Nov. 7, 1930. Serial No. 307,638.

BURLEY

For Radio Receiving Sets, Radio Receiving Sets Adapted to be Combined with Phonographs, and Radio Electron Tubes.
Claims use since July 30, 1930.

287,403. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) JAMES M. OBERTI, doing business as Oberti Manufacturing Company, San Francisco, Calif. Filed Nov. 5, 1930. Serial No. 307,561.



For Curved Floor Squeegees, Straight Floor Squeegees, Curved Floor Brushes, and Straight Floor Brushes.
Claims use since July 29, 1930.

287,404. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) SEARS, ROEBUCK AND CO., also doing business as Illinois Paint Works, Chicago, Ill. Filed Oct. 31, 1930. Serial No. 307,428.

Modernart

For Ready Mixed House Paints for Interior and Exterior Use, Ready Mixed Barn Paint, Shingle Stain, Ready Mixed Porch Paint, Paint Enamel, Enamel Undercoats, Kalsomines, Lacquers, Varnish, Varnish Undercoats, Paint and Varnish Removers, Putty and Wood Fillers, Brush Lacquer Thinner, and Automobile Enamel.
Claims use since Aug. 1, 1930.

287,405. (CLASS 39. CLOTHING.) WRIGHT-LA MONTAGNE COMPANY, Springfield, Mass. Filed Aug. 28, 1930. Serial No. 305,128.

Slendermode

For Corsets, Brassières, Girdles, and Corset-Brassières.
Claims use since July 1, 1930.

287,406. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) BONDED MATERIALS CO., Louisville, Ky. Filed Aug. 26, 1930. Serial No. 305,029.

SILVER SHEEN

For Aluminum Paint.
Claims use since Aug. 1, 1930.

287,407. (CLASS 37. PAPER AND STATIONERY.) RIEGEL PAPER CORPORATION, Riegelsville, N. J. Filed Aug. 23, 1930. Serial No. 304,973.

DIAFANE

For Wrapping Paper.
Claims use since Aug. 2, 1930.

287,408. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE EVEREDY COMPANY, Frederick, Md. Filed Aug. 23, 1930. Serial No. 304,946.

GEAR TOP

For Bottle Cappers.
Claims use since Nov. 8, 1929.

287,409. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE HIND & HARRISON PLUSH CO., New York, N. Y. Filed July 2, 1930. Serial No. 303,055.

GRA-SQUIRL

For Pile Fabric With a Cotton Back and an Alpaca Cut Pile Giving a Squirrel Skin Effect in the Piece.
Claims use since June 10, 1930.

287,410. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) STEDMAN'S FOUNDRY & MACHINE WORKS, Aurora, Ind. Filed June 7, 1930. Serial No. 302,262.

NIFE-LESS

For Hogs in the Nature of Power Driven Crushing and Grinding Machines for the Reduction of Veneer Scrap, Wood Blocks and Strips, Wood Offal, Sodium Silicate, Cork, Coal, Manure and Superphosphate, and Many Other Materials.
Claims use since Nov. 20, 1929.

287,411. (CLASS 38. PRINTS AND PUBLICATIONS.) FAIRCHILD AERIAL SURVEYS, INC., New York, N. Y. Filed May 29, 1930. Serial No. 301,607.

FAIRCHILD

For Maps and Photographs.
Claims use since Mar. 1, 1930.

287,412. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES SEGALAS & Co., San Francisco, Calif. Filed May 26, 1930. Serial No. 301,303.

San Carlos

For a General Medicinal Tonic Having a Wine Base.
Claims use since May 12, 1930.

287,413. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JOHN STUBBS HOOKS, Yazoo City, Miss. Filed May 20, 1930. Serial No. 300,873.

HOOVER CAT

For Stuffed Figure Toy.
Claims use since May 2, 1930.

287,414. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WILLIAM WESLEY HICKS, San Francisco, Calif., assignor to Wired Heat Co. Ltd., a Corporation of California. Filed July 9, 1929. Serial No. 286,827.

WIRED HEAT

For Electric Heaters—Namely, Individual Room Heaters.
Claims use since June 17, 1929.

287,415. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KEANE-LOFFLER INC., Benning, D. C. Filed Dec. 18, 1928. Serial No. 276,894.

DAINTILINX

For Sausage.
Claims use since Aug. 9, 1928.

287,416. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FERNGREN MESTLER MANUFACTURING COMPANY, Toledo, Ohio. Filed May 28, 1928. Serial No. 267,115.



For Coffee.
Claims use since June, 1926.

287,417. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEMUEL E. EDWARDS, Pascoag, R. I. Filed July 15, 1931. Serial No. 316,959.

EDWARDS'
HEADACHE
CAPSULES

For Headache Capsules.
Claims use since September, 1902.

287,418. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ALLBRIGHT ELECTRIC CORPORATION, New York, N. Y. Filed July 15, 1931. Serial No. 316,953.

ALLBRIGHT

For Flash Light Batteries and Other Electric Dry Cells, Electric Storage Batteries, Electric Lanterns and Portable Electric Lanterns, Electric Light Bulbs, and Portable Electric Flash Lights.
Claims use since Apr. 1, 1929.

287,419. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) AUGUST KARRETH, doing business as Luitpold-Werk, Chemisch-Pharmazeutische Fabrik, Munich, Germany. Filed July 8, 1931. Serial No. 316,726.

Karreth

For Hemostatic.
Claims use since September, 1929.

287,420. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MIDWEST DAIRY PRODUCTS CORPORATION, Duquoin, Ill. Filed June 30, 1931. Serial No. 316,497.

NU-BAR

For Frozen Confections.
Claims use since January, 1930.

287,421. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE SOUTHERN EQUIPMENT COMPANY, St. Louis, Mo. Filed June 25, 1931. Serial No. 316,300.

CUSTOM-BILT

For Lunch Counters, Back Bars, Pastry Display Cases, Urn Stands, and Cabinet Tables.
Claims use since Jan. 1, 1928.

287,422. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) MILTON D. SWARTZ, doing business as Farboil Paint Co., Baltimore, Md. Filed June 18, 1931. Serial No. 316,020.

STA-CLEAN

For Paints in Paste and Ready Mixed Form.
Claims use since January, 1922.

287,423. (CLASS 39. CLOTHING.) ELDER MANUFACTURING COMPANY, St. Louis, Mo. Filed June 18, 1931. Serial No. 315,995.

Chantilly

For Men's and Boys' Dress and Negligee Shirts and Boys' and Children's Waists and Blouses.
Claims use since Aug. 6, 1930.

287,424. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) UNITED STATES RADIO & TELEVISION CORP., Marion, Ind. Filed May 27, 1931. Serial No. 315,121.

UNITED STATES RADIO & TELEVISION CORP.

For Radio Sending and Receiving Sets and Television Sending and Receiving Sets.
Claims use since Dec. 28, 1928.

287,425. (CLASS 38. PRINTS AND PUBLICATIONS.) THE APPLETON COATED PAPER CO., Appleton, Wis. Filed Apr. 20, 1931. Serial No. 313,527.

POLYCHROME

For Book Paper.
Claims use since Apr. 1, 1927.

287,426. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) UNITED STATES REGISTER CO., Battle Creek, Mich. Filed Feb. 17, 1931. Serial No. 311,165.

TRUSSTEEL

For Ventilating and Register Faces.
Claims use since July 15, 1930.

287,427. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) THE SEAMLESS RUBBER COMPANY, INC., New Haven, Conn. Filed Jan. 16, 1931. Serial No. 310,028.

NOSHOC

For Rubber Recoil Cushion or Pad for Shotguns or Rifles.
Claims use since Aug. 12, 1930.

287,428. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 15, 1930. Serial No. 309,005.

CHAIN-GRIP

For Chain Hoists.
Claims use since July, 1930.

287,429. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 4, 1930. Serial No. 308,599.

LONG WEAR

For Wagon Woods—Namely, Wood Wheels for Wagons, Singletrees, Neckyokes, Wagon Tongues, Tongue Hounds, Wagon Bolsters, Bolster Springs, Bolster Stakes, Plough Eveners.
Claims use since July, 1930.

287,430. (CLASS 38. PAPER AND STATIONERY.) LAKESIDE ENVELOPE CO., Chicago, Ill. Filed Nov. 28, 1930. Serial No. 308,376.

HYWHITE

For Paper Tablets, Envelopes, Note Paper, Letter Paper.
Claims use since Aug. 6, 1930.

287,431. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) PIONEER BROOM CO., INC., Amsterdam, N. Y. Filed Nov. 14, 1930. Serial No. 307,902.

DIAGNAL

For Whiskbrooms.
Claims use since Aug. 1, 1930.

287,432. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JAY H. SCHMIDT, doing business as Joan Bedford, New York, N. Y. Filed Nov. 12, 1930. Serial No. 307,881.

Joan Bedford

For Cold Cream, Cleansing Cream, Rouge, Lipsticks, and Face Powder.
Claims use since July 31, 1930.

LABELS

REGISTERED SEPTEMMER 22, 1931

39,759.—*Title:* ARCHER. For Hosiery. ARCHER HOSIERY MILLS, Columbus, Ga. Published July 1, 1931.

39,760.—*Title:* MARVEL QUALITY. For Bread. CENTRAL WAXED PAPER COMPANY, Chicago, Ill. Published August 10, 1931.

39,761.—*Title:* COLLINGBOURNE'S 6 STRAND QUILT-EMBROIDERY FLOSS, ART. 711. For Quilt-Embroidery Floss. COLLINGBOURNE MILLS INC., doing business as Dexter, Virginia Snow Studios, Jap Silk Co., and Berkshire & Becket Silk Co., Elgin, Ill. Published June 15, 1931.

39,762.—*Title:* DEXTER ORIENTA RUG-TEX-YARN, 1 OUNCE UNIT, ART. 221. For Yarn. COLLINGBOURNE MILLS INC., doing business as Dexter, Virginia Snow Studios, Jap Silk Co., and Berkshire & Becket Silk Co., Elgin, Ill. Published June 15, 1931.

39,763.—*Title:* ELGIN MAID KINDER-KIT, LUSTROUS COTTON EMBROIDERY AND CROCHET FOR QUILT BLOCKS, ART. 127. For Lustrous Cotton. COLLINGBOURNE MILLS INC., doing business as Dexter, Virginia Snow Studios, Jap Silk Co., and Berkshire and Becket Silk Co., Elgin, Ill. Published June 15, 1931.

39,764.—*Title:* UPRIGHT. For Sweet Variety Peas. THE COPPS CO., Stevens Point, Wis. Published July 1, 1931.

39,765.—*Title:* DAWN-GLO WASHING FLUID. For Washing Fluid. DAWN-GLO CHEMICAL COMPANY, Pittsburgh, Pa. Published July 20, 1931.

39,766.—*Title:* POLYSHINE BLACK LIQUID SHOE POLISH. For Black Liquid Shoe Polish. E. E. FAIRCHILD CORPORATION, Rochester, N. Y. Published May 20, 1931.

39,767.—*Title:* THE VIRGINIA HOME-MADE HONEY-CHEW. For a Confection Made with Pure Honey. BENJAMIN HOROWITZ, doing business as Ben Hur Candy Kitchen, Philadelphia, Pa. Published April 10, 1931.

39,768.—*Title:* KEMP'S HALF AND HALF. For Candy and Nuts. E. F. KEMP, INC., Boston, Somerville and Worcester, Mass. Published May 23, 1931.

39,769.—*Title:* FINE CANDIES. For Candies. F. J. SCHLEICHER PAPER BOX CO., St. Louis, Mo. Published July 27, 1931.

39,770.—*Title:* THE IDEAL SERVICE COAT. For White Duck and Laboratory Coats. SCHWARTZ & SON, New York, N. Y. Published June 1, 1931.

39,771.—*Title:* SIMS MALT-O-WHEAT. For Breakfast Cereal. SIMS MALT-O-WHEAT COMPANY, St. Paul, Minn. Published July 1, 1931.

39,772.—*Title:* RAISIN-BRAN. For Whole Wheat with Raisins, Bran and Salt Added. SKINNER MANUFACTURING COMPANY, Omaha, Nebr. Published July 18, 1931.

39,773.—*Title:* CHASE & SANBORN'S TEA TOWN SCHOOL— For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 13, 1931.

39,774.—*Title:* CHASE & SANBORN'S TEA TOWN GROCERY STORE. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 13, 1931.

39,775.—*Title:* CHASE & SANBORN'S TEA TOWN FIRE STATION. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 13, 1931.

39,776.—*Title:* ONE BUYS THREE. For Malt Syrup. STERLING PRODUCTS COMPANY, Evansville, Ind. Published July 18, 1931.

39,777.—*Title:* TEA. For Tea. UNION BAG & PAPER CORPORATION, New York, N. Y. Published August 17, 1931.

PRINTS

REGISTERED SEPTEMBER 22, 1931

13,419.—*Title:* WE ASKED FARM MOTHERS THEN CITY MOTHERS. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published August 5, 1931.

13,420.—*Title:* GOLDEN STATE. For Evaporated Milk. GOLDEN STATE COMPANY, LTD., San Francisco, Calif. Published June 1, 1931.

13,421.—*Title:* "THE THRILL IN EVERY PICNIC—" For Peanut Butter, Mustard, Applebutter, Oven-Baked Beans, Salad Cream, Etc. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published August 15, 1931.

13,422.—*Title:* WRIGLEY'S JUICY FRUIT. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published December 30, 1929.

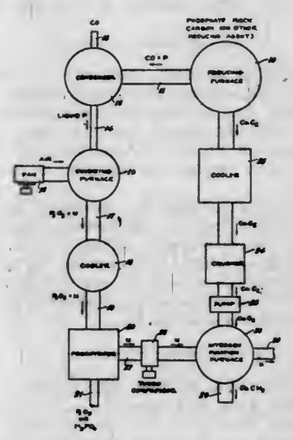
13,423.—*Title:* WRIGLEY'S PINK P. K. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published May 14, 1930.

13,424.—*Title:* WRIGLEY'S P. K. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published January 30, 1930.

REISSUES

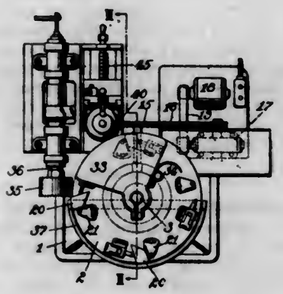
SEPTEMBER 22, 1931

18,198. PROCESS OF MAKING PHOSPHORIC ACID AND CYANAMIDE. THADDEUS F. BAILY, Alliance, Ohio. Original No. 1,775,802, dated Sept. 16, 1930, Serial No. 337,573, filed Feb. 5, 1929. Application for reissue filed May 21, 1931. Serial No. 539,119. 20 Claims. (Cl. 23—79.)



1. The combined process of producing phosphoric acid and calcium cyanamide which consists in reducing phosphate rock with a carbonaceous reducing agent, withdrawing CO gas and volatile phosphorus therefrom, condensing the volatile phosphorous and removing it from the CO, adding air to the condensed phosphorus producing phosphoric acid and nitrogen, and passing the nitrogen thus obtained over the calcium carbide resulting from the reducing operation, the calcium carbide being maintained at a sufficient temperature to produce calcium cyanamide.

18,199. HEEL BREASTING MACHINE. FRED AUSTIN DAY, Cincinnati, Ohio, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original No. 1,758,030, dated May 13, 1930, Serial No. 399,426, filed Oct. 14, 1929. Application for reissue filed Aug. 3, 1931. Serial No. 554,791. 13 Claims. (Cl. 12—42.)



1. In a heel breasting machine, a base, a table rotatably mounted in connection with said base, means for rotating said table, a cylindrical cutter carried by said base and mounted for rotation about an axis disposed perpendicularly to the axis of the table, a clamping device on said table adjacent to the peripheral edge thereof for supporting a heel blank in connection with said base adjacent to the peripheral portion of the table and arranged to engage with the heel blank as the latter rotates with the table past said cutter, a horizontally disposed slotting cutter carried by said base and adapted to engage with said heel blank, and means operating upon said clamping device to hold the latter in clamping engagement with said heel blanks while the latter are in engagement with both of said cutters.

18,200. CELLULOSE COOKING. GUSTAF HAGLUND, Stockholm, Sweden, assignor to Patentaktiebolaget Grön-dal-Ramén, Stockholm, Sweden, a Limited Company. Original No. 1,791,476, dated Feb. 3, 1931, Serial No. 432,564, filed Mar. 1, 1930, and in Sweden Apr. 10, 1929. Application for reissue filed June 6, 1931. Serial No. 542,688. 4 Claims. (Cl. 92—7.)

1. In the cooking of cellulose, for example sulphite cellulose, the improved process of producing waste liquor containing a high percentage of organic matter which comprises, impregnating the raw material, for example wood chips, with a cooking liquor produced in the usual manner without the addition thereto of waste liquor, and then conducting the cooking operation in the presence of waste liquor.

18,201. SHOE ORNAMENTING MACHINE. CHARLES A. MESSMER, Jr., St. Louis, Mo., assignor to Benjamin W. Freeman, Cincinnati, Ohio. Original No. 1,696,442, dated Dec. 25, 1928, Serial No. 102,444, filed Apr. 16, 1926. Application for reissue filed Feb. 17, 1930. Serial No. 429,161. 12 Claims. (Cl. 164—29.)

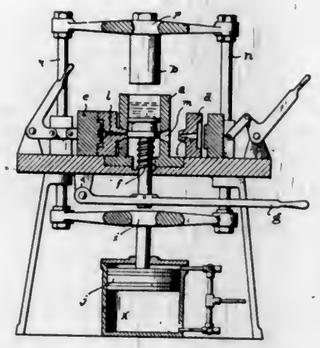


1. A shoe ornamenting machine having a plate having an opening adapted to receive and locate a sheet of stock to be blanked, gauge pins projecting from the said plate along the outline of said opening to assist the said opening in locating the said stock, and a die-holding member connected to the said plate so as to be movable toward and away from the said opening.

18,202. CASTING MACHINE. JOSEF POLÍK, Prague, Czechoslovakia. Original No. 1,717,254, dated June 11, 1929, Serial No. 298,329, filed Aug. 8, 1928, and in Czechoslovakia Sept. 1, 1927. Application for reissue filed June 8, 1931. Serial No. 542,989. 11 Claims. (Cl. 22—68.)

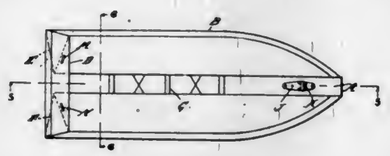
8. A casting machine comprising in combination a cylinder capable of being filled with molten metal, said

cylinder having a lateral opening in the wall thereof, a mould capable of being moved so as to bring its gate up against the said lateral opening, a plunger capable of sliding axially in the cylinder for producing the casting pressure and of being withdrawn from the cylinder while the



molten metal is being introduced into the latter and a piston capable of sliding in the cylinder, of shutting off the opening in the cylinder wall during the introduction of the molten metal and of ejecting the superfluous metal remaining in the cylinder after the completion of the casting operation, as and for the purpose set forth.

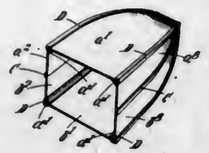
18,203. FOLDING VEHICLE. NICHOLAS STRAUSSLER, London, England. Original No. 1,739,269, dated Dec. 10, 1929, Serial No. 350,518, filed Mar. 28, 1929, and in Great Britain Feb. 13, 1928. Application for reissue filed June 16, 1930. Serial No. 461,661. 20 Claims. Cl. 9—2.)



5. In a folding vehicle, a longitudinally continuous floor member tapered at one end and truncated at its opposite end, lateral members adapted to lie substantially parallel to said member, means extending throughout the length of the contiguous edges of said floor and lateral members to flexibly connect said lateral members to said floor member and enabling said lateral members to be moved into a position substantially at right angles to said floor member, and a rear member flexibly connected to the truncated end of said floor member and to said lateral members and foldable over the same.

18,204. COLLAPSIBLE STRUCTURE SUCH AS PONTOONS AND SEA PLANE FLOATS, DIVISIBLE INTO BOATS. NICHOLAS STRAUSSLER, London, England. Original application filed June 7, 1926, Serial No. 114,148. and in Great Britain Apr. 10, 1926. Divided and application filed Mar. 24, 1927, Serial No. 177,976, Patent No. 1,720,701, dated July 16, 1929. This application for reissue filed June 16, 1930. Serial No. 461,662. 18 Claims. (Cl. 9—2.)

15. In a collapsible structure adapted for flotation, a plurality of panels and means flexibly connecting the same and extending throughout the length of said panels, said last named means forming a waterproof casing for the edges of said panels and comprising flexible strips attached



to said panels interiorly and exteriorly thereof, and means connecting said strips between said panels to form a hinge.

18,205. STENCIL SHEET. HERBERT L. SHALLCROSS, Collingdale, Pa., assignor to The Shallcross Company, Philadelphia, Pa., a Corporation of Delaware. Original No. 1,674,611, dated June 19, 1928, Serial No. 226,817, filed Oct. 17, 1927. Application for reissue filed June 19, 1930. Serial No. 462,394. 9 Claims. (Cl. 41—38.6.)

6. A stencil sheet adapted for conversion into a stencil by impact of type thereon, comprising a paper sheet of open texture, porous material, having a type impressible coating thereon consisting of a mixture of lac, nitrated cotton, a non-volatile solvent for the mixture of lac and cotton, and a liquid extending agent which is not a solvent for the nitrated cotton or the lac.

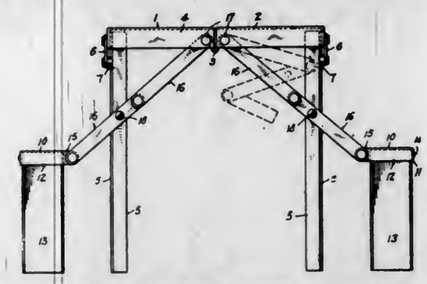
18,206. DRIVE FOR MOTOR VEHICLES. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Original No. 1,791,138, dated Feb. 3, 1931, Serial No. 199,429, filed June 17, 1927. Application for reissue filed July 23, 1931. Serial No. 553,676. 2 Claims. Cl. 180—22.)



2. In a drive for a plurality of axles, a differential, a solid shaft for transmitting power to the differential, a hollow shaft, a housing for journaling the hollow shaft and one of the axles, a solid shaft journaled within the hollow shaft, means on one end of the hollow shaft to transmit power thereto, driving connections between the differential and the power transmitting means on the hollow shaft, and between the hollow shaft and last named axle, a hollow shaft similar in construction to the first hollow shaft, a housing for journaling the last named hollow shaft and interchangeable therewith and another of the axles with the end of the hollow shaft carrying the power transmitting means adjacent the corresponding means of the first hollow shaft, and driving connections between the differential and power transmitting means on the second hollow shaft, and between the second hollow shaft and the last named axle.

18,207. ARTICLE OF FURNITURE. NICK SOLTESZ, Toledo, Ohio, assignor to Handy Table Set Company, West Allis, Wis., a Corporation of Wisconsin. Original No. 1,594,572, dated Aug. 3, 1926, Serial No. 51,355, filed Aug. 20, 1925. Application for reissue filed July 31, 1931. Serial No. 554,320. 9 Claims. (Cl. 45—116.)

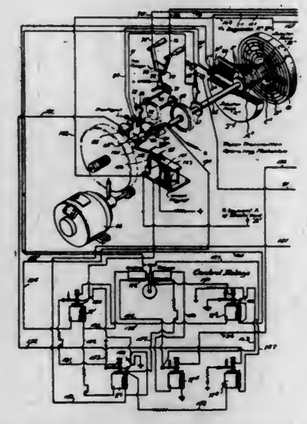
1. In combination, a table having supporting legs foldably connected thereto, a seat adapted to be disposed at one side of the table, link connection between the seat and the under side of the table top to permit a compact folding of the seat and connections beneath the table in close rela-



tion to its top, and means for securing said connections to the adjacent table legs, when the latter are in set-up position, to secure the seat in usable position.

18,208. AUTOMATIC TAPE CONTROLLED TRANSMISSION FOR TICKERS. EVAN R. WHEELER, North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Original No. 1,765,042, dated June 17, 1930, Serial No. 754,188, filed Dec. 5, 1924. Application for reissue filed Nov. 6, 1930. Serial No. 493,872. 36 Claims. (Cl. 178—4.)

1. An automatic telegraph system, comprising a tape-controlled transmitting apparatus and a typewheel printing mechanism, said transmitting apparatus embodying a selecting device having cooperating movable and stationary contacts, means for selecting and positioning certain of said movable contacts simultaneously with relation to their cooperating stationary contacts in accordance with a code combination determined by the permutations of the perforations in the tape, a segmented circuit controller having circuit connections to said contact device, motor-



actuated brushes movable over the segments of said controller, and electro-magnetic means for stopping said brushes at a point determined by a circuit passing serially through a plurality of said segments and contacts predetermined by the selected arrangement of perforations in the tape.

DESIGNS

SEPTEMBER 22, 1931

85,143. TRAFFIC SIGNAL FACING. CHARLES ADLER, Jr., Baltimore, Md. Filed July 28, 1931. Serial No. 40,642. Term of patent 14 years.



The ornamental design for a traffic signal facing as shown and described.

85,144. LAMP BASE. WILLIAM M. ADRIAN, Chicago, Ill. Filed July 15, 1931. Serial No. 40,551. Term of patent 3½ years.



The ornamental design for a lamp base, as shown and described.

85,145. COMBINED STANDARD AND LAMP BASE. WILLIAM M. ADRIAN, Chicago, Ill. Filed July 15, 1931. Serial No. 40,552. Term of patent 3½ years.



The ornamental design for a combined standard and lamp base as shown and described.

85,146. TEXTILE FABRIC OR SIMILAR ARTICLE. FRED W. BADER, Hillsdale, N. J., assignor to J. Kridel, Sons & Co., a Partnership of New York. Filed June 29, 1931. Serial No. 40,353. Term of patent 7 years.



The ornamental design for a textile fabric or similar article as shown.

85,147. ASH TRAY. ERNEST THEODORE BAHNER, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a Firm composed of Amalia Earles and Edgar H. Barbe, co-partners. Filed June 8, 1931. Serial No. 40,104. Term of patent 7 years.



The ornamental design for an ash tray as shown.

85,148. ASH TRAY. ERNEST THEODORE BAHNER, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a Copartnership composed of Amalia Earles and Edgar H. Barbe. Filed June 8, 1931. Serial No. 40,105. Term of patent 7 years.



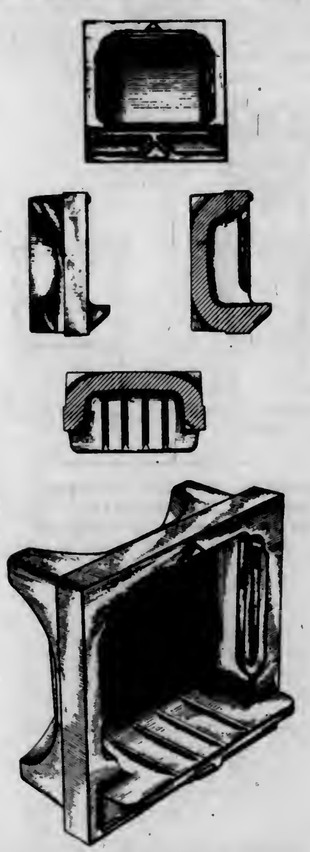
The ornamental design for an ash tray as shown.

85,149. ASH TRAY. ERNEST THEODORE BAHNER, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a Copartnership composed of Amalia Earles and Edgar H. Barbe. Filed June 8, 1931. Serial No. 40,106. Term of patent 7 years.



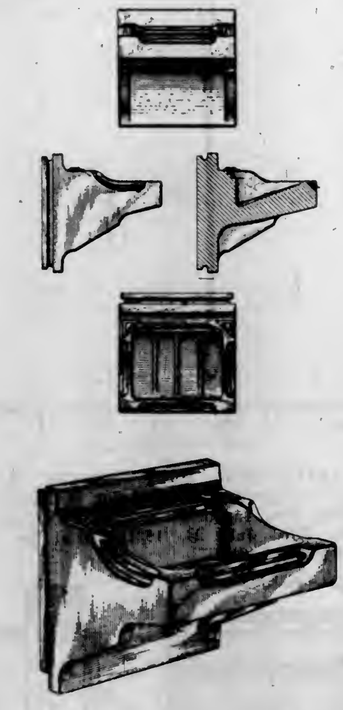
The ornamental design for an ash tray as shown.

85,150. SOAP HOLDER OR SIMILAR ARTICLE. STEPHEN D. BAKER, New York, N. Y. Filed May 13, 1931. Serial No. 39,830. Term of patent 14 years.



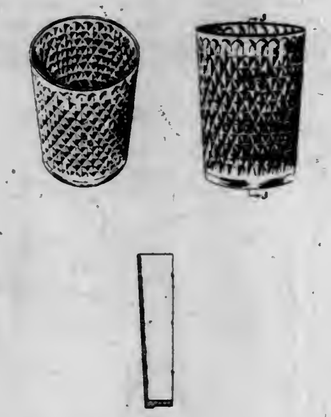
The ornamental design for a soap holder or similar article, as shown.

85,151. SOAP HOLDER OR SIMILAR ARTICLE. STEPHEN D. BAKER, New York, N. Y. Filed May 13, 1931. Serial No. 39,831. Term of patent 14 years.



The ornamental design for a soap holder or similar article, as shown.

85,152. GLASS TUMBLER OR ARTICLE OF SIMILAR NATURE. ROBERT J. BEATTY, Columbus, Ohio, assignor to The Federal Glass Company, Colmbus, Ohio, a Corporation of Ohio. Filed July 24, 1931. Serial No. 40,664. Term of patent 14 years.



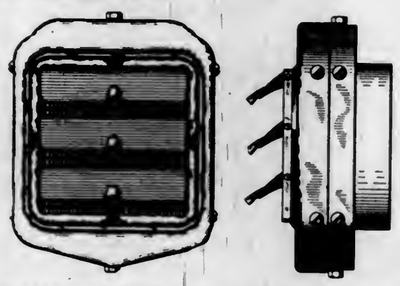
The ornamental design for a glass tumbler or article of similar nature, as shown.

85,153. BOOKMARKER. ERNEST BERGMAN, Long Beach, Calif. Filed Sept. 23, 1930. Serial No. 37,059. Term of patent 3½ years.



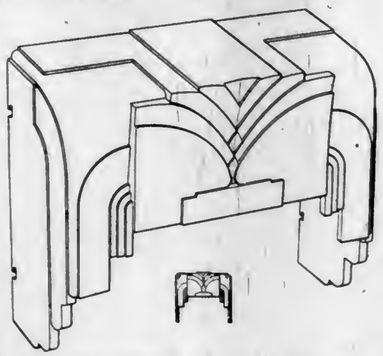
The ornamental design for a book marker, substantially as shown.

85,154. AUTOMOBILE BODY HEATER. EARL C. BOOTH, Indianapolis, Ind., assignor to Noblitt-Sparks Industries, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed July 24, 1931. Serial No. 40,673. Term of patent 7 years.



The ornamental design for an automobile-body heater, as shown.

85,155. CHIME COVER OR SIMILAR ARTICLE. GILBERT L. BOSSARD, Dayton, Ohio, assignor to General Kontrolar Company, Inc., Dayton, Ohio, a Corporation of Ohio. Filed May 1, 1931. Serial No. 39,684. Term of patent 14 years.



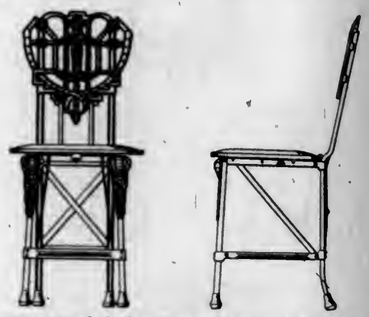
The ornamental design for a chime cover or similar article, substantially as shown.

85,156. SMOKER'S APPLIANCE. WILLIAM F. BOWEN, North Attleboro, Mass., assignor to Evans Case Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1931. Serial No. 38,312. Term of patent 7 years.



The ornamental design for a smoker's appliance as shown.

85,157. CHAIR OR SIMILAR ARTICLE. LESLIE H. BURLIN, Oak Park, Ill., assignor to Advance Pattern & Foundry Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1931. Serial No. 39,043. Term of patent 7 years.



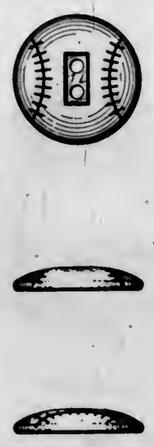
The ornamental design for a chair or similar article as shown and described.

85,158. BUTTON. LEONARD R. CARLEY, Watertown, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 27, 1931. Serial No. 39,636. Term of patent 14 years.



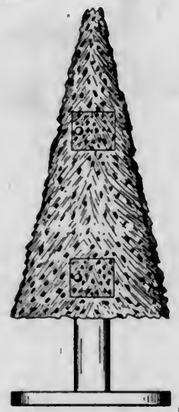
The ornamental design for a button, as shown.

85,159. BUTTON. LEONARD R. CARLEY, Watertown, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 27, 1931. Serial No. 39,637. Term of patent 14 years.



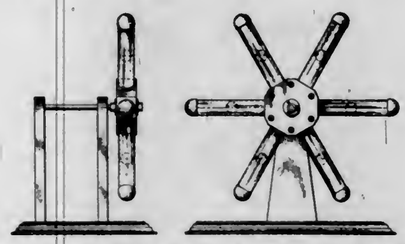
The ornamental design for a button, as shown.

85,160. INCINERATOR. ARTHUR F. CARR, Los Angeles, Calif. Filed Sept. 6, 1930. Serial No. 36,888. Term of patent 14 years.



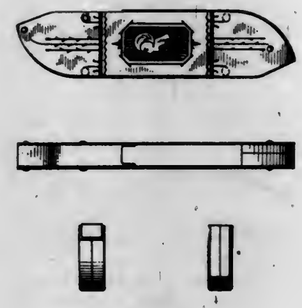
The ornamental design for an incinerator, as shown and described.

85,161. ADVERTISING DEVICE. VERN L. CHAMBERLIN, Lake Orion, Mich. Filed June 15, 1931. Serial No. 40,209. Term of patent 7 years.



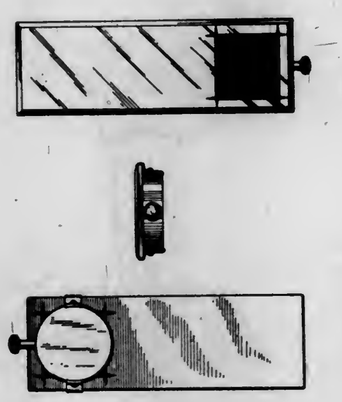
The ornamental design for an advertising device, as shown and described.

85,162. HOLDER OR APPLIANCE FOR COSMETICS OR THE LIKE. ROBERT T. CHRISTY, New York, N. Y., assignor to The Kurlash Company, Inc., Rochester, N. Y. Filed Jan. 17, 1931. Serial No. 38,339. Term of patent 14 years.



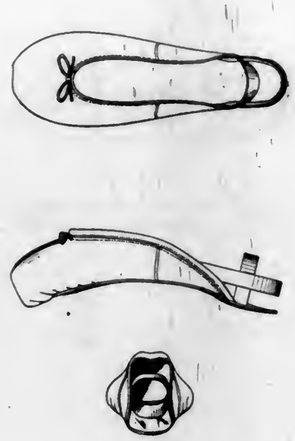
The ornamental design for a holder or appliance for cosmetics or the like, as shown.

85,163. MIRROR CLOCK COMBINATION. STEPHEN C. COOK, Brooklyn, N. Y., assignor to Phinney-Walker Co., Inc., New York, N. Y., a Corporation of New York. N. Y. Filed Jan. 17, 1931. Serial No. 38,339. Term of patent 14 years.



The ornamental design for a mirror clock combination as shown and described.

85,164. HARD TOE BALLET SLIPPER. CARLO DE CRISTOFARO, St. Louis, Mo., assignor of one-half to WILLIAM F. SCARPELLI, St. Louis, Mo. Filed June 1, 1931. Serial No. 40,054. Term of patent 14 years.



The ornamental design for a hard toe ballet slipper, as shown.

85,165. COMBINATION CIGARETTE HOLDER AND ASH TRAY OR SIMILAR ARTICLE. LOUISE CROSS, New York, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed July 6, 1931. Serial No. 40,426. Term of patent 3½ years.



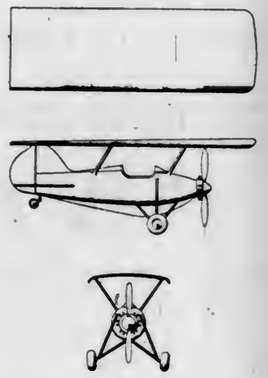
The ornamental design for a combination cigarette holder and ash tray or similar article, substantially as shown.

85,166. ASH TRAY OR SIMILAR ARTICLE. LOUISE CROSS, New York, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed July 6, 1931. Serial No. 40,427. Term of patent 3½ years.



The ornamental design for an ash tray or similar article, substantially as shown.

85,167. AIRPLANE. ELMER L. CROZIER, Birmingham, Ala. Filed May 19, 1931. Serial No. 39,905. Term of patent 14 years.



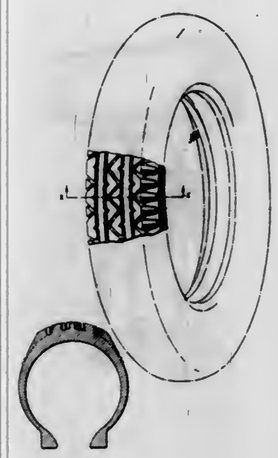
The ornamental design for an airplane, as shown.

85,168. PLAQUE. JOSEPH WARREN CUTLER, Rochester, N. Y., assignor to Cutler Mail Chute Co., Rochester, N. Y., a Corporation of New York. Filed July 29, 1931. Serial No. 40,717. Term of patent 14 years.



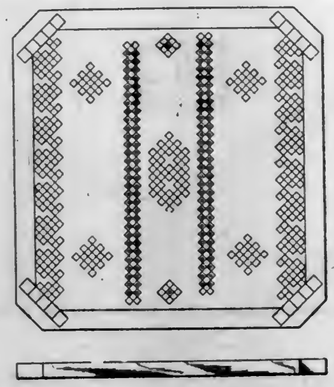
The ornamental design for a plaque substantially as shown.

85,169. TIRE. BURGESS DARROW, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 30, 1931. Serial No. 40,385. Term of patent 14 years.



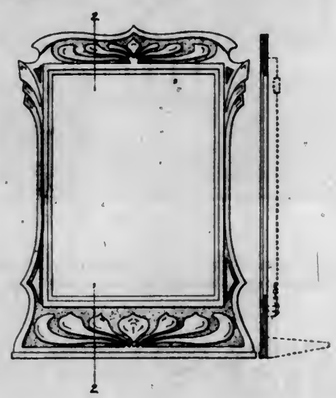
The ornamental design for a tire, as shown and described.

85,170. GAME DEVICE. MARY L. DECK, Bellingham, Wash. Filed Mar. 5, 1931. Serial No. 38,930. Term of patent 7 years.



The ornamental design for a game device, substantially as shown and described.

85,171. PICTURE FRAME. CHARLES A. ELSY, Glen Ellyn, Ill., assignor to Chicago Hardware Foundry Company, North Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1931. Serial No. 39,611. Term of patent 3½ years.



The ornamental design for a picture frame, as shown.

85,172. SHOE BUCKLE. ADA E. FARMER, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed July 24, 1931. Serial No. 40,669. Term of patent 7 years.



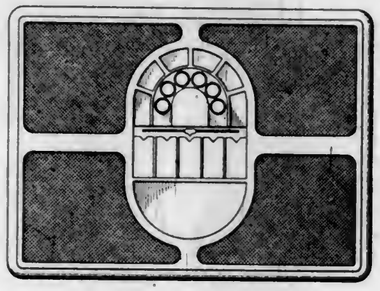
The ornamental design for a shoe buckle as shown.

85,173. SHOE BUCKLE. ADA E. FARMER, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed July 24, 1931. Serial No. 40,670. Term of patent 7 years.



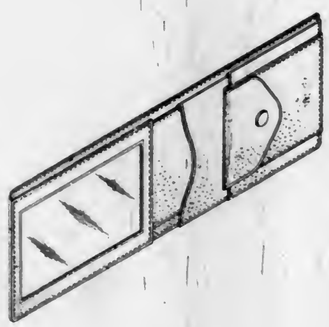
The ornamental design for a shoe buckle as shown.

85,174. COMBINED SIDE MEMBER AND EXPOSURE METER FOR CAMERAS. CHARLES LEO FITZ, Chicago, Ill., assignor to Q. R. S.-De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1930. Serial No. 37,145. Term of patent 7 years.



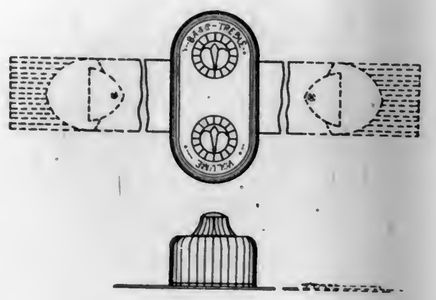
The ornamental design for a combined side member and exposure meter for cameras as shown and described.

85,175. BILL FOLD. PRINCE A. GARDNER, Jr., St. Louis, Mo. Filed July 13, 1931. Serial No. 40,527. Term of patent 14 years.



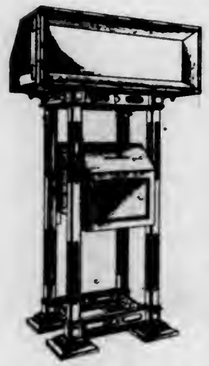
The ornamental design for a bill fold, as shown.

85,176. EASY CHAIR RADIO REMOTE CONTROL. ARTHUR GARRETSON, Plymouth, Pa. Filed July 29, 1931. Serial No. 40,716. Term of patent 7 years.



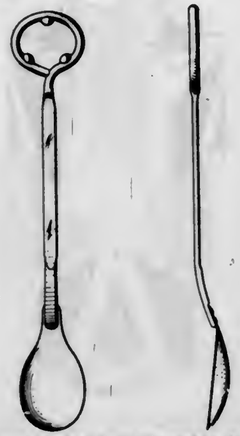
The ornamental design for an easy chair radio remote control, as shown.

85,177. COMBINATION PROJECTION ARRANGEMENT AND SUPPORT THEREFOR. FRANK E. HALLORAN, Brooklyn, N. Y., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed July 8, 1930. Serial No. 36,294. Term of patent 14 years.



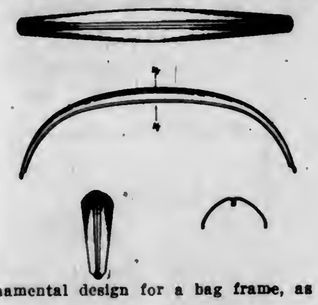
The ornamental design for a combination projection arrangement and support therefor substantially as shown and described.

85,178. BEVERAGE SPOON OR SIMILAR ARTICLE. THOMAS HARDING, Newark, N. J., assignor to J. L. Sommer Manufacturing Company, a Corporation of New Jersey. Filed July 6, 1931. Serial No. 40,435. Term of patent 14 years.



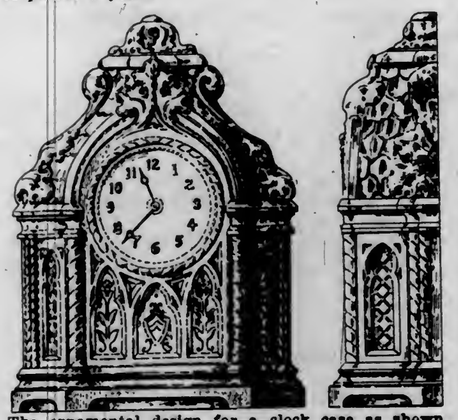
The ornamental design for a beverage spoon or similar article, as shown.

85,179. BAG FRAME. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 35,375. Term of patent 3½ years.



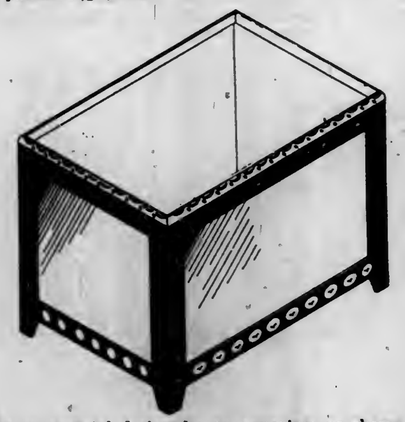
The ornamental design for a bag frame, as shown.

85,180. CLOCK CASE. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Apr. 17, 1931. Serial No. 39,587. Term of patent 7 years.



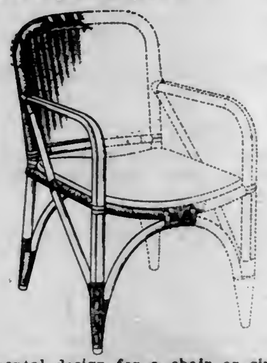
The ornamental design for a clock case as shown.

85,181. AQUARIUM. HERMANN HUFNER, New York, N. Y. Filed Aug. 13, 1930. Serial No. 36,661. Term of patent 3½ years.



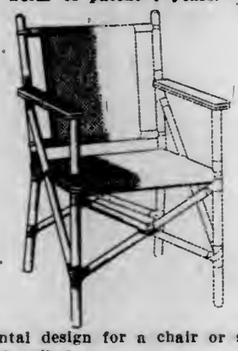
The ornamental design for an aquarium as shown.

85,182. CHAIR OR SIMILAR ARTICLE. CHARLES WESLEY JONES, Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y., a Corporation of New York. Filed June 9, 1931. Serial No. 40,143. Term of patent 7 years.



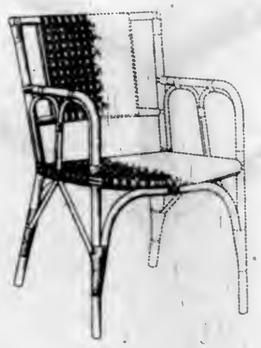
The ornamental design for a chair or similar article, as shown and described.

85,183. CHAIR OR SIMILAR ARTICLE. CHARLES WESLEY JONES, Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y., a Corporation of New York. Filed June 19, 1931. Serial No. 40,270. Term of patent 7 years.



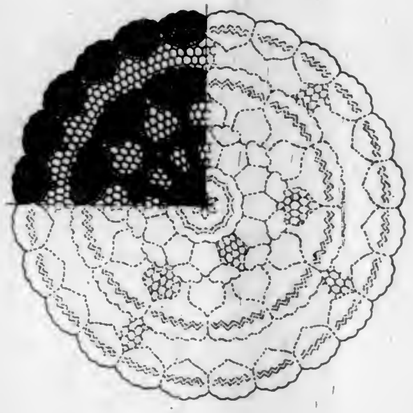
The ornamental design for a chair or similar article, as shown and described.

85,184. CHAIR OR SIMILAR ARTICLE. CHARLES WESLEY JONES, Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y., a Corporation of New York. Filed June 20, 1931. Serial No. 40,285. Term of patent 7 years.



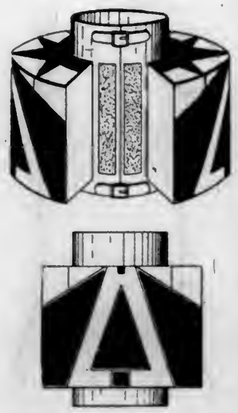
The ornamental design for a chair or similar article, as shown and described.

85,185. DOILY. EDWARD KARFIOL, Brooklyn, N. Y. Filed June 23, 1931. Serial No. 40,301. Term of patent 14 years.



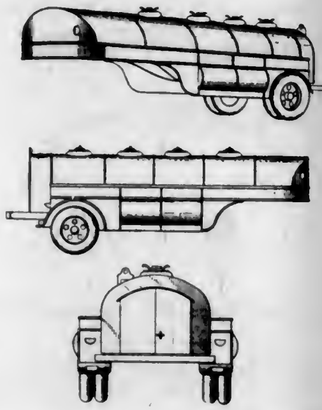
The ornamental design for a doily as shown and described.

85,186. COMBINED CIGARETTE AND MATCH CONTAINER. ADELE W. KEHLER, San Francisco, Calif. Filed Mar. 27, 1931. Serial No. 39,261. Term of patent 7 years.



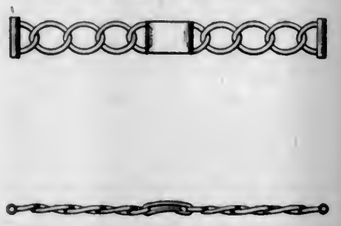
The ornamental design for a combined cigarette and match container substantially as shown and described.

85,187. TRAILER TANK VEHICLE. ANDREW A. KRAMER, Kansas City, Mo. Filed July 14, 1930. Serial No. 36,846. Term of patent 14 years.



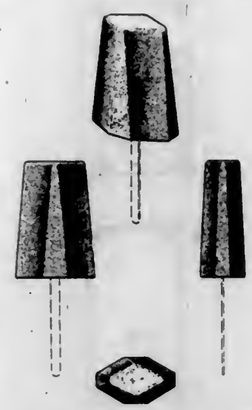
The ornamental design for a trailer tank vehicle substantially as shown.

85,188. WRIST WATCH BRACELET. ALEXANDER R. KRAUSE, Hollywood, Calif. Filed Aug. 30, 1929. Serial No. 32,623. Term of patent 3½ years.



The ornamental design for a wrist watch bracelet as shown.

85,189. CONFECTION. LEONARD B. KRICK, Chicago, Ill., assignor to Popsicle Corporation of the United States, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 37,182. Term of patent 14 years.



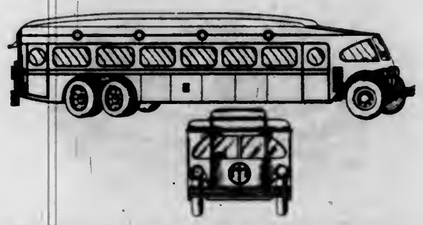
The ornamental design for a confection substantially as shown.

85,190. BAG. ROSWELL HUNT LYON, Harrisburg, Pa. Filed July 17, 1931. Serial No. 40,583. Term of patent 14 years.



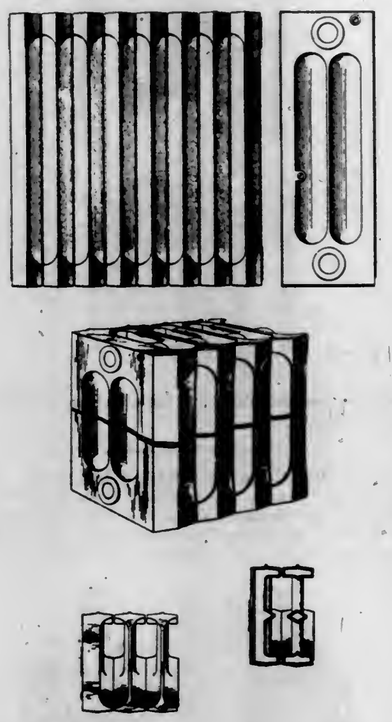
The ornamental design for a bag, as shown and described.

85,191. BUS. PHILIP E. MATTHEWS, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1931. Serial No. 39,521. Term of patent 7 years.



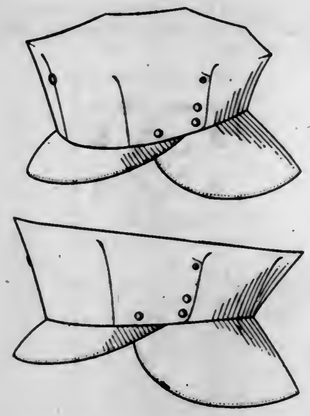
The ornamental design for a bus, as shown.

85,192. RADIATOR. JAMES F. MCINTIRE, Detroit, Mich., assignor to United States Radiator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 10, 1930. Serial No. 37,604. Term of patent 14 years.



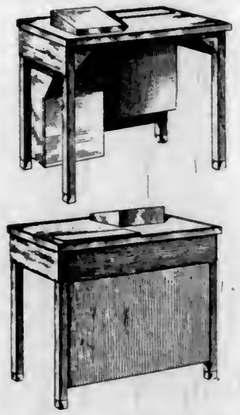
The ornamental design for a radiator substantially as shown and described.

85,193. WATERPROOF COVER FOR CAPS. DANIEL F. MCKINNON, Boston, Mass. Filed Feb. 18, 1931. Serial No. 38,640. Term of patent 14 years.



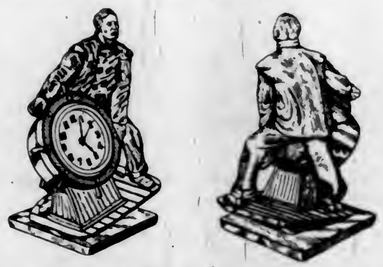
The ornamental design for a waterproof cover for caps, as shown and described.

85,194. TABLE FOR TAPE PRINTING TELEGRAPH. RALPH I. MEADER, Lynbrook, N. Y. Filed Dec. 18, 1929. Serial No. 33,822. Term of patent 14 years.



The ornamental design for a table for tape printing telegraph, as shown.

85,195. CLOCK CASE OR SIMILAR ARTICLE. GEORGE MULLIGAN, Chicago, Ill., assignor to Mulroco, Chicago, Ill., a co-partnership composed of Henry Royer, John A. Svoboda, and George Mulligan. Filed July 24, 1931. Serial No. 40,681. Term of patent 7 years.



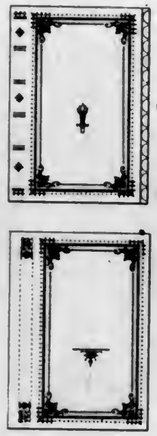
The ornamental design for a clock case or similar article, substantially as shown.

85,196. GAME BOARD. ORA E. NEITZEL, South Bend, Ind. Filed May 26, 1931. Serial No. 39,991. Term of patent 3½ years.



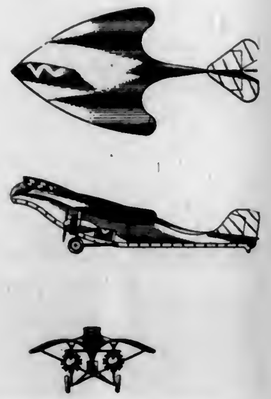
The ornamental design for a game board as shown.

85,197. ADVERTISING FOLDER. NICHOLAS PAPAPETROU, Chicago, Ill. Filed July 7, 1931. Serial No. 40,446. Term of patent 14 years.



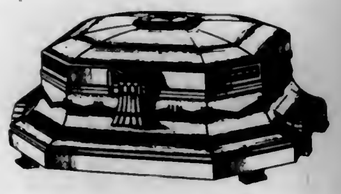
The ornamental design for an advertising folder as shown.

85,198. AIRPLANE. PAUL E. PAPKE, Chicago, Ill. Filed June 19, 1931. Serial No. 40,276. Term of patent 14 years.



The ornamental design for an airplane, substantially as shown.

85,199. WAFFLE IRON. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc., a Corporation of New York. Filed July 20, 1931. Serial No. 40,603. Term of patent 14 years.



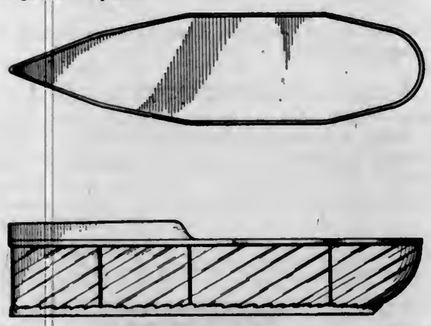
The ornamental design for a waffle iron substantially as shown.

85,200. IMITATION CHRISTMAS TREE. CHARLES PECKERMAN, New York, N. Y. Filed July 2, 1931. Serial No. 40,399. Term of patent 14 years.



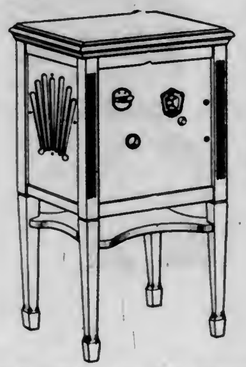
The ornamental design for an imitation Christmas tree substantially as shown.

85,201. AQUARIUM. VALERIUS POMERNACKI, Chicago, Ill. Filed June 22, 1931. Serial No. 40,297. Term of patent 7 years.



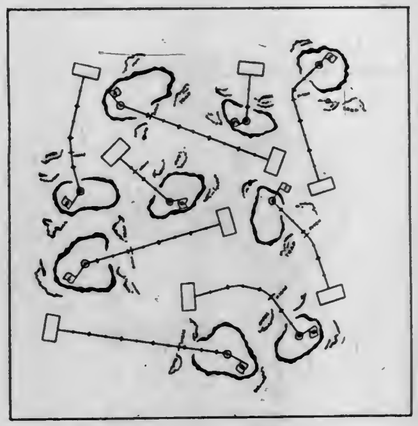
The ornamental design for an aquarium, as shown.

85,202. RADIOCABINET. GUY E. RIDGEL, Spokane, Wash. Filed July 25, 1931. Serial No. 40,685. Term of patent 7 years.



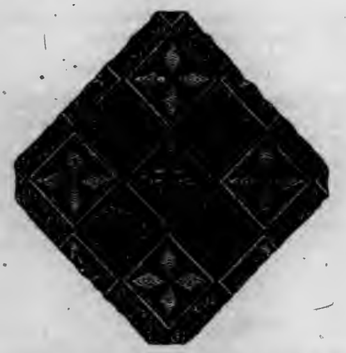
The ornamental design for a radiocabinet, as shown and described.

85,203. TABLE COVER. CLYDE B. ROBINETTE, Cleveland, Ohio. Filed Oct. 23, 1930. Serial No. 37,854. Term of patent 7 years.



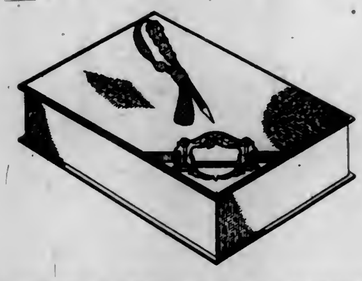
The ornamental design for a table cover, as shown.

85,204. TEXTILE FABRIC. FRANK E. RUDD, Louisville, Ky. Filed July 13, 1931. Serial No. 40,533. Term of patent 3½ years.



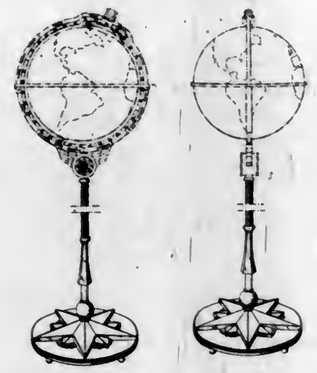
The ornamental design for a textile fabric substantially as shown and described.

85,205. BOX. FRANK J. SCHLEICHER, St. Louis, Mo. Filed May 13, 1931. Serial No. 39,840. Term of patent 7 years.



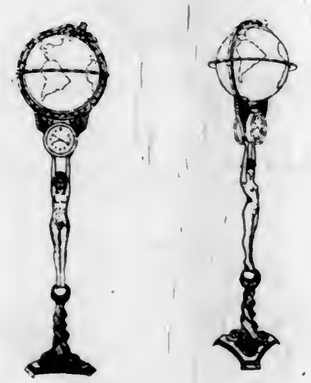
The ornamental design for a box, substantially as shown and described.

85,206. COMBINED TERRESTRIAL GLOBE FRAME AND SUPPORT THEREFOR. HERMAN E. SCHULSE, Wilmington, Del., assignor to Uniclox Corporation, a Corporation of Delaware. Filed Apr. 11, 1931. Serial No. 39,450. Term of patent 3½ years.



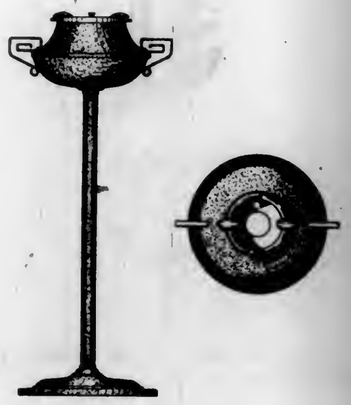
The ornamental design for a combined terrestrial globe frame and support therefor as shown.

85,207. COMBINED TERRESTRIAL GLOBE FRAME, CLOCK CASING, AND SUPPORT THEREFOR. HERMAN E. SCHULSE, Wilmington, Del., assignor to Uniclox Corporation, a Corporation of Delaware. Filed Apr. 11, 1931. Serial No. 39,453. Term of patent 3½ years.



The ornamental design for a combined terrestrial globe frame, clock casing, and support therefor, as shown.

85,208. TOBACCO ASH RECEPTACLE. EDWARD SCHULTZ, Chicago, Ill. Filed July 18, 1931. Serial No. 40,536. Term of patent 7 years.



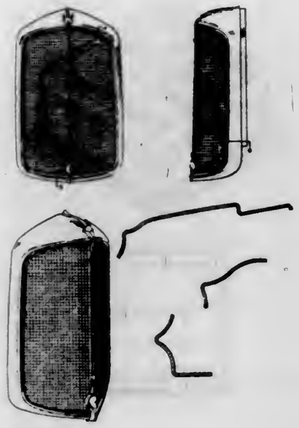
The ornamental design for a tobacco ash receptacle substantially as shown.

85,209. TIRE. EDWARD M. SEARS, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 28, 1930. Serial No. 36,818. Term of patent 14 years.



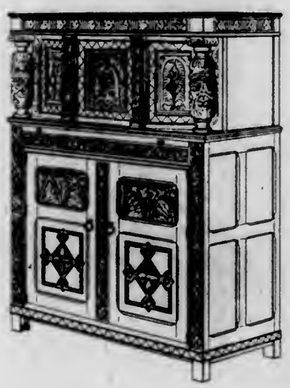
The ornamental design for a tire as shown.

85,210. RADIATOR. HARRY A. SHAW, East Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed June 8, 1931. Serial No. 40,114. Term of patent 7 years.



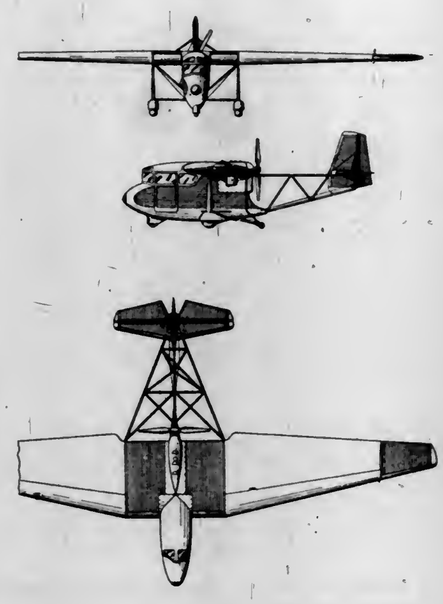
The ornamental design for a radiator as shown.

85,211. CABINET. KELLAR STEM, Hastings, Mich., assignor to Grand Rapids Bookcase & Chair Company, Hastings, Mich. Filed July 9, 1931. Serial No. 40,476. Term of patent 3½ years.



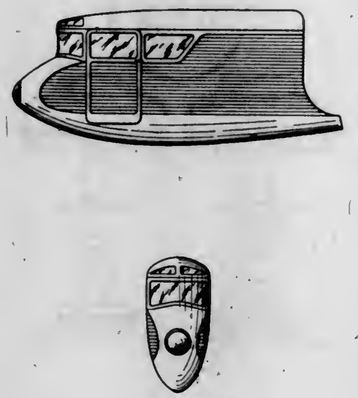
The ornamental design for a cabinet as shown.

85,212. AIRPLANE. WILLIAM B. STOUT, Detroit, Mich. Filed May 11, 1931. Serial No. 39,815. Term of patent 14 years.



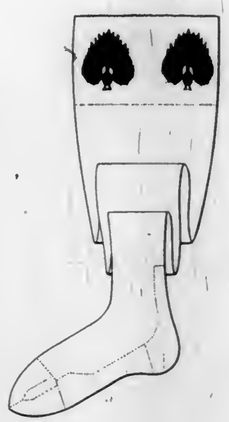
The ornamental design for an airplane, as shown.

85,213. FUSELAGE FOR AIRPLANES. WILLIAM B. STOUT, Detroit, Mich. Original application filed May 11, 1931, Serial No. D—39,815. Divided and this application filed June 22, 1931. Serial No. 40,295. Term of patent 14 years.



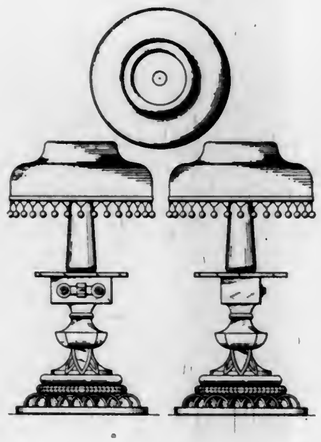
The ornamental design for an airplane fuselage, as shown.

85,214. HOSIERY OR THE LIKE. JAMES A. STRUTHERS, Minneapolis, Minn. Filed Dec. 12, 1930. Serial No. 37,954. Term of patent 14 years.



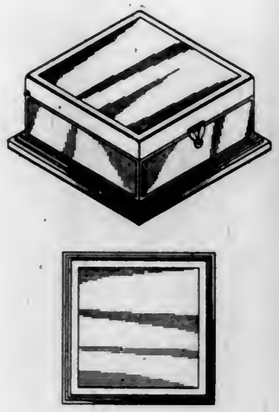
The ornamental design for hosiery or the like, substantially as shown and described.

85,215. COMBINED LAMP AND RADIOCABINET. EWALD UFERT, Trenton, N. J. Filed June 10, 1931. Serial No. 40,159. Term of patent 14 years.



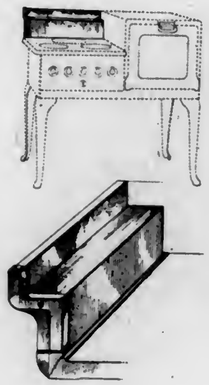
The ornamental design for a combined lamp and radio cabinet, as shown.

85,216. POWDER CONTAINER OR SIMILAR ARTICLE. FRANK E. WAKEFIELD, Elgin, Ill, assignor to Lucien Lelong Inc., Chicago, Ill., a Corporation of Illinois. Filed May 26, 1930. Serial No. 35,776. Term of patent 7 years.



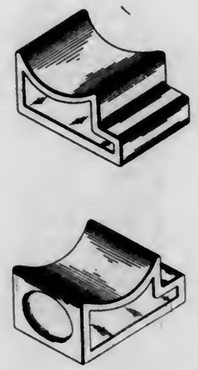
The ornamental design for a powder container, or similar article, as shown and described.

85,217. RANGE. ARTHUR W. WALKER, Malden, Mass., assignor to Walker & Pratt Manufacturing Co., Boston, Mass., a Corporation of Massachusetts. Filed June 8, 1931. Serial No. 40,116. Term of patent 14 years.



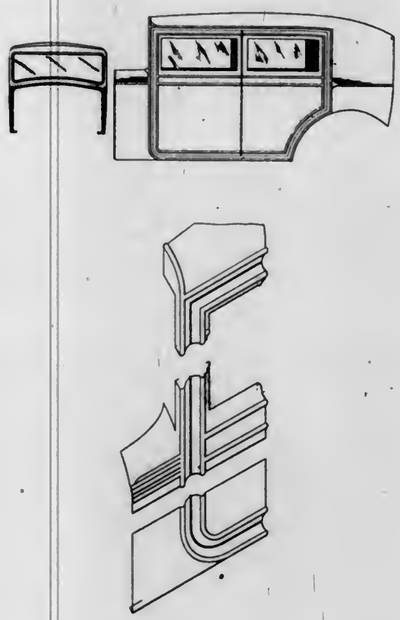
The ornamental design for a range, substantially as shown and described.

85,218. SAFETY RAZOR BLADE SHARPENER. ALBERT F. WEISS, University City, Mo., assignor, by mesne assignments, of one-half to Albert F. Weiss and one-half to Elmer V. Kline, University City, Mo. Filed Aug. 1, 1931. Serial No. 40,752. Term of patent 14 years.



The ornamental design for a safety razor blade sharpener, substantially as shown.

85,219. VEHICLE BODY. CHARLES H. WIDMAN, Detroit, Mich., assignor to Murray Corporation of America, Detroit, Mich., a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 32,895. Term of patent 8½ years.



The ornamental design for a vehicle body as shown and described.

85,220. PLATE. JAMES H. WILSON, Falls Creek Pa. Filed June 18, 1931. Serial No. 40,261. Term of patent 7 years.



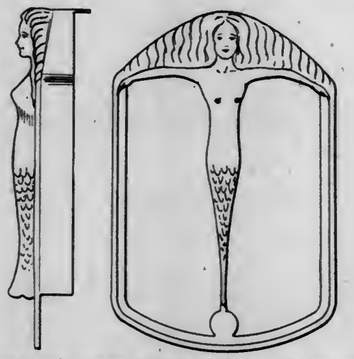
The ornamental design for a plate, as shown and described.

85,221. FONT OF TYPE. ISADORE O. WITTE, Los Angeles, Calif. Filed Jan. 23, 1931. Serial No. 38,429. Term of patent 7 years.



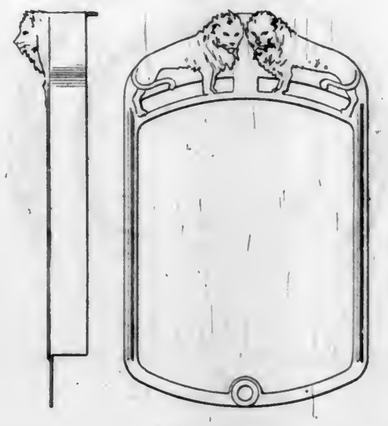
The ornamental design for a font of type as shown.

85,222. RADIATOR SHELL. LUDWIG F. ZORC, Chicago, Ill. Filed July 3, 1931. Serial No. 40,405. Term of patent 8½ years.



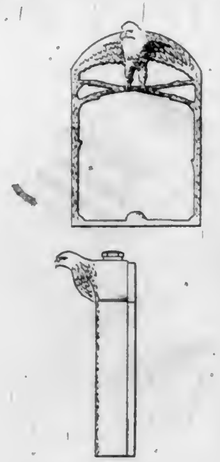
The ornamental design for a radiator shell as shown.

85,223. RADIATOR SHELL. LUDWIG F. ZORC, Chicago, Ill. Filed July 3, 1931. Serial No. 40,406. Term of patent 3½ years.



The ornamental design for a radiator shell as shown.

85,224. RADIATOR SHELL. LUDWIG F. ZORC, Chicago, Ill. Filed July 3, 1931. Serial No. 40,407. Term of patent 3½ years.

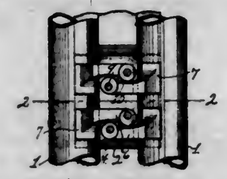


The ornamental design for a radiator shell as shown.

PATENTS

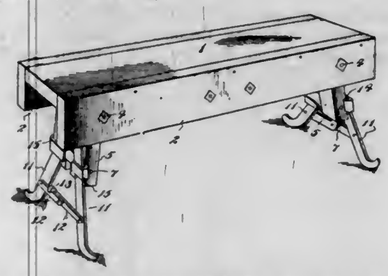
GRANTED SEPTEMBER 22, 1931

1,823,870. RETAINING MEANS FOR FURNACE WALL BLOCKS CONTACTING WITH WALL TUBES. ERVIN G. BAILEY, Easton, and RALPH M. HARDGROVE, Bethlehem, Pa., assignors to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Original application filed Oct. 20, 1927, Serial No. 227,456. Divided and this application filed Nov. 17, 1928. Serial No. 320,039. 8 Claims. (Cl. 122—6.)



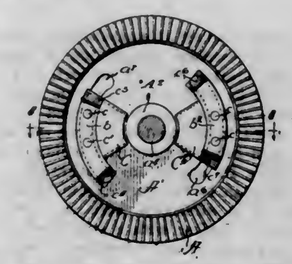
8. In a furnace wall, water tubes and wall blocks, levers clamping said blocks to said tubes, and threaded bolts extending through one end of said levers and resting against said blocks.

1,823,871. SAWHORSE. JESSIE P. BEASLEY, Greenville, Tex. Filed June 14, 1929. Serial No. 370,966. 5 Claims. (Cl. 304—5.)



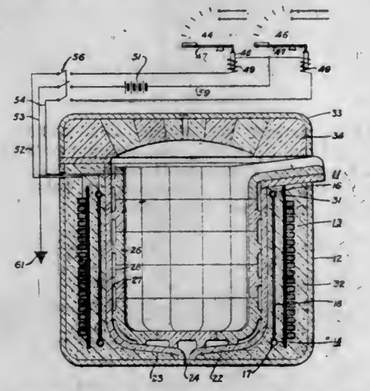
2. A device of the class described comprising a beam, blocks pivotally connected with the beam, legs pivotally connected with the blocks, arcuate arms carried by the blocks, stops carried by the blocks for limiting the swinging movement of the legs, and yieldable means carried by the beam for engaging the arms to hold the blocks against pivotal movement.

1,823,872. DRIVING MECHANISM. NAHUM C. BEMENT, Rockford, Ill. Filed Sept. 7, 1923. Serial No. 661,377. 11 Claims. (Cl. 74—7.)



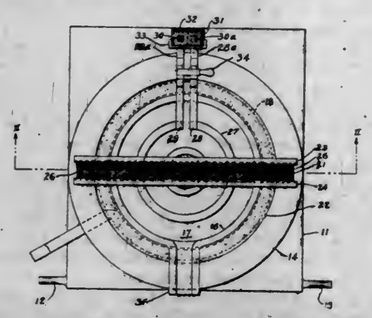
1. In a positive drive differential for motor vehicles, the combination of a divided shaft, a disc for driving said shaft, a gear joined to said disc, driving blocks on each side of said disc, sleeve members on said shaft on opposite sides of said disc, driven blocks on said sleeve members co-acting with the blocks on said disc, and cams carried by said disc and movable independently thereof and independently of each other, said cams being arranged to co-act with the blocks on said sleeves to release one or the other of said sleeves when one part of said shaft rotates faster than the other.

1,823,873. INDUCTION FURNACE. PORTER H. BRACE, Forest Hills, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 23, 1930. Serial No. 422,776. 9 Claims. (Cl. 13—26.)



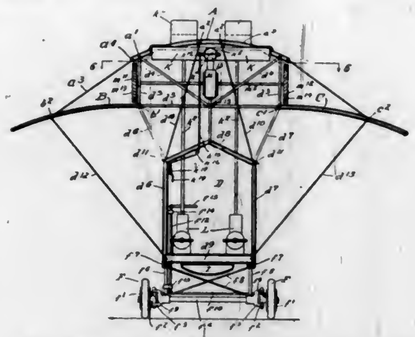
1. An induction furnace including a crucible, an induction coil therearound, and a grounded water-cooled protecting shield between the crucible and the induction coil.

1,823,874. INDUCTION FURNACE. PORTER H. BRACE, Forest Hills, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 23, 1930. Serial No. 446,439. 3 Claims. (Cl. 13—26.)



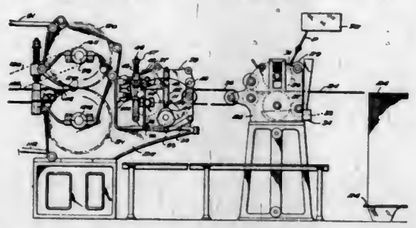
1. In an electric induction furnace, in combination with an annular crucible, an energizing coil surrounding the crucible and a magnetic core operatively associated with the crucible and the coil, a current-conducting annular member located in said crucible, and means for closing and opening an electric circuit therethrough.

1,823,875. AIRSHIP. JOHN BRAUNWALDER, Los Angeles, Calif. Filed Jan. 30, 1929. Serial No. 336,189. 14 Claims. (Cl. 244—18.)



1. In an airship, a central plane surface longitudinally disposed, a plurality of side planes extending parallel to, and outwardly and below said central plane surface, means for creating opposing air currents from above said side planes to the under side of said central plane surface, to create an increased static air pressure thereunder.

1,823,876. SHEET MOUNTING APPARATUS. ALBERT BROADMEYER, Harrisburg, Pa., assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa., a Corporation of Pennsylvania. Filed Nov. 23, 1928. Serial No. 321,469. 72 Claims. (Cl. 154—36.)



3. In a sheet mounting apparatus, the combination with rotatable sheet pressing cylinders, of means for feeding sets of separate sheets thereto, a gate for each set of sheets, and means for operating the gates in predetermined timed relation.

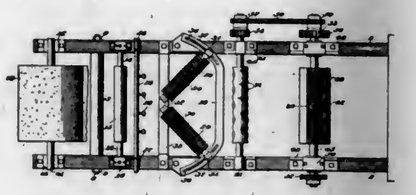
23. In a sheet mounting apparatus, the combination with means for bringing sheets into associated relation, of mechanism for automatically stopping said means on the failure of a sheet to be properly brought for association with another sheet.

29. In a sheet mounting apparatus, the combination with rotatable sheet pressing cylinders, of means for feeding sets of separate sheets thereto, a gate for each set of sheets, means for operating the gates in predetermined timed relation, and means for stopping the delivery of the sheets to certain of the gates upon the failure of a sheet to be properly presented thereto.

41. In a sheet mounting apparatus, the combination with a suction sheet feeder, of means for periodically creating suction thereon, a gate for controlling the passage of sheets fed by the feeder, and means for controlling the operation of the feeder including a device operated on by the sheets positioned at the gate.

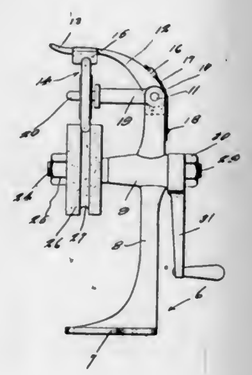
48. In a sheet mounting apparatus, the combination with mechanism for operating on a plurality of sheets, of means for cutting a web into a plurality of successive sheets, means for conveying said sheets to the mechanism, a gate controlling the passage of the sheets, a clutch controlled drive for the cutting mechanism, and means controlled by the cut sheets delivered to the gate for controlling the operation of the clutch.

1,823,877. WEB CONVERTING APPARATUS. WILLIAM H. CANNARD, Green Bay, Wis. Original application filed May 7, 1926, Serial No. 107,474. Divided and this application filed Jan. 31, 1928. Serial No. 250,866. 13 Claims. (Cl. 92—69.)



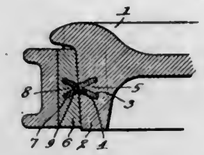
1. An attachment for web-converting machines comprising a frame adapted to be secured to a converting machine; a supply roll of material rotatably carried by the frame; a pair of rolls, one of which has an embossed surface, mounted in coactive operative relation upon the frame; means whereby the pair of rolls may be driven at equal peripheral speed and in opposite directions to draw a web of material from the supply roll therebetween; and means carried by the frame intermediate the supply roll and said pair of rolls for simultaneously crinkling and narrowing the web preparatory to action thereon by said embossed roll.

1,823,878. ERASER CLEANING APPLIANCE. LUCILE CHAMBERS and JOHN CHARLES CHAMBERS, San Francisco, Calif. Filed May 21, 1929. Serial No. 364,886. 4 Claims. (Cl. 51—103.)



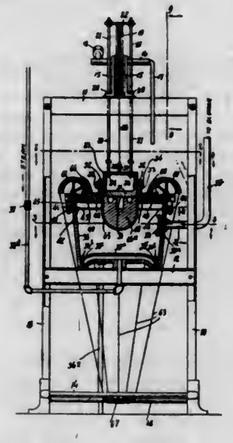
1. As a new product of manufacture, an office accessory of the class described comprising a support, a shaft mounted for rotation on said support, a grooved abrasive wheel carried by said shaft, an arm pivotally mounted on the upper end of the support and adapted to swing over the wheel, a spring for moving the arm out of the way, said arm being formed with a finger piece and with a block having its groove for cooperation with the adjacent edge portion of the eraser, said block being adapted to be located in alinement with the peripheral portion of said wheel, together with a stub shaft associated with said arm and adapted to be disposed in spaced parallelism with said first named shaft, said stub shaft being provided with a terminal spindle for reception of the hub portion of the eraser.

1,823,879. WHEEL AND BRAKE SHOE. JOHN L. CONNOLLY, New York, N. Y. Original application filed Sept. 27, 1927, Serial No. 222,367. Divided and this application filed Apr. 16, 1928. Serial No. 270,880. 6 Claims. (Cl. 188—256.)



1. In combination, a wheel having in its tread an insert of friction-material, and a brake-shoe having an insert of friction-material in the braking-face thereof adapted to contact with the insert in the wheel-tread when the brake is applied.

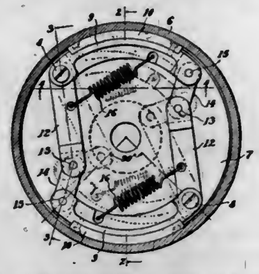
1,823,880. MACHINE FOR TREATING HAT BODIES. GEORGE W. CUMING, New York, N. Y., assignor to M. A. Cuming & Co. Inc., a Corporation of New York. Filed Jan. 11, 1928. Serial No. 245,856. 5 Claims. (Cl. 223—31.)



1. In a machine for treating hat bodies, the combination of a steam chamber, a hat forming member fixed relatively thereto and provided with means for supporting a hat body extending partially thereinto, a plurality of foot plates slidably mounted in position and adapted to be moved outwardly in order to stretch the hat brim, gripping jaws carried by said foot plates for gripping the outer edge of said hat brim, a plurality of rollers carried by said foot plates, and a cam ring connected with said steam chamber and engaging said rollers, said cam ring being controllable by the operator for shifting the positions of said rollers and thereby causing said foot plates to be moved outwardly.

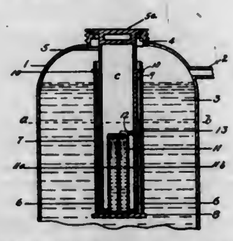
1,823,881. CENTRIFUGAL CLUTCH. ALBERT A. ACKERMAN, Westfield, and CHARLES L. THOMSON, Newark, N. J., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 27, 1929. Serial No. 410,053. 3 Claims. (Cl. 192—105.)

1. In a centrifugal clutch, a cylindrical driven drum, a driving disk, diametrically opposed clutch-shoes pivotally mounted on said disk, toggle-links pivotally connecting the pivot-point of a respective clutch-shoe to the free end of the other clutch-shoe, said clutch-shoes each having a



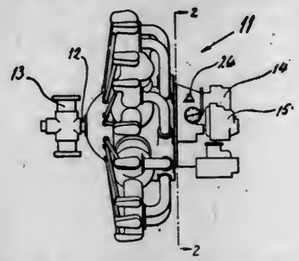
length between its end-pivots of about one quarter of the circumference of the clutch-drum, and spring means for contracting said clutch-shoes and toggle-links.

1,823,882. FIRE EXTINGUISHER. WILLIAM CHARLES BAUER, Evanston, Ill. Filed Mar. 5, 1929. Serial No. 344,537. 24 Claims. (Cl. 23—10.)



23. In a fire extinguisher for the purpose of producing gas, in suitable combination, the organic chemical called urea having the chemical formula $CO(NH_2)_2$, an acid, and an alkali solution of an alkali nitrite.

1,823,883. INDICATOR FOR INTERNAL COMBUSTION ENGINES. MAITLAND B. BLEECKER, Hempstead, N. Y., assignor to Wright Aeronautical Corporation, a Corporation of New York. Filed July 8, 1930. Serial No. 466,491. 6 Claims. (Cl. 116—124.)

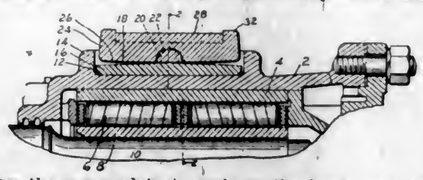


1. In an internal combustion engine, a crank shaft, an indicator shaft driven thereby, a pointed attached to the indicator shaft, an indicator dial over which the pointer passes, and a tachometer drive shaft driven by said indicator shaft.

1,823,884. CAR FRAME SUPPORT AND JOURNAL BOX. RICHARD J. BRITTAIN, Jr., Bloomfield, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 28, 1928. Serial No. 281,071. 14 Claims. (Cl. 105—218.)

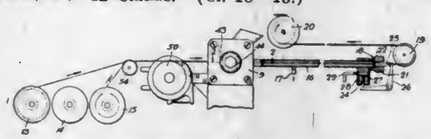
1. In a device of the character described, a journal box having a recess in the top thereof, a lower plate set in

said recess and having a clearance with the walls thereof to allow the plate to adjust itself, an upper plate seated on the lower plate, the engaging surfaces of the plates having a relative crowning longitudinally of the box to



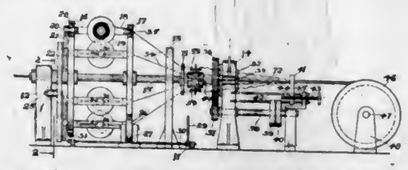
allow the upper plate to rock on the lower one, a car frame member extending crosswise of the box, and a seat on the upper plate for the car frame member; substantially as described.

1,823,885. METHOD OF AND APPARATUS FOR HANDLING STRAND MATERIAL. GEORGE LAFAYETTE CHERRY, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1929. Serial No. 353,042. 22 Claims. (Cl. 18—13.)



7. A method of handling strand material, comprising advancing a plurality of strands along a predetermined path at a predetermined speed, applying a common covering to the strands during such advancement, and utilizing the tension in one of the strands to advance the forward end of a strand to the covering means at a faster rate than said predetermined speed.

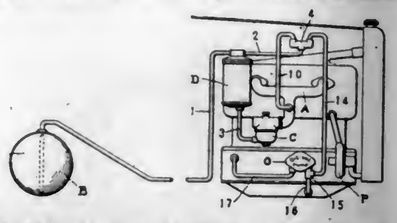
1,823,886. WIRE ROPE MACHINE AND THE LIKE. DAVID W. CLARK, Montreal, Quebec, Canada, assignor to John A. Roebling's Sons Company, Trenton, N. J., a Corporation of New Jersey. Filed Feb. 6, 1928, Serial No. 252,234, and in Canada Oct. 14, 1927. 3 Claims. (Cl. 117—20.)



1. A wire rope machine including a fly and a head adapted to rotate simultaneously, a collar adapted to rotate with the fly and the head and positioned therebetween, and a plurality of strand bending means secured to the face of the collar, each comprising a pair of rollers adapted to be moved towards and away from one another parallel to the longitudinal axis of the machine, means for simultaneously adjusting said rollers along the horizontal axis of the machine, and a roller positioned between the pair of rollers and adjustable radially of the centre of rotation of the machine, said rollers being positioned for crimping wire or strands passing between them.

1,823,887. FUEL FEEDING APPARATUS. JOSEPH C. COULOMBE, Kokomo, Ind. Filed Mar. 5, 1925. Serial No. 13,224. 2 Claims. (Cl. 123—136.)

1. In a device of the character described, an engine, a reduced pressure fuel feeding device therefor having a liquid fuel supply connection and a suction connection, a pump for circulating a fluid for the engine and producing sub-atmospheric pressures in the suction connection, a manifold interposed in the suction connection between the fuel feeding device and the circulating pump, a connection from said manifold to the intake manifold of the engine, metered valve openings in the manifold, valves automatically controlling the intake manifold con-



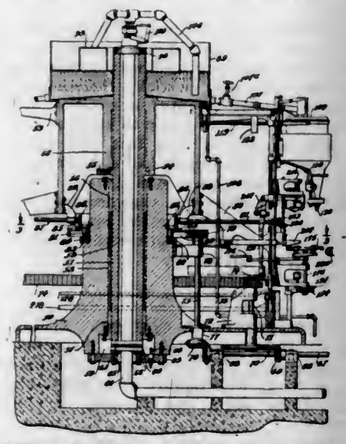
nection and the pump connection of the manifold and automatic means including a valve at the intake of the circulating pump permitting circulation of fluid at all times and increase in the flow and consequent suction at the suction connection upon increased speed of the engine and pump.

1,823,888. CAR BRAKE. HENRY C. DORRIS and LINDSAY C. PRITNER, Johnstown, Pa., assignors to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Aug. 21, 1929. Serial No. 387,411. 14 Claims. (Cl. 188—57.)



1. The combination with a car body and a wheel at one side of the car, a rock-shaft arranged parallel to and supported on the car body, a resilient brake band having one end slidably connected to the car body adapted to slide longitudinally when the brakes are set or released, a flexible connection between the rock-shaft and the opposite end of the brake band, means for turning the rock-shaft, and means when the rock-shaft is turned to force the brake band into or out of frictional engagement with the wheel.

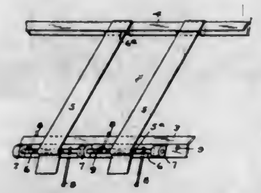
1,823,889. FILLING AND CAPPING APPARATUS. ROLLIN L. DRAKE, Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 13, 1924. Serial No. 731,730. 60 Claims. (Cl. 249—18.)



1. A filling and capping apparatus comprising means for simultaneously conveying a plurality of containers to

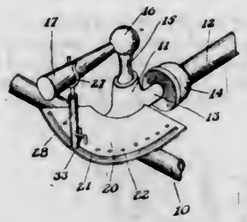
be filled and capped, means for weighing out predetermined amounts of fluid during a given period in the cycle of operation of the apparatus, means for discharging said quantities of fluid into the several containers and means for capping the several containers in substantially that portion of the cycle that the weighing means is in operation.

1,823,890. HOSPITAL BED. JOE J. ETTINGER, Warsaw, Ind., assignor to Zimmer Manufacturing Company, Warsaw, Ind., a Corporation. Filed Aug. 2, 1928. Serial No. 296,950. 2 Claims. (Cl. 5—89.)



1. A bed frame, a plurality of bands each engaged at one end to one side of the frame, a series of slotted and transversely apertured rollers mounted on the opposite side of the frame the slots of which are adapted to receive the opposite ends of the bands, members engaged in the apertures respectively by which to rotate the rollers for stretching the bands and apertures in the adjacent side of the frame adapted to receive the members to prevent unauthorized reverse rotation of the rollers respectively.

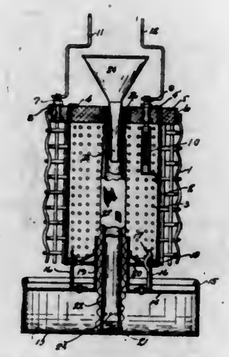
1,823,891. ADJUSTABLE VALVE LOCK. HARRY FRANKFORT and ALICE FRANKFORT, Brooklyn, N. Y. Filed Oct. 22, 1928. Serial No. 314,050. 2 Claims. (Cl. 251—166.)



1. In a device of the class described, a valve body having a swingable handle bar thereon, a plate having a curved slot and openings formed therein, said openings and curved slot being generated about the axis of said valve body, a stud mounted movably on said plate guided in a circular path in said slot and being connected to said handle bar, a barrel slidable on said stud, latch pegs depending from said barrel adapted to register in said openings, and resilient means in said barrel for causing said first-named means to drop into said openings.

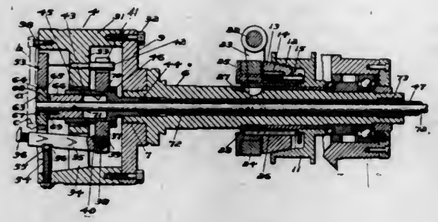
1,823,892. INSECT TRAP. GEORGE R. GALBRAITH, Brewster, Wash. Filed Jan. 27, 1930. Serial No. 423,611. 4 Claims. (Cl. 43—112.)

2. The combination with an electrocuting insect trap, of a lower bait reservoir having a closed flanged top forming a collection receptacle, supporting detents on the top fixed to the lower end of the trap, a stand pipe



having ports within the reservoir and extending up into the trap and means for filling the reservoir through said pipe, and a capillary wick surrounding said stand pipe.

1,823,893. WORK HEAD FOR GRINDING MACHINES. GEORGE E. GARNO and EUGENE A. ENGSTROM, Worcester, Mass., assignors to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 25, 1928. Serial No. 280,552. 6 Claims. (Cl. 279—106.)

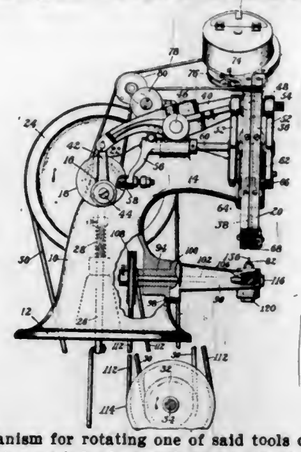


1. In apparatus of the class described, the combination with a rotatable chuck, means to open and close the chuck, and means to start and stop the chuck, of a work centering plug in said chuck, means actuated by the opening and closing means when said chuck is opened for moving said plug to work centering position, and means actuated by the starting and stopping means when said chuck is started in rotation for moving said plug out of work centering position.

1,823,894. FASTENER-SETTING MACHINE. SYLVESTER L. GOOKIN, Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 24, 1928. Serial No. 328,208. 22 Claims. (Cl. 218—15.)

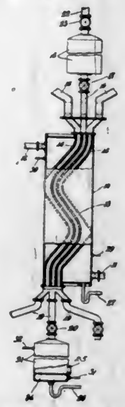
1. A fastener-setting machine comprising two initially separated fastener-setting tools formed and arranged to project into and operate against opposite ends of the barrel of a tubular fastener, automatic mechanism for

relatively moving said tools to apply upsetting and clenching pressure against the ends of the barrel of a fastener,



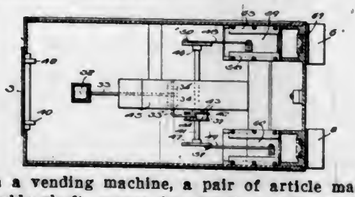
and mechanism for rotating one of said tools continuously throughout a period of upsetting and clenching pressure to supplement such pressure with a spinning action.

1,823,895. APPARATUS FOR CONTACTING VAPORS WITH SOLIDS. THOMAS T. GRAY, Elizabeth, N. J., assignor to Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed Aug. 28, 1926. Serial No. 132,055. 2 Claims. (Cl. 196—96.)



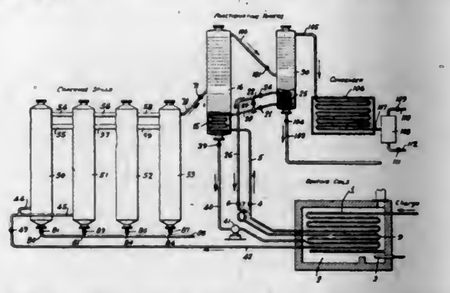
1. In an apparatus for contacting vapor with solid treating materials, a closed treating vessel having a vapor inlet and outlet, a conduit extending through said vessel and having walls pervious to vapors but impervious to said solid treating material and vapor tight hoppers for supplying active treating material to said conduit and receiving spent treating material therefrom.

1,823,896. VENDING MACHINE. HAROLD GREENHILL, Chicago, Ill. Filed Mar. 1, 1928. Serial No. 258,206. 2 Claims. (Cl. 312—35.)



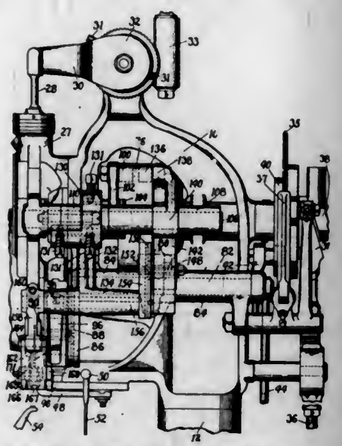
1. In a vending machine, a pair of article magazines, a rotatable shaft, means for rotating said shaft, a pair of disks fixedly mounted on the shaft, a reciprocably movable plate for each magazine for ejecting articles therefrom, links connected with said disks and said plates whereby rotation of the shaft reciprocally moves the plates to eject articles alternately from said magazines, and means for locking said shaft against rotation.

1,823,897. METHOD AND APPARATUS FOR FRACTIONATING HYDROCARBON OILS. FRANK W. HALL, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,804. 6 Claims. (Cl. 196—48.)



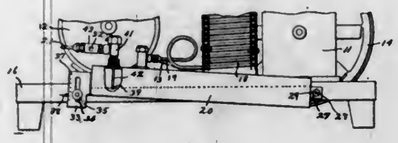
2. The process of converting higher boiling hydrocarbon oils into lower boiling ones which comprises passing the oil through a heating coil to raise it to a cracking temperature under superatmospheric pressure, discharging the highly heated oil into an enlarged chamber in which cracking and vaporization takes place, conducting evolved vapors to a fractionating tower and subjecting them to fractionation therein to form an overhead vapor fraction and a final liquid condensate, collecting the final liquid condensate in the lower portion of the fractionating tower, passing a portion of the highly heated oil from the heating coil, before it has been discharged into the enlarged chamber, through a coil in contact with the liquid condensate collected in the lower portion of the fractionating tower and returning this portion of heated oil to the heating coil for further heating.

1,823,898. FASTENING INSERTING MACHINE. GEORGE HAZELTON, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 17, 1929, Serial No. 393,285, and in Great Britain Sept. 26, 1928. 24 Claims. (Cl. 1—18.)



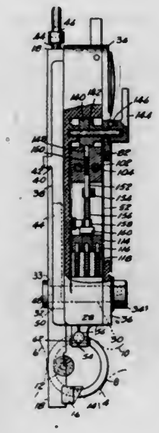
1. In a machine for inserting driven fastenings, a driver, a cam, an awl operated by the cam and arranged for movement to feed work to the driver, and means operated by the cam for feeding the work when the awl is in inoperative position and arranged to continue the feed of the work in the same direction as it is fed by the awl.

1,823,899. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 27, 1930. Serial No. 464,304. 12 Claims. (Cl. 62—115.)



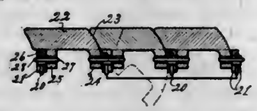
1. A refrigerating apparatus comprising in combination, a refrigerant circulating unit including a container for a quantity of liquid refrigerant, said container being pivotally mounted to said unit, means communicating with said container for detecting the flow of refrigerant therefrom, and means associated with said container for indicating the quantity of liquid refrigerant therein upon movement of the container.

1,823,900. GAUGE SWITCH. PHILIP H. HUTCHINSON, Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 24, 1930. Serial No. 455,294. 17 Claims. (Cl. 200—47.)



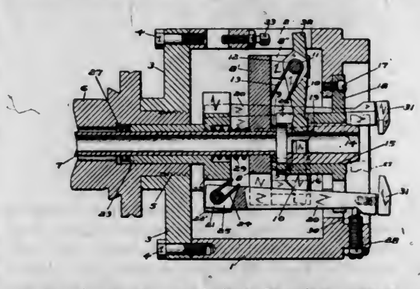
1. In a device of the character described, a gauge carrier, a feeler movable with respect to the carrier and engaging the work to be tested, a contact carrying member movably mounted on the gauge carrier, means for urging the member towards contact making position, a plate having a curved surface arresting the contact carrying member, and means controlled by the feeler for moving the curved surface of the plate to release the contact carrying member; substantially as described.

1,823,901. FURNACE WALL. DAVID S. JACOBUS, Montclair, N. J., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Original application filed Oct. 28, 1927, Serial No. 229,326. Divided and this application filed Sept. 28, 1928. Serial No. 308,905. 6 Claims. (Cl. 72—101.)



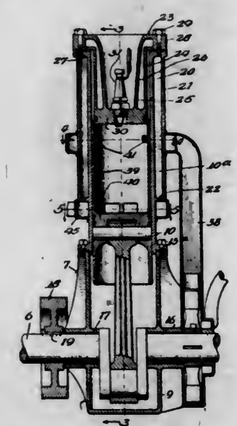
1. A furnace wall comprising tile having lugs extending beyond the ends thereof, supports for said tile, and straight pins passing through said lugs and supports.

1,823,902. CHUCK. RICHARD H. JELLICOE, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Original application filed Dec. 27, 1926, Serial No. 157,144. Divided and this application filed Sept. 26, 1928. Serial No. 308,390. 10 Claims. (Cl. 279—106.)



1. In a chuck, workpiece-clamping means comprising clamping fingers and a cooperating backing plate against which the workpiece is pressed by the action of said fingers, in combination with a member for centering said workpiece, said member being slidably mounted in the axis of said backing plate and means for procuring rapid withdrawal of said centering member away from contact with said workpiece after said workpiece is centered.

1,823,903. INTERNAL COMBUSTION ENGINE. JOHN W. KABITZKE, Chicago, Ill. Filed Apr. 11, 1928, Serial No. 269,045. Renewed Feb. 9, 1931. 2 Claims. (Cl. 123—65.)



2. In a two-cycle internal combustion engine, the combination of a casing having a cylinder formed therein, a

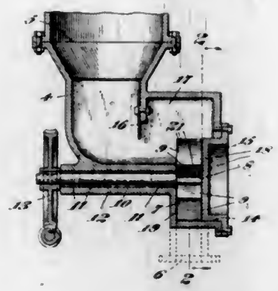
shaft, a piston slidable in one end of the cylinder and connected to impart rotary movement to the shaft, a head extending longitudinally into the other end of the cylinder, means integral with the casing forming a fuel inlet port for the cylinder adjacent and inwardly of the head, means integral with the casing forming an exhaust port for the cylinder adjacent the said one end thereof, said exhaust port being longitudinally offset with respect to the inlet port, a skirt secured to the head portion of the piston slidable around the head and forming, together with said head and head portion, a combustion chamber, said skirt having an inlet and exhaust port formed therein to register respectively with the inlet and exhaust ports of the casing when the piston is at the end of its power stroke, said inlet and exhaust ports in the skirt being longitudinally offset relatively to each other similarly to the ports of the casing.

1,823,904. THUMB SUCKING PREVENTIVE. PHYLLIS C. KAISER, Beverly Hills, Calif. Filed Oct. 23, 1929. Serial No. 401,696. 2 Claims. (Cl. 128—133.)



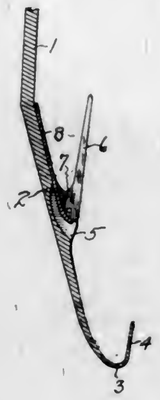
2. A thumb and finger sucking preventive, comprising a section of adhesive tape of such length as to pass around the end portion of the thumb or finger, both ends of which section of tape are split lengthwise to form a pair of tabs, the members of one pair being longer than the other so as to overlie both sides of the shorter tabs and provide projecting members composed of three thicknesses of material when the tape is secured to a thumb or finger and said tabs are secured to each other.

1,823,905. FEEDER FOR PULVERIZED MATERIAL. OTTO A. KREUTZBERG, Fountain Hill Borough, Bethlehem, Pa. Filed Oct. 6, 1928. Serial No. 310,717. 11 Claims. (Cl. 221—186.)



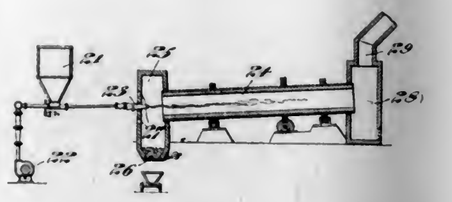
1. In an apparatus for feeding pulverized material, the combination, a hopper having an inlet and an outlet, and means to cause the movement of material from said inlet to said outlet in uniform quantities, the axis of said means being in the direction of the movement of the material between said inlet and said outlet and offset in relation to said outlet, said means forming a seal between said inlet and said outlet.

1,823,906. KNITTING NEEDLE. WILLIAM H. LEAVIN and SAMUEL B. LEAVIN, New York, N. Y., assignors, by mesne assignments, to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1928. Serial No. 299,487. 1 Claim. (Cl. 66—117.)



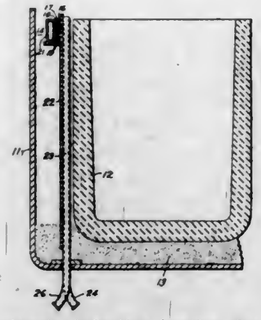
A knitting needle of the type described comprising a straight shank portion and a straight line portion inclined at an angle to said straight shank portion, a curved portion running abruptly into said straight line portion, and a latch member pivotally supported on the straight line portion of the needle, said latch portion being of such length as to just overlie the end of the hook portion when closed and reaching to the angle on the straight line portion when the latch is open.

1,823,907. PYRITES ROASTING. JAMES E. LITTLE, Bethlehem, Pa., assignor to Bethlehem Steel Company. Filed May 4, 1928. Serial No. 274,983. 2 Claims. (Cl. 75—60.)



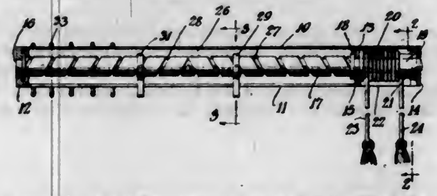
1. A process for treating pyritic fines for the purpose of producing sulphurous gases and an agglomerated cinder of metallic oxide, which consists in, blowing the fines into a stream of air, initially igniting the fines suspended in the latter, permitting their combustion to proceed uninterruptedly without application thereto of extraneous heat, controlling the flow of air so as to supply oxygen more than sufficient to oxidize both the sulphur and the metals comprising the fines, and utilizing the excess heat developed by the burning of the sulphur to agglomerate the metallic oxides precipitated from the gas stream.

1,823,908. INDUCTION FURNACE. THOMAS H. LONG, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 20, 1930. Serial No. 483,242. 6 Claims. (Cl. 13—26.)



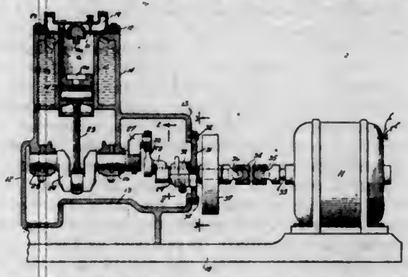
1. In an electric inductive heating device, a plural-turn energizing coil embodying a radially-laminated conductor and a fluid-cooled thermal shield located between the energizing coil and material to be inductively heated thereby.

1,823,909. ADJUSTABLE PORTIÈRE HANGER. HANS MEIER, New York, N. Y. Filed Jan. 28, 1930. Serial No. 423,938. 1 Claim. (Cl. 156—20.)



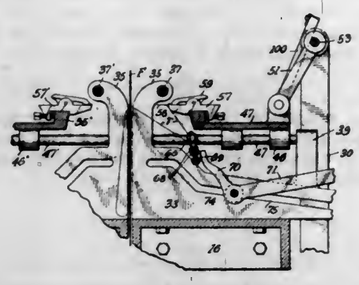
A curtain spreader comprising a longitudinal barrel having a longitudinal slot therein, a spindle rotatable in said barrel, split rings mounted loosely on said barrel, a pair of rings mounted on said spindle, hooks depending from said rings, said hooks being adapted to have the corners of curtains suspended therefrom, a drum on said spindle, a rope wound about said drum having depending ends, said rope ends depending from opposite sides of said drum and being adapted to rotate said drum in either direction, said rope being adapted to rotate said spindle, right and left hand helical channels formed in said spindles, pins projecting inwardly from said rings, said pins registering in said helical channels, said spindle when rotated being adapted to shift said rings materially toward each other, or away from each other synchronously.

1,823,910. APPARATUS FOR DISPLACING FLUID. VIRGIL WILLIS MORAY, New York, N. Y. Filed Jan. 9, 1930. Serial No. 419,543. 6 Claims. (Cl. 230—212.)



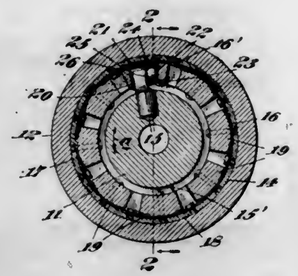
1. In a device for displacing fluid, the combination of a cylinder, a piston in said cylinder, a shaft member, a connecting rod connected to said piston and to said shaft member and means for producing varying speed of said shaft member comprising a second shaft member out of alignment with the first mentioned shaft member, a link eccentrically and pivotally mounted on both the shaft members, means for rotating the second shaft member at constant speed and means for adjusting the relation of speed of the shaft members.

1,823,911. EMBROIDERY MACHINE. CHRISTIAN MUENTENER and PAUL HELBIG, Bogota, N. J. Filed Sept. 5, 1929. Serial No. 390,523. 4 Claims. (Cl. 112—94.)



1. An embroidering machine comprising in combination with a fabric holding frame, of an upper and lower series of needle holders on each side of said frame, cam means for actuating the holders on one side in opposed timed relation to the holders on the other side alternately, means for passing threaded needles from one series of holders to the other through the fabric, means for automaticaly releasing the needles when in an advanced position, means on the opposite side of the fabric to grip the released needles, and pivotaly supported yielding means to draw the threads carried by said needles taut on both sides of the fabric.

1,823,912. CLUTCH. HENRY W. NIEMAN and JAMES P. MADDEN, Bethlehem, Pa., assignors to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Nov. 26. 1929. Serial No. 409,800. 5 Claims. (Cl. 192—105.)



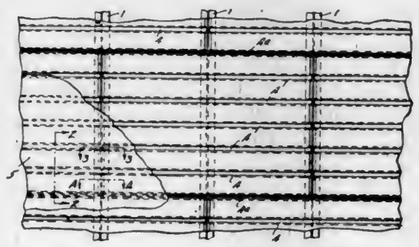
1. In a device of the class described, a rotatable cylindrical drum, a rotatable member in approximately coaxial relationship with said drum, a flexible friction member adapted to wrappingly engage the cylindrical surface of said drum, a pin disposed radially of said members, fixed at one end to one of said members and at its other end tractively but loosely connected to the other of said members, and a curved bearing body disposed between a portion of said last mentioned member and said pin and laterally of said pin.

1,823,913. ZIP OR LIGHTNING FASTENER. WILLY PIETSCH, Pulsnitz, Germany. Filed Nov. 19, 1930. Serial No. 496,710, and in Germany Nov. 18, 1929. 6 Claims. (Cl. 24—205.)



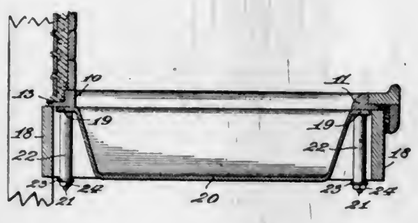
1. A zip or lightning fastener comprising a pair of opposed ribbons, fastening members secured to said ribbons, a slider movable on said members for causing the same to interlock or disengage from each other and fringed braids secured to the opposed ribbons and covering the fastening members to conceal the same from view.

1,823,914. PLASTER BOARD. THOMAS D. PRIDDY, Cleveland, Ohio, assignor to The Formed Steel Products Company, Cleveland, Ohio. Filed Feb. 13, 1929. Serial No. 339,683. 5 Claims. (Cl. 72—10.)



1. A wall board construction comprising a plurality of sections arranged with their adjacent edges in close proximity to each other, some of said edges being beveled so as to provide a joint space of increasing width from the bottom to the top of said joint, other of said edges being undercut from the surface of the section so as to provide dove-tail form of joint space, and binding material applied to said joint spaces.

1,823,915. SINK SUPPORTING FRAME. WALTER JOHN REEVES, Glendale, Calif. Filed Oct. 9, 1929. Serial No. 398,347. 5 Claims. (Cl. 248—30.)



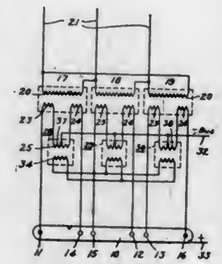
1. As a new article of manufacture, a sink supporting frame cast in a single piece from metal and comprising front, rear and side rails, flanges projecting outwardly from the lower portions of said front, rear and end rails and perforated ears projecting outwardly from the flanges on said end rails.

1,823,916. NOVELTY MAP. DANIELS SCOATES, College Station, Tex. Filed July 5, 1929. Serial No. 876,022. 2 Claims. (Cl. 35—6.)



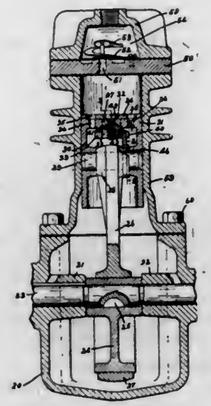
1. A novelty including a map having a smaller map superimposed thereon representative of a predetermined area of said first map and means to secure said superimposed map at several points whereby the same may be moved in a series of circles over said first map.

1,823,917. BALANCE TRANSFORMER CONNECTION FOR RECTIFIERS. ERROL B. SHAND, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 11, 1927. Serial No. 225,482. 12 Claims. (Cl. 175—363.)



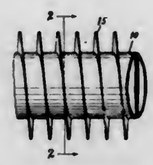
1. In a rectifier system comprising a substantially balanced three-phase supply line, a direct-current load circuit, and rectifying means having six rectifying paths interposed therebetween and having a common direct-current terminal, the combination, with said rectifying means, of a main transformer aggregate having a three-phase primary connection of such nature that the three primary phase-voltages are always substantially balanced, regardless of the load conditions on the several phases, and having two secondary windings for each primary phase, and an auxiliary transformer aggregate comprising three balancing coils, each coil being connected respectively between the two secondary windings associated with each primary phase, the three neutral points of said balance coils being solidly connected together to constitute the other direct-current terminal, means for maintaining the fluxes in the different phases of said auxiliary transformer aggregate at any moment substantially equal, the rectifying paths being connected to the respective secondary windings of the main transformer aggregate.

1,823,918. VALVE MECHANISM. WALTER E. SHEW, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 27, 1926. Serial No. 144,605. 4 Claims. (Cl. 230—221.)



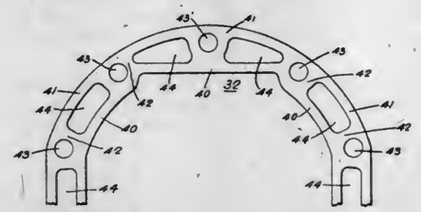
1. In a device of the character described, the combination with a piston having a head portion including an aperture concentric with the axis of the piston, and an aperture offset from the first mentioned aperture; a rotatable valve in said head, said valve including two members, one of which has an apertured plate portion resting on the piston head and a central stud portion extending into the central aperture of said piston head, the stud portion having a transverse slot in its outer surface; the other member comprising a flanged portion having a slot and spaced from the interior surface of the piston head, said flanged portion having a central stud extending into the central aperture in the piston head, said stud being provided with a transverse projecting tongue adapted to extend into the transverse slot of the other valve member; a screw stud holding the two members engaged; a spring washer interposed between the interior of the piston head and the second valve member so as to hold the plate portion of the valve against the outer surface of the piston head; a pitman pivotally secured to the piston; and a tongued ring secured to the pitman, the tongue of said ring engaging the slot in the flanged portion of the valve member in the piston so as to operate said valve.

1,823,919. REFRIGERATING APPARATUS. HARRY F. SMITH, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 28, 1929. Serial No. 350,711. 7 Claims. (Cl. 257—262.)



1. A tube consisting of separately formed longitudinal sections providing separate and distinct passages for the tube, and means for holding the sections together to complete the tube and to provide extended radiating surfaces on the exterior thereof.

1,823,920. GASKET. ANTHONY T. STOCK, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Feb. 6, 1926. Serial No. 86,597. 2 Claims. (Cl. 288—1.)

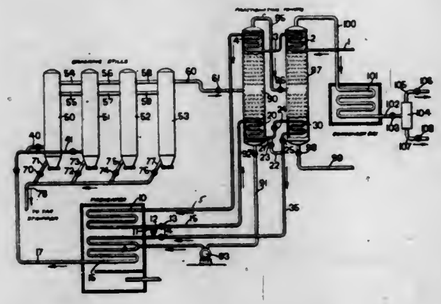


1. A gasket made wholly of a plastic metal and having a central opening and a plurality of perforations arranged in spaced relation about said opening so as to provide portions of approximately equal cross-sectional area between adjacent perforations and between the perforations and edges of the gasket.

1,823,921. COLORING RUBBER. HANS TOCHTERMANN, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 8, 1929, Serial No. 353,661, and in Germany Apr. 28, 1928. 8 Claims. (Cl. 18—50.)

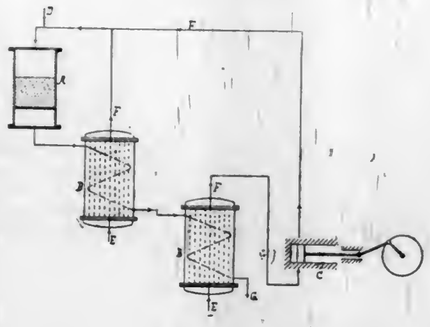
2. The process of coloring rubber-like masses which comprises incorporating therewith prior to vulcanization a coloring matter in the form of an aqueous paste containing a difficultly volatile organic substance.

1,823,922. PROCESS FOR CONVERTING HYDROCARBONS. CLAUDE W. WATSON, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed June 26, 1928. Serial No. 288,410. 1 Claim. (Cl. 196—48.)



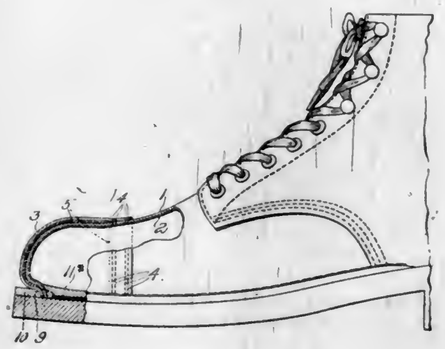
An oil conversion process which comprises heating a high boiling oil in a coil to a conversion temperature and permitting cracking to produce vapors of lower boiling oils, passing the vapors to a fractionator to effect separation between a high boiling condensate having substantially the same characteristics as said high boiling oil and a vapor of lower boiling constituents, returning the condensate to said coil, passing said vapor to a second fractionator to effect further separation, eliminating from the system the condensate so formed, passing partially heated oil withdrawn from said heating coil in heat exchange with the condensate in the bottoms of said fractionators to reboil said condensates, returning said heated oil to the coil for further heating, and condensing the vapors leaving said second fractionator to form a desired final distillate.

1,823,923. PRODUCTION OF STEAM IN THE MANUFACTURE OF PHOSPHORUS ACIDS FROM PHOSPHORUS AND STEAM. WILHELM WILD and GUSTAV WIETZEL, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 29, 1926. Serial No. 151,598, and in Germany Dec. 3, 1925. 2 Claims. (Cl. 23—165.)



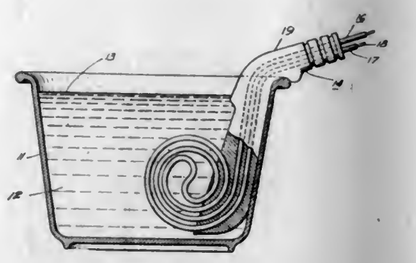
1. In the production of acids of phosphorus and hydrogen by the interaction of phosphorus and steam, the step of passing the hot gases issuing from the said interaction into indirect heat exchange relation with water maintained at a temperature of at least 100° C., thereby separating the acids of phosphorus and simultaneously producing essential proportions of the steam needed in the reaction of at least atmospheric pressure from the water contained in the said condenser, and allowing the steam thus produced to interact with further amounts of phosphorus.

1,823,924. ARMORED SHOE. ARTHUR A. WILLIAMS, Holiston, Mass. Filed Nov. 19, 1929. Serial No. 408,223. 3 Claims. (Cl. 36—77.)



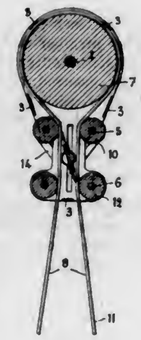
1. A boot or shoe of the character described comprising a sole; an upper having a complete toe portion; a toe cap upon the exterior of said toe portion; means fastening the rear marginal portion of said toe cap directly to said toe portion of the upper; means fastening the lower marginal portions of said toe cap and of said upper to the sole, and a rigid metal toe box wholly disposed between said two fastening means and between said toe cap and said toe portion of the upper to protect the toes of the wearer, the metal box having an inwardly turned portion shaped to form a seat extending thereabout and supporting the box against downward thrust.

1,823,925. ELECTRIC HEATING UNIT. JAMES C. WOODSON, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 6, 1928. Serial No. 310,684. 1 Claim. (Cl. 219—41.)



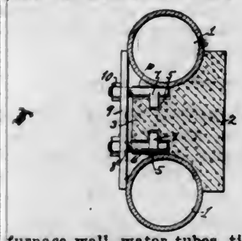
In an electric-heating unit, in combination, a preformed encased tubular heating element comprising an elongated portion and a return-bent portion and a mass of metal cast around the elongated portion and a part only of the return-bent portion.

1,823,926. SHARPENER FOR RAZOR BLADES, SUCH AS THE GILLETTE AND OTHER BLADES HAVING TWO CUTTING EDGES. EDOUARD GEORGES AVIGNON, Vitry-sur-Seine, France. Filed Nov. 15, 1927, Serial No. 233,472, and in France Nov. 18, 1926. 1 Claims. (Cl. 51—63.)



Razor blade sharpening apparatus comprising a roller mounted for rotation, a double strop engaging said roller, rolls mounted for rotation and engaging opposite sides of the strop, a blade holder mounted for oscillating movement and having cranks provided with arms which diverge in one direction, links connecting the rolls and said cranks and serving to oscillate the holder at times corresponding to the changes in the direction of movement of the strop, and cam acting devices on the strop arranged to engage and coact with the arms of said cranks to move the blade edge from the strop at the end of the movement of the strop in each direction.

1,823,927. DEVICE FOR RETAINING FURNACE WALL BLOCKS AGAINST TUBES. ERVIN G. BAILEY, Easton, Pa., and RALPH M. HARDGROVE, Bethlehem, Pa., assignors to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Oct. 20, 1927. Serial No. 227,456. 6 Claims. (Cl. 122—6.)

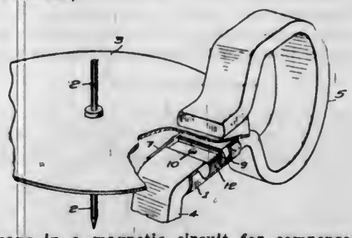


3. In a furnace wall, water tubes, tile having a portion between said tubes extending beyond the center line thereof, recesses in the sides of said extending portion, and bolts with lugs thereon between said recesses and tubes for keeping said tile in place, said bolts being rotatable to permit removal of said lugs from said recesses.

1,823,928. METHOD OF MAKING INSULATING TILE OR BRICK. ERIK B. BJORKMAN, New York, N. Y., assignor to The Aerocrete Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 7, 1930. Serial No. 434,173. 5 Claims. (Cl. 18—47.5.)

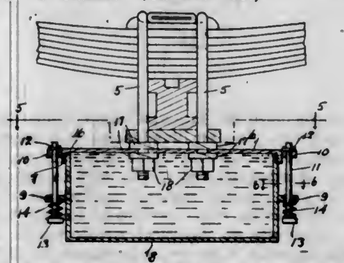
1. The method of making bricks or tiles which consists in screening granulated blast furnace slag, grinding the larger porous particles to cement fineness, adding thereto the finer particles as an aggregate, adding water, forming the tiles or bricks under pressure, and curing the same.

1,823,929. WATT-HOUR METER. MAXWELL BOWER, Cambridge, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 14, 1930. Serial No. 452,231. 7 Claims. (Cl. 171—34.)



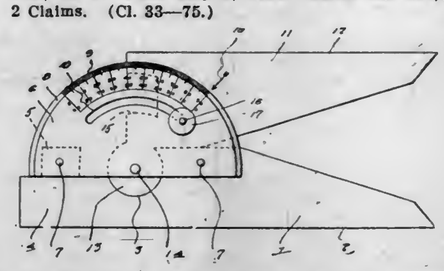
2. Means in a magnetic circuit for compensating for the effect of temperature changes comprising a magnetic shunt including portions of the same alloy composition having different magnetic release or transformation points.

1,823,930. SPRING CLIP BOX. HAYES JAMES CHAUVIN, Jefferson, La. Filed June 20, 1930. Serial No. 462,563. 2 Claims. (Cl. 267—53.)



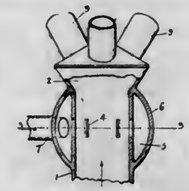
1. In combination with spring clips having nuts threaded on the ends thereof, of means held in place by the nut for encasing the nuts against exposure to the elements, said means comprising a receptacle adapted to contain a lubricant into which the nuts are immersed, and a cover supported on the ends of the clips by the nuts, and spring means engaging the receptacle with the cover so that said receptacle may be pushed downwardly to leave space enough for insertion of a tool to engage the nuts.

1,823,931. PROTRACTOR. GLEN H. DINGMAN, Canastota, N. Y. Filed May 9, 1930. Serial No. 451,046. 2 Claims. (Cl. 33—75.)



1. A protractor of the character described comprising a stationary arm formed to provide a straight edge and having a reduced end portion, said arm being further provided with an arcuate recess at the point where the reduced portion merges therewith, an integral apertured ear projecting laterally from the reduced end portion, a flat, segmental plate rigidly secured to the stationary arm and to the apertured ear, said plate being disposed across the recess, a swingable arm having an integral substantially circular extension on one end portion, said extension being rotatably seated in the recess of the stationary arm, a pivot pin extending through the segmental plate and the substantially circular extension for swingably mounting the second named arm on the segmental plate, one end of the swingable arm being engageable with the inner side edge of the reduced portion of the stationary arm and having a recess formed therein for the reception of the apertured ear when said swingable arm is in open position.

1,823,932. APPARATUS FOR PREPARING PULVERIZED FUEL FOR COMBUSTION. HORACE T. DYER, Greenwich, Conn., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 14, 1928. Serial No. 269,923. 4 Claims. (Cl. 302—28.)

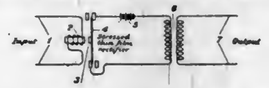


1. A system comprising a source of pulverized material suspended in carrier air, a conduit leading therefrom, a plurality of branch conduits, a distributor connecting the main conduit with the branch conduits, said distributor including means for injecting a current of air into a stream of the material flowing therethrough to effect a substantially uniform diffusion of the material through the carrier air.

1,823,933. REPEATER APPARATUS. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 14, 1929. Serial No. 363,065. 4 Claims. (Cl. 179—171.)

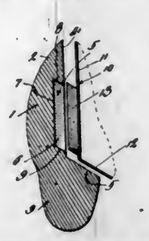
1. In a transmission system comprising a circuit including a source of current and a disk having a stressed tran-

sition layer between two substances, the method of repeating sound energy which comprises causing sound waves



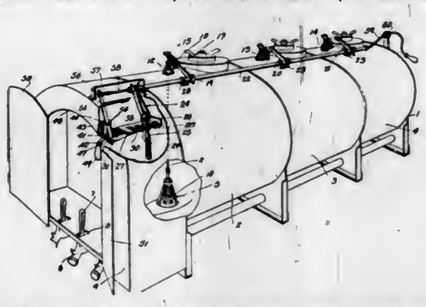
coming in over an adjacent circuit to vary the impedance in its circuit of said transition layer by superimposing stresses on the layer by flexing said disk.

1,823,934. REPLACEABLE PORCELAIN TIPPED PONTIC TOOTH. CLARENCE E. FRIARS, Tacoma, Wash. Filed Apr. 18, 1927. Serial No. 184,701. 2 Claims. (Cl. 32—9.)



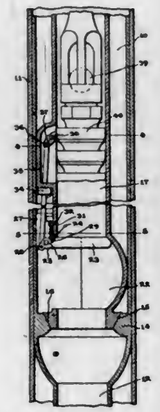
1. An artificial tooth comprising a facing having an integral gingival tip and provided with a perpendicular face and a face inclined downwardly and inwardly from the perpeudicular face and at an obtuse angle thereto and being provided in the perpendicular face with a relatively narrow perpendicular groove constituting a socket and having side walls parallel to each other throughout their length and downwardly and inwardly inclined upper and lower end walls, and a backing comprising a portion for contact with the perpendicular face of the facing and another portion extending at an obtuse angle thereto for engagement with the second mentioned face, and a perpendicular anchoring tongue upon the first mentioned portion of the backing of uniform thickness throughout and of the same thickness as the backing and of dimensions to fit snugly within said groove and having downwardly and inwardly inclined upper and lower end edges, the angle of inclination of the upper and lower end walls of the groove, the upper and lower end edges of the anchoring tongue, and the inclination of the second mentioned face of the facing and the second mentioned portion of the backing all being the same.

1,823,935. VALVE OPERATING MECHANISM FOR TANKS. RALPH D. GEORGE, Kansas City, Mo., assignor to Andrew A. Kramer, Kansas City, Mo. Filed Apr. 18, 1924. Serial No. 707,409. 55 Claims. (Cl. 137—21.)



1. In combination, a compartmental tank having outlet openings in the compartments, spring pressed valves for closing the opening and means for unseating the valves, said means consisting of a rock shaft, valve unseating arms on the rock shaft, a selector plate having selector slots, a locking arm receivable in any one of the several slots in the selector plate, the arm being connected to the rock shaft and adapted to swing it so as to unseat one of the valves against the action of its spring, a detent normally urged in position to close the slot in which the locking arm is received to hold the locking arm in functional position and a spring pressed lever connected to the detent and adapted to move the detent out of slot obstructing position to permit the springs of the spring pressed valve to close the valve on its seat.

1,823,936. UNDERGROUND VALVE FOR OIL WELLS. CHOICE R. HARPER, Knox City, Tex., assignor of one-third to Jack Watkins, Wink, Tex. Filed Sept. 20, 1929. Serial No. 894,121. 4 Claims. (Cl. 103—203.)



1. In combination with the working valve of an oil pumping apparatus, a safety valve actuated to open or closed position respectively by the working valve in lowering the latter into or withdrawing it from the well.

1,823,937. COMBINED FISH LURE AND SIGNAL. ANDREW H. HATCHETT, Sr., Cleveland, Ohio. Filed Apr. 30, 1930. Serial No. 448,660. 6 Claims. (Cl. 43—17.)



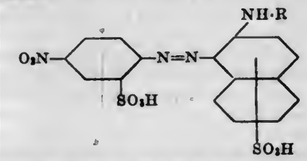
1. In a combined fish lure and signal, a float for attachment to a fishing line, an illuminating bulb carried by the bottom wall of the float for illuminating the water to lure the fish, a member pivoted to the float to swing about a horizontal axis, spaced contacts carried thereby having electrical connection with a source of electrical energy to normally complete an electrical circuit to the bulb, the float being inverted in the water to expose the illuminating bulb to view incident to the strain placed on the fishing line by a fish.

1,823,938. PROCESS FOR THE PRODUCTION OF SILVER PLATED METAL ARTICLES SUCH AS TABLE REQUISITES. GUSTAV HENKE, Bremen, Germany, assignor to M. H. Wilkins & Söhne Akt.-Ges. Hemelingen, near Bremen, Germany. Filed Jan. 27, 1930, Serial No. 423,888, and in Germany Dec. 11, 1928. 2 Claims. (Cl. 91—68.2.)

1. A process for producing silver plated metal articles such as knives, forks, spoons and the like, consisting in coating an article of non-ferrous metal, mechanically working the coated member, heating the said member to incandescence effecting a fusion of the silver layer with the surface crystals of the blank, applying a second coating of silver to the member, cold working the second coat, and subjecting it to heat to produce incandescence.

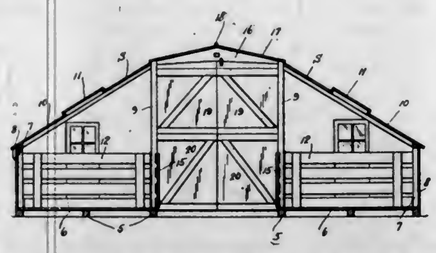
1,823,939. NEW MONOAZODYESTUFFS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, and RUDOLF KNOCHE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 7, 1929, Serial No. 361,254, and in Germany May 14, 1928. 2 Claims. (Cl. 260—90.)

1. As new dyestuffs monoazo-dyestuffs of the probable general formula:



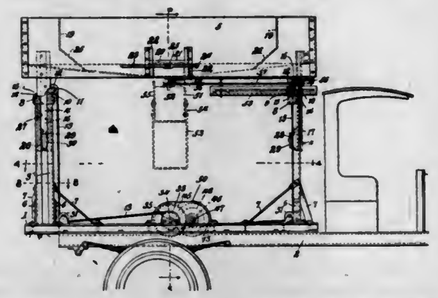
wherein R stands for an alkyl group containing three to five carbon atoms, being in the dry pulverised form dark metallic lustrous powders, in the form of their alkali metal salts soluble in water with a violet to blue coloration, dyeing wool from an acid bath even blue to violet shades of good fastness to washing, fulling and light.

1,823,940. PORTABLE HOG HOUSE. HERMAN HOEGERMEYER, Winslow, Nebr. Filed Nov. 6, 1929. Serial No. 405,169. 2 Claims. (Cl. 119—16.)



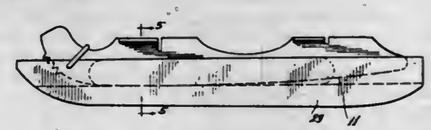
2. A portable hog house comprising a pair of house sections respectively including a floor, skids for supporting the floor raised above the ground, each of said house sections being open on one side thereof, said house sections adapted to be disposed in spaced parallelism with the open sides in confronting relation to provide therebetween an alley, rests extending transversely of the alley and connecting said house sections, roof sections hingedly connected to said house sections and adapted for rest on said rests or to be swung down along side of the sections when the rests are removed, a plurality of pairs of guides arranged in each house section, partitions slidable between the guides of the respective pairs for dividing the respective house sections into a plurality of pens, doors hingedly connected to one side of each pair for closing the pens of the respective house sections at the open side of the sections, and upper and lower end doors on the sections for closing said alleys at the ends of said alleys.

1,823,941. COAL TRUCK. HARVEY W. HOPKINS, Baltimore, Md. Filed July 17, 1929. Serial No. 379,046. 4 Claims. (Cl. 298—11.)



1. The combination with a motor truck, of vertical standards consisting of angle bars L-shaped in cross section mounted on the truck at the corners thereof and arranged in pairs to form guides, a vertically movable body provided with depending slides slidable between the guiding standards and provided with inner and outer plates spaced apart by the slides and projecting from the opposite edges thereof to form grooves, said grooves receiving the adjacent flanges of the angle bars, guide pulleys arranged at the upper ends of the standards, cables secured at their outer ends at the tops of the said standards and looped within the same and arranged on the said guide pulleys, pulleys carried by the said slides and supported in the said loops, and operating mechanism designed to be actuated by the motor of the truck and connected with the cables for raising the body.

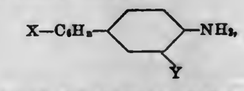
1,823,942. SKATE. ALBERT JUNG, Plainfield, N. J. Filed Jan. 28, 1931. Serial No. 511,773. 2 Claims. (Cl. 208—183.)



1. A one-piece skate comprising a runner having a curved front end, teeth on said curved front end, and pairwise arranged wings integrally formed with said runner, and laterally bent thereto, the wings of each pair pointing in opposite directions, said wings having button hole openings and holes therein, and means passed through said openings and holes to secure the skate to a shoe.

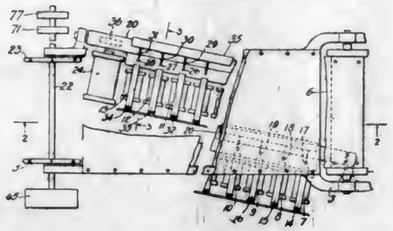
1,823,943. NEW AZODYESTUFFS AND PROCESS OF MAKING SAME. GEORG KALISCHER, Frankfort-on-the-Main, and CARL SCHULTIS, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 8, 1929, Serial No. 369,520, and in Germany June 16, 1928. 8 Claims. (Cl. 260—94.)

1. A process which comprises diazotizing an aromatic amine of the general formula:



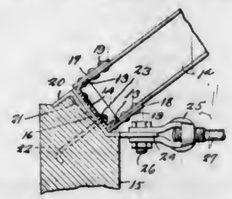
wherein X means hydrogen or an alkyl group, n the number 8 or 10 and Y hydrogen, halogen, an alkyl or an alkoxy group, and combining the diazo compound thus obtained with a combining component of the naphthalene and pyrazolone series containing at least one sulfonic group.

1,823,944. TIME RECORDING. LINUS H. KITTREDGE, Brooklyn, and LOUIS A. DORFF, New York, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed June 22, 1927. Serial No. 200,733. 13 Claims. (Cl. 234—33.5.)



1. The method of making a time record of apparatus which comprises perforating a tape in such manner that the location of a single perforation indicates both the time of seizure and the holding time of the apparatus.

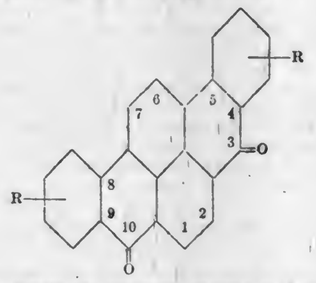
1,823,945. SPACE COVERING STRUCTURE, SUCH AS ROOFS, WALLS AND THE LIKE. WILHELM KLINGENBERG, New York, N. Y., assignor to Lamella Roof Syndicate Inc., New York, N. Y. Filed Aug. 2, 1927. Serial No. 210,171. 5 Claims. (Cl. 108—1.)



1. In a space covering and closing structure comprising reticularly connected separate lamellas, a channel beam, a plurality of lamellas arranged with their ends close together and opposed to the channel side of said beam, plates secured to and connecting said lamella ends to said beam, and a bearing plate on the side of said beam opposite the ends of said lamellas and secured to said side of said beam.

1,823,946. PROCESS OF DYEING AND PRINTING VEGETABLE FIBERS. GEORG KRÄNZLEIN and HEINRICH VOLLMANN, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 2, 1928. Serial No. 297,105. 6 Claims. (Cl. 8—5.)

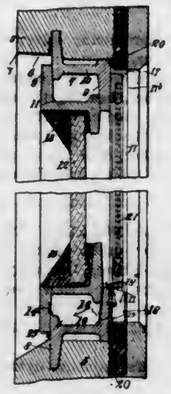
1. The process which consists in dyeing vegetable fiber with a dyestuff of the following formula:



wherein *R* stands for hydrogen, halogen or alkyl.

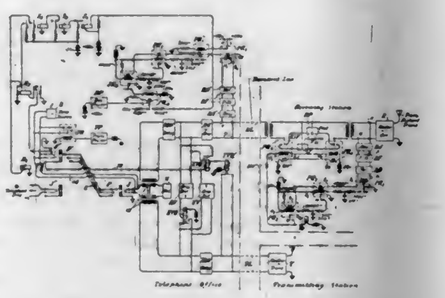
3. Material prepared from vegetable fibers dyed with a dyestuff of the 4.5.8.9-dibenzpyren-3.10-quinone series, the brilliant shades thus produced on the material varying from orange to violet and possessing good fastness properties.

1,823,947. WINDOW FRAME CONSTRUCTION. THOMAS W. MACAULAY and STEPHENSON RASTELLI, Reno, Nev. Filed Mar. 18, 1930. Serial No. 436,752. 6 Claims. (Cl. 189—69.)



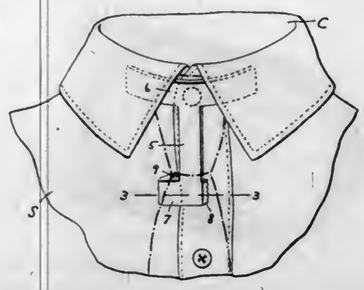
1. A window frame construction adapted to be mounted in an opening in a wall structure so as to mount therein a window sash, comprising a pair of spaced vertical side members and upper and lower horizontal members, said lower horizontal member having openings therethrough from its inner side to its outer side, a flange member extending outwardly from the inner side of said window frame and along the upper horizontal and the two vertical members of said frame, and a trough member mounted horizontally on and transversely of the inner face of the lower horizontal member of said window frame and having openings therein registering with openings in said lower frame member, the lower ends of the vertical portion of the flange member forming ends for said trough member.

1,823,948. RADIO TELEPHONE AND TELEGRAPH SYSTEM. THOMAS A. MCCANN, Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 19, 1929. Serial No. 379,491. 15 Claims. (Cl. 250—9.)



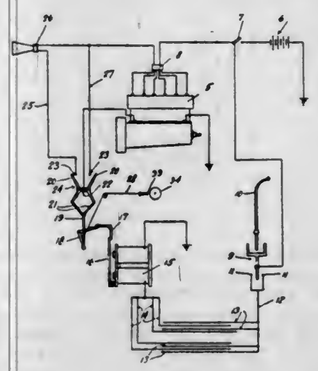
11. In a signaling system, a transmitting path and a receiving path at each terminal, a signal transmitter for each terminal normally disconnected from the transmitting path, and means responsive to the switching of the signal transmitter into connection with the transmitting path at one terminal to switch the signal transmitter at the other terminal into connection with the corresponding transmitting path.

1,823,949. TIE HOLDER. LOUIS H. MCINNIS, Brandon, Tex. Filed Jan. 17, 1931. Serial No. 509,503. 2 Claims. (Cl. 2—153.)



1. A tie holder comprising in combination a shank provided adjacent one end thereof with a jaw having teeth extending at right angles to the shank adjacent one edge of the shank, a second jaw pivotally connected with the first mentioned jaw and provided with teeth cooperating with the first mentioned teeth, and spring means for normally urging the teeth of the jaws into co-operating clamping relation, said jaws extending transversely with respect to the shank, and said first mentioned jaw laterally of said shank and remote from said teeth being provided with a tie engaging prong.

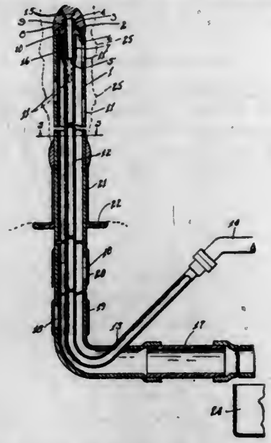
1,823,950. AUTOMATIC AUTOMOBILE CONTROL. GIOVANNI MECHETTI, Rochester, N. Y. Filed Jan. 31, 1930. Serial No. 424,945. 2 Claims. (Cl. 180—83.)



1. In combination, an ignition system for automobiles, a magnetic switch circuit, said magnetic switch circuit being normally open, an emergency switch means whereby the said magnetic switch may be energized for grounding the ignition system, a speedometer, and means associated with the said magnet and switch whereby the speedometer may be stopped at the speed indication present at the time of the closing of the switch means.

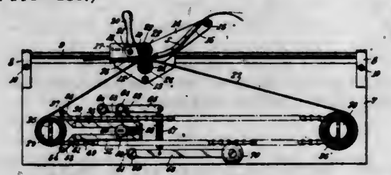
1,823,951. IRRIGATION TUBE. JOHN W. ONEILL, Chicago, Ill. Filed Mar. 29, 1929. Serial No. 351,102. 2 Claims. (Cl. 128—241.)

1. A syringe nozzle comprising an outer tube having a hemispherical end provided with an opening, a head having a hemispherical recess arranged to fit on the hemispherical end and being provided with outlet openings, an inner tube, a connecting member having a threaded attachment with said head and being provided with curved flange portions arranged to bear against the inner walls of the hemispherical end portion of the head, said connecting member being arranged to enter the inner



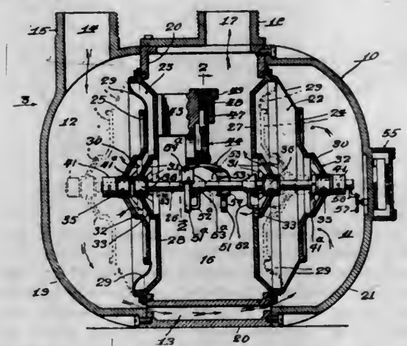
tube, said outer tube being provided with openings near the head portion, and means for supplying a liquid to the inner tube.

1,823,952. DUPLICATING MACHINE. RICHARD P. PHIBBS, South Amboy, N. J. Filed June 27, 1930, Serial No. 464,234. Renewed Apr. 22, 1931. 12 Claims. (Cl. 101—133.)



1. In a duplicating machine, a gelatinous sheet, rollers at the ends of the machine over which the sheet may be wound, a horizontally slidable carriage, and a roller on the carriage over which the sheet passes, said sheet being always at an angle to the horizontal.

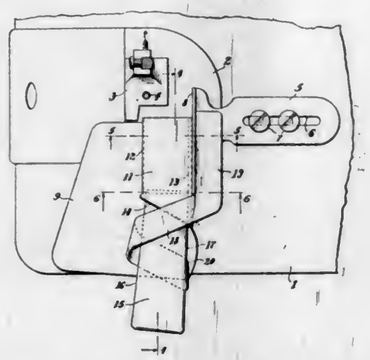
1,823,953. GAS METER. GEORGE R. RICH, Pasadena, Calif. Filed Jan. 24, 1930. Serial No. 422,972. 21 Claims. (Cl. 73—12.)



1. In a gas meter, the combination of two oppositely acting bellows, each having a stationary wall and a pressure operated movable wall, there being inlet ports in the movable walls and outlet ports in the stationary

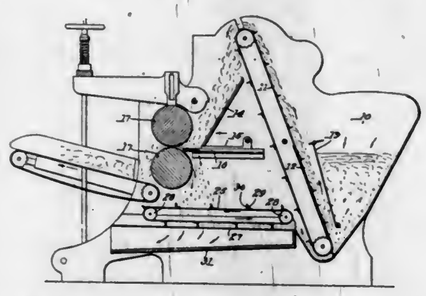
walls, a reciprocatory shaft connecting said movable walls, whereby movement of one is transmitted to the other, valves for controlling the passages through said inlet and outlet ports, and valve actuating mechanism for said valves controlled from said shaft.

1,823,954. HEM-FOLDER FOR SEWING MACHINES. RUDOLPH J. SAILER, Townley, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 3, 1930. Serial No. 432,599. 8 Claims. (Cl. 42—141.)



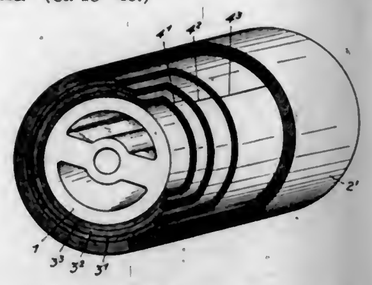
1. A hem-folder comprising a scroll having guiding walls adapted to form the outer and inner fold-edges of a hem, in the margin of a body material, a fold-face separating arbor projecting into said scroll, and supporting means for said arbor providing a guide directing the inturned edge of the hem into contact with the outer edge-fold thereof within said scroll.

1,823,955. MACHINE FOR FEEDING MIXED STOCK. CHARLES G. SARGENT and FRANK L. FURBUSH, Graniteville, Mass., assignors to C. G. Sargent's Sons Corporation, Graniteville, Mass., a Corporation of Massachusetts. Filed Dec. 10, 1926. Serial No. 153,953. 2 Claims. (Cl. 100—47.)



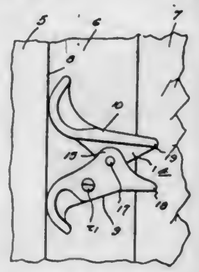
1. The combination of a feed hopper with a pair of rolls in position for receiving stock therefrom, a horizontal endless conveyor located underneath the rolls to receive the droppings therefrom, said conveyor comprising an apron having transverse floats thereon, a perforated trough located under the return lower strand of the apron in position to have the floats thereof come substantially into contact with it, the trough delivering back into the feed hopper, and a trough underneath the perforated trough and inclined in a direction for directing the liquid away from the hopper.

1,823,956. SECTIONAL MANDREL. RICHARD SCHROEDER, Berlin-Weissensee, Germany. Filed Feb. 25, 1927, Serial No. 170,931, and in Germany Mar. 5, 1926. 3 Claims. (Cl. 18—45.)



1. A sectional mandrel for use as a core in producing hollow bodies comprising a plurality of mandrel elements in the form of sleeves adapted for engagement one over another to provide a core of a desired diameter, each sleeve comprising a strip of flexible material wound in superimposed layers and longitudinally slit, the smallest sleeve corresponding in interior cross sectional size and shape to a mandrel over which said sleeve is adapted to be engaged, and each successively larger sleeve corresponding in interior size and shape to the exterior size and shape of the sleeve next smaller in size.

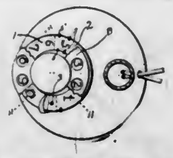
1,823,957. WINDOW FASTENER. JAMES EDWARD SCOTT, Stockholm, Saskatchewan, Canada. Filed July 16, 1929. Serial No. 378,761. 1 Claim. (Cl. 292—54.)



In a window fastener of the character referred comprising a plate including a body having a retaining cam at one end adapted to frictionally engage the adjacent window frame surface and having a lateral extension adjacent the other end constituting a flange, said body being apertured at a point between its ends for reception of a pivotal attaching screw, and another plate including a body having a retaining cam at one end for frictionally engaging the adjacent window frame surface and having a lateral extension adjacent the other end constituting a flange, said flanges being disposed in overlapping rockable relationship and formed with alined pivot holes, a pivot pin passing through said holes for securing said flanges together in frictional contact companionship, the pivot pin being located at a point eccentrically from the attaching screw to support the second named plate on the first named plate in a manner to be rocked to a position beyond the main pivotal attaching screw for the purpose specified.

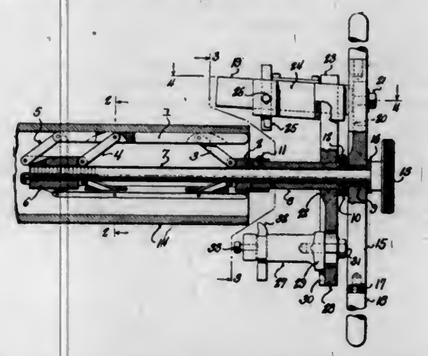
1,823,958. NUMERAL PLATE FOR DIAL TELEPHONES. HETTIE J. SORRELLS, Wichita, Kans. Filed July 18, 1930. Serial No. 468,751. 3 Claims. (Cl. 40—10.5.)

1. In an improved numeral plate for a dial telephone, a numeral plate consisting of two members pivotally connected at one end, and means to connect the other ends securely together, a flange and a hook element integral with one of the members as a stationary attaching means



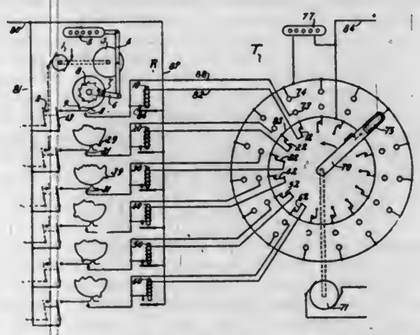
for the members, said flange and said hook element being spaced apart to snugly engage with the bracket of a finger stop substantially as shown.

1,823,959. TOOL FOR SHAPING THE ENDS OF CONDUITS. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 24, 1929. Serial No. 388,142. 4 Claims. (Cl. 144—205.)



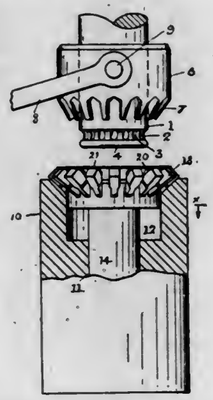
1. A device for shaping the ends of conduits comprising an expanding mandrel, adapted to be inserted within and locked to the interior portion of a conduit, a rotary head carried by said mandrel, a threaded member carried by and concentric with said mandrel, an auxiliary head carried by said threaded member and rotated around it, directly by the rotation on the mandrel of said rotary head, a guide carried around said mandrel by said rotary head, and a tool carried around said mandrel by said rotary head and moved along said guide by said auxiliary head.

1,823,960. TOTALIZING COUNTER. FERDINAND B. TROUTMAN, Elmhurst, Ill. Filed Feb. 17, 1930. Serial No. 428,978. 5 Claims. (Cl. 235—92.)



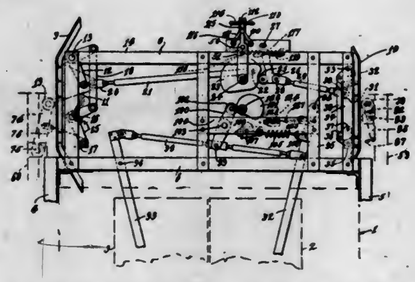
1. In combination, a totalizing counter, a plurality of individual counters, individual control circuits controlled by the respective individual counters, means controlled by the individual counters for characteristically conditioning their associated circuits, continuously operated commutating means for successively connecting the totalizing counter to the respective circuits for operation over the circuits that have been characteristically conditioned, and switching means controlled by the commutating means for removing the characteristic condition of each circuit over which the totalizing counter has been operated.

1,823,961. BOTTLE CAP FORMING DIE. LUDY VOGELSANG, East Orange, N. J., assignor to Lydia B. Koch, New York, N. Y. Filed June 5, 1930. Serial No. 459,367. 5 Claims. (Cl. 93—60.)



1. A die for making bottle caps having a depending corrugated circumferential flange comprising an upper die having a bottom circumferential flange and an annular groove located above the same and provided with a series of recesses, and a lower die having a shaft and an enlargement at the upper end thereof, and a series of detents circumferentially arranged and pivoted at the upper portion of the enlargement and provided with bosses designed to coact with the recesses in the grooves of the upper die, and means for spreading the bosses diametrically and circumferentially to receive the circular blank designed to form the cap and for retracting the detents when the upper die is brought down so as to bring the groove and recesses thereof opposite the bosses of the detents.

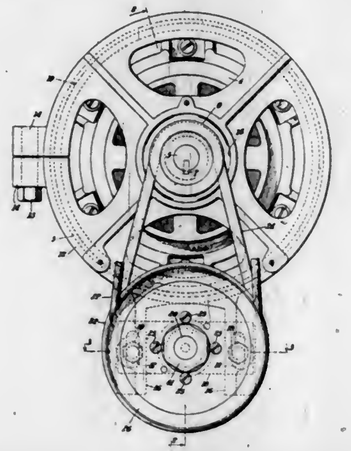
1,823,962. ELEVATOR DOOR OPERATOR. CRANFORD P. WALKER and DANIEL A. LYONS, Los Angeles, Calif., assignors to Consolidated Steel Corporation, Los Angeles, Calif., a Corporation of California. Filed Aug. 16, 1930. Serial No. 475,686. 18 Claims. (Cl. 187—52.)



1. In combination with a door for an elevator hoistway, an elevator car, and a door operator carried by said car

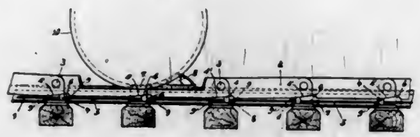
including means for engaging said door to move the same, means for engaging said hoistway and power means for moving said door engaging means and said hoistway engaging means relative to each other.

1,823,963. POWER-TRANSMITTING DEVICE. IRVING F. WEBB, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 17, 1930. Serial No. 468,543. 6 Claims. (Cl. 308—13.)



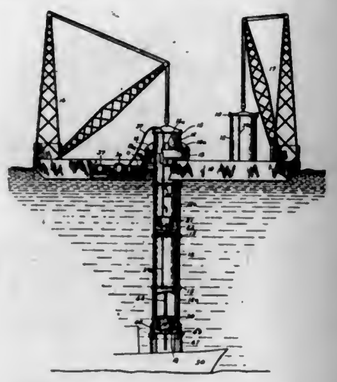
1. An electric motor having a frame housing a rotor and a stator, said frame being provided with an annular seat concentric with the axis of rotation of the rotor, a member having a split cylindrical ring embracing said frame seat, means frictionally clamping said cylindrical ring upon the frame seat, a driving element carried by said rotor, a driven element operatively connected with said driving element and journaled upon said member for rotation upon an axis substantially parallel with the rotor axis, and a power-transmitting member rotatable with the driven element.

1,823,964. SLIDABLE BLOCK RAIL BRAKE. KARL ERNST WENZEL, Hamborn-on-the-Rhine, Germany. Filed Dec. 7, 1929, Serial No. 412,374, and in Germany Oct. 15, 1928. 4 Claims. (Cl. 188—62.)



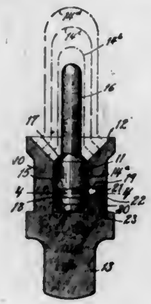
1. Means to regulate the braking distance or length in track or rail vehicles which are retarded by the agency of a brake shoe interposed between wheel and rail, comprising a remote-controlled lifting device by means of which the wheel loading the brake-shoe is adapted to be lifted clear of the brake shoe at a definite point of the braking distance.

1,823,965. METHOD OF AND APPARATUS FOR HYDRAULIC PROSPECTING. EDWARD A. ADLER, Schenectady, N. Y. Filed June 25, 1929, Serial No. 378,522. Renewed Mar. 6, 1931. 14 Claims. (Cl. 61—69.)



1. The method of prospecting below the surface of a body of a liquid that comprises creating a vortex in the liquid in the region to be prospected.

1,823,966. TUBE-FLANGING TOOL. WILLIAM H. BURT, Waterbury, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Jan. 3, 1930. Serial No. 418,200. 8 Claims. (Cl. 153—79.)

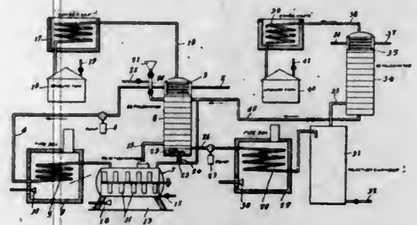


1. In a flanging-tool, the combination with a body-member provided in one end with a mandrel-receiving socket and with an annular flange-stop surrounding the open mandrel-receiving end of the said socket; of a removable mandrel-member provided at one end with a shank adapted to fit into the socket in the said body-member, at its opposite end with a pilot projecting outward from the open end of the said socket and intermediate its ends with an annular deflecting-surface diverging from the base of the said pilot and positioned so as to deflect the end of a tube against the annular flange-stop of the said body-member; the said body-member, stop-flange and mandrel-member being organized together in a manner to provide for their being concurrently driven toward the end of a tube.

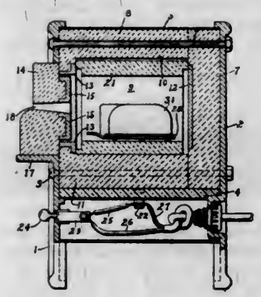
1,823,967. PROCESS OF PRODUCING NAPHTHA FROM HYDROCARBON OILS. MARVIN L. CHAPPELL, Los Angeles, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Dec. 1, 1926. Serial No. 151,876. 7 Claims. (Cl. 196—54.)

1. A process of treating hydrocarbon oil with metallic halide which comprises contacting fresh hydrocarbon oil

and metallic halide in a reaction zone under conditions to reduce all of the tarry residue containing metallic halide to a solid mass or coke and at the same time vaporize all of the hydrocarbon oil not decomposed into coke, passing the vapors to a reflux zone, therein introducing the fresh metallic halide into the system, and passing the metallic halide and metallic halide reactions products from said reflux zone to said reaction zone.

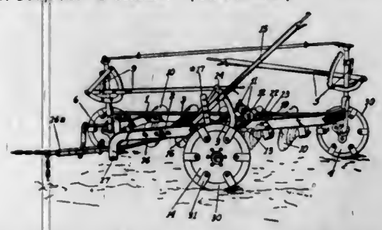


1,823,968. MATERIAL CONTAINER FOR DENTAL FURNACES. ORA A. COLBY, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Feb. 14, 1928, Serial No. 254,208. Divided and this application filed May 1, 1930. Serial No. 448,861. 1 Claim. (Cl. 263—47.)



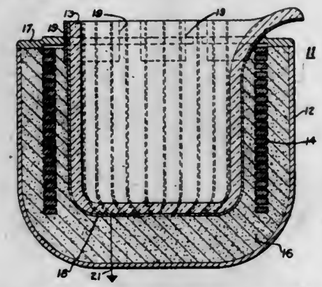
In a dental furnace, means for supporting and protecting an artificial tooth during the heating and cooling thereof including a supporting tray and a cover therefor of highly refractory material, means cooperating with the cover to constitute a substantially dustproof enclosure for said tooth, integral handling means on the cover, and a depression at the junction of the handling means and the cover to receive a temperature-indicating means.

1,823,969. CONTROL STRUCTURE FOR PLOWS. JOHN H. DAVIS, Stockton, Calif. Filed June 10, 1929. Serial No. 369,578. 4 Claims. (Cl. 97—53.)



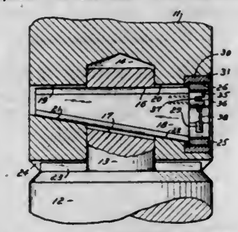
1. In plow construction, a main wheel-supported frame, a drawbar pivoted at its rear end on the frame toward its rear end for swinging movement in a transverse horizontal plane, means between the drawbar and frame at the front end of the latter for enabling the drawbar to be held against swinging movement in different angular positions relative to the line of pull, an extension on the drawbar pivoted thereon ahead of said drawbar holding means for horizontal swinging movement, a wheel to one side of said extension mounted on the frame for swivel movement in a horizontal plane, and connecting means between the wheel and the extension to cause them to swing together.

1,823,970. INDUCTION FURNACE. NEVILLE RYLAND DAVIS, Woodcourt, Brooklands, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 26, 1929, Serial No. 395,229, and in Great Britain Oct. 9, 1928. 6 Claims. (Cl. 13—27.)



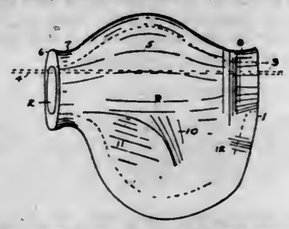
1. In an electric induction furnace having a crucible, an induction coil surrounding the crucible, and a casing therearound, an earthed electric-conducting screen located within the casing and between it and the crucible.

1,823,971. WEDGE COUPLED JOINT. EMIL M. ERLANDSON, Los Angeles, Calif. Filed Nov. 14, 1930. Serial No. 495,659. 8 Claims. (Cl. 287—103.)



1. A device of the character described, comprising; abutting members joined by means of a wedge inserted through a tapped hole in one of said members; and a plug screwed into said hole against the head of said wedge; said plug having an opening therethrough into which a tool may be inserted and whereby the wedge may be further driven and the plug be simultaneously tightened.

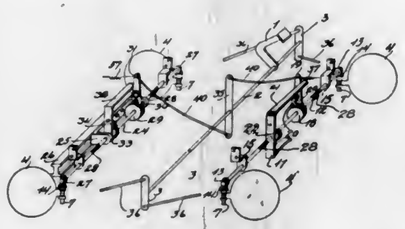
1,823,972. SURGICAL SPLINT. JOE J. ETTINGER, Warsaw, Ind., assignor to Zimmer Manufacturing Company, Warsaw, Ind., a Corporation. Filed Dec. 5, 1927. Serial No. 237,622. 3 Claims. (Cl. 128—89.)



1. A splint consisting of a body having a finger supporting section on its surface at and adjacent one end

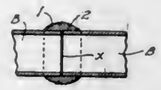
and having a palm supporting section between said finger supporting section and the rear end of the body, a lateral projection on the body adapted to be received between the first finger and the thumb, the finger-supporting section being convex and the palm-supporting section having depressions at its opposite sides adapted to be engaged by the fleshy portions of said palm and the bottom of the body being convex longitudinally.

1,823,973. SELF ADJUSTING BRAKE MECHANISM. AUDLEY F. EVERHART, Dunlo, Pa., assignor of one-half to Joseph Maravalli. Filed Oct. 25, 1929. Serial No. 402,454. 3 Claims. (Cl. 188—196.)



1. In a self adjusting brake mechanism, the combination of a plurality of brake bands, band contracting means carried by the bands, transverse connections between said front and back bands, play compensating universals in said transverse connections, means for simultaneously adjusting said brake bands, means for limiting the movement of the adjusting means for said bands, and means for retaining the brakes in adjusted position after the same have been adjusted.

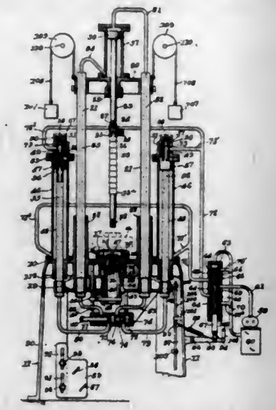
1,823,974. JOINTING ELEMENT FOR PIPE AND OTHER TUBULAR MEMBERS. WILLIAM C. FERGUSON, St. Louis, Mo. Filed Nov. 11, 1929. Serial No. 406,484. 7 Claims. (Cl. 25—127.)



6. A method of jointing pipes and similar members arranged in endwise relation, which consists in molding a mass of plastic or semi-plastic material onto a flexible strip so as to form a body that will serve as a closure for the joint between the adjacent pipe, arranging a member on said body so as to prevent the material of same from seeping into said joint, and then using said flexible strip as a carrier to apply said molded mass to the adjacent end portions of the pipe and to confine said mass in position while it is setting or hardening.

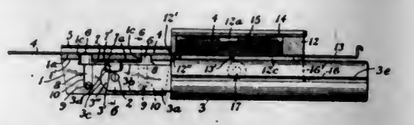
1,823,975. BROACHING MACHINE. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 17, 1922. Serial No. 544,534. 32 Claims. (Cl. 90—38.)

1. A broaching machine, comprising a tool head having means for securing a broaching tool to one side thereof, a work support arranged upon the same side of said tool head for sustaining the pressure of the work, and power means arranged upon the same side of said tool head and



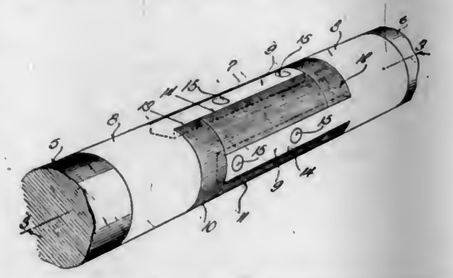
alongside the path of said broaching tool for producing relative reciprocation between said tool head and said work support.

1,823,976. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Mar. 11, 1927, Serial No. 174,458. Renewed Nov. 10, 1930. 18 Claims. (Cl. 30—12.)



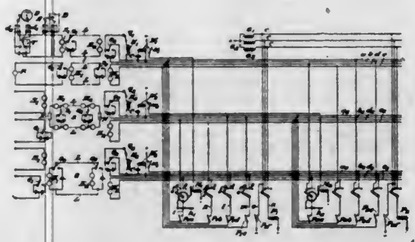
1. A safety razor comprising a blade holder having a guard, a handle pivotally connected therewith, one or more projections adapted to enter apertures in a blade, and means movably supporting the projections, the handle having a portion to operate said means for causing the projections to enter the apertures in the blade when the handle and the blade holder are moved from one position to another and for causing withdrawal of the projections from the blade when the handle and blade holder are in a different position.

1,823,977. ELECTRICAL APPLIANCE. LEM E. HENDEE, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed June 18, 1926. Serial No. 116,850. 3 Claims. (Cl. 287—10.)



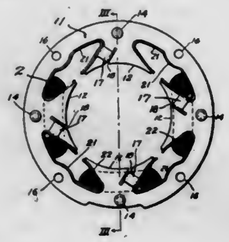
1. An appliance of the character described, comprising a pair of coupling members having spaced fingers extended from adjacent ends, an insulating member engaged by the ends of the coupling members adapted to be compressed therebetween and having spaced recesses to receive said fingers, the opposite ends of the recesses being closed to provide a bed of insulating material between the end of each finger and the adjacent coupling member and means securing said fingers to the insulating member, whereby longitudinal stress may be applied to the coupling members in either direction.

1,823,978. TELEGRAPH OR TELETYPER PLANT. AUGUST JIPP, Spandau, near Berlin, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Feb. 18, 1929, Serial No. 340,882, and in Germany Feb. 18, 1928. 8 Claims. (Cl. 178—2.)



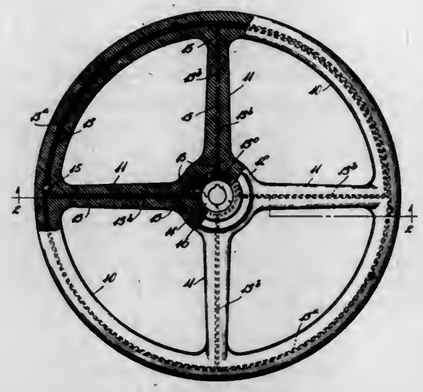
1. A telegraph or teletyper system comprising a plurality of subscriber stations, lines for transmitting the telegraphic messages, one or more exchanges, automatic selectors at each of said exchanges for connecting said stations selectively, means located at the subscriber stations and operative to control the said selectors over the said telegraphic lines, and devices at each of said exchanges for releasing the said selectors at the end of a communication, said devices being operable by current of a frequency different from that of the telegraph currents.

1,823,979. LAMINATION FOR DYNAMO-ELECTRIC MACHINES. RICHARD H. JORDAN, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1929. Serial No. 360,279. 1 Claim. (Cl. 172—278.)



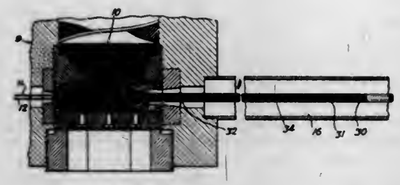
A laminated core structure embodying a plurality of laminations each including a yoke portion, a plurality of pole pieces each having a smaller area of neck portion than the area of the pole face such that the straight sides of the pole pieces are substantially tangential to the cylinder defined by the pole-piece faces and each pole piece being substantially symmetrical relative to a radial line centrally therethrough, each pole piece having a slot therein parallel to the adjacent straight side, and a shading coil of resilient metal frictionally gripping the edges of the pole portion enclosed thereby.

1,823,980. STEERING WHEEL. ENOCH KARRER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 22, 1928. Serial No. 327,946. 5 Claims. (Cl. 74—33.)



1. A steering wheel comprising a body structure of molded material, and an internal reinforcement therein comprising a laminated structure composed of a single piece of material.

1,823,981. METHOD OF HANDLING STRAND MATERIAL. LESLIE FAWCETT LAMPLOUGH, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1929. Serial No. 353,043. 9 Claims. (Cl. 18—13.)

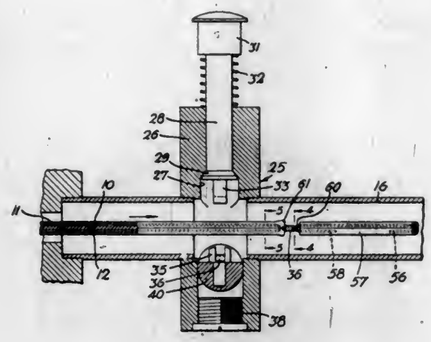


1. A method of handling strand material, comprising continuously advancing a pair of strands in parallel relation, applying a common covering to the strands during such advancement, advancing a third strand in longitudinally spaced relation to one of said pair of strands, connecting to the forward end of said third strand a length of strand material of less rigidity than the third strand, and connecting said length of strand material to one of said pair of strands by means of the covering material.

1,823,982. METHOD OF AND APPARATUS FOR HANDLING STRAND MATERIAL. JOSEPH EVERETT LODGE, Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1929. Serial No. 353,041. 10 Claims. (Cl. 18—13.)

7. A device for handling coated wires, comprising a container for a gas under pressure, means for moving a plurality of coated wires through said container, and

means for securing some of said strands together during their movement through said container, said last men-



tioned means comprising a member projecting into the container and maintaining during its operation a seal against the escape of the gas.

1,823,983. OXIDATION OF HYDROCARBONS AND EXTRACTION OF THE OXIDIZED PRODUCTS. MARTIN LUTHER, Mannheim, and HANS WILLE, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 19, 1926, Serial No. 130,352, and in Germany Aug. 25, 1925. 3 Claims. (Cl. 260—116.)

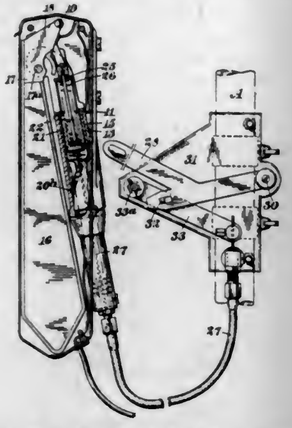
1. In the process of partly oxidizing paraffin hydrocarbons, waxes and related organic materials in the liquid state and returning unattacked initial material to the oxidation, the step which comprises removing the oxidation products by treatment with a solvent selected from the group consisting of methanol and acetone.

1,823,984. CATHODE FOR THERMIONIC DEVICES. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed May 13, 1926. Serial No. 108,961. 2 Claims. (Cl. 250—27.5.)

1. An electron emissive cathode for thermionic devices having a vacuum of the higher order comprising a metallic electrode having a multiple coating consisting of superposed layers containing barium oxide and zirconium oxide, the ratio of the former to that of the latter being maintained substantially between the ratios of three to one and five to one by weight, to afford good adherence to said electrode with a degree of thermionic activity comparable to the activity of barium oxide and a constancy of activity with protracted use of the cathode.

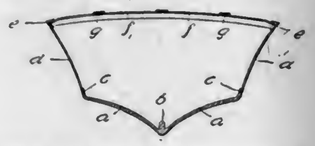
1,823,985. DIRECTION AND MOVEMENT INDICATOR FOR VEHICLES. HUMPHREY RIVERS POLLOCK, London, England, assignor to Robert James Paton, London, England. Filed Jan. 6, 1931, Serial No. 507,016, and in Great Britain Jan. 11, 1930. 14 Claims. (Cl. 116—52.)

1. In a direction and movement indicator having an indicating arm pivotally supported in a base-part and capable of turning about two axes inclined to one another and transverse to the length of the arm and a single control-member, for moving the indicating-arm, the combination of a driving element arranged to reciprocate on the base part, an operative connection between said driving element and the indicating arm, an operative connection between the said driving element and the single control member, and a device associated with the driving element and arranged to constrain the indicating



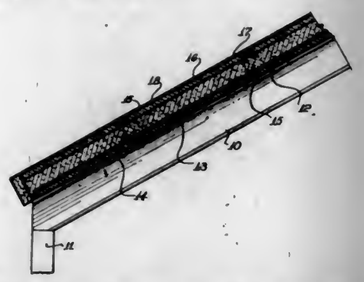
arm to turn first about one axis and then about the other axis if the single control member is moved continuously in one direction.

1,823,986. METAL BOAT. PERCY PRITCHARD, Smethwick, Birmingham, England, assignor of one-half to The Birmingham Aluminium Casting (1903) Company Limited, Smethwick, England. Filed June 29, 1931, Serial No. 547,596, and in Great Britain May 31, 1930. 5 Claims. (Cl. 114—79.)



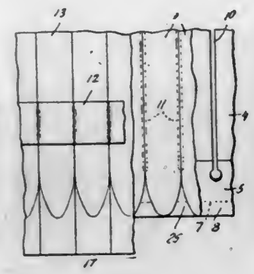
1. Improved metal boat hull comprising in combination a base and keel cast in light metal or light metal alloy and side plates of wrought light metal or light metal alloy secured thereto.

1,823,987. ROOF AND FLOOR CONSTRUCTION. HERBERT W. REEL, Hinsdale, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1929. Serial No. 369,706. 2 Claims. (Cl. 108—6.5.)



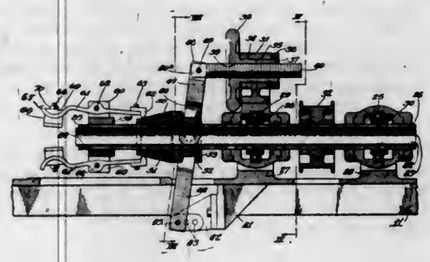
2. The method of forming a roof which comprises pouring a slab of gypsum stucco upon a supporting surface, applying a dry board to said poured slab before the setting of the latter so that a bond is caused between the poured slab and the boards, and applying a bituminous weather and waterproof coating to the upper surface of said board.

1,823,988. DISPLAY DEVICE. RUDOLPH M. SANDERS, New York, N. Y., assignor to Adartcraft, Inc., New York, N. Y., a Corporation of Delaware. Filed June 13, 1930. Serial No. 460,931. 12 Claims. (Cl. 40—126.)



1. A display device comprising a support and an embossed sheet comprising a plurality of spaced embossings representing articles to be displayed, the unembossed portions of the sheet being folded under the surface to dispose said embossings adjacent each other.

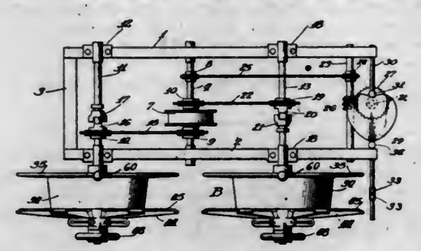
1,823,989. WIRE POLISHING MACHINE. ARTHUR K. SANDERSON, Aurora, Ill., assignor to Love Brothers Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Apr. 12, 1929. Serial No. 354,542. 5 Claims. (Cl. 173—244.)



4. A machine for polishing wire having a coating of wax or the like, said machine including in combination, a rotatable hollow spindle, bearings supporting said spindle arranged to take radial and axial thrusts thereof, a cone movable on said spindle, a hub carried by said spindle positioned adjacent said cone, a pair of axially extending arms mounted pivoted on said hub, said arms being arranged with the inner ends thereof engaging said cone, dies supported at the outer ends of said arms and spaced beyond the delivery end of said spindle, means manually adjustable to move said cone to adjust the distance between said dies while they are rotating, means to rotate said spindle, and removable guide means for the coated wire, said means comprising a sleeve extending through said spindle and removably secured thereto.

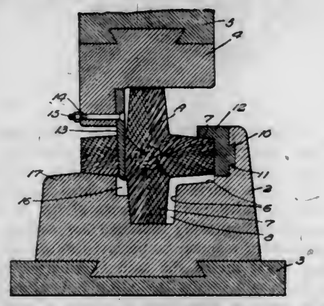
1,823,990. WIRE TAKE OFF MECHANISM. ARTHUR K. SANDERSON, Aurora, Ill., assignor to Love Brothers Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Apr. 12, 1929. Serial No. 354,543. 7 Claims. (Cl. 242—84.)

1. A wire take off mechanism including in combination a plurality of winding spools, means for connecting any one of said spools in winding relation, said spools having a plurality of pivoted fingers for normally forming the front frame of the spools, and sliding cylindrical eccentric hubs on the shafts of said spools for moving said



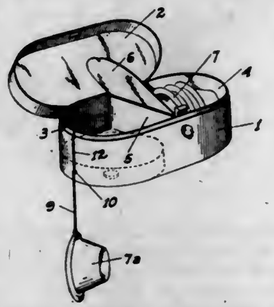
fingers into and out of flange forming position, said hubs having clamping means thereon for locking the same to the spool shafts.

1,823,991. APPARATUS FOR SHEARING FLANGES FROM INGOTS. WILLIAM J. SCHULTZ and ROBERT S. STEVICK, McKeesport, Pa., assignors to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Aug. 20, 1929. Serial No. 387,135. 3 Claims. (Cl. 164—58.)



1. A device for shearing flanges from ingots having a body portion and flanges extending radially therefrom, comprising a supporting die provided with at least one pocket adapted to receive one flange of the ingot and a supporting surface for a second flange, the die pocket providing clearance for the ingot flanges, a wedge slidable relative to the die for securing the ingot in the die, and a pressing head and knife movable relative to the die, the cutting edge of said knife extending axially of the body of the ingot.

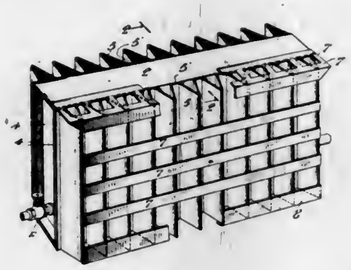
1,823,992. GOLF TEE CONTAINER AND RETRIEVER. RAY S. SMITH, Modesto, Calif. Filed Aug. 17, 1929. Serial No. 386,613. 1 Claim. (Cl. 273—33.)



A golf tee holder comprising an open-topped container, a lid for the same, a spring reel in the container, a cord

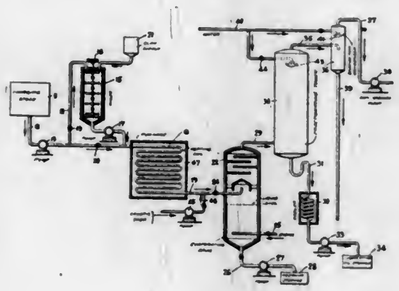
wound on the reel and projecting thence through an opening in the side of the container, a tee on the outer end of the cord, the outer surface of the container having a depression at the top in vertical alignment with the opening to receive the portion of the cord adjacent the tee when the latter is placed in the container and prevent pinching of the cord by the lid when the latter is in a closed position.

1,823,993. SHEET METAL RADIATOR. GEORGE I. STANFORD, Milford, Conn., assignor to The Universal Pipe and Radiator Company, New York, N. Y., a Corporation of Maryland. Filed Jan. 31, 1930. Serial No. 424,842. 3 Claims. (Cl. 257—141.)



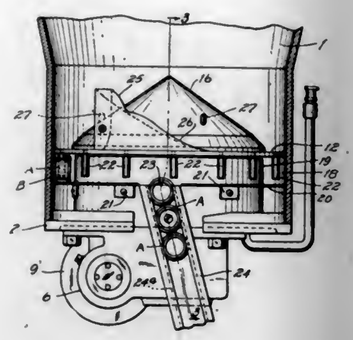
2. A radiator comprising a heat or steam chamber constructed from sheet metal, heat-radiating corrugated sheet metal formed with flattened faces secured directly against the outer surface of the sheet metal body, combined with a multiplicity of cross strips of sheet metal spaced apart and suitably fastened across the outer bends of the corrugated member to permit the use of exceedingly light gage sheet metal for said corrugated member, the upper one of said strips including a portion turning inwardly and secured directly to the edge of said corrugated sheet metal member to secure further rigidity.

1,823,994. TREATING HYDROCARBON OIL. WILLIAM M. STRATFORD, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 13, 1928. Serial No. 246,423. 4 Claims. (Cl. 196—79.)



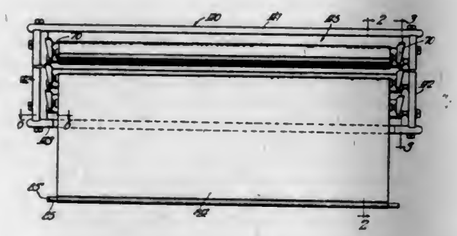
4. The process of treating and purifying hydrocarbon lubricating oil which comprises treating the oil with sulfuric acid and then distilling under vacuum without substantial decomposition in the presence of an alkali and an adsorbent decolorizing material which is most efficient at temperatures in excess of about 250° F., whereby the purified lubricating oil is collected as a distillate.

1,823,995. AUTOMATIC FEED DEVICE. RAY D. STREBY, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 22, 1928. Serial No. 327,910. 9 Claims. (Cl. 198—33.)



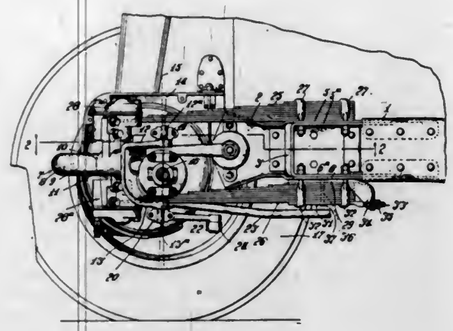
1. An automatic feed device comprising a receptacle for containing a promiscuous mass of articles, a movable bottom plate for said receptacle, said bottom plate being provided with a series of openings that are shaped to permit said articles to drop therethrough only in one position, a way located beneath said openings in position to receive articles which drop therethrough, said way being spaced far enough below said movable bottom plate to bring the tops of the articles deposited on said way below said movable bottom plate, a discharge chute communicating with said way, and means on the underside of said movable bottom plate for moving the articles along said way to said discharge chute.

1,823,996. APPARATUS FOR MAP DISPLAY AND PRESERVATION. FRANK H. SWANSON, Chicago, Ill., assignor to A. J. Nystrom & Co., a Corporation of Illinois. Filed Oct. 7, 1927. Serial No. 224,651. 13 Claims. (Cl. 40—83.)



1. In a map cabinet of the character described, a supporting frame structure including a pair of side members adapted to cooperate with the ends of a map unit, a mounting member for the map unit connected to one of said side members, said mounting member having a slot for receiving a portion of said map unit, and gravity impelled reciprocable drop latch means associated with said slot for retaining the portion of said unit in the mounting member against accidental displacement.

1,823,997. AUTOMOBILE CONSTRUCTION. CORNELIUS W. VAN RANST, Auburn, Ind., assignor to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1929. Serial No. 398,878. 10 Claims. (Cl. 280—106.5.)



1. An automobile embodying therein a frame, an axle, top and bottom springs carried by the frame and operatively connected to the axle, wheel steering spindles carried by the axle, and means operable through one of the springs for adjustably positioning the axes of the wheel steering spindles.

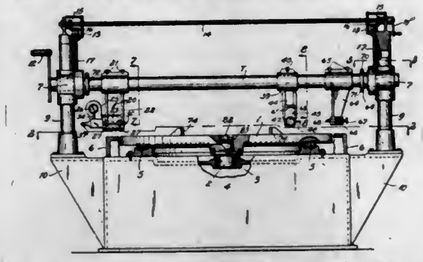
1,823,998. PLASTER BOARD BUILDING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed May 6, 1930. Serial No. 450,093. 1 Claim. (Cl. 72—42.)



In combination, a plaster board having permanently secured thereto prior to erection a precast slab which slab is secured centrally of the plaster board so as to leave a marginal unattached portion of said slab, and means including clips for coupling together a plurality of said articles in erected position.

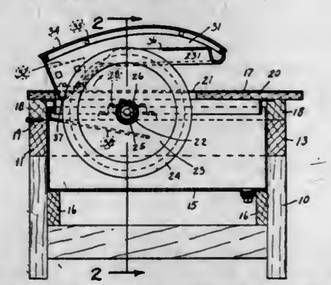
1,823,999. GAUGING MACHINE. HOWARD L. VINE, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed June 30, 1928. Serial No. 289,898. 17 Claims. (Cl. 33—147.)

1. A machine for determining the diameter, circularity and concentricity of the inside and outside walls of an annular article, said machine comprising a table for rotatably supporting said article, gauging devices located above said table in position to engage the inside and outside walls, respectively, of said article at diametrically opposite points, a gauging device located above said table



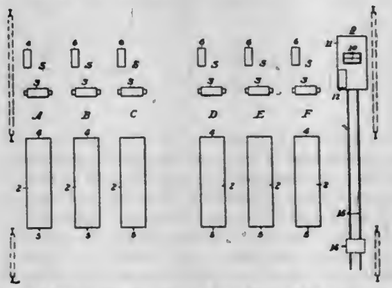
and adapted to engage the inside wall of said article, means whereby said gauging devices are adapted for independent movement radially of said table, and means for raising and lowering said gauging devices with respect to said table.

1,824,000. TILE CUTTING MACHINE. OTTO WALTER, Perrysville, Ind. Filed June 27, 1930. Serial No. 464,235. 4 Claims. (Cl. 125—13.)



2. A machine of the kind described having a slotted table, a rotary cutter with its upper portion projecting through said slot in the table, a water tank in which the lower part of the cutter projects, a guard for the upper portion of the cutter which is secured on the table and has a trough adjacent to each side of the cutter slot to receive the water thrown up into the guard by the cutter, and an outlet at the rear end of the guard through which all the water in the guard flows by gravity rearward and is discharged into the said water tank.

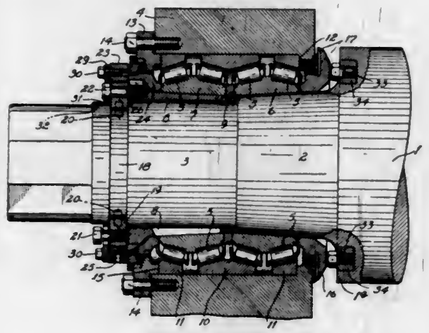
1,824,001. METHOD AND APPARATUS FOR ROLLING SHEETS. RAYMOND J. WEAN, Warren, Ohio, assignor to The Wean Engineering Company, Incorporated, Warren, Ohio, a Corporation of Ohio. Filed Oct. 31, 1929. Serial No. 403,740. 7 Claims. (Cl. 29—18.)



7. In the method of rolling sheets, the steps comprising collecting sheets as rolled by a plurality of different units,

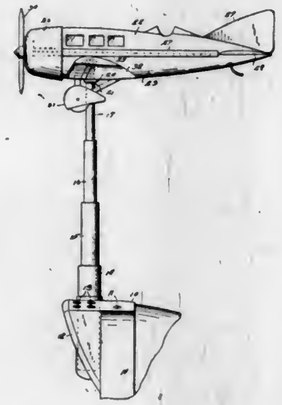
conveying said sheets to a common point, maintaining a reserve at such point, drawing from said reserve as required and doubling the sheets, and thereafter distributing the sheets to any of said rolling units.

1,824,002. ROLLER BEARING CONSTRUCTION. SAMSON M. WECKSTEIN, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 7, 1929. Serial No. 390,912. 5 Claims. (Cl. 308—207.)



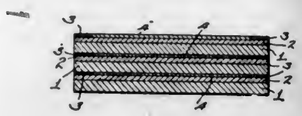
1. A rolling mill roll having a reduced neck portion forming a shoulder adjacent to one end of said roll, a roller bearing comprising an inner raceway member fitting tight on said reduced neck portion, and means mounted in the shoulder portion of said roll for loosening said inner raceway member on said mill roll.

1,824,003. AIRPLANE ORNAMENT FOR MOTOR CARS. KENNETH W. WILSON, St. Louis, Mich. Filed May 27, 1930. Serial No. 456,225. 3 Claims. (Cl. 46—14.)



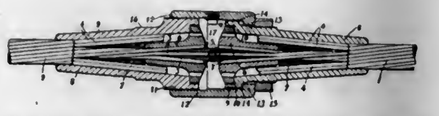
1. A motor car ornament of the character described, comprising a base, a socket section mounted upon the base, a plurality of telescopic sections, the last of said sections having telescopic engagement with the socket section, a miniature airplane mounted upon the uppermost section and having laterally projecting upwardly and forwardly inclined wings, the lower end of each telescopic section and the upper end of the adjacent telescopic section having stops limiting the upward movement of adjacent sections relative to each other.

1,824,004. ALTERNATING CURRENT RECTIFIER. SAMUEL J. M. ALLEN, Cincinnati, Ohio. Filed Mar. 24, 1927. Serial No. 178,186. 8 Claims. (Cl. 175—366.)



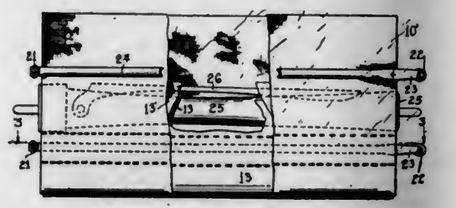
5. An alternating current rectifier, comprising, a plate of copper having a coating of red copper oxide thereon, a layer of reduced copper on the central portion of the red copper oxide coating to provide electrical contact, and a layer of black copper oxide on the coating of red copper oxide about the margin of the plate.

1,824,005. CONNECTING DEVICE FOR USE WITH STRANDED METAL CABLES. JOHN WILLIAM ASTLEY, Prescot, England, assignor to British Insulated Cables Limited, Prescot, England, a British Company. Filed Apr. 2, 1930, Serial No. 440,983, and in Great Britain May 22, 1929. 3 Claims. (Cl. 24—126.)



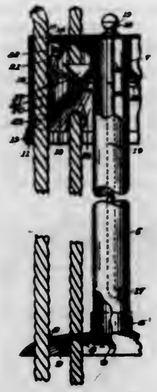
3. A device for connecting an end of a length of cable, comprising an outer group of wires and a core consisting of an inner group of wires or a single central wire, to another member, said device comprising an inner clamping cone for the core, an outer clamping cone for the core having a flange laterally extending from its end of greater diameter, an inner clamping cone for the outer group of wires, an outer clamping cone for said group, said outer clamping cone having a conical extension, which surrounds the outer cone for the core and which has at its end of greater diameter a seating to receive the flange on that outer cone, and a sleeve engaging the extension of the outer conical member for the outer group of wires and connecting said cable end to the other member.

1,824,006. SHIELD FOR HAIR CURLERS. GEORGE EDWARD BJORKMAN, Djursholm, Sweden. Filed Dec. 7, 1929. Serial No. 412,323. 6 Claims. (Cl. 132—361.)



1. A shield for hair curlers comprising a plurality of strips of impregnated material, said strips being folded over to form long and short sections, and padding sections formed similarly of long and short sections, disposed between the long and short sections of each of said impregnated strips, hems formed adjacent the point of folding of the strips and the padding, the upper hem of each strip being adapted to have passed therethrough an arm of a clip, the lower hem of each strip being adapted to form a protective pad for the head.

1,824,007. ROPE DISPENSER. FRED BRINNER, Mason City, Ill. Filed May 10, 1929. Serial No. 362,015. 6 Claims. (Cl. 33—127.)



6. In a rope dispenser the combination of a column, a head portion surrounding the upper end of the column and having rope passages therethrough spaced around the column, rope gripping means associated with each passage, a rope measuring device mounted adjacent the upper end of the column and normally occupying a position withing the column but movable to extended position and to any point around the head portion and provided with graduations for measuring in pre-determined units.

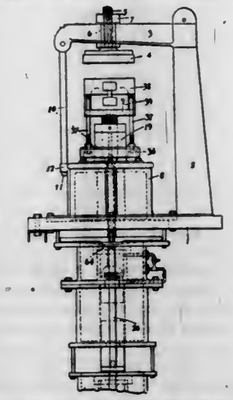
1,824,008. GARTER. JOHN H. BROUSSEAU, New York, N. Y. Filed Feb. 15, 1930. Serial No. 428,089. 3 Claims. (Cl. 241—6.)



1. A garter comprising a strap, a garment clasp at each end of the strap, each clasp including a garment securing member and means for directly attaching one of said clasps to the clasp at the opposite end of the strap by the use of said garment securing member.

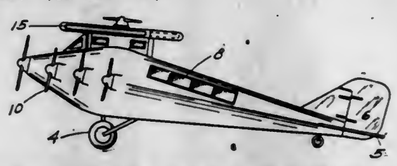
1,824,009. FOUNDRY MOLDING MACHINE. THOMAS WOODWARD BULLOCK, Rainhill, England, assignor to British Insulated Cables Limited, Prescot, England, a British Company. Filed Sept. 14, 1929, Serial No. 392,510, and in Great Britain Oct. 1, 1928. 6 Claims. (Cl. 22—25.)

1. A foundry molding machine in which the sand is consolidated by directly applied pressure, comprising two relatively movable members adapted to apply pressure to a mould placed between them and means for imparting pressure and relative movement to said members at an



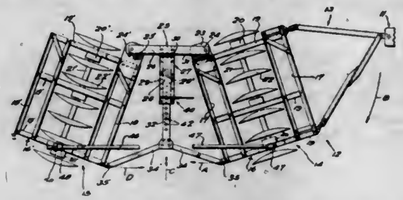
automatically controlled rate, said means comprising an electro-magnetic device and a fluid friction braking device operatively associated together.

1,824,010. AIRCRAFT. GIACOMO CARTASSO, Oakland, Calif. Filed Feb. 25, 1930. Serial No. 431,070. 1 Claim. (Cl. 244—14.)



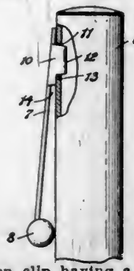
A helicopter aeroplane provided with a fuselage of substantially equi-lateral triangular form in plan, the apex constituting the tail, and a plurality of forwardly stepped motor housings extending forwardly from the base thereof, a cross-section of said fuselage being of substantially diamond form, tapering uniformly forwardly and rearwardly, and a wing structure adapted to receive heated air from said fuselage, and openings in the tips of said wings for escape of said heated air.

1,824,011. OFFSET DISK HARROW. EDWARD M. ENZENAUER, Maywood, and ROLLIE H. MITCHELL, Huntington Park, Calif., assignors to Killefer Manufacturing Corporation, a Corporation of California. Filed Apr. 22, 1930. Serial No. 446,287. 16 Claims. (Cl. 55—83.)



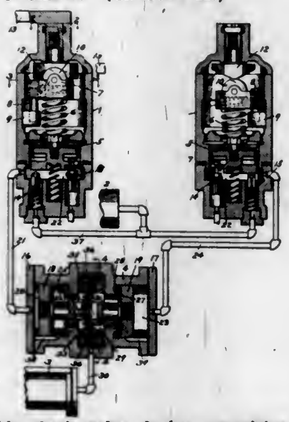
1. A disk harrow embodying the combination of: a front gang and a rear gang arranged in tandem relation; draft means on the front gang; a rigid connection pivotally attached to one side of the front gang and to the corresponding side of the rear gang; and expansible connection interposed between the opposite side of the front gang and the correspondingly opposite side of the rear gang; and means for holding said rear gang against bodily movement laterally of said front gang.

1,824,012. FOUNTAIN PEN CLIP. HARRY ESTEROW, New York, N. Y. Filed June 25, 1931. Serial No. 546,737. 3 Claims. (Cl. 24—11.)



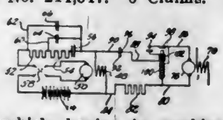
2. A fountain pen clip having a body portion, integral members formed thereon and extending rearwardly therefrom, said members having shoulder portions adapted to abut against the outer face of a fountain pen cap and hold a part of the body portion of the clip spaced therefrom, said members also being provided with tongue portions which pass through the fountain pen cap and are bent over within the same to hold the clip in position thereon.

1,824,013. DOUBLE CHECK VALVE DEVICE. ELLERY R. FITCH, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1930. Serial No. 476,783. 5 Claims. (Cl. 303—41.)



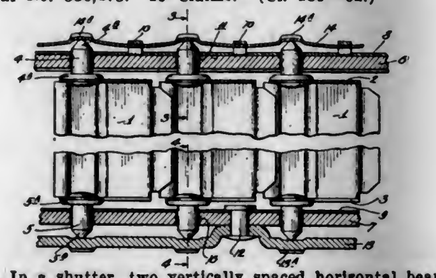
1. A double check valve device comprising connected valve heads movable in one direction by fluid under pressure and movable in the opposite direction by fluid under pressure and a yielding resistance device for initially opposing movement of said valve heads in either direction of movement.

1,824,014. DRIVING MECHANISM FOR MOTOR VEHICLES. OSCAR E. H. FROELICH, Queens Village, N. Y., assignor to Ward Motor Vehicle Company, Mount Vernon, N. Y., a Corporation of New York. Filed Aug. 22, 1927. Serial No. 214,547. 6 Claims. (Cl. 290—16.)



1. A motor vehicle having in combination a vehicle body, wheels therefor, a storage battery, an electric vehicle driving motor operated by current supplied by said battery, a hydrocarbon motor, driving connections between said motors and certain of the vehicle wheels for driving the vehicle from both said motors simultaneously, means controlled automatically in accordance with the speed of the vehicle for converting the electric motor into a generator to charge the battery when the speed of the vehicle rises above a predetermined speed and for restoring the electric motor to its normal motor operation when the speed of the vehicle falls below a predetermined speed, and mechanism for throwing said means into and out of operation independently of the electric motor.

1,824,015. MOUNTING FOR RADIATOR SHUTTER BLADES. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 11, 1931. Serial No. 536,473. 19 Claims. (Cl. 189—62.)



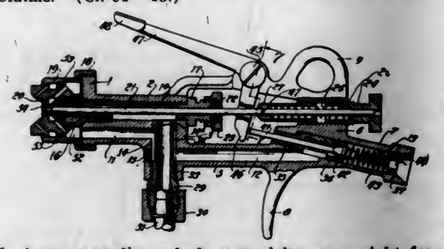
1. In a shutter, two vertically spaced horizontal bearing bars provided with alined bores, upright shutter blade members each including two pivot pins extending respectively through alined bores in the said bars, and two means respectively supported by the two bearing bars and each engaging the tips of the pivot pins which extend through the adjacent bearing bar, one of the said means being fast with respect to the bearing bar adjacent thereto, and the other having its pin engaging portions continuously pressed toward the last named bearing bar.

1,824,016. PROPULSION MECHANISM. EDWARD W. HALL, Portland, Oreg. Filed Aug. 11, 1930. Serial No. 474,421. 5 Claims. (Cl. 115—63.)



1. The combination with a boat having an endless propeller mechanism operating below the bottom of the boat, of a bottom portion of the boat forward of the mechanism having an inclination upwardly toward the stern of the boat, and a down turned lip at the aft edge of said bottom portion.

1,824,017. TOUCH-UP SPRAY GUN. WILLIAM HERSLEB and SVEND BRAMSEN, Chicago, Ill., assignor to Binks Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 18, 1929. Serial No. 379,098. 6 Claims. (Cl. 91—45.)



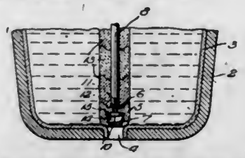
1. A spray appliance body comprising an upright frame including end members and longitudinal members, a neck extending forwardly from the forward end frame member above the bottom of the latter, and a tail extending from the lower portion of the rear end member of the frame;

the body having a rear bore extending through the said tail and through an adjacent member of the frame into the space bordered by the frame members, a lower bore extending upwardly into the forward end member, and a longitudinal passage extending within the lower longitudinal frame member and connecting the rear bore with the lower bore; the neck having a passage leading from the said longitudinal passage to the forward end of the neck.

1,824,018. MEDICINAL PREPARATION. WILLIAM J. HORN, Bridgeport, Conn., assignor, by mesne assignments, to McKesson & Robbins, Inc., Bridgeport, Conn., a Corporation of Connecticut. Filed June 30, 1930. Serial No. 465,060. 4 Claims. (Cl. 167—68.)

1. A medicinal preparation for the treatment of anemia comprising as its principal ingredients a proteid of iron and a proteid of copper.

1,824,019. LADLE STOPPER CONSTRUCTION. ARTHUR J. JACKSON, Forest Hills Borough, Pa., assignor to Vesuvius Crucible Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 2, 1929. Serial No. 396,749. 10 Claims. (Cl. 22—85.)

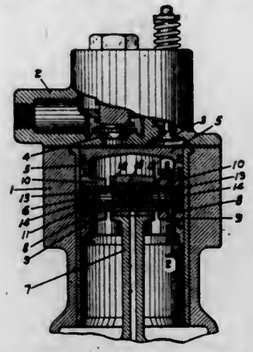


7. A ladle stopper construction, comprising a stopper having a cavity increasing in size from the surface of the stopper inwardly, a rod connected with the stopper and terminating within the cavity, and a protective member capable of entering the cavity in one position but adapted to be turned after entering so as to be maintained in place therein.

1,824,020. METHOD OF PRODUCING RESIN ESTERS. ALAN C. JOHNSTON, Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 12, 1928. Serial No. 269,611. 29 Claims. (Cl. 260—98.)

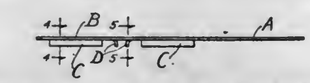
1. The method of producing a resin acid ester which includes heating a resin acid with a chlorohydrin and an alkali in the presence of a solvent for the chlorohydrin and alkali.

1,824,021. WRIST PIN LOCKING MECHANISM. ANTON K. KUSEBAUCH, Bellevue, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 20, 1930. Serial No. 453,882. 4 Claims. (Cl. 74—108.)



1. The combination with a piston, of a wrist pin mounted therein, a pin for securing said wrist pin to the piston, means contained in said wrist pin for retaining said securing pin in its securing position, and a spring for maintaining said means in its pin retaining position.

1,824,022. KNIFE. CHANDLEY WILLIAM LAMBERT, Cleveland, Ohio. Filed Mar. 10, 1930. Serial No. 434,765. 1 Claim. (Cl. 30—9.)



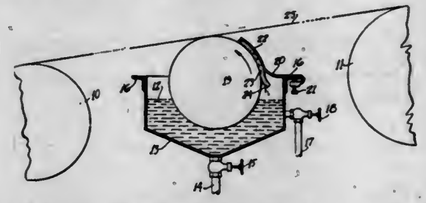
A knife tang for use with a plastic handle, said tang having two longitudinal H shaped cuts and a central transverse H shaped cut, the flanges of said H shaped cuts being pressed outwardly at an angle to the face of said tang, said tang and said flanges forming bearing surfaces for the reception of the plastic material of said plastic handle, said bearing surfaces being so disposed as to prevent shearing of said plastic handle by said tang.

1,824,023. LEVELING ROD. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 29, 1927. Serial No. 216,306. 14 Claims. (Cl. 287—58.)



1. An extension leveling rod comprising a lower section, an upper section, means for slidably holding said sections in assembled relation so that the upper section may be moved to extreme outwardly extended position, and cooperating means carried by said holding means and one of said sections for automatically locking said sections in such extended positions, said co-operating means comprising a pin and a spring latch member adapted to snap over said pin and to interlock therewith when the parts reach extended position.

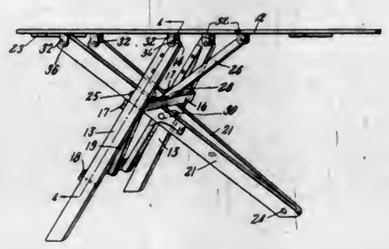
1,824,024. METHOD OF TREATING PAPER. LOUIS L. LEADBETTER, Portland, Oreg. Filed Oct. 2, 1928. Serial No. 309,813. 1 Claim. (Cl. 91—68.)



A method of treating paper consisting of progressively forming said paper into a continuous web, then oiling

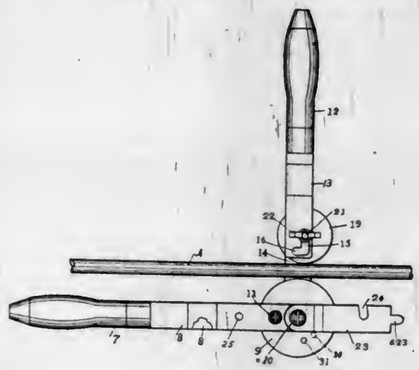
the entire surface of said paper except the edges thereof, then forming said web into a roll, and then trimming the unoiled edges from said roll.

1,824,025. FOLDABLE IRONING TABLE. GEORGE W. LEWIS, Berlin, Mass. Filed Nov. 3, 1930. Serial No. 493,039. 2 Claims. (Cl. 68—10.)



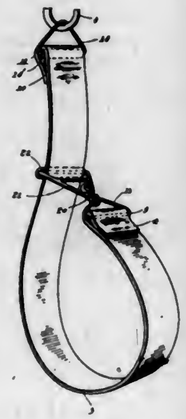
1. A foldable ironing table, comprising a board, a wide leg, and a narrow leg, said legs being crossed when the table is erected and adapted to swing relative to each other and to the board to erect and fold the table, the wide leg including two spaced apart longitudinal members, hinged at their inner ends to the midlength portion of the board and having outer ends adapted to bear at spaced apart points on a floor, a transverse holding bar fixed to the outer end portions of said members, and inclined confining bars fixed to the longitudinal members and to the holding bar, and oppositely inclined so that they form opposite sides of a tapering space, the narrow leg being V-shaped and including two longitudinal members spaced apart and hinged to the forward end portion of the board at their inner ends and converging therefrom to their outer ends to bear on a floor and constitute a wedge which extends between and is in wedging contact with the inclined confining bars of the wide leg when the table is erected, so that the legs laterally brace each other, the table being provided with confining means resisting downward pressure on the board and preventing folding movements of the legs when the table is erected.

1,824,026. TUBE AND PIPE BENDER. BERT R. LITTLE, Bellingham, Wash. Filed May 13, 1930. Serial No. 451,957. 2 Claims. (Cl. 81—15.)



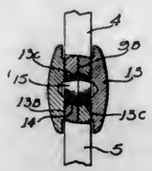
1. A tube and pipe bender including a former block having a grooved arcuate edge, a former arm fastened to the former block, a bender arm, a bifurcated shank on the bender arm pivoted to the former block concentric with the arcuate edge thereof for oscillation, a grooved bender roll mounted for revolution on the bender arm shank between the members thereof in operative proximity to the arcuate edge of the former block, a means providing for withdrawing the bender roll from close proximity to the former block, a latch included in one member of the bifurcated shank of the bender arm adapted to be opened to permit the admission of a tube laterally between the members of said bifurcated shank thereof, and means to retain the tube in operative position in the bender.

1,824,027. HOISTING SLING. ALARIK LUNDQUIST, Portland, Oreg. Filed Aug. 1, 1930. Serial No. 472,304. 2 Claims. (Cl. 294—74.)



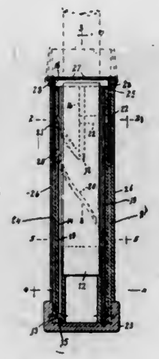
1. A hoisting sling comprising a flexible belt; metal loops secured to the ends of said belt; and a loop slidable on the body of said belt, and having a hook detachably engaging the loop on one end of said belt.

1,824,028. KNUCKLE JOINT MEANS. ROBERT W. MILLER, Cortland, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed June 11, 1929. Serial No. 370,024. 5 Claims. (Cl. 287—101.)



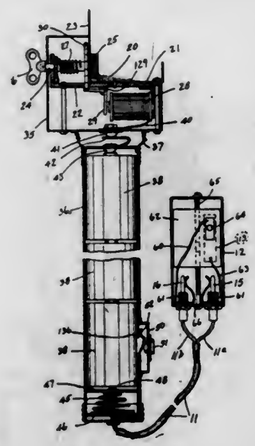
5. Jointed brace means comprising a pair of relatively movable shanks respectively equipt with apertured bosses, tubular pintle means interconnecting said bosses, said pintle having an interior cavity that is radially undercut with respect to the end openings thereof, a separate trimplate for each pintle end, each such plate being provided with expansible plug means adapted to enter the respective end openings, and a common wedge means interposed between and serving to expand both of said plugs into the pintle cavity.

1,824,029. CONTAINER. LUCIFER J. MOST and RALPH W. WILSON, New York, N. Y. Filed May 9, 1928. Serial No. 276,210. 14 Claims. (Cl. 206—56.)



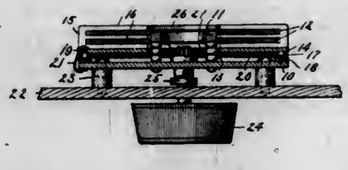
13. A container having a cover, a carrier for material movable to and from the cover, and a member revoluble on the container including means for operating the carrier and the cover when the member is revolved.

1,824,030. SIMULTANEOUS CAMERA EXPOSURE AND FLASH. HARRY E. ARMSTEAD, Indianapolis, Ind. Filed Oct. 6, 1928. Serial No. 310,701. 6 Claims. (Cl. 67—29.)



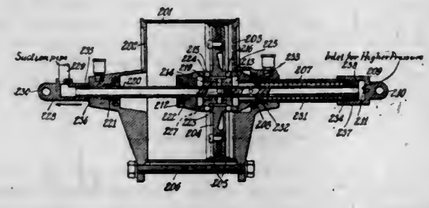
2. Independent portable flash light apparatus for a photographic camera having shutter releasing means, including means for causing the flash, electrical means for releasing the means for causing the flash, said electrical means having circuit wires, a switch mechanism adapted to be secured to the camera and with which said wires may be temporarily connected and having a circuit closing switch member, and means in said switch mechanism for adjusting the position of said circuit closing switch member with respect to the shutter releasing means, so that it can be operated and the circuit closed automatically by the camera at the instant of the releasing of the shutter while taking the photograph, substantially as set forth

1,824,031. VARIABLE CONDENSER. WILSON AULL, Jr., Astoria, N. Y. Filed Nov. 19, 1928. Serial No. 320,337. 4 Claims. (Cl. 175—41.5.)



3. A variable electrostatic condenser comprising a support, a fixed stator having circumferentially spaced insulators connected to the support, a rotor having an annular metallic bearing at its edge and coacting with said support and means for yieldingly holding the rotor bearings in place.

1,824,032. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Original application filed Apr. 16, 1925, Serial No. 23,459. Divided and this application filed Nov. 13, 1926, Serial No. 148,157. Renewed Jan. 7, 1929. 17 Claims. (Cl. 121—41.)

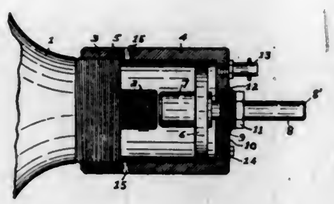


1. In a power actuator, the combination of a cylinder closed at both ends, a double acting piston in said cylinder provided with a cylindrical valve chamber, and with ports connecting said valve chamber with the end portions of the cylinder on both sides of the piston, a reversing piston valve in said valve chamber, provided with cylindrical valve portions, adapted to be brought into registration with said ports and having an outlet chamber intermediate said cylindrical valve portions, said outlet chamber adapted to be brought into substantial registration with the ports for one or other of the end portions of the cylinder, means for connecting the piston with a part to be actuated, a valve sleeve extending through one end of the cylinder, and connected with said valve for operating the same, the interior of said sleeve being in communication with the said outlet chamber of the reversing valve, said sleeve being provided with means for connecting it to an operator operated part, means for connecting the interior of said sleeve with a lower pressure outlet, and means for admitting higher pressure fluid to the end portions of the valve chamber, adjacent to the opposite ends of said reversing piston valve, the cylindrical valve portions and outlet chamber of said valve being so located with respect to the piston ports as to place the piston ports on opposite sides of the piston in communication with each other and with said outlet chamber, when the valve is in neutral position.

1,824,033. WHEEL PULLER. REXFORD B. BRENNEMAN and WILLIAM H. MONAGHAN, Pittsburgh, Pa. Filed June 11, 1929. Serial No. 369,967. 1 Claim. (Cl. 29—86.)

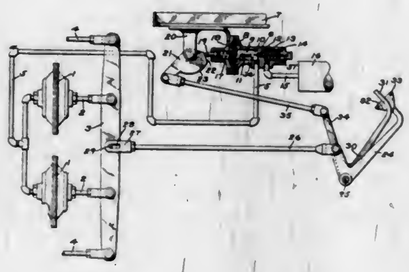
In combination, a fluid operated wheel puller comprising a cylindrical hollow body portion, an end wall closing the

outer end of said body portion, said body portion having an internally threaded inner end for threadedly connecting said body portion to the wheel hub, a piston shiftably mounted in said body portion, a push bar being formed integral with and disposed at the axial center of the inner side of said piston for engaging the outer end of the wheel axle, the diameter of said push bar being less than the diameter of the outer end of the wheel axle, a guide stem being formed integral with and disposed at the axial center of the outer side of said piston and projecting through said end walls, an automatically operable fluid inlet valve being



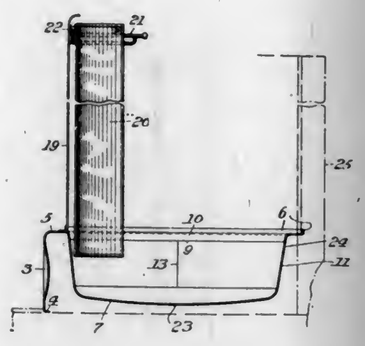
mounted in said end wall and communicating with the interior of said hollow body portion, said body portion being formed with air vents disposed adjacent to the inner end thereof, said air vents constituting wrench holes facilitating the connection of said body portion to and the release of the latter from the wheel hub, means carried by said end wall for draining the fluid from said body portion, and a shoulder being formed on the inner end of said guide stem for preventing the engagement of said piston with said end wall, substantially as described and for the purpose set forth.

1,824,034. AUTOMOTIVE BRAKE. WILLIAM M. CADY, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 6, 1929. Serial No. 344,817. 1 Claim. (Cl. 188—152.)



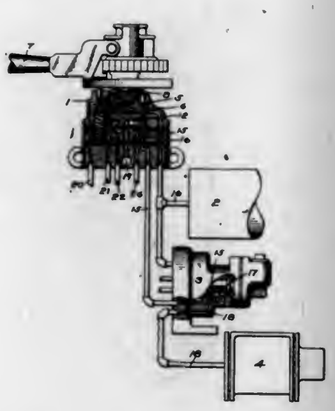
In an automotive brake system, the combination with a fluid pressure brake including controlling valve means, of a foot operated lever mechanically connected to operate the brakes by foot power, a foot operated lever having a movement relative to the mechanical foot lever for operating said valve means, the mechanical foot lever being arranged to be operated by the continued movement of the foot in operating the levers which controls the valve means, a substantially rigid operating conection between said valve means and said foot operated lever, and means associated with said connection for preventing further movement of said valve means upon movement of the foot operated lever with said mechanical foot lever.

1,824,035. SHOWER BATHTUB. JOHN C. CROMWELL, Alliance, Ohio, assignor to The Steel Sanitary Company, Alliance, Ohio, a Corporation of Ohio. Filed June 13, 1928. Serial No. 284,963. 4 Claims. (Cl. 4—145.)



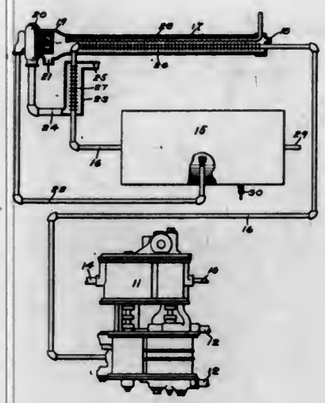
1. A corner tub comprising a sheet metal blank of substantially the shape of the quadrant of a circle having an opening therein and spaced integral legs, a sheet metal bottom and an independently formed sheet metal side wall connecting said bottom to the blank at the edge of the opening.

1,824,036. BRAKE VALVE DEVICE. JOSEPH M. DAPRON, St. Louis, Mo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 3, 1929. Serial No. 367,955. 2 Claims. (Cl. 303—52.)



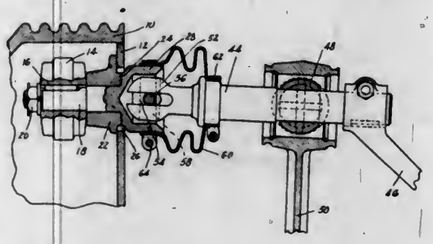
1. In a fluid pressure brake, the combination with a brake valve device comprising a casing having a seat for a rotary valve, of a rotary valve in said casing having a cavity which varies in width throughout its length and through which fluid under pressure flows to effect an application of the brakes, and having two ports through which fluid under pressure is supplied to said cavity, one of said ports leading into said cavity at its narrowest portion and the other leading into the cavity at a wider portion, said rotary valve and valve seat cooperating to vary the rate of the flow of fluid from said cavity as said rotary valve is operated to effect an application of the brakes.

1,824,037. AIR PURIFIER. WILLIAM E. DEAN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 6, 1928. Serial No. 324,291. 4 Claims. (Cl. 62—136.)



1. An apparatus of the character described comprising a reservoir, an air compressor, a pipe connecting the reservoir and compressor, a casing enclosing a section of the pipe, and a fan actuated by air supplied from the reservoir for circulating a cooling fluid through the casing.

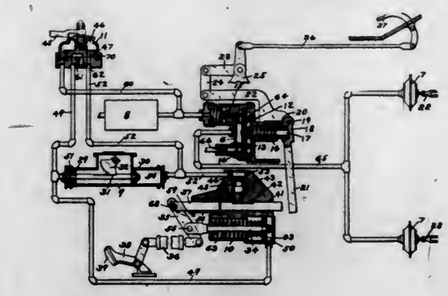
1,824,038. BRAKE-OPERATING MEANS. ADIEL Y. DODGE and ROY S. SANFORD, South Bend, Ind., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 2, 1928. Serial No. 289,818. 3 Claims. (Cl. 188—194.)



1. Brake-operating means comprising, in combination with a backing plate, a supporting bracket engaging one face of said plate, a camshaft journaled in said bracket and having an enlarged hollow head at its end projecting through an opening in the backing plate and resting against the backing plate side of said bracket, an operating shaft having an enlarged end inside of the hollow head in spaced relation to the side walls thereof and formed with a cross slot extending through said end and provided with a connector pivot at right angles to said slot, and a connecting pin held at its ends by the sides of the hollow head and received in said slot and passing through said pivot.

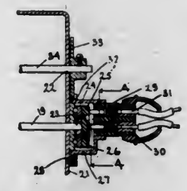
1,824,039. VARIABLE LOAD BRAKE. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 20, 1929. Serial No. 356,829. 17 Claims. (Cl. 303—22.)

1. In a load regulated brake for vehicles, the combination with a brake chamber, valve means subject on one side to the pressure of a spring and on the opposite side to fluid pressure, for regulating the fluid under pressure supplied to the brake chamber, means for compressing said spring to operate the valve means so as to supply fluid



under pressure to the brake chamber, and means for limiting the compression of said valve spring according to the load on the vehicle.

1,824,040. TIME CONTROLLED SWITCH. HUGH W. DRIFTMEYER, Boston, Mass. Filed Mar. 24, 1928. Serial No. 264,486. 6 Claims. (Cl. 200—36.)



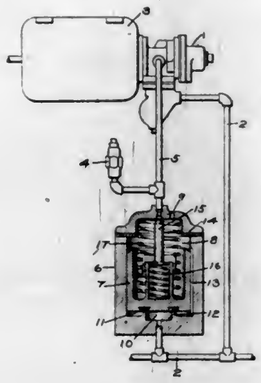
3. In a time controlled switch having a switch member rotatably coordinated with, and in fixed relation to timing mechanism, a terminal holder concentrically adjustable in relation to the axis of the switch member, an indicator, and operative connections between the terminal holder and the indicator through which movement of the indicator is transmitted to rotate the terminal holder to adjust the angular relation of the terminals and the switch member, the combination therewith of a pair of insulated terminals mounted in the holder, one in operative engagement with the switch member, the other adapted to be engaged thereby as it is rotated by the timing mechanism, as and for the purpose described.

1,824,041. FLEXIBLE HARD SURFACED FLOOR COVERING. JOHN EMIG, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed May 7, 1929. Serial No. 361,076. 4 Claims. (Cl. 154—49.)



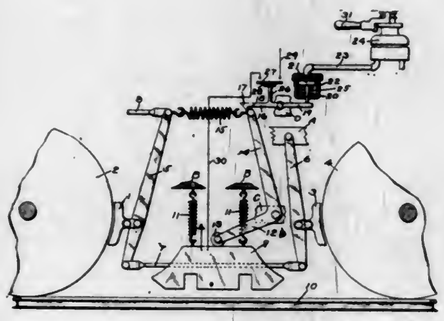
1. As a new article of manufacture, a flexible hard surfaced floor covering comprising a backing having pattern elements thereon, there being design elements overlying the pattern elements.

1,824,042. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 4, 1926. Serial No. 139,275. 2 Claims. (Cl. 303—77.)



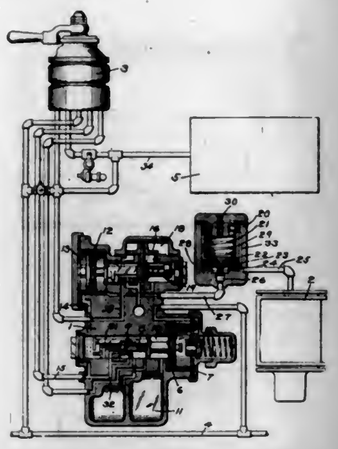
1. In a fluid pressure brake, the combination with a brake cylinder and brake pipe, of a valve device comprising a valve for controlling communication from the brake cylinder to an atmospheric exhaust port, a piston for operating said valve having a seated position in which only a restricted area of said piston is exposed to brake pipe pressure, and a spring opposing brake pipe pressure on said piston, the outer seated area of said piston being connected to the atmosphere through a passage controlled by the movement of the piston.

1,824,043. MAGNETIC BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1928. Serial No. 257,164. 6 Claims. (Cl. 303—3.)



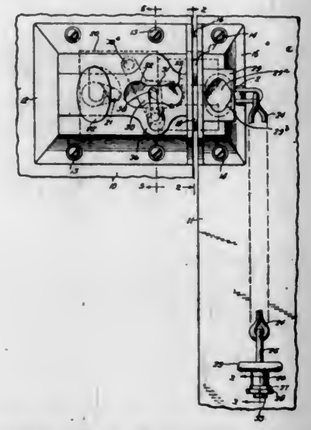
1. The combination with a fluid pressure brake and a magnetic brake shoe normally held suspended above the rail, of mechanism operated upon applying the fluid pressure brake for shifting the magnetic brake shoe to engagement with the rail, means for locking said mechanism against operation, and means operated upon applying the brakes for releasing said locking means to permit said mechanism to operate.

1,824,044. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1929. Serial No. 351,838. 5 Claims. (Cl. 303—40.)



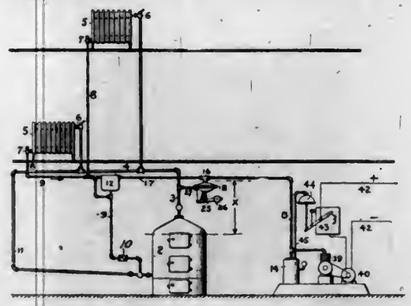
1. In a locomotive fluid pressure brake equipment, the combination with a brake cylinder, of means for effecting an emergency application of the brakes and means only on the locomotive for initially supplying fluid under pressure at a restricted rate to the brake cylinder in an emergency application of the brakes.

1,824,045. LOCK CONSTRUCTION. JOSEPH FETYK, New York, N. Y., assignor to Francis Kell & Son, Inc., a Corporation of New York. Filed Dec. 24, 1926. Serial No. 156,803. 22 Claims. (Cl. 292—264.)



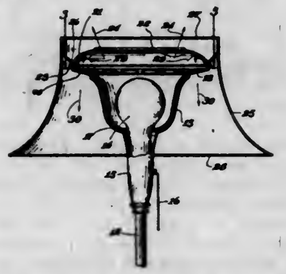
1. In construction of the character described, in combination, a lock mechanism adapted to be secured to a door and including a casing and a bolt adapted to be moved into and out of said casing, means adapted to be positioned upon the door frame and adapted to receive said bolt to hold the door in closed position, a chain secured at one end to said means upon the door frame, a slot formed in said lock casing upon the door adapted to receive and hold the other end of said chain, said chain being of a length adapted when operative to permit opening of the door to a limited degree, and means separate from said bolt for locking said last end of said chain in said slot.

1,824,046. MEANS FOR STEAM HEATING. JAMES LOGAN FITTS, Merchantville, N. J., assignor to Warren Webster & Company, a Corporation of New Jersey. Filed June 10, 1927. Serial No. 197,843. 1 Claim. (Cl. 237—9.)



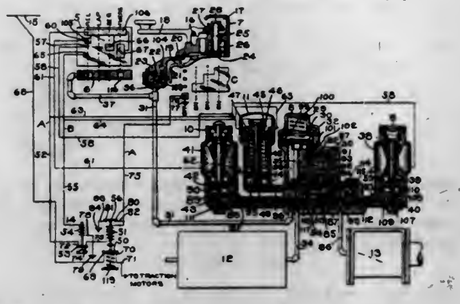
In a steam heating system, a steam boiler, radiators supplied with steam therefrom, and return means for returning the water of condensation to the boiler and maintaining in such return means a predetermined normal static head for causing the water of condensation normally produced to be delivered into the boiler by gravity and against a normal operative pressure therein, combined with a source of gaseous medium non-condensible at the temperatures and pressure of the steam in the system, means for delivering said gaseous medium into the return means of the system whereby it acts upon the static head therein to increase its effectiveness, and steam actuated means for controlling the operation of the means for delivering the gaseous medium into the return means under and in accordance with variations in pressure in the boiler to cause a substantially constant pressure differential to be maintained between the pressures in the supply side and in the return side of the system, said pressure difference together with the static head automatically causing the water of condensation to pass into the boiler when the steam pressure therein is in excess of that required to maintain the predetermined normal static head, and in which the controlling means comprises a diaphragm motor having one side thereof in communication with the steam pressure on the supply side of the system and the other side in communication with both the return side of the system and source of compressed gaseous medium.

1,824,047. LAMP. SAMUEL GOLDFINGER, New York, N. Y. Filed Jan. 16, 1931. Serial No. 509,139. 4 Claims. (Cl. 240—81.)



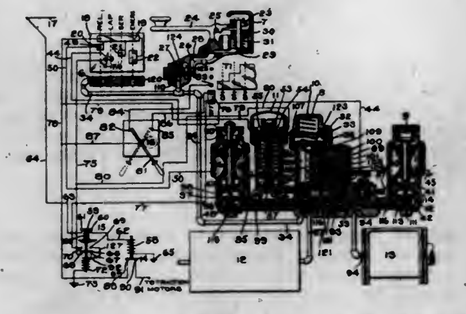
1. In a floor lamp of the character described, an upwardly divergent, opaque reflecting bowl, a source of light therein, a substantially horizontal, outwardly projecting flange integrally formed on the upper edge of said bowl and having light-transmitting openings therein, and an upwardly convergent, opaque reflecting annulus removably mounted on the peripheral edge of said flange for directing certain light beams downwardly through said openings.

1,824,048. BRAKE AND POWER INTERLOCK. JOHN B. GROSSWEGE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed July 9, 1929. Serial No. 377,002. 17 Claims. (Cl. 303—20.)



1. A device of the class described comprising a power circuit, a controller handle, a circuit breaker, and electric means for operating the circuit breaker to break the power circuit when the operator releases the controller handle when said handle is in a "power on" position, said circuit breaker operating means being operated upon the return of said handle to "power off" position to reset the circuit breaker so as to close the power circuit.

1,824,049. BRAKE AND POWER INTERLOCK. JOHN B. GROSSWEGE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed July 13, 1929. Serial No. 377,940. 17 Claims. (Cl. 303—20.)

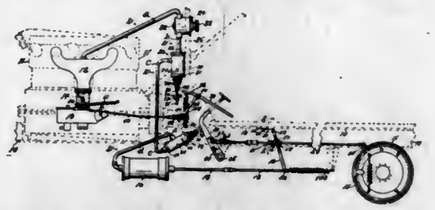


1. In combination with the power circuit of safety car equipment, a controller handle, a circuit breaker, a double switch device for controlling the operation of said circuit breaker, one portion of said switch device being adapted in one position to close one circuit and being adapted to another position to close a second circuit connected with the "power off" position of the controller handle, the other portion of said switch device being adapted to close the circuit by which the circuit breaker is operated, and means operative only in the "power off" position of the controller handle for temporarily controlling the second circuit.

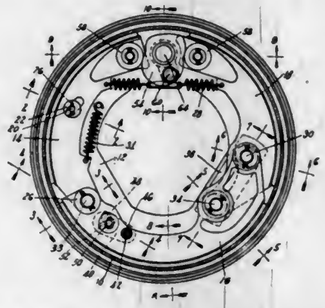
1,824,050. BRAKE SETTING AND RELEASING APPARATUS. CARL F. JOERS and FRED D. JOERS, Beverly Hills, Calif. Filed May 4, 1929. Serial No. 360,392. 4 Claims. (Cl. 192—3.)

1. In a brake setting and releasing apparatus for an automobile the combination with a brake of a piston connected to said brake, a cylinder in which said piston is mounted, a pipe connection between said cylinder and the inlet manifold of an internal combustion engine, where-

by suction is applied to said piston to set said brake when the engine is operating and the throttle valve is closed, means adapted to be actuated by the clutch pedal for interrupting suction through said pipe connections so that the brake can be released, and means for releasing said brake when suction through said pipe connection is interrupted.

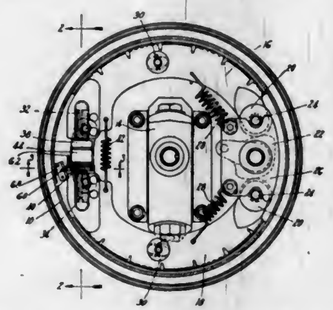


1,824,051. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 20, 1927. Serial No. 199,988. 6 Claims. (Cl. 188—78.)



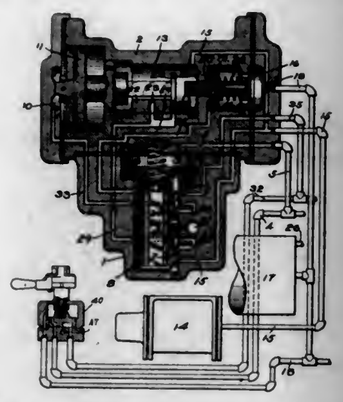
1. A brake comprising, in combination, friction means having adjacent ends provided on their opposite sides with thrust devices, and a pair of separate applying devices engaging the opposite sides of said ends to hold the friction means against lateral movement and operatively engaging the thrust devices.

1,824,052. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 27, 1927. Serial No. 201,894. 41 Claims. (Cl. 188—79.5.)



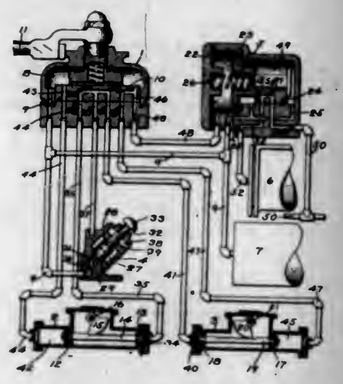
1. A brake shoe having a thrust member threaded in one end, and means including a part with respect to which the shoe moves when the brake is applied and which means is operated by such relative movement for automatically turning said member to increase the effective length of the shoe to compensate for wear.

1,824,053. STRAIGHT AIR EMERGENCY VALVE DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 1, 1929. Serial No. 351,495. 12 Claims. (Cl. 303—40.)



1. In a fluid pressure brake equipment, the combination with a brake cylinder, of a valve device comprising an application portion and an emergency portion, each of said portions being operative to supply fluid under pressure to the brake cylinder independent of the other in effecting an emergency application of the brakes.

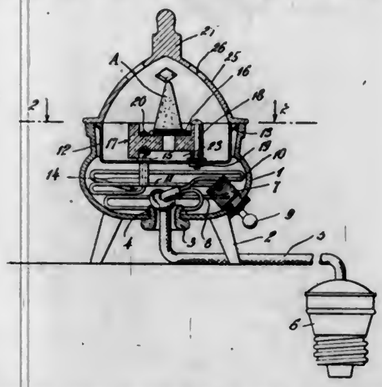
1,824,054. BRAKE AND DOOR INTERLOCK. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1929. Serial No. 352,463. 11 Claims. (Cl. 303—6.1.)



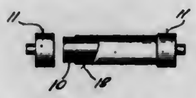
1. The combination with a brake cylinder, of means for establishing communication through which fluid under pressure is adapted to be supplied and released to and from the brake cylinder, means for controlling the opening and closing of a vehicle door, the first mentioned means being operative to close said communication when the second mentioned means is operated to open said door.

1,824,055. INCENSE BURNER. JAY EARL NEWTON, Madison, Wis. Filed July 19, 1928. Serial No. 293,821. 8 Claims. (Cl. 167—3.)

2. An incense burner comprising a receptacle, an inner casing arranged within the receptacle, said inner casing being capable of being removed a limited distance from the receptacle, an insulating support mounted in said inner casing, said support comprising a pair of legs, a body portion arranged between said pair of legs of less height than said legs whereby the bottom of the body portion is spaced from the inner casing, the upper surface of said body portion being provided with parallel ribs forming grooves, said body portion being provided with a vertical opening communicating with the space beneath said body portion, and an electrical igniting device arranged in said grooves on the upper surface of said body portion.

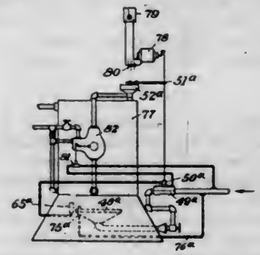


1,824,056. RESISTOR UNIT AND METHOD OF FORMING THE SAME. LAURENCE E. POWER, Milwaukee, Wis., assignor, by mesne assignments, of one-half to Lynde Bradley and one-half to Harry L. Bradley, Milwaukee, Wis. Filed June 10, 1927. Serial No. 197,882. 6 Claims. (Cl. 201—76.)



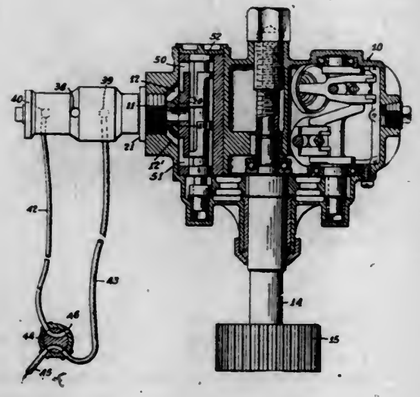
4. The hereindescribed method of forming resistor units which consists in providing a body of resistance material, in encasing the body with the ends of the casing terminating inwardly of the body, in pressing terminal members on the ends of the body to bear against the ends of the casing to enclose the body and protect the same against the atmosphere, in immersing the assembled unit in molten paraffin, in placing the unit while immersed in paraffin in an evacuated vessel to open the pores of the casing, and in allowing air to enter the vessel to force the paraffin into the open pores of the casing to thoroughly impregnate the same.

1,824,057. DIAPHRAGM VALVE AND METHOD OF OPERATING THE SAME. FREDERICK W. ROBERTSHAW, Pittsburgh, and GEORGE A. ROBERTSHAW, Greensburg, Pa. Filed Sept. 17, 1926. Serial No. 136,028. 8 Claims. (Cl. 236—80.)



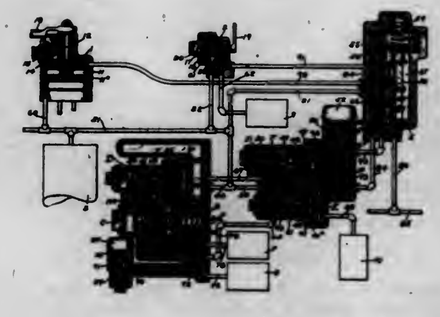
1. The combination with a diaphragm valve in a heating system having a fluid heating chamber, said valve having a diaphragm, of means controlling the diaphragm in accordance with variations in the contents of the heating chamber, and means controlling the diaphragm in accordance with a temperature of the system.

1,824,058. REMOTE CONTROL FOR FLUID MOTORS. ARTHUR SCOTT, Cleveland, Ohio assignor to The Cleveland Pneumatic Tool Company Cleveland Ohio a Corporation of Ohio. Filed Feb. 3 1927. Serial No. 165,658. 8 Claims. (Cl. 121—138.)



1. A reversible rotary fluid pressure motor having a reversing valve operated by fluid pressure, said reversing valve being arranged to be acted upon by the motive fluid passing to said motor, and means for causing fluid from a common source to take either one of two different courses in approaching said reversing valve.

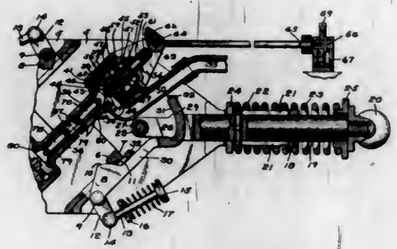
1,824,059. AUTOMATIC TRAIN CONTROL. THOMAS H. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 13, 1925. Serial No. 29,951. 7 Claims. (Cl. 303—18.)



1. In a train control apparatus, the combination with a fluid pressure controlled brake application means operated upon a reduction in fluid pressure for effecting an application of the brakes, of two reservoirs, valve means having one position in which one reservoir is connected to a passage through which fluid is vented from said brake application means to said reservoir and another position in which said reservoir is connected to the atmosphere and

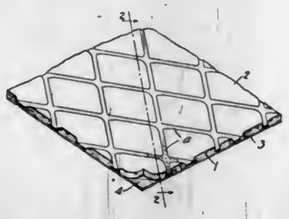
the other reservoir is connected to said passage so that fluid is vented from said application means to the last mentioned reservoir, and means controlling the operation of said valve means.

1,824,060. VALVE MECHANISM FOR AUTOMATIC TRAIN PIPE COUPLINGS. THOMAS H. THOMAS, Edgewood, and UNCAS A. WHITAKER, Wilmerding, Pa., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 14, 1928. Serial No. 326,090. 8 Claims. (Cl. 284—12.)



1. A coupling having a conduit valve means for controlling communication through the conduit, said valve means having a normally closed restricted opening therein. manually operated means for moving the valve means to closed position when the coupling is uncoupled from a counterpart coupling, and means mounted in the conduit in proximity to the valve means for opening the restricted opening in the valve means when the coupling is being connected to a counterpart coupling.

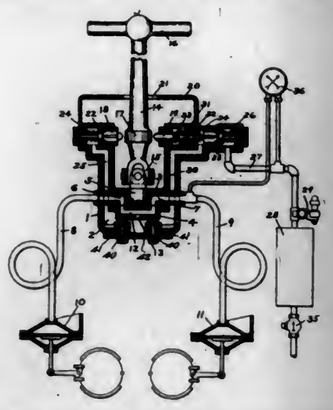
1,824,061. PACKING. HARRISON R. WILLIAMS, New York, N. Y. Filed Mar. 9, 1927. Serial No. 173,909. 3 Claims. (Cl. 154—54.)



3. A packing sheet for fragile articles consisting of a backing of thin, relatively strong fabric, and a relatively thick, uniform and substantially homogeneous unlaminated padding of soft, loosely felted wood fibre, and having an outer skin formed of the fibres themselves impregnated by a suitable thickening agent.

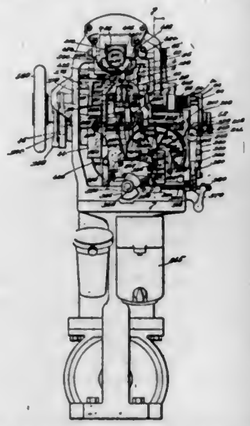
1,824,062. FLUID PRESSURE BRAKE FOR AIRPLANES. HARRY J. WINTER, London, England, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1928, Serial No. 296,918, and in Great Britain Mar. 30, 1928. 6 Claims. (Cl. 303—6.)

1. In a brake for airplanes, the combination with two brake chambers operated by a variation in fluid pressure for applying the brakes, of valve means for varying the fluid pressure in said brake chambers, separate valve members for controlling communication through which fluid pressure is varied in said brake chambers and having one position in which the fluid pressure is varied in both brake chambers and another position in which the fluid



pressure is varied in only one of said brake chambers, and a single manually operable means for operating both said valve means.

1,824,063. SEWING MACHINE. FRED ASHWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 19, 1920, Serial No. 382,558. Renewed Jan. 22, 1926. 37 Claims. (Cl. 112—38.)

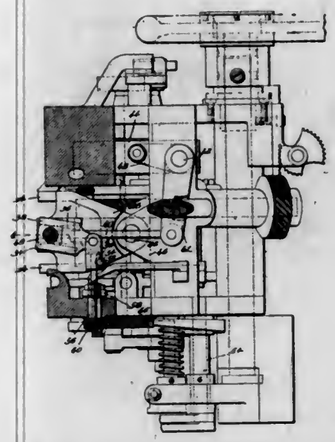


1. A sewing machine having, in combination, stitch forming devices, and means for feeding the work in timed relation to the stitch forming devices comprising a work support, a presser foot, and means for imparting work feeding and retracting movements to the work support and presser foot, and means comprising two relatively movable wedge blocks for locking the presser foot during the work feeding movement and for unlocking the presser foot during said retracting movement of the work support and presser foot.

1,824,064. FEEDING MECHANISM. FRED ASHWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed May 19, 1920, Serial No. 382,558. Divided and this application filed Nov. 23, 1923, Serial No. 676,535. Renewed Feb. 10, 1931. 11 Claims. (Cl. 112—47.)

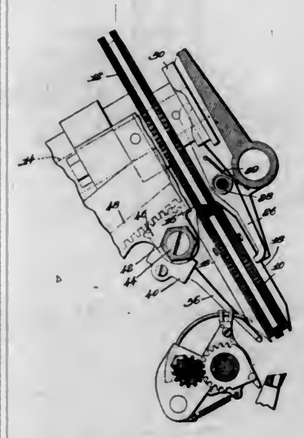
3. A sewing machine having, in combination, work feeding means comprising a laterally movable work support having a groove, a presser foot cooperating with the work

support, and means for moving the work support to feed the work comprising a reciprocating member, a pair of blocks actuated by the reciprocating member, one of the blocks being mounted to slide in the groove in the work



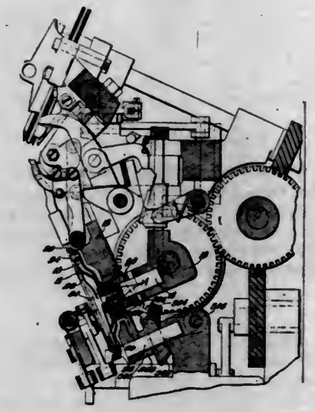
support, a guiding member having a groove extending angularly to the groove in the work support and engaged by the other block, and means for adjusting the guiding member to vary the angular position of its groove.

1,824,065. SHUTTLE MECHANISM. FRED ASHWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed May 19, 1920, Serial No. 382,558. Divided and this application filed Nov. 23, 1923, Serial No. 676,536. Renewed Apr. 4, 1929. 11 Claims. (Cl. 112—38.)



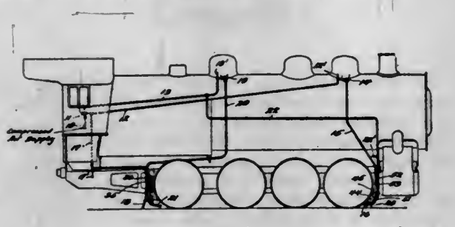
1. A sewing machine having, in combination, stitch forming devices including a needle, a rotary loop taker having an uninterrupted circular series of uniformly spaced gear teeth formed on its periphery extending parallel to the axis of the loop taker and having a recess between two adjacent gear teeth extending inwardly beyond the gear teeth for the reception of the transverse part of the needle loop, and a gear engaging the gear teeth for driving the loop taker.

1,824,066. TAKE UP MECHANISM. FRED ASHWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed May 19, 1920, Serial No. 382,558. Divided and this application filed Nov. 23, 1923. Serial No. 676,537. 9 Claims. (Cl. 112—57.)



3. A lock stitch sewing machine having, in combination, stitch forming devices including a hook needle, a loop taker, and a take-up mechanism comprising a pair of disks having cooperating thread gripping peripheral portions, a lever having its pivot co-axial with the disks, connections between the lever and disks to cause the lever to turn with the disks and to permit a limited amount of relative movement between the lever and disks, a thread truck mounted on one end of the lever over which the stretch of thread leading from the supply to the disks passes, means for rotating the disks and lever in a direction to pull the loop from the loop taker and to set the stitch, and for rotating the disks and lever in the opposite direction to pay out thread to the stitch forming devices and loop taker, and means for limiting the latter movement of the lever to place a strain on the thread before the loop leaves the loop taker.

1,824,067. RAIL SANDING AND CLEANING DEVICE. HARRY G. BECKER, Albany, N. Y. Filed July 9, 1929. Serial No. 376,886. 8 Claims. (Cl. 291—5.)



1. In a locomotive, the combination of a rearwardly directed forward sanding device, a forwardly directed rear sanding device, a forwardly directed forward rail cleaning nozzle, a rearwarly directed rear rail cleaning nozzle, all of said devices and nozzles discharging toward the rail a supply of compressed air, and means for selectively admitting air from said supply to the forward sanding device and the rear rail cleaning nozzle or to the rear sanding device and the forward rail cleaning nozzle.

1,824,068. ESTERS. BENJAMIN T. BROOKS, Greenwich, Conn., and EUGENE J. CARDARELLI, Newark, N. J., assignors to Petroleum Chemical Corporation, a Corporation of Delaware. Filed June 16, 1930. Serial No. 461,642. 4 Claims. (Cl. 260—106.)

1. The dibutyl ester of Δ 4 cyclohexene dicarboxylic acid.

1,824,069. DIETHYL ESTER. BENJAMIN T. BROOKS, Greenwich, Conn., and EUGENE J. CARDARELLI, Newark, N. J., assignors to Petroleum Chemical Corporation, a Corporation of Delaware. Filed Aug. 16, 1930. Serial No. 475,854. 3 Claims. (Cl. 260—106.)

1. The diethyl ester of Δ 4 cyclohexene di-carboxylic acid.

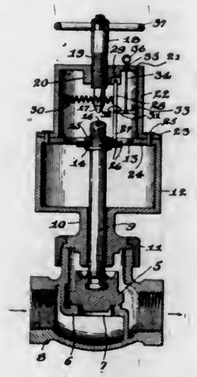
1,824,070. DIPROPYL ESTER. BENJAMIN T. BROOKS, Greenwich, Conn., and EUGENE J. CARDARELLI, Newark, N. J., assignors to Petroleum Chemical Corporation, a Corporation of Delaware. Filed Aug. 16, 1930. Serial No. 475,855. 4 Claims. (Cl. 260—106.)

1. The dipropyl ester of Δ 4 cyclohexene dicarboxylic acid.

1,824,071. DIAMYL ESTER. BENJAMIN T. BROOKS, Greenwich, Conn., and EUGENE J. CARDARELLI, Newark, N. J., assignors to Petroleum Chemical Corporation, a Corporation of Delaware. Filed Sept. 16, 1930. Serial No. 482,375. 4 Claims. (Cl. 260—106.)

1. The diamyl ester of Δ 4 cyclohexene dicarboxylic acid.

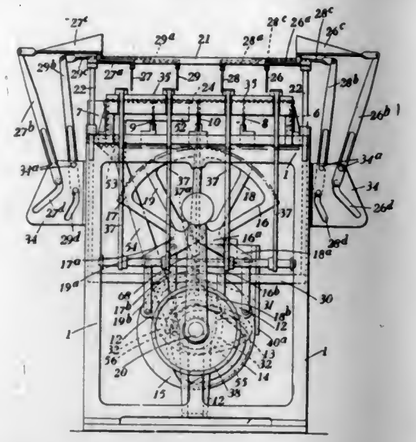
1,824,072. AUTOMATIC SAFETY VALVE. CHIPLEY D. BULLARD, New Orleans, La. Filed Sept. 22, 1930. Serial No. 483,692. 1 Claim. (Cl. 137—153.)



In combination with a movable valve, a diaphragm secured to move therewith and subject to the pressure of the fluid flowing past said valve, a toggle joint secured to said diaphragm and to a fixed part and adapted to lock the valve in the closed position, a light spring connected to said locking toggle and a fixed part for tending to move the toggle into locked position, an operating toggle extending at substantially right angles to the first mentioned toggle and connected thereto at its central pivotal point and to a fixed part, and an operating rod connected to the intermediate pivot point of the operating toggle.

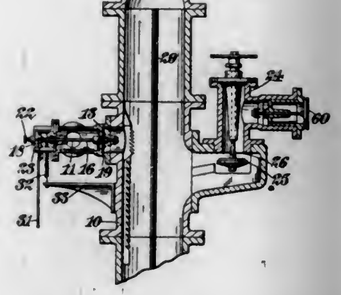
1,824,073. PAPER FOLDING MACHINE. CHARLES LAURENCE BURDICK, London, England. Filed Dec. 11, 1929, Serial No. 413,352, and in Great Britain Dec. 21, 1928. 13 Claims. (Cl. 270—85.)

1. A machine having mechanism making a number of parallel folds in papers, spaced abutment means, a box removably attached to the machine, and a member feeding the folded papers successively between said spaced abut-



ment means and into said box, said member simultaneously with its feeding movement making a transverse fold in the paper being fed.

1,824,074. INTERNAL COMBUSTION PUMP AND PRIME MOVER. STANLEY PERCY CHRISTIE, London, England. Filed July 21, 1930, Serial No. 469,588, and in Great Britain Aug. 14, 1929. 18 Claims. (Cl. 103—249.)

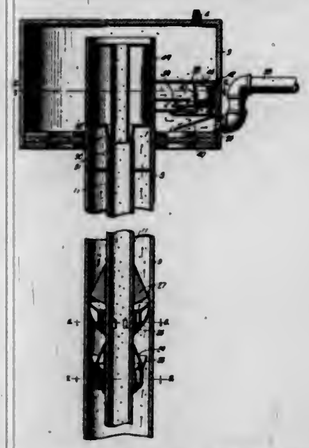


1. In an internal combustion liquid piston pump having a combustion chamber provided with a fuel inlet, a valve control fuel outlet, and a liquid inlet and outlet the combination of a valve associated with said fuel inlet comprising a ported valve seating and a complementarily ported valve disc rotatable in face contact therewith, means to partially rotate said valve disc to bring the ports into and out of register, and means operable by the cyclic flow of the working fluid to control said partial rotation of the valve disc.

1,824,075. AUTOMATIC AIR-LIFT. WALTER J. CLUTHE, Kansas City, Mo. Filed Sept. 26, 1929. Serial No. 395,300. 10 Claims. (Cl. 103—232.)

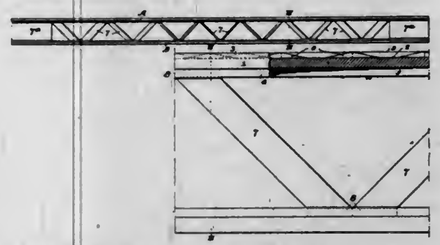
1. Automatic air lift apparatus including a liquid conduit, an air pipe extending in the conduit, a float housing

at the lower end of the pipe, a nipple having lateral ports supported by the float housing and communicating there-



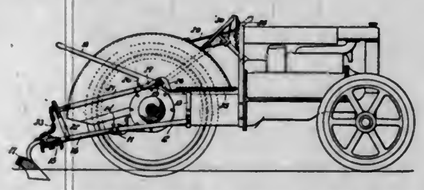
with, a float operated valve responsive to liquid rising in the housing for closing the pipe, and means for delivering a pressure medium to the nipple.

1,824,076. STRUCTURAL REENFORCING AND BUILDING MEMBER. GEORGE E. DALE, Trenton, N. J., assignor to Kalman Steel Co., Chicago, Ill., a Corporation of Delaware. Filed May 6, 1924, Serial No. 711,337. Renewed Jan. 10, 1931. 14 Claims. (Cl. 72—110.)



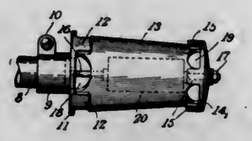
1. A metallic building structure element comprising a channel compression member, a channel tension member, and a web composed of a plurality of similar bars each having lateral projections formed on their ends and secured in said channels laterally of the channel; said bars being arranged diagonally and in zigzag fashion and so that one end of each bar abuts an end of an adjacent bar.

1,824,077. LEVERAGE POWER LIFT DEVICE. JOHN A. DENNIS, Edison, Calif. Filed Aug. 7, 1928. Serial No. 297,993. 9 Claims. (Cl. 97—47.)



1. In combination with a tractor, a gang draw bar associated therewith; a gang bar pivotally connected to the gang draw bar; a gang lifting lever; a link pivotally connected to the lever; a pivoted arm to which the rear end of the link is connected; a flexible element connected to the pivoted arm and to the gang; a lifting spring operatively connected to the lever; an arm between the spring and the lever so arranged that when the lever is in its lowermost position the spring is inactive to move the lever and when the lever is moved toward lifting position the spring assists in the lifting movement.

1,824,078. DEVICE FOR REMOVING CARBON MONOXIDE FROM EXHAUST GASES. FREDERICK C. FISCHER, Newark, N. J. Filed Jan. 23, 1929. Serial No. 334,502. 2 Claims. (Cl. 23—289.)



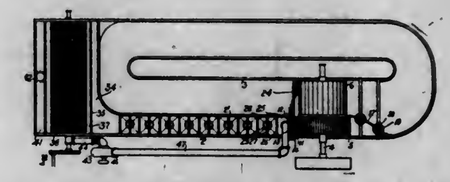
1. In a device for converting carbon monoxide, an aluminum casing provided with means for regulating the entrance of air and the escape of the gas.

1,824,079. FILTER. CHARLES B. FOLEY, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Aug. 2, 1928. Serial No. 296,908. 16 Claims. (Cl. 210—169.)



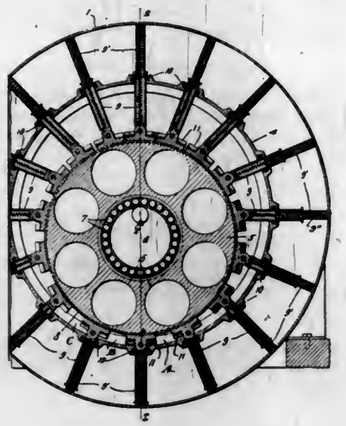
1. A filter element comprising impermeable laminations with spaced-apart cross-bars criss-crossed relative to the adjacent laminations to form with smooth surfaces of next adjacent laminations criss-crossed channels extending from one face of the filter element to the other face thereof.

1,824,080. PULP BEATER, EXTRACTOR, AND CLEANER. JOHN D. HASKELL, Fulton, N. Y., assignor to Dilts Machine Works, Inc., Fulton, N. Y., a Corporation of New York. Filed Nov. 5, 1929. Serial No. 405,081. 20 Claims. (Cl. 92—24.)



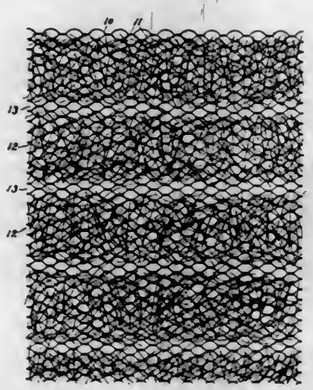
1. In pulp beating apparatus of the character described, the combination with a tub, of a combined breaker and beater roll having the same shaft means whereby the breaker roll circulates the stock in the tub, a series of refuse receiving receptacles partitioned from the tub, and said beater roll being arranged to direct beaten stock into said receptacles.

1,824,081. ENGINE. PAUL C. HELLER, La Lima, Honduras. Filed Jan. 18, 1928. Serial No. 247,664. 2 Claims. (Cl. 123—8.)



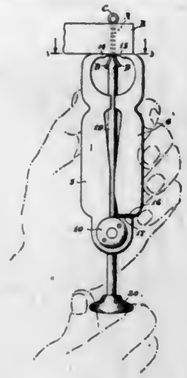
1. An apparatus of the class described comprising a circular cylinder, a ring-shaped partition therein forming a circular chamber, a shaft passing through the center of the cylinder and rotatably mounted therein, an eccentric disk fastened to the shaft, a non-rotatable circular member eccentrically arranged in the chamber and having a central opening therein for receiving the eccentric disk, a plurality of radially arranged members passing through openings in the partition, each member being telescopic, with its outer part abutting the inner circumferential wall of the casing, shoes pivoted to the inner parts and bearing against the outer circumference of the circular member, means for yieldingly holding the telescopic members expanded, the side walls of the chamber having grooved therein for receiving the edges of the inner parts of the telescopic members and inlet and exhaust means connected with the compartments formed by the telescopic members and the walls of the chamber.

1,824,082. METAL LATHING. JOSEPH B. HERNANDEZ, New York, N. Y., assignor to Joseph B. Hernandez Corporation, a Corporation of New Jersey. Filed Aug. 28, 1928. Serial No. 302,493. 12 Claims. (Cl. 72—116.)



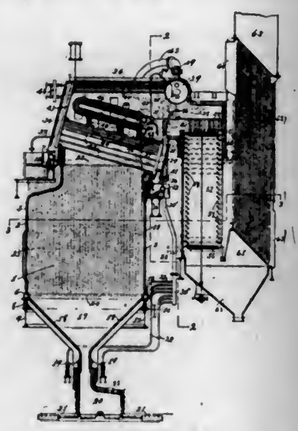
1. A plaster base, comprising an open mesh metal lath having loose fibers distributed thereon and cemented to the strands thereof and extending over the meshes.

1,824,083. COTTER PIN TOOL. SIGURD J. HOFF, Brooklyn, N. Y. Filed Mar. 5, 1930. Serial No. 433,888. 5 Claims. (Cl. 81—15.)



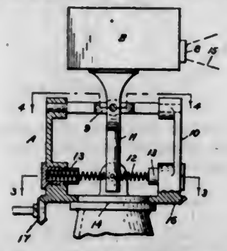
1. A cotter pin tool including a pair of jaws for gripping the protruding ends of the legs of a cotter pin for retaining said cotter pin in active position and means movably carried by the jaws for expanding said protruding ends of the legs while gripped by the jaws.

1,824,084. BOILER. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 9, 1928. Serial No. 260,355. 9 Claims. (Cl. 122—235.)



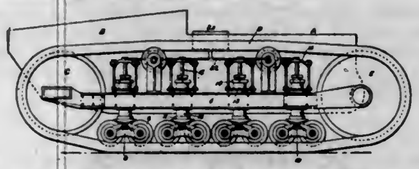
1. The combination with a combustion chamber of a water tube boiler comprising at least three distinct groups of steam generating tubes arranged to be subjected successively to the heating effect of said combustion chamber, one of said groups being constructed to produce a natural water circulation therein and including a plurality of wall tubes subject to the radiant heat of said chamber, another of said groups succeeding said first named group relative to gas flow and being constructed to produce a natural water circulation therein and including a steam and water separator through which the water of both of said natural circulation groups is circulated, a third group of steam generating tubes succeeding the second group relative to gas flow from the combustion chamber thereby to be contacted with gases from which a portion of their heat has been given up to said first and second named groups, said third group being connected to said steam and water separator, the heat transfer surfaces of the three groups being so related to each other and to the heat output of the combustion chamber as to insure that the gases entering the third group of tubes shall be of such quantity and temperature as to progressively heat the water passing therethrough from its inlet temperature to its boiling point and then to evaporate a portion thereof.

1,824,085. CAMERA MOUNTING. JAMES C. KARNES, Buffalo, N. Y., and GREGORY J. KESSENICH, Madison, Wis. Filed June 12, 1930. Serial No. 460,738. 5 Claims. (Cl. 95—12.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In combination with a vehicle, a support therein, a gimbal ring on the support, a camera trunnioned in the gimbal ring with its field of view corresponding to the field of view of an occupant in normal position in the vehicle, a depending member on the camera, springs acting on the depending member from different points to maintain the camera in a predetermined position, and means for rotating the support.

1,824,086. SUSPENSION FOR TRACKLAYING VEHICLES. HARRY A. KNOX, Davenport, Iowa. Filed May 18, 1927. Serial No. 192,422. 7 Claims. (Cl. 305—9.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



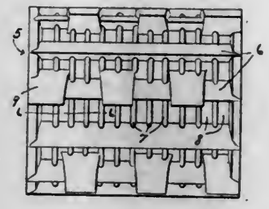
1. A suspension for track laying vehicles embodying a frame, brackets secured to the frame, a supporting unit in each bracket including a vertically movable cylinder, a transverse spindle at the base of the cylinder and having a fluid passage in communication therewith, arms having a fluid passage centrally pivoted on the spindle, rollers mounted at the extremities of the arms, a yoke on the bracket, a piston fixed to the yoke and working in the cylinder, springs within the cylinder and confined between its base and the piston head, means for admitting a lubricating fluid to the cylinder, and means for throttling the fluid through the piston head during the downward stroke of the cylinder.

1,824,087. HAIR DYEING APPARATUS. GRACE MANN KRAG, Chicago, Ill. Filed Sept. 22, 1930. Serial No. 483,726. 13 Claims. (Cl. 132—12.)



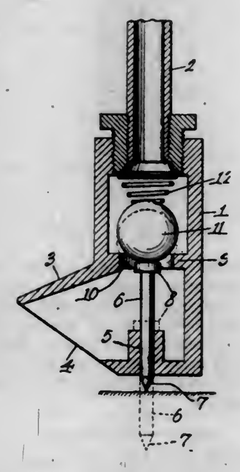
1. Hair dyeing apparatus comprising a member to be positioned on one side of a bunch of hair to be dyed, a comb to be positioned on the other side of the bunch of hair, and means for attaching said comb to said member, said comb having its teeth edge curved.

1,824,088. CRUSHER ROLL. GEORGE EDWARD KRIDER, Duncansville, Pa., assignor to McLanahan-Stone Machine Company, Hollidaysburg, Pa., a Corporation of Pennsylvania. Filed Dec. 16, 1929. Serial No. 414,449. 4 Claims. (Cl. 83—12.)



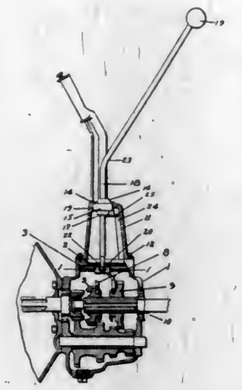
1. A crusher roll for rock crushing machines or the like, having on its peripheral surface a plurality of circumferentially spaced longitudinally extending ribs and spaced annular ribs intersecting said longitudinal ribs, all of said ribs cooperating to provide recesses of substantially cubical formation, said longitudinally extending ribs having their outer edges projecting beyond the outer edges of said annular ribs.

1,824,089. CORE FILLER. GEORGE LANGE, New York, N. Y., assignor to Knickerbocker Stamping Co., Parkersburg, W. Va. Filed Jan. 15, 1931. Serial No. 509,020. 6 Claims. (Cl. 62—159.)



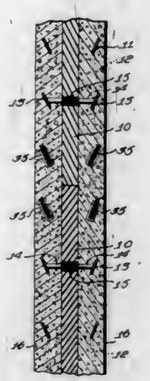
5. A tool of the class described including a casing having an outlet adjacent to one end inclined relative to the casing, and an inlet, and means operated by the movement of the casing toward and close to a surface to which liquid is to be applied, for unseating the valve.

1,824,090. GEAR SHIFT LEVER MECHANISM. HUGH C. LORD, Erie, Pa. Filed Dec. 10, 1927. Serial No. 239,094. 11 Claims. (Cl. 74—39.)



1. In a gear shift lever mechanism, the combination of a gear box, a shift lever, and a resilient rubber fulcrum for the lever sustaining the fulcrum thrust of the lever in any of its several directions of movement.

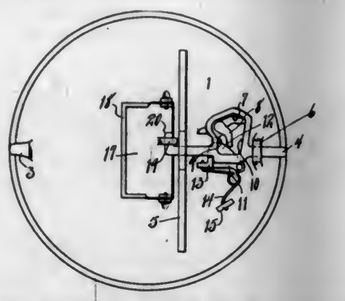
1,824,091. STRUCTURAL BUILDING UNIT. JOHN H. MAGEE, Carthage, Mo. Filed Aug. 21, 1929. Serial No. 387,423. 10 Claims. (Cl. 72—31.)



1. A building unit comprising a central body, a metallic reinforcing element arranged at each side of said body, and fastening means each securing said elements to each other through said body and for spacing said elements from said body throughout the greater portion of their areas, said securing means being arranged at spaced points to prevent relative movement between said body and said reinforcing elements.

1,824,092. METER BOX LID AND LOCK THEREFOR. PAUL MCAFEE, Dallas, Tex., assignor to Dallas Foundry Dallas, Tex., a Corporation of Texas. Filed May 5, 1930. Serial No. 449,841. 3 Claims. (Cl. 70—14.)

1. In a meter box provided with a rim and a cover therefor; said cover having a door opening and a keyhole, a door hingedly connected to said cover for closing said opening, a slotted lug integral with said cover, a key-operated plunger slidably connected to the under side of said cover and provided with a key loop, and a lug formed on said plunger and projecting into said slotted lug for

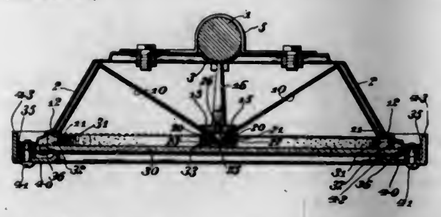


simultaneously opening said door while said cover is being unlocked and for closing said door while said cover is being locked to said rim.

1,824,093. RECOVERY OF PRECIOUS METALS FROM REFRACTORY ORES. RALPH F. MEYER, Freeport, Pa., assignor to Meyer Mineral Separation Company, Pittsburgh, Pa. Filed Dec. 13, 1928. Serial No. 325,002. 5 Claims. (Cl. 75—18.)

1. The process of treating refractory ores containing silver, comprising effecting a sulfate roasting of the ore so as to allow the formation of a basic metal sulfate functioning to increase the amount of recoverable silver, leaching the roasted ore to produce a filtrate and a residue, recovering from the leaching solution silver and a sulfate solution, treating the residue with the sulfate solution to precipitate therein a basic sulfate and subjecting the so-treated residue to a second sulfate roast.

1,824,094. REFLECTOR SIGNAL. VICTOR L. OESTNAES, Westfield, N. J., assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 11, 1926. Serial No. 147,661. 19 Claims. (Cl. 88—1.)

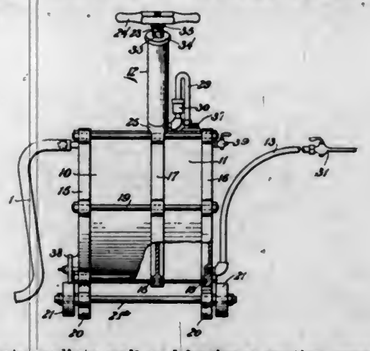


1. A reflector signal comprising a plurality of reflectors arranged about an axis, means located coincidentally with the said axis and contacting with the rear sides of portions of the said reflectors adjoining the said axis and aiding in the support of the same, and means for rigidly connecting the said reflectors to the first-named means.

7. A reflector signal comprising a container having a ventilating opening therein, light-reflecting means mounted within the said container and facing outwardly, means for retaining the said light reflecting means within the said container, and means cooperating with the said ventilating opening to prevent the entry of water thereinto and at the same time permitting the free passage of air or vapor therethrough.

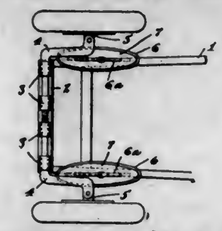
1,824,095. APPARATUS FOR CLEANING LUBRICANT CASES. CHARLES M. OLES, Unadilla, N. Y. Filed May 15, 1928. Serial No. 277,929. 3 Claims. (Cl. 184—1.5.)

3. In an apparatus of the class described the combination of a pair of tanks; a pair of end walls, each forming a head for one of the tanks; an intermediate wall between the tanks to form a head for both tanks; a pump secured



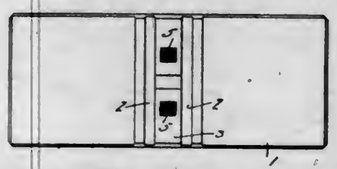
to the intermediate wall and having a suction connection with one tank and a pressure connection with the other tank; and flexible conduits leading from the tanks.

1,824,096. VEHICLE SUSPENSION. COY ORSETT, Boston, Mass. Filed Aug. 31, 1928, Serial No. 303,350. Renewed Feb. 13, 1931. 1 Claim. (Cl. 280—124.)



In a vehicle running gear, a chassis frame including longitudinally extending side members connected at their front ends by a cross member, a plurality of transversely arranged bearings on said cross member, two half axles, each half axle consisting of a transversely extending portion and a rearwardly extending portion, said transversely extending portions being mounted in said bearings for pivotal movement independent of each other, a wheel mounted on each rearwardly extending portion, and pneumatic suspension means between each rearwardly extending portion and the chassis frame.

1,824,097. MICROSCOPE SLIDE OR COUNTING CHAMBER. HARRY G. OTT, Kenmore, N. Y., assignor to Spencer Lens Company, Buffalo, N. Y. Filed Feb. 4, 1928. Serial No. 251,988. 5 Claims. (Cl. 88—40.)

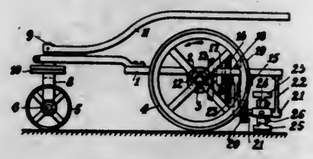


1. A microscope slide of the counting chamber type formed of glass having an index of refraction in excess of 1.57, with rulings upon a surface thereof.

1,824,098. AGRICULTURAL MACHINE. FRITZ PATZSCHKE, Leipzig, Germany. Filed June 17, 1929, Serial No. 371,634, and in Germany June 19, 1928. 1 Claim. (Cl. 97—38.)

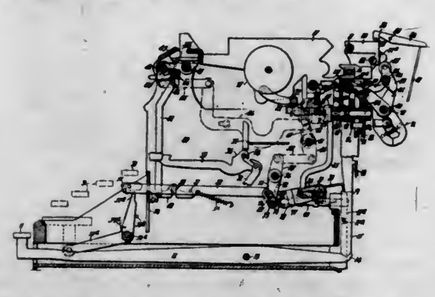
In an agricultural machine of the character described, in combination with a wheeled frame-structure, a rear

shaft, and a driving spur bevel wheel, the arrangement of a second shaft, a third shaft, driven spur bevel wheels, a disc-shaped support mounted on and rotating with the said third shaft, cutting blades mounted removably and interchangeably on said support, loosely mounted wheels in mesh with said driven spur bevel wheels and causing them to rotate in one and the same direction, the said driving spur bevel wheel having a certain number of its



teeth cut off so as to obtain a temporarily interrupted mesh with the driven spur bevel wheel, a flat key in connection with the driving spur wheel and allowing the latter to be displaced in axial direction and to be brought in engagement or out of engagement with the driven spur bevel wheel, a double-armed lever, a pin secured thereto and intended to enter a groove provided in the wheel boss, and means for fixing in position the said double-armed lever.

1,824,099. TYPEWRITING MACHINE. HENRY L. PITMAN, Westfield, N. J., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 11, 1926. Serial No. 87,533. 3 Claims. (Cl. 197—176.)



2. In a tabulator-mechanism for a typewriting machine, the combination with a traveling carriage, an electric motor having a normally open circuit and a normally open carriage-clutch, a carriage-return mechanism operative to close the motor-circuit and close the clutch between the carriage and motor, and a tabulator, of means whereby an operation of said tabulator will break the clutch to release the carriage, without breaking the motor-circuit until the tabulator is released.

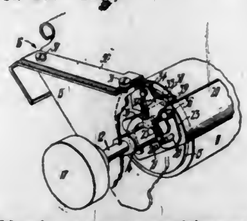
1,824,100. PROCESS FOR ELECTROLYTIC DEPOSIT OF HEAVY METALS. MAX SCHLÖTTER, Berlin, Germany. Filed Jan. 16, 1929, Serial No. 332,764, and in Germany Nov. 9, 1928. 8 Claims. (Cl. 204—1.)

1. Process for electrolytic deposit of metals of the lead group which consists in the use of metal salts in which the metal to be deposited is partly bound to an organic and partly to an inorganic anion.

1,824,101. STRONTIUM PERCHLORATE COMPOSITION AND PROCESS OF PREPARING THE SAME. GEORGE FREDERICK SMITH, Urbana, Ill. Filed May 10, 1930. Serial No. 451,519. 10 Claims. (Cl. 23—5.)

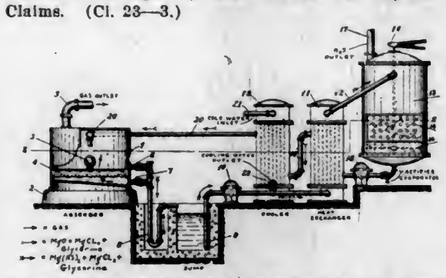
4. The process of producing a product containing strontium perchlorate which consists in grinding together strontium carbonate and ammonium perchlorate.

1,824,102. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 13, 1927. Serial No. 198,365. 4 Claims. (Cl. 197—136.)



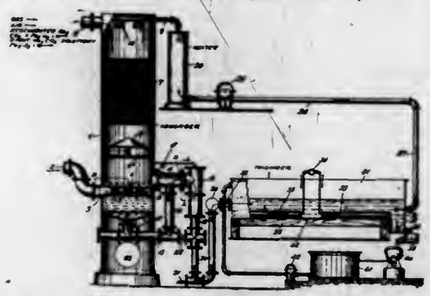
1. A work-holder for use on typewriting-machine platens and effective to clamp the work between the holder and the platen, including a work-clamping bar, means to secure only one end of the bar to the platen, a latch called into action by pressure upon the other end of the bar towards the platen for releasably latching the bar to the platen, and a frame-supported member effective to trip the latch when the platen is rotated in one direction, means being provided to move the member into inoperative position when the direction of said rotation is reversed.

1,824,103. GAS PURIFICATION PROCESS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1925. Serial No. 21,981. 18 Claims. (Cl. 23—3.)



1. In the treatment of gas purification liquor, comprising a suspension of an alkaline earth metal compound adapted to take up acidic gaseous constituents from gas and to be revivified upon revivification of the liquor, to improve its efficiency, the improvement which comprises adding and maintaining a peptizing agent in such liquor to substantially prevent coagulation of the particles during revivification of the liquor.

1,824,104. AERATION AND GAS PURIFICATION PROCESS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1925. Serial No. 21,983. 18 Claims. (Cl. 23—225.)

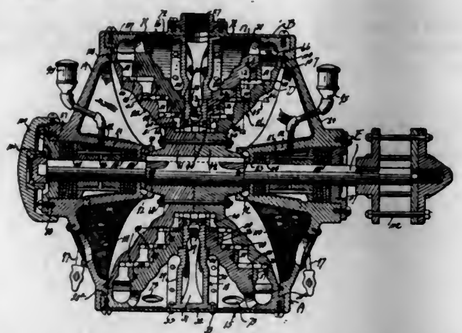


1. A process for the elimination of hydrogen sulphide and other impurities from fuel gases comprising washing the gas with a liquid containing an alkaline sodium compound in solution and an iron compound, thereby characterized that the liquid entering the washing stage is maintained at a temperature of at least about 85° F.

1,824,105. PROCESS OF TREATING FURS. CHARLES C. TRUAX, Detroit, Mich. Filed May 27, 1929. Serial No. 366,524. 4 Claims. (Cl. 15—269.)

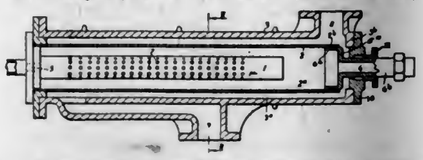
1. A method of treating furs and fur articles which consists in bringing into intimate contact with the furs and fur articles a finely comminuted material or meal made from corn cobs.

1,824,106. STEAM TURBINE. BERT BENSON WOOD, Oakland, Calif. Filed Feb. 14, 1930. Serial No. 428,457. 6 Claims. (Cl. 253—67.)



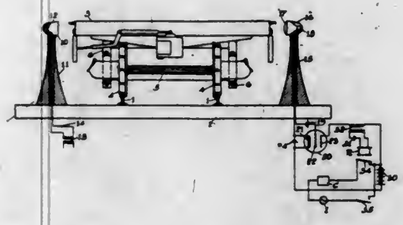
1. As an article of manufacture a steam engine stator comprising a plurality of relatively concentric steps each having a face thereof parallel to the axis of the concentric steps provided with a plurality of rigidly mounted diagonally sloping ribs defining diagonal steam expanding passageways therebetween, the stator at its outermost portion annularly beyond the step of greatest diameter being provided with a channel facing the axis of the concentric steps, said channel having baffles therein arcuated with concave baffle faces facing said axis, said last mentioned baffles being relatively spaced and located at the entrance of said channel to provide an annular passageway in the channel communicating with said spaces between the baffles, said stator having transverse ports to said channel passageway for exhaust of motive fluid.

1,824,107. HEAT EXCHANGER. JAMES NEWBY WYNDHAM and STEPHEN LEYSHON, WYNDHAM, Cardiff, Wales. Filed Feb. 13, 1929, Serial No. 339,664, and in Great Britain May 11, 1928. 4 Claims. (Cl. 257—243.)



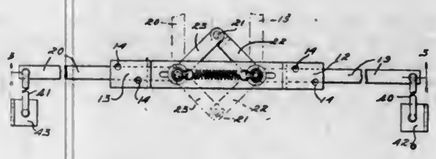
1. A heat exchanger, preferably for use as a boiler feed-water heater, comprising, in combination, a tubular casing with inlet and outlet connections, an inner tubular member and an intermediate tubular member projecting concentrically into said casing from one end thereof, flanges for said members at said end, a nozzle member projecting through the opposite end of said casing to constitute a severable joint for the proximate end of said intermediate member, and means co-acting with said nozzle member to form an expansion joint said inner tubular member being supported at one end only and being substantially shorter than said casing.

1,824,108. TRACK INSTRUMENT. KARL W. ABENDROTH, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Nov. 1, 1930. Serial No. 492,778. 4 Claims. (Cl. 246—29.)



1. Apparatus for detecting the passage of a railway vehicle comprising; a light source for directing a beam of light across the path of such vehicle and including a sealed glass tube containing a suitable conducting gas, means for passing alternating current of a specific frequency through said gas to produce a pulsating light beam of a corresponding frequency, and light responsive means responsive only to a pulsating light beam of said frequency located on the other side of the path of movement of said vehicle, whereby the passage of such vehicle can be detected irrespective of the presence of foreign light sources.

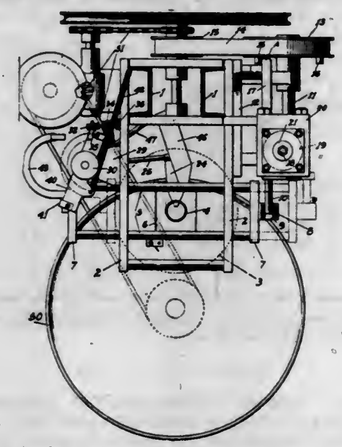
1,824,109. DOOR OPERATING MECHANISM. EVERETTE E. ALLARD and CURTIS R. BERRY, Highland Park, Mich. Filed Jan. 4, 1930. Serial No. 418,643. 6 Claims. (Cl. 268—62.)



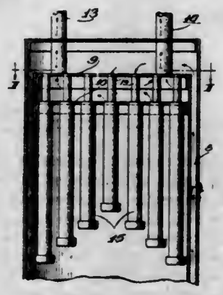
1. In a door control mechanism, a base member having a pair of spaced aligned slots therein, a pair of arms having their inner ends pivoted and arranged for toggle action, pivot pins on said arms adjacent their connected ends, said pivot pins extending through said slots for pivotally and slidably supporting said arms on said base, a pair of tension springs connecting said pivot pins on opposite sides of said base for urging said pins toward the inner ends of said slots and a pair of door-connecting links pivoted to the outer ends of said arms.

1,824,110. PLASTIC MEASURING AND CUTTING MACHINE. GEORGE K. BAINBRIDGE, Ripon, Calif. Filed May 24, 1930. Serial No. 455,237. 14 Claims. (Cl. 107—20.)

1. In a machine for measuring and cutting plastic material, a discharge spout depending from the press of the machine and from which the material to be cut issues, a cutting element movable across the end of the spout, a support for the element movable horizontally in a direction to enable the element to be thus moved, operating means applied to said support to reciprocate the cutting element back and forth across and beyond the spout in both directions whereby with each stroke of the support the cutting element will move across the spout to effect a cutting operation, and means controlling the functioning of said operating means actuated by the discharge of the material from the spout and to cause the same to be halted after each single stroke of the cutting element.



1,824,111. WATER HEATER. FRANCIS J. BEDNER, Chicago, Ill. Filed Feb. 6, 1930. Serial No. 426,251. 1 Claim. (Cl. 122—181.)

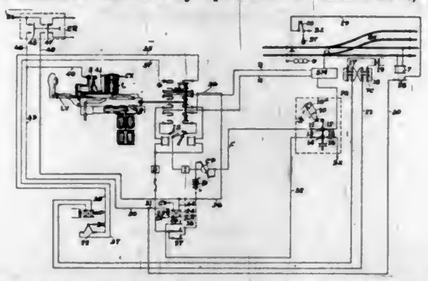


A water heater having a hot water outlet and a cold water inlet, said heater comprising a casing defining a fire box space, an apertured top plate on said casing, a second casing enveloping said first casing in spaced relation thereto defining a cold water space therewith, an internal partition member in said first casing adjacent said top plate defining a hot water space therewith, a plurality of tubes extending downwardly from said partition member communicating with the hot water space, said tubes having a closed bottom, other tubes communicating with the cold water space extending downwardly from said top plate into said first named tubes arranged providing a space for circulating water therebetween, the lower end of said other tubes being arranged terminating a substantial distance above the bottom of said first tubes, means adapted to restrict the flow of hot water in said first tubes, said means comprising a flared lower end portion of said other tubes, and a plurality of slits in said flared portion.

1,824,112. POWER INTERLOCKING SYSTEM FOR RAILROADS. FRANK BENEDICT, Rutherford, N. J., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 9, 1929. Serial No. 377,033. 15 Claims. (Cl. 246—135.)

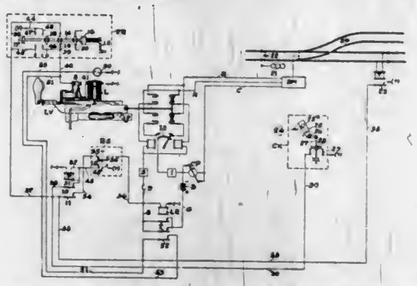
1. In a power interlocking system, a switch machine, a lever for controlling the operation of the switch ma-

chine, said switch machine including means operable to permit manual manipulation thereof, a power cut-off device rendered effective by operation of said means, and



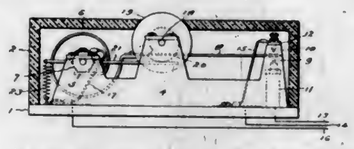
means preventing restoration of power to the switch machine unless it is in a position corresponding with the position of said control lever.

1,824,113. POWER INTERLOCKING SYSTEM FOR RAILROADS. FRANK BENEDICT, Rutherford, N. J., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 9, 1929. Serial No. 377,034. 14 Claims. (Cl. 246—135.)



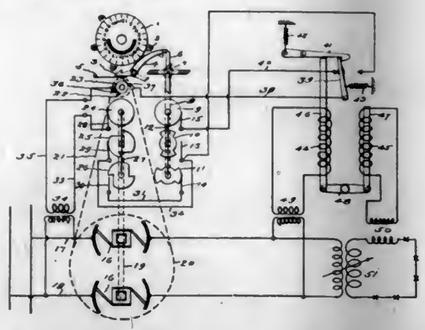
1. In a power interlocking system, a switch machine, means permitting hand operation of the switch machine and including a manually movable member which must be shifted before this machine can be operated by hand, electrically operable power control means for cutting off the supply of power to said switch machine controlled electrically and rendered effective by the movement of said member, said power control means when once operated remaining in that condition until specially restored, and manually operable means for restoring said power control means.

1,824,114. THERMOSTAT. HENRY J. BLAKESLEE, Marlboro, Conn. Filed Sept. 3, 1929. Serial No. 389,898. 2 Claims. (Cl. 200—139.)



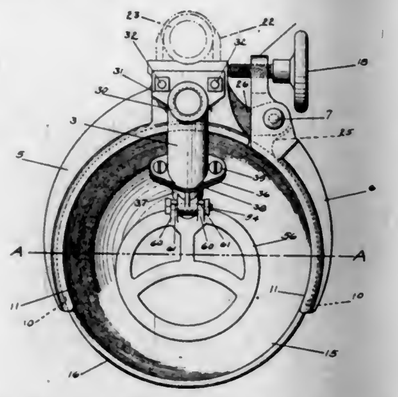
1. A thermostat comprising a base and an enclosing casing, an axle rotatably mounted on the base and electrically connected with a circuit terminal, a coiled thermostatic strip having one end attached to said axle and its other end extending between circuit contacts, an arm adjustably fastened to said axle, a rotatably mounted graduated disk projecting through the casing, and a cam rotatable with said disk and engaging said arm, whereby the normal position of the thermostatic strip may be regulated by adjusting the arm with relation to the axle and the action of the thermostatic strip may be varied by rotating said disk and cam.

1,824,115. SAFETY MEANS FOR ELECTRIC CIRCUITS. HENRY J. BLAKESLEE, Marlboro, Conn. Continuation of application Serial No. 219,917, filed Sept. 16, 1927. This application filed Oct. 21, 1929. Serial No. 401,271. 12 Claims. (Cl. 175—294.)



1. Safety means for electric circuits comprising, a transformer having primary and secondary windings, a motor, a main switch mechanically connected to and operated by the motor and adapted to connect and disconnect said primary winding with an electrical source, a load circuit connected to said secondary winding, an electromagnetically actuated switch having two windings, one winding adapted to be energized when said primary is energized, the other winding adapted to be energized when current flows in said load circuit, and conductors connecting the electromagnetically operated switch with the motor and with an electrical source, whereby when the current in the load circuit is interrupted the electromagnetic switch will act to so connect said conductors that the motor will cause the main switch to disconnect the primary coil of the transformer from the electrical source.

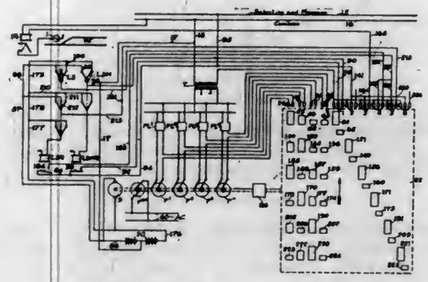
1,824,116. FOUNTAIN UNIT. JOHN HANSON BOYDEN, Glendale, Md., assignor to H. D. Hudson Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 3, 1928. Serial No. 310,004. 10 Claims. (Cl. 119—75.)



1. An element adapted to be detachably secured to a support and having means adjustable to clampingly circumferentially engage the rim of a receptacle to secure the same in liquid-retaining position, and also to reinforce the receptacle, a liquid supply conduit carried by the element and having a portion arranged to lie within a receptacle supported by the element, said conduit having a valve, and a valve control means carried by the conduit and also arranged to lie within the supported receptacle,

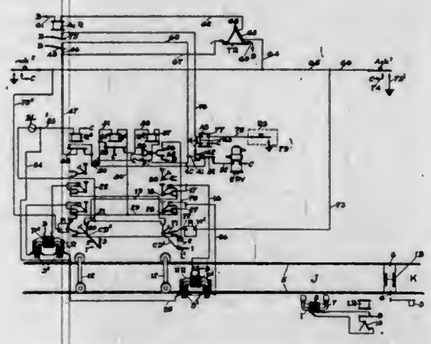
and positioned to be operated by a portion of the nose of a drinker when the mouth is positioned to withdraw liquid from the receptacle.

1,824,117. TRAIN DISPATCHING SYSTEM FOR RAILROADS. FREDERICK W. BRIXNER, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Nov. 25, 1929. Serial No. 409,663. 11 Claims. (Cl. 246—3.)



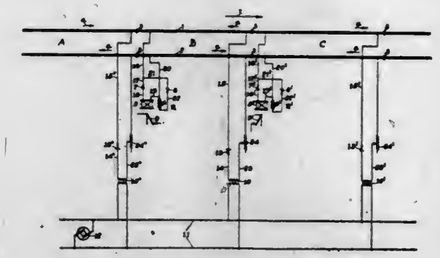
1. In a train dispatching system of the selector type, the combination with a single line circuit extending along the railway track and connecting a large number of way stations and a dispatcher's office, code responsive means at each way station for rendering available a particular message circuit branch upon the reception of a particular code, and means controlled over such message circuit for again making such branch unavailable.

1,824,118. INTERMITTENT INDUCTIVE TRAIN CONTROL SYSTEM. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 19, 1929. Serial No. 400,867. 13 Claims. (Cl. 246—63.)



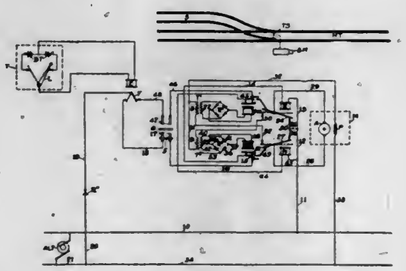
1. Train control apparatus immune to the flow of propulsion current comprising; a receiver consisting of a primary coil on the back yoke of an inverted U-shaped core; a secondary coil on each leg; said secondary coils being connected in series so that a change of flux in said core will produce voltages in said secondary coils which are cumulative; an energizing circuit for said primary coil including a source of direct current and a check relay; a control relay having a stick contact; a secondary circuit including in series said control relay, its stick contact, said secondary coil and said check relay; and trackway means for changing the reluctance of the magnetic circuit including said core; whereby the voltage drop over said check relay serves as a source of current to maintain said control relay energized, and whereby propulsion currents cannot induce a voltage in said secondary circuit.

1,824,119. RAILWAY TRACK CIRCUIT. AINSLIE T. CARTER, Coldwater, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Jan. 11, 1930. Serial No. 420,253. 10 Claims. (Cl. 246—34.)



10. A single phase alternating current track circuit system comprising, sources of alternating current and rectifying means supplying uni-directional pulsating current to each track section, adjacent track sections being supplied only with pulsating currents of different polarities.

1,824,120. RAILWAY TRAFFIC CONTROLLING SYSTEM. AINSLIE T. CARTER, Coldwater, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Jan. 11, 1930. Serial No. 420,254. 8 Claims. (Cl. 246—242.)

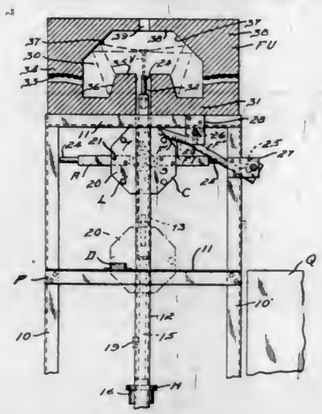


1. In a traffic controlling system for railroads, an alternating current source, an alternating current power operated reversible motor having normal and reverse operating circuits, two overload protective devices associated with said operating circuits respectively, one of said overload protective devices being effective for opening said normal operating circuit when excessive alternating current flow occurs therein, the other of said overload protective devices being effective for opening said reverse operating circuit when excessive alternating current flow occurs therein, and means for supplying said overload protective devices with uni-directional current of a valve in direct proportion to the alternating current flow in their respective operating circuits.

1,824,121. OPEN-BOTTOM FURNACE ORGANIZATION. GEORGE CHARLTON, Detroit, Mich., assignor to Wilcox-Rich Corporation, a Corporation of Michigan. Filed July 22, 1930. Serial No. 469,878. 1 Claim. (Cl. 263—7.)

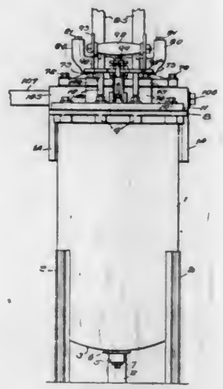
For use in a treating organization as described, a device comprising; a frame; and a rotatable carrier provided with substantially radial work-receiving arms and slidably mounted in said frame for substantial vertical reciproca-

tion relatively to an open-bottom furnace thereabove, said carrier being provided with means for effecting its partial



rotation incidentally to a reciprocatory movement thereof; and means for stripping work units from said arms incidentally to such rotation.

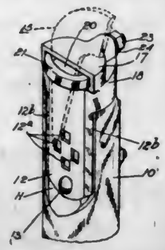
1,824,122. FUSED CUT-OUT. NICHOLS J. CONRAD, Wilmette, Ill., assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 21, 1926. Serial No. 156,213. 23 Claims. (Cl. 200—50.)



1. In a cut-out of the character described, an oil tank, line contacts within the tank, a fuse structure mounted for rectilineal movement into operative relation to the contact, spring means for moving the structure out of operative relation to the contact with a snap action, and means controlled exteriorily of the tank for moving the fuse structure into operative position while the tank remains closed and for retaining it in such position against the action of the spring means.

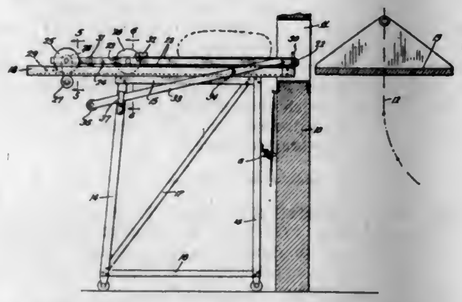
1,824,123. SCYTHE SNATH FASTENER. SAMUEL L. CROWE, Seymour, Ind., assignor to Seymour Manufacturing Company, Incorporated, Seymour, Ind., a Corporation of Delaware. Filed May 12, 1930. Serial No. 451,599. 5 Claims. (Cl. 56—326.5.)

1. In combination with a snath, a plate rigidly secured to the lower end thereof and having an exposed surface formed to serve as a seat for the tang of a scythe blade, a cap rigidly associated with the plate and constructed to completely encase the extreme lower end of the snath, and



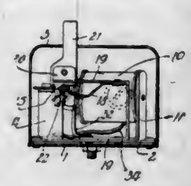
means associated with the cap, constructed to engage said tang of the scythe blade independently of the snath for securing it in place on the plate.

1,824,124. OVEN LOADER. JOSEF CRYNS, Chicago, Ill., assignor to The Petersen Oven Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 3, 1931. Serial No. 527,411. 3 Claims. (Cl. 107—57.)



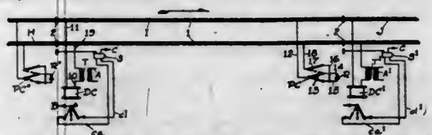
1. A loading device for ovens comprising a support, a carriage reciprocable thereon and having a flat supporting bed, an endless apron circumscribing said bed and capable of movement independently thereof, a cross-piece secured to said apron and extended beyond the side edges thereof, and arms pivoted intermediate their ends on said support, said arms having their ends nearest the oven positioned normally in the path of movement of the extended portions of said cross-piece to arrest progress of the apron during movement of the carriage away from the oven and having their other ends extended towards the end of the support farthest from the oven in ready reach of the operator.

1,824,125. CIRCUIT BREAKER. WILLIAM W. DASHNER, Logansport, Ind., assignor to R-B-M Manufacturing Co., Logansport, Ind., a Corporation of Indiana. Filed May 31, 1929. Serial No. 367,262. 8 Claims. (Cl. 200—87.)



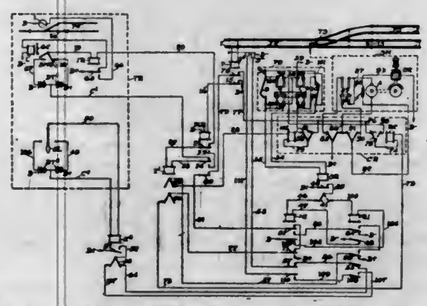
1. In a circuit breaker of the class described, an armature, a magnet coil, a pivot about which said armature is moved by an abormal energization of said magnet coil, a spring engaging said armature, and an angled extension of said spring engaging said armature only during its rotation about its pivot to aid said rotation.

1,824,126. SIGNALING SYSTEM FOR RAILROADS. OSCAR H. DICKE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 15, 1930. Serial No. 488,899. 16 Claims. (Cl. 246—40.)



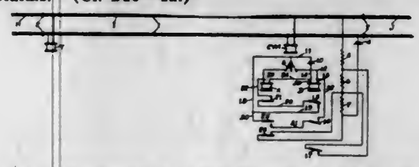
1. In combination, a section of railway track isolated from the remaining track by insulating joints, a track circuit for said section including a source of current of one character and an electro-responsive device responsive only to current of a different character connected in series across the track rails at one end of said section, and means connected across the track rails at the other end of said section for changing the current derived from said source to a current of said different character.

1,824,127. INTERLOCKING SYSTEM FOR RAILROADS. FRANK L. DODGSON, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Mar. 20, 1930. Serial No. 437,472. 15 Claims. (Cl. 246—135.)



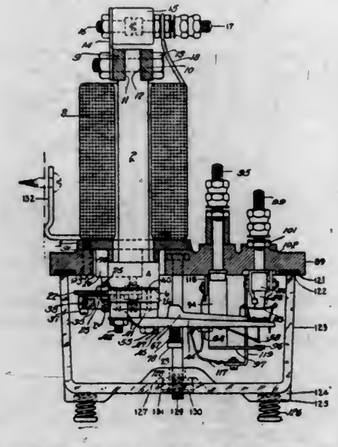
9. In a railroad traffic controlling system; a track switch; power actuated means for operating said track switch; an electro-responsive device for governing said power actuated means, said device being remotely controlled; indication means for indicating the position and locked condition of said track switch, said indication means being responsive to the correspondence between said electro-responsive device and said track switch; and signals governed by said indication means.

1,824,128. SIGNALING SYSTEM FOR RAILROADS. GEORGE E. DUFFY and FRANK T. CASPER, Rochester, N. Y., assignors to General Railway Signal Company, Rochester, N. Y. Filed Oct. 15, 1930. Serial No. 488,900. 4 Claims. (Cl. 246—41.)



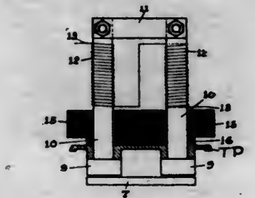
1. In combination, a track section isolated from the remaining railway track by insulating joints, a track relay connected across the track rails at one end of said section, a track circuit source connected across the track rails at the other end of said section, and means for adjusting the potential across the track rails including a contact making volt meter and a stick relay and means for picking up said stick relay under one potential condition and for dropping said stick relay under another potential condition of said track circuit as manifested by said volt meter.

1,824,129. RELAY. OSCAR S. FIELD, Albany, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 27, 1926. Serial No. 126,914. 25 Claims. (Cl. 200—104.)



1. In combination in a relay, a supporting top, an electromagnet and co-acting armature carried by said top, contact fingers on said armature, front and back contacts carried by said top in operative relation to said contact fingers, adjusting means whereby said contact fingers may be individually adjusted on said armature and locking means for said adjusting means.

1,824,130. RELAY. OSCAR S. FIELD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Apr. 26, 1929. Serial No. 358,198. 10 Claims. (Cl. 175—336.)

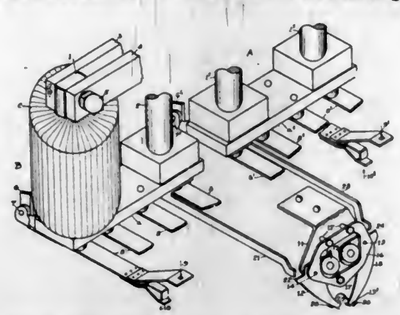


1. In a relay relatively slow to pick up, or to release, means magnetically shunting the relay armature to a greater or lesser extent, and means choking the magnetic path through the relay cores to a greater or lesser extent, depending on the original characteristics of the relay and the extent of the said magnetic bridging, whereby to make the relay relatively slow to pick up, or relatively slow to release, depending, respectively, upon the preponderating effect of the bridging or the choking.

1,824,131. RELAY. OSCAR S. FIELD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 13, 1930. Serial No. 474,958. 2 Claims. (Cl. 246—256.)

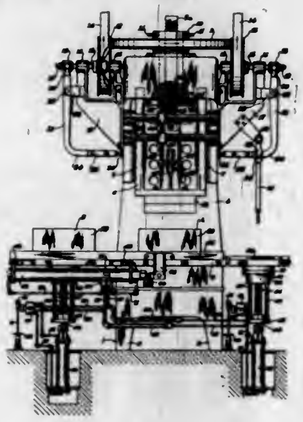
1. An interlocking relay comprising two neutral armatures, each of said armatures having individual electromagnetic actuating means, an extending arm attached to each of said armatures, two locking dogs, each of said locking dogs having pivot supporting means so as to be movable in the same plane, and counter-weights on each of said dogs on the inside of said pivot supporting means, each of said locking dogs including a downward extending leg, said leg having a heel and a hook, a shoulder on each of said locking dogs on the outside of said pivot support-

ing means and engageable by said armature arm, means for restricting the movement of one of said locking dogs by a previous movement of the other of said locking dogs,



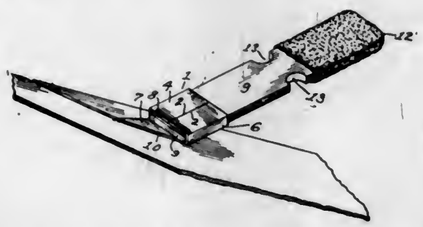
and means effective after the operation of both locking dogs for engaging the heel of the locking dog first operated by the hook of the locking dog last operated.

1,824,132. PRESS. BARTHOLOMEW GREENE, Sebring, Ohio. Filed June 23, 1928. Serial No. 287,694. 8 Claims. (Cl. 25—60.)



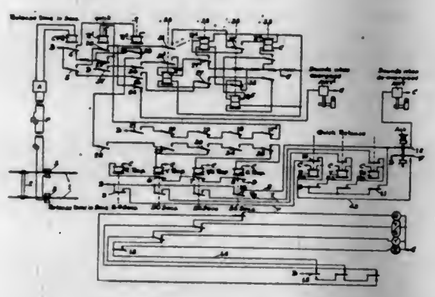
1. A press including a reciprocating head, a die carried by the head, a bed below the head, a table slidably mounted upon the head, a pair of spaced molds carried by the table, means for moving the table upon the bed to alternately position the molds directly beneath the die, a movable bottom in each mold carried by the table and means for raising the bottom of each mold while the other mold is positioned beneath the die.

1,824,133. TOOL. FRED J. HAGERLING, St. Louis, Mo. Filed July 23, 1928. Serial No. 294,903. 3 Claims. (Cl. 30—9.)



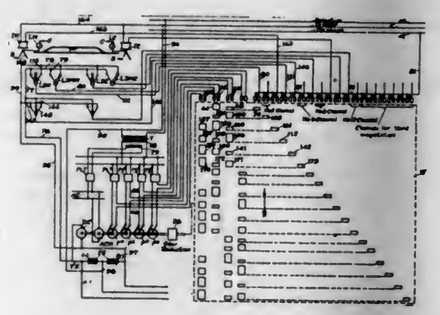
1. A cutter including a sleeve, a blade projecting forwardly from the anterior end of said sleeve and angularly with respect to the front side thereof, said blade presenting a cutting edge disposed obliquely across the entire opening at said end and a handle inserted into said sleeve with its anterior end in abutting relation to the oblique portion of said blade adjacent said sleeve, whereby said handle is prevented from slipping forwardly in said sleeve.

1,824,134. CONTINUOUS INDUCTIVE TRAIN CONTROL SYSTEM. WILLIAM D. HAILES, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 20, 1929. Serial No. 379,638. 17 Claims. (Cl. 246—63.)



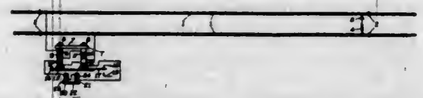
1. In continuous train control systems, in combination with code receiving means and secondary circuits for setting up controls of varying restrictiveness, a decoder for governing the secondary circuits and operated by the receiving means, said decoder having means making it incapable of setting up a favorable control in response to code having spaced alternate on and off periods of current, unless there intermittently occurs an off period, which is long relatively to said alternate off periods.

1,824,135. TRAIN DISPATCHING SYSTEM FOR RAILROADS. WILLIAM D. HAILES, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 23, 1929. Serial No. 401,729. 26 Claims. (Cl. 246—3.)



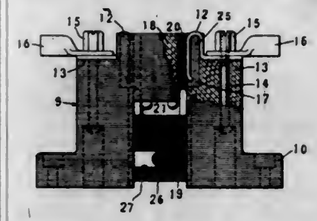
9. In a system for independently controlling a large number of devices over the same line circuit comprising, a selector circuit connecting a large number of distinctive frequency responsive devices, means for applying a plurality of distinctive frequencies to said selector circuit in distinctive order to actuate certain ones of said devices to close contacts of said devices, and a message circuit including part of said selector circuit and including said contacts.

1,824,136. DIRECT CURRENT TRACK RELAY FOR RAILWAY SIGNALING SYSTEMS. WILLIAM D. HAILES, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 15, 1930. Serial No. 488,901. 11 Claims. (Cl. 246—41.)



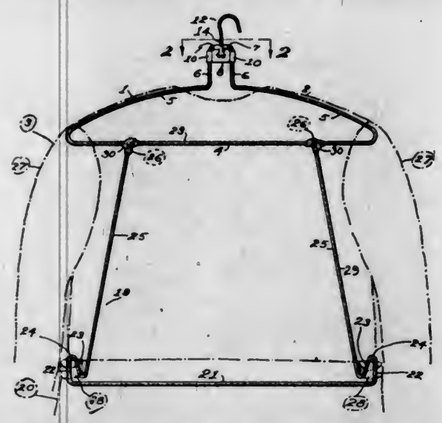
1. In a track circuit for railway signaling, the combination with a track circuit source, and a track relay in series therewith including a main coil and an auxiliary coil opposing the action of said main coil and inductively coupled with said main coil.

1,824,137. DISAPPEARING BLADE SWITCH. HERMAN J. HAMMERLY, Wallingford, Conn., assignor to Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed July 19, 1930. Serial No. 469,152. 14 Claims. (Cl. 200—163.)



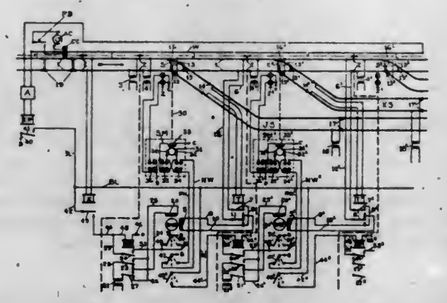
1. In a double break switch, a one-piece insulating block having guide perforations therethrough, stationary contacts mounted on said block in line with the outside edges of said perforations, and a switch member slidable in said perforations with spaced contact blades mounted thereon and engageable with said stationary contacts and retractable in said perforations to break the circuit within said block.

1,824,138. GARMENT HANGER. MORRIS A. HEIMANN, St. Louis, Mo. Filed Jan. 13, 1930. Serial No. 420,495. 3 Claims. (Cl. 223—61.)



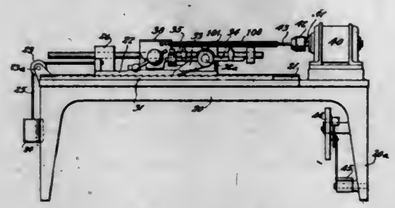
1. In a garment hanger, a support for an upper garment, and a wire loop for supporting a lower garment, said loop comprising a horizontal portion having ends bent upwardly, inwardly, and downwardly into hook formation and portions that rise from the lower ends of the downwardly extending portions of the hook and have their upper ends secured to the said support at points sufficiently inward from the ends of the latter to provide room for the sleeves of the upper garment beneath the end portions of said support.

1,824,139. SWITCHING MEANS CONTROLLABLE FROM ENGINE CABS. WILLIAM S. HENRY, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 13, 1924. Serial No. 731,776. 23 Claims. (Cl. 246—221.)



20. In a switching system for railways, a main track and diverging routes each connected to the main track by a switch, a power operated machine to operate each switch, and control means for each machine, requiring, for energization of the machine, shunting of the main track in advance of the switch, and actuation of car-carried mechanism.

1,824,140. MACHINE FOR MAKING TWISTED BRUSHES. HARRY HERTZBERG, Brooklyn, N. Y. Filed Apr. 28, 1930. Serial No. 447,912. 7 Claims. (Cl. 140—149.)

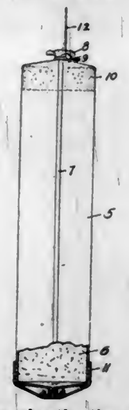


1. In a machine for making twisted brushes a bed, a carriage movable longitudinally of said bed, a twisting spindle near one end of said bed, wire-holding means at one end of said spindle and other wire-holding means fixed to said carriage, said wire holding means being in axial alinement with each other and with said spindle, said pair of wires held by said holding means are twisted about carriage being adapted to approach said spindle when a each other by the rotation of said spindle, electric means controlled by the operator to start rotation of said spindle and other electric means actuated by said carriage to stop said rotation independently of the operator when the carriage has travelled a predetermined distance.

1,824,141. WATER-TIGHT EXPLOSIVE CARTRIDGE. ROY LINDEN HILL, Wilmington, Del., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 18, 1930. Serial No. 436,888. 3 Claims. (Cl. 102—6.)

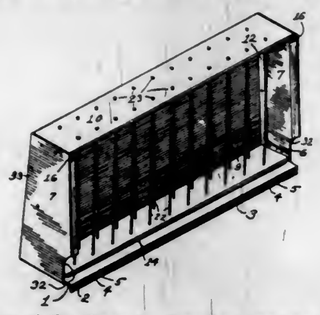
1. A sheathing for explosive cartridges such as dynamite or blasting powder, which consists of a woven fabric coated and impregnated with a waterproofing composition which

enters and is locked within the interstices of the fabric, a waterproofed side of the fabric being disposed toward



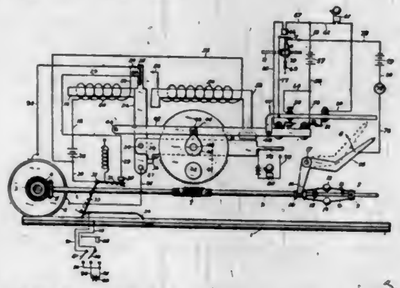
the inner side of the sheath, the mouth of said fabric sheathing being gathered and tied, and means for sealing said tied and gathered portion of the sheathing.

1,824,142. RACK. WALLER C. HORNADAY, University City, Mo., assignor to Jas. H. Forbes Tea & Coffee Company, St. Louis, Mo., a Corporation of Missouri. Filed June 24, 1929. Serial No. 373,261. 3 Claims. (Cl. 312—42.)



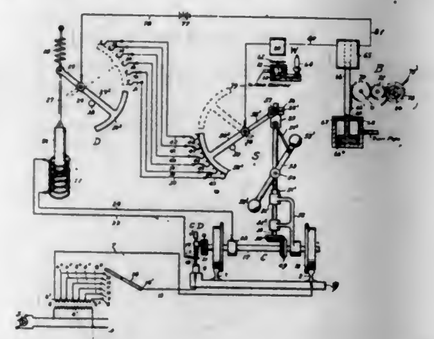
1. A case of the character described having a true bottom presenting a depending flange on its anterior edge, and a false bottom superposed on the true bottom, and terminating short of the forward edge of the true bottom, said false bottom presenting a flange resting on said true bottom to incline said false bottom rearwardly.

1,824,143. AUTOMATIC TRAIN STOP. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Apr. 16, 1913. Serial No. 761,462. 75 Claims. (Cl. 246—182.)



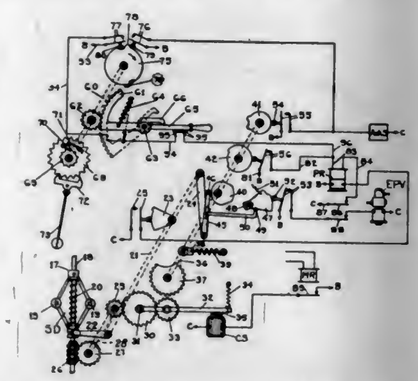
2. In an automatic train stop: a vehicle; a speed arm moved in correspondence with the speed of the vehicle; a movable member moved in the path of the speed arm in correspondence with the distance traveled by the vehicle; a support for said movable member, said support and movable member being movable away from each other by a continuous relative movement of the speed arm and the movable member after contact with each other; vehicle braking means; and means governed jointly by the support and the movable member for governing the vehicle braking means.

1,824,144. AUTOMATIC SPEED CONTROL OF VEHICLES. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Feb. 10, 1915. Serial No. 7,287. 92 Claims. (Cl. 246—182.)



1. In a system of automatic train control for protecting railway traffic, in combination: a railroad track; impulse transmitting devices distributed along the track; means responsive to the presence of a train on said track for producing progressively varying electrical conditions of several of said impulse transmitting devices in the rear of said train; and means on a following vehicle responsive to said varying electrical conditions of said impulse transmitting devices for automatically enforcing corresponding limitations on the speed of said following vehicle.

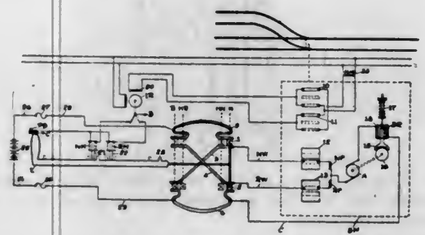
1,824,145. TRAIN CONTROL. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Sept. 11, 1924. Serial No. 737,163. 25 Claims. (Cl. 246—63.)



1. In an automatic train control system, vehicle-carried brake control apparatus comprising a permissive speed means initiated in response to change in control influences corresponding to unfavorable traffic conditions ahead, said permissive speed means acting to impose increasingly restrictive speed limits followed by a minimum speed limit

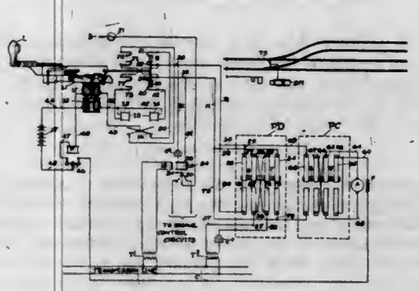
as the vehicle proceeds under said conditions, means for bringing the vehicle to a stop after said minimum speed limit has been imposed, and manually operable means for preventing such stop if operated at successive intervals while said minimum speed limit is in effect.

1,824,146. INTERLOCKING SYSTEM FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Feb. 2, 1929. Serial No. 337,000. 22 Claims. (Cl. 246—135.)



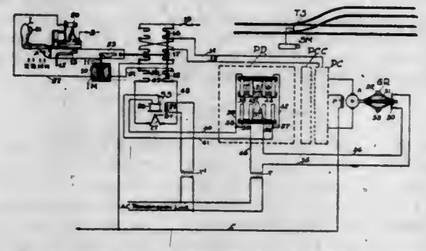
10. Apparatus for operating distant traffic controlling devices; the combination with a switch machine including the usual reversible motor having a normal and a reverse circuit and contacts for opening said normal or the reverse circuit of said motor when the corresponding operating stroke of the motor has been completed; of a normally active spring actuated brake for said motor, an electro-magnet for rendering said brake inactive connected in series with said motor, said electro-magnet being constructed to have a pick-up characteristic so that said brake will only release if full normal starting current flows through said motor, means for applying current to said motor, a protective circuit in multiple with said motor closed only when unauthorized current is applied to said motor, and means for indicating the position of said switch machine.

1,824,147. SIGNALING SYSTEM FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 23, 1929. Serial No. 380,286. 6 Claims. (Cl. 246—135.)



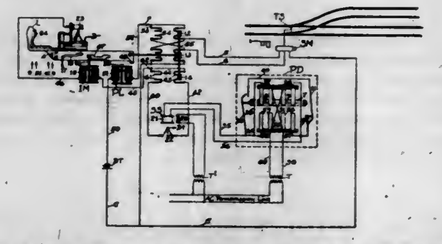
1. In an interlocking system for railroads, a control lever in an interlocking tower, a distant switch machine, three control wires connecting said control lever with said distant switch machine, an alternating current relay in said interlocking tower operable to any of three positions, and means, including two of said control wires operable to control said alternating current relay to any one of its three positions.

1,824,148. INTERLOCKING SYSTEM FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Sept. 12, 1929. Serial No. 392,139. 18 Claims. (Cl. 246—135.)



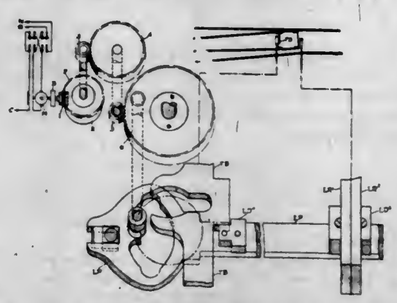
1. In an interlocking system, a track switch operably controlled by a switch machine, a control lever located in a tower and governing the movement of said switch machine, and indicating means giving indication in the tower of the position and locked condition of said track switch only if said switch machine is at rest.

1,824,149. INTERLOCKING SYSTEM FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Sept. 12, 1929. Serial No. 392,140. 14 Claims. (Cl. 246—135.)



6. In an interlocking system for railroads, a switch machine, a control lever for governing said switch machine, and means governing reversal of said lever only during operation of said switch machine.

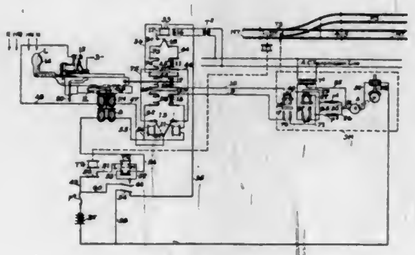
1,824,150. BRAKE FOR RAILROAD SWITCH MACHINES. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 14, 1929. Serial No. 399,549. 3 Claims. (Cl. 188—166.)



1. For use with a railroad track switch and a power driven switch machine, a mechanical brake including, a fixed brake drum, two brake shoes within said fixed brake drum biased to engage said brake drum, means disengaging said brake shoes from said brake drum upon applica-

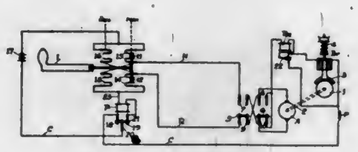
tion of power to said switch machine including, a power driven shaft of said switch machine, a plurality of arms upon said power driven shaft, and means movably connecting said arms to said brake shoes, whereby rotation of said shaft in either direction in respect to said brake shoes disengages said brake shoes from said brake drum, and means operably causing said brake shoes to rotate with said shaft after said braking effect has been eleminated, including stops provided by said brake shoes and engaging said arms on said power driven shaft.

1,824,151. INTERLOCKING SYSTEM FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Nov. 14, 1929. Serial No. 407,133. 15 Claims. (Cl. 246—135.)



6. In an interlocking system for railroads of the type substantially as shown and described, a track switch, a switch machine driven by a motor having two field windings, a control lever, operating circuits, indication means, and means including said field windings for super-imposing alternating current on said operating circuits for controlling said indication means.

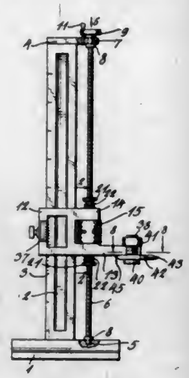
1,824,152. SWITCH MACHINE FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Jan. 27, 1930. Serial No. 423,743. 10 Claims. (Cl. 246—135.)



1. In a switch machine, in combination, an electrically operated motor, a brake for the motor, control means for energizing the motor, and a device to prevent release of the brake until a relatively large energizing current flows through the motor.

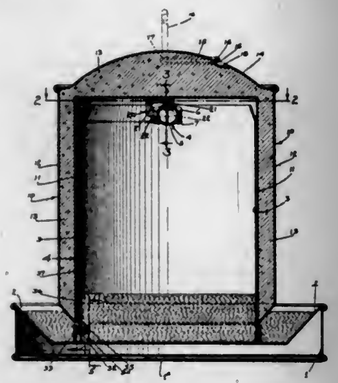
1,824,153. HEIGHT GAUGE. JOSEPH H. JACOBS, Rochester, N. Y. Filed Dec. 23, 1929. Serial No. 416,073. 3 Claims. (Cl. 33—170.)

1. A height gauge comprising, in combination, a base, a blade having one end secured to the base, the other end of the blade having a lateral projection, a screw having one end journaled in the base and the other end journaled in the lateral projection, means for holding the screw against longitudinal movement, a jaw slidably connected with the blade, the jaw having an opening for the screw, a split nut rotatably connected with the jaw and with the screw, means for normally holding the nut in engagement with the screw, and means for spreading the



nut so as to release it from engagement with the screw whereby the jaw can be moved in the direction of the length of the screw.

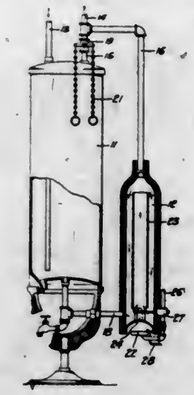
1,824,154. CHICKEN WATERER. CLEMENT JOHNSON and MAURICE H. KEATING, Minneapolis, Minn., assignors to H. D. Hudson Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 7, 1930. Serial No. 433,975. 11 Claims. (Cl. 119—73.)



1. A device of the class described comprising a water pan and a reservoir attached thereto, said reservoir having a lifting handle arranged within and adjacent its top, a cover for the reservoir, means to detachably connect the cover to the handle and a handle.

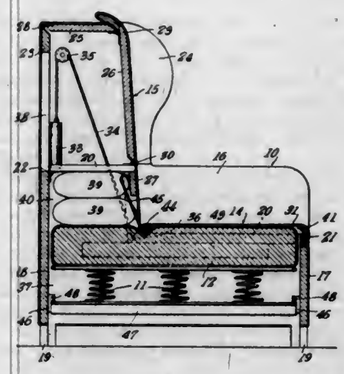
1,824,155. WATER SUPPLY HEATER. ARTHUR J. KERCHER, Berkeley, and WILLIAM WESLEY HICKS, San Francisco, Calif., assignors to Wesix National Company, San Francisco, Calif., a Corporation of Delaware. Filed Feb. 27, 1928, Serial No. 257,528, and in Great Britain Apr. 28, 1926. Renewed Apr. 14, 1931. 3 Claims. (Cl. 126—362.)

1. A heater for maintaining varied quantities of hot water for supplying hot water faucets comprising a pair of isolated water storage tanks, one tank being substantially larger than the other, means for supplying heat to the liquid in the small tank, piping connecting the lower portions of said tanks, a cold water supply pipe communicating with the large tank, a hot water discharge pipe, piping connecting the upper portion of said large tank and said discharge pipe, piping connecting the upper portion of said small tank and said discharge pipe, thermostat means responsive to the temperature of the water in the lower portion of the small tank to control the supply of



heating medium to the heating means of the small tank, and valve means interposed in the piping between the hot water discharge pipe and the large tank and controlling the circulation of water between said tanks.

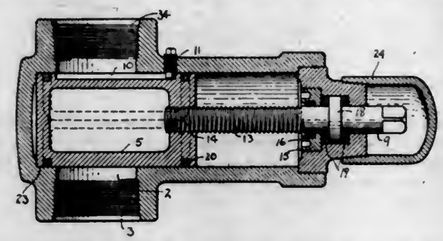
1,824,156. BED. HORACE G. KIMBLE, Brooklyn, N. Y. Filed Aug. 6, 1930. Serial No. 473,362. 5 Claims. (Cl. 5—12.)



1. A bed having a frame with front and rear side boards, springs and mattress removably supported between said front and rear side boards, a screen hinged to the rear side board for covering the mattress, a plurality of resilient strips suitably disposed along the edges of said screen overlapping those portions of the top edges of the mattress which lie within said screen when in its closed position, a back member hinged to said screen in front of the rear side board, means for holding the screen in the raised position and means for changing the vertical position of the springs and mattress.

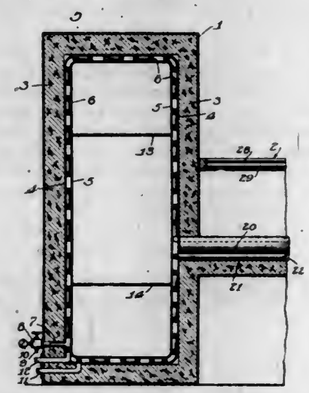
1,824,157. VALVE FOR WELL CASINGS. WALTER E. KING, Houston, Tex., assignor to James S. Abercrombie, Houston, Tex. Filed May 17, 1928. Serial No. 278,540. 2 Claims. (Cl. 251—62.)

1. A valve for well casings comprising a body having a passage therethrough, a cylindrical chamber transversely of the body, said chamber providing a valve receiving recess beyond the wall of said passage, a cylindrical valve in said chamber, said valve having grooves substantially around each end and along the sides thereof, the said end



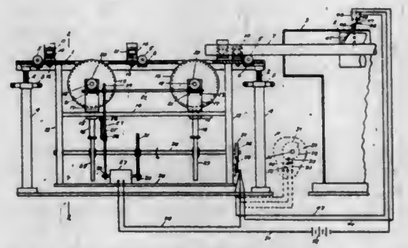
grooves being spaced slightly from the ends of the valve, and packing in said grooves adapted to contact the peripheral wall of said recess.

1,824,158. REFRIGERATING APPARATUS. HERMAN W. KLEIST, Chicago, Ill., assignor to Dole Refrigerating and Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 28, 1929. Serial No. 417,211. 10 Claims. (Cl. 62—95.)



1. A refrigerating apparatus comprising a refrigerator, means for maintaining a freezing temperature in said refrigerator continuously so that the food therein may remain in a frozen condition, and an elongated laterally extending display device associated with said refrigerator, said display device being provided with means for maintaining food in a frozen condition while being displayed the individual cooling means being surrounded by a vacuum.

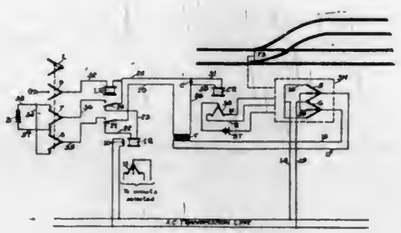
1,824,159. AUTOMATIC DISCHARGE DEVICE FOR GRINDING MACHINES. JOHN M. KOCH, Wyomissing, Pa. Filed Mar. 3, 1931. Serial No. 519,749. 9 Claims. (Cl. 51—103.)



1. In an automatic discharging device for grinding machines, the combination with rails adapted to slidably

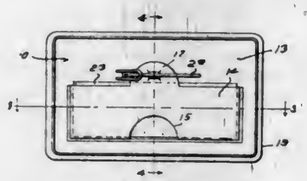
support the work from a grinding machine, means to lift said work from said rails upon completion of the grinding operation, means to direct said work to one side of said rails, and means to control said lifting operation, said controlling means being adapted to be operated by the rear end of said work.

1,824,160. TRAFFIC CONTROLLING SYSTEM FOR RAILROADS. ANDREW LANGDON, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 30, 1930. Serial No. 492,281. 8 Claims. (Cl. 246—3.)



1. In combination, an electro-responsive device responsive to direct current only, a circuit for said electro-responsive device, a source of alternating current at times connected in said circuit, a source of direct current, another electro-responsive device responsive to alternating current only, and means at times connecting said circuit to said another electro-responsive device and at times connecting said circuit to said direct current source.

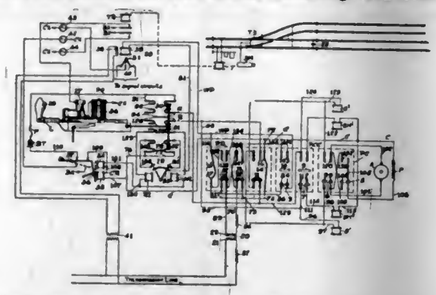
1,824,161. BADGE. JOHN A. LETHERT, St. Paul, Minn. Filed Sept. 22, 1930. Serial No. 483,673. 4 Claims. (Cl. 40—1.5.)



1. A badge comprising a front plate having a window, a rear plate having a rearwardly bulging pocket stamped therefrom to receive a display element, said pocket having its bottom closed and its top open, and provided at its open top with an upwardly projecting tab, and a covering for the front plate having a transparent portion covering the window in the front plate, the marginal edges of the front plate, rear plate, and covering being bent into a rearwardly extending marginal bead which surrounds the pocket and tab, the tab serving to move the upper open end of the pocket rearwardly.

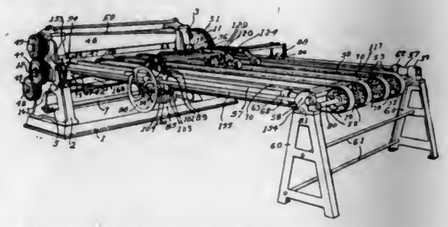
1,824,162. INTERLOCKING SYSTEM FOR RAILROADS. JOHN C. LINDNER, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 12, 1929. Serial No. 385,172. 18 Claims. (Cl. 246—135.)

1. In an interlocking system, a distant track switch, a switch machine for operating said track switch, a control lever in the tower governing the operation of said switch machine over a plurality of control wires including a common return wire, and means including said common



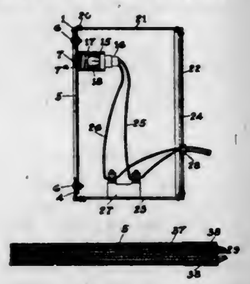
return wire, and a separate indication line wire, for indicating in the tower the position and locked condition of said track switch.

1,824,163. CUTTING MACHINE. WILLIAM MAIER, St. Louis, Mo. Filed July 3, 1924. Serial No. 723,933. 14 Claims. (Cl. 164—68.)



1. A machine of the character described comprising controlled intermittently operable shears adapted to sever a continuously traveling length of stock fed thereto, a conveyor associated with the shears for carrying the severed portions, means for driving the shears, means for driving the conveyor at a speed in excess of the speed at which the stock is fed to the shears to space the end edges of the current stock portions, a clutch for coupling said shear driving means to or uncoupling it from said shears, trip means for the shears adjustable along the path of travel of the stock delivered from the shears and a mechanical connection from the trip means to the clutch whereby the frequency of the intervals of actuation of the cutting means is determined by the adjusted position of said trip means, the arrangement being such that the length of said connection is adjusted automatically concomitantly with the adjustment of the trip means along the path of travel of the stock delivered from the shears.

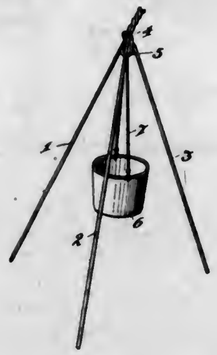
1,824,164. ILLUMINATED TRACK DIAGRAM. JOSEPH F. MERKEL, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Mar. 18, 1929. Serial No. 348,026. 3 Claims. (Cl. 40—133.)



2. An illuminated track diagram for railway signaling systems comprising an opaque panel formed of paper

laminæ impregnated with a phenol compound, the outer lamina having a drawing of the track layout thereon, said drawing being covered with a thin layer of the phenol compound, and metal supports for indicating lamps and lenses secured in through holes formed in said panel.

1,824,165. COLLAPSIBLE TRIPOD. GEORGE MILLER, North Syracuse, N. Y. Filed Apr. 11, 1930. Serial No. 443,530. 4 Claims. (Cl. 248—43.)

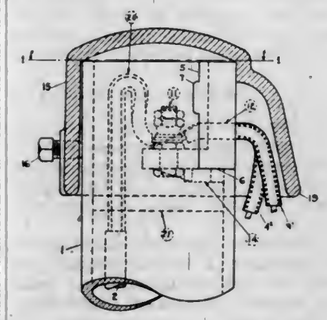


1. A collapsible tripod including a leg having a bent portion, a second leg having a bent portion adapted to engage with and disengage from the bent portion of the first leg to secure the said legs together, and to separate the said legs, and a third leg having a loop portion adapted to fit over the bent portions of the first and second legs.

1,824,166. WELDING METHOD. HARRY J. MORGAN, Walnut Park, Calif., assignor to P. L. & M. Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 16, 1929. Serial No 333,029. 6 Claims. (Cl. 219—10.)

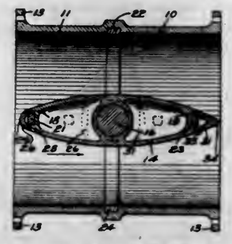
1. A process of applying a hard metal facing to a softer metal body comprising placing an oxygen containing compound of an element capable of forming a hard metallic carbide, together with carbon upon the softer metal body, and fusing the element and forming reducing conditions whereby the hard metallic carbide is formed on the softer body.

1,824,167. CONNECTING MEANS FOR ELECTRIC CONDUCTORS. HERMON P. OBER, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 22, 1927. Serial No. 228,025. 12 Claims. (Cl. 247—1.)



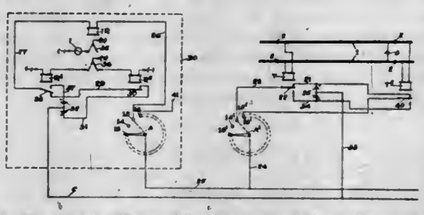
1. In cable connecting means, a hollow riser, a cut out portion in one side of the riser, an outlet block of insulating material, loosely inserted into said cut out portion, means sealing the riser below the cut-out portion, and a cap fitting over the end of the riser and bearing against the outlet block, the lower edge of the cap extending below the lower edge of the cut out portion whereby to form an air seal against water entering the riser.

1,824,168. BUTTERFLY VALVE. ERNEST W. ORTON, Mountain View, Calif., assignor to the Pelton Water Wheel Company, San Francisco, Calif., a Corporation of California. Filed Feb. 18, 1929. Serial No. 340,786. 14 Claims. (Cl. 251—12.)



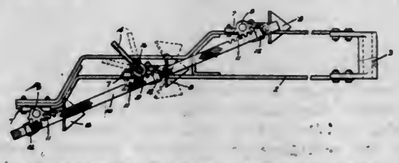
10. A valve comprising a body having a passage extending thru the same for flow of fluid, a pair of struts arranged at spaced points along said passage in the direction of flow, a butterfly member movable from a closed position to an open position, said member when in open position having a leading edge lying immediately behind one strut and a trailing edge lying immediately in front of tht other strut, said struts and said member shaped to present a stream-lined surface as a whole.

1,824,169. TRAIN DISPATCHING SYSTEM FOR RAILROADS. ROBERT M. PHINNEY, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 26, 1929. Serial No. 381,288. 16 Claims. (Cl. 246—3.)



14. In a train dispatching system of the selector type, the combination with a plurality of message circuits closed one at a time and connecting a dispatcher's office and a plurality of way stations, means at a distant way station for including in a particular message circuit a source of current of a particular polarity under certain traffic conditions, and means at said dispatcher's office for neutralizing the effect of said course.

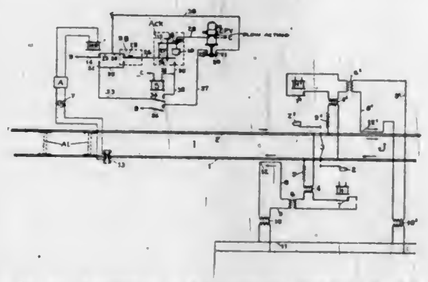
1,824,170. CULTIVATOR ATTACHMENT. JORGEN RAMSTAD, Stillwater, Minn., assignor to State of Minnesota. Filed June 13, 1030. Serial No. 460,904. 1 Claim. (Cl. 97—179.)



The combination with a beam having guides thereon, of a plurality of shovel shanks mounted for rotation on said

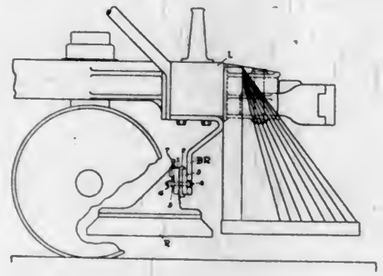
beam and provided with ground-engaging shovels, a single bar slidable longitudinally in said guides and having a series of teeth formed in one edge opposite and near the shanks of said shovels, a gear secured on each shank to mesh with the opposite teeth of said bar, said guides holding said gears and bar together, one of said shanks having a handle forming a continuation thereof for moving said bar longitudinally to rotate said shanks, and a latch and rack for normally locking said bar against premature longitudinal movement.

1,824,171. TRAIN CONTROL SYSTEM FOR SINGLE TRACK RAILROADS. WADE H. REICHARD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Apr. 10, 1925. Serial No. 22,127. 28 Claims. (Cl. 246—63.)



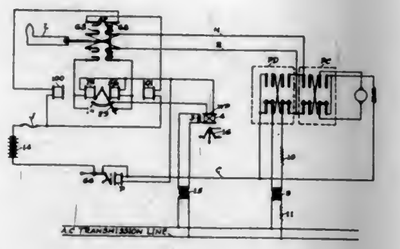
1. In an automatic train control system, a car-carried relay energized by influences inductively received from the trackway, means for applying the vehicle brakes when said relay is de-energized, means for suppressing said brake application if a manually actuable device is actuated before said relay is de-energized, trackway means for continuously supply sadi influences to energize said relay under favorable traffic conditions and for cutting off said influences to de-energize said relay under unfavorable traffic conditions, and further trackway means for momentarily supplying said influences at spaced points under all traffic conditions for momentarily energizing said relay, manually actuable resetting means for permitting release of the vehicle brakes, and means for preventing said resetting means being left in its active condition permanently.

1,824,172. TRAIN CONTROL CAR ELEMENT. WADE H. REICHARD, Rochester, N. Y., assgnor to General Railway Signal Company, Rochester, N. Y. Filed Apr. 27, 1929. Serial No. 358,578. 12 Claims. (Cl. 246—63.)



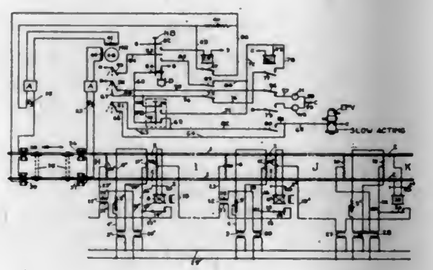
1. In a train control receiver, in combination, a magnetic core forming a partial magnetic circuit, and a magnetic bridge core member nut and screw members for adjusting the position of the bridge member, and elastic means for retaining the parts in adjusted positions, whereby to vary the reluctance of said magnetic circuit, at will.

1,824,173. SIGNALING SYSTEM FOR RAILROADS. WADE H. REICHARD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 23, 1929. Serial No. 380,346. 24 Claims. (Cl. 246—135.)



5. In an interlocking system for railroads, an electrically operated switch machine, a control lever having normal and reverse contacts, a relay in the tower having normal and reverse energizing circuits including said lever contacts, and means responsive to indication current generated dynamically by said switch machine after operation thereof for controlling said energizing circuit for said relay.

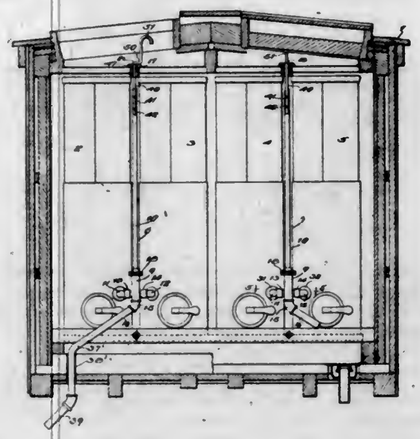
1,824,174. TRAIN CONTROL. WADE H. REICHARD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 18, 1924. Serial No. 732,753. 20 Claims. (Cl. 246—63.)



1. In an automatic train control system, trackway circuits for influencing car-carried brake control apparatus comprising track rails divided into blocks by insulated joints, a circuit for energizing a portion of each of said blocks including a source of electrical energy and the primary winding of a transformer, and a second circuit for energizing the entire length of each of said blocks under favorable traffic conditions, said second circuit including the secondary winding of said transformer.

1,824,175. BRINE RETAINING AND DISCHARGE VALVE MECHANISM. VINCENT SCHULIS, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 23, 1928. Serial No. 256,450. 3 Claims. (Cl. 137—21.)

1. In a device of the class described, a valve body having a valve seat, a vertical tubular guide connected at its lower end with the valve body, a combined hanger and guide bracket composed of spaced hanger portions provided with means for engaging frame members of a car, the space between the hanger members forming a guide, means for connecting the upper end of the tubular guide with the said bracket, a valve plunger within the valve body cooperating with the valve seat, and an operating rod connected with and carrying the valve plunger and extending through and guided by the tubular member and the space between the hanger members.



1,824,176. SOCK LINER. CLARENCE H. STEMMONS, Kansas City, Mo. Filed Aug. 12, 1929. Serial No. 385,094. 1 Claim. (Cl. 36—71.)



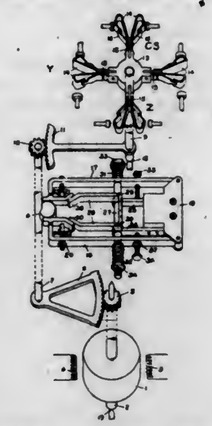
As a new article of manufacture, a sock liner consisting of a single thickness of flexible material and an arch support marginally underlying the inner edge of the liner from the heel portion to the sole portion thereof, and of loop form in cross section beyond the side of the liner, the loop portion being provided with moss hair filling.

1,823,177. PROCESS FOR PRODUCTION OF PIGMENTED PYROXYLIN COMPOSITIONS. ARNOLD M. TAYLOR and ARTHUR R. CHAPMAN, Stamford, Conn., assignors to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed July 28, 1924. Serial No. 728,719. 3 Claims. (Cl. 134—79.)

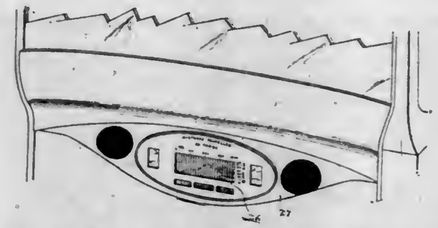
1. The herein described process of preparing a lacquer enamel which will dry with a high gloss, which consists of employing a moisture bearing pigment and designedly absorbing the moisture therefrom by wetting the same with an anhydrous highly hygroscopic organic liquid, and thereafter incorporating the wetted pigment in a nitrocellulose solution.

1,824,178. RELAY OPERATING MECHANISM. HERBERT B. TAYLOR, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Mar. 25, 1926. Serial No. 97,362. 12 Claims. (Cl. 200—104.)

1. In a relay, a movable contact element having two operated positions, electrically operable means for moving said element to one of said positions, mechanical means for moving said element to the other of said positions, said element being constructed to allow it to move beyond said positions, and magnetic means for exerting a magnetic force for stopping and retaining said element in one of said positions.

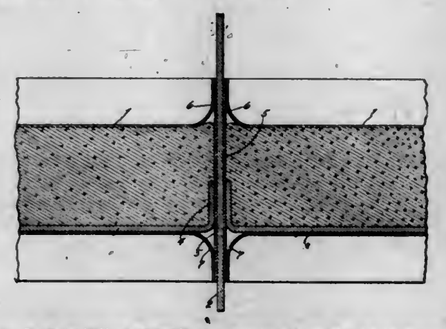


1,824,179. RECORDING DEVICE. JAMES R. M. TISDALE, Vancouver, British Columbia, Canada, assignor to Arnold M. Ivey, Toronto, Ontario, Canada. Filed June 7, 1929. Serial No. 369,056. 13 Claims. (Cl. 234—31.)



1. A recording device, comprising a transparent movable member, a surface arranged in close association with said member, an endless indicator element adapted to be laid between said movable member and said surface and to be held thereby in a visible position, and a variable element operating to place said indicator member between said surfaces.

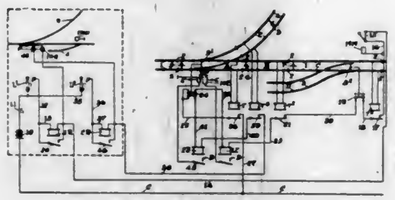
1,824,180. FLOOR CONSTRUCTION. MICHAEL J. TRACY, St. Louis County, Mo. Filed Mar. 14, 1930. Serial No. 435,690. 6 Claims. (Cl. 72—106.)



1. In a building, a wall, a concrete floor, a plate mounted between the floor and the wall and extending above and

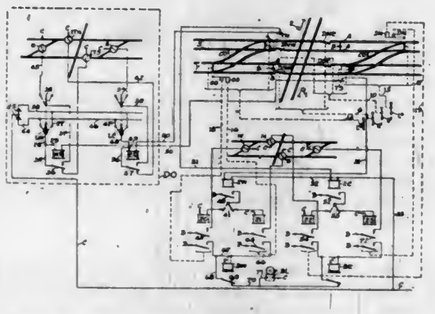
below the floor, and laterally curved portions rigid with the upper and lower edges of said plate covering the upper and lower marginal portions of said floor adjacent to said wall.

1,824,181. INTERLOCKING SYSTEM FOR RAILROADS. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 18, 1929. Serial No. 379,176. 14 Claims. (Cl. 246—3.)



1. In an interlocking system, the combination with a plurality of levers in an interlocking tower free to be moved to any position at any time, a traffic controlling device for each lever controlled by such lever and located at a distant way station, and a circuit controlled by one of said levers for controlling a particular traffic controlling device including contacts mechanically operated by other and conflicting traffic controlling devices closed only when such other conflicting traffic controlling devices are in their non-conflicting positions.

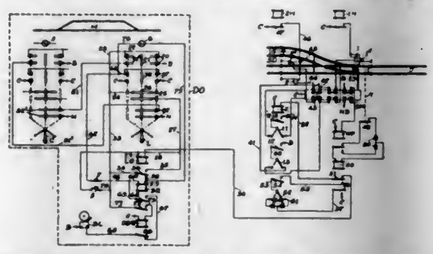
1,824,182. TRAIN DISPATCHING SYSTEM FOR RAILROADS. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Nov. 25, 1929. Serial No. 409,605. 18 Claims. (Cl. 246—3.)



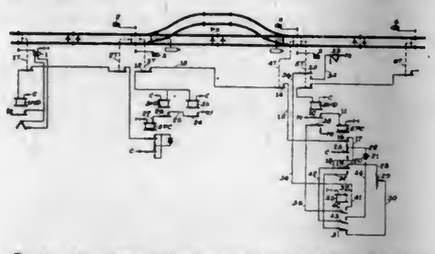
1. The method of dispatching the movement of trains, which consists in visually indicating to the operator at a distant interlocking plant from an invisible point the routes to be set up in said plant, and in having an operator in such plant act on such visual indication and set up such routes.

1,824,183. TRAIN DISPATCHING SYSTEM FOR RAILROADS. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Original application filed Oct. 13, 1927, Serial No. 225,925, now Patent No. 1,770,364, dated July 8, 1930. Divided and this application filed June 4, 1930. Serial No. 459,208. 8 Claims. (Cl. 246—3.)

1. In a system of remote control for traffic controlling apparatus for railroads, the combination with a single line circuit for controlling a distant traffic controlling device from a local tower, of a line relay connected in series in said circuit and located at said tower, a lever at said tower for applying electrical energy to said line circuit, means for opening said circuit at said distant traffic controlling device when a certain indication is to be transmitted, means for momentarily sounding an audible signal when said line relay is deenergized by opening of said line circuit at a distant point, and manually operable means for rendering said audible signal inactive.

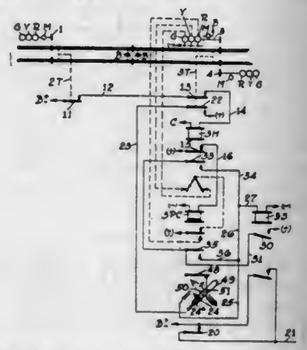


1,824,184. SIGNALING SYSTEM FOR RAILROADS. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 11, 1930. Serial No. 467,223. 6 Claims. (Cl. 246—33.)



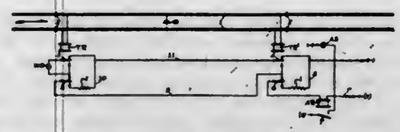
1. In an automatic block signaling system of the type described, two signals governing traffic toward the end of a passing siding, a line circuit, relays energized by said line circuit and responsive to variations in the current intensity for controlling said signals, and means responsive to the direction of movement of trains for controlling the current intensity in said energizing circuit.

1,824,185. RAILWAY TRAFFIC CONTROLLING SYSTEM. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Original application filed May 16, 1927, Serial No. 191,735, Patent No. 1,792,455, dated Feb. 10, 1931. Divided and this application filed Jan. 2, 1931. Serial No. 506,031. 7 Claims. (Cl. 246—41.)



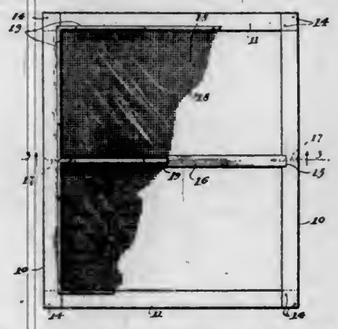
1. In a signaling system of the type described, a line relay controlled by two adjacent track circuits, a repeater relay controlled by said line relay, said repeater relay having contacts directly actuated by its armature which are slow in closing upon movement of said armature to its attracted position, and a directional stick relay having a pick-up circuit including said contacts.

1,824,186. LIGHT SIGNAL SYSTEM FOR RAILROADS. JOSEPH E. WILLING, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 20, 1930. Serial No. 476,709. 8 Claims. (Cl. 246—41.)



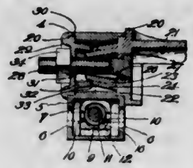
1. In a signal system, in combination, a center feed track section, a wayside signal at the entrance end of the section, a normally de-energized approach signal at the exit end of the section, an approach relay, and an energizing circuit for the approach signal including a front point of the approach relay.

1,824,187. WINDOW SCREEN FRAME. FRANK RICHARD ADAMS, Chicago, Ill. Filed Feb. 1, 1930. Serial No. 425,096. 3 Claims. (Cl. 156—14.)



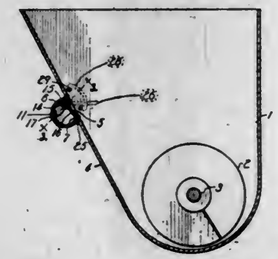
2. A window screen frame comprising upright side and horizontal cross members joined together at the corners, each member being provided at each end with alternate tongues and grooves, a tongue being arranged flush with one surface and a groove at the other, said tongues and grooves being oppositely arranged on adjacent members to interfit and form a smooth flush joint on both sides of the frame at each corner, there being rectangular notches in the inner sides of said upright members; a cross brace traversing said frame with its ends fitted into and secured in said notches; and nails driven through the sides of said upright members and into the ends of said cross brace.

1,824,188. LATERAL ARM AWNING SUPPORT. FREDERICK A. ANTON, Topeka, Kans. Filed May 29, 1930. Serial No. 457,194. 7 Claims. (Cl. 156—44.)



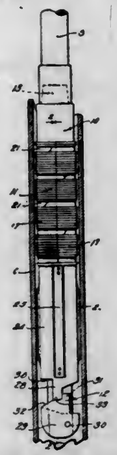
4. A lateral arm awning support comprising a hanger having a transversely-extending tubular head and a chamber underlying the head and provided with a front wall opening and with two side wall slots, a pair of brackets rotatably adjustable on and at opposite sides of the hanger, a collar having outwardly-projecting trunnions extending transversely of the hanger and through said slots and pivotally engaging said brackets respectively, a second collar fitting in the front wall opening and having outwardly-projecting trunnions extending transversely of and pivotally engaging the hanger, and a bolt extending through the front opening of the hanger and said second collar and swivelled to the latter and having a threaded engagement with the other collar.

1,824,189. ADJUSTABLE GATE FOR CONDUITS. HENRY H. BAILEY and JACK LEE THOMAS, Oklahoma City, Okla., assignors to Mechanical Royalties Corporation, Oklahoma City, Okla., a Corporation of Oklahoma. Filed Oct. 23, 1930. Serial No. 490,686. 8 Claims. (Cl. 83—73.)



1. In combination wtih a hopper having a longitudinal opening, a liquid conduit open at one end and having an opposite closed end wall and an aperture corresponding to said opening, a rocking shaft mounted in the end wall, and a rocking valve gate fixed on the shaft in functional relation with said opening and aperture to discharge the liquid in sheet form and to vary the thickness of the liquid sheet.

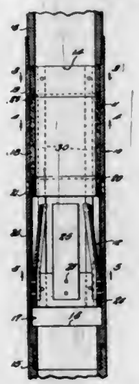
1,824,190. SPEAR. MILLARD S. BLACK, Huntington Park, Calif. Filed Mar. 5, 1930. Serial No. 433,296. 7 Claims. (Cl. 294—96.)



1. A spear of the character described including, a body, a wedge face on the body, a slip on the body operable to an expanded position by the wedge face upon longi-

tudinal movement of the body relative to the slip, and means for releasably holding the body against longitudinal movement relative to the slip and operable by rotation to release the body for movement including, a sleeve slidably on the body, a head on the body below the sleeve and having an inclined face, and a part on the sleeve normally at the upper end of the face of the head and operable downwardly over the inclined face to allow relative movement between the body and slip.

1,824,191. PACKING OVERSHOT. MILLARD SUMTER BLACK, Huntington Park, and FREDERICK M. BRAMBLEY, Brea, Calif. Filed June 18, 1930. Serial No. 462,018. 15 Claims. (Cl. 294—90.)



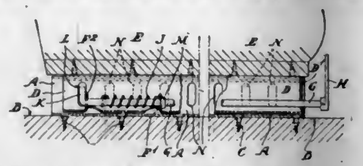
1. A tool of the character described for operation on a string of pipe including, a body adapted to pass over the pipe, packing in the body, means movably carried in the body below the packing for engaging the pipe, an operative connection between the said means and the packing whereby the packing is actuated to pack between the body and the pipe upon movement of the said means, and means for limiting the movement of the first mentioned means so that the pipe is supported on the body through the said first mentioned means.

1,824,192. UMBRELLA. WIKKE BOUMA, Los Angeles, Calif., assignor of one-fourth to John Van Nuland, Los Angeles, Calif. Filed Sept. 3, 1929. Serial No. 390,105. 4 Claims. (Cl. 135—25.)



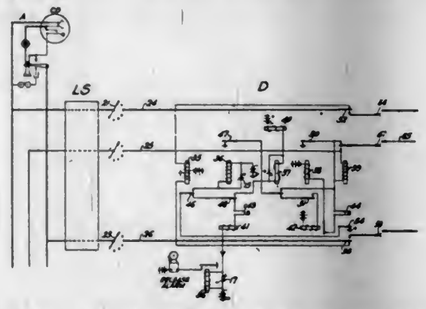
4. In an umbrella, a set of ribs, a handle, a runner sliding on the handle, a floating crown unattached to the end of the handle, a set of main cover spreaders attached to the runner, and a set of actuating struts connecting the spreaders and said crown.

1,824,193. SLIDING SEAT FOR MOTOR CARS AND THE LIKE. GEORGE EDWARD BOVINGDON, Hampstead, England. Filed Mar. 8, 1930, Serial No. 434,327, and in Great Britain Mar. 12, 1929. 1 Claim. (Cl. 155—14.)



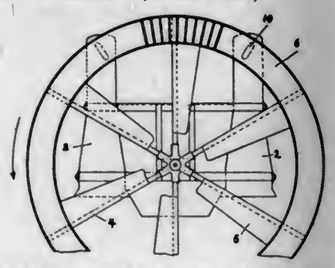
A device for locking slidable seats of motor cars and the like in an adjusted position comprising a pair of hollow interfitting channel members, one of which is carried by the seat and the other of which is carried by the floor of the vehicle, the adjacent walls of said interfitting channel members being provided with openings, and a locking device carried by the member fitted to the seat, said locking device comprising a shaft journaled in said member and having an offset locking arm at one end adapted to enter registering openings in the said interfitting members, a spring for urging said rod in a direction to maintain the arm interlocked with said openings, and a radially disposed handle on the end of the rod for manipulating the same.

1,824,194. RELAY CONTROL CIRCUIT. CHARLES R. BROOKS, Chicago, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 26, 1929. Serial No. 395,249. 5 Claims. (Cl. 179—18.)



1. In an operating circuit for a single coil relay having an armature, a source of direct current energy and a circuit closing device, and an electronic valve also in circuit with said relay coil for maintaining said armature in operated or released position when said current is intermittently closed for a prolonged period, depending on the polarity of said valve with respect to said current.

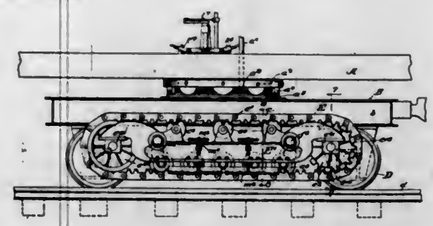
1,824,195. HELICOPTER. RUDOLPH CHILLINGWORTH, Brooklyn, N. Y. Filed Apr. 13, 1929. Serial No. 354,847. 2 Claims. (Cl. 244—19.)



1. In a helicopter of the class described, the combination with the fuselage of a plurality of propellers, tubes

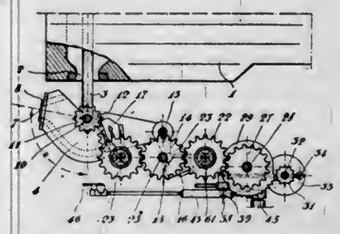
held to the fuselage at a predetermined distance from each other in which said propellers work for furnishing currents of compressed air, a lifting screw, means for rotating said lifting screw and nozzles on said tubes for directing the compressed air against the means for rotating said lifting screw.

1,824,196. TRUCK FOR ROTATABLY MOUNTED STRUCTURES. EDWARD V. CULLEN and ALBERT G. A. SCHMIDT, Chicago, Ill., assignors to Cullen-Friestedt Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 11, 1929. Serial No. 406,362. 17 Claims. (Cl. 105—215.)



1. A truck comprising in combination a frame structure, a deck rotatably mounted on the frame structure, traction wheels for the truck, crawlers for the truck, mechanism for driving the traction wheels, mechanism for driving the crawlers, and mechanism actuated from the deck for relatively adjusting the crawlers and the wheels to position either the crawlers or the traction wheels for supporting the truck.

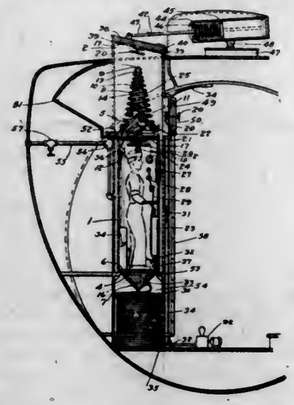
1,824,197. AUTOMATIC FEEDER FOR GLASS MOLDING MACHINES. TANCREDO DE BIASE, Buenos Aires, Argentina. Filed June 7, 1928, Serial No. 283,865, and in Argentina May 7, 1928. 12 Claims. (Cl. 49—55.)



12. An automatic feder, comprising an open-topped vessel to receive molten glass having a lateral discharge opening; a needle mounted above the open top of the vessel; means for positively tilting said vessel downward about a horizontal axis at regular intervals into position to aline the discharge opeinng with the needle; means for imparting a vertical reciprocating movement to said needle so as to project its lower end through said opening at the end of the down-stroke and thereby extrude a gob of glass; and means for severing the extruded gob; said needle, during its up-stroke, drawing back, through the discharge opening into the interior of the vessel, the remains of glass adhering to the needle at the moment when the gob is severed, said remains staying in the vessel while the latter occupies its non-discharging position.

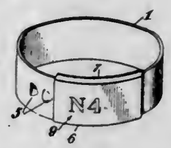
1,824,198. LIFE SAVING DEVICE. GEORGE F. DILLOW, Seattle, Wash. Filed Apr. 19, 1928. Serial No. 271,243. 3 Claims. (Cl. 114—16.7.)

1. In a life saving device of the type having a hollow cylinder extending downward into a submarine from the deck thereof with a cylindrical container therein by which an occupant of the submarine may escape therefrom and in which the cover of the container may be opened, said hollow cylinder having a recess in one side into which the said cover may be opened and an opening in the opposite side providing ingress and egress to and from said container from the upper end thereof,



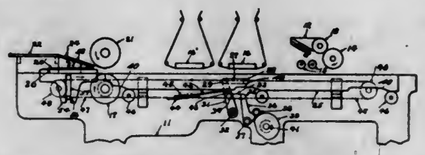
a port hole cover for said opening, a mast formed by a coil spring on top of said cover, a light at the upper end if said mast, a window in the side of said container, and a valve operable from the interior of the hollow cylinder by the occupant of said container with the cover open for admitting sea water to the hollow cylinder to release said container.

1,824,199. IDENTIFICATION SEAL. PHILIP DONOHOE, Los Angeles, Calif. Filed Apr. 27, 1931. Serial No. 533,231. 4 Claims. (Cl. 40—21.)



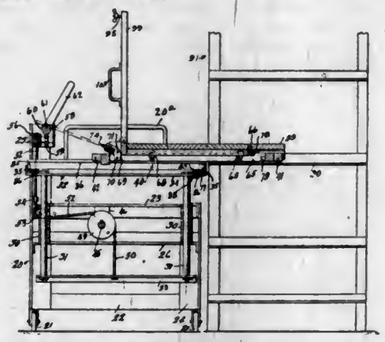
1. In a seal, a bendable band adapted to be affixed to an object to be protected or identified thereby, opposed resilient locking tongues adjacent one end of said band and arranged to receive and engage the other end of the band therebetween, said tongues being of different lengths, and teeth provided on opposite sides of said other end of the band and adapted to lock against free ends of said tongues.

1,824,200. PRINTING MACHINE. WILLIAM K. ECKHARD, Dunellen, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed July 11, 1929. Serial No. 377,570. 11 Claims. (Cl. 101—162.)



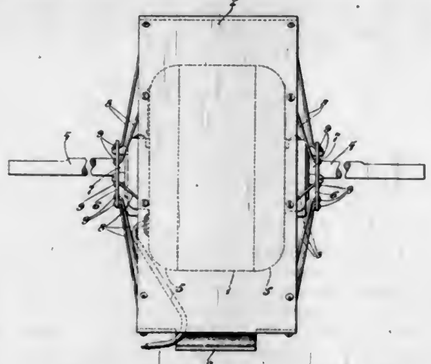
2. In a plate printing machine, a bed movable on a track and arranged to support a printing plate, a guide for the bed, an inking mechanism, and means for raising the tracks to engage the plate with the inking mechanism.

1,824,201. LIFT-TRUCK. ISIDOR EISENBERG, Brooklyn, N. Y. Filed Jan. 27, 1930. Serial No. 423,675. 8 Claims. (Cl. 214—97.)



2. In a device of the nature described, an elevator, a truck slidingly mounted thereon, means for releasably locking the truck to the elevator, the said means comprising a spring pressed member pivotally mounted on the truck, a flexible connection secured at one end thereof to the pivotal member, and a tongue at the opposite end of the flexible connection passing through the truck and adapted to lockingly engage the elevator when the pivotal member is operated against the tension of the spring.

1,824,202. SUPPORT FOR ELECTRIC MOTORS. HERBERT I. FINCH, St. Louis, Mo., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Mar. 31, 1927. Serial No. 179,809. 5 Claims. (Cl. 248—16.)



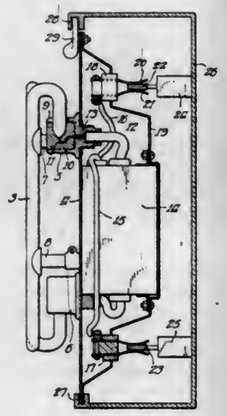
1. In combination with a motor housing, a motor support including an outer frame, a series of straight yieldable wire spokes extending from the outer frame to the motor housing, said spokes converging toward their inner ends, the points of attachment on the housing being in a different vertical plane from the points of support on the outer frame.

1,824,203. SHAVING DEVICE. JOHN U. FISHER, Cleveland, Ohio. Filed Feb. 24, 1927. Serial No. 170,473. 4 Claims. (Cl. 30—12.)



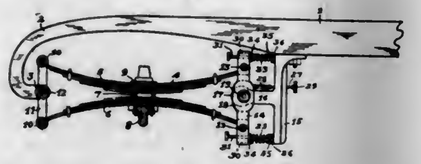
1. A shaving device including a handle having transverse grooves therein and a neck betwen the grooves, a guard adapted to receive a razor blade and having a slot therein in alignment with a slot in the razor blade when the guard and razor blade are assembled, the assembled guard and blade being in frictional contact with walls of said grooves when the same are telescoped over said neck.

1,824,204. SIGN CONSTRUCTION. CLAUDE E. FITCH, Wilmette, Ill., assignor to Q. R. S.-De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1930. Serial No. 504,010. 4 Claims. (Cl. 40—130.)



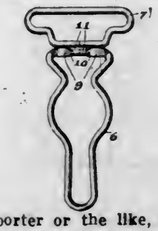
1. A sign construction comprising in combination an open faced housing having therein spaced low voltage bus-conductors and a plurality of individual sign units each having a sign character composed of gaseous conduction tubing, a background plate for said character, a transformer having its high potential leads directly connected to said character and having means on its low voltage leads for ready contact with said bus conductors, a housing member cooperating with said plate to house the transformer and its leads, and cooperating means on said housing and background for locking said units in position, said background completing the closure of said housing.

1,824,205. MOTOR VEHICLE SUSPENSION. WILLIAM G. HASLEY, Pittsburgh, Pa., assignor of one-third to John H. Downes, Pittsburgh, Pa. Filed Nov. 29, 1929. Serial No. 410,331. 7 Claims. (Cl. 267—36.)



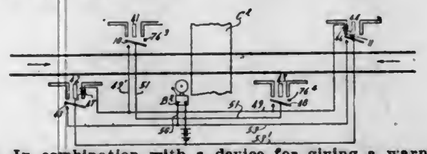
1. In a motor vehicle suspension apparatus of the character described consisting of a pair of semi-elliptical spring sections adapted for being secured to the motor vehicle axle, said pair of spring sections having their convex sides disposed toward each other, a shackle member pivotally connecting the outer ends of said pair of spring sections, means for pivotally joining said shackle member centrally of its length with the motor vehicle frame, a shackle element pivotally connecting the inner ends of said pair of spring sections, means for pivotally joining said shackle element with the motor vehicle frame, and means for adjusting the pivotal connection of said shackle element with said last mentioned means.

1,824,206. HOSE SUPPORTER. MICHAEL HAWIE, Greens Farms, Conn. Filed Apr. 16, 1931. Serial No. 530,029. 1 Claim. (Cl. 24—245.)



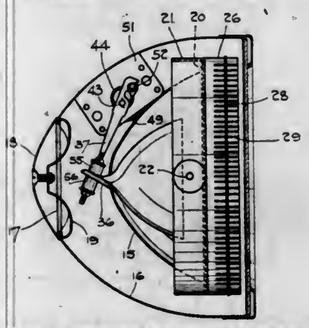
A garment supporter or the like, comprising a button loop formed of substantially cylindrical wire and having coaxial end portions, each of said end portions having a substantially cylindrical extremity and opposite flattened faces at its sides arranged adjacent to its said extremity, each end portion also having a shoulder between its flattened faces and its said extremity, said flattened faces forming cavities at opposite sides of said end portions, a strap loop, and a tubular metal binder joining said loops and having end portions aligned within said cavities and snugly engaging said flattened faces and said cylindrical extremities, the binder having shoulders interlocking with the shoulders of the button loop to prevent the ends of the button loop from pulling apart.

1,824,207. RAILWAY CROSSING SIGNAL CONTROL CIRCUITS. ALFRED E. HUDD, Evanston, and HARRY E. HERSHEY, Oak Park, Ill., assignors to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Sept. 29, 1928. Serial No. 309,173. 4 Claims. (Cl. 246—125.)



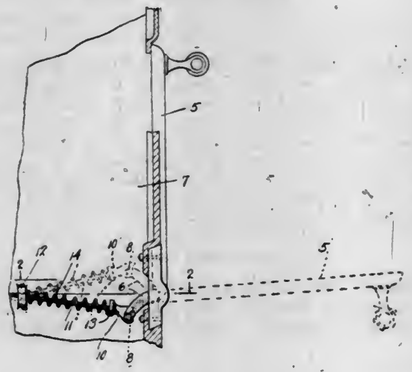
1. In combination with a device for giving a warning when a train is approaching a crossing, a track relay having an armature and two associated pole-pieces and having means for magnetically biasing its armature into association with either pole-piece to which it is moved, a circuit for said device including normally open contacts on said armature, vehicle carried means for transmitting a magnetic impulse to said relay to cause the same to actuate and complete said circuit, and means including a second vehicle controlled relay for causing said first relay to again actuate its armature to again open the circuit of said device.

1,824,208. LIGHT. JAMES DAVIS HUDSON, Montreal, Quebec, Canada. Filed May 11, 1929. Serial No. 362,234. 2 Claims. (Cl. 240—44.61.)



1. In lights, a dipping reflector containing the light and mounted in suitable bearings and having a deflecting front and a crank arm extending rearwardly therefrom, a connecting rod having a threaded end extending through the inner end of said crank arm and resilient collars rigidly held and locked to engage in said crank arm, said connecting rod at the other end having adjacent pin slots and a crank pin orifice, an electric motor suitably supported adjacent to said reflector and having an armature shaft associated with the crank engaging in said connecting rod, and a locking pin from the support of said motor held in one or other of said slots by the pressure of said resilient collars.

1,824,209. DOOR RETAINING DEVICE. ELMER P. JACOBS, Bridgeport, Ala. Filed Mar. 7, 1928. Serial No. 259,788. 1 Claim. (Cl. 126—191.)



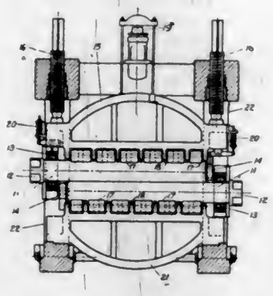
In combination, an oven having a door opening and also having on the outer side of one of its side walls an opertured lug, a swingable door complementary to said opening and having a trunnion and an arm fixed to said trunnion and disposed and movable at the outer side of and alongside said oven wall and provided at its free end with a lateral pin extending toward said oven wall and equipped with a head, said arm in all positions extending rearwardly from said trunnion, a rod slidable through said apertured lug and disposed at the outer side of said oven wall and alongside and adjacent to the same and having a yoke pressing outwardly against said pin on the arm and confined in its movement between the arm and the head of the pin and also having back of said yoke an abutment, and a spring mounted on and coiled about said rod and interposed between said apertured lug and said abutment.

1,824,210. LATHING UNIT. FRANK M. JACOBS, Tacoma, Wash. Filed Mar. 17, 1930. Serial No. 436,569. 4 Claims. (Cl. 72—116.)



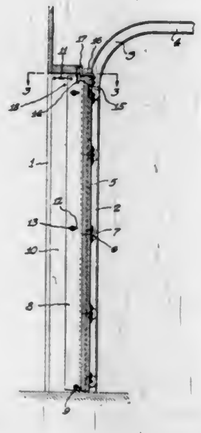
1. An article of manufacture comprising a plurality of wood laths disposed edge to edge in spaced parallel relation, metal strips extending across the ends of said laths and secured thereto, and a pair of parallel metal strips extending across and secured to said laths between the ends of the latter, said pair of strips being sufficiently spaced to allow cutting of the laths between them.

1,824,211. ROLLING MILL. AUGUST F. JOBKE, Pittsburgh, Pa. Filed May 2, 1928. Serial No. 274,502. 4 Claims. (Cl. 80—38.).



4. In a rolling mill a working roll and a backing member therefor, the latter consisting of stationary beam, bearings integral therewith to support backing rollers in contact with the working roll, the axis of the backing rollers, when not subjected to the rolling pressure, being arranged on the tangent of a curve, which is opposite to the deflection of the beam due to the rolling pressure, so that the backing rollers are in a straight line when subjected to such pressure.

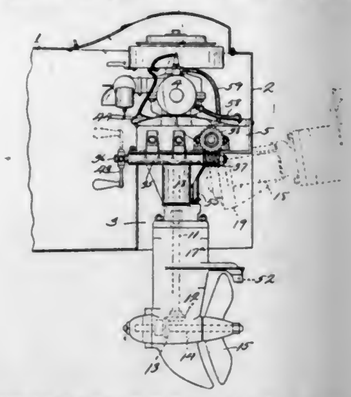
1,824,212. MOVABLE SEALING STRIP FOR DOORS. CLARENCE G. JOHNSON, Hartford, City, Ind. Filed Apr. 12, 1928. Serial No. 269,474. 7 Claims. (Cl. 20—20.)



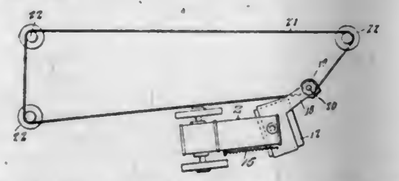
1. In combination with a frame and a closure member slidably mounted to cover and uncover the frame, sealing strips pivoted to the frame and normally disengageable from said member in the uncovering position of the latter, and means operable by said closure member for swinging said strips towards said member when the latter approaches closing position.

1,824,213. MARINE MOTOR. HARRY L. JOHNSON, South Bend, Ind., assignor to Johnson Brothers Engineering Corporation, South Bend, Ind. Filed Oct. 12, 1927. Serial No. 225,772. 86 Claims. (Cl. 115—18.)

1. A marine engine comprising a motor, a base carried by said motor, a hinged section carried by said base, a propeller drive shaft in said hinged section, a propeller carried by said hinged section and driven by said drive shaft, a clutch connection between the motor and the drive shaft, the propeller carrying portion of the hinged section being pivotally mounted, a steering segment carried by said propeller carrying portion, a worm meshing with said segment and means for rotating said worm.

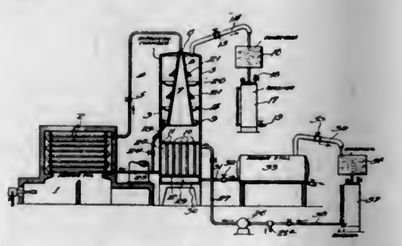


1,824,214. TOY VEHICLE AND GUIDING APPARATUS THEREFOR. JAMES FRANCIS KEY, Pasadena, Calif., assignor of sixty-eight per cent to James Irvine, jr. Filed Nov. 12, 1930. Serial No. 495,077. 5 Claims. (Cl. 46—48.)



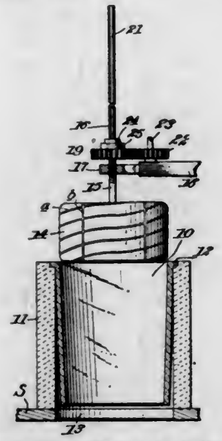
1. A toy vehicle comprising means for driving the vehicle, steering means for the vehicle, means yieldingly urging the steering means into position to turn the vehicle in one direction, and means for connecting the steering means of the vehicle with a guiding cable in such manner that the guiding cable applies force to the steering mechanism to turn the vehicle in the opposite direction and the vehicle is guided around a path determined by the guiding cable and supporting means about which the cable is loosely trained and approximately defining the path of travel of the vehicle.

1,824,215. PROCESS FOR TREATING HYDROCARBONS. LESTER KIRSCHBRAUN, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 1, 1922, Serial No. 598,248. Renewed Nov. 25, 1929. 6 Claims. (Cl. 196—49.)



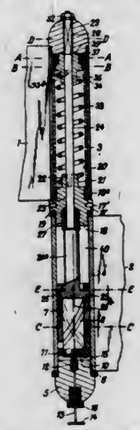
1. A continuous process for cracking hydrocarbon oil, consisting in raising the oil to a cracking temperature while flowing in a restricted stream through a heating zone, in delivering the heated oil to an enlarged reaction zone, through which the oil is caused to flow downwardly and undergo substantial vaporization, in causing vapors released from the oil during the downward flow of the oil to rise in an annular stream through said reaction zone, while out of contact with the downflowing oil, in collecting condensate separated from the vapors rising in said annular stream and in removing the same from said reaction zone, without permitting the same to contact with unvaporized oil therein, and in returning such condensate to said heating zone, in taking off uncondensed vapors from said reaction zone and in subjecting the same to condensation, and in collecting the resulting distillate.

1,824,216. METHOD OF MAKING GLASS CYLINDERS. NICHOLAS KOPP, Pittsburgh, Pa., assignor to Kopp Glass, Incorporated, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1929. Serial No. 343,230. 8 Claims. (Cl. 49—84.)



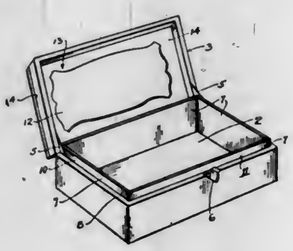
1. The method of surfacing a hollow article while in a pliable condition, consisting in subjecting a surface of the glass to combined rectilinear pressure and pressure in a direction at an angle thereto through the movement of a body against the same of different external shape to the initial shape of that portion of the article engaged by the body.

1,824,217. DOOR HINGE. FRIEDRICH KREINER, Furth, Germany. Filed June 4, 1930, Serial No. 459,132, and in Germany June 13, 1929. 1 Claim. (Cl. 16—54.)



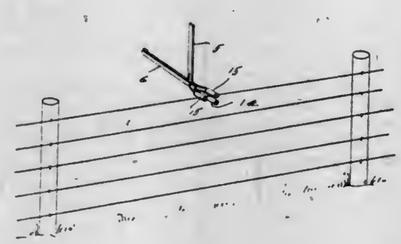
A combined door hinge and check, comprising in combination a pair of leaves, a closing spring having its ends secured respectively to said leaves, a fluid container associated with one of said leaves, a non-rotatable brake piston slidable in said container and having guideways therein extending in part helically and in part parallel to a plane normal to the longitudinal axis of the piston, a piston rod having a cross-bar thereon in engagement with said guideways, a closing cap secured on the other leaf, said closing cap and the end of the piston rod remote from the piston having mutually engaging securing means for adjustably securing the said end of the piston rod to the second mentioned leaf with the cross-bar of the piston rod in various angular positions with respect to the piston, so as to enable the engagement of the cross-bar with the helically extending part of the guideways to take place at different periods of the opening movement of the door, as and for the purposes set forth.

1,824,218. BOX. HENRY LEIMAN, Tampa, Fla., assignor to Leiman-Weidman Box Company, Tampa, Fla. Filed Nov. 28, 1930. Serial No. 498,880. 1 Claim. (Cl. 217—5.)



A cigar box comprising a body having a bottom and four sides secured together to form a receptacle, a lid having a top and four sides secured to each other, the lid being hinged to said body so that the sides of the lid and body are in alinement when the lid is closed, four false sides each having its ends connected by a miter joint with the ends of the adjacent false sides and fitting snugly and detachably within said body and against the sides thereof, and extending above the edges of the sides of said body to form flanges projecting into said lid when the lid is closed, said flanges being beveled inwardly to permit the sides of the lid to close thereover with a wedging action.

1,824,219. FENCE WIRE CRIMPER. FRED LOVELESS, Griggsville, Ill. Filed July 17, 1930. Serial No. 468,665. 1 Claim. (Cl. 40—106.)



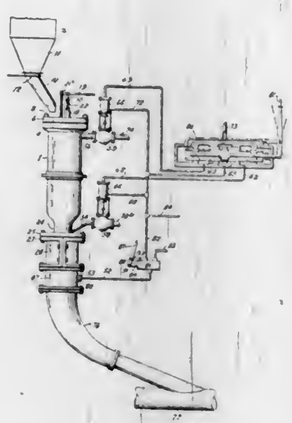
A wire crimping implement of the character described comprising a bar, bent at its intermediate portion to provide a pair of parallel legs, said legs being provided with outwardly offset end portions, a lever pivotally connected

to the legs and being operative between the same, and an extension on the lever operative between the offset ends of the legs.

1,824,220. COMPOSITION OF MATTER ADAPTED FOR THE FABRICATION OF BATTERY BOXES AND OTHER MATERIAL. ALBERT B. MACKEY, Cleveland Heights, and EDWIN A. MACKEY, Cleveland, Ohio, assignors to The Goliath Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 19, 1926. Serial No. 149,524. 5 Claims. (Cl. 106—2.)

1. A composition of matter consisting of the following ingredients in substantially the proportions by weight as follows: ground tire carcass, 15 parts; used tire fabric derubberized and ground, 7½ parts; wax, 7½ parts; carbon black, 1½ parts; siliceous material, 30 parts; blown asphalt, 22½ parts; and gilsonite, 16 parts.

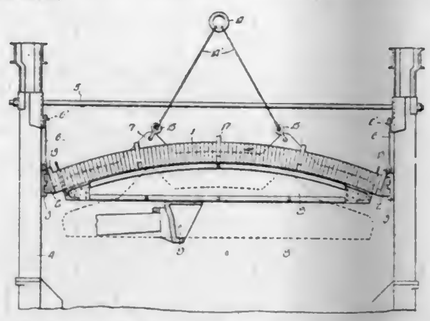
1,824,221. PROCESS AND APPARATUS FOR DISINTEGRATING OF FIBROUS MATERIAL. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Filed Oct. 24, 1928. Serial No. 314,812. 32 Claims. (Cl. 92—1.)



4. In an apparatus of the class described, an elongated vertically disposed body having a pressure chamber, means for closing the lower end of said chamber, said means having one or more ports, movable valve means for closing said port or ports, a wear plate having a port or ports in registry with the first named port or ports, said wear plate resting upon the pressure chamber closing means within the pressure chamber and being removable therefrom in a vertical direction, and means for securing said wear plate against movement in a horizontal plane.

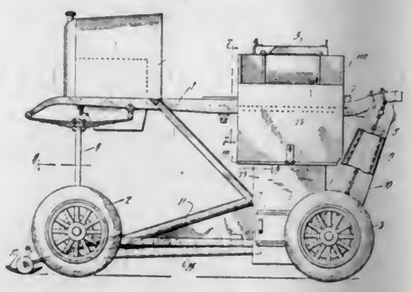
19. A process for reducing vegetable fibre by disintegration of wood or woody material, which consists in substantially filling a pressure chamber with such material in small pieces unsubmerged in liquid, said chamber having a charging inlet and a constricted discharge opening, admitting steam at a pressure of the order of 100 lbs. per square inch to the chamber only at a point adjacent the discharge opening for a time sufficient to soften the material adjacent said opening and thereafter admitting steam at a pressure upward of 500 lbs. per square inch to the chamber only at a point remote from the discharge opening, opening the discharge opening and progressively discharging the material therethrough while substantially maintaining the high steam pressure.

1,824,222. METHOD OF REPAIRING FURNACE ROOFS. JOHN P. MCLIMANS, Duluth, Minn. Filed June 25, 1927. Serial No. 201,486. 5 Claims. (Cl. 72—55.)



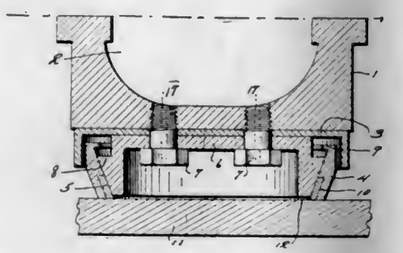
4. The method of repairing a furnace which consists of building a roof structure in a holding means and lowering said structure in place, securing said structure, and removing the holding means.

1,824,223. COTTON HARVESTING MACHINE. GEORGE R. MEYERCORD, Chicago, and OLIN H. BASQUIN, Evanston, Ill., assignors to Geo. R. Meyercord and Associates, a Corporation of Illinois. Filed Feb. 18, 1929. Serial No. 340,836. 29 Claims. (Cl. 56—14.)



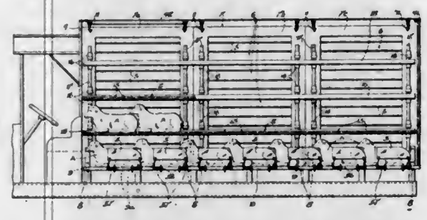
1. In a machine of the character described, a rotatable drum, picker elements extending through and rotatable in the wall of the drum, stationary segments of flexible material arranged within the drum, and means cooperating with said segments and said picker elements for causing movements of said picker elements along the segments to be translated into rotary movements of the picker elements about their own axes.

1,824,224. BALANCING SLIDE VALVE FOR STEAM ENGINES. WILLIAM J. MILLER, Sulphur, La. Filed May 24, 1930. Serial No. 455,397. 6 Claims. (Cl. 121—184.)



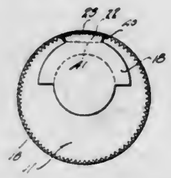
1. In combination with a slide valve and a steam chest cover, a cone carried by the valve, a ring snugly engaging the cone and having close contact at one end thereof with the cover, and coacting means carried by the ring and cone to prevent the ring from dropping off of the cone when the cover is removed.

1,824,225. METHOD OF PACKING LIVESTOCK FOR CONVEYANCE IN TRANSPORT VEHICLES. EDWARD FANCOURT MITCHELL, Melbourne, Australia. Filed July 17, 1928, Serial No. 293,471, and in Australia Aug. 19, 1927. 2 Claims. (Cl. 119—9.)



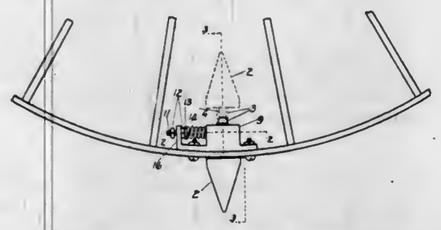
1. A method of packing livestock for vehicular conveyance consisting in arranging the animals in substantially couchant attitudes in rows extending longitudinally and transversely of the vehicle, and simultaneously confining in such couchant attitudes a plurality of the animals of each transverse row, with each group of confined animals repeated throughout each vertical row.

1,824,226. POWDER PUFF. CHARLES A. MUREAU, Los Angeles, Calif. Filed May 21, 1930. Serial No. 454,273. 11 Claims. (Cl. 132—78.5.)



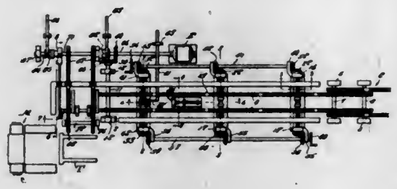
1. A powder puff including an element porous to powder, an element impervious to powder secured to the porous element, there being a space between the elements having a filling opening, and a closure means for the opening including, a flap integral with the impervious element stitched to the porous element at the opening in a manner to be normally folded over the opening.

1,824,227. TRACTOR LUG. CLAYTON J. NOTTKE, Huron, Ohio. Filed June 16, 1930. Serial No. 461,291. 2 Claims. (Cl. 501—50.)



1. In combination, a wheel rim provided with a plurality of perforations, a casting carried on the inner face of the said rim and provided with radial perforations adapted to be aligned with the perforations of said rim and extending completely through said casting, said casting also beng provided with a lateral passage intersecting one of said perforations, a reversible lug provided with a plurality of pins adapted to be seated in said radial perforations, one of said pins being provided with a locking groove, a yoke mounted in said lateral passage and adapted to be seated in said groove and embrace said last mentioned pin to lock the lug in position, and means for yieldingly retaining said yoke in operative position.

1,824,228. TIN-PACK HANDLING MECHANISM. JOHN WILLIAM PERRY, Wheeling, W. Va. Filed Aug. 9, 1930. Serial No. 474,200. 6 Claims. (Cl. 198—137.)



6. A tin pack handling mechanism including in combination an endless conveyor, pack positioning and plate alining means on opposite sides of the conveyor for substantially the full length of the conveyor and shiftable relative to one another and to the conveyor for positioning the packs on the conveyor and retaining the plates of the respective packs flush one with the other, and pivotally mounted pack plate alining members arranged in the path of movement of the packs and adapted to be engaged by the successive packs.

1,824,229. DECORATED TRANSPARENT CONTAINER. JOSHUA PEBSNER, Brooklyn, N. Y. Filed Mar. 12, 1930. Serial No. 435,146. 3 Claims. (Cl. 41—22.)

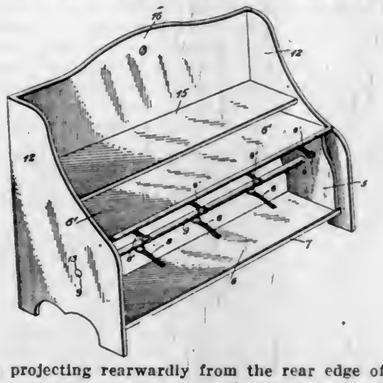


1. A method of decorating transparent containers comprising pouring sand against the wall of the container from the spout of a funnel, withdrawing the spout of the funnel to the center of the container, carrying the spout adjacent the container wall at a predetermined distance from the preceeding pouring position and pouring sand of the same or different color at this position, continuing the pouring in this manner completely around the container wall and repeating the process on top of the preceding pouring with sand of a selected color or colors, and shifting the sand in the lower layers in any desired manner to secure any desired design.

1,824,230. SPICE CAN RACK. OLIVER J. PHELPS and DAVID F. EASTBURN, Salem, Oreg. Filed Dec. 16, 1929. Serial No. 414,378. 4 Claims. (Cl. 211—80.)

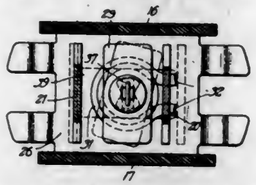
3. A rack of the class described comprising two end walls, a top and a bottom extending between and secured to said end walls, the front longitudinal edge of said bottom and the rear longitudinal edge of said top being pro-

vided with a vertical can-retaining flange, a plurality of can-engaging spring fingers projecting forwardly from the front edge of said top, a plurality of can-engaging spring



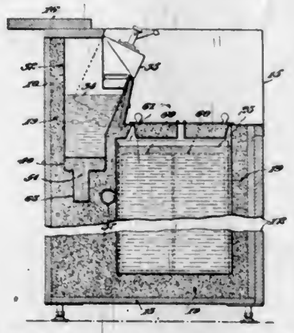
fingers projecting rearwardly from the rear edge of said bottom, means rotatably supporting said end walls to allow complete inversion of the rack, and releasable means for normally holding the rack against rotation.

1,824,231. CANDLE SOCKET. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, a Corporation of Indiana. Filed June 8, 1929. Serial No. 369,334. 8 Claims. (Cl. 173—351.)



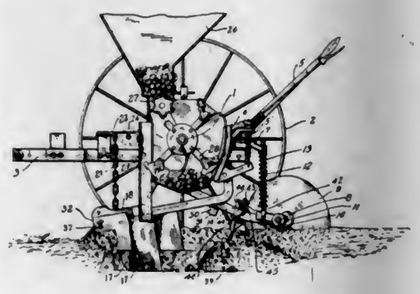
1. In a switch and lamp socket unit, a shell socket, support means upon which said socket is mounted, a central contact for said socket comprising a conducting member extending from said shell and carried by said means, said member having a resilient portion adapted to serve as a stationary contact of a switch, a second stationary contact member carried by said means, and a rotary bridging contact device interposed between said stationary contacts, said support means including a pair of insulating plates and said first named member serving as a spacer for said plates.

1,824,232. SODA FOUNTAIN CABINET. ALVIN W. PUFFER, Medford, Mass., assignor to Puffer Manufacturing Company, Winchester, Mass., a Corporation of Maine. Filed Feb. 13, 1928. Serial No. 253,958. 16 Claims. (Cl. 62—101.)



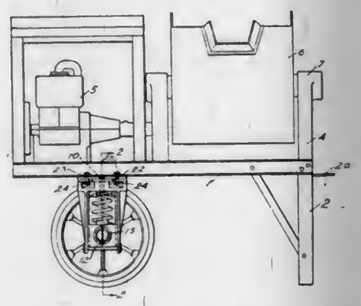
14. In a soda fountain cabinet, in combination, a relatively low temperature refrigerating compartment, an expansion chamber in said refrigerating compartment, a cooling compartment capable of containing a liquid and open at its upper portion for the insertion of syrup jars and the like, a container for a body of liquid refrigerant external to said cooling compartment and co-operating therewith to cool the same, and means for effecting a thermal connection between said container and said low temperature refrigerating compartment for effecting a circulation of the liquid refrigerant in said container.

1,824,233. POTATO PLANTING PROCESS AND POTATO PLANTER. ORLAND BAZIL RECTOR, Eaton, Colo. Filed July 21, 1930. Serial No. 469,313. 8 Claims. (Cl. 111—85.)



1. The process of planting potatoes, which comprises removing the dry surface earth, planting and covering the potatoes where the dry earth has been removed, and then replacing the dry earth.

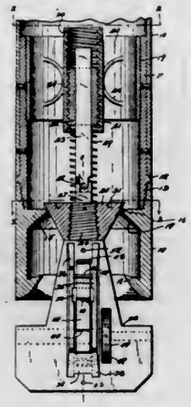
1,824,234. TRUCK. BENJAMIN C. RHODES and CLARENCE W. CONORE, Cambridge Springs, Pa., assignors to Blystone Manufacturing Company, Cambridge Springs, Pa., a Corporation of Pennsylvania. Filed July 17, 1928. Serial No. 293,427. 10 Claims. (Cl. 280—80.)



1. In a truck, the combination of a frame; wheel supporting posts swiveled on the frame; hollow pins extending laterally from the posts; wheels journaled on the pins; and a rod extending into the hollow pins.

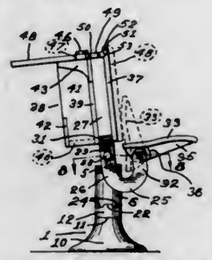
1,824,235. CONVERTIBLE BAILER BOTTOM. HERBERT E. RUTHERFORD, Uvalde, Tex. Filed Dec. 11, 1930. Serial No. 501,640. 11 Claims. (Cl. 166—19.)

1. A bailer bottom having a valve seat, a downwardly closing valve coacting with the seat and having a dart, a spring urging said valve downward against the seat, and means within the bailer whereby the tension of the spring may be increased, lessened or entirely relieved, said means including a many-sided stem extending upward from the valve and through said spring, an internally screw-threaded member mounted within the bailer, an externally



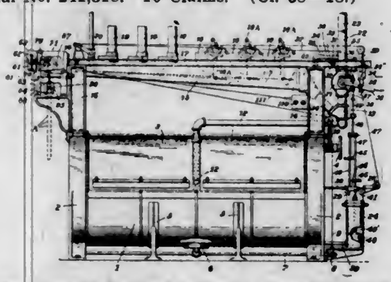
screw-threaded member engaging the internally screw-threaded member and having a many-sided passage through its center through which said many-sided stem slides.

1,824,236. DESK. EDWIN J. SANTEE, St. Louis County, Mo. Filed June 16, 1927. Serial No. 199,218. 2 Claims. (Cl. 155—89.)



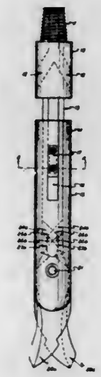
1. A desk comprising a frame having a desk top and a seat mounted on said frame, a tubular casing carried by the frame, a base member having a cylindrical upper portion and a shoulder at the lower ends of said portion, said cylindrical portion having depressions, a collar mounted upon said cylindrical portion and having a screw adapted to enter one of the depressions, said casing receiving said cylindrical portion and engaging the collar, and a bolt passing through the base and having its head housed in the casing with the upper surface of the head spaced below the upper edge of of the casing.

1,824,237. WASHING MACHINE AND AUTOMATIC CONTROL THEREFOR. FLETCHER SCHAUM, Philadelphia, Pa., assignor to Fletcher Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 20, 1927. Serial No. 241,318. 10 Claims. (Cl. 68—18.)



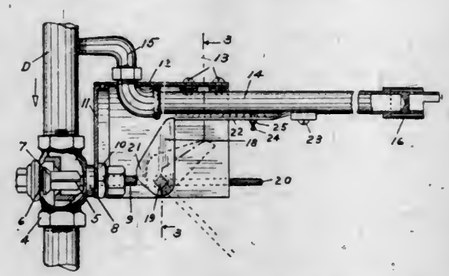
1. The combination of a washing machine, means for holding powder ingredients and means for holding liquid ingredients for the said machine, hot and cold water inlets, a flush valve and a dump valve, a jacquard control mechanism for operating the means for holding the powder ingredients and the liquid ingredients and the jacquard control mechanism controlling the opening of the hot and cold water inlets, a float mechanism for cutting off the hot and cold water inlets and means determining at what height the hot and cold water inlet shall be cut off, said means being operated by the jacquard mechanism.

1,824,238. OIL SAND BIT. WILLIAM O. SCOTT, Walnut Park, Calif. Filed Feb. 2, 1931. Serial No. 512,950. 3 Claims. (Cl. 255—76.)



1. An expansion bit having a slotted body and a stem sliding therein, said stem being adapted for attachment to a drill pipe; two blades pivotally mounted within said slotted body, and cooperating lugs on the lower end of said stem and the upper ends of said blades adapted to force the lower ends of said blades apart as said stem is caused to move downwardly within said body by the vertically exerted pressure of the material to be drilled.

1,824,239. THERMOSTATIC CONTROL. RICHARD H. SHADRICK, Minneapolis, Minn., assignor, by mesne assignments, to Milwaukee Gas Specialty Company, Milwaukee, Wis., a Corporation. Filed Jan. 6, 1927. Serial No. 159,350. 7 Claims. (Cl. 158—117.1.)



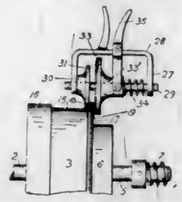
1. A device of the character described, comprising a valve having a spring projected valve pin, a lever having a cam portion for engaging the valve pin to open the valve, said lever having a fulcrum axis which is substantially in alignment with the valve pin, and thermostatically operated means for releasably securing the lever in a predetermined position, said means including a strip of bi-metal having end contact with the lever and which upon being subjected to predetermined temperature will entirely free itself from the lever thus permitting a quick closing action of the valve.

1,824,240. ACOUSTICAL MATERIAL. HERBERT C. SMITH, Los Angeles, Calif., assignor to Coast Insulating Co., a Corporation of Delaware. Filed May 6, 1930. Serial No. 450,207. 8 Claims. (Cl. 154—44.)



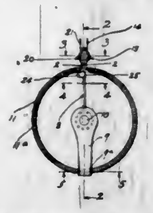
1. An acoustical material composed of fibrous wads each surrounded and joined to one another by cement coatings; limited to provide interstitial spaces between the wads; the exposed surface of the material being of greater density than the remainder of such coatings.

1,824,241. APPARATUS FOR THE MANUFACTURE OF BOXES OF CARDBOARD AND THE LIKE. FRANZ RIEDL STELLING, Roseville, Sydney, New South Wales, Australia. Filed Oct. 15, 1930, Serial No. 488,920, and in Australia Nov. 6, 1929. 5 Claims. (Cl. 93—56.)



1. Apparatus for the manufacture of boxes of cardboard or the like, comprising a framing in which is rotatably mounted a block to neatly receive the rim of a portion of a box, a plate rotatably mounted in the framing to contact with, and hold in juxtaposition on the rim, a base of such size as to form a flange about the rim, and two rollers mounted in the framing to apply to the box parts an adhesive strip for the purpose of joining them, one of said rollers being adapted to register with and bear upon the rim and the adjacent surface of the flange, and the second roller, of larger diameter than the former roller and spring pressed there-toward, being adapted to overlie the surface of the flange remote from the rim, so that pressure is applied by these rollers to the faces of the flange under the influence of the spring pressure when the rollers are in operative position upon the box parts.

1,824,242. VARIABLE RESISTANCE. ERWIN R. STOEKLE, Milwaukee, Wis., assignor to Central Radio Laboratories, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 11, 1927. Serial No. 198,014. 9 Claims. (Cl. 201—56.)



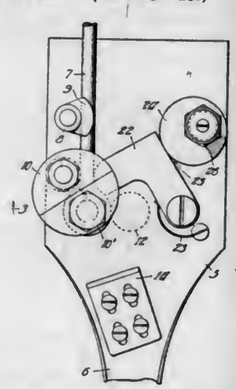
9. A device of the character described comprising a split core having transversely extending lugs at its split, a resistor mounted on and insulated from the core, a radial arm doubled upon itself and having a bight at its inner end provided with bearing means, the outer end of the radial arm being secured between the lugs of the core, a shaft mounted in the bearing means of the arm and a contact shoe mounted on the shaft and engageable with the resistor.

1,824,243. KNOCK-DOWN FURNITURE STRUCTURE. URBAN C. THIES, Dayton, Ohio, assignor, by mesne assignments, to The Globe-Wernicke Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 28, 1926, Serial No. 125,542. Renewed Feb. 5, 1931. 12 Claims. (Cl. 211—136.)



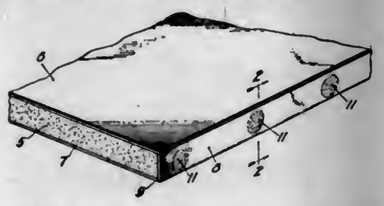
1. A knock-down sheet metal structure of the class described comprising a plurality of vertical spaced support members, cantilever sheet metal brackets adjustably secured to said support members and having ends fitting within said members, sheet metal shelves supported on the upper sides of said brackets with the two ends of adjacent shelves at substantially the center of a common bracket, means for detachably fastening said shelves to said brackets, and a fastening screw extending through each of said brackets to clamp said brackets in any position along said members.

1,824,244. CATENARY ROD BENDER. SELIM N. TIDEMAN, Wilmette, Ill. Filed June 23, 1930. Serial No. 463,222. 3 Claims. (Cl. 153—45.)



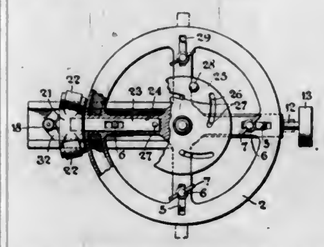
1. A hand tool for rod bending comprising a base having a pair of spaced stationary guides and a pair of movable members whose normal resting position leaves a path for insertion of the rod between the stationary guides and the movable members, means for moving one of said members against the rod between said guides to form an initial bend, and means for turning the other member about the guide nearest the inserted end of the rod to bend it into substantially a loop, said last named means being pivoted on the guide about which the rod is bent and removable therefrom in only one position.

1,824,245. PLASTER BOARD. CLARENCE W. UTZMAN, Chicago, Ill., assignor, by mesne assignments, to United States Gypsum Company. Filed Aug. 12, 1922. Serial No. 581,361. 5 Claims. (Cl. 154—45.9.)



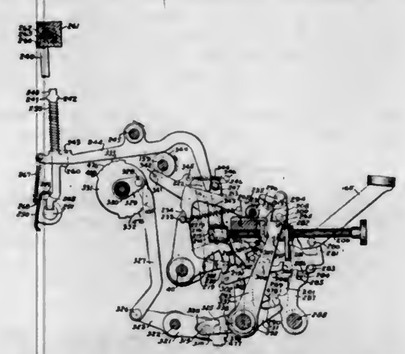
1. A plaster board comprising, in combination, a body of plaster or the like; covering material on the face of said body; and a folded cover sheet margin on an edge of said body and anchored thereto by portions of the body material protruding through apertured portions of the margin.

1,824,246. TIRE REMOVING MACHINE. GERRIT VAN DAAM, Kenmore, N. Y. Filed Dec. 2, 1929. Serial No. 411,150. 1 Claim. (Cl. 157—6.)



A tire removing machine comprising a standard, a table thereon, a bracket thereon having a pair of arms, said table having radial guideways, supporting members slidably mounted in said guideways, means for radially adjusting the supporting member simultaneously, said bracket having a channeled guideway in one of its arms, a removable jack having a flanged base slidably interlocked in the bracket guideway and having a part movable across the periphery of the table for exerting a tire shifting pressure on the tire supported by the table, and means on the other bracket arm for providing relative rotary movement between the table and bracket.

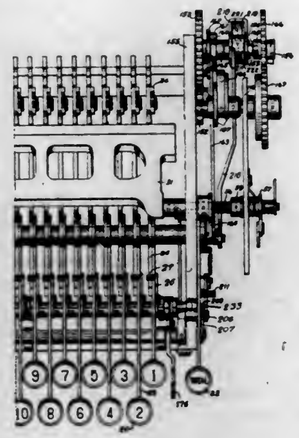
1,824,247. CASH REGISTER. EDWARD J. VON PEIN and WILLIAM S. ROUX, Dayton, Ohio, assignors, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed June 14, 1922. Serial No. 568,161. 34 Claims. (Cl. 235—3.)



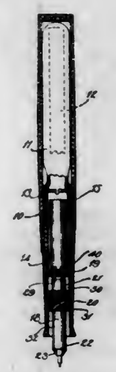
12. In a machine of the class described, a totalizer, item entering means adapted to enter items on said totalizer, a transaction type printing wheel, a transaction key adapted upon movement from home position, to position said transaction type printing wheel, a total printing device, and means for retaining said transaction type printing wheel in operated position until released by the total printing device.

1,824,248. CASH REGISTER. EDWARD J. VON PEIN, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Sept. 25, 1922. Serial No. 590,373. 7 Claims. (Cl. 235—2.)

1. In a machine of the class described, the combination with an item printing mechanism; a total printing mechanism; and a single driving means therefor; of shiftable means to connect the driving means with the item printing mechanism or the total printing mechanism; the shiftable means normally in connection with one of said mechanism; and manipulative means to disconnect the shiftable means from the mechanism with which it is normally engaged and connect it with the remaining mechanism.

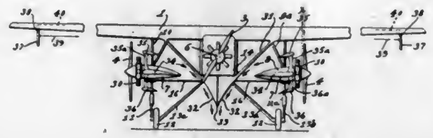


1,824,249. FOUNTAIN PEN. JOSEPH WALLACE, Cedarhurst, N. Y. Filed July 31, 1930. Serial No. 471,910. 20 Claims. (Cl. 120—44.)



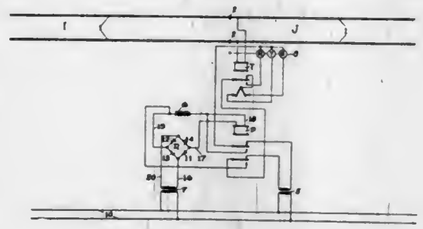
1. The combination with a fountain pen of the class described, of an ink feed comprising a tubular casing detachably coupled with one end of the barrel of a pen, means whereby an ink sack may be coupled with the inner end of said casing, a tubular plug mounted in the outer end of said casing and projecting therebeyond, a tubular pen point in and projecting from the lower end of said plug, said plug forming in the lower end of said casing an ink trap, a passage opening outwardly through said casing around said plug, said plug being fashioned to form an indirect communication between said trap and passage and an aperture placing the upper end of said trap in communication with the bore of said plug adjacent the upper end thereof, a plunger movably disposed in said casing above said plug, a pin carried by said plunger and movably disposed in the bore of said pen point and adapted to project therethrough, and means forming a reserve ink storage in said plunger adjacent the inner end of said plug.

1,824,250. AIRSHIP. DON W. WELLS, Los Angeles, Calif., assignor of one-half to Geo. W. Anderson, Los Angeles, Calif. Filed Nov. 5, 1928. Serial No. 317,172. 11 Claims. (Cl. 244—14.)



1. In an airship, the combination of a frame, a pair of propellers for driving the airship forward mounted on opposite sides of the central axis of the frame, each propeller having a shaft mounted to rotate on an axis substantially parallel with the said central axis, means for supporting the propellers on the frame to enable the same to be oriented in a substantially horizontal plane into a position with the propeller shafts transverse to the said central axis of the airship, and means including inclined surfaces receiving the air current from the propellers in their oriented position and exerting a lifting force on the airship.

1,824,251. SIGNALING SYSTEM FOR RAILROADS. JOSEPH E. WILLING, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 26, 1929. Serial No. 381,239. 11 Claims. (Cl. 246—41.)



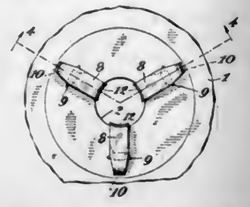
7. In combination, a battery for supplying current for railway signaling purposes, a source of alternating current, a rectifier for charging said battery from said alternating current source, and means for varying the rate of charging of said battery by said rectifier in accordance with the degree to which said battery has been charged.

1,824,252. RAZOR. RICHARD G. WINKLER, Springfield, Mass. Filed Dec. 3, 1930. Serial No. 499,659. 10 Claims. (Cl. 30—12.)



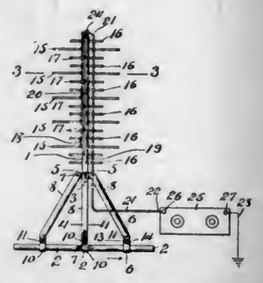
3. A razor of the class described comprising in combination, a triangular plate provided with a centrally disposed depression and grooves extending outwardly therefrom and a triangular blade provided with a central circular slot and pairs of slots extending outwardly therefrom to form a central hub and radial bars receivable in said depression and grooves of the plate.

1,824,253. PHONOGRAPH RECORD. ARTHUR M. ACHESON, Dobbs Ferry, N. Y., assignor to Durium Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 10, 1930. Serial No. 487,713. 8 Claims. (Cl. 274—42.)



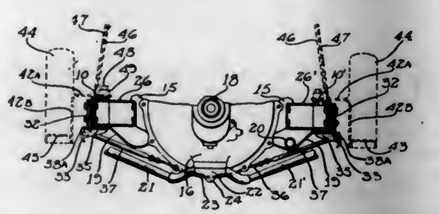
1. A phonograph record of the disc type provided with a pin opening located in the center thereof, and friction bands extending through said opening and anchored to said phonograph record.

1,824,254. RADIO AERIAL. DINSMORE ALTER, Lawrence, Kans. Filed June 22, 1928. Serial No. 287,428. 1 Claim. (Cl. 250—33.)



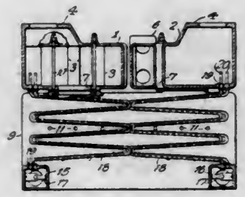
In a radio aerial, a pole having transverse holes disposed in different transverse and longitudina lradial planes, conductive receiving members slidably and removably fitted in said holes respectively, said holes and members being so spaced that said members are substantially non-inductively related to each other, and conducting wires connecting said members, and adapted when said members are withdrawn from said holes to be disposed therewith alongside of and parallel with said pole.

1,824,255. SUPPLEMENTAL ENGINE SUPPORT MEANS. WILLIAM K. BISHOP, Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed June 21, 1929. Serial No. 372,590. 7 Claims. (Cl. 180—64.)



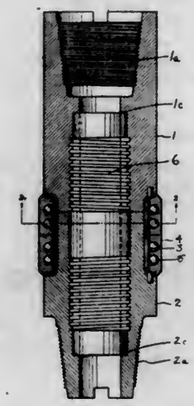
1. A crank-casing provided with lateral arm extensions adapted to span a pair of longitudinally disposed chassis beams as applied to engine driven vehicle purposes, an interposed cushioning medium serving to resiliently mount the respective arm extensions relative to their beams, a clamp plate for each of such beams and which plates are respectively equipt with an apertured ear lug disposed to depend outwardly beyond the bottom region of their respective beams, fastening means extending through each such beam and the adjoining plate thereof and respectively adapted to yieldingly cooperate with said cushioned arm extensions, and supplementary support meaas adjustably suspended between said apertured ears and beneath the crank-casing to reenforce the cushioned mounting thereof, the terminals of said support means being sustained solely by the respective fastening means.

1,824,256. STEAM BOILER. GEORGE A. BRYAN, Peru, Ind., assignor to Bryan Steam Corporation, a Corporation of New Mexico. Filed Aug. 13, 1929. Serial No. 385,574. 9 Claims. (Cl. 122—359.)



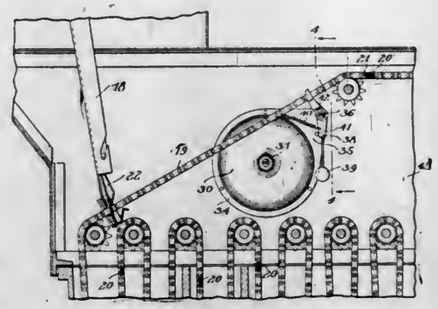
3. A water tube boiler comprising two counterpart castings constituting a dome, two counterpart castings constituting a base header, two counterpart castings constituting water ends, one water end casting connecting each dome casting and base header casting, the two castings of the dome, base header and water ends being symmetrically related and symmetrically connected, and two symmetrically related sets of counterpart water tubes, one set symmetrically connecting each dome casting and base header casting and the tubes of each set being bent to run horizontally back and forth only underneath its own dome casting.

1,824,257. TOOL JOINT. CLINTON H. M. BULL, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Jan. 30, 1928. Serial No. 250,349. 6 Claims. (Cl. 285—146.)



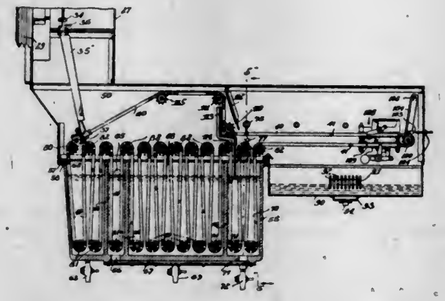
3. A tool joint for hollow drill stems and the like, said joint comprising a pair of hollow sections having means to prevent relative rotation thereof, and a hollow turn buckle within and connecting said sections together.

1,824,258. SIGNAL FOR PHOTOGRAPHIC APPARATUS. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 2, 1928. Serial No. 289,761. 9 Claims. (Cl. 116—67.)



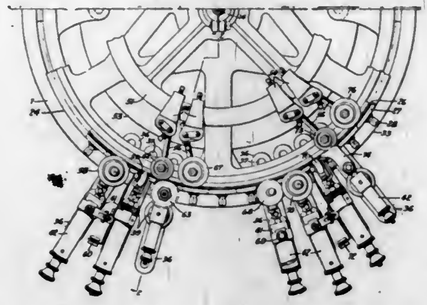
1. The combination with a photographic apparatus having a dark chamber and sheet handling means therein, of audible signal means located within said dark chamber for indicating the position of a part of said sheet handling means, and an opening in a wall of the dark chamber for transmitting sound from said audible signal means exteriorly of said chamber, said opening being covered by said signal means so that light from said opening is thereby excluded from said dark chamber.

1,824,259. APPARATUS FOR TREATING PHOTOGRAPHIC PRINTS. ARTHUR W. CAPS and JOHN S. GREENE, Rochester, N. Y., assignors to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 7, 1928. Serial No. 290,974. 22 Claims. (Cl. 95—94.)



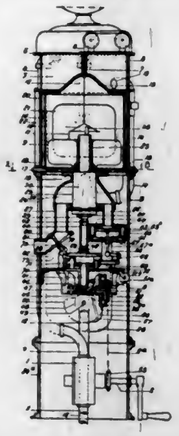
1. In a photographic apparatus, the combination with a developing bath, a fixing bath, and a washing bath, of a set of shafts extending transversely across said baths near the tops thereof, a sprocket on each of said shafts, a set of shafts extending transversely across said baths near the bottoms thereof, carrier members extending upwardly through said baths from each of the shafts of the lower set, the shafts of the lower set being each mounted on one of said carrier members, print conveying means including a chain threaded back and forth alternately first over a shaft of one set and then over a shaft of another set and engaging said sprockets, and adjustable means for resisting the upward thrust on said carrier members caused by said conveying means and for individually adjusting the carrier members to obtain the desired tension on the portion of said chain between each two sprockets on the shafts of the upper set.

1,824,260. KNITTING MACHINE. SIMON D. COHEN, San Francisco, Calif. Filed Mar. 13, 1928. Serial No. 261,266. 8 Claims. (Cl. 66—79.)



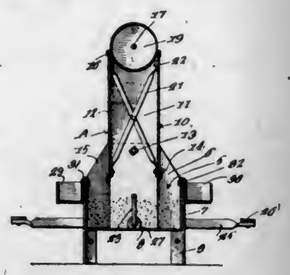
1. A knitting machine of the cylinder spring needle type comprising a feed including in succession a backing bur, a sinker bur, a presser, a lander bur, and a cast-off bur; alternated with a feed including in succession a sinker bur, a lander bur, a cut presser, and a cast-off bur.

1,824,261. LIQUID MEASURING AND DELIVERING APPARATUS. MARCEL COUPIER, Paris, France. Filed Nov. 5, 1928. Serial No. 317,160. 6 Claims. (Cl. 221—100.)



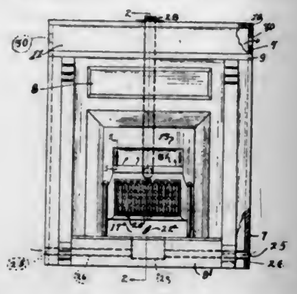
1. A liquid measuring and delivering apparatus comprising, in combination, a supply well, a tank connected to said well, a pump for forcing the liquid from the well into the tank, a three way cock fitted with a rotary shell and having its three ways respectively connected with the tank, with the well and with the liquid delivery tube, a vessel surmounting the cock and adapted to receive the liquid to be delivered from the tank and through the cock, a plunger of predetermined volume housed for vertical motion within said vessel, movable suspension means for the plunger, an upstanding overflow tube connected to the cock and projecting in the vessel to a height larger than that of the plunger, a gear for transmitting the rotation of the pump to the cock shell, piston means arranged in the discharge tube from the cock to the well and connected with the plunger suspension means for preventing the plunger from being immersed before the liquid has reached the overflowing level in the vessel, and valve means arranged in the delivery tube and connected with the cock shell and with the plunger suspension means for preventing the plunger from being lifted in the vessel before the liquid displaced by its immersion has been discharged through the overflow and delivery tubes.

1,824,262. CHICKEN FEEDER. IRVINE C. DREWS and CONRAD E. BOEHM, Marshfield, Wis. Filed Apr. 29, 1929. Serial No. 358,991. 1 Claim. (Cl. 119—54.)



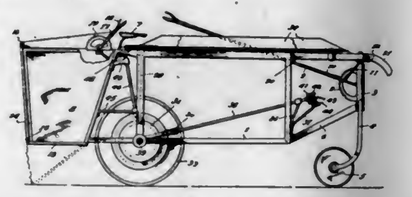
A feeding device for poultry comprising a feed trough, a feed hopper carried by and projecting into the trough and communicating at its lower end therewith, rockable perches carried by the trough, a distributing blade operatively connected with said perches and arranged in said trough, and a removable roller carried by the upper end of said hopper forming a closure therefor at all times.

1,824,263. FIREPLACE. JACOB J. FOUSE, Akron, Ohio. Filed Feb. 27, 1928. Serial No. 275,223. 4 Claims. (Cl. 126—127.)



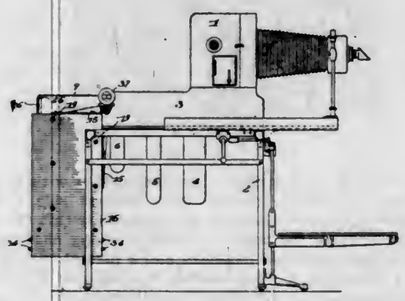
1. In a device of the class described in combination, a portable mantel, a gas stove operatively mounted therein, means enclosing the space below said stove, said stove provided with spaced rear walls forming an air passage therebetween, said passage communicating with said enclosed space and emerging from the upper side of said stove, and air tubes leading from the sides of said mantel to said enclosure.

1,824,264. GRAIN HEADER. FRANK GENTRY, Carlsbad, N. Mex. Filed Jan. 3, 1930. Serial No. 418,330. 1 Claim. (Cl. 56—59.)



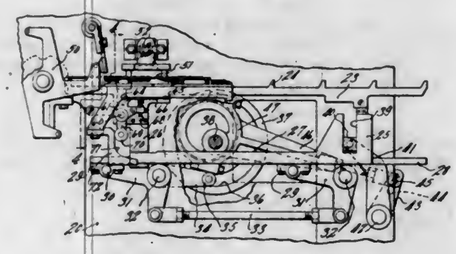
A grain header comprising a portable frame, grain gathering mechanism mounted on the frame, a shaft mounted centrally in the lower portion of the frame and extending longitudinally thereof, a second shaft, arranged centrally of the frame and extending upwardly at the rear thereof, a crank at the front end of the first-mentioned shaft, a crank at the upper end of the second-mentioned shaft, reciprocatory cutters on the frame at the sides thereof, and pitmen connecting the cutters with the respective cranks.

1,824,265. PHOTOGRAPHIC PRINT EXPOSING AND HANDLING APPARATUS. JOHN S. GREENE, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Original application filed May 12, 1923, Serial No. 638,644. Divided and this application filed Aug. 29, 1928. Serial No. 302,807. 2 Claims. (Cl. 95—90.5.)



1. In a photographic apparatus including a frame, a camera body mounted on said frame and movable thereon for focusing, and a dark chamber attached to said camera body and containing photographic print developing apparatus, said camera body and dark chamber being movable together as a unit when said body is shifted for focusing, the combination with print drying apparatus mounted on said dark chamber exteriorly thereof and movable as a unit therewith, of print conveying mechanism for moving a developed print from said dark chamber to said drying apparatus.

1,824,266. REAR TUCKING MECHANISM FOR WRAPPING MACHINES. EDWARD HAAS, Brooklyn, N. Y., assignor to Package Machinery Co., Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1929. Serial No. 396,335. 4 Claims. (Cl. 93—2.)



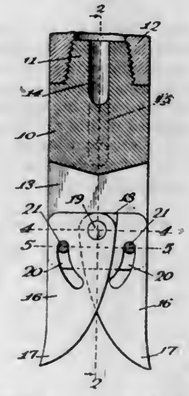
1. A wrapping machine having a folding channel, a finger-bearing transporter movable in a closed path into, along, and back outside of the channel, and a folding blade movably mounted upon the transporter and constrained for a movement generally partaking of the movement of the transporter but having an initial travel along the channel faster than the transporter fingers to form a tuck in the projecting portion of a wrapper carried by said fingers, and a terminal movement less than that of the transporter fingers to cause it to be withdrawn from contact with the tucked wrapper ends.

1,824,267. NECKTIE. MARION M. HALL, Port Nelson, Ontario, Canada. Filed Sept. 9, 1929. Serial No. 391,432. 4 Claims. (Cl. 2—146.)



1. A necktie having a lining of bias cut resilient material the longitudinal edge portions of which are folded inwardly with the doubled edges thereof secured flat to the body portion of the lining by zig-zag stitching passing through said edges and body portion, said stitching extending longitudinally thereof and being free of connection with the outer tie material.

1,824,268. EXPANSION DRILLING BIT. EARL S. HARTSON, Los Angeles, Calif. Filed July 30, 1928. Serial No. 296,310. 2 Claims. (Cl. 255—75.)

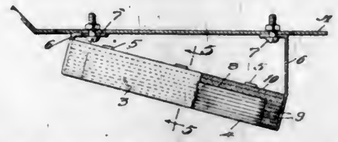


1. In an expansion drilling bit, a body provided in its lower portion with a centrally arranged slot, a pair of bits arranged within said slot so as to move vertically therein the upper inner corners of the bodies of which bits overlap each other, a pivot pin passing through the overlapping upper inner corners of said bits, the bodies of the bits below and outwardly from the point of pivotal connection being provided with arcuate slots and pins seated in the body near the lower end thereof, which pins pass through said arcuate slots.

1,824,269. POSITIONING DEVICE FOR USERS OF AUTOMATIC PHOTOGRAPHIC MACHINES. SIDNEY HIRSCH, New York, N. Y., and JOHN F. SINGER, Nutley, N. J., assignors to Photomaton, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 29, 1929. Serial No. 348,429. 2 Claims. (Cl. 88—1.)

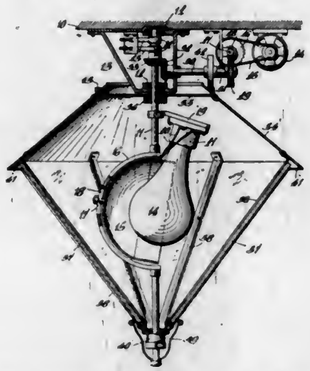
1. In a device of the character described, a casing having top, bottom and front walls, the front wall being

formed with a longitudinal relatively narrow aperture, a mirror in said casing, means for spacing the mirror rear-



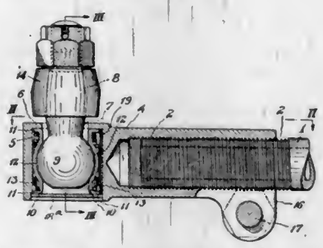
wardly of said front wall so that the top and bottom walls provide a hood for the mirror, and means for securing the casing to the front of a photographic machine.

1,824,270. ILLUMINATING DEVICE. JOHN F. HOLZMAN, Olcott, N. Y. Filed Apr. 30, 1930. Serial No. 448,537. 3 Claims. (Cl. 240—10.1.)



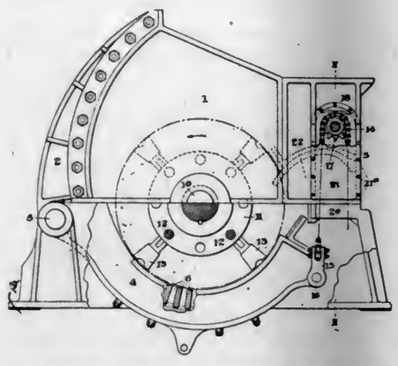
1. An illuminating device of the character described, comprising a revolving lamp body including a substantially conical lower portion having variegated lenses and a frustoconical upper portion constituting a reflector in opposing relation to said lenses, a revolving light reflector including a source of light arranged within said lamp body for directing the light rays successively through said lenses during the relative revolutions of the lamp body and the reflector, and means for transmitting motion to said revolvable parts.

1,824,271. END CONSTRUCTION FOR TIE-RODS OR THE LIKE. GEORGE H. HUFFERD, Detroit, Mich., assignor to Thompson Products Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1925. Serial No. 76,455. 4 Claims. (Cl. 287—90.)



1. In combination, in a universal joint, a ball casing comprising a tubular member having a polygonal-shaped cavity, ball seating means disposed in said cavity and shaped to conform with the polygonal contour of said cavity, a ball stud having its shank extending into said cavity and having its ball in cooperation with said seating means, and a closure for said casing disposed at substantially right angles to said seating means and directly opposite said ball.

1,824,272. HAMMER CRUSHER. CHARLES A. JAMISON, Philadelphia, Pa., assignor to Pennsylvania Crusher Company, Philadelphia, Pa., a Corporation of New York. Filed Aug. 28, 1928. Serial No. 302,562. 4 Claims. (Cl. 83—11.)



1. In a hammer crusher, the combination with a casing having a crushing chamber with vertical side walls, a hammer-carrying rotor structure disposed within the same, a cage forming the bottom of said crushing chamber and cooperating with said hammers and a pivotal support normally occupying a fixed position for one end of the cage while the opposite end of said cage is susceptible to raising and lowering movements to adjust the surface of the same relatively to the path of the hammers, of supporting chains passing outside the side walls of the casing and connected to said movable end of the cage, sprocket wheels over which said chains pass also disposed outside the side walls of the casing; said side walls having external vertical flanges forming spaces for the reception of the sprocket wheels and the upper portion of the chains which pass over the same and horizontal flanges slotted for the passage of said chains, and a manually operable shaft journaled in said side walls and carrying said sprocket wheels.

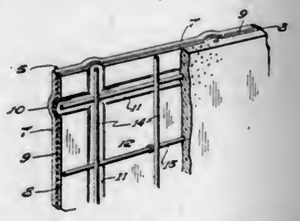
1,824,273. PROCESS FOR DYEING REGENERATED CELLULOSE MATERIALS. HENRY JORDAN, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 11, 1928. Serial No. 305,331. 5 Claims. (Cl. 8—5.)

1. The process of coloring regenerated cellulose materials which comprises applying thereto a dye of the formula:

$$R_1—N=N—R_2—N=N—R_3$$

R_1 being a naphthyl-monosulphonic acid, R_2 being an aromatic radical not containing a free hydroxyl- or amino group, and R_3 being 2-amino-5-naphthol-7-sulphonic acid or an N-substituted derivative thereof.

1,824,274. LATH STRUCTURE. JULIUS KAHN and HERBERT E. WHITE, Youngstown, Ohio, assignors to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Feb. 11, 1929. Serial No. 339,087. 6 Claims. (Cl. 72—116.)



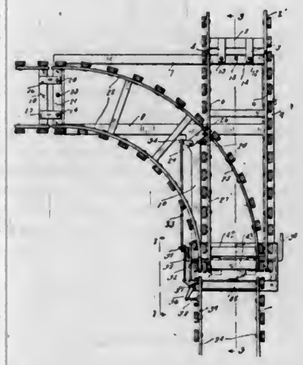
3. A plaster supporting structure comprising a backing sheet having rearwardly outstanding intersecting stiffening ribs forming intersecting grooves that open through the face of the sheet, and a lath fabric overlying the face of the sheet and secured thereto.

1,824,275. FOUNTAIN PEN. HOSFORD DUDLEY KELLOGG, Jr., Haverford, Pa. Filed Mar. 11, 1926. Serial No. 93,933. 7 Claims. (Cl. 120—44.)



1. In a stylographic pen, in combination, a barrel for the ink supply, a rigid point member supported by a longitudinally channelled pedestal within the barrel and with a solid core stem tapering to the writing tip, said point member being surrounded below its pedestal by a nozzle member supported in, and having longitudinal air vents extending within, the barrel and tapering internally and externally to an outlet orifice in juxtaposition to, and partially enshrouding the end of said writing tip.

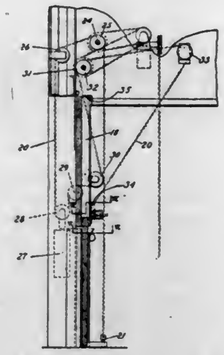
1,824,276. CONVEYER SWITCH. CHARLES J. KESTI, Hood River, Oreg. Filed Mar. 17, 1930. Serial No. 436,607. 7 Claims. (Cl. 193—36.)



7. In a device of the class described, the combination with main line and side track sections, a switch section, means for maintaining the switch section in fixed position relative to one of the main line sections and the side track section, pairs of rails movably disposed upon the switch section, and means for imparting a reciprocal vertical movement to said pairs of tracks and simultaneously imparting lateral movement to the other main line section.

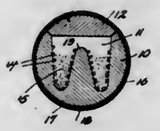
1,824,277. SECTION DOOR. GRAHAM KING, South Orange, and FRANK A. HOWARD, Ridgewood, N. J., assignors to Truscon Steel Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 5, 1926. Serial No. 127,407. 6 Claims. (Cl. 20—19.)

6. A door structure including an upper movable section and a lower section movable to and from an overlapping position with respect to the upper section, an actuating cable mechanism having a section secured to the lower door section and another section fixedly connected to the lower portion of the upper door section; mechanism for creating first a draft on the cable section secured to the lower door section to raise the section to overlapping relation with the upper door section and thereafter causing an upward and outward draft on the cable section secured to the lower portion of the upper door section to raise



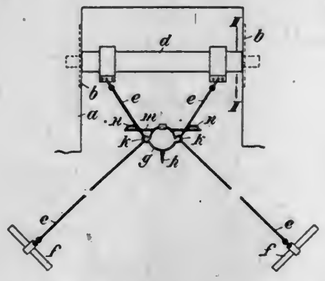
both sections together, and means operated by the cable mechanism for resisting the movement of the upper section while the lower section is being individually operated.

1,824,278. COVERING FOR TOY TORPEDOES. KOBY KOHN, New York, N. Y., assignor to Chatham Specialty Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1929. Serial No. 369,461. 14 Claims. (Cl. 102—25.)



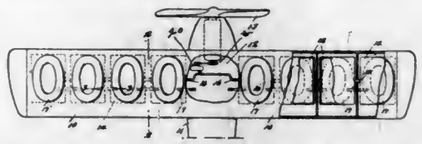
1. A toy torpedo comprising a casing of frangible material having a cavity, explosive compound in said cavity and a completely enveloping covering of thin metal.

1,824,279. FIRE ESCAPE. JOHANN KOLESZA, Berlin, Germany. Filed Mar. 10, 1930, Serial No. 434,696, and in Germany Mar. 28, 1928. 2 Claims. (Cl. 227—28.)



1. A rope descent appliance for use as a fire escape and for like purposes, comprising a safety belt adapted to be fastened round the body of the person who is to descend, an eye attached to the safety belt, two lateral hollow lugs forming part of the eye, two ropes, one passing through each of the lugs, and both secured at their upper ends to two fixed points a substantial distance apart, and means whereby the person descending can tilt the eye and lugs, thereby increasing the friction between the lugs and the ropes.

1,824,280. AIRCRAFT. YOUNG HO KOUN, New York, N. Y. Filed Sept. 13, 1929. Serial No. 392,286. 3 Claims. (Cl. 244—5.)



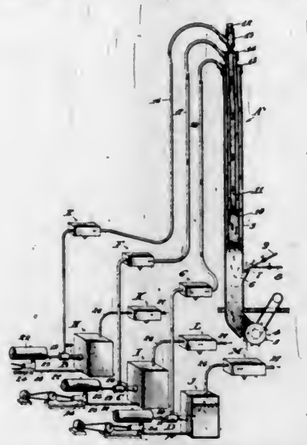
1. In an aircraft, partial vacuum or vacuum tanks built into said wings, combinations of tanks and wings to form hollow space in the said wings, and stream-line gas bags mounted on said tanks.

1,824,281. PHOTOGRAPHIC PRINT DEVELOPING APPARATUS. PAUL LANDROCK, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Aug. 4, 1928. Serial No. 297,426. 21 Claims. (Cl. 95—90.)



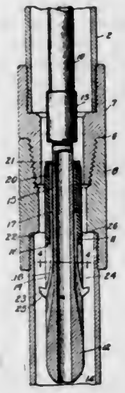
1. In a photographic developing apparatus, the combination with a tray having an opening for the introduction of an exposed print at one end, of an upper submerging guide for the prints spaced from the bottom of the tray and a quickly and easily removable and replaceable carrier fitting within said tray and supporting said guide and also carrying a cover for the tray.

1,824,282. METHOD OF DISTILLING SOLID MATERIAL CONTAINING COMBUSTIBLE CARBONACEOUS MATERIAL. CARL T. LOUGHREY, Los Angeles, Calif. Filed Apr. 1, 1922, Serial No. 548,838. Renewed Sept. 19, 1930. 1 Claim. (Cl. 202—6.)



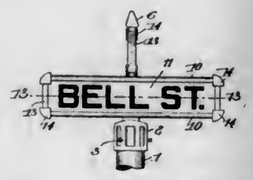
The herein described method of distilling solid material containing combustible carbonaceous material, which consists in passing said material substantially downwardly in a long narrow solid column through a heating zone, radially expanding said column in successive stages at definite points with respect to the length of said column, the radially expanding portions of said material below said long narrow column being progressively larger in cross-section but shorter in length than the first recited column of said material, and the first expanded portion of the said material being shorter than the second expanded portions thereof, and in simultaneously withdrawing the gases from the column proper and from the expanded portions thereof in counter current to the direction of the progress of the material being treated, there being a combustion zone in the lowermost expanded portion of the column, the hot gas from which is utilized to increase by conduction the temperature of the descending material in said solid column as said hot gas passes up therearound.

1,824,283. PACKING OFF TOOL. RIZAL M. MARR, Oklahoma City, Okla., assignor of one-half to American Iron & Machine Works, Inc., Oklahoma City, Okla., a Corporation of Oklahoma. Filed July 12, 1929. Serial No. 377,752. 9 Claims. (Cl. 166—12.)



3. In a packing off tool, a body having longitudinal grooves and an annular shoulder, an expansible packing member on said body adapted to engage said shoulder, a dog element slidable on the body and including hooks adapted to operate the dog element, and means on said dog element for bearing on the sleeve to urge the same toward the shoulder for expanding the sleeve when the dog element is operated.

1,824,284. SIGN EXHIBITOR. CHARLES T. MARTON, Rochester, N. Y. Filed July 13, 1928. Serial No. 292,405. 3 Claims. (Cl. 40—145.)

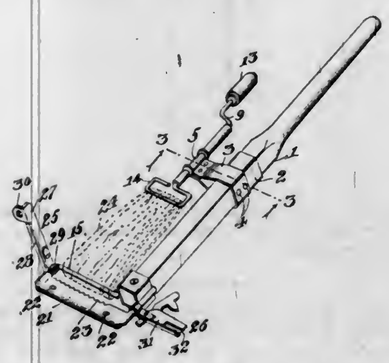


1. In a street sign exhibitor, the combination with a support and a pair of sign holders arranged back to back on opposite sides of the support and having therewith cooperating projecting and recessed positioning and supporting elements, said sign holders being provided with sign retaining flanges on the longitudinal sides thereof, of fastening devices slidably engaged on the ends of the sign holders securing the latter together and against the support, said fastening devices being provided with flanges in continuation of those on the sign holders for engaging and confining the ends of sign plates held therein.

1,824,285. METHOD OF SEALING. CARL A. MATSON, Lynnfield, Mass. Filed May 14, 1927. Serial No. 191,542. 4 Claims. (Cl. 120—8.)

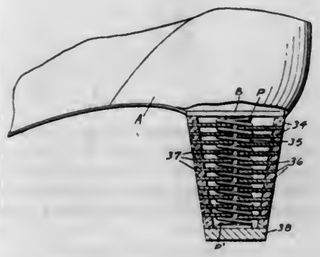
1. That improved method of wrapping and sealing which consists in applying a non-hygroscopic adhesive to the enclosing materials of the articles to be wrapped and sealed and applying heat momentarily thereto.

1,824,286. MOP WRINGING DEVICE. MILTON BOWEN MCCOY, Pueblo, Colo. Filed May 24, 1930. Serial No. 455,339. 2 Claims. (Cl. 15—120.)



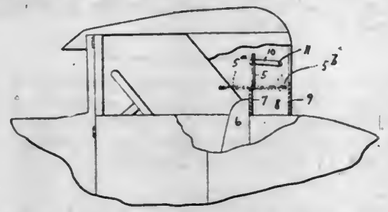
1. In a device of the class described, the combination with a handle, of a jaw carrying frame on said handle, a fixed jaw on said frame, a movable jaw comprising a primary and an auxiliary section, each of said sections looped at its inner end around one end of said jaw carrying frame, said primary section provided with an apertured lug, said auxiliary section provided with a slot adapted to receive said lug, a latch on said auxiliary section adapted to enter said lug and hold the sections together, and cloth supporting and twisting means slidably mounted on said handle.

1,824,287. RESILIENT HEEL. BELLA R. MCKINNEY, Los Angeles, Calif. Filed Dec. 7, 1929. Serial No. 412,364. 4 Claims. (Cl. 36—38.)



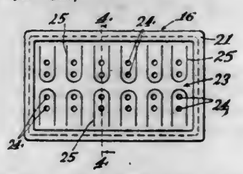
1. In combination with a shoe a heel composed of a plurality of leather laminations arranged in staggered pairs, each lamination being semi-cylindrical, a coiled spring arranged centrally in said heel with the staggered laminations projecting between the windings of the spring to be seated thereupon yieldably, and compressible yieldable means interposed between the outer marginal edges of the laminations for closing the interstices between the said laminations.

1,824,288. LUGGAGE RACK FOR AUTOMOBILES. LEWIS J. MEYER, Torerro, N. Mex. Filed July 25, 1930. Serial No. 470,731. 1 Claim. (Cl. 296—37.)



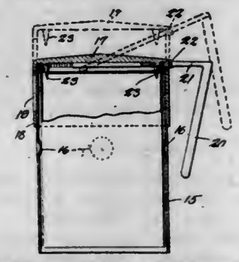
In an automobile of the coupé type, a vertical member at the top of the rear part of the back of the seat thereof spaced from the rear wall of the body of the vehicle, an elongated rack, hinges connecting one edge of the rack to the top part of said vertical member, one leaf of each hinge being connected to the upper edge of said vertical member with the hinge pin at the rear edge of the leaf, whereby the rack will be supported in a horizontal position by the upper edge of the vertical member when the rack is swung forwardly, a pair of links pivoted one to each side wall of the body of the vehicle adjacent the back of the body and above the horizontal plane of the top edge of the vertical member, each link having a hook at its free end and projections on the ends of the rack adjacent the free edge thereof for engagement by the hooks of the links for holding the rack either in a vertical position or a horizontal position, in the latter horizontal position the rack extends rearwardly over the space between the vertical member and the rear wall of the back.

1,824,289. PEDAL PAD. JACOB MILHANDER, Los Angeles, Calif. Filed Jan. 21, 1930. Serial No. 422,291. 5 Claims. (Cl. 74—81.)



4. A pedal cushion of the character described comprising in combination with a motor vehicle pedal, a plate engaging the foot rest of said motor vehicle pedal, a pad formed of resilient material having a cavity formed therein secured to said plate, said plate having a plurality of tongues with openings formed therein engaging the oppositely disposed sides of the foot rest of said motor vehicle pedal, and bolts extending through the openings in said tongues and passing over the underside of the foot rest to rigidly secure the pad thereto.

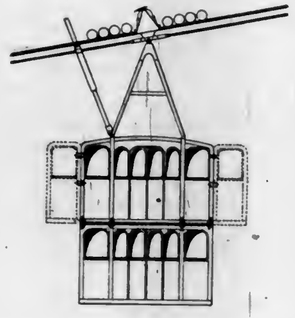
1,824,290. CAN PUNCH AND COVER. JOHN R. MILLER, Baldwin Park, Calif. Filed Jan. 14, 1930. Serial No. 420,761. 2 Claims. (Cl. 220—51.)



1. A can holder comprising a body portion, a cover at one end of the body portion, prongs extending from the

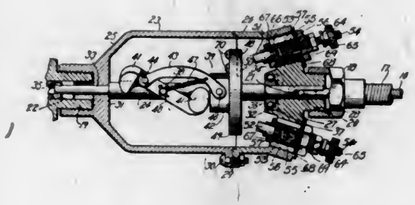
cover and adapted to pierce the end of the can held in the body portion, said cover having a circumferential flange formed with an opening to permit material to be poured from the can, and a handle connected with the cover for operating the cover.

1,824,291. CAR FOR PASSENGER ROPEWAYS. MAX MÜLLER, Leipzig-Reudnitz, Germany, assignor to the Firm Adolf Bleichert & Co., A. G., Leipzig, Germany. Filed Sept. 12, 1928, Serial No. 305,582, and in Germany Sept. 10, 1927. 2 Claims. (Cl. 105—150.)



1. A car for passenger ropeways, comprising in combination a number of superposed compartments bolts connecting said compartments so that they are easily detachable and adapted to be run either as a one-storied car or as a car with several stories as required.

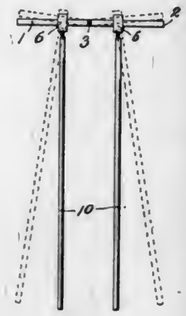
1,824,292. SPEED CONTROL DEVICE. WILLIAM R. MURROW, Independence, Kans., assignor of one-half to O. W. Compton, Independence, Kans. Filed July 13, 1928. Serial No. 292,418. 7 Claims. (Cl. 175—355.)



2. In combination with a multiple cylinder engine, of a motor driven vehicle, means for igniting charges in the engine cylinders including normally spaced commutator and brush members and means responsive to speed of the vehicle for moving one of said member stoward the other, the commutator including a conductive element for breaking the ignition circuit engageable with the brush member at intervals out of time with periodic firing of the cylinders.

1,824,293. GARMENT STRETCHER. ORA L. NEWTON, Kansas City, Mo. Filed Oct. 3, 1929. Serial No. 397,074. 4 Claims. (Cl. 223—19.)

1. In a garment stretcher, two members hinged to each other, and two handles respectively adjustable toward and from each other on said members and extending therefrom in a plane at an angle to the axis of said members, and adapted for insertion into a dress or trouser leg and to be swung apart to stretch said dress or trouser leg,



each handle having means for being releasably clamped to its supporting member in the position thereon to which it may be adjusted.

1,824,294. SOUND AND PICTURE FILM MATCHING MEANS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y. Filed Mar. 8, 1929. Serial No. 345,576. 1 Claim. (Cl. 88—16.2.)

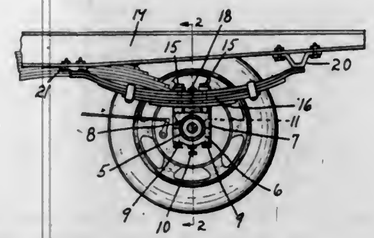


A film strip having a sound record thereon for reproduction synchronously with a separate picture film, and visible images on said strip corresponding with images on the picture film for matching, said images on the strip comprising partial duplicates of the images on the picture film.

1,824,295. OVERLOAD VEHICLE SPRING. ALBERT M. J. POHL and ARTHUR A. POHL, Spokane, Wash. Filed Oct. 2, 1929. Serial No. 396,742. 1 Claim. (Cl. 267—45.)

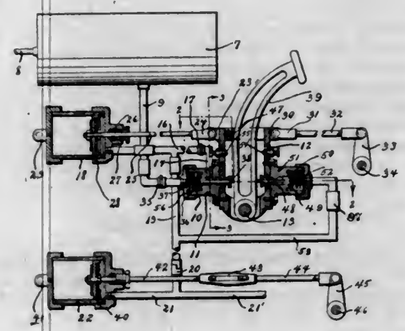
The combination with the axle housing and body frame of a vehicle of an overload vehicle spring comprising a clamping block, said block comprising an upper and a lower member each having complementary parts of an annular opening adapted to receive the vehicle axle housing, means for securing said block members around the axle housing, means for locking the lower block member

to the axle housing, a shoulder for the upper block member arranged to increase the bearing surface of said member and adapted to provide space for a lug on the axle housing whereby the clamping block may be disposed in vertical alignment with the body frame, said upper block having a recess in its upper surface, a vehicle spring rest-



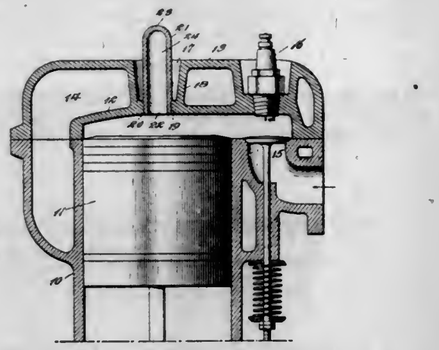
ing on the upper surface of said upper member, said recess adapted to receive the head of the holding bolt for the spring leaves, bolts for securing the spring to the upper block, and plates secured to the body frame for preventing frictional wear of the body frame by the ends of the vehicle spring which bear against said plates when the vehicle is unloaded.

1,824,296. VEHICLE AND TRAILER BRAKE. GRANT I. RAWSON, Royal Oak, and BENJAMIN H. JACKSON, Center Line, Mich. Filed Dec. 29, 1927. Serial No. 243,295. 4 Claims. (Cl. 188—152.)



1. A brake mechanism of the class described, comprising: a reservoir for the reception of air under pressure; a cylinder; a piston slidably mounted in said cylinder; a connection between said piston and a brake beam with which used; means for connecting said cylinder and said reservoir in communication; a valve interposed in said connecting means for opening and closing said commuication; a valve stem on said valve; and a rockably mounted operating lever engageable with the end of said valve stem, the rocking of said lever in one direction moving said valve to open position, said piston moving axially in said cylinder upon movement of said valve to open position, said valve moving, upon axial movement of said piston, away from said lever sufficient for permitting movement of said valve to closed position.

1,824,297. INTERNAL COMBUSTION ENGINE. ENOCH RECTOR, New York, N. Y., assignor to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Mar. 20, 1923, Serial No. 626,255. Renewed Jan. 28, 1927. 1 Claim. (Cl. 123—191.)

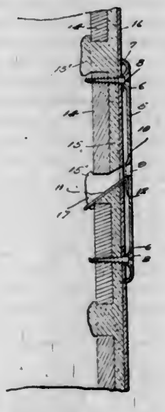


In an internal combustion engine, the combination of an explosion chamber, means for initially igniting the charge, and an unobstructed tube closed at its outer end and having its inner end opening into the chamber beyond the point of initial ignition of the charge in the direction of the cylinder.

1,824,298. PROCESS FOR OBTAINING BARIUM-ORTHO-SILICATE OR BARIUM-TRI-SILICATE BY THE DECOMPOSITION OF BARIUM CARBONATE. FRITZ ROTHE and HANS BRENEK, Berlin, Germany, assignors to the Firm Rhenania-Kunheim Verein Chemischer Fabriken A. G., Berlin, Germany. Filed May 27, 1927, Serial No. 194,854, and in Germany Aug. 27, 1926. 7 Claims. (Cl. 23—110.)

1. The process for obtaining bariumorthosilicate or bariumtrisilicate by the decomposition of barium carbonate comprising heating barium carbonate together with silica containing material in the presence of steam.

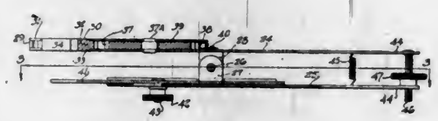
1,824,299. DEVICE FOR DISPOSING OF SMALL ARTICLES. HARRY B. ROUNTREE, Santa Barbara, Calif. Filed Oct. 23, 1928. Serial No. 314,384. 1 Claim. (Cl. 72—18.)



In combination, a wall portion having an opening in communication with a space at the inner side of the wall

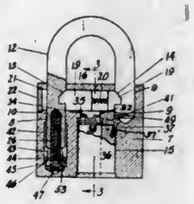
portion, and an escutcheon plate arranged against the face of the wall portion and having a horizontal slot in coincidence with said wall opening and also having at its inner side an inwardly directed flange with its upper side flush with the lower wall of said slot and disposed at an acute angle to the plate and arranged in the wall opening and adjacent the lower wall of said opening to guide razor blades inwardly and downwardly to said space at the inner side of the wall portion.

1,824,300. VALVE TAPPET ADJUSTING TOOL. WILLIAM L. ROWLAND, Mosier, Oreg. Filed Apr. 17, 1929. Serial No. 355,850. 2 Claims. (Cl. 81—56.)



1. A valve tappet adjusting tool having in combination a frame, a rotatable segment gear mounted in said frame constituting an open end wrench, a pair of pinions meshing with said gear, a drive gear meshing with both of said pinions, a slidable holding wrench hingedly mounted on said frame, and means for varying the spacing between said wrenches along the axis of the tappet.

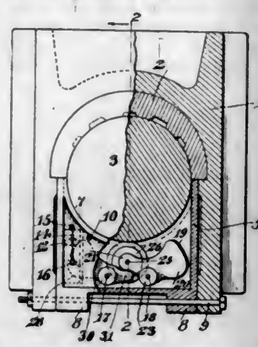
1,824,301. PADLOCK. FRANK A. RUSSELL, Tulsa, Okla., assignor to Unit Lock Company, Tulsa, Okla., a Corporation. Filed July 23, 1928. Serial No. 294,894. 4 Claims. (Cl. 70—108.)



1. In a lock, a U-shaped shackle having notches in the inner sides of its ends, a body having two longitudinal bores opening through one of its ends and slidably receiving said shackle ends, said body also having a central longitudinal recess which opens through its other end, being further formed with a transverse recess from one of said bores to the other and having a cylindrical opening from the inner end of said longitudinal recess to said transverse recess, spring-pressed bolts slidable in said transverse recess to engage said notches, said bolts having opposed sets of teeth at their inner ends, an elongated pinion between said sets of teeth and meshing therewith, said pinion having a cylindrical base rotatably received in said cylindrical opening, said cylindrical base and opening jointly forming means for rotatably mounting the pinion, a lock cylinder secured in said longitudinal recess and having a rotatable barrel, and separably interengaged driving means on the inner end of said barrel and said base of said pinion, said separably engaged means being separable upon withdrawal of said barrel.

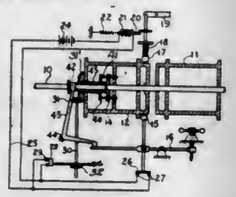
1,824,302. ROLLER CONTACT OILER. ALBERT JEFFERSON SAMS, Chicago, Ill. Filed Dec. 26, 1928. Serial No. 328,567. 3 Claims. (Cl. 308—91.)

1. In a device of the class described, an oil reservoir, a pair of levers fulcrumed in the reservoir, the inner end of one lever being engaged beneath the inner end of the other lever, an oil applying member on the inner end



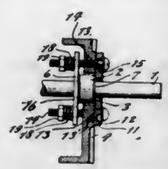
of the last specified lever, and the outer ends of the levers being so weighted as to press the oil applying member against the part to be lubricated.

1,824,303. SAFETY BRAKE APPARATUS. ARTHUR SCHORNO, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Feb. 28, 1927. Serial No. 171,392, and in Germany Mar. 12, 1926. 6 Claims. (Cl. 254—173.)



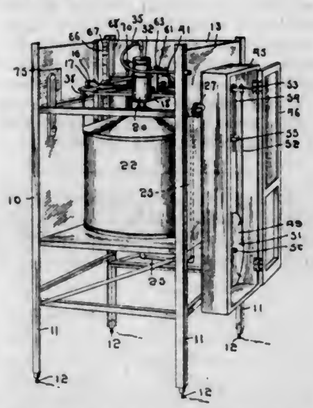
1. In apparatus of the character described, an operating member, driving means therefor, a plurality of elements for holding said member against operating movement and disposed for movement independently of each other into and out of holding position, means for controlling movement of one of said elements into holding position, a plurality of devices each operable to control said controlling means, means for actuating one of said controlling devices, and means responsive to operating movement of said member and being operable upon such movement to effect actuation of the other of said controlling devices.

1,824,304. BEARING FOR ELECTRICAL CONDENSERS. THEODORE J. SCOFIELD, Jackson, Mich., assignor to The Sparks-Withington Company, a Corporation of Ohio. Filed Nov. 9, 1929. Serial No. 405,880. 4 Claims. (Cl. 308—135.)



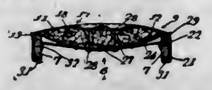
1. In electrical condensers, a frame, a shaft, a side-bearing flange on said shaft near one end, an end member on said frame having an opening adapted to permit the entry of said flange and shaft at an angle thereto, a bearing member fastened to said end member and fitting on one end of said shaft outside of said flange, a plate fastened to said end member and engaging the inside of said flange, and a bearing member for the other end of said shaft.

1,824,305. RECORDING GRAVITOMETER FOR GASES. DONALD A. SILLERS, Dallas, HOWARD W. PRICE, Breckenridge, and JOSEPH W. BARTLETT, Houston, Tex., assignors to Refinery Supply Company, Tulsa, Okla. Filed Apr. 27, 1929. Serial No. 358,534. 21 Claims. (Cl. 234—28.)



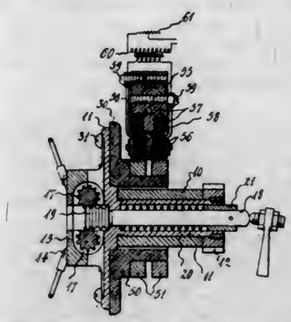
1. In combination, a balance mechanism including a counter-balanced balance bar and a float suspended from said bar, and inlet and outlet pipes connected by gas-tight joints with the float permitting the continual passage of gas therethrough.

1,824,306. FURNITURE UPHOLSTERY. HARRY SISKIN, Los Angeles, Calif. Filed July 31, 1928. Serial No. 296,506. 2 Claims. (Cl. 155—184.)



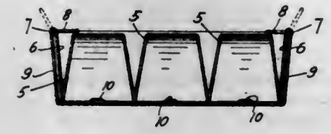
2. A furniture construction having rails, two pieces of fabric having their edges extending over the tops of the rails, cushioning material disposed between the pieces and a third piece of fabric or the like secured between the rails having its center positioned against the side of the lowermost of the first two pieces, to assist in supporting the first two pieces and the cushioning material, and ties extending through the three pieces and cushioning material binding them together.

1,824,307. ELECTRICALLY HEATED TWISTER. ELMER L. SMITH, Longmeadow, and FREDERIC B. FULLER, Springfield, Mass., assignors to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 31, 1929. Serial No. 382,357. 4 Claims. (Cl. 93—5.)



1. In a wrapping machine, a head, a pair of parallel shafts journaled in the head, a coupling mounted on each of the shafts but electrically insulated therefrom, a pair of U-shaped twister wires, each having one end supported by and electrically connected to one of the shafts and the other end supported by and electrically connected to that coupling mounted on said shaft, means for rotating said shafts simultaneously in opposite directions to open and close the twisters, and means for connecting the shafts and the couplings respectively to the opposite poles of a source of electric current.

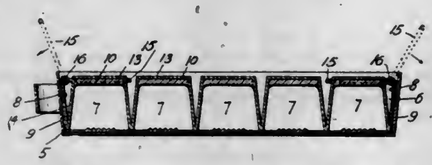
1,824,308. MOLD FOR FROZEN SUBSTANCES. RICHARD M. STORER, Denver, Colo. Filed July 2, 1928. Serial No. 289,780. 5 Claims. (Cl. 62—108.5.)



2. A freezing process comprising confining a liquid, adapted to expand upon freezing, in a two-part mold, freezing the liquid, and applying the expansive force of freezing to the mold, whereby one part of the mold is lifted by and separated from the ice therein.

4. A device of the character described comprising a tray member and a mold member fitted together, the mold member having sides converging toward a closed end and being open at the opposite end to be closed by the tray member, the mold member being liftable away from the tray member when the members are fitted together.

1,824,309. MOLD FOR FREEZING LIQUIDS. RICHARD M. STORER, Denver, Colo. Filed Sept. 10, 1928. Serial No. 304,886. 11 Claims. (Cl. 62—108.5.)



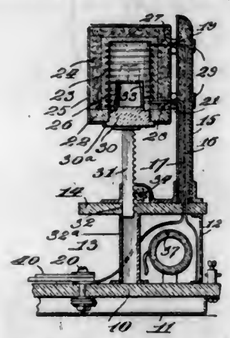
1. In a device of the character described, a mold-member including a freezing unit having conductive side-walls converging with relation to each other, and a non-conductive end-wall.

6. A process of freezing comprising confining a liquid, adapted to expand upon freezing, in a mold having sides converging toward a closed end, freezing the liquid, retarding the freezing action at the closed end, and applying the expansive force of freezing to the closed end of the mold, whereby the mold is lifted and separated from the ice.

1,824,310. DENTAL PORCELAIN ELECTRIC FURNACE. NAT THOMPSON, Chicago, Ill. Refiling of application Serial No. 11,665, filed Feb. 26, 1925. This application filed Nov. 21, 1928, Serial No. 321,016. Renewed Feb. 20, 1930. 6 Claims. (Cl. 219—35.)

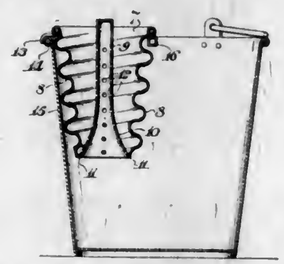
1. In an electric dental furnace, a standard, electric conductors extending upwardly through said standard, contacts at the upper ends of said conductors and arranged externally of said standard, an oven removably positioned on said standard, which oven is provided with a heating chamber that is open at its lower end, a heating coil within said oven around the chamber therein, contacts

on the ends of said coil, which contacts are adapted to engage the contacts on the standard and a vertically



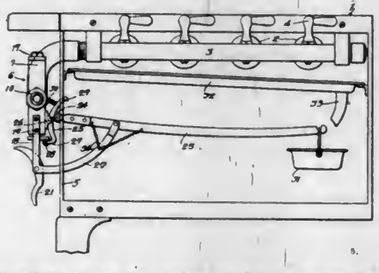
movable work carrier arranged beneath the heating chamber and adapted when moved upward to plug the open lower end thereof.

1,824,311. MOP WRINGER. GERRIT VAN DAAM, Buffalo, N. Y. Filed Oct. 9, 1930. Serial No. 487,387. 5 Claims. (Cl. 15—263.)



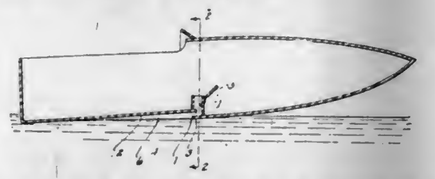
1. A mop wringer, comprising a hollow, substantially cylindrical formation having its inner wall formed with a helical channel, a body centrally positioned within the cylinder flaring toward the bottom so that the space between the central body and the surrounding cylindrical wall decreases from the top toward the bottom.

1,824,312. SAFETY DEVICE FOR GAS RANGES. BENJAMIN VICTOR and RICHARD E. ABRAMSON, Bronx, N. Y. Filed Jan. 27, 1930. Serial No. 423,869. 4 Claims. (Cl. 126—42.)



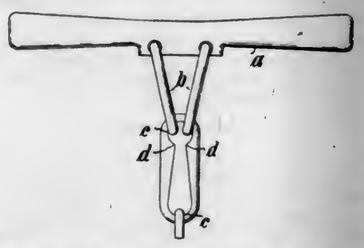
1. A safety device for ranges of the character described comprising a valve casing interposed in the fuel supply pipe of the range, a valve body mounted for reciprocation in the valve casing and controlling the passage therethrough, resilient means engaged with the valve body yieldingly urging the same toward closed position, a valve stem depending from the valve body and extending through the casing, a latch plate rigidly mounted on the free end of the valve stem, said latch plate provided with a transverse groove adjacent one end, an arcuate keeper pivotally mounted intermediate its end on the valve casing and having a right angularly disposed extension on one end, a roller mounted on the extension engageable in the groove of the latch plate for retaining the valve in open position, and means for rocking the keeper in a manner to disengage the same from the latch plate comprising a pivotally mounted lever having one end disposed adjacent said keeper, a roller mounted on said end engaged with the keeper, a receptacle on the other end portion of the lever, an inclined pan for the reception of liquid disposed above the receptacle and below the burners of the range and means for discharging the liquid from the pan into the receptacle in a manner to rock the lever and shift the keeper out of engagement with the latch plate.

1,824,313. MEANS FOR AERATING THE UNDERSKIN OF VESSELS AUTOMATICALLY. FRANK D. VOGLER, Milwaukie, Oreg. Filed Apr. 24, 1930. Serial No. 446,945. 1 Claim. (Cl. 114—67.)



In a device of the class described, the combination of a boat hull, the bottom strakes of the hull being cut and disposed in spaced relation with each other to form a step for the full width of the bottom strakes, an inlet passage disposed across the boat bottom for the admission of air across the bottom strakes of the boat, tapered fins parallelly disposed in spaced relation with each other and secured to the bottom strakes and running longitudinally of the boat, and a counter balanced air controlled valve disposed in line with the inlet passageway.

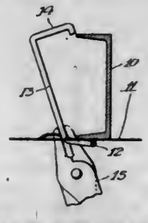
1,824,314. SAFETY PACKING STICK. ADOLF WENDT, Hohenselchow, Germany. Filed Feb. 19, 1930, Serial No. 429,762, and in Germany Mar. 1, 1929. 2 Claims. (Cl. 59—93.)



1. A safety packing stick, comprising in combination with the stick proper having two holes near its lower edge a suitable distance apart, two chain links loosely engaging one with each of said holes, and a chain loop engaging with both chain links.

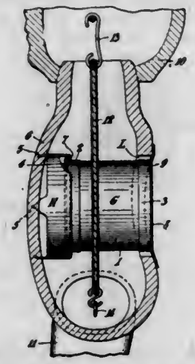
1,824,315. LATH CLIP AND METHOD OF INSTALLING THE SAME. WILLIAM E. WHITE, Chicago, Ill., assignor to Kalman Steel Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 1, 1929. Serial No. 343,752. 4 Claims. (Cl. 72—118.)

1. A lath attaching system comprising in combination with the lath and furring bar, a lath clip composed of resilient material having a straight body and right angularly bent ends terminating in hooks projecting in opposite directions, said hooks having rebent ends, the length of the straight portion of the bent ends being substantially no greater than the combined thickness of the support and lath, the body portion of the clip being adapted to extend diagonally relative to the longitudinal axis of the support and in contact with the lath throughout the length of the clip, with the bent ends extending vertically on opposite sides of the support and the hooks engaging



over the support, the bent ends being adapted to be rotated into place, after locally upwardly deflecting the lath and the end of the body portion to the extent of the length of the rebent end of the particular hook that is being positioned.

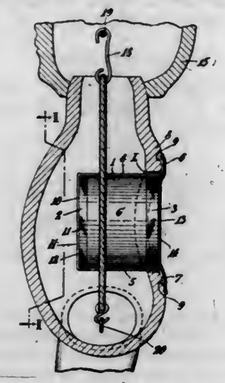
1,824,316. DOLL. JOHN H. WILHELM, Long Island, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 14, 1929. Serial No. 346,832. 4 Claims. (Cl. 46—40.)



1. A doll comprising a hollow moulded body having front and back walls spaced apart, a separately formed metallic platform member arranged interiorly of the body, said platform member resting against the inner surface of the front wall and having prongs embedded into said front wall, the back wall having an opening therethrough adjacent said platform member, said platform member having a seat facing toward said opening, a sound producing device extending through said opening and engaging within said seat, and means to retain the sound producing device against displacement from said seat.

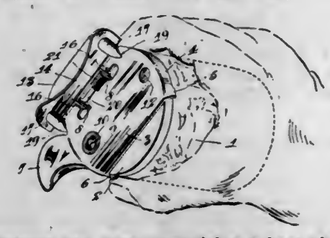
1,824,317. DOLL. JOHN H. WILHELM, Long Island, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 14, 1929. Serial No. 346,831. 2 Claims. (Cl. 46—40.)

1. The combination with a hollow moulded doll structure having an opening through one wall thereof, a sound producing device arranged interiorly of the structure, of a generally U-shaped metallic bracket arranged interiorly of the structure having its legs projecting outwardly through said opening and turned over upon the outer surface of the structure, the sound producing device being supported between the legs of said bracket with its outer surface in the general plane of the outer surface of the doll structure, means connected with the outer surface of the doll structure overlying said opening in engagement with the outer surface of the sound producing device to hold the sound producing device against displacement from said supporting bracket, and flexible means carried within the structure engaging and pressing



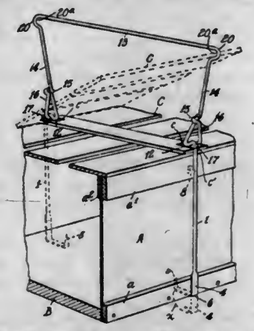
against opposite sides of the sound producing device to assist in holding the sound producing device in position in said supporting bracket.

1,824,318. SNAP-ON MILK CAN COVER. PETER SMITH WIND, San Francisco, Calif. Filed July 1, 1929. Serial No. 374,990. 5 Claims. (Cl. 220—51.)



4. A snap-on can cover comprising a base plate having depending grippers to hold said plate on top of a can, said plate having a pouring hole and a vent hole, combined with a member consisting of a plate having a lip and a finger engagenble handle portion, hingedly associated with said base plate, said lip being adapted to overlie said pouring and vent holes, combined can-top-puncturing and valve elements secured to said lip to project into said holes, said combined elements being pointed and of a length to penetrate the top of the can when said lip lies against said base plate.

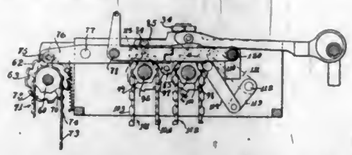
1,824,319. HANDLE FOR WOODEN BASKETS. RALPH P. YOUNG, Marlboro, N. Y. Filed Apr. 23, 1927. Serial No. 185,960. 4 Claims. (Cl. 217—125.)



2. A handle element for wooden baskets, comprising a rod-like member having lid engaging means at one end

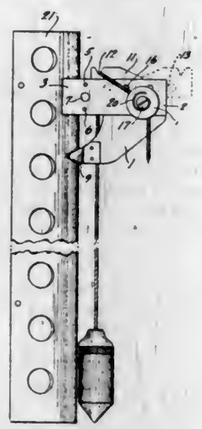
thereof, basket engaging and holding means adjacent thereto, basket holding and engaging means at the other end, said rod-like member being specially prepared adjacent the latter means for bending.

1,824,320. KNITTING MACHINE. MICHAEL ZIMIC, Ridgewood, N. Y. Filed Mar. 19, 1930. Serial No. 436,945. 8 Claims. (Cl. 66—155.)



1. In a knitting machine, two pattern chains, a controlling chain, means for periodically driving the controlling chain, said means comprising a shaft in operative association with the controlling chain, a fast and a loose ratchet wheel on the shaft, a reciprocative pawl normally in engagement with the loose ratchet wheel, a counting chain on the loose ratchet wheel, low links on the said chain to permit the pawl to periodically engage the fast ratchet wheel, pattern chain driving means, actuating means, and means on the controlling chain for periodically engaging the said actuating means with either of the said driving means to drive their respective pattern chains.

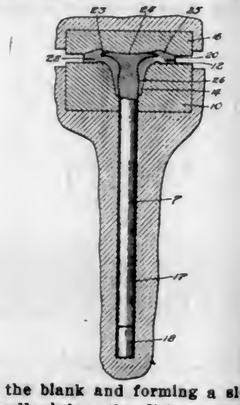
1,824,321. PLUMB LINE GUIDE. FRANCIS G. BAKER, Chicago, Ill. Filed Oct. 27, 1928. Serial No. 315,361. 4 Claims. (Cl. 33—216.)



1. In a plumb line holder, having a clamp for securing the holder to the surface to be aligned and a forked extension for engaging the surface to retain the holder in position, an adjustable guide having a notch, and means for fastening the line and holding it in place either in the notch or the forked end.

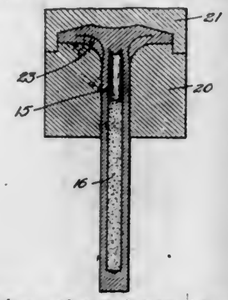
1,824,322. VALVE AND METHOD OF MANUFACTURING SAME. MICHAEL J. BOYLE, Chicago, Ill. Filed Mar. 19, 1926. Serial No. 95,880. 12 Claims. (Cl. 29—156.7.)

3. The method of valve manufacture which consists in providing a cylindrical blank having an axial hole therethrough and having one end reduced, then inserting a stem in said hole with one end flush with the end of the blank, then heating the blank by electricity, then placing the blank and stem in a die and pressing a disk outwardly from the blank, with a seat on the lower face thereof, and then pressing the parts by another die and expanding the upper portion of the blank outwardly over the disk and enlarging the end of the stem which is



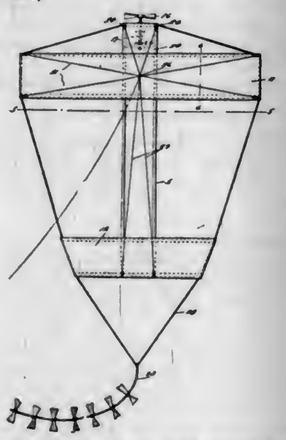
embedded in the blank and forming a sleeve which projects downwardly below the disk and engages with the stem.

1,824,323. VALVE AND METHOD OF MANUFACTURE. MICHAEL J. BOYLE, Chicago, Ill. Filed Nov. 21, 1927. Serial No. 234,821. 6 Claims. (Cl. 123—188.)



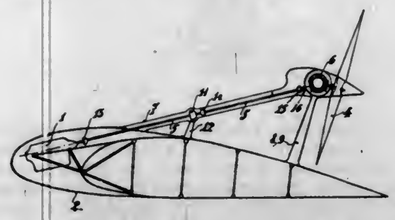
1. A single-piece valve and stem having a separation extending from the upper end of the stem outwardly into the head.

1,824,324. KITE. ORLA E. BRADFORD, Brookville, Kans. Filed Feb. 20, 1930. Serial No. 430,016. 3 Claims. (Cl. 244—22.)



1. A monoplane kite of the class described comprising a pair of spaced parallel frame bars, a cross member connecting the upper ends of the bars, another cross member spaced inwardly of the said cross member, a pair of long substantially parallelly spaced cross bars below said other cross members to form a main wing frame, a pair of short substantially parallelly spaced cross bars, the lower of which is fixed on the ends of the frame bars, and coverings across said pairs of cross bars forming a main wing and a tail wing, the pair of long cross bars being of equal length, and the rearmost of the short cross bars being shorter than its companion short cross bar, the bars being secured together at the points of intersection having oppositely formed notches permitting joining of the bars so that they lie in the same plane, and guy strings stretched from each upper end of the frame bars, to the upper corner of the main wing, through the edge of the wing covering, from the lower corner of the main wing to the upper corner of the tail wing, through the edge of the covering thereof, and hung loose from the lower corner of the tail wing, and a tail joining and depending from the ends thereof.

1,824,325. PROPELLING SYSTEM FOR AIRCRAFT. LOUIS BREGUET, Paris, France, assignor to Societe Anonyme des Ateliers d'Aviation Louis Breguet, Paris, France, a Company of France. Filed Dec. 16, 1929, Serial No. 414,464, and in France Dec. 22, 1928. 14 Claims. (Cl. 244—14.)



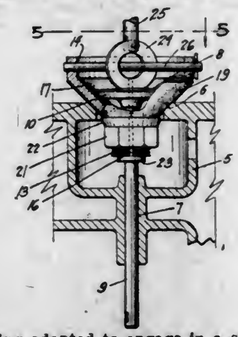
1. A motor propelling device for aeroplanes comprising a streamline structure, a motor disposed in said structure, a propeller supported above the main supporting surface of the aeroplane and to the rear of the leading edge thereof, a prolonged motor drive shaft inclined from front to rear in a longitudinal plane with respect to the aeroplane and projecting through the upper face of said streamline structure, and motion transmitting means interconnecting said prolonged motor drive shaft and said propeller.

1,824,326. PRODUCTION OF COKE. WALTER BROADBRIDGE, EDWIN EDSER, and WILLIAM WARWICK STENNING, London, England, assignors to Minerals Separation North American Corporation, New York, N. Y., a Corporation. Original application filed Nov. 20, 1922, Serial No. 602,251, and in Great Britain Nov. 29, 1921. Divided and this application filed Apr. 22, 1926. Serial No. 103,968. 23 Claims. (Cl. 202—25.)

1. A process for producing coke which consists in agitating an aqueous pulp of finely divided coal with a flocculating agent having the characteristics of both a frothing agent and a coating oil, so that the coal is flocculated and coated with a water-repellant coating having so little adhesiveness as not to cause the coal to form into briquettes under water-expelling pressure, separating and draining the flocculated coal, and coking the drained coal.

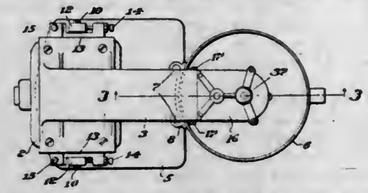
1,824,327. REFINISHING DEVICE. JOHN V. BUECKERMANN, Denver, Colo. Filed Apr. 8, 1929. Serial No. 353,508. 2 Claims. (Cl. 51—187.)

2. A refinishing device comprising a grinding-element having an outer grinding face adapted for engagement with a valve-seat, and an inner face adapted for frictional engagement with a valve, the element having alined apertures for the application of a key, and an operating-element



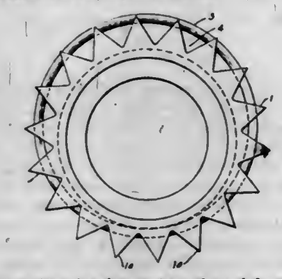
including a ring adapted to engage in a slit of the valve, and a key extending through the ring and into the apertures of the grinding-element.

1,824,328. DOMESTIC MIXING MACHINE. OSWALD CAMMANN, Jr., Newton, Mass. Filed Nov. 19, 1929. Serial No. 408,220. 9 Claims. (Cl. 259—102.)



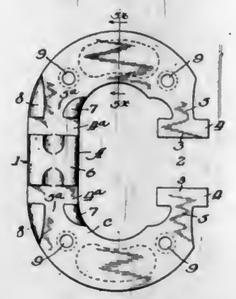
1. A domestic mixer comprising an electric motor, a base adapted to support a bowl, a frame secured to and movable with said motor, said frame including an arm extending upwardly therefrom and a transmission casing carried by said arm and overhanging said bowl, a dash carried by said frame and arranged to work in said bowl, mechanism for transmitting motion from said motor to said dash including a transmission mechanism in said frame adjustable to vary the speed ratio between said motor and dash, and parts on said base summiting said motor and frame for tipping movement to swing said dash into its operative position in said bowl and into an inoperative position out of the bowl, the weight of said motor, casing and frame and the parts carried thereby being so disposed as to hold said dash in either of said positions into which it is moved, said motor and casing being so disposed relative to said frame as to balance said frame during its tipping movement.

1,824,329. ROLLER CUTTER. WILLIAM L. CHILDS, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Mar. 8, 1930. Serial No. 434,219. 7 Claims. (Cl. 255—71.)



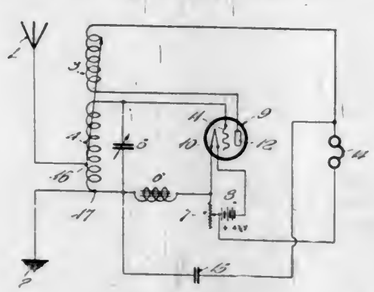
1. A roller cutter having external peripheral teeth, and a tooth cleaning ring surrounding said cutter adjacent and radially movable with respect to said teeth.

1,824,330. REPLACEMENT LINK. JOHN O'FALLON CLARK, University City, Mo., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Apr. 20, 1931. Serial No. 531,370. 2 Claims. (Cl. 59—87.)



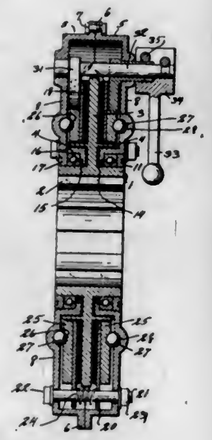
1. A chain link, comprising two complementary link members separated in a cleavage plane that includes both the end and side portions of the link; each link member having at one side a receiving opening for an element to which the link is to be connected, and on its other side a filler for the opening of its complementary link member; said link members beng constructed with means for anchoring the ends of the complementary link adjacent its said filler; said anchoring means comprising two T-shaped recesses on each link member lying substantially in the plane of cleavage, with the head of each recess extending transversely across an end of the filler and the necks of the recesses extending longitudinally of the link, and two anchors constituting confines of the side opening of the member and formed with T-heads entering the transverse portions of the recesses and with shanks entering the necks thereof; and the confines of the T-shaped recesses comprising shoulder lugs against which said anchors abut longitudinally and laterally under forces tending to displace the anchors.

1,824,331. RADIO RECEIVING APPARATUS. BRYAN Y. CUMMINGS, Jr., Springfield, Mo. Filed Apr. 11, 1928. Serial No. 269,146. 2 Claims. (Cl. 250—27.)



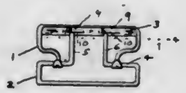
1. A radio receiving system comprising an electron tube having grid, cathode and plate electrodes, a tuned input circuit interconnecting said grid and cathode electrodes, an out-put circuit interconnecting said plate and cathode electrodes, a cathode heating circuit including a source of potential and a variable resistor connected in series with said cathode electrode, sound reproducer windings disposed in said output circuit, a connection from one side of said sound reproducer windings to said plate electrode, a connection from the other side of said sound reproducer windings to a point on said resistor, a reactance included between said tuned input circuit and said cathode electrode, and a condenser interconnecting the end of said reactance remote from said cathode with the side of said sound reproducer windings remote from said cathode electrode.

1,824,332. BRAKE. THOMAS DAVIDSON and WALTER F. DIXON, Sullivan, Ind.; said Dixon assignor to Zada Dixon, Sullivan, Ind. Filed Sept. 10, 1929. Serial No. 391,654. 3 Claims. (Cl. 188—72.)



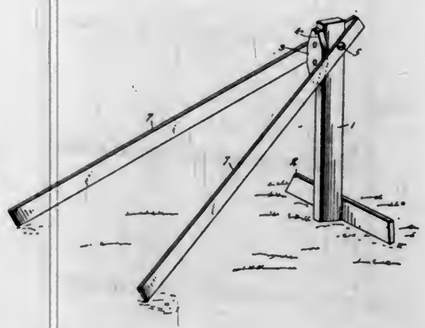
1. In combination with two members, one being rotatable with respect to the other, a braking device comprising a disk mounted to rotate with one of the members, a housing fixed to the second member and to which said disk extends, braking elements within the housing at opposite sides of the disk and movable toward and from the disk, and means interposed between the housing and the braking elements for moving said braking disks into engagement with the first named disks, said means including a ring-shaped plate frictionally engaging said braking elements and having a plurality of tapering recesses in one face thereof and mounted for free rotation with respect to the housing and braking elements, and spherical means engaging the housing and said plate whereby to limit the rotation of said plate, said spherical means forcing the plate inwardly upon rotation of the plate in one direction.

1,824,333. PRONG BUCKLE. JOHN H. DOMKER, New Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed July 17, 1930. Serial No. 468,567. 5 Claims. (Cl. 24—188.)



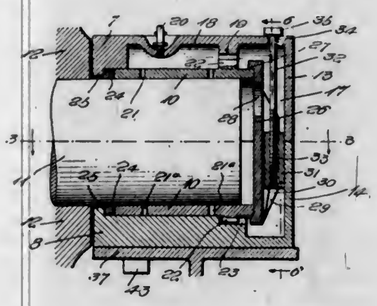
5. A prong buckle having a wire frame and a wire prong member pivotally assembled in a common plane, said pivotal assembly being loose enough to provide relative movements along their pivotal axes and also out of said plane; a flattened section provided by and in the plane of the frame and parallel to said axes; prongs provided by the prong member to intersectingly engage the flattened section; and housings provided by the flattened section, each housing having an opening to admit the end of a spring advanced laterally by the relative axial movements of the frame and prong member.

1,824,334. BARRICADE. EDWIN B. DONALDSON and WILLIAM W. DONALDSON, Washington, D. C. Filed Mar. 5, 1931. Serial No. 520,388. 6 Claims. (Cl. 256—64.)



1. A barricade comprising a stable upright, bracing members, means for pivotally connecting said bracing members to an end portion of the upright, said bracing members being movable to extend either fore or aft of the upright or to be placed in collapsed position alongside the upright.

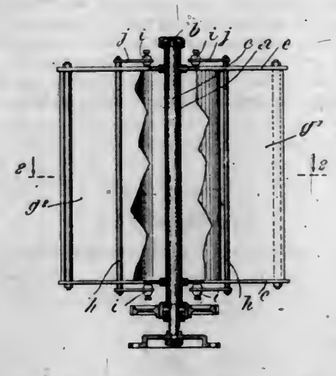
1,824,335. CROWN BLOCK BEARING. ORSON W. DUNHAM, Webb City, Mo. Filed Apr. 8, 1930. Serial No. 442,618. 3 Claims. (Cl. 308—184.)



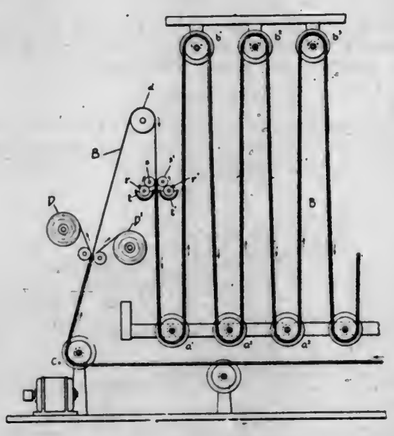
1. A bearing comprising a body closed at one end and open at its other end to receive the end of a shaft, the last named end of said body having an internal shoulder to surround the shaft, an annular packing abutting the inner side of said shoulder, a shaft-receiving bushing sleeve in said body having one of its ends disposed against said packing, a cap for the other end of said bushing sleeve, a cap for the other end of said bushing sleeve, a wedge slidable transversely of said sleeve and interposed between said cap and the closed outer end of said body for inwardly sliding said cap and sleeve to compress said packing, and means extending from said wedge to the exterior of said body for operating the former.

1,824,336. FLUID MOTOR. GEORGES FRANCIS MICHOT-DUPONT, Vincinnes, France. Filed May 13, 1930, Serial No. 452,034, and in Belgium May 14, 1929. 6 Claims. (Cl. 170—33.)

1. In a fluid motor, a fixed support, and a rotatable assembly mounted on said fixed support and comprising a rotatable supporting element, and a fluid-resisting element having a surface presenting, in section, a line having one extremity farther from the axis of rotation of the rotatable assembly than the other, the extremity nearest said axis of rotation being substantially in the form of a circular arc struck off with the axis of rotation as a center and positioned in spaced relation to the latter.



1,824,337. MEANS FOR THE PRODUCTION OF THIN AND VERY THIN FOILS AND FILM-LIKE BANDS FROM SOLUBLE CELLULOSE DERIVATIVES. ARTHUR EICHENGRÜN, Charlottenburg, Germany, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 16, 1925, Serial No. 62,936, and in Germany Oct. 20, 1924. 14 Claims. (Cl. 18—15.)



1. In apparatus for producing continuous film bands of cellulose derivative, the combination of supply means for a solution of cellulose derivative, a travelling band repellant to the said cellulose derivative when solidified and passing beneath said supply means, and means for removing said cellulose derivative solution solidified from said band, said band being arranged in the form of loops uniformly individually positively driven and supported by its borders only.

1,824,338. SAFETY RAZOR. EDWARD M. FINN, Hoisington, Kans. Filed June 20, 1930. Serial No. 462,638. 1 Claim. (Cl. 30—12.)

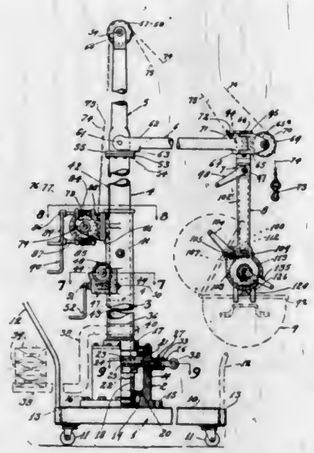
A safety razor comprising a guard having its forward edge extending at an incline, a clamp pivoted at

one end to one side of said guard and extending across the guard when in an operative position, said clamp having flanges along its front and rear edges, the guard having teeth along its front edge and the front flange of said clamp being spaced rearwardly from the teeth, a blade disposed against said guard and having sharpened front and rear edges, said blade being tapered towards one end and having its front edge overlapping rear ends of said teeth, tongues at the side edges of said guard to



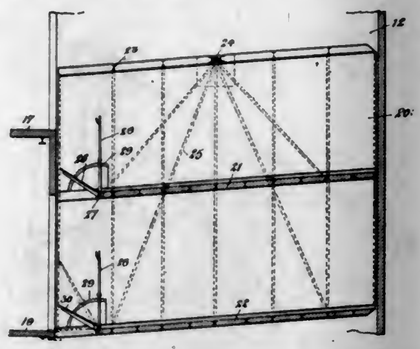
overlap front and rear edges of the blade at the ends thereof, other tongues carried by said guard to overlap the narow end of said blade longitudinally thereof, and means to releasably secure the clamp in an operative position with its front flange bearing against the blade rearwardly from the front edge thereof and its rear flange bearing against the upper face of the guard rearwardly from the blade, the pivoted end of the clamp engaging the wide end of the blade to hold the blade firmly in place beneath the tongues.

1,824,339. HOIST. FRANK D. FORADAS and THOMAS HASAPES, Homestead, Pa. Filed Sept. 29, 1930. Serial No. 485,057. 10 Claims. (Cl. 214—1.1.)



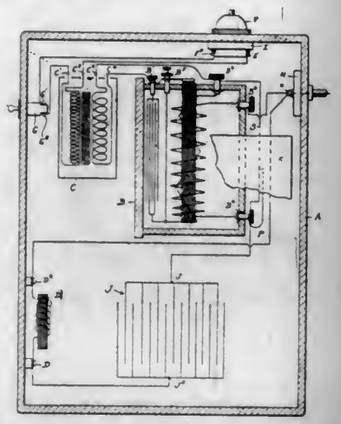
1. In a hoist of the character described, a column; a post longitudinally movable therein; a boom secured to said post; clamping means positioned at the free end of the boom; a horizontal slide-frame rotatably supported in said clamping means; lifting arms depending from said frame; load gripping means positioned on the lifting arms, and means to vary the distance between said arms.

1,824,340. GARAGE ELEVATOR. ERNST GEIGER, Irvington, N. J. Filed Nov. 3, 1927. Serial No. 230,847. 4 Claims. (Cl. 214—85.)



1. As a new article of manufacture, an automobile elevator of the class described having a door opening, an inclined floor sloping downwardly toward the door opening, and a tiltable floor section adjacent the door opening normally blocking gravitational rolling movement of a car through the door.

1,824,341. MEANS FOR INDELIBLY WRITING UPON PAPER AND OTHER FABRICS. WALTER L. GILL, Redlands, Calif. Filed June 25, 1928. Serial No. 288,238. 2 Claims. (Cl. 175—265.)

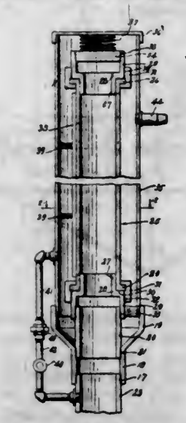


2. In a device of the character described, comprising a rectangular casing, the top of which is shaped to form a writing surface, a plate constituting a part of said top, said plate being conductive over substantially all of its area, a stylus, means within the casing for supplying high potential to said stylus in such manner that when the stylus is passed over a piece of paper placed upon said plate, said paper will be perforated by the action of high potential, and a rest made of a piece of insulating material of substantial L-shape, the extremity of the long leg of which is pivoted to the top of the casing, with said long leg disposed in substantial parallelism with the top of said plate.

1,824,342. AUTOMATIC CUSHION FOR PIPING SYSTEMS. DANIEL A. GILLEN and FREDERICK W. SEYMOUR, Flushing, N. Y. Filed Mar. 12, 1929. Serial No. 346,286. 5 Claims. (Cl. 137—71.)

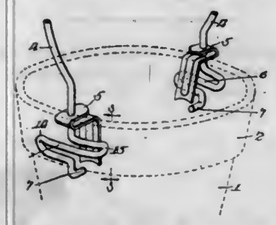
1. A device for eliminating water hammer from a piping system, said device including a hollow member

made of a flexible composition material, means connecting the same with the piping system, and a housing for the member, said means including a reducing coupling portion having connection at its small end with the piping



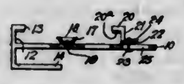
system and at its large end with the housing, and tubular means extending from the small end portion of the reducing coupling and engaging the said member to afford communication therebetween with the piping system, and resilient means re-enforcing the walls of said member.

1,824,343. FLOWERPOT HOLDER. JULES P. GITS and EDWARD L. VAN WEZEMAEL, Chicago, Ill. Filed June 1, 1926. Serial No. 112,758. 22 Claims. (Cl. 215—100.)



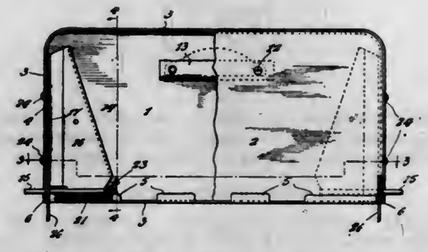
1. A flower-pot holder construction comprising a hanging wire, a stationary clamping member associated with said hanging-wire, providing a multi-point engagement with the pot, a laterally projecting means for engaging under the chime of said pot, and an adjustably movable clamping member, slidable along the hanging-wire, adapted to engage the pot opposite to the stationary clamping member.

1,824,344. MEANS FOR SECURING DISHES ON SHIPS' TABLES. JOSEPH GOLDBERG, Los Angeles, Calif. Filed Feb. 11, 1929. Serial No. 338,899. 1 Claim. (Cl. 248—41.)



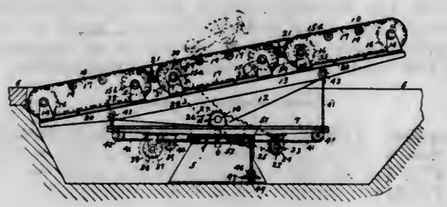
As a new article of manufacture a rectangular base member, a spaced parallel web disposed at one end thereof, and projecting transversely from opposite sides of the base member, keeper posts integrally joining at right angles the ends of the base member and of the web and projecting above the base member, right angular lugs formed upon the upper ends of said posts, rubber strips secured to the under edges of said lugs, said base member being formed at its opposite end with an elongated slot, a slide on said base member having a rightangular lug at its upper end confronting the other lug, a rubber strip secured to the under edge of the last-named lug, an integral base on the slide means projecting thru said slide adjustably and carrying the latter, means locking the last-named means onto the base member, and a compressible under support for a plate secured centrally upon said base member.

1,824,345. STOVE DOOR. CHRISTOPHER L. HARDWICK, Cleveland, Tenn., assignor to Hardwick Stove Company, Cleveland, Tenn., a Firm composed of Christopher Hardwick and Mrs. J. H. Hardwick. Filed May 28, 1930. Serial No. 456,638. 6 Claims. (Cl. 126—190.)



1. In an oven door, a front plate having flanges around its edges, a back plate having flanges to fit against the inner sides of the flanges on the front plate, reinforcing brackets of sheet material fitted between the front and back plates at the lower corners thereof and provided along their side edges with flanges in contact with both the front and the back plates and further provided at their lower ends with hinge-supporting elements, hinge pins inserted through the end flanges of the front and back plates and resting in said hinge-supporting elements, and a fastening bolt inserted through the end flanges of the front and back plates and through the adjacent side flange of the respective bracket.

1,824,346. AEROPLANE STATION. WILLIAM BEVERLEY HARISON, Garden City, N. Y. Filed Sept. 22, 1928. Serial No. 307,626. 3 Claims. (Cl. 244—2.)

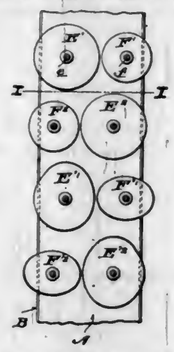


3. An endless carrier having pivoted supporting means adapted to change the inclination of said carrier, cable connections engaging said pivoted support at opposite sides of said pivot center and at equal distances therefrom, and a driving drum engaging said cable between said connections and disposed to afford equal cable tensions at opposite sides thereof.

1,824,347. APPARATUS FOR GRINDING, SMOOTHING, AND POLISHING GLASS. CHARLES HIBON, St.-Mande, France, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Filed June 23, 1930, Serial No. 463,206, and in France July 13, 1929. 1 Claim. (Cl. 51—110.)

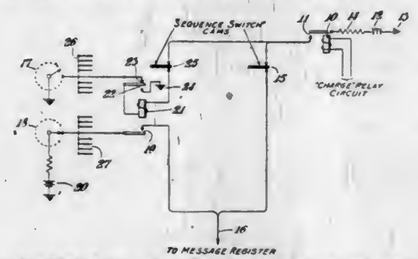
In a surfacing device for the continuous grinding, smoothing and polishing of glass, the combination of a

travelling support for the glass to be surfaced, a series of abrasive members mounted above said support, each



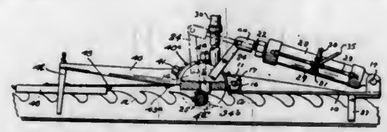
member consisting of elements dissimilar in coverage which extend across the support, the dissimilar elements of adjacent members being arranged in reverse order.

1,824,348. TIMING APPARATUS. RAYMOND M. HICKS, East Orange, N. J., assignor to Ward & Crosby, a Partnership composed of S. Mortimer Ward, jr., and Gorham Crosby, New York, N. Y. Filed Aug. 3, 1928. Serial No. 297,273. 5 Claims. (Cl. 179—9.)



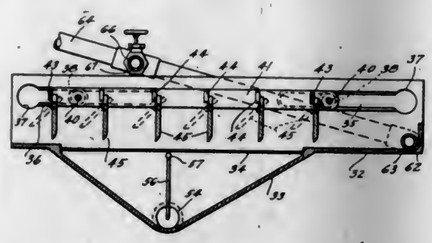
1. Apparatus for recording overtime charges, for telephone calls, comprising message registers for each subscriber, "district selector circuits" and "charge" relay circuits cooperating therewith for operating said message registers at the termination of each call, and additional circuits cooperating with the "charge" relays to additionally operate the message registers at the termination of predetermined arbitrary overtime payment periods.

1,824,349. POWER ATTACHMENT FOR SAW SWAGES. RAE G. HORTON and GEORGE FRALEY, Fresno, Calif. Filed Feb. 23, 1926. Serial No. 89,826. 6 Claims. (Cl. 76—54.)



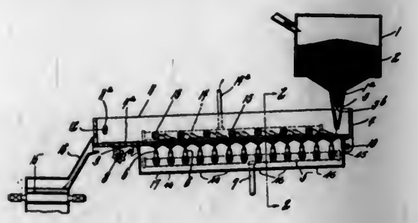
1. A saw swage comprising a supporting plate of substantial length provided at one of its ends with means for firmly mounting the plate over the teeth of a saw, a swage carried by the other end of said plate in position for operating upon the teeth of the saw, said swage provided with an operating arm, fluid pressure operated means pivotally secured to one end of the plate and connected with said arm, the housing of the swage provided on one side with means by which it is pivotally connected to said plate and an arm adjustably secured to the opposite side of the housing such arm extending parallel with the saw and at a variable angle with the plane touched by the saw teeth.

1,824,350. SAND TREATING APPARATUS. OAKLEY W. HOSKING, Monroe, N. Y. Original application filed Nov. 15, 1928, Serial No. 319,553. Divided and this application filed Oct. 18, 1929. Serial No. 400,565. 5 Claims. (Cl. 210—152.)



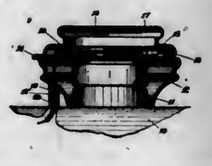
1. In a sand treating apparatus, a sand receiver having a well in the bottom thereof, and provided with a discharge opening at one end, a foraminous screen over the top of said well and disposed below the bottom of said receiver, a suction pipe entering said well, a reciprocable frame mounted in said receiver, spaced conveyor blades pivotally mounted on said frame, and stop means for limiting swinging movement of said blades in one direction to cause the same to move sand over said screen toward the discharge end of said receiver during movement of said frame toward the discharge end and to swing to an idle position upon movement of said frame in an opposite direction, an air pipe pivotally mounted beneath said screen for breaking any possible seal between the sand and the mesh of said screen, and means operable by said reciprocable frame for imparting reverse swinging movement to said air pipe.

1,824,351. METHOD OF PRODUCING LIME. GUY H. HUNT, Brookline, Mass. Filed Dec. 2, 1926. Serial No. 152,141. 2 Claims. (Cl. 222—4.)



1. A process of producing lime, which comprises forming a substantially uniform, relatively thin layer of limestone granules, indirectly heating the layer to a sufficiently elevated temperature to effect a complete decomposition of such granules into lime, and causing a vibration of such granules during decomposition.

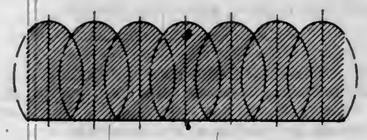
1,824,352. GAS TANK LOCK. WILLIAM ISAACS, Lincoln, Nebr. Filed Aug. 16, 1929. Serial No. 386,381. 1 Claim. (Cl. 70—90.)



A lock for gasoline tanks of automobiles, said lock including a casing adapted to surround the filler conduit

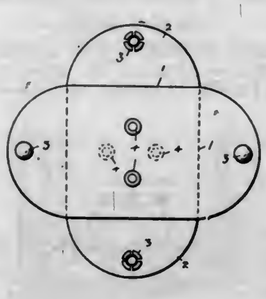
of the gasoline tank and to be secured thereto, a cover hingedly connected to said casing, a slidable bolt underneath said cover, said casing and said cover being each provided with apertures which are in alignment when said cover is in closing position, a leaf spring having lobes on opposite side of said bolt and having a recessed portion at its rear engaging with said bolt to yieldably hold said bolt in latching position, and means for withdrawing said bolt from the apertures to unlatch said cover.

1,824,353. SCREEN FOR SHOWING PROJECTED IMAGES IN LIGHTED ROOMS AND FOR SHORT-EXPOSURE PHOTOGRAPHY. RASMUS OLAF JONAS JENSEN, Copenhagen, Denmark. Filed Dec. 1, 1927, Serial No. 237,092, and in Denmark Dec. 15, 1926. 2 Claims. (Cl. 88—24.)



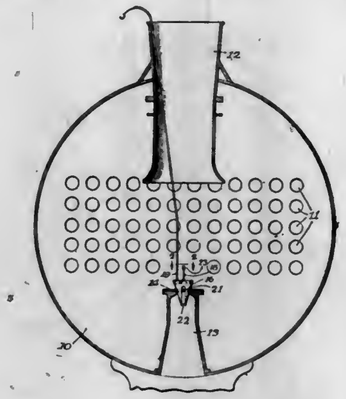
1. A device for casting an image comprising a member of light refracting material having one surface thereof formed to present a multiplicity of lenticular elements to the image source, each of said elements being constructed and arranged to focus the light received thereby on the opposite surface of the member, the last mentioned surface being translucent at those points which constitute the foci of the elements, and being opaque and light absorbent at all other points thereon.

1,824,354. COIN PURSE. AARON L. KOTLICKE, Baltimore, Md., assignor to Max Goldstein, Baltimore, Md. Filed May 12, 1930. Serial No. 451,542. 1 Claim. (Cl. 150—37.)



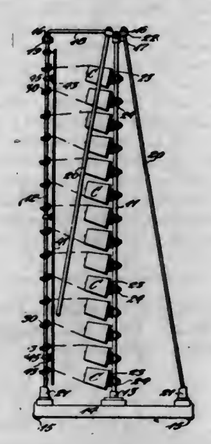
A coin purse formed of two separate pieces of material of the same shape placed one upon the other and at right angles to each other, each of said pieces being provided with a flap on each end thereof, the said flaps being each provided with a socket member of a fastener and the body portion of each of said pieces being provided with two stud members of a fastener near the center thereof, the socket members of each of the flaps being adapted to fit over a stud member on the body portion of the other piece.

1,824,355. LOCOMOTIVE DRAFT INDUCER. LOUIS G. KUNZER, Oak Park, Ill. Filed Aug. 1, 1927. Serial No. 209,742. 5 Claims. (Cl. 290—96.)



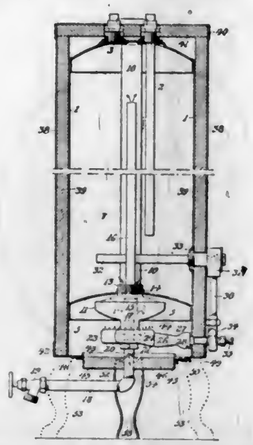
1. A portable draft inducer for the purpose described comprising an inverted cone, a pipe secured near the base of the cone transverse thereof and having its ends sealed, an exhaust tip connected to said transverse pipe at the center thereof and a supply pipe connected to said transverse pipe near the end thereof.

1,824,356. CREEL. WILLIAM MARCROFT, Cranston, and JOHN A. MOLLOY, Apponaug, R. I., assignors to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed July 14, 1928. Serial No. 292,672. 16 Claims. (Cl. 242—131.)



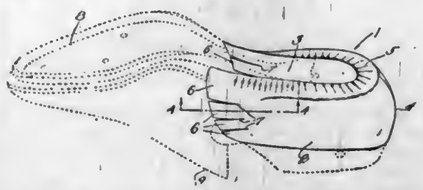
1. In a device of the type specified, the combination of means for supporting a plurality of supply packages, means for guiding the strands delivering from the packages, and means intermediate the packages and the guiding-means and spaced at a distance from each for restricting the ballooning of the strands as they unwind from the packages to prevent interference therebetween or entanglement thereof, said last-named means having circular openings through which the strands draw, and each opening being large enough to permit the strand to play therein to a certain extent to revolve around the edge thereof whereby the ballooning action is dampened or quenched to prevent it from becoming excessive.

1,824,357. GAS WATER HEATER. VICTOR MAUCK, Merion, Pa. Original application filed Nov. 24, 1924, Serial No. 752,037. Divided and this application filed Nov. 22, 1927. Serial No. 235,025. 2 Claims. (Cl. 126—351.)



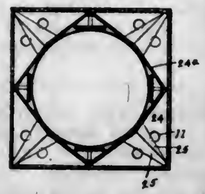
1. In a gas water heater, the combination with cylindrical shell having a water container in the upper portion thereof, a combustion chamber in the lower portion thereof, and a restricted opening in the bottom of said shell in coaxial relation therewith; of a removable closure for said opening; a water drain pipe pending from said container through said combustion chamber and its closure, in eccentric relation with the axis of said shell; a burner support carried by said water pipe; a gas inlet conduit extending radially through the wall of said shell into said combustion chamber in tangential relation with said drain pipe; the portion of said gas conduit extending into said combustion chamber being smoothly cylindrical; and a gas burner comprising a horseshoe-shaped body having a gap in its perimeter and bearings extending inwardly upon opposite sides of said gap adapted to detachably embrace said pendent pipe and rest upon said support on said pipe, and having a mixing tube projecting from said body and fitted over said gas conduit; the axis of said mixing tube being in tangential relation with said body, and the gap in the perimeter of the latter being in oblique relation to the axis of said mixing tube; whereby said burner is stably supported in level position solely by said pipe and gas conduit but is readily removable therefrom, alone, and through said opening, when said closure is removed.

1,824,358. COUNTER STIFFENER. CHARLES D. MALAGUTI, Boston, Mass. Filed Feb. 25, 1929. Serial No. 342,364. 2 Claims. (Cl. 36—68.)



1. A molded counter stiffener of stiff sheet material having the forward end portions of its opposite side walls each constituted throughout by a plurality of longitudinal independently flexible tangs each independently conformable longitudinally to the shape of the shank portion of a last, said tangs also rendering said end portions conformable transversely to the convex curvature of the shank portions of the last.

1,824,359. PACKING MEANS FOR FOOD MATERIALS. MORRIS E. MILLER, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed May 26, 1927. Serial No. 194,336. 4 Claims. (Cl. 62—91.5.)



1. A closed packing means for a frozen body of food material having walls formed from cellulose material and comprising an outer member, and an inner member comprising sectional side walls disposed edge to edge to form an enclosure for the frozen body and having devices to space said side walls of said outer member.

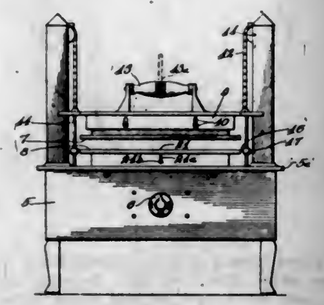
1,824,360. MANUFACTURE OF BURKEITE. HARRY WHEELER MORSE, Redwood City, Calif. Filed Mar. 30, 1929. Serial No. 351,331. 9 Claims. (Cl. 23—40.)

4. A process for making sulfate-carbonate of soda which comprises adding to a brine containing sulfate, carbonate and chloride of sodium, tails salts from another portion of said brine, heating and agitating the mixture until the sulfate-carbonate separates, and separating the solid from the liquid.

1,824,361. MANUFACTURE OF SULPHATE OF POTASH. HARRY WHEELER MORSE, Redwood City, Calif. Filed Apr. 29, 1929. Serial No. 359,108. 4 Claims. (Cl. 23—38.)

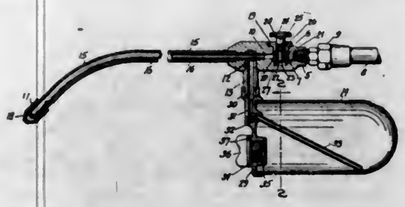
1. A process for the recovery of potassium from a solution containing the same, comprising treating said solution in one stage with solid partially reacted sodium sulphate from a second stage, separating a double salt of sodium and potassium sulphates from the liquid, adding solid sodium sulphate to the liquid, allowing said sodium sulphate to react with said solution to form a precipitate of sodium sulphate partially reacted with potassium sulphate, separating solid partially reacted sodium sulphate from the liquid, and adding said partially reacted sodium sulphate to a fresh supply of solution in the first stage.

1,824,362. FOOD TOASTER. JOHN J. NOETH and FREDERICK E. HUMMEL, Chicago, Ill. Filed Apr. 11, 1927. Serial No. 182,801. 7 Claims. (Cl. 53—5.)



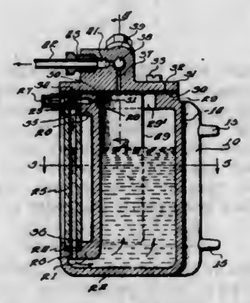
1. A food toaster comprising a base, a lower heat plate mounted thereon, an upper heat plate adapted to approach and recede from the lower heat plate, depending guide rods carried by the upper heat plate, and a food support disposed between the heat plates and slidably carried by said guide rods.

1,824,363. SPRAY GUN. CARL A. NORGREN, Denver, Colo. Filed Apr. 16, 1928. Serial No. 270,400. 2 Claims. (Cl. 299—88.)



1. A spray gun comprising a lubricant container, an oil discharge conduit having a nozzle for the discharge of liquid at its outer end and provided with an inlet in that portion of the container lowermost when the gun is in its operative position, an air pipe having a jet cooperating with the nozzle, and valve-controlled means to connect the air-pipe with a source of pressure-fluid, the container having remote from the inlet of the conduit, a filler neck projecting into the container to define a space for the entrapment of air when the container is being filled, and a movable member providing an air-tight closure for the filler-neck.

1,824,364. LUBRICATING APPARATUS. CLAYTON BELKNAP PIERCE and WILLIAM CORMAC PIERCE, Chicago, Ill. Filed July 9, 1928. Serial No. 291,226. 4 Claims. (Cl. 261—121.)

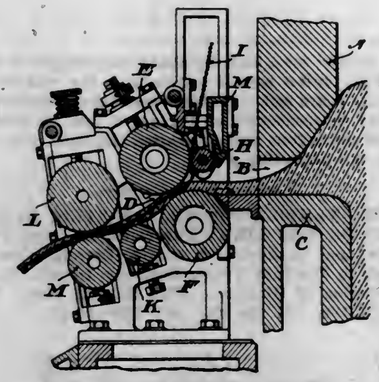


4. Lubricating apparatus for an internal combustion engine comprising an oil reservoir having air inlet and outlet apertures therein, a transparent tube communicating at one end with said air inlet and the reservoir and at the other end with the bottom of said oil reservoir for injecting air below the oil level thereof, said tube being adapted to disclose the flow of air to the bottom of said reservoir when said engine is in operation and to indicate the quantity of oil in said reservoir when said engine is not in operation.

1,824,365. PROCESS OF AND APPARATUS FOR THE MANUFACTURE OF WIRE GLASS. LEANDER N. POND and JOSEPH H. LEWIS, Kingsport, Tenn., assignors to Blue Ridge Glass Corporation, Kingsport, Tenn., a Corporation of New York. Filed July 31, 1929. Serial No. 382,391. 9 Claims. (Cl. 49—32.)

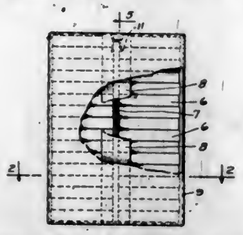
1. The hereinbefore described process of manufacturing wire glass which comprises feeding molten glass to and through a forming pass between rolls, feeding wire to the molten glass in a direction at a substantial angle to the direction of movement of the wire through the pass, and determining the position of the wire in the glass sheet by varying the speed or drive on the wire in relation to the speed of the forming rolls.

1,824,366. APPARATUS FOR THE MANUFACTURE OF WIRE GLASS. LEANDER N. POND, Kingsport, Tenn., assignor to Blue Ridge Glass Corporation, Kingsport, Tenn., a Corporation of New York. Filed Sept. 6, 1930. Serial No. 480,253. 1 Claim. (Cl. 49—32.)



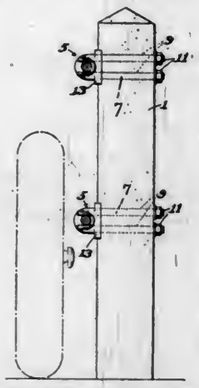
In a device for the manufacture of wire glass, the combination with forming rollers having a forming pass between them, means for feeding glass to the forming pass, a netting feed roll adjacent to the upper forming roll, the two having a space therebetween for the passage of netting, the axis of the netting feed roll being in a horizontal plane below that of the upper forming roll and the netting feed roll having its center swelled in respect to its ends.

1,824,367. PACKET OF FIRECRACKERS WITH SEALED BAND. WILFRED ERNEST PRIESTLEY, Seattle, Wash. Filed Dec. 11, 1929. Serial No. 413,248. 5 Claims. (Cl. 206—46.)



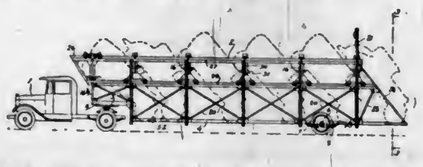
1. In a packet of firecrackers, comprising two rows of firecrackers with the fuse ends thereof abutting each other, an adhesive band sealed to the abutting ends parallel with the space occupied by the fuses between the ends and over the space, to form an enclosed channel with the fuses therein between the ends.

1,824,368. HIGHWAY GUARD RAIL. JOSEPH H. RAMSEY, Albany, N. Y., and CLEO ALVIN SHORT, Medford, Mass.; said Short assignor to said Ramsey. Filed Oct. 3, 1930. Serial No. 486,070. 6 Claims. (Cl. 248—31.)



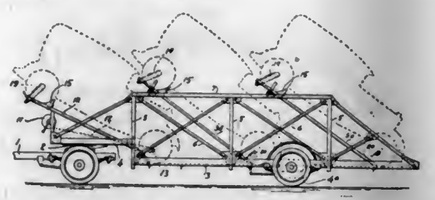
4. A support for a highway guard rail comprising means adapted to project beyond and embrace the roadside surface of the guard rail, and means associated therewith and supported independently of the guard rail for diverting a vehicle wheel from and preventing the same from striking the rail embracing means.

1,824,369. VEHICLE FOR TRANSPORTING AUTOMOBILES OR THE LIKE. FREDERICK M. REID, PIERRE SCHON, and CLARENCE M. EASON, Detroit, Mich., assignors to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed May 12, 1928. Serial No. 277,196. 21 Claims. (Cl. 280—33.1.)



13. A vehicle for transporting automobiles or the like comprising a platform, side frames on the platform, a track device on each side frame elevated with respect to the platform, dollies carried by the track devices for supporting one end of an automobile in elevated position, and means for elevating one end of an automobile for placement on the dollies.

1,824,370. AUTOMOBILE CARRYING VEHICLE. FREDERICK M. REID, Detroit, Mich., assignor to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 1, 1928. Serial No. 303,394. 7 Claims. (Cl. 280—33.1.)



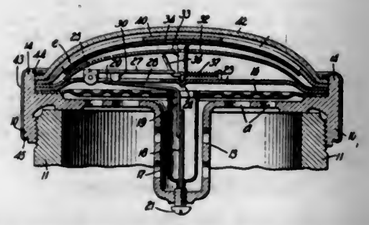
1. In an automobile-carrying vehicle, the combination with a vehicle frame having side walls arranged to permit automobiles to move between them, permanent inclined ramps positioned at the forward end of the vehicle for directly supporting the wheels of an automobile in inclined position, and a plurality of removable ramps spaced from the front to the rear end of the vehicle, each for directly supporting the wheels of an automobile in inclined position, with the automobiles in overlapping relation.

1,824,371. HOLDER WITH PULLEY FOR DRAWING CURTAINS. AUGUST RAPP, Iserlohn (Westfalen), Germany. Filed Jan. 2, 1931, Serial No. 506,221, and in Germany Jan. 3, 1930. 7 Claims. (Cl. 156—21.)



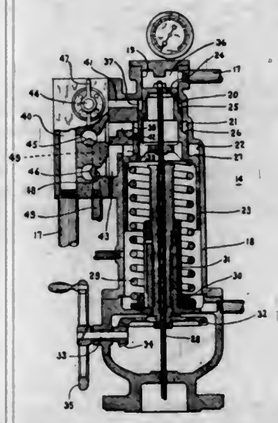
4. In a holder with pulley for drawing curtains, said holder consisting of a wire of which one end forms a hook, the other end forming a ring surrounding said pulley, a cap, said cap being supported by said ring and enclosing the upper half of said pulley and being provided with notches serving as bearing for the axle of the pulley, said cap being open at its upper end, the ends of the wire to said ring being partly bent over to secure the cap in position.

1,824,372. INDICATING DEVICE RESPONSIVE TO TEMPERATURE AND PRESSURE FOR INTERNAL COMBUSTION ENGINES. HERMAN SCHLAICH, Long Island City, N. Y. Filed Dec. 20, 1928. Serial No. 327,448. 13 Claims. (Cl. 116—114.)



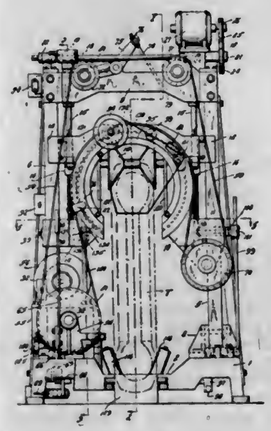
1. In a device for indicating thermal conditions in the cooling system of an internal combustion engine, an indicator proper having a movable indicating member in combination with means responsive to temperature conditions in said cooling system for giving said member a portion only of its indicating movement and means responsive to pressure conditions in said system for giving said member a further portion of its indicating movement.

1,824,373. VARIABLE SPEED GOVERNOR. WALTER SCHMID, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 21, 1929. Serial No. 401,219. 3 Claims. (Cl. 264—14.)



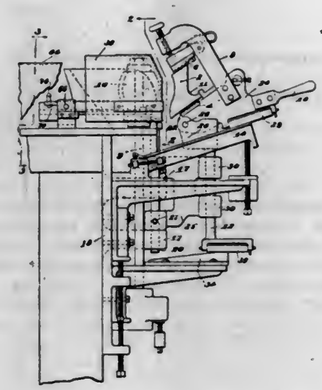
1. In a fluid pressure speed-responsive governing mechanism for governing the speed of a prime mover within the same percentage of speed variation at a plurality of speed settings, the combination of means providing a fluid pressure varying as a function of the speed of the prime mover, pressure-responsive means subjected to said variable fluid pressure and controlling the admission of motive fluid to the prime mover, a spring acting on the pressure-responsive means in opposition to the fluid pressure, and means for varying the area of the surface of the pressure-responsive means subjected to said variable fluid pressure.

1,824,374. WRAPPING MACHINE. HERMAN SCHOLZ, Chicago, Ill. Filed Mar. 23, 1929. Serial No. 349,296. 13 Claims. (Cl. 242—6.)



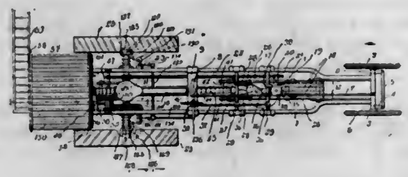
1. In a wrapping machine for wrapping annular articles, spaced supporting drums for holding the articles in an upright position, a shuttle at the top of the article, means to adjust the shuttle vertically, a movable support for one of said drums, and means associated with the shuttle and the movable drum to cause coordinate movement of the shuttle and the drum.

1,824,375. GUARD FOR WOOD-HEEL TURNING MACHINES. WESLEY J. SHAW, Haverhill, and MILES E. BASTOW, Groveland, Mass., assignors to New England Wood Heel Co., Haverhill, Mass., a Corporation of Massachusetts. Filed Oct. 29, 1927. Serial No. 229,729. 3 Claims. (Cl. 74—105.)



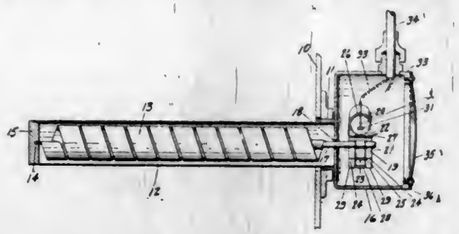
1. A heel-turning machine having, in combination, two horizontally spaced cutters for respectively turning opposite sides of a heel block, a clamp for holding the heel block, a jack upon which the clamp is mounted, means for swinging the jack from an intermediate position between the cutters toward either cutter, a pivot fixed near each cutter, a hooded guard pivoted to swing about each pivot so as to enclose and uncover the respective cutters, the guards enclosing the respective cutters when the jack occupies the intermediate position, each guard having an extension on the other side of its pivot, and means for engaging the respective extensions to pivot each guard to uncover its cutter when the jack is swung from the intermediate position toward the corresponding cutter.

1,824,376. BEET HARVESTER. ALBERT E. SHINN, East Las Vegas, N. Mex. Filed Apr. 16, 1928. Serial No. 270,410. 2 Claims. (Cl. 55—9.)



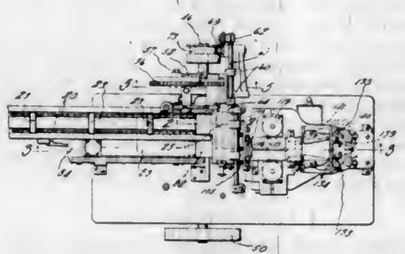
1. A beet harvester comprising a traveling frame, means carried by the frame for topping and lifting the beets, an elevator having its front portion disposed immediately at the rear of the topping and lifting means to receive beet bodies therefrom, a drum rotatably mounted upon the frame at the rear end thereof with its axis extending longitudinally of the frame and consisting of two annuli and spaced rods connecting the same, the inner diameter of the front annulus being less than the inner diameter of the rear annulus, the upper rear portion of the elevator being arranged adjacent the drum to deliver the beet bodies directly into the same, a rear axle, and means driven by the rear axle for actuating the elevator and rotating the drum.

1,824,377. THERMOSTATIC ELECTRICAL CONTROL SWITCH. JOHN J. SHIVELY, Brookville, Pa. Filed Mar. 30, 1926. Serial No. 98,465. 2 Claims. (Cl. 200—138.)



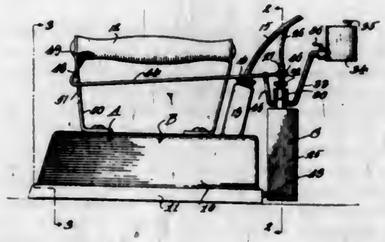
1. A thermostatic electric control device comprising the combination with a helix of bimetallic metal fixed at one end, of a shaft secured to the other end, a spring clip mounting on the shaft so as to be readily adjustable to any desired angle thereon, and a spring clip on said mounting for holding a mercury contact switch therein, said last-named spring clip being supported on said mounting by a flexible leaf spring so as to be rockable thereon.

1,824,378. WRAPPING MACHINE. ELMER L. SMITH, Longmeadow, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 27, 1928. Serial No. 308,802. 12 Claims. (Cl. 93—2.)



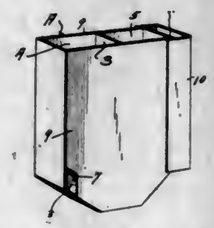
1. A wrapping machine for long, flexible articles comprising a curved guideway having a radial aperture at one point, means for feeding an article to the guideway, an arc-shaped plunger for feeding the article longitudinally of the guideway to a point in front of the aperture, and means forcing the articles through the aperture to fold it.

1,824,379. PRESSING AND STEAMING IRON. LLOYD A. SMITH, Davenport, Iowa. Filed June 25, 1928, Serial No. 288,167. Renewed Feb. 9, 1931. 6 Claims. (Cl. 68—26.)



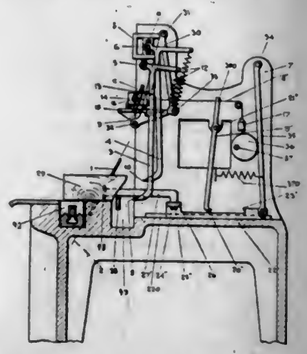
1. The combination with a sad iron having longitudinally extending passageways and ports communicating with said passageways opening out through the lower face of the iron, of a steam generating device carried by said iron including a body having a steam generating chamber therein, a heat device surrounding said body, said body having a tortuous passageway communicating with said chamber, means for delivering a liquid to said chamber, and means for connecting the tortuous passageway with the passageways in said iron.

1,824,380. DISINFECTING APPARATUS. ULYSSES JOSEPH SMITH, Cleveland, Ohio. Filed Nov. 8, 1927. Serial No. 231,947. 2 Claims. (Cl. 167—3.)



2. A disinfecting apparatus of the class described comprising a container provided therethrough with an air passageway and with compartments in communication with the passageway, one of said compartments being adapted to contain a disinfectant material and the other a granular material, and an additional compartment extending along the container, said compartment forming a flue into which the air passageway discharges, said compartment or flue being comprised in the structure of the container, said compartment or flue extending to the upper part of the container.

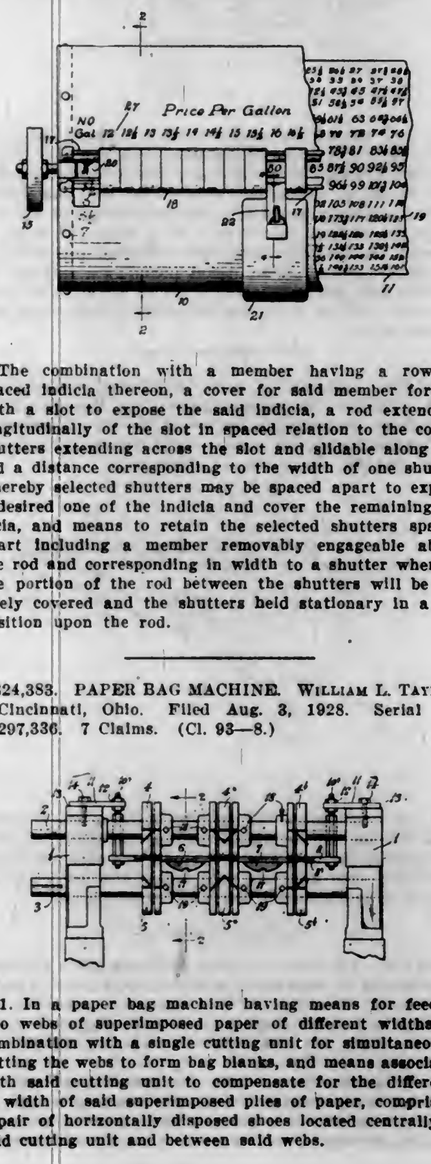
1,824,381. LUMBER POSITIONING MECHANISM. EINAR F. SÖRENSEN, Stockholm, and NIELS E. E. SÖRENSEN, Savenas per Gottenborg, Sweden. Filed Mar. 24, 1931, Serial No. 524,968, and in Sweden Sept. 27, 1929. 22 Claims. (Cl. 143—168.)



1. Mechanism for governing the positioning of lumber for operation by trimming means having a predetermined trimming plane, comprising a series of selectors and means for causing them to adapt themselves to a contour of a work piece, a second series of members and means for so controlling the position of the latter series by the former series that they define an inverted facsimile of the contour registered by the selectors, and means for positioning said work piece with reference to said trimming plane, controlled by members of the second series.

22. Mechanism for governing the positioning of lumber for operation by trimming means having a predetermined trimming plane, comprising a work piece gripping device movable laterally of and at an inclination with respect to the trimming plane, a series of selectors and means for causing the selectors to adapt themselves to a contour of a work piece, a second series of members and means for so controlling the position of the second series by the first series that they define an inverted facsimile of the contour registered by the selectors, means normally tending to move the gripper device and the work piece carried thereby, stop members for limiting the movement of the gripper device and controlled by the second series of members, and means normally holding the gripping device against movement and actuating to release the latter following positioning of the stop members.

1,824,382. MECHANICAL COMPUTER. JOSEPH H. TAYLOR, Benton, Tenn., assignor to Frank R. Bradford, Benton, Tenn. Filed Oct. 12, 1926. Serial No. 141,219. 1 Claim. (Cl. 235—87.)



The combination with a member having a row of spaced indicia thereon, a cover for said member formed with a slot to expose the said indicia, a rod extending longitudinally of the slot in spaced relation to the cover, shutters extending across the slot and slidable along the rod a distance corresponding to the width of one shutter whereby selected shutters may be spaced apart to expose a desired one of the indicia and cover the remaining indicia, and means to retain the selected shutters spaced apart including a member removably engageable about the rod and corresponding in width to a shutter whereby the portion of the rod between the shutters will be entirely covered and the shutters held stationary in a set position upon the rod.

1,824,383. PAPER BAG MACHINE. WILLIAM L. TAYLOR, Cincinnati, Ohio. Filed Aug. 3, 1928. Serial No. 297,336. 7 Claims. (Cl. 93—8.)

1. In a paper bag machine having means for feeding two webs of superimposed paper of different widths, in combination with a single cutting unit for simultaneously cutting the webs to form bag blanks, and means associated with said cutting unit to compensate for the difference in width of said superimposed plies of paper, comprising a pair of horizontally disposed shoes located centrally of said cutting unit and between said webs.

1,824,384. POWER MACHINE FOR SEALING CAPS TO JARS AND CANS. SWAN NILS TEVANDER, Maywood, Ill., assignor to Swan Metallic Seal & Cap Company, a Corporation of Illinois. Filed June 4, 1923. Serial No. 643,208. 4 Claims. (Cl. 226—86.)



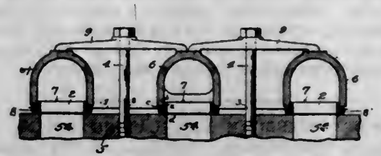
3. In a device of the class described, a floor stand adapted to support jar sealing devices, a reciprocatory jar supporting table, a plurality of horizontally movable die blocks, sealing means for compressing a plurality of vertically spaced annular beads of a sealing cap while gripped by said die blocks for causing the cap to tightly adhere to the receptacle, means for operating in succession said die blocks and said sealing means, a control member operable at will for initiating the working movements of said die blocks and sealing means, and means for limiting the operation of said device to a single sealing cycle for each initiating actuation of the control member.

1,824,385. DRAPERY FIXTURE. JACOB M. WINTROB, Philadelphia, Pa. Filed July 10, 1930. Serial No. 466,921. 12 Claims. (Cl. 156—22.)



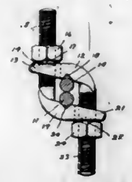
4. In a hanging rod bracket, in combination, a member adapted for securement flatwise against a wall surface, said member being provided with opposed parallel grooves, and a rod supporting member having supporting means slidably received between said grooves and including a web portion projecting forwardly from said means, a tubular portion the axis of which lies substantially in the plane of said web portion, and a supporting yoke for one or more draw-cord pulleys arranged below said tubular portion.

1,824,386. GASKET. CLAUDE B. BAILEY, Wyandotte, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed June 8, 1925. Serial No. 35,511. 2 Claims. (Cl. 288—1.)



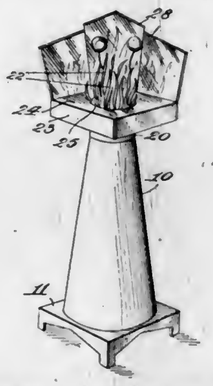
1. A manifold gasket having an elongated body composed of a single layer of sheet metal and having a plurality of port and stud holes therein spaced apart lengthwise of the gasket body with the stud holes between the port holes, asbestos rings, one about each port hole on the under side of the body, and tubular guide members at the respective port holes and projecting outward from the upper side of the body, each of said guide members being made in folded form from a single integral piece of sheet metal separate from the body and having inner and outer annular portions integrally connected together by the fold in the metal between them at the outer end of said member, said portions having base flanges engaging the outer sides of the gasket body and rings, respectively, for holding the guides on the body and the rings against the same; the inner portions of the guides extending through the associated rings and port holes.

1,824,387. WIRE CLAMP. STEPHEN P. BECKER, Poughkeepsie, N. Y. Filed May 31, 1930. Serial No. 458,102. 1 Claim. (Claim 24—135.)



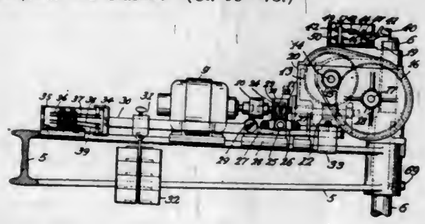
A clamp for securing two or more wires together, comprising a pair of clamping members each of which is formed with a head and a threaded portion, clamping nuts threaded thereon and formed with a conical end, one of said clamping members formed with a hole in the head thereof adapted to receive the threaded portion of the other member, and the other member formed with a bifurcated head adapted to receive the threaded portion of the first member, both of said members formed with parallel notches to engage the wires.

1,824,388. COMBINATION LAMP AND VENTILATOR. GEORGE SERGE BIRCH, Tulsa, Okla. Filed Feb. 11, 1930. Serial No. 427,514. 9 Claims. (Cl. 40—126.)



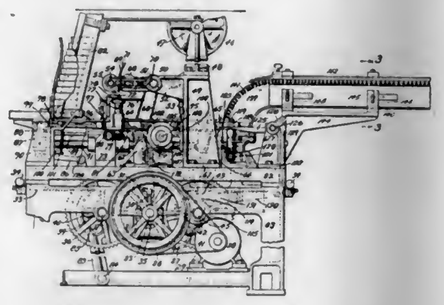
1. In a combined lamp and ventilator, a housing, a plurality of flame representing members arranged in one end of said housing, means for establishing and maintaining a flow of air through said housing, a reflector arranged on said housing adjacent to the end in which the flame representing members are located and means for illuminating said flame representing members and reflector.

1,824,389. PRESSURE REGULATING MEANS. WILLIAM C. BROEKHUYSEN, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed July 14, 1927. Serial No. 205,825. 24 Claims. (Cl. 95—73.)



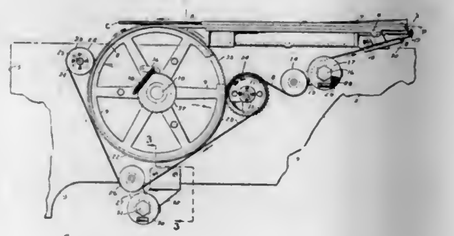
1. The combination with motor driven means for applying pressure, of pressure actuated motor reversing means automatically governing the action of said applying means.

1,824,390. DUPLEX WRAPPING MACHINE. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Apr. 15, 1925, Serial No. 23,342. Renewed Aug. 16, 1930. 24 Claims. (Cl. 93—2.)



1. The combination with a device for continuously pulling a taut strip of flexible material from a source of supply, of mechanism for producing a to and fro movement of said device to alternately advance and stop the leading end of said strip, means for severing a section of material from the leading end of said strip while the latter is stopped, and means for wrapping the severed section around an article, said wrapping means including a pathway for articles said pathway having a curved section, and intermittently moving means for advancing articles along said curved section.

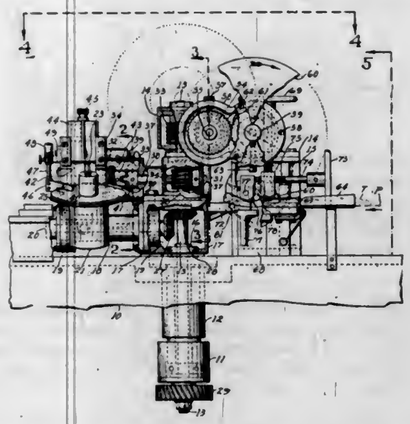
1,824,391. CIGARETTE-ROD DRIVE FOR CIGARETTE MACHINES. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Nov. 1, 1929. Serial No. 404,168. 7 Claims. (Cl. 131—43.)



1. In a continuous rod cigarette machine, the combination with an endless tape for feeding the rod, of a pulley for driving the tape and a belt adjacent said pulley and travelling with said tape said pulley and belt being arranged to grip a loop of the tape between them.

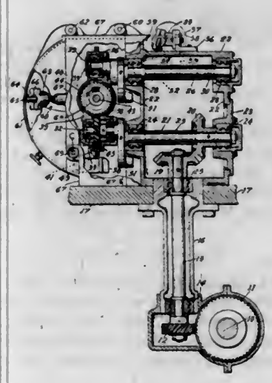
1,824,392. CIGARETTE ROD FORMER AND PASTER. WILHELM B. BRONANDER, Montclair, N. J., and PETER M. NEJEDLY, Brooklyn, N. Y., assignors to American Machine & Foundry Company, a Corporation of New Jersey. Filed Nov. 16, 1929. Serial No. 407,757. 12 Claims. (Cl. 131—43.)

1. In a cigarette machine, the combination with rod forming means having a tube and coacting tongue for continuously folding a wrapper strip about a stream of tobacco to form a rod, of pasting mechanism having a pasting wheel in operative contact with a flap of said wrapper strip beyond said tube, and tobacco impelling



means projecting through said tongue into said tube to engage the tobacco to prevent slippage of the wrapper strip and rod.

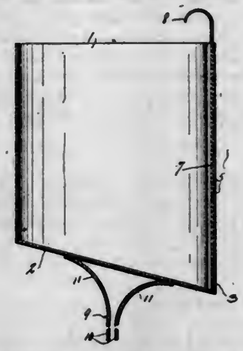
1,824,393. CIGARETTE CUTOFF. ROBERT JOHN ALEXANDER CHANDLER, London, England, assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Feb. 14, 1930. Serial No. 428,475. 18 Claims. (Cl. 131—37.)



1. In a continuous rod cigarette machine, the combination with a flying frame, of a cutoff blade and cooperating ledger plate both supported by said frame, and means for moving said frame in an orbital path to cause said blade and ledger plate to move in an orbital path to operate on the rod.

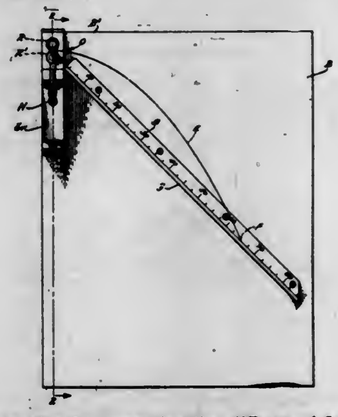
1,824,394. LIQUID DRIPPING DEVICE. LUELLA D. CRANE, Portland, Oreg. Filed Mar. 6, 1929. Serial No. 344,837. 1 Claim. (Cl. 65—45.)

A liquid dripping device, comprising a receptacle having a bottom inclined with respect to the side wall and a discharge aperture through the wall at the lowest point of said bottom, a guide channel integrally formed with and extending vertically of the receptacle wall, said aperture being formed through the lower portion of said channel, a sliding gate arranged in said channel and designed to have its lower end extend across and close the aperture, said aperture being of triangular formation with two sides extending in upwardly diverging relation from the bottom of the receptacle, and said slide having the



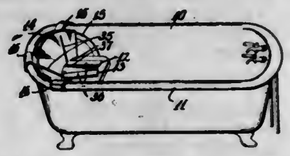
upper end extending above the top of the receptacle and formed to provide a finger hold and a pair of oppositely inclined clamping members secured to said bottom.

1,824,395. APPARATUS FOR THE MEASUREMENT OF STIFFNESS OF FLEXIBLE MATERIALS. TOBIAS DANTZIG and ESTHER C. PETERSON, Washington, D. C., dedicated to the Government and the people of the United States of America. Filed Aug. 9, 1928. Serial No. 298,577. 1 Claim. (Cl. 73—51.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



An apparatus for measuring the stiffness of flexible material, comprising means for clamping said material at one end, a downwardly inclined guide for said material at its other end, said guide having a scale provided with calibrations having their origin at the clamp end of said flexible material, and means for supporting said clamping means and said guide.

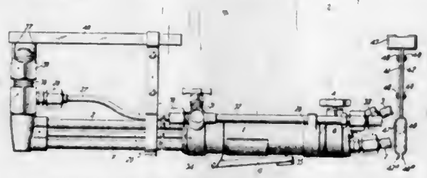
1,824,396. BATHTUB SEAT. JOHN W. ERHARD and ANTOINETTE ERHARD, New York, N. Y. Filed May 12, 1930. Serial No. 451,550. 6 Claims. (Cl. 4—185.)



1. A bath tub seat, comprising a seat member, arms connected therewith, a plurality of adjacent hook pieces

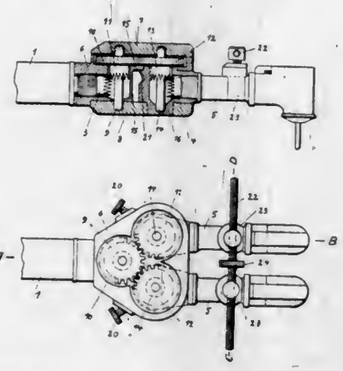
connected to the ends of the arms, these pieces being provided at their adjacent edges with a tongue from one piece engaging between a pair of tongues from the other piece, the first mentioned tongue being provided with an aperture and a plurality of keyways connected therewith, the pair of tongues being provided with an aperture and one keyway connected therewith, and a shaft with a key engaged in the said apertures, and certain of the keyways for holding the pieces at angular relations to each other.

1,824,397. UNDERWATER TORCH AND METHOD THEREFOR. EDWARD ELLSBERG, Westfield, N. J. Filed Dec. 20, 1927. Serial No. 241,387. 4 Claims. (Cl. 263—1.)



3. The method of adjusting an oxygen-fuel gas flame surrounded by an air sheath, for under-water cutting, which method includes adjusting the proportions of the gases by separately and successively projecting and adjusting the pressures of unignited jets of each, at substantially the depth at which the cutting is to be performed to obtain a desired ratio of lengths for the respective bubble cavities formed by each gas separately, then simultaneously supplying all of the gases to their jets at the respective pressures thus predetermined.

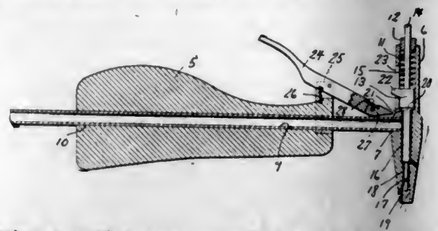
1,824,398. HOLDER FOR DENTISTRY WORK. MAX FLEISCHHACKER, Hanover, Germany. Filed Apr. 9, 1929, Serial No. 353,714, and in Germany Apr. 17, 1928. 3 Claims. (Cl. 32—11.)



1. In a device of the kind described, a housing, prime driving means entering the housing at one side thereof, cap-like casings within the housing, movable and adjustable tool-guiding holders extending from the housing and secured to the casings, driving means within said casings and secured to the holders, a partition between the casing and the prime driving means, means operatively connecting the several driving means, and adjusting means intermediate the holders.

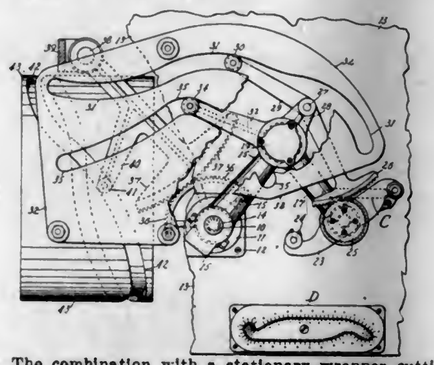
1,824,399. TACK SETTER. WILLIAM E. GRAFFIOUS, Moundsville, W. Va. Filed Aug. 26, 1930. Serial No. 477,913. 2 Claims. (Cl. 1—47.)

1. A tack setting tool comprising in combination a handle, a suction tube extending through said handle, a head mounted on one end of said suction tube, a tack receiving socket in the lower end of said head, said head



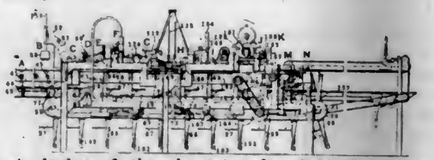
having a vertical bore connecting said tube with said socket and tack engaging hammer means mounted in said head for forcibly ejecting a tack from said socket.

1,824,400. PREPARING CIGAR WRAPPERS. JOHN FREDRIK HALSTEAD, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed June 20, 1930. Serial No. 462,583. 5 Claims. (Cl. 131—39.)



3. The combination with a stationary wrapper cutting bed provided with wrapper underlap and overlap sides positioned with the wrapper overlap side nearer the operator so that she will superstretch a leaf section along that side, of means for taking a cutout wrapper from said bed and delivering it to a cigar bunch with the superstretched side of the wrapper forming the overlap on the bunch.

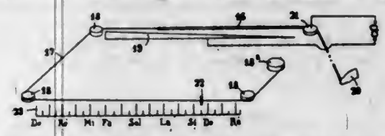
1,824,401. PACKAGING MACHINE. JOHN L. KELLOGG, PETER W. FOSTER, RICHARD S. POOLE, and MORRIS RAYMER, Battle Creek, Mich., assignors to Kellogg Company, Battle Creek, Mich., a Corporation of Delaware. Filed Dec. 14, 1923. Serial No. 680,664. 59 Claims. (Cl. 93—7.)



1. A device of the character described, including in combination, means for receiving a package having flaps adjacent its upper edges and means for retaining the flap adjacent the front edge of the package at an angle to the edge face thereof.

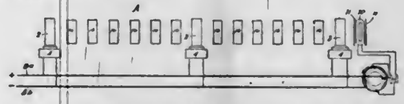
1,824,402. ELECTRIC MUSICAL INSTRUMENT. MAURICE LOUIS EUGÈNE MARTENOT, Neuilly-sur-Seine, France. Filed Mar. 27, 1929, Serial No. 350,357, and in France Apr. 2, 1928. 17 Claims. (Cl. 84—1.)

3. Electric musical instrument utilizing oscillating currents of variable frequency for producing different musical sounds, comprising electrical regulating means for varying said frequency, flexible movable means made of an insulating material and capable of manipulation by the executant for controlling said electrical regulating means,



a movable part of said latter being directly connected to said movable control means, so as to form therewith a continuous movable member and insulating means for connecting said member to one finger of the executant.

1,824,403. APPARATUS FOR DEMAGNETIZING MAGNETICALLY CONVEYED MATERIAL. WILLIS MCKEE, Cleveland, Ohio, assignor to The Central United National Bank, a Corporation of the United States. Filed June 11, 1930. Serial No. 460,513. 2 Claims. (Cl. 198—41.)



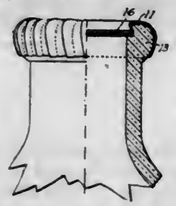
1. A conveyor for magnetic metallic material including magnetic roller energized by direct current for supporting and conveying such material, a coil energized by alternating current adjacent to the path of said material after it passes the magnetic roller, and means associated with said coil for converting direct current into alternating current of low frequency for energizing said coil.

1,824,404. MATCH BOOK. SABURO M. MORIYA, Wilmington, Del. Filed Mar. 22, 1930. Serial No. 438,219. 5 Claims. (Cl. 206—29.)



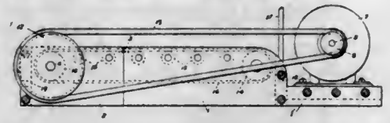
1. A match book comprising spaced cover members, a plurality of match receiving pockets secured to said cover members, reinforcing means extending longitudinally of said pockets through the material forming the pockets to define their lateral limits, and a coating of striking material on the interior surfaces of the pockets at their open ends.

1,824,405. CAPPING MILK BOTTLES AND THE LIKE. MOREHEAD PATTERSON, New York, and EUGENE F. MARESFORD, Merrick, N. Y., assignors to The Lakewest Corporation, a Corporation of New York. Filed Jan. 7, 1930. Serial No. 419,106. 11 Claims. (Cl. 215—38.)



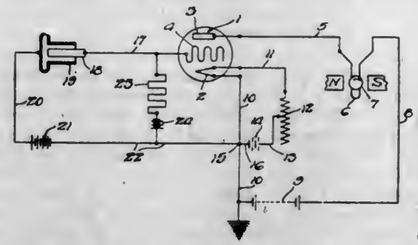
6. A closure for bottles having laterally projecting beads, comprising a cap of flexible material having a mouth closing portion and a skirt, the edge portion of which is folded back against the mouth closing portion of the cap, whereby the skirt edge may be secured in the bottle mouth by a plug disk, and the doubled intermediate portion of which is folded around and under the bead.

1,824,406. FOLDING WALKER. IRA M. PETERSIME, Gettysburg, Ohio. Filed Feb. 10, 1930. Serial No. 427,389. 5 Claims. (Cl. 272—69.)



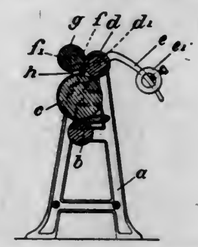
1. In a folding walker, a portable frame having sections adapted to fold one on the other, a platform extending from one section, a motor on said platform, a roller on opposite ends of each section, a belt on said rollers adapted to be moved thereby, idler rollers on said frame engaging the underside of the upper loop of said belt, means connecting the motor to one of the end rollers for causing the belt to travel, and a hand support on one of said sections.

1,824,407. INTENSITY OF IGNITION APPARATUS. PHILIP P. QUAYLE, Lebanon, Ohio, assignor to The Peters Cartridge Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 11, 1929. Serial No. 406,450. 22 Claims. (Cl. 175—183.)



1. An electrical apparatus comprising a vacuum tube having a plate, a filament, and a grid therein, an electrical circuit in which said vacuum tube is included, a source of electrical energy for said circuit, an indicating instrument in said electrical circuit, electrical means normally preventing flow of current through said vacuum tube, and means operable on the explosion of an explosive being tested to render said electrical means inoperative for the purpose set forth.

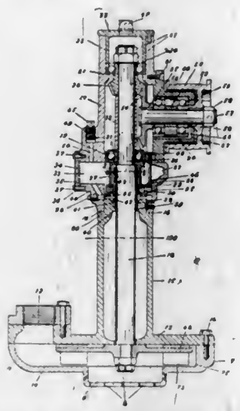
1,824,408. LOAF FORMING MACHINE. GOTTFRIED RAUSCH, Ammendorf, near Halle on Saale, Germany. Filed Dec. 20, 1929, Serial No. 415,591. Renewed Apr. 21, 1931. 3 Claims. (Cl. 107—9.)



1. In a loaf forming machine, the combination with a principal roller, of a sheeting roller cooperating therewith

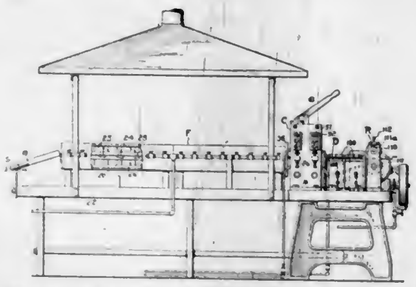
to roll a piece of dough into a sheet, a coiling roller cooperating with said principal roller to coil the sheet of dough, a two armed lever pivoted on the axis of said coiling roller, a coiling roller mounted in one arm of said lever and cooperating with the first coiling roller, and an adjustable counterweight mounted on the other arm of said lever, whereby said last mentioned coiling roller engages the coil of dough with a pressure which decreases as the size of the coil increases.

1,824,409. REVERSIBLE CENTRIFUGAL PUMP. EDWARD J. RUTHMAN, Cincinnati, Ohio. Original application filed June 4, 1926, Serial No. 113,793. Divided and this application filed June 4, 1928. Serial No. 282,532. 8 Claims. (Cl. 74—7.)



1. In a device of the class described the combination of a tubular housing, a shaft extending through the housing, a ball bearing having an inner and an outer race, a second ball bearing having an inner and an outer race, means for securing the inner races of said bearings to the shaft, means for securing the outer race of one of said bearings to the housing, a second shaft disposed at an angle to the first mentioned shaft, meshing bevel gears carried by said shafts, means for imparting rotation to the second mentioned shaft, means surrounding the first mentioned shaft for providing an oil well in the housing, an impeller disposed in the oil well and actuated by said first mentioned shaft whereby oil may be pumped into that portion of the housing containing the bevel gears for permitting the gears to splash oil one upon the other and on to the ball bearings.

1,824,410. HEAT TREATING RAZOR BLADE STRIPS. THOMAS C. SHEEHAN, Upper Montclair, N. J., assignor to Durham Duplex Razor Company, a Corporation of New York. Filed July 12, 1929. Serial No. 377,695. 19 Claims. (Cl. 266—3.)



1. The combination with mechanism for feeding a metal strip, of means for tempering the strip as it is fed, and devices operating on the strip fed from the tempering means to draw the temper from the mid portion thereof only.

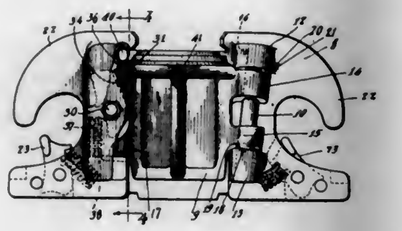
18. The method of heat treating thin steel strips which consists in imparting feeding movement to the strip, then heating and rapidly cooling the strip to temper the same and passing the mid portion only of the cooled strip into contact with a hot surface to draw the temper of that portion of the strip.

1,824,411. FIRE PREVENTION DEVICE FOR OIL WELLS. HARRY L. SIMMONDS, San Diego, Calif. Filed Aug. 18, 1930. Serial No. 475,923. 6 Claims. (Cl. 166—14.)



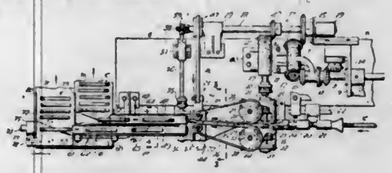
1. In a fire prevention device for oil wells, the combination with an oil well casing of a shell continuing from the upper end of said casing, and yieldable non-metallic lining for said shell.

1,824,412. SIDE DOOR ELEVATOR. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron Jackson Co., Los Angeles, Calif., a Corporation of Delaware. Filed Apr. 7, 1930. Serial No. 442,259. 5 Claims. (Cl. 294—90.)



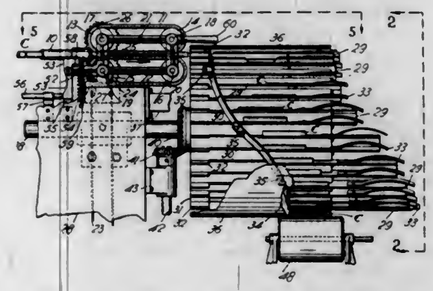
1. A side door elevator comprising a body provided with a concave recess, and a door pivoted to the body to close the open side of said recess, the door pivot extending aslant downwardly and outwardly when viewed from either side of the body and extending aslant inwardly and downwardly when viewed from a position in front of the door.

1,824,413. DOUBLE BELT CIGARETTE COLLECTOR. JOHN ALFRED STEIN, New York, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 28, 1929. Serial No. 366,710. 19 Claims. (Cl. 131—39.)



1. A cigarette collector comprising mechanism seizing and forwarding cigarettes in a horizontal plane at a given speed and alternately delivering them endwise at separated positions, and means forwarding cigarettes from said positions at reduced speed.

1,824,414. DRUM TYPE CIGARETTE COLLECTOR. JOHN ALFRED STEIN, New York, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed June 8, 1929. Serial No. 369,316. 10 Claims. (Cl. 131—39.)



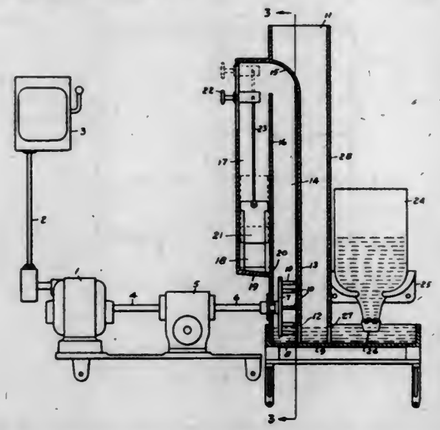
1. A cigarette collector comprising mechanism for forwarding cigarettes, a rotating drum provided with axial pockets successively receiving cigarettes from said mechanism, and means within said pockets for stopping and aligning cigarettes entering said pockets.

1,824,415. SAFETY FUSE DEVICE. JESSE STONE, Pittsburgh, Pa. Filed Sept. 9, 1929. Serial No. 391,450. 7 Claims. (Cl. 200—119.)



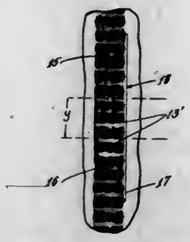
1. In a safety fuse device, a fuse block having a feeder connection, and a branch circuit connection, a ferrule mounted in the block, an adapter having a perforated center, a concentric recess formed in the upper face of the adapter, and a peripheral recess formed in the adapter, a spring locking wire adapted to fit in the peripheral recess, and lock the adapter within the ferrule, a fuse plug having a centrally disposed contact pin therein, a fuse plug disc having a concentric projecting ring thereon formed complementary to the concentric adapter recess, a contact screw mounted in the fuse block, means connecting the contact screw with the feeder connection, and means connecting the contact pin with the branch circuit connection.

1,824,416. HUMIDIFIER. FRANK E. STOVER, Springfield, Ohio, assignor of one-third to Bruce A. Mayer, Springfield, Ohio, and one-third to Dennis T. Igou, Springfield, Ohio. Filed Jan. 6, 1930. Serial No. 418,822. 8 Claims. (Cl. 261—92.)



1. In a humidifying apparatus, a tank having a horizontally disposed pool of liquid, a vertically disposed passageway terminating at the surface of the liquid, a second vertically disposed passageway parallel thereto communicating by a restricted passageway over the surface of the liquid with the first-mentioned vertical passageway, means in the second passageway for picking up a film of liquid, means associated therewith for drawing air through said passageway over said film of liquid and a third vertical passageway parallel to the second having a discharge opening at the bottom.

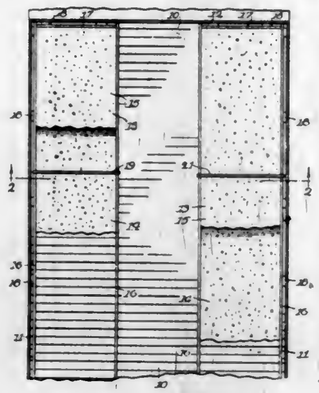
1,824,417. METHOD OF TREATING SOUND RECORDS AND RECORDS PRODUCED THEREBY. ALFRED T. TAYLOR, Beverly Hills, Calif., assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 425,035. 11 Claims. (Cl. 274—43.)



4. A method of treating continuous films bearing sound recordings thereon and including extraneous recordings, comprising removing a section of the sound record to be treated, said section being in the form of a half cycle sine curve with its crest at the point where the extraneous sound records are located, said sine curve having an amplitude substantially equivalent to the width of the sound record and a period equivalent to a vibration below normal audibility, cutting a section from a separate film bearing a desired sound record thereon, said separate section being identical in size and configuration to the first section removed from the film to be treated, and inserting and cementing said separate section in the aperture formed in the sound record to be treated.

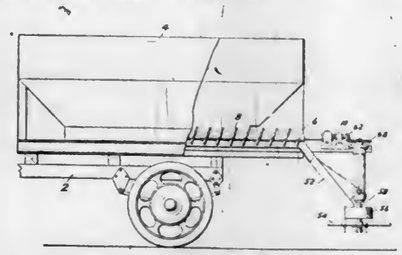
5. A continuous sound record including a section of different material bodily inserted thereinto, said section having the form of a half cycle sine wave.

1,824,418. BITUMINOUS CONCRETE FLOORING. LAWRENCE S. WILBUR, Evanston, Ill., assignor to Johns-Manville Corporation, a Corporation of New York. Filed Nov. 25, 1927. Serial No. 235,426. 6 Claims. (Cl. 94—23.)



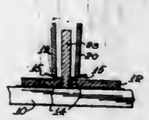
1. The process of laying bituminous concrete floors, which includes laying a layer of hot concrete and immediately placing thereon a layer of other hot concrete and working the latter to a finished surface.

1,824,419. SAND SPREADING MECHANISM. GEORGE C. ABBE, Kennett Square, Pa., assignor to American Road Machinery Company, Inc., Kennett Square, Pa., a Corporation of Delaware. Filed Mar. 15, 1928. Serial No. 261,732. 2 Claims. (Cl. 275—8.)



1. A sand spreading mechanism comprising a bin, rotary sand spreading means, a screw conveyor for feeding sand from the bin to the spreading means, a power driven shaft, connections between the shaft and spreading means, a plurality of clutch members, connections between each of the clutch members and the conveyor, and a manually controlled clutch member rotating with the shaft and selectively movable to engage either of the aforementioned clutch members whereby the speed of the conveyor may be adjusted relatively to that of the spreading means.

1,824,420. FOLDING DEVICE FOR PLASTER BOARD MACHINERY. CARL ABSMEIER, Maywood, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed May 1, 1929. Serial No. 359,461. 7 Claims. (Cl. 154—1.)

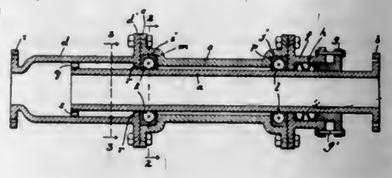


1. In a plaster board machine, the combination with an endless belt conveyor having a plurality of lines of plaster board supported by and moving with said conveyor, said plaster board having lower flexible overlapping cover sheets and upper cover sheets separated by plastic material, and means between a pair of adjacent lines of plaster board for folding cover sheets of said plaster board about the edges thereof during the movement of said lines of plaster board.

1,824,421. MAKING PRODUCTS OF FINELY DIVIDED VEGETABLE MATERIAL. ARTHUR P. ALLEN, San Mateo, Calif. Filed July 9, 1927. Serial No. 204,653. 9 Claims. (Cl. 154—46.)

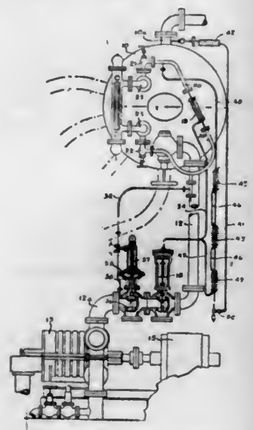
1. A manufactured product consisting of a finely divided fibrous material treated with a monosaccharide and with the particles thereof bound together.

1,824,422. GUIDED EXPANSION JOINT. ARTHUR C. BADGER, Newton, Mass. Filed June 24, 1925. Serial No. 39,206. 7 Claims. (Cl. 285—162.)



1. An expansion joint comprising inner and outer relatively movable parts, a stuffing box on the outer part through which the inner part extends, and anti-friction supporting means between said parts arranged to hold them in a given alinment with the packing of said stuffing box.

1,824,423. BOILER FEED WATER CONTROL SYSTEM. JOSEPH M. BARRETT, Fostoria, Ohio, assignor to The Swartwout Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 4, 1925. Serial No. 27,736. 17 Claims. (Cl. 122—451.2.)

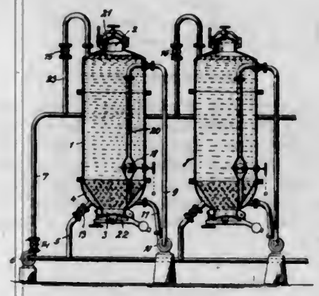


1. In a feed water regulating system for a boiler, the combination of a feed water line, a diaphragm valve controlling said line, a pressure generator means having a connection above and below the normal water level of the boiler, a conduit extending between said means and said valve whereby variations in pressure in said generator consequent to varying water levels in the boiler will vary the condition of the valve, a conduit connected to the boiler

drum above the water level thereof and having a liquid therein and to a nozzle or steam line leading from the boiler, and a pressure generator mounted on said conduit and also connected to said valve.

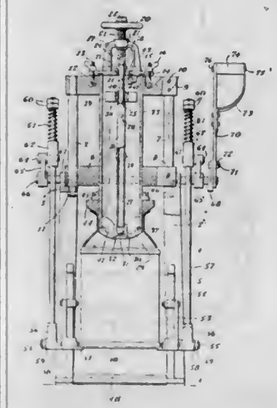
13. The method of operating a pressure actuated feed water valve involving the creation of a common fluid pressure from two independent pressure sources including the steps of creating a valve actuating pressure in response to variation in boiler water level, creating another valve actuating pressure in response to variation of boiler load, and combining and exerting the combined pressure to actuate the said feed water regulating valve.

1,824,424. EXTRACTOR. WALTER BUSS, Basel, Switzerland, assignor to Buss Aktiengesellschaft, Basel, Switzerland, a Corporation of Switzerland. Original application filed Nov. 7, 1927, Serial No. 231,657, and in Germany Nov. 12, 1926. Divided and this application filed Jan. 18, 1930. Serial No. 421,676. 5 Claims. (Cl. 87—28.)



1. Apparatus for making extracts or infusions by steeping comprising a container, a strainer in said container at the bottom thereof for filtering the liquid at the lower portion of said container, a tubular strainer extending lengthwise of said container and connected at its lower end with said bottom strainer, and a pump having its suction side connected with the upper end of said tubular strainer and its pressure side connected with said container.

1,824,425. CAN FILLING MACHINE. ROLLAND J. CANTON, Worcester, Mass. Filed June 27, 1929. Serial No. 374,220. 3 Claims. (Cl. 226—109.)

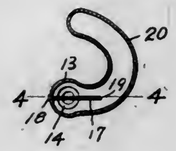


1. In a milk can filling machine, a cylinder having a milk inlet therein, a valve stem depending through said cylinder, a valve head fixed to the lower end of said stem, said valve head and stem having a vent channel therethrough, said stem having an outlet vent therein located within said cylinder, a cylinder head on said cylinder having a valve seat therein, a valve located below said seat, a shoulder on said stem adjacent to its upper end, and a float slidable on said valve stem, and normally seated on said shoulder, said float being automatically operated by the liquid level in said cylinder to engage said valve and seat the same in said seat to prevent the discharge of air through said cylinder.

1,824,426. NORMAL HEPTYL PHENOL. EMIL C. FANTO, Fairfield, Conn., assignor to McKesson & Robbins, Inc., Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 24, 1929. Serial No. 357,885. 6 Claims. (Cl. 260—154.)

1. As a new product, normal heptyl phenol.

1,824,427. HEARING DEVICE. CHARLES FENSKY, St. Louis, Mo. Filed May 19, 1928. Serial No. 278,961. 4 Claims. (Cl. 181—23.)



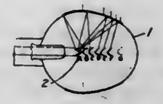
1. A hearing device comprising two hollow members communicating with and arranged at substantially right angles to each other, one of said portions adapted to lie wholly within the outer ear and the other portion to be inserted in the ear passage, a flexible reed secured at one end only carried by one of said portions, the other end of said reed being uncontacted with whereby said reed is freely vibrating, said vibrations augmenting the sound waves.

1,824,428. EMULSION SUITABLE FOR WOOD PRESERVATION AND PROCESS OF WOOD PRESERVATION AND PRODUCT THEREOF. ALFRED FISHER, Roselle, N. J., assignor to William G. Atwood, trustee, New York, N. Y. Filed July 25, 1928. Serial No. 295,351. 11 Claims. (Cl. 99—12.)

7. Timber impregnated with Montan wax and also with zinc chloride, the chloride lying at least partly behind a water resisting wall of Montan wax.

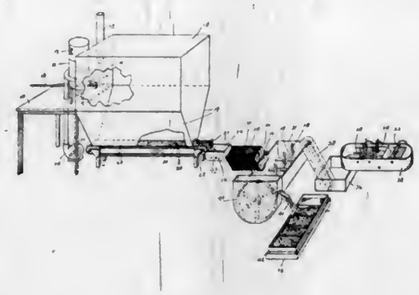
10. The process of preserving timber which consists in heating together heavy oil and Montan wax to commingle them, adding a colloidal clay, admixing an aqueous solution of a wood-preserving salt, and causing the timber to absorb the resulting composition to a measurable depth.

1,824,429. INCANDESCENT LAMP. WORTH C. GOSS, Seattle, Wash. Filed Apr. 16, 1928. Serial No. 270,219. 1 Claim. (Cl. 176—34.)



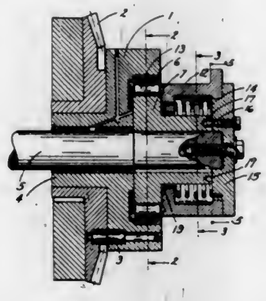
In a lamp, a bulb having a filament therein and in which the surface thereof is formed by a plurality of ellipses and provided with suitable reflecting surfaces.

1,824,430. APPARATUS AND PROCESS OF TREATING MINERAL WOOL. CHARLES C. HALL, Alexandria, Ind., assignor, by mesne assignments, to Banner Rock Corporation, Alexandria, Ind., a Corporation of Delaware. Filed Nov. 25, 1927. Serial No. 235,443. 3 Claims. (Cl. 92—21.)



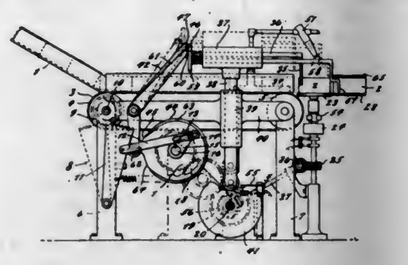
2. A process of treating mineral wool, comprising mixing in an excess of water substantially shot free mineral fiber and fibrous pulp admixed with a water-proofing binding material, discharging the watery mixture into a drainage vessel, and thereafter drying the drained mixture.

1,824,431. CLUTCH. KARL WILLIAM HALLDEN, Thomaston, Conn., assignor, by mesne assignments, to Steel and Tubes, Inc., Cleveland, Ohio, a Corporation of Ohio (1928). Filed Apr. 21, 1928. Serial No. 271,718. 4 Claims. (Cl. 192—27.)



1. The combination with a shaft of a notched disc keyed to an end thereof, a rotatably mounted clutch housing surrounding said disc, a basket carrying a plurality of rollers said rollers being interposed between said clutch housing and said disc and arranged to provide a driving connection therebetween, said basket including a cylindrical flange projecting outwardly from said disc, a cap adjustably secured to the end of said shaft and closing the end of said basket, and a spring secured to said basket and said cap and housed therewithin.

1,824,432. PACKING MACHINE. WILLIAM F. HENDRY, Ossining, N. Y., assignor to E. D. Anderson, Inc., New York, N. Y., a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,829. 11 Claims. (Cl. 226—14.)



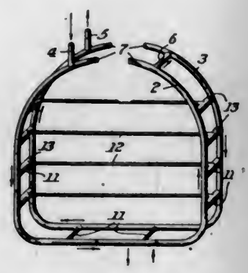
1. In a packing machine, means for causing an article to assume a series of different positions and light responsive means for detecting one of said positions and rendering inactive said means first mentioned.

1,824,433. PRINTING MARBLEIZED PATTERNS ON FLOOR COVERINGS. CHARLES F. HUMPHREYS and J. CLARENCE MCCARTHY, Lancaster, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Original application filed Aug. 12, 1926, Serial No. 128,870. Divided and this application filed Oct. 30, 1929. Serial No. 403,481. 6 Claims. (Cl. 101—199.)



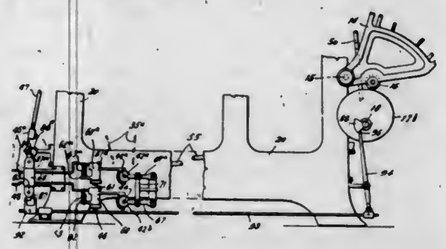
1. The method of printing floor coverings which consists in first applying a ground coat of paint to at least a portion of the surface of the floor covering, printing a well defined pattern over a portion of the area first coated, then pressing a solid smooth surface against that portion of the floor covering which has been thus printed, and then pressing a smooth block having a divided surface thereagainst.

1,824,434. VALVE STRUCTURE. PERRY D. HUSHOUR, Youngstown, Ohio, assignor to Walter M. Charman, Youngstown, Ohio. Filed June 8, 1929. Serial No. 369,353. 17 Claims. (Cl. 251—51.)



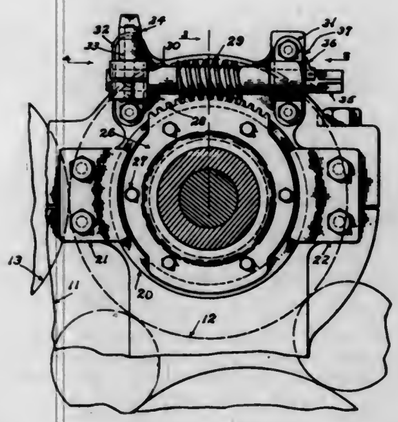
1. As an article of manufacture, a valve comprising a pair of laterally disposed seat-defining water cooled members of substantially similar construction, and a refractory filling carried by said members and positioned therebetween.

1,824,435. LAUNDRY IRONER. FRANK J. KAHN, New York, N. Y. Filed Nov. 15, 1929. Serial No. 407,434. 5 Claims. (Cl. 68—9.)



1. In a device of the character described having a plurality of rolls and an apron cooperating with a steam chest, in combination, means for raising and lowering the rolls and means for altering the apron tension, said two sets of means being independent of each other and having separate control means, said control means being situated adjacent to each other and movable in the same direction to lower the rolls and tension the apron.

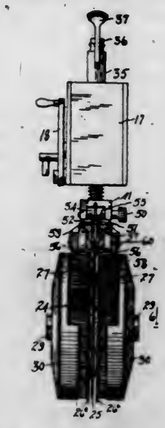
1,824,436. IMPRESSION ADJUSTING MECHANISM. FREDERICK LAMATSCH, Grantwood, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 16, 1928. Serial No. 319,835. 5 Claims. (Cl. 101—220.)



1. In a printing machine having a frame, a printing couple consisting of a form cylinder and an impression cylinder, journals for the cylinders, bearings for the journals, said bearings for the journals of one cylinder comprising eccentric bushings rotatable in the frame, gears secured to the bushings, worms co-acting with the gears, suitably supported shafts secured to the worms, means for securing the shafts to prevent their rotation, pointers on the shafts, and index plates on the frame whereby the positions of the bearings for the journals of one of the cylinders are indicated.

1,824,437. MACHINE FOR REPAIRING RUNS IN FABRICS. WILLIAM H. LEAVIN, New York, N. Y., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1929. Serial No. 385,877. 13 Claims. (Cl. 66—1.)

1. In a machine for repairing runs in knitted fabrics and the like, the combination comprising means for supporting the fabric with the threads that traverse the run in spaced relation, means for causing the movement of said



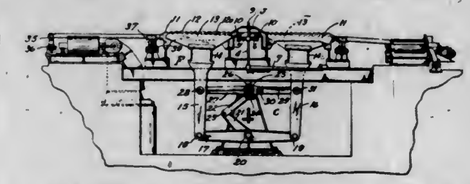
means, and means including a plurality of needles for successively looping the cross threads of the run one with another to form parallel lines of repair in the fabric.

1,824,438. SAVINGS BANK. CHARLES L'ENFANT, New York, N. Y. Filed May 9, 1929. Serial No. 361,689. 17 Claims. (Cl. 232—4.)



1. A coin bank comprising an elongated casing substantially closed at one end and entirely open at its opposite end, and a tray longitudinally slidable in said casing and wholly contained therein when in operative position to form in conjunction with the side walls of the casing a pair of raceways receiving coins inserted into the open end of the casing, guard means carried by the tray at the latter end of the casing to prevent the extraction of the coins therethrough, and releasable locking means carried by the tray and cooperating with means on the casing wall to lock the tray against sliding movement in the casing.

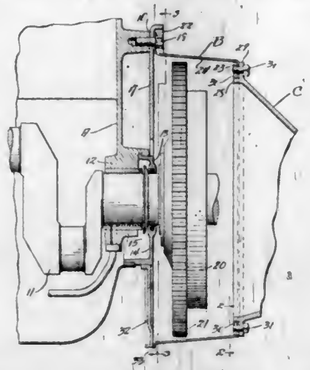
1,824,439. HOTBED. WILLIS MCKEE, Cleveland, Ohio, assignor to The Central United National Bank, a Corporation of the United States. Filed Aug. 28, 1929. Serial No. 388,920. 10 Claims. (Cl. 198—219.)



1. Mechanism of the class described, comprising, in combination, two series of fixed supports, two series of

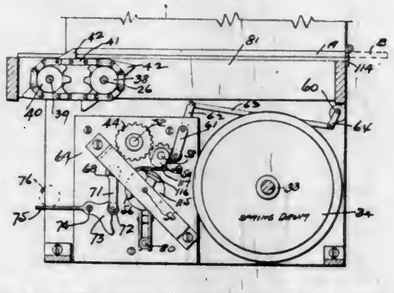
supports movable in orbits so as to convey material in opposite directions and means for operating both series of movable supports simultaneously, consisting of a single drive shaft, a pair of cam means carried on the shaft, and connections between each of the cam means and each series of movable supports.

1,824,440. ENGINE CONSTRUCTION. ANDRE J. MEYER, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Jan. 20, 1928. Serial No. 248,070. 8 Claims. (Cl. 74—56.)



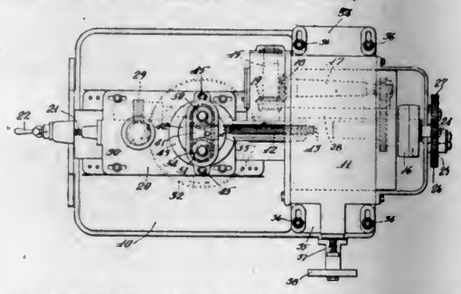
1. An engine construction comprising in combination with an engine and crankshaft having a flywheel mounted thereon, a housing structure for the flywheel comprising a pressed sheet metal body portion and engine supporting means associated with the housing structure extending laterally thereof.

1,824,441. VENDING MACHINE. CLYTUS C. MILLER, Memphis, Tenn. Filed Dec. 6, 1928. Serial No. 324,195. 5 Claims. (Cl. 312—63.)



1. In a power operated apparatus having coin actuated means for initiating operation, a vending machine including a pair of parallel horizontally disposed rails, which are adapted to support articles to be vended, means for disposing articles thereon, a pair of shafts extending from rail to rail and substantially at right angles thereto, aligned pairs of sprocket wheels carried by said shafts, and lying slightly below said rails, chains each carried by a pair of said sprocket wheels, lugs equally spaced, carried by said chains and adapted to be advanced thereby in progressive cycles, into, along, and out of, the path of an article on said rails, and means for effectuating and controlling said advancement, comprising a motor, gearing connecting said motor and one of said sprocket shafts, a cam shaft, a cam secured thereon, said cam having pockets equally spaced around the periphery thereof, a detent adapted to engage said pockets successively, means for releasing said detent from one of said pockets, and for engaging same with a succeeding pocket, gearing connecting, and synchronizing movement of said cam and said chains, whereby release of said detent from one of said pockets and engagement with a second thereof will permit a cycle of movement of said chain lugs; a governor, gearing connecting said governor and said cam shaft and driving said governor at an increased speed over said cam shaft, a disk on said governor shaft, a brake shoe adapted to engage against said disk, a rotatable member adapted to force said shoe against said disk, and gears driving said member from, and timing same with, said cam shaft, whereby said member will force said shoe against said disk as said cam pockets approach said detent therefor, and release same as said detent seats in said pocket.

1,824,442. TRUING MEANS FOR HELICAL CUTTING TOOLS. EDWARD W. MILLER, Springfield, Vt., assignor to The Fellows Gear Shaper Company, Springfield, Vt., a Corporation of Vermont. Filed Aug. 31, 1928. Serial No. 303,308. 15 Claims. (Cl. 125—11.)



1. A means for truing a helical cutting tool, comprising a chain, a truing tool connected to said chain for propulsion thereby and guided to move in a path across the helix of said cutting tool, and means for so moving the chain and at the same time rotating the helical cutting tool about the axis of the helix.

1,824,443. LUBRICANT. JAMES W. MOOREHEAD, Zelienople, Pa. Filed June 14, 1927. Serial No. 198,871. 2 Claims. (Cl. 134—8.)

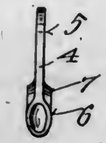
1. A dressing for brake lining consisting of rosin, castor oil, neat's-foot oil, thinner oil comprising heavy crude solvent naphtha from coal distillation, and turpentine.

1,824,444. SIGN. CHARLES C. MUELLER, Jr., and DANIEL C. WENDEL, Newark, N. J., assignors to Wendel Co. Inc., Newark, N. J. Filed June 27, 1929. Serial No. 374,033. 3 Claims. (Cl. 40—125.)



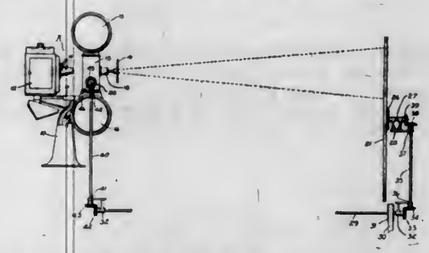
1. A sign of the character described comprising a pivotally mounted frame, a stand for supporting said frame, an open lower portion in said frame adapted to receive sign plates and a filler placed between said plates, a counterweight secured to the lower portion of said frame which forms a binder and provides the opening through which the sign plates and filler are inserted, and a stop member in said counterweight to prevent the signs from falling out.

1,824,445. KNITTING NEEDLE. ALEXANDER C. PARLINI, Woodside, N. Y., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,657. 5 Claims. (Cl. 66—117.)



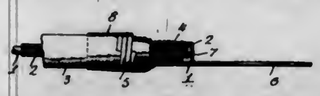
1. A run repair needle having a slotted shank portion and a hook shaped end portion, in combination with a latch member pivotally secured at one end in the slotted shank portion and cooperating at its free end with the tip of the hook shaped end portion, said latch member being formed with a fin terminating in a hood at the free end thereof, said fin being of a substantially narrower width than the slot of the shank for a greater part of its length and having an enlarged thickened portion adjacent the hood whereby the closing of the latch is retarded.

1,824,446. METHOD OF AND APPARATUS FOR PRODUCING MOTION PICTURES IN COLOR. EDWIN L. PEARSON, Minneapolis, Minn. Filed Apr. 13, 1929. Serial No. 354,815. 7 Claims. (Cl. 88—16.4.)



1. A projection device for colored motion pictures comprising a projector arranged to successively project images produced through different color filters, a projection screen from which the picture may be viewed having various sections colored to correspond to the filters through which the images are produced, and means for shifting the relative positions of said projector and projection screen to successively project the images upon the portions of the projection screen corresponding to the particular filters through which the images are produced.

1,824,447. TERMINAL FOR CIRCUIT ELEMENTS. HENRY G. RICHTER, Roselle Park, N. J. Filed Apr. 27, 1929. Serial No. 358,780. 2 Claims. (Cl. 201—63.)

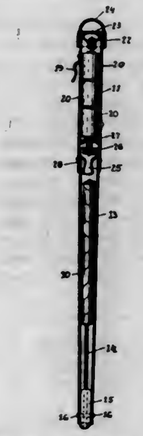


2. A resistance unit comprising a resistor element having a covering of insulation suitably proportioned to leave the ends of the resistor exposed, a single layer winding of soft metal wire closely wound over the ends of the insulation and the exposed ends of the resistor, and terminal clips, each having two pairs of lugs, one pair clamping the soft metal covered end of the insulation and the other pair clamping the soft metal covered end of the resistor.

1,824,448. WATERPROOF GLUE. TEIKICHI SATOW, Tokyo, Japan. Filed Jan. 23, 1926. Serial No. 83,200. 17 Claims. (Cl. 87—17.)

1. An adhesive composition comprising a protein containing material having mixed therewith papaia milk, a filler material, calcium hydroxid and a potassium chromate.

1,824,449. CANE. AGNES SJOBERG, Upper Montclair, N. J. Filed Oct. 5, 1928. Serial No. 310,527. 2 Claims. (Cl. 135—47.)



2. The combination in a cane, of two main sections, one of said sections having a bayonet-slot joint on each end adapted to hold it in position on the other section from either end, said reversible section being hollow and having a partition separating it into two chambers, one of which is adapted to contain a whistle and the other an electric light and battery, including a removable cover over the exposed end of said section to protect the whistle or light and act as a knob for the cane.

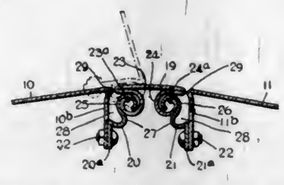
1,824,450. LINK. JOHN SNEED, Ferndale, Mich. Filed Aug. 23, 1928. Serial No. 301,949. 14 Claims. (Cl. 74—17.)



1. A link comprising a body part, socket parts near the ends and parts extending beyond the socket parts

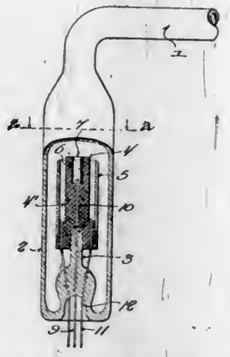
engageable with securing means, said link comprising two similar longitudinal halves each half integrally including complementary portions of said parts, and means cooperable with said last named parts for holding said halves together.

1,824,451. HINGE. JOSEPH SOSS, Brooklyn, N. Y. Filed Mar. 7, 1929. Serial No. 345,048. 5 Claims. (Cl. 16—163.)



1. A hinge for coupling independent and relatively movable body parts comprising three hinge members in the form of elongated and comparatively narrow strips, the central portion of one of said strips being slightly arched, and the side edges of said strip projecting downwardly and inwardly with respect to the concave face of the strip to form oppositely disposed and substantially cylindrical bearing members, the other hinge members being of substantially similar cross sectional form and having at one side thereof substantially cylindrical bearings adapted to be arranged and operated in the cylindrical bearings of the first named hinge member, and the other side of the second named hinge members forming attaching plates with which the independent body parts are coupled.

1,824,452. LUMINESCENT TUBE. CHARLES J. WAMSER, Milwaukee, Wis. Filed July 16, 1929. Serial No. 378,591. 3 Claims. (Cl. 176—126.)



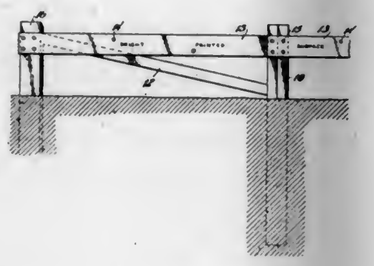
3. An electrode for luminescent gas tubes comprising an insulating member provided with a central recess, an illuminating electrode positioned within said recess, and an auxiliary heating electrode carried by said insulator and surrounding the same.

1,824,453. AIRSHIP. NATHANIEL G. WARTH, Gallipolis, Ohio. Filed Sept. 19, 1927. Serial No. 220,423. 12 Claims. (Cl. 244—3.)



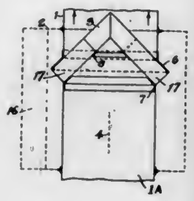
4. In an air ship, a frame including a central longitudinal girder, transverse trusses secured at intervals to said girder, and a plurality of continuous cables each extending straight away from end to end of said girder and secured under tension to the opposite ends of the girder and supported on the rims of said transverse trusses, and means individual to said rims for clamping said tension cables to said rims.

1,824,454. HIGHWAY GUARD FENCE. WILLIAM E. WHITE, Atlanta, Ga., assignor to Southern Wood Preserving Company, Atlanta, Ga., a Corporation of Georgia. Filed Mar. 26, 1931. Serial No. 525,522. 2 Claims. (Cl. 256—13.1.)



1. In combination with a safety fence for highways having a plurality of wooden posts at the edge of the highway and a wooden guard rail on the insides of the posts, sheet metal strips secured to the inner face of the guard rail and overlapped in the direction of the traffic at the joints between the guard rail sections and the posts; and means securing both the guard rail and the overlapped portions of the strips to the posts.

1,824,455. DUST COLLECTOR OR SEPARATOR. JOHN WHITMORE, Belfast, Ireland, assignor to Davidson & Company Limited, Belfast, Ireland. Filed Jan. 15, 1926, Serial No. 81,369, and in Great Britain Aug. 14, 1925. 6 Claims. (Cl. 183—87.)

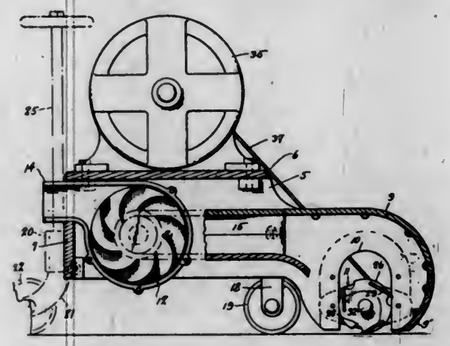


2. In dust collectors, separators and the like, the combination with a chimney of constant cross section passing through the casing of the apparatus, of a number of pyramidally disposed vanes therein, and a truncated conical member secured to the lower edges of the vanes and fixing these vanes to the wall of the chimney.

1,824,456. FLOOR SURFACING MACHINE. JAMES S. WILGUS and IRA E. STUTZMAN, Norfolk, Va. Filed Nov. 5, 1930. Serial No. 493,650. 1 Claim. (Cl. 144—117.)

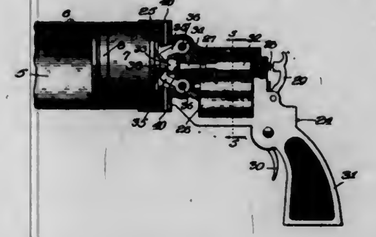
In a floor surfacing machine of the class described, a housing having an open bottom, front and rear wheels for supporting the same, the housing having a forwardly extending head part having openings in its side parts open-

ing through the lower end of said side parts, a cross piece extended across each opening, means whereby each cross piece can be adjusted vertically, a tool member, trunnions thereon journalled in the cross pieces, a removable part at the front of the forwardly extended portion for providing access to the interior thereof, a fan device located in the housing having its inlet extending to a point in



rear of the forwardly extended portion thereof and its outlet extending through the rear wall of the housing and a motor on the housing for operating the tool member and the rotor of the fan, and means for adjusting the rear wheel of the housing vertically to tilt the housing on the front wheel to properly position the tool member with respect to the surface on which the device is movable.

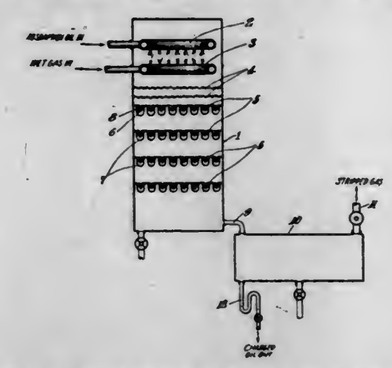
1,824,457. MEANS FOR PRODUCING COMPRESSED STARTING CHARGES FOR ENGINES. LESTER P. BARLOW, Detroit, Mich. Filed Sept. 30, 1927. Serial No. 223,156. 9 Claims. (Cl. 230—56.)



1. A compressor, comprising a cylinder, a free piston therein, a mechanism at one end of the cylinder whereby an explosive charge may be fired for forcing the piston toward the opposite end of the cylinder for compressing air therein, means for automatically returning the piston to the firing end of the cylinder, means at the latter end of the cylinder for automatically engaging the piston on its return stroke for normally holding it at the firing end of the cylinder, and means whereby air may be supplied to the cylinder on the compressing side of the piston on its return stroke.

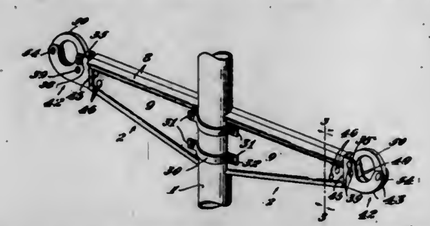
1,824,458. METHOD FOR ABSORPTION OF VAPORS AND LIQUIDS. ISAAC N. BEALL, Eastland, Tex., assignor, by mesne assignments, to Research Process Company, a Corporation of Delaware. Filed Jan. 18, 1928. Serial No. 246,602. 11 Claims. (Cl. 183—114.6.)

4. In the absorption in a liquid of vapors or gases of substances having different boiling points, the process comprising bringing the gas containing its most readily absorbable constituents into contact with the liquid while it is substantially free of absorbed constituents of the gas, flowing the gas and liquid concurrently toward a point of separation, causing the gas to bubble through collected



bodies of the liquid during the flow thereof in contact, and separating residual gas from the charged liquid at said point of separation.

1,824,459. BRACKET. LOUIS I. BECKWITH, Dorchester, Mass. Original application filed Aug. 27, 1929, Serial No. 388,762. Divided and this application filed Feb. 19, 1930. Serial No. 429,612. 8 Claims. (Cl. 248—30.)



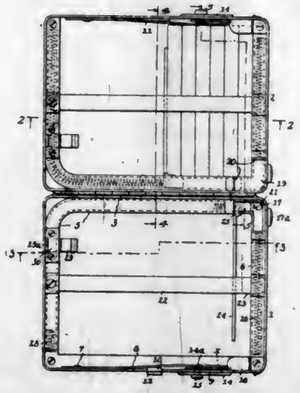
2. A cantilever supporting bracket having a slot at its outer end, and a holding member secured to the outer end of said bracket, said holding member comprising similar sheet metal parts with juxtaposed extensions disposed in the slot at the outer end of said bracket, said parts having parallel body portions spaced from each other and notched to provide a recess for a horizontal bar or the like, and a retainer disposed between said parts and adapted to cooperate with the recess in providing an enclosed opening for the horizontal bar or the like, one end of said retainer being pivotally connected to said parts and the other end having adjustable connections therewith whereby the effective size of said opening may be varied to accommodate bars of different sizes.

1,824,460. SAMPLE CARD. SYDNEY E. BENDER, Brooklyn, N. Y., assignor to Benze-Perfection Sample Card Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 29, 1930. Serial No. 491,910. 5 Claims. (Cl. 206—82.)



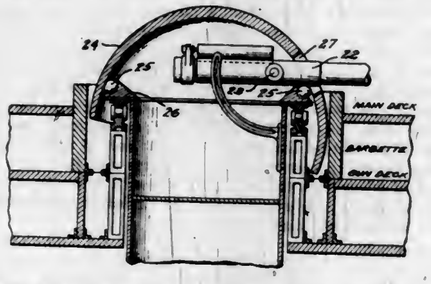
1. A color card sample, comprising in combination a carrier in the form of tab, a yarn sample support representing another tab, but shorter than the first mentioned tab secured with its lower face to the upper face of said carrier, a yarn sample attached to and extending with its ends beyond the edges of said support, and means for securing the extending ends of said yarn sample to the latter in the manner indicated.

1,824,461. AUTOMATIC POCKET CIGARETTE CASE. ROBERT BERGER, Paterson, N. J. Filed Apr. 11, 1930. Serial No. 443,348. 3 Claims. (Cl. 206—41.)



1. In combination, a container to hold a row of elongated articles having a bottom and upstanding marginal walls, means to urge the articles toward one wall transversely of them, one wall adjoining the first-named wall having near the latter an ejection opening, means to hold the articles against the bottom, a sliding gate for said opening slidable on the second wall into and out of closing relation to the opening and having a knob device, and a plate-spring attached to the inside of the second wall and having an arched portion, said second wall having a slot extending lengthwise of the movement of the gate and said knob-device penetrating said slot and having wiping contact with said arched portion.

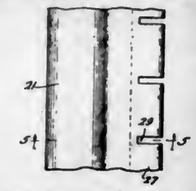
1,824,462. ORDNANCE. CHARLES BITTINGER, Washington, D. C. Original application filed Apr. 26, 1926, Serial No. 104,832. Divided and this application filed Apr. 3, 1930. Serial No. 441,328. 6 Claims. (Cl. 89—37.)



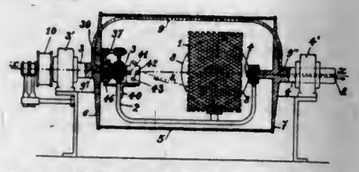
1. In a gun mount, a turret, an armored wall for the turret having a gun port, a gun extending through the port, trunnions pivotally supporting the gun, means for pivotally supporting the armor for movement relative to the trunnions on an axis eccentric to the trunnions, means for varying the relative position of the port in relation to the trunnions whereby said gun may oscillate on the trunnions through a full 90° vertically according to the relative positions of the trunnions and port.

1,824,463. GAS CLEANING APPARATUS. ARTHUR J. BOYNTON, Winnetka, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1930. Serial No. 434,199. 13 Claims. (Cl. 183—77.)

1. A gas cleaning apparatus embodying a rotary element, a series of spaced parallel bars mounted upon the rotor and extending in directions lengthwise of the axis of rotation of the rotary element, a series of stationary bars parallel with the rotating bars and alternately arranged with respect thereto, said bars operating to disintegrate the gas contacting therewith, and means carried by the forward surface of the outer row of rotating bars and operating to divert the globules of water in the gas from their path of flow and merge them together.

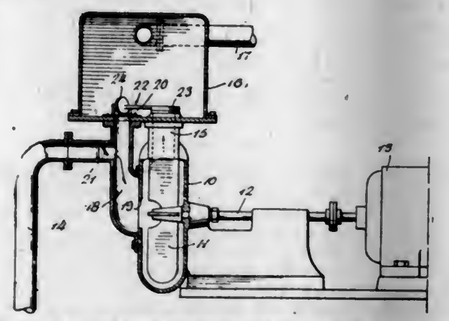


1,824,464. APPARATUS FOR TWISTING TEXTILE FIBERS OR YARNS. JULES BEATHIER, Chamalieres, France, assignor to Societe Textile Twistok, Chamalieres, France, a French Company. Filed June 12, 1930, Serial No. 460,762, and in France June 26, 1929. 14 Claims. (Cl. 117—28.)



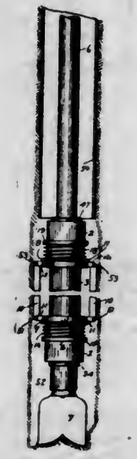
1. In an apparatus for twisting textile fibers comprising a bobbin carrier suspended on bearings integral with a flyer, the said bobbin carrier being normally fixed in position, and the said flyer provided with channels to conduct the thread from the centre of the same radially outwards at one end of the same and inwards at the other end of the same, a channel for conducting the thread from one of the said ends to the other and a driving shaft for the said flyer, the combination of contact elements carried by the flyer, contact elements arranged opposite the foregoing and carried by the bobbin carrier, these elements being subjected to the disturbances to which the apparatus is exposed and constructed so as to be able to contact with the contact elements carried by the flyer, an external electric circuit permanently connected with the contact members of the flyer, this circuit being closed in case of disturbance by contact members of the bobbin carrier and comprising means for stopping the driving shaft of the apparatus as soon as the said circuit is closed.

1,824,465. PUMPING SYSTEM. RALPH B. CARTER, Jr., Haworth, N. J. Filed Dec. 27, 1929. Serial No. 416,971. 6 Claims. (Cl. 103—113.)



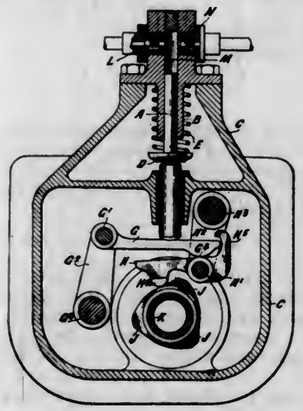
1. In a self-priming pumping system, a pump having an impeller chamber provided with a discharge outlet, a suction line from which liquid, air and gas is drawn to said chamber, a by-pass for establishing connection between said outlet and chamber, and means controlled by the velocity of the flowing liquid from said chamber, for by-passing the discharged liquid back into the chamber through said by-pass when air and gas enters said chamber, said means including a balanced valve.

1,824,466. ROTARY WELL DRILL CENTERING AND GUIDING DEVICE. WALLACE K. CRILEY, Los Angeles, Calif., assignor of one-half to B. C. Travis, Los Angeles, Calif. Filed Jan. 23, 1929. Serial No. 334,421. 4 Claims. (Cl. 308—4.)



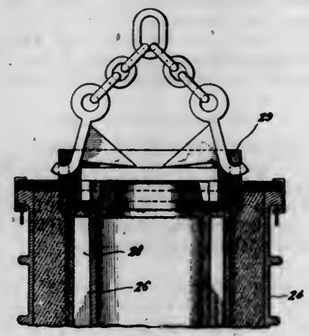
4. A centering and guiding device for well drills comprising housings in which the drill stem is journaled, shoes mounted on said housings, spring means for normally expanding said shoes against the wall of the well for centering the drill stem in the well, and cams on said shoes for engaging the ends of the well casing for contracting said shoes so that said shoes may pass through the casing.

1,824,467. FUEL PUMP. MAURICE ORMONDE DARBY, London, and ARTHUR ALEXANDER SIDNEY, Croydon, England. Filed Dec. 16, 1929, Serial No. 414,514, and in Great Britain Jan. 18, 1929. 1 Claims. (Cl. 123—139.)



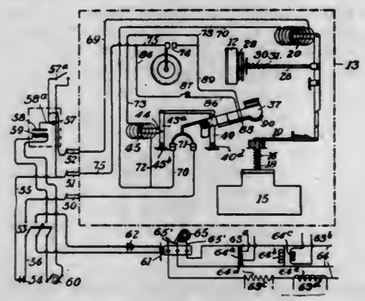
In a liquid fuel supply for internal combustion engines, the combination of a plunger pump, a cam, a cam rocked element having a cam engaging arm at one end and an upstanding horn at its other end and a plunger rocking element, said elements being mounted on pivots which are remote from each other, the cam engaging arm of the cam rocked element bearing on the cam and the free end of the plunger rocking element bearing at one side on the cam rocked element, and at its other side against the plunger, means for laterally adjusting the cam rocked element so as to vary the timing of the plunger with respect to the cam, and means for laterally adjusting the plunger rocking element from a position in which its free end engages with the upstanding horn to move the cam rocked element off the cam, when movement of the plunger is stopped, to a position away from the horn so as gradually to increase the amount of movement imparted to the plunger as the free end of the plunger rocking element becomes distanced from the upstanding horn and gradually to decrease the amount of movement of the plunger as the free end approaches the upstanding horn.

1,824,468. PATTERN LIFTING DEVICE. DANIEL BAKER DIMICK, Birmingham, Ala. Original application filed Oct. 23, 1929, Serial No. 401,767. Divided and this application filed Dec. 26, 1930. Serial No. 504,971. 7 Claims. (Cl. 22—186.)



1. A lifting mechanism for drawing patterns from mold flasks comprising grab hooks for engaging the pattern having lugs, a bridge piece fitted in the flask upon the inner stripping plate and engaged by said lugs, and means connected to the hooks for lifting the pattern and tending to rotate the hooks whereby to press the lugs firmly against the bridge.

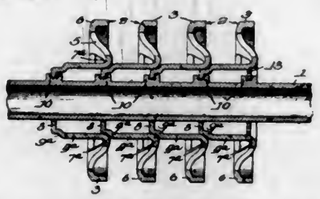
1,824,469. CAMERA OPERATING MECHANISM. HOWARD E. DYCHE, Wilkinsburg, Pa. Filed June 16, 1926. Serial No. 116,344. 14 Claims. (Cl. 284—1.5.)



1. In an operating mechanism for a camera having a shutter and using a film spool, continuously rotating driving means, electrically operated means for opening the shutter and simultaneously connecting the film spool with

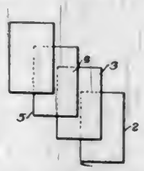
the driving means, and electrically operated means for closing the shutter and simultaneously disengaging the film spool from the driving means, substantially as described.

1,824,470. INTERSUPPORTED DISK FOR FURNACE CONVEYERS. FRANK A. FAHRENWALD, Chicago, Ill. Filed Dec. 10, 1930. Serial No. 501,257. 10 Claims. (Cl. 263—6.)



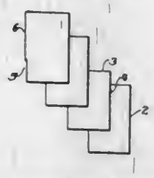
1. In a heat treatment furnace, a conveyer, comprising a shaft and a supporting disk mounted on said shaft; said disk comprising rim, web and hub members together with a member for spacing the hub from and supporting it upon the shaft; said members being integrally united end to end as substantial continuations one of another without abrupt deflections between them; the hub member including a portion, spaced from the shaft, of material length in the direction of the axis of the shaft; and the spacing and supporting member being at one end of said hub member and the web member being at the other end thereof.

1,824,471. ROOFING ELEMENT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original application filed Sept. 17, 1921, Serial No. 501,443. Divided and this application filed Aug. 26, 1929. Serial No. 388,455. 10 Claims. (Cl. 108—7.)



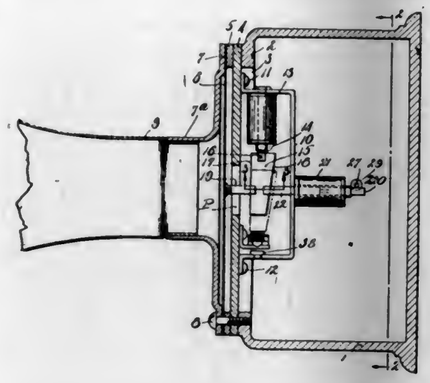
1. A roofing strip comprising an elongated body including in its structure individual shingles arranged in overlapping offset relation to provide a series of projecting tabs on one edge of the body.

1,824,472. ROOFING ELEMENT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original application filed Sept. 17, 1921, Serial No. 501,443. Divided and this application filed Aug. 26, 1929. Serial No. 388,457. 4 Claims. (Cl. 108—7.)



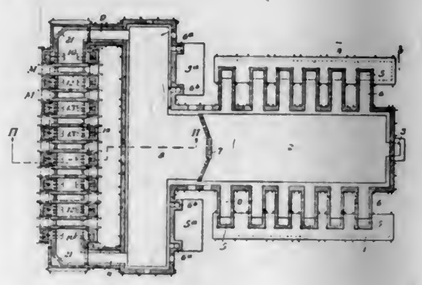
1. A roofing strip comprising an elongated body having the surface delineated to simulate a series of individual shingles arranged diagonally in offset relation with tabs on the weather exposed edge, and a spacing means on one end of the strip for spacing the stepped tabs from the tabs of an adjacently laid strip.

1,824,473. ALARM. CLARENCE L. FLAGG, Atlantic, Mass., assignor to Bankers Electric Protective Association, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 26, 1926. Serial No. 83,830. 60 Claims. (Cl. 177—314.)



34. In an alarm system, a vibration member responsive to sound or mechanical disturbances, an alarm means, an accumulator means controlled by said member to operate said alarm means after a predetermined number of either continuous or intermittent vibrations of said member.

1,824,474. MAKING SHEET GLASS. SAMUEL A. FORTER, Bellevue, Pa., assignor to H. L. Dixon Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 28, 1927. Serial No. 178,876. 2 Claims. (Cl. 49—56.)

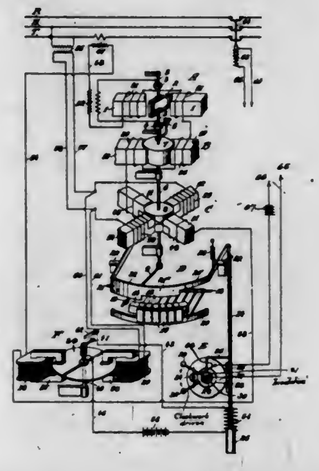


1. Apparatus for making sheet glass including a container having at least two spaced machines with a chamber therebetween, at least one side of the chamber having a pair of inlet ports for heating gases and having an outlet port therebetween.

1,824,475. PROCESS FOR SMELTING MATERIAL CONTAINING TIN OXIDE. MAX GERHARD FREISE, Angermund, and HERMANN MASCHMEYER, Bad Ems, Germany, assignors to Berzelius Metallhuetten-Gesellschaft mit beschrankter Haftung, Duisburg-Manheim, Germany, a Corporation of Germany. Filed Feb. 19, 1930, Serial No. 429,815, and in Germany Mar. 4, 1929. 1 Claim. (Cl. 75—17.)

A process for smelting materials containing tin oxide, which comprises treating the fine-grained material with solid, liquid or gaseous reducing agents, in a furnace of the rotary type, and towards the close of the reduction, raising the working temperature to such a degree as to produce a sintered, or a pasty, slag, which envelops the reduced tin and protects it from re-oxidation in the furnace itself and during the subsequent treatment in which the tin is separated from the non-metallic parts of the slag.

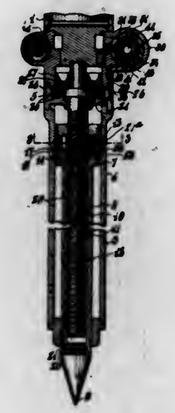
1,824,476. PROTECTION OF ELECTRIC LINES OR LINE SYSTEMS. WILHELM GAARZ, JOACHIM SORGE, and MANFRED SCHLEICHER, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Simensstadt, near Berlin, Germany, a German Corporation. Filed Apr. 7, 1926, Serial No. 100,461, and in Germany Nov. 1, 1924. 5 Claims. (Cl. 177—311.)



1. Arrangement for perceptibly supervising the condition of an electric line section comprising a measuring instrument indicating the quotient of the prevailing line voltage and line current, a relay connected to the line to respond to a change in the line condition, a pointer on said instrument and a plurality of movable stick tell tales extending along the pointer path and denoting corresponding sections of an electric line, means controlled by said relay for depressing said pointer and forcing it against one of said tell tales to give a permanent indication of the particular line section affected.

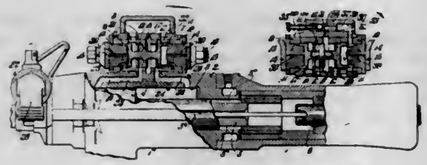
2. Arrangement for perceptibly supervising the condition of an electric line section comprising a measuring instrument indicating the quotient of the prevailing line voltage and line current, a relay of the Ferraris type, having a disc and a contact operated by said disc and two oppositely acting systems for operating said disc, one system being excited by the current in the line, the other being connected across the line to respond to the varying line potentials, a pointer on said measuring instrument and a plurality of movable stick tell tales extending along the pointer path and denoting corresponding sections of an electric line, and adapted to give a permanent indication of the particular line section affected when the pointer in its assumed position is forced against one of said tell tales, and a solenoid-controlled ball extending over the pointer path, and an energizing circuit for the solenoid, controlled by said relay contact for depressing said pointer by said ball in the direction of said tell tales, said ball being stepped to lengthen or shorten its stroke required for the depression of the pointer according to the position of the latter, a line switch and means, controlled by said ball for timely releasing said switch in accordance with the length of the ball stroke.

1,824,477. ROCK DRILLING MECHANISM. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 21, 1922. Serial No. 576,605. 13 Claims. (Cl. 121—9.)



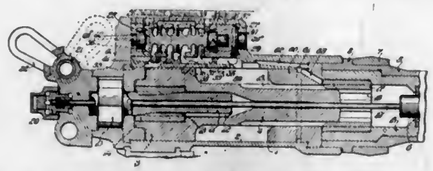
1. In a rock drilling mechanism, a drilling motor and feeding means therefor comprising a member movable with said motor, a cooperating member stationary during feeding, means for supplying air to effect relative movement of said members to advance said motor, and means including a cooperating ratchet and screw mechanism for preventing reverse movement thereof, the cooperating parts of said mechanism being carried respectively by said members.

1,824,478. DRILLING MECHANISM. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 27, 1924. Serial No. 746,242. 2 Claims. (Cl. 121—6.)



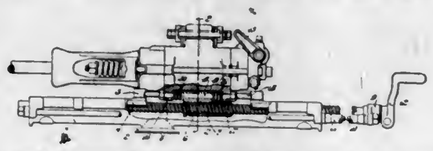
1. In a rock drill, a cylinder, a piston in the cylinder, an extension on the piston having a passage therein positionable on rearward movement of the piston to establish communication between the forward end of the cylinder and a hollow steel which is positioned for actuation by the piston, a valve chest having a chamber and an inlet port, supply passages leading from the chamber to the cylinder on opposite sides of the piston, a valve in the chamber controlling the distribution of pressure fluid to the supply passages, kicker passages leading from the valve chamber to the cylinder on opposite sides of the center thereof to control the movement of the valve, a bore in the valve chest, ducts leading from one end of the chamber and from the inlet port to the bore, a manually operable plug in the bore, said plug having a passage and ports communicating in one position of said plug with the ducts to move the valve to establish direct communication between the inlet port and the cylinder at the front end thereof and through the passage in the piston extension with a drill steel.

1,824,479. DRILLING APPARATUS. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 4, 1928. Serial No. 282,702. 15 Claims. (Cl. 121—28.)



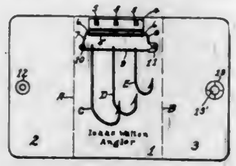
1. A pressure fluid motor comprising a cylinder, a piston reciprocable therein, and means for effecting reciprocation of said piston including a piston controlled fluid actuated valve, a valve chest providing a chamber in which said valve moves, said valve chest providing a plurality of separate supply ports opening into said valve chamber through the wall of the latter and controlled by said valve for admitting motive fluid to said chest for supply to one end of the cylinder, one of said ports opening through the wall nearer the end of the valve chamber than does the other, a single passage only controlled by said valve for venting from said valve chest exhaust from said end of the cylinder, fluid conducting passage means leading to said end of the cylinder and arranged to communicate through said valve chest and under control of said valve with said plurality of separate supply ports and to conduct fluid therefrom to said end of the cylinder, and other exhaust means independent of said valve for said end of the cylinder.

1,824,480. DRILLING APPARATUS. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 27, 1928. Serial No. 295,814. 8 Claims. (Cl. 255—45.)



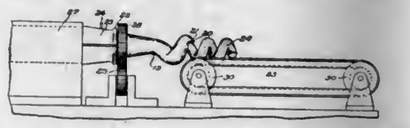
1. In a drilling apparatus, a shell having a guideway, a cradle having guides slidably mounted in the shell guideway, a percussive rock drill slidably guided in the guides on said cradle, means for feeding said cradle relative to said shell to effect feeding of the rock drill including a feed nut carried by said cradle and a cooperating feed screw on said shell, and resilient shock absorbing connections between said drill and cradle adapted to yield to permit sliding movement of said drill in a rearward direction relative to said cradle.

1,824,481. ANGLER PACKET. CLARK J. HAZLITT, near Richmond, Ind. Filed Mar. 24, 1931. Serial No. 524,899. 1 Claim. (Cl. 43—31.)



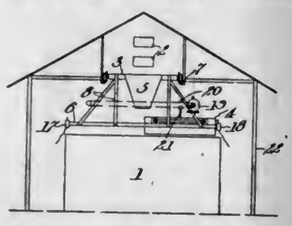
An angler packet comprising a three-part case with the parts thereof adapted to fold together, a hanger secured across the top of the central portion of said case and forming a tubular portion at its lower edge, a suspensory device comprising a stem rotatable in said tubular portion, arms extending downwardly from the ends of said stem, a prong having one end thereof integrally connected with one of said arms by means of a spring, and a catch carried by the lower end of the other one of said arms and adapted to detachably secure the free end of said prong.

1,824,482. METHOD AND APPARATUS FOR MAKING CURVED BODIES. GEORG HARTMANN, Ilseder-bei-Peine, Hanover, Germany, assignor to The Charles Taylor Sons Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 9, 1929. Serial No. 398,362. 13 Claims. (Cl. 25—17.)



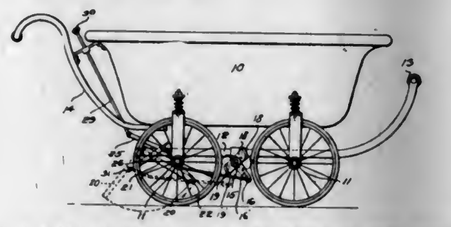
11. A molding machine comprising a curved die terminating in an overhanging lip, means for rotating the die, an auger machine for supplying material to the die whereby a helical body is formed by material discharged from the die during its rotation, and means for receiving and conveying said helical body, the operation of said conveying means being controlled in accordance with the pitch of said helical body.

1,824,483. APPARATUS FOR OPERATING SHAFT FURNACES IN THE THERMAL TREATMENT OF GRANULAR MATERIAL. OTTO HUBMANN, Frankfort-on-the-Main, and FRANZ VOERKEL, Hochst-on-the-Main, Germany. Filed Mar. 26, 1930, Serial No. 439,165, and in Germany, Feb. 3, 1927. 6 Claims. (Cl. 214—18.)



1. A device for charging shaft furnaces with granular material comprising a conveyer running above the furnaces, a carriage below said conveyer and movable in the direction of motion of said conveyer, a reservoir on said carriage, a container positioned to be filled from said reservoir and mounted on said carriage, and means to move said container transversely to the direction of motion of said carriage, said container being provided with elements cooperating with guiding means to automatically open the bottom of said container in its end positions.

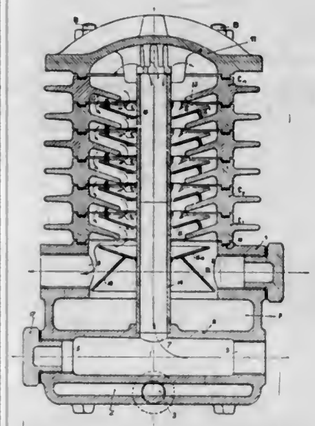
1,824,484. BRAKE CONSTRUCTION. JOSEPH W. JACKSON, Brooklyn, N. Y., assignor to Harry Perlmutter, Brooklyn, N. Y. Filed Feb. 3, 1930. Serial No. 425,635. 10 Claims. (Cl. 188—20.)



1. A brake device comprising two wheels in close spaced relation, a transverse rock shaft therebetween equally

spaced from the wheels, opposite spaced eccentric yielding shoe members on the shaft having a radius to simultaneously engage the wheels.

1,824,485. OIL REMOVING APPARATUS. MARIE PAUL ROBERT JOURDAIN, Paris, France, assignor to Societe Anonyme Freins Jourdain Monneret, Paris, France. Filed Feb. 21, 1929, Serial No. 341,755, and in France Feb. 27, 1928. 6 Claims. (Cl. 183—79.)



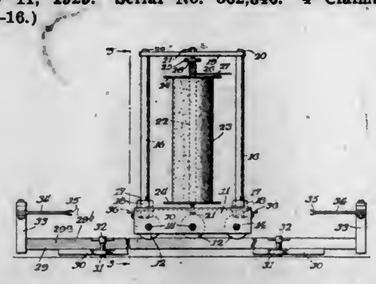
1. An apparatus for the removal of oil from hot air, comprising in combination a chamber with peripheral walls and an air inlet, a series of heat-conducting ribs formed integrally with the peripheral walls of said chamber and forming with said walls a circulation path of the air, internal elements alternated with the said ribs and forming baffles disposed in the circulation path of the air, adapted for the progressive cooling of the air and for the depositing of the oil and having perforations for permitting the flow of oil downwardly, a discharge conduit for the cooled air from which the oil has been removed and a chamber for collecting the oil which is thus separated.

1,824,486. ROLLING SHEETS. JULIAN KENNEDY, Pittsburgh, Pa. Filed Jan. 19, 1929. Serial No. 333,633. 15 Claims. (Cl. 29—17.)



14. Apparatus for rolling sheets comprising a plurality of mills adapted to effect successive reductions, a table for supporting material passing from one mill to the next, a workman's platform over the table adjacent the exit side of the mill, a stop adjacent the entering side of the next mill, and means for operating the stop from the platform.

1,824,487. ROTOR PROPELLED APPARATUS. PAUL E. KLOPSTEG, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1929. Serial No. 362,846. 4 Claims. (Cl. 85—16.)



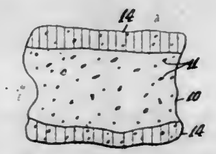
1. In apparatus of the class described, a car, a pair of posts rising from the car, a cross arm between the tops of the posts, an upper pivot bearing on the cross arm, a lower pivot bearing on the car, and an upright rotor rotatably mounted between the bearings.

1,824,488. PAD FOR SADDLES. JOSEPH B. KOPF, Rockville Center, N. Y. Filed Sept. 26, 1930. Serial No. 484,503. 5 Claims. (Cl. 54—37.)



1. A pad for saddles comprising a pad of felted material, a layer of lamb's wool, a layer of resilient material interposed between the felted material and the layer of lamb's wool, and a finishing cover completely enclosing the defining edges of said layers of material and secured to the pad of felted material.

1,824,489. STUFFING MATERIAL. XAVIER LAUCIRICA, New York, N. Y. Filed June 21, 1929. Serial No. 372,724. 2 Claims. (Cl. 5—361.)

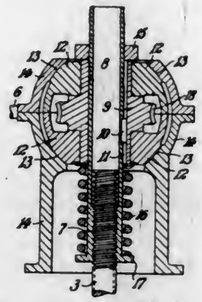


1. Material for the stuffing of mattresses and other similar objects, comprising pieces of cork in the form of thin wrinkled strips, and shellac on the longitudinal edges of said pieces.

1,824,490. MEANS FOR FEEDING MOLTEN GLASS TO A ROLLING APPARATUS FOR PRODUCING A CONTINUOUS GLASS STRIP. ERNEST BRISTOW LE MARE, St. Helens, and FREDERIC BARNES WALDRON, Prescot, England, assignors to Pilkington Brothers Limited, Liverpool, England, a Company of England. Filed Dec. 18, 1930, Serial No. 503,197, and in Great Britain Dec. 28, 1929. 10 Claims. (Cl. 49—55.)

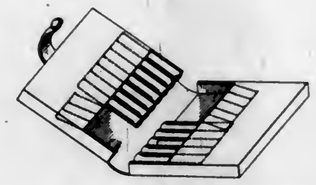
10. In apparatus of the type described, the combination with a gate and two members connected to the gate near its ends, of a raising and lowering device engaging each of said members, comprising a worm and worm wheel, a

spherical block within which the worm wheel is rotatable, a spherical seating for the said block, a sleeve mounted coaxially within and angularly fast to the worm wheel but movable axially thereof, a nut threaded on the upper end



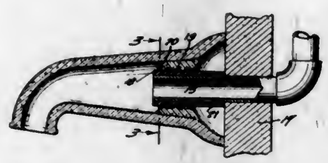
of the sleeve constituting an adjustable stop for the downward movement of the sleeve, a spring constantly tending to depress the sleeve to the limit permitted by said stop, and a nut fast to the sleeve and in threaded engagement with the member, and a shaft carrying the two worms.

1,824,491. CIGARETTE CONTAINER. WALTER EVERETT MOLINS, Deptford, London, England. Filed Dec. 30, 1927, Serial No. 243,720, and in Great Britain Jan. 20, 1927. 3 Claims. (Cl. 206—41.)



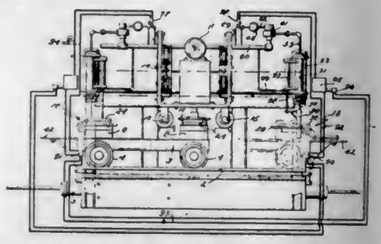
1. A cigarette carton formed of fibrous material having a portion of one free edge thereof slitted and bent upon the main body of the material to form a series of independently movable teeth arranged within the carton so as to engage yieldingly with the cigarettes to retain the latter against accidental removal from the carton and to occupy the vacated space resulting from removal of one or more cigarettes for preventing displacement of the remaining cigarettes within the carton.

1,824,492. WALL FIXTURE ATTACHING MEANS. GEORGE J. MORRIS, Los Angeles, Calif. Filed Oct. 10, 1928. Serial No. 311,573. 3 Claims. (Cl. 285—30.)



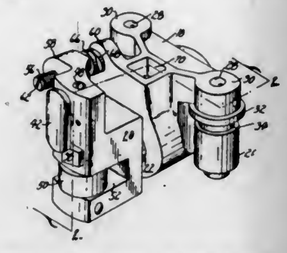
1. In combination, a rubber sleeve adapted to be applied to a wall projection to tightly embrace the latter, a wall fixture having an opening for receiving the projection and sleeve, and a collar exteriorly threaded with the threads embedded in the fixture and interiorly threaded to compress the sleeve in a spiral path for securing the collar to the sleeve.

1,824,493. BRICK MOLDING MACHINE. ABIRAM A. OEFFNER and VINCENT TROTTA, Mount Union, Pa., assignors to Harbison-Walker Refractories Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 8, 1929. Serial No. 353,403. 20 Claims. (Cl. 25—2.)



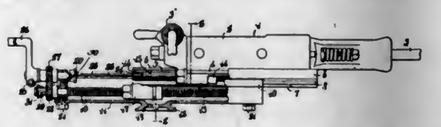
1. In a machine of the class described, a mold, a carriage for moving the mold from charge-receiving position to mold-inverting position while maintaining the mold upright, means for covering the mold with a pallet while the mold is on the carriage, and operatively associated means for inverting the covered mold while retaining the pallet thereon.

1,824,494. CYLINDER EDGE DRESSING TOOL. CARL A. OLSON, Clarinda, Iowa, assignor to Lisle Manufacturing Company, Clarinda, Iowa, a Corporation of Iowa. Filed Mar. 24, 1930. Serial No. 438,495. 7 Claims. (Cl. 77—2.)



1. An internal cutting tool for dressing cylinder walls and the like, comprising a body, rollers pivoted on the body and adapted to travel in contact with the wall adjacent the portion to be dressed, a carrier member having a sliding connection with said body, a roller pivoted on said carrier member, said body and carrier being formed with parallel lugs, a screw threaded through one of said lugs and having a swivel connection with the other and providing means for adjusting the span of the rollers for use in bores of different diameters, a cutter blade carried by the carrier, means for causing said blade to be advanced toward the work, a stop member adjustably mounted on the carrier and adapted to be engaged by the blade for stopping the advance of the latter when the operation has been carried to the required extent, and means for rotating the body and carrier.

1,824,495. FEEDING MECHANISM. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed May 31, 1923. Serial No. 642,489. 7 Claims. (Cl. 255—45.)



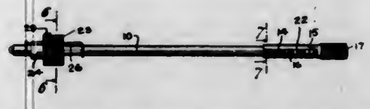
1. In a rock drill, a drilling tool, a cradle therefor having guideways along which said tool is slidable, a guide

shell for supporting said tool and cradle and having guideways along which said cradle is slidable, means to feed said drilling tool relative to said cradle, and means to feed said cradle relative to said shell, said feeding means being simultaneously operable to effect feed of the drilling tool relative to said shell during drilling and including a common operating element mounted on said shell to effect simultaneous feed of said cradle relative to said shell and said tool relative to said cradle, said operating element remaining, as regards bodily movement, stationary with said shell during feeding of said cradle.

1,824,496. FOOD PRODUCT AND METHOD OF MAKING. CLINTON HENRY PARSONS, Chicago, Ill., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1928. Serial No. 271,650. 10 Claims. (Cl. 99—11.)

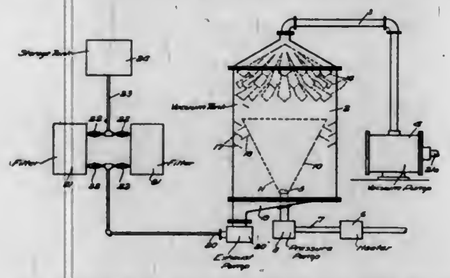
1. The process of treating milk which comprises subjecting the milk in a concentrated state to a caramelizing and hydrolyzing treatment in the presence of a stabilizing agent to produce a product containing caramelized milk sugar and hydrolyzed protein.

1,824,497. HAIR CURLING APPLIANCE. JOHN D. PERCELL, Philadelphia, Pa., assignor, by direct and mesne assignments, of sixty per cent to George Ganser and August Zimmerman, Philadelphia, Pa., trading as the Diamond Machine Company, and forty per cent to Lena Willig, Philadelphia, Pa. Filed July 11, 1930. Serial No. 467,167. 6 Claims. (Cl 132—33.)



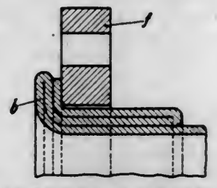
1. In a hair curling appliance, a rod upon which a strand of hair is adapted to be spirally wound, a collar rotatably and longitudinally movable with respect to the rod, said collar having an axially extending slot therein, and a member received within said slot and extending longitudinally of said rod, one end of said member being provided with a laterally extending finger for engaging the hair strand and the opposite end thereof being fashioned for frictional engagement with the rod.

1,824,498. PURIFICATION OF LIQUIDS. CLARENCE J. RODMAN and RUSSELL P. DUNMIRE, Alliance, Ohio, assignors to The Buckeye Twist Drill Company, Alliance, Ohio, a Corporation of Ohio. Filed June 25, 1929. Serial No. 373,503. 10 Claims. (Cl. 196—16.)



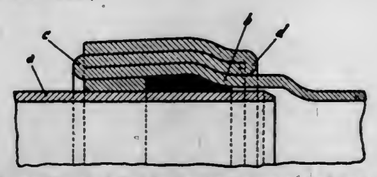
10. The process of removing moisture and volatiles from oil, comprising spraying the oil upwardly under a vacuum of 28–30 inches of mercury against baffles arranged in staggered relation so as to arrest the oil and cause the moisture and volatiles to be separated therefrom, removing the moisture and volatiles, and collecting the oil.

1,824,499. REENFORCED PIPE JOINT. GEORG REICHENBECHER, Mulheim-Ruhr, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Dec. 21, 1928, Serial No. 327,617, and in Germany Mar. 27, 1928. 4 Claims. (Cl. 285—140.)



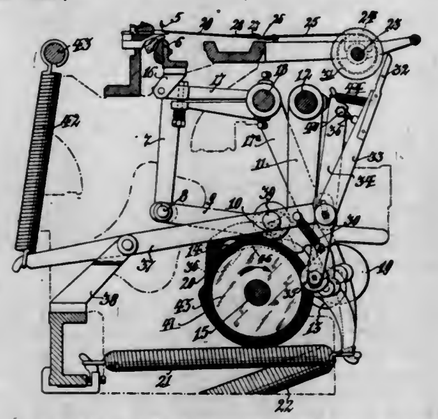
1. A reenforced flanged pipe end having its wall folded back and forth upon itself several times to form circumferential layers and its flange formed integrally by bending said circumferential layers together in such a fashion that the juncture between said flange and the cylindrical pipe wall has a thickness equal to the sum of the thickness of said layers.

1,824,500. REENFORCED JOINT FOR SOCKET PIPES. GEORG REICHENBECHER, Mulheim-Ruhr, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Dec. 21, 1928, Serial No. 327,618, and in Germany Feb. 28, 1928. 2 Claims. (Cl. 285—111.)



1, A reenforced joint for socket pipes sealed by a gasket and lead packing having the end of the exterior pipe wall folded back upon itself several times and increased in diameter so as to form a reenforced socket consisting of a plurality of circumferential layers over the entire depth of the socket joint.

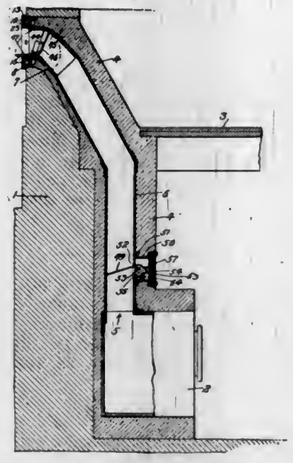
1,824,501. FABRIC TAKE-OFF DEVICE FOR FULL FASHIONED KNITTING MACHINES. EMIL RICHTER, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1930. Serial No. 479,630. 10 Claims. (Cl. 66—149.)



1. In a straight knitting machine, a reciprocatively operated set of needles for producing a knitted fabric, tension

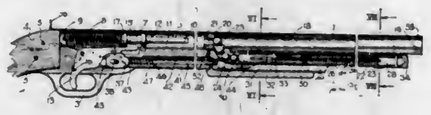
take-off means for the latter and means for varying the tension during the needle reciprocations so as to exert a constantly uniform fabric tension on the needles.

1,824,502. NIGHT SAFE DEPOSITORY. HARRY J. ROBINSON, Boston, Mass., assignor to The Mosler Safe Company, Hamilton, Ohio, a Corporation of New York. Filed May 25, 1928. Serial No. 280,470. 6 Claims. (Cl. 193—34.)



2. The combination with a deposit chute having a wall, a housing on the exterior of said wall, means mounted in said housing and extending into the chute permitting articles to pass through the chute in one direction only, a cover plate for the housing, and means, including a member extending from the cover plate into the chute and a coacting locking member mounted on the interior of said chute wall, whereby said cover plate is locked in place on said housing.

1,824,503. TOY GUN. FREDERICK T. RUSSELL, Utica, N. Y., assignor, by mesne assignments, to Fox Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1928. Serial No. 319,472. 17 Claims. (Cl. 124—13.)



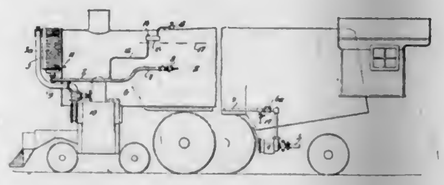
1. In a toy gun the combination of a receiver, barrel and striker, an action lock located within the receiver, a forehand piece manually movable rearwardly of the barrel into engagement with the striker to cock the same and forwardly of the barrel to release the action lock and spring means for automatically returning the lock to its safe position when the forehand piece is relieved from manual control.

1,824,504. TOY GUN OF THE REPEATER TYPE. FREDERICK T. RUSSELL, Utica, N. Y., assignor, by mesne assignments, to Fox Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 11, 1930. Serial No. 443,278. 16 claims. (Cl. 124—13.)

12. In a toy gun, the combination of a frame, a barrel, an impact block rigidly mounted in the bore of said barrel, a spring-impelled, trigger-controlled impact plunger reciprocable within said barrel and in the rear of said impact block, a ball retainer rigidly mounted in the bore of said barrel between the free end of said barrel and said impact block and adjacent said impact block, a longitudinally reciprocable strike-pin mounted to slide longitudinally in said ball retainer and said impact block, and a light spring normally yieldingly holding said strike-pin in its rearmost position with its rear end projecting through said impact block into the path of the forward movement of said plunger.

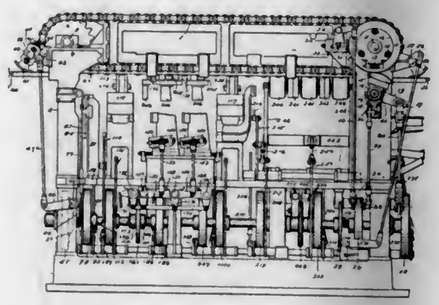


1,824,505. METHOD OF AND APPARATUS FOR CLEANING FEED WATER HEATERS. EUGENE L. SCHELLENS, Millburn, N. J., assignor to C-S Engineering Company, Englewood, N. J., a Corporation of Delaware. Filed Sept. 7, 1928. Serial No. 304,591. 18 Claims. (Cl. 122—379.)



1. The method of cleaning a tubular feed water heater which consists in carrying a cleaning solution through the heater tubes from the outlet side of the heater to the inlet side and in diluting the solution by the carrying medium as it passes through the heater.

1,824,506. MACHINE FOR BACK LINING BOOKS. CARL SCHRAMM, West Hartford, and ERNEST WAYNE CLARK, Hartford, Conn., assignors to The Smyth Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed July 31,1930. Serial No. 472,045. 45 Claims. (Cl. 11—4.)



1. In a machine for back-lining book fillers, a runway for receiving fillers, means for feeding fillers edgewise with their backs down, from the runway into the machine, an elevator for receiving and lifting the fillers with their front edges up, an endless conveyer with clamps extending transverse of its line of travel, for gripping the sides of the lifted fillers, mechanism for intermittently moving the conveyer and carrying the fillers sidewise back down in a straight line through the machine, and mechanisms for applying adhesive, crash and lining to the backs of fillers thus conveyed.

1,824,507. PROCESS FOR TREATING GLYCERINE LIQUORS. THEO. SCHWARZ, Gomez Palacio, Mexico, assignor to Wurster & Sanger, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 21, 1928. Serial No. 279,601. 5 Claims. (Cl. 87—4.)

1. A process of refining glycerine which comprises providing a glycerine liquor of 5 to 15% concentration, treating such glycerine liquor with hydrated lime, separating the precipitate resulting from the liquor, treating the liquor with a zeolite and finally concentrating.

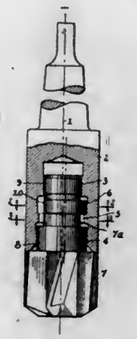
1,824,508. BAG. EMANUEL F. SHIPMAN, Philadelphia, Pa. Filed Oct. 29, 1927. Serial No. 229,546. 4 Claims. (Cl. 150—3.)



1. In a bag structure, a body portion open at the top and provided with a cover flap formed as an integral extension of its rear part and providing a front portion adapted to be folded over the opening to the bag and downward upon the front part thereof, said flap having laterally extensions severed from the side portions of the body at its top and folded downward and permanently secured to the side portions of the bag body adjacent to the back portion and below the open top thereof, to provide the flap with side portions which extend over and below the upper side portions of the bag, whereby when the cover flap is folded over the front into closed position, the lateral portions of said cover flap are caused to curve over the side portions of the bag body to form an overhanging canopy to shield the bag opening from the entrance of rain, and wherein further, detachable connecting means are provided for normally attaching the cover flap to the front of the bag body, whereby said flap is not only continuous with the back but also has connections with the sides and front of the body below the open end thereof and said side connections of the cover flap approximately on the level of the detachable connection thereof with the front of the body.

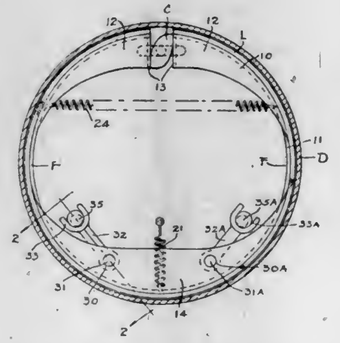
1,824,509. ROTARY TOOL COUPLING. IRA J. SNADER, Paterson, N. J. Filed Aug. 30, 1929. Serial No. 389,568. 3 Claims. (Cl. 279—89.)

2. In combination, a socket member having a bore formed with a cylindrical centering portion and portions eccentric to said centering portion and offset each with respect to the other, and a tool shank having a cylindrical centering portion that detachably and rotatably engages in the centering portion of the socket, said shank portion having an eccentric portion that passes through one of the eccentric portions of the bore when in one position and into the other eccentric portion and when rotated out of



line with the first eccentric portion is held against detachment, said shank when so rotated, having a bearing against the wall of the bore.

1,824,510. BRAKE. JOHN SNEED, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 12, 1927. Serial No. 218,873. 10 Claims. (Cl. 188—78.)

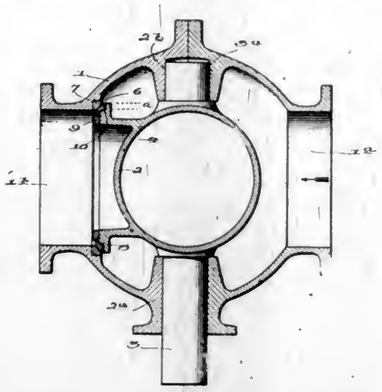


1. In a brake, the combination of a drum, a pair of anchor pins spaced apart, relatively rigid friction means spaced between said anchor pins, a link pivoted to said friction means and engageable with one of said pins when the drum rotation is clockwise, a second link pivoted to said friction means and engageable with the other of said pins when the drum rotation is counter clockwise, and additional relatively flexible friction means angularly displaced beyond said anchor pins and adapted to serve said first named means regardless of the direction of drum rotation.

1,824,511. ROTARY SLIDE VALVE. WALTER SPIESER, Zurich, Switzerland. Filed May 11, 1927, Serial No. 190,443, and in Switzerland May 12, 1926. 1 Claim. (Cl. 251—102.)

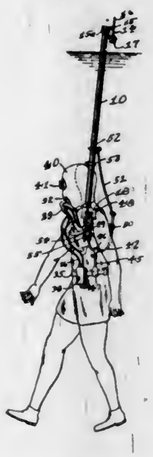
A rotary valve comprising a casing, a valve member in the casing, and packing rings of comparatively small cross-sectional area on this valve and casing, one of said rings being axially movable relatively to the other for a sealing action under pressure, a part of the area of

said movable ring being in closed position of the valve still directly exposed to the fluid pressure, that part



being a proportion of the full pressure bearing area of the valve sufficiently great to secure a perfectly tight closure of the valve.

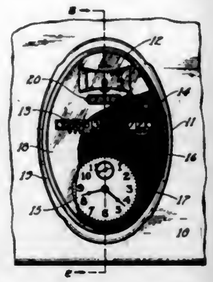
1,824,512. DIVING APPARATUS. VINCENTY SZAMIER, Bristol, Conn. Filed Oct. 4, 1930. Serial No. 486,369. 10 Claims. (Cl. 61—70.)



1. In a diving apparatus, a helmet, a vertical rigid tube for supplying air to said helmet, a flexible connection between the bottom of said tube and said helmet to permit the diver to stand erect or lie in a horizontal position beneath the surface of the water, and means for attaching the lower end of said tube to said diver for permitting him to carry it about.

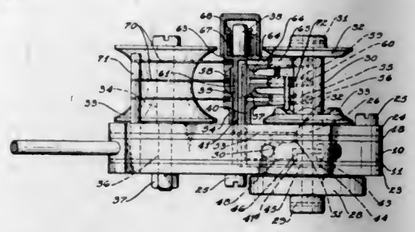
1,824,513. WRITING SURFACE FOR RECORDING INSTRUMENTS. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 20, 1926. Serial No. 142,813. 3 Claims. (Cl. 35—10.)

1. In a recording instrument, the combination of a dark face for said instrument, a transparent cover over and adjacent to the dark face, an etched panel on the outside of said cover for recording data, and a reflector panel on the inside of said cover and between the etched



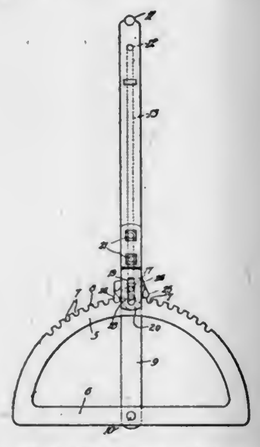
panel and the dark face whereby the reflector panel obscures the dark face and reflects and intensifies the recorded data.

1,824,514. PAINTING DEVICE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 12, 1928. Serial No. 292,107. 24 Claims. (Cl. 91—62.6.)



1. A painting instrument comprising a paint containing chamber, a laterally oscillatory nozzle, means associated therewith for feeding paint from the chamber through the nozzle at a rate proportionate to the rate of movement of the instrument.

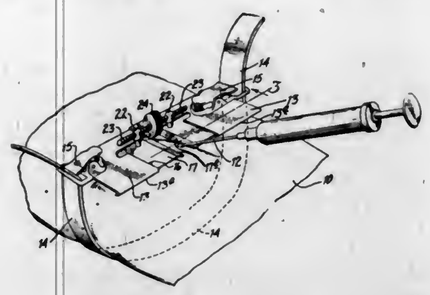
1,824,515. LEVER DETENT MECHANISM. HARRY RANDALL TRAPHAGEN, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 12, 1929. Serial No. 385,284. 6 Claims. (Cl. 74—39.)



1. In lever mechanism of the character described, the combination of a notched rack, a slotted lever, a latch

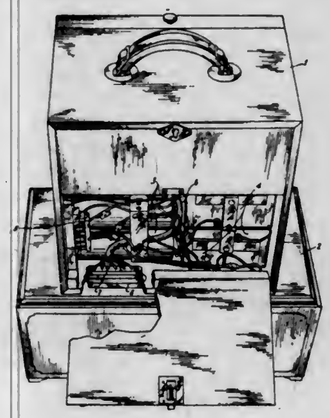
rod, a slotted guard plate carried by said lever, and a detent pawl provided with a plurality of teeth and having pivots within the slots of the lever and guard plate and having an opening to receive an offset part of the latch rod.

1,824,516. VEIN RETAINER. RAYMOND E. TYVAND, Chicago, Ill. Filed May 5, 1930. Serial No. 449,943. 10 Claims. (Cl. 128—327.)



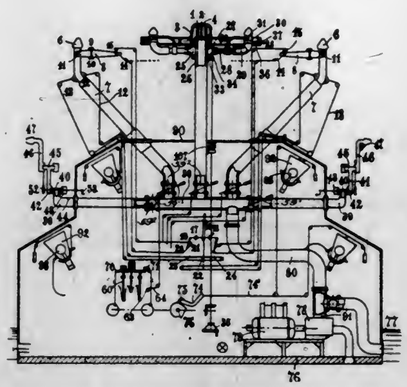
1. A device of the character described for fixing a vein in position under the skin, including; a supporting-plate; means for holding the supporting-plate on a part of the body; a pair of retaining fingers with downwardly turned ends carried by the plate; and means for causing relative sliding movement of said fingers toward or away from each other.

1,824,517. RADIO RECEIVING APPARATUS. ARTHUR F. VAN DYCK, Yonkers, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 7, 1925. Serial No. 67,475. 3 Claims. (Cl. 250—14.)



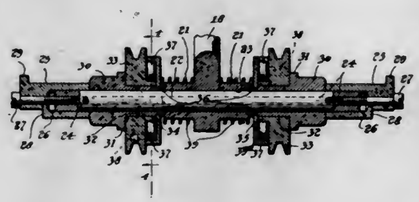
1. In combination, a portable cabinet including a radio apparatus, connector means comprising a single cable connected at one end to the various circuits of said apparatus, a single plug member connected to the other end of said cable, a pair of socket members adapted to receive said plug member, independent current sources, either of said sources being adapted to energize all the circuits of the portable apparatus, connections between said socket members and sources of current, one of said sources of current being smaller than the other and mounted within said portable cabinet, a non-portable cabinet, said other current source being disposed within said non-portable cabinet, and means for facilitating selective connection of said plug member with the socket member connected to the larger current source when said portable cabinet is positioned against said non-portable cabinet.

1,824,518. WATER DISPLAYING AND ILLUMINATING DEVICE. EDOUARD VEDOVELLI, deceased, Paris, France, by Mrs. E. Vodevelli, née Jeanne Hénaux, executrix, Paris, France. Substitute for and continuation of application Serial No. 55,766, filed Sept. 11, 1925, and in France Feb. 27, 1925. This application filed Feb. 10, 1930. Serial No. 427,283. 8 Claims. (Cl. 299—4.)



8. In a fountain, a set of sprayer heads; a flexible liquid supply pipe individual to each head; a set of levers, one for each pipe, engaged therewith to rock the sprayers from side to side in one direction; a set of cables for operating said levers; a separate set of cables for rocking the sprayers from side to side in another direction; and a universally-mounted lever connected with both sets of cables.

1,824,519. REEL MOUNTING FOR MOTION PICTURE PROJECTORS. ALEXANDER FERDINAND VICTOR, New York, N. Y. Filed Apr. 24, 1930. Serial No. 446,997. 10 Claims. (Cl. 242—55.)

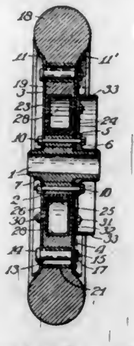


1. A reel mounting comprising a spindle one end of which is shouldered and has a lateral retainer flange, and a rotatable member on the opposite end of said spindle and of different cross-section form than said spindle.

1,824,520. CUSHIONED VEHICLE WHEEL. GEORGE VORDERMARK, Indianapolis, Ind. Filed Mar. 3, 1930. Serial No. 432,672. 4 Claims. (Cl. 152—29.)

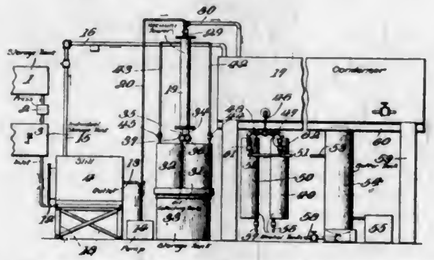
1. A cushioned vehicle wheel including a hub, two disks spaced apart on the hub and secured thereto, the disks having flared marginal guard portions, an annular resilient rim portion arranged between the disks and having a

resilient tire integral therewith, the rim portion having cushioned support on the hub, the tire extending loosely



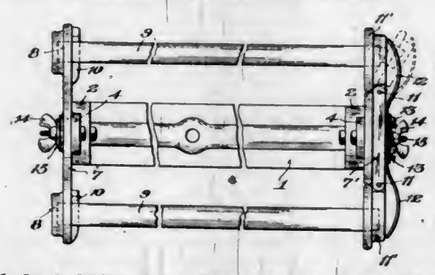
about the flared portions, and retaining bolts extending shiftably through the rim portion and secured to the disks.

1,824,521. PROCESS FOR SEPARATING ALCOHOLS FROM OIL. THEODORE A. WERKENTHIN, Lima, Ohio, assignor to The Solar Refining Company, Lima, Ohio, a Corporation of Ohio. Filed Nov. 24, 1925. Serial No. 71,112. 4 Claims. (Cl. 196—77.)



1. The process of treating petroleum still residues containing small amounts of alcohol for the purpose of separating the alcohol and petroleum without altering the nature of the petroleum, comprising heating the mixture in the form of a body of liquid at substantially normal pressure to a temperature of from about 220° F. to about 250° F., withdrawing the alcohol vapor therefrom, and thereafter finely dividing the heated mixture while under reduced pressure and withdrawing the final traces of alcohol therefrom in the form of a vapor.

1,824,522. LEASE ROD FOR WARPING MACHINES. JOHN B. YACOVONE, Pawtucket, R. I. Filed Dec. 4, 1930. Serial No. 499,915. 7 Claims. (Cl. 28—22.)



1. In a device of the class described, a base having upturned end portions formed with guides, bifurcated shanks slidable in said guides, locking means carried by said upturned portions and engaging between the furcations of said shanks, a head pivotally carried by one of said shanks, and having spaced sockets near its ends, U-shaped socket guides carried by said head adjacent its sockets, a second head pivotally carried by the other of said shanks, hinged end portions carried by said second head and having sockets, bowed springs carried by said second head and exerting pressure on said hinged portions, means carried by said supports whereby the tiltable adjustment of said heads about their pivots may be fixed, and rods carried in the sockets of said heads and maintained in position by the pressure of said springs.

1,824,523. SULPHURIZED OILS. ELMER W. ADAMS, Hammond, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Aug. 8, 1929. Serial No. 384,503. 8 Claims. (Cl. 87—9.)

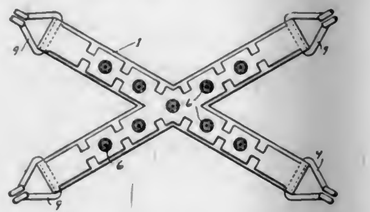
1. The method of producing a sulphurized cutting oil which comprises incorporating into hydrocarbon oil free from fatty oil and containing initially at least 0.75% sulfur, additional sulfur sufficient to bring the total sulfur content of the oil to at least 2%.

1,824,524. PROCESS OF PRODUCING IMPREGNATED IRREGULAR PAVING. HANS AEBLY, Zurich, Switzerland. Filed Jan. 5, 1929, Serial No. 330,676, and in Switzerland Jan. 10, 1928. 1 Claim. (Cl. 94—6.)



A method of paving street or road surfaces, which consists in depositing upon the bed of the surface a base layer of sand, laying upon the sand paving stones of irregular form and thereby producing a haphazard arrangement of spaces or joints between the stones, subjecting the stones to rolling pressure to level the stones at the top and to depress the stones in the sand and cause the sand to rise in the spaces or joints to a level between the top and bottom surface of the stones, floating over the surface cold liquid asphalt in quantity to fill the joints to the surface level therewith and to form with the sand a viscous pastry mixture, spreading aggregate over the surface before the asphalt sets, and rolling the surface to force the surface asphalt and aggregate down into the joints and to force the pasty mixture of asphalt and sand upward between the stones so as to fill all voids and to form with the aggregate a hard compact filling solidly cementing the stones together.

1,824,525. TRACTION DEVICE. HAROLD F. AMES, Grand Rapids, Mich. Filed Mar. 30, 1929. Serial No. 351,378. 3 Claims. (Cl. 152—14.)

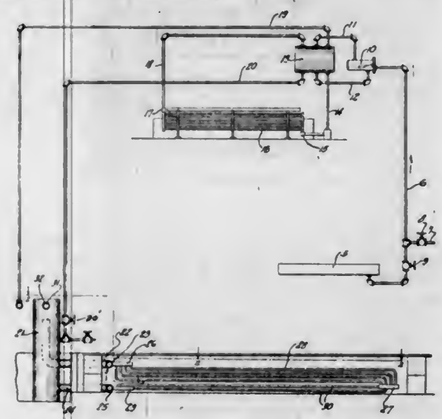


1. An anti-skid device comprising a strap member adapted to lie across the tread of a wheel, the said strap member having a flexible wire core, a pair of base plates embracing opposite sides of said wire core, a calk having a shank extending through said base plates for securing them to said core, said core and plates being imbedded in a surrounding covering of rubber and securing means on the ends of said strap.

1,824,526. METHOD FOR MAKING COKE. CHARLES W. ANDREWS, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 22, 1928. Serial No. 307,786. 5 Claims. (Cl. 202—33.)

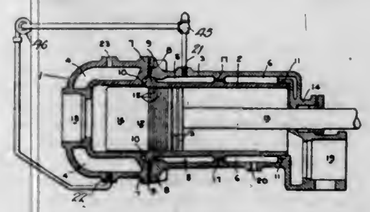
1. The method of making coke which comprises mixing a mixture comprising up to fifteen percent of low volatile solid combustible carbonaceous material sized to substantially all pass a sixteenth inch mesh screen and high volatile coal crushed to a size such that at least approximately ninety percent will pass a quarter inch mesh screen, and subjecting the mixture to a coking operation.

1,824,527. REFRIGERATING SYSTEM. CHARLES G. BACH, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 29, 1928. Serial No. 289,105; 6 Claims. (Cl. 62—126.)



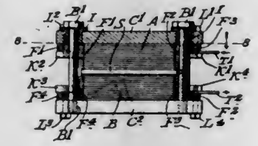
1. A cooling unit for a refrigerating system comprising a liquid header, a plurality of extension headers extending from said liquid header, a plurality of other headers spaced at a distance from said liquid header, and extension headers, pipes connecting each of said extension headers with one of the second mentioned headers, a suction header spaced at a distance from the second mentioned headers, a plurality of extension headers extending from said suction header, and a plurality of pipes connecting each of the suction extension headers with one of the second mentioned headers.

1,824,528. INTERNAL COMBUSTION ENGINE. RICHARD WILLIAM BAILEY, Altrincham, England, assignor, by mesne assignments, to Associated Electrical Industries Ltd., England. Filed Oct. 25, 1927, Serial No. 228,576, and in Great Britain Oct. 25, 1926. 12 Claims. (Cl. 123—170.)



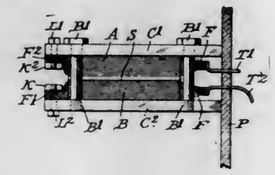
1. In an engine, the combination of a cylinder embodying a barrel portion and a head portion, a piston disposed within the cylinder and movable in the barrel portion thereof, separate cooling jackets associated with the barrel portion and the head portion, and means for admitting cooling media of relatively low temperature to the jacket associated with the barrel portion and admitting cooling media of relatively high temperature to the jacket associated with the head portion.

1,824,529. ELECTRICAL CONDENSER. WILLIAM M. BAILEY, Lynn, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Original application filed May 27, 1924, Serial No. 716,107. Divided and this application filed Mar. 30, 1926. Serial No. 98,412. 14 Claims. (Cl. 175—41.)



1. The improvement in preventing undesirable temperature rise in the interior of an electrical condenser stack, which includes an electrically insulating separator dividing the stack electrically into two units; two metal clamping members in clamping engagement with the ends of the stack, and having substantial areas exposed from the stack for heat-dissipation; means holding said clamping members in their clamping positions; means insulating the clamping members from one another; wide armature-projections from armatures of each stack unit held in thermal connection with one of said clamping and heat-dissipating members by lying flat against it; and wide armature-projections from other armatures of each stack unit held in thermal connection with the other clamping and heat-dissipating member by lying flat against it; the stack-units being connected thermally in parallel with one another between the two clamping and heat-dissipating members.

1,824,530. ELECTRICAL CONDENSER. WILLAM M. BAILEY, Lynn, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Original application filed May 27, 1924, Serial No. 716,107. Divided and this application filed Mar. 30, 1926, Serial No. 98,413. Renewed Apr. 6, 1931. 13 Claims. (Cl. 175—41.)



1. The improvement in preventing undesirable temperature rise in the interior of a foil-stack electrical condenser, which includes means dividing the stack electrically into two units, each comprising foil-armatures in inductive relation to one another; two terminals insulated from one another; foil-projections from the two stack-units and electrically connected with said insulated terminals; metal stack-clamping means constituting a unitary electrical conductor and having a substantial area exposed from the stack for heat-dissipation, said clamping means including metal compression members engaging and covering substantially the entire areas of the

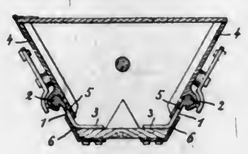
end faces of the stack, and including metal tension members mechanically and electrically connecting said compression members together; and foil-projections from foils in both stack-units in direct thermal connection with said heat-dissipating clamping means, whereby the metal of said clamping means constitutes the electrical connection of the foil-armatures on one side of said dividing means with the foil-armatures lying on the other side of said dividing means.

1,824,531. CLIPPER SHARPENER. HORACE M. BENNETT and SIDNEY J. BOMAN, Margaret, Tex. Filed May 4, 1929. Serial No. 360,506. 2 Claims. (Cl. 51—212.)



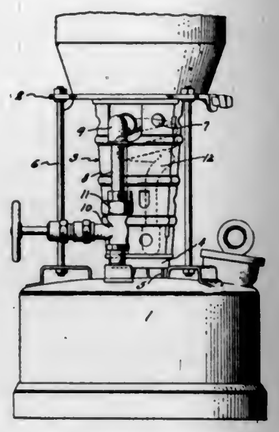
1. A device for sharpening both blades of a clipper comprising a spacing element for spacing apart the blades of the clipper, an abrasive element corresponding in thickness to the spacing element insertable between the blades for sharpening the same, a key having means on its opposite sides for fastening said abrasive element and either of the blades together thereby preventing relative motion between the same and permitting relative motion between the abrasive element and the other blade, substantially as set forth.

1,824,532. DISTRIBUTING DEVICE FOR FERTILIZER, GRAIN AND SEED DRILLS. RENÉ BERGERIOUX, Reuilly, France. Original application filed Feb. 15, 1928, Serial No. 254,559, and in France Oct. 24, 1927. Divided and this application filed Mar. 19, 1930. Serial No. 437,262. 1 Claim. (Cl. 221—126.)



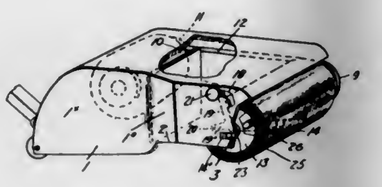
In a seed and like distributing machine, the combination with a container having in its side wall a slot carried parallel to and close to the bottom, of a distributing element comprising a reciprocating rod mounted on the outer surface of the side wall above and parallel to the slot, bent fingers on said rod each having an upper part parallel to and grazing the side wall and a lower part which passes through the slot close to the bottom and is parallel to the latter, and a flange carried by the bottom outside the fingers and grazed by the upper portions of the latter, said flange reaching substantially to the level of the upper edge of the slot.

1,824,533. FIRE POT CONSTRUCTION. WILLIAM BLASKEWITZ, Detroit, Mich., assignor, by mesne assignments, to Clayton & Lambert Manufacturing Company, Detroit, Mich., a Corporation of Delaware. Filed Dec. 10, 1928. Serial No. 324,907. 3 Claims. (Cl. 126—240.)



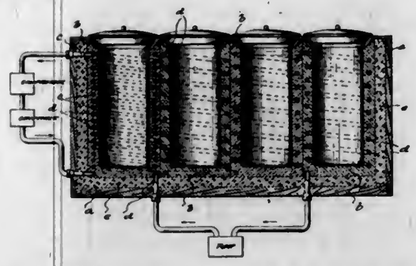
1. In a fire pot, a tank, a top plate, a cup member positioned at the top of said tank and provided with an annular groove at its upper edge, a burner positioned between the top plate and said cup member, and a shield surrounding said burner and spacing the top plate from said cup member, the lower edge of a portion of said shield fitting in the said groove in the cup member, and said shield being clamped between the top plate and cup member by clamping means directly connecting the tank and top plate, a portion of said shield member being of less height than the remainder of the shield and being hinged to the shield body whereby to permit removal of the burner laterally through the shield without disturbing the remaining elements of the fire pot.

1,824,534. COMBINED FLOOR WAXER AND POLISHER. JOHN ROBERT CAMPBELL, Burnaby, Ontario, Canada. Filed Dec. 29, 1928. Serial No. 329,141. 5 Claims. (Cl. 91—67.8.)



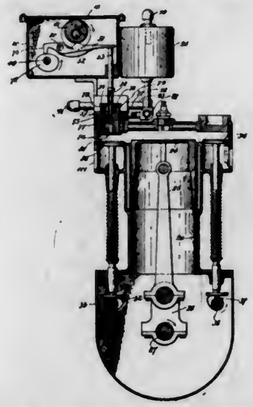
1. In a combined floor waxer and polisher, a waxing or polishing element comprising a centre cylindrical core, a cushioning member covering the peripheral surface of the core, a fabric wrapper extending around the cushioning member and attached along its free opposing edges to the core, such attaching means comprising eyelets secured to the wrapper adjacent one transverse edge thereof, spring members carried by the core and extending through the cushioning member and adapted to snap into the open centres of the eyelets, and means for detachably securing the opposite edge of the wrapper to the core in a position overlapping the aforesaid wrapper edge.

1,824,535. APPARATUS FOR CONTROLLING THE TEMPERATURE OF UNIT CONTAINERS. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Feb. 8, 1926. Serial No. 86,719. 5 Claims. (Cl. 62—101.)



1. A refrigerating unit comprising a plurality of container units and a plurality of alternately positioned expansion coils and circulating coils for a non-freezing solution arranged in the walls of only one of said units said second named coils extending to and being arranged in at least one adjacent unit.

1,824,536. INTERNAL COMBUSTION ENGINE. HENRY H. CUTLER, Brookline, Mass. Filed Nov. 2, 1927. Serial No. 230,488. 9 Claims. (Cl. 123—139.)



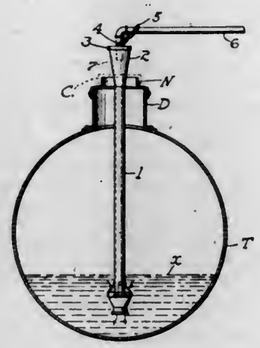
1. An internal combustion engine comprising in combination, a cylinder, an air intake valve, means for mechanically creating an influx of liquid fuel into said cylinder, means for creating an influx of air into said cylinder through said intake valve and mechanical connections for correlating the movements of both of said means to maintain practically constant the ratio of the rate of such influx of liquid fuel to the rate of the influx of air flowing into said cylinder while said intake valve is open.

1,824,537. ARTICLE COVERED WITH SHEET PYROXYLIN. HOWARD P. DE CORREVONT, Chicago, Ill., assignor to The Brunswick-Balke-Collender Co., Chicago, Ill., a Corporation of Delaware. Filed Aug. 6, 1928. Serial No. 297,904. 3 Claims. (Cl. 154—41.)



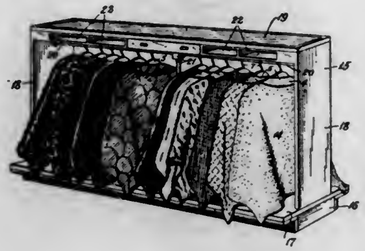
1. In a pyroxylin-covered article, the combination with a core having an edge provided with a recess, of sheets of pyroxylin covering said core and meeting at said edge, and a reinforcing strip of similar material extending longitudinally of said edge and received in said recess, said core and sheets and reinforcing strip being united adhesively.

1,824,538. FILLER PIPE. ERNEST F. FISHER, St. Louis, Mo., assignor to Alpha Tank and Sheet Metal Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Aug. 16, 1929. Serial No. 386,439. 2 Claims. (Cl. 226—29.)



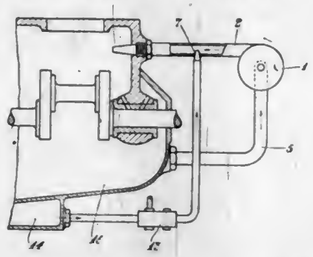
1. A tank filler pipe arranged to be positioned in the tank and extending to near the bottom thereof, a funnel at the upper end of the filler pipe, means on said funnel for supporting the filler pipe in place, and means at the lower end of the filler pipe for collecting accumulated vapor and causing it to re-enter the liquid.

1,824,539. DISPLAY DEVICE. WILLIAM J. FITZPATRICK, Cedarhurst, N. Y., assignor to R. H. Macy & Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 15, 1931. Serial No. 508,931. 2 Claims. (Cl. 35—17.)



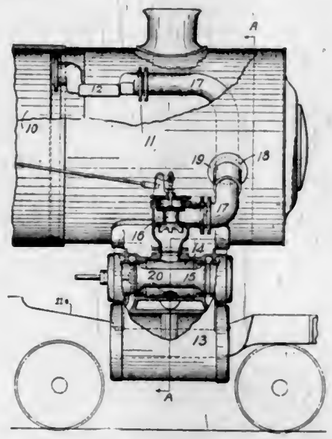
1. A piece goods display device comprising a coat hanger of the type having a bar extending across the lower portion of the coat hanger and secured to the sides thereof, a section of piece goods upon said hanger substantially larger than said hanger, said section of piece goods being folded upon itself along one edge, said folded portion being reversely folded to form a collar, said collar passing across the back of said hanger, thence over the front edges of said hanger, then folded around said bar so as to embrace the same and having portions engaging each other and pinned together, the fabric below the said bar being allowed to freely drape.

1,824,540. APPARATUS FOR PRODUCING A LUBRICATING OIL MIST. OSCAR ROBERT GRÖNKWIST, Katrineholm, Sweden. Original application filed May 6, 1922, Serial No. 559,035, and in Germany May 7, 1921. Divided and this application filed Sept. 24, 1925. Serial No. 58,412. 4 Claims. (Cl. 184—6.)



4. An apparatus for producing a lubricating oil mist in a closed casing, comprising in combination with such casing, a closed circuit circulation passage connected to said casing, means for admitting oil to be atomized into said passage, and a fan in said passage for generating and maintaining a current of gas in the circulation passage.

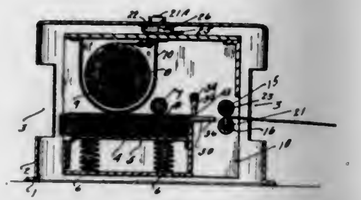
1,824,541. STEAM LOCOMOTIVE. CHARLES HALDER, Hawthorne, N. J., assignor to The Bradford Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 321,800. 20 Claims. (Cl. 105—37.)



1. In a locomotive, the combination of a boiler, a cylinder saddle, a smoke box, a plurality of working cylinders, a distribution valve chest for each of the cylinders, a single passageway, passing through the smoke box wall, and adapted to conduct through said wall a supply of boiler steam for at least two of the working cylinders, said passageway leading to one of the distribution valve chests only, a throttle valve disposed in said passageway and outside of the smoke box, and a second passageway leading from the first mentioned valve chest through the cylinder saddle to another of the valve chests for conducting the supply of working steam thereto.

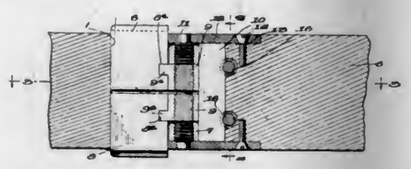
1,824,542. AUTOMATIC CARD DISTRIBUTING DEVICE. EARL J. HANGERUD, Portland, Oreg. Filed Oct. 24, 1929. Serial No. 402,146. 4 Claims. (Cl. 273—149.)

2. In a device of the class described, the combination of a base, a housing superposed on the base, a supporting pin disposed centrally of the upper surface of the housing, a frame depending from the pin and disposed within the housing, entrance and discharge openings disposed in equal spaced relationship in the side wall of the housing, a card receiving support disposed within the frame, a feed roller mounted over said card receiving support, means for maintaining the cards in intimate engagement with said roller, means for driving the feed roller and thereby feeding one card at a time from the deck of



cards disposed upon the card receiving support, automatic means including ejecting rollers for receiving the cards delivered by said feed roller and ejecting one card from one of said openings and for rotating the frame to the next succeeding opening and for discharging a card therefrom as a continuous operation until the entire deck of cards has been exhausted, and automatic means for stopping the operating mechanism when the last card has been ejected from the device.

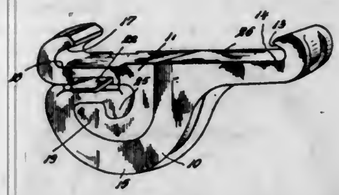
1,824,543. BORING BAR. FLOYD S. HARTWELL, Cleveland, Ohio. Filed Dec. 28, 1926. Serial No. 157,572. 3 Claims. (Cl. 77—58.)



1. A boring bar having a slot and a pair of cutters therein, an adjusting block for each of said cutters and carried in said slot, the blocks operatively engaging and flatly contacting against one edge of their respective cutters, a backing member engaging one wall of said slot and having a plane, unobstructed opposite side surface acting through flat contact with said adjusting blocks for slidably retaining said cutters against the opposite slot wall, a screw having oppositely threaded end portions, said adjusting blocks being operatively mounted upon the respective ends of said screw, removable plates carried at opposite sides of said bar and in which the ends of said screw are journalled, said plates engaging opposite ends of said backing member to center the same and hold it against shifting endwise in said slot, the ends of plates bearing against the cutters and comprising an auxiliary sustaining means therefor, said plates being arranged to close the said slot adjacent said cutters whereby to removably confine said screw, adjusting blocks and backing member in said slot, said plates having openings whereby access may be had to said screw for turning the same to adjust said cutters, and wedge screws carried by said bar, said wedge screws being disposed transversely of and acting through said backing member and adjusting blocks for holding the cutters in a set position, and the rear edge of said backing member having recesses adapted to receive said screws.

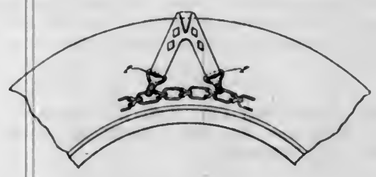
1,824,544. ANTICREEPER FOR RAILS. CHARLES P. HESS, Cleveland, Ohio. Filed Feb. 11, 1931. Serial No. 515,107. 5 Claims. (Cl. 238—325.)

1. An anti-creeper for rails comprising a pair of separable complementary members adapted to interlock with each other to clamp with a rail and to abut against a cross-tie, and cooperating interlocking instrumentalities carried by the members, the instrumentalities comprising a series of grooves on one of the rail gripping members



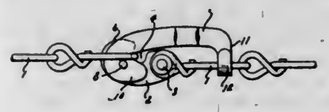
and a resilient pawl member carried by the other member for engaging with the grooves for interlocking therewith to prevent accidental displacement of the rail gripping members, while permitting ready interlocking thereof in rail clamping position.

1,824,545. TREAD MEMBER CONNECTION FOR ANTI-SKID DEVICES. FREDERICK G. HODELL, Cleveland Heights, Ohio, assignor to The Chain Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 16, 1926. Serial No. 122,930. 2 Claims. (Cl. 152—4.)



1. In a non-skid device, a non-metallic tread member, a side chain engaging device secured thereto, an upstanding end of said device adapted to be secured upon a side chain link by bending thereabout, a portion of said tread member extending alongside said upstanding end of said device, and adapted upon said bending thereof to lie between said device and a link engaged thereby.

1,824,546. CONNECTING MEANS FOR CHAINS. FREDERICK G. HODELL, Cleveland Heights, Ohio, assignor to The Chain Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 23, 1930. Serial No. 454,986. 2 Claims. (Cl. 24—69.)



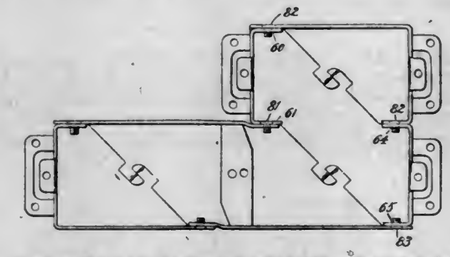
1. A device of the character described comprising a tension member pivotally connected to one of the links of a chain, a locking lever pivotally connected to said tension member and adapted to extend along said tension member when in closed position, both of said pivots being in substantially the same plane, said tension member having an undercut notch therein for the reception of a chain link, and said locking lever having a notch therein that is coincident with the undercut notch in said tension member when the connecting means is in substantially closed position, said locking lever being adapted to move the chain link both into and out of the undercut notch in said tension member, and having means on one end thereof for engaging a link in the chain to maintain the connecting means in closed position.

1,824,547. BUTTON LOOP. ROBERT J. HODGE, West Haven, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed Apr. 22, 1930. Serial No. 446,385. 3 Claims. (Cl. 24—224.)



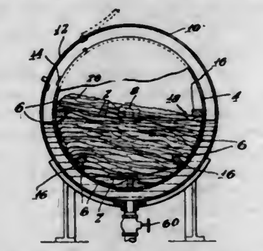
3. A button loop comprising a pair of spring arms cooperatingly bent to form associated loops in axial alignment and having an intermediate normally contracted throat portion, the extremities of the arms being longitudinally aligned and having elongated looped enlargements relatively converging and substantially abutting, and a clip coupling mounted upon the aligned extremities, the clip coupling having flanged edge portions enclosing the enlargements, the enlargements having within the clip coupling a freedom of separating movements upon the expansion of the throat portion, said flanged edge portions abutting each other and opposite flanged portions of the clip coupling providing stops to limit the expansion.

1,824,548. SWITCH BOX. RICHARD M. HOLMES, Davenport, Iowa. Filed Aug. 10, 1922. Serial No. 580,964. 8 Claims. (Cl. 247—16.)



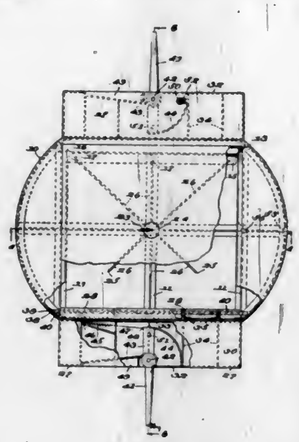
1. A switch box comprising separable units, one of said units comprising a bottom, end and diagonally cut back portion, and the other unit comprising a top, end, and diagonally cut back portion, a spacing strip insertable between the units, said spacing strip having a top, bottom, and back portion, the edge of the back portion being cut diagonally, and means for detachably connecting the units and spacing strip.

1,824,549. METHOD OF TANNING HIDES AND SKINS. AARON HOYT, Haverhill, Mass., assignor of one-half to Spencer L. Worthen, Haverhill, Mass. Filed Jan. 8, 1930. Serial No. 418,182. 13 Claims. (Cl. 149—4.)



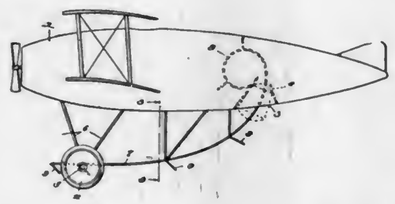
1. A method of manipulating tender hides that comprises first swinging the hides back and forth in a degreasing liquid, and then tanning the hides.

1,824,550. CARGO CARRIER FOR AIRCRAFT. CHARLES HUNTINGTON JACOBS, San Francisco, and ASA F. HARSHBARGER, Oakland, Calif. Original application filed Sept. 10, 1925, Serial No. 55,504. Divided and this application filed Dec. 26, 1929. Serial No. 416,630. 12 Clams. (Cl. 258—1.)



1. A cargo carrier adapted to be loaded into aircraft while the latter is in motion comprising a light, hollow shell having a detachable cover plate, and elongated wing members extended from the shell at substantially diametrical points.

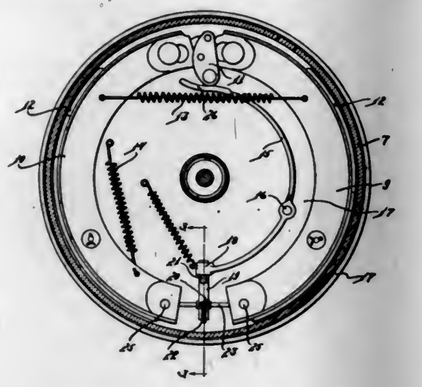
1,824,551. CARGO-CARRIER SUPPORT. CHARLES HUNTINGTON JACOBS, San Francisco, and ASA F. HARSHBARGER, Oakland, Calif. Original application filed Sept. 10, 1925, Serial No. 55,504. Divided and this application filed Dec. 26, 1929. Serial No. 416,631. 14 Claims. (Cl. 258—1.)



1. A support for a cargo carrier comprising a plurality of upright standards having rounded bases weighted at the bottoms and with means at the tops whereon may rest a cargo carrier at a plurality of points.

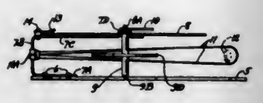
1,824,552. VEHICLE BRAKE. ALEXANDER KHEZARJIAN, Detroit, Mich. Filed Nov. 18, 1929. Serial No. 407,855. 1 Claims. (Cl. 188—79.5.)

A device of the class described, comprising: a brake drum; a pair of brake shoes movably mounted in said braked rum; a brake lining on the periphery of each of said brake shoes engageable with said brake drum upon the movement of said shoes outwardly from each other; means for moving said shoes outwardly from each other, each of said shoes having at one end a socket, the sockets in the oppositely positioned shoes being in alignment; a threaded nut rockably mounted in each of said sockets; a rod threaded at its opposite ends and threaded through each of said nuts; a ratchet wheel fixedly mounted on said rod intermediate its ends and positioned between the adjacent ends of said shoes; a bow shaped resilient arm rockably mounted in said drum; a spring arm carried by said bow shaped arm and projecting over and normally in engagement with the periphery of said ratchet wheel, said spring arm having a slot formed therein, said bow shaped arm being rocked upon movement of said shoes outwardly beyond a predetermined distance for effecting engagement



of one of the teeth of said ratchet wheel in said slot; and resilient means for returning said bow shaped arm to normal position subsequent to outward movement of said shoes as aforesaid for effecting a rotation of said rod and maintaining the adjustment of said shoes relatively to said brake drum.

1,824,553. GAME DEVICE. AXEL L. LARSEN, St. Paul, Minn. Filed Apr. 23, 1930. Serial No. 446,547. 2 Claims. (Cl. 273—141.)



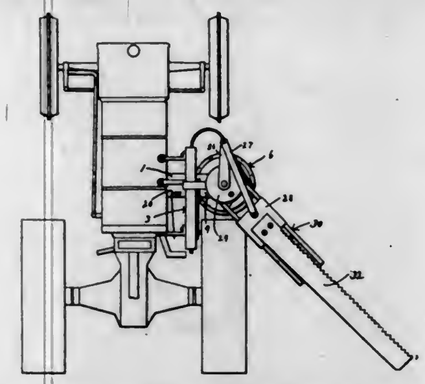
1. A game device of the class described, comprising a base, a frame fixed on said base and comprising two vertically spaced parallel arms and an upright post connecting said parallel arms integrally, a vertical spindle journaled in the upper frame arm and in the base and protruding above said arm, an actuating disc on said spindle, circular game-disc means adapted to be removably held on said upper frame arm concentric of said spindle, an elastic element fixed to said post and adapted to be stretched in a horizontal line tangential of the actuating disc to contact with the said disc when released, to cause rotation of the spindle by the contraction of the elastic element.

1,824,554. AUTOMATIC BRAKE FOR TRAILERS. WILLIAM CHARLES LATHERS, Beloit, Wis. Filed Aug. 1, 1930. Serial No. 472,340. 1 Claims. (Cl. 188—112.)



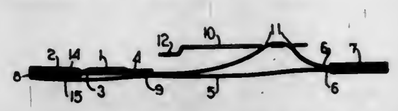
A trailer of the type described, comprising a frame, axles on said frame, and wheels mounted on said axles, brakes associated with said wheels, brake operating shafts associated with said brakes, and brackets mounted on said axles for supporting said brake operating shafts, and levers on one end of said brake operating shafts, said levers connected by equalizing means, and a spring attached to the frame of the trailer to said equalizing means for maintaining said brakes in inoperative position, and a brake operating cable affixed at one end to said equalizing means and its other end projecting forward of said trailer frame; a hollow tubular draw bar pivoted to one of said axles, a brake operating bar mounted to slide telescopically in said hollow tubular draw bar, coupling means at the outer end of said bar, and attaching means at the forward end of said cable, a toothed rack on the upper side of the inner end of said bar, and a slot transversely through said bar at its ends; a hollow projection on the lower side of said tubular draw bar and a pair of pulleys arranged in said hollow projection, a housing mounted on the upper side of said hollow tubular draw bar adapted to register with the slot in said upper side of said pivoted draw bar, a pinion mounted for rotation transversely in said housing and projecting through said slot into said housing, said pinion adapted to engage the said rack on the sliding bar, and dogs pivoted in the ends of said housing adapted to selectively engage the teeth of said pinion, to retain said bar against longitudinal movement, and a hub on the outer end of the pinion wheel shaft having bores adapted to receive means for manually turning said pinion.

1,824,555. POWER SAW. PAUL LATHERS, Beloit, Wis. Filed Sept. 8, 1930. Serial No. 480,496. 3 Claims. (Cl. 143—62.)



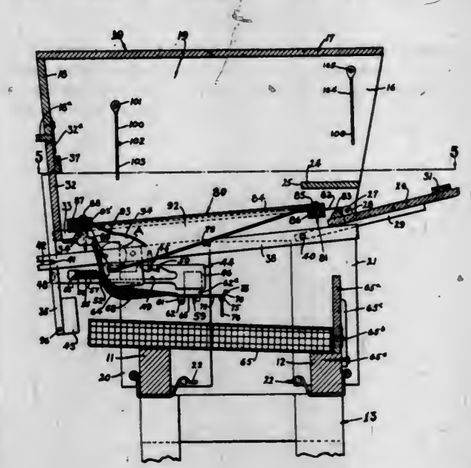
1. A tractor including in combination, a clutch housing, a longitudinally extensible adjustable member, means for pivotally supporting said member adjacent said clutch housing, said member including a gear chamber, a drive shaft operatively connected with the prime mover of the tractor and extending into said clutch housing, a driven shaft, clutch means operatively connecting said shafts, said last mentioned shaft having a gear thereon arranged in said gear chamber, a third shaft slidably supported axially of said longitudinally extensible adjustable member for movement relative to the first mentioned shafts upon adjustment of said longitudinally extensible adjustable member, a second gear arranged in said gear chamber and slidably engaged with the last referred to shaft, said second gear adapted to mesh with the first mentioned gear, for transmitting rotary motion to said last mentioned shaft, a crank arm carried by said last mentioned shaft adjacent one end of said longitudinally extensible adjustable member, a cutter member, means for supporting said cutter member at right angles to the longitudinal axis of said longitudinally extensible adjustable member, whereby said cutter member may be moved on a plane parallel to the axis of said longitudinally extensible adjustable member upon adjustment of said member, and means operatively connecting said cutter with said crank arm for transmitting reciprocatory movement to said cutter upon rotation of the last mentioned shaft.

1,824,556. GARMENT SUPPORT. WINFIELD S. LAPWORTH, Hopedale, Mass. Filed July 15, 1931. Serial No. 550,829. 4 Claims. (Cl. 24—245.)



1. A fastening device for securing a garment or other fabric in a desired position comprising an anchoring member, a flat rigid clamping frame having apertures therein, a flexible tape threaded through said apertures embracing portions of said frame and secured to said anchoring member, said tape presenting a clamping socket accessible through one of said apertures in said frame and a locking member slidably engaging the said tape operable to secure a garment or other fabric to said frame by inserting one end thereof in said clamping socket together with a portion of the area of the garment or other fabric whereby said garment or fabric will be secured therein by the clamping pressure existing between the tape, the locking member and the frame which is proportional to the stress acting to separate the garment from the fastener.

1,824,557. AUTOMATIC TRAP NEST. CHARLES J. LOEHR, Los Angeles, Calif. Filed Mar. 21, 1927. Serial No. 176,938. 11 Claims. (Cl. 119—47.)

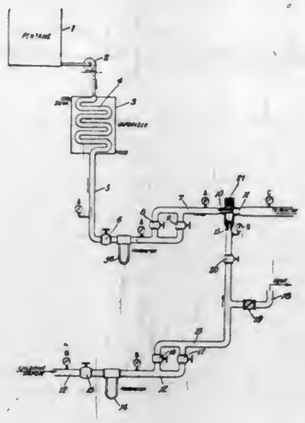


1. A trap nest including a receptacle, a laying nest in said receptacle, an entrance door to said receptacle, an exit door from said receptacle, a trigger mechanism associated with said exit door, a spring associated with said trigger for moving said trigger in one direction, said trigger mechanism being adapted to retain said exit door in both a closed position and in a partly open position, and egg operated means adapted to actuate said trigger mechanism to cause said exit door to move to partly open position.

1,824,558. CHLORINATION OF ORGANIC COMPOUNDS. GEORGE P. LUNT, Boston, Mass., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 14, 1927. Serial No. 183,666. 15 Claims. (Cl. 260—166.)

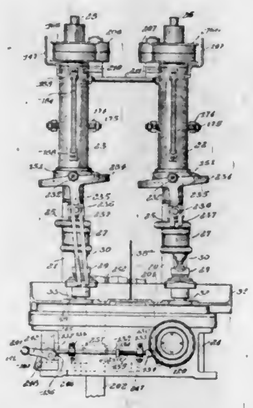
1. In the chlorination in vapor phase of hydrocarbons that react with chlorine at a low velocity at the temperature at which the hydrocarbon is in vapor form, the steps for bringing together the hydrocarbon vapor and chlorine gas in one zone to form a mixture thereof without ignition or explosion preparatory to passing that mixture to the

influence of a reacting agent in another zone, said steps comprising maintaining the hydrocarbon in vapor form under pressure, releasing the vaporized hydrocarbon into a



zone of lower pressure, introducing chlorine into the vapor at such lower pressure, and passing the resulting mixture to the influence of a reacting agent in another zone.

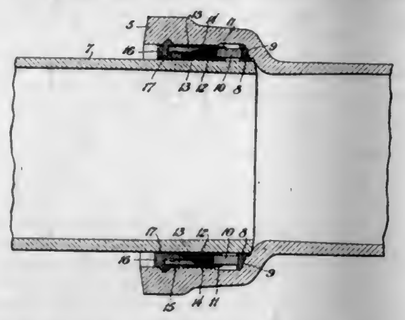
1,824,559. LENS SURFACING MACHINE. JOSEPH J. MCCABE, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 26, 1927. Serial No. 171,310. 19 Claims. (Cl. 51—119.)



1. In a machine of the class described, the combination with a lens block and a tool adapted to cooperate therewith, of means for bodily rotating said lens block, crank means for moving said tool in a curved path, means for operating said crank means at a constant rate of speed, and means for constantly changing the throw of said crank means to vary the speed of movement of said tool.

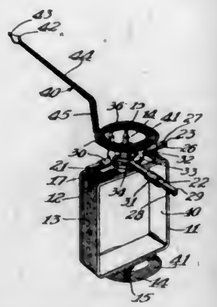
1,824,560. PIPE JOINT. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Feb. 20, 1929. Serial No. 341,407. 6 Claims. (Cl. 285—115.)

1. A bell and spigot pipe joint comprising, in combination, a calked primary seal at the bottom of the bell; an intermediate rubber gasket; a calked lead ring in the mouth of the bell; and a plastic parting substance between the spigot and said calked lead ring to permit the spigot to slide longitudinally with respect to the bell due



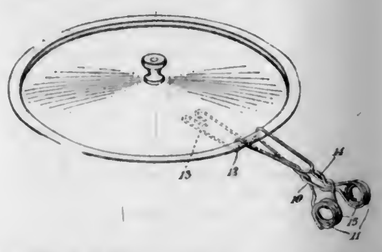
to expansion and contraction without disturbing the calked lead ring and ultimately causing leakage through the joint.

1,824,561. BALANCE MECHANISM FOR INSTRUMENTS. JOHN H. MILLER, Oak Park, Ill., assignor to Jewell Electrical Instrument Co., Chicago, Ill., a Corporation of Illinois. Filed May 8, 1930. Serial No. 450,863. 6 Claims. (Cl. 171—95.)



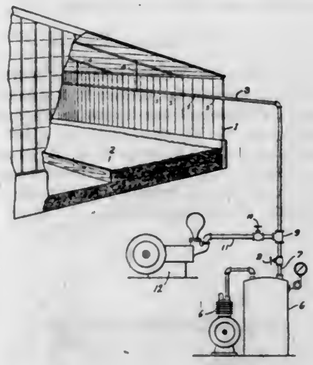
1. In a measuring instrument, the combination of a support with a rotating movement, a balance mechanism comprising an outwardly projecting arm including a plurality of resilient members, and a balance weight carried by said resilient members and frictionally engaged thereby.

1,824,562. ARTICLE HOLDER. RUDOLF MUHLICHEN, Hoboken, N. J. Filed Apr. 30, 1931. Serial No. 533,896. 6 Claims. (Cl. 294—29.)



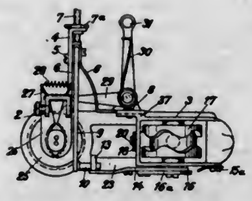
1. An article holder, comprising two members having looped ends hingedly connected at these ends and adapted to independently swing from or towards one another over their entire length for the purpose described.

1,824,563. GREENHOUSE AERATOR. GEORGE WILEY O'CONNOR, Grand Rapids, Mich. Filed Sept. 24, 1928. Serial No. 307,918. 2 Claims. (Cl. 47—17.)



1. A greenhouse having plant beds therein, a discharge pipe in spaced relation above said plant beds, said pipe having discharge orifices for directing fluid discharged therefrom down onto plants in said plant beds, and means for alternately or simultaneously supplying water and air under pressure to said discharge pipe for sprinkling and aerating respectively, plants in said plant beds.

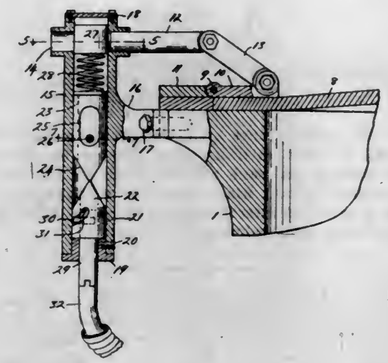
1,824,564. SEWING MACHINE ATTACHMENT FOR SEWING ON BUTTONS. FRANZ OTTO, Magdeburg, Germany, assignor of one-half to Willy Küstermann, Culbe-on-the-Saale, Germany. Filed July 21, 1928, Serial No. 294,505, and in Germany Dec. 31, 1926. 1 Claim. (Cl. 112—115.)



An apparatus for sewing on buttons which is detachably mounted on the cloth presser bar of existing sewing machines and actuated by the needle bar, comprising in combination with the cloth presser bar, a clamp screwed on said presser bar, a frame, a guide on said frame, and a common bent carrier slidably mounted at one end in said guide and slidably connected at the other end to said carrying clamp in such a manner that the apparatus is adjustable in the transverse and longitudinal directions of the machine to allow for differences in the distances between the presser- and needle-bars in different makes of machines and to enable the sewing-on of both two- and four-hole buttons.

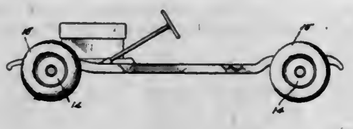
1,824,565. LOCKING MECHANISM FOR EXTRACTOR COVERS. ALFRED PARTLOW, Lincoln Park, Mich., assignor, by mesne assignments, to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1928. Serial No. 264,763. 7 Claims. (Cl. 192—136.)

2. The combination with an extractor comprising a curb, a cover for said curb, and a basket rotative in said curb, of a locking device for said cover comprising a sliding plunger having a cam portion, means restraining said plunger from rotation, means for restraining said cover against opening movement in one limiting sliding position of said plunger, a cam member rotatively coacting with the



cam portion of said plunger to shift the plunger to its locking position, and a common drive means for said cam member and basket.

1,824,566. AUTOMOBILE CONSTRUCTION. CLYDE R. PATON and TOM S. SLIGH, Jr., South Bend, Ind., assignors, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 21, 1927. Serial No. 162,464. 7 Claims. (Cl. 280—87.)



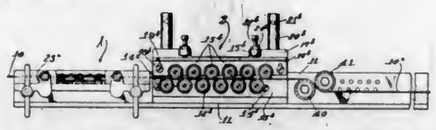
1. In combination with an automobile subject to tramping, a vertically extending support carried by the front axle thereof, a mass slidably mounted on said support, spring means co-operating with said mass imparting thereto a natural period of vibration causing said mass to vibrate in sympathy with said tramping movement, and means for frictionally resisting movement of said mass.

1,824,567. MARKING AND SEALING TAG. JOANNUS JACOBUS PERQUIN and HENRI JACOBUS FRANCKEN, The Hague, Netherlands. Filed Jan. 8, 1929, Serial No. 331,038, and in the Netherlands Jan. 14, 1928. 4 Claims. (Cl. 40—3.)



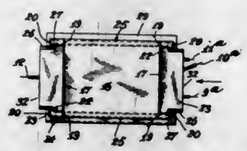
1. A marking and sealing tag comprising a sheet metal strip having a narrowed point at one end and a substantially circular head at the opposite end provided with a slot for the reception of the point and a substantially circular cap on the head, covering the slot and having a continuous peripheral portion bent around the peripheral edge of the head.

1,824,568. METHOD OF TREATING WIRE. ROBERT C. PIERCE, Niles, Mich., assignor to National-Standard Company, Niles, Mich., a Corporation of Michigan. Filed Oct. 25, 1929. Serial No. 402,521. 4 Claims. (Cl. 140—148.)



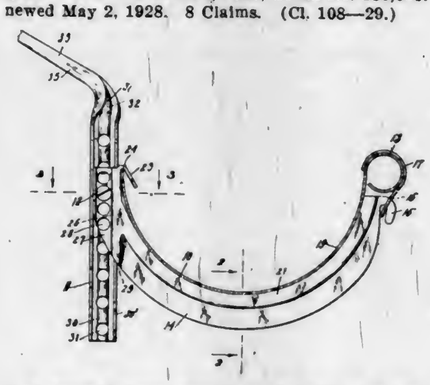
1. In the manufacture of a reinforcing element for a tire bead, the method of treating wire to be used as a tension member in said reinforcement to increase the stretchability of said wire, consisting of subjecting said wire to a series of alternate opposite bends until the desired degree of stretchability is obtained.

1,824,569. ELECTRICAL CONDENSER. WILLIAM H. PRIESS, Upper Montclair, N. J., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Filed Jan. 6, 1922, Serial No. 527,449. Renewed Feb. 13, 1931. 22 Claims. (Cl. 175—41.)



1. In an electrical condenser, a stack comprising alternate sheets of foil and dielectric, a clamp surrounding said stack, exerting pressure thereon and open at its opposite ends, insulating sheets interposed between said stack and clamp and projecting at opposite ends beyond the ends of the clamp providing box-like structures of insulating material at opposite ends, and terminal leads from said condenser extending through said box-like structures.

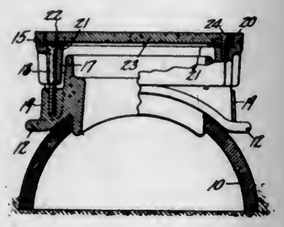
1,824,570. GUTTER HANGER. MAX RACHLIN, Brooklyn, N. Y. Filed Mar. 31, 1927, Serial No. 180,035. Renewed May 2, 1928. 8 Claims. (Cl. 108—29.)



1. A gutter hanger circle stamped from a single strip of sheet metal curved edgewise in an arc of a circle and including a body portion having a flange forming a gutter seat and a groove adjacent said flange, a vertically extending heel portion, and a vertically extending rib bent out from said heel portion, said rib being apertured and said heel portion being provided with a groove extending in parallel relation to said rib throughout the entire length of the latter and disposed between said rib and said flange and merging with said first-mentioned groove.

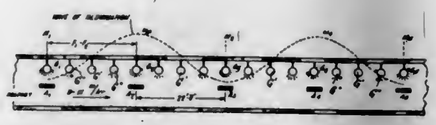
5. A gutter hanger shank of channel formation stamped from a single strip of sheet metal and comprising a vertically extending stem apertured substantially throughout its length, a roof attaching portion extending at an angle to said stem, and a rib formed at the juncture of said stem and said roof attaching portion, said rib extending into the channel of both said stem and said roof attaching portion.

1,824,571. INSERT FOR UNDERFLOOR WIRING DUCTS OR THE LIKE. HENRY F. RICHARDSON, Northport, N. Y., assignor of one-fourth to Henry F. Richardson, Northport, N. Y., one-fourth to Allan Coggeshall, Pleasantville, N. Y., one-sixth to S. R. Bradley, Nyack, N. Y., one-sixth to A. M. Cregier, Orangeburg, N. Y., and one-sixth to Alonzo B. Bradley, New York, N. Y. Filed May 6, 1927. Serial No. 189,291. 1 Claim. (Cl. 247—28.)



In combination, a perforated conduit wall, and an insert fitting comprising a centering portion adapted to enter in the conduit wall, and having a surrounding flange adapted to seat on the conduit wall and extending laterally therefrom.

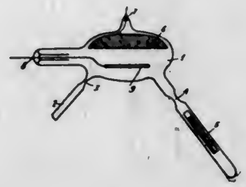
1,824,572. ILLUMINATING SYSTEM FOR REGULATING TRAFFIC. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,409. 19 Claims. (Cl. 177—352.)



6. A method for guiding traffic composed of independent, moving units, along a predetermined path in such a manner that the units may space themselves a constant distance apart and may travel at the same speed, which consists in generating pulsating electrical energy of a predetermined voltage, transmitting the energy through a transmission path positioned along said traffic path, generating additional energy of a voltage approximately equal to that of the pulsating energy, transmitting the additional energy through the transmission path in such a manner that the energy voltages are neutralized and reinforced at predetermined points of the said transmission path at a frequency equal to the desired speed of said units, and causing indicators to indicate points of voltage reinforcement.

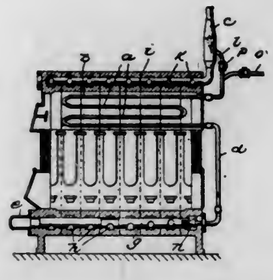
7. In combination, in a traffic system, an electric transmission line including one, or more, sections containing distributed reactances of predetermined values, a source of pulsating current at each end of the line, a plurality of equally spaced illumination means associated with the line, said pulsating currents being of such relative magnitudes and different frequencies that waves of illumination travel along the line with a frequency equal to the difference of the said frequencies.

1,824,573. PHOTO-ELECTRIC TUBE. FRITZ SCHRÖTER, Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed May 13, 1926, Serial No. 108,911, and in Germany July 8, 1925. 5 Claims. (Cl. 250—27.5.)



1. A photo-electric cell provided with a light sensitive cathode and an anode member, said light sensitive cathode being formed of an alkali metal to which a very small portion of cæsium is added for the purpose of accentuating the photo-electric effect and raising the critical potential at which glow discharge is started.

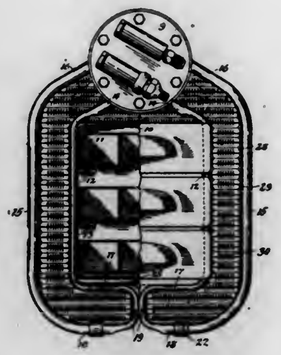
1,824,574. DEVICE FOR INCREASING THE WATER CIRCULATION AND FOR DECREASING BOILER RESISTANCES TO FLOW IN CENTRAL HEATING PLANTS. EMIL SCHÜNEMANN, Hamburg, Germany. Filed June 17, 1929, Serial No. 371,605, and in Germany June 25, 1928. 6 Claims. (Cl. 122—406.)



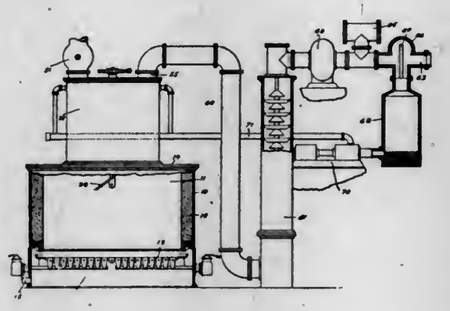
1. A device for increasing the water circulation and tending to equalize the return flow within a boiler, comprising a distributer pipe receiving the return flow of the water and delivering it at a plurality of points within the boiler, an outlet pipe for delivering hot water from the boiler, and a water heating coil having the inlet end in communication with the distributer pipe to thereby create a suction on the water flowing through said pipe, the outlet end of the coil connected to the outlet pipe for delivering the flow from the coil into the heated water flowing from the boiler at a point beyond the boiler.

1,824,575. COOLING UNIT FOR REFRIGERATORS. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Apr. 27, 1927. Serial No. 186,878. 8 Claims. (Cl. 62—126.)

1. A cooling unit for refrigerators, comprising a cooling compartment, a header arranged over said compartment, and a plurality of refrigerant conducting tube loops each of which has upright sections arranged adjacent to the same side of said compartment and both connected at their upper ends with the same side of said header and the lower parts of said upright sections being connected by a return bend which is arranged underneath said compartment, and the parts of said return bend being arranged one above another.



1,824,576. METHOD OF AND APPARATUS FOR PREPARING FUEL AND GENERATING GAS THEREFROM. HARRY F. SMITH, Dayton, Ohio, assignor to The Gas Research Co., Dayton, Ohio, a Corporation of Ohio. Filed Sept. 20, 1921. Serial No. 501,887. 27 Claims. (Cl. 202—31.)

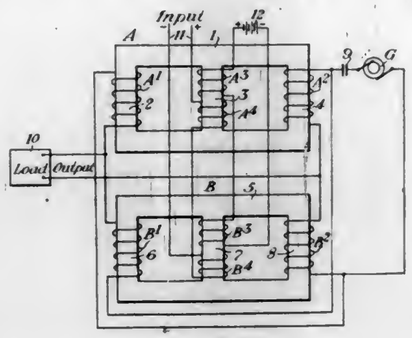


1. The method of preparing coal for use in the generating chamber of a gas producer, which comprises feeding the coal toward the generating chamber of the producer, subjecting such fuel as it is being thus fed toward the generating chamber to a heating action to evolve tar therefrom, alternately compacting the fuel admixed with such evolved tar and breaking up the resulting compacted mass, while subjecting it to further heating tending to effect coking thereof, and breaking up the treated fuel into lumps of suitable size and feeding these lumps into the generating chamber of the producer.

1,824,577. ELECTRICAL TRANSLATING APPARATUS. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 7, 1930. Serial No. 426,564. 15 Claims. (Cl. 171—119.)

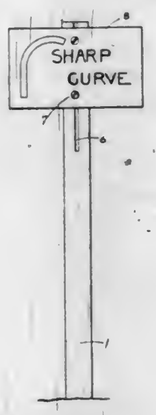
1. In combination, a core carrying a first and a second winding, a third winding, a load connected across said first

and third windings, a fourth winding connected in series with said second winding across said load to form a bridge having said first and second windings in opposite arms and having said load connected across two corners of the



bridge, a source of alternating current connected across the remaining corners of said bridge, and an input circuit inductively related with said core and operating when supplied with current to cause similar changes in the impedances of said first and second windings.

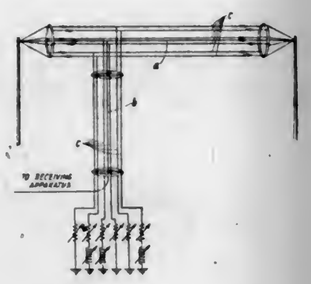
1,824,578. REMOVABLE SIGN SUPPORTING DEVICE. HENRY G. THAKE, Great Bend Township, Cottonwood County, Minn. Filed July 8, 1929. Serial No. 376,622. 3 Claims. (Cl. 40—145.)



1. In a supporting standard, a supporting tube adapted for being embedded in the soil, a plug rigidly positioned within the tube, a rigid transverse element above the upper surface of the plug, a removable standard, and grooves in the lower end of the standard adapted to cooperate with the transverse element.

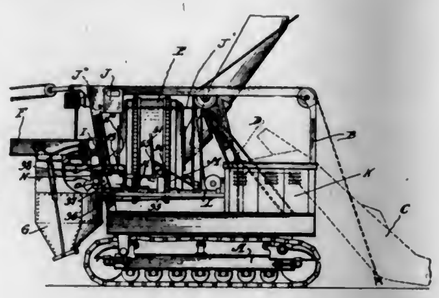
1,824,579. AERIAL RECEIVING SYSTEM FOR WIRELESS SIGNALING. TOM GORDON THRELKELD and ARTHUR WILLIAM WRIGHT BUTTERFIELD, Manchester, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 2, 1925, Serial No. 6,182, and in Great Britain Feb. 6, 1924. 3 Claims. (Cl. 250—33.)

1. In combination, an aerial for a receiving circuit, a plurality of conductors supported in parallelism to said aerial, grounded leads connected to said conductors, and adjustable impedances in said leads solely adjacent the



ground connections of said leads the impedance in at least one of said leads being purely resistive, the impedance in at least another of said leads including inductance.

1,824,580. CONTROL MECHANISM FOR CONCRETE PAVING MACHINES. EMIL L. TRANAAS, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Dec. 10, 1929. Serial No. 413,029. 34 Claims. (Cl. 83—73.)

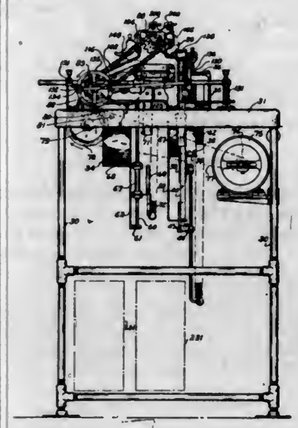


1. In a paving machine, in combination, a concrete mixer, charging means therefor, discharging means therefor, power operated means for actuating said charging and discharging means, a timing device for the control of the operation of the discharging means, an operating connection intermediate the timing device and the power operated means to initiate the operation of the power operated means, means whereby said connection is normally inactive, and means manually to render said connection operative.

1,824,581. PUNCHED CARD ACCOUNTING MACHINE. CHARLES A. TRIPP, Indianapolis, Ind., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed June 9, 1917. Serial No. 173,760. 85 Claims. (Cl. 235—60.)

19. In combination, electrical contact mechanism cooperating successively with a series of cards and controlled by punchings in said cards, said contact mechanism having a plurality of contacts, power-operated adding mechanism, and electro-magnetically operated means controlled by said contact mechanism for selectively causing said adding mechanism to accumulate or to totalize.

60. In combination, automatic registering mechanism; automatic total-taking mechanism; and means for automatically initiating automatic total-taking by said total-taking mechanism.



69. In a card accounting machine, automatic registering mechanism controlled by record cards, means for feeding the cards thereto, and means controlled by a record card having variant characteristics from certain of the other cards for stopping and automatically resuming the operation of the feeding means.

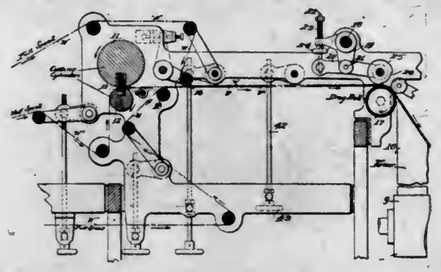
1,824,582. BROOM TENSIONING DEVICE. STEPHEN G. WILSON, Philadelphia, Pa. Filed Mar. 23, 1931. Serial No. 524,611. 9 Claims. (Cl. 15—17.)



1. In a broom tensioning device, a body portion, means to fasten the body portion to the broom, said body portion having openings longitudinally spaced from each other, a carrier, and a wire surrounding the broom and connected with said carrier with its free ends laterally deflected and movably carried by said carrier whereby they can be brought together and passed through a selected opening to provide a pivotal movement therewith of the carrier.

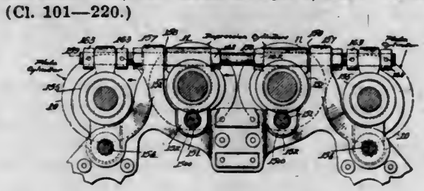
1,824,583. HALF SPEED SHEET INSERTING MECHANISM. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Dec. 3, 1926, Serial No. 152,402. Renewed Feb. 25, 1930. 11 Claims. (Cl. 270—41.)

1. In web forwarding mechanism, the combination with means for forwarding a web and means for forwarding a second web in contact therewith at half the speed of the first web, of means for perforating the half speed web



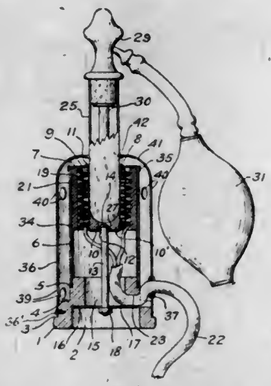
across at paper length intervals, and means for nipping both webs and positively advancing them at full speed to separate the forward sheet from the half speed web.

1,824,584. PRINTING COUPLE SUPPORTING MEANS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 4, 1923, Serial No. 655,778. Renewed Apr. 6, 1929. 13 Claims. (Cl. 101—220.)



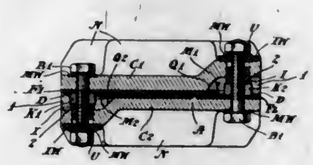
1. In a printing press, the combination with a printing couple, of means for supporting both of the printing cylinders on axes below the centers of the cylinders, and means for positioning the said cylinders with relation to one another located above the level of the said supporting means.

1,824,585. ELECTRIC HEATING DEVICE. FRANK E. WOLCOTT, West Hartford, and LOUIS V. LUCIA, Hartford, Conn., assignors, by mesne assignments, to The Beardsley & Wolcott Mfg. Co., a Corporation of Connecticut. Filed Nov. 23, 1927. Serial No. 235,316. 5 Claims. (Cl. 219—19.)



1. In combination, a base, an upstanding ferrule connected to the base housing electric heating means and having a central socket member heated thereby, and heat insulating means for said ferrule including an outer shell spaced therefrom and provided with an apertured end spaced therefrom and having an aperture overlying the socket of said socket member.

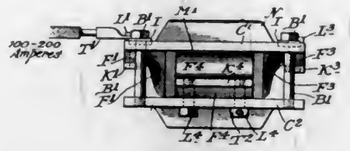
1,824,586. ELECTRICAL CONDENSER. WILLIAM M. BAILEY, Lynn, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Filed May 27, 1924. Serial No. 716,107. 5 Claims. (Cl. 175—41.)



1. In an electrical condenser consisting of a stack of metal foils and dielectric sheets, wherein portions of the foils distributed substantially throughout the length of the stack project out therefrom, the improvement comprising a two-part metal casing engaging the opposite ends of the stack, said casing-parts being electrically insulated from one another and in direct thermal and electrical connection with sets of projecting portions of said distributed foils; means for drawing together said casing-parts as compression members to compress the stack from end to end; and heat-resistant insulating material covering the sides of the stack not engaged by said casing-parts, and protecting them from access of air or moisture to the interior of the stack.

5. An electric condenser comprising spaced rigid metal plates, a stack of dielectric and armature members between said plates, clamping means for the stack, laterally extending flexible armature members of one polarity clamped to one end plate, laterally extending flexible armature members to another polarity clamped to the opposite end plate, and clamping means for the projecting flexible armature members, said last mentioned clamping means and the stack clamping means being separately adjustable.

1,824,587. ELECTRICAL CONDENSER. WILLIAM M. BAILEY, Lynn, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Original application filed May 27, 1924, Serial No. 716,107. Divided and this application filed Mar. 30, 1926. Serial No. 98,411. 8 Claims. (Cl. 175—41.)

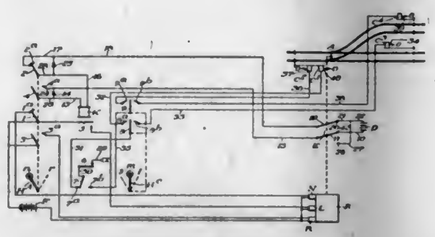


1. A construction for an electrical condenser of the foil-stack type adapting it for high duty involving substantial internal heating, such construction including two substantially massive and rigid metal stack-compressing plates respectively engaging the entire surfaces of the end faces of the stack and extending laterally beyond four side portions of the stacked dielectric sheets, said compressing plates themselves having substantially large heat-dissipating surfaces and the plates being formed on their surfaces exposed from the stack with metal projections also having substantially large heat-dissipating surfaces; a plurality of substantial metal rods cooperating with said four plate-extensions and insulated from at least one of the plates and compressing the surfaces of the stacked dielectric sheets into good thermal contact with the foil-sheets, and four foil-clamping devices located laterally of the stacked dielectric sheets and between the two end plates and cooperating with said four plate-extensions; the two sets of foils which are in inductive relation to one another as armatures in the stack projecting laterally from the stack in four bunches into positions adjacent the stack-side surfaces of said four lateral plate-extensions and between said plate extensions and said foil-clamping devices, whereby the individual foils of each bunch are clamped together and the several foil-bunches are clamped to said heat-dissipating plates in direct metallic thermal contact therewith.

1,824,588. DUST LAYER HAVING IMPROVED HYGROSCOPIC PROPERTIES. EDWIN O. BARSTOW and SHELDON B. HEATH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Nov. 6, 1928. Serial No. 317,684. 14 Claims. (Cl. 94—25.)

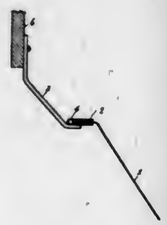
1. The method of laying dust which comprises distributing on the surface to be treated a mixture of $CaCl_2$, $MgCl_2$ and water in which the $MgCl_2$ content is 6 to 10 per cent. of the $CaCl_2$ content thereof.

1,824,589. RAILWAY TRAFFIC CONTROLLING APPARATUS. GODFREY BAUMGARTNER, Astoria, N. Y., assignor to The Union Switch & Signal Company, Swissdale, Pa., a Corporation of Pennsylvania. Filed Mar. 11, 1930. Serial No. 434,918. 19 Claims. (Cl. 246—3.)



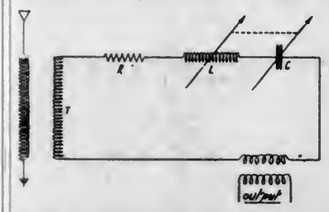
1. In combination, a railway switch having normal and reverse positions, a manually operable lever having normal and reverse positions, an indication relay, means for energizing said indication relay when and only when said switch and said lever occupy corresponding positions, and means for preventing operation of said switch unless said relay is deenergized.

1,824,590. DIAPHRAGM-EQUIPPED ACOUSTIC APPARATUS. MARCEL BERNARD, Paris, France. Filed June 7, 1929, Serial No. 369,076, and in France June 14, 1928. 3 Claims. (Cl. 181—31.)



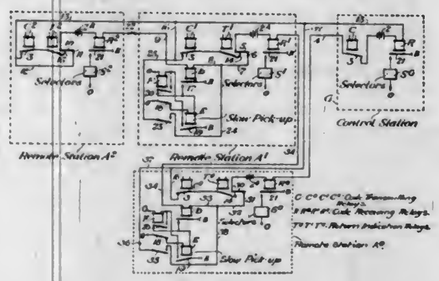
1. Acoustic apparatus comprising a diaphragm, a rim on said diaphragm presenting a cylindrical surface, a support for the diaphragm, and metallic elements fixed to the support and bearing elastically against the interior face of said cylindrical surface.

1,824,591. AMPLIFIER. JOSEPH BETHENOD, Paris, France. Filed Apr. 27, 1925, Serial No. 25,977, and in France May 26, 1924. 10 Claims. (Cl. 179—171.)



1. The method of amplifying alternating current by the use of an oscillating circuit having an inductance L and a capacitance C, which consists in periodically and simultaneously varying the inductance L and capacitance C at a high frequency that is lower than that of the current to be amplified.

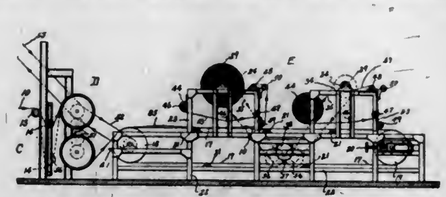
1,824,592. REMOTE CONTROL SYSTEM. CHARLES A. BROOKS, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 23, 1928. Serial No. 301,626. 2 Claims. (Cl. 177—353.)



1. In a remote control system, a normally closed circuit extending from a control station to a plurality of remote stations, said circuit including in series a code transmitting device at the control station, code transmitting means at each remote station and a source of energy at each station, a protection relay at each remote station except the last serially included in said circuit, means at each remote station except the last for placing a shunt across said circuit at such station so that the local source of current and the local code responsive means are included in the portion of the circuit leading to the control station and the local protection relay is included in the portion of the circuit leading to the next more remote station, means whereby each of said protection relays causes the corresponding shunting means to complete the corresponding shunt when said normally closed circuit is broken for a time interval greater than the maximum time interval said circuit is broken during the transmission of codes by the code transmitting means, whereby upon a break in the circuit at any point the protection relay at each remote station becomes de-energized to cause the operation of the associated shunting means and remains de-energized until the circuit therefor is completed by the shunt applied by the relay at the more remote station or by the repair of the break in said circuit.

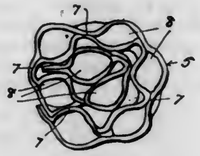
1,824,593. WIND-UP MECHANISM. MARTIN CASTRICUM and PERCY L. BUTTERFIELD, Springfield, Mass., assignors to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Apr. 3, 1925. Serial No. 20,398. 2 Claims. (Cl. 242—55.)

1. In combination, a calender, a delivery conveyor, a plurality of windup devices associated with the conveyor and adapted to receive calendered web material therefrom alternatively, separate drives for the calender and the delivery conveyor, separate means to vary the respective



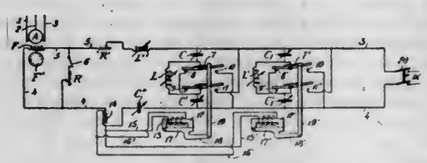
speeds of said drives to synchronize the speed of the conveyor with the speed of the delivery of material thereto and means acting independently of said synchronising means to slow down both drives simultaneously.

1,824,594. PASTRY. MICHAEL CONFORTO, Philadelphia, Pa. Filed Jan. 29, 1930. Serial No. 424,196. 1 Claim. (Cl. 99—10.)



The process of producing an article of pastry which consists of making a dough, flattening the same, cutting said dough into strips, bringing the edges together at intervals to provide spaced chambers, then winding said chambered strip from one end to the other to form a coil, then cooking said coil in oil and finally applying honey to said coil.

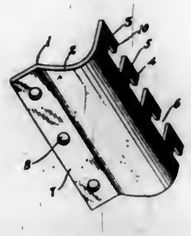
1,824,595. ALTERNATING CURRENT MOTOR REGULATION. RUPERT N. EARLY and SANFORD P. BORDEAU, Minneapolis, Minn., assignors to Electric Machinery Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Dec. 31, 1927. Serial No. 243,909. 14 Claims. (Cl. 172—274.)



1. The method of operating an alternating current motor, comprising, producing a revolving flux from the primary member, causing the revolving flux to generate a magnetization of slip frequency on the secondary member along an axis which is fixed with respect to the secondary member, and establishing a resonant or nearly resonant circuit comprising the fixed magnetization producing winding and tuned to a selected slip frequency.

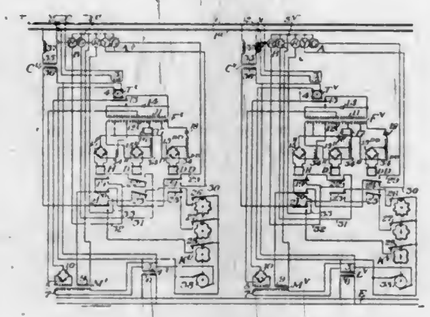
7. In a polyphase motor, a primary and a secondary member, a winding on the secondary in inductive relation to the primary and adapted to produce a magnetization of slip frequency along one axis per pole pair, and a static condenser in circuit with the winding on the secondary and having a capacity adjusted to cause the circuit of said winding to resonate at a selected slip frequency.

1,824,596. PIPE CLAMP. HENRY EISENBERG, New York, N. Y. Filed Apr. 22, 1930. Serial No. 446,236. 5 Claims. (Cl. 24—19.)



1. A clamp comprising a pair of mutually engaged members having rounded portions adapted to fit about a portion of a pipe, said members having their edges provided with oppositely extending, longitudinally interlocking projections, and means passing through the opposite edges of said members for securing them to a pipe.

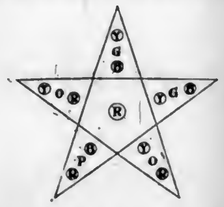
1,824,597. RAILWAY TRAFFIC CONTROLLING APPARATUS. CHARLES W. FAILOR, Forest Hills Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1930. Serial No. 429,290. 2 Claims. (Cl. 246—38.)



1. In combination, a stretch of railway track divided into sections, a track relay and three decoding relays H, D and DD for each section; means controlled by the decoding relays for each section for supplying the rails of the section next in the rear with alternating current peridoically interrupted at one rate when relay H is deenergized, at a second rate when relay H is energized and relays D and DD are deenergized, and at a third rate when relay H and either relay D or DD are energized; each track relay being responsive to the periodic interruptions of the alternating current thus supplied to the rails of its section; means controlled by each track relay for energizing the associated relay H in response to alternating current periodically interrupted at the first rate, relays H and D in response to alternating current periodically interrupted at the second rate, and relays H and DD in response to alternating current periodically interrupted at the third rate; and signals for the sections controlled by said decoding relays.

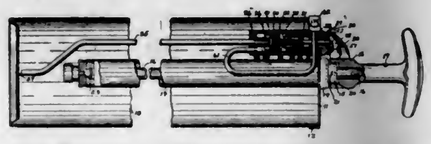
1,824,598. PAINTING CHART. EDWARD P. HOLDER, New York, N. Y. Filed July 23, 1928. Serial No. 294,861. 3 Claims. (Cl. 35—12.)

1. An educational device, for teaching children colors, comprising a chart having an outline of a figure thereon; lines dividing the figure into divisions; a plurality of spots of water color paints of different color disposed on the chart within a division of the figure; and an indication



on the chart within said division of the figure giving the name of the color obtained by a mixing of the colors which are disposed in that division of the figure.

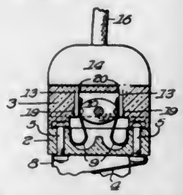
1,824,599. FIRE EXTINGUISHER. ROSCOE C. IDDINGS, Dayton, Ohio, assignor to The Fyr-Fyter Company, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 3, 1924. Serial No. 696,429. 23 Claims. (Cl. 299—96.)



1. In a fire extinguisher, a liquid container, a discharge nozzle therefor, a valve casing having an inlet for liquid from the container and an outlet connected to said nozzle, means for forcing a liquid from the container to the said valve casing, a valve adapted to close said inlet, a spring adapted to open said valve, a second spring tending to resist the action of the first spring and to urge the valve toward closed position but normally under insufficient tension to overcome the action of said first spring, and manually operable means effective only during periods of non-operation of the extinguisher for increasing the tension of the second spring to cause said second spring to close said valve.

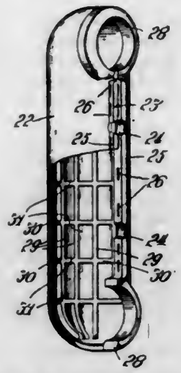
15. A portable fire extinguisher comprising an elongate liquid container having a fixed nozzle at one end with a bore extending radially with reference to the longitudinal axis of the container, and a fixed tube, one end of which is connected to said nozzle, the other or open end being situated at the far end of the container on a line radiating from said axis at such an angle that with the container held in a reclining position with the nozzle end somewhat elevated the open end of said tube will be in approximately the lowermost part of the container when the nozzle is directed approximately straight away from the operator.

1,824,600. LAMP SOCKET. JOSEPH H. KINZLER, Monaca, Pa. Filed May 22, 1930. Serial No. 454,541. 4 Claims. (Cl. 173—350.)



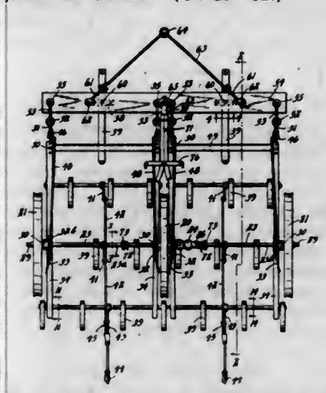
1. In a lamp socket of the kind disclosed, the combination with an insulating base having a lamp receiving shell and a pair of circuit establishing spring contact arms and a key-actuated spreader therefor, of a removable plug having prongs insertible in the base in range of said arms.

1,824,601. INSULATING COVERING FOR FLEXIBLE PIPE CONDUITS. WILLIAM W. KNIGHT, Evanston, Ill., assignor to Roth Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed July 9, 1928. Serial No. 291,318. 13 Claims. (Cl. 154—44.)



1. An insulating covering for a portion of a metallic conduit structure, comprising a rubber casing shaped to surround the conduit member substantially from end to end thereof, and split lengthwise to permit the casing to be sprung into place about the conduit, there being projecting flanges formed along the adjacent edges of the split portion, mating perforations being formed in these flanges, and binding members passed through these perforations.

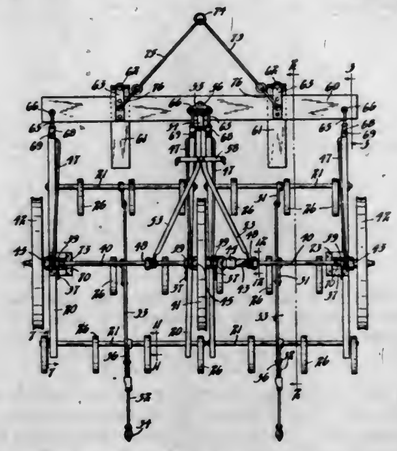
1,824,602. CULTIVATOR WITH THREE WHEELS. JOHN R. KOVAR and LOUIS W. KOVAR, Owatonna, Minn., assignors to Joseph J. Kovar Company, Owatonna, Minn., a Corporation of Minnesota. Filed June 7, 1928. Serial No. 283,542. 12 Claims. (Cl. 55—92.)



1. A harrow having in combination, a plurality of tooth carrying sections, each comprising a pair of spaced drag bars, a tie bar to which said drag bars are flexibly connected, a runner for each section pivotally connected to said tie bar for supporting said sections, a wheel disposed between adjacent sections, a wheel at the outer side of each end section, an axle for said wheels comprising flexibly connected sections, and means for supporting said sections from said axle.

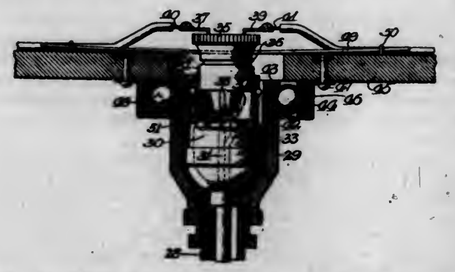
1,824,603. CULTIVATOR STRUCTURE. JOHN R. KOVAR and LOUIS W. KOVAR, Owatonna, Minn. Filed Nov. 1, 1928. Serial No. 316,390. 7 Claims. (Cl. 55—89.)

1. A harrow having in combination, a plurality of tooth-carrying sections each comprising spaced drag bars flexibly connected solely by a plurality of tooth-carrying members, a tie bar at the front of said sections, a plurality of runners pivotally connected to said tie bar about vertical axes and disposed within the outer drag bars and



flexible means directly connecting said drag bars to said tie bar and supporting said drag bars independently of said runners.

1,824,604. ELECTRIC SWIVEL CONNECTION. CHARLES F. LEDERLE, Chicago, Ill. Filed May 6, 1929. Serial No. 360,853. 2 Claims. (Cl. 173—324.)

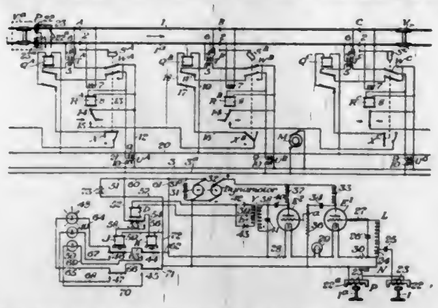


1. In a device of the character set forth, the combination of a pipe, a cup mounted on said pipe, a rotatable member for supporting other devices, a ball bearing for supporting the member on the cup, a socket mounted in said cup and having two terminals, wires leading from a source of supply to said terminals, a plug rotatably mounted in the socket having two contacts adapted to engage with the respective terminals in the socket, a spring coacting with the rotatable member and the plug which tends to hold the plug in engaging position, and conductors leading from said plug.

1,824,605. RAILWAY TRAFFIC CONTROLLING APPARATUS. LLOYD V. LEWIS, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 17, 1926. Serial No. 116,608. 3 Claims. (Cl. 246—63.)

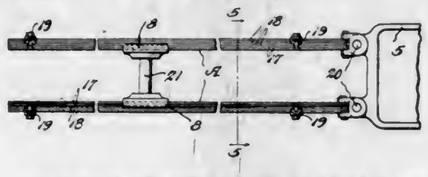
1. Railway traffic controlling apparatus comprising a section of railway track, means for at times supplying alternating current continuously to the rails of said section in series, means for at times periodically interrupting said alternating current, amplifying apparatus on the train receiving energy from the track rails, a train carried relay, a rectifier interposed between said amplifying apparatus and said train carried relay, two slow acting relays one controlled by a front contact of said train carried relay and the other controlled by a back contact of said relay, a first governing device controlled by a front contact

on each said slow acting relay, a second governing device controlled by a front contact on one of said slow acting



relays and by a back contact on the other said relay, and a third governing device controlled by a back contact on such one slow acting relay.

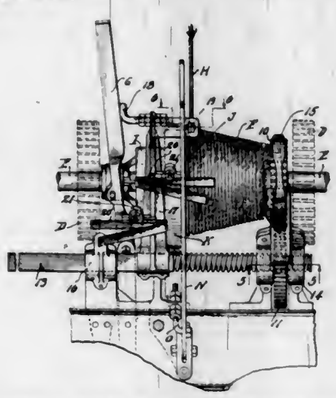
1,824,606. DIPPER STICK. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis. Filed June 9, 1926. Serial No. 114,832. 7 Claims. (Cl. 214—145.)



1. In excavating machines, a dipper, a laminated dipper stick having a laminae on one side thereof narrowing down in width dimension, and shackles engaging about the laminae for holding the laminae together, said shackles including bolts which pass through the edge portions of a lamina only.

4. In an excavating machine, a dipper, and a dipper stick composed of spaced parallel side members yieldable laterally unner force of side impacts, and pivot connections intermediate said members and the dipper extending in a vertical plane whereby the dipper is maintained in its normal relative excavating position during the lateral yielding aforesaid.

1,824,607. AUTOMATIC SKIP CONTROL MECHANISM. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Oct. 28, 1926. Serial No. 144,798. 21 Claims. (Cl. 192—141.)



6. In control means of the class described, a winding drum, a brake coacting therewith, a brake lever therefor, yieldable means adapted to cooperate with the lever to shift the same with gradually increasing braking action, and means for shifting said yieldable means into cooperative relation to said brake lever.

1,824,608. METHOD OF MAKING POLISHED ANNEALED STAINLESS STEELS. FRANCIS LOCKE, North Attleboro, Mass., assignor to J. D. Crosby Company, Pawtucket, R. I., a Corporation of New York. Filed June 18, 1929. Serial No. 371,960. 2 Claims. (Cl. 148—8.)

1. The process of making a polished, annealed, stainshift the same with gradually increasing braking action, less steel which consists in rolling the stainless steel until it has the desired dimensions and polish and then passing the same through an annealing furnace and depositing a light oxide or scale on the same and thereafter removing this oxide or scale by passing this steel through an acid bath, energized by electricity, the steel being the positive pole and thereafter washing or cleaning the loose scale resulting from the acid bath treatment.

1,824,609. ACCELERATOR FOR CAOUTCHOUC. WILHELM LOMMEL, Wiesdorf-on-the-Rhine, THEODOR GOOST, Leverkusen-on-the-Rhine, and HERMANN FRIEDRICH, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 15, 1927, Serial No. 240,331, and in Germany Nov. 8, 1927. 14 Claims. (Cl. 18—53.)

1. Process for the manufacture of vulcanized rubber compounds which consists in effecting the vulcanization in the presence of a compound of the probable formula:

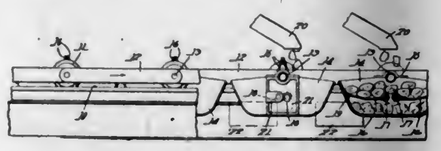


wherein R_1 means an alicyclic residue, y means one of the numbers 1 or 2 and R_2 stands for a hydrocarbon residue, which may be linked up with R_1 to form a ring configuration.

1,824,610. PROCESS OF RECOVERING ALCOHOL FROM ALCOHOLIC CAUSTIC FUSIONS. CHAUNCEY ALLAN LYFORD, East Aurora, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 1, 1928. Serial No. 323,186. 10 Claims. (Cl. 202—57.)

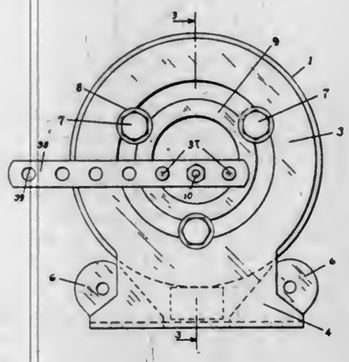
1. In the process of fusing an organic compound with alcoholic caustic alkali wherein a fusion mass is obtained, the improvement which comprises treating the hot fusion mass with water in an amount not in excess of that required to obtain the alcohol in concentrated form upon distillation, and boiling off, condensing and collecting the alcohol.

1,824,611. CONVEYER BUCKET. HENRY F. MAUREL, Providence, R. I., assignor to Maurel Investment Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 8, 1930. Serial No. 434,399. 5 Claims. (Cl. 198—152.)



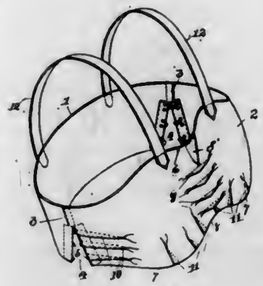
5. As an article of manufacture, a conveyer basket having a bottom for receiving material to be conveyed and means above the bottom for receiving a second layer of material to prevent the depositing in the basket of a body of material having a depth sufficient to prevent the action of heat or gases on any material at the center thereof, said means being adapted to swing upwardly in the bucket to permit depositing the materials on said bottom from above.

1,824,612. GENERAL UTILITY SWITCH MECHANISM. IRA E. MCCABE, Chicago, Ill. Filed Aug. 4, 1930. Serial No. 472,900. 4 Claims. (Cl. 200—153.)



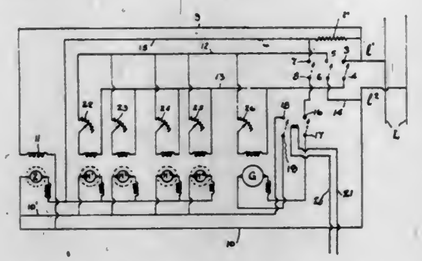
1. A general utility mercury switch mechanism including a casing about said mechanism, a bracket rotatably secured to said casing for attaching it to a support, a switch mechanism operating shaft extending beyond the exterior of the casing, means actuated upon rotation of the shaft to operate the switch mechanism, means exterior of the casing to rotate the shaft, and means to determine the amount of rotation of the shaft to operate the switch mechanism from any fixed position of the shaft irrespective of the relation of the casing to said fixed position.

1,824,613. BREAST SUPPORTER. MINNIE C. MIDDLETON, Yeadon, Pa. Filed July 30, 1929. Serial No. 382,099. 1 Claim. (Cl. 2—42.)



A breast supporter consisting of a continuous band forming a circular endless garment to surround the upper portion of a person's body, said garment being slit from the lower edge upwardly, the slits terminating short of the upper edge, means to fasten the edges of the slits together, said garment being pleated adjacent to and forward of each of the slits, and also along the upper and lower edges and likewise between the top and bottom edges along the front central part to provide compound curved upper and lower edges and to give the necessary fullness for the accommodation of the breasts and shoulder straps attached to said garment at the upper edge thereof.

1,824,614. WINDER DRIVE. LLOYD E. MILLER, Cleveland Heights, Ohio, assignor to The Reliance Electric and Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 20, 1928. Serial No. 307,205. 4 Claims. (Cl. 164—65.)

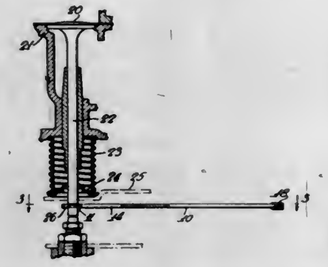


1. Apparatus of the character described, which comprises paired horizontal cylinders presenting a trough adapted to rotate a winding roll of web material, a cutter for slitting web fed thereto, an electric motor drive for said winder cylinders, a circuit for supplying driving E. M. F. for the normal operation of said motor drive, and means for supplying a tensioning E. M. F. thereto when the circuit for supplying driving E. M. F. is broken.

1,824,615. PROCESS OF SULPHONATING MINERAL OIL. LATIMER D. MYERS, Cincinnati, Ohio, assignor to The Twitchell Process Company, St. Bernard, Ohio, a Corporation of Ohio. Filed Mar. 2, 1929. Serial No. 344,100. 2 Claims. (Cl. 196—40.)

2. In the process of producing white oil or light colored technical oils, mahogany sulphonates, and sludge layer sulphonates from mineral oil, the step of treating said mineral oil with fuming sulphuric acid containing between 25 and 35% free sulphur trioxide.

1,824,616. TOOL. OTTO NEHER, North Plainfield, N. J. Filed Dec. 27, 1928. Serial No. 328,778. 5 Claims. (Cl. 81—3.)

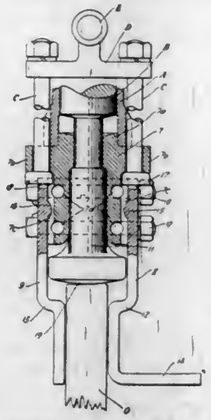


1. A washer holding tool comprising a pair of jaws formed with a socket therebetween, the socket having a normal diameter slightly smaller than the outside diameter of the washer that is to be held, and the jaws being adapted to spring apart sufficiently to admit the washer flatwise into the socket from either side of the tool but not from the end of the tool.

1,824,617. PILE DRIVING APPARATUS. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1928. Serial No. 319,789. 13 Claims. (Cl. 61—77.)

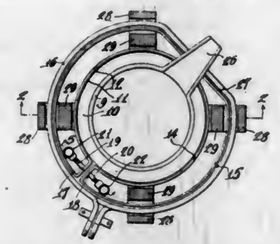
1. In apparatus for pile driving and the like including a percussive machine having an impact element with a front head secured to said machine and an anvil block

supported by said head and arranged to receive the blows of said element, means for adjustable attachment to said



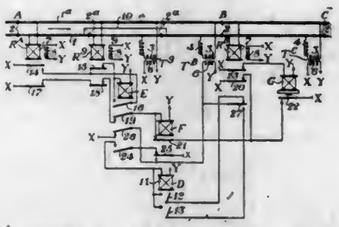
head to form an extension of the same and to provide a socket for the pile to be driven disposed either in line with or at an angle to the support for said machine.

1,824,618. INDUCTION ELECTRIC FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed July 9, 1929. Serial No. 376,921. 16 Claims. (Cl. 219—13.)



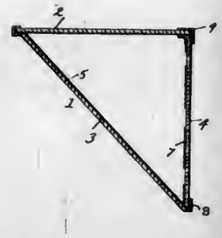
1. A focus inductor comprising a primary coil and inner and outer hollow focus inductor coils in series, one forming a secondary to the primary and the other about the charge, and fluid connections passing the fluid through the two focus inductor coils in parallel.

1,824,619. RAILWAY TRAFFIC CONTROLLING APPARATUS. BERNARD E. O'HAGAN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 20, 1930. Serial No. 489,780. 19 Claims. (Cl. 246—130.)



19. In combination, a first main section of railway track, one of the rails of which is divided to form an auxiliary section, and means effective upon the entrance of a train into said main section for at times supplying the rails of said main section with train controlling current provded said auxiliary section is unoccupied.

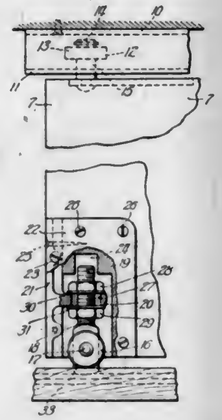
1,824,620. ILLUMINATED SIGN. HENRY K. PALMER, Los Angeles, Calif., assignor to Daylectric System Ltd., a Corporation of California. Filed Jan. 10, 1930. Serial No. 419,787. 4 Claims. (Cl. 40—131.)



1. A sign as described comprising a translucent plate through which light is first projected and a reflector formed with a light diffusing surface for reflecting the light projected through said translucent plate and a sign plate through which light is reflected by said reflector for illuminating the sign on said sign plate.

3. An illuminated sign comprising a casing formed with a sign plate with transparent letters, a top plate through which light may enter the casing and a reflector for reflecting the light from the casing through said transparent letters, the rear surface of said sign plate about said letters being covered with luminous material to reflect light upon said reflector.

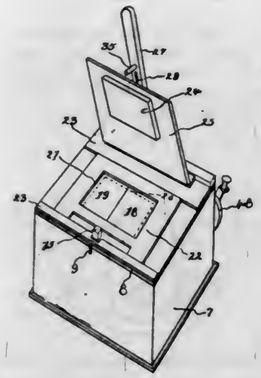
1,824,621. MOUNTING FOR FOLDING DOORS. ELLIS J. G. PHILLIPS, Aurora, Ill., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed Mar. 9, 1929. Serial No. 345,652. 6 Claims. (Cl. 16—100.)



1. In a folding door comprising a leaf mounted to turn about a verctial axis with respect to a door opening and to move longitudinally of such opening, the combination with a door leaf, and a guide for the upper portion thereof, of a swivel mounting for the lower portion of the leaf, comprising a member adapted to be secured to the leaf and having a supporting portion, a screw threaded stem extending through an opening in said supporting portion, a bushing on said stem having a rotatable bearing in said opening, washers engaging the upper and lower ends of said bushing and extending over said supporting portion at opposite ends of said opening, to permit rotative movement of said washers relative to said supporting portion, nuts screwing over said threaded stem and engaging said washers, and a roller carried by said stem adapted to travel on a suitable horizontal surface below the leaf.

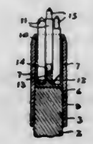
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1,824,622. PHOTO-PRINTING MACHINE. HENRY A. REEDY, St. Paul, Minn. Filed June 22, 1929. Serial No. 373,011. 7 Claims. (Cl. 95—73.)



1. In a photo-printing machine, a pair of light compartments having a common wall between them and each formed with an opening adjacent to said wall, means for mounting a photographic plate and a relatively thin film with their adjoining edges in alignment with said wall, and with their upper surfaces in substantially the same plane in positions for exposure in said openings respectively, means for severally illuminating said compartments and means for retaining sensitized stock in printing relation to said film and plate to secure simultaneous exposures therefrom.

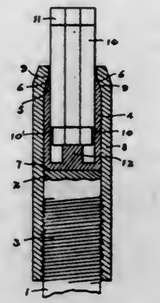
1,824,623. TOOL HOLDER. PETER LYMBURNER ROBERTSON, Milton, Ontario, Canada. Filed July 2, 1928. Serial No. 289,954. 9 Claims. (Cl. 279—56.)



1. A tool holder, comprising a rigid chuck having a solid head provided with a transverse slot in the end, said slot presenting unbroken parallelly spaced side walls and being open at each side of the chuck and adapted to receive a plurality of tools having parallel sided shanks, a U-shaped holder adapted to fit bodily into said slot and hold said tools snugly together, a stud extending upwardly from the bottom of said U-shaped holder adapted to hold the central tool in a position with its working end projecting beyond the adjacent tools, and a sleeve threaded on said chuck adapted to clamp the sides of said U-shaped holder against said tools and secure said U-shaped holder and tools in said slot.

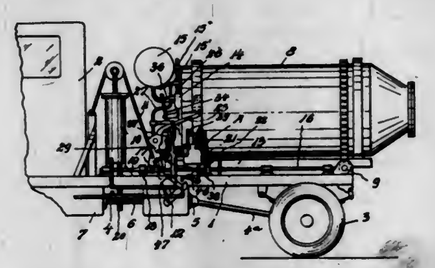
1,824,624. SCREW DRIVER. PETER L. ROBERTSON, Milton, Ontario, Canada. Filed Jan. 10, 1929. Serial No. 331,516. 6 Claims. (Cl. 145—50.)

1. A screw driver, comprising the combination with a chuck having a transverse slot in the end adapted to hold a plurality of bits, of a plurality of rectangular parallel-sided screw driver bits adapted to be placed side by side in said slot and having transverse slot-engaging ends, the outer bits having stepped portions, means carried by said chuck co-operating with the stepped portions of said bits to effect their relative positioning in the slot to be used



either singly or collectively in accordance with their position in said slot, and means for clamping said bits within said slot.

1,824,625. TRUCK MIX METER FOR TILTABLE TRUCKS. JOHN F. ROBB, Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed May 2, 1930. Serial No. 449,800. 13 Claims. (Cl. 83—73.)



1. In control mechanism for truck mixers, in combination, a truck, a mixing drum thereon adapted to be tilted to discharge, a hoist connected with the drum to discharge the same, a power shaft, a device for connecting the power shaft with the drum to rotate it, and lock means for the hoist controlled from the above mentioned device so that the hoist may not be operated until said device has been actuated.

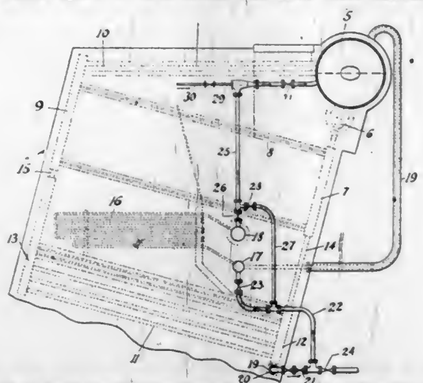
1,824,626. METHOD OF TREATING DRY CELL CONTAINERS. OTTO E. RUHOFF and GEORGE H. SCHROEDER, Wausau, Wis., assignors to Marathon Battery Company, Wausau, Wis., a Corporation of Wisconsin. Filed May 4, 1928. Serial No. 275,254. 2 Claims. (Cl. 136—126.)

2. The method of treating zinc dry cell containers which comprises selecting a solution of a mercury salt of a concentration calculated to produce the desired finished coating upon complete exhaustion of the mercury, placing said solution in said containers and depositing upon the inner walls of said containers, substantially all of the mercury content of said solution.

1,824,627. SUPERHEATER. CHARLES U. SAVOYE, Hackensack, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 28, 1930. Serial No. 431,998. 7 Claims. (Cl. 122—487.)

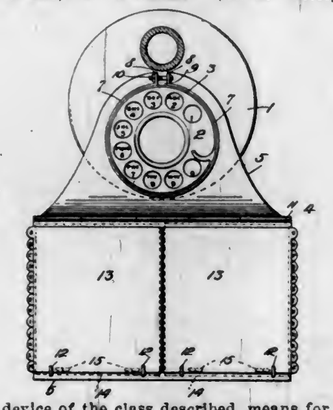
1. The combination in a steam boiler having a steam and water drum, a superheater, inlet and outlet headers, a connection between the steam space of said drum and

said superheater inlet header, a valved connection between the water space of said drum and said inlet header, a



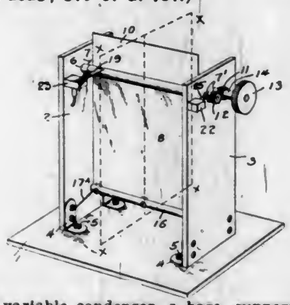
second valved connection between said outlet header and said drum and water circulating means associated with one of said valved connections.

1,824,628. TELEPHONE DIRECTORY AND PAD. BERTHA L. SCHMALZ, Brooklyn, N. Y. Filed Apr. 1, 1930. Serial No. 440,711. 3 Claims. (Cl. 40—10.5.)



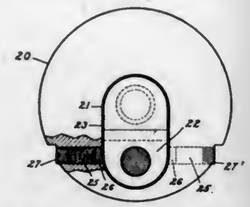
1. In a device of the class described, means for securing a plate to a telephone, a hinge on said plate and a second plate hinged to the first, having on one surface means for holding cards for a directory and on another surface means for holding sheets for memoranda.

1,824,629. VARIABLE CONDENSER. ROLLAND F. SHERRY, Washington, D. C. Filed Sept. 21, 1927. Serial No. 220,982. 14 Claims. (Cl. 175—41.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



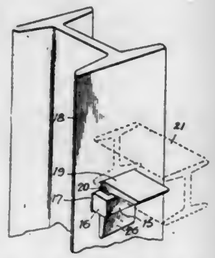
1. In a variable condenser, a base, supporting members secured thereto, rolls, metallic films mounted on said rolls and between said members, means securing the free ends of said films together, and means for simultaneously rolling and unrolling said films in parallel planar relation to vary the capacity and to form a condenser substantially planar.

1,824,630. INTERNAL COMBUSTION ENGINE. CHARLES R. SHORT, Dayton, Ohio, assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 18, 1923. Serial No. 646,041. 32 Claims. (Cl. 74—6.)



27. In an internal combustion engine, the combination of a vibration damper and a counter-weight, said counter-weight forming the inertia member of said vibration damper.

1,824,631. METAL CONNECTION FOR BUILDING FRAMES. VAN RENSSELAER POWELL SAXE, Baltimore, Md. Filed Apr. 23, 1930. Serial No. 446,592. 4 Claims. (Cl. 189—36.)

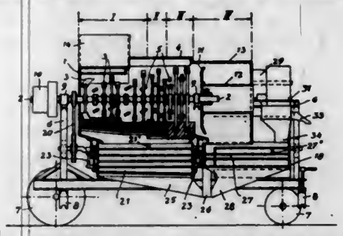


1. The combination with a vertically disposed metallic building element, a horizontally disposed metallic building element terminating adjacent the first mentioned building element, of a connection between said elements, said connection comprising a weld-connected U-shaped yoke carried by the vertically disposed building element, an angle bracket carried by the horizontally disposed building element, one arm of said bracket extending downwardly with its outer face at a right angle to the horizontally disposed building element, the inner face of said arm being at an obtuse angle to said horizontally disposed building element and cooperating with the yoke whereby the outer face of the arm is forced into close engagement with the vertical building element for a welding operation below the yoke, said arm of the bracket terminating a substantial distance below the yoke for said welding operation.

1,824,632. AXIAL THRASHING AND STRAW REDUCING MACHINE. FELIX SCHLAYER, Madrid, Spain. Filed Feb. 23, 1929, Serial No. 342,175, and in Austria Feb. 20, 1928. 17 Claims. (Cl. 130—27.)

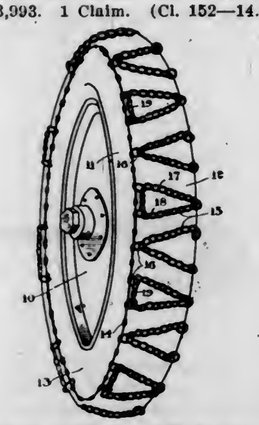
1. The combination of an axial thrashing machine including means for gradually reducing the straw and having a thrashing drum with a grain outlet and an axially spaced combined reduced straw and grain outlet with a winnowing apparatus operatively associated therewith and projecting underneath the drum, the said winnowing apparatus comprising axially and successively positioned independently functioning cleaning and separat-

ing means extending transversely to the longitudinal direction of the drum and being positioned closely adjacent the outlets of the drum to which they correspond and



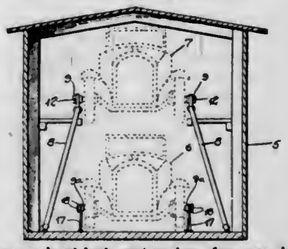
with which they communicate to separately receive the different grades of materials as they come from the axial machine and to treat them in transverse direction to the machine casing.

1,824,633. VEHICLE CHAIN. ALLEN N. SCOTT, Montreal West, Quebec, Canada. Filed Sept. 20, 1929. Serial No. 393,993. 1 Claim. (Cl. 152—14.)



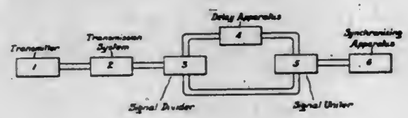
A device of the character described comprising side chains, endless cross chains extending between said side chains, relatively large circular connecting links rotatably secured to the side chains and loosely receiving the cross chains therethrough, said connecting links being arranged to cause at least one flight of the cross chains to extend in an oblique direction between the side chains, whereby the links of the cross chains are caused to creep through the connecting links during the use of the device and the said connecting links being also capable of a turning or creeping motion with respect to both the side chains and the cross chains.

1,824,634. TEMPORARY HUB EXTENSION. CLIFFORD L. SNYDER, Detroit, Mich., assignor to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed Aug. 1, 1927. Serial No. 210,000. 1 Claim. (Cl. 188—32.)



A temporary wheel-hub extension for use in the shipment of automobiles comprising a short section of rigid metal tubing internally threaded at one end for detachable engagement with the threaded end of a wheel hub, and a closure plug fitted and secured in the other end of said tubing section, said closure plug embodying a sheet metal disk having an annular marginal flange firmly pressed outwardly against the inner surface of the tubing section, said tubing section having spaced pairs of longitudinal slits in said other end thereof defining a tongue between the slits of each pair, said tongues being outturned to form stops.

1,824,635. SYNCHRONIZATION IN TELEVISION AND FACSIMILE TRANSMISSION SYSTEM. ARTHUR C. STOCKER, Audubon, N. J., assignor to General Electric Company, a Corporation of New York. Filed Oct. 21, 1930. Serial No. 490,237. 6 Claims. (Cl. 178—69.5.)



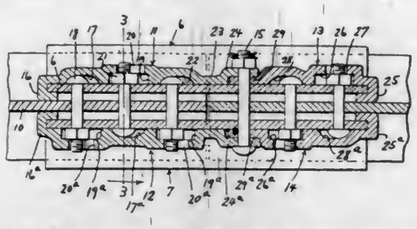
1. In a television or facsimile transmission system employing a synchronizing signal comprising regularly recurring impulses, the method of reducing the effect of transient phenomena on the synchronization which comprises dividing the synchronizing signal at the receiving station into a plurality of parts, producing a phase displacement of one of said parts a whole number of cycles and recombining the parts to make up a complete signal by which the synchronization is effected.

1,824,636. HOSIERY. ROY E. TILLES, New Rochelle, N. Y. Filed Apr. 16, 1931. Serial No. 530,601. 2 Claims. (Cl. 66—172.)



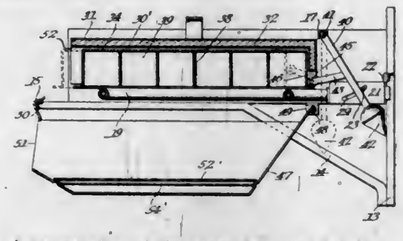
1. In a full fashioned stocking of delicate material, such as silk and adapted to be folded to accommodate legs of different lengths, and having adjacent the top thereof a welt of heavier reinforced material, the improvement which comprises providing the welt which is extended downward a distance at least greater than the width of the stocking at its open end, and providing such welt portion with a plurality of spaced rows of laterally transferred loops transverse lines of openwork wherbey the stocking is adapted to be folded downward so that the fold occurs upon and about one of the upper rows of open work to conform the stocking to varying length of leg.

1,824,637. RAIL JOINT. CARMINO TIMPERIO, New Geneva, Pa. Filed Apr. 9, 1931. Serial No. 528,879. 3 Claims. (Cl. 151—32.)



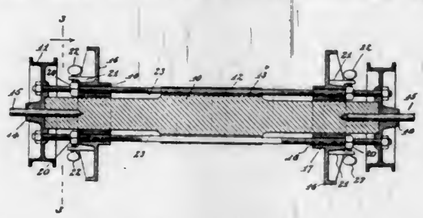
1. A rail joint guard of the type described comprising, recessed bodies adapted to be assembled in pairs on each side of a rail joint by hooking about the ends of the fish plates of the joint and nbutting the head and nut of each bolt of the rail joint whereby to prevent their accidental displacement, and a single bolt passing through the bodies, the fish plates and the web of the rail to assemble the guard on the rail joint.

1,824,638. ICE MELTING DEVICE. AUGUSTUS R. TOWNS, Richmond, Va. Filed Jan. 12, 1929. Serial No. 332,152. 22 Claims. (Cl. 62—113.)



1. An apparatus of the class described having in combination a heating element, an ice tray invertedly and perimetrically supported on said element, and means upon the generating of heat by said element for liberating the ice from said tray.

1,824,639. ADJUSTABLE LOOM WARP BEAM. WILLIAM G. TRAUTVETTER, Paterson, N. J. Filed Aug. 8, 1929. Serial No. 384,303. 5 Claims. (Cl. 242—124.)



1. A warp beam, including a body, a pair of longitudinally adjustable warp flanges carried thereby, driving flanges mounted upon the extremities of said body, tie rods extending through all of said flanges for securing said flanges on said body, said warp flanges being freely movable longitudinally over said tie rods in one direction, and means carried by said rods for preventing movement of said warp flanges in the opposite direction.

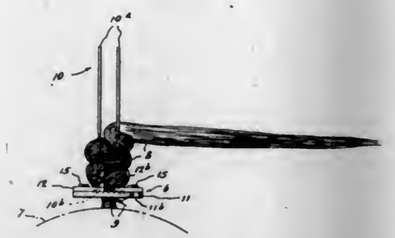
1,824,640. EXTENSION TABLE. JOHN H. TRENKLER and WARREN A. KING, Hornell, N. Y. Filed May 7, 1929. Serial No. 361,180. 8 Claims. (Cl. 45—113.)

1. The combination with a table top and a top extension, of an extension slide including two members one rigid with the top and the other rigid with the top extension, one of said slide members having two sets of ways at different points in the length of the member and also in different horizontal planes, each of said sets comprising two parallel ways and a junction way between them, and the other of said slide members having two projections at



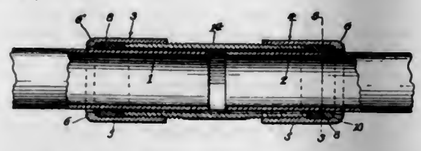
different points in the length of the member and also in different horizontal planes, each of said projecting operating on one of said ways and serving to hold the top extension against tilting in the movement of said top extension from an inner position under the top to an outer position in the plane of the top or vice versa.

1,824,641. HAIR WAVING DEVICE. SOTER B. TUSIS, New York, N. Y. Filed Nov. 12, 1930. Serial No. 495,221. 4 Claims. (Cl. 132—33)



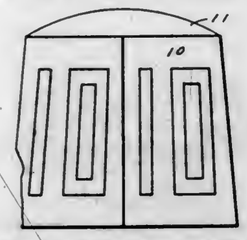
1. In a hair waving device, the combination of a pularity of substantially parallel resilient posts, and a mounting therefor adapted to embrace a strand of hair between the scalp and the portion of the strand to be waved.

1,824,642. PIPE UNION. HAROLD LEE UBER, Jamestown, N. Y., assignor of one-third to C. R. Womer, Eldred, Pa., and one-third to O. D. Underwood, Olean, N. Y. Filed Jan. 16, 1931. Serial No. 509,248. 2 Claims. (Cl. 285—196.)



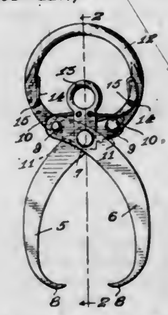
1. An expandible, frictional clamping, gripping and sealing element for use in a pipe union of that type including a pair of spaced opposed adjustable carriers and a combined carrier coupling and sealing element compressing member for encompassing throughout in spaced relation opposed terminal portions of a pair of pipe line sections to be coupled, comprising an expandible body portion for mounting in a carrier to encompass the terminal portion of one of said sections, having its inner end formed of an outer part of rectangular cross section and an inner part of triangular cross section for extension into the space between said member and a pipe section to close and seal one end of said space, spaced from and projecting beyond the free end of said outer part and forming in connection with the latter a groove for the reception of a compressing member.

1,824,643. YARDAGE INDICATOR OR MARKER FOR FOOTBALL GRIDIRONS. FREDERICK A. WARREN and EDGAR A. HORNBY, Flandreau, S. Dak. Filed Apr. 10, 1930. Serial No. 443,167. 5 Claims. (Cl. 40—125.)



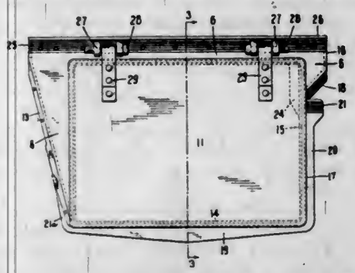
1. A marker of the character described formed of a hollow india rubber body, having sufficient elasticity to be readily bent upon itself, but sufficient rigidity to stand upright, the marker being formed with a plurality of side faces, each face having thereon a numeral indicating the yardage of a particular yard line on a playing field.

1,824,644. ICE TONGS. JOHN R. WEBB, Parkersburg, W. Va. Filed June 15, 1931. Serial No. 544,592. 2 Claims. (Cl. 294—117.)



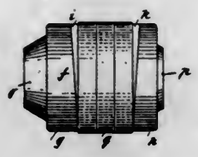
1. In tongs of the character described, a pair of crossed pivotally connected jaws, a handle having the jaws slidably connected therewith for opening and closing movements. and a tensioned finger engaging element connected with the pivot of the jaws and within the handle whereby gripping action between said handle and member will effect the automatic opening and closing of the jaws.

1,824,645. RAILWAY HOPPER CAR DOOR FRAME. WILLIAM E. WINE, Toledo, Ohio. Filed May 5, 1928. Serial No. 275,506. 28 Claims. (Cl. 105—249.)



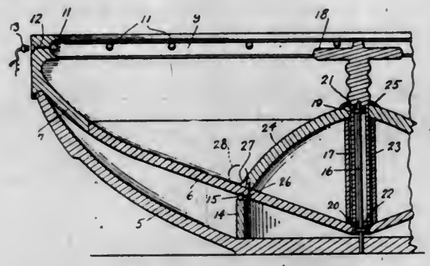
1. A hopper car door frame having a cargo discharge opening, outwardly projecting sealing flanges defining the sides of said opening, and inwardly projecting portions affording means for securing the frame to side sheets of the hopper, one of said door sealing flanges constituting a prolongation of the adjacent side sheet securing portion and being provided with a bracket for attachment to a car center sill.

1,824,646. LATE NEWS DEVICE FOR ROTARY PRINTING MACHINES. CARL WINKLER, Bern, Switzerland, assignor to Maschinenfabrik Winkler, Fallert & Co., A. G., Bern, Switzerland, a Corporation of Switzerland. Filed Nov. 30, 1928. Serial No. 322,707. 1 Claim. (Cl. 101—378.)



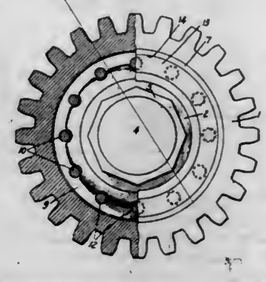
1. In a rotary printing press, a segmento-cylindrically shaped plate holder having a plate holding channel therein, said channel being tapered in a directon opposite to the direction of rotation of said rotary press.

1,824,647. ROULETTE WHEEL. EDWARD L. WRIGHT, Chicago, Ill. Filed June 1, 1929. Serial No. 367,639. 3 Claims. (Cl. 273—142.)



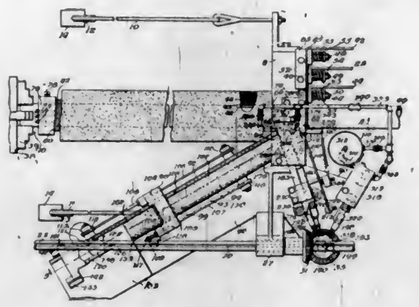
1. In a game apparatus, a relatively fixed bowl, a concavo-convex rotor positioned within the bowl, a centrally arranged spindle rotatably supporting the rotor, an upstanding annular wall carried by the bowl and positioned between the axis and the peripheral edge of the rotor, anti-friction elements carried by the upper edge of said annular wall and engaging the rotor between the axis and the periphery thereof, and a dome mounted on said rotor and engaging the rotor at a point adjacent said upstanding wall, said dome having pockets in its lower edge for receiving a movable game piece carried by the rotor, the wall supporting the rotor being located at a substantial distance outwardly of the axis of said rotor.

1,824,648. RESILIENT GEAR. ROBERT G. ANDERSON, Harborcreek, Pa., assignor to General Electric Company, a Corporation of New York. Filed June 18, 1930. Serial No. 462,118. 8 Claims. (Cl. 74—29.)



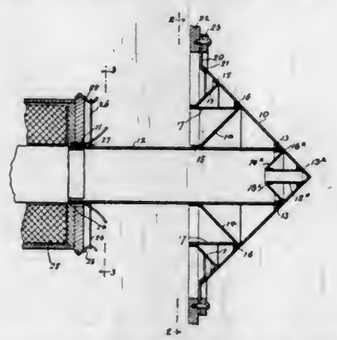
1. A gear comprising a hub, a separate toothed rim, and a resilient pin substantially parallel to the axis of the gear connecting said hub rim.

1,824,649. ROTARY BRUSH AND METHOD OF MAKING SAME. ARNOLD A. ANGELL, Chicago, Ill. Original application filed Apr. 30, 1925, Serial No. 26,870. Divided and this application filed June 17, 1929. Serial No. 371,689. 16 Claims. (Cl. 300—21.)



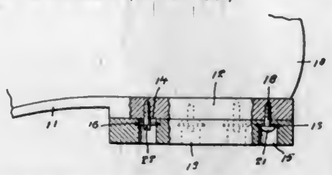
1. The method of forming a brush which comprises winding a strand into a helical coil, laying bristles separated from said strand prior to the winding thereof between the turns of the coil simultaneously with the winding of the coil and anchoring the base ends of the bristles to the coil by the winding of the coil.

1,824,650. SOUND PROPAGATING DEVICE. LOY E. BARTON, Collingswood, N. J. Filed Oct. 4, 1929. Serial No. 397,309. 10 Claims. (Cl. 181—31.)



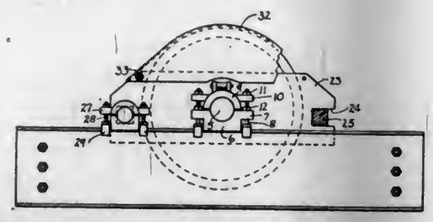
1. In a sound propagating apparatus, the combination with a sound propagating diaphragm, of an actuating unit associated therewith, said unit including a plurality of concentrically arranged tubular members engageable with said diaphragm.

1,824,651. DETACHABLE HEEL. ALBERT C. BLACKBURN, Madison, Wis. Filed Dec. 29, 1930. Serial No. 505,448. 2 Claims. (Cl. 36—36.)



1. A detachable shoe heel construction comprising a heel body having a multiplicity of elongated slots in communication with circular-shaped counter-sunk openings, disk members embedded within the body having slots corresponding in shape and in constant alignment with the elongated slots in the body, and fastenings embedded within the shoe having portions extended through the registering slots to underlie said disks.

1,824,652. CROWN BLOCK. BURWELL BOYKIN, Jr., Beaumont, Tex., assignor, by mesne assignments, to International-Stacey Corporation, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 7, 1930. Serial No. 419,028. 8 Claims. (Cl. 254—190.)

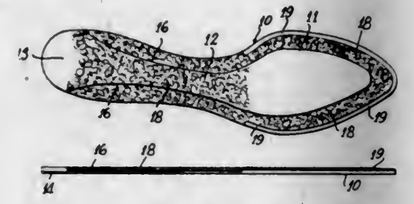


1. A crown block including spaced supporting beams, bearing blocks adjustable thereon, a shaft supported in said blocks, sheaves rotatable on said shaft, plates on said shaft between said sheaves, and means supporting the ends of said plates, said means being slidable into and out of supporting engagement with said plates.

1,824,653. STABLE IRRADIATED ERGOSTERINE AND PROCESS FOR THE MANUFACTURE OF SAME. ERNST BRAUCHLI, Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a Corporation of New Jersey. Filed July 22, 1929, Serial No. 380,265, and in Germany Sept. 22, 1928. 2 Claims. (Cl. 167—81-c.)

1. A stable irradiated ergosterine preparation including a small quantity of a di-hydroxyl phenol as a stabilizing agent.

1,824,654. OUTER SOLE AND METHOD OF PREPARING THE SAME. WILLIAM H. BRESNAHAN, Lynn, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 19, 1929. Serial No. 356,385. 10 Claims. (Cl. 12—146.)

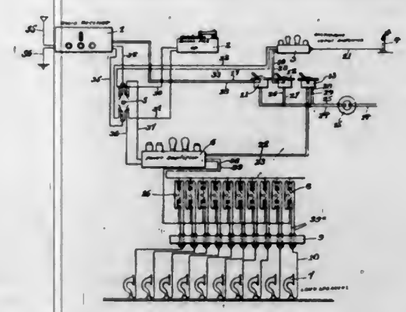


1. A method of preparing an outer sole adapted for permanent attachment to a lasted upper by adhesive cement, which includes applying adhesive cement to the marginal portion of the fore part of a sole, and thereafter removing a marginal strip from said cemented portion.

1,824,655. COMBINED REPRODUCTION AND SENDING UNIT. CLARENCE E. BURK, Marion, Ohio. Filed May 29, 1929. Serial No. 366,970. 4 Claims. (Cl. 179—100.11.)

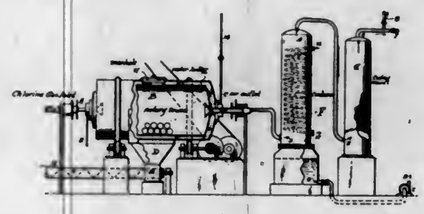
1. In a centralized switchboard control and impedance matching system for reproduction and sending units, the combination with a radio receiving set, a transmitter, an input amplifier, a power amplifier, means for selectively cutting in said set, input amplifier to a power circuit and power amplifier, a record pick-up, normally open circuits leading respectively from said pick-up, set and input amplifier to said power amplifier, and controlling means common to said normally open pick-up, set and input amplifier circuits for selectively closing them to said power amplifier, of a plurality of independent, normally open and selectively closable loud speaker circuits leading from said

power amplifier, each circuit including a switch for selectively closing it, each switch having as a part thereof a resistance connected when the circuit is open to keep the circuit balanced at all times and the impedance of all the



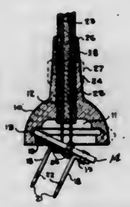
circuits balanced at all times, and a combined supporting and enclosing cabinet common to said set, transmitter, amplifiers, circuit connections and circuits, said controlling means and switches being located on a switchboard at the front of the cabinet.

1,824,656. PROCESS OF AND MEANS FOR MANUFACTURING CHLORIDE OF LIME. ACHILLE CARUGHI and CARLO PAOLONI, Brescia, Italy. Filed Jan. 22, 1929, Serial No. 334,295, and in Italy Feb. 1, 1928. 1 Claim. (Cl. 23—86.)



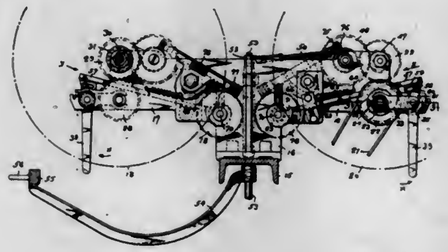
Process for manufacturing a crystalline, stable, high grade chloride of lime, which consists in causing chlorine to act upon slaked lime suspended and ground in carbon tetrachloride at a temperature above 40° C. and causing the temperature at the end of the reaction to drop below 20° C., the chloride of lime thus obtained being then freed by vaccum from the liquid and finally dried.

1,824,657. PLUG CAP FOR SEPARABLE ATTACHMENT PLUGS. JOHN S. COLDWELL, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Apr. 22, 1927. Serial No. 185,703. 9 Claims. (Cl. 173—361.)



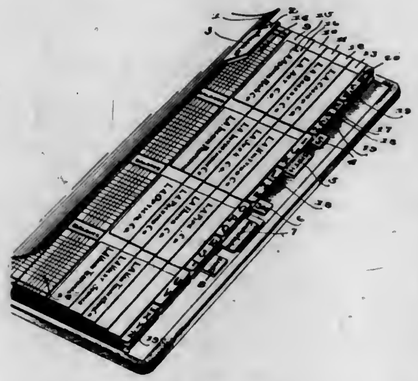
1. In an attachment plug cap the combination with a cap body formed of relatively soft rubber and having a relatively shallow central cavity and a conductor passage leading to said cavity, of a relatively thin but relatively rigid part arranged within and spanning said cavity in said cap body to form a strut for said body and to be gripped by the latter, and contact blades carried by said relatively rigid part.

1,824,658. SKEINING MACHINE. HENRY CREWDSON, Wilmington, Del., assignor to The Viscose Company, Marcus Hook, Pa., a Corporation of Pennsylvania. Filed July 20, 1927. Serial No. 207,164. 8 Claims. (Cl. 242—49.)



1. In a skeining machine, a reel, a clutch controlled drive for the reel, a manually actuated clutch operating lever, a trip-released shifting rod having a lost motion connection with said lever, and means for releasing the rod to actuate the clutch after a predetermined reel drive, said means being associated with the reel through permanently engaged mechanism.

1,824,659. LEDGER AND INDEX THEREFOR. FRANK H. CRUMP, Los Angeles, Calif. Filed Dec. 11, 1928. Serial No. 325,332. 6 Claims. (Cl. 283—38.)

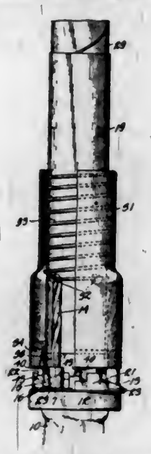


1. A ledger comprising a plurality of pages having a succession of transverse columns, and division sheets separating the pages into sections, said sheets having tabs spaced to aline with the columns of the respective section, the tabs on one division sheet being staggered with respect to those on the adjacent sheet to make all of the tabs visible in a single row.

1,824,660. BOTTLE CAPPING MACHINE. EDGAR STOUFFER DARNER, Hagerstown, Md. Filed Oct. 1, 1930. Serial No. 485,771. 9 Claims. (Cl. 226—92.)

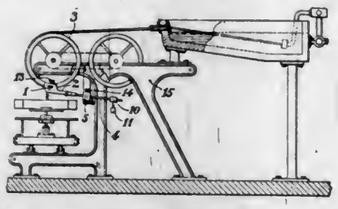
1. A bottle capping machine comprising a ring adapted to seat upon the top of the bottle, centering means for said ring, a tube adapted to hold bottle caps supported by

said ring, spiral rods carried by said ring, a sleeve slidably mounted on said rods, cap holding and delivering



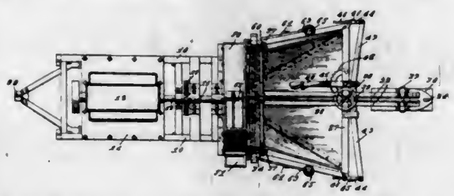
means carried by said ring, and means operable to push a cap upon a bottle when the same has been released by the said delivering means, substantially as set forth.

1,824,661. DEVICE FOR CURLING THREADS MADE OF CELLULOSIC MATERIAL AT THEIR ISSUE FROM SPINNING MACHINES. MICHEL DASSONVILLE, Paris, France. Filed June 8, 1929, Serial No. 369,451, and in France Oct. 30, 1928. 3 Claims. (Cl. 18—8.)



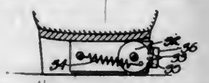
1. In a machine for spinning cellulosic products and having a rotary drum serving to pull the threads when they issue from the coagulation bath, the combination of a lever rocking about an axis parallel to that of the said drum, this lever having an end in the shape of a trunnion, a socket freely mounted on this end of the lever so as to be capable of rocking according to a small angle about its axis, this socket being terminated by a forked portion, a scraper of prismatic shape mounted in the said forked portion and adapted to bear by one of its edges against the surface of the said winding up drum, and a counterweight adjustable on the said lever, adapted to press the said scraper against the drum.

1,824,662. SNOWPLOW. ISAAC F. DAVIDSON, Central Point, Oreg. Filed July 29, 1929. Serial No. 381,807. 3 Claims. (Cl. 37—43.)



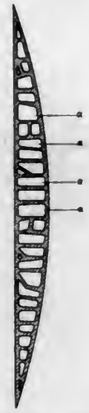
2. A snow plow including a sled having a power driven snow receiving and delivery means, a scoop pivoted to the forward end of the sled to collect and deliver snow to said means, vertically disposed guide blades hinged to the scoop, a steering means for varying the angles of the blades relative to the scoop, and tails for the blades and movable with the blades in one direction.

1,824,663. BURGLAR ALARM. FERDINAND D. DE MUNBRUN, Indianapolis, Ind. Filed May 10, 1929. Serial No. 361,961. 2 Claims. (Cl. 200—52.)



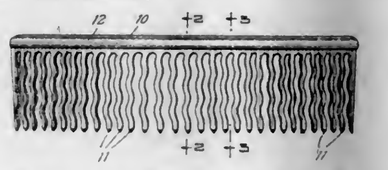
1. In a burglar alarm system, a manually operable contact making device comprising a rotary disk adapted to be mounted upon the heel of a person, said disk having a projecting tooth on its edge, resilient means tending to rotate the disk to pull the tooth to a depending position, and a manually releasable latch for holding the disk to position the tooth in an elevated position substantially parallel to the floor, substantially as set forth.

1,824,664. SOUND BOX MEMBRANE. JOHN EGGERT, Leipzig, and RICHARD SCHMIDT, Dessau in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 13, 1929, Serial No. 392,434, and in Great Britain Aug. 19, 1929. 8 Claims. (Cl. 181—32.)



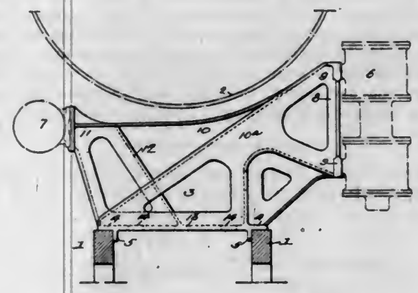
1. A sound box membrane consisting of a circular film of a cellulose derivative diminishing in thickness towards the periphery and including a plurality of closely adjacent hollow chambers the diameter of which is considerably greater than the thickness of their walls.

1,824,665. COMB. ROSE EHRLICH, New York, N. Y., assignor to Lapin Specialty Mfg. Co., Inc., New York, N. Y. Filed Dec. 5, 1930. Serial No. 500,162. 1 Claim. (Cl. 132—18.)



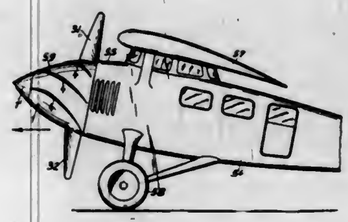
A comb as characterized, comprising a body portion with teeth depending therefrom, said teeth being substantially flat in a direction of the general surface of the comb and having wavy edges between the teeth, said teeth being equally spaced apart for easy insertion in the hair, and said body portion being curved to fit the head and having a longitudinal bead projecting from one side thereof for the entire length of the comb and having a corresponding depression on the other side thereof both for reinforcing the comb and for obtaining a secure grip thereof, all said parts being integral and of non-inflammable material.

1,824,666. AIR PUMP AND POWER REVERSE SUPPORT. HARRY GLAENZER, Philadelphia, Pa. Filed July 28, 1930. Serial No. 471,386. 4 Claims. (Cl. 105—37.)



2. The combination of a main frame of a locomotive; a structure mounted on said frame and secured thereto and arranged to support an air pump at one side of the locomotive, and a power reverse on the opposite side thereof, said structure being independent of the boiler and the boiler supports.

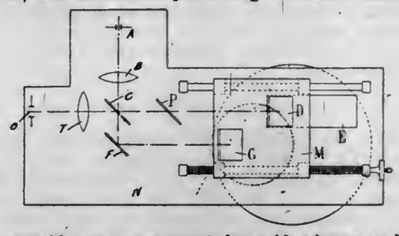
1,824,667. ROTARY PROPELLER. OSKAR FRITZ AMANDUS EMIL GRUMPELT, Berlin, Germany, assignor, by mesne assignments, to Syndicat "Vaproc," Brussels, Belgium, a Company of Belgium. Filed Apr. 28, 1928, Serial No. 273,641, and in Germany July 20, 1926. 7 Claims. (Cl. 170—156.)



1. A propeller for use in a fluid medium comprising a rotatable body having a stream lined casing which is closed at its tip, and stepped fluid contact surfaces associated with said casing, said contact surfaces extending tangentially from said casing to rise in a direction inverse to that of the rotation thereof, and means for rotating said body.

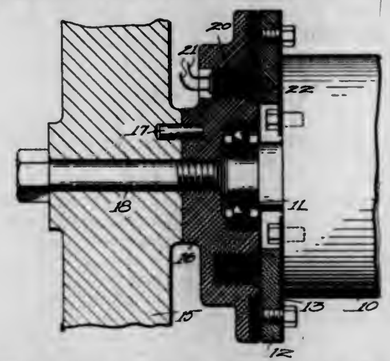
1,824,668. INTERFEROMETER FOR THE TESTING OF OPTICAL ELEMENTS. JOHN WILLIAM HASSELKUS and OWEN GEORGE HAY, London, England. Filed Oct. 19, 1928, Serial No. 313,568, and in Great Britain Jan. 3, 1928. 4 Claims. (Cl. 88—14.)

1. In an interferometer for testing optical elements, of the kind utilizing a beam of light split into a test beam and a reference beam, the combination of a test-beam mirror directing said test beam to a test object and a reference-beam mirror directing said reference beam to a reference object; a common support for said directing mirrors; and means for permitting a relative movement



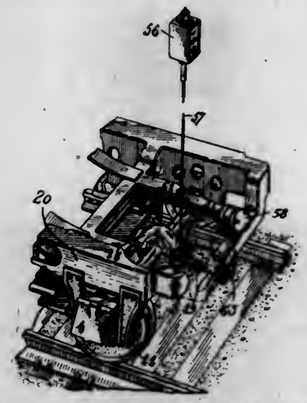
between said common support for said mirrors and said test object, said relative movement being transverse to said beam impinging on said test object.

1,824,669. BRAKE FOR PAPER GUIDE ROLLS. HANS C. JORDHOY, North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 12, 1927. Serial No. 232,917. 4 Claims. (Cl. 271—2.1.)



1. The combination with a printing press and a motor for operating it, of a freely rotatable web guide roll and an electric brake fixed in position and electrically connected with said motor to be energized by the current generated thereby when the current is shut off from the motor and the motor is still running, and means whereby the brake will exert a pull on the guide roll to decrease its rotation or bring it to a stop.

1,824,670. AXLE DRIVE MECHANISM. ARMAND JUNEAU, Montreal, Quebec, Canada. Filed Mar. 30, 1929. Serial No. 351,292. 4 Claims. (Cl. 105—109.)



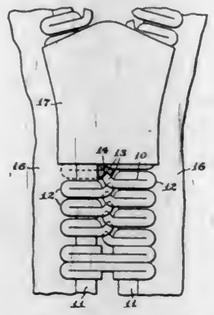
1. In a drive mechanism for railway apparatus, the combination with a rotary axle, of a toothed drive gear

secured on said axle, a toothed pinion journaled adjacent said drive gear and meshing therewith, and a plurality of auxiliary transmission drive mechanisms connected with the pinion adapted to drive the shafts of auxiliary apparatus in reversible rotary movement and in uni-directional rotary movement.

1,824,671. TREATMENT OF COTTON AND ARTIFICIAL SILK. PAUL KARRER, Zurich, and WALTER WEHRLI, Binningen, near Basel, Switzerland, assignors to the Firm of Chemical Works Formerly Sandoz, Basel, Switzerland. Filed Jan. 20, 1928, Serial No. 248,269, and in Germany Jan. 28, 1927. 7 Claims. (Cl. 8—5.)

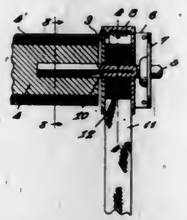
1. process for rendering cotton and regenerated cellulose fibres capable of being dyed by acid colors, consisting in treating these fibres simultaneously with an aromatic sulphonic chloride and a tertiary organic base.

1,824,672. INTERLOCKING MEMBER FOR SLIDE FASTENERS. MARIO LAGUZZI, Long Island City, N. Y. Filed Oct. 10, 1930. Serial No. 487,862. 4 Claims. (Cl. 24—205.)



1. A slide fastener interlocking member bifurcated to receive a flexible stringer, the furcations of said member being bent upon themselves to form attaching portions of two thicknesses contacting with each other, and an interlocking end formed on one of said thicknesses and projecting beyond the other thickness.

1,824,673. WINDOW SHADE OPERATING DEVICE. OLIVER W. LEE, Houston, Tex. Filed Apr. 26, 1930. Serial No. 447,710. 1 Claim. (Cl. 156—20.)



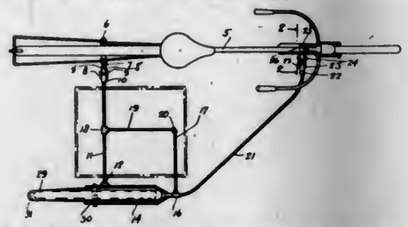
An operating means for a spring wound window shade roller, in which the roller has a pintle projecting a suitable distance from the center of one of its ends, a tape having one end secured to the pintle and wound around said pintle, said means comprising a bracket to be fixed to a window casing and having an angle flange which is round in plan and through the center of which the pintle is journaled, a second disc on the pintle and the wound portion of the tape being received between the discs so that the said discs provide a guide for the said wound portion of the tape.

1,824,674. BUDDING AND GRAFTING PLASTER. PAIGE B. L'HOMMEDIEU, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed June 1, 1929. Serial No. 367,709. 2 Claims. (Cl. 47—7.)



1. As an article of manufacture, a patch for contour fitting purposes in the budding and grafting industry, comprising a sheet of fabric adhesively coated on one side, and a detachable facing applied to said coated area and extending marginally beyond the coated fabric to prevent dogearing, and buckling of the same, and to afford purchase points for readily separating it from the coated fabric.

1,824,675. SIDE CAR FRAME FOR BICYCLES. ROYAL LINN, Springfield, Ill. Filed Oct. 23, 1930. Serial No. 490,782. 2 Claims. (Cl. 208—45.)

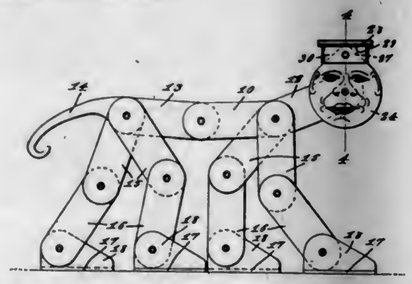


1. In a frame structure of the class described, a fork, a bar extending laterally from the fork, a wheel journaled in the fork, a bar extending diagonally from the fork, blocks on the ends of the bars, a pair of arms projecting from each block, other blocks pivotally mounted between the arms one of which is provided with an internally threaded socket and a U-shaped bolt for the other.

1,824,676. ALDEHYDE BASE AND PROCESS FOR THE MANUFACTURE OF SAME. CHARLES MANNICH, Berlin-Steglitz, Germany. Filed Mar. 27, 1930. Serial No. 439,539, and in Germany June 25, 1928. 11 Claims. (Cl. 260—130.)

1. As new product, α, α-dimethyl-β-diethyl-amino-propyl-aldehyde, which is produced by treating isobutyl-aldehyde with formaldehyde and diethylamine, the new product being a colorless oil and boiling between 175–177° C., its hydrochloride being very hygroscopic.

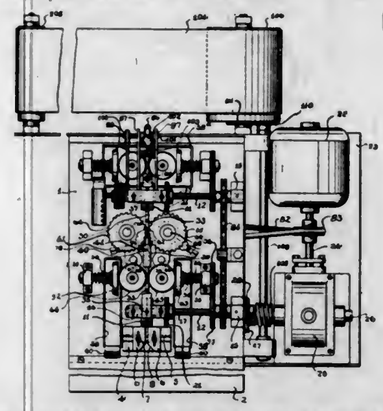
1,824,677. TOY. EDWIN GRANT MASTERS, Long Beach, Calif. Filed Sept. 8, 1930. Serial No. 480,538. 1 Claim. (Cl. 46—40.)



A figure toy having swingably connected body sections, a head section for the toy having interchangeably arranged

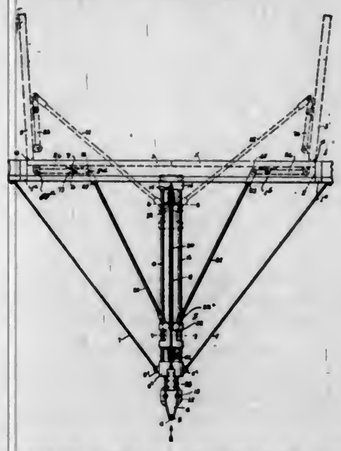
foldably connected relatively flat face sections, a cap for the head section, and means for retaining a multiplicity of the face sections for simultaneous exhibition on the figure.

1,824,678. STRAP EDGE FINISHING MACHINE. EDWIN S. MIX, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed June 6, 1928. Serial No. 283,397. 14 Claims. (Cl. 69—17.)



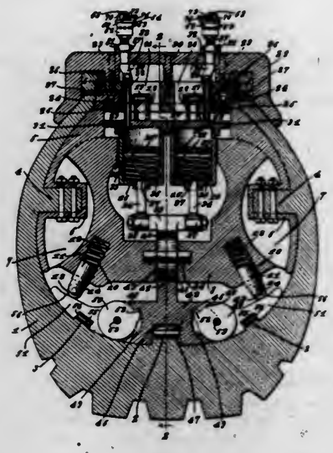
1. In a strap edge finishing machine, an intake guide comprising a guide plate formed with a guideway extending transversely of the line of travel of the strap on the guide, two guide blocks having opposed grooved sides and beveled ends leading to said grooved sides, and means for adjusting the blocks relatively to each other on the guideway.

1,824,679. OPERATING MECHANISM. HOWARD I. MORRIS, Lakewood, Ohio, assignor to The Yoder-Morris Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 26, 1925, Serial No. 58,706. Renewed Aug. 13, 1931. 28 Claims. (Cl. 268—63.)



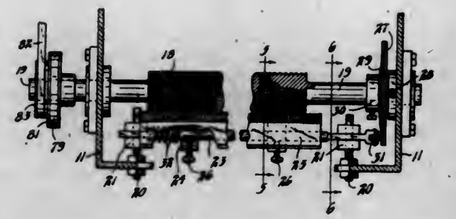
2. In apparatus of the class described, the combination with a structure having a door, of a guide frame, a cross head mounted to reciprocate thereon, a rod between and operatively connected to said cross head and said door, means for moving said cross head in either direction, means for cutting off the power to said moving means as said cross head approaches a predetermined position in either direction of movement, and separate means connected to said screw and disposed in the path of movement of said cross head at one end of its movement along said guide-frame for stopping said moving means.

1,824,680. TIRE. ALVA S. NORMENT, Richmond, Va. Filed Feb. 25, 1931. Serial No. 518,181. 12 Claims. (Cl. 152—22.)



1. A tire construction including a rubber casing, a hollow metal core therein rigidly secured thereto, shoes in and arranged opposite the tread surface of the casing, means loosely connecting the confronting ends of the shoes, interengaging means between the shoes and the casing for holding the shoes from independent circumferential movement, a web on each shoe entering the hollow core, compression pumps arranged in pairs in the casing and having their plungers spring influenced in one direction, and their said plungers being loosely connected with the webs, and designed to be operated by the shoes when the said shoes are subjected to pressure by the weight of a load on the casing.

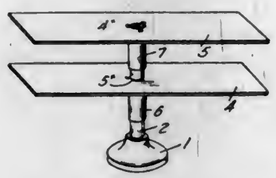
1,824,681. MACHINE FOR CUTTING COFFEE AND THE LIKE. BENJAMIN A. O'NEILL, Minneapolis, Minn., assignor to Schutz-O'Neill Co., Minneapolis, Minn., a Corporation of Minnesota. Filed July 10, 1930. Serial No. 466,911. 4 Claims. (Cl. 83—14.)



1. In a machine for cutting coffee beans or the like into small particles, a rotatable cylinder provided with numerous projections on its curved face disposed in spaced relation and arranged in rows extending longitudinally and circumferentially of the cylinder, a reciprocal knife support, a knife mounted on said support for reciprocation therewith relative to the cylinder, said knife being disposed adjacent to said cylinder and having a toothed edge for cooperation with said projections to effect cutting of coffee beans or the like delivered between the cylinder and the knife, said knife being disposed at a downward inclination toward said cylinder and being mounted on

its support for angular adjustment relative thereto and relative to the cylinder, and means for securing said knife on said support in different positions of angular adjustment relative thereto.

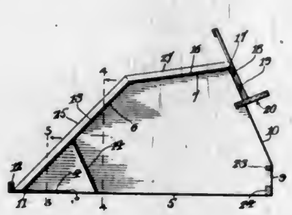
1,824,682. KNOCKDOWN SECTIONAL DISPLAY SHELVES. EDWARD LLEWELLYN O'NEIL, London, Ontario, Canada. Filed Sept. 8, 1930. Serial No. 480,541. 3 Claims. (Cl. 211—148.)



3. Knock-down sheet metal display shelving, comprising a base, a plurality of shelf members having vertically aligned orifices therein, a tubular standard member connected to the base, a sleeve member forming a tubular stem depending from each shelf section concentric with its orifice, a connecting sleeve inserted at one end in the stem of one shelf member and extending at its opposite end through the orifice of the other shelf member into the stem thereof, and means for locking the sleeves and stems together

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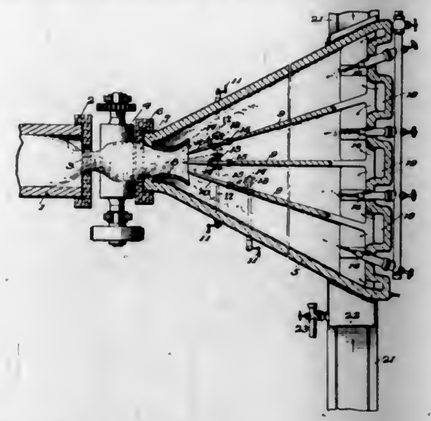
1,824,683. COMBINED DISPLAY AND STORAGE UNIT. WILLIAM E. PETERSON, Sioux Falls, S. Dak. Filed June 23, 1930. Serial No. 463,124. 4 Claims. (Cl. 312—118.)



3. A combined display and storage unit including a pair of side walls having inclined front and inclined top edges, a front wall disposed at an inclination corresponding to the inclination of said front edges, a top wall disposed at an inclination corresponding to the inclination of said top edges, said front and top walls being secured to said side walls, said front edges inclining rearwardly from the bottom to the top thereof, said top edges inclining upwardly from the forward to the rear edges thereof, a foot piece secured to and projecting from the bottom of said side walls at the forward ends of said walls, a nosing secured upon said foot piece and spaced from the lower end of said front wall, and a shelf secured between and projecting rearwardly from said side walls, said shelf extending at an upward inclination throughout from its inner to its outer edge.

1,824,684. APPARATUS FOR MAKING VITRIFIED ARGILLACEOUS PRODUCTS. WILLIAM B. PINE, Okmulgee, Okla. Filed July 22, 1930. Serial No. 469,904. 30 Claims. (Cl. 25—1.)

1. A process for treating argillaceous materials which comprises heating a mass of said materials to a temperature at which it becomes somewhat plastic but not completely fused, distributing the hot mass into separate por-



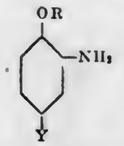
tions, separately densifying said portions by applying compacting pressure thereto while so heated, and welding the hot portions together.

1,824,685. PRESERVING PROCESS. JOHN W. PITTOCK, Swarthmore, Pa. Filed Mar. 29, 1929. Serial No. 351,125. 4 Claims. (Cl. 99—11.)

3. The process of manufacturing an edible product, which consists in taking a waste material comprising the head and viscera of shrimp, rapidly whirling said material in a centrifugal and simultaneously subjecting the material to the action of steam, and thereafter bringing the product to substantial dryness by a supplemental drying operation.

1,824,686. MANUFACTURE OF MONOAZO-DYESTUFFS. BERNHARD RICHARD, Basel, Switzerland, assignor to J. R. Geigy S. A., Basel, Switzerland. Filed June 7, 1930, Serial No. 459,836, and in France July 4, 1929. 13 Claims. (Cl. 260—92.)

1. A process for the manufacture of monoazo-dyestuffs, consisting in coupling a diazo-compound of an ortho-aminophenol-ether of the following formula



wherein R stands for phenyl of benzyl and their homologues or halogen substitution products and Y for H, Cl and CH_3, with an acidyl-1-amino-8-naphthol-disulphonic acid.

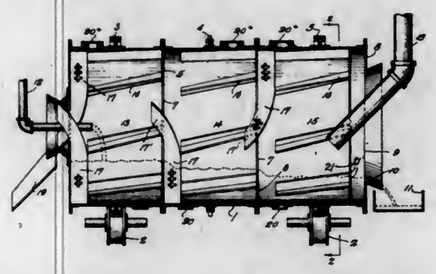
1,824,687. FOLDING METALLIC AWNING. FRANCIS J. RICHARDSON, New Orleans, La. Filed Sept. 27, 1930. Serial No. 484,871. 1 Claim. (Cl. 156—16.)



In an awning construction of the class described, a series of grouped metal strips of considerable thickness

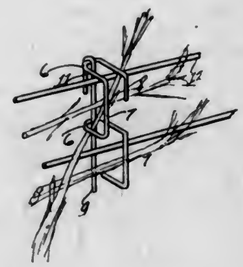
and of substantially U-shape in cross section, flexible members reversely looped around alternate strips from the outside of one strip to the inside of the next strip adjacent thereto for holding them together in spaced relation, flexible members loosely passing through the strips for preventing longitudinal movement of the strips, a supporting roller having the upper ends of the first mentioned flexible member connected thereto and a pivoted member having its outer part connected with the lower part of the grouped strips, said first and second named flexible members being arranged in spaced relation to each other longitudinally of said grouped strips.

1,824,688. WASHER. RICHARD W. RIGLER, Philadelphia, Pa. Filed Jan. 30, 1930. Serial No. 424,661. 1 Claim. (Cl. 209—452.)



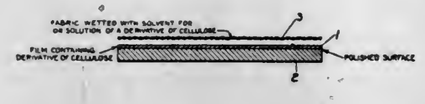
In a washer, an elongated tank provided with end walls and partitions having orifices of progressively increasing diameters defining a plurality of separate compartments and adapted to cause progressively lower levels of wash liquid in the compartments, means for introducing wash liquid into the highest level compartment to overflow into the next lower level compartment, means for introducing material to be washed into the lowest level compartment, and means for transferring the material from compartment to compartment; the lowest level compartment having a perforated plate spaced from the adjacent end wall of the tank to provide a supplemental compartment into which material to be washed is not fed and preventing said material from being carried out of the lowest level compartment with the wash liquid, the annular end wall of the lowest level compartment having a bell mouth to facilitate delivery of the wash liquid.

1,824,689. VINE SUPPORTING DEVICE. CHARLES E. ROBBINS, Santa Cruz, Calif. Filed Apr. 26, 1930. Serial No. 447,703. 3 Claims. (Cl. 47—46.)



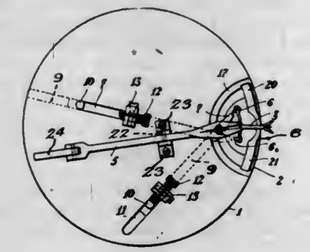
1. In a vine support of the character described, a wire adapted to be bent upon itself so as to form substantially semi-circular loops at intervals throughout its length, said loops being joined by bridge portions, and a locking wire adapted to be passed through said loops for the purpose specified.

1,824,690. METHOD OF COATING FABRICS WITH CELLULOSE DERIVATIVES. GEORGE SCHNEIDER, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed May 21, 1926. Serial No. 110,826. 4 Claims. (Cl. 154—2.)



1. A process of producing a surface or coating of a cellulose derivative on a fabric base which comprises coating a solution of said cellulose derivative on a rigid surface, evaporating the solvent and drying the film thus formed at an appropriate temperature, wetting a fabric with a dilute solution of the cellulose derivative and pressing the thus wetted fabric against the film, thereby attaching the fabric to the film, and then removing the fabric, with the film attached thereto, from the supporting surface.

1,824,691. DEVICE FOR ADJUSTING THE PALLET STONES IN ESCAPEMENT LEVERS. RENÉ SCHWAAR, Bienne, Switzerland. Filed Apr. 28, 1930, Serial No. 448,083, and in Switzerland May 4, 1929. 1 Claim. (Cl. 81—6.)

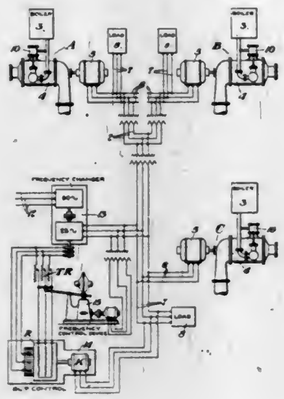


In a device for adjusting pallet stones in escapement levers from a provisory into their true and final position the combination of a rest made with an upper and a lower plate the latter having a semicircular portion left free by a cut out of the upper plate, a heating device comprising a casing containing the heating element and fitted into the free portion of the lower plate, means capable of maintaining the lever always in the same position on said casing, manually operated slides arranged to move in line with the axes of the notches of the stones, and adjustable stops adapted to cooperate with the slides so as to adjust all stones into the same position.

1,824,692. ELECTRIC POWER SYSTEM. WILLIAM B. SKINKLE, Coraopolis, Pa. Filed Dec. 6, 1929. Serial No. 412,225. 2 Claims. (Cl. 290—4.)

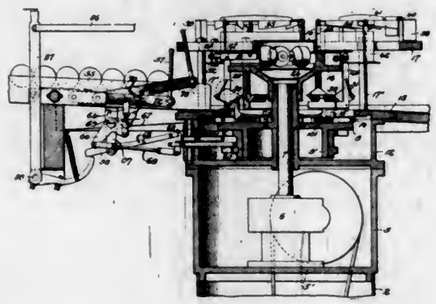
1. In an electric power system, a plurality of alternating current sub-generating systems having independent load requirements, said sub-generating systems being connected in parallel, and an alternating current electric power supply system, said parallel connected sub-generating systems and said supply system being interconnected through a frequency changer, means for automatically controlling each of said sub-generating systems so that they will each generate at maximum capacity for the fuel provided at all times regardless of the load on each system so that if any of said sub-generating systems are generating less energy than its load requirements said system will absorb energy from the other sub-generating

systems, a control device for controlling the direction of energy flow through said frequency changer, and a frequency ratio control means operable by said parallel connected sub-generating systems for automatically operating said control device responsive to the frequency of said parallel connected sub-generating systems, whereby energy



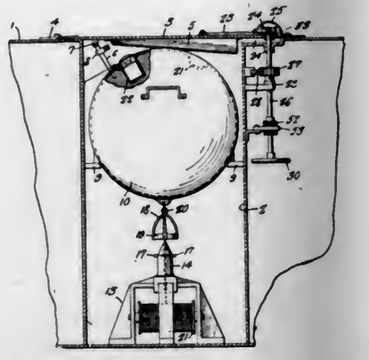
will flow from said sub-generating systems through said frequency changer into said power supply system when the frequency on said sub-generating systems rises above a predetermined limit and energy will flow from said power supply system through said frequency changer into said sub-generating systems when the frequency on said sub-generating systems falls below a predetermined limit.

1,824,693. AUTOMATIC EGG WEIGHING AND SORTING MACHINE. CLEMENT SMITH, Topeka, Kans. Filed Feb. 21, 1928. Serial No. 256,039. 5 Claims. (Cl. 209—121.)



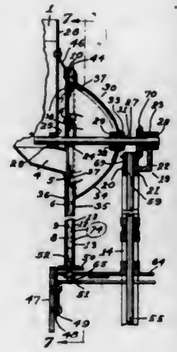
5. A weighing and sorting machine for eggs comprising a support, a shaft rotatable therein, a plurality of weighing platforms mounted to rotate with the shaft, cams rotatable with the platforms but movable relatively thereto, operating means for the cams mounted on the support at points spaced about the shaft, said operating means serving to actuate said cams relative to the platforms and cooperative means between said cams and platforms whereby said platforms are tripped by said cams to discharge an egg at various stations corresponding to the weight of the egg.

1,824,694. SUBMARINE SALVAGE APPARATUS. ABRAHAM STAVE, Brooklyn, N. Y. Filed Dec. 6, 1929. Serial No. 412,202. 4 Claims. (Cl. 114—16.5.)



1. In a submarine salvage apparatus, a buoy chamber, a buoy retained in said chamber, a normally non-turnable valve member, a normally turnable valve member, means whereby said non-turnable valve member is rendered turnable, and means whereby said turnable member is rendered non-turnable.

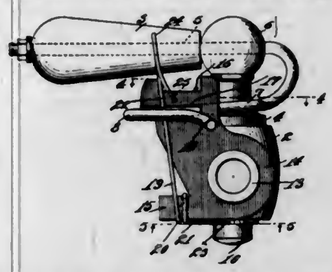
1,824,695. APPARATUS FOR DISPENSING FLAVORING TABLETS. GERHART S. SUPPIGER and HENRY G. WEGENER, Collinsville, Ill. Filed Dec. 12, 1927. Serial No. 239,510. 2 Claims. (Cl. 226—2.)



1. In a tablet-dispensing machine, a hopper adapted to receive the material and having a declining spout, a rotatable receptacle having its walls sloping upwardly and outwardly below said spout and presenting an annular flange spaced from the outer end of said spout, an annular wall associated with said hopper and presenting a lateral flange cooperating with the flange of said receptacle to define a trough constricted in width to receive the tablets edgewise as they drop from said spout, a shaft rotatably carrying said receptacle, means borne by said annular flange and extending into said trough to prevent clogging of the tablets therein, lugs positioned inwardly of said means for agitating the tablets in said receptacle and a chute for receiving the tablets from said trough.

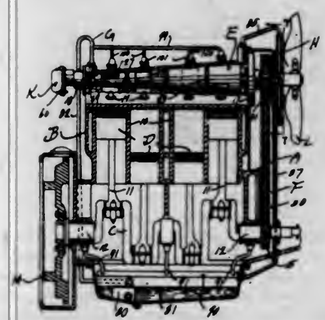
1,824,696. SAFETY DEVICE FOR GAS BURNERS AND THE LIKE. GEORGE THOMAS, Rahway, N. J. Filed July 6, 1929. Serial No. 376,388. 5 Claims. (Cl. 251—164.)

1. A safety device for gas valves or the like comprising a valve body, a valve therein having a handle, a recurved extension carried upon one end of said handle and movable therewith, a plate carried by said valve having a slot in the path of movement of said extension adapted to re-



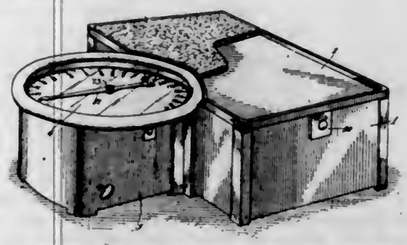
ceive said extension in one movement of the handle, and a resilient spring disposed between said plate and said extension to latch said valve against accidental movement.

1,824,697. ROTARY VALVE INTERNAL COMBUSTION ENGINE. PETER THOMSON, Wilmington, Del. Filed May 20, 1929. Serial No. 364,566. 5 Claims. (Cl. 123—59.)



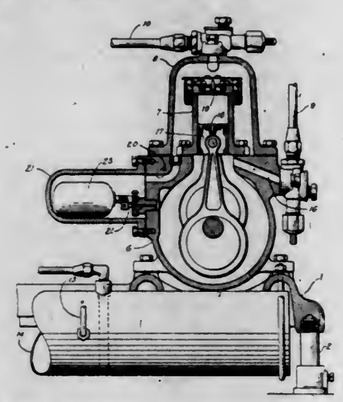
1. In an internal combustion engine the combination of a housing having cylinder chambers therein with port means thereto, a rotary valve for the cylinder chambers including port means for cooperative association with the first mentioned port means for controlling intake and exhaust with respect to the cylinder chambers, means for rotating the rotary valve, and means for lubricating the rotary valve in its seat including lubricating ducts leading to the rotary valve, and normally closed check valve means associated with the rotary valve in a cooperative relation to be opened during operation of the rotary valve.

1,824,698. COMBINED LEVER AND COIL SPRING TYPE OF SCALE. MATHIAS J. WEBER, Chicago, Ill., assignor to Healthometer Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1926. Serial No. 107,864. Renewed Aug. 14, 1931. 31 Claims. (Cl. 265—68.)



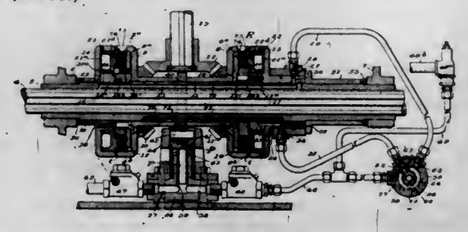
1. In a device of the class described, the combination of a substantially shallow casing adapted to rest on the floor and having a platform supporting portion of substantial area and open at its top to receive a weighing platform, said casing having a lateral extension, a registering mechanism, including a dial closing the top of said extension and lying substantially in the plane of the platform, a plurality of levers horizontally disposed in the casing beneath the platform, said levers being supported by said casing and operative connections from said levers to said registering mechanism, including a spring for actuating said registering mechanism upon the movement of said platform.

1,824,699. REFRIGERATING MACHINE. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed Nov. 16, 1927. Serial No. 233,553. 4 Claims. (Cl. 62—115.)



1. In a self contained closed domestic refrigerating system, a sealed compression unit including, a compression cylinder, a crank case communicating with one side thereof, means for inducing a gaseous refrigerating fluid into said cylinder, a compression dome about said cylinder, means for compressing said fluid in said cylinder and discharging the compressed fluid into said dome, means leading the compressed fluid from the dome to the system, and means for removing lubricant collecting in said dome and discharging said lubricant directly into said crank case including a sealed lubricant trap chamber communicating with the interior of the dome and having an automatic valve controlled by the level of the lubricant in the trap chamber in the discharge passage communicating with the crank case.

1,824,700. HYDRAULICALLY OPERATED REVERSING MECHANISM. LARKIN R. WILLIAMSON, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 15, 1927. Serial No. 161,397. 11 Claims. (Cl. 74—59.)



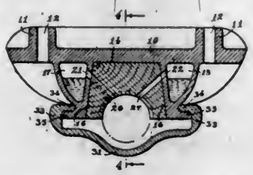
1. A reversing unit combining a translatable casing; a non-translatable prime mover; a power delivery shaft journaled in said casing; a driven gear on said shaft; a sleeve journaled in the casing and rotatable with the prime mover; two driving gears journaled in said casing and permanently in mesh with diametrically opposite sides of the first named gear; a disk clutch associated

with each of said driving gears and each adapted when actuated, to cause its gear to rotate with said prime mover thereby to rotate the driven gear; a pump translatable with said casing and actuated by said sleeve and adapted to supply fluid pressure to actuate said clutches; a valve connected with the exhaust of said pump and adapted to direct fluid pressure from said pump alternately to said two clutches thereby to connect said pump alternately to said two clutches to effect oppositely directed rotations in the power delivery shaft; and a reservoir provided by walls of said translatable casing.

1,824,701. TREATMENT OF WOODS FOR CELLULOSE. KARL GUSTAF BERGSTRÖM and ARTHUR F. ZENNSTRÖM, Paris, France. Filed Feb. 8, 1930, Serial No. 427,050, and in Finland Sept. 18, 1929. 1 Claim. (Cl. 92—13.)

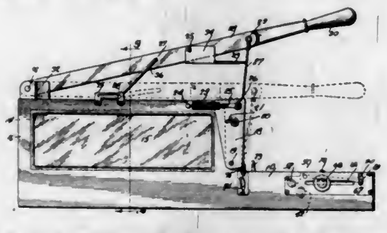
In the fabrication of cellulose from resinous or balsamic woods, in combination a treatment by a weak alkaline solution at room temperature, a treatment by hot turpentine oil and a treatment by steam.

1,824,702. JOURNAL BOX AND BEARING. THEODORE BIRD, Scranton, Pa. Filed Apr. 24, 1929. Serial No. 357,829. 5 Claims. (Cl. 308—81.)



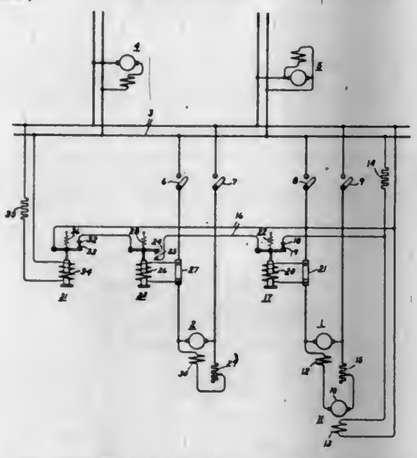
4. In a journal bearing box for mine cars, a journal box having a bearing socket with two lubricant chambers, one at each end of the bearing socket; there being ports connecting the upper portions of the lubricant chambers with the bearing socket, and a bearing block in the socket having a bearing groove and obliquely disposed passages from the ports to the bearing groove.

1,824,703. CHEESE CUTTER. WILLIAM J. BROWN, Buffalo, Ky. Filed Apr. 26, 1930. Serial No. 447,642. 4 Claims. (Cl. 31—20.)



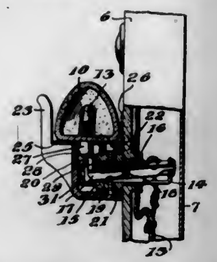
2. A food cutter of the character described comprising a base having an elongated cut away portion in the bottom thereof, a housing mounted at one end of the base having transparent side walls and being open at one end, a follower reciprocably mounted in the housing, a lever having one of its ends pivoted to the housing, a handle formed at the other end of the lever for reciprocating the same, means for preventing lateral movement of the reciprocating lever, and a reciprocating knife pivotally attached to the reciprocating lever, a pair of guide plates pivotally attached to each side of the housing adjacent the cutter for guiding the reciprocating knife, a coil spring having one of its ends connected to the housing and its opposite end connected to the guide plate whereby the reciprocating knife will be held in close contact to the open end of the housing, a pivot plate having one end connected to the reciprocating lever and its free end engaging the reciprocating knife, a stop vertically and longitudinally movable in the base in close relation to the reciprocating knife, and means operable upon the full downward movement of the reciprocating knife for causing the stop to be moved below the surface of the top of the base, whereby the sliced food product may move along the top surface of the base.

1,824,704. ELECTRICAL REGULATING SYSTEM. FRANK A. BYLES, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 23, 1930. Serial No. 463,309. 8 Claims. (Cl. 171—312.)



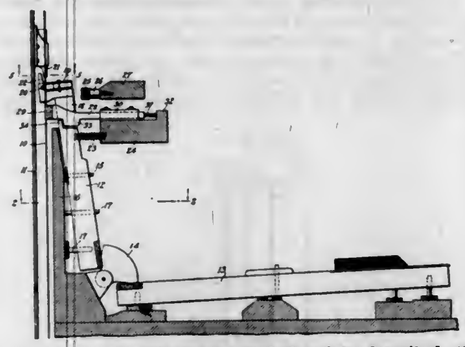
1. In combination, an electric circuit, a variable load connected thereto, a substantially constant voltage source of electrical energy connected thereto, a variable voltage source of electrical energy connected to said circuit, means responsive to the current flow in said second source for increasing the voltage of said variable voltage source until a predetermined value of current flows therein and for decreasing the excitation of said variable voltage source if said predetermined current value is exceeded, and means responsive to the current flow in said constant voltage source for reducing the voltage of said variable voltage source if the current flow in said constant voltage source is below a predetermined value.

1,824,705. WALL TELEPHONE INSTRUMENT. JOSEPH O. CADIEUX, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn., a Corporation of Delaware. Filed Mar. 22, 1930. Serial No. 438,022. 9 Claims. (Cl. 179—100.)



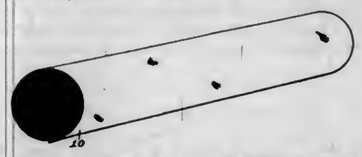
1. A telephone instrument comprising a wall casing containing the signal device and circuit switch and lever and having a projecting tube containing a hook lever, a cradle supported by said tube, a plunger coacting with the hook lever, a hand combination receiver and transmitter adapted to rest in the cradle on said plunger and having a cord connected to said switch lever in said casing.

1,824,706. PLECTRUM PIANO ACTION. GIUSEPPE CASCIOTTA, New York, N. Y. Filed Oct. 17, 1930. Serial No. 489,451. 7 Claims. (Cl. 84—258.)



1. In a musical instrument of the class described, the combination of a music string, an actuating lever having means for picking the string upon the actuation of the lever, a damper mounted for movement with respect to said string, yieldable means constantly acting on the damper to urge it in contact with said string, said damper being in engagement with said lever so that said damper will be moved by the lever out of contact with said string prior to the string being picked by said picking means.

1,824,707. PLUG FOR LUG STRAPS AND METHOD OF MAKING SAME. JOSEPH H. CHADBOURNE, Danielson, Conn., assignor to E. H. Jacobs Mfg. Co., Danielson, Conn., a Corporation of Connecticut. Filed July 5, 1929. Serial No. 375,930. 1 Claim. (Cl. 139—153.)



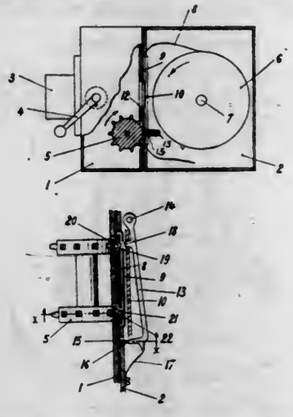
That improvement in the art of forming plugs of condensed textile layers for use in lug straps, which consists in utilizing a strip of textile material, having a width equal to a predetermined plurality of subsequent lug straps to be formed therefrom, forming from said fabric sheet an elongated roll impregnated with adhesive, compressing said elongated roll into a condensed bar having a length equal to said plurality of lugs to be formed therefrom, dividing said bar into plug-sized sections by visible lines of division, and thereupon separating individual plugs from said bar on said lines of division.

1,824,708. ELECTRICAL FIXTURE AND FAN SUPPORT. ELMER D. DAVIS and ROBERT T. PAYNE, El Paso, Tex. Filed Apr. 4, 1930. Serial No. 441,577. 4 Claims. (Cl. 247—20.)



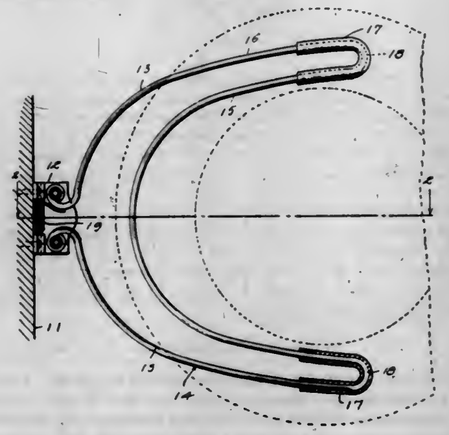
1. In combination with an outlet box, its supporting header and plaster ring, a bracket situated in the box having a cut-out depression facing the opening in the ring, a hanger bolt having a head fitted in the cut-out and resting upon the depression, and means for commonly securing the bracket and outlet box together and to the supporting header thus to suspend the hanger bolt in the ring opening.

1,824,709. APPARATUS FOR TAKING PHOTOGRAPHIC OR CINEMATOGRAPHIC PICTURES. ANDRÉ LÉON VICTOR CLÉMENT DEBRIE, Paris, France. Filed Mar. 17, 1926. Serial No. 95,416, and in France Apr. 20, 1925. 3 Claims. (Cl. 88—17.)



1. In a view taking apparatus, the combination of two independent parts adapted to be removably secured together one behind the other and to bear against each other exclusively along the cooperating front wall of the rear part and rear wall of the front part, cooperating exposure apertures being provided in said cooperating walls, an objective carried by the front part, a film and means for feeding same to the exposure aperture and for winding it after exposure carried by the rear part, a device contained in the rear part adapted to pass through a perforation of the film for holding the latter in a predetermined position with reference to the aperture in the front wall of the rear part, control means carried by the front part adapted to render said device inoperative when the two parts are brought into cooperation and film advancing means including a sprocket wheel disposed in the front part said sprocket wheel being spaced from the last mentioned control means by a distance such that when the above mentioned device is caused to release the film one of its teeth snaps immediately into a perforation of the film.

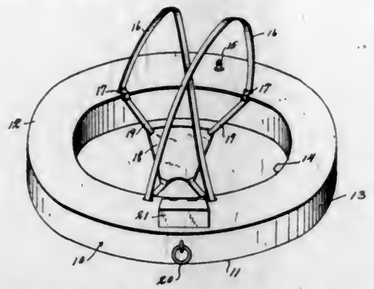
1,824,710. HAT HOLDER. JOHN DE CARLO, Brooklyn, N. Y. Filed Aug. 27, 1929. Serial No. 388,801. 1 Claim. (Cl. 211—31.)



A device for holding a hat flatly against a wall comprising a yoke member, and flexible means secured to said yoke member adapted to be attached to a support for urging

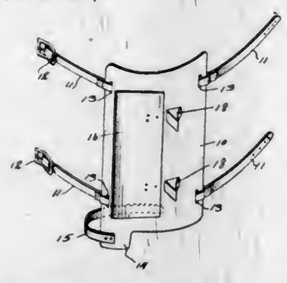
said yoke member into position to press said hat rim against said wall, said yoke member including a pair of spaced approximately concentric open loops arranged in a common plane and connected at their outer ends, the arms of the inner of said loops being laterally flexible whereby to grip the sides of the crown of a hat.

1,824,711. WADING BOAT. EVERETT A. DE NOYA, Pawhuska, Okla., assignor of one-half to Floyd Soderstrom, Pawhuska, Okla. Filed Feb. 28, 1931. Serial No. 519,144. 1 Claim. (Cl. 9—5.)



A wading boat of the character described comprising a ring-shaped boat structure of hollow construction, a pair of strap members adapted to engage about the shoulders and legs of the wearer, and loop members secured to said boat structure and loosely engaging said strap members whereby to suspend the boat structure from the shoulders of the wearer.

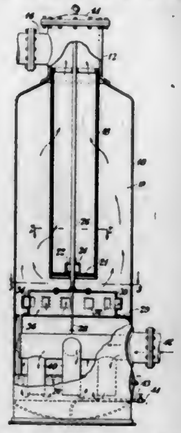
1,824,712. OAR. EVERETT A. DE NOYA, Pawhuska, Okla., assignor of one-half to Floyd Soderstrom, Pawhuska, Okla. Filed Feb. 28, 1931. Serial No. 519,145. 1 Claim. (Cl. 9—21.)



As a new article of manufacture, an oar of the character described comprising a plate member of longitudinally arcuate configuration, means for removably securing said plate to the limb of an individual, a reduced extension extending downwardly from the lower end of said plate, a locking member carried by said extension and engaging about the heel of a shoe whereby to cooperate with said securing means for holding said plate against circumferential movement on the limb, an oar member, means for rockably securing said oar member to said plate, and bracing means outstanding from said plate and adapted to engage said oar member whereby to hold said oar member in outstanding operative position.

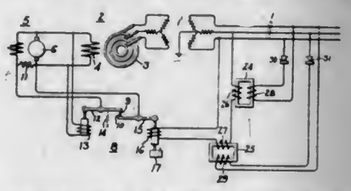
1,824,713. APPARATUS FOR CLEANING GAS. JAMES P. FISHER and GEORGE F. DOWNS, Bartlesville, Okla., assignors to Empire Oil & Refining Company, Dover, Del., a Corporation of Delaware. Filed June 10, 1927. Serial No. 197,791. 11 Claims. (Cl. 183—10.)

1. Apparatus for removing mist from gas comprising, an upright cylindrical gas holder, a tubular gas-permeable screen depending from the top of said holder in spaced relation with respect to the sides thereof whereby there is formed an annular chamber between said screen and holder, a partition extending across the holder below the screen for dividing the holder into upper and lower compartments, a plurality of nozzles arranged in a circle associated with said partition and through which mist-laden gas from below the partition is passed into the upper of said compartments, said nozzles being so arranged as to introduce



the mist-laden gas into the annular chamber in the upper compartment with a rotary motion about the screen whereby the heavier particles of mist are caused to impinge against the sides of the holder and coalesce thereon, a gas outlet communicating with the top of the screen which outlet the gas reaches by passing through the walls of the screen, the walls of the screen serving as a body to which the residual mist in the gas will cling and coalesce as the gas passes therethrough on its way to said outlet.

1,824,714. ELECTRICAL REGULATOR. ALAN S. FITZ GERALD, Wynnewood, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 12, 1930. Serial No. 451,875. 15 Claims. (Cl. 171—119.)



1. In combination, a polyphase alternating current circuit, an electrical regulator having a control element, and means including a plurality of rectifiers for controlling the energization of said control element in accordance with an electrical condition of different phases of said circuit.

1,824,715. MULTIPLE FLOOR STRIP. PASQUALE GALASSI, New York, N. Y. Filed Mar. 5, 1930. Serial No. 433,316. 19 Claims. (Cl. 94—17.)



1. A dividing strip for terrazzo floors or the like, comprising a main strip section provided with laterally extending supporting means adapted to support additional sections, and additional section retaining means, integral with said strip, projecting upwardly of the outer edge

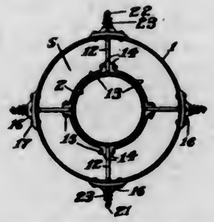
of said supporting means, said main section having an uninterrupted upper edge level with the surface of a floor in which the strip is used, and being adapted per se to be used as a complete strip.

1,824,716. CONTROL VALVE ATTACHMENT FOR FLUSH TANK FAUCETS. PATRICK C. GIBBONS, Edina, Mo. Filed Mar. 6, 1928. Serial No. 259,480. 1 Claim. (Cl. 251—34.)



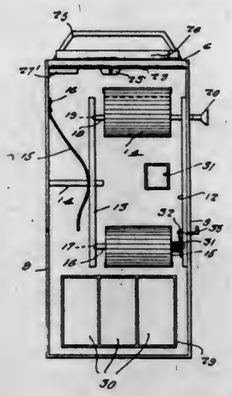
In a device of the class described the combination with a flush tank faucet having a hand valve; of a three-way T-valve with one end of which said faucet is connected, the other end of said coupling having means for connection with a water line, the shank of the coupling extending upwardly when in operative position, said shank being externally threaded to receive a coupling nut, a coupling nut engaged with said threaded shank portion and having an inturned flange at its outer end, a tubular member having an outturned flange at its lower end adapted to underlie and engage with the flange of the nut, said tubular member having a reduced externally threaded section, a tubular upper section having an enlarged bore at its lower end to fit said tubular threaded extension of the first mentioned extension, the upper or outer portion of said bore being threaded to receive a valve stem, a downwardly and outwardly inclined spout carried by said upper section and communicating with the interior of said tubular portion thereof, a valve stem threaded throughout a portion of its length and having threaded engagement with said tubular upper section with its unthreaded portion adapted to slide freely and turn in the reduced extension of the lower section, the unthreaded section of said valve stem having a groove extending longitudinally thereof and tapering toward its inner end for controlling the water and permitting it to flow from the hollow upper section into the flush tank, the valve stem being adjustable to vary the amount of water permitted to pass.

1,824,717. DRIER. WILLIAM A. HARTY, Buffalo, N. Y., and FRANK W. MOORE, Thorold, Ontario, Canada, assignors to Harmor & Co. Inc., Buffalo, N. Y., a Corporation of New York. Filed May 26, 1930. Serial No. 455,602. 6 Claims. (Cl. 34—5.)



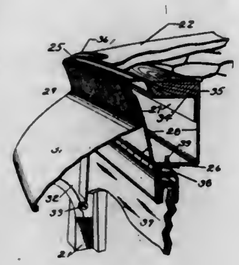
1. In a drier, spaced inner and outer shells, suspension members connecting said shells, said members hinged at their inner ends to the inner shell and having ball and socket connection at their outer ends with said outer shell.

1,824,718. STENOGRAPHER'S APPLIANCE. BEATRICE HASBROUCK, Highland, N. Y. Filed Feb. 19, 1930. Serial No. 429,057. 2 Claims. (Cl. 242—55.)



1. In a device of the character described, a fixed bar, a movable bar parallel to the fixed bar and movable toward or away from the latter bar, a pair of shafts supported between said bars, spring means normally urging said movable bar in a direction toward the fixed bar for retaining said shafts between said bars, rollers on said shafts for rotation therewith, said rollers being adapted to support and operate a strip of paper or the like.

1,824,719. BODY CONSTRUCTION. JAMES R. HUGHES, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed June 28, 1928. Serial No. 288,826. 6 Claims. (Cl. 296—28.)

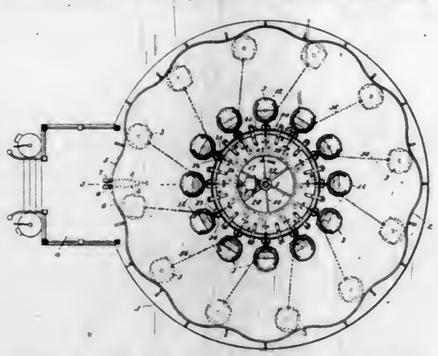


6. In a vehicle body having top side rails and a windshield, a peak rail interconnecting said side rails comprising a pair of sheet metal members secured together along their adjacent overlapping edges, one of said members being extended downwardly over the other member and then forwardly to form a sun visor, and the other of said members being provided with means for supporting said windshield.

1,824,720. AMUSEMENT RIDE. JACOB IRSCH, New York, N. Y., assignor of one-half to Barbara E. Jones, Freeport Village, N. Y. Filed Sept. 6, 1928. Serial No. 304,323. 6 Claims. (Cl. 272—43.)

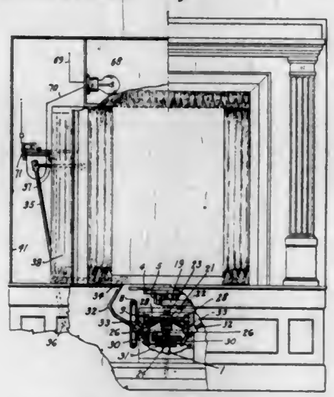
1. An amusement ride, comprising a stationary platform, a rotary platform arranged centrally of the stationary platform, means for rotating said central platform, a plurality of cars supported by casters mounted on the stationary platform, a spring rewound drum mounted on said rotary platform for each of said cars, a cable connected with each of said drums and with the respective

cars, whereby when said central platform rotates said cars will be swung in a circle and caused to move radially outwardly under the action of centrifugal force, and a guid-



ing structure carried by said rotary platform for each of said cables, said guiding structure acting to cause said cables to extend substantially radially from the drums to a point beyond the periphery of the rotary platform.

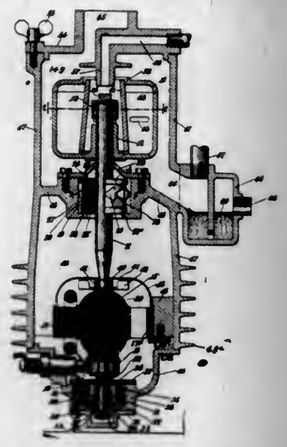
1,824,721. DISPLAY DEVICE. HUGH J. JONES, Denver, Colo. Filed July 13, 1929. Serial No. 378,080. 12 Claims. (Cl. 40—33.)



1. In a display cabinet adapted to present a plurality of displays successively in a recurring cycle and to make the change from one display to the next during the time the curtains of said cabinet are closed, a frame, a revolving cam carried by the frame, a cam actuated lever, pivotally mounted on the frame, a pair of pivotally mounted shafts carried by the frame substantially parallel with said lever, a pair of arms adjustably secured upon said shafts and adapted to contact with and be actuated by said lever to give said shafts an oscillating movement, spring means adapted to maintain the lever in contact with the cam, and a pair of arms adjustably secured upon said shafts and connected to said curtains whereby at each revolution of the cam the curtains will be closed and will remain closed for a predetermined period of time, and will then be opened and remain open for a predetermined period of time.

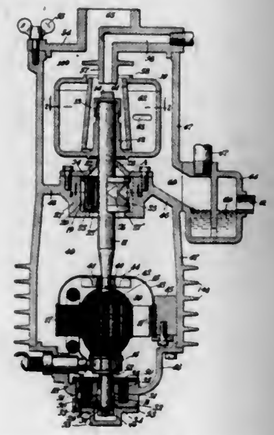
1,824,722. CENTRIFUGAL MACHINE. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 19, 1927. Serial No. 227,122. 7 Claims. (Cl. 233—23.)

1. In a centrifugal machine, a unitary rotor spindle, a resilient bearing and a bearing fixed against radial movement respectively engaging said spindle at spaced points thereof, a motor armature mounted on said spindle adjacent said fixed bearing, a commutator for said arma-



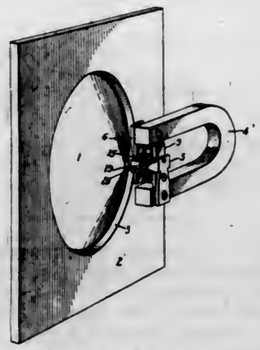
ture and mounted on said spindle between said armature and said fixed bearing, and fixed field magnets in operative relation to said armature.

1,824,723. CENTRIFUGAL MACHINE. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Original application filed Oct. 19, 1927, Serial No. 227,122, and in Japan Oct. 15, 1928. Divided and this application filed June 15, 1931. Serial No. 544,576. 19 Claims. (Cl. 233—27.)



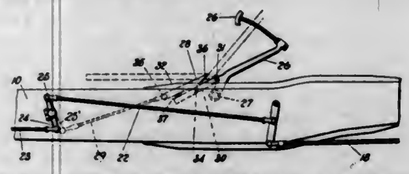
1. In a centrifugal machine, a rotating system comprising a spindle and a rotor supported thereby and having outlets for the discharge of separated constituents, a casing comprising a side wall encircling said system and having openings for the discharge of separated constituents and otherwise closed, a wall closing one end of said side wall and provided with an opening for said rotating system, and a removable cover closing the other end of said side wall; and a plate in said casing and removable therefrom through the end closed by said removable cover and having an opening for said rotating system and dividing the interior of said casing into separate compartments that respectively receive constituents discharged from said discharge outlets of said rotor and from which compartments respectively lead said openings in said side wall.

1,824,724. ELECTROMAGNETIC DEVICE. EDWARD W. KELLOGG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 3, 1926. Serial No. 152,475. 4 Claims. (Cl. 179—115.5.)



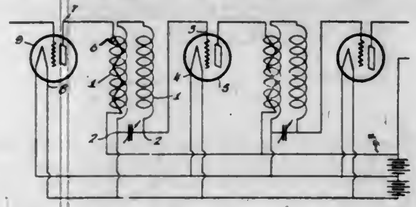
1. In combination, a magnetic structure comprising an armature, a magnet, a pole piece connected to the magnet and adapted to complete a magnetic circuit through the magnet and armature, said pole piece comprising a pair of pole tips of like polarity, means for vibrating the armature, a spring adapted to hold the armature in its normal position, said armature being of such cross-section as to prevent saturation thereof, the portion of the pole piece between the pole tips and magnet being constantly magnetically saturated, whereby a straight line relation may be maintained between the deflection of the armature and the force tending to deflect it.

1,824,725. BRAKE OPERATING MECHANISM. ROBERT F. KOHR, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed June 10, 1929. Serial No. 369,759. 10 Claims. (Cl. 188—217.)



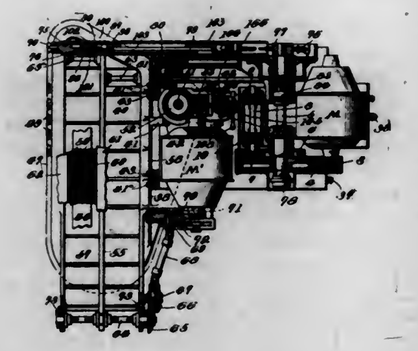
10. In a brake operating mechanism, a modulator interposed between the brake applying member and the brake to be operated thereby, said modulator comprising members pivotally connected together having their longitudinal axes normally intersecting each other and movable by said brake applying member toward parallel relationship upon actuation of said member to apply said brake.

1,824,726. INDUCTANCE COIL. PERCIVAL DAVIS LOWELL, Jamaica, N. Y. Filed Feb. 12, 1926. Serial No. 87,819. 6 Claims. (Cl. 175—359.)



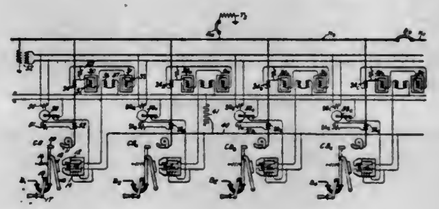
1. A radio frequency transformer made up of a substantially cylindrically wound primary winding and a secondary winding consisting of two similar substantially cylindrical coils disposed close to one another, with parallel axes, the secondary windings being so arranged that their magnetic polarities are opposite to one another, the primary winding being magnetically associated with one of the coils of the secondary winding.

1,824,727. RETREATING LONGWALL FACE MINING MACHINE. ALEXANDER M. MARION, Pittsburgh, and EMIL C. GERRY, Canonsburg, Pa. Filed Mar. 7, 1927. Serial No. 173,331. 15 Claims. (Cl. 262—28.)



10. In a longwall mining machine, the combination of a body portion, movable devices for supporting and moving said body portion forward and back, a frame supported by said body portion and projecting from and extending across the entire front end of said body portion and having its lower face disposed in substantially the plane of the lower face of the supporting devices, a traveling cutter movable in front of the projecting frame from one side of the body portion to the other side thereof for producing a horizontal kerf to receive the constantly advancing frame, and a conveyor independent of the traveling cutter and disposed adjacent the active portion of the movable cutter and traveling over the upper face of said frame in a direction substantially at right angles to the forward movement of the body portion for receiving the material breaking down as it is cut and for conveying the material received thereon to one side of the body portion and out of the forward path of travel of the machine, and means carried by the body portion of the machine for operating said traveling cutter and for operating said conveyor.

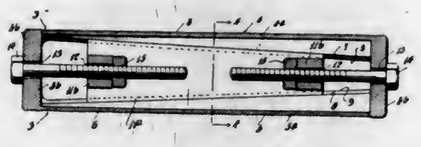
1,824,728. ELECTRORESPONSIVE DEVICE AND SYSTEM. JACOB W. MCNAIRY, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed June 22, 1928. Serial No. 287,540. 10 Claims. (Cl. 175—294.)



1. In combination, plurality of parallel feeders interconnecting two supply stations therefor, a plurality of

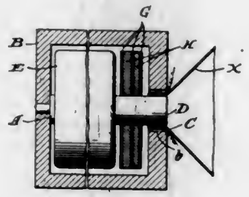
feeder disconnecting switches, each having automatic operating means responsive to short circuit fault currents in a corresponding feeder for disconnecting the same from a corresponding one of the supply stations, and automatic electrical means for preventing operation of the feeder disconnecting switches for each station when internal short circuit faults occur at the other station.

1,824,729. WEDGE KEY BLOCK. WILLIAM J. MILLER and FORREST R. JONES, Sulphur, La., assignors of three-fourths to Wm. J. Miller and one-fourth to Forrest R. Jones. Filed Aug. 31, 1929. Serial No. 389,836. 4 Claims. (Cl. 254—104.)



4. A wedge key block, comprising angular members having their sides arranged in parallel relation and provided with converging inner surfaces, the end of one member extending in the direction of the side of the other member, a wedge arranged between and contacting with said converging surfaces, and wedge adjusting members engaged with the wedge and with the ends of said first members, said wedge adjusting members maintaining said first members and the wedge in assembled relation.

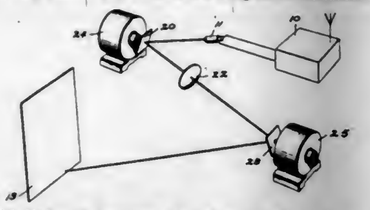
1,824,730. ACOUSTICAL DEVICE. ANDREW P. MONTGOMERY, Kew Gardens, N. Y., assignor to A. H. Grebe & Co., Inc., Richmond Hill, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,772. 7 Claims. (Cl. 174—115.5.)



1. In an electro-magnetic sound reproducer employing a magnetizing coil carrying a pulsating magnetizing current, an air gap in which a pulsating magnetic field is developed, means for diminishing the amount of pulsation of said field, said means consisting of a laminated ring placed between the air gap and the magnetizing coil, said laminated ring consisting of alternating laminæ of magnetic material and non-magnetic material of high conductivity.

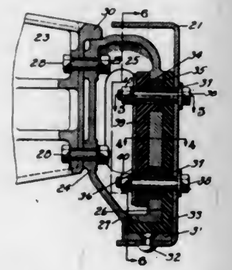
1,824,731. PICTURE TRANSMITTING SYSTEM. DANIEL MCFARLAN MOORE, East Orange, N. J., assignor to General Electric Company, a Corporation of New York. Filed July 9, 1929. Serial No. 377,004. 3 Claims. (Cl. 178—6.)

1. In a picture transmitting system, a receiving apparatus comprising means for producing light modulated in accordance with the shading of the successive elemental areas of the picture to be transmitted, a screen, a plurality of rotatably mounted mirrors arranged to successively re-



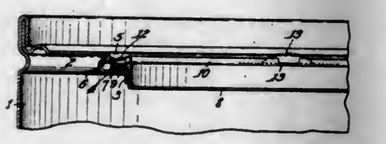
flect said light to produce a trace on the screen, means for rotating said mirrors continuously in one direction at different speeds, and a lens arranged between said mirrors.

1,824,732. INTERNAL COMBUSTION ENGINE. CLYDE R. PATON, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed July 5, 1928. Serial No. 290,532. 3 Claims. (Cl. 248—142.)



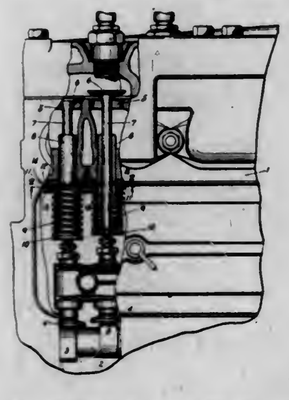
1. In combination with a supporting frame of channel section and a member to be resiliently supported thereby, of a supportnig bracket secured to said member having vertical and horizontal faces, an apertured resilient, non-metallic, cushioning member of L-section interposed between said vertical and horizontal faces of said bracket and the vertical web and lower flange of said frame respectively, insulating members of resilient non-metallic material received by said bracket having apertures therein in alignment with the apertures of said cushioning member, spacers received by said apertures in said cushioning and insulating members, and bolts extending through said spacers for securing said bracket to said frame.

1,824,733. CLOSURE RETAINING DEVICE FOR DRUMS. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Dec. 5, 1930. Serial No. 500,235. 6 Claims. (Cl. 220—61.)



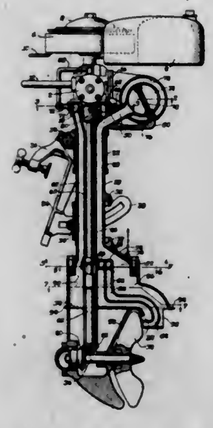
1. A closure retaining device comprising a split expansible ring of sheet metal shaped to provide a plurality of alternate horizontal and inclined panels, the inclined panels inclining upwardly toward the inner peripheral edge of the ring from the plane of the horizontal panels at points adjacent to the outer peripheral edge of the ring.

1,824,734. VALVE SPRING CONTROL FOR INTERNAL COMBUSTION ENGINES. DELMAR G. ROOS, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed May 20, 1929. Serial No. 364,495. 10 Claims. (Cl. 267—1.)



1. Means for damping a valve spring comprising, a spring contacting with an end of said valve spring, and means for damping said second named spring.

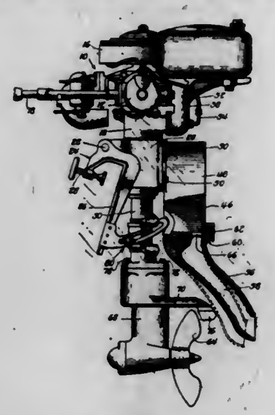
1,824,735. OUTBOARD MOTOR. LOUIS J. JOHNSON, South Bend, Ind., assignor to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed July 24, 1929. Serial No. 380,730. 51 Claims. (Cl. 115—18.)



1. An outboard motor having a jacketed combustion engine, a jacketed muffler, under-water driving means connected with the engine, and a single support casing for said means, having water inlet passages to the engine and muffler and a common water discharge passage and an exhaust passage from the muffler terminating below the normal water level.

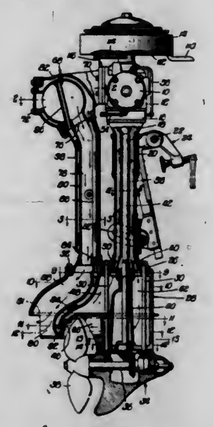
1,824,736. OUTBOARD MOTOR. LOUIS J. JOHNSON, South Bend, Ind., and HARRY L. JOHNSON, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed Nov. 7, 1928. Serial No. 317,749. 35 Claims. (Cl. 115—18.)

1. In an outboard motor assembly, the combination of a support, a motor mounted thereon, means connected with the motor for effecting the discharge of exhaust gases under water, and means operable by the movement of the



assembly through the water for relieving against the development of back pressure by the exhaust gases within the motor.

1,824,737. OUTBOARD MOTOR ASSEMBLY. LOUIS J. JOHNSON, South Bend, Ind., and HARRY L. JOHNSON, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed Jan. 28, 1929. Serial No. 335,447. 6 Claims. (Cl. 115—18.)

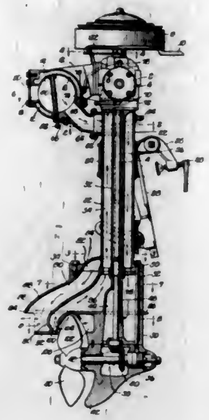


1. In an outboard motor assembly, the combination with a support, of a motor mounted thereon having a lower turnable unit, a drive shaft casing connecting the motor and said unit, an expansion chamber for receiving exhaust gases from the motor and means forming a passage way from the chamber to the unit separate from the casing, the lower unit having a passage communicating therewith for discharging exhaust gases at the rear of the unit and below normal water level.

1,824,738. OUTBOARD MOTOR ASSEMBLY. LOUIS J. JOHNSON and HARRY L. JOHNSON, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed Feb. 4, 1929. Serial No. 337,244. Renewed Apr. 18, 1931. 14 Claims. (Cl. 115—18.)

12. In an outboard motor assembly, the combination of a support, a motor mounted thereon having a lower turn-

able unit of stream-line cross section, means connected with the motor for effecting the discharge of exhaust gases rearwardly of said lower unit, means for controlling the



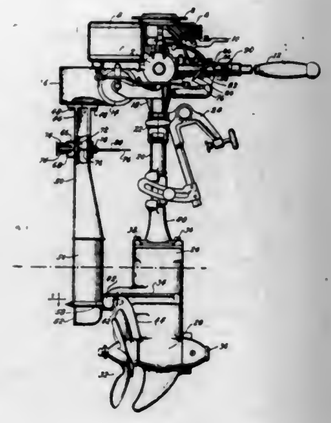
speed of the motor, and means operable in response to the actuation of said speed controlling means for relieving against the development of back pressure by the exhaust gases within the motor.

1,824,739. OUTBOARD MOTOR ASSEMBLY. LOUIS J. JOHNSON, South Bend, Ind., and HARRY L. JOHNSON, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed June 27, 1929. Serial No. 374,110. 8 Claims. (Cl. 115—18.)



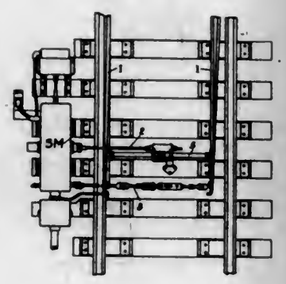
1. An outboard motor having a water jacketed gas engine with a vertically depending drive shaft and casing surrounding the shaft, the casing having separate passages for the cooling water and the engine exhaust connected at the upper end to the engine and terminating at the lower end below the normal water level, supporting means for hinging the casing about a horizontal axis and permitting rotation of the casing about a vertical axis for steering and reversing, and closable means in the exhaust passage above the supporting means for discharging the exhaust gases above the water level without interfering with the horizontal or vertical rotation of the casing therein.

1,824,740. WATER PROPULSION DEVICE. LOUIS J. JOHNSON, South Bend, Ind., and HARRY L. JOHNSON, Waukegan, Ill., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed May 31, 1929. Serial No. 367,569. 15 Claims. (Cl. 115—18.)



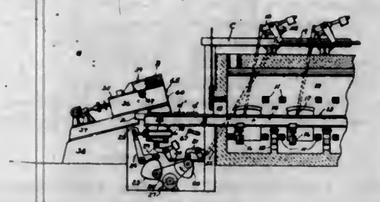
1. In combination with a water propulsion device having a power head including an internal combustion engine, having a muffler, a sleeve surrounding the extended drive shaft of the engine having a propeller carrying casing at its lower end which is of streamline construction, an underwater exhaust attachment for said propulsion device comprising an exhaust manifold having means for attachment to the gear casing, and means engaging said attaching means and said gear casing for rigidly holding said manifold in position at the rear of the gear casing, and within the streamlined lateral sides of the gear casing, said manifold being constructed and arranged to discharge the exhaust gases below normal water level and at the rear of the propeller.

1,824,741. SAFETY DEVICE FOR POWER OPERATED SWITCHES. SIDNEY G. JOHNSON, Rahway, N. J., assignor to General Railway Signal Company, Rochester, N. Y. Filed May 20, 1929. Serial No. 364,464. 6 Claims. (Cl. 246—448.)



1. In a device of the character described, the combination with a switch and machine operating means therefor, of manually operable emergency means, wholly detachable, for directly fastening the switch points independently of said operating means, and target means for indicating when said fastening means is effective.

1,824,742. MEANS FOR FEEDING SHEET BARS TO FURNACE CONVEYERS. ARNOLD L. LARSEN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed July 31, 1930. Serial No. 472,064. 15 Claims. (Cl. 214—18.)



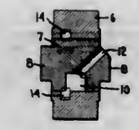
1. The combination with a work bed extending from the charging end of a heating furnace, of a slab supporting table extending upwardly and forwardly with respect to said bed and having its upper end above the level of the bed, a slide way extending downwardly and forwardly from the upper end of said table whereby slabs discharged from said table may move down said slide way to said bed, and means for moving a plurality of slabs up the incline of said table and successively over the edge thereof for passage to said bed.

1,824,743. PISTON PIN TOOL. KARL B. NEU, Alhambra, Calif. Filed Nov. 25, 1929. Serial No. 409,574. 7 Claims. (Cl. 29—88.2.)



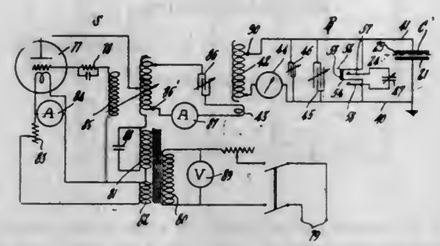
1. An article of manufacture comprising a cylindrical body having a tapered portion at one end terminating in a flat driving head, an annular shoulder at the opposite end and a stem of smaller diameter extending therefrom ending in a driving toe, and threaded retaining means on the outer portion of said stem adapted to retain a piston pin upon said stem, substantially as described.

1,824,744. LUBRICATED ROLL BEARING. IRA W. NOYES, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Mar. 15, 1930. Serial No. 436,025. 4 Claims. (Cl. 308—106.)



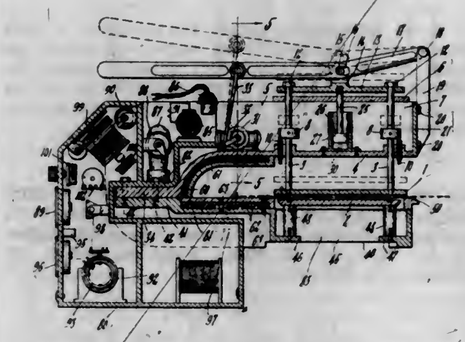
1. A bearing structure comprising a support, a journal pin non-rotatably mounted in the support and having a central recess in its under portion with a feed opening extending therefrom upward out through one end of the pin, and a roll journalled on the pin and having recesses in its bearing surface arranged in circumferential rows with each recess at each rotation of the roll overlapping the pin recess, whereby lubricant supplied through the feed opening forms a reservoir in the pin recess and is distributed therefrom to the roll recesses and from all the recesses to the bearing surfaces.

1,824,745. MEANS FOR MEASURING CHARACTERISTICS OF MATERIAL. ALBERT ALLEN, Winchester, Mass., assignor to Atlantic Precision Instrument Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 8, 1927. Serial No. 166,705. 28 Claims. (Cl. 175—183.)



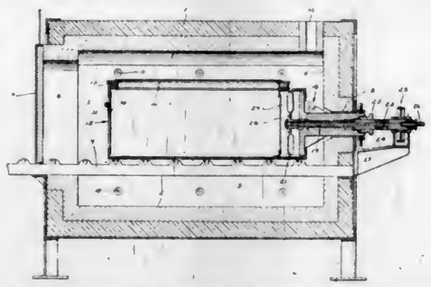
1. Apparatus for determining a characteristic of a material comprising in combination an oscillatory electric circuit including a condenser, means for so relating a portion of the material to be tested to said condenser as to vary the frequency of said circuit, a variable condenser connected in parallel to the first mentioned condenser, means responsive to the value of said electrical property for indicating the value of said characteristic, a checking condenser, and means for connecting said checking condenser in parallel to the first mentioned condenser when the capacity of said variable condenser is substantially zero.

1,824,746. MEASURING MECHANISM. ALBERT ALLEN, Winchester, Mass., assignor to Atlantic Precision Instrument Company, Boston, Mass., a Corporation of Massachusetts. Filed July 6, 1927. Serial No. 203,790. 3 Claims. (Cl. 175—183.)



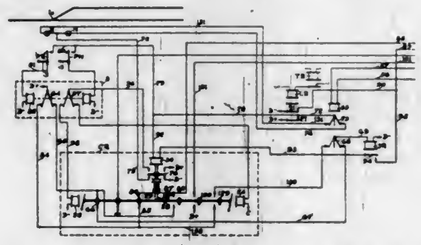
2. In combination, a U shaped frame having spaced parallel jaw portions connected at one end, said jaw portions having side walls and a web at said connection, a pair of condenser plates each plate carried by one of said jaw portions and normally spaced from said other plate a predetermined distance, a casing fixed to said web and extending between said side walls, a high frequency transformer system carried by said casing, said pair of condenser plates being connected to one side of said system as a tuning element, and means for measuring current flow for a given excitation of the primary side of said system in accordance with nearness to and departures from resonance of said primary and secondary sides.

1,824,747. FURNACE. ERNEST G. DE CORIOLIS, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Sept. 8, 1930. Serial No. 480,353. 5 Claims. (Cl. 266—5.)



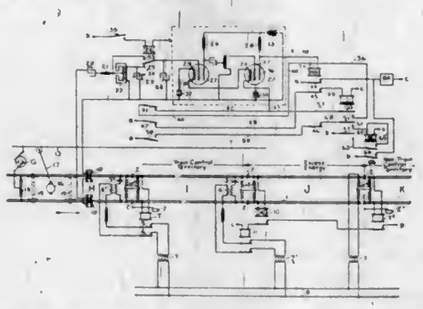
1. In combination, a furnace, a work holding container removably positioned in the furnace, a fan within said container at one end thereof, a hollow drive-shaft on which said fan is mounted, said shaft extending outside of the container and furnace, and means coupled to the outer end of the shaft for introducing fluid into said container.

1,824,748. INTERLOCKING SYSTEM FOR RAILROADS. NORMAN L. DONOVAN, Jersey City, N. J., assignor to General Railway Signal Company, Rochester, N. Y. Filed Dec. 5, 1929. Serial No. 411,823. 8 Claims. (Cl. 246—135.)



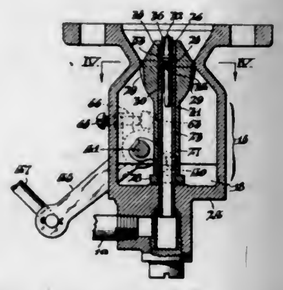
1. In an interlocking system for railroads, a track switch, a switch machine having normal and reverse operating circuits, electro-magnetic contactor means for closing said normal or said reverse operating circuit, and self-restoring push button means for causing operation of said contactor means.

1,824,749. CONTINUOUS INDUCTIVE TRAIN CONTROL SYSTEM. WILLIAM D. HAILES, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 30, 1925. Serial No. 65,816. 26 Claims. (Cl. 246—63.)



1. In an automatic train control system of the type in which influences corresponding to traffic conditions are continuously transmitted inductively from the trackway to a moving vehicle, car-carried equipment for controlling the vehicle brakes in accordance with said inductively received influences, and means for rendering said car-carried equipment inactive for vehicle travel over sections of trackway unequipped for train control operation comprising, a section of trackway for transmitting an excessive amount of energy to the vehicle, a receiving circuit on the vehicle including a step-up transformer, means for varying the operative relation of the transformer to the receiving circuit, and further car-carried means whereby said brake control apparatus may be rendered inactive if the sensivity of said receiving circuit is reduced while said excessive energy trackway section is being traversed.

1,824,750. CARBURETOR. JOSEPH PERCY REMINGTON, Philadelphia, Pa., assignor to Remington Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 7, 1926. Serial No. 114,297. 7 Claims. (Cl. 261—50.)



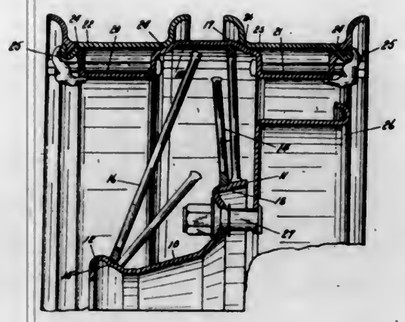
1. The combination with the air intake of an internal combustion engine, of an automatic throttle for maintaining therein at least a substantial minimum suction; a conduit for supplying liquid fuel to the region of such suction; a valve device for controlling the flow of fuel responsive to movement of said throttle means, and also movable relative thereto; and other controlling means including a seat carried by said throttle means cooperating with said valve device to vary the fuel passage in response to relative movement of said throttle means and said valve device.

1,824,751. ANTIFROST SHIELD. HARRY H. STEINMAN, St. Paul, Minn., assignor to No Frost Clear Vision Shield Company, Inc., a Corporation of Minnesota. Filed Aug. 9, 1929. Serial No. 384,643. 2 Claims. (Cl. 20—40.5.)



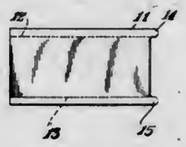
1. An anti-frost shield formed of a transparent, planiform flexible sheet having a plurality of indentations spaced inwardly from the edges thereof to hold the central portion of said sheet in spaced relation from a window glass on which it is mounted, and an adhesive strip connected about the edges of said flexible sheet to extend beyond said edges and adapted to fasten to a plate of glass on which the device is mounted, the adhesive strip drawing the edges of said sheet downwardly to distort the sheet from its normal planiform shape.

1,824,752. DUAL WIRE WHEEL. JOSEPH G. SWAIN, Akron, Ohio, assignor to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1928. Serial No. 281,776. 4 Claims. (Cl. 301—55.)



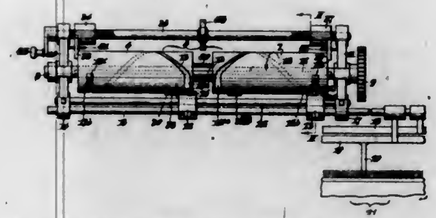
1. In a wheel construction, a continuous felloe formed with a central inwardly directed spoke seating channel and an outwardly directed demountable rim seating channel on each side of said central channel.

1,824,753. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 15, 1930. Serial No. 496,024. 6 Claims. (Cl. 30—12.)



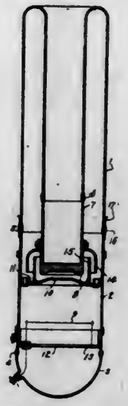
1. A composite blade for a safety razor, including an envelope enclosing the body of the blade and adhesively attached thereto, and having a perforated edge portion which may be removed to expose the cutting edge of the blade independently of the remainder of the envelope.

1,824,754. RECIPROCATING MECHANISM. WILHELM BOCK, Gwynedd, Pa., assignor to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1929. Serial No. 344,550. 14 Claims. (Cl. 66—82.)



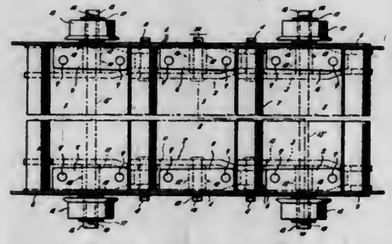
10. In mechanism for reciprocating the yarn carriers of flat knitting machines, a rotor embodying two co-axially mounted components functional respectively in moving the actuator rod for the yarn carrier in opposite directions; and means for varying the spacing of said rotor components to correspondingly vary the amplitude of reciprocation imparted to the yarn carriers incidental to fashioning operations.

1,824,755. ELECTRIC DISCHARGE TUBE. ALBERT BOUWERS, Eindhoven, Netherlands, assignor to N. V. Philips Gloeilampenfabrieken, Eindhoven, Netherlands. Filed Oct. 6, 1925, Serial No. 60,891, and in the Netherlands Jan. 28, 1925. 3 Claims. (Cl. 250—27.5.)



1. A high-tension discharge tube having an envelope which consists of a conductor hermetically sealed directly to a non-conductor and which is provided with a device for protecting the seal from high potential disruptive forces, said device consisting of at least one conductive coating which immediately covers the seal and extends longitudinally of the tube envelope on both sides of the seal and is provided on at least one side of the surface of the envelope.

1,824,756. CONVEYER. GEORGE B. WELSER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 24, 1927. Serial No. 228,308. 5 Claims. (Cl. 198—196.)



1. A conveyer comprising parallel lines of sprocket chains formed of links having separated sidebars, and being pintle-connected, transversely arranged means for transporting material, such means being supported equally by both sidebars of the links that are arranged opposite each other in the lines of sprocket chain, and pins connecting the transporting means of the conveyer to links of the chains, such connections being slack.

1,824,757. COATING COMPOSITION. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Dec. 24, 1927. Serial No. 242,580. 3 Claims. (Cl. 134—26.)

1. A coating composition containing nitrocellulose of a viscosity of 4 to 10 seconds, and a compatible synthetic resin of the polyhydric alcohol-polybasic acid type, said resin being characterized by the property of solubility in a benzol anhydrous methylalcohol solvent mixture, the proportions of nitrocellulose to resin in the coating composition yielding a smooth hard film.

THE

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OF THE

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CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

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Trade-Marks	250—No.	287,433 to No.	287,682, inclusive.
Labels	42—No.	39,778 to No.	39,819, inclusive.
Prints	9—No.	13,425 to No.	13,433, inclusive.
Reissues	9—No.	18,209 to No.	18,217, inclusive.
Designs	48—No.	85,225 to No.	85,272, inclusive.
Patents	892—No.	1,824,758 to No.	1,825,649, inclusive.
Total	1,250		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,688,887, C. C. Spreen, Mechanical refrigeration, decided September 10, 1931, claim 2.

Pat. 1,705,219, R. E. Jenkinson, Tire building machine, decided September 10, 1931, claims 1 and 6.

Pat. 1,701,210, Edward Mach, Combination bumper, spare tire carrier and trunk rack, decided August 21, 1931, claims 6 and 7.

Adjudicated Patents

(C. C. A. Mass.) Young patent, No. 1,264,740, for frying apparatus, claims 1 and 4 *Held* not infringed. *A. & E. Pitman Mfg. Co.* v. *Pitman*, 50 F.(2d) 744.

(C. C. A. Cal.) Oliver patent, No. 1,624,146, for rotary core drills, *Held* invalid. *Elliott Core Drilling Co.* v. *Smith*, 50 F.(2d) 813.

(D. C. Md.) McCarthy patent, No. 1,722,005, for soot and grease extractor, claims 9 to 12, 15, 16 *Held* invalid as broader than specifications and drawings. *Aluminate Co.* v. *Akme Flue, Inc.*, 50 F.(2d) 921.

(C. C. A. Tex.) Heath reissue patent, No. 16,468, for hollow building block and system of wall construction, claims 6 to 12 *Held* invalid. *Acme Brick Co.* v. *Heath Unit Tile Co.*, 50 F.(2d) 735.

Notices of Cancellation

U. S. Patent Office, *Washington, D. C., Aug. 31, 1931.*

Chinook Lumber & Shingle Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Charles E. Putman, 4421 White Building, Seattle, Wash., to effect the cancellation of the trade-mark registration of the Chinook Lumber & Shingle Co., 915 White Building, Fourth Avenue S, E., corner Union, Seattle, Wash., No. 128,650, dated January 13, 1920, and the notice of such proceeding sent by registered mail to the said Chinook Lumber & Shingle Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Chinook Lumber & Shingle Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner

U. S. Patent Office, *Washington, Sept. 17, 1931.*

St. Louis Piston Ring Corporation, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Ramsey Accessories Manufacturing Corp., 3093 Forest Park Boulevard, St. Louis, Mo., to effect the cancellation of the trade-mark registration of the St. Louis Piston Ring Corporation, of 2638 Locust Street, St. Louis, Mo., No. 138,713, dated January 4, 1921, and the notice of such proceeding sent by registered mail to the said St. Louis Piston Ring Corporation at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said St. Louis Piston Ring Corporation, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

M. J. MOORE,
Acting Commissioner.

Applicant's Address

The requirement of Rule 33, that the post-office address of the applicant must be stated in the petition, means that the applicant must give the post-office address at which he customarily receives his mail.

The rule was made in order that the Office in necessary cases might correspond directly with the applicant and not through his attorney. The address of the attorney with instructions to send communications to the applicant in his care will not be accepted as a compliance with this rule.

Condition of Applications Under Examination at Close of Business September 12, 1931

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 94,493; Trade-Mark Division, 1,181. Oldest new case, Jan. 12, 1931; oldest amended, Jan. 12, 1931. DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Apr. 27	Apr. 24	849
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Mar. 24	Apr. 1	1,361
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 22	May 2	995
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 6	Apr. 15	844
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 14	Mar. 17	754
318	6. LEWERS, A. M., Carbon Chemistry	Jan. 27	Jan. 29	2,270
106	7. JARBOE, C. G., Optics; Photography	Feb. 24	Feb. 24	2,089
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Feb. 16	Feb. 19	1,678
221	9 ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Mar. 30	Mar. 30	1,280
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 16	Apr. 2	1,172
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Apr. 13	Apr. 15	751
380	12. HENRY, C. C., Machine Elements	Jan. 26	Mar. 3	1,173
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 16	Mar. 27	1,114
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 19	Mar. 24	1,160
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Feb. 21	Feb. 21	2,505
242*	16. SPENCER, C. J., Telegraphy; Telephony	June 1	May 22	876
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Feb. 15	Feb. 16	1,553
229	18. PORTER, M. E., Motors. Expansible-Chamber Type: Power Plants; Speed-Responsive Devices	Mar. 20	Mar. 20	1,092
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Jan. 21	Jan. 31	2,196
179	20. GROVE, S. D., Miscellaneous Hardware: Closure Fasteners; Locks and Latches; Safes; Undertaking.	May 8	May 11	990
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 16	Mar. 30	1,010
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Apr. 24	May 2	842
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 20	Jan. 13	1,009
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 15	Mar. 18	1,059
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Mar. 16	Mar. 21	1,617
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 13	Mar. 16	1,006
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Mar. 16	Mar. 16	1,119
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 13	Feb. 16	1,810
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	May 16	May 15	598
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 13	May 13	887
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Jan. 12	Jan. 12	2,651
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Apr. 13	Apr. 13	1,240
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Mar. 12	Mar. 14	2,326
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches and Signals; Store Service; Vehicle Fenders.	May 5	May 12	912
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 29	June 29	687
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Jan. 24	Jan. 28	2,242
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Feb. 21	Feb. 21	1,610
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	May 22	May 28	596
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 14	Mar. 19	1,656
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Feb. 9	Feb. 18	3,205
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Apr. 20	Apr. 23	789
223*	42. CUTTING, H. O., Electric Signaling	Feb. 16	Feb. 19	1,518
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 12	Mar. 14	1,541
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Jan. 15	Jan. 16	2,166
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Feb. 9	Feb. 12	2,155
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Mar. 26	Apr. 6	1,118
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 12	Mar. 12	2,204
212*	48. ROEPKE, O. B., Electricity, General Applications	Mar. 13	Mar. 13	1,111
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 25	Mar. 26	1,481
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 19	Jan. 26	2,661
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Jan. 28	Jan. 28	2,122
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Mar. 28	Mar. 30	1,463
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 15	Apr. 13	760
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Jan. 23	Jan. 23	2,915
102	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery {Designs	Aug. 22 July 17	Sept. 4 July 17	183 267
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Feb. 2	Feb. 6	1,892
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw-Fastenings; Jewelry; Nut and Bolt Locks.	Mar. 13	Mar. 17	898
270*	58. DOWELL, E. F., Abrading; Typewriting	Feb. 12	Feb. 12	1,591
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Mar. 14	Mar. 14	1,703
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Feb. 7	Feb. 10	2,031
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Jan. 19	Jan. 23	2,052
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Jan. 15	Jan. 19	2,629
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 29	Jan. 29	2,369
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.—{Trade-Marks {Labels and Prints	Aug. 3 Aug. 24	Aug. 12 Aug. 29	1,086 95

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE WELLMAN

No. 2,682. Decided April 22, 1931

DIVISION—PROCESS AND ARTICLE.

A requirement for division between claims for a shipping receptacle and claims for the process of making such receptacle *Held* to have been properly made.

APPEAL from the Patent Office. Affirmed.

HATFIELD, *J.*, concurs in the conclusion.

Messrs. Roberts, Cushman & Woodberry, Mr. Arlon V. Cushman, Mr. Robert Cushman, and *Mr. Robert C. Child* for Wellman.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant filed an application for patent on improvements in lined receptacles and the art of making the same. Twenty-three claims were filed, claims 1 to 11 being for a process, and claims 12 to 23 being for a product. The Examiner cited certain references as bearing upon the subject matter of the method claims, and required division between the process and product claims. Thereupon, under rule 41 of the United States Patent Office, the appellant elected to prosecute his process claims 1 to 11, inclusive, and to retain the remaining claims in the case with the privilege of appealing from the requirement of division after final action by the Examiner on the group of claims prosecuted, as was provided by said rule. Thereafter, the Examiner allowed claims 1 to 11, inclusive, and the matter was taken to the Board of Appeals as to the correctness of the order for division.

The Examiner held, in effect, that the product claims described an article which might be made by some other process than that described in the process claims, and that, therefore, different inventions were involved in the process and product claims. In this connection the Examiner suggested that the box could be made by using a separate mandrel for the lining and for the cover.

The inventor Wellman filed an affidavit in the Patent Office, under rule 138 of the rules of practice of said office, in which affidavit the affiant states, in effect, that in a commercial way the making of containers, such as is involved in his product claims, is impracticable if the work is done by hand, and that speed and machine operations are required. He further states:

> I do not know how to proceed to make by hand or machine a receptacle corresponding to claim 14, for instance, without practicing the manipulative steps of the method of one or more of claims 1 to 11.

He further states that if there is any other way of making his product except by the method described in his application, he is not informed of what it is. He adds—

> nevertheless many different machines might be resorted to to practice my new method or make my new product.

The Board of Appeals of the United States Patent Office affirmed the action of the Examiner in requiring division. In its decision the Board mentioned the fact that the requirement of division should be affirmed in order to preserve the office classification, and this holding of the Board is complained of by appellant in this case. However, the Board did not base its decision upon this matter but held that the product might be made by other processes than those described in claims 1 to 11 of appellant's claims, and that, therefore, the division was properly required.

Claims 1 and 12 are given as typical of the two classes of claims involved:

> 1. Art of making lined receptacles comprising wrapping and fastening together about a mandrel or form a blank for a lining of suitable material to make a bag; making a box to support and protect the bag in use by bending and sealing a blank of suitable stiff material on and about the bag and mandrel; and thereafter removing the bag and box from the mandrel.
>
> 12. Packaging, storing, or shipping receptacles comprising a lining continuous except for a sealed overlapped seam, and a stiff cover having an overlapped seam, the cover seam and lining seam respectively lying in contact with an integrally continuous area of said lining and cover.

Rule 41 of the rules of the United States Patent Office originally provided as follows:

> 41. Two or more independent inventions can not be claimed in one application; but where several distinct inventions are dependent upon each other and mutually contribute to produce a single result, they may be claimed in one application.
>
> Claims for a machine and its product must be presented in separate applications.
>
> Claims for a machine and the process in the performance of which the machine is used must be presented in separate applications.
>
> Claims for a process and its product may be presented in the same application.

In *Steinmetz* v. *Allen*, 192 U. S. 543, 109 O. G. 549, this rule came to the attention of the Supreme Court and was found to be invalid.

The court, in passing upon the particular matter involved in that case, quoted from Robinson on Patents, Vol. II, section 473, to the effect that a process cannot be—

> joined with the apparatus that performs it, nor either of these with the product in which they result, unless they are to such an extent inseparable that the existence of some one of them is dependent upon that of the others.

The court gave expression to the view that the Patent Office was vested with a discretion in requiring divisions, but that such discretion was not unlimited and was reviewable. The court further quoted, with approval from *James* v. *Campbell*, 104 U. S. 356, 21 O. G. 337, the following language:

> Where a new process produces a new substance, the invention of the process is the same as the invention of the substance, and a patent for the one may be reissued so as to include both, as was done in the case of Goodyear's vulcanized rubber patent. But a process, and a machine for applying the process, are not necessarily one and the same invention.

Other authorities to the same effect as *Steinmetz* v. *Allen*, supra, are *Mosler Safe and Lock Co.* v. *Mosler*, 127 U. S. 354, 361; 43 O. G. 1115; *In re Hawkins*, 20 F.(2d) 278, 57 App. D. C. 176, 365 O. G. 477; *Wirebounds Patents Co.* v. *Saranac, etc.*, 37 F.(2d) 830; *In re Isherwood*, 46 App. D. C. 507, 245 O. G. 847; *In re Butler*, 17 C. C. P. A. (Patents) 810, 37 F.(2d) 623, 394 O. G. 276.

In *Union Paper-Bag Mach. Co.* v. *Waterbury et al.*, 39 Fed. 389, an applicant filed certain claims for a reissue. In his original application, the applicant

filed claims for a paper bag of a certain kind, irrespective of the process of making the same; these were rejected on the prior art by the Office, and the applicant amended his application by inserting process claims which went to patent. On his application for reissue, certain claims for the bag were rejected, it being held that he had originally waived the right to such a claim by acquiescing in the decision of the Patent Office. The principle to be deduced from that case is that a broad claim, such as was made in that case, described a different invention from that set forth in the process claims, and the applicant, if he desires the benefit of product and process claims in the same patent, must so claim his product that it is apparent that it is the production of the process also claimed.

Claims 12 to 23, inclusive, are for a product, without defining in any way the process by which they may be made. It has been well said that such products might be made by hand or by separate mandrels. Not only is this true, but the whole field of mechanical art would be foreclosed, if such a patent were issued, from making such a container and the applicant would be in exclusive possession of the field. He is entitled to the benefits of his invention, but no more, and that invention consists in making containers of a certain kind, in a certain way.

Whether the appellant will be met as urged at length in his brief in the tribunals of the Patent Office, with the objection of double patenting, in the future, is a matter not now before us. Nor is the matter of a possibility of the bar of the statutory limit of two years being raised against appellant in the future, a matter which we can now consider. However, it may be said that the appellant was put to his election in the Patent Office, and could have filed his divisional application during the statutory period, if he had so desired.

The affidavit of Wellman, filed in the Patent Office, does not help the situation. The fact that he knows of no other way to make the container in question is not proof that it can not be so made.

The decision of the Board of Appeals is affirmed.

Affirmed.

HATFIELD, *J.*, concurs in the conclusion.

U. S. Court of Customs and Patent Appeals

IN RE SPENCE AND BERGEN

No. 2,685. Decided April 22, 1931

PATENTABILITY—SLEEVE VALVE AND SPECIFIC DRIVE THEREFOR.

Claims for an internal-combustion engine of the sleeve valve type comprising the combination of a sleeve valve and a specific drive therefor *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. James T. Newton for Spence and Bergen.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellants have appealed from the decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner in rejecting claims 1 and 2 of appellants' application for patent on an alleged invention relative to internal-combustion engines of the sleeve-valve type.

The claims were rejected on reference to Urtel, 1,156,508, October 12, 1915, and Knight (British), 28,693, December 13, 1912. Claim 1 is illustrative, and is as follows:

1. In an internal combustion engine, a cylinder with intake and exhaust ports, a sleeve with like ports, the intake being spaced from the exhaust port in the cylinder and not substantially spaced in the sleeve, both of the sleeve ports being located between the cylinder ports when the engine is under compression and firing stroke, the cylinder having a cylindrical chamber into which the sleeve moves to protect the sleeve ports during firing, with the cylinder intake located in both walls of said chamber, a piston, with packing rings between the piston and the sleeve, said sleeve extending down out of the cylinder, and means for operating the sleeve in timed relation to the piston, so that when both sleeve ports are located between the cylinder ports during compression and firing strokes of the piston, the sleeve is without substantial movement.

Appellants' device consists of a sleeve valve for internal-combustion motors, which sleeve valve is long enough to project below the cylinder and into the crank case, and which is caused to move up and down in correlation with the piston, so that by means of inlet and outlet ports in the sleeve valve, and through ports in the cylinder, gas used for combustion will be admitted, and the exhaust gases expelled, at the proper times. The engine is of the ordinary four-cycle type.

The movement of the sleeve valve to correlate with the movements of the piston is caused by a combination of two eccentrics, the shaft of one of which rotates at the same rate of speed as the crank shaft, and the shaft of the other of which rotates at one-half the speed of the crank shaft. The two eccentrics are connected by an eccentric arm and a bell crank lever, which has its fulcrum on the shaft of the eccentric which operates at half speed. The other arm of this bell crank lever is connected with a link which, in turn, is connected with the sleeve valve and moves it up or down as the eccentrics and the bell crank move. The shafts upon which these eccentrics move are rotated by means of sprockets and a chain from the crank shaft.

In the Knight reference the inventor shows a sleeve valve operating with similar ports and in the same relation to the strokes of the piston as are shown by appellant here. Knight states in his specification that he provides a—

sleeve valve working over a fixed head and containing ports for inlet and exhaust adapted to be brought into communication with ports in a surrounding cylinder casing at the desired period by a motion derived from the compounding of two approximately simple harmonic motions of crankshaft and half crankshaft speed respectively.

This statement is repeated in his specification description of the operation of his device.

Counsel for appellants admits in his oral argument that the arrangement of the ports and their operation with respect to the sleeve valve and piston are the same in Knight as in appellants' application. However, they argue that the Knight device is inoperative because no showing is made as to how the result sought by Knight can be obtained, his sleeve valve not extending below the bottom of the piston. No affidavits have been furnished and

there is no showing made here except the statement of appellants that the Knight device is inoperative. It is quite evident that Knight had in mind the same means of operating it as are set out by appellants, in view of the portion of his specification hereinbefore quoted. At least, he plainly states how it may be done.

The Urtel reference shows a sleeve-valve motor with a different arrangement of ports than that shown in the Knight reference, but shows a sleeve valve which projects below the bottom of the piston for engagement with the device which operates it. Several alternative forms of this latter device are shown by Urtel. In Fig. 4 he discloses two eccentrics, one with a shaft revolving at the same speed as the crank shaft, the other at half speed, and these two connected by a pivoted double-arm lever, the arms of which are at right angles to each other. The connection with the sleeve valve is made by an eccentric arm from the half-speed eccentric, and a link. The inventor states in his specification—

Figs. 3, 4, and 5 show arrangements in which one of the eccentric rods is used as a lever and is set in oscillating movement about its eccentric by the other eccentric. The lever may be a single-arm, a double-arm or a bell-crank in order to keep the exhaust open long enough, etc.

Further references are made in the specification to variations which may be made in this general plan.

The substance of the matter is that appellants here are seeking a patent upon a combination of two elements: namely, a sleeve valve and a drive for the sleeve valve consisting of two eccentrics, one full speed and one half speed, with proper connections, so that the movements of the sleeve valve will be timed in correlation with the strokes of the piston. There is nothing novel in either of these ideas and nothing which was not well known at the time the application was filed. To combine these elements without any showing of a new and useful result is not invention, and, therefore, the rejection of the claims was proper.

Counsel for appellants calls attention to the fact that Knight does not show any piston rings and that this feature is novel. However, we assume that the appellants would not claim their device is patentable if this is the only matter in it not shown by the references. Piston rings have been used for many years and are well known in the art, and could hardly be said to render inventive this disclosure.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE WHITING

No. 2,691. Decided April 22, 1931

1. DESIGNS—PATENTABILITY—COMBINATION OF OLD FEATURES MAY BE PATENTABLE.

"• • • the fact that the individual elements of the design are old does not prove want of invention in assembling them into a design. Old and well-known elements may be combined into a design which is patentable. The authorities are wont to state that such a design is patentable if there be invention in it."

2. SAME—SAME—DRESS.

A design for a dress *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Louis E. Giles and *Messrs. Fraser, Myers & Manley* for Whiting.

Mr. T. A. Hostetler for the Commissioner of Patents.

GRAHAM, *P. J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner in denying a patent to appellant upon a design for a dress. The particular dress in question is stated by counsel to be the official uniform of the Girl Scouts of America, and the drawings accompanying the application show a one-piece dress with a box pleat in the back and with a detachable belt. Three patch pockets are shown in front, one on the left breast and two below the belt. There is a rolling collar which has upon the lapels on each side the letters G. S. Over each shoulder are inverted tucks. The sleeves are of the ordinary type, stitches hold the upper yoke on the back, and also confine it just above the belt line. A row of extra stitching is around the edge of the collar and two rows of extra stitching are across the top of each pocket. The pockets are closed with buttons, and the belt is fastened in front with two buttons. This belt also has extra stitching and there is an extra row of stitching around a large hem at the bottom of the skirt. The cuffs are fastened with buttons.

The Board of Appeals has refused to grant a patent for this design by reference to the following: Reed, 1,008,493, November 14, 1911. Anderson (Des.), 51,831, March 5, 1918. Goldstein, 1,538,632, May 19, 1925. Montgomery Ward & Co., item 36–B–359, page 60, 1925.

The reference Reed shows a shirtwaist with a box pleat in the back. Anderson is a design patent for a sweater coat and shows a roll collar, with a belt and cuffs and bands of different colored material surrounding the bottom of the skirt of the coat and edging the two pockets which appear upon the front. Goldstein is a product patent upon a belted garment, and shows the back of a garment with a box pleat, a detachable belt, a yoke and a rolling collar. The reference to the catalogue of Montgomery Ward, items 36–B–359 and 367, shows house dresses—359 being made to button in front, with one patch pocket and a rolling collar; item 367 showing a similar collar, a belt and two patch pockets, this garment evidently being of the slip-on type.

[1] It is quite evident that every individual feature of this garment is old and shown by the references. However, the fact that the individual elements of the design are all old, does not prove want of invention in assembling them into a design. *Zidell* v. *Dexter*, 262 Fed. 145. Old and well known elements may be combined into a design which is patentable. The authorities are wont to state that such a design is patentable if there be invention in it. In this court, we have said that to constitute

such invention the designer must have invented a new, original and ornamental design. *In re Walter*, 17 C. C. P. A. (Patents) 982, 39 F.(2d) 724, 396 O. G. 706.

Speaking of design patents, the Supreme Court said in *Gorham* v. *White*, 14 Wall. 510, 528:

We hold, therefore, that if, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other, the first one patented is infringed by the other.

Again, it was said in *Smith* v. *Whitman Saddle Co.*, 148 U. S. 674, 679, 63 O. G. 912:

The exercise of the inventive or originative faculty is required, and a person cannot be permitted to select an existing form and simply put it to a new use any more than he can be permitted to take a patent for the mere double use of a machine. If, however, the selection and adaptation of an existing form is more than the exercise of the imitative faculty and the result is in effect a new creation, the design may be patentable.

To the same effect are *Zidell* v. *Dexter, supra; Faris* v. *Patsy*, etc., 273 Fed. 900; *Sagendorph* v. *Hughes*, 95 Fed. 478; *Boldt* v. *Turner Bros. Co.*, 199 Fed. 139.

[2] We are forced, somewhat reluctantly, to the conclusion that the design disclosed here presents nothing inventive in character, and nothing which would lead the ordinary observer to conclude on seeing it that here was something distinctive and different from anything he had seen before. Every bit of ornamentation or work upon it is old in the art of the seamstress and its elements can be seen on any street of any city, in the costumes of the passers-by.

Allusion is made to the letters G. S. upon the collar lapels as being distinctive. These are simply block letters, of no unusual design. The placing of these letters upon the design can not be said to be inventive. If so, any letter, or any combination of letters, would constitute a different, patentable design. The substitution of one letter, or emblem, in such a design, for another, is not inventive in any greater sense than was the fraternal emblem in *In re Merritt*, 17 C. C. P. A. (Patents) 629, 35 F.(2d) 783, 390 O. G. 3.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HORNSEY

No. 2,687. Decided April 22, 1931

PATENTABILITY—REDUCING IRON OXIDE MATERIAL.

Claims for a process of reducing iron oxide material to metallic iron without melting *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Edward W. Shepard and *Messrs. Usina & Rauber* for Hornsey.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

The application in this appeal relates to a process of reducing iron oxide materials to metallic iron and involves the consideration of three claims, 2, 56 and 57, of which claim 2 is illustrative and reads as follows:

2. The process of reducing iron oxide materials to metallic iron without melting, which consists in first heating the ore in a state of division in an internally heated inclined rotating cylinder to approximately the temperature of reaction, in discharging the heated ore into a second, reducing, inclined rotating cylinder, introducing fuel into said second cylinder, and also introducing solid carbonaceous material in a state of division into the second cylinder near the inlet end thereof at a place whereby said material is entrained with the ore and moves therewith and whereby nascent gases are liberated in situ, passing the gases from the second cylinder into the first and burning them to effect the internal heating referred to, and in cooling the product of reduction, at all stages excluding all air save that actually required for the combustion.

The rejection of the three claims by the Examiner was affirmed by the Board of Appeals of the United States Patent Office, and from the decision of the latter, appeal was taken to this court.

In the Board's decision the following references were listed: Jones, 981,280, January 10, 1911; Rendall, 1,053,436, February 18, 1913; Alford, 1,097,156, May 19, 1914; Jones, 1,174,729, March 7, 1916; Stansfield, 1,403,576, January 17, 1922. Rendall, Alford and Stansfield were relied upon.

In the method disclosed, the ore is first heated in a state of division in an internally-heated, inclined, rotary cylinder to approximately the temperature of reduction. The heated ore is then discharged into a second reducing, inclined, rotating cylinder into which last-named cylinder is introduced fuel by a pipe, and also into the last-named cylinder is introduced solid carbonaceous material in a state of division, which material is coal or coke finely pulverized. The gases generated in the second cylinder during the reducing process are passed upwardly through a chute into the first cylinder and these gases are then mixed with additional fuel and are burned to effect the internal heating of the first cylinder. The product of the reduction is cooled in a third cylinder. During the process all air is excluded save that which is necessary for combustion.

The claims were rejected on the patent to Rendall for the reason that no patentable invention would be involved in substituting a solid carbonaceous reducing agent for that part of the gaseous reducing agent in Rendall, the solid reducing agent being well known and old in the art as shown by Alford and Stansfield. The claims were also rejected on the ground that there was no invention in substituting the reduction of Stansfield in the process of Rendall.

Appellant admits in his brief that "the separate elements of which this combination is composed may be separately found in diverse patents" and cleverly and earnestly argues that this fact constitutes no true anticipation of the combination itself. He argues at length that the substitution which would have to be made by taking one element from one patent and putting it into another could not be made in a successfully-operating process, since no desirable results would obtain, and discusses, in detail and with obvious familiarity with the subject, the technical phases of the process under consideration.

The process necessarily involves a consideration of highly technical matters. The Board and the Examiner have given these matters careful consideration, and, notwithstanding appellant's exhaustive treatment of the subject, we are not convinced that the Board's conclusions are wrong. In matters appealed here from the Patent Office, which involve the findings of the experts of the Office on highly technical questions, such findings are given great weight and are only rejected when it is clear that they are erroneous. *In re Beswick*, 16 App. D. C. 345, 91 O. G. 1436; *In re Demarest*, 17 C. C. P. A. (Patents) 904, 38 F.(2d) 895, 396 O. G. 4; *In re Wietzel et al.*, 17 C. C. P. A. (Patents) 1079, 39 F.(2d) 669, 400 O. G. 463.

Since it is admitted that all of the elements of the process are old, we are not prepared to say, contrary to the decision of the Board, that invention resulted from the combination of these old elements. The Board sustained the Examiner in holding that "there is no invention in substituting the reduction step of Stansfield in the process of Rendall", and the Board states further that:

We see no reason why the Stansfield patent would not suggest the use of solid carbonaceous material as a substitute for the hydro-carbon reducing gas of Rendall if it were found to be of any advantage.

and also:

• • • if Stansfield were willing to sacrifice the advantage of effecting partial reduction of his ore in the reducing cylinder as described on page 1, lines 106 to 107, there is no reason why he should not use Rendall's direct preheating system of feeding his carbonaceous material to the reducing cylinder as Rendall does his reducing gas. This mode of feeding is also disclosed in Alford though he uses indirect heating for both cylinders.

With the above-quoted conclusions we are not prepared to disagree.

In arguing that, notwithstanding the fact that the separate elements in his process may be separately found in other patents, this is no true anticipation, appellant relies upon *Frederick Co.* v. *Sanford Riley Co.*, 287 Fed. 495; *In re Champeau*, 17 C. C. P. A. (Patents) 568, 34 F.(2d) 1012, 388 O. G. 783; and *Line Material Co.* v. *Brady Elec. & Mfg. Co.*, 299 Fed. 824. Without discussing these authorities at length, we call attention to a quotation from *In re Champeau*, supra:

But, even though there be nothing novel in the elements combined, if applicant here has, by a combination of known elements, *accomplished a new and useful result*, he is entitled to his patent. [Italics ours.]

In *In re Appelburg et al.*, 17 C. C. P. A. (Patents) 820, 37 F.(2d) 620, 394 O. G. 7, we said the following:

Where a given number of elements, which produce a known result when functioning separately, is assembled and the assembly produces only a combination of the results found in the individual units, no invention is shown.

Many other citations of authorities by this court to the same effect might here be enumerated, but the principle is so well settled that we regard this as unnecessary.

Agreeable to the decision of the Board, we conclude that there is nothing inventive in the rejected claims, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BRONSON

No. 2,688. Decided April 22, 1931

PATENTABILITY—COUPLING FOR AN AIR CONNECTION.

Claims relating to a coupling in an air connection used in inflating rubber inner tubes during the curing process *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Kwis, Hudson & Kent, Mr. A. J. Hudson, Mr. W. T. Estabrook, and *Mr. W. E. Williams* for Bronson.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

The alleged invention involved in this appeal relates to a coupling in an air connection used in inflating rubber inner tubes during the curing or vulcanizing process and is particularly directed to the air stem which leads from the inner tube through the outer casing and through the rim of the wheel.

The six claims presented were rejected by the Board of Appeals of the United States Patent Office. No. 1 is a combination claim and claims 2 to 6 are drawn to cover the construction of the stem, and, therefore, 1 and 2 are regarded as illustrative and are as follows:

1. An air connection comprising a flexible tube having a nipple at one end, a plunger member to which the other end of the tubing is secured, a casing surrounding the plunger, resilient means between the plunger and the casing tending to normally separate one with respect to the other, an air stem having a part for securing the same with respect to a tire mold and another part with which said plunger engages, *and a noncircular head on said stem, said casing having one end which has a substantially noncircular opening through which the said head may extend and within which it may be turned to properly position said stem for engagement by said plunger.* (Italics ours.)

2. An air stem comprising an integral hollow tubular body, a head at one end thereof, and a second head at the other end which is noncircular.

The italicized portion of claim 1 is claimed to be the new part of the combination involved in that claim and is substantially the subject matter called for in the other claims involved, although expressed in language differing in each of the claims.

The claims were rejected on the prior art and the following references are relied upon: Kotten, 660,856, October 30, 1900; Rose, 1,362,189, December 14, 1920; Crumlich, 1,386,603, August 9, 1921; Smith, 1,487,696, March 18, 1924.

The rejection is based upon the ground that in view of the general combination shown in Rose, Crumlich and Smith, it is not inventive to substitute in any of these devices the specific coupling disclosed in Kotten. The patents to Rose, Crumlich and Smith involved couplings used for the same purpose as those of applicant, while Kotten was an air pipe coupling for a pneumatic tool.

Appellant argues to the effect that since the Kotten patent concerns a nonanologous art, it should not be cited to defeat appellant's application. Kotten's connection operates upon the same principle as applicant's and we do not think that invention would lie in placing the Kotten device in a vulcanizer connection in view of disclosures in the other references.

We agree with the finding of the Board that the details found in appellant's structure involved nothing more than the usual mechanical skill over the prior art cited.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE LEASK AND DYER

No. 2,692. Decided April 22, 1931

PATENTABILITY—METHOD OF BURNING FINELY-DIVIDED FUEL.

Certain claims for a method of burning finely-divided fuel *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Meyers & Jones and *Mr. Charles S. Jones* for Leask and Dyer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

The invention involved in this appeal relates to a method and apparatus for burning finely-divided fuel. All of the apparatus claims and some of the method claims were allowed by the Patent Office. Method claims 1 to 4 were rejected and it is from a decision of the Board of Appeal of the United States Patent Office, affirming the decision of the Examiner as to these claims, that appeal is taken here.

Claim 1 is illustrative and follows:

1. The method of burning finely divided fuel which consists in delivering such fuel with carrier air to a burner tube, causing the fuel to travel in a spiral path in a general direction transverse to the line of feed toward one end of the tube, and discharging the fuel in a relatively thin stream around the periphery of the end of the tube into a combustion chamber.

The method consists of three steps enumerated in claim 1. Centrifugal force is set up in the burner which causes the mass of fuel carrying air to travel spirally and hug the inner wall of the burner tube. A rotating column of secondary air, required for combustion, is also admitted within the interior of the spirally moving mass of fuel.

The claims were rejected upon the British patent to Peabody, No. 256,685, August 12, 1926, which relates to a method of burning pulverized fuel, and which method consists, according to the specification found in the record,

in forcing a body of air or other combustion-supporting gas with a whirling motion into a passage leading to a combustion chamber and injecting a mixture of pulverized fuel and air or other gaseous fluid into sad rotating body of air, from a source outside said latter, at an angle to the axial direction of travel of said rotating body.

The method in the Peabody patent is carried out by an apparatus which is shown in the drawings. A fuel and carrier medium such as air is admitted through an inlet in the member specified and discharged into the throat opening along an annular outlet, including an inclined wall, "in a thin sheet with a rotary motion relative to the axis of the throat", as stated at record page 31, lines 67–74. The patent further states that—

Upon passing out of the annular outlet, this thin sheet of combustible material is mixed with a rotating column of air which is entering through the air register and passage formed by the wall 12 of the member 10.

The allowed method claims were drawn so as to provide for the admission of fuel and carrier air into the burner tube "tangentially to its inner wall." This feature of appellants' device was found to be new and not covered by the prior art. Appellants seem to argue in this court that because there was a rotary spiral movement of the fuel and air in Peabody, and also a rotary spiral motion in appellants' device, which in the latter device was occasioned, in part, by the tangentially placed opening, that the Board, therefore, having allowed the claims providing for the "tangentially" placed opening, must have regarded the spiral movement as new. Appellants argue here that if this is the case, then the claims in issue here, which omit the tangentially opening feature, should also be allowed.

It is sufficient to say that we agree with the finding of the Board that the tangentially placed opening feature is new and the spiral motion feature old. Since appellants' claims now under consideration leave out the tangentially placed opening feature and are confined to the spiral movement, appellants' contention is without merit, and the Board of Appeals correctly rejected the claims and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE JENNINGS

No. 2,697. Decided April 22, 1931

PATENTABILITY—PUMPING APPARATUS.

Claims for a pumping apparatus *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Louis W. Southgate and *Mr. Chas. E. Riordon* for Jennings.

Mr. T. A. Hostetler for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, Nos. 4 and 6 to 11, inclusive, in appellant's application for a patent for an alleged invention relating to improvements in wet vacuum pumping apparatus, and consists in securing the motor and pumps as a unit to the side of the tank, and providing a float control for the electric motor.

Claims 4 and 8 are illustrative. They read:

4. A pumping apparatus of the class described including a tank, a casing containing a liquid and a gas pump secured to the side of the tank, a frame rabbeted to the pump casing, a motor carried by the frame, and means for securing these parts as a unit to the tank.

8. In an apparatus of the class described, the combination of a tank, a lug therein, a yoke fitting said lug, an arm extending from said yoke and carrying a float, a shaft extending through the tank, lug and yoke, means as a screw for adjustably connecting the yoke and shaft, an electric switch, and connections between the shaft and switch.

The references are: Creamer, 404,174, May 28, 1889; Coppus, 1,056,151, March 18, 1913; Wellington, 1,125,611, January 19, 1915; McCarthy, 1,264,315; April 30, 1918; Wilson, 1,463,989, August 7, 1923; Jennings, 1,592,024, July 13, 1926.

In his specification, appellant stated that the object of the alleged invention was to improve the wet vacuum apparatus disclosed in the Jennings reference, which comprised a rigid base, a tank and motor secured to the base, and pumps fastened to the side of the tank.

Counsel for appellant contends that considerable difficulty was encountered in aligning the motor with the pumps in the apparatus disclosed in the Jennings reference, due to the fact that the motor was secured to the base; and that by securing the motor and pumps as a unit to the side of the tank, they may be removed and replaced as a unit, or separately, as desired, and the motor is retained in alignment with the pumps.

Appellant has undoubtedly improved the apparatus disclosed in the patent issued to him in 1926. This is not denied by the Patent Office tribunals. They concurred, however, in holding that, in view of the references of record, the improvements defined in the claims do not involve invention.

In its decision, the Board of Appeals described and applied the references in the following language:

The patent to Jennings discloses the combination set forth in claims 4, 6, 7, 9, 10, and 11 except that the motor is supported on the machine base instead of being secured to a rabbeted seat on the pump casing. The patent to Wilson discloses a construction in which the container 51 corresponds to appellant's container B, the rabbeted pump casing 2 to appellant's pump casing, and the motor 4 with its legs 3 to appellant's motor M and legs 11. In Wilson the motor and pump casing are attached to the top of the container but there would be nothing inventive in supporting Wilson's structure on the side of the tank in view of Jennings in which the pump casing is so located and the motor is axially aligned with the pump. The patent to Coppus also shows a motor and pump or fan arranged horizontally and supported as a unit from an opening in the side of the casing 5. The purpose of appellant's construction is to insure accurate alignment of these elements which is also stated on page 1, lines 27 to 36 as one object of Wilson's invention. If Wilson's perforated motor support is considered not the same as appellant's legs 11, it is clearly an equivalent therefor, the leg type of support being old, as shown in Wellington.

Claim 8 was rejected on Creamer. In the reference the lug is divided and the float carrying arm is secured between the two parts of the lug whereas in appellant's construction the lug is single and is embraced by the yoke on the float arm. One structure is a mere reversal of the other. In the reference the shaft appears to be integral with the float arm instead of being adjustable therein but there is no invention in merely making parts adjustable by the common means of a set screw. The reference operats a valve R instead of an electric switch but these elements are recognized equivalents in a float controlled device.

We have given the issues involved careful consideration. Were it proper to grant appellant a patent merely because he has decidedly improved the apparatus disclosed in his Patent No. 1,592,024, it would be necessary to reverse the decision of the Board of Appeals. Regardless, however, of the importance of the improvements in a commercial sense, invention, as distinguished from obvious mechanical changes, must be present to warrant the issuance of a patent.

Although counsel for appellant has vigorously urged the presence of invention in the involved application, we are unable to find any error, either in the reasoning or in the conclusion reached by the tribunals of the Patent Office. The decision of the Board of Appeals must, therefore, be and, accordingly, is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

BENNETT *v.* FITZGERALD

No. 2,661. Decided April 15, 1931

1. INTERFERENCE—PRIORITY—REDUCTION TO PRACTICE—NECESSITY FOR TESTS.

An invention relating to sealing means for fastening the covers to the bodies of containers *Held* such that in order to establish a reduction to practice it was essential to determine by actual tests if the cover of the container would resist severe shocks with minimum danger of leakage because of the loosening of the tops.

2. SAME—SAME—SAME.

Testimony reviewed and held that in view of the circumstances of the case B. had not established that he reduced the invention to practice prior to the filing of the application of F.

3. SAME—SAME—DILIGENCE.

Evidence reviewed and *Held* insufficient to establish that B., who was the first to conceive the invention but the last to reduce it to practice, was diligent from the time that F. entered the field and that priority therefore was properly awarded to the latter.

APPEAL from the Patent Office. Affirmed.

GRAHAM, *P. J.*, concurs in the conclusion.

Mr. Glenn S. Noble for Bennett.

Messrs. Kwis, Hudson & Kent. Mr. A. F. Kwis, and *Mr. B. J. Boughton* for Fitzgerald.

LENROOT, *J.:*

This is an interference proceeding; appellant appeals from a decision of the Board of Appeals of the United States Patent Office affirming a decision of the Examiner of Interferences, awarding priority of invention to appellee.

The counts in issue are:

1. A container comprising a body having a bead at the top, a head having a portion extending over the bead, and a sealing ring for securely fastening and sealing the cover having a flange extending inwardly over said portion of the head and having a continuous downward flange crimped inward at intervals beneath said bead leaving intervening uncrimped portions.

2. A container having a head at the top, a head fitted to the container and having an outwardly extending marginal flange projecting over said bead, and a sealing ring for securely fastening and sealing the cover head having a flange projecting inwardly over the flange of the head, and having a continuous downwardly projecting flange having portions bent inwardly at intervals at substantially a right angle to said downwardly projecting flange beneath the bead leaving intervening uncrimped portions having curved connections with the inwardly bent portions.

The invention relates to cans or containers of the general type common in the art, comprising body portions having covers with sealing rings for fastening the covers to the body portions. The invention involved is the crimping of the sealing ring at intervals, thereby leaving uncrimped portions between the crimped portions.

The application of appellant was filed on April 30, 1927, and that of appellee was filed on August 19, 1926. Appellant is, therefore, the junior party.

Both tribunals of the Patent Office held that appellee conceived the invention in September, 1925, and reduced it to practice in the spring of 1926; that appellant conceived the invention in December, 1923, but did not reduce it to practice prior to the reduction to practice by appellee, and that appellant was not diligent in reducing his invention to practice at the time appellee entered the field, nor for more than one year thereafter; that even if appellant had reduced his invention to practice in

December, 1923, he had concealed and suppressed his invention, thereby forfeiting any right to claim priority of invention.

The questions involved upon this appeal are principally questions of fact. The tribunals of the Patent Office having concurred in their findings of fact, we must accept such findings unless they are manifestly wrong. *Pengilly* v. *Copeland*, 17 C. C. P. A. (Patents) 1143, 40 F. (2d) 995, 399 O. G. 3.

We therefore accept without discussion the findings of said tribunals as to conception and reduction to practice by appellee, and as to conception by appellant, because the record clearly supports such findings. The real contest here is whether appellant reduced his invention to practice in December, 1923, and if he did so, whether he concealed and suppressed the invention, thus forfeiting any right to claim priority of invention.

Appellant claims, and we think the evidence establishes, that following the making of a sketch of a ring seal container in December, 1923, which sketch is in evidence, he made or caused to be made and tested one dozen of such containers, which correspond to the counts in issue; that the invention as embodied in these containers was fully disclosed to three persons, all of whom were fellow officers of the Wilson & Bennett Manufacturing Co., hereinafter called the Wilson Company, of which appellant was secretary and general manager. It appears that said company was a large manufacturer of steel containers and steel barrels, and had been so engaged since 1907; that in December, 1923, in addition to the container here involved, another form of container had been developed by said company which was known as No. 7.

Appellant testified that all of said twelve containers were lost or destroyed, but that a pail cover and ring, embodying the invention here in question, was preserved. Said cover and ring were produced and offered in evidence. Appellant testified that the majority of the dozen containers were made by means of their No. 7 closing machine, designed for closing lead containers and especially their No. 7 container; that in making the tests the containers were filled with water and paint and dropped; that the tests showed that said containers were not any more satisfactory than their No. 7 container; that they were as good but no better, and for that reason they did not consider the extra expense of their manufacture justified at that time; that the closing seal used upon said containers was very weak and ineffective, and that after said tests the invention was passed on to the Wilson Company for further development.

Appellant further testified that no application for a patent was made for the No. 7 container because it was found that the art embodied therein was old; that in August, 1925, appellant invented another form of container and applied for a patent thereon in December, 1925. This container was put upon the market and became known as their No. 8 container. Appellant further testified that on December 1, 1925, he filed an application for patent on a new closing machine, which was known as the No. 8 closing machine, and manufactured it and commenced its use in that month; that said No. 8 closing machine, used upon the containers embodying the invention here in question, made a much better closure, and that this fact, in addition to an improvement in the hoop or ring, caused the Wilson Company to enter upon the manufacture of containers of the type here in question and to sell them to the trade; that this was determined upon either in October or December, 1926, and the first orders were received in May, 1927; that in the fall of 1926 appellant learned that the Niles Steel Products Company had put upon the market a pail of the type here in issue, and appellant also knew that the American Can Company had been in the market for a number of years with the same general type of container, but not embodying the invention here in issue.

Appellant's testimony was corroborated in most respects by the testimony of James H. Wilson, John Chase Bennett and Augustus P. Heinze, all officers of the Wilson Company. The testimony concerning the result of the tests of said containers amounted to conclusions of the witnesses, except as to the witness Wilson, who testified that some of the sample cans were filled with water and some were filled with paint; that some of them were dropped two feet and others were dropped three feet; that the result of the tests was that "some of them had a slight leak and some were tight"; that "about six" were closed by the No. 7 closing tool and "about four" were closed by hand; that pails closed by the No. 7 closing machine would be more likely to leak than pails closed by the new No. 8 closing machine; that he would not care to furnish to the trade pails embodying this invention with closing machines such as were used in December, 1923.

It also appears from testimony offered on behalf of appellant that tests were made in 1927 of pails purchased in the open market, embodying appellee's device, and that the same kind of tests were applied to them as had been applied to appellant's sample containers in December, 1923; that the result of the tests was that they broke open and their contents were largely lost.

The first question for consideration is whether appellant reduced the invention to practice in December, 1923, as claimed.

Appellant contends that the making of a dozen containers, exactly as specified in the counts in issue, in itself constitutes a reduction to practice, and that no tests of the containers were necessary, but that, if it should be held that tests were necessary to constitute a reduction to practice, then the evidence establishes that such tests were made and that they were successful.

We think the requirements of tests in reduction to practice were correctly stated by the Court of Appeals of the District of Columbia in the case of

Sydeman v. *Thoma*, 32 App. D. C. 362, 141 O. G. 866, wherein the court said:

> Decisions involving this often-litigated question of actual reduction to practice may be divided into three general classes. The first class includes devices so simple and of such obvious efficacy that the complete construction of one of a size and form intended for and capable of practical use is held sufficient without test in actual use [citing cases]. The second class consists of those where a machine embodying every essential element of the invention, having been tested and its practical utility for the intended purpose demonstrated to reasonable satisfaction, has been held to have been reduced to practice notwithstanding it may not be a mechanically perfect machine. In other words, it is sufficient reduction to practice, although a more desirable commercial result may be obtained by some simple and obvious mechanical improvement, or by substituting another well-known material for the one used in the original construction, as, for example, metal for wood, cast metal for sheet metal, and the like [citing cases]. The third class includes those where the machine is of such a character that the particular use for which it is intended must be given special consideration, and requires satisfactory operation in the actual execution of the object.

[1] We are of the opinion that the invention here in issue belongs to the second class of devices above referred to. It was, we think, essential to determine by actual tests if the cover of the container embodying the invention here involved would resist severe shocks, as when dropped, with minimum danger of leakage because of loosening of the top. Both of the parties hereto seem to have recognized this, because appellant did subject the 1923 container to tests and also the same type of container brought out by him in 1926, and appellee also tested his container embodying the invention in issue.

[2] The next question is, did the tests in December, 1923, of appellant's device demonstrate its practicability sufficiently to constitute a reduction to practice of the invention?

As heretofore noted, the testimony of most of appellant's witnesses upon this point consists of conclusions, rather than statements of fact from which we might draw our own conclusion. The witness Wilson, however, did testify that the results of the tests were such that he would not care to offer to the trade containers embodying this invention, with closing machines such as the company then had, and also that the tests revealed that some of the containers had a slight leak. Also, appellant testified that the closing machine used upon the sample containers was very weak and ineffective. This testimony, standing alone, would not be sufficient to negative a successful reduction to practice. A device need not be mechanically perfect, or in its exact form a commercial success. We think it proper, however, to consider said testimony in connection with other circumstances revealed by the record bearing upon the question of reduction to practice.

Of course, if reduction to practice is established, other circumstances or conduct of a party would not warrant us in making a contrary finding; but if reduction to practice is not clearly established, the facts and circumstances shown by the record may be resorted to for the purpose of determining whether there was in fact a reduction to practice, or whether the alleged reduction to practice was only an abandoned experiment.

The circumstances shown by the record, which we deem material on this point, are:

1. In December, 1923, appellant's company was manufacturing a container, No. 7, which was not patented, and which it preferred to appellant's 1923 device.

2. Appellant's device was, after the tests in December, 1923 referred to, turned over to the development department of the Wilson Company "for further development".

3. In 1925 appellant's 1923 device was discussed by the officers of the Wilson Company, and it was again determined not to manufacture the same.

4. In 1925 appellant invented another container for which he made application for patent in December, 1925, and the Wilson Company then entered upon the manufacture of said type of container.

5. In 1925 appellant invented a closing device and applied for a patent thereon, which closing device was the type used in closing appellant's device here in issue when the Wilson Company began its manufacture. The testimony on behalf of appellant is to the effect that this closing device made appellant's container here involved commercially practicable.

6. In the fall of 1926 appellant was aware that appellee's device was upon the market, as was also a ring seal device of the American Can Company, but said last named device was of a different character than the device here in question.

7. Appellant did not place his device upon the market until 1927, and did not file his application for a patent upon the device here involved until April 30, 1927.

Considering the foregoing facts in connection with the lack of positive evidence of the success of the tests in 1923, we are compelled to agree with the tribunals of the Patent Office that the claimed reduction to practice in December, 1923, constituted only an abandoned experiment.

The record does not disclose that appellant in 1926 made any use of the drawing or sketch made in 1923, nor in the consultation held by the executive officers of the Wilson Company in the fall of 1926 was the sample cover, made in December, 1923, and preserved and offered in evidence in this proceeding, produced or considered. On the contrary, the testimony is to the effect that new drawings were made in 1926 and the party who did the drafting, the witness Cornwell, was not advised that the invention had been conceived or reduced to practice in 1923 or at any time prior to his being given instructions to make drawings.

It is a significant circumstance that if the tests of 1923 by appellant were successful, and the only bar to commercial success of the device was the type of closing machine used in 1923, appellant waited for more than a year after perfecting a closing

machine which would successively operate upon the device here in issue before bringing out as a commercial proposition the device here involved. It is also a significant fact that although in 1925 appellant applied for a patent for another container, and also for a patent for a closing device, he did not apply for a patent on the device here in issue until long after appellee's device was upon the market.

In the case of *Paul* v. *Hess*, 24 App. D. C. 462, 115 O. G. 251, the court said:

> Long delay in making use of an invention claimed to have been reduced to practice, or in applying for a patent, have always been regarded as potent circumstances tending to show that the alleged reduction to practice was nothing more than an unsatisfactory or abandoned experiment. *Traver* v. *Brown*, 14 App. D. C. 34, 41; *Reichenbach* v. *Kelley*, 17 App. D. C. 333, 344; *Latham* v. *Armat*, 17 App. D. C. 345. And this is specially the case where, in the meantime, the inventor has been engaged in the prosecution of similar inventions (*Fefel* v. *Stocker*, 17 App. D. C. 317, 321), or others, without reasonable explanation, have been adopted for manufacture and commercial use.

Appellant's counsel relies upon the decision of this court in the case of *Janette* v. *Persons*, 17 C. C. P. A. (Patents) 884, 38 F.(2d) 364, 395 O. G. 1138, to sustain his contention that appellant reduced his invention to practice. It is sufficient to say that in that case the evidence clearly established a reduction to practice of the invention there involved; and in the case at bar, if the evidence clearly established a reduction to practice in December, 1923, by appellant of his alleged invention, the circumstances above set out would be immaterial upon that point.

We hold that while appellant conceived the invention in December, 1923, he did not reduce it to practice until after the application of appellee was filed.

[3] The next question is, was appellant diligent in reducing the invention to practice at the time that appellee entered the field, and thereafter until appellant's actual reduction to practice? The testimony shows that in December, 1923, after the tests by appellant above referred to, the invention was passed on to the development department of the Wilson Company for further development. At the time of appellee's conception in September, 1925, appellant had done nothing further with the invention. The testimony shows that appellant and his associates discussed the invention, but decided to bring out another type of container. The first activity disclosed by the record on the part of appellant in reducing the invention to practice after December, 1923, occurred in the fall of 1926.

Having held that appellant did not reduce the invention to practice in December, 1923, the evidence clearly shows that there was lack of diligence upon his part in reducing it to practice at the time appellee entered the field and thereafter until appellant reduced the invention to practice.

In view of the conclusion we have reached, it is unnecessary to consider the question of whether appellant concealed and suppressed the invention, as held by the tribunals of the Patent Office.

The decision of the Board of Appeals is affirmed.

Affirmed.

GRAHAM, *P. J.*, concurs in the conclusion.

U. S. Court of Customs and Patent Appeals

IN RE HERMANS

No. 2,677. Decided April 15, 1931

PATENTABILITY—DEPTH BOMB AND METHOD OF COMBATING SUBMARINES.

Claims for a depth bomb and claims for a method of combating submarines *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Chas. H. Andros for Hermans.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner, rejecting claims 1 to 10, inclusive, and 12, 13, 14, 20 and 21 of appellant's application, for lack of invention over the prior art.

Claims 1, 3, 8 and 20 are illustrative of the claims in issue and read as follows:

> 1. In a device of the class described, in combination, a casing adapted to contain an explosive, releasable means adapted to cause an explosion thereof, releasing means separate from said exploding means adapted to release the same and permit said means to cause said explosion, said releasing means being actuated by water pressure, and means for controlling the action of said water pressure dependent upon the depth and time of immersion.
>
> 3. In a device of the class described, in combination, a shell adapted to contain an explosive and a detonator therefor, releasable means for firing said detonator, actuating mechanism for releasing said firing means including means normally retaining said firing means under tension adapted to be actuated by the flow of water dependent upon the time and depth of immersion, and a valve for controlling the water for actuating said means, said valve being adjustable by the operator to vary the time of explosion dependent upon the depth of immersion.
>
> 8. In a device for use as a mine and adapted to function upon mere immersion in water, a casing, an explosive and a detonator therefor, means for exploding the detonator, and means carried by the device for releasing the exploding means; the operation of said releasing means being controllable depending upon the depth or time of immersion.
>
> 20. The method of combating submarine vessels which comprises launching from a surface vessel an explosive charge without substantial initial velocity, and thereafter exploding the same under water by hydrostatic pressure.

The references are: Graydon, 356,067, January 11, 1887; Lynch et al., 678,367, July 16, 1901; Lynch et al., 682,728, September 17, 1901; Unge, 806,026, November 28, 1905; Niehoff, 820,888, May 15, 1906; Hallock, 1,183,375, May 16, 1916; Scoville, 1,203,058, October 31, 1916; Des Rosiers, 1,207,511, December 5, 1916.

Appellant's alleged invention is a depth bomb and method of combating submarines. It comprises a container which is divided into two chambers, one of which carries the explosive and the other of which is normally empty, but adapted to fill with water, and the movement of this element releases a preenergized firing pin to detonate the explosive. The depth or time at which the detonation occurs is controlled by means of a valve regulating the rate of inflow of water.

All of the questions involved in this appeal are questions of fact, and as the tribunals of the Patent Office concurred in their determinations, they will be accepted by us unless manifestly wrong. *In re Demarest*, 17 C. C. P. A. (Patents) 904, 38 F.(2d) 895, 396 O. G. 4.

Claims 8, 20 and 21 were held by the Board of Appeals to be anticipated by any one of several named references. All of the other claims were rejected upon a combination of references, some of which were held to be applicable without modification, while others, it was held, would require modification involving only mechanical skill. It was also held that there was no invention in combining the several elements shown by the references, as appellant has done.

Appellant earnestly insists that what he did was not obvious in view of the references, but did, in fact, involve invention. In support of this contention he relies very largely upon a publication by the Navy Department, entitled "Navy Ordnance Activities, World War, 1917-1918", published in 1920, and he placed before the Patent Office tribunals extracts from such publication which are found in the record. Said extracts describe a depth bomb devised in 1917 by the Bureau of Ordnance, in which a float became detached from the charge proper upon striking the water, and remained on the surface while the charge sank, and in sinking, paid out rope attached to the buoy, which rope eventually fired the charge.

In his brief in this court, referring to said publication, appellant states:

> This publication is an authoritative and interesting commentary upon the general state of the art at the time of applicant's invention. It describes in considerable detail the problem with which the allied nations were confronted, the solutions which were attempted and discarded before applicant's solution was finally adopted, and it refutes any possible contention on the part of the Office that applicant's solution could possibly have been the "obvious thing" to do. * * *

We have examined the publication thus referred to and, immediately following the extracts quoted therefrom in the record, we find a statement that at the entrance of the United States into the war the Navy Department developed a new type of depth bomb operated by hydrostatic pressure. We quote from said publication, pages 99 and 100, as follows:

> Meanwhile, however, the Naval Torpedo Station at Newport had developed a type of hydrostatically operated depth charge, which appeared at least the equal of even the latest British design. This firing mechanism was mainly the work of the Bureau's engineer of mines and explosives, Mr. C. T. Minkler.
>
> * * * * * * *
>
> Manufacture in quantity of the American depth charge of the Newport design, now known as Mark II, was at once commenced, under the direction of Commander S. P. Fullinwider, and *the issue to the service began in the fall of 1917. The first contract for 10,000 of these Mark II depth charges was placed in July, 1917.* Later, modifications of the Mark II depth charge were made and contracts for 20,000 more were issued in the spring of 1918. In December, 1917, the bureau placed a contract for 15,000 British type depth charges for the British Government. (Italics ours.)
>
> * * * * * * *
>
> The American and British depth charges differ in several main particulars. Ours fires by means of hydrostatic pressure, while the British utilize the seepage principle also. * * *
>
> The depth charge consists of a cylindrical metal case, approximately 18 inches in diameter and 28 inches long for the 300-pound depth charge, containing the explosive and firing mechanism, or pistol, as it is called. By means of a dial at one end of the case, the depth charge may be set to explode at one of several depths from 50 to 200 feet. When the depth charge reaches the depth at which it is set to explode, the pistol is actuated by the hydrostatic pressure at that depth and explodes the charge.

It thus appears that instead of discarding all other solutions "before applicant's solution was finally adopted," as claimed by appellant, the Navy Department had perfected in 1917 a successful depth bomb operated by hydrostatic pressure, while appellant did not file his application until January 24, 1918, and, according to a statement to his counsel before the Patent Office, offered his device to the Navy in the spring of 1918.

Therefore, said publication is not helpful to appellant, and does not indicate that he made any contribution to the solution of the then very pressing problem before our Government.

This, of course, does not negative invention upon the part of appellant in his particular device and is not cited as an anticipation thereof, but it does negative appellant's contention, insofar as it is based on said publication, that his solution was not obvious because the Navy Department was unable to produce a successful depth bomb until appellant laid before the Navy officials his alleged invention, the fact being, according to said publication, that the broad idea of appellant's device was successfully put into operation in 1917.

We are not convinced that the Board of Appeals was manifestly wrong in its decision and it is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,104,589, Ward & Taylor, Gear grinding machine; 1,155,532, F. A. Ward, Machine for grinding splined shafts; 1,271,495, same, Method of grinding splined shafts, etc.; 1,273,016, same, Splined shaft, D. C., E. D. Mich., S. Div., Doc. 4484, *Gear Grinding Machine Co.* v. *Hudson Motor Car Co.* Dismissed without prejudice Aug. 12, 1931.

1,124,305, A. L. Day, Perforating machine, filed Aug. 15, 1931, D. C., E. D. Wis. (Milwaukee), Doc. 3292, *The American Perforator Co.* v. *Follen-Strom Mfg. Co.*

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C., S. D. N. Y., Doc. E 50/67, *Claude Neon Lights, Inc.*, v. *Federal Neon Tube Corp. et al.* Decree for plaintiff Aug. 17, 1931.

1,128,292, E. H. Colpitts, Electric wave amplifier; 1,231,764, F. Lowenstein, Telephone relay; 1,426,754, R. C. Mathes, Circuits for electron discharge devices; 1,432,022, R. A. Heising, Circuit connections of electron discharge apparatus; 1,448,550, H. D. Arnold, Thermionic amplifier circuit; 1,504,537, same, Power limiting amplifying device; 1,483,273, D. G. Blattner, Circuit for heating the filaments of audions; 1,493,595, same, Amplifying with vacuum tubes, D. C., W. D. N. Y., Doc. 7, *Western Electric Co., Inc., et al.* v. *S. Wallerstein.* Dismissed as to 1,231,764 and 1,483,273, decree for plaintiffs July 31, 1931.

1,155,532. (See 1,104,589.)

1,160,383, H. A. Courmettes, Bifocal lens and method of making, filed Aug. 14, 1931, D. C., S. D. Ohio, W. Div., Doc. E 769, *United Kingdom Optical Co., Ltd., et al.* v. *W. N. Bennedict Co. et al.*

1,231,764. (See 1,128,292.)

1,263,499, Whiting & Logan, Bottom filler for boots and shoes, filed Aug. 15, 1931, D. C. Mass., Doc. 3447, *The Elhide Co.* v. *H. Golden.*

1,271,495. (See 1,104,589.) 1,273,016. (See 1,104,589.)

1,423,956, Mitchell & White, Tipless incandescent lamp, filed July 17, 1931, D. C., N. D. Calif. (San Francisco), Doc. 2870–L, *General Electric Co.* v. *J. S. Frank.*

1,426,754. (See 1,128,292.) 1,432,022. (See 1,128,292.)

1,448,550. (See 1,128,292.)

1,460,716, B. F. Greer, Book form savings bank, D. C., S. D. N. Y., Doc. E 50/64, *B. B. Deitel* v. *Reich-Ash Corp. et al.* Dismissed Aug. 13, 1931.

1,483,273. (See 1,128,292.)

1,490,174, P. Kennedy, Base ball glove; 1,631,735, Kennedy & Kennedy, same, D. C., S. D. N. Y., Doc. E 60/95, *Ken-Wel Sporting Goods Co., Inc.*, v. *A. Silverman (Peerless Sporting Goods Co.)*. Consent decree for plaintiff Aug. 13, 1931.

1,493,595. (See 1,128,292.) 1,504,537. (See 1,128,292.)

1,512,888, L. Haft, Lighting set, filed Aug. 14, 1931, D. C., S. D. N. Y., Doc. E 61/269, *Norma Electric Corp.* v. *Raylite Trading Co., Inc., et al.*

1,526,982, E. W. Hill, Stencil sheet, filed Aug. 13, 1931, D. C., S. D. Fla. (Jacksonville), Doc. —, *A. B. Dick Co.* v. *Fibroin, Inc.*

1,534,289, E. Teppet, Process of and composition of matter for killing plants, C. C. A., 3d Cir., Doc. 4578, *A. Charpillon et al.* v. *Reade Mfg. Co., Inc.* Decree affirmed Aug. 13, 1931.

1,620,809, A. H. Fager, Vehicle running gear, filed July 23, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U–64–C, *Fager Hydraulic Hoist & Body Co.* v. *Barton Brown Engineering Corp.*

1,627,542, A. Katzinger, Reenforced baking pan, filed Aug. 14, 1931, D. C. Ill. (Springfield), Doc. 1562, *E. Katzinger Co.* v. *A. J. Hart (Springfield Baking Co.)*.

1,630,543, W. H. Scott, Receptacle filling and draining device, D. C. Mass., Doc. E 3409, *W. H. Scott* v. *Siph-O Products Corp. et al.* Dismissed without prejudice Aug. 14, 1931.

1,631,735. (See 1,490,174.)

1,658,323, L. Blackmore, Refrigerator control, filed Aug. 12, 1931, D. C., S. D. Iowa (Des Moines), Doc. 4461, *Frigidaire Corp. et al.* v. *S. Davidson & Bros., Inc.* Doc. 4462, *Frigidaire Corp. et al.* v. *M. L. Munn et al. (Munn & Cassaday)*.

1,675,998. (See Re. 17,823.)

1,681,511, S. B. Battey, Hair waving or curling device, filed Aug. 1, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2974–S, *S. B. Battey et al.* v. *Paris Beauty Parlors Supply Co. of San Francisco, Ltd.*

1,703,655, Beekley & Martens, Heat exchanger for recovering heat from waste process water, filed Aug. 10, 1931, D. C., S. D. N. Y., Doc. E 61/224, *The Whitlock Coil Pipe Co.* v. *The Patterson-Kelley Co.*

1,725,500, V. P. Writer, Tam pressing machine, D. C., S. D. N. Y., Doc. E 51/202, *Anderson & Writer Corp.* v. *T. Kane et al. (Kane & Fisher)*. *Consent decree for plaintiff* Aug. 13, 1931.

1,728,024, M. Buchsbaum, Hosiery, filed July 6, 1931, D. C. Pa. (Philadelphia), Doc. 6615, *Gotham Silk Hosiery Co., Inc.*, v. *Victor Silk Hosiery Co.*

1,751,842, M. Propp, Current tap fitting, filed Aug. 14, 1931, D. C., S. D. N. Y., Doc. E 61/268, *M. Propp & Co., Inc.*, v. *Raylite Trading Co. et al.*

1,753,725, Solomon & Levine, Rack for garments, filed June 25, 1931, D. C., S. D. N. Y., Doc. E 60/264, *S. Solomon et al. (Hercules Rack Co.)* v. *Tenzer Bros., Inc., et al.*

1,756,784, E. S. Johnson, Electric toaster; Des. 80,348, same, Casing for toaster, filed Jan. 8, 1931, D. C. Conn. (New Haven), Doc. E 2105, *Knapp-Monarch Co.* v. *Starr Bros. Bell Co.*

1,760,260. (See Re. 17,823.) 1,760,262. (See Re. 17,823.)

1,760,265. (See Re. 17,823.)

1,768,000, H. B. Hull, Refrigerating apparatus, filed Aug. 12, 1931, D. C., S. D. Iowa (Des Moines), Doc. 4463, *Frigidaire Corp.* v. *M. L. Munn et al. (Munn & Cassaday)*.

1,784,051, Frantz & Lemon, Locomotive sanding device, filed July 1, 1931, D. C. Pa., Doc. 6613, *Graham-White Sander Corp.* v. *The United States Metallic Packing Co.*

1,801,645, A. G. Sherman, Camping trailer, filed Aug. 10, 1931, D. C., E. D. Mich., S. Div., Doc. 4917, *A. G. Sherman* v. *J. Lewis (Auto Car-A-Van Co.)*.

1,815,745. (See Re. 17,567.)

Re. 17,567, J. H. Gaisman, Safety razor; 1,815,745, R. E. Thompson, same, filed Aug. 11, 1931, D. C., S. D. N. Y., Doc. E 61/225, *Gillette Safety Razor Co.* v. *Segal Lock & Hardware Co., Inc.*

Re. 17,823, 1,760,260, R. F. Walters, Upholstery installations; 1,675,998, 1,760,262, same, Separable fastener; 1,760,265, F. S. Carr, Trimming installation, filed Aug. 12, 1931, D. C., E. D. Mich., S. Div., Doc. 4918, *United-Carr Fastener Corp.* v. *Gagnier Fibre Products Co.*

Des. 80,348. (See 1,756,784.)

Des. 84,811, R. DeBoer, Combination ash receiver and electric lighter, filed Aug. 14, 1931, D. C. Mich. (Grand Rapids), Doc. 2461, *Grand Rapids Metalcraft Corp.* v. *Applied Arts Corp.*

T. M. 46,225, T. M. 75,501, The C. H. Phillips Chemical Co., Preparation of magnesia, C. C. A., 2d Cir., Doc. —, *McKesson & Robbins, Inc.*, v. *The C. H. Phillips Chemical Co., Inc.* Decree modified (notice Aug. 7, 1931).

T. M. 75,501. (See T. M. 46,225.)

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 29, 1931

[VOL. 410. No. 5]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 317,725. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed Aug. 6, 1931.

BEUTENE

For Condensation Product of Butyraldehyde and Aniline.
Claims use since Apr. 10, 1931.

Ser. No. 317,726. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed Aug. 6, 1931.

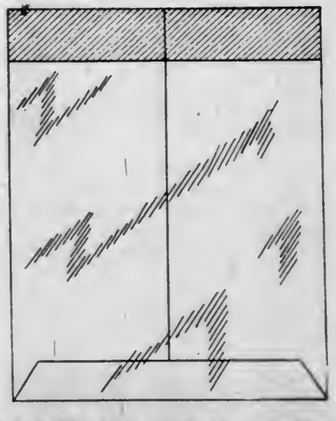
HEPTEEN BASE

No claim is made to the exclusive use of the word "Base" apart from the combination shown in the drawing.
For Condensation Product of Heptaldehyde and Aniline.
Claims use since Mar. 24, 1931.

CLASS 2

Receptacles

Ser. No. 288,198. EDWARD F. KEMP, Somerville, Mass. Filed Aug. 6, 1929.



The drawing is lined for purple and the trade-mark consists of a purple edge arbitrarily applied to the mouth edge of the bag. No claim being made to the representation of the goods.
For Paper Bags.
Claims use since Mar. 28, 1928.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 270,311. THE DOW CHEMICAL COMPANY, Midland, Mich. Filed July 30, 1928.

DOWLENE

For Cleaning Compositions and Compounds—Namely, Oil, Fat, and Grease Removers; Tar, Gum, and Organic Resin Removers; and Solvent Type Cleaning Fluid—Containing Carbon Tetrachloride.
Claims use since 1920.

Ser. No. 317,478. THE LEO MEYER CO., Akron, Ohio. Filed July 30, 1931.

Rugaid

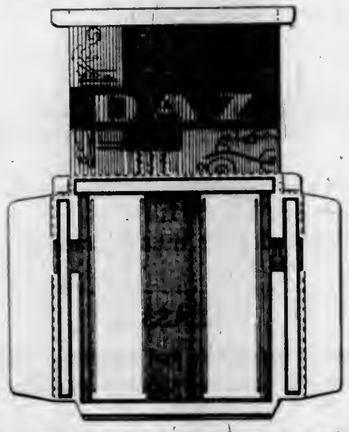
For Cleaning Compound for Carpets, Rugs, Upholstery, and the Like.
Claims use since Jan. 1, 1931.

Ser. No. 317,699. BENNINGTON WAX PAPER COMPANY, Bennington, Vt. Filed Aug. 6, 1931.

DAZ

For Paper Impregnated with Oil and Cleaning and Polishing Composition to be Used for a Cleaning, Polishing, and Dusting Tissue.
Claims use since July, 1931.

Ser. No. 317,700. BENNINGTON WAX PAPER COMPANY, Bennington, Vt. Filed Aug. 6, 1931.



The representation of a carton per se appearing in the drawing is hereby disclaimed. The lining in the drawing represents the color red, and the color features of applicant's mark are an essential part of his mark.

For Oiled Paper Impregnated with a Cleaning and Polishing Composition to be Used as a Cleaning, Polishing and Dusting Tissue.

Claims use since July, 1931.

Ser. No. 318,169. RALSTON PURINA COMPANY, St. Louis, Mo. Filed Aug. 19, 1931.

PURINA

For Dog Soap.
Claims use since May 1, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 301,570. CALIFORNIA MEDICINAL WINE CO., Los Angeles, Calif. Filed May 29, 1930.

CALIFORNIA PADRES

For Medicinal and Pharmaceutical Preparations—Namely, Wine Elixir or a Medicinal Wine for Use as a General Tonic, Magnesia Magma, Extract of Witch Hazel.

Claims use since Sept. 1, 1926, on wine elixir, and since May 27, 1930, on magnesia magma and extract of witch hazel.

Ser. No. 306,767. CHEMISCH-PHARMAZEUTISCHE A. G. BAD HOMBURG WERK FRANKFURT, A. M., Frankfort-on-the-Main, Germany. Filed Oct. 15, 1930.

Hosal

For Diet and Cooking Salt to be Used for Nutrition without Salt and Pour in Salt.
Claims use since April, 1928.

Ser. No. 310,821. O. N. CRAWFORD, doing business as Searchlight Products Company, Memphis, Tenn. Filed Feb. 7, 1931.



For Poultry Medicines—Namely, Laxative Tablets and Worm Tablets and Phenosulphonate Tablets.
Claims use since Nov. 1, 1929.

Ser. No. 312,743. MOTH-NO-MOR CORPORATION, Chicago, Ill. Filed Mar. 28, 1931.

MOTH-NO-MOR

For Insecticide.
Claims use since July 7, 1926.

Ser. No. 313,289. ANTONIO FERNANDES, doing business as Perfection Bottling Works, New Bedford, Mass. Filed Apr. 13, 1931.



The representation of the female figure is fanciful. Antonio Fernandes hereby disclaims the words "Kleerwite" and "Bleaching Water" apart from the mark shown.

For Bleaching Water.
Claims use since Jan. 2, 1929.

Ser. No. 313,574. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Apr. 20, 1931.

EXIT

For Liquid Insecticide.
Claims use since Jan. 7, 1930.

Ser. No. 313,681. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Apr. 22, 1931.

OLIGAN

For Chemical Products for Use as Auxiliary Agents in the Textile Industry—Namely, Dressing, Finishing, Leveling, Emulsifying, Scouring, Desizing, Protecting, Carbonizing, Wetting, Cleansing, Reserving, Sizing, Oiling, Thickening, Waterproofing, Softening Agents, Agent to Facilitate Penetration, Agent to Improve the Feel, Agent to Facilitate Bobbin Winding.
Claims use since Jan. 21, 1931.

Ser. No. 314,044. THE DEANE PLASTER CO., Yonkers, N. Y. Filed May 1, 1931.

STRAP-AID

"STRAP IT WITH STRAPAID"

For Adhesive Bandage Dressing Medicated with Mercurochrome.
Claims use since Apr. 22, 1931.

Ser. No. 315,021. UNITED LABORATORIES INC., Chicago, Ill. Filed May 25, 1931.

Wel-Fut

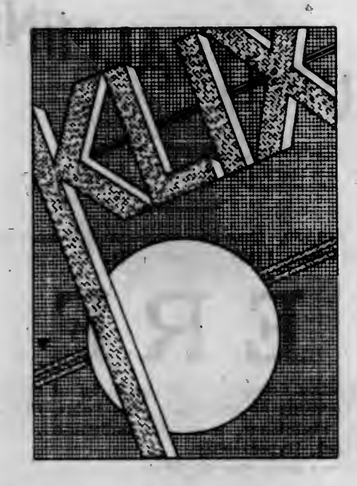
For Liquid Preparation for the Feet and a Greaseless Preparation for the Skin, Particularly of the Feet.
Claims use since Apr. 1, 1929.

Ser. No. 315,120. SUPERDENT DENTIST'S & CHEMIST'S CORPORATION, New York, N. Y. Filed May 27, 1931.

SUPERDENT

For Tooth Paste and Mouth Antiseptic.
Claims use since May 6, 1931.

Ser. No. 315,438. EDWARD M. BOGART, doing business as Fax Products Co., East Lansing, Mich. Filed June 5, 1931.



The drawing is lined for the colors black and orange.
For Water Softener.
Claims use since Dec. 1, 1930.

Ser. No. 315,614. K. GULBENKIAN, New York, N. Y. Filed May 26, 1931.

INSTANTO

For Bleaching Compound for Maturing and Improving Flour and Meal.
Claims use since Feb. 17, 1930.

Ser. No. 315,915. MIFFLIN CHEMICAL CORPORATION, Philadelphia, Pa. Filed June 16, 1931.

dorval

For Cream Deodorant.
Claims use since Jan. 8, 1931.

Ser. No. 316,030. ARTAL CHEMICAL COMPANY, Anniston, Ala. Filed June 19, 1931.

ARTAL

For Ointment for Use in Treatment of Athlete's Foot, Eczema, Poison Oak, Poison Ivy, Scabies, Rash, Itch, Ringworm, Tetter, Itching Piles, Sore Corns, Cuts, Burns, and Chafed Skin.
Claims use since Jan. 28, 1931.

Ser. No. 316,221. SCHERING-KAHLBAUM, A. G., Berlin, Germany. Filed June 24, 1931.

EUPHTHALMINE

For Alkamine Derivatives.
Claims use since Apr. 9, 1897.

Ser. No. 316,259. THE ERF COMPANY, INCORPORATED, New Haven, Conn. Filed June 25, 1931.

ERF

For Medical Compound for the Relief of Stomach Disorders, Vomiting of Pregnancy, Gas Pains, Ulcers of the Stomach, Flatulency, Gastritis, Indigestion, Catarrh of the Stomach, Hyperacidity.
Claims use since May 26, 1931.

Ser. No. 316,392. WALLERSTEIN COMPANY, INC., New York, N. Y. Filed June 27, 1931.

''STRIP-RITE''

For Enzymatic Material for Desizing Fabrics and Silks.
Claims use since Feb. 15, 1930.

Ser. No. 316,452. JOHN A. SWEENEY, Cleveland, Ohio. Filed June 29, 1931.



The drawing is lined for blue.
For Cleansing Mouth Wash and Tissue Stimulant.
Claims use since Jan. 1, 1931.

Ser. No. 316,515. JAMES E. WEBB, doing business as Knox Chemical Company, St. Petersburg, Fla., and Knoxville, Tenn. Filed June 30, 1931.

608

For Tonic for Treating Kidneys.
Claims use since July, 1924.

Ser. No. 316,734. PAUL KLOPSTOCK, Jr., doing business as The Suave Company, New York, N. Y. Filed July 8, 1931.



For Crystal Water Softener.
Claims use since June 1, 1931.

Ser. No. 316,862. MICHAEL F. NAYLIN, doing business as Nayoli Co., Kemmerer, Wyo. Filed July 10, 1931.



For Hair Restorer.
Claims use since June 1, 1929.

Ser. No. 316,863. THE CHAPMAN HEALTH PRODUCTS CO., Cleveland, Ohio. Filed July 11, 1931.

R-A-N

For Medicinal Preparation for the Treatment of Rheumatism, Arthritis and Neuritis.
Claims use since July 1, 1930.

Ser. No. 316,886. J. HENRY HEALY, doing business as The Sanistik Company, Philadelphia, Pa. Filed July 13, 1931.

Sani-Stik

No claim is made to the word "Stik" apart from the mark as shown.
For Lipsticks.
Claims use since Mar. 1, 1931.

Ser. No. 316,933. ADOLPH J. MARSCHALL, doing business as Marschall Dairy Laboratory, Madison, Wis. Filed July 14, 1931

MARSCHALL'S



No claim is made to the words "Disinfects", "Sterilizes", and "Deodorizes" apart from the mark shown.
For Disinfectant.
Claims use since June 3, 1931.

Ser. No. 316,952. ACHESON OILDAG COMPANY, Port Huron, Mich. Filed July 15, 1931.

Glydag

For Mixtures or Compounds Consisting of or Containing Glycerine and Colloidal Graphite for Various Uses in the Industrial Arts.
Claims use since July 8, 1931.

Ser. No. 316,973. MARINELLO COMPANY, New York, N. Y.



Filed July 15, 1931.
For Tissue Cream.
Claims use since June 25, 1931.

Ser. No. 317,017. PAUL ZINGLER, doing business as Creocarb Co., Brooklyn, N. Y. Filed July 16, 1931.



Applicant disclaims any right or any claim for the registration of the word "Compound" in the phrase "Creocarb Compound" of the trade-mark.
For Cough and Cold Medicine.
Claims use since Feb. 9, 1931.

Ser. No. 317,020. H. W. BIRDSONG, doing business as Fermolax Chemical Company, Athens, Ga. Filed July 17, 1931.

Fermlax

For Medicine in Form of an Alkaline Powder for Heartburn, Sour Stomach, Hyperacidity Eructations, Gastric Distention, Fermentation and Putrefaction, and Habitual Constipation.
Claims use since Apr. 18, 1931.

Ser. No. 317,086. H. V. JENKINS, INC., Knoxville, Tenn. Filed July 18, 1931.



The portrait appearing in the drawing is purely fanciful. No claim is made to the words "Oil Sheen" apart from the mark shown in the drawing.
For Permanent Waving Solutions and Hair Oils.
Claims use since Nov. 1, 1930.

Ser. No. 317,138. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed July 20, 1931.



The drawing is lined and shaded to indicate the colors red, yellow, and black. No claim is made to the printed matter appearing on the drawing with the exception of the word "Flit".

For Insect Repellent.

Claims use since July 6, 1931.

Ser. No. 317, 269. THE BLACK FLAG COMPANY, Baltimore, Md. Filed July 24, 1931.



All of the descriptive matter appearing on the drawing, with the exception of the words "Black Flag", "Bandera Negra", and "The Black Flag Co." is disclaimed apart from the mark as shown.

For Insecticides.

Claims use since January, 1926.

Ser. No. 317,358. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Filed July 27, 1931.

AVALON

For Domestic Ammonia and Liquid Bluing.

Claims use since July 10, 1905.

Ser. No. 217,363. LOS ANGELES SOAP COMPANY, Los Angeles, Calif. Filed July 27, 1931.

WHITE KING



For Water Softener.

Claims use since July 7, 1931.

Ser. No. 317,369. RALPH H. OSMUN, doing business as Petro-Mal Laboratories, Wheeling, W. Va. Filed July 27, 1931.

Petro-Mal

For Pharmaceutical Preparations for Use to Relieve Constipation.

Claims use since Jan. 13, 1931.

Ser. No. 317,398. MCKINLEY GASSETT, Washington, D. C. Filed July 28, 1931.

CO-CA-SYL

For Laxative.

Claims use since June 22, 1931.

Ser. No. 317,435. SAMUEL HECHT, doing business as Harlem Chemical Company, Long Island City, N. Y. Filed July 29, 1931.

FLO-ROSET

For Lighting Fluid Used in Cigarette Lighters.

Claims use since July 1, 1926.

Ser. No. 317,537. ROBERT M. SEARLES, doing business as Rust-Ban Company, Philadelphia, Pa. Filed July 31, 1931.

RUST-BAN

For Liquid Preparation Used for Preventing Rust in Radiators, Heating Boilers, and Steam Boilers.

Claims use since July 27, 1931.

Ser. No. 317,543. AMERICAN NICOTON CORPORATION, New York, N. Y. Filed Aug. 1, 1931.

NICONETTE

For Liquid Preparation to be Applied to Tobacco, Cigars, Cigarettes, and the Like, Before Smoking to Neutralize Injurious Effects of Nicotine.

Claims use since July 22, 1931.

Ser. No. 317,545. ELIZABETH ARDEN, INC., New York, N. Y. Filed Aug. 1, 1931.

LYSETTA

For Face Powder.

Claims use since June 6, 1931.

Ser. No. 317,556. ROBERT T. GARDNER, doing business as The Alatol Company, Philadelphia, Pa. Filed Aug. 1, 1931.

Alatol

For Blackboard Dye.

Claims use since Apr. 15, 1931.

Ser. No. 317,562. LACASSIAN LABORATORIES CORPORATION, doing business as Salfene Chemical Co., St. Louis, Mo. Filed Aug. 1, 1931.

SALFO

For Antipyretic and Anodyne Powders and Tablets.

Claims use since May 19, 1900.

Ser. No. 317,565. KORA M. LUBLIN, New York, N. Y. Filed Aug. 1, 1931.

go'Lox

For Cosmetics—Namely, Depilatories and Deodorants.

Claims use since Mar. 15, 1931.

Ser. No. 317,573. WILLIAM C. ROWSEY, Shawmut, Mont. Filed Aug. 1, 1931.

DRIOOL

For Compound for Use in Treating Sweating Armpits and Feet.

Claims use since June 8, 1931.

Ser. No. 317,599. GOVE PHARMACAL PRODUCTS, LTD., Brooklyn, N. Y. Filed Aug. 3, 1931.

TONASEPTOL

For Preparation to Relieve Colds, Coughs, and Congestions and for the Respiratory Tract.

Claims use since March, 1931.

Ser. No. 317,659. ACHESON OILDAG COMPANY, Port Huron, Mich. Filed Aug. 5, 1931.

Aquadag

For Colloidal Graphited Water for Various Uses in the Industrial Arts.

Claims use since June 25, 1907.

Ser. No. 317,660. ACHESON OILDAG COMPANY, Port Huron, Mich. Filed Aug. 5, 1931.

Oildag

For Colloidal Graphited Oil for Various Uses in the Industrial Arts.

Claims use since June 25, 1907.

Ser. No. 317,708. DAVID N. DITCHEK, doing business as Sani-Re Chemical Co., Brooklyn, N. Y. Filed Aug. 6, 1931.

Ment-Gal RECTAL OINTMENT

The words "Rectal Ointment" are hereby disclaimed.

For Gelatinous or Semi-Solid Preparation for the Relief of Rectal Troubles.

Claims use since June 25, 1931.

Ser. No. 317,709. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Filed Aug. 6, 1931.

Man-Glu-Col

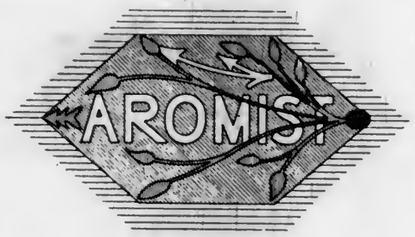
For Manganese Gluconate Colloidal Solution Used in the Treatment of Cocci Infections.
Claims use since June 30, 1931.

Ser. No. 317,712. OTIS CLAPP & SON, INC., Boston, Mass. Filed Aug. 6, 1931.

PHENOCASALATE

For Laxative.
Claims use since July 17, 1931.

Ser. No. 317,768. T. J. HOLMES CO., INC., Chartley, Mass. Filed Aug. 7, 1931.



The drawing is lined for the colors green and red.
For Antiseptic Compound.
Claims use since July 10, 1931.

Ser. No. 317,818. SCHERING CORPORATION, New York, N. Y. Filed Aug. 8, 1931.

Niazo

For Genito-Urinary Antiseptic.
Claims use since May 4, 1931.

Ser. No. 317,892. HAUSER LABORATORY, Minneapolis, Minn. Filed Aug. 12, 1931.

O_2X

For Preparation for Skin Diseases.
Claims use since July 1, 1931.

Ser. No. 317,898. THE MILSON COMPANY, doing business as The Health-O-Quality Product Co., Cincinnati, Ohio. Filed Aug. 12, 1931.

WAFO-LAX

For Laxative Wafers.
Claims use since Apr. 3, 1931.

Ser. No. 317,942. BENJAMIN LEVIN, doing business as Vigorol Laboratories, St. Albans, Long Island, N. Y. Filed Aug. 13, 1931.

O-VIG-O

For Reconstructant Tonic.
Claims use since July 20, 1931.

Ser. No. 317,943. ELI LILLY AND COMPANY, Indianapolis, Ind. Filed Aug. 13, 1931.

EXTRALIN

For Liquid Liver Extract to be Used in the Parenteral Treatment of Anemia of Various Kinds.
Claims use since July 24, 1931.

Ser. No. 317,953. PRATT FOOD COMPANY, Philadelphia, Pa. Filed Aug. 13, 1931.

S/H

For Disinfectant.
Claims use since June 20, 1931.

Ser. No. 317,975. THE DE PREE COMPANY, doing business as Knickerbocker Products, Holland, Mich. Filed Aug. 14, 1931.

Zinkette

For Emollient or Skin Powder in Cake Form.
Claims use since June 15, 1931.

Ser. No. 318,078. ALEXANDER C. RICE, doing business as Rice Laboratories, Chicago, Ill. Filed Aug. 17, 1931.

RinKil

For Liquid Treatment for Ring Worm.
Claims use since July 25, 1931.

Ser. No. 318,110. FRANCIS J. JACOBI, doing business as The Grove Pharmacy and The Amodine Co., Tonawanda,

AMODINE

N. Y. Filed Aug. 18, 1931.
For Preparation for the Relief of Headaches, Neuralgia, and Muscular Aches and Pains.
Claims use since Jan. 1, 1929.

Ser. No. 318,114. PHILFUELS COMPANY, Bartlesville, Okla. Filed Aug. 18, 1931.

UTILGAS

For Liquefied Natural Gas.
Claims use since July, 1931.

CLASS 7

Cordage

Ser. No. 317,988. PACIFIC WIRE ROPE COMPANY, Los Angeles, Calif. Filed Aug. 14, 1931.

COLORMARK

For Wire Strand.
Claims use since July 15, 1931.

Ser. No. 318,200. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



DEGUSSA

For Wire Ropes and Cables.
Claims use since Sept. 24, 1930.

CLASS 12

Construction Materials

Ser. No. 310,302. THE RED RIVER LUMBER COMPANY, Minneapolis, Minn. Filed Jan. 23, 1931.



The trade-mark consists of two concentric circles, a fanciful human head within the inner circle and the words "A Paul Bunyan Product", "Paul Bunyan" being the traditional names of a mythological character so known among lumbermen. The word "Product" appearing upon the drawing is disclaimed apart from the mark shown.
For Door Frames, Window Frames, Doors, Sash, and Molding.
Claims use since Jan. 3, 1931.

Ser. No. 313,498. EL REY PRODUCTS CO., Los Angeles, Calif. Filed Apr. 18, 1931.

MAR KEE

For Composition Shingles.
Claims use since August, 1930.

Ser. No. 313,499. EL REY PRODUCTS CO., Los Angeles, Calif. Filed Apr. 18, 1931.

NUART

For Composition Shingles.
Claims use since July, 1929.

Ser. No. 313,501. EL REY PRODUCTS CO., Los Angeles, Calif. Filed Apr. 18, 1931.



For Felt and Asphalt Roofing, Composition Shingles, Composition Siding Material, Duck Deck Roofing, Felt and Asphalt Saturated Felt, Industrial Flooring Material, Asphalt Saturated Sheathing, Roofing Felt, Deadening Felt, Rosin Sized Sheathing, Felt and Asphalt Saturated Felt Car Lining, Plasterboard, and Felt and Asphalt Saturated Felt House Lining Material.
Claims use since Jan. 1, 1926.

Ser. No. 314,744. ASSOCIATED TIMBER EXPORTERS OF BRITISH COLUMBIA LIMITED, Vancouver, Canada. Filed May 19, 1931.

ASTEXO
CANADA

The word "Canada" is not claimed apart from the mark.
For Lumber in All Forms.
Claims use since Aug. 1, 1930.

Ser. No. 317,734. PIONEER PAPER COMPANY, Los Angeles, Calif. Filed Aug. 6, 1931.

TREHEAL

For Bituminous Emulsion for Arboricultural Use.
Claims use since Feb. 10, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 314,253. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Filed May 6, 1931.

HANDY ANDY

For Seat Cover and Door Stop Cushions, Screws, Nuts, Bolts, Bolt Heads, Cotter Pins, Ball-Cock Cups, Seat Caps, and Collars for Pipe Fittings and Plumbing Supplies; Fuller Caps, Stems, Nuts, and Eccentrics; and Metallic Washers.
Claims use since December, 1923.

Ser. No. 315,609. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn. Filed June 9, 1931.

SPRINKLEMIST

For Lawn Sprinklers.
Claims use since May 7, 1931.

CLASS 15

Oils and Greases

Ser. No. 310,315. WOLVERINE-EMPIRE REFINING COMPANY, Wilmington, Del., and New York, N. Y. Filed Jan. 23, 1931.

WOLF'S HEAD

For Lubricating Oils and Greases.
Claims use since Apr. 1, 1911.

Ser. No. 310,316. WOLVERINE-EMPIRE REFINING COMPANY, Wilmington, Del., and New York, N. Y. Filed Jan. 23, 1931.



For Lubricating Oils and Greases.
Claims use since Apr. 1, 1911.

Ser. No. 317,785. STANCO INCORPORATED, New York, N. Y. Filed Aug. 7, 1931.

KOTO

For Lubricating Oils.
Claims use since Oct. 10, 1921.

Ser. No. 317,974. HENRY H. CROSS COMPANY, Chicago, Ill. Filed Aug. 14, 1931.

PENNCROSS

For Lubricating Oils.
Claims use since July 1, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 317,022. CLEAN SURFACE PRODUCTS COMPANY, Chicago, Ill. Filed July 17, 1931.



The words "Waterproof Wax Finish Liquid" are hereby disclaimed apart from the other features of the mark.
For Waterproof Wax Finish in the Nature of a Polish for Automobiles, Furniture, Woodwork, and Floors, Which Products May Also be Used for Glazing.
Claims use since June 10, 1929.

Ser. No. 317,932. WILLIAM S. GRAY & CO., New York, N. Y. Filed Aug. 13, 1931.

TITAN-O-PONE

For Pigments Used in Paints.
Claims use since July 31, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 297,021. LOCKE & COMPANY, Rochester, N. Y. Filed Mar. 8, 1930.



Applicant disclaims the words "Design by" except as specially herein included.
For Wagons, Carriages, Automobiles, Baby Carriages, Including Bodies, Structural Parts, and Body Parts Therefor.
Claims use since Jan. 15, 1929.

Ser. No. 318,068. MONROE AUTO EQUIPMENT COMPANY, Monroe, Mich. Filed Aug. 17, 1931.

RIDE SELECTOR

For Remote Control Devices for Shock Absorbers.
Claims use since July 31, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 317,343. THE AMERICAN FOUNDRY EQUIPMENT COMPANY, Mishawaka, Ind. Filed July 27, 1931.

ELECTROMODE

For Room Heating Device with Electrical Heating Element.
Claims use since Apr. 22, 1931.

Ser. No. 317,588. CARL J. ULRICH, Minneapolis, Minn. Filed July 31, 1931.

HUMIDAK

For Humidity Controlled Electric Switches for Operating Humidifying Mechanism.
Claims use since June 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 269,306. NATIONAL GUT STRING MFG. CO., INC., Chicago, Ill. Filed July 9, 1928.



The trademark comprises providing a string of gut with a short red colored section intermediate its length. In the drawing which shows a commercial length of gut string the short colored section is lined to represent red. No claim is being made to the representation of a coil of gut string.

For Gut String for Tennis Rackets.
Claims use since June 18, 1928.

Ser. No. 316,822. PEO MANUFACTURING CORPORATION, Rochester, N. Y. Filed July 10, 1931.

PLAY POKER

For Game Played with Balls Adapted to Traverse a Spiral Loop and Fall into a Horizontal Row of Pockets.
Claims use since Apr. 1, 1931.

Ser. No. 317,590. THE AMERICAN DISPLAY COMPANY, Dayton, Ohio. Filed Aug. 3, 1931.

DUBBLE-HEADER

For Artificial Fish Lures.
Claims use since Nov. 26, 1929.

Ser. No. 317,979. IDEAL NOVELTY & TOY CO., New York, and Brooklyn, N. Y. Filed Aug. 14, 1931.

SAUCY SUE

For Dolls.
Claims use since Feb. 1, 1931.

Ser. No. 318,051. THE CRAWFORD, MCGREGOR AND CANBY COMPANY, Dayton, Ohio. Filed Aug. 17, 1931.

JUMBO

For Golf Clubs.
Claims use since July 15, 1931.

Ser. No. 318,053. THE CRAWFORD, MCGREGOR AND CANBY COMPANY, Dayton, Ohio. Filed Aug. 17, 1931.

TRU-FLEX

For Golf Clubs.
Claims use since July 15, 1931.

Ser. No. 318,069. THE OAK RUBBER COMPANY, Ravenna, Ohio. Filed Aug. 17, 1931.

HY-TEX

For Toy Rubber Balloons.
Claims use since Aug. 11, 1931.

Ser. No. 318,254. RUSSELL PLAYING CARD COMPANY, Jersey City, N. J. Filed Aug. 20, 1931.

"400" SMART SET

For Playing Cards.
Claims use since 1909.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 306,736. HERBERTS MACHINERY COMPANY, LTD., Los Angeles, Calif. Filed Oct. 14, 1930.



No claim is made to the exclusive use of the word "Reguaranteed" apart from the mark as shown in the drawing.

For Rebuilt Machines and Machinery—Namely, Lathes, Shapers, Milling Machines, Drill Presses, Radial Drill Presses, Turret Lathes, Screw Machines, Grinding Machines, Sheet Metal Working Machines, Punch Presses, Boring Mills, Planers, Slotters, Key Seaters, Pipe Machines, Bolt Machines.
Claims use since June 1, 1929.

Ser. No. 314,928. THE PRESS-OR CO., Miami, Fla. Filed May 22, 1931.

PRESS-OR

No claim is made to the word "Press" apart from the mark as shown in the drawing.

For Fruit Press or Fruit Juice Extractor.
Claims use since December, 1929.

Ser. No. 317,633. ECLIPSE MACHINE COMPANY, Elmira Heights, N. Y. Filed Aug. 4, 1931.

STARTIX

For Automatic Starting Mechanism for Engines.
Claims use since June 20, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 314,672. MCCOY WILKINSON, St. Louis, Mo. Filed May 16, 1931.



The word "Glare-Eze", the word "Lenses", and the representation of eyeglasses appearing in the drawing being disclaimed apart from the mark as shown.

For Lenses for Eyeglasses.
Claims use since Aug. 1, 1929.

Ser. No. 316,007. ALBERT W. HEINEMANN, Independence, Kans. Filed June 18, 1931.

Chexall

For Oiling Chart Check and Indicator for Personal Use by Employees in Automobile Servicing.
Claims use since Mar. 1, 1931.

Ser. No. 317,131. NEW ERA OPTICAL CO., Chicago, Ill. Filed July 20, 1931.

Precision

No claim is made to the word "Precision" apart from the mark.

For Optical Lenses.
Claims use since Jan. 10, 1925.

Ser. No. 317,516. JOHN E. R. HASBROUCK, New York, N. Y. Filed July 31, 1931.

PENNYWAY

For Automatic Weighing Scales and Weighing Machines With or Without Coin Controlled Operating Mechanism.
Claims use since July 30, 1931.

Ser. No. 317,673. THE NATIONAL ACME CO., Cleveland, Ohio. Filed Aug. 5, 1931.

NAMCO

For Non-Measuring Gasoline Pumps.
Claims use since July 7, 1931.

CLASS 27

Horological Instruments

Ser. No. 313,708. ERNST HOMBERGER-RAUSCHENBACH, VORMALS INTERNATIONAL WATCH CO. (ERNEST HOMBERGER-RAUSCHENBACH, CI-DEVANT INTERNATIONAL WATCH CO.), Schaffhouse, Switzerland. Filed Apr. 23, 1931. Under 10-year proviso.

INTERNATIONAL WATCH

For Watch Movements, Cases, Dials, and Sheaths.
Claims use since 1868.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 317,750. THE WATSON COMPANY, Attleboro, Mass. Filed Aug. 6, 1931.

EXEMPLAR

For Sterling Silver Hollow Ware and Sterling Silver Flat Ware.
Claims use since June 26, 1931.

Ser. No. 317,913. LOUIS FARBER, doing business as Farber Brothers, New York, N. Y. Filed Aug. 10, 1931.

FUTURA

For Silver and Silver Plated Ware for Domestic Table Use.
Claims use since Dec. 10, 1930.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 318,224. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Porcelain or Real China.
Claims use since Sept. 24, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 300,556. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed May 15, 1930.

Air-Way

For Refrigerating Apparatus and Parts Thereof.
Claims use since Sept. 26, 1929.

CLASS 37

Paper and Stationery

Ser. No. 304,374. ILLINOIS PAPER COMPANY, Chicago, Ill. Filed Aug. 8, 1930.

SWALLOW

For Stencils and Stencil Correction Varnish.
Claims use since January, 1930.

Ser. No. 316,273. S. H. KRESS & Co., New York, N. Y. Filed June 25, 1931.

BONITA

For Writing Tablets, Albums, Composition Books, Note Books, Writing Paper, Correspondence Cards, Correspondence Envelopes, Wrapping Paper, Toilet Paper, Facial Tissue, Paper Towels, Paper Napkins, Paper Handkerchiefs, Waxed Paper, Pen Holders, Fountain Pens, Pencils, Crayons, Pen Points, Rubber Erasers, File Guides, and Loose-Leaf Binders.
Claims use since May 15, 1931.

Ser. No. 317,711. FEDERAL ENVELOPE MANUFACTURING Co., Omaha, Nebr. Filed Aug. 6, 1931.

NOPEEK

For Correspondence and Mailing Envelopes.
Claims use since June 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 278,081. AIRPORT PUBLISHERS, INC., Buffalo, N. Y. Filed Jan. 17, 1929.

"AIR-LINE"

For Maps.
Claims use since Nov. 1, 1927.

Ser. No. 287,630. U. S. GOVERNMENT ADVERTISER, Washington, D. C. Filed July 24, 1929.

U. S. Government Advertiser

For A Journal Published Weekly.
Claims use since June 5, 1882.

Ser. No. 316,855. THE SUN PRINTING & PUBLISHING ASSOCIATION, New York, N. Y. Filed July 11, 1931.

The Sun Dial

For Column Printed Daily.
Claims use since Apr. 7, 1913.

CLASS 39

Clothing

Ser. No. 314,239. JARMAN SHOE COMPANY, Nashville, Tenn. Filed May 6, 1931.

FRIENDLY FITTERS

No claim being made to the word "Fitters" except in association with the word "Friendly."
For Boots and Shoes of Leather, Fabric, or Combinations Thereof.
Claims use since Apr. 8, 1931.

Ser. No. 314,912. JAFFEE-COHEN & LANG, INC., New York, N. Y. Filed May 22, 1931.



The lining shown in the drawing represents color, to wit, a red background. However, no claim is made to the particular color, but rather to the mark shown. The words "Vicuna-Spun" and the words "Continental Fabric" are hereby disclaimed except in combination with the pictorial representation shown in the drawing.
For Clothing and Wearing Apparel—Namely, Coats, Suits, Knickers, Caps, and Hats for Men, Women and Children; Dresses for Women and Children; Pajamas, Nightshirts, Nightdresses and Night Drawers for Men, Women, and Children; Union Suits, Uniforms, Drawers, Chemises, Undershirts, Bloomers; Step-Ins, i. e., Underdrawers Type; Brassières, Hosiery, Collars, Bathing Suits, Shirt Waists, Blouses, Negligees, Work and Under Shirts, Neckties, Lumberjacks, Sweaters, Trousers, Scarfs; Shoes of Leather, Rubber, Fabric, or Combinations of the Same; Slippers, and Gloves of Leather, Rubber, Fabric, Felt, or Combinations of the Same.
Claims use since Apr. 30, 1931.

Ser. No. 316,563. MAYERHOFF, INCORPORATED, Norwalk, Conn. Filed July 2, 1931.

Club Life
SPORTSWEAR

No claim is made to the word "Sportswear" apart from the mark.
For Women's, Misses', and Children's Dresses, Shirt Waists, Blouses, Pajamas, Slips, Under-Shirts, Shorts, and Union Suits; Hats and Coats, and Men's Dress, Negligee, and Work Shirts, Pajamas, and Shirts, Shorts, and Union Suits.
Claims use since June 16, 1931.

Ser. No. 316,591. L. HEIT, New York, N. Y. Filed July 3, 1931.

JAYE-LORD

For Men's, Youths', and Boys' Coats, Vests, Pants, Suits, Topcoats, and Overcoats.
Claims use since Mar. 15, 1931.

Ser. No. 316,780. BEN A. LEVIN, doing business as Mitzi Hat Shops, Decatur, Springfield, Danville, and Champaign, Ill., and St. Louis, Mo. Filed July 9, 1931.



No claim is made to the words "Hats," "$1.88," "All one Price," "None Higher," and "America's Greatest Millinery Values," apart from the mark shown on the drawing.
For Ladies' Hats.
Claims use since June 17, 1931.

Ser. No. 316,990. BEAR BRAND HOSIERY CO., Kankakee, Ill. Filed July 16, 1931.

GAR-TARE

For Knitted Articles—Namely, Hosiery.
Claims use since Mar. 19, 1931.

Ser. No. 317,296. THE ASBURY MILLS, New York, N. Y. Filed July 25, 1931.

Sunsport

For Dresses for Women, Misses, and Children.
Claims use since July 1, 1931.

Ser. No. 317,346. EZRIL BERLIN, doing business as Berlin Shoe Shop, New York, N. Y. Filed July 27, 1931.

Kidtrix
NATURAL WALK

No claim is made to the exclusive use of the words "Natural Walk" apart from the mark as shown in the drawing.
For Leather and Fabric Shoes.
Claims use since Mar. 3, 1931.

Ser. No. 318,054. CLAUDE H. DANIELS, Boston, Mass. Filed Aug. 17, 1931.

AIR-COOLER

For Men's, Women's and Children's Boots, Shoes, and Slippers, Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Materials.
Claims use since Aug. 4, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 315,128. JOSEPH BENN CORPORATION, Greystone, R. I. Filed May 28, 1931.

Bengora

For Woolen Piece Goods.
Claims use since Apr. 11, 1931.

Ser. No. 315,486. CRAMERTON MILLS, INCORPORATED, Cramerton, N. C. Filed June 6, 1931.

SEAL CREPE

No claim is made to the word "Crepe" apart from the mark as shown.
For Piece Goods of Cotton and Silk or Combinations Thereof.
Claims use since July, 1930.

Ser. No. 316,255. BROWNSTEIN-LOUIS COMPANY, Los Angeles, Calif. Filed June 25, 1931.

SOPHOMORE BLUES

No claim is made to the word "Blues" apart from the mark shown in the drawing.
For Woolen Piece Goods.
Claims use since Mar. 23, 1931.

Ser. No. 317,044. MARVLO MILLS, INC., New York, N. Y. Filed July 17, 1931.

CHULLA CREPE

No claim is made to the word "Crepe" apart from the mark as shown.
For Cotton, Linen, Artificial and Natural Silk Goods, Plain, Colored, and Printed, in Pieces.
Claims use since Nov. 1, 1930.

Ser. No. 317,476. S. W. MAGNUS HDKF. CO., New York, N. Y. Filed July 30, 1931.

"Bretonne"

Applicant is owner of registration No. 80,030, registered Nov. 1, 1910, for the mark "Bretonne".
For Handkerchiefs and Linen Piece Goods.
Claims use since Jan. 15, 1908.

Ser. No. 317,864. WEIL-KALTER MFG. COMPANY, St. Louis, Mo. Filed Aug. 10, 1931.

No 5

For Knitted Rayon Fabric.
Claims use since Sept. 15, 1929.

Ser. No. 317,872. RIBELASTIC COMPANY INC., Needham Heights, Mass., and Central Falls, R. I. Filed Aug. 11, 1931.

RE

For Knitted Elastic Fabrics.
Claims use since May, 1928.

Ser. No. 318,185. WILLIAM H. ADAMS, Kenyon, R. I. Filed Aug. 20, 1931.

U-SO

For Strand Material for Making Braided Rugs and Braided Mats.
Claims use since July 13, 1931.

CLASS 43

Thread and Yarn

Ser. No. 317,523. LILY MILL AND POWER COMPANY, Shelby, N. C. Filed July 31, 1931.

DAISY

For Sewing Thread.
Claims use since July 21, 1931.

Ser. No. 317,769. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Aug. 7, 1931.

Silekstra

For Threads and Yarns.
Claims use since Nov. 21, 1929.

Ser. No. 318,212. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Spun Yarn Fibres.
Claims use since Sept. 24, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 315,635. OLE HIBNER, Cleveland, Ohio. Filed June 10, 1931.

PAK O KURLS

For Permanent Wave Pads, Permanent Wave Sachets, Permanent Wave Solutions Sold as a Unit.
Claims use since Jan. 23, 1931.

Ser. No. 315,757. THE O-C MANUFACTURING COMPANY, Little Falls, N. J. Filed June 12, 1931.

OLYMPIC

For Jock Straps and Suspensories for Men, and Athletic Supporters and Anklets, Ankle Supporters, and Wrist Supporters for Both Men and Women.
Claims use since 1912.

Ser. No. 316,366. S. H. KRESS & CO., New York, N. Y. Filed June 27, 1931.

BONITA

For Rubber Gloves for Medical or Surgical Use, Absorbent Cotton, Sanitary Belts, Sanitary Napkins, and Sanitary Aprons.
Claims use since May 15, 1931.

Ser. No. 316,613. THE PYRAMID RUBBER COMPANY, Ravenna, Ohio. Filed July 3, 1931.

SUNSHINE

For Rubber Nursing Nipples.
Claims use since June 6, 1931.

Ser. No. 317,436. THE KENDALL COMPANY, Boston, Mass., and Chicago, Ill. Filed July 29, 1931.

ARRO

For Gauze Bandage and Adhesive Plaster—Namely, Adhesive Tape.
Claims use since June 24, 1931.

Ser. No. 317,914. JOHN A. HUTH, Natrona, Pa. Filed Aug. 10, 1931.

HUTH ELECTRODE DIATHERMY

Applicant disclaims the words "Electrode for Diathermy."
For Electrode for Diathermy Treatments.
Claims use since June 1, 1931.

Ser. No. 318,085. VACULETTE CO., NOT INC., Chicago, Ill. Filed Aug. 17, 1931.

Vaculette

For Vacuum Massaging Machines.
Claims use since July 14, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 298,484. BARKER-MILLER DISTRIBUTING CO., Phoenix, Ariz. Filed Apr. 7, 1930.

EL GABILAN

For Fresh Vegetables.
Claims use since Oct. 10, 1929.

Ser. No. 310,143. SOCIEDAD ANONIMA MACKINNON & COELHO. LIMITADA COMPANIA YERBATERA, Buenos Aires, Argentina. Filed Jan. 19, 1931.

Yerba Mate ESPECIAL



SALUS

ELABORADA POR E. MACKINNON & COELHO BUENOS AIRES

All the reading matter with the exception of the word "Salus" is disclaimed apart from the mark shown on the drawing. The portrait of the woman shown on the drawing is fanciful.
For Yerba Mate.
Claims use since July, 1922.

Ser. No. 312,766. NEW ENGLAND CONFECTIONERY COMPANY, Cambridge, Mass. Filed Mar. 31, 1931.

PEANUT TREAT

No claim being made to the word "Peanut" except in association with the word "Treat".
For Candy.
Claims use since Mar. 13, 1931.

Ser. No. 313,010. JESSE C. STEWART CO., doing business as Pittsburgh Food Products Co., Pittsburgh, Pa. Filed Apr. 6, 1931.

JEL-X-CEL. JEL-X-CEL.

For a Gelatin Dessert Mixture.
Claims use since about 1916.

Ser. No. 313,587. WILLIAM BARTELS COMPANY, New York, N. Y. Filed Apr. 21, 1931.

CANARY VIM

The word "Canary" is disclaimed apart from the mark shown.
For Canary Bird Food.
Claims use since Dec. 20, 1930.

Ser. No. 313,790. MCLAREN-CONSOLIDATED CONE CORPORATION, Dayton, Ohio. Filed Apr. 25, 1931.

ZOO

Bakery Products—Namely, Ice-Cream Cones.
Claims use since Jan. 1, 1931.

Ser. No. 314,251. RUNKEL BROTHERS, INC., New York, N. Y. Filed May 6, 1931.

Runkel's Milk CHOCOLATE RAISINS and NUTS

Makers of Fine Chocolate since 1870 Runkel Brothers, Inc. New York MADE IN U.S.A.

Applicant makes no claim to the exclusive use of any of the wording shown on the drawing except the words "Runkel's" and "Runkel Brothers, Inc." apart from the trade-mark as shown. Applicant claims ownership of Reg. Nos. 52,043 and 52,044 effected under the 10-year proviso of section 5 of the act of Feb. 20, 1905.
For Chocolate Candy.
Claims use since Feb. 15, 1931.

Ser. No. 315,039. CRYSTAL GROWERS EXCHANGE, INC., Crystal City, Tex. Filed May 26, 1931.

RELIEF



The lining on the drawing is intended to indicate shading only. Color is not an essential feature of the trade-mark and therefore any lining for color is disclaimed.
For Vegetables—Namely, Spinach, Onions, Brocoli, Cauliflower, Tomatoes, Beans, Peppers, Egg Plant, Beets, Carrots, Turnips, Radishes, and Cucumbers.
Claims use since Nov. 1, 1930.

Ser. No. 315,680. FRIOID FRUIT CORPORATION, Hollywood and Miami, Fla. Filed June 11, 1931.



FROZO

For Solidified Combination of Fruits Congealed and Marketed in Bar Form with or without Edible Coating Thereon.
Claims use since 1930.

Ser. No. 316,017. THE PIONEER MAPLE PRODUCTS COMPANY, St. Paul, Minn. Filed June 18, 1931.

BUCKET

Applicant is the owner of registration No. 262,797.
For Peanut Butter, Jellies, and Jams.
Claims use since June 9, 1931.

Ser. No. 316,464. PAULINE GUIDICI, Lindenhurst, L. I., N. Y. Filed June 26, 1931.



No claim is made to any of the wording except the word "Borgo" apart from the mark shown in the drawing.
For Tomato Sauce.
Claims use since June 27, 1929.

Ser. No. 316,572. JOSEPH DELLO RUSSO, Philadelphia, Pa. Filed July 2, 1931.



Applicant disclaims the pictorial representation of tomatoes shown upon applicant's mark except in the combination illustrated.
For Canned Tomatoes and Tomato Paste.
Claims use since Dec. 28, 1926.

Ser. No. 316,617. TEAKWOOD, INC., Chicago, Ill. Filed July 3, 1931.

TEAKWOOD

For Candy.
Claims use since March, 1931.

Ser. No. 316,680. BOTTLER'S CHOCOLATE SUPPLY CORPORATION, Brooklyn, N. Y. Filed July 3, 1931.



No claim is made to any of the words appearing on the drawing except the word "Chico.".
For Chocolate Milk Food Drink.
Claims use since Mar. 15, 1931.

Ser. No. 316,801. AMERICAN CHICLE COMPANY, Long Island City, N. Y. Filed July 10, 1931.

Frozen Mints

No claim is made to the exclusive right to the use of the word "Mints" apart from and except in association with the other features of the mark shown in the drawing.
For Chewing Gum.
Claims use since May 28, 1931.

Ser. No. 317,127. LINDA BAKING COMPANY, St. Louis, Mo. Filed July 20, 1931.

LINDA ROSE

For Edible Cups for Frozen and Other Confections.
Claims use since Jan. 15, 1930.

Ser. No. 317,278. TOM HUSTON FROSTED FOODS, INC., Columbus, Ga. Filed July 24, 1931.

Snow-Jo

For Frozen Confection.
Claims use since May 18, 1931.

Ser. No. 317,308. RUTH GINSBERG, doing business as Gin's Products Co., Easton, Pa. Filed July 25, 1931.

GIN'S

For Malt Syrup.
Claims use since Apr. 1, 1931.

Ser. No. 317,439. ORPHAN ANNIE GREASELESS DOUGHNUT SHOP, Clearwater, Fla. Filed July 29, 1931.



No claim being made to the words "Food Products" apart from the mark shown.
For Doughnuts, Cakes, Pies, Breads, and Candies.
Claims use since June 10, 1931.

Ser. No. 317,628. BREAKSTONE BROS. INC., New York, N. Y. Filed Aug. 4, 1931.

Belle O'the Valley

For Butter.
Claims use since July 1, 1931.

Ser. No. 318,166. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Aug. 19, 1931.

POPPLES

For Frozen Confections.
Claims use since Aug. 17, 1931.

Ser. No. 318,167. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Aug. 19, 1931.

POPSY

For Frozen Confections.
Claims use since Aug. 17, 1931.

Ser. No. 318,178. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Aug. 19, 1931.



The lining on the drawing is not indicative of or restrictive to any particular colors.
For Tea.
Claims use since June 9, 1931.

Serial No. 318,179. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Aug. 19, 1931.



The lining on the drawing is not indicative of or restrictive to any particular colors.
For Tea.
Claims use since June 9, 1931.

Ser. No. 318,180. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Aug. 19, 1931.



The lining on the drawing is not indicative of or restrictive to any particular colors.
For Tea.
Claims use since June 9, 1931.

Ser. No. 318,181. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Aug. 19, 1931.



The lining on the drawing is not indicative of or restrictive to any particular colors.
For Tea.
Claims use since June 9, 1931.

Ser. No. 318,188. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Filed Aug. 20, 1931.

AUTOGIRO

For Chewing Gum.
Claims use since June 16, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

SEPTEMBER 29, 1931

287,433. COFFEE. DAVIES & SULLIVAN COMPANY, New York, N. Y.
Filed January 20, 1931. Serial No. 310,162. PUBLISHED JULY 21, 1931. Class 46.

287,434. DISPLAY TRAYS MADE OF WOOD. COHN & ROSENBERGER, INC., New York, N. Y.
Filed February 17, 1931. Serial No. 311,128. PUBLISHED JULY 21, 1931. Class 2.

287,435. TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed March 18, 1931. Serial No. 312,271. PUBLISHED JUNE 23, 1931. Class 46.

287,436. KITCHENETTE SETS, INCLUDING FLOUR, SUGAR, COFFEE, AND TEA CANISTERS, BREAD BOXES, FLOUR BINS, CAKE CLOSETS, COOKIE BOXES, PANTRY BOXES, MADE OF JAPANNED WARE. NATIONAL ENAMELING & STAMPING CO., Milwaukee, Wis.
Filed April 9, 1931. Serial No. 313,145. PUBLISHED JULY 14, 1931. Class 2.

287,437. KITCHENETTE SETS, INCLUDING FLOUR, SUGAR, COFFEE, AND TEA CANISTERS, BREAD BOXES, FLOUR BINS, CAKE CLOSETS, COOKIE BOXES, PANTRY BOXES, MADE OF JAPANNED WARE. NATIONAL ENAMELING & STAMPING CO., Milwaukee, Wis.
Filed April 9, 1931. Serial No. 313,146. PUBLISHED JULY 14, 1931. Class 2.

287,438. CANNED SHRIMP MEAT. ALASKAN GLACIER SEA FOOD COMPANY, Seattle, Wash., and Petersburg, Alaska.
Filed April 28, 1931. Serial No. 313,948. PUBLISHED JULY 14, 1931. Class 46.

287,439. FRESH VEGETABLES, FRESH DECIDUOUS FRUITS. LAMBERT MARKETING COMPANY, Sacramento, Calif.
Filed May 9, 1931. Serial No. 314,372. PUBLISHED JULY 14, 1931. Class 46.

287,440. COFFEE. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed May 13, 1931. Serial No. 314,518. PUBLISHED JULY 7, 1931. Class 46.

287,441. COFFEE AND TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed May 16, 1931. Serial No. 314,662. PUBLISHED JULY 7, 1931. Class 46.

287,442. POTATO CHIPS. GOLBUR, INC., Chicago, Ill.
Filed May 21, 1931. Serial No. 314,940. PUBLISHED JULY 21, 1931. Class 46.

287,443. CANNED FRUITS AND VEGETABLES. JOS. M. SPRIGGS' SONS, INC., Washington, Pa.
Filed May 22, 1931. Serial No. 314,932. PUBLISHED JULY 14, 1931. Class 46.

287,444. COFFEE AND TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed May 27, 1931. Serial No. 315,115. PUBLISHED JULY 14, 1931. Class 46.

287,445. COFFEE AND TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed May 27, 1931. Serial No. 315,116. PUBLISHED JULY 14, 1931. Class 46.

287,446. CANDY. FRANK G. SHATTUCK COMPANY, doing business as Schrafft's Stores, New York, N. Y.
Filed June 4, 1931. Serial No. 315,432. PUBLISHED JULY 14, 1931. Class 46.

287,447. TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed June 5, 1931. Serial No. 315,471. PUBLISHED JULY 14, 1931. Class 46.

287,448. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,734. PUBLISHED JULY 21, 1931. Class 42.

287,449. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,735. PUBLISHED JULY 21, 1931. Class 42.

287,450. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,737. PUBLISHED JULY 21, 1931. Class 42.

287,451. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,738. PUBLISHED JULY 21, 1931. Class 42.

287,452. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,740. PUBLISHED JULY 21, 1931. Class 42.

287,453. BELT DRESSING. MCGREW AND NYE, Payne, Ohio.
Filed February 24, 1931. Serial No. 311,411. PUBLISHED JULY 14, 1931. Class 4.

287,454. SHOE POLISH AND LEATHER DRESSING. FRANK J. LE DOYEN CO., Baltimore, Md.
Filed April 3, 1931. Serial No. 312,921. PUBLISHED JULY 21, 1931. Class 4.

287,455. A CLEANING COMPOUND AND A METAL POLISH PREPARATION IN THE NATURE OF A SOAP. JOHN W. SAUER, doing business as Secure-Lab, San Francisco, Calif.
Filed April 3, 1931. Serial No. 312,928. PUBLISHED JULY 21, 1931. Class 4.

287,456. READY MIXED PAINT, AND IMITATION STONE PAINT. PAUL OMER ALEXIS REAU, Glenay, Par Saint Varent, France.
Filed April 10, 1931. Serial No. 313,205. PUBLISHED JULY 21, 1931. Class 16.

287,457. PERIODICAL MAGAZINE. PAUL R. GRUEN, Chicago, Ill.
Filed April 17, 1931. Serial No. 313,471. PUBLISHED JULY 14, 1931. Class 38.

287,458. DEODORIZER, DISINFECTANT, BIRD AND POULTRY TONIC, ETC. WAGNER BROS. FEED CORP., Brooklyn, N. Y.
Filed April 27, 1931. Serial No. 313,875. PUBLISHED JULY 21, 1931. Class 6.

287,459. CLEANSING PREPARATION FOR GENERAL HOUSEHOLD USE. D. W. CALL, doing business as Soonite Company, San Francisco, Calif.
Filed April 29, 1931. Serial No. 313,957. PUBLISHED JULY 21, 1931. Class 4.

287,460. MAGAZINE. PATTERSON PUBLISHING COMPANY, Chicago, Ill.
Filed May 1, 1931. Serial No. 314,071. PUBLISHED JULY 14, 1931. Class 38.

287,461. CHECKS. MAXIMILIAN I. PRIESTER, Brooklyn, N. Y.
Filed April 30, 1931. Serial No. 314,012. PUBLISHED JULY 14, 1931. Class 37.

287,462. CARD INDEX. JAMES M. KEPLAR, Elkhart, Ind.
Filed May 6, 1931. Serial No. 314,241. PUBLISHED JULY 14, 1931. Class 37.

287,463. DAILY NEWSPAPER. DETROIT DAILY MIRROR, INC., Detroit, Mich.
Filed May 11, 1931. Serial No. 314,400. PUBLISHED JULY 7, 1931. Class 38.

287,464. GUMMED CLOTH TAPE AND GUMMED PAPER TAPE. THE O. & W. THUM COMPANY, Grand Rapids, Mich.
Filed May 13, 1931. Serial No. 314,520. PUBLISHED JULY 14, 1931. Class 37.

287,465. PAINT. JOSEPH WEXLER, doing business as Atlas Paint and Varnish Co., New York, N. Y.
Filed May 16, 1931. Serial No. 314,669. PUBLISHED JULY 14, 1931. Class 16.

287,466. LIQUID DRY CLEANING SOAP. R. R. STREET & CO., INC., Chicago, Ill.
Filed May 18, 1931. Serial No. 314,724. PUBLISHED JULY 21, 1931. Class 4.

287,467. CERTAIN NAMED PAINT PRODUCTS. THE MARTIN-SENOUR COMPANY, Cleveland, Ohio.
Filed May 21, 1931. Serial No. 314,853. PUBLISHED JULY 14, 1931. Class 16.

287,468. CLEANING COMPOUND. QUIGLEY COMPANY, INC., New York, N. Y.
Filed May 23, 1931. Serial No. 314,964. PUBLISHED JULY 21, 1931. Class 4.

287,469. CERTAIN NAMED PAINT PRODUCTS. INDIANAPOLIS PAINT & COLOR CO., Indianapolis, Ind.
Filed May 29, 1931. Serial No. 315,200. PUBLISHED JULY 14, 1931. Class 16.

287,470. PAINT CLEANERS. INDIANAPOLIS PAINT & COLOR CO., Indianapolis, Ind.
Filed May 29, 1931. Serial No. 315,201. PUBLISHED JULY 21, 1931. Class 4.

287,471. PENCILS. RELIANCE PENCIL CORPORATION, New York, N. Y.
Filed June 1, 1931. Serial No. 315,276. PUBLISHED JULY 14, 1931. Class 37.

287,472. LEAD PENCILS. EAGLE PENCIL COMPANY, New York, N. Y.
Filed June 3, 1931. Serial No. 315,345. PUBLISHED JULY 14, 1931. Class 37.

287,473. PREPARATIONS FOR TREATING AND WAVING THE HUMAN HAIR. HERMANN STEIN, doing business as Hair Research Laboratories, New York, N. Y.
Filed May 11, 1931. Serial No. 314,434. PUBLISHED JULY 14, 1931. Class 6.

287,474. ANTI-PAIN PREPARATION. JOSHUA HOLLAND, doing business as Vernon Laboratories, Chicago, Ill.
Filed May 11, 1931. Serial No. 314,439. PUBLISHED JULY 14, 1931. Class 6.

287,475. CUTICLE REMOVER, FINGER NAIL ENAMEL AND POLISH, ETC. SCHNEFEL BROS., INC., Newark, N. J.
Filed May 12, 1931. Serial No. 314,467. PUBLISHED JULY 14, 1931. Class 6.

287,476. INORGANIC CHEMICALS. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y.
Filed May 14, 1931. Serial No. 314,582. PUBLISHED JULY 14, 1931. Class 6.

287,477. ASTRINGENTS. JEANNE V. GOLDSMITH, doing business as Terri Cosmetics, New York, N. Y.
Filed May 16, 1931. Serial No. 314,644. PUBLISHED JULY 14, 1931. Class 6.

287,478. MEDICINAL PREPARATION FOR THE TREATMENT OF THE NOSE AND THROAT. VIA B. HAGGARD, Blackwell, Okla.
Filed May 19, 1931. Serial No. 314,759. PUBLISHED JULY 14, 1931. Class 6.

287,479. TOOTH POWDER, LOTION, PACKS, ETC. ROSE WILKE, doing business as Vital Food Company of California and V. P. O. Company of America, Los Angeles, Calif.
Filed May 18, 1931. Serial No. 314,742. PUBLISHED JULY 14, 1931. Class 6.

287,480. MEDICINAL PREPARATION USED AS A PAIN ALLEVIATOR. SCHERING & GLATZ, INC., Bloomfield, N. J.
Filed May 21, 1931. Serial No. 314,867. PUBLISHED JULY 14, 1931. Class 6.

287,481. ANALGESICS, ANÆSTHETICS, ANODYNES, ETC. SCHERING & GLATZ, INC., Bloomfield, N. J.
Filed May 21, 1931. Serial No. 314,866. PUBLISHED JULY 14, 1931. Class 6.

287,482. DENTAL CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed May 25, 1931. Serial No. 314,982. PUBLISHED JULY 14, 1931. Class 6.

287,483. ECZEMA OINTMENT. PAUL P. MATTHEWS, doing business as Salvador Products Co., Cleveland, Ohio.
Filed May 8, 1931. Serial No. 314,336. PUBLISHED JULY 14, 1931. Class 6.

287,484. LIQUID ERGOT. BURROUGH BROTHERS MANUFACTURING COMPANY, doing business as Burrough Brothers Laboratories, Baltimore, Md., and Cleveland, Ohio.
Filed May 8, 1931. Serial No. 314,321. PUBLISHED JULY 14, 1931. Class 6.

287,485. PREPARATION CONSISTING OF SALINE AQUEOUS SOLUTION. SANOZYM, INCORPORATED, New York, N. Y.
Filed May 7, 1931. Serial No. 314,303. PUBLISHED JULY 14, 1931. Class 6.

287,486. HYDROCARBON GASES FOR HEATING AND CUTTING PURPOSES. HOPE CONSTRUCTION & REFINING COMPANY, Pittsburgh, Pa.
Filed May 1, 1931. Serial No. 314,051. PUBLISHED JULY 14, 1931. Class 6.

287,487. RUST REMOVING PREPARATIONS. EDWARD A. WILLIAMS, Jr., Lima, Ohio.
Filed April 30, 1931. Serial No. 314,024. PUBLISHED JULY 14, 1931. Class 6.

287,488. INSECTICIDE. PROTEX CORPORATION OF AMERICA, Springfield, Mass.
Filed May 9, 1931. Serial No. 314,377. PUBLISHED JULY 21, 1931. Class 6.

287,489. PILE AND HOUSEHOLD OINTMENT. GEORGE CHRISTIAN ULRICH, doing business as Ven-Zol Co., Portland, Oreg.
Filed May 8, 1931. Serial No. 314,347. PUBLISHED JULY 21, 1931. Class 6.

287,490. FACE CREAMS, FACE AND HAND LOTIONS, TOILET WATERS, FACE POWDERS, LIPSTICKS, ROUGES, AND PERFUMES. FLORADERM LABORATORIES, Long Island City, N. Y.
Filed May 1, 1931. Serial No. 314,049. PUBLISHED JULY 21, 1931. Class 6.

287,491. HANDLED AXES, HATCHETS, AND HAMMERS. EVANSVILLE TOOL WORKS, INC., Evansville, Ind.
Filed February 16, 1931. Serial No. 311,089. PUBLISHED APRIL 28, 1931. Class 23.

287,492. HYDROCARBON GASES FOR HEATING AND CUTTING PURPOSES. HOPE CONSTRUCTION & REFINING COMPANY, Pittsburgh, Pa.
Filed May 1, 1931. Serial No. 314,052. PUBLISHED JULY 14, 1931. Class 6.

287,493. BAT AND BALL GAME SOMEWHAT RESEMBLING SHUTTLECOCK. NEWTON MANUFACTURING COMPANY, Newton, Iowa.
Filed May 22, 1931. Serial No. 314,925. PUBLISHED JULY 14, 1931. Class 22.

287,494. PLAYING CARDS. S. H. KRESS & Co., New York, N. Y.
Filed May 22, 1931. Serial No. 314,918. PUBLISHED JULY 21, 1931. Class 22.

287,495. COMBINATION GAME OF CROQUET AND POOL FOR INDOORS OR OUTDOORS. DAVID STANLEY CORWIN, Greenport, N. Y.
Filed May 20, 1931. Serial No. 314,792. PUBLISHED JULY 14, 1931. Class 22.

287,496. PAINTS, ENAMELS, VARNISHES, LACQUER, AND KALSOMINE. HENRY FELTES, Chicago, Ill.
Filed May 15, 1931. Serial No. 314,605. PUBLISHED JULY 21, 1931. Class 16.

287,497. MARINE PAINTS. INTERNATIONAL COMPOSITIONS COMPANY, INC., New York, N. Y.
Filed May 5, 1931. Serial No. 314,203. PUBLISHED JULY 14, 1931. Class 16.

287,498. POCKETBOOKS, PARTICULARLY LEATHER POCKETBOOKS. WASHINGTON LEATHER GOODS CO. INC., New York, N. Y.
Filed April 28, 1931. Serial No. 313,943. PUBLISHED JUNE 16, 1931. Class 3.

287,499. TENNIS AND SQUASH RACQUETS, CANOE PADDLES AND OARS, BASEBALL BATS, ETC. ALEX TAYLOR & CO. INC., New York, N. Y.
Filed April 16, 1931. Serial No. 313,454. PUBLISHED JULY 14, 1931. Class 22.

287,500. NON-ALCOHOLIC, MALTLESS FLAVOR BASES USED IN THE PREPARATION OF SOFT DRINKS. WALTER T. MARKILLIE, San Francisco, Calif.
Filed April 1, 1931. Serial No. 312,810. PUBLISHED JULY 14, 1931. Class 45.

287,501. INSECTICIDE PREPARATION FOR THE DESTRUCTION OF INSECT PESTS. MILLER PRODUCTS COMPANY, Portland, Oreg.
Filed March 27, 1931. Serial No. 312,678. PUBLISHED JULY 7, 1931. Class 6.

287,502. NON-ALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS. HARRY E. MEADE, doing business as Mo-Ja Company, Tulsa, Okla.
Filed June 15, 1931. Serial No. 315,856. PUBLISHED JULY 21, 1931. Class 45.

287,503. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES, SOLD AS SOFT DRINKS AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. DE LISSER EXTRACT CO. INC., New York, N. Y.
Filed June 11, 1931. Serial No. 315,676. PUBLISHED JULY 14, 1931. Class 45.

287,504. MINERAL WATER. KATE E. PARKER, Santa Rosa, Calif.
Filed June 9, 1931. Serial No. 315,603. PUBLISHED JULY 14, 1931. Class 45.

287,505. LIQUID AND PASTE PAINTS. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.
Filed June 6, 1931. Serial No. 315,501. PUBLISHED JULY 21, 1931. Class 16.

287,506. BALL PROJECTING AND TEEING DEVICES USED IN PRACTICING THE GAME OF GOLF. SYNDICATE POSTER & EQUIPMENT CO., Chicago, Ill.
Filed May 29, 1931. Serial No. 315,215. PUBLISHED JULY 21, 1931. Class 22.

287,507. BOARD GAMES AND PUZZLES PLAYED BY ASSEMBLING PIECES AND PICTURE PUZZLES COMPRISING ASSEMBLY OF VARIED DESIGNS AND SHAPES. SYNDICATE POSTER & EQUIPMENT CO., Chicago, Ill.
Filed May 29, 1931. Serial No. 315,214. PUBLISHED JULY 21, 1931. Class 22.

287,508. INSTRUCTIVE EDUCATIONAL GAMES COMPRISING CARDS FOR FORMING THE LETTERS OF THE ALPHABET. OMER LAMIREAUD, New York, N. Y.
Filed May 28, 1931. Serial No. 315,150. PUBLISHED JULY 21, 1931. Class 22.

287,509. GOLF CLUBS AND GOLF BALLS. JAMES H. BOYE MANUFACTURING CO., Chicago, Ill.
Filed May 27, 1931. Serial No. 315,084. PUBLISHED JULY 21, 1931. Class 22.

287,510. EDUCATIONAL BLOCKS. RUTH WEST, New York, N. Y.
Filed May 26, 1931. Serial No. 315,072. PUBLISHED JULY 21, 1931. Class 22.

287,511. ICE-CREAM FREEZERS. NEW STANDARD CORPORATION, Mount Joy, Pa.
Filed May 22, 1931. Serial No. 314,924. PUBLISHED JULY 14, 1931. Class 31.

287,512. CARBONATED NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND SYRUPS, EXTRACTS, AND CONCENTRATES USED IN MAKING THE SAME. CLICQUOT CLUB COMPANY, Millis, Mass.
Filed June 16, 1931. Serial No. 315,898. PUBLISHED JULY 21, 1931. Class 45.

287,513. INDIA PRINTS OF COTTON OR LINEN. HINDUSTAN ART CO., INC., New York, N. Y.
Filed December 17, 1930. Serial No. 309,080. PUBLISHED JULY 21, 1931. Class 42.

287,514. BORATED TALCUM POWDER. THE MENNEN COMPANY, Newark, N. J.
Filed May 12, 1931. Serial No. 314,455. PUBLISHED JULY 14, 1931. Class 6.

287,515. EAU DE COLOGNE WATER, PERFUMERY, SHAMPOO, ETC. PAUL PETER MÜLHENS, doing business as Eau de Cologne & Parfümerie-Fabrik "Glockengasse No. 4711" Gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany.
Filed February 12, 1931. Serial No. 311,017. PUBLISHED JULY 14, 1931. Class 6.

287,516. MEDICINAL PREPARATIONS FOR TREATING HEADACHES, RHEUMATISM, TOOTHACHE, ARTHRITIS, GOUT, AND SCIATICA. DR. RENTSCHLER & Co., Laupheim, Germany.
Filed February 14, 1931. Serial No. 311,073. PUBLISHED JULY 21, 1931. Class 6.

287,517. PERFUMERY. E. DALTROFF & CIE., doing business as Parfumerie Caron, Paris, France.
Filed May 21, 1931. Serial No. 314,841. PUBLISHED JULY 14, 1931. Class 6.

287,518. CHEMICAL SUBSTANCES USED FOR CONSTIPATION. FREDERICK EDWARD COE, Twickenham, England.
Filed May 4, 1931. Serial No. 314,149. PUBLISHED JULY 14, 1931. Class 6.

287,519. ALKALINE LAXATIVE AND ANTISEPTIC SOLUTION. JAMES R. RICHARDSON, doing business as Malitone, Inc., Los Angeles, Calif.
Filed March 7, 1931. Serial No. 311,886. PUBLISHED JULY 14, 1931. Class 6.

287,520. PREPARATION FOR THE TREATMENT OF CONSUMPTION AND KINDRED COMPLAINTS. SAMUEL ALEXANDER PAUL, doing business as The Paul Proprietary Co., Auckland, New Zealand.
Filed April 28, 1931. Serial No. 313,933. PUBLISHED JULY 14, 1931. Class 6.

287,521. DISINFECTANTS AND MEANS FOR EXTERMINATING VERMIN. AKTIEBOLAGET PROBAT, Stockholm, Sweden.
Filed April 27, 1931. Serial No. 313,822. PUBLISHED JULY 14, 1931. Class 6.

287,522. MIXTURES OF HERBS, COMPOUNDS FOR CONSTIPATION, ETC. DR. H. C. LEMKE MEDICINE Co., Chicago, Ill.
Filed May 31, 1930. Serial No. 301,955. PUBLISHED JULY 14, 1931. Class 6.

287,523. HERBAL MEDICINE FOR HUMAN USE. S. A. PALMER LIMITED, Leeds, England.
Filed May 27, 1930. Serial No. 301,358. PUBLISHED JULY 21, 1931. Class 6.

287,524. LEATHER. MAX HERTZ LEATHER COMPANY, Newark, N. J.
Filed May 25, 1931. Serial No. 314,993. PUBLISHED JULY 14, 1931. Class 1.

287,525. WHEAT FLOUR. COMMANDER-LARABEE CORPORATION, Minneapolis, Minn.
Filed April 28, 1931. Serial No. 313,905. PUBLISHED JUNE 23, 1931. Class 46.

287,526. PREPARATIONS FOR DESTROYING OF MOTH LARVÆ AND EGGS. REGAL PRODUCTS Co., San Francisco, Calif., and New York, N. Y., assignor to Gilree Products Co., Inc., New York, N. Y., a Corporation of New York.
Filed February 19, 1931. Serial No. 311,246. PUBLISHED JULY 14, 1931. Class 6.

287,527. KNOCKED DOWN PORTABLE INSULATED BUILDINGS. J. C. BURKE, Bakersfield, Calif.
Filed April 22, 1931. Serial No. 313,645. PUBLISHED JULY 21, 1931. Class 12.

287,528. ASPHALT, PAVEMENT MATERIALS, ASPHALTIC BINDERS, ASPHALTIC EMULSIONS, AND COMPOUNDS. AMERICAN BITUMULS COMPANY, Wilmington, Del., and Oakland, Calif.
Filed April 20, 1931. Serial No. 313,525. PUBLISHED JULY 21, 1931. Class 12.

287,529. DRESSED STONE READY FOR USE, INCLUDING GRANITE. W. C. TOWNSEND & COMPANY, Zanesville, Ohio.
Filed April 17, 1931. Serial No. 313,481. PUBLISHED JULY 21, 1931. Class 12.

287,530. COPPER DOWNSPOUTS, METAL DIVIDING STRIPS, BRASS RAILINGS, ETC. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn.
Filed March 12, 1931. Serial No. 312,042. PUBLISHED JULY 21, 1931. Class 12.

287,531. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,743. PUBLISHED JULY 21, 1931. Class 42.

287,532. BOTANICAL DRUGS. PEEK AND VELSOR, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,668. PUBLISHED JULY 21, 1931. Class 6.

287,533. MEDICINAL POULTRY PREPARATIONS—NAMELY, COD LIVER OIL, CARBOLINEUM. T. C. FOX & SONS, Newfield, N. J.
Filed April 6, 1931. Serial No. 313,110. PUBLISHED JULY 21, 1931. Class 6.

287,534. BOOTS AND SHOES OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. LANE BROS. Co., Boston, Mass.
Filed May 28, 1931. Serial No. 315,151. PUBLISHED JULY 21, 1931. Class 39.

287,535. WOMEN'S AND CHILDREN'S SHOES MADE OF LEATHER, RUBBER, CANVAS, AND/OR ANY COMBINATIONS THEREOF. STRAWBRIDGE & CLOTHIER, Philadelphia, Pa.
Filed May 20, 1931. Serial No. 314,824. PUBLISHED JULY 21, 1931. Class 39.

287,536. SHOES MADE OF LEATHER. ANSONIA BOOTERY, INC., New York, N. Y.
Filed May 19, 1931. Serial No. 314,743. PUBLISHED JULY 21, 1931. Class 39.

287,537. BRASSIÈRES, CORSETS, BANDEAUX, AND CORSET AND BRASSIÈRE COMBINATIONS. THE LUCILE SOMARCO BRASSIERE, New York, N. Y.
Filed May 12, 1931. Serial No. 314,525. PUBLISHED JULY 21, 1931. Class 39.

287,538. LEATHER BOOTS AND SHOES FOR MEN, WOMEN, AND CHILDREN. S. BEARMAN SHOE COMPANY, St. Louis, Mo.
Filed May 4, 1931. Serial No. 314,138. PUBLISHED JULY 14, 1931. Class 39.

287,539. SHOES MADE OF LEATHER AND FABRIC, AND ALSO SHOES MADE OF BOTH OF THESE MATERIALS WITH RUBBER SOLES AND OTHERS HAVING THE USUAL LEATHER SOLES. WINCHELL SHOE MANUFACTURING CO., Natick and Boston, Mass.
Filed May 1, 1931. Serial No. 314,039. PUBLISHED JULY 14, 1931. Class 39.

287,540. HEEL PADS. JOHN H. STARK, Miami, Fla.
Filed April 27, 1931. Serial No. 313,893. PUBLISHED JULY 14, 1931. Class 39.

287,541. BABY SHOES. MONARCH SHOE CO., INC., Chicago, Ill.
Filed April 27, 1931. Serial No. 313,887. PUBLISHED JULY 14, 1931. Class 39.

287,542. LEATHER AND FABRIC GLOVES. STEINBERGER BROS. GLOVE CORP., San Francisco, Calif., and New York, N. Y.
Filed April 25, 1931. Serial No. 313,811. PUBLISHED JULY 14, 1931. Class 39.

287,543. DOMESTIC LAUNDRY WASHING MACHINES. VULCAN MANUFACTURING CO., Kansas City, Mo.
Filed February 12, 1931. Serial No. 311,011. PUBLISHED JULY 14, 1931. Class 24.

287,544. MANIFOLDING ASSEMBLIES OF RECORD AND CARBON MATERIAL IN PACKET OR ROLL FORM. THE STANDARD REGISTER COMPANY, Dayton, Ohio.
Filed June 5, 1931. Serial No. 315,580. PUBLISHED JULY 14, 1931. Class 37.

287,545. PYROXYLIN LACQUERS. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.
Filed June 6, 1931. Serial No. 315,500. PUBLISHED JULY 14, 1931. Class 16.

287,546. LIQUID AND PASTE PAINTS. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.
Filed June 6, 1931. Serial No. 315,499. PUBLISHED JULY 14, 1931. Class 16.

287,547. PREPARATION FOR CLEANING METAL AND WOODWORK. MICHAEL ARON, doing business as Met Cleaning Products Company, Bloomfield, N. J.
Filed June 5, 1931. Serial No. 315,434. PUBLISHED JULY 21, 1931. Class 4.

287,548. CANNED FRUITS AND FRUIT PRESERVES, CANNED VEGETABLES, MEATS, ETC. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio.
Filed February 10, 1929. Serial No. 279,479. PUBLISHED JUNE 30, 1931. Class 46.

287,549. CALENDAR PADS AND CALENDAR STANDS. COLUMBIAN ART WORKS, INC., Milwaukee, Wis.
Filed March 11, 1929. Serial No. 280,541. PUBLISHED JULY 14, 1931. Class 37.

287,550. CERTAIN NAMED TABLE LINENS, BED LINENS AND COVERINGS, AND CURTAINS. MRS. GEORGE HERZOG, doing business as The Closet Shop, New York, N. Y.
Filed May 1, 1929. Serial No. 283,334. PUBLISHED JULY 21, 1931. Class 42.

287,551. FRIED POTATO CHIPS. TOLAND & JULIEN, Ventura, Calif.
Filed December 2, 1929. Serial No. 293,164. PUBLISHED JULY 21, 1931. Class 46.

287,552. CANNED SALMON. COLUMBIA RIVER PACKERS ASSOCIATION, INC., Astoria, Oreg.
Filed January 22, 1930. Serial No. 295,068. PUBLISHED JULY 7, 1931. Class 46.

287,553. NON-ALCOHOLIC MALTLESS FRUIT JUICES SOLD AS SOFT DRINKS, AND MINERAL AND SPRING WATER. ZOYA MATZKA, Rye Hill, Monroe, N. Y.
Filed April 9, 1930. Serial No. 298,581. PUBLISHED JULY 21, 1931. Class 45.

287,554. TAR REMOVER AND CLEANSER FOR AUTOMOBILE BODIES. THE TAR-RID CHEMICAL CO., Frankford, Philadelphia, Pa.
Filed May 16, 1930. Serial No. 300,689. PUBLISHED SEPTEMBER 9, 1930. Class 4.

287,555. BLOWER AND RADIATOR HEATER UNITS. WESTERN BLOWER COMPANY, Seattle, Wash.
Filed May 19, 1930. Serial No. 300,842. PUBLISHED JULY 14, 1931. Class 34.

287,556. GLASS CLEANING PREPARATION. MALCOLM E. ROCKHILL, doing business as Universal Glas-Spra Company, Tulsa, Okla.
Filed May 23, 1930. Serial No. 301,127. PUBLISHED JULY 14, 1931. Class 4.

287,557. CLEANING AND POLISHING PREPARATION FOR GLASS, METAL SURFACES, ETC. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed September 3, 1930. Serial No. 305,289. PUBLISHED JULY 21, 1931. Class 4.

287,558. CHALK CRAYONS, SCHOOL CHALK, AND PENCILS. SHIRAISHI KOGYO KABUSHIKI KAISHA, Inben Gun, Miye Ken, Japan.
Filed November 4, 1930. Serial No. 307,538. PUBLISHED JULY 14, 1931. Class 37.

287,559. CHALK CRAYONS AND SCHOOL CHALK. SHIRAISHI KOGYO KABUSHIKI KAISHA, Inben Gun, Miye Ken, Japan.
Filed November 4, 1930. Serial No. 307,539. PUBLISHED JULY 14, 1931. Class 37.

287,560. TEXTILE FABRICS—NAMELY, SILK PIECE GOODS. FOREMOST FABRICS COSPORATION, New York, N. Y.
Filed November 14, 1930. Serial No. 307,887. PUBLISHED JULY 14, 1931. Class 42.

287,561. CANNED FISH. PACIFIC COMMERCIAL COMPANY, San Francisco, Calif.
Filed December 8, 1930. Serial No. 308,750. PUBLISHED JULY 14, 1931. Class 46.

287,562. PORTABLE PRACTICE DEVICE FOR GOLF COMPRISING A CASING AND RUNWAY. CHESTER W. ROSS, Medford, Mass.
Filed December 5, 1930. Serial No. 308,641. PUBLISHED JULY 21, 1931. Class 22.

287,563. CERTAIN NAMED WEARING APPAREL. SAKOWITZ BROTHERS, Houston, Tex.
Filed December 8, 1930. Serial No. 308,765. PUBLISHED JULY 14, 1931. Class 39.

287,564. CONCENTRATED CHLORINE DISINFECTANT. THE C. B. DOLGE COMPANY, Westport, Conn.
Filed December 29, 1930. Serial No. 309,420. PUBLISHED JULY 14, 1931. Class 6.

287,565. ARTIFICIAL TEETH. Dr. HILTEBRANDT ZAHNFABRIK AKTIENGESELLSCHAFT, Essen, Germany.
Filed January 9, 1931. Serial No. 309,778. PUBLISHED JULY 21, 1931. Class 44.

287,566. PERMANENT WAVE MACHINES. NEW YORK HAIR CO., INC., New York, N. Y.
Filed May 20, 1931. Serial No. 314,820. PUBLISHED JULY 21, 1931. Class 44.

287,567. SANITARY NAPKINS. THE STERILEK COMPANY INC., Brooklyn, N. Y.
Filed May 16, 1931. Serial No. 314,663. PUBLISHED JULY 21, 1931. Class 44.

287,568. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. DEAN RUBBER MANUFACTURING COMPANY, North Kansas City, Mo.
Filed May 13, 1931. Serial No. 314,487. PUBLISHED JULY 14, 1931. Class 44.

287,569. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. DEAN RUBBER MANUFACTURING COMPANY, North Kansas City, Mo.
Filed May 13, 1931. Serial No. 314,486. PUBLISHED JULY 14, 1931. Class 44.

287,570. TWEEZERS FOR SURGICAL AND MANICURE USE, MANICURE ARTICLES, ETC. SCHNEFEL BROS., INC., Newark, N. J.
Filed May 12, 1931. Serial No. 314,465. PUBLISHED JULY 14, 1931. Class 44.

287,571. TOILET ARTICLES. JOHN DELSON, doing business as The John Delson Drug Co., New York, N. Y.
Filed February 28, 1931. Serial No. 311,564. PUBLISHED JULY 14, 1931. Class 6.

287,572. MEDICINES FOR THE RELIEF OF GASTRIC HYPERACIDITY, SOUR STOMACH, ETC. HENRY NEWCOMB LIVEZEY, doing business as Clayton Tablet Company, Los Angeles, Calif.
Filed January 16, 1931. Serial No. 310,019. PUBLISHED JULY 14, 1931. Class 6.

287,573. MANGE OINTMENT. ANNA SPERL, doing business as The Anna Sperl Mfg. Co., New York, N. Y.
Filed January 22, 1931. Serial No. 310,268. PUBLISHED JULY 14, 1931. Class 6.

287,574. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. THE ROSSEN-NESSOR COMPANY, Akron, Ohio.
Filed January 24, 1931. Serial No. 310,351. PUBLISHED JULY 21, 1931. Class 44.

287,575. TEXTILE FABRICS COMPOSED OF COTTON, WOOL, LINEN, RAYON, SILK, OR RAMIE, OR COMPOSED OF MIXTURES OF COTTON, WOOL, LINEN, RAYON, SILK, AND/OR RAMIE. T. GAINES AMERY, INC., New York, N. Y.
Filed April 9, 1931. Serial No. 313,115. PUBLISHED JULY 14, 1931. Class 42.

287,576. HANDKERCHIEFS. THEODORE PEARL, doing business as Pearl Handkerchief Company, New York, N. Y.
Filed April 21, 1931. Serial No. 313,609. PUBLISHED JULY 14, 1931. Class 42.

287,577. BROADCLOTH IN THE PIECE. J. P. STEVENS & CO. INC., New York, N. Y.
Filed April 21, 1931. Serial No. 313,613. PUBLISHED JULY 14, 1931. Class 42.

287,578. COTTON, RAYON, SILK, AND WOOLEN PIECE GOODS. CHARLES E. SIGLER, New York, N. Y.
Filed May 1, 1931. Serial No. 314,078. PUBLISHED JULY 14, 1931. Class 42.

287,579. KNITTED, NETTED, AND TEXTILE FABRICS MADE OF COTTON, RAYON, ARTIFICIAL SILK, SILK, AND/OR COMBINATIONS OF SAID MATERIALS. JAMES H. DUNHAM & CO., New York, N. Y.
Filed May 2, 1931. Serial No. 314,103. PUBLISHED JULY 21, 1931. Class 42.

287,580. GOLFER'S TOWEL TO BE USED IN CONJUNCTION WITH GOLFERS' KITS. JOHN C. GALLAGHER, doing business as Detroit Waste Works, Detroit, Mich.
Filed May 6, 1931. Serial No. 314,236. PUBLISHED JULY 14, 1931. Class 42.

287,581. COTTON PIECE GOODS. THOS. G. HILL & CO. LIMITED, Manchester, England.
Filed May 9, 1931. Serial No. 314,365. PUBLISHED JULY 14, 1931. Class 42.

287,582. SILK GOODS IN THE PIECE. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y.
Filed May 12, 1931. Serial No. 314,464. PUBLISHED JULY 14, 1931. Class 42.

287,583. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed May 25, 1931. Serial No. 314,981. PUBLISHED JULY 14, 1931. Class 42.

287,584. COTTON PIECE GOODS AND MIXTURES OF COTTON AND SILK PIECE GOODS. BURTON BROTHERS & CO. INC., New York, N. Y.
Filed May 26, 1931. Serial No. 315,030. PUBLISHED JULY 14, 1931. Class 42.

287,585. SHEETS AND PILLOW CASES. UTICA STEAM & MOHAWK VALLEY COTTON MILLS, Utica, N. Y.
Filed May 26, 1931. Serial No. 315,070. PUBLISHED JULY 14, 1931. Class 42.

287,586. SILK PIECE GOODS, COTTON PIECE GOODS, AND WOOLEN PIECE GOODS AND FABRICS CONSISTING OF MIXTURES OF SILK, COTTON, AND WOOL. HAAS BROTHERS FABRICS CORPORATION, New York, N. Y.
Filed May 27, 1931. Serial No. 315,095. PUBLISHED JULY 21, 1931. Class 42.

287,587. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,188. PUBLISHED JULY 14, 1931. Class 42.

287,588. GLASSWARE. ELITE IMPORT CO. INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,194. PUBLISHED JULY 21, 1931. Class 33.

287,589. WOOL FABRICS IN THE PIECE. HILLSBORO WOOLEN MILL CO., INC., Hillsboro, N. H.
Filed May 29, 1931. Serial No. 315,231. PUBLISHED JULY 21, 1931. Class 42.

287,590. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed June 5, 1931. Serial No. 315,436. PUBLISHED JULY 21, 1931. Class 42.

287,591. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed June 5, 1931. Serial No. 315,437. PUBLISHED JUNE 21, 1931. Class 42.

287,592. COTTON PIECE GOODS. CRAMERTON MILLS, INCORPORATED, Cramerton, N. C.
Filed June 6, 1931. Serial No. 315,487. PUBLISHED JULY 21, 1931. Class 42.

287,593. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 10, 1931. Serial No. 315,629. PUBLISHED JULY 21, 1931. Class 42.

287,594. ELASTIC FABRICS. CHARLES R. DE BEVOISE COMPANY, Newark, N. J.
Filed June 11, 1931. Serial No. 315,675. PUBLISHED JULY 21, 1931. Class 42.

287,595. NON-ALCOHOLIC, MALTLESS BEVERAGES—NAMELY, APPLE CIDER, CIDER ALE, AND GRAPE JUICE. JAMES R. RICHARDSON, doing business as Adelanto Cider Mill, Los Angeles, Calif.
Filed May 28, 1930. Serial No. 301,511. PUBLISHED JULY 21, 1931. Class 45.

287,596. STRUCTURAL UNITS OF METAL FOR BUILDINGS. TRUSCON STEEL COMPANY, Youngstown, Ohio.
Filed June 12, 1930. Serial No. 302,358. PUBLISHED JULY 21, 1931. Class 12.

287,597. LAUNDRY WASHING MACHINES. VULCAN MANUFACTURING CO., Kansas City, Mo.
Filed August 18, 1930. Serial No. 304,743. PUBLISHED OCTOBER 28, 1930. Class 24.

287,598. DOORS AND OTHER MILL WORK AND PLY WOOD. M AND M WOOD WORKING COMPANY, Portland, Oreg.
Filed November 24, 1930. Serial No. 308,260. PUBLISHED JULY 21, 1931. Class 12.

287,599. SYRUP LAXATIVE. THE SYRUP OF SICILIAN MANNA COMPANY, Dayton, Ohio.
Filed December 8, 1930. Serial No. 308,757. PUBLISHED JULY 14, 1931. Class 6.

287,600. ANÆSTHETIC. LOYOLA J. FAY, doing business as Par-Plus Laboratories, Spokane, Wash.
Filed April 27, 1931. Serial No. 313,844. PUBLISHED JULY 14, 1931. Class 6.

287,601. SALT. WORCESTER SALT COMPANY, New York, N. Y.
Filed April 21, 1931. Serial No. 313,620. PUBLISHED JULY 14, 1931. Class 6.

287,602. ANALGESIC. STERLING PRODUCTS (INCORPORATED), Wheeling, W. Va.
Filed May 19, 1931. Serial No. 314,775. PUBLISHED JULY 21, 1931. Class 6.

287,603. ANALGESIC. STERLING PRODUCTS (INCORPORATED), Wheeling, W. Va.
Filed May 19, 1931. Serial No. 314,774. PUBLISHED JULY 21, 1931. Class 6.

287,604. TOILET PREPARATIONS. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,614. PUBLISHED JULY 21, 1931. Class 6.

287,605. TOILET PREPARATIONS. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,613. PUBLISHED JULY 21, 1931. Class 6.

287,606. PERFUME, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,611. PUBLISHED JULY 21, 1931. Class 6.

287,607. PERFUME, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,610. PUBLISHED JULY 21, 1931. Class 6.

287,608. PERFUME, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,609. PUBLISHED JULY 21, 1931. Class 6.

287,609. MEDICINAL AND PHARMACEUTICAL PREPARATIONS FOR USE ON THE SCALP AND HAIR. LEON TAUB, INC., New York, N. Y.
Filed May 12, 1931. Serial No. 314,470. PUBLISHED JULY 21, 1931. Class 6.

287,610. TOILET PREPARATIONS—NAMELY, HAIR DRESSING. MUSCLE SHOALS LABORATORIES, INC., New York, N. Y.
Filed May 8, 1931. Serial No. 314,390. PUBLISHED JULY 21, 1931. Class 6.

287,611. EMBROCATION FOR THE RELIEF OF MUSCULAR PAIN AND SORENESS. OWEN TRAVERS, Savannah, Ga.
Filed March 5, 1931. Serial No. 311,804. PUBLISHED JULY 21, 1931. Class 6.

287,612. SNAKE BITE MEDICINES. WILLIAM C. WHITEHEAD, Hopson, Tenn.
Filed February 28, 1931. Serial No. 311,580. PUBLISHED JULY 21, 1931. Class 6.

287,613. MEDICINAL PREPARATION FOR THE TREATMENT OF RHEUMATISM, HEADACHE, ETC. T. P. DOWNEY, Birmingham, Ala.
Filed February 19, 1931. Serial No. 311,234. PUBLISHED JULY 21, 1931. Class 6.

287,614. MEDICINAL PREPARATION FOR USE IN THE TREATMENT OF NEURITIS, RHEUMATISM, SCIATICA, BACKACHE, TIRED FEET, SWELLINGS, SPRAINS, BRUISES, CHEST COLDS, SORE THROAT, RUBDOWN FOR ATHLETES AND AFTER EXPOSURE, AND IN GENERAL TO ALLEVIATE MUSCULAR PAINS AND STRAINS. BERNARD E. DAVIS, doing business as Dav-O-Lin Company, New York, N. Y.
Filed April 20, 1931. Serial No. 313,585. PUBLISHED JULY 14, 1931. Class 6.

287,615. WATCH CRYSTALS. AMERICAN PERFIT CRYSTAL CORP., New York, N. Y.
Filed December 18, 1930. Serial No. 309,113. PUBLISHED JULY 14, 1931. Class 33.

287,616. SHOES OF LEATHER, FABRIC, RUBBER, AND COMBINATIONS THEREOF. THE GUARANTEE SHOE COMPANY, San Antonio, Tex.
Filed February 18, 1931. Serial No. 311,188. PUBLISHED JULY 21, 1931. Class 39.

287,617. PIECE GOODS OF SILK AND RAYON AND MIXTURES THEREOF. DUPLAN SILK CORPORATION, New York, N. Y.
Filed February 20, 1931. Serial No. 311,268. PUBLISHED JULY 14, 1931. Class 42.

287,618. HEEL UPPER PADS. STEPHAN BROS., Shelbyville, Ind.
Filed March 11, 1931. Serial No. 312,021. PUBLISHED JULY 14, 1931. Class 39.

287,619. LADIES' CORSELETS. MME. CÉLESTE BETTER FORM FOUNDATION GARMENT, New York, N. Y.
Filed March 18, 1931. Serial No. 312,281. PUBLISHED JULY 21, 1931. Class 39.

287,620. CORSETS AND BRASSIÈRES. ELISE AUVRAY BESANÇON, New York, N. Y.
Filed March 21, 1931. Serial No. 312,359. PUBLISHED JULY 21, 1931. Class 39.

287,621. WOMEN'S UNDERGARMENTS—VIZ., BRASSIÈRES, CORSET BRASSIÈRES, CORSETS, GIRDLES, AND CORSELETS. WEINGARTEN BROS., New York, N. Y.
Filed April 2, 1931. Serial No. 312,872. PUBLISHED JULY 14, 1931. Class 39.

287,622. ANÆSTHETICS, PREPARATIONS FOR STERILIZING AND PRESERVING DENTAL AND SURGICAL INSTRUMENTS, EUGENOL, ETC. DAVID CURTIS, doing business as De-Cè Products Co. of New York, New York, N. Y.
Filed April 14, 1931. Serial No. 313,332. PUBLISHED JUNE 9, 1931. Class 6.

287,623. COTTON AND RAYON YARN. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed April 20, 1931. Serial No. 313,568. PUBLISHED JULY 21, 1931. Class 43.

287,624. COTTON THREAD AND COTTON YARN. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed April 28, 1931. Serial No. 313,941. PUBLISHED JULY 14, 1931. Class 43.

287,625. NARROW ELASTIC WEBBING. EVERLASTIK, INC., Chelsea, Mass.
Filed May 1, 1931. Serial No. 314,046. PUBLISHED JULY 14, 1931. Class 40.

287,626. SHEET GLASS AND SHEET GLASS PRODUCTS—NAMELY, WINDOW GLASS, BUREAU, TABLE, OR COUNTER GLASS TOPS. KUHNS & ALLEN, Kansas City, Mo.
Filed May 4, 1931. Serial No. 314,163. PUBLISHED JULY 14, 1931. Class 33.

287,627. ARTIFICIAL SILK (RAYON) YARN. TUBIZE CHATILLON CORPORATION, New York, N. Y.
Filed May 16, 1931. Serial No. 314,664. PUBLISHED JULY 14, 1931. Class 43.

287,628. BONING FOR WEARING APPAREL. HENRY STUART COMPANY, INCORPORATED, Milford, Conn.
Filed May 20, 1931. Serial No. 314,823. PUBLISHED JULY 14, 1931. Class 40.

287,629. THREAD MADE OF SILK, COTTON, RAYON, ARTIFICIAL SILK, OR ANY COMBINATION OF THESE MATERIALS. GENERAL SILK CORPORATION, New York, N. Y.
Filed June 4, 1931. Serial No. 315,392. PUBLISHED JULY 14, 1931. Class 43.

287,630. PIECE GOODS OF COTTON, LINEN, HEMP, JUTE, FLAX, SILK, ARTIFICIAL SILK, OR RAYON, WOOL, HAIR. ETABLISSEMENTS SCHAEFFER & CIE., Pfastatt-le-Chateau, France.
Filed June 2, 1931. Serial No. 315,306. PUBLISHED JULY 21, 1931. Class 42.

287,631. PIECE GOODS OF COTTON, LINEN, HEMP, JUTE, FLAX, SILK, ARTIFICIAL SILK, OR RAYON, WOOL, HAIR. ETABLISSEMENTS SCHAEFFER & CIE., Pfastatt-le-Chateau, France.
Filed June 2, 1931. Serial No. 315,307. PUBLISHED JULY 21, 1931. Class 42.

287,632. SEAMLESS WILTON RUGS. ARTLOOM CORPORATION, Philadelphia, Pa.
Filed June 4, 1931. Serial No. 315,423. PUBLISHED JULY 21, 1931. Class 42.

287,633. SEAMLESS WILTON RUGS. ARTLOOM CORPORATION, Philadelphia, Pa.
Filed June 4, 1931. Serial No. 315,424. PUBLISHED JULY 21, 1931. Class 42.

287,634. ORDER BOOKS, FORM BLANKS, DESK PADS. SAMUEL RUBIN, New York, N. Y.
Filed June 4, 1931. Serial No. 315,419. PUBLISHED JULY 14, 1931. Class 37.

287,635. MANICURE FILES. THE SCHAAF & GOOD COMPANY, Fremont, Ohio.
Filed June 1, 1931. Serial No. 315,281. PUBLISHED JULY 14, 1931. Class 44.

287,636. MANICURE FILES. THE SCHAAF & GOOD COMPANY, Fremont, Ohio.
Filed June 1, 1931. Serial No. 315,282. PUBLISHED JULY 14, 1931. Class 44.

287,637. X-RAY FILM PACKETS. MILLARD B. HODGSON, doing business as George W. Brady & Company, Chicago, Ill.
Filed June 3, 1931. Serial No. 315,357. PUBLISHED JULY 14, 1931. Class 44.

287,638. PREPARATIONS FOR USE IN THE TREATMENT OF HEMORRHOIDS. CARL W. MEYER, Toledo, Ohio.
Filed April 18, 1931. Serial No. 313,506. PUBLISHED JULY 14, 1931. Class 6.

287,639. APPLICATORS FOR INJECTION OF VAGINAL PROPHYLACTIC SUBSTANCES, ETC. LANTEEN LABORATORIES, INC., Chicago, Ill.
Filed April 13, 1931. Serial No. 313,300. PUBLISHED JULY 21, 1931. Class 44.

287,640. CORN, BUNION, AND CALLOUS PADS, ETC. FOREST CITY RUBBER COMPANY, Cleveland, Ohio.
Filed April 24, 1931. Serial No. 313,732. PUBLISHED JULY 21, 1931. Class 44.

287,641. HOSE HOLDERS. CLARENCE K. BEYER, South Bend, Ind.
Filed June 3, 1931. Serial No. 315,341. PUBLISHED JULY 21, 1931. Class 13.

287,642. BOLT ANCHORS. STAR EXPANSION BOLT COMPANY, New York, N. Y.
Filed June 4, 1931. Serial No. 315,428. PUBLISHED JULY 21, 1931. Class 13.

287,643. ROTARY SHUTTER TYPE DOOR VENTILATORS. RICHARD F. WORTHAM, doing business as Kell-Worth Company, Boston, Mass.
Filed May 27, 1931. Serial No. 315,123. PUBLISHED JULY 14, 1931. Class 34.

287,644. HEATING APPARATUS—NAMELY, RADIATORS AND GAS WATER HEATERS AND PARTS THEREOF. AUTOMATIC FLORZONE HEATING COMPANY, Conshohocken, Pa.
Filed May 14, 1931. Serial No. 314,544. PUBLISHED JULY 21, 1931. Class 34.

287,645. AUTOMOBILE RADIATOR GRILLES. THE GLOBE MACHINE & STAMPING COMPANY, Cleveland, Ohio.
Filed May 23, 1931. Serial No. 314,953. PUBLISHED JULY 14, 1931. Class 19.

287,646. HEATING APPARATUS—NAMELY, GAS WATER HEATERS AND RADIATORS AND PARTS THEREOF. AUTOMATIC FLORZONE HEATING COMPANY, Conshohocken, Pa.
Filed May 14, 1931. Serial No. 314,543. PUBLISHED JULY 21, 1931. Class 34.

287,647. COIL SPRINGS FOR GENERAL USE. J. H. SPECIALTY MANUFACTURING CORP., New York, N. Y.
Filed May 13, 1931. Serial No. 314,516. PUBLISHED JULY 21, 1931. Class 13.

287,648. FRAMES USED IN THE DRYING OF STOCKINGS, SHIRTS, AND INFANT GARMENTS. J. B. TIMBERLAKE & SONS, INC., Jackson, Mich.
Filed May 5, 1931. Serial No. 314,218. PUBLISHED JULY 21, 1931. Class 24.

287,649. WASHING DEVICES—NAMELY, CLOTHES AGITATORS OR POUNDERS. MAUDE T. KELLEY, Mount Vernon, N. Y.
Filed May 1, 1931. Serial No. 314,057. PUBLISHED JULY 14, 1931. Class 24.

287,650. GAS RANGES. EASTERN OUTFITTING CO. OF LOS ANGELES, CAL., Los Angeles, Belvedere, and Huntington Park, Calif.
Filed April 28, 1931. Serial No. 313,949. PUBLISHED JULY 14, 1931. Class 34.

287,651. HEATING SYSTEMS FOR BUILDINGS AND DWELLINGS. ILG ELECTRIC VENTILATING COMPANY, Chicago, Ill.
Filed April 25, 1931. Serial No. 313,784. PUBLISHED JULY 14, 1931. Class 34.

287,652. CELLULOSE ACETATE, CELLULOSE NITRATE, AND CELLULOSE ACETATE STEARATE PRODUCTS—NAMELY, CONTAINERS IN TUBE-LIKE FORMATION, CYLINDRICAL CANS WITH FRANGIBLE SEALS, COLLAPSIBLE TUBES, VIALS, AND BOTTLES FOR CREAM, SALVES, OINTMENTS, EMULSIONS, AND OTHER COMPOSITIONS. HYGIENIC TUBE AND CONTAINER COMPANY, Newark, N. J.
Filed April 21, 1931. Serial No. 313,600. PUBLISHED JULY 14, 1931. Class 2.

287,653. CARDBOARD BOXES USED PARTICULARLY FOR HOLDING INFANTS SHOES. B. & B. SHOE COMPANY, Chicago, Ill.
Filed April 18, 1931. Serial No. 313,484. PUBLISHED JULY 14, 1931. Class 2.

287,654. HELICALLY WELDED METAL PIPE AND TUBING. CALIFORNIA CORRUGATED CULVERT CO., Berkeley, Calif.
Filed April 13, 1931. Serial No. 313,281. PUBLISHED JULY 14, 1931. Class 13.

287,655. GARMENT STEAMING AND PRESSING MACHINES AND PARTS THEREOF. PANTEX PRESSING MACHINE, INC., Pawtucket, R. I.
Filed January 17, 1931. Serial No. 310,067. PUBLISHED JULY 21, 1931. Class 24.

287,656. BATH-ROOM ACCESSORIES OF THE BUILT-IN AND PROJECTING TYPES. THE FAIRFACTS COMPANY, New York, N. Y.
Filed December 26, 1930. Serial No. 309,337. PUBLISHED JULY 21, 1931. Class 13.

287,657. STOCKINGS. AJAX HOSIERY MILLS, Phoenixville, Pa.
Filed March 5, 1931. Serial No. 311,768. PUBLISHED JULY 7, 1931. Class 39.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

287,658. (CLASS 45. BEVERAGES, NONALCOHOLIC.) JACOB SODINI, Pittsburgh, Pa. Filed July 18, 1931. Serial No. 317,098.

Roma Gold Medal

For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks, Sirups, and Extracts for Making the Same.
Claims use since January, 1907.

287,659. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) KIRKMAN & SON, Brooklyn, N. Y., assignor, by mesne assignments, to Kirkman & Son, Inc., a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 299,393.

VIGO

For a Preparation Having Cleansing, Detergent, and Water-Softening Qualities for Cleansing, Washing, and Polishing Purposes, Particularly for Washing Windows, Mirrors, Porcelain Fixtures, Painted Walls and Woodwork, Floor Coverings, and for Use in the Household Generally, for Personal Use, and for Use in Laundries and Garages.
Claims use since Apr. 22, 1930.

287,660. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) GEORGE HOLLSTEIN, San Francisco, Calif. Filed July 3, 1930. Serial No. 303,112.

TRUGALVANIC

For Electrical Apparatus for the Treatment of Patients by the Use of Galvanic Current.
Claims use since June 7, 1930.

287,661. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) W. F. STRAUB LABORATORIES, INC., Chicago, Ill. Filed Sept. 16, 1930. Serial No. 305,768.

SAFEDRY

For a Dry-Cleaning Cylinder, Sometimes Vended Empty and Sometimes Vended Partly Filled with a Dry-Cleaning Fluid, Which is Designed to be Used as the Cleansing Cylinder or Washing Device For Dry-Cleaning Purposes.
Claims use since Aug. 1, 1930.

287,662. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JESSIE MCCORKLE FISHER, Salisbury, N. C., and Brigantine Beach, N. J. Filed Mar. 31, 1931. Serial No. 312,754.

MADAME JESSIE McCORKLE FISHER

For Toilet Preparations for Scenting, Beautifying, and Preserving the Skin and Hair.
Claims use since July 1, 1930.

287,663. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed Apr. 7, 1931. Serial No. 313,036.

CHALFONT WILTON

For Textile Carpets.
Claims use since Aug. 6, 1930.

287,664. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CORNELIUS E. VOOGT, doing business as C. E. Voogt Candy Co., Chicago, Ill. Filed Apr. 24, 1931. Serial No. 313,761.

Pound and Half for a "Half"

For Candy.
Claims use since July 15, 1930.

287,665. (CLASS 2. RECEPTACLES.) PLANTERS MFG. CO., INC., Portsmouth, Port Norfolk, West Norfolk, Pughs, and Churchland, Va. Filed May 13, 1931. Serial No. 314,511.

EXPORT TUB

For Baskets Made of Wood.
Claims use since August, 1928.

287,666. (CLASS 2. RECEPTACLES.) PLANTERS MFG. CO., INC., Portsmouth, Port Norfolk, West Norfolk, Pughs, and Churchland, Va. Filed May 13, 1931. Serial No. 314,512.

IMPROVED TUB

For Baskets Made of Wood.
Claims use since Aug. 1, 1930.

287,667. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. J. OESTERLING & SON, INC., Butler, Pa. Filed June 24, 1931. Serial No. 316,214.

I-O DIZED

For Eggs.
Claims use since Apr. 1, 1924.

287,668. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ALBERS PACKING COMPANY, Riverside, Calif. Filed June 29, 1931. Serial No. 316,398.

ELSINORE

For Canned Olives.
Claims use since Mar. 4, 1924.

287,669. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) QUEEN ANNE CANDY COMPANY, INC., Seattle, Wash. Filed Apr. 30, 1929. Serial No. 283,300.

Virginia Fay

For Candy.
Claims use since February, 1918.

287,670. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE CLEVELAND GRAPHITE BRONZE COMPANY, Cleveland, Ohio. Filed Aug. 15, 1929. Serial No. 288,547.

ARMORED BRONZE

For Plain Machinery Bearings.
Claims use since May 7, 1929.

287,671. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) VREELAND CORPORATION, New York, N. Y. Filed Aug. 17, 1929. Serial No. 288,677.

BAND SEL ECTOR

For Radio Receiving Sets.
Claims use since about Aug. 12, 1929.

287,672. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) SHEPARD-NILES CRANE & HOIST CORPORATION, Montour Falls, N. Y. Filed June 18, 1930. Serial No. 302,554.

SHEPARD NILES CRANE & HOIST CORP.

For Electrically-Operated Cranes and Electrically-Operated Hoisting Machinery.
Claims use since Feb. 11, 1929.

287,673. (CLASS 39. CLOTHING.) THE H. C. GODMAN COMPANY, Columbus, Ohio. Filed July 3, 1930. Serial No. 303,105.

Fash-en-Fit

For Shoes Constructed of Leather.
Claims use since May 30, 1930.

287,674. (CLASS 39. CLOTHING.) SAMUEL FISHKIN, doing business as Samuel Fishkin & Co., New York, N. Y. Filed Aug. 13, 1930. Serial No. 304,546.

Ardmore

For Overcoats, Topcoats and Suits for Men, Young Men, and Boys.
Claims use since Aug. 6, 1930.

287,675. (CLASS 39. CLOTHING.) S. J. LEVY & SONS, New York, N. Y. Filed Aug. 23, 1930. Serial No. 304,961.

ZIGZAG

For Hosiery.
Claims use since July 15, 1930.

287,676. (CLASS 39. CLOTHING.) THE FORMFIT COMPANY, Chicago, Ill. Filed Oct. 3, 1930. Serial No. 306,348.

Sylvanease

For Corsets, Corset Waists, Brassieres, Bandeaux, Girdles, Garter Belts, Belts for Outer Wear, and Belts in the Nature of Garment Supporters, and Combinations of Corsets and Brassieres.
Claims use since Aug. 1, 1930.

287,677. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) KESTENMAN BROS. MFG. CO., Providence, R. I. Filed Feb. 13, 1931. Serial No. 311,036.

KESTENMADE

For Wrist-Watch Bracelets.
Claims use since April, 1924.

287,678. (CLASS 39. CLOTHING.) STEINBERGER BROS. GLOVE CORP., San Francisco, Calif. Filed Mar. 17, 1931. Serial No. 312,241.



For Leather and Fabric Gloves.
Claims use since Aug. 28, 1929.

287,679. (CLASS 39. CLOTHING.) MAIDEN FORM BRASSIERE CO. INC., New York, N. Y. Filed May 29, 1931. Serial No. 315,208.

"EVER-SHEER"

For Girdles.
Claims use since May 1, 1930.

287,680. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ORANGE COVE CITRUS ASSOCIATION, Orange Cove, Calif. Filed June 23, 1931. Serial No. 316,164.

ORANGE COVE

For Fresh Citrus Fruits.
Claims use since 1916.

287,681. (CLASS 39. CLOTHING.) AETNA SHIRT CO., Baltimore, Md. Filed July 17, 1931. Serial No. 317,018.

STAY BILT

For Collars.
Claims use since Mar. 22, 1929.

INTERNATIONAL TRADE-MARK REGISTRATIONS

The following International Registration has been received from the Bureau at Habana and has been placed upon the Register

287,682. International Registration No. 1,266 of August 13, 1930. Registered in Cuba on September 25, 1925, No. 41,222. Proprietor: JOSÉ ARRECHABALA, S. A. Address: Cardenas, Province of Matanzas, Cuba.



Merchandise to which the mark is affixed.—Refined Sugar, in Class 46, Foods and ingredients of foods.

LABELS

REGISTERED SEPTEMBER 29, 1931

39,778.—*Title:* ALATOL. For a Preparation for Renewing Slate or Composition Blackboards. THE ALATOL COMPANY, Philadelphia, Pa. Published July 15, 1931.

39,779.—*Title:* BANANA PIE. For Frozen Banana Pie Confection. BANANA PIE CO., New York, N. Y. Published June 1, 1931.

39,780.—*Title:* BIRK'S SHAVING CREAM. For Shaving Cream. BIRK MANUFACTURING COMPANY, Owensboro, Ky., and New Albany, Ind. Published May 23, 1931.

39,781.—*Title:* BURNETT'S INC., NATURAL FISH FOOD. For Fish Food. BURNETT'S, INC., Newark, N. J. Published June 1, 1931.

39,782.—*Title:* CLEANS POLISHES TREX WONDERFUL FURNITURE POLISH. For Preparation for Polishing and Cleaning Pianos, Furniture, Etc. HENRY BUTTENHEIM, doing business as Trex Manufacturing Company, Brooklyn, N. Y. Published January 10, 1931.

39,783.—*Title:* CASCO ONYZOID ELECTRIC CIGAR LIGHTER. For Electric Cigar Lighters. CASCO PRODUCTS CORPORATION, Bridgeport, Conn. Published May 18, 1931.

39,784.—*Title:* CASCO PENDANT-LITE. For Electric Cigar Lighters. CASCO PRODUCTS CORPORATION, Bridgeport, Conn. Published March 19, 1931.

39,785.—*Title:* KAL-AR-STIK. For an Adhesive Calcium Arsenate Dusting Compound Used as an Insecticide. CORNELI SEED COMPANY, St. Louis, Mo. Published August 7, 1931.

39,786.—*Title:* 3 FRUITS PRESERVE. For Preserves. CROSSE & BLACKWELL, INC., Baltimore, Md. Published July 31, 1931.

39,787.—*Title:* FOR CALLOUSES. For Preparation for Treating Callouses, Corns, and Bunions. JOHN C. CROWE, Los Angeles, Calif. Published June 3, 1931.

39,788.—*Title:* JITNEY CIRCUS. For Potato Chips. WILLIAM M. DEVITT, Memphis, Tenn. Published April 2, 1931.

39,789.—*Title:* EHRHARDT'S RAZOR KING. For Sharpening Compound. EHRHARDT BROS., New York, N. Y. Published May 1, 1930.

39,790.—*Title:* F & F COUGH LOZENGES. For Cough Lozenges. F & F LABORATORIES, Omaha, Nebr. Published August 10, 1931.

39,791.—*Title:* STANTEST PAINT STANDS THE TEST. For Paints. FRENCH-WOLF PAINT PRODUCTS CORP., doing business as Research Paint Products Co., Bristol, Pa. Published June 4, 1931.

39,792.—*Title:* DIXIE BUTTER BISCUIT. For Butter Biscuits. THE JAMES A. HARPER SUPPLY COMPANY, Kansas City, Mo. Published February 9, 1931.

39,793.—*Title:* THE MAY CO. FOOTWEAR. For Footwear. HOLMAN PAPER BOX CO., INC., St. Louis, Mo. Published July 29, 1931.

39,794.—*Title:* THE MAGIC CLEANER. For Household Cleaner. IT PRODUCTS, LTD., Los Angeles, Calif. Published January 1, 1931.

39,795.—*Title:* CB—361. For Butterscotch Cake. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,796.—*Title:* CB—353. For Chocolate Layer Cake. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,797.—*Title:* CB—360. For Strawberry Layer Cake. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,798.—*Title:* LAMBRECHT BUTTER "FAMOUS FOR ITS FLAVOR." For Butter. LAMBRECHT CREAMERY, Milwaukee, Wis. Published June 1, 1931.

39,799.—*Title:* LUCKEL'S STEAM REFINED BORAX SOAP GRANULATED. For Soap. LUCKEL, KING & CAKE SOAP COMPANY, Portland, Oreg. Published August 10, 1931.

39,800.—*Title:* MOTHDED. For Liquid Insecticide. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Published December 31, 1927.

39,801.—*Title:* MONEYSWORTH. For Sliced Bacon. MILLER AND HART, INC., Chicago, Ill. Published August 4, 1931.

39,802.—*Title:* HIS FIRST CHRISTMAS. For Hosiery. THOMAS MILLS, INC., High Point, N. C. Published July 27, 1931.

39,803.—*Title:* MY-T-FINE—D & C—FOR MAKING LEMON FLAVORED DESSERTS. For Mixture of Ingredients to be Used for Making Lemon Flavored Desserts. MY-T-FINE CORPORATION, Dover, Del., and Brooklyn, N. Y. Published August 24, 1931.

39,804.—*Title:* HEP-U-RUB. For Medicinal Preparation Intended for Colds. GEO. T. PENNY, doing business as Penny's Chemical Co., Greensboro, N. C. Published July 2, 1931.

39,805.—*Title:* DR. P. PHILLIPS. For Pure Orange Juice. DR. P. PHILLIPS COMPANY, INC., Orlando, Fla. Published October 15, 1930.

39,806.—*Title:* FIRMFIT. For Men's Garters. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Published August 15, 1931.

39,807.—*Title:* BLUE DIAMOND BARLEY MALT SYRUP. For Barley Malt Syrup. ABRAHAM POUST, doing business as Pilzner Products Co., New York, N. Y. Published March 1, 1931.

39,808.—*Title:* PRATTLOW. For Sliced Hawaiian Pineapple. PRATT-LOW PRESERVING COMPANY, Santa Clara, Calif. Published July 1, 1931.

39,809.—*Title:* QUANDT CORE OIL. For Core Oil, an Oil Used in Foundry Work. A. QUANDT & SONS, San Francisco, Calif. Published August 5, 1931.

39,810.—*Title:* MAR-VAY LINGERIE. For Lingerie. REAL SILK HOSIERY MILLS, INC., Indianapolis, Ind. Published April 1, 1931.

39,811.—*Title:* FLY-TOX. For Insecticide. THE REX RESEARCH CORPORATION, Toledo, Ohio. Published March 30, 1931.

39,812.—*Title:* FLY-TOX. For Insecticide. THE REX RESEARCH CORPORATION, Toledo, Ohio. Published March 30, 1931.

39,813.—*Title:* RED RIBBON MALT SYRUP. For Malt SYRUP. HENRY RUBIN, doing business as Empire Malt Products Co., Brooklyn, N. Y. Published July 27, 1931.

39,814.—*Title:* MURRAYKNIT, FOR FASHION AND FIT. For Knitted Sportswear. SACKS-SONS CARTON CO., INC., Brooklyn, N. Y. Published July 1, 1931.

39,815.—*Title:* PRIDE OF MICHIGAN BUTTER. For Butter. FREDERICK W. SEVERSON and VICTOR BIRDSALL, doing business as Fred and Vick, Battle Creek, Mich. Published June 25, 1931.

39,816.—*Title:* WARRANTY OF SATISFACTION. For Opthalmic Lenses. SOFT-LITE LENS CO., INC., New York, N. Y. Published July 12, 1930.

39,817.—*Title:* FRENCHVEL. For Rolls of Prepared Tracing Paper. SPECIAL PAPER MANUFACTURING CO., New York, N. Y. Published August 20, 1931.

39,818.—*Title:* VELLUX. For Rolls of Prepared Tracing Paper. SPECIAL PAPER MANUFACTURING CO., New York, N. Y. Published August 20, 1931.

39,819.—*Title:* MY WIFE'S FAVORITE SALAD DRESSING. For Salad Dressing. MRS. ESTHER WALLACE, Cincinnati, Ohio. Published June 4, 1931.

PRINTS

REGISTERED SEPTEMBER 29, 1931

13,425.—*Title:* A GENUINE VAN DYNE COLOR CREATION. For Furniture Finish. CONTINENTAL LACQUER CORPORATION, Baltimore, Md. Published April 7, 1931.

13,426.—*Title:* THERE'S SOMETHING ABOUT MARY ROBERTS RINEHART II. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published June 10, 1931.

13,427.—*Title:* DUGAN'S SPECIAL CAKES. For Cake Used as Food. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published June 19, 1931.

13,428.—*Title:* QUALITY AND VARIETY IN DUGAN PRODUCTS. For Bakery Products. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published July 3, 1931.

13,429.—*Title:* GENUINE OLD STYLE LUDEFISK. For Fish. THE KILDALL COMPANY, Minneapolis, Minn. Published August 8, 1931.

13,430.—*Title:* LIQUID OLIVE. For a Hair Preparation. THE LIQUID OLIVE CO., New York, N. Y. Published October 12, 1930.

13,431.—*Title:* STRAWBERRY SUNDAE. For Sundae. NATIONAL DAIRY & FOOD BUREAU, Chicago, Ill. Published March 7, 1931.

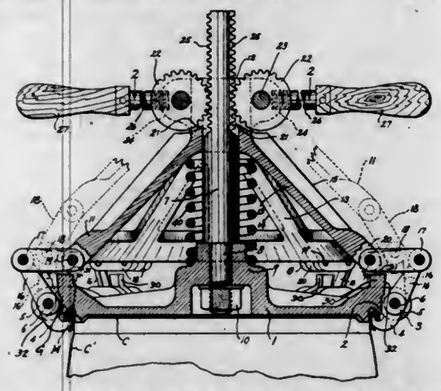
13,432.—*Title:* BRICK ICE CREAM. For Ice Cream. NATIONAL DAIRY & FOOD BUREAU, Chicago, Ill. Published March 7, 1931.

13,433.—*Title:* THE RAINBOW GIRL. For Gasoline. TRUE'S OIL COMPANY, Spokane, Wash. Published July 20, 1931.

REISSUES

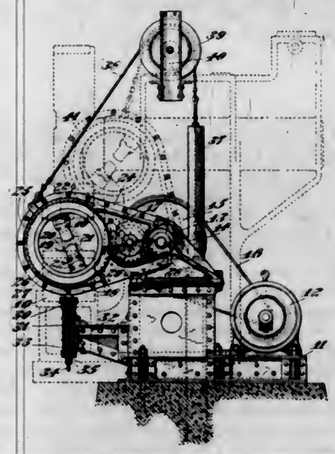
SEPTEMBER 29, 1931

18,209. CAN CLOSING MACHINE. ALFRED J. CHAMBERLAIN, Milwaukee, Wis. Original No. 1,788,659, dated Jan. 13, 1931, Serial No. 554,558, filed Nov. 26, 1926. Application for reissue filed Aug. 1, 1931. Serial No. 554,558. 10 Claims. (Cl. 113—18.)



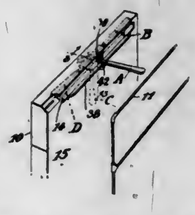
1. A portable can closing machine comprising a head carrying a passive die, active dies pivoted to the head, a mounting shaft fixed to and extending upwardly from the head, an actuating member having a bearing portion slidably mounted on the shaft, and a body portion extending downwardly and outwardly from the bearing portion, motion transmission means between the lower end of the body portion and the active dies, racks on the shaft, said bearing portion having opposed slots, gear segments operating in said slots and rotatably mounted on the bearing portion, and combined handles and operating members fixed to said gear segments.

18,210. RAIL TURNING DEVICE. HAROLD M. ELY, deceased, Harrisburg, Pa., by Bethlehem Steel Company, Bethlehem, Pa., assignee. Original No. 1,775,851, dated Sept. 16, 1930, Serial No. 94,780, filed Mar. 15, 1926. Application for reissue filed Feb. 6, 1931. Serial No. 514,002. 13 Claims. (Cl. 153—48.)



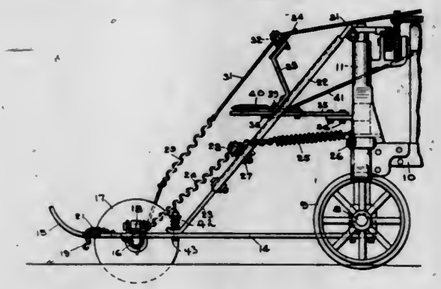
1. A device for handling articles comprising a swinging frame, means to support said frame including a shaft, an annular member adapted to engage the articles to be handled, means interposed between said shaft and said member to actuate the latter, and means for rotating said shaft.

18,211. TURNSTILE. DAVID TULCHIN, New York, N. Y. Original No. 1,726,779, dated Sept. 3, 1929, Serial No. 717,965, filed June 5, 1924. Application for reissue filed July 24, 1931. Serial No. 552,957. 27 Claims. (Cl. 39—3.)



3. In a turnstile, in combination, a head rotatable in a plane at an angle to the horizontal, barrier arms carried by the head and free to swing in a downward direction relative thereto, means limiting said arms to movement in a substantially horizontal plane across a passage guarded by the turnstile, said head having means carried thereby to advance along the substantially horizontal plane the arm entering the passage to be guarded.

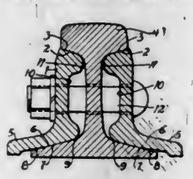
18,212. STEERING ATTACHMENT FOR TRACTORS. FRED L. WILLRODT, Omaha, Nebr., assignor to The Willrodt Tractor Guide Company, Omaha, Nebr., a Corporation of Nebraska. Original No. 1,776,940, dated Sept. 30, 1930, Serial No. 387,869, filed Aug. 23, 1929. Application for reissue filed July 6, 1931. Serial No. 548,996. 19 Claims. (Cl. 97—49.)



1. In attachments for maintaining the travel of a tractor parallel with a ground-furrow, said tractor being provided with steering devices, a carrier-beam mounted on the tractor to permit swinging movements thereof, a brace-bar mounted on the tractor and disposed above the carrier-beam, an extension member slidingly connected with the brace-bar and mounted on the carrier-beam, a supporting-shaft hinged to said beam and having a disc for engaging in said furrow, a spring connected with the tractor and attached to the supporting-shaft for pressing the disc toward the land-side of the furrow, and mechanism on the brace-bar and engaging said steering devices for moving the steering devices of the tractor by a movement of said carrier-beam.

18,213. RAIL JOINT. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Original No. 1,562,423, dated Nov. 17, 1925, Serial No. 10,537, filed Feb. 20 1925. Original application for reissue No. 17,561, dated Jan. 14, 1930, Serial No. 340,937, filed Feb. 18, 1929. Divided and application for reissue No. 17,596, dated Feb. 18, 1930, filed Dec. 9, 1929, Serial No. 412,949. This application for reissue filed July 13, 1931. Serial No. 550,602. 13 Claims. (Cl. 238—243.)

1. A bar for joining adjacent ends of rail-road rails, comprising a wedge bar having angularly disposed bear-



ing surfaces at its top and bottom edges disposed for contact with the corresponding surfaces of the rail ends, said bar being of greater height at its center portion than at its end portions, said center portion of the bar being laterally convexed when the bar is out of a joint and is free from lateral tension.

18,214. SEPARATOR PLATE. ABRAHAM SIDNEY BEHRMAN, Chicago, Ill. Original No. 1,784,981, dated Dec. 16, 1930, Serial No. 339,269, filed Feb. 11 1929. Application for reissue filed June 6 1931. Serial No. 542,687. 19 Claims. (Cl. 136—146.)

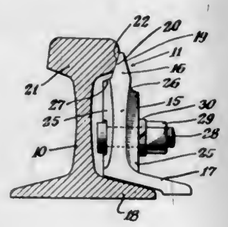
1. A separator consisting of hard highly porous particles of a siliceous gel material held in place by an inert binder.

18,215. LIQUID CONTAINER. KONOSUKE TSUCHIYA, Sausalito, Calif. Original No. 1,776,458, dated Sept. 23, 1930, Serial No. 348,167, filed Mar. 19, 1929. Application for reissue filed Nov. 8 1930. Serial No. 494,437. 6 Claims. (Cl. 229—4.5.)



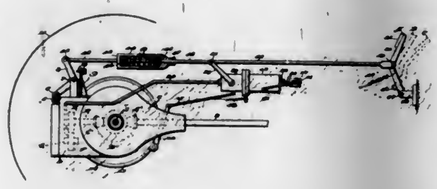
1. A liquid container comprising a tubular container body of rigid structure having a frustum conical upper portion superposed on a cylindrical lower portion, which lower portion is provided in its wall near and in spaced relation to its open bottom with a circumferential groove opening inwardly into the container, said groove provided with a bottom wall disposed at substantially right angles to the wall of the receptacle, and further provided with an upwardly and inwardly curved wall connecting the outer edge of the bottom wall of the groove with the container wall, a disc-shaped bottom closure having a crowned center and peripherally flanged to correspond to said groove, said bottom closure adapted for insertion into the container through its bottom.

12,216. RAIL SWITCH. JAMES B. STRONG, New York, N. Y., assignor to Ramapo Ajax Corporation, New York, N. Y., a Corporation of New York. Original No. 1,793,976, dated Feb. 24, 1931. Serial No. 476,477, filed Aug. 20, 1930. Application for reissue filed June 19, 1931. Serial No. 545,579. 10 Claims. (Cl. 246—437.)



1. A switch structure comprising a switch point, said switch point having an outer inclined surface adapted to contact with a wheel flange and an inner surface oppositely inclined to said first mentioned surface and adapted to contact with a complementary inclined surface on a rail head.

18,217. HYDRAULIC AND BAND BRAKE OPERATING MEANS. WILLIAM GUNN PRICE, Deceased, by McCleary Hydraulic Brake Co., Seattle, Wash., assignee. Original No. 1,694,020, dated Dec. 4, 1928, Serial No. 155,725, filed Dec. 18, 1926. Application for reissue filed Apr. 7, 1930. Serial No. 442,433. 2 Claims. (Cl. 188—2.)

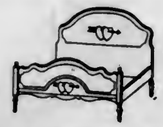


1. In combination, a motor vehicle having a hydraulic brake and a band brake, a piston for operating said band brake, a cylinder for said piston, a valve casing in said cylinder having a pressure connection with said hydraulic brake, a rotary valve in said casing adapted to occupy egress neutral and band brake positions, said casing having an egress port leading from said pressure connection to said valve, and an ingress port leading from said pressure connection to said valve, a non-return device interposed in said ingress port, said casing having a cylinder port leading from said valve to said cylinder, and said valve having a peripheral connection port for connecting said egress and cylinder ports when said valve is in an egress position, and registering said connection port exclusive with said cylinder port when said valve is in a neutral position, and connecting said cylinder port with said ingress port when said valve is in a band brake position, and mechanism connected with said hydraulic brake and valve for causing operation of said hydraulic brake and band brake.

DESIGNS

SEPTEMBER 29, 1931

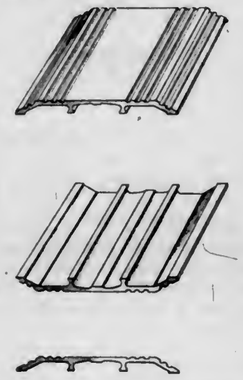
85,225. BEDSTEAD OR SIMILAR ARTICLE. ANTONE J. AMBROSE, Westville, Ill. Filed June 18, 1931. Serial



No. 40,262. Term of patent 3½ years.

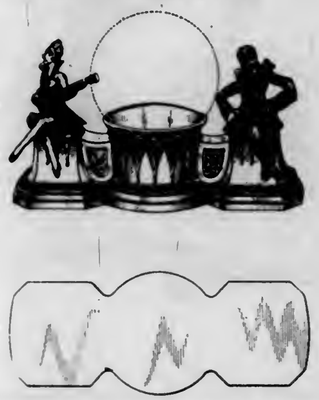
The ornamental design for a bedstead or similar article as shown.

85,226. THRESHOLD PLATE OR SIMILAR ARTICLE. SAMUEL C. AWBREY, Kansas City, Mo., assignor to Floor Accessories Company, Inc., Kansas City, Mo., a Corporation of Missouri. Filed May 3, 1930. Serial No. 35,484. Term of patent 7 years.



The ornamental design for a threshold plate or similar article as shown and described.

85,227. LAMP OR ANALOGOUS ARTICLE. CHARLES M. BECKER, Brooklyn, N. Y. Filed Mar. 14, 1931. Serial No. 39,090. Term of patent 3½ years.



The ornamental design for a lamp or analogous article as shown and described.

85,228. SPRAY GUN. ERIC N. BERGGREN, Chicago, Ill., assignor to William Anderson, Chicago, Ill. Filed Jan. 10, 1931. Serial No. 38,267. Term of patent 14 years.



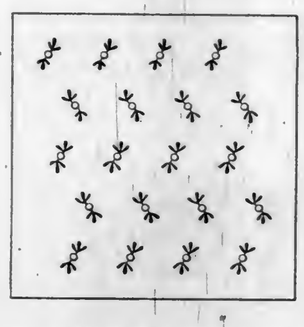
The ornamental design for a spray gun, as shown.

85,229. GOLF TEE. CHARLES F. CANNON, Jr., Milwaukee, Wis., assignor of forty-five per cent to Elmer O. Bischoff, Milwaukee, Wis. Filed July 11, 1931. Serial No. 40,505. Term of patent 14 years.



The ornamental design for a golf tee, as shown.

85,230. TEXTILE FABRIC. ABRAHAM H. EISENSTADT, New York, N. Y., assignor to Pacific Mills, a Corporation of Massachusetts. Filed Jan. 19, 1931. Serial No. 38,360. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

85,231. SHOE BUCKLE. ADA E. FARMER, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed July 29, 1931. Serial No. 40,715. Term of patent 3½ years.





The ornamental design for a shoe buckle as shown.

85,232. COMBINATION SPOON AND SCRAPER OR SIMILAR ARTICLE. IRVING W. FARQUHARSON, Media, Pa. Filed July 22, 1930. Serial No. 36,440. Term of patent 14 years.



The ornamental design for a combination spoon and scraper or similar article substantially as shown.

85,233. BOTTLE. EDWIN W. FUERST, Toledo, Ohio, assignor to Cloverdale Spring Company, Baltimore, Md. Filed Aug. 15, 1931. Serial No. 40,858. Term of patent 14 years.



The ornamental design for a bottle, as shown.

85,234. FINGER RING OR ARTICLE OF SIMILAR NATURE. EDWARD J. GROSS, New Rochelle, N. Y., assignor to Benjamin & Edward J. Gross Co., Inc., New York, N. Y. Filed Dec. 4, 1929. Serial No. 33,631. Term of patent 3½ years.





The ornamental design for a finger ring or article of similar nature, as shown and described.

85,235. FINGER RING OR ARTICLE OF SIMILAR NATURE. EDWARD J. GROSS, New Rochelle, N. Y., assignor to Benjamin & Edward J. Gross Co., Inc., New York, N. Y. Filed Dec. 5, 1929. Serial No. 33,659. Term of patent 3½ years.





The ornamental design for a finger ring or article of similar nature, as shown and described.

85,236. FINGER RING OR ARTICLE OF SIMILAR NATURE. EDWARD J. GROSS, New Rochelle, N. Y., assignor to Benjamin & Edward J. Gross Co., Inc., New York, N. Y. Filed Dec. 5, 1929. Serial No. 33,663. Term of patent 3½ years.





The ornamental design for a finger ring or article of similar nature, as shown and described.

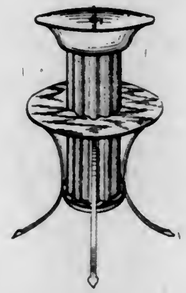
85,237. FINGER RING OR ARTICLE OF SIMILAR NATURE. EDWARD J. GROSS, New Rochelle, N. Y., assignor to Benjamin & Edward J. Gross Co., Inc., New York, N. Y. Filed Dec. 5, 1929. Serial No. 33,664. Term of patent 3½ years.





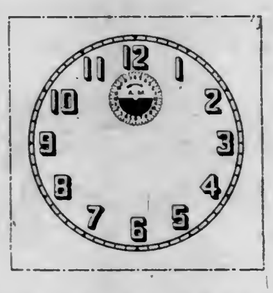
The ornamental design for a finger ring or article of similar nature, as shown and described.

85,238. DISPLAY FOUNTAIN OR SIMILAR ARTICLE. EDWARD GUIDO, New York, N. Y. Filed Aug. 1, 1931. Serial No. 40,754. Term of patent 3½ years.



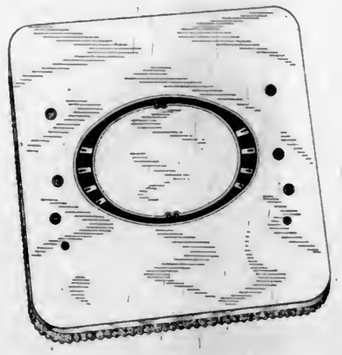
The ornamental design for a display fountain or similar article as shown.

85,239. CLOCK DIAL. EDWARD INGRAHAM, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Jan. 2, 1931. Serial No. 38,186. Term of patent 7 years.



The ornamental design for a clock-dial as shown and described.

85,240. TYPEWRITER PAD. HARRY C. HARDING, Wilkes-Barre, Pa. Filed July 28, 1931. Serial No. 40,705. Term of patent 14 years.



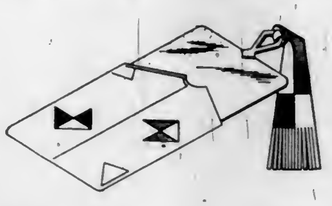
The ornamental design for a typewriter pad as shown.

85,241. SUN VISOR. HERBERT V. HENDERSON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 33,883. Term of patent 3½ years.



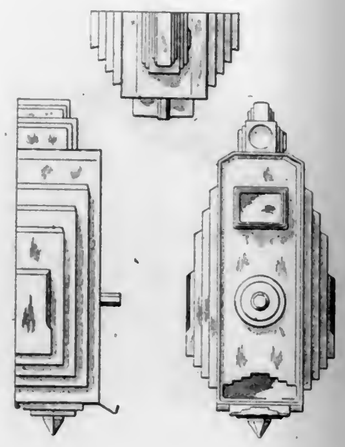
The ornamental design of a sun visor substantially as shown.

85,242. COMBINED PURSE MIRROR AND POUCH. CLEMENS KAMMERER, New York, N. Y. Filed Dec. 31, 1930. Serial No. 38,157. Term of patent 3½ years.



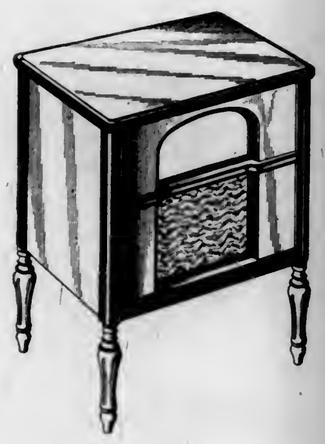
The ornamental design for a combined purse mirror and pouch, as shown and described.

85,243. VENDING MACHINE CASING. EDWARD KANTER, Cleveland Heights, Ohio. Filed May 13, 1931. Serial No. 39,828. Term of patent 14 years.



The ornamental design for a vending machine casing, as shown.

85,244. CABINET FOR RADIO RECEIVING APPARATUS. ARTHUR ATWATER KENT, Ardmore, Pa. Filed Sept. 4, 1930. Serial No. 36,859. Term of patent 7 years.



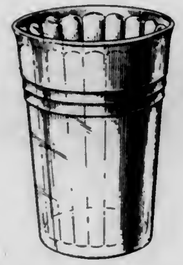
The ornamental design for a cabinet for radio receiving apparatus, as shown and described.

85,245. SPOON OR OTHER ARTICLE OF TABLEWARE. ALFRED G. KINTZ, Wallingford, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Aug. 13, 1931. Serial No. 40,841. Term of patent 14 years.



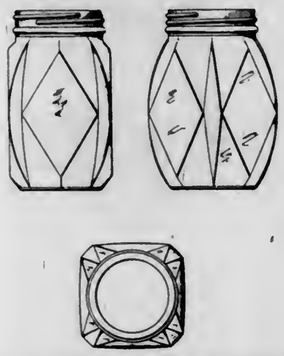
The ornamental design for a spoon or other article of table-ware, as shown and described.

85,246. DRINKING GLASS. JOHN KIRKPATRICK, Clarksburg, W. Va., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed July 29, 1931. Serial No. 40,714. Term of patent 7 years.



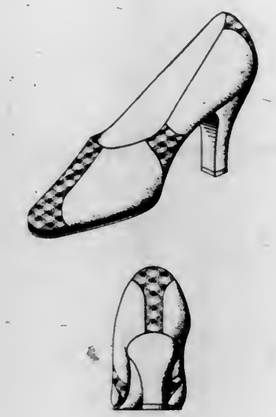
The ornamental design for a drinking glass, as shown.

85,247. JAR. SHELBY V. KNEPPER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 30, 1931. Serial No. 40,736. Term of patent 14 years.



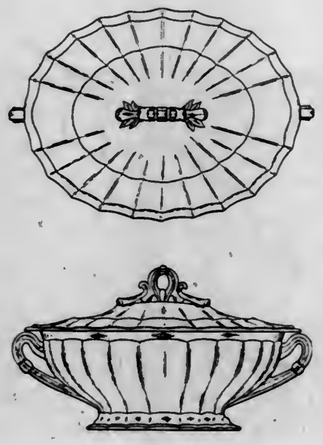
T e ornamental design for a jar substantially as shown.

85,248. SHOE. GEORGE S. LAIRD, Philadelphia, Pa., assignor to Laird, Schober & Co., Philadelphia, Pa., a Firm composed of George S. Laird, J. Laird Schober, John C. McKeon, and Samuel S. Laird, jr., Philadelphia, Pa. Filed Aug. 1, 1931. Serial No. 40,756. Term of patent 3½ years.



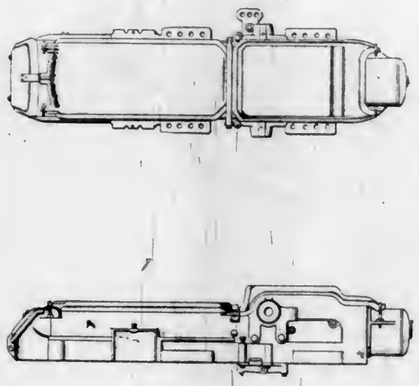
The ornamental design for a shoe, substantially as shown.

85,249. COVERED DISH OR SIMILAR ARTICLE. WALTER LINDLEY, Stoke-on-Trent, England, assignor to Herman C. Kupper, Inc., New York. N. Y., a Corporation of New York. Filed July 6, 1931. Serial No. 40,417. Term of patent 7 years.



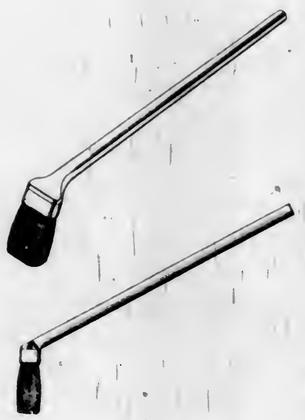
The ornamental design for a covered dish or similar article, as shown.

85,250. HOUSING FOR DUAL CONTROL SWITCH AND LOCK MOVEMENT ASSEMBLY FOR RAILWAYS. EDWIN G. LITTLE, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 22, 1931. Serial No. 40,624. Term of patent 14 years.



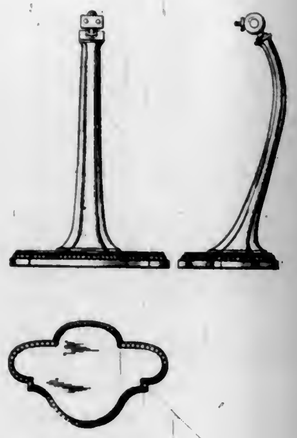
The ornamental design for housing for dual control switch and lock movement assembly for railways, as shown.

85,251. PAINT BRUSH. WILLIS L. LYNDE, West Bend, Wis., assignor of one-half to Victor Geib, West Bend, Wis. Filed July 19, 1930. Serial No. 36,401. Term of patent 14 years.



The ornamental design for a paint brush, as shown.

85,252. COMBINED LAMP ARM AND BASE. GEORGE A. MARKS, Chicago, Ill. Filed Apr. 16, 1931. Serial No. 39,503. Term of patent 3½ years.



The ornamental design for a combined lamp arm and base, as shown.

85,253. AQUARIUM OR SIMILAR ARTICLE. MITSUO MATSUNO, New York, N. Y. Filed Aug. 1, 1931. Serial No. 407,753. Term of patent 3½ years.



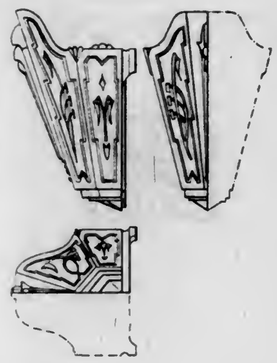
The ornamental design for an aquarium or similar article, as shown and described.

85,254. SHADE FOR AN ELECTRIC LIGHT FIXTURE. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 27, 1931. Serial No. 40,687. Term of patent 3½ years.



The ornamental design for a shade for an electric light fixture, substantially as shown and described.

85,255. SHADE FOR AN ELECTRIC LIGHT FIXTURE. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 27, 1931. Serial No. 40,688. Term of patent 3½ years.



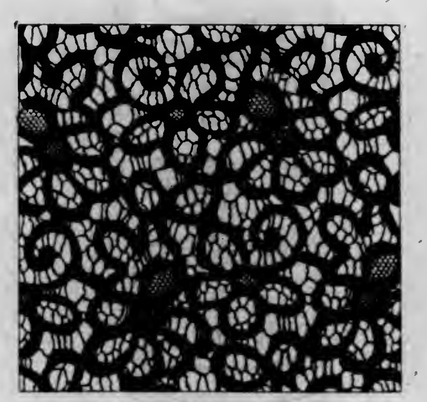
The ornamental design for a shade for an electric light fixture, substantially as shown and described.

85,256. SHADE FOR AN ELECTRIC LAMP. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 27, 1931. Serial No. 40,692. Term of patent 3½ years.



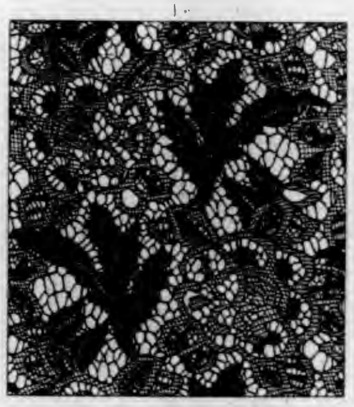
The ornamental design for a shade for an electric lamp substantially as shown and described.

85,257. LACE. JOHN MOOSHERR, New York, N. Y. Filed July 23, 1931. Serial No. 40,640. Term of patent 3½ years.



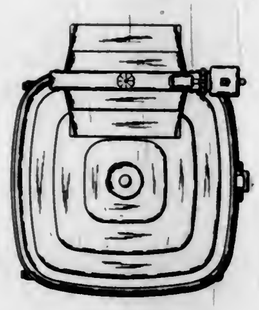
The ornamental design for lace, substantially as shown.

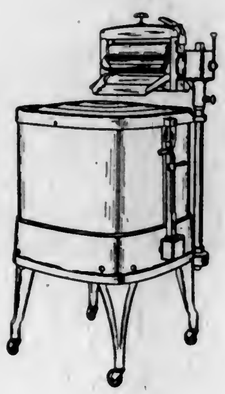
85,258. LACE. JOHN MOOSHERR, New York, N. Y. Filed July 24, 1931. Serial No. 40,679. Term of patent 3½ years.



The ornamental design for lace, substantially as shown.

85,259. COMBINED WRINGER AND CASING FOR A WASHING MACHINE. JABEZ C. NELSON, Syracuse, N. Y. Filed July 30, 1931. Serial No. 40,730. Term of patent 14 years.





85,259—Continued.



The ornamental design for a combined wringer and casing for a washing machine, substantially as shown.

85,260. BOTTLE. NATHAN C. PHILLIPS, Gloucester, Mass., assignor to Russia Cement Company, Gloucester, Mass. Filed Aug. 1, 1931. Serial No. 40,755. Term of patent 14 years.



The ornamental design for a bottle, as shown.

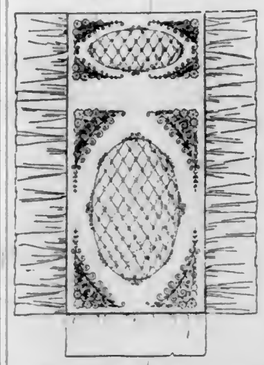
85,261. SALESMAN'S COMMERCIAL BUTTONHOLE EMBLEM. EMIL SALOMON, Tulsa, Okla. Filed May 4, 1931. Serial No. 39,695. Term of patent 3½ years.





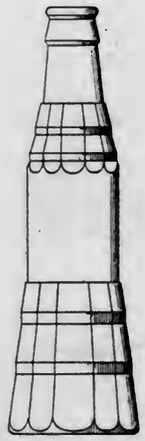
The ornamental design for a salesman's commercial button-hole emblem, as shown.

85,262. BEDSPREAD. GEORGES SELLIER, Park Ridge, N. J., assignor to B. Saubiac & Son, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 4, 1931. Serial No. 40,780. Term of patent 3½ years.



The ornamental design for a bedspread substantially as shown.

85,263. BOTTLE. ORVALL SMILEY, Indianapolis, Ind. Filed Feb. 28, 1931. Serial No. 38,865. Term of patent 14 years.



The ornamental design for a bottle, as shown and described.

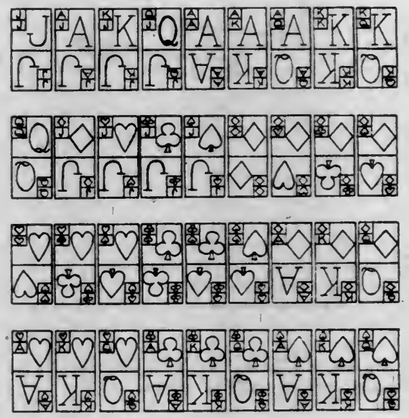
85,264. BADGE. FREDERICK S. TEW, Chevy Chase, Md. Filed Mar. 26, 1931. Serial No. 39,258. Term of patent 3½ years.





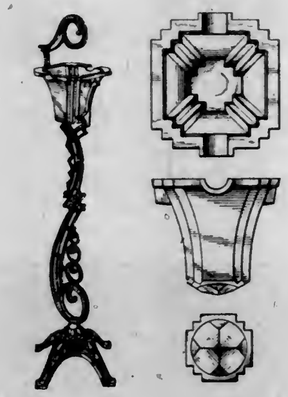
The ornamental design for a badge, as shown.

85,265. SET OF PLAYING CARDS. HOWARD JOHN THOMAS, Brooklyn, N. Y. Filed July 15, 1931. Serial No. 40,559. Term of patent 7 years.



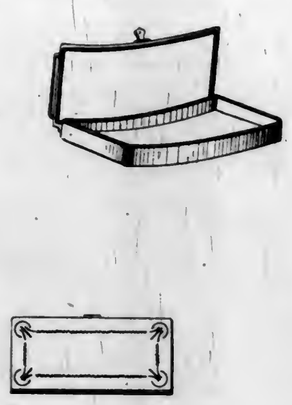
The ornamental design for a set of playing cards, as shown.

85,266. STAND FOR SMOKER'S AND SIMILAR ARTICLES. CHARLES TUTEUR, Chicago, Ill. Filed Aug. 3, 1931. Serial No. 40,763. Term of patent 3½ years.



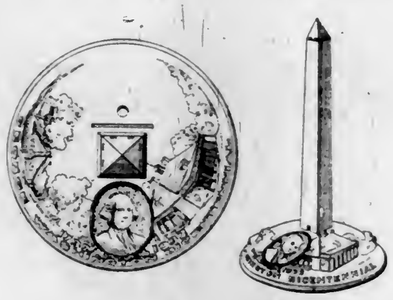
The ornamental design for a stand for smoker's and similar articles, as shown.

85,267. CASE-BEARER BUCKLE FOR BATHING BELT. GISBERTO VALLAGUZZA, Milan, Italy. Filed Apr. 2, 1930, Serial No. 35,101, and in Italy Mar. 17, 1930. Term of patent 7 years.



The ornamental design for a case-bearer buckle for bathing belt substantially as shown.

85,268. TOY MONEY BANK. GEORGE C. WALLING, Washington, D. C., assignor to Walling's Syndicated Services, Inc., Washington, D. C., a Corporation of Delaware. Filed Sept. 10, 1930. Serial No. 36,922. Term of patent 3½ years.



The ornamental design for a toy money bank, as shown.

85,269. LACE. GASTON WASSELIN, Calais, France. Filed June 5, 1931. Serial No. 40,098. Term of patent 3½ years.



The ornamental design for lace, as shown.

85,270. DIRECTIONAL SIGNAL FOR MOTOR VEHICLES. MICHAEL WEHNER, Kansas City, Mo. Filed June 1, 1931. Serial No. 40,051. Term of patent 7 years.



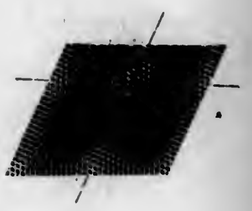
The ornamental design for a directional signal for motor vehicles, as shown.

85,271. SHOE BUCKLE. HERBERT G. WHITEHOUSE, Newark, N. J., assignor to The Riker Company, a Corporation of New Jersey. Filed July 17, 1931. Serial No. 40,581. Term of patent 7 years.



The ornamental design for a shoe buckle, as shown.

85,272. LEATHER OR SIMILAR ARTICLE. KARL DAVIS ROBINSON, New York, N. Y., assignor to Barrett & Company, a Corporation of New Jersey. Filed July 9, 1931. Serial No. 40,477. Term of patent 14 years.

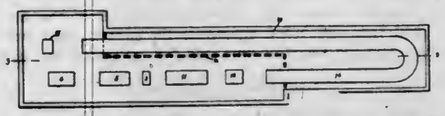


The ornamental design for leather or similar article, substantially as shown and described.

PATENTS

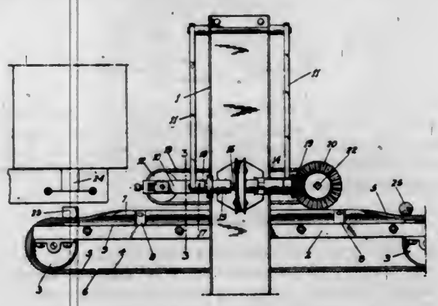
GRANTED SEPTEMBER 29, 1931

1,824,758. METHOD OF AND MEANS FOR PRODUCING RUG AND OTHER PATTERNS ON FELT BASE FABRICS. JOHN B. CAMPBELL, Salem, N. J., assignor, by mesne assignments, to Carthage Mills Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 28, 1925. Serial No. 26,349. 4 Claims. (Cl. 101—426.)



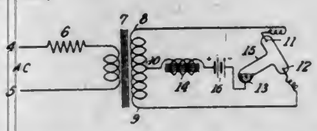
1. The method of producing rug patterns on saturated felt bases which consists in continuously applying paint to the face of the base in the form of complete rug designs by contacting the face with a continuous, moving printing surface and having thereon a complete rug design.

1,824,759. PLASTIC ROLLING MACHINE. GEORGE K. BAINBRIDGE, Ripon, Calif. Filed May 24, 1930. Serial No. 455,236. 2 Claims. (Cl. 107—9.)



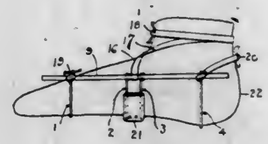
1. A plastic rolling machine including upper and lower endless belts between the adjacent runs of which the material to be rolled passes, the upper run of the lower belt along that portion of the same under the upper belt having a substantially semicircular concave form in cross section relative to the upper belt and being narrower between its side edges than the upper belt, and means to reciprocate said upper belt transversely.

1,824,760. ALTERNATING CURRENT VAPOR ELECTRICAL DEVICE. LESTER F. BIRD, Newark, N. J., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed Oct. 22, 1929. Serial No. 401,600. 5 Claims. (Cl. 176—13.)



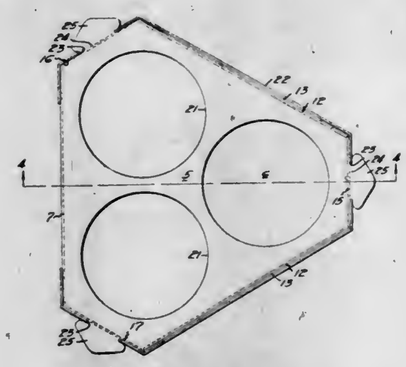
1. In combination with a vapor or a gas filled electric lamp for operating on alternating current, a source of alternating current connected with the lamp, means for impressing upon the lamp a direct current potential in opposition to the indicated direct current potential normally existing between the anodes and cathode of the lamp while operating.

1,824,761. WATER WINGS. PANDO BLAGOEFF, Brooklyn, N. Y. Filed June 22, 1931. Serial No. 545,891. 5 Claims. (Cl. 9—21.)



1. A water wing comprised of two wings and a multiple of U shaped wires bent and coiled on the sides to provide stops for wings attachable thereto by means of a pivot, said pivot engageable with said coils and wings.

1,824,762. CONTAINER. DAVID BLOOM, Berkeley, Calif. Filed Nov. 11, 1929. Serial No. 406,383. 3 Claims. (Cl. 229—22.)

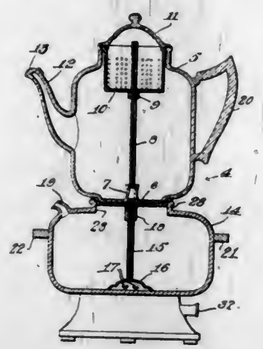


1. A container comprising a sheet of material having apertures therein, said sheet including a flap and a plurality of ears, tabs and tongues all formed integral therewith and extending therefrom; said sheet being adapted to be folded upon a section thereof to form a top wall, a bottom wall and a side wall of said container, said ears being adapted to overlap each other when said sheet is folded to provide additional side walls of said container, and said flap adapted to form the remaining side wall of said container when said sheet is folded, and a flexible strip secured to said side walls, said strip having portions cut therefrom to provide, when secured to said walls, a plurality of recesses within which said tongues are disposed.

1,824,763. PERCOLATOR. BARTON C. BRIDGHAM, San Francisco, Calif. Filed Feb. 10, 1930. Serial No. 427,270. 5 Claims. (Cl. 53—3.)

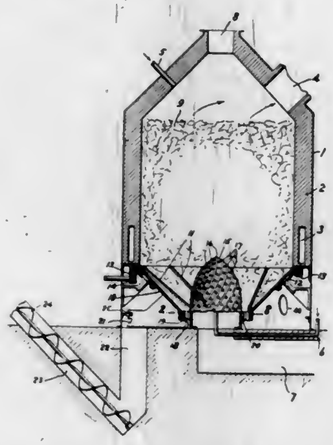
1. In a device of the character described, two open mouthed vessels in superposed relation, the upper of which is provided with an imperforate bottom bearing centrally thereof a tubular member extending interiorly and upwardly thereof, a section of percolator tubing having an

extremity adapted to be received by and to be detachably supported within said tubular member, a perforated coffee receptacle detachably supported by the upper extremity of said section of percolator tubing, a lid for the top opening of said upper vessel, a discharge spout, a pres-



sure-governing means borne by said spout, and a cover for the lower of said vessels in superposed relation, said cover comprising a flanged removable plate bearing centrally a downwardly projecting tubular member in registration with said tubular member borne by the superposed of said vessels.

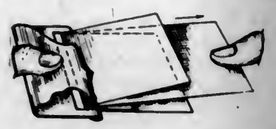
1,824,764. GAS GENERATOR. CHARLES S. CHRISMAN, West Chester, Pa., assignor to The United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1928. Serial No. 313,203. 11 Claims. (Cl. 48—66.)



1. In a gas generator, a rotatable bosh member of frusto-conical shape having a central opening therein, cutter bars mounted thereon on the inner frusto-conical surface, ploughs mounted on the outer frusto-conical surface, on the opposite side of the rotatable member from the cutter bars, and a central body located in said central opening but spaced from said rotatable member.

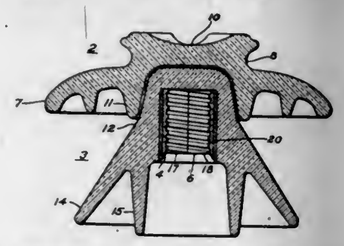
1,824,765. CARRYING CASE FOR CURRENCY. FRANCIS DRAKE BALLARD, Flushing, and FREDERICK SILAS BUCK, Wellsville, N. Y. Filed Jan. 16, 1931. Serial No. 509,066. 2 Claims. (Cl. 150—38.)

1. A case for bank notes and the like, comprising a body portion, a flange disposed in spaced relation to the body portion to form a slot extending transversely of the body portion, and a cover plate having hinged connection with the body portion rearwardly of the slot cooperating with the body portion to form a receptacle for a plurality of superimposed notes, the slot being adapted



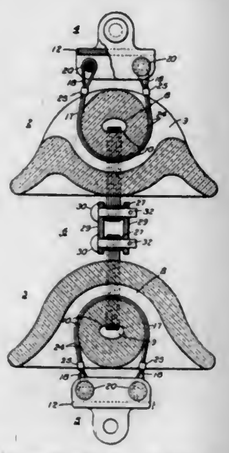
to receive the notes folded transversely through the slot and around the flange, the free end of the cover plate overlying the flange, the adjoining surfaces of the flange and said free end being substantially parallel and constituting extended bearing surfaces for gripping the notes.

1,824,766. INSULATOR. GEORGE M. BARROW, Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 7, 1927. Serial No. 173,363. 4 Claims. (Cl. 173—318.)



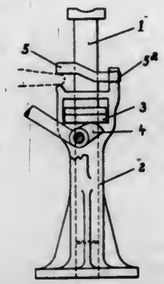
2. An insulator comprising an insulating member having a pin recess and a longitudinally-divided insulating sleeve secured in position in said recess for holding co-operation with a pin removably associated with the insulator in said recess.

1,824,767. INSULATOR CONNECTER. GEORGE M. BARROW, Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 9, 1927. Serial No. 182,208. 4 Claims. (Cl. 173—366.)



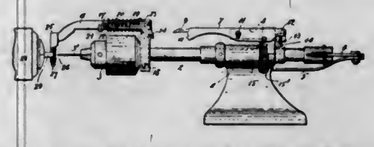
1. A connecter comprising an element constructed of wound wire in the form of an endless strap-like band folded to provide a single strap having a plurality of strap-like layers in adjacent registering broad-side relation merging into a closed-loop portion, connecting said sections and means for holding the wire turns in said relation.

1,824,768. CAR JACK. EUGEN BRASELMANN, Delle, near Breckerfeld, Germany. Filed Jan. 6, 1930, Serial No. 418,830, and in Germany Sept. 17, 1927. 2 Claims. (Cl. 254—106.)



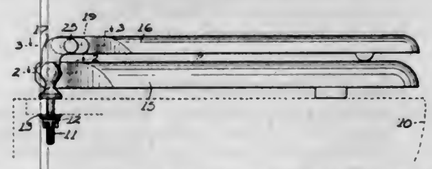
1. A car jack, comprising in combination with an upright frame and a spindle mounted in said frame, a lifting plate loosely mounted on said frame and embracing said spindle with little clearance, a lifting cam pivotally mounted on said frame under said lifting plate, a handle for operating said cam, and a locking plate hingedly mounted at one side on said frame and embracing said spindle with little clearance, said two plates being formed at a suitable point so that the imaginary line between their clamping points is approximately perpendicular to the axis of said spindle.

1,824,769. CENTERING DEVICE FOR LATHES. EDWIN NATANAEL BRODEN, Roxbury, Mass. Filed Jan. 9, 1930. Serial No. 419,667. 1 Claim. (Cl. 82—34.)



In a device of the class described, a tail stock support, a tail stock spindle slidably mounted therein, means for sliding said spindle, a chuck at one end of said spindle, an angle piece near the other end of spindle, a latch loosely pivoted to said angle pieces, a spring for urging said latch in one direction, an angle piece near the forward end of the spindle adjacent to the chuck and having a transverse pivot, a spotter arm having a longitudinal slot mounted on said pivot, a lever pivotally mounted on the angle piece and having a longitudinal slot at its forward end and a rearwardly projecting portion having a catch to be engaged by the latch when the spindle is moved rearwardly, a perforated plate slidably mounted on the spotter arm and having a pin to engage the slot in the lever and a spring interposed between said plate and the second mentioned angle piece.

1,824,770. CLOSET SEAT HINGE. FRANK G. BROTZ, Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Filed Nov. 25, 1929. Serial No. 409,560. 11 Claims. (Cl. 4—236.)

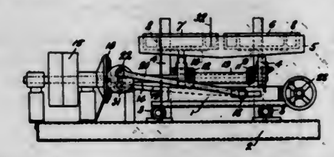


7. The combination, with a closet seat and a cover, of a pair of standards adapted to be secured to a closet bowl, a hinge pin extending between and mounted in said standards and passing through the rear portion of the seat, a pair of separate hinge plates pivoted on said pin and engaged with the side edges of the cvoer, and adjustable means passing through the cover for fixedly clamping the hinge plates thereto.

1,824,771. COATING COMPOSITION. EDWIN P. COX, Edgewood Arsenal, Md. Filed May 23, 1929. Serial No. 365,553. 2 Claims. (Cl. 134—17.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

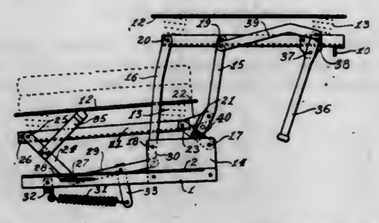
1. A coating composition comprising 75 to 100 parts of a smoked sheet rubber base, 25 to 63 parts of carbon black, 10 to 33.3 parts of paraffin, and from none to 2 parts of an antioxidant.

1,824,772. METHOD OF AND MEANS FOR COLLECTING ARTIFICIAL WOOL. MICHEL DASSONVILLE, Paris, France. Filed Sept. 28, 1929, Serial No. 395,980, and in France Feb. 9, 1929. 8 Claims. (Cl. 118—1.)



1. Apparatus for collecting a fibrous staple comprising means for feeding said staple downwards, an annular receptacle, means for rotating said receptacle and means for giving said staple a reciprocating motion as it is fed down into said receptacle.

1,824,773. FOLDING DAVENPORT OR BED. WILLIAM J. DUVALL, St. Louis, Mo., assignor to Smith & Davis Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed July 26, 1928. Serial No. 295,502, 9 Claims. (Cl. 5—22.)

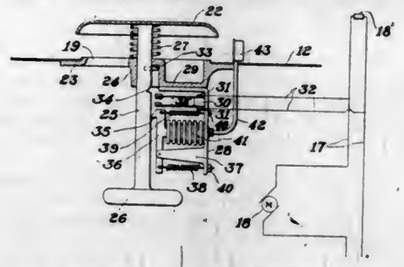


1. A folding davenport or bed comprising, end supports, a top section, a bottom section, forward and rear levers pivoted on each support and connected with said top section adapted to move the latter to positions beside and above said bottom section, means for moving said bottom section vertically including pivots connecting the front of said bottom section with arms extending laterally from the forward of said levers, movable struts connecting the rear of said bottom section with said supports, and link connections from said struts to the rear of said levers.

1,824,774. CIRCUIT CONTROL MECHANISM FOR MECHANICAL REFRIGERATING APPARATUS. FREDERICK R. ERBACH, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 19, 1927. Serial No. 241,072. 6 Claims. (Cl. 62—4.)

1. In combination with refrigerating apparatus having electrical connections for establishing a circuit between a

driving motor and a source of electrical supply, an automatically operated switch mechanism for establishing and breaking said circuit upon predetermined temperature conditions, and a second switch mechanism for controlling



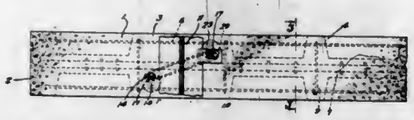
said circuit independently of said automatically operated switch mechanism, said last mentioned switch mechanism being manually operable to establish said circuit and including means for automatically breaking said circuit under a predetermined temperature condition.

1,824,775. HAIR CURLING DEVICE. ERNEST O. FREDERICS, New York, N. Y., assignor to E. Frederics, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 12, 1928. Serial No. 311,994. 12 Claims. (Cl. 132—33.)



1. A hair curling device, comprising a curling element and an attaching element, said curling element being formed intermediate its ends with a series of annular grooves and with longitudinal grooves intersecting said annular grooves, means for rotatably connecting said attaching and curling elements, and means to prevent relative rotation of said elements in one direction while permitting relative rotation thereof in the other direction.

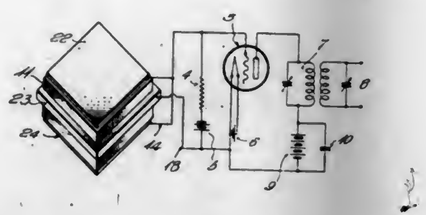
1,824,776. RAILWAY CROSSTIE. HOMER M. HADLEY, Seattle, Wash. Filed Mar. 11, 1930. Serial No. 434,863. 14 Claims. (Cl. 238—92.)



1. A railway cross-tie consisting of an elongated molded body having a plurality of pockets formed in the side faces thereof to receive ballast when the tie is laid in the roadbed, said cross-tie having a plurality ofsockets formed in the upper face thereof and extending down into the interior of the tie, the axes of said sockets being disposed in a helix, and bolts having helical bodies screwed into the said sockets, said bolts each having a stud at its upper end projecting substantially vertically to cooperate with means for engaging the rail flange.

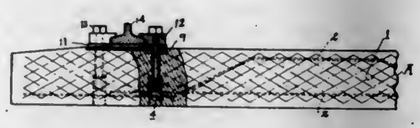
1,824,777. PIEZO ELECTRIC CRYSTAL SYSTEM. JAMISON R. HARRISON, Pittsburgh, Pa., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1929. Serial No. 399,738. 7 Claims. (Cl. 171—327.)

2. In a piezo electric crystal system, a source of electrical potentials, a piezo electric crystal element cut to have two faces, the planes of which are parallel to the X axis and perpendicular to the Y axis of said element, and means for utilizing potentials from said source to produce fields of like sign on both of the faces of said element



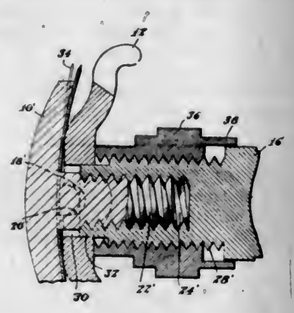
and of like sign simultaneously on all of the sides of said element, the latter fields being of different sign from the fields produced on the faces of said crystals.

1,824,778. RAILROAD TIE. JOSEPH N. HOBART, New Cumberland, Pa., assignor to Holmes B. Groniger, Pittsburgh, Pa. Filed Nov. 25, 1930. Serial No. 497,968. 6 Claims. (Cl. 238—93.)



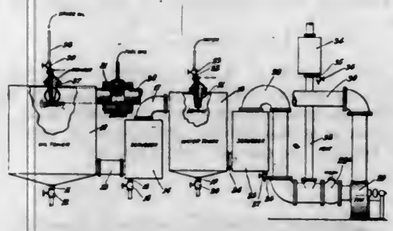
1. A sleeper comprising a monolithic structure having a flat-walled recess extending from its bottom face and into its body, said sleeper including a bolt hole which extends inward from its top face and in axial alignment with said recess, which bolt hole terminates at the inner terminus of said recess, a nut which fits the walls of such recess adjacent its said terminus, said nut being of insufficient depth to fill the recess, and the region of such recess as is unoccupied by said nut being packed with filler, whereby said nut is secured within the body of said sleeper and comprises a fixed, threaded continuation of said bolt hole.

1,824,779. SAFETY RAZOR. JOHN SKINNER ISDALE, Meriden, Conn., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 20, 1930. Serial No. 496,945. 4 Claims. (Cl. 30—12.)



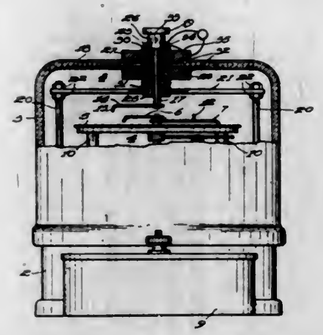
1. A safety razor comprising a cap member and a rigid guard member shaped to clamp a flexible blade between them, the cap having a threaded shank, a handle releasably connected thereto and having a bearing portion upon which the guard member is mounted to move freely toward and from the cap, and an adjustable sleeve on the handle arranged to bear against the guard.

1,824,780. SEPARATION OF OIL. ARTHUR B. JONES, New York, N. Y., assignor to Industrial Associates, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 24, 1928. Serial No. 256,553. 2 Claims. (Cl. 196—89.)



1. The process of obtaining a hydrocarbon fraction from a hydrocarbon liquid of which said fraction is a constituent which comprises producing a circulating stream of combustion gases free from tar and solid matter, directing said stream downwardly through a distillation zone maintained at a temperature above the maximum boiling point of the desired product, centrifugally atomizing said hydrocarbon liquid and spraying the same into the upper portion of said zone, withdrawing the unvaporized constituents of said hydrocarbon liquid from said distillation zone, directing said stream downwardly through a condensing zone and spraying into the upper part of said zone cooling liquid of lower boiling point than the desired product, thereby condensing the desired product and vaporizing the cooling liquid, withdrawing the liquefied desired product from said condensing zone, venting gas from said stream and adding to said stream fresh combustion gases free from tar and solid matter to maintain the required temperature in said distillation zone.

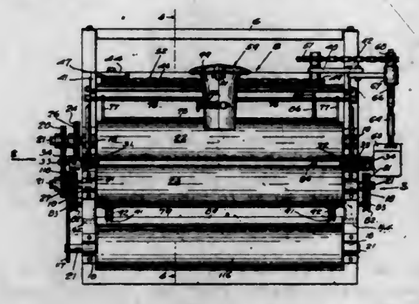
1,824,781. METER DEVICE. BERT G. LA BAR, Union, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 6, 1930. Serial No. 486,598. 8 Claims. (Cl. 171—34.)



5. In combination, in a meter, a casing including a base and a movable cover, a meter mechanism on the base in the casing, and means including cooperating elements for holding the cover in position and controlling an element of said mechanism.

1,824,782. BAT REELING MACHINE. ALLISTER S. MITCHELL, Detroit, Mich. Filed Feb. 11, 1929. Serial No. 339,038. 23 Claims. (Cl. 19—162.)

1. The combination in a reel of positively driven drums adapted to contact with and rotate a reel tube, a feed horn support, a feed horn movably related to the support, aprocket and chain traverse mechanism for imparting reciprocal movement to the feed horn in parallelism with



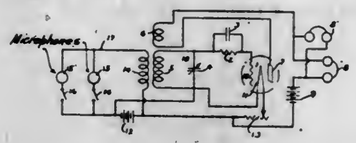
the axis of the reel tube while simultaneously urging the feed horn on its support away from the tube at a constant and uniform rate of movement.

1,824,783. EGG OR PANCAKE TURNER. ISABELLE C. MOLLESON, Baldwin, N. Y. Filed Oct. 28, 1930. Serial No. 491,678. 3 Claims. (Cl. 294—7.)



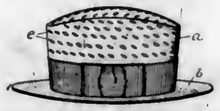
1. An egg or pancake turner, comprising a flat scoop formed with a knife edge at one side and a vertical ridge on the side directly opposite said side, and a plurality of apertures in the vicinity of said ridge, and a handle connected with said scoop.

1,824,784. COMMUNICATION SYSTEM. FRED BENJAMIN MONAR, Washington, D. C. Filed May 15, 1928. Serial No. 277,930. 8 Claims. (Cl. 250—6.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



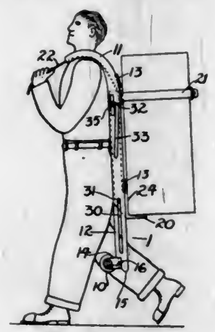
1. In a combined oscillating detector radio receiving and local voice intercommunication system, a vacuum tube having input and output circuits, variable impedance means associated with said input circuit, means in said output circuit inductively associated with said variable impedance means whereby said vacuum tube is placed in an oscillating state, which aforesaid elements are a part of the oscillating detector radio receiving system, in combination with an impedance circuit the impedance of which may be independently varied at a predetermined point said point lying outside the physical limits of said receiving system, means whereby a variation in the impedance of said impedance circuit will produce a variation in the impedance of said impedance means associated with sad input circuit, whereby radio signals may be observed as well as local intercommunication voice frequencies.

1,824,785. FELT HAT AND PROCESS OF MAKING IT. FRANK J. MUHLFELD, New York, N. Y. Filed July 5, 1929. Serial No. 376,132. 3 Claims. (Cl. 2—194.)



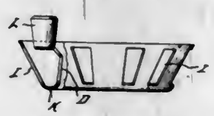
1. In the manufacture of a felt hat the steps of cutting slits into the hat body, stretching the hat body and then subjecting the hat body to steam while the hat is closely fitted to a block, so as to shrink the material of such body.

1,824,786. EXPRESSMAN'S TRUCK. TAYGVE B. NAKKERUD, Seattle, Wash. Filed Dec. 20, 1928. Serial No. 327,208. 3 Claims. (Cl. 280—53.)



1. An expressman's truck, a floor-engaging frame terminating at its lower end in spaced, unconnected legs, floor-engaging rollers carried thereon, a trunk-supporting frame including a ledge, and guided at its sides only on said floor-engaging frame for movement therealong between an elevated position, wherein the user's leg may be placed beneath the ledge, and a lowered position, with the ledge close to the floor, and means for maintaining the trunk-supporting frame in its elevated position.

1,824,787. ROLLER BEARING AND METHOD OF MAKING SAME. NICHOLAS J. NOLAN, Detroit, Mich., assignor to Advance Stamping Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 2, 1931. Serial No. 519,559. 3 Claims. (Cl. 113—117.)

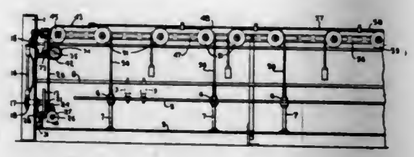


1. In a roller bearing, the combination with a series of rolls having their axes converging to a common point, of a cage or retainer for said rolls comprising a conical annular flange having spaced apertures therein of a width slightly less than the diameter of the roll, integral tongues extending upward from the small diameter end of said flange between said rolls and radially outwardly bent portions at the ends of said tongues contacting with said flange and constituting spacers for holding the edges of said tongues in proximity to the intermediate rolls when the latter are engaged with the edges of said aperture in the flange.

2. The method of forming a roller bearing cage consisting in cupping a sheet metal blank to form a flat bottom portion and a flaring annular flange, forming a series of apertures in said flange to constitute a roll receiving pockets, cutting away the central bottom portion to form a series of radially inwardly extending tongues intermediate the apertures in said flange, bending said tongues upward to receive the rolls between the same and said flange and further bending said tongues to contact the ends thereof with said flange with their side edges in proximity to the rolls when the latter are located in said apertures in the flange

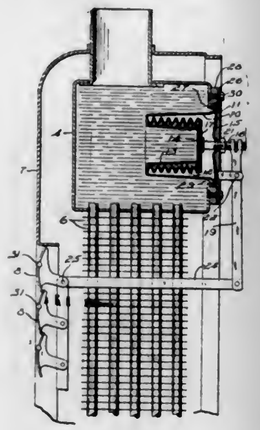
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1,824,788. SPINDLE RAIL LIFTING MECHANISM. HENRY A. OWEN, Foxboro, Mass., assignor to Davis & Furber Machine Company, North Andover, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1930. Serial No. 443,015. 14 Claims. (Cl. 118—5.)



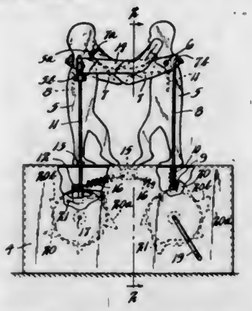
1. In a spinning frame, a plurality of spindles, a vertically movable spindle rail upon which the spindles are mounted, a builder motion acting to lower said spindle rail with said spindles and bobbins from its initial topmost position where the bobbins are empty down to full bobbin position and means detachably connected to a driven element of the machine acting when connected to lift the spindle rail with the full bobbins and spindles to its initial topmost position to permit doffing.

1,824,789. THERMOSTATIC CONSTRUCTION. LAMBERT M. PAYNE, Detroit, Mich. Filed Nov. 8, 1929. Serial No. 405,599. 11 Claims. (Cl. 236—35.)



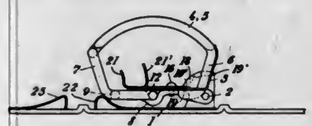
1. In combination, a tubular body provided with an out-turned flange at one end thereof and an inturned flange at the other end thereof, a cup-shaped member in spaced relation within said body and having its rim sealed to said inturned flange, an expansible cup-shaped metal bellows positioned between said body and said member and having its rim sealed with respect to the rim of said member and means for so horizontally supporting the same as exteriorly to expose both said body and said member to a cooling fluid while exposing a surface of said bellows to air within said body.

1,824,790. BOXING TOY. JOHN PETERSON, St. Paul, Minn. Filed Mar. 22, 1930. Serial No. 438,042. 5 Claims. (Cl. 46—40.)



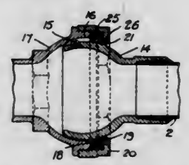
1. A boxing toy comprising a platform, a toy figure mounted in upstanding relation on said platform, an object mounted in opposition to said toy figure, an arm pivoted to said toy figure for swinging movement about a horizontal axis to and from said object, an arm pivoted to said toy figure for swinging movement about a vertical axis to and from said object, resilient means urging said arms toward said object and means for moving said arms away from said object against the tension of said resilient means and suddenly releasing the same.

1,824,791. PAPER FILE. THURE RENOMANN, Berlin-Charlottenburg, Germany, assignor of one-half to Grunewalds Registrator Co. Akt, Ges., Berlin, Germany. Filed Dec. 23, 1929, Serial No. 416,091, and in Germany Dec. 31, 1928. 10 Claims. (Cl. 129—24.)



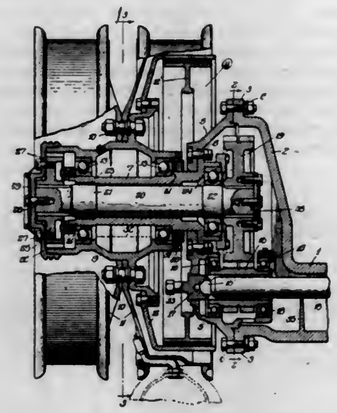
1. A paper file of the character described comprising a pair of hingedly connected file members carrying arched prongs which are concentric about the hinge, a base plate to which one of said members is pivoted so as to allow the hinge to be raised from the plate for opening out the prongs, and means for arresting the pivoted member in different angular positions relative to the base plate.

1,824,792. METALLIC PIPE COUPLING. FRANÇOIS LOUIS RENÉ REUBE, Paris, France. Filed June 27, 1929, Serial No. 373,995, and in France Mar. 12, 1929. 2 Claims. (Cl. 285—95.)



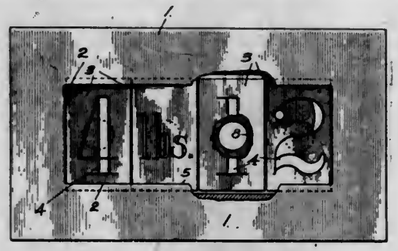
1. In a ball and socket joint for a metallic pipe coupling, the combination with a ball member and a cooperating socket member, of a securing ring member carried by said socket member, and carrying a resilient ring engaging said ball member and permitting relative longitudinal movement of said ball member with respect to said socket member, a resilient packing ring engaging said ball member at one side of a diameter of the ball member and engaging parallel seating surfaces on the socket member and and the securing ring member, a nut engaging a flange of said securing ring member and having screw-threaded engagement with said socket member, and a cylindrical flange carried by said securing ring member and engaging said resilient packing ring, to prevent radially outward movement of said packing ring and thereby cause said resilient packing ring to expand laterally against said parallel seating faces upon a longitudinal movement of the ball member relative to the socket member.

1,824,793. REAR AXLE CONSTRUCTION. JOHN RIISE, Doylestown, Ohio. Filed Sept. 21, 1925. Serial No. 57,621. 18 Claims. (Cl. 74—7.)



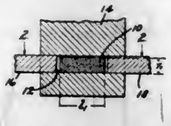
1. In a road vehicle, an axle housing comprising a drive shaft enclosing portion and an end portion, said end portion being enlarged upwardly, a cover mounted upon said enlarged portion, said cover being provided with an outwardly extending bearing member, and a road wheel mounted upon said bearing member, said bearing member comprising a tubular member, a drive shaft within said axle housing, a secondary drive shaft within said tubular member, and gearing, supported wholly by said cover, connecting said drive shafts.

1,824,794. PRICE MARKING DEVICE. CLEMENS ROHLFES, San Francisco, Calif. Filed Sept. 29, 1930. Serial No. 485,121. 9 Claims. (Cl. 40—5.)



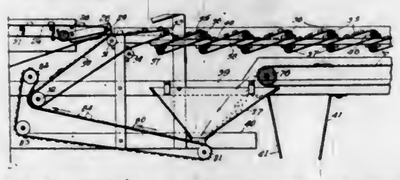
1. A price marking device comprising a mounting member having an opening in the front thereof; a plurality of strips each attached at one end to the mounting member and having transverse folds at regularly spaced points to form a plurality of panels having price marking characters thereon, the panels being foldable in either direction upon the transverse folds into superimposed matching relation, with a desired character exposed upon the outermost panel, and the folded strips being insertable into operative positions within the opening; and means to engage the ends of the folded panels to retain the same within the opening.

1,824,795. GRANULAR BODY AND METHOD OF MAKING SAME. RALPH L. SEABURY, Toledo, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed July 3, 1926. Serial No. 120,540. 3 Claims. (Cl. 171—325.)



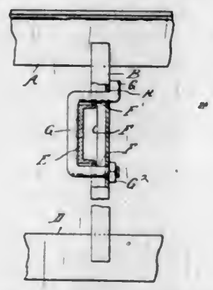
1. The method of making granular bodies consisting in pressing the material into initial shape in a mold, said initial shape having a smaller cross sectional area than the final shape, baking the initially shaped body at a temperature less than that which will cause fusing thereof, electroplating the baked body, and subsequently re-shaping the body under considerable pressure at both ends, while it is held in a die, to compact the material of the body and of the electroplating, and to provide a more intimate connection between the two.

1,824,796. CONFECTION FORMING MACHINE. PETER SISCO, Chicago, Ill. Filed Mar. 21, 1929. Serial No. 348,862. 5 Claims. (Cl. 107—1.)



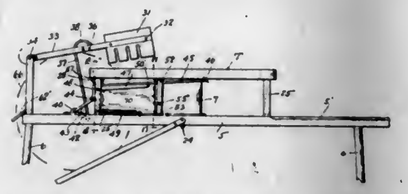
1. Means for coating the top and bottom of a confection with granular material comprising a belt adapted to convey such confection, a hopper adapted to spread confection material over a confection thereon, and a return belt adapted to spread the excess material from said hopper upon the surface of said conveyor belt anterior to the deposit of additional confections thereon, in combination with a plurality of tumbling belts adapted to receive the coated confection and the excess material deposited on said conveyor belt, said tumbling belts being arranged to discharge the excess of such material onto said return belt.

1,824,797. CROSS BRACING AND BRIDGING FOR METALLIC JOISTS. WILLIAM F. ZABRISKIE, Detroit, Mich., assignor to Gabriel Steel Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 5, 1929. Serial No. 344,480. 7 Claims. (Cl. 189—36.)



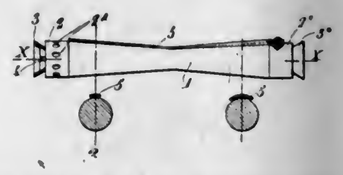
7. In a floor construction, the combination with a metallic joist having upper and lower cord members, the upper cord member being of structural shape and having oppositely extending flanges, of a bracket attachable to said upper cord member comprising a bar having an eye at its upper end and a laterally extending member attached thereto terminating in a transversely bent flange for engaging the under side of a flange of said structural shape, a hook bolt engaging said eye and hooking over the oppositely extending flange of said structural shape, a clamping nut for said bolt adapted to wedge said laterally projecting member against the flange of said structural shape, and a clamp at the lower end of said bar for attachment to a bracing bar.

1,824,798. POTATO CUTTER. LEWIS F. ALTFATHER, Berlin, Pa., assignor of one-third to John Calvin Altfather and one-third to Ralph Mac Taylor, Berlin, Pa. Filed June 10, 1930. Serial No. 460,206. 3 Claims. (Cl. 146—169.)



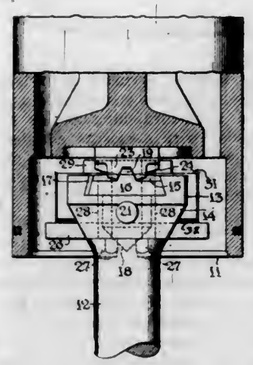
1. In combination, a table, means for rotatably mounting the table, a plurality of cutting frames in the table, a follower block for forcing a potato through the frames, arms on the block, means for swingably mounting the arms, means for oscillating the arms to swing the block into engagement with one of the frames which is disposed thereunder, means for imparting intermittent rotary motion to the frame, said last mentioned means comprising a shaft having a crank arm thereon, a catch pivotally engaged with the crank arm and having a catch head engageable with recesses in the bottom of the table, means for holding the catch into engagement with the table, said last mentioned means comprising a crank shaft having a spring engaged therewith to urge one end of the crank shaft in engagement with the catch to hold it in engagement with the table.

1,824,799. APPARATUS FOR THE PERMANENT WAVING OF THE HAIR. ISAIE CLÉMENT FRANCOIS ADAM, Paris, and RENÉ ALEXIS RAGODY, Le Perreux, France, assignors to Compagnie Francaise des Appareils Adam, Paris, France, a Limited Company of France. Filed Dec. 17, 1928, Serial No. 326,660, and in France Dec. 22, 1927. 3 Claims. (Cl. 132—36.)



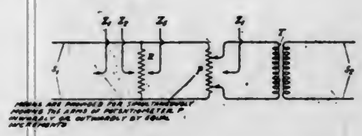
1. In an apparatus for the permanent waving of hair of the character described, in combination: clips provided with means for supporting a hair curler, a heating stove formed by two shells which are superposed on their edges so as to form between them a heating chamber, electric heating resistances in one of the shells, in the rear part thereof, semi-cylindrical bearings on the lateral edges of the said shells for forming bearing supports of the curler in the front part of the shells, means on the ends of the curler for ensuring the tightness of the stove and recesses in the curlers and a spring returned pawl on the stove and having a spherical end to engage spherical recesses in the curler and means for maintaining the shells relatively to each other.

1,824,800. ENGINE. JOHN WALLACE ANDERSON, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 27, 1929. Serial No. 410,207. 10 Claims. (Cl. 74—108.)



1. The combination with a piston and a pitman, of a wrist connection between said piston and pitman, comprising thrust members in rolling contact with each other at least one of said members being cylindrical; guiding means serving to constrain the relative motion of said thrust members to rolling contact; and means for preventing separation of said thrust members including a trunnion on the pitman and a transverse guide member on the piston, said guide member having a cycloidal surface against which said trunnion reacts.

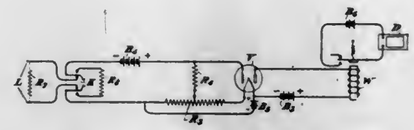
1,824,801. ELECTRICAL POTENTIOMETER. LEWIS L. BOUTON, Leonia, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 8, 1926. Serial No. 121,248. 18 Claims. (Cl. 178—44.)



1. The combination of a potentiometer, a circuit supplying currents to said potentiometer, said potentiometer comprising two resistances of predetermined magnitudes connected parallel relationship with each other, each of said resistances having a greater impedance than the circuit supplying currents thereto and so related to each other that their joint impedance substantially equals the impedance of said circuit, and means for adjusting the gain of the potentiometer, said means comprising two arms and an arrangement whereby said arms may determine and change the proportion of the potential drop across one of said resistances to be delivered by said potentiometer.

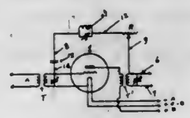
1,824,802. INSULATION TESTING SYSTEM. LUTHER W. BREHMAN, Detroit, Mich., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 22, 1929. Serial No. 334,226. 1 Claim. (Cl. 175—183.)

An arrangement for indicating the presence of low insulation or high leakage in the conductors of a line comprising a vacuum tube having plate, filament and grid electrodes, first, second and third batteries, first and second resistances, said first battery being connected in series with the filament of said vacuum tube and said first resistance, said second resistance being connected between the grid of said vacuum tube and a point movable along said first resistance so that only a predetermined portion of said first resistance may be connected in series with



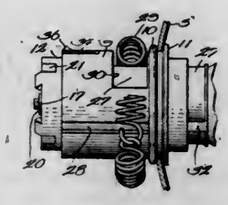
the grid and filament electrodes of said vacuum tube, said second battery being connected in series with the line and that portion of the first resistance not connected in series with the grid and filament electrodes of said vacuum tube, and a relay having a winding connected in series with said third battery and the plate and filament electrodes of said vacuum tube.

1,824,803. METHOD AND APPARATUS FOR RECEIVING WIRELESS SIGNALS. WILLIAM M. BRUCE, Springfield, Ohio. Filed Apr. 30, 1928. Serial No. 273,869. 6 Claims. (Cl. 250—20.)



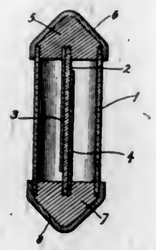
6. In a wireless receiving circuit having a vacuum tube, an auxiliary filter circuit connected from the plate to the grid side of said tube, and a transformer with its primary connected to the plate of said tube with its secondary winding included in the auxiliary filter circuit to change the phase of the oscillations passing through said filter circuit to cancel like oscillations in the main receiving circuit.

1,824,804. ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Filed Oct. 23, 1929. Serial No. 401,724. 7 Claims. (Cl. 173—357.)



2. The combination with a socket holder; of a lamp receiving socket within said holder and smaller in cross section than the bore of the holder; and a coiled spring, separately formed from the holder, pressing the socket laterally against one side of said holder to position the socket with respect to the holder, said spring encircling the said holder and socket and being retained by having its free ends hooked together.

1,824,805. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1926. Serial No. 96,096. 5 Claims. (Cl. 175—41.)



1. A condenser comprising a tubular sleeve, an insulating member therein, conductive elements carried by said member, an end of each element extending beyond the adjacent end of the other toward an end of said insulating member, and means engaging the ends of said member and one end of each of said elements to enable the condenser to be connected in circuit.

1,824,806. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 4, 1926. Serial No. 127,156. 3 Claims. (Cl. 175—41.)



1. An electrical condenser comprising a tubular casing of conductive material forming one electrode, and a sheet of conductive material forming another electrode in said casing and insulated therefrom, the casing being compressed at one end into proximity to the sheet to the required extent and having other portions spaced therefrom.

1,824,807. REMOVAL OF IMPURITIES FROM SAND, CLAY, AND THE LIKE MATERIALS. JOHN ENGLISH, Glass Works, Smethwick, England, assignor to Chance Brothers and Co. Limited, Glass Works, Smethwick, England. Filed Dec. 13, 1929, Serial No. 413,948, and in Great Britain Feb. 12, 1929. 3 Claims. (Cl. 252—8.)

1. Method for the removal of iron from sand, clay and like materials which consists in heating the materials to a temperature of from 700° to 1000° C., and while so heated subjecting the materials to the action of a reducing gas and chlorine, the chloride formed being afterwards removed from the gas.

1,824,808. POWDER PLACING SYRINGE. LESTER L. FINDLEY, Los Angeles, Calif. Filed Oct. 29, 1928. Serial No. 315,850. 2 Claims. (Cl. 128—266.)

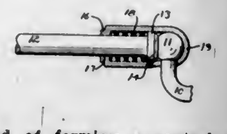


1. A powder placing syringe comprising a tubular charge-container having one end reduced and adapted to be connected to a blast-furnishing device and having its other end provided with a closure adapted to be opened for discharge of the contents, said charge-container itself being the insertible part of the syringe to be thrown away after a single use.

1,824,809. MANUFACTURE OF SOAP. ERNST FLAMMER and CHRISTIAN KELBER, Heilbronn, Germany. Original application filed Nov. 16, 1925, Serial No. 69,488. Divided and this application filed Aug. 16, 1926. Serial No. 129,657. 10 Claims. (Cl. 87—16.)

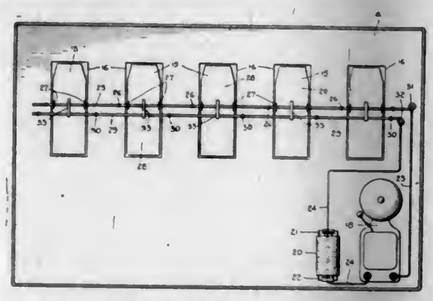
1. A process for the manufacture of translucent soap flakes which comprises forming a mixture of sodium and potassium soaps, incorporating therewith a per-salt and forming the mass into flakes.

1,824,810. METHOD OF FORMING CONTROL ROD BALL JOINTS. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Nov. 18, 1927. Serial No. 234,069. 6 Claims. (Cl. 29—148.)



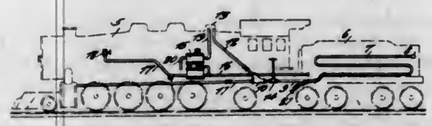
1. The method of forming a control rod ball joint consisting of, forming a head having a socket therein, on the end of one of the control rods, then forming a ball on the end of the other control rod, then drawing a cup shaped housing from a sheet metal blank, then piercing an opening in the bottom of said housing adapted to slidably receive the first mentioned control rod so that the head may be enclosed by the housing, and then closing the rim of said housing to form a dome end adapted to receive the ball end formed on the second mentioned control rod.

1,824,811. ELECTRICAL TARGET TOY. HARCOURT F. GADE, Brooklyn, N. Y. Filed June 15, 1928. Serial No. 285,552. 8 Claims. (Cl. 273—102.)



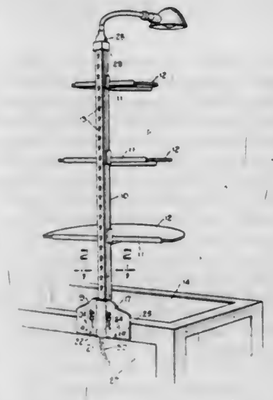
1. An electrical target toy comprising a wall, a plurality of target elements, means including a common hinge pintle for mounting all of said target elements on said wall, a battery holder, a common signal element and conductors forming a complete signal circuit with any of said target elements located on said wall, said common hinge pintle forming one of the conductors of the circuit, and means actuated by movement of any of said target elements about the hinge pintle when struck for closing said signal circuit and operating said common signal element.

1,824,812. FUEL SAVER FOR LOCOMOTIVES. NORMAN E. FRANCE, Lima, Ohio. Filed Apr. 23, 1927. Serial No. 186,126. 1 Claim. (Cl. 122—36.)



The combination with a locomotive and its boiler, and a tender and its tank, of a water heating pipe coil in said tank, a valved pipe leading from the live steam space of the boiler to the coil in the tender tank, a valved branch line for connection at one end to an extraneous heat source and connected at the other end to said pipe between the valve therein and said coil, whereby the boiler and tender may both be supplied with heat from an extraneous source or the tender alone may be supplied with heat from an extraneous source.

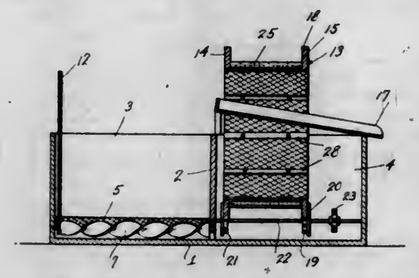
1,824,813. DISPLAY STAND. MATTHEW M. FRIEDEMANN, New York, N. Y. Filed Feb. 8, 1929. Serial No. 338,384. 11 Claims. (Cl. 211—136.)



1. In a display device, a standard arranged to mount display elements or brackets independently, a support therefor adapted to vertically dispose said standard upon a show case or the like, comprising complemental sections arranged to embrace the base of said standard, one of said sections comprising an extension plate including means to fasten said plate to the show case.

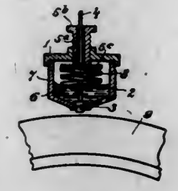
1,824,814. FRUIT WASHING MACHINE. GEORGE F. FRINE, Sodus, N. Y. Filed Sept. 10, 1928. Serial No. 304,929. 1 Claim. (Cl. 146—194.)

In a fruit washing machine, an open top tank adapted to be filled with liquid, a partition arranged within the tank for dividing the same into a rear fruit receiving compartment, and a forward delivery compartment, an endless conveyor located within the first mentioned compartment, fruit receiving screens located within said first mentioned compartment and sloping from opposite side walls of the compartment to terminate in spaced relation on opposite longitudinal sides of said conveyor, a rotatable drum located within said forward delivery compartment, said drum including an annular band of foraminous material, a series of perforated buckets arranged in the annular face of the foraminous band, securing means for the bucket, an inclined discharge chute having its rear end



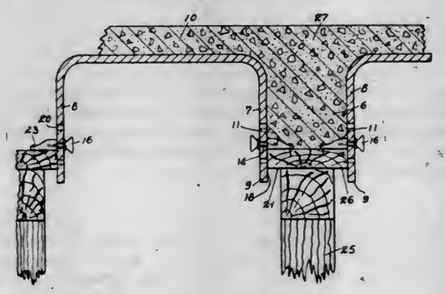
arranged axially within the upper portion of the drum, means for rotatably supporting said drum in said forward compartment, means for actuating said endless conveyor, and an operating connection between the first mentioned and last mentioned means, whereby said drum and said conveyor may be actuated simultaneously.

1,824,815. METHOD OF AND MEANS FOR PREVENTING THE SLIDING OR SKIDDING OF VEHICLES. FRITZ FUCHS, Vienna, Austria. Filed Jan. 4, 1930, Serial No. 418,528, and in Austria Jan. 14, 1929. 3 Claims. (Cl. 291—1.)



1. Method of preventing the sliding or skidding of vehicles provided with rubber tires which consists in applying under pressure a plastic, adhering and friction-promoting substance to the running face of the rubber tire.

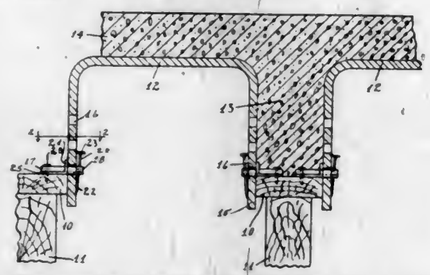
1,824,816. SUPPORT LUG FOR DOMES. WILLIAM M. GOLDSMITH, Cincinnati, Ohio, assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 24, 1927. Serial No. 177,923. 5 Claims. (Cl. 25—131.5.)



1. A supporting device for forms having perforate side walls and a top, comprising a lug having a threaded bore and adapted to extend outwardly from one of the side

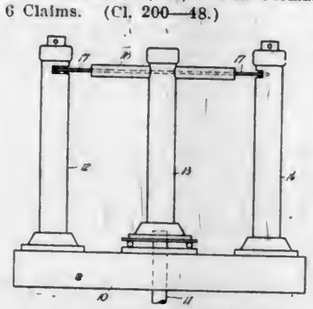
walls for suspending the form from a soffit, a screw threaded means adapted to extend through one of the perforations in the side wall and to be received in the threaded lug for securing the lug upon the wall at predetermined distances from the top of the form whereby to form beams of various dimensions, and means for securing the lug to a soffit for precluding relative movement of the form and soffit when plastic concrete is applied thereon.

1,824,817. MOUNTING FOR REMOVABLE TILE. MAX S. GOLDSMITH and BENJAMIN HARIG, Cincinnati, Ohio, assignors to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 12, 1927, Serial No. 225,666. Renewed Nov. 3, 1928. 5 Claims. (Cl. 25—131.5.)



1. The combination with a perforated tile and a support of a plate comprising a perforated rib and a flange disposed adjacent said rib, the perforated rib adapted for insertion through a perforation in the tile and means insertable in the perforation in the rib for securing the plate to the tile and for holding the tile in frictional contact upon and between the flange and the fastening means, the plate adapted for mounting upon the support.

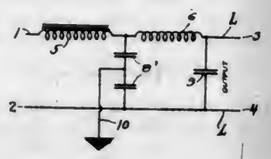
1,824,818. HIGH TENSION APPARATUS. DIETRICH MÜLLER-HILLEBRAND, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 21, 1928, Serial No. 271,722, and in Germany Apr. 22, 1927. 6 Claims. (Cl. 200—48.)



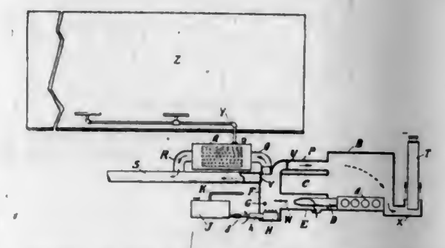
1. In combination, in outdoor high-voltage apparatus, spaced weather-exposed electrodes, a conducting element therebetween in spaced relation thereto, and means including a dielectric covering on a portion of said element providing closer spacing between the electrodes than is permissible with said portion exposed.

1,824,819. ELECTRICAL FILTER. HARRY W. HOUCK, Mount Vernon, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed May 17, 1926. Serial No. 109,500. 3 Claims. (Cl. 178—44.)

1. An interference eliminator for connection between radio receiving apparatus and a source of power supply, comprising a series connected choke coil for suppressing low frequency disturbances, a series connected high frequency choke coil, and condensers connected in circuit with the high frequency choke to form an oscillatory circuit for preventing the passing of radio frequency disturbances.

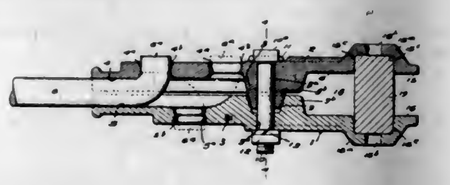


1,824,820. BUS HEATING SYSTEM. LEE P. HYNES, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed Feb. 2, 1926. Serial No. 85,501. 7 Claims. (Cl. 123—174.)



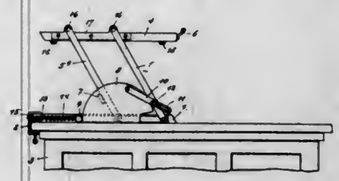
1. Means for heating an automotive vehicle equipped with an internal combustion engine and the radiator of said engine, comprising a combustion chamber external of said engine, a mixing chamber in communication with said combustion chamber and having an air inlet, means for discharging exhaust gases from said engine through said mixing chamber so as to induce an inflow of air through said air inlet, and to discharge the mixed air and gases into said combustion chamber, an ignition device within said combustion chamber, a fuel burner in said combustion chamber, means for supplying fuel to said burner, and means for causing the heat produced by the reburning of said exhaust gases while the engine is operating, or the heated air from the fuel burner while the engine is idle to be transferred to said vehicle or to the radiator of said engine.

1,824,821. ADJUSTABLE BRAKE ROD JAW. LAMBERT C. KOOPMANS, Chicago, Ill. Filed May 26, 1928. Serial No. 280,917. 8 Claims. (Cl. 287—20.5.)



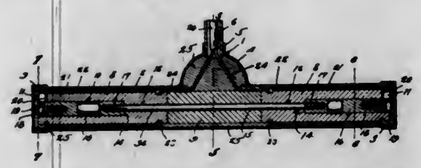
8. In a brake rod jaw comprising a pair of separable sections having means for non-rotatably securing an eye-receiving bearing therebetween, adjacent one end thereof, and a rod connecting means adjacent the other end, and securing means intermediate the bearing and rod connecting means for holding the sections together.

1,824,822. SUPPORT FOR TYPEWRITERS OR OTHER OFFICE APPLIANCES. ERNESTO KRADOLFER, Mexico, Mexico. Filed Oct. 9, 1930, Serial No. 487,545, and in Mexico Apr. 25, 1930. 4 Claims. (Cl. 45—90.)



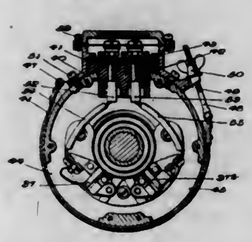
1. A support for typewriters and other office appliances, comprising a stationary board, a second board supporting the appliance, laterally connected with said first board by means of pivoted arms whereby the second board may be guided to and supported in inoperative position above and in the rear of its operative position, and means acting as brakes connected with said arms for substantially balancing the weight of said appliance on being raised from or lowered to the operative position.

1,824,823. AQUARIUM HEATER. FERDINAND KUMP, Glendale, N. Y. Filed May 28, 1930. Serial No. 456,636. 2 Claims. (Cl. 219—41.)



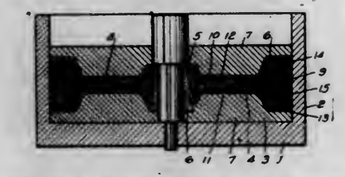
1. A device for warming the water in aquaria, comprising a casing of inverted T-shape, and including a body and a stem joined to the body intermediate the ends of the body, electrical heaters in the ends of the body, the inner ends of the heaters being spaced apart an appreciable distance, approximating the length of either heater, to afford a cool space at the stem, and a circuit including the heaters, the circuit extending upwardly through the stem.

1,824,824. ELECTRICAL APPARATUS. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed May 23, 1929. Serial No. 365,494. 9 Claims. (Cl. 171—209.)



1. In an electrical generator, an armature winding, means for collecting the current generated in said winding, a casing for said generator having a plurality of openings in the plane of said collecting means, an output electrode, means for mounting said electrode in one of said openings, means for closing the remaining openings, a metallic shield for said electrode, and a common means for attaching said electrode shield and said closure means to the casing.

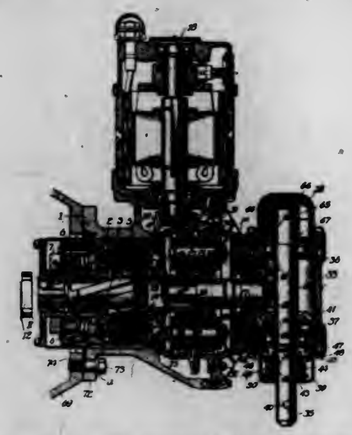
1,824,825. MOLDED LAMINATED GEAR BLANK. GERALD H. MAINS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 6, 1928. Serial No. 317,652. 15 Claims. (Cl. 154—43.)



1. A gear blank having a rim portion comprising layers of fibrous material impregnated with a phenolic condensation product, the layers adjacent at least one face being flared outwardly.

12. The method of producing a gear blank having a rim provided with outwardly flared laminations adjacent to at least one face which comprises impregnating layers of fibrous material with a binding agent and forming the gear blanks under heat and pressure in a mold having a bevelled depression at the outer edge of one of its pressure blocks.

1,824,826. ENGINE STARTER. CHARLES MARCUS, New York, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed May 18, 1925. Serial No. 30,917. 10 Claims. (Cl. 123—179.)

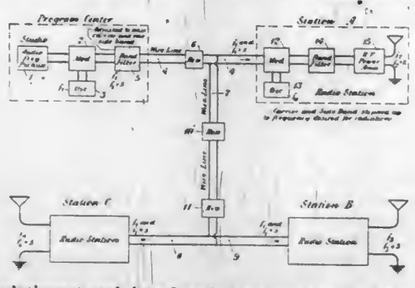


1. An engine starter including a driving member adapted to engage and drive a member of the engine to be started but normally out of engagement therewith, means for actuating the driving member in its engaging and driving movements, a driving element operatively connected with said actuating means, a main casing which substantially encloses and supports said member and element and through which a gear part of such element extends, a second casing removable over said gear-part detachably secured to the main casing, and manually operated means mounted in the second casing and operatively connected with the extending part of said element.

1,824,827. RADIO SIGNALING SYSTEM. DE LOSS K. MARTIN, West Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 25, 1925. Serial No. 58,663. 5 Claims. (Cl. 250—6.)

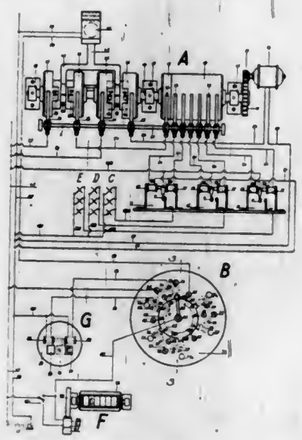
1. In a system comprising a plurality of radio broadcasting stations, a program center, and a plurality of circuits connecting the said center with each of said

broadcasting stations, the method which consists in modulating by an audio frequency a carrier current of intermediate frequency suitable for transmission over a wire line, transmitting to each broadcasting station the carrier frequency and one of the side bands resulting from modulation of the said carrier by the said audio frequency,



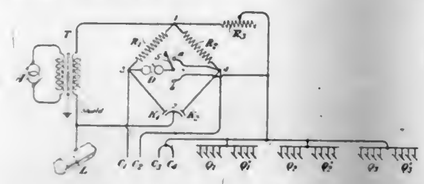
modulating at each broadcasting station a radio frequency carrier by the said intermediate frequency carrier and its side band, and radiating one of the side bands produced by the modulation of the said radio frequency carrier by a band of frequencies consisting of the said intermediate frequency carrier and the side band transmitted therewith over the said wire line.

1,824,828. SYSTEM FOR CONTROLLING ELECTRIC SWITCHES. GEORG MAURER, Berlin-Charlottenburg, Germany. Filed Jan. 20, 1928, Serial No. 248,264, and in Germany Jan. 21, 1927. 15 Claims. (Cl. 171—97.)



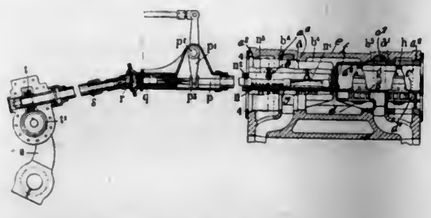
10. A system for controlling electric switches, comprising a rotary member carrying circumferentially displaced contacts, switch members in position for engagement with said contacts, current consumers each connected with one only of said switch members, an electromotor for rotating said rotary member, a normally open switch included in the motor circuit comprising a switch member rotatable with said rotary member and having a circuit making and a circuit breaking portion and a brush movable independently of said rotary member and adapted to be moved through said contact making and breaking portions, electric means responsive to current impulses for moving said brush from contact breaking position into contact making position, means remote from said rotary member and electromotor for sending current impulses to said electric means, a single circuit connecting said electric means and means for sending current impulses, and automatic means controlled by said electromotor and operative while the motor circuit is closed for breaking the circuits of said current consumers.

1,824,829. CABLE TESTING SYSTEM. RALPH G. McCURDY, Englewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 10, 1929. Serial No. 413,132. 5 Claims. (Cl. 179—175.)



1. The method of determining the degree of unbalance in a telephone cable which consists in measuring the capacity unbalance between two of the conductors of the cable and its sheath and maintaining all of the other conductors of the cable substantially at the same potential as said two conductors.

1,824,830. VALVE AND VALVE GEAR FOR LOCOMOTIVES AND OTHER ENGINES. JACQUES MOUCHLY, Haifa, Palestine. Filed Sept. 25, 1928, Serial No. 308,191, and in Great Britain Jan. 13, 1928. 8 Claims. (Cl. 121—127.)



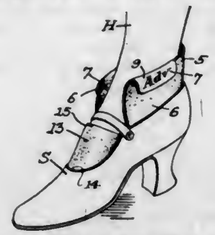
1. A poppet valve steam distribution unit for a locomotive or other engine, comprising in combination a tubular body-part independent of the engine cylinder, poppet valves located in cages detachably housed within said body-part and having seatings formed in the interior of the latter, passages controlled by said valves also formed in said body-part for steam admission and exhaust, pivotal transmission means for actuating said valves operatively associated with cams rigidly supported by a common rotatable shaft disposed parallel to the longitudinal axis of said body-part, and means for axially adjusting said shaft for the purpose described.

1,824,831. PRODUCTION OF BLUE DYESTUFFS OF THE HALOGENATED ANTHRACENE SERIES. PAUL NAWIASKY and ARTUR KRAUSE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 28, 1929, Serial No. 350,812, and in Germany July 23, 1928. 1 Claim. (Cl. 260—31.)

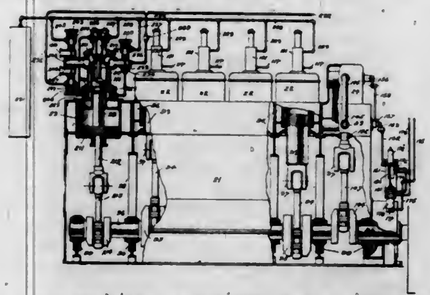
The process which comprises acting on impure N-dihydro-2',1'-1,-2,- anthraquinone-azine with sulphuric acid and manganese dioxide and treating the resulting product, suspended in sulphuric acid of from 50 to 80 per cent strength, with a halogen hydride.

1,824,832. HOSE PROTECTOR AND ADVERTISING NOVELTY. NITA G. NETHERLAND, Ballsville, Va. Filed Feb. 18, 1930. Serial No. 429,302. 1 Claim. (Cl. 36—70.)

A hose protector for use while shoes are being polished, comprising a strip of flexible material bent into U-shape and having the bottom edge shape to permit of convenient insertion and removal of the bottom edge portion of the hose protector inside the top edge portion of shoes, and opposite outwardly turned flaps formed on the opposite top portions of the protector for use in inserting and removing the hose protector, said flaps being of stiff smooth material and suitable to receive printing whereby they may be used for displaying advertising matter.

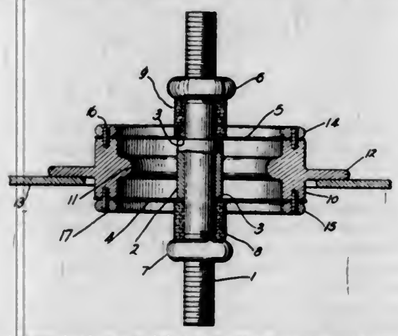


1,824,833. POWER PLANT. BRUNO V. E. NORDBERG and RUDOLPH WINTZER, Milwaukee, Wis., assignors to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 31, 1928. Serial No. 266,193. 25 Claims. (Cl. 60—19.)



1. In a power plant, the combination of an internal combustion engine, including a compressor for furnishing compressed air used in the normal operation of the engine and capable of furnishing an excess of air; a power transmitting compressor and a pneumatic motor connected in a closed pneumatic circuit maintained above atmospheric pressure, said power transmitting compressor being driven by said engine; and means for supplying air compressed by the first-named compressor to said closed circuit to compensate for leakage therefrom.

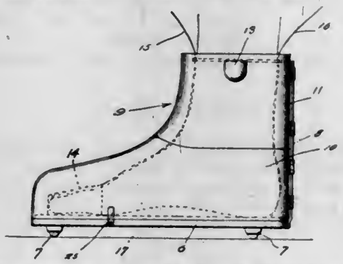
1,824,834. ELECTRIC TERMINAL. ALEXANDER NYMAN, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 10, 1925. Serial No. 55,594. 9 Claims. (Cl. 173—318.)



1. A terminal comprising a hollow conductive support, a conductor in the support, and an insulating diaphragm carried by the support through which the conductor passes, the conductor and the support being shaped to provide a safety spark gap between them, and means for completing an enclosure for said spark gap.

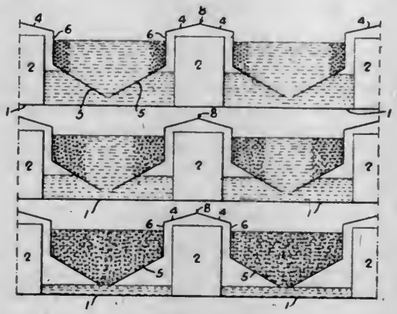
4. A terminal comprising a hollow conductive support, a conductor in the support, and a pair of insulating diaphragms carried by the support, said diaphragms secured against the opposite ends of the support, the conductor passing through the diaphragms.

1,824,835. FOOT IMPRESSION MOLD. FREDERICK J. PIERCE, Saranac Lake, N. Y. Filed Jan. 25, 1929. Serial No. 334,953. 1 Claim. (Cl. 18—42.)



In a structure of the class described, substantially ovate base plate having supporting feet, a hinge pintle connected to and rising from one end of said plate, a foot shaped molding shell comprising a pair of duplicate half sections hingedly mounted on said pintel, each half section being composed of upper and lower relatively swingable portions, said upper portions being formed with filler openings, and adjacent receptacles mounted on and projecting laterally from the sides of the upper portions and communicating with the openings and operating as funnels.

1,824,836. BONNET FOR RECTIFYING COLUMNS. CHARLES SNOWDEN PIGGOT, Washington, D. C. Filed May 25, 1927. Serial No. 194,047. 7 Claims. (Cl. 261—114.)

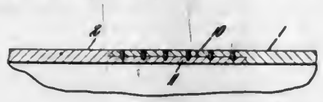


1. Apparatus of the character described, comprising a cap for the delivery of gases, and an apron extending downwardly and outwardly therefrom at an angle of between approximately 30° and approximately 60° to the horizontal, said apron being perforated throughout its extent, the perforations in said apron increasing in size from its upper and inner portion to its lower and outer portion.

1,824,837. PAPERMAKING COMPOSITION. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 15, 1929. Serial No. 407,569. 6 Claims. (Cl. 92—3.)

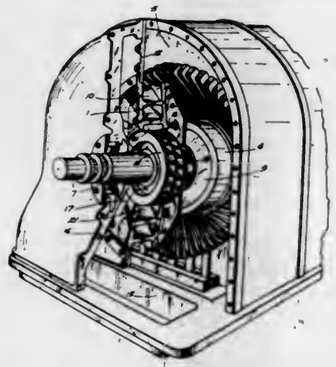
1. A papermaking composition comprising a stable, white, long-fibered pulp of high alpha cellulose content in gelatinized condition, and a stable, white, short-fibered wood pulp of high alpha cellulose content in free condition.

1,824,838. CONDUIT JOINT AND METHOD OF MAKING THE SAME. BERTWELL C. ROOT, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 12, 1926. Serial No. 108,673. 2 Claims. (Cl. 285—161.)



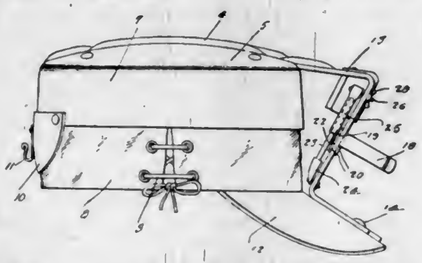
2. A joint between two sections of rigid felted fibrous conduit, comprising end portions of said sections fitted together in overlapping relationship, wooden pegs extending across the contacting faces of said end portions and embedded partly in each said portion, and waterproofing compound permeating said sections and penetrating said pegs.

1,824,839. VENTILATION OF DYNAMO ELECTRIC MACHINES. MALCOLM D. ROSS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,460. 7 Claims. (Cl. 230—127.)



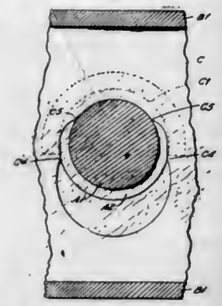
1. In a dynamo-electric machine, a ventilating system comprising a double-entry fan, and means in combination with said fan for performing a duo-function of supplying air to the inner half of said fan and of effectively expanding the air leaving said fan, said means comprising a hollow-bladed diffuser, of which the hollow blades direct air axially and also direct the air discharged from the outer periphery of said fan.

1,824,840. MINER'S CAP. JOHN RUFFINO, Sr., Nokomis, Ill., assignor of one-half to Warren C. Argust, Taylorville, Ill. Filed Jan. 14, 1931. Serial No. 508,778. 1 Claim. (Cl. 240—60.)



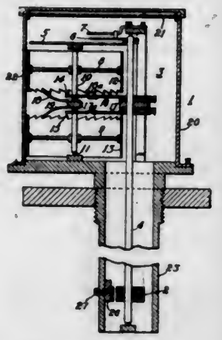
A lamp supporting means for a miner's cap comprising a frame including an upright portion having a vertically arranged elongated opening therein, a vertically arranged bar located in the lower part of the opening, a transverse bar connected to each face of the vertical bar at the lower end thereof for engaging the inner and outer faces of the upright part of the frame, a clamp connected with the front face of the vertical bar and a bar pivotally connected with the upper end of the vertical bar for engaging the rear face of the upright part of the frame when said pivoted bar is turned into horizontal position to detachably hold the lamp carrying bar in position.

1,824,841. MINE CAR. HUGH W. SANFORD, Knoxville, Tenn. Filed Sept. 17, 1930. Serial No. 482,616. 29 Claims. (Cl. 295—41.)



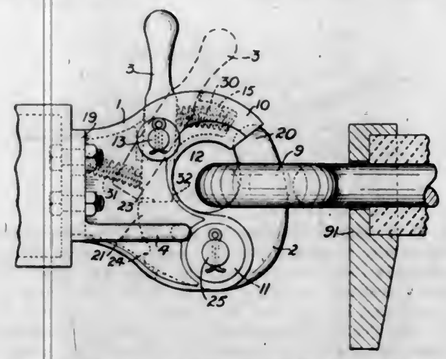
1. In a railway car of the kind described, the combination of car body longitudinal side members, two unitary axle bearings on each of said side members, axles in said bearings, wheels on said axles, the upper part of each bearing being formed to seat on the adjacent upper face of the adjacent axle and the bearing opening being extended downward below the lower part of the axle when the bearing is seated on the axle and said downward-extended part of said opening being wider than the upper part of the bearing.

1,824,842. TEMPERATURE INDICATING DEVICE. HARVEY P. SLEEPER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 7, 1920. Serial No. 371,939. 6 Claims. (Cl. 73—118.)



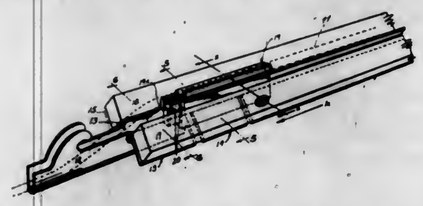
1. In a temperature indicator for a translating device, the combination with means heated in accordance with the temperature of the translating device, of means controlled by said heated means for indicating the instantaneous temperature thereof, means controlled by said first-named indicating means for indicating the maximum temperautre attained by the translating device, and means controlled by said heated means for indicating the number of times a plurality of predetermined different temperatures have been attained in the translating device.

1,824,843. TOW HOOK. EARL B. STALEY, Seattle, Wash. Filed Jan. 22, 1930. Serial No. 422,580. 7 Claims. (Cl. 280—33.15.)



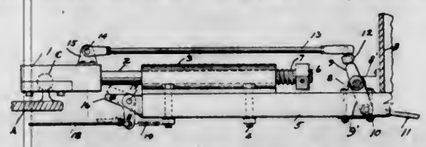
1. In a tow hook, in combination, a fixed jaw having an upper and a lower point opening rearwardly, a movable jaw pivotally supported upon the lower point of the fixed jaw, and in operative position extending upward to close the gap between the points of the fixed jaw, said movable jaw when unrestrained swinging into a downwardly and rearwardly inclined open position, and releasable means to retain said movable jaw in operative position.

1,824,844. TROLLEY CONTACTOR. SAMUEL S. STOLP, Louisville, Ky., assignor to Cheatham Electric Switching Device Company. Filed June 11, 1928. Serial No. 284,636. 8 Claims. (Cl. 246—254.)



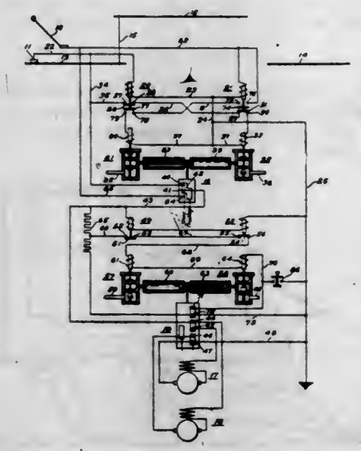
1. A trolley pan with a supporting bracket and a separable arc dissipator engaging said structure.

1,824,845. TRAILER BRAKE OPERATING MECHANISM. ROY L. STOUT, Oakland, Calif. Filed Sept. 21, 1927. Serial No. 220,877. 3 Claims. (Cl. 188—142.)



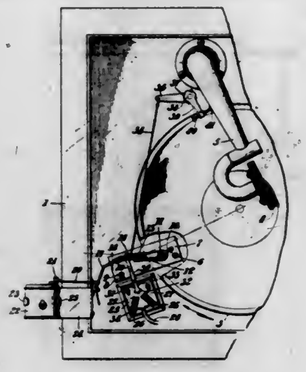
1. In a brake operating mechanism, a draw-bar adapted for extension from a vehicle and provided with a round shank, a tongue adapted for extension from a second vehicle and rigidly secured thereto and provided with a socket slidably engaging said shank, said shank provided with means limiting its slidable movement in said socket and providing a load pulling member, a brake actuating device for said second vehicle extending adjacent said tongue, a crank lever pivotally mounted on said tongue connected from one end to said device for operating the same, and a thrust rod extending past said socket and pivotally connecting the other end of said arm to said draw-bar, whereby a sliding of said draw-bar in said socket will operate said rocker arm and said brake actuating device.

1,824,846. CONTROL SYSTEM. WILLIAM R. TALIAFERRO, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 30, 1930. Serial No. 424,516. 6 Claims. (Cl. 191—3.)



1. In a motor-control system, in combination, electric motors disposed to be connected in series or in parallel-circuit relation, a plurality of supply conductors for the motors, means responsive to the energization of one of the supply conductors for automatically connecting the motors to said supply conductor, and means responsive to the voltage of said supply conductor for automatically connecting the motors in series or in parallel-circuit relation.

1,824,847. AUTOMATIC PHONOGRAPH STOP. EMIL TRAUB, Newark, N. J. Filed Apr. 14, 1928. Serial No. 270,100. 7 Claims. (Cl. 192—118.)

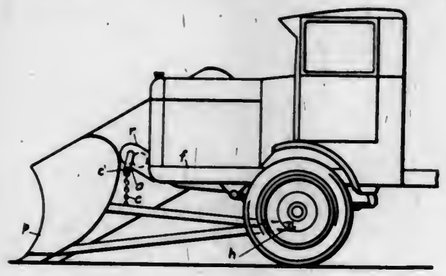


1. In a sound-reproducing apparatus having a rotatable record-table, a swinging brake-lever having its pivotal axis within the circumference of said record-table, a friction-element carried by the brake-lever positioned to engage and release the circumferential periphery of said table in swinging movements of the brake-lever in opposite directions, means acting to shift said brake-lever from braking to release positions and means for releasably latching said brake-lever in braking position.

1,824,848. BLASTING CARTRIDGE, PERCUSSION CAP, DETONATOR, DETONATING FUSE, AND THE LIKE. OLDŘICH TUREK, Pizen, Czechoslovakia. Filed Sept. 11, 1928, Serial No. 305,324, and in Czechoslovakia Oct. 13, 1927. 4 Claims. (Cl. 52—4.)

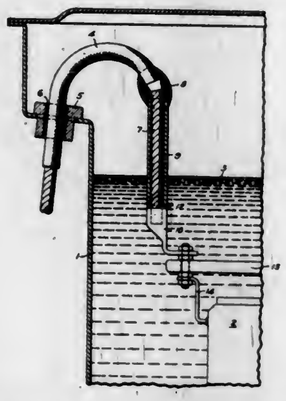
1. As a new explosive for use in blasting cartridges, percussion caps, detonators, detonating fuses, special projectiles and the like 2,4,6-trinito, 1,3,5-tri-azido benzene in admixtures with an azide of heavy materials.

1,824,849. LIFTING MECHANISM FOR SNOWPLOWS FOR MOTOR VEHICLES. MAURICE WALTER, New York, N. Y. Filed Apr. 18, 1929. Serial No. 356,027. 1 Claim. (Cl. 37—44.)



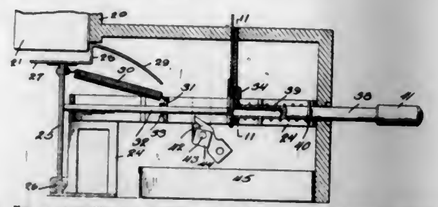
In combination with a vehicle, a snow plow, means to pivot the plow upon a vehicle, means to raise and lower the forward end of the plow comprising an arm, a connection between the arm and the plow, a uni-directionally operating electric motor for rotating the arm, a housing, a worm journaled in the housing and driven by the motor, a shaft journaled at its ends in the housing, a worm wheel on the shaft engaging the first worm, a worm on the shaft, and a worm wheel secured to the arm and engaging the second worm.

1,824,850. CABLE CONNECTER. WILLIAM R. WARD, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,268. 7 Claims. (Cl. 173—353.)



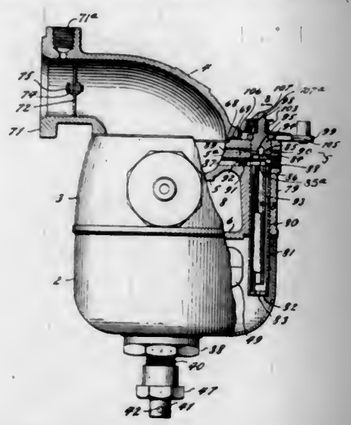
1. In combination, electrical apparatus immersed in oil, a stranded electrical conductor connected thereto and extending above the level of the oil, and means for preventing the passage of oil along said conductor comprising a tube terminal for receiving the end of the conductor and a fluid-tight covering extending from said terminal to a point above the oil level.

1,824,851. VENDING MACHINE. GORDON I. WATTERS, Knoxville, Ill., assignor to James V. Kennedy, Jacksonville, Ill. Filed June 12, 1929. Serial No. 370,315. 2 Claims. (Cl. 194—79.)



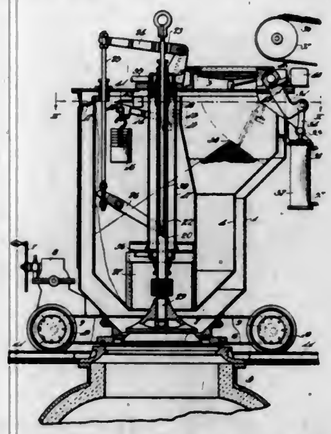
1. In a vending machine, a cabinet, a frame mounted substantially horizontally in the cabinet, a hollow plunger mounted in the forward end of the frame and biased to a forward position, a plunger rod mounted in the rear end of the frame in line with the plunger to receive the latter telescopically thereover when the plunger is depressed, a cross bar secured in the frame adjacent the normally disposed rear end of the plunger and having a plunger receiving opening therethrough, and a coin slot member secured through the wall of the cabinet and having a coin socket on its lower end fitting in said frame adjacent said cross member and in line with the forward end of the rod and having therein a coin receiving depression adapted to aline with the plunger receiving opening of the cross member, said coin socket having means for interlocking engagement with said cross member to hold the coin socket and the slot member in adjusted position within the frame.

1,824,852. CARBURETOR. WALTER H. WEBER, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a Corporation of Michigan. Filed May 11, 1927. Serial No. 190,483. 18 Claims. (Cl. 261—41.)



1. In a carburetor, a casing having a mixing chamber, main air and fuel inlets adapted to discharge into said mixing chamber, supplementary fuel and air supply means adapted to discharge into said mixing chamber, said fuel supply means comprising a well, a tube depending into said well and having communication with said chamber and said air supply means, said air supply means having communication with said well around said tube to admit air to the lower end of said tube, and a valve controlling communication with said well around said tube and controlling said supplementary fuel aid air supply means, said valve having means which in one position of said valve will permit admission of solid liquid fuel through said supplementary means to said mixing chamber and which in another position will permit admission of fuel and air through said supplementary means to said mixing chamber.

1,824,853. CHARGING DEVICE. GLEN R. WELLS, Fort Wayne, Ind., assignor to The Western Gas Construction Company, a Corporation of Indiana. Filed July 2, 1929. Serial No. 375,533. 6 Claims. (Cl. 214—18.)

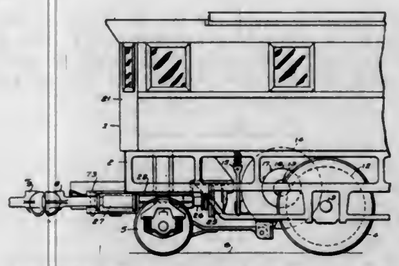


1. Fuel-charging apparatus for a gas generator which comprises, in combination, an enclosure adapted to be positioned over the charging opening of the gas generator, a charging valve located in said enclosure and serving as the charging door of said generator, an inlet door in said enclosure, a weigh hopper suspended within said enclosure beneath said charging opening, means for delivering fuel through said inlet door to said weigh hopper, said means being responsive to the position of said inlet door and the weight of said weigh hopper and its contents, whereby fuel is delivered to said weigh hopper when said inlet door is open and said weigh hopper contains less than a predetermined quantity of fuel.

1,824,854. EMPLOYMENT OF CEMENT AND THE LIKE. GERALD NOEL WHITE, London, England, assignor of one-half to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Nov. 3, 1927, Serial No. 230,931, and in Great Britain Nov. 10, 1926. 1 Claim. (Cl. 106—27.)

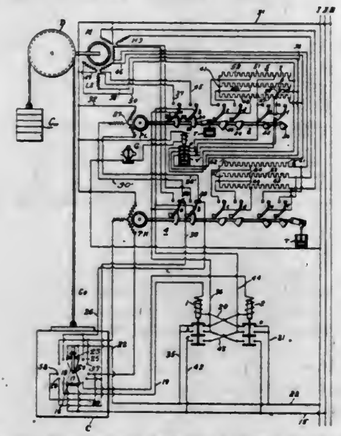
The method of settling the color and arresting incrustation on the exposed surfaces of set cementitious material which comprises incorporating 3 to 5% of commercial ammonia carbonate with a cement containing free lime and vat dye stuff colors reacting to form a colloidal precipitate binding the color.

1,824,855. PROTECTIVE MEANS FOR RAILWAY VEHICLE MOTORS. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 17, 1928. Serial No. 278,405. 20 Claims. (Cl. 105—49.)



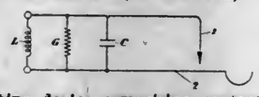
1. In an electrical locomotive, in combination, a draw-bar and means for oscillating the locomotive relative to the draw-bar.

1,824,856. ELEVATOR CONTROL SYSTEM. HAROLD W. WILLIAMS, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 27, 1928. Serial No. 265,003. 7 Claims. (Cl. 172—152.)



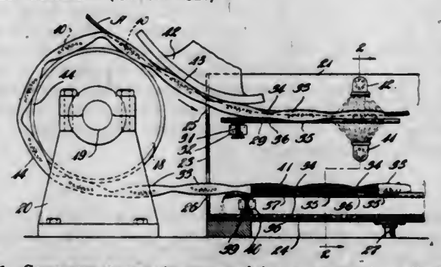
1. In a motor-control system, a multi-speed motor having a primary winding for each speed, a source of power, voltage-modifying devices in circuit with said windings, means for selectively connecting said windings to said source and for excluding said voltage-modifying means from the winding circuits, means operable by movement of said motor at a speed above synchronous speed of the lower-speed winding for preventing exclusion of a portion of the voltage-modifying means for that winding when that winding is connected to said source.

1,824,857. ELECTRICAL SWITCHING DEVICE. WILLIAM T. WINTRINGHAM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 21, 1929. Serial No. 387,425. 3 Claims. (Cl. 178—44.)



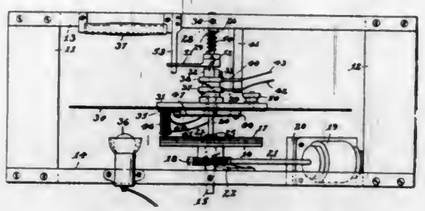
1. A switching device comprising contact members so positioned that an inherent capacity effect will exist therebetween, and an inductance shunted across said contact members and tuned to resonate with said capacity.

1,824,858. CONVEYER APPARATUS. WARREN K. WILLIAMS, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 9, 1931. Serial No. 507,585. 12 Claims. (Cl. 74—51.)



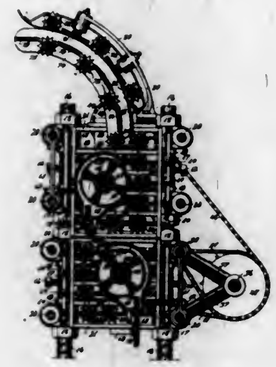
1. Conveyer apparatus comprising a support, a flexible carrier adapted to slide against said support, said support and carrier having cooperating bearing surfaces one of which is of resilient rubber composition and one of which is grooved for passage of a lubricant.

1,824,859. COLOR DISPLAY APPARATUS. WATSON H. WOODFORD, Bridgeport, Conn. Filed Mar. 31, 1930. Serial No. 440,220. 9 Claims. (Cl. 84—464.)



9. In a device of the character described, a rotatable transparent, variably colored disk, means for reflecting light through the disk, drive means for rotating said disk, an electromagnetic clutch acting between the drive means and the disk for rotating the latter in one direction, and means connected with the disk for rotating it in a direction opposite to that of the drive when released by the clutch.

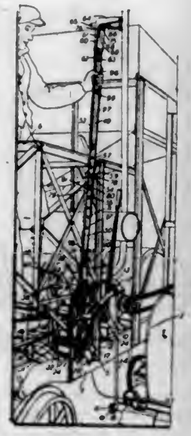
1,824,860. COATING MACHINE. ROBERT G. WOODS, Newton, Iowa, assignor of one-half to J. E. McAninch, Laurence L. Brierly, and James J. Engle, Newton, Iowa. Filed May 28, 1930. Serial No. 456,419. 15 Claims. (Cl. 91—41.)



1. An apparatus of the character described comprising a base, posts rising in spaced parallel relation from said base, similar material-coating assemblies in superposed relation carried by and independently adjustable vertically of said posts, each of said assemblies comprising a plurality of feeding rolls defining a passage about and adjacent one side of a rotatable brush element, and material feeding means on and in operative relation with the upper of said assemblies.

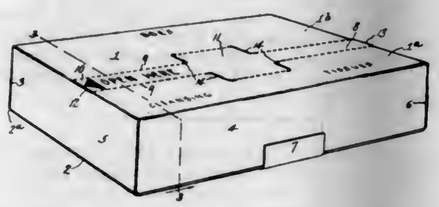
1,824,861. TILTING MECHANISM FOR HARVESTERS. WAYNE H. WORTHINGTON, Battle Creek, Mich., assignor to Gleaner Combine Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Apr. 11, 1930. Serial No. 443,493. 20 Claims. (Cl. 56—122.)

20. In a machine of the character described including a main frame, and a sub-frame adjustably mounted on the main frame, a ratchet wheel rotatably mounted on the main frame, means operably connecting the ratchet wheel with the sub-frame, an extensible actuating lever associated with the ratchet wheel for operating the ratchet wheel remotely of the machine, a pawl on the actuating



lever for engaging the ratchet wheel, means extensible with the actuating lever for drawing the pawl, a latching lever for engaging the ratchet wheel when the pawl is drawn, and extensible means operable from the actuating lever for shifting the latching lever.

1,824,862. DISPENSING CARTON. LLOYD V. YOUNG, Glenbrook, Conn., assignor to Pond's Extract Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 12, 1929. Serial No. 413,531. 6 Claims. (Cl. 229—51.)

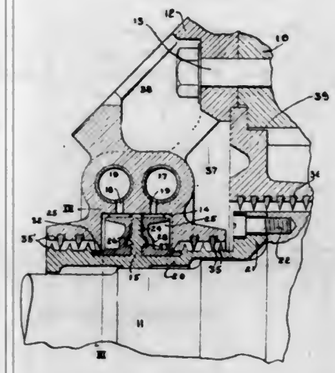


1. A dispensing carton having an elongated tear-out strip which is transversely enlarged in a portion of its length, the wall of the carton being weaker in the transverse portions of the lines defining said enlarged portion than in the longitudinal portions thereof.

1,824,863. PACKING GLAND. ROBERT C. ALLEN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 11, 1926. Serial No. 128,669. 5 Claims. (Cl. 286—9.)

1. In a fluid seal packing gland, the combination of a stationary member having an annular housing and sealing fluid inlet means communicating therewith, a rotating member extending into the stationary member and having

an imperforate flange unitary therewith extending into the housing, said flange being formed with a surface facing radially inwardly, a separate removable impeller element

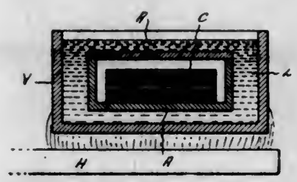


disposed at the side of the flange and abutting against said surface, and means for securing the impeller element in position.

1,824,864. PROCESS FOR TREATING TAR ACIDS. CLIFFORD BANTA and FRANK WELDON HIGHTOWER, Philadelphia, Pa., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 24, 1928. Serial No. 321,758. 13 Claims. (Cl. 260—154.)

1. A process for the reduction of the sulfur content of tar acid which comprises heating said acid in the presence of a compound containing an aromatic sulfonic radicle and in the absence of substantial amounts of aldehydes or sugars, and distilling the resultant product under diminished pressure.

1,824,865. PROCESS OF HEAT-TREATING METAL. JAMES J. BOWDEN, Warren, Ohio. Filed Dec. 29, 1930. Serial No. 505,353. 3 Claims. (Cl. 148—13.)

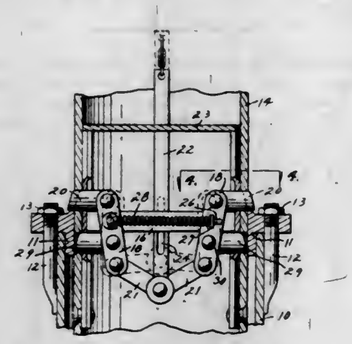


1. The method of heat treatment which consists in enclosing the charge to be treated in an air-tight and liquid-tight container, immersing said container with its contained charge in a molten heating agent and allowing it to remain so immersed until the charge assumes substantially the temperature of said molten heating agent.

1,824,866. SAFETY LATCH DEVICE. CYRUS J. BRISTOL, Des Moines, Iowa, assignor to Globe Machinery & Supply Company, Des Moines, Iowa, a Corporation of Iowa. Filed July 30, 1929. Serial No. 382,231. 5 Claims. (Cl. 254—73.)

1. In a safety latch device, the combination of a plunger, a flange through which the plunger is slidingly extended,

a support carried by the plunger, a lever pivotally and slidingly mounted on the support, a latch bar pivoted to the lever on one side of the support, a fulcrum pin pivoted to the lever on the opposite side of the support, a spring for normally holding the lever at its outer limit of movement relative to its support, said parts being so shaped

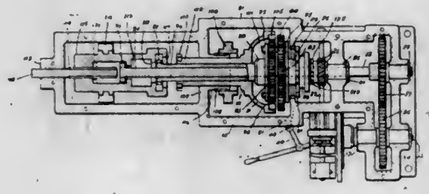


and proportioned that when the fulcrum pin engages said flange the latch bar will be held outwardly to engage the top of said flange and thereby prevent the downward movement of the plunger, and manually operated means for compressing the spring and withdrawing the latch bar.

1,824,867. METHOD OF PURIFYING A PHENOL BY DISTILLATION. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 15, 1928. Serial No. 306,293. 2 Claims. (Cl. 202—66.)

2. The method of producing a persistently water-white phenol, which comprises distilling such phenol and condensing the vapors thereof in contact with condenser surfaces consisting of metallic chromium.

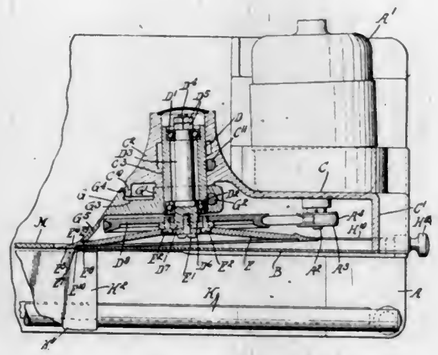
1,824,868. TRANSMISSION MECHANISM. WILLIAM L. BROOKINS, Cleveland, Ohio. Filed Mar. 30, 1929. Serial No. 351,344. 7 Claims. (Cl. 74—34.)



1. In a transmission mechanism a casing, a bearing sleeve fixedly supported within said casing, a drive shaft mounted within said bearing sleeve, a gear at the free end of said drive shaft, a driven shaft, a gear at the free end of said driven shaft, a spider comprising a pair of plates provided with hubs, one of said hubs being supported on

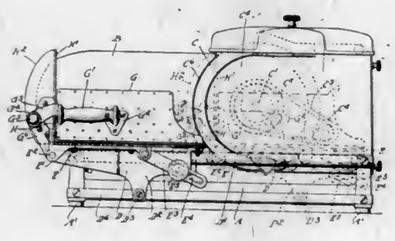
the fixed bearing sleeve of the driving shaft, said plates carrying pinions meshing respectively with said gears on said drive shaft and driven shaft, said pinions being connected to each other in pairs, a friction disc, means for driving said disc from said drive shaft, a friction wheel on a cross-shaft carrying a worm, and a worm wheel secured to the spider hub adapted to rotate the same and modify the driving action through the pinions in speed and direction in accordance with the speed and direction of said spider.

1,824,869. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed June 11, 1928. Serial No. 284,292. 2 Claims. (Cl. 146—102.)



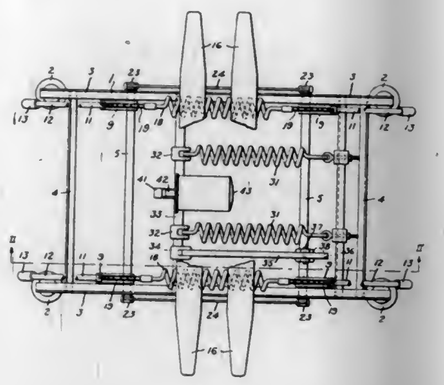
1. In a slicing machine, a supporting frame, a rotary knife, a knife shaft therefor, a bearing sleeve about said shaft and a guard mounted about said shaft and sleeve, the knife shaft, sleeve and guard being removable as a unit from the slicing machine frame.

1,824,870. KNIFE GUARD FOR SLICING MACHINES. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed June 8, 1929. Serial No. 369,448. 14 Claims. (Cl. 146—102.)



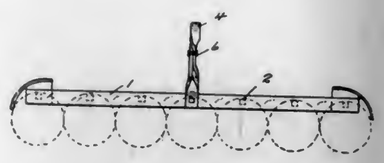
2. In association with a slicing machine including a knife and means for actuating it and a work supporting member and means for guiding it across the face of the knife, a guard, lying in a plane generally parallel with and closely adjacent the cutting plane, adapted to mask the cutting edge of the knife from the work support side at the termination of the cutting excursion of the work support, said guard having a generally straight edge generally perpendicular to the face of the work support, and an additional guard member, intersecting said first mentioned guard along said straight edge and extending outwardly away from the cutting plane.

1,824,871. PANTOGRAPH. JOHN A. CLARKE, Jr., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 6, 1927. Serial No. 238,193. 9 Claims. (Cl. 191—55.)



1. A pantograph-trolley structure comprising an extensible pantograph frame, a contact member carried by the frame and means for retracting the pantograph frame at a uniformly progressive decelerating speed.

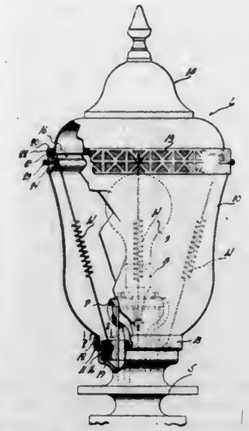
1,824,872. CAN HOLDER. HARRY C. CLAYBURGH, Oakland, Calif., assignor to Dawson Manufacturing Company, Oakland, Calif. Filed Nov. 11, 1929. Serial No. 406,349. 6 Claims. (Cl. 294—87.)



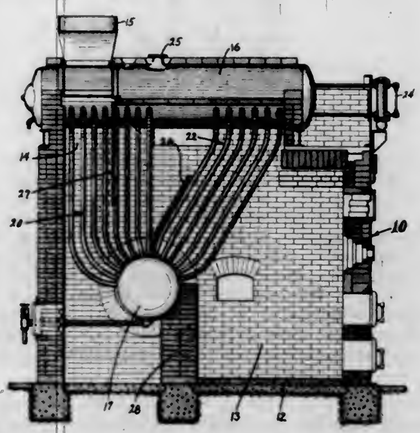
1. A device for lifting a plurality of adjacent cans disposed in parallel relation to each other, comprising a pair of cooperating members hingedly related to each other and adapted to engage the opposite ends of said cans, a plurality of projections extending at regularly spaced intervals from the inner surface of each of said members so as to engage the can rim at the opposite ends of each can, means for guiding a definite number of said cans into operative position with respect to said projections, and means for operating said members to engage and disengage said cans.

1,824,873. LIGHTING FIXTURE. GEORGE H. COLE, Milwaukee, Wis., assignor to Line Material Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 14, 1930. Serial No. 444,182. 4 Claims. (Cl. 240—25.)

1. In a lighting fixture of the character described comprising a support, a two part glass bowl mounted on said support, resilient means engaging one part of said bowl between said parts to resiliently urge said bowl onto said support, said other part being superimposed on the first part and on said means, and joined to said first part through an ornamental metal ring, substantially as described.

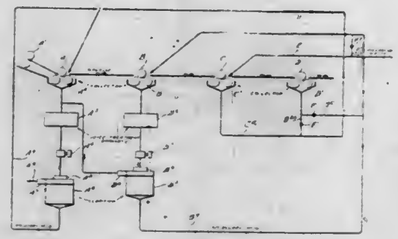


1,824,874. BOILER CONSTRUCTION. GLENVILLE A. COLLINS, San Marino, Calif. Filed Apr. 23, 1928, Serial No. 272,085. Renewed Feb. 14, 1931. 1 Claim. (Cl. 122—273.)



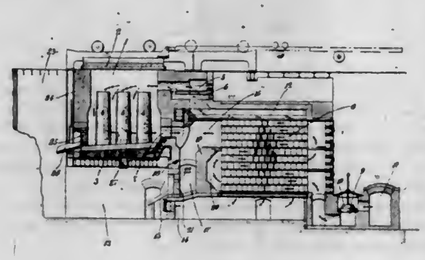
In a boiler including a furnace or combustion chamber and a smoke stack at the rear end in the upper portion thereof, a steam drum adjacent the top of the boiler and extending from the front to the rear thereof and a mud drum positioned below said steam drum, the longitudinal axis of said steam drum and the longitudinal axis of said drum being at right angles, a bank of tubes adjacent the rear of said steam drum connecting said steam drum and said mud drum, said tubes being vertical and curved adjacent said steam drum and said mud drum, the curvature of said tubes adjacent said steam drum being arranged at right angles to the curvature of said tubes adjacent said mud drum, another bank of tubes adjacent the front of said steam drum connecting said steam drum and said mud drum, said second bank of tubes being inclined from said mud drum upward and forwardly to said steam drum, said tubes being curved adjacent said steam drum and said mud drum said curved portions being disposed in planes at right angles to each other, a third curve in said second bank of tubes intermediate said first two curvatures, said third curvature being on a plane at right angles to said curvature adjacent said steam drum and in a direction opposite to the curvature adjacent said steam drum, a baffle plate between said first bank of tubes and said second bank of tubes and extending upwardly from said mud drum, the major portion of the length of the bottom of said steam drum being exposed to hot gases generated in said combustion chamber, a second baffle, said second baffle being vertically arranged between certain of the tubes of said first bank of tubes and extending downwardly from said steam drum and forwardly of said smoke stack.

1,824,875. SUGAR CANE PROCESS AND APPARATUS. EARLE M. COPP, San Juan, Porto Rico, assignor to Petree & Dorr Engineers, Inc., New York, N. Y., a Corporation of Cuba. Filed Nov. 22, 1928. Serial No. 321,066. 4 Claims. (Cl. 127—43.)



1. The method of ertracting sugar cane juice from sugar cane which consists in successively crushing the sugar cane in primary and secondary mill sections, separately defecating the extracted juice from the primary and secondary mill sections, returning the defecation mud from the primary circuit to the bagasse at a point subsequent to the primary mill section, and returning the defecation mud from the secondary mill section to the bagasse at a point subsequent to the secondary mill section.

1,824,876. RECUPERATIVE SOAKING PIT. ALBERT L. CULBERTSON, Mount Vernon, Ohio, assignor, by mesne assignments, to The Chapman-Stein Company, Mount Vernon, Ohio, a Corporation of Ohio. Filed Sept. 9, 1927. Serial No. 218,381. 4 Claims. (Cl. 263—15.)



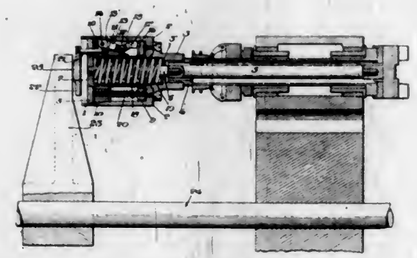
2. In combination, a soaking pit having passageways leading into one side wall thereof for admitting air and fuel thereto, a heat interchanger for preheating the air from the heat of the waste gases located on the outer side of and adjacent said side wall, said heat interchanger being connected to said air passageway and there being also a waste gas passageway leading from said side wall to said heat interchanger, a chamber beneath said soaking pit, a

slag pocket forming a depression in the bottom of said waste gas passageway and interposed between the soaking pit and heat interchanger, and means affording communication between said slag pocket and chamber.

1,824,877. CELLULOSE PROPIONATE AND PROCESS OF MAKING THE SAME. CAMILLE DREYFUS, New York, N. Y., and GEORGE SCHNEIDER, East Orange, N. J., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed July 20, 1928. Serial No. 294,309. 16 Claims. (Cl. 260—101.)

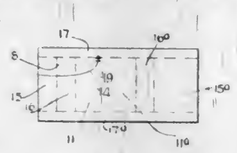
16. Cellulose propionate of high clarity and being soluble in benzol and butyl acetate.

1,824,878. CHUCK OPERATING MECHANISM. ALFRED E. DRISSNER, Cleveland, Ohio, assignor to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 10, 1928. Serial No. 311,495. 12 Claims. (Cl. 279—1.)



1. In an operating mechanism of the class described, the combination of a sliding member, a compresible spring for shifting said member in one direction, toggle levers for shifting the member in the opposite direction and movable means located interiorly of and in direct contact with said toggle levers for operating said toggle levers.

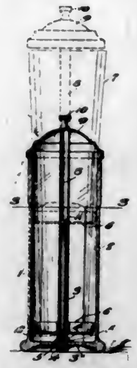
1,824,879. CIGARETTE WRAPPER AND PACKAGE. FRANCIS X. FIELDS, Queens Village, N. Y. Filed Jan. 9, 1929. Serial No. 331,371. 6 Claims. (Cl. 229—51.)



1. A package composed of a plurality of independent wrappers arranged one upon the other to form inner, outer and intermediate wrappers, and means attached at a predetermined point to the inner wrapper and extending around a portion of the intermediate wrapper and exposed outwardly through the outer wrapper whereby said wrappers may be severed along predetermined lines to form of predetermined sections of said wrappers a closure member movable into open and closed positions.

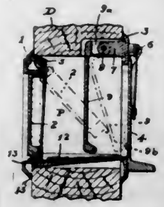
1,824,880. STRAW HOLDER AND DISPENSER. BRUCE L. FORBES, New Martinsville, W. Va. Filed June 17, 1930. Serial No. 461,674. 1 Claim. (Cl. 312—78.)

In a device of the character stated, a receptacle having an open top and a closed bottom, a guide rod extending upwardly from and detachably engaging said bottom, a tray slidable on said rod, a stop at the top of said rod for limiting the vertical movement of said tray, a closure for the open top of said receptacle, and a sleeve connecting said closure and said tray and slidable over said rod, the latter extending substantially to the midheight of said re-



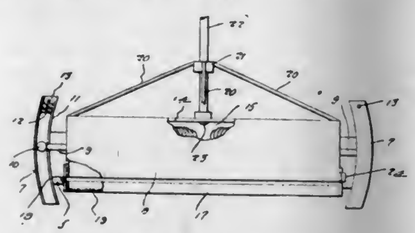
ceptacle, and said sleeve being substantially the same length as said receptacle, and having an inwardly deflected portion engaging said stop when elevated.

1,824,881. MAIL-RECEIVING DEVICE FOR DOORS. BENJAMIN F. FOSS, Portland, Me. Filed May 31, 1930. Serial No. 457,876. 3 Claims. (Cl. 232—45.)



1. In apparatus of the class described comprising in combination with an outer and an inner door-plate and two covers hingedly connected, respectively to said door-plates, an arm pivotally suspended between said door-plates, a foot on the lower end of said arm adapted to engage said inner cover when said arm is swung theretoward, said arm being so disposed in the apparatus as to lie normally in the path of movement of said outer cover and to be engaged thereby during a portion only of the swinging movement of said outer cover, said inner cover being raised by the co-acting movements of said outer cover and said arm.

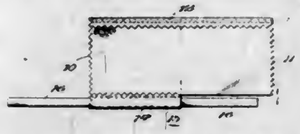
1,824,882. MEANS FOR MOUNTING THE PROPELLER AND ITS PRIME MOVER ON AN AIRCRAFT. CLIFFORD FRITZ, Milwaukee, Wis. Filed Jan. 14, 1931. Serial No. 508,742. 4 Claims. (Cl. 244—25.)



1. In combination a pair of oppositely disposed arcuate sleeves, a frame, pintles projecting from opposite sides of the frame and extending into said sleeves, balls on

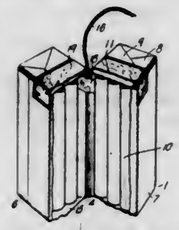
the ends of the pintles and arranged within the sleeves, means for mounting a prime mover within said frame, and a propeller operatively connected with the prime mover.

1,824,883. HAIR CURLER. NELL FULTON, New York, N. Y. Filed Nov. 9, 1929. Serial No. 405,982. 2 Claims. (Cl. 132—43.)



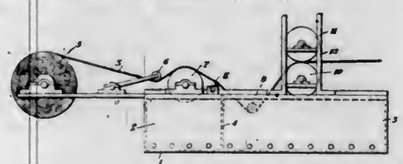
1. A hair curler, comprising a flexible body sheet adapted to be overturned on a transverse fold line for enveloping a lock of hair, a bendable stiffener extending throughout one longitudinal edge of said body sheet for holding the latter in overturned position, and a bendable tongue member secured to the opposite longitudinal edge of the body sheet throughout substantially one half the length thereof and at one side of said fold line, said tongue member having end portions projecting beyond the connected portion of the body sheet and adapted to be bent over upon the same subsequent to the rolling of the sheet with the enclosed lock of hair to retain the curler in position.

1,824,884. CIGARETTE PACKAGE. ROBERT C. GLENN and WILLIAM W. FERGUSON, Rich Hill, Mo. Filed June 10, 1929. Serial No. 369,820. 5 Claims. (Cl. 229—51.)



1. In a cigarette package including a container having separable overlapping inner and outer end flaps, and a cover provided with a longitudinal score line on the median line of the package, an opener comprising a thread-like member having one end anchored in the package adjacent the base of the outer end flap and extending between said flaps and over the cover.

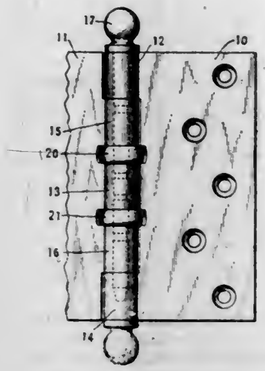
1,824,885. WAX PAPER. ANNING SMITH HAMMOND, Los Angeles, Calif., assignor to Western Waxed Paper Company, Oakland, Calif. Filed Aug. 24, 1926. Serial No. 131,148. 9 Claims. (Cl. 91—68.)



8. A wax sheet of paper consisting of paper stock impregnated with a low melting point wax, and an outer coating of wax on each side of the sheet, having a higher melting point.

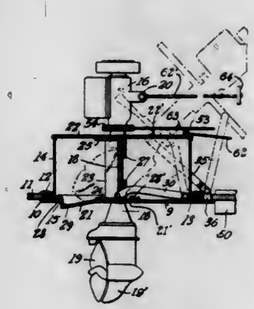
9. The method of making waxed paper consisting in first impregnating a strip of paper with wax having a low melting point and then applying to both sides of said strip wax having a higher melting point.

1,824,886. HINGE CONSTRUCTION. WALTER HENRY HART, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed June 19, 1929. Serial No. 372,042. 5 Claims. (Cl. 16—136.)



1. A hinge comprising leaves having coacting knuckles, a pin removably mounted in said knuckles for connecting the same, said pin formed with spaced peripheral grooves, antifriction devices positioned at each end of one of said knuckles, a sleeve mounted in the bore of said latter knuckle for holding said knuckle and antifriction devices together, and spaced rows of resilient beads formed on the interior of said sleeve and adapted to rest in grooves of said pin whereby said pin is yieldingly held in position.

1,824,887. MOTOR BOAT INSTALLATION. JAMES W. HARVEY, Falmouth Foreside, Me. Filed Sept. 23, 1930. Serial No. 483,780. 14 Claims. (Cl. 115—41.)

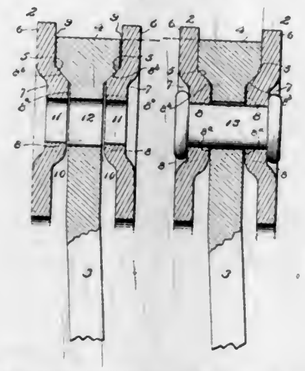


1. A motor installation including a casing, open at the top and bottom, a motor frame and two arms hinged to the lower part of the casing and to the upper and lower parts respectively of the frame.

1,824,888. TENSION WHEEL AND METHOD OF MAKING THE SAME. JOSEPH L. HECHT, Davenport, Iowa, assignor to French & Hecht, Incorporated, a Corporation of Iowa. Filed Sept. 11, 1930. Serial No. 481,118. 11 Claims. (Cl. 29—174.)

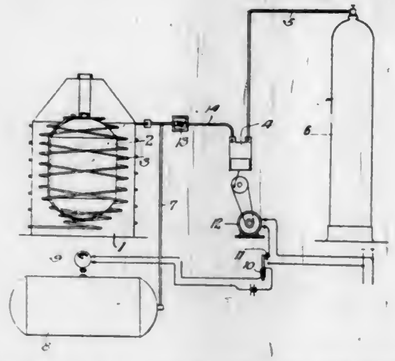
5. In the method of making tension wheels, the step of tensioning the spokes by subjecting the sides of the same at

one of their ends, to side pressure between annular sections constituting one of the annular members of the wheel, while causing said pressure to stretch the spokes endwise.



8. In a wheel, the combination of a hub, a rim member composed of two annular sections formed on their inner sides with inclined surfaces, tensioned spokes engaged at their inner ends with the hub, and provided at their outer ends with inclined side surfaces forcibly engaged with the inclined surfaces on the rim sections, and means acting on the rim sections to hold them forcibly engaged with the spoke ends to maintain the tension on the spokes.

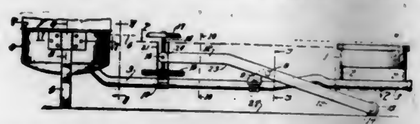
1,824,889. METHOD AND APPARATUS FOR PRODUCING COMPRESSED GASES FROM LIQUEFIED GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Lankwitz, Germany, assignor to Fluga Aktien-Gesellschaft, St. Moritz, Switzerland. Filed Nov. 12, 1927, Serial No. 232,923, and in Germany Dec. 15, 1926. 4 Claims. (Cl. 62—1.)



1. The method of producing compressed gases from liquefied gases, which consists in confining a liquefied gas in a closed vessel under heat control thereby to cause vaporization of the liquid, inducing a self-compression in the gas arising from said liquefied gas, and subjecting the self-compressed gas to a final mechanical compression.

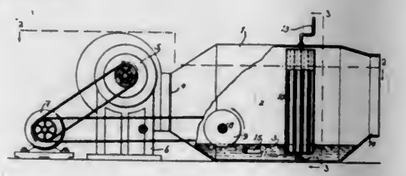
1,824,890. THERMOSTATICALLY CONTROLLED OIL-BURNER. DEWEY H. HILL, Macomb, Ill., assignor to Globe American Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Dec. 23, 1930. Serial No. 504,285. 18 Claims. (Cl. 236—6.)

1. An oil burning heater comprising a burner adapted to rock on a horizontal supporting surface, an oil supply member spaced horizontally from the burner; a rigid oil duct connecting the oil supply member with the burner; an inclined lever member pivotally connected on a horizontal pivot axis to the said duct and having the lower end portion of the lever member engaging the said sup-



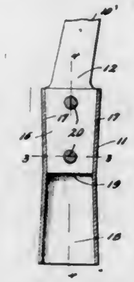
porting surface; and means operatively interposed between the lever member and the pipe for relatively moving the same, whereby to vary the elevation of the burner.

1,824,891. AIR CLEANING AND CONDITIONING APPARATUS. EARL VERNON HILL, Chicago, Ill. Filed Nov. 10, 1930. Serial No. 494,740. 11 Claims. (Cl. 183—24.)



1. In an air washing and humidifying apparatus, the combination of a casing member defining a washing chamber and a stationary eliminator therein, said eliminator being reversible about an axis fixed with respect to the casing so that opposite faces thereof may be alternately opposed to the incoming current of air.

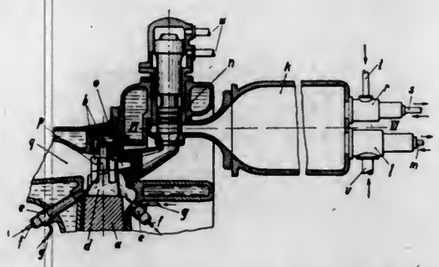
1,824,892. LEVER FOR SHAKING GRATES. HARRY A. HOKE, Altoona, Pa. Filed May 23, 1928. Serial No. 279,980. 1 Claim. (Cl. 287—108.)



In a lever for shaking locomotive grates, in combination, a metal shaker bar having an enlarged portion at one end, said portion being rectangular in cross section and having two parallel faces and two faces converging toward the end of the bar, a length of seamless steel tubing having walls of uniform thickness and substantially twice the length of said enlarged portion, a portion of said tubing closely fitting over said enlarged portion of said bar, means fastening said tubing and bar together and a portion of said tube extending beyond said bar and forming a socket to engage a shaker stud.

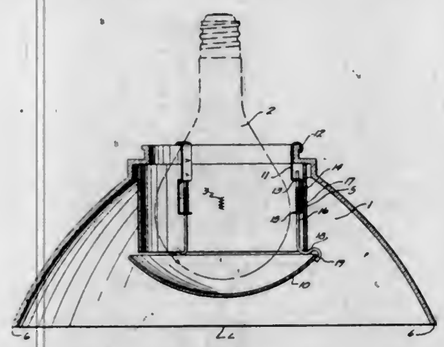
1,824,893. EXPLOSION TURBINE. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 8, 1929, Serial No. 353,458, and in Germany Apr. 21, 1928. 6 Claims. (Cl. 60—41.)

1. In an explosion turbine, the combination of a rotor having a blade-carrying portion at its periphery, said blade-carrying portion being provided with slots which divide such portion into a plurality of sections and permit expansion of such sections, means for directing combus-



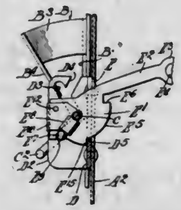
tion gases against the blades of said rotor, and means for charging a cooling medium to cool said blade-carrying portion.

1,824,894. COLOR SCREEN FOR REFLECTORS. ALFRED HOPKIN, Jr., Philadelphia, Pa., assignor to Pittsburgh Reflector Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 16, 1928. Serial No. 293,115. 6 Claims. (Cl. 240—1.)



1. The combination with a reflector, of a tubular screen and a concave screen therein, together with a clamp provided with a hook for engaging the reflector and reversely curved portions for engaging said screens.

1,824,895. HOOD LATCH. DIBRELL P. HYNES, Chicago, Ill., assignor to Chicago, Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1930. Serial No. 497,163. 14 Claims. (Cl. 292—218.)

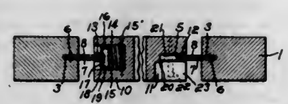


1. In securing means for a closure, a rod rotatably mounted upon the inner face of the closure, locking members on the rod, adapted to be moved into locking position in response to rotation of the rod, a handle for rotating the rod into and out of locking position, and means for holding the rod against rotation when it is in locking position, said means including an abutment substantially fixed in relation to the closure and an abutment adapted to move with the rod, said handle being adapted to bring said abutments into holding opposition when the rod has been rotated into locking position.

1,824,896. PROCESS OF PRODUCING REDUCTION PRODUCTS OF CARBON MONOXIDE. ALPHONS O. JAEGER, Chicago, Ill., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Sept. 9, 1925. Serial No. 55,393. 27 Claims. (Cl. 260—138.)

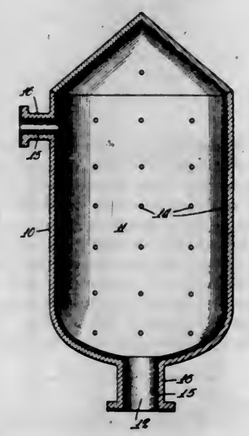
18. The method of preparing methyl alcohol which comprises causing carbon monoxide and hydrogen-containing gases to react in the presence of catalysts favoring only the production of formaldehyde, and causing the formaldehyde thus produced, without separation from the gas stream and in a separate stage, to react with further amounts of hydrogen in the presence of mild reduction catalysts and oxidation catalysts, the reduction catalysts being in such excess as to favor only the production of methyl alcohol.

1,824,897. WINDOW SCREEN. JOSEPH E. JOHNSON, Roslindale, Mass. Filed Apr. 15, 1930. Serial No. 444,407. 5 Claims. (Cl. 156—14.)



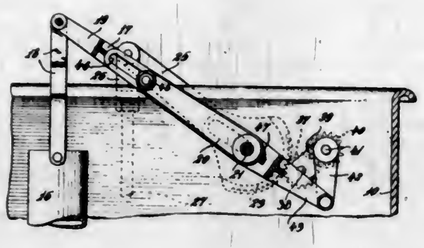
4. The combination, with an outside window casing having saw cut grooves formed longitudinally of the inner edges thereof, of a guide strip formed of longitudinally folded sheet material inserted in each of said grooves with its folded edge protruding from said groove, and means to secure its guide strips in said grooves.

1,824,898. LINED TANK OR PRESSURE VESSEL. WALLACE C. JOHNSON, East Orange, N. J., assignor to Industrial Welded Alloys Inc., Newark, N. J., a Corporation of Delaware. Filed Jan. 31, 1930. Serial No. 424,759. 4 Claims. (Cl. 220—63.)



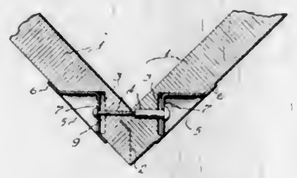
1. A tank or pressure vessel having a liner of corrosion resistant alloy anchored at a series of points spaced lengthwise and circumferentially of the vessel and spaced from the wall of the vessel at the points of anchorage.

1,824,899. RECEPTACLE FILLING APPARATUS. ELLIS L. JONES, Long Island City, N. Y., assignor, by mesne assignments, to American Sealcone Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 19, 1929. Serial No. 408,232. 9 Claims. (Cl. 226—102.)



1. In receptacle filling apparatus, a tank arranged with an outlet tube having the entrance thereto above the liquid level in the tank, a dipper slidable on the tube to deliver the liquid to the tube entrance, a rock shaft rotatably mounted in the tank, an open frame having slots in the end members thereof engaged by the shaft for mounting the frame on the shaft to have pivotal movement about the axis of the shaft and transversely of the shaft and connected to the dipper, and means connecting the shaft with the frame to transmit rotative movement and movement transversely of the shaft to the frame to actuate the dipper relative to the tube without lateral stress in said actuation.

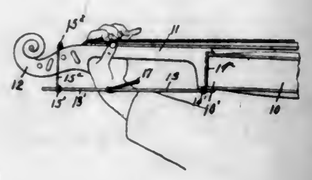
1,824,900. CORNER JOINT. JACOB M. KAUFMAN, Detroit, Mich., assignor to American Show Case & Mfg. Co., Detroit, Mich., a Corporation of Michigan. Filed Apr. 27, 1929. Serial No. 358,505. 4 Claims. (Cl. 20—92.)



1. A device of the character described comprising abutting members arranged at substantially right angles to each other and having their meeting ends mitered, sockets formed in said abutting members adjacent the ends thereof, plates engaging said members around said sockets, indents formed in said plates and received in said sockets in a manner whereby the bottom of said indent lies substantially parallel to a line bisecting the meeting angle of said members, and means passing through said members and received in said indents for drawing said plates towards each other to secure said members together.

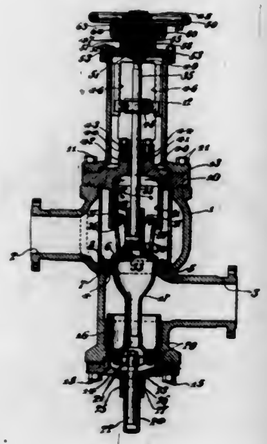
1,824,901. VIOLIN ATTACHMENT. JOEL H. KESSLER, Brooklyn, N. Y. Filed Jan. 5, 1931. Serial No. 506,592. 7 Claims. (Cl. 84—281.)

1. In a violin attachment, a hand guide comprising a member adapted to extend below the neck portion of a violin and be attached to the violin so as to bear against the side portion of the wrist of the player's hand and means adjustably mounted on said member so as to bear against the inner part of said wrist, said member being suspended from the violin by pairs of arms fixed to the



ends of said member, one pair embracing the neck portion of the violin and another pair suspended from the body thereof.

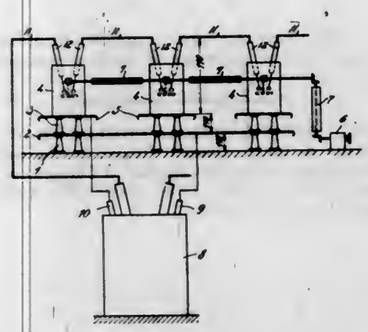
1,824,902. VALVE. PAUL W. KNAUF, Cynwyd, Pa., assignor to Schutte and Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1930. Serial No. 419,790. 4 Claims. (Cl. 277—37.)



1. A valve structure of the character described comprising a valve casing, a movable valve member located in said casing for closing an opening therethrough, said valve member having a hollow guiding stem and also having an opening therethrough in communication with the opening through the said guiding stem, a valve for closing said opening, said valve having a stem which is exposed to the atmosphere, and a tail rod having connection with the said hollow stem and being exposed to the atmosphere, the diameters of the said tail rod and the stem for the second named valve being approximately equal.

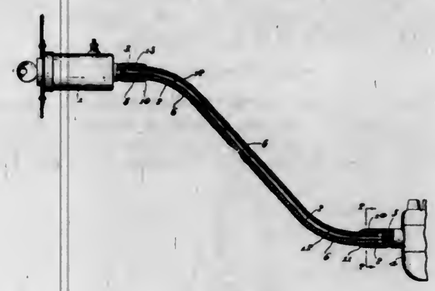
1,824,903. SWITCHING EQUIPMENT CONTROLLING HIGH-VOLTAGE DISTRIBUTING LINES. ALEXANDER KÜHNS, Berlin-Charlottenburg, and FRITZ KESSELRING, Berlin-Hermsdorf, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Nov. 20, 1928, Serial No. 320,693, and in Germany Nov. 24, 1927. 4 Claims. (Cl. 175—298.)

1. Electric switching equipment for controlling high voltage distributing lines, consisting of a plurality of circuit breakers connected together for simultaneous operation, individual insulating structures upon which said circuit breakers are mounted, and leads, insulated from the supporting structure of each breaker, for connecting said circuit breakers in series, said circuit breakers being di-



mensioned for a rupturing voltage which is lower than the service voltage, and the insulating structure for each circuit breaker being insulated from ground for a voltage equal the service voltage less the rupturing voltage of the circuit breakers.

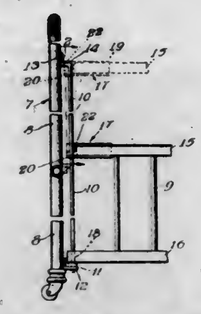
1,824,904. MEANS FOR PREVENTING THE STRETCHING OF FLEXIBLE ARMOR FOR ELECTRIC CONDUCTORS. FREDERICK W. KULICKE, Philadelphia, Pa., assignor, by mesne assignments, to The Electrolock Manufacturing Company, Vicksburg, Miss., a Corporation of Mississippi. Filed Apr. 6, 1928. Serial No. 268,048. 5 Claims. (Cl. 173—267.)



1. The combination of an electric conductor, a flexible armor for protecting said conductor, flexible non-stretchable means associated with the said armor and conductor, and means for inclosing and permanently anchoring the opposite ends of the said flexible non-stretchable means.

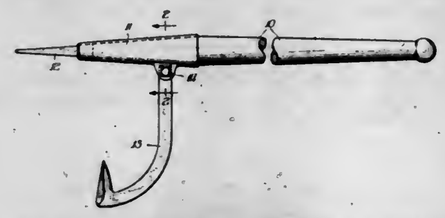
1,824,905. CRIB LOCK. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 13, 1927. Serial No. 160,792. 6 Claims. (Cl. 5—100.)

1. The combination with crib posts, of guide rods on said crib posts having top portions, a crib side slidable on the rods, and means on the top rail of the sliding side to detachably engage over the top portions of the guide rods, said means including a slotted plate mounting the side to swing laterally on the rods and having a downturned portion adapted in one position to fit over the top



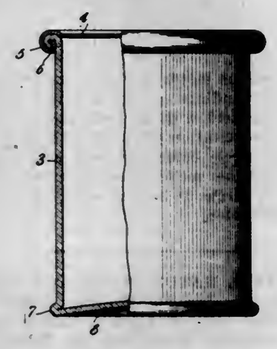
portion of the guide rod to support the side in a raised position or to be disengaged therefrom to permit sliding of the side.

1,824,906. PEAVEY SOCKET. ELBERT C. LEACH and JAY F. DOORNBOS, Oshkosh, Wis., assignors to Leach Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Feb. 12, 1930. Serial No. 427,744. 8 Claims. (Cl. 294—17.)



1. An improved peavey socket, consisting of a forwardly tapering sheet metal shell having a longitudinally extending edge joint and a pair of spaced laterally extending ears cupped toward each other at opposite sides of the joint for the reception therebetween of a hook.

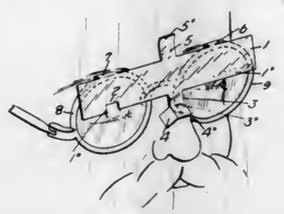
1,824,907. CONTAINER. HERMAN B. LERMER, Newark, N. J., assignor to Hygienic Tube Co., Newark, N. J., a Corporation of New Jersey. Filed Aug. 9, 1929. Serial No. 384,571. 1 Claim. (Cl. 229—5.5.)



A container comprising a cylindrical body composed of transparent impermeable and limitedly flexible material, an arcuately raised bottom of the same material integral with

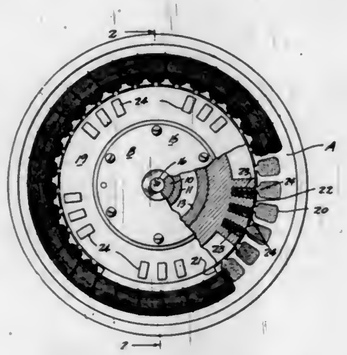
the body, said bottom having a bead at the juncture of the body and the bottom, a metallic cap fitting over the bottom and around the bead, and a metallic cover adapted to be crimped together with the upper edge of the body to provide an air tight joint.

1,824,908. MOTORIST'S EYE SHIELD. FREDERICK WILLIAM MAGEE, London, Ontario, Canada, assignor of one-half to Thomas William Baker, London, Ontario, Canada. Filed Nov. 1, 1929. Serial No. 404,131. 3 Claims. (Cl. 2—13.)



1. A motorist's eye shield comprising a shield body, a resilient tongue extending from the lower edge of the shield body to form a nose rest, a resilient tongue extending upwardly from the upper edge of the shield body and adapted to bear against the forehead of the wearer, and means at each side of the upper tongue for engaging the upper edges of spectacle rims worn by the wearer.

1,824,909. ELECTRIC MOTOR. OTIS C. MARTIN, Los Angeles, Calif. Filed Apr. 28, 1930. Serial No. 447,909. 11 Claims. (Cl. 172—120.)



1. A synchronous motor having a rotor member and a stator member, windings on one of said members to produce a magnetic field with an even number of field poles spaced along an excitation arc at equal angles, the remaining arc of the circle being unwound and constituting a neutral arc, the other member having salient poles equally spaced about a circle at angles equal to the angles between said field poles.

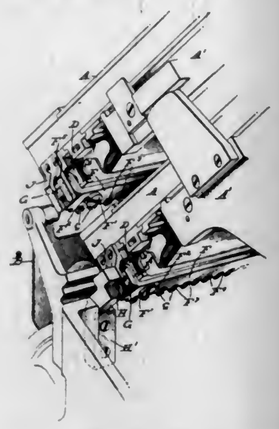
1,824,910. STEEL HATCH COVER FOR SHIPS. ROBERT MACGREGOR, London, England, assignor to MacGregor & King Limited, London, England, a Company of Great Britain. Filed Oct. 22, 1930, Serial No. 490,349, and in Great Britain Nov. 8, 1929. 3 Claims. (Cl. 114—202.)

1. In a ship's hatch, the combination of a stepped-topped hatch coaming, cover plates adapted to slide along lower step portions of said stepped top and having their upper surfaces flush with an upper portion of said stepped top, and other cover plates adapted to reside on said upper or-



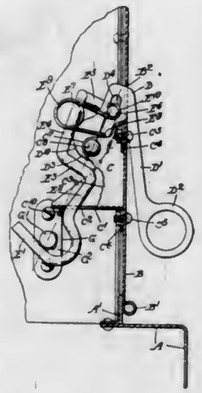
tion of the stepped top and to slide on to the covers on the lower steps so as to reside thereon in superimposed fashion.

1,824,911. TYPOGRAPHICAL COMPOSING MACHINE. RICHARD R. MEAD, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Dec. 21, 1929. Serial No. 415,643. 21 Claims. (Cl. 199—20.)



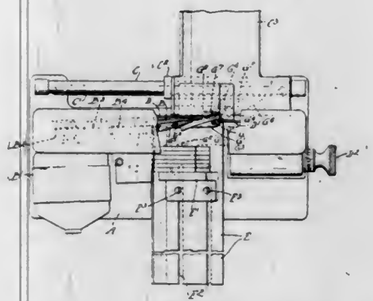
1. In or for a typographical composing machine, a matrix magazine equipped with a series of matrix releasing escapements and with a longitudinally adjustable locking plate to cooperate with said escapements in preventing or permitting their actuation.

1,824,912. HOOD LATCH. NORTON A. MEARS, Chicago, Ill., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1930. Serial No. 493,946. 8 Claims. (Cl. 292—113.)



1. In a hood closure securing means, the combination, with a hinged door member to be latched, of a keeper within the hood, an actuating lever pivoted to the hood, for rotation about a horizontal axis generally parallel with the inner face of the hood, including an outwardly extending handle portion, a latch pivoted to said lever within the hood, said latch including a hook, said lever being slotted to receive an end of said latch, and yielding means for holding said latch end at a predetermined position in said slot.

1,824,913. STACKER. ABNER LEMUEL MILLIGAN, Atlanta, Ga., assignor to American Slicing Machine Co., Chicago, Ill., a Corporation of New York. Filed Sept. 12, 1929. Serial No. 391,992. 4 Claims. (Cl. 146—94.)



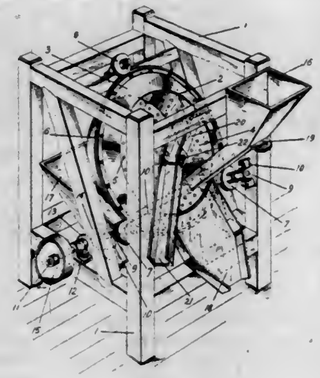
1. In combination with a slicing machine, including a rotary knife and means for rotating it, a carriage and means for guiding it across the face of the knife, a slice receiver, positioned on the side of the knife opposite to the carriage and means for moving slices on said slice receiver, away from the cutting plane of the knife, including a lever member mounted adjacent the slice receiver, and a slice engaging member pivoted to said lever member, and means tending normally to rotate said lever and to move said slice engaging member against the slices positioned on the slice receiver.

1,824,914. MANUFACTURE OF CHROMED COMPLEXES OF AZO AND ORTHO-HYDROXY-AZO DYESTUFFS. HENRY MIROCOURT, Sotteville-Lez-Rouen, France, assignor to Compagnie Nationale de Martieres Colorantes et Manufactures de Produits Chimiques du Nord Reunies, Etablissements Kuhlmann, Paris, France, a Corporation of France. Filed Aug. 20, 1928, Serial No. 300,977, and in France Mar. 15, 1928. 1 Claim. (Cl. 260—12.)

Process for the manufacture of chromed complexes of azo and ortho-hydroxy-azo dyestuffs by treating the dyestuff with a chromium salt of an aromatic sulphonic acid of the group consisting of benzene and naphthalene mono- and polysulphonic acids.

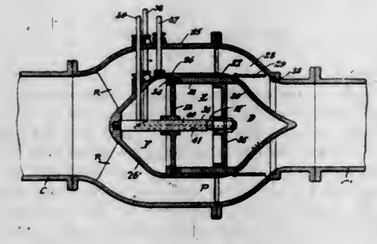
1,824,915. APPARATUS FOR SEPARATING GRAIN OR SEED OR THE LIKE. JOHN NANKIVELL MITCHELL, Strathfield, near Sydney, New South Wales, Australia. Filed Dec. 19, 1927, Serial No. 241,175, and in Australia Dec. 23, 1926. 8 Claims. (Cl. 209—1.)

1. In a grain or like separator, a pan provided with an open mouth the walls of which mouth are reversely angularly inclined to the walls of the rear of the pan which are perforated, a frame on which the said pan is adapted to be disposed angularly and to be rotatable thereon, whereby during the rotation of the said pan light and coarse substances of the material fed to said pan will be discharged from the mouth of the pan and delivered from the apparatus, dust from said material will pass through



the perforated walls of the pan, and means associated with the pan for receiving and discharging good grain from the apparatus.

1,824,916. VALVE. LEWIS F. MOODY, Philadelphia, Pa. Filed Nov. 17, 1926. Serial No. 148,810. 9 Claims. (Cl. 137—139.)

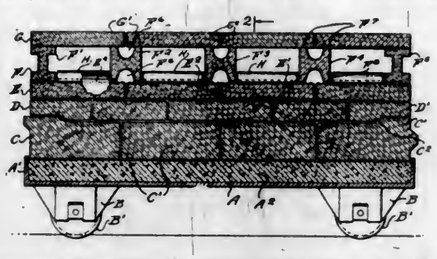


1. A fluid receiving and controlling valve, including a valve body arranged to be connected to a fluid conveying conduit, said valve being arranged to receive flowing fluid at one end and to control its discharge from the opposite end, a valve seat arranged in said body, a movable plunger adapted for cooperation with said seat, a fixed valve element within said body and having a conical head at one end adapted to telescopically receive said movable plunger at its opposite end, said valve element providing an annular waterway within said body, a piston movable with said plunger, a fixed tubular member within said valve element, a fixed diaphragm carried by the end of said tubular member and arranged to fit within said plunger, said valve member, plunger, piston and diaphragm providing three tandem pressure chambers adapted to receive pressure fluid from said conduit, and means for controlling the relative pressure in all of said chambers.

1,824,917. KILN CAR CONSTRUCTION. GEORGE D. MORRIS, New Castle, Pa., assignor to New Castle Refractories Company, New Castle, Pa., a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,114. 8 Claims. (Cl 25—142.)

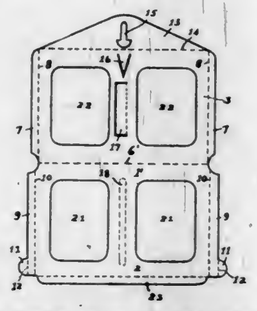
1. A tunnel kiln car having a superstructure comprising a plurality of refractory slabs having adjacent edge sur-

faces forming longitudinally and transversely extending joints, a plurality of supporting girders extending transversely of said car and positioned over said transversely



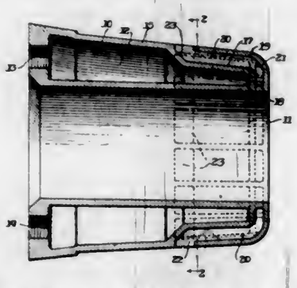
extending slab joints, and cover plates mounted on said slabs between said transverse girders and extending over said longitudinally extending slab joints.

1,824,918. PRICE CARD DISPLAY HOLDER. FRED O. NELSON and CLIFFORD A. FOGEL, Pittsburgh, Pa. Filed May 31, 1930. Serial No. 458,746. 6 Claims. (Cl. 40—5.)



1. A card display holder, of the character described, comprising in combination, a casing constructed from an integral sheet of material bent upon itself to provide spaced and parallel disposed front and rear walls having a closed bottom, the end edge margins of said rear wall being bent forwardly, the end edge margins of said front wall being bent rearwardly and overlapping the respective forwardly extending edge margins of said rear wall, ears carried by the end edge margins of said front wall and engaging said rear wall for securing said front and rear walls in their relative positions, said front wall being provided with a plurality of openings.

1,824,919. TUYÈRE. LOUIS M. NESSELBUSH, Youngstown, Ohio, assignor to The Falcon Bronze Company, Youngstown, Ohio, a Corporation of Ohio. Filed July 17, 1929. Serial No. 378,827. 6 Claims. (Cl. 122—6.6)



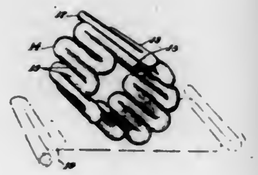
1. A tuyère of integral metal having in combination, a water compartment and a compartment for refractory material located in the nose thereof, and surrounding a portion of the water compartment and metallic webs extending between the outer wall of said second named compartment and the wall between said water and refractory compartment.

1,824,920. EXERCISING DEVICE. LEON NOVAK, Cleveland, Ohio. Filed Nov. 3, 1928. Serial No. 317,052. 7 Claims. (Cl. 272—57.)



1. An exercising device adapted to be pushed outwardly from and pulled inwardly toward the user, including a pair of wheels arranged in tandem relationship, a member connecting them, and hand grips extending laterally from the member in opposite directions and intermediate the wheels.

1,824,921. VEHICLE HEATER. JOHN R. OISHEI, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed May 11, 1927. Serial No. 190,519. 2 Claims. (Cl. 237—241.)

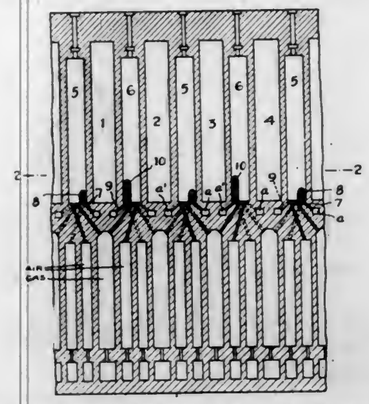


1. In a warm-air vehicle heater, a flexible air-pre-heater body formed from a single length of pipe folded back and forth upon itself in zigzag formation to provide a flexible body with a circuitous passage therethrough open at its opposite ends, said body being foldable about the exhaust line of the vehicle with the superimposed legs of the folds extending substantially parallel to the axis of the exhaust line, the opposite ends of the pipe being extended from each other in opposite directions: and means for securing the flexible body folded about the exhaust line.

1,824,922. REGENERATIVE COKE OVEN. CARL OTTO, Essen-Ruhr, Germany. Filed Jan. 23, 1928, Serial No. 248,940, and in Germany Feb. 28, 1927. 1 Claim. (Cl. 202—142.)

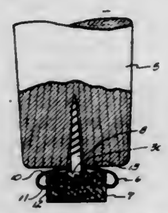
In a regenerative coke oven battery, provided with a series of alternate horizontally elongated oven chambers and heating walls therefor, arranged side by side in a row, each heating wall comprising a row of vertical combustion flues, regenerators extending below and in the direction of the oven chambers, strong gas distributing channels located below the bottom of each of said oven chambers and above the regenerators, a strong gas supply main, means for communicably connecting said channels to the main,

means for alternately supplying strong gas from said main to the distributing channels located below alternate oven chambers and to the distributing channels located below



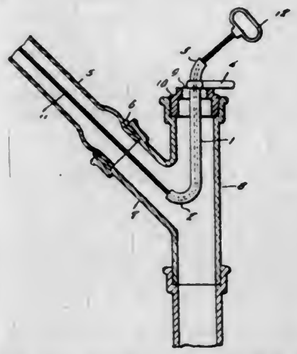
the chambers intermediate said alternate chambers, and conduits communicably connecting said distributing channels with the heating flues.

1,824,923. FURNITURE SHOE. FRED A. PARSONS, Milwaukee, Wis. Filed Mar. 24, 1928. Serial No. 264,310. 6 Claims. (Cl. 45—137.)



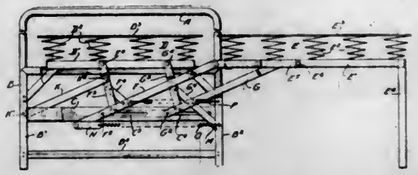
4. A device for supporting an article of furniture, or the like, comprising the combination with a member attached underneath said article and provided with a substantially flat bottom surface terminating in a centrally and upwardly projecting margin, of a pad removably confined within said margin to normally project beneath said surface.

1,824,924. GUIDE FOR PIPE CLEANING RODS. EDWIN PAUL and JOHN MANTONYA, Albuquerque, N. Mex. Filed May 25, 1931. Serial No. 539,882. 1 Claim. (Cl. 15—104.36.)



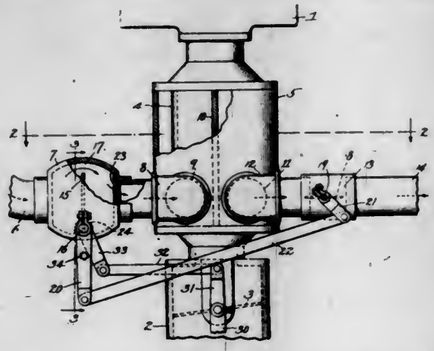
A guide for pipe cleaning rods comprising an elongated tube having one end portion longitudinally curved, a goose neck formed integrally with the other end of the tube, and a laterally projecting supporting arm rigidly mounted on the tube.

1,824,925. FOLDING BED. ANGELO PITTONI, Lynbrook, N. Y., assignor to The Rome Company, Inc., Rome, N. Y., a Corporation of New York. Filed Aug. 22, 1928. Serial No. 301,185. 6 Claims. (Cl. 5—22.)



1. A couch bed comprising a main stationary frame, an inner movable bed section, a movable extension bed section normally positioned above said inner bed section and movable relatively thereto to a position at one side thereof, a spring mattress structure for each of said bed sections, and mechanism for guiding the movements of said bed sections in an upright condition, said mechanism comprising a pair of levers at each end of said bed, each of said levers having a fixed pivot connection with each of said spring structures and a movable pivot connection with said stationary frame.

1,824,926. CONTROL MEANS FOR HEATING FUEL MIXTURES SUPPLIED TO INTERNAL COMBUSTION ENGINES. FRANK POKORNY, Mamaroneck, N. Y. Filed Oct. 10, 1924. Serial No. 742,763. 2 Claims. (Cl. 123—122.)

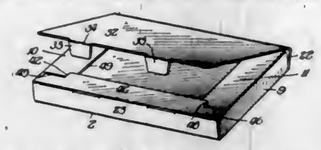


1. The combination, in an internal combustion engine, having a fuel mixture supply passage-way, of separate bypass pipes for leading hot gases from the engine exhaust respectively to and away from contact with said supply passage-way, respective control means for said separate pipes, and connecting means between said respective control means causing the latter to both close and open in unison.

1,824,927. FOLDING CARTON. HENRY K. POWELL, Chicago, Ill., assignor to Morris Paper Mills, Chicago, Ill., a Corporation of Illinois. Filed Mar. 11, 1929. Serial No. 345,936. 5 Claims. (Cl. 204—44.)

1. In a folding paper box, a blank having longitudinal and transverse creases defining a bottom portion, additional transverse creases defining end members joined to the bottom portion and end flaps joined to the end members, said end flaps being adapted to lie parallel to the bottom portion when the box is folded, additional

longitudinal creases and transverse slits defining forward and rearward sides joined to the bottom portion, an outside cover member joined to the rearward side, and a relatively narrow member joined to the forward side adapt-



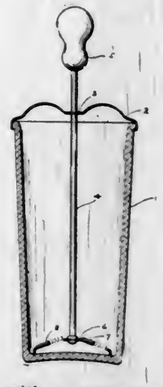
ed to overlap said end flaps and form longitudinal retaining means for the contents of the box when the box is folded, and means for holding said member and said flaps in position when the outside cover is open.

1,824,928. PROCESS AND APPARATUS FOR DEGUMMING, WASHING, AND DRYING OF FIBERS. REUBEN LEVI PRITCHARD, Hampstead, London, England. Filed Dec. 20, 1928, Serial No. 327,417, and in Great Britain June 14, 1928. 11 Claims. (Cl. 8—19.)



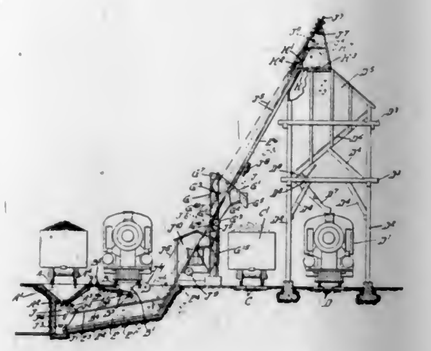
2. Apparatus for the treatment of fibers with currents of fluid, comprising an open ended and covered tray in which the fibers are arranged vertically lengthwise in a more or less parallel condition, means for maintaining the fibers in a separated condition, and means for causing a current of fluid to flow through said tray lengthwise of the said fibers.

1,824,929. DRINK MIXER. WILLIAM C. PRITCHARD, Columbia, Pa., assignor to Toddy, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 21, 1930. Serial No. 476,851. 1 Claim. (Cl. 259—113.)



The combination, with a receptacle, of a cover seated on the mouth of the receptacle, said cover having an aperture through the center thereof, a rod extending slidably through said aperture into the receptacle, and an agitator on the end of the rod within the receptacle, said agitator consisting of a substantially conical disk connected at its vertex to said rod and a cylindrical skirt depending from the base thereof, said disk being provided on its inclined face with concentric circular rows of radial slots, the slots of one row being staggered relative to the slots of the next row, each slot having a deflecting plate extending along one of its edges and above the convex surface of the disk, the plates of one row of slots being inclined relative to said surface oppositely to the plates of the next row.

1,824,930. COMBINED COAL AND CINDER HANDLING PLANT. CLYDE P. ROSS, Chicago, Ill. Filed Jan. 8, 1927. Serial No. 159,833. 12 Claims. (Cl. 214—1.)



1. In a combined coal and cinder plant, a coal car track, a locomotive decindering track, a coal receiving member beneath the coal car track, a cinder receiving member beneath the decindering track, a coal receiving track and a cinder receiving track, laterally spaced from the coal car track and the decindering track, and conveying means adapted to receive a load selectively from the coal car track and from the decindering track and to deliver the load so received, selectively, above the cinder car track or the coal receiving track, including a hoist bucket, and means for guiding it beneath the two first mentioned tracks and above the last two tracks, said guide means including an inclined portion extending upwardly of and laterally over the said last two tracks, individual bucket discharging stations on the inclined guide means substantially vertically alined with the respective coal and cinder receiving tracks, and at substantially different elevations thereabove, and selectively operable means for delivering to the hoist bucket a load from the first two tracks and selectively operable means for dumping the hoist bucket above the second two tracks.

1,824,931. COATING DAMP OR WET STONE. SAMUEL S. SADTLER, Chestnut Hill, Springfield Township, Montgomery County, Pa., assignor to Amiesite Asphalt Company of America, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 18, 1927. Serial No. 213,973. 12 Claims. (Cl. 106—31.)

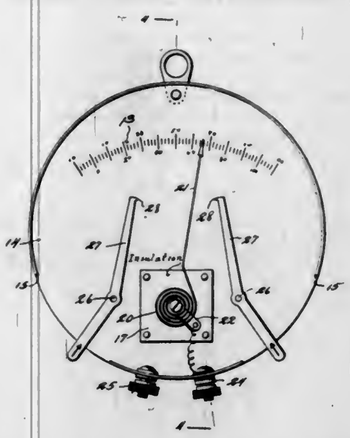
4. The method of preparing a paving material from damp stone, which comprises agitating said stone in a mixer and dispersing upon said agitated stone a thin layer of bentonite, thereafter adding a volatile hydrocarbon to the mass of agitated coated stone and distributing said hydrocarbon over said coated stone, thereafter adding hot asphalt to the mass and continuing the agitation until the asphalt has been distributed over said coated stone.

1,824,932. PICKLING OF STAINLESS STEEL. NATHAN H. SCHERMER, Youngstown, Ohio. Filed Aug. 21, 1930. Serial No. 476,947. 12 Claims. (Cl. 148—8.)

6. The method of removing the scale from stainless steel alloys which consists in treating the alloys with a solution containing from about 1% to about 5% of sulphuric acid and from about 1% to about 5% of sodium nitrate.

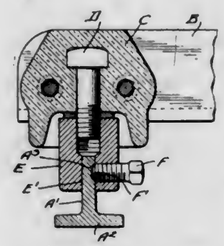
12. A solution for removing the scale from stainless steel alloys containing from about 1% to about 5% of sulphuric acid and from about 1% to about 5% of sodium nitrate.

1,824,933. THERMOSTATIC ALARM. FERDINAND J. SCHOLTZ, Watertown, S. Dak. Filed Aug. 27, 1929. Serial No. 388,791. 1 Claim. (Cl. 200—139.)



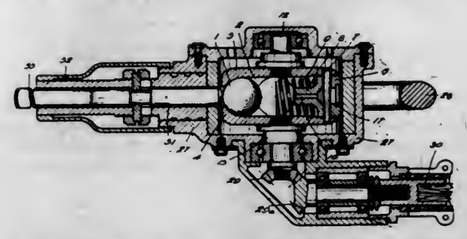
In a thermostatic alarm of the character described, a casing having a metallic section, an insulating base mounted upon the metallic section, a rivet passing through said insulating base, a thermometric element in the form of a spring having one end coiled and engaged with said rivet, the other end formed to provide a pointer, the case having a graduated scale over which the pointer moves, a lug carried by the rivet, binding post mounted upon the casing and insulated therefrom to which said lug is electrically connected and contact arms each pivoted to a metallic portion of the case, the inner ends of the contact arms being disposed in the path of movement of said pointer, the case having slots through which the outer ends of the arms project and the case having graduations associated with each of said arms whereby to indicate the positions to which the arms are adjusted, a binding post mounted upon the case, the pivots to said arms being connected to the binding posts, said binding posts being adapted to be connected in a circuit with an alarm and a source of current.

1,824,934. ELECTRICAL CONDUCTOR. JAMES A. SHEPARD, Montour Falls, N. Y., assignor to Shepard-Niles Crane & Hoist Corporation, Montour Falls, N. Y., a Corporation of New York. Filed Feb. 3, 1928. Serial No. 251,474. 3 Claims. (Cl. 191—29.)



1. The combination with an electrical conductor adapted for use in supplying current in an overhead travelling crane system and comprising a bar-like web portion having flat sides and a lower edge portion arranged to form a contact surface, of a block having a narrow vertical slot therein, and means for assembling said conductor and block with said web portion in intimate contact with the sides of said block slot comprising a horizontal groove formed in one side and extending a substantial distance longitudinally of said web portion and a screw member extending through the side of said block and into said groove and supporting said conductor in position in said block.

1,824,935. PERCUSSION MECHANISM FOR TOOLS. GEORGE HENRY THOMPSON, Selly Oak, Birmingham, England. Filed Mar. 30, 1928, Serial No. 265,925, and in Great Britain May 31, 1927. 8 Claims. (Cl. 125—33.)

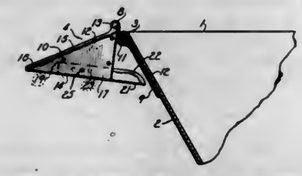


1. Centrifugal percussion mechanism for percussion tools comprising a casing, a body rotatably mounted in the casing, a stationary ring surrounding said body, an annular groove of curved cross-section in the inner face of the ring, a slidably mounted offset striker projecting through the ring, a radial cylindrical bore in the body, and a ball member freely mounted in the bore, said ball member when thrown outwardly by centrifugal force being adapted to travel around the groove in the ring and to engage the end of the striker.

1,824,936. PROCESS FOR PURIFYING INDUSTRIAL WASTE LIQUORS. JOHN T. TRAVERS, Columbus, Ohio, assignor, by direct and mesne assignments, to The Ohio Sanitary Engineering Corporation, Columbus, Ohio, a Corporation of Ohio. Filed June 30, 1928. Serial No. 289,635. 4 Claims. (Cl. 23—200.)

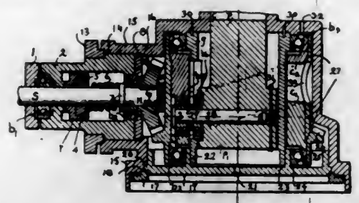
1. A process for purifying hot spent sulfuric acid pickle liquors, comprising maintaining the pH of the hot spent pickle liquor between the pH value 6.0 and the pH value 7.0 by incorporating in the hot liquor a quantity of a carbonate of an alkaline earth metal in sufficient excess to increase the available neutralizing value from 15% to 20% over that theoretically required to neutralize the entire acid content of the liquor, and agitating the liquor in which said carbonate has been incorporated for a time period adequate to neutralize the entire acid content and bring the pH within range of from pH 6.0 to 7.0 effecting hydrolysis of the ferrous-sulfate contained in the liquor into ferrous hydroxide and sulfuric acid, and rendering the hydrolysis continuous and complete by neutralizing sulfuric acid so formed and oxidizing the ferrous hydroxide resulting from said hydrolysis to ferric hydroxide.

1,824,937. SACK SEVERING DEVICE. JOHN E. TROUTH, Oklahoma City, Okla., assignor to Independent Oil Well Cementing Company, Oklahoma City, Okla., a Corporation of Oklahoma. Filed Oct. 31, 1930. Serial No. 492,453. 8 Claims. (Cl. 214—1.)



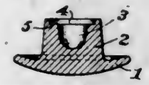
1. In combination with a hopper, a cutting device including a hinge having one leaf fixed to a side of the hopper, a support fixed to the other leaf, a knife blade, and means for attaching said blade to the support.

1,824,938. PISTON PROCESS AND APPARATUS. GARDNER TUFTS VOORHEES, Boston, Mass. Filed Oct. 25, 1926. Serial No. 144,021. 8 Claims. (Cl. 74—14.)



1. The combination of a casing, a shaft, a cylindrical cam, a cylindrical guide and a reciprocating member, the casing having an opening therein for the projection of the shaft therethrough, means to seal the shaft and casing opening against leakage therethrough, part of the shaft, the cam, guide and reciprocating member being enclosed by the casing, means to cause the shaft to rotate the cam, the cam inclosing the guide and the guide enclosing the reciprocating member, anti-friction bearings for the cam, means on one end of the guide to prevent its rotation and on its other end to center and support it, an anti-friction cam roller for the cam, carried by a projection from the reciprocating member, the guide having a groove adapted to engage an anti-friction guide roller carried by a projection from the reciprocating member, an anti-friction guide roller.

1,824,939. BUTTON. FRANKLIN R. WHITE, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 31, 1930. Serial No. 505,893. 2 Claims. (Cl. 24—95.)



1. A solid head button having an integral hub and a central chamber formed therein, a recess formed in the hub about said chamber to thereby form a shoulder, an imperforate disk fitting within the recess, the edge of the hub forced over said disk to hold the same tightly in place, and said disk provided with slanting walls centrally located and adapted to properly position a fastener to be driven through said disk.

1,824,940. BUTTON. FRANKLIN R. WHITE, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 31, 1930. Serial No. 505,894. 2 Claims. (Cl. 24—95.)



1. A solid head button comprising an integral hub provided with a chamber and a recess formed adjacent the chamber, an imperforate shell tightly fitting within said recess and the rim of the shell contacting with the walls of the recess throughout the periphery of the shell, and the shell provided with means to properly position a fastener when the button is to be attached.

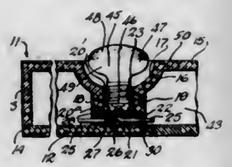
1,824,941. HOOK. WILLIAM A. WINDER, Portland, Oreg., assignor of one-third to Francis Joseph Winder, Portland, Oreg. Filed Nov. 20, 1929. Serial No. 408,533. 1 Claim. (Cl. 294—26.)

A hook comprising a hook element having a shank disposed at its handle receiving end, of a handle rotatably disposed about the shank, a plurality of slits disposed within the side wall of the handle, lugs outwardly extending from the shank and adapted to engage within the slits, a compressible element disposed about the shank



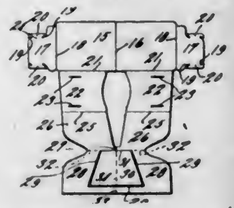
for normally maintaining the lugs in registerable engagement with the slits and means for locking or unlocking the handle relatively to the shank to facilitate the turning of the handle, said means including the lugs and slits.

1,824,942. ELECTRIC DISPLAY DEVICE. JOSEPH BLOCK, Brooklyn, N. Y. Filed Sept. 12, 1930. Serial No. 481,545. 5 Claims. (Cl. 40—130.)



3. A unitary sign comprising a front member having a flat surface constituting a background, a plurality of integral channeled portions depressed from said front surface, each channeled portion conforming to a part of the sign to be seen against said back-ground, a plurality of tubular members extending from said channeled portions, and lamps mounted in said tubular members and extending into said channeled portions.

1,824,943. FLEXIBLE POCKET RECEPTACLE. WARNER R. BUXTON, Longmeadow, Mass. Filed June 15, 1928, Serial No. 285,693. Renewed Mar. 4, 1930. 9 Claims. (Cl. 150—38.)



1. A bill fold, comprising, an outer wall, a pair of longitudinally spaced flaps in part defining the inner wall, a second pair of longitudinally spaced flaps superposed one on each of the first named pair and each connecting one

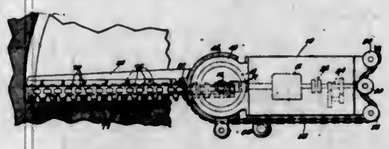
longitudinal edge of the outer wall to the opposite and non-adjacent longitudinal edge of that first-named flap on which it is superposed, and a central inner wall member bridging the space between said pairs of flaps and having each end received between a flap of the first named pair and a flap of the second named pair, said bridging member being connected to the first named pair of flaps along that edge which is opposite and non-adjacent to the edge to which the second named flaps are connected, and means connecting each end of the outer wall to the adjacent flap of the second named pair, said wall, flaps and member being made of flexible material.

1,824,944. CHAIN WRENCH. FRANCIS J. CARNELLI, New York, N. Y. Filed Oct. 25, 1930. Serial No. 491,124. 10 Claims. (Cl. 81—65.)



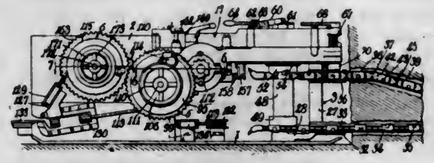
1. In a chain wrench, a body comprising a handle bar, a pair of jaw plates secured at one end of the bar to form a pair of jaws provided with teeth at the end of the wrench, and a link chain connected at pivotal points on opposite sides of the body, each toothed jaw end face on each side of the middle portion extending in the general form of a flat convex curve with the chord of the curve on each side in alinement and transverse to the handle axis.

1,824,945. MINING APPARATUS. FRANK CARTLIDGE, Cincinnati, Ohio, assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Aug. 10, 1922. Serial No. 580,907. 10 Claims. (Cl. 262—30.)



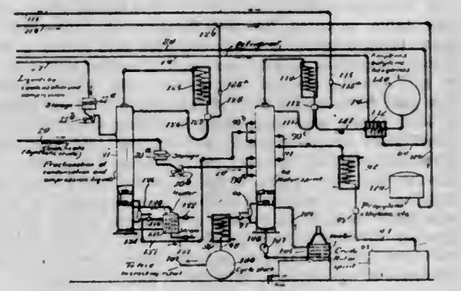
6. In a mining apparatus, a machine frame slidable bodily over a mine bottom transversely across the coal face during lateral cutting and comprising a motor, cutting mechanism pivotally supported on said frame for swinging movement about a substantially vertical axis relative to said frame and to said motor and including cutting elements circulating in an orbit parallel to a vertical plane, and means for transmitting movement to said elements in their orbit irrespective of change in position thereof relative to said motor during swinging of said cutting mechanism.

1,824,946. MINING MACHINE. FRANK CARTLIDGE, Chicago, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 28, 1926, Serial No. 84,464. Renewed Dec. 27, 1929. 79 Claims. (Cl. 262—30.)



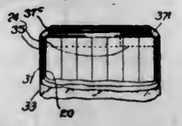
1. In a mining apparatus, a plurality of relatively converging cutter bars provided with relatively movable cutting elements, and direct driving means for said cutting elements rotating on axes in the same straight line.

1,824,947. APPARATUS FOR FRACTIONATION OF CERTAIN HYDROCARBONS. HAROLD S. DAVIS, Belmont, and WALLACE J. MURRAY, Reading, Mass., assignors, by mesne assignments, to Petroleum Chemical Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 5, 1926. Serial No. 127,282. 4 Claims. (Cl. 196—94.)



1. Apparatus for separating sharp boiling point fractions from products of cracking petroleum oil, comprising a fractional condenser, a condensate outlet from said fractional condenser, a first rectifying column connected to said condensate outlet, means for taking top, bottom and side cuts from said first rectifying column, a vapor outlet from said fractional condenser, an absorber connected to said vapor outlet, an absorber outlet for unabsorbed hydrocarbon gases, a stripper operatively connected to strip absorbed hydrocarbons from absorption oil delivered by said absorber, a second rectifying column, a pipe delivering said stripped hydrocarbons into said second rectifying column, and means for taking top and bottom cuts from said second rectifying column.

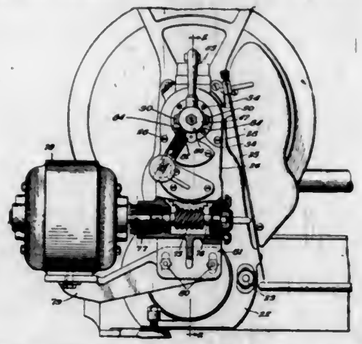
1,824,948. CIGARETTE WRAPPER AND PACKAGE. FRANCIS X. FIELDS, Queens Village, Long Island, N. Y. Filed Jan. 4, 1929. Serial No. 330,302. 7 Claims. (Cl. 229—51.)



1. A package composed of a plurality of independent wrappers arranged one upon the other, and said wrappers being provided with removable portions arranged at a predetermined section or area of the resulting package formed from said wrappers, and a member engaging with said removable portions and exposed through the package to

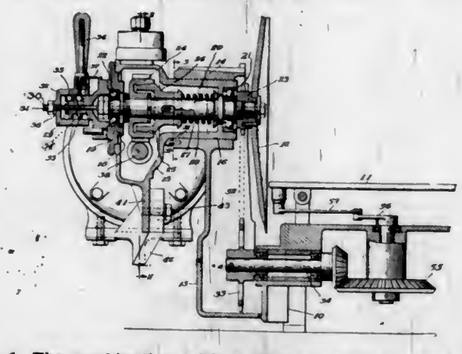
facilitate the removal of said portions in the operation of pulling upon the exposed part of said member in opening the package.

1,824,949. MULTIPLE SPEED MECHANISM FOR SLICING MACHINES. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Jan. 8, 1926. Serial No. 79,924. 16 Claims. (Cl. 146—102.)



2. The combination with a slicing machine frame, of a feed table mounted for reciprocation on said frame, a gear casing detachably connected with said frame, a knife spindle journaled in said gear casing, a disc knife carried by said spindle, a clutch mounted on said spindle, a shiftable gear train having driving connection with one element of said clutch, said gear train including a set of change speed shift gears, a motor for driving said gear train adjustably carried by said gear casing, a slide bar for moving said shift gears, a spring detent for holding said slide bar in its various positions of adjustment in which said gear train is in driving connection, and a movable member for operating said clutch, said movable member having means for engaging said detent to control the relative time of operation of said clutch and shift gears.

1,824,950. POWER DRIVE MECHANISM FOR SLICING MACHINES. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Jan. 29, 1926. Serial No. 84,590. 11 Claims. (Cl. 146—102.)

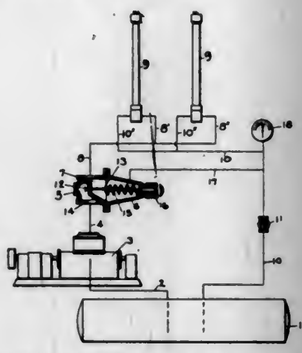


1. The combination with a slicing machine having a reciprocating table and a rotary knife spindle, of driving connection between said table and spindle, a bearing support, a bearing for said spindle carried by said support and angularly adjustable about the axis of said spindle, a gear housing carried by said bearing, a motor carried by said gear housing and adjustable therewith about the axis of said spindle, and gearing in said gear housing for connecting said motor with said spindle.

1,824,951. PROCESS OF MAKING ALKYL CHLORIDES. JOHN FREI, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 19, 1925. Serial No. 16,808. 18 Claims. (Cl. 260—166.)

1. The process of making an alkyl chloride which comprises heating together sodium chloride, sulphuric acid, and an alcohol to form a vapor mixture containing an alkyl chloride, alcohol, hydrogen chloride, and water, and bringing said vapor mixture in contact with an aqueous metal chloride solution capable of prompting reaction between said alcohol and said hydrogen chloride, said solution being maintained at a temperature between 100 and 150° C.

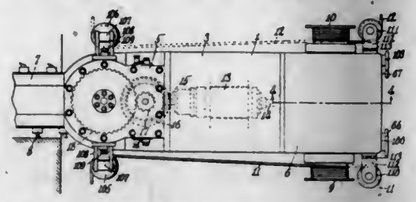
1,824,952. OIL BURNING SYSTEM. DAVID P. GRAHAM and JOHN M. FERRY, Jr., New York, N. Y., assignors to Peabody Engineering Corporation, a Corporation of New York. Filed Oct. 1, 1929. Serial No. 396,581. 17 Claims. (Cl. 158—36.3.)



1. The method consisting in delivering oil under pressure to an atomizer, returning a portion of the oil from said atomizer, and automatically varying the pressure of oil delivered to the atomizer by variations in the pressure of the return oil.

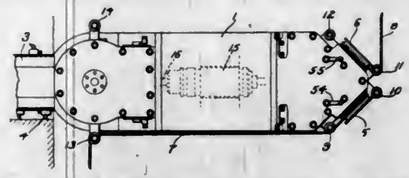
4. An oil burning system comprising an atomizer, means for supplying oil thereto under pressure, means for returning a portion of the oil from the atomizer, and means for varying the presure of supply oil by variations in the pressure of the return oil.

1,824,953. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 3, 1929. Serial No. 368,114. 37 Claims. (Cl. 262—30.)



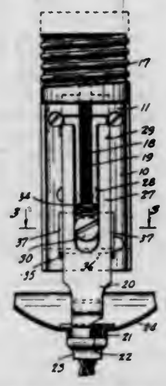
1. In a mining machine, a motor, cutting mechanism driven thereby including an elongated kerf cutter, and feeding means driven by said motor including relatively rotatable feed operating and controlling members each adapted to cooperate with flexible feeding means and mechanism for independently driving said members at either a relatively low speed or a relatively high speed and selectively in opposite directions at either speed while said motor runs continuously in one direction, said driving mechanism including means whereby said members may be driven by said motor simultaneously but with one revolving at a different speed from the other.

1,824,954. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 19, 1930. Serial No. 437,233. 23 Claims. (Cl. 262—30.)



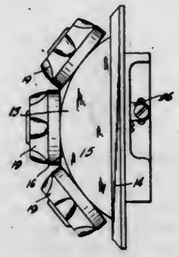
1. A mining machine feeding mechanism including relatively rotatable feed members each adapted to cooperate directly with flexible feeding means and disposed on axes at oblique angles to the central longitudinal median line of the machine.

1,824,955. ADJUSTABLE CANDLE SOCKET MOUNTING. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed May 3, 1928. Serial No. 274,895. 7 Claims. (Cl. 240—52.4.)



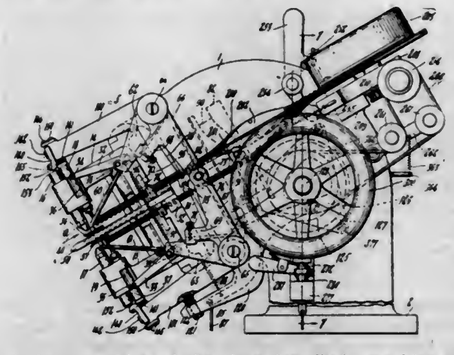
1. In a candle socket, an insulating body member having a longitudinal recess in one side wall thereof, a support extending into said recess with its edges guided by the sides of the recess and provided with a longitudinal slot, and a securing means mounted on the body and extending into said slot and adapted to press laterally on the sides of the slot to secure the body in adjusted positions on the support, the edges of said recess limiting the movement of the support under the influence of the lateral action of the securing means.

1,824,956. ELECTRIC RECEPTACLE. HARVEY HUBBELL Jr., Bridgeport, Conn. Filed Feb. 6, 1929. Serial No. 337,840. 5 Claims. (Cl. 173—330.)



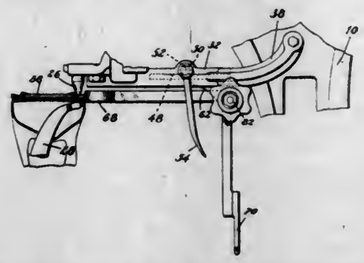
1. An electric receptacle comprising, a body of insulating material having a pair of spaced elongated chambers opening through the rear wall thereof, said body being provided in its front wall with a pair of elongated slots leading to said chambers and of sufficient length to receive the terminal contacts of a plurality of attachment plug caps at one time, a receptacle contact in each chamber adapted to be inserted through the rear wall openings and substantially coextensive with said slots, and means for connecting the receptacle contacts with a source of current.

1,824,957. DUPLEX FASTENER SETTING MACHINE. GEORGE W. JACQUES, New Bedford, Mass., assignor to Atlas Tack Corporation, Fairhaven, Mass., a Corporation of New York. Filed Feb. 5, 1927. Serial No. 166,153. 20 Claims. (Cl. 218—15.2.)



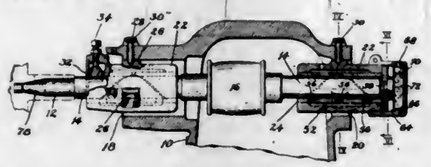
1. In a machine of the class described, punching and setting devices including a member having punching and setting portions disposed on each of opposite sides thereof, and a punch and a set movable to and from said member on each of said opposite sides and cooperating with said portions, means for moving said devices as a unit to successively present said setting and punching portions in the same relation to work, and a pair of raceways alined with the direction of movement of said devices and laterally of the line of feed of the work for delivering fasteners to both of said sets.

1,824,958. GAUGE MECHANISM FOR FASTENING INSERTING MACHINES. JOHN L. JONES, Weymouth, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 2, 1928, Serial No. 258,612, and in Great Britain Dec. 24, 1927. 9 Claims. (Cl. 1—19.)



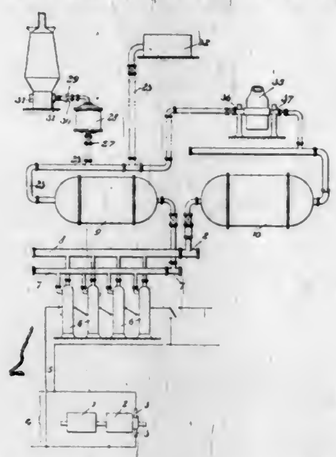
1. Gauge mechanism for controlling the presentation of shoes to the fastening instrumentalities of a fastening inserting machine comprising a gauge member formed and arranged to engage the edge of a sole to be attached to a shoe by fastenings inserted by the machine, a second gauge member formed and arranged to engage the heel of a shoe below its top lift when attaching a top lift to a heel, said gauge members being arranged so that either one of the two may be held positively in operative position while the other is positioned away from the work and is inoperative.

1,824,959. MACHINE FOR USE IN THE MANUFACTURE OF BOOTS AND SHOES. NORWOOD H. KNOWLTON, Rockport, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 15, 1926. Serial No. 135,601. 9 Claims. (Cl. 308—72.)



1. A machine comprising a rotary tool-shaft having two journal portions and a driven member between them, a frame having two coaxial bearing sockets one of which is large enough to permit said driven member to pass through it, bearing sleeves formed to be inserted axially into said sockets respectively to engage said journal portions, said shaft having an annular peripheral groove near one end to provide a thrust abutment, and two relatively adjustable members affixed to one end of one of said bearing sleeves to provide a double-acting end-thrust bearing, one of the latter said members being arranged to engage said end of the shaft and the other being arranged to engage a face of said groove.

1,824,960. METALLURGICAL PROCESS AND APPARATUS. FRANZ LAWACZECK, Munich, Germany, assignor to Firm Lawaczeck Gesellschaft mit beschrankter Haftung, Berlin, Germany. Original application filed Mar. 16, 1927, Serial No. 175,855, and in Germany Dec. 17, 1925. Divided and this application filed Dec. 22, 1927. Serial No. 241,946. 3 Claims. (Cl. 75—17.)

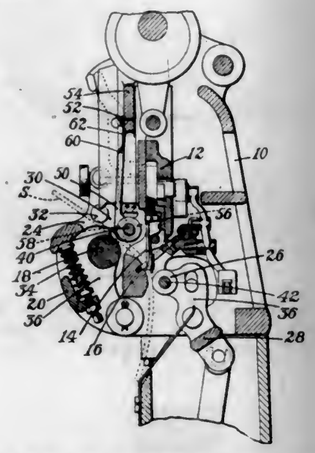


1. The method of operating electric power plants comprising utilizing the excess energy resulting in said plant for the electrolytic generation of hydrogen and oxygen under pressure, and causing said oxygen to draw from the atmosphere the air required for operating a blast furnace, at the same time imparting to it the pressure required for operating said furnace.

1,824,961. CELLULOSE DERIVATIVE COMPOSITIONS. WALTER E. LAWSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 18, 1928. Serial No. 305,873. 9 Claims. (Cl. 134—79.)

1. A composition comprising a cellulose derivative and, as a softener therefor, an acetal of an alkyl ether of diethylene glycol.

1,824,962. MACHINE FOR OPERATING UPON SOLES. CARL J. MEEK, St. Louis, Mo., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 29, 1929. Serial No. 335,851. 14 Claims. (Cl. 12—40.)



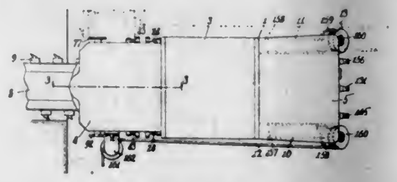
1. In a machine for operating upon ribbed soles, in combination, an operating instrumentality, and means for feeding a sole to the operating instrumentality comprising a roll constructed and arranged to have peripheral engagement with the face at the ribbed side of the sole between oppositely disposed portions only of the rib, said roll being of substantially the same width as the space between said oppositely disposed portions of the rib at the narrowest part of the shank of the sole to facilitate effective feeding of the sole.

1,824,963. ACETALS OF ALKYL ETHERS OF POLYETHYLENE GLYCOLS. JULIUS A. NIEUWLAND, Notre Dame, Ind., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 13, 1928. Serial No. 305,867. 8 Claims. (Cl. 260—151.)

2. As a new compound, an acetal of an alkyl ether of a polyethylene glycol.

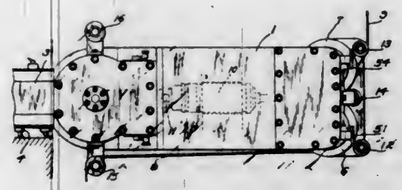
1,824,964. MINING MACHINE. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 27, 1928. Serial No. 273,314. 77 Claims. (Cl. 262—30.)

1. In a mining machine, a machine frame slidable on its bottom on the mine bottom, a horizontal motor carried thereby having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor, and feeding means driven from the oppo-



site end of said motor for feeding the machine bodily laterally over the mine bottom comprising a plurality of relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on transversely extending horizontal axes wholly within the lateral limits of said frame.

1,824,965. MINING MACHINE. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 19, 1930. Serial No. 429,654. Renewed Oct. 31, 1930. 29 Claims. (Cl. 262—30.)



1. A mining machine feeding mechanism including relatively rotatable feeding members each disposed on a vertical axis and adapted to cooperate directly with flexible feeding means, and motor operated driving means for said members including a plural predetermined speed transmission mechanism for each member through which it, but not the other member, is driven, each transmission mechanism including a fast predetermined speed gear train and a slow predetermined speed gear train and a friction controlling clutch for each train for connecting said trains in driving relation with their respective members.

1,824,966. ALLOYS AND PROCESS FOR IMPROVING WORKABILITY OF SAME. NORMAN B. PILLING, Elizabeth, N. J., assignor, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 30, 1927. Serial No. 223,233. 10 Claims. (Cl. 75—1.)

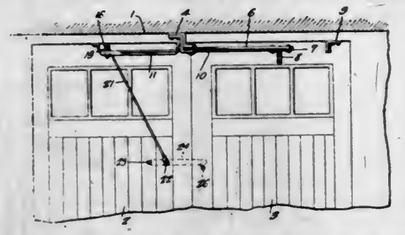
1. The process of producing alloys containing nickel which includes deoxidizing the principal melt and subsequently adding thereto a metal of the alkaline earth group.

1,824,967. TOOTHBRUSH. BERTHA SEELIG, Kansas City, Mo. Filed Aug. 24, 1928. Serial No. 301,809. 6 Claims. (Cl. 15—26.)



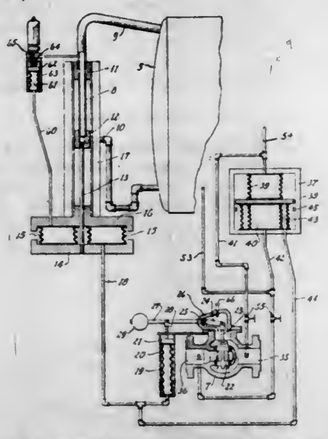
1. A rotary tooth brush support comprising a barrel, a shaft within the barrel having a longitudinal slot, a coil spring surrounding the shaft having a finger slidable in the slot for latching the spring to the shaft, means for latching the opposite end of the spring to the barrel, and means including a rack and pinion for rotating the shaft in one direction to tension the spring for rotating the shaft in the opposite direction.

1,824,968. DOOR OPERATING DEVICE. PAUL SMITH, Farmingdale, N. Y. Filed May 28, 1930. Serial No. 456,734. 5 Claims. (Cl. 268—62.)



1. An operating device for abutting hinged doors, comprising a bell crank, a rod pivoted to one arm of the crank and to one of the doors, a bar having notched edges pivoted to the second arm of the crank and pivoted for slidable movement to the second door, a rail on which the bar rests and having spaced notches to receive therein the notched portions of the bar when the doors are opened or closed and means for raising the bar to bring the same out of the notches of the rail to permit of the opening or closing of the doors.

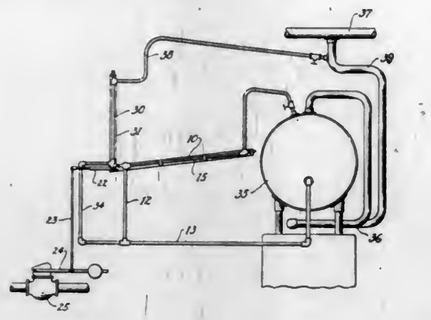
1,824,969. FLUID REGULATING SYSTEM. VINCENT V. VEENSCHOTEN, Erie, Pa., assignor to Northern Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1926. Serial No. 137,850. 9 Claims. (Cl. 122—451.)



1. A valve adapted to transmit a fluid in combination with means depending on the variations in the fall in fluid pressure through said valve for varying the opening of said valve, said means comprising three collapsible chambers, one end of each of said chambers being movable but fixed with reference to each other, the other ends of said chambers being immovable, communicating means connecting one of said chambers with the inlet of said valve, communicating means connecting another of said chambers with the outlet of said valve, and means operatively connecting said third chamber to said valve.

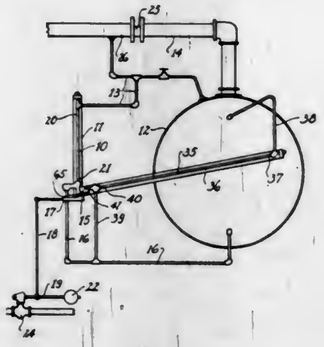
9. A boiler feed-water regulator system comprising a feed-water valve, a thermostat adapted to expand and contract as the water level in the boiler sinks and rises and hydraulic means connecting said thermostat with said valve, said hydraulic means comprising a first collapsible chamber, the ends of said chamber being fixed with reference to the respective ends of said thermostat, a second collapsible chamber having a cross sectional area much less than that of said first chamber, and communicating means connecting said two chambers, said second chamber being operatively connected with said valve.

1,824,970. FEED WATER REGULATOR. VINCENT V. VEENSCHOTEN, Erie, Pa., assignor to Northern Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed Nov. 24, 1926. Serial No. 150,398. 9 Claims. (Cl. 122—451.1.)



1. The combination of a boiler and a feed-water regulator system therefor, said boiler comprising a feed-water valve, a water space, an adjacent steam space, and a more remote steam space, said regulator system operatively communicating with the said water space, with the said adjacent steam space, and with the said remote steam space, and means operatively connecting said regulator system with said valve, said regulator system comprising two feed-water regulators, each of said regulators communicating with said water space, one communicating with said adjacent steam space materially above the normal water level elevation therein and the other with said remote steam space, each of said regulators being independently operatively connected to said water space.

1,824,971. FEED WATER REGULATOR. VINCENT V. VEENSCHOTEN, Erie, Pa., assignor to Northern Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1927. Serial No. 220,113. 9 Claims. (Cl. 122—451.1.)



1. In a boiler system a boiler having a steam main and a feed water valve, said main having a restricted orifice therein, a feed-water regulator comprising a thermostatic tube, one end of said tube being operatively connected with the water space of the boiler, the other end of the tube being operatively connected with said steam main with the orifice between the point of connection and the boiler, and means operatively connecting said thermostatic tube with said valve.

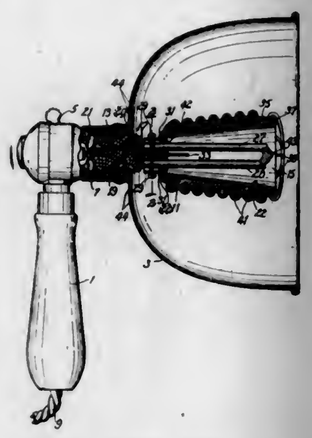
2. In a boiler system a boiler having a steam main, said main having a restricted orifice therein, a feed water regulator comprising a thermostatic tube, one end of said tube being operatively connected with the water space of the boiler, the other end of the tube being operatively connected with said steam main with the orifice between the point of connection and the boiler, a feed-water valve operatively connected with said boiler, and means operatively connecting said thermostatic tube with said valve in combination with a second thermostatic tube operatively connected with the water space and the steam space of the boiler, said second tube being operatively connected with the said means which connects the first mentioned tube with said valve.

5. The combination of a boiler and a feed-water regulator system therefor, said boiler comprising a feed-water valve, a water space, an adjacent steam space, and said boiler being connected to a more remote steam space, and means operatively connecting said regulator system with said valve, said regulator system comprising two feed-water regulators, both being operatively connected to said water space, one being operatively connected to the adjacent steam space, and the other being operatively connected to the remote steam space, said means comprising two operatively connected levers, one of said levers being operatively connected with said valve and with one regulator, and the other lever being operatively connected with the other regulator, the ports of said valve being shaped so that, as the valve opens, its rate of movement will be greater than the rate of increase in the opening of the ports.

8. A valve comprising a cylindrical plunger having ports in its wall, the opposing edges of said ports being convex with the effective edges adjacent one end of the ports being spaced apart farther than elsewhere, and adjacent the other end of the ports the effective edges being spaced apart less than elsewhere.

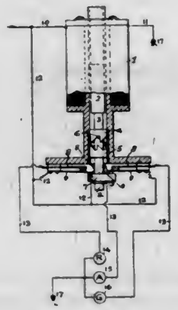
9. A valve, comprising a cylindrical plunger having ports in its wall, the opposing edges of said ports being tapering with the effective edges adjacent one end of the ports being spaced apart farther than elsewhere, and adjacent the other end of the ports the effective edges being spaced apart less than elsewhere, the wider end of the ports being first to open.

1,824,972. ELECTRICAL APPARATUS. ALFRED VISCHER, Jr., Floral Park, N. Y. Filed Apr. 13, 1927. Serial No. 183,401. 8 Claims. (Cl. 174—177.)



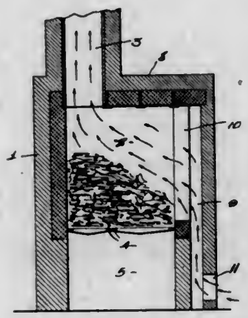
1. A heater comprising a reflector, an electric socket therein, a heating element adapted to be connected into said socket comprising a cup-shaped portion having a heating resistance on the outside thereof and spaced electrodes on the inside thereof, said resistance and electrodes being connected in series, means for applying current to the heating element whereby the resistance is brought to a glowing heat and whereby an arc may be maintained between the electrodes, the reflector reflecting the heat from the resistance but being protected from the action of said arc and means for breaking the arc after the electrodes have been reduced to a predetermined length.

1,824,978. UNITARY TRAFFIC CONTROL. DANA E. WESCOTT, South Bend, Ind., assignor to South Bend Current Controller Company, a Firm Composed of Dana E. Wescott, Sole Trader. Filed Dec. 20, 1926. Serial No. 155,848. 1 Claim. (Cl. 200—11.)



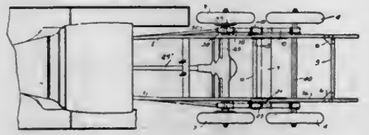
A control switch comprising a solenoid magnet, a tubular extension therefrom, a pair of oppositely notched sleeves entirely enclosed within the extension and positioned in spaced-apart relation from each other, a permeable core within the magnet, an extension of the core projecting through the notched tubes, a cross pin on the core extension operative between the notched tubes, a base through which the core extension projects, a plurality of narrow contact strips beneath the base arranged in pairs and side by side, an adjustable arm secured to the core extension at its lower end, coordinated with the notches and contact strips.

1,824,974. INCINERATOR. ALBERT R. ACHESON, Syracuse, N. Y., assignor to E. C. Stearns & Co., Syracuse, N. Y., a Corporation of New York. Filed July 2, 1926. Serial No. 120,108. 3 Claims. (Cl. 110—18.)



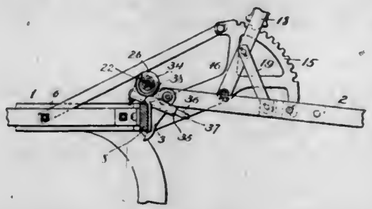
1. In a garbage incinerator, the combination of a body formed with a combustion chamber and an ash pit, a flue leading from the chamber, the body being formed with a permanently open upright passage in one of its side walls and with outlet passages opening from the first passage laterally into the combustion chamber and with other passages opening through the outer wall of the body serving as an inlet to the air, the latter passages being located below the outlets into the combustion chamber, all of said passages having no direct communication with the ash pit.

1,824,975. MOTOR VEHICLE MECHANISM. CHARLES E. F. AHLM, Cleveland, and GEORGE L. ELMSLIE, East Cleveland, Ohio, assignors to Continuous Torque Transmission Company, Cleveland, Ohio, a Corporation of Delaware. Filed June 12, 1929. Serial No. 370,169. 8 Claims. (Cl. 180—22.)



1. In a motor driven vehicle, a longitudinally extending frame adapted to support a load, a pair of rearwardly disposed traction wheels and a driving axle therefor, a pair of rearwardly disposed load carrying wheels and a non-driving axle therefor, a pair of multiple leaf springs, means to pivotally secure the springs, intermediately of their ends, to the frame on a transverse horizontal axis, and means for securing the end portions of said springs to the respective axles, the non-driving axle being disposed a materially greater horizontal distance from the pivot axis of the spring than the driving axle, whereby the greater portion of the load will be imparted to the driving axle and traction wheels, said springs and the means connecting the same to the non-driving axle constituting the sole connection from the frame to the non-driving axle.

1,824,976. AGRICULTURAL IMPLEMENT. HERMAN E. ALTGELT, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Aug. 8, 1927. Serial No. 211,570. 3 Claims. (Cl. 111—67.)



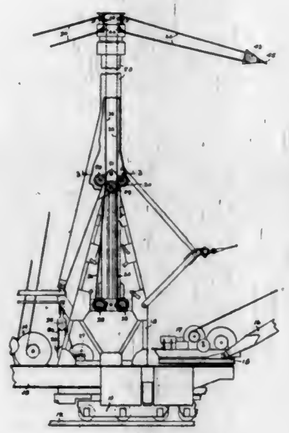
1. The combination with a lister including front and rear wheeled frames hinged together, soil-engaging means carried by the front frame, lifting mechanism carried by the front frame and operatively connected with the rear frame whereby to raise the hingedly connected ends of the two frames, seeding mechanism carried by the front frame, a driving shaft for said seeding mechanism, driving means for said shaft, a spring-pressed clutch between said shaft and its driving mechanism, and a clutch shaft having a part to engage the rear frame when the soil-engaging means are raised and thus cause operation of said clutch lever to open the clutch.

1,824,977. COLORED GASOLINE. GELLERT ALLEMAN, Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed July 28, 1928. Serial No. 296,101. 7 Claims. (Cl. 44—9.)

1. A colored gasoline comprising commercial gasoline containing a small proportion of a halogenated derivative of indigo.

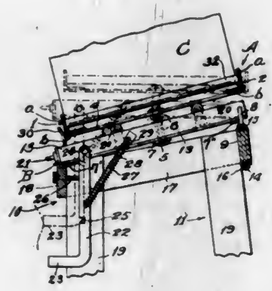
7. A colored gasoline comprising commercial gasoline containing a small proportion of a mixture of hexabromindigo (4.5.7.4'.5'.7') and of pentabromindigo (4.5.7.5'.7') together with a smaller proportion of tetrabromindig (5.7.5'.7').

1,824,978. GUY LINE AND SHEAVE MEANS FOR USE IN CONNECTION WITH HOISTING AND HAULING MACHINES. KNUTE BERGER, Seattle, Wash. Filed July 23, 1929. Serial No. 380,334. 4 Claims. (Cl. 254—190.)



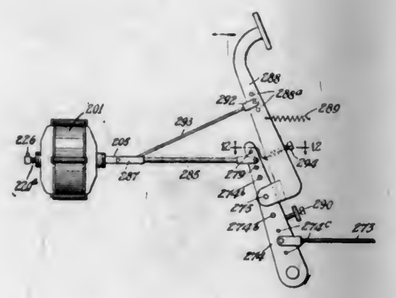
1. The combination with the pivotally mounted main spar of a tower skidder, of guy lines extending lengthwise through said main spar and guide sheaves for said guy lines mounted for rotation in the lower end of said main spar in planes substantially parallel with the plane in which said main spar is moved when said main spar is turned into and out of operative position.

1,824,979. FRUIT PACKER'S BENCH. ALBERT J. BLACK, Whittier, Calif. Filed Jan. 3, 1929. Serial No. 330,129. 5 Claims. (Cl. 226—129.)



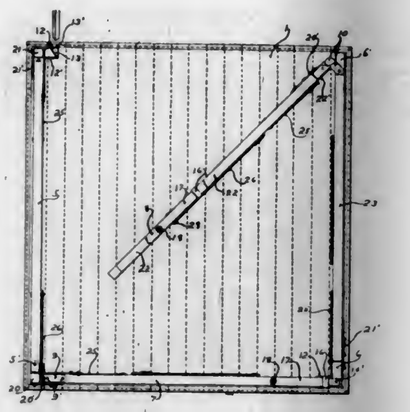
1. The combination with a support; of an adjustable tilting frame hinged to the support rearwardly of the front edge thereof; means to releasably hold the front edge of the tilting frame in an adjusted position; a turntable adapted to hold a receptacle and mounted to be revolved on the tilting table; means to hold the tilting table with its front edge elevated in an adjusted position, and knee operated means to release the table from the adjusted position.

1,824,980. BRAKE ACTUATING MECHANISM. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Dec. 8, 1924. Serial No. 754,484. 7 Claims. (Cl. 188—152.)



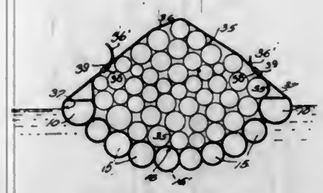
7. In an automotive vehicle, the combination with a pair of separately movable cooperating controlling levers, of a diaphragm chamber device operatively connected with one of said levers, and means cooperating with both of said levers for controlling the operation of said device.

1,824,981. FOLDING TABLE. NEWTON N. BROWN, Racine, Wis., assignor to Gold Medal Folding Furniture Company, Racine, Wis., a Corporation of Wisconsin. Filed July 29, 1929. Serial No. 381,818. 6 Claims. (Cl. 45—11.)



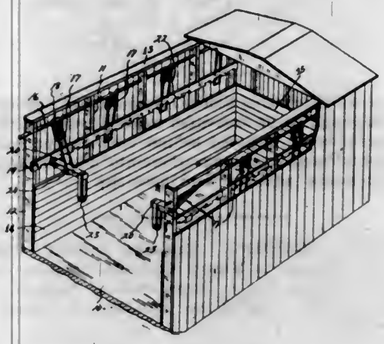
1. A folding table comprising a top to be rolled, a supporting frame for said top including side and end members, ends of the side members being hingedly connected to ends of the end members at diagonally opposite corners of the frame, socket pieces attached to said end members and having open sides to permit of the insertion and removal of the ends of the side members, means for releasably holding the ends of the side members in said sockets, and legs pivotally connected to the end members and side members and adapted to be folded down thereagainst so as to be extended therefrom.

1,824,982. LOG RAFTING DEVICE. JOHN M. CHEVALIER, Takoma, Wash., assignor of one-half to Otto A Rhode, Seattle, Wash. Filed May 1, 1929. Serial No. 359,502. 9 Claims. (Cl. 9—15.)



2. In a log raft, the combination with a frame comprising side sticks, and cables and chokers disposed longitudinally of the raft and connecting the component parts of the respective side sticks together, of a plurality of cables disposed transversely of the raft and connecting the side sticks at opposite sides of the raft, and a load receiving cradle comprising longitudinally arranged logs disposed in interwoven relation with said transverse cables and cooperating with the latter to provide a floor upon which the raft cargo is loaded, said transversely disposed cables being detachably connected to the side sticks through clamping means secured to said side sticks, said clamping means having integrally-secured pin elements arranged for embedding engagement in the logs.

1,824,983. DECKING DEVICE. ALFRED COPONY, Mount Clemens, Mich., assignor to Copony Auto Loading Company, Detroit, Mich., a Corporation of Michigan. Filed May 14, 1928. Serial No. 277,704. 10 Claims. (Cl. 105—368.)

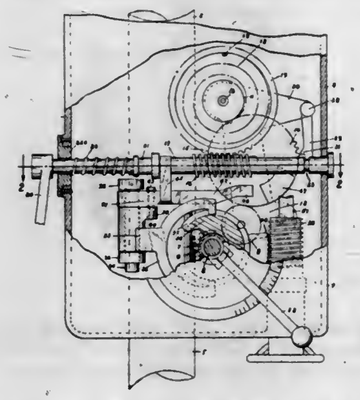


1. In a decking device, a supporting rod, a footing strip arranged in spaced relation to said supporting rod, and a hanger slidably carried by said supporting rod for movement to positions on opposite sides of said footing strip and for movement longitudinally of said rod.

2. A decking device including in combination a supporting rod, a footing strip spaced from said supporting rod, a hanger pivotally and slidably carried by said supporting rod, and a beam adapted to be secured to the said footing strip and to be braced by the said hanger.

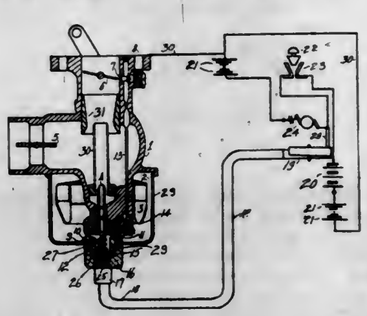
1,824,984. DRILL HEAD SAFETY MECHANISM. WILLIAM C. DE ROO, Cincinnati, Ohio, assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 4, 1930. Serial No. 418,530. 2 Claims. (Cl. 77—36.)

1. In a machine tool the combination of a safety catch, a gear adapted to be arrested by engagement of the catch therewith, a longitudinally movable rod normally urged to set the catch, normally operative means in said machine tool resisting movement of the rod, a power control clutch, a trip lever for operating the clutch and also movable by the clutch, a boss on the gear, a finger on the trip lever adapted to be displaced by said boss, a collar on the rod and a block on the finger retained thereby in the path of



the collar when the clutch is in engaged position to preclude operation of the safety catch while the clutch is engaged and retractable upon disengagement of the clutch for releasing the safety catch upon failure of the normally resisting means, the boss on the gear and said finger automatically disengaging the clutch upon predetermined rotation of the gear.

1,824,985. ELECTRICAL CARBURETOR STARTER. PHILIP E. EDELMAN, Chicago, Ill. Filed Mar. 22, 1928. Serial No. 263,791. 2 Claims. (Cl. 210—38.)

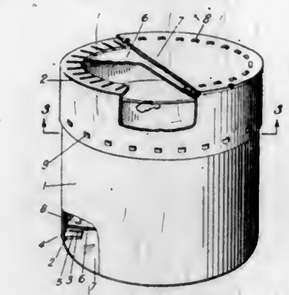


1. An electric heater plug for a carburetor comprising a threaded insulator having a centrally disposed aperture, a metallic lead-in within the aperture and occupying the lowermost portion thereof, a heater wire connected to and supported by the lead-in thereabove and within and in spaced relation to the walls defining the aperture, thus providing a well for the accumulation of fuel about the wire, and a metallic conducting gasket surrounding the heater wire and electrically connected thereto to seal the plug to the carburetor.

1,824,986. CONTAINER. HANS A. EGGERSS, Van Wert, Ohio. Filed July 11, 1930. Serial No. 467,204. 4 Claims. (Cl. 229—5.5.)

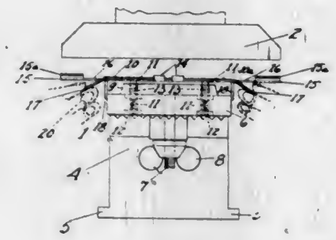
1. A container end structure made of fiber board or similar material comprising a cylindrical body portion, an inwardly extending integral annular flange on one end thereof comprising an unbroken shelf and a series of

tabs of maximum width disposed in the same plane, a disk of fiber board or similar material within said body portion and having a vertical support from said inwardly



extending annular flange and a lateral support from the vertical inner wall of said body portion, and means for securing said disk and said annular flange together.

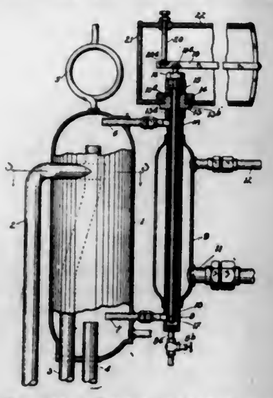
1,824,987. HAND GUARD FOR SHOE ORNAMENTING DEVICES. BENJAMIN W. FREEMAN, Cincinnati, Ohio. Filed Nov. 22, 1927. Serial No. 235,100. 7 Claims. (Cl. 164—98.)



1. In combination with shoe ornamenting instrumentalities so arranged as to provide spaces in which an operator may insert his fingers to hold or adjust work with relation to the ornamenting instrumentalities, guarding means associated with said instrumentalities so arranged with reference to the space occupied by the operator's fingers when holding work as to block the movement of the operator's fingers into such relation to said instrumentalities as might cause injury, during the ornamenting operation, said ornamenting instrumentalities comprising a support carrying ornamenting means and a stripper plate having a resilient mounting with relation to said dies, and said guarding means comprising extensions of said stripper plate.

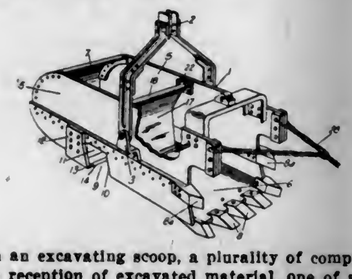
1,824,988. WATER LEVEL INDICATOR APPARATUS FOR STEAM POWER PLANTS. CHARLES A. FRENCH and RUSSELL R. WATERMAN, Long Beach, Calif., assignors to Farmers' National Bank of Greenville, Ohio, trustee, Greenville, Ohio, a Corporation of Ohio. Filed Jan. 12, 1925. Serial No. 1,855. 10 Claims. (Cl. 73—54.)

6. In a water level indicator apparatus for steam power plants, a combined steam and water drum, a water column member communicating with the upper and lower ends of said drum, a cold water circulation receptacle surrounding said water column member, an expansion means mounted in said water column member and secured to and extending from one end thereof and adapted to be ex-



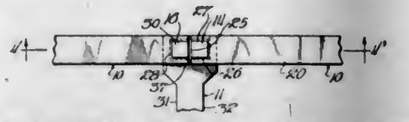
panded by the steam therein in inverse proportion to the height of the water therein.

1,824,989. EXCAVATING SCOOP. EARL H. FUNDOM, Kenton, Ohio. Filed Feb. 7, 1930. Serial No. 426,694. 11 Claims. (Cl. 37—135.)



3. In an excavating scoop, a plurality of compartments for the reception of excavated material, one of said compartments being disposed behind another and said compartments having openings thereinto and material-penetrating means adjacent said openings.

1,824,990. CRIBBING. CHARLES GILMAN, Plainfield, N. J., assignor to Massey Concrete Products Corporation, Chicago, Ill., a Corporation of Virginia. Filed Oct. 1, 1928. Serial No. 309,528. 9 Claims. (Cl. 61—47.)

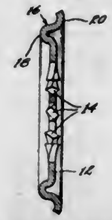


1. In a cribbing, a header comprising an elongated concrete member of substantially rectangular cross section and an enlargement at the end of said member having a bearing surface and a socket for receiving parts of a stretcher.

1,824,991. LOCK-WASHER. JOHN M. GRIBBIN, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 9, 1929. Serial No. 391,162. 1 Claim. (Cl. 151—35.)

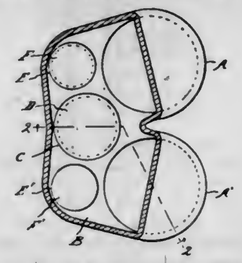
In a lock washer of the class described comprised of flat stock, an annular body portion having a plurality of internal work engaging teeth and a resilient marginal section including an annular flange extending out of the plane of the body portion in one direction and an annular

flange coextensive therewith extending out of the plane of the body portion in the opposite direction, the space



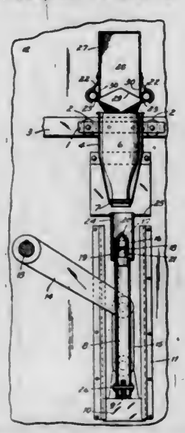
presented within one of said annular flanges being adapted to receive a clamping member.

1,824,992. INTERNAL COMBUSTION ENGINE. RAY W. HARROUN, Detroit, Mich. Filed Sept. 3, 1929. Serial No. 390,167. 5 Claims. (Cl. 123—53.)



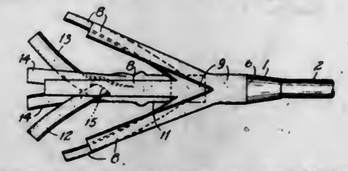
1. An internal combustion engine comprising a pair of adjacent cylinders with parallel axes, a common combustion chamber having a restricted area connecting the same with said cylinders and provided with a single valve controlled inlet port arranged between and overlapping said cylinders and a pair of exhaust ports of smaller diameter arranged on opposite sides of said inlet port.

1,824,993. MEANS FOR WASHING BOTTLES. JAMES L. HEROLD and JOSEPH W. DAWSON, St. Louis, Mo., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 5, 1928. Serial No. 324,005. 6 Claims. (Cl. 141—7.)



2. In a bottle washing device, a support on which the bottle is mounted, means acting on the bottle itself to rotate said bottle during the washing operation, said means comprising a nozzle directed toward the periphery of the bottle at an angle to a radial plane extending from the axis of rotation of the bottle through said nozzle, through which nozzle cleansing liquid is discharged onto the bottle thereby to rotate and at the same time wash the bottle, and means whereby said support is raised and lowered during the operation of said first named means.

1,824,994. BOTTLE-WASHING BRUSH. JAMES L. HEROLD and JOSEPH W. DAWSON, St. Louis, Mo., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a Corporation of Missouri. Filed June 21, 1929. Serial No. 372,558. 5 Claims. (Cl. 15—213.)

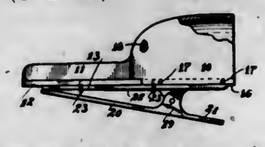


1. A bottle-washing brush having flexible fingers at one end to brush the bottom of the bottle, said fingers crossing and being joined to each other at a point between their ends to provide a continuous brushing face extending across the junction of the crossed fingers and adapted to brush the bottom of the bottle.

1,824,995. INK. EDWARD W. HILL, Chicago, Ill., assignor to A. B. Dick Company, Chicago, Ill., a Corporation of Illinois. Filed May 1, 1923. Serial No. 635,978. 2 Claims. (Cl. 134—35.)

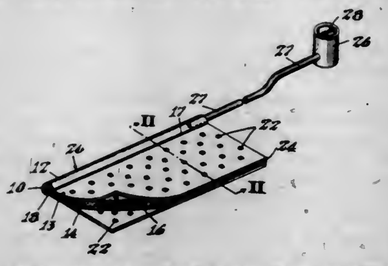
1. An ink for stencil-duplicating machines, comprising rosin oil, Turkey red oil, paraffin oil, water and coloring matter, a greater percentage of rosin oil being present than Turkey red oil and a greater percentage of Turkey red oil being present than paraffin oil.

1,824,996. SKULL FOR FUR NECKPIECES. CHARLES ABEL HOSIER, Toronto, Ontario, Canada. Filed Nov. 6, 1930, Serial No. 493,754, and in Canada Mar. 10, 1930. 4 Claims. (Cl. 2—65.)



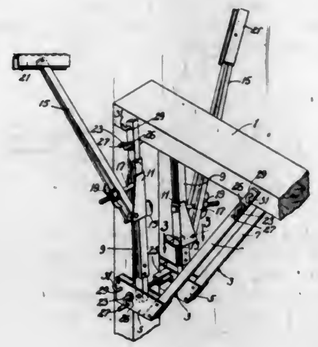
1. A skull of the class described comprising a hollow metal member approximating in size and shape the head of the animal that is to be mounted on it, and a wooden upper jaw plate secured to the metal member.

1,824,997. LUBRICATING WELT AND SYSTEM OF USING THE SAME. ALBERT L. HOWARD, Brockton, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1929. Serial No. 417,806. 14 Claims. (Cl. 184—1.)



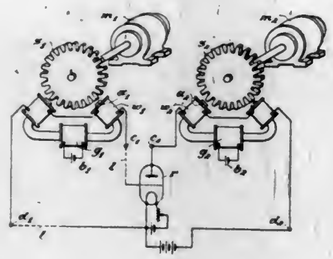
1. A fender welting of flexible textile material having a longitudinally disposed bead with an absorbent filler extending along one of its edges.

1,824,998. BUCK SUPPORT. WILLIAM O. ISAACSON, Chicago, Ill. Filed May 29, 1930. Serial No. 457,193. 15 Claims. (Cl. 20—0.5.)



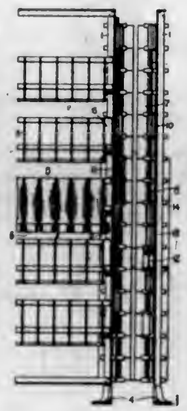
1. A support of the class described comprising clamping members adapted to be drawn together on a building device, each member comprising a strut and a guide, sliding means on said guides, and laterally swingable braces on said sliding means.

1,824,999. SYNCHRONIZING DEVICE. AUGUST JIPP, Berlin-Spandau, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Nov. 5, 1926, Serial No. 146,345, and in Germany Nov. 6, 1925. 3 Claims. (Cl. 172—293.)



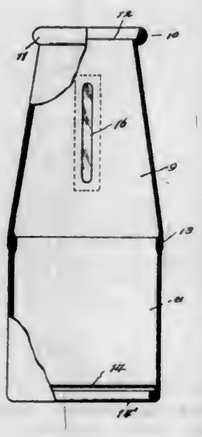
2. A synchronizing device comprising a motor at the transmitting station, another motor at the receiving station, both of said motors being adapted to run at approximately the same speed, a synchronous generator driven by the first-named motor and producing electric impulses of relatively high frequency, of about the order of up to three thousand to four thousand cycles, another synchronous generator driven by the other motor and producing electric impulses of the same frequency as the first-named generator, and a transmission system by which the impulses are transmitted from one of said generators to the other.

1,825,000. TELEPHONE SYSTEM. FRANK KESSLER and ALBERT GEORGE FORSTER, Liverpool, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed May 11, 1929, Serial No. 362,194, and in Great Britain July 2, 1928. 17 Claims. (Cl. 179—98.)



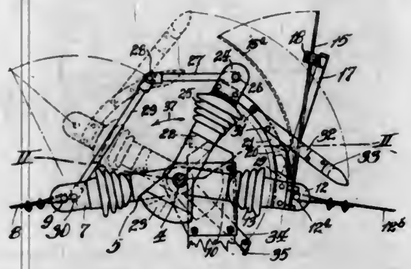
1. The combination with a switch supporting rack, of a plurality of shelves of automatic switches mounted thereon, a distributing frame comprising a plurality of parallel vertical rows of terminal pins, each of said rows corresponding to one of said shelves, and multiple connections between the bank contacts of the respective shelves and the corresponding row of terminal pins.

1,825,001. PAPER BOTTLE. LYDIA B. KOCH, New York, N. Y., assignor to Reinforced Paper Bottle Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 23, 1928. Serial No. 256,188. 2 Claims. (Cl. 229—5.6)



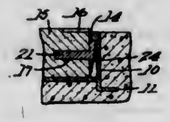
1. A paper bottle having a tapered laminated neck portion, a reinforced thickened pouring edge secured thereto, and an added reinforcing filler strip interposed between said neck portion and pouring edge, said thickened portion being molded to form a horizontal upward opening seat, substantially as described.

1,825,002. ELECTRIC AIR-BREAK SWITCH. HERBERT J. KRATZER, St. Louis, Mo. Filed May 11, 1925. Serial No. 29,418. 12 Claims. (Cl. 200—48.)



1. An electric switch comprising a blade, a contact member for said blade, an auxiliary blade having a hook portion extending from said blade, a stationarily held contact member for said auxiliary blade, said auxiliary blade being in sliding contact with said last mentioned contact member adapted to have the hook portion thereof engage and flex said contact member, and catching means cooperable with said contact member after it has been flexed and released by said hook portion.

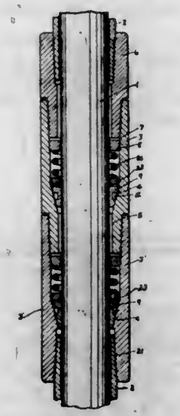
1,825,003. TRAFFIC MARKER. JOSEPH A. LEDOUX, Worcester, Mass. Filed June 26, 1930. Serial No. 464,046. 4 Claims. (Cl. 94—1.5.)



4. A traffic marker comprising a casing embedded in the roadway and open at the top, said casing having flanges extending inwardly at its ends, a resilient rubber block in said casing and having its upper surface constituting the marker proper and a pair of latches each set into a horizontal opening in the end of the rubber block and adapted to be forced out by the resiliency of the rubber to a point underneath the said flanges to hold the rubber block in position, said latches having an inclined surface, whereby when the block is in position the tool can be introduced behind an inclined surface to force the latch back and release it from the flange under which it is normally located.

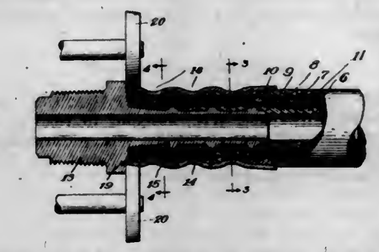
1,825,004. PACKING FOR RODS AND THE LIKE. GERALD R. LIVERGOOD, Houston, Tex., assignor of one-fourth to W. L. Pearson, Harris County, Tex.; Marie E. Livergood, administratrix of Gerald R. Livergood, deceased. Filed July 29, 1925. Serial No. 46,830. 3 Claims. (Cl. 286—30.)

1. A packing assembly comprising in cooperation a rod, a sleeve about said rod, said sleeve being threaded internally and externally on opposite ends, a tapered seat within said sleeve, a sectional packing adapted to wedge in said seat and contract to engage said rod, a ring seated



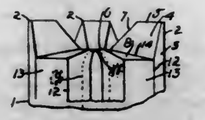
upon said packing, a coil spring urging said ring into engagement with said packing, and a retaining ring screwed into said sleeve to adjustably compress said spring.

1,825,005. MEANS FOR ATTACHING FITTINGS TO THE ENDS OF HIGH PRESSURE HOSE. MALCOLM LOUGHEAD, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed July 10, 1925. Serial No. 42,849. 1 Claim. (Cl. 285—84.)



A hose coupling comprising, a thimble having an enlarged attachment portion formed integral therewith, said attachment portion having a sloping shoulder adjacent the thimble, the thimble being provided with a conical portion at its innermost end, and a sleeve extending beyond the end of the thimble and annularly contracted at intervals along its length, the innermost end of the sleeve being contracted into a cone shape, the wall of which slopes in a direction opposite to the underlying cone of the thimble.

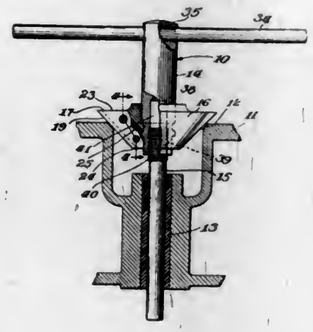
1,825,006. CORK. MERLIN T. R. MAYNARD, San Jose, Calif. Filed Aug. 26, 1929. Serial No. 388,482. 2 Claims. (Cl. 128—65.)



1. A cork having an axially disposed passage formed therein open at the inner end and normally closed at its outer end, the said outer end having a plurality of radially

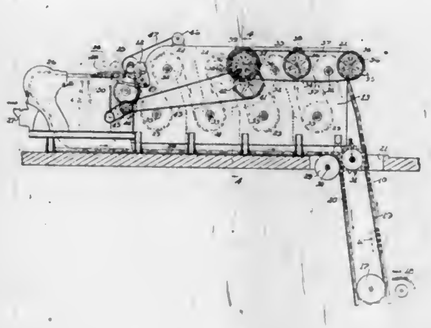
disposed fingers of resilient, flexible material formed thereon, the several fingers having engaging portions adapted to normally form a closure for the closed end of the passage.

1,825,007. VALVE SEAT RECONSTRUCTION TOOL. NORRIS F. MCNAUGHT, Chicago, Ill., assignor to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1928. Serial No. 311,724. 3 Claims. (Cl. 90—12.5.)



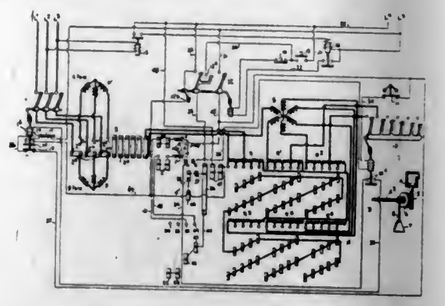
1. A valve seat reconstruction tool, comprising an arbor having anchoring formations thereon, a blade having anchoring formations, and a body of cast metal formed about said formations, to provide a support for said arbor and blade.

1,825,008. BOTTLE CLEANING APPARATUS. GEORGE J. MEYER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed Oct. 18, 1929. Serial No. 400,635. 8 Claims. (Cl. 15—61.)



1. In combination, an endless work-carrying conveyor, means for continuously driving a part of said conveyor, means for operating on the work during the continuous travel of the conveyor, means for intermittently driving another part of said conveyor, means for operating on the work in the intermittently travelling part of the conveyor and while said conveyor is intermittently stationary, and means for loading and unloading said conveyor.

1,825,009. CONTROLLER FOR ELECTRIC MOTORS. NIELS L. MORTENSEN, Milwaukee, and EDWIN W. SEEGER, Wauwatosa, Wis., assignors, by mesne assignments, to Cutler-Hammer Inc., Milwaukee, Wis., a Corporation of Delaware. Filed July 11, 1928. Serial No. 291,785. 17 Claims. (Cl. 172—274.)



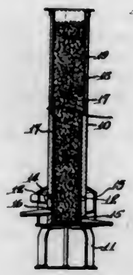
1. The combination with an electric motor drive having windings affording it a plurality of speed ranges, of control means for said drive including transfer means and speed regulating means affording overlap of the speed ranges for transfer.

1,825,010. ELECTRICAL CONDUIT. DANIEL HAYES MURPHY, West Hartford, Conn., assignor to The Wiremold Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 14, 1931. Serial No. 515,737. 7 Claims. (Cl. 247—37.)



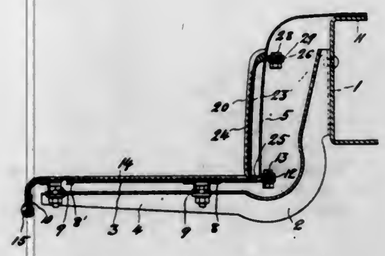
1. A surface conduit for electrical conductors comprising a base strip having two walls that are at right angles to each other and are provided near the edges with outwardly opening grooves which extend longitudinally thereof, and a bowed cover strip that has its edges bent inward therefrom and overlying the edges of the base strip.

1,825,011. METALLURGICAL FURNACE. HANS NAVRATIEL, Flint, Mich., assignor to Vacuumschmelze G. m. b. H., Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 27, 1928, Serial No. 328,858, and in Germany Jan. 2, 1928. 2 Claims. (Cl. 266—43.)



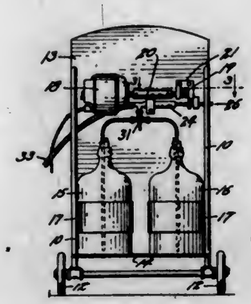
1. A metallurgical furnace comprising an outer wall, an inner metal template having a melting point below the intended temperature of the charge and a dry, finely divided granular refractory material adapted to sinter at a temperature below the melting temperature of the template, filling the space between the wall and the template and comprising small grains of cementitious quartzite initially cemented together by cementitious binding material as distinguished from the typical or rock quartzite.

1,825,012. RUNNING BOARD ASSEMBLY. IVAN ORNBERG, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed May 21, 1928. Serial No. 279,486. 12 Claims. (Cl. 280—163.)



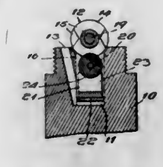
1. In a running board assembly, the combination with a sill member, and a running board supporting bracket carried thereby, of a running board mounted on said bracket, a running board dust shield carried by said sill member, a kick plate carried by said shield, and a common detachable connection between said shield, kick plate and running board.

1,825,013. METHOD AND APPARATUS FOR FLUSHING AND FILLING HYDRAULIC BRAKE SYSTEMS. ARTHUR L. PATTON, Denver, Colo., assignor to Mountain Chemical Company, Denver, Colo., a Corporation of Colorado. Filed Sept. 15, 1928. Serial No. 306,280. 6 Claims. (Cl. 188—152.)



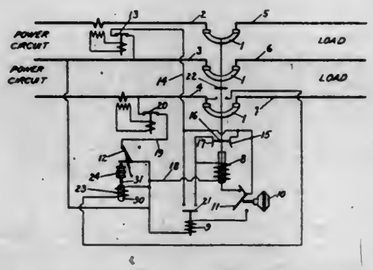
5. A method for servicing a hydraulic brake system comprising: forcing a cleansing solution into one point of said system and allowing it to discharge from another point thereof; discharging said solution by forcing brake liquid into said system at said first point so as to discharge the cleansing fluid therefrom at the second point.

1,825,014. CHECK PROTECTOR. STANLEY E. PETERS, Chicago, Ill. Filed May 31, 1930. Serial No. 457,808. 9 Claims. (Cl. 101—24.)



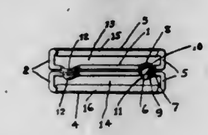
1. In a device of the kind described, the combination of a fountain pen cap having a recess provided in one end thereof, an impression roller and means for feeding ink to said roller, said roller and means being mounted in said recess and said feeding means including an ink fountain having a plurality of ink retaining recesses.

1,825,015. AUTOMATICALLY OPERATED CIRCUIT BREAKER. ESTEL C. RANEY, Columbus, Ohio. Filed Dec. 9, 1925. Serial No. 74,401. 4 Claims. (Cl. 175—294.)



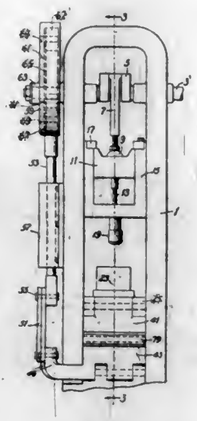
1. In a three wire circuit, a plurality of main breakers, a main breaker located in each of the said wires, means for automatically reclosing the said breakers, means for rendering said reclosing means inoperative and comprising a switch aind a resistance element, a thermostat element located in operative relation to the resistance element, the resistance element energized when the main breakers are open to heat the thermostat element to cause the thermostat element after a certain time to operate the switch to render the said reclosing means permanently inoperative, if the main breakers remain open for a too long time interval either continuously or an aggregate of successive open periods during the said time interval.

1,825,016. SLIDE BUCKLE. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed Nov. 3, 1930. Serial No. 492,995. 5 Claims. (Cl. 24—169.)



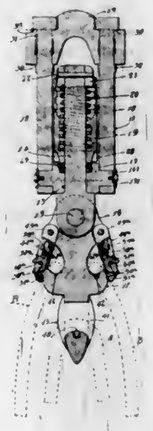
1. A slide buckle comprising a substantially rectangular frame including side structures each supporting an intermediate bar section, the sections being longitudinally aligned, one with the other, and the free extremities of the sections being bent out of the plane of the buckle and in opposite directions one from the other.

1,825,017. EXTRUSION PRESS. FRITZ SINGER, Nuremberg, Germany. Filed Aug. 25, 1930, Serial No. 477,567, and in Germany Apr. 2, 1928. 16 Claims. (Cl. 207—2.)



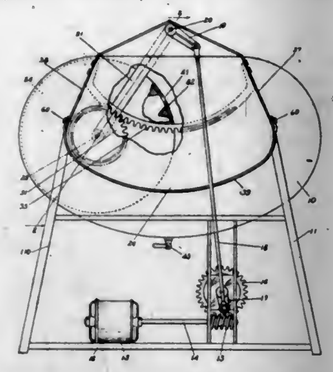
1. A mechanical extrusion press comprising two members mounted for opposed movement, an extruding die on one of said members and means cooperating with said die to extrude therefrom located on the other of said members and mechanical driving means adapted to move said members simultaneously at different speeds.

1,825,018. ROTARY AND CASING HOOK. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron Jackson Co., Los Angeles, Calif., a Corporation of Delaware. Filed Apr. 7, 1930. Serial No. 442,260. 15 Claims. (Cl. 294—82.)



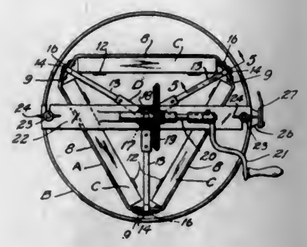
1. A rotary and casing hook comprising a hook member provided with a notch to receive the bail of a swivel and provided with other notches to receive the bails of an elevator, the second mentioned notches having their axes at a right angle to the first mentioned notch.

1,825,019. WASHING MACHINE. FRANK SNYDER, Huntington, W. Va., assignor, by mesne assignments, to Snyder Engineering Corporation, Wilmington, Del., a Corporation of Delaware. Filed Oct. 1, 1924, Serial No. 740,914. Renewed May 7, 1930. 5 Claims. (Cl. 68—18.)



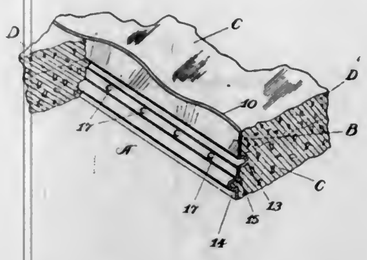
1. In a wash machine the combination of a tub having an arcuate bottom and substantially vertical side walls, the side walls being provided with lateral extensions for providing recesses at the sides of the tub, a perforated cylinder within the tub, having end walls and arranged for backward and forward movement, the cylinder walls being closely adjacent, but spaced sufficiently from the lower ends of the walls of the tub to permit movement of the cylinder within the tub, whereby movement of the cylinder within the tub will serve to move the greater mass of fluid ahead of the cylinder and to minimize the flow of fluid between the cylinder and the tub so that the major portion of the fluid is impounded on a given side of the cylinder and forced through the perforations in the cylinder upon movement of the cylinder into the impounded fluid, and means within the recesses to move the cylinder backward and forward within the tub.

1,825,020. CENTRIFUGAL HONEY EXTRACTOR. JOHN SNYDER, Wapakoneta, Ohio, assignor to Standard Churn Company, Wapakoneta, Ohio, a Corporation of Ohio. Filed Nov. 27, 1929. Serial No. 410,058. 1 Claim. (Cl. 210—65.)



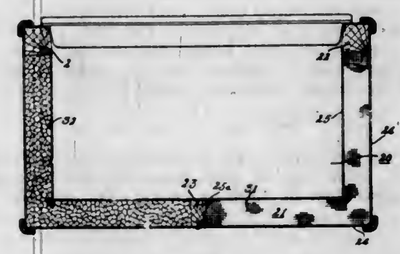
In a centrifugal honey extractor, of the type having an outer container, and an inner wire mesh rotating container to receive the honey combs, said inner container formed with a hexagonal frame havng a covering of wire mesh; three of the sides being longer than the remaining three sides the said long sides being disposed with reference to each other in approximately the shape of an equilateral triangle, to receive against each side thereof a comb frame; the smaller sides being unobstructed adjacent the angles of the hexagon to form an edge abutment to prevent slipping of the comb, means for rotating the container, and said container being detachably carried in the outer container.

1,825,021. FLOOR SEPARATOR. ANDREW STRAND, Minneapolis, Minn. Filed Jan. 11, 1928. Serial No. 245,874. 11 Claims. (Cl. 94—17.)



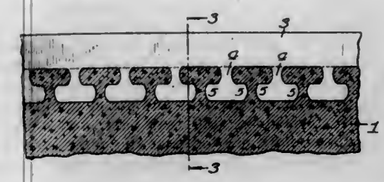
1. A separator for terrazzo surfaced floors including an irregularly edged thin ribbon-like member adapted to form a particular pattern along the length of the spacer, and anchoring members oppositely disposed and extending longitudinally through the body of said separator for the purposes specified.

1,825,022. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 244,017. 3 Claims. (Cl. 220—9.)



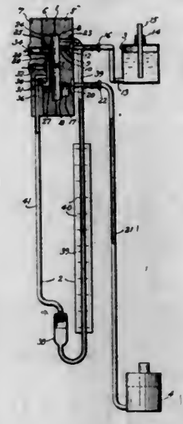
1. A refrigerator having an insulation space, bags of loose insulating material in said space, and additional loose insulating material in layers between the bags in said space.

1,825,023. CEMENTITIOUS FLOORING. PASCAL SYLVESTER, Chicago, Ill. Filed Feb. 23, 1928. Serial No. 256,078. 2 Claims. (Cl. 94—17.)



1. A sheet metal partition strip for cementitious flooring, said strip comprising an upper imperforate part and a lower part including a plurality of spaced downwardly projecting prongs, integral with said upper part, said prongs being provided with widened portions spaced from said upper part, the area of said prongs being substantially equal to the area of the spaces between them and said prongs and spaces being of substantially like shapes.

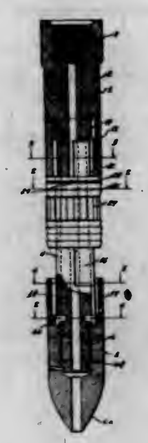
1,825,024. GAS MEASURING AND INDICATING DEVICE. JOHN GUDBRAND TANDBERG, Lund, Sweden, assignor to Aktiebolaget Carba, Stockholm, Sweden, a Corporation of Sweden. Filed June 20, 1928, Serial No. 286,819, and in Germany June 23, 1927. 17 Claims. (Cl. 23—255.)



1. Apparatus for measuring gas content and the like comprising a housing, a chamber formed within said housing, said housing having a passage for gas, a porous member arranged between said passage and said chamber and means for flowing a continuous stream of absorption liquid through said chamber.

13. The method of measuring the amount of a gas constituent in a gas mixture which comprises diffusing the gas constituent through a porous member into the presence of a continuously moving absorption agency and measuring variations in the difference of gas pressure on the opposite sides of the porous member.

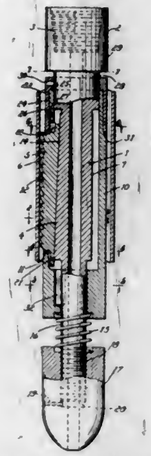
1,825,025. FISHING TOOL. IDRIS THOMAS, Whittier, and ERNEST I. TIBBET, Huntington Park, Calif. Filed Feb. 1, 1928, Serial No. 251,032. Renewed Nov. 7, 1930. 16 Claims. (Cl. 294—86.)



1. A fishing tool for recovering "lost" objects from a well, having an elongated tapered retaining member for carrying slips, said retaining member having curved eccentric faces eccentric to its longitudinal axis, and slips in arcuate form carried by the retaining member, having curved faces on one side to cooperate with the curved

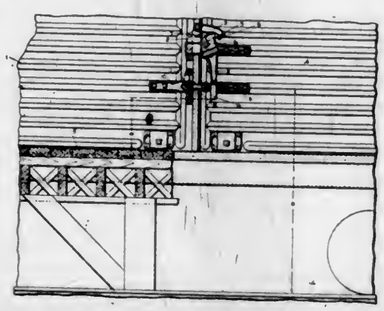
faces of the retaining member, and having teeth on their opposite sides, said retaining members and said slips co-operating upon a rotation of the retaining member on its longitudinal axis to move the slips to grip the "lost" object, the said taper of the retaining member being in a direction to tighten the slips on the "lost" object when the retaining member is pulled upwardly.

1,825,026. CASING SPEAR. IDRIS THOMAS, Whittier, Calif. Filed July 7, 1930. Serial No. 465,995. 14 Claims. (Cl. 294—94.)



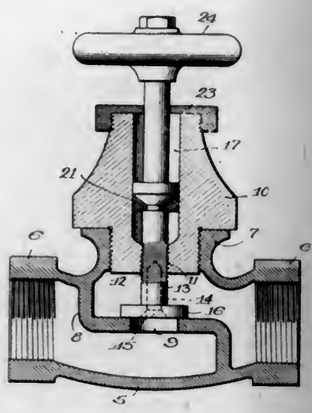
1. In a casing spear, the combination of a mandrel with a tapered portion having thrust faces, and with its enlarged end disposed downward, slips received on said thrust faces and co-operating with the mandrel when it is pulled upwardly, to expand and engage the wall of the casing, a slip-carrier for holding the slips so that they extend longitudinally with the mandrel, said mandrel being capable of rotation relative to the slip carrier and having untapered portions located circumferentially between said thrust faces forming recesses to receive the slips when a relative rotation of the mandrel takes place, thereby releasing the spear, and means for yieldingly holding the slips in an elevated position on the mandrel.

1,825,027. DOOR OPERATING MEANS. KENNETH J. TOBIN and WILLIAM W. DARROW, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1929. Serial No. 351,000. 10 Claims. (Cl. 268—44.)



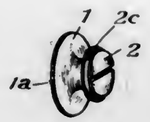
1. In a door operating lever, a pivoted operating lever, said lever having a relatively short handle and said lever having a socket opening adjacent its pivot adapted to receive a bar to obtain increased leverage.

1,825,028. VALVE. ERVIN A. TOWNILL, Lockport, Ill. Filed July 2, 1930. Serial No. 465,353. 3 Claims. (Cl. 251—50.)



3. A valve, a valve stem, means for detachably securing said valve to said valve stem, a valve stem casing centrally bored, a portion of said bore being tapped and the remainder thereof being enlarged, said valve stem being threaded at a point for co-operating with the tapped portion of said valve stem casing, said valve stem having an annular recess with an oblique wall and a split ring having an oblique wall sprung into the recess in said valve stem and co-operating with the walls of the enlarged bore in said valve stem casing.

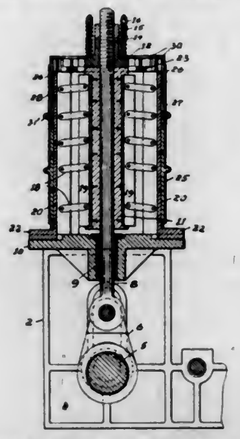
1,825,029. BUTTON. FRITZ TRÜB, Rorschach, Switzerland. Filed Aug. 14, 1930, Serial No. 475,284, and in Germany Aug. 19, 1929. 2 Claims. (Cl. 24—105.)



1. A button for attachment to cloth in two separable parts, in combination, a front part to present the aspect of a garment button, a head provided on said front part, a base formed on said front part in close proximity to said head, a rounded-off peripheral taper provided on said base at an obtuse angle, a rear part connected to said front part by screw engagement and a rim complementary to said taper formed on said rear part, and adapted to push the gripped cloth portion past the outer edge of said taper for locking said screw connection without damaging the cloth.

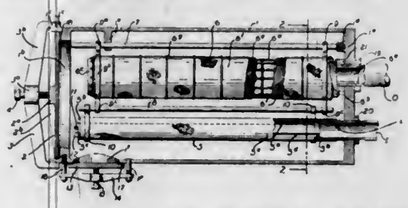
1,825,030. MACHINE FOR EXPANDING CYLINDERS. HAROLD G. VAUGHN, Warren, Ohio, assignor to The Ohio Corrugating Company, a Corporation of Ohio. Filed July 1, 1927. Serial No. 202,916. 10 Claims. (Cl. 153—73.)

1. A machine for expanding cylinders, comprising radially shiftable rigid means adapted to expand a sheet metal cylinder circumferentially, said means being arranged to move longitudinally in respect to the axis of



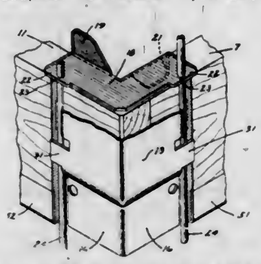
the cylinder coincidently with the longitudinal draw movement of the material as it is being expanded.

1,825,031. FLUID CLEANER. WOLFE VOLK, San Diego, Calif., assignor to San Diego Consolidated Gas and Electric Company, San Diego, Calif., a Corporation of California. Filed Jan. 31, 1929. Serial No. 336,396. 5 Claims. (Cl. 183—70.)



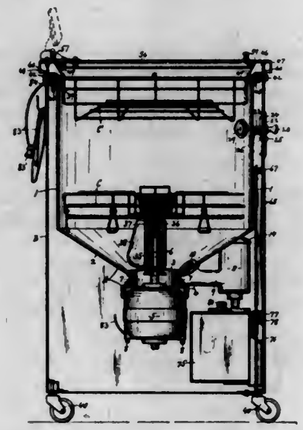
1. In a device of the class described, an outer substantially horizontal enclosing casing, having an opening at its one end, a readily removable cover for said opening, inlet and outlet pipes connected to the other end of said casing, a filter cylinder positioned within the casing and removably connected with said outlet pipe, a diffusing cylinder positioned within the casing and removably connected with said inlet pipe, said diffusing cylinder and said filter cylinder so arranged that the said filter cylinder receives fluid directly from said diffusing cylinder throughout its entire length, and means for locking said diffusing cylinder in position.

1,825,032. CRATE. CHARLES A. WOOLSEY and HENRY V. BOWMAN, Minneapolis, Minn. Filed Mar. 22, 1930. Serial No. 438,083. 8 Claims. (Cl. 217—65.)



1. A crate having walls composed of slats arranged one upon another and provided with alined recesses adjacent to the corners of the crate, angle plates fitting the outer corners of the crate and having channels adapted to be seated in said recesses, anchor plates interposed between the slats at the corners of the crate and having ears formed thereon adapted to engage inner surfaces of said slats, said anchor plates having apertures therein adapted to be alined with said channels, and a wire inserted in each channel and through the apertures in said anchor plates alined therewith, thereby to secure together said corner plates, anchor plates and wall slats.

1,825,033. COMBINED MECHANICAL DISHWASHER AND CABINET THEREFOR. FORREST A. WALKER, Syracuse, N. Y., assignor to Walker Dishwasher Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 7, 1929. Serial No. 412,532. 7 Claims. (Cl. 141—9.)



4. The combination with a dishwasher having a vat for receiving the dishes and washing fluid, an upright casing surrounding the vat, means on the casing for supporting the vat thereon, a cap-plate supported on the upper end of the casing, and additional means on the cap-plate for additionally supporting the vat.

1,825,034. SECTIONAL PIPE COUPLING. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Apr. 13, 1927. Serial No. 183,373. 5 Claims. (Cl. 285—86.)

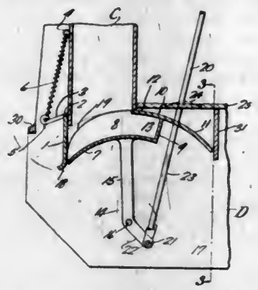


1. A sectional pipe coupling, comprising a body member having conical sealing seats on opposite sides thereof and a fluid passage open to the center of each seat, a yoke member sleeved over said body member having screw-threaded openings adapted to be placed opposite said seats, and tubular nuts extending through said screw-threaded openings adapted to clamp a pair of flanged pipes against said seats and to lock said yoke member to said body member.

1,825,035. DROPPER VALVE FOR CORN PLANTERS. EDGAR B. YOUNG, Newman, Ill. Filed Jan. 31, 1931. Serial No. 512,583. 2 Claims. (Cl. 111—51.)

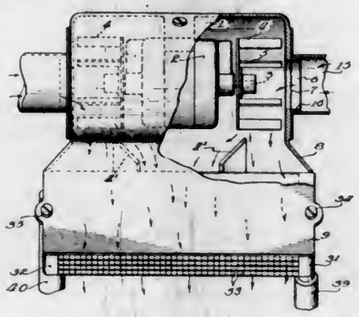
1. In a device of the kind described, in combination with the seed tube, runner, and rock shaft of a corn planter,

a bell crank lever fulcrumed in the runner beneath the seed tube, a valve mounted beneath the seed tube and comprising an upwardly convexed base plate secured to the bell crank lever, sides and an end on the base plate, an upwardly convexed hood mounted on the upper margin



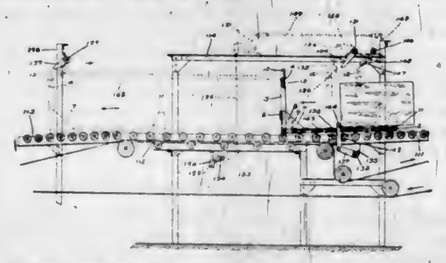
of the end and extended at one end over a portion of the base plate and at its other end beyond the end of the base plate, a crank extended from the planter rock shaft, and an operating rod pivotally connected at its ends to the said bell crank lever and the crank.

1,825,036. VEHICLE HEATER. FRED M. YOUNG, Racine, Wis. Filed June 17, 1929. Serial No. 371,390. 4 Claims. (Cl. 257—137.)



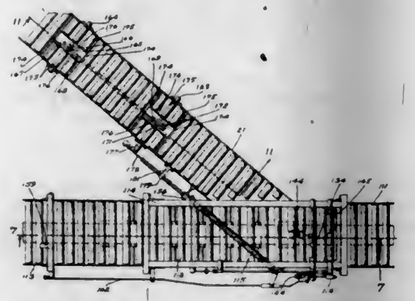
2. In a vehicle having a cowl vent therein, a plate removably mounted in said cowl vent and having an aperture with a tubular flange around said aperture, means for drawing fresh air thereinto, comprising a blower housing and a rotary blower in said housing, a conduit connecting said blower housing with said tubuluar flange, and a heating element mounted within said housing.

1,825,037. CONVEYING APPARATUS. MARTIN J. ANDERSON, Ellwood City, Pa., assignor to Mathews Conveyer Company, Ellwood City, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1927. Serial No. 169,281. 14 Claims. (Cl. 198—38.)



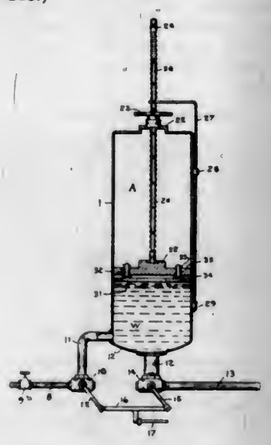
1. An apparatus of the class described, comprising a main conveyer, a plurality of branch conveyers leading therefrom, deflecting mechanisms on said main conveyer for diverting articles therefrom to the branch conveyers, an article-carrying member movable over the main conveyer, control means on said member adapted selectively to actuate one of said deflecting mechanisms to cause following articles to be diverted from the main conveyer to a selected branch conveyer, means also actuable by said control means to effect the unloading of the article from said member and to permit the member to continue onward over the main conveyer after said deflecting mechanism has been operated to divert the articles onto a selected branch conveyer.

1,825,038. CONVEYING APPARATUS. MARTIN J. ANDERSON, Ellwood City, Pa., assignor to Mathews Conveyer Company, Ellwood City, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1927, Serial No. 169,282. Renewed Sept. 8, 1930. 11 Claims. (Cl. 198—38.)



1. A conveying apparatus comprsiing in combination, a main conveyer having a branch conveyer connected therewith, means for diverting packages or articles from said main conveyer onto said branch conveyer, and means adapted to be operated only by the accumulation of packages on said branch conveyer adjacent to said main conveyer to actuate said diverting means to prevent following articles from being diverted onto said branch conveyer.

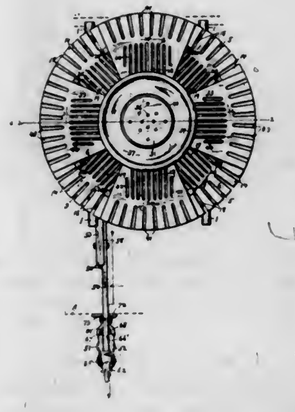
1,825,039. WATER SUPPLY MEANS FOR CONCRETE MIXERS. FRANK ASPDEN, Vancouver, British Columbia, Canada, assignor to Ransome Concrete Machinery Company, Dunellen, N. J., a Corporation of New Jersey. Filed Oct. 21, 1927. Serial No. 227,651. 1 Claim. (Cl. 221—113.)



In a concrete mixing machine having a mixer and a loading device for charging said mixer with non-aqueous

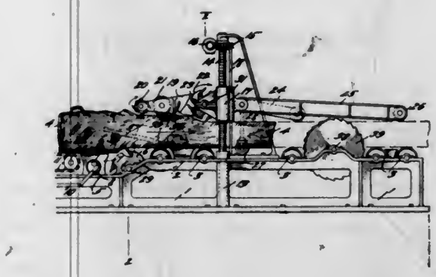
material, a water supply device comprising a tank, an adjustable partition therein for varying and determining the effective capacity of said tank, apertures adapted to act as air vents in said partition, a float member secured to said partition and positioned in close proximity thereto, supporting pins projecting from said float member and engaging said apertures, means for securing said pins to said partition, closure means around said projecting pins and adapted to close said apertures as and when the usuable portion of said tank is filled to capacity, controllable means adapted to alternately fill and completely discharge water into and from said tank respectively.

1,825,040. FUEL GRATE. FRANK A. AUSTIN, Syracuse, N. Y. Filed Nov. 14, 1929. Serial No. 407,118. 16 Claims. (Cl. 126—170.)



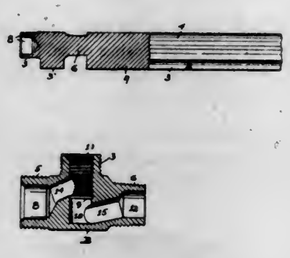
13. In a heater grate, a non-rotatable main grate and supporting means therefor, in combination with separate rotatable grate sections co-axial with said main grate and each provided with diametrically opposite wings overlying the main grate, the wings of both sections being disposed in the same horizontal plane, and means for locking said grate sections to each other to cause them to rotate in unison.

1,825,041. SAWING MACHINE. GEORGE BABARE, Tacoma, Wash. Filed Mar. 29, 1929. Serial No. 351,029. 6 Claims. (Cl. 144—39.)



1. In a sawing machines, a saw, a frame, a plurality of positively driven feed rolls mounted therein for feeding the log into the operative plane of the saw, a cutter for the lower surface of the log arranged in advance of the feed rolls, a threaded post rotatably mounted in the frame, an arm having threaded connection with the post to permit vertical adjustment of the arm in the rotation of the post, an upper log cutter carried by the arm, a pressure roll carried by the arm, and a knot cutter carried by the arm.

1,825,042. METHOD OF MAKING COCKS OR VALVES. JOHN D. BALDWIN, Jr., Cleveland, Ohio, assignor to Albert J. Weatherhead, jr., Cleveland, Ohio. Filed May 3, 1928. Serial No. 274,705. 18 Claims. (Cl. 29—157.)



1. A method of producing a valve body, which includes the steps of forming a reduced cylindrical portion off center in and lengthwise of a rod, and of severing from the main body of the rod a section thereof adjacent to and including said cylindrical portion.

1,825,043. AUTOMATIC WINDOW CLOSING DEVICE. CHARLES A. BALTZ, Jr., Ruxton, Md. Filed Dec. 15, 1930. Serial No. 502,292. 2 Claims. (Cl. 268—123.)



2. The combination with a window sash and frame of a device for closing the window comprising a base rigidly secured to said frame, a case removably fitted in said base, a drum revolubly mounted in said case, a spring within said drum for actuating the latter, a tape or cable wound upon said drum and adapted to be secured at one end to the window sash, means for holding the drum against the action of the spring therein, means for automatically releasing the drum to allow the tape or cable to be wound thereon and close the window, and manual means for operating the automatic releasing means.

1,825,044. METAL SPOOL. THOMAS GEORGE BAXENDEN, Watford, and JOHN ROBERT COLLYEAR, Bushey, England. Filed Aug. 2, 1929, Serial No. 382,999, and in Great Britain Aug. 10, 1928. 3 Claims. (Cl. 242—74.)

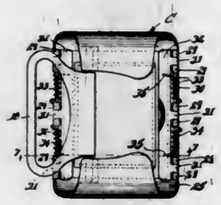
8. A spindle for photographic film spools comprising a blank of sheet metal rolled upon itself to provide a split tube, the longitudinal edges of said blank being cut-away

at their corners and formed with inwardly projecting reenforcing flanges spaced apart to provide a normally opened strip receiving slot, the cut-away corner portions



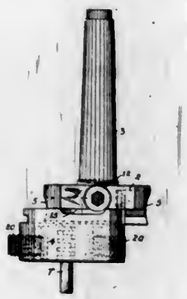
of said split tube outwardly of said flanges forming abutting edges to prevent the closing of said slot, the ends of said tubular spindle being connectible to spool discs.

1,825,045. BELT BUCKLE. GEORGE R. BLICKHAHN, Chicago, Ill. Filed Feb. 16, 1929. Serial No. 340,456. 1 Claim. (Cl. 40—152.)



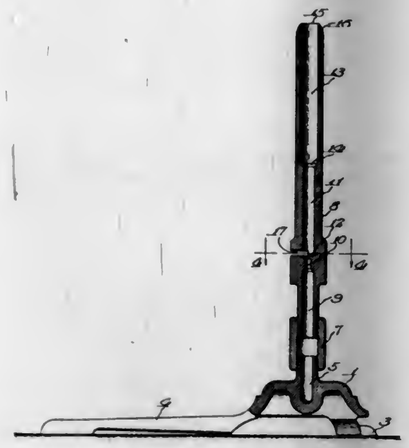
Insignia holding means for a buckle having a main face plate provided with a window opening, comprising integral hinge supporting members mounted upon said face plate upon opposite sides of said opening, pintle members supported in said supporting members on opposite sides of said opening, a pair of longitudinally extending strips having ear members pivotally mounted upon said pintle members, and a coil spring surrounding each pintle member for normally maintaining said strips in contacting relation with a supported insignia.

1,825,046. TOOL HOLDER. BENJAMIN T. BROWAND, Cleveland, Ohio. Filed Mar. 14, 1928. Serial No. 261,452. 6 Claims. (Cl. 279—6.)



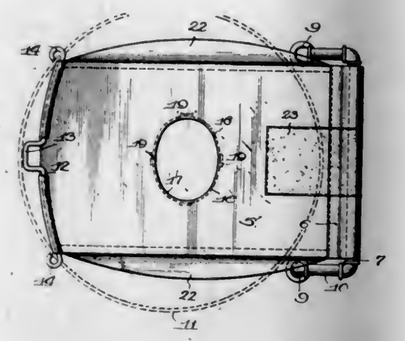
2. A tool holder, including a supporting member, a slidable head, means for sliding said head upon said member, a locking device for said head, and means adjustably mounted upon said head for holding a tool, said tool holding means being held in place by said supporting member.

1,825,047. BURNER. JULES BUCHEL, New Orleans, La., assignor of one-half to the estate of Charles Louque. New Orleans, La. Filed Feb. 17, 1928. Serial No. 254,959. 15 Claims. (Cl. 158—99.)



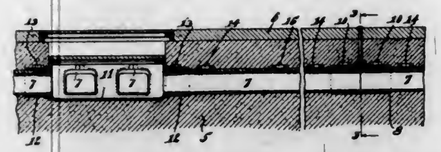
1. A burner comprising a series of connected passage sections, each succeeding section being greater in cross-sectional area than that of the preceding section, and a narrow air inlet at the juncture of a pair of said sections.

1,825,048. APRON RETORT CRATE LOADER. MIRON S. CANADAY, Rochester, Minn., assignor to Reid, Murdoch & Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 20, 1931. Serial No. 523,963. 6 Claims. (Cl. 193—7.)



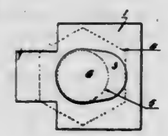
5. An apron retort crate loader comprising, in combination, a flexible apron having a hem along one edge for receiving a supporting member, a member secured along the opposite edge and providing a handle at its central portion, a plurality of attaching devices along said opposite edge of the apron for spanning the apron across the top of a retort crate, said apron having an opening therein and a canvas tube having its upper end secured along the edge of said opening so as to provide a downwardly extending spout through which cans discharged onto the apron may pass.

1,825,049. MEANS FOR LOCATING CONDUIT OUTLETS. GEORGE L. CHAMBERLAIN, and GUSS H. GNEISS, Chicago, Ill. Filed July 8, 1929. Serial No. 376,771. 6 Claims. (Cl. 247—3.)



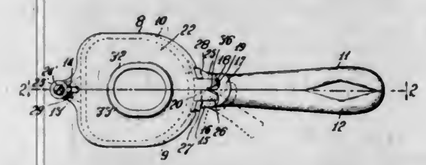
1. In an undersurface wiring system, a unitary duct section having places for outlet located at predetermined intervals in the length thereof, and a marker element perpendicularly coincident with the ends of said duct section in definite measured relation to said places of outlet and visible above the surface under which the duct is concealed for determining the direction in which said duct section extends and the location of the said predetermined places of outlet.

1,825,050. NUT LOCK. WILLIAM CHAPLIN, Paris, France. Filed Jan. 5, 1931, Serial No. 506,788, and in Germany Jan. 10, 1930. 6 Claims. (Cl. 151—3.)



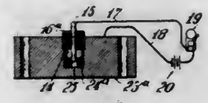
3. Nut lock for preventing rotation of a nut with respect to a bolt which comprises a plate provided with an elongated slot adapted to receive the bolt having one circular end the diameter of which is slightly larger than that of the bolt and the opposite circular end substantially smaller in diameter than the bolt section, said ends being connected by rectilinear converging walls parallel to the axis of the bolt, and means for simultaneously fixing said plate in the transversal direction with respect to said bolt and locking said plate with respect to said nut whereby the larger portion of the slot in the plate can be slipped over the bolt, the plate strongly forced in the direction that wedges the bolt between the sides of the slot and the means for transversely fixing the plate with respect to the bolt and locking the plate with respect to the nut can then be applied.

1,825,051. DENTAL FLASK. WALTER J. CLARK, Chicago, Ill., assignor to Coe Laboratories, Inc., Chicago, Ill., a Corporation. Filed Oct. 4, 1929. Serial No. 397,194. 11 Claims. (Cl. 22—97.)



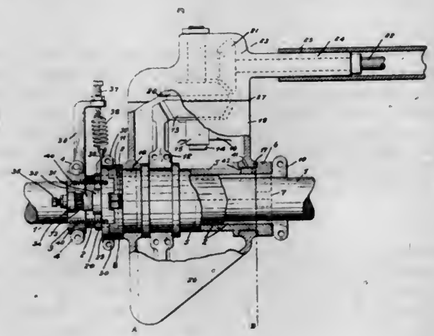
1. A dental flask comprising the combination of a box formed in two separable sections, means hingedly connecting the sections together, handle means for said sections, a bottom plate, cooperating means on said plate and said sections for fixing said plate in position when the sections are closed, cover means for said box, and locking means actuated by one of said handles for holding the sections in closed position.

1,825,052. HOT BEARING INDICATING MEANS. EDGAR L. CLEVELAND, Mobridge, S. Dak. Filed Oct. 26, 1928. Serial No. 315,211. 1 Claim. (Cl. 200—142.)



In hot bearing indicating means, a block of heat conducting metal apertured to receive fastening means whereby the metal block may be secured to the journal bearings of railroad cars and provided with a cavity extending downwardly from the top of the block; current conducting means disposed into said cavity out of contact with the walls of the cavity; insulating means secured in the upper end of said cavity for holding said conducting means in place and for closing the orifice of the cavity; and a body of fusible material arranged in contact with the cavity wall so as to flow throughout the bottom of the cavity when fused and into contact with said current conducting means.

1,825,053. POWER TRANSMITTING MEANS. JOHN L. CREVELING, Oracle, Ariz., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed June 16, 1924, Serial No. 720,257. Renewed May 2, 1930. 13 Claims. (Cl. 192—56.)

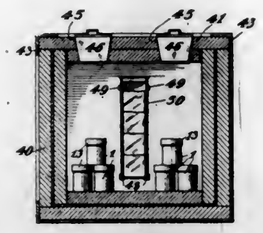


1. The combination with a reversible driving member, a clutch member, resilient means operatively connecting said members, and a second clutch member in positive engagement with said first-named clutch member and driven thereby in a plurality of directions, of means for automatically effecting the disengagement of said clutch members when the load upon said resilient means reaches a predetermined value.

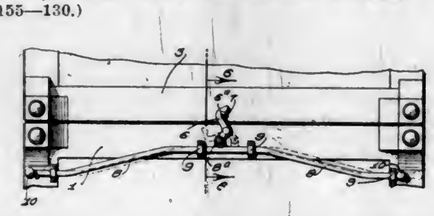
1,825,054. REFRIGERATIVE APPARATUS. GEORGE C. CUSACK, West New York, N. J., assignor, by mesne assignments, to Dryice Equipment Corporation, a Corporation of Delaware. Filed Aug. 9, 1926. Serial No. 128,075. 2 Claims. (Cl. 62—91.5.)

1. A refrigerator consisting of a box of insulating material and gas tight construction open only at the top and having its top opening horizontal, an insulating cover removably closing said top and provided with a plurality of relatively small hand holes therethrough, having insulating closures, and within said box a container of

carbon dioxide, of great depth as compared with its thickness, means supporting it near but above the bottom of said box to afford circulation on all sides thereof and having its top spaced apart below the cover of the box and discharging the sublimated carbon dioxide gas at a level which is a substantial distance below said cover.

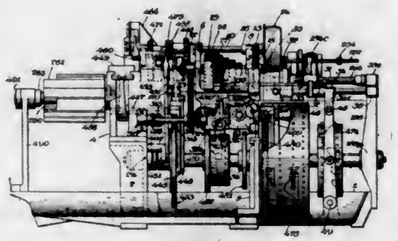


1,825,055. DAY-BED, CHAISE LONGUE, AND CHAIR. MAUDE LILLIAN DE BRETTEVILLE, Coronado, Calif. Filed Feb. 23, 1928. Serial No. 256,086. 1 Claim. (Cl. 155—130.)



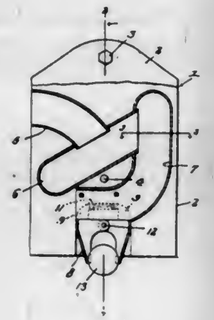
In a combination of the class described, an upholstered chair, an upholstered chaise longue in engagement therewith, catch and hook means mounted on the under side of said chair and chaise longue engageable with each other, and an actuating bar in connection with said catch and extending to both sides of said chair and chaise longue, whereby said catch may be operated from either side thereof for separating said chair and chaise longue.

1,825,056. MECHANICAL MOVEMENT. ALFRED E. DRISSNER, Cleveland, Ohio, assignor to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Dec. 6, 1921, Serial No. 520,287. Divided and this application filed Sept. 24, 1925. Serial No. 58,235. 5 Claims. (Cl. 74—57.)



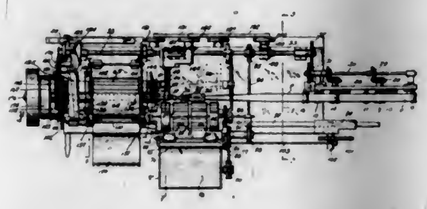
1. In a metal working machine, the combination of a drive shaft, a rotary spindle, a cam shaft, means for rotating said spindle at different speeds, means directly connected to said spindle for driving said cam shaft from the spindle at different speeds, clutch mechanism for disconnecting the cam shaft from the spindle, and means for independently driving the cam shaft from said drive shaft.

1,825,057. CHECK HOLDER FOR MINE DUMP CARS. JOSEPH DROPULICH, Houston, Pa. Filed Nov. 28, 1930. Serial No. 498,810. 5 Claims. (Cl. 40—15.)



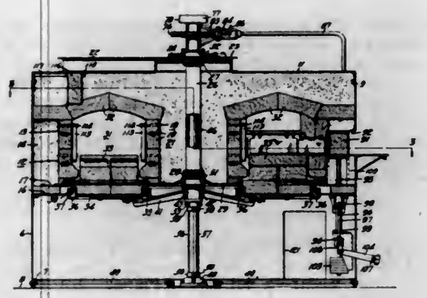
1. A check holder comprising a casing for vertical mounting on a support, an inclined pocket mounted in the casing and closed at its lower end and open at its upper end, a check receiving chute disposed in the casing and having one end communicating with an intermediate portion of the pocket through the upper wall of the pocket, and a check discharge chute mounted in the casing, the upper end portion of the pocket communicating with an upper portion of the discharge chute in a manner to discharge the check thereinto when the casing is moved from a vertical to an inclined position, and a pair of pivoted, spring controlled jaws disposed beneath the outlet end of the discharge chute to receive the check therefrom and releasably retain said check.

1,825,058. MACHINE FOR PACKAGING STRAWS AND THE LIKE. ALBERT M. GOLDSTEIN, New York, and MAYER GARFINKEL, Brooklyn, N. Y.; said Garfinkel assignor to said Goldstein. Filed May 20, 1927. Serial No. 193,013. 20 Claims. (Cl. 226—2.)



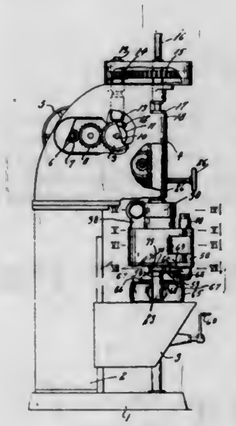
1. In a machine for packaging straws and the like, the combination of a feed hopper, a straw-carrying drum, means for intermittently rotating the drum, a channel leading from the hopper to the drum, in which the straws are maintained side by side in parallel relation, the channel having a delivery opening next the drum, means for pushing the straws along said channel and reciprocable means limited in its movement to a rectilinear path, for pushing the straws endwise out of the drum, during the periods when the drum is stationary.

1,825,059. FURNACE. WALTER GROTHE, San Leandro, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed July 9, 1928. Serial No. 291,322. 10 Claims. (Cl. 263—7.)



10. In a furnace, a hearth, and a screw to adjustably support and to rotate said hearth.

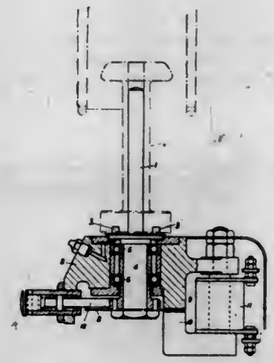
1,825,060. REVOLVING HOLDER MACHINE TOOL. GEORGE E. HALLENBECK, Toledo, Ohio, assignor to Baker Brothers, Inc., Toledo, Ohio, a Corporation of Ohio. Filed May 24, 1926. Serial No. 111,160. 6 Claims. (Cl. 279—6.)



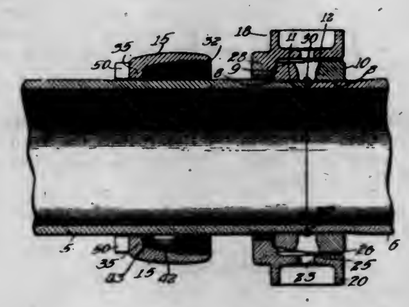
6. A tool holder attachment for a rotary spindle comprising an adjustable lever, a fulcrum for the lever parallel to the spindle axis, and control means for positioning the lever for varying eccentricity of the tool, said control means including a cam.

1,825,061. DRAG ARRANGEMENT FOR SPINNING AND OTHER TEXTILE FRAMES. JOHN HARGROVE, Monifieth, Angus, Scotland. Filed July 8, 1930, Serial No. 466,410, and in Great Britain Sept. 6, 1929. 1 Claim. (Cl. 118—55.)

A drag arrangement for textile frames in which the bobbin is rotated by the pull of yarn comprising, in combination with a fixed spindle rail, an upright spindle journalled for free rotation in said rail, the lower end of said spindle being exposed below said rail, said spindle having a flange formed with pins engageable with sockets in a bobbin impaled on the upper portion of said spindle above said rail, a magnet having opposed poles, one of said poles being unitary with said rail, and the other of said poles being below said rail, and a disc of non-ferrous metal fixed to the lower end of said spindle below said rail and rotatable in the gap between said poles.



1,825,062. PIPE JOINT. HERMAN C. HEATON, Kenilworth, and WILLIAM H. NEUBECK and LOUIS REISFELD, Chicago, Ill., assignors to Sargent and Lundy, Incorporated, a Corporation of Illinois. Filed Aug. 13, 1925. Serial No. 49,878. 6 Claims. (Cl. 285—111.)

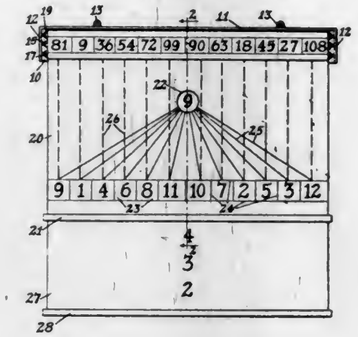


1. In combination, a pair of pipes having their ends abutted and directly welded together, a ring member on each of said ends, and a coupling sleeve surrounding and engageable with said ring members by turning movement relative thereto for mechanically coupling the ends of the pipe and forming a mechanically sealed compartment about the welded joint and completely enclosing said welded joint.

1,825,063. INSTRUCTION CHART. NELLIE KITTS HICKS, Maywood, Calif. Filed Sept. 3, 1930. Serial No. 479,495. 3 Claims. (Cl. 35—2.)

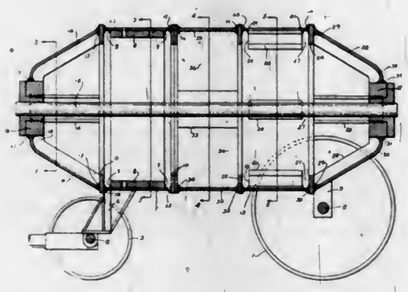
1. An instruction chart, comprising a support, a pair of spring actuated rollers journaled on said support and disposed in parallel arrangement one directly above the other, a free running roller journaled on said support above and parallel with said spring actuated rollers, a flexible member secured to the upper one of said spring actuated rollers and depending from the rear thereof, said flexible member being provided at a point midway between its sides with an opening and with a transversely

disposed row of digits and numbers that are arranged parallel with and adjacent to its lower edge, a flexible member secured to the lower one of the spring actuated rollers and extending upwardly in front of the upper one of the spring actuated rollers, over the free running roller, thence downwardly behind the spring actuated rollers and the depending portion of the flexible member that is carried by the upper one of said spring actuated rollers, the front face of the second mentioned flexible member bearing a centrally arranged vertically disposed row of digits



and numbers that are visible in succession through the opening in the first mentioned flexible member as one flexible member is adjusted vertically relative to the other and the rear face of the second mentioned flexible member bearing transversely disposed rows of digits and numbers that bear relation to the digits and numbers on the front faces of the flexible members and which appear in succession on the front face of that portion of said second mentioned flexible member that is positioned between the free running roller and the lower one of the spring actuated rollers.

1,825,064. ELECTRIC WELDER. EDWARD A. HOBART, Troy, Ohio, assignor to The Hobart Bros. Co., Troy, Ohio, a Corporation of Ohio. Filed July 19, 1929. Serial No. 379,374. 10 Claims. (Cl. 171—123.)



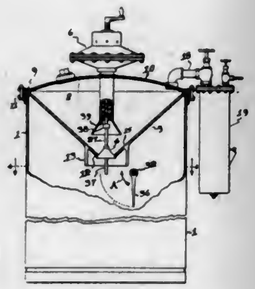
1. In a welder frame, in combination with an armature shaft, a drum generator section, a drum motor section, spaced bars interconnecting said sections and welded steel frames mounted on the opposite ends of said sections for supporting said armature shaft, a generator means, an exciter and a motor, all mounted upon such shaft within said frame.

2. In a welder frame, in combination with an armature shaft, a drum generator section, a drum motor section, spaced bars interconnecting said sections and welded steel frames mounted on the opposite ends of said sections for supporting said armature shaft, a generator means, an exciter and a motor, all mounted upon such shaft within said frame, and means to support the generator stator away from its drum section and the sides thereof to insure ventilation.

1,825,065. TREATMENT AND PRESERVATION OF CUT PLANTS. ARTHUR B. HOWELL, New York, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 30, 1929. Serial No. 389,609. 13 Claims. (Cl. 47—58.)

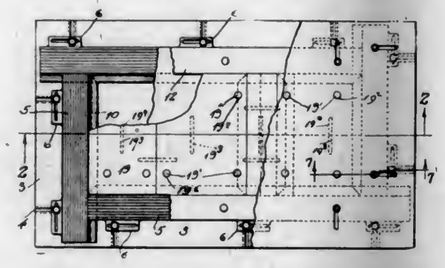
12. The herein described method of treating cut plants which consists essentially in supplying them with moisture while subjecting them to an atmosphere consisting of air containing an abnormal percentage of CO_2 gas.

1,825,066. CARBIDE FEED FOR ACETYLENE GENERATORS. HERBERT G. IRWIN, Amarillo, Tex. Filed Aug. 23, 1928. Serial No. 301,638. 6 Claims. (Cl. 48—53.3.)



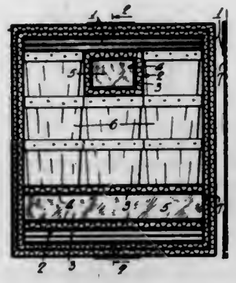
1. In a carbide feed for an acetylene generator, a carbide feed hopper, a hollow conical bottom for said hopper, a carbide feed outlet in the smaller end of said bottom, a resilient covering on said bottom, said covering being impervious to acetylene and water moisture under generator pressure.

1,825,067. ADJUSTABLE DIE. WALTER C. JOHNSON, Jamestown, N. Y. Filed Oct. 24, 1929. Serial No. 402,278. 2 Claims. (Cl. 113—49)



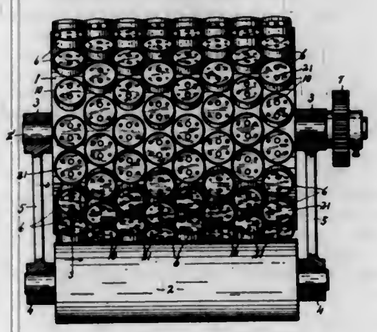
1. In a die of the character described, the combination with a base block of a set of retaining side and end bars, longitudinally and laterally adjustable relatively to said block and to each other, the end of each end bar abutting against the side of one side bar, and against the end of the opposite side bar whereby the enclosed rectangular space may be varied in dimensions in two directions while maintaining their contact relationship the said bars and base constituting a lower member of a die press.

1,825,068. REFRIGERATING APPARATUS, PACKAGE AND METHOD. CHARLES L. JONES, Pelham, N. Y., and HOWARD S. MCILVAIN, Belleville, N. J., assignors to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 448,053. 24 Claims. (Cl. 62—91.5.)



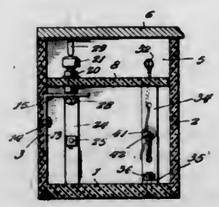
1. A package including an outer insulating container, products to be refrigerated packed therein and refrigerant means comprising relatively long narrow containers, substantially impermeable to gas, of solid carbon dioxide extending horizontally one at the bottom and one at the top thereof.

1,825,069. STAMPING MACHINE. OSCAR C. KAYLE, Syracuse, N. Y. Filed Sept. 29, 1928. Serial No. 309,231. 9 Claims. (Cl. 164—28.)



1. In a machine for stamping disks from sheet material, a rotary platen-element, a rotary die-carrying element having its die tiltably mounted thereon and adapted to be fed thereby between and in contact with both of said elements tangential to the contiguous faces thereof.

1,825,070. RADIO RECEIVING SET. WILLIAM J. KAYSER, Little Rock, Ark. Filed Nov. 13, 1929. Serial No. 406,920. 3 Claims. (Cl. 250—14.)



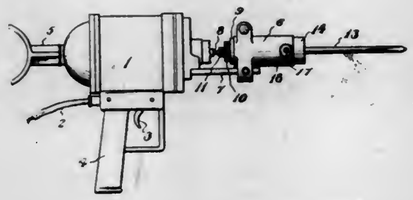
1. A radio receiving set including a cabinet, a panel mounted in said cabinet, a bracket mounted on a wall of the cabinet, a crystal cup stem carried by the bracket and extending through the panel, means securing the stem on the bracket and cooperating with the panel and bracket to provide a medial support for the panel, a cup mounted on said stem and adapted to receive a crystal, and circuit connections for said crystal.

1,825,071. FABRIC OF CREPE THREAD AND PROCESS OF MAKING SAME. BRUNO KAYSER, Reading, Pa. Filed May 31, 1930. Serial No. 458,276. 2 Claims. (Cl. 117—52.)



1. As a new article of manufacture, a textile fabric formed of crepe thread which is made up of two tightly twisted strands of multi-fibres, one of said strands being more tightly twisted and in a direction reverse to the other strand, and said two strands being combined into a single thread by a light twisting together in a direction reverse to said more tightly twisted strand so as to neutralize the twist-distorting action of the several strands inn the textile fabric formed thereof.

1,825,072. HAMMERING TOOL. CHARLES KELLER, Eau Claire, Wis. Filed Feb. 25, 1930. Serial No. 431,190. 1 Claim. (Cl. 125—33.)



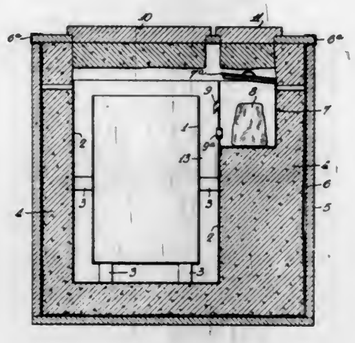
A tool of the character described comprising a casing, a cylindrical hammer disposed within the casing in position to impinge upon the stem of a tool fitted in the end of the casing, a cam sleeve threaded into the rear end of the hammer and having a cam surface upon its forward end, the cam sleeve and the hammer having radial notches in their rear ends adapted to aline when the sleeve is turned home, a driving shaft rotatably mounted in the casing and extending through the sleeve into the hammer, a cam upon the shaft cooperating with the cam surface of the sleeve, a thrust plate fitted loosely upon the shaft and provided on its forward face with radial lugs engaging in the notches in the cam sleeve and the hammer whereby to lock the hammer and the sleeve together, a closure for the end of the casing around the shaft, and an expansion spring disposed within the casing around the shaft between the closure and the thrust plate.

1,825,073. APPARATUS AND METHOD FOR REFRIGERATING. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,201. 15 Claims. (Cl. 62—91.5.)

1. A refrigerant container enclosing solid carbon dioxide, including outer and inner layers of cellular material and an interposed layer of asphalt.

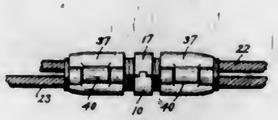
13. A method of regulating temperature of the atmosphere in an outer insulating container of products refrigerated by solid carbon dioxide sublimating and discharg-

ing its gas therein, for circulation in refrigerant relation to said products, which method includes enclosing said solid in a container designed to be gas-tight up to a desired out flow level and to admit inflow of said atmos-



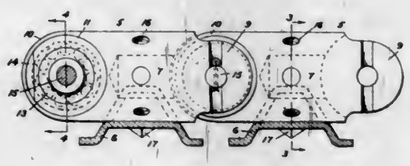
phere at a higher level than the out flow level, and predeterminating or adjusting the vertical distance between said levels making it greater for low temperatures and less for higher temperatures.

1,825,074. CABLE SPLICING AND CLAMPING DEVICE. FREDERICK H. KNAPP, Kelso, Wash. Filed Mar. 5, 1929. Serial No. 344,398. 3 Claims. (Cl. 24—123.)



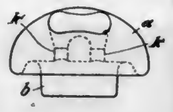
1. In a device of the class described, the combination of male and female coacting clamping elements, the male element comprising two sections hingedly secured with each other being threaded at their outer periphery, a separator hingedly disposed longitudinally therebetween having a concaved surface disposed on its oppositely disposed sides and male elements having means hingedly disposed thereon for permitting their placement about the male element without disturbing the cable.

1,825,075. FLEXIBLE TRACK FOR TRACK LAYING VEHICLES. HARRY A. KNOX and BERT F. BAKER, Davenport, Iowa. Filed Jan. 10, 1930. Serial No. 420,025. 1 Claim. (Cl. 305—10.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



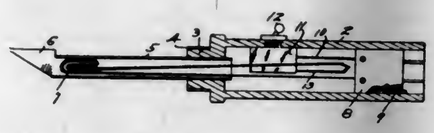
An endless track embodying a symmetrical sectional trackway, a shoe for each section, and means whereby the shoes may be selectively attached on opposite sides of the track sections.

1,825,076. FLAG TRUCK. ERIK LANGE, Starnberg, Germany, assignor to Firm Lange & Co., Gesellschaft mit beschrankter Haftung, Starnberg, Germany. Filed July 29, 1930, Serial No. 471,568, and in Germany June 30, 1930. 3 Claims. (Cl. 116—173.)



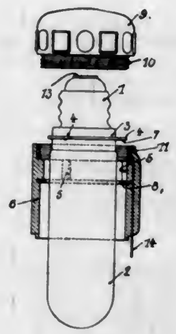
1. A hemispherical hollow head piece of ceramic material for a flag staff having orifices to accommodate the flag rope, and a depending collar the lower end of which extends below the plane of the center of the arc described by the hemispherical surface of the head.

1,825,077. BURNINTOOL. EDWARD B. T. LAWRENCE, Burbank, Calif. Filed Oct. 1, 1929. Serial No. 396,528. 1 Claim. (Cl. 219—21.)



In a device of the class described, the combination with a handle member and a tubular shank, on the distal end of which is a protected heating coil; of a burnin which consists of a single-layer, flexible blade forming an integral part of said tube and in the form of a right triangle having its longer side parallel to the axis of the tool and in a line beyond the side of the tool; the plane of the blade being oblique to and across the axis of the tool shank.

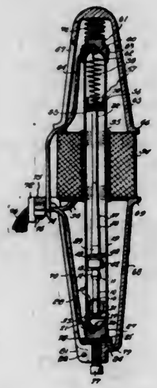
1,825,078. INCANDESCENT ELECTRIC LAMP FOR PROJECTION APPARATUS. JACQUES MARETTE, Paris, France, assignor to Pathé Cinéma Anciens Etablissements Pathé Frères, Paris, France. Filed May 17, 1928, Serial No. 278,592, and in France June 1, 1927. 1 Claim. (Cl. 176—32.)



In a lighting device for projection apparatus, the combination of an ordinary glow lamp having a metallic cap and a central contact piece for leading the current to the filament, a metallic ring secured to the cap of said lamp, a number of projections unsymmetrically disposed on said ring, a socket of insulating material adapted to receive said lamp cap and provided with slots in equal number and disposed in the same unsymmetrical relation as said projections and

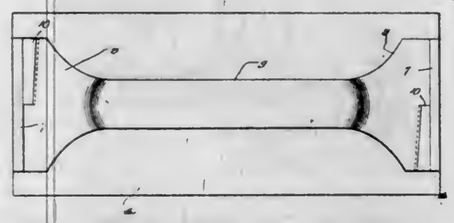
adapted to engage said projections, an annular metallic stop member secured in said socket at the inner ends of said slots and on which said projections are adapted to bear, an annular metallic fitting on said socket, a cover for said socket provided with an inner metallic sleeve adapted to engage said fitting, metallic means connected with said sleeve for pressing against said central contact piece of said lamp, whereby said projections are applied on said annular stop member and means for leading current to said metallic stop member and to said metallic fitting.

1,825,079. ELECTRICAL REGULATOR. FRANK WINTHROP MERRILL, Fort Wayne, Ind. Filed Dec. 23, 1929. Serial No. 416,140. 16 Claims. (Cl. 171—229.)



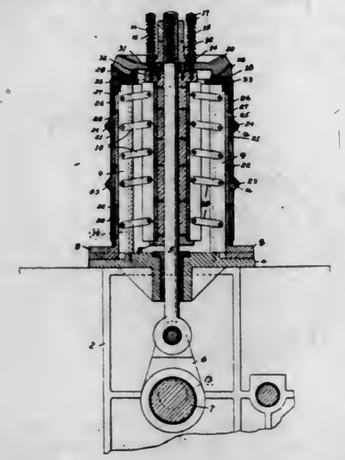
1. Apparatus of the character described comprising a substantially vertical tube, a body of a liquid electrical conductor contained in said tube, a resistor arranged in said tube and projecting downwardly into said conductor, electro-magnetic means for varying the depth of the immersion of said resistor in said conductor, means carried by said resistor below the level of said conductor for increasing the buoyant effect of the latter on said resistor, and electrical connections for said conductor and the upper end of said resistor.

1,825,080. PLASTERER'S FLOAT. ARTHUR R. MORFORD, Kokomo, Ind. Filed Dec. 16, 1929. Serial No. 414,446. 1 Claim. (Cl. 306—44.)



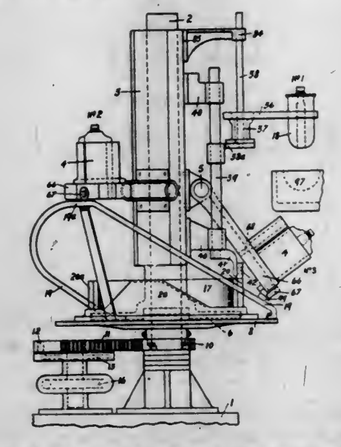
In a structure of the class described, in combination, a brush-head including a backing plate, having its opposite ends bent upwardly and its terminal portions bent downwardly to provide retaining flanges and intervening connecting webs, a handle including feet at its opposite ends resting firmly against said backing plate and having enlarged handle extensions provided with grooves constituting keyways and receiving said flanges, alternate end portions of the respective grooves being widened to provide wedge-receiving recesses and retaining wedges fitted removably in said recesses and engaging a portion of the companion flange to securely and detachably fasten the handle to the backing plate.

1,825,081. MACHINE FOR EXPANDING CYLINDERS. GEORGE G. MCKAY, Youngstown, Ohio, assignor to The Ohio Corrugating Company, Warren, Ohio, a Corporation of Ohio. Filed July 1, 1927. Serial No. 202,915. 10 Claims. (Cl. 153—73.)



1. A machine for expanding cylinders, comprising a set of rigid expanding dies, means arranged to move said dies simultaneously on radial lines in respect to the axis of a cylinder, and means arranged to move said dies longitudinally in respect to the axis of the cylinder concurrently with their radial movement.

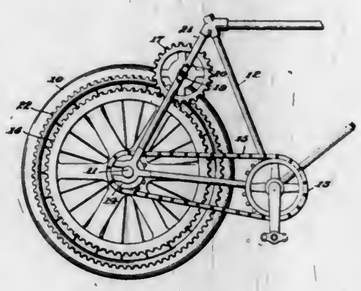
1,825,082. ROTARY MACHINE FOR MANUFACTURING GLASS HOLLOW-WARE AND OTHER MOLDED ARTICLES OF GLASS. ALEXANDER FRANCIS MCNISH, Perth, Scotland, assignor of one-half to John Moncrieff Limited, Perth, Scotland. Filed Apr. 12, 1929, Serial No. 354,574, and in Great Britain June 1, 1928. 14 Claims. (Cl. 49—5.)



1. In a glass working machine, the combination of a central support, a mold carrier revoluble about said support, a member oscillatory about said support, means for oscillating said member through part of a circle, means

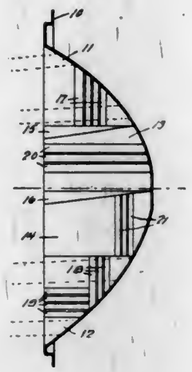
for connecting said carrier and member in one direction of oscillation of said member to move the mold carrier forward, means for arresting the mold carrier during the return movement of said member, a series of separable molds carried by said carrier, mechanism on said carrier for operating said molds, and devices movable with said member and cooperating with said mechanism to effect the operation of said molds during the return movement of said member.

1,825,083. SPEED REDUCING MECHANISM FOR TRAINING CYCLES. SAMUEL MORSE, New York, N. Y. Filed Dec. 7, 1929. Serial No. 412,549. 14 Claims. (Cl. 208—154.)



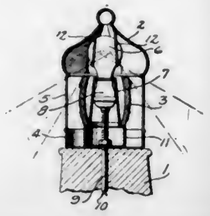
1. In a training cycle, a driving sprocket and a wheel mounted therein, speed reducing means gearing said wheel to said sprocket, and means for rendering said speed reducing means inoperative.

1,825,084. REFLECTOR FOR AUTOMOBILE HEADLAMPS. CLARENCE A. MICHEL, Cleveland, Ohio, assignor to Delco Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 15, 1927. Serial No. 212,867. 2 Claims. (Cl. 240—41.36.)



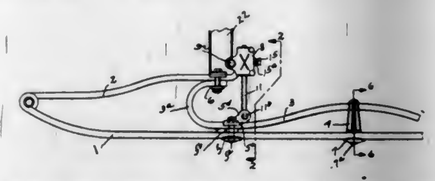
1. A reflector for use with a plurality of separately energizable light sources to provide a high beam and a low beam, provided with top and bottom zones and a central zone extending from one side edge of the reflector to the other, said top and bottom zones having their axes downwardly inclined with respect to the central zone, one of the two zones first mentioned being provided with a horizontally extending fluted portion blending into the adjacent portion of the reflector without abrupt break in curvature and arranged to give increased vertical spread to the light reflected therefrom to smooth the beam.

1,825,085. READING LAMP. CHARLES W. NEILL, Syracuse, N. Y. Filed Sept. 8, 1930. Serial No. 480,311. 5 Claims. (Cl. 240—81.)



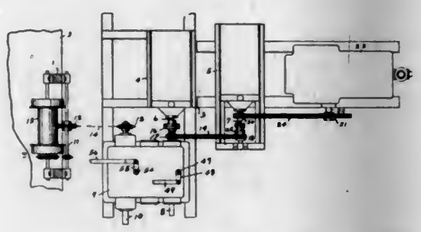
3. A reading lamp including in combination a base portion; a cylindrical translucent member mounted on the base portion; an opaque shade mounted on the translucent member with its marginal edge horizontally spaced from the translucent member; a source of light mounted under the opaque shade in position to throw light downwardly across the top edge of the translucent member and under the edge of the opaque shade; a frusto-conical reflector mounted within the translucent member in position to reflect a portion of the light from the light source through the translucent member.

1,825,086. BUMPER MECHANISM. EMIL F. OHLENDORF, Moline, Ill. Filed July 12, 1930. Serial No. 467,562. 14 Claims. (Cl. 293—55.)



1. A bumper mechanism including a bumper bar and a resistance unit comprising a sliding friction member connected to the bumper bar and having side faces, and gripping members frictionally engaging the side faces of the sliding friction member to resist movement of the sliding member.

1,825,087. POWER UNIT. LINN K. PARK, Houston, Tex. Filed Aug. 2, 1926. Serial No. 126,726. 5 Claims. (Cl. 74—21.)



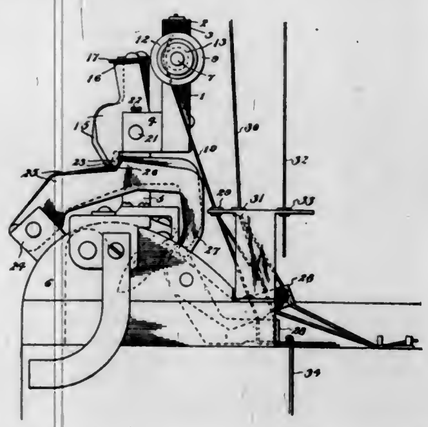
1. An apparatus of the character described including a pair of motors each having a driving shaft, a pair of sprocket wheels loosely mounted on one of said shafts, means for alternately clutching said sprocket wheels with said shaft, a sprocket chain in driving relation with each sprocket wheel, a sprocket wheel fixed on the shaft of the other motor over which one of said sprocket chains operate, a driven mechanism operatively connected with said last mentioned shaft and a driven mechanism including a sprocket wheel over which the other sprocket chain operates.

1,825,088. COMBINED SAFETY LIGHT AND ILLUMINATING LAMP. JOHN THOMAS POWELL and EDWIN T. POWELL, Washington, D. C. Filed Apr. 10, 1930. Serial No. 443,161. 7 Claims. (Cl. 240—59.)



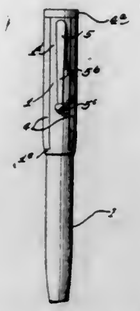
1. A device of the character described comprising a support to be worn by a person and including a waist-encircling belt and straps extending upwardly therefrom to engage over a person's shoulders at opposite sides of the neck, an electric lamp having a backing slidably engaged with said straps with portions of the straps extending well above and below the lamp and mounting whereby the lamp may be slid longitudinally of the straps to adjusted position between a person's waist and shoulders, a battery holder, and conductors leading from said holder to said lamp and of sufficient length to permit sliding of the lamp.

1,825,089. TENSION DEVICE. JOHN A. PRATT, Nashville, Tenn. Filed Mar. 27, 1929. Serial No. 350,368. 2 Claims. (Cl 66—146.).



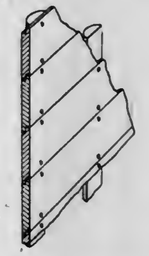
1. The combination of a support, pairs of tension disks thereon arranged to hold threads for a knitting machine, pattern-controlled fingers below the disks engaged with the respective threads, angle levers fulcrumed on the support below the tension disks, tapered spreaders carried by the upper ends of said levers to enter between and move from the corresponding disks, intermediate fingers arranged below and engaging the lower ends of the levers for rocking the same, and pattern-controlled thread-carrying fingers below the intermediate fingers and in engagement therewith to selectively actuate the same.

1,825,090. COMBINATION PEN CAP AND BLOTTER. MARION O. REIS, San Diego, Calif., assignor of one-half to Selma T. McHorney, San Diego, Calif. Filed Mar. 21, 1929. Serial No. 348,720. 2 Claims. (Cl. 120—42.)



1. In a combination of the class described, a pen cap adapted to be mounted on a conventional pen, said pen cap provided with a reduced arcuate portion extending longitudinally therewith, a blotter means mounted on said reduced portion, and a removable casing enclosing said blotter portion, the outer periphery of said casing adapted to complement the unreduced arcuate portion of said pen cap and form a continuation therewith.

1,825,091. BOAT JOINT CONSTRUCTION. CLAUDE H. ROGERS, Peterboro, Ontario, Canada. Filed Aug. 2, 1930. Serial No. 472,523. 12 Claims. (Cl. 9—6.)



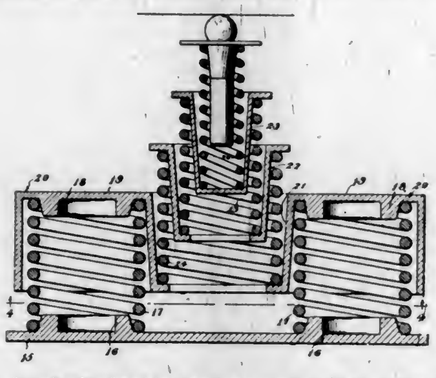
11. A construction unit comprising a wood strip having an angular mating groove extending longitudinally of the edge, and a length of cord embedded in the groove wall at the angle.

1,825,092. SPRAYING DEVICE. JOHN B. ROSENFIELD, Piedmont, Calif. Filed Mar. 23, 1929. Serial No. 349,832. 5 Claims. (Cl. 299—88.)



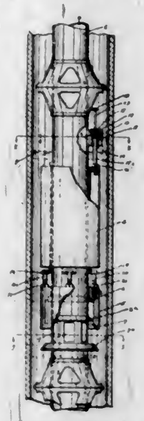
5. A spraying device comprising an air pump provided with a suitable discharge, a container secured to said pump, a drip cup secured to said pump opposite said container, and means for simultaneously siphoning the fluid to the pump discharge from both the drip cup and the said container.

1,825,093. SHOCK ABSORBING SPRING FOR MOTOR TRUCKS. ALEXANDER W. SANSBURN, Pilares de Nacozari, Sonora, Mexico. Filed Apr. 8, 1929. Serial No. 353,518. 2 Claims. (Cl. 267—60.)



1. In shock absorbing springs for vehicles, relatively movable base and cap plates, the cap plate having spaced sockets and a cup between the sockets, helical springs in said sockets bearing upon said base plate, a helical spring in said cup, a plurality of concentrically disposed cups having flanges upon their upper and lower ends, and a plurality of coil springs encircling the cups and having their terminals bearing upon the flanges of the respective cups, the lowermost of said plurality of cups being seated upon the spring carried by said cap plate cup.

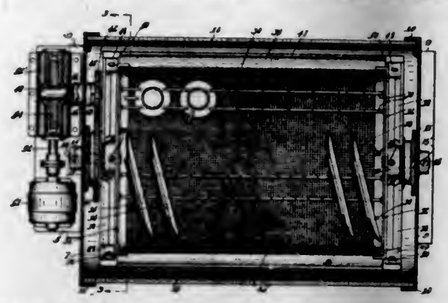
1,825,094. AIR LIFT DEVICE. JAMES MADISON SCHEUBER, Bairoil, Wyo. Filed Aug. 15, 1927. Serial No. 213,133. 4 Claims. (Cl. 103—233.)



1. In a float valve operated pumping mechanism adapted to deep oil wells which are cased and have means for supplying a gas pressure within said casing, the combination of a single stationary tubing throughout the depth of said casing and having ports arranged at a predetermined position, a circular valve seat surrounding and secured to said tubing below said ports, a valve slidably mounted on said tubing above said valve seat and adapted to engage said seat and close the ports, and a valve operating float, whereby the valve is opened when the float is submerged.

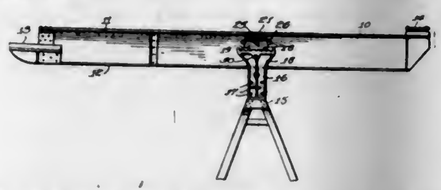
1,825,095. DISH WASHING DEVICE. HERMAN S. SCHNEIDER, Chicago, Ill. Filed June 15, 1928. Serial No. 285,543. 5 Claims. (Cl. 141—9.)

1. A device of the kind described comprising a drum, a dish-containing basket in said drum, said drum having an adjustable cover, said basket and cover being removably connected to said drum, an agitator wheel within said drum and rotatably mounted about said basket, a power-



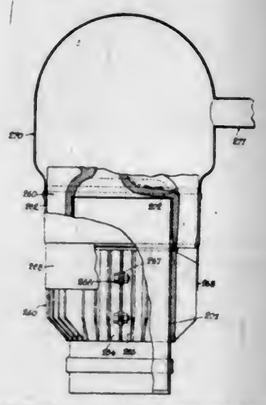
operated shaft, drive mechanism operatively connecting said shaft and said agitator wheel, and a releasable one-way clutch operatively mounted in said drive mechanism.

1,825,096. ROCKER BEARING FOR WALKING BEAMS. WILLIAM SCHWEMLEIN, Parkersburg, W. Va., assignor to The Parkersburg Rig and Reel Company, Parkersburg, W. Va., a Corporation of West Virginia. Filed July 11, 1929. Serial No. 377,549. 10 Claims. (Cl. 308—21.)



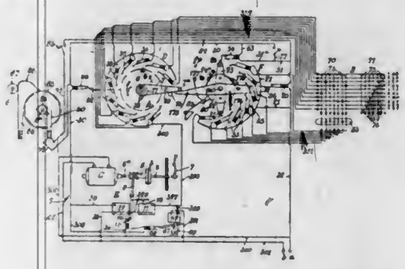
5. In a device of the character described, a Samson post having on its upper end wholly corrugated top load surfaces, and a walking beam having a rocker portion on each side thereof provided with a wholly corrugated face, the corrugations of said faces uniformly engaging the corrugations of the load surfaces in a plane intermediate the top and bottom of said beam to provide a plurality of changing point contacts of the faces and the load surface.

1,825,097. CONSTRUCTION OF INTERNAL COMBUSTION ENGINES. LAURENT SEGUIN and AUGUSTIN SEGUIN, Paris, France. Filed Feb. 12, 1929, Serial No. 339,460, and in France Feb. 28, 1928. 4 Claims. (Cl. 123—171.)



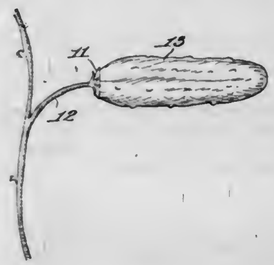
1. In an internal combustion engine with air cooled cylinders, a cylinder, a longitudinally section socket adapted to fit on said cylinder below the cylinder head and having integral cooling flanges and means for yieldingly pressing said socket on said cylinder.

1,825,098. AUTOMATIC CALLING APPARATUS FOR AUTOMATIC TELEPHONES. LAURENT SEGUIN and AUGUSTIN SEGUIN, Paris, France. Filed Dec. 18, 1929, Serial No. 414,964, and in France Jan. 21, 1929. 21 Claims. (Cl. 179—90.)



1. In combination with an automatic telephone having a rotary call transmitting means; a recorder for setting a call signal, a movable controller adapted to actuate said rotary call transmitting means, driving means for moving said controller, electric circuits adapted to be selectively controlled by said recorder and including means whereby said circuits are closed for detremined respective angular positions of said controller, and electric means controlled by the current from said circuits for stopping the movement of said controller when the latter closes one of said circuits, which is also closed over one element of said recorder.

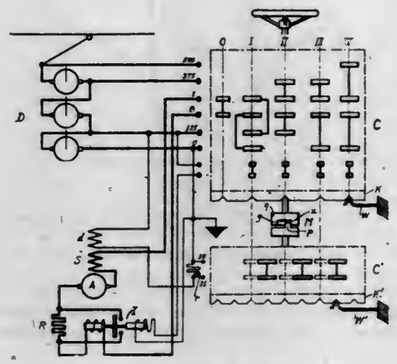
1,825,099. METHOD OF GROWING VEGETABLES AND FRUIT. THOMAS H. SHOPE, Southgate, Calif., assignor of one-half to W. B. Shope, Southgate, Calif. Filed Sept. 29, 1930. Serial No. 485,147. 3 Claims. (Cl. 47—58.)



1. The herein described method of producing second growth vegetables and fruit which consists in separating the bodies of the first growth vegetables or fruit from their stems at points adjacent to the points where said bodies join said stems so as to leave a relatively small portion of the first growth body attached to the stem to provide a base or slip for the second growth vegetable or fruit.

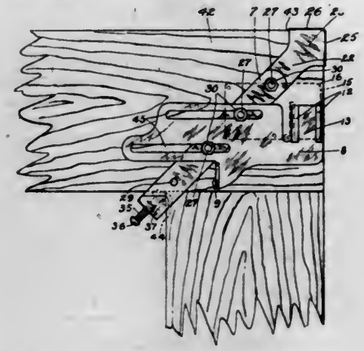
1,825,100. ELECTRIC CONTROL APPARATUS. GIACOMO SOMAJNI, Milan, Italy. Filed Jan. 19, 1929, Serial No. 333,605, and in Italy Jan. 31, 1928. 6 Claims. (Cl. 172—179.)

1. In a multiple-voltage system of motor control, including a source of balanced multiple supply, a compound wound motor and a controller having a number of double setting positions for throwing upon said motor consecutively the different pressures of the multiple supply, means to increase temporarily the shunt excitation of said motor when said controller is throwing upon said motor a greater pressure and to decrease temporarily said shunt excitation when said controller is throwing upon said motor a lesser pressure, a series wound motor mechanically



connected with said source of multiple supply, and means operated by said controller and adapted to insert said series wound motor in the armature circuit of said compound wound motor in the first of each of said double position of rest which is reached, whether the rotation of said controller be clockwise or counterclockwise.

1,825,101. WINDOW SHADE ROLLER AND CURTAIN BRACKET. WILLIAM EARL SOUDERS, Cincinnati, Ohio. Filed Feb. 28, 1929. Serial No. 343,511. 7 Claims. (Cl. 156—24.)

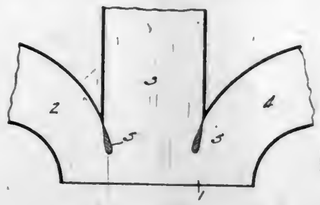


2. In a device of the class described the combination of a clamp means for attachment to a window frame, a plate carried by the clamp means, a shade roller support and a guide means on the plate, said guide means being adapted to removably receive a curtain and drapery support means, and means for adjusting the plate upon the clamp means both vertically and horizontally of the window frame.

1,825,102. ART OF COLORING RATTAN. ROBERT W. SPOFFORD, New York, N. Y. Filed Sept. 11, 1928. Serial No. 305,327. 4 Claims. (Cl. 8—5.)

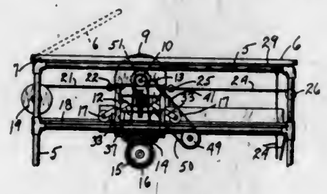
1. The process of producing variegated permanent fast colors on rattan which consists in immersing the rattan in a hot bath of water with an aniline dye therein and allowing the same to remain in the dye until it has penetrated sufficiently to deposit the dye below and upon the surface of the outer portion of the rattan to produce variegated colors in accordance with the texture of the wood being dyed.

1,825,103. CONDUIT. ALFRED E. STACEY, Jr., Essex Fells, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Mar. 21, 1929. Serial No. 348,765. 10 Claims. (Cl. 137—75.)



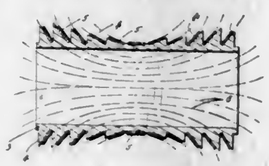
1. An improved conduit construction comprising a main duct sub-dividing into a plurality of separate auxiliary ducts, the wall forming each junction edge between auxiliary ducts having a convex free edge and a thickness tapering to a minimum towards the opposite edge whereby said junction edge will have a stream line configuration with respect to the direction of fluid flow through said main duct.

1,825,104. SAW TABLE. CHARLES A. STAEHELI, Spokane, Wash. Filed Aug. 8, 1930. Serial No. 473,793. 2 Claims. (Cl. 143—35.)



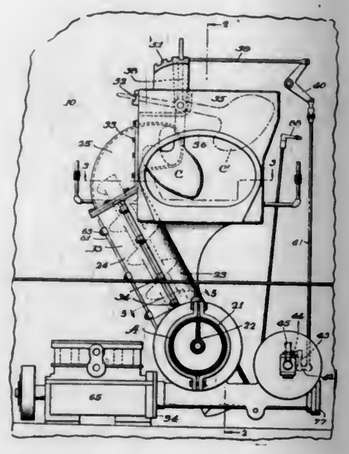
1. A saw table having in combination a table frame, a table top hingedly connected to the frame and having a longitudinal slot, a saw carriage adapted for movement in parallel with the slot, a circular saw for the carriage projecting through the slot, a track and wheels for the carriage, arms for the wheels pivotally connected to the carriage frame, depending head portion for said arms, a screw bar pivotally and threadedly connecting each longitudinally aligned pair of heads, a sprocket for each screw bar, a crank bar, a sprocket for the crank bar, and a chain extending around said screw and crank bar sprockets whereby rotary movement of the crank bar will rotate the screw bars and pivotally move the wheel arms to raise or lower the carriage.

1,825,105. INDUCTANCE COIL FOR RADIO FREQUENCIES. FREDERICK EMMONS TERMAN, Stanford University, Calif. Filed June 15, 1927. Serial No. 198,877. 8 Claims. (Cl. 175—359.)



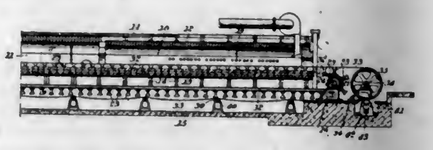
8. A radio frequency inductance coil comprising a conductor winding in which the conductor is a flat strip and at each point is so oriented as to have the flat side of the strip substantially parallel with the direction of the flux line at that particular point, whereby at different places on the coil where the flux line will be in different directions the flat side of the conductor is oriented in different directions at different places in the coil in accordance with the direction of the flux line at each location.

1,825,106. LOCOMOTIVE STOKER. EDWIN ARCHER TURNER, Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed July 8, 1926. Serial No. 121,109. 9 Claims. (Cl. 110—101.)



9. In a locomotive stoker, the combination of a substantially horizontal transfer conveyor adapted to bring fuel from the tender to the locomotive, a single elevator extending upwardly from the delivery end of the transfer conveyor and outwardly from an extended vertical plane passing through a longitudinal center line of said transfer conveyor and thence inwardly toward said plane, a lateral swinging chute receiving fuel from the delivery end of the elevator, and means for so swinging said chute, said elevator including a screw the lower end of which is located directly adjacent to and extends below the forward end of the transfer conveyor to receive fuel directly therefrom.

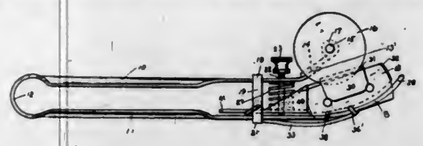
1,825,107. FURNACE CONVEYER. RAYMOND J. WEAN, Warren, Ohio, assignor to The Wean Engineering Company, Inc., Warren, Ohio, a Corporation of Ohio. Filed Oct. 6, 1930. Serial No. 486,555. 5 Claims. (Cl. 263—8.)



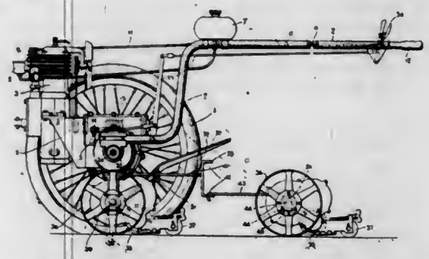
4. Means for protecting sheets from direct contact with a chain conveyer traversing a heat-treating furnace, comprising an endless, heat-resisting belt surrounding said conveyer and traveling therewith.

1,825,108. TRIMMING KNIFE AND BLADE HOLDER. GEORGE C. WEBSTER, Los Angeles, Calif. Filed July 3, 1931. Serial No. 548,628. 10 Claims. (Cl. 30—9.)

1. A device as described consisting of a spring metal strap doubled upon itself to provide parallel handle bars, one of said bars extending beyond the other and curving upwardly and forwardly, the curved front portion of the mentioned bar having an elevated slit thru which a safety razor blade may adjustably project, a blade carrier having an inner saddle piece disposed between the handle bars, means pivotally mounting said saddle piece for swinging movement to adjustably position the razor blade, and manually operable means for actuating said blade carrier and for locking it in adjusted position.



1,825,109. LAWN MOWING APPARATUS. CHARLES C. WORTHINGTON, Dunfield, N. J., assignor to Worthington Mower Company, a Corporation of Delaware. Filed Nov. 28, 1927. Serial No. 236,107. 32 Claims. (Cl. 56—7.)



30. A walk-type power lawn mower comprising an axle structure in the form of a housing supported on a pair of traction wheels and enclosing a clutch and gearing through which said wheels are driven, unit-propelling means provided on said housing, a lawn mower unit having ground wheels movably held by said means to follow undulations of the ground, a motor on said housing for driving said gearing and propelling the unit, and a walk-type guiding handle for said structure.

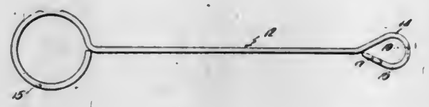
1,825,110. PILE FABRIC LOOM. JOSEPH A. COYLE, Amsterdam, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Oct. 6, 1930. Serial No. 486,525. 7 Claims. (Cl. 139—7.)



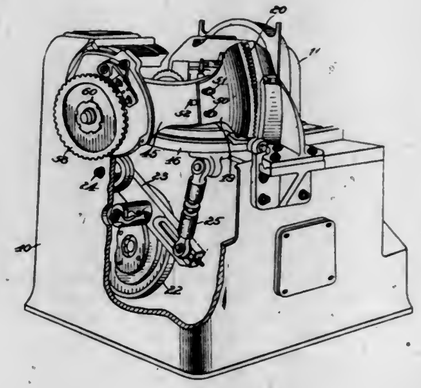
1. In a pile fabric loom, in combination, a weft inserting needle, a carrier for presenting pile yarns to the weaving point, a lay, means for operating the lay with an uneven beat to delay its beat-up movement while the carrier is presenting the pile yarns to the fabric, and means for operating the weft inserting needle with an even beat or period that does not vary with the uneven beat of the lay and adapted to impart a pronounced overtravel to the needle to thereby accommodate its even beat movement to the uneven beat lay movement.

1,825,111. TOOL. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Aug. 24, 1929. Serial No. 388,105. 1 Claim. (Cl. 12—103.)

A tool for inserting and withdrawing shoe forms of the kind which have laterally spaced walls and a pivotally mounted cross-brace for expanding and contracting the form, said tool comprising a shank provided at one end with a loop having a notch in its foremost end for engaging the cross-brace when it is desired to swing the brace forwardly to expand the form within a shoe, said loop being open to receive the cross-brace when it is desired to swing the brace rearwardly to contract the form.



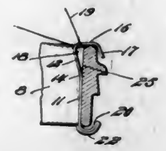
1,825,112. GEAR GENERATING MACHINE. EYVIND FINSEN, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed June 6, 1929. Serial No. 368,865. 9 Claims. (Cl. 90—9.)



1. In a gear generating machine, the combination with a work support, a tool support, a cradle on which one of said supports is mounted, and means for rotating the cradle, of a work spindle journaled directly in the work head, a sleeve mounted on the work spindle, a segment connected to the sleeve, a segment having a fixed relation to the tool on which the first segment rolls, and indexing mechanism adapted to connect the work spindle and sleeve during cutting said indexing mechanism being operated by the relative rolling movement of said segments.

9. In a gear generating machine, a support, a work spindle mounted on the support, a sleeve in which the work spindle is rotatable, a notched plate secured to the spindle, a ratchet wheel secured to the spindle, a pawl pivotally mounted on the support, an arm connected to the sleeve, a locking dog pivotally connected to the arm adapted to engage the notches of said index plate, a lever pivotally connected to the arm, a link connecting the lever to the dog so that the two move together, means on the lever adapted to engage the pawl to hold the same out of engagement with the ratchet wheel when the dog is engaged with the plate, means for oscillating the sleeve, a lug on the lever, means on the support adapted to be engaged by said lug on rotation of the sleeve in one direction to lift said lever out of engagement with the pawl and simultaneously lift said locking dog out of engagement with the notched plate, and means for moving the pawl into engagement with the ratchet wheel when released.

1,825,113. RING TRAVELER. GEORGE H. GILLIGAN, Providence, R. I., assignor to U. S. Ring Traveler Company, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 20, 1931. Serial No. 517,148. 7 Claims. (Cl. 118—61.)



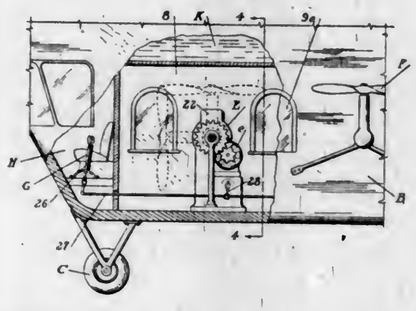
1. A traveler for spinning or twisting rings comprising a shank, a horn upon the upper end of the shank, a foot, and a gravity strip upon the bottom of the foot, extending inwardly from the free end of the foot.

1,825,114. VENTILATING FAN. CLAUD A. HENDRICKSON, Denver, Colo. Filed Apr. 12, 1929. Serial No. 354,554. 1 Claim. (Cl. 170—159.)



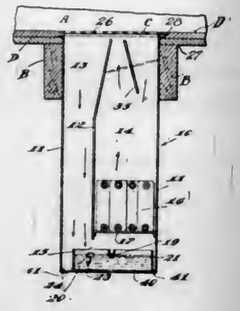
A ventilator fan comprising a hub provided with a plurality of narrow fan blades that extend radially from the hub, the front sides of the blades being flat and inclined to the plane of rotation, the rear sides being convex, the outer end of each blade being provided with a tip that extends from one side thereof and which lies substantially in the plane of rotation.

1,825,115. AIRCRAFT. JOSEPH J. HICKS, Los Angeles, Calif. Filed Dec. 9, 1929. Serial No. 412,830. 1 Claim. (Cl. 244—25.)



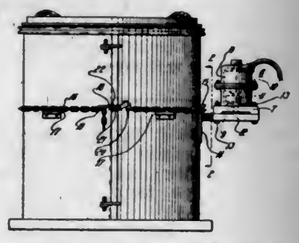
An aircraft inclusive of a plurality of propellers each mounted for movement to vary the direction of thrust thereof, an electric motor individual to each propeller for so moving the same, a controlling switch individual to each motor, and a single mechanical operating device connected with each of said switches for simultaneously actuating the same.

1,825,116. HEATING AND HUMIDIFYING UNIT. EUGENE H. HOLDEN, Arlington, Mass. Filed Mar. 23, 1929. Serial No. 349,879. 5 Claims. (Cl. 257—138.)



1. A heating and humidifying unit for a room comprising a casing having an opening into the room, a partition dividing the casing into two compartments each compartment opening into the room, a passage connecting said compartments, a pan in said passage adapted to contain water, means for heating the water in the pan and a radiator in one of said compartments whereby air is drawn from the room, circulates through one of said compartments over the surface of the water in the pan and returns past the radiator into the room again, and a damper in the compartment containing the radiator for controlling the circulation of the air.

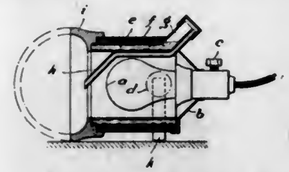
1,825,117. MEANS FOR COUPLING AGITATORS TO CONCRETE POURING FORMS AND MOLDS. RICHARD D. HUDSON, Upper Montclair, N. J., assignor to Newark Concrete Pipe Co., Newark, N. J., a Corporation of New Jersey. Filed Aug. 27, 1929. Serial No. 388,760. 1 Claim. (Cl. 248—30.)



An agitator means for dismounting attachment to molds, forms and the like, comprising a vibrating agitator element, a substantially horizontal carrying bracket, to which said agitator element is rigidly secured, said carrying bracket having at its inner end a pair of laterally spaced shoe plates extending at right angles thereto and having minor portions extending above and major portions extending below the same, said shoe plates being adapted to abut an exterior surface of a mold or the like, a binding chain to engage over the upper minor portions of said shoe plates and thence to extend around said mold, stop means to retain said chain against displacement from engaged relation to said minor portions of said shoe plates, and means to both couple and tighten said chain in such holding relation.

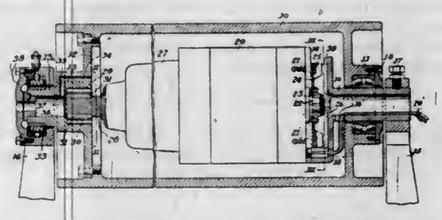
1,825,118. DEVICE FOR KEEPING WARM AND DAMP COMPRESSES FOR LOCAL BODILY TREATMENT. JOSEPH JAEG, Bern, Switzerland. Filed May 28, 1930. Serial No. 456,671, and in Switzerland June 1, 1929. 1 Claim. (Cl. 174—177.)

In a device for applying heat and dampness to compresses for local bodily treatment and in combination, a closed cylindrical receptacle having an annular cross section and a heat insulated outside wall, a nozzle opening into said receptacle, an outer end wall provided at one end of the cylindrical receptacle and a cup shaped application piece provided at the other end and adapted to be



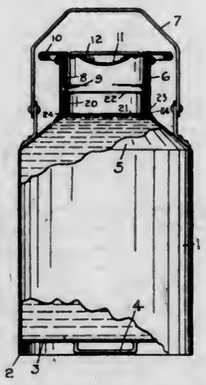
applied to the body part to be treated, a heating lamp carried by said outer end wall and extended into the hollow space of the receptacle and a steam conduit establishing the communication between said nozzle and the opening of the mouth-piece.

1,825,119. INDIVIDUAL MOTOR DRIVE FOR ROLLER CONVEYER ROLLS. EDWARD T. MUG, Pittsburgh, Pa., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J., a Corporation of New Jersey. Filed Mar. 6, 1930. Serial No. 433,845. 18 Claims. (Cl. 198—127E.)



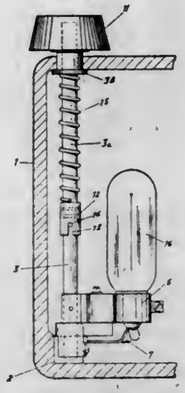
18. The combination with a drum, of a motor supported therein on a fixed bracket extending into and terminating within the drum, of a speed reducer secured to the motor frame and connected to the motor and the drum for driving the latter.

1,825,120. NONSPLASH AND SELF-DRAINING CAN. SWAN E. NORD, Seattle Wash. Filed July 26, 1930. Serial No. 470,779. 8 Claims. (Cl. 220—1.)



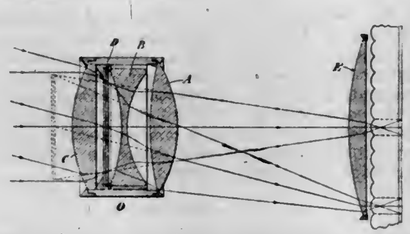
1. In a nonsplash and self-draining can having a body portion, a neck portion and a detachable hollow top engageable with the neck portion; an annular member spaced away from the neck portion to provide a circumferential channel adapted to telescopically receive and frictionally engage said top, and a closure carried by said top adapted to engage said channel when said top is disposed in closed position and thereby prevent aplashing of liquid contents from said can.

1,825,121. LAMP-HOLDER. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed May 3, 1929. Serial No. 360,249. 2 Claims. (Cl. 240—37.)



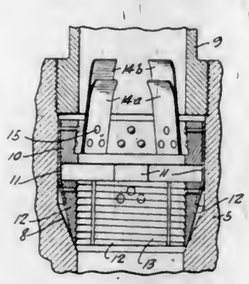
1. A lamp holder, comprising a movable base having a plurality of lamp-carrying sockets adjustably secured thereon, means for moving said base to bring the lamps carried thereby successively into a predetermined operative position, flat stop faces formed on said base corresponding in number to said lamps, a resilient member adapted to engage said stop faces successively thereby positively to retain the base in position for each successive lamp, and a fixed contact member beneath said base for engagement by said lamps when moved to operative position.

1,825,122. OBJECTIVE FOR COLOR PHOTOGRAPHY. ANDRÉ OSWALD, Paris, France, assignor, by mesne assignments, to Keller-Dorian Colorfilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 23, 1925, Serial No. 17,724, and in France Feb. 7, 1925. 12 Claims. (Cl. 95—2.)



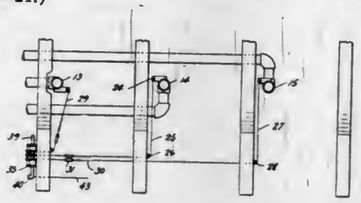
1. An objective for picture-taking and projection in color photography and cinematography of films goffered with lenticular refracting elements, comprising an objective proper embodying a lens system made up of a plurality of different elements, a trichrome color-selecting diaphragm-filter located in the objective intermediate said system in the path of the rays passing therethrough, and a collimating lens positioned substantially in the focal plane of the said objective and having a focal length such that the pupil of emergence of the original objective will be disposed in the anterior focal plane of said collimating lens, the objective proper, the diaphragm-filter and the collimating lens being disposed on the same optical axis.

1,825,123. CORE CATCHER CONSTRUCTION. JOHN T. PHIPPS, Huntington Park, Calif., assignor to H. C. Smith Manufacturing Company, Whittier, Calif., a Corporation of California. Filed Sept. 27, 1929. Serial No. 395,572. 3 Claims. (Cl. 235—72.)



1. The combination with a core bit and barrel having a recess in the bore thereof for a core catcher unit and having a tapered seat; of a core catcher longitudinally slidable in said recess; said core catcher unit including a core catcher ring, resilient catcher fingers upstanding from said ring with the tips free and directed inwardly, said fingers comprising multiple spring leaves with the tip ends of said leaves longitudinally spaced, a contractible gripping ring depending from and secured to said core catcher ring and having faces riding on said seat for expansion and contraction of said gripping ring upon longitudinal movement of said unit.

1,825,124. EMERGENCY VALVE OPERATING MECHANISM. VICTOR E. PIERRET, Los Angeles, Calif. Filed Oct. 16, 1924. Serial No. 743,945. 11 Claims. (Cl. 137—21.)

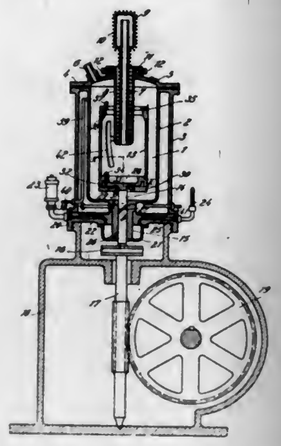


1. The combination with a plurality of tank compartments having outlet valves normally closed, a control unit comprising a corresponding number of independent fingers, linkage connecting each finger with a valve, means to maintain tension in said linkage, thermal joints, one for each valve, disposed in said linkage, and a longitudinally movable shaft having a cam registerable with any selected finger, said cam being shaped so as to swing a finger when said shaft is turned.

1,825,125. METHOD OF PRODUCING AN INTIMATE MIXTURE OF MUTUALLY INSOLUBLE SUBSTANCES. MICHAEL POLANYI, Berlin-Zehlendorf-Mitte, and STEPHAN VON BOODANDY, Berlin-Dahlem, Germany. Filed Feb. 28, 1928, Serial No. 257,762, and in Germany Mar. 4, 1927. Renewed Nov. 30, 1929. 19 Claims. (Cl. 252—6.)

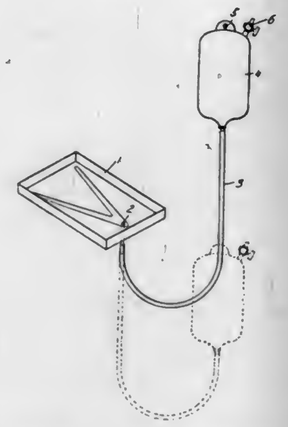
1. The method of producing an intimate mixture of substances, which consists in converting one of said substances in a finely divided state, in a vacuum, forming a free surface of another substance being in the liquid state in the said vacuum, and precipitating the said finely divided substance upon said surface.

4. The method of causing an intimate mixture of substances, and a chemical reaction between said substances, which consists in converting one of the substances in a finely divided state, rendering it chemically active by dissolving the molecular unions of the fine particles, forming a free surface of liquid paraffin containing another



substance in a dissolved state, and precipitating the said finely divided substance upon the said surface, the said finely divided substance acting chemically upon said substance dissolved in paraffin.

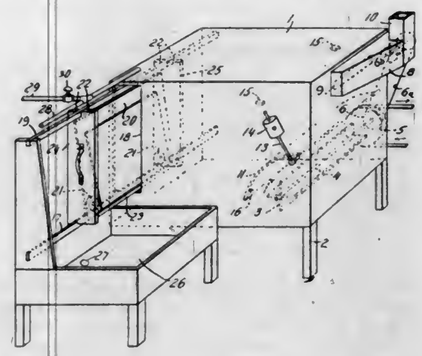
1,825,126. FLUID HANDLING DEVICE. FRANK T. POWERS, Douglaston, N. Y. Filed Dec. 8, 1928. Serial No. 324,783. 4 Claims. (Cl. 95—89.)



1. A photographic developing device comprising in combination a shallow open receptacle provided with a drain opening, a flexible tube communicating at one of its ends with said drain opening and at its other end with a flexible, completely collapsible closed receptacle having a vent at its top and means for closing said vent substantially as described.

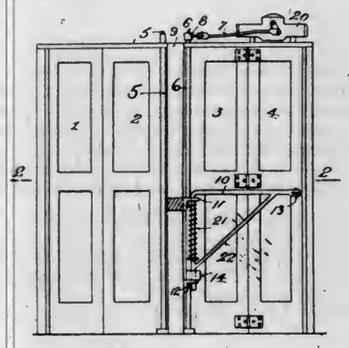
1,825,127. ETCHING MACHINE. FRANK T. POWERS, Douglaston, N. Y. Filed Apr. 22, 1930. Serial No. 446,394. 4 Claims. (Cl. 41—9.)

1. A machine for etching photo-mechanical printing plates, of the type having a receptacle for the etching fluid, a support for the plate to be etched, and means for spraying the etching fluid against the plate, which is characterized by having an opening in one of the upright sides of the receptacle through which the said support upon which the plate rests in a substantially vertical position is movable to position the plate for etching within the recep-



tacle, said support being provided with closure members whereby the said opening is covered when said support is in its extreme positions within or without the receptacle, substantially as described.

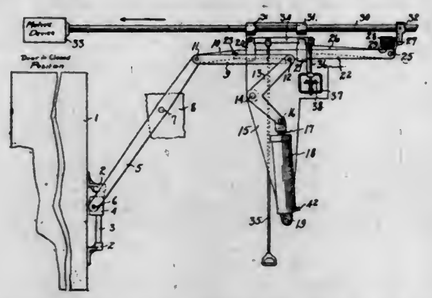
1,825,128. AUTOMATICALLY OPERATED DOOR FOR PASSAGEWAYS. HAROLD ROWNTREE, Scarsdale, N. Y., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Aug. 8, 1926. Serial No. 126,835. 3 Claims. (Cl. 268—34.)



1. In an automatic door operating system, the combination with a passageway, having doors therein and motor means for operating said doors, of a barrier pivotally supported in said passageway and in advance of the doors, and a switch on said barrier connected to said power means whereby the motor means is caused to open said doors when the barrier is displaced by the movement of a person through said passageway.

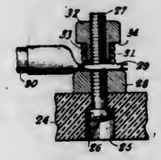
1,825,129. DOOR OPERATING MECHANISM. HAROLD ROWNTREE, Scarsdale, N. Y., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed July 20, 1929. Serial No. 379,649. 2 Claims. (Cl. 268—16.)

1. In a door operating system of the type described, the combination comprising at least one movable rod, power means for moving said rod, a plurality of doors, connections between said rod and said doors whereby they are all operated simultaneously in the opening direction, independent spring actuated power devices connected to each door for operating each door in the closing direction independently of the other doors when freed by return movement of said rods and connections between said connec-



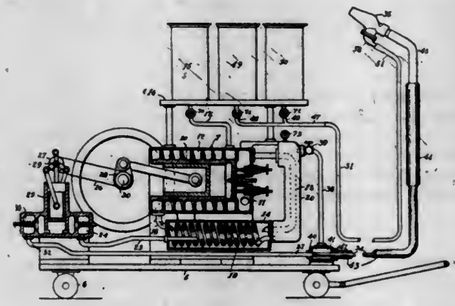
tions and power devices whereby the power device store energy during the opening of the doors for use in closing the corresponding doors independently.

1,825,130. BINDING POST. ADOLF SCHNEIDER, Brooklyn, N. Y., assignor of one-half to Arthur A. Schneider, East Orange, N. J. Filed Jan. 12, 1928. Serial No. 246,200. 9 Claims. (Cl. 173—259.)



1. In a binding-post comprising a stationary screw-stud protruding from a terminal-rest and a revolvable nut-member having a reduced extension, a coil-spring surrounding the said screw-stud, the said coil-spring having at least two turns wound in a direction opposite to the direction of the threads of said screw-stud, said spring being slightly tapered and placed with its smaller end around said reduced extension of the nut-member in such a manner as to grip the sides of said extension, and its other end engaging a member resting on the terminal to be fastened.

1,825,131. POWER UNIT AND METHOD OF CREATING ENERGY. JOHN E. SHEPHERD, Charlottesville, Va., assignor to National Cold Steam Company, Charlottesville, Va., a Corporation of Delaware. Filed Sept. 1, 1925. Serial No. 53,892. 36 Claims. (Cl. 299—84.)

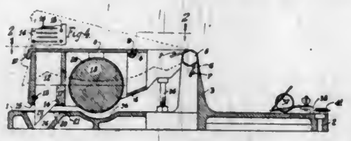


7. In combination, an internal combustion engine having an exhaust pipe; a steam jacket on the exhaust pipe; means supplying water to the steam jacket; a tank; a noz-

zle; and conduit means conducting fluid from the exhaust pipe, the steam jacket, and the tank to the nozzle.

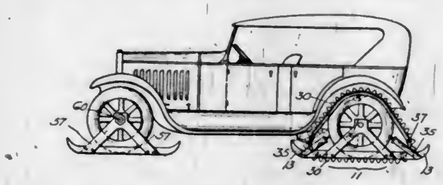
31. A spraying method which comprises supplying a material to be sprayed, simultaneously by the same combustion generating power and heat, generating a gaseous fluid by the action of said heat, generating a pressure fluid by the action of said power, and finally spraying said material and gaseous fluid by the action of said pressure fluid.

1,825,132. MULTIPLE KNIFE FUR-CUTTING MACHINE. KIRIACO SHOPIS, New York, N. Y., and DIMITER MAMARCHEFF, West Norwalk, Conn. Filed Apr. 5, 1930. Serial No. 441,855. 2 Claims. (Cl. 164—42.)



1. A fur cutting machine, comprising in combination a base over which the material to be cut is positioned, and a box member pivotally mounted on said base, means for regulating the position of the box member with respect to the base, said box member including two compartments, one of which forms an enclosure for a plurality of knives and the other of which contains a roller, a die strip countersunk to take a position over a channel in the base member, said strip having slots through which the ends of the knives are adapted to extend when in operative position, the roller being adapted to press the material firmly against the base and guide the same through the knives during the cutting operation.

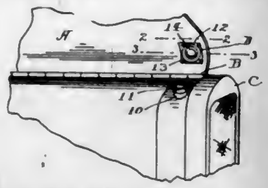
1,825,133. SLED ATTACHMENT FOR AUTOMOBILES. FRANK A. SPACSEK, Utica, N. Y. Filed July 25, 1928. Serial No. 295,218. 4 Claims. (Cl. 180—5.)



1. A sled and traction attachment for use with the rubber tires of the rear wheels of automobiles, comprising a frame straddling the said tire and wheel and removably attached to the axle housing on the inner side of said wheel and removably connected to the end of the rear axle on the outer side of the wheel, a runner on said frame adjacent the level of the bottom of the rubber tire, a guideway on the said frame adjacent said runner and a frictionally-driven traction belt having its lower part slidingly mounted in said frame guideway and frictionally, drivingly engaged on its inner surface by the lower part of said rubber tire and adapted to project below said runners to engage the ground, the upper part of said belt extending over the upper part of the rubber tire and being frictionally, drivingly engaged thereby.

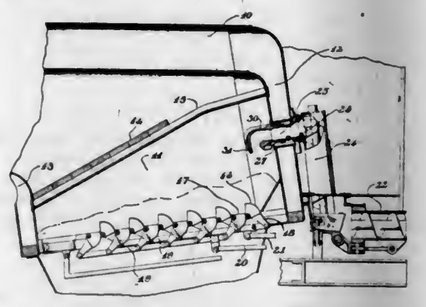
1,825,134. RADIATOR CLOSING MEANS FOR AUTOMOBILES. EARL W. STORMS, Huntington Park, Calif. Filed Mar. 21, 1930. Serial No. 437,793. 4 Claims. (Cl. 180—69.)

1. In combination with the hood and radiator of an automobile, said hood having a hinged cover element and said radiator having a service inlet within said hood and below said cover, a cap element arranged to close and seal said inlet and movable to open said inlet, said cap element co-operating with said cover element and influenced



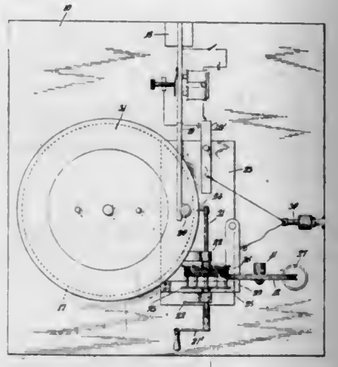
thereby to cause said inlet to be closed and sealed when the cover element is closed and to be opened automatically when the cover element is opened.

1,825,135. LOCOMOTIVE FURNACE. CHARLES J. SURDYKOWSKI, Erie, Pa., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,751. 3 Claims. (Cl. 110—101.)



1. In a locomotive furnace, in combination, a grate comprising rocking bars for progressively advancing fuel, a fuel delivering nozzle projecting into the furnace, and delivering upon the rearward portion of the grate only, such nozzle comprising a tube and a skirt depending from the top of the tube and spaced from its open end, and mechanical means for delivering fuel to the nozzle.

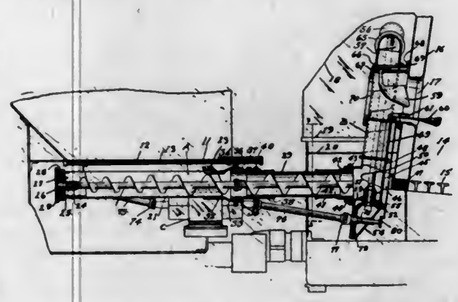
1,825,136. APPARATUS FOR INVESTIGATING EXPERIMENTALLY THE LAWS OF MOVING BODIES. PETER L. TEA, Yonkers, N, Y. Filed Dec. 20, 1927. Serial No. 241,431. 4 Claims. (Cl. 234—1.)



1. In combination, a rotatable table adapted to support a disk of paper or the like, a vibratory marking member supported above said table, means for imparting vibration

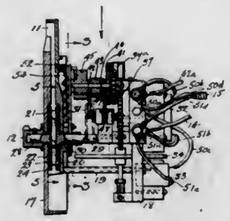
to said member, means for making indications on the periphery of said disk, said means being operable by a falling weight, means for preventing the operation of said indication marking means, and means operable successively to start the operating means for the vibratory member and to render inoperative said preventing means.

1,825,137. LOCOMOTIVE STOKER. EDWIN ARCHER TURNER and CHARLES J. SURDYKOWSKI, Pittsburgh, Pa., assignors, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed July 18, 1927. Serial No. 206,427. 4 Claims. (Cl. 110—101.)



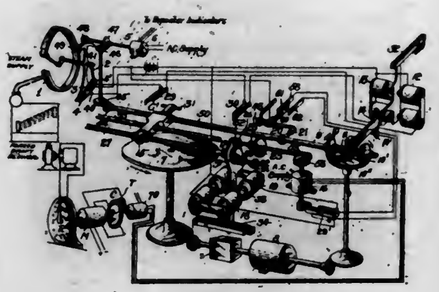
1. In a stoker for use and in combination with a locomotive including a backhead having a firing opening leading into the fire-box and a tender behind the locomotive, the combination of a substantially upright single elevator arranged at one side of the center line of the locomotive, and delivering to the firing opening, a transfer conduit for bringing fuel from the tender to the locomotive and including a rear portion located substantially along the center line of tender and a forward portion lying at an angle to the rear portion and extending in a direct line from the forward end of the rear portion to the base of said elevator and delivering directly thereto, said forward portion being disposed laterally from and at an acute angle with a vertical plane through the center line of the tender, and means for advancing fuel through the conduit.

1,825,138. TIMING CONTROL FOR CIRCUIT BREAKERS. ARTHUR W. WELCOME, Los Angeles, Calif. Filed Sept. 1, 1927, Serial No. 216,910. Renewed Aug. 13, 1930. 3 Claims. (Cl. 200—33.)



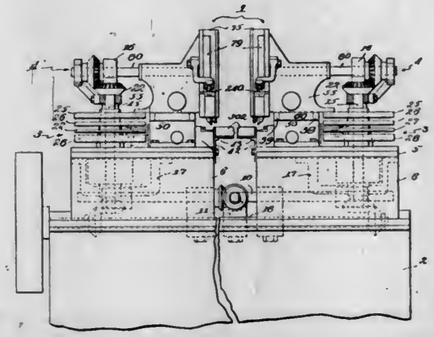
1. In a time controlled switch mechanism, the combination of: contact points for closing a circuit, a support, a wheel pivoted on said support, a switch lever pivotally mounted on the support and normally holding the contact points apart to break the circuit, means for forcing the switch lever in one direction to permit the contact points to close while the wheel is stationary, means adapted to contact with and rotate the switch lever upon motion of the wheel, and motor means operative on closing the circuit to move the wheel and cause said switch lever to separate said contact points.

1,825,139. REGULATING SYSTEM. MORTIMER F. BATES, Brooklyn, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 22, 1929. Serial No. 357,217. 5 Claims. Cl. 236—26.)



1. In a fluid pressure system, a source of pressure supply, reversible means for actuating said source of increase or decrease the same, means movable in one direction or the other in response to changes of pressure in said system, and means whereby said second means controls said first means, said last-named means including delayed-action means brought into action when said second means changes its direction for delaying reversal of said first means.

1,825,140. BOX-FASTENER MACHINE. KENNETH F. BERTHOLD, North Attleboro, Mass., assignor to The Mason Box Company, Attleboro Falls, Mass., a Corporation of Massachusetts. Filed May 2, 1928. Serial No. 274,438. 25 Claims. (Cl. 140—93.)

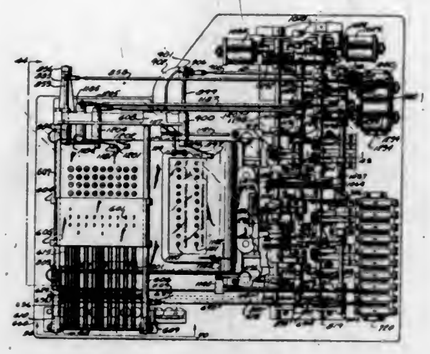


1. In a machine of the class described means for forming and inserting a fastener partially through the wall of a box, means for folding the portions of said fastener projecting from each side of said wall into parallelism, means for bending one of said portions over the edge of said box wall, and means for turning said bent portion across the other portion.

1,825,141. COMPUTING AND RECORDING MECHANISM. HARRY RUSSELL BRAND, New York, N. Y. Filed May 19, 1922. Serial No. 562,229. 70 Claims. (Cl. 235—58.)

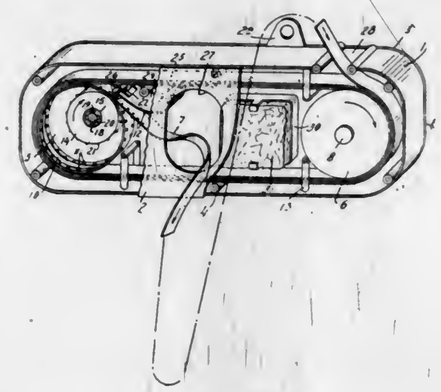
1. A computing and recording machine including in combination a computing mechanism and operating means

therefor, and controlling means for initiating and controlling the operation of said operating means to cause



the computing mechanism to perform a computation upon insertion of said controlling means in said machine and to record the result on said controlling means.

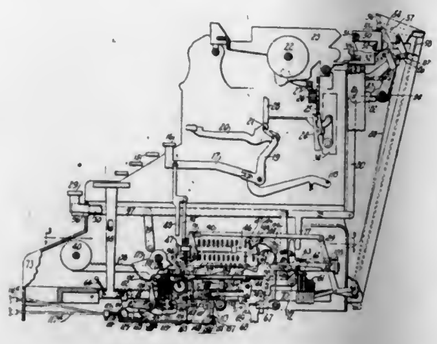
1,825,142. MOTION PICTURE FILM MAGAZINE. WILLIAM A. BRUNO, Astoria, N. Y., assignor to Clarence W. Fuller, Yonkers, N. Y. Filed Apr. 9, 1929. Serial No. 353,811. 11 Claims. (Cl. 88—18.7.)



2. In a machine of the type described, a film reel having a plurality of spaced openings on the cylindrical film carrying surface thereof, a propelling drum of appreciably smaller diameter than said reel mounted within the cylindrical surface of said reel on an axis parallel to the axis of said reel, and a plurality of sprocket teeth on said drum for simultaneously engaging the openings in said reel and spaced openings in the film carried by said reel.

1,825,143. COMBINED TYPEWRITING AND COMPUTING MACHINE. FREDERICK U. CONARD, Bridgeport, Conn., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 18, 1925. Serial No. 44,503. 20 Claims. (Cl. 235—60.)

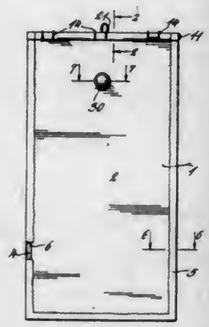
7. In a combined typeriting and computing machine, the combination of a computing mechanism including a general operator, driving mechanism for the general operator, starting means for the driving mechanism, a lead screw rotated by the general operator, a series of pins movable into engagement with said screw to be moved thereby a carrier for the pins reciprocable parallel to the



screw, keys to set the pins, mechanism operated by each key to prevent the restoring of the starting means during the first cycle of the driving means, and means operative during the reciprocation of a pin by the screw to release the starting means during the last predetermined cycle of the driving means.

19. The combination of a totalizer, a general operator, driving mechanism for the general operator, key-actuated means to start the driving mechanism, pin-bars carrying displaceable index-pins to be operated by the general operator, index-pin-restoring means operated by the general operator, key-actuated means operative to disable the operation of the index-pin-restoring means by the general operator during the first cycle thereof, other mechanism operated by the same key to prevent the restoring of the starting means during the first cycle of the driving mechanism, and mechanism operated by the general operator and effective to automatically restore the pin-restoring means to the control of the general operator and release the driving mechanism starting means during the last predetermined cycle of the general operator.

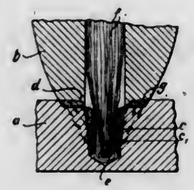
1,825,144. MOTH KILLER HYGIENIC GARMENT PROTECTOR. BERNARD S. DONOVAN, Denver, Colo., assignor to B. Donovan and H. F. Fisher as trustees of The National Chemical Products Company, Denver, Colo., a Common-Law Trust. Filed July 1, 1920. Serial No. 375,142. 2 Claims. (Cl. 206—7.)



1. A moth killing and garment storage device comprising a bag adapted to receive the garments to be stored, one end of said bag having an opening for the introduction

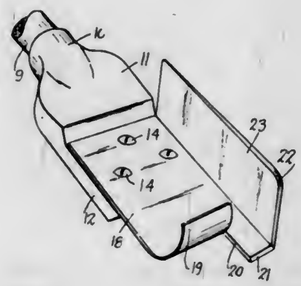
of garments thereinto, one edge of the bag projecting beyond the other edge, the projecting edge having a hem, a substantially rigid bar extending through the hem, a hanger near the upper end of the bag, a perforated receptacle located within the bag near the upper end thereof, said receptacle having an opening for the introduction of an insecticide material.

1,825,145. METHOD OF SECURING BUNDLES OF BRISTLES IN THE BODIES OF BRUSHES. KARL DRESSLER, Gross Schonau, Germany, assignor to Israel Moses Lerch, Leipzig, Germany. Filed Apr. 29, 1927, Serial No. 187,674, and in Germany May 7, 1926. 2 Claims. (Cl. 300—21.)



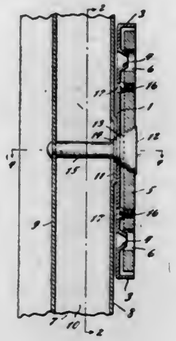
1. A process for the manufacture of bristle brushes which consists in forming a multiplicity of sockets in a piece of metal the thickness of which is greater than the depth of the sockets and sufficient to adapt it for use as a brush body, each of said sockets having a well rounded edge, inserting a bundle of bristles in each of said sockets, and applying to an annular surface around each socket pressure sufficient to cause lateral displacement of metal substantially throughout the depth of the socket, and thereby form a socket entirely below the plane of the upper surface of the body which socket has a rounded edge and securely grips the bundle of bristles throughout its depth.

1,825,146. LAWN EDGE TRIMMER. EMANUEL EIERMANN, Rosedale, N. Y. Filed Oct. 22, 1929. Serial No. 401,491. 1 Claim. (Cl. 97—227.)



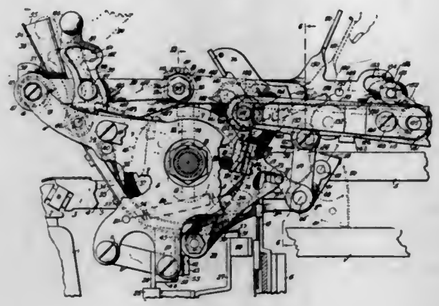
A lawn edge trimmer comprising a holder having integral base and socket parts, a blade secured to the base and having a horizontal and a vertical portion, said horizontal portion being slit adjacent said vertical portion and curved upwardly to provide a rolled edge, the leading edges of the unrolled horizontal portion and the said vertical portion being sharpened.

1,825,147. FRICTION PIVOT HINGE. ALVIN C. GODDARD, Forest Hills, N. Y. Filed Feb. 11, 1928. Serial No. 253,568. 10 Claims. (Cl. 16—140.)



1. The combination with a hollow metallic window frame member, of a pivot pin extending across and secured at one end to said member, a hinge plate rotatably journaled on said pin intermediate its ends, and a friction plate frictionally engaging the other end of said pin to retard rotation of said hinge plate upon said pin.

1,825,148. TYPEWRITING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Oct. 22, 1926. Serial No. 143,382. 49 Claims. (Cl. 197—128.)

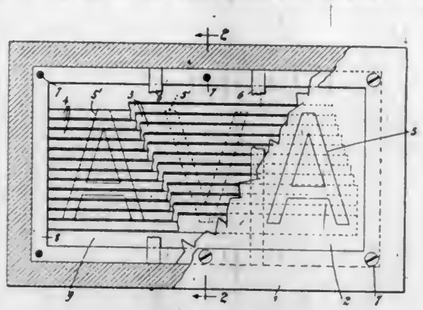


1. In a typewriting machine, the combination of a platen, a set of margin paper feed rollers, controlling means for applying said feed rollers against the platen with a positive pressure, a second set of margin paper feed rollers spring-pressed against the platen, and means rendered effective by said controlling means for restraining the spring pressed rollers against the action of their spring means and away from the platen while the first mentioned set of rollers are being positively applied.

1,825,149. SIGN. CECIL HUMPHREYS, Jackson Heights, N. Y., assignor to Prismo Holding Corporation, a Corporation of New York. Filed June 20, 1928. Serial No. 286,970. 2 Claims. (Cl. 40—135.)

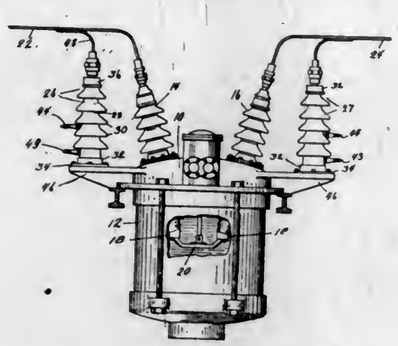
1. A sign having a glass face in combination with means for reflecting back through the glass face the light trans-

mitted through the glass face, comprising reflecting strips angularly disposed with respect to the glass face, said strips being all at the same angle and parallel to each



other, the front face of each strip being spaced at a distance less than the thickness of the strip from the rear face of the adjacent strip to prevent shadow bands.

1,825,150. SYNCHRONIZING SWITCH. GUSTAV E. JANSSON, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Mar. 30, 1928. Serial No. 266,065. 7 Claims. (Cl. 171—118.)



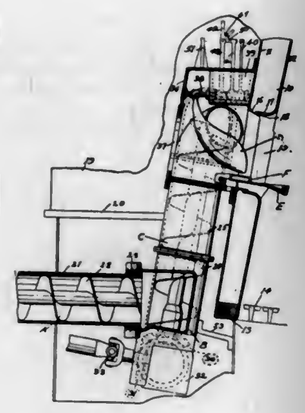
1. A high tension synchronizing switch having insulated switch terminals and a pair of surge absorbing condensers carried by the switch in close proximity to said terminals, said condensers having high tension terminals connected each to the circuit of a switch terminal and low tension terminals connected together and each having an intermediate low voltage terminal.

6. The combination of two separately energized sections of a high tension alternating current line, apparatus for connecting said sections together when they are in synchronism comprising a switch having two terminals each connected with a separate one of said line sections, and grounded condensers each separately connected to a separate one of said sections at a separate switch terminal, said condensers having such high capacity as to absorb surges that may be set up by the closing of the switch when the sections are not in precise synchronism and to prevent such surges from going out onto said sections.

1,825,151. MELTING COMPOUND. SOUREN KEOLEIAN, Philadelphia, Pa., assignor of twenty-five per cent to Haig Y. Yardumian, Philadelphia, Pa. Filed July 7, 1930. Serial No. 466,345. 4 Claims. (Cl. 252—5.)

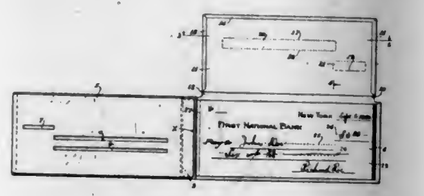
1. An ice melting compound consisting of sodium chloride, ammonium chloride and magnesium sulphate.

1,825,152. LOCOMOTIVE STOKER. NATHAN M. LOWER, Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed July 18, 1927. Serial No. 206,701. 2 Claims. (Cl. 110—101.)



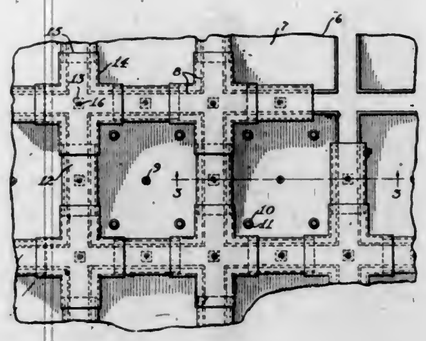
2. In a stoker for use with a locomotive, including a backhead having a firing opening leading into the firebox, a tender behind the locomotive, the combination of a transfer conveyor bringing the fuel from the tender to the locomotive, and located substantially along the center line thereof, a sole elevator conduit spaced laterally at one side of the transfer conveyor for delivering fuel to a point adjacent the firing opening, distributing means receiving fuel from said elevator conduit for delivering it to the fire through said firing opening, an elevator screw in the elevator conduit and a connecting conduit curving laterally in a substantially horizontal plane forming a continuation of, and receiving fuel from, the transfer conveyor and delivering to the adjacent end of said elevator conduit, said transfer conveyor forcing the fuel through said connecting conduit to the elevator screw.

1,825,153. CHECK PROTECTING DEVICE. WILLIAM MCCANN, New York, N. Y. Filed July 23, 1929. Serial No. 380,389. 7 Claims. (Cl. 281—3.)



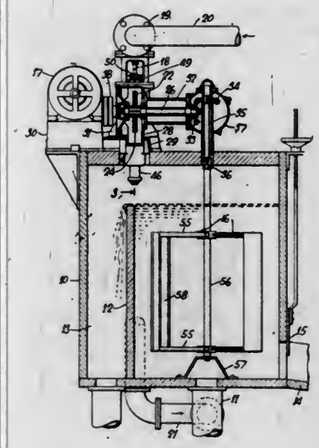
1. A check protecting device for a book for bills of exchange, notes, checks and other commercial paper, comprising a top cover, a bottom cover, means for holding commercial paper blanks therebetween, a perforating plate, having thereon one or more suitably located perforating members, attached to the bottom cover, and a stencil plate attached to the top cover and provided with openings therein, which register with said perforating members, whereby desired portions of the commercial paper may be perforated when said perforating plate and stencil plate are pressed together with the written commercial paper interposed therebetween.

1,825,154. METALLIC LINING FOR HIGH TEMPERATURE VESSELS. STEPHEN T. MCDERMOTT, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed July 23, 1930. Serial No. 469,975. 7 Claims. (Cl. 220—63.)



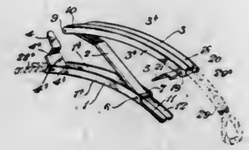
1. In combination, a metallic lining for vessels subjected to relatively high temperatures comprising a plurality of panels connected at substantially their central portions to the inner wall of a vessel, and means attached to said inner wall for slidably connecting abutting spaced edges of adjoining panels.

1,825,155. CONSISTENCY CONTROLLING DEVICE. SIDNEY E. MEYERS, Lockport, N. Y., assignor of one-half to Ericsson H. Merritt, Lockport, N. Y. Filed May 7, 1929. Serial No. 361,061. 20 Claims (Cl. 92—46.)



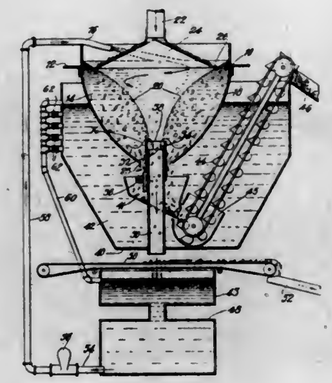
1. In a device for regulating consistency of a fluid suspension, the combination comprising movable means adapted to be disposed in the suspension and arranged to have a frictional drag responsive to the consistency of said suspension, means for driving said movable means, a driving train arranged to effect driving connection between said driving means and said movable means having a part adapted to move in dynamic response to the driving force transmitted, and means for controlling the utilization of a consistency-modifying agent arranged to be actuated directly by the motion of said movable part.

1,825,156. BRACELET EXTENSION DEVICE. LAWRENCE F. OTTEN, Fort Thomas, Ky., assignor to The Wadsworth Watch Case Company, Dayton, Ky., a Corporation of Kentucky. Filed Jan. 25, 1930. Serial No. 423,383. 1 Claim. (Cl. 24—71.)



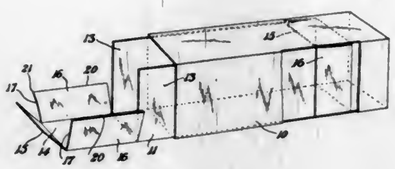
An extension device for cord bracelets and the like comprising a plurality of sections hinged together to fold one over the other, two of said sections being longitudinally and transversely arched and each of said sections being provided with parallel channels, which channels receive the outer ends of said bracelet, and clamping means carried by said last-mentioned sections to detachably hold the outer free ends of said bracelet in adjusted position within the channels of said last-mentioned sections.

1,825,157. METHOD AND APPARATUS FOR HYDRAULICALLY SEPARATING MATERIALS. FRANK PARDEE, Hazleton, Pa., assignor to Anthracite Separator Company, Hazleton, Pa., a Corporation of Pennsylvania. Filed Dec. 3, 1926. Serial No. 152,322. 8 Claims. (Cl. 209—211.)



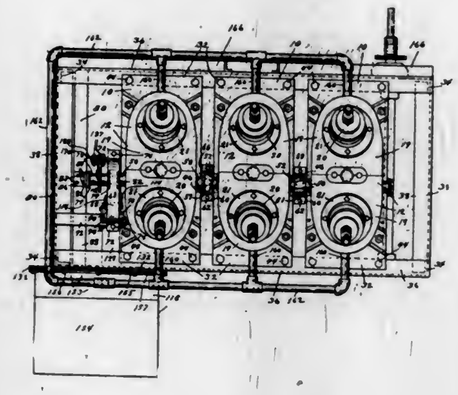
5. An apparatus of the class described comprising a vessel having a converging wall, means for supplying a liquid thereto on a tangent so as to produce a whirling body, means for distributing mixed materials around the outer periphery of said whirling body, an annular outlet port in the lower part of said vessel for the heavier material, and an outlet pipe opening into the lower central part of said vessel adapted to carry off the lighter material, a tank below said vessel adapted to receive the heavy material and liquid discharged therewith, a second tank located below said pipe adapted to receive the liquid discharged and means for conveying the lighter material to a suitable discharge point.

1,825,158. SELF-LOCKING PAPER SLIDE BOX. REINHOLDT PETERSEN, Fairlawn, and RALPH E. FARMER, Akron, Ohio; said Farmer assignor to said Petersen. Filed Oct. 3, 1929. Serial No. 396,970. 3 Claims. (Cl. 229—9.)



1. A paper box comprising an outer casing open at both ends, and a sliding member therein comprising a bottom wall, end walls foldably attached to said bottom wall, and side flaps foldably attached to said end walls and having self-locking engagement with the top wall of the casing, against internal outward pressure, each end wall being automatically releasable by pushing said slide from the other end.

1,825,159. MULTIPLE ELECTRIC SWITCH AND OPERATING MECHANISM THEREFOR. HENRY P. PINKHAM, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed July 9, 1930. Serial No. 466,769. 30 Claims. (Cl. 200—18.)



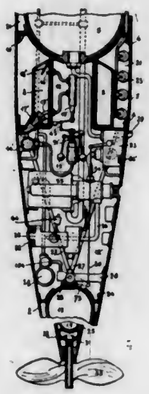
1. The combination of a plurality of electric switches having enclosing casings that are arranged in spaced relation, an operating member which extends through and beyond the casings and from one casing to another for operating all the switches conjointly and actuating mechanism for said operating member having means for connection with said operating member between any immediately-adjacent two casings.

1,825,160. PRESSURE INDICATING TIRE VALVE. EDWARD A. ROCKWELL, New York, N. Y. Filed Mar. 3, 1924. Serial No. 696,494. 3 Claims. (Cl. 152—11.5.)



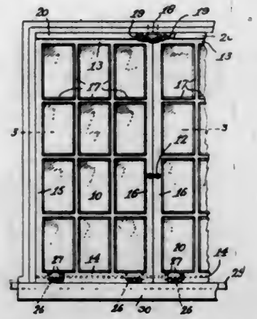
2. An air pressure indicating gauge adapted to register the actual pressure to which it is subjected comprising an extensible tube open at one end and having an indicating means secured to the other end, and means to prevent transverse expansion thereof comprising a series of flat rings with adjacent right-angle tube-supporting edges around the said tube.

1,825,161. TORPEDO. LUIGI ARNALDO SACCO, Genoa, Italy. Filed Mar. 9, 1929, Serial No. 345,808, and in Great Britain Mar. 9, 1928. 10 Claims. (Cl. 114—20.)



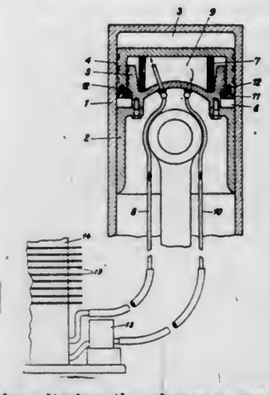
1. A locomotive torpedo including a body, a propeller connected with and forming a unit with said body, and means for directing jets of fluid from said body in planes substantially normal to the axis of the body to produce rotary movement of the latter whereby the propeller imparts an axial thrust to the torpedo.

1,825,162. CONCRETE WINDOW SASH. FRANK MCMURRAY SAWYER, Richmond, Va. Filed June 11, 1930. Serial No. 460,444. 4 Claims. (Cl. 72—99.)



4. A window sash formed of concrete and provided with vertical and horizontal rails and mullions connecting said rails, the rails and mullions being reinforced by longitudinally extending metallic elements, one of the metallic reinforcing elements in the bottom rail being arch-shaped in cross section and extending the full width of the sash to provide a raceway, and also being provided with longitudinal flanges arranged acutely with respect to the body portion of the arched-shaped member.

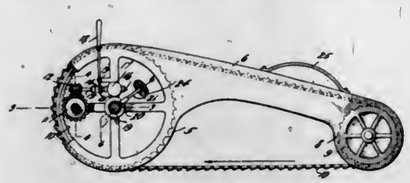
1,825,163. DEVICE FOR ALTERING THE CLEARANCE SPACE IN PISTON MACHINES. ERICH SCHWETER, Bornstedt, Germany. Filed Dec. 19, 1927, Serial No. 241,249, and in Germany Aug. 2, 1926. 16 Claims. (Cl. 123—78.)



1. Device for altering the clearance space in piston machines, comprising in combination a piston including a bottom part and a head part, said bottom part being axially movable against the said head part, a spring arranged between said bottom part and said head part, a pressure liquid provided between said bottom part and said head, for producing a damping action between them means providing a throttling exit for said liquid and means for again introducing liquid, said spring being of such dimensions as to balance the friction, acceleration and the normal pressure load of the movable piston head, and the pressure of the liquid being chosen so as to yield under supernormal combustion pressures and enlarge the clearance space.

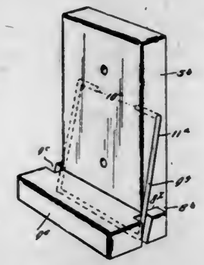
1,825,164. PORTABLE SAW. CLARENCE SKILLMAN, Swingley, Mont. Filed May 31, 1930. Serial No. 458,170. 2 Claims. (Cl. 143—32.)

1. A tree felling apparatus including a carriage having enlarged round ends which are partly open and sprocket wheels journaled in each of said ends, one of which provides a drive sprocket, said drive sprocket having on its inner periphery a ring gear, a chain carrying teeth trained around the sprocket wheels and providing an endless saw, a pointed ground entering support having a threaded portion which is received through one of the rounded ends



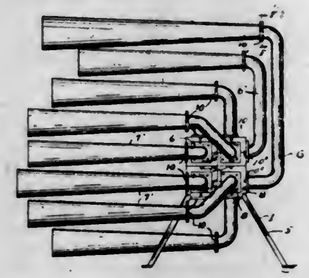
of the carriage and through the center of the drive sprocket, an interiorly threaded beveled gear concentric with the drive sprocket engaging the threaded portion of the support, a gear mounted for turning on the carriage engaging the beveled gear, and a motor driven gear engaging with the ring gear on the drive sprocket.

1,825,165. FLEXIBLE MATERIAL GRIP. WILLIAM ANDREW SMITH and HUGH A. BELDEN, Sherman, Tex. Filed Jan. 27, 1930. Serial No. 423,867. 2 Claims. (Cl. 24—248.)



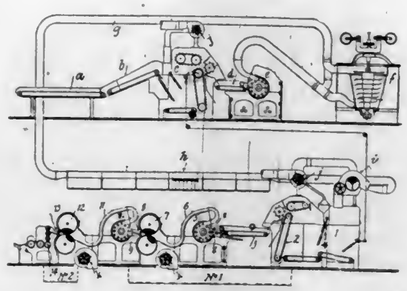
2. A flexible material clamp comprising a body, a U-shaped link having its end portions engaged into the body permitting the link member to swing, and a block rockably mounted on the bight portion of the link member so that one edge portion thereof can clamp a piece of material against one end of the body.

1,825,166. SOUND AMPLIFIER. JOSEPH PATRICK SULLIVAN, Edmonton, Alberta, Canada. Filed May 15, 1930, Serial No. 452,776, and in Canada Jan. 3, 1930. 5 Claims. (Cl. 181—27.)



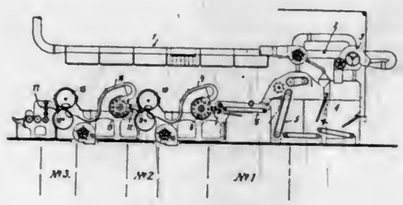
1. An amplifier consisting of a plurality of superposed rows of units, means for placing the units in communication with each other, sound emitting devices in certain of the units, a horn connected with each unit, and means for controlling the passage of sound waves from one unit to the other and to the horns.

1,825,167. CONTROLLING MECHANISM FOR MACHINES FOR CLEANING AND OPENING COTTON AND FORMING THE SAME INTO LAPS. HENRY WILKINSON, Oldham, England, assignor of one-half to Platt Brothers and Company Limited, Oldham, England. Filed Nov. 26, 1929, Serial No. 409,812, and in Great Britain Feb. 16, 1929. 9 Claims. (Cl. 19—68.)



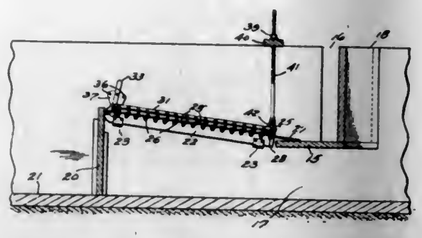
1. In a cotton-cleaning and lap-forming apparatus, the combination of two distinct groups of similar mechanisms, a shaft mounted for rotation, gearing at one end of said shaft for transmitting motion to one of said groups, a gear mounted for free rotation on said shaft, means shiftable into and out of engagement with said gear for imparting motion thereto, gearing in mesh with said gear for imparting motion to the other group of mechanisms and cooperating means carried by said shaft and gear for imparting rotation to the shaft after the gear has been rotated through a predetermined angle whereby motion is imparted first to one of said groups in advance of the other group and then to both groups.

1,825,168. METHOD OF CONTROLLING AND CONTROLLING MECHANISM FOR MACHINES FOR CLEANING AND OPENING COTTON AND FORMING THE SAME INTO LAPS. HENRY WILKINSON, Oldham, England, assignor of one-half to Platt Brothers and Company Limited, Oldham, England. Filed Nov. 26, 1929, Serial No. 409,813, and in Great Britain Feb. 22, 1929. 7 Claims. (Cl. 19—68.)



1. In an apparatus of the character described, the combination of three groups of mechanisms, a shaft geared to one of said groups, a driving gear mounted for free rotation on said shaft, driving means movable into engagement with said gear, means between said gear and shaft for locking them for rotation together after the gear has rotated through a predetermined angle, means for rotating the other two groups and normally out of operative engagement therewith, and means automatically operative on engagement of said driving means with the driving gear first to carry the rotating means of said two groups into operative engagement with their respective groups one in advance of the other and to cause locking engagement between said driving gear and its shaft at a predetermined period after the engagement of the second group with its rotating means.

1,825,169. FISH GUARD FOR IRRIGATION DITCHES. MUNRO WYCKOFF, Seattle, Wash. Filed Apr. 9, 1928. Serial No. 268,554. 8 Claims. (Cl. 210—172.)



1. A fish guarding device for use in an irrigation ditch having a side outlet in spaced relation above the floor of the ditch, said device comprising a partition for closing the lower portion of the ditch and in upstream spaced relation from said outlet, a grate extending rearwardly from said partition, said grate being provided with transversely arranged slats, said grate being pivotally supported at its upstream end, means provided for raising and lowering the rear end of the grate to adjust the slope of the latter, a horizontally arranged partition provided at the downstream end of said grate, transverse angularly disposed directive means cooperating therewith for conducting water passing over the entire length of the grate into the side opening of the ditch, and an apron pivoted to said grate at the downstream end thereof and having its free end slidable over said horizontal partition for sealing the downstream end of the grate with respect thereto, said water conducting means permitting the unobstructed flow of irrigating water from said grate in the ditch.

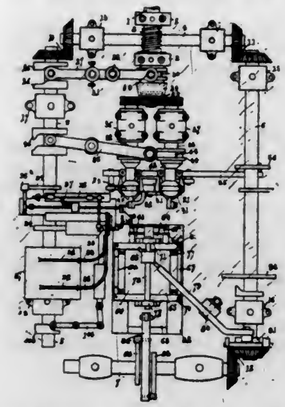
1,825,170. HAIR WAVING COMB. GRACE T. ALLEN, St. Joseph, Mo. Filed Mar. 13, 1930. Serial No. 435,602. 5 Claims. (Cl. 132—38.)



1. A comb of the character described comprising a comb structure and a pair of outstanding oppositely extending extensions secured to the opposite end portions of the comb, one of said extensions being relatively longer than the other.

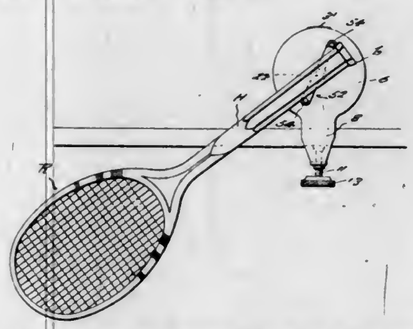
1,825,171. AUTOMATIC SCREW-THREADING MACHINE. JEAN FRANÇOIS ARNOLD, Paris, France. Filed June 22, 1928, Serial No. 287,543, and in France Mar. 26, 1928. 4 Claims. (Cl. 10—2.)

1. An automatic wood screw cutting machine comprising in combination a drive shaft, a plurality of screw blank receiving chucks, a clutch for operatively connecting said chucks to said drive shaft whereby they will be caused to rotate therewith, a screw blank feeding mechanism adapted to deliver the blanks to said chucks, an auxiliary shaft operatively connecting said feeding mechanism with said drive shaft, means for operatively connecting said auxiliary shaft with said clutch and adapted to operate the latter with rotation of said auxiliary shaft to operatively connect the chucks to the drive shaft, a plurality of cutting tools and means for operatively connecting said cutting tools



with said drive shaft whereby they will be automatically brought into and out of engagement with the screw blanks supported by said chucks.

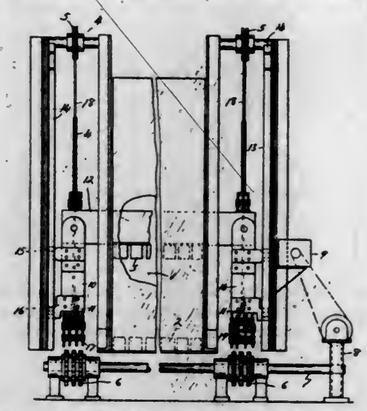
1,825,172. BALANCE INDICATOR. WILLIAM M. BARRET, Shreveport, La. Filed Dec. 13, 1929. Serial No. 413,827. 5 Claims. (Cl. 265—1.)



1. A device for determining the balance of suitable articles, said device comprising a rotatably mounted shaft, means for rotatably mounting the shaft, a torsion-head carried by said shaft at one end of said shaft for accommodating one end portion of a suitable article whose balance is to be determined, said torsion-head adapted to retain said article in relation to the shaft so that the center line of the article will pass directly over the center of the shaft, and whereby the free end of the article will be so supported as to be free to assume its position of equilibrium, an indicating scale, means for controlling the rotation of said shaft, and an operating connection between said shaft and said indicating scale, whereby the static balance of the article will be registered on said scale.

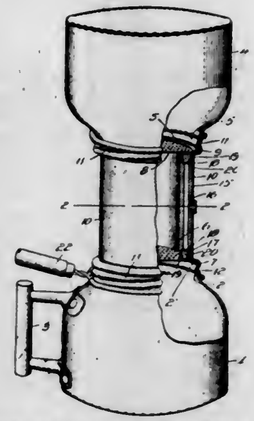
1,825,173. BALING PRESS. ALFORD C. BARROWS, JOHN H. MCLEAN, and GEORGE W. LANGFORD, Ann Arbor, Mich., assignors to Economy Baler Company, Ann Arbor, Mich., a Corporation of Michigan. Filed Mar. 21, 1927. Serial No. 177,146. 12 Claims. (Cl. 100—12.)

1. In a baling press, the combination with a baling chamber having an open end, of a platen movable longitudinally within said baling chamber, means for actuating said platen, including a link connected to and depending from the lower end of said platen, and a driving member connected to the other end of said link, and means for guiding said platen, including a track having a portion extending longitudinally of said baling chamber, and a portion extending transversely of said baling chamber at its open end and a shoe upon said link for engaging the



portions of said track, said shoe being positioned to compel the end of said link connected to said platen to carry said platen out of said baling chamber and transversely thereof beyond its open end.

1,825,174. COFFEEPOT. SETH W. BLOOM, Du Bois, Pa. Filed Dec. 6, 1930. Serial No. 500,609. 2 Claims. (Cl. 53—3.)

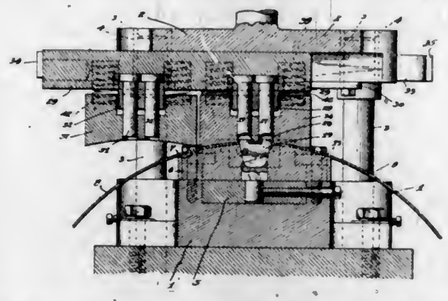


1. A percolating coffee pot, comprising two end sections, an intermediate section detachably connecting the end sections, screens between the intermediate and end sections, and a tube having a vent opening and oppositely acting check valves in its ends mounted in the intermediate section and serving to connect the end sections.

1,825,175. MACHINE FOR RIVETING LUGS TO A TIRE CARRYING RIM. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed June 1, 1926. Serial No. 112,961. 12 Claims. (Cl. 78—49.)

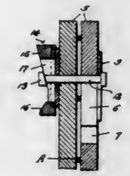
3. In a machine for riveting a lug to a rim, the combination with a support for a rim and lug with a rivet extending from the lug through the rim, of a holder movable toward and away from said support, punches for alternatively splitting and riveting down the rivet, a reciprocable slide carried by said holder and supporting said punches, clamping pads movably supported by said slide and engageable with the rim prior to engagement of said

punches with the rivet for clamping the rim against said support, and means tending to yieldably force said clamp-



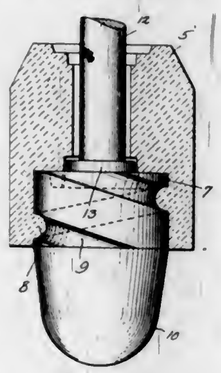
ing pads away from said slide and toward said support, said means permitting movement of said slide toward said support after said clamping pad has engaged the rim.

1,825,176. CLAMP FOR WIRE FENCE STRUCTURES. JOHN BRADFORD, Winslow, Ill. Filed Aug. 7, 1928. Serial No. 298,036. 1 Claim. (Cl. 254—83.)



A fence wire clamp comprising a pair of pressure plates having registering openings therein; a guide plate having an opening therein registering with the openings of the pressure plates, a downwardly tapering block having a longitudinally extending slot therein registering with the openings in the guide and pressure plates, a stop shoulder on the block at the lower end of the slot therein, an elongated member disposed through the openings in the block and plates, and a head on each end of the member, said guide plate being provided with vertically extending flanges for guiding the block in a vertical direction.

1,825,177. STOPPER. GEORGE A. BROSIUS, Lewistown, and ADOLPH A. BROGE, Burnham, Pa. Filed July 22, 1930. Serial No. 469,770. 4 Claims. (Cl. 22—85.)



4. A stopper comprising a body portion, and a stopper section, a rod removably connected with the stopper section for lifting the stopper, and means independent of the rod for connecting the body portion and stopper section.

1,825,178. PROCESS FOR THE TREATMENT OF FIBERS OR FIBROUS MATERIALS. ROBERT DOUGLAS COGHILL, Roslyn, Dunedin, New Zealand. Filed Dec. 26, 1929. Serial No. 416,736. 6 Claims. (Cl. 92—13.)

1. A process for the treatment of fabrics of vegetable fibrous composition, comprising an initial treatment of the said fabric while being squeezed and rubbed and also lightly pounded, to a bath of approximately boiling solution of silicate of soda and water, subsequently washing the fabric in clear hot water, then squeezing and partly drying the same and allowing it to absorb an oil bearing substance and while still damp therewith subjecting it to a gentle pounding action, and finally treating the fabric to the action of a size or starch solution and while still damp therewith to the action of warm rapidly revolving rollers, or cylinders, through or over which it is passed.

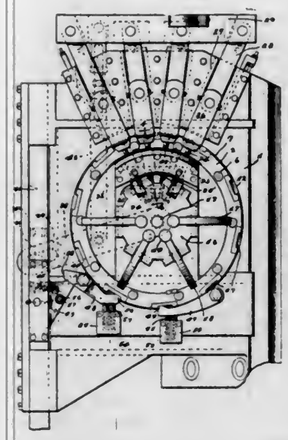
1,825,179. GRAPPLING TONGS. CLARENCE B. COLLOM and DWIGHT HORTON, Dallas, Tex., assignors of fifty per cent to W. L. Thornton and F. W. Bartlett, Dallas, Tex. Filed Dec. 2, 1929. Serial No. 410,951. 2 Claims. (Cl. 294—118.)



1. Grappling tongs including substantially S-shaped members, pivotally joined together in reverse relationship for scissor-like movement, the lower ends of which are curved on the same plane as the upper ends thereof to engage cylindrical objects transversely, the said upper ends being relatively parallel in normal position and linked together at their tops, providing a central pivot in alinement with the pivotal connection between said members, a loop at said central pivot to receive a cable, an eye adjacent said loop to receive another cable and means at the pivotal connection between said members to receive the end of said latter cable.

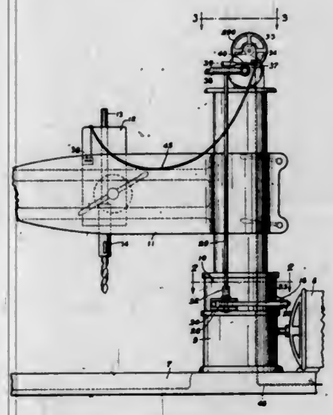
1,825,180. APPARATUS FOR FORMING SPOKE HOLES IN RIM MEMBERS OF VEHICLE WHEELS. DWIGHT E. COPPLE, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed June 13, 1929. Serial No. 370,598. 4 Claims. (Cl. 29—89.)

1. The combination with a carrier for annular work, of a reciprocable member movable transversely of said carrier, and means for clamping the annular work to said carrier, including pivotal members upon said reciprocable member adapted in one position of said reciprocable mem-



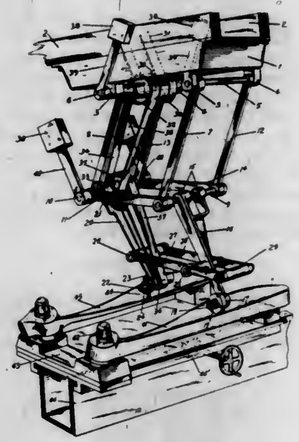
ber to engage the annular work and in another position of said reciprocable member to clear the inner surface of the annular work.

1,825,181. ELECTRICALLY OPERATED COLUMN CLAMP FOR RADIAL DRILLS. WILLIAM C. DE ROO, Cincinnati, Ohio, assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 27, 1926. Serial No. 151,209. 2 Claims. (Cl. 77—28.)



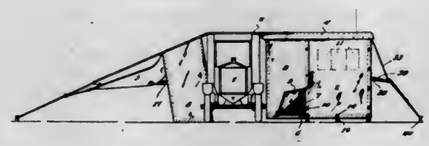
1. In a device of the class described, the combination of a rigid column, a rotatable column supported by the rigid column, a split bearing comprising perforate lugs on the rotatable column, a clamp screw adapted to be received in the perforations in the lugs, a lever, means for pivotally connecting the lever and one end of the clamp screw, a fulcrum block on the lever adapted to abut a lug of the split bearing, a bearing bracket on the rotatable column, a vertical rotatory cam shaft, the lower end of which is journaled in the bearing bracket, a cam on the cam shaft adapted to abut the lever for moving said lever about the fulcrum block, a second cam on the cam shaft, an electrical circuit comprising a motor, a manually operated start switch, and a stop switch, gearing for transmitting motion of the motor to the cam shaft, and a pitman associated with the second cam and the stop switch, for actuating the stop switch whereby the electrical circuit is broken for stopping the motor.

1,825,182. MACHINE FOR THE MANUFACTURE OF AIRSCREWS. FREDERICK WILLIAM DOSE, Bexley, New South Wales, Australia. Filed Nov. 12, 1929, Serial No. 406,704, and in Australia Mar. 21, 1929. 2 Claims. (Cl. 90—13.2.)



1. A machine for the purpose set forth, comprising three links and a fixed member constituting a quadric cycle chain of the parallel double crank type, three other links which form, on a quasi fixed member constituted by the link of the said chain opposite the first mentioned fixed member, a second quadric cycle chain of the parallel double crank type, a roller mounted on an extension of one link of the second chain which is adjacent the quasi fixed member, a cutter mounted to rotate on a similar extension of the opposite link of the second chain, said roller and cutter being rotatable in a plane parallel to the plane of the linkwork, and a belt drive which is mounted upon the linkwork and supplies constant drive ratio to the cutter independently of the configuration of the linkwork.

1,825,183. TOURIST'S OUTFIT. WILLIAM A. FRISBY, Houston, Tex. Filed Jan. 3, 1930. Serial No. 418,343. 7 Claims. (Cl. 135—1.)



1. A tent outfit comprising a roof section adapted to extend across the top of a touring vehicle and beyond the sides of the same, means for securing the ends of the roof section, fabric wall sections connected to the roof section to depend therefrom, means for holding one of said wall sections against collapse whereby it may form a support for the roof section, and means for suspending said section in a horizontal position from the roof whereby it may serve as a bed.

1,825,184. AEROPLANE PROPELLER. IGNATZ GLANSCHNIG, Gary, Ind., assignor of one-half to Anton Kazlawski, Gary, Ind. Filed Aug. 16, 1929. Serial No. 386,368. 5 Claims. (Cl. 170—159.)



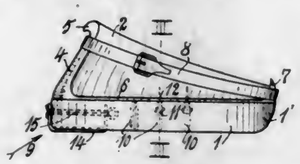
1. An aeroplane propeller comprising a hub, a pair of blades formed integral with the hub and disposed on the diametrically opposite sides thereof, said blades inclining in opposite directions from each other, each of said blades rolling from an angle of sixty-five degrees with respect to the plane of the rotation of the propeller on its outer end to an angle of thirty degrees at a point where each blade merges with the hub, and means on the hub for connection to a drive shaft of a prime mover, the margin at the upper edge of each blade flat on the leading face and curved on the trailing face and the margin at the lower edge of each blade curved on the leading face and flat on the trailing face to provide pulling power the entire width of the blade from end to hub.

1,825,185. PACKING FOR PISTONS AND THE LIKE. SAMUEL M. GREENIDGE, Thurber, Tex. Filed Dec. 11, 1926. Serial No. 154,286. 5 Claims. (Cl. 74—109.)



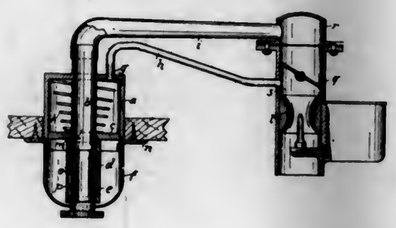
1. A packing including a plurality of substantially cup-shaped elements arranged in nested relationship, certain of said elements being formed from slitted discs, the portions of the discs between the slits being bent up and providing overlapping fingers on each disc.

1,825,186. HORSESHOE. PETER ANDREAS HARSEM, Oslo, Norway, assignor to Imperator Hestesko A/S., Tonsberg, Norway, a Norwegian Concern. Filed May 7, 1930, Serial No. 450,523, and in Norway Nov. 20, 1929. 4 Claims. (Cl. 168—4.)



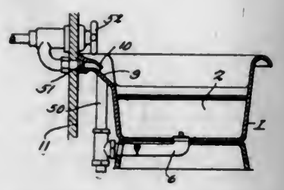
1. A horseshoe of elastic material, having a toe-cap closely fitting the hoof and a metal member in the upper side of the rear portion of the shoe, so as to prevent the hoof from pressing into the rubber, and having a built-up rear edge serving to prevent the hoof from slipping out at the back of the shoe, said metal member being bent upwardly and adapted to serve for reinforcing the projection at the rear of the shoe.

1,825,187. AUTOMATIC FUEL MIXTURE REGULATOR. HUGO HÜBNER, Mosbach, Germany. Filed Aug. 15, 1927, Serial No. 213,126, and in Germany Aug. 21, 1926. 3 Claims. (Cl. 123—124.)



1. An apparatus for regulating the supply of additional air to the suction pipe of an explosion motor, comprising the combination with the suction pipe and a throttle therein, of an air pipe having a plurality of rows of holes therein at one end and connected to the suction pipe on the engine side of the throttle, a cylinder in open communication at one end with the suction pipe on the atmospheric side of the throttle and surrounding said air pipe, said cylinder being closed at the end thereof in open communication with the suction pipe and open at the opposite end and an assembly comprising a regulating piston and a sleeve connected to said piston, so as to be movable in unison therewith mounted on the air pipe so as to be slidable thereon with the regulating piston movable in the cylinder by the variation in pressure in the suction pipe on the atmospheric side of the throttle and the sleeve adapted to cover and uncover with its end remote from the regulating piston, the said holes in the air pipe for regulating the supply of air to the air pipe, said sleeve being recessed intermediately of its ends and having at the junction of the piston and sleeve an internal annular groove and holes in its wall communicating with the outside and said groove, a rotary sleeve in the air inlet pipe, said sleeve having air regulating openings adapted to co-operate with the openings in the air inlet pipe and means connected to said sleeve for turning the sleeve by hand for varying the number of holes uncovered by the sleeve from the outside, as and for the purposes set forth.

1,825,188. BATHTUB. PAULINE JARMUSZ, Gary, Ind. Filed Sept. 9, 1929. Serial No. 391,365. 1 Claim. (Cl. 4—173.)



A bath tub provided at the upper edge of one of its walls with an open chute discharging into the tub and including a bottom which is downwardly and inwardly inclined to the inner surface of the tub, the bottom of the chute being provided with a raised outlet member extended longitudinally of the chute and connected integrally throughout its entire length with the bottom of the chute, the outlet member having its outlet end set backwardly from the inner end of the chute and from the inner surface of the tub, the intake end of the outlet member opening through the bottom of the chute independently of said wall of the tub, the outlet member being housed completely within the chute.

1,825,189. ELECTRODEPOSITED PATTERN. ARTHUR K. LAUKEL, Detroit, Mich. Filed Dec. 3, 1928. Serial No. 323,391. 9 Claims. (Cl. 22—158.)



1. A metal pattern consisting of a shell of electrolytically deposited metal of insufficient thickness to withstand manipulation in molding operations, and a filling material therein for reinforcing the same, said material being of a character capable of withstanding high production molding operations.

1,825,190. COMBINED SHOOTING AND MAGAZINE BARREL FOR SPRING AIR GUNS. CHARLES F. LEFEVER, Plymouth, Mich., assignor to Daisy Manufacturing Company, Plymouth, Mich., a Corporation of Michigan. Filed Mar. 5, 1929. Serial No. 344,428. 5 Claims. (Cl. 124—11.)



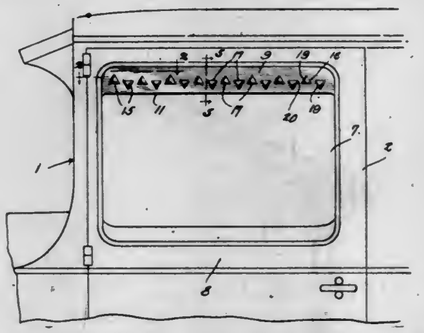
1. In an air gun, a magazine barrel and a shooting barrel formed from an integral sheet metal blank, a liner tube for said shooting barrel apertured for communication with said magazine barrel and means for adjustably and removably securing said liner tube in position.

1,825,191. METHOD OF TEMPERING SHOE UPPERS. HENRY G. LUMBARD, Auburn, Me. Filed Mar. 20, 1931. Serial No. 524,189. 11 Claims. (Cl. 12—146.)



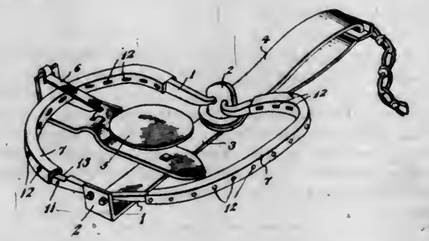
1. The method of tempering shoe uppers which comprises disposing one upper right side out and a second upper inside out, and interposing a moisture ladened member between said uppers so that like surfaces of both uppers are in substantially uniform and equal contact with said member and absorb substantially equal quantities of moisture therefrom.

1,825,192. WINDOW VENTILATOR FOR AUTOS. JOHN JACOB MACK, York, Pa. Filed Nov. 27, 1928. Serial No. 322,250. 5 Claims. (Cl. 98—2.)



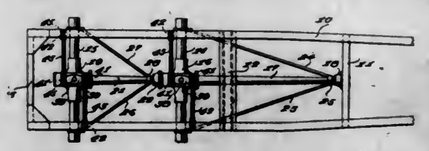
3. A window ventilator comprising a plate from which tapered louvers are struck, the axes of all of the louvers being arranged in a single zig-zag line.

1,825,193. TRAP. JOHN W. MADDOX, Marion, Md. Filed Oct. 21, 1929. Serial No. 401,239. 1 Claim. (Cl. 43—90.)



A trap having jaws each formed with transversely extending openings spaced from each other longitudinally of the jaws, bindings for said jaws, said bindings being U-shaped in cross section and straddling the jaws and having side walls formed with opposed openings registering with the openings in the jaws, and removable fasteners passed through the registering openings of the jaws and bindings and each having a head at one end and arms at its other end spread to a clinching position.

1,825,194. ROAD VEHICLE. ARTHUR I. MARCUM, Oakland, Calif. Filed Oct. 1, 1928. Serial No. 309,545. 5 Claims. (Cl. 280—104.)



1. A road vehicle comprising a frame; an axle yieldably connected to said frame; a lever centrally pivoted to said axle; rods flexibly and yieldably connected to said frame and the opposite ends of said lever at the respective oppo-

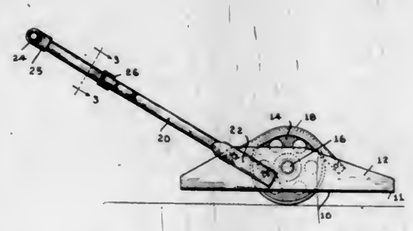
site ends thereof; said flexible and yieldable connections comprising balls rigidly mounted on said frame and said lever, longitudinally movably mounted in cylindrical end portions of said rods against cushioned springs mounted therein.

1,825,195. UNIT-SYSTEM BUILDING CONSTRUCTION. CHARLES F. MCAVOY and DANIEL E. MCAVOY, Long Island City, N. Y. Filed Apr. 19, 1928. Serial No. 271,340. 8 Claims. (Cl. 20—2.)



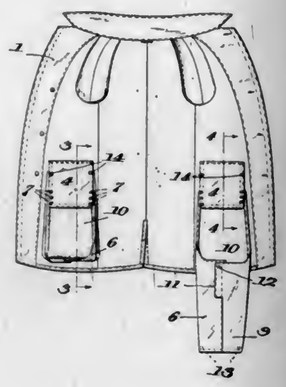
2. A panel for unit building structures having a frame comprising two longitudinal side members and at least two transverse members, suitably united to one another, said transverse members being suitably bored to receive and having screwed into such borings, flanged socket plugs of circular cross section, having an external thread to engage the walls of the borings and an internal thread to receive each a tap bolt or screw.

1,825,196. HAND TRUCK. ALEX S. MCDANIEL, Bradford, Pa. Filed Dec. 14, 1929. Serial No. 414,131. 4 Claims. (Cl. 280—53.)



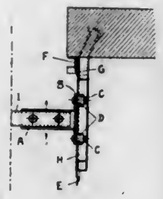
1. A hand truck comprising an integral sheet steel platform having integral flanges projecting upwardly from the lateral edges thereof, a pair of aligned stub shafts affixed to and carried by said flanges at points substantially midway of the front and rear edges of said platform and a substantial distance above said platform and projecting laterally and outwardly from said flanges, a pair of wheels rotatably mounted on said stub shafts, and a handle bar secured to said platform.

1,825,197. GARMENT. HERBERT P. MCGINNIS, Parkersburg, W. Va., assignor to General Raincoat Co., Parkersburg, W. Va., a Corporation of West Virginia. Filed Jan. 20, 1930. Serial No. 422,091. 3 Claims. (Cl. 2—86.)



1. A garment of the character described comprising a body portion having pockets extending into and disposed on the inner side thereof, and leg covering elements attached to and supported entirely by certain of said pockets and adapted to embrace the legs of the wearer, the points of attachment being located on the inner faces of the pockets adjacent the coat.

1,825,198. TRUCK AND GUIDE MEMBER FOR ROLLER BLINDS. BRUNO NEGRINI, Bologna, Italy. Filed May 12, 1931, Serial No. 536,913, and in Italy Apr. 30, 1930. 3 Claims. (Cl. 156—16.)

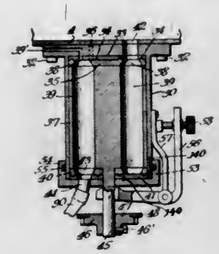


3. A truck and guide member for winding drums of roller blinds, according to claim 1, in which, each of the trucks is formed from a rectangle of sheet iron, cut and bent so as to form an axial channel-shaped part (A) in which end of the axle (I) for the winding drum of the roller blind is fitted and a head plate (A') bent at right angles to the axis of the channel and connected to a transverse plate (B) and to the pivots (C) of the truck wheels (D).

1,825,199. PROCESS OF WATERPROOFING. JOSÉ A. PATIÑO, Paramus, N. J. Filed Mar. 17, 1928. Serial No. 262,599. 3 Claims. (Cl. 91—68.)

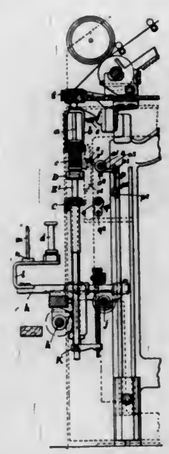
1. The process of waterproofing surfaces which consists in applying thereto a liquid coating composed of iron filings, sal-ammoniac and water, and covering said second liquid coating with a coating of cement mixed with the ingredients of said first coating.

1,825,200. MEASURING DEVICE FOR LIQUIDS. JOHN L. PATTERSON, Richmond, Va., assignor to Richmond Beverage Machine Corporation, Richmond, Va., a Corporation of Virginia. Original application filed Sept. 3, 1924, Serial No. 835,613, Patent No. 1,650,151, dated Nov. 22, 1927. Divided and this application filed Oct. 4, 1927. Serial No. 223,956. 3 Claims. (Cl. 221—108.)



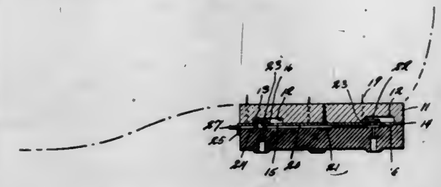
1. A beverage-dispensing apparatus provided with a syrup-measuring device comprising an outer cylinder having an inlet opening at its top and an outlet opening in its base, and an internal cylinder provided with syrup-measuring chambers of frusto-conical form at their ends, the smaller opening of each frusto-conical passage being of the same diameter as the proximate inlet or outlet opening; whereby the pocketing of air is precluded and the chambers are caused to fill and empty completely and quickly.

1,825,201. MEANS FOR FACILITATING DOFFING IN FLYER SPINNING, TWISTING, AND SIMILAR MACHINES. WILLIAM PRINCE-SMITH and DAVID WATERHOUSE, Keighley, England. Filed Nov. 8, 1930, Serial No. 494,424, and in Great Britain Dec. 7, 1929. 5 Claims. (Cl. 118—39.5.)



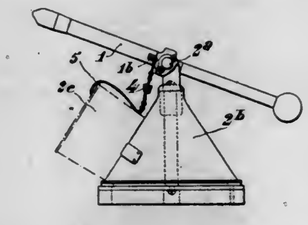
1. In a flyer-spinning, twisting and similar machine provided with mechanical doffing apparatus, spindles, flyers mounted on said spindles, bobbins on said spindles, threads passing through said flyers and wound on said bobbins on said spindles, transfer pegs, empty bobbins on some of said transfer pegs, thread severing means, a series of angularly movable members located in rear of said spindles, means to move said angularly movable members into the paths of said threads extending from said flyers to said bobbins on said spindles, means carried by said angularly movable members to seize said threads when said bobbins have been transferred by said mechanical doffing apparatus to some of said transfer pegs, said means on said angularly movable members also serving to retain the ends of said threads passing through said flyers after severance by said thread severing means, and means to tension said ends of said threads upon their release from said retaining means on said angularly movable members.

1,825,202. REMOVABLE HEEL. MARTIN PUDIN, Coplay, Pa., assignor of forty per cent to John Haberern, Coplay, Pa. Filed Dec. 14, 1929. Serial No. 414,128. 1 Claim. (Cl. 36—42.)



A removable heel for a shoe comprising an upper heel plate, means for mounting the plate on a shoe, said plate having a plurality of elongated slots therethrough terminating at one end in an enlarged opening, said plate having a depending horizontally slotted lug on the inner edge thereof intermediate each side, a lower plate, a heel member, means for securing said lower plate to said member, said securing means including rivets having enlarged heads adapted to engage in said slots of said upper plate, and a locking bar pivotally mounted on said upper plate, said bar having a pair of notches intermediate its ends, one of said notches receiving the head of one of said rivets and the other of said notches receiving said lug, the sides of said bar inwardly of said other notch frictionally engaging the sides of the notch in said lug whereby to frictionally lock said bar thereon.

1,825,203. CONTRIVANCE OR DEVICE FOR THROWING PROJECTILES OR THE LIKE. JEAN FREDERIC JULES REIBEL, Chatellerault, France, assignor to Société des Armes Lewis, Paris, France, a Joint-Stock Company of France. Filed Dec. 28, 1928, Serial No. 329,015, and in France Feb. 11, 1928. 13 Claims. (Cl. 89—1.)

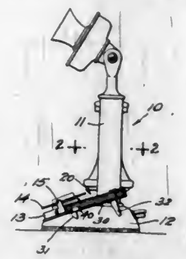


3. In a projectile throwing device, a body, a propelling charge container, means for securing said propelling charge container at the forward end of the body, means for firing the propelling charge.

1,825,204. MEMORANDUM-PAD HOLDER FOR DESK TELEPHONES. GEORGE H. REVELLE, Seattle, Wash. Filed Jan. 18, 1928. Serial No. 247,532. 2 Claims. (Cl. 45—82.)

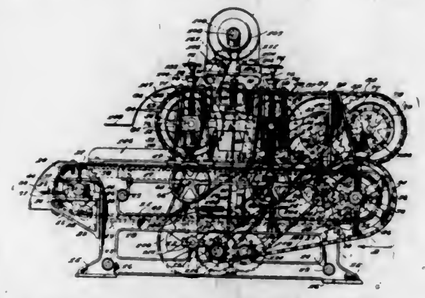
1. In a memorandum-pad holder for a desk-telephone instrument having a base member, a post member and a casing containing the switching mechanism, a pad-holding element adapted to be supported by said base member,

laterally extending hook devices pivotally connected to said pad-holding element, said hook devices being engageable about said casing and post member for retaining the



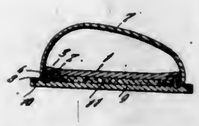
holder in juxtaposed relation with the casing, and means cooperating with said casing for detachably securing a memorandum-pad upon the holder.

1,825,205. MEAT TRIMMING APPARATUS. R. G. REYNOLDSON, Madison, Wis., assignor to The Allbright-Nell Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 22, 1929. Serial No. 387,643. 8 Claims. (Cl. 146—81.)



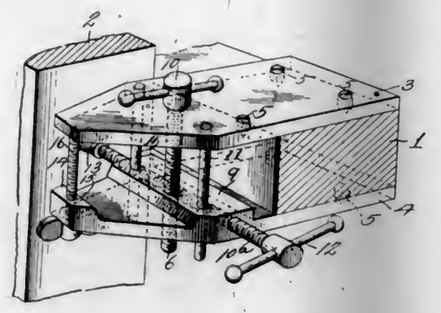
1. A combined rolling and cutting machine for meat slabs comprising two endless conveyors for receiving the meat therebetween and rolling the same, a knife for slicing part of the meat from the slab, and means for driving said endless conveyors at slightly different speeds to cause an ironing of the meat slabs.

1,825,206. SHOE AND PROCESS OF MAKING SAME. CHARLES A. RIVAS, St. Louis, Mo. Filed Feb. 20, 1930. Serial No. 430,003. 1 Claim. (Cl. 12—142.)



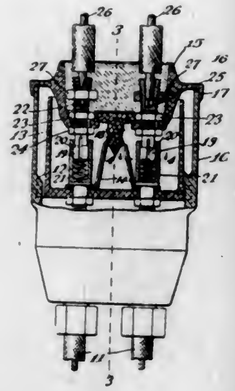
The method of making shoes consisting in forming a slit in the marginal edge of an insole in a manner to provide upper and lower flaps extending around the insole, inserting nails through the lower flap from the inner side thereof, securing the insole temporarily on a last, turning inwardly certain of the marginal portions of a shoe upper beneath the lower flap and impaling the marginal upper portions on the nails, placing a filler on the insole within the impaled marginal upper portions, impaling a welt on the nails over the impaled marginal upper portions and certain of the marginal portions of the filler, clinching the nails on the welt, and securing an outer sole to the welt.

1,825,207. CLAMP. JOHN F. ROBERTS, West Palm Beach, Fla. Filed Mar. 5, 1931. Serial No. 520,424. 4 Claims. (Cl. 144—298.)



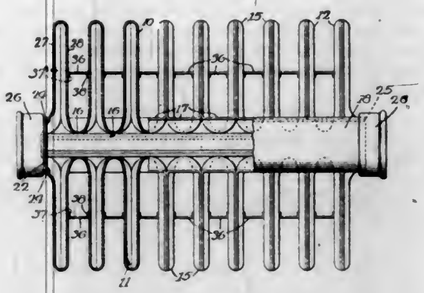
1. A clamp adapted to be received on a support, said clamp comprising spaced jaws, a clamping screw extending through said jaws and forming means for forcing the same towards each other, guide pins carried by one of said jaws and slidably mounted in the other jaw, said clamping screw and guide pins being in the same plane, a transverse enlargement carried by one of said jaws and through which said pins and clamping screw extend, and a pressure screw extending transversely through said jaw and enlargement and forming means whereby pressure may be applied to a member disposed to one side of the jaw.

1,825,208. AUTOMATIC DISCONNECTING POTHEAD. ALEX C. RUMBLE, Sierra Madre, Calif., assignor of one-half to William Edward Lauer, Los Angeles, Calif. Filed June 21, 1928. Serial No. 287,142. 5 Claims. (Cl. 173—353.)



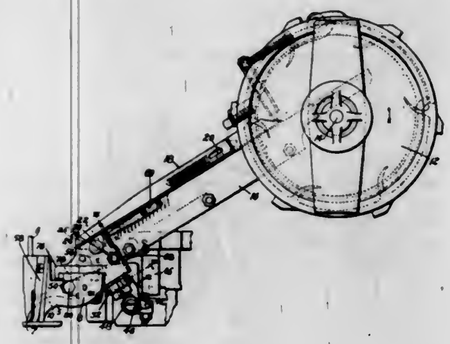
1. In a disconnecting pothead, the combination with a housing having underground cables leading thereto and a cup of insulating material positioned within the upper portion of said housing, sockets seated in the bottom of said cup, to which sockets said underground cables are connected, a detachable cover of insulating material for said housing, said cover having a centrally arranged recess, contact pins arranged within said recess and extending through the wall at the bottom thereof, the lower ends of which contact pins are removably seated in said sockets, conductors secured to the upper ends of said contact pins, and a body of insulating material within said recess for enclosing the upper portions of said contact pins and the portions of the conductors that are connected thereto.

1,825,209. HEAT EXCHANGE DEVICE. CLARENCE E. SAFFORD, Cleveland, Ohio. Filed Oct. 6, 1927, Serial No. 224,342. Renewed Aug. 25, 1931. 15 Claims. (Cl. 257—139.)



4. In a heat exchange apparatus, the combination of a pair of sides folded, bent and welded to produce parallel corrugations having closed ends, the ends of the inner portions of the corrugations being flattened and curved outwardly until they constitute parallel flanges, trough-shaped strips bridging the spaces between the flanges and attached thereto and means connecting across between said inner portions of the corrugations between the ends thereof, to stiffen the structure.

1,825,210. TACK HANDLING MECHANISM. THOMAS H. SEELY, Melrose, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed May 12, 1920, Serial No. 380,897. Divided and this application filed Dec. 30, 1929. Serial No. 417,475. 7 Claims. (Cl. 1—6.)

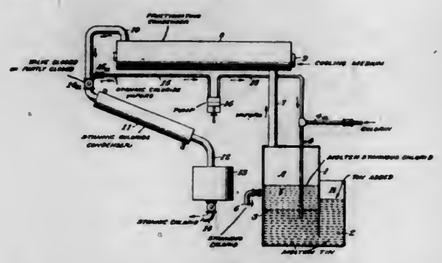


1. In a machine for handling fastenings, the combination of an inclined raceway, a rotary member having a plurality of slots to receive fastenings from the raceway, a pin at right angles to the axis of the rotary member, a longitudinally movable sleeve mounted on the pin having means for rotating the member step by step, means for adjusting the length of the step-by-step movement of the member to cause accurate alinement of the slots with the raceway, and a friction device for preventing movement of the rotary member except that imparted to it by movement of the pawl in one direction.

1,825,211. RECOVERY OF METALS AND METAL COMPOUNDS SOLUBLE IN AMMONIACAL LIQUORS. LEO SCHLECHT and WALTER SCHUBARDT, Ludwigshafen-on-the-Rhine, and FRANZ DUFTSCHMID, Heidelberg, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 29, 1928, Serial No. 265,810, and in Germany April 27, 1927. 20 Claims. (Cl. 75—18.)

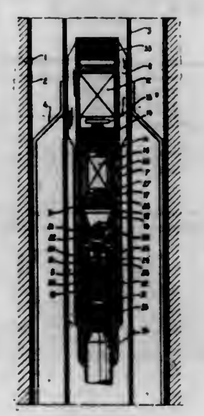
1. A process for recovery of metals, which are soluble in ammoniacal liquors, which comprises subjecting materials containing the said metals to a chlorinating roasting treatment and then leaching with an ammoniacal solution.

1,825,212. PROCESS OF MAKING STANNOUS CHLORIDE. WALTON S. SMITH, Hillside, N. J. Filed Jan. 17, 1930. Serial No. 421,458. 3 Claims. (Cl. 23—98.)



1. In the mainufacture of stannous chloride, the process which comprises establishing and maintaining a bath of molten tin at a temperature above the melting point of stannous chloride and introducing chlorin into said bath at the rate only at which it is taken to form stannous chloride and thereby forming a floating layer of fused stannous chloride on the bath.

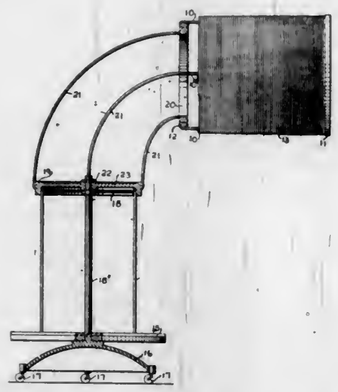
1,825,213. MEANS FOR RECORDING THE INCLINATION AND THE ANGULAR POSITION OF CORES IN BORE HOLES. ALPHONS G. H. STRAATMAN, The Hague, Netherlands, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands, a Company of the Netherlands. Filed July 25, 1929, Serial No. 380,807, and in the Netherlands Aug. 3, 1928. 1 Claim. (Cl. 234—1.)



In a device for recording the inclination of a bore hole and the angular position of a core in said hole including

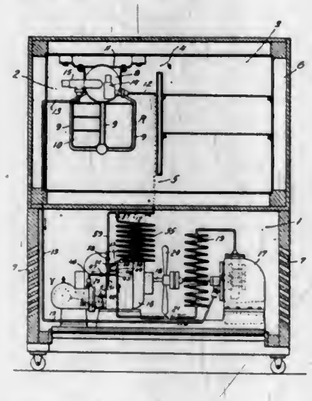
marking means for indicating the rotated position of the device relative to the core; a liquid level comprising a container having a concave top surface constituting a cathode, means to prevent rotation of said cathode relative to said marking means, said container being adapted to be substantially filled with an electrolyte to provide a gas bubble between the electrolyte and said cathode surface, and means for passing an electric current through said electrolyte and said cathode to effect a deposit on all of the cathode surface except that portion of said surface which is exposed to said gas bubble.

1,825,214. WIRE TRANSFER APPARATUS. GEORGE G. SWANK, Crawfordsville, Ind. Filed Dec. 2, 1929. Serial No. 411,145. 3 Claims. (Cl. 242—79.)



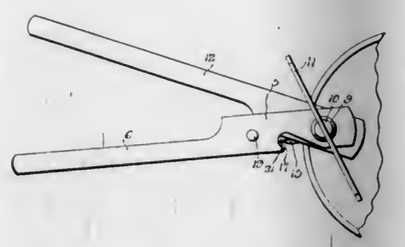
3. A wire coil transfer device adapted for use between a form block and a reel, comprising a main body part, means at one end of the main body part for detachable engagement with the form block and means at the opposite end of the main body part for detachably seating upon the reel, said last mentioned means comprising a ring carried by the main body part and a spider carried by the upper portion of the ring, forming a cavity in the lower portion of the ring to receive the upper portion of the reel.

1,825,215. REFRIGERATING APPARATUS. ALFRED M. THOMSON, Newark, N. J., assignor to Joseph Mercadante, New York, N. Y. Filed Nov. 22, 1926. Serial No. 149,844. 8 Claims. (Cl. 62—8.)



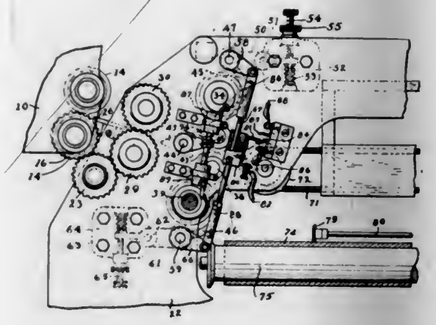
1. In a refrigerating apparatus, the combination of a cooling chamber, a refrigeration element therein, a second chamber located in close proximity to the cooling chamber, means within said second chamber for compressing and liquefying a gasified refrigerant, fluid connections for conducting the liquefied refrigerant to said refrigeration element, and a float valve for controlling the passage of liquid refrigerant to said element, the said fluid connections including a pipe extending between the valve and the said element with most of the pipe arranged within said second chamber, and the said pipe having a cross-section and length such that substantially all of the refrigerant passes into the refrigeration element in liquid form.

1,825,216. CAN OPENER. NELS W. THYBONY and RUDOLPH M. OZABAL, Chicago, Ill., assignors, by mesne assignments, to Klaas Van Wyngaarden, Chicago, Ill. Filed July 17, 1925. Serial No. 44,244. 25 Claims. (Cl. 30—3.)



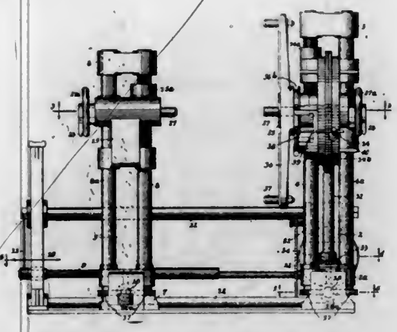
1. A can opener comprising in combination a pair of pivoted levers, a feed roller mounted upon one of said levers, a shifting fulcrum connecting said roller with the other lever, a cutting disk mounted upon said other lever, and means adapted to move said roller and disk toward and from each other.

1,825,217. SHEET DEFLECTOR. LESLEY R. TUFTS, East Cleveland, and ANDREW OLSON, Cleveland, Ohio, assignors to The Cleveland Folding Machine Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed July 16, 1928, Serial No. 293,278. Divided and this application filed Oct. 11, 1929. Serial No. 399,012. 6 Claims. (Cl. 271—64.)



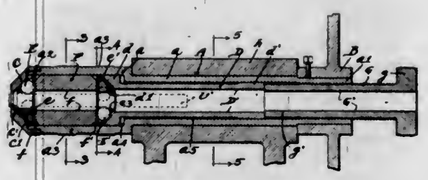
1. In a paper handling machine, means for causing sheets to travel single file in a given path, a deflector for directing sheets from said path to either of two courses, electrical means for shifting said deflector from one position to the other, and means actuated by the travel of the sheets themselves for controlling said electrical means.

1,825,218. CABLE REEL STAND. CHARLES F. VAN HOOK, Paterson, N. J., assignor to Watson Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 26, 1930. Serial No. 431,379. 9 Claims. (Cl. 242—54.)



1. In combination, a supporting means, a head adjustable therein up or down, and a spool carrying and rotating means arranged in the head and including a substantially horizontal spindle having a free end and movable back and forth to enter said end in or clear it from the bore of a spool placed substantially coaxial therewith and a revoluble dog concentric with the spindle and shiftable back and forth lengthwise thereof into and out of clutching engagement with the spool, said spindle and dog being each adapted to occupy its spool-engaging position when the other is clear of the spool.

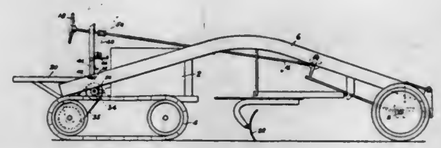
1,825,219. CHUCK. ROBERT WEBER, Los Angeles, Calif. Filed July 31, 1928. Serial No. 296,564. 1 Claim. (Cl. 279—75.)



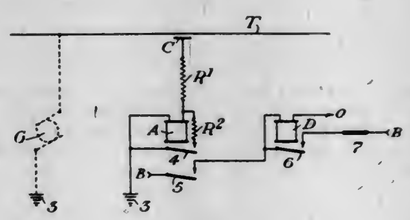
A chuck comprising a hollow spindle formed with a head, a detachable end piece on said head formed with an integral cone located in said spindle head, a sleeve longitudinally adjustable in said spindle and formed with an internal cone located in said spindle head, floating ball retainers in said spindle head adjacent said internal cones respectively, balls radially adjustable in said retainers for engagement with said internal cones, a spacer mounted in said head and formed with flat end faces for engagement with said ball retainers respectively, and a locking member screw-seated in said hollow spindle for engaging the end of the shank of said sleeve and longitudinally adjusting said sleeve, to cause said internal cones to force said balls inwardly to grip the work in the chuck.

1,825,220. MOTOR GRADER TRACTOR STEERING DEVICE. ISAAC CHAR, Kennett Square, Pa., assignor to American Road Machinery Company, Kennett Square, Pa., a Corporation of Delaware. Filed Oct. 10, 1928. Serial No. 311,458. 1 Claim. (Cl. 180—9.2.)

In combination, a frame, dirigible traction means supporting one end of the frame, traction devices supporting the opposite end of the frame at opposite sides thereof, means for driving said traction devices including a clutch for each, means for steering said dirigible traction means including a rotary steering rod, a drum carried by the rod, and connections whereby one or the other of said clutches is disengaged upon actuation of the steering means including flexible members arranged to be wound on said drum, a pinion arranged to be rotated by movements of the flexible members, a sliding rack driven by the pinion and lever connections between the rack and clutches, said traction devices consisting of endless tracks.

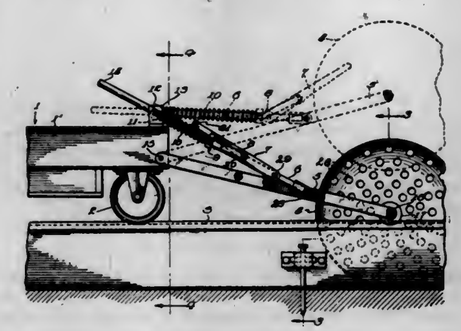


1,825,221. ELECTRICAL TRANSLATING APPARATUS. PAUL H. CRAGO, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,339. 8 Claims. (Cl. 246—254.)



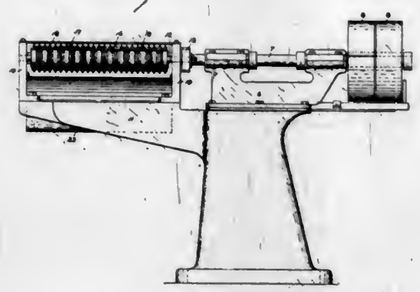
1. In combination, a normally open circuit including in series a source of direct current and a relay as well as a non-inductive resistance of considerable value, means for closing said circuit for a brief interval of time to momentarily energize the relay, and a shunt around the winding of said relay including a front contact of the relay and a resistance whereby the release of the relay is delayed after the relay becomes deenergized.

1,825,222. MECHANICAL SPADER. TAYLOR R. CURRY, Prophetstown, Ill., assignor of one-half to Dora R. Curry, Prophetstown, Ill. Filed June 28, 1930. Serial No. 464,610. 6 Claims. (Cl. 94—39.)



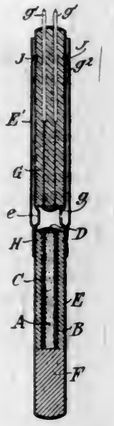
1. A mechanical spader comprising a perforated blade, a bearing part secured thereto for riding on the edge of the form, and a strut for pushing the spader forwardly along the form in spading relation to the concrete.

1,825,223. CUTTING MACHINE. HOWARD S. DECK, Dover, N. J. Filed May 3, 1929. Serial No. 360,250. 5 Claims. (Cl. 164—60.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a cutting machine, parallel driven shafts, a plurality of disk cutters fixed on one shaft and reversely arranged in pairs, a spacing sleeve between the cutters, a feed roller of greater diameter than the cutters loosely mounted on each spacing sleeve, a resilient rim on the feed roller, alternately placed die and feed collars on the other shaft maintaining the feed rollers eccentrically with respect to the cutters, the die collar cooperating with each pair of cutters.

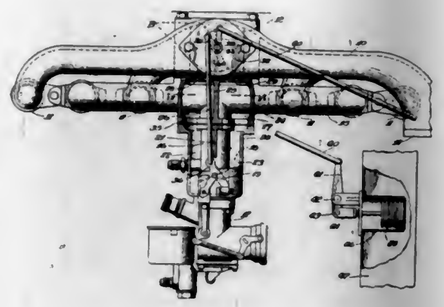
1,825,224. SAFETY FUSE. HENRY E. ELLSWORTH, Simsbury, Conn., assignor to The Ensign-Bickford Co., Simsbury, Conn., a Corporation of Connecticut. Filed Feb. 28, 1930. Serial No. 432,086. 11 Claims. (Cl. 102—10.)



1. A fuse element consisting of a core of slow burning powder, cellular material enclosing the powder and a covering of a relatively non-combustible rigid impervious material snugly engaging over the cellular material, said impervious material having an accurately sized uniform external diameter.

1,825,225. THERMOSTATIC HEAT CONTROL. DAVID FIRTH, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed June 14, 1929. Serial No. 370,809. 11 Claims. (Cl. 123—122.)

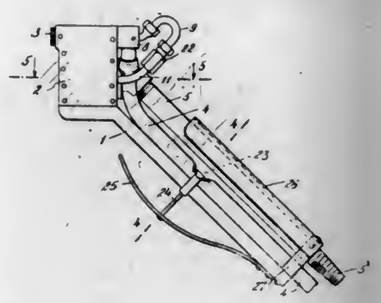
1. A manifolding system for internal combustion engines, including an exhaust manifold, an intake manifold and a throttle valve for said intake manifold, a control valve in said exhaust manifold, a heating jacket surrounding a portion of the intake manifold and having supply and return ducts opening into said exhaust manifold on opposite sides of said control valve therein, linkage connecting said throttle valve and said control valve whereby said valves operate in unison, and means cooperating with said exhaust control valve for varying the primitive opening position thereof relative to the throttle valve.



1,825,226. DEOXIDIZER. JAMES G. FORD, Wilkinsburg, and WILLIAM C. WILHARM, Edgewood, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 21, 1923. Serial No. 682,098. 15 Claims. (Cl. 252—1.)

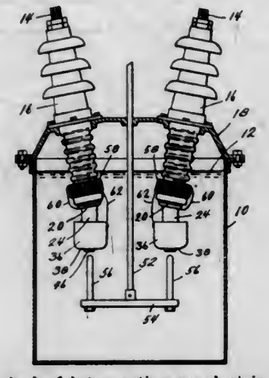
1. A material for deoxidizing atmospheres comprising an oxidizable metal, calcium chloride and water.

1,825,227. METHOD AND APPARATUS FOR PRODUCING DECORATIVE EFFECTS BY SPOTTING OR MOTTLING. ROBERT FRANKLIN GRADY, Jr., Chicago, Ill. Filed Sept. 26, 1929. Serial No. 395,244. 3 Claims. (Cl. 91—45.)



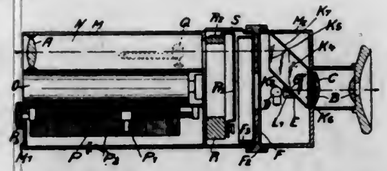
1. Apparatus for producing spotted or mottled effects which comprises a valveless air motor having two exhausts, means for conveying air under pressure to the motor whereby pulsations of air are forced from the exhausts in alternation, two nozzles, a connection between each exhaust and one of the nozzles, two sources of liquid color, and means for conveying one color to each nozzle whereby spurts of color are intermittently and in alternation ejected from the nozzles.

1,825,228. ELECTRIC SWITCH AND ARC EXTINGUISHING METHOD. TALMA T. GREENWOOD, East Templeton, Mass., assignor to Conduit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Dec. 1, 1926, Serial No. 152,049. Renewed Jan. 21, 1930. 18 Claims. (Cl. 200—150.)



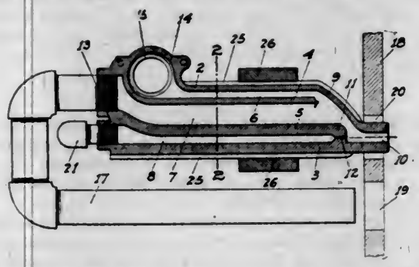
1. The method of interrupting an electric circuit which consists in drawing a circuit interrupting arc between separable contact members in a closely confined fluid body, and subjecting the circuit interrupting arc to the arc extinguishing action of an electrostatic field which is at a potential that is different from the arc potential.

1,825,229. OPTICAL PYROMETER. RUDOLF HASE, Hanover, Germany. Filed Dec. 9, 1926, Serial No. 153,486, and in Germany Feb. 26, 1926. 10 Claims. (Cl. 88—14.)



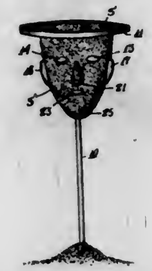
1. An optical pyrometer comprising a casing, an object glass, an eye piece, a mirror arranged to reflect an image of the object whose temperature is to be measured into said eye piece, a window in the surface of said mirror, a comparison light arranged in close proximity to said window, means for illuminating said window from the rear thereof with diffused light from said comparison light, and means for varying the light intensity of said image to reduce it to the light intensity of said window.

1,825,230. OIL BURNER. JOSEPH J. HASKIN, Stockton, Calif. Substitute for application Serial No. 51,943, filed Aug. 24, 1925. This application filed Aug. 29, 1928. Serial No. 302,765. 1 Claim. (Cl. 158—73.)



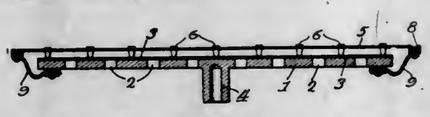
In combination, an oil burner comprising a substantially horizontal shell having longitudinally extending flanges projecting above and below the top and bottom surfaces of the shell at the opposite side edges of the same, and clamping bars adapted to extend across the burner and rest on the flanges.

1,825,231. EDUCATIONAL TOY. SAMUEL S. HIMMELL, New York, N. Y. Filed Sept. 13, 1930. Serial No. 481,679. 3 Claims. (Cl. 35—12.)



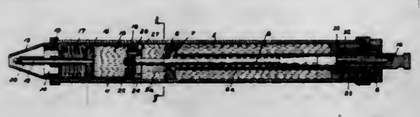
1. A toy comprising a plurality of separate and interconnected members, said interconnected members comprising the selected visible parts of an object to be imitated, said interconnected members being so disposed as to permit filling material to be placed between them with the outer ends of said interconnected members then exposed to view so as to imitate the appearance of an object.

1,825,232. RADIORECEIVING LOUD SPEAKER. WALTER H. HUTH and BYRON B. MINNIUM, Chicago, Ill., assignors to Story & Clark Radio Corp., Chicago, Ill., a Corporation of Delaware. Original application filed Oct. 9, 1928, Serial No. 311,399. Divided and this application filed Sept. 15, 1930. Serial No. 481,862. 6 Claims. (Cl. 179—111.)



1. An electrostatic reproducer comprising a stationary member and a vibratory member disposed a distance apart, with a plurality of yielding and resilient supports interposed between the two members, distributed over the opposing surfaces thereof, said members being adapted to be included in series in a reproducing circuit to cause audible action thereof by the vibration of said vibratory member.

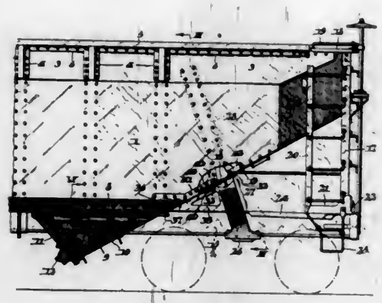
1,825,233. FLUID BRAKE MECHANISM. BRYAN P. JOYCE, Dover, N. J. Filed June 16, 1930. Serial No. 461,517. 11 Claims. (Cl. 89—43.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



7. A fluid brake mechanism embodying a brake cylinder, a brake piston therein, an auxiliary chamber having a non-return outlet to the brake cylinder, a throttled inlet for the auxiliary chamber, means for regulating the throttled inlet, and a plunger in the auxiliary chamber.

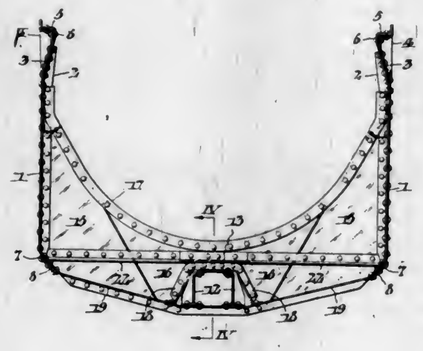
11. In a valve mechanism, a member provided with a passage, a hollow pivot provided with ports affording communication with the passage and a gravity actuated member carried by the pivot.

1,825,234. HOPPER CAR. WILLIAM F. KIESEL, Jr., Hollidaysburg, Pa. Filed Sept. 25, 1930. Serial No. 484,256. 20 Claims. (Cl. 105—249.)



1. In a freight car end construction, a slope floor, and a transverse body bolster in a plane at substantially right angles to said slope floor.

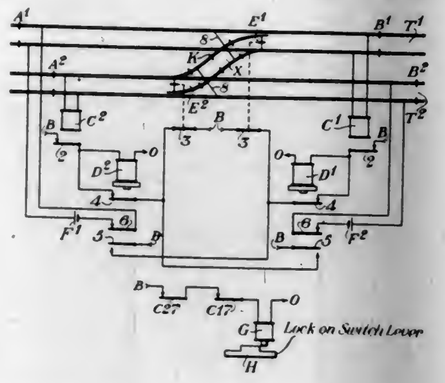
1,825,235. HOPPER CAR. WILLIAM F. KIESEL, Jr., Hollidaysburg, Pa. Filed Sept. 25, 1930. Serial No. 484,258. 8 Claims. (Cl. 105—249.)



1. In a freight car, a number of hoppers, a center sill running longitudinally through said hoppers, and a transverse partition between said hoppers, said partition comprising a gusset extending from one side of the car to the other and having a U-shaped opening at the top, and said partition serving as a cross-bearer to support the center sill from the sides of the car.

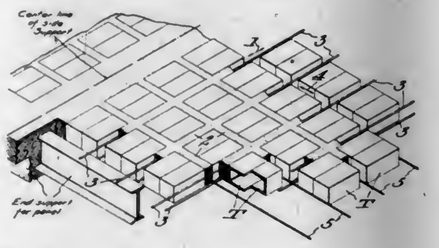
1,825,236. RAILWAY TRACK CIRCUITS. RONALD A. MCCANN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 22, 1931. Serial No. 532,027. 4 Claims. (Cl. 246—41.)

1. In combination, two parallel railway tracks each provided with an insulated track section, a crossover connecting said two sections, a track circuit for each section including the rails of the section and the rails of said crossover on the adjoining side of a common intermediate point as well as the usual track relay and source of track circuit current, means operating when the switches of said crossover are reversed and a vehicle enters one track section to open the track circuit for the other track section and to keep it open until the vehicle passes said



intermediate point in the cross over, and means for preventing operation of the switches of said crossover unless both of said track relays are closed.

1,825,237. FIREPROOF FLOOR CONSTRUCTION. ROWLAND MCWILLIAMS, New York, N. Y.; Jane C. McWilliams, executrix of said Rowland McWilliams, deceased, assignor to Republic Fireproofing Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 8, 1928. Serial No. 318,010. 5 Claims. (Cl. 72—66.)

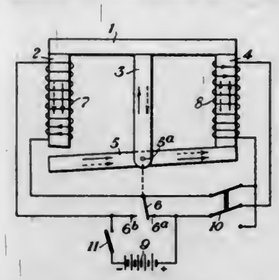


5. In a floor construction, a plurality of hollow blocks alined in rows to define channels, adjacent blocks of each row being spaced apart to leave passages therebetween, reinforcing members in said channels above the level of the lower surfaces of said blocks, and concrete filling said channels and passages, said concrete terminating in planes substantially flush with the upper and lower surfaces of said blocks having substantially plane surfaces engaging said concrete and each of said blocks being formed of a dry mixture of cement, sand and slag molded under heavy pressure and having such properties that concrete hardened against the surface thereof develops a bond strength of the order of the shear resistance of said concrete and said blocks.

1,825,238. ELECTRICAL RELAY. BENJAMIN MISHELEVICH, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 19, 1931. Serial No. 516,935. 2 Claims. (Cl. 175—320.)

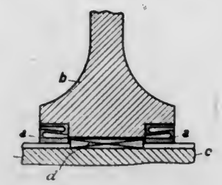
1. A relay comprising a core having three legs, an armature pivotally attached to the middle leg to swing toward one or the other of the outer legs, a winding on each outer leg, a circuit including said windings and a source of current, means operating when said armature is swung

toward either outer leg to place the winding on such leg on short circuit, and means for reversing the polarity of the current supplied to one of said windings but not the



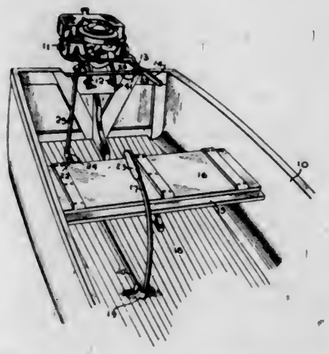
other whereby the armature will oscillate at one rate or another according to the polarity of the current supplied to said one winding.

1,825,239. TURBINE ROTOR DISK FASTENING MEANS. ADOLF MEYER, Zurich, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed Mar. 11, 1924, Serial No. 698,547, and in Switzerland Apr. 11, 1923. 4 Claims. (Cl. 287—52.)



1. Turbine construction comprising the combination with a rotor shaft, of a disk mounted thereon, a resilient centering member held under elastic deformation between the shaft and disk, and means engaging the disk and shaft laterally of the centering member to hold the disk and the shaft against relative rotation.

1,825,240. STEERING DEVICE FOR OUTBOARD MOTOR BOATS. LLOYD P. MILLER, Allerton, Mass. Filed Aug. 19, 1929. Serial No. 386,939. 4 Claims. (Cl. 115—18.)



1. In combination with a boat, and an outboard motor for the same having steering means, a transversely movable upright mounted in the boat adjacent said steering means, an arm universally connected to said upright and to the motor steering means, and a remote control device for moving said upright laterally.

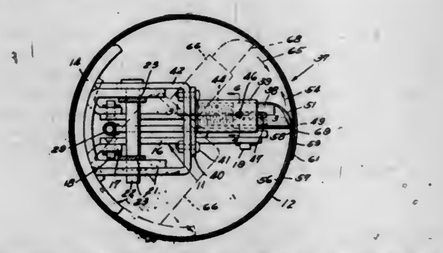
1,825,241. PRODUCTION OF METALS FROM THEIR CARBONYLS. ALWIN MITTASCH, Mannheim, and LEO SCHLECHT, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 18, 1929, Serial No. 348,120, and in Germany Mar. 26, 1928. 5 Claims. (Cl. 75—17.)

1. In the production of metals by thermal decomposition of the corresponding metal carbonyl, the step of freeing the carbon monoxide, produced simultaneously with the metal, from carbon dioxide and metallic dust, and then acting therewith on further amounts of metal to produce metal carbonyl.

1,825,242. PROCESS OF PRODUCING CASTINGS OF MAGNESIUM AND HIGH GRADE MAGNESIUM ALLOYS. ALBERT LEVY MOND, London, England, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 14, 1929, Serial No. 414,240, and in Great Britain Dec. 19, 1928. 8 Claims. (Cl. 22—188.)

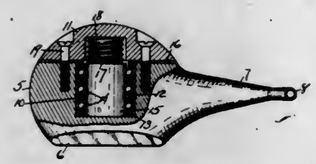
1. A process of producing castings of magnesium and high grade magnesium alloys which comprises bringing ammonium fluoride and an acid capable of absorbing ammonia into contact with the surface of the molten metal within the mould.

1,825,243. SEAM LOCATOR FOR CASING PERFORATORS. ROSCOE MOSS, Los Angeles, Calif., assignor to Roscoe Moss Company, Los Angeles, Calif., a Corporation of California. Filed Nov. 12, 1929. Serial No. 406,642. 1 Claim. (Cl. 81—188.)



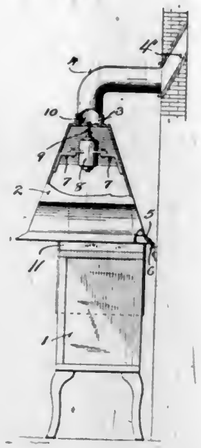
A perforator of the character described, including: a structure adapted to be inserted in a casing; a perforating tool carried by said structure; and a member yieldably supported on said structure for locating a seam in said casing, said member having the end thereof sloped off so as to form a shoulder at one side thereof adapted to engage a seam in said casing when moved in opposition to said seam.

1,825,244. GOLF CLUB. JOHN JAMES NERO, Hartford, Conn. Filed Mar. 12, 1929. Serial No. 346,338. 3 Claims. (Cl. 273—77.)



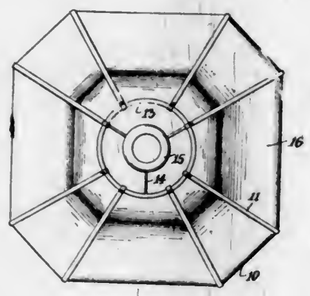
1. A golf club including a head having a chamber therein, a weight movably mounted in said chamber and free to make contact with the forward end thereof, a plate placed against the back of said head, a ball cage integrally formed with said plate and projecting into said chamber, balls positioned in said cage, a cap to close the rear end of said chamber, and a spring located between said cap and said weight and exerting pressure upon the latter.

1,825,245. VENTILATOR HAT FOR STOVES. ALBERT NITKA, Milwaukee, Wis. Filed Apr. 17, 1930. Serial No. 445,066. 1 Claim. (Cl. 126—299.)



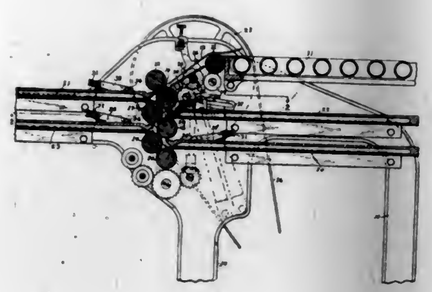
A ventilator hood for stoves having a mouth adapted to be positioned over the top of the stove and having an opening in its top wall, a vent pipe leading from said opening, brackets extending from the inner wall of the hood, a motor carried by the brackets, a fan associated with the motor and extending into the vent pipe and a shield depending from the lower open side of the hood and embracing the back and sides of the stove.

1,825,246. FORM FILLER. JACOB OBSTLER, New York, N. Y. Filed Oct. 7, 1930. Serial No. 486,901. 8 Claims. (Cl. 240—108.)



1. A lamp shade comprising a plurality of form fillers, marginal elements to which the ends of said fillers are secured, tubular coverings for said fillers, and means for holding said coverings in place.

1,825,247. SLIDING DEFLECTOR. ANDREW OLSON, Cleveland, Ohio, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 23, 1930. Serial No. 422,693. 7 Claims. (Cl. 270—68.)



1. In combination, a fold plate, a deflector adapted to cover the nose of said plate, and means for mounting said deflector upon said plate to slide forwardly over the upper surface of the plate and to swing downwardly into position in front of the nose thereof.

1,825,248. PRODUCTS RESEMBLING NATURAL WAXES. WILHELM PUNGS, Ludwigshafen-on-the-Rhine, and KARL BEHRINGER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 5, 1929, Serial No. 352,903, and in Germany July 5, 1928. 7 Claims. (Cl. 87—19.)

1. The process of producing products resembling natural waxes which comprises heating a bleached Montan wax containing free acids with another organic acid of high molecular weight and an organic polyhydroxy compound until at least partial esterification occurs.

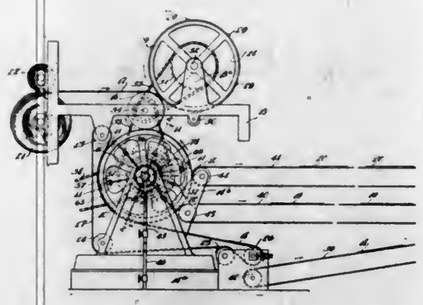
6. As new articles of manufacture, products resembling natural waxes comprising mixed esters of the free acids contained in oxidation bleached Montan wax and another organic acid of high molecular weight with a polyhydric alcohol.

1,825,249. PRODUCTS RESEMBLING NATURAL WAXES. WILHELM PUNGS, Ludwigshafen-on-the-Rhine, and KARL BEHRINGER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 5, 1929, Serial No. 352,904, and in Germany July 5, 1928. 5 Claims. (Cl. 87—19.)

1. The process of producing products resembling natural waxes which comprises heating a bleached Montan wax with a hydroxy-carboxylic acid of high molecular weight until at least partial esterification occurs.

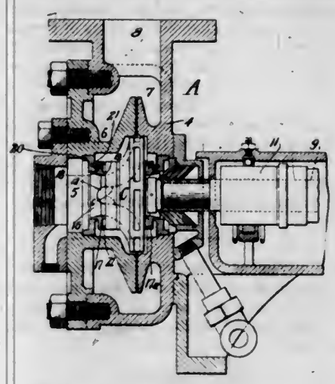
5. As new articles of manufacture, products resembling natural waxes comprising esters of the free acids contained in oxidation-bleached Montan wax with ricinoleic acid.

1,825,250. BIAS CUTTER. JAMES REHAK, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 435,760. 6 Claims. (Cl. 164—68.)



1. The combination, with a bias cutter of the type comprising a rotary member adapted to carry the cut work upon its periphery, of means carried thereby for selectively removing work from said member at a plurality of angularly spaced apart positions and means for selectively receiving and delivering the work so removed.

1,825,251. PACKING FOR CENTRIFUGAL PUMPS. CHRISTOPHER A. SCHELLENS, Marblehead, Mass., assignor to C-S Engineering Company, Englewood, N. J., a Corporation of Delaware. Original application filed Jan. 12, 1927, Serial No. 160,539, which in turn is a division of application Serial No. 723,469, filed July 1, 1924. Again divided and this application filed Mar 30, 1929. Serial No. 351,201. 4 Claims. (Cl. 286—9.)

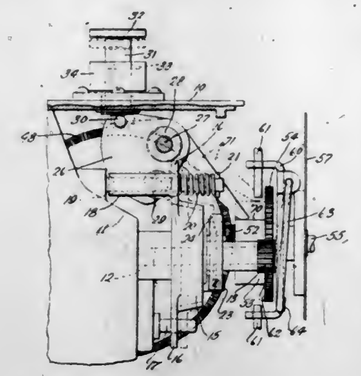


1. In a centrifugal pump, the combination of a casing, a runner, and a packing member having a leak restraining connection with one of said elements permitting of axial motion relative thereto, said member having means whereby it is held removed by a small clearance from the other element under influence of fluid pressure.

1,825,252. METHOD OF DECORATING RUBBER. BERT S. TAYLOR, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1929. Serial No. 356,602. 3 Claims. (Cl. 91—68.)

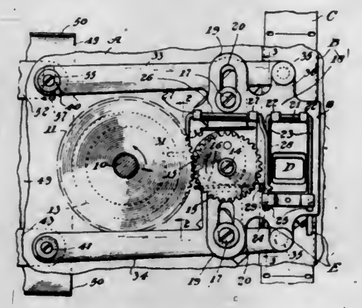
1. A decorated soft rubber article comprising a vulcanized colored, extensible rubber base, a single layer of finely divided, flaked metal uniformly distributed over at least a portion of the base, and a transparent extensible coating over the metal layer.

1,825,253. MOTION PICTURE APPARATUS. ALEXANDER FERDINAND VICTOR, New York, N. Y. Filed Jan. 21, 1929. Serial No. 334,069. 8 Claims. (Cl. 88—18.)



1. A device of the kind described comprising film feeding devices, manually controlled means for arresting movement of the feed devices, a rotatable shutter actuated by said feed devices, an arm extending from a portion of the arresting means, and a rotatable element connected to said shutter and adapted to be engaged by said arm to operate the arresting means at a predetermined position of the shutter.

1,825,254. INTERMITTENT FEED FOR MOTION PICTURE APPARATUS. ALEXANDER FERDINAND VICTOR, New York, N. Y. Filed Apr. 24, 1930. Serial No. 446,998. 14 Claims. (Cl. 88—18.4.)

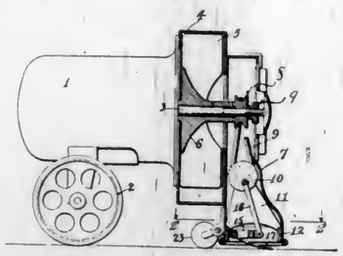


1. An intermittent feed mechanism for motion picture apparatus comprising a support having an aperture past which a film is moved, a reciprocable film engaging structure adjacent said aperture, vibratory arms pivotally connected to said reciprocable structure and pivotally mounted on said support, a rotatable cam engaged with said arms, and means for adjusting said arms towards and away from each other.

1,825,255. VACUUM CLEANER. MAXIMILIAN WENSAUER, Sheboygan, Wis., assignor of one-half to Kreszenzia Wensauer, Sheboygan, Wis. Filed Feb. 18, 1929. Serial No. 341,008. 1 Claim. (Cl. 15—13.)

In a vacuum cleaner having a suction nozzle, a substantially rectangular frame fitted in said nozzle, spaced substantially triangular-shaped upright bearing members carried by said frame, a shaft supported at the upper ends of said bearing members, a longitudinal shaft carried by the frame at one side thereof, spaced U-shaped beating members

having their ends connected with said shaft and disposed at the inlet end of the nozzle, a crank arm extending laterally from the longitudinal shaft, a pulley carried by the first shaft, a pitman having one end connected to the

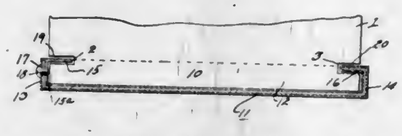


outer end of the crank arm and the other end eccentrically connected to the pulley, and means for imparting movement to the first shaft for rotating said pulley and rocking the longitudinal shaft to impart an oscillating movement to said U-shaped members.

1,825,256. LUBRICANT FOR HOT SURFACES. MERL R. WOLFARD, Cambridge, and AVERY A. MORTON and RICHARD H. HUSSEY, Watertown, Mass. Filed Jan. 16, 1929. Serial No. 333,022. 8 Claims. (Cl. 87—9.)

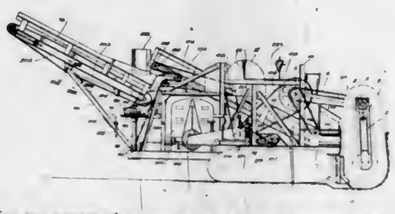
1. A lubricant for the combustion chamber of an internal combustion engine comprising from two to ten per cent of a fat which contains a high percentage of saturated fatty acid in solution with oil of a fluidity capable of atomization at ordinary atmospheric temperatures by the suction of the engine.

1,825,257. MAGAZINE BINDER. HERMAN T. ARENDS, Highland Park, Mich. Filed Jan. 2, 1930. Serial No. 417,994. 2 Claims. (281—19.)



1. A binder for magazines, periodicals and the like, comprising a back plate having side flanges and end flanges, each of said end flanges having an inturned portion projecting therefrom, at least one of said inturned portions being detachable from the end flange associated therewith.

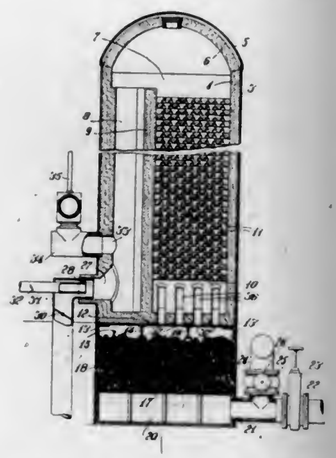
1,825,258. EXCAVATOR. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, a Corporation of Illinois. Filed Apr. 30, 1928. Serial No. 273,796. 12 Claims. (Cl. 37—192.)



1. In an excavating machine, a plurality of relatively adjustable excavating units, and an indicator responsive to the movement of one of said units for indicating the difference in elevation between said one unit and the other.

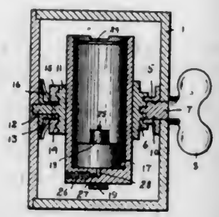
7. In an excavator, supporting mechanism, a plurality of arms pivoted thereto, digging units carried by said arms, a hoisting mechanism for each unit, and power operated means for simultaneously operating said hoisting mechanisms or one of them.

1,825,259. APPARATUS FOR HEATING AIR AND OTHER GASES FOR INDUSTRIAL USES. HERMAN A. BRASSERT, Kenilworth, Ill. Filed Nov. 26, 1926. Serial No. 150,780. 2 Claims. (Cl. 263—19.)



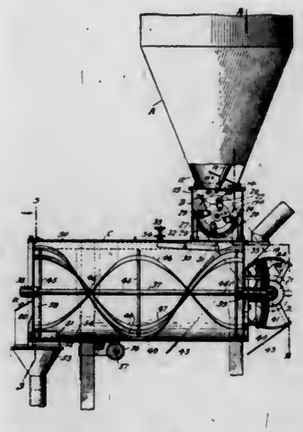
2. A regenerating furnace comprising a shell, partition means dividing the shell into a combustion chamber, a main heating chamber, and a secondary heating chamber, said combustion chamber being arranged vertically over said secondary heating chamber, a mass of refractory material in said main heating chamber, a mass of loosely and promiscuously mixed metal objects in said secondary heating chamber and having their surfaces formed to increase their radiating area and forming irregular tortuous channels for the passage of gas therethrough, means for passing hot gases through the refractory material and through the metal mass to heat the same, and means for thereafter passing air through the metal mass and the refractory mass to extract the heat therefrom.

1,825,260. SWITCH. BENNIE N. BRUNBERG, Proctor, Minn., assignor of thirty-five per cent to Charles G. Wood and twenty per cent to Axel Johnson, Proctor, Minn. Filed Jan. 21, 1928. Serial No. 248,460. 1 Claim. (Cl. 200—33.)



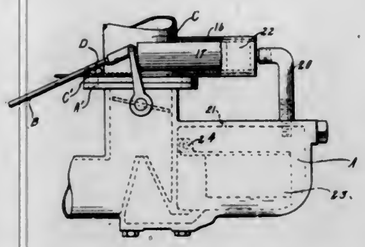
The combination with a time switch of the class described having a rotative cylinder and gravity piston therein for control of same, of contact points spaced adjacent the path of the cylinder and independent thereof, and means whereby when the cylinder is in one of its vertical positions the contact points will be opened by the action of the piston, and when the cylinder is in its alternative vertical position the contact points will remain closed.

1,825,261. MIXING APPARATUS. WILLIAM G. BURNS and ARCHIBALD D. KIRKLAND, New York, N. Y., assignors to Jabez Burns & Sons, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,517. 2 Claims. (Cl. 259—9.)



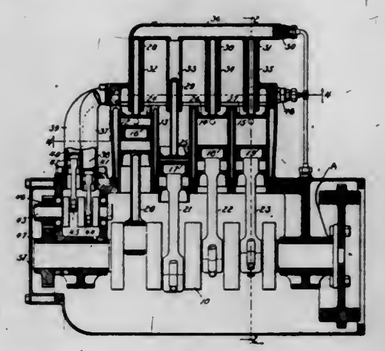
1. An apparatus for continuously mixing finely divided dry materials such as coffee and chaff, comprising a drum of substantial length providing for the accumulation of an appreciable amount of material therein, means for supplying the materials to be mixed at one end of the drum, there being a discharge outlet at the opposite end of the drum at an elevation above the bottom thereof so that there must be an accumulation of materials being mixed within the drum before the mixed materials can pass through said discharge outlet, conveying and agitating devices in said drum constructed to move the material more toward the inlet end than the outlet end so as to form a greater accumulation of material at the inlet end than at the outlet end of the drum, whereby the incoming materials are thoroughly agitated and mixed with previously accumulated material before being passed through the discharge outlet.

1,825,262. CARBURETOR ATTACHMENT. JASPER F. CULLIN, Detroit, Mich., assignor to William J. Hartwig, Detroit, Mich. Filed Mar. 21, 1930. Serial No. 437,890. 1 Claim. (Cl. 261—60.)



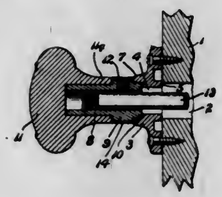
In combination with a carburetor having a float bowl and a discharge nozzle having a flanged upper end adapted to engage the flanged lower end of a pipe leading to the intake manifold of an engine, bolts securing the flanged ends aforesaid to each other, an element fixedly secured to the carburetor and having a portion extending outwardly from the flanges and having a part formed to provide a horizontal cylinder having an open end, a casing in said cylinder and having one open end, a horizontally reciprocating piston in said casing having a portion projecting thru the open end of the casing and a coiled tension resisting spring connected to the projecting portion of the piston, the carburetor and a throttle rod connected to the arm, the parts being so disposed with respect to one another that the end of the rod engages the projecting portion of the piston, the casing being pneumatically connected to the float chamber of the carburetor.

1,825,263. INTERNAL COMBUSTION ENGINE. CLARENCE D. DAVIS, Los Angeles, Calif. Filed Aug. 17, 1929. Serial No. 386,717. 11 Claims. (Cl. 123—77.)



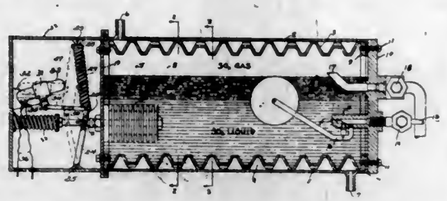
1. In an internal combustion engine, the combination of a crankshaft, a cylinder with a piston therein operatively connected to the crankshaft for performing power and compression strokes, a piston in said cylinder opposed to said power piston, liquid pressure means for operating said last mentioned piston to draw in and expel gas from the cylinder, and valvular means for controlling the exhaust and intake of gas.

1,825,264. DOOR HANDLE STRUCTURE. LUCIEN A. DEXTER, Grand Rapids, Mich., assignor to National Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Aug. 12, 1929. Serial No. 385,826. 1 Claim. (Cl. 292—351.)



In a construction of the class described, a sleeve having a longitudinal opening therein and formed with an enlarged smooth portion of an exterior diameter greater than the remaining portions of the sleeve at a point between the ends of the sleeve, said enlarged portion of the sleeve having a threaded opening therethrough, a set screw threaded into said opening, a continuous flat metal band, having a smooth interior surface, around the larger portion of the sleeve and over said set screw and having an opening in a side thereof of an area larger than the cross section of the set screw, said band being movable around the sleeve to bring said opening to the set screw, said band snugly engaging the sleeve whereby accidental movement relative thereto is prevented, and a knob member located around and secured to one end portion of the sleeve and extending beyond the same, said knob at its inner end having a neck, the free end of which abuts said enlarged portion of the sleeve and one edge of said band.

1,825,265. HEAT EXCHANGER FOR MECHANICAL REFRIGERATING UNITS. DAVID H. EBINGER, Columbus, Ohio, assignor to The D. A. Ebinger Sanitary Mfg. Co., Columbus, Ohio, a Corporation of Ohio. Filed July 11, 1928. Serial No. 291,928. 6 Claims. (Cl. 62—141.)



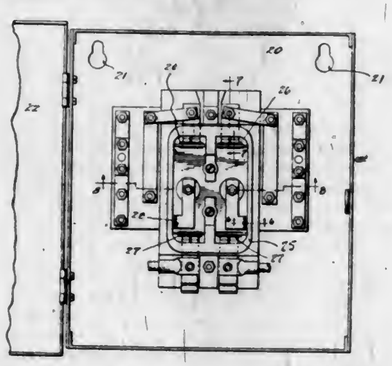
1. In a heat absorption unit for liquid refrigerating systems, a refrigerant container comprising a cylindrical outer wall and an adjoining corrugated inner wall, said corrugations providing a plurality of annular liquid circulating spaces arranged in different planes, said inner walls being provided with relatively staggered longitudinally extending passages permitting of the flow of a fluid from one of said spaces to another serially, and fluid inlet and outlet connections arranged at opposite ends of said container.

1,825,266. COMBINATION RULE AND COMPASS. ARTHUR A. FISCHER, Bensenville, Ill. Filed Nov. 10, 1928. Serial No. 318,320. 1 Claim. (Cl. 33—27.)



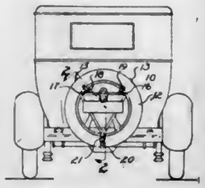
In a device of the kind described, a rule having aligned circular recesses in its upper and lower faces, with a relatively smaller bore connecting the said recesses through the stock of the rule, a tubular spindle rotatably mounted through the said bore, a circular metal plate and a circular rubber plate rotatably mounted in the recesses in the upper and lower faces respectively of the rule and secured to the ends of the said tubular spindle.

1,825,267. SWITCHING DEVICE. HARRISON J. L. FRANK and PAUL S. JENKINS, Detroit, Mich., assignors to Bull Dog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed May 19, 1930. Serial No. 453,553. 11 Claims. (Cl. 200—114.)



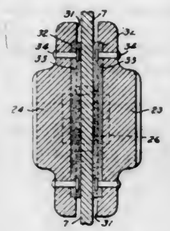
1. In a meter and service entrance switch for a plurality of lines, a stationary block having, for each line, a meter contact and a pair of line contacts spaced from said meter contacts, one of said line contacts being adjacent said meter contact, and the other being remote therefrom, and a movable block adapted to cooperate with said stationary block, said movable block having a pair of contacts one of which is shaped to cooperate with the meter contact and the adjacent line contact, and the other of which is shaped to cooperate with the remote meter contact on the stationary block, and means on said movable block to electrically connect said movable block contacts to each other.

1,825,268. SPARE TIRE CARRIER. JOHN L. GILMORE, Kansas City, Mo. Filed Mar. 3, 1930. Serial No. 432,683. 5 Claims. (Cl. 224—29.)



1. In a spare tire carrier, a U-shaped member adapted to fit over the tread of the upper portion of a tire, a substantially straight member adapted to engage the inner face of a rim carrying such tire, said straight member having a part projecting laterally to support a second rim and provided with means for engaging the side of the second rim farther from the U-shaped member, means adapted to project between the rims for adjustably connecting said members together and gripping the first rim and its tire between such members.

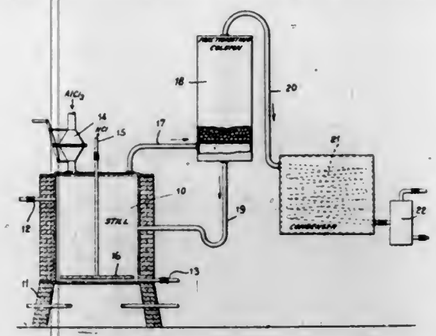
1,825,269. SAFETY DEVICE FOR ELEVATORS. GUSTAF A. HALFVARSON, Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 21, 1928. Serial No. 294,392. 2 Claims. (Cl. 187—1.)



1. In a safety device for elevator cars operating between guide rails, a safety-braking device carried by the car comprising a pair of rail-gripping jaws mounted in associated relation to each guide rail and having enlarged gripping faces, a recess provided in the gripping face of each jaw, a fibrous lining disposed in each recess for frictional engagement with the rails in the normal operation of the safety device, the unrecessed unlined portion of the rail-gripping faces having an area suitable for frictional engagement of the metal with the rail, whereby the device may still be operated in the usual manner if the lining wears out and is not replaced, and means for moving the jaws into frictional engagement with the rails.

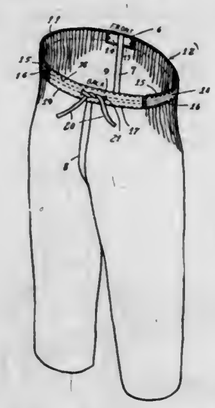
1,825,270. TREATING HYDROCARBONS. VANCE N. JENKINS and CHARLES P. WILSON, Jr., Port Arthur, Tex., assignors, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed June 14, 1924. Serial No. 719,970. 2 Claims. (Cl. 196—54.)

1. The process of treating hydrocarbon oils to convert higher boiling hydrocarbons into lower boiling hydrocarbons which comprises treating a petroleum fraction with aluminum chloride and hydrogen chloride below the conversion temperature of the oil to form a liquid treating agent consisting of aluminum chloride and hydrocarbons, mixing said treating agent with the oil to be converted,



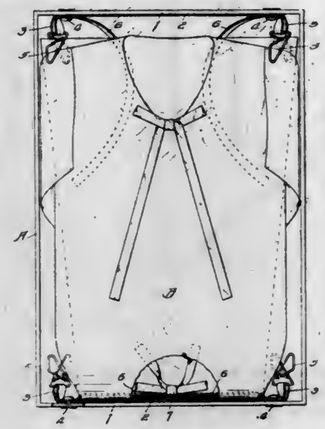
heating the mixture to a conversion temperature, introducing hydrogen chloride gas into said mixture to produce an even evolution of vapors and to maintain the treating agent in an active condition, separating the vapors of low boiling products and withdrawing residual liquid before substantial accumulation of coke has occurred.

1,825,271. GARMENT. PETER K. KARBERG, Dubuque, Iowa, assignor to H. B. Glover Company, Dubuque, Iowa, a Corporation of Iowa. Filed Mar. 31, 1930. Serial No. 440,284. 6 Claims. (Cl. 2—237.)



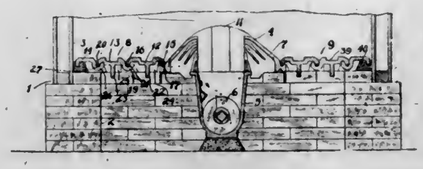
1. In a garment having leg portions, an adjustable waist construction for said garment, comprising in combination with inelastic waist material, elastic web members disposed at opposite sides of the waist spanning gathers of waist material, the said elastics having the gathers stitched thereto so as to fold and unfold uniformly in the contraction and stretching of the elastics, and a pair of adjusting strings reaching from the ends of the elastics toward each other and arranged to be intertwined with one another at their free ends and drawn up so as to, first of all, take up excess waist material and, beyond that, place the elastics under a predetermined desired tension, said strings being arranged to be tied together in adjusted position whereby to keep the garment with the exact waist measurement and elastic tension to which the same has been adjusted, the said elastic web members normally having the ends thereof spaced far enough apart to permit the desired range waist measurement adjustment and adjustment of the elastics up to the point where there is substantially no further elasticity therein.

1,825,272. GARMENT BOX. KATHERINE G. LANGSTON, St. Louis, Mo. Filed May 7, 1930. Serial No. 450,525. 6 Claims. (Cl. 206—7.)



1. In combination with a shipping box for containing ladies' dresses, a pair of tie strings secured in spaced relation at their one end to the inner face of each end wall of the box, a loop formed at the attached end of each tie string and a parment clamping device carried by the loop of each tie string.

1,825,273. UNDERFEED MECHANICAL STOKER. VERNON G. LEACH, Chicago, Ill., assignor to Modern Coal Burner Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 24, 1929. Serial No. 388,063. 6 Claims. (Cl. 110—47.)

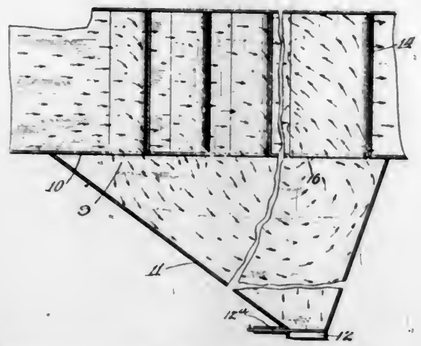


1. In an underfeed stoker, the combination of a plurality of tuyère blocks in assembled relation, each having a registering groove formed along an edge, dead plates provided with male and female joint forming elements associated therewith, the dead plate adjacent the grooved edge of the tuyère block having an upstanding and reversely directed portion forming a ridge and a male joint forming element along one of its longitudinal edges, entered in the groove of the tuyère block, and having a second upstanding and reversely directed portion forming a ridge and a male joint forming element along its other longitudinal edge for cooperation with a female joint forming element on the next adjacent dead plate.

1,825,274. DUST RECOVERY DEVICE. VERNON G. LEACH, Chicago, Ill., assignor to Modern Coal Burner Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1930. Serial No. 500,197. 7 Claims. (Cl. 183—75.)

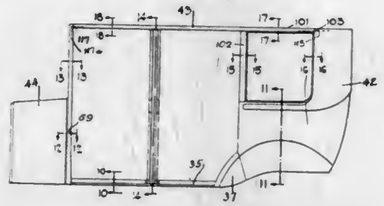
1. In a device of the class described, in combination a fluid conduit, a chamber located below said conduit, a series of U-shaped baffles having plane sides arranged in staggered relation in said conduit, said baffles extending

from the top of the conduit to the bottom thereof, the bottom of said conduit being provided with openings aligned with said baffles for communication with said chamber



and communicating means comprising another series of baffles having openings in the bottom thereof to allow the flow of the fluid from said chamber back into said conduit.

1,825,275. PRESSED METAL BODY CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 2, 1924. Serial No. 741,262. 22 Claims. (Cl. 296—28.)



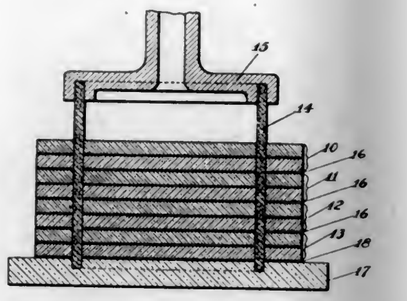
1. A pressed metal vehicle body comprising front posts of channel cross-section presenting inwardly, the front wall of said posts being extended inwardly intermediate of their ends, and a transverse panel secured to the inward extensions of said walls and forming a substantially continuous surface extending from the bottom of one post across the top of the cowl to the bottom of the other post, and a cowl panel flanged inwardly at its rear edge and secured to said surface through said flange.

1,825,276. OVERSHOE AND METHOD OF MAKING THE SAME. LESLIE H. L'HOLLIER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 14, 1929. Serial No. 362,956. 10 Claims. (Cl. 36—6.)



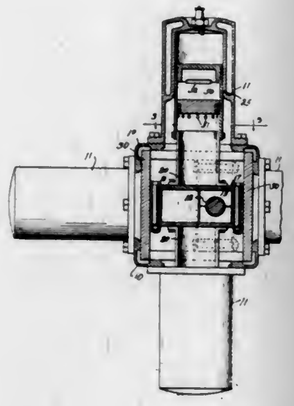
1. An overshoe comprising a rubber vamp, a lining therefor of such size that its edge is spaced from the sole edge of the vamp, and an outsole adhered solely to said vamp.

1,825,277. PROCESS OF CUTTING DISKS FROM GLASS PLATES. WILLIAM O. LYTLE, New Kensington, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Dec. 21, 1928. Serial No. 327,691. 1 Claim. (Cl. 125—20.)



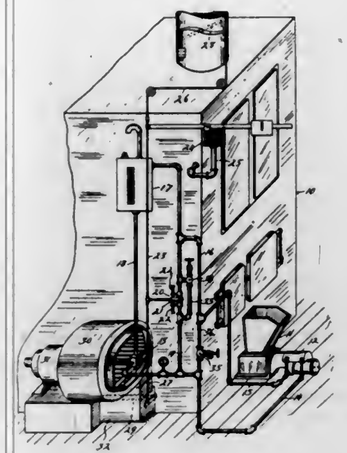
A process of cutting a series of circular disks from a series of plates of glass, which consists in cementing the series of plates together in a pack, cementing the outer face of one of the outer sheets of the pack to another plate of glass which acts as a support for the pack, and then cutting through the pack from the side thereof remote from the supporting plate with an annular drill until the end of the drill penetrates such supporting plate.

1,825,278. INTERNAL COMBUSTION ENGINE. WARD W. MARVIN, Royal Oak, Mich., assignor, by mesne assignments, to Jane Stuart Marvin, Royal Oak, Mich. Filed Dec. 29, 1928. Serial No. 329,132. 1 Claim. (Cl. 123—56.)



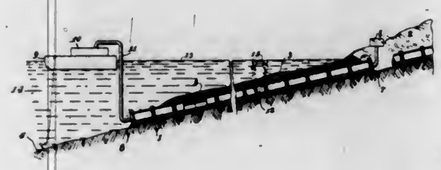
An internal combustion engine of the multi-cylinder two-stroke cycle type comprising a square crankcase, a cylinder on each side thereof, a single-throw crankshaft extending therethru, a movable hollow piston in each of said cylinders, the pistons in opposed cylinders being connected to each other, a stationary piston inside each of said movable hollow pistons, the hollows forming compression chambers in said movable pistons, a Scotch yoke midway of each connecting means and adapted to actuate the shaft, and means in said crankcase furnishing lateral guides for said Scotch yokes.

1,825,279. AUTOMATIC REGULATOR FOR STOKERS. DALE O. MILLER, Detroit, Mich. Filed May 28, 1928. Serial No. 281,324. 3 Claims. (Cl. 236—26.)



1. In combination, a furnace having a stoker, a fluid operated motor for actuating said stoker, a pump for supplying fluid directly to said motor, means for by-passing the fluid to reduce the speed of the motor, and pressure responsive means automatically operable upon fluctuations in the load on the furnace for actuating the means aforesaid.

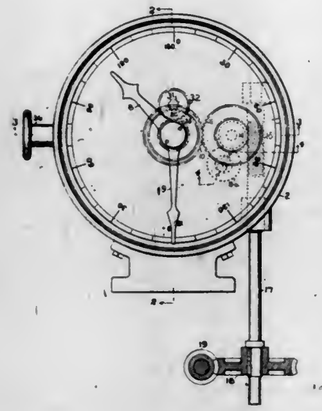
1,825,280. METHOD FOR LOCATING POINTS OF LEAKAGE IN CONDUITS. GEORGE C. OXER, New York, N. Y. Filed Aug. 22, 1929. Serial No. 387,649. 6 Claims. (Cl. 137—77.)



1. The method of locating points of leakage in a submerged conduit which comprises introducing into the conduit a body of liquid impregnated with a gas under pressure, whereby as such liquid passes through the conduit, some of the impregnated liquid will escape through the points of leakage, and bubbles will form by the gas released from such escaping liquid, the bubbles indicating the point or points of leakage.

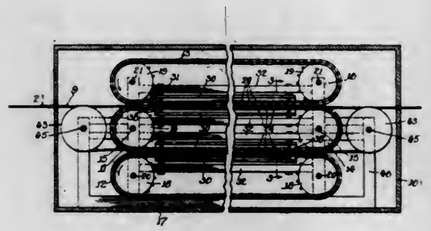
1,825,281. REGISTERING DEVICE. PHILIP D. PARSONS, Swarthmore, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed June 18, 1928. Serial No. 286,215. 2 Claims. (Cl. 74—36.)

1. A driving worm shaft and a driven member having a spur gear, combined with gear-changing means between the driving and driven members, said means comprising bearings fixedly positioned for the driving shaft and driven member, two stub shaft bearings respectively arranged at different relative distances from the aforesaid bearings, a stub shaft arranged for operation in either of the two stub shaft bearings, a worm wheel detachably secured to the stub shaft and of a diameter to accommodate itself to the position of the stub shaft in the respective stub shaft



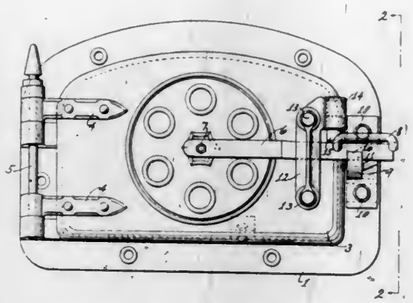
bearings, and a spur gear detachably secured to the stub shaft so as to be positively driven therewith and of a diameter to accommodate itself to the position of the stub shaft in respect to the stub shaft bearings, and whereby said stub shaft maintains geared connection with the worm of the driving shaft and the spur gear of the driven member.

1,825,282. APPARATUS FOR MANUFACTURING RUBBER PRODUCTS. WILLIS J. PEELLE, Chicago, Ill. Filed Feb. 1, 1929. Serial No. 336,893. 7 Claims. (Cl. 18—6.)



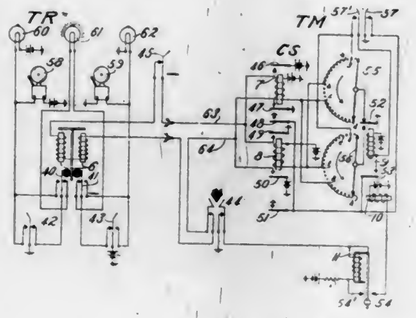
1. An apparatus for vulcanizing rubber covered wire combining means providing a vulcanizing chamber, an endless conveyor chain having two parallel portions guided for movement in rectilinear paths, a second conveyor chain having a straight run guided for movement in unison with one of said straight portions of the first mentioned chain, and a third conveyor chain disposed opposite the other straight portion of said first mentioned chain and driven in unison therewith, the cooperating portions of said first and second chains and the cooperating portions of said first and third chains constituting two compression means through which a continuous length of wire to be vulcanized may be passed successively.

1,825,283. DOOR LATCH. JOHN PRENTICE, Bayonne, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 4, 1928. Serial No. 274,995. 2 Claims. (Cl. 292—238.)



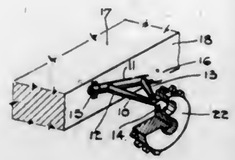
1. A door having a latch and a guide thereon, a movable weight guided by said guide and adapted to contact with said latch, and a stop to limit the upward movement of said weight, said stop being positioned so that said weight can move upwardly after said latch has reached its uppermost position.

1,825,284. STREET TRAFFIC REGULATING SYSTEM. ARTHUR J. RAY and CLARENCE E. LOMAX, Chicago, Ill., assignors, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed May 28, 1925. Serial No. 33,320. 4 Claims. (Cl. 177—337.)



1. In a device for transmitting alternate polarities of current, conductors associated therewith, a progressively movable switch including a wiper and a set of bank contacts associated therewith, means for advancing said wiper over said bank contacts at a predetermined rate of speed, and means responsive to the advancement of said wiper over one portion of said bank contacts for connecting a certain polarity of current to said conductors, and means responsive to the advancement of said wiper over another portion of said contacts for connecting the opposite polarity to said conductors.

1,825,285. SKEW LEVER. WILFRID THOMAS REID, St. Laurent, Quebec, Canada, assignor to Curtiss-Reid Aircraft Company Limited, Montreal, Quebec, Canada. Filed Nov. 30, 1928. Serial No. 322,618. 1 Claim. (Cl. 244—29.)

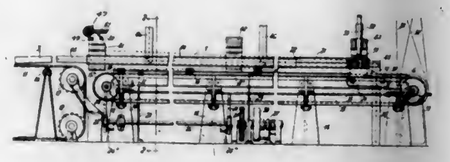


In skew levers, the combination with an aileron of angularly formed lever having its base journalled in bearings secured to the inner edge face of the aileron and extending obliquely thereacross and its projecting bars terminating in a universal joint, a sprocket having a recess for a joint member and suitably mounted, and a chain connection to said sprocket from the operating member of an aeroplane.

1,825,286. DENTURE. ELMER ROBERTS, Montclair, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Feb. 9, 1929. Serial No. 338,881. 3 Claims. (Cl. 32—4.)

1. As a new article a denture comprising a tough polymerized styrol.

1,825,287. ARTICLE FEEDING AND STRIPPING MACHINE. JULIUS H. SCHLAFLY, Canton, Ohio. Filed May 22, 1928. Serial No. 279,777. 17 Claims. (Cl. 153—70.)

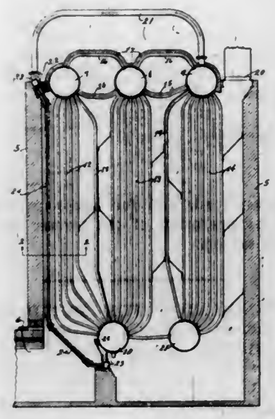


14. The combination in apparatus for supplying elongated articles to and removing them from forming machines, said combination comprising a conveyor for receiving the articles and movable toward and from the machine, means operable by the conveyor for actuating an article into the machine, and means operable by the conveyor for withdrawing the article from the machine.

1,825,288. VULCANIZATION OF RUBBER. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Apr. 24, 1929. Serial No. 357,881. 14 Claims. (Cl. 18—53.)

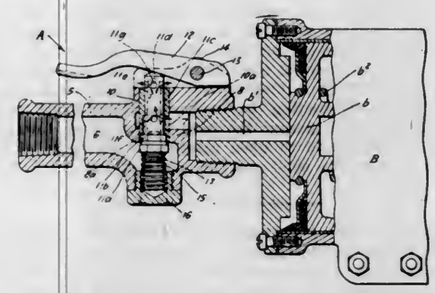
1. The process of vulcanizing rubber comprising heating rubber and sulfur in the presence of the reaction product of an aliphatic aldehyde derivative of a Schiff's base and the product formed by reacting a mercapto-benzothiazole and hexa-methylene-tetramine.

1,825,289. WASTE HEAT BOILER. HERMAN B. SMITH, Plainfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 25, 1927. Serial No. 215,314. 3 Claims. (Cl. 122—7.)



1. In a waste heat boiler, upper and lower drums connected by banks of tubes, means for passing hot gases longitudinally along said tubes, and a superheater having tubes located in front of one of said banks and substantially parallel thereto, said superheater having a header located in proximity to one of said lower drums.

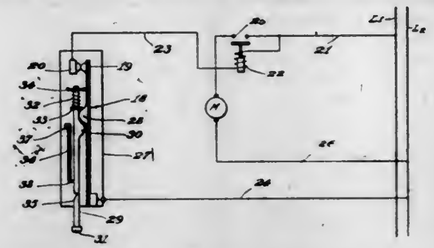
1,825,290. THROTTLE HANDLE. EDWARD W. STEVENS, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 27, 1928. Serial No. 308,632. 10 Claims. (Cl. 251—23.)



1. A throttle device for a fluid pressure machine having a chamber to be connected to said machine and another chamber to be connected to a source of fluid pressure, a partition separating said chambers and having a port therethrough, and a movable valve member controlling said port, said member extending beyond said device and providing a vent in its extended portion for said machine chamber but arranged to seal said port so long as said vent is open.

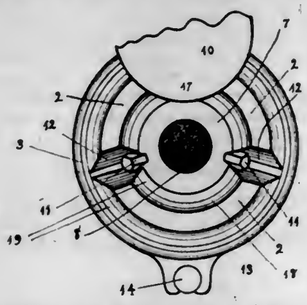
1,825,291. REFRIGERATING APPARATUS. WILLIAM F. SWEZEY, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,239. 7 Claims. (Cl. 62—4.)

1. Refrigerating apparatus comprising an evaporator, means for circulating a refrigerant medium through the evaporator, temperature-responsive means for controlling the operation of the refrigerant-medium-circulating means, means for rendering said temperature-responsive means temporarily ineffective and a second temperature-



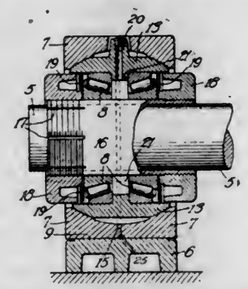
responsive means for rendering effective the first temperature-responsive means after a predetermined temperature has been reached in the evaporator.

1,825,292. RIFLE TARGET AND FRANGIBLE DISK. MARWOOD D. VAN AUKEN, New York, N. Y., assignor to Van-Au-Matic Rifle Target Co., Inc., a Corporation of New York. Filed Jan. 9, 1929, Serial No. 331,228. Renewed Feb. 12, 1931. 8 Claims. (Cl. 124—15.)



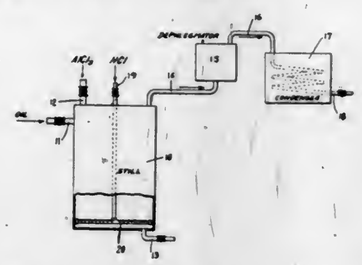
6. A frangible disk for targets of the character described, consisting of a thin flat disk of substantially unifodm thickness having on its face a white annular rim portion and a center of contrasting color.

1,825,293. SHAFT SUPPORT. GEORGE N. VAN DERHOEF, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation, a Corporation of Delaware. Filed Sept. 27, 1926. Serial No. 137,942. 12 Claims. (Cl. 308—207.)



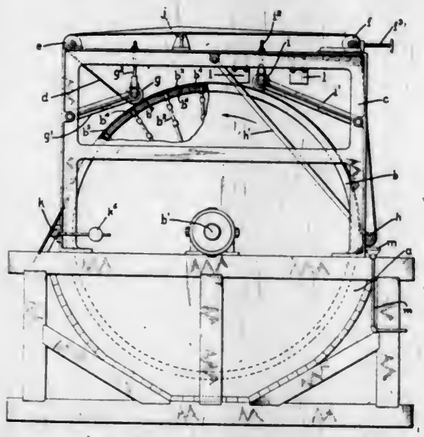
1. Shaft supporting means comprising a chair having a semi-circular recess, a housing member mounted in said recess and slidable axially with respect to said chair, bearing means carried by said housing for journaling of a shaft or the like, and means to secure said housing in said chair recess against rotation relative thereto, said means comprising arms detachably secured to said chair, said housing being provided with means for engagement by said arms.

1,825,294. TREATING HYDROCARBONS. EDSON R. WOLCOTT, Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed June 14, 1924. Serial No. 719,958. 2 Claims. (Cl. 196—54.)



1. The process of treating hydrocarbon oils to effect conversion of higher boiling hydrocarbons into lower boiling hydrocarbons which comprises charging a high boiling petroleum oil and a catalyst consisting solely of anhydrous aluminum chloride to a still, maintaining said still at a temperature sufficient to effect material conversion of the oil therein, introducing hydrogen chloride into said still to thoroughly commingle with the oil and aluminum chloride, whereby a smooth evolution of vapors is obtained and the aluminum chloride is maintained in an active condition, condensing the evolved vapors to form a distillate of low boiling hydrocarbons, and withdrawing, before substantial accumulation of coke occurs, the residual liquid from the still for disposal without further treatment.

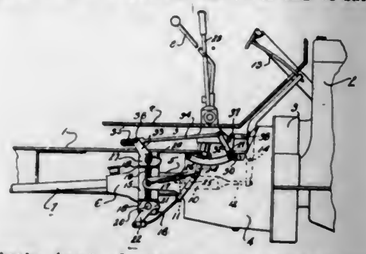
1,825,295. FILTER. ARTHUR WRIGHT, Upper Montclair, and FRANK W. YOUNG, Verona, N. J. Filed Feb. 28, 1928. Serial No. 257,722. 11 Claims. (Cl. 210—199.)



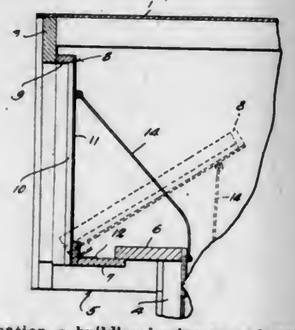
9. Apparatus of the class described comprising in combination, a rotary drum type filter, a compressor belt and rollers about which said belt travels, one of said rollers being formed with reversely extending threads to work the sides of the belt outwardly from its median line and means to adjust said reversely threaded roller.

1,825,296. BRAKE. CLIFFORD J. ZINK, Cleveland, Ohio. Filed July 30, 1928. Serial No. 296,259. 1 Claim. (Cl. 188—106.)

In an automotive vehicle having a hydraulic braking system and an emergency brake, said brake having a brakeband, operator-operated means associated with one end of said band for applying the emergency brake, control means for said system, and a lost motion connection between said control means and the other end of said emergency brake band adapted for brake-applying actuation of the latter by operation of the former upon failure of said hydraulic system.

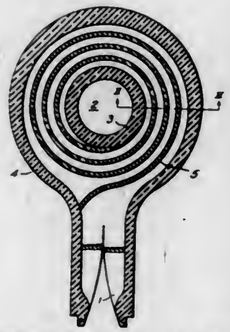


1,825,297. VENTILATOR FOR BUILDINGS. WESLEY LINCOLN ARCHER, Rutland, Vt. Filed Oct. 19, 1928, Serial No. 313,532. Renewed Feb. 20, 1931. 1 Claim. (Cl. 98—42.)



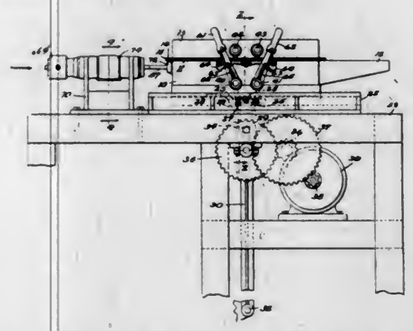
In combination, a building having an end wall, and roof sections defining a gable, a shelf extended across the building and located near to the upper edge of the end wall, a panel extended from the shelf to the roof sections, and constituting a closure for the gable, and means for hingedly connecting the lower edge of the panel to the shelf, thereby to permit the panel to be swung inwardly over the shelf and to open completely the space at the gable between the shelf and the roof sections.

1,825,298. ARC EXTINGUISHING MEANS. BENJAMIN P. BAKER, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 10, 1929. Serial No. 361,865. 12 Claims. (Cl. 200—144.)



1. The combination with an arc-extinguishing chamber for a circuit interrupter, of a plurality of spaced metallic plates associated therewith, a magnetic field associated with the plates to cause an arc between said plates to move repeatedly thereon, and insulating guide members on the surface of the plates to cause the arc to move over different portions of the surfaces thereof.

1,825,299. RUBBING AND GRINDING MACHINE. HAROLD G. BARRETT, Wilmette, Ill., assignor to Pyratone Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1928. Serial No. 300,175. 12 Claims. (Cl. 51—67.)

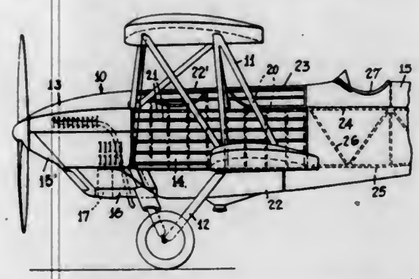


1. A machine of the character described embodying opposed co-operating rubbing elements between which the work is disposed, means for imparting a rotary and also a bodily reciprocatory movement to the work and said elements one with relation to the other, resilient means individual to the elements for maintaining the said elements and the work in engagement, and means common to said resilient means for varying at will the stress thereof.

1,825,300. PROCESS OF DECOLORIZING OILS BY FILTRATION THROUGH PAPER. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Filed Apr. 24, 1928. Serial No. 272,572. 6 Claims. (Cl. 196—147.)

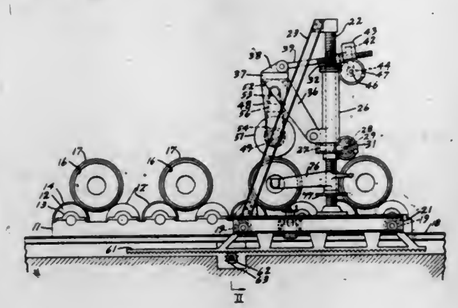
1. The method of decolorizing a liquid containing suspended colloidal coloring matter which comprises passing the said liquid through a filtering paper containing acid-activated clay which contains free acid.

1,825,301. AEROPLANE. REX B. BEISEL, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Aug. 8, 1928. Serial No. 298,147. 1 Claim. (Cl. 244—30.)



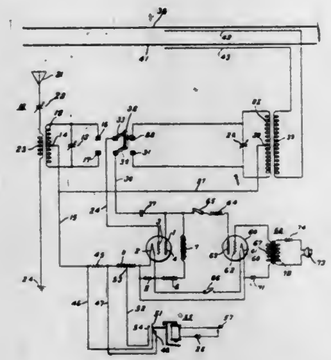
In an aeroplane, a power plant, a transversely divided fuselage including a forward truss section, an intermediate monocoque section and a rear truss section, a power plant attached to and partly enclosed within said forward truss section, a landing gear and a supporting surface, said landing gear and said supporting surface being fastened to said intermediate monocoque section, and said monocoque section being characterized by a total absence of cockpit space for the accommodation of the flying personnel, and a cockpit formed in said rear truss section for the flying personnel, said cockpit being disposed nearer to said intermediate monocoque section than to the rear end thereof.

1,825,302. CENTRIFUGAL MOLDING APPARATUS. WILLIAM H. BEATTY, Birmingham, Ala., assignor of three-eighths to W. Henry Beatty, Birmingham, Ala. Filed June 17, 1929. Serial No. 371,349. 15 Claims. (Cl. 22—65.)



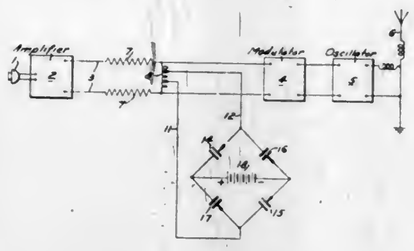
1. In a centrifugal molding apparatus, a roller bed embodying a pair of flask supporting roller means, a hold down means adapted to bear downwardly on the flask, means to drive the flask, and means for effecting relative transverse movement of the hold down means and the flask supporting roller means.

1,825,303. RADIO TRANSMITTING SYSTEM. CLARENCE A. BODDIE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 29, 1927. Serial No. 164,548. 4 Claims. (Cl. 250—17.)



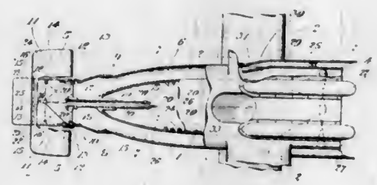
1. In a transmission system, a thermionic device capable of generating oscillations when associated with a suitable circuit network, a radio antenna and a network associated therewith tuned to a relatively high frequency, a power system and an inddependent network associated therewith tuned to a relatively low frequency, and means for at will placing said thermionic device in operative relation to either network.

1,825,304. TELEPHONE LINES. CARROL J. BURNSIDE, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 19, 1927. Serial No. 220,513. 4 Claims. (Cl. 178—44.)



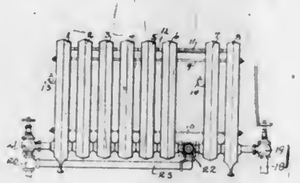
3. In a voltage-control device, a source of current, a load, a line connecting said source to said load, said line including impedance, and a shunt across said line between said impedance and said load, said shunt including a plurality of asymmetrically conductive members arranged in a Wheatstone bridge and a source of potential in a diagonal of said bridge.

1,825,305. AEROPLANE. RUDOLPH CHILLINGWORTH, New York, N. Y. Filed Sept. 26, 1927. Serial No. 221,877. 13 Claims. (Cl. 244—18.)



2. A tube construction for aeroplanes having propelling means, means for controlling the flow of the current of air created by the propeller, and guiding means under the control of the current of air for reversing said current and discharging the air in a forward direction for landing.

1,825,306. RADIATOR. JOHN M. CLARK, New York, N. Y. Filed Nov. 26, 1927. Serial No. 235,780. 2 Claims. (Cl. 257—134.)

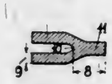


2. A radiator comprising a plurality of sections, certain of said sections being separated from other of said sections, all said sections being secured to form an integral radiator, a valve between said separated sections and the remaining sections and means for by-passing the circulatory medium around certain of said sections and air valves in each said group of sections.

1,825,307. PROCESS OF PRODUCING MATERIAL RICH IN XYLAN. ELTON R. DARLING, Danville, Ill., assignor to Cornstalk Products Company, Inc., Danville, Ill., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,226. 7 Claims. (Cl. 92—13.)

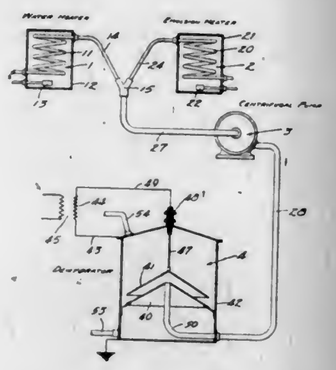
1. The process of separating lignin from xylan when associated in a vegetable material which comprises subjecting said material to the action of a dilute solution of sodium hydroxide of such strength that when the lignin has been substantially dissolved insufficient free sodium hydroxide will remain in the solution to materially affect the residual xylan.

1,825,308. INFLATABLE HOLLOW RUBBER BODY. ISTVÁN DOROGI and LAJOS DOROGI, Budapest, Hungary, assignors of one-half to Dr. Dorogi Es Tarsa Gummigyar, R. T., Budapest-Albertfalva, Hungary, a Limited Company of Hungary. Filed Oct. 31, 1928, Serial No. 316,326, and in Austria Sept. 15, 1928. 3 Claims. (Cl. 154—42.)



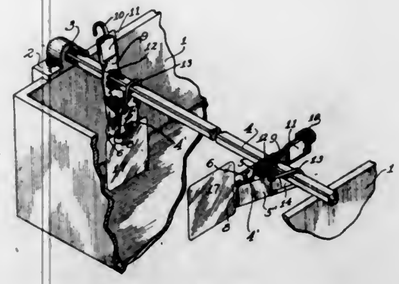
1. A distendable rubber article formed of a plurality of sheets of rubber coalesced along their edges to form a welded ridge, said sheets being welded together throughout the width of said ridge, said ridge projecting outwardly from the periphery of said article when the article is distended, the width of said ridge being not less than substantially one and one-half times the thickness of said ridge, the thickness of said ridge being less than the combined thicknesses of said sheets and exceeding the thickness of one of said sheets.

1,825,309. METHOD OF REMOVING A SALT FROM OIL. HAROLD C. EDDY, Los Angeles, Calif., assignor to Petroleum Rectifying Company of California, Los Angeles, Calif., a Corporation of California. Filed Oct. 3, 1927. Serial No. 223,602. 5 Claims. (Cl. 204—24.)



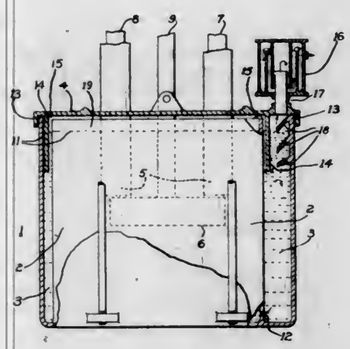
4. A method of removing crystalline salt from an emulsion of oil and water, which method includes the steps of: adding to said emulsion a solvent capable of dissolving said crystalline salt and in sufficient quantities to dissolve said crystalline salt; mixing said emulsion and said solvent to form a secondary emulsion; subjecting said secondary emulsion to the action of a high intensity electric field; and separating the dissolved salt and the water from said oil.

1,825,310. PHOTOGRAPHIC FILM SUPPORT. CARL O. ENOSTROM, Sacramento, Calif. Filed Apr. 17, 1928. Serial No. 270,640. 5 Claims. (Cl. 95—100.)



1. A sheet suspending device comprising a clip consisting of pivotally connected relatively movable jaws one having a body extension formed with an aperture therethrough, and a yieldable member carried by the clip and movable transversely over the axis of said aperture.

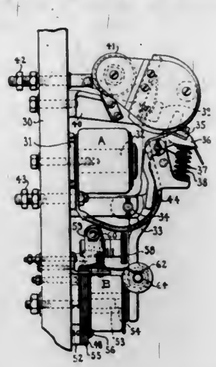
1,825,311. OIL CIRCUIT BREAKER. OTTO H. ESCHHOLZ, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 27, 1922. Serial No. 609,171. 17 Claims. (Cl. 200—150.)



1. In combination, a receptacle, a fluid in said receptacle, a cover for said receptacle in fixed relation therewith, an electrical device in said receptacle, the fluid in said receptacle insulating said electrical device, a second receptacle at least partially encasing the first named receptacle, a passageway between said receptacles, and means for sealing the passageway against an ingress of gas.

1,825,312. CIRCUIT CONTROLLER. CLARENCE T. EVANS, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Oct. 17, 1925. Serial No. 62,989. 3 Claims. (Cl. 200—95.)

1. An electromagnetic switch having a pivoted operating armature, electromagnetic means associated with said armature for restraining the same against movement from a given position, said means including a fixed magnet frame having a projection thereon, a winding mounted on said projection and having a core member fixed therein, a non-magnetic stop mounted on the end of said projection to limit movement of said armature and means for adjusting said winding axially on said projection to provide a variable air gap between said core member and said armature while maintaining the reluctance of the iron circuit for said winding substantially constant.

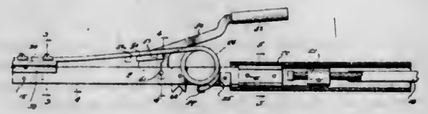


1,825,313. NECKTIE. GEORGE EDWARD FIGG, New York, N. Y. Filed Sept. 19, 1929. Serial No. 393,699. 1 Claim. (Cl. 2—158.)



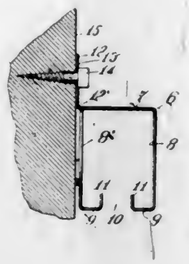
A necktie frame comprising a closed wire loop having at one end a neckband vertical bar and a V-shaped hook catch at the other, an arcuate bar joining these ends and a forwardly projecting V-shaped bar also joining the ends and projecting outwardly in the center to hold out the knot of the tie, and a necktie tied on said bars.

1,825,314. ELECTRODE HOLDER. HOMER H. HECKMAN, Detroit, Mich., assignor to Howard Hanna, Detroit, Mich. Filed Jan. 30, 1928. Serial No. 250,455. 2 Claims. (Cl. 219—8.)



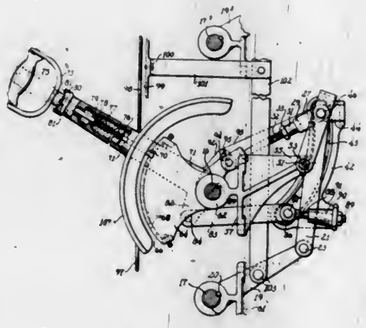
1. An electrode holder comprising a pair of jaws adapted to hold a welding electrode, one of said jaws being fixed to a conducting body portion, and the other being movable toward and away from the first jaw, said body portion being made of a plurality of thin strips spaced from each other.

1,825,315. COMBINED TROLLEY TRACK AND HANGER. PETER L. HOFFMAN, Aurora, Ill., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed June 6, 1928. Serial No. 283,320. 3 Claims. (Cl. 16—94.)



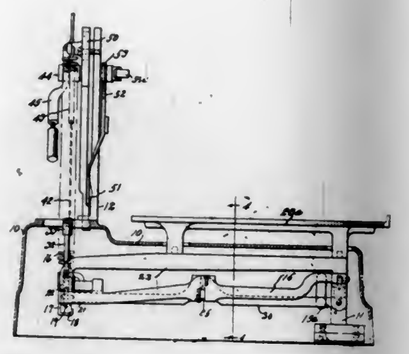
1. A trolley track for sliding doors consisting of a sheet metal stamping of inverted substantially U-shaped cross-section, and having a hanger portion punched out from the back wall of the track portion and extending upwardly beyond the top wall thereof, said hanger portion being offset rearwardly from the plane of the back wall of the track portion to space said back wall from the supporting structure on which the track is mounted.

1,825,316. ILLUMINATION CONTROL SYSTEM. RICHARD B. HUNTER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,036. 19 Claims. (Cl. 175—312.)



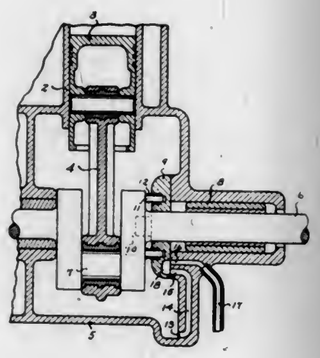
1. In an illumination control system, in combination, a plurality of groups of dimmer rheostats, common operating means for all of said groups of rheostats, and means common to all rheostats of each group for preselecting the proportional influence of said common operating means upon the same to produce simultaneous regulation by the respective groups of rheostats between any two selected points within their respective ranges, said means including means to reverse the influence of said common operating means upon the respective rheostats individually with respect to each other.

1,825,317. SCALE. LOUIS JAENICHEN, Springfield Township, Oakland County, Mich., assignor to The Standard Computing Scale Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 6, 1927. Serial No. 211,188. 4 Claims. (Cl. 265—68.)



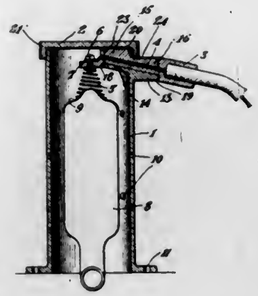
1. In a platform scale, a support, a platform and levers pivotally connected to said support and to said platform, said levers intersecting each other and pivotally connected to each other at the point of intersection, the distances from said intersection point to said points of connection of said levers to said supports and platform being the same.

1,825,318. PUMP. LEONARD B. KAPP, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1923. Serial No. 664,513. 10 Claims. (Cl. 184—6.)



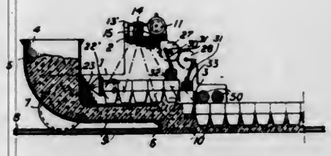
1. In an oil pump in combination with an engine crank case, a piston, a crank shaft, an air-stop ring consisting of an axially movable collar rotatable with the crank shaft, a conduit adapted to be placed in periodic communication with the interior of said crank case through the collar, coincidently with the innermost position of said piston with respect to the crank case, said conduit and collar being adapted to direct a fluid from the crank case, to a point external to the engine.

1,825,319. INSULATOR. PHILIP J. KAYATT, Yonkers, N. Y., assignor to American Neon Light Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,563. 6 Claims. (Cl. 173—328.)



1. An insulator comprising a shell having a seat thereon with inner and outer extensions and upwardly extending sides, a bushing adapted to fit in said seat, current carrying means passing through said bushing, a resilient member connecting with the current carrying means and a cap closing said shell and retaining the bushing in its seat.

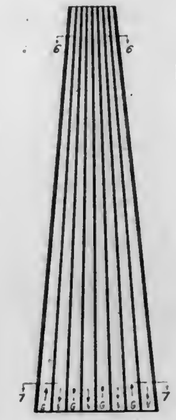
1,825,320. BLOCK PAVING MACHINE AND THE LIKE. ERNST KUERTS, Stettin, Germany. Filed Jan. 6, 1928. Serial No. 244,813, and in Germany May 27, 1927. 9 Claims. (Cl. 94—46.)



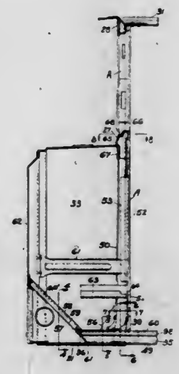
1. In a machine of the character described, consisting of a frame supported by axles with wheels, power means supported by the frame, means supported by the frame for transmitting power from the power means to certain of the axles whereby to advance the machine, a hopper disposed on the front of the frame to receive and hold cementing material and provided with an underslung extension extending toward the rear of the machine, said extension receiving the material from the hopper and affording a passage for the movement of the material to the rear of the machine for delivery upon the road way to provide a bed in the road way, the top of said extension affording a platform for the assembly thereon of rows of paving units in pavement order, and means for automatically maintaining the rows of paving units in pavement order during relative advancement of the machine.

1,825,321. ART OF EFFECTING HEAT EXCHANGE. WALTER DOUGLAS LA MONT, Colebrook, Conn., and ALFRED F. ERNST, Rutherford, N. J., assignor to La Mont Corporation, New York, N. Y., a Corporation of New York. Original application filed Oct. 7, 1926, Serial No. 140,099. Divided and this application filed Nov. 4, 1930. Serial No. 493,258. 11 Claims. (Cl. 257—224.)

1. An apparatus for exchange of heat between fluids comprising a wall providing heat exchange surfaces on opposite sides thereof, means for causing one fluid to flow in contact with one surface and another fluid to flow in contact with the other surface, said parts being so arranged that the cross sectional area of the passage through which each fluid flows progressively decreased toward the zone of cooler temperature thereof.



1,825,322. PRESSED METAL SEDAN BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1926. Serial No. 80,798. 23 Claims. (Cl. 296—28.)

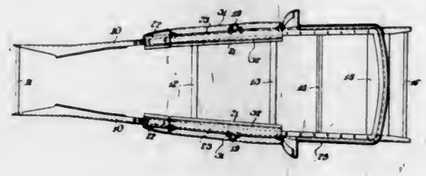


2. In a pressed metal vehicle body, in combination, a main body side sill, a body post having its bottom portion projected outwardly of the threshold margin of the sill to admit the extension of the body door past the bottom of the sill structure, a fore sill connected with the main body sill and having a margin lying outwardly of the threshold margin of the main body sill by substantially the projected depth of the body post, together with a cowl panel having its bottom secured to the sill and its rear edge secured to the post.

15. In a pressed metal vehicle body, a post bracket having a wheel housing portion and a post portion at the margin thereof, an angle section tonneau side sill having one branch connected to the flank of the wheel housing

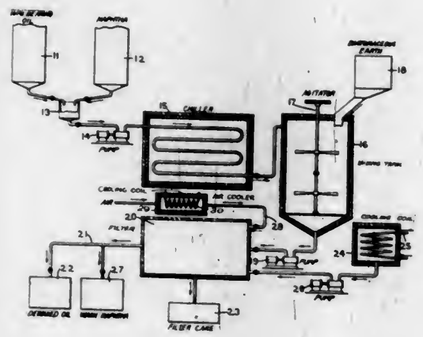
portion and the other branch inwardly extending, a body cross brace of obverted channel cross section having an end overlying the horizontally extending branch of the tonneau side sill and secured thereto by its bottom, which cross brace is provided with a flange on one side wall constituting a floor board support and an upward extension from the flange constituting a heel board and which upward extension has a flanged end secured to a flank of the post bracket.

1,825,323. COMBINED BODY AND CHASSIS CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 2, 1928. Serial No. 282,498. 5 Claims. (Cl. 296—28.)



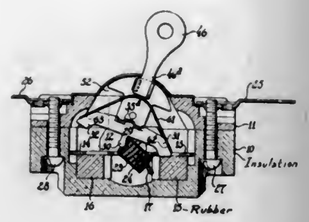
1. In a vehicle construction, a chassis underframe having side sills contoured to the form of the lower edge of the body to be mounted thereon, combined with a body superstructure having thresholds formed solely by a unitary sill stamping of downwardly presenting angular section, one arm of the angle lying directly on top of the chassis sill and another arm overlapping the outside of and conforming to the contour of said side sill and being directly secured thereto.

1,825,324. TREATING HYDROCARBON OILS. ROBERT E. MANLEY, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 16, 1927. Serial No. 233,565. 4 Claims. (Cl. 196—19.)



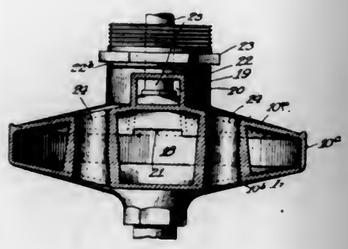
4. In a process of separating wax from hydrocarbon oil involving the filtration of precipitated wax from a naphtha solution of the chilled oil in the presence of a comminuted solid material, the procedure which comprises separating residual oil from the mixture of wax and comminuted solid material deposited as a cake upon the filter by first forcing a cool gas through the filter cake, and then forcing cool naphtha therethrough.

1,825,325. KEY OPERATED ELECTRIC SWITCH. RALPH A. MILLERMASTER and CARSTEN PETERSEN, Milwaukee, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed May 5, 1930. Serial No. 449,826. 8 Claims. (Cl. 200—42.)



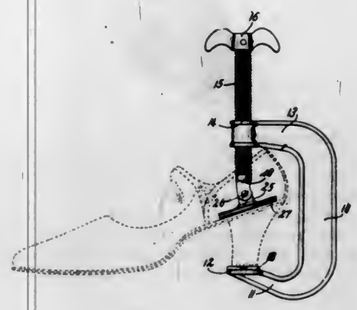
1. In a key-operated electric switch, in combination, a horizontally divided two-part insulating casing, supporting lugs at opposite ends of said casing, common means at each end of said casing for securing the casing sections to each other and to said supporting lugs, snap switch mechanism enclosed within and supported by said casing sections jointly, said switch mechanism having a rock-lever with arcuate edge portions projecting outwardly through one of said casing sections, and a key-guard or guide seated upon said last-mentioned casing section and having an arcuate portion adapted to accommodate the arcuate edges of said rock-lever, said guard having downwardly offset end portions adapted to underlie said supporting lugs whereby said guard may be securely clamped in position.

1,825,326. WATER HEATER. JAMES P. MORLEY, Michigan City, Ind., assignor to Bastian-Morley Company, La Porte, Ind., a Corporation of Indiana. Filed Feb. 10, 1928. Serial No. 253,267. 5 Claims. (Cl. 122—18.)



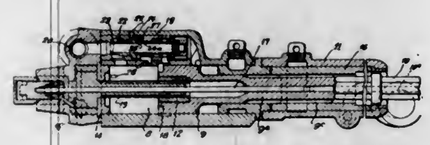
4. A thermosiphonic fluid heating unit having oppositely concaved heat transmitting walls united at their peripheries and spaced at all other points to provide a fluid heating chamber therebetween, one of said walls being provided with cold water intake means extending transversely of the chamber and leading to a point adjacent said peripheral junction to provide a clearance passageway for fluid in said chamber, an exit passageway leading from said chamber through said wall, and a plurality of flues associated with said chamber at points remote from the said cold water intake means adapted to receive heating gases to thereby furnish additional heat for the water at the points of location thereof to accelerate the thermosiphonic circulation thereof through said spreader.

1,825,327. CLAMP. LOUIS NEEDLMAN, Chicago, Ill. Filed Oct. 7, 1929. Serial No. 397,886. 2 Claims. (Cl. 12—125.)



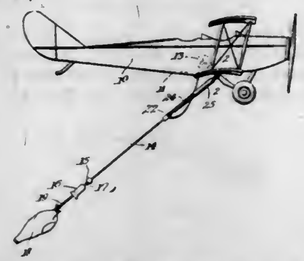
1. A clamp for holding the heel of a shoe against the body portion of the shoe, said clamp comprising a bracket member having a heel surface against which the heel portion of a shoe is adapted to bear, a screw member for forcing the shoe against the heel surface, the body of the clamp being of insufficient size to permit the turning of a shoe about its heel as a center when the same is held against the heel surface, a plate member for fitting into the inside of a shoe at the heel portion thereof, said plate having a stud member with which the screw cooperates for forcing the plate against the heel surface, said plate being freely rotatable with respect to the screw so that upon turning the screw the shoe need not turn and the plate remains stationary with respect to the shoe, said plate being swiveled with respect to the screw so that it adjusts itself to transmit the clamping force along the axis of the heel regardless of the angle between the heel and the shoe.

1,825,328. FLUID PRESSURE TOOL. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 17, 1929. Serial No. 386,528. 10 Claims. (Cl. 121—6.)



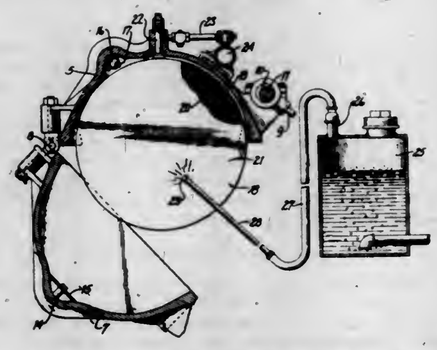
1. In a fluid pressure percussive tool, a cylinder providing a piston chamber, a piston reciprocable therein and provided with an extension having grooves, means for supporting a hollow drill steel to receive the blows of said piston, an automatically thrown valve for controlling the distribution of motive fluid for actuating said piston, said cylinder having an atmospheric exhaust port for said piston chamber under control of said piston, and means including a normally open vent for one of the pressure areas of said valve and manually operated means for simultaneously opening and closing both said vent and said exhaust port, thereby at will to dispose said piston in position to permit pressure fluid to pass along the grooves thereof to the hollow drill steel.

1,825,329. AIRPLANE ARTICLE PICK UP SHOCK ABSORBING MEANS. LYTLE S. ADAMS, New York, N. Y. Filed Oct. 22, 1929. Serial No. 401,585. 20 Claims. (Cl. 244—1.)



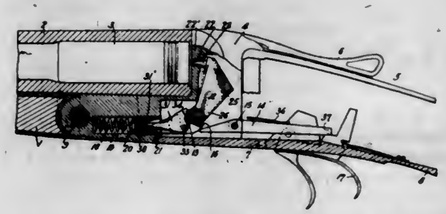
1. The combination with an airplane, of a grappling line, and shock absorbing means comprising an elastic cord connecting the grappling line with the airplane.

1,825,330. FILTERING. CHARLES R. BAKER, Wood River, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Jan. 9, 1929. Serial No. 331,216. 3 Claims. (Cl. 210—200.)



1. In the operation of filtering mineral oils admixed with finely dispersed decolorizing material, through a filter medium, the step of improving the operation which comprises preliminarily applying to the filtering surface of the filter medium, as a superficial nonpermanent coating, a liquid suspension of finely divided filter-aiding material, said application being made prior to beginning filtration of the oil therethrough and while both sides of the filter medium are under substantially the same pressure.

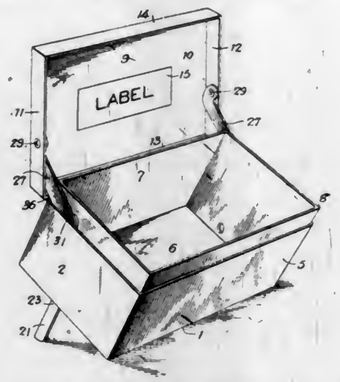
1,825,331. REBOUNDING HAMMER. BURT BECKER, Philadelphia, Pa. Filed Sept. 18, 1930. Serial No. 482,821. 14 Claims. (Cl. 42—41.)



1. A shot gun comprsing in part a frame, a hammer having an integral firing nose thereon, said hammer pivotally mounted in said frame, a dog mounted on said hammer, a hammer spring bearing against said dog, a sear for holding said hammer, means for releasing the sear, and

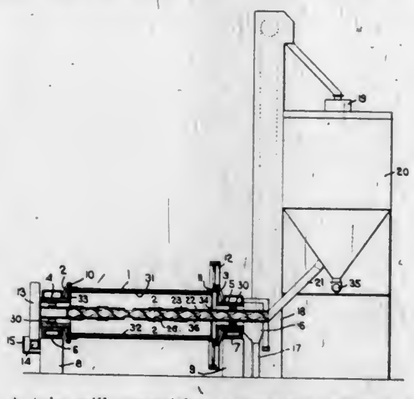
said dog being adapted to strike against the hammer above the pivotal mount of said hammer when said hammer is released, to thereby cause the hammer to slightly rebound.

1,825,332. DISPLAY BOX. DAVID F. BENBOW, Reading, Pa., assignor to Yocum Brothers, Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Sept. 25, 1930. Serial No. 484,457. 6 Claims. (Cl. 206—44.)



1. In a device of the character described, a box having a lid and a body, said body having a side wall and an interior flange, said wall and said flange being spaced apart to form a recess, hinge means connecting said lid and said body to permit said lid to be raised to open position and lowered to closed position, a prop pivoted to said body and adapted to be alternatively projected below the base of said body and to be retracted within said recess, a brace pivoted to said lid and to said prop, said brace moving said prop when said lid is moved.

1,825,333. TUBE MILL. ARTHUR W. CATLIN, Chicago, Ill., assignor to Bradley Pulverizer Company, Allentown, Pa., a Corporation of Massachusetts. Filed Sept. 27, 1930. Serial No. 484,885. 10 Claims. (Cl. 83—9.)



1. A tube mill comprising a rotatable grinding drum having hollow trunnions at its ends providing respectively an inlet for the material to be ground and an outlet for the ground material, means for feeding the material into the drum through said inlet trunnion, auxiliary means for introducing material into said drum including a conveyer of smaller diameter than the hollow trunnions, extending concentrically through one of said hollow trunnions into and longitudinally of said drum, and having means for delivering the material into the drum at a predetermined distance from the inlet end of the drum.

1,825,334. COVER AND PROTECTOR FOR SHADES. DANIEL W. CAUSEY, Norfolk, Va. Filed Oct. 2, 1930. Serial No. 486,016. 12 Claims. (Cl. 156—10.)



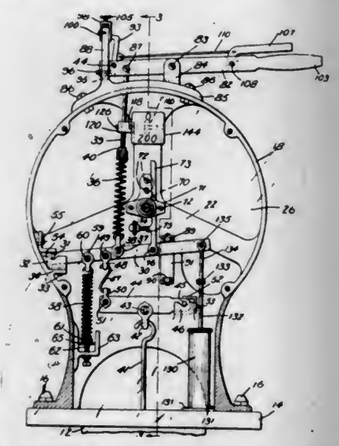
5. An attachment for roller shades and the like comprising a body having the edges of its long sides formed with hem portions, strips inserted in said hem portions and having offset keeper lugs thereon, and means for connecting and spacing said strips comprising a substantially U-shaped clip member having one leg shorter than the other and said legs being provided with openings for receiving the keeper lugs on the strip members.

1,825,335. SAFETY RAZOR. JAMES E. CONNOLLY, Baltimore, Md. Filed Apr. 28, 1928. Serial No. 273,560. 12 Claims. (Cl. 30—12.)



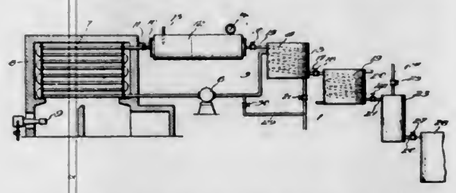
1. In a safety razor, the combination with a guard plate, of a blade mounted in operative position on the guard plate, a roller mounted on the guard plate in associated relation with the blade to guard its cutting edge and to reapply lather to the face of a user adjacent the blade cutting edge, and means adjustably mounted in association with the roller to regulate the reapplication of lather.

1,825,336. WEIGHING SCALE. EDMUND R. CROSS, Arlington, Mass., assignor to Chadwick & Carr Company, Boston, Mass., a Corporation of Massachusetts. Filed May 24, 1928. Serial No. 280,325. 20 Claims. (Cl. 265—68.)



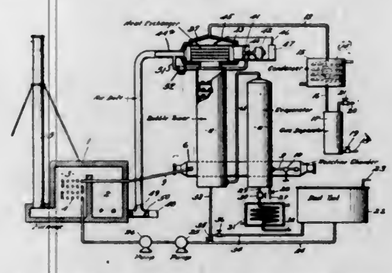
1. In a weighing scale, the combination of a scale-beam, a support for the article being weighed, a weight resisting member, both said support and said member being connected to said scale-beam, weight indicating means having graduations and means operable at the will of the operator for varying the effect of said weight resisting member upon said scale beam to vary the capacity of the scale and for simultaneously changing the initial graduation on said indicating means to correspond with the change in capacity of the scale.

1,825,337. PROCESS FOR THE CONVERSION OF PETROLEUM OIL. ROY CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Wilmington, Del., a Corporation of Delaware. Filed July 22, 1922. Serial No. 576,659. 4 Claims. (Cl. 196—51.)



1. A process of cracking hydrocarbons which comprises passing the hydrocarbons through heating tubes under cracking conditions of temperature and pressure, then passing the hydrocarbons along at a reduced rate of flow while maintaining them at cracking temperature and under such pressures as will prevent distillation, cooling the hydrocarbons in separate stages under substantially different pressures to a degree sufficient to prevent vaporization when they are discharged at an atmospheric pressure.

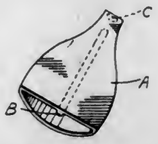
1,825,338. PROCESS AND APPARATUS FOR CONVERTING HYDROCARBONS. WALTER M. CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Feb. 1, 1926. Serial No. 85,157. 4 Claims. (Cl. 196—139.)



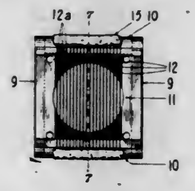
1. A process for converting petroleum hydrocarbons comprising heating oil to cracking conditions of temperature and pressure in a heating stage, passing the heated oil to conversion, evaporating and dephlegmating stages and controlling the character of the vapors discharged from the dephlegmating stage by submitting the vapors to heat exchange relationship with a mechanically driven cool air draft regulated to effect said control; passing air preheated by the discharged vapors to the heating stage, and returning a portion of the preheated air to the cooler air draft, whereby the said air draft is maintained at a predetermined temperature.

1,825,339. DOSING DEVICE. ARTHUR T. DAVENPORT, Washington, D. C. Filed Nov. 24, 1930. Serial No. 497,936. 2 Claims. (Cl. 128—222.)

1. A dosing device adapted for interchangeable attachment to any ordinary spoon for delivery of liquid therefrom, said device being composed of soft rubber or other soft, elastic waterproof material, and comprising a sleeve shaped at one end to conform with the bowl of a spoon and having at the other end a nozzle of reduced diameter to discharge the contents of the spoon and sleeve, and means on the inner upper surface of the sleeve adapted to provide an outlet passage between the sleeve and the spoon when in assembled position.

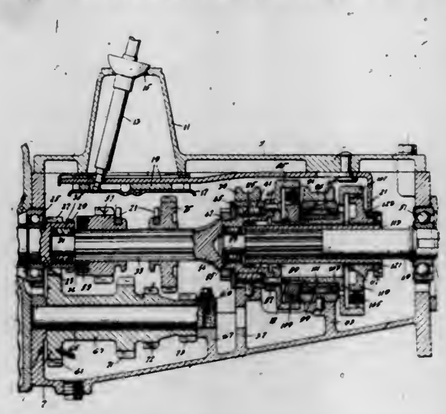


1,825,340. ELECTROOPTIC CELL. NOEL DEISCH, Washington, D. C. Filed June 15, 1927. Serial No. 199,098. 10 Claims. (Cl. 88—61.)



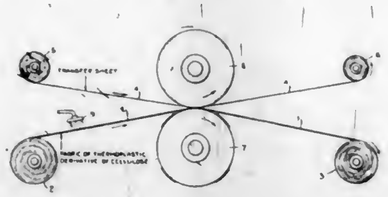
1. An electrode for an electro-optic cell comprising a frame having an opening comprising the active space thereof and a plurality of flexible ribbon like division members dividing the opening into a plurality of light passages, said flexible ribbon like members being secured to said frame and held taut across said opening.

1,825,341. OVERGEAR TRANSMISSION. HAROLD DREW, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 5, 1927. Serial No. 210,839. 2 Claims. (Cl. 74—57.)



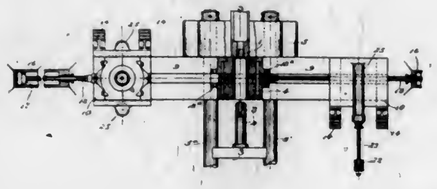
1. In a change speed transmission, an internal idler gear ring for interposition between a driving and a driven member, said idler composed of two rings of equal diameter assembled in axial alignment, one ring terminating in an external pinion, the other in an internal gear, a supporting ring upon which said gear rings are assembled and means to secure said gear rings to said supporting ring.

1,825,342. PRINTED FABRIC AND PROCESS OF MAKING THE SAME. CAMILLE DREYFUS, New York, N. Y., and WILLIAM WHITEHEAD and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 21, 1927. Serial No. 221,138. 5 Claims. (Cl. 41—33.)



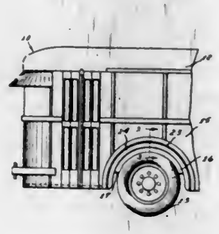
3. Method of simultaneously embossing and printing fabrics containing cellulose acetate which comprises wetting the fabric with a liquid that is capable of softening said cellulose acetate and also of at least partially dissolving the dye stuff to be used, and then contacting said fabric with a transfer sheet containing a dyestuff dispersed in a wax by means of an embossing device.

1,825,343. METHOD OF EXTRUSION AND APPARATUS THEREFOR. CLAIR O. EVANS, Plainfield, N. J. Filed Mar. 5, 1930. Serial No. 433,228. 25 Claims. (Cl. 207—3.)



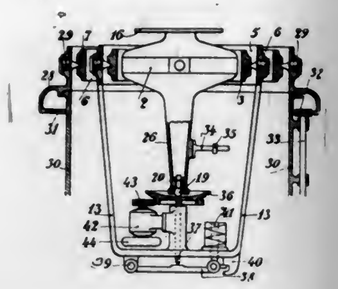
1. The method of extruding tubing, which consists in casting in a container a heated billet with a mandrel centering bore, supporting the container in operative relation to an extrusion die, and a mandrel, inserting the mandrel in the bore of the billet and thereby centering the mandrel relative to the die, and acting on the billet to extrude the metal through the die and around the mandrel.

1,825,344. FLEXIBLE GUARD FOR ROAD VEHICLES. WILLIAM B. FAGEOL, Kent, Ohio, assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed Apr. 1, 1931. Serial No. 526,997. 18 Claims. (Cl. 280—152.)



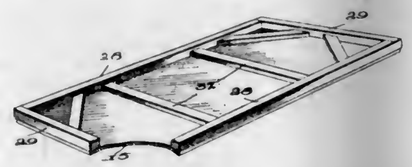
1. In a vehicle comprising a substantially rigid body designed to form a wheel recess, a relatively freely flexible guard mounted adjacent the outer edge of said wheel recess, said guard being of preformed shape and designed to project laterally beyond the rigid vehicle body.

1,825,345. COMPENSATED GYROSCOPIC DEVICE FOR THE DETERMINATION OF PLANES OR DIRECTIONS OF REFERENCE. JEAN FIEUX, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint Stock Company. Filed Nov. 14, 1927. Serial No. 233,268, and in France Dec. 22, 1926. 17 Claims. (Cl. 74—78.)



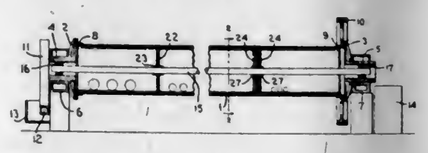
1. Apparatus of the class described comprising a gyroscopic system mounted for universal movement, a compensating pendulum, means for mounting said pendulum for independent universal movement, and frictional connecting means operatively interposed between said system and pendulum, said connecting means being independent of said mounting means.

1,825,346. BUILDING SLAB AND WALL CONSTRUCTION. THOMAS J. FOSTER, Ridgewood, N. J. Filed Sept. 24, 1927. Serial No. 221,780. 11 Claims. (Cl. 72—1.)



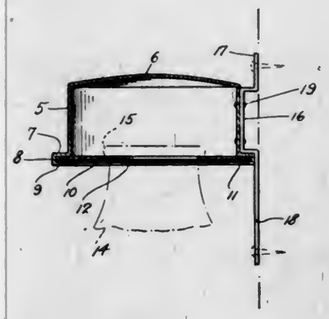
1. The process of constructing building slabs having facing sheets of insulating material and a filling of heat and sound proofing material that comprises placing a rigid facing sheet in a horizontal position, adhesively securing edge strips to the edges of said facing sheet, pouring a plastic cementitious mixture of heat and sound proofing material on top of said sheet within the space confined by said edging strips, permitting the filling material to set, removing the slab from its horizontal position and permitting it to dry thoroughly.

1,825,347. ADJUSTABLE SCREEN DIAPHRAGM FOR TUBE MILLS, ETC. WILLIAM A. GIBSON, Allentown, Pa., assignor to Bradley Pulverizer Company, Allentown, Pa., a Corporation of Massachusetts. Filed Oct. 13, 1930. Serial No. 488,331. 5 Claims. (Cl. 83—9.)



1. A tube mill comprising a rotatable drum having at one end an inlet for the material to be ground and at the other end an outlet for the ground material, a rigid member secured to said drum and extending axially thereof, a screen diaphragm dividing the drum into a plurality of grinding compartments, means for adjustably securing said diaphragm to said rigid member in different positions longitudinally of the drum, whereby the relative lengths of adjacent grinding compartments may be varied, and complementary means upon the periphery of the diaphragm and the inner face of the drum for preventing relative rotative movement between said diaphragm and said drum.

1,825,348. SANITARY MILK BOTTLE HOLDER. HAROLD GURNSEY, Seminole, Okla. Filed Mar. 6, 1929. Serial No. 344,821. 2 Claims. (Cl. 248—65.)



1. A bottle holder of the class described comprising a cylindrical body, a top over the body, the lower end of the body merging into an outwardly directed annular flange which in turn merges into a depending annular flange, the depending annular flange merging into an inwardly directed annular flange, an elastic disk having its outer periphery between the outwardly and inwardly directed flanges and provided with a central opening.

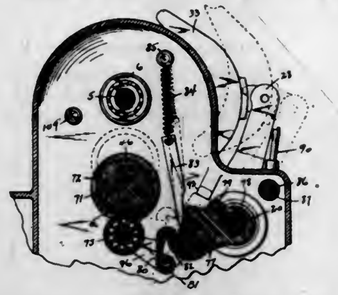
1,825,349. METHOD OF MANUFACTURING PAPER PULP FROM BAGASSE AND OTHER GRAMINEÆ PLANTS. TETSUDO HAGIWARA, Kitatoshima Gun, Tokyo Fu, Japan, assignor to Ryoji Miura, Tokyo, Japan. Filed Apr. 10, 1930, Serial No. 443,240, and in Japan Apr. 1, 1929. 1 Claim. (Cl. 92—11.)

Method of manufacturing paper pulp from bagasse and other gramineæ plants, characterized by digesting fibrous material of bagasse and other gramineæ plants rapidly under pressure at a temperature of 100° to 115° C. for between 30 and 40 hours with solution consisting mainly of magnesium bisulphite ($Mg.(HSO_3)_2$) with a small quantity of magnesium sulphite ($MgSO_3$) added so as to absolutely evade the presence of free sulphurous acid.

1,825,350. IRONER. HERMANN HILL, Syracuse, N. Y., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed Jan. 3, 1930. Serial No. 418,237. 10 Claims. (Cl. 68—9.)

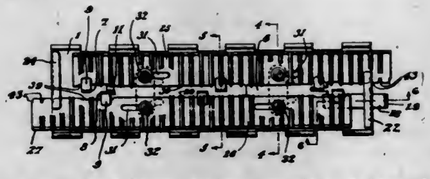
7. In an ironing machine, provided with a roll, a shoe cooperating therewith, said shoe having a portion of one end less in thickness from the face to back than the thickness of the body of the shoe.

9. In a device of the class described, a roll, means for rotating the roll, a shoe, means for moving the shoe into and out of contact with the roll including a shaft, an arm secured to the shaft, a link having one end pivotally mounted on the arm, a latch for holding the link and the arm against relative movement, a cam member cooperating with the link, a source of power, a normally inoperative clutch between the cam member and the source of power, means for making the clutch operative, and automatic



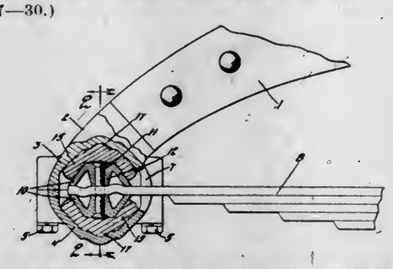
means for making the clutch inoperative when the cam member is in a selected one of a plurality of positions in relation to the ring.

1,825,351. LOOSE LEAF BOOK. LE ROI E. HUTCHINGS, Buffalo, N. Y., assignor to Remington Rand Inc., New York, N. Y. Filed Oct. 6, 1928. Serial No. 310,806. 8 Claims. (Cl. 120—9.)



1. A unit for a record system comprising a base plate, an operating member thereon, a pair of leaf rests on the operating member, a group of retaining members extending through said base plate, operating member and one of the leaf rests, another group of retaining members extending through said base plate, operating member and remaining leaf rest, said retaining members including means for maintaining said base plate, operating member and leaf rests in adjacent assembled relation, said base plate, operating member and leaf rests, being formed for cooperation with each other and the retaining members, whereby the operating member is longitudinally movable relative to the base plate to secure movement of the leaf rests laterally apart relative to the base plate, while said leaf rests are independently and longitudinally movable relative to the base plate when moved apart, but retained against longitudinal movement when moved together.

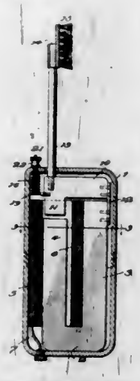
1,825,352. RUBBER SPRING SHACKLE. AXEL J. JANSSON, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 25, 1929. Serial No. 402,352. 10 Claims. (Cl. 267—30.)



1. In a spring shackle, the combination with a vehicle frame and a load supporting leaf spring, of a hollow housing on the frame, having a lateral spring receiving opening therein, through which an end of the spring extends to

the interior of the housing, a spool-like enlargement on the end of the spring within the housing and elastic deformable material interposed between the spool and housing and between the end flanges of the spool and end seats provided on the housing.

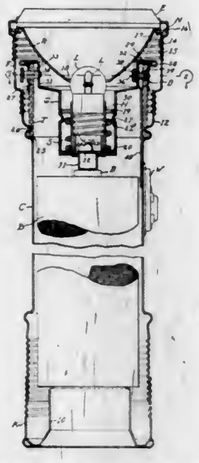
1,825,353. VIBRATOR. CARL W. JOHNSON, Los Angeles, Calif., assignor of one-half to Robert W. Hall, Los Angeles, Calif. Filed Nov. 4, 1929. Serial No. 404,804. 8 Claims. (Cl. 128—41.)



1. A vibrating tooth brush having an armature, means for causing a point on the armature to vibrate through an arcuate path, and an applicator carried by the armature having a contact surface disposed in a plane substantially parallel with the plane of the arcuate path described by vibration of said point.

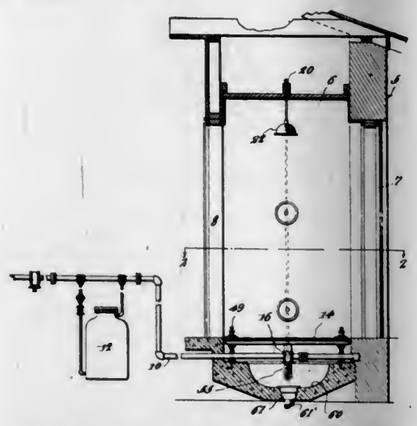
7. A vibrator having a magnetizable core, an armature associated therewith, connecting means carried by the armature having a square shank formed in its free end, and an applicator having a contact surface on one face and a square socket on its opposite face receiving said shank, whereby the applicator may be mounted in different selected relations to the plane of vibration of the armature.

1,825,354. FOCUSING HAND LAMP. HOMER WALTER JONES, Jackson Heights, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed Mar. 31, 1926. Serial No. 98,806. 8 Claims. (Cl. 240—10.69.)



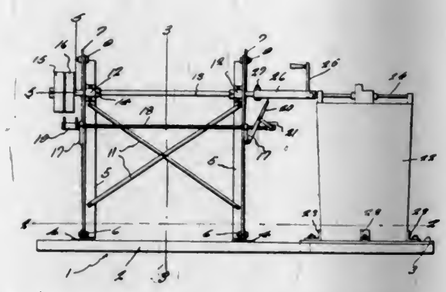
1. A battery hand lamp comprising the combination of a casing; a reflector having an aperture; an incandescent lamp projecting through said aperture; a support for said lamp mounted in said casing independently of said reflector; a contact on said support in circuit with said lamp; a battery having a center contact engaging the contact on said support; means for adjusting said support in any direction transversely of the focal axis of said reflector, said contacts being maintained in engagement during such adjustment; said means for adjusting said support comprising screws within said casing spaced 90 degrees apart about said reflector axis, and said casing comprising a sleeve carrying said reflector and having holes through which said screws are exposed.

1,825,355. SHOWER BATH. JOHN J. KEEFE, San Antonio, Tex. Filed May 28, 1930. Serial No. 456,480. 10 Claims. (Cl. 4—145.)



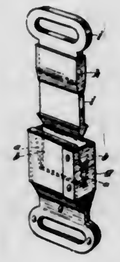
1. In a shower bath, a platform, springs supporting the platform at the corners thereof and normally holding the same in elevated position, a supply pipe having means to discharge a bathing solution above said platform, a valve controlling the flow of fluid through said pipe and having a stem, and a yoke suspended from said platform and having a bight portion operatively connected to said stem.

1,825,356. POWER ATTACHMENT FOR ICE CREAM FREEZERS. DONALD DAVID KOHLER, Amsterdam, Ohio. Filed Sept. 24, 1930. Serial No. 484,198. 3 Claims. (Cl. 74—7.)



3. A power attachment for ice cream freezers of the character described comprising a supporting structure including a pair of spaced, parallel, co-extensive beams, a platform mounted on one end portion of the beams, cross bars extending between the beams at spaced points on said beams, a pair of legs pivotally connected, at one end, to one end portion of the cross bars, and extending outwardly at an inclination therefrom for swinging adjustment in a vertical plane, braces pivotally connected, at one end, to the other end portions of the cross bars, and extending upwardly therefrom at an inclination and having a series of spaced holes in their upper end portions, means adjustably connecting the braces to the legs in a manner to support said legs in adjusted position, a horizontal shaft rotatably supported on the legs and extending outwardly from said legs, means on the platform for engagement with the freezer in a manner to retain the freezer in alignment with the shaft, means for operatively connecting the freezer to the shaft for actuation thereby, said means comprising a tubular coupling rigidly connected at one end portion of the shaft, said coupling being adapted for engagement telescopically over one end portion of the operating shaft of the freezer and having an arcuate slot in said one end portion for the passage of the actuating crank of the freezer in a manner to lock the coupling to the freezer shaft against relative rotary movement with respect to said freezer shaft.

1,825,357. DISENGAGEABLE COUPLING DEVICE. LEOPOLD LASSELSBERGER, Niederndorf, Austria. Filed Mar. 28, 1930, Serial No. 439,803, and in Austria Apr. 3, 1929. Renewed June 19, 1931. 1 Claim. (Cl. 24—230.)



In a disengageable coupling device comprising two elements, spring urged means for holding the two elements in engaged position and a member being slidably mounted on one element for releasing said holding means by merely longitudinal motion of said member, said means comprising two springs in the other element which may be spread apart from each other by said member for the purpose of disengaging the two elements.

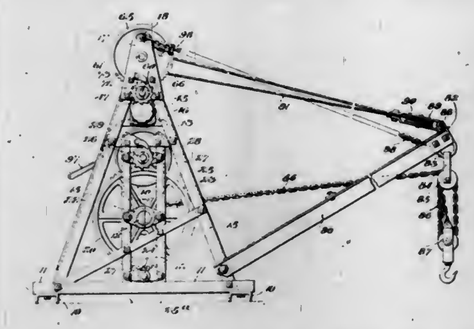
1,825,358. METHOD AND MEANS FOR REMOVING CARBON DEPOSITS. WHEELER G. LOVELL and THOMAS A. BOYD, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 28, 1929. Serial No. 389,088. 5 Claims. (Cl. 87—5.)

2. The process of removing carbon deposits from the combustion chamber of an internal combustion engine which comprises heating the coated parts, applying to the carbon deposit nitromethane and a low boiling varnish remover, and removing the carbon deposit.

5. A composition of matter for removing carbon deposits from internal combustion engines comprising nitromethane, benzol and alcohol.

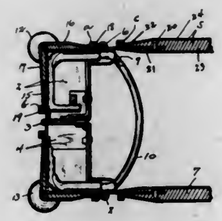
1,825,359. LIGHT WRECKING CRANE. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Nov. 7, 1927. Serial No. 231,708. 5 Claims. (Cl. 212—8.)

1. In a light wrecking crane, a pair of triangular members forming a hoist frame, a winch shaft, a winch drive shaft, a hoisting drum shaft, a plurality of hoist drum drive shafts, all of said shafts mounted in the hoist frame and having their axes in the same vertical plane, means for locking the hoist drum and the winch drum against



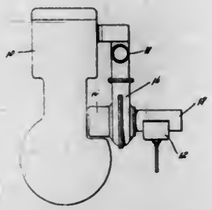
rotation in a direction to pay out cable, a motor drive for winding the hoist cable on the hoist drum and additional means for winding both drums simultaneously.

1,825,360. LOOSE LEAF BINDER. JOHN L. MCMILLAN, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Aug. 12, 1929. Serial No. 385,103. 3 Claims. (Cl. 281—36.)



1. In a loose leaf binder, a cover system including a back member and covers carried by the back member, covering material secured to the cover system and protective strips secured to the cover system return bent to overlie the edges of the covering material.

1,825,361. GASEOUS FUEL MIXING DEVICE. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Apr. 22, 1927. Serial No. 185,751. 4 Claims. (Cl. 48—180.)



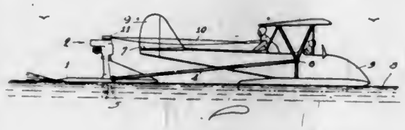
1. In a gaseous fuel mixing device for engines having an intake manifold comprising a casing independent of the manifold, a rotor in said casing, said rotor having a plurality of mixing blades, power operated means for driving said rotor, said blades having a configuration substantially to prevent compression of the fuel.

1,825,362. SPARK PLUG WITH SLEEVE-CONSTRICTIVE BUSHING. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 7, 1928. Serial No. 324,511. 20 Claims. (29—155.5.)



1. In a spark plug including non-vitreous insulation: an electrode spindle unit comprising inner and outer insulation assemblies separated by a constrictive bushing; and a shell providing a chamber for said spindle, a deformed retainer flange engaging said bushing and a seat for an auxiliary sheaf of non-vitreous insulation held under compression through said inner insulating assembly.

1,825,363. WATER PLANE. RUSSELL J. ROBERTSON, Oakland, Calif., assignor of one-half to Milton S. Robertson, Alameda, Calif. Filed May 27, 1929. Serial No. 366,408. 13 Claims. (Cl. 114—66.5.)



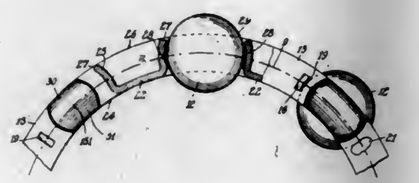
1. An aircraft propelling device comprising a movable vessel, rigid arms pivoted to said vessel and being pivoted to an aircraft at its center of gravity and adapted to aid in lifting the latter during flight.

1,825,364. VALVE OPERATING HANDLE. WALLACE B. ROSS, Syracuse, N. Y., assignor to Diemolding Corporation, Canastota, N. Y., a Corporation of New York. Filed Feb. 6, 1931. Serial No. 513,865. 5 Claims. (Cl. 251—150.)



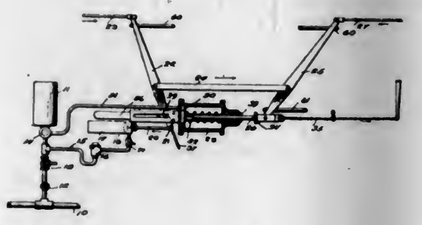
2. A handle for valve stems comprising an outer end section having its inner end reduced to form a shoulder, and an inner end section telescoping with said reduced end and abutting against said shoulder, the telescoping portions of said sections being splined one upon the other to turn together, the inner end section having a stop shoulder adapted to co-operate with a companion stop on the valve case for limiting the turning movement of the handle about its axis.

1,825,365. CAGE FOR BALL BEARINGS. ROBERT F. RUNGE, Forest Hills Gardens, Long Island, N. Y., assignor to The Hess-Bright Manufacturing Company, Philadelphia, Pa., a Corporation of Delaware. Filed June 12, 1929. Serial No. 370,246. 26 Claims. (Cl. 308—201.)



1. A circumferentially floating ball bearing cage comprising a pair of side rings and ball separators carried by the side rings at equally spaced distances, affording ball pockets between the side rings at the spaces between adjacent separators, the separators being so positioned in relation to each pocket as to permit a minute relative free forward and backward movement of a ball therein, the side rings being concave and parallel at the ball pockets throughout at least the range of traverse of the polar regions of the ball during the aforesaid free relative forward and backward movement.

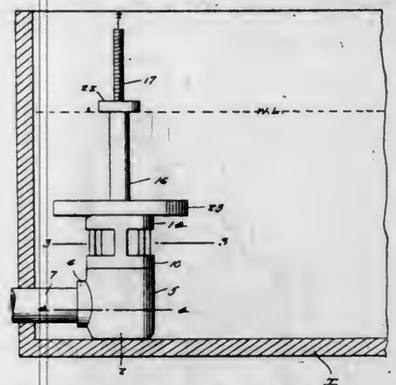
1,825,366. REGULATOR FOR BRAKE RIGGING. WILLIAM H. SAUVAGE, New York, N. Y., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 16, 1928. Serial No. 299,977. 16 Claims. (Cl. 188—200.)



1. In a brake regulating device of the character described, in combination, a brake lever, a manually actuated regulator including a lost motion device connected to said lever, and pneumatically actuated means for actuating said regulator.

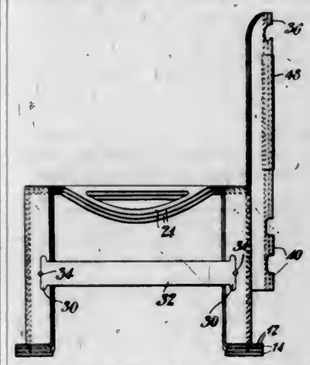
1,825,367. FLOAT CONTROLLED VALVE. CHARLES E. SCHILLING, Willcox, Ariz., assignor of one-half to E. A. Schilling, Willcox, Ariz. Filed July 1, 1929. Serial No. 375,072. 2 Claims. (Cl. 137—104.)

1. A device of the class described comprising a vertical cylinder formed with a bottom, a neck radiating outwardly from the cylinder to form an inlet, a cap threadedly engaged in the upper end of the cylinder and being hollow and having circumferentially arranged lateral openings, a sleeve rising from the cap, a rod slidable through the sleeve and the cap, a valve on the lower end of the rod within the cylinder to normally rest on the bottom and to rise in abutment with the cap to



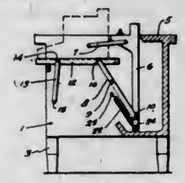
close the opening therethrough, a float circumjacent the sleeve, a nut on the upper portion of the rod with which the float may engage to raise the rod and close the valve.

1,825,368. NEST OF CHAIRS. ALEXANDER D. SCULLY, New York, N. Y., assignor, by mesne assignments, to Ralph T. Tyner, jr., Allendale, N. J. Filed Mar. 7, 1928. Serial No. 259,637. 4 Claims. (Cl. 155—2.)



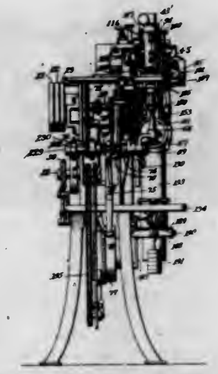
1. In a nest of chairs wherein each chair is constructed to fit telescopically over another along the vertical axis, each of said chairs being formed of thin pressed metal parts comprising legs, rungs, and bottom and a back, the legs, rungs, and back being fitted together and held against relative longitudinal movement by head and groove joints and held against transverse movement by fasteners.

1,825,369. TYPEWRITER DESK. EDWARD W. SIBLEY, Kenmore, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Dec. 14, 1929. Serial No. 414,181. 6 Claims. (Cl. 312—24.)



4. A typewriter desk having a compartment and a cover therefor, a typewriter support housed in said compartment, a pair of levers each of which is pivotally connected at its opposite ends to the cover and the support and rotatably mounted intermediate its ends within the compartment, and a tension spring having one end secured within the compartment adjacent said rotatable mounting and the other end secured to the cover adjacent the pivotal connection of the levers therewith.

1,825,370. KNITTING MACHINE. WILLIAM L. SMITH, Jr., Nashville, Tenn., assignor to May Hosiery Mills, Nashville, Tenn., a Corporation of Tennessee. Filed May 12, 1927. Serial No. 190,919. 23 Claims. (Cl. 66—24.)

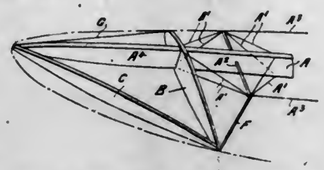


1. A knitting machine comprising dial and cylinder needles, a rotary needle cylinder, a rotary dial, needle actuating cams, and pattern mechanism for controlling said cams to knit either ribbed or plain work as desired, including means for stopping the rotation of the dial during plain knitting on the cylinder needles, substantially as set forth.

8. A knitting machine comprising dial and cylinder needles, a rotary needle cylinder, a rotary dial, needle actuating cams, pattern mechanism for controlling the cams to knit either ribbed, plain circular or reciprocating work as desired, a main shaft, a main pattern drum post, a bracket having bearings for said shaft and dial post and means in connection with the bearing for the driving shaft for adjusting the dial vertically relatively to the cylinder, substantially as set forth.

14. A knitting machine comprising dial and cylinder needles, a rotary needle cylinder, a rotary dial, needle actuating cams, pattern mechanism for controlling said cams to knit either ribbed, plain circular or reciprocating work as desired, a main shaft, a main pattern drum driven in conventional ratio to the cylinder, a rib pattern drum, a main dial driving shaft operated from said main shaft, and driving connections from said main dial driving shaft to said rib pattern drum for driving said rib pattern drum in 1 : 1 ratio to the cylinder, substantially as set forth.

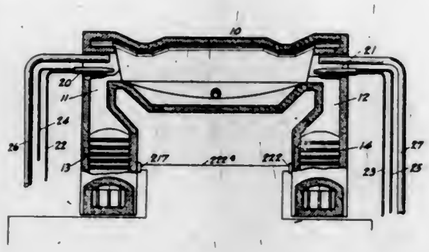
1,825,371. WING AND AILERON CONSTRUCTION FOR AIRCRAFT. HELMUT JOHN STIEGER, Wimbledon, London, England, assignor to The Monospar Company, Limited, London, England. Filed June 26, 1930, Serial No. 463,959, and in Great Britain June 27, 1929. 6 Claims. (Cl. 244—31.)



1. Cantilever wings for aircraft comprising, in combination, a single spar having a tapered extension, means on said spar up to the tapered extension for bracing said

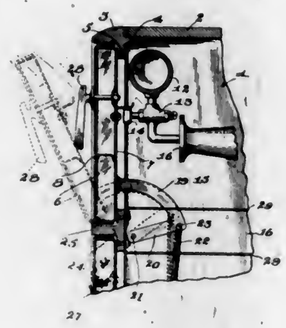
spar against torsional deflection, a stiff cross rib at the inner end of said tapered extension of the spar and a diagonal spar connecting the outer tip of said tapered extension to the after portion of the stiff cross rib.

1,825,372. REGENERATIVE-FURNACE-CONTROLLING APPARATUS. WILFRED SYKES, Chicago, Ill. Filed Jan. 22, 1930. Serial No. 422,616. 7 Claims. (Cl. 236—15.)



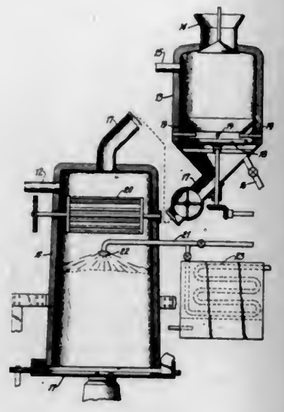
1. In a regenerative furnace, the combination with its furnace proper and regenerative chambers communicating therewith, of means operating automatically upon the lapsing of a predetermined time interval to reverse the flow through said regenerative chambers comprising mechanism including a movable element controlling the reversal, means for driving said element in one direction and comprising a clutch, means for driving said element in the opposite direction, and means operative upon the driving of said element by said second-named means, to a predetermined position in which the flow is reversed, to release said clutch and permit said third-named means to return to initial position and thereupon restore said clutch to clutching position.

1,825,373. SAFETY DEVICE FOR GAS STOVES AND RANGES. JACOB TELLER, Chicago, Ill., assignor to Teller Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Jan. 20, 1930. Serial No. 422,089. 8 Claims. (Cl. 126—37.)



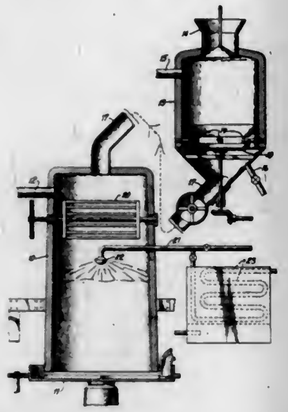
1. A safety device for gas stoves and ranges comprising, a gas stove having a compartment open at its forward end and containing the gas valves, a frame for and defining said opening, a door or closure pivotally mounted on said frame and adapted to swing outwardly, a guard secured to the inner face of said door and adapted to be disposed over the handles of said valves when said door is in closed position.

1,825,374. METHOD OF COKING PETROLEUM RESIDUES FROM THE DISTILLATION OF PETROLEUM OILS. ERNEST W. THIELE, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 14, 1928. Serial No. 277,767. 9 Claims. (Cl. 202—14.)



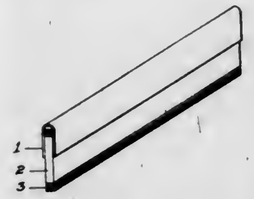
1. The method of coking petroleum residue from the distillation of petroleum oils which comprises heating said residue by passing it through a heating zone in a confined stream at such speed that substantially no coke is formed therein, heating finely divided coke by partial combustion thereof to a high temperature sufficient to effect coking of said residue and intimately mixing said heated residue and the heated coke, the proportion of coke being sufficient to raise the residue to coking temperature and permitting the residue to become coked in contact with said coke and in the absence of extraneous heat.

1,825,375. APPARATUS FOR COKING LIQUID PETROLEUM RESIDUES. ERNEST W. THIELE, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Original application filed May 14, 1928, Serial No. 277,767. Divided and this application filed July 27, 1929. Serial No. 381,479. 9 Claims. (Cl. 202—95.)



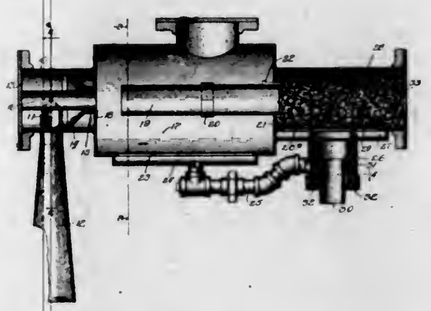
1. An apparatus for coking liquid petroleum residue which comprises a retort, means for subjecting finely divided coke to partial combustion whereby it is highly heated, means for supplying said highly heated, finely divided coke to said retort, means for introducing petroleum residue into said retort and adapted to distribute the same upon the highly heated coke within the retort, and an outlet for volatilized products from said retort.

1,825,376. WIPER BLADE FOR CLEANING DEVICES. SIDNEY P. VAUGHN, U. S. Navy, Ackerman, Miss. Filed Dec. 18, 1929. Serial No. 413,880. 3 Claims. (Cl. 15—245.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A cleaning device comprising a stiff back, an elastic rubber element secured thereto capable of being flexed, a soft flexible element secured to said elastic rubber element to serve as a cleaning edge, said flexible element having a lower coefficient of friction than said elastic rubber element.

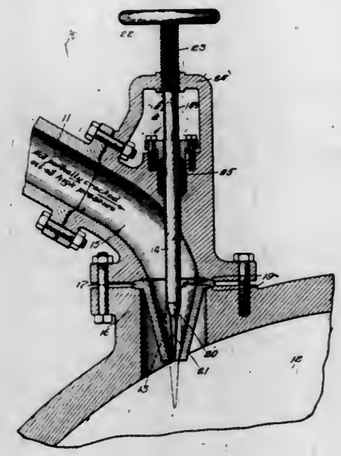
1,825,377. CENTRIFUGAL SEPARATOR. GEORGE W. WATTS, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Feb. 18, 1926. Serial No. 89,097. 3 Claims. (Cl. 183—85.)



3. A centrifugal separator of the class described comprising a cylindrical chamber, a pipe leading tangentially thereto, a reduced opening at one end of said chamber, a separating chamber into which said opening delivers, the walls of said separating chamber widening abruptly at said opening so as to permit the liquid particles to be discharged tangentially on entrance into said separating chamber, a cylindrical outlet from the center of said separating chamber, a screen chamber into which said outlet discharges, a screening material in said screen chamber, and means for withdrawing liquid from said separating and screen chambers.

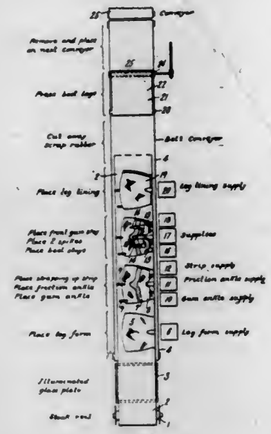
1,825,378. VALVE. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 27, 1926. Serial No. 112,024. 7 Claims. (Cl. 196—127.)

1. A valve for controlling the flow and pressure of hot, partially cracked petroleum liquids, comprising a stream line curved conduit, a gradually contracting valve-seat communicating therewith, an enlarged chamber beyond said valve seat, said valve seat being contracted in a direction toward said enlarged chamber, and a valve closure within said gradually contracting valve valve-seat



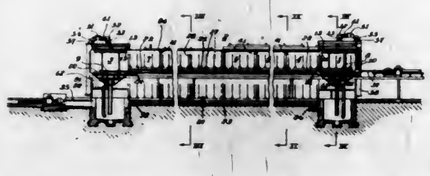
and adapted to cooperate with said valve seat, the conduit, valve seat and valve closure being so constructed that at no adjustment thereof do they introduce sharp turns or sudden restrictions.

1,825,379. METHOD OF ASSEMBLING RUBBER FOOTWEAR ELEMENTS. FREDERICK ZONINO, Naugatuck, Conn., assignor to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 7, 1931. Serial No. 520,960. 9 Claims. (Cl. 12—142.)



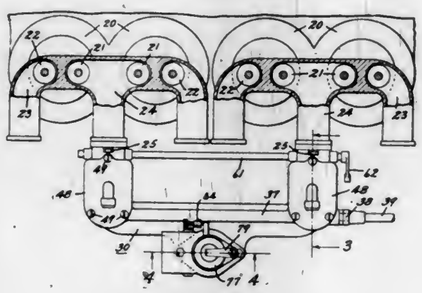
8. Method of assembling parts to form boot legs in the flat, which comprises unreeling a sheet of rubber, superposing rubberized fabric leg forms at intervals on said sheet, superposing on said leg forms rubber and cloth ankles, ankle stays, side spikes and heel stays, superposing on said parts boot leg linings, severing said rubber sheet around each assembled boot leg, pressing together the parts of each assembled boot leg, and removing said bootlegs.

1,825,380. ANNEALING FURNACE. HENRY ALINDER and GRANT B. SHIPLEY, Pittsburgh, Pa., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 23, 1928, Serial No. 294,777, and in Great Britain June 29, 1928. 8 Claims. (Cl. 263—28.)



3. A continuous annealing furnace comprising a tunnel having an elevator shaft leading thereinto and provided with a track, an elevator in said shaft having a floor provided with a longitudinally movable track, a track moving arm engaging said movable track, and means extending from said arm to said shaft for moving said arm as the elevator is raised and lowered, whereby said movable track is moved to and from registration with said tunnel track.

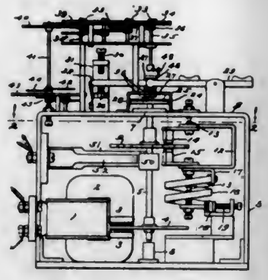
1,825,381. MULTIPLE CARBURETOR CHARGE FORMING DEVICE. HORACE W. ASIRE, Dayton, Ohio, assignor to General Motors Research Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 29, 1925. Serial No. 53,338. 7 Claims. (Cl. 123—52.)



1. In a charge forming device for a multicylinder internal combustion engine having a plurality of intake ports, an air manifold having a branch leading to each engine intake port and a common main air inlet, a spring closed valve in said main air inlet which is opened to admit air according to the depression in said manifold, an individual carburetor for supplying fuel to each of said branches relatively close to said engine intake ports, a throttle valve in each branch on the engine side of the point of fuel admission, common means for concurrently actuating all of said throttle valves, and manual means whereby the operator may at will change the spring tension on said spring closed valve to vary the amount of air admitted to said manifold and hence equally vary the fuel and air ratio drawn into each of said engine intake ports.

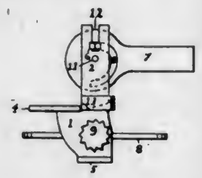
1,825,382. MAGNETIC CLOCK ESCAPEMENT. HENRY STEVENSON BAKER, Niagara Falls, Ontario, Canada, assignor, by mesne assignments to Arthur K. Kempton, Jackson Heights, N. Y. Filed Jan. 25, 1927. Serial No. 163,390. 10 Claims. (Cl. 58—116.)

1. A magnetic clock mechanism comprising a motor, an escape wheel provided with teeth of magnetic metal adapted to be revolved by said motor, and an oscillatory magnet with its field traversed by the teeth of the escape wheel, whereby the speed of rotation of the escape wheel



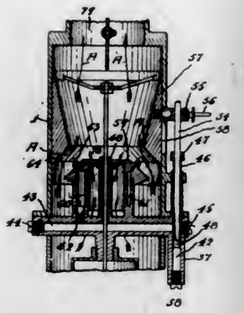
is controlled by the magnet and the oscillations of the magnet are continued by the magnetic influence of the teeth of the rotating escape wheel.

1,825,383. CAN OPENER. REYBURN T. CHASE, Camden, N. J. Filed Nov. 20, 1928. Serial No. 320,663. 6 Claims. (Cl. 30—3.)



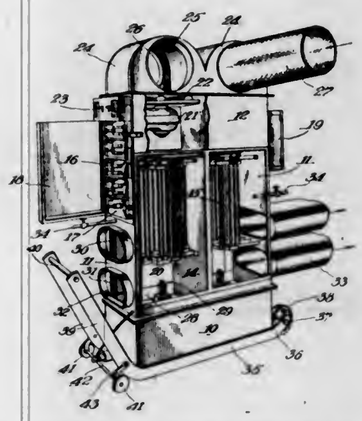
1. In a can opener, the combinatiorn of a frame having guides thereon, a sliding shear blade having an oblique cutting edge and adapted to slide on certain of said guides; a cam and lever to force the point of said blade through the can top and adjust it to various depths for cutting; and a toothed wheel adapted to engage the lower edge of the rim of a can, and rotated by a key to advance the opener along the rim of the can.

1,825,384. CARBURETOR. ERNESTO F. CIGLIA, Scarsdale, and LOUIS F. PELLETIER, East Bronx, N. Y., assignors of one-fourth to Walter W. Irwin, New York, N. Y., and one-fourth to Victor von Schlegell, White Plains, N. Y. Filed Nov. 18, 1927. Serial No. 234,199. 17 Claims. (Cl. 261—41.)



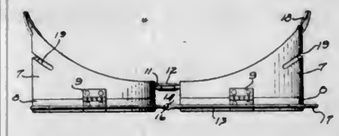
1. In combination, a vertical carburetor casing; an upwardly pointed jet head disposed intermedintely of the casing; a piston valve in said casing, having a Venturi passage above said head; a float chamber; a main duct disposed diametrically across the carburetor casing below the level in the float chamber and communicating with said head and provided at one end exterior to the casing with a vertical duct, the lower end portion of which communicates with and receives fuel from the float chamber; a metering sleeve fitting in said vertical duct and provided with an open lower end and a lateral opening registerable with said main duct, whereby fuel may flow from the float chamber into the main duct and out said nozzles; said sleeve being longitudinally adjustable to meter the flow of fuel; and a reciprocal needle valve slidable in said sleeve and connected to said piston valve and provided with a flattened tapering face adjacent to said lateral opening, whereby when the piston valve is raised, the passage to the lateral opening is enlarged.

1,825,385. APPARATUS FOR PRERIPENING OR RETARDING PERISHABLE FOOD PRODUCTS. FRED JOHN DAY, Los Angeles, Calif. Filed Dec. 17, 1928. Serial No. 326,581. 2 Claims. (Cl. 219—39.)



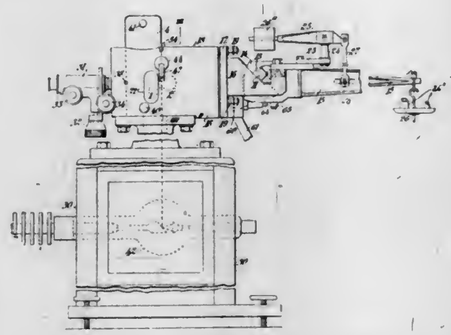
1. In a portable self-contained apparatus for treating perishable products in a storage enclosure, the combination of a vertically elongated casing provided at its top and bottom with air ports, electric heating elements located within said casing between the upper and lower air ports, a fan located between said heating elements and one of said ports, flexible ducts connecting with said air ports and extending outwardly therefrom and adapted to be led to the desired point of intake or discharge, thermostatic means for regulating the energizing of the heating elements in conformity with predetermined thermal conditions, and humidifying means located below the heating elements and adjacent to the lower air port.

1,825,386. COMBINED GOGGLES FOR GRINDING AND WELDING. ALBERT R. DOBBS, East Detroit, Mich. Filed May 20, 1931. Serial No. 538,696. 9 Claims. (Cl. 2—14.)



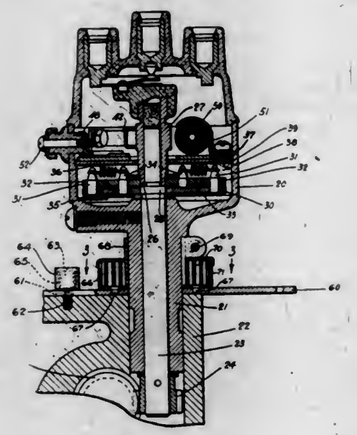
1. A pair of guards for encompassing the eyes having transparent lenses therein and joined together by a flexible bridging member to constitute a goggle, a pair of colored lenses supported on said guards and swingable to raised or lowered position relative thereto, and a hinged member joining said frames together.

1,825,387. APPARATUS FOR TESTING PHYSICAL PROPERTIES OF MATERIALS. ROBERT ESNAULT-PELTERIE, Paris, France. Filed Dec. 14, 1926, Serial No. 154,700, and in Great Britain June 30, 1926. 24 Claims. (Cl. 265—2.)



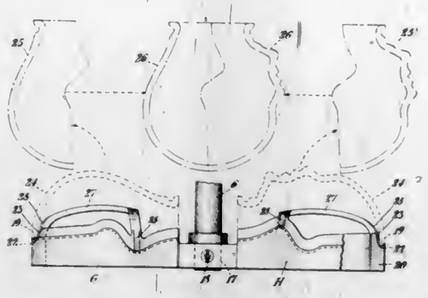
1. An apparatus for use in testing the physical properties of materials, said apparatus comprising butting means for subjecting a specimen to pressure, and sensitized recording means adapted to receive and preserve a record of at least one of the dimensions of the area of contact between said specimen and the said butting means.

1,825,388. IGNITION APPARATUS. JOHN T. FITZSIMMONS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,891. 3 Claims. (Cl. 123—117.)



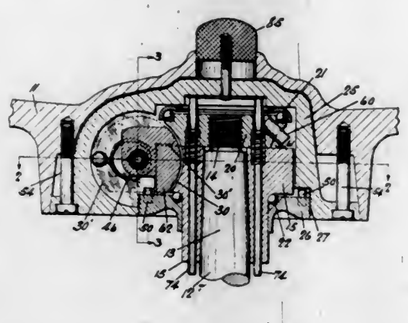
1. Apparatus for controlling the timing of the ignition of an internal combustion engine comprising, in combination, a housing; a circuit interrupting device carried in said housing; a cam for operating said device; a manually operable lever; and a bi-metallic, temperature controlled member in the form of a helical coil, having one end thereof secured to the lever, the other end anchored to the housing, whereby the housing may be adjusted manually by the lever to adjust the position of the circuit interrupting device relative to the cam for varying the time of sparking impulses said temperature controlled member automatically adjusting the angular relation between the housing and the lever in accordance with temperature changes.

1,825,389. ADHESIVE APPLYING DEVICE. MORRIS A. FRISCH, Brooklyn, and LEO V. ROSENBERG, Bronx, N. Y., said Rosenberg assignor to said Frisch. Filed Mar. 6, 1929. Serial No. 344,721. 8 Claims. (Cl. 91—47.)



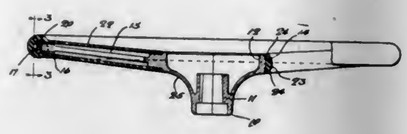
1. An adhesive applying device by which to apply adhesive to the joint forming edge surfaces of the halves of a two part hollow doll head, said device comprising a container for containing a quantity of liquid adhesive, a pair of adhesive carriers mounted for movement into and out of submerged position within said container, each of said carriers consisting of a generally ring shaped body portion having an upwardly facing ledge thereon, said ledges of the two carriers being of a contour to conform to and receive the joint forming edge of one of the doll head parts respectively so that adhesive present upon said ledges when the carriers are moved upwardly from the adhesive in the container may be transferred to the joint forming edges of the respective doll head parts by the operation of placing said doll head parts with their joint forming edges upon said ledges, and means for manually moving the carriers into and out of submerged position.

1,825,390. LOCKING HANDWHEELS. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 11, 1924. Serial No. 755,185. 7 Claims. (Cl. 70—47.)



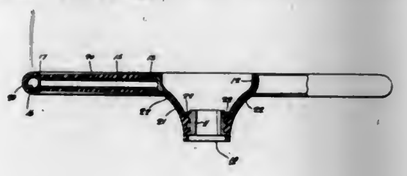
1. In combination, a locking bolt, a lock for actuating said bolt, said lock comprising a fixed bushing and a rotary barrel therein, operable by a key, said barrel being reciprocatable within said bushing to a non-rotatable or safety position when the bolt is in a predetermined position, and means for automatically moving said barrel to said safety position, whereby a positive stop is provided for preventing the accidental displacement of said bolt from said predetermined position.

1,825,391. STEERING WHEEL. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 3, 1928. Serial No. 266,937. 3 Claims. (Cl. 74—33.)



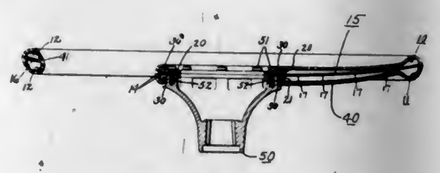
1. A steering wheel comprising an integral spider casting having a central open top cup portion and a sleeve portion depending therefrom and adapted to be fixed to a shaft and a plurality of spokes radiating from the periphery of said cup portion, a metal reinforcing hoop fixed to the ends of said spokes, and molded rubber encasing said hoop, metal spokes and the upper peripheral portion of said cup portion, but leaving said depending sleeve portion unencased by said rubber, whereby to give the appearance of a separate hub portion fixed to a molded rubber wheel.

1,825,392. MOLDED STEERING WHEEL. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 274,048. 5 Claims. (Cl. 74—33.)



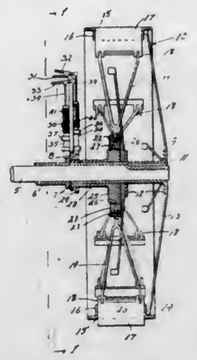
1. In a steering wheel, a metal hub having a sleeve portion adapted to fit a shaft and an upwardly and outwardly flaring central cup portion, said cup portion having radiating sockets formed on the periphery thereof, a plurality of tubular metal spokes rigidly fixed in said sockets, a tubular metal rim rigidly fixed to the spoke ends, and a hard rubber casing vulcanized upon said rim, spokes, and central cup portion of said hub.

1,825,393. STEERING WHEEL. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,776. 9 Claims. (Cl. 74—33.)



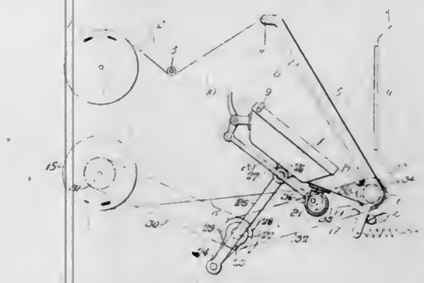
1. A handwheel having an outer covering and a metal skeleton for the rim, spokes and hub ring, said skeleton comprising: two sheet metal stampings forming the upper and lower halves of said skeleton and rigidly fixed together, said two metal stampings each having a rim portion of substantially closed cross-section.

1,825,394. CONVERTIBLE TRACTOR WHEEL. ALBERT GNAEGY, Chester, Ill. Filed Sept. 9, 1930. Serial No. 480,637. 2 Claims. (Cl. 301—48.)



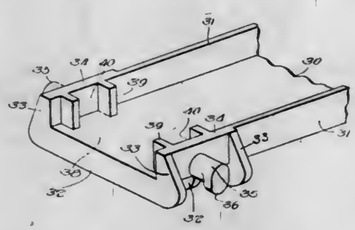
2. In a convertible tractor wheel, an axle, a housing surrounding a portion of said axle, a keeper carried by said housing and having a fixed position, a wheel keyed to said axle, said wheel comprising a hub, an apertured rim, and spokes connected with the hub and rim, walled guides surrounding the apertures in the rim and projecting from the inner surface of said rim, cleats slidably mounted in said guides, a sleeve rotatably mounted on the hub, a notched disc at one end of said sleeve, an eccentric at the other end of said sleeve, said notched disc, sleeve and eccentric being rotatable together, an annular tongue on the periphery of said eccentric, a two-pieced internally grooved yoke mounted on the eccentric, arms having their inner ends pivotally connected with the yoke and having their outer ends pivotally connected with the cleats, an operating lever rotatably journalled between the notched disc and the keeper, a pair of spring latches mounted on opposite faces of the operating lever so that one coacts with the keeper and the other with the notched disc and independent means for actuating said spring latches to selectively disengage either one from the respective member with which it co-operates.

1,825,395. DEVICE FOR PRINTING ON LONG WEBS OF PAPER CLOTH, OR THE LIKE IN PLATEN-PRESSES. NILS GUNNAR GOLJE, Stockholm, Sweden. Filed Jan. 18, 1929, Serial No. 333,440, and in Sweden Jan. 24, 1928. 4 Claims. (Cl. 101—291.)



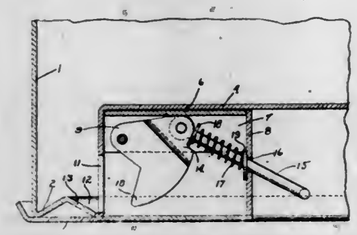
1. A platen press having a form bed, a platen rotatable into and out of co-operating relation with said bed, a roller carrying a roll of paper, a second roller on which the paper winds after passing between said bed and said platen, a clamp rotatable coaxially with said platen, means for normally maintaining said clamp in an angular, idle position, and shoulders on said clamp and said platen co-operating to withdraw paper from said first roller upon movement of said platen towards said bed and releasing the paper upon return movement to permit winding thereof on said second roller.

1,825,396. CAR TRUCK. KARL M. HAMILTON, Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Nov. 27, 1929. Serial No. 410,055. 9 Claims. (Cl. 105—208.)



2. A spring plank for car trucks, comprising a body casting having upstanding angular flanges adjacent its end to define a spring seat therebetween, and integral trunnion lugs axially aligned and outstanding from said flanges.

1,825,397. BURIAL VAULT LATCH. ELMER HEDEEN, Bucyrus, Ohio, assignor to Charles F. Michael, Bucyrus, Ohio. Filed June 20, 1930. Serial No. 462,529. 4 Claims. (Cl. 27—35.)

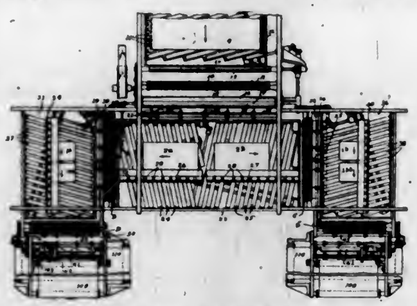


1. In a burial vault, a platform having a countersunk ledge around the edge thereof, a vault having an inturned flange at the lower edge portion thereof adapted to rest on said ledge, and means for securing said vault to said platform, said means comprising a latch, means for pivotally mounting said latch on the underside of said platform, a rod pivoted to said latch at a point remote from the pivotal mounting of said latch, a spring encircling said rod adapted to hold said latch in latching position, and a plate depending from said platform having an opening to receive said rod, one end of said spring abutting against said plate, the parts being so constructed and arranged that said latch may be swung out of latching position by said rod and upon a slight additional movement of said rod the component of spring force serves to hold said latch in non-latching position.

1,825,398. PAPER HANDLING MACHINE. REUBEN HITCHCOCK, Bratenahl, Ohio, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 26, 1928. Serial No. 264,823. 20 Claims. (Cl. 270—68.)

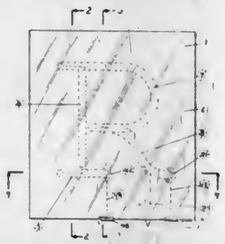
1. In a buckle-type folding machine, means for feeding a quadruple size sheet through a cutter to divide it into double size sheets, means associated with said cutter for imparting a fold to each double size sheet, a cross feed table for the reception of said folded double size sheets

side by side, said table being adapted to feed said double size sheets through cutter mechanism for dividing them into single sheets, two further sheet carriers each of which



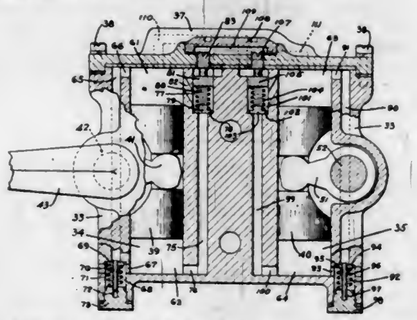
is adapted to receive pairs of single sheets from said cross feed table, and means for separately stacking the sheets of each pair.

1,825,399. FLAT TUBELESS IONIZATION CONDUCTOR DEVICE. FRED HOTCHNER, Los Angeles, Calif. Filed June 26, 1929. Serial No. 373,858. 17 Claims. (Cl. 176—14.)



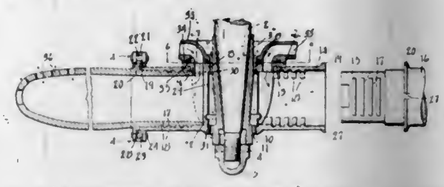
1. In an electric device, two sheets of dielectric material forming a discharge-guiding structure, grooves in the joining faces of said sheets of material forming upon the assembly of said sheets a continuous tortuous passageway therebetween, the said passageway being essentially superposed over itself in at least one portion of its path, the opposing grooves at the said superposed portion being formed with openings to the contacting surfaces of the sheets staggered with respect to each other so that upon the joining of said sheets each groove at the superposed portion of the path is separated from the opposing groove by a region of contact between the joining faces of the said sheets.

1,825,400. SHOCK ABSORBER. JOHN H. HUNT, Detroit, Mich., assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 27, 1929. Serial No. 410,096. 5 Claims. (Cl. 267—11.)



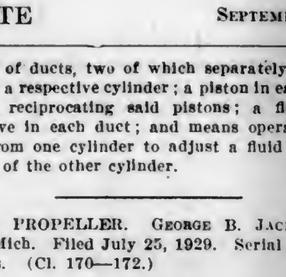
1. An hydraulic shock absorber comprising in combination, a casing presenting two cylinders, said casing having a plurality of ducts, two of which separately connect the two ends of a respective cylinder; a piston in each cylinder; means for reciprocating said pistons; a fluid pressure release valve in each duct; and means operated by fluid pressure from one cylinder to adjust a fluid pressure release valve of the other cylinder.

1,825,401. PROPELLER. GEORGE B. JACKSON, Three Rivers, Mich. Filed July 25, 1929. Serial No. 380,817. 6 Claims. (Cl. 170—172.)



1. In a propeller, the combination with a hub sleeve having front and rear flanges, the rear flange being provided with an inner and an outer series of openings and with a forwardly facing annular groove, the front flange having a series of openings and being peripherally threaded, of a chambered hub threaded upon said sleeve and having an annular rib coacting with said annular groove in the rear flange of said sleeve, said hub having tubular arms, hollow blades having discharge openings in their rear edges mounted on said arms, and a sheet metal sleeve housing arranged within said hub, said hub and rear sleeve flange being provided with shoulders engaging the ends of said housing, supporting it in spaced concentric relation to the sleeve at the outside of the inner series of openings in the rear sleeve flange and the openings in the front sleeve flange.

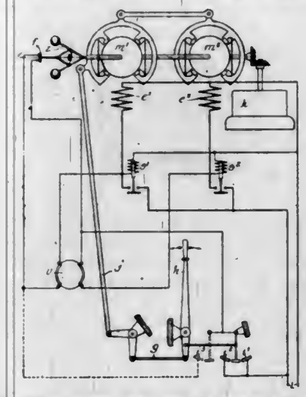
1,825,402. VIBRATION DAMPER. ROSS W. JUDSON, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Apr. 18, 1927. Serial No. 184,752. 4 Claims. (Cl. 74—6.)



3. A vibration damper for internal combustion engines comprising a driving element fixed to the engine crankshaft, a flywheel element mounted on said driving element concentric with the crankshaft, said elements formed with complementary portions forming a pocket, a spring in said pocket constituting a yielding driving connection between the driving and flywheel elements, and a member cooperating with said pocket to house the spring and providing an abutment limiting axial movement of the flywheel element.

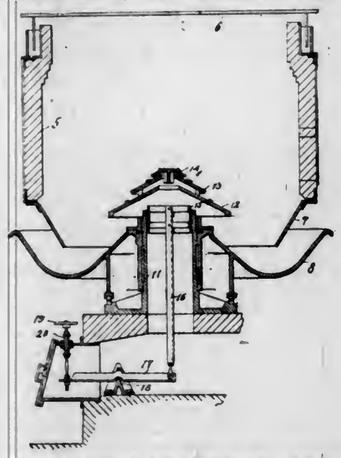
1,825,403. MACHINE DRIVE CONTROL. FERDINAND JUNOBLUT, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed May 17, 1926, Serial No. 109,520, and in Germany June 22, 1925. 5 Claims. (Cl. 172—239.)

1. In apparatus of the character described, a driven element having a given operating speed, a plurality of driving motors therefor, certain of said motors being operable to produce a braking action on said element, means operable during speed conditions of said element below said given speed to effect conjoint driving operation of said motors or to effect braking action of said



certain of said motors, and means operable independently of said last-named means and responsive to speed conditions of said element equal substantially to said given speed condition to render certain of said motors ineffective with respect to said element.

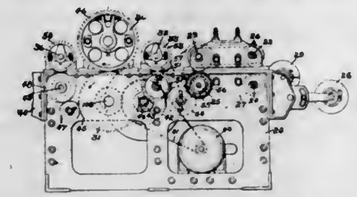
1,825,404. GAS PRODUCER AIR SLEEVE. ALFRED VINCENT KEMP, Pinner, England, assignor to The Wellman Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 23, 1928, Serial No. 248,639, and in Great Britain Feb. 5, 1927. 8 Claims. (Cl. 48—87.)



1. In a gas producer, a gas generating chamber adapted to contain solid fuel, a fluid duct extending upwardly thereinto, a conical blast deflector mounted upon and spaced from the upper end of said duct, a valve carried by said duct adapted to regulate the area of the passage between the upper end of the duct and said deflector, and actuating means for said valve operable from the exterior of the producer.

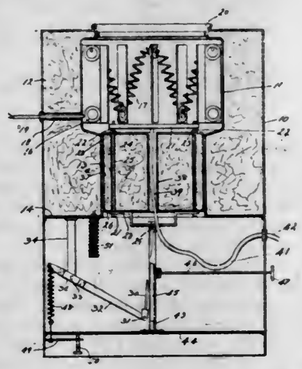
1,825,405. CUTTING AND DELIVERY APPARATUS FOR BAG LENGTHS. CARL G. KRONMILLER, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Nov. 7, 1927. Serial No. 231,507. 8 Claims. (Cl. 164—168.)

1. In apparatus for severing a strip of fabric, means for moving the fabric at a predetermined speed, means for moving a cutter at the same speed as that of the fabric, means for gripping the fabric on the receiving side of the cutter, means for moving said gripper during the cutting operation at a speed slightly slower than that of



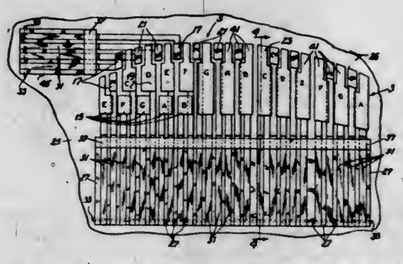
the cutter, a gripper on the discharging side of the cutter, and means for moving the last said gripper during the cutting operation at a speed greater than that of the cutter.

1,825,406. ELECTRIC COOKING APPLIANCE. HARVEY J. LIPHAM, Creamery, Pa. Filed May 29, 1930. Serial No. 456,920. 8 Claims. (Cl. 219—43.)



2. In an appliance of the character described, a heating unit having a well therein, an eye opening into said well, means for heating the interior of the well, a movable bottom located within the well, means to temporarily hold the bottom depressed in any adjustment to accommodate the cooking utensils of various depths, means for automatically elevating said bottom when the holding means is released.

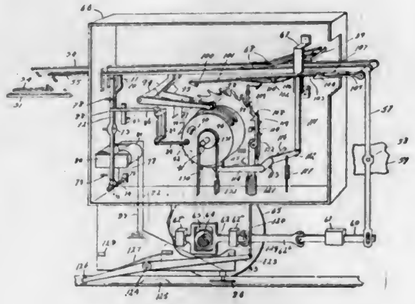
1,825,407. ACCORDION. MAX B. LUTTBEG, St. Louis, Mo. Filed Jan. 26, 1931. Serial No. 511,134. 11 Claims. (Cl. 84—376.)



8. In an accordion, a reed chamber including a first group of two reeds, said two reeds being disposed in relationship to each other such that one of said two reeds is operated by the flow of air in one direction and the other of said two reeds is operated by the flow of air in the reverse direction, and a second group of two reeds

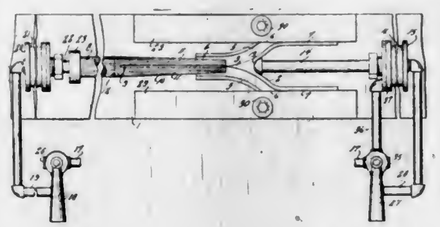
disposed with relation to each other in a manner similar to said first group of two reeds, said second group of two reeds vibrating in octave relationship to said first group of two reeds, the lower of said two groups of reeds being mounted so that the free, vibrating ends of the reeds of that group are oppositely positioned with relation to the vibrating ends of the reeds of the higher of said two groups.

1,825,408. TRAIN STOP. MICHAEL MAILE, Philadelphia, Pa. Filed Sept. 24, 1930. Serial No. 483,997. 5 Claims. (Cl. 246—186.)



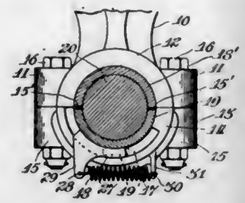
1. In a train stop, the combination with a switch in the electric line leading from a source of power and an air brake system, of a bell crank lever suitably supported and having one arm projected behind the movable member of the switch, a hook mounted for longitudinal sliding movement connected with the other arm of the bell crank lever, a conduit connected with the exhaust side of the air brake system, a regulating valve in said conduit, a stop valve in said conduit, means to permit the manual closing of said stop valve, a hook mounted for longitudinal sliding movement and connected with said stop valve, a pair of operating hooks, each arranged for cooperation with one of the first mentioned hooks, means to oscillate said operating hooks from a movable part of the railway vehicle, and means to control the engagement of said operating hooks with the first mentioned hooks.

1,825,409. BENT WOOD HANDLE MANUFACTURE. LAVON D. MILLER, Hicksville, Ohio. Filed Feb. 19, 1930. Serial No. 429,602. 4 Claims. (Cl. 144—261.)



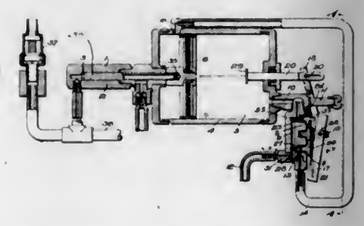
1. The method of producing a U-shaped fork from a piece of wood comprising notching the wood lengthwise of the grain to form two tines, spreading the tines to V form by applying force between the tines toward the crotch of the V to effect straight diverging thereof, and thereafter the additional step of applying force spaced from the crotch of the V and on the outside thereof to move the diverging free end portions of the spreading tines inward toward each other into approximate parallelism.

1,825,410. AUTOMATIC TAKE UP BEARING. GUSTAV C. MONCKMEIER, Tipton, Iowa. Filed Nov. 17, 1927. Serial No. 233,760. 13 Claims. (Cl. 308—167.)



1. In combination with a crank shaft, a bearing support for said crank shaft, a bearing cap secured to said support, semi-circular bearing bushings mounted in said bearing support and cap, and means including a slidable wedge member mounted on said cap and engageable with one of said semi-circular bearing bushings for moving the same longitudinally with respect to said cap for taking up the radial and end wear on said bearing bushing.

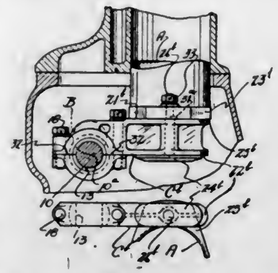
1,825,411. SUCTION MOTOR. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 9, 1926. Serial No. 80,249. 3 Claims. (Cl. 121—164.)



1. In apparatus of the class described, a suction operated motor comprising a chamber, a piston in said chamber operated by admitting atmospheric pressure to one side thereof while a partial vacuum is created at the other side by suction, a valve device connected to a source of suction supply and communicating with said chamber at both ends, check valves for controlling admission of atmosphere and suction to said chamber, each check valve including a ball check, a hollow movable stem through which atmosphere may be admitted to a passage leading to one end of said chamber, a spring normally pressing said ball check against a seat adjacent the inner end of said stem to prevent passage of atmosphere into said chamber while admitting suction to said chamber through the passage which leads to said chamber, and spring pressed leverage means adapted to press against one of said hollow stems to press one of said ball checks against a seat to cut off suction from one side of said piston and admit atmosphere while the other ball check admits suction to the opposite side of the piston and cuts off the atmosphere.

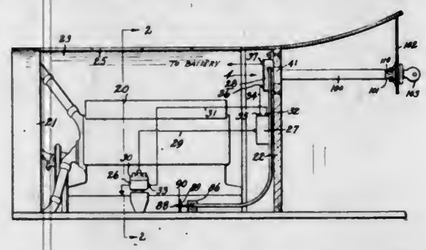
1,825,412. SLEEVE VALVE ACTUATING MECHANISM. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Apr. 15, 1927. Serial No. 183,969. 10 Claims. (Cl. 123—81.)

1. Sleeve valve driving mechanism for internal combustion engines comprising in combination a sleeve valve, and mechanism for imparting combined reciprocating and oscillating movement to said sleeve valve, said mechanism consisting of a layshaft and a link connecting the layshaft and sleeve, said sleeve having a bearing surface substantially transverse to the sleeve axis, said link having spaced parallel bearing surfaces one of which engages the said



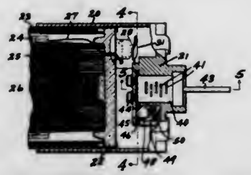
sleeve bearing surface, means pivotally connecting the said link and sleeve, and means provided with a bearing surface engaging the other of said link bearing surfaces and carried by the said pivotal connecting means.

1,825,413. ANTITHEFT DEVICE. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 6, 1928. Serial No. 244,991. 6 Claims. (Cl. 180—82.)



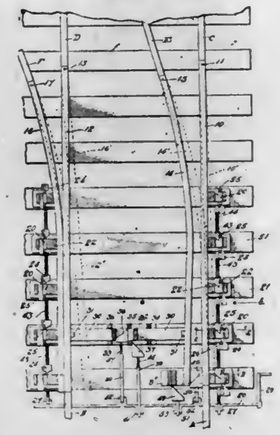
1. An anti-theft device for automotive vehicles comprising in combination, a case, a shaft rotatably supported by the case, a plate supported by the shaft and connected therewith by an axially engageable coupling, a switch movable contact supported by the plate and connected therewith by an axially engageable coupling, a cover for the case carrying stationary contacts engaged by the movable contact, means for securing the cover to the case, and thereby preventing the disconnection of the shaft, plate and movable contact, and means operated by the plate for preventing the raising of the hood of the vehicle.

1,825,414. ELECTRIC SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 28, 1928. Serial No. 250,105. 3 Claims. (Cl. 200—164.)



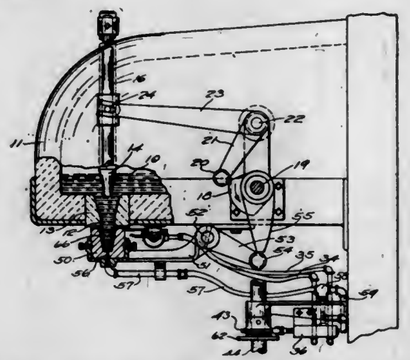
1. An electric switch comprising a leaf spring conductor fixed adjacent one end and having a bowed free end, a stationary contact engageable by the bowed end of said conductor, a housing supporting said contact and conductor, and having interfitting engagement with a metallic end wall, said end wall providing a member engageable with the conductor for causing the bowed end to engage the stationary contact and for modifying the shape of the bowed end while engaging the contact in order to produce a wiping between the conductor and the contact.

1,825,415. RAILWAY SWITCH. ROY A. OVERMILLER, Sharon Hill, Pa. Filed Apr. 25, 1931. Serial No. 532,757. 8 Claims. (Cl. 246—445.)



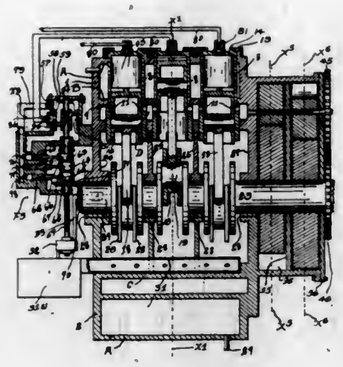
1. A railway switch embodying fixed rail sections, rail sections movable relative to the fixed sections, and means to move the movable sections through different lateral amplitudes into register with the fixed sections.

1,825,416. MEANS FOR DELIVERING CHARGES OF MOLTEN GLASS. MICHAEL J. OWENS, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 3, 1920, Serial No. 400,921. Renewed Oct. 17, 1927. 31 Claims. (Cl. 49—55.)



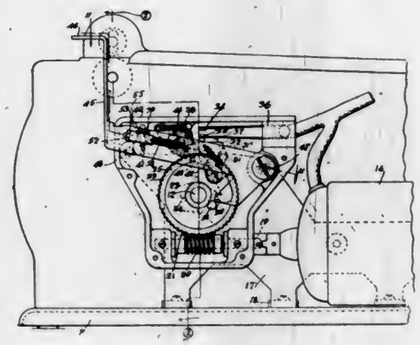
6. The combination of a receptacle to contain molten glass, having an outlet orifice in the bottom thereof, a regulator projecting downward into the glass above said orifice, means to reciprocate said regulator vertically, a forming cup, means to periodically move said cup into position beneath said orifice in synchronism with the movements of the regulator, means to exhaust the air from said forming cup and thereby shape a mass of glass therein, means for withdrawing the cup away from the said mass of glass and from said position beneath the orifice, thereby leaving the mass suspended from the walls of the orifice, and means for severing the mass after the cup is withdrawn.

1,825,417. MULTIPLE CYLINDER ENGINE. ADOLPHE C. PETERSON, Minneapolis, Minn. Filed Sept. 23, 1926. Serial No. 137,361. 3 Claims. (Cl. 123—138.)



1. In a fuel injection means, for multi-cylinder engines, means supplying fuel under sustained high pressure, conduits to each cylinder and non-return means at each cylinder in combination with a distributing means permitting communication of the high pressure fuel supply with each conduit periodically and at alternate intervals permitting release of pressure in the conduits.

1,825,418. MOTOR CONTROL AND DRIVE. FRANK E. PFEIFFER and WILLIAM C. PFEIFFER, Dayton, Ohio, assignors to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 11, 1930. Serial No. 420,267. 12 Claims. (Cl. 192—.02.)



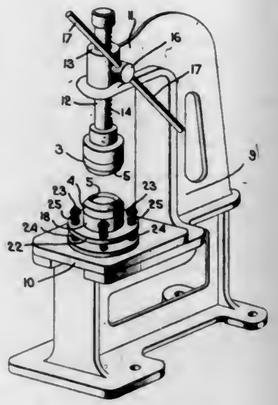
2. In combination, a motor, means to be driven by said motor, means to connect the driven means to the motor, a locking arm adapted to maintain said connecting means inoperative when the motor is at rest and to cause it to operate when the motor is operated, means on said locking arm for closing a switch to operate said motor, a switch therefor, an operating handle for said locking arm, and means on said handle to cause the handle to move the locking arm into switch closing position and adapted to slip by the locking arm for the handle to return to its initial position without disturbing the locking arm, and means associated with said driven means for moving said handle a complete stroke to insure the closing of said switch and the connection of the motor with the driven means.

1,825,419. SCREW. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Original application filed May 11, 1929, Serial No. 362,365. Divided and this application filed Dec. 26, 1929. Serial No. 416,368. 1 Claim. (Cl. 85—41.)



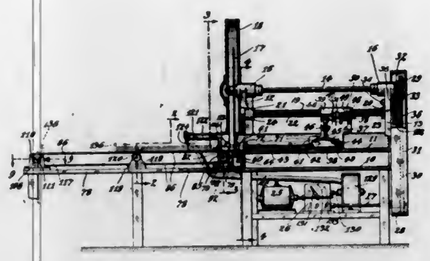
A lip-engaging screw comprising a shank of approximately uniform diameter throughout its length, and having a head at one end, said shank having an enlarged portion of substantial diameter adjacent to said head, a helical lip-engaging flange of substantially rectangular cross section extending longitudinally of said shank and merging at one end into said enlarged portion, said flange and said enlarged portion being of approximately the same diameter, so that the screw may be supported thereby with the shank axially centered, said shank projecting beyond the other end of said flange a substantial distance to provide a lip-engaging-aligning guide cooperating with said flange and said extension to accurately position said screw with respect to the lip to be engaged thereby.

1,825,420. METHOD OF AND APPARATUS FOR CUTTING FORMS FROM STONE SLABS. GEORGE M. RAND, Barre, Vt. Filed Mar. 11, 1927. Serial No. 174,484. 2 Claims. (Cl. 125—23.)



1. A machine for cutting forms from a stone slab, comprising a frame having a bed and a head provided with a bearing, a self-adjusting die carried by the bed, a plunger carried by the head and extending through said bearing, a second die carried by the plunger, and means to move vertically the plunger and the die carried thereby, the upper end of the plunger extending above the bearing and being provided with a head adapted to be struck a blow with a hammer.

1,825,421. SLICING MACHINE. CHRISTIAN ROESCH, Brooklyn, N. Y., assignor of one-half to himself and one-half to George Gockeler, Brooklyn, N. Y. Filed Apr. 13, 1929. Serial No. 354,758. 11 Claims. (Cl. 146—113.)

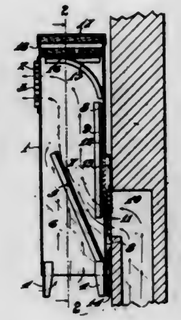


1. In a slicing machine, a cutter, a carriage, a feed shaft, means for simultaneously actuating the cutter and feed shaft, a conveyor, a conveyor shaft, means mounted loosely on the conveyor shaft and over which the said conveyor passes, means for driving the conveyor shaft from the feed shaft, and means for simultaneously connecting and disconnecting the carriage to the feed shaft and connecting and disconnecting the conveyor shaft to and from the means thereon for moving the conveyor.

1,825,422. MANUFACTURE OF SHEET MATERIAL. REED P. ROSE, Jackson Heights, N. Y., assignor to General Rubber Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 2, 1926. Serial No. 152,313. 8 Claims. (Cl. 92—21.)

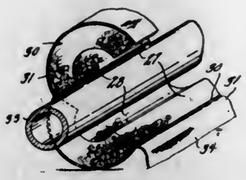
1. Process for making fibrous sheet material which comprises beating paper-making pulp, introducing rubber dispersion and bituminous dispersion into the beaten pulp, coagulating the solid material from both dispersions on the pulp, and recovering the treated pulp.

1,825,423. DEFLECTOR FOR WARM AIR FURNACE REGISTERS. OSCAR ROTTINGHAUS, Norwood, Ohio. Filed June 4, 1930. Serial No. 459,162. 1 Claim. (Cl. 98—108.)



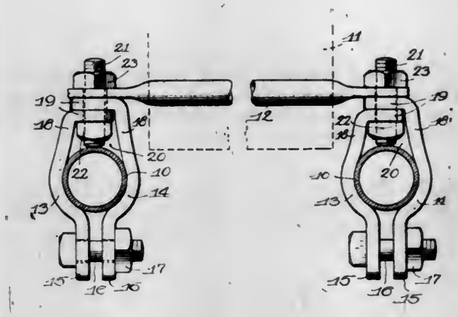
A deflector for register openings of warm air heating furnaces, comprising, a sheet metal cabinet having an outlet opening through the upper part from its front wall, and an intake opening through its rear wall for connecting with the register opening, the lower half of the cabinet subdivided to provide a cold air passage opening to the full area of the base of the cabinet and communicating with the warm air passage above the warm air inlet.

1,825,424. PIPE INSULATION. FRANK C. RUSSELL and CLINTON L. SAVIDGE, Toledo, Ohio, assignors to The Mineral Felt Insulating Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 10, 1930. Serial No. 494,547. 6 Claims. (Cl. 154—28.)



1. In the forming of concavo-convex sections, supplying fibroua material for the body in a suspension medium, draining the medium therefrom while mechanically expediting the taking of form for the body by changing upper surface form in departing from gravity level contour, drying said formed section, trimming and jacketing.

1,825,425. CLAMP. ALBERT T. SCANNELL, Chicago, Ill. Filed Sept. 20, 1930. Serial No. 483,253. 4 Claims. (Cl. 24—243.)



1. A clamp for construction towers comprising a pair of clamp members each having a central curved portion adapted to contact with a portion of the circumference of a tower post and having ends disposed in overlapping relation and spaced from said post, a stud bolt passing through openings in said overlapping ends, a nut on the inner end of said bolt disposed within said space and confined by said clamp members against turning, a nut on the outer end of said bolt for securing an additional member to said clamp, and a bolt for securing the opposite ends of said clamp members together and tightening the same on said post.

1,825,426. INSTRUMENT CASE. LEO C. SHIPPY, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 25, 1929. Serial No. 365,799. 12 Claims. (Cl. 180—90.)

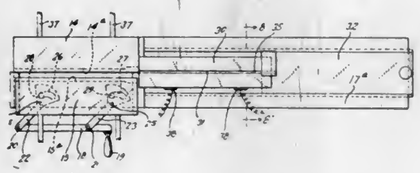
1. In an instrument case, the combination comprising, a mounting bracket provided with a dial plate and supporting an instrument case, said dial plate and mounting bracket providing an inspection opening, said instrument case being apertured to provide an illumination opening,

a transparent medium for each of said openings, said case provided with tangs which cooperate in the retention of each of said transparent mediums, and resilient means



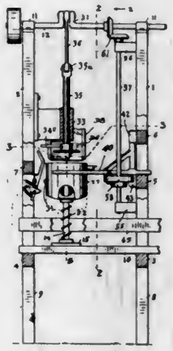
disposed between some of said tangs and one of said transparent mediums for securing the same within the case.

1,825,427. METHOD OF MAKING EYEGLASS PARTS. WILBUR H. SIDDALL, Attleboro, Mass., assignor to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed Nov. 25, 1927. Serial No. 235,724. 14 Claims. (Cl. 18—51.)



3. The herein described art of making eyeglass parts which consists in softening a celluloid member, hardening portions thereof, and inserting a metal member into the unhardened portions.

1,825,428. TOMATO PEELING MACHINE. JOHN WALTER SNIDER, Franklin, Ind. Filed Mar. 19, 1930. Serial No. 437,162. 6 Claims. (Cl. 100—40.)



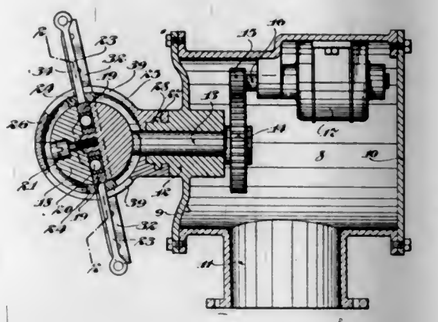
1. A machine of the kind described, comprising a bolster, a cage mounted for and which is operable to projected position to surround the bolster, and to retracted position to clear the bolster, means to urge the cage to projected position, a presser member spaced from the cage and operable to and from engagement with the bolster, and during its stroke toward the bolster, to move the cage to retracted position, means operable to detain the cage at retracted position, and means to sweep the bolster.

1,825,429. MAGAZINE SAFETY RAZOR. HARRY H. STRAUS, New York, N. Y, Filed Apr. 2, 1927. Serial No. 180,373. 15 Claims. (Cl. 30—12.)



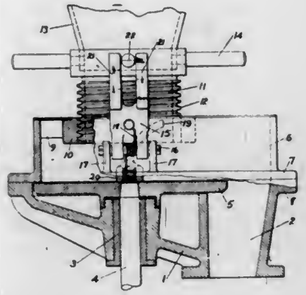
10. A razor of the class described comprising a hollow handle, a shaving head pivotally connected to the handle and when in idle position substantially aligned with the handle, means on the head for retaining a blade in shaving position and arranged to admit lengthwise movement of a blade to such position, means within the handle for maintaining a stack of fresh blades ready for feeding to the head, mechanical blade feeding means, and a receiving casing supported on the razor and aligned with the head when the latter is in blade-receiving position.

1,825,430. MECHANICAL VIBRATOR. SIGURD M. SWENSEN, Minneapolis, Minn. Filed Oct. 14, 1929. Serial No. 399,513. 10 Claims. (Cl. 128—63.)



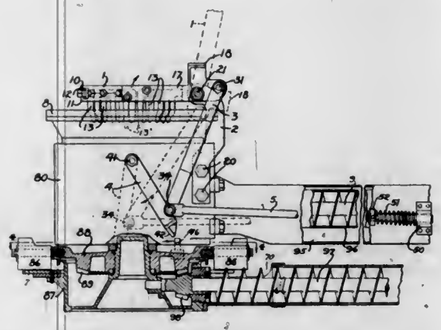
5. The structure defined in claim 1 in further combination with a cross bar adjustably applied to the arm of said ring member and to which the vibration-transmitting member is directly connected.

1,825,431. FEEDING MECHANISM. JOHN G. TSAGARIS, West Millcreek Township, Erie County, Pa., assignor to Erie City Iron Works, Erie, Pa., a Corporation of Pennsylvania. Filed July 16, 1929. Serial No. 378,786. 5 Claims. (Cl. 221—118.)



1. In a feeding mechanism, the combination of a frame; a rotating feeding platform mounted in the frame; a feed tube above the platform; means adjusting the tube toward and from the platform comprising a screw formed on the surface of the tube; and a finger mounted on the frame locking the tube in adjustment.

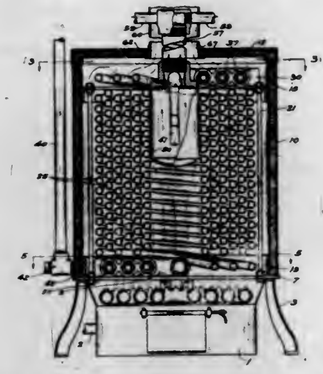
1,825,432. COKE BREAKER FOR COAL STOKERS. EDGAR T. WARNER, Seattle, Wash., assignor, by mesne assignments, to Automatic Coal Burner Co., Seattle, Wash., a Corporation of Washington. Filed July 7, 1927. Serial No. 203 972. 14 Claims. (Cl. 110—45.)



1. In an automatic coal stoker, in combination, a burner open at its top, means for advancing fuel therethrough and centrally upward through the open top, a cokebreaker supported at one side of the burner top, and normally positioned out of the direct heat from the burning fuel therein, and means for causing movement of said cokebreaker, from time to time, to strike the fuel mass in the burner at all sides of its central feed axis, and to return it to its upraised position.

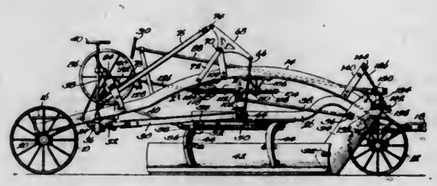
1,825,433. HEATER. JOHN WILLIAM WHITE, Buffalo, N. Y. Filed Jan. 7, 1929. Serial No. 330,733. 9 Claims. (Cl. 257—229.)

1. A heater comprising heating means, a plurality of spiral ducts in mutually concentric juxtaposition, the adjoining ends of the ducts terminating in at least two separate regions, headers in each of said regions, each of said headers providing outwardly extending substantially straight header sections, and connecting unions between said duct ends and header sections, whereby the



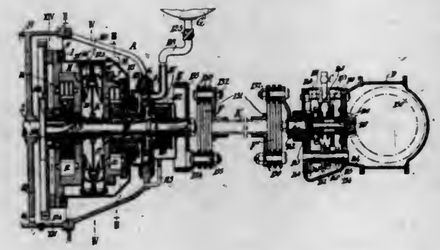
unions on each header section are spaced sufficiently to permit ready access thereto and whereby any selected spiral fluid duct may be independently removed.

1,825,434. BANK SLOPER. FRED D. WILSON, Harvey, Ill., assignor to Austin Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 28, 1926. Serial No. 144,785. 6 Claims. (Cl. 37—156.)



2. In a road grader, the combination with a main frame, supporting wheels therefor, and a road working blade mounted in said frame, of a supplemental blade pivotally connected to said road working blade, an adjusting unit consisting of two complemental threaded members, one of which is rotatable with respect to the other, an operating member connecting said supplemental blade and said adjusting unit, and means independent of said connecting member and rotatable with respect to said adjusting unit for actuating said unit, so that the position of said supplemental blade may be changed during travel of the grader.

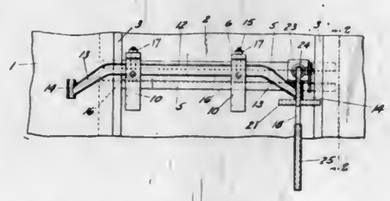
1,825,435. HYDRAULIC POWER TRANSMISSION. SVEN GUSTAF WINGQUIST, Gottenborg, Sweden. Filed Apr. 19, 1926. Serial No. 103,036. 26 Claims. (Cl. 192—58.)



1. A hydraulic power transmission including co-operating delivery and receiving pumps, and a sliding valve

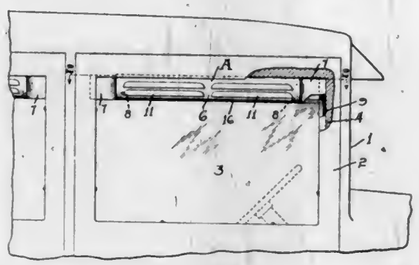
connected between said pumps, said valve having three operating positions, the first position cutting off communication between the two pumps, the second position establishing communication between the said pumps, and the third position connecting the pressure chambers of the pumps to the idle fluid side of the pumping system, whereby in the latter position of said valve the movement of the pumps results in the idle circulation of fluid.

1,825,436. AUTOMOBILE AXLE PRESS. HENRY WOCHNER, Rock Island, Ill., assignor to Bear Manufacturing Company, Rock Island, Ill., a Corporation. Original application filed Dec. 21, 1928, Serial No. 327,643. Divided and this application filed Feb. 17, 1930. Serial No. 428,983. 3 Claims. (Cl. 153—32.)



1. A press for automobile axles, comprising a beam held rigidly in place, a jack mounted on said beam axle supporting frames fixed to said beam, means for holding an axle rigidly on said frames, and a bar engageable with one end of such axle, and provided with an extension for engagement by the rod of a jack positioned on said beam.

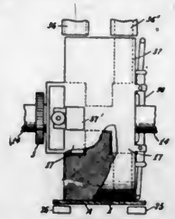
1,825,437. WINDOW VENTILATOR. CYRUS E. YEAGLE, Toledo, Ohio. Filed July 22, 1929. Serial No. 380,012. 2 Claims. (Cl. 98—2.)



1. A window ventilator having opposed side members with baffled openings therethrough and between which a window closure member is adapted to have reciprocatory opening and closing movements and spring tongues projecting from the side members at each end thereof for insertion into a respective closure member runway of a window casing.

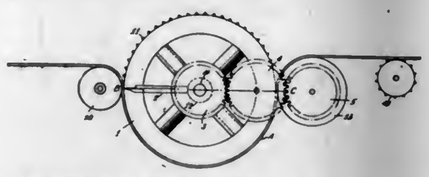
1,825,438. PHOTO-ELECTRIC SOUND RECORDING OR REPRODUCING. ALOYSIUS J. CAWLEY, Pittston, Pa., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Jan. 8, 1921, Serial No. 435,984. Divided and this application filed Sept. 16, 1929. Serial No. 393,071. 23 Claims. (Cl. 274—5.)

6. In combination, means including a wheel to carry a film having a sound record adjacent to the edge thereof with said sound record extending beyond the side of said wheel, and a light-sensitive cell and a light source so arranged as to cooperate with said portion of the film extending from the wheel for the reproduction of the sound record therefrom.



23. In apparatus of the class described, a wheel adapted to support a motion picture film having a sound record adjacent to the edge thereof with means whereby the sound record portion of the film extends beyond the edge of the wheel, said wheel being relatively large, and means for moving said film through said apparatus.

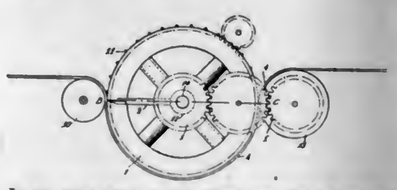
1,825,439. SOUND RECORDING OR REPRODUCING APPARATUS. ALOYSIUS J. CAWLEY, Pittston, Pa., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Jan. 8, 1921, Serial No. 435,984. Divided and this application filed Sept. 16, 1929. Serial No. 393,072. 9 Claims. (Cl. 274—5.)



1. Phonographic apparatus adapted for sound records on film, comprising a means including a large wheel directly supporting that portion of the film laterally adjacent to that portion of the sound record from which sound is reproduced, whereby said apparatus operates in a uniform manner, the second record portion being unsupported thereby.

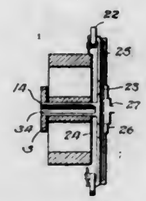
8. Phonographic apparatus adapted to operate with photographic sound records on film comprising a large wheel in cooperative relation with the film adjacent the operational point whereby said apparatus operates in a uniform manner, means comprising a yieldable idler for maintaining said film in cooperative relation with said wheel, whereby said film is firmly supported upon said wheel, and means independent of said wheel for pulling the film through the said apparatus.

1,825,440. SOUND RECORDING OR REPRODUCING APPARATUS. ALOYSIUS J. CAWLEY, Pittston, Pa., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Jan. 8, 1921, Serial No. 435,984. Divided and this application filed Sept. 16, 1929. Serial No. 393,073. 5 Claims. (Cl. 274—5.)



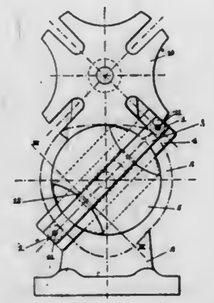
2. In an apparatus of the class described a wheel adapted to support a film having a sound record adjacent to the edge thereof with the sound record portion of the film extending beyond the edge of said wheel, said wheel being relatively large, sound reproducing means in cooperative relation to the sound record on said extending edge, and means for driving said wheel.

1,825,441. SOUND RECORDING PROCESS AND APPARATUS. ALOYSIUS J. CAWLEY, Pittston, Pa., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1921. Serial No. 435,984. 12 Claims. (Cl. 274—46.)



7. A combination consisting of a large wheel freely rotating on a hollow shaft having a film wound around its periphery, two hollow radial members rigidly attached to said hollow shaft and bearing sound recorders which contact alternately with said film, said hollow shaft and hollow radial members forming a sound passage from said recorders to external air; a gear wheel rigidly mounted on said shaft, a wheel coacting with said film, gear wheels coacting with said first gear wheel and said sprocket to cause said recorders and said film to move in opposite directions while in alternate contact with each other; mechanical means such as shoes and cams to alternately lift one of said recorders from said film.

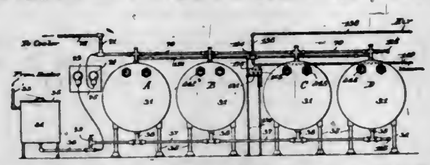
1,825,442. DRIVING DEVICE EMPLOYING MALTESE CROSS WHEELS. MARIUS CHAMBON, Paris, France, assignor to Etablissements L. Chambon, Paris, France. Filed Apr. 8, 1929, Serial No. 353,505, and in France Apr. 19, 1928. 3 Claims. (Cl. 74—41.)



1. Power transmitting device comprising a drive shaft, a driven shaft, a Geneva gear mounted on said driven shaft, a plate mounted on the drive shaft, a sliding member on said plate, a cam parallel with said plate, a roller mounted on said member and engaging with the cam, another roller mounted on said member, this latter roller engaging with the Geneva gear.

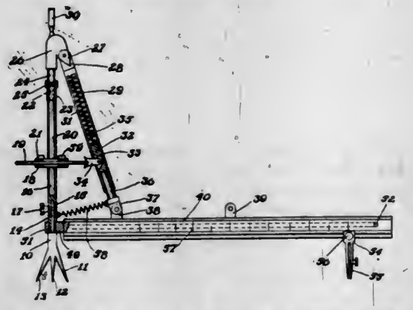
1,825,443. LIQUID TREATING APPARATUS. OTTO I. CHORMANN, Rochester, N. Y., and JENS N. JACOBSEN, Alameda, Calif., assignors to The Pfaudler Co., Rochester, N. Y., a Corporation of New York. Filed June 14, 1928. Serial No. 285,409. 21 Claims. (Cl. 137—21.)

1. In an apparatus for treating liquids, the combination with a plurality of tanks, of a conduit connected to a source of liquid supply, a branch leading from said conduit to each of said tanks, means for causing liquid to flow from said conduit into a selected tank through the branch



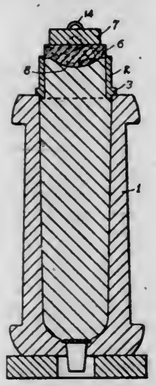
corresponding thereto, and means for causing liquid within said conduit to flow toward said branch from each side thereof.

1,825,444. ELLIPSOGRAPH. ALFONS DIETRICH, Glendale, Long Island, N. Y. Filed Sept 17, 1928. Serial No. 306,294. 7 Claims. (Cl. 33—27.)



7. A compass for scribing outlines of predetermined contour comprising a vertically positioned spindle, means for retaining said spindle in stationary position, a disc having the desired outline mounted rigid with said spindle, a head rotatably mounted on sad spindle adapted to be gripped by the fingers when in use, a compass beam extending from said spindle and rotatable therabout, an arm suspended from said head and movable therewith and bearing against said disc, an I-beam pivotally connected to said arm and slidable on said compass beam, said compass beam extending at right-angles to said spindle and comprising spaced-apart parallel arms thereon, said disc being adapted to guide the rail in extensible movement on said arms.

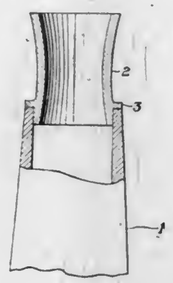
1,825,445. HOT TOP FOR INGOT MOLDS. MAXWELL GERSON DUMAS, Pittsburgh, Pa. Filed Dec, 5, 1929. Serial No. 411,756. 2 Claims. (Cl. 22—147.)



1. The combination with a hot-top, of a weight the outer dimensions of which is less than the inner dimensions of said hot-top, and a refractory plunger adapted to

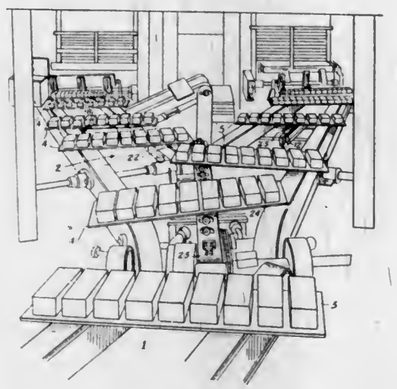
be interposed between said weight and the metal in the hot-top, said plunger having its bottom face of substantially convex-shape.

1,825,446. HOT TOP FOR INGOT MOLDS. MAXWELL GERSON DUMAS, Pittsburgh, Pa. Filed Aug. 23, 1930. Serial No. 477,269. 2 Claims. (Cl. 22—147.)



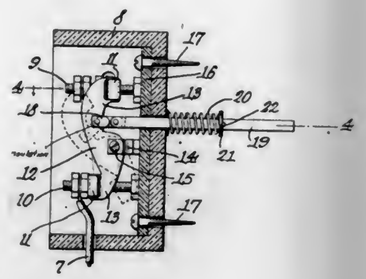
1. A hot top structure for feeding metal to ingots comprising a hollow body having its longitudinal wall section of substantially convexo-concave shape to produce a maximum columnar pressure in a given mass of molten metal.

1,825,447. PALLET CONVEYER. ARTHUR O. DUPUY, Beacon, N. Y., assignor to New York Brick Handling Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1929. Serial No. 403,274. 8 Claims. (Cl. 198—21.)



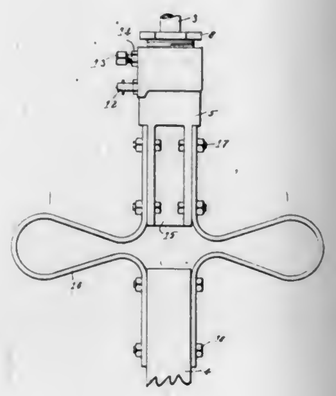
1. In a conveyer system comprising convergent branch conveyers delivering at a common point, means to prevent articles traveling on the branch conveyers reaching the common point at the same time, comprising a stop in one branch for inhibiting the progress of an article along said branch, and complementary means in both branches controlling the operation of said stop, upon the actuation at the same time of both said means by articles on the respective branches, the control means in the branch opposite that having the stop, having a greater controlling duration than the means in the other branch, and article actuated safety means in the branch having the stop for inhibiting the operation of said stop by said complementary control means, when an article is obstructing the normal movement of said stop.

1,825,448. LOCK ACTUATED ELECTRICAL SWITCH. MARSHALL WHARTON FASSMANN, Monroe, La. Filed Jan. 4, 1929. Serial No. 330,355. 1 Claim. (Cl. 200—162.)



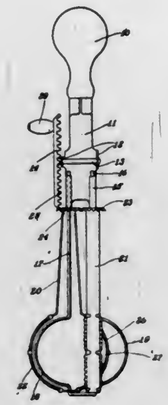
In a switch, a body portion, binding posts extending into the body portion, contact plates extending laterally from the binding posts, a switch blade pivotally mounted intermediate its ends, a link pivotally connected with the blade at a point in spaced relation with the pivot point of the blade, a spring pressed actuating rod extending through the body portion, a link connecting the actuating rod and switch blade to transmit movement of the rod to the blade, and yieldable means for normally urging the rod in one direction to complete a circuit between the blade and binding posts.

1,825,449. WINDMILL SUCKER ROD CONNECTION. FRANK J. HALLER, Freeport, Ill., assignor to Stover Manufacturing & Engine Co., Freeport, Ill., a Corporation of Illinois. Filed Jan. 9, 1929. Serial No. 331,372. 6 Claims. (Cl. 74—48.)



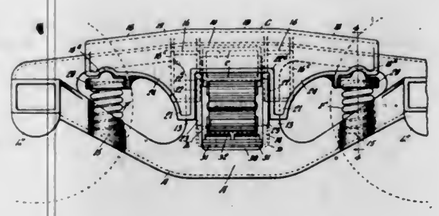
1. In a windmill, the combination of a plunger rod, a sucker rod arranged to be reciprocated thereby, and one or more parts providing a normally rigid connection between said rods, said parts being arranged to buckle in the event of inability of the sucker rod to move and said parts being of sufficient length to space the end of the one rod with respect to the adjoining end of the other a distance at least equivalent to the stroke of the plunger rod.

1,825,450. CULINARY AGITATOR. EDWIN HALSE, New York, N. Y. Filed Sept. 20, 1930. Serial No. 483,271. 2 Claims. (Cl. 259—1.)



1. In an agitator, a pair of semi-circular agitator loops, straps extending from said loops, pinions attached to said straps, arcuate bands resting on said agitator loops, ears on said bands clinched over to secure said bands to said loop, the longitudinal edges of said bands being scalloped.

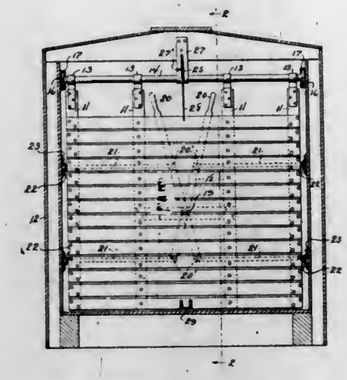
1,825,451. CAR TRUCK. KARL M. HAMILTON, Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed July 18, 1927. Serial No. 206,570. 21 Claims. (Cl. 105—190.)



21. In a truck, the combination of side frames having upper and lower chords, spaced column guides between said chords, transom, transom yokes having columns slidably engaging said guides, resilient members supported on the frame lower chord and supporting said yokes, a bolster, a spring plank, and supporting members between said bolster and spring plank and disposed to partially project beyond said frames between the transom columns.

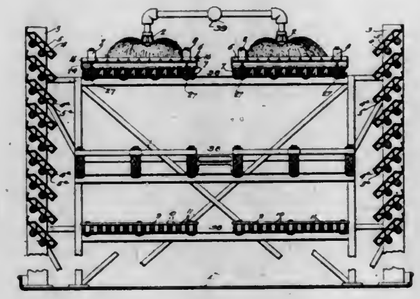
1,825,452. ADJUSTABLE CAR PARTITION. EDGAR P. HARRIS, Triplett, Mo. Filed Oct. 21, 1929. Serial No. 401,262. 1 Claim. (Cl. 105—376.)

In a car partition, elevated tracks adapted to be secured along the inside of a car, wheels movable along the tracks, a shaft connecting the wheels, a normally vertical partition swingingly supported by the shaft and adapted to be disposed transversely of the car, said partitions including spaced walls, levers pivotally mounted within the walls, horizontally slidable bolts connected



with the levers, and means adapted to be secured within the car for engagement by the levers to hold the partition against movement.

1,825,453. COOLING TOWER. JOSHUA BARTON HARRY, Philadelphia, Pa. Filed Dec. 22, 1928. Serial No. 327,945. 5 Claims. (Cl. 261—113.)

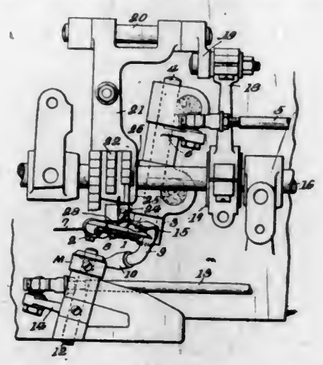


1. In a cooling tower system, the combination of a series of drip bars having their longitudinal axes parallel, each bar having a longitudinal trough on its upper surface, and a spacer of approximately channel section, extending transversely of the longitudinal axes of the bars; the outer flange of said spacer extending downwardly therefrom and abutting the ends of said bars, the inner flange of the spacer being cut away to form spacing lugs of contour substantially that of the section of the troughs, and fitting therein adjacent the said ends of the bars.

1,825,454. OVEREDGING SEWING MACHINE. ERNST HÄUSSLER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed June 26, 1929, Serial No. 373,754, and in Germany July 11, 1928. 6 Claims. (Cl. 112—162.)

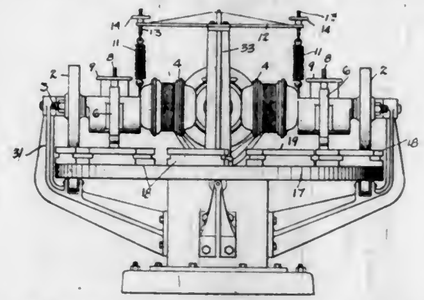
1. An overedging sewing machine including in combination a thread carrying needle, a thread carrying looper adapted to enter the needle thread loop, a loop carrying

implement adapted to engage the looper thread and form a loop therein and position the same for the needle to enter, and means for engaging the looper thread between the looper and the previously formed stitch for drawing



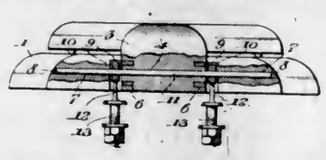
on said looper thread during the setting of the stitches so as to lay said looper thread substantially straight at the edge of the fabric section, thus forming loops in the needle thread on the upper and lower faces of the fabric which extend to the edge of the fabric section.

1,825,455. POLISHING AND GRINDING MACHINE. CHARLIE L. HAWES, Ashtabula, Ohio. Filed Apr. 10, 1926. Serial No. 101,098. 9 Claims. (Cl. 51—100.)



1. In a machine of the character described, an electric motor and a grinding wheel, a floating frame therefor, means for compensating the weight of said frame and contents, means for adjusting the grinding wheel relative to said frame, and travelling work carrying means cooperating with said grinding wheel.

1,825,456. HINGE FOR WATER CLOSET SEATS AND COVERS. WILLIAM AUGUSTUS HENN, Evansville, Ind., assignor to Peerless Tank and Seat Works, Inc., Evansville, Ind., a Corporation of Indiana. Filed Nov. 28, 1928. Serial No. 322,427. 2 Claims. (Cl. 4—236.)



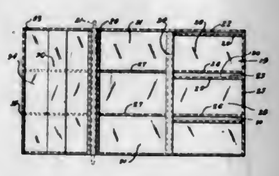
1. The combination with a water closet seat having a notch in its rear part and lateral holes flanking said notch, of a cover for said seat, said cover being provided with a depending angle hinge member received in said notch, posts for connecting the seat and cover to the bowl, said posts having their upper ends housed and concealed by the seat and lying immediately adjacent and flanking the angle hinge member, and a pintle whose ends are entered in the aforesaid holes, said pintle extending through and being secured to the upper ends of the posts and passing loosely through the depending angle hinge member aforesaid to permit the cover to turn on said pintle while said pintle is held by said posts.

1,825,457. SWING. HERBERT F. HOFFMAN, Memphis, Tenn. Filed Sept. 29, 1930. Serial No. 485,033. 4 Claims. (Cl. 155—65.)



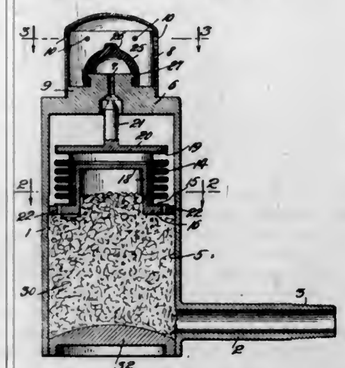
2. A swing comprising a rigid frame having suspending means, an upright pivoted on the frame, said upright having handle means and a seat rigidly secured thereto, and suspending means secured to the seat at a sufficient distance from said upright to provide space for a user between said last-named suspending means and said upright, substantially as set forth.

1,825,458. DISPLAY HOLDER FOR CARDS. WALTER C. HOFFMAN, Maywood, Ill. Filed Apr. 26, 1929. Serial No. 358,327. 2 Claims. (Cl. 40—102.)



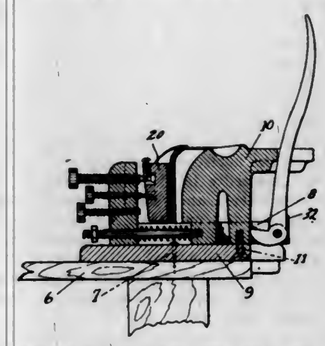
1. A display device for greeting cards of the book type comprising a case including upper and lower wall members having slots therein and pins slidably mounted in said slots, a plurality of card supporting frames arranged like the leaves of a book and each mounted on one of said pins and each including parallel sheets of transparent material providing pockets on one face of each frame with said pockets opening toward said pins, a transparent sheet extended across the other face of each frame, and a transparent strip extended from top to bottom across each of said last named sheets whereby when one leaf of said greeting card is inserted under said strip and the other leaf thereof inserted in a corresponding pocket on the adjacent frame the entire four pages of the card will be exposed to view.

1,825,459. AIR RELIEF VALVE FOR HEATING SYSTEMS. SVEN A. JOHNSON, Brooklyn, N. Y., and FRANK C. RISSELT, Tenafly, N. J. Filed Jan. 14, 1930. Serial No. 420,685. 5 Claims. (Cl. 236—64.)



1. An air relief valve device for radiators of heating systems comprising a suitable casing provided with an intake opening and a venting passage, a thermal responsive valve adapted for automatically closing the venting passage consisting of a supporting member within the casing, an expansible bellows carried by the supporting member and provided with a valve positioned to close the venting passage, said supporting member being formed with a by-pass opening for the passage of the fluid medium to the venting passage and having a chamber forming portion extending within the bellows and open to receive the heating medium to provide an enlarged heat radiating surface and an expansible fluid contained within the chamber formed by the bellows and the supporting member, substantially as described.

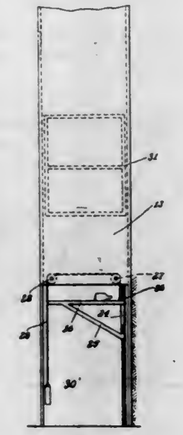
1,825,460. ARCH SUPPORT ADJUSTER. MAX KAPPNER, Cincinnati, Ohio. Filed July 3, 1929. Serial No. 375,835. 12 Claims. (Cl. 153—48.)



1. In a device of the class described, the combination of a supporting base, an anvil table secured to said base, a vise member slidable between a portion of said anvil table and said base and guided thereon, means for moving said vise member, a pressure block secured to said member and a plurality of means for changing the position of said block in relation to said member.

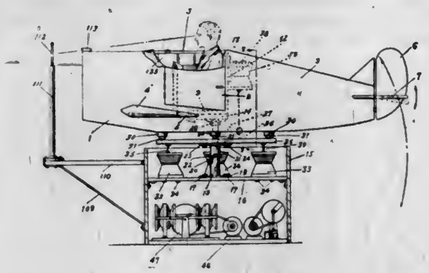
1,825,461. DUMB WAITER GUARD CARRIAGE. ANDREAS LANG, Astoria, N. Y. Filed Mar. 5, 1930. Serial No. 438,197. 1 Claim. (Cl. 187—1.)

In a vertical elevator having I-rails provided with opposing channels, a guard carriage comprising a skeleton frame, said frame having an aperture, a resilient lattice work covering said aperture including springs, guides integral with said frame registering slidably in the channels of said rails, said guides comprising ledges entering into said channels, a weight suspended from a pulley, and



a rope passing around said pulley and being secured to said carriage, the latticed members of said aperture covering having their ends secured to the springs, the springs being secured to said frame.

1,825,462. COMBINATION TRAINING DEVICE FOR STUDENT AVIATORS AND ENTERTAINMENT APPARATUS. EDWIN A. LINK, Jr., Binghamton, N. Y. Filed Mar. 12, 1930. Serial No. 435,151. 25 Claims. (Cl. 35—12)



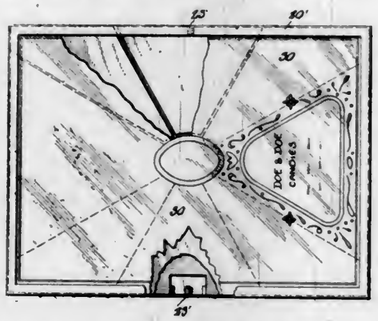
1. An apparatus for teaching the art of aeroplaning, comprising a stationary support, a frame and seat pivotally mounted thereon for tilting with respect to said support, and fluid actuated means operable from said seat for controlling the position of said frame and seat, on the support.

1,825,463. METHOD OF RECLAIMING STAINLESS STEEL SCRAP. LEWIS B. LINDEMUTH, New York, N. Y. Filed July 30, 1930. Serial No. 471,893. 3 Claims. (Cl. 75—22.5.)

3. The method of reclaiming stainless steel scrap, which comprises melting the scrap in an electric furnace, tapping the melt into a ladle, adding thereto from 1% to 2% of an exothermic reducing agent, transferring the molten mass to a Bessemer converter, blowing the same until the carbon content is reduced below .07% and approximately 8% of the chromium is oxidized, adding to the molten blown product silicon to effect reduction of approximately 2% of the chromium in the slag and further adding thereto ferro-chromium to supply approximately

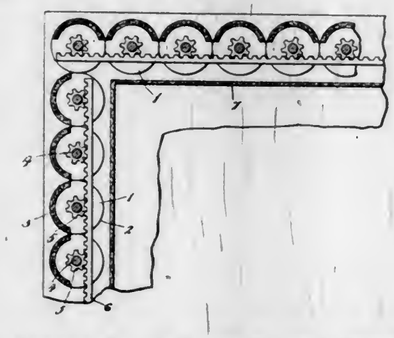
3% of chromium, melting ferro-chromium by the alumino-thermic reaction in a separate crucible, and adding an amount of the melt to the aforesaid blown product to bring the chromium content to the desired total percentage of the alloy.

1,825,464. DISPLAY TABLE TOP. PETER LOPEZ, West Tampa, Fla. Filed Apr. 29, 1929. Serial No. 358,084. 1 Claim. (Cl. 45—31.)



1. In a device of the class described, a supporting element having a plain surface, a transparent table top to be mounted above the supporting element, a flanged band surrounding the edge portions of the supporting element and transparent table top, the end portions of the band being inwardly turned, adjustable securing means for retaining the inturned ends, the element first named being cut away for receiving said ends and securing means, and the top being adapted to receive display matter on the underside thereof, and detachable display sheets for insertion between the supporting element and transparent top.

1,825,465. SOUND-CONTROLLING MEANS. MARY J. MACDONALD, Kansas City, Mo. Filed July 10, 1929. Serial No. 377,228. 3 Claims. (Cl. 181—30.)

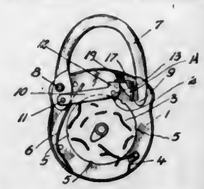


1. Apparatus for the purpose set forth comprising a plurality of rotatably mounted elements each having a portion of its surface constituting a sound-reflecting member and the remaining portion of its surface covered with sound-deadening material, and means for simultaneously rotating said elements.

1,825,466. PRIMING MIXTURE. JOSEPH D. MCNUTT, New Haven, Conn., assignor to Winchester Repeating Arms Company, New Haven, Conn., a Corporation of Delaware. Filed Oct. 28, 1930. Serial No. 491,812. 12 Claims. (Cl. 52—3.)

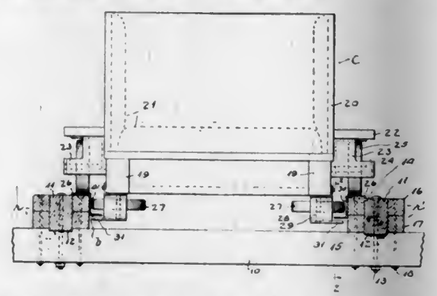
1. A priming mixture comprising mercury fulminate, an oxidizing agent having a non-corrosive residue, a fuel and witherite.

1,825,467. KEYLESS LOCK. EDWARD M. MILLER, Kent, Ohio, assignor to J. B. Miller Keyless Lock Company, Kent, Ohio, a Corporation. Filed July 12, 1929. Serial No. 377,812. 5 Claims. (Cl. 70—112.)



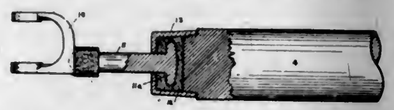
1. In a lock of the class described, the combination of a casing, a shackle pivoted thereto near one of its ends, the other end being movable in and out of the casing, means for locking the movable end of the shackle in the casing, and mechanism for moving said locking means to unlocked position, said mechanism including an arm pivoted to the shackle at a point removed from the pivotal mounting of the shackle on the casing, said arm being operable upon movement of the shackle to allow the locking means to move to locked position.

1,825,468. PLEASURE RAILWAY STRUCTURE. JOHN A. MILLER, Homewood, Ill. Filed May 9, 1929. Serial No. 361,616. 1 Claim. (Cl. 104—247.)



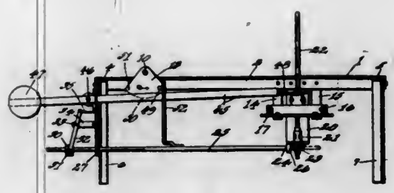
In a coaster apparatus of the character described, the combination of track beams, a car having supporting wheels for traveling along the tops of said track beams, horizontally disposed wheels carried by said car for preventing the lateral movement of said car on said track beams, an angle bar rail being fixed along the inner side of each of said track beams, the vertically disposed portions of said rails constituting a track for said horizontally disposed wheels, the horizontally disposed portions of said rails extending inwardly to be disposed below said horizontally disposed wheels, and retainer elements detachably secured to said car and extending below and being normally spaced from the horizontally disposed portions of said rails, said retainer elements being adapted for engaging the underside of said horizontally disposed rail portions for limiting the vertical displacement of said car from said track beams.

1,825,469. SWITCH THROWING DEVICE. JOHN L. MILTON, Louisville, Ky., assignor to Cheatham Electric Switching Device Co., Louisville, Ky. Filed Feb. 4, 1929. Serial No. 337,423. 11 Claims. (Cl. 246—225.)



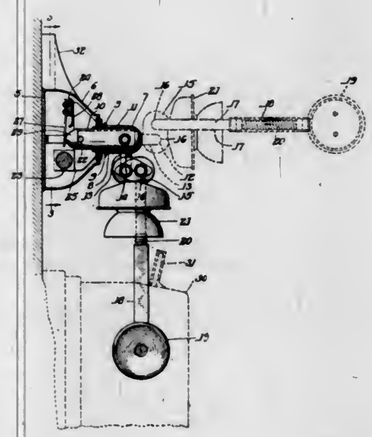
1. In an electrically operated switch throwing device comprising a solenoid provided with an elastic cushion plunger, said elastic cushion being attached to said plunger.

1,825,470. SEED CELLING MACHINE. JOHN MUSSELMAN, Orrtanna, Pa. Filed Nov. 12, 1930. Serial No. 495,070. 7 Claims. (Cl. 146—40.)



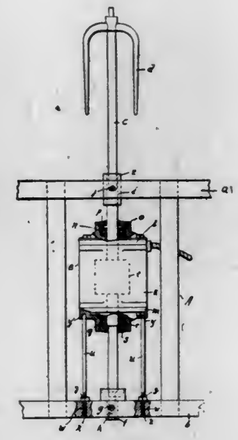
2. In a seed celling machine, the combination of a stationary ring, knives arranged radially in the said ring, a shaft mounted centrally in said ring and adapted to rotate, a plurality of knives projecting radially from said shaft above said stationary knives, said shaft being adapted to receive a cored apple thereon, means for pushing the apple down along the said shaft and causing the knives on the shaft to slit through the apple to the zone of the seed cells while the shaft and knives are stationary, means for then rotating the shaft and knives to remove the seed cells, means for thereafter holding the shaft and knives stationary and means to push the apple down along the shaft and knives thereon and through the first named set of stationary knives.

1,825,471. TELEPHONE. KATHERINE NICHOLS and RICHARD BETTIEN, Chicago, Ill; said Bettien assignor to said Nichols. Filed Apr. 17, 1931. Serial No. 530,867. 4 Claims. (Cl. 179—149.)



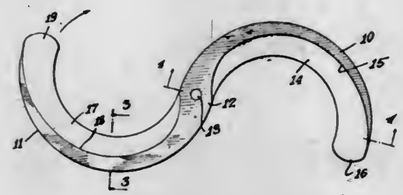
1. In a device of the class described, a unit comprising a pair of receivers, a transmitter operatively connected to the receivers, means for pivotally connecting said unit to a telephone housing, and manually operated means independent of the pivotal movement of the unit for controlling the signal circuit of the telephone system.

1,825,472. MEANS FOR DRIVING SPINDLES IN TEXTILE SPINNING MACHINES. JOSEPH BERLINERBLAU, Warsaw, Poland. Filed Dec. 14, 1927, Serial No. 240,050, and in Great Britain Dec. 15, 1926. 1 Claim. (Cl. 118—43.)



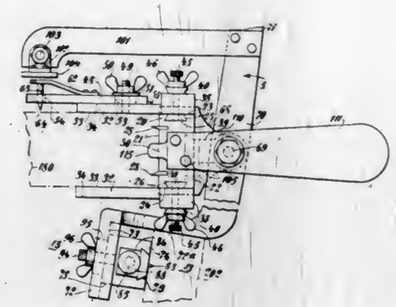
In combination, a spinning machine including a frame provided with top and bottom rails, spindles, electric motors driving said spindles, means supporting the motors on the bottom rail, means on said bottom rail for taking the axial thrust of the spindles, and bearing means for said spindles carried by the top rail, said bearing means having a tapered bore and the adjacent portion of the spindle being correspondingly shaped to permit compensation for wear by adjustment of the bearing member.

1,825,473. PROPELLER. GEORGE PEMSL, Dubuque, Iowa. Filed Sept. 17, 1930. Serial No. 482,408. 1 Claim. (Cl. 170—159.)



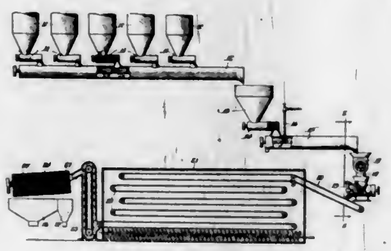
An aerial propeller comprising a substantially S-shaped body of equal width throughout, a perforated median boss, a pair of blades extending torsionally to both sides of said boss, the inner face of one of the blades fluted to present an air engaging face and shoulder decreasing in width from the boss towards the end of the blade, the outer face of the other blade fluted to present an air engaging shoulder facing in a direction opposite to the inner face of the first-named blade, and comparatively wide thrust-surfaces formed at the ends of the blades for gradually forcing the air against the shoulders towards the center of the propeller.

1,825,474. DOORLOCK MARKER. JOE PERKIN, Bayonne, N. J. Filed Nov. 11, 1927. Serial No. 232,588. 11 Claims. (Cl. 33—107.)



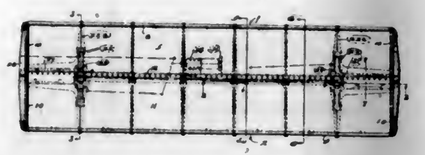
9. In a door lock marker the combination of a supporting block having a bearing face, means extending from the block to maintain it in operative position on a door with its bearing face bearing on the edge face of the swinging end of the door operated upon, a journal bracket extending from the face of the block opposite its bearing face, a main operating handle pivoted to said journal bracket and marking means supported on said handle, said marking means being adapted to impress marks on the jam of the door upon the swinging of said handle.

1,825,475. PREPARATION OF MINERAL FEEDS. GROVER F. PFEIFFER, Quincy, Ill., assignor to Moorman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1928. Serial No. 253,573. 10 Claims. (Cl. 99—2.)



10. A device for forming a mixture of moistened mineral feed ingredients into granules, comprising an apertured die plate arranged in a substantially horizontal plane, means for forcing the mixture downwardly through the apertures in the plate under pressure, means for limiting the length of the granules extruded through the apertures, and means beneath the plate in closely spaced relation to the same for receiving the granules into which the mixture is shaped as it passes through the apertures.

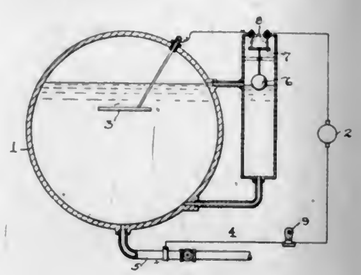
1,825,476. RAILWAY CAR STRUCTURE. HARRY M. PFLAGER, St. Louis, Mo., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Aug. 11, 1930. Serial No. 474,561. 23 Claims. (Cl. 105—406.)



1. A railway car structure comprising a longitudinal half section of a car floor and a center sill integral with said floors.

2. A railway car structure comprising a longitudinal half section of a car floor and a center sill integral with said floor and provided with elements for engaging and supporting a complementary car floor unit.

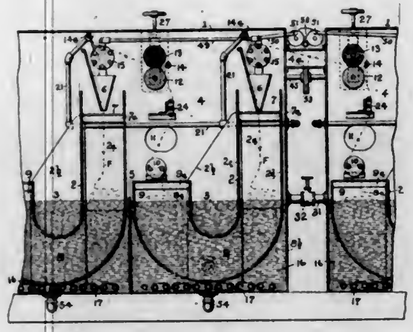
1,825,477. SCALE PREVENTION IN BOILERS OR THE LIKE. WILLIAM M. REICHART, Cleveland, Ohio, assignor, by direct and mesne assignments, to The Effenare Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 14, 1926. Serial No. 129,118. 13 Claims. (Cl. 204—1.)



1. A method of preventing scale-formation in boilers or the like, which comprises supplying an electric current to a circuit including such boiler or the like and the water therein and an electrode in relation to the water, and intermittently interrupting such current by surface fluctations in the water.

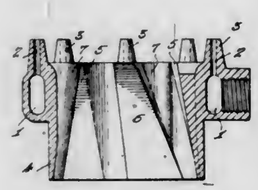
1,825,478. METHOD AND MEANS FOR TREATING TEXTILE FABRICS. WILLIAM S. ROWLEY and HARRY W. BUTTERWORTH, Jr., Philadelphia, Pa., assignors to H. W. Butterworth & Sons Company, a Corporation of Pennsylvania. Filed Apr. 12, 1926. Serial No. 101,245. 9 Claims. (Cl. 8—19.)

4. In an apparatus of the character stated, the combination of a chamber having at its lower part a tank structure and a plurality of curved passages respectively extending down into the tank structure and each passage having its end opening upwardly, separate means for feeding a textile material downward and into the receiving open end of the respective curved passages comprising a reel over which the fabric is fed and a swinging folder guide for laying the fabric in a zigzag form and whereby it is piled within the curved passage and by gravity caused to move through the curved passages, and separate means for withdrawing the piled fabric from the delivering open ends of the respective curved passages comprising squeeze



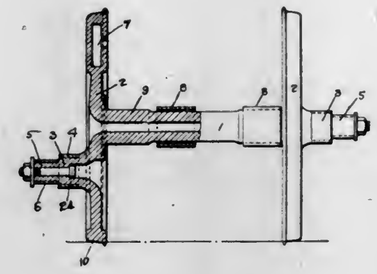
rolls and means acting upon the fabric between the open end of the passenger and the squeeze rolls to centralize it, and wherein further, the curved passages are respectively provided on each side of their receiving ends with adjustable side plates extending between the folder guide and the curved passages in the tank structure for guiding the fabric in a central position between the sides of the curved passages.

1,825,479. EXHAUST NOZZLE. CHARLES SEYMOUR, Little Rock, Ark. Filed Nov. 9, 1929. Serial No. 406,032. 1 Claim. (Cl. 230—96.)



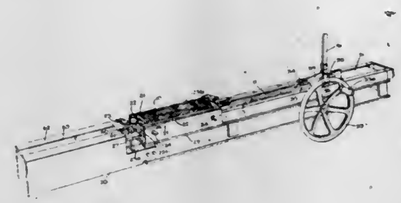
An exhaust nozzle arranged in a smokebox of a locomotive below the petticoat pipe of the stack which includes a body that is substantially circular in cross section, which has its upper portion provided wit ha blower passage, vertically arranged outlet passages communicating with the blower passages and conical members surrounding said openings, said nozzle having its bore rifled longitudinally to provide the same with ribs which are substantially equi-distantly spaced, the portions of the ribs at the upper end of the body being projected a material distance into the bore thereof, and the faces of the said ribs gradually decreasing in both width and thickness to the bottom of the nozzle and merging into feather edges at the bottom of the nozzle and providing angle passages therebetween and the said passages being gradually increased in width from the lower to the upper end of the nozzle.

1,825,480. LOCOMOTIVE DRIVING WHEEL STRUCTURE. WILLIAM M. SHEEHAN, Merion, Pa., and HARRY M. PFLAGER, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 510,826. 9 Claims. (Cl. 295—2.)



1. A railway locomotive driving wheel center with axle, crank pin, counter balance, and tire integral therewith.

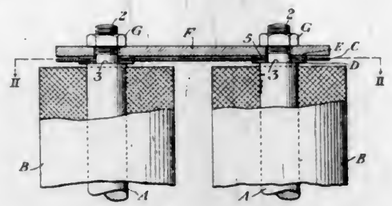
1,825,481. METHOD OF AND MEANS FOR ASSEMBLING RESISTANCE UNITS. ROY C. SHINDLEDECKER, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Oct. 23, 1929. Serial No. 401,934. 10 Claims. (Cl. 29—84.)



1. An assembling machine for a resistance unit which has a coiled resistance element, electrical insulators upon which the resistance element is mounted and a member for supporting said insulators, said assembling machine comprising means for inserting said insulators within the coil formed by said resistance element, means for moving said insulators into their respective supporting positions with respect to said coiled resistance element and means for positioning said supporting member with respect to said insulators so that said insulators are secured in their respective supporting positions.

8. The method of assembling a resistance unit which has a coiled resistance element, electrical insulators upon which the resistance element is mounted and a member for supporting said insulators which comprises inserting said insulators within the coil formed by said resistance element, then moving said insulators outwardly into assembled position with respect to said coil and then inserting said supporting member within said coil in assembled position with respect to said insulators so that the insulators are secured in their respective supporting positions with the resistance element.

1,825,482. ELECTROMAGNET. PAUL P. SOSINSKI, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1930. Serial No. 473,479. 3 Claims. (Cl. 175—21.)



1. An electromagnet comprising two spaced parallel magnetizable cores, each having a reduced end forming a shoulder, a magnetizable back strap having two holes larger than and surrounding the reduced ends of the cores, a variable number of non-magnetizable washers located between said back strap and each shoulder, an auxiliary non-magnetizable back strap having holes to receive said reduced core ends and lying on the outside of said magnetizable back strap, and means for clamping said washers and back straps against the shoulders on said cores, whereby the reluctance of the magnetic circuit may be varied by changing the number of said washers and also by shifting said magnetizable back strap laterally with respect to the cores.

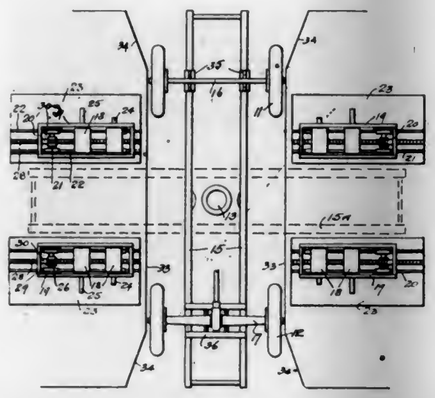
1,825,483. PUMP PLUNGER. FRANK E. SPRAGUE, Bakersfield, Calif. Filed Aug. 6, 1930. Serial No. 473,356. 7 Claims. (Cl. 74—109.)



1. In a pump plunger, a core adapted to be reciprocated within a pump barrel, and a sliding packer carried by said core in sliding engagement with said barrel and comprising a cup-shaped member of substantially resilient metal having a relatively thin cylindrical side wall divided into spiral strips, each of said spiral strips extending substantially throughout the complete circumference of said packer.

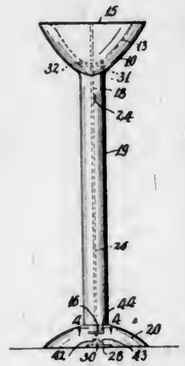
1,825,484. BRAKE TESTING MEANS AND METHOD FOR AUTOMOBILES. LOUIS C. STUKENBORG, Memphis, Tenn. Filed Aug. 19, 1929. Serial No. 386,842. 8 Claims. (Cl. 73—51.)

4. In means for supporting an auto for brake testing: units, each comprising a frame, parallel rollers spaced apart journalled in said frame, shafts journalled in said frame, and casters mounted on and secured to said shafts, a gear secured on one end of said shafts, a latch engageable with said gear to lock same against rotation, and means hinged securing said latch to said frame; trackways each supporting the casters of a unit, and racks each disposed parallel with one of said tracks, each meshing with one of said gears, whereby each of said units may be positioned along its trackway and secured in position by latching its gear.



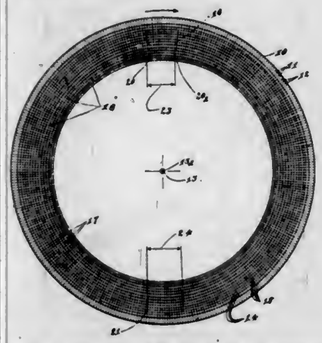
5. In means for supporting an automobile for brake testing, four elongated pedestals symmetrically disposed and permanently located, laterally spaced in pairs to conform to the wheel tread spacing of an automobile and longitudinally spaced in pairs to permit the passage of an automobile therebetween; wheel supporting units adjustably disposed one on each of said pedestals, said units being positionable longitudinally, along said pedestals; and means, rotatable about a vertical axis and adapted to be elevated for raising an automobile, positioned transversely between said pairs of pedestals, above the level of said pedestals and wheel supporting units thereon; whereby said automobile may be raised, rotated to position the wheels thereof over said pedestals, said wheel supporting unit may be positioned under said wheels, and said wheels be lowered thereon to support the automobile for brake testing.

1,825,485. SANITARY CUSPIDOR. SAMUEL TAMNY, New York, N. Y. Filed Sept. 4, 1930. Serial No. 479,613. 6 Claims. (Cl. 4—272.)



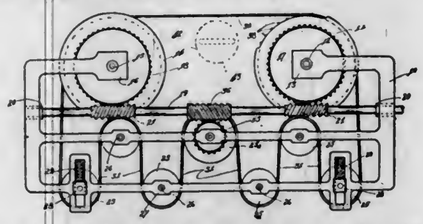
1. A sanitary cuspidor, comprising a casing with a top having an opening for supporting a cup-like vessel, a cup-like vessel in said opening and having a flange resting on the marginal edge of said casing top, a neck and base connected with said casing for supporting it, a cover pivotally mounted on said casing for covering said cup-like vessel, means including a foot pedal for raising said cover upon depression of the foot pedal through a predetermined distance, means for slightly raising said cup-like vessel so that it may be gripped beneath the flange for removal from said casing and including a depressible peg for accomplishing the raising and in the path of motion of an element of said means for raising said cover, and foot controlled means to allow further depression of said foot pedal for depressing said peg.

1,825,486. SCANNING DISK. ALFRED ORDE TATE, Toronto, Ontario, Canada. Filed Dec. 29, 1928. Serial No. 329,084. 5 Claims. (Cl. 178—6.)



1. A scanning disk having a plurality of apertures therein arranged in reverse spirals, each of said apertures being bounded by arcs of concentric circles and by radii of the disk.

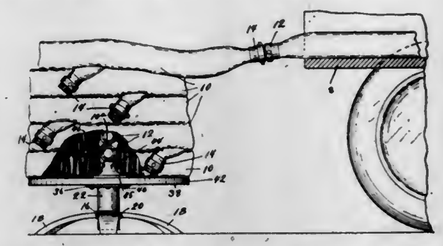
1,825,487. SCANNING DEVICE. ALFRED ORDE TATE, Toronto, Ontario, Canada. Filed May 22, 1929. Serial No. 365,031. 5 Claims. (Cl. 178—6.)



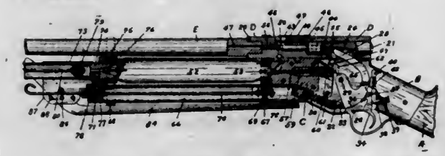
4. A scanning device for use in the art of television comprising a pair of drums suitably journalled and spaced, a plurality of pulleys journalled at varying distances from said drums, an apertured belt trained around said drums and pulleys and reducing the reach of the belt on the pulley to within a distance approximately even with the stretch around said drums, and means for driving said belt.

1,825,488. METHOD OF AND APPARATUS FOR HANDLING FIRE HOSE. WILLIAM H. TOBIN, Boston, Mass. Filed Apr. 5, 1929. Serial No. 352,867. 10 Claims. (Cl. 242—86.)

1. The method of transferring fire hose from separate rolls of hose into the body of a fire truck wherein the hose is differently arranged and the lengths are connected together by the use of a rotatable horizontal support, the convolutions of each roll being in a common plane with one convolution against and in contact with the next adjacent convolution and with one end innermost and the other end outermost, which method consists in stacking the separate rolls of hose horizontally in superimposed order on the rotatable support, withdrawing hose from the uppermost roll on said support by rotating the stack and moving the hose into the body of the truck, connecting the free end of the length of hose in the truck with the outer end of the hose of next lowermost roll in the stack and continuing as aforesaid until all of the hose on the support has been moved into the truck.



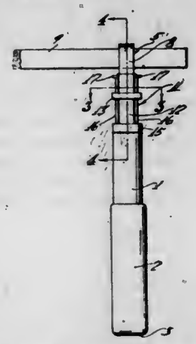
1,825,489. REPEATING AIR GUN. HANS T. TOSTENSON, Nicollet, Minn. Filed Mar. 10, 1930. Serial No. 434,585. 13 Claims. (Cl. 124—8.)



1. The combination with an air gun, of a compressed air chamber communicating with the gun bore, a primary pump and a secondary pump, having oppositely acting pistons, for supplying the air chamber, a lever, having a link connection with the gun and separate pivot connections with the two pump pistons, for actuating the latter.

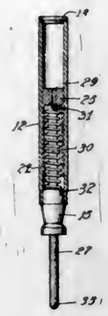
13. In an air gun the combination of a cocking piece slidable in a breach block, and operative, upon a full movement, to load the gun, a hammer pivotally secured under the cocking piece and having an arm extending up for engagement with the piece, a hammer actuated valve for controlling an air passage to the gun bore, and a trigger for holding and releasing the hammer to effect an opening of the valve.

1,825,490. CIGARETTE HOLDER. MARIA V. TREMBLAY, Willimantic, Conn. Filed Oct. 24, 1930. Serial No. 490,858. 3 Claims. (Cl. 131—51.)



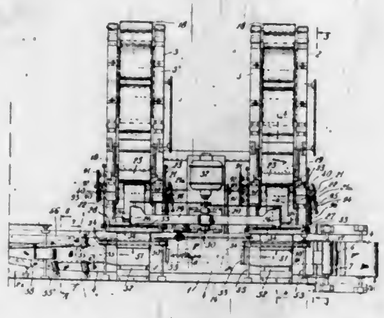
1. In a cigarette holder, a handle, cigarette gripping means on one end of the handle, the said cigarette gripping means comprising a U-shaped member including spaced normally converging spring jaws, and means upon the handle for ejecting a cigarette from the said gripping means.

1,825,491. KEY PRESSURE GAUGE. FRANK E. WALTERS, Chicago, Ill. Filed May 27, 1929. Serial No. 366,316. 1 Claim. (Cl. 265—1.)



In a key pressure gauge, the combination of a barrel having a window of transparent material in its wall near one end; a bushing in the other end, having a guide hole; a cylinder slidably fitting the inside of the barrel having a head with an attachment hole and bearing calibration marks visible through the window; a stem extending from the outside through the guide hole into the barrel, having a reduced end in the attachment hole split by a notch and bent over to secure it to the cylinder head; and a coil spring inside the cylinder and surrounding the stem, having one end in the notch and the other end secured to the bushing.

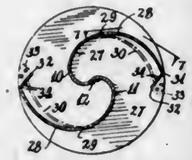
1,825,492. MACHINE FOR MAKING ABSORBENT PADS. KURT WANDEL, New York, N. Y., assignor to National Cellulose Corporation, a Corporation of New York. Filed June 7, 1929. Serial No. 369,159. 8 Claims. (Cl. 223—15.)



1. In a machine of the class described, the combination of means for continuously feeding a web of gauze, means for depositing pads of absorbent material at intervals on said gauze, a second pad-depositing mechanism for depositing pads in the spaces between the first deposited pads, and means for folding said gauze over said pads.

1,825,493. ROTARY WING FOR AEROPLANES. FREDERICK WANDER, Jr., New York, N. Y. Filed Aug. 26, 1930. Serial No. 477,862. 6 Claims. (Cl. 244—14.)

1. A rotary wing for airplanes, comprising a curved longitudinal member of uniform transverse section throughout its length, said transverse section being substantially in the form of a pair of similar spirals starting at a common center and directed away from the center at 180° from each other and each spiral being substantially three-quarters of a turn, a pair of discs attached on the ends of said longitudinal member with their centers in line with said common point, means for supporting said discs and longitudinal member for rotating about said common



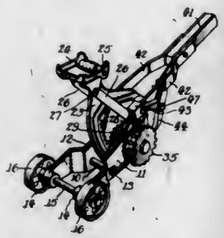
point constituting the axis of said wing, and means for adjusting the positions of the outer halves of said spirals for charging the action of said wing.

1,825,494. HAIR TRIMMING ATTACHMENT FOR SAFETY RAZORS. HARRY C. WARNER, Kansas City, Mo. Filed July 13, 1931. Serial No. 550,381. 9 Claims. (Cl. 30—12.)



1. The combination with a safety razor having a cutting blade interposed between an upper and a lower plate, of a hair trimming attachment including a pivotally mounted guide at each end respectively of said blade, the cutting edge of said blade moving between said guides as the attachment is operated.

1,825,495. JACK. GAILARD E. WEAVER and HARRY C. BUFFINGTON, Springfield, Ill., assignors to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed June 3, 1927. Serial No. 196,184. 19 Claims. (Cl. 254—6.)

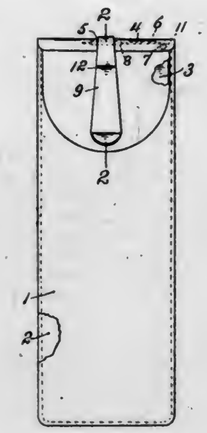


1. In a jack, the combination of a supporting-frame, a load lifting and lowering arm fulcrumed on said frame, a handle rockable on said frame in substantially the same vertical plane of movement of said arm, and means connecting said handle and arm selectively causing the latter to rock upwardly or downwardly upon substantially the same downward movement of said handle.

1,825,496. BILLFOLD. VIRGIL E. WEEKS, Kansas City, Mo. Filed Sept. 3, 1929. Serial No. 390,190. 2 Claims. (Cl. 150—38.)

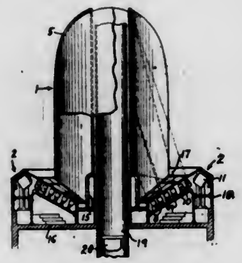
1. In a device of the kind described, a strip of flexible material, a clip on the inner side and adjacent to one end of said strip having a free end portion adapted to extend over and to press against said strip, a channel member embracing opposite sides of said strip at one end thereof and having a notch, the other end of said clip extending into said notch, and a spring in said channel

member having one end engaged by and held from turning by said channel member and having a portion extending



across said notch and fastened to and adapted to swing with said clip and normally forcing said clip at the free end of the latter toward said strip.

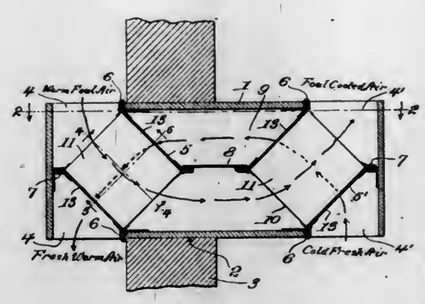
1,825,497. LIGHT PROJECTION DISPLAY APPARATUS. THOMAS WILFRED, Forest Hills, N. Y. Filed June 1, 1929. Serial No. 367,803. 3 Claims. (Cl. 240—9.)



1. Light projection display apparatus comprising an upright polysided screen consisting of a plurality of upright differently facing concave sides, meeting in thin edges, and a light-projecting means spaced outwardly in front of each of said concave sides, the several projecting means adapted to project cooperatively upon the respective adjacent concave sides to afford combined effects.

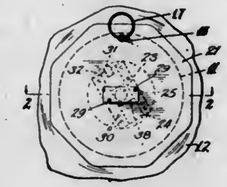
1,825,498. UNIT FOR HEATING, COOLING, AND VENTILATING SYSTEM. SELMER F. WOGAN, Montevideo, Minn. Filed Apr. 22, 1929. Serial No. 357,308. 3 Claims. (Cl. 257—245.)

1. A unit for heating, cooling and ventilating systems comprising a casing having upper and lower alined openings in each end thereof, a conduit diagonally supported within the casing adjacent each end and partitions dividing each conduit into two series of passages, one series being arranged at right angles to the other, whereby one



series communicates with the upper opening, and the other series communicates with the lower opening of the casing for the purpose specified.

1,825,499. NONSLIPPING STOPPER FOR SINKS AND THE LIKE. FRANK ZORN, New York, N. Y. Filed Nov. 2, 1929. Serial No. 404,231. 2 Claims. (Cl. 4—293.)

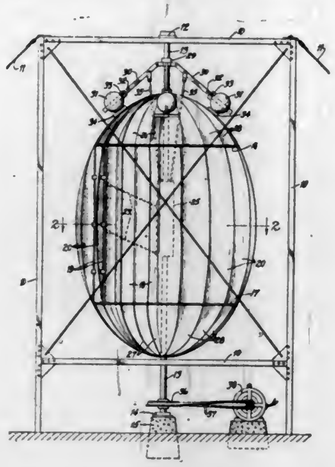


1. A stopper for sinks and the like, comprising a flat flexible soft rubber member of a size adapted to cover the water outlet strainer of a sink and provided with gripping portions for convenient handling, a peg portion projecting from the bottom side of the flat member and adapted to engage openings in said strainer for maintaining the position of the flat member upon the strainer, and means for adjusting the position of the peg portion adapting it to engage in the opening in said strainer so that the center of the flat member coincides with the center of the strainer irrespective of the location of the opening in the strainer.

1,825,500. WINDMILL. WILLIAM C. BANKER, Chapin, Iowa. Filed Feb. 28, 1930. Serial No. 432,021. 3 Claims. (Cl. 170—33.)

1. A windmill comprising a shaft, a drum mounted axially thereon, a set of vanes rigidly mounted on the top and bottom of said drum and located at an angle to the radial direction, vanes pivoted on axes parallel to the shaft on the exterior of the drum intermediate the two sets of rigid vanes, and adapted to be moved into positions at an angle to the radial direction so that they form pockets

with the surface of the drum, a governor mounted on said shaft and comprising a member slidable on the shaft within the drum in accordance with variations of speed of

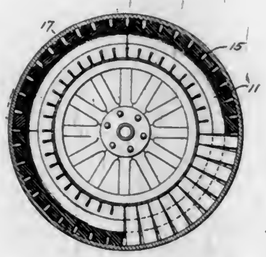


rotation, and links connecting said member to said vanes whereby the resistance of the same is lessened when excessive speeds are attained.

1,825,501. METHOD OF FLOATING ORES. GEORGE BARSKY, New York, N. Y., and GODFREY B. WALKER, Roselle, N. Y., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Dec. 13, 1929. Serial No. 413,931. 6 Claims. (Cl. 209—166.)

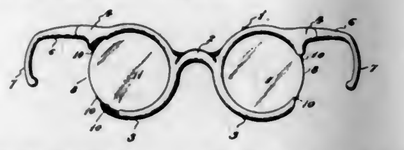
1. A method of recovering minerals from ores which comprises subjecting said ores to a froth flotation operation in the presence of an imino thiodiazole as a promoter.

1,825,502. RESILIENT TIRE. EDUARDO DE A. BRAGA, Sao Paulo, Brazil. Filed Apr. 24, 1929. Serial No. 357,766. 1 Claim. (Cl. 152—1.)



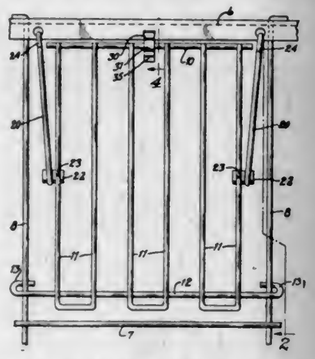
A tire core comprising a plurality of cylindrical shaped sections arranged in endwise relation within a tire and having longitudinally extending bores of the same diameter throughout the lengths of the sections to provide the sections of thicknesses of material to insure proper riding quality of the tire, each of said sections having longitudinally spaced circumferential grooves providing spaced ribs and the walls of said grooves relatively inclined to render the ribs substantially wedge-shaped when removed from the tire, said sections are positioned in the tire with the narrowest portions of the grooves disposed adjacent the tread of the tire and said sections slit longitudinally to the bores to increase the flexibility of said sections.

1,825,503. EYEGLASS FRAME. THOMAS H. CAROW, San Antonio, Tex., assignor of one-half to Russell J. Kieffer, San Antonio, Tex. Filed May 17, 1929. Serial No. 363,864. 1 Claim. (Cl. 88—47.)



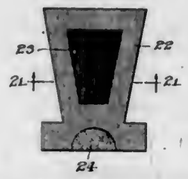
In a pair of spectacles, a nose bride bar, frames for the lenses having the outer end portions cut away remote from the bridge bar to provide gaps which permit unobstructed lateral vision, lenses in said frames, extensions projecting from the frames near the upper ends of the gaps, temples hinged to the extensions, and curved leaf springs for retaining the lenses, said springs being secured to the inner edges of the ends of the frame above and below the gaps and engaging the edges of the lenses.

1,825,504. POULTRY COOP GATE LATCH. ERNEST R. CARR, Clinton, Iowa, assignor to The Collis Company, Clinton, Iowa, a Corporation of Iowa. Filed Nov. 1, 1930. Serial No. 492,700. 5 Claims. (Cl. 119—17.)



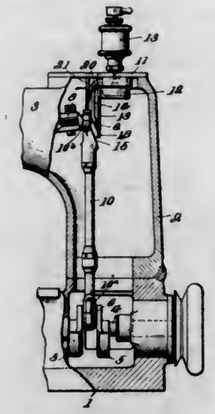
1. In combination, a frame in which is movably mounted a gate, and a latch swingingly depended from the frame in a position to engage with either of two spaced parts of the gate, the latch comprising a wire bent to provide two loops, one upper and rearwardly facing and the other lower and forwardly facing, the wire adjacent each loop being inclined with respect to the direction of movement of the gate part engageable therewith to be deflected preliminary to a locking operation.

1,825,505. DISPLAY AND DECORATING DEVICE. EUGENE CARRAINE, Philadelphia, Pa. Filed Dec. 20, 1929. Serial No. 415,442. 4 Claims. (Cl. 41—35.)



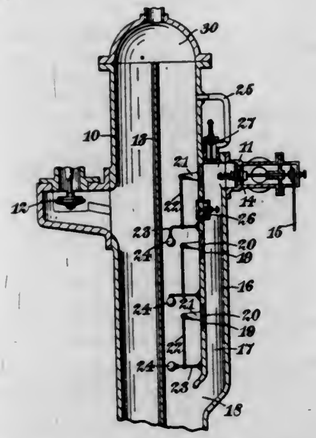
1. An article of manufacture comprising a pasteboard backing sheet, a front sheet secured upon the backing sheet and having an opening cut therein and an insert secured upon the backing sheet within and closely fitting the walls of the opening in the front sheet, said front sheet comprising a pasteboard body having a sheet of paper secured to the rearward surface thereof, and a sheet of paper secured to the forward surface thereof, and said insert comprising a pasteboard body having a sheet of paper secured to the rearward surface thereof and a sheet of paper secured to the forward surface thereof.

1,825,506. OILING SYSTEM FOR SEWING MACHINES. NORMAN V. CHRISTENSEN, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 10, 1928. Serial No. 291,534. 1 Claim. (Cl. 112—256.)



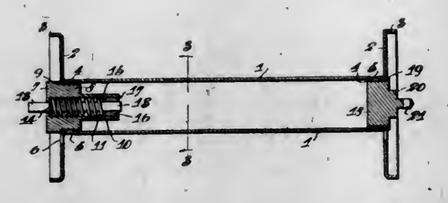
An oiling system for sewing machines having connected actuating parts, means for supplying oil to lubricate the connection between said parts including a supply pipe, a wick in said pipe and projecting from the end thereof, said pipe and wick being so disposed relative to said connection that said connection while moving will take oil from said wick, and a separate supply pipe for receiving lubricating oil, said supply pipe having a free opening therethrough to its discharge end disposed so as to supply oil directly to said connection when the parts are stopped in a predetermined position relative to said last-named pipe.

1,825,507. LIQUID PISTON INTERNAL COMBUSTION PUMP FOR LIQUIDS. STANLEY PERCY CHRISTIE, London, England. Filed July 8, 1930, Serial No. 466,552, and in Great Britain July 29, 1929. 12 Claims. (Cl. 103—249.)



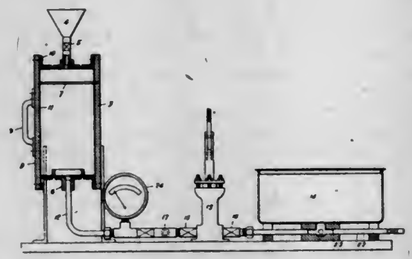
1. In a liquid piston internal combustion pump in which the fuel charge is introduced wholly or in part during the upstroke of the liquid column, the combination of a pump chamber and guide mechanism within the pump chamber operable by the liquid piston, to confine the distribution of the charge to a zone which is immediately above and rises bodily with the surface of said liquid piston.

1,825,508. ALL METAL SPOOL. FRED J. COLLINS, Amsterdam, N. Y., assignor to Collins Loom Works, Inc., Amsterdam, N. Y., a Corporation of New York. Filed Feb. 13, 1929. Serial No. 339,676. 5 Claims. (Cl. 242—123.)



3. An all-metal spool comprising a metal tubular barrel, a pair of metal heads each having a central tubular hub tightly fitted into the ends of said barrel and spot-welded thereto, bearing plugs having smooth cylindrical surfaces tightly pressed into said hollow hubs to be there held by retaining frictional contact between the smooth surfaces of the plugs and the inner surface of the tubular hubs of the heads.

1,825,509. PROCESS FOR CAUSING SOLIDS TO BE PENETRATED BY OR IMPREGNATED WITH LIQUIDS OR SOLUTIONS OF VARIOUS SUBSTANCES. HORATIO JOHN COLLINS, London, England. Filed June 15, 1928, Serial No. 285,618, and in Great Britain May 16, 1928. 4 Claims. (Cl. 99—12.)

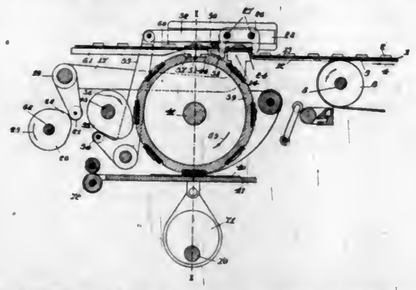


2. A method of impregnating a solid with a liquid, consisting in suspending the solid within a closed chamber filled with liquid under pressure and then by a continuous series of variations of the volume occupied by the liquid producing a continuous series of variations in the pressure, the changes of volume being effected by actual mechanical displacement of a portion of the liquid.

1,825,510. METHOD AND APPARATUS FOR PRINTING VARIABLE LETTERPRESS. GASTON CORSE, Paris, France, assignor to Etablissements L. Chambon, Paris, France. Filed July 14, 1927, Serial No. 205,700, and in Germany Aug. 19, 1926. 6 Claims. (Cl. 101—62.)

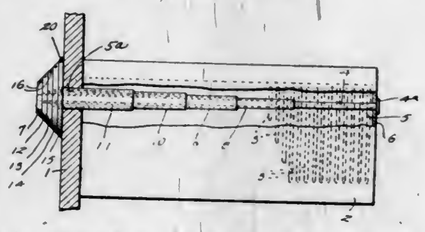
1. In a machine for printing by means of printing blocks the combination of a drum, having grooves on the periphery thereof, hooks located at the ends of said grooves having recesses therein substantially equal to the thickness of the blocks, means for raising the two hooks located at

the ends of the same longitudinal groove, means for introducing a block into said recesses when said two hooks are in raised position, means for lowering said two hooks so



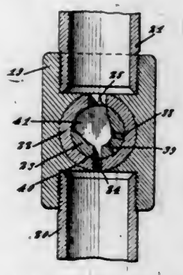
as to position said block in said recesses in said groove, and means for intermittently rotating said drum to bring said block to printing position.

1,825,511. ADJUSTING OR TUNING DEVICE FOR VARIABLE CONDENSERS. JAMES E. DENTON, Irvine, Ky., assignor of one-fourth to John A. Wallace and Betty A. Wallace, Irvine, Ky. Filed Jan. 4, 1930. Serial No. 418,596. 5 Claims. (Cl. 74—7.)



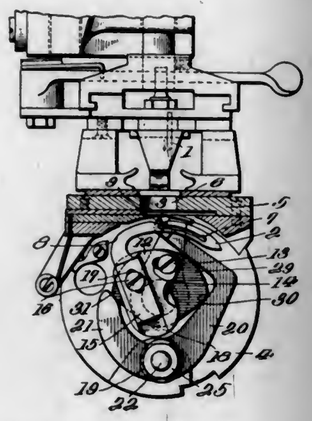
1. An adjusting or tuning device for variable condensers, comprising a series of concentrically related and independently turnable shafts, each shaft carrying the movable plates of a condenser, knobs secured to the shafts to permit them to be turned independently and provided with peripheral notches, and a latch bar pivotally secured at one end in the notch in one of the knobs for movement into and out of the notches of the other knobs, the latch bar being adapted when in the notches of all of the knobs to secure the knobs together to permit the shafts to be simultaneously turned.

1,825,512. VALVE. HERBERT W. DURHAM and CHARLES M. RUCKER, Louisville, Ky. Filed Mar. 6, 1929. Serial No. 344,793. 1 Claim. (Cl. 251—92.)



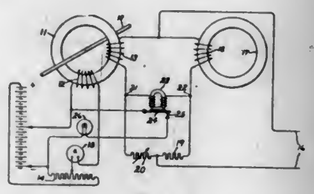
A valve structure comprising a coupling having inlet and outlet pipes communicating therewith upon diametrically opposite sides thereof, said coupling having a bore rightangularly disposed with relation to the connection of the pipes therewith and in communication with the latter through restricted orifices, a sleeve carried within the bore of the coupling engaged circumferentially thereof and having small and large ports in constant communication through the restricted orifices with the inlet and discharge pipes respectively, a valve member telescopically associated for longitudinal movement within the sleeve having one end extended exteriorly of the coupling, and said valve having a multiplicity of elongated longitudinally extending radially disposed inlet ports and a common correspondingly disposed discharge port arranged for registration with the discharge pipe and large port to communicate any one of the inlet ports with the latter.

1,825,513. LOOP RETAINER FOR SEWING MACHINES. ARVID ERICSSON, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1927. Serial No. 197,068. 13 Claims. (Cl. 112—200.)



1. The combination of a needle, a thread carrying looper cooperating therewith, a support for said looper adapted to oscillate and move endwise, a retainer for engaging and holding the needle thread loop back on the looper, an actuating member mounted on said looper support, and devices cooperating therewith for moving said retainer lengthwise of the looper, and means for moving said retainer laterally of the looper.

1,825,514. APPARATUS FOR MEASURING DIRECT CURRENTS. ALAN S. FITZ GERALD, Wynnewood, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 29, 1930. Serial No. 499,120. 9 Claims. (Cl. 175—183.)

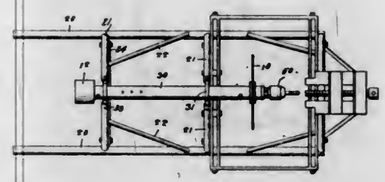


1. Measuring apparatus comprising a core of magnetic material, a primary circuit for producing a unidirectional flux in said core, a measuring circuit for neutralizing the flux produced in said core by the primary circuit, and an alternating current impedance bridge, one arm of which comprises a winding on said core for determining when the unidirectional flux of said core is neutralized.

1,825,515. METHOD FOR THE PRODUCTION OF HIGHLY VISCOUS AQUEOUS DISPERSIONS OF RUBBER, GUTTA PERCHA, AND BALATA. MAX FORRER, Paris, France, assignor to Anode Rubber Company Limited, Guernsey, England. Filed June 2, 1928, Serial No. 282,511, and in Germany June 9, 1927. 2 Claims. (Cl. 18—50.)

1. A method for the production of highly viscous aqueous dispersions of rubber, gutta percha or balata, which comprises adding an aqueous solution of a completely hydrolized gel-forming protein substance in such quantities as to increase the viscosity of the said dispersion above the viscosity which would be obtained by concentration alone before the point of inversion of the dispersion is reached.

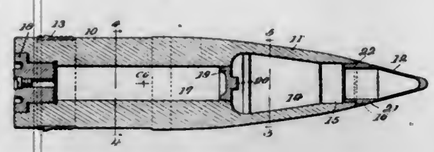
1,825,516. SAWING MACHINE. GEORGE FRANCYK, Akron, Ohio. Filed July 19, 1929. Serial No. 379,477. 3 Claims. (Cl. 143—43.)



1. In a device of the class described, a main frame, including lower frame elements, a saw shaft and saw, a housing for the shaft, a plurality of yoke frames each including an upper central portion surrounding and suspending the housing and including downwardly and outwardly extending legs, and means for supporting said legs by the lower elements of the main frame.

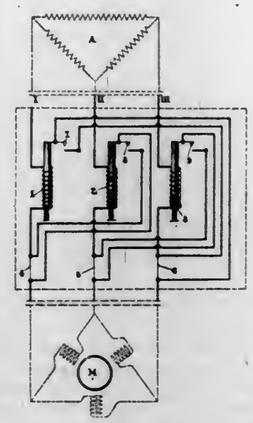
2. In a device of the class described, a structure comprising the elements of claim 1, assembled as there specified, and devices for effecting adjustable connection between the legs and the supporting means for the legs.

1,825,517. PROJECTILE. GEORGE C. GARDNER, Richmond, Va. Filed June 23, 1930. Serial No. 463,235. 7 Claims. (Cl. 102—28.)



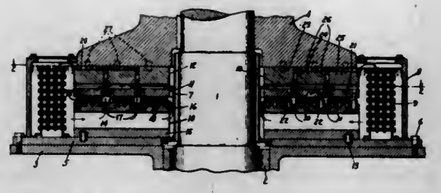
1. A projectile comprising a cylindrical body tapered at its forward end and balanced with respect to a predetermined center of gravity, the cylindrical portion of said body having a concentric internal cylindrical chamber section, the thickness of the wall of which controls the weight of the projectile, the said predetermined center of gravity being located at the axis of said chamber, the ends of said chamber being equi-distant from said predetermined center of gravity, so that the diameter of the cavity may be increased or diminished to bring the projectile to a predetermined weight and at the same time maintain said predetermined center of gravity.

1,825,518. PROTECTING DEVICE FOR ALTERNATING CURRENT THREE-PHASE MOTORS. PAUL GÉNY, Nancy, France. Filed Nov. 23, 1928, Serial No. 321,374, and in France Dec. 21, 1927. 7 Claims. (Cl. 175—294.)



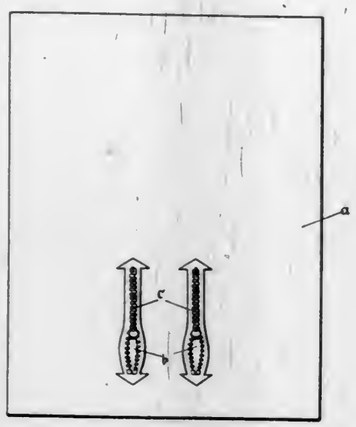
1. A system for protecting alternating current polyphase motors, comprising a motor including a short circuited rotor, current mains connected to said rotor, a multi-wire lead system for said motor, each lead comprising a separate circuit, each of said circuits comprising an electro-magnet, a winding for said electro-magnet, a fuse mounted in series with said winding, and a switch actuated by said electro-magnet to shunt the fuse of a selected one of the other lead circuits.

1,825,519. THRUST BEARING. THEODORE W. GORDON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 7, 1930. Serial No. 459,805. 5 Claims. (Cl. 308—168.)



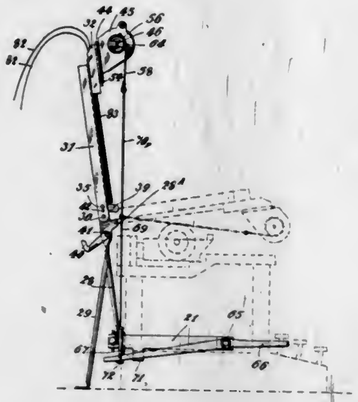
1. In a bearing, a plurality of concentrical ring cooperating members radially spaced, and means interposed between said cooperating members for deflecting radial flowing lubricant leaving the bearing surfaces of one set of cooperating members away from bearing surfaces of outer sets of cooperating rings.

1,825,520. ROBE. FRANZ VIKTOR GRUNFELD, Berlin, Germany. Filed Apr. 5, 1930. Serial No. 441,864. 1 Claim. (Cl. 2—69.)



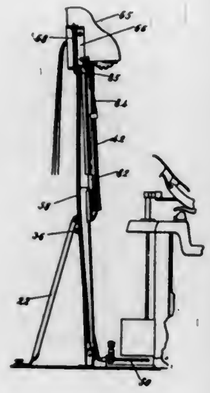
A robe for motorists having unobstructed slits in the lower portion thereof terminating inwardly of the edges of the robe adapted to receive the feet therethrough, and means extending the full length of said slits for closing said slits for varying distances from one end towards the other end thereof to provide openings to snugly receive the legs of the wearer or to close said slits entirely.

1,825,521. BOOK SUPPORTING DEVICE. HARRY H. HARNSBERGER, Croton-on-Hudson, N. Y., assignor to The Turnapage Company, Inc., New York, N. Y., a Corporation of New York. Filed June 30, 1922, Serial No. 571,914. Renewed Feb. 7, 1931. 54 Claims. (Cl. 120—32.)



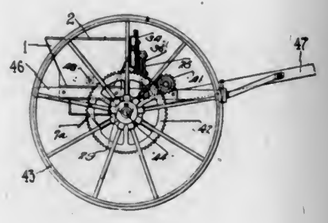
1. In a device of the character specified, in combination, a book-supporting member, a movable member abuttable upon and near the upper end only of the exposed portion of a page of a book carried by the book-support, means whereby a movement of the movable member will shift the page upon which it abuts a predetermined amount, thus bringing another part thereof in the operator's line of vision, and movable supporting means for said movable member whereby said movable member may be maintained in operative position, or moved away therefrom, exposing that part of the underlying surface which is normally concealed thereby.

1,825,522. NOTEBOOK HOLDER. HARRY H. HARNSBERGER, Croton-on-Hudson, N. Y., assignor to The Turnapage Company, Inc., New York, N. Y., a Corporation of New York. Filed July 3, 1924, Serial No. 724,065. Renewed Feb. 9, 1931. 36 Claims. (Cl. 120—32.)



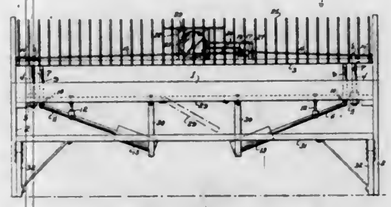
1. In a device of the class described, the combination, with a note book comprising a plurality of superimposed sheets, means for holding the same in position, and feeding means adapted to successively engage and unfold the said sheets, of a carrier for said feeding means, adapted to hold the same in abutment with the surface of each succeeding sheet a relatively short distance from the folding edge thereof, said carrier being movable towards said book and away from the said folding edge, as the thickness of the book decreases.

1,825,523. DISTRIBUTOR FOR MANURE AND OTHER MATERIAL. MICHAEL HIGGINS, Mercer, Auckland, New Zealand. Filed May 16, 1929, Serial No. 363,657, and in New Zealand June 2, 1928. 7 Claims. (Cl. 221—126.)



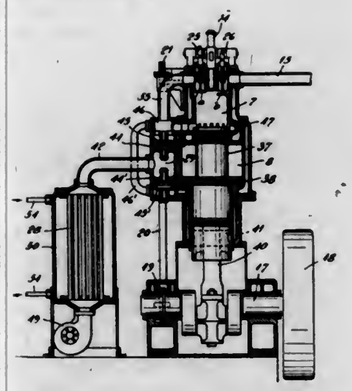
1. In a manure distributor a feeder plate with recesses in its edges reciprocable through slotted fittings secured over material discharge openings in a hopper and means actuated from a running wheel of the distributor for operating said plate including a shifting link motion through which the stroke of said plate is variable substantially as described and illustrated.

1,825,524. POULTRY FEEDER. JOHN F. HINTZ, Brillion, Wis. Filed May 31, 1930. Serial No. 458,455. 6 Claims. (Cl. 119—63.)



1. A device of the class described comprising a trough, a cover for the trough, means for normally holding the cover in raised position, latch means for holding the cover in lowered position, cover guiding means passing through the cover and engaged by the latch means and clock controlled means for releasing the latch means at any desired time.

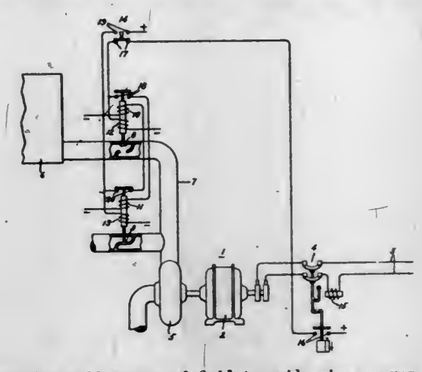
1,825,525. GAS GENERATING COMBUSTION ENGINE. JOHAN ERIK JOHANSSON, Gottenborg, Sweden, assignor to Aktiebolaget Gotaverken, Gottenborg, Sweden, a Corporation of Sweden. Filed Oct. 12, 1925, Serial No. 61,897, and in Sweden Oct. 22, 1924. 15 Claims. (Cl. 60—44.)



1. In a generator plant for producing a gas mixture, an internal combustion piston engine, an air compressor directly driven by said engine, means for admitting the air compressed by the compressor into the cylinder of said engine, and exhaust means opening at the end of the expansion stroke when the pressure of the expanded gas is approximately the same as the pressure of the air compressed by the compressor, the stroke volume of the compressor being such relative to the stroke volume of the combustion engine that the total quantity of the air sucked by he compressor and supplied when compressed to the cylinder of the combustion engine is at least fifty per cent larger than the quantity of the same air which will remain, after the scavenging period, in the said cylinder for charging.

1,825,526. FLUID OPERATED PRIME MOVER DYNAMO-ELECTRIC PLANT. RINPEI KAMADA, Yokohama, Japan, assignor to General Electric Company, a Corporation of New York. Filed Oct. 8, 1930, Serial No. 487,271, and in Japan Nov. 16, 1929. 5 Claims. (Cl. 175—294.)

1. In combination, an electric circuit, a generator connected to said circuit, means for disconnecting said generator from said circuit, a prime mover driving said generator, a source of fluid for said prime mover, a penstock



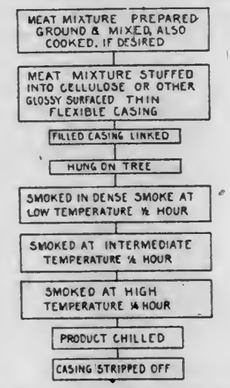
connecting said source of fluid to said prime mover and means controlled by said disconnecting means for draining the fluid from said penstock.

1,825,527. FUSE. PAUL M. KELLEY, New York, N. Y., and JAMES L. CLAYTON, Coytesville, N. J. Filed July 19, 1930. Serial No. 469,222. 4 Claims. (Cl. 200—131.)



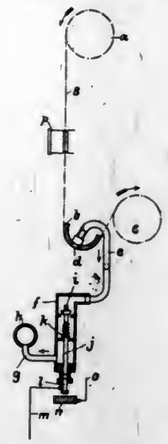
1. A fuse comprising a body, a fuse element therein, and a coupling member at one end of said body to which said fuse element is connected and having internal screw threads of different diameters capable of receiving different sized shanks of terminal members.

1,825,528. METHOD OF PRODUCING SKINLESS SAUSAGE. FRITZ W. KNUDSEN, Washington, D. C., assignor to Andrew D. Loffler, Jr., Washington, D. C. Filed Apr. 3, 1929. Serial No. 352,133. 6 Claims. (Cl. 99—11.)



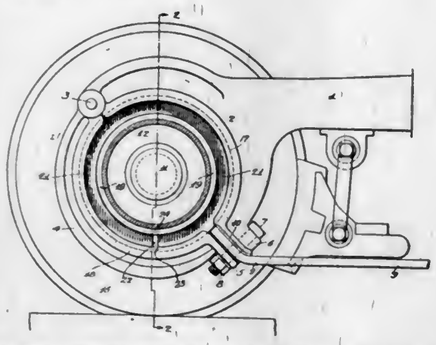
1. The steps in producing a skinless sausage consisting in stuffing a flexible waterproof casing with a meat stock, linking the encased product, curing the encased product in a dense smoke at a temperature not exceeding 120° for a substantial period to condense the surface of the sausage to prevent adhesion of the casing thereto, then increasing the temperature to a normal stage corresponding to the ordinary prior curing practice and finally stripping the casing from the sausage.

1,825,529. MEANS FOR REPRODUCTION OF SOUND FILMS. ROBERT KOLLER, Baden, Switzerland. Filed May 22, 1930, Serial No. 454,803, and in Switzerland Feb. 14, 1929. 1 Claim. (Cl. 88—16.2.)



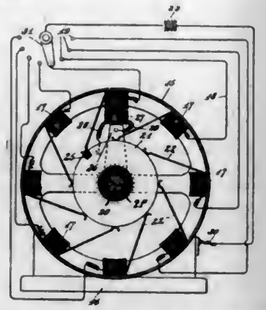
The combination with a moving picture film and a sound producer controlling band moving synchronously with and forming part of the film and having a plurality of longitudinally extending zones, each zone controlling a different sound producer, of a plurality of different electrically actuated sound producers equal in number to the zones, and means for energizing the sound producers comprising a plurality of chambers, one for each sound producer, a tracker board having openings equal in number to the chambers, a tubular connection between each chamber and the corresponding opening in the tracker board, a valve seat in each chamber, an upwardly opening valve coacting with the seat and having a stem extending downward through the chamber, a spring urging the valve upward, a vacuum producing means connected to each of said chambers at a point below the seats in said chambers, the lower end of the stem of each valve forming an electrical contact and being electrically connected to one terminal of the corresponding sound producer and a contact member disposed below and in normally spaced relation to the several contacts when the valves correlated to the several contacts are raised but electrically engaging said contacts when the valves are lowered.

1,825,530. MOUNTING FOR CAR AXLES. ELMER LATSHAW, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 2, 1931. Serial No. 519,541. 6 Claims. (Cl. 105—221.)



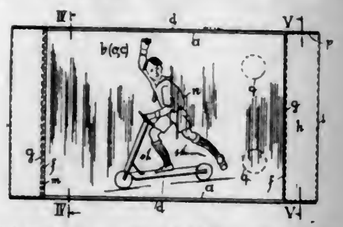
6. The combination in a car truck frame, of a journal box located in the frame; and a split ring of rubber located between the journal box and the frame, the box and the frame each having a lug extending into the space between the end of the split ring to prevent the ring turning.

1,825,531. MOTOR. HOWARD Z. LEFFEL, Brooklyn, N. Y. Filed July 26, 1929. Serial No. 381,234. 4 Claims. (Cl. 172—239.)



1. An electrical motor, comprising a casing, a plurality of stationary electromagnets carried by said casing, a rotor within said casing, an electromagnet carried by said rotor for electromagnetic reaction with any desired one of the stationary electromagnets, and means for energizing the rotor electromagnet upon energization of one of the stationary electromagnets, said means being operable to break the energization of both of said electromagnets when said electromagnets are in alinement, said means comprising a commutator wheel.

1,825,532. DRAWING SLATE. HUGO LIEBETRUTH, Nuremberg, Germany, assignor to A. Liebetruth & Co. G. m. b. H., Nuremberg, Germany. Filed Feb. 21, 1929, Serial No. 341,772, and in Germany Oct. 4, 1928. 5 Claims. (Cl. 35—10.)

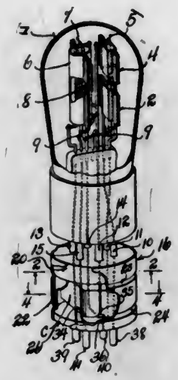


1. A drawing slate comprising in combination a sheet metal plate adapted to carry original pictures and ground glass plate, and a frame for said ground glass plate consisting of sheet metal abutment bars extending along all four sides of said sheet metal plate, abutments for the longitudinal edges of the ground glass plate formed by the edges bent up from the carrying plate to not higher than the upper surface of the ground glass plate, sheet metal boxes one on each side of said sheet metal plate adapted to hold drawing and painting utensils, the inside walls of said boxes forming abutments for the transverse edges of said ground glass plate, a hinged lid for each box, a projecting edge of each lid adapted to hold said inserted ground glass plate and the original picture on the sheet metal bottom plate.

1,825,533. METHOD OF PRODUCING HIGH-MELTING PARAFFIN AND CERESINE. ALBERT LOEBEL, Amsterdam, Netherlands, assignor to De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Oct. 22, 1928, Serial No. 314,328, and in the Netherlands Nov. 15, 1927. 2 Claims. (Cl. 196—17.)

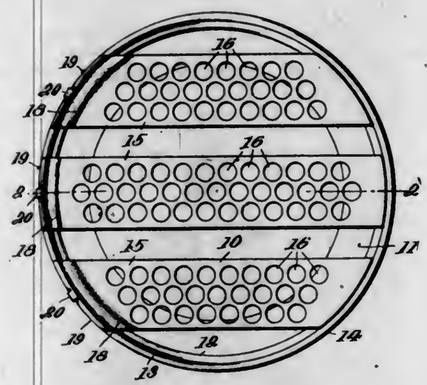
1. A process of producing high melting paraffin from the distillation residue of mixed base oil obtained by distilling off the fractions boiling up to approximately 400° centigrade, comprising adding to the said residue one or more hydrocarbons boiling above 200° centigrade which are materially soluble in liquid SO_2, subsequently distilling the mixture and separating the hard paraffin from the distillate obtained.

1,825,534. TUBE BASE ADAPTER. ARISTOTE MAVROGENIS, Milwaukee, Wis. Filed Aug. 17, 1927. Serial No. 213,581. 7 Claims. (Cl. 250—16.)



1. A base adapter for cooperation with a radio receiving device having a certain number of terminals and for cooperating with a base having a different number of terminals, said base adapter having means on opposite sides cooperating with the terminals of the said device and base and having intermediate means for electrically grouping the means on one side of the base adapter to conform to the number of means on the other side of the base adapter.

1,825,535. SUPPORT FOR BAKING CRUST. MARY A. MILLER, Lancaster, Pa. Filed Apr. 17, 1928. Serial No. 270,717. 2 Claims. (Cl. 53—6.)

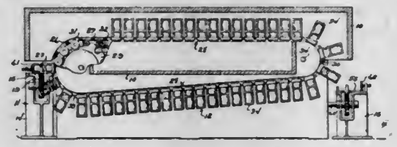


1. A support for baking crust, comprising a receptacle having a flange extending outwardly from the upper edge thereof, and a rim portion extending upwardly from the outer edge of said flange, a plurality of supporting members extending in spaced relation across the receptacle and removably resting on said flange for supporting a dough covering, one end of each of said supporting members abutting the inside of the rim portion for confining the members within the receptacle, and means on the other ends of said supporting members resting on said flange and projecting upwardly along said rim and extending outwardly therebeyond so that the members may be withdrawn from beneath the baked covering.

1,825,536. PROCESS OF REDUCING THE QUANTITY OF SULPHUROUS ACID GAS SET FREE FROM COPPER GLANCE ON ITS ROASTING. MASAO MIYAKE, Yehime-Ken, Japan. Filed Oct. 18, 1929, Serial No. 400,733. Renewed Aug. 24, 1931. 1 Claim. (Cl. 75—60.)

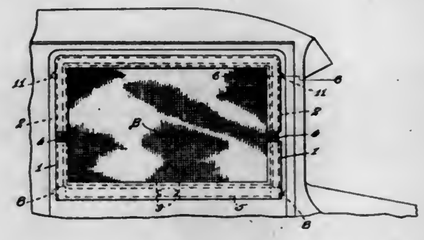
A process of reducing the quantity of sulphurous acid gas set free from copper glance on its roasting, consisting in roasting copper glance in the condition of a mixture of 827–1240 pounds of copper glance and 83–165 pounds of a mixture of red earth and bone-ash comprising 5–7 parts of red earth and 5–3 parts of bone-ash by weight, as described.

1,825,537. MECHANICAL PACK CARRIER FOR FURNACES. WALTER NEWBY, Aliquippa, Pa. Filed Oct. 9, 1929. Serial No. 398,431. 4 Claims. (Cl. 214—18.)



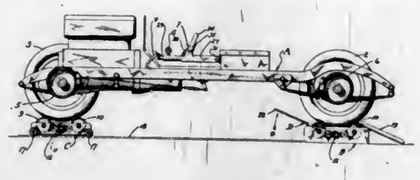
1. In an apparatus of the kind described, a straight longitudinally extended furnace opening downwardly at opposite ends, feeding and delivering conveyors at said ends below the openings therein, conveyor mechanism outside of and coextensive with the furnace between said conveyors, arms extending laterally from the conveyor mechanism into the furnace and movable therethrough including its ends, carriers on the arms to receive articles from the feeding conveyor and discharge said articles to the delivering conveyor, and means coacting with the conveyors, one for feeding articles into the carriers from the feeding conveyor and the other for moving the articles away from the carrier to the delivering conveyor.

1,825,538. SCREEN. LINWOOD ANDERSON PACE, Shreveport, La. Filed Sept. 9, 1930. Serial No. 480,730. 2 Claims. (Cl. 156—14.)



1. A screen for a window having grooves in its sides, comprising a pair of frames, hinges connecting the frames, a wire mesh section entirely covering the pair of frames and foldable along the axis of said hinges, projections on the ends of the frame for fitting in the grooves in the window, means for moving some of the projections inwardly to disengage them from the grooves, whereby the screen section can be placed in vertical position in the window or folded on a line with the hinges to have the frames moved toward each other to permit the sash to be partly closed and the screen used as an awning.

1,825,539. METHOD AND APPARATUS FOR TESTING VEHICLE BRAKES. HARRY H. PATTON, Oakland, Calif., assignor to Brake-Testing Equipment Corporation, San Francisco, Calif., a Corporation of California. Filed Apr. 9, 1928. Serial No. 268,398. 4 Claims. (Cl. 265—1.)



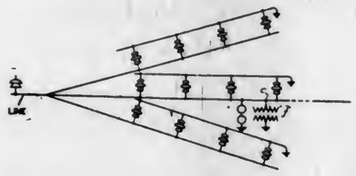
1. A method of testing vehicle brakes which consists in applying a predetermined pressure on the brake pedal and the brakes actuated thereby, rotating the wheels of the vehicle against the resistance of the brakes, and then determining the resistance.

1,825,540. WINDER AND CLIP FOR HAIR WAVING APPARATUS. ARNAUD E. PAUSSER, Philadelphia, Pa. Filed Oct. 4, 1930. Serial No. 486,479. 14 Claims. (Cl. 132—33.)



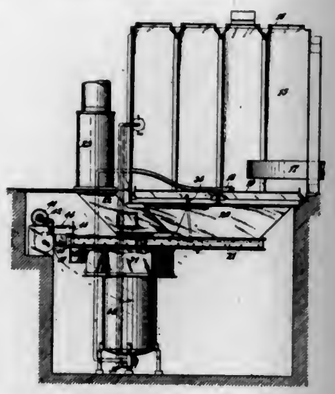
1. A winding and clasping device comprising a central coiled spring portion adapted to surround a rod upon which it is desired to wind a given article, an extension at one end of said portion adapted to lie along said rod and provide a substantial bearing against said rod, and a U-shaped winding and clasping portion at the other end of said spring portion urged into frictional engagement with said rod by said spring portion and adapted to hold said article against said rod.

1,825,541. MEANS FOR PROTECTING ELECTRICAL APPARATUS. FRANK W. PEEK, Jr., Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 1, 1927. Serial No. 209,762. 5 Claims. (Cl. 175—30.)



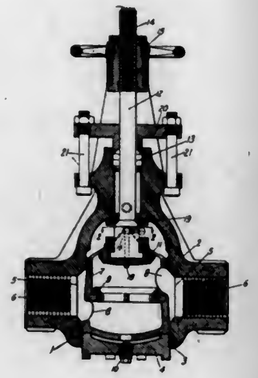
4. In an electric transmission system, a line insulated from ground for a given arc-over voltage, an electric apparatus connected between the line and ground, a discharge gap connected in shunt of said apparatus and having a spark-over voltage below said arc-over voltage of the line, and means for decreasing the surge impedance of the line in the region of said apparatus and gap to a value smaller than that of other parts of said line, whereby the voltage of an abnormal transient wave traveling along the line is reduced before reaching said apparatus and gap.

1,825,542. DOWN DRAFT ROOM. LOUIS D. PEIK, Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y., a Corporation of Delaware. Filed May 13, 1927. Serial No. 191,024. 4 Claims. (Cl. 51—8.)



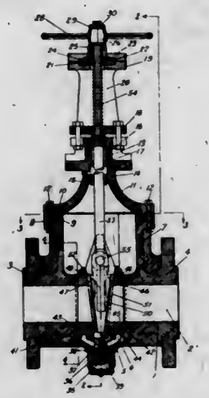
1. A blasting apparatus comprising a blasting chamber having a perforated floor, a down draft for assisting spent abrasive material therethrough, a transfer pan beneath said chamber having material receiving and material discharging sections, an exhaust duct whereby said air current may be used to pick up dust particles and separate the same from the abrasive material, and a secondary opening in said duct substantially over said material discharging portion, means for causing said air current to pass over said pan and through said secondary opening whereby further quantities of dust may be removed.

1,825,543. VALVE FOR HIGH PRESSURE AND HIGH TEMPERATURE PURPOSES. HARRY B. REDDING, Columbus, Ohio, assignor to The Valve Equipment Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 5, 1927. Serial No. 181,183. 6 Claims. (Cl. 251—156.)



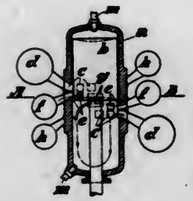
1. A valve comprising a casing having an integral bonnet and provided with inlet and outlet passageways in opposite sides thereof, a well within the casing between said passageways and having a vertically disposed frusto-conical inner surface, a cage in the well having a frusto-conical outer surface engaging the complementary surface of the well above and below said passageways and having upper and lower ports at opposite sides thereof, a valve seat in the cage between said ports, the bottom of the casing having an opening therein, a plug closing said opening and forcing the cage into snug engagement with the inner surface of the well, a valve stem having an unthreaded portion extending through an opening in the top of the bonnet, and a valve head connected to the lower end of the stem and engageable with said seat, said cage, seat, valve head and stem being removable through the opening in the bottom of the casing when the plug is detached from the latter.

1,825,544. GATE VALVE STRUCTURE. HARRY B. REDDING, Cleveland, Ohio, assignor to The Valve Equipment Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 23, 1927. Serial No. 242,065. 8 Claims. (Cl. 251—167.)



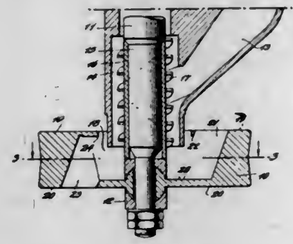
1. A gate valve structure comprising a casing, spaced valve seats, inclined flanges on said valve seats, an adjustable valve cage movable longitudinally relative to said inclined flanges to force said valve seats laterally when adjusted, a projection on said cage extending through a wall of the casing, and means cooperating with said projection and the casing for drawing said cage toward said wall.

1,825,545. INTERNAL COMBUSTION ENGINE. WILHELM RIEHM, Augsburg, Germany, assignor to the Firm Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany, a Corporation of Germany. Filed Apr. 30, 1928, Serial No. 273,951, and in Germany May 4, 1927. 17 Claims. (Cl. 123—61.)



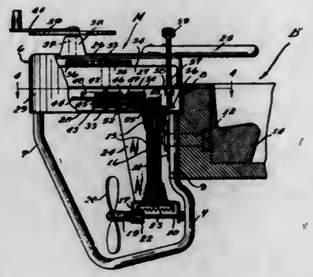
4. A two-stroke cycle engine of the character described, with port scavenging; comprising a cylinder having an exhaust port, a scavenging air-inlet port and a fuel-inlet port in the wall thereof, the exhaust port and the scavenging air-inlet port being arranged in general axial alignment within the cylinder wall, with the exhaust port positioned between the scavenging air-inlet port and the end of the cylinder, and the portion of the cylinder wall opposite said ports being imperforate, and the fuel-inlet port being partly coextensive in positioning with the scavenging air-inlet port but angularly spaced therefrom in the cylinder wall; and a piston reciprocable within said cylinder to control said ports, the arrangement of said ports being such that during travel of the piston in one direction it will first uncover the exhaust port to permit the escape of exhaust gas from the combustion space of the cylinder, will then uncover the scavenging air-inlet port to permit the inflow of scavenging air across, along and back along said combustion space to drive out remaining exhaust gas, and to then uncover the fuel-inlet port, which is so arranged that fuel introduced therethrough will mix with the portion of scavenging air being concomitantly introduced so that a neutral stratum of such scavenging air will be maintained between the resulting fuel mixture and any residue of exhaust gas remaining in the cylinder.

1,825,546. NEBULIZER. CHAMPLAIN L. RILEY, North Plainfield, N. J., assignor to Industrial Associates, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 2, 1928. Serial No. 297,085. 8 Claims. (Cl. 299—63.)



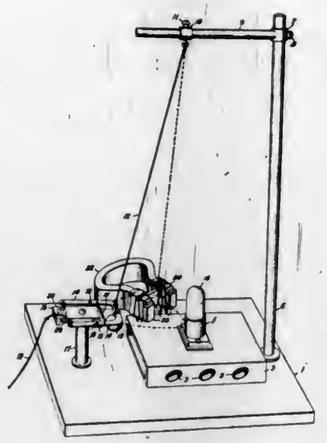
7. A nebulizing rotor comprising a substantially radial web, a peripheral flange around the web, a top wall defining with said flange and web, an interior chamber above said web and having a central inlet opening, and a series of upwardly extending flow channels on the inner surface of said flange, said top wall being apertured in register with said channels.

1,825,547. TOY BOAT WITH OUTBOARD MOTOR. HERBERT S. ROCKWELL, Hopewell, N. J., assignor to H. A. Smith Machine Company, Hopewell, N. J., a Corporation of New Jersey. Filed Apr. 29, 1931. Serial No. 533,820. 15 Claims. (Cl. 46—37.)



1. In a device of the character described, in combination with a miniature boat body, a toy outboard spring motor assembly, means for pivotally mounting the entire motor assembly as a unit about a vertical axis at the stern of the boat body, means for swinging the motor assembly as a unit about said vertical axis to steer the boat, and means for yieldingly resisting said swinging movement.

1,825,548. TUBE TESTING APPARATUS. ALAN C. ROCKWOOD and WARREN R. FERRIS, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,360. 13 Claims. (Cl. 250—27.)

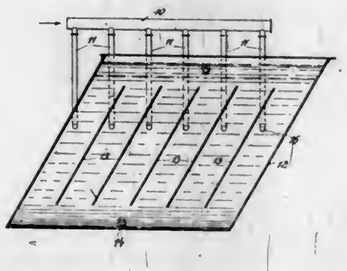


1. A device for determining the amount of microphonic movement between the electrodes of a radio tube comprising a flexible base for supporting the tube, means for causing an impact with the base by a force of accurate reproducibility whereby a train of mechanical disturbances is set up between the electrodes, and means for measuring the integrated effect of said disturbances in terms of an electric current whereby a substantially accurate and reproducible test for microphonics is obtained.

1,825,549. 3-ETHYL-4-CYCLOHEXYL-1,2,4-TRIAZOLE. GEORG SCHEUING and BRUNO WALACH, Nieder-Ingelheim on-the-Rhine, Germany, assignors to C. H. Boehringer Sohn Aktiengesellschaft, Nieder-Ingelheim on-the-Rhine, Germany, a Corporation of Germany. Filed Feb. 27, 1931, Serial No. 518,883, and in Switzerland Aug. 24, 1929. 1 Claim. (Cl. 260—44.)

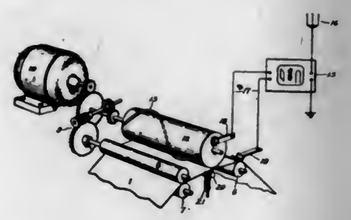
As a new compound 3-ethyl-4-cyclohexyl-1,2,4-triazole.

1,825,550. SETTLING TANK. JOHANNES SCHULTE, Essen-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 13, 1929, Serial No. 406,889, and in Germany July 4, 1928. 3 Claims. (Cl. 210—57.)



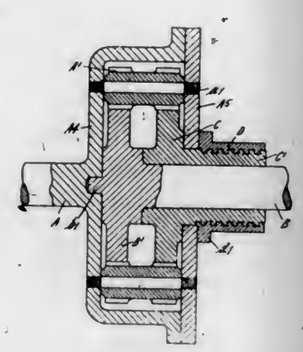
1. Settling tank comprising two opposite end walls enclosing with the tank bottom an angle other than a right angle, a plurality of spaced overlapping partitions extending in parallel to one of said end walls and to each other, so as to leave gaps between the bottom ends and the tank bottom, upper and lower outlets for said tank, and perforated feed pipes extending between two adjoining partitions and between one of said end walls and partition adjoining the same, near the rearwardly inclined surfaces far below the top edges and far above the bottom edges thereof so as to deliver the liquid into the tank intermediate the upper and lower edges of the partitions in the tank and the outlets therefor.

1,825,551. ELECTRICAL RECORDING. ROBERT SEABELL, Haddon Heights, N. J., assignor to General Electric Company, a Corporation of New York. Filed June 18, 1930. Serial No. 462,099. 7 Claims. (Cl. 178—94.)



1. The method of making a record on paper having a thin metallic coating thereon, which comprises vaporizing the coating by current flow between it and a relatively movable conductor.

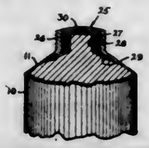
1,825,552. SPEED CHANGING AND REVERSING GEAR. JOHN STANDEN SHAW, Fazakerley, Liverpool, England. Filed Nov. 6, 1929, Serial No. 405,139, and in Great Britain Nov. 13, 1928. 3 Claims. (Cl. 74—34.)



1. In speed varying gear, in combination, a driving shaft, a driven shaft, an epicyclic gear interposed between the driving shaft and the driven shaft; respective members of the said gear being driven by the driving shaft, being adapted to drive the driven shaft, and forming an engaging part and being mounted concentrically with a part driven by one of the other members of the epicyclic gear, and being adapted to be driven by frictional contact therewith; a control part mounted concentrically with the engaging part, one of these parts having a surface inclined to its plane of rotation and the other having a corresponding surface engaging therewith, said surfaces being adapted when there is relative angular movement between the two parts, to give axial movement between them, which axial movement in the one direction increases the said frictional contact and means for varying speed of the control part; substantially as described.

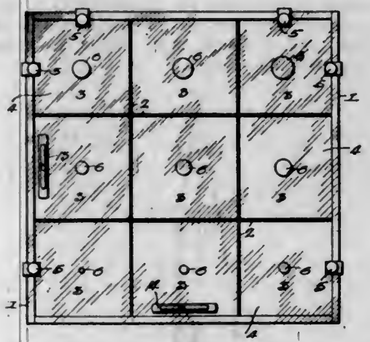
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1,825,553. CONTAINER CLOSURE. ARTHUR E. SMITH, Los Angeles, Calif. Filed Nov. 15, 1926. Serial No. 148,350. 8 Claims. (Cl. 221—60.)



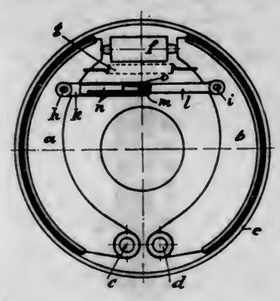
1. In combination with a collapsible tube having an end portion, and a neck, a flexible closure including a body having an internal projecting portion thereon engaging said neck, said portion having an outwardly extending portion at its lower extremity, said closure having a straight dispensing slit therein.

1,825,554. SEISMOMETER. WALTER O. SNELLING and GUY A. RUPP, Allentown, Pa., assignors to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1925. Serial No. 68,594. 7 Claims. (Cl. 73—51.)



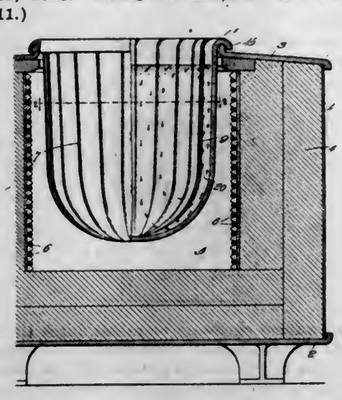
5. A seismometer comprising a substantially air-tight container, and a series of cylindrical pins adapted for mounting therein, each of said pins differing from the others in at least one of the two dimensions of length and diameter so as to form a series, the component members of which vary progressively as to stability in the vertically standing positions.

1,825,555. BRAKE. NATHAN STERN, Frankfort-on-the-Main, Germany, assignor to Alfred Teves Maschinen-und Armaturen-Fabrik Gesellschaft mit beschrankter Haftung, Frankfort-on-the-Main, Germany, a Corporation. Filed Feb. 12, 1929, Serial No. 339,389, and in Germany Nov. 2, 1927. 2 Claims. (Cl. 188—79.5.)



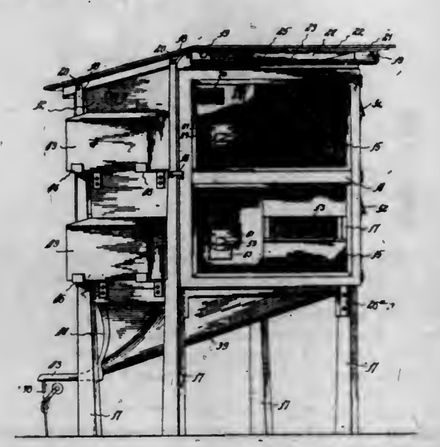
1. A brake comprising a brake drum, two brake shoes therefor and means to move the shoes into and out of engagement with the drum; in combination with a member loosely connected at one end to one of said shoes, spring fingers on the other end of the member, a second member loosely connected to the other shoe and having a screw thread thereon engaged by the fingers, said fingers differing in length by a fraction of the pitch of said thread.

1,825,556. CORRUGATED POT. CARY H. STEVENSON, Chicago, Ill., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 12, 1928. Serial No. 292,218. 4 Claims. (Cl. 263—11.)



1. In a furnace of the pot type, a receptacle for receiving a charge, said receptacle having a cylindrical section and a bowl shaped end section, the walls of said receptacle comprising flutings having off set portions extending in opposite directions, the off set portions extending exteriorly of said pot providing means for absorbing heat, and the off set portions extending interiorly of said pot providing means for delivering heat thus absorbed to a charge interiorly of the receptacle, the flutings increasing in depth upwardly from the bottom to the top of the bowl shaped section and being of constant depth throughout the cylindrical section of the receptacle.

1,825,557. RABBIT HUTCH. ABRAHAM DEWEY STONER, New Windsor, Md. Filed Aug. 20, 1930. Serial No. 476,637. 10 Claims. (Cl. 119—16.)



1. An animal house comprising side and rear walls attached to corner posts by which they are supported above the ground, a door hinged to the front of the house between the side walls thereof, and a roof structure mounted on the upper ends of the posts above the walls and door,

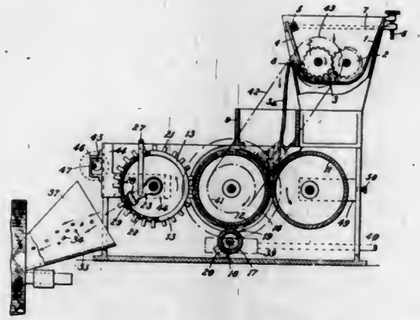
said roof structure consisting of side strips to the upper and lower sides of which the roof and ceiling are attached to form an air space, and a hood pivoted to the forward ends of the side strips of the roof structure to project in front of the air space and adapted to be folded below the projecting portion of the ceiling.

1,825,558. RABBIT HUTCH. ABRAHAM DEWEY STONER, New Windsor, Md. Filed Nov. 18, 1930. Serial No. 496,518. 3 Claims. (Cl. 119—16.)



1. In an animal enclosure or rabbit hutch the combination with the framework comprising the housing supported by legs at the corners thereof, the rear wall of said housing having a transverse opening through the same on a line with the floor of the enclosure, of an outwardly bulged plate secured to the outer side of the rear wall of the housing to provide a passageway or chute leading from the aforesaid opening, and an extension of said plate to form a discharge end of the chute.

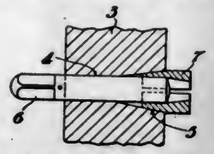
1,825,559. APPARATUS FOR MANUFACTURING SMALL ARTICLES SUCH AS PILLS OR THE LIKE FROM PLASTIC MATERIAL. WILLIAM SUMNER, Liverpool, England. Filed Jan. 21, 1931, Serial No. 510,302, and in Great Britain Jan. 31, 1930. 9 Claims. (Cl. 107—23.)



1. Apparatus for manufacturing small units or pellets from a mass of plastic material comprising rollers for forming the material into a ribbon or sheet upon and completely surrounding one of said rollers, a series of tubes adapted to be embedded into the ribbon or sheet and take up small pellets of the material and means for expelling the pellets from the tubes by compressed air.

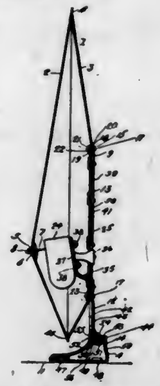
1,825,560. LOCKING MEANS FOR STRINGED INSTRUMENT TUNING PINS. GEORGE TADGELL, Tottenham, England. Filed Aug. 4, 1930, Serial No. 472,968, and in Great Britain Aug. 8, 1929. 1 Claim. (Cl. 84—202.)

In a stringed instrument, a member having a hole therein for the reception of a tuning pin, said hole extending through the member and being cylindrical throughout a portion of its length and throughout the remaining part of its length being inwardly tapered from one side of the member to said cylindrical portion, a cylindrical tuning pin neatly fitting the cylindrical portion of said hole and extending into the tapered portion thereof, said pin having a smooth exterior surface and the wall of said hole



being smooth, and a split collar disposed in the tapered portion of said hole in embracing relation to said pin, said collar having a tapered exterior face corresponding to and frictionally seated against the wall of the tapered portion of said hole and also having a cylindrical bore corresponding in diameter substantially to the diameter of the tuning pin, the wall of said bore frictionally engaging the pin.

1,825,561. CONE-TYPE LOUD SPEAKER. JOHN S. TIMMONS, Philadelphia, Pa., assignor to J. S. Timmons, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 9, 1926. Serial No. 153,570. 7 Claims. (Cl. 181—31.)



1. A support for a loud speaker, comprising a base member, means for securing said member to said loud speaker in one position to serve as a floor mount and in another position to serve as a wall mount, and means cooperating with said base member, whereby said loud speaker may be suspended in said last-mentioned position.

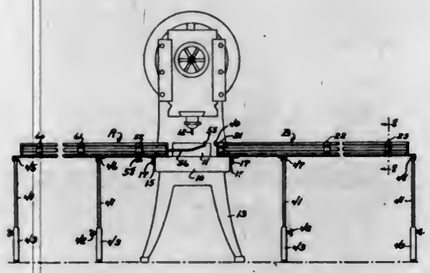
1,825,562. VALVE KEY. PAOLO TURA, Treviglio, near Milan, Italy, assignor to the Firm Vereinigte Thuringer Metallwarenfabriken, A. G., Zella-Mehlis, Germany. Filed June 28, 1930, Serial No. 464,615, and in Italy Nov. 28, 1929. 2 Claims. (Cl. 152—12.)



1. A reversible key for controlling valves, comprising a body portion having a bore therein, a check valve in said

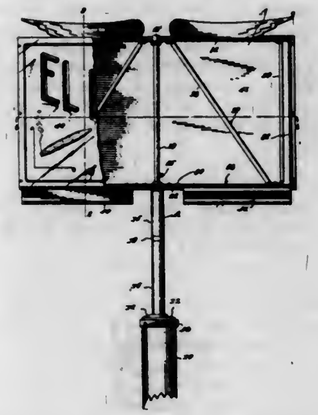
bore, and attachment portions at each end of the bore, the said attachment portions each being of sufficient length to depress the valve stem of the valve to which they are attached.

1,825,563. GAUGE FOR SHEET METAL PUNCHING MACHINES. GORDON RAY WALTS, New Albany, Ind. Filed Nov. 3, 1928. Serial No. 317,018. 2 Claims. (Cl. 164—86.)



1. In a gauging device for a punching machine, a structure adapted to be connected with the side of the machine and to extend horizontally thereupon, said structure comprising a plurality of longitudinal elements spaced apart, gauge blocks slidable between the longitudinal elements, resiliently mounted pins carried by the blocks and adapted to space the work at predetermined distances with reference to the path of the punch, said structure including a slotted end member, and a detachable hook-like gauge element connected with one of the blocks, adapted to project thru the slot, and constituting a stop against which the work abuts when a hole is to be punched near the edge of said work.

1,825,564. REVOLVING SIGN. JOE B. WHITLOW, Johnson City, Tenn. Filed Feb. 27, 1931. Serial No. 518,809. 8 Claims. (Cl. 40—39.)

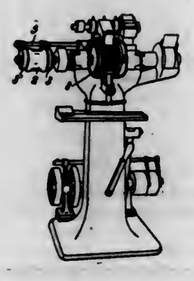


1. A wind operated revolving sign comprising a supporting standard, a rotatable spindle received within the standard, a sign head secured to the spindle and projecting from the opposite sides thereof, and oppositely directed wind blades secured to the edge of the rotatable sign head, said blades being of a substantially V-shape and arcuated laterally toward one side of the head.

1,825,565. METHOD OF TREATING METALS AND TREATING AGENT THEREFOR. FRANK J. WILSON, Alturas, and ALAN S. EVANS, Los Angeles, Calif.; said Wilson assignor to said Evans. Filed Dec. 17, 1928. Serial No. 326,697. 9 Claims. (Cl. 75—17.)

1. In a process of treating metals the steps of heating a metal to above red heat and contacting the heated metal in the absence of carbonaceous material with a comminuted material containing andesite.

1,825,566. POLISHING ROLL FOR SHOES. KARL WOLLNY, Weissenfels, Germany. Filed June 10, 1929, Serial No. 369,651, and in Germany Feb. 26, 1929. 1 Claim. (Cl. 12—77.)



A rotating shoe polishing roll, a working surface on the roll, friction surfaces on both sides of the working surfaces of said roll and concentric to the axis of rotation of the roll, friction bands embracing the friction surfaces, means for fastening one end of the friction bands to a fixed part of the machine, and screws for connecting the other end of the bands with the said first mentioned band ends and adjustable for tightening the bands.

1,825,567. BOBBIN MARKING DEVICE. WILLIAM A. WOODRUFF, Macon, Ga., assignor to Bibb Manufacturing Company, Macon, Ga., a Corporation of Georgia. Filed Dec. 20, 1929. Serial No. 415,569. 3 Claims. (Cl. 40—20.)

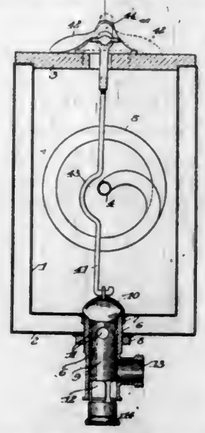


1. The combination of a bobbin having a recess, with a screw provided with a flanged head and threaded into a bobbin with the flanged head projecting into the central part of the recess, a stud member including a flared head clamped around the screw head within the recess of the bobbin, and a detachable indicating member fitting within the bobbin recess and including a resilient socket adapted to engage the flared head of the stud member.

1,825,568. VALVE STRUCTURE. CHARLES F. WRAY, Rochester, N. Y., assignor to National Brass Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed May 14, 1926. Serial No. 109,197. 7 Claims. (Cl. 137—21.)

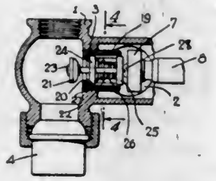
1. The combination with a container, of a valve housing at the bottom thereof, a valve in the housing, a pipe extending through the container, a rod extending vertically of the container and connected at its lower end to the

valve, and operating means at the top of the container connected with said rod for opening and closing the valve, the rod including a U-shaped portion surrounding



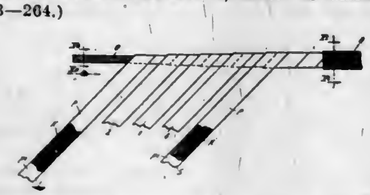
said pipe and imparting yieldability to the rod whereby tight closing of the valves is effected upon movement in either direction.

1,825,569. CHECK VALVE. JOHN G. ZOLLEIS, Germantown, Pa. Filed Oct. 27, 1928. Serial No. 315,534. 2 Claims. (Cl. 272—27.)



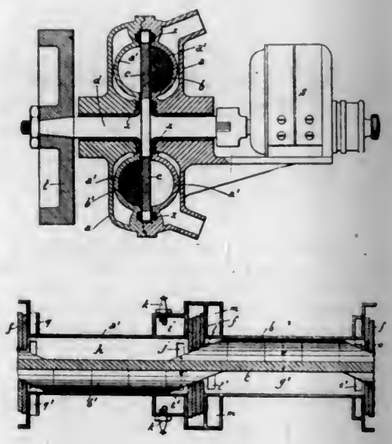
1. In combination with a valve casing comprising a portion for connection to a source of supply and an extension thereon for housing a valve with an opening between said portion and extension, a bushing mounted through said opening with a substantial portion of its length extending into and housed by said extension with its forward end constituting a seat for the valve, a valve seat at the rear end of the bushing, a check valve for said seat, a stem carrying said check valve, a head on the forward end of the stem having guided movement within the bushing, a guiding member for the stem in said bushing between said check valve and head, and a spring between said head and guiding member normally acting to close the check.

1,825,570. METHOD OF AND APPARATUS FOR MANUFACTURING INSULATED ELECTRIC CABLES. JOHN EDWARD ALLAN and STERRY BAINES FREEMAN, Birkenhead, England. Filed Nov. 5, 1928, Serial No. 317,288, and in Great Britain Mar. 4, 1927. 18 Claims. (Cl. 173—264.)



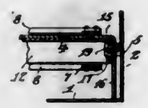
3. An insulated electric cable composed of multiple layers of combined fabric and cellulose tapes, and characterized in that the contacting surfaces of some of the successive layers are united together by an adhesive, whilst the contacting surfaces of the other layers are not so united, the sliding freedom thus permitted between certain of the layers combined with the freedom due to the intervening fabric layers increasing the flexibility of the finished insulated cable; substantially as described.

1,825,571. ROTARY INTERNAL COMBUSTION ENGINE. ALPHONSE BARREAUX, Loury, and GEORGES SARRAZIN, Orleans, France. Filed Jan. 23, 1930, Serial No. 422,875, and in France Feb. 8, 1929. 4 Claims. (Cl. 123—14.)



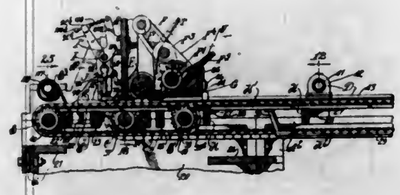
1. An internal combustion engine comprising a torus-shaped casing having an intake chamber therein, a partition disposed in the equatorial plane of the casing, a driven shaft coaxial with the torus and secured to the partition, pistons secured to either side of the partition and adapted to cooperate with the inner casing wall, a double blade arrangement disposed in a diametrical plane of the casing and adapted to allow the fluidtight passage of the partition and pistons through it, means for feeding an aeriform explosive to the intake chamber of the casing on either side of the partition, means for igniting said mixture, means for leading the gases from one side of the blade arrangement to a point of the casing on the other side thereof and exhaust means for exhausting the burnt gases.

1,825,572. CONVEYER. JOHN E. BOGER, Hoisington, Kans. Filed Nov. 8, 1930. Serial No. 494,895. 2 Claims. (Cl. 198—204.)



1. In a conveyer for mounting on a harvester platform, a conveyer base, an endless conveyer element encircling the base, and a grain guard extending across the conveyer element, said grain guard being slidably connected with the base and having downwardly extending flanges in sliding contact with the platform.

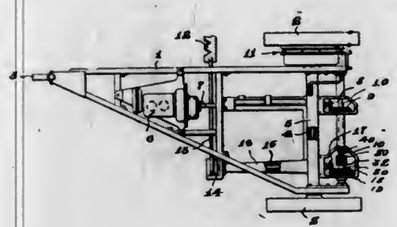
1,825,573. UPHOLSTERY MACHINE. FRANK W. BRINTNALL and FREDERICK N. ROSS, Detroit, Mich., assignors, by mesne assignments, to National Automotive Fibres, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 5, 1928. Serial No. 310,588. 58 Claims. (Cl. 112—2.)



12. In a machine of the character set forth, means for feeding a plurality of plies of fabric and intervening strips of batting and forming from the fabrics nested outstanding seams, said means comprising a vertically movable cross-head; a forming-roll journalled in said cross-head; a shaft journalled in said cross-head and equipped with a swinging frame; means mounted on the cross-head for turning said shaft to effect swinging of said frame; and a breaker-roll journalled in said frame and equipped with means for effecting breaking of the strips of batting.

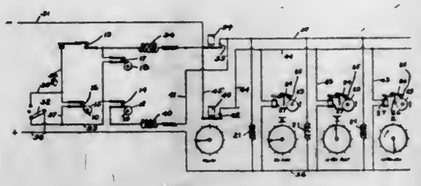
33. In the manufacture of cushions, the steps which comprise: feeding plies of cloth continuously; sewing the plies together to form pleats; feeding batts to the pleats as they are formed; and periodically arresting and severing the batts, thus forming a series of cushions connected by fabric.

1,825,574. SAFETY CLUTCH MEANS FOR IMPLEMENTS OF MOTOR DRIVEN AGRICULTURAL MACHINES. CHARLES S. BROWN, Syracuse, N. Y. Filed May 21, 1930. Serial No. 454,256. 6 Claims. (Cl. 56—25.)



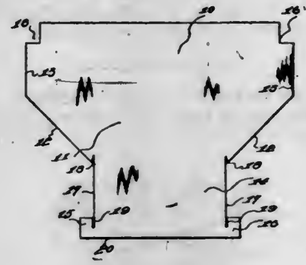
1. In a motor vehicle of the class described having ground driving wheels, and a reciprocating work performing implement, a motor, motion transmitting means between the motor and the ground wheels and the implement, the motion transmitting means for driving the implement comprising a low speed drive shaft, and a high speed driven shaft, the latter being connected to the implement, and a gear of large diameter on the low speed shaft, and a pinion of smaller diameter on the driven shaft and meshing with said gear, and a friction clutch coacting with the gear of larger diameter adjacent the periphery thereof for connecting and disconnecting the same and the low speed drive shaft, whereby the implement is normally driven through a geared up gearing, and when the implement is obstructed, the back leverage of the pinion on the gear is sufficient to cause the clutch to slip with a minimum slipping force.

1,825,575. SYNCHRONIZING CLOCK. JAMES W. BRYCE, Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Mar. 23, 1926. Serial No. 17,683. 18 Claims. (Cl. 58—24.)



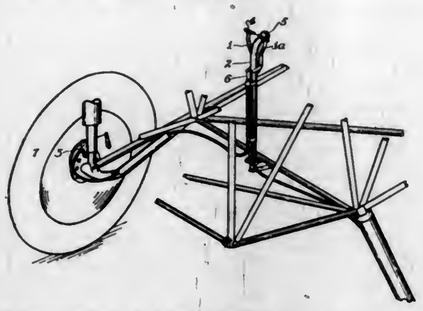
4. In an electrical clock system including a master clock, a secondary clock, operating means for said secondary clock, a single line circuit electrically connecting said operating means to said master clock, means in the master clock for sending normal and fast impulses all in the same direction over the said single line circuit to the secondary clock operating means for effecting all advances of the secondary clock throughout the entire cycle, in combination with synchronizing means therefor, characterized by the provision of means for sending from the master clock both the normal impulses and the fast impulses over said single common circuit which is always permanently connected electrically with the operating means of the secondary clock and means in the secondary clock for stopping further advance of the clock irrespective of the receipt of operating impulses by the operating means, said last mentioned stopping means being controlled for stopping action automatically and periodically by and in accordance with the chronological condition of the secondary clock itself and independently of electrical control from the master clock.

1,825,576. INTERLOCKING SHINGLE. NAASON Z. BUTTERICK, Miami, Fla. Filed Feb. 4, 1927. Serial No. 165,972. 4 Claims. (Cl. 108—7.)



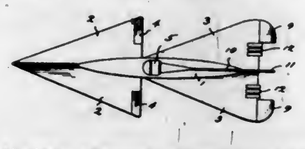
1. A shingle of the class described consisting of a sheet of material having an upper substantially rectangular portion, an intermediate trapezoidal portion and a lower substantially rectangular portion of a width equal to the minor parallel edge of the trapezoidal portion, the shingle being notched at the junction of the side edges of the trapezoidal and lower portions and the lower portion having lateral tabs at its lower corners provided with slits having their inner and outer edges alined with the side edges of said lower portion and at the junctions of said side edges and tabs, said upper portion having notches in the extreme upper corners, said notches leaving the necessary material to form said tabs, whereby the shingles can be cut from a continuous strip without any waste.

1,825,577. BRAKE CONTROL FOR AIRCRAFT LANDING WHEELS. WALTER J. CARR, Saginaw, Mich., assignor, by mesne assignments, of one-half to Paramount Aircraft Corporation, a Corporation of Michigan, and one-half to George C. Willcox, Saginaw, Mich. Filed Oct. 13, 1928, Serial No. 312,253. Renewed Feb. 9, 1931. 1 Claim. (Cl. 244—2.)



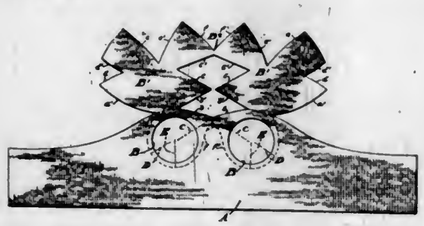
In combination, a control stick and two independently operable brake actuating elements carried by said control stick in such relation to the handle thereof that the pilot's hand while normally positioned on said handle can, without removal therefrom and simultaneously with the operation of the control stick or independently thereof, operate either of said brake-actuating elements independently or both together, for the purposes set forth.

1,825,578. AIRPLANE. ANTONIO CERNUDA, Habana, Cuba. Filed Jan. 2, 1930. Serial No. 418,128. 9 Claims. (Cl. 244—14.)



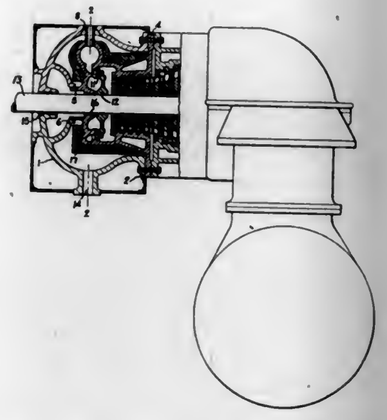
1. An airplane structure including a combination of airfoil elements together forming, with another part of the airplane, a general dart-like air-attacking structure of high lift efficiency, said general dart-like structure including a pair of equally laterally extending dart-shaped sustaining surfaces in tandem relationship.

1,825,579. BRASSIÈRE. VASKA CHRISTOFF, Detroit, Mich. Filed Feb. 28, 1930. Serial No. 432,189. 1 Claim. (Cl. 2—42.)



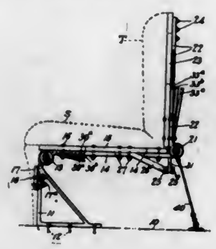
A garment comprising a body encircling band having the medial portion of greater width than the remaining portion and provided with spaced circular-shaped openings, and panels formed integral with one edge of the band adjacent the openings and provided with a plurality of V-shaped cutout portions, said panels having certain edges stitched to the band about the openings and the other edges stitched together to provide combined covers and supports, and said panels connected by a narrow integral portion stitched to the band between the openings.

1,825,580. ELASTIC FLUID TURBINE. ROBERT H. COLLINGHAM, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Jan. 22, 1929, Serial No. 334,291, and in Great Britain Jan. 27, 1928. 7 Claims. (Cl. 253—69.)



1. An elastic fluid turbine for use with elastic fluid at a very high initial temperature comprising an internal casing, inlet nozzles carried by the internal casing, means for conveying elastic fluid of high initial temperature to said nozzles, an external casing surrounding the internal casing in spaced relation thereto, and means whereby a fluid at a lower temperature, but of substantially the same pressure as that of the high temperature fluid may be circulated through the space between said casings.

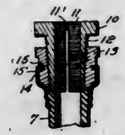
1,825,581. RESILIENT SEAT. WILLIAM COMERFORD, Buffalo, N. Y. Filed Aug. 28, 1929. Serial No. 388,929. 5 Claims. (Cl. 155—54.)



1. A resiliently supported seat comprising fixed floor-supported members, a pivot mounted on said fixed members, a seat on said pivot, and a plurality of sets of springs each having a central coil surrounding said pivot, a depending end engaged by said fixed members, and a rearwardly directed end engageable with said seat, one spring of each set being normally engaged with the seat, and the other springs of the sets being successively engaged by the seat in its downward rocking movement.

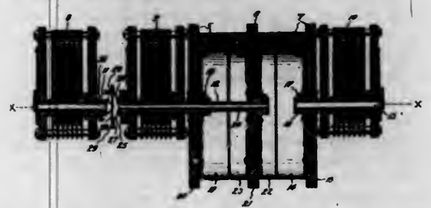
1,825,582. DEVICE FOR FLUSHING DRAIN PIPES. BENJAMIN P. CONNELLY, Raleigh, N. C. Filed Nov. 30, 1929. Serial No. 410,805. 2 Claims. (Cl. 285—123.)

1. A device for flushing drain pipes, comprising a tube having a coupling for connection with a faucet, said coupling consisting of a tapered sleeve having a series of vertical slots and interior and exterior screw threads, an adjusting threaded collar for engaging the exterior threads of said sleeve and having an annular groove in its outer face, and a band having one end connected to said tube



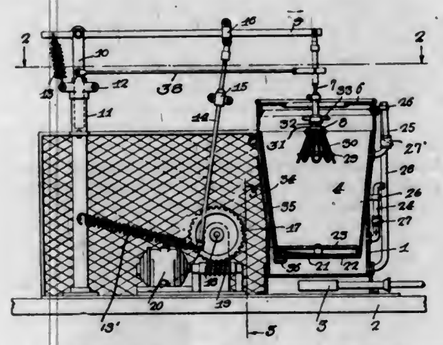
and the other end formed with a flange at its upper edge to engage the annular groove of said band of said collar to guide and retain said collar.

1,825,583. ADJUSTABLE ELECTRIC DEVICE. DONALD R. DE TAR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 11, 1926. Serial No. 147,813. 4 Claims. (Cl. 74—7.)



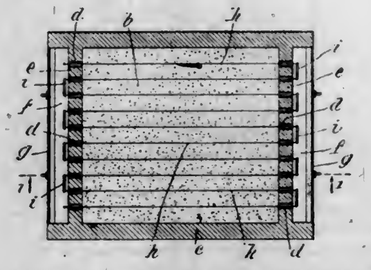
1. A panel mounting for three tuning devices each provided with a rotor member, comprising three control drums, one for each of said rotor members, grouped side by side and each projecting through the panel, each of said control drums being arranged to rotate with its corresponding rotor member independently of the other control drums and rotor members, said drums and rotor members being arranged to rotate on the same axis, one of said tuning devices being mounted at one side of said group of control drums, two of said tuning devices being mounted at the other side of said group of control drums.

1,825,584. WASHING AND DRYING MACHINE. ROBERT W. DONLEY, Philadelphia, Pa. Filed Sept. 12, 1928. Serial No. 305,513. 3 Claims. (Cl. 68—37.)



1. A machine of the class described comprising inner and outer receptacles, the inner receptacle fitting snugly in the outer receptacle, with the lower portions of the two receptacles spaced apart to provide a water space, the bottom of the inner receptacle having perforations therein, a flap valve in the inner receptacle for normally closing the perforations, a discharge pipe connected with the upper part of the inner receptacle, a water supply pipe connected with the lower part of the outer receptacle for introducing water into the space between the two receptacles, and thence upwardly through the perforations in the bottom of the inner receptacle into said inner receptacle and flowing out of the inner receptacle through the discharge pipe, a reciprocating plunger extending into the inner receptacle, means for attaching the articles to be cleaned to the lower end of the plunger and means for reciprocating the plunger.

1,825,585. REPLACEABLE RESISTANCE. ROBERT DUBOIS, Dreux, France. Filed May 18, 1927, Serial No. 192,415, and in Belgium Mar. 18, 1927. 4 Claims. (Cl. 201—64.)



1. A device of the class described comprising in combination a pair of end supports having openings formed therein, pulverized insulating material supported between said end supports, a plurality of independent, substantially rectilinear, resistance elements traversing said insulating material each passing through a pair of aligned openings in the end supports, said resistance elements having a cross section smaller than the areas of the aligned openings of the end supports through which they extend and being out of contact with the walls of said openings, and means for electrically connecting resistance elements issuing from adjacent openings in the end supports.

1,825,586. FABRIC AND METHOD OF MAKING THE SAME. JOSEPH C. FARBER, Cleveland Heights, Ohio, assignor to The Friedman-Blau-Farber Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 3, 1931. Serial No. 541,955. 4 Claims. (Cl. 28—1.)

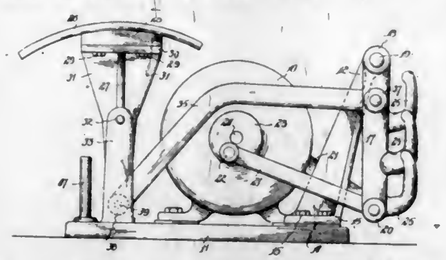
1. In the method of producing crepe like effects on fabrics, the steps which consist in twisting together yarns of rayon fibre and wool fibre to form a double strand, forming a fabric from such strands and then shrinking one yarn to the extent that the other yarn is looped.

1,825,587. PIVOTAL SASH WINDOW. ERNEST THOMAS FISK, Sydney, New South Wales, Australia. Filed June 27, 1930, Serial No. 464,402, and in Australia July 4, 1929. 5 Claims. (Cl. 20—53.)



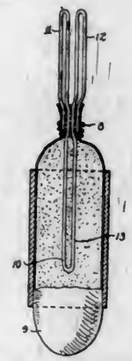
1. A window comprising a main sash adapted to be inclined downward and outward and a sub-sash fitted into the main sash, the sub-sash being adapted to swing on a horizontal axis for opening and closing, and sound suppressing panels fitted on the inner side of the main sash.

1,825,588. PORTABLE VIBRATING MACHINE. LESTER C. GUNDERMAN, Pittsburgh, Pa. Filed Jan. 29, 1929. Serial No. 335,862. 8 Claims. (Cl. 128—63.)



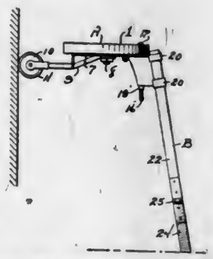
5. A portable vibrating machine for manipulating different parts of the human body, comprising a motor mounted on a supporting base, uprights rising from the base at the forward end of the machine, arms pivoted at one end to said uprights for swinging movement thereon, a pitman wheel mounted on the shaft of the motor, and a pitman rod connecting the pitman wheel to the outer ends of the arms supports pivoted on the base at the rear end thereof, horizontal plates mounted on said supports for vibrating movement, and means connecting the swinging arms to the pivoted supports for the horizontal plates for vibrating the latter.

1,825,589. FIRECRACKER. THOMAS G. HITT, Seattle, Wash. Filed Oct. 2, 1929. Serial No. 396,829. 4 Claims. (Cl. 102—22.)



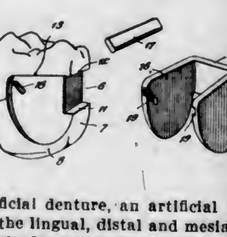
1. A firecracker comprising an open-ended tube, a bag containing a flash composition within said bag, said bag extending beyond the ends of said tube.

1,825,590. PORTABLE STAGING. LESTER R. HOLLISTER, Hall, Mont. Filed May 31, 1930. Serial No. 458,082. 5 Claims. (Cl. 304—2.)



1. A staging of the class described comprising a platform, a bracket pivoted to the under part of each end of the platform, a second bracket hinged to the first bracket, a leg connected with each second bracket whereby the leg can be folded and partly rotated about the end of the platform and means for holding the second bracket in adjusted position with the leg at the end of the platform or at either side thereof.

1,825,591. THERMOSTATIC SWITCH. LEONARD P. HUTT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,730. 14 Claims. (Cl. 200—140.)



1. In combination, a movable switch member, oppositely acting biasing means therefor, one of said means predominating, and automatic means having a part movable proportionately to variations in a predetermined condition and adjustably connected to render said predominating biasing means effective and ineffective upon opposite variations of said condition from a different predetermined value.

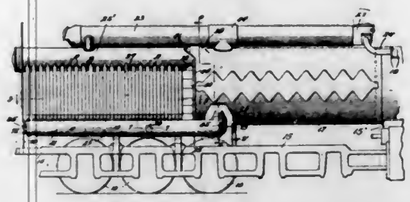
1,825,592. FLYING BOAT. OTHO W. JOHNSON, Baltimore, Md. Filed Mar. 27, 1930. Serial No. 439,444. 4 Claims. (Cl. 244—2.)

1. An improved flying boat comprising a boat structure adapted to float on water, rails on the boat, an airplane superstructure having runners to slide on said rails, braces carried by the superstructure, sockets on the boat to receive said braces, and hold-down means between the braces and boat.

1,825,593. ARTIFICIAL DENTURE. WALTER E. KEMPF, Stamford, Conn. Filed Oct. 2, 1929. Serial No. 396,799. 4 Claims. (Cl. 32—9.)

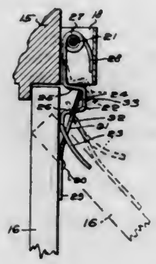
1. In an artificial denture, an artificial tooth having a groove girdling the lingual, distal and mesial sides, a backing member snugly fitted into the groove by relative movement of the tooth and backing at substantially a right angle to the stress of the bite and a reinforcing bar extending through the tooth from the mesial to the distal sides, projecting from said sides and having interengagement with the backing member.

1,825,594. BOILER. WILLIAM F. KIESEL, Jr., Altoona, Pa. Filed June 30, 1927. Serial No. 202,521. 20 Claims. (Cl. 122—94.)



1. In a locomotive type boiler, in combination, a barrel having fire tubes therein, a fire box, a water drum communicating with and extending from said barrel over said fire box, a steam drum extending over said water drum and over substantially the full length of the barrel, a connection between the steam drum and barrel and a throttle valve chamber closing the forward end of said steam drum.

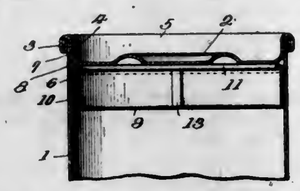
1,825,595. STORM SASH OR SCREEN HANGER. PAUL KOHL, Wausau, Wis. Filed Apr. 24, 1930. Serial No. 447,031. 3 Claims. (Cl. 292—80.)



1. A hanger for the frame of a storm sash or screen, or the like, comprising a swinging bolt having spring action and provided at its lower end with an inclined portion extending forwardly from the frame toward its lower end, said bolt being provided at the inner end of the inclined portion with a hook, means for attaching the bolt to a window frame, or the like, and a keeper to be secured to the first-named frame and having an upper inclined end portion extending forwardly from said frame toward its upper end, the inclined end portion of the keeper having an opening formed therein which is spaced from its upper end for providing a closed end element, the arrangement being such that the inclined end portion of the swinging bolt is adapted to enter said opening and the closed end element of the keeper is adapted to enter said hook, the swinging bolt and the upper end of the keeper swinging in opposite directions, when the screen is swung outwardly.

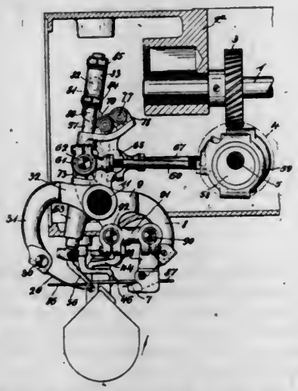
1,825,596. INTERIOR COLLAR CAN. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 4, 1930. Serial No. 459,202. 4 Claims. (Cl. 220—54.)

1. A metal container comprising a body portion and ends secured thereto by seaming, said body portion having score lines adjacent one end thereof, forming a rip strip for releasing the end, and a collar disposed within the body so that the upper end thereof extends above the lower score line, one end of said collar being straight and the other end being bent upon itself to form a housing for said straight end, whereby said end portions, of the collar



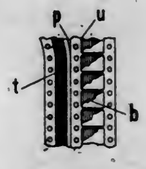
are firmly held in abutted relation and prevented from shifting laterally and releasing when said collar is under compression.

1,825,597. SEWING MACHINE FOR JOINING EDGE PORTIONS OF FABRIC SECTIONS. KARL MAIER and FRIEDRICH LUTZ, Stuttgart, Germany, assignors to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed July 26, 1927, Serial No. 208,471, and in Germany July 29, 1926. 19 Claims. (Cl. 112—63.)



1. A sewing machine including in combination, a frame, a work support, a housing overhanging said work support, means for trimming the edge portions of the fabric placed face to face and arranged vertically, means mounted on said housing for joining said edge portions by through and through stitches, and means mounted in said housing for forming blind stitch covering stitches for the joined edge portions of the fabric sections.

1,825,598. PROCESS FOR PRODUCING COMBINED SOUND AND PICTURE FILMS. HANS VOGT, Berlin-Wilmersdorf, JOSEPH MASSOLLE and JOSEF ENGL, Berlin-Grunewald, Germany, assignors, by mesne assignments, to American Tri-Ergon Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1922, Serial No. 547,860, and in Germany Apr. 14, 1921. 11 Claims. (Cl. 88—16.2.)



5. A process for producing a combined sound and picture positive film, for talking moving pictures, comprising, photographing a sequence of pictures on one length of film, and simultaneously photographing on another length of film a corresponding sequence of sounds accom-

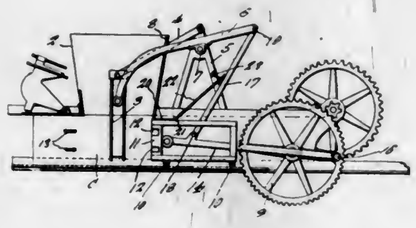
panying the action, separately developing the two negatives in a manner appropriate for each, and printing the sound and picture negatives respectively upon different longitudinally extending portions of the same sensitized film, to form the sound sequence at one side of and along the picture sequence.

1,825,599. APPLE PICKER. EVERETT MILLER, Blackfork, Ohio. Filed May 27, 1930. Serial No. 456,262. 1 Claim. (Cl. 56—334.)



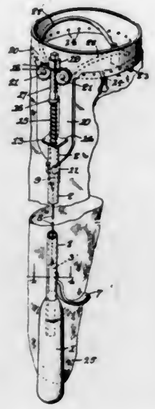
A fruit picker comprising a handle a guide member mounted transversely across the end thereof and having an inclined upper surface, fruit gripping members pivotally mounted upon the handle at a point below the guide member, said fruit gripping members having end portions lying at the opposite sides of the guide and adapted to move toward the guide in gripping the fruit, a receptacle supported in position to receive the fruit from the guide and means operable to effect movement of the gripping members toward the guide.

1,825,600. BALING PRESS. EUGENE D. NICHOLS, Fortuna, Mo. Filed July 22, 1930. Serial No. 469,743. 2 Claims. (Cl. 100—3.)



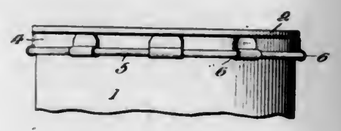
2. A baling press including in combination, a lever actuated presser foot, a pitman actuated plunger, an apron pivotally mounted on the plunger, a link pivotally connecting the presser foot lever with the pitman actuating the plunger, and a stud projecting from the link and extending through an aperture provided in the apron remote from the pivot of the apron.

1,825,601. FRUIT PICKER. ANDREW H. PALMBUSH, Conrad, Mont. Filed Mar. 7, 1930. Serial No. 434,099. 7 Claims. (Cl. 56—334.)



1. In a fruit picker, the combination of a handle, a hollow rod, a plate affixed to the upper end of the hollow rod, a ring on the plate, said ring having a fabric tube attached thereto, semicircular wires having outturned ends pivotally mounted in extensions of the ring, opposite pinions on one end of each of the wires, a double rack bar with which each of said pinions mesh, a collar on the rack bar, an apertured plate affixed to the ring extension, a spring interposed between said collar and said apertured plate to tend to raise the rack bar and thus throw the fruit picking wires to an open position, a wire attached to the rack bar, a weight member to which said wire is attached, a trigger affixed to said weight element, the hollow rod being slotted to permit of sliding movement of the trigger.

1,825,602. SCORED CONTAINER WITH BREAKING TAB. WILLIAM F. PUNTE, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1930. Serial No. 459,342. 2 Claims. (Cl. 220—59.)

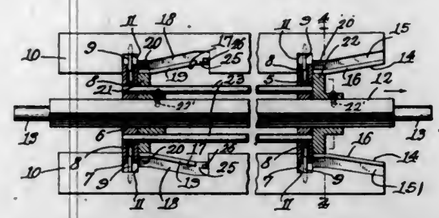


1. A metal container including in combination a body portion, an outside slip cover having a depending flange provided with a bead at the lower edge, said body portion having holding lugs formed integral therewith adapted to bend outwardly and inwardly around said bead on the cover flange for securing said cover in sealing contact with the container body, said holding lugs being scored whereby they may be torn away and the cover released from the container body.

1,825,603. METHOD OF MAKING DEXTROSE AND DEXTROSE COMPOUNDS. CARL RACH, New York, N. Y. Filed Mar. 17, 1930. Serial No. 436,637. 6 Claims. (Cl. 127—46.)

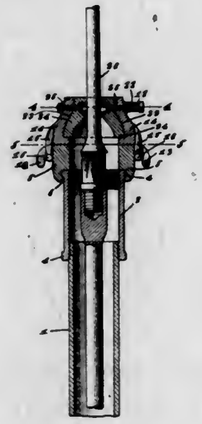
1. A process for manufacturing pure dextrose sodium chloride comprising determining the amount of dextrose in an impure solution containing dextrose, adding sodium chloride to the solution, evaporating the solution to syrup consistency to effect crystallization of dextrose sodium chloride, and collecting the crystals.

1,825,604. REEL. ROBERT L. RAY, Elizabethton, Tenn. Filed Apr. 9, 1929. Serial No. 353,727. 3 Claims. (Cl. 242—110.)



3. A reel of the class described, including heads, said heads having notches, blades fitted in the notches, pins carried by the blades, said heads having openings to receive the pins of the blades to restrict movement of the blades in one direction, a shaft extending through the heads, and means for transmitting movement of the shaft to the blades to move the blades laterally to expand or contract the reel.

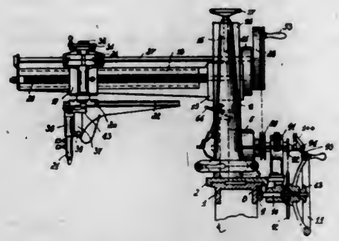
1,825,605. COMBINATION THREAD PROTECTOR AND SUCKER ROD STRIPPER. MARTIN L. REED, Wilson, Okla. Filed Nov. 5, 1930. Serial No. 493,670. 2 Claims. (Cl. 166—14.)



1. In a device for the purpose set forth, a well casing having a T-coupling in the outer section thereof, an inner head comprising two sections which are adjustably connected and which are fixed on the outer end of the T-coupling, an outer head section which is removably and swingably secured to the inner head section and which also comprises two similar parts or sections, spring means for forcing the sections toward each other, adjusting means for said spring means and a compressible washer pocketed in the outer head section to engage with the sucker rod for the casing.

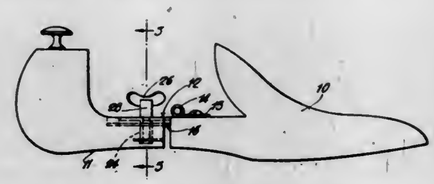
1,825,606. CUTTING AND WELDING MACHINE. ADAM SCHMIDT, Strebersdorf, Austria, assignor to the Firm Aktiengesellschaft fur Tiefbohrtechnik und Maschinenbau vormals Trauzl & Co., Vienna, Austria. Filed May 17, 1929, Serial No. 363,965, and in Austria May 19, 1928. 30 Claims. (Cl. 266—23.)

1. A blowpipe cutting or welding machine, comprising a burner, a plurality of linearly slidable supports and rotary supports carrying the said burner, and, in different combinations, simultaneously operable means for individually operating the several supports for moving the burner along any direction in a plane and in a direction perpendicular to that plane, and along circles, whereby the



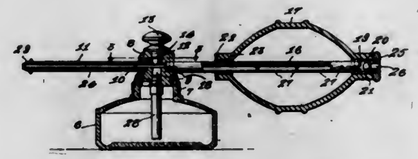
center of the circular movements of at least one of the rotary supports is shiftable along any direction in a plane and a direction perpendicular to that plane.

1,825,607. EXTENSION FORMER. JASPER SCIALLIS, Staten Island, N. Y. Filed June 27, 1930. Serial No. 464,340. 4 Claims. (Cl. 12—128.6.)



1. In a shoe tree constructed of two sections, an extensible hinge comprising a leaf plate secured to one of the tree sections, a shank pivoted to said leaf plate and slidable in a recess provided with the other of said tree sections, and clamping means for securing said shank in an adjusted position within said recess, said means including a clamping screw passing through an elongated slot in said shank and being threaded into a threaded socket in the bottom wall of said recess.

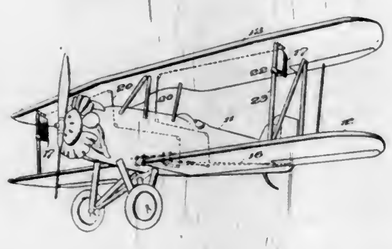
1,825,608. ATOMIZER. ARTHUR J. SHAUKIS, Haverhill, Mass. Filed Aug. 10, 1928. Serial No. 298,658. 2 Claims. (Cl. 299—88.)



1. An atmoider including a container, a plug closing the container and having a vertical bore extending therethrough and horizontally disposed recesses arranged in opposite sides of the bore and in alignment with each other, oppositely extending rigid intake and discharge tubes secured in said recesses and said discharge tube having the free end thereof shaped to provide a nozzle and the intake tube having spaced openings, a bulb arranged on the intake tube and enclosing the openings, a check valve associated with the bulb and the intake tube, an air tube secured in the plug and entering the intake tube and extending through the discharge tube and terminating in the nozzle end thereof, said air tube traversing the bore, said plug having an inclined passage between the bore and the discharge tube and disposed in a plane above

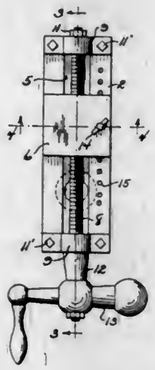
the air tube, and a flanged closure element threaded in the upper portion of the bore and said plug having an air passage extending from beneath the flange through the inner end of the plug to be closed when the flange is seated against the plug and to admit atmospheric pressure to the container when the flange is disengaged from the plug, said closure element controlling the communication of the inclined passage with the bore.

1,825,609. AIRPLANE CONTROL. CHARLES WALD, Freeport, N. Y. Filed Nov. 26, 1929. Serial No. 409,870. 3 Claims. (Cl. 244—29.)



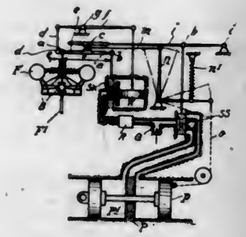
1. In airplane control mechanism including operatively connected tail and wing rudders, said tail rudder being operable to a predetermined degree for directional control of the plane, and means carried by the tail rudder operating means whereby continued operation of said tail rudder effects movement of one of the wing rudders to stop helicoidal movement of the plane.

1,825,610. COUNTERBALANCE. FERNANDO J. WOOD, Pampa, Tex. Filed Mar. 31, 1930. Serial No. 440,487. 1 Claim. (Cl. 74—38.)



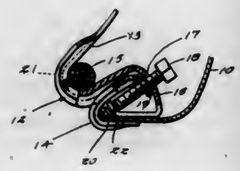
A counterbalance comprising an elongated body fixed to a crank shaft adjacent one end and having a dove-tail groove in one face and extending the full length thereof, bearings having dove-tail portions fitting in the groove, fasteners securing the bearings to the body at the ends thereof, a feed shaft journalled in the bearings and extending parallel with the groove, a weight having a screw-threaded bore receiving the feed shaft and having a dove-tail extension in the groove and adjustable along said groove by the feed screw, said body having spaced sockets adjacent the groove, and a spring pressed element carried by the weight to engage any one of the sockets for locking the weight in various adjusted positions on the body.

1,825,611. PRESSURE OIL GOVERNOR FOR TURBINE WHEELS. JAKOB BANGERTER, Burgdorf, Switzerland. Filed Jan. 3, 1930, Serial No. 418,341, and in Germany Jan. 7, 1929. 2 Claims. (Cl. 121—42.)



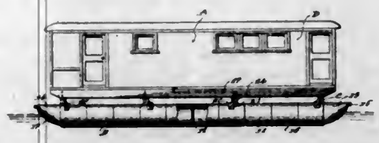
1. In a pressure oil governor for turbine wheels and other rotatory motors and in combination, a spring-governor and a sleeve forming part of the same all mounted on a vertical axle, a piston of a servomotor and a distributing valve combined with the same, a piston of an auxiliary motor guided in a vertical cylinder and a distributing valve combined therewith, passage ways for pressure oil communicating with the chest of said two distributing valves, a pair of levers establishing the operative connection between the governor sleeve and the auxiliary motor and comprising a first lever hinged between its ends to the governor sleeve and at one end to the distributing valve of the auxiliary motor and a second lever pivoted between its ends and linked to the other end of the first lever and to the piston of the auxiliary motor and a second pair of levers establishing the dependency of the servomotor on the movement of the said first lever and comprising one pivoted lever arm linked near its middle portion to the distributing sleeve of the servomotor and supported with its free end by said first lever and a pivoted bell-crank lever linked with one arm to the supporting member of the first lever of the second pair of levers and a spring attached to the bell crank cover and adapted to effect the return movement of the piston of the servomotor, the whole for the purpose set forth.

1,825,612. FENDER ROPE FASTENER. EDWARD D. BARTON, Fountain, Colo. Filed July 31, 1930. Serial No. 472,006. 2 Claims. (Cl. 24—84.)



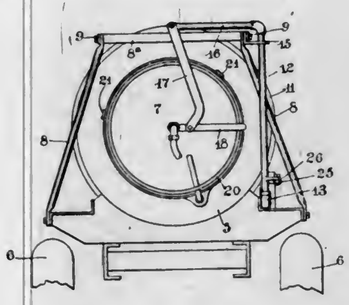
1. A clamp of the character described comprising a fixed hook member, a movable clamping member, means for holding said movable clamping member against lateral movement with respect to said fixed clamping member, said means comprising a groove in said fixed hook member and a bead on said movable member slidably engaging in said groove, and a threaded bolt rotatably carried by said fixed member and threadably engaging said movable member.

1,825,613. PONTOON HOUSE BOAT. LOUIS N. BELL, Sault Ste. Marie, Mich. Filed Mar. 10, 1930. Serial No. 434,736. 4 Claims. (Cl. 114—0.5.)



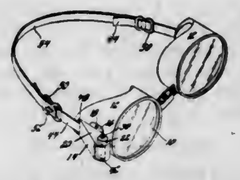
4. In a boat, a pontoon structure, an elevated supporting frame work carried by the pontoon structure, a body on said frame work spaced at all points from the pontoon structure, and pivoted platforms, carried by the ends of the frame work, means for holding the platforms in a raised position to act as a spray dash.

1,825,614. COVER FOR THE DISCHARGE OPENINGS OF CONCRETE MIXING DRUMS. JOSEPH EGGERT, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed July 5, 1929. Serial No. 376,108. 10 Claims. (Cl. 83—73.)



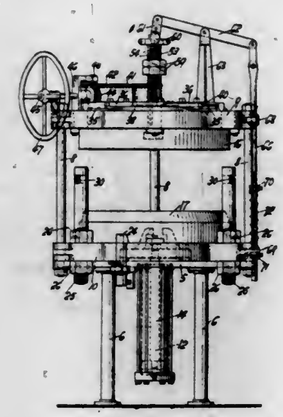
1. In combination with a concrete mixer having a discharge opening, a cover for said opening and means for supporting said cover including a horizontally swinging arm and a pivoted link on said arm carrying the cover adapted to permit the swinging of the cover toward and from said opening and means permitting movement of the cover in its plane on said pivoted link.

1,825,615. GOGGLES ATTACHMENT. HOMER H. HECKMAN, Detroit, Mich., assignor to Theophila Heckman, Detroit, Mich. Filed Dec. 9, 1930. Serial No. 501,062. 9 Claims. (Cl. 2—14.)



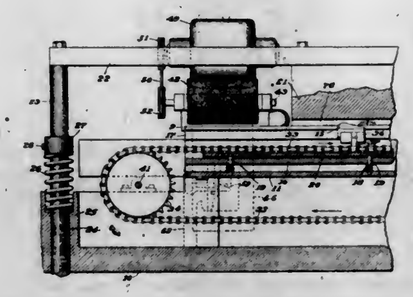
1. In combination, a pair of goggles and a head loop therefor, the latter including a strap of fixed length, and a tape of variable length, connecting an end of the strap with the frame of the goggles, the tape being connected to the goggles frame by a coiled spring, one end of the coiled spring being connected to the goggles frame and the other end being connected to the tape thru a releasable clutch.

1,825,616. VULCANIZING PRESS. RICHARD J. SCHMIDT, Akron, Ohio, assignor to The Akron Equipment Company, Akron, Ohio, a Corporation of Ohio. Filed July 5, 1927. Serial No. 203,486. 13 Claims. (Cl. 18—17.)



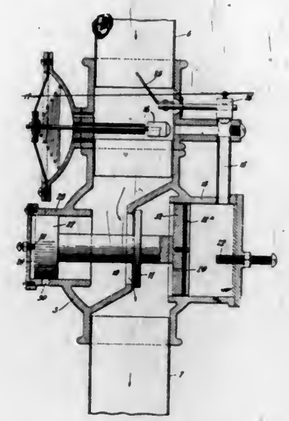
13. In a vulcanizing press, mold sections, means for moving the mold sections toward and from one another, clamps for squeezing the sections together about the inner circumference of the mold comprising wedge surfaces carried by one mold section, a shaft movable axially of the mold, wedge surfaces upon the head of the shaft, means for projecting the shaft so that the head will be in alignment with the wedge surfaces on the mold section when the mold is closed and withdrawing it when the mold is opened, an abutment carried upon the shaft and bearing against the other mold section and means for rotating the shaft, and a plurality of locking devices about the outer periphery of the mold operable by the rotation of the shaft.

1,825,617. MACHINE FOR TRIMMING THE TUFT YARNS OF TUBE FRAMES. GEORGE H. SIMONSON, Springfield, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Mar. 27, 1930. Serial No. 439,438. 17 Claims. (Cl. 164—73.)



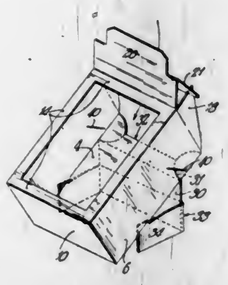
1. In a tuft yarn trimming machine, the combination of a tube frame support, a slotted surface on which the tuft yarns extending beyond the tube frame rest, a brush for straightening out the loose yarn on said supporting surface, a cutter movable along said slot to cut the yarns to a uniform length from the tube frame, and means for holding the yarns while they are being cut.

1,825,618. PNEUMATIC DISPATCH CONTROL VALVE. JOSEPH JOHN STOETZEL, Queens Village, N. Y., assignor to G & G Atlas Systems, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 19, 1929. Serial No. 393,604. 15 Claims. (Cl. 243—15.)



1. A control valve for a minimum flow pneumatic dispatch system comprising a valve casing having a main port, a freely floating valve member closing said port and opening in the direction of flow through the port, and means responsive to conditions in the line for controlling said valve.

1,825,619. DISPLAY CONTAINER. EARL BARTSCH WHITEHEAD, Norwich, Conn, assignor to Atlantic Carton Corporation, Norwich, Conn., a Corporation of New York. Filed Feb. 25, 1930. Serial No. 431,306. 5 Claims. (Cl. 206—44.)

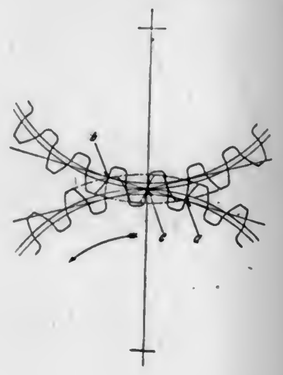


1. A carton of the class described comprising in combination, forward, side and rear walls forming a receptacle, a display panel hinged to said forward wall including a rim hinged thereto, side flaps hinged to said side walls, a closing flap hinged to said rear walls, a strap hinged to the outer edge of said closing flap having tucks hinged to its opposite ends, the said panel, side flaps and closing flap adapted to overlap one another to close said receptacle with the strap portion overlying said forward wall and the tucks overlying the side walls and being movable to open said receptacle wherein the closing flap may extend below the same with said tucks inserted in slots in the walls of said receptacle to support the receptacle in an inclined position while the panel portion is movable to an angular position with respect to said forward wall and the rim movable to engage said side flaps whereby the said panel is supported in said angular position.

1,825,620. COLORED COLD MOLDED INSULATION. ROY EDWIN COLEMAN, Meriden, Conn., assignor, by mesne assignments, to The Manowatt Electric Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 18, 1926. Serial No. 149,273. 8 Claims. (Cl. 106—15.)

1. The method of making a brown cold molded insulation product which includes, heating and mixing together a drying oil, a resin of the copal type and an asphaltic material, grinding finely divided iron oxide with a dispersing medium including linseed oil so as to widely disperse the iron oxide, adding the iron oxide dispersed in the dispersing medium to the first mentioned heated mixture, and mixing until a homogeneous binder mass is produced, mixing the binder mass with inert filler material until a homogeneous mass is produced in the form of individual granules or pellets, the proportions of binder and filler being such that the mass produced is cold moldable, curing the mass, then pressing into the desired shapes, and then baking the pressed articles until they become hard and permanent in character.

1,825,621. STANDARD GEAR TOOTH FORM. ANTHONY BRUCE COX, Wilkinsburg, Pa. Filed Aug. 19, 1927. Serial No. 214,039. 4 Claims. (Cl. 74—41.)



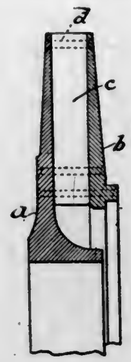
1. A toothed gearing comprising teeth having a form factor which is determined by the formula

$$q=\frac{n}{2\pi}(-1+\sqrt{1+3\sin^2\phi})$$

where q is the form factor which is the ratio of addendum length to circular pitch, or in symbols, $q=a/Pc$, n the number of teeth in the smaller of the two meshing gears, ϕ the pressure angle or cot $\phi=n/\pi$ M_t, and M_t, the total number of pairs of teeth in contact in a given pair of meshing wheels.

1,825,622. HIGH SPEED BLOWER. FRANK W. KENNEDY, Trenton, N. J., assignor to De Laval Steam Turbine Company, Trenton, N. J., a Corporation of New Jersey. Filed Dec. 23, 1924. Serial No. 757,585. 10 Claims. (Cl. 230—134.)

1. A blower wheel for high speed blowers comprising a hub, a side plate, duralumin vanes extending between them, and rivets uniting the vanes to the hub and side plate, vanes adjacent the rivets being solid and substantially thicker than the shanks of the rivets and the rivets which unite a vane to the hub and side plate extending through all three members and from edge to edge and between the faces of the vane, the outlet end portion of the vane



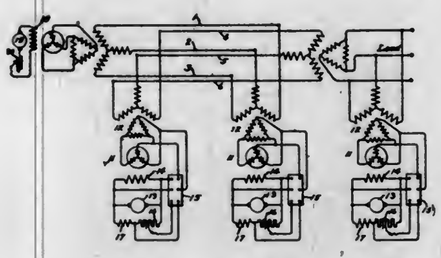
extending backward relative to the direction of rotation of the wheel at an angle not less than twenty degrees to the radius of the wheel.

1,825,623. DERIVATIVE OF QUINOLINE CARBOXYLIC ACIDS AND PROCESS OF MAKING SAME. KARL MIESCHER, Basel, Switzerland, assignor to the firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Dec. 23, 1927, Serial No. 242,281, and in Germany May 3, 1926. 12 Claims. (Cl. 260—39.)

1. A process for the manufacture of substituted basic derivatives of quinoline carboxylic acids by causing an acid halide of an α-halogen-γ-quinoline-carboxylic acid, to react with a base of the formula

wherein A represents an alkylene radical containing at least two carbon atoms, R_1 stands for hydrogen, alkyl or dialkyl-aminoalkyl, and R_2 and R_3 for alkyl, and wherein R_1 and R_3 or R_2 and R_3 may also stand for an alkylene chain to form a heterocyclic six member ring in which one or two of the N-atoms will be part of the ring.

1,825,624. ELECTRICAL POWER TRANSMISSION. CLIFFORD A. NICKLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 18, 1925. Serial No. 24,243. 12 Claims. (Cl. 172—246.)



2. In a high-voltage power transmission system, a source of alternating current supply, a receiving circuit, and a transmission circuit comprising phase conductors consisting respectively of a plurality of conductors in substantially parallel spaced relation and arranged to provide a series distributed capacitance having a value sufficient substantially to neutralize the inherent inductive reactance of said transmission circuit for increasing the power limit of said transmission system.

9. In a system of power transmission, a transmission line having an inherent inductive reactance several times in excess of the resistance of said line, and a capacitive reactance interposed in series relation with said line having such a value as to change artificially the ratio of the inductance reactance to the resistance in a manner to approach the theoretical relation of inductive reactance to resistance for permitting a maximum power flow over said line.

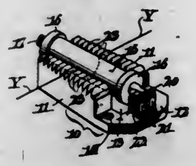
1,825,625. STIFFENING MEMBER FOR BOOTS AND SHOES. WALLACE C. BENNETT, Hingham, Mass., assignor to Bennett Box Co., Boston, Mass., a Corporation of Massachusetts. Filed June 15, 1923. Serial No. 645,520. 4 Claims. (Cl. 154—46.)



1. A stiffening member for a boot or shoe comprising a wood pulp layer, a fabric layer and a stiffening composition comprising a soluble silicate and rubber latex applied to both layers and adhesively affixing said layers together.

3. A composite material adapted for use as a stiffener comprising a supporting fabric, a mass of fibres derived from wood associated in a loosely-matted form with said supporting fabric, and, distributed throughout the interstices of said supporting fabric and said mass of fibres, a continuous body of hardened saturant.

1,825,626. YARN TENSIONING DEVICE. WILHELM BOCK, Lansdale, Pa., assignor to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Mar. 30, 1928. Serial No. 265,849. 2 Claims. (Cl. 242—151.)

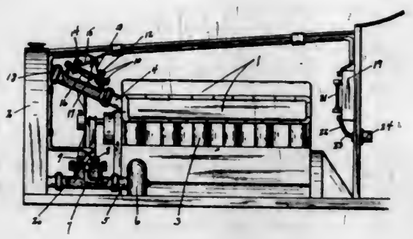


1. A yarn tensioning device embodying an elongated weighted tensioning member adapted to be floatingly sustained by the yarn, and a fixed member having a central longitudinal clearance slot and affording the tensioning member free pivotal support at one end for movement up and down within said slot, said fixed member also having serrations along each side of the slot providing a series of transverse grooves for selective guidance of the yarn crosswise of the tension member at different distances from its pivot to vary the drag induced.

1,825,627. HEATER FOR WATER-COOLED ENGINES. KENNETH H. BOWEN, Auburn, N. Y., assignor to Henry and Allen, Auburn, N. Y., a Corporation of New York. Filed July 2, 1928. Serial No. 289,851. 3 Claims. (Cl. 123—174.)

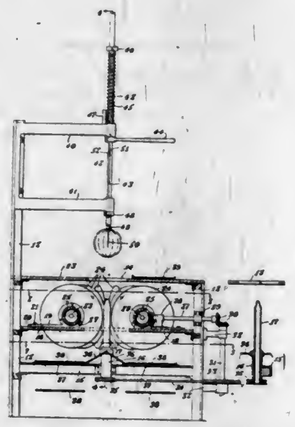
1. In a device of the class described, an engine having a water jacket, a radiator, an upper conduit connecting the water jacket to the radiator and having a heat conducting wall, a casing mounted on said conduit, the heat conducting wall forming a part of said casing, a lower con-

duit connecting the water jacket to the radiator, an electrical heater disposed in the lower conduit, a contact socket for connection to a source of potential, an electrical connection between the heater and the contact socket, and



heat controlled means arranged in said casing, and actuated in accordance with the temperature of the fluid in the upper conduit for breaking such electrical connection at a substantially predetermined temperature in the upper conduit.

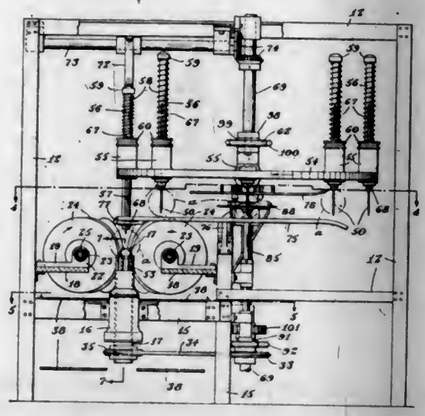
1,825,628. MACHINE FOR CORING AND SLICING CITROUS FRUITS. CAROL FLOYD and DANIEL M. SMALLE, Orlando, Fla., assignors to Dr. P. Phillips Company, Orlando, Fla., a Corporation of Florida. Filed Oct. 21, 1929. Serial No. 401,061. 3 Claims. (Cl. 146—40.)



1. In a machine having a rotary corer and a surrounding series of rotary knives for simultaneously coring and slicing citrous fruit, means for delivering the fruit to position to ensure operation of the corer in a path to cut the meeting edges of the segments of the fruit.

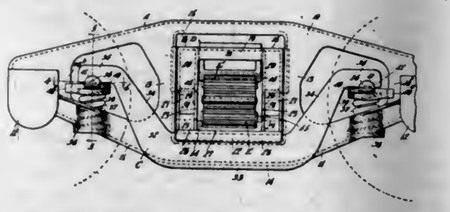
1,825,629. MACHINE FOR DIVIDING FRUIT. CAROL FLOYD, Orlando, Fla., assignor to Dr. P. Phillips Company, Orlando, Fla., a Corporation of Florida. Filed June 18, 1930. Serial No. 461,899. 12 Claims. (Cl. 146—40.)

1. A machine for dividing fruit, said machine having a rotary cutter for bi-secting the fruit, a group of radially arranged knives for dividing the fruit on lines crossing its bi-secting cut, a guideway from the bi-secting cutter to said radially arranged knives, means for effecting movement of the fruit along said guideway to position



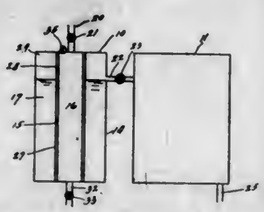
in line with the center of said knives, means for rotating the fruit while being bi-sected, and means for causing the bi-sected fruit to enter between said knives.

1,825,630. CAR TRUCK. KARL M. HAMILTON, Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Nov. 2, 1927. Serial No. 230,472. 9 Claims. (Cl. 105—190.)



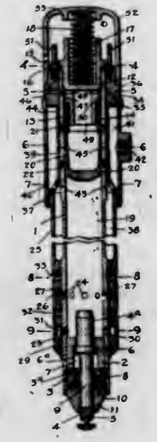
1. In a truck, the combination with the side frames having central openings; of a transom having its opposite ends received in said openings; carrier bars yieldably mounted on said frames upon which the ends of said transom rest; springs extending through said central openings and suspended from said transom for lateral movement with reference to said side frames, and a bolster supported by said springs.

1,825,631. WATER SOFTENING. ANTHONY G. HORVATH, Dayton, Ohio, assignor, by mesne assignments, to Uniflow Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Dec. 9, 1926. Serial No. 153,579. 4 Claims. (Cl. 210—9.)



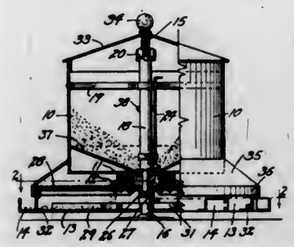
1. The method in the softening of hard water containing salts which react with soap to form insoluble compounds which comprises maintaining hard water and softened water on opposite sides of a semi-permeable membrane, exerting a controlled pressure on the hard water to effect reverse osmotic flow through said membrane, and maintaining controlled concentration of said hard water.

1,825,632. PERCUSSIVE TOOL. BORIS V. KORVIN-KROUKOVSKY, Beechhurst, New York, N. Y., and KENNETH D. VOSLER, College Point, New York, N. Y., assignors to Edo Aircraft Corporation, College Point, Long Island, N. Y., a Corporation of New York. Filed Dec. 3, 1927. Serial No. 237,440. 15 Claims. (Cl. 121—21.)



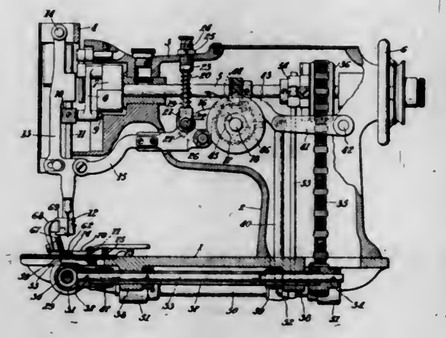
1. In a single impact tool of the class described, an inner member forming a ported working chamber, a piston reciprocable in said chamber, an outer member forming a ported reservoir to which working fluid is admitted, said reservoir having a volume substantially greater than the volume of the working chamber, and said outer member being manually movable longitudinally with respect to said inner member to admit working fluid through the ports from the reservoir to the working chamber during the full stroke of said piston.

1,825,633. AUTOMATIC HOG FEEDER AND GRINDER. ALLAN J. MCDOUGALL, Denver, Colo., assignor of one-half to Edward J. James, Denver, Colo. Filed Oct. 8, 1928. Serial No. 311,052. Renewed Feb. 13, 1931. 3 Claims. (Cl. 83—7.)



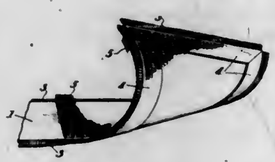
1. A hog feeding and grain grinding device comprising: a vertical supporting standard; a sleeve surrounding said standard; means for supporting said sleeve at any desired vertical height on said standard means for preventing rotation of said sleeve about said standard; a grain reservoir secured to said sleeve; a grinding burr secured to the bottom of said grain reservoir; a feed pan rotatably supported from said standard below said reservoir; a second grinding burr operatively connected to said feed pan so as to co-act with said first grinding burr; and a series of feeding pockets at the periphery of said feeding pan, said pockets being arranged to cause the animals in feeding to act at a tangent to the periphery of and rotate said feed pan, there being a series of openings communicating between said feeding pan and said pockets and stationary rake means within said feeding pan arranged to force the ground grain delivered by said burrs toward said openings as said pan is rotated.

1,825,634. SEWING MACHINE. WALTER MYERS, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 20, 1929. Serial No. 415,449. 12 Claims. (Cl. 112—99.)



1. In a sewing machine for attaching a bead-chain to a body material, a work-support, a reciprocatory and laterally vibratory needle, means for advancing the body-material and the bead-chain past the needle including a feed-dog projected through the work-support to engage the chain-beads rearward only of the needle, and presser devices opposed to said work-support bearing upon the body material and bead-chain to yield independently of each other.

1,825,635. PILE-FABRIC ARTICLE AND PROCESS OF PRODUCING THE SAME. WALTER MYERS, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 16, 1930. Serial No. 489,080. 6 Claims. (Cl. 2—278.)

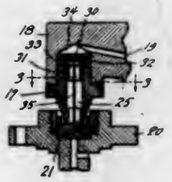


1. A process of producing pile-fabric articles, comprising stitching a row of pile-thread loops in a body material to project from a face of said material in a direction substantially normal thereto, folding said body material on the line of the row of the pile-thread loops in a manner whereby the pile-threads project outwardly beyond the fold edge in a direction substantially parallel with a face of said material, and securing the fold by an additional row or row of pile-thread loops.

1,825,636. REACTION PRODUCT OF SALICYLIC ACID AND HEXAMETHYLENETETRAMINE AND METHOD OF PRODUCING SAME. LEONHARD PINK, Berlin, Germany, assignor to Hermann Meffert, Hamburg, Germany. Filed Mar. 8, 1929, Serial No. 345,580, and in Germany Dec. 29, 1926. 3 Claims. (Cl. 260—111.)

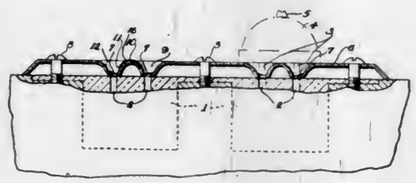
1. As a new product, the compound obtained by causing salicylic acid in alcoholic solution to react with the molecular quantity of hexamethylenetetramine at a temperature near the boiling point of the alcoholic solvent and removing this solvent, the compound forming a viscous syrup, reacting with ferric chloride with formation of a reddish precipitate and having the property of dissolving uric acid in the blood.

1,825,637. PRESSURE REGULATING VALVE. GEORGE A. RICKER, Coraopolis, Pa., assignor to Carbo-Oxygen Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,050. 6 Claims. (Cl. 50—23.)



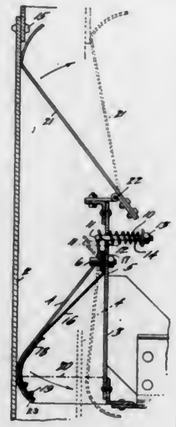
1. A fluid pressure regulating valve comprising a nozzle and heat vulnerable valve disk or seat therefor, one of said parts being movable relatively to the other part, and a cup-like member arranged within the nozzle to prevent the creation by the fluid pressure within the nozzle of such heat as will cause melting or combustion of the disk or seat, said cup-like member having its open end extending into the upper end of the nozzle and being provided with a series of passages extending from the interior thereof upwardly and outwardly and opening above the upper end of said nozzle.

1,825,638. WALL OR FLOOR RECEPTACLE. EMMETT J. SCHUTT, Ramsey, N. J., assignor to Outlet Industries Inc., Buffalo, N. Y., a Corporation of New York. Filed Dec. 27, 1927. Serial No. 242,643. 7 Claims. (Cl. 247—23.)



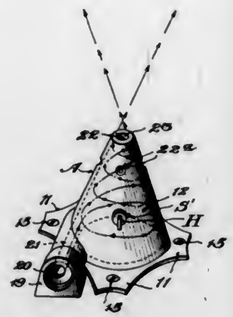
1. A detachable face plate for a separable electrical wall or floor receptacle having post sockets, comprising a body of insulating material having spaced post holes therethrough for registry with the post sockets of a related receptacle, the outer face of said body having integral concentric, arcuate guideways forming a central post-guiding knob, each of the post holes being disposed in the bottom of a respective guideway at the base of the guiding knob.

1,825,639. FLOATING ROOF SEAL. EDGAR E. SHANOR, Sharon, Pa., assignor to The Petroleum Iron Works Co. of Ohio, Sharon, Pa., a Corporation of Ohio. Filed Jan. 17, 1931. Serial No. 509,435. 5 Claims. (Cl. 220—26.)



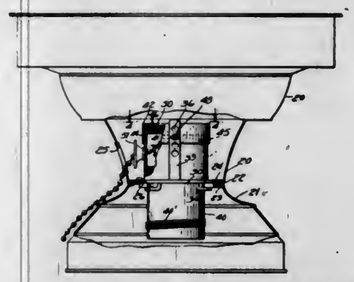
1. In combination, a storage tank, a floating deck and means for sealing the annular space between them, comprising sealing plates in spaced order of arrangement circumferentially of the deck and fulcrumed with relation to the deck, the fulcrum defining the line of division between heel and toe portions of the plates, said heel portion being angularly directed for the application of stress to hold the depending curved toe portion against the shell, and a sealing apron secured respectively to the toe of the plate and to the deck.

1,825,640. LAWN SPRINKLER. CYRUS S. WERT, Kendallville, Ind.; Aaron W. Shaefer administrator of said Cyrus S. Wert, deceased. Filed Mar. 5, 1929. Serial No. 344,375. 2 Claims. (Cl. 299—118.)



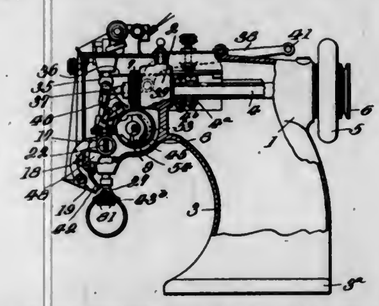
1. A sprinkler device comprising a hollow conical body having an inlet opening in its lower end tangential to the inner face of the body and an outlet orifice at its upper end arranged axially of the body, a disk valve disposed within said body intermediate the outlet at the upper end and the inlet at the lower end thereof for rotatable adjustment on an axis extending transversely of the body, means located exteriorly of the body for rotatably adjusting said valve, and means also located exteriorly of the body and connected with said valve for securing the same against rotation in any desired position of adjustment thereof.

1,825,641. SOCKET SUPPORT FOR LIGHTING FIXTURES. ISIDORE WOLARSKY, Mount Vernon, N. Y., assignor of one-fourth to John M. Cole, New York, N. Y. Filed Oct. 15, 1927. Serial No. 226,384. 9 Claims. (Cl. 240—78.)



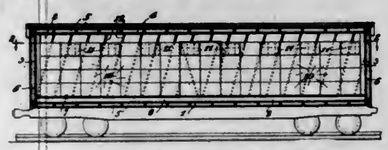
1. A lighting fixture comprising a body having an interior flange, a ring carried by and secured to the flange and provided with two upwardly directed straps disposed on opposite sides of the ring, and a lamp socket extending downwardly through said ring and flange and having an end cap detachably and adjustably secured to the upper ends of the straps.

1,825,642. BLINDSTITCH SEWING MACHINE. KARL MAIER and FRIEDRICH LUTZ, Stuttgart, Germany, assignors to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed July 26, 1927, Serial No. 208,472, and in Germany Oct. 14, 1926. 19 Claims. (Cl. 112—177.)



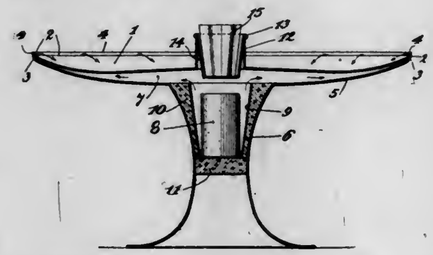
1. A sewing machine including in combination, a frame, a work supporting arm suspended therefrom and having a feed dog arranged for feeding the material lengthwise of and off the end of said arm, a housing carried by said frame and overhanging the free end of said work supporting arm, a pressed foot, and cooperating stitch forming elements mounted in said housing and disposed so as to form blind stitches in the material on the work supporting arm.

1,825,643. REFRIGERATING APPARATUS AND METHOD. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 19, 1926, Serial No. 142,550. Renewed May 11, 1931. 12 Claims. (Cl. 62—170.)



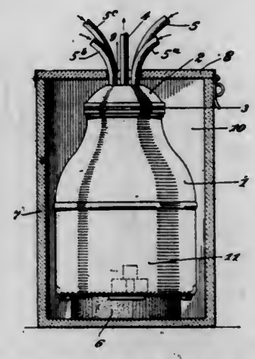
1. The method of refrigeration which consists in enclosing within a chamber, with the material to be refrigerated, and adjacent the upper part thereof, a quantity of separated masses of carbon dioxide which has been previously frozen and is in solidified mass form, and which on absorption of heat through the insulation passes directly from a solid to a gas much heavier than air; and permitting all the gas to escape into said enclosing chamber, as formed, to substantially include all of said material in the path of such downflow, and providing for upflow of displaced air and warm gas between said material and the outer shell of the chamber, and permitting inflow thereof above said material so as to maintain a closed circuit of thermo circulation.

1,825,644. REFRIGERATIVE DISH OR UTENSIL. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 4, 1926, Serial No. 146,181. Renewed Dec. 9, 1929. 10 Claims. (Cl. 62—91.5.)



1. A metal dish adapted to be cooled by frozen carbon dioxide comprising a compartment for material to be cooled, a second compartment for holding said frozen carbon dioxide, and means whereby the generated gas from the frozen carbon dioxide in said second compartment overflows into said first compartment, the generated gas being in operative relation to the back surface of the dish, whereby frost is maintained on exposed surfaces of the dish.

1,825,645. METHOD OF TREATMENT OF MILK AND OTHER LIQUIDS. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 21, 1927. Serial No. 162,588. 3 Claims. (Cl. 99—8.)

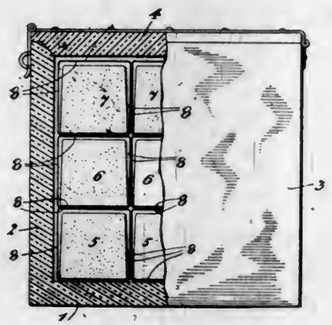


1. The method which includes milking and discharging the milk, as drawn from the cow, into a vessel while exteriorly refrigerating, insulating and protecting the same by providing solid carbon dioxide in heat absorbing relation to the receiving vessel and by retaining the resultant cold carbon dioxide gas as an enveloping atmosphere for the vessel.

1,825,646. METHOD OF CRYSTALLIZATION. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 22, 1927. Serial No. 235,041. 5 Claims. (Cl. 127—58.)

1. The method of accelerating crystallization and making small crystals, which consists in liberating freshly sublimated, intensely cold carbon dioxide gas in a solution of crystallizable constituency and concentration at extremely low temperature, within said solution to produce simultaneous agitation and freezing therein.

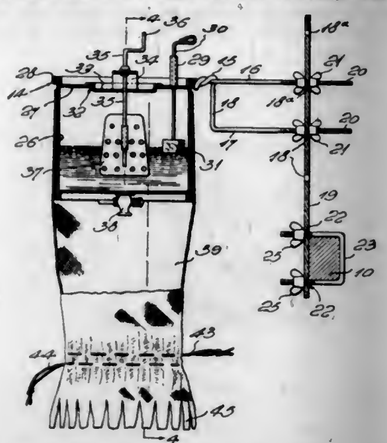
1,825,647. STORAGE, TRANSPORTATION AND DISTRIBUTION OF FROZEN CARBON DIOXIDE. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 22, 1927. Serial No. 235,044. 10 Claims. (Cl. 62—91.5.)



5. A storage or transportation package, comprising an insulating container having superposed layers of packages therein, each package comprising a block of frozen carbon dioxide enclosed in a paper bag so as to prevent inlet of air, while permitting escape of the carbon dioxide gas as the block sublimates.

1,825,648. INSECTICIDE APPLYING APPARATUS. JOHN C. HEWITT, Timmonsville, S. C., assignor of one-half to Lacy A. Cashwell, Stamford, Conn. Filed Apr. 19, 1930. Serial No. 445,737. 8 Claims. (Cl. 299—30.)

1. In apparatus for applying a liquid insecticide to cotton plants or the like, a frame, a liquid poison holding tank mounted within the frame, a flexible tubular mop receiving the tank in its upper end to telescope therewith,



means for attaching the mop to the frame and outlet means for the tank, said outlet means being arranged within the tubular mop.

1,825,649. IDENTIFICATION MARKER. NICHOLAS SACCOCCIA, Cranston, R. I., assignor to Tulford Mfg. Co., a Corporation of Rhode Island. Filed July 22, 1931. Serial No. 552,399. 8 Claims. (Cl. 40—17.)



1. A marker comprising a body having a face plate provided with a sight opening, edge flanges extending rearwardly therefrom leaving an unflanged portion providing an opening, prongs extending rearwardly from the edge flanges to extend through and over the rear surface of a support, said flanges holding the face plate spaced from said support, a frame having a character mounted therein slidable into said space between said plate and support, to be hidden beneath said plate, but permit said character to be viewed through said sight opening, and a bendable finger on said body adjacent said open side to be folded across the opening and obstruct withdrawal of the character frame therefrom.

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Acutone Corporation, New York, N. Y. Lenses. 287,688; Oct. 6; Serial No. 314,942; published July 14, 1931. Class 26.

Aluminum Company of America, Pittsburgh, Pa. Anti-seize compound. 287,719–20; Oct. 6; Serial No. 314,541–2; published July 14, 1931. Class 15.

American Graphophone Company, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Talking machines and parts thereof. 84,714; renewed Jan. 2, 1932.

American Molasses Co., assignor to The American Molasses Co. of New York, New York, N. Y. Molasses. 84,799; renewed Jan. 9, 1932.

Baker Perkins Company, Inc. (See Werner & Pfleiderer.)

Bates, Dr. J. L. Bliss, Washington, D. C., and Revere, Mass. Medicinal preparation. 287,776; Oct. 6; Serial No. 315,027; published July 14, 1931. Class 6.

Bausch & Lomb Optical Company, Rochester, N. Y. Field and opera glasses. 287,760; Oct. 6; Serial No. 315,725; published July 21, 1931. Class 26.

Becker, Abram J., Lansing, Mich. Liquid massage preparation. 287,785; Oct. 6; Serial No. 314,317; published July 14, 1931. Class 6.

Beich, Paul F., Company, Bloomington and Chicago, Ill. Confections and chocolates. 84,811; renewed Jan. 9, 1932.

Beiersdorf, P., & Co. Inc., New York, N. Y. Medicated adhesive plasters. 287,770; Oct. 6; Serial No. 301,785; published July 14, 1931. Class 6.

Benos, Olga, doing business as Onaida Turkish Beauty Preparations, New York, N. Y. Toilet articles. 287,777; Oct. 6; Serial No. 314,978; published July 14, 1931. Class 6.

Beta Theta Pi, New York, N. Y. Fraternity badges, lapel buttons, cuff links, etc. 287,743; Oct. 6; Serial No. 310,084; published July 21, 1931. Class 28.

Blumenfeld Ice & Coal Company, doing business as Blumenfeld Oil Company, Memphis, Tenn. Motor lubricating oils and gasoline. 287,750; Oct. 6; Serial No. 299,893; published July 14, 1931. Class 15.

Bonicot Warenvertriebsgesellschaft m. b. H., Vienna, Austria. Disinfectants, liquid, and solutions and preparations. 287,790; Oct. 6; Serial No. 310,932; published July 14, 1931. Class 6.

Brock, John D., doing business as Specialty Optical Company, Kansas City, Mo. Lenses and frames. 287,706; Oct. 6; Serial No. 315,244; published July 14, 1931. Class 26.

Brock, John D., doing business as Specialty Optical Company, Kansas City, Mo. Eye glass lenses. 287,707; Oct. 6; Serial No. 315,247; published July 14, 1931. Class 26.

Buckeye Mineralized Stock Powders Company, Gettysburg, Ohio. Cattle, hog, and poultry powders, and a tonic preparation. 287,775; Oct. 6; Serial No. 311,645; published July 14, 1931. Class 6.

Büssing-Nag Vereinigte Nutzkraftwagen Aktiengesellschaft, Brunswick, Germany. Tractors and internal combustion engines. 287,685; Oct. 6; Serial No. 314,146; published July 14, 1931. Class 23.

Carborundum Company, The, Niagara Falls, N. Y. Pyrometer tubes, muffles. 287,703; Oct. 6; Serial No. 310,283; published July 14, 1931. Class 26.

Chicago Pneumatic Tool Company, New York, N. Y. Electrical apparatus and machines. 287,700; Oct. 6; Serial No. 314,271; published July 14, 1931. Class 21.

Clark, Joel B., doing business as J. B. Clark Oil Company, Buffalo, N. Y. Lubricating oils and lubricating oil compositions. 287,717; Oct. 6; Serial No. 314,947; published July 14, 1931. Class 15.

Colora Products Company Inc. (See Segal, Herman.)

Columbia Phonograph Company, Inc. (See American Graphophone Company, assignor.)

Columbus Handle & Tool Corporation, Columbus, Ohio. Handles for shovels, etc. 287,753; Oct. 6; Serial No. 309,460; published July 14, 1931. Class 23.

Cover, Benjamin A., Jr., doing business as Tilton Manufacturing Company, New York, N. Y. Radio items and parts. 287,737; Oct. 6; Serial No. 314,153; published July 21, 1931. Class 21.

Davies, Theo. H., & Company, Ltd., Honolulu, Hawaii, assignor, by mesne assignments, to Peter Pan, Incorporated, Chicago, Ill. Canned pineapple. 84,819; renewed Jan. 9, 1932.

Dentalade Co. (See Lindahl, Kermit.)

Dixon, William, Incorporated, Newark, N. J. Jewelers' tools and appliances. 287,762; Oct. 6; Serial No. 286,425; published Mar. 17, 1931. Class 23.

Dixon, William, Incorporated, Newark, N. J. Pliers, engraving tools, files, and saws. 287,763; Oct. 6; Serial No. 296,960; published Dec. 2, 1930. Class 23.

Du Pont, E. I., de Nemours Powder Company, Hoboken, N. J., and Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Mining, blasting, and safety fuse. 83,821; renewed Oct. 17, 1931.

Du Pont, E. I., de Nemours Powder Company, Hoboken, N. J., and Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Mining, blasting, and safety fuse. 83,995; renewed Oct. 31, 1931.

Du Pont Pathé Film Manufacturing Corporation, New York, N. Y. Photographic film. 287,702; Oct. 6; Serial No. 314,899; published July 21, 1931. Class 26.

Edison, Thomas A., Incorporated, West Orange, N. J. Phonographic apparatus. 287,732; Oct. 6; Serial No. 308,436; published July 14, 1931. Class 36.

Elgin American Manufacturing Co., Elgin, Ill. Jewelry and flat and hollow tableware. 287,740; Oct. 6; Serial No. 313,709; published July 21, 1931. Class 28.

Ellison Furniture & Carpet Co., Fort Worth, Tex. Cotton mattresses, springs, and pillows. 287,766; Oct. 6; Serial No. 255,502; published Nov. 4, 1930. Class 32.

Emporia Machine Co. Inc., Emporia, Va. Plows. 287,694; Oct. 6; Serial No. 314,901; published July 14, 1931. Class 23.

Emporia Machine Co. Inc., Emporia, Va. Plows. 287,722; Oct. 6; Serial No. 314,902; published July 14, 1931. Class 23.

Emporia Machine Co. Inc., Emporia, Va. Plows. 287,723; Oct. 6; Serial No. 314,903; published July 21, 1931. Class 23.

F. & N. Lawn Mower Company, The, Richmond, Ind. Lawn mowers. 287,684; Oct. 6; Serial No. 314,752; published July 14, 1931. Class 23.

Fair, The, Chicago, Ill. Lenses. 287,713; Oct. 6; Serial No. 314,986; published July 14, 1931. Class 26.

Ferodo and Asbestos Incorporated, New Brunswick, N. J. Friction materials. 287,695; Oct. 6; Serial No. 314,904; published July 21, 1931. Class 35.

Gas and Electric Heater Co., La Porte, Ind. Heaters. 287,757; Oct. 6; Serial No. 302,941; published July 21, 1931. Class 21.

Gevaert Photo-Producten Naamlooze Vennootschap, Oude-God, near Antwerp, Belgium. Sensitized photographic papers, plates, films, etc. 287,733–6; Oct. 6; Serial No. 315,683–6; published July 21, 1931. Class 26.

Gilmer, L. H., Co., Philadelphia, Pa. Sheaves for belt drives. 287,709; Oct. 6; Serial No. 312,048; published July 21, 1931. Class 23.

Gold Dust Corporation, New York, N. Y. Soap. 287,792; Oct. 6; Serial No. 315,393; published July 28, 1931. Class 4.

Gross, Benjamin & Edward J., Co., Inc., New York, N. Y. Finger rings and mountings therefor. 287,765; Oct. 6; Serial No. 299,317; published July 21, 1931. Class 28.

Habirshaw Wire Company, Yonkers and New York, N. Y., assignor to Habirshaw Cable & Wire Corporation, New York, N. Y. Covered wires, cables, and cores for electrical purposes. 83,577; renewed Sept. 26, 1931.

Hart, H. C., Mfg. Co., The, Unionville, Conn. Table knives, forks, and spoons, pliers, can openers, etc. 287,708; Oct. 6; Serial No. 312,128; published July 21, 1931. Class 23.

Herfarth Bros., New Orleans, La. Razors, shears and scissors, and pocket-knives. 82,983; renewed Aug. 8, 1931.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 287,779; Oct. 6; Serial No. 314,615; published July 14, 1931. Class 6.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 287,780; Oct. 6; Serial No. 314,612; published July 14, 1931. Class 6.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 287,781–2; Oct. 6; Serial No. 314,607–8; published July 14, 1931. Class 6.

Hurley-Townsend Corporation, New York, N. Y. Spark plugs. 287,699; Oct. 6; Serial No. 315,052; published July 21, 1931. Class 21.

Ideal Clamp Mfg. Co. Inc., Brooklyn, N. Y. Fruit juice extractors. 287,759; Oct. 6; Serial No. 315,688; published July 21, 1931. Class 23.

Jarvis & Jarvis, Inc., Palmer, Mass. Caster tires 287,752; Oct. 6; Serial No. 309,273; published July 21, 1931. Class 35.

Keith, William M., Youngstown, Ohio. Bolt clippers. 287,683; Oct. 6; Serial No. 315,053; published July 14, 1931. Class 23.

Kirshner, Nathaniel M., Los Angeles, Calif. Finger rings, bracelets, belt buckles, etc. 287,698; Oct. 6; Serial No. 313,662; published July 21, 1931. Class 28.

Lau Bros., Berwyn, Ill. Liniment. 287,707; Oct. 6; Serial No. 291,835; published July 14, 1931. Class 6.

Layton, Joseph E., doing business as Red-Hed Laboratories, Seattle, Wash. Preparation for treating coccidiosis in poultry. 287,789; Oct. 6; Serial No. 313,439; published July 14, 1931. Class 6.

Lewis, Robert B., doing business as State Line Oil Service, Unionville, N. Y. Compounded lubricated gasoline fuel. 287,705; Oct. 6. Serial No. 312,609; published July 21, 1931. Class 15.

Liebovitz, S., & Son, assignor to S. Liebovitz & Sons, Inc., New York, N. Y. Shirts. 37,104; renewed Sept. 24, 1931.

Lindahl, Kermit, doing business as Dentalade Co., New York, N. Y. Tooth powder. 287,778; Oct. 6; Serial No. 314,651; published July 14, 1931. Class 6.

Lubriplate Corp., New York, N. Y. Lubricating oils and greases. 287,745; Oct. 6; Serial No. 314,389; published July 21, 1931. Class 15.

Maison Pierre-Bardou Job, Perpignan, assignor to Societe Job Anciens Etablissements Bardou-Job et Paulhac, Perpignan and Toulouse, France. Cigarette papers. 37,640; renewed Jan. 14, 1932.

Maxwell & Tennyson, Washington, D. C. Intestinal bactericides. 287,786; Oct. 6; Serial No. 314,065; published July 14, 1931. Class 6.

Miller Company, The, Meriden, Conn. Lamps. 287,689; Oct. 6; Serial No. 314,922; published July 14, 1931. Class 21.

Miller Company, The, Meriden, Conn. Lamps. 287,693; Oct. 6; Serial No. 314,923; published July 14, 1931. Class 21.

Monument Mills, Housatonic, Mass., and New York, N. Y., to Monument Mills, New York, N. Y. Bedspreads and counterpanes. 84,985; renewed Jan. 16, 1932.

Moseley & Motley Milling Co., Rochester, N. Y. Wheat flour. 85,156; renewed Jan. 30, 1932.

Mülhens & Kropff, New York, N. Y., assignor to Peter Mülhens, Cologne-on-the-Rhine, Germany. Toilet soap, perfumes, etc. 36,707–8; renewed July 9, 1931.

Mutsu Vapor Balm Company, The, Memphis, Tenn. Ointments or salves. 287,788; Oct. 6; Serial No. 313,719; published July 14, 1931. Class 6.

N. V. Standard Water Maatschappij, Amsterdam, Netherlands. Preparations for purifying liquids. 287,791; Oct. 6; Serial No. 311,748; published July 14, 1931. Class 6.

Neumann, William R., doing business as W. R. Neumann & Co., Chicago, Ill. Diamond rings. 287,727; Oct. 6; Serial No. 308,263; published July 14, 1931. Class 28.

Newark Packing Company, Newark, N. J. Smoked beef and bacon. 84,990; renewed Jan. 16, 1932.

Nip-It Company, Brunswick, Ga. Medicine. 287,772; Oct. 6; Serial No. 312,568; published July 14, 1931. Class 6.

Onaida Turkish Beauty Preparations. (See Benos, Olga.)

Ovacide Laboratories. (See Savelli, Richard F.)

Perey Manufacturing Company, Inc., New York, N. Y. Combination turnstiles and registering fare boxes. 287,761; Oct. 6; Serial No. 312,720; published July 21, 1931. Class 26.

Perfected Bifocals, Inc., Indianapolis, Ind. Bifocal lenses. 287,712; Oct. 6; Serial No. 315,722; published July 21, 1831. Class 26.

Permanent Electric Company, The, Cleveland, Ohio. Electrically operated air deoderizer, filter, and purifier. 287,690; Oct. 6; Serial No. 313,865; published July 14, 1931. Class 21.

Peter Pan, Incorporated. (See Davies, Theo. H. & Company, Ltd., assignor.)

Peters, H. W., Co., Inc., Boston, Mass. Finger rings. 287,725; Oct. 6; Serial No. 314,293; published July 14, 1931. Class 28.

Petroleum Derrick Company, Ltd., Los Angeles, Calif. Oil well derricks and structural parts thereof. 287,754; Oct. 6; Serial No. 315,556; published July 14, 1931. Class 23.

Phi Kappa Tau Fraternity, The, Oxford, Ohio. Fraternity pins and badges. 287,744; Oct. 6; Serial No. 311,885; published July 21, 1931. Class 28.

Phillips Petroleum Company, Bartlesville, Okla. Gasolines. 287,714; Oct. 6; Serial No. 314,861; published July 21, 1931. Class 15.

Pick-Barth, Albert, Company, Inc., New York, N. Y., and Chicago, Ill. Steak knives, forks, spoons, etc. 287,748; Oct. 6; Serial No. 300,965; published July 14, 1931. Class 23.

Pick-Barth, Albert, Company, Inc., New York, N. Y., and Chicago, Ill. Chairs, tables, davenports, etc. 287,740; Oct. 6; Serial No. 300,969; published July 14, 1931. Class 32.

Plough, Inc., doing business as The St. Joseph's Laboratories, Memphis, Tenn. Medicinal preparation. 287,771; Oct. 6; Serial No. 313,001; published July 14, 1931. Class 6.

Powell, G. R., Chemical Company, The, Cleveland, Ohio. Medicine and disinfectants. 287,768; Oct. 6; Serial No. 304,427; published Oct. 14, 1930. Class 6.

Pressler, Otto, Thüringer Vacuumröhrenfabrik, Leipzig, Germany. Electron tubes, photoelectric cells, etc. 287,726; Oct. 6; Serial No. 307,112; published July 14, 1931. Class 21.

Price Baking Powder Company, assignor to Royal Baking Powder Company, Chicago, Ill. Baking powder. 83,689; renewed Oct. 3, 1931.

Radbill Oil Company, Philadelphia, Pa. Oils. 287,739; Oct. 6; Serial No. 314,015; published July 14, 1931. Class 15.

Reddaway, Fenwick Mfg., Co., Newark, N. J. Portable water pump. 287,710; Oct. 6; Serial No. 311,958; published July 21, 1931. Class 23.

Red-Hed Laboratories. (See Layton, Joseph E.)

Richards, Dr., Dyspepsia Tablet Association, New York, N. Y., to Dr. Richards Association, Inc., Norwalk, Conn., successor. Medicines. 35,975; renewed Feb. 26, 1931.

Ridenour Baker Grocery Co., Kansas City, Mo. Rice. 83,279; renewed Aug. 29, 1931.

Riegel, Guy E., Spokane, Wash. Radio receiving apparatus. 287,756; Oct. 6; Serial No. 303,613; published July 14, 1931. Class 21.

Royal Baking Powder Company. (See Price Baking Powder Company, assignor.)

St. Joseph's Laboratories, The. (See Plough, Inc.)

Savelli, Richard F., doing business as Ovacide Laboratories, Oakland, Calif. Antiseptic preparation, medicated antiseptic suppositories, and jelly. 287,784; Oct. 6; Serial No. 314,252; published July 14, 1931. Class 6.

Scott and Fetzer Company, The, Cleveland, Ohio. Carpet sweepers and suction cleaners. 287,751; Oct. 6; Serial No. 300,368; published July 7, 1931. Class 23.

Segal, Herman, doing business as Colora Products Company, Inc., New York, N. Y. Photographic dry plates. 287,687; Oct. 6; Serial No. 314,931; published July 14, 1931. Class 26.

Sharples Specialty Company, The, Philadelphia, Pa. Centrifugal machines and parts thereof. 287,711; Oct. 6; Serial No. 314,176; published July 14, 1931. Class 23.

Shaw, Alex. D., & Co., New York, N. Y. Sherry wine. 83,012; renewed Aug. 8, 1931.

Shelby Gum Company, The, Shelby, Ohio. Menthol chewing gum. 287,787; Oct. 6; Serial No. 313,979; published July 14, 1931. Class 6.

Shiman, M. H., & Co., Inc., New York, N. Y. Finger rings. 287,724; Oct. 6; Serial No. 312,164; published July 21, 1931. Class 28.

Signal Oil & Gas Company, Los Angeles, Calif. Gasoline. 287,715; Oct. 6; Serial No. 313,008; published July 21, 1931. Class 15.

Sinclair Refining Company, New York, N. Y. Kerosene. 287,716; Oct. 6; Serial No. 315,162; published July 21, 1931. Class 15.

Sinclair, T. M., & Co., Limited, Cedar Rapids, Iowa. Hams, shoulders, and bacon. 82,474; renewed June 27, 1931.

Societe Anonyme des Mines & Fonderies de Zinc de la Vieille Montagne, Angleur, Belgium. Zinc sheets. 84,138; renewed Nov. 7, 1931.

Societe Anonyme des Mines et Fonderies de Zinc de la Vieille Montagne, Angleur, Belgium. Spelter. 84,139; renewed Nov. 7, 1931.

Societe Job Anciens Etablissements Bardou-Job et Paulhac. (See Maison Pierre-Bardou Job, assignor.)

Specialty Optical Company. (See Brock, John D.)

Standard Oil Company, Whiting, Ind., and Chicago, Ill. Lubricating oils and greases. 287,741; Oct. 6; Serial No. 314,869; published July 14, 1931. Class 15.

Standard Oil Company of New Jersey, Wilmington, Del. Oil. 287,718; Oct. 6; Serial No. 314,084; published July 14, 1931. Class 15.

Standard Oil Company of New York, New York, N. Y. Petroleum and products of petroleum. 287,746; Oct. 6; Serial No. 311,346; published July 21, 1931. Class 15.

Standard Stores, Incorporated, Boston, Mass. Radio electron tubes, chassis, receiving sets, etc. 287,701; Oct. 6; Serial No. 314,255; published July 21, 1931. Class 21.

Stanley Works, The, New Britain, Conn. Electric tools. 287,704; Oct. 6; Serial No. 312,020; published July 21, 1931. Class 21.

Stanley Works, The, New Britain, Conn. Screw drivers. 287,731; Oct. 6; Serial No. 308,226; published July 14, 1931. Class 23.

State Line Oil Service. (See Lewis, Robert B.)

Strouse, Adler Company, The, New Haven, Conn. Elastic fabric material. 287,742; Oct. 6; Serial No. 312,868; published July 14, 1931. Class 42.

Sturdy's, J. F., Sons, assignor to J. F. Sturdy's Sons Co., Attleboro Falls, Mass. Chains. 37,263; renewed Oct. 29, 1931.

Sun Oil Company, Philadelphia, Pa. Oil. 287,738; Oct. 6; Serial No. 313,758; published July 14, 1931. Class 15.

Sutro, E., & Son Company, assignor, by mesne assignments, to E. Sutro & Son Company, Inc., Philadelphia, Pa. Hosiery. 85,018; renewed Jan. 16, 1932.

Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,417–8; renewed Dec. 12, 1931.

Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,420–1; renewed Dec. 12, 1931.

Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,423; renewed Dec. 12, 1931.

Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,425–35; renewed Dec. 12, 1931.

Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,437; renewed Dec. 12, 1931.

Tilton Manufacturing Company. (See Cover, Benjamin A., jr.)

Toland & Son, Inc., Baltimore, Md. Saws, knives and other special tools. 287,686; Oct. 6; Serial No. 314 825; published July 21, 1931. Class 23.

Traffic Storage Battery Co., Los Angeles, Calif. Storage batteries. 287,692; Oct. 6; Serial No. 313,584; published July 14, 1931. Class 21.

Traveltone Pictures, Inc., San Diego, Calif. Motion picture films and motion pictures. 287,747; Oct. 6; Serial No. 300,245; published July 21, 1931. Class 26.

Trico Products Corporation, Buffalo, N. Y. Fluid operated horns. 287,729; Oct. 6; Serial No. 308,402; published July 21, 1931. Class 23.

Tucker, Isidor, Beacon, N. Y. Hair tonic. 287,773; Oct. 6; Serial No. 310,031; published July 21, 1931. Class 6.

Tyson Roller Bearing Corporation, Massillon, Ohio. Roller bearings. 287,721; Oct. 6; Serial No. 312,673; published July 14, 1931. Class 23.

Una Welding & Bonding Company, Cleveland, Ohio. Welders. 287,755; Oct. 6; Serial No. 303,407; published July 21, 1931. Class 21.

Union Manufacturing Co., Frederick, Md. Hose. 82,927–9; renewed Aug. 1, 1931.

United Conveyor Corporation, Chicago, Ill. Conveyors and conveying systems. 287,730; Oct. 6; Serial No. 308,273; published July 21, 1931. Class 23.

United States Wire Mat Company, by change of name to U. S. Manufacturing Corporation, Decatur, Ill. Fly killers or hand devices for killing flies and other insects. 85,049; renewed Jan. 23, 1932.

Vaporet Corporation of America, New York, N. Y. Moulded paradichlorbenzine. 287,769; Oct. 6; Serial No. 300,697; published July 22, 1930. Class 6.

Victaulic Company of America, Jersey City, N. J. Laminated gaskets. 287,696; Oct. 6; Serial No. 314,827; published July 14, 1931. Class 35.

Vollrath Company, The, Sheboygan, Wis. Enameled metal ware. 287,764; Oct. 6; Serial No. 292,473; published July 21, 1931. Class 23.

Wallace, William A., doing business as Wallace Chemical Company, Savannah, Ga. Ointment. 287,774; Oct. 6; Serial No. 311,048; published July 14. 1931. Class 6.

Walrath, Edward, doing business as Sirocco Manufacturing Co., La Fargeville, N. Y. Preparation for killing flies and insects. 287,783; Oct. 6; Serial No. 314,474; published July 14, 1931. Class 6.

Werner & Pfeiderer, to Baker Perkins Company, Inc., Saginaw, Mich., successor. Machines. 36,113; renewed Mar. 19, 1931.

West Disinfecting Company, New York, to West Disinfecting Company, Long Island City, N. Y. Disinfecting fluid. 84,772; renewed Jan. 2, 1932.

Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electric lighting fixture units. 287,728; Oct. 6; Serial No. 308,676; published July 21, 1931. Class 21.

White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental filling alloy. 287,758; Oct. 6; Serial No. 303,867; published Sept. 9, 1930. Class 44.

Wholesale Radio Service Co. Inc., New York, N. Y. Radio receiving sets and parts thereof. 287,691; Oct. 6; Serial No. 314,594; published July 21, 1931. Class 21.

Wood, Albert F., Detroit, Mich. Toilet preparations. 84,152; renewed Nov. 7, 1931.

Woodwind Company, The, New York, N. Y. Reeds for clarinets and saxophones. 287,697; Oct. 6; Serial No. 314,312; published July 14, 1931. Class 36.

Wurlitzer, Rudolph, Company, The, Cincinnati, Ohio. Musical strings. 84,774; renewed Jan. 2, 1932.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Algus Company. (See Sacks, Albert H.)

American Drug Company. (See Cash, J. H.)

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Brand Chocolate Drops. For Candy. 39,820; Oct. 6.

Blue Byrd Specialty Company, Dallas and Fort Worth, Tex. Blue Byrd. For Cantaloupe Preserves (with Spices). 39,821; Oct. 6.

Blue Byrd Specialty Company, Dallas and Fort Worth, Tex. Blue Byrd. For Salad Dressing. 39,822; Oct. 6.

Blue Byrd Specialty Company, Dallas and Fort Worth, Tex. Blue Byrd. For Grape Jelly. 39,823; Oct. 6.

Blue Byrd Specialty Company, Dallas and Fort Worth, Tex. Blue Byrd. For Sandwich Spread. 39,824; Oct. 6.

Buettner, T., & Co. Inc., Chicago, Ill. Nun's Fadeproof and Mothproof. For Yarns for Rug Making, Embroidering, Crocheting, and Knitting. 39,825; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Del Monte Liquid Spreader. For Liquid Spreader for Making Liquid Sprays Quicker Wetting and Better Spreading. 39,826; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Weed Killer. For Preparation for Killing Weeds. 39,827; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Garden Sulphur. For Garden Sulphur. 39,828; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Garden Bug-Go. For a Poisoned Bait for Use in Controlling Snails, Slugs, Sow Bugs, Earwigs, Grasshoppers, Etc. 39,829; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Garden Bordo. For Fungicide. 39,830; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Garden Whale Oil Soap. For Garden Whale Oil Soap. 39,831; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Greenhouse Special Volck. For Greenhouse Special Volck for Control of Greenhouse Pests. 39,832; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Garden Pyrum. For Spray for Killing Plant Insects. 39,833; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Poisoned Barley. For Poisoned Barley for Killing Squirrels, Gophers, and Prairie Dogs. 39,834; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Garden Fluosilicate Dust. For Garden Fluosilicate Dust for Control of Beetles and Other Leaf Eating Insects. 39,835; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Garden Volck. For Nicotine-Oil Spray. 39,836; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Lead Arsenate. For Lead Arsenate. 39,837; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Para-Di-Chloro-Benzene. For Soil Fumigant for the Control of Peach Root Borer, Wire Worms, and Termites. 39,838; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Nursery Volck. For a Spray for the Control of Nursery and Greenhouse Pests. 39,839; Oct. 6.

California Spray-Chemical Company, Berkeley, Calif. Garden Tendust, a Nicotine Dust. For a Nicotine Dust for Killing Aphis and Thrips. 39,840; Oct. 6.

Carter, John H., Washington, D. C. Quality Poultry. For Poultry. 39,841; Oct. 6.

Cash, J. H., doing business under the name of the American Drug Company, Mobile, Ala. White Cross Quinine & Iron Tonic. For Quinine and Iron Tonic. 39,842; Oct. 6.

Central Tablet Mfg. Co., The, Columbus, Ohio. Columbus School Series. For Writing Tablets. 39,843; Oct. 6.

Champion No-Leak Paper Dish Company, The, Toledo, Ohio. Handetray. For Sanitary Food Containers. 39,844; Oct. 6.

Columbia Phonograph Company, Inc., New York, N. Y. Columbia. For Radio Tubes. 39,845; Oct. 6.

Faust-Kennedy Company, Ann Arbor, Mich. Rust-Off. For Compound Which Removes Rust from Porcelain and Enamel Ware and Metals. 39,846; Oct. 6.

Favitta, Salvatore, Rome, N. Y. Face Massage and Face Cream. For Face Massage and Face Cream. 39,847; Oct. 6.

Fox, Frances, Ridgewood, N. J. Frances Fox Liquid Herbal Shampoo. For Liquid Herbal Shampoo. 39,848; Oct. 6.

Frankfort Distillery, Inc., The, Louisville, Ky. Sir Thomas. For Whiskey. 39,849; Oct. 6.

Hoffman's Cake Specialties Co., Detroit, Mich. Hoffmans Buttermilk Rye Bread. For Bread. 39,850; Oct. 6.

Hubinger Company, The, doing business as The J. C. Hubinger Bros. Co., Keokuk, Iowa. Tiger Brand Corn Starch. For Corn Starch. 39,851; Oct. 6.

John, J. T., Company, Johns, N. C. Old North State. For Watermelons. 39,852; Oct. 6.

Lewis, G. B., Company, Watertown, Wis. Comb Honey Fragile—Comb Honey Remove from Case and Display. For Honey. 39,853; Oct. 6.

Mid-West Wax Paper Company, Fort Madison, Iowa. Jumbo Bread. For Bread. 39,854; Oct. 6.

Old Egyptian Laboratories. (See Smart & Company, Inc.)

Parfumerie Dollup, Inc., New York, N. Y. L'Manda. For Cologne. 39,855; Oct. 6.

Sacks, Albert H., doing business as Algus Company, New York, N. Y. Sure Seal. For Pipe Joint Compound. 39,856; Oct. 6.

Shea, Peter Jno., doing business as Shea Floor Surfacing Co., Detroit, Mich. Shea's Magic Waxine. For Dance Floor Wax. 39,857; Oct. 6.

Smart & Company, Inc., doing business as Old Egyptian Laboratories, Los Angeles, and Hollywood, Calif., and New York, N. Y. Old Egyptian Turtle Oil Cream. For Turtle Oil Cream. 39,858; Oct. 6.

Southern Mattress Company, New Orleans, La. Sublimerest. For Mattresses. 39,859; Oct. 6.

Standard Bleachery and Printing Co., The, Carlton Hill, East Rutherford, N. J. Swanwhite. For Dyes, Bleaches, and Finishes. 39,860; Oct. 6.

Steinbrunn, Harry J., Philadelphia, Pa. Razorline. For Strop Dressing. 39,861; Oct. 6.

Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. "X" Boiler Liquid. For Liquid for Repairing Leaky Boilers. 39,862; Oct. 6.

Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. "X" Radiator Liquid. For Liquid for Repairing Leaky Radiators. 39,863; Oct. 6.

Tolfree, Edward R., doing business at "X" Laboratories, New York, N. Y. "X" Boiler Liquid. For Liquid for Repairing Leaky Boilers. 39,864; Oct. 6.

Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. "X" Radiator Liquid. For Liquid for Repairing Leaky Radiators. 39,865; Oct. 6.

Town Talk Ice Cream Co., Inc., Brooklyn, N. Y. The Talk of the Town. For Ice Cream. 39,866; Oct. 6.

Viviny Perfumers, Inc., West Haven, Conn. Lionel Rogers University Club. For Shaving Cream. 39,867; Oct. 6.

Watkins, J. R. Company, The, doing business under the name of Watkins, Winona, Minn. Mary King Peach Bloom Nourishing Cream. For Nourishing Cream. 39,868; Oct. 6.

Willcuts, Mrs. Byron, Topeka, Kans. World's Best Cocktail Sauce—Red-Hot Barbecue Horse Radish. For Barbecue Horse-Radish. 39,869; Oct. 6.

"X" Laboratories. (See Tolfree, Edward R.)

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Chocolate Flavored Drops. For Candy. 13,434; Oct. 6.

Lamphere, Grover C., Oneonta, N. Y. Aristocraft. For Porch Enclosures. 13,435; Oct. 6.

McKesson & Robbins, Incorporated, Fairfield, Conn. McKesson's Yodora. For Delicate Deodorant Cream. 13,436; Oct. 6.

Minnehaha Water Co., Cleveland, Ohio. Minnehaha. For Beverages. 13,437; Oct. 6.

Vosine Co., The, Lynn, Mass. Vosine. For Mouth Wash. 13,438; Oct. 6.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adler, J. C., Co., Joliet, Ill. Hams, bacons, sausages, and lard. 317,966; Oct. 6. Class 46.

Agfa Ansco Corporation, Binghamton, N. Y. Photographic cameras. 304,707; Oct. 6. Class 26.

Aldrich, Carl G., Cambridge, Mass. Electrical headlights. 318,344; Oct. 6. Class 21.

Alpine Electric Corporation, Schenectady, N. Y. Electric lamp sockets. 318,035; Oct. 6. Class 21.

American Crayon Company, The, Sandusky, Ohio. Tempera colors and water colors. 317,625; Oct. 6. Class 16.

American Seed & Food Products, Chicago, Ill. Bird seed, wild grass seed, egg bread, moulting food, etc. 317,344; Oct. 6. Class 46.

American Tobacco Company, The, New York, N. Y. Cigarettes, smoking and chewing tobacco. 313,823; Oct. 6; Class 17.

Bachmann, Joseph, doing business as Bachmann Pharmacy, Granville, Iowa. Preparation for stomach disorders. 313,414; Oct. 6. Class 6.

Baird, E. W., jr., doing business as Free State Laboratories, Baltimore, Md. An adsorbent or absorbent preparation. 318,574; Oct. 6. Class 6.

Balthaser, Harry B., Philadelphia, Pa. Nippers, cutters, scissors, etc. 307,916; Oct. 6. Class 44.

Bell Equipment Corporation, New York, N. Y. Machines for recording and reproducing sound and motion pictures and parts therefor. 317,268; Oct. 6. Class 26.

Betta-Dress Auto Top Dressing Manufacturing Co., Anadarko, Okla. Automobile top dressing. 317,701; Oct. 6. Class 4.

Black Flag Company, The, Baltimore, Md. Insecticides. 317,145; Oct. 6. Class 6.

Bluekamel Manufacturing Company. (See Graff, May.)

Bohme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Soap and soap preparations. 316,526; Oct. 6. Class 4.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Billiard tables and parts thereof. 317,147–8; Oct. 6. Class 22.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Billiard tables and parts thereof. 317,150; Oct. 6. Class 22.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Billiard tables and parts thereof. 317,153; Oct. 6. Class 22.

California Bottling Assn. (See Cereal Products Refining Corpn.)

Cameron, William J., doing business as Cameron's Surgical Specialty Co., Not Inc., Chicago, Ill. Compound for insulating purposes. 312,212; Oct. 6. Class 21.

Celanese Corporation of America, New York, N. Y. Fabrics. 316,186; Oct. 6. Class 42.

Cereal Products Refining Corpn., doing business as California Bottling Assn., San Francisco, Calif. Beverages. 317,270; Oct. 6. Class 45.

Cerruti, E., Inc., New York, N. Y. Olive oil. 314,039; Oct. 6, 1931. Class 46.

Chatham Manufacturing Company, Portland, Conn. Rubber thread. 317,919; Oct. 6. Class 43.

Church & Company, Limited, Northampton, England. Boots, shoes, galters, and spats. 317,245; Oct. 6. Class 39.

Citizens' Wholesale Supply Company, The, Columbus, Ohio. Bay leaves, dried beans, rolled oats, etc. 315,715–6; Oct. 6. Class 46.

Clair De Soleil Corporation, New York, N. Y. Cosmetics. 317,349; Oct. 6. Class 6.

Close Co., George, The, doing business as Close's, Cambridge, Mass. Candy. 317,888; Oct. 6. Class 46.

Clyde, Maui, doing business as NaVo Products, Kansas City, Mo. Depilatory. 311,913; Oct. 6. Class 6.

Commodore Shirt Co., Inc., New York, N. Y. Shirts. 317,664; Oct. 6. Class 39.

Consolidated Car Heating Company, Inc., Albany, N. Y. Stokers. 311,263; Oct. 6. Class 34.

Daner Co. (See Danerhirsch, Joseph.)

Danerhirsch, Joseph, doing business as Daner Co., New York, N. Y. Shirts. 304,496; Oct. 6. Class 39.

Day & Night Water Heater Co., Ltd., Monrovia, Calif. Electric water heaters. 315,075; Oct. 6. Class 21.

Decrow Automotive Specialties, Inc., Lockport, N. Y. Lubricating devices. 271,232; Oct. 6. Class 23.

Dillie & McGuire Manufacturing Co., Richmond, Ind. Lawn mowers. 317,595; Oct. 6. Class 23.

Direct Toy Sales Corporation, New York, N. Y. Toys. 309,582; Oct. 6. Class 22.

District Grocery Stores, Inc., Washington, D. C. Coffee. 317,456; Oct. 6. Class 46.

Doughty, W. J., Detroit, Mich. Supports for golf bags. 318,585; Oct. 6. Class 22.

Drisox Chemical Company, Incorporated, Raleigh, N. C. Liquid preparation. 317,273; Oct. 6. Class 6.

Durivan, Inc., Cincinnati, Ohio. Electric direction signal indicator. 296,266; Oct 6. Class 21.

Eddie Manufacturing Co., doing business as Hot Shot Electric Water Heater Corporation, Chicago, Ill., assignor to E. J. Vogt, Grand Rapids, Mich. Electrically energized hot water heaters. 298,157; Oct. 6. Class 21.

Emulsol Corporation, Chicago, Ill. Emulsion and margarine improving substances. 310,370–2; Oct. 6. Class 46.

Endo Products, Inc. (See Intravenous Products Co. of America, Inc.)

Enterprise Manufacturing Company, The, Akron, Ohio. Fish lines. 318,353; Oct. 6. Class 22.

Famous Bathrobe Company, Inc., New York, N. Y. Bathrobe and buntings. 299,305; Oct. 6. Class 39.

Fibreboard Products Inc., San Francisco, Calif. Containers and receptacles. 316,152; Oct. 6. Class 2.

Fidalgo Island Packing Company, Anacortes, Wash. Canned salmon. 310,336; Oct. 6. Class 46.

First National Pictures, Inc., New York, N. Y. Sound picture apparatus. 308,012; Oct. 6. Class 26.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 317,927; Oct. 6. Class 42.

Free State Laboratories. (See Baird, E. W., jr.)

Frye, Whitney M., doing business as E. B. Frye & Son, Wilton, N. H. Ice cream freezers. 317,799; Oct. 6. Class 31.

General Cable Corporation, New York, N. Y. Electric wires, cables, and terminals. 316,636; Oct. 6. Class 21.

General Mills, Inc., Minneapolis, Minn. Cereal breakfast food. 317,306; Oct. 6. Class 46.

Globe Oil Tools Company, Los Nietos, Calif. Well drilling equipment. 312,184–5; Oct. 6. Class 23.

Gonzalez, Arthur, New York, N. Y. Mexican chick peas. 318,140; Oct. 6. Class 46.

Goodrich-Gamble Company, St. Paul, Minn. Insecticide. 314,001; Oct. 6. Class 6.

Graff, May, doing business as Blue-kamel Manufacturing Company, Detroit, Mich. Astringents, bleach creams, dry rouges, etc. 316,837; Oct. 6. Class 6.

Grant, Thomas D., Jackson, Mich. Suits, top coats, overcoats, and raincoats. 317,354; Oct. 6. Class 39.

Gross, Benjamin & Edward J., Co., Inc., New York, N. Y. Finger rings and mountings therefor. 274,220; Oct. 6. Class 28.

Gunite Concrete & Construction Company, Kansas City, Mo. Graduated measuring receptacle. 318,242; Oct. 6. Class 26.

Haber, Charles L., New York, N. Y. Locks and keys. 317,205; Oct. 6. Class 25.

Hahlo & Solomon, Inc., New York, N. Y. Fabrics of cellulose derivatives. 318,519; Oct. 6. Class 42.

Hartwell, Lindley S., doing business as Household Helps Co., Burlington, Vt. Metal polish and a general cleaner. 315,747; Oct. 6. Class 4.

Hemingway, H. C., & Company, Inc., Syracuse, N. Y. Canned fruits and vegetables and frosted, frozen, and iced fresh fruits and vegetables. 318,007; Oct. 6. Class 46.

Hercules Powder Company, Wilmington, Del. Propellent powder. 318,592; Oct. 6. Class 9.

Hilsenrath, Irwin, New York, N. Y. Mayonnaise. 316,677; Oct. 6. Class 46.

Hoffman-Klein Company, New York, N. Y. Woolen, silk, and cotton piece goods. 318,521; Oct. 6. Class 42.

Hoffman, S., Los Angeles, Calif. Manicure implements. 315,377; Oct. 6. Class 44.

Hot Shot Electric Water Heater Corporation. (See Eddie Manufacturing Co.)

Household Helps Co. (See Hartwell, Lindley S.)

Hyland, G. H., doing business as Hyland's Home Health Service. Kidney diuretic. 317,603; Oct. 6. Class 6.

Independent Druggists' Alliance Distributing Co., Chicago, Ill. Sanitary napkins. 318,276; Oct. 6. Class 44.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

International Games, Inc., New York, N. Y. Tables, clubs, and pucks. 317,941; Oct. 6. Class 22.

Intravenous Products Co. of America, Inc., doing business as Endo Products, Inc., New York, N. Y. Bismuth and organic arsenic preparation. 317,559; Oct. 6. Class 6.

Jimco Chemical Co. Inc., Laurelton, N. J. Solution for cleaning and whitening clothes, etc. 314,764; Oct. 6. Class 6.

Kohler-Liebich Company, The, Chicago, Ill. Combination lamp and chime. 304,332; Oct. 6. Class 21.

La Salle Bottling Company, St. Louis, Mo. Beverage. 317,897; Oct. 6. Class 45.

Life Savers, Inc., Port Chester, N. Y. Candy. 317,608; Oct. 6. Class 46.

Mackintosh, John, & Sons Ltd., Inc., Boston, Mass. Candy. 318,455; Oct. 6. Class 46.

Martha Washington Candies Company, Chicago, Ill. Candies. 312,966; Oct. 6. Class 46.

Masury-Young Company, Charlestown, Mass. Liquid preparation. 317,610; Oct. 6. Class 16.

McElwee and McElwee, Philadelphia, Pa. Hosiery. 311,746; Oct. 6. Class 39.

McGlothlen, L., Salt Lake City, Utah. Preparation for holding permanent waves. 317,325; Oct. 6. Class 6.

McKenzie, William H., doing business as Red Top Oil Burner Co., Chicago, Ill. Oil burners. 308,080; Oct. 6. Class 34.

McLaughlin, Thomas P., doing business as Southern Products Corporation, Inc., New Orleans, La. Cleaning compound. 316,934; Oct. 6. Class 4.

Me Chin Company, San Francisco, Calif. Bean cake. 316,159; Oct. 6. Class 46.

Miller Drug Sundry Company, Baltimore, Md. Prophylactic rubber and membraneous articles. 311,099; Oct. 6. Class 44.

Namm, A. I. & Son, Brooklyn, N. Y. Shirts. 313,254; Oct. 6. Class 39.

National Grocery Company, Jersey City, N. J. Butter. 315,156; Oct. 6. Class 46.

Naugatuck Chemical Company, The, New York, N. Y. Mixture of oil and a condensation product of heptaldehyde and aniline. 317,727; Oct. 6. Class 6.

NaVo Products. (See Clyde, Maud.)

Nestor Johnson Manufacturing Company, Chicago, Ill. Ice skates. 317,528; Oct. 6. Class 22.

Ninetynine Malt Company. (See Wendling, Carl J.)

Nirenberg & Salzman, Inc., New York, N. Y. Shirts and athletic goods. 291,402; Oct. 6. Class 39.

Northern Jobbing Company, New York, N. Y., St. Paul, Minn., and Highland, Ill. Canned fruits and berries. 314,859; Oct. 6. Class 46.

Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. 315,316; Oct. 6. Class 42.

Pabst Corporation, Milwaukee, Wis. Malt beverage. 318,014; Oct. 6. Class 48.

Pearce Manufacturing Co., Latrobe, Pa. Woolens and cotton piece goods and mixtures thereof. 317,568; Oct. 6. Class 42.

Peo Manufacturing Corporation, Rochester, N. Y. Games. 317,951; Oct. 6. Class 22.

Petro-Glaze Products, Inc., Los Angeles, Calif. Compound of raw materials. 274,890; Oct. 6. Class 1.

Posner Hosiery, Inc., New York, N. Y. Underwear. 303,611; Oct. 6. Class 39.

Prima Manufacturing Company, Inc., Philadelphia, Pa. Electric laundry washing machines. 317,736; Oct. 6. Class 24.

Pronto, Inc., Ballardvale, Mass. Cleaner or polish. 312,999; Oct. 6. Class 4.

Purox Products Company, Chicago, Ill. Cleaning compound. 315,869; Oct. 6. Class 4.

Ranff, Benjamin H. Brooklyn, N. Y. Candies. 316,939; Oct. 6. Class 46.

Ray-Glo Chemical Company. (See Tumbler, J. A. Laboratories.)

Ray-X-Water Corporation, Toledo, Ohio. Drinking water. 317,904; Oct. 6. Class 45.

Red Band Company, Inc., Johnson City, Tenn. Wheat flour. 310,810; Oct. 6. Class 46.

Red Top Oil Burner Co. (See McKenzie, William H.)

Reid Ice Cream Corporation, Brooklyn, N. Y. Ice cream and frozen confection. 316,002; Oct. 6. Class 46.

Remington Rand Business Service, Inc., Buffalo, N. Y. Index cards, strips and sheets, etc. 311,159; Oct. 6. Class 37.

Revere Copper and Brass Incorporated, Rome, N. Y. Heating radiators. 317,739; Oct. 6. Class 34.

Richfield Oil Company, Los Angeles, Calif. Petroleum and petroleum products. 317,572; Oct. 6. Class 15.

Schneierson, I., & Sons, Inc., New York, N. Y. Chemises, bloomers, pajamas, etc. 317,744–5; Oct. 6. Class 39.

Schraeder, Charles M., Brookline, Mass. Dice bearing numbers and symbols. 318,416; Oct. 6. Class 22.

Scudder Food Product Inc., Los Angeles, Calif. Potato chips. 317,781; Oct. 6. Class 46.

Shapiro, Ira J., New York, N. Y. Tooth paste and tooth powder. 318,600; Oct. 6. Class 6.

Sherman, Sol, New York, N. Y. Bow-ties. 317,051; Oct. 6. Class 39.

Sinclair Refining Company, New York, N. Y. Lubricating oils and greases. 316,902; Oct. 6. Class 15.

South Bend Bait Company, South Bend, Ind. Fishing tackle. 318,603; Oct. 6. Class 22.

Southern Mineral Products Corporation, New York, N. Y. Titanium dioxide pigments. 318,174; Oct. 6. Class 16.

Southern Products Corporation, Inc. (See McLaughlin, Thomas P.)

Southern Specialty Company. (See Traugott, William.)

Steedly, Benjamin B., Taylors, S. C. Antiseptic, astringent, and healing preparation. 317,876; Oct. 6. Class 6.

Sterilek Company, Inc., The, Brooklyn, N. Y. Sanitary napkins. 318,117; Oct. 6. Class 44.

Stirn, L. & E., New York, N. Y. Velveteen. 315,709; Oct. 6. Class 42.

Swift and Company, Chicago, Ill. Vegetable shortening. 318,337; Oct. 6. Class 46.

Teebeeban Company, Manheim, Pa. Medical compound. 304,790; Oct. 6. Class 6.

Tesman, Jacob, Philadelphia, Pa. Liniment. 309,719; Oct. 6. Class 6.

Texlite, Inc., Dallas, Tex. Electric signs. 318,183; Oct. 6. Class 21.

Timme, E. F., & Son, New York, N. Y. Pile fabrics. 318,421; Oct. 6. Class 42.

Traffic Storage Battery Co., Los Angeles, Calif. Storage batteries. 318,118; Oct. 6. Class 21.

Traugott, William, doing business as Southern Specialty Company, St. Louis, Mo. Beverage. 317,882; Oct. 6. Class 45.

Trompeter, David, Baldwin, N. Y. Abrasive hand tool. 316,671; Oct. 6. Class 4.

Tubular Textile Machinery Corporation, New York, N. Y. Machines for treating tubular textile fabrics. 318,338; Oct. 6. Class 23.

Tumbler, J. A., Laboratories, doing business as Ray-Glo Chemical Company, Baltimore, Md. Cleaner. 318,298; Oct. 6. Class 4.

Twichel, Beatrice C., Miami, Fla. Art pictures. 317,994; Oct. 6. Class 32.

United States Rubber Company, New York, N. Y. Rubber toys simulating animals. 318,339; Oct. 6. Class 22.

United Stove Company, Ypsilanti, Mich. Oil stoves, ranges, ovens, etc. 314,728; Oct. 6. Class 34.

Van Brunt, Grace W., Belton, Mo. Dolls' clothing 306,151; Oct. 6. Class 22.

Van Raalte Company, New York, N. Y. Underwear. 317,685–6; Oct. 6. Class 39.

Visking Corporation, The, Chicago, Ill. Sausage casings. 314,087; Oct. 6. Class 46.

Vogt, E. J. (See Eddie Manufacturing Co., assignor.)

Vogue Brassiere Mfg. Co., Newark, N. J. Corsets, brassières, girdles, etc. 317,413; Oct. 6. Class 39.

Von Ladau, Karl, New York, N. Y. Meat pie. 316,140; Oct. 6. Class 46.

Walgreen Co., Chicago, Ill. Sanitary napkins. 317,490; Oct. 6. Class 44.

Waynesboro Knitting Company, Waynesboro, Pa. Underwear. 317,751; Oct. 6. Class 39.

Wendling, Carl J., doing business as Ninetynine Malt Company, Buffalo, N. Y. Malt extract. 312,675; Oct. 6. Class 46.

Winkler Film Corporation, New York, N. Y. Series of different animated motion picture cartoons. 318,302; Oct. 6. Class 26.

Winship, Bolt & Co., Wakefield, Mass. Bathing suits, underwear, and play suits. 310,743; Oct. 6. Class 39.

Wofford Syrup Co. Inc., Houston, Tex. Cane syrup. 315,884; Oct. 6. Class 46.

Wright, Stephenson & Co. Limited, Wellington, New Zealand. Benzine, gasoline, kerosine, etc. 313,576; Oct. 6. Class 15.

Wrigley, Wm., Jr., Company, Chicago, Ill. Chewing gum. 318,386; Oct. 6. Class 46.

Zimmerman Apparel Shop Inc., Wilkes-Barre, Pa. Dresses, coats, suits, etc. 313,763; Oct. 6. Class 39.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 4

Soap. Gold Dust Corporation. 287,792; Oct. 6; Serial No. 315,393; published July 28, 1931.

Soap, perfumes, etc., Toilet. Mülhens & Kropff. 36,707–8; renewed July 9, 1931.

CLASS 6

Baking powder. Price Baking Powder Company. 83,689; renewed Oct. 3, 1931.

Dicinfectants, liquid, and solutions and preparations. Bonicot Warenvertriebagesellschaft M. B. H. 287,790; Oct. 6; Serial No. 310,932; published July 14, 1931.

Disinfecting fluid. West Disinfecting Company. 84,772; renewed Jan. 2, 1932.
Gum, Menthol chewing. Shelby Gum Company. 287,787; Oct. 6; Serial No. 313,979; published July 14, 1931.
Intestinal bactericides. Maxwell & Tennyson. 287,786; Oct. 6; Serial No. 314,065; published July 14, 1931.
Liniment. Lau Bros. 287,767; Oct. 6; Serial No. 291,835; published July 14, 1931.
Liquid massage preparation. A. J. Becker. 287,785; Oct. 6; Serial No. 314,317; published July 14, 1931.
Medicated adhesive plasters. P. Beiersdorf & Co. Inc. 287,770; Oct. 6; Serial No. 301,785; published July 14, 1931.
Medicinal preparation. Plough, Inc. 287,771; Oct. 6; Serial No. 313,001; published July 14, 1931.
Medicinal preparation. Dr. J. L. Bliss Bates. 287,776; Oct. 6; Serial No. 315,027; published July 14, 1931.
Medicine. Nip-It Company. 287,772; Oct. 6; Serial No. 312,568; published July 14, 1931.
Medicine and disinfectants. G. R. Powell Chemical Company. 287,768; Oct. 6; Serial No. 304,427; published Oct. 14, 1930.
Medicines. Dr. Richards Dyspepsia Tablet Association. 35,975; renewed Feb. 26, 1931.
Ointment. W. A. Wallace. 287,774; Oct. 6; Serial No. 311,048; published July 14, 1931.
Ointments or salves. Mutso Vapor Balm Company. 287,788; Oct. 6; Serial No. 313,719; published July 14, 1931.
Paradichlorbenzine, Moulded. Vaporet Corporation of America. 287,769; Oct. 6; Serial No. 300,697; published July 22, 1930.
Perfume, toilet water, face powder, etc. Houbigant, Inc. 287,779; Oct. 6; Serial No. 314,615; published July 14, 1931.
Perfume, toilet water, face powder, etc. Houbigant, Inc. 287,780; Oct. 6; Serial No. 314,612; published July 14, 1931.
Perfume, toilet water, face powder, etc. Houbigant, Inc. 287,781–2; Oct. 6; Serial No. 314,607–8; published July 14, 1931.
Powder. K. Lindahl. 287,778; Oct. 6; Serial No. 314,651; published July 14, 1931.
Powders, and a tonic used to eradicate worms, Cattle, hog, and poultry. Buckeye Mineralized Stock Powders Company. 287,775; Oct. 6; Serial No. 311,645; published July 14, 1931.
Preparation for killing flies and insects. E. Walrath. 287,783; Oct. 6; Serial No. 314,474; published July 14, 1931.
Preparation for treating coccidiosis in poultry. J. E. Layton. 287,789; Oct. 6; Serial No. 313,439; published July 14, 1931.
Preparation, medicated antiseptic suppositories and jelly, Antiseptic. R. F. Savelli. 287,784; Oct. 6; Serial No. 314,252; published July 14, 1931.
Preparations for purifying liquids. N. V. Standard Water Maatschappij. 287,791; Oct. 6; Serial No. 311,748; published July 14, 1931.
Toilet articles. O. Benos. 287,777; Oct. 6; Serial No. 314,978; published July 14, 1931.
Toilet preparations. A. F. Wood. 84,152; renewed Nov. 7, 1931.
Tonic, Hair. I. Tucker. 287,773; Oct. 6; Serial No. 310,031; published July 21, 1931.

CLASS 8

Cigarette papers. Maison Pierre-Bardou Job. 37,640; renewed Jan. 14, 1932.

CLASS 9

Fuse, Mining, blasting, and safety. E. I. du Pont de Nemours Powder Company. 83,821; renewed Oct. 17, 1931.
Fuse, Mining, blasting, and safety. E. I. du Pont de Nemours Powder Company. 83,995; renewed Oct. 31, 1931.

CLASS 14

Spelter. Societe Anonyme des Mines et Fonderies de Zinc de la Vieille Montagne. 84,139; renewed Nov. 7, 1931.
Zinc sheets. Societe Anonyme des Mines & Fonderies de Zinc de la Vieille Montagne. 84,138; renewed Nov. 7, 1931.

CLASS 15

Compound Anti-seize. Aluminum Company of America. 287,719–20; Oct. 6 Serial No. 314,541–2; published July 14, 1931.
Gasoline. Signal Oil & Gas Company. 287,715; Oct. 6; Serial No. 313,008; published July 21, 1931.
Gasoline fuel, Compounded lubricated. R. B. Lewis. 287,705; Oct. 6; Serial No. 312,609; published July 21, 1931.
Gasolines. Phillips Petroleum Company. 287,714; Oct. 6; Serial No. 314,861; published July 21, 1931.
Kerosene. Sinclair Refining Company. 287,716; Oct. 6; Serial No. 315,162 published July 21 1931.
Oil. Standard Oil Company of New Jersey. 287,718; Oct. 6; Serial No. 314,084; published July 14, 1931.
Oil. Sun Oil Company. 287,738; Oct. 6; Serial No. 313,758; published July 14, 1931.
Oils. Radbill Oil Company. 287,739; Oct. 6; Serial No. 314,015; published July 14, 1931.
Oils and gasoline. Motor Lubricating. Blumenfeld Ice & Coal Company. 287,750; Oct. 6; Serial No. 299,893; published July 14, 1931.
Oils and greases. Standard Oil Company. 287,741; Oct. 6; Serial No. 314,869; published July 14, 1931.
Oils and greases, Lubricating. Lubriplate Corp. 287,745; Oct. 6; Serial No. 314,389; published July 21, 1931.
Oils and lubricating compositions, Lubricating. J. B. Clark. 287,717; Oct. 6; Serial No. 314,947; published July 14, 1931.
Oils, Lubricating. Texas Company. 84,417–8; renewed Dec. 12, 1931.
Oils, Lubricating. Texas Company. 84,420–1; renewed Dec. 12, 1931.
Oils, Lubricating. Texas Company. 84,423; renewed Dec. 12, 1931.
Oils, Lubricating. Texas Company. 84,425–35; renewed Dec. 12, 1931.
Oils, Lubricating. Texas Company. 84,437; renewed Dec. 12, 1932.
Petroleum. Standard Oil Company of New York. 287,746; Oct. 6; Serial No. 311,346; published July 21, 1931.

CLASS 21

Batteries, Storage. Traffic Storage Battery Co. 287,692; Oct. 6; Serial No. 313,584; published July 14, 1931.
Electric lighting fixture units. Westinghouse Electric & Manufacturing Company. 287,728; Oct. 6; Serial No. 308,676 published July 21, 1931.
Electric tools. The Stanley Works. 287,704; Oct. 6; Serial No. 312,020; published July 21, 1931.
Electrical apparatus and machines. Chicago Pneumatic Tool Company. 287,700; Oct. 6; Serial No. 314,271; published July 14, 1931.
Electrically operated air deodorizer, filter, and purifier. Permanent Electric Company. 287,690; Oct. 6; Serial No. 313,865; published July 14, 1931.
Heaters. Gas and Electric Heater Co. 287,757; Oct. 6; Serial No. 302,941; published July 21, 1931.
Lamps. Miller Company. 287,689; Oct. 6; Serial No. 314,922; published July 14, 1931.
Lamps. Miller Company. 287,693; Oct. 6; Serial No. 314,923; published July 14, 1931.
Radio electron tubes, chassis, receiving sets, etc. Standard Stores, Incorporated. 287,701; Oct. 6; Serial No. 314,255; published July 21, 1931
Radio items and parts. B. A. Cover, jr. 287,737; Oct. 6; Serial No. 314,153; published July 21, 1931.
Radio receiving apparatus. G. E. Riegel. 287,756; Oct. 6; Serial No. 303,613; published July 14, 1931.
Radio receiving sets and parts thereof. Wholesale Radio Service Co. Inc. 287,691; Oct. 6; Serial No. 314,594; published July 21, 1931.
Spark plugs. Hurley-Townsend Corporation. 287,699; Oct. 6; Serial No. 315,052; published July 21, 1931.
Tubes, photoelectric cells, etc., Electron. Otto Pressler Thüringer Vacuumröhrenfabrik. 287,726; Oct. 6; Serial No. 307,112; published July 14, 1931.
Welders. Una Welding & Bonding Company. 287,755; Oct. 6; Serial No. 303,407; published July 21, 1931.
Wires, cables, and cores, Covered. Habirshaw Wire Company. 83,577; renewed Sept. 26, 1931.

CLASS 23

Bearings, Roller. Tyson Roller Bearing Corporation. 287,721; Oct. 6; Serial No. 312,673; published July 14, 1931.
Bolt clippers. W. M. Keith. 287,683; Oct. 6; Serial No. 315,053; published July 14, 1931.
Carpet sweepers and suction cleaners. Scott and Fetzer Company. 287,751; Oct. 6; Serial No. 300,368; published July 7, 1931.
Centrifugal machines and parts thereof. Sharples Specialty Company. 287,711; Oct. 6; Serial No. 314,176; published July 14, 1931.
Conveyors and conveying systems. United Conveyor Corporation. 287,730; Oct. 6; Serial No. 308,273; published July 21, 1931.
Derricks and structural parts thereof, Oil well. Petroleum Derrick Company. 287,754; Oct. 6; Serial No. 315,556; published July 14, 1931.
Extractors, Fruit juice. Ideal Clamp Mfg. Co. Inc. 287,759 Oct. 6; Serial No. 315,688; published July 21, 1931.
Handles for shovels, etc. Columbus Handle & Tool Corporation. 287,753; Oct. 6; Serial No. 309,460; published July 14, 1931.
Horns, Fluid operated. Trico Products Corporation. 287,729; Oct. 6; Serial No. 308,402; published July 21, 1931.
Knives, forks, and spoons, pliers, can openers, etc., Table. H. C. Hart Mfg. Co. 287,708; Oct. 6; Serial No. 312,128; published July 21, 1931.
Knives, forks, spoons, etc., Steak. Albert Pick-Barth Company. 287,748; Oct. 6; Serial No. 300,965; published July 14, 1931.
Machines. Werner & Pfleiderer. 36,113; renewed Mar. 19, 1931.
Metal ware, Enameled. Vollrath Company. 287,764; Oct. 6; Serial No. 292,473; published July 21, 1931.
Mowers, Lawn. F. & N. Lawn Mower Company. 287,684; Oct. 6; Serial No. 314,752; published July 14, 1931.

Pliers, Engraving tools, files, and saws. William Dixon, Incorporated. 287,763; Oct. 6; Serial No. 296,960; published Dec. 2, 1930.
Plows. Emporia Machine Co. Inc. 287,694; Oct. 6; Serial No. 314,901; published July 14, 1931.
Plows. Emporia Machine Co. Inc. 287,722; Oct. 6; Serial No 314,902; published July 14, 1931.
Plows. Emporia Machine Co. Inc. 287,723; Oct. 6; Serial No. 314,903; published July 21, 1931
Pump, Portable water. Fenwick Reddaway Mfg., Co. 287,710; Oct. 6; Serial No. 311,958; published July 21, 1931.
Razors, shears and scissors, and pocket-knives. Herfarth Bros. 82,983; renewed Aug. 8, 1931.
Saws, knives, and other special tools. Toland & Son, Inc. 287,686; Oct. 6; Serial No. 314,825; published July 21, 1931.
Screw drivers. Stanley Works. 287,731; Oct. 6; Serial No. 308,226; published July 14, 1931.
Sheaves for belt drives. L. H. Gilmer Co. 287,709; Oct. 6; Serial No. 312,048; published July 21, 1931.
Tools and appliances, Jewelers'. William Dixon, Incorporated. 287,762; Oct. 6; Serial No. 286,425; published Mar. 17, 1931.
Tractors and internal combustion engines. Büssing-Nag Vereinigte Nutzkraftwagen Aktiengesellschaft. 287,685; Oct. 6; Serial No. 314,146; published July 14, 1931.

CLASS 26

Film, Photographic. Du Pont Pathé Film Manufacturing Corporation. 287,702; Oct. 6; Serial No. 314,899; published July 21, 1931.
Films and motion pictures, Motion. Traveltone Pictures, Inc. 287,747; Oct. 6; Serial No. 300,245; published July 21, 1931.
Glasses, Field and opera. Bausch & Lomb Optical Company. 287,760; Oct. 6; Serial No. 315,725; published July 21, 1931.
Lenses. Acutone Corporation. 287,688; Oct. 6; Serial No. 314,942; published July 14, 1931.
Lenses. J. D. Brock. 287,707; Oct. 6; Serial No. 315,247; published July 14, 1931.
Lenses. The Fair. 287,713; Oct. 6; Serial No. 314,986; published July 14, 1931.
Lenses and frames. J. D. Brock. 287,706; Oct. 6; Serial No. 315,244; published July 14, 1931.
Lenses, Bifocal. Perfected Bifocals, Inc. 287,712; Oct. 6; Serial No. 315,722; published July 21, 1931.
Photographic dry plates. H. Segal. 287,687; Oct. 6; Serial No. 314,931; published July 14, 1931.
Sensitized photographic papers, plates, films, etc. Gevaert Photo-Production Naamlooze Vennootschap. 287,733–6; Oct. 6; Serial Nos. 315,683–6; published July 21, 1931.
Tubes, muffles, Pyrometer. Carborundum Company. 287,703; Oct. 6; Serial No. 310,283; published July 14, 1931.
Turnstiles and registering fare boxes, Combination. Perey Manufacturing Company. 287,761; Oct. 6; Serial No. 312,720; published July 21, 1931.

CLASS 28

Chains. J. F. Sturdy's Sons. 37,263; renewed Oct. 29, 1931.
Diamond rings. W. R. Neumann. 287,727; Oct. 6; Serial No. 308,263; published July 14, 1931.
Fraternity badges, lapel buttons, cuff links, etc. Beta Theta Pi. 287,743; Oct. 6; Serial No. 310,084; published July 21, 1931.
Fraternity pins and badges. Phi Kappa Tau Fraternity. 287,744; Oct. 6; Serial No. 311,885; published July 21, 1931.
Jewelry and flat and hollow tableware. Elgin American Manufacturing Co. 287,740; Oct. 6; Serial No. 313,709; published July 21, 1931.
Rings and mountings therefor, Finger. Benjamin & Edward J. Gross Co. Inc. 287,765; Oct. 6; Serial No. 299,317; published July 21, 1931.
Rings, bracelets, belt buckles, etc., Finger. N. M. Kirshner. 287,698; Oct. 6; Serial No. 313,662; published July 21, 1931.
Rings, Finger. M. H. Shiman & Co. 287,724; Oct. 6; Serial No. 312,164; published July 21, 1931.
Rings, Finger. H. W. Peters Co., Inc. 287,725; Oct. 6; Serial No. 314,293; published July 14, 1931.

CLASS 32

Chairs, tables, davenports, etc. Albert Pick-Barth Company. 287,749; Oct. 6; Serial No. 300,969; published July 14, 1931.
Mattresses, springs, and pillows, Cotton. Ellison Furniture & Carpet Co. 287,766; Oct. 6; Serial No. 255,502; published Nov. 4, 1930.

CLASS 35

Caster tires. Jarvis & Jarvis, Inc. 287,752; Oct. 6; Serial No. 309,273; published July 21, 1931.
Friction materials. Ferodo and Asbestos Incorporated. 287,695; Oct. 6; Serial No. 314,904; published July 21, 1931.
Gaskets, Laminated. Victaulic Company of America. 287,696; Oct. 6; Serial No. 314,827; published July 14, 1931.

CLASS 36

Musical strings. Rudolph Wurlitzer Company. 84,774; renewed Jan. 2, 1932.
Phonographic apparatus. Thomas A. Edison, Incorporated. 287,732; Oct. 6; Serial No. 308,436; published July 14, 1931.
Reeds. Woodwind Company. 287,697; Oct. 6; Serial No. 314,312; published July 14, 1931.
Talking machines and parts thereof. American Graphophone Company. 84,714; renewed Jan. 2, 1932.

CLASS 39

Hose. Union Manufacturing Co. 89,927–9; renewed Aug. 1, 1931.
Hosiery. E. Sutro & Son Company. 85,018; renewed Jan. 16, 1932.
Shirts. S. Liebovitz & Son. 37,104; renewed Sept. 24, 1931.

CLASS 42

Bedspreads and counterpanes. Monument Mills. 84,985; renewed Jan. 16, 1932.
Elastic fabric material. Strouse, Adler Company. 287,742; Oct. 6; Serial No. 312,868; published July 14, 1931.

CLASS 44

Alloy, Dental filling. S. S. White Dental Manufacturing Company. 287,758; Oct. 6; Serial No. 303,867; published Sept. 9, 1930.

CLASS 46

Beef and bacon, Smoked. Newark Packing Company. 84,990; renewed Jan. 16, 1932.
Canned pineapple. Theo. H. Davies & Company. 84,819; renewed Jan. 9, 1932.
Confections and chocolates. Paul F. Beich Company. 84,811; renewed Jan. 9, 1932.
Flour, Wheat. Moseley & Motley Milling Co. 85,156; renewed Jan. 30, 1932.
Hams, shoulders, and bacon. T. M. Sinclair & Co. 82,474; renewed June 27, 1931.
Molasses. American Molasses Co. 84,799; renewed Jan. 9, 1932.
Rice. Ridenour Baker Grocery Co. 83,279; renewed Aug. 29, 1931.

CLASS 47

Sherry-wine. Alex. D. Shaw & Co. 83,012; renewed Aug. 8, 1931.

CLASS 50

Fly killers or hand devices for killing flies and other insects. United States Wire Mat Company. 85,049; renewed Jan. 23, 1932.

ALPHABETICAL LIST OF LABELS

Beech-Nut Brand Chocolate Drops. For Candy. Beech-Nut Packing Company. 39,820; Oct. 6.
Blue Byrd. For Cantaloupe Preserves (with Spices.) Blue Byrd Specialty Company. 39,821; Oct. 6.
Blue Byrd. For Salad Dressing. Blue Byrd Specialty Company. 39,822; Oct. 6.
Blue Byrd. For Grape Jelly. Blue Byrd Specialty Company. 39,823; Oct. 6.
Blue Byrd. For Sandwich Spread. Blue Byrd Specialty Company. 39,824; Oct. 6.
Columbia. For Radio Tubes. Columbia Phonograph Company. 39,845; Oct. 6.
Columbus School Series. For Writing Tablets. Central Tablet Mfg. Co. 39,843; Oct. 6.
Comb Honey Fragile—Comb Honey remove from Case and Display. For Honey. G. B. Lewis Company. 39,853; Oct. 6.
Del Monte Liquid Spreader. For Liquid Spreader for Making Liquid Sprays, Quicker Wetting and Better Spreading. California Spray-Chemical Company. 39,826; Oct. 6.
Face Massage and Face Cream. For Face Massage and Face Cream. S. Favitta. 39,847; Oct. 6.
Francis Fox Liquid Herbal Shampoo. For Liquid Herbal Shampoo. F. Fox. 39,848; Oct. 6.
Garden Bordo. For Fungicide. California Spray-Chemical Company. 39,830; Oct. 6.
Garden Bug-Go. For a Poisoned Bait for Use in Controlling Snails, Slugs, Sow Bugs, Earwigs, Grasshoppers, Etc. California Spray-Chemical Company. 39,829; Oct. 6.
Garden Fluosilicate Dust. For Garden Fluosilicate Dust for Control of Beetles and Other Leaf Eating Insects. California Spray-Chemical Company. 39,835; Oct. 6.
Garden Py'run. For Spray for Killing Plant Insects. California Spray-Chemical Company. 39,833; Oct. 6.
Garden Sulphur. For Garden Sulphur. California Spray-Chemical Company. 39,828; Oct. 6.
Garden Tendust. a Nicotine Dust. For a Nicotine Dust for Killing Aphis and Thrips. California Spray-Chemical Company. 39,840; Oct. 6.
Garden Volck. For Nicotine-Oil Spray. California Spray-Chemical Company. 39,836; Oct. 6.
Garden Whale Oil Soap. For Garden Whale Oil Soap. California Spray-Chemical Company. 39,831; Oct. 6.

Greenhouse Special Volck. For Greenhouse Special Volck for Control of Greenhouse Pests. California Spray-Chemical Company. 39,832; Oct. 6.
Handetray. For Sanitary Food Containers. Champion No-Leak Paper Dish Company. 39,844; Oct. 6.
Hoffmanns Buttermilk Rye Bread. For Bread. Hoffman's Cake Specialties Co. 39,850; Oct. 6.
Jumbo Bread. For Bread. Mid-West Wax Paper Company. 39,854; Oct. 6.
Lead Arsenate. For Lead Arsenate. California Spray-Chemical Company. 39,837; Oct. 6.
Lionel Rogers University Club. For Shaving Cream. Viviny Perfumers. 39,867; Oct. 6.
L'Manda. For Cologne. Parfumerie Dollup. 39,855; Oct. 6.
Mary King Peach Bloom Nourishing Cream. For Nourishing Cream. J. R. Watkins Company. 39,868; Oct. 6.
Nun's Fadeproof and Mothproof. For Yarns for Rug Making, Embroidering, Crocheting, and Knitting. T. Buettner & Co. Inc. 39,825; Oct. 6.
Nursery Volck. For a Spray for the Control of Nursery and Greenhouse Pests. California Spray-Chemical Company. 39,839; Oct. 6.
Old Egyptian Turtle Oil Cream. For Turtle Oil Cream. Smart & Company. 39,858; Oct. 6.
Old North State. For Watermelons. J. T. John Company. 39,852; Oct. 6.
Para-Di-Chloro-Benzene. For Soil Fumigant for the Control of Peach Root Borer, Wire Worms, and Termites. California Spray-Chemical Company. 39,838; Oct. 6.
Poisoned Barley. For Poisoned Barley for Killing Squirrels, Gophers, and Prairie Dogs. California Spray-Chemical Company. 39,834; Oct. 6.
Quality Poultry. For Poultry. J. H. Carter. 39,841; Oct. 6.
Razorline. For Strop Dressing. H. J. Steinbrunn. 39,861; Oct. 6.
Rust-Off. For Compound Which Removes Rust from Porcelain and Enamel Ware and Metals. Faust-Kennedy Company. 39,846; Oct. 6.
Shea's Magic Waxine. For Dance Floor Wax. P. J. Shea. 39,857; Oct. 6.
Sir Thomas. For Whiskey. Frankfort Distillery. 39,849; Oct. 6.
Sublimerest. For Mattresses. Southern Mattress Company. 39,859; Oct. 6.
Sure Seal. For Pipe Joint Company. A. H. Sacks. 39,856; Oct. 6.
Swanwhite. For Dyes, Bleaches, and Finishes. Standard Bleachery and Printing Co. 39,860; Oct. 6.
The Talk of the Town. For Ice Cream. Town Talk Ice Cream Co. 39,866; Oct. 6.
Tiger Brand Corn Starch. For Corn Starch. Hubinger Company. 39,851; Oct. 6.
Weed Killer. For Preparation for Killing Weeds. California Spray-Chemical Company. 39,827; Oct. 6.
White Cross Quinine & Iron Tonic. For Quinine and Iron Tonic. J. H. Cash. 39,842; Oct. 6.
Worlds Best Cocktail Sauce—Red-Hot Barbecue Horse Radish. For Barbecue Horse-Radish. Mrs. Byron Willcuts. 39,869; Oct. 6.
"X" Boiler Liquid. For Liquid for Repairing Leaky Boilers. E. R. Tolfree. 39,862; Oct. 6.
"X" Boiler Liquid. For Liquid for Repairing Leaky Boilers. E. R. Tolfree. 39,864; Oct. 6.
"X" Radiator Liquid. For Liquid for Repairing Leaky Radiators. E. R. Tolfree. 39,863; Oct. 6.
"X" Radiator Liquid. For Liquid for Repairing Leaky Radiators. E. R. Tolfree. 39,865; Oct. 6.

ALPHABETICAL LIST OF PRINTS

Aristocraft. For Porch Enclosures. G. C. Lamphere. 13,435; Oct. 6.
Beech-Nut Choclate Flavored Drops. For Candy. Beech-Nut Packing Company. 13,434; Oct. 6.
McKesson's Yodora. For Delicate Deodorant Cream. McKesson & Robbins, Incorporated. 13,436; Oct. 6.
Minnehaha. For Beverages. Minnehaha Water Co. 13,437; Oct. 6.
Vosine. For Mouth Wash. The Vosine Co. 13,438; Oct. 6.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 6TH DAY OF OCTOBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Berdon, Albert E., assignor.)
A C Spark Plug Company. (See Dinsmore, Clarence B., assignor.)
A C Spark Plug Company. (See Hans, Edmund E., assignor.)
A C Spark Plug Company. (See Rabezzana, Hector, assignor.)
A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
Abbe, Edward J., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,826,489; Oct. 6.
Abbe, Edward J., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,826,490; Oct. 6.
Abraham, Leonard G., Teaneck, N. J., assignor to American Telephone and Telegraph Company. Echo suppressor. 1,826,196; Oct. 6.
Acheson, James M., Los Angeles, Calif. Toothbrush. 1,826,234; Oct. 6.
Ackerberg, Carl W., San Francisco, Calif. Perspectograph. 1,826,338; Oct. 6.
Adams, John S., and B. Miller, Adams, Mass. Windshield and car heating device. 1,826,590; Oct. 6.
Adams, Wallace A., Petaluma, Calif. Fruit basket crate. 1,826,197; Oct. 6.
Addington, Charles G. (See Addington, William and C. G.)
Addington, William and C. G., Redwing, Colo. Adjustable beadrest for morticians. 1,825,989; Oct. 6.
Adey, Horace W., London, England. Inductance coil. 1,826,642; Oct. 6.
Ainslie, Morris D., Binghamton, N. Y., assignor to Doughnut Machine Corporation, New York, N. Y. Aliment forming device. 1,825,844; Oct. 6.
Ainsworth, Albert A., Ossining, N. Y. Filing system. 1,825,845; Oct. 6.
Air Reduction Company. (See Anderson, James L., assignor.)
Aktiebolaget Formator. (See Wehmann, F. W., and Dahlström, assignors.)
Aktiebolaget Menitor. (See Rudeberg, Arvid, assignor.)
Aland, Richard C., assignor to W. E. Baker, and G. A. Frantz, trustees of The Web Engineering Company, Cleveland, Ohio. Separator. 1,825,990; Oct. 6.
Albright, H. Nelson, et al, executors. (See Zifferer, Lothar R.)
Alemite Corporation. (See Butler, Clyde G., assignor.)
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alemite Corporation. (See Murphy, Howard J., assignor.)
Allan, Edward T., assignor to The Union Thread Company, Cincinnati, Ohio. Thread package. 1,826,491; Oct. 6.
Allen, Donald G., Dallas, Tex. Check holder and serving tray. 1,826,037; Oct. 6.
Allison, Leslie R., Wilkinsburg, and F. H. Nicholson, Edgewood Borough, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,826,161; Oct. 6.
Allyne, Edmund E. (See Schickler, Albert C., assignor.)
Almqvist, August, Idrottsplatsen, Sweden. Hand cuff. 1,826,591; Oct. 6.
Altenbach, Otto, Los Angeles, Calif. Hand tool. 1,826,038; Oct. 6.
Aluminum Screw Machine Products Company. (See Naylor, W. F., and Sponseller, assignors.)
American Anode Inc. (See Klein, Paul, assignor.)
American Anode, Inc. (See Klein, P., and Gábor, assignors.)
American Anode, Inc. (See Klein, P., and Szegvari, assignors.)
American Bank Note Company. (See Murray, John J., assignor.)
American Buckle Company, The. (See Hodge, Robert J., assignor.)
American Buckle Company, The. (See Salisbury, Jessup, assignor.)
American Cyanamid Company. (See Christmann, Ludwig J., assignor.)
American Electrical Heater Company. (See Kuhn, Robert, assignor.)
American Lurgi Corporation. (See Lehrecke, Hans, assignor.)
American Mills Company, The. (See Chisholm, Lester B., assignor.)
American Rubber Company. (See Teague, Merwyn C., assignor.)
American Sealcone Corporation. (See Winton, Lewis B., assignor.)
American Sheet and Tin Plate Company. (See Harding, C. T., and Whetzel, assignors.)
American Slicing Machine Company. (See Campbell, William J., assignor.)
American Steel and Wire Company of New Jersey, The. (See Hawk, Glenn C., assignor.)
American Telephone and Telegraph Company. (See Abraham, Leonard G., assignor.)
American Telephone and Telegraph Company. (See Cory, Samuel I., assignor.)
American Telephone and Telegraph Company. (See Friend, O. A., and Heitsmith, assignors.)
Andale Company. (See McNeal, Daniel R., assignor.)
Anderson, Frank H., Birmingham, Ala. Chair. 1,825,846; Oct. 6.
Anderson, Gabriel W., Chula Vista, Calif., assignor to Gas Furnace Control Co. Electromagnetic valve. 1,826,269; Oct. 6.
Anderson, Harley E., assignor to Gustin-Bacon Manufacturing Co., Kansas City, Mo. Folding adjustable locomotive cab seat. 1,826,643; Oct. 6.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Installing welded pipe systems and fittings therefor. 1,826,377; Oct. 6.
Anderson, Merrill, New York, N. Y. Safety razor blade. 1,825,766; Oct. 6.
Anderson, Merrill, New York, N. Y. Safety razor blade. 1,825,767; Oct. 6.
Anderson, Thomas F. (See Carpenter, R. F., and Anderson.)
Andrews Crane Corporation. (See Andrews, Donald S., assignor.)
Andrews, Donald S., Rumson, N. J., assignor to Andrews Crane Corporation, New York, N. Y. Lift-platform truck. 1,826,116; Oct. 6.
Apparel Ingenuities Corporation. (See Wolfson, Isadore D., assignor.)
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine element. 1,826,295; Oct. 6.
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine member. 1,826,296; Oct. 6.
Apple, Vincent G., Dayton, Ohio. Making electric coils. 1,826,297; Oct. 6.
Armitage, Sylvester, Highland Park, assignor to General Motors Corporation, Detroit, Mich. Door lock for vehicles. 1,826,117; Oct. 6.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Combined safety razor and sharpening mechanism. 1,826,410; Oct. 6.
Art Metal Works. (See Aronson, Louis V., assignor.)
Ashe, Marselins T., Chicago, Ill. Vending machine. 1,825,847; Oct. 6.
Ashton, Richard O., assignor to Kelvinator Corporation, Detroit, Mich. Mechanical refrigerating apparatus. 1,826,339; Oct. 6.
Ashworth, Fred, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine and method for forming and attaching rands. 1,825,688; Oct. 6.
Auerbach, Abraham. (See Auerbach, Harry, assignor.)
Auerbach, Harry, assignor to A. Auerbach, Brooklyn, N. Y. Convertible presser foot. 1,826,592; Oct. 6.
Auñero, John M., Brooklyn, and J. H. Smoot, New York, assignors to E. A. Laboratories, Inc., Brooklyn, N. Y. Commutator and making the same. 1,826,443; Oct. 6.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Clamp for cables or the like. 1,825,650; Oct. 6.
Austin, Dwight E., Los Angeles, Calif. Vehicle. Des. 85,273; Oct. 6.
Automatic Arc Welding Company. (See Morton, Harry D., assignor.)
Automatic Food Machinery Corporation. (See Hall, Charles G., assignor.)
Automatic Sprinkler Company of America. (See Hamilton, John R., assignor.)
Azamber, John, Pittsburg, Kans. Sanitary cap for milk cans. 1,826,593; Oct. 6.
Baash-Ross Tool Company. (See Wiskersham, Harry P., assignor.)
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Babcock & Wilcox Company, The. (See Smith, Herman B., assignor.)
Babson, Roger W., Wellesley, Mass. Automatic control for self propelled vehicles. 1,826,492; Oct. 6.
Bacino, Mario, Turin, Italy. Coin-operated photographic apparatus. 1,825,709; Oct. 6.

Badger, E. B., & Sons Company. (See Lawrence, Almon R., assignor.)
Bahrman, S. Leonard, Cadillac, Mich. Engine head stand. 1,826,493; Oct. 6.
Baird, Dudley. (See Fowler, E. J., and Baird.)
Baker, Bert F. (See Knox, H. A., and Baker.)
Baker & Company. (See Montuori, Felix C., assignor.)
Baker, Hugh J., Indianapolis, Ind. T-head for shores. 1,826,118; Oct. 6.
Baker, Stephen D., New York, N. Y. Ash tray or article of similar nature. Des. 85,274; Oct. 6.
Baker, Thomas T. (See Goldsmith, J. N., and Baker.)
Baker, Walter J., assignor to The Wahl Company, Chicago, Ill. Fountain pen. 1,825,931; Oct. 6.
Baker, William H., Montreal, Quebec, Canada. Stopping mechanism for looms. 1,826,444; Oct. 6.
Baker, William E., et al., trustees. (See Aland, Richard C., assignor.)
Balk, William H., Cleveland, Ohio. Sign. 1,826,162; Oct. 6.
Balsiger, Harold E., assignor to Landis Tool Company, Waynesboro, Pa. Safety device for grinding machines. 1,826,445; Oct. 6.
Bamaz-Meguin Aktiengesellschaft. (See Miedbrodt, Carl, assignor.)
Barbarou, Marius J-B., Paris, France. Propeller with variable pitch. 1,825,768; Oct. 6.
Barbarou, Marius J-B., Paris, France. Construction of the cylinders of internal combustion engines. 1,825,769; Oct. 6.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Multiweb handling machine. 1,826,446; Oct. 6.
Barber, Hugh B., and W. M. Hepburn, assignors to Surface Combustion Corporation, Toledo, Ohio. Combined gas burner and mixing apparatus. 1,826,163; Oct. 6.
Barker, Dyson, assignor to Whitin Machine Works, Whitinsville, Mass. Cotton comber. 1,826,494; Oct. 6.
Barmer Maschinenfabrik Aktiengesellschaft. (See Lenk, Wilhelm, assignor.)
Barnes, Ransom A., Antioch, Calif. Sterilizer kit. Des. 85,276; Oct. 6.
Barnett, Louis, Brooklyn, assignor of one-half to A. Sitzman, Lynbrook, and one-half to A. Hamburger, Flushing, Long Island, N. Y. Sound absorbing construction. 1,825,770; Oct 6.
Barrett Company, The. (See Miller, Stuart P., assignor.)
Barrett, Leon J., Worcester, Mass. Centrifugal washer and drier. 1,825,651; Oct. 6.
Basse, Frederick. (See Tennesse, H., and Basse.)
Bayley, William D., Springfield, Ohio. Silo top. 1,826,378; Oct. 6.
Bean, Roscoe D., assignor to The Brown Instrument Company, Philadelphia, Pa. Control method and apparatus. 1,825,932; Oct. 6.
Bear Manufacturing Company. (See Wochner, Henry, assignor.)
Bear, Paul S. (See Phelan, L. A. M., and Bear.)
Bechtold, Reuben E., Fort Wayne, Ind., assignor to The Tokheim Oil Tank and Pump Company. Liquid dispensing apparatus. 1,826,340; Oct. 6.
Beck, Charles J., Philadelphia, Pa. Feeding mechanism for cutting and folding machines. 1,826,495; Oct. 6.
Beck, Heinrich, Vienna, Austria. Combination lock. 1,826,235; Oct. 6.
Beck, Leo L., Linden, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Color flasher. 1,826,384; Oct. 6.
Beck, Leo L., Linden, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Nonhardening vacuum tube lamp. 1,826,385; Oct. 6.
Beck, Leo L., Jackson Heights, assignor to Claude Neon Lights, Inc., New York, N. Y. Controlling the color in vacuum tube lamps. 1,826,386; Oct. 6.
Beck, Leo L., Jackson Heights, assignor to Claude Neon Lights, Inc., New York, N. Y. Deadening mercury in blue neon tubes. 1,826,387; Oct. 6.
Beelman, David H., Mount Vernon, N. Y. Plaster cutter. 1,826,496; Oct. 6.
Behan, Thomas W., assignor to Nineteen Hundred Corporation, Binghamton, N. Y. Washing machine tub. 1,826,236; Oct. 6.
Behle, Joseph, G. E. King, and H. C. Blackmon, assignors to The Murray Company, Dallas, Tex. Automatic tramper control mechanism. 1,826,198; Oct. 6.
Beimling, William A., and F. B. Peterson, assignors to National Brake & Electric Company, Milwaukee, Wis. Cooling system. 1,826,040; Oct. 6.
Bell & Howell Company, The. (See Ziebarth, Charles A., assignor.)
Bell, John E., Brooklyn, assignor to Foster Wheeler Corporation, New York, N. Y. Water back for steam generators. 1,826,933; Oct. 6.
Bellamy, Harry T., River Forest, and J. C. Smith, Wilmette, Ill. Tubular boiler. 1,826,411; Oct. 6.
Bellone, Alfred F. S., Lyon, assignor to Société des Usines Chemiques Rhône Poulenc, Paris, France. Production of potassium manganate. 1,826,594; Oct. 6.
Beloit Iron Works. (See Berry, Earl E., assignor.)
Bendix Brake Company. (See Cautley, John R., assignor.)
Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Bendix Brake Company. (See Sanford, Roy S., assignor.)
Benham, Edgar M., Norwood, Ohio, assignor to The Mosler Lock Company, Covington, Ky. Interchangeable key lock. 1,826,595; Oct. 6.
Benjamin, Harry S., Utica, N. Y. Leveling device. 1,825,848; Oct. 6.
Benjamin, Merrill G., Lakewood, Ohio. Combustion control. 1,826,644; Oct. 6.
Benner, Raymond C., Niagara Falls, and G. H. Porter, La Salle, assignors to The Carborundum Company, Niagara Falls, N. Y. Reversible and irreversible thermo plastic bonded abrasive articles. 1,825,771; Oct. 6.
Bennett, Walter E., and L. J. Bishop, assignors to Mechanical Handling Systems, Inc., Detroit, Mich. Trolley conveyor. 1,826,412; Oct. 6.
Benson, Arthur E., Boston, assignor to Draper Corporation, Hopedale, Mass. Loom filling fork and protector controlling mechanism. 1,826,685; Oct. 6.
Berdon, Albert E., Detroit, assignor to A C Spark Plug Company, Flint, Mich. Liquid fuel supply system. 1,826,119; Oct. 6.
Bergstrom, Carl P., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Bobbin support for weft replenishing looms. 1,826,298; Oct. 6.
Bergquist, John U., Hudson, assignor to A. A. Williams, Holliston, Mass. Shoe pac. 1,826,645; Oct. 6.
Bernson, Maurice F., Canadian Tex. Folder. 1,826,596; Oct. 6.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Paper winding apparatus. 1,826,041; Oct. 6.
Bettendorf Company, The. (See Hamilton, Karl M., assignor.)
Beusch, Willi, assignor to Landis & Gyr, A.-G., Zug, Switzerland. Induction meter. 1,826,447; Oct. 6.
Bianco, Henry, assignor to Campbell Metal Window Corporation, Baltimore, Md. Weather seal construction for windows. 1,826,686; Oct. 6.
Bicheroux, Francois, Liege, Belgium. Dephosphorizing iron in the converter and means for carrying out said process. 1,826,497; Oct. 6.
Bickel, Clara B., San Francisco, Calif. Novelty dog. Des. 85,277; Oct. 6.
Biddle, David R., Albuquerque, N. Mex. Spatula. 1,825,710; Oct. 6.
Bignell, George L., assignor to The Rose Patch and Label Co., Grand Rapids, Mich. Label strip feeding means for printing presses. 1,826,498; Oct. 6.
Bing, Julius, assignor to the firm Magnet-Werk G. m. b. H. Eisenach Spezialfabrik fur Elektromagnet-Apparate, Eisenach, Germany. Power transmission device. 1,825,934; Oct. 6.
Bird & Son, Inc. (See Roberts, B. H., and Gach, assignors.)
Birdsboro Steel Foundry & Machine Company. (See Martin, Mark H., assignor.)
Birkmeyer, Paul J., Brooklyn, N. Y., M. V. Creedon, Westfield, N. J., and W. C. Chadbourne, Elmhurst, assignors to The Western Union Telegraph Company, New York, N. Y. Transfer means for belt conveyers. 1,826,379; Oct. 6.
Bishop, Leonard J. (See Bennett, W. E., and Bishop.)
Bissell Carpet Sweeper Company. (See Owen, Ira J., assignor.)
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,826,042; Oct. 6.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,826,043; Oct. 6.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,826,044; Oct. 6.
Black and Decker Manufacturing Company, The. (See Decker, Alonzo G., assignor.)
Black, Willy. (See Stedefeld, C., and Black.)
Blackburn, Wayne W., Leesburg, Fla. Lathing unit. 1,826,499; Oct. 6.
Blackmon, Henry C., et al. (See Behle, J., and King, and Blackmon, assignors.)
Blake, Benjamin F., deceased, by E. E. Blake, administratrix, Marion, Ohio. Flower tray. 1,826,500; Oct. 6.
Blake, Ethel E., administratrix. (See Blake, Benjamin F.)
Blake, Isabelle B., New York, N. Y. Paper bag. 1,826,646; Oct. 6.
Blakeslee, Orrin C., Compton, Calif. Duplex grip tool. 1,826,045; Oct. 6.
Blau Knox Company. (See Schieldrop, Bjarne H., assignor.)
Blazier, Edward O., et al. (See Holifer, J. G., and Landess, assignor.)
Blazier, Harold E., et al. (See Holifer, J. G., and Landess, assignor.)
Blodgett, Herbert C., assignor to Overhead Door Corporation, Hartford City, Ind. Overhead door structure. 1,826,647; Oct. 6.
Blood, Howard E., assignor to Norge Corporation, Detroit, Mich. Baffle shield. Des. 85,278; Oct. 6.
Bobroff, Bornett L., Racine, Wis. Switch for signaling systems. 1,825,991; Oct. 6.
Bobroff, Bornett L., Milwaukee, Wis. Signaling system. 1,826,501; Oct. 6.
Boechino, Ernest, Newark, N. J. Safety fire balcony exit. 1,826,448; Oct. 6.
Bock, Carl J., assignor to Yellow Truck and Coach Manufacturing Company, Pontiac, Mich. Front brake control shaft. 1,826,380; Oct. 6.
Bodkin, Irving S., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,826,341; Oct. 6.

Bodmer, Christian, assignor to The Stanley Works, New Britain, Conn. Ratchet mechanism. 1,825,936; Oct. 6.
Boeckel, Emile, Paris, France. Cigarette and cigar holder. 1,826,237; Oct. 6.
Boggs, Hugh L., assignor of one-fourth to F. Piotti and one-fourth to K. Moonjian, Savannah, Ga. Automatic vacuum pressure gravity water system. 1,825,772; Oct. 6.
Böhm, Friedrich, Stuttgart, Germany. Direct current electromotor. 1,826,342; Oct. 6.
Bollinger, Edward, San Francisco, Calif. Insulator for automobile hoods. 1,826,046; Oct. 6.
Bond, Samuel C., Holly Oak, Del., assignor to The Henry P. Scott Company. Determining moisture content. 1,825,896; Oct. 6.
Booge, James E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Stable homogeneous nitrocellulose drying oil mixtures and making same. 1,825,773; Oct. 6.
Booge, James E., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Liquid coating composition and making same. 1,825,935; Oct. 6.
Booth, Burnett C., Los Angeles, Calif. Lineman's platform. 1,826,120; Oct. 6.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Brake drum. 1,826,413; Oct. 6.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Forming vehicle wheel rim members. 1,826,449; Oct. 6.
Borden, Perry A., assignor to The Bristol Company, Waterbury, Conn. Regulating apparatus. 1,825,849; Oct. 6.
Borg & Beck Company, The. (See Reed, Harold V., assignor.)
Bortolus, Frank, Eveleth, Minn. Positioning bracket for snatch blocks. 1,826,199; Oct. 6.
Bostock, Edgar H., Nutley, N. J. Mine car. 1,825,850; Oct. 6.
Boulogne, Baltus, Pasoeroean, Java, Dutch East Indies. Device for interconnecting the evaporation elements of evaporation plants. 1,825,937; Oct. 6.
Bowker Chemical Company. (See Lang, Peter A., assignor.)
Boynton, Alexander, San Antonio, Tex. Casing head. 1,825,774; Oct. 6.
Bragg, Caleb S., and V. W. Kliesrath, assignors to Bragg-Kliesrath Corporation, New York, N. Y. Power actuator. 1,826,417; Oct. 6.
Bragg, Caleb S., and V. W. Kliesrath, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Poppet valve mechanism for power actuators. 1,826,415; Oct. 6.
Bragg, Caleb S., and V. W. Kliesrath, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,826,416; Oct. 6.
Bragg, Caleb S., and V. W. Kliesrath, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake mechanism for automotive vehicles. 1,826,414; Oct. 6.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignor to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake system for automotive vehicles. 1,826,418; Oct. 6.
Bragg, Caleb S., and V. W. Kliesrath, Long Island City, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,826,450; Oct. 6.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,826,648; Oct. 6.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brand, John J. F., Roseville, Ohio. Brick embossing machine. 1,825,938; Oct. 6.
Brauer, Albert C., and G. W. Weimer, Girard, Ohio. Rolling mill repeater. 1,826,451; Oct. 6.
Brecht, Winston A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Spring element. 1,826,597; Oct. 6.
Briggs, Stephen F., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,826,649; Oct. 6.
Briggs & Stratton Corporation. (See Briggs, Stephen F., assignor.)
Brill, J. G., Company, The. (See Thomas, Cyril, assignor.)
Bristol Company, The. (See Borden, Perry A., assignor.)
Bristow, James H., Evansville, Ind. Curb service device. 1,826,047; Oct. 6.
Brozie, Richard S., assignor to Brogie Window Corporation, Chicago, Ill. Window construction. 1,826,121; Oct. 6.
Brogie, Richard S., assignor to Brogie Window Corporation, Chicago, Ill. Window construction. 1,826,122; Oct. 6.
Brogie Window Corporation. (See Brogie, Richard S., assignor.)
Broluska, Amel B., Detroit, Mich. Aeroplane. 1,826,048; Oct. 6.
Brooke, Gale E., Minneapolis, Minn. Service bottle. Des. 85,279; Oct. 6.
Brooke, Gale E., Minneapolis, Minn. Service bottle. 1,825,897; Oct. 6.
Brooks, Benjamin L., Lynchburg, Va. Artificial tooth. 1,826,270; Oct. 6.
Brooks, Benjamin L., Lynchburg, Va. Artificial tooth 1,826,271; Oct. 6.
Brooks, Morris, East Orange, N. J., and J. Carner, New York, N. Y. Accordion case or the like. Des. 85,280; Oct. 6.
Bropson, James, Cleveland, Ohio. Cleaning device. 1,825,851; Oct. 6.
Brown, Campbell, et al. (See Wilson, J. E., McConnell, and Brown.)
Brown-Hutchinson Iron Works. (See Hoefen, Walter V., assignor.)
Brown Instrument Company, The. (See Bean, Roscoe D., assignor.)
Brown, Silas B., assignor to The Edwards Manufacturing Company, Cincinnati, Ohio. Baby walker. 1,826,502; Oct. 6.
Brubaker, Walter S., Oakland, assignor to Granberg Meter Corporation, San Francisco, Calif. Automatic control for pump equipped meter systems. 1,825,775; Oct. 6.
Brubaker, Walter S., Oakland, assignor to Granberg Meter Corporation, San Francisco, Calif. Float controlled valve. 1,825,776; Oct. 6.
Bruner, Abrom D., Rockwell City, Iowa. Quickly applied nonskid device. 1,826,123; Oct. 6.
Brunson, Sophia, et al. (See Moise, Harmon D., assignor.)
Brunswick-Balke-Collender Company, The. (See Wollaston, Walter, assignor.)
Brunswick-Kroeschell Company. (See Marshall, Henry H., assignor.)
Brush, Charles L., Ruth, Nev. Shoe cabinet. 1,826,700; Oct. 6.
Bucklus, E. M., et al. (See Griffin, Albert D., assignor.)
Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Locating locomotive axles. 1,826,503; Oct. 6.
Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph., assignor.)
Budd, Edward G., Manufacturing Company. (See Tarbox, John P., assignor.)
Budd Wheel Company. (See Kuiper, Gerhard C. R., assignor.)
Buell, William H., New Haven, Conn. Metallic bellows and producing the same. 1,825,652; Oct. 6.
Bügler, Ferdinand. (See Spiegler, G., and Bügler.)
Bundy Whitney E., et al. (See Stover, Frank E., assignor.)
Burgess, Andrew O. (See Woolson, H. T., and Burgess.)
Burrell, Howard A., et al. (See Gonsett, Robert R., assignor.)
Buse, Henry, Parker, S. Dak. Tractor attachment. 1826,238; Oct. 6.
Bush, A. G. (See Criner, Harry J., assignor.)
Bushnell, Lyman S., and R. Morales, Freeport, Tex., assignors to Freeport Sulphur Company. Removing carbonaceous matter from sulphur and improving its color. 1,826,124; Oct. 6.
Butkus, Joseph A., assignor to G. A. E. Kohler, Chicago, Ill. Furniture corner construction. 1,826,419; Oct. 6.
Butkus, Joseph A., assignor to G. A. E. Kohler, Chicago, Ill. Furniture corner construction. 1,826,420; Oct. 6.
Butkus, Joseph A., assignor to G. A. E. Kohler, Chicago, Ill. Furniture Corner Construction. 1,826,421; Oct. 6.
Butler, Clyde G., Cincinnati, Ohio, assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Grease gun coupling. 1,825,939; Oct. 6.
Butler, Eric W., St. Philips, Bristol, and J. C. Mann, Birmingham, England. Mixing liquids. 1,826,598; Oct. 6.
Button, George W., Corporation. (See Sierad, Milton, assignor.)
Byers, Katherine., and J. Hug, Ames, Iowa. Rotary wire whisk. 1,826,200; Oct. 6.
Byrnes, Clarence P., trustee. (See Fulton, K. H., and Inman, assignors.)
Callahan, Michael J., New York, N. Y., deceased; A. V. Deardon and E. E. Wigg, executors, assignors to Peerless Unit Ventilation Co. Inc., Bridgeport, Conn. Thermal control for dampers for heating and ventilating units. 1,825,689; Oct. 6.
Camizzi, Vincent, et al. (See Wright, Leonard K., assignor.)
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. 1,826,049; Oct. 6.
Campbell, Harry E., Milwaukee, Wis., assignor by mesne assignments to Cutler-Hammer, Inc. Drum controller box. 1,826,050; Oct. 6.
Campbell Metal Window Corporation. (See Bianco, Henry, assignor.)
Campbell, Sterling H., assignor to Western Railway Equipment Company, St. Louis, Mo. Retaining valve fastening. 1,826,051; Oct. 6.
Campbell, Sterling H., assignor to Western Railway Equipment Company, St. Louis, Mo. Retaining valve fastening. 1,826,052; Oct. 6.
Campbell, William, Tulsa, Okla. Combination ladder and ironing board. 1,826,504; Oct. 6.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Pusher plate for slicing machines. 1,825,711; Oct. 6.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing Machine Company, Chicago, Ill. 1,825,712; Oct. 6.
Canvas Products Company. (See Dees, William H., assignor.)
Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Copy conveyer for photographic apparatus. 1,826,599; Oct. 6.

Carborundum Company, The. (See Benner, R. C., and Porter, assignors.)
Carner, John. (See Brooks, M., and Carner.)
Carpenter, Chalmer, Pittsburgh, Pa. Toy pistol. 1,826,053; Oct. 6.
Carpenter, Robert F., and T. F. Anderson, assignors to The Sanymetal Products Company, Cleveland, Ohio. Sheet metal locking means. 1,826,452; Oct. 6.
Carrier Engineering Company. (See Yarrow, William S., assignor.)
Carrier, Robert M., jr., and M. G. Whitley, Louisville, Ky. Apparatus for the guiding of tools in three dimensions. 1,826,164; Oct. 6.
Carrm, Bazel E., Chicago, Ill. Lamp. Des. 85,281; Oct. 6.
Carroll, Martin, Kansas City, Mo. Concrete insert. 1,826,201; Oct. 6.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing acetyl phenyl glycine. 1,826,687; Oct. 6.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing a bromo compound. 1,826,688; Oct. 6.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing chloro-cyclohexane. 1,826,689; Oct. 6.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing ethyl chloro-carbonate. 1,826,690; Oct. 6.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing ethyl-A-bromo-propionate. 1,826,691; Oct. 6.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing methyl anisate. 1,826,692; Oct. 6.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing tripropionin. 1,826,693; Oct. 6.
Carscallen, Ernest J., Mohall, N. Dak. Well fishing tool. 1,826,650; Oct. 6.
Carson, William W., jr., assignor, by mesne assignments, to The Fulton Syphon Company, Knoxville, Tenn. Pilot controlled piston operated valve. 1,826,343; Oct. 6.
Cartwright, Raymond H., assignor to Holgate Brothers Company, Kane, Pa. Brush handle. 1,826,165; Oct. 6.
Carver, C. R., Company. (See Fellows, Walter C., assignor.)
Casselman, James, Hartsmere, Ontario, Canada. Transmission mechanism. 1,825,852; Oct. 6.
Cautley, John R., assignor to Bendix Brake Company, South Bend, Ind. Shoe for areoplane brakes. 1,825,653; Oct. 6.
Celanese Corporation of America. (See Ellis, George H., assignor.)
Central Mine Equipment Company. (See Ormsby, Erle, assignor.)
Central Specialty Company. (See Lonskey, John H., assignor.)
Chadbourne, William C., et al. (See Birkmeyer, P. J., Creedon, and Chadbourne.)
Chain Belt Company. (See Shafer, Samuel, jr., assignor.)
Chamberlin, Benjamin D., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic camera. 1,826,299; Oct. 6.
Champion, Harry E., et al., executors. (See Zifferer, Lothar R.)
Chandler, Charlie A., Wapato, Wash., assignor of eighty-five-hundredths to Chandler Equipment Co., and fifteen-hundredths to L. O. Cockrill. Load bracing device. 1,825,992; Oct. 6.
Chandler Equipment Co., et al. (See Chandler, Charlie A., assignor.)
Chappell, Eugene L., McKeesport, Pa., assignor to National Tube Company. Coating. 1,826,301; Oct. 6.
Chappell, Revere, Cincinnati, Ohio. Abrasive wheel. 1,826,300; Oct. 6.
Charch, William H., Buffalo, N. Y., and K. E. Prindle, Cleveland, Ohio., assignors, by mesne assignments, to Du Pont Cellophane Company, Inc., New York, N. Y. Moistureproofing composition. 1,826,696; Oct. 6.
Charch, William H., Buffalo, and N. A. Craigue, Kenmore, assignors, by mesne assignments, to Du Pont Cellophane Company, Inc., New York, N. Y. Apparatus for coating. 1,826,697; Oct. 6.
Charch, William H., Buffalo, and N. A. Craigue, Kenmore, assignors to Du Pont Cellophane Company, Inc., New York, N. Y. Coating. 1,826,698; Oct. 6.
Charch, William H., Buffalo, N. Y. and K. E. Prindle, Cleveland, Ohio, assignors to Du Pont Cellophane Company, Inc., New York, N. Y. Preparing moistureproof materials. 1,826,699; Oct. 6.
Charcolite Corporation. (See Rodgers, Richard L., assignor.)
Chase, Theron P., assignor to General Motors Research Corporation, Detroit, Mich. Brake drum. 1,826,381; Oct. 6.
Cheetham, Joseph H., assignor to Mueller Co., Decatur, Ill., White bronze. 1,826,239; Oct. 6.
Chesterfield Control Company. (See Chester, Frank R., assignor.)
Chester, Frank R., New York, N. Y., assignor, by mesne assignments, to Chesterfield Control Company, Dover, Del. Game. 1,825,777; Oct. 6.
Chester, Frank R., New York, N. Y., assignor, by mesne assignments, to Chesterfield Control Company. Dover, Del. Game. 1,825,778; Oct. 6.
Cheston, Arthur S., Birmingham, C. Coward and C. F. Coward, Maidenhead, England. Vehicle seat. 1,825,713; Oct. 6.
Chevalier, La Rue B., Iola, Kans. Reenforcing sleeve for bull and calf wheel shafts. 1,825,714; Oct. 6.
Chisholm, Joliette E., Portland, Oreg. Ice cream scoop. 1,826,651; Oct. 6.
Chisholm, Lester B., assignor to The American Mills Company, Waterbury, Conn. Anchoring the elastic strands of elastic fabrics. 1,826,240; Oct. 6.
Chrisman, Horace, Swissvale, assignor, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Demand meter. 1,826,272; Oct. 6.
Christiansen, Niels, Newport News, Va., assignor of one-half to Charles H. Shepler, Ridley Park, Pa. Power plant. 1,826,273; Oct. 6.
Christmann, Ludwig J., Jersey City, N. J., assignor to American Cyanamid Company, New York, N. Y. Tertiary amine antioxidants. 1,825,654; Oct. 6.
Chrysler Corporation. (See Cripps, Albert A., assignor.)
Chrysler Corporation. (See Delahanty, Edward J., assignor.)
Chrysler Corporation. (See Selje, Frederick A., assignor.)
Chrysler Corporation. (See Woolson, H. T., and Burgess, assignors.)
Chryst, William A., Dayton, Ohio, assignor, by mesne assignments, to L. G. S. Devices Corporation, Indianapolis, Ind. Electric motor and friction clutch therefor. 1,826,054; Oct. 6.
Cincinnati Bickford Tool Company, The. (See Williamson, Larkin R., assignor.)
Cincinnati Grinders Incorporated. (See Hopkins, Cecil W., assignor.)
Cincinnati Grinders Incorporated. (See Nenninger, Lester F., assignor.)
Cincinnati Milling Machine Company, The. (See Einstein, Sol., assignor.)
Clapp, Alan, Davenport, Iowa. Embalming implement. 1,825,993; Oct. 6.
Clarke, Hans T., and D. F. Othmer, assignors to Eastman Kodak Company, Rochester, N. Y. Dehydration of formic acid. 1,826,302; Oct. 6.
Claude, Georges, Boulogne-sur-Seine, France, assignor to Claude Neon Lights, Inc. Vacuum discharge tube. 1,826,382; Oct. 6.
Claude Neon Lights, Inc. (See Beck, Leo S., assignor.)
Claude Neon Lights, Inc. (See Claude, Georges, assignor.)
Claude Neon Lights, Inc. (See Fullerton, Stephen W., assignor.)
Claude Neon Lights, Inc. (See Smalley, R. C., and Moorefield, assignors.)
Clause, Robert L., Sewickley, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making plate glass. 1,825,853; Oct. 6.
Clavel, René, Basel-Augst, Switzerland. Treatment of artificial silks. 1,826,274; Oct. 6.
Cleveland Trust Company, The. (See Franquist, Gustave E., assignor.)
Cleveland Trust Company, The. (See McCoy, William C., assignor.)
Cleveland Trust Company, The. (See Mooers, Louis P., assignor.)
Clyde Iron Works. (See McGiffert, John R., assignor.)
Cockrill, Leonard O., et al. (See Chandler, Charlie A., assignor.)
Coffman, Roscoe A., Hollywood, Calif. Turbine. 1,826,453; Oct. 6.
Cole, Frank A., Altoona, Pa. Carburetor. 1,826,202; Oct. 6.
Coleman, Jacques G., Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,826,600; Oct. 6.
Colman, Howard D. (See Stewart, Duncan J., assignor.)
Colton, Henry S. (See Singmaster, J. A., and Colton.)
Columbia Axle Company, The. (See Flanigan, Charles R., assignor.)
Columbia Axle Company, The. (See Mooers, Louis P., assignor.)
Columbia Malleable Castings Corporation. (See Zifferer, Lothar R., assignor.)
Comstock, Gregory J., Pittsburgh, Pa., assignor to Firth-Sterling Steel Company, McKeesport, Pa. Composition of matter. 1,826,454; Oct. 6.
Comstock Gregory J., Pittsburgh, and E. B. Welch, assignors to Firth-Sterling Steel Company, McKeesport, Pa. Composition of matter. 1,826,455; Oct. 6.
Comstock, Gregory J., Pittsburgh, assignor to Firth-Sterling Steel Company, McKeesport, Pa. Metal aggregate. 1,826,456; Oct. 6.
Comstock, Gregory J., Pittsburgh, and E. B. Welch, assignors to Firth-Sterling Steel Company, McKeesport, Pa. Composition of matter. 1,826,457; Oct. 6.
Congoleum-Nairn, Inc. (See McConoughey, Merle S., assignor.)
Congoleum-Nairn, Inc. (See Thompson, John B., assignor.)
Conley, Patrick J., Canton, Ohio. Wall bearing ceramic tile. 1,825,779; Oct. 6.
Conn, Robert W., Cranston, R. I., assignor to Westinghouse Lamp Company. Self adjusting base and bulb holder. 1,826,505; Oct. 6.

Consolidated Machine Tool Corporation of America. (See Forward, W. J. F., and Harding, assignors.)
Consolidated Machine Tool Corporation of America. (See Forward, W. J. F., and Roberts, assignors.)
Consolidated Machine Tool Corporation of America. (See Leiter, Charles R., assignor.)
Consolidated Machine Tool Corporation of America. (See Trosch, Alfred, assignor.)
Container Corporation of America. (See Van Cleaf, John C., assignor.)
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cooke, Philip A., South Farnborough, England. Gyroscopic system for controlling dirigible craft. 1,825,994; Oct. 6.
Cooper, Ernest, Shidler, Okla. Propeller mechanism. 1,826,458; Oct. 6.
Copper Plate Sheet & Tube Company. (See Watkins, William E., assignor.)
Coquille, Emile H., Paris, assignor to Societe Anonyme Des Usines Chausson, Asnieres, France. Luggage and like carrier for motor vehicles. 1,825,940; Oct. 6.
Corell, Martin et al. (See Kränzlein, G., Vollmann, and Corell.)
Corning Glass Works. (See LaFollette, C. D., and Jahraus, assignors.)
Cornwall, Albert B., Pittsburgh, Pa. Shelving. 1,826,055; Oct. 6.
Corrall, Herbert, Oakfield, Helensburgh, and J. Heggie, Clydebank, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Stocking guiding device for use with sewing machines. 1,826,694; Oct. 6.
Cory, Claude D., Seattle, Wash. Concrete admixture composition. 1,826,166; Oct. 6.
Cory, Samuel I., Towaco, N. J., assignor to American Telephone and Telegraph Company. Telegraph transmission measuring system. 1,825,715; Oct. 6.
Coryell, William C., assignor to Republic Steel Corporation, Youngstown, Ohio. Making metal strips. 1,825,854; Oct. 6.
Cotes, William A., assignor to Reo Motor Car Company, Lansing, Mich. Seam rolling machine. 1,826,506; Oct. 6.
Cottrell, C. B., & Sons Company. (See Barber, Howard M., assignor.)
Coulter, Samuel N., Los Angeles, Calif. Garment supporter. 1,825,898; Oct. 6.
Council, Kinchen C., Wananish, N. C. Tool holder. 1,826,459; Oct. 6.
Courtenay, Frederic D., East Orange, N. J., assignor to Embossograf Corporation of America, New York, N. Y. Easel. 1,825,716; Oct. 6.
Coutin, Jean, assignor to Preparation Industrielle Des Combustibles (Societe Anonyme), Nogent-sur-Marne, Seine, France. Cleaning device for trucks. 1,826,460; Oct. 6.
Coward, Charles. (See Cheston, A. S., C. Coward, and C. F. Coward.)
Crafts, Curtis S., Oak Park, Ill., assignor to Goss Printing Press Company. Sheet cutting, collecting, and folding mechanism. 1,826,601; Oct. 6.
Crafts, Curtis S., Oak Park, Ill., assignor to Goss Printing Press Company. Sheet cutting, collecting, and folding mechanism. 1,826,652; Oct. 6.
Craig, Palmer H., Cincinnati, Ohio, assignor to Invex Corporation. System and apparatus employing the "hall effect." 1,825,855; Oct. 6.
Craigue, Norman A. (See Charch, W. H., and Craigue.)
Cram, Leroy V., Flint, assignor to General Motors Corporation, Detroit, Mich. Crank case ventilation. 1,826,390; Oct. 6.
Creedon, Michael V., et al. (See Birkmeyer, P. J., Creedon, and Chadbourne.)
Criner, Harry J., assignor of one-half to A. G. Bush, Davenport, Iowa. Valve grinding machine. 1,826,653; Oct. 6.
Cripps, Albert A., Detroit, Mich., assignor, by mesne assignments, to Chrysler Corporation. Body construction. 1,826,125; Oct. 6.
Crompton & Knowles Loom Works. (See Bergstrom, Carl P., assignor.)
Crompton & Knowles Loom Works. (See Flynn, Maurice J., assignor.)
Crompton & Knowles Loom Works. (See Gordon, Albert A., assignor.)
Crompton & Knowles Loom Works. (See Holmes, Elbridge R., assignor.)
Crompton & Knowles Loom Works. (See Hutchins, Allan S., assignor.)
Crompton & Knowles Loom Works. (See Lindegren, Carl J., assignor.)
Crompton & Knowles Loom Works. (See Lundgren, William E., assignor.)
Crompton & Knowles Loom Works. (See Lundgren, W. E., and Soderberg, assignors.)
Crompton & Knowles Loom Works. (See McCleary, William E., assignor.)
Crompton & Knowles Loom Works. See Payne, Oscar V., assignor.)
Crompton & Knowles Loom Works. (See Wakefield, Walter H., assignor.)
Crompton & Knowles Loom Works. (See Wattie, William M., assignor.)
Crosby, Roy T., Greenville, S. C. Propelling means for boats and the like. 1,826,507; Oct. 6.
Cross, Michael B., et al. (See Moise, Harmon D., assignor.)
Cunningham, William, Mount Kisco, N. Y. Closure for openings in buildings. 1,826,203; Oct. 6.
Currie, Robert A., Syracuse, assignor to R. E. Dietz Company, New York, N. Y. Combustion cone or protector for torches. 1,826,241; Oct. 6.
Cutler-Hammer, Inc. (See Campbell, Harry E., assignor.)
Cutler-Hammer, Inc. (See Stevens, William C., assignor.)
Dabbs, Harry, assignor of forty-nine one-hundredths to J. R. Whitthorne, Little Rock, Ark. Stripper spindle. 1,826,602; Oct. 6.
Dahlström, Ernst R. (See Wehmann, F. W., and Dahlström.)
Daimler-Motorin-Gesellschaft. (See Schwerdtfeger, Walter, assignor.)
Dalgliesh, Herbert V., assignor, by mesne assignments, to Research & Development Corporation, Atlanta, Ga. Heat exchange element. 1,826,344; Oct. 6.
Daniel, Everett, Moultrie, Ga. Crossing gate. 1,825,780; Oct. 6.
D'Asseler, Jules, Ghent, Belgium. Wind motor. 1,826,039; Oct. 6.
Davenport, Edmund A. See Gero, W. B., and Davenport.)
David, Sara, West View, Pa. Securing device for clothing. 1,826,167; Oct. 6.
Davis, Ernest W., Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill. Coupling. 1,825,941; Oct. 6.
Davis, Frank G., et al. See Stover, Frank E., assignor.)
Davis, Richard S., Baltimore, Md. Rotary engine valve. 1,826,461; Oct. 6.
Dawson, Leo H., Washington, D. C. Television scanning device. 1,825,781; Oct. 6.
Day, Fred, Alcester, S. Dak. Carburetor for internal combustion engines. 1,825,717; Oct. 6.
Dayton, James M., Torrington, Conn. Counting and indicating device. 1,826,603; Oct. 6.
Dayton, James M., Torrington, Conn. Compensating device. 1,826,604; Oct. 6.
Dayton Pump & Manufacturing Company, The. (See Eickmeyer, Earl E., assignor.)
Deardon, Arthur V., et al., executors. (See Callahan, Michael J.)
Debouteville, Marcel D., Neuilly-sur-Seine, France. Weaving. 1,826,654; Oct. 6.
Decker, Alonzo G., assignor to The Black and Decker Manufacturing Company, Towson, Md. Apparatus for humidifying air. 1,826,508; Oct. 6.
Dees, William H., St. Louis, assignor to Canvas Products Company, St. Louis, Mo. Grass catcher for lawn mowers. 1,826,605; Oct. 6.
De Forest Crosley Radio Company. (See Hepburn, D., and Thompson, assignors.)
Dehuff, Walter F., Glen Rock, Pa. Dough mixer. 1,826,242; Oct. 6.
Delahanty, Edward J., Lake St. Clair, assignor to Chrysler Corporation, Detroit, Mich. Motor support. 1,826,126; Oct. 6.
Delaney, Joseph A., Jersey City, N. J. Window screen. 1,826,606; Oct. 6.
De la Roza, Joaquin J., sr., Tuinucu, Cuba. Manufacturing cellulose. 1,825,655; Oct. 6.
Delco-Remy Corporation. (See Fitzsimmons, John T., assignor.)
Delco-Remy Corporation. (See Parker, Leslie O., assignor.)
Dellinger, Martin C. (See Kulp, H. W., and Dellinger.)
Deloison, Fernand, La Delivrance par Lomme, France. Railway car retarder. 1,825,899; Oct. 6.
Denmead, John W., Akron, Ohio. Tile cutting machine. 1,826,056; Oct. 6.
Derry, Gardner C., Sharon, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Heat exchange apparatus and operating the same. 1,825,656; Oct. 6.
Desimone, Cornelius A., Ventnor, N. J., assignor to John Wood Manufacturing Company, Conshohocken, Pa. Liquid dispensing apparatus. 1,826,204; Oct. 6.
Detroit, Steel Products Company. (See Rumney, Mason P., assignor.)
Detroit Vapor Stove Company, The. (See Sherman, Alvin G., assignor.)
Dickinson, Merian H., Seattle, assignor to Lidgerwood Pacific Company, Tacoma, Wash. Variable speed skidding device. 1,826,303; Oct. 6.
Diehl, Conrad, Heroldsberg, Germany. Pad, cushion, or the like. 1,826,304; Oct. 6.
Diesch, Ferd G., Hayfield, Minn. Canvas holder. 1,825,995; Oct. 6.
Dietz, Franklin M., Hutchinson's Mills, Hamilton Township, Mercer County, N. J. Liquid container. 1,825,856; Oct. 6.
Dietz, R. E., Company. (See Currie, Robert A., assignor.)
Di Marco, Nicholas, et al. (See Wright, Leonard K., assignor.)
Dinsmore, Clarence B., assignor to A C Spark Plug Company, Flint, Mich. Odometer. 1,826,391; Oct. 6.
Dispersions Process, Inc. (See Pratt, William B., assignor.)
Dixon, Howard F., and P. Weiland, Detroit, Mich. Brake mechanism for vehicle wheels. 1,826,462; Oct. 6.
Dobbins, James G., Long Beach, Calif. Packing ring for pumps. 1,826,057; Oct. 6.
Doherty, Henry L. (See Loebell, Henry O., assignor.)
Donle, Harold P., Meriden, Conn. Television apparatus. 1,826,305; Oct. 6.
Doughnut Machine Corporation. (See Ainslie, Morris D., assignor.)

Douglas, Harry A., Bronson, Mich. Electric switch. 1,826,509; Oct. 6.

Douglass, James S., jr., Canandaigua, N. Y. Steam heating system for automobiles. 1,826,168; Oct. 6.

Douglass, James S., jr., Canandaigua, N. Y. Heating system for automobiles and coupling therefor. 1,826,169; Oct. 6.

Dow Chemical Company, The. (See Hale, William J., assignor.)

Dowd, Benjamin F., Long Beach, Calif. Feed water regulator. 1,826,058; Oct. 6.

Drager, Heinrich O. (See Stampe, Gerhard K. E. H., assignor.)

Draper Corporation. (See Benson, Arthur E., assignor.)

Dreher, Otto. (See Meyer, G. J., and Dreher.)

Drenning, Percy R. (See Kadel, B. W., and Drenning.)

Driggs, Frank H., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Refractory insulator for electron discharge devices. 1,826,510; Oct. 6.

Duff, Robert P., Dundee, Angus, Scotland. Device for delivering squares or otherwise shaped pieces of cloth or other sheet material. 1,825,782; Oct. 6.

Duff Patents Company. (See Treat, Francis H., assignor.)

Dufford, Lawrence O., Harrisonburg, Va., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Prerinse deflector. 1,825,718; Oct. 6.

Dugelay, Paul, assignor to Societe Des Moteurs Ducelay, Paris, France. Internal combustion engine. 1,826,306; Oct. 6.

Duggan, John P., Long Island City, N. Y. Fluid strainer. 1,826,170; Oct. 6.

Dukes, Emily, Pittsburgh, Pa., assignor to Gears & Forgings, Incorporated, Cleveland, Ohio. Apparatus for coiling strips, etc. 1,825,657; Oct. 6.

Dumanois, Emile P., Boulogne-sur-Seine, France. Internal combustion engine. 1,825,658; Oct. 6.

Dumas, Joseph, Bristol, Conn. Ice creeper. 1,826,511; Oct. 6.

Dunham, George W., Utica, N. Y., assignor to Whirldry Corporation, New Haven, Conn. Washing machine. 1,825,942; Oct. 6.

Dunham, Robert A., Long Beach, assignor to Union Oil Company of California, Los Angeles, Calif. Rubber latex preparation and manufacture of goods therefrom. 1,826,392; Oct. 6.

Dunn, William T., Houston, and J. E. Shows, Harrisburg, Tex. Drilling head. 1,826,059; Oct. 6.

Dunning, William E., and R. Middleton, Alliance, assignors to The McCaskey Register Company, Alliance Ohio. Adding machine. 1,825,783; Oct. 6.

Duo-Tor Manufacturing Company, The. (See Epstein, William C., assignor.)

Du Pont Cellophane Company. (See Charch, W. H., and Craigue, assignors.)

Du Pont Cellophane Company. (See Charch, W. H., and Prindle, assignors.)

Du Pont, E. I., de Nemours & Company. (See Booge, James E., assignor.)

Du Pont, E. I., de Nemours & Co. (See Rogers, Thomas H. assignor.)

Dur-O-Lite Pencil Company. (See Keeran, Charles R., assignor.)

Dur-O-Lite Pencil Company. (See Lynn, John P., assignor.)

Dyche-Teague, Francis C., London, England. Rubber product and production thereof. 1,826,275; Oct. 6.

E. A. Laboratories, Inc. (See Auflero, J. M., and Smoot, assignors.)

Earl, Harley J., and J. F. Wilson, assignors to General Motors Corporation, Detroit, Mich. Front splash guard with covered crank hole. 1,826,393; Oct. 6.

Eastman, Fred C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lasting machine. 1,825,857; Oct. 6.

Eastman Kodak Company. (See Carroll, Stewart J., assignor.)

Eastman Kodak Company. (See Chamberlin, Benjamin D., assignor.)

Eastman Kodak Company. (See Clarke, H. T., and Othmer, assignors.)

Eastman Kodak Company. (See Favour, Paul, assignor.)

Eastman Kodak Company. (See Fuerst, Carl C., assignor.)

Eastman Kodak Company. (See Hopkins, Roy S., assignor.)

Eastman Kodak Company. (See Murray, T. F., jr., and Staud, assignors.)

Eastman Kodak Company. (See Staud, C. J., and Murray, assignors.)

Eastman Kodak Company. (See Stuber, Adolph, assignor.)

Eastman Kodak Company. (See Sulzer, Albert F., assignor.)

Eastman Kodak Company. (See Webber, C. S., and Staud, assignors.)

Eaton Axle & Spring Company, The. (See Veale, George W., assignor.)

Eaton Axle & Spring Company, The. (See Wallace, William H., assignor.)

Eaton, George M., Pittsburgh, Pa. Making helical springs. 1,826,060; Oct. 6.

Eddy, Harold C., Los Angeles, assignor to Petroleum Rectifying Company of California, Los Angeles, Calif. Salvaging oil from sludge. 1,826,276; Oct. 6.

Edwards Manufacturing Company, The. (See Brown, Silas B., assignor.)

Ehlefeld, John C., Danville, Ill. Sign. 1,825,996; Oct. 6.

Ehrhart, Eugene N., Brooklyn, and L. Wickenden, Manhasset, N. Y., assignors to J. J. Naugle, Greenwich, Conn Preparing refined sirups. 1,826,655; Oct. 6.

Ehrhart, Raymond N., Edgewood, assignor to Elliott Company, Pittsburgh, Pa. Apparatus for measuring fluids. 1,826,422; Oct. 6.

Eiben, Michael A., Cleveland, Ohio. Method and apparatus for promoting plant growth in greenhouses. 1,826,607; Oct. 6.

Eickmeyer, Earl E., assignor to The Dayton Pump & Manufacturing Company, Dayton, Ohio. Casing. 1,825,997; Oct. 6.

Einstein, Sol., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Control mechanism. 1,825,719; Oct. 6.

Electric Thermal Company, The. (See Newton, Frank H., assignor.)

Elliott Company. (See Ehrhart, Raymond N., assignor.)

Ellis, Arthur H., Rochester, Minn. Illuminated sign. 1,826,512; Oct. 6.

Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Treatment of cellulose acetate or products made therewith. 1,826,608; Oct. 6.

Elnett, Anthony A., New York, N. Y. Blackboard eraser. 1,825,858; Oct. 6.

Elwell-Parker Electric Company, The. (See Abbe, Edward J., assignor.)

Embosograf Corporation of America. (See Courtenay, Frederic D., assignor.)

Engel, Frederick, Miamisburg, Ohio. Making round piles of sliver in cordage machines. 1,825,784; Oct. 6.

Engineering Development Associates. (See Hewitt, Ashley C., assignor.)

England, Henry C., Flint, Mich. Educational picture exhibitor. 1,825,900; Oct. 6.

Ensign Carburetor Co. Ltd. (See Ensign, Roy F., assignor.)

Ensign, Roy F., South Pasadena, assignor to Ensign Carburetor Co. Ltd., Los Angeles, Calif. Carburetor. 1,826,061; Oct. 6.

Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)

Epstein, William C., assignor to The Duo-Tor Manufacturing Company, Dayton, Ohio. Gas burner and the like. 1,826,205; Oct. 6.

Erbach, Frederick R., assignor to Kelvinator Corporation, Detroit, Mich. Fluid cooler. 1,826,345; Oct. 6.

Ericson, George W., Galesburg, Ill. Trough. 1,826,277; Oct. 6.

Evans, Thomas R., Petros, Tenn. Mine car. 1,825,943; Oct. 6.

Evensen, William, Chicago, Ill., assignor to Goss Printing Press Company. Printing press. 1,825,944; Oct. 6.

Evensen, William, Chicago, Ill. assignor to Goss Printing Press Company. Printing press. 1,825,998; Oct. 6.

Everwear Manufacturing Company, The. (See Hoppes, Charles E., assignor.)

Ewing, Emma L., assignor of one-third to A. M. Lamar and one-third to R. H. Jenkins, Detroit, Mich. Wall construction. 1,826,127; Oct. 6.

Falulah Paper Company. (See Lowe, Joseph A., assignor.)

Fankboner, Harland, Chicago, Ill., assignor to The Goss Printing Press Company. Inking mechanism. 1,825,999; Oct. 6.

Farley & Loetscher Mfg. Co. (See Loetscher, John A., assignor.)

Farmer, Patterson, Detroit, Mich. Regulatable bellows mechanism of refrigeration systems. 1,826,307; Oct. 6.

Farmer, Roscoe D., Oklahoma City, Okla. Joint form for paving. 1,826,062; Oct. 6.

Farrelly, Patrick, Belmont, Calif. Shirt protecting support. 1,826,206; Oct. 6.

Fassler, Peter W., assignor to General Motors Corporation, Detroit, Mich. Welding machine. 1,826,207; Oct. 6.

Favour, Paul, assignor to Eastman Kodak Company, Rochester, N. Y. Light protected motion picture film. 1,826,695; Oct. 6.

Fellows, Walter C., Philadelphia, Pa., assignor to C. R. Carver Company. Embossing and printing press. 1,825,945; Oct. 6.

Finn, John, jr., assignor to B. C. Mickle, San Francisco, Calif. Coating, veneering, or glazing candles with a permanent color. 1,825,785; Oct. 6.

Firth Sterling Steel Company. (See Comstock, Gregory J., assignor.)

Firth-Sterling Steel Company. (See Comstock, G. J., and Welch, assignors.)

Firth-Sterling Steel Company. (See Comstock, Gregory J., assignor.)

Firth-Sterling Steel Company. (See Longnecker, Paul F., assignor.)

Fisher, Walter S., assignor to The Willys-Overland Company, Toledo, Ohio. Cap for sealing containers. 1,826,000; Oct. 6.

Fiske, Jonathan P. B., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerator. 1,826,308; Oct. 6.

Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Apparatus for transferring freight. 1,825,786; Oct. 6.

Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Apparatus for transferring freight. 1,825,787; Oct. 6.

Fitzgerald, James E., Youngstown, assignor to The Niles Steel Products Company, Niles, Ohio. Sheet metal container. 1,826,609; Oct. 6.

Fitzsimmons, John T., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Ignition timer. 1,825,720; Oct. 6.

Flanigan, Charles R., assignor to The Columbia Axle Company, Cleveland, Ohio. Steering wheel. 1,826,278; Oct. 6.

Flynn, Maurice J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle motion for narrow ware looms. 1,826,394; Oct. 6.

Foehr, Otto, Karlsruhe, Germany. Cigar and cigarette holder. 1,825,946; Oct. 6.

Fones, Margaret M., New York, N. Y. Mender attachment for sewing machines. 1,826,610; Oct. 6.

Forward, Worthy J. F., and R. R. Roberts, assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Milling machine. 1,825,721; Oct. 6.

Forward, Worthy J. F., and S. A. Harding, assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Hydraulically driven lathe for car wheel axles and the like. 1,825,722; Oct. 6.

Fosdick, Eddie L., Pontiac, Ill. Mechanical hoist end gate. 1,826,513; Oct. 6.

Foster Wheel Corporation. (See Bell, John E., assignor.)

Fowler, Edith M., executrix. (See Fowler, E. J., and Baird.)

Fowler, Edward J., deceased, by E. M. Fowler executrix, Redwood City, and D. Baird, Berkeley, Calif., assignors to Nichols Copper Company, New York, N. Y. Roasting apparatus. 1,825,947; Oct. 6.

Foy, Edward N., Twin Buttes, Ariz., assignor of one-tenth to G. A. Kennedy, Denver, Colo. Plane. 1,825,859; Oct. 6.

Franquist, Gustave E., deceased, Rochester, N. Y.; M. L. Franquist, executrix, assignor to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,826,171; Oct. 6.

Franquist, Margaret L., executrix. (See Franquist, Gustave E.)

Frantz, George A., et al., trustees. (See Aland, Richard C., assignor.)

Freeport Sulphur Company. (See Bushnell, L. S., and Morales, assignors.)

Frenck, Hugo, Nesekow, Post Arnshagen, Germany. Drop catching device for umbrellas. 1,826,063; Oct. 6.

Friend, Otto A., New York, N. Y., and W. J. Heitsmith, Ridgefield Park, N. J., assignors to American Telephone and Telegraph Company. Telephone system. 1,825,723; Oct. 6.

Frigidaire Corporation. (See Hobart, Edward A., assignor.)

Frigidaire Corporation. (See Hull, Harry B., assignor.)

Frigidaire Corporation. (See Hull, H. B., and Hofferberth, assignors.)

Frigidaire Corporation. (See King, Jesse G., assignor.)

Frigidaire Corporation. (See Macready, J. A., and Hodgson, assignors.)

Frigidaire Corporation. (See Rauen, John T., assignor.)

Fry, Adolf, Essen, Germany, assignor, by mesne assignments, to The Nitralloy Corporation. Externally hardening cast iron and article of manufacture produced thereby. 1,826,656; Oct. 6.

Fuerst, Carl C., assignor to Eastman Kodak Company, Rochester, N. Y. Self erecting front focusing camera. 1,826,243; Oct. 6.

Fullerton, Stephen W., Flushing, assignor to Claude Neon Lights, Inc., New York, N. Y. Illuminating device. 1,826,389; Oct. 6.

Fullips, George A., Detroit, Mich., assignor to G. J. Hewlett, Cleveland, Ohio. Bottle brushing mechanism. 1,825,724; Oct. 6.

Fulton, Harold, West Dover, Ohio. Clothesline. 1,826,064; Oct. 6.

Fulton, Karl H., and M. T. Inman, jr., Pittsburgh, assignors to C. P. Byrnes, trustee, Sewickley, Pa. Insecticide and fungicide mixture. 1,826,065; Oct. 6.

Fulton, Lyle H., assignor to Rail Appliance Co poration, Nashville, Tenn. Reversible switch point guard. 1,826,657; Oct. 6.

Fulton Syphon Company, The. (See Carson, William W., jr., assignor.)

Furgason, Claude E., assignor to Reo Motor Car Company, Lansing, Mich. Universal joint. 1,826,611; Oct. 6.

Gábor, Francis. (See Klein, P., and Gábor.)

Gach, Erich. (See Roberts, B. H., and Gach.)

Gagnaux, Léon. (See Lamy, L., Mathieu, and Gagnaux.)

Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Wireworking mechanism. 1,826,612; Oct. 6.

Gallagher, Paul C., Omaha, Nebr. Fork or analogous article. Des. 85,282; Oct. 6.

Gallimore, Keith F. (See Kempton, H. E., and Gallimore.)

Galvin, Charles E., Springfield, Ohio. Pressing machine pad. 1,826,395; Oct. 6.

Gamewell Company, The. (See Philbrick, Frederick E., assignor.)

Garber, Freeman. (See Williams, Charles L., assignor.)

Gardner, Dale, assignor to G. M. Holley, Detroit, Mich. Carburetor. 1,825,788; Oct. 6.

Gardner, George W., and J. R. Underhill, Greenville, N. C. Fire hose hoist. 1,826,658; Oct. 6.

Gardner-Denver Company. (See Gustafson, Hjalmer C., assignor.)

Gardner-Denver Company. (See Sheets, B. R., and Stewart, assignors.)

Garner, Kirby R., Prud'homme, Saskatchewan, Canada. Automobile chain. 1,826,279; Oct. 6.

Garrison, Forrest C., assignor to Oscar C. Rixson Co., Chicago, Ill. Threshold. 1,826,613; Oct. 6.

Gas Furnace Control Co. (See Anderson, Gabriel W., assignor.)

Gaston, Mittie O., and T. R. James, Dallas, Tex. Ear pad. 1,826,309; Oct. 6.

Gault, John J., assignor to W. J. Newman Company, Chicago, Ill. Well drilling apparatus. 1,826,396; Oct. 6.

Gears & Forgings, Incorporated. (See Dukes, Emil, assignor.)

Gégauff, Charles, and J. Pflimlin, Mulhouse, France. Staple fiber reclaiming device for revolving flat cards. 1,825,948; Oct. 6.

Geisselinger, Jean, Forest Hills, assignor to A. K. Kempton, Jackson Heights, N. Y. Electrical horology. 1,826,066; Oct. 6.

General Aniline Works, Inc. (See Hentrich, W., Hardtmann, and Tietze, assignors.)

General Aniline Works, Inc. (See Kunz, M. A., and Koberle, assignors.)

General Aniline Works, Inc. (See Kränzlein, G., Vollman, and Corell, assignors.)

General Motors Corporation. (See Armitage, Sylvester, assignor.)

General Motors Corporation. (See Cram, Leroy V., assignor.)

General Motors Corporation. (See Earl, H. J., and Wilson, assignors.)

General Motors Corporation. (See Fassler, Peter W., assignor.)

General Motors Corporation. (See Gibson, George F., assignor.)

General Motors Corporation. (See Humer, Frank, assignor.)

General Motors Corporation. (See Ihrig, Henry, assignor.)

General Motors Corporation. (See Manning, William H., assignor.)

General Motors Corporation. (See O'Brien, Frank, assignor.)

General Motors Corporation. (See Tenney, Perry L., assignor.)

General Motors Corporation. (See Thompson, Earl A., assignor.)

General Motors Research Corporation. (See Chase, Theron P., assignor.)

General Motors Research Corporation. (See Iseler, Charles W., assignor.)

General Motors Research Corporation. (See King, J. G., and Hull, assignors.)

General Necessities Corporation. (See Hayes, Harry C., assignor.)

Gensmer, Theodore, Portland, Oreg. Automatic Gearless transmission. 1,825,789; Oct. 6.

Gentry, Houston C., Sheridan, Ark. Roller dump body for trucks. 1,825,901; Oct. 6.

George, Adam J., Kennett, Mo. Shirt collar setting device. 1,826,659; Oct. 6.

Gercich, Frederick A., and J. C. Weisman, assignors to Hammer-Bray Company, Oakland, Calif. Kindling burner installation. 1,826,067; Oct. 6.

Gero, William B., and E. S. Davenport, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Tungsten and manufacturing the same. 1,826,514; Oct. 6.

Gerrard Company, Inc., The. (See McChesney, John S., assignor.)

Gershon, Victor P. (See Lloyd, E. A., and Gershon.)

Gianolio, Giuseppe, Turin, Italy. Rolling parallel ruler. 1,825,902; Oct. 6.

Gibson, Frank P., San Francisco, Calif. Fan and spray wheel attachment for hose nozzles. 1,826,208; Oct. 6.

Gibson, George F., Luton, England., assignor to General Motors Corporation, Detroit, Mich. Carburetor. 1,826,128; Oct. 6.

Gibson Art Company, The. (See Gibson, William H., assignor.)

Gibson, William H., assignor to The Gibson Art Company, Cincinnati, Ohio. Automatic sheet associating mechanism and control. 1,826,463; Oct. 6.

Gillette Safety Razor Company. (See Bodkin, Irving S., assignor.)

Gillette Safety Razor Company. (See Coleman, Jacques G., assignor.)

Gillette Safety Razor Company. (See Lewando, Felix J., assignor.)

Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)

Gillis, William, Fort Worth, Tex. Safety elevated bank and vault protector. 1,826,464; Oct. 6.

Gilman, John A., Seattle, Wash. Reel for plumb bobs. 1,826,465; Oct. 6.

Ginsburg, Isaac. (See Gronquist, Albin W., assignor.)

Ginsburg, Lionel L., assignor to Saginaw Furniture Shops, Saginaw, Mich. Cabinet. Des. 85,283; Oct. 6.

Givago-Grishina, Nadeshda J., Los Angeles, Calif. Doll. Des. 85,284; Oct. 6.

Gleason Works. (See Johanson, Magnus H., assignor.)

Gloster, George F., Makurdi North, Northern Nigeria, West Africa. Train braking system. 1,825,903; Oct. 6.

Goben, John. (See Houseman, Martin L., assignor.)

Godel, Albert, Lagnieu, assignor to Société de Recherches et d'Exploitations Petrolifères, Paris, France. Apparatus for the production of activated carbon. 1,826,209; Oct. 6.

Goetz, Julius J., Shorewood, Wis., assignor to Western Metal Specialty Co., Milwaukee, Wis. Heater. Re18,218; Oct. 6.

Goetzenberger, Ralph L., Philadelphia, Pa. Data computer. 1,825,659; Oct. 6.

Going, George G., Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,826,068; Oct. 6.

Goldsmith, John N., London, and T. T. Baker, Hatch End, assignors to Spicers Limited, London, England. Color photography. 1,826,001; Oct. 6.

Gonder, James H., Liberty, Mo. Apparatus for testing lubricating oils. 1,825,725; Oct. 6.

Gonsett, Robert R., assignor of one-sixteenth to V. V. Ullom, one-sixteenth to W. D. Spencer, one-sixteenth to H. A. Burrell, and one-sixteenth to B. Walker, Los Angeles, Calif. Adjustable accessory time switch. 1,825,660; Oct. 6.

Good Inventions Co. (See Good, Michel, assignor.)

Good, Michel, Garden City, assignor to Good Inventions Co., New York, N. Y. Liquid fuel burner. 1,826,423; Oct. 6.

Goodyear Tire & Rubber Company, The. (See Sloteman, Donald K., assignor.)

Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom dobby. 1,826,311; Oct. 6.

Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Combined thread holder and cutter. 1,826,312; Oct. 6.

Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Dobby finger for looms. 1,826,313; Oct. 6.

Goss Printing Press Company. (See Crafts, Curtis S., assignor.)

Goss Printing Press Company. (See Evensen, William, assignor.)

Goss Printing Press Company, The. (See Fankboner, Harland, assignor.)

Goss Printing Press Company. (See Laycock, Kenneth G., assignor.)

Graff, George B., Company. (See Graff, L. S., and Stewart, assignors.)

Graff, Leland S., Arlington, and R. A. Stewart, Watertown, assignors to George B. Graff Company, Cambridge, Mass. Index tab. 1,826,614; Oct. 6.

Granat, Joseph, San Francisco, Calif. Finger ring. Des. 85,285; Oct. 6.

Granberg Meter Corporation. (See Brubaker, Walter S., assignor.)

Granger, Paul H., Los Angeles, Calif. Draining liquid from well tubing. 1,826,210; Oct. 6.

Grasselli Chemical Company, The. (See Westbrook, Leon R., assignor.)

Gray, Bony, Kansas City, Mo., assignor of one-half to J. S. Warren, Kansas City, Mo. Wheel rim lock. 1,825,860; Oct. 6.

Gray Processes Corporation. (See Gray, Thomas T., assignor.)

Gray, Thomas T., Elizabeth, N. J., assignor to Gray Processes Corporation, Newark, N. J. Refining hydrocarbons. 1,825,861; Oct. 6.

Gredell, Otto N., assignor to Standard Steel Works, North Kansas City, Mo. Manhole cover. 1,825,726; Oct. 6.

Green, Frank W., Framingham, assignor to The Heald Machine Company, Worcester, Mass. Work supporting fixture. 1,825,862; Oct. 6.

Greenlee Bros. & Co. (See Mansfield, J. H., and Penrose, assignor.)

Greenwold, Harold A., assignor to T. C. Whitehead, Detroit, Mich. Power transmitting device. 1,826,172; Oct. 6.

Greer, Robert L. (See Mapson, Robert L., assignor.)

Greiner, Fritz, Stuttgart-Cannstatt, assignor to Maschinenfabrik Esslingen, Esslingen, Germany. Manufacturing gray pig iron. 1,826,211; Oct. 6.

Gremminger, Ernest, Mill Valley, Calif. Rotary spring stuffing box. 1,826,212; Oct. 6.

Griffin, Albert D., assignor of one-third to H. L. Horton, and one-third to E. M. Buckius, Los Angeles, Calif. Boiler control device. 1,825,690; Oct. 6.

Griffin, James H. (See Waldron, F. B., and Griffin.)

Grischy, William B. (See Splain, Walter E., assignor.)

Gronquist, Albin W., Brainerd, Minn., assignor of one-half to I. Ginsburg, Brainerd, Minn. Whistle. 1,826,129; Oct. 6.

Grosvenor, William M. (See Lloyd, E. A., and Gershon, assignor.)

Guermont, Miguel E., assignor to S. I. A. M. Limited, London, England. Fluid meter. 1,826,346; Oct. 6.

Guilbert, Paul, Rouen, J. Legrand, St. Mand, and M. Lemaire, Paris, France. Substitution of railroads by means of substitution trains and mechanical apparatus constituting the same. 1,826,069; Oct. 6.

Guild, Waldo J., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,826,070; Oct. 6.

Gull, Adolf E., London, England. Pumping apparatus. 1,825,661; Oct. 6.

Gustafson, Hjalmer C., Denver, Colo., assignor to Gardner-Denver Company. Rock drill. 1,826,071; Oct. 6.

Gustin-Bacon Manufacturing Company. (See Anderson, Harley E., assignor.)

H. L. J. Specialty Co. (See Hayden, Robert B., assignor.)

Haas, Charles C., Whitewood, S. Dak. Treating ores. 1,825,949; Oct. 6.

Haddow, William, Ossining, N. Y. Die lapping machine. 1,826,347; Oct. 6.

Hahn, Mathias, assignor to H. Frantz, Aachen, Germany. Flat-pressing of textile fabrics. 1,825,727; Oct. 6.

Haidekker, Miklós, Budapest, Hungary. Wire fence making machine. 1,826,515; Oct. 6.

Haines Hosiery Mills, Inc. (See Haines, Joseph, jr., assignor.)

Haines, Joseph, jr., Meadowbrook, assignor to Haines Hosiery Mills, Inc., Philadelphia, Pa. Loop regulating mechanism for full fashioned hosiery knitting machines. 1,826,660; Oct. 6.

Haines, Joseph, jr., Meadowbrook, assignor to Haines Hosiery Mills, Inc., Philadelphia, Pa. Welt closing mechanism for full fashioned knitting machines. 1,826,661; Oct. 6.

Hale, William J., assignor to The Dow Chemical Company, Midland, Mich. Manufacture of thiohydroxy organic compounds. 1,825,662; Oct. 6.

Hall, B. J., & Company. (See Hall, Benjamin J., assignor.)

Hall, Benjamin J., assignor to B. J. Hall & Company, Ltd., London, England. Apparatus for developing photographic prints and the like. 1,825,728; Oct. 6.

Hall, Charles G., Boise, assignor to Automatic Food Machinery Corporation, Boise, Idaho. Waiterless restaurant. 1,825,950; Oct. 6.

Hall, Charles G., assignor to Automatic Food Machinery Corporation, Boise, Idaho. Waiterless restaurant. 1,825,951; Oct. 6.

Hall, Charles G., assignor to Automatic Food Machinery Corporation, Boise, Idaho. Layout for restaurants. 1,825,952; Oct. 6.

Hall, Edwin S., New Haven, Conn. Internal combustion engine. 1,825,691; Oct. 6.

Hallongren, Per G. H., Stockholm, Sweden. Device for permitting the continuous feeding of the film in projecting apparatus. 1,825,953; Oct. 6.

Halversen, Sidney C., San Francisco, Calif. Front wheel drive mechanism for vehicles. 1,826,130; Oct. 6.

Hamburger, Adolph, et al. (See Barnett, Louis, assignor.)

Hamilton, John R., assignor to Automatic Sprinkler Company of America, Cleveland, Ohio. Fire protection apparatus. 1,826,072; Oct. 6.

Hamilton, Karl M., Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa. Door for cars. 1,826,244; Oct. 6.

Hamilton, Karl M., Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa. Railway car floor door. 1,826,348; Oct. 6.

Hammer-Bray Company. (See Gercich, F. A., and Weisman, assignors.)

Hammerle, Josef, New York, N. Y. Parachute. 1,826,245; Oct. 6.

Hanahan, Marion L., Newark, N. J., assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Lithophone and making same. 1,826,131; Oct. 6.

Hanahan, Marion L., Newark, N. J., assignor, by mesne assignments, to Kerebs Pigment & Color Corporation, Wilmington, Del. Lithopone pigment suitable for flat wall paints and enamels. 1,826,132; Oct. 6.

Hans, Edmund E., Detroit, assignor to A C Spark Plug Company, Flint, Mich. Duplex pressure gauge. 1,826,397; Oct. 6.

Hansard, Orren H., and D. D. McGuire, Nashville, Tenn. Concrete testing apparatus. 1,825,954; Oct. 6.

Hansen, Fred A., assignor to Hevi Duty Electric Company, Milwaukee, Wis. Retort furnace. 1,825,790; Oct. 6.

Hansen, Eli, and I. Poderzaj, Copenhagen, Denmark. Key for different locks. 1,826,615; Oct. 6.

Harding, Clarke T., Baton Rouge, La., and J. C. Whetzel, assignors to American Sheet and Tin Plate Company, Pittsburgh, Pa. Recovering oil. 1,826,349; Oct. 6.

Harding, Sherman A. (See Forward, W. J. F., and Harding.)

Hardtmann, Max. (See Hentrich, W., Hardtmann, and Tietze.)

Harel, Eugene, assignor of one-third to J. Moyneur, and one-third to S. Labarge, Ottawa, Ontario, Canada. Universal joint. 1,826,662; Oct. 6.

Harnischfeger Corporation. (See Harnischfeger, Walter, assignor.)

Harnischfeger Corporation. (See Lillard, Gwynn L., assignor.)

Harnischfeger, Walter, assignor to Harnischfeger Corporation, Milwaukee, Wis. Selective drive for excavating machines. 1,826,466; Oct. 6.

Harris, Charles W., Proctor, Minn., assignor to Transportation Devices Corporation, Indianapolis, Ind. Indicating and controlling mechanism. 1,826,280; Oct. 6.

Harris, Edward E., Tulsa, Okla. Combination salt and pepper shaker. 1,826,539; Oct. 6.

Harris, Joseph B., jr., Los Angeles, Calif. Color photography. 1,825,863; Oct. 6.

Harteneck, Aenne, Mannheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Activation of proteases. 1,826,467; Oct. 6.

Harter, Edwin S., Indianapolis, Ind. Nozzle. 1,825,864; Oct. 6.

Hartford-Empire Company. (See Peiler, Karl E., assignor.)

Hartford-Empire Company. (See Wadman, Harold A., assignor.)

Haskins, James D., Brooklyn, N. Y. Display stand. Des. 85,286; Oct. 6.

Hatch, Charles T., Albion, assignor to Union Steel Products Company, Albion, Mich. Structural device. 1,826,133; Oct. 6.

Hawaiian Pineapple Company. (See Landrum, Francis H., assignor.)

Hawk, Glenn C., East Cleveland, Ohio, assignor to The American Steel and Wire Company of New Jersey. Apparatus and method for making spokes. 1,826,350; Oct. 6.

Hawkinson, Paul E., assignor to Kehawke Manufacturing Co., Minneapolis, Minn. Tire patch. 1,826,073; Oct. 6.

Hayden, Arthur C., Brockton, Mass. Film reel and spindle. 1,825,663; Oct. 6.

Hayden, Arthur C., Brockton, Mass. Heel. 1,825,692; Oct. 6.

Hayden, Robert B., Seattle, Wash., assignor to H. L. J. Specialty Co. Money bank. 1,826,398; Oct. 6.

Hayes, Harry C., assignor to General Necessities Corporation, Detroit, Mich. Condenser. 1,826,540; Oct. 6.

Hayford, Eugene S., New Orleans, La. Recording and reproducing talking motion pictures. 1,825,955; Oct. 6.

Haynes, John I., St. Louis, Mo. Rotary internal combustion engine. 1,825,791; Oct. 6.

Hays, Samuel L., Covington, Ky. Expansion mandrel. 1,825,865; Oct. 6.

Heald Machine Company, The. (See Green, Frank W., assignor.)

Heald Machine Company, The. (See Guild, Waldo J., assignor.)

Heald Machine Company, The (See Kempton, H. E., and Gallimore, assignors.)

Heald Machine Company, The. (See Page, Dwight C., assignor.)

Heerklotz, Max, assignor to Firm Simplo Fullfeder Gesellschaft Voss, Lausen & Dziambor, Hamburg, Germany. Closure for self-filling pens. 1,826,246; Oct. 6.

Heggie, James. (See Corrall, H., and Heggie.)

Heinemann, Karl, Dusseldorf, assignor to Rheinische Metallwaaren und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Automatic firearm. 1,825,904; Oct. 6.

Heitsmith, William J. (See Friend, O. A., and Heitsmith.)

Henige, John, Chicago, Ill. Liquid treatment comb. 1,826,541; Oct. 6.

Henneuse, Clarence A., Bucyrus, Ohio. Tractor belt link. 1,825,693; Oct. 6.

Henry, August M., Brooklyn, N. Y., assignor of thirty per cent to F. J. Kent, Montclair, N. J. Airplane. 1,825,792; Oct. 6.

Hentrich, Winfrid, M. Hardtmann, Wiesdorf-on-the-Rhine, and E. Tietze, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Diazonium salts of complex metallo hydrofluoric acid. 1,825,729; Oct. 6.

Hepburn, Dugald, Toronto, Ontario, and M. L. Thompson, East York Township, York County, Ontario, assignors to De Forest Crosley Radio Company, Limited, Toronto, Canada. Apparatus for reproducing radio broadcasts or recorded audio frequencies. 1,826,173; Oct. 6.

Hepburn, William M. (See Barber, H. B., and Hepburn.)

Hepburn, William M., assignor to Surface Combustion Corporation, Toledo, Ohio. Controlling means for heat exchange apparatus. 1,826,213; Oct. 6.

Heppenstall, Thomas E., Longview, Wash. Process and apparatus for determining the moisture content of substances. 1,826,247; Oct. 6.

Hermann, Wolfgang, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Spraying device. 1,826,134; Oct. 6.

Heroy, Herbert, Belmar, N. J. Electric heating system for fluids. 1,825,793; Oct. 6.

Hervig, Richard, assignor to Rich Tool Company, Detroit, Mich. Blank and making valve tappets. 1,826,544; Oct. 6.

Hervig, Richard, and R. Jardine, Chicago, Ill., assignors to Rich Tool Company, Portland, Me. Poppet valve and making same. 1,826,542; Oct. 6.

Hervig, Richard, and R. Jardine, Chicago, Ill., assignors to Rich Tool Company, Chicago, Ill. Composite metal article and making the same. 1,826,543; Oct. 6.

Hessenbruch, Herman M. Wynnewood, assignor to Philadelphia Lawn Mower Company Inc., Philadelphia, Pa. Lawn mower. 1,826,663; Oct. 6.

Hevi Duty Electric Company. (See Hansen, Fred A., assignor.)

Hewitt, Ashley C., Essex Falls, assignor to Engineering Development Associates, Plainfield, N. J. Cowl muffler for aeroplane engines. 1,825,794; Oct. 6.

Hewlett, George J. (See Fullips, George A., assignor.)

Heylandt, Christian W. P., Berlin-Larkwitz, Germany. Gas supplying method and device therefor. 1,826,248; Oct. 6.

Heymann, George H., Louisville, and E. D. Rose, Bowling Green, Ky. Safety razor. 1,825,795; Oct. 6.

Hickok Manufacturing Company. (See Mix, Edwin S., assignor.)

Hieser, Albert E., and E. R. Hieser, Pekin, Ill. Fishing reel. 1,825,866; Oct. 6.

Hieser, Edward R. (See Hieser, Albert E. and E. R.)

Higgins, Charles M., & Co. (See Porter, Vernon C., assignor.)

Higgins, Eugene, Jackson, Mich. Braiding machine. 1,826,545; Oct. 6.

Higley, Frank R., Cleveland Heights, Ohio. Internal combustion engine. 1,826,424; Oct. 6.

Himmell, Samuel S., New York, N. Y. Safety paper. 1,825,796; Oct. 6.

Hirst, Harry A. (See Potter, Elbert R., assignor.)

Hobart, Edward A., Troy, assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerator. 1,825,694; Oct. 6.

Hochman, Julius C., New York, N. Y. Typewriter ribbon device. 1,826,074; Oct. 6.

Hodge, Robert J., assignor to The American Buckle Company, West Haven, Conn. Slide buckle. 1,826,174; Oct. 6.

Hodgson, Harry H. (See Macready, J. A., and Hodgson.)

Hoefen, Walter V., assignor to Brown-Hutchinson Iron Works, Detroit, Mich. Conveyer chain. 1,826,351; Oct. 6.

Hofferberth, George F. (See Hull, H. B., and Hofferberth.)

Hoke, Henry E., Hanover, Pa. Pen clip. 1,825,730; Oct. 6.

Holgate Brothers Company. (See Cartwright, Raymond H., assignor.)

Holifer, John G., and V. S. Landess, assignors of one-fourth to E. O. Blazier and one-fourth to H. E. Blazier, Portland, Oreg. Bundle shocking machine. 1,826,249; Oct. 6.

Holley, George M. (See Gardner, Dale, assignor.)

Holman, George A., Dayton, Ohio. Roofing clip. 1,825,732; Oct. 6.

Holmes, Elbridge R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loose reed for looms. 1,826,314; Oct. 6.

Holmes, George A., Newton, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Fastener. 1,826,281; Oct. 6.

Hoover Company, The. (See White, Harry B., assignor.)

Hopkins, Cecil W., assignor to The Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,825,797; Oct. 6.

Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Indicating device for document photographing apparatus. 1,826,664; Oct. 6.

Hopkinson, Ernest, New York, N. Y., assignor to Morgan & Wright, Detroit, Mich. Form for rubber articles. 1,826,214; Oct. 6.

Hopland, Raymond R., deceased, Rockport, Wash.; R. J. Hopland, administrator. Electric socket lock. 1,825,867; Oct. 6.

Hopland, Robert J., administrator. (See Hopland, Raymond R.)

Hoppes, Charles E., assignor to The Everwear Manufacturing Company, Springfield, Ohio. Playground apparatus. 1,826,468; Oct. 6.

Horii, Shinjiro, Kanda-Ku, Tokyo, Japan. Stencil sheet. 1,825,798; Oct. 6.

Horstman, John H., Dayton, Ohio. Tie rack. Des. 85,287; Oct. 6.

Horton, H. L., et al. (See Griffin, Albert D., assignor.)

Hotchkiss, E. H., Company, The. (See Peterson, Roy E., assignor.)

Hotchner, Fred, Los Angeles, Calif. Luminous display. 1,825,799; Oct. 6.

Houseman, Martin L., Hollywood, assignor of one-half to J. Goben, Los Angeles, Calif. Roof construction. 1,825,800; Oct. 6.

Howard, Bryan, Austin, Tex. Blotting pad. 1,826,546; Oct. 6.

Huennekens, Alphonse V., Milwaukee, Wis. Conveyer excavator. 1,825,956; Oct. 6.

Hug, John. (See Byers, K., and Hug.)

Hull, Harry B. (See King, J. G., and Hull.)

Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,825,665; Oct. 6.

Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,825,731; Oct. 6.

Hull, Harry B., and G. F. Hofferberth, assignors to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,825,664; Oct. 6.

Hull, Horace, Denver, Colo. Propeller. 1,825,868; Oct. 6.

Hulse, Walter S., Mechanitville, N. J. Compressed air operated pump. 1,826,175; Oct. 6.

Humer, Frank, assignor to General Motors Corporation, Detroit, Mich. Collapsible bow construction for an automotive vehicle. 1,826,399; Oct. 6.

Hunt, Fred E., and C. L. Peters, Marinette, Wis. Multiple bulletin board. 1,826,469; Oct. 6.

Hutchins, Allan S., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft tension device for shuttles. 1,826,315; Oct. 6.

Hutchinson, Rutherford H., Ogden, Utah. Piano carrier. 1,826,470; Oct. 6.

Hutchison, Delbert T., Baton Rouge, La., assignor to G. A. Ripley, Dallas, Tex. Collar supporter. 1,826,176; Oct. 6.

Hutchison, Thomas S., Chicago, Ill. Game. 1,826,215; Oct. 6.

I. G. Farbenindustrie Aktiengesellschaft. (See Harteneck, Aenne, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Kränzlein, G., and Voss, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Pistor, G., Suchy, and Reubke, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schoenburg, C., and von der Bruck, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schuette, Hermann, assignor.)

Ihrig, Henry, Lansing, assignor to General Motors Corporation, Detroit, Mich. Rubber cushion shackle. 1,826,400; Oct. 6.

Imhof, Alfred, Hongg, near Zurich, Switzerland. Leading-in insulator. 1,825,905; Oct. 6.

Imperial Chemical Industries Limited. (See Moore, J. W., and Lamble, assignors.)

Inman, Marcus T., jr. (See Fulton, K. H., and Inman.)

International Harvester Company. (See Wessman, Arnt W., assignor.)

International Motor Company. (See Masury, Alfred F., assignor.)

Invex Corporation. (See Craig, Palmer H., assignor.)

Iseler, Charles W., assignor to General Motors Research Corporation, Detroit, Mich. Steering pitman arm. 1,826,401; Oct. 6.

Jack, Arthur C., Pittsburgh, Pa. Rail fastening. 1,826,316; Oct. 6.

Jackson, Corwill, Chicago, Ill. Power unit or plant for track apparatus. 1,826,075; Oct. 6.

Jackson, Thelma P., Houston, Tex. Flower bulb container. 1,826,547; Oct. 6.

Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Tube supported furnace wall. 1,825,666; Oct. 6.

Jaeger, Alphons O., St. Louis, Mo., assignor to The Selden Company. Pittsburgh, Pa. Catalytic apparatus. 1,826,548; Oct. 6.

Jahraus, Harold A. (See La Follette, C. D., and Jahraus.)

James, Albert S., Eureka, Calif. Aircraft. 1,826,076; Oct. 6.

James, Lester A., Oklahoma City, Okla. Heating and cooling device for inclosed spaces. 1,826,471; Oct. 6.

Jardine, Thomas R. (See Gaston, Mittie O., and James.)

Jardine, Robert. (See Hervig, R., and Jardine.)

Jardine, Robert, Detroit, Mich., assignor to Rich Tool Company Chicago, Ill. Making composite valves. 1,826,549; Oct. 6.

Jeanneret, Abram L., La Chaux-de-Fonds, assignor to J. Weil, Geneva, Switzerland. Timepiece. 1,825,906; Oct. 6.

Jefferson Electric Company. (See Kellner, Louis, assignor.)

Jenkins, Russell H., et al. (See Ewing, Emma L., assignor.)

Jennings, Mrs. S. C., administratrix. (See Jennings, Sherman C.)

Jennings, Sherman C., deceased, Winston-Salem, N. C.; Mrs. S. C. Jennings, administratrix. Plastic compound. 1,826,002; Oct. 6.

Jensen, Frederick H. (See Traeger, H., and Jensen.)

Jensen, Jens W., Fairfield, Idaho. Hay knife. 1,826,250; Oct. 6.

Johanson, Magnus H., assignor to Gleason Works, Rochester, N. Y. Gear cutter and employing same. 1,825,733; Oct. 6.

Johné-Werk Grafische Maschinen-Aktiengesellschaft. (See Stegmann, Karl, assignor.)

Johnson, Alfred, Chicago, Ill. Shoe construction. 1,826,616; Oct. 6.

Johnson, Alfred J., assignor to York Band Instrument Company, Grand Rapids, Mich. Method and apparatus for treating drawn tubes. 1,826,077; Oct. 6.

Johnson, Edward P., Sagamore, Pa. Back for oilcloth. 1,826,135; Oct. 6.

Johnson, Frederick H., Detroit, Mich. Sanding machine. 1,826,177; Oct. 6.

Johnson, Henry T., London, England. Self-supporting golf-bag and the like. 1,826,216; Oct. 6.

Johnson, Lane, assignor to United Engineering and Foundry Company, Pittsburgh, Pa. Differential adjustment for rolls. 1,825,957; Oct. 6.

Johnson, Laurence A., Kansas City, Mo. Street marker. 1,825,667; Oct. 6.

Johnson, William H., Arlington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Nail plate feeder. 1,825,695; Oct. 6.

Johnston, William, jr., Pittsburgh, Pa. Clay gun. 1,825,734; Oct. 6.

Jones, James I. M., and W. Kilby, Lancaster, England, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Dyeing and printing. 1,826,352; Oct. 6.

Jones, Lester L., Orndell, N. J. Radio frequency amplifying system. 1,826,550; Oct. 6.

Jordan Amzie E., Beloit, Kans. Camp trailer. 1,826,136; Oct. 6.

Junkers, Hugo, Dessau, Germany. Heating stove. 1,825,735; Oct. 6.

Kadel, Byers W., and P. R. Drenning, Baltimore, Md., assignors to The Symington Company, New York, N. Y. Draft rigging. 1,825,696; Oct. 6.

Kadow, August, assignor to The Vacuum Casting Company, Toledo, Ohio. Making metal articles. 1,825,958; Oct. 6.

Kanter, Edward, Cleveland Heights, Ohio. Dispensing machine casing. Des. 85,288; Oct. 6.

Kanter, Edward, Cleveland Heights, Ohio. Dispensing apparatus. Des. 85,289; Oct. 6.

Kavanagh, Burnett, New York, N. Y. Ventilator. 1,826,353; Oct. 6.

Keeler Brass Company. (See Keeler, George E., assignor.)

Keeler, George E., assignor to Keeler Brass Company, Grand Rapids, Mich. Locking latch. 1,826,472; Oct. 6.

Keeran, Charles R., Evanston, assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Mechanical pencil. 1,826,473; Oct. 6.

Kehawke Manufacturing Co. (See Hawkinson, Paul E., assignor.)

Keller, Charles L., Cincinnati, assignor to The Richardson Company, Lockland, Ohio. Producing felted materials containing bitumen. 1,825,869; Oct. 6.

Kellner, Louis, assignor to Jefferson Electric Company, Chicago, Ill. Outlet box. 1,825,697; Oct. 6.

Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)

Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Car coupler. 1,825,907; Oct. 6.

Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Car coupler mechanism. 1,825,908; Oct. 6.

Kelvinator Corporation. (See Ashton, Richard O., assignor.)

Kelvinator Corporation. (See Erbach, Frederick R., assignor.)

Kelvinator Corporation. (See Fiske, Jonathan P. B., assignor.)

Kelvinator Corporation. (See Spreen, Charles C., assignor.)

Kempton, Arthur K. (See Geisslinger, Jean, assignor.)

Kempton, Herbert E., and K. F. Gallimore, Fond du Lac, Wis., assignors, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,826,178; Oct. 6.

Kennedy, George A. (See Foy, Edward N., assignor.)

Kennedy, Joseph E., New York, N. Y. Mixer and distributor for pneumatic transported pulverized material. 1,825,668; Oct. 6.

Kent, Frank J. (See Henry, Augustus M., assignor.)

Kerstens, Otto, Bremen, Germany. Safety pin. 1,826,003; Oct. 6.

Key, James F., Pasadena, assignor of one-half to L. S. Lyon, Los Angeles, Calif. Night sight for firearms. 1,826,004; Oct. 6.

Kilby, William. (See Jones, J. I. M., and Kilby.)

King, George A., assignor to Scovill Manufacturing Company, Waterbury, Conn. Tack fastened button. 1,826,665;; Oct. 6.

King, George E., et al. (See Behle, J., King, and Blackmon, assignors.)

King, Gilbert M., Pawtucket, R. I., assignor to Seekonk Lace Company. Lace. Des. 85,290; Oct. 6.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,825,669; Oct. 6.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,825,698; Oct. 6.

King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,825,870; Oct. 6.

King, Jesse G., and H. B. Hull, assignors, by mesne assignments, to General Motors Research Corporation, Dayton, Ohio. Refrigerating apparatus. 1,825,801; Oct. 6.

Kinney, Fay D., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Assembling the uppers of rubber shoes. 1,825,871; Oct. 6.

Kinyon, Brice W. (See Kinyon, Minnie E. and B. W.)

Kinyon, Minnie E. and B. W., South Bend, Ind. Removing printing ink from paper. 1,826,179; Oct. 6.

Klein, Frederick, College Point, and F. Walsleben, Oceanside, assignors to Warp Twisting-In Machine Company, Brooklyn, N. Y. Mechanism for knotting together threads. 1,825,872; Oct. 6.

Klein, Paul, Budapest, Hungary, and A. Szegvari, Akron, Ohio, assignors, by mesne assignments, to American Anode Inc. Production of rubber goods directly from latex. 1,825,736; Oct. 6.

Klein, Paul, Budapest, Hungary, assignor to American Anode Inc., Akron, Ohio. Drying products produced from aqueous dispersions of organic substances particularly of caoutchouc or caoutchouc like substances by agglomeration upon a base. 1,825,737; Oct. 6.

Klein, Paul, and F. Gábor, Budapest, Hungary, assignors, by mesne assignments, to American Anode Inc. Producing dipped goods from organic dispersions. 1,825,738; Oct. 6.

Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)

Klockner, John, Elkhorn, and E. E. Thomas, Omaha, Nebr., assignors to Klockner-Thomas Manufacturing Company. Automatic disk sharpener. 1,826,517; Oct. 6.

Klockner-Thomas Manufacturing Company. (See Klockner, J., and Thomas, assignors.)

Klopsteg, Paul E., Chicago, Ill. Wave machine. 1,825,739; Oct. 6.

Klopsteg, Paul E., Chicago, Ill. Educational apparatus. 1,826,180; Oct. 6.

Knox, Harry A., and B. F. Baker, Davenport, Iowa. Cooling system for motors. 1,826,005; Oct. 6.

Koch & Sterzel, Aktiengesellschaft. (See Sterzel, Kurt A., assignor.)

Koeberle, Karl. (See Kunz, M. A., and Koeberle.)

Köhler, Fritz, Leipzig, Germany. Stand or support. 1,826,474; Oct. 6.

Kohler, Gustavus A. E. (See Butkus, Joseph A., assignor.)

Kondo, Rennosuke, Tokyo, Japan. Operating system of internal combustion engines. 1,825,959; Oct. 6.

Koski, Hjalmar J. (See Smith, Arthur E., assignor.)

Kotlan, Albert, Cicero, Ill. Stop light for automobiles. Des. 85,291; Oct. 6.

Krantz, Hubert. (See Hahn, Mathias, assignor.)

Kränzlein, Georg, H. Vollman, and M. Corell, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs and preparing them. 1,825,740; Oct. 6.

Kränzlein, Georg, and A. Voss, Hochston-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-theMain, Germany. Tanning substance and preparing same. 1,825,802; Oct. 6.

Krebs Pigment & Color Corporation. (See Hanaban, Marion L., assignor.)

Krebs Pigment & Color Corporation. (See Singmaster, J. A., and Colton, assignors.)

Krenzel, Walter, Leoti, Kans. Agricultural machine attachment. 1,826,551; Oct. 6.

Krob, Joseph S. (See Ross, I. W., and Krob.)

Krob, Joseph S., et al. (See Ross, I. W., and Krob, assignors.)

Krueger, Robert B. (See Snyder, H. W., and Krueger.)

Krueger, Robert B. (See Thorburn, D. B., and Krueger.)

Kuck, Henry G., Peoria, Ill. Container. 1,825,670; Oct. 6.

Kuhn, Robert, assignor to American Electrical Heater Company, Detroit, Mich. Electric toaster. 1,826,475; Oct. 6.

Kühn, Wilhelm, Frankfort-Eschersheim, Germany. Rotary engine. 1,825,741; Oct. 6.

Kuiper, Gerhard C. R., Indianapolis, Ind., assignor to Budd Wheel Company, Philadelphia, Pa. Vehicle wheel. 1,826,617; Oct. 6.

Kulp, Catherine C., Philadelphia, Pa. Clasp. 1,826,181; Oct. 6.

Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Wrist-pin inserting tool. 1,825,742; Oct. 6.

Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Wrist-pin inserting tool. 1,825,873; Oct. 6.

Kuna, Frank J. (See Lorang, Henry J., assignor.)

Kunian, Paul, and J. Sten, Minneapolis, Minn.; said Sten assignor to said Kunian. Permanent wave apparatus. 1,826,078; Oct. 6.

Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New vat dyestuffs. 1,825,874; Oct. 6.

Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs. 1,825,875; Oct. 6.

Kupferschmid, Karl, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,826,006; Oct. 6.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,825,743; Oct. 6.

Kushner, Andrew S., Beccaria, Pa. Invalid's cuspidor. 1,826,137; Oct. 6.

Kuttner Aktiengesellschaft. (See Küttner, Hugo, assignor.)

Küttner, Hugo, Dresden-A, assignor to Kuttner Aktiengesellschaft, Pirna-on-the-Elbe, Germany. Treating artificial silk cakes made by the spinning can process. 1,825,960; Oct. 6.

L. G. S. Devices Corporation. (See Chryst, William A., assignor.)

Labarge, Simon, et al. (See Harel, Eugene, assignor.)

La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake shoe. 1,825,671; Oct. 6.

Lacambra, Vicente O., Barcelona, Spain. Double acting internal combustion engine. 1,825,961; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with sulphonic acid salts. 1,826,138; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with copper salts. 1,826,139; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with cadmium salts. 1,826,140; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with mercury salts. 1,826,141; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with iron salts. 1,826,142; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with chromium salts. 1,826,143; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with manganese salts. 1,826,144; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with aluminum salts. 1,826,145; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with nickel salts. 1,826,146; Oct. 6.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils with cobalt salts. 1,826,147; Oct. 6.

Laclede-Christy Clay Products Company. (See Williams, Herman P., assignor.)

La Follette, Charles D., and H. A. Jahraus, assignors to Corning Glass Works, Corning, N. Y. Teapot. Des. 85,292; Oct. 6.

Laird, Wilbur G., New York, N. Y. Gasket. 1,825,962; Oct. 6.

Lake, William B., Commerce, Tex. Clothespin. 1,825,963; Oct. 6.

Lamar, Alfred M., et al. (See Ewing, Emma L., assignor.)

Lamble, Alfred. (See Moore, J. W., and Lamble.)

Lamy, Léon, Annecy, E. Mathieu, Paris, and L. Gagnaux, Marignier, assignors to Societe d'Electro-Chimie, d'ElectroMetallurgie et des Acieries Electriques d'Ugine, Paris, France. Extraction of tin from ores, alloys, scrap or the like. 1,826,552; Oct. 6.

Lancey, Roswell A., Townsend, Mass., assignor to Spaulding Fibre Company, Inc., North Rochester, N. H. Counter molding machine. 1,825,964; Oct. 6.

Landaw, Oak, Nappanee, Ind. Table top. 1,826,618; Oct. 6.

Landess, Victor S. (See Holifer, J. G., and Landess.)

Landis & Gyr, A.-G. (See Beusch, Willi, assignor.)

Landis Tool Company. (See Balsiger, Harold E., assignor.)

Landrum, Francis H., San Francisco, Calif. Apparatus for testing sealed containers. 1,825,672; Oct. 6.

Landrum, Francis H., assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii. Testing sealed containers. 1,825,699; Oct. 6.

Landrum, Francis H., Honolulu, Hawaii. Method and apparatus for testing sealed containers. 1,825,700; Oct. 6.

Landrum, Francis H., Honolulu, Hawaii. Testing sealed containers. 1,825,744; Oct. 6.

Landrum, Francis H., San Francisco, Calif. Method and apparatus for testing sealed containers. 1,825,745; Oct. 6.

Lang, Peter A., Carteret, N. J., assignor to Bowker Chemical Company, New York, N. Y. Production of disodium phosphate. 1,825,965; Oct. 6.

Langston, William A. P. S., Woburn, England. Organ. 1,826,518; Oct. 6.

Larsen, Paul J. (See Shapiro, L., and Larsen.)

Lasier, David R., assignor to Norton-Lasier Company, Inc., Chicago, Ill. Door holder arm. 1,826,553; Oct. 6.

Lässig, Fritz, assignor to the Firm Schubert & Salzer Maschinenfabrik Aktiengesellschaft, Chemnitz, Germany. Knitting machine. 1,825,746; Oct. 6.

Latimer, Albert N., New York, N. Y. Game board. 1,825,673; Oct. 6.

Laurence, Joseph, Cleveland, Ohio. Money bank. Des. 85,293; Oct. 6.

Laurila, Frans H., Worcester, Mass. Tip-up. 1,826,251; Oct. 6.

Lawrence, Almon R., Medford, assignor to E. B. Badger & Sons Company, Boston, Mass. Expansion joint. 1,826,666; Oct. 6.

Laycock, Kenneth G., Kingston Township, Luzerne County, Pa., assignor to Goss Printing Press Company, Chicago, Ill. Paper tension control device for printing presses. 1,825,966; Oct. 6.

Lea Fabrics Inc. (See Smith, Paul S., assignor.)

Le Bleu, Charles, Los Angeles, Calif. Revolving scraper. 1,826,252; Oct. 6.

Ledbetter, James C., New York, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Garment press. 1,826,619; Oct. 6.

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Pressed metal body frame. 1,826,425; Oct. 6.

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Pressed metal vehicle body. 1,826,426; Oct. 6.

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body construction. 1,826,427; Oct. 6.

Lee, Delmer C., Maplewood, assignor to Missouri Rolling Mill Corporation, St. Louis, Mo. Wire securing means for fence posts. 1,826,182; Oct. 6.

Leek, Frederick H., Cleveland, Ohio. Brake construction. 1,825,674; Oct. 6.

Le Ganger, Woodward B., Buck Hill Falls, Pa. Toy. 1,825,967; Oct. 6.

Legrand, Jules. (See Guilbert P., Legrand, and Lemaire.)

Lehrecke, Hans, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y. Treating metallurgical slimes. 1,826,183; Oct. 6.

Leiter, Charles R., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Stud setter. 1,825,876; Oct. 6.

Lemaire, Maurice. (See Guilbert, P., Legrand, and Lemaire.)

Lemley, John S. (See Schnier, William C., assignor.)

Lenk, Wilhelm, assignor to Barmer Maschinenfabrik Aktiengesellschaft, Remscheid-Lennep, Germany. Thread brake for twisting spindles. 1,826,354; Oct. 6.

Leonard, Charles, South Connellsville, Pa. Pressed steel crosstie. 1,826,554; Oct. 6.

Levi, Julius, assignor to S. Pass, Chicago, Ill. Furniture cover. 1,825,909; Oct. 6.

Lewando, Felix J., South Boston, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,825,910; Oct. 6.

Libbey-Owens Ford Glass Company. (See Kupferschmid, Karl, assignor.)

Lidgerwood Pacific Company. (See Dickinson, Merian H., assignor.)

Lienzén, David L., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Selector. 1,825,911; Oct. 6.

Lillard, Gwyn L., Memphis, Tenn., assignor to Harnischfeger Corporation, Milwaukee, Wis. Mud sled. 1,826,620; Oct. 6.
Lincoln Electric Company, The. (See Lincoln, James F., assignor.)
Lincoln, James F., East Cleveland, assignor to The Lincoln Electric Company, Cleveland, Ohio. Arc-welding. Re18,221; Oct. 6.
Lincoln Electric Company, The. (See Lincoln, James F., assignor.)
Lincoln, James F., assignor to The Lincoln Electric Company, Cleveland, Ohio. Arc-welding. 1,826,355; Oct. 6.
Lindegren, Carl J., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle box for drop box looms. 1,826,317; Oct. 6.
Linn, Robert E. (See McCormick, T. J., and Linn.)
Listo Pencil Corporation. (See Wehn, Charles E., assignor.)
Litter, Ferdinand J., assignor to Frederick Snare Corporation, New York, N. Y. Adjustable support for concrete forms and scaffolding. 1,825,747; Oct. 6.
Livingstone, James. (See Walker, Malcolm, assignor.)
Lloyd, Ellis A., and V. P. Gershon, assignors to W. M. Grosvenor, New York, N. Y. Making anthraquinone and like products. 1,826,621; Oct. 6.
Lock Joint Pipe Company. (See Mitchell, John C., assignor.)
Locke, Albert R., Oak Park, Ill. Master lever. 1,826,079; Oct. 6.
Lockwood, Harry A., assignor to The Lockwood Manufacturing Company, Cincinnati, Ohio. Baking pan unit. 1,826,080; Oct. 6.
Lockwood Manufacturing Company, The. (See Lockwood, Harry A., assignor.)
Loebell, Henry O., assignor to H. L. Doherty, New York, N. Y. Apparatus for manufacturing combustible gas. 1,826,007; Oct. 6.
Loetscher, Emil C., Dubuque, Iowa. Composition flooring and making the same. 1,825,877; Oct. 6.
Loetscher, John A., assignor to Farley & Loetscher Mfg. Co., Dubuque, Iowa. Door construction. 1,825,878; Oct. 6.
Longnecker, Paul F., assignor to Firth-Sterling Steel Company, McKeesport, Pa. Rolling. 1,826,622; Oct. 6.
Lonskey, John H., Ypsilanti, assignor to Central Specialty Company, Detroit, Mich. Shower bath trap. 1,826,555; Oct. 6.
Lorang, Henry J., assignor of one-half to F. J. Kuna, St. Louis, Mo. Process of and compound for hardening the surface of mild steels. 1,826,008; Oct. 6.
Los Angeles Spring Bed Company, The. (See Moeller, William A., assignor.)
Loske, Frank, Brooklyn, N. Y. Aircraft parachute. 1,826,556; Oct. 6.
Louthlan, Paul J., Hutchinson, Kans. Hanger for supporting strips of bacon. 1,825,879; Oct. 6.
Lowe, Joseph A., assignor to Faluiah Paper Company, Fitchburg, Mass. Paper. 1,826,557; Oct. 6.
Lowry, Lorene, administratrix. (See Lowry, Samuel D.)
Lowry, Samuel D., deceased; Elizabeth, N. J.; L. Lowry administratrix. Individual butter cutting machine. 1,826,519; Oct. 6.
Lowther, William P., Merced, Calif. Valve stem guide. 1,826,148; Oct. 6.
Lubretor Company, The. (See Piper, Earle C., assignor.)
Lucas, Mary T., Whitestone, N. Y. Fastener for intimate-body garments. 1,826,623; Oct. 6.
Lufkin Rule Co. (See Witchger, Eugene J., assignor.)
Lundgren, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Driving connection for loom dobbies. 1,826,318; Oct. 6.
Lundgren, William E., and J. G. Soderberg, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Reed holder for looms. 1,826,319; Oct. 6.
Lupton's, David, Sons Company. (See Sheard, Joseph H., assignor.)
Lynn, John P., assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Pencil. 1,825,803; Oct. 6.
Lyon, Leonard S. (See Key, James F., assignor.)
MacCallum, Thomas, North Lima, Ohio. Sectional track. 1,825,804; Oct. 6.
Macready, John A., and H. H. Hodgson, assignors to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,825,748; Oct. 6.
Mac-Roh Sales Mfg. Company. (See Rohwedder, Otto F., assignor.)
Magers, Henry B., Santa Fe, N. Mex. Combination rule and compass. 1,826,081; Oct. 6.
Magnet-Werk G. m. b. H. Eisenach Spezialfabrik fur Elektromagnet-Apparate. (See Bing, Julius, assignor.)
Mahony, William J., Montreal, Quebec, Canada. Beater for foodstuffs. 1,826,356; Oct. 6.
Makutchan, Ralph W., Chicago, Ill. Elevator construction. 1,826,357; Oct. 6.
Mann, John C. (See Butler, E. W., and Mann.)
Manning, William H., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Constant clearance poppet valve. 1,826,402; Oct. 6.
Mansfield, Judson H., and C. F. Penrose, assignors to Greenlee Bros. & Co., Rockford, Ill. Screw machine. 1,825,749; Oct. 6.
Mapson, Robert L., Los Angeles, assignor of one-half to R. L. Greer, San Diego, Calif. Motor vehicle toy apparatus. 1,825,968; Oct. 6.
Margulies, Irving W., New York, N. Y. Attachment for dental tools. 1,825,880; Oct. 6.
Markham, Charles M., Toledo, Ohio. Shore head bracket. 1,825,912; Oct. 6.
Markson, Clemens J., Philadelphia, Pa. Dispensing case. 1,825,805; Oct. 6.
Markus, Ralph M., Chicago, Ill. Machine for mending runs in fabrics. 1,825,806; Oct. 6.
Marriott, Hugh F., London, England. Steam generator or water heater. 1,826,358; Oct. 6.
Marshall, Henry H., Highland Park, assignor to Brunswick-Kroeschell Company, New Brunswick, N. J. Liquid cooling apparatus. 1,826,253; Oct. 6.
Martin, Bruno, Saginaw, Mich. Valve. 1,825,807; Oct. 6.
Martin, Mark H., Reading, assignor to Birdsboro Steel Foundry & Machine Company, Birdsboro, Pa. Lateral motion device for railway car trucks. 1,826,476; Oct. 6.
Martineau, Edward J., Seattle, Wash. Ice cream dipper. 1,826,009; Oct. 6.
Maschinenfabrik Esslingen. (See Greiner, Fritz, assignor.)
Mason, Harold, Hyde, assignor to Spencer & Cook, Limited, Stalybridge, England. Turning sheets of paper and the like in folding, ruling, and other machines. 1,826,624; Oct. 6.
Masters, Charles E., Perry, Mo. Machine tool. 1,826,625; Oct. 6.
Mastick, Edwin A., Rocky River, Ohio. Roofing tile. 1,826,082; Oct. 6.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Inclosed automobile cab. Des. 85,294; Oct. 6.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Vehicle drive for radial engines. 1,826,359; Oct. 6.
Matchett, Henry J., Philadelphia, Pa. Toilet article. 1,826,558; Oct. 6.
Mathieu, Eugène. (See Lamy, L., Mathieu, and Gagnaux.)
Matthews, George A. (See Schwarz, R. E., and Matthews.)
Matthey, William A., Kansas City, Mo. Variable pitch airplane propeller. 1,825,881; Oct. 6.
Mauney, William C., Gastonia, N. C. Ball throwing machine. 1,825,882; Oct. 6.
Maytag Company, The. (See Snyder, Howard F., assignor.)
Mazurie, James V., and T. Patterson, Gary, Ind., assignor to National Tube Company. Seamless tube mill. 1,826,360; Oct. 6.
McCann, John H., Chicago, Ill. Protective cover for plumbing fixtures. 1,826,010; Oct. 6.
McCaskey Register Company, The, (See Dunning, W. E., and Middleton, assignors.)
McChesney, John S., Chicago, Ill., assignor, by mesne assignments, to The Gerrard Company, Inc., San Francisco, Calif. Wire tying appliance. Re18,219; Oct. 6.
McClatchey, Thomas G. (See Pittman, Clovis C., assignor.)
McCleary, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for axminster looms. 1,826,320; Oct. 6.
McClintock, William, assignor to Pacific Clay Products, Los Angeles, Calif. Brick and making the same. 1,825,969; Oct. 6.
McConnell, Samuel, et al. (See Wilson, J. E., McConnell, and Brown.)
McConoughey, Merle S., East Orange, N. J., assignor to Congoleum-Nairn, Inc. Linoleum product and making same. 1,826,217; Oct. 6.
McConway & Torley Company, The. (See Kelso, William, assignor.)
McCormick, Thomas J., and R. E. Linn, Detroit, Mich.; said Linn assignor to said McCormick. Tire cover. Des. 85,295; Oct. 6.
McCoy, Harry E., assignor to Specialties Manufacturing Company, Pittsburgh, Pa. Exercising device. 1,826,254; Oct. 6.
McCoy, William C., Shaker Heights, assignor to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,825,750; Oct. 6.
McCullough, Frederick S., Wilkinsburg, Pa. Electron emitting cathode and forming same. 1,826,011; Oct. 6.
McDowell, Hamilton E., New York, N. Y. Dead end clamp. 1,825,913; Oct. 6.
McElroy, Robert E., assignor to Reynolds Spring Company, Jackson, Mich. Spring structure. 1,826,012; Oct. 6.
McGiffert, John R., assignor to Clyde Iron Works, Duluth, Minn. Winding engine. Re18,220; Oct. 6.
McGill Manufacturing Company. See Popp, Rudolf, assignor.)
McGowan, Edward M., Toledo, Ohio. Tally device. 1,826,520; Oct. 6.
McGuire, Donald D. See Hansard, O. H., and McGuire.)
McHugh, Thomas P., and W. T. McHugh, Pittsburgh, Pa. Reversible doorframe. 1,826,516; Oct. 6.
McHugh, William T. See McHugh, Thomas P. and W. T.)
McIlwaine Patent Corporation. (See Raus, John, assignor.)
McIntire, James F., assignor to United States Radiator Corporation, Detroit, Mich. Radiator. Des. 85,296; Oct. 6.
McMahon, Harry R., Coraopolis, Pa., assignor to Standard Steel Spring Company. Bumper construction. 1,826,626; Oct. 6.
McNeal, Daniel R., Abington, assignor to Andale Company, Philadelphia, Pa. Rotary strainer. 1,826,361; Oct. 6.

McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Pipe flask. 1,826,083; Oct. 6.
Mechanical Handling Systems. (See Bennett, W. E., and Bishop, assignors.)
Meier, Frederic, Chicago, Ill. Method and apparatus for forming can tops. 1,826,559; Oct. 6.
Melcher, Lee W., Winnetka, Ill. Air conditioning apparatus. 1,825,808; Oct. 6.
Menniges, Michael B., St. Louis, Mo. Speed controlling means for engines. 1,825,701; Oct. 6.
Meredith, Frederick W., Farnborough, England. Gyroscopic control system for dirigible craft. 1,826,013; Oct. 6.
Merte, Willy, assignor to the firm Carl Zeiss, Jena, Germany. Photographic lens. 1,826,362; Oct. 6.
Mesinger, William F., Indianapolis, Ind., assignor to Prest-O-Lite Co. Inc. Hydraulic flash arrester. 1,825,970; Oct. 6.
Metal Specialties Manufacturing Company. (See Hermann, Wolfgang, assignor.)
Meyer, Frederick G. (See Nelson, Nels S., assignor.)
Meyer, George J., and O. Dreher, assignors to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis. Bottle feeder. 1,825,751; Oct. 6.
Meyer, Geo. J., Manufacturing Company. (See Dufford, Lawrence O., assignor.)
Meyer, Geo. J., Manufacturing Company. (See Meyer, G. J., and Dreher, assignors.)
Meyers, Joseph J. R., New York, N. Y. Hatchet. Des. 85,297; Oct. 6.
Meyerson, Max, New York, N. Y. Loose leaf binder. 1,826,627; Oct. 6.
Mickle, Benjamin C. (See Finn, John, jr., assignor.)
Midcap, John R., St. Louis, Mo. Metal corner bead with attachment. 1,825,914; Oct. 6.
Middleton, Ray. (See Dunning, W. E., and Middleton.)
Miedbrodt, Carl, Berlin-Rosenthal, assignor to Bamag-Meguin Aktiengesellschaft, Berlin, Germany. Automatic reversing apparatus for controlling the closure members of periodically operating gas producers. 1,826,363; Oct. 6.
Miller, Bert. (See Adams, J. S., and Miller.)
Miller, George J., Chelsfield, England. Seed drill. 1,826,560; Oct. 6.
Miller, Stuart P., Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y. Recovery of tar acids. 1,825,809; Oct. 6.
Miller, Stuart P., Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y. Producing creosote oils. 1,826,429; Oct. 6.
Miller, Stuart P., Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y. Recovery of creosote oils, tar acids, etc. 1,826,430; Oct. 6.
Miller, Stuart P., Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y. Recovery of tar acids and other products. 1,826,431; Oct. 6.
Miller, Stuart P., Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y. Recovery of ammonia and other products from coke oven gases. 1,826,561; Oct. 6.
Miller, Stuart P., Tenafly, N. J., assignor to The Barrett Company, New York, N. Y. Pitch composition and making the same. 1,826,428; Oct. 6.
Minneapolis-Honeywell Regulator Company. (See Phelan, Louis A. M., assignor.)
Minneapolis-Honeywell Regulator Company. (See Phelan, L. A. M., and Bear, assignors.)
Minto, Wallace M., Jersey City, N. J. Gas gun. 1,826,562; Oct. 6.
Miranda, Francisco, Q., Cordoba, Argentina. Mute for stringed instruments. 1,825,915; Oct. 6.
Missouri Rolling Mill Corporation. (See Lee, Delmer C., assignor.)
Mitchell, John C., Bloomfield, assignor to Lock Joint Pipe Company, Ampere, N. J. Pipe joint. 1,826,321; Oct. 6.
Mix, Edwin S., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt for personal wear. 1,826,563; Oct. 6.
Mix, Edwin S., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Safety hook. 1,826,564; Oct. 6.
Mock, Hugo, New York, N. Y. Ice tray for electric refrigerators. 1,825,916; Oct. 6.
Moeller, William A., Los Angeles, assignor to The Los Angeles Spring Bed Company, Los Angeles, Calif. Folding bed. 1,826,184; Oct. 6.
Mohr, Hubert C., assignor to The Packard Electric Company, Warren, Ohio. Carton. 1,826,084; Oct. 6.
Moise, Harmon D., Sumter, assignor to M. B. Cross, Entawville, R. Schwartz, W. Y. Yeadon, S. Brunson, and M. W. Seabrook, Sumter, S. C. Air bound siphon flush tank. 1,826,282; Oct. 6.
Montgomery, Donald H., Berlin, Conn. Automobile. Des. 85,298; Oct. 6.
Montuori, Felix C., Washington, D. C., assignor to Baker & Company, Inc. Denture retaining device. 1,826,014; Oct. 6.
Mooers, Louis P., Tonawanda, N. Y., assignor to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,826,185; Oct. 6.
Mooers, Louis P., assignor to The Columbia Axle Company, Cleveland, Ohio. Brake shoe and making same. 1,826,283; Oct. 6.
Moonyian, Karrey, et al. (See Boggs, Hugh L., assignor.)
Moore, Albert H. (See Pickering, A. V., and Moore.)
Moore, Frank R., Upper Darby, Pa. Grinding head or attachment. 1,825,883; Oct. 6.
Moore, George A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Disk-spring commutator. 1,826,628; Oct. 6.
Moore, Joseph W., Runcorn, Cheshire, and A. Lamble, Liverpool, assignors to Imperial Chemical Industries Limited, London, England. Manufacture of bleaching powder. 1,826,629; Oct. 6.
Moore, Marcus D., Bloomington, Ind. Fuel control for internal combustion engines. 1,826,630; Oct. 6.
Moorefield, William E. (See Smalley, R. C., and Moorefield.)
Morales, Rita. (See Bushnell, L. S., and Morales.)
Morgan, Howard H., Hollywood, Calif. Cap support. 1,825,810; Oct. 6.
Morgan, William T., Neodesha, Kans. Sanitary bead opening. 1,826,255; Oct. 6.
Morgan & Wright. (See Hopkinson, Ernest, assignor.)
Morgan & Wright. (See Smith, Clyde J., assignor.)
Morriss, Benham, et al. (See Pettit, James C., assignor.)
Morse Chain Company. (See Morse, Frank L., assignor.)
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Power transmission chain. 1,825,675; Oct. 6.
Morton, Alberta I., New York, N. Y. Fruit washer. 1,826,015; Oct. 6.
Morton, Harry D., assignor to Automatic Arc Welding Company, Detroit, Mich. Metallic electrode arc welding. 1,826,186; Oct. 6.
Mosler Lock Company, The. (See Benham, Edgar M., assignor.)
Motor Terminals Company. (See Fitch, Benjamin F., assignor.)
Mott, Garret, Yonkers, assignor to Pinto Valley Co., New York, N. Y. Ore leaching process. 1,825,752; Oct. 6.
Moyneur, Joseph, et al. (See Harel, Eugene, assignor.)
Mueller, August J., Yankton, S. Dak. Automotive vehicle heater. 1,825,884; Oct. 6.
Mueller Co. (See Cheetham, Joseph H., assignor.)
Mueller Co. (See Mueller, Frank H., assignor.)
Mueller Co. (See Mueller, Robert H., assignor.)
Mueller Co. (See Wilkins, James M., assignor.)
Mueller, Frank H., assignor to Mueller Co., Decatur, Ill. Combined drill, reamer, and tap. 1,826,323; Oct. 6.
Mueller, Johann A., Berlin, Germany. Stenciling machine. 1,826,149; Oct. 6.
Mueller, Robert H., assignor to Mueller Co., Decatur, Ill. Ball cock. 1,826,322; Oct. 6.
Muhl, Charles H., assignor to The National Automatic Tool Company, Richmond, Ind. Drill unit with common feed. 1,825,971; Oct. 6.
Mullinax, Claude, et al. (See Pettit, James C., assignor.)
Mulock, Fred S., San Gabriel, Calif., assignor to United States Smelting, Refining & Mining Company, Portland, Me. Drill point and making the same. 1,826,085; Oct. 6.
Munday, Horace D., Schenectady, N. Y. Truing commutators. 1,825,676; Oct. 6.
Municipal Street Sign Co. (See Sprung, Abraham, assignor.)
Murase, Eiichi, San Francisco, Calif. Bicycle gearing. 1,826,565; Oct. 6.
Murchi, Guy, jr., Dedham, Mass. Cuff link. 1,826,364; Oct. 6.
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,825,972; Oct. 6.
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating system. 1,825,973; Oct. 6.
Murray Company, The. (See Behle, J., King, and Blackmon, assignors.)
Murray, John J., Rye, assignor to American Bank Note Company, New York, N. Y. Sheet collecting machine. 1,825,885; Oct. 6.
Murray, Thomas F., jr. (See Staud, C. J., and Murray.)
Murray, Thomas F., jr., and C. J. Staud, assignors to Eastman Kodak Company Rochester, N. Y. Cellulosic composition of matter containing piperidine. 1,826,667; Oct. 6.
Murray, Thomas F., jr., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing anisidine. 1,826,668; Oct. 6.
National Automatic Tool Company, The. (See Muhl, Charles H., assignor.)
National Blank Book Company. (See Schade, Frank S., assignor.)
National Brake & Electric Company. (See Beimling, W. A., and Peterson, assignors.)
National India Rubber Company. (See Rice, Harold de B., assignor.)
National Supply Company, The. (See Zerbe, Lewis E., assignor.)
National Tube Company. (See Chappell, Eugene L., assignor.)
National Tube Company. (See Mazurie, J. V., and Patterson, assignors.)
Naugle, John J. (See Ehrhart, E. N., and Wickenden, assignors.)

Naylor, William F., Bergen Field, and T. L. Sponseller, Grantwood, assignors to Aluminum Screw Machine Products Company, Edgewater, N. J. Apparatus for shearing aluminum sections. 1,826,016; Oct. 6.

Neidich, Samuel A., Edgewater Park, assignor to Sanite Corporation, Burlington, N. J. Tubes and forming the same. 1,826,669; Oct. 6.

Nelson, Nels S., assignor of one-half to F. G. Meyer, Detroit, Mich. Thermoresponsive fuse. 1,825,811; Oct. 6.

Nemenyi, Lajos, Mount Vernon, N. Y. Boiler feeding device. 1,826,017; Oct. 6.

Nenninger, Lester F., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Truing mechanism. 1,825,753; Oct. 6.

Neumann, Richard G., Wandsbek, near Hamburg, Germany. Wind separator for coca powder. 1,826,086; Oct. 6.

Neumann, Wilhelm, Wurzburg, assignor to the firm Schering-Kahlbaum A. G., Berlin, Germany. Acylated k-strophanthidine and producing same. 1,825,812; Oct. 6.

Newman, William J., Chicago, Ill. Apparatus for drilling wells. 1,826,087; Oct. 6.

Newman, W. J., Company. (See Gault, John J., assignor.)

Newton, Frank H., Los Angeles, Calif., assignor to The Electro Thermal Company, Steubenville, Ohio. Dilator. 1,826,284; Oct. 6.

Newton, Herbert E., Tonbridge, England. Lifting jack. 1,825,702; Oct. 6.

Nichols Copper Company. (See Fowler, E. J., and Baird, assignors.)

Nicholson, Frank H. (See Allison, L. R., and Nicholson.)

Niles Steel Products Company, The. (See Fitzgerald, James E., assignor.)

Nineteen Hundred Corporation. (See Behan, Thomas W., assignor.)

Nitchy, George W., Kansas City, Mo. Air tempering and humidifying unit. 1,825,813; Oct. 6.

Nitralloy Corporation, The. (See Fry, Adolf, assignor.)

N rse Corporation. (See Blood, Howard E., assignor.)

Norris, James F., Boston, Mass., assignor, by mesne assignments, to Petroleum Chemical Corporation, New York, N. Y. Purification of synthetic or substitution products such as alkyl halides. 1,825,814; Oct. 6.

Norton-Lasier Company. (See Lasier, David R., assignor.)

Nott, Albin J., Richmond, N. Y. Surface condenser. 1,826,521; Oct. 6.

Nye, Ralph D., Columbus, Ohio. Reversing valve and equipment for combustion control. 1,825,815; Oct. 6.

Obee, Leon E., Whitehouse, Ohio. Circuit closer for automobile rear lights. 1,825,917; Oct. 6.

Obermaier, Otto J., Neustadt-on-the-Hardt, Germany. Dyeing textile fiber laps. 1,825,974; Oct. 6.

O'Brien, Frank, Flint, assignor to General Motors Corporation, Detroit, Mich. Process and apparatus for bending tubing. 1,826,403; Oct. 6.

O'Hearn, George E., assignor to O'Hearn Manufacturing Company, Gardner, Mass. Panel fabric for furniture or similar article. Des. 85,299; Oct. 6.

O'Hearn Manufacturing Company. (See O'Hearn, George E., assignor.)

Ohio Brass Company, The. (See Austin, Arthur O., assignor.)

Ohnstrand, Enoch, Kenmore, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Insulated furniture construction. 1,826,670; Oct. 6.

Ohnstrand, Enoch, Kenmore, assignor to Remington Rand Inc., New York, N. Y. Label holder. 1,826,671; Oct. 6.

Oishei, John R., assignor to Trico Products Corporation, Buffalo, N. Y. Windshield parker. 1,826,672; Oct. 6.

Olpp, Ernest A., New York, N. Y. Circuit controlling means. 1,826,477; Oct. 6.

Orlando, Paolo, assignor to Silurificio Whitehead Di Fume Societa Anonima, Fiume, Italy. Torpedo. 1,825,816; Oct. 6.

Orsmby, Elon A., Centerville, Calif. Can opener. 1,826,324; Oct. 6.

Ormsby, Erle, assignor to Central Mine Equipment Company, St. Louis, Mo. Blasting cartridge and tamper. 1,826,150; Oct. 6.

Osborn, Warren M., Chicago, Ill. Rail silencing tie plate. 1,826,566; Oct. 6.

Osgood, Charles F., Claremont, N. H., assignor Sullivan Machinery Company. Mining apparatus. 1,826,218; Oct. 6.

Ostlind, Oscar J., Marshfield, Oreg. Pressure operated valve. 1,826,088; Oct. 6.

Oswald, Alfred E., Hackensack, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Brush for electric motors. 1,826,478; Oct. 6.

Othmer, Donald F. (See Clarke, H. T., and Othmer.)

Ottinger, Nathan, New York, N. Y. Folder or similar container constructed of flexible material. Des. 85,300; Oct. 6.

Overhead Door Corporation. (See Blodgett, Herbert C., assignor.)

Owen, Ira J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet sweeper brush and pulley. 1,826,432; Oct. 6.

Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Machine for severing composite glass sheets and the like. 1,825,886; Oct. 6.

Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass tank construction. 1,825,887; Oct. 6.

Owens, Cephis E., Detroit, Mich. Compressor for refrigeration apparatus. 1,826,479; Oct. 6.

Owens Development Corporation. (See Owens, Freeman H., assignor.)

Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Apparatus and method for reproducing photographic sound records. 1,826,522; Oct. 6.

Owsley, Herbert, et al., trustee. (See Patzkowski, E. C.)

Oxford Varnish Corporation. (See von Webern, Guido, assignor.)

Pacific Clay Products. (See McClintock, William, assignor.)

Pacific Machinery Company. (See Thompson, Albert R., assignor.)

Packard Electric Company. (See Mohr, Hubert C., assignor.)

Page, Dwight C., assignor to The Heald Machine Company, Worcester, Mass. Workholding apparatus. 1,825,677; Oct. 6.

Pagel, Ernest C., assignor to Signode Steel Strapping Company, Chicago, Ill. Seal. 1,826,018; Oct. 6.

Panhorst, Paul. (See Schwarz, C., and Panhorst.)

Parker, John W., Detroit, Mich. Grinding wheel trimming fixture. 1,826,219; Oct. 6.

Parker, Leslie O., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Signal lamp. 1,826,220; Oct. 6.

Pass, Sam. (See Levi, Julius, assignor.)

Patenge, Robert, Los Angeles, Calif. Milk bottle support. 1,825,975; Oct. 6.

Patterson, John, Oakland, assignor of one-fourth to B. Walker and one-fourth to C. L. Walker, Piedmont, Calif. Stratifying arrangement for internal combustion engines. 1,825,817; Oct. 6.

Patterson, Thomas. (See Mazurie, J. V., and Patterson.)

Patzkowski, Elmer C., assignor to E. C. Patzkowski, E. Truett, and H. Owsley, trustees, Compton, Calif. Aeroplane. Des. 85,301; Oct. 6.

Paul, William F., Oaklyn, N. J. Wobble wheel power transmission. 1,826,325; Oct. 6.

Pavelsky, Thomas R., Rochester, N. Y. Traffic signal. Des. 85,302; Oct. 6.

Payer, Jacob H., Philadelphia, Pa. Jewel setting tool. 1,826,567; Oct. 6.

Payne, Charles G., Glasgow, Ky. Bearing puller. 1,826,631; Oct. 6.

Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Indicator for fallen drop wires. 1,826,326; Oct. 6.

Pearson, Henry C., Pasadena, Calif. Ball. 1,826,221; Oct. 6.

Peerless Unit Ventilation Co. Inc. (See Callahan, Michael J., assignor.)

Peliel, Zygmunt, New York, N. Y., and G. Zych, Linden, N. J. Door alarm. 1,825,888; Oct. 6.

Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for transferring glass parisons. 1,826,019; Oct. 6.

Peltier, Frank D., and E. Widerborg, Evansville, Ind., assignors, by mesne assignments, to Servel, Inc., New York, N. Y. Shaft seal. 1,825,918; Oct. 6.

Pelton, George E., Hartford, Conn. Supplying ink to inking ribbons. 1,826,568; Oct. 6.

Penn Metal Company. (See Redding, Edward T., assignor.)

Penrose, Chester F. (See Mansfield, J. H., and Penrose.)

Perfect Circle Company, The. (See Teetor, Ralph R., assignor.)

Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Pressure control for automatic pumps. 1,826,089; Oct. 6.

Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Thermoelectric control valve. 1,826,151; Oct. 6.

Peters, Charles L. (See Hunt, F. E., and Peters.)

Petersen, Martin J., Canyon, Minn. Trap. 1,826,569; Oct. 6.

Peterson, Axel, Minneapolis, Minn. Sawing machine. 1,826,222; Oct. 6.

Peterson, Charles A., assignor to The Peterson Nut Company, Cleveland, Ohio. Display rack. Des. 85,303; Oct. 6.

Peterson, Floyd B. (See Beimling, W. A., and Peterson.)

Peterson Nut Company, The. (See Peterson, Charles A., assignor.)

Peterson, Roy E., East Norwalk, assignor to The E. H. Hotchkiss Company, Norwalk, Conn. Rotary anvil for stapling machines. 1,826,632; Oct. 6.

Petroleum Chemical Corporation. (See Norris, James F., assignor.)

Petroleum Rectifying Company of California. (See Eddy, Harold C., assignor.)

Petticore, Anthony, Sedro, Woolley, Wash. Automatic switch electric sadiron. 1,825,919; Oct. 6.

Pettit, James C., assignor of one-third to C. Mullinax, and one-third to B. Morris, Blackstone, Va. Shuttle for separators. 1,826,633; Oct. 6.

Pew, Arthur E., jr., Bryn Mawr, and H. Thomas, Ridley Park, assignors to Sun Oil Company, Philadelphia, Pa. Cracking mineral oil. 1,825,976; Oct. 6.

Pew, Arthur E., jr., Bryn Mawr, and H. Thomas, Ridley Park, assignors to Sun Oil Company, Philadelphia, Pa. Cracking mineral oil. 1,825,977; Oct. 6.

Pfimlin, Jules. (See Gégauff, C., and Pfimlin.)

Phelan, Louis A. M., Chicago, Ill., and P. S. Bear, Elkhart, Ind., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical switch. 1,826,570; Oct. 6.

Phelan, Louis A. M., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical apparatus. 1,826,571; Oct. 6.

Phelan, Louis A. M., and P. S. Bear, Elkhart, Ind., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical device. 1,826,572; Oct. 6.

Phelps, Will E., Cleveland Heights, Ohio. Traffic signal indicator for automobiles. 1,826,090; Oct. 6.

Philadelphia Lawn Mower Company Inc. (See Hessenbruch, Hermann M., assignor.)

Philbrick, Frederick B., Needham, assignor to The Gamewell Company, Newton Upper Falls, Mass. Multicircuit testing mechanism. 1,825,978; Oct. 6.

Philippi, Theodore F., St. Louis, Mo. Punch press. 1,826,152; Oct. 6.

Photostat Corporation. (See Caps, Arthur W., assignor.)

Pickering, Albert V., Woonsocket, R. I., assignor, by mesne assignments, to Portable Electric Tool Corporation, Fitchburg, Mass. Jig saw. 1,826,187; Oct. 6.

Pickering, Albert V., and A. H. Moore, assignors to Portable Electric Tool Corporation, Fitchburg, Mass. Jig saw. 1,826,188; Oct. 6.

Pilkington Brothers Limited. (See Waldron, F. B., and Griffin, assignors.)

Pinto Valley Co. (See Mott, Garrett, assignor.)

Piotti, Frank, et al. (See Boggs, Hugh L., assignor.)

Piper, Earle C., assignor to The Lubretor Company, Columbus, Ohio. Lubricating system for internal combustion engines. 1,825,889; Oct. 6.

Pippin, Haskel A., Okmulgee, Okla. Well drilling apparatus. 1,826,634; Oct. 6.

Pistor, Gustav, Leipzig, R. Suchy, and E. Reubke, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Simultaneously volatilizing phosphorus and producing latent hydraulic binders. 1,826,433; Oct. 6.

Pittman, Clovis C., assignor of one-half to T. G. McClatchey, New York, N. Y. Cylinder lining. 1,825,678; Oct. 6.

Pittsburgh Equitable Meter Company. (See Chrisman, Horace, assignor.)

Pittsburgh Plate Glass Company. (See Clause, Robert L., assignor.)

Pittsburgh Plate Glass Company. (See Owen, William, assignor.)

Poderzaj, Ivan. (See Hansen, E., and Poderzaj.)

Poleck, Hans, Berlin-Lichterfelde, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Apparatus for determining the distance to ground connections in electric conductors. 1,825,754; Oct. 6.

Poorman, John W., Blanchester, Ohio. Automatic tire pressure maintainer. 1,826,523; Oct. 6.

Popp, Rudolf, Valparaiso, Ind., assignor to McGill Manufacturing Company. Fixture mounting hickey. 1,825,920; Oct. 6.

Portable Electric Tool Corporation. (See Pickering, Albert V., assignor.)

Portable Electric Tool Corporation. (See Pickering, A. V., and Moore, assignors.)

Porter, Garnett H. (See Benner, R. C., and Porter.)

Porter, Vernon C., assignor to Charles M. Higgins & Co., New York, N. Y. Attachment for bottles. 1,826,285; Oct. 6.

Post, Claude L., Chicago, Ill. Feeding device. 1,826,020; Oct. 6.

Potter, Elbert R., Villa Park, assignor to H. A. Hirst, Chicago, Ill. Speed up hair clipper. 1,825,818; Oct. 6.

Potter, George A., Dallas, Tex. Lubricant heat dissipating device. 1,825,819; Oct. 6.

Pratt, William B., Wellesley, Mass., assignor, by mesne assignments, to Dispersions Process, Inc., Dover, Del. Reclaiming waste rubber and product of same. 1,826,091; Oct. 6.

Preparation Industrielle Des Combustibles (Societe Anonyme). (See Coutin, Jean, assignor.)

Prestek, Louis A., Seattle, Wash. Musical signaling device. 1,826,645; Oct. 6.

Prest-O-Lite Co. Inc. (See Mesinger, William F., assignor.)

Price, William D., Prince Georges County, Md. Railway car hand brake. 1,826,636; Oct. 6.

Prindle, Karl E. (See Charch, W. H., and Prindle.)

Prosperity Company, The. (See Ledbetter, James C., assignor.)

Prosperity Company, The. (See Yanchenko, Basil J., assignor.)

Quigan, Frank J., Inc. (See Zachman, William H., assignor.)

Rabozzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Spark plug with a ruff neck bushing. 1,826,404; Oct. 6.

Radio Corporation of America. (See Shapiro, L., and Larsen, assignors.)

Rail Appliance Corporation. (See Fulton, Lyle H., assignor.)

Ramage, John H., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Treatment of metallic filaments. 1,826,524; Oct. 6.

Randall, James F., Ozark, Mo. Propeller. 1,826,021; Oct. 6.

Rappich, George F., Marengo, Ill. Camping trailer. 1,826,480; Oct. 6.

Rauen, John T., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,825,703; Oct. 6.

Raus, John, Cleveland, Ohio, assignor, by mesne assignments, to McIlvaine Patent Corporation, St. Charles, Ill. Resistance apparatus. 1,826,673; Oct. 6.

Read, Ernest K., Forrest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Disconnecting switch. 1,825,820; Oct. 6.

Ready, William A., Brookline, Mass. Shovel and the like. 1,826,022; Oct. 6.

Redding, Edward T., Parkersburg, W. Va., assignor to Penn Metal Company, Cambridge, Mass. Expanded metal lath machine. 1,826,286; Oct. 6.

Reed, Harold V., assignor to The Borg & Beck Company, Chicago, Ill. Friction clutch. 1,825,979; Oct. 6.

Reed, Harold V., assignor to The Borg & Beck Company, Chicago, Ill. Friction clutch. 1,825,980; Oct. 6.

Reed, Harold V., assignor to The Borg & Beck Company, Chicago, Ill. Driven plate for friction clutches. 1,825,981; Oct. 6.

Reiss, Walter A., Linden, Md. Vibrating device. 1,826,434; Oct. 6.

Remington Accounting Machine Corporation. (See Strother, Robert H., assignor.)

Remington Rand Inc. (See Ohnstrand, Enoch, assignor.)

Remington Typewriter Company. (See Going, George G., assignor.)

Remsnider, George, Belleville, Ill. Fluid pressure regulator. 1,825,755; Oct. 6.

Reo Motor Car Company. (See Cotes, William A., assignor.)

Reo Motor Car Company. (See Furgason, Claude E., assignor.)

Republic Steel Corporation. (See Coryell, William C., assignor.)

Republic Steel Corporation. (See Sills, George W., assignor.)

Research & Development Corporation. (See Daigliesh, Herbert V., assignor.)

Reubke, Emil. (See Pistor, G., Suchy, and Reubke.)

Reynard, Otto, London, England. Briquetting finely divided coal, fuel, of other pulverulent materials. 1,825,756; Oct. 6.

Reynolds, Anson J., St. Paul, Minn. Cushion tire. 1,825,982; Oct. 6.

Reynolds Spring Company. (See McElroy, Robert E., assignor.)

Rheinische Metallwaaren und Maschinenfabrik. (See Heinemann, Karl, assignor.)

Rice, Harold de B., assignor to National India Rubber Company, Bristol, R. I. Making flexible insulated wire. 1,826,092; Oct. 6.

Rich Tool Company. (See Hervig, Richard, assignor.)

Rich Tool Company. (See Hervig, R., and Jardine, assignors.)

Rich Tool Company. (See Jardine, Robert, assignor.)

Richardson Company, The. (See Keller, Charles L., assignor.)

Richfield Oil Company of California. (See Lachman, Arthur, assignor.)

Richter, Bernhard, Berlin, Germany. Rotatable gas filter. 1,826,256; Oct. 6.

Rider, Ernest G., assignor to Stokes and Smith Company, Philadelphia, Pa. Box wrapping mechanism. 1,826,287; Oct. 6.

Rider, Ernest G., assignor to Stokes and Smith Company, Philadelphia, Pa. Box wrapping mechanism. 1,826,435; Oct. 6.

Ripley, George A. (See Hutchison, Delbert T., assignor.)

Rixson, Oscar C., Co. (See Garrison, Forrest C., assignor.)

Roberts, Benjamin H., and E. Gach, Chicago, Ill., assignor to Bird & Son, Inc., East Walpole, Mass. Building strip and construction. 1,826,674; Oct. 6.

Roberts, Eugene, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah. Drive transmission for centrifugals. 1,826,675; Oct. 6.

Roberts, Harry L., Keokuk, Iowa. Locked closure for fuel tanks. 1,826,023; Oct. 6.

Roberts, Roland R. (See Forward, W. J. F., and Roberts.)

Robertson Art Tile Co. (See Solon, Léon V., assignor.)

Robinson, Gale S., Seattle, Wash. Combined punch and slitting device. 1,826,257; Oct. 6.

Robinson, Joseph, New York, N. Y. Automatic air and steam hose connecter. 1,826,288; Oct. 6.

Rodgers, Richard L., Chicago, Ill., assignor, by mesne assignments, to Charcolite Corporation, Clinton, Ind. Apparatus for carbonizing coal. 1,826,573; Oct. 6.

Roeder, William O., Oshkosh, Wis. Toy. 1,825,921; Oct. 6.

Roessner, William L., E. Wheeler, and V. C. Smedley, Denver, Colo.; said E. Wheeler and V. C. Smedley assignors to said W. L. Roessnes. Fire extinguisher. 1,825,922; Oct. 6.

Rogers, Thomas H., assignor to E. I. du Pont de Nemours & Co., Wilmington, Del. Oil composition and process of retarding development of rancidity therein. 1,826,258; Oct. 6.

Rohwedder, Otto F., assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa. Bread handling apparatus. 1,826,676; Oct. 6.

Roller, Frank W., East Orange, N. J., assignor to Roller-Smith Company. Electric weighing apparatus. 1,826,024; Oct. 6.

Roller-Smith Company. (See Roller, Frank W., assignor.)

Romine, Robert T., Mount Clemens, Mich. Industrial truck. 1,825,923; Oct. 6.

Root, Harry, Buffalo, N. Y. Kite string reel. 1,826,481; Oct. 6.

Rose, Chester, Glenns Ferry, Idaho. Dirigible light. 1,826,025; Oct. 6.

Rose, Edward D. (See Heymann, G. H., and Rose.)

Rose Patch and Label Co., The. (See Bignell, George L., assignor.)

Rosen, Alfred H., Alcoma, Va. Corn thinner. 1,826,365; Oct. 6.

Rosenthal, Arthur, Grand Rapids, Mich. Apparatus and process for printing letterheads. 1,825,821; Oct. 6.

Rosenthal, Arthur, Grand Rapids, Mich. Printing machine. 1,826,525; Oct. 6.

Ross, Irving W., et al. (See Ross, I. W., and Krob, assignors.)

Ross, Irving W., and J. S. Krob, assignors of one-half to I. W. Ross and one-half to J. S. Krob, Chicago, Ill. Stripping machine. 1,826,526; Oct. 6.

Rostek, Vinzent R., Philadelphia, Pa. Pressure steam cooker. 1,826,366; Oct. 6.

Rothwell, Ralph B., Los Angeles, Calif. Dispensing device. 1,826,189; Oct. 6.

Rudeberg, Arvid, assignor to Aktiebolaget Menitor, Stockholm, Sweden. Propeller. 1,826,026; Oct. 6.

Rumbaugh, Roland, C., Shreveport, La. Jack post. 1,826,574; Oct. 6.

Rummel, Philip C., jr., Glenside, Pa. Power stop mechanism. 1,826,482; Oct. 6.

Rumney, Mason P., assignor to Detroit Steel Products Company, Detroit, Mich. Shock absorber. 1,826,575; Oct. 6.

Rump, Franz A., Philadelphia, Pa. Lighter for gas burners and stoves. 1,826,576; Oct. 6.

Rundell, Raymond R., Waterville, Conn. Paper roll holder. 1,825,822; Oct. 6.

Russell Manufacturing Company, The. (See Sauermann, George H., assignor.)

Ryder, Elmer, Elgin, Ill. Shock absorbing mechanism. 1,825,823; Oct. 6.

Ryder, Elmer, Elgin, Ill. Motor vehicle heater. 1,825,824; Oct. 6.

S. I. A. M. Limited. (See Guermont, Miguel E., assignor.)

Saginaw Furniture Shops. (See Ginsburg, Lionel L., assignor.)

Sailer, Rudolph J., Townley, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Hemmer. 1,826,677; Oct. 6.

Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Button loop. 1,826,223; Oct. 6.

Sanford, Hugh W., Knoxville, Tenn. Railway car. 1,826,387; Oct. 6.

Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake operating connection. 1,825,680; Oct. 6.

Sanite Corporation. (See Neidich, Samuel A., assignor.)

Sanymetal Products Company, The. (See Carpenter, R. F., and Anderson, assignors.)

Sauermann, George H., assignor to The Russell Manufacturing Company, Middletown, Conn. Ventilated webbing. 1,825,924; Oct. 6.

Savani, Luigi, Milan, assignor to Societa Italiana Ernesto Breda per Costruzioni Meccanicke, Milan, Italy. Percussion fuse for bombs and other projectile. 1,826,190; Oct. 6.

Schade, Frank S., assignor to National Blank Book Company, Holyoke, Mass. Book cover. 1,826,259; Oct. 6.

Schaefer, Frederic, Pittsburgh, Pa. Manufacturing closed-link brake hangers. 1,826,027; Oct. 6.

Schantz, Henry, New Castle, Pa. Molding machine. 1,826,577; Oct. 6.

Schering-Kahlbaum A. G. (See Neumann, Wilhelm, assignor.)

Schickler, Albert C., assignor to E. E. Allyne, Cleveland, Ohio. Refrigerating system. 1,826,436; Oct. 6.

Schieldrop, Bjarne H., London, England, assignor to Blaw Knox Company, Pittsburgh, Pa. Apparatus for projecting materials. 1,826,483; Oct. 6.

Schjolin, Eric O., Birmingham, assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich. Cooling system. 1,826,405; Oct. 6.

Schlage Lock Company. (See Schlage, Walter R., assignor.)

Schlage, Walter R., assignor to Schlage Lock Company, San Francisco, Calif. Post anchored door latch. 1,826,093; Oct. 6.

Schlaupitz, Oswald, assignor to The Timken Roller Bearing Company, Canton, Ohio. Gauging machine. 1,826,527; Oct. 6.

Schmanska, Frank F., Burlington, Vt. Feeler. 1,826,637; Oct. 6.

Schmitt, Charles J., Algoma, Wis. Table. 1,826,578; Oct. 6.

Schneider, Laura M., New York, N. Y. Hose supporter. 1,826,368; Oct. 6.

Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Radiator cap or similar article for an automotive vehicle. Des. 85,304; Oct. 6.

Schnier, William C., assignor of one-half to J. S. Lemley, St. Louis, Mo. Toy bank. 1,826,528; Oct. 6.

Schoenburg, Curt, and G. von der Bruck, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of phenols from gas liquors. 1,826,369; Oct. 6.

Schroeder, Max G. T., Berlin, Germany. Production of sulphite liquor. 1,826,028; Oct. 6.

Schubert & Salzer Maschinenfabrik Aktiengesellschaft. (See Lässig, Fritz, assignor.)

Schuette, Hermann, Mannheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of synthetic tanning agents. 1,826,094; Oct. 6.

Schulder, Fred, Cleveland, Ohio. Coupling connection. 1,825,825; Oct. 6.

Schulder, Fred, Cleveland, Ohio. Lavatory faucet. 1,825,826; Oct. 6.

Schultz, Johann B., Glauchau, Germany. Shuttle picker. 1,826,484; Oct. 6.

Schultze, Willi, Halle-on-the-Salle, Germany. Treating talloel. 1,826,224; Oct. 6.

Schumacher, Albert H., Passaic, N. J. Rotary cloth press. 1,825,757; Oct. 6.

Schuster, Carl, Pittsburgh, Pa. Knife blade switch and making the same. 1,826,225; Oct. 6.

Schutte, August E., Northboro, Mass., assignor to Warren Brothers Company. Forming concrete structural units. 1,826,529; Oct. 6.

Schwartz, Raymon, et al. (See Moise, Harmon D., assignor.)

Schwartz, Samuel, Albany, N. Y., assignor to Si-Wo Corporation. Necktie. Re18,222; Oct. 6.

Schwarz, Carl, and P. Panhorst, Philadelphia, Pa. Adjustable form for making paper boxes. 1,826,260; Oct. 6.

Schwarz, Richard E., Royal Oak, and G. A. Matthews, Detroit, Mich. Electric switch. 1,826,370; Oct. 6.

Schwerdtfeger, Walter, Unterturkheim, Wurttemberg, assignor to Daimler-Motoren-Gesellschaft, Unterturkheim, Germany. Internal combustion engine and working the same. 1,826,638; Oct. 6.

Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Concrete mixer. 1,826,289; Oct. 6.

Scott, Frank W., Kirkland, Ill. Sheep shears. 1,825,890; Oct. 6.

Scottish Dyes, Limited. (See Jones, J. I. M., and Kilby, assignor.)

Scovill Manufacturing Company. (See King, George A., assignor.)

Scovill Manufacturing Company. (See Summey, David L., assignor.)

Scovill Manufacturing Company. (See Warner, Frank E., assignor.)

Seabrook, Marion W., et al. (See Moise, Harmon D., assignor.)

Seamon, Charles, Hollis, N. Y. Shirring attachment. 1,825,758; Oct. 6.

Searle, George R., London, England. Loud-speaker for wireless apparatus or the like. 1,826,226; Oct. 6.

Seekonk Lace Company. (See King, Gilbert M., assignor.)

Seely, Thomas H., Melrose, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Pressure mechanism. 1,825,704; Oct. 6.

Segal Lock & Hardware Co. (See Segal, Samuel, assignor.)

Segal, Samuel, assignor to Segal Lock & Hardware Co., Inc., New York, N. Y. Razor. 1,826,530; Oct. 6.

Seidelinger, Robie, Philadelphia, Pa. Ribbon mechanism for typewriters. 1,825,705; Oct. 6.

Selden Company, The. (See Jaeger, Alphons O., assignor.)

Selje, Frederick A., assignor to Chrysler Corporation, Detroit, Mich. Trunk rack. 1,825,679; Oct. 6.

Servel, Inc. (See Peltier, F. D., and Widerborg, assignors.)

Scott, Henry P., Company, The. (See Bond, Samuel C., assignor.)

Shapiro, Lazarus, New York, N. Y., and P. J. Larsen, Cranford, N. J., assignors to Radio Corporation of America. Radiocabinet with adjustable loop. 1,826,437; Oct. 6.

Sheard, Joseph H., assignor to David Lupton's Sons Company. Philadelphia, Pa. Window construction. 1,826,678; Oct. 8.

Shearer, Ray R., Cleveland, Ohio. Radiocabinet. Des. 85,305; Oct. 6.

Shearer, Ray R., Cleveland, Ohio. Radiocabinet. Des. 85,306; Oct. 6.

Sheets, Barton R., and C. M. Stewart, assignors to Gardner-Denver Company, Denver, Colo. Fluid operated tool. 1,826,095; Oct. 6.

Shenk, Charles J., Westminster, Pa. Expanding mandrel. 1,825,925; Oct. 6.

Shepler, Charles H. (See Christiansen, Niels, assignor.)

Sherman, Alvin G., Grosse Point, assignor to The Detroit Vapor Stove Company, Detroit, Mich. Self-aligning thermostatic valve assembly. 1,826,327; Oct. 6.

Sherman, Alvin G., Grosse Point, assignor to The Detroit Vapor Stove Company, Detroit, Mich. Thermostatic control for ovens. 1,826,328; Oct. 6.

Sherman, John Q., Dayton, Ohio, assignor to The Standard Register Company. Multiple manifolding machine. 1,825,706; Oct. 6.

Shows, John E. (See Dunn, W. T., and Shows.)

Shuster, Ira B. (See Shuster, Samuel K., assignor.)

Shuster, Samuel K., Sandyville, assignor of one-half to I. B. Shuster, Louisville, Ohio. Protective shooting mechanism. 1,825,926; Oct. 6.

Siemens & Halske Aktiengesellschaft. (See Poleck, Hans, assignor.)

Sierad, Milton, assignor to George W. Button Corporation, New York, N. Y. Bottle. Des. 85,307; Oct. 6.

Signode Steel Strapping Company. (See Pagel, Ernest C., assignor.)

Silica Gel Corporation, The. (See Wagner, Fred H., jr., assignor.)

Silica Gel Corporation, The. (See Wilson, Alvin C., assignor.)

Sills, George W., Chicago, Ill., assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Guide for rolling mills. 1,826,531; Oct. 6.

Silurificio Whitehead Di Fiume Societa Anonima. (See Orlando, Paolo, assignor.)

Simmons Company. (See Gail, John F., assignor.)

Simplo Fullfeder Gesellschaft Voss, Lausen & Dziambor. (See Heerklotz, Max, assignor.)

Simpson, Kenneth M., New York, N. Y. Refining ferrochrome. 1,826,261; Oct. 6.

Singer Manufacturing Company, The. (See Corrall, H., and Heggie, assignors.)

Singer Manufacturing Company, The. (See Sailer Rudolph J., assignor.)

Singmaster, James A., Bronxville, N. Y., and H. S. Colton, assignors, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Light resistant lithopone. 1,826,153; Oct. 6.

Sinnes, Anton C., Miami, Fla. Window adjuster. 1,825,681; Oct. 6.

Sitzman, Arthur, et al. (See Barnett, Louis, assignor.)

Si-Wo Corporation. (See Schwartz, Samuel, assignor.)

Slawski, Stephen F., Culver City, Calif. Folding ironing board. Re18,223; Oct. 6.

Sloteman, Donald K., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire. Des. 85,308; Oct. 6.

Small, Edward F., Waltham, Mass. Reversing seat base. 1,826,532; Oct. 6.

Smalley, Robert C., Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Method and apparatus for introducing foreign substances into vacuum tube lights. 1,826,383; Oct. 6.

Smalley, Robert C., Arlington, N. J., and W. E. Moorefield, Flushing, assignors to Claude Neon Lights, Inc., New York, N. Y. Sign. 1,826,388; Oct. 6.

Smedley, Victor C. (See Roessner, W. L., Wheeler, and Smedley.)

Smith, Arthur E., Los Angeles, Calif. Closure for containers. 1,826,096; Oct. 6.

Smith, Arthur E., assignor of one-half to H. J. Koski, Selma, Ala. Bevel square. 1,825,759; Oct. 6.

Smith, Clyde J., assignor to Morgan & Wright, Detroit, Mich. Valve mechanism. 1,826,097; Oct. 6.

Smith, George S., Edwardsville, Ill. Windshield wiper attachment. 1,825,891; Oct. 6.

Smith, Herman B., Plainfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Waste heat boiler. 1,826,029; Oct. 6.

Smith, John W., Syracuse, N. Y. Fuel mixing device. 1,825,892; Oct. 6.

Smith, Julian C. (See Bellamy, H. T., and Smith.)

Smith, Paul S., Madison, assignor, by mesne assignments, to Lea Fabrics Inc., Newark, N. J. Single texture fabric and making the same. 1,825,827; Oct. 6.

Smitmans, John A., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Pinion stand. 1,825,927; Oct. 6.

Smoot, John H. (See Aufiero, J. M., and Smooth.)

Snare, Frederick, Corporation. (See Litter, Ferdinand J., assignor.)

Snyder, Herbert W., and R. B. Krueger, Lima, Ohio. Locomotive steam distribution. 1,826,290; Oct. 6.

Snyder, Howard F., assignor, by mesne assignments, to The Maytag Company, Newton, Iowa. Soaper and brusher for washing machine tubs. 1,826,030; Oct. 6.

Societa Italiana Ernesto Breda per Costruzioni Meccanicke. (See Savani, Luigi, assignor.)

Societe Anonyme Des Usines Chausson. (See Coquille, Emile H., assignor.)

Societe d'Electro-Chimie, d'Electrometallurgie et des Acieries Electriques d'Ugine. (See Lamy, L., Mathieu, and Gagnaux, assignors.)

Société de Recherches et d'Exploitations Petrolifères. (See Godel, Albert, assignor.)

Societe Des Moteurs Dugelay. (See Dugelay, Paul, assignor.)

Société Des Usines Chimiques Rhône Poulenc. (See Bellone, Alfred F. S., assignor.)

Societe Le Nickel. (See Thurneyssen, Christian, assignor.)

Soderberg, John G. (See Lundgren, W. E., and Soderberg.)

Solon, Leon V., assignor to Robertson Art Tile Co., Trenton, N. J. Producing designs on tile. 1,826,262; Oct. 6.

Sonnefeld, August, assignor to the Firm of Carl Zeiss, Jena, Germany. Photographic lens. 1,825,828; Oct. 6.

Spaulding Fibre Company. (See Lancey, Roswell A., assignor.)

Specialties Manufacturing Company. (See McCoy, Harry E., assignor.)

Spencer & Cook, Limited. (See Mason, Harold, assignor.)

Spencer, Wesley D., et al. (See Gonsett, Robert R., assignor.)

Spicers Limited. (See Goldsmith, J. N., and Baker, assignors.)

Spiegler, Gottfried and F. Bügler, Vienna, Austria. X-ray system. 1,826,579; Oct. 6.

Spindler, Peter J., Olean, N. Y. Treating oil fields. 1,826,371; Oct. 6.

Spinney, Edmund S., Attleboro, Mass., assignor to The Adam Sutcliffe Company. Pinless ticket. 1,826,580; Oct. 6.

Splain, Walter E., Terrace Park, assignor to W. B. Grischy, Cincinnati, Ohio. Liquid dispensing apparatus. 1,825,682; Oct. 6.

Sponseller, Emery L. (See Naylor, W. F., and Sponseller.)

Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Condenser for refrigerating apparatus. 1,825,760; Oct. 6.

Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Fluid cooler. 1,826,372; Oct. 6.

Spreen, Charles C., Detroit, Mich. Seal for journal bearings. 1,826,373; Oct. 6.

Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Refrigeration. 1,826,374; Oct. 6.

Sprung, Abraham, assignor to Municipal Street Sign Co., Inc., New York, N. Y. Street sign. 1,826,581; Oct. 6.

Squyer, Albert R. (See Weaver, G. E., and Squyer.)

Stampe, Gerhard K. E. H., assignor, by mesne assignments, to H. O. Drager, Lubeck, Germany. Absorbent for breathing cartridges. 1,826,329; Oct. 6.

Standard Register Company, The. (See Sherman, John Q., assignor.)

Standard Steel Spring Company. (See McMahon, Harry R., assignor.)

Standard Steel Works. (See Gredell, Otto N., assignor.)

Stanley Works, The. (See Rodmer, Christian, assignor.)

Staud, Cyril J. (See Murray, T. F., jr., and Staud.)

Staud, Cyril J. (See Webber, C. S., and Staud.)

Staud, Cyril J., and T. F. Murray, jr., assignors to Eastman Kodak Company, Rochester, N. Y. Improving cellulose ester films. 1,826,679; Oct. 6.

Stedefeld, Curt, and W. Black, Heidelberg, Germany; said Black assignor to said Stedefeld. Turning arrangement for monorail suspended vehicles. 1,825,683; Oct. 6.

Steele, Ralph W., Madison Township, Clarion County, Pa. Display device. 1,826,533; Oct. 6.

Stegmann, Karl, assignor to Johne-Werk Grafische Maschinen-Aktiengesellschaft, Bautzen, Germany. Positioning means in paper cutting machines and the like. 1,825,928; Oct. 6.

Sten, John. (See Kunian, P., and Sten.)

Stephens, Edward A., Los Angeles, Calif. Tool attachment means. 1,826,098; Oct. 6.

Stephens, Robert M., Winnipeg, Manitoba, Canada. Fire escape. 1,826,263; Oct. 6.

Sterzel, Kurt A., assignor to the Firm Koch & Sterzel, Aktiengesellschaft, Dresden, Germany. Apparatus for comparing quantities of alternating-current systems. 1,826,191; Oct. 6.

Steudel, George E., Chicago, Ill. Checkerwork. 1,826,227; Oct. 6.

Stevens, William C., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Phase failure and phase reverse protective device for polyphase alternating current circuits. 1,826,099; Oct. 6.

Stewart, Charles M. (See Sheets, B. R., and Stewart.)

Stewart, Duncan J., assignor to H. D. Colman, Rockford, Ill. Heating system and control therefor. 1,826,100; Oct. 6.

Stewart, Robert A. (See Graff, L. S., and Stewart.)

Stewart-Warner Corporation. (See Wheeler, Leonard H., assignor.)

Stöhr, Rolf, Berlin-Wilmersdorf, Germany. Valve lifter for baths, lavatories, and the like. 1,826,639; Oct. 6.

Stokes and Smith Company. (See Rider, Ernest G., assignor.)

Stokes and Smith Company. (See Stokes, John S., assignor.)

Stokes, John S., Huntingdon Valley, assignor to Stokes and Smith Company, Philadelphia, Pa. Wrapping stayed boxes. 1,826,264; Oct. 6.

Stoody Company. (See Stoody, Winston F. and S. M.)

Stoody, Shelley M. (See Stoody, Winston F. and S. M.)

Stoody, Winston F. and S. M., assignors to Stoody Company, Whittier, Calif. Welding rod. 1,825,829; Oct. 6.

Stover, Frank E., Luray, Va., assignor of one-third to W. E. Bundy and one-third to F. G. Davis, Springfield, Ohio. Incubator. 1,826,438; Oct. 6.

Stratford, Charles W., Oakland, Calif. Heating fluids in a spinning column and apparatus used in connection therewith. 1,825,761; Oct. 6.

Streich, Frank, assignor to Union Machinery Company, Joliet, Ill. Dough divider. 1,826,031; Oct. 6.

Strother, Robert H., Montclair, N. J., assignor to Remington Accounting Machine Corporation, New York, N. Y. Calculating machine. 1,826,291; Oct. 6.

Stryker, Daniel, White Plains, assignor to The Texas Company, New York, N. Y. Motor fuel. 1,826,439; Oct. 6.

Stuber, Adolph, assignor to Eastman Kodak Company, Rochester, N. Y. Motion picture projector cabinet. 1,826,680; Oct. 6.

Stukenborg, Louis C., Memphis, Tenn. Cotton boll gatherer. 1,826,101; Oct. 6.

Sturgis, Earl G., Huron, S. Dak. Article holder. 1,826,640; Oct. 6.
Sturtevant, B. F., Company. (See Derry, Gardner C., assignor.)
Sturtevant Mill Company. (See Sturtevant, Thomas J., assignor.)
Sturtevant, Thomas J., Wellesley, assignor to Sturtevant Mill Company, Boston, Mass. Air separator. 1,826,406; Oct. 6.
Suchy, Robert. (See Pistor, G., Suchy, and Reubke.)
Sullivan Machinery Company. (See Osgood, Charles F., assignor.)
Sullivan, Timothy G., Portland, Oreg. Gasifier. 1,825,830; Oct. 6.
Sulzer, Albert F., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition. 1,826,681; Oct. 6.
Summey, David L., assignor to Scoville Manufacturing Company, Waterbury, Conn. Furnace. 1,825,831; Oct. 6.
Sun Oil Company. (See Pew, A. E., jr., and Thomas, assignors.)
Surface Combustion Corporation. (See Barber, H. B., and Hepburn, assignors.)
Surface Combustion Corporation. (See Hepburn, William M., assignor.)
Sutcliffe, Adam, Company, The. (See Spinney, Edmund S., assignor.)
Swanson, Ernest R., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Winding machine. 1,826,265; Oct. 6.
Sweetland, Ernest J., Hazleton, Pa. Replaceable element filter. 1,825,983; Oct. 6.
Symington Company, The. (See Kadel, B. W., and Drenning, assignors.)
Syverstad, Iver, San Francisco, Calif. Power mechanism. 1,826,534; Oct. 6.
Szabo, Joseph, Astoria, N. Y. Distance determining instrument. 1,826,582; Oct. 6.
Szegvari, Andrew. (See Klein, P., and Szegvari.)
Talbert, Frank D., Los Angeles, Calif. Pin resetting apparatus. 1,826,154; Oct. 6.
Tarbox, John P., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Vehicle body wall construction. 1,826,440; Oct. 6.
Tatum, John J., Baltimore, Md. Stake pocket. 1,825,832; Oct. 6.
Taveau, René de M., Elizabeth, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Extraction process. 1,825,762; Oct. 6.
Teague, Merwyn C., Elmhurst, N. Y., assignor to American Rubber Company, East Cambridge, Mass. Thickening and stabilizing latex and product. 1,826,192; Oct. 6.
Teetor, Ralph R., assignor to The Perfect Circle Company, Hagerstown, Ind. Piston and piston ring. 1,825,893; Oct. 6.
Telefonaktiebolaget L. M. Ericsson. (See Lienzén, David L., assignor.)
Tennesse, Hans, and F. Basse, New York, N. Y. Acoustic diphragm. 1,825,833; Oct. 6.
Tenney, Perry L., Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich. Transmission shifting mechanism. 1,826,407; Oct. 6.
Tenney, Perry L., Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich. Variable speed transmission. 1,826,408; Oct. 6.
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Texas Company, The. (See Stryker, Daniel, assignor.)
Texas Company, The. (See Taveau, René de M., assignor.)
Thiele, Hans, Berlin-Friedenau, Germany. Cock. 1,826,330; Oct. 6.
Thomas, Cyril, Yeadon, assignor to The J. G. Brill Company, Philadelphia, Pa. Injecting means for internal combustion motors or for Diesel engines. 1,826,535; Oct. 6.
Thomas, Edward, New York, N. Y. Composition and producing and using it. 1,825,834; Oct. 6.
Thomas, Elza E. (See Klockner, J., and Thomas.)
Thomas, Henry. (See Pew, A. E., jr., and Thomas.)
Thompson, Albert R., San Jose, assignor to Pacific Machinery Company, San Francisco, Calif. Fruit pitting apparatus. 1,825,835; Oct. 6.
Thompson, Earl A., Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich. Transmission. 1,826,682; Oct. 6.
Thompson, John B., Kearney, N. J., assignor to Congoleum-Nairn, Inc. Making linoleum. 1,826,155; Oct. 6.
Thompson, Milton L. (See Hepburn, D., and Thompson.)
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,825,836; Oct. 6.
Thorburn, David B., and R. B. Krueger, Lima, Ohio. Geared locomotive engine construction. 1,826,292; Oct. 6.
Thorne, Carl B., Hawkesbury, Ontario, Canada. Separating particles from free water. 1,826,485; Oct. 6.
Thurneyssen, Christian, assignor to Societe Le Nickel, Paris, France. Metallurgical treatment. 1,826,583; Oct. 6.
Tietze, Ernst. (See Hentrich, W., Hardtmann, and Tietze.)
Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)
Timken Roller Bearing Company, The. (See Schlanpitz, Oswald, assignor.)
Tokheim Oil Tank and Pump Company, The. (See Bechtold, Reuben E., assignor.)
Towne, Earle A., assignor to Union Steel Products Company, Albion, Mich. Cartage or display cabinet. 1,826,102; Oct. 6.
Traeger, Henry, Auburn, and F. H. Jensen, Seattle, Wash. Well drilling machinery. 1,825,984; Oct. 6.
Transportation Devices Corporation. (See Harris, Charles W., assignor.)
Traube, Isidor, Berlin, Germany. Doing away with the nicotine and the methylalcohol when smoking tobacco. 1,826,331; Oct. 6.
Treat, Francis H., Bellevue, Ohio, assignor to Duff Patents Company, Inc., Pittsburgh, Pa. Gas producer. 1,826,156; Oct. 6.
Trempe, William J., North Billerica, Mass. Automatic compensator for traveling felt in paper making machines. 1,826,103; Oct. 6.
Tribune Company, The. (See Von der Horst, Frederick, assignor.)
Trico Products Corporation. (See Oishei, John R., assignor.)
Trosch, Alfred, assignor to Consolidated Machine Tool Corporation of America, Rochester N. Y. Milling machine. 1,825,684; Oct. 6.
Trosch, Alfred, assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Machine tool. 1,825,685; Oct. 6.
Troth, Walter A., Brooklyn, N. Y. Kitchen utensil. 1,826,032; Oct. 6.
Truett, Edgar, et al., trustees. (See Patzkowski, Elmer C.)
Tull, Roger, assignor to Western Lithograph Company, Los Angeles, Calif. Decalcomania. 1,826,228; Oct. 6.
Turucz, Paul, Chicago, Ill. Apparatus for milling wheat. 1,826,157; Oct. 6.
Ullom, Virgil V., et al. (See Gonsett, Robert R., assignor.)
Underhill, John R. (See Gardner, G. W., and Underhill.)
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Oswald, Alfred E., assignor.)
Union Machinery Company. (See Streich, Frank, assignor.)
Union Oil Company of California. (See Dunham, Robert A., assignor.)
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
Union Steel Products Company. (See Hatch, Charles T., assignor.)
Union Steel Products Company. (See Towne, Earle A., assignor.)
Union Switch & Signal Company, The. (See Allison, L. R., and Nicholson, assignors.)
Union Thread Company, The. (See Allan, Edward T., assignor.)
United-Carr Fastener Corporation. (See Holmes, George A., assignor.)
United Engineering & Foundry Company. (See Johnson, Lane, assignor.)
United Engineering & Foundry Company. (See Smitmans, John A., assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred, assignor.)
United Shoe Machinery Corporation. (See Eastman, Fred C., assignor.)
United Shoe Machinery Corporation. (See Johnson, William H., assignor.)
United Shoe Machinery Corporation. (See Kinney, Fay D., assignor.)
United Shoe Machinery Corporation. (See Seely, Thomas H., assignor.)
United States Radiator Corporation. (See McIntire, James F., assignor.)
United States Smelting, Refining & Mining Company. (See Mulock, Fred S., assignor.)
Universal Winding Company. (See Swanson, Ernest R., assignor.)
Vacuum Casting Company, The. (See Kadow, August, assignor.)
Valmore, William S., Mansfield, Ohio. Valve mechanism. 1,826,158; Oct. 6.
Van Buskirk, Paul R., Detroit, Mich. Apparatus for drawing topographic maps. 1,826,375; Oct. 6.
Van Cleaf, John C., Maplewood, N. J., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill. Shipping box. 1,826,104; Oct. 6.
Van Wienen, Pieter, Hamburg, Germany. Ship's hull. 1,826,229; Oct. 6.
Varnau, Bernard H., and T. B. Wayne, Sugar Land, Tex. Manufacture of extra fine, soft granulated cane sugar. 1,826,441; Oct. 6.
Veale, George W., Cleveland Heights, assignor to The Eaton Axle & Spring Company, Cleveland, Ohio. Spotlight switch. 1,826,105; Oct. 6.
Vermillion, Charles O., Bloomfield, N. J., assignor to Wired Radio, Inc., New York, N. Y. Television apparatus. 1,826,332; Oct. 6.
Vierow, Thomas S., Jersey City, N. J. Extruding machine. 1,826,230; Oct. 6.
Vilt, Lucien, Lille, France. Textile apparatus. 1,826,584; Oct. 6.
Viscardi, Henry, et al. (See Wright, Leonard K., assignor.)

Vodoz, Frederick W., Wilmette, Ill. Automatic stoker. 1,826,106; Oct. 6.
Voight, Gust H., Holgate, Ohio. Brush. 1,825,929; Oct. 6.
Vollmann, Heinrich, et al. (See Kränzlein, G., Vollman, and Corell.)
Von der Bruck, Gerhard. (See Schoenburg, C., and von der Bruck.)
Von der Horst, Frederick, assignor to The Tribune Company, Chicago, Ill. Roll handling apparatus. 1,826,107; Oct. 6.
Von Frankenberg, Arthur, New York, N. Y. Support for smokers' and similar articles. Des. 85,309; Oct. 6.
Von Frankenberg, Arthur, New York, N. Y. Combined lamp and supporting base. Des. 85,310; Oct. 6.
Von Webern, Guido, Dayton, Ohio, assignor to Oxford Varnish Corporation, Detroit, Mich. Roll cleaning machine. 1,825,837; Oct. 6.
Voss, Arthur. (See Kränzlein, G., and Voss.)
Waddell, George W., Lapaz, Ind. Golf ball ejector. 1,826,641; Oct. 6.
Wadman, Harold A., Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn. Parison transfer and inversion mechanism and method. 1,825,985; Oct. 6.
Wagner, Fred H., jr., assignor to The Silica Gel Corporation, Baltimore, Md. Adsorbing a gas in a solid adsorbent. 1,825,707; Oct. 6.
Wahl Company, The. (See Baker, Walter J., assignor.)
Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Bobbin for automobile looms. 1,826,333; Oct. 6.
Waldron, Frederic B., Prescot, and J. H. Griffin, St. Helens, assignors to Pilkington Brothers Limited, Liverpool, England. Apparatus for the grading of abrasives for use in continuous glass grinding machines. 1,826,585; Oct. 6.
Walker, Brooks, et al. (See Patterson, John, assignor.)
Walker, Buck, et al. (See Gonsett, Robert R., assignor.)
Walker, Clinton L., et al. (See Patterson, John, assignor.)
Walker, Elsie M., Deep River, Iowa. Jar holder. 1,826,486; Oct. 6.
Walker, Malcolm, Glasgow, assignor to J. Livingstone, Ardbeg, Scotland. Screw press. 1,825,686; Oct. 6.
Wallace, William H., Detroit, Mich., assignor, by mesne assignments, to Eaton Axle & Spring Company, Cleveland, Ohio. Spring. 1,826,108; Oct. 6.
Walsh & Weidner Boiler Co., The. (See Weigel, Carl F., assignor.)
Walsleben, Fred. (See Klein, F., and Walsleben.)
Warner, Frank E., Waterbury, assignor to Scovill Manufacturing Company, Waterbury, Conn. Tack fastened stud for snap fasteners. 1,826,683; Oct. 6.
Warp Twisting-In Machine Company. (See Klein, F., and Walsleben, assignors.)
Warren Brothers Company. (See Schutte, August E., assignor.)
Warren, James S. (See Gray, Bony, assignor.)
Watkins, William E., assignor to Copper Plate Sheet & Tube Company, New York, N. Y. Plating metals. 1,825,763; Oct. 6.
Watson, Charles G., Youngstown, Ohio. Lily pool tank. 1,825,894; Oct. 6.
Watson, Frank, Baltimore, Md. Packaging device. 1,826,536; Oct. 6.
Wattie, William M., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Reversible dobby for harness and box motion. 1,826,334; Oct. 6.
Wayne, Truman B. (See Varnau, B. H., and Wayne.)
Weaver, Gallard E., and A. R. Squyer, assignors to Weaver Manufacturing Company, Springfield, Ill. Automobile lifting appliance. 1,825,764; Oct. 6.
Weaver Manufacturing Company. (See Weaver, G. E., and Squyer, assignors.)
Web Engineering Company, The. (See Aland, Richard C., assignor.)
Webber, Charles S., Springfield, Mass., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Hydrolysis of cellulose acetate. 1,826,335; Oct. 6.
Webster, Richard H., Richmond Heights, Mo. Sealing device. 1,826,033; Oct. 6.
Wehmann, Friedrich W., Stockholm, and E. R. Dahlström, assignors to Aktiebolaget Formator, Stockholm, Sweden. Machine for stripping tobacco leaves. 1,826,376; Oct. 6.
Wehn, Charles E., assignor to Listo Pencil Corporation, Alameda, Calif. Pencil 1,826,266; Oct. 6.
Weigel, Carl F., assignor to The Walsh & Weidner Boiler Co., Chattanooga, Tenn. Solid water wall for boilers and the like. 1,826,293; Oct. 6.
Welt, Jean. (See Jeanneret, Abram L., assignor.)
Weiland, Paul. (See Dixon, Howard F., and Weiland.)
Welmer, George W. (See Brauer, A. C., and Welmer.)
Welsman, John C. (See Gercich, F. A., and Welsman.)
Welch, Elmer B. (See Comstock, G. J., and Welch.)
Wessman, Arnt W., Chicago, Ill., assignor to International Harvester Company, Interchangeable straw bruiser and wind-stacker. 1,825,838; Oct. 6.
West, George E., Dallas, Tex. Sanitary container. 1,826,193; Oct. 6.
Westbrook, Leon R., Cleveland Heights, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Electroplating. 1,826,159; Oct. 6.
Western Lithograph Company. (See Tull, Roger, assignor.)
Western Metal Specialty Co. (See Goetz, Julius J., assignor.)
Western Railway Equipment Company. (See Campbell, Sterling H., assignor.)
Western States Machine Company. (See Roberts, Eugene, assignor.)
Western Union Telegraph Company, The. (See Birkmeyer, P. J., Creedon, and Chadbourne, assignors.)
Westinghouse Electric & Manufacturing Company. (See Brecht, Winston A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Moore, George A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Read, Ernest K., assignor.)
Westinghouse Lamp Company. (See Conn, Robert W., assignor.)
Westinghouse Lamp Company. (See Driggs, Frank H., assignor.)
Westinghouse Lamp Company. (See Gero, W. B., and Davenport, assignors.)
Westinghouse Lamp Company. (See Ramage, John H., assignor.)
Wheeler, Emma. (See Roessner, W. L., Wheeler, and Smedley.)
Wheeler, Eugene W., Salem, Oreg. Jar lifter. 1,826,194; Oct. 6.
Wheeler, Leonard H., assignor to Stewart-Warner Corporation, Chicago, Ill. Depth gauge and pump. 1,825,708; Oct. 6.
Whetzel, Joshua C. (See Harding, C. T., and Whetzel.)
Whirldry Corporation. (See Dunham, George W., assignor.)
White, Harry B., Canton, Ohio, assignor to The Hoover Company. Brush. 1,826,267; Oct. 6.
Whitehead, Thomas C. (See Greenwald, Harold A., assignor.)
Whitin Machine Works. (See Barker, Dyson, assignor.)
Whitley, Maurice G. (See Carrier, R. M., jr., and Whitley.)
Whitthorne, J. R. (See Dabbs, Harry, assignor.)
Wickenden, Leonard. (See Ehrhart, E. N., and Wickenden.)
Wickersham, Harry P., Walnut Park, assignor to Baash-Ross Tool Company, Incorporated, Los Angeles, Calif. Crown block. 1,826,109; Oct. 6.
Wickman, Henry J., deceased, Howell, Mich.; L. M. Wickman, admin'stratrix. Vehicle jack. 1,826,110; Oct. 6.
Wickman, Leora M., administratrix. (See Wickman, Henry J.)
Widerborg, Elmer. (See Peltier, F. D., and Widerborg.)
Wigg, Elmer E., et al. (See Callahan, Michael J.)
Wiggins, John H., Tulsa, Okla. Flame arrester. 1,826,487; Oct. 6.
Wilczynski, John, Buffalo, N. Y. Reversible nonglaring rear-vision mirror for automobiles. 1,825,687; Oct. 6.
Wilkin, Otho P., South Pasadena, Calif. Take up device for electric fixtures. 1,826,294; Oct. 6.
Wilkins, James M., assignor to Mueller Co., Decatur, Ill. Flanging tool. 1,826,268; Oct. 6.
Williams, Arthur A. (See Bergquist, John U., assignor.)
Williams, Charles L., Alhambra, assignor to F. Garber, Los Angeles, Calif. Constructing fire extinguishers. 1,826,684; Oct. 6.
Williams, Forest L., assignor to Williams Manufacturing Company, Portsmouth, Ohio. Buckle. 1,826,231; Oct. 6.
Williams, George W., Burlingame, Calif. Hollow concrete wall construction. 1,826,111; Oct. 6.
Williams, Herman P., assignor to Laclede-Christy Clay Products Company, St. Louis, Mo. Method and apparatus for manufacturing sewer pipe and similar articles. 1,826,586; Oct. 6.
Williams Manufacturing Company. (See Williams, Forest L., assignor.)
Williamson, Larkin R., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Hydraulic column clamp. 1,825,986; Oct. 6.
Williamson, Robert M., Burley, Ringwood, England. Device for teaching arithmetic. 1,826,034; Oct. 6.
Willys-Overland Company, The. (See Fisher, Walter S., assignor.)
Wilson, Alvin C., assignor to The Silica Gel Corporation, Baltimore, Md. Constant uniform delivery siphon. 1,826,112; Oct. 6.
Wilson, James E., S. McConnell, and C. Brown, Belfast, Ireland. Apparatus for mechanically handling dough during proving. 1,826,537; Oct. 6.
Wilson, John F. (See Earl, H. J., and Wilson.)
Winder, William A., Portland, Oreg. High pressure leak detector for autos. 1,825,839; Oct. 6.
Winsor, Roy J., Bucyrus, Ohio. Steering means and axle assembly for vehicles. 1,826,113; Oct. 6.
Winton, Lewis B., Greenwich, Conn., assignor, by mesne assignments, to American Sealcone Corporation, New York, N. Y. Perforating containers. 1,825,840; Oct. 6.
Wired Radio, Inc. (See Vermillion, Charles O., assignor.)
Witchger, Eugene J., assignor to Lufkin Rule Co., Saginaw, Mich. Radius gauge. 1,825,987; Oct. 6.
Wochner, Henry, assignor to Bear Manufacturing Company, Rock Island, Ill. Spindle gauge for automobile axles. 1,825,988; Oct. 6.
Wolfsheim, Sylvan, New York, N. Y. Watch display box. Des. 85,312; Oct. 6.
Wolfson, Isadore D., assignor to Apparel Ingenuities Corporation, New York, N. Y. Reversible necktie. 1,826,035; Oct. 6.

Wollaston, Walter, Muskegon, Mich, assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Billiard ball. 1,826,538; Oct. 6.
Wood, John, Manufacturing Company. (See Desimone, Cornelius A., assignor.)
Wooldridge, William J., Mansfield, Ohio. Fountain pen. 1,826,195; Oct. 6.
Woolson, Harry T., Detroit, Mich., and A. O. Burgess, Brooklyn, N. Y., assignors to Chrysler Corporation, Detroit, Mich. Valve. 1,826,160; Oct. 6.
Woolwine, Howard C., Fayetteville, W. Va. Shower bath. 1,826,336; Oct. 6.
Wright, Leonard K., Jackson Heights, assignor of twenty-two per cent to N. Di Marco, twenty-two per cent to V. Camizzi, and twenty-two per cent to H. Viscardi, Corona, N. Y. Eraser. 1,826,587; Oct. 6.
Wyckoff, Amos A., and B. L. Yauney, Oakland, Calif. Garment hanger. Des. 85,311; Oct. 6.
Yanchenko, Basil J., New York, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Garment press. 1,826,442; Oct. 6.
Yarrow, William S., Harrow, assignor to Carrier Engineering Company, Limited, London, England. Processing plant. 1,826,036; Oct. 6.
Yauney, Bernice L. (See Wyckoff, A. A., and Yauney.)
Yeadon, W. Yates, et al. (See Moise, Harmon D., assignor.)
Yellow Truck & Coach Manufacturing Company. (See Bock, Carl J., assignor.)
Yellow Truck & Coach Manufacturing Company. (See Schjolin, Eric O., assignor.)
York Band Instrument Company. (See Johnson, Alfred J., assignor.)
Young, Amps P., Cave City, Ky. Soil sterilizing apparatus. 1,826,232; Oct. 6.
Young Brothers Company. (See Young, George A., assignor.)
Young, George A., assignor to Young Brothers Company, Detroit, Mich. Insulating panel. 1,826,114; Oct. 6.
Younghusband, James L., Chicago, Ill. Lip-stick holder. 1,825,895; Oct. 6.
Yurkovitch, Anton, Pittsburgh, Pa. Clothes stick. 1,826,337; Oct. 6.
Zachman, William H., Woodhave, assignor to Frank J. Quigan, Inc., Brooklyn, N. Y. Purse, hand bag or pocketbook. 1,826,233; Oct. 6.
Zanetti, Joseph, San Francisco, Calif. Vacuum paper feeder. 1,825,765; Oct. 6.
Zeiss, Firm, Carl. (See Merté, Willy, assignor.)
Zeiss, Firm, Carl. (See Sonnefeld, August, assignor.)
Zerbe, Lewis E., Moneta, Calif., assignor to The National Supply Company, Toledo, Ohio. Locking bar for bushings. 1,825,930; Oct. 6.
Ziebarth, Charles A., assignor to The Bell & Howell Company, Chicago, Ill. Humidor. 1,826,115; Oct. 6.
Zifferer, Lothar R., deceased; M. C. Zifferer, H. E. Champion, and H. N. Albright, executors, assignors to Columbia Malleable Castings Corporation, Columbia, Pa. Melting metals. 1,825,841; Oct. 6.
Zifferer, Lothar R., deceased; M. C. Zifferer, H. E. Champion, and H. N. Albright, executors, assignors to Columbia Malleable Castings Corporation, Columbia, Pa. Pipe hanger. 1,825,842; Oct. 6.
Zifferer, Mabel C., et al., executors. (See Zifferer, Lothar R.)
Zimmermann, Hans J., Mannheim, Germany. Apparatus for compressing and expanding fluids. 1,825,843; Oct. 6.
Zink, John S., Tulsa, Okla. Gas burner. 1,826,588; Oct. 6.
Zisch, George J., Newark, N. J. Thermostatic switch. 1,826,488; Oct. 6.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Mounting of speed cup and rotor shaft. 1,826,409; Oct. 6.
Zuch, Harry A., New York, N. Y. Electrically controlled mechanism for detecting leaks in cylindrical cans or containers. 1,826,589; Oct. 6.
Zych, George. (See Pehel, Z., and Zych.)

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 6TH DAY OF OCTOBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive articles, Reversible and irreversible thermo plastic bonded. R. C. Benner and G. H. Porter. 1,825,771; Oct. 6.
Abrasive wheel. R. Chappell. 1,826,300; Oct. 6.
Abrasives for use in continuous glass grinding machines, Apparatus for the grading of. F. B. Waldron and J. H. Griffin. 1,826,585; Oct. 6.
Acetate or product made therewith, Treatment of cellulose. G. H. Ellis. 1,826,608; Oct. 6.
Acid, Dehydration of formic. H. T. Clarke and D. F. Othmer. 1,826,302; Oct. 6.
Acids, Recovery of tar. S. P. Miller. 1,825,809; Oct. 6.
Acoustic diaphragm. H. Tennesse and F. Basse. 1,825,838; Oct. 6.
Adding machine. W. E. Dunning and R. Middleton. 1,825,788; Oct. 6.
Aeroplane. A. B. Broluska. 1,826,048; Oct. 6.
Aeroplane. E. C. Patzkowski. Des. 85,301; Oct. 6.
Agricultural machine attachment. W. Krenzel. 1,826,551; Oct. 6.
Air, Apparatus for humidifying. A. G. Decker. 1,826,508; Oct. 6.
Air conditioning apparatus. L. W. Melcher. 1,825,808; Oct. 6.
Aircraft. A. S. James. 1,826,076; Oct. 6.
Airplane. A. M. Henry. 1,825,792; Oct. 6.
Airplane propeller, Variable pitch. W. A. Matthey. 1,825,881; Oct. 6.
Air separator. T. J. Sturtevant. 1,826,406; Oct. 6.
Air tempering and humidifying unit. G. W. Nitchy. 1,825,813; Oct. 6.
Alarm: *See*—
Door alarm.
Aliment forming device. M. D. Ainslie. 1,825,844; Oct. 6.
Aluminum sections, Apparatus for shearing. W. F. Naylor, B. Field, and E. L. Sponseller. 1,826,016; Oct. 6.
Ammonia and other products from coke oven gases, Recovery of. S. P. Miller. 1,826,561; Oct. 6.
Anthraquinone and like products, Making. E. A. Lloyd and V. P. Gershon. 1,826,621; Oct. 6.
Antioxidants, Tertiary amine. L. J. Christmann. 1,825,654; Oct. 6.
Anvil for stapling machines, Rotary. R. E. Peterson. 1,826,632; Oct. 6.
Arc welding. J. F. Lincoln. Re18,221; Oct. 6.
Arc welding. J. F. Lincoln. 1,826,355; Oct. 6.
Arithmetic, Device for teaching. R. M. Williamson. 1,826,034; Oct. 6.
Ash receiver or article of similar nature. S. D. Baker. Des. 85,275; Oct. 6.
Automobile. D. H. Montgomery. Des. 85,298; Oct. 6.
Automobile body construction. J. Ledwinka. 1,826,427; Oct. 6.
Automobile lifting appliance. G. E. Weaver and A. R. Squyer. 1,825,764; Oct. 6.
Axles, Locating locomotive. T. V. Buckwalter. 1,826,503; Oct. 6.
Bag: *See*—
Papar bag.
Ball: *See*—
Billiard ball.
Ball. H. C. Pearson. 1,826,221; Oct. 6.
Ball throwing machine. W. C. Mauney. 1,825,882; Oct 6.
Bank, Money. R. B. Hayden. 1,826 398; Oct. 6.
Bank, Money. J. Laurence. Des. 85,293; Oct. 6.
Base and bulb holder, Self adjusting. R. W. Conn. 1,826,505; Oct. 6.
Bath: *See*—
Shower bath.
Bead opening, Sanitary. W. T. Morgan. 1,826,255; Oct. 6.
Bearing puller. C. G Payne 1,826,631; Oct 6
Beater for foodstuffs. W. J. Mahony. 1,826,356; Oct. 6.
Bed, Folding. W. A. Moeller. 1,826,184; Oct. 6.
Bellow and producing the same, Metallic. W. H. Buell. 1,825,652; Oct. 6.
Belt for personal wear. E. S. Mix. 1,826,563; Oct. 6.
Bevel square. A. E. Smith. 1,825,759; Oct. 6.
Billiard ball. W. Wollaston. 1,826,538; Oct. 6.
Binder, Loose leaf. M. Meyerson. 1,826,627; Oct. 6.
Blank and process for making valve tappets. R. Hervig. 1,826,544; Oct. 6.
Block: *See*—
Crown block.
Blotting pad. B. Howard. 1,826,546; Oct. 6.
Board: *See*—
Bulletin board. Game board.
Folding ironing board. Ladder and ironing board.
Boats and the like, Propelling means for. R. T. Crosby. 1,826,507; Oct. 6.
Bobbin for automatic looms. W. H. Wakefield. 1,826,333; Oct. 6.
Body construction. A. A. Cripps. 1,826,125; Oct. 6.
Body for trucks, Roller dump. H. C. Gentry. 1,825,901; Oct. 6.
Body frame, Pressed metal. J. Ledwinka. 1,826,425; Oct. 6.
Boiler: *See*—
Tubular boiler. Waste heat boiler.
Boiler control device. A. D. Griffin. 1,825,690; Oct. 6.
Boiler feeding device. L. Nemenyi. 1,826,017; Oct. 6.
Bottle. M. Sierad. Des. 85,307; Oct. 6.
Bottle attachment. V. C. Porter. 1,826,285; Oct. 6.
Bottle brushing mechanism. G. A. Fullips. 1,825,724; Oct. 6.
Bottle feeder. G. J. Meyer and O. Dreher. 1,825,751; Oct. 6.
Bottle, Service. G. E. Brooke. Des. 85,279; Oct. 6
Bottle, Service G. E. Brooke. 1,825,897; Oct. 6.
Box: *See*—
Drum controller box. Shipping box.
Outlet box. Stuffing box.
Box wrapping mechanism. E. G. Rider. 1,826,287; Oct. 6.
Box wrapping mechanism. E. G. Rider. 1,826,435; Oct. 6.
Boxes, Wrapping stayed. J. S. Stokes. 1,826,264; Oct. 6.
Bracket: *See*—
Shore head bracket.
Bracket for snatch block, Positioning. F. Bortolus. 1,826,199; Oct. 6.
Braiding machine. E. Higgins. 1,826,545; Oct. 6.
Brake: *See*—
Hand brake.
Brake construction. F. H. Leek. 1,825,674; Oct. 6.
Brake control shaft, Front. C. J. Bock. 1,826,380; Oct. 6.
Brake drum. W. N. Booth. 1,826,413; Oct. 6.
Brake drum. T. P. Chase. 1,826,381; Oct. 6.
Brake for twisting spindles, Thread. W. Lenk. 1,826,354; Oct. 6.
Brake hangers, Manufacturing closed link. F. Schaefer. 1,826,027; Oct. 6.
Brake mechanism for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,826,414; Oct. 6.
Brake mechanism for vehicle wheels. H. F. Dixon and P. Welland. 1,826,462; Oct. 6.
Brake shoe. L. E. La Brie. 1,825,671; Oct. 6.
Brake shoe and making same. L. P. Mooers. 1,826,283; Oct. 6.
Brake system for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,826,418; Oct. 6.
Bread handling apparatus. O. F. Rohwedder. 1,826,676; Oct. 6.
Brick and making the same. W. McClintock. 1,825,969; Oct. 6.
Brick embossing machine. J. J. F. Brand. 1,825,938; Oct. 6.
Bronze, White. J. H. Cheetham. 1,826,239; Oct. 6.
Brush. G. H. Voight. 1,825,929; Oct. 6.
Brush. H. B. White. 1,826,267; Oct. 6.
Brush and pulley, Carpet sweeper. I. J. Owen. 1,826,432; Oct. 6.
Brush for electric motors. A. E. Oswald. 1,826,478; Oct. 6.
Brush handle. R. H. Cartwright. 1,826,165; Oct. 6.
Buckle. F. L. Williams. 1,826,231; Oct. 6.
Buckle, Slide. R. J. Hodge. 1,826,174; Oct. 6.
Building strip and construction. B. H. Roberts and E. Gach. 1,826,674; Oct. 6.
Bulletin board, Multiple. F. E. Hunt and C. L. Peters. 1,826,469; Oct. 6.
Bumper construction. H. R. McMahon. 1,826,626; Oct. 6.
Bundle shocking machine. J. G. Hollifer and V. S. Landess. 1,826,249; Oct. 6.
Burner: *See*—
Gas burner. Liquid fuel burner.
Burner and the like, Gas. W. C. Epstein. 1,826,205; Oct. 6.
Burner installation, Kindling. F. A. Gercich and J. C. Weisman. 1,826,067; Oct. 6.
Butter cutting machine, Individual. S. D. Lowry. 1,826,519; Oct. 6.
Button loop. J. Salisbury. 1,826,223; Oct. 6.
Button, Tack fastened. G. A. King. 1,826,665; Oct. 6.
Cab, Inclosed automobile. A. F. Masury. Des. 85,294; Oct. 6.
Cab seat, Folding adjustable locomotive. H. E. Anderson. 1,826,643; Oct. 6.
Cabinet. L. L. Ginsberg. Des. 85,283; Oct. 6.

Cabinet, Cartage or display. E. A. Towne. 1,826,102; Oct. 6.
Cabinet, Motion picture projector. A. Stuber. 1,826,680; Oct. 6.
Cabinet, Shoe. C. L. Brush. 1,826,700; Oct. 6.
Calculating machine. R. H. Strother. 1,826,291; Oct. 6.
Camera, Photographic. B. D. Chamberlin. 1,826,299; Oct. 6.
Camera, Self erecting front focusing. C. C. Fuerst. 1,826,243; Oct. 6.
Can tops, Method and apparatus for forming. F. Meier. 1,826,559; Oct. 6.
Candles with a permanent color, Coating, veneering, or glazing. J. Flinn, jr. 1,825,785; Oct. 6.
Cap for milk cans, Sanitary. J. Azamber. 1,826,593; Oct. 6.
Cap for sealing containers. W. S. Fisher. 1,826,600; Oct. 6.
Car, Mine. E. H. Bostock. 1,825,850; Oct. 6.
Car, Mine. T. R. Evans. 1,825,943; Oct. 6.
Car, Railway. H. W. Sanford. 1,826,367; Oct. 6.
Car, Railway retarder. F. Deloison. 1,825,899; Oct. 6.
Carbon, Apparatus for the production of activated. A. Godel. 1,826,209; Oct. 6.
Carbonaceous matter from sulphur and improving its color, Removing. L. S. Bushnell and R. Morales. 1,826,124; Oct. 6.
Carburetor. F. A. Cole. 1,826,202; Oct. 6.
Carburetor. R. F. Ensign. 1,826,061; Oct. 6.
Carburetor. D. Gardner. 1,825,788; Oct. 6.
Carburetor. G. F. Gibson. 1,826,128; Oct. 6.
Carburetor for internal combustion engines. F. Day. 1,825,717; Oct. 6.
Carrier: *See*—
Piano carrier.
Carrier for motor vehicles, Luggage and like. E. H. Coquille. 1,825,940; Oct. 6.
Carton. H. C. Mohr. 1,826,084; Oct. 6.
Cartridge and tamper, Blasting. E. Ormsby. 1,826,150; Oct. 6.
Cartridges, Absorbent for breathing. G. K. E. H. Stampe. 1,826,329; Oct. 6.
Case: *See*—
Dispensing case.
Case or the like, Accordion. M. Brooks and J. Carner. Des. 85,280; Oct. 6.
Casing. E. E. Eickmeyer. 1,825,997; Oct. 6.
Casing, Dispensing machine. E. Kanter. Des. 85,288; Oct. 6.
Casing head. A. Boynton. 1,825,774; Oct. 6.
Catalytic apparatus. A. O. Jaeger. 1,826,548; Oct. 6.
Cathode and forming same, Electron emitting. F. S. McCullough. 1,826,011; Oct. 6.
Cellulose acetate composition. A. F. Sulzer. 1,826,681; Oct. 6.
Cellulose acetate, Hydrolysis of. C. S. Webber and C. J. Staud. 1,826,335; Oct. 6.
Cellulose, Manufacturing. J. J. de La Roza, sr. 1,825,655; Oct. 6.
Chain, Automobile. K. R. Garner. 1,826,279; Oct. 6.
Chain, Conveyer. W. V. Hoefen. 1,826,351; Oct. 6.
Chain, Power transmission. F. L. Morse. 1,825,675; Oct. 6.
Chair. F. H. Anderson. 1,825,846; Oct. 6.
Checkerwork. G. E. Steudel. 1,826,227; Oct. 6.
Circuit closer for automobile rear lights. L. E. Obee. 1,825,917; Oct. 6.
Circuit controlling means. E. A. Olpp. 1,826,477; Oct. 6.
Clamp: *See*—
Column clamp. Dead end clamp.
Clamp for cables or the like. A. O. Austin. 1,825,650; Oct. 6.
Clasp. C. C. Kulp. 1,826,181; Oct. 6.
Clay gun. W. Johnston, jr. 1,825,734; Oct. 6.
Cleaning device. J. Bropson. 1,825,851; Oct. 6.
Cleaning device for trucks. J. Coutin. 1,826,460; Oct. 6.
Clip: *See*—
Pen clip. Roofing clip.
Closure for containers. A. E. Smith. 1,826,096; Oct. 6.
Closure for fuel tanks, Locked. H. L. Roberts. 1,826,023; Oct. 6.
Closure for openings in buildings. W. Cunningham. 1,826,203; Oct. 6.
Closure for self-filling pens. M. Heerklotz. 1,826,246; Oct. 6.
Cloth or other sheet material, Device for delivering squares or otherwise shaped pieces of. R. P. Duff. 1,825,782; Oct. 6.
Clothesline. H. Fulton 1,826,064; Oct. 6.
Clothespin. W. B. Lake. 1,825,963; Oct. 6.
Clothing, Securing device for. S. David. 1,826,167; Oct. 6.
Clutch, Friction. H. V. Reed. 1,825,979–80; Oct. 6.
Clutches, Driven plate for friction. H. V. Reed. 1,825,981; Oct. 6.
Coal, Apparatus for carbonizing. R. L. Rodgers. 1,826,573; Oct. 6.
Coal, fuel, or other pulverulent materials, Briquetting finely divided. O. Reynard. 1,825,756; Oct. 6.
Coating. E. L. Chappell. 1,826,301; Oct. 6.
Coating. W. H. Charch and N. A. Craigue. 1,826,698; Oct. 6.
Coating, Apparatus for. W. H. Charch and N. A. Craigue. 1,826,697; Oct. 6.
Cock. H. Thiele. 1,826,330;; Oct. 6.
Cock, Ball. R. H. Mueller. 1,826,322;; Oct. 6.
Coil, Inductance. H. W. Adey. 1,826,642; Oct. 6.
Coils, Making electric. V. G. Apple. 1,826,297; Oct. 6.
Collar setting device, Shirt. A. J. George. 1,826,659; Oct. 6.
Color flasher. L. L. Beck. 1,826,384; Oct. 6.
Color in vacuum tube lamps, Controlling the. L. L. Beck. 1,826,386; Oct. 6.
Color photography. J. N. Goldsmith and T. T. Baker. 1,826,001; Oct. 6.
Color photography. J. B. Harris, jr. 1,825,863; Oct. 6.
Column clamp, Hydraulic. L. R. Williamson. 1,825,986; Oct. 6.
Comb: *See*—
Liquid treatment comb.
Combination lock. H. Beck. 1,826,235; Oct. 6.
Combustion cone or protector for torches. R. A. Currie. 1,826,241; Oct. 6.
Combustion control. M. G. Benjamin. 1,826,644; Oct. 6.
Commutator and making the same. J. M. Aufiero and J. H. Smoot. 1,826,443; Oct. 6.
Commutator, Disk-spring. G. A. Moore. 1,826,628; Oct. 6.
Commutators, Truing. H. D. Munday. 1,825,676; Oct. 6.
Compensating device. J. M. Dayton. 1,826,604; Oct. 6.
Compensator for traveling felts in paper making machines, Automatic. W. J. Trempe. 1,826,103; Oct. 6.
Composition and producing and using it. E. Thomas. 1,825,834; Oct. 6.
Compounds, Manufacture of thiohydroxy organic. W. J. Hale. 1,825,662; Oct. 6.
Compressor for refrigerating apparatus. C. E. Owens. 1,826,479; Oct. 9.
Concrete admixture composition. C. D. Cory. 1,826,166; Oct. 6.
Concrete insert. M. Carroll. 1,826,201; Oct. 6.
Concrete mixer. S. Shafer, jr. 1,826,289; Oct. 6.
Concrete structural units, Forming. A. E. Schutte. 1,826,529; Oct. 6.
Concrete testing apparatus. O. H. Hansard and D. D. McGuire. 1,825,954; Oct. 6.
Concrete wall construction, Hollow. G. W. Williams. 1,826,111; Oct. 6.
Condenser. H. C. Hayes. 1,826,540; Oct. 6.
Condenser for refrigerating apparatus. C. C. Spreen. 1,825,760; Oct. 6.
Condenser, Surface. A. J. Nott. 1,826,521; Oct. 6.
Connecter, Automatic air and steam hose. J. Robinson. 1,826,288; Oct. 6.
Connection, Brake operating. R. S. Sanford. 1,825,680; Oct. 6.
Container. H. G. Kuck. 1,825,670; Oct. 6.
Container, Flower bulb. T. P. Jackson. 1,826,547; Oct. 6.
Container, Liquid. F. M. Dietz. 1,825,856; Oct. 6.
Container, Sanitary. G. E. West. 1,826,193; Oct. 6.
Container, Sheet metal. J. E. Fitzgerald. 1,826,609; Oct. 6.
Containers, Apparatus for testing sealed. F. H. Landrum. 1,825,672; Oct. 6.
Containers, Method and apparatus for testing sealed. F. H. Landrum. 1,825,700; Oct. 6.
Containers, Method and apparatus for testing sealed. F. H. Landrum. 1,825,745; Oct. 6.
Containers, Perforating. L. B. Winton. 1,825,840; Oct. 6.
Containers, Testing sealed. F. H. Landrum. 1,825,699; Oct. 6.
Containers, Testing sealed. F. H. Landrum. 1,825,744; Oct. 6.
Control for dampers for heating and ventilating units, Thermal. M. J. Callahan. 1,825,689; Oct. 6.
Control for self propelled vehicles, Automatic. R. W. Babson. 1,826,492; Oct. 6.
Control mechanism. S. Einstein. 1,825,719; Oct. 6.
Control mechanism, Automatic tramper. J. Behle, G. B. King, and H. C. Blackmon. 1,826,198; Oct. 6.
Control method and apparatus. R. D. Bean. 1,825,932; Oct. 6.
Control system for dirigible craft, Gyroscopic. F. W. Meredith. 1,826,013; Oct. 6.
Controlling means for heat exchange apparatus. W. M. Hepburn. 1,826,213; Oct. 6.
Cooker, Pressure steam. V. R. Rostek. 1,826,366; Oct. 6.
Cooler: *See*—
Fluid cooler.
Cooling system. W. A. Beimling and F. B. Peterson. 1,826,040; Oct. 6.
Cooling system. E. O. Schjolin. 1,826,405; Oct. 6.
Cooling system for motors. H. A. Knox and B. F. Baker. 1,826,005; Oct. 6.
Cordage machines, Making round piles of sliver in. F. Engel. 1,825,784; Oct. 6.
Corn thinner. A. H. Rosen. 1,826,365; Oct. 6.
Corner bead with attachments, Metal. J. R. Midcap. 1,825,914; Oct. 6.
Cotton boll gatherer. L. C. Stukenborg. 1,826,101; Oct. 6.
Cotton comber. D. Barker. 1,826,494; Oct. 6.
Counter molding machine. R. A. Lancey. 1,825,964; Oct. 6.
Counting and indicating device. J. M. Dayton. 1,826,603; Oct. 6.
Coupler, Car. W. Kelso. 1,825,907; Oct. 6.
Coupler mechanism, Car. W. Kelso. 1,825,908; Oct. 6.
Coupling: *See*—
Grease gun coupling.

Coupling. E. W. Davis. 1,825,941; Oct. 6.
Coupling connection. F. Schulder. 1,825,825; Oct. 6.
Cover, Book. F. S. Schade. 1,826,259; Oct. 6.
Cover for plumbing fixtures, Protective. J. H. McCann. 1,826,010; Oct. 6.
Cover, Furniture. J. Levi. 1,825,909; Oct. 6.
Cover, Manhole. O. N. Gredell. 1,825,726; Oct. 6.
Cover, Tire. T. J. McCormick and R. E. Linn. Des. 85,295; Oct. 6.
Crankcase ventilation. L. V. Cram. 1,826,390; Oct. 6.
Crate, Fruit basket. W. A. Adams. 1,826,197; Oct. 6.
Creosote oils, Producing. S. P. Miller. 1,826,429; Oct. 6.
Creosote oils, tar acids, etc., Recovery of. S. P. Miller. 1,826,430; Oct. 6.
Crossing gate. E. Daniel. 1,825,780; Oct. 6.
Crown block. H. P. Wickersham. 1,826,109; Oct. 6.
Cuff link. G. Murchi, jr. 1,826,364; Oct. 6.
Curb service device. J. H. Bristow. 1,826,047; Oct. 6.
Current electrometer, Direct. F. Böhm. 1,826,342; Oct. 6.
Current systems, Apparatus for comparing quantities of alternating. K. A. Sterzel. 1,826,191; Oct. 6.
Cuspidor, Invalid's. A. S. Kushner. 1,826,137; Oct. 6.
Cutter: *See*—
Plaster cutter.
Cutter and employing same, Gear. M. H. Johanson. 1,825,733; Oct. 6.
Cutting and folding machines, Feeding mechanism for. C. J. Beck. 1,826,495; Oct. 6.
Cutting, collecting, and folding mechanism, Sheet. C. S. Crafts. 1,826,601; Oct. 6.
Cutting machines and the like, Positioning means in paper. K. Stegmann. 1,825,928; Oct. 6.
Cylinders of internal combustion engines, Construction of the. M. J. B. Barbarou. 1,825,769; Oct. 6.
Data computer. R. L. Goetzenberger. 1,825,659; Oct. 6.
Dead end clamp. H. E. McDowell. 1,825,913; Oct. 6.
Decalcomania. R. Tull. 1,826,228; Oct. 6.
Deflector, Prerinse. L. O. Dufford. 1,825,718; Oct. 6.
Demand meter. H. Chrisman. 1,826,272; Oct. 6.
Denture retaining device. F. C. Montuori. 1,826,014; Oct. 6.
Designs on tile, Producing. L. V. Solon. 1,826,262; Oct. 6.
Die lapping machine. W. Haddow. 1,826,347; Oct. 6.
Differential adjustment for rolls. L. Johnson. 1,825,957; Oct. 6.
Dilator. F. H. Newton. 1,826,284; Oct. 6.
Dipper, Ice cream. E. J. Martineau. 1,826,009; Oct. 6.
Dirigible light. C. Rose. 1,826,025; Oct. 6.
Discharge tube, Vacuum. G. Claude. 1,826,382; Oct. 6.
Disconnecting switch. E. K. Read. 1,825,800; Oct. 6.
Dispensing apparatus. E. Kanter. Des. 85,289; Oct. 6.
Dispensing apparatus, Liquid. R. E. Bechtold. 1,826,340; Oct. 6.
Dispensing apparatus, Liquid. C. A. Desimone. 1,826,204; Oct. 6.
Dispensing apparatus, Liquid. W. E. Splain. 1,825,682; Oct. 6.
Dispensing case. C. J. Markson. 1,825,805; Oct. 6.
Dispensing device. R. B. Rothwell. 1,826,189; Oct. 6.
Display device. R. W. Steele. 1,826,533; Oct. 6.
Display, Luminous. F. Hotchner. 1,825,799; Oct. 6.
Display rack. C. A. Peterson. Des. 85,303; Oct. 6.
Display stand. J. D. Haskins. Des. 85,286; Oct. 6.
Distance determining instrument. J. Szabo. 1,826,582; Oct. 6.
Distance to ground connections in electro conductors, Apparatus for determining the. H. Polock. 1,825,754; Oct. 6.
Dobby for harness and box motion, Reversible. W. M. Wattie. 1,826,334; Oct. 6.
Document photographing apparatus, Indicating device for. R. S. Hopkins. 1,826,064; Oct. 6.
Dog, Novelty. C. B. Bickel. Des. 85,277; Oct. 6.
Doll. N. J. Givago-Grishina. Des. 85,284; Oct. 6.
Door alarm. Z. Pehel and G. Zych. 1,825,888; Oct. 6.
Doorframe, Reversible. T. P. and W. T. McHugh. 1,826,516; Oct. 6.
Door, Car. A. Campbell. 1,826,049; Oct. 6.
Door construction. J. A. Loetscher. 1,825,878; Oct. 6.
Door for cars. K. M. Hamilton. 1,826,244; Oct. 6.
Door holder arm. D. R. Lasier. 1,826,553; Oct. 6.
Door, Railway car floor. K. M. Hamilton. 1,826,348; Oct. 6.
Door structure, Overhead. H. C. Blodgett. 1,826,647; Oct. 6.
Dough divider. F. Streich. 1,826,031; Oct. 6.
Dough during proving, Apparatus for mechanically handling. J. E. Wilson, S. McConnell, and C. Brown. 1,826,537; Oct. 6.
Dough mixer. W. F. Dehuff. 1,826,242; Oct. 6.
Draft rigging. B. W. Kadel, and P. R. Drenning. 1,825,696; Oct. 6.
Drill: *See*—
Rock drill. Seed drill.
Drill point and making the same. F. S. Mulock. 1,826,085; Oct. 6.
Drill, reamer, and tap, Combined. F. H. Mueller. 1,826,323; Oct. 6.
Drill unit with common feed. C. H. Mubl. 1,825,971; Oct. 6.
Drilling head. W. T. Dunn, and J. E. Shows. 1,826,059; Oct. 6.
Drive for excavating machines, Selective. W. Harnischfeger. 1,826,466; Oct. 6.
Drive for radial engines, Vehicle. A. F. Masury. 1,826,359; Oct. 6.
Drive mechanism for vehicles, Front wheel. S. C. Halversen. 1,826,130; Oct. 6.
Drive transmission for centrifugals. E. Roberts. 1,826,675; Oct. 6.
Drum controller box. H. E. Campbell. 1,826,050; Oct. 6.
Dyeing and printing. J. I. M. Jones, and W. Kilby. 1,826,352; Oct. 6.
Dyeing textile fiber laps. O. J. Obermaier. 1,825,974; Oct. 6.
Dyestuffs and preparing them, Vat. G. Kränzlein, H. Vollman, and M. Corell. 1,825,740; Oct. 6.
Dyestuffs, New vat. M. A. Kunz, and K. Koeberle. 1,825,874; Oct. 6.
Dyestuff, Vat. M. A. Kunz, and K. Koeberle. 1,825,875; Oct. 6.
Ear pad. M. O. Gaston, and T. R. James. 1,826,309; Oct. 6.
Easel. F. D. Courtenay. 1,825,716; Oct. 6.
Echo suppressor. L. G. Abraham. 1,826,196; Oct. 6.
Educational apparatus. P. E. Klopsteg. 1,826,180; Oct. 6.
Electric machine element, Dynamo. V. G. Apple. 1,826,295; Oct. 6.
Electric machine member, Dynamo. V. G. Apple. 1,826,296; Oct. 6.
Electric switch. H. A. Douglas. 1,826,509; Oct. 6.
Electric switch. R. E. Schwarz and G. A. Matthews. 1,826,370; Oct. 6.
Electrical apparatus. L. A. M. Phelan. 1,826,571; Oct. 6.
Electrical device. L. A. M. Phelan, and P. S. Bear. 1,826,572; Oct. 6.
Electrical horology. J. Geissiinger. 1,826,066; Oct. 6.
Electrical switch. L. A. M. Phelan, and P. S. Bear. 1,826,570; Oct. 6.
Electrically controlled mechanism for detecting leaks in cylindrical cans or containers. H. A. Zuch. 1,826,589; Oct. 6.
Electrode arc welding, Metallic. H. D. Morton. 1,826,186; Oct. 6.
Electroplating. L. R. Westbrook. 1,826,159; Oct. 6.
Elevator construction. R. W. Makutchan. 1,826,357; Oct. 6.
Embalming implement. A. Clapp. 1,825,993; Oct. 6.
Embossing and printing press. W. C. Fellows. 1,825,945; Oct. 6.
Engine: *See*—
Internal-combustion engine. Winding engine.
Rotary engine.
Engine and working the same, Internal combustion. W. Schwerdtfeger. 1,826,638; Oct. 6.
Engine construction, Geared locomotive. D. B. Thorburn and R. B. Krueger. 1,826,292; Oct. 6.
Engine head stand. S. L. Bahrman. 1,826,493; Oct. 6.
Engines, Fuel control for internal combustion. M. D. Moore. 1,826,630; Oct. 6.
Engines, Operating system of internal combustion. R. Kondo. 1,825,959; Oct. 6.
Engines, Speed controlling means for. M. B. Menniges. 1,825,701; Oct. 6.
Engines, Stratifying arrangement for internal combustion. J. Patterson. 1,825,817; Oct. 6.
Eraser. L. K. Wright. 1,826,587; Oct. 6.
Eraser, Blackboard. A. A. Elnett. 1,825,858; Oct. 6.
Excavator, Conveyor. A. V. Huennekens. 1,825,956; Oct. 6.
Exercising device. H. E. McCoy. 1,826,254; Oct. 6.
Expansion joint. A. R. Lawrence. 1,826,666; Oct. 6.
Extraction process. R. de M. Taveau. 1,825,762; Oct. 6.
Extruding machine. T. S. Vierow. 1,826,230; Oct. 6.
Fabric and making the same, Single texture. P. S. Smith. 1,825,827; Oct. 6.
Fabric for furniture or similar articles, Panel. G. E. O'Hearn. Des. 85,299; Oct. 6.
Fabrics, Anchoring the elastic strands of elastic. L. B. Chisholm. 1,826,240; Oct. 6.
Fastener. G. A. Holmes. 1,826,281; Oct. 6.
Fastener for intimate body garments. M. T. Lucas. 1,826,623; Oct. 6.
Faucet, Lavatory. F. Schulder. 1,825,826; Oct. 6.
Feeding device. C. L. Post. 1,826,020; Oct. 6.
Feeler. F. F. Schmanska. 1,826,637; Oct. 6.
Fence making machine, Wire. M. Haidekker. 1,826,515; Oct. 6.
Ferrochrome, Refining. K. M. Simpson. 1,826,261; Oct. 6.
Fiber reclaiming device for revolving flat cards, Staple. C. Gégauff and J. Pflimlin. 1,825,948; Oct. 6.
Filaments, Treatment of metallic. J. H. Ramage. 1,826,524;; Oct. 6.
Filing system. A. A. Ainsworth. 1,825,845; Oct. 6.
Film in projecting apparatus, Device for permitting the continuous feeding of the. P. G. H. Hallongren. 1,825,953; Oct. 6.
Film, Light protected motion picture. P. Favour. 1,826,695; Oct. 6.
Film reel and spindle. A. C. Hayden. 1,825,663; Oct. 6.
Films, Cellulose ester. C. J. Staud and T. F. Murray, jr. 1,826,679; Oct. 6.
Filter, Replaceable element. E. J. Sweetland. 1,825,983; Oct. 6.
Filter, Rotatable gas. B. Richter. 1,826,256; Oct. 6.
Finger ring. J. Granat. Des. 85,285; Oct. 6.
Fire escape. R. M. Stephens. 1,826,263; Oct. 6.
Fire extinguisher. W. L. Roessner, E. Wheeler, and V. C. Smedley. 1,825,922; Oct. 6.

Fire extinguishers, Constructing. C. L. Williams. 1,826,684; Oct. 6.
Fire protection apparatus. J. R. Hamilton. 1,826,072; Oct. 6.
Firearm, Automatic. K. Heinemann. 1,825,904; Oct. 6.
Firearms, Night sight for. J. F. Key. 1,826,004; Oct. 6.
Fishing reel. A. E. and E. R. Hieser. 1,825,866; Oct. 6.
Flame arrester. J. H. Wiggins. 1,826,487; Oct. 6.
Flash arrester, Hydraulic. W. F. Mesinger. 1,825,970; Oct. 6.
Flask: *See*—
Pipe flask.
Flooring and making the same, Composition. E. C. Loetscher. 1,825,877; Oct. 6.
Fluid cooler. F. R. Erbach. 1,826,345; Oct. 6.
Fluid cooler. C. C. Spreen. 1,826,372; Oct. 6.
Fluid meter. M. E. Guermont. 1,826,346; Oct. 6.
Fluid pressure regulator. G. Remsnider. 1,825,755; Oct. 6.
Fluids, Apparatus for compressing and expanding. H. J. Zimmermann. 1,825,843; Oct. 6.
Fluids, Apparatus for measuring. R. N. Ehrhart. 1,826,422; Oct. 6.
Fluids in a spinning column and apparatus used in connection therewith, heating. C. W. Stratford. 1,825,761; Oct. 6.
Folder. M. F. Bernson. 1,826,596; Oct. 6.
Folder or similar container constructed of flexible material. N. Ottinger. Des. 85,300; Oct. 6.
Foreign substances into vacuum tube lights, Method and apparatus for introducing. R. C. Smalley. 1,826,383; Oct. 6.
Fork or analogous article. P. C. Gallagher. Des. 85,282; Oct. 6.
Form for making paper boxes, Adjustable. C. Schwarz and P. Panhorst. 1,826,260; Oct. 6.
Form for paving, Joint. R. D. Farmer. 1,826,062; Oct. 6.
Form for rubber articles. E. Hopkinson. 1,826,214; Oct. 6.
Frame: *See*—
Body frame.
Freight, Apparatus for transferring. B. F. Fitch. 1,825,786-7; Oct. 6.
Fruit pitting apparatus. A. R. Thompson. 1,825,835; Oct. 6.
Fruit washer. A. I. Morton. 1,826,015; Oct. 6.
Fuel mixing device. J. W. Smith. 1,825,892; Oct. 6.
Fuel, Motor. D. Stryker. 1,826,439; Oct. 6.
Fuel supply system, Liquid. A. E. Berdon. 1,826,119; Oct. 6.
Furnace: *See*—
Retort furnace.
Furnace. D. L. Summey. 1,825,831; Oct. 6.
Furnace wall, Tube supported. D. S. Jacobus. 1,825,666; Oct. 6.
Furniture construction, Insulated. E. Ohnstrand. 1,826,670; Oct. 6.
Furniture corner construction. J. A. Butkus. 1,826,419-21; Oct. 6.
Fuse for bombs and other projectiles, Percussion. L. Savani. 1,826,190; Oct. 6.
Fuse, Thermoresponsive. N. S. Nelson. 1,825,811; Oct. 6.
Game. F. R. Chester. 1,825,777-8; Oct. 6.
Game. T. S. Hutchison. 1,826,215; Oct. 6.
Game board. A. N. Latimer. 1,825,673; Oct. 6.
Garment hanger. A. A. Wyckoff and B. L. Yauney. Des. 85,311; Oct. 6.
Garment press. J. C. Ledbetter. 1,826,619; Oct. 6.
Garment press. B. J. Yanchenko. 1,826,442; Oct. 6.
Gas, Apparatus for manufacturing combustible. H. O. Loebell. 1,826,007; Oct. 6.
Gas burner. J. S. Zink. 1,826,588; Oct. 6.
Gas burner and mixing apparatus, Combined. H. B. Barber and W. M. Hepburn. 1,826,163; Oct. 6.
Gas gun. W. M. Minto. 1,826,562; Oct. 6.
Gas in a solid adsorbent, Adsorbing a. F. H. Wagner, jr. 1,825,707; Oct. 6.
Gas producer. F. H. Treat. 1,826,156; Oct. 6.
Gas producers, Automatic reversing apparatus for controlling the closure members of periodically operating. C. Niedbrodt. 1,826,363; Oct. 6.
Gas supplying method and device therefor. C. W. P. Heylandt. 1,826,248; Oct. 6.
Gasifier. T. G. Sullivan. 1,825,830; Oct. 6.
Gasket. W. G. Laird. 1,825,962; Oct. 6.
Gate: *See*—
Crossing gate. Hoist end gate.
Gauge: *See*—
Pressure gauge. Radius gauge.
Gauge and pump, Depth. L. H. Wheeler. 1,825,708; Oct. 6.
Gauge for automobile axles, Spindle. H. Wochner. 1,825,988; Oct. 6.
Gauging machine. O. Schlaupitz. 1,826,527; Oct. 6.
Gearing, Bicycle. E. Murase. 1,826,565; Oct. 6.
Generator or water heater, Steam. H. F. Marriott. 1,826,358; Oct. 6.
Generators, Water back for steam. J. E. Bell. 1,825,933; Oct. 6.
Glass, Apparatus for making plate. R. L. Clause. 1,825,853; Oct. 6.
Glass apparatus, Sheet. K. Kupferschmid. 1,826,006; Oct. 6.
Glass parisons, Method of and apparatus for transferring. K. E. Peller. 1,826,019; Oct. 6.
Golf-bag and the like, Self-supporting. H. T. Johnson. 1,826,216; Oct. 6.
Golf ball ejector. G. W. Waddell. 1,826,641; Oct. 6.
Goods from organic dispersions, Producing dipped. P. Klein and F. Gábor. 1,825,738; Oct. 6.
Grease gun coupling. C. G. Butler. 1,825,939; Oct. 6.
Grinding head or attachment. F. R. Moore. 1,825,883; Oct. 6.
Grinding machine. W. J. Guild. 1,826,070; Oct. 6.
Grinding machine. C. W. Hopkins. 1,825,797; Oct. 6.
Grinding machine. H. E. Kempton and K. F. Gallimore. 1,826,178; Oct. 6.
Guard, Reversible switch point. L. H. Fulton. 1,826,657; Oct. 6.
Guard with covered crank hole, Front splash. H. J. Earl and J. F. Wilson. 1,826,393; Oct. 6.
Gyroscopic system for controlling dirigible craft. P. A. Cooke. 1,825,994; Oct. 6.
Hair clipper, Speed up. E. R. Potter. 1,825,818; Oct. 6.
"Hall effect," System and apparatus employing the. P. H. Craig. 1,825,855; Oct. 6.
Hand brake, Railway car. W. D. Price. 1,826,636; Oct. 6.
Hand-cuff. A. Almqvist. 1,826,591; Oct. 6.
Handle: *See*—
Brush handle.
Hanger: *See*—
Pipe hanger.
Hanger for supporting strips of bacon. P. J. Louthian. 1,825,879; Oct. 6.
Hatchet. J. J. R. Meyers. Des. 85,297; Oct. 6.
Headrest for morticians, Adjustable. W. and C. G. Addington. 1,825,989; Oct. 6.
Heat dissipating device, Lubricant. G. A. Potter. 1,825,819; Oct. 6.
Heat exchange apparatus and operating the same. G. C. Derry. 1,825,656; Oct. 6.
Heat exchange element. H. V. Dalgliesh. 1,826,344; Oct. 6.
Heater: *See*—
Generator or water heater. Vehicle heater.
Heater. J. J. Goetz. Re18,218; Oct. 6.
Heating and cooling device for inclosed spaces. L. A. James. 1,826,471; Oct. 6.
Heating device, Windshield and car. J. S. Adams and B. Miller. 1,826,590; Oct. 6.
Heating system and control therefor. D. J. Stewart. 1,826,100; Oct. 6.
Heating system for automobiles and coupling therefor. J. S. Douglass, jr. 1,826,169; Oct. 6.
Heating system for automobiles, Steam. J. S. Douglass, jr. 1,826,168; Oct. 6.
Heating system for fluids, Electric. H. Heroy. 1,825,793; Oct. 6.
Heel. A. C. Hayden. 1,825,692; Oct. 6.
Heel for plumb bobs. J. A. Gilman. 1,826,465; Oct. 6.
Hemmer. R. J. Sailer. 1,826,677; Oct. 6.
Hoist end gate, Mechanical. E. L. Fosdick. 1,826,513; Oct. 6.
Hoist, Fire hose. G. W. Gardner and J. R. Underhill. 1,826,658; Oct. 6.
Holder and cutter, Combined thread. A. A. Gordon. 1,826,312; Oct. 6.
Holder and serving tray, Check. D. G. Allen. 1,826,037; Oct. 6.
Holder, Article. E. G. Sturgis. 1,826,640; Oct. 6.
Holder, Canvas. F. G. Diesch. 1,825,995; Oct. 6.
Holder, Cigar and cigarette. O. Foehr. 1,825,946; Oct. 6.
Holder, Cigarette and cigar. E. Boeckel. 1,826,237; Oct. 6.
Holder, Jar. E. M. Walker. 1,826,486; Oct. 6.
Holder, Label. E. Ohnstrand. 1,826,671; Oct 6.
Holder, Lip-stick. J. L. Younghusband. 1,825,895; Oct. 6.
Holder, Paper roll. R. R. Rundell. 1,825,822; Oct. 6.
Holder, Tool. K. C. Council. 1,826,459; Oct. 6.
Hook: *See*—
Safety hook.
Hosiery knitting machines, Loop regulating mechanism for full fashioned. J. Haines, jr. 1,826,660; Oct. 6.
Humidor. C. A. Ziebarth. 1,826,115; Oct. 6.
Hydrocarbons, Refining. T. T. Gray. 1,825,861; Oct. 6.
Ice creeper. J. Dumas. 1,826,511; Oct. 6.
Ignition timer. J. T. Fitzsimmons. 1,825,720; Oct. 6.
Illuminating device. S. W. Fullerton. 1,826,389; Oct. 6.
Incubator. F. E. Stover. 1,826,438; Oct. 6.
Indicating and controlling mechanism. C. W. Harris. 1,826,280; Oct. 6.
Indicator for fallen drop wires. O. V. Payne. 1,826,326; Oct. 6.
Induction meter. W. Beusch. 1,826,447; Oct. 6.
Ink from paper, Removing printing. M. E. and B. W. Kinyon. 1,826,179; Oct. 6.
Ink to inking ribbons, Supplying. G. E. Pelton. 1,826,568; Oct. 6.
Inking mechanism. H. Fankboner. 1,825,999; Oct. 6.
Insecticide and fungicide mixture. K. H. Fulton and M. T. Inman, jr. 1,826,065; Oct. 6.
Insulating panel. G. A. Young. 1,826,114; Oct. 6.
Insulator for automobile hoods. E. Bollinger. 1,826,046; Oct. 6.
Insulator for electron discharge devices, Refractory. F. H. Driggs. 1,826,510; Oct. 6.
Insulator, Leading-in. A. Imhof. 1,825,905; Oct. 6.
Internal combustion engine. P. Dugelay. 1,826,306; Oct. 6.

Internal combustion engine. E. P. Dumanois. 1,825,658; Oct. 6.
Internal combustion engine. E. S. Hall. 1,825,691; Oct. 6.
Internal combustion engine. F. R. Higley. 1,826,424; Oct. 6.
Internal combustion engine, Double acting. V. O. Lacambra. 1,825,961; Oct. 6.
Internal combustion engine, Rotary. J. I. Haynes. 1,825,791; Oct. 6.
Iron and article of manufacture produced thereby, Externally hardening cast. A. Fry. 1,826,656; Oct. 6.
Iron in the converter, and carrying out said process, Dephosphorizing. F. Bicheroux. 1,826,497; Oct. 6.
Iron, Manufacturing gray pig. F. Greiner. 1,826,211; Oct. 6.
Ironing board, Folding. S. F. Slawski. Re18,223; Oct. 6.
Jack: *See*—
Lifting jack. Vehicle jack.
Jack post. R. C. Rumbaugh. 1,826,574; Oct. 6.
Jar lifter. E. W. Wheeler. 1 826,194; Oct. 6.
Joint: *See*—
Expansion joint. Universal joint.
Pipe joint.
Key for different locks. E. Hansen and I. Poderzag. 1,826,615; Oct. 6.
Key lock, Interchangeable. E. M. Benham. 1,826,595; Oct. 6.
Kit, Sterilizer. R. A. Barnes. Des. 85,276; Oct. 6.
Kite string reel. H. Root. 1,826,481; Oct. 6.
Knife, Hay. J. W. Jensen. 1,826,250; Oct. 6.
Knitting machine. F. Lässig. 1,825,746; Oct. 6.
Knitting machines, Welt closing mechanism for full fashioned. J. Haines, jr. 1,826,661; Oct. 6.
Knock-off for electric warp stop motion. A. A. Gordon. 1,826,310; Oct. 6.
K-stropanthidine and producing same, Acylated. W. Neumann. 1,825,812; Oct. 6.
Lace. G. M. King. Des. 85,290; Oct. 6
Ladder and ironing board, Combination. W. Campbell. 1,826,504; Oct. 6.
Lamp. B. E. Carrm. Des. 85,281; Oct. 6.
Lamp and supporting base, Combined. A. von Frankenberg. Des. 85,310; Oct. 6.
Lamp, Nonhardening vacuum tube. L. L. Beck. 1,826,395; Oct. 6.
Lamp, Signal. L. O. Parker. 1,826,220; Oct. 6.
Lasting machine. F. C. Eastman. 1,825,857; Oct. 6.
Latch, Locking. G. E. Keeler. 1,826,472; Oct. 6.
Latch, Post anchored door. W. R. Schlage. 1,826,093; Oct. 6.
Latex and product, Thickening and stabilizing. M. C. Teague. 1,826,192; Oct. 6.
Lath machine, Expanded metal. E. T. Redding. 1,826,286; Oct. 6.
Lathe for car wheel axles and the like, Hydraulically driven. W. J. F. Forward and S. A. Harding. 1,825,722; Oct. 6.
Lathing unit. W. W. Blackburn. 1,826,499; Oct. 6.
Layout for restaurants. C. G. Hall. 1,825,952; Oct. 6.
Leak detector for autos, High pressure. W. A. Winder. 1,825,839; Oct. 6.
Lens, Photographic. W. Merte. 1,826,362; Oct. 6.
Lens, Photographic. A. Sonnefeld. 1,825,828; Oct. 6.
Letterheads, Apparatus and process for printing. A. Rosenthal. 1,825,821; Oct. 6.
Leveling device. H. S. Benjamin. 1,825,848; Oct. 6.
Lever, Master. A. R. Locke. 1,826,079; Oct. 6.
Lifter: *See*—
Jar lifter.
Lifter for baths, lavatories, and the like, Valve. R. Stöhr. 1,826,639; Oct. 6.
Lifting jack. H. E. Newton. 1,825,702; Oct. 6.
Light: *See*—
Dirigible light.
Light for automobiles, Stop. A. Kotlan. Des. 85,291; Oct. 6.
Lighter for gas burners and stoves. F. A. Rump. 1,826,576; Oct. 6.
Lily pool tank. C. G. Watson. 1,825,894; Oct. 6.
Lining, Cylinder. C. C. Pittman. 1,825,678; Oct. 6.
Link, Tractor belt. C. A. Henneuse. 1,825,693; Oct. 6.
Linoleum, Making. J. B. Thompson. 1,826,155; Oct. 6.
Linoleum product and making same. M. S. McConoughey. 1,826,217; Oct. 6.
Liquid coating composition and making same. J. E. Booge. 1,825,935; Oct. 6.
Liquid cooling apparatus. H. H. Marshall. 1,826,253; Oct. 6.
Liquid from well tubing, Draining. P. H. Granger. 1,826,210; Oct. 6.
Liquid fuel burner. M. Good. 1,826,423; Oct. 6.
Liquid treatment comb. J. Henige. 1,826,541; Oct. 6.
Liquids, Mixing. E. W. Butler and J. C. Mann. 1,826,598; Oct. 6.
Lithopone and making same. M. L. Hanahan. 1,826,131; Oct. 6.
Lithopone, Light resistant. J. A. Singmaster and H. S. Colton. 1,826,153; Oct. 6.
Lithopone pigment suitable for flat wall paints and enamels. M. L. Hanahan. 1,826,132; Oct. 6.
Load bracing device. C. A. Chandler. 1,825,992; Oct. 6.
Lock: *See*—
Combination lock. Socket lock.
Key lock. Wheel rim lock.
Lock. S. F. Briggs. 1,826,649; Oct. 6.
Lock for vehicles, Door. S. Armitage. 1,826,117; Oct. 6.
Locking bar for bushings. L. E. Zerbe. 1,825,930; Oct. 6.
Locking means, Sheet metal. R. F. Carpenter and T. F. Anderson. 1,826,452; Oct. 6.
Locomotive steam distribution. H. W. Snyder and R. B. Krueger. 1,826,290; Oct. 6.
Loom dobbies, Driving connection for. W. E. Lundgren. 1,826,318; Oct. 6.
Loom dobby. A. A. Gordon. 1,826,311; Oct. 6.
Loom filling fork and protector controlling mechanism. A. E. Benson. 1,826,685; Oct. 6.
Looms, Bobbin support for wert replenishing. C. P. Bergstrom. 1,826,208; Oct. 6.
Looms, Dobby finger for. A. A. Gordon. 1,826,313; Oct. 6.
Looms, Loose reed for. E. R. Holmes. 1,826,314; Oct. 6.
Looms, Reed holder for. W. E. Lundgren and J. G. Soderberg. 1,826,319; Oct. 6.
Looms, Shuttle box for drop box. C. J. Lindegren. 1,826,317; Oct. 6.
Looms, Shuttle motion for narrow ware. M. J. Flynn. 1,826,394; Oct. 6.
Looms, Stopping mechanism for. W. H. Baker. 1,826,444; Oct. 6.
Looms, Tube frame for Axminster. W. E. McCleary. 1,826,320; Oct. 6.
Loud-speaker for wireless apparatus or the like. G. R. Searle. 1,826,226; Oct. 6.
Lubricating apparatus. H. J. Murphy. 1,825,972; Oct. 6.
Lubricating system. H. J. Murphy. 1,825,973; Oct. 6.
Lubricating system for internal combustion engines. E. C. Piper. 1,825,889; Oct. 6.
Machine and method for forming and attaching rands. F. Ashworth. 1,825,688; Oct. 6.
Machine for mending runs in fabrics. R. M. Markus. 1,825,806; Oct. 6.
Machine for severing composite glass sheets and the like. W. Owen. 1,825,886; Oct. 6.
Machine for stripping tobacco leaves. F. W. Wehmann and E. R. Dahlström. 1,826,376; Oct. 6.
Mandrel, Expanding. C. J. Sheuk. 1,825,925; Oct. 6.
Mandrel, Expansion. S. L. Hays. 1,825,865; Oct. 6.
Manifolding machine, Multiple. J. Q. Sherman. 1,825,706; Oct. 6.
Maps, Apparatus for drawing topographic. P. R. Van Buskirk. 1,826,375; Oct. 6.
Marker, Street. L. A. Johnson. 1,825,667; Oct. 6.
Materials, Apparatus for projecting. B. H. Schieldrop. 1,826,483; Oct. 6.
Materials containing bitumen, Producing felted. C. L. Keller. 1,825,869; Oct. 6.
Materials, Preparing moistureproof. W. H. Charch and K. E. Prindle. 1,826,699; Oct. 6.
Matter, Composition of. G. J. Comstock. 1,826,454; Oct. 6.
Matter, Composition of. G. J. Comstock and E. B. Welch. 1,826,455; Oct. 6.
Matter, Composition of. G. J. Comstock and E. B. Welch. 1,826,457; Oct. 6.
Matter containing a bromo compound, Cellulosic composition of. S. J. Carroll. 1,826,688; Oct. 6.
Matter containing acetyl phenyl glycine, Cellulosic composition of. S. J. Carroll. 1,826,687; Oct. 6.
Matter containing anisidine, Cellulosic composition of. T. F. Murray, jr., and C. J. Staud. 1,826,668; Oct. 6.
Matter containing chloro-cyclohexane, Cellulosic composition of. S. J. Carroll. 1,826,689; Oct. 6.
Matter containing ethyl-A-bromo-propionate, Cellulosic composition of. S. J. Carroll. 1,826,691; Oct. 6.
Matter containing ethyl chloro-carbonate, Cellulosic composition of. S. J. Carroll. 1,826,690; Oct. 6.
Matter containing methyl anisate, Cellulosic composition of. S. J. Carroll. 1,826,692; Oct. 6.
Matter containing piperidine, Cellulosic composition of. T. F. Murray, jr., and C. J. Staud. 1,826,667; Oct. 6.
Matter containing triporprionin, Cellulosic composition of. S. J. Carroll. 1,826,693; Oct. 6.
Mercury in blue neon tubes, Deadening. L. L. Beck. 1,826,387; Oct. 6.
Metal aggregate. G. J. Comstock. 1,826,456; Oct. 6.
Metal article and making the same, Composite. R. Hervig and R. Jardine. 1,826,543; Oct. 6.
Metal articles, Making. A. Kadow. 1,825,958; Oct. 6.
Metal strips, Making. W. C. Coryell. 1,825,854; Oct. 6.
Metallurgical slimes, Treating. H. Lehrecke. 1,826,183; Oct. 6.
Metallurgical treatment. C. Thurneyssen. 1,826,583; Oct. 6.
Metals, Melting. L. E. Zifferer. 1,825,841; Oct. 6.
Metals, Plating. W. E. Watkins. 1,825,763; Oct. 6.
Meter: *See*—
Demand meter. Induction meter.
Fluid meter.
Meter systems, Automatic control for pump equipped. W. S. Brubaker. 1,825,775; Oct. 6.
Mill: *See*—
Seamless tube mill.
Mill repeater, Rolling. A. C. Brauer and G. W. Weimer. 1,826,451; Oct. 6.
Mills, Guide for rolling. G. W. Sills. 1,826,531; Oct. 6.
Milling machine. W. J. F. Forward and R. R. Roberts. 1,825,721; Oct. 6.
Milling machine. A. Trosch. 1,825,684; Oct. 6.
Mining apparatus. C. F. Osgood. 1,826,218; Oct. 6.

Mirror for automobiles, Reversible nonglaring rear-vision. J. Wilczynski. 1,825,687; Oct. 6.
Mixer: *See*—
Concrete mixer. Dough mixer.
Mixer and distributor for pneumatic transported pulverized material. J. E. Kennedy. 1,825,668; Oct. 6.
Moisture content, Determining. S. C. Bond. 1,825,896; Oct. 6.
Moisture content of substances, Process and apparatus for determining the. T. E. Heppenstall. 1,826,247; Oct. 6.
Moistureproofing composition. W. H. Charch and K. E. Prindle. 1,826,696; Oct. 6.
Molding machine. H. Schantz. 1,826,577; Oct. 6.
Motor: *See*—
Wind motor.
Motor and friction clutch therefor, Electric. W. A. Chryst. 1,826,054; Oct. 6.
Motors or for Diesel engines, Injecting means for internal combustion. C. Thomas. 1,826,535; Oct. 6.
Mounting hickey, Fixture. R. Popp. 1,825,920; Oct. 6.
Mounting of speed cup and rotor shaft. J. Zubaty. 1,826,409; Oct. 6.
Mower, Lawn. H. M. Hessenbruch. 1,826,663; Oct. 6.
Mowers, Grass catcher for lawn. W. H. Dees. 1,826,605; Oct. 6.
Muffler for aeroplane engines, Cowl. A. C. Hewitt. 1,825,794; Oct. 6.
Multicircuit testing mechanism. F. B. Philbrick. 1,825,978; Oct. 6.
Multiweb handling machine. H. M. Barber. 1,826,446; Oct. 6.
Mute for stringed instruments. F. Q. Miranda. 1,825,915; Oct. 6.
Nail plate feeder. W. H. Johnson. 1,825,695; Oct. 6.
Necktie. S. Schwartz. Re18,222; Oct. 6.
Necktie, Reversible. I. D. Wolfson. 1,826,035; Oct. 6.
Nicotine and the methylalcohol when smoking tobacco, Doing away with the. I. Traube. 1,826,331; Oct. 6.
Nonskid device, Quickly applied. A. D. Bruner. 1,826,123; Oct. 6.
Nozzle. E. S. Harter. 1,825,864; Oct. 6.
Nozzles, Fan and spray wheel attachment for hose. F. P. Gibson. 1,826,208; Oct. 6.
Odometer. C. B. Dinsmore. 1,826,391; Oct. 6.
Oil composition and process of retarding development of rancidity therein. T. H. Rogers. 1,826,258; Oct. 6.
Oil, Cracking mineral. A. E. Pew, jr., and H. Thomas. 1,825,976 7; Oct. 6.
Oil fields, Treating. P. J. Spindler. 1,826,371; Oct. 6.
Oil from sludge, Salvaging. H. C. Eddy. 1,826,276; Oct. 6.
Oil mixtures and making same, Stable homogeneous nitrocellulose drying. J. E. Booge. 1,825,773; Oct. 6.
Oil, Recovering. C. T. Harding and J. C. Whetzel. 1,826,349; Oct. 6.
Oils, Apparatus for testing lubricating. J. H. Gonder. 1,825,725; Oct. 6.
Oils with aluminum salts, Refining hydrocarbon. A. Lachman. 1,826,145; Oct. 6.
Oils with cadmium salts, Refining hydrocarbon. A. Lachman. 1,826,140; Oct. 6.
Oils with chromium salts, Refining hydrocarbon. A. Lachman. 1,826,143; Oct. 6.
Oils with cobalt salts, Refining hydrocarbon. A. Lachman. 1,826,147; Oct. 6.
Oils with copper salts, Refining hydrocarbon. A. Lachman. 1,826,139; Oct. 6.
Oils with iron salts, Refining hydrocarbon. A. Lachman. 1,826,142; Oct. 6.
Oils with manganese salts, Refining hydrocarbon. A. Lachman. 1,826,144; Oct. 6.
Oils with mercury salts, Refining hydrocarbon. A. Lachman. 1,826,141; Oct. 6.
Oils with nickel salts, Refining hydrocarbon. A. Lachman. 1,826,146; Oct. 6.
Oils with sulphonic acid salts, Refining hydrocarbon. A. Lachman. 1,826,138; Oct. 6.
Opener, Can. E. A. Ormsby. 1,826,324; Oct. 6.
Ore leaching process. G. Mott. 1,825,752:; Oct. 6.
Ores, Treating. C. C. Haas. 1,825,949; Oct. 6.
Organ. W. A. P. S. Langston. 1,826,518; Oct. 6.
Outlet box. L. Kellner. 1,825,697; Oct. 6.
Ovens, Thermostatic control for. A. G. Sherman. 1,826,328; Oct. 6.
Packaging device. F. Watson. 1,826,536; Oct. 6.
Packing ring for pumps. J. G. Dobbins. 1,826,057; Oct. 6.
Pad: *See*—
Blotting pad. Pressing machine pad.
Ear pad.
Pad, cushion or the like. C. Diehl. 1,826,304; Oct. 6.
Pan unit, Baking. H. A. Lockwood. 1,826,080; Oct. 6.
Paper. J. A. Lowe. 1,826,557; Oct. 6.
Paper and the like in folding, ruling, and other machines, Turning sheets of. H. Mason. 1,826,624; Oct. 6.
Paper bag. I. B. Blake. 1,826,646; Oct. 6.
Paper feeder, Vacuum. J. Zanetti. 1,825,765; Oct. 6.
Paper, Safety. S. S. Himmell. 1,825,796; Oct. 6.
Paper winding apparatus. E. E. Berry. 1,826,041; Oct. 6.
Parachute. J. Hammerle. 1,826,245; Oct. 6.
Parachute, Aircraft. F. Loske. 1,826,556; Oct. 6.
Parison transfer and inversion mechanism and method. H. A. Wadman. 1,825,985; Oct. 6.
Pen clip. H. E. Hoke. 1,825,730; Oct. 6.
Pen, Fountain. W. J. Baker. 1,825,931:; Oct. 6.
Pen, Fountain. W. J. Wooldridge. 1,826,195; Oct. 6.
Pencil. J. P. Lynn. 1,825,803; Oct. 6.
Pencil. C. E. Wehn. 1,826,266; Oct. 6.
Pencil, Mechanical. C. R. Keeran. 1,826,473; Oct. 6.
Permanent wave apparatus. P. Kunian and J. Sten. 1,826,078; Oct. 6.
Perspectograph. C. W. Ackerberg. 1,826,338; Oct. 6.
Phenols from gas liquors, Recovery of. C. Schoenburg and G. von der Bruck. 1,826,369; Oct. 6.
Phosphate, Production of disodium. P. A. Lang. 1,825,965; Oct. 6.
Phosphorus and producing latent hydraulic binders, Simultaneously volatilizing. G. Pistor, R. Suchy, and E. Reubke. 1,826,433; Oct. 6.
Photographic apparatus, Coin operated. M. Bacino. 1,825,709; Oct. 6.
Photographic apparatus, Conveyer for copy. A. W. Caps. 1,826,599; Oct. 6.
Photographic prints and the like, Apparatus for. B. J. Hall. 1,825,728; Oct. 6.
Piano carrier. R. H. Hutchinson. 1,826,470; Oct. 6.
Picker: See—
Shuttle picker.
Picture exhibitor, Educational. H. C. England. 1,825,900; Oct. 6.
Pictures, Recording and reproducing talking motion. E. S. Hayford. 1,825,955; Oct. 6.
Pin: *See*—
Safety pin.
Pin resetting mechanism. F. D. Talbert. 1,826,154; Oct. 6.
Pinion stand. J. A. Smitmans. 1,825,927; Oct. 6.
Pipe and similar articles, Method and apparatus for manufacturing sewer. H. P. Williams. 1,826,586; Oct. 6.
Pipe flask. J. R. McWane. 1,826,083; Oct. 6.
Pipe hanger. L. R. Zifferer. 1,825,842; Oct. 6.
Pipe joint. J. C. Mitchell. 1,826,321; Oct. 6.
Pipe systems and fittings therefor, Installing welded. J. L. Anderson. 1,826,377; Oct. 6.
Piston. G. Franquist. 1,826,171; Oct. 6.
Piston. W. C. McCoy. 1,825,750; Oct. 6.
Piston. L. P. Mooers. 1,826,185; Oct. 6.
Piston and piston ring. R. R. Teetor. 1,825,893; Oct. 6.
Pitch composition and making the same. S. P. Miller. 1,826,428; Oct. 6.
Pitman arm, Steering. C. W. Iseler. 1,826,401; Oct. 6.
Plane. E. N. Foy. 1,825,859; Oct. 6.
Plants, Device for interconnecting the evaporation elements of evaporation. B. Boulogne. 1,825,937; Oct. 6.
Plant growth in greenhouses, Method and apparatus for promoting. M. A. Eiben. 1,826,607; Oct. 6.
Plaster cutter. D. H. Beelman. 1,826,496; Oct. 6.
Plastic compound. S. C. Jennings. 1,826,002; Oct. 6.
Platform, Lineman's. B. C. Booth. 1,826,120; Oct. 6.
Playground apparatus. C. E. Hoppes. 1,826,468; Oct. 6.
Plug with a ruff neck bushing, Spark. H. Rabezzana. 1,826,404; Oct. 6.
Post: *See*—
Jack post.
Potassium manganate, Production of. A. F. S. Bellone. 1,826,594; Oct. 6.
Powder, Manufacture of bleaching. J. W. Moore and A. Lamble. 1,826,629; Oct. 6.
Power actuator. C. S. Bragg and V. W. Kliesrath. 1,826,416–17; Oct. 6.
Power actuator. C. S. Bragg and V. W. Kliesrath. 1,826,450; Oct. 6.
Power actuator. C. S. Bragg and V. W. Kliesrath. 1,826,648; Oct. 6.
Power mechanism. I. Syverstad. 1,826,534; Oct. 6.
Power plant. N. Christiansen. 1,826,273; Oct. 6.
Power transmission device. J. Bing. 1,825,934; Oct. 6.
Power transmission, Wobble wheel. W. F. Paul 1,826,325; Oct. 6.
Power transmitting device. H. A. Greenwald. 1,826,172; Oct. 6.
Power unit or plant for track apparatus. C. Jackson. 1,826,075; Oct. 6.
Press: *See*—
Embossing and printing press. Punch press.
Rotary cloth press.
Garment press. Screw press.
Printing press.
Presser foot, Convertible. H. Auerbach. 1,826,592; Oct. 6.
Pressing machine pad. C. E. Galvin. 1,826,395; Oct. 6.
Pressure gauge, Duplex. E. E. Hans. 1,826,397; Oct. 6.
Pressure mechanism. T. H. Seely. 1,825,704; Oct. 6.
Printing machine. A. Rosenthal. 1,826,525; Oct. 6.
Printing press. W. Evensen. 1,825,944; Oct. 6.
Printing press. W. Evensen. 1,825,998; Oct. 6.
Printing presses, Label strip feeding means for. G. L. Bignell. 1,826,498; Oct. 6.
Processing plant. W. S. Yarrow. 1,826,036; Oct. 6.
Products produced from aqueous dispersions of organic substances, particularly of caoutchouc or caoutchou like substances by agglomeration upon a base, Drying. P. Klein. 1,825,737; Oct. 6.
Products such as alkyl halides, Purification of synthetic or substitution. J. F. Norris. 1,825,814; Oct. 6.
Propeller. H. Hull. 1,825,868; Oct. 6.
Propeller. J. F. Randall. 1,826,021; Oct. 6.
Propeller. A. Rudeberg. 1,826,026; Oct. 6.
Propeller mechanism. E. Cooper. 1,826,458; Oct. 6.
Propeller with variable pitch. M. J-B. Barbarou. 1,825,768; Oct. 6.
Proteases, Activation of. A. Harteneck. 1,826,467; Oct. 6.

Protective device for polyphase alternating current circuits, Phase failure and phase reverse. W. C. Stevens. 1,826,099; Oct. 6.
Protector, Safety elevated bank and vault. W. Gillis. 1,826,464; Oct. 6.
Puller: *See*—
Bearing puller.
Pump, Compressed air operated. W. S. Hulse. 1,826,175; Oct. 6.
Pumping apparatus. A. E. Gull. 1,825,661; Oct. 6.
Pumps, Pressure control for automatic. L. M. Persons. 1,826,059; Oct. 6.
Punch and slitting device, Combined. G. S. Robinson. 1,826,257; Oct. 6.
Punch press. T. F. Philippi. 1,826,152; Oct. 6.
Purse, handbag or pocketbook W. H. Zachman. 1,826,233; Oct. 6.
Rack: *See*—
Truck rack.
Rack for oilcloth. E. P. Johnson. 1,826,135; Oct. 6.
Radiator. J. F. McIntire. Des. 85,296; Oct. 6.
Radiator cap or similar article for an automotive vehicle. W. Schnell. Des. 85,304; Oct. 6.
Radio broadcasts or recorded audio frequencies, Apparatus for reproducing. D. Hepburn and M. L. Thompson. 1,826,173; Oct. 6.
Radiocabinet. R. R. Shearer. Des. 85,305–6; Oct. 6.
Radiocabinet with adjustable loop. L. Shapiro and P. J. Larsen. 1,826,437; Oct. 6.
Radio frequency amplifying system. L. L. Jones. 1,826,550; Oct. 6.
Radius gauge. E. J. Witchger. 1,825,987; Oct. 6.
Rail fastening. A. C. Jack. 1,826,316; Oct. 6.
Railroads by means of substitution trains and mechanical apparatus constituting the same, Substitution of. P. Guilbert, J. Legrand, and M. Lemaire. 1,826,069; Oct. 6.
Ratchet mechanism. C. Bodmer. 1,825,936; Oct. 6.
Razor. S. Segal. 1,826,530; Oct. 6.
Razor and sharpening mechanism, Combined safety. L. V. Aronson. 1,826,410; Oct. 6.
Razor blade, Safety. M. Anderson. 1,825,766–7; Oct. 6.
Razor, Safety. I. S. Bodkin. 1,826,341; Oct. 6.
Razor, Safety. J. G. Coleman. 1,826,600; Oct 6
Razor, Safety. G. H. Heymann and E. D. Rose. 1,825,795; Oct. 6.
Razor, Safety. F. J. Lewando. 1,825,910; Oct. 6.
Razor, Safety. R. E. Thompson. 1,825,836; Oct. 6.
Reel: *See*—
Fishing reel. Kite string reel.
Reel for plumb bobs. J. A. Gilman. 1,826,465; Oct. 6.
Regulating apparatus. P. A. Borden. 1,825,849; Oct. 6.
Refrigerating apparatus. H. B. Hull. 1,825,665; Oct. 6.
Refrigerating apparatus. H. B. Hull and G. F. Hofferberth. 1,825,664; Oct. 6.
Refrigerating apparatus. H. B. Hull. 1,825,731; Oct. 6.
Refrigerating appa atus. J. G. King. 1,825,669; Oct. 6.
Refrigerating apparatus. J. G. King. 1,825,698; Oct. 6.
Refrigerating apparatus. J. G. King and H. B. Hull. 1,825,801; Oct. 6.
Refrigerating appa atus. J. G. King. 1,825,870; Oct. 6.
Refrigerating apparatus. J. A. Macready and H. H. Hodgson. 1,825,748; Oct. 6.
Refrigerating apparatus. J. T. Rauen. 1,825,703; Oct. 6.
Refrigerating apparatus, Mechanical. R. O. Ashton. 1,826,389; Oct. 6.
Refrigerating system. A. C. Schickler. 1,826,436; Oct. 6.
Refrigeration. C. C. Spreen. 1,826,374; Oct. 6.
Refrigeration systems Regulatable bellows mechanism of. P. Farmer. 1,826,307; Oct. 6.
Refrigerator. J. P. B. Fiske. 1,826,308; Oct. 6.
Refrigerator. E. A. Hobart 1,825,694; Oct. 6.
Regulator: *See*—
Fluid pressure regulator. Water regulator.
Resistance apparatus. J. Raus. 1,826,673; Oct. 6.
Restaurant, Waiterless. C. G. Hall. 1,825,950–1; Oct. 6.
Retort furnace. F. A. Hansen. 1,825,790; Oct. 6.
Ring: *See*—
Piston and piston ring.
Roasting apparatus. E. J. Fowler. 1,825,947; Oct. 6.
Rock drill. H. C. Gustafson. 1,826,071; Oct. 6.
Rod: *See*—
Welding rod.
Roll cleaning machine. G. von Webern. 1,825,837; Oct. 6.
Roll handling apparatus. F. von der Horst. 1,826,107; Oct. 6.
Rolling. P. F. Longnecker. 1,826,622; Oct. 6.
Roof construction. M. L. Houseman. 1,825,800; Oct. 6.
Roofing clip. G. A. Holman. 1,825,732; Oct. 6.
Rotary cloth press. A. H. Schumacher. 1,825,757; Oct. 6.
Rotary engine. W. Kühn. 1,825,741; Oct. 6.
Rubber and product of same, Reclaiming waste. W. B. Pratt. 1,826,091; Oct. 6.
Rubber goods directly from latex, Production of. P. Klein and A. Szegvari. 1,825,736; Oct. 6.
Rubber latex preparation and manufacture of goods therefrom. R. A. Dunham. 1,826,392; Oct. 6.
Rubber product and production thereof. F. C. Dyche-Teague. 1,826,275; Oct. 6.
Rule and compass, Combination. H. B. Magers. 1,826,081; Oct. 6.
Ruler, Rolling parallel. G. Gianolio. 1,825,902; Oct. 6.
Sadiron, Automatic switch electric. A. Petticore. 1,825,919; Oct. 6.
Safety device for grinding machines. H. E. Baleiger. 1,826,445; Oct. 6.
Safety fire balcony exit. E. Bocchino. 1,826,448; Oct. 6.
Safety hook. E. S. Mix. 1,826,564; Oct. 6.
Safety pin. O. Kerstens. 1,826,003; Oct. 6.
Salt and pepper shaker, Combination. E. E. Harris. 1,826,539; Oct. 6.
Salts of complex metallo hydrofluoric acid, Diazonium. W. Hentrich, M. Hardtmann, W. and E. Tietze. 1,825,729; Oct. 6.
Sanding machine. F. H. Johnson. 1,826,177; Oct. 6.
Saw, Jig. A. V. Pickering. 1,826,187; Oct. 6.
Saw, Jig. A. V. Pickering and A. H. Moore. 1,826,188; Oct. 6.
Sawing machine. A. Peterson. 1,826,222; Oct. 6.
Scoop, Ice cream. J. E. Chisholm. 1,826,651; Oct. 6.
Scraper, Revolving. C. Le Bleu. 1,826,252; Oct. 6.
Screen: *See*—
Window screen.
Screw machine. J. H. Mansfield and C. F. Penrose. 1,825,749; Oct. 6.
Screw press. M. Walker. 1,825,686; Oct. 6.
Seal. E. C. Pagel. 1 826,018; Oct. 6.
Seal construction for windows, Weather. H. Bianco. 1,826,686; Oct. 6.
Seal for journal bearings. C. C. Spreen. 1,826,373; Oct. 6.
Seal, Shaft. F. D. Peltier and E. Widerborg. 1,825,918; Oct. 6.
Sealing device. R. H. Webster. 1,826,033; Oct. 6.
Seam rolling machine. W. A. Cotes. 1,826,506; Oct. 6.
Seamless tube mill. J. V. Mazurie and T. Patterson. 1,826,360; Oct. 6.
Seat: *See*—
Cab seat. Vehicle seat.
Seat base, Reversing. E. F. Small. 1,826,532; Oct. 6.
Seed drill. G. J. Miller. 1,826,560; Oct 6.
Selector. D. L. Lienzen. 1,825,911; Oct. 6.
Separator: *See*—
Air separator.
Separator. R. C. Aland. 1,825,990; Oct. 6.
Separator for cocoa powder, Wind. R. G. Neumann. 1,826,086; Oct. 6.
Sewing machines, Mender attachment for. M. M. Fones. 1,826,610; Oct. 6.
Sewing machines, Stocking guiding device for use with. H. Corrall and J. Heggie. 1,826,694; Oct. 6.
Shackle, Rubber cushion. H. Ibrig. 1,826,400; Oct. 6.
Sharpener, Automatic disk. J. Klockner and E. E. Thomas. 1,826,517; Oct. 6.
Shears: *See*—
Sheep shears.
Sheep shears. F. W. Scott. 1,825,890; Oct. 6.
Sheet associating mechanism and control, Automatic. W. H. Gibson. 1,826,463; Oct. 6.
Sheet collecting machine. J. J. Murray. 1,825,885; Oct. 6.
Sheet cutting, collecting, and folding mechanism. C. S. Crafts. 1,826,652; Oct. 6.
Shelving. A. B. Cornwall. 1,826,055; Oct. 6.
Shield, Baffle. H. E. Blood. Des. 85,278; Oct. 6.
Shipping box. J. C. Van Cleaf. 1,826,104; Oct. 6.
Ship's hull. P. van Wienen. 1,826,229; Oct. 6.
Shirring attachment. C. Seaman. 1,825,758; Oct. 6.
Shock absorber. M. P. Rumney. 1,826,575; Oct. 6.
Shock absorbing mechanism. E. Ryder. 1,825,823; Oct. 6.
Shoe construction. A. Johnson. 1,826,616; Oct. 6.
Shoe for aeroplane brakes. J. R. Cautley. 1,825,653; Oct. 6.
Shoe pac. J. U. Bergquist. 1,826,645; Oct. 6.
Shoes, Assembling the uppers of rubber. F. D. Kinney. 1,825,871; Oct. 6.
Shooting mechanism, Protective. S. K. Shuster. 1,825,926; Oct. 6.
Shore head bracket. C. M. Markham. 1,825,912; Oct. 6.
Shovel and the like. W. A. Rendy. 1,826,022; Oct. 6.
Shower bath. H. C. Woolwine. 1,826,336; Oct. 6.
Shower bath trap. J. H. Lonskey. 1,826,555; Oct. 6.
Shuttle for separators. J. C. Pettit. 1,826,633; Oct. 6.
Shuttle picker. J. B. Schultz. 1,826,484; Oct. 6.
Shuttles, Weft tension device for. A. S. Hutchins. 1,826,315; Oct. 6.
Sign. W. H. Balk. 1,826,162; Oct. 6.
Sign. J. C. Ehlenfeld. 1,825,996; Oct. 6.
Sign. R. C. Smalley and W. E. Moorefield. 1,826,388; Oct. 6.
Sign, Illuminated. A. H. Ellis. 1,826,512; Oct. 6.
Sign, Street. A. Sprung. 1,826,581; Oct. 6.
Signaling device, Musical. L. A. Prestek. 1,826,635; Oct. 6.
Signaling system. B. L. Bohroff. 1,826,501; Oct. 6.
Silk cakes made by the spinning can process, Treating artificial. H. Küttner. 1,825,960; Oct. 6.
Silks, Treatment of artificial. R. Clavel. 1,826,274; Oct. 6.
Silo top. W. D. Bayley. 1,826,378; Oct. 6.
Siphon. Constant uniform delivery. A. C. Wilson. 1,826,112; Oct. 6.
Siphon flush tank, Air bound. H. D. Moise. 1,826,282; Oct. 6.
Sirups, Preparing refined. E. N. Ehrhart and L. Wickenden. 1,826,655; Oct. 6.
Sled, Mud. G. L. Lillard. 1,826,620; Oct. 6.
Sleeve for bull and calf wheel shafts, Reenforcing. L. B. Chevalier. 1,825,714; Oct. 6.
Slicing machine. W. J. Campbell. 1,825,712; Oct. 6.
Slicing machines, Pusher plate for. W. J. Campbell. 1,825,711; Oct. 6.

Soaper and brusher for washing machine tub. H. F. Snyder. 1,826,030; Oct. 6.
Socket lock, Electric. R. R. Hopland. 1,825,867; Oct. 6.
Soil sterilizing apparatus. A. P. Young. 1,826,232; Oct. 6.
Sound absorbing construction. L. Barnett. 1,825,770; Oct. 6.
Sound records, Apparatus and method for reproducing photographic. F. H. Owens. 1,826,522; Oct. 6.
Spatula. D. R. Biddle. 1,825,710; Oct. 6.
Speed skidding device, Variable. M. H. Dickinson. 1,826,303; Oct. 6.
Speed transmission, Variable. P. L. Tenney. 1,826,408; Oct. 6.
Spindle, Stripper. H. Dabbs. 1,826,602; Oct. 6.
Spokes, Apparatus and method for making. G. C. Hawk. 1,826,350; Oct. 6.
Spotlight switch. G. W. Veale. 1,826,105; Oct. 6.
Spraying device. W. Hermann. 1,826,134; Oct. 6.
Spring. W. H. Wallace. 1,826,108; Oct. 6.
Spring element. W. A. Brecht. 1,826,597; Oct. 6.
Spring structure. R. E. McElroy. 1,826,012; Oct. 6.
Springs, Making helical. G. M. Eaton. 1,826,060; Oct. 6.
Stake pocket. J. J. Tatum. 1,825,832; Oct. 6.
Stand: *See*—
Engine head stand. Pinion stand.
Stand or support. F. Köhler. 1,826,474; Oct. 6.
Steel crosstie, Pressed. C. Leonard. 1,826,554; Oct. 6.
Steels, Process of and compound for hardening the surface of mild. H. J. Lorang. 1,826,008; Oct. 6.
Steering means and axle assembly for vehicles. R. J. Winsor. 1,826,113; Oct. 6.
Steering wheel. C. R. Flanigan. 1,826,278; Oct. 6.
Stencil sheet. S. Horii. 1,825,798; Oct. 6.
Stenciling machine. J. A. Mueller. 1,826,149; Oct. 6.
Stick, Clothes. A. Yurkovitch. 1,826,337; Oct. 6.
Stoker, Automatic. F. W. Vodoz. 1,826,106; Oct. 6.
Stop mechanism, Power. P. C. Rummel, jr. 1,826,482; Oct. 6.
Stove, Heating. H. Junkers. 1,825,735; Oct. 6.
Strainer, Fluid. J. P. Duggan. 1,826,170; Oct. 6.
Strainer, Rotary. D. R. McNeal. 1,826,361; Oct. 6.
Straw bruiser and wind stacker, Interchangeable. A. W. Wessman. 1,825,838; Oct. 6.
Stripping machine. I. W. Ross and J. S. Krob. 1,826,526; Oct. 6.
Strips, etc., Apparatus for coiling. E. Dukes. 1,825,567; Oct. 6.
Structural device. C. T. Hatch. 1,826,133; Oct. 6.
Structural unit. D. H. Bitney. 1,826,042; Oct. 6.
Stud for snap fasteners, Tack fastened. F. E. Warner. 1,826,683; Oct. 6.
Stud setter. C. R. Leiter. 1,825,876; Oct. 6.
Stuffing box, Rotary spring. E. Gremminger. 1,826,212; Oct. 6.
Sugar, Manufacture of extra fine, soft granulated cane. B. H. Varnau and T. B. Wayne. 1,826,441; Oct. 6.
Sulphite liquor, Production of. M. G. T. Schroeder. 1,826,028; Oct. 6.
Support, Cap. H. H. Morgan. 1,825,810; Oct. 6.
Support for concrete forms and scaffolding, Adjustable. F. J. Litter. 1,825,747; Oct. 6.
Support for smokers' and similar articles. A. von Frankenberg. Des. 85,309; Oct. 6.
Support, Milk bottle. R. Patenge. 1,825,975; Oct. 6.
Support, Motor. E. J. Delahanty. 1,826,126; Oct. 6.
Support, Shirt protecting. P. Farrelly. 1,826,206; Oct. 6.
Supporter, Collar. D. T. Hutchison. 1,826,176; Oct. 6.
Supporter, Garment. S. N. Coulter. 1,825,898; Oct. 6.
Supporter, Hose. L. M. Schneider. 1,826,368; Oct. 6.
Switch: *See*—
Disconnecting switch. Spotlight switch.
Electric switch. Thermostatic switch.
Electrical switch. Time switch.
Switch and making the same, Knife blade. C. Schuster. 1,826,225; Oct. 6.
Switch for signaling systems. B. L. Bobroff. 1,825,991; Oct. 6.
T-head for shores. H. J. Baker. 1,826,118; Oct. 6.
Tab, Index. L. S. Graff and R. A. Stewart. 1,826,614; Oct. 6.
Table. C. J. Schmitt. 1,826,578; Oct. 6.
Take up device for electric fixtures. O. P. Wilkin. 1,826,294; Oct. 6.
Talloel, Treating. W. Schultze. 1,826,224; Oct. 6.
Tally device. E. M. McGowan. 1,826,520; Oct. 6.
Tank: *See*—
Lily pool tank. Syphon flush tank.
Tank construction, Glass. W. Owen. 1,825,887; Oct. 6.
Tanning agents, Production of synthetic. H. Schuette. 1,826,094; Oct. 6.
Tanning substance and preparing same. G. Kränzlein and A. Voss. 1,825,802; Oct. 6.
Tar acids from other products, Recovery of. S. P. Miller. 1,826,431; Oct. 6.
Teapot. C. D. La Follette and H. A. Jahraus. Des. 85,292; Oct. 6.
Telegraph transmission measuring system. S. I. Cory. 1,825,715; Oct. 6.
Telephone system. O. A. Friend and W. J. Heitsmith. 1,825,723; Oct. 6.
Television apparatus. H. P. Donle. 1,826,305; Oct. 6.
Television apparatus. C. O. Vermillion. 1,826,332; Oct. 6.
Television scanning device. L. H. Dawson. 1,825,781; Oct. 6.
Tension control device for printing presses, Paper. K. G. Laycock. 1,825,966; Oct. 6.
Textile apparatus. L. Vilt. 1,826,584; Oct. 6.
Textile fabrics, Flat pressing of. M. Hahn. 1,825,727; Oct. 6.
Thermostatic switch. G. J. Zisch. 1,826,488; Oct. 6.
Thread package. E. T. Allan. 1,826,491; Oct. 6.
Threads, Mechanism for knotting together. F. Klein, and F. Walsleben. 1,825,872; Oct. 6.
Threshold. F. C. Garrison. 1,826,613; Oct. 6.
Ticket, Pinless. E. S. Spinney. 1,826,580; Oct. 6.
Tie plate, Rail silencing. W. M. Osborn. 1,826,566; Oct. 6.
Tie rack. J. H. Horstman. Des. 85,287; Oct. 6.
Tile cutting machine. J. W. Denmead. 1,826,056; Oct. 6.
Tile, Roofing. E. A. Mastick. 1,826,082; Oct. 6.
Tile, Wall bearing ceramic. P. J. Conley. 1,825,779; Oct. 6.
Timepiece. A. L. Jeanneret. 1,825,906; Oct. 6.
Time switch, Adjustable accessory. R. R. Gonsett. 1,825,660; Oct. 6.
Tin from ores, alloys, scrap or the like, Extraction of. L. Lamy, E. Mathieu, and L. Gagnaux. 1,826,552; Oct. 6.
Tip-up. F. H. Laurila. 1,826,251; Oct. 6.
Tire. D. K. Sloteman. Des. 85,308; Oct. 6.
Tire, Cushion. A. J. Reynolds. 1,825,982; Oct. 6.
Tire patch. P. E. Hawkinson. 1,826,073; Oct. 6.
Tire pressure maintainer, Automatic. J. W. Poorman. 1,826,523; Oct. 6.
Toaster, Electric. R. Kuhn. 1,826,475; Oct. 6.
Toilet article. H. I. Matchett. 1,826,558; Oct. 6.
Tool attachment means. E. A. Stephens. 1,826,098; Oct. 6.
Tool, Duplex grip. O. C. Blakeslee. 1,826,045; Oct. 6.
Tool, Flanging. J. M. Wilkins. 1,826,268; Oct. 6.
Tool, Fluid operated. B. R. Sheets, and C. M. Stewart. 1,826,095; Oct. 6.
Tool, Hand. O. Altenbach. 1,826,038; Oct. 6.
Tool, Jewel setting. J. H. Payer. 1,826,567; Oct. 6.
Tool, Machine. C. E. Masters. 1,826,625; Oct. 6.
Tool, Machine. A. Trosch. 1,825,685; Oct. 6.
Tool, Well fishing. E. J. Carscallen. 1,826,650; Oct. 6.
Tool, Wrist-pin inserting. H. W. Kulp, and M. C. Dellinger. 1,825,742; Oct. 6.
Tool, Wrist-pin inserting. H. W. Kulp, and M. C. Dellinger. 1,825,873; Oct. 6.
Tools, Attachment for dental. I. W. Margulies. 1,825,880; Oct. 6.
Tools in three dimensions, Apparatus for the guiding of. R. M. Carrier, jr., and M. G. Whitley. 1,826,104; Oct. 6.
Tooth, Artificial. B. L. Brooks. 1,826,270–1; Oct. 6.
Toothbrush. J. M. Acheson. 1,826,234; Oct. 6.
Top, Table. O. Landaw. 1,826,618; Oct. 6.
Torpedo. P. Orlando. 1,825,816; Oct. 6.
Toy. W. B. Le Gauger. 1,825,967; Oct. 6.
Toy. W. O. Roeder. 1,825,921; Oct. 6.
Toy apparatus, Motor vehicle. R. L. Mapson. 1,825,968; Oct. 6.
Toy bank. W. C. Schnier. 1,826,528; Oct. 6.
Toy pistol. C. Carpenter. 1,826,053; Oct. 6.
Track, Sectional. T. MacCallum. 1,825,804; Oct. 6.
Tractor attachment. H. Buse. 1,826,238; Oct. 6.
Traffic controlling apparatus, Railway. L. R. Allison and F. H. Nicholson. 1,826,161; Oct. 6.
Traffic signal. T. R. Pavelsky. Des. 85,302; Oct. 6.
Traffic signal indicator for automobiles. W. E. Phelps. 1,826,090; Oct. 6.
Trailer, Camp. A. E. Jordan. 1,826,136; Oct. 6.
Trailer, Camping. G. F. Rappich. 1,826,480; Oct. 6.
Train braking system. G. F. Gloster. 1,825,903; Oct. 6.
Transfer means for belt conveyors. P. J. Birkmeyer, M. V. Crecdon, and W. C. Chadbourne. 1,826,379; Oct. 6.
Transmission. E. A. Thompson. 1,826,682; Oct. 6.
Transmission, Automatic gearless. T. Gensmer. 1,825,789; Oct. 6.
Transmission mechanism. J. Casselman. 1,825,852; Oct. 6.
Transmission shifting mechanism. P. L. Tenney. 1,826,407; Oct. 6.
Trap: *See*—
Shower bath trap.
Trap. M. J. Petersen. 1,826,569; Oct. 6.
Tray, Flower. B. F. Blake. 1,826,500; Oct. 6.
Tray for electric refrigerators, Ice. H. Mock. 1,825,916; Oct. 6.
Tray, or article of similar nature, Ash. S. D. Baker. Des. 85,274; Oct. 6.
Trolley conveyer. W. E. Bennett and L. J. Bishop. 1,826,412; Oct. 6.
Trough. G. W. Ericson. 1,826,277; Oct. 6.
Truck, Industrial. E. J. Abbe. 1,826,489–90; Oct. 6.
Truck, Industrial. R. T. Romine. 1,825,923; Oct. 6.
Truck, Lift platform. D. S. Andrews. 1,826,116; Oct. 6.
Trucks, Lateral motion device for railway car. M. H. Martin. 1,826,476; Oct. 6.
Truing mechanism. L. F. Nenninger. 1,825,753; Oct. 6.
Trunk rack. F. A. Selje. 1,825,679; Oct. 6.
Tube: *See*—
Discharge tube.
Tube and forming the same. S. A. Neidich. 1,826,669; Oct. 6.

Tubes, Method and apparatus for treating drawn. A. J. Johnson. 1,826,077; Oct. 6.
Tubing, Process and apparatus for bending. F. O'Brien. 1,826,403; Oct. 6.
Tubular boiler. H. T. Bellamy and J. C. Smith. 1,826,411; Oct. 6.
Tungsten and manufacturing the same. W. B. Gero and E. S. Davenport. 1,826,514; Oct. 6.
Turbine. R. A. Coffman. 1,826,453; Oct. 6.
Turning arrangement for monorail suspended vehicles. C. Stedefeld and W. Black. 1,825,683; Oct. 6.
Typewriter ribbon device. J. C. Hochman. 1,826,074; Oct. 6.
Typewriters, Ribbon mechanism for. R. Seidelinger. 1,825,705; Oct. 6.
Typewriting machine. G. G. Going. 1,826,068; Oct. 6.
Typewriting machine. A. G. F. Kurowski. 1,825,743; Oct. 6.
Umbrellas, Drop catching device for. H. Frenck. 1,826,063; Oct. 6.
Universal joint. C. E. Furgason. 1,826,611; Oct. 6.
Universal joint. E. Harel. 1,826,662; Oct. 6.
Utensil, Kitchen. W. A. Troth. 1,826,032; Oct. 6.
Valve. B. Martin. 1,825,807; Oct. 6.
Valve. H. T. Woolson and A. O. Burgess. 1,826,160; Oct. 6.
Valve and equipment for combustion control, Reversing. R. D. Nye. 1,825,815; Oct. 6.
Valve and making same, Pocket. R. Hervig and R. Jardine. 1,826,542; Oct. 6.
Valve assembly, Self aligning thermostatic. A. G. Sherman. 1,826,327; Oct. 6.
Valve, Constant clearance poppet. W. H. Manning. 1,826,402; Oct. 6.
Valve, Electromagnetic. G. W. Anderson. 1,826,269; Oct. 6.
Valve fastening, Retaining. S. H. Campbell. 1,826,051–2; Oct. 6.
Valve, Float controlled. W. S. Brubaker. 1,825,776; Oct. 6.
Valve grinding machine. H. J. Criner. 1,826,653; Oct. 6.
Valve mechanism. C. J. Smith. 1,826,097; Oct. 6.
Valve mechanism. W. S. Valmore. 1,826,158; Oct. 6.
Valve mechanism for power actuators, Poppet. C. S. Bragg and V. W. Kliesrath. 1,826,415; Oct. 6.
Valve, Pilot controlled piston operated. W. W. Carson, jr. 1,826,343; Oct. 6.
Valve, Pressure operated. O. J. Ostlind. 1,826,088; Oct. 6.
Valve, Rotary engine. R. S. Davis. 1,826,461; Oct. 6.
Valve stem guide. W. P. Lowther. 1,826,148; Oct. 6.
Valve, Thermoelectric control. L. M. Persons. 1,826,151; Oct. 6.
Valves, Making composite. R. Jardine. 1,826,549; Oct. 6.
Vehicle. D. E. Austin. Des. 85,273; Oct. 6.
Vehicle body, Pressed metal. J. Ledwinka. 1,826,426; Oct. 6.
Vehicle body wall construction. J. P. Tarbox. 1,826,440; Oct. 6.
Vehicle, Collapsible bow construction for an automotive. F. Humer. 1,826,399; Oct. 6.
Vehicle heater, Automobile. A. J. Mueller. 1,825,884; Oct. 6.
Vehicle heater, Motor. E. Ryder. 1,825,824; Oct. 6.
Vehicle jack. H. J. Wickman. 1,826,110; Oct. 6.
Vehicle seat. A. S. Cheston, C. and C. F. Coward. 1,825,713; Oct. 6.
Vehicle wheel. G. C. R. Kuiper. 1,826,617; Oct. 6.
Vending machine. M. T. Ashe. 1,825,847; Oct. 6.
Ventilator. B. Kavanagh. 1,826,353; Oct. 6.
Vibrating device. W. A. Reiss. 1,826,434; Oct. 6.
Walker, Baby. S. B. Brown. 1,826,502; Oct. 6.
Wall construction. E. L. Ewing. 1,826,127; Oct. 6.
Wall for boilers and the like, Solid water. C. F. Weigel. 1,826,293; Oct. 6.
Washer: *See*—
Fruit washer.
Washer and drier, Centrifugal. L. J. Barrett. 1,825,651; Oct. 6
Washing machine. G. W. Dunham. 1,825,942; Oct. 6.
Washing machine tub. T. W. Behan. 1,826,236; Oct. 6.
Waste heat boiler. H. B. Smith. 1,826,029; Oct. 6.
Watch display box. S. Wolfsheim. Des. 85,312; Oct. 6.
Water regulator, Feed. B. F. Dowd. 1,826,058; Oct. 6.
Water, Separating particles from free. C. B. Thorne. 1,826,485; Oct. 6.
Water system, Automatic vacuum pressure gravity. H. L. Boggs. 1,825,772; Oct. 6.
Wave machine. P. E. Klopsteg. 1,825,739; Oct. 6.
Weaving. M. D. Debouttevile. 1,826,654; Oct. 6.
Webbing, Ventilated. G. H. Sauermann. 1,825,924; Oct. 6.
Weighing apparatus, Electric. F. W. Roller. 1,826,024; Oct. 6.
Well drilling apparatus. J. J. Gault. 1,826,396; Oct. 6.
Well drilling apparatus. H. A. Pippin. 1,826,634; Oct. 6.
Well drilling machinery. H. Traeger and F. H. Jensen. 1,825,984; Oct. 6.
Wells, Apparatus for drilling. W. J. Newman. 1,826,087; Oct. 6.
Welding machine. P. W. Fassler. 1,826,207; Oct. 6.
Welding rod. W. F. and S. M. Stoody. 1,825,829; Oct. 6.
Wheat, Apparatus for milling. P. Turucz. 1,826,157; Oct. 6.
Wheel: *See*—
Abrasive wheel. Vehicle wheel.
Steering wheel.
Wheel rim lock. B. Gray. 1,825,860; Oct. 6.
Wheel rim members, Forming vehicle. W. N. Booth. 1,826,449; Oct. 6.
Wheel trimming fixture, Grinding. J. W. Parker. 1,826,219; Oct. 6.
Whisk, Rotary wire. K. Byers and J. Hug. 1,826,200; Oct. 6.
Whistle. A. W. Gronquist. 1,826,129; Oct. 6.
Wind motor. J. D'Asseler. 1,826,039; Oct. 6.
Winding engine. J. R. McGiffert. Re18,220; Oct. 6.
Winding machine. E. R. Swanson. 1,826,265; Oct. 6.
Window adjuster. A. C. Sinnes. 1,825,681; Oct. 6.
Window construction. R. S. Brogie. 1,826,121–2; Oct. 6.
Window construction. J. H. Sheard. 1,826,678; Oct. 6.
Window screen. J. A. Delaney. 1,826,606; Oct. 6.
Windshield parker. J. R. Olshei. 1,826,672; Oct. 6.
Wiper attachment, Windshield. G. S. Smith. 1,825,891; Oct. 6.
Wire, Making flexible insulated. H. de B. Rice. 1,826,092; Oct. 6.
Wire securing means for fence posts. D. C. Lee. 1,826,182; Oct. 6.
Wire tying appliance. J. S. McChesney. Re18,219; Oct. 6.
Wireworking mechanism. J. F. Gall. 1,826,612; Oct. 6.
Work supporting fixture. F. W. Green. 1,825,862; Oct. 6.
Workholding apparatus. D. C. Page. 1,825,677; Oct. 6.
X-ray system. G. Spiegler and F. Bögler. 1,826,579; Oct. 6.

CLASSIFICATION OF PATENTS

ISSUED OCTOBER 6, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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58: 1,826,441
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305— 10: 1,825,693
306— 23: 1,826,098
40: 1,826,459
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U. S. GOVERNMENT PRINTING OFFICE: 1931

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & M. Karagheusian, Inc., New York, N. Y. Textile rugs, carpets, floor and wall coverings. 318,366; Oct. 13. Class 42.

Agfa Ansco Corporation, Binghamton, N. Y. Sensitized-photographic film. 318,730–2; Oct. 13. Class 26.

Air Reduction Sales Company, New York, N. Y. Gas mixture. 318,733; Oct. 13. Class 6.

Algemeene Kunstzijde Unie N. V., Arnhem, Holland. Piece goods. 314,887; Oct. 13. Class 42.

Al-Lon Manufacturing Company, Inc., Baltimore, Md. Wardrobe bags, dress and shoulder covers, and garment bags. 318,387; Oct. 13. Class 2.

American Baby Bonds Corporation, Denver, Colo. Prints and printed matter. 301,385; Oct. 13. Class 38.

American Baby Bonds Corporation, Denver, Colo. Prints and printed matter. 301,387; Oct. 13. Class 38.

American Tar Products Company, Inc., Pittsburgh, Pa. Wood preservers. 312,895; Oct. 13. Class 6.

Anacin Company, The, Chicago, Ill. Medicinal preparation. 317,967; Oct. 13. Class 6.

Arden, Elizabeth, Inc., New York, N. Y. Rouge. 317,544; Oct. 13. Class 6.

Ayer Company, The, Lowell, Mass. Perfumes and perfumery. 318,092; Oct. 13. Class 6.

B & W Products Co., Toledo, Ohio. Solvent. 317,388; Oct. 13. Class 6.

Baillod, Dr. Camille, Basel, Switzerland. Syrups. 312,971; Oct. 13. Class 45.

Barrett Company, The, New York, N. Y. Insecticide and insect repellant and naphthalene. 316,521; Oct. 13. Class 6.

Bartlett, Nicholas, Auburn, N. Y. Heating radiators. 315,724; Oct. 13. Class 34.

Barton-Cotton, Inc., Baltimore, Md. Advertising folders, pamphlets, brochures, etc. 317,880; Oct. 13. Class 38.

Bastian-Morley Co., La Porte, Ind. Gas burners. 318,388; Oct. 13. Class 34.

Baum, Alden H., doing business as The Ti-Trinox Company, Pittsburgh, Pa. Antiseptic and pain relieving application for ringworm, skin infection, etc. 314,194; Oct. 13. Class 6.

Birmingham Aluminum Casting (1903) Company Limited, The, Birmingham, England. Alloys of aluminum. 316,403; Oct. 13. Class 14.

Blay, Harry R., doing business as Harbly Products, Janesville, Wis. Preparation for the treatment of the hair and scalp. 317,347; Oct. 13. Class 6.

Bogart, Edward M., doing business as Fax Products Co., Lansing, Mich. Washing powder. 314,979; Oct. 13. Class 4.

Bohme, H. Th., Aktiengeselischaft, Chemnitz, Germany. Moistening, dyeing, washing, bleaching agents. 316,522 5; Oct. 13. Class 6.

Bonded Fuel Dealers of America, Chicago, Ill. Coal and coke. 303,463; Oct. 13. Class 1.

Bon-E-Bin Co., The. (See Marchisella, Vincent.)

Brewer & Company Inc., Worcester, Mass. Medicinal preparation. 318,037; Oct. 13. Class 6.

Brewer & Company Inc., Worcester, Mass. Tonic. 318,038; Oct. 13. Class 6.

Brigstock, Robert E., Battle Creek, Mich. Milk bottle caps. 316,545; Oct. 13. Class 50.

British Enka Artificial Silk Company Limited, London, England. Yarns, threads, and fibres. 316,250; Oct 13. Class 43.

Broadway Department Store, Inc., Los Angeles, Calif. Sanitary napkins. 314,188; Oct. 13. Class 44.

Brookins Manufacturing Company, Dayton, Ohio. Containers. 304,183; Oct. 13. Class 2.

Browns, Dr., Laboratories. (See Nostane Produces Corporation.)

Buffalo Bolt Company, North Tonawanda, N. Y. Bolts nuts, screws, etc. 311,225; Oct. 13. Class 13.

California Consolidated Water Company, Wilmington, Del., and Los Angeles, Calif. Water coolers. 318,820; Oct. 13. Class 31.

Cambridge Blade Co., Inc., New York, N. Y. Razor blades. 318,270; Oct. 13. Class 23.

Carey Corporation, The. (See McLaughlin, James G.)

Carnrick, G. W., Co., Newark, N. J. Active estrus inducing principles. 318,024; Oct. 13. Class 6.

Carter's Ink Company, The, doing business as Winner Chemical Co., Cambridge, Mass. Writing ink. 316,921; Oct. 13. Class 11.

Carvelli, John, doing business as Lady Onda Company, Chicago, Ill. Hair waving fluid. 318,189; Oct. 13. Class 6.

Celanese Corporation of America, New York, N. Y. Fabrics. 318,042; Oct. 13. Class 42.

Chamberlain, F. B., Company, East St. Louis, Ill., and St. Louis, Mo. Powder compound. 318,643; Oct. 13. Class 45.

Cheney Brothers, South Manchester, Conn. Cravat display device. 316,957; Oct. 13. Class 50.

Chicago Mail Order Company, Chicago, Ill. Face powder. 313,534; Oct. 13. Class 6.

Chipman Chemical Engineering Co. Inc., Bound Brook, N. J. Paris green. 316 082; Oct. 13. Class 6.

Clayton & Lambert Manufacturing Company, Detroit, Mich. Liquid fuel blow torches. 318,097; Oct. 13. Class 34.

Clorox Chemical Co., Oakland, Calif. Liquid preparation for cleaning. 316,629; Oct. 13. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Toilet soap. 318,350; Oct. 13. Class 4.

Columbus McKinnon Chain Corporation, Tonawanda, N. Y. Chains. 318,049; Oct. 13. Class 13.

Consumer Demand Publishing Company, Seattle, Wash. Magazine. 318,050; Oct. 13. Class 38.

Continental Mills, Inc., Philadelphia, Pa. Overcoats, topcoats, suits, etc. 317,791; Oct. 13. Class 39.

Convey, James M., New York, N. Y. Liniment. 314,396; Oct. 13. Class 6.

Cooper, Marie S., Los Angeles, Calif. Antiseptic douche powder. 315,901; Oct. 13. Class 6.

Cora, G. & L. Flli, Turin, Italy. Wine vermouth. 314,987; Oct. 13. Class 47.

Cora, G. & L. Flli, Turin, Italy. Bitters, cordials, brandies, etc. 314,988; Oct. 13. Class 49.

Cora, G. & L. Flli, Turin, Italy. Wines. 314,989; Oct. 13. Class 47.

D & L Pharmacal Company, The, Cleveland Heights, Ohio. Medicinal preparation. 317,881; Oct. 13. Class 6.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Coffin. 318,195; Oct. 13. Class 2.

Devil Laboratories Company. (See Seligman, Sely S.)

Doty, Ellsworth P., doing business as Doty Fertiler Company, Jordan, N. Y. Hair grower. 317,458; Oct. 13. Class 6.

Drummond, Waldo E., doing business as Drummond Laboratories, Dayton, Ohio. Medicine. 318,586; Oct. 13. Class 6.

Duryea Seed Co., Inc., New York, N. Y. Seed. 317,510–12; Oct. 13. Class 1.

Eastman Kodak Company, Rochester, N. Y. Rubber solution and retouching fluid. 313,838; Oct. 13. Class 6.

Eltassibus Co., Oak Forest, Ill. Medicinal preparation. 316,960; Oct. 13. Class 6.

Emdee Laboratories Co. (See Sontag Chain Stores Co. Ltd.)

Empson Packing Company, The, Brighton, Colo. Peas, green lima beans, sugar corn, etc. 318,134; Oct. 13. Class 46.

Eppers, Walter P., Allentown, Pa. Babbitt metal. 317,460; Oct. 13. Class 14.

Expello Corporation, The, Dover, N. H. Dry cleaning liquid. 317,598; Oct. 13. Class 4.

Fax Products Co. (See Bogart, Edward M.)

Fay, Charles J. (See United Biscuit & Specialty Co. Inc.)

Ferrocrete Cement Co. Inc., New York, N. Y. Portland cement. 318,002; Oct. 13. Class 12.

Finn, J. A., & Co., New York, N. Y. Cotton piece goods. 318,622; Oct. 13. Class 42.

Fruhauf Bros. & Co., New York, N. Y. Suits, knickers, and vests. 288,184; Oct. 13. Class 39.

Gemsco, Inc., New York, N. Y. Boot hooks and boot jacks. 317,169; Oct. 13. Class 50.

General Cigar Co., Inc., New York, N. Y. Cigars. 314,641; Oct. 13. Class 17.

Gernsback Publications, Inc., New York, N. Y. Publication. 318,060; Oct. 13. Class 38.

Good Products, Newark, N. J. Liquid hair wash. 314,479; Oct. 13. Class 6.

Greiser, Lewis C., Cincinnati, Ohio. Beverages, sirups, and extracts. 318,780; Oct. 13. Class 45.

Gulf Refining Company, Port Arthur, Tex. Publication. 318,006; Oct. 13. Class 38.

Harbly Products. (See Blay, Harry R.)

Hartley, Wm. P., (London & Aintree) Limited, doing business as Wm. P. Hartley, Liverpool and London, England. Marmalade. 315,967; Oct. 13. Class 46.

Havatampa Cigar Company, Tampa, Fla. Cigars. 314,798; Oct. 13. Class 17.

Hennessey, Patrick G., Spokane, Wash. Preparation for the scalp. 317,313; Oct. 13. Class 6.

Herold-Bertsch Shoe Company, The, Grand Rapids, Mich. Shoes. 311,930; Oct. 13. Class 30.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 318,311; Oct. 13. Class 6.

House of Crane, The, Indianapolis, Ind. Cigars. 315,829; Oct. 13. Class 17.

Hubinger Co., The, Keokuk, Iowa. Starch. 316,966; Oct. 13. Class 6.

Hubinger Co., The, Keokuk, Iowa. Laundry starch. 317,356; Oct. 13. Class 6.

Hume, Jack, doing business as Stop-O-Stain Manufacturing Company, Portland, Oreg. Stain cover. 315,798; Oct. 13. Class 16.

Humfeld-Leonard Chemical Corporation, Frankfort, Ind. Solutions. 317,978; Oct. 13. Class 6.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Imperial Type Metal Company, Philadelphia, Pa. Compound used as a flux. 315,971; Oct. 13. Class 6.
Industrial Welded Alloys, Inc., Newark, N. J. Sheets, plates, etc., of metal. 317,518; Oct. 13. Class 14.
Interstate Folding Box Company, The, Middletown, Ohio. Paper boxes. 317,519; Oct. 13. Class 2.
Jaciel Perfumers, Inc., New York, N. Y. Shaving cream and washing and hand soap. 317,670; Oct. 13. Class 4.
Ja Neen Toiletries. (See Los Angeles Drug Company.)
Johnson & Johnson, New Brunswick, N. J. Sanitary napkins. 318,559; Oct. 13. Class 44.
Karab Laboratories, Petersburg, Va. Preparation for asthma, hay fever, etc. 317,771; Oct. 13. Class 6.
Kessler, Albert, doing business as F. A. Kessler, Mittweida, Germany. Polishing cloths. 303,291; Oct. 13. Class 29.
Knapp, William G., doing business as Winola Laboratories, Ashland, Pa. Salves, ointments. 315,313; Oct. 13. Class 6.
Koch Beverage Company, The, Wapakoneta, Ohio. Malt beverage. 302,144; Oct. 13. Class 48.
Kress, S. H., & Co., New York, N. Y. Suspenders and garters. 304,244; Oct. 13. Class 39.
Kress, S. H., & Co., New York, N. Y. Buttons, snap fasteners, combs, etc. 316,274; Oct. 13. Class 40.
Kwality Farm. (See Mahar, Daniel H.)
Lady Onda Company. (See Carvelli, John.)
Lavin Parfumes, Inc., Wilmington, Del. Perfume extract. 318,486; Oct. 13. Class 6.
Lebiond, It. K., Machine Tool Company, The, Cincinnati, Ohio. Lathes. 311,616; Oct. 13. Class 23.
Levi, Bruno D., New York, N. Y. Detergent preparation. 284,188; Oct. 13. Class 4.
Los Angeles Drug Company, doing business as Ja-Neen Toiletries, Los Angeles, Calif. Cream, pore paste, astringent, etc. 317,524; Oct. 13. Class 6.
M. & L. Typesetting & Electrotyping Co., Chicago, Ill. Cast lines of type and printer's type. 315,202; Oct. 13. Class 14.
Mahar, Daniel H., doing business as Kwality Farm, West Windsor Township, N. J. Eggs, breeding chickens, and baby chicks. 301,664; Oct. 13. Class 46.
Marchisella, Vincent, doing business as The Bon-E-Blu Co., New York, N. Y. Bluing and bluing sticks. 311,766; Oct. 13. Class 6.
Marietta Paint & Color Co., The, Marietta, Ohio. Wood stains and paint surfacers. 317,720; Oct. 13. Class 16.
Martha Washington Candies Company, Chicago, Ill. Ice cream. 316,350; Oct. 13. Class 46.
Master Builders Company, The, Cleveland, Ohio. Material in the nature of portland cement. 304,875; Oct. 13. Class 12.
Master Marble Company, Clarksburg, W. Va. Marbles. 318,841; Oct. 13. Class 22.
McKesson & Robbins, Incorporated, Bridgeport, Conn. Petroleum products or preparations containing them. 317,775; Oct. 13. Class 6.
McLaughlin, James G., doing business as The Carey Corporation, Elmira, N. Y. Health candy. 317,672; Oct. 13. Class 6.
Mead Corporation, The, Dayton, Ohio. Paper. 304,823; Oct. 13. Class 37.
Mechanische Weberei Sorau vormals F. A. Martin & Co., Sorau, Nieder Lausitz, Germany. Tea sets, table cloths, napkins, etc. 306,063; Oct. 13. Class 42.
Medical Research Corporation, Newark, N. J. Deodorant and perspiration corrective. 317,815; Oct. 13. Class 6.
Medical Research Council, Inc., Brooklyn, N. Y. Antiseptic ointment or vaginal jelly. 317,947; Oct. 13. Class 6.
Miami-Havana Trading Company, Miami, Fla. Cigars. 317,004; Oct. 13. Class 17.
Miller, Frank W., doing business as Radex Company, Toledo, Ohio. Electrically activated water. 317,722; Oct. 13. Class 6.
Morris, John, jr., Harlingen, Tex. Fruits and vegetables. 318,636; Oct. 13. Class 46.
Morton Manufacturing Corporation, doing business as Whitehouse Chemical Co., Lynchburgh, Va. Astringent deodorant powder. 317,899; Oct. 13. Class 6.
Moulton, S. F., Los Angeles, Calif. Insecticides. 315,548; Oct. 13. Class 6.
Mueller, L. J., Furnace Company, Milwaukee, Wis. Heating and air conditioning systems. 318,429; Oct. 13. Class 34.
Mullins Manufacturing Corporation, Salem, Ohio. Canoes, boats, and boat trailers. 297,202; Oct. 13. Class 19.
Murachanian, Melkon, West New York, N. J. Card game. 318,159; Oct. 13. Class 22.
National Acme Co., The, Cleveland, Ohio. Instruments for the combined recording of time and production. 317,088; Oct. 13. Class 26.
National Metal Edge Box Company, Philadelphia, Pa. Metal stays. 311,303; Oct. 13. Class 13.
National Metal Edge Box Company, Philadelphia, Pa. Paper boxes. 311,305; Oct. 13. Class 2.
National Soap & Polish Co., The, Cleveland, Ohio. Hand soap, automobile and metal cleaner, and silver polish. 315,643; Oct. 13. Class 4.
Nea Service, Inc., Cleveland, Ohio. Comic strip. 318,161–2; Oct. 13. Class 38.
Nelson-Columbia, Hugh, Carpet Mills, Inc., Philadelphia, Pa. Textile rugs and carpets. 318,671; Oct. 13. Class 42.
Nostane Products Corporation, doing business as Dr. Browns Laboratories, Brooklyn, N. Y. Laxative. 314,458; Oct. 13. Class 6.
Oleide Products Company, Brooklyn, N. Y. Spray. 318,249; Oct. 13. Class 6.
Oliver Farm Equipment Company, Chicago, Ill. Tractors, threshers, plows, etc. 315,294; Oct. 13. Class 23.
Omaha Cold Storage Company, Omaha, Nebr. Eggs. 317,730; Oct. 13. Class 46.
Park Publishing Company, Chicago, Ill. Publication. 318,563; Oct. 13. Class 38.
Parke, Davis & Co., Detroit, Mich. Radiopaque oil. 318,075; Oct. 13. Class 6.
Patex Fibre Corporation, Montville, N. J. Towels and toweling. 318,564; Oct. 13. Class 42.
Patou, Jean, Inc., New York, N. Y. Perfumes. 318,788; Oct. 13. Class 6.
Penny, George T., doing business as Penny's Chemical Co., Greensboro, N. C. Medicinal preparation. 317,676; Oct. 13. Class 6.
Perlman, M., doing business as Ponchartrain Shirt Company, Detroit, Mich. Shirts, neckties, underwear, and hosiery. 316,501; Oct. 13. Class 39.
Phelps Dodge Corporation, New York, N. Y. Copper castings. 317,332; Oct. 13. Class 14.
Pollack, Max, & Co., Inc., New York, N. Y. Sewing threads. 313,384; Oct. 13. Class 43.
Pontchartrain Shirt Company. (See Perlman, M.)
Portre Corporation, The, San Francisco, Calif. Prints. 318,168; Oct. 13. Class 38.
Potter, William, New York, N. Y. Wood scrapers, parts thereof, and scraper blades. 318,018; Oct. 13. Class 23.
Pre Cote Corporation, Indianapolis, Ind. Machines. 316,050; Oct. 13. Class 23.
Radex Company. (See Miller, Frank W.)
Real-Oil-Heat Burner Company, Winona, Minn. Heat savers. 318,170; Oct. 13. Class 34.
Reubel-Stallard Co., St. Louis, Mo. Preparation for headaches, colds, etc. 317,615; Oct. 13. Class 6.
Richmar Laboratories Inc., Elizabeth, N. J. Face powder, lip stick, face rouge, etc. 317,905; Oct. 13. Class 6.
Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Tympan paper. 316,508; Oct. 13. Class 37.
Ritter, P. J., Company, Philadelphia, Pa. Spaghetti and tomato juice. 317,250; Oct. 13. Class 46.
Roper, Geo. D., Corporation, Rockford, Ill. Gas stoves and ranges. 318,415; Oct. 13. Class 34.
Schindler, Charles E., Coldwater, Ohio. Medicinal preparation. 317,335; Oct. 13. Class 6.
Sears, Roebuck and Co., Chicago, Ill. Lawn mowers. 302,485; Oct. 13. Class 23.
Sears, Roebuck and Co., Chicago, Ill. Fishing tackle. 306,466; Oct. 13. Class 22.
Self, Luther B., Portland, Oreg. Nuts. 317,992; Oct. 13. Class 46.
Seligman, Sely S., doing business as Devil Laboratories Company, Cincinnati, Ohio. Rust and stain remover. 317,587; Oct. 13. Class 6.
Semler, R. B., Incorporated, New York, N. Y. Hair tonic. 313,216; Oct. 13. Class 6.
Simon, Julius, Inc., New York, N. Y. Shirts. 303,824; Oct. 13. Class 39.
Societe Vinicole Botrys, Societe Anonyme, Paris, France. Grape juice. 318,683; Oct. 13. Class 45.
Societe Vinicole Botrys, Societe Anonyme, Paris, France. Wines. 318,684; Oct. 13. Class 47.
Sontag Chain Stores Co. Ltd., doing business as Studio Products Co., Los Angeles, Calif. Manicure preparations. 309,744; Oct. 13. Class 6.
Sontag Chain Stores Co. Ltd., doing business as Emdee Laboratories Co., Los Angeles, Calif. Cosmetics, toilet preparations, and medicinal preparations. 315,573; Oct. 13. Class 6.
Standard Brands Incorporated, New York, N. Y. Phosphate and lactate mixture. 316,669; Oct. 13. Class 6.
Sterli Manufacturing Company, Omaha, Nebr. Casket carriages or trucks. 314,519; Oct. 13. Class 19.
Stop-O-Stain Manufacturing Company. (See Hume, Jack.)
Strauss Toy Shops, Inc., New York, N. Y. Dolls. 318,792; Oct. 13. Class 22.
Studio Products Co. (See Sontag Chain Stores Co. Ltd.)
Suchar Process Corporation, New York, N. Y. Sugar and sugar syrups. 311,706; Oct. 13. Class 40.
Tamenaga, Atsumori, Ebara-Gun, Tokyo Prefecture, Japan. Ointment. 299,873; Oct. 13. Class 6.
Texaco Salt Products Company, New York, N. Y. Salt. 317,819; Oct. 13. Class 6.
Tillman & Bendel, Inc., San Francisco, Calif. Coffee. 317,877; Oct. 13. Class 46.
Ti-Trinox Company, The. (See Baum, Alden H.)
Trees Candy Company. (See Zimetbaum, Samuel.)
Tropical Sweets Incorporated, Davenport, Fla. Candy and candied citrus. 318,640; Oct. 13. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Uber & Weiss Mfg. Corp., New York, N. Y. Powdered substance. 317,821; Oct. 13. Class 6.
United Biscuit & Specialty Co. Inc., assignor to Charles J. Fay, Clifton, N. J. Dog food. 311,202; Oct. 13. Class 46.
United Combustion & Engineering Co. Inc., Hoboken, N. J. Coal burning equipment. 315,620; Oct. 13. Class 34.
Veltene Limited, London, England. Common soap and detergent soap extracts. 310,313–14; Oct. 13. Class 4.
Wellington Sears Company, New York, N. Y. Cloths. 318,301; Oct. 13. Class 42.
Western Grocer Company, Marshalltown, Iowa. Coffee. 298,220; Oct. 13. Class 46.
Whitehouse Chemical Co. (See Morton Manufacturing Corporation.)
Wil-gro Company, Bridgeboro, N. J. Fertilizer. 317,290; Oct. 13. Class 10.
Winner Chemical Co. (See Carter's Ink Company.)
Winola Laboratories. (See Knapp, William G.)
Zimetbaum, Samuel, doing business as Trees Candy Company, Newark, N. J. Candy. 318,472; Oct. 13. Class 46.

LIST OF REGISTRANTS OF TRADE-MARKS

Adler, Harry, Coat Co. Inc., New York, N. Y. Coats. 287,843; Oct. 13; Serial No. 315,622; published July 28, 1931. Class 39.
Aerofonic Company, The, Los Angeles, Calif. Loud speakers. 287,902; Oct. 13. Class 21.
Ambrosia Chocolate Company, Milwaukee, Wis. Candy. 287,918; Oct. 13. Class 46.
American Character Doll Co. Inc., New York, N. Y. Dolls. 287,805; Oct. 13; Serial No. 316,147; published July 28, 1931. Class 22.
American Legion of Rhode Island, The, Providence, R. I. Uniforms. 287,862; Oct. 13; Serial No. 314,481; published July 14, 1931. Class 39.
American Mint Corporation, New York, N. Y. Candy and candy tablets. 287,895; Oct. 13; Serial No. 315,298; published July 28, 1931. Class 46.
Amtorg Trading Corporation, New York, N. Y. Canned fish. 287,874; Oct. 13; Serial No. 308,570; published July 28, 1931. Class 46.
Ansonia O & C Company, The, Ansonia, Conn. Elastic webbing. 287,837; Oct. 13; Serial No. 315,623; published July 28, 1931. Class 42.
Apex Products Corporation. (See Clean Home Products Corporation, assignor.)
Arthur Stores, Incorporated, The, Union, S. C. Silk hosiery. 287,845; Oct. 13; Serial No. 315,236; published July 28, 1931. Class 39.
Associated Silver Company, Chicago, Ill. Boxes and chests. 287,814; Oct. 13; Serial No. 313,070; published July 28, 1931. Class 2.
Atlas Mills. (See Goldman, Charles.)
Baskind, Louis & Co., Inc., New York, N. Y. Shirts, pajamas, and underwear. 287,803; Oct. 13; Serial No. 314,596; published July 21, 1931. Class 39.
Basso, M. P., & Co., Inc., New York, N. Y. Bond paper. 287,905; Oct. 13. Class 37.
Benn, Joseph, Corporation, Greystone, R. I., and New York, N. Y. Mohair suitings. 287,865; Oct. 13; Serial No. 314,636; published July 28, 1931. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 287,828; Oct. 13; Serial No. 315,780; published July 28, 1931. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 287,838; Oct. 13; Serial No. 315,779; published July 28, 1931. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 287,839; Oct. 13; Serial No. 315,782; published July 28, 1931. Class 42.
Bob, H. D. Company, Inc., New York, N. Y. Shirts, blouses, underwear, etc. 287,854; Oct. 13; Serial No. 314,141; published July 14, 1931. Class 39.
Bordentown Dairy Company, Bordentown, N. J. Cultured sweet cream. 287,901; Oct. 13. Class 46.
Bradley, Smith Co., The, New Haven, Conn. Candy. 287,879; Oct. 13; Serial No. 299,679; published July 29, 1930. Class 46.
Brooklyn Beverage Dealers Association, Inc., Brooklyn, and New York, N. Y. Malt beverages. 287,793; Oct. 13; Serial No. 311,855; published July 28, 1931. Class 48.
Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Billiard tables and parts thereof. 287,930–2; Oct. 13. Class 22.
Cabinet Mfg. Co., Quincy, Ill. Shirts. 287,803; Oct. 13; Serial No. 315,133; published July 28, 1931. Class 39.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 287,840; Oct. 13; Serial No. 315,897; published July 28, 1931. Class 42.
Character Products Company, Incorporated, Danville, Va. Shirts. 287,875; Oct. 13; Serial No. 285,146; published Aug. 5, 1930. Class 39.
Clean Home Products Corporation, Chicago, Ill., assignor to Apex Products Corporation, Chicago, Ill. Cleaning scouring preparation. 287,907; Oct. 13. Class 4.
Colorado Fuel and Iron Company, The, Denver, Colo. Wire fence. 287,869; Oct. 13; Serial No. 302,269; published Sept. 16, 1930. Class 13.
Colorado Fuel and Iron Company, The, Denver, Colo. Nails, tacks, brads, etc. 287,927; Oct. 13. Class 13.
Columbus McKinnon Chain Corporation, Tonawanda, N. Y. Chain hoist. 287,821; Oct. 13; Serial No. 315,135; published July 28, 1931. Class 23.
Cone Export and Commission Company, New York, N. Y. Cotton goods. 287,878; Oct. 13; Serial No. 296,220; published July 28, 1931. Class 42.
Cortland Line Company, Incorporated, Cortland, N. Y. Silk fish lines. 287,916; Oct. 13. Class 22.
Crane Co., Chicago, Ill. Globe and check valve. 287,818; Oct. 13; Serial No. 314,898; published July 28, 1931. Class 13.
Cullen Fuel Co., Inc., New York, N. Y. Coal. 287,926; Oct. 13. Class 1.
Dalby, Thomas, Company, Watertown, Mass. Underwear. 287,848; Oct. 13; Serial No. 315,137; published July 21, 1931. Class 39.
Da-Lee Candy Co. (See Plotke, David.)
Damm, Max, Company, Inc., Newark, N. J. Gladstone bags, traveling bags, and suit cases. 287,914; Oct. 13. Class 3.
De Gilio, Nicholas, San Francisco, Calif. Beverage filters. 287,811; Oct. 13; Serial No. 315,659; published July 28, 1931. Class 31.
Demi-Tasse Manufacturing Co., Brooklyn, N. Y. Maltless beverages. 287,804; Oct. 13; Serial No. 315,529; published July 28, 1931. Class 45.
Dickman, I., & Sons, Brooklyn, N. Y. Canned salmon, sardines, tomatoes, etc. 287,929; Oct. 13. Class 46.
Earl Fruit Company, San Francisco, Calif. Fresh fruits. 287,835; Oct. 13; Serial No. 315,530; published July 28, 1931. Class 46.
Earnshaw Knitting Company, Newton, Mass. Bathing suits. 287,798; Oct. 13; Serial No. 315,041 published July 21, 1931. Class 39.
Ebinger, D. A., Sanitary Manufacturing Company, The, Columbus, Ohio. Enameled ware. 287,870; Oct. 13; Serial No. 302,373; published July 28, 1931. Class 13.
Enterprise Manufacturing Company, The, Akron, Ohio. Artificial bait. 287,806; Oct. 13; Serial No. 316,196; published July 28, 1931. Class 22.
Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, etc. 287,922; Oct. 13. Class 39.
Garfield Motor Products Co. (See Palazzolo, Sam.)
General Cable Corporation, New York, N. Y. Electrical coils. 287,904; Oct. 13. Class 21.
Glass, C. A., Co., Inc., Los Angeles, Calif. Fresh deciduous fruits and fresh vegetables. 287,881; Oct. 13; Serial No. 301,897; published Apr. 28, 1931. Class 46.
Glass, Henry, & Co., New York, N. Y. Piece goods. 287,829; Oct. 13; Serial No. 315,049; published July 28, 1931. Class 42.
Glass, Henry, & Co., New York, N. Y. Piece goods. 287,868; Oct. 13; Serial No. 315,048; published July 28, 1931. Class 42.
Globe Machine & Stamping Company, Cleveland, Ohio. Radiator shutters, Automobile. 287,819; Oct. 13; Serial No. 314,954; published July 28, 1931. Class 19.
Globe Overall Company, The, Cincinnati, Ohio. Work clothing. 287,871; Oct. 13; Serial No. 304,135; published July 14, 1931. Class 39.
Goldman, Charles, doing business as Atlas Mills, New York, N. Y. Textile fabrics. 287,898; Oct. 13; Serial No. 315,394; published July 28, 1931. Class 42.
Gonzalez, A. E., West Riverside, Calif. Malt syrup. 287,920; Oct. 13. Class 46.
Gorov, Joshua, Los Angeles, Calif. Candy. 287,891; Oct. 13; Serial No. 314,991; published July 28, 1931. Class 46.
Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 287,799; Oct. 13; Serial No. 315,050; published July 14, 1931. Class 39.
Gotham Tissue Corporation, New York, N. Y. Toilet paper. 287,925; Oct. 13. Class 37.
Greenberg, Max & Co., New York, N. Y. Dresses. 287,849; Oct. 13; Serial No. 314,448; published July 14, 1931. Class 39.
Greenebaum Brothers, Philadelphia, Pa. Waists, blouses, shirts, pyjamas, and underwear. 287,850; Oct. 13; Serial No. 314,693; published July 21, 1931. Class 39.
Greenfield Tap and Die Corporation, Greenfield, Mass. Machine screw taps. 287,912; Oct. 13. Class 23.
Greif, L., & Bros., Incorporated, Baltimore, Md. Top coats, overcoats, coats, etc. 287,802; Oct. 13; Serial No. 315,092; published July 21, 1931. Class 39.

Himmah & Moffitt, Salinas, Calif. Fresh vegetables. 287,836; Oct. 13; Serial No. 315,616; published July 28, 1931. Class 46.

Hogue, Edward E., Los Angeles, Calif. Hosiery. 287,858; Oct. 13; Serial No. 311,410; published July 21, 1931. Class 39.

Hoover Co., The, San Francisco, Calif. Diaper covers. 287,842; Oct. 13; Serial No. 315,536; published July 28, 1931. Class 39.

Hoover Hosiery Company, Concord, N. C. Hosiery. 287,800; Oct. 13; Serial No. 315,051; published July 21, 1931. Class 39.

International Fruit Corporation, Orlando, Fla. Fresh citrus fruits. 287,887; Oct. 13; Serial No. 313,239; published July 28, 1931. Class 46.

Jackson & Jackson Company, Salisbury, Md. Shirts. 287,844; Oct. 13; Serial No. 315,912; published July 28, 1931. Class 39.

Janome Rayon Corporation, Brooklyn, N. Y. Underwear. 287,857; Oct. 13; Serial No. 311,311; published July 21, 1931. Class 39.

K. and G. Manufacturing Company. (See King, C. M.)

Kendall Company, The, Walpole, Mass. Cheese cloth. 287,882; Oct. 13; Serial No. 310,017; published July 28, 1931. Class 42.

King, C. M., doing business as K. and G. Manufacturing Company, Birmingham, Ala. Wheel pullers and ignition cable extractors. 287,824; Oct. 13; Serial No. 315,269; published July 28, 1931. Class 23.

Lesher, Whitman & Co., Inc., New York, N. Y. Piece goods. 287,899; Oct. 13; Serial No. 315,406; published July 28, 1931. Class 42.

Liquori, Celeste A., New York, N. Y. Candy. 287,834; Oct. 13; Serial No. 315,464; published July 28, 1931. Class 46.

Lowenfeld, Marguerite F. J., London, England. Brassières, corselets, corsets, etc. 287,859; Oct. 13; Serial No. 312,610; published July 14, 1931. Class 39.

Luxite Silk Products Co., Milwaukee, Wis. Underwear. 287,795; Oct. 13; Serial No. 314,705; published July 21, 1931. Class 39.

Makransky, S., and Sons, Inc., Philadelphia, Pa. Suits, overcoats, and top coats. 287,846; Oct. 13; Serial No. 315,495; published July 21, 1931. Class 39.

May Department Stores Company, The, St. Louis, Mo. Shirts. 287,847; Oct. 13; Serial No. 314,998; published July 28, 1931. Class 39.

McGaugh, Calvin C., Dallas, Tex. Hosiery. 287,851; Oct. 13; Serial No. 314,376; published July 14, 1931. Class 39.

McKesson & Robbins, Incorporated. (See Saba, C. N., assignor.)

Meadowland Confections Limited, London, England. Confectionery. 287,856; Oct. 13; Serial No. 311,039; published July 28, 1931. Class 46.

Miami Avocado & Citrus Growers Inc., Avocado Park Groves, Miami, Fla. Fresh citrus fruit. 287,860; Oct. 13; Serial No. 313,215; published July 28, 1931. Class 46.

Midway Chemical Company, Chicago, Ill. Stove polish. 287,910; Oct. 13.

Miller, I., & Sons, Incorporated, Long Island City, N. Y. Hosiery. 287,883; Oct. 13; Serial No. 312,347; published July 21, 1931. Class 39.

Monroe Bottling Company. (See Szwajkos, John K.)

Murdock Mfg. & Supply Company, The, Cincinnati, Ohio. Shut off valves and steam valves. 287,825; Oct. 13; Serial No. 315,549; published July 28, 1931. Class 13.

National Pectin Products Company, Chicago, Ill. Fruit pectin. 287,911; Oct. 13. Class 46.

Neustadter Bros., San Francisco, Calif. Overalls, pants, combination suits, work shirts, etc. 287,815; Oct. 13; Serial No. 313,888; published June 30, 1931. Class 39.

New York Pattern Company, Inc., The, New York, N. Y. Paper patterns. 287,826; Oct. 13; Serial No. 315,551; published July 28, 1931. Class 26.

Novo Engine Company, Lansing, Mich. Pumps. 287,816; Oct. 13; Serial No. 314,167; published July 28, 1931. Class 23.

Nutrine Candy Co., Chicago, Ill. Candy. 287,909; Oct. 13. Class 46.

Oakes, Thomas, & Co., Bloomfield, N. J. Woolen and worsted cloths. 287,884; Oct. 13; Serial No. 312,858; published July 28, 1931. Class 42.

Oakes, Thomas, & Co., Bloomfield, N. J. Woolen and worsted cloths. 287,885; Oct. 13; Serial No. 312,860; published July 28, 1931. Class 42.

Olmito Packing Company, Olmito, Tex. Canned fruits, vegetables, pumpkin, and fruit juices. 287,924; Oct. 13. Class 46.

Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. 287,833; Oct. 13; Serial No. 315,318; published July 28, 1931. Class 42.

Pacific Products, Inc., San Francisco, Calif. Maltless beverages. 287,807–9; Oct. 13; Serial Nos. 315,321–3; published July 28, 1931. Class 45.

Palazzolo, Sam, doing business as Garfield Motor Products Co., St. Louis, Mo. Antifreeze compound. 287,906; Oct. 13. Class 6.

Pennsylvania Textile Mills, Inc., New York, N. Y. Pile fabrics. 287,900; Oct. 13; Serial No. 315,414; published July 28, 1931. Class 42.

Perlstein, H., Philadelphia, Pa. Cut glass, ornamental glass, etc. 287,889; Oct. 13; Serial No. 313,969; published July 28, 1931. Class 33.

Pioneer Fruit Co., The, San Francisco, Calif. Fresh deciduous fruits, fresh asparagus, and fresh lettuce. 287,876; Oct. 13; Serial No. 290,475; published Aug. 12, 1930. Class 46.

Pittsburgh Steel Company, Pittsburgh, Pa. Wire fencing. 287,227; Oct. 13; Serial No. 316,132; published July 28, 1931. Class 13.

Plotke, David, doing business as Da-Lee Candy Co., Chicago, Ill. Candy bars. 287,866; Oct. 13; Serial No. 314,862; published July 28, 1931. Class 46.

Quiklift Manufacturing Company. (See Slocum, Charles D., assignor.)

Rasmussen, Geo., Co., Chicago, Ill. Maltless beverages. 287,810; Oct. 13; Serial No. 315,502; published July 28, 1931. Class 45.

Reich, A., & Sons, Kansas City, Mo. Raw tomatoes. 287,877; Oct. 13; Serial No. 290,764; published Oct. 21, 1930. Class 46.

door game played with shuttlecocks. 287,794; Oct. 13; Serial No. 313,446; published July 28, 1931. Class 22.

Royal Baking Powder Company, New York, N. Y. Gela-Reynolds Mfg. Co., The, Holyoke, Mass. Paper. 287,928; Oct. 13. Class 37.

Rimmer, Herbert A., Glasgow, Scotland. Indoor and outtin desserts. 287,892; Oct. 13; Serial No. 315,015; published July 14, 1931. Class 46.

Royal Baking Powder Company, New York, N. Y. Gelatin desserts. 287,893–4; Oct. 13; Serial Nos. 315,017–18; published July 28, 1931. Class 46.

Royal Dress Co., Inc., New York, N. Y. Dresses, frocks, and gowns. 287,700; Oct. 13; Serial No. 314,719; published July 14, 1931. Class 39.

Saba, G. N., doing business as Saba Products Company, Toronto, Canada, assignor to McKesson & Robbins, Incorporated. Ointment. 287,923; Oct. 13. Class 6.

Saladino, C., & Sons, Chelsea, Mass. Racket strings. 287,921; Oct. 13. Class 22.

Salvato, Charles, doing business as Charles Salvato & Company, Brooklyn, N. Y. Uniforms. 287,864; Oct. 13; Serial No. 314,656; published July 28, 1931. Class 39.

Sanford Mills, The, Sanford, Me. Mixed angora, hair and cotton fabric. 287,832; Oct. 13; Serial No. 315,280; published July 28, 1931. Class 42.

Schwob, Simon, doing business as The Standard Tailoring Company and The Schwob Company, Columbus, Ga. Suits and overcoats. 287,852; Oct. 13; Serial No. 314,428; published July 14, 1931. Class 39.

Sears, Roebuck and Co., Chicago, Ill. Felt base rug and floor covering. 287,817; Oct. 13; Serial No. 314,721; published July 28, 1931. Class 20.

Sears, Roebuck and Co., Chicago, Ill. Men's hosiery 287,861; Oct. 13; Serial No. 313,259; published July 28, 1931. Class 39.

Shor, Isador, doing business as I. Shor, New York, N. Y. Jewelry saws. 287,820; Oct. 13; Serial No. 315,067; published July 28, 1931. Class 23.

Simon, Franklin, & Co. Inc., New York, N. Y. Dresses, coats, and frocks. 287,908; Oct. 13. Class 4.

Slocum, Charles D., doing business as Quiklift Manufacturing Company, Wichitka, Kans.; said Slocum assignor to Quiklift Manufacturing Company. Paint and varnish remover. 287,915; Oct. 13. Class 16.

Sonneborn, Henry, & Co., Baltimore, Md., assignor, by mesne assignments, to The Henry Sonneborn Company, New York, N. Y. Garments worn by boys, men, and children. 85,292; renewed Feb. 6, 1932. Class 39.

South Carolina Packing Corporation, Fairfax, S. C. Canned fruits and vegetables. 287,880; Oct. 13; Serial No. 300,153; published July 22, 1930. Class 46.

Southern Mills, Incorporated, Atlanta, Ga. Cotton flannel and cotton padding. 287,888; Oct. 13; Serial No. 313,809; published July 28, 1931. Class 42.

Spiegel, May, Stern Company, Inc., Chicago, Ill. Rugs. 287,917; Oct. 13. Class 42.

Standard Fruit and Steamship Company, New Orleans, La. Bananas. 287,831; Oct. 13; Serial No. 315,118; published July 28, 1931. Class 46.

Standard Tailoring Company, The. (See Schwob, Simon.)

Sturman Dress Co., Inc., New York, N. Y. Dresses, gowns, frocks, etc. 287,855; Oct. 13; Serial No. 313,453; published July 28, 1931. Class 39.

Szwajkos, John K., doing business as Monroe Bottling Company, Rochester, N. Y. Maltless beverages and flavors and extracts used in the preparation of same. 287,812; Oct. 13; Serial No. 315,661; published July 28, 1931. Class 45.

Thompson-Bremer & Co., Chicago, Ill. Lock washers. 287,913; Oct. 13. Class 13.

Timely Fabrics Corporation, New York, N. Y. Silk, cotton, and rayon piece goods. 287,896–7; Oct. 13; Serial Nos. 315,374–5; published July 28, 1931. Class 42.

Trees Candy Co. (See Zimetbaum, Samuel.)

Turner, R., & Sons, Limited, Warwick, England. Fish hooks, snelled hooks, etc. 287,872; Oct. 13; Serial No. 304,425; published July 28, 1931. Class 22.

United Furniture Company, The, Lexington, N. C. Bedroom furniture. 287,813; Oct. 13; Serial No. 310,964; published July 28, 1931. Class 32.

Vandam, Albert H., Co. Inc., New York, N. Y. Cotton piece goods. 287,841; Oct. 13; Serial No. 316,022; published July 28, 1931. Class 42.

Van Dyk, James, Company, New York, N. Y. Coffee. 287,890; Oct. 13; Serial No. 314,972; published July 28, 1931. Class 46.

Van Raalte Company, New York, N. Y. Hosiery. 287,853; Oct. 13; Serial No. 313,687; published July 21, 1931. Class 39.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Containers made of iron. 287,822; Oct. 13; Serial No. 315,217; published July 28, 1931. Class 2.

Victor Talking Machine Company, Camden, N. J. Talking machine records. 287,903; Oct. 13. Class 36.

Vidalou, Manila, P. I. Dresses. 287,801; Oct. 13; Serial No. 315,071; published July 21, 1931. Class 39.

Washington Mfg. Co., The, New York, N. Y. Pants. 287,886; Oct. 13; Serial No. 313,162; published July 14, 1931. Class 39.

Withers Brothers, Los Angeles, Calif. Fresh fruits, vegetables. 287,830; Oct. 13; Serial No. 315,073; published July 28, 1931. Class 46.

Wolsey Ltd., Leicester, England. Stockings, socks, pants, etc. 287,919; Oct. 13. Class 39.

Wolverine Brass Works, Grand Rapids, Mich. Moulded rubber valve ball. 287,823; Oct. 13; Serial No. 315,228; published July 28, 1931. Class 13.

Yorke Shirt Company, The, Glens Falls and New York, N. Y. Collars. 287,797; Oct. 13; Serial No. 314,782; published July 28, 1931. Class 39.

Zeiss, Carl, Jena, Germany. Optical objectives. 287,873; Oct. 13; Serial No. 306,679; published July 28, 1931. Class 26.

Zimethaum, Samuel, doing business as Trees Candy Co., Newark, N. J. Candy. 287,867; Oct. 13; Serial No. 314,973; published July 28, 1931. Class 46.

LIST OF REGISTRANTS OF LABELS

Bat-Les Lite Corporation, Albany, N. Y. Bat-Les Lite. For Flashlights. 39,870; Oct. 13.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Butter Wafers. For Butter Wafers. 39,871; Oct. 13.

Cammarano Bros., Inc., Tacoma, Wash. Monterey. For Lime Rickey. 39,872; Oct. 13.

Chem-Art Company, The. (See Pinault, Robert W.)

Dunlap, R. L., & Company, Kokomo, Ind. Dunlap's Chocolate Covered Frozen Bananas. For Chocolate Covered Frozen Bananas. 39,873; Oct. 13.

Eves American Beverage Co. (See Pernice, Domenico.)

Flamex, Inc., Denver, Colo. Flamex. For Fire Extinguishers. 39,874; Oct. 13.

Horton, J. M., Ice Cream Company, Inc., New York, N. Y. Horton's Ice Cream and Ices. For Ice Cream and Water Ices. 39,875; Oct. 13.

Inland Motor Products Company, Des Moines, Iowa. Sav-A-Car. For Preparation for Stopping Leaks in Radiators. 39,876; Oct. 13.

Inland Motor Products Company, Des Moines, Iowa. Cap seal. For Preparation for Stopping Leaks in Radiators. 39,877; Oct. 13.

International Braid Company, Providence, R. I. Lacelastic. The Modern Elastic Shoe Lace. For Elastic Shoe Laces. 39,878; Oct. 13.

Katalite Laboratories. (See Poole, John M.)

Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Lombardy. For Prepared Mustard. 39,879; Oct. 13.

Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB—352. For Chocolate Cakes. 39,880; Oct. 13.

Lowenfels, F. F., & Son, New York, N. Y. Hotel bars. For Butter. 39,881; Oct. 13.

Mechling Brothers Chemical Company, Camden, N. J. Mechling's Granulated Sal Soda. For Granulated Sal Soda. 39,882; Oct. 13.

National Carbon Company, Inc., New York, N. Y. Eveready Electric Candle. For Electric Candle and Lights. 39,883; Oct. 13.

O. K. Insect Exterminating Co., Inc., Chicago, Ill. O. K. For Insecticides. 39,884; Oct. 13.

Pernice, Domenico, doing business as Eves American Beverage Co., Brooklyn, N. Y. Eves. For Nonalcoholic Beverage. 39,885; Oct. 13.

Pinault, Robert W., doing business as The Chem-Art Company, Sterling, Conn. Presto-Shave. For a Preparation for Use as a Beard Softener. 39,886; Oct. 13.

Poole, John M., doing business as Katalite Laboratories, Foxboro, Mass. Katalite Combustion Catalyst Creates an Anti-Carbon Super-Fuel from Common Gasoline. For Catalytic Combustion Agent or Preparation. 39,887; Oct. 13.

Service Laboratories, Inc., St. Louis, Mo. Toil-Flush. For Toilet Bowl Cleanser. 39,888; Oct. 13.

Smith, Lonnie G., doing business as Tulco Laboratories, Tulsa, Okla. Tulco. For Material Comprising a Combination Tooth Powder and Mouth Antiseptic. 39,889; Oct. 13.

Southwest Utility Dairy Products Company, Oklahoma City, Okla. Frozert. For Ice-Cream Confection. 39,890; Oct. 13.

Stahl-Meyer, Inc., Brooklyn, N. Y. Stahl-Meyer. For Sauerkraut and Frankfurters. 39,891; Oct. 13.

Stahl-Meyer, Inc., Brooklyn, N. Y. Stahl-Meyer. For Imported Style Frankfurters. 39,892–3; Oct. 13.

Standard Brands Incorporated, New York, N. Y. Royal. For Vanilla Pudding. 39,894; Oct. 13.

Trees Candy Co. (See Zimetbaum, Samuel.)

Tulco Laboratories. (See Smith, Lonnie G.)

Vineland Progressive Poultrymen, Inc., Vineland, N. J. V. V. B. Egg Crate Label. For Eggs. 39,895; Oct. 13.

Waukesha Pure Spring Water Company, Inc., Chicago, Ill. Waukesha Pale Ginger Ale. For Ginger Ale. 39,896; Oct. 13.

Wesco Foods Co. (See Kroger Grocery & Baking Co., The.)

Zimetbaum, Samuel, doing business as Trees Candy Co., Newark, N. J. Trees Short & Sweet. For Confection. 39,897; Oct. 13.

LIST OF REGISTRANTS OF PRINTS

Cream of Wheat Corporation, The, Minneapolis, Minn. We Have to do without a Lot of things. For Wheat Breakfast Food. 13,439; Oct. 13.

Cream of Wheat Corporation, The, Minneapolis, Minn. Lucky the Child who is raised on a Farm. For Wheat Breakfast Food. 13,440; Oct. 13.

Cream of Wheat Corporation, The, Minneapolis, Minn. Dear Fathers. For Wheat Breakfast Food. 13,441; Oct. 13.

Keyston Bros., San Francisco, Calif. Lasso 'Em Bill. For Cowboy Chaps. 13,442; Oct. 13.

Nesbitt Fruit Products, Inc., doing business as Nesbitt's, Los Angeles, Calif. Drink Nesbitt's California Orange Juice. For Orange Juice. 13,443; Oct. 13.

Pacific Railways Advertising Company, San Francisco, Calif. Typewriters Rented—Sold, Table supplied if desired. For Typewriters and Typewriter Tables. 13,144; Oct. 13.

Svarstad, Ivar, Salem, Oreg. Flipp. For Safety Razor Guard. 13,445; Oct. 13.

Wrigley, Wm., Jr., Company, Chicago, Ill. For more enjoyment from both Smoking and Eating keep your taste fresh with P. K. For Chewing Gum. 13,446; Oct. 13.

Wrigley, Wm., Jr., Company, Chicago, Ill. Keep your taste fresh with P. K. A delicious Peppermint Gum Candy dipped. For Chewing Gum. 13,447; Oct. 13.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Cullen Fuel Co. 287,926; Oct. 13.

CLASS 2

Boxes and chests of wood, etc. Associated Silver Company. 287,814; Oct. 13; Serial No. 313,070; published July 28, 1931.

Containers made of iron. Vereinigte Stahlwerke Aktiengesellschaft. 287,822; Oct. 13; Serial No. 315,217; published July 28, 1931.

CLASS 3

Bags and suit cases, Gladstone and traveling. Max Damm Company. 287,914; Oct. 13.

CLASS 4

Cleaning scouring preparation. Clean Home Products Corporation. 287,907; Oct. 13.

Polish, Stove. Midway Chemical Company. 287,910; Oct. 13.

CLASS 6

Antifreeze compound. S. Palazzolo. 287,906; Oct. 13.
Ointment. C. N. Saba. 287,923; Oct. 13.

CLASS 13

Enameled ware. D. A. Ebinger Sanitary Manufacturing Company. 287,870; Oct. 13; Serial No. 302,373; published July 28, 1931.
Fencing, Wire. Pittsburgh Steel Company. 287,827; Oct. 13; Serial No. 316,132; July 28, 1931.
Lock washers. Thompson-Bremer & Co. 287,913; Oct. 13.
Nails, tacks, brads, etc. Colorado Fuel and Iron Company. 287,927; Oct. 13.
Valve ball, Moulded rubber. Wolverine Brass Works. 287,823; Oct. 13; Serial No. 315,228; published July 28, 1931.
Valves, Globe and check. Crane Co. 287,818; Oct. 13; Serial No. 314,898; published July 28, 1931.
Valves, Shut off and steam. Murdock Mfg. & Supply Company. 287,825; Oct. 13; Serial No. 315,549; published July 28, 1931.
Wire fence. Colorado Fuel and Iron Company. 287,869; Oct. 13; Serial No. 302,269; Sept. 16, 1930.

CLASS 16

Paint and varnish remover. C. D. Slocum. 287,915; Oct. 13.

CLASS 19

Radiator shutters, Automobile. Globe Machine & Stamping Company. 287,819; Oct. 13; Serial No. 314,954; published July 28, 1931.

CLASS 20

Rugs, Felt base, and floor covering. Sears, Roebuck and Co. 287,817; Oct. 13; Serial No. 314,721; published July 28, 1931.

CLASS 21

Electrical coils. General Cable Corporation. 287,904; Oct. 13.
Loud speakers. Aerofonic Company. 287,902; Oct. 13.

CLASS 22

Bait, Artificial. Enterprise Manufacturing Company. 287,806; Oct. 13; Serial No. 316,196; published July 28, 1931.
Billiard tables and parts thereof. Brunswick-Balke-Collender Company. 287,930–2; Oct. 13.
Dolls. American Character Doll Co. Inc. 287,805; Oct. 13; Serial No. 316,147; published July 28, 1931.
Fish hooks, snelled hooks, etc. R. Turner & Sons Limited. 287,872; Oct. 13; Serial No. 304,435; published July 28, 1931.
Fish lines, Silk. Cortland Line Company. 287,916; Oct. 13.
Game, Indoor and outdoor, played with shuttlecocks. H. A. Rimmer. 287,794; Oct. 13; Serial No. 313,446; published July 28, 1931.
Racket strings. C. Saladino & Sons. 287,921; Oct. 13.

CLASS 23

Chain hoists. Columbus McKinnon Chain Corporation. 287,821; Oct. 13; Serial No. 315,135; published July 28, 1931.
Pumps. Novo Engine Company. 287,816; Oct. 13; Serial No. 314,167; published July 28, 1931.
Saws, Jewelry. I. Shor. 287,820 Oct. 13; Serial No. 315,067; published July 28, 1931.
Taps, Machine screw. Greenfield Tap and Die Corporation. 287,912; Oct. 13.
Wheel pullers and ignition cable extractors. C. M. King. 287,824; Oct. 13. Serial No. 315,269; published July 28, 1931.

CLASS 26

Optical objectives. Carl Zeiss. 287,873; Oct. 13; Serial No. 306,679; published July 28, 1931.
Patterns, Paper. New York Pattern Company. 287,826; Oct. 13; Serial No. 315,551; published July 28, 1931.

CLASS 31

Filters, Beverage. N. De Gilio. 287,711; Oct. 13; Serial No. 315,659; published July 28, 1931.

CLASS 32

Furniture, Bedroom. United Furniture Company. 287,813; Oct. 13; Serial No. 310,964; published July 28, 1931.

CLASS 33

Glass, ornamental glass, etc., Cut. H. Perlstein. 287,889; Oct. 13; Serial No. 313,969; published July 28, 1931.

CLASS 36

Records, Talking machine. Victor Talking Machine Company. 287,903; Oct. 13.

CLASS 37

Paper. Reynolds Mfg. Co. 287,928; Oct. 13.
Paper, Bond. M. P. Basso & Co. 287,905; Oct. 13.
Paper, Toilet. Gotham Tissue Corporation. 287,925; Oct. 13.

CLASS 39

Brassières, corselets, corsets, etc. M. F. J. Lowenfeld. 287,859; Oct. 13; Serial No. 312,610; published July 14, 1931.
Clothing, Work. Globe Overall Company. 287,871; Oct. 13; Serial No. 304,135; published July 14, 1931.
Coats, Ladies'. Harry Adler Coat Co. Inc. 287,843; Oct. 13; Serial No. 315,622; published July 28, 1931.
Coats, vests, pants, etc. Fashion Park Associates, Inc. 287,922; Oct. 13.
Collars. Yorke Shirt Company. 287,797; Oct. 13; Serial No. 314,782; published July 28, 1931.
Diaper covers. Hoover Co. 287,842; Oct. 13; Serial No. 315,536; published July 28, 1931.
Dresses. M. Greenberg & Co. 287,849 Oct. 13; Serial No. 314,448; published July 14, 1931.
Dresses. Vidalou. 287,801; Oct. 13; Serial No. 315,071; published July 21, 1931.
Dresses, coats, and frocks. Franklin Simon & Co. Inc. 287,908.
Dresses, frocks, and gowns. Royal Dress Co., Inc. 287,796; Oct. 13; Serial No. 314,719; published July 14, 1931.
Dresses, gowns, and frocks, etc. Sturman Dress Co. 287,855; Oct. 13; Serial No. 313,453; published July 28, 1931.
Garments worn by boys, men, and children. Henry Sonneborn & Co. 85,292; renewed Feb. 6, 1932.
Hosiery. Arthur Stores, Incorporated. 287,845; Oct. 13; Serial No. 315,236; published July 28, 1931.
Hosiery. Gotham Silk Hosiery Company. 287,799; Oct. 13; Serial No. 315,050; published July 14, 1931.
Hosiery. E. E. Hogue. 287,858; Oct. 13; Serial No. 311,410; published July 21, 1931.
Hosiery. Hoover Knitting Company. 287,800; Oct. 13; Serial No. 315,051; published July 21, 1931.
Hosiery. C. C. McGaugh. 287,851; Oct. 13; Serial No. 314,376; published July 14, 1931.
Hosiery. I. Miller & Sons, Incorporated. 287,883; Oct. 13; Serial No. 312,347; published July 21, 1931.
Hosiery. Sears, Roebuck and Co. 287,861; Oct. 13; Serial No. 313,259; published July 28, 1931.
Hosiery. Van Raalte Company. 287,853; Oct. 13; Serial No. 313,687; published July 21, 1931.
Overalls, pants, combination suits, work shirts, etc. Neustadter Bros. 287,815; Oct. 13; Serial No. 313,888; published June 30, 1931.
Pants. Washington Mfg. Co. 287,886; Oct. 13; Serial No. 313,162; published July 14, 1931.
Shirts. Character Products Company. 287,875; Oct. 13; Serial No. 285,146; published Aug. 5, 1930.
Shirts. Jackson & Jackson. 287,844; Oct. 13; Serial No. 315,912; published July 28, 1931.
Shirts, blouses, underwear, etc. H. D. Bob Company, Inc. 287,854; Oct. 13; Serial No. 314,141; published July 14, 1931.
Shirts, Dress and negligee. May Department Stores Company. 287,847; Oct. 13; Serial No. 314,998; published July 28, 1931.
Shirts, Dress, negligee, and work. Cabinet Mfg. Co. 287,803; Oct. 13; Serial No. 315,133; published July 28, 1931.
Shirts, pajamas, and underwear. Louis Baskind & Co. 287,863; Oct. 13; Serial No. 314,596; published July 21, 1931.
Stockings, socks, pants, etc. Wolsey Ltd. 287,919; Oct. 13.
Suits and overcoats. S. Schwob. 287,852; Oct. 13; Serial No. 314,428; published July 14, 1931.
Suits, Bathing. Earnshaw Knitting Company. 287,798; Oct. 13; Serial No. 315,041; published July 21, 1931.
Suits, overcoats, and top coats. S. Makransky and Sons, Inc. 287,846; Oct. 13; Serial No. 315,495; published July 21, 1931.
Top coats, overcoats, coats, etc. L. Greif & Bro. Incorporated. 287,802; Oct. 13; Serial No. 315,092; published July 21, 1931.
Underwear. Thomas Dalby Company. 287,848; Oct. 13; Serial No. 315,137; published July 21, 1931.
Underwear. Janome Rayon Corporation. 287,857; Oct. 13; Serial No. 311,311; published July 21, 1931.
Underwear. Luxite Silk Products Co. 287,795; Oct. 13; Serial No. 314,705; published July 21, 1931.
Uniforms. American Legion of Rhode Island. 287,862; Oct. 13; Serial No. 314,481; published July 14, 1931.
Uniforms, Men's naval. C. Salvato. 287,864; Oct. 13; Serial No. 314,650; published July 28, 1931.
Waists, blouses, shirts, pyjamas, and underwear. Greenebaum Brothers. 287,850; Oct. 13; Serial No. 314,693; published July 21, 1931.

CLASS 42

Cheese cloth. Kendall Company. 287,882; Oct. 13; Serial No. 310,017; published July 28, 1931.
Cotton flannel and cotton padding. Southern Mills, Incorporated. 287,888; Oct. 13; Serial No. 313,809; published July 28, 1931.

Cotton goods. Cone Export and Commission Company. 287,878; Oct. 13; Serial No. 296,220; published July 28, 1931.
Cotton piece goods. Albert H. Vandam Co. Inc. 287,841; Oct. 13; Serial No. 316,022; published July 28, 1931.
Elastic webbing. Ansonia O & C Company. 287,837; Oct. 13; Serial No. 315,623; published July 28, 1931.
Fabric, Mixed Angora, hair, and cotton. Sanford Mills. 287,832; Oct. 13; Serial No. 315,280; published July 28, 1931.
Fabrics made of cellulose derivatives. Celanese Corporation of America. 287,840; Oct. 13; Serial No. 315,897; published July 28, 1931.
Mohair suitings. Joseph Benn Corporation. 287,865; Oct. 13; Serial No. 314,636; published July 28, 1931.
Piece goods. Henry Glass & Co. 287,829; Oct. 13; Serial No. 315,049; published July 28, 1931.
Piece goods. Henry Glass & Co. 287,868; Oct. 13; Serial No. 315,048; published July 28, 1931.
Piece goods. Lesher, Whitman & Co. 287,899; Oct. 13; Serial No. 315,406; published July 28, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 287,828; Oct. 13; Serial No. 315,780; published July 28, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 287,838; Oct. 13; Serial No. 315,779; published July 28, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 287,839; Oct. 13; Serial No. 315,782; published July 28, 1931.
Pile fabrics. Pennsylvania Textile Mills, Inc. 287,900; Oct. 13; Serial No. 315,414; published July 28, 1931.
Rugs. Spiegel, May, Stern Company. 287,917; Oct. 13.
Silk, cotton, and rayon piece goods. Timely Fabrics Corporation. 287,896–7; Oct. 13; Serial Nos. 315,374–5; published July 28, 1931.
Silk fabrics. Onondaga Silk Company. 287,833; Oct. 13; Serial No. 315,318; published July 28, 1931.
Textile fabrics. C. Goldman. 287,898; Oct. 13; Serial No. 315,394; published July 28, 1931.
Woolen and worsted cloths. Thomas Oakes & Co. 287,884; Oct. 13; Serial No. 312,858; published July 28, 1931.
Woolen and worsted cloths. Thomas Oakes & Co. 287,885; Oct. 13; Serial No. 312,860; published July 28, 1931.

CLASS 45

Beverages and flavors and extracts used in the preparation of the same, Maltless. J. K. Szwajkos. 287,812; Oct. 13; Serial No. 315,661; published July 28, 1931.
Beverages, Maltless. Demi-Tasse Manufacturing Co. 287,804; Oct. 13; Serial No. 315,529; published July 28, 1931.
Beverages, Maltless. Pacific Products, Inc. 287,807–9; Oct. 13; Serial Nos. 315,321–3; published July 28, 1931.
Beverages, Maltless. Geo. Rasmussen Co. 287,810; Oct. 13; Serial No. 315,502;; published July 28, 1931.

CLASS 46

Bananas. Standard Fruit and Steamship Company. 287,831; Oct. 13; Serial No. 315,118; published July 28, 1931.
Candy. Ambrosia Chocolate Company. 287,918; Oct. 13.
Candy. Bradley, Smith Co. 287,879; Oct. 13; Serial No. 299,679; published July 29, 1930.
Candy. J. J. Gorov. 287,891; Oct. 13; Serial No. 314,991; published July 28, 1931.
Candy. C. A. Liquori. 287,834; Oct. 13; Serial No. 315,464; published July 28, 1931.
Candy. Nutrine Candy Co. 287,909; Oct. 13.
Candy. S. Zimetbaum. 287,807; Oct. 13; Serial No. 314,973; published July 28, 1931.
Candy and candy tablets. American Mint Corporation. 287,895; Oct. 13; Serial No. 315,298; published July 28, 1931.
Candy bars. D. Plotke. 287,866; Oct. 13; Serial No. 314,862; published July 28, 1931.
Canned fish. Amtorg Trading Corporation. 287,874; Oct. 13; Serial No. 308,570; published July 28, 1931.
Canned fruits and vegetables. South Carolina Packing Corporation. 287,880; Oct. 13; Serial No. 300,153; published July 22, 1930.
Canned fruits, vegetables, pumpkin, and fruit juices. Olmito Packing Company. 287,924; Oct. 13.
Canned salmon, sardines, tomatoes, etc. I. Dickman & Sons. 287,929; Oct. 13.
Coffee. James Van Dyk Company. 287,890; Oct. 13; Serial No. 314,972; published July 28, 1931.
Confectionery. Meadowland Confections Limited. 287,856; Oct. 13; Serial No. 311,039; published July 28, 1931.
Cream, Cultured sweet. Bordentown Dairy Company. 287,901; Oct. 13.
Fruit, Fresh. Miami Avocado & Citrus Growers Inc. 287,860; Oct. 13; Serial No. 313,215; published July 28, 1931.
Fruit pectin. National Pectin Products Company. 287,911; Oct. 13.
Fruits and berries, Fresh. Earl Fruit Company. 287,835; Oct. 13; Serial No. 315,530; published July 28, 1931.
Fruits and fresh vegetables, Fresh deciduous. C. A. Glass Co., Inc. 287,881; Oct. 13; Serial No. 301,897; published Apr. 28, 1931.
Fruits, asparagus, and lettuce, Fresh deciduous. Pioneer Fruit Co. 287,876; Oct. 13; Serial No. 290,475; published Aug. 12, 1930.
Fruits, Fresh. International Fruit Corporation. 287,887; Oct. 13; Serial No. 313,239; published July 28, 1931.
Fruits, Vegetables, Fresh. Withers Brothers. 287,830; Oct. 13; Serial No. 315,073; published July 28, 1931.
Gelatin desserts. Royal Baking Powder Company. 287,892; Oct. 13; Serial No. 315,015; published July 14, 1931.
Gelatin desserts. Royal Baking Powder Company. 287,893–4; Oct. 13; Serial No. 315,017–18; published July 14, 1931.
Syrup, Malt. A. E. Gonzalez. 287,920; Oct. 13.
Tomatoes, Raw. A. Reich & Sons. 287,877; Oct. 13; Serial No. 290,764; published Oct. 21, 1930.
Vegetables, Fresh. Himmah & Moffitt. 287,836; Oct. 13; Serial No. 315,616; published July 28, 1931.

CLASS 48

Malt beverages. Brooklyn Beverage Dealers Association, Inc. 287,793; Oct. 13; Serial No. 311,855; published July 28, 1931.

LIST OF LABELS

Bat-Les Lite. For Flashlights. Bat-Les Lite Corporation. 39,870; Oct. 13.
Beech-Nut Butter Wafers. For Butter Wafers. Beech-Nut Packing Company. 39,871; Oct. 13.
CB—352. For Chocolate Cakes. Lambooy Label and Wrapper Co. 39,880; Oct. 13.
Capseal. For Preparation for Stopping Leaks in Radiators. Inland Motor Products Company. 39,877; Oct. 13.
Dunlap's Chocolate Covered Frozen Bananas. For Chocolate Covered Frozen Bananas. R. L. Dunlap & Company. 39,873; Oct. 13.
Eveready Electric Candle. For Electric Candle and Lights. National Carbon Company. 39,883; Oct. 13.
Eves. For Non-Alcoholic Beverage. D. Pernice. 39,885; Oct. 13.
Flamex. For Fire Extinguishers. Flamex, Inc. 37,874; Oct. 13.
Frozert. For Ice Cream Confection. Southwest Utility Dairy Products Company. 39,890; Oct. 13.
Horton's Ice Cream and Ices. For Ice Cream and Water Ices. J. M. Horton Ice Cream Company. 39,875; Oct. 13.
Hotel Bars. For Butter. F. F. Lowenfels & Son. 39,881; Oct. 13.
Katalite Combustion Catalyst Creates an Anti-Carbon Super-fuel from common Gasoline. For Catalytic Combustion Agent or Preparation. J. M. Poole. 39,887; Oct. 13.
Lacelastic, The Modern Elastic Shoe Lace. For Elastic Shoe Laces. International Braid Company. 39,878; Oct. 13.
Lombardy. For Prepared Mustard. Kroger Grocery & Baking Co. 39,879; Oct. 13.
Mechling's Granulated Sal Soda. For Granulated Sal Soda. Mechling Brothers Chemical Company. 39,882; Oct. 13.
Monterey. For Lime Rickey. Cammarano Bros., Inc. 39,872; Oct. 13.
O. K. For Insecticides. O. K. Insect Exterminating Co. 39,884; Oct. 13.
Presto-Shave. For a Preparation for Use as a Beard Softener. R. W. Pinault. 39,886; Oct. 13.
Royal. For Vanilla Pudding. Standard Brands Incorporated. 39,894; Oct. 13.
Sav-A-Car. For Preparation for Stopping Leaks in Radiators. Inland Motor Products Company. 39,876; Oct. 13.
Stahl-Meyer. For Sauerkraut and Frankfurters. Stahl-Meyer, Inc. 39,891; Oct. 13.
Stahl-Meyer. For Imported Style Frankfurters. Stahl-Meyer, Inc. 39,892–3; Oct. 13.
Toil-Flush. For toilet Bowl Cleanser. Service Laboratories, Inc. 39,888; Oct. 13.
Trees Short & Sweet. For Confection. S. Zimetbaum. 39,897; Oct. 13.
Tulco. For Material Comprising a Combination Tooth Powder and Mouth Antiseptic. L. G. Smith. 39,889; Oct. 13.
V. V. B. Egg Crate Label. For Eggs. Vineland Progressive Poultrymen, Inc. 39,895; Oct. 13.
Waukesha Pale Ginger Ale. For Ginger Ale. Waukesha Pure Spring Water Company. 39,896; Oct. 13.

LIST OF PRINTS

Dear Fathers. For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,441; Oct. 13.

Drink Nesbitt's California Orange Juice. For Orange Juice. Nesbitt Fruit Products, Inc. 13,443; Oct. 13.

Flipp. For Safety Razor Guard. I. Svarstad. 13,445; Oct. 13.

For More Enjoyment from Both Smoking and Eating Keep Your Taste Fresh with P. K. For Chewing Gum. Wm. Wrigley Jr. Company. 13,446; ; Oct. 13.

Keep Your Taste Fresh with P. K. A Delicious Peppermint Gum Candy Dipped. For Chewing Gum. Wm. Wrigley Jr. Company. 13,447; Oct. 13.

Lasso 'Em Bill. For Cowboy Chaps. Keyston Bros. 13,442; Oct. 13.

Lucky the Child who is Raised on a Farm. For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,440; Oct. 13.

Typewriters Rented—Sold, Table Supplied if Desired. For Typewriters and Typewriter Tables. Pacific Railways Advertising Company. 13,444; Oct. 13.

We Have to do without a Lot of Things. For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,439; Oct. 13.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 13TH DAY OF OCTOBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A-B Stove Company. (See Reedy, Alfred J., assignor.)

Abel, Joseph C., Westwood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Running board for cars. 1,827,450; Oct. 13.

Adams, Arthur H., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Soldering. 1,826,709; Oct. 13.

Adams, Arthur H., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for soldering. 1,826,710; Oct. 13.

Adlake Company, The. (See Smith, Wilson A., assignor.)

Agfa Ansco Corporation. (See Hopkins, Philip S., assignor.)

Aglow, Harry, assignor to Gill Glass & Fixture Company, Philadelphia, Pa. Shade or reflector. Des. 85,313; Oct. 13.

Aichelen, Karl. (See Jacobson, H., and Aichelen.)

Aillaud, Louis, Plan De Cuques, near Marseilles, France. Machine for typewriting music. 1,827,451; Oct. 13.

Air Reduction Company. (See Anderson, James L., assignor.)

Ajax Electrothermic Corporation. (See Willcox, Dudley, assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Kubler, Johannes, assignor.)

Aktiengesellschaft Brown, Boveri and Cie. (See Seitz, Oskar, assignor.)

Albany Hardware Specialty Manufacturing Company. (See Whitcomb, Harris M., assignor.)

Albert, Carl P., assignor to Greene Manufacturing Company, Racine, Wis. Trunk locking device. 1,827,060; Oct. 13.

Alexander, William J. (See Hazlett, R. R., and Alexander.)

Alfaro, Heraclio, East Cleveland, Ohio. Aeroplane construction. 1,827,181; Oct. 13.

Alfaro, Heraclio, East Cleveland, Ohio. Aeroplane. 1,827,276; Oct. 13.

Algeo, Albert M., G. R. Haub, and J. W. Ross, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Transfer apparatus. 1,827,553; Oct. 13.

Alland, Maurice, Atlantic City, N. J. Cigarette dispenser and lighter with detachable support. 1,827,501; Oct. 13.

Alland, Maurice, Atlantic City, N. J. Combined valve and mixing device. 1,827,502; Oct. 13.

Allen, Scott E., and O. N. Wiswell, assignors by mesne assignments to C-O-Two Fire Equipment Company, Los Angeles, Calif. Pressure-operated means for puncturing closure diaphragm. 1,827,723; Oct. 13.

Allen, W. D., Manufacturing Company. (See Steininger, William, assignor.)

Ament, Edward F., Youngstown, Ohio. Furnace discharging apparatus. 1,827,413; Oct. 13.

American Brake Materials Corporation. (See Gillies, Hugh A., assignor.)

American Car and Foundry Company. (See Abel, Joseph C., assignor.)

American Car and Foundry Company. (See Anchor, Charles J., assignor.)

American Car and Foundry Company. (See Beyer, John, assignor.)

American Car and Foundry Company. (See Evelo, George J., assignor.)

American Car and Foundry Company. (See Hummer, Charles I., assignor.)

American Car and Foundry Company. (See Joy, Robert W., assignor.)

American Car and Foundry Company. (See Pancake, Herman H., assignor.)

American Car and Foundry Company. (See Rohifing, John M., assignor.)

American Coach & Body Company, The. (See Larsen, Neil P., assignor.)

American Container Corporation. (See McKay, H. J., Carlsen, Fuhrman, and Unzel, assignors.)

American Engineering Company. (See Mellon, James A., assignor.)

American Face Brick Research Corporation. (See Wyatt, Edwin M., assignor.)

American Optical Company. (See Baker, Nelson M., assignor.)

American Optical Company. (See Maynard, Albert E., assignor.)

American Safety Navigation Company, The. (See McKenzie, Angus D., assignor.)

American Safety Razor Corporation. (See Dalkowitz, Godfrey, assignor.)

American Sales Book Company. (See Wiswall, William J., assignor.)

American Seating Company. (See Friend, Keith, assignor.)

American Telephone and Telegraph Company. (See Bartenbach, Herman, assignor.)

American Telephone and Telegraph Company. (See Nyquist, Harry, assignor.)

American Tobacco Company, The. (See Luckett, William S., assignor.)

Ames, Charles H., Worcester, Mass. Means for sealing packages. 1,827,636; Oct. 13.

Ames, Shirley L., Pasadena, Calif., and L. Day, New York, N. Y., assignors to Chem-Electric Engineering Co.poration. Spray-dried sugar. 1,826,701; Oct. 13.

Amiesite Asphalt Company of America. (See Hepburn, Donald M., assignor.)

Anchor, Charles J., Milton, Pa., assignor to American Car and Foundry Company, New York, N. Y. Method of and apparatus for flanging metal. 1,827,452; Oct. 13.

Anders, Otto, Berlin- Schmargendorf, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, bei Berlin, Germany. Telephone system. 1,827,061; Oct. 13.

Anderson, Donald D., Clackamas, Oreg. Amusement device. 1,827,344; Oct. 13.

Anderson, Emil C., Downers Grove, Ill. Corrugated metallic wall plate. 1,826,859; Oct. 13.

Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorpo.ated, New York, N. Y. Torch. 1,827,697; Oct. 13.

Anderson, Russell J., assignor to Belle City Malleable Iron Company, Racine, Wis. Skimming tool. 1,827,503; Oct. 13.

Anderson, Russell J., assignor to Belle City Malleable Iron Company, Racine, Wis. Skimmer. 1,827,504; Oct. 13.

Anderson, Wm., Textile Mfg. Co. (See Brice, Stephen H., assignor.)

Andrews, George G., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for buffing airbags. 1,827,637; Oct. 13.

Andrews, John W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Making magnetic structures. 1,826,711; Oct. 13.

Antrim, William D., Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa. Oven door spring for ranges. 1,827,554; Oct. 13.

Arbuckle, Samuel F., Highland Park, assignor to Monogram Lens Corporation, Detroit, Mich. Fixed focus headlamp. 1,826,712; Oct. 13.

Archibald Wheel Company. (See Bradstreet, Hosea E., assignor.)

Arias, Manuel M., Buenos Aires, Argentina. Holder for firearms. 1,827,182; Oct. 13.

Armstrong, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,826,702; Oct. 13.

Armstrong, Percy A. E., Loudonville, assignor to Ludlum Steel Company, Watervliet, N. Y. Making products with welded faces of stable surface alloy. 1,826,860; Oct. 13.

Arnold, Howard P., Rockland, Mass. Flyer or traveler for severing machines. 1,826,713; Oct. 13.

Aronson, Peter B., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Priming mixture. 1,826,714; Oct. 13.

Atlas Bolt & Screw Company, The. (See Weidler, Ward W., assignor.)

Austin, Agnes W., Bovill, Idaho. Pie crust seal. 1,827,062; Oct. 13.

Austin, Frederick D., assignor of one-half to D. J. Kelly, jr., Port Chester, N. Y. Teakettle and like domestic boiler. 1,827,131; Oct. 13.

Automatic Electric Inc. (See Lomax, Clarence A., assignor.)

Automatic Electric Inc. (See Riebe, Theodore C., assignor.)

Automatic Musical Instrument Company. (See Yeider, Harry A., assignor.)

Automatic Paper Machinery Co. (See Marcalus, Nicholas, assignor.)

Automatic Recording Safe Company, The. (See Fisher, Charles, assignor.)

Auto-Meter Company. (See Huggins, Merlon J., assignor.)

Babcock & Wilcox Company. (See Kerr, Howard J., assignor.)

Babcock & Wilcox Company, The. (See Langvand, Ivar L., assignor.)

Bailey Meter Company. (See Barrett, Joseph M., assignor.)

Baker & Co. Inc. (See Russell, Harry J., assignor.)

Baker, Harold C., and O. A. Ross, New York, N. Y. Cleaning device for radio tuning dials. 1,826,715; Oct. 13.

Baker, Irving C., York, assignor to York Ice Machinery Corporation, York, Pa. Spraying device. 1,826,977; Oct. 13.

Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,827,345; Oct. 13.

Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,827,346; Oct. 13.

Baker, Stephen D., New York, N. Y. Soap dish or article of similar nature. Des. 85,314; Oct. 13.

Balcolm, Charles A., et al. (See Reynolds, Joy S., assignor.)

Baldwin Company, The. (See Morse, Arthur H., assignor.)

Baldwin Locomotive Works. (See Michael, Loren P., assignor.)

Ball, Charles E., Turlock, Calif. Wagon grader. 1,827,414; Oct. 13.

Banning, Ephraim. (See Potter, Earl F., assignor.)

Banschbach, Edward A., Madison, Wis. Automobile side buffer. 1,826,979; Oct. 13.

Barbé, Edgar H., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 85,315; Oct. 13.

Barbé, Edgar H., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Ash tray. Des. 85,316; Oct. 13.

Barclay, Gustaf I., assignor to Detroit Steel Products Company, Detroit, Mich. Window construction. 1,826,861; Oct. 13.

Barota, Laslo, Perryopolis, Pa. Guard booth. 1,827,347; Oct. 13.

Barrett, Joseph M., Cleveland Heights, assignor to Bailey Meter Company, Cleveland, Ohio. Drainage control system. 1,827,453; Oct. 13.

Barrows, Allan S., Los Angeles, Calif., assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Dump door for railway cars. 1,827,063; Oct. 13.

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Draft key retainer. 1,827,132; Oct. 13.

Bartenbach, Herman, Pittsburgh, Pa., assignor to American Telephone and Telegraph Company. Gas-tight plugging of cables and the like. 1,826,716; Oct. 13.

Bartenbach, Herman, Pittsburgh, Pa., assignor to American Telephone and Telegraph Company. Dispensing device. 1,826,717; Oct. 13.

Barthelemy, Henri L., Milan, Italy, assignor to Ruthaldo Company Inc., New York, N. Y. Manufacture of threads, ribbons, films, and the like from solutions of cellulose esters and cellulode ethers. 1,826,718; Oct. 13.

Bartlebaugh, Benjamin C., Wheeling, W. Va. Gas heater. 1,827,379; Oct. 13.

Bassett, Chas. W., et al. (See Dootson, Norman L., assignor.)

Batson, Louis P., Greenville, S. C. Loom temple. 1,826,862; Oct. 13.

Battegay, Constant, Levallois-Perret, France. Self-oscillating electric clock. 1,826,719; Oct. 13.

Batts, John E., Chicago, Ill. Power transmission gearing. 1,826,703; Oct. 13.

Bauer, Wilhelm, and L. Zeh, Wiesdorf, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Sulphuric acid ester of the leuco compound of a vat dyestuff. 1,826,720; Oct. 13.

Bauer, Wilhelm, and L. Zeh, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Indigoid dyestuff. 1,826,721; Oct. 13.

Baum, Howard W., Kearny, N. J. Cable guard. 1,826,978; Oct. 13.

Baum, Isaac A., Chicago, Ill. Corner connection for metal frames. 1,826,981; Oct. 13.

Baumgardner, Harold K., et al., administrators. (See Secrest, Harry O.)

Bausch & Lomb Optical Company. (See McCabe, Joseph J., assignor.)

Bausch & Lomb Optical Company. (See Patterson, William L., assignor.)

Bausman, Alonzo L., assignor to National Equipment Company, Springfield, Mass. Confection making machine. 1,826,980; Oct. 13.

Beardsley, Orie L., Gary, Ind. Coupling for separable members. 1,826,982; Oct. 13.

Beauregard, William, Fall River, Mass., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Duct terminal. 1,826,863; Oct. 13.

Beazley Power Mower Co. (Incorporated). (See Beazley, William E., assignor.)

Beazley, William E., assignor to Beazley Power Mower Co. (Incorporated), St. Petersburg, Fla. Power operated lawn mower. 1,827,559; Oct. 13.

Beck, Leo L., Jackson Heights, assignor to Claude Neon Lights, Inc., New York, N. Y. Method of and apparatus for modifying color of vacuum tube lights. 1,827,704; Oct. 13.

Becker, Carl, assignor of fifteen per cent to R. E. Garrett, Nashville, Tenn. Machine for cutting and panning biscuits. 1,827,133; Oct. 13.

Becker, Carl., assignor of one-fourth to R. E. Garrett, Nashville, Tenn. Bakery machinery. 1,827,134; Oct. 13.

Beckwith, Albert Y., administrator. (See Schroeder, Anthony.)

Beebe, Robert H., Seattle, Wash. Jig saw. 1,826,983; Oct. 13.

Behnke, Cord H. (See Townsend, G. H., and Behnke.)

Beissel, P. G., executor. (See Towner, Heber F., assignor.)

Bell, R. J., Company. (See Bell, Robert J., assignor.)

Bell, Robert J., assignor to R. J. Bell Company, Inc., Jacksonville, Fla. Fastening means for metal barrels. 1,826,918; Oct. 13.

Bell Telephone Laboratories, Incorporated. (See Casper, William L., assignor.)

Bell Telephone Laboratories, Incorporated. (See Helsing, Raymond A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Moore, Charles R., assignor.)

Bellay, Julien, Brussels, Belgium. Preparting soda-lime to be used in the manufacture of pure hydrogen. 1,826,722. Oct. 13.

Bells City Malleable Iron Company. (See Anderson, Russell J., assignor.)

Bemis, Kenneth E., Glendale, Calif. Building structure. Des. 85,317; Oct. 13.

Bendix Aviation Corporation. (See Lorenzen, Christian, assignor.)

Bendix Aviation Corporation. (See Perrot, Henri, assignor.)

Bendix Brake Company. (See Dodge, Adiel Y., assignor.)

Benjamin, Eric, et al. (See Greiner, Josef, assignor.)

Bennett, Charles A., Tallulah, La. Ginning cotton with air-blast gins. 1,827,183. Oct. 13.

Bennett, John C., et al. (See Haubert, Leo, assignor.)

Benoit, Joseph P., Alton, Ill., assignor to Owens-Illinois Glass Company. Glassware forming machine. 1827,698; Oct. 13.

Berdell, Theodore V. D. (See Holz, August, assignor.)

Bergen, William V., Hillsboro, and Arthur C. Shute, Portland, Oreg., assignors to Niterday Signal Co., Portland, Oreg. Reflecting light unit. Des. 85,360; Oct. 13.

Bertrand, Frederic E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for use in attaching heels to shoes. 1,826,723; Oct. 13.

Bethlehem Steel Company. (See McGrew, John A., assignor.)

Beyer, John, Bayonne, N. J., assignor to American Car and Foundry Company, New York, N. Y. Securing means for car tank dome closures. 1,827,454; Oct. 13.

Bidwell, Clarence G., Bristol, assignor to The Fafnir Bearing Company, New Britain, Conn. Chuck. 1,827,415; Oct. 13.

Bigelow-Sanford Carpet .Co. (See St. Jean, Paul J., assignor.)

Binckley, George S., Los Angeles, Calif. Transmission of motion. 1,827,560; Oct. 13.

Bing, Julius, Eisenach, assignor to the Firm: Magnet-Werk G. m. b. H., Eisenach Specialfabrik für Elektromagnet-Apparate, Eisenach, Thuringia, Germany. Power transmission device. 1,827,348; Oct. 13.

Bing, Julius, assignor to the Firm Magnet-Werk G. m. b. H. Eisenach Specialfabrik für Elektromagnet-Apparate, Eisenach, Germany. Method and apparatus for tracing metallic bodies in fabrics. 1,827,349; Oct. 13.

Bingham, Frederick C., assignor to Boorum & Pease Company, New York, N. Y. Visible index sheet. 1,827,638; Oct. 13.

Birdsall, Wilfred T., Montclair, N. J., assignor, by mesne assignments, to National Carbon Company Inc., New York, N. Y. Dry cell sealing device. 1,827,416; Oct. 13.

Birdsboro Steel Foundry and Machine Company. (See Martin, Mark H., assignor.)

Bishop, Carl E., Mitchelville, Iowa. Steam generator and generation. 1,827,064; Oct. 13.

Bitgood, Lucille M., New London, assignor to The Goodyear's India Rubber Glove aMnufacturing Company. Naugatuck, Conn. Gaiter or similar waterproof rubber footwear. Des. 85,318; Oct. 13.

Bitgood, Lucille M., New London, assignor to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn. Gaiter or similar waterproof rubber footwear. Des. 85,319; Oct. 13.

Blake, Lowell A., Wheelersburg, Ohio. Transit. 1,827,135; Oct. 13.

Blau, Ernst, Berlin, Germany. Driver for wheel lathes. 1,827,136. Oct. 13.

Bliss, Carl G., assignor to Standard Boiler & Steel Works, Los Angeles, Calif. Measuring apparatus. 1,826,919; Oct. 13.

Blome, Harry L., Stonington, Ill. Thermostatic alarm. 1,827,137; Oct. 13.

Bluhm, Frank J. C., assignor of one-half to W. C. Kleiner, Chicago, Ill. Gas burner. 1,827,505; Oct. 13.

Blume, Robert, Hood, Calif. Rail chair. 1,827,217; Oct. 13.

Bock, Walter. (See Tschunkur, E., and Bock.)

Boderek, Bruno, Chicago, Ill. Child's vehicle. 1,827,350; Oct. 13.

Boggs, Howie, Pound, Va. Cable reel for mining machines. 1,827,380; Oct. 13.

Bolton, James A., Lower Plenty, via Heidelberg, near Melbourne, Australia. Apparatus for dispensing liquids. 1,827,555; Oct. 13.

Bonat, Harry, New York, N. Y. Method and apparatus for waving hair. 1,827,455; Oct. 13.

Bonney, Robert D., Glen Ridge, and W. B. Coleman, Kearny, N. J., assignors to Congoleum-Nairn, Inc. Testing. 1,827,184; Oct. 13.

Boorum & Pease Company. (See Bingham, Frederick C., assignor.)

Boorum & Pease Company. (See Lewis, Harry B., assignor.)

Boos, Frederick E. E., and R. N. Chamberlain, Chicago, Ill., assignors, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y. Protecting storage battery grids. 1,826,724; Oct. 13.

Booth, Robert J., Dannemora, N. Y. Combination garment and kit. 1,827,456; Oct. 13.

Borden, Gail, 2d, and E. Carlton, New York, N. Y. Control apparatus. 1,827,185; Oct. 13.

Borgeson, Sidney E., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Winding machine. 1,827,186; Oct. 13.

Borgo, Carlo, and E. R. Manuel, Turin, Italy. Piston for internal combustion engines. 1,827,556; Oct. 13.

Borodin, Pawel Y., Moscow, Union of Soviet Socialist Republics. Binder. 1,827,506; Oct. 13.

Boschetti, Vencenzo, Union City, N. J. Heater. 1,827,639; Oct. 13.

Boundy, Ray H. (See Grebe, J. J., and Boundy.)

Bovee, Hiram N., assignor of one-fourth to P. Olson, and one-half to J. B. Rooney, International Falls, Minn. Garage door operating mechanism. 1,826,984; Oct. 13.

Bowman, Samuel B., Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Hollow glass brick. Des. 85,320; Oct. 13.

Boynton, John E., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coupling in an apparatus for extruding matter. 1,826,725; Oct. 13.

Bradford, Ada G., San Francisco, Calif. Magnifying glass attachment for dial telephones. 1,827,557; Oct. 13.

Bradner, Donald B., Hamilton, Ohio, assignor to The Champion Coated Paper Company, Hamilton, Ohio. Paper coating composition. 1,826,726; Oct. 13.

Bradstreet, Hosea E., Methuen, assignor to Archibald Wheel Company, Lawrence, Mass. Ironing board. 1,827,218; Oct. 13.

Brancart, Arthur, Ronquieres, Belgium. Process of and apparatus for rolling glass. 1,827,138; Oct. 13.

Branson, Russell W., Kansas City, Mo., assignor of one-half to J. E. Schultz, Groesbeck, Tex. Parking device. 1,827,457; Oct. 13.

Breeze, Dudne M. (See Welch, Roy J. C., assignor.)

Brendlin, Herman J., assignor to The Hayward Company, New York, N. Y. Excavating shovel. 1,826,920; Oct. 13.

Brenizer, Orson W., Philadelphia, Pa. Reel connecting means for fishing rods. 1,827,277; Oct. 13.

Brice, Stephen H., South Orange, N. J., assignor to Wm. Anderson Textile Mfg. Co., Inc., New York, N. Y. Fabric for curtains. 1,827,278; Oct. 13.

Bright Star Battery Company, The. (See Buchholz, Max E., assignor.)

Bristol, Edward S., assignor to Leeds & Northrup Company, Philadelphia, Pa. Control system. 1,827,351; Oct. 13.

Bristol, Edward S., assignor to Leeds & Northrup Company, Philadelphia, Pa. Control system. 1,827,417; Oct. 13.

Britten, Chancy J., Charlotte, assignor to Britten Light & Power Company, Lansing, Mich. Radio apparatus. 1,826,727; Oct. 13.

Britten Light & Power Company. (See Britten, Chancy J., assignor.)

Broadwood, John, & Sons Limited. (See Collen, Robert H., assignor.)

Brockett, Bluford W., Cleveland Heights, assignor to The Gilkey Printing Company, Cleveland, Ohio. Envelope. 1,827,507; Oct. 13.

Brogden, Ernest M., assignor to Brogdex Company, Winter Haven, Fla. Preserving fresh fruits. 1,827,219; Oct. 13.

Brogdex Company. (See Brogden, Ernest M., assignor.)

Brooks, Thomas R. (See Haywood, John W., assignor.)

Brown, Arthur E., assignor to W. R. Meadows, Incorporated, Elgin, Ill. Method of and machine for manufacturing expansion joints. 1,826,985; Oct. 13.

Brown, Charles H., and J. A. Brown, Eureka, Calif. Cutter for defiberizing or shredding redwood bark, wood, and mill waste. 1,827,352; Oct. 13.

Brown Company. (See Richter, G. A., Schur, and Rasch, assignors.)

Brown, George R., Chicago, and C. Loesges, Congress Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Recording apparatus. 1,827,187; Oct. 13.

Brown Instrument Company, The. (See Brown, Richard P., assignor.)

Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)

Brown Instrument Company. (See Keeler, Earl A., assignor.)

Brown Instrument Company, The. (See Krogh, Anker E., assignor.)

Brown Instrument Company, The. (See Pearce, Walter H., assignor.)

Brown, Joe, Granite City, Ill. Refrigerator. Des. 85,321; Oct. 13.

Brown, Joe, Granite City, Ill. Stove or range. Des. 85,322; Oct. 13.

Brown, Judd A. (See Brown, Charles H. and J. A.)

Brown, Richard P., assignor to The Brown Instrument Company, Philadelphia, Pa. Control method and apparatus. 1,826,986; Oct. 13.

Brown and Sharpe Manufacturing Company. (See Rich, Charles A., assignor.)

Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Cultivator. 1,827,708; Oct. 13.

Brown, William H., Cleveland, Ohio. Chair. 1,827,418; Oct. 13.

Brownyer, Nelson R., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Brake. 1,827,065; Oct. 13.

Bruce, Alfred W., New York, N. Y. Throttle valve operating mechanism. 1,827,189; Oct. 13.

Brun, Jean A. F., Paris, France. Taximeter. 1,827,139; Oct. 13.

Bryan, James E., Seattle, Wash. Electric hammer. 1,827,611; Oct. 13.

Bryant Electric Company, The. (See Johnson, George A., assignor.)

Bryant, Roderick W., Omaha, Nebr. Double slope re-railing frog. 1,827,220; Oct. 13.

Bubblestone Company, The. (See Rice, John A., assignor.)

Buchholz, Max E., assignor to The Bright Star Battery Company, Hoboken, N. J. Flash light. 1,826,864; Oct. 13.

Buckeye Incubator Manufacturing Company, The. (See Le Daum, H. L., and Sturgis, assignors.)

Bulkeley, Claude A., assignor to Niagara Blower Company, Buffalo, N. Y. Air conditioner. 1,826,921; Oct. 13.

Bullock, William S., Chicago, Ill. Spring handling machine. 1,827,561; Oct. 13.

Bundy, Harry W., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich. Tubing. 1,827,381; Oct. 13.

Bundy Tubing Company. (See Bundy, Harry W., assignor.)

Bunting Brass and Bronze Company, The. (See Yager, George F., assignor.)

Burgess, Lysle P., assignor, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif. Coupling for connecting pump rods and plungers. 1,827,188; Oct. 13.

Burke, Mark P., Los Angeles, Calif. Gas lift means. 1,827,066; Oct. 13.

Burrows, Vivian N., Big Beaver, Mich. Bucket holder. 1,827,221; Oct. 13.

Burt, Grinnell. (See Burt, H. P., Burt, and Sanborn.)

Burt, Howard P., and G. Burt, Palermo, and R. E. Sanborn, assignors to California Packing Corporation, San Francisco, Calif. Producing olive oil. 1,826,987; Oct. 13.

Byerlein, Arthur A., Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio. Press. 1,827,558; Oct. 13.

Byrne, Thomas J., Tulsa, Okla. Ice can filler. 1,826,704; Oct. 13.

C-O-Two Fire Equipment Company. (See Allen, S. E., and Wiswell, assignors.)

Cairns Development Company. (See Carns, Edmund B., assignor.)

California Packing Corporation. (See Burt, H. P., Burt, and Sanborn, assignors.)

Camel Company. (See Wasberg, A., and Tobin, assignors.)

Campbell, A. S., Company. (See Kubler, Frederick J., assignor.)

Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window head construction. 1,827,222; Oct. 13.

Campbell, James T., jr., Franklin, Pa. Securing device for carpets. 1,826,988; Oct. 13.

Campbell Metal Window Corporation. (See Campbell, Harry E., assignor.)

Camps, Harold E. J., London, England. Hull structure of ships and the like. 1,826,728; Oct. 13.

Caps, Arthur W. (See Greene, J. S., and Caps.)

Card, Andrew H., jr., Pineville, Ky. Vehicle screen. 1,827,353; Oct. 13.

Carder, Frederick, Corning, N. Y. Article of bric-a-brac. Des. 85,328; Oct. 13.

Carey, Philip Manufacturing Company, The. (See Fischer, A. C., Stewart, and Herbst, assignors.)

Carlsen, Paul J. (See McKay, H. J., Carlsen, Fuhrman, and Unzel.)

Carlstedt Ragnar, Stockholm, Sweden. Hydraulic regulator. 1,827,067; Oct. 13.

Carlton, Eric. (See Borden, G., 2d. and Carlton.)

Carmichael, Mead S., Sparta, Wis. Elevator. 1,827,068; Oct. 13.

Carnahan, George H., New York, N. Y., assignor to Rubber Surfacers, Inc., Wilmington, Del. Method and apparatus for refining pulp. 1,827,279; Oct. 13.

Carnahan, George H., New York, N. Y., assignor to Rubber Surfacers, Inc., Wilmington, Del. Method and apparatus for treating pulp. 1,827,280; Oct. 13.

Carns, Edmund B., New York, N. Y., assignor to Cairns Development Company, Wilmington, Del. Wing or plane for aircraft. 1,827,281; Oct. 13.

Carpenter, Charles E., Chicago, Ill. Draft appliance and the like. 1,826,989; Oct. 13.

Carpenter, Charles E., assignor to E. F. Houghton & Company, Philadelphia, Pa. Porosity tester. 1,827,562; Oct. 13.

Carpenter, Rupert H. H., Purley, England. Electromagnetic device. 1,826,990; Oct. 13.

Carr, Moses F., Lexington, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Rivet. 1,826,705; Oct. 13.

Carr, Raymond L., Boston, Mass. Convertible body. 1,826,865; Oct. 13.

Carr, Raymond L., Boston, Mass. Vehicle body. 1,826,922; Oct. 13.

Carrier Engineering Corporation. (See Le Grand, Joseph M., assignor.)
Carroll, Fred M., Yonkers, N. Y., and J. S. Eaton, Ridgefield, N. J., assignors to The Tabulating Machine Company, Endicott, N. Y. Record card container. 1,826,991; Oct. 13.
Carroll, Fred M., Yonkers, assignors to The Tabulating Machine Company, Endicott, N. Y. Card handling device for tabulating machines. 1,826,992; Oct. 13.
Carroll, Raleigh S. (See Doty, L., and Carroll.)
Carstein, Lorenz W. F., Forest Hills, N. Y. Material for and method of making ornamental devices. 1,826,923; Oct. 13.
Carter, Leslie F., Leonia, N. J., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y. Low rail joint recorder. 1,827,190; Oct. 13.
Carver, Fred S., East Orange, N. J. Press. 1,826,729; Oct. 13.
Cary, Claxton. (See Chester, A. T., and Cary.)
Case, Lynn B., assignor to John Waldron Corporation, New Brunswick, N. J. Coating table for coating machines. 1,827,640; Oct. 13.
Case, Lynn B., assignor to John Waldron Corporation, New Brunswick, N. J. Distributing brush for coating machines. 1,827,641; Oct. 13.
Casper, William L., Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Shielded inductance. 1,827,191; Oct. 13.
Caterpillar Tractor Co. (See Grothe, Walter, assignor.)
Causan, Nemorin L., Suresnes, France. Rigid frame for motor cars. 1,826,730; Oct. 13.
Central Commercial Company. (See Stephens, Elton S., assignor.)
Chamberlain, Rufus N. (See Booss, F. E. E., and Chamberlain.)
Chamberlain, Wilson P., jr., assignor to Corry Metal Corporation, Corry, Pa. Metal screen. 1,827,382; Oct. 13.
Champion Coated Paper Company, The. (See Bradner, Donald B., assignor.)
Chapman, Warren B., Carthage, Mo., and H. G. Fischer, assignors to H. G. Fischer & Co., Chicago, Ill. Electrode. 1,827,306; Oct. 13.
Chatham, Elisha C., Tarrant, Ala. Spirit level. 1,826,731; Oct. 13.
Chatillon, George E., assignor to John Chatillon & Sons, New York, N. Y. Stability testing apparatus. 1,826,732; Oct. 13.
Chatillon, John, & Sons. (See Chatillon, George E., assignor.)
Chem-Electric Engineering Corporation. (See Ames, S. L., and Day, assignors.)
Chemipulp Process, Incorporated. (See Dunbar, Thomas L., assignor.)
Chereton, Avery B., Chicago, and W. L. Cummings, Berwyn, Ill., assignors to The Vitaglo Corporation. Photographic sound recording means. 1,826,924; Oct. 13.
Chester, Arthur T., and A. C. Cary, Rye, N. Y. Intaglio printing press. 1,827,684; Oct. 13.
Chester, Arthur T., and A. C. Cary, Rye, N. Y. Pressure unit for intaglio printing. 1,827,685; Oct. 13.
Chicago Carton Company. (See Hayes, Charles G., assignor.)
Chicago Spring Hinge Company. (See Keene, William J., assignor.)
Chouinard, Oscar, assignor to Motion Picture Improvements, Inc., New York, N. Y. Method of and apparatus for producing motion picture films. 1,827,282; Oct. 13.
Christensen, Christen, assignor to Electrical Engineers Equipment Company, Chicago, Ill. Switch lock. 1,826,733; Oct. 13.
Christensen, Christen, assignor to Electrical Engineers Equipment Company, Chicago, Ill. Switch. 1,826,734; Oct. 13.
Chromeplate, Inc. (See Lichtman, Louis, assignor.)
Ciciotti, Andrea, assignor of one-half to A. Santarelli, Rochester, N. Y. Clarinet construction. 1,827,069; Oct. 13.
Cincinnati Advertising Products Company, The. (See Thies, Samuel, assignor.)
Clark, Arthur E., Freeport, assignor to The Diapex Corporation, New York, N. Y. Machine for making diapers. 1,826,925; Oct. 13.
Clark, Joseph C., assignor to The Ohio State Stove Corporation, Columbus, Ohio. Cooking stove or article of similar nature. Des. 85,324; Oct. 13.
Clark, Robert L., Oshkosh, Wis. Game board. 1,827,383; Oct. 13.
Clark Tructractor Company. (See Williams, A. O., and Davis, assignors.)
Claude, Georges, and J. M. E. D. Beaufort, Bologne-sur-Seine, France, assignors to Claude Neon Lights, Inc., New York, N. Y. Modifying color in vacuum tube lights. 1,827,705; Oct. 13.
Claude Neon Lights, Inc. (See Beck, Leo L., assignor.)
Claude Neon Lights, Inc. (See Claude, G., and De Beaufort, assignors.)
Cleveland Tractor Company, The. (See Jones, George D., assignor.)
Cofrin, Austin E., Green Bay, Wis. Paper making machine. 1,826,735; Oct. 13.
Cole, William H., Paris, France. Proofing of metal against corrosion and particularly of iron and steel against rust. 1,826,866; Oct. 13.
Coleman, William B. (See Bonney, R. D., and Coleman.)
Colitz, Jacob, Chicago, Ill. Conduit receptacle. 1,826,708; Oct. 13.
Collen, Robert H., Blackwater, East Ham, assignor of one-half to John Broadwood & Sons Limited, London, England. Pneumatically operated pianoforte. 1,827,563; Oct. 13.
Comer, William T., assignor to Crystal Carbonic Laboratory, Atlanta, Ga. Beverage mixing faucet. 1,827,458; Oct. 13.
Comrie, Robert D., Southampton, England. Dispensing device. 1,827,564; Oct. 13.
Condit Electrical Manufacturing Corporation. (See Greenwood, Talma T., assignor.)
Congoleum-Nairn, Inc. (See Bonney, R. D., and Coleman, assignors.)
Conn, Roy C., Clarksburg, W. Va., assignor to Pittsburgh Plate Glass Company. Apparatus for making sheet glass. 1,827,459; Oct. 13.
Conner Crouse Corporation. See Crouse, George B., assignor.)
Connery, Alder F., Brooklyn, and R. S. Wishart, Rockville Center, assignors to International Communications Laboratories, Inc., New York, N. Y. Alternating current balance indicator. 1,826,736; Oct. 13.
Connery, Alder F., Brooklyn, and R. S. Wishart, Rockville Center, assignors to International Communications Laboratories, Inc., New York, N. Y. Balancing telegraph lines. 1,826,737; Oct. 13.
Cooper, Simon, Brooklyn, N. Y. Electrical sostenuto piano. 1,827,419; Oct. 13.
Cooper, Simon, assignor to Cooper Tea Packet Company, Brooklyn, N. Y. Packet-package and dispensing apparatus. 1,827,354; Oct. 13.
Cooper Tea Packet Company. (See Cooper, Simon, assignor.)
Cope, Frank T., assignor to the Electric Furnace Company, Salem, Ohio. Metallic resistor. 1,827,508; Oct. 13.
Copeland Products, Inc. (See Muffly, Glenn, assignor.)
Corbett, Charles F., Edmonton, Alberta, Canada. Tobacco pipe. 1,826,738; Oct. 13.
Corbett, John F., Long Beach, Calif. Spray nozzle dissolver. 1,827,384; Oct. 13.
Corl, Robert M. (See Howlett, Grayle W., assignor.)
Cornell Bag Corporation. (See Currier, Andrew E., assignor.)
Cornibert, Pierre, Turin, Italy, assignor, by mesne assignments, to Sächsische Textilmaschinefabrik vorm. Rich. Hartman, Aktiengesellschaft, Chemnitz, Germany. Pull-through drawing frame for medium and long fibrous material, more particularly, combed wool, artificial silk, ramie. 1,827,385; Oct. 13.
Corrall, Herbert, Helensburgh, and J. Heggie, Clydebank, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Machine for drawing threads in fabrics. 1,827,706; Oct. 13.
Corry Metal Corporation. (See Chamberlain, Wilson P., jr., assignor.)
Cory, Chas., Corporation. (See Jones, Joseph S., assignor.)
Costello, William F., assignor to The New Britain Machine Company, New Britain, Conn. Tool set and container therefor. 1,826,739; Oct. 13.
Coultas, Wilbur J., and R. C. Livesay, assignors to Deere & Company, Moline, Ill. Power take-off mechanism for tractors. 1,827,070; Oct. 13.
Courtney, Nicholas P., Passaic, N. J. Receptacle opener. 1,826,740; Oct. 13.
Cramblet, Paul K., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch. 1,826,993; Oct. 13.
Cramblet, Paul K., Milwaukee, Wis., assignor by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch metal clip type. 1,827,071; Oct. 31.
Cramblet, Paul K., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch. 1,827,072; Oct. 13.
Creed and Company. (See Creed, Frederick G., assignor.)
Creed and Company. (See Creed, F. G., and Salmon, assignors.)
Creed, Frederick G., assignor to Creed and Company, Limited, Croydon, England. Printing wheel. 1,826,741; Oct. 13.
Creed, Frederick G., and R. D. Salmon, assignors to Creed and Company, Limited, Telegraph Works, Croydon, England. Regenerator. 1,827,460; Oct. 13.
Crews, Halbert O., administrator. (See Poulsen, Eller.)
Crocker-Wheeler Electric Manufacturing Company. (See Waring, Edward H., assignor.)
Crofoot, John B. (See Hallen, Carl E., assignor.)
Croft, Hiram D. (See Perkins, J. L., and Croft.)
Crooks, Robert A., Chicago, Ill. Power drive selective mechanism. 1,826,742; Oct. 13.
Croset, Louis P., Strood, England. Device for starting internal combustion engines. 1,827,461; Oct. 13.
Crosfield, Joseph, & Sons Limited. (See Newall, Sidney, assignor.)
Crosley Radio Corporation, The. (See Langley, R. H., and Drexelius, assignors.)

Crouse, George B., Woodcliff, N. J., assignor to Conner Crouse Corporation, New York, N. Y. Apparatus for energizing an audion circuit. 1,826,743; Oct. 13.
Crouse-Hinds Company. (See McCoy, Jay W., assignor.)
Crouse-Hinds Company. (See Olley, E. A., and Winter, assignors.)
Crown Stove Works. (See Rogers, C. and C., assignors.)
Crump, Frank H., Los Angeles, Calif. Loose leaf binder. 1,827,462; Oct. 13.
Cryns, Josef. (See Hoppe, F. A., and Cryns.)
Crystal Carbonic Laboratory. (See Comer, William T., assignor.)
Cubberley, Amariah H., Belleville, assignor to Hoffman Beverage Company, Newark, N. J. Shipping case. 1,826,744; Oct. 13.
Culver, Lagar R., assignor to F. Falkner, Los Angeles, Calif. Dipper door latch release. 1,827,420; Oct. 13.
Cummings, William L. (See Chereton, A. B., and Cummings.)
Cundall, Robert N., Glasdell, assignor to The Hoepner Automatic Machinery Corporation, Buffalo, N. Y. Machine for filling containers. 1,826,926; Oct. 13.
Cuno, Charles H., and S. L. Wolfson, assignors to The Cuno Engineering Corporation, Meriden, Conn. Liquid level gauge. 1,827,192; Oct. 13.
Cuno Engineering Corporation, The. (See Cuno, C. H., and Wolfson, assignors.)
Cupedo, Jan G., Rotterdam, Netherlands. Apparatus for cleaning bottles and the like. 1,827,140; Oct. 13.
Currier, Andrew E., Leominster, Mass., assignor, by mesne assignments, to Cornell Bag Corporation. Reenforced valve bag. 1,826,994; Oct. 13.
Curry, B. V., trustee. (See Towner, Heber F., assignor.)
Cushing, George H., Washington, D. C. Illuminating apparatus. 1,827,141; Oct. 13.
Cushman, H. T., Mfg. Co. (See Cushman, William C. H., assignor.)
Cushman, William C. H., assignor to H. T. Cushman Mfg. Co., North Bennington, Vt. Table or similar article. Des. 85,325; Oct. 13.
Cutler-Hammer, Inc. (See Simon, Arthur, assignor.)
Cutler-Hammer, Inc. (See Stansbury, Carroll, assignor.)
Daetsch, William J. (See Glynn, Stephen A., assignor.)
Daimaru, Yaso, New York, N. Y. Ball game. 1,827,642; Oct. 13.
Dalkowitz, Godfrey, New York, assignor to American Safety Razor Corporation, Brooklyn, N. Y. Razor. 1,826,745; Oct. 13.
David, Aubrey D., assignor to The Universal Oil Products Company, Chicago, Ill. Cracking petroleum oil. 1,827,073; Oct. 13.
Davis Engineering Corporation. (See Davis, H. C., and Thompson, assignors.)
Davis, Frank P. C., assignor to The Lawrence Products Company, Incorporated, Kelso, Wash. Medical powder applicator. 1,827,463; Oct. 13.
Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Let off mechanism for looms. 1,827,712; Oct. 13.
Davis, Henry F., Walters, Okla. Flytrap. 1,826,746; Oct. 13.
Davis, Howard C., Elizabeth, and W. H. Thompson, Chatham, N. J., assignors to Davis Engineering Corporation. Heat exchanger. 1,826,747; Oct. 13.
Davis, Isadore, Marshalltown, Iowa. Making sheet roofing. 1,826,706; Oct. 13.
Davis, Robert B. (See Dugan, Thomas, assignor.)
Davis, Trayharn, Berkeley, Calif. Disappearing rotary hydrocarbon fuel burner. 1,826,995; ; Oct. 13.
Davis, William L. (See Williams, A. O., and Davis.)
Dawson, Elma N. (See Dawson, James C., assignor.)
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder mechanism. 1,826,707; Oct. 13.
Day, Harry V. (See Harvey, R., and Day.)
Day, Leonard. (See Ames, S. L., and Day.)
Debaene, Louis H., Philadelphia, Pa. Lace machine. 1,826,996; Oct. 13.
De Beaufort, Jean M. E. (See Claude, G., and De Beaufort.)
Deere & Company. (See Brown, Theophilus, assignor.)
Deere & Company. (See Coultas, W. J., and Livesay, assignors.)
Deere & Company. (See Trively, Rolland A., assignor.)
De Forest, Lee, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation. Sound reproducer. 1,827,283; Oct. 13.
Delamere, Rudolf D., Toronto, Ontario, assignor to Delamere & Williams Limited, Toronto, Canada. Combustion device for furnaces. 1,826,748; Oct. 13.
Delamere & Williams Limited. (See Delamere, Rudolf D., assignor.)
Delco-Light Company. (See Lee, Ralph L., assignor.)
De Loach, Daniel O., Savannah, Ga. Nut cracker. 1,827,643; Oct. 13.
De Long, Charles E., San Diego, Calif., assignor to Sangamo Electric Company, Springfield, Ill. Astronomical time switch. 1,826,749; Oct. 13.
De Markus, Louis, Pittsburgh, Pa., assignor to The Liquid Carbonic Corporation, Chicago, Ill. Carbonator. 1,827,386; Oct. 13.
Demers, Isaie J. B., assignor to Superior Metal Products Company, St. Paul, Minn. Milk cooler. 1,826,750; Oct. 13.
Denaro, James, Cambridge, Mass. Edible container. Des. 85,326; Oct. 13.
Dennis, Clark M., Montclair, N. J. Treatment of iron and steel. 1,827,223; Oct. 13.
Denniss, Alfred J., Chingford, and V. W. Edwards, Walthamstow, London, assignors to The Houghton-Butcher Manufacturing Company Limited, London, England. Pressure plate or pad for photographic cameras. 1,827,464; Oct. 13.
Dentists' Supply Company, The. (See Dunham, Lawrence W., assignor.)
De Reamer, Frank C., Bridgeport, Conn., assignor to General Electric Company. Metal insert for molded parts and making the same. 1,827,565; Oct. 13.
De Riz, Gisela, Vienna, Austria. Bicycle frame. Des. 85,327; Oct. 13.
De Trafrup, Martin K., London, England. Treatment of Aluminum. 1,827,142; Oct. 13.
Detroit Steel Products Company. (See Barclay, Gustaf I., assignor.)
Dettelbach, Samuel E., et al. (See Jaworowski, Joseph F., assignor.)
Dettman, Benjamin E. (See Larmer, C. D., and Dettman.)
Deutsche Gasolin Aktiengesellschaft. (See Pfaff, J. K. and Siewecke, assignors.)
De Witt, Howard S. (See Walter, Henry L., assignor.)
D'Halloy, Audoin, Paris, France, assignor to International Safety Lock Nut Corporation, New York, N. Y. Lock nut. 1,826,777; Oct. 13.
Diapex Corporation, The. (See Clark, Arthur E., assignor.)
Dickey, Albert W. (See Haglund, H. H., and Dickey.)
Dickson, George E., Evanston, Ill. Nail head capping machine. 1,827,566; Oct. 13.
Dictaphone Corporation. (See Woodbridge, Charles K., assignor.)
Diebold Safe & Lock Company, The. (See Gialdini, Bruno T., assignor.)
Dietrich, Fred E., Salamanca, N. Y. Motor timing and correcting device. 1,826,997; Oct. 13.
Ditesheim, Isidore, La Chaux-de-Fonds, Switzerland. Watch novelty. 1,827,567; Oct. 13.
Ditlevsen, Jens C., Antioch, Calif. Power operated hoe. 1,827,074; Oct. 13.
Doane, Duane H., St. Louis, Mo., assignor to W. P. Paepcke, Chicago, Ill. Animal feeder. 1,827,075; Oct. 13.
Doddridge, James M., Milton, Ind. Highway guard. 1,826,998; Oct. 13.
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,827,421; Oct. 13.
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,827,422; Oct. 13.
Dodson, Carroll E., assignor to L'Art Manufacturing Company, Kansas City, Mo. Container opener. 1,827,307; Oct. 13.
Domizi, David F., Cleveland, Ohio. Multiple spindle machine. 1,826,867; Oct. 13.
Donadio, Americo, Rome, Italy. Automobile radiator. 1,827,568; Oct. 13.
Dootson, Norman L., San Francisco, assignor of one-fifth to C. W. Bassett and W. B. Juett, Antioch, Calif. Rubber cushioned spring shackle. 1,827,284; Oct. 13.
Dorris, Lewis R., Pensacola, Fla. Propeller for swimmers. 1,827,308; Oct. 13.
Doty, Lee, and R. S. Carroll, Klamath Falls; said Doty assignor of three-tenths to S. W. Kesler, Jackson County, Oreg., and one-fifth to H. W. Herrick, Winfield, Kans. Demountable rim. 1,827,465; Oct. 13.
Dow Chemical Company, The. (See Grebe, J. J., and Boundy, assignors.)
Doyle, Joseph B., Mount Vernon, N. Y., assignor to James L. Howard & Company, Hartford, Conn. Doorcheck. 1,827,143; Oct. 13.
Draikin, Joseph, Chicago, Ill. Hosiery protector. 1,827,423; Oct. 13.
Draper Corporation. (See Davis, Harry A., assignor.)
Draper Corporation. (See Thatcher, Harry W., assignor.)
Drexelius, Julius K. (See Langley, Ralph H., and Drexelius.)
Drill, Daniel C. (See Mottweiler, O. F., and Drill.)
Dubbs, Carbon P., Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating hydrocarbons. 1,827,076; Oct. 13.
Ducey, John K., Chicago, Ill. Game board or article of analogous nature. Des. 85,328; Oct. 13.
Duffee, Paul Y., Springfield, assignor to The Ohio Steel Foundry Company, Lima, Ohio. Return header. 1,826,999; Oct. 13.
Duffin, John V., Chicago, Ill. Container for paper in rolls. 1,827,000; Oct. 13.
Duffy, Charles H., Miami, Fla. Radio loud speaker. 1,826,751; Oct. 13.
Dugan, Thomas, Denver, Colo., assignor of one-half to R. B. Davis, Wichita, Kans. Thrashing and separating device. 1,826,752; Oct. 13.
Dunbar, Thomas L., Watertown, N. Y., assignor to Chemipulp Process, Incorporated. Method and apparatus for making chemical solutions. 1,826,753; Oct. 13.
Dunham, Lawrence W., assignor to The Dentists' Supply Company, New York, N. Y. Dental foil container. 1,827,077; Oct. 13.
Dunn, Peter S., assignor to Sargent & Company, New Haven, Conn. Latch. 1,826,868; Oct. 13.
Dunn, William H. (See Taylor, C. J., and Dunn.)

Duplan Silk Corporation. (See Geier, Ernest C., assignor.)
Du Pont Ammonia Corporation. (See Williams, Roger, assignor.)
Durocher, Thomas L. (See Gruppe, Alfred H., assignor.)
Dur-O-Lite Pencil Company. (See Lynn, John P., assignor.)
Dyresen, Didrick, Somerville, Mass. Fastener unit. 1,827,309; Oct. 13.
East, Frederick W., assignor to I. T. S. Rubber Company Limited, Petersfield, England. Boot and shoe. 1,827,224; Oct. 13.
Eastern Tool & Mfg. Co. (See Peterson, Carl E., assignor.)
Eaton, George, Cleveland, Ohio. Electric toaster. Des. 85,329; Oct. 13.
Eaton, James S. (See Carroll, F. M., and Eaton.)
Ebert, Georg. F. A. Fries, and W. Reppe, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerization products of diolefines. 1,827,285; Oct. 13.
Eclipse Lawn Mower Company. (See Roth, Lester B., assignor.)
Edgar, Paul T., Arcola, Ill. Bottle cleaning brush. 1,827,569; Oct. 13.
Edo Aircraft Corporation. (See Korvin-Kroukovsky, Boris V., assignor.)
Edwards, Valentine W. (See Denniss, A. J., and Edwards.)
Egerer, Georg W. (See Schulze, J. C., and Egerer.)
Eggert, Joseph, assignor to The Jaeger Machine Company, Columbus, Ohio. Charging concrete mixing or transporting vessels. 1,827,713; Oct. 13.
Ehrenhaft, Franz, Berlin-Lichtenberg, Germany. Method of and apparatus for making photophonographic records. 1,826,754; Oct. 13.
Electric Furnace Company, The. (See Cope, Frank T., assignor.)
Electrical Engineers Equipment Company. (See Christensen, Christen, assignor.)
Electrical Improvements Limited. (See Grant, Lewis C., assignor.)
Elliott-Fisher Company. (See Hanson, Hans, assignor.)
Elliott-Fisher Company. (See Pitman, Henry L., assignor.)
Ellis, Claude, Springville, N. Y. Ash receiver. 1,827,078; Oct. 13.
Ellis, Kenneth K., St. Louis, Mo. Building. 1,827,310; Oct. 13.
Ellsworth, Francis P., New York, N. Y. Shoe lace fastening device. 1,827,424; Oct. 13.
Elizey, Vernon S., Rochester, N. Y. Comb. 1,827,425; Oct. 13.
Elmquist, Carl H. M., Stockholm, Sweden. Molding material and mold. 1,827,426; Oct. 13.
Emerson, Sam W., et al. (See Jaworowski, Joseph F., assignor.)
Emsco Derrick & Equipment Company. (See Burgess, Lysle P., assignor.)
Engel, Hans, Stettin, Germany. Kiln for the production of cement. 1,827,144; Oct. 13.
Englund, Ernst E., assignor to The Ohio Cultivator Company, Bellevue, Ohio. Plow. 1,827,001; Oct. 13.
Eppensteiner, William F., and H. Morecraft, Rahway, assignor to United States Metals Refining Company, Carteret, N. J. Apparatus for recovering easily-fusible metals. 1,826,755; Oct. 13.
Ericsson, Arthur W., Brooklyn, N. Y. Handle member for razor blades. 1,827,509; Oct. 13.
Evans Flexible Reamer Corporation. (See Evans, William H., assignor.)
Evans, William H., assignor to Evans Flexible Reamer Corporation, Chicago, Ill. Valve seat reamer. 1,827,510; Oct. 13.
Evans, William H., assignor to Evans Flexible Reamer Corporation, Chicago, Ill. Reamer. 1,827,511; Oct. 13.
Evelo, George J., Terre Haute, Ind., assignor to American Car and Foundry Company, New York, N. Y. Chuck. 1,827,387; Oct. 13.
Everett, Edward A., Long Island City, N. Y. Terminal block. 1,826,869; Oct. 13.
Ewald, Bernhard K. F., Villingen, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Perforating device. 1,827,002; Oct. 13.
Excelsior Hardware Co., The. (See Komenak, Albert J., assignor.)
Exelmans, Maurice, Paris, France, assignor to Holophane Company, Inc., New York, N. Y. Light projector. 1,826,927; Oct. 13.
Eynck, John F., Guatemala City, Guatemala. Calendar attachment. 1,827,570; Oct. 13.
Fafnir Bearing Company, The. (See Bidwell, Clarence G., assignor.)
Fafnir Bearing Company, The. (See Searles, Raymond R., assignor.)
Fahrenwald, Frank A., Chicago, Ill. Furnace. 1,827,079; Oct. 13.
Fairchild Corporation, E. E. (See Friedrich, Charles F., assignor.)
Falkner, Benjamin H., assignor to Western Wheeled Scraper Company, Aurora, Ill. Track liner. 1,826,756; Oct. 13.
Falkner, Frederick. (See Culver, Lagar R., assignor.)
Falls, Johnson C., St. Joseph, La. Saw guide. 1,826,757; Oct. 13.
Fanner Manufacturing Company, The. (See Gibson, Samuel H., assignor.)
Fansteel Products Company. (See Stryker, Clinton E., assignor.)
Farmer, Ada E., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 85,361; Oct. 13.
Farr, Frederick G., deceased, by H. R. Farr, executrix, Garden City, assignor to Farr Hydraulic Systems, Inc., New York, N. Y. Nozzle controlled switch. 1,827,355; Oct. 13.
Farr, Helen R., executrix. (See Farr, Frederick G.)
Farr Hydraulic Systems, Inc. (See Farr, Frederick G., assignor.)
Farrar, Alvin J., Cleveland, Ohio. Parking light timing device. 1,826,870; Oct. 13.
Federal Telegraph Company. (See Shermund, Ralph C., assignor.)
Felipe, Vincent Z., New York, N. Y. Fountain pen and pencil. 1,827,311; Oct. 13.
Ferguson Brothers Manufacturing Company. (See Hanley, William, assignor.)
Ferreby, Rolla B., Los Angeles, Calif. Centrifugal propeller for dirigible balloons. 1,827,225; Oct. 13.
Ferretti, Antonio, Milan, assignor to Società Invenzioni Brevetti Anonima-Torino, Turin, Italy. Treatment of animal fibers. 1,827,356; Oct. 13.
Fick, Beulah B., Baltimore, Md. Drapery hook. 1,827,644; Oct. 13.
Field, Crosby, Brooklyn, N. Y. Winding and unwinding mechanism. 1,826,758; Oct. 13.
Fiene, Marcus E., Ballston Lake, N. Y., assignor to General Electric Company. Insulation of electrical apparatus. 1,827,571; Oct. 13.
Filtrators Company. (See Sanftleben, Joseph E., assignor.)
Finch, Willis E. (See Stimpson, W. F., and Finch.)
Fincher, Walter G., Kansas City, Md. Canopy. 1,827,427; Oct. 13.
Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Conveying system. 1,826,759; Oct. 13.
Finney, James M., et al. (See Schroeder, Anthony, assignor.)
Fischer, Albert C., B. A. Stewart, and H. W. Herbst, Chicago, Ill., assignor, by mesne assignments, to The Philip Carey Manufacturing Company. Cutting equipment for plastic sheet material. 1,827,193; Oct. 13.
Fischer, H. G., & Co. (See Chapman, W. B., and Fischer, assignors.)
Fischer, H. G., & Co. Inc. (See Richardson, Donald E., assignor.)
Fischer, Herman G. (See Chapman, W. B., and Fischer.)
Fisher, Charles, Yonkers, N. Y., assignor to The Automatic Recording Safe Company, Chicago, Ill. Savings bank. 1,827,388; Oct. 13.
Fitzgibbons, Gerald A., St. Louis, Mo. Rack. 1,827,572; Oct. 13.
Flumedoro, Aloysius J., Readville, Mass., assignor to Standard Neckwear Co., Boston, Mass., and New York, N. Y. Necktie. Re18,224; Oct. 13.
Fletcher, John B., Newport, Ky. Metallic dolly. 1,827,226; Oct. 13.
Flexlume Corporation. (See Laube, Louis W., assignor.)
Flexlume Corporation. (See Woolrich, Edward S., assignor.)
Flintkote Company, The. (See Kirschbraun, Lester, assignor.)
Folgarolas, Antonio. (See Folgarolas, Jacinto and A.)
Folgarolas, Jacinto and A., Mexico, Mexico. Rim for automobile wheels. 1,827,645; Oct. 13.
Ford, Clifton S., Ecorse, Mich. Automobile top construction. 1,826,871; Oct. 13.
Forshee, Russell E. (See Spillman, Edward T., assignor.)
Foster, Lee R., River Edge, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Duplex telegraph system. 1,826,928; Oct. 13.
Foster, Walter W., Wichita Falls, Tex. Casing spinning apparatus for drilling rigs. 1,826,760; Oct. 13.
Fox, William, Vaudeville Company. (See Fried, Armin, assignor.)
Fradette, Donald F., Cleveland, Ohio. Shingle. 1,826,761; Oct. 13.
Frank, John M., and S. Stack, assignor to Ilg Electric Ventilating Company, Chicago, Ill. Cabinet air heater. 1,827,512; Oct. 13.
Franklin, Bernard S., Troy, N. Y. Ratio recorder. 1,826,762; Oct. 13.
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Franks, George A., assignor of one-third to R. W. Seymour and one-third to M. T. Wetton, Chicago, Ill. Slug and change making machine. 1,827,312; Oct. 13.
Fraser, John, jr., assignor to Milwaukee Valve Company, Milwaukee, Wis. Receptacle closure. 1,827,573; Oct. 13.
Frazier, Lucius E., assignor to Phillips Petroleum Company, Bartlesville, Okla. Method and apparatus for gauging the contents of tank cars and the like. 1,827,574; Oct. 13.
Fried, Armin, assignor to William Fox Vaudeville Company, Los Angeles, Calif. Camera transport car. 1,827,227; Oct. 13.
Fried. Krupp Aktiengesellschaft. (See Jacobs, Werner, assignor.)
Friedman, Leon, Milwaukee, Wis. Necktie. 1,827,313; Oct. 13.

Friedrich, Charles F., assignor to E. E. Fairchild Corporation, Rochester, N. Y. Box. Des. 85,330; Oct. 13.
Friend, Keith, assignor to American Seating Company, Grand Rapids, Mich. Metal blackboard sheet. 1,827,389; Oct. 13.
Frierson, Henry C. (See Martin, James R., assignor.)
Fries, Friedrich A. (See Ebert, G., Fries, and Reppe.)
Friestedt, Sven H. (See Pensel, G. R., and Friestedt.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frone, Robert A., Detroit, Mich. Steering device for automobiles. 1,827,428; Oct. 13.
Fuhrman, Alvin O. (See McKay, H. J., Carlsen, Fuhrman, and Unzel.)
Fuller Lehigh Company. See Heller, Lewis W., assignor.)
Furnas, William C., West Allis, Wis. Magnetic clutch. 1,826,929; Oct. 13.
Gabler, Johann, Ettlingen, Germany. Weft holding device. 1,827,046; Oct. 13.
Gabrielson, Arthur A., Minneapolis, Minn. Foldable rule. 1,827,686; Oct. 13.
Gabrielson, Carl, assignor to L. C. Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,826,763; Oct. 13.
Gade, Max, assignor of one-half to Zellstoffabrik Waldhof, Mannheim-Waldhof, Germany. Treating sulphite liquor spirit. 1,827,080; Oct. 13.
Gailhofer, Joseph, Mannheim, Germany, assignor, by mesne assignments, to Self-Spread Waxer Corporation, New York, N. Y. Floor and the like polishing appliance. 1,827,003; Oct. 13.
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,826,764; Oct. 13.
Galaz, Jaun, Los Angeles, Calif. Attachment for pneumatic hammers. 1,827,647; Oct. 13.
Gallipoli, Frank P., and T. A. Kingsley, sr., Englewood, N. J. Device for producing and dispensing lather. 1,827,649; Oct. 13.
Gilng, Gottfried, Uster, near Zurich, Switzerland. Wrench. 1,826,765; Oct. 13.
Garrett, Robert E. (See Becker, Carl, assignor.)
Gas Machinery Company, The. (See Russell, Walter M., assignor.)
Gastrich, Gustav, assignor to Textile Machine Works, Wyomissing, Pa. Fabric take off device for full fashioned knitting machines. 1,826,872; Oct. 13.
Gat Gun Lubricating Corporation. (See Hundemer, Walter F., assignor.)
Gavitt, Arthur W., assignor to A. Stein & Company, Chicago, Ill. Fastener. 1,827,357; Oct. 13.
Gearhart, Alonzo W., Fresno, Calif. Fuel oil burner. 1,827,390; Oct. 13.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Interlocking system for high frequency transmitters. 1,826,766; Oct. 13.
Gebruder Brehmer Maschinen-Fabrik. (See Kleinschmidt, Oscar, assignor.)
Geier, Ernest C., assignor to Duplan Silk Corporation, New York, N. Y. Identifying fabrics. 1,827,513; Oct. 13.
Geiger, Ernst, Irvington, N. J. Building construction. 1,826,767; Oct. 13.
Geiger, Josef, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany. Diesel locomotive having power cylinders connected to the driving mechanism. 1,826,873; Oct. 13.
General Aniline Works, Inc. (See Bauer, W., and Zeh, assignor.)
General Aniline Works, Inc. (See Hentrich, Winfrid, assignor.)
General Aniline Works, Inc. (See Lüttringhaus,, A. Wolff, and Neresheimer, assignors.)
General Aniline Works, Inc. (See Muench, E., and Voltz, assignor.)
General Cable Corporation. (See Hunter, Joseph H., assignor.)
General Electric Company. (See De Reamer, Frank C., assignor.)
General Electric Company. (See Fiene, Marcus E., assignor.)
General Electric Company. (See Gosling, Joseph W., assignor.)
General Electric Company. (See Greene, Oliver W., assignor.)
General Electric Company. (See Heinbuch, George W., assignor.)
General Electric Company. (See Ipsen, Carl L., assignor.)
General Electric Company (See Kellogg, Edward W., assignor.)
General Electric Company. (See Kline, Halsey W., assignor.)
General Electric Company. (See Nordlander, Birger W., assignor.)
General Electric Company. (See Raube, William C., assignor.)
General Electric Company. (See Thumin, Carl, assignor.)
General Electric Company. (See Weidehoff, Georg, assignor.)
General Insulating and Manufacturing Company. (See Mottweiler, O. F., and Drill, assignors.)
General Machinery Corporation. (See Byerlein, Arthur A., assignor.)
General Motors Research Corporation. (See Hughes, Victor, assignor.)
General Motors Research Corporation. (See Short, Charles R., assignor.)
General Refractories Company. (See Himmelright, Raleigh J., assignor.)
General Talking Pictures Corporation. (See de Forest, Lee, assignor.)
George, Harry H. (See Truett, V. S., and George.)
Germersbausen, Joseph H., Plainfield, N. J. Bathtub grip. 1,827,575; Oct. 13.
Gersman, Harvey M., Chicago, Ill. Apparatus for the manufacture of expanded steel load bearing members. 1,827,314; Oct. 13.
Gesellschaft fur Drahtlose Telegraphie m. b. H. (See von Arco, Georg, assignor.)
Gialdini, Bruno T., assignor to The Diebold Safe & Lock Company, Canton, Ohio. Safe. 1,826,768; Oct. 13.
Gibson, Samuel H., Lakewood, assignor to The Fanner Manufacturing Company, Cleveland, Ohio. Agitator. 1,827,004; Oct. 13.
Gilbert, Frank N., Binghamton, N. Y. Pocket pencil and pen holder. 1,827,466; Oct. 13.
Giles, Steele A., Hutchinson, Kans. Apparatus for recovering gold and silver. 1,827,467; Oct. 13.
Giletti, John, New York, N. Y. Machine for turning manure piles. 1,827,358; Oct. 13.
Gilkey Printing Company, The. (See Brockett, Bluford W., assignor.)
Gilkey, W. S., Printing Company, The. (See Guina, William E., assignor.)
Gill Glass & Fixture Company. (See Aglow, Harry, assignor.)
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillies, Hugh A., Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y. Brake shoe. 1,827,081; Oct. 13.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Drop door for railway cars. 1,826,874; Oct. 13.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Cast metal end plate. 1,826,875; Oct. 13.
Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,827,891; Oct. 13.
Gitzendanner, Fred, New York, N. Y. Self adjusting feed roller. 1,827,359; Oct. 13.
Glasier, Harold H., Los Angeles, Calif. Mechanical spader. 1,827,429; Oct. 13.
Gleason Works. (See Hill, Maxwell H., assignor.)
Gleason Works. (See Wildhaber, Ernest, assignor.)
Glidden, Harvey L., Lexington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Card holder for shoe racks. 1,826,769; Oct. 13.
Glomb, George D., assignor to J. C. Glomb, Bradford Woods, Pa. Extinguisher for cigarettes and the like. 1,827,360; Oct. 13.
Glomb, John C. (See Glomb, George D., assignor.)
Gloyd, Frank M., assignor to Simonds Worden White Company, Dayton, Ohio. Beater bar. 1,827,228; Oct. 13.
Glynn, Stephen A., Gardenville, assignor of one-half to W. J. Dnetsch, Buffalo, N. Y. Train pipe coupling and valve arrangement. 1,827,286; Oct. 13.
Godfrey, Alfred A., assignor to Linoleum Manufacturing Company, Limited, London, England. Manufacture of linoleum. 1,827,145; Oct. 13.
Goewey, Harold W., Baltimore, Md., assignor to Parke Davis & Company, Detroit, Mich. Machine for applying caps to bottles. 1,826,930; Oct. 13.
Gold Car Heating & Lighting Company. (See Gold, Edward E., assignor.)
Gold, Edward E., assignor to Gold Car Heating & Lighting Company, New York, N. Y. Hose or pipe coupler. 1,826,770; Oct. 13.
Goldberg, Maximilian M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Auditing machine. 1,827,005; Oct. 13.
Golden, Daniel J., Brockton, Mass. Athletic shoe. 1,827,514; Oct. 18.
Goldenberg, Michael, Philadelphia, Pa. Antislip shoe. 1,827,515; Oct. 13.
Golding, George E. (See Keating, Charles E., assignor.)
Goldman, Benjamin, New York, N. Y. Razor. 1,826,876; Oct. 13.
Goldschmidt, Th., A.-G. (See Schrader, Hans sasignor.)
Gollmar, Herbert A., East Orange, N. J., assignor to The Koppers Company. Treatment of arsenical solutions. 1,827,082; Oct. 13.
Goodyear Tire & Rubber Company, The. (See Andrews, George G., assignor.)
Goodyear Tire & Rubber Company, The. (See Haase, Jorgen I., assignor.)
Goodyear Tire & Rubber Company, The. (See Leavenworth, William H., assignor.)
Goodyear Tire & Rubber Company, The. (See Maas, Eloy E., assignor.)
Goodyear Tire & Rubber Company, The. (See Musselman, Alvin J., assignor.)
Goodyear Tire & Rubber Company, The. (See Shively, Jess A., assignor.)
Goodyear's Indian Rubber Glove Manufacturing Company, The. (See Bitgood, Lucille M., assignor.)
Goodyear's India Rubber Glove Manufacturing Company, The. (See Heilhecker, Eugene C., assignor.)

Gosling, Joseph W., Schenectady, N. Y., assignor to General Electric Company. Lighting standard. Des. 85,331; Oct. 13.

Gottwald, Christian, assignor to The Ric-Wil Company, Cleveland, Ohio. Fitting for conduit systems. 1,826,877; Oct. 13.

Gould Storage Battery Corporation. (See Booss, F. E. E., and Chamberlain, assignors.)

Gover, James C., Newton, Iowa. Primer for internal combustion engines. 1,826,771; Oct. 13.

Grant, John. (See Parker, Lloyd A., assignor.)

Grant, Lewis C., assignor to Electrical Improvements Limited, Newcastle-upon-Tyne, England. Electric circuit breaker. 1,826,772; Oct. 13.

Graybar Electric Company. (See Reddig, Charles, assignor.)

Grebe, John J., and R. H. Boundy, assignors to The Dow Chemical Company, Midland, Mich. Electrolytic production of alkali and alkaline earth metals. 1,826,773; Oct. 13.

Greene, John S., and A. W. Caps, Rochester, N. Y., assignors to Photostat Corporation, Providence, R. I. Photographic apparatus. 1,827,392; Oct. 13.

Greene Manufacturing Company. (See Albert, Carl P., assignor.)

Greene, Oliver W., Pittsfield, Mass., assignor to General Electric Company. Centrifuge bucket. 1,827,648; Oct. 13.

Greenwood, Talma T., East Templeton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and contact structure. 1,827,430; Oct. 13.

Greenwood, Talma T., East Templeton, assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass. Electric switch. 1,827,516; Oct. 13.

Greiner, Josef, Vienna, Austria, assignor to G. A. Ungar and E. Benjamin, New York, N. Y. Capsule of microphones. 1,827,229; Oct. 13.

Griess, Justin W., Cincinnati, Ohio. Spraying machine. 1,826,774; Oct. 13.

Griffin, James H. (See Kisby, Charles A., assignor.)

Grosz, Adam H., New Orleans, La. Electric meter protector. 1,826,775; Oct. 13.

Grothe, Walter, assignor to Caterpillar Tractor Co., San Leandro, Calif. Tempering furnace. 1,827,194; Oct. 13.

Gruppe, Alfred H., Milwaukee, Wis., assignor of one-half to T. L. Durocher, Detour, Mich. Crib, caisson, and the like. 1,827,146; Oct. 13.

Guldinger, Edward F., assignor to Phillips Petroleum Company, Bartlesville, Okla. Casing head. 1,827,287; Oct. 13.

Guina, William E., Detroit, Mich., assignor to The W. S. Gilkey Printing Company, Cleveland, Ohio. Envelope. 1,827,468; Oct. 13.

Gunther, Charles O., Grand View-on-Hudson, N. Y. Liquid fuel burner and atomizing liquids 1,826,776; Oct. 13.

Gurschke, Joseph, San Francisco, Calif. Pipe clamp. 1,827,576; Oct. 13.

Haase, Jorgen L., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for building rubber conduits. 1,827,650; Oct. 13.

Haase, Leo G., Long Beach, Calif. Water meter. 1,827,230; Oct. 13.

Hacheney, Frank C., Vancouver, Wash. Headlight. 1,827,651; Oct. 13.

Hadley, Charles R., Company. (See Webb, Robert R., assignor.)

H[illegible] H. Fleming, and A. W. Dickey, Mount Vernon, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y. Tape feed mechanism for printing telegraph apparatus. 1,827,652; Oct. 13.

Hahn, Edgar A., et al. (See Jaworowski, Joseph F., assignor.)

Hall, Lee, St. Paul, Minn. Preserving game and food carrier. 1,827,517; Oct. 13.

Hall, Renée, Detroit, Mich. Undergarment. 1,827,147; Oct. 13.

Hallen, Carl E., Chicago, assignor to J. B. Crofoot, Mount Prospect, Ill. Holding frame for staples. 1,827,315; Oct. 13.

Hamburg, Max. (See Jalowetz, E. and Hamburg.)

Hammer, Thorvald F., Branford, Conn. Saddle rack. Des. 85,332; Oct. 13.

Hammermill Paper Company. (See Johnsen, Bjarne, assignor.)

Hammond, John H., jr., Gloucester, Mass. Piano with floating bridge. 1,826,778; Oct. 13.

Handy-Haul Auto Trunk Company. (See Nelson, O. S., and Willy, assignors.)

Haner, Carl, Moyland, assignor to Publicker, Inc., Philadelphia, Pa. Manufacturing esters. 1,827,653; Oct. 13

Hanley, William, East Orange, assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J. Lap table. 1,827,518; Oct. 13.

Hanneman, Walter M., Evansville, Ind., assignor to Union Special Machine Company, Chicago, Ill. Feed-off-the-arm sewing machine. 1,827,577; Oct. 13.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Clamp. 1,827,195; Oct. 13.

Hansen, Christian, Essen-Stadtwald, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Absorption of hydrogen sulphide and ammonia from gases. 1,826,779; Oct. 13.

Hansen, Edmund H., New York, N. Y. Apparatus for radio recording and reproduction. 1,827,519; Oct. 13.

Hanson, Hans, Ivoryton, Conn., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,826,878; Oct. 13.

Harder, Anna, Idaho Falls, Idaho. Mop. 1,827,578; Oct. 13.

Harmon, Edwin L., Groton, assignor to L. C. Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,826,780; Oct. 13.

Harnischfeger Corporation. (See Henricks, Arthur G., assignor.)

Harper, Lester J., St. George, N. Y. Toothbrush cover. 1,827,654; Oct. 13.

Harrington, Alfred L., Rosslyn Farms, Pa., assignor to Pittsburgh Plate Glass Company. Glass melting apparatus. 1,727,469; Oct. 13.

Harris, Francis J., Johnstown, Pa. Coupling for pumping fire engines. 1,827,579; Oct. 13.

Harris-Seybold Potter Company. (See Pritchard, C. G., and Harrold, assignors.)

Harrison, Charles D., and P. D. Lindsey, Hominy, Okla. Reversible check valve and cut off. 1,827,470; Oct. 13.

Harrison, Raymond L., Albuquerque, N. Mex. Earth working apparatus. 1,826,931; Oct. 13.

Harrison, Thomas R., Wyncote, assignor to The Brown Instrument Company, Philadelphia, Pa. Electric measuring instrument. 1,826,879; Oct. 13.

Harrison, Thomas R., Wyncote, assignor to The Brown Instrument Company, Philadelphia, Pa. Reco ding and control system and apparatus therefor. 1,827,520; Oct. 13.

Harrold, Charles W. (See Pritchard, C. G., and Harrold.)

Harrop Ceramic Service Company, The. (See Sylvester, George R., assignor.)

Hart, Charles, Media, Pa., assignor of one-half to P. Shields, Washington, D. C. Treating ores in the manufacture of rustless steel. 1,826,932; Oct. 13.

Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,827,431; Oct. 13.

Hartford-Empire Company. (See Russell, A. W., and Wadman, assignors.)

Hartman, Harry B., Buffalo, N. Y. Safety razor. 1,827,148; Oct. 13.

Hartmann Trunk Company. (See Ritter, Julius, jr., assignor.)

Harvell, Robert, et al. (See Udell, Earl L., assignor.)

Harvey, Raymond, New York, N. Y., and H. V. Day, Pequannock Township, Morris County, assignors to The Pantosote Leather Company, Passaic, N. J. Mildew-proof fabric and making same. 1,827,083; Oct. 13.

Haub, George R. (See Algeo, A. M., Haub, and Ross.)

Haubert, Leo, assignor of one-third to J. A. Wolfe, and one-third to J. C. Bennett, Tulsa, Okla. Power delivering attachment for automobile trucks or tractors. 1,827,655; Oct. 13.

Haven, William A., Youngstown, Ohio. Heat exchanging device. 1,827,231; Oct. 13.

Hayes, Charles G., assignor to Chicago Carton Company, Chicago, Ill. Printing plate and making the same. 1,827,361; Oct. 13.

Hayes, James J., assignor to R. S. Hayes, Louisville, Ky. Freezing device. 1,826,781; Oct. 13.

Hayes, Ruth S. (See Hayes, James J., assignor.)

Hayes, Stanley W., assignor to Hayes Track Appliance Company, Richmond, Ind. Bumper post. 1,827,288; Oct. 13.

Hayes Track Appliance Company. (See Hayes, Stanley W., assignor.)

Hayman, Eber J., Parkersburg, W. Va. Stovepipe. 1,827,722; Oct. 13.

Haynsworth, Julius D., assignor to McQuay Radiator Corporation, Minneapolis, Minn. Rotor. 1,827,316; Oct. 13.

Hayward Company, The. (See Brendlin, Herman J., assignor.)

Haywood, John W., New York, N. Y., assignor to T. R. Brooks, Scranton, Pa. Directional signal. 1,827,289; Oct. 13.

Hazel-Atlas Glass Co. (See Algeo, A. M., Haub, and Ross, assignors.)

Hazel-Atlas Glass Co. (See Bowman, Samuel B., assignor.)

Hazlett, Raymond R., and W. J. Alexander, Linden, N. J. Electric soldering iron. 1,826,933; Oct. 13.

Heathman, Edward M., assignor to F. O. Schoedinger, Columbus, Ohio. Water heater. 1,827,521; Oct. 13.

Heggie, James. (See Corrall, H., and Heggie.)

Heilbecker Eugene C., Bristol, R. I., assignor to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn. Combined sole and heel. Des. 85,333; Oct. 13.

Heimerdinger, William G., Louisville, Ky. Combined hedge clipper and grass cutter. 1,827,149; Oct. 13.

Heinbuch, George W., Toronto, Ontario, Canada., assignor to General Electric Company. Electric oven. 1,827,656; Oct. 13.

Heising, Raymond A., Milburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Piezo electric oscillator. 1,827,196; Oct. 13.

Heller, Lewis W., Oak Harbor, Ohio, assignor to Fuller Lehigh Company, Fullerton, Pa. Boiler furnace. 1,827,197; Oct. 13.

Henderson, John L., Boone Grove, Ind. Internal combustion engine. 1,827,006; Oct. 13.

Hennessy, Daniel E., assignor to Lewis-Shepard Company, Watertown, Mass. Elevating truck with safety lock. 1,827,012; Oct. 13.

Hennig, Charles T., Barberton, Ohio. Purifying ferrous metals. 1,826,880; Oct. 13.

Hennig, Charles T., Cleveland, Ohio. Purification of steel in the Bessemer process. 1,826,881; Oct. 13.

Hennig, Charles T., Cleveland, Ohio. Purifying steel in the open hearth process. 1,826,882; Oct. 13.

Henning, Malcolm E., Des Moines, assignor to Penn Electric Switch Co., Des Moines, Iowa. Differential adjusting mechanism. 1,827,084; Oct. 13.

Henricks, Arthur G., assignor to Harnischfeger Corporation, Milwaukee, Wis. Transmission mechanism. 1,827,013; Oct. 13.

Henry, William A., Hollywood, Calif. Folding tire tube tester and bucket. 1,827,232; Oct. 13.

Hentrich, Winfrid, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dyeing organic cellulose esters. 1,827,150; Oct. 13.

Hepburn, Donald McK., assignor to Amiesite Asphalt Company of America, Philadelphia, Pa. Stone asphalt road and preparing and laying the same. 1,827,522; Oct. 13.

Herbst, Henry W. (See Fischer, A. C., Stewart, and Herbst.)

Herrick, Harold W., et al. (See Doty, L., and Carroll.)

Herthel, Eugene C., Chicago, Ill., and H. L. Pelzer, Highland, Ind., assignors to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,826,782; Oct. 13.

Hertzberg, Harry, Brooklyn, N. Y. Mop. 1,827,523; Oct. 13.

Hess, Fritz, Hagen, Westphalia, Germany. Process and apparatus for manufacturing anatomically accurate individual foot supports for shoes. 1,826,783; Oct. 13.

Heywood-Wakefield Company. (See Stinson, George, assignor.)

Hickok Manufacturing Company. (See Mix, Edwin S., assignor.)

Hilburger, Frederick, Castle Rock, Colo. Umbrella holder. 1,827,524; Oct. 13.

Hill, Maxwell H., assignor to Gleason Works, Rochester, N. Y. Indexing mechanism. 1,827,007; Oct. 13.

Hill, Rowland F., Toledo, Ohio. Safety hook-off. 1,826,883; Oct. 13.

Hiller, Heinrich. (See Müller, W. J., and Hill.)

Hiltz, George S., Brooklyn, N. Y., and W. F. Purcell, Hoboken, N. J., assignors to Stock Quotation Telegraph Company, New York, N. Y. Printing telegraph system. 1,827,362; Oct. 13.

Himmelright, Raleigh J., New Rochelle, N. Y., assignor to General Refractories Company, Philadelphia, Pa. Fire box construction. 1,826,784; Oct. 13.

Hirsch, Kupfer-and Messingwerke, A. G. (See Tama, Cyrano, assignor.)

Hitner, Harry F., Oakmont, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making glass. 1,827,471; Oct. 13.

Hitner, Harry F., Oakmont, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making glass. 1,827,472; Oct. 13.

Hodgkinson, Francis, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Load limiting device. 1,826,884; Oct. 13.

Hoehn, Harry W. (See Hoehn, Thurman L., and H. W.)

Hoehn, Thurman L., and H. W., Lancaster, Pa. Airplane parachute flare. 1,827,580; Oct. 13.

Hoepner Automatic Machinery Corporation, The. (See Cundall, Robert N., assignor.)

Hoffman Beverage Company. (See Cubberley, Amariah H., assignor.)

Hofstetter, Robert, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Threading apparatus 1,827,198; Oct. 13.

Holmes, William H., Mount Vernon, N. Y. Educational strip-holder. 1,826,934; Oct. 13.

Holophane Company. (See Exelmans, Maurice, assignor.)

Holthoff, Henry C., Long Beach, Calif., assignor to B. S. Thayer, Philadelphia, Pa. Multistage low temperature coke apparatus. 1,827,199; Oct. 13.

Holz, August, Irvington, N. J., assignor to T. V. D. Berdell, New York, N. Y. Producing fertilizers. 1,826,785; Oct. 13.

Hopkins, Philip S., assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Method and apparatus for reproducing sound in connection with pictures. 1,826,786; Oct. 13.

Hoppe, Friedrich A., and J. Cryns, assignors to The Petersen Oven Company, Chicago, Ill. Oven loader. 1,826,885; Oct. 13.

Hopper, William, Old Kilpatrick, Scotland, assignor, to The Singer Manufacturing Company, Elizabeth, N. J. Decalcomania transfer sheet. Des. 85,334; Oct. 13.

Horowitz, Louis. (See Theys, H. S., and Horowitz.)

Houghton-Butcher Manufacturing Company Limited, The. (See Denniss, A. J., and Edwards, assignors.)

Houghton, E. F., & Company. (See Carpenter, Charles E., assignor.)

Houghton, E. F., and Company. (See Quimby, Charles W., assignor.)

Howard Development Company. (See Howard, Merton W., assignor.)

Howard, James L., & Company. (See Doyle, Joseph B., assignor.)

Howard, Merton W., assignor to Howard Development Company, Lynn, Mass. Method and machine for trimming top lifts. 1,826,935; Oct. 13.

Howell, Harry, Cleveland, Ohio. Copper coil water heater construction. 1,827,581; Oct. 13.

Howlett, Grayle W., Toledo, Ohio, assignor of one-half to R. M. Corl, Maumee, Ohio. Treatment of aliphatic hydrocarbons. 1,826,787; Oct. 13.

Huber, Fritz, Mannheim, assignor to Heinrich Lanz Aktiengesellschaft, Mannheim, Baden, Germany. Oil engine. 1,826,788; Oct. 13.

Huckel John F., Kansas City, Mo. Display rack. 1,827,008; Oct. 13.

Huff, Lyman C., Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill. Cleaning stills. 1,827,085; Oct. 13.

Huffman Manufacturing Company, The. (See Wilson, Ronald M., assignor.)

Hugershoff, Reinhard, Dresden, assignor to the Firm Ikarus Internationale Patentverwertungs-Aktiengesellschaft, Vaduz, Liechtenstein. Tracing appliance for pairs of measuring pictures. 1,827,473; Oct. 13.

Huggins, Merion J., Upper Saddle River, N. Y. Electric liquid measuring and indicating means. 1,827,525; Oct. 13.

Hughes, Victor, assignor to General Motors Research Corporation, Detroit, Mich. Rubber spring bushing and making the same. 1,827,233; Oct. 13.

Hughes, Victor, assignor to General Motors Research Corporation, Detroit, Mich. Rubber spring shackle and producing the same. 1,827,234; Oct 13.

Hughes, Walter J. (See Nordell, E., and Hughes.)

Hulbert Thomas H. (See McPhee W. F. and Krueger assignors.)

Hummer, Charles I., Jersey City, N. J., assignor to American Car and Foundry Company, New York, N. Y. Container construction. 1,827,393; Oct. 13.

Hundemer, Walter F., Alameda, assignor, by mesne assignments, to Gat Gun Lubricating Corporation, Oakland Calif. Flexible joint. 1,827,432; Oct. 13.

Hunter, Joseph H., Detroit, Mich., assignor by mesne assignments to General Cable Corporation. Conduit system. 1,827,086; Oct. 13.

Hutchby, Grace M., Los Angeles, Calif. Permanent waving pad and stick apparatus. 1,827,290; Oct. 13.

Hynes & Cox Electric Corporation. (See Hynes, Lee P., assignor.)

Hynes, Lee P., assignor to Hynes & Cox Electric Corporation, Albany, N. Y. Electric water heater. 1,827,087; Oct. 13.

I. G. Farbenindustrie Aktiengesellschaft. (See Ebert, G., Fries, and Reppe, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Hansen, Christian, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Seidel, Walter, assignor.)

I. T. S. Rubber Company Limited. (See East, Frederick W., assignor.)

Ikarus Internationale Patentverwertungs-Aktien-Gesellschaft. (See Hugershoff, Reinhard, assignor.)

Ilg Electric Ventilating Company. (See Frank, J. M., and Stack, assignors.)

Independent Lock Company. (See MacGuire, Andrew A., assignor.)

Industrial Research Company. (See Joffé, Abraham, assignor.)

Industries of America, Inc. (See Robinson, Harry G., assignor.)

Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)

Ingraham, E., Company, The. (See Weindel, Fred, jr., assignor.)

International Communications Laboratories, Inc. (See Connery, A. F., and Wishart, assignors.)

International Couplers Co. (See White, Walter C., assignor.)

International Safety Lock Nut Corporation. (See d'Halloy, Audoin, assignor.)

International Shoe Company. See Keefe, John P., assignor.)

International Time Recording Company of New York. (See Ogsbury, James S., assignor.)

Ipsen, Carl L., Schenectady, N. Y., assignor to General Electric Company. Electric arc welding. 1,827,657; Oct. 13.

Ivey, Henry B., Goldsboro, N. C. Cigar and cigarette lighter. 1,826,789; Oct. 13.

Jacobs, Charles, Coney Island, N. Y. Amusement device. Des. 85,335; Oct. 13.

Jacobs, Werner, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Variable speed gear. 1,827,582; Oct. 13.

Jacobson, Henry, and K. Aichelen, Milwaukee, Wis. Locking device for doors of baling presses. 1,826,936; Oct. 13.

Jacquesson, André, assignor of one-half to J. A. Newman and one-half to M. G. Jenkins, Morris Cove, New Haven, Conn. Claw crowbar. 1,827,363; Oct. 13.

Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic dehydrogenation of organic compounds. 1,827,317; Oct. 13.

Jaeger Machine Company, The. (See Eggert, Joseph, assignor.)

Jalowetz, Eduard, and M. Hamburg, Vienna, Austria. Obtaining malt enzymes and beverage. 1,826,790; Oct. 13.
James Manufacturing Company. (See Shodron, John G., assignor.)
James, Thomas W., assignor to Lubri-Graph Corporation, Cleveland, Ohio. Spraying liquids. 1,827,583; Oct. 13.
Janalik, Alois J., New York, N. Y. Water deflector. 1,827,009; Oct. 13.
Jannell, Leslie D., Sherborn, Mass. Bevel protractor for rafters. 1,827,014; Oct. 13.
Jardine, Robert, Detroit, Mich., assignor to Wilcox-Rich Corporation. Dual exhaust port and valve cooling arrangement. 1,827,699; Oct. 13.
Jarvis, Graham W., assignor of one-half to J. E. Shepherd, Charlottesville, Va. Adjustable fuel burning nozzle. 1,827,235; Oct. 13.
Jaworowski, Joseph F., assignor of two-ninths to S. E. Dettelbach, one-third to S. W. Emerson, and one-ninth to E. A. Hahn, Cleveland, Ohio. Rotary pump. 1,827,088; Oct. 13.
Jenkins, Charles H., Chicago, Ill., assignor to Jenkins Petroleum Process Company. Processes and apparatus for treating heavier hydrocarbons. 1,827,018; Oct. 13.
Jenkins, Forrest L., Wheaton, assignor to Western Foundation Company, Chicago, Ill. Expanding pile core. 1,827,015; Oct. 13.
Jenkins, Morris G., et al. (See Jacquesson, André, assignor.)
Jenkins Petroleum Process Company. (See Jenkins, Charles H., assignor.)
Jensen, John, assignor to Whitney Metal Tool Co., Rockford, Ill. Anchoring means for portable tool supports. 1,826,937; Oct. 13.
Jewett and Sherman Company. (See McDonald, Harry, assignor.)
Joffé, Abraham, Leningrad, Russia, assignor to Industrial Research Company, Cambridge, Mass. Photoelectric cell. 1,827,016; Oct. 13.
Johnsen, Bjarne, assignor to Hammermill Paper Company, Erie, Pa. Method and apparatus for determining the result of treatment of material. 1,827,658; Oct. 13.
Johnson, Arthur F. (See Johnson, Fredolph, H. W., and A. F.)
Johnson, Emil L., and O. Lundsten, Attleboro, Mass. Fastening device for bracelets. 1,827,364; Oct. 13.
Johnson, Fredolph, H. W. and A. F., Little Falls, Minn. Litter remover. 1,827,236; Oct. 13.
Johnson, George A., Fairfield, assignor to The Bryant Electric Company, Bridgeport, Conn. Inclosed tumbler switch. 1,827,584; Oct. 13.
Johnson, Harry W. (See Johnson, Fredolph, H. W., and A. F.)
Johnson Laboratories, Incorporated. (See Polydoroff, Wladimir J., assignor.)
Jones, George D., assignor to The Cleveland Tractor Company Cleveland, Ohio. Pushed agricultural implement. 1,827,237; Oct. 13.
Jones, George F. (See Morgan, B. H., and Jones.)
Jones, Joseph S., Brooklyn, assignor to Chas. Cory Corporation, New York, N. Y. Wind intensity and direction transmitter and indicator. 1,827,151; Oct. 13.
Joos, Bernard. (See Tisza, E. T., and Joos.)
Joosten, Hugo, Nordhausen, assignor of one-third to Tiefbau- und Kälteindustrie-Aktiengesellschaft vormals Gebhardt & Koenig, Nordhausen im Harz, and one-third to Siemens-Bauunion Gesellschaft mit beschränkter Haftung Kommanditgesellschaft, Berlin Siemensstadt, Germany. Solidifying permeable rock, loosely spread masses or building structures. 1,827,238; Oct. 13.
Jordan & Taylor, Inc. (See Makinster, Glenn E., assignor.)
Joseph, Alexander, assignor to L. A. Joseph, Jacksonville, Fla. Animal trap. 1,827,019; Oct. 13.
Joseph, L. A. (See Joseph, Alexander, assignor.)
Joy, Robert W., Brooklyn, assignor to American Car and Foundry Company, New York, N. Y. Railway car brake. 1,827,474; Oct. 13.
Joyce, Lyndon W., assignor to Joyce-Venning Manufacturing Co., Inc., Greensboro, N. C. Manufacture of suspenders. 1,827,017; Oct. 13.
Joyce-Venning Manufacturing Co. (See Joyce, Lyndon W., assignor.)
Judd, H. L., Company. (See Toelle, Walter H., assignor.)
Juett, W. B., et al. (See Dootson, Norman L., assignor.)
Julien, Antone W., et al. (See Sager, Lee R., assignor.)
Jung, Karl, Berlin, Germany. Device for surfacing grindstones. 1,827,659; Oct. 13.
Kalman Steel Company. (See White, W. E., and Monjar, assignors.)
Kaplan, Philip, and J. Kohn, Kokomo, Ind. Adjustable heel clamp for shoemakers. 1,827,152; Oct. 13.
Kaumagraph Company. (See Lawrence, Winthrop S., assignor.)
Kautz, Jacob, Chicago, Ill. Overalls. 1,827,585; Oct. 13.
Keating, Charles E., assignor of one-half to G. E. Golding, Indianapolis, Ind. Ore roasting furnace. 1,827,526; Oct. 13.
Keefe, John P., Manchester, N. H., assignor to International Shoe Company, St. Louis, Mo. Manufacture of boots and shoes. 1,827,200; Oct. 13.
Keefer, Charles H., Andrews, Ind., assignor of one-half to E. J. Keefer, Los Angeles, Calif. Battery terminal puller. 1,827,475; Oct. 13.
Keefer, Edward J. (See Keefer, Charles H., assignor.)
Keefer, Walter L., Chambersburg, Pa. Vibrating mechanism. 1,827,586; Oct. 13.
Keeler, Earl A., Philadelphia, assignor to Brown Instrument Company, Philadelphia, Pa. Measuring electric conductivity of fluid. 1,826,886; Oct. 13.
Keen, John S., Philadelphia, Pa. Main crank pin collar for locomotives. 1,827,587; Oct. 13.
Keene, William J., assignor to Chicago Spring Hinge Company, Chicago, Ill. Spring pivot hinge. 1,827,365; Oct. 13.
Kelley, Charles W., Purcellville, Va. Pressure-operated device for leading wires through conduits. 1,827,239; Oct. 13.
Kellogg, Edward W., Schenectady, N. Y., assignor to General Electric Company. Film drive. 1,827,588; Oct. 13.
Kellogg, Herbert C., assignor to Liquid Cooler Corporation, Detroit, Mich. Liquid cooling apparatus. 1,826,791; Oct. 13.
Kelly, David J., jr. (See Austin, Frederick D., assignor.)
Kemme, Joseph, assignor to C. R. Nalle, Philadelphia, Pa. Caster. 1,827,240; Oct. 13.
Kempf, Arthur R., Springfield, Tenn. Tourniquet. 1,827,241; Oct. 13.
Kendall, Allen B., Maywood, assignor to Archibald G. Shaver, Chicago, Ill. Locating a train and instructing it to take a siding. 1,827,020; Oct. 13.
Kendall, Walter H., Chicago, assignor to N. T. Ladenson, Evanston, Ill. Sliding door. 1,827,433; Oct. 13.
Kennedy, Leo W., Detroit, Mich. Clip construction. 1,827,021; Oct. 13.
Kennedy, Leo W., Detroit, Mich. Show case light assembly. 1,827,022; Oct. 13.
Kent, Alfred W., assignor to William Spiers Limited, Leicester, England. Yarn changing means for circular knitting machines. 1,827,660; Oct. 13.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Economizer with overlapping plates. 1,827,201; Oct. 13.
Kertz, James J., Jamaica, assignor of one-half to P. Roeder, Brooklyn, N. Y. Burglar alarm. 1,827,366; Oct. 13.
Keseleff, Fader, Seattle, Wash. Toy gun. 1,827,023; Oct. 13.
Kesler, Selwyn W., et al. (See Doty, L., assignor, and Carroll.)
Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)
Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Clasping device for bracelets. 1,826,887; Oct. 13.
Kiewicz, John, assignor to The Reece Button Hole Machine Company, Boston, Mass. Buttonhole sewing machine. 1,827,696; Oct. 13.
Kilponen, Edward, assignor to Simplex Ignition Corporation, Detroit, Mich. Distributor. 1,826,888; Oct. 13.
Kimmel, Ina B., Jamestown, N. Y. Curling rod hair winder. 1,827,291; Oct. 13.
King & Co., C. G. (See Farmer, Ada E., assignor.)
King, James M. (See Smith, S. H., and King.)
Kingsley, Thomas A., sr. (See Gallipoli, F. P., and Kingsley, sr.)
Kinnon, William C., Denver, Colo. Sintering machine. 1,826,792; Oct. 13.
Kirschbraun, Lester, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass. Waterproof paper and making same. 1,827,700; Oct. 13.
Kirschbraun, Lester, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass. Waterproof felted sheet. 1,827,701; Oct. 13.
Kisby, Charles O., Morganville, assignor of one-third to J. H. Griffin, Clay Center, Kans. Baling press. 1,827,024; Oct. 13.
Kiss, Béla, New York, N. Y. Stabilizing device for aircraft. 1,826,938; Oct. 13.
Klein, Walter F., assignor to Snap-on Wrench Company, Milwaukee, Wis. Ratchet wrench. 1,827,202; Oct. 13.
Kleiner, William C. (See Bluhm, Frank J. C., assignor.)
Kleinschmit, Oscar, assignor to Gebruder Brehmer Maschinen-fabrik, Leipzig-Plagnitz, Germany. Paper folding machine. 1,827,589; Oct. 13.
Kline, Elmer V., University City, assignor to Victor Pharmacal Company, Inc., St. Louis, Mo. Bottle or similar container. Des. 85,336; Oct. 13.
Kline, Halsey W., Schenectady, N. Y., assignor to General Electric Company. Course finding system for aircraft. 1,827,590; Oct. 13.
Klinger, Ira C., Elkhart, Ind. Self clearing rake. 1,826,793; Oct. 13.
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,827,318; Oct. 13.
Knoedler, Theodore A. (See Stump, I. E., and Knoedler.)
Knoud, Martha J., Flushing, N. Y. Riding bridle. 1,827,367; Oct. 13.
Koch, Henry C., Chicago, Ill. Cutter head. 1,826,889; Oct. 13.
Koehring Company. (See Koehring, Philip A., assignor.)
Koehring, Philip A., assignor to Koehring Company, Milwaukee, Wis. Boom construction for paving machines. 1,827,527; Oct. 13.
Kohirogawa, Haruichi, New York, N. Y. Mechanical display device. 1,826,939; Oct. 13.
Kohlmeyer, Lawrence D., Indianapolis, Ind. Film flame stop. 1,827,010; Oct. 13.

Kohlmeyer, Lawrence D., Indianapolis, Ind. Power transmission and framing mechanism for motion picture machines. 1,827,011; Oct. 13.
Kohn, Jacob. (See Kaplan, P., and Kohn.)
Kohori, George U., Tacoma, Wash. Tea roaster. Des. 85,337; Oct. 13.
Kolar, Mildred A., Portland, Oreg. Doll. 1,827,476; Oct. 13.
Komenak, Albert J., assignor to The Excelsior Hardware Co., Stamford, Conn. Hasp for trunk locks. 1,827,319; Oct. 13.
Kooyoomjian, Karekin H., Providence, R. I. A combined finger and ring gauge. 1,827,702; Oct. 13.
Koppers Company, The. (See Gollmar, Herbert A., assignor.)
Korvin-Kroukovsky, Boris V., Beechhurst, assignor to Edo Aircraft Corporation, College, Point, N. Y. Landing-gear. 1,827,242; Oct. 13.
Kotrausek, Josef, Vienna, Austria. Reposing mat with foldable sun-blind. 1,827,477; Oct. 13.
Kouyoumjian, Haroutiun K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,826,890; Oct. 13.
Kowarick, Frederico A., Sao Paolo, Brazil. Lubricating the piston of engines. 1,827,661; Oct. 13.
Krag, Franz K. (See Nelson, John V., assignor.)
Krasne, Isidore, Tulsa, Okla. Needle plate worktable. 1,826,940; Oct. 13.
Krebs Pigment and Color Corporation. (See Specht, Norbert, assignor.)
Kress, Claude W., New York, N. Y. Gun stock. Des. 85,338; Oct. 13.
Krogan, Abner H., Stanley, Wis. Cutter. 1,826,891; Oct. 13.
Krogh, Anker E., assignor to The Brown Instrument Company, Philadelphia, Pa. Control apparatus. 1,827,528; Oct. 13.
Krueger, Henry C. (See McPhee, W. F., and Krueger.)
Kubler, Frederick J., New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass. Vehicle body. 1,827,394; Oct. 13.
Kubler, Frederick J., New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass. Vehicle body construction. 1,827,395; Oct. 13.
Kubler, Johannes, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electrical transformer. 1,826,794; Oct. 13.
Kuehner, Wilhelm, Providence, R. I. Strap tightener. 1,827,243; Oct. 13.
Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Caster mounting means. 1,827,320; Oct. 13.
Ladenson, Nathan T. (See Kendall, Walter H., assignor.)
Lamb, Frank C., Los Angeles, Calif. Motor vehicle brake. 1,827,720; Oct. 13.
La Mont Corporation. (See La Mont, Walter D., assignor.)
La Mont, Walter D., New Rochelle, N. Y., assignor to La Mont Corporation. Preventing leakage in valves. 1,826,941; Oct. 13.
La Mont, Walter D., Larchmont, N. Y., assignor to La Mont Corporation. Generation of steam and other vapors. 1,827,244; Oct. 13.
Lamson Company, The. (See Shannehan, Arthur W., assignor.)
Landry, Arthur J., East Boston, Mass. Float for supporting fire hose nozzles. 1,826,892; Oct. 13.
Lang, Herbert, et al. (See Schmid, Anton, assignor.)
Langley, Ralph H., and J. K. Drexelius, assignors to The Crosley Radio Corporation, Cincinnati, Ohio. Controlling and indicating device for radio sets. 1,827,089; Oct. 13.
Langvand, Ivar L., Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler and superheater. 1,827,529; Oct. 13.
Lanz, Heinrich, Aktiengesellschaft. (See Huber, Fritz, assignor.)
Larmer, Claude D., and B. E. Dettman, Chicago, Ill. Sectional automobile radiator. 1,827,025; Oct. 13.
Larsen, Neil P., assignor to The American Coach & Body Company, Cleveland, Ohio. Ladder support. 1,826,893; Oct. 13.
Larson, Homer W., Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Indenturing apparatus. 1,826,795; Oct. 13.
L'Art Manufacturing Company. (See Dodson, Carroll E., assignor.)
Laube, Louis W., East Cleveland Ohio, assignor, by mesne assignments, to Flexlume Corporation, Tonawanda, N. Y. Electrode. 1,827,292; Oct. 13.
Lawrence, Charles M., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,827,293; Oct. 13.
Lawrence Products Company, The. (See Davis, Frank P. C., assignor.)
Lawrence, Winthrop S., Brooklyn, assignor to Kaumagraph Company, New York, N. Y. Dyeing transfer and transfer ink. 1,827,591; Oct. 13.
Lawson, Oscar L., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sole grooving machine. 1,826,796; Oct. 13.
Layng, Thomas E. (See Parr, S. W., and Layng.)
Leach, Henry G., Red Bank, N. J., and E. H. Stolz, New Rochelle, N. Y. Audiphone unit. 1,826,797; Oct. 13.
Leavenworth, William H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for manufacturing floor mats for motor vehicles. 1,827,709; Oct. 13.
Le Daum, Henry L., and L. C. Sturgis, Springfield, assignors, by mesne assignments, to The Buckeye Incubator Manufacturing Company, Beachwood, Ohio. Oil burner. 1,827,294; Oct. 13.
Lee, Frederick W., Owings Mills, and M. W. Pullen, Towson, Md. Alternating current circuit controlling mechanism. 1,826,894; Oct. 13.
Lee, Ralph L., assignor to Delco-Light Company, Dayton, Ohio. Domestic appliance. 1,826,798; Oct. 13.
Lee Rubber & Tire Corporation. (See Weamer, Paul M., assignor.)
Leeds & Northrup Company. (See Bristol, Edward S., assignor.)
Le Grand, Joseph M., assignor to Carrier Engineering Corporation, Newark, N. J. Method and apparatus for producing artificial climates. 1,827,530; Oct. 13.
Lehuta, Benedikt J., Briarcliff Manor, N. Y. Animal trap. 1,826,799; Oct. 13.
Leonard, Arthur G., jr., Wilmington, Ill. Making roofing, saturated felts, and the like. 1,827,026; Oct. 13.
Leveques, Bernard T., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lockstitch sewing machine. 1,827,321; Oct. 13.
Lewis, Harry B., assignor to Boorum & Pease Company, Brooklyn, N. Y. Loose leaf ring book. 1,827,592; Oct. 13.
Lewis-Shepard Company. (See Hennessy, Daniel E., assignor.)
Ley, Emil., Muttenz, near Basel, Switzerland. Grinding machine. 1,827,688; Oct. 13.
Leyst-Küchenmeister, Carl, Berlin-Schlachtensee, Germany. Treating fibrous materials. 1,827,710; Oct. 13.
Lichtman, Louis, assignor to Chromeplate, Inc., New York, N. Y. Hanger for articles to be plated. 1,827,478; Oct. 13.
Lienhardt, Winfield S., Stapleton, N. Y. Making stannic chloride. 1,826,800; Oct. 13.
Lierman, Otto J., assignor of one-half to C. J. Schlag, San Francisco, Calif. Sterilizer for barbers' tools. 1,827,479; Oct. 13.
Lincoln Electric Company, The. (See Lincoln, J. F., and Peck, assignors.)
Lincoln, James F., East Cleveland, and C. C. Peck, assignors to The Lincoln Electric Company, Cleveland, Ohio. Arc welding. 1,827,245; Oct. 13.
Lindermann, Willy, Hamburg, Germany. Device for breakage proof packing of glass and other very fragile articles. 1,827,322; Oct. 13.
Lindsey, Parren D. (See Harrison, C. D., and Lindsey.)
Line Material Company. (See Beauregard, William, assignor.)
Line Material Company. (See Mack, Edward A., assignor.)
Linoleum Manufacturing Company. (See Godfrey, Alfred A., assignor.)
Liquid Carbonic Corporation, The. (See De Markus, Louis, assignor.)
Liquid Cooler Corporation. (See Kellogg, Herbert C., assignor.)
Little, John S., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Cellulose-containing articles and producing such articles. 1,827,203; Oct. 13.
Littleford, John S. jr., Fort Thomas, Ky. Road marker. 1,826,801; Oct. 13.
Livesay, Robert C. (See Coultas, W. J., and Livesay.)
Locke, Sanford J., Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Garment press. 1,827,154; Oct. 13.
Locke, Sanford J., and F. R. Webster, Syracuse, assignors to United States Hoffman Machinery Corporation, New York, N. Y. Press. 1,827,153; Oct. 13.
Locreille, Claude, Fanquez, Belgium. Apparatus for rolling glass. 1,827,155; Oct. 13.
Loesges, Carl. (See Brown, G. R., and Loesges.)
Lomax, Clarence E., Oak Park, assignor to Automatic Electric Inc., Chicago, Ill. Voltage control equipment. 1,827,090; Oct. 13.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 85,339; Oct. 13.
Longpré, Arthur, St. Joseph, Quebec, Canada. Demountable wheel. 1,827,531; Oct. 13.
Lorenzen, Christian, Berlin-Treptow, Germany, assignor to Bendix Aviation Corporation, Chicago, Ill. Gas turbine. 1,827,246; Oct. 13.
Louis, Terrence G., assignor to Wico Electric Company, West Springfield, Mass. Magneto. 1,827,323; Oct. 13.
Lovenston, Hans J., Detroit, Mich. Sine bar fixture. 1,826,802; Oct. 13.
Lubell, Abraham P., New York, N. Y. Detachable tape adjuster for pajamas. 1,826,803; Oct. 13.
Lubri-Graph Corporation. (See James, Thomas W., assignor.)
Luckett, William S., assignor to The American Tobacco Company, New York, N. Y. Telescopically collapsible box. 1,827,396; Oct. 13.
Ludlum Steel Company. (See Armstrong, Percy A. E., assignor.)
Luftschiffbau Zeppelin G. m. b. H. (See Strobl, Hans, assignor.)

Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung. (See Sturm, Fritz, assignor.)
Lundsten, Olof. (See Johnson, E. L., and Lundsten.)
Lupton, Elmer H., Baltimore, Md. Folding box. 1,827,593; Oct. 13.
Lüttringhaus, Arthur, and H. Wolff, Mannheim, and H. Neresheimer, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the benzanthrone series. 1,827,295; Oct. 13.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Looper operating mechanism for sewing machines. 1,827,594; Oct. 13.
Lynn, John P., assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Clip for pocket instruments. 1,827,324; Oct. 13.
Maas, Elov F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Pneumatic tire inflation system. 1,827,662; Oct. 13.
MacDonald, Donald A., St. Peters, Nova Scotia, Canada. Snowplow. 1,826,804; Oct. 13.
MacGuire, Andrew C., assignor to Independent Lock Company, Fitchburg, Mass. Doorcheck. 1,827,595; Oct. 13.
Mack, Edward A., Huntington, W. Va., assignor to Line Material Company, South Milwaukee, Wis. Suspension clamp. 1,827,325; Oct. 13.
MacKenzie, Thomas W., assignor, by mesne assignments, to The Mechanical Engineering Corporation, New London, Conn. Bulletin printing machine. 1,826,805; Oct. 13.
Mackres, Vasilios S., Brockton, Mass. Apparatus for cleaning glassware. 1,826,942; Oct. 13.
Maeder, Marie, Glendale, Calif. Sliding desk leaf index. 1,827,027; Oct. 13.
Magnet-Werk G. m. b. H., Eisenach Specialfabrik für Elektromagnet-Apparate. (See Bing, Julius, assignor.)
Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Strip guide for sewing machines. 1,827,596; Oct. 13.
Maker, John A., Duluth, Minn. Teething and exercising device. 1,826,943; Oct. 13.
Makinster, Glenn E., assignor, by mesne assignments, to Jordan & Taylor, Inc., Los Angeles, Calif. Valve construction for gas pumps. 1,827,091; Oct. 13.
Malcom, Robert, Chicago, Ill. Respirator. 1,827,028; Oct. 13.
Manuel, Elisio R. (See Borgo, C., and Manuel, E. R.)
Marcalus, Nicholas, Lynbrook, N. Y., assignor to Automatic Paper Machinery Co. Inc. Wax paper package. 1,827,029; Oct. 13.
Marden, John W., and H. C. Rentschler, East Orange, N. J., assignor to Westinghouse Lamp Company. Preparation of an oxide-free halide of a rare refractory metal. 1,826,806; Oct. 13.
Marlow, Chiel W., and H. G. Marlow, Atlanta, Ga. Bell housing support. 1,827,532; Oct. 13.
Marlow, Henry G. (See Marlow, Chiel W., and H. G.)
Marqua, William A., assignor to The Frank F. Taylor Company, Incorporated, Cincinnati, Ohio. Velocipede. Re18,225; Oct. 13.
Marquette Tool & Mfg. Company. (See Rode, Fredrich J., assignor.)
Martin, Alfred O., Ringwood, England. Dovetail-marker. 1,827,156; Oct. 13.
Martin, Frank J., Turners Falls, Mass. Spraying equipment. 1,827,157; Oct. 13.
Martin, James R., assignor to H. C. Frierson, Winter Haven, Fla. Liquefied gas cooler for refrigerating apparatus. 1,827,480; Oct. 13.
Martin, Mark H., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Car hopper. 1,827,030; Oct. 13.
Martin, Thomas R., Tyseley, Birmingham, England. Electric switch contact. 1,827,533; Oct. 13.
Martocello, Joseph A., Philadelphia, Pa. Spray dehydrator. 1,827,092; Oct. 13.
Maschinenfabrik Augsburg-Nurnberg A. G. (See Geiger, Josef, assignor.)
Mason, Sumner R., Wilmette, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Protecting metal surfaces. 1,827,204; Oct. 13.
Mason, Sumner R., Wilmette, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Protecting metal surfaces. 1,827,247; Oct. 13.
Massey, Juan C. M., Adrogue, Argentina. Motor vehicle. 1,827,397; Oct. 13.
Mastrillo, Joseph, Trenton, N. J. Clean out closure. 1,827,663; Oct. 13.
Mathews Conveyer Company. (See Sekulski, Lee, assignor.)
Matthews, H. A., Manufacturing Company, The. (See Naylor, Henry R., assignor.)
Matthews, Marian A., Newburgh, N. Y. Sharpening device. 1,827,664; Oct. 13.
Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Lens edging machine. 1,827,368; Oct. 13.
McBride, Lewis M., Fort Sill, Okla. Mechanical loader for muzzle loading mortars. 1,827,031; Oct. 13.
McCabe, Joseph J., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Measuring instrument. 1,827,093; Oct. 13.
McCandless, Harry E., Rochester, N. Y. Combination crib, bathtub and dressing table. 1,827,687; Oct. 13.
McCann, Charles S., assignor of one-half to G. B. McCann, Montgomery County, near Dayton, Ohio. Radial internal combustion engine. 1,827,094; Oct. 13.
McCann, George S. (See McCann, Charles S., assignor.)
McClurkin, John C., and A. Stallard, Larkin, Kans. Geared rod. 1,827,248; Oct. 13.
McCormick, Thomas J., Detroit, Mich. Tire cover. 1,827,095; Oct. 15.
McCoy, Jay W., assignor to Crouse-Hinds Company, Syracuse, N. Y. Electric conduit coupling. 1,827,249; Oct. 13.
McCurdy, William A., Duluth, Minn. Ferrule for blasting cartridges. 1,827,032; Oct. 13.
McDanel, Abram J., New Brighton, Pa. Gauge. 1,826,807; Oct. 13.
McDonald, Harry, Dunkirk, Ind., assignor to Jewett and Sherman Company, Milwaukee, Wis. Bottle. Des. 85,340; Oct. 13.
McDonough, John, and L. Normann, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for removing connecting elements. 1,826,808; Oct. 13.
McEldowney, Wilber E., Denver, Colo. Swing-rail switch. 1,827,158; Oct. 13.
McFadden, Fay, Rutland, Vt. Katopter. 1,827,250; Oct. 13.
McGavin, James, Springfield, Ill. Amusement and exercising device. 1,826,944; Oct. 13.
McGrew, John A., Albany, N. Y., assignor to Bethlehem Steel Company. Locomotive booster frame. 1,827,665; Oct. 13.
McHale, Michael J., Scranton, Pa. Flyer construction. 1,827,161; Oct. 13.
McIntire, Christian H., Chicago, Ill. Method and apparatus for hair waving. 1,827,434; Oct. 13.
McKay, Hobart J., P. J. Carlsen, A. O. Fuhrman, St. Paul, and E. Unzel, Minneapolis, assignors to American Container Corporation, St. Paul, Minn. Molding apparatus. 1,826,945; Oct. 13.
McKenzie, Angus D., Mansfield, assignor to The American Safety Navigation Company, Canton, Ohio. Load-carrying and launching device. 1,827,534; Oct. 13.
McKenzie, Angus D., Mansfield, assignor to The American Safety Navigation Company, Canton, Ohio. Boat launching device. 1,827,535; Oct. 13.
McKnight, Richard, Chicago, Ill. Filing apparatus. 1,827,296; Oct. 13.
McPhee, William F., and H. C. Krueger, Chicago, Ill., assignors, by mesne assignments, to T. H. Hulbert. Heat intensifier for boilers. 1,827,033; Oct. 13.
McQuay Radiator Corporation. (See Haynsworth, Julius D., assignor.)
Mead Research Engineering Company, The. (See Zimmerman, Walter J., assignor.)
Meadows, W. R., Incorporated. (See Brown, Arthur E., assignor.)
Mechanical Engineering Corporation, The. (See MacKenzie, Thomas W., assignor.)
Mellon, James A., assignor to American Engineering Company, Philadelphia, Pa. Hand operated windlass. 1,827,597; Oct. 13.
Mendenhall, Charles H., Homer, La. Cant holster. 1,827,034; Oct. 13.
Merriman, Arthur G., Philadelphia, Pa. Moving picture cabinet. 1,827,598; Oct. 13.
Metal Office Furniture Company. (See Wege, Peter M., assignor.)
Metz, Gustave P., Bayside, assignor to H. A. Metz Laboratories, Inc., New York, N. Y. Receptacle for packing ampules. 1,826,809; Oct. 13.
Metz, H. A., Laboratories, Inc. (See Metz, Gustave P., assignor.)
Meyer, Ferd H., Oakland, assignor of one-half to G. H. Roberts, and one-half to J. Schor, San Francisco, Calif. Slicing machine. 1,827,251; Oct. 13.
Meyer, John F., Pasadena, Calif. Display plate. Des. 85,341; Oct. 13.
Michael, Loren P., Elmhurst, Ill., assignor of one-half to The Baldwin Locomotive Works, Philadelphia, Pa. Locomotive construction. 1,827,666; Oct. 13.
Michigan Steel Corporation. (See Pitts, Frederick W., assignor.)
Middlekauff, Robert P., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Composite relay stud. 1,827,205; Oct. 13.
Miller, John A., Homewood, Ill. Brake structure. 1,827,162; Oct. 13.
Milligan, Henry C., Canton, Ohio. Flexible vitreous coating for metals. 1,827,536; Oct. 13.
Milwaukee Valve Company. (See Fraser, John, jr., assignor.)
Miner, Roy H., assignor of one-half to D. L. Smith, Lansing, Mich. Air wrench. 1,827,159; Oct. 13.
Minneapolis-Honeywell Regulator Company. (See Cramblet, Paul K., assignor.)
Minneapolis-Honeywell Regulator Company. (See Taylor, Daniel G., assignor.)
Minor, Burt S., San Pedro, Calif. Crown block. 1,826,946; Oct. 13.
Mix, Edwin S., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Fastener. 1,827,398; Oct. 13.
Mollard, Thomas A., Oakland, assignor to Pacific Fire Extinguisher Company, San Francisco, Calif. Thermopile. 1,827,252; Oct. 13.

Mompon, Joaquin G., Barcelona, Spain. Cut out figures constituted by strips or rods. 1,827,599; Oct. 13.
Monjar, Percival C. (See White, W. E., and Monjar.)
Monogram Lens Corporation. (See Arbuckle, Samuel F., assignor.)
Moore, Charles R., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Joining wires by means of sleeves. 1,827,297; Oct. 13.
Moore, Raymond H., Chicago, Ill. Material conveying system. 1827,326; Oct. 13.
Moore, Robert E. (See Nelson, Henry F., assignor.)
Moore, Robert S., Silver Spring, Md. Airplane. 1,827,253; Oct. 13.
Morecraft, Harry. (See Eppensteiner, W. M., and Morecraft.)
Morgan, Benjamin H., and G. F. Jones, Westminster, London, England. Air-cooled internal combustion engine. 1,827,600; Oct. 13.
Morishita, Buichi, Los Angeles, Calif. Nursing bottle holder. 1,826,810; Oct. 13.
Morrell, Jacque C., assignor to Universal Oil Products Company, Chicago, Ill. Desulphurization and purification of hydrocarbon oil. 1,827,537; Oct. 13.
Morrell, Jacque C., assignor to Universal Oil Products Company, Chicago, Ill. Dehydration of emulsified oil. 1,827,714; Oct. 13.
Morse, Arthur H., assignor to The Baldwin Company, Cincinnati, Ohio. Folding key bed for pianos. 1,827,096; Oct. 13.
Mosher, Harvey G., Detroit, Mich. Automatic signal light. 1,827,481; Oct. 13.
Motion Picture Improvements, Inc. (See Chouinard, Oscar, assignor.)
Mottweiler, Oliver F., and D. C. Drill, assignors to General Insulating and Manufacturing Company, Alexandria, Ind. Insulating jacket. 1,827,035; Oct. 13.
Mowrey, Ralph, Camas, Wash. Paper oiler, waxer, and moistener. 1,827,667; Oct. 13.
Muench, Eduard, Ludwigshafen-on-the-Rhine, Germany, and T. Voltz, Basle, Switzerland, assignors to General Aniline Works, Inc., New York, N. Y. Reduction of organic carbonyl compounds. 1,826,811; Oct. 13.
Muffly, Glenn, Richmond, assignor to Copeland Products, Inc., Detroit, Mich. Refrigerating apparatus. 1,827,097; Oct. 13.
Müller, Wolf J., and H. Hiller, Vienna, Austria. Preparation of alumina. 1,826,895; Oct. 13.
Murch, Wilfred M., Hamburg, assignor to National Aniline & Chemical Co. Inc., New York, N. Y. Production of flavanthrone. 1,827,254; Oct. 13.
Musselman, Alvin J., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Pneumatic tire. 1,827,668; Oct. 13.
Myrick, Lockwood, Jr., Honolulu, Hawaii. Internal combustion engines. 1,827,482; Oct. 13.
Naamlooze Venootschap Nederlandsche Kabelfabriek. (See Proos, Cornelis F., assignor.)
Nagel, Friedrich L. (See Nagel, Wilhelm R. and F. L.)
Nagel, W. R., & Company. (See Nagel, Wilhelm R. and F. L., assignors.)
Nagel, Wilhelm R. and F. L., assignors to W. R. Nagel & Company, Paducah, Ky. Curing tobacco. 1,827,707; Oct. 13.
Nalle Charles R. (See Kemme, Joseph, assignor.)
Nanterme, Joseph, Lyon, France. Machine for folding or plaiting fabrics. 1,827,160; Oct. 13.
Nasmith, John W., Heaton Mersey, Manchester, England. Combing machine for textile fibres. 1,827,689. Oct. 13.
Nastri, Matthew, Akron, Ohio. Resilient automobile fender. 1,827,435; Oct. 13.
Nastukoff, Alexander M., Moscow, Union of Socialist Soviet Republics. Plastic composition. 1,827,558; Oct. 13.
National Aniline & Chemical Co. (See Murch, Wilfred M., assignor.)
National Automotive Fibres, Inc. (See Ross, F. N., and Ratley, assignors.)
National Carbon Company. (See Birdsall, Wilfred T., assignor.)
National Cash Register Company, The. (See Goldberg, Maximilian M., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Equipment Company. (See Bausman, Alonzo L., assignor.)
National Lock Co. (See North, Edwin W., assignor.)
National Pressure Cooker Company. (See Nelson, Carl, assignor.)
Naylor, Henry R., Derby, assignor to The H. A. Matthews Manufacturing Company, Seymour, Conn. Toggle bolt for trunks and other luggage, etc. 1,827,369; Oct. 13.
Nehsmann, Fred, New York, N. Y. Clothes drier. 1,827,601; Oct. 13.
Nelson, Andrew F., Seattle, Wash. Furnace. 1,827,370; Oct. 13.
Nelson, Carl, assignor to National Pressure Cooker Company, Eau Claire, Wis. Pressure cooker. 1,826,947; Oct. 13.
Nelson, Henry F., assignor of one-fourth to R. E. Moore, Muncie, Ind. Carburetor. 1,827,255; Oct. 13.
Nelson, Herman, Corporation, The. (See Otis, Gerald E., assignor.)
Nelson, John V., Elmhurst, assignor to F. K. Krag, Chicago, Ill. Corn popper. 1,826,948; Oct. 13.
Nelson, Martin L., Park Ridge, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Supervisory system. 1,827,098; Oct. 13.
Nelson, Otto S., and W. M. Willy, Mitchell, S. Dak., assignors to Handy-Haul Auto Trunk Company, Minneapolis, Minn. Extensible auto trunk. 1,826,949; Oct. 13.
Neresheimer, Heinrich. (See Lüttringhaus, A, Wolff, and Neresheimer.)
New Britain Machine Company, The. (See Costello, William F., assignor.)
New Haven Clock Co., The. (See Whitehead, R. H., and Porter, assignors.)
New Iden Spreader Company, The. (See Synck, Henry, assignor.)
Newall, Sidney, Brantwood, Moore, assignor to Joseph Crosfield & Sons Limited, Warrington, England. Measuring apparatus. 1,827,602; Oct. 13.
Newcomb, Philip P., assignor to The Pratt & Whitney Aircraft Company, Hartford, Conn. Connecting rod for radial engine. 1,827,436; Oct. 13.
Newman, John A., et al. (See Jacquesson, André, assignor.)
Niagara Blower Company. (See Bulkeley, Claude A., assignor.)
Niterday Signal Co. (See Bergen, W. V., and Shute, assignors.)
Noble, Elmer C., assignor of one-half to R. V. Noble, Tulsa, Okla. Belt clamp. 1,827,327; Oct. 13.
Noble, Reade V. (See Noble, Elmer C., assignor.)
Nordell, Eskel, and W. J. Hughes, Fort Wayne, Ind., assignors, by mesne assignments, to The Permutit Company, New York, N. Y. Feeding a regenerating brine solution to the top surface of a zeolite bed in a zeolite water softener of the filter type. 1,827,603; Oct. 13.
Nordlander, Birger W., Schenectady, N. Y., assignor to General Electric Company. Vulcanization of rubber. 1,827,604; Oct. 13.
Normann, Lars. (See McDonough, J., and Normann.)
North, Edwin W., assignor to National Lock Co., Rockford, Ill. Escutcheon plate. Des. 85,342; Oct. 13.
Novick, Abraham, Flushing, N. Y. Making envelopes and machine therefor. 1,827,539; Oct. 13.
Numberall Stamp and Tool Co. (See Powers, Timothy B., assignor.)
Nyquist, Harry, Milburn, N. J., assignor to American Telephone and Telegraph Company. Electrooptical transmissions. 1,826,812; Oct. 13.
Oberschulte, Hermann, Essen-on-the-Ruhr, Germany. Device for use in forming undercut sections of rolled metal. 1,826,813; Oct. 13.
Obidine, Wladimire J., Los Angeles, Calif. Safety device for emergency brakes. 1,827,256; Oct. 13.
O'Connell, Thomas, St. Paul, Minn. Radiator hanger. 1,827,540; Oct. 13.
O'Connor, Arthur F., assignor to Union Railway Equipment Company, Chicago, Ill. Refrigerating car. 1,826,814; Oct. 13.
O'Connor, Arthur F., assignor to Union Railway Equipment Company, Chicago, Ill. Hand brake wheel. 1,826,815; Oct. 13.
Ogonowski, Matthew S., Utica, N. Y. Centrifugal clothes drier for washing machines. 1,826,816; Oct. 13.
Ogsbury, James S., Dayton, Ohio, assignor to International Time Recording Company of New York, Endicott, N. Y. Printing attachment for pay roll recorders. 1,827,036; Oct. 13.
O'Hearn, George E., assignor to O'Hearn Manufacturing Company, Gardner, Mass. Woven fabric. Des. 85,343; Oct. 13.
O'Hearn Manufacturing Company. (See O'Hearn, George E., assignor.)
Ohio Cultivator Company, The. (See Englund, Ernst E., assignor.)
Ohio State Stove Corporation, The. (See Clark, Joseph C., assignor.)
Ohio Steel Foundry Company, The. (See Duffee, Paul Y., assignor.)
Olley, Edwin A., and D. B. Winter, assignors to Crouse-Hinds Company, Syracuse, N. Y. Fastener for boxes. 1,826,817; Oct. 13.
Olson, Patrick, et al. (See Bovee, Hiram N., assignor.)
Opperman, Otto F., Seattle, Wash. Child's power shovel. 1,827,541; Oct. 13.
Otis, Gerald E., assignor to The Herman Nelson Corporation, Moline, Ill. Effective temperature control apparatus. 1,827,099; Oct. 13.
Otto, Carl, Hellerup, Denmark. Vertical chamber oven. 1,827,328; Oct. 13.
Otto, Carl, Essen-Ruhr, Germany. Coke oven door. 1,827,329; Oct. 13.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Film support for photographic apparatus. 1,827,206; Oct. 13.
Owens-Illinois Glass Company. (See Benoit, Joseph P., assignor.)
Pacific Fire Extinguisher Company. (See Mollard, Thomas A., assignor.)
Packard Motor Car Company. (See Summers, Caleb E., assignor.)
Paepcke, Walter P. (See Doane, Duane H., assignor.)
Pagel, John F., jr. (See Smith, C. E., and Pagel.)

Paige, Arthur E., Philadelphia, assignor to John Wood Manufacturing Company, Conshohocken, Pa. Heat exchange apparatus. 1,826,950; Oct. 13.
Palmer, Charles G., Irvington, N. J. Ice cream scoop. 1,826,818; Oct. 13.
Pancake, Herman H., Huntington, W. Va., assignor to American Car and Foundry Company, New York, N. Y. Drop bottom mine car. 1,827,399; Oct. 13.
Pan-Ross Laboratories, Inc. (See Parsons, J., and Stover, assignors.)
Pantosote Leather Company. (See Harvey, R., and Day, assignors.)
Paper Service Company, The. (See Rowe, William W., assignor.)
Pardee, George A., Omaha, Nebr. Air valve for nursing bottles and nipples. 1,827,100; Oct. 13.
Parke Davis & Company. (See Goewey, Harold W., assignor.)
Parker, Lloyd A., Long Beach, assignor to J. Grant, Los Angeles, Calif. Circulating head. 1,827,257; Oct. 13.
Parker, William, jr., Ben Avon, Pa. Shirt. 1,827,605; Oct. 13.
Parr, Samuel W., and T. E. Layng, assignors to Urbana Coke Corporation, Urbana, Ill. Apparatus for coking coal. 1,827,483; Oct. 13.
Parr, Samuel W., and T. E. Layng, assignors to Urbana Coke Corporation, Urbana, Ill. Apparatus for coking coal. 1,827,484; Oct. 13.
Parry, William H., sr., assignor to Simmons Company, Kenosha, Wis. Side rail lock for bedsteads and the like. 1,827,330; Oct. 13.
Parsons, John, Newton Center, Mass., and J. H. Stover, Nutley, N. J., assignors to Pan-Ross Laboratories, Inc., New York, N. Y. Igniting composition. 1,826,819; Oct. 13.
Pascoe, Alfred H., Los Angeles, Calif. Making reenforced drill pipe casings. 1,827,437; Oct. 13.
Patchen, Arthur D., Bloomfield, N. J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Pronged plate device for attaching seat covers. 1,827,606; Oct. 13.
Patent Novelty Company. (See Reimer, George H., assignor.)
Patterson, John H. L., Toronto, Ontario, Canada. Rack for dishwashers. 1,826,951; Oct. 13.
Patterson, William L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Projector for strip films. 1,827,101; Oct. 13.
Payzant, Henry H., Everett, assignor to Weyerhaeuser Timber Company, Tacoma, Wash. Pneumatic clamp. 1,827,258; Oct. 13.
Pearce, Walter H., assignor to The Brown Instrument Company, Philadelphia, Pa. Recording chart support. 1,826,896; Oct. 13.
Peck, Cecil C. (See Lincoln, J. F., and Peck.)
Pedersen, John D., Springfield, Mass. Firearm. 1,827,037; Oct. 13.
Peirce, John R., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y. Card feeding mechanism. 1,827,259; Oct. 13.
Pelzer, Harry L. (See Herthel, E. C., and Pelzer.)
Pender, Culbert J., Lautoka, Fiji. Sugar roll mill. 1,827,669; Oct. 13.
Penn Electric Switch Co. (See Henning, Malcolm E., assignor.)
Penn Electric Switch Co. (See Penn, Ralph, assignor.)
Penn, Ralph, assignor to Penn Electric Switch Co., Des Moines, Iowa. Pressure actuated switch. 1,827,102; Oct. 13.
Penn, Ralph, assignor to Penn Electric Switch Co., Des Moines, Iowa. Differential widening means. 1,827,103; Oct. 13.
Penney, J. C., Company. (See Rader, Robert J., assignor.)
Pensel, George R. and S. H. Friestedt, assignors to Ritter Chemical Company, Amsterdam, N. Y. Lustering leather. 1,827,163; Oct. 13.
Perkins, Julian L., West Springfield, and H. D. Croft, Springfield, assignors to Perkins Machine and Gear Company, West Springfield, Mass. Washing machine carriage. 1,826,820; Oct. 13.
Perkins, Louis E., assignor to Perkins Marine Lamp Corporation, Brooklyn, N. Y. Marine lamp. 1,827,207; Oct. 13.
Perkins Machine and Gear Company. (See Perkins, J. L., and Croft, assignors.)
Perkins Marine Lamp Corporation. (See Perkins, Louis E., assignor.)
Permutit Company, The. (See Nordell, E., and Hughes, assignors.)
Perrot, Henri, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake operating mechanism. 1,827,104; Oct. 13.
Perrot, Henri, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake mechanism. 1,827,105; Oct. 13.
Perun, Edward P., Toronto, Ohio. Cheese cutter. 1,827,164; Oct. 13.
Petersen Oven Company, The. (See Hoppe, F. A., and Cyrns, assignors.)
Peterson, Carl E., Upper Montclair, assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Slide. 1,827,331; Oct. 13.
Petri, Dixie W. (See Petri, Thomas C. and D. W.)
Petri, Thomas C. and D. W., Nashville, Tenn. Ironing board. 1,827,670; Oct. 13.
Pfaff, Johann K., Uetze, Kreis Burgdorf, Hanover, and A. Siewecke, Kreis, Burgdorf, Hanover, assignors to the Firm Deutsche Gasolin Aktiengesellschaft, Berlin, Charlottenburg, Germany. Separation of oil from bleaching clay. 1,827,165; Oct. 13.
Pfaffinger, Frank, Chicago, Ill. Wrist pin cushion. 1,827,607; Oct. 13.
Pharr, Clyde, Nashville, Tenn. Bookholder. 1,827,166; Oct. 13.
Phillips Petroleum Company. (See Frazier, Lucius E., assignor.)
Phillips Petroleum Company. (See Guidinger, Edward F., assignor.)
Photogrammetrie G. m. b. H., the Firm. (See Wulkow, Karl, assignor.)
Photostat Corporation. (See Greene, J. S., and Caps, assignors.)
Pickard, Frank, Havelock, Nebr. Oil salad dressing mixer. 1,827,608; Oct. 13.
Pillliod Company, The. (See Trent, Kline S., assignor.)
Piper, James J., Spokane, Wash. Door latch. 1,827,400; Oct. 13.
Pittman, Henry L., Westfield, N. J., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,827,298; Oct. 13.
Pitts, Frederick W., assignor to Michigan Steel Corporation, Detroit, Mich. Apparatus for normalizing steel sheets. 1,827,038; Oct. 13.
Pittsburgh Equitable Meter Company. (See Weymouth, Harry G., assignor.)
Pittsburgh Plate Glass Company. (See Conn, Roy C., assignor.)
Pittsburgh Plate Glass Company. (See Harrington, Alfred L., assignor.)
Pittsburgh Plate Glass Company. (See Hitner, Harry F., assignor.)
Pocock, Merton A., et al. (See Sager, Lee R., assignor.)
Pollock, Robert T., Boston, Mass., assignor to Universal Oil Products Company, Chicago, Ill. Vapor chamber. 1,827,106; Oct. 13.
Polydoroff, Wladimir J., assignor to Johnson Laboratories, Incorporated, Chicago, Ill. Radio circuits. 1,827,332; Oct. 13.
Porter, Wilson E. (See Whitehead, R. H., and Porter.)
Potter, Earl F., Waukegan, assignor to E. Banning, Chicago, Ill. Acoustic condenser diaphragm. 1,826,952; Oct. 13.
Potter, James C., Pawtucket, R. I. Multiple spindle metal turning machine. 1,827,485; Oct. 13.
Poulsen, Eller, Chicago, Ill.; H. O. Crews, administrator of said Eller Poulsen, deceased. Tent. 1,827,486; Oct. 13.
Powers, Edwin H., assignor to Saginaw Stamping and Tool Company, Saginaw, Mich. Swivel caster. 1,826,821; Oct. 13.
Powers, Timothy B., Brooklyn, assignor to Numberall Stamp and Tool Co., Inc., New York, N. Y. Multiple stamp device. 1,827,260; Oct. 13.
Pratt, Clifton J., Tulsa, Okla., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for hydrocarbon oil conversion. 1,827,107; Oct. 13.
Pratt & Letchworth Company. (See Williams, Keith, assignor.)
Pratt & Whitney Aircraft Company, The. (See Newcomb, Philip P., assignor.)
Pritchard, Carl G., Hiram, and C. W. Harrold, assignors to Harris-Seybold-Potter Company, Cleveland, Ohio. Plate clamp. 1,827,300; Oct. 13.
Pritchard, George A., Atlantic Beach, Fla. Built in visor for motor cars. 1,827,299; Oct. 13.
Pritchard, J. F., & Co. (See Weston, William, assignor.)
Proos, Cornelis F., assignor to Naamlooze Venootschap Nederlandsche Kabelfabriek, Delft, Netherlands. Joining the ends of high tension electric cables and an improved junction box therefor. 1,827,609; Oct. 13.
Prosperity Company, The. (See Titterington, Morris M., assignor.)
Publicker, Inc. (See Haner, Carl, assignor.)
Pullen, Myrick W. (See Lee, F. W., and Pullen.)
Purcell, William F. (See Hiltz, G. S., and Purcell.)
Pyridium Corporation, The. (See Tisza, E. T., and Joos, assignors.)
Quimby, Charles W., assignor to E. F. Houghton and Company, Philadelphia, Pa. Valve seat for gas governors and the like. 1,827,610; Oct. 13.
Raddatz, Albert. (See Schroeder, F., and Raddatz.)
Rader, Robert J., New Rochelle, N. Y., assignor to J. C. Penney Company. Velocipede trailer. 1,827,401; Oct. 13.
Ragan, Ralph, Atlanta, Ga. Fan regulating device. 1,827,039; Oct. 13.
Ransohoff, Nathan, Cincinnati, Ohio. Tumbling mill. 1,826,822; Oct. 13.
Rasch, Royal H. (See Richter, G. A., Schur, and Rasch.)
Ratley, Harold M. (See Ross, F. N., and Ratley.)
Rauhe, William C., Schenectady, N. Y., assignor to General Electric Company. Control system for electric motors. 1,827,671; Oct. 13.
Rauch, John D., Lima, Ohio. Airplane. 1,827,438; Oct. 13.
Rawlings Manufacturing Company. (See Whitley, William P., assignor.)

Reber, James W., London, England. Cooling coke. 1,827,612; Oct. 13.
Rector, Enoch, New York, N. Y., assignor to Waukesha Motor Company, Waukesha, Wis. Internal combustion engine. 1,827,108; Oct. 13.
Reddig, Charles E., Kew Garden, assignor to Graybar Electric Company, New York, N. Y. Floor treating machine. 1,827,402; Oct. 13.
Redington, John C., Geneva, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Valve bag and closing the same. 1,827,040; Oct. 13.
Reece Button Hole Machine Company, The. (See Kiewicz, John, assignor.)
Reedy, Alfred J., assignor to A-B Stove Company, Battle Creek, Mich. Gas stove. Des. 85,344; Oct. 13.
Reedy, Alfred J., assignor to A-B Stove Company, Battle Creek, Mich. Gas stove. Des. 85,345; Oct. 13.
Reeves, Cuthbert E., Buffalo, N. Y. Steering stabilizer. 1,827,487; Oct. 13.
Regan, Paul H., Fitchburg, Mass. Advertising device. 1,827,107; Oct. 13.
Reimer, George H., assignor to Patent Novelty Company, Fulton, Ill. Clothesline reel. 1,827,439; Oct. 13.
Remington Arms Company. (See Aronson, Peter R., assignor.)
Remington Typewriter Company. (See Hart, Frederick A., assignor.)
Rentschler, Harvey C. (See Marden, J. W., and Rentschler.)
Reppe, Walter. (See Ebert, G., Fries, and Reppe.)
Resch, Henry, Bayonne, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,826,823; Oct. 13.
Reserve Holding Company. (See Nelson, Martin L., assignor.)
Reversible Collar Company. (See Snow, William B., assignor.)
Reynolds, Joy S., San Francisco, Calif., assignor, by mesne assignments, of one-half to J. S. Reynolds, Detroit, Mich., and C. A. Balcolm, San Francisco, Calif. Vehicle braking. 1,826,824; Oct. 13.
Reynolds, Joy S., et al. (See Reynolds, Joy S., assignor.)
Rice, John A., Berkeley, Calif., assignor to The Bubblestone Company, Pittsburgh, Pa. Treating foam compounds. 1,826,897; Oct. 13.
Rice, William A., Los Angeles, Calif. Extractor. 1,827,109; Oct. 13.
Rich, Charles A., Providence, R. I., assignor to Brown and Sharpe Manufacturing Company. Screw and similar machine. 1,826,953; Oct. 13.
Richardson, Donald E., assignor to H. G. Fischer & Co. Inc., Chicago, Ill. High frequency wattmeter. 1,827,333; Oct. 13.
Richter, George A., M. O. Schur, and R. H. Rasch, assignors to Brown Company, Berlin, N. H. Preparation of cellulose fiber for conversion into derivatives. 1,826,825; Oct. 13.
Rick, Herbert R., Kent, Ohio. Guard rail construction. 1,827,261; Oct. 13.
Ric-Wil Company, The. (See Gottwald, Christian, assignor.)
Riddell, Arthur M., Los Angeles, Calif. Hand control for electric motors. 1,827,372; Oct. 13.
Riddell, W. A., Company. (See Shaeffer, George D., assignor.)
Ridder, Thomas A., Whitman, Mass. Radiator hanger. 1,827,110; Oct. 13.
Rider, Ernest G., assignor to Stokes and Smith Company, Philadelphia, Pa. Preparing and applying tabbed wrappers. 1,827,334; Oct. 13.
Riebe, Theodore C., assignor to Automatic Electric Inc., Chicago, Ill. Time recording device. 1,827,208; Oct. 13.
Riebe, Theodore C., assignor to Automatic Electric Inc., Chicago, Ill. Reeling device. 1,827,262; Oct. 13.
Rieber, Frank, San Francisco, Calif. Geological explorations. 1,827,371; Oct. 13.
Riker, Samuel M., Chester, N. J. Shoe ornament. Des. 85,346; Oct. 13.
Riker, Samuel M., Chester, N. J. Shoe buckle. Des. 85,347; Oct. 13.
Rittenhouse, Arthur E., Honeoye Falls, N. Y. Electric motor. 1,827,690; Oct. 13.
Ritter Chemical Company. (See Pensel, G. R., and Friestedt, assignors.)
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Wardrobe hatbox. 1,827,542; Oct. 13.
Rivière, Albert S., and C. F. Rubel, assignors to Union Special Machine Company, Chicago, Ill. Flat seam sewing machine. 1,827,613; Oct. 13.
Riviere, Albert S., assignor to Union Special Machine Company, Chicago, Ill. Tufted fabric and making the same. 1,827,614; Oct. 13.
Roach, Burtus U., Bronson, Mich. Fishing line reel. 1,827,488; Oct. 13.
Robbins, Charles W., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Industrial truck. 1,827,209; Oct. 13.
Roberts & Mander Stove Company. (See Antrim, William D., assignor.)
Roberts, Ben H., Cordele, Ga. Shelling machine. 1,827,168; Oct. 13.
Roberts, George H., et al. (See Meyer, Ferd H., assignor.)
Roberts, John A. (See Shaffer, Ora C., assignor.)
Robertson, Harry M., Cleveland, Ohio. Kiln for decorating ceramic ware and other purposes. 1,827,543; Oct. 13.
Robinson, Harry G., Waterbury, Conn., assignor to Industries of America, Inc. Stop mechanism for braiding machine. 1,827,715; Oct. 13.
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter. 1,826,954; Oct. 13.
Rochefort, Luc, New York, N. Y. Collapsible umbrella. 1,827,335; Oct. 13.
Rode, Fredrich J., assignor to Marquette Tool & Mfg. Company, Chicago, Ill. Spring cushion for presses. 1,827,440; Oct. 13.
Rodgers, Willis W. (See Wood, B. D., and Rodgers.)
Rodrigues, George, Gastroville, Calif. Differential mechanism. 1,827,403; Oct. 13.
Roeder, Peter. (See Kertz, James J., assignor.)
Rogers, Charles and C., assignors to Crown Stove Works, Cicero, Ill. Combination heater and range. Des. 85,348; Oct. 13.
Rogers, Clarence. (See Rogers, C. and C.)
Rogers, Jacob B., Altoona, Pa. Adjustment for alignment of road or similar forms. 1,827,672; Oct. 13.
Rohlfing, John M., Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y. Bolster and making same. 1,827,404; Oct. 13.
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Apparatus for attaching covers on pails. 1,827,544; Oct. 13.
Rollodor Manufacturing Company. (See Barbé, Edgar H., assignor.)
Roman, Frank L., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Composition for flameproofing inflammable materials. 1,827,263; Oct. 13.
Rooney, Joseph B., et al. (See Bovee, Hiram N., assignor.)
Rosen, Ernst A., Portland, Oreg. Folding table. 1,827,373; Oct. 13.
Rosenberg, Heyman, New York, N. Y. Fastener. 1,827,615; Oct. 13.
Rosenberg, Samuel, New York, N. Y. Tape suspension for window sash and the like. 1,827,264; Oct. 13.
Rosenkranz, Hugo E., Oshkosh, Wis. Casket lowering apparatus. 1,826,898; Oct. 13.
Ross, Frederick N., Grosse Pointe Park, and H. M. Ratley, Highland Park, Mich., assignors to National Automotive Fibres, Inc., Oakland, Calif. Sewing mechanism. 1,827,694; Oct. 13.
Ross, James W. (See Algeo, A. M., Haub, and Ross.)
Ross, Oscar A. (See Baker, H. C., and Ross.)
Rotary Pressure Cooler Company. (See Vanderwerp, Henry, assignor.)
Roth, Lester B., assignor to Eclipse Lawn Mower Company, Prophetstown, Ill. Lawn mower. 1,826,899; Oct. 13.
Rowe, William W., Cincinnati, assignor to The Paper Service Company, Lockland, Ohio. Barrel liner and forming same. 1,827,111; Oct. 13.
Rubber Surfacers, Inc. (See Carnahan, George H., assignor.)
Rubel, Charles F. (See Riviere, A. S., and Rubel.)
Ruben Rectifier Corporation. (See Ruben, Samuel, assignor.)
Ruben, Samuel, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J. Electric current rectifier. 1,826,955; Oct. 13.
Rüdiger, Walter, Berlin-Karlshorst, assignor to Telephon-Apparat Fabrik E. Zweitusch and Company, Berlin, Germany. Damp proof condenser. 1,827,112; Oct. 13.
Russell, Alan W., Worcester, Mass., and H. A. Wadman, assignors to Hartford-Empire Company, Hartford, Conn. Glass annealing leer with insulated tunnel. 1,827,673; Oct. 13.
Russell, Harry J., Toronto, Canada, assignor to Baker & Co. Inc. Ready-made cusp. 1,826,826; Oct. 13.
Russell, Thomas C., assignor to Ultra Violet Generator Corporation, Chicago, Ill. Electric arc lamp. 1,827,374; Oct. 13.
Russell, Walter M., Wellesley, Mass., assignor to The Gas Machinery Company, Cleveland, Ohio. Manufacturing water gas. 1,827,169; Oct. 13.
Rust, Gunder, Alkabo, N. Dak. Plowshare. 1,827,170; Oct. 13.
Ruthaldo Company Inc. (See Barthelemy, Henri L., assignor.)
Sächsische Textilmaschinefabrik vorm. Rich. Hartman, Aktiengesellschaft. (See Cornibert, Pierre, assignor.)
Safety Grinding Wheel & Machine Company, The. (See Vance, George E., assignor.)
Safety Mining Company. (See Armstrong, Frank H., assignor.)
Safety Mining Company. (See Kneeland, Frank H., assignor.)
Sager, Lee R., assignor of one-third to A. W. Julien and one-third to M. A. Pocock, Minneapolis, Minn. Laundry flat piece spreader and rack. 1,827,336; Oct. 13.
Saginaw Stamping and Tool Company. (See Powers, Edwin H., assignor.)

St. Jean, Paul J., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Filling replenishing loom. 1,826,717; Oct. 13.
St. Regis Paper Company. (See Redington, John C., assignor.)
Salmon, Reginald D. (See Creed, F. G., and Salmon.)
Sanborn, Ralph E. (See Burt, H. P., Burt, and Sanborn.)
Sandberg, Christer P., O. F. A., and N. P. P., assignors to the Firm of Messrs. Sandberg, London, England. Manufacture of railway and tramway rails. 1,827,616; Oct. 13.
Sandberg, Messrs. (See Sandberg, Christer P., O. F. A., and N. P. P., assignors.)
Sandberg, Nils P. P. (See Sandberg, Christer P., O. F. A., and N. P. P.)
Sandberg, Oscar F. A. (See Sandberg, Christer P., O. F. A., and N. P. P.)
Sanftleben, Joseph F., assignor to Filtrators Company, Inc., New York, N. Y. Apparatus for use in preventing incrustation of water cooled engines. 1,827,113; Oct. 13.
Sangamo Electric Company. (See De Long, Charles E., assignor.)
Santarelli, Alphonse. (See Ciciotti, Andrea, assignor.)
Sargent & Company. (See Dunn, Peter S., assignor.)
Sargent, Walter H., Malden, Mass. Propeller. 1,826,957; Oct. 13.
Sasse, Wilhelm, Charlottenburg, Germany. Apparatus for drying liquid or pulpy material. 1,827,617; Oct. 13.
Sauerbeck, Joseph M., Danville, Va. Sealing apparatus. 1,827,618; Oct. 13.
Saunders, William L., Chicago, Ill. Variable speed transmission. 1,827,489; Oct. 13.
Sax, Isidore, et al. (See Wolf, Jacob, assignor.)
Sax, Marcus, et al. (See Wolf, Jacob, assignor.)
Sayer, John, Flagstaff, Ariz. Ice skate blade. 1,826,958; Oct. 13.
Scharnberg, Herman J. B., Fort Wadsworth, N. Y. Hydraulic cane feed stop and leveler. 1,826,827; Oct. 13.
Schlag, Chris J. (See Liberman, Otto J., assignor.)
Schlenker, Vesper A., Rochester, N. Y. Acoustic device. 1,827,114; Oct. 13.
Schmid, Anton, Huntington, W. Va., assignor of two-thirds to H. Lang, J. Yerkeson, and G. Yerkeson, Huntington, W. Va. Depth cut indicator. 1,827,265; Oct. 13.
Schmitt, John A., assignor to The Universal Milking Machine Company, Waukesha, Wis. Pulsator. 1,827,405; Oct. 13.
Schneider, Franz P., assignor to Transo Envelope Company, Chicago, Ill. Guide card. 1,827,375; Oct. 13.
Schneider, Moses, Bayonne, N. J. Cloth unrolling device. 1,827,171; Oct. 13.
Schoedinger, F. O. (See Heathman, Edward M., assignor.)
Schoof, Arthur W., Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for gauging and adjusting articles. 1,826,828; Oct. 13.
Schor, Joseph, et al. (See Meyer, Ferd H., assignor.)
Schrader, Hans, assignor to the firm of Th. Goldschmidt A.-G., Essen-Ruhr, Germany. Producing emulsions. 1,826,900; Oct. 13.
Schroeder, Anthony, deceased, assignor of one-half to J. M. Finney, Cleveland, Ohio; A. Y. Beckwith, administrator of Anthony Schroeder, assignor to M. Schroeder, Cleveland, Ohio. Machine for making containers. 1,827,545; Oct. 13.
Schroeder, Fred, West St. Paul, and A. Raddatz, St. Paul, Minn.; said Raddatz assignor to said Schroeder. Pencil. 1,827,619; Oct. 13.
Schroeder, Mollie, et al. (See Schroeder, Anthony, assignor.)
Schultz, John E. (See Branson, Russell W., assignor.)
Schulz, Arthur P. (See Teller, Jacob, and Schulz.)
Schulze, John C., Croton-on-Hudson, N. Y., and G. W. Egerer, Westwood, N. J. Reenforced concrete pipes and the like. 1,827,620; Oct. 13.
Schur, Milton. (See Richter, G. A., Schur, and Rasch.)
Schwartz, Morris, Chicago, Ill. Electric current conducting bond. 1,827,337; Oct. 13.
Scott, William H., Rochester, N. Y. Filling and draining device. 1,826,829; Oct. 13.
Scovill Manufacturing Company. (See Patchen, Arthur D., assignor.)
Searing, Frederick D. W., Newark, N. J. Stabilizing device. 1,826,830; Oct. 13.
Searles, Raymond R., assignor to The Fafnir Bearing Company, New Britain, Conn. Spring connection. 1,827,711; Oct. 13.
Secrest, Harry O., deceased, Cleveland, Ohio; H. K. Baumgardner and M. O. Secrest, administrators, assignors to The Secrest Safety Razor Corporation, Cleveland, Ohio. Safety razor. 1,827,041; Oct. 13.
Secrest, Myra O., et al., administrators. (See Secrest, Harry O.)
Secrest Safety Razor Corporation, The. (See Secrest, Harry O., assignor.)
Seidel, Walter, Leverkusen, near Cologne-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of chromealum. 1,826,831; Oct. 13.
Seitz, Oskar, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Metal vapor rectifier. 1,827,172; Oct. 13.
Sekulski, Lee, assignor to Mathews Conveyer Company, Ellwood City, Pa. Conveyer feeding mechanism. 1,826,832; Oct. 13.
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Self-Spread Waxer Corporation. (See Gailhofer, Joseph, assignor.)
Semet-Solvay Engineering Corporation. (See Steere, George R., assignor.)
Service Station Equipment Company. (See Wilson, Charles G., assignor.)
Sexton, Earl, Hartford, Conn. Device for raising submerged vessels. 1,826,959; Oct. 13.
Seymour, Robert W., et al. (See Franks, George A., assignor.)
Shaeffer, George D., assignor to W. A. Riddell Company, Bucyrus, Ohio. Road grader. 1,827,042; Oct. 13.
Shaffer, Ora C., Van Wert, Ohio, assignor of one-half to J. A. Roberts, Ravenna, Ky. Automatic car coupler. 1,827,621; Oct. 13.
Shaffrank, Elliott J., Cleveland, Ohio. Trailer cab. Des. 85,349; Oct. 13.
Shanahan, Arthur W., Roslindale, Mass., assignor to The Lamson Company, Syracuse, N. Y. Pneumatic dispatch carrier. 1,826,833; Oct. 13.
Shaver, Archibald G. (See Kendall, Allen B., assignor.)
Shaw, Clyde M., Manhattan, Kans. Dent removing tool. 1,826,834; Oct. 13.
Shepherd, John E. (See Jarvis, Graham W., assignor.)
Sheridan, Joseph J., Philadelphia, Pa. Device for keeping count of telephone calls. 1,827,622; Oct. 13.
Shermund, Ralph C., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Making magnetic cores. 1,827,376; Oct. 13.
Shields, Peter. (See Hart, Charles, assignor.)
Shipley, A. H. (See Shipley, Marion R., assignor.)
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,826,901; Oct. 13.
Shipley, Marion R., Harmosa Beach, assignor to A. H. Shipley, Fresno, Calif. Valve body. 1,827,266; Oct. 13.
Shippee, Carl C., Fair Haven, N. J. Burner device for domestic furnaces. 1,827,338; Oct. 13.
Shively, Jess A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for flipping covers on belts. 1,827,674; Oct. 13.
Shodron, John G., assignor to James Manufacturing Company, Fort Atkinson, Wis. Putty shield. 1,827,115; Oct. 13.
Short, Charles R., assignor to General Motors Research Corporation, Detroit, Mich. Making resilient joints. 1,827,267; Oct. 13.
Short, Charles R., assignor to General Motors Research Corporation, Detroit, Mich. Rubber spring shackle. 1,827,268; Oct. 13.
Shute, Arthur C. (See Bergen, W. V., and Shute.)
Shutt, John C. (See Winegar, E. M., and Shutt.)
Siebe, John P., Sacramento, Calif. Price tag holder. 1,827,623; Oct. 13.
Siebs, Claude T., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Welding. 1,827,210; Oct. 13.
Siemens & Halske Aktiengesellschaft. (See Anders, Otto, assignor.)
Siemens-Bauunion Gesellschaft mit beschränkter Haftung Kommanditgesellschaft. (See Joosten, Hugo, assignor.)
Siewecke, Adolf. (See Pfaff, J. K., and Siewecke.)
Simmen Automatic Railway Signal Company. (See Simmen, Paul J., assignor.)
Simmen, Paul J., assignor to Simmen Automatic Railway Signal Company, Eden, N. Y. System for controlling moving vehicles comprising multiple signals. 1,827,406; Oct. 13.
Simmen, Paul J., Buffalo, assignor to Simmen Automatic Railway Signal Company, Eden, N. Y. Automatic speed control system. 1,827,407; Oct. 13.
Simmons Company. (See Kusterle, Frank, assignor.)
Simmons Company. (See Parry, William H., sr., assignor.)
Simning, Roy B., Detroit, Mich. Vehicle transport construction. 1,826,960; Oct. 13.
Simon, Arthur, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Illumination control system. 1,827,043; Oct. 13.
Simon, Isidore, Chicago, Ill. Making shoes, innersoles, and the like. 1,827,044; Oct. 13.
Simonds Worden White Company. (See Gloyd, Frank M., assignor.)
Simplex Gold Stamping Press Co. (See Williams, Frank, assignor.)
Simplex Ignition Corporation. (See Kliponen, Edward, assignor.)
Sinclair Refining Company. (See Herthel E. C., and Pelzer, assignors.)
Singer Manufacturing Company, The. (See Corrall, H., and Heggie, assignors.)
Singer Manufacturing Company, The. (See Hopper, William, assignor.)
Slichter, Louis B., Madison, Wis. Apparatus for exploring for ore. 1,826,961. Oct. 13.
Small, Arthur E., assignor to Union Metal Products, Company, Chicago, Ill. Operating device for car couplers. 1,826,902; Oct. 13.
Smart, Morton, London, England. Electromedical apparatus. 1,827,045; Oct. 13.
Smith, Clarence E., and J. F. Pagel, jr., Detroit, Mich. Light reflecting window. 1,827,624; Oct. 13.

Smith, Daniel L. (See Miner, Roy H., assignor.)
Smith, George E., Park Hills, Ky., assignor to The United States Electrical Tool Company, Cincinnati, Ohio. Tool driving apparatus. 1,827,269; Oct. 13.
Smith, George E., Covington, Ky., assignor to The United States Electrical Tool Company, Cincinnati, Ohio. Grinding wheel guard. 1,827,270; Oct. 13.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,826,903; Oct. 13.
Smith, L. C., & Corona Typewriters Inc. (See Gabrielson, Carl, assignor.
Smith, L. C., & Corona Typewriters Inc. (See Harmon, Edwin L., assignor.)
Smith, Storrs H., Portland, Oreg., and J. M. King, Grove City, Pa. Radiator and cylinder block cleaner. 1,827,301; Oct. 13.
Smith, Wilson A., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash latch. Des. 85,350; Oct. 13.
Snap-on Wrench Company. (See Klein, Walter F., assignor.)
Snelling, Walter O., and J. A. Wyler, Allentown, Pa., assignors to Trojan Powder Company, New York, N. Y. Ammonium nitrate sensitized by amino compounds. 1,827,675; Oct. 13.
Snook, Clarence G., assignor to The Troy Sunshade Company, Troy, Ohio. Umbrella construction. 1,827,676; Oct. 13.
Snow, William B., assignor to Reversible Collar Company, Boston, Mass. Detachable shirt bosom. 1,827,716; Oct. 13.
Snyder, John M., Fairfield, Ill. Stove closure. 1,827,046; Oct. 13.
Societa' Invenzioni Brevetti Anomina-Torino. (See Ferretti, Antonio, assignor.)
Soss, Mark, Spokane, Wash. Lawn mower. 1,827,116; Oct. 13.
Spanbauer, Frank, North Kansas City, Mo. Rose. Pl. Pat. 2; Oct. 13.
Spare, Alexander T., Chicago, Ill. Folding box. 1,826,962; Oct. 13.
Specht, Norbert, Oranienburg, near Berlin, Germany, assignor, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J. Treating ores of titanium containing chromium and recovering the sulphuric acid. 1,827,691; Oct. 13.
Spencer, Harold M., Crescent City, Calif. Band saw. 1,827,490; Oct. 13.
Sperry Products, Inc. (See Carter, Leslie F., assignor.)
Spiers, Ernest, assignor to William Spiers Limited, Leicester, England. Circular knitting machine. 1,827,677; Oct. 20.
Spiers, William, Limited. (See Kent, Alfred W., assignor.)
Spiers, William, Limited. (See Spiers, Ernest, assignor.)
Spillman, Edward T., assignor, by mesne assignments to R. E. Forshee, Columbus, Ohio. Bracket for roofing scaffolds. 1,827,491; Oct. 13.
Spinks, Thomas M., Shubuta, Miss. Coating implement. 1,827,047; Oct. 13.
Spousta, Winslow C., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Assembling articles for transportation. 1,826,835; Oct. 20.
Spraker, Henry G., Muskogee, Okla. Direction signal for vehicles. 1,827,271; Oct. 13.
Sprich, Emil M., St. Louis, Mo. Smoking pipe. Des. 85,351; Oct. 13.
Squires, John, Detroit, Mich. Airplane. 1,827,441; Oct. 13.
Stacho, Michael, Cleveland, Ohio. Television scanning device. 1,826,836; Oct. 13.
Stack, Stanley. (See Frank, J. M., and Stack.)
Staiger, Alfred H., New York, N. Y. Electrode structure. 1,827,211; Oct. 13.
Stallard, Aubrey. (See McClurkin, J. C., and Stallard.)
Standard Boiler & Steel Works. (See Bliss, Carl G., assignor.)
Standard Neckwear Co. (See Fiumedoro, Aloysius J., assignor.)
Stansbury, Carroll, Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Controller for induction motors. 1,826,963; Oct. 13.
Stant, Kyle E., assignor to The Stant Machine Company, Connersville, Ind. Closing apparatus. 1,826,904; Oct. 13.
Stant Machine Company, The. (See Stant, Kyle E., assignor.)
Staude, Edwin G., Minneapolis, Minn. Hydraulic steering mechanism for power propelled vehicles. 1,827,117; Oct. 13.
Stebbins, Frank E., Washington, D. C. Draft and buffing gear. 1,826,837; Oct. 13.
Steere, George R., Owosso, Mich., assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Self leveling U-gauge. 1,827,546; Oct. 13.
Stein, A., & Company. (See Gavitt, Arthur W., assignor.)
Steininger, William, Berwyn, assignor to W. D. Allen Manufacturing Company, Chicago, Ill. Lawn sprinkler. 1,827,339; Oct. 13.
Steinway & Sons. (See Vietor, Frederick A., assignor.)
Stephens, Elton S., Chicago, Ill., assignor to Central Commercial Company. Testing device. 1,827,547; Oct. 13.
Stephens, Lucien A., Angels Camp, Calif. Fire fighting tool. 1,827,118; Oct. 13.
Sterk, Frank R., Kansas City, Mo. Battery case. 1,827,625; Oct. 13.
Sternbergh, Layman M., Ocean Grove, N. J. Skee-ball apparatus. 1,8: 6,964; Oct. 13.
Stern-Gesellschaft fur Moderne Grundbautechnik m. b. H. (See Zeissl, Ignaz, assignor.)
Stewart, Burns A. (See Fischer, A. C., Stewart, and Herbst.)
Stimpson, Walter F., and W. E. Finch, Louisville, Ky.; said Finch assignor to said Stimpson. Scale. 1,827,048; Oct. 13.
Stinson, George, Gardner, assignor to Heywood-Wakefield Company, Boston, Mass. Running gear for baby carriages. 1,827,492; Oct. 13.
Stock Quotation Telegraph Company. (See Hiltz, G. S., and Purcell, assignors.)
Stokes, John S., Huntingdon Valley, Pa. Forming and applying tabbed wrappers in boxes. 1,827,212; Oct. 13.
Stokes and Smith Company. (See Rider, Ernest G., assignor.)
Stokes and Smith Company. (See Stokes, John S., assignor.)
Stokes, John S., Huntingdon Valley, assignor to Stokes and Smith Company, Philadelphia, Pa. Producing and applying tabbed wrappers. 1,827,442; Oct. 13.
Stolz, Ernest H. (See Leach, H. G., and Stolz.)
Stone, Herman L., Philadelphia, Pa., assignor to Union Tank Car Company, Chicago, Ill. Valve. 1,827,377; Oct. 13.
Stover, Jordan H. (See Parsons, J., and Stover.)
Stramaglia, Nicola, Chicago, Ill. Laundry device. 1,827,678; Oct. 13.
Street Gate Co. (See Street, John W., assignor.)
Street, John W., assignor to Street Gate Co., Litchfield, Ill. Gate. 1,827,173; Oct. 13.
Strobl, Hans, Berlin-Tempelhof, assignor, by mesne assignments, to Luftschiffbau Zeppelin G. m. b. H., Friedrichshafen, Bodensee, Germany. Manufacturing gas tight material. 1,827,213; Oct. 13.
Stryker, Clinton E., Highland Park, assignor to Fansteel Products Company, North Chicago, Ill. Electrical safety device. 1,826,965; Oct. 13.
Stuart, Clyde W., New York, N. Y. Can punch. 1,827,679; Oct. 13.
Studer, Erwin, Chicago, Ill. Aeroplane. 1,827,548; Oct. 13.
Stull, John S., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material working apparatus. 1,827,302; Oct. 13.
Stump, Ira E., East Cleveland, and T. A. Knoedler, Shaker Heights, Ohio. Driving faucet. 1,826,838; Oct. 13.
Sturgis, La Verne C. (See Le Daum, H. L., and Sturgis.)
Sturm, Fritz, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Friedrichshafen, Bodensee, Germany. Carburetor for internal combustion engines. 1,827,214; Oct. 13.
Summers, Caleb E., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Counterbalancing and for counteracting torsional vibration in crank shafts. 1,827,721; Oct. 13.
Summers, Otto M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,826,839; Oct. 13.
Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,826,966; Oct. 13.
Superior Metal Products Company. (See Demers, Isaie J. B., assignor.)
Swenson, Gordon C. (See Swenson, Wilhelm and G. C.)
Swenson, Wilhelm, and G. C. Swenson, Erie, Pa. Display device. 1,827,493; Oct. 13.
Sylvester, George R., assignor to The Harrop Ceramic Service Company, Columbus, Ohio. Apparatus for collecting and conveying materials. 1,826,840; Oct. 13.
Symington Company, The. (See Barrows, Donald S., assignor.)
Symmonds, Charles J., Washington, D. C. Locking device. 1,826,841; Oct. 13.
Synck, Henry, assignor to The New Idea Spreader Company, Coldwater, Ohio. Corn lifter attachment for tractors. 1,827,215; Oct. 13.
Synck, Henry, assignor to The New Idea Spreader Company, Coldwater, Ohio. Snapping rolls for corn pickers. 1,827,216; Oct. 13.
Tabulating Machine Company, The. (See Carroll, Fred M., assignor.)
Tabulating Machine Company, The. (See Carroll, F. M., and Eaton, assignors.)
Tabulating Machine Company, The. (See Ewald, Bernhard K. F., assignor.)
Tabulating Machine Company, The. (See Peirce, John R., assignor.)
Tabulating Machine Co., The. (See Williams, Raymond G., assignor.)
Takenaka, Benjamin K., New Rochelle, N. Y. Post for interchangeable teeth. 1,827,119; Oct. 13.
Tama, Cyrano, Eberswalde, assignor to firm: Hirsch, Kupfer-and Messingwerke, A. G., Finow/Mark, Germany. Melting oxidizable material. 1,827,174; Oct. 13.
Tantlinger, Don V., Sherman, Calif. Boomerang. 1,826,905; Oct. 13.
Taylor, Clifford J., and W. H. Dunn, Lubbock, Tex. Display case. 1,827,175; Oct. 13.

Taylor, Daniel G., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Heat regulating device. 1,827,340; Oct. 13.
Taylor, Frank F., Company, The. (See Marqua, William A., assignor.)
Taylor Instrument Companies. (See Teague, Walter D., assignor.)
Teague, Walter D., Forest Hills, assignor to Taylor Instrument Companies, Rochester, N. Y. Barometer. Des. 85,352; Oct. 13.
Telephon-Apparat Fabrik E. Zivcitusch and Company. (See Rüdiger, Walter, assignor.)
Teller Corporation. (See Teller, Jacob, and Schulz, assignors.)
Teller, Jacob, Chicago, Ill., and Arthur P. Schulz, Buffalo, N. Y., assignors to Teller Corporation, Chattanooga, Tenn. Cabinet cooking range. Des. 85,353; Oct. 13.
Teller, Jacob, and A. P. Schulz, New York, N. Y., assignors to Teller Corporation, Chattanooga, Tenn. Gas or electric cabinet cookstove or range. Des. 85,354; Oct. 13.
Tenney, Walter M., Chicago, Ill. Engineer's plumb rod. 1,827,049; Oct. 13.
Textile Machine Works. (See Gastrich, Gustav, assignor.)
Thatcher, Harry W., assignor to Draper Corporation, Hopedale, Mass. Shuttle box motion for looms. 1,827,272; Oct. 13.
Thayer, Benjamain S. (See Holtchoff, Henry C., assignor.)
Theys, Henry S., and L. Horowitz, Brooklyn, N. Y. Fastening means. 1,827,050; Oct. 13.
Thies, Samuel, assignor to the Cincinnati Advertising Products Company, Cincinnati, Ohio. Luminous globe. 1,826,842; Oct. 13.
Thomas, Adolph A., New York, N. Y. Supporting structure. 1,826,843; Oct. 13.
Thomas, Adolph A., New York, N. Y. Recording and reproducing system and apparatus. 1,827,051; Oct. 13.
Thomas, Cecil O., Montreal, Quebec, Canada. Flexible coupling. 1,827,176; Oct. 13.
Thomas, Claud F., Nashville, Tenn. Self-adjusting metallic gland packing. 1,826,967; Oct. 13.
Thompson, Harry W., et al. (See Udell, Earl L., assignor.)
Thompson, William H. (See Davis, H. C., and Thompson.)
Thomson, George I., Kansas City, Mo. Combination window and screen. 1,827,494; Oct. 13.
Thomson, William R., Westmount, Quebec, Canada. Paper making machine. 1,827,177; Oct. 13.
Thorne, Carl B., Hawkesbury, Ontario, Canada. Log barker. 1,827,052; Oct. 13.
Thorner, Walther, Berlin, Germany. Telescopic instrument for subjective determination of the refraction of the eye. 1,826,844; Oct. 13.
Thorpe, George E. (See Thorpe, Thomas W. and G. E.)
Thorpe, Thomas W. and G. E., Des Moines, Iowa. Tool jack. 1,827,120; Oct. 13.
Thumim, Carl, Philadelphia, Pa., assignor to General Electric Company. Switch operating mechanism. 1,826,626; Oct. 13.
Thurston, Albert P., London, England. Controlling aircraft, submarines, and like totally immersed craft or structures. 1,827,304; Oct. 13.
Tiefbau- und Kalteindustrie-Aktiengesellschaft vormals Gebhardt & Koenig. (See Joosten, Hugo, assignor.)
Timken-Detroit Axle Company, The. (See Brownyer, Nelson R., assignor.)
Tippett, Charles C., Luckey, Ohio. Grain bag holder. 1,827,495; Oct. 13.
Tisza, Edmond T., and B. Joos, Yonkers, assignors to The Pyridium Corporation, Nepera Park, N. Y. Arsine oxide substitution products of phenyl-azo-alpha-alpha-diamono-pyridine. 1,827,680; Oct. 13.
Titterington, Morris M., Brooklyn, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Garment press. 1,827,341; Oct. 13.
Tobin, Kenneth J. (See Wasberg, A., and Tobin.)
Toelle, Walter H., assignor to H. L. Judd Company, Inc., Wallingford, Conn. Curtain carrier. 1,827,443; Oct. 13.
Tomlinson, John K., Chicago, Ill. Shade roller. 1,827,444; Oct. 13.
Tonietti, Simon, Cougar, Calif. Recording device. 1,827,178; Oct. 13.
Towner, Heber F., deceased, Santa Ana, Calif.; P. G. Beissel, executor of the estate, assignor to B. V. Curry, trustee. Disk harrow. 1,827,125; Oct. 13.
Townsend, George H., Flushing, N. Y. Accelerator. 1,826,906; Oct. 13.
Townsend, George H., and C. H. Behnke, Flushing, N. Y. Accelerator and foot rest. 1,826,968; Oct. 13.
Toye, Paul W., New Orleans, La. Automatic quick stop signal. 1,827,445; Oct. 13.
Trane, Raymond, Omaha, Nebr. Window cleaner. 1,827,121; Oct. 13.
Transo Envelope Company. (See Schneider, Franz P., assignor.)
Traver, Harry G., Beaver Falls, Pa. Amusement ride. 1,827,303; Oct. 13.
Travis, George B., Santa Paula, Calif. Adjustable chair seat. 1,827,627; Oct. 13.
Trent, Kline S., Roanoke, Va., assignor to The Pilliod Company, Swanton, Ohio. Reverse yoke for locomotive valve gears. 1,827,122; Oct. 13.
Trively, Rolland A., Randolph, Iowa, assignor to Deere & Company, Moline, Ill. Tractor guide. 1,827,123; Oct. 13.
Trogner, Arthur M., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Remote control radio receiving system. 1,826,845; Oct. 13.
Trojan Powder Company. (See Snelling, W. O., and Wyler, assignors.)
Troy Sunshade Company, The. (See Snook, Clarence G., assignor.)
Trudo, Eugene F., Weston, Mass. Removable seat. 1,827,124; Oct. 13.
Truett, Velma S., and H. H. George, assignors to Trujo Banjo Co., Ltd., San Francisco, Calif. Attachment for stringed musical instruments. 1,826,969; Oct. 13.
Trujo Banjo Co. (See Truett, V. S., and George, assignors.)
Tschunkur, Eduard, and W. Bock, Cologne-Mulheim, Germany. Artificial rubber. 1,826,846; Oct. 13.
Twedell, Edward M., Van Buren, Ark. Bolt. 1,827,628; Oct. 13.
Udell, Earl L., assignor of one-third to R. Harvell and one-third to H. W. Thompson, Tallahassee, Fla. Headlight rim. 1,827,305; Oct. 13.
Ultra Violet Generator Corporation. (See Russell, Thomas C., assignor.)
Underwood Elliott Fisher Company. (See Lawrence, Charles M., assignor.)
Underwood Elliott Fisher Company. (See Resch, Henry, assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Underwood Elliott Fisher Company. (See Von Reppert, Richard, assignor.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Metal Products Company. (See Small, Arthur E., assignor.)
Union Railway Equipment Company. (See O'Connor, Arthur F., assignor.)
Union Special Machine Company. (See Hanneman, Walter M., assignor.)
Union Special Machine Company. (See Riviere, Albert S., assignor.)
Union Special Machine Company. (See Riviere, A. S., and Rubel, assignors.)
Union Special Maschinenfabrik, G. m. b. H. (See Lutz, Friedrich, assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, Karl, assignor.)
Union Switch & Signal Company, The. (See Gilson, Robert M., assignor.)
Union Tank Car Company. (See Stone, Herman L., assignor.)
Ungar, G. A., et al. (See Greiner, Josef, assignor.)
United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)
United Shoe Machinery Corporation. (See Bertrand, Frederic E., assignor.)
United Shoe Machinery Corporation. (See Finn, Sidney J., assignor.)
United Shoe Machinery Corporation. (See Glidden, Harvey L., assignor.)
United Shoe Machinery Corporation. (See Lawson, Oscar L., assignor.)
United Shoe Machinery Corporation. (See Leveque, Bernard T., assignor.)
United Shoe Machinery Corporation. (See Winkley, Erastus E., assignor.)
United Shoe Machinery Corporation. (See Woodcock, Reginald B., assignor.)
United States Electrical Tool Company, The. (See Smith, George E., assignor.)
United States Hoffman Machinery Corporation. (See Locke, Sanford J., assignor.)
United States Hoffman Machinery Corporation. (See Locke, S. J., and Webster, assignors.)
United States Metals Refining Company. (See Eppensteiner, W. F., and Morecraft, assignors.)
Universal Milking Machine Company. (See Schmitt, John A., assignor.)
Universal Oil Products Company, The. (See David, Aubrey D., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Morrell, Jacque C., assignor.)
Universal Oil Products Company. (See Pollock, Robert T., assignor.)
Universal Oil Products Company. (See Pratt, Clifton J., assignor.)
Unzel, Edwin. (See McKay, H. J., Carlsen, Fuhrman, and Unzel.)
Urbana Coke Corporation. (See Parr, S. W., and Layng, assignors.)
Vance, George E., assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio. Grinding wheel. 1,826,907; Oct. 13.
Van der Molen, Everet, Groningen, Holland. Centrifugal separator. 1,827,681; Oct. 13.

Vanderwerp, Henry, assignor to Rotary Pressure Cooler Company, Manitowoc, Wis. Apparatus for making cement. 1,826,847; Oct. 13.
Vanderwilt, Bert, Everett, Wash. Dust collecting bag for vacuum sweepers. 1,827,496; Oct. 13.
Varney, William T., Vancouver, British Columbia, Canada. Speculum. 1,827,497; Oct. 13.
Veneman, Carl C., Los Angeles, Calif. Lavatory construction. 1,827,053; Oct. 13.
Victor Pharmacal Company. (See Kline, Elmer V., assignor.)
Videtto, S. Sague, Minatare, Nebr. Rotary engine. 1,827,408; Oct. 13.
Vietor, Frederick A., Great Neck, assignor to Steinway & Sons, New York, N. Y. Piano key mounting. 1,826,848; Oct. 13.
Vik, Olav, Minneapolis, Minn. Lifting truck. 1,827,692; Oct. 13.
Villain, Ena, Dulwich, London, England. Manufacture of transparent soap tablet containing advertisements. 1,827,549; Oct. 13.
Vitaglo Corporation, The. (See Chereton, A. B., and Cummings, assignors.)
Vogt, Clarence W., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky. Refrigerating apparatus for package goods. 1,827,629; Oct. 13.
Vogt Instant Freezers Incorporated. (See Vogt, Clarence W., assignor.)
Voisine, John J., Kalamazoo, Mich. Oil can. Des. 85,355; Oct. 13.
Voltz, Theodor. (See Muench, E., and Voltz.)
Von Arco, Georg, assignor to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Communication by electromagnetic waves. 1,827,054. Oct. 13.
Von Dorn, Theodore F., New York, N. Y. Two-piece railway rail anchor. 1,827,630; Oct. 13.
Von Reppert, Richard, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,827,693; Oct. 13.
Wadman, Harold A. (See Russell, A. W., and Wadman.)
Wainwright, Joseph E., Brooklyn, N. Y. Valve spring compressor and replacer. 1,826,908; Oct. 13.
Waldron, John, Corporation. (See Case, Lynn B., assignor.)
Walker, Jack L., Dallas, Texas. Television and telephoto device. 1,826,970; Oct. 13.
Walter, Henry L., assignor of one-half to H. S. De Witt, Twin Falls, Idaho. Hemoglobinometer. 1,826,849; Oct. 13.
Ward Leonard Electric Company. (See Kouyoumjian, Haroutiun K., assignor.)
Waring, Edward H., Essex Fells, assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. Shaft bearing. 1,827,409; Oct. 13.
Warren, Joseph, sr., Bridgeport, Ohio. Combined cabinet and lamp. Des. 85,356; Oct. 13.
Warren, Virgil P., Atlanta, Ga. Defrosting refrigeration system. 1,827,410; Oct. 13.
Warshaw, Nathan, Brooklyn, N. Y. Separable fastener. 1,826,909; Oct. 13.
Wasberg, Axel, and K. J. Tobin, assignors to Camel Company, Chicago, Ill. Elevating means for car doors. 1,826,910; Oct. 13.
Washburn Company, The. (See Washburn, Reginald, assignor.)
Washburn, Reginald, assignor to The Washburn Company, Worcester, Mass. Handle construction for culinary utensils. 1,827,126; Oct. 13.
Watson, Richard M., Detroit, Mich. Base member for loose leaf binders. 1,827,411; Oct. 13.
Waukesha Motor Company. (See Rector, Enoch, assignor.)
Wayne, Alexander A., San Francisco, Calif. Elevator door closing device. 1,827,631; Oct. 13.
Weamer, Paul M., Gladwyne, assignor to Lee Rubber & Tire Corporation, Conshohocken, Pa. Ornamenting rubber mats. 1,827,127; Oct. 13.
Webb, Robert C., Baton Rouge, La. Building wall slab. 1,827,632; Oct. 13.
Webb, Robert R., assignor to Charles R. Hadley Company, Los Angeles, Calif. Loose-leaf file. 1,827,273; Oct. 13.
Webster, Floyd R. (See Locke, S. J., and Webster.)
Weeks, Ernest B., Biloxi, Miss. Pole carrier attachment for vehicles. 1,827,498; Oct. 13.
Wege, Peter M., assignor to Metal Office Furniture Company, Grand Rapids, Mich. Calculator desk construction. 1,827,128; Oct. 13.
Weidehoff, Georg, Charlottenburg, Germany, assignor to General Electric Company. Elastic fluid turbine. 1,827,682; Oct. 13.
Weidler, Ward W., assignor to The Atlas Bolt & Screw Company, Cleveland, Ohio. Scale mechanism. 1,827,499; Oct. 13.
Weindel, Fred, jr., Allentown, Pa., assignor to The E. Ingraham Company, Bristol, Conn. Clock dial or similar article. Des. 85,357; Oct. 13.
Weindel, Fred, jr., Allentown, Pa., assignor to The E. Ingraham Company, Bristol, Conn. Clock dial or similar article. Des. 85,358; Oct. 13.
Welch, Horace H., New York, N. Y. Composite gem and jewel. 1,827,695; Oct. 13.
Welch, Roy J. C., Boston, assignor of one-third to D. M. Breeze, Cambridge, Mass. Smoking pipe. 1,827,412; Oct. 13.
Wesolowski, Peter J., Detroit, Mich. Window fastener. 1,826,911; Oct. 13.
Westberg, Sigurd, Oslo, Norway. Making refractory linings. 1,827,446; Oct. 13.
Western Electric Company. (See Adams, Arthur H., assignor.)
Western Electric Company. (See Andrews, John W., assignor.)
Western Electric Company. (See Borgeson, Sidney E., assignor.)
Western Electric Company. (See Boynton, John E., assignor.)
Western Electric Company. (See Brown, G. R., and Loesges, assignors.)
Western Electric Company. (See Hofstetter, Robert, assignor.)
Western Electric Company. (See Larson, Homer W., assignor.)
Western Electric Company. (See Little, John S., assignor.)
Western Electric Company. (See Mason, Sumner R., assignor.)
Western Electric Company. (See McDonough, J., and Normann, assignors.)
Western Electric Company. (See Middlekauff, Robert P., assignor.)
Western Electric Company. (See Robbins, Charles W., assignor.)
Western Electric Company. (See Roman, Frank L., assignor.)
Western Electric Company. (See Schoof, Arthur W., assignor.)
Western Electric Company. (See Siebs, Claude T., assignor.)
Western Electric Company. (See Spousta, Winslow C., assignor.)
Western Electric Company. (See Stull, John S., assignor.)
Western Electric Company. (See Zimmerman, Paul P., assignor.)
Western Foundation Company. (See Jenkins, Forrest L., assignor.)
Western Union Telegraph Company, The. (See Foster, Lee R., assignor.)
Western Union Telegraph Company, The. (See Haglund, H. H., and Dickey, assignors.)
Western Wheeled Scraper Company. (See Falkner, Benjamin H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hodgkinson, Francis, assignor.)
Westinghouse Electric & Manufacturing Company. (See Zworykin, Vladimir K., assignor.)
Westinghouse Lamp Company. (See Marden, J. W., and Rentschler, assignors.)
Weston, William, Independence, assignor to J. F. Pritchard & Co., Kansas City, Mo. Cooling tower. 1,826,912; Oct. 13.
Wetton, Merle T., et al. (See Franks, George A., assignor.)
Weyerhaeuser Timber Company. (See Payzant, Henry H., assignor.)
Weymouth, Harry G., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Adjustable tangent arm for gas meters. 1,826,850; Oct. 13.
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
Whitcomb, Harris M., assignor to Albany Hardware Specialty Manufacturing Company, Albany, Wis. Doorstop. 1,827,055; Oct. 13.
White, Walter C., Los Angeles, Calif., assignor to International Couplers Co., Pittsburgh, Pa. Flexible pipe joint. 1,827,500; Oct. 13.
White, William E., and P. C. Monjar, assignors to Kalman Steel Company, Chicago, Ill. Fastening for metal decking. 1,826,913; Oct. 13.
Whitehead, Richard H., and W. E. Porter, assignors to The New Haven Clock Co., New Haven, Conn. Clock. 1,827,179; Oct. 13.
Whitley, William P., Clayton, assignor to Rawlings Manufacturing Company, St. Louis, Mo. Baseball glove. 1,826,851; Oct. 13.
Whitmanis Manufacturing Company. (See Whitney, Karl H., assignor.)
Whitney, Karl H., assignor to Whitman's Manufacturing Company, Inc., Kirksville, Mo. Ventilated window and porch shade. 1,827,718; Oct. 13.
Whitney Metal Tool Co. (See Jensen, John, assignor.)
Widness, Lawrence J., Brooklyn, N. Y. Trousers presser and stretcher. 1,826,971; Oct. 13.
Wico Electric Company. (See Louis, Terrence G., assignor.)
Wilbur, Lawrence S., Evanston, Ill. Shock absorber. 1,826,972; Oct. 13.
Wilcox-Rich Corporation. (See Jardine, Robert, assignor.)
Wildhaber, Ernest, Brooklyn, assignor to Gleason Works, Rochester, N. Y. Hypoid gear. 1,826,852; Oct. 13.
Willcox, Dudley, Lawrenceville, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Electric induction furnace. 1,827,274; Oct. 13.
Williams, Alfred O., and W. L. Davis, Battle Creek, assignors to Clark Tructractor Company, Buchanan, Mich. Conveyer. 1,826,853; Oct. 13.
Williams, Estelle P. (See Williams, Villor P., assignor.)
Williams, Frank, assignor to Simplex Gold Stamping Press Co., New York, N. Y. Attachment to embossing or stamping machine. 1,827,550; Oct. 13.

Williams, Keith, assignor to Pratt & Letchworth Company, Buffalo, N. Y. Coiling machine. 1,827,056; Oct. 13.
Williams Oil-O-Matic Heating Corporation. (See Williams, Walter W., assignor.)
Williams, Raymond G., Providence, R. I., assignor to The Tabulating Machine Co., New York, N. Y. Punching mechanism. 1,827,180; Oct. 13.
Williams, Roger, assignor to Du Pont Ammonia Corporation, Wilmington, Del. Producing hydrogen. 1,826,974; Oct. 13.
Williams, Villor P., assignor, by mesne assignments, to E. P. Williams, Baltimore, Md. Flexible coupling. 1,827,129; Oct. 13.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Stack control device for oil burner systems. 1,827,703; Oct. 13.
Willoughby Mfg. Co., The. (See Winegar, E. M., and Shutt, assignors.)
Wills, Silas D., Birmingham, Ala. Life belt. 1,827,057; Oct. 13.
Willy, Walter M. (See Nelson, O. S., and Willy.)
Wilmore, Charles C., Wheatridge, Colo. Sling for moving trees. 1,827,447; Oct. 13.
Wilmot, Charles L., Pittsburgh, Pa. Trolley. 1,826,854; Oct. 13.
Wilson, Charles G., assignor to Service Station Equipment Company, Bryan, Ohio. Apparatus for supplying air under pressure. 1,826,975; Oct. 13.
Wilson, Ronald M., West Chester, Pa., assignor to The Huffman Manufacturing Company, Dayton, Ohio. Railway track signal. 1,827,633; Oct. 13.
Winegar, Edmund, Willoughby, and J. C. Shutt, Wickliffe, assignors to The Willoughby Mfg. Co., Willoughby, Ohio. Door holder. 1,827,634; Oct. 13.
Wingquist, Sven G., Gottenborg, Sweden. Packing device. 1,826,914; Oct. 13.
Winkley, Erastus E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,827,378; Oct. 13.
Winner, Hudson T., Trenton, N. J. Hoisting truck. 1,826,973; Oct. 13.
Winter, Daniel B. (See Olley, E. A., and Winter.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wishart, Ronald S. (See Connery, A. F., and Wishart.)
Wiswall, William J., Portland, Oreg., assignor to American Sales Book Company, Limited, Toronto, Canada. Manifolding paper holder. 1,827,448; Oct. 13.
Wiswell, Ozro N. (See Allen, S. E., and Wiswell.)
Wolf, Jacob, Milwaukee, Wis., assignor of one-half to I. Sax and M. Sax, co-partners doing business as Sax Bros. Heel attaching device. 1,827,058; Oct. 13.
Wolfe, John A., et al. (See Haubert, Leo, assignor.)
Wolff, Hugo. (See Lüttringhaus, A., Wolff, and Neresheimer.)
Wolfson, Sidney L. (See Cuno, C. H., and Wolfson.)
Wolters, Carl F., Marietta, Ohio. Combined concentric dial plate, lock dial, and handle for safes. Des. 85,359; Oct. 13.
Wood, Burris D., and W. W. Rodgers, Dallas, Texas. Designating temperature zones in iceboxes. 1,827,449; Oct. 13.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Folding blade cleaning device. 1,827,635; Oct. 13.
Wood, John, Manufacturing Company, (See Paige, Arthur E., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodbridge, Charles K., New York, N. Y., assignor to Dictaphone Corporation, Bridgeport, Conn. Sound collecting and transmitting. 1,827,719; Oct. 13.
Woodcock, Reginald B., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Work-presenting device. 1,826,855; Oct. 13.
Woodroof, William W., Pittsburgh, Pa. Electrical signaling switch. 1,827,342; Oct. 13.
Woolcott, William, Winchester, Ky. Weatherproof adjustable canopy for vehicles. 1,827,059; Oct. 13.
Woods, Leonard, St. Louis, Mo. Sock supporter. 1,827,343; Oct. 13.
Woolrich, Edward S., Cleveland Heights, Ohio, assignor, by mesne assignments, to Flexlume Corporation, Tonawanda, N. Y. Neon sign. 1,827,275; Oct. 13.
Wooster, Floyd R., Walden, N. Y. Combined loading and dump car. 1,826,915; Oct. 13.
Wright, David E., Weyers Cave, Va. Traveling bag. 1,826,976; Oct. 13.
Wulkow, Karl, Berlin-Neukolln, assignor to the Firm Photogrammetrie G. m. b. H., Munich, Germany. Stereoisohypsograph. 1,827,551; Oct. 13.
Wyatt, Edwin M., Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Textured brick. 1,826,916; Oct. 13.
Wyatt, Edwin M., Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Patterned brick wall. 1,826,917; Oct. 13.
Wyler, Joseph A. (See Snelling, W. O., and Wyler.)
Yager, George F., assignor to The Bunting Brass and Bronze Company, Toledo, Ohio. Stamping machine. 1,827,683; Oct. 13.
Yeider, Harry A., Grand Rapids, Mich., assignor to Automatic Musical Instrument Company. Selector mechanism. 1,827,130; Oct. 13.
Yerkeson, Grant, et al. (See Schmid, Anton, assignor.)
Yerkeson, James, et al. (See Schmid, Anton, assignor.)
Youngstown Steel Door Company, The. (See Barrows, Allan S., assignor.)
York Ice Machinery Corporation. (See Baker, Irving C., assignor.)
Zeh, Ludwig. (See Bauer, W., and Zeh.)
Zelssl, Ignaz, assignor to Stern-Gesellschaft fur Moderne Grundbautechnik m. b. H., Vienna, Austria. Arrangement for forcing away the pile core from the point of the pile. 1,827,552; Oct. 13.
Zellstoffabrik Waldhof. (See Gade, Max, assignor.)
Zimmerman, Paul P., Chicago, Ill., assignor to Western Electric Company. Incorporated, New York, N. Y. Treating materials. 1,826,856; Oct. 13.
Zimmerman, Walter J., assignor to The Mead Research Engineering Company, Dayton, Ohio. Beater. 1,826,857; Oct. 13.
Zworykin, Vladimir K., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Photographic printing apparatus. 1,826,858; Oct. 13.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 13TH DAY OF OCTOBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator. G. H. Townsend. 1,826,906; Oct. 13.
Accelerator and foot rest. G. H. Townsend and C. H. Behnke. 1,826,968; Oct. 13.
Acoustic condenser diaphragm. E. F. Potter. 1,826,952; Oct. 13.
Acoustic device. V. A. Schlenker. 1,827,114; Oct. 13.
Advertising device. P. H. Regan. 1,827,167; Oct. 13.
Aeroplane. H. Alfaro. 1,827,276; Oct. 13.
Aeroplane. E. Studer. 1,827,548; Oct. 13.
Aeroplane construction. H. Alfaro. 1,827,181; Oct. 13.
Agitator. S. H. Gibson. 1,827,004; Oct. 13.
Agricultural implement, Pushed. G. D. Jones. 1,827,237; Oct. 13.
Air conditioner. C. A. Bulkeley. 1,826,921; Oct. 13.
Aircraft, Stabilizing device for. B. Kiss. 1,826,938; Oct. 13.
Aircraft, submarines, and like totally immersed craft or structures, Controlling. A. P. Thurston. 1,827,304; Oct. 13.
Aircraft, Wing or plane for. E. B. Carns. 1,827,281; Oct. 13.
Air heater, Cabinet. J. M. Frank and S. Stack. 1,827,512; Oct. 13.
Airplane. R. S. Moore. 1,827,253; Oct. 13.
Airplane. J. D. Rauch. 1,827,438; Oct. 13.
Airplane. J. Squires. 1,827,441; Oct. 13.
Air under pressure, Apparatus for supplying. C. G. Wilson. 1,826,975; Oct. 13.
Air wrench. R. H. Miner. 1,827,159; Oct. 13.
Alarm: *See*—
  Burglar alarm. **Thermostatic alarm.**
Alkali and alkaline earth metals, Electrolytic production of. J. J. Grebe and R. H. Boundy. 1,826,773; Oct. 13.
Alumina, Preparation of. W. J. Muller and H. Hiller. 1,826,895; Oct. 13.
Aluminum, Treatment of. M. K. De Trairup. 1,827,142; Oct. 13.
Ammonium nitrate sensitized by amino compounds. W. O. Snelling and J. A. Wyler. 1,827,675; Oct. 13.
Amusement and exercising device. J. McGavin. 1,826,944; Oct. 13.
Amusement device. D. D. Anderson. 1,827,344; Oct. 13.
Amusement device. C. Jacobs. Des. 85,335; Oct. 13.
Amusement ride. H. G. Traver. 1,827,303; Oct. 13.
Anchor, Two piece railway rail. T. F. Von Dorn. 1,827,630; Oct. 13.
Anchoring means for portable tool supports. J. Jensen. 1,826,937; Oct. 13.
Animal fibers, Treatment of. A. Ferretti. 1,827,356; Oct. 13.
Animal trap. A. Joseph. 1,827,019; Oct. 13.
Animal trap. B. J. Lehuta. 1,826,799; Oct. 13.
Applicator, Medical powder. F. P. C. Davis. 1,827,463; Oct. 13.
Arc welding. J. F. Lincoln and C. C. Peck. 1,827,245; Oct. 13.
Arc welding, Electric. C. L. Ipsen. 1,827,657; Oct. 13.
Arsenical solutions, Treatment of. H. A. Gollmar. 1,827,082; Oct. 13.
Arsine oxide substitution products of phenyl-azoit-alpha-alpha-diamino-pyridine. E. T. Tisza and B. Joos. 1,827,080; Oct. 13.
Articles and producing such articles, Cellulose containing. J. S. Little. 1,827,203; Oct. 13.
Articles, Apparatus for gauging and adjusting. A. W. Schoof. 1,826,828; Oct. 13.
Articles for transportation, Assembling. W. C. Spousta. 1,826,835; Oct. 13.
Ash receiver. C. Ellis. 1,827,078; Oct. 13.
Audion circuit, Apparatus for energizing an. G. B. Crouse. 1,826,743; Oct. 13.
Audiphone unit. H. G. Leach and E. H. Stolz. 1,826,797; Oct. 13.
Auditing machine. M. M. Goldberg. 1,827,005; Oct. 13.
Automobile top construction. C. S. Ford. 1,826,871; Oct. 13.
Bag: *See*—
  Traveling bag. **Valve bag.**
Bag for vacuum sweepers, Dust collecting. B. Vanderwilt. 1,827,496; Oct. 13.
Bakery machinery. C. Becker. 1,827,134; Oct. 13.
Balance indicator, Alternating current. A. F. Connery and R. S. Wishart. 1,826,736; Oct. 13.
Baling press. C. A. Kisby. 1,827,024; Oct. 13.
Ball game. Y. Daimaru. 1,827,642; Oct. 13.
Bank, Savings. C. Fisher. 1,827,388; Oct. 13.
Bar: *See*—
  Beater bar.
Bar fixture, Sine. H. J. Lovenston. 1,826,802; Oct. 13.
Barometer. W. D. Teague. Des. 85,352; Oct. 13.
Barrel liner and forming same. W. W. Rowe. 1,827,111; Oct. 13.
Bathtub grip. J. H. Germershausen. 1,827,575; Oct. 13.
Battery case. F. R. Sterk. 1,827,625; Oct. 13.
Battery terminal puller. C. H. Keefer. 1,827,475; Oct. 13.
Bearing, Shaft. E. H. Waring. 1,827,409; Oct. 13.
Beater. W. J. Zimmerman. 1,826,857; Oct. 13.
Beater bar. F. M. Lloyd. 1,827,228; Oct. 13.
Belt clamp. E. C. Noble. 1,827,327; Oct. 13.
Bicycle frame. G. de Riz. Des. 85,327; Oct. 13.
Binder. P. Y. Borodin. 1,827,506; Oct. 13.
Binder, Loose leaf. F. H. Crump. 1,827,462; Oct. 13.
Binder mechanism, Loose leaf. J. C. Dawson. 1,826,707; Oct. 13.
Binders, Base member for loose leaf. R. M. Watson. 1,827,411; Oct. 13.
Blackboard sheet, Metal. K. Friend. 1,827,389; Oct. 13.
Blade cleaning device, Folding. H. A. W. Wood. 1,827,635; Oct. 13.
Block: *See*—
  Crown block. **Terminal block.**
Board: *See*—
  Game board. **Ironing board.**
Boat launching device. A. D. McKenzie. 1,827,535; Oct. 13.
Body, Convertible. R. L. Carr. 1,826,865; Oct. 13.
Boiler and superheater, Steam. I. L. Langvand. 1,827,529; Oct. 13.
Boiler furnace. L. W. Heller. 1,827,197; Oct. 13.
Bolster and making same. J. M. Rohlfing. 1,827,404; Oct. 13.
Bolt. E. M. Twedell. 1,827,628; Oct. 13.
Bolt for trunks and other luggage, etc., Toggle. H. R. Naylor. 1,827,369; Oct. 13.
Book, Loose leaf ring. H. B. Lewis. 1,827,592; Oct. 13.
Bookholder. C. Pharr. 1,827,166; Oct. 13.
Bo m construction for paving machines. P. A. Koehring. 1,827,527; Oct. 13.
Boomerang. D. V. Tantlinger. 1,826,905; Oct. 13.
Boot and shoe. F. W. East. 1,827,224; Oct. 13.
Boots and shoes, Manufacture of. J. P. Keefe. 1,827,200; Oct. 13.
Booth, Guard. L. Barota. 1,827,347; Oct. 13.
Bottle. H. McDonald. Des. 85,340; Oct. 13.
Bottle or similar container. E. V. Kline. Des. 85,336; Oct. 13.
Bottles and the like, Apparatus for cleaning. J. G. Cupedo. 1,827,140; Oct. 13.
Box: *See*—
  Collapsible box. **Hat box.**
  Folding box.
Box. C. F. Friedrich. Des. 85,330; Oct. 13.
Box construction, Fire. R. J. Himmelright. 1,826,784; Oct. 13.
Bracket for roofing scaffolds. E. T. Spillman. 1,827,491; Oct. 13.
Brake: *See*—
  Railway car brake. **Vehicle brake.**
Brake. N. R. Brownyer. 1,827,005; Oct. 13.
Brake. A. Y. Dodge. 1,827,421-2; Oct. 13.
Brake mechanism. H. Perrot. 1,827,105; Oct. 13.
Brake operating mechanism. H. Perrot. 1,827,104; Oct. 13.
Brake shoe. H. A. Gillies. 1,827,081; Oct. 13.
Brake structure. J. A. Miller. 1,827,162; Oct. 13.
Bric-a-brac, Article of. F. Carder. Des. 85,323; Oct. 13.
Brick, Hollow glass. S. B. Bowman. Des. 85,320; Oct. 13.
Brick, Textured. E. M. Wyatt. 1,826,916; Oct. 13.
Brick wall, Patterned. E. M. Wyatt. 1,826,917; Oct. 13.
Bridle, Riding. M. J. Knoud. 1,827,367; Oct. 13.
Brush, Bottle cleaning. P. T. Edgar. 1,827,569; Oct. 13.
Brush for coating machines, Distributing. L. B. Case. 1,827,641; Oct. 13.
Bucket, Centrifugal. O. W. Greene. 1,827,648; Oct. 13.
Buckle, Shoe A. E. Farmer. Des. 85,361; Oct. 13.
Buckle, Shoe. S. M. Riker. Des. 85,347; Oct. 13.
Buffer, Automobile side. E. A. Banschbach. 1,826,979; Oct. 13.
Building. K. K. Ellis. 1,827,310; Oct. 13.
Building structure. K. E. Bemis. Des. 85,317; Oct. 13.
Bumper post. S. W. Hayes. 1,827,288; Oct. 13.
Burglar alarm J. J. Kertz. 1,827,366; Oct. 13.
Burner: *See*—
  Fuel burner. **Oil burner.**
  Gas burner.
Burner and atomizing liquids, Liquid fuel. C. O. Gunther. 1,826,776; Oct. 13.
Burner device for domestic furnaces. C. C. Shippee. 1,827,338; Oct. 13.
Building construction. E. Geiger. 1,826,767; Oct. 13.
Bushing and making the same, Rubber spring. V. Hughes. 1,827,233; Oct. 13.

Cab, Trailer. E. J. Shaffrank. Des. 85,349; Oct. 13.
Cabinet and lamp, Combined. J. Warren, sr. Des. 85,356; Oct. 13.
Cabinet, Moving picture. A. G. Merriman. 1,827,598; Oct. 13.
Cable guard. H. W. Baum. 1,826,978; Oct. 13.
Cable reel for mining machines. H. Boggs. 1,827,380; Oct. 13.
Cables and an improved junction box therefor, Joining the ends of high-tension electric. C. F. Proos. 1,827,609; Oct. 13.
Calendar attachment. J. F. Eynck. 1,827,570; Oct. 13.
Cameras, Pressure plate or pad for photographic. A. J. Denniss and V. W. Edwards. 1,827,464; Oct. 13.
Canopy. W. G. Fincher. 1,827,427; Oct. 13.
Canopy for vehicles, Weatherproof adjustable. W. Woolcott. 1,827,059; Oct. 13.
Cant hoister. C. H. Mendenhall. 1,827,034; Oct. 13.
Capsule of microphones. J. Greiner. 1,827,229; Oct. 13.
Car, Camera transport. A. Fried. 1,827,227; Oct. 13.
Car, Combined loading and dump. F. R. Wooster. 1,826,915; Oct. 13.
Car coupler, Automatic. O. C. Shaffer. 1,827,621; Oct. 13.
Car couplers, Operating device for. A. E. Small. 1,826,902; Oct. 13.
Car, Drop bottom mine. H. H. Pancake. 1,827,399; Oct. 13.
Car, Refrigerator. A. F. O'Connor. 1,826,814; Oct. 13.
Cars and the like, Method and apparatus for gauging the contents of tank. L. E. Frazier. 1,827,574; Oct. 13.
Carbonator. L. De Markus. 1,827,386; Oct. 13.
Carbonyl compounds Reduction of organic. E. Muench and T. Voltz. 1,826,811; Oct. 13.
Carburetor. H. F. Nelson. 1,827,255; Oct. 13.
Carburetor for internal combustion engines. F. Sturm. 1,827,214; Oct. 13.
Card feeding mechanism, J. K. Peirce. 1,827,259; Oct. 13.
Card, Guide. F. P. Schneider. 1,827,375; Oct. 13.
Carrier: *See*—
Curtain carrier. Game and food carrier.
Dispatch carrier.
Carrier attachment for vehicles, Pole. E. B. Weeks. 1,827,498; Oct. 13.
Cartridge, Blasting. F. H. Armstrong. 1,826,702; Oct. 13.
Cartridge, Blasting. F. H. Kneeland. 1,827,318; Oct. 13.
Case: *See*—
Battery case. Shipping case.
Display case.
Cash register. B. M. Shipley. 1,826,901; Oct. 13.
Casing head. E. F. Guidinger. 1,827,287; Oct. 13.
Casings, Making reenforced drill pipe. A. H. Pascoe. 1,827,437; Oct. 13.
Casket lowering apparatus. H. E. Rosenkranz. 1,826,898; Oct. 13.
Caster. J. Kemme. 1,827,240; Oct. 13.
Caster mounting means. F. Kusterle. 1,827,320; Oct. 13.
Caster, Swivel. E. H. Powers. 1,826,821; Oct. 13.
Cellulose esters, Dyeing organic. W. Hentrich. 1,827,150; Oct. 13.
Cement. Apparatus for making. H. Vanderwerp. 1,826,847; Oct. 13.
Centrifugal separator. E. van der Molen. 1,827,681; Oct. 13.
Chair: *See*—
Rail chair.
Chair. W. H. Brown. 1,827,418; Oct. 13.
Chair seat, Adjustable. G. B. Travis. 1,827,627; Oct. 13.
Cheese cutter. E. P. Perun. 1,827,164; Oct. 13.
Chemical solutions, Method and apparatus for making. T. L. Dunbar. 1,826,753; Oct. 13.
Chlorid, Making stannic. W. S. Lienhardt. 1,826,800; Oct. 13.
Chrome alum, Manufacture of. W. Seidel. 1,826,831; Oct. 13.
Chuck. C. G. Bidwell. 1,827,415; Oct. 13.
Chuck. G. J. Evelo. 1,827,387; Oct. 13.
Circuit breaker, Electric. L. C. Grant. 1,826,772; Oct. 13.
Circuit controlling mechanism, Alternating current. F. W. Lee and M. W. Pullen. 1,826,894; Oct. 13.
Circulating head. L. A. Parker. 1,827,257; Oct. 13.
Clamp: *See*—
Belt clamp. Pneumatic clamp.
Pipe clamp. Suspension clamp.
Plate clamp.
Clamp. C. C. Hansen. 1,827,195; Oct. 13.
Clarinet construction. A. Ciciotti. 1,827,069; Oct. 13.
Clasping device for bracelets. C. H. Kestenman. 1,826,887; Oct. 13.
Claw crowbar. A. Jacquesson. 1,827,363; Oct. 13.
Cleaner: *See*—
Window cleaner.
Cleaning device for radio tuning dials. H. C. Baker and O. A. Ross. 1,826,715; Oct. 13.
Climates, Method and apparatus for producing artificial. J. M. Le Grand. 1,827,530; Oct. 13.
Clip construction. L. W. Kennedy. 1,827,021; Oct. 13.
Clip for pocket instruments. J. P. Lynn. 1,827,324; Oct. 13.
Clipper and grass cutter, Combined hedge. W. G. Heimerdinger. 1,827,149; Oct. 13.
Clock. R. H. Whitehead and W. E. Porter. 1,827,179; Oct. 13.
Clock dial or similar article. F. Weindel, jr. Des. 85,357-8; Oct. 13.
Clock, Self-oscillating electric. C. Battegay. 1,826,719. Oct. 13.
Closure apparatus. K. E. Stant. 1,826,904; Oct. 13.
Closure, Clean out. J. Mastrillo. 1,827,663; Oct. 13.
Closure diaphragms, Pressure operated means for puncturing. S. E. Allen and O. N. Wiswell. 1,827,723; Oct. 13.
Closure, Receptacle. J. Fraser, jr. 1,827,573; Oct. 13.
Cloth unrolling device. M. Schneider. 1,827,171; Oct. 13.
Clothes drier. F. Nehsmann. 1,827,601; Oct. 13.
Clothesline reel. G. H. Reimer. 1,827,439; Oct. 13.
Clutch, Magnetic. W. C. Furnas. 1,826,929; Oct. 13.
Coal, Apparatus for coking. S. W. Parr and T. E. Layng. 1,827,483-4; Oct. 13.
Coating for metals, Flexible vitreous. H. C. Milligan. 1,827,556; Oct. 13.
Coating implement. T. M. Spinks. 1,827,047; Oct. 13.
Coiling machine. K. Williams. 1,827,056; Oct. 13.
Coke apparatus, Multistage low temperature. H. C. Holthoff. 1,827,199; Oct. 13.
Collapsible box, Telescopically. W. S. Luckett. 1,827,396; Oct. 13.
Color in vacuum tube lights, Modifying. G. Claude and J. M. E. de Beaufort. 1,827,705; Oct. 13.
Color of vacuum tube lights, Method of and apparatus for modifying. L. L. Beck. 1,827,704; Oct. 13.
Comb. V. S. Elizey. 1,827,425; Oct. 13.
Combing machine for textile fibres. J. W. Nasmith. 1,827,689; Oct. 13.
Combustion device for furnaces. R. D. Delamere. 1,826,748; Oct. 13.
Communication by electromagnetic waves. G. von Arco. 1,827,054; Oct. 13.
Composition for flameproofing inflammable materials. F. L. Roman. 1,827,263; Oct. 13.
Concrete mixing or transporting vessels, Charging. J. Eggert. 1,827,713; Oct. 13.
Condenser, Dampproof. W. Rüdiger. 1,827,112; Oct. 13.
Conduit coupling, Electric. J. W. McCoy. 1,827,249; Oct. 13.
Conduit system. J. H. Hunter. 1,827,086; Oct. 13.
Confection making machine. A. L. Bausman. 1,826,980; Oct. 13.
Connecter, Automatic train pipe. J. Robinson. 1,826,954; Oct. 13.
Connecting elements, Apparatus for removing. J. McDonough and L. Normann. 1,826,808; Oct. 13.
Connecting rod for radial engines. P. P. Newcomb. 1,827,430; Oct. 13.
Container construction. C. I. Hummer. 1,827,393; Oct. 13.
Container, Dental foil. L. W. Dunham. 1,827,077; Oct. 13.
Container, Edible. J. Denaro. Des. 85,326; Oct. 13.
Container for paper in rolls. J. V. Duffin. 1,827,000; Oct. 13.
Container, Record card. F. M. Carroll and J. S. Eaton. 1,826,991; Oct. 13.
Control apparatus. G. Borden, 2d., and E. Carlton. 1,827,185; Oct. 13.
Control apparatus. A. E. Krogh. 1,827,528; Oct. 13.
Control device for oil burner systems, Stack. W. W. Williams. 1,827,703; Oct. 13.
Control for electric motors, Hand. A. M. Riddell. 1,827,372; Oct. 13.
Control method and apparatus. R. P. Brown. 1,826,986; Oct. 13.
Control system. E. S. Bristol. 1,827,351; Oct. 13.
Control system. E. S. Bristol. 1,827,417; Oct. 13.
Control system for electric motors. W. C. Raube. 1,827,671; Oct. 13.
Controller for induction motors. C. Stansbury. 1,826,963; Oct. 13.
Conveyer. A. O. Williams and W. L. Davis. 1,826,853; Oct. 13.
Conveyer feeding mechanism. L. Sekulski. 1,826,832; Oct. 13.
Conveying system. S. J. Finn. 1,826,759; Oct. 13.
Cooker, Pressure. C. Nelson. 1,826,947; Oct. 13.
Cookstove or range, Gas or electric cabinet. J. Teller and A. P. Schulz. Des. 85,354; Oct. 13.
Cooler: *See*—
Milk cooler.
Cooler for refrigerating apparatus, Liquefied gas. J. R. Martin. 1,827,480; Oct. 13.
Cooling apparatus, Liquid. H. C. Kellogg. 1,826,791; Oct. 13.
Cooling coke. J. W. Reber. 1,827,612; Oct. 13.
Cooling tower. W. Weston. 1,826,912; Oct. 13.
Corn popper. J. V. Nelson. 1,826,948; Oct. 13.
Corner connection for metal frames. I. A. Baum. 1,826,981; Oct. 13.
Cotton with air-blast gins, Ginning. C. A. Bennett. 1,827,183; Oct. 13.
Coupler, Hose or pipe. E. E. Gold. 1,826,770; Oct. 13.
Coupling: *See*—
Conduit coupling. Flexible coupling.
Coupling and valve arrangement, Train pipe. S. A. Glynn. 1,827,286; Oct. 13.
Coupling for connecting pump rods and plungers. L. P. Burgess. 1,827,188; Oct. 13.
Coupling for pumping fire engines. F. J. Harris. 1,827,579; Oct. 13.

Coupling for separable members. O. L. Beardsley. 1,826,982; Oct. 13.
Coupling in an apparatus for extruding matter. J. E. Boynton. 1,826,725; Oct. 13.
Course finding system for aircraft. H. W. Kline. 1,827,590; Oct. 13.
Cover, Tire. T. J. McCormick. 1,827,095; Oct. 13.
Cover, Toothbrush. L. J. Harper. 1,827,634; Oct. 13.
Covers on pails, Apparatus for attaching. C. H. Rollason, 1,827,544; Oct. 13.
Crib, bath tub, and dressing table, Combination. H. E. McCandless. 1,827,687; Oct. 13.
Crib, caisson, and the like. A. H. Gruppe. 1,827,146; Oct. 13.
Crown block. B. S. Minor. 1,826,946; Oct. 13.
Cultivator. T. Brown. 1,827,708; Oct. 13.
Current conducting bond, Electric. M. Schwartz. 1,827,837; Oct. 13.
Current rectifier, Electric. S. Ruben. 1,826,955; Oct. 13.
Curtain carrier. W. H. Toelle. 1,827,443; Oct. 13.
Cusp, Ready made. H. J. Russell. 1,826,826; Oct. 13.
Cutter: *See*—
Cheese cutter.
Cutter. A. H. Krogan. 1,826,891; Oct. 13.
Cutter for defiberizing or shredding redwood bark, wood, and mill waste. C. H. and J. A. Brown. 1,827,352; Oct. 13.
Cutter head. H. C. Koch. 1,826,889; Oct. 13.
Cutting equipment for plastic sheet material. A. C. Fischer, B. A. Stewart, and H. W. Herbst. 1,827,193; Oct. 13.
Decalcomania transfer sheet. W. Hopper. Des. 85,334; Oct. 13.
Deflector, Water. A. J. Janalik. 1,827,009; Oct. 13.
Defrosting refrigeration system. V. P. Warren. 1,827,410; Oct. 13.
Dehydrator, Spray. J. A. Martocello. 1,827,092; Oct. 13.
Demountable wheel. A. Longpré. 1,827,531; Oct. 13.
Depth cut indicator. A. Schmid. 1,827,265; Oct. 13.
Desk construction, Calculator. P. M. Wege. 1,827,128; Oct. 13.
Dial plate, lock dial, and handle for safes, Combined concentric. C. F. Wolters. Des. 85,359; Oct. 13.
Differential adjusting mechanism. M. E. Henning. 1,827,084; Oct. 13.
Differential mechanism. G. Rodrigues. 1,827,403; Oct. 13.
Differential widening means. R. Penn. 1,827,103; Oct. 13.
Directional signal. J. W. Haywood. 1,827,289; Oct. 13.
Dish or article of similar nature, Soap. S. D. Baker. Des. 85,314; Oct. 13.
Disk harrow. H. F. Towner. 1,827,125; Oct. 13.
Dispatch carrier, Pneumatic. A. W. Shannehan. 1,826,883; Oct. 13.
Dispenser and lighter with detachable support, Cigarette. M. Alland. 1,827,501; Oct. 13.
Dispensing device. H. Bartenbach. 1,826,717; Oct. 13.
Dispensing device. R. D. Comrie. 1,827,564; Oct. 13.
Display case. C. J. Taylor and W. H. Dunn. 1,827,175; Oct. 13.
Display device. W. and G. C. Swenson. 1,827,493; Oct. 13.
Display device, Mechanical. H. Kohirigawa. 1,826,939; Oct. 13.
Display plate. J. F. Meyer. Des. 85,341; Oct. 13.
Display rack. J. F. Huckel. 1,827,008; Oct. 13.
Distributor. E. Kliponen. 1,826,888; Oct. 13.
Doll. M. A. Kolar. 1,827,476; Oct. 13.
Dolly, Metallic. J. B. Fletcher. 1,827,226; Oct. 13.
Domestic appliance. R. L. Lee. 1,826,798; Oct. 13.
Doorcheck. J. B. Doyle. 1,827,143; Oct. 13.
Doorcheck. A. C. MacGuire. 1,827,595; Oct. 13.
Door closing device, Elevator. A. A. Wayne. 1,827,631; Oct. 13.
Door, Coke oven. C. Otto. 1,827,329; Oct. 13.
Door for railway cars, Drop. G. G. Gilpin. 1,826,874; Oct. 13.
Door for railway cars, Dump. A. S. Barrows. 1,827,063; Oct. 13.
Door operating mechanism, Garage. H. N. Bovee. 1,826,984; Oct. 13.
Door, Sliding. W. H. Kendall. 1,827,433; Oct. 13.
Doors, Elevating means for car. A. Wasberg and K. J. Tobin. 1,826,910; Oct. 13.
Draft appliance and the like. C. E. Carpenter. 1,826,989; Oct. 13.
Drainage control system. J. M. Barrett. 1,827,453; Oct. 13.
Drapery hook. B. B. Fick. 1,827,644; Oct. 13.
Dress. D. Long. Des. 85,339; Oct. 13.
Dressing mixer, Oil salad. F. Pickard. 1,827,608; Oct. 13.
Drier: *See*—
Clothes drier.
Drier for washing machines, Centrifugal clothes. M. S. Ogonowski. 1,826,816; Oct. 13.
Drive, Film. B. W. Kellogg. 1,827,588; Oct. 13.
Driver for wheel lathes. E. Blau. 1,827,136; Oct. 13.
Duct terminal. W. Beauregard. 1,826,863; Oct. 13.
Dyestuff, Indigold. W. Bauer and L. Zeh. 1,826,721; Oct. 13.
Dyestuffs of the benzanthrone series, Vat. A. Lüttringhaus, H. Wolff, and H. Neresheimer. 1,827,295; Oct. 13.
Earth working apparatus. R. L. Harrison. 1,826,931; Oct. 13.
Economizer with overlapping plates. H. J. Kerr. 1,827,201; Oct. 13.
Electric controlling apparatus. H. K. Kouyoumjian. 1,826,890; Oct. 13.
Electric inductance furnace. D. Willcox. 1,827,274; Oct. 13.
Electric motor. A. E. Rittenhouse. 1,827,690; Oct. 13.
Electric switch. T. T. Greenwood. 1,827,516; Oct. 13.
Electrical apparatus, Insulation of. M. E. Fiene. 1,827,571; Oct. 13.
Electrical safety device. C. E. Stryker. 1,826,965; Oct. 13.
Electrical transformer. J. Kubler. 1,826,794; Oct. 13.
Electrode. W. B. Chapman and H. G. Fischer. 1,827,306; Oct. 13.
Electrode. L. W. Laube. 1,827,292; Oct. 13.
Electrode structure. A. H. Staiger. 1,827,211; Oct. 13.
Electromagnetic device. R. E. H. Carpenter. 1,826,990; Oct. 13.
Electromedical apparatus. M. Smart. 1,827,045; Oct. 13.
Elevator. M. S. Carmichael. 1,827,068; Oct. 13.
Embossing or stamping machine, Attachment to. F. Williams. 1,827,550; Oct. 13.
Emulsions, Producing. H. Schrader. 1,826,900; Oct. 13.
Engine: *See*—
Internal-combustion engine. Rotary engine.
Oil engine.
Engines, Apparatus for use in preventing incrustation of water cooled. J. F. Sanftleben. 1,827,113; Oct. 13.
Engines, Device for starting internal combustion. L. P. Croset. 1,827,461; Oct. 13.
Envelope. B. W. Brockett. 1,827,507; Oct. 13.
Envelope. W. E. Guina. 1,827,468; Oct. 13.
Envelopes and machine therefor, Making. A. Novick. 1,827,539; Oct. 13.
Enzymes and beverage, Obtaining malt. E. Jalowetz and M. Hamburg. 1,826,790; Oct. 13.
Escutcheon plate. E. W. North. Des. 85,342; Oct. 13.
Ester of the leuco compound of a vat dyestuff, Sulphuric acid. W. Bauer and L. Zeh. 1,826,720; Oct. 13.
Esters, Manufacturing. C. Haner. 1,827,653; Oct. 13.
Excavating shovel. H. J. Brendlin. 1,826,920; Oct. 13.
Extinguisher for cigarettes and the like. G. D. Glomb. 1,827,360; Oct. 13.
Extractor. W. A. Rice. 1,827,109; Oct. 13.
Fabric and making same, Mildewproof. R. Harvey and H. V. Day. 1,827,083; Oct. 13.
Fabric and making the same, Tufted. A. S. Riviere. 1,827,614; Oct. 13.
Fabric for curtains. S. H. Brice. 1,827,278; Oct. 13.
Fabrics, Identifying. E. C. Geier. 1,827,513; Oct. 13.
Fabrics, Method and apparatus for tracing metallic bodies in. J. Bing. 1,827,349; Oct. 13.
Fan regulating device. R. Ragan. 1,827,039; Oct. 13.
Fastener. A. W. Gavitt. 1,827,357; Oct. 13.
Fastener. E. S. Mix. 1,827,398; Oct. 13.
Fastener. H. Rosenberg. 1,827,615; Oct. 13.
Fastener for boxes. E. A. Olley and D. B. Winter. 1,826,817; Oct. 13.
Fastener, Separable. N. Warshaw. 1,826,909; Oct. 13.
Fastener unit. D. Dyresen. 1,827,309; Oct. 13.
Fastener, Window. P. J. Wesolowski. 1,826,911; Oct. 13.
Fastening device for bracelets. E. L. Johnson and O. Lundsten. 1,827,364; Oct. 13.
Fastening device, Shoe lace. F. P. Ellsworth. 1,827,424; Oct. 13.
Fastening for metal decking. W. E. White and P. C. Monjar. 1,826,913; Oct. 13.
Fastening means. H. S. Theys and L. Horowitz. 1,827,050; Oct. 13.
Fastening means for metal barrels. R. J. Bell. 1,826,918; Oct. 13.
Faucet, Beverage mixing. W. T. Comer. 1,827,458; Oct. 13.
Faucet, Driving. I. E. Stump and T. A. Knoedler. 1,826,838; Oct. 13.
Feeder, Animal. D. H. Doane. 1,827,075; Oct. 13.
Feed roller, Self adjusting. F. Gitzendanner. 1,827,359; Oct. 13.
Fender, Resilient automobile. M. Nastri. 1,827,435; Oct. 13.
Ferrule for blasting cartridges. W. A. McCurdy. 1,827,032; Oct. 13.
Fertilizers, Producing. A. Holz. 1,826,785; Oct. 13.
Fiber for conversion into derivatives, Preparation of cellulose. G. A. Richter, M. O. Schur, and R. H. Rasch. 1,826,825; Oct. 13.
Figures constituted by strips or rods, Cut out. J. G. Mompou. 1,827,599; Oct. 13.
File, Loose leaf. R. R. Webb. 1,827,273; Oct. 13.
Filing apparatus. R. McKnight. 1,827,296; Oct. 13.
Filling and draining device. W. H. Scott. 1,826,829; Oct. 13.
Film support for photographic apparatus. F. H. Owens. 1,827,206; Oct. 13.
Films, Method of and apparatus for producing motion picture. O. Chouinard. 1,827,282; Oct. 13.
Finger and ring gauge, Combined. K. H. Kooyoomjian. 1,827,702; Oct. 13.
Firearm. J. D. Pedersen. 1,827,037; Oct. 13.
Fishing line reel. B. U. Rosch. 1,827,488; Oct. 13.
Fishing rods, Reel connecting means for. O. W. Brenizer. 1,827,277; Oct. 13.
Fitting for conduit systems. C. Gottwald. 1,826,877. Oct. 13.

Flare, Airplane parachute. T. L. Hoehn and H. W. Hoehn. 1,827,580; Oct. 13.
Flash light. M. E. Buchholz. 1,826,864; Oct. 13.
Flavanthrone, Production of. W. M. Murch. 1,827,254; Oct. 13.
Flexible coupling. C. O. Thomas. 1,827,176; Oct. 13.
Flexible coupling. V. P. Williams. 1,827,129; Oct. 13.
Flexible joint. W. F. Hundemer. 1,827,432; Oct. 13.
Floor and the like polishing appliance. J. Gailhofer. 1,827,003; Oct. 13.
Floor treating machine. C. E. Reddig. 1,827,402; Oct. 13.
Flyer construction. M. J. McHale. 1,827,161; Oct. 13.
Flyer or traveler for serving machines. H. P. Arnold. 1,826,713; Oct. 13.
Fly trap. H. F. Davis. 1,826,746; Oct. 13.
Foam compounds, Treating. J. A. Rice. 1,826,897; Oct. 13.
Folding box. E. H. Lupton. 1,827,593; Oct. 13.
Folding box. A. T. Spare. 1,826,962; Oct. 13.
Folding table. E. A. Rosen. 1,827,373; Oct. 13.
Forms, Adjustment for alignment of road or similar. J. B. Rogers. 1,827,672; Oct. 13.
Frame: *See*—
Locomotive booster frame.
Frame for medium and long fibrous material, more particularly combed wood, artificial silk, ramie, Pull-through drawing. P. Cornibert. 1,827,385; Oct. 13.
Frame for motor cars, Rigid. N. L. Causan. 1,826,730; Oct. 13.
Frame for staples, Holding. C. E. Hallen. 1,827,315; Oct. 13.
Freezing device. J. J. Hayes. 1,826,781; Oct. 13.
Frog, Double slope re-railing. R. W. Bryant. 1,827,220; Oct. 13.
Fruits, Preserving fresh. E. M. Brogden. 1,827,219; Oct. 13.
Fuel burner, Disappearing rotary hydrocarbon fuel. T. Davis. 1,826,995; Oct. 13.
Furnace: *See*—
Boiler furnace. Ore roasting furnace.
Electric inductance furnace. Tempering furnace.
Furnace. F. A. Fahrenwald. 1,827,079; Oct. 13.
Furnace. A. F. Nelson. 1,827,370; Oct. 13.
Furnace discharging apparatus. E. F. Ament. 1,827,413; Oct. 13.
Gaiter or similar waterproof rubber footwear. L. M. Bitgood. Des. 85,318–19; Oct. 13.
Game and food carrier, Preserving. L. Hall. 1,827,517; Oct. 13.
Game board. R. L. Clark. 1,827,383; Oct. 13.
Game board or article of analogous nature. J. K. Ducey. Des. 85,328; Oct. 13.
Garment and kit, Combination. R. J. Booth. 1,827,456; Oct. 13.
Garment press. S. J. Locke. 1,827,154; Oct. 13.
Garment press. M. M. Titterington. 1,827,341; Oct. 13.
Gas burner. F. J. C. Bluhm. 1,827,505; Oct. 13.
Gas heater. B. C. Bartlebaugh. 1,827,379; Oct. 13.
Gas lift means. M. P. Burke. 1,827,066; Oct. 13.
Gas, Manufacturing water. W. M. Russell. 1,827,169; Oct. 13.
Gate. J. W. Street. 1,827,173; Oct. 13.
Gauge: *See*—
Finger and ring gauge. U-gauge.
Liquid level gauge.
Gauge. A. J. McDanel. 1,826,807; Oct. 13.
Gear, Draft and buffing. F. E. Stebbins. 1,826,837; Oct. 13.
Gear for baby carriages, Running. G. Stinson. 1,827,492; Oct. 13.
Gear, Hypoid. E. Wildhaber. 1,826,852; Oct. 13.
Gear, Landing. B. V. Korvin-Kroukovsky. 1,827,242; Oct. 13.
Gear, Variable speed. W. Jacobs. 1,827,582; Oct. 13.
Geared rod. J. C. McClurkin and A. Stallard. 1,827,248; Oct. 13.
Gearing, Power transmission. J. E. Batts. 1,826,703; Oct. 13.
Gears, Reverse yoke for locomotive valve. K. S. Trent. 1,827,122; Oct. 13.
Gem and jewel, Composite. H. H. Welch. 1,827,695; Oct. 13.
Generator and method of generation, Steam. C. E. Bishop. 1,827,064; Oct. 13.
Geological explorations. F. Rieber. 1,827,371; Oct. 13.
Glass, Apparatus for making. H. F. Hitner. 1,827,471–2; Oct. 13.
Glass, Apparatus for making sheet. R. C. Conn. 1,827,459; Oct. 13.
Glass, Apparatus for rolling. C. Locreille. 1,827,155; Oct. 13.
Glass attachment for dial telephones, Magnifying. A. G. Bradford. 1,827,557; Oct. 13.
Glass melting apparatus. A. L. Harrington. 1,827,469; Oct. 13.
Glass, Process of and apparatus for rolling. A. Brancart. 1,827,138; Oct. 13.
Glassware, Apparatus for cleaning. V. S. Mackres. 1,826,942; Oct. 13.
Glassware forming machine. J. P. Benoit. 1,827,698; Oct. 13.
Globe, Luminous. S. Thies. 1,826,842; Oct. 13.
Glove, Baseball. W. P. Whitley. 1,826,851; Oct. 13.
Gold and silver, Apparatus for recovering. S. A. Giles. 1,827,467; Oct. 13.
Grader, Road. G. D. Shaeffer. 1,827,042; Oct. 13.
Grids, Protecting storage battery. F. E. E. Booss and R. N. Chamberlain. 1,826,724; Oct. 13.
Grinding machine. E. Ley. 1,827,688; Oct. 13.
Grinding wheel. G. E. Vance. 1,826,907; Oct. 13.
Grindstones, Device for surfacing. K. Jung. 1,827,659; Oct. 13.
Guard, Grinding wheel. G. E. Smith. 1,827,270; Oct. 13.
Guard, Highway. J. M. Dodridge. 1,826,998; Oct. 13.
Gun stock. C. W. Kress. Des. 85,338; Oct. 13.
Hair, Method and apparatus for waving. H. Bonat. 1,827,455; Oct. 13.
Hair waving, Method and apparatus for. C. H. McIntire. 1,827,434; Oct. 13.
Hair winder, Curling rod. I. B. Kimmel. 1,072,291; Oct. 13.
Halide of a rare refractory metal, Preparation of an oxide-free. J. W. Marden and H. C. Rentschler. 1,826,806; Oct. 13.
Hammer, Electric. J. E. Bryan. 1,827,611; Oct. 13.
Hammers, Attachment for pneumatic. J. Galaz. 1,827,647; Oct. 13.
Hand brake wheel. A. F. O'Connor. 1,826,815; Oct. 13.
Handle construction for culinary utensils. R. Washburn. 1,827,126; Oct. 13.
Handle member for razor blades. A. W. Ericsson. 1,827,509; Oct. 13.
Hanger: *See*—
Radiator hanger.
Hanger for articles to be plated. L. Lichtman. 1,827,478; Oct. 13.
Hasp for trunk locks. A. J. Komenak. 1,827,319; Oct. 13.
Hat box, Wardrobe. J. Ritter, jr. 1,827,542; Oct. 13.
Header, Return. P. Y. Duffee. 1,826,999; Oct. 13.
Headlamp, Fixed focus. S. F. Arbuckle. 1,826,712; Oct. 13.
Headlight. F. C. Hacheney. 1,827,651; Oct. 13.
Headlight rim. E. L. Udell. 1,827,305; Oct. 13.
Heat exchange apparatus. A. E. Paige. 1,826,950; Oct. 13.
Heat exchanger. H. C. Davis and W. H. Thompson. 1,826,747; Oct. 13.
Heat exchanging device. W. A. Haven. 1,827,231; Oct. 13.
Heat intensifier for boilers. W. F. McPhee and H. C. Krueger. 1,827,033; Oct. 13.
Heat regulating device. D. G. Taylor. 1,827,340; Oct. 13.
Heater: *See*—
Air heater. Water heater.
Gas heater.
Heater. V. Boschetti. 1,827,639; Oct. 13.
Heater and range, Combination. C. and C. Rogers. Des. 85,348; Oct. 13.
Heater construction, Copper coil water. H. Howell. 1,827,581; Oct. 13.
Heel attaching device. J. Wolf. 1,827,058; Oct. 13.
Heel clamp for shoemakers, Adjustable. P. Kaplan and J. Kohn. 1,827,152; Oct. 13.
Heels to shoes, Apparatus for use in attaching. F. E. Bertrand. 1,826,723; Oct. 13.
Hemiglobinometer. H. L. Walter. 1,826,849; Oct. 13.
Hinge, Spring pivot. W. J. Keene. 1,827,365; Oct. 13.
Hoe, Power operated. J. C. Ditlevsen. 1,827,074; Oct. 13.
Holder, Bucket. V. N. Burrows. 1,827,221; Oct. 13.
Holder, Door. E. Winegar and J. C. Shutt. 1,827,634; Oct 13.
Holder, Educational strip. W. H. Holmes. 1,826,934; Oct. 13.
Holder for firearms. M. M. Arias. 1,827,182; Oct. 13.
Holder for shoe racks, Card. H. L. Glidden. 1,826,769; Oct. 13.
Holder, Grain bag. C. C. Tippett. 1,827,495; Oct. 13.
Holder, Manifolding paper. W. J. Wiswall. 1,827,448; Oct. 13.
Holder, Nursing bottle. B. Morishita. 1,826,810; Oct. 13.
Holder, Pocket pencil and pen. F. N. Gilbert. 1,827,466; Oct. 13.
Holder, Price tag. J. P. Siebe. 1,827,623; Oct. 13.
Holder, Umbrella. F. Hilburger. 1,827,524; Oct. 13.
Hook: *See*—
Drapery hook.
Hopper, Car. M. H. Martin. 1,827,030; Oct. 13.
Hydraulic regulator. R. Carlstedt. 1,827,067; Oct. 13.
Hydrocarbons, Cracking. E. C. Herthel and H. L. Pelzer. 1,826,782; Oct. 13.
Hydrocarbons, Process and apparatus for treating. C. P. Dubbs. 1,827,076; Oct. 13.
Hydrocarbons, Process and apparatus for treating heavier. C. H. Jenkins. 1,827,018; Oct. 13.
Hydrocarbons, Treatment of aliphatic. G. W. Howlett. 1,826,787; Oct. 13.
Hydrogen, Producing. R. Williams. 1,826,974; Oct. 13.
Ice can filler. T. J. Byrnes. 1,826,704; Oct. 13.
Igniting composition. J. Parsons and J. H. Stover. 1,826,819; Oct. 13.
Illuminating apparatus. G. H. Cushing. 1,827,141; Oct. 13.
Illumination control system. A. Simon. 1,827,043; Oct. 13.
Indenturing apparatus. H. W. Larson. 1,826,795; Oct. 13.
Index sheet Visible. F. C. Bingham. 1,827,638; Oct. 13.
Index, Sliding desk leaf. M. Maeder. 1,827,027; Oct. 13.

Indexing mechanism. M. H. Hill. 1,827,007; Oct. 13.
Indicator: *See*—
Balance indicator. Depth cut indicator.
Inductance, Shielded. W. L. Casper. 1,827,191; Oct. 13.
Insert for molded parts and making the same, Metal. F. C. De Reamer. 1,827,565; Oct. 13.
Insulating jacket. O. F. Mottweiler and D. C. Drill. 1,827,035; Oct. 13.
Interlocking system for high frequency transmitters. L. A. Gebhard. 1,826,766; Oct. 13.
Internal combustion engine. J. L. Henderson. 1,827,006; Oct. 13.
Internal combustion engine. L. Myrick, jr. 1,827,482; Oct. 13.
Internal combustion engine. E. Rector. 1,827,108; Oct. 13.
Internal combustion engine, Air-cooled. B. H. Morgan and G. F. Jones. 1,827,700; Oct. 13.
Internal combustion engine, Radial. C. S. McCann. 1,827,094; Oct. 13.
Iron: *See*—
Soldering iron.
Iron and steel, Treatment of. C. M. Dennis. 1,827,223; Oct. 13.
Ironing board. H. E. Bradstreet. 1,827,218; Oct. 13.
Ironing board. T. C. and D. W. Petri. 1,827,670; Oct. 13.
Jack: *See*—
Tool jack.
Joint: *See*—
Flexible joint. Pipe joint.
Joint recorder, Low rail. L. F. Carter. 1,827,190; Oct. 13.
Joints, Making resilient. C. R. Short. 1,827,267; Oct. 13.
Joints, Method of and machine for manufacturing expansion. A. E. Brown. 1,826,985; Oct. 13.
Katopter. F. McFadden. 1,827,250; Oct. 13.
Key retainer, Draft. D. S. Barrows. 1,827,132; Oct. 13.
Kiln for decorating ceramic ware and other purposes. H. M. Robertson. 1,827,543; Oct. 13.
Kiln for the production of cement. H. Engel. 1,827,144; Oct. 13.
Knitting machine, Circular. E. Spiers. 1,827,677; Oct. 13.
Knitting machines, Fabric take off device for full fashioned. G. Gastrich. 1,826,872; Oct. 13.
Knitting machines, Yarn changing means for circular. A. W. Kent. 1,827,660; Oct. 13.
Lace machine. L. H. Debaene. 1,826,996; Oct. 13.
Lamp, Electric arc. T. C. Russell. 1,827,374; Oct. 13.
Lamp, Marine. L. E. Perkins. 1,827,207; Oct. 13.
Lap table. W. Hanley. 1,827,518; Oct. 13.
Latch. P. S. Dunn. 1,826,868; Oct. 13.
Latch, Door. J. J. Piper. 1,827,400; Oct. 13.
Latch release, Dipper door. L. R. Culver. 1,827,420; Oct. 13.
Latch, Sash. W. A. Smith. Des. 85,350; Oct. 13.
Lather, Device for producing and dispensing. F. P. Gallipoli and T. A. Kingsley, sr. 1,827,649; Oct. 13.
Laundry device. N. Stramaglia. 1,827,678; Oct. 13.
Laundry flat spreader and rack piece. L. R. Sager. 1,827,336; Oct. 13.
Lavatory construction. C. C. Veneman. 1,827,053; Oct. 13.
Lawn sprinkler. W. Steininger. 1,827,339; Oct. 13.
Leakage in valves, Preventing. W. D. La Mont. 1,826,941; Oct. 13.
Leather, Lustering. G. R. Pensel and S. H. Friestedt. 1,827,163; Oct. 13.
Lehr with insulated tunnel, Glass annealing. A. W. Russell and H. A. Wadman. 1,827,673; Oct. 13.
Lens edging machine. A. E. Maynard. 1,827,368; Oct. 13.
Level, Split. E. C. Chatham. 1,826,731; Oct. 13.
Life belt. S. D. Wills. 1,827,057; Oct. 13.
Light: *See*—
Flash light. Signal light.
Light assembly, Show case. L. W. Kennedy. 1,827,022; Oct. 13.
Light projector. M. Exelmans. 1,826,927; Oct. 13.
Light timing device, Parking. A. J. Farrar. 1,826,870; Oct. 13.
Light unit, Reflecting. W. V. Bergen and A. C. Shute. Des. 85,360; Oct. 13.
Lighter, Cigar and cigarette. H. B. Ivey. 1,826,789; Oct. 13.
Linings, Making refractory. S. Westberg. 1,827,446; Oct. 13.
Linoleum, Manufacture of. A. A. Godfrey. 1,827,145; Oct. 13.
Liquid level gauge. C. H. Cuno and S. L. Wolfson. 1,827,192; Oct. 13.
Liquids, Apparatus for dispensing. J. A. Bolton. 1,827,555; Oct. 13.
Liquids, Spraying. T. W. James. 1,827,583; Oct. 13.
Liquor spirit, Treating sulphite. M. Gade. 1,827,080; Oct. 13.
Litter remover. F., H. W., and A. F. Johnson. 1,827,236; Oct. 13.
Load carrying and launching device. A. D. McKenzie. 1,827,534; Oct. 13.
Loading limiting device. F. Hodgkinson. 1,826,884; Oct. 13.
Loader for muzzle-loading mortars, Mechanical. L. M. McBride. 1,827,031; Oct. 13.
Loader, Oven. F. A. Hoppe and J. Cryns. 1,826,885; Oct. 13.
Lock: *See*—
Switch lock.
Lock for bedsteads and the like, Side rail. W. H. Parry, sr. 1,827,330; Oct. 13.
Locking device. C. J. Symmonds. 1,826,841; Oct. 13.
Locking device, Trunk. C. P. Albert. 1,827,060; Oct. 13.
Locking device for doors of baling presses. H. Jacobson and K. Aichelen. 1,826,936; Oct. 13.
Locomotive booster frame. J. A. McGrew. 1,827,665; Oct. 13.
Locomotive construction. L. P. Michael. 1,827,666; Oct. 13.
Locomotive having power cylinders connected to the driving mechanism, Diesel. J. Geiger. 1,826,873; Oct. 13.
Locomotives, Main crank pin collar for. J. S. Keen. 1,827,587; Oct. 13.
Log barker. C. B. Thorne. 1,827,052; Oct. 13.
Loom. Filling replenishing. P. J. St. Jean. 1,827,717; Oct. 13.
Loom temple. L. P. Batson. 1,826,862; Oct. 13.
Looms, Let off mechanism for. H. A. Davis. 1,827,712; Oct. 13.
Looms, Shuttle box motion for. H. W. Thatcher. 1,827,272; Oct. 13.
Looper operating mechanism for sewing machines. F. Lutz. 1,827,594; Oct. 13.
Machine for applying caps to bottles. H. W. Goewey. 1,826,930; Oct. 13.
Machine for buffing air bags. G. G. Andrews. 1,827,637; Oct. 13.
Machine for building rubber conduits. J. I. Haase. 1,827,650; Oct. 13.
Machine for cutting and panning biscuits. C. Becker. 1,827,133; Oct. 13.
Machine for drawing threads in fabrics. H. Corrall. 1,827,706; Oct. 13.
Machine for filling containers. R. N. Cundall. 1,826,926; Oct. 13.
Machine for flipping covers on belts. J. A. Shively. 1,827,674; Oct. 13.
Machine for folding or plaiting fabrics. J. Nanterme. 1,827,160; Oct. 13.
Machine for making containers. A. Schroeder. 1,827,545; Oct. 13.
Machine for making diapers. A. E. Clark. 1,826,925; Oct. 13.
Machine for manufacturing floor mats for motor vehicles. W. H. Leavenworth. 1,827,709; Oct. 13.
Machine for turning manure piles. J. Giletti. 1,827,358; Oct. 13.
Machine for typewriting music. L. Ailland. 1,827,451; Oct. 13.
Magnetic cores, Making. R. C. Shermund. 1,827,376; Oct. 13.
Magnetic structures, Making. J. W. Andrews. 1,826,711; Oct. 13.
Magneto. T. G. Louis. 1,827,323; Oct. 13.
Marker, Dovetail. A. O. Martin. 1,827,156; Oct. 13.
Marker, Road. J. S. Littleford, jr. 1,826,801; Oct. 13.
Mat with foldable sun-blind, Reposing. J. Kotausek. 1,827,477; Oct. 13.
Material, Apparatus for drying liquid or pulpy. W. Sasse. 1,827,617; Oct. 13.
Material conveying system. R. H. Moore. 1,827,326; Oct. 13.
Material for and making ornamental devices. L. W. F. Carstein. 1,826,928; Oct. 13.
Material, Manufacturing gas tight. H. Strobl. 1,827,213; Oct. 13.
Material, Melting oxidizable. C. Tama. 1,827,174; Oct. 13.
Material, Method and apparatus for determining the result of treatment of. B. Johnsen. 1,827,658; Oct. 13.
Material working apparatus. J. S. Stull. 1,827,302; Oct. 13.
Materials, Apparatus for collecting and conveying. G. R. Sylvester. 1,826 840; Oct. 13.
Materials, Treating. P. P. Zimmerman. 1,826,856; Oct. 13.
Materials, Treating fibrous. C. Leyst-Küchenmeister. 1,827,710; Oct. 13.
Mats, Ornamenting rubber. P. M. Weamer. 1,827,127; Oct. 13.
Measuring and indicating means, Electric liquid. M. J. Huggins. 1,827,525; Oct. 13.
Measuring apparatus. C. G. Bliss. 1,826,919; Oct. 13.
Measuring apparatus. S. Newall. 1,827,602; Oct. 13.
Measuring electric conductivity of fluid. E. A. Keeler. 1 826,886; Oct. 13.
Measuring instrument. J. J. McCabe. 1,827,093; Oct. 13.
Measuring instrument, Electric. T. R. Harrison. 1,826,879; Oct. 13.
Mercury switch. P. K. Cramblet. 1,826,993; Oct. 13.
Mercury switch. P. K. Cramblet. 1,827,072; Oct. 13.
Mercury switch metal clip type. P. K. Cramblet. 1,827,071; Oct. 13.
Metal against corrosion and particularly of iron and steel against rust, Proofing of. W. H. Cole. 1,826,866; Oct. 13.
Metal and plate, Cast. G. G. Gilpin. 1,826,875; Oct. 13.
Metal, Device for use in forming undercut sections of rolled. H. Oberschulte. 1 826,813; Oct. 13.
Metal, Method of and apparatus for flanging. C. J. Anchor. 1,827,452; Oct. 13.
Metal screen. W. P. Chamberlain, jr. 1,827,382; Oct. 13.
Metal surfaces, Protecting. S. R. Mason. 1,827,204; Oct. 13.
Metal surfaces, Protecting. S. R. Mason. 1,827,247; Oct. 13.

Metal turning machine, Multiple spindle. J. C. Potter. 1,827,485; Oct. 13.
Metallic resistor. F. T. Cope. 1,827,508; Oct. 13.
Metals, Apparatus for recovering easily fusible. W. F. Eppensteiner and H. Morecroft. 1,826,755; Oct. 13.
Metals, Purifying ferrous. C. T. Henning. 1,826,880; Oct. 13.
Meter: *See*—
Water meter.
Meters, Adjustable tangent arm for gas. H. G. Weymouth. 1,826,850; Oct. 13.
Milk cooler. I. J. B. Demers. 1,826,750; Oct. 13.
Mill: *See*—
Sugar roll mill. Tumbling mill.
Mixer: *See*—
Dressing mixer.
Molding apparatus. H. J. McKay, P. J. Carlsen, A. O. Fuhrman, and E. Unzel. 1,826,945; Oct. 13.
Molding material and mold. C. H. M. Elmquist. 1,827,426; Oct. 13.
Mop. A. Harder. 1,827,578; Oct. 13.
Mop. H. Hertzberg. 1,827,523; Oct. 13.
Motion, Transmission of. G. S. Binckley. 1,827,560; Oct. 13.
Motor: *See*—
Electric motor.
Motor timing and correcting device. F. E. Dietrich. 1,826 997; Oct. 13.
Mounting, Piano key. F. A. Victor. 1,826,848; Oct. 13.
Mower, Lawn. L. B. Roth. 1,826,899; Oct. 13.
Mower, Lawn. M. Soss. 1,827,116; Oct. 13.
Mower, Power operated lawn. W. E. Beazley. 1,827,559; Oct. 13.
Musical instruments, Attachment for stringed. V. S. Truett and H. H. George. 1,826,969; Oct. 13.
Nail head capping machine. G. E. Dickson. 1,827,566; Oct. 13.
Necktie. A. J. Fleumedoro. Re18,224; Oct. 13.
Necktie. L. Friedman. 1,827,313; Oct. 13.
Nozzle. Adjustable fuel burning. G. W. Jarvis. 1,827,235; Oct. 13.
Nozzle controlled switch. F. G. Farr. 1,827,355; Oct. 13.
Nozzle dissolver, Spray. J. F. Corbett. 1,827,384; Oct. 13.
Nut cracker. D. O. De Loach. 1,827,643; Oct. 13.
Nut, Lock. A. d'Halloy. 1,826,777; Oct. 13.
Oil burner. H. L. Le Daum and L. C. Sturgis. 1,827,294; Oct. 13.
Oil burner, Fuel. A. W. Gearhart. 1,827,390; Oct. 13.
Oil can. J. J. Voisine. Des. 85,355; Oct. 13.
Oil conversion, Process and apparatus for, hydrocarbon. C. J. Pratt. 1,827,107; Oct. 13.
Oil, Cracking petroleum. A. D. Davis. 1,827,073; Oct. 13.
Oil, Dehydration of emulsified. J. C. Morrell. 1,827,714; Oct. 13.
Oil, Desulphurization and purification of hydrocarbon. J. C. Morrell. 1,827,537; Oct. 13.
Oil engine. F. Huber. 1,826,788; Oct. 13.
Oil from bleaching clay, Separation of. J. K. Pfaff and A. Siewecke. 1,827,165; Oct. 13.
Olive oil, Producing. H. P. and G. Burt, and R. E. Sanborn. 1,826,987; Oct. 13.
Opener, Container. C. E. Dodson. 1,827,307; Oct. 13.
Opener, Receptacle. N. P. Courtney. 1,826,740; Oct. 13.
Ophthalmic mounting. N. M. Baker. 1,827,345–6; Oct. 13.
Ore, Apparatus for exploring for. L. B. Slichter. 1,826,961; Oct. 13.
Ore roasting furnace. C. E. Keating. 1,827,526; Oct. 13.
Ores in the manufacture of rustless steel, Treating. C. Hart. 1,826,932; Oct. 13.
Ores of titanium, containing chromium and recovering the sulphuric acid, Treating. N. Specht. 1,827,691; Oct. 13.
Organic compounds, Catalytic dehydrogenation of. A. O. Jaeger. 1,827,317; Oct. 13.
Ornament, Shoe. S. M. Riker. Des. 85,346; Oct. 13.
Oscillator, Piezo electric. R. A. Heising. 1,827,196; Oct. 13.
Oven, Electric. G. W. Heinbuch. 1,827,656; Oct. 13.
Oven, Vertical chamber. C. Otto. 1,827,328; Oct. 13.
Overalls. J. Kantz. 1,827,585; Oct. 13.
Packages, Sealing. C. H. Ames. 1,827,636; Oct. 13.
Packet-package and dispensing apparatus. S. Cooper. 1,827,354; Oct. 13.
Packing device. S. G. Wingquist. 1,826,914; Oct. 13.
Packing of glass and other very fragile articles, Device for breakage-proof. W. Lindermann. 1,827,322; Oct. 13.
Packing, Self adjusting metallic gland. C. F. Thomas. 1,826,967; Oct. 13.
Pajamas, Detachable tape adjuster for. A. P. Lubell. 1,826,803; Oct. 13.
Paper and making same, Waterproof. L. Kirschbraum. 1,827,700; Oct. 13.
Paper coating, composition. D. B. Bradner. 1,826,726; Oct. 13.
Paper folding machine. O. Kleinschmit. 1,827,589; Oct. 13.
Paper making machine. A. E. Cofrin. 1,826,735; Oct. 13.
Paper making machine. W. R. Thomson. 1,827,177; Oct. 13.
Paper oiler, waxer, and moistener. R. Mowrey. 1,827,667; Oct. 13.
Paper package, Wax. N. Marcalus. 1,827,029; Oct. 13.
Parking device. R. W. Branson. 1,827,457; Oct. 13.
Pen and pencil, Fountain. V. Z. Felipe. 1,827,311; Oct. 13.
Pencil. F. Schroeder and A. Raddatz. 1,827,619; Oct. 13.
Perforating device. B. K. F. Ewald. 1,827,002; Oct. 13.
Permanent waving pad and stick apparatus. G. M. Hutchby. 1,827,290; Oct. 13.
Photoelectric cell. A. Joffé. 1,827,016; Oct. 13.
Photographic apparatus. J. S. Greene and A. W. Caps. 1,827,392; Oct. 13.
Photographic sound recording means. A. B. Chereton and W. C. Cummings. 1,826,924; Oct. 13.
Photographic printing apparatus. V. K. Zworykin. 1,826,858; Oct. 13.
Piano, Electrical sostenuto. S. Cooper. 1,827,419; Oct. 13.
Piano with floating bridge. J. H. Hammond, jr. 1,826,778; Oct. 13.
Pianos. Folding keybed for. A. H. Morse. 1,827,096; Oct. 13.
Pianoforte, Pneumatically operated. R. H. Collen. 1,827,563; Oct. 13.
Pickers, Snapping roll for corn. H. Synck. 1,827,216; Oct. 13.
Picture machines, Power transmission and framing mechanism for motion. L. D. Kohlmeyer. 1,827,011; Oct. 13.
Pile core, Expanding. F. L. Jenkins. 1,827,015; Oct. 13.
Pile core from the point of the pile, Arrangement for forcing away the. I. Zelssl. 1,827,552; Oct. 13.
Pipe: *See*—
Smoking pipe. Tobacco pipe.
Stove pipe.
Pipe and the like. Reinforced concrete. J. C. Schulze and G. W. Egerer. 1,827,620; Oct. 13.
Pipe clamp. J. Gurschke. 1,827,576; Oct. 13.
Pipe joint, Flexible. W. C. White. 1,827,500; Oct. 13.
Piston for internal combustion engines. C. Borgo and E. Manuel. 1,827,556; Oct. 13.
Piston of engines, Lubricating the. F. A. Kowarick. 1,827,661; Oct. 13.
Plastic composition. A. M. Nastukoff. 1,827,538; Oct. 13.
Plate clamp. C. G. Pritchard and C. W. Harrold. 1,827,300; Oct. 13.
Plate device for attaching seat covers, Pronged. A. D. Patchen. 1,827,606; Oct. 13.
Plow. E. E. Englund. 1,827,001; Oct. 13.
Plowshare. G. Rust. 1,827,170; Oct. 13.
Plugging of cables and the like, Gastight. H. Bartenbach. 1,826,716; Oct. 13.
Plumb rod, Engineer's. W. M. Tenney. 1,827,049; Oct. 13.
Pneumatic clamp. H. H. Payzant. 1,827,258; Oct. 13.
Porosity tester. C. E. Carpenter. 1,827,562; Oct. 13.
Port and valve cooling arrangement, Dual exhaust. R. Jardine. 1,827,699; Oct. 13.
Post: *See*—
Bumper post.
Post to interchangeable teeth. 1,827,119; Oct. 13.
Power shovel, Child's. O. F. Opperman. 1,827,541; Oct. 13.
Power transmission device. J. Bing. 1,827,348; Oct. 13.
Press: *See*—
Baling press. Garment press.
Press. A. A. Byerlein. 1,827 558; Oct. 13.
Press. Fred S. Carver. 1,826,729; Oct. 13.
Press. S. J. Locke and F. R. Webster. 1,827,153; Oct. 13.
Presser and stretcher, Trousers. L. J. Widness. 1,826,971; Oct. 13.
Pressure actuated switch. R. Penn. 1,827,102; Oct. 13.
Pressure unit for intaglio printing. A. T. Chester and A. C. Cary. 1,827,685; Oct. 13.
Primer for internal combustion engines. J. C. Gover. 1,826,771; Oct. 13.
Priming mixture. P. R. Aronson. 1,826 714; Oct. 13.
Printing attachment for pay roll recorders. J. S. Ogsbury. 1,827,036; Oct. 13.
Printing machine, Bulletin. T. W. MacKenzie. 1,826,805; Oct. 13.
Printing plate and making the same. C. G. Hayes. 1,827,361; Oct. 13.
Printing press, Intaglio. A. T. Chester and A. C. Cary. 1,827,684; Oct. 13.
Printing telegraph apparatus, Tape feed mechanism for. H. H. Haglund and A. W. Dickey. 1,827,652; Oct. 13.
Printing telegraph system. G. S. Hiltz and W. F. Purcell. 1,827,362; Oct. 13.
Printing wheel. F. G. Creed. 1,826,741; Oct. 13.
Products of dioleflnes, Polymerization. G. Ebert, F. A. Fries, and W. Reppe. 1,827,285; Oct. 13.
Products with welded faces of stable surface alloy, Making. P. A. E. Armstrong. 1,826,860; Oct. 13.
Projector for strip films. W. L. Patterson. 1,827,101; Oct. 13.
Propeller. W. H. Sargent. 1,826,957; Oct. 13.
Propeller for dirigible balloons, Centrifugal. R. B. Fereby. 1,827,225; Oct. 13.
Propeller for swimmers. L. R. Dorris. 1,827,308; Oct. 13.
Protector, Electric meter. A. H. Grosz. 1,826,775; Oct. 13.
Protector, Hosiery. J. Dralkin. 1,827,423; Oct. 13.
Puller: *See*—
Battery terminal puller.
Pulp, Method and apparatus for refining. G. H. Carnahan. 1,827,279; Oct. 13.

Pulp, Method and apparatus for treating. G. H. Carnahan. 1,827,280; Oct. 13.
Pulsator. J. A. Schmitt. 1,827,405; Oct. 13.
Pump, Rotary. J. F. Jaworowski. 1,827,088; Oct. 13.
Punch, Can. C. W. Stuart. 1,827,679; Oct. 13.
Punching mechanism. R. G. Williams. 1,827,180; Oct. 13.
Rack: *See*—
Display rack.
Rack. G. A. Fitzgibbons. 1,827,572; Oct. 13.
Rack for dishwashers. J. H. L. Patterson. 1,826,951; Oct. 13.
Radiator and cylinder block cleaner. S. H. Smith and J. M. King. 1,827,301; Oct. 13.
Radiator, Automobile. A. Donadio. 1,827,568; Oct. 13.
Radiator hanger. T. O'Connell. 1,827,540; Oct. 13.
Radiator hanger. T. A. Ridder. 1,827,110; Oct. 13.
Radiator, Sectional automobile. C. D. Larmer and B. E. Dettman. 1,827,025; Oct. 13.
Radio apparatus. C. J. Britten. 1,826,727; Oct. 13.
Radio circuits. W. J. Polydoroff. 1,827,332; Oct. 13.
Radio loud speaker. C. H. Duffy. 1,826,751; Oct. 13.
Radio receiving system, Remote control. A. M. Trogner. 1,826,845; Oct. 13.
Radio sets, Controlling and indicating device for. R. H. Langley and J. K. Drexelius. 1,827,089; Oct. 13.
Rafters, Bevel protractor for. L. D. Jannell. 1,827,014; Oct. 13.
Rail chair. R. Blume. 1,827,217; Oct. 13.
Rail construction, Guard. H. R. Rick. 1,827,261; Oct. 13.
Railway car brake. R. W. Joy. 1,827,474; Oct. 13.
Rails, Manufacture of railway and tramway. C. P., O. F. A., and N. P. P. Sandberg. 1,827,616; Oct. 13.
Rake: *See*—
Self clearing rake.
Range, Cabinet cooking. J. Teller and A. P. Schulz. Des. 85,353; Oct. 13.
Ratchet wrench. W. R. Klein. 1,827,202; Oct. 13.
Ratio recorder. B. S. Franklin. 1,826,762; Oct. 13.
Razor. G. Dalkowitz. 1,826,745; Oct. 13.
Razor. B. Goldman. 1,826,876; Oct. 13.
Razor, Safety. H. J. Galsman. 1,826,764; Oct. 13.
Razor, Safety. H. B. Hartman. 1,827,148; Oct. 13.
Razor, Safety. H. O. Secrest. 1,827,041; Oct. 13.
Reamer. W. H. Evans. 1,827,511; Oct. 13.
Receptacle, Conduit. J. Colitz. 1,826,708; Oct. 13.
Receptacle for packing ampules. G. P. Metz. 1,826,809; Oct. 13.
Recorder: *See*—
Joint recorder. Radio recorder.
Recording and control system and apparatus therefor. T. R. Harrison. 1,827,520; Oct. 13.
Recording and reproducing system and apparatus. A. A. Thomas. 1,827,051; Oct. 13.
Recording and reproduction, Apparatus for radio. E. H. Hansen. 1,827,519; Oct. 13.
Recording apparatus. G. R. Brown and C. Loesges. 1,827,187; Oct. 13.
Recording device. S. Tonietti. 1,827,178; Oct. 13.
Records, Method of and apparatus for making photophonographic. F. Ehrenhaft. 1,826,754; Oct. 13.
Rectifier, Metal vapor. O. Seitz. 1,827,172; Oct. 13.
Reel: *See*—
Clothesline reel. Fishing line reel.
Reeling device. T. C. Riebe. 1,827,262; Oct. 13.
Refrigerating apparatus. G. Muffly. 1,827,097; Oct. 13.
Refrigerating apparatus. O. M. Summers. 1,826,839; Oct. 13.
Refrigerating apparatus. O. M. Summers. 1,826,966; Oct. 13.
Refrigerating apparatus for package goods. C. W. Vogt. 1,827,629; Oct. 13.
Refrigerator. J. Brown. Des. 85,321; Oct. 13.
Regenerator. F. G. Creed and R. D. Salmon. 1,827,460; Oct. 13.
Register: *See*—
Cash register.
Regulator: *See*—
Hydraulic regulator.
Relay stud, Composite. R. P. Middlekauff. 1,827,205; Oct. 13.
Removable seat. E. F. Trudo. 1,827,124; Oct. 13.
Respirator. R. Malcom. 1,827,028; Oct. 13.
Rim, Demountable. L. Doty and R. S. Carroll. 1,827,465; Oct. 13.
Rim for automobile wheels. J. and A. Folgarolas. 1,827,045; Oct. 13.
Rivet. M. F. Carr. 1,826,705; Oct. 13.
Road and preparing and laying the same, Stone asphalt. D. M. Hepburn. 1,827,522; Oct. 13.
Rock, loosely spread masses, or building structures, Solidifying permeable. H. Joosten. 1,827,238; Oct. 13.
Rod: *See*—
Geared rod. Plumb rod.
Roller: *See*—
Feed roller. Shade roller.
Roofing, saturated felts, and the like, Making. A. G. Leonard, jr. 1,827,026; Oct. 13.
Rose. F. Spanbauer. Pl. Pat. No. 2; Oct. 13.
Rotary engine. S. S. Videtto. 1,827,408; Oct. 13.
Rotor. J. D. Haynsworth. 1,827,316; Oct. 13.
Rubber, Artificial. E. Tschunkur and W. Bock. 1,826,846; Oct. 13.
Rubber, Vulcanization of. B. W. Nordlander. 1,827,604; Oct. 13.
Rule, Foldable. A. A. Gabrielson. 1,827,686; Oct. 13.
Running board for cars. J. C. Abel. 1,827,450; Oct. 13.
Saddle rack. T. F. Hammer. Des. 85,332; Oct. 13.
Safe. B. T. Gialdini. 1,826,768; Oct. 13.
Safety device for emergency brakes. W. J. Obidine. 1,827,256; Oct. 13.
Safety hook-off. R. F. Hill. 1,826,883; Oct. 13.
Saw, Band. H. M. Spencer. 1,827,490; Oct. 13.
Saw guide. J. C. Falls. 1,826,757; Oct. 13.
Saw, Jig. R. H. Beebe. 1,826,983; Oct. 13.
Scale. W. F. Stimpson and W. E. Finch. 1,827,048; Oct. 13.
Scale mechanism. W. W. Weidler. 1,827,499; Oct. 13.
Scoop, Ice cream. C. G. Palmer. 1,826,818; Oct. 13.
Screen: *See*—
Metal screen. Vehicle screen.
Screw and similar machine. C. A. Rich. 1,826,953; Oct. 13.
Seal, Pie crust. A. W. Austin. 1,827,062; Oct. 13.
Sealing apparatus. J. M. Sauerbeck. 1,827,618; Oct. 13.
Sealing, device, Dry cell. W. T. Birdsall. 1,827,416; Oct. 13.
Seat: *See*—
Chair seat. Valve seat.
Removable seat.
Seat for gas governors and the like, Valve. C. W. Quimby. 1,827,610; Oct. 13.
Securing device for carpets. J. T. Campbell, jr. 1,826,988; Oct. 13.
Securing means for car tank dome closures. J. Beyer. 1,827,454; Oct. 13.
Selective mechanism, Power drive. R. A. Crooks. 1,826,742; Oct. 13.
Selector mechanism. H. A. Yeider. 1,827,130; Oct. 13.
Self clearing rake. I. C. Klinger. 1,826,793; Oct. 13.
Separator: *See*—
Centrifugal separator.
Set and container therefor, Tool. W. F. Costello. 1,826,730; Oct. 13.
Sewing machine. E. E. Winkley. 1,827,378; Oct. 13.
Sewing machine, Buttonhole. J. Kiewicz. 1,827,696; Oct. 13.
Sewing machine, Feed-off-the-arm. W. M. Hanneman. 1,827 577; Oct. 13.
Sewing machine, Flat seam. A. S. Riviere and C. F. Rubel. 1,827,613; Oct. 13.
Sewing machine, Lockstitch. B. T. Leveques. 1,827,321; Oct. 13.
Sewing machines, Strip guide for. K. Maier. 1,827,596; Oct. 13.
Sewing mechanism. F. N. Ross and H. M. Ratley. 1,827,694; Oct. 13.
Shackle and producing the same, Rubber spring. V. Hughes. 1,827,234; Oct. 13.
Shackle, Rubber cushioned, spring. N. L. Bootson. 1,827,284; Oct. 13.
Shackle, Rubber spring. C. R. Short. 1,827,268; Oct. 13.
Shade or reflector. H. Aglow. Des. 85,313; Oct. 13.
Shade roller. J. K. Tomlinson. 1,827,444; Oct. 13.
Shade, Ventilated window and porch. K. H. Whitney. 1,827,718; Oct. 13.
Sharpening device. M. A. Matthews. 1,827,664; Oct. 13.
Sheet roofing, Making. I. Davis. 1,826,706; Oct. 13.
Shelling machine. B. H. Roberts. 1,827,168; Oct. 13.
Shield, Putty. J. G. Shodron. 1 827,115; Oct. 13.
Shingle. D. F. Fradette. 1,826,761; Oct. 13.
Shipping case. A. H. Cubberley. 1,826,744; Oct. 13.
Ships and the like, Hull structure of. H. E. J. Camps. 1,826,728; Oct. 13.
Shirt. W. Parker, jr. 1,827,665; Oct. 13.
Shirt bosom, Detachable. W. B. Snow. 1,827,716; Oct. 13.
Shock absorber. L. S. Wilbur. 1,826,972; Oct. 13.
Shoe, Antislip. M. Goldenberg. 1,827,515; Oct. 13.
Shoe, Athletic. D. J. Golden. 1,827,514; Oct. 13.
Shoes, Innersoles, and the like, Making. I. Simon. 1,827,044; Oct. 13.
Shovel: *See*—
Excavating shovel. Power shovel.
Sign, Neon. E. S. Woolrich. 1,827,275; Oct. 13.
Signal: *See*—
Directional signal. Track signal.
Stop signal.
Signal for vehicles, Direction. H. G. Spraker. 1,827,271; Oct. 13.
Signal light, Automatic. H. G. Mosher. 1,827,481; Oct. 13.
Signaling switch, Electrical. W. W. Woodroof. 1,827,342; Oct. 13.
Sintering machine. W. C. Kinnon. 1,826,792; Oct. 13.
Skate blade, Ice. J. Sayer. 1,826,958; Oct. 13.
Skee-ball apparatus. L. M. Sternbergh. 1,826,964; Oct. 13.
Skimmer. R. J. Anderson. 1,827,504; Oct. 13.
Slicing machine. F. H. Meyer. 1,827,251; Oct. 13.
Slide. C. E. Peterson. 1,827,331; Oct. 13.
Sling for moving trees. C. C. Wilmore. 1,827,447; Oct. 13.
Slug and change making machine. G. A. Franks. 1,827,312; Oct. 13.
Smoking pipe. E. M. Sprich. Des. 85,351; Oct. 13.
Smoking pipe. R. J. C. Welch. 1,827,412; Oct. 13.
Snow plow. D. A. MacDonald. 1,826,804; Oct. 13.

Soda-lime to be used in the manufacture of pure hydrogen, Preparing. J. Bellay. 1,826,722; Oct. 13.
Soldering. A. H. Adams. 1,826,709; Oct. 13.
Soldering, Apparatus for. A. H. Adams. 1,826,710; Oct. 13.
Soldering iron, Electric. R. R. Hazlett and W. J. Alexander. 1,826,933; Oct. 13.
Sole and heel, Combined. E. C. Hellhecker. Des. 85,333; Oct. 13.
Sole grooving machine. O. L. Lawson. 1,826,796; Oct. 13.
Solution to the top surface of a zeolite bed in a zeolite water softener of the filter type, Feeding a regenerating brine. E. Nordell and W. J. Hughes. 1,827,603; Oct. 13.
Sound collecting and transmitting. C. K. Woodbridge. 1,827,719; Oct. 13.
Sound in connection with pictures, Method and apparatus for reproducing. P. S. Hopkins. 1,826,786; Oct. 13.
Sound reproducer. L. de Forest. 1,827,283; Oct. 13.
Spader, Mechanical. G. H. Glasier. 1,827,429; Oct. 13.
Speculum. W. T. Varney. 1,827,497; Oct. 13.
Speed control system, Automatic. P. J. Simmen. 1,827,407; Oct. 13.
Speed transmission, Variable. W. L. Saunders. 1,827,489; Oct. 13.
Spindle machine, Multiple. D. F. Domizi. 1,826,867; Oct. 13.
Spinning apparatus for drilling rigs, Casing. W. W. Foster. 1,826,760; Oct. 13.
Spraying device. I. C. Baker. 1,826,977; Oct. 13.
Spraying equipment. F. J. Martin. 1,827,157; Oct. 13.
Spraying machine. J. W. Griess. 1,826,774; Oct. 13.
Spring connection. R. R. Searles. 1,827,711; Oct. 13.
Spring cushion for presses. F. J. Rode. 1,827,440; Oct. 13.
Spring for ranges, Oven door. W. D. Antrim. 1,827,554; Oct. 13.
Spring handling machine. W. S. Bullock. 1,827,561; Oct. 13.
Sprinkler: *See*—
Lawn sprinkler.
Stabilizing device. F. D. W. Searing. 1,826,830; Oct. 13.
Stamp device, Multiple. T. B. Powers. 1,827,200; Oct. 13.
Stamping machine. G. F. Yager. 1,827,683; Oct. 13.
Standard, Lighting. J. W. Gosling. Des. 85,331; Oct. 13.
Steam and other vapors, Generation of. W. D. La Mont. 1,827,244; Oct. 13.
Steel in the Bessemer process, Purification of. C. T. Hennig. 1,826,881; Oct. 13.
Steel in the open hearth process, Purifying. C. T. Hennig. 1,826,882; Oct. 13.
Steel load bearing members, Apparatus for the manufacture of expanded. H. M. Gersman. 1,827,314; Oct. 13.
Steel sheets, Apparatus for normalizing. F. W. Pitts. 1,827,038; Oct. 13.
Steering device for automobiles. R. A. Frone. 1,827,428; Oct. 13.
Steering mechanism for power propelled vehicles, Hydraulic. E. G. Staude. 1,827,117; Oct. 13.
Steering stabilizer. C. E. Reeves. 1,827,487; Oct. 13.
Stereoisohypsograph. K. Wulkow. 1,827,551; Oct. 13.
Sterilizer for barbers' tools. O. J. Lierman. 1,827,479; Oct. 13.
Stills, Cleaning. L. C. Huff. 1,827,085; Oct. 13.
Stop and leveler, Hydraulic cane feed. H. J. B. Scharnberg. 1,826,827; Oct. 13.
Stop, Door. H. M. Whitcomb. 1,827,055; Oct. 13.
Stop, Film flame. L. D. Kohlmeyer. 1,827,010; Oct. 13.
Stop mechanism for braiding machines. H. G. Robinson. 1,827,715; Oct. 13.
Stop signal, Automatic quick. P. W. Toye. 1,827,445; Oct. 13
Stove closure. J. M. Snyder. 1,827,036; Oct. 13.
Stove, Gas. A. J. Reedy. Des. 85,344–5; Oct. 13.
Stove or article of similar nature, Cooking. J. C. Clark. Des. 85,324; Oct. 13.
Stove or range. J. Brown. Des. 85,322; Oct. 13.
Stovepipe. E. J. Hayman. 1,827,722; Oct. 13.
Strap tightener. W. Kuehner. 1,827,243; Oct. 13.
Sugar roll mill. C. J. Pender. 1,827,669; Oct. 13.
Sugar, Spray-dried. S. L. Ames and L. Day. 1,826,701; Oct. 13.
Sulphide and ammonia from gases, Absorption of hydrogen. C. Hansen. 1,826,779; Oct. 13.
Supervisory system. M. L. Nelson. 1,827,098; Oct. 13.
Support, Bell housing. C. W. and H. G. Marlow. 1,827,532; Oct. 13.
Support for supporting fire hose nozzles. A. J. Landry. 1,826,892; Oct. 13.
Support, Ladder. N. P. Larsen. 1,826,893; Oct. 13.
Support, Recording chart. W. H. Pearce. 1,826,896; Oct. 13.
Supporter, Sock. L. Woods. 1,827,343; Oct. 13.
Supporting structure. A. A. Thomas. 1,826,843; Oct. 13.
Supports for shoes, Process and apparatus for manufacturing anatomically accurate individual foot. F. Hess. 1,826,783; Oct. 13.
Suspenders, Manufacture of. L. W. Joyce. 1,827,017; Oct. 13.
Suspension clamp. E. A. Mack. 1,827,325; Oct. 13.
Swing-rail switch. W. E. McEldowney. 1,827,158; Oct. 13.
Switch: *See*—
Electric switch. Signaling switch.
Mercury switch. Swing rail switch.
Nozzle controlled switch. Time switch.
Pressure actuated switch. Tumbler switch.
Switch, C. Christensen. 1,826,734; Oct. 13.
Switch and contact structure, Electric. T. T. Greenwood. 1,827,430; Oct. 13.
Switch contact, Electric. T. R. Martin. 1,827,533; Oct. 13.
Switch lock. C. Christensen. 1,826,733; Oct. 13.
Switch operating mechanism. C. Thumim. 1,827,626; Oct. 13.
Table: *See*—
Folding table. Lap table.
Table for coating machines, Coating. L. B. Case. 1,827,640; Oct. 13.
Table or similar article. W. C. H. Cushman. Des. 85,325; Oct. 13.
Tablets containing advertisements, Manufacture of transparent soap. E. Villain. 1,827,549; Oct. 13.
Tabulating machines, Card handling device for. F. M. Carroll. 1,826,992; Oct. 13.
Tape suspens on for window sash and the like. S. Rosenberg. 1,827,264; Oct. 13.
Taximeter. J. A. F. Brun. 1,827,139; Oct. 13.
Tea roaster. G. U. Kohori. Des. 85,337; Oct. 13.
Teakettle and like domestic boiler. F. D. Austin. 1,827,131; Oct. 13.
Teething and exercsing device. J. A. Maker. 1,826,943; Oct. 13.
Telegraph lines, Balancing. A. F. Connery and R. S. Wishart. 1,826,737; Oct. 13.
Telegraph system, Duplex. L. R. Foster. 1,826,928; Oct. 13.
Telephone calls Device for keeping count of. J. J. Sheridan. 1,827,622; Oct. 13.
Telephone system. O. Anders. 1,827,061; Oct. 13.
Telescopic instrument for subjective determination of the refraction of the eye. W. Thorner. 1,826,844; Oct. 13.
Television and telephoto device. J. L. Walker. 1,826,970; Oct. 13.
Television scanning device. M. Stacho. 1,826,836; Oct. 13.
Temperature control apparatus, Effective. G. E. Otis. 1,827,099; Oct. 13.
Temperature zones in iceboxes, Designating. B. D. Wood and W. W. Rodgers. 1,827,449; Oct. 13.
Tempering furnace. W. Grothe. 1,827,194; Oct. 13.
Tent. E. Poulsen. 1,827,486; Oct. 13.
Terminal block. E. A. Everett. 1,826,869; Oct. 13.
Testing. R. D. Bonney and W. B. Coleman. 1,827,184; Oct. 13.
Testing apparatus, Stability. G. E. Chatillon. 1,826,732; Oct. 13.
Testing device. E. S. Stephens. 1,827,547; Oct. 13.
Thermopile. T. A. Mollard. 1,827,252; Oct. 13.
Thermostatic alarm. H. L. Blome. 1,827,137; Oct. 13.
Thrashing and separating device. T. Dugan. 1,826,752; Oct. 13.
Threading apparatus. R. Hofstetter. 1,827,198; Oct. 13.
Threads, ribbons, films, and the like from solutions of cellulose esters and cellulose ethers, Manufacture of. H. L. Barthelemy. 1,826,718; Oct. 13.
Time recording device. T. C. Riebe. 1,827,208; Oct. 13.
Time switch, Astronomical. C. E. De Long. 1,826,749; Oct. 13.
Tire inflation system, Pneumatic. E. F. Maas. 1,827,662; Oct. 13.
Tire, Pneumatic. A. J. Musselman. 1,827,668; Oct. 13.
Tire tube tester and bucket, Folding. W. A. Henry. 1,827,232; Oct. 13.
Toaster, Electric. G. Eaton. Des. 85,329; Oct. 13.
Tobacco, Curing. W. R. and F. L. Nagel. 1,827,707; Oct. 13.
Tobacco pipe. C. F. Corbett. 1,826,738; Oct. 13.
Tool, Dent removing. C. M. Shaw. 1,826,834; Oct. 13.
Tool driving apparatus. G. E. Smith. 1,827,269; Oct. 13.
Tool, Fire fighting. L. A. Stephens. 1,827,118; Oct. 13.
Tool jack. T. W. and G. E. Thorpe. 1,827,120; Oct. 13.
Tool, Skimming. R. J. Anderson. 1,827,503; Oct. 13.
Top lifts, Method and machine for trimming. M. W. Howard. 1,826,935; Oct. 13.
Torch. J. L. Anderson. 1,827,697; Oct. 13.
Tourniquet. A. R. Kempf. 1,827,241; Oct. 13.
Toy gun. F. Keseleff. 1,827,023; Oct. 13.
Tracing appliance for pairs of measuring pictures. R. Hugershoff. 1,827,473; Oct. 13.
Track liner. B. H. Falkner. 1,826,756; Oct. 13.
Track signal, Railway. R. M. Wilson. 1,827,633; Oct. 13.
Tractor guide. R. A. Trively. 1,827,123; Oct. 13.
Tractors, Corn lifter attachment for. H. Synck. 1,827,215; Oct. 13.
Tractors, Power take-off mechanism for. W. J. Coultas and R. C. Livesay. 1,827,070; Oct. 13.
Traffic control apparatus, Railway. R. M. Gilson. 1,827,391; Oct. 13.
Train and instructing it to take a siding, Locating a. A. B. Kendall. 1,827,020; Oct. 13.
Transfer and transfer ink, Dyeing. W. S. Lawrence. 1,827,591; Oct. 13.

Transfer apparatus. A. M. Algeo, G. R. Haub, and J. W. Ross. 1,827,553; Oct. 13.
Transit. L. A. Blake. 1,827,135; Oct. 13.
Transmission, Electrooptical. H. Nyquist. 1,826,812; Oct. 13.
Transmission mechanism. A. G. Henricks. 1,827,013; Oct. 13.
Transmitter and indicator, Wind intensity and direction. J. S. Jones. 1,827,151; Oct. 13.
Trap: *See*—
Animal trap. Fly trap.
Traveling bag. D. E. Wright. 1,826,976; Oct. 13.
Tray, Ash. E. H. Barbè. Des. 85,315–16; Oct. 13.
Trolley. C. L. Wilmot. 1,826,854; Oct. 13.
Truck, Hoisting. H. T. Winner. 1,826,973; Oct. 13.
Truck, Industrial. C. W. Robbins. 1,827,209; Oct. 13.
Truck, Lifting. O. Vik. 1,827,692; Oct. 13.
Truck with safety lock, Elevating. D. E. Hennessy. 1,827,012; Oct. 13.
Trucks or tractors, Power delivering attachment for automobile. L. Haubert. 1,827,655; Oct. 13.
Trunk, Extensible auto. O. S. Nelson and W. M. Willy. 1,826,949; Oct. 13.
Tubing. H. W. Bundy. 1,827,381; Oct. 13.
Tumbler switch, Inclosed. G. A. Johnson. 1,827,584; Oct. 13.
Tumbling mill. N. Ransochoff. 1,826,822; Oct. 13.
Turbine, Elastic fluid. G. Weidehoff. 1,827,682; Oct. 13.
Turbine, Gas. C. Lorenzen. 1,827,246; Oct. 13.
Typewriting and computing machine, Combined. H. Hanson. 1,826,878; Oct. 13.
Typewriting and computing machine, Combined. H. L. Pittman. 1,827,298; Oct. 13.
Typewriting machine. C. Gabrielson. 1,826,763; Oct. 13.
Typewriting machine. E. L. Harmon. 1,826,780; Oct. 13.
Typewriting machine. F. A. Hart. 1,827,431; Oct. 13.
Typewriting machine. C. M. Lawrence. 1,827,293; Oct. 13.
Typewriting machine. H. Resch. 1,826,823; Oct. 13.
Typewriting machine. J. A. B. Smith. 1,826,903; Oct. 13.
Typewriting machine. R. Von Reppert. 1,827,693; Oct. 13.
U-gauge, Self leveling. G. R. Steere. 1,827,546; Oct. 13.
Umbrella, Collapsible. L. Rochefort. 1,827,335; Oct. 13.
Umbrella construction. C. G. Snook. 1,827,676; Oct. 13.
Undergarment. R. Hall. 1,827,147; Oct. 13.
Valve. H. L. Stone. 1,827,377; Oct. 13.
Valve and cut off, Reversible check. C. D. Harrison and P. D. Lindsey. 1,827,470; Oct. 13.
Valve and mixing device, Combined. M. Alland. 1,827,502; Oct. 13.
Valve bag and closing the same. J. C. Redington. 1,827,040; Oct. 13.
Valve bag, Reinforced. A. E. Currier. 1,826,994; Oct. 13.
Valve body. M. R. Shipley. 1,827,266; Oct. 13.
Valve construction for gas pumps. G. E. Makinster. 1,827,091; Oct. 13.
Valve for nursing bottles and nipples, Air. G. A. Pardee. 1,827,100; Oct. 13.
Valve operating mechanism, Throttle. A. W. Bruce. 1,827,189; Oct. 13.
Valve seat reamer. 1,827,510; Oct. 13.
Valve spring compressor and replacer. J. E. Wainwright. 1,826,908; Oct. 13.
Vapor chamber. R. T. Pollock. 1,827,106; Oct. 13.
Vehicle body. R. L. Carr. 1,826,922; Oct. 13.
Vehicle body. F. J. Kubler. 1,827,394; Oct. 13.
Vehicle body construction. F. J. Kubler. 1,827,395; Oct. 13.
Vehicle brake, Motor. F. C. Lamb. 1,827,720; Oct. 13.
Vehicle braking. J. S. Reynolds. 1,826,824; Oct. 13.
Vehicle, Child's. B. Boderek. 1,827,350; Oct. 13.
Vehicle, Motor. J. C. M. Massey. 1,827,397; Oct. 13.
Vehicle screen. A. H. Card, jr. 1,827,353; Oct. 13.
Vehicle transport construction. R. B. Simning. 1,826,960; Oct. 13.
Vehicles comprising multiple signals, System for controlling moving. P. J. Simmen. 1,827,406; Oct. 13.
Velocipede. W. A. Marque. Re18,225; Oct. 13.
Velocipede trailer. R. J. Rader. 1,827,401; Oct. 13.
Vessels, Device for raising submerged. E. Sexton. 1,826,959; Oct. 13.
Vibrating mechanism. W. L. Keefer. 1,827,586; Oct. 13.
Vibration in crank shafts, Counterbalancing and for counteracting torsional. C. E. Summers. 1,827,721; Oct. 13.
Visor for motor cars, Built in. G. A. Pritchard. 1,827,299; Oct. 13.
Voltage control equipment. C. E. Lomax. 1,827,090; Oct. 13.
Wagon grader. C. E. Ball. 1,827,414; Oct. 13.
Wall plate, Corrugated metallic. E. C. Anderson. 1,826,859; Oct. 13.
Wall slab, Building. R. C. Webb. 1,827,632; Oct. 13.
Washing machine carriage. J. L. Perkins and H. D. Croft. 1,826,820; Oct. 13.
Watch novelty. I. Ditesheim. 1,827,567; Oct. 13.
Water heater. E. M. Heathman. 1,827,521; Oct. 13.
Water heater, Electric. L. P. Hynes. 1,827,087; Oct. 13.
Water meter. L. G. Haase. 1,827,230; Oct. 13.
Waterproof felted sheet. L. Kirschbraum. 1,827,701; Oct. 13.
Wattmeter, High frequency. D. E. Richardson. 1,827,333; Oct. 13.
Weft holding device. J. Gabler. 1,827,646; Oct. 13.
Welding. C. T. Siebs. 1,827,210; Oct. 13.
Wheel: *See*—
Demountable wheel. Hand brake wheel.
Grinding wheel. Printing wheel.
Winding and unwinding mechanism. C. Field. 1,826,758; Oct. 13.
Winding machine. S. E. Borgeson. 1,827,186; Oct. 13.
Windlass, Hand-operated. J. A. Mellon. 1,827,597; Oct. 13.
Window and screen, Combination. G. I. Thomson. 1,827,494; Oct. 13.
Window cleaner. R. Trane. 1,827,121; Oct. 13.
Window construction. G. I. Barclay. 1,826,861; Oct. 13.
Window head construction. H. E. Campbell. 1,827,222; Oct. 13.
Window, Light reflecting. C. E. Smith and J. F. Pagel, jr. 1,827,624; Oct. 13.
Wires by means of sleeves, Joining. C. R. Moore. 1,827,297; Oct. 13.
Wires through conduits, Pressure operated device for leading. C. W. Kelley. 1,827,239; Oct. 13.
Work presenting device. R. B. Woodcock. 1,826,855; Oct. 13.
Worktable, Needle plate. I. Krasne. 1,826,940; Oct. 13.
Woven fabric. G. E. O'Hearn. Des. 85,343; Oct. 13.
Wrappers in boxes, Forming and applying tabbed. J. S. Stokes. 1,827,212; Oct. 13.
Wrappers, Preparing and applying tabbed. E. G. Rider. 1,827,334; Oct. 13.
Wrappers, Producing and applying tabbed. J. S. Stokes. 1,827,442; Oct. 13.
Wrench: *See*—
Air wrench. Ratchet wrench.
Wrench. G. Ging. 1,826,765; Oct. 13.
Wrist pin cushion. F. Pfaffinger. 1,827,607; Oct. 13.

CLASSIFICATION OF PATENTS

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138: 1,827,317
146: 1,826,825
261— 16: 1,827,214
19: 1,827,386
75: 1,827,255
113: 1,826,912
263— 2: 1,827,194
6: 1,827,038
1,827,079
10: 1,826,755
24: 1,827,526
264— 4: 1,826,884
265— 11: 1,826,732
68: 1,827,499
69: 1,827,048
266— 20: 1,827,467
21: 1,826,792
266— 37: 1,827,504
1,827,504
267— 1: 1,827,440
30: 1,827,284
54: 1,827,268
54: 1,827,711
268— 56: 1,827,631
62: 1,826,984
270— 68: 1,827,589
77: 1,827,635
79: 1,827,160
271— 2.3: 1,827,588
4: 1,827,259
44: 1,826,902
51: 1,827,359
272— 44: 1,827,303
75: 1,826,944
273— 102: 1,826,964
106: 1,826,905
109: 1,827,383
124: 1,827,642
277— 25: 1,827,470
279— 46: 1,827,415
55: 1,827,387
280— 90: 1,827,487
106.5: 1,826,730
152: 1,827,435
282— 4: 1,826,991
12: 1,827,448
284— 9: 1,827,286
285— 1: 1,826,725
9: 1,827,579
20: 1,826,999
58: 1,826,954
68: 1,826,770
92: 1,827,432
95: 1,827,500
161: 1,827,257
286— 11: 1,826,914
25: 1,826,967
287— 119: 1,827,188
292— 100: 1,827,389
128: 1,826,841
173: 1,826,868
290: 1,827,400
256: 1,826,517
263: 1,827,684
270: 1,826,911
274: 1,827,055
293— 57: 1,826,979
294— 57: 1,827,118
296— 28: 1,826,960
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1,827,394
1,827,395
45: 1,826,865
1,826,922
105: 1,827,059
137: 1,826,871
298— 19: 1,826,973
299— 59: 1,826,977
69: 1,827,339
80: 1,826,975
83: 1,827,384
1,827,502
92: 1,827,649
107: 1,827,583
111: 1,827,157
114: 1,826,776
116: 1,827,235
301— 9: 1,827,531
30: 1,827,465
34: 1,827,645
302— 14: 1,827,068
304— 20: 1,827,491
308— 134: 1,827,409
312— 74: 1,827,354
84: 1,827,501
115: 1,827,175
140: 1,827,021
1,827,022

U. S. GOVERNMENT PRINTING OFFICE: 1931

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adams, William, Ltd., Hockley, Birmingham, England. Waiters, teasets, trays, etc. 305,096; Oct. 20. Class 13.

Affiliated Brush Co. (See Glidden Company, The.)

Alcoa Ore Company, East St. Louis, Ill. Lime, gypsum, and for bauxite residues. 315,776; Oct. 20. Class 12.

Allied Drug Products Co. Inc., Chattanooga, Tenn. After shaving lotion, toothpaste, cold cream, etc. 302,206; Oct. 20. Class 6.

Al-O-Mar Company. (See Clark, Leora O.)

Ambassador Chemical Company. (See Franks, Robert.)

American Baby Bonds Corporation, Denver, Colo. Prints and printed matter. 301,386; Oct. 20. Class 38.

American Bakeries Company, Atlanta, Ga. Bread. 318,432; Oct. 20. Class 46.

American Gypsum Company, The, Port Clinton, Ohio. Plaster Paris and sanded wood fibre plaster. 316,684; Oct. 20. Class 12.

American Hard Rubber Company, Hempstead and New York, N. Y. Combs. 317,496; Oct. 20. Class 40.

American Rolling Mill Company, The, Middletown, Ohio. Galvanized iron and steel sheets. 318,345; Oct. 20. Class 14.

American Steel Company, Pittsburgh, Pa. Cotter pins. 316,518; Oct. 20. Class 13.

Aqua-Seal Corporation, New York, N. Y. Piece goods treated by a special process. 316,692; Oct. 20. Class 50.

Arcadia Knitting Mills Inc., New York, N. Y. Piece goods. 318,503–4; Oct. 20. Class 42.

Associated Portland Cement Manufacturers, Limited, The, London, England. Portland cement. 318,546; Oct. 20. Class 12.

Ault-Williamson Shoe Company, Auburn, Me. Women's shoes. 317,755; Oct. 20. Class 39.

Automatic Gold Chain Company. (See Speidel, Edwin F. M.)

Batterson, William H., Washington, D. C., and Whitefield, N. H. Bookshelves. 318,580; Oct. 20. Class 32.

Beatrice Creamery Company, Chicago, Ill. Butter, eggs. 313,416; Oct. 20. Class 46.

Belmont Manufacturing Company, Worcester, Mass. Oil burners. 318,346; Oct. 20. Class 34.

Belson Manufacturing Company, Chicago, Ill. Electric lighting equipment. 316,583; Oct. 20. Class 21.

Bickum, Dorothy, New York, N. Y. Undergarments. 317,593; Oct. 20. Class 39.

Biddick, Walter W., doing business as Moto-Matic Company, Los Angeles, Calif. Starting switches. 318,436; Oct. 20. Class 21.

Billings & Spencer Company, The, Hartford, Conn. Golf clubs. 305,097; Oct. 20. Class 22.

Binney & Smith Company, New York, N. Y. Marking ink. 317,627; Oct. 20. Class 11.

Bohemian Distributing Co. Ltd., Los Angeles, Calif. Malt syrup. 305,743; Oct. 20. Class 46.

Bowers, Edward C., and Charles L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Mechanical conveyor belts. 318,305; Oct. 20. Class 23.

Bowser, S. F., & Company, Inc., Fort Wayne, Ind. Oil purifying and reclaiming apparatus. 318,347; Oct. 20. Class 31.

Bradford Dyers' Association Limited, The, Bradford, England. Cotton piece goods. 318,863; Oct. 20. Class 42.

Bradstone Rubber Company, Woodbine, N. J. Rubber heels, soles, and half soles. 317,829; Oct. 20. Class 39.

Bragg, Paul C., doing business as O. K. Lax Mfg. Co., Los Angeles, Calif. Herb laxative. 317,838; Oct. 20. Class 6.

Burton Brothers & Co. Inc., New York, N. Y. Piece goods. 315,590; Oct. 20. Class 42.

Cataract-Sharpe Mfg. Co., Buffalo, N. Y. Glassware. 318,125; Oct. 20. Class 33.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 318,903; Oct. 20. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 318,971–2; Oct. 20. Class 42.

Chayes, Herman E. S., New York, N. Y. Alloys of gold, silver, nickel, etc. 317,970–1; Oct. 20. Class 14.

Chernus, John, doing business as Chernus Fruit Co., Los Angeles, Calif. Fresh citrus fruit. 306,232; Oct. 20. Class 46.

Chrysler Corporation, Highland Park, Mich. Automobiles and their structural parts. 316,420; Oct. 20. Class 19.

Clark, Leora O., doing business as Al-O-Mar Company, Oakland, Calif. Decorative articles or novelties. 317,663; Oct. 20. Class 50.

Clark Thread Company, The, Newark, N. J. Thread and yarn. 318,974–5; Oct. 20. Class 43.

Clover Farm Stores. (See Grocers & Producers Co., The.)

Cloverdale Spring Company, Baltimore, Md. Beverages. 305,069; Oct. 20. Class 45.

Cloverdale Spring Company, Baltimore, Md. Metal baskets. 316,530; Oct. 20. Class 2.

Cohn & Rosenberger, Inc., New York, N. Y. Strings of pearls, necklaces, bracelets. 317,920; Oct. 20. Class 28.

Cooley Finishing Company, The, Pawtucket, R. I. Waterproof cotton duck. 311,516; Oct. 20. Class 50.

Crisofulli, Leo, doing business as Verginella Olive Oil Co., New York, N. Y. Olive oil. 311,324; Oct. 20. Class 46.

Crocker, S. Chilton, doing business as Chilton Crocker Company, Boston, Mass. Binders containing money holding envelopes. 315,300; Oct. 20. Class 37.

Cubbison, Sophie C., Los Angeles, Calif. Bread and toast. 292,869; Oct. 20. Class 46.

Dalton Hat Co., Inc., Yonkers, N. Y. Mens' hats. 306,644; Oct. 20. Class 39.

Dalton Hat Co., Inc., Yonkers, N. Y. Men's hats. 311,184; Oct. 20. Class 39.

Davies, David A., Los Angeles, Calif. Organic mineral food, or food supplement. 316,321; Oct. 20. Class 46.

De Dixor Paris. (See Schoepfer, Maurice.)

De Leon, Charles, New York, N. Y. Firecrackers. 318,977; Oct. 20. Class 9.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Fertilizers. 318,202; Oct. 20. Class 10.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Umbrellas and canes. 318,210; Oct. 20. Class 41.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Drawing instruments. 318,220; Oct. 20. Class 26.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Watches, clocks, and parts thereof. 318,222; Oct. 20. Class 27.

Dewey Portland Cement Company, Kansas City, Mo. Portland cement. 317,796; Oct. 20. Class 12.

Di Santo, Joseph, doing business as Di Santo & Company, Duluth, Minn. Syrups. 318,480; Oct. 20. Class 45.

Dittrich, Eugen, St. Bonifacius, Minn. Beverages and syrups. 318,511; Oct. 20. Class 45.

Dobbs, Robert M., doing business as The Flexitone Company, Atlanta, Ga. Hair tonic, hair dressing, shampoo. 315,904; Oct. 20. Class 6.

Douglas, Bernard M., New York, N. Y. Roquefort cheese. 318,133; Oct. 20. Class 46.

Draper Hat Corporation, New York, N. Y. Ladies' hats. 314,600; Oct. 20. Class 39.

Draper Hat Corporation, New York, N. Y. Ladies' hats. 314,602; Oct. 20. Class 39.

Dunham, C. A., Company, Chicago, Ill. Heating systems. 316,557; Oct. 20. Class 34.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Rubberized fabric. 318,236; Oct. 20. Class 50.

Eisendrath, B. D., Tanning Company, Chicago, Ill. Tanned leather. 317,057; Oct. 20. Class 1.

Electric Auto-Lite Company, The, Toledo, Ohio. Clocks and parts thereof. 318,441; Oct. 20. Class 27.

Electric Indicator Corporation, Stamford, Conn. Electrical regulators, electrical control apparatus, etc. 272,474; Oct. 20. Class 21.

Elmo, Incorporated, Philadelphia, Pa. Astringents, astringent cerates, creams, etc. 302,237; Oct. 20. Class 6.

Emmons Loom Harness Company, Lawrence, Mass. Loom harnesses. 292,158; Oct. 20. Class 23.

Euro Trading Corporation. (See Gelles, Leo M.)

Fair, The, Chicago, Ill. Cleansing tissue paper. 313,182; Oct. 20. Class 37.

Feldman, Charles I. (See Bowers, Edward C., and Charles L. Feldman.)

Ferrocarril Nord Este Argentino, Buenos Aires, Argentina. Fruits and vegetables. 316,812; Oct. 20.

Ferrocrete Cement Co. Inc., New York, N. Y. Portland cement. 318,001; Oct. 20. Class 12.

Fletcher Paper Company, Alpena, Mich. Wrapping and letter paper. 312,180; Oct. 20. Class 37.

Flexitone Company, The. (See Dobbs, Robert M.)

Flintkote Company, The, Boston, Mass. Asphaltic composition roofing shingles. 318,272; Oct. 20. Class 12.

Francine Frock Company, Chicago, Ill. Dresses. 318,356; Oct. 20. Class 39.

Franks, Robert, doing business as Ambassador Chemical Company, Los Angeles, Calif. Insecticides. 318,830; Oct. 20. Class 6.

Frisch, Leo, New York, N. Y. Face powders, rouge, lipstick, etc. 317,428; Oct. 20. Class 6.

Gadpaille, Edgar C., doing business as International Laboratories of America, Inc., New Orleans, La. Antiseptic powders. 316,324; Oct. 20. Class 6.

Gallenkamp Stores Co., San Francisco, Calif. Footwear. 314,753; Oct. 20. Class 39.

Gatke, Thomas L., Chicago, Ill. Brake and clutch linings. 285,855; Oct. 20. Class 35.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Geiles, Leo M., doing business as Euro Trading Corporation, Battle Creek, Mich. Elastic stockings, rubber gloves, trusses, etc. 303,373; Oct. 20. Class 44.
Glidden Company, The, doing business as Affiliated Brush Co., Cleveland, Ohio. Paint brushes. 317,802; Oct. 20. Class 29.
Gray, Dorothy, Bloomfield, N. J. Lotions, tonics, ointments, etc. 309,166; Oct. 20. Class 6.
Grocers & Producers Co., The, doing business as Clover Farm Stores, Cleveland, Ohio. Toilet, laundry, granulated soap, etc. 317,800; Oct. 20. Class 4.
Groves Thread Company, Inc., Gastonia, N. C. Cotton thread and yarns. 317,834; Oct. 20. Class 43.
Haartz-Mason-Grower Company, Watertown, Mass. Rubberized fabrics. 318,309; Oct. 20. Class 50.
Hale, Amy A. J., doing business as Jane Hale, New York, N. Y. Dolls. 317,717; Oct. 20. Class 22.
Handy & Harman, New York, N. Y. Solder. 317,636; Oct. 20. Class 14.
Hansen's, Chr., Laboratory, Inc., Little Falls N. Y. Butter color. 311,239; Oct. 20. Class 6.
Harris Manufacturing Company, Johnson City, Tenn. Flooring and interior wood trim. 318,358; Oct. 20. Class 12.
Harrower Laboratory, Inc., The, Glendale, Calif. Solution of an active principle of the pancreas. 317,394; Oct. 20. Class 6.
Hassinger, Egon, Barcelona, Spain. Fountain pens. 308,203; Oct. 20. Class 37.
Heller-Deltah Company, Inc., New York, N. Y. Clocks and watches and cases and movements therefor. 317,939; Oct. 20. Class 27.
Hijos De Carlos Albo, Candas, Arena, Lastres, Coruna, Vigo, Bermeo, and Ribadesella Spain and New York, N. Y. Fish. 304,179; Oct. 20. Class 46.
Hirsch, Kupfer und Messingwerke A.-G., Finow/Mark, Germany. Copper silicon zinc alloys. 302,858; Oct. 20. Class 14.
Holmes-Terhune Company, Lewiston, Me. Boots and shoes. 317,893; Oct. 20. Class 39.
Hubbs, Charles F., & Company, New York, N. Y. Paper. 314,911; Oct. 20. Class 37.
International Laboratories of America, Inc. (See Gadpaille, Edgar C.)
International Pulp Company, New York, N. Y. Pulp or powder. 317,808; Oct. 20. Class 1.
International Pulp Company, New York, N. Y. Pulp or powder for tiling and ceramic products. 318,277; Oct. 20. Class 1.
International Shoe Co., St. Louis, Mo. Boots and shoes. 317,718; Oct. 20. Class 39.
International Shoe Co., New York, N. Y. Boots and shoes. 318,148; Oct. 20. Class 39.
International Silver Company, Meriden, Conn. Flat ware and toilet ware. 318,522; Oct. 20. Class 28.
Iroquois Company, The. (See Longshore, James H.)
Johns-Manville Corporation, New York, N. Y. Acoustic material. 318,524; Oct. 20. Class 12.
Juneman, E. P., Corporation, The, Chicago, Ill. Gut strings. 285,918–19; Oct. 20. Class 22.
Katten, Arthur A., Co. Inc., New Orleans, La. Outer clothing. 312,280; Oct. 20. Class 39.
Kennedy Manufacturing Company, Van Wert, Ohio. Sheet metal boxes. 311,386; Oct. 20. Class 2.
Kennedy-McCandless Corporation, Rochester, N. Y. Infant's bath tub and dressing table. 318,149; Oct. 20. Class 32.
Kidde, Walter, & Company, Inc., New York, N. Y. Aircraft flotation system. 311,964; Oct. 20. Class 19.
Kingery Manufacturing Company, The, Cincinnati, Ohio. Corn popping machines. 318,625; Oct. 20. Class 23.
Kirk, Walter R., Chicago, Ill. Soap. 318,009; Oct. 20. Class 4.
Knapp-Monarch Company, Belleville, Ill. Electric heaters, grill stoves, hot plates, etc. 315,847; Oct. 20. Class 21.
Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Rubber erasers, penholders, elastic bands, etc. 314,333; Oct. 20. Class 37.
Kolynos Company, The, New Haven, Conn. Dental cream. 317,870; Oct. 20. Class 6.
Kresge, S. S., Company, Detroit, Mich. Dolls. 319,032; Oct. 20. Class 22.
Labaty, Zarina L. (See McNally, Margaret.)
Lamar & Whitmore, Book Agents, Publishing House, Methodist Episcopal Church, South, doing business as The Parthenon Press, Nashville, Tenn. Publications. 318,627; Oct. 20. Class 38.
Lavino, E. J., and Company, Philadelphia, Pa. Ores. 316,732; Oct. 20. Class 1.
Lavino, E. J., and Company, Philadelphia, Pa. Ores. 316,735; Oct. 20. Class 1.
Libbey, W. S., Company, Inc., Lewiston, Me. Blankets. 316,043; Oct. 20. Class 42.
Lily-Tulip Cup Corporation, New York, N. Y. Receptacles. 313,712; Oct. 20. Class 2.
Longshore, James H., doing business as The Iroquois Company, Chicago, Ill. Filler and finish. 316,472; Oct. 20. Class 16.
Ludium Steel Co., Watervliet, N. Y. Hard metal composition. 318,487; Oct. 20. Class 14.
Lustberg, Nast & Co., Inc., New York, N. Y. Cotton suede cloth. 313,138; Oct. 20. Class 42.
Maconochie Brothers, Limited, London, England. Jams, marmalade, and sugar confectionery mixtures. 315,204; Oct. 20. Class 46.
Marshall Field & Company, Chicago, Ill. Handkerchiefs. 314,106; Oct. 20. Class 42.
Martin, J. B., Company, Norwich, Conn. Pile fabrics. 318,876; Oct. 20. Class 42.
Matsil Brothers, New York, N. Y. Apparel. 313,859; Oct. 20. Class 39.
McEnery, Joseph P., Long Island City, N. Y. Pencil holders. 318,405; Oct. 20. Class 37.
McNally, Margaret, doing business as Zarina L. Labaty, Los Angeles, Calif. Skin tonic, cleansing cream, face powder, etc. 315,058; Oct. 20. Class 6.
Metlox Corporation, Ltd., Manhattan Beach, Calif. Luminous tube signs. 318,614; Oct. 20. Class 21.
Midwest Flour Company, The. (See Moskovitz, Benjamin.)
Milrick Products Corporation, assignor to The Milrick Corporation, Kokomo, Ind. Polish. 310,400; Oct. 20. Class 16.
Mission Dry Corporation, Ltd., Los Angeles, Calif. Dispensers. 314,709; Oct. 20. Class 23.
Moskovitz, Benjamin, doing business as The Midwest Flour Company, Chicago, Ill. White milled flour. 309,439; Oct. 20. Class 46.
Moto-Matic Company. (See Biddick, Walter W.)
Muralo Company, Inc., The, New Brighton, N. Y. Dry powder to be mixed with water and used as a plastic paint. 318,691; Oct. 20. Class 16.
National Bellas Hess Co. Inc., New York, N. Y. Tennis rackets and balls, baseball glove and mitts, etc. 316,738; Oct. 20. Class 22.
National Bellas Hess Co. Inc., New York, N. Y. Hand bags. 318,283; Oct. 20. Class 3.
New England Confectionery Company, Cambridge, Mass. Chewing gum. 318,408; Oct. 20. Class 46.
Niedbale, Frank C., Chicago, Ill. Billiard cue tips. 318,965; Oct. 20. Class 22.
Nudelman and Conti, Inc., New York, N. Y. Wool cloth. 318,111; Oct. 20. Class 42.
O. K. Lax Mfg. Co. (See Bragg, Paul C.)
O'Donnell, William, doing business as Tel-O-Flash Spark Plug Co., Upper Darby, Pa. Spark plugs. 318,013; Oct. 20. Class 21.
Ohio Sugar Company, Ottawa, Ohio. Sugar. 318,163; Oct. 20. Class 46.
Ohio Sugar Company, Ottawa, Ohio. Sugar. 318,409; Oct. 20. Class 46.
Pacific Wire Rope Company, Los Angeles, Calif. Wire strand. 318,074; Oct. 20. Class 7.
Parthenon Press, The. (See Lamar & Whitmore, Book Agents, Publishing House, Methodist Episcopal Church, South.)
Pelham, Millie B., Clinton, Iowa. Flours for pie crust and biscuits. 315,498; Oct. 20. Class 46.
People's Products Company. (See Schulman, Morris L.)
Pestaner, Jacquin F., doing business as Pilon Hair Grower Co., New York, N. Y. Hair grower. 314,714; Oct. 20. Class 6.
Peters, John J., New York, N. Y. Base metal plates. 318,015; Oct. 20. Class 13.
Photoreflex of New England, Incorporated, New Haven, Conn. Photographs, holders and mounts. 312,063; Oct. 20. Class 37.
Pilon Hair Grower Co. (See Pestaner, Jacquin F.)
Pilzner Products Co. (See Poust, Abraham.)
Pinetrine Company, Inc., The, New York, N. Y. Liniment. 315,759; Oct. 20. Class 6.
Plumb, Fayette R., Philadelphia, Pa. Hatchets, hammers, and axes. 310,835; Oct. 20. Class 23.
Poust, Abraham, doing business as Pilzner Products Co., New York, N. Y. Malt syrup. 312,311; Oct. 20. Class 46.
Pratt, Monroe T., doing business as M. Pratt Co., Washington, D. C. Preparation for the treatment of cuts, bruises, etc. 318,290; Oct. 20. Class 6.
Prior, Ralph G., Warwood, W. Va. Cotton piece goods. 303,384; Oct. 20. Class 42.
RCA Victor Company, Inc., Camden, N. J. Radio receiving sets, kits, chokes, coils, etc. 316,570; Oct. 20. Class 21.
Ralston, W., & Co., Inc., Niagara Falls, N. Y. Sheet insulation for building. 318,292; Oct. 20. Class 12.
Reynolds & Co., New York, N. Y. Cheese. 318,953; Oct. 20. Class 46.
Rhoads, J. E., & Sons, Philadelphia, Pa. Lace leather. 317,740; Oct. 20. Class 1.
Rhorer Wool Products, Inc., Phoenix, Ariz. Washing and polishing pads. 314,208; Oct. 20. Class 29.
Rodriguez, Salvador, Inc., Tampa, Fla., and Habana, Cuba. Cigars. 317,778; Oct. 20. Class 17.
Roesch, George E., San Francisco, Calif. Table board game. 318,031; Oct. 20. Class 22.
Ruberoid Co., The, Bound Brook, N. J. Composition shingles. 317,779; Oct. 20. Class 12.
Rumford Chemical Works, Rumford, R. I. Cleaning preparation. 315,418; Oct. 20. Class 4.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Schaaf & Good Company, The, Fremont, Ohio. Manicure files. 315,066; Oct. 20. Class 44.
Scherzer Lift Bridge Company, The, Chicago, Ill. Rolling lift or bascule bridges. 317,405; Oct. 20. Class 12.
Schoepfer, Maurice, doing business as De Dixor Paris, Paris, France. Face and skin lotion. 314,773; Oct. 20. Class 6.
Schulman, Morris L., doing business as People's Products Company, Worcester, Mass. Malt syrup. 318,379; Oct. 20. Class 46.
Scoppetone, Harry A., Seattle, Wash. Window frames. 318,630; Oct. 20. Class 12.
Sears, Roebuck and Co., Chicago, Ill. Asphalt roofing and shingles. 314,305; Oct. 20. Class 12.
"Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft, Vienna, Austria. Sponges. 318,721; Oct. 20. Class 1.
Shell Oil Company, San Francisco, Calif. Petroleum coke. 318,601–2; Oct. 20. Class 1.
Shell Oil Company, San Francisco, Calif. Asphalt. 318,851; Oct. 20. Class 12.
Simplex Wire & Cable Company, Boston, Mass. Wires, cables, insutated wires, etc. 317,856; Oct. 20. Class 21.
Simson & Frey, Inc., New York, N. Y. Saxophones and oboes. 318,297; Oct. 20. Class 36.
Solo Oil Company, McAlester, Okla. Motor lubricating oil and automotive packing grease. 317,099; Oct. 20. Class 15.
Southern Malleable Iron Company, St. Louis, Mo., and East St. Louis, Ill. Rust proof malleable iron. 317,577; Oct. 20. Class 14.
Southern Mineral Products Corporation, New York, N. Y. Apatite, ilmenite, gypsum, and mica. 318,173; Oct. 20. Class 1.
Sparks-Withington Company, The, Jackson, Mich. Radio receiving sets. 316,615; Oct. 20. Class 21.
Special Paper Manufacturing Co., New York, N. Y. Prepared tracing paper. 318,417; Oct. 20. Class 37.
Speidel, Edwin F. M., doing business as Automatic Gold Chain Company, Providence, R. I. Jewelry. 317,958–9; Oct. 20. Class 28.
Steinman & Steinman, Inc., Lancaster, Pa. Newspaper. 316,907–8; Oct. 20. Class 38.
Sterling Products Company, Easton, Pa. Preparation for cleaning tile, procelain, etc. 317,747; Oct. 20. Class 4.
Stowell Coffee Company, The, Cincinnati, Ohio. Package coffee. 318,725; Oct. 20. Class 46.
Sun Vitamin Company, Oxford, Pa. Candy containing vitamins. 309,486–7; Oct. 20. Class 46.
Swann Chemical Company, Birmingham, Ala. Fertilizer. 317,693; Oct. 20. Class 10.
Swann Corporation, The, Birmingham, Ala. Phosphoric acid, phosphoric acid paste, mono ammonium phosphate, etc. 317,826; Oct. 20. Class 6.
Tel-O-Flash Spark Plug Co. (See O'Donnell, William.)
Templeton, Walter B., Chicago, Ill. Lifting jacks of the screw type. 318,493; Oct. 20. Class 23.
Timme, E. F., & Son, New York, N. Y. Pile fabrics. 318,420; Oct. 20. Class 42.
Tinkham Brothers, Inc., Jamestown, N. Y. Hosiery. 318,422; Oct. 20. Class 39.
"Titus" Chemisch-Pharmazeutische Fabrik G. m. b. H., Berlin-Pankow, Germany. Pharmaceutic rejuvenation. 308,227; Oct. 20. Class 6.
United States Envelope Company, Springfield, Mass. Toilet paper. 318,753; Oct. 20. Class 37.
Vacuum Oil Company, New York, N. Y. Oils, greases, and waxes, gasoline, benzene, etc. 311,987; Oct. 20. Class 15.
Vapor Ice Machine Corporation, Philadelphia, Pa. Carbon dioxide. 319,008; Oct. 20. Class 6.
Vellumoid Company, The, Worcester, Mass. Sheet packings. 318,087; Oct. 20.
Verginella Olive Oil Co. (See Crisofulli, Leo.)
Webster Products Corporation, Chicago, Ill. Electrical table lamps. 318,384; Oct. 20. Class 21.
Weiss, J., Shoe Co., Inc., New York, N. Y. Leather shoes. 317,687; Oct. 20. Class 39.
Wheeler Paper Corporation, Albany, N. Y. Toilet paper. 318,633; Oct. 20. Class 37.
Whelan Drug Co., Inc., New York, N. Y. Rouge, lip sticks, hand lotion, etc. 316,792; Oct. 20. Class 6.
Wickwire Spencer Steel Company. (See Bowers, Edward C., and Charles L. Feldman, receivers.)
Williams, Brown & Earle, Inc., Philadelphia, Pa. Turn tables. 317,995; Oct. 20. Class 36.
Willson Products, Inc., Reading, Pa. Respirator and mask attachments. 318,608; Oct. 20. Class 44.
Wilson-Maeulen Company, Inc., New York, N. Y. Porcelain tubes. 317,415; Oct. 20. Class 26.
Wright, Ernest A., Grants Pass, Oreg. Alloy metals. 308,663; Oct. 20. Class 14.
Yates-American Machine Company, Beloit, Wis. Electric motors. 318,805; Oct. 20. Class 21.

LIST OF REGISTRANTS OF TRADE-MARKS

A. & J. Manufacturing Co., The, Binghamton, N. Y. Spoons, cake turners, forks, etc. 288,177; Oct. 20; Serial No. 314,353; published Aug. 4, 1931. Class 23.
Abelson, Meyer H., Wilkes-Barre, Pa. Chocolate candy. 288,245; Oct. 20; Serial No. 315,296; published Aug. 4, 1931. Class 46.
Acheson Oildag Company, Port Huron, Mich. Lubricants. 288,096; Oct. 20; Serial No. 315,174; published July 28, 1931. Class 15.
Adjusto Chair Corporation, New York, N. Y. Household chairs. 288,166; Oct. 20; Serial No. 303,758; published Aug. 4, 1931. Class 32.
Advertising and Selling Publishing Company, New York, N. Y. Bi-monthly magazine. 288,032; Oct. 20; Serial No. 310,034; published Aug. 4, 1931. Class 38.
Algemeene Kunstzijde Unie N. V., Arnhem, Netherlands. Artificial horsehair and straw made of cellulose. 287,983; Oct. 20; Serial No. 314,889; published Aug. 4, 1931. Class 1.
Allis-Chalmers Manufacturing Company. (See Rumely, M., Company, assignor.)
American Brake Shoe and Foundry Company, Wilmington, Del., and New York, N. Y. Brake shoes. 288,054; Oct. 20; Serial No. 309,794; published Aug. 4, 1931. Class 19.
American Burtonizing Company, assignor to Wallerstein Company, Inc., New York, N. Y. Preparations for use in brewing. 83,976; renewed Oct. 31, 1931. Class 48.
American Cable Company, Inc., New York, N. Y., and Bridgeport, Conn. Devices for transmitting power for operating brakes. 288,067; Oct. 20; Serial No. 315,658; published Aug. 4, 1931. Class 19.
American Cast Iron Pipe Company, Birmingham, Ala. Hollow cast metal bodies. 288,068; Oct. 20; Serial No. 315,666; published Aug. 4, 1931. Class 13.
American Chicle Company. (See Sen-Sen Chiclet Company, assignor.)
American Chicle Company, Long Island City, N. Y. Chewing gum. 288,137; Oct. 20; Serial No. 316,181; published Aug. 11, 1931. Class 46.
American Coffee Company of New Orleans, Ltd., assignor to American Coffee Company, Incorporated, New Orleans, La. Tea and compound of coffee and chicory. 81,047; renewed Feb. 28, 1931. Class 46.
American Lead Pencil Company, New York, N. Y. Lead pencils and pen holders. 288,013; Oct. 20; Serial No. 316,399; published Aug. 11, 1931. Class 37.
American Manufacturing Company, The, Charleston, W. Va., and New York, N. Y., assignor to American Manufacturing Company, Brooklyn, N. Y. Hemp clotheslines. 84,402–3; renewed Feb. 20, 1932. Class 7.
American Paper Goods Company, The, Montclair, N. J., and Kensington, Conn. Merchandising envelopes and bags. 288,053; Oct. 20; Serial No. 309,298; published Aug. 4, 1931. Class 2.
American Radiator Company, Chicago, Ill., assignor to Arco Vacuum Corporation, New York, N. Y. Vacuum cleaning apparatus. 83,205; renewed Aug. 29, 1931.
American Sugar Refining Company, The, Jersey City, N. J., and New York, N. Y. Hard sugar. 37,051; renewed Sept. 10, 1931.
American Sugar Refining Company, The, Jersey City, N. J., and New York, N. Y. Hard sugar. 37,082; renewed Sept. 17, 1931.
American Sugar Refining Company, The, Jersey City, N. J., and New York, N. Y. Hard sugar. 37,177; renewed Oct. 8, 1931.
American Tissue Mills. (See Japanese Tissue Mills.)
Ames Shovel and Tool Company, Jersey City, N. J., and Boston, Mass., to Ames Shovel and Tool Company, North Easton, Mass. Shovels, spades, and scoops. 83,310–12; renewed Sept. 5, 1931.
Amoskeag Manufacturing Company, Manchester, N. H. Textile diapers. 288,041; Oct. 20; Serial No. 316,027; published Aug. 11, 1931. Class 42.
Amoskeag Manufacturing Company, Manchester, N. H. Textile diapers. 288,274; Oct. 20; Serial No. 316,026; published Aug. 4, 1931. Class 42.
Angelus, Louis, doing business as Nuzone Products Co., New York, N. Y. Cleansing compound for hats. 288,217; Oct. 20; Serial No. 312,253; published July 28, 1931. Class 4.
Ankle Deep Products Company of America. (See Reid, Robert A.)
Arco Vacuum Corporation. (See American Radiator Company, assignor.)
Argol Chemicals, Inc., The, Baltimore, Md. Cleansing compound. 288,214; Oct. 20; Serial No. 311,592; published July 28, 1931. Class 4.
Aseptic Products Company, New York and Long Island City, to Aseptic Products Company, Long Island City, N. Y. Corn and bunion plasters, belladonna plasters, and sulfur candles. 84,206; renewed Nov. 21, 1931.

Aseptic Products Company, New York and Long Island, to Aseptic Products Company, Long Island City, N. Y. Absorbent cotton and dental floss. 84,303; renewed Nov. 28, 1931.

Aspegren & Co., New York, N. Y., assignor, by mesne assignments, to The Procter & Gamble Manufacturing Co., Cincinnati, Ohio. Oils lard, syrup, etc. 36,938; renewed Aug. 20, 1931.

Aspegren & Co., New York, N. Y., assignor, by mesne assignments, to The Procter & Gamble Manufacturing Co., Cincinnati, Ohio. Seed oils, lard, syrup, etc. 36,940; renewed Aug. 20, 1931.

Aspegren & Co., New York, N. Y., assignor, by mesne assignments, to The Procter & Gamble Manufacturing Co., Cincinnati, Ohio. Cotton seed oil and lard. 37,092; renewed Sept. 17, 1931.

Associated Stationers Supply Company, Chicago, Ill. Printed forms, typewriter paper, and stenographers' note books. 288,092; Oct. 20; Serial No. 312,037; published July 21, 1931. Class 37.

Atlanta Knitting Mills, Brooklyn, N. Y. Fabrics. 288,158; Oct. 20; Serial No. 303,043; published Aug. 4, 1931. Class 42.

Atlas Supply Company, Wilmington, Del., and New York, N. Y. Storage batteries. 288,232; Oct. 20; Serial No. 308,769; published Feb. 3, 1931. Class 21.

Automatic Canteen Company, Chicago, Ill. Vending machines. 288,284; Oct. 20; Serial No. 315,081; published Aug. 11, 1931. Class 23.

Bagnole, Joseph, doing business as Sun Rise Press, Roseland, N. J. Letter heads, blank forms, and envelopes. 288,162; Oct. 20; Serial No. 302,568; published July 21, 1931. Class 37.

Bangor Packing Company. (See Bugge, F. A.)

Bastian-Morley Co., La Porte, Ind. Gas water heaters. 288,071; Oct. 20; Serial No. 316,312; published Aug. 11, 1931. Class 34.

Bavarian Liquid Mat Company. (See Silnutzer, David.)

Bayerson Oil Works, Erie, Pa. Lubricating oils. 83,316; renewed Sept. 5, 1931.

Beaton & Corbin Manufacturing Company, The, Southington, Conn. Floor and ceiling plates. 82,398; renewed June 27, 1931.

Becker, Henry, & Son, Inc., Roseland, N. J. Light cream. 287,947; Oct. 20; Serial No. 315,890; published Aug. 4, 1931. Class 46.

Becker, Henry, & Son, Inc., Roseland, N. J. Milk and cream. 287,982; Oct. 20; Serial No. 314,745; published July 14, 1931. Class 46.

Becker, Henry, & Son, Inc., Roseland, N. J. Milk and cream. 287,984; Oct. 20; Serial No. 314,747; published July 14, 1931. Class 46.

Becker, Henry, & Son, Inc., Roseland, N. J. Heavy cream. 288,207; Oct. 20; Serial No. 315,889; published Aug. 4, 1931. Class 46.

Becker, Henry, & Son, Inc., Roseland, N. J. Milk. 288,266; Oct. 20; Serial No. 315,888; published Aug. 4, 1931. Class 46.

Bessing, Clarence, Los Angeles, Calif. Fresh citrus fruits. 288,134; Oct. 20; Serial No. 315,893; published Aug. 4, 1931. Class 46.

Best, Richard, Pencil Company, Inc., New York, N. Y. Pencils. 288,090; Oct. 20; Serial No. 313,626; published July 21, 1931. Class 37.

Blakeslee, R. S. (See Fulton, Paul, assignor.)

Blue Diamond Cement Co., assignor to Blue Diamond Corporation, Ltd., Los Angeles, Calif. Building cement. 288,119; Oct. 20; Serial No. 289,497; published Dec. 17, 1929. Class 12.

Bluffton Chemical Company, Bluffton, Ind. Medicinal preparation. 85,064; renewed Jan. 30, 1932.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 288,033–4; Oct. 20; Serial Nos. 315,183–4; published Aug. 4, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 288,060–1; Oct. 20; Serial Nos. 315,186–7; published Aug. 4, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 288,178; Oct. 20; Serial No. 315,189; published Aug. 4, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 288,181; Oct. 20; Serial No. 315,191; published Aug. 4, 1931. Class 42.

Bosch & Co., Badalona, near Barcelona, Spain. Anisette. 82,568; renewed July 11, 1931.

Bosch & Co., Badalona, near Barcelona, Spain. Anisette. 83,318; renewed Sept. 5, 1931.

Boston Woven Hose & Rubber Company, Cambridge, Mass. Belts and belting. 288,258; Oct. 20; Serial No. 316,315; published Aug. 4, 1931. Class 35.

Bowditch Mills, Inc., Pascoag, R. I. Fibers for decorating cloth, etc. 288,264; Oct. 20; Serial No. 314,944; published July 28, 1931. Class 1.

Bradley, Milton, Company, Springfield, Mass. Carving or sculpturing material. 287,988; Oct. 20; Serial No. 315,523; published July 14, 1931. Class 1.

Bressler, Albert A., New York, N. Y. Brackets. 288,059; Oct. 20; Serial No. 314,891; published Aug. 11, 1931. Class 13.

Briggs Manufacturing Company, Detroit, Mich. Chairs. 288,174; Oct. 20; Serial No. 315,242; published Aug. 11, 1931. Class 32.

Bright Star Products Co., Miami, Fla. Mayonnaise. 288,301; Oct. 20; Serial No. 303,945; published July 14, 1931. Class 46.

Brill, H. C., Company, Inc., Newark, N. J. Cake. 287,964; Oct. 20; Serial No. 315,243; published July 28, 1931. Class 46.

British Enka Artificial Silk Company Limited, London, England. Imitation straw and horsehair made of cellulose. 287,973; Oct. 20; Serial No. 316,253; published Aug. 4, 1931. Class 1.

British Enka Artificial Silk Company Limited, London, England. Piece goods. 288,042; Oct. 20; Serial No. 316,251; published Aug. 4, 1931. Class 42.

Brooklyn Daily Times, The, Brooklyn, N. Y. Newspaper feature articles. 288,109; Oct. 20; Serial No. 315,167; published Aug. 4, 1931. Class 38.

Brooks-Scanlon Corporation, Foley, Fla. Lumber. 288,255; Oct. 20; Serial No. 315,820; published Aug. 4, 1931. Class 12.

Bugge, F. A., doing business as Bangor Packing Company, Bangor, Wash. Canned clams and clam nectar. 288,135; Oct. 20; Serial No. 315,894; published Aug. 4, 1931. Class 46.

Bulldog Electric Products Company. (See Mutual Electric & Machine Company.)

Burton-Dixie Corporation, Chicago, Ill. Mattresses, bed springs, and pillows. 288,173; Oct. 20; Serial No. 314,229; published Aug. 4, 1931. Class 32.

Butler Paper Corporations, Chicago, Ill. Paper. 288,075; Oct. 20; Serial No. 316,256; published Aug. 11, 1931. Class 37.

Caley, A. J., & Son, Limited, Norwich, England. Snapping crackers for favors and similar uses. 37,446; renewed Dec. 10, 1931.

California Crushed Fruit Corporation, now by change of name Mission Dry Corporation, Ltd., Los Angeles, Calif. Nonalcoholic maltless beverages. 288,155; Oct. 20; Serial No. 309,723; published Aug. 4, 1931. Class 45.

California Fruit Growers Exchange, Los Angeles, Calif. Lemons. 85,069; renewed Jan. 30, 1932.

California-Hawaiian Milling Company, San Francisco, Calif. Dehydrated alfalfa leaf meal and dehydrated alfalfa meal. 287,949; Oct. 20; Serial No. 316,120; published Aug. 11, 1931. Class 46.

California Tropical Foods, Ltd., Pasadena, Calif. Ice cream. 288,191; Oct. 20; Serial No. 315,032; published July 21, 1931. Class 46.

Campbell, Courtney, doing business as The Educational Press, New York, N. Y. Scrap books. 288,014; Oct. 20; Serial No. 316,317; published Aug. 11, 1931. Class 37.

Campbell, Metzger & Jacobson, assignor to Tobin, Sporn & Glaser, Inc., New York, N. Y. Fancy goods and furnishings therefor. 83,389; renewed Sept. 12, 1931.

Canby, Ach & Canby Co., The, Dayton, Ohio, assignor to Wm. S. Scull Company, Camden, N. J. Spices, teas, and flavoring extracts. 84,165; renewed Nov. 14, 1931.

Cantrell & Cochrane, Limited, Dublin, Ireland. Club soda. 37,352; renewed Nov. 26, 1931.

Capital City Baking Co., Harrisburg, Pa. Bread. 287,990; Oct. 20; Serial No. 315,988; published July 28, 1931. Class 46.

Capital City Dairy Co., The, assignor, by mesne assignments, to The Capital City Products Company, Columbus, Ohio. Oleomargarin. 83,137; renewed Aug. 22, 1931.

Capital City Dairy Co., The, assignor, by mesne assignments, to The Capital City Products Company, Columbus, Ohio. Oleomargarin. 84,210; renewed Nov. 21, 1931.

Carscadin, Henry L., doing business as The John Henry Co., Chicago, Ill. Memorandum booklets for salesmen. 288,074; Oct. 20; Serial No. 316,318; published Aug. 11, 1931. Class 37.

Carson Pirie Scott & Co., Chicago, Ill. Textile blankets. 288,035; Oct. 20; Serial No. 315,441; published Aug. 11, 1931. Class 42.

Carson, Pirie Scott & Co., Chicago, Ill. Handkerchiefs. 288,036; Oct. 20; Serial No. 315,442; published Aug. 11, 1931. Class 42.

Cattell, J. McKeen, doing business as The Science Press, New York, N. Y. Magazine. 287,958; Oct. 20; Serial No. 314,445; published July 21, 1931. Class 38.

Cee-Bee Products. (See Champion & Barber, Inc.)

Celanese Corporation of America, New York, N. Y. Fabrics. 288,043; Oct. 20; Serial No. 316,281; published Aug. 4, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 288,044–5; Oct. 20; Serial Nos. 316,283–4; published Aug. 4, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 288,046; Oct. 20; Serial No. 316,286; published Aug. 4, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics made of cellulose derivatives. 288,047–8; Oct. 20; Serial Nos. 316,409–10; published Aug. 11, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics made of cellulose derivatives. 288,049–52; Oct. 20; Serial Nos. 316,412–15; published Aug. 11, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 288,249; Oct. 20; Serial No. 312,093; published Apr. 28, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 288,276; Oct. 20; Serial No. 316,187; published Aug. 4, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 288,279; Oct. 20; Serial No. 316,280; published Aug. 4, 1931. Class 42.

Central Commercial Company, Chicago, Ill. Asphalt. 85,324; renewed Feb. 13, 1932.

Central Waxed Paper Company, Chicago, Ill. Paper bread wrappers. 288,087; Oct. 20; Serial No. 314,683; published July 21, 1931. Class 37.

Chain Belt Company, Milwaukee, Wis. Drive, power, and conveyer chains. 84,211; renewed Nov. 21, 1931.

Chamberlain, F. B., Company, St. Louis, Mo., and East St. Louis, Ill. Foods. 84,081; renewed Nov. 7, 1931.

Champion & Barber, Inc., doing business as Cee-Bee Products, Los Angeles, Calif. Detergent cleaning compounds. 288,110; Oct. 20; Serial No. 315,728; published Aug. 11, 1931. Class 4.

Chandler & Rudd Company, The, Cleveland, Ohio. Candy. 83,047; renewed Aug. 15, 1931.

Chapman Manufacturing Co., The, to Chapman Manufacturing Company, Chicago, Ill., successor. Stomach and blood remedies. 37,069; renewed Sept. 17, 1931.

Chef and Steward Co., The, Chicago, Ill. Periodical. 287,962; Oct. 20; Serial No. 315,192; published July 21, 1931. Class 38.

Chicago Cream Fried Cake Company, Chicago, Ill. Bakery products. 288,132; Oct. 20; Serial No. 300,334; published Aug. 4, 1931. Class 46.

Chipman's, Chas., Sons, Easton and Selinsgrove, Pa., to Chas. Chipman's Sons Co., Inc., New York, N. Y., successor. Hosiery. 83,393; renewed Sept. 12, 1931.

Chung, Thos. G., Co., Chualar, Calif. Fresh vegetables. 288,140; Oct. 20; Serial No. 316,148; published Aug. 11, 1931. Class 46.

Church of the Heavenly Rest, New York, N. Y. Magazines. 288,129; Oct. 20; Serial No. 299,682; published Aug. 4, 1931. Class 38.

Cinamette Corporation, New York, N. Y. Cameras, motion picture cameras, picture projectors, etc. 288,185–6; Oct. 20; Serial Nos. 315,671–2; published Aug. 4, 1931. Class 26.

Cinamette Corporation, New York, N. Y. Cameras, picture projectors, etc. 288,267; Oct. 20; Serial No. 315,673; published Aug. 4, 1931. Class 26.

Clark, Rex B., Norco, Calif. Canned fruit. 288,142; Oct. 20; Serial No. 316,529; published Aug. 11, 1931. Class 46.

Cleveland Tractor Company, The, Cleveland, Ohio. Periodical. 287,972; Oct. 20; Serial No. 316,141; published Aug. 4, 1931. Class 38.

Coast Fishing Co., Wilmington, Calif. Dog and cat food. 288,208; Oct. 20; Serial No. 315,900; published Aug. 4, 1931. Class 46.

Codman, F. L. & J. C., Company, Boston and South Boston, Mass. Buffing wheels. 288,203; Oct. 20; Serial No. 284,840; published Aug. 4, 1931. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving cream. 288,108; Oct. 20; Serial No. 315,731; published July 28, 1931. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 288,189; Oct. 20; Serial No. 313,833; published July 28, 1931. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving cream. 288,195; Oct. 20; Serial No. 315,989; published July 28, 1931. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving cream. 288,204; Oct. 20; Serial No. 315,730; published July 28, 1931. Class 4.

Comstock, S. E., & Co., to Comstock Canneries, Inc., Newark, N. Y., successor. Canned fruits and vegetables, and sauerkraut. 85,416; renewed Feb. 20, 1932. Class 46.

Conde Nast Publications, Inc., The, New York, N. Y. Publication. 288,023; Oct. 20; Serial No. 315,592; published Aug. 4, 1931. Class 38.

Consolidated Automatic Merchandising Corporation, New York N. Y. Scale tickets. 288,026; Oct. 20; Serial No. 315,344; published Aug. 4, 1931. Class 38.

Consolidated Tea Company, Inc. (See Zechnowitz, Samuel, assignor.)

Cotter, R. E., Company, San Francisco, Calif. Dog food. 287,943; Oct. 20; Serial No. 315,732; published July 21, 1931. Class 46.

Cowgill Flour Mills, Inc., Carthage, Mo. Wheat flour and wheat stock feed. 287,953; Oct. 20; Serial No. 312,878; published July 14, 1931. Class 46.

Creamery Package Mfg. Company, The. (See Owatonna Manufacturing Company, assignor.)

Crown Card and Paper Company, New York, N. Y. Bond paper. 288,091; Oct. 20; Serial No. 313,535; published Aug. 4, 1931. Class 37.

Crystal Refrigerator Co., Fremont, Nebr. Syrup filters and refrigerator cabinets. 288,004; Oct. 20; Serial No. 315,733; published Aug. 4, 1931. Class 31.

Czechoslovak Musical Instruments Company, New York, N. Y. Violins, violas, cellos, etc. 288,167; Oct. 20; Serial No. 308,532; published July 28, 1931. Class 36.

Daily Credit Broadcast, Inc., New York, N. Y. Credit circular or pamphlet. 287,960; Oct. 20; Serial No. 314,555; published July 21, 1931. Class 38.

Daland, Frederick H., New York, N. Y. Soap. 85,086; renewed Jan. 30, 1932.

Daner Co. (See Danerhirsch, Joseph.)

Danerhirsch, Joseph, doing business as Daner Co., New York, N. Y. Shirts. 288,229; Oct. 20; Serial No. 304,489; published Nov. 4, 1930. Class 39.

Danerhirsch, Joseph, doing business as Daner Co., New York, N. Y. Shirts. 288,230; Oct. 20; Serial No. 304,495; published Nov. 4, 1930. Class 39.

Davidson Biscuit Company, Mount Vernon, Ill. Bread, cookies, crackers, etc. 287,985; Oct. 20; Serial No. 315,089; published July 21, 1931. Class 46.

De Luxe Saddlery Co., Baltimore, Md. Saddles, bridles, sample cases, knapsacks, etc. 287,936; Oct. 20; Serial No. 314,488; published July 21, 1931. Class 3.

Deutsche-Glühstoff-Gesellschaft mit beschrankter Haftung, Dresden, Germany. Household articles. 37,384; renewed Nov. 26, 1931.

Dewey, A. G., Company, Quechee, Vt. Woolen cloth. 288,182; Oct. 20; Serial No. 315,397; published Aug. 4, 1931. Class 42.

Di Santo, Joseph, doing business as Di Santo & Company, Duluth, Minn. Fresh artichokes, bread, cakes, etc. 288,187; Oct. 20; Serial No. 314,985; published July 21, 1931. Class 46.

Distillata Company, The, Cleveland, Ohio. Bottled mineral water. 288,065; Oct. 20; Serial No. 315,489; published Aug. 4, 1931. Class 45.

Dold, Jacob, Packing Co., Buffalo, N. Y. Dressed carcasses and cuts of fresh beef, pork, mutton, and veal. 288,244; Oct. 20; Serial No. 315,138; published Aug. 4, 1931. Class 46.

Dooly Manufacturing Co., Inc., The, Philmont, N. Y. Glues. 287,971; Oct. 20; Serial No. 316,122; published July 28, 1931. Class 5.

Dortch, Ambrose M., Spokane, Wash. Cookies. 287,961; Oct. 20; Serial No. 314,687; published July 28, 1931. Class 46.

Double Eagle Garment Co., Waco, Tex. Work clothes. 288,113; Oct. 20; Serial No. 285,020; published Aug. 11, 1931. Class 39.

Dougherty Grape Growers Association, Acampo, Fla. Fresh grapes. 288,141; Oct. 20; Serial No. 316,424; published Aug. 11, 1931. Class 46.

Eagle Clothes, New York, N. Y. Men's clothing. 288,118; Oct. 20; Serial No. 287,287; published Jan. 13, 1931. Class 39.

Eagle Marcaroni Company, Chicago, Ill. Alimentary pastes. 288,289; Oct. 20; Serial No. 315,391; published July 21, 1931. Class 46.

Eagle Pencil Company, assignor to Eagle Pencil Company, New York, N. Y. Automatic knives. 84,220; renewed Nov. 21, 1931.

Eagle Pencil Company, assignor to Eagle Pencil Company, New York, N. Y. Metallic pens. 84,365; renewed Dec. 5, 1931.

Eberle, J. N., & Cie., Augsburg, to J. N. Eberle & Cie. Aktiengesellschaft, Augsburg-Pfersee, Germany, successor. Saws and springs. 37,833; renewed Feb. 18, 1932.

Eberle Tanning Company, Westfield, Pa. Leather. 287,937–8; Oct. 20; Serial Nos. 315,254–5; July 28, 1931. Class 1.

Edgerton, C. A., Mfg. Co., The, assignor, by mesne assignments, to President Suspender Company, Shirley, Mass. Suspenders and garters. 85,334; renewed Feb. 13, 1932.

Educational Press, The. (See Campbell, Courtney.)

Edward Valve and Manufacturing Co., The, East Chicago, Ind. Periodical. 288,030; Oct. 20; Serial No. 314,027; July 28, 1931. Class 38.

Eisenstadt Manufacturing Company, St. Louis, Mo. Watches, clocks, watch-movements, etc. 84,733; renewed Jan. 2, 1932.

Elliott, B. K., Company, Pittsburgh, Pa. Sensitized printing paper. 288,193; Oct. 20; Serial No. 315,256; published Aug. 4, 1931. Class 26.

Empire Lithographing Co. Inc., New York, N. Y. Writing tablets. 288,021; Oct. 20; Serial No. 315,834; published Aug. 11, 1931. Class 37.

Enid Poultry & Egg Co., Inc., Enid, Okla. Dressed poultry. 288,294; Oct. 20; Serial No. 315,678; published Aug. 4, 1931. Class 46.

Exeter Citrus Association, Exeter, Calif. Fresh citrus fruits. 288,136; Oct. 20; Serial No. 315,905; published Aug. 11, 1931. Class 46.

Faber, A. W., Stein, near Nuremberg, and Berlin, Germany, assignor, by mesne assignments, to A. W. Faber, Inc., Newark, N. J. Lead-pencils, ink-pencils, and colored pencils. 83,824; renewed Oct. 17, 1931.

Felsenthal, Ben, & Co., Inc., New York, N. Y. Jewelry and costume jewelry. 288,106; Oct. 20; Serial No. 315,679; published July 28, 1931. Class 28.

Firth-Sterling Steel Company, McKeesport, Pa. Tool-steel. 84,736; renewed Jan. 2, 1932.

Fisher Flouring Mills Company, Seattle, Wash. Wheat flour. 287,945; Oct. 20; Serial No. 315,795; published Aug. 11, 1931. Class 46.

Fishermans's News. (See Matson, Charles H.)

Flaster, H., & Son, New York, N. Y. Trousers. 288,231; Oct. 20; Serial No. 306,675; published Jan. 13, 1931. Class 39.

Fleisher Yarns, Inc., New York, N. Y. Yarns. 288,251; Oct. 20; Serial No. 315,308; published July 28, 1931. Class 43.

Forest City Bronze Company. (See Long, Benjamin J.)

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 288,268; Oct. 20; Serial No. 315,739; published Aug. 4, 1931. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 288,269; Oct. 20; Serial No. 315,741; published Aug. 4, 1931. Class 42.
French Maid Cocolat Company, Inc., New York, N. Y. Fudge powders. 288,213; Oct. 20; Serial No. 311,093; published July 21, 1931. Class 46.
Frostilla Company, The. (See Shoemaker, Flora H.)
Fulton, Paul, assignor, by mesne assignments, to R. S. Blakeslee, Burlington, Iowa. Wall paper. 288,018; Oct. 20; Serial No. 316,090; published Aug. 11, 1931. Class 37.
Galena Oil Corporation, Franklin, Pa. Lubricating oils and greases. 288,144; Oct. 20; Serial No. 309,268; published Mar. 17, 1931. Class 15.
Garner Print Works & Bleachery, Wappingers Falls, assignor to Garner & Co., Inc., New York, N. Y. Cambrics, sheetings, shirtings, etc. 84,903; renewed Jan. 9, 1932.
Garrett, William H., doing business as Garrett Manufacturing Company, Houston, Tex. Glue. 287,944; Oct. 20; Serial No. 315,771; published July 21, 1931. Class 5.
Gelfand Manufacturing Co. of California, Los Angeles, Calif. Chicken and egg noodles, spaghetti dinner with chicken croquettes, etc. 288,221; Oct. 20; Serial No. 314,364; published July 14, 1931. Class 46.
Gem Clay Forming Company, The, Sebring, Ohio. Miniature theatres, figures therefor, and materials for coloring the same. 288,009; Oct. 20; Serial No. 316,154; published Aug. 11, 1931. Class 22.
General Silk Corporation, New York, N. Y. Silk. 288,038; Oct. 20; Serial No. 315,682; published Aug. 11, 1931. Class 42.
Gestetner, D., Limited, London, England. Stencil duplicating apparatus, stencils, etc. 288,156; Oct. 20; Serial No. 303,962; published Aug. 4, 1931. Class 37.
Gilbert, E. Warren, doing business as W. H. Ryan & Co., Allentown, Pa. Toy. 288,164; Oct. 20; Serial No. 301,757; published Aug. 4, 1931. Class 22.
Godward Gas Generator, Inc., New York, N. Y. Fuel vaporizers. 288,184; Oct. 20; Serial No. 315,660; published Aug. 4, 1931. Class 23.
Golden Eagle Milling Co., Petaluma, Calif. Prepared poultry feeds. 288,124; Oct. 20; Serial No. 297,188; published July 21, 1931. Class 46.
Golden Pond Ginger Ale Co. (See McNutt, Samuel H., jr.)
Goodyear Tire & Rubber Company, The, Akron, Ohio. Tires, treads, tire tubes, etc. 288,121; Oct. 20; Serial No. 293,320; published Aug. 11, 1931. Class 35.
Gordon-Allen Ltd., Oakland, Calif. Soap. 288,102; Oct. 20; Serial No. 315,595; published July 28, 1931. Class 4.
Great Lakes Aircraft Corporation, Cleveland, Ohio. Device simulating an airplane. 287,996; Oct. 20; Serial No. 311,571; published Aug. 4, 1931. Class 22.
Great Lakes Industrial Laboratories. (See Rex, Clarence R.)
Green, Adelbert W., Schenectady, N. Y. Tonic beverages. 82,598; renewed July 11, 1931.
Grigsby-Grunow Company, Chicago, Ill. Publication. 288,017; Oct. 20; Serial No. 316,202; published Aug. 4, 1931. Class 38.
Grigsby-Grunow Company, Chicago, Ill. Publication. 288,082; Oct. 20; Serial No. 315,836; published July 21, 1931. Class 38.
Grocers & Producers Co., The, Cleveland, Ohio. Toilet paper, paper napkins, and wrapping and wax paper. 288,117; Oct. 20; Serial No. 286,762; published Mar. 10, 1931. Class 37.
Ground Gripper Shoe Company, Inc. (See Henne, Wm., & Co., assignor.)
Guerin & Lorimer, New York, N. Y. Metal polish. 288,098; Oct. 20; Serial No. 315,395; published July 28, 1931. Class 4.
Gumpert, S., Co. Inc., Brooklyn, N. Y. Cup cakes, cookies, and pastries. 287,967; Oct. 20; Serial No. 315,615; published July 28, 1931. Class 46.
Halbert & Fryxell, Inc., New York, N. Y. Ophthalmic mountings. 288,271; Oct. 20; Serial No. 316,006; published Aug. 4, 1931. Class 26.
Hall, E. C., Company, doing business as Nation-Wide Service Grocers and Nation-Wide Stores Co., Brockton and Hyannis, Mass., and Augusta, Me. Tea, coffee, butter, etc. 288,305; Oct. 20; Serial No. 308,506; published July 14, 1931. Class 46.
Hall Milling Company. (See Kehlor Flour Mill Company, assignor.)
Halsell, Harold, Company, Oklahoma City, Okla. Cartoon strips. 288,029; Oct. 20; Serial No. 314,501; published July 28, 1931. Class 38.
Harding, William A., doing business as Harding Company, New York, N. Y. Brake linings. 288,277; Oct. 20; Serial No. 316,203; published Aug. 4, 1931. Class 35.
Harlacher, J. Cloyd, Cranston, R. I. Golf balls. 287,993; Oct. 20; Serial No. 315,140; published Aug. 11, 1931. Class 22.
Harrington & King Perforating Company, Chicago, Ill. Ornamental metal molding, fittings, etc. 288,131; Oct. 20; Serial No. 311,794; published Aug. 4, 1931. Class 12.
Harrington, Lewis W., New York, N. Y. Outlets for cast metal drains. 288,252; Oct. 20; Serial No. 315,310; published Aug. 11, 1931. Class 12.
Hashiba, Frank Y., New York, N. Y., to Frank Y. Hashiba, Hopkinton, R. I. Table sauce. 83,332; renewed Sept. 5, 1931.
Hat-Nu Corporation, Washington, D. C. Felt hat cleaning powder. 288,112; Oct. 20; Serial No. 316,486; published Aug. 11, 1931. Class 4.
Hedley, Thomas, & Company, Limited, Newcastle-on-Tyne, England. Olive oil. 288,219; Oct. 20; Serial No. 313,544; published July 21, 1931. Class 46.
Heflin, R. L., Inc., Sherman, Whitesboro, and Galveston, Tex. Stock feed. 287,941–2; Oct. 20; Serial Nos. 315,452–3; published July 14, 1931. Class 46.
Henne, Wm., & Co., New York, N. Y., assignor to Ground Gripper Shoe Company, Inc., Harrisburg, Pa. Boots and shoes. 83,155; renewed Aug. 22, 1931.
Henry, John, Co., The. (See Carscadin, Henry L.)
Hercules Motors Corporation, Canton, Ohio. Internal combustion engines, power units. 288,283; Oct. 20; Serial No. 314,694; published Aug. 4, 1931. Class 23.
Hercules Powder Company. (See Independent Powder Company of Missouri, assignor.)
Hertzwig, Olaf, Trading Co. Inc., New York, N. Y. Sardines, olive oil, and cheese. 288,211; Oct. 20; Serial No. 310,167; published July 21, 1931. Class 46.
Hoberg, John, Co., The, assignor to Hoberg Paper and Fibre Co., Green Bay, Wis. Toilet paper. 82,887; renewed Aug. 1, 1931.
Hoffman, Edward L., Buffalo, N. Y. Hair restorers. 36,916; renewed Aug. 20, 1931.
Howlett & Hockmeyer Co., Inc., New York, N. Y. Textile fabrics. 288,037; Oct. 20; Serial No. 315,537; published Aug. 11, 1931. Class 42.
Hubbard Milling Company, Mankato, Minn. Wheat flour. 287,951; Oct. 20; Serial No. 316,489; published Aug. 11, 1931. Class 46.
Hubert, Maryan J., doing business as Hubert's Baking Co., Maspeth, N. Y. Toasted rolls. 287,981; Oct. 20; Serial No. 314,366; published July 21, 1931. Class 46.
Hutter & Maxwell, East Palestine, Ohio. Newspaper cartoons. 288,019; Oct. 20; Serial No. 315,911; published Aug. 4, 1931. Class 38.
Hygrade Lamp Company, Boston, Mass. Electron radio tubes. 288,095; Oct. 20; Serial No. 315,144; published July 28, 1931. Class 21.
Independent Powder Company of Missouri, Joplin, Mo., assignor to Hercules Powder Company, Wilmington, Del. Dynamite and powder. 85,353; renewed Feb. 13, 1932.
Indian River Fisheries, The, Sebastian, Fla. Fish and fish meats. 288,236; Oct. 20; Serial No. 310,829; published Aug. 11, 1931. Class 46.
Inhalent Corporation, The. (See Sanford, William W., assignor.)
International Fruit Corporation, Orlando, Fla. Fresh citrus fruits. 288,239; Oct. 20; Serial No. 313,240; published Aug. 11, 1931. Class 46.
International Sugar Feed No. Two Company, Memphis, Tenn. Stock food. 287,956; Oct. 20; Serial No. 314,114; published July 28, 1931. Class 46.
International Sugar Feed No. Two Company Memphis, Tenn. Stock food. 287,980; Oct. 20; Serial No. 314,113; published July 28, 1931. Class 46.
Japanese Tissue Mills, to American Tissue Mills, Holyoke, Mass., successor. Paper towels and napkins. 85,354; renewed Feb. 13, 1932.
Jefferson Union Company, Inc., New York and Lockport, N. Y., and Lexington, Mass. Metal pipe fittings. 288,070; Oct. 20; Serial No. 316,092; published Aug. 11, 1931. Class 13.
Jelke, John F., Company, Chicago, Ill. Oleomargarine. 287,946; Oct. 20; Serial No. 315,839; published July 21, 1931. Class 46.
Jelke, John F., Company, Chicago, Ill. Oleomargarine. 288,262; Oct. 20; Serial No. 314,810; published Aug. 11, 1931. Class 46.
Jelke, John F., Company, Hillsboro, Wis. Evaporated milk. 288,122; Oct. 20; Serial No. 295,269; published Apr. 15, 1930. Class 46.
Johnson, Jennie A., assignor to Taylor and Johnson, Spokane, Wash. Flour compound. 288,238; Oct. 20; Serial No. 312,345; published Aug. 11, 1931. Class 46.
Johnson, Robert H. N., London England. Medicine. 36,713; renewed July 9, 1931.
Johnson-Williams, Ltd., Palo Alto, Calif. Scientific instruments, recording instruments, etc. 288,280; Oct. 20; Serial No. 315,770; published Aug. 11, 1931. Class 26.
Kames, Crawford J., Philadelphia, Pa. Columns or sections of daily newspapers. 287,966; Oct. 20; Serial No. 315,459; published July 21, 1931. Class 38.
Kaplan, Oscar B., doing business as The Kay Company, New York, N. Y. Malt syrup. 288,288; Oct. 20; Serial No. 315,266; published July 21, 1931. Class 46.
Kay Company, The. (See Kaplan, Oscar B.)
Kehlor Flour Mills Company, St. Louis, Mo., and East St. Louis, Ill., assignor to Hall Milling Company, St. Louis, Mo. Wheat-flour. 85,136; renewed Jan. 30, 1932.
Keller-Dorian Paper Co., Inc., New York, N. Y. Cards and announcements. 288,022; Oct. 20; Serial No. 315,640; published July 21, 1931. Class 38.
Kelloggs & Miller, assignor to Kelloggs & Miller, Inc., Amsterdam, N. Y. Cleaned and ground flaxseed. 84,642; renewed Dec. 26, 1931. Class 6.
Kelloggs & Miller, assignor to Kelloggs & Miller, Inc., Amsterdam, N. Y. Oil-cake and oil-meal. 84,834; renewed Jan. 9, 1932.

Keuffel and Esser Company, Hoboken, N. J. Surveyors' leveling rods. 288,192; Oct. 20; Serial No. 315,149; published Aug. 4, 1931. Class 26.
Keuffel and Esser Company, Hoboken, N. J. Brownprint papers and cloths. 288,278; Oct. 20; Serial No. 316,206; published Aug. 4, 1931. Class 26.
Kindel Furniture Company, Grand Rapids, Mich. Furniture. 288,176; Oct. 20; Serial No. 315,268; published Aug. 4, 1931. Class 32.
Kingsport Press, Inc., Kingsport, Tenn. Airbrush finished book covers. 288,083; Oct. 20; Serial No. 315,599; published July 28, 1931. Class 37.
Kirk, James S., & Company, Jersey City, N. J., and New York, N. Y., assignor to The Procter & Gamble Company, Cincinnati, Ohio. Soap. 37,037; renewed Sept. 10, 1931. Class 4.
Knapp-Monarch Company, Belleville, Ill. Vegetable graters and choppers. 288,256; Oct. 20; Serial No. 315,846; published Aug. 11, 1931. Class 23.
Knight, Raymond, New York, N. Y. Candy. 288,295; Oct. 20; Serial No. 315,721; published Aug. 4, 1931. Class 46.
Knight, Raymond, New York, N. Y. Candy. 288,296; Oct. 20; Serial No. 315,842; published Aug. 4, 1931. Class 46.
Koppers Company, The, Pittsburgh, Pa. Coke. 287,948; Oct. 20; Serial No. 316,039; published Aug. 4, 1931. Class 1.
Krause, Max E., doing business as Royal Malt Extract Company, Cincinnati, Ohio. Malt syrup for food purposes. 288,198; Oct. 20; Serial No. 260,946; published Feb. 5, 1929. Class 46.
Kresge Department Store Corporation, Newark, N. J. Soap. 288,100; Oct. 20; Serial No. 315,539; published July 28, 1931. Class 4.
Lancor, Joseph H., doing business as Lancor Manufacturing Company, Providence, R. I. Hair clasps, lingerie clasps, etc. 288,147; Oct. 20; Serial No. 314,059; published July 28, 1931. Class 28.
Land O'Lakes Creameries, Inc., Minneapolis, Minn. Creamery butter. 287,975; Oct. 20; Serial No. 313,579; published July 14, 1931. Class 46.
Latz, Harry, Service, Inc., New York, N. Y. Advertising devices. 288,159–60; Oct. 20; Serial Nos. 302,781–2; published Aug. 4, 1931. Class 38.
Lawrence, A. C., Leather Co., Boston, Mass., to A. C. Lawrence Leather Company, Peabody, Mass. Leather. 83,568; renewed Sept. 26, 1931. Class 1.
Lawrence, A. C., Leather Company, Peabody, Mass. Pelts. 287,952; Oct. 20; Serial No. 316,534; published Aug. 11, 1931. Class 1.
Lazzaroni, D. & C., Saronno, Italy. Crackers. 288,116; Oct. 20; Serial No. 285,978; published July 21, 1931. Class 46.
Leary, Dennis W., Walnut Grove, Calif. Pears. 288,143; Oct. 20; Serial No. 316,601; published Aug. 11, 1931. Class 46.
Leggett, Francis H., & Co., to Francis H. Leggett & Company, New York, N. Y., successor. Olives. 36,888; renewed Aug. 13, 1931. Class 46.
Leggett, Francis H., & Company, New York, N. Y. Mint confections. 288,292; Oct. 20; Serial No. 315,600; published Aug. 4, 1931. Class 46.
Leichtmetallverwertungs-Gesellschaft m. b. H., Trier, Germany. Mineral raw products. 288,165; Oct. 20; Serial No. 301,661; published July 21, 1931. Class 1.
Lennox Furnace Company, Marshalltown, Iowa. Furnaces. 288,058; Oct. 20; Serial No. 314,700; published Aug. 11, 1931. Class 34.
Leschke & Pletcher to Leschke & Pletcher, Hartford, Conn., successor. Cigars and tobacco. 84,046; renewed Dec. 26, 1931. Class 17.
Loeb and Welch, Inc., Memphis, Tenn. Mantels. 288,253; Oct. 20; Serial No. 315,407; published Aug. 4, 1931. Class 12.
Long, Benjamin J., doing business as Forest City Bronze Company, Cleveland, Ohio. Weather strip. 288,247; Oct. 20; Serial No. 309,824; published July 28, 1931. Class 12.
Looney, Hubert R., Portland, Oreg. Medicinal preparation. 288,228; Oct. 20; Serial No. 304,620; published Aug. 11, 1931. Class 6.
Los Angeles Brewing Co., Los Angeles, Calif. Grain alcohol. 287,997; Oct. 20; Serial No. 311,742; published Aug. 4, 1931. Class 49.
Los Angeles Brewing Co., Los Angeles, Calif. Malt syrup. 288,220; Oct. 20; Serial No. 314,701; published July 14, 1931. Class 46.
Lowe, Joe, Co. Inc., Brooklyn, N. Y. Dehydrated whole eggs, egg yolk, and egg albumen. 288,196; Oct. 20; Serial No. 249,011; published July 21, 1931. Class 46.
Lufkin Rule Co., Saginaw, Mich. Measuring tapes. 288,273; Oct. 20; Serial No. 316,094; published Aug. 4, 1931. Class 26.
M. S. M. Developing and Printing Co., Clifton, N. J. Photographic prints. 288,080–1; Oct. 20; Serial Nos. 315,852–3; published July 21, 1931. Class 38.
Macfadden Publications, Inc., New York, N. Y. Magazine. 287,969; Oct. 20; Serial No. 315,753; published July 21, 1931. Class 38.
Madison-Kipp Corporation, Madison, Wis. Tools, parts, replacements, and accessories. 288,126; Oct. 20; Serial No. 298,900; published Aug. 4, 1931. Class 23.
Malleable Steel Range Mfg. Co., The, South Bend, Ind. Rubbish incinerator. 288,055; Oct. 20; Serial No. 310,708; published Aug. 11, 1931. Class 34.
Mallinson, H. R. & Co. Inc. (See Migel, M. C. & Co., assignor.)
Maple Grove Candies, Inc., St. Johnsbury, Vt. Maple sugar. 288,172; Oct. 20; Serial No. 308,994; published July 21, 1931. Class 46.
Maple Grove Candies, Inc., St. Johnsbury, Vt. Maple sugar. 288,304; Oct. 20; Serial No. 308,993; published July 21, 1931. Class 46.
Marros, Arthur, New York, N. Y. Canary birds. 288,088; Oct. 20; Serial No. 314,624; published July 28, 1931. Class 1.
Maryland Baking Company, Inc., The, Baltimore, Md. Ice cream cones. 288,299; Oct. 20; Serial No. 301,670; published July 14, 1931. Class 46.
Matson, Charles H., doing business as Fisherman's News, New York, N. Y. Monthly magazine. 288,027; Oct. 20; Serial No. 315,336; published Aug. 11, 1931. Class 38.
McLaurin-Jones Co., Brookfield, Mass. Decalcomania paper. 288,077; Oct. 20; Serial No. 316,045; published July 28, 1931. Class 37.
McNutt, Samuel H., jr., doing business as Golden Pond Ginger Ale Co., Paducah, Ky. Maltless beverages, sirups, and extracts for making the same. 288,072; Oct. 20; Serial No. 316,655; published Aug. 11, 1931. Class 45.
McVicker, W. B., Company, New York, N. Y., to W. B. McVicker Company, Brooklyn, N. Y. Lubricating oils and greases. 83,080; renewed Aug. 15, 1931.
Mead Corporation, The, Dayton, Ohio. Printing paper. 288,015; Oct. 20; Serial No. 316,277; published Aug. 11, 1931. Class 37.
Meyrowitz, E. B., Inc., New York, N. Y. Opera glasses, reading and magnifying glasses. 288,127; Oct. 20; Serial No. 299,145; published Aug. 4, 1931. Class 26.
Meyrowitz, E. B., Inc., New York, N. Y. Goggles, eyeglasses, and spectacles. 288,270; Oct. 20; Serial No. 315,799; published Aug. 4, 1931. Class 26.
Meyrowitz, E. B., Inc., New York, N. Y. Goggles, spectacles, and eye protectors. 288,275; Oct. 20; Serial No. 316,160; published Aug. 4, 1931. Class 26.
Michael, Julius, Brooklyn, N. Y. Safety razor sharpening device. 288,300; Oct. 20; Serial No. 302,128; published July 28, 1931. Class 4.
Michel, Maksik & Feldman, Inc., New York, N. Y. Hand bags, purses, and pocket books. 287,986; Oct. 20; Serial No. 315,207; published July 14, 1931. Class 3.
Midway Chemical Company, Chicago, Ill. Shoe polish. 288,225; Oct. 20; Serial No. 314,572; published July 28, 1931. Class 4.
Migel, M. C., & Co., assignor, by mesne assignments, to H. R. Mallinson & Co. Inc., New York, N. Y. Woven broad silk piece goods. 84,656; renewed Dec. 26, 1931.
Miller, Robert P., doing business as Parlor Pride Mfg. Co. Inc., North Andover, Mass. Stove polish. 288,148; Oct. 20; Serial No. 314,652; published Aug. 4, 1931. Class 4.
Millett, J. C., Company, San Francisco, Calif. Malt syrup. 288,240; Oct. 20; Serial No. 314,375; published July 21, 1931. Class 46.
Mission Dry Corporation, Ltd. (See California Crushed Fruit Corporation.)
Moland's, William, Sons, assignor to William Moland's Sons, Inc., Philadelphia, Pa. Preparation of pork. 84,846; renewed Jan. 9, 1932.
Monocraft Products Company, Brooklyn, assignor to Monocraft Products Co., Inc., New York, N. Y. Escutcheon plates. 288,206; Oct. 20; Serial No. 278,053; published Aug. 11, 1931. Class 13.
Mooring, Ward, Bryan, Tex. Alfalfa leaf meal, etc. 287,970; Oct. 20; Serial No. 315,864; published July 28, 1931. Class 46.
Morgan Company, The, Peoria, Ill. Paints, paint enamels, and varnishes. 288,199; Oct. 20; Serial No. 275,179; published Feb. 18, 1930. Class 16.
Morrell, John, & Company, Ottumwa, Iowa. Lard (Manteca pura De Cerdo). 288,293; Oct. 20; Serial No. 315,602; published Aug. 4, 1931. Class 46.
Mosinee Paper Mills Company, Mosinee, Wis. Wrapping paper. 288,120; Oct. 20; Serial No. 290,269; published Nov. 4, 1930. Class 37.
Moto-Bita Corporation, Wilmington, Del., and New York, N. Y. Apparatus for analyzing gaseous mixtures. 288,210; Oct. 20; Serial No. 309,917; published Aug. 4, 1931. Class 26.
Motor Melody Corporation, Chicago, Ill. Radio receiving sets. 288,150; Oct. 20; Serial No. 314,855; published July 28, 1931. Class 21.
Mountain States Coal Company, Cincinnati, Ohio. Coal. 288,209; Oct. 20; Serial No. 316,538; published Aug. 11, 1931. Class 1.
Mountain States Mixed Feed Company, Denver, Colo. Baby chick starter mash, etc. 287,976; Oct. 20; Serial No. 313,926; published July 28, 1931. Class 46.
Mountain States Mixed Feed Company, Denver, Colo. Baby chick starter mash, etc. 287,977–8; Oct. 20; Serial Nos. 313,928–9; published July 28, 1931. Class 46.
Mountain States Mixed Feed Company, Denver, Colo. Baby chick starter mash, etc. 287,979; Oct. 20; Serial No. 313,931; published July 28, 1931. Class 46.
Mountain States Mixed Feed Company, Denver, Colo. Laying mash, baby chick grains, etc. 288,259; Oct. 20; Serial No. 313,930; published Aug. 4, 1931. Class 46.
Munson School for Private Secretaries. (See Smith, Juliet M.)

Musco, Nicolo, New York, N. Y. Cheese. 288,260; Oct. 20; Serial No. 314,122; published Aug. 4, 1931. Class 46.

Mutual Electric & Machine Company, Wheeling, W. Va., by change of name to Bulldog Electric Products Company, Detroit, Mich. Electrical appliances. 85,270; renewed Feb. 6, 1932.

Namm, A. I., & Son, doing business as The Namm Store, Brooklyn, N. Y. Hats. 288,246; Oct. 20; Serial No. 313,255; published July 14, 1931. Class 39.

Nashville Hardwood Flooring Company, to Nashville Hardwood Flooring Company, Nashville, Tenn., successor. Flooring, square-edge strips, and wood flooring squares. 81,091; renewed Feb. 28, 1931.

National Biscuit Company. (See Shredded Wheat Company, The, assignor.)

National Biscuit Company, Jersey City, N. J. and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 84,849; renewed Jan. 9, 1932.

National Utilization Corporation, Norfolk, Va. Tankage. 84,509; renewed Dec. 19, 1931.

National Utilization Corporation, Norfolk, Va. Tankage. 84,790; renewed Jan. 2, 1932.

Nation-Wide Service Grocers. (See Hall, E. C., Company.)

Nation-Wide Stores Co. (See Hall, E. C., Company.)

Nelson Bros. Company, Alma, Mich., to Nelson Brothers Company, Saginaw, Mich., successor. Engines and parts thereof. 83,271; renewed Aug. 29, 1931.

New England Chemical Associates. (See Swanson, Oliver A.)

New England Confectionery Company, Cambridge, Mass. Candy. 288,138; Oct. 20; Serial No. 315,868; published Aug. 4, 1931. Class 46.

New Jersey Dairymen, Inc., Trenton, N. J. Raw milk. 288,306; Oct. 20; Serial No. 308,846; published Aug. 4, 1931. Class 46.

New Standard Baking Company, Philadelphia, Pa. Cakes. 288,263; Oct. 20; Serial No. 314,858; published Aug. 4, 1931. Class 46.

New York Canners Inc. (See Olney, Burt, Canning Co., The, assignor.)

Nightingale Fireplace Cabinet Manufacturing Company, The, Philadelphia, Pa. Fireplace cabinet. 288,272; Oct. 20; Serial No. 316,048; published Aug. 4, 1931. Class 32.

Northern Feather Works, Inc., Newark, N. J. Pillows, cushions, and mattresses. 288,180; Oct. 20; Serial No. 315,696; published Aug. 4, 1931. Class 32.

Nuzone Products Co. (See Angelus, Louis.)

Oakland Lumber Company, Orgas, W. Va. Rough lumber. 288,250; Oct. 20; Serial No. 313,751; published July 28, 1931. Class 12.

Ohio Farm Bureau Service Company, The, Columbus, Ohio. Dairy feeds. 287,933; Oct. 20; Serial No. 312,196; published July 21, 1931. Class 46.

Ohio and Michigan Paper Company, The, Toledo, Ohio. Wrapping paper, toilet paper, etc. 288,157; Oct. 20; Serial No. 303,778; published July 28, 1931. Class 37.

Oklahoma Portland Cement Company, Oklahoma City, Okla. Quick hardening oil well cement. 288,233; Oct. 20; Serial No. 308,501; published July 28, 1931. Class 12.

Old Bleach Linen Company, Limited, The, Randalstown, Ireland, assignor to The Old Bleach Linen Co. Ltd. Inc., New York, N. Y. Textile fabrics. 82,714; renewed July 18, 1931.

Old Quaker Company. (See Stagg, Geo. T., Co., The., assignor.)

Oligodyn A.-G., Zug, Switzerland. Metallic substance. 288,114; Oct. 20; Serial No. 285,371; published Aug. 4, 1931. Class 31.

Oligodyn A.-G., Zug, Switzerland. Metallic substance. 288,115; Oct. 20; Serial No. 285,374; published Aug. 4, 1931. Class 31.

Olney, Burt, Canning Co., The, Oneida and Albion, assignor to New York Canners Inc., Rochester, N. Y. Canned fruits and vegetables. 65,799; renewed Oct. 22, 1927.

Oneida Community, Limited. (See Rogers, Wm. A. Limited, assignor.)

Oppleman, I., doing business as L. Oppleman, New York, N. Y. Pistols. 288,005–6; Oct. 20; Serial Nos. 315,920–1; published Aug. 4, 1931. Class 9.

Owatonna Manufacturing Company, Owatonna, Minn., assignor to The Creamery Package Mfg. Company, Chicago, Ill. Combined churns and butter workers. 83,180; renewed Aug. 22, 1931.

Pacific Egg Producers Cooperative, Inc., New York, N. Y. Eggs. 287,974; Oct. 20; Serial No. 312,247; published July 28, 1931. Class 46.

Page Steel and Wire Company, Adrian, Mich., and Bridgeport, Conn. Steel and iron strands. 288,003; Oct. 20; Serial No. 315,553; published Aug. 11, 1931. Class 7.

Page Steel and Wire Company, Adrian, Mich., and Bridgeport, Conn. Steel and iron magnet core wire. 288,101; Oct. 20; Serial No. 315,554; published July 28, 1931. Class 21.

Palmer, A. N., Company, The, New York, N. Y. Penholders. 288,086; Oct. 20; Serial No. 314,713; published July 28, 1931. Class 37.

Paper Specialty Company, Wausau, Wis. Lining paper. 288,128; Oct. 20; Serial No. 299,591; published Aug. 4, 1931. Class 37.

Parfumerie Roger et Gallet, Société Anonyme, Paris, France. Soaps. 288,146; Oct. 20; Serial No. 314,011; published Aug. 11, 1931. Class 4.

Parlor Pride Mfg. Co. Inc. (See Miller, Robert P.)

Perfect, A. H., & Co., Fort Wayne, Ind. Canned fruits, vegetables, coffee, etc. 288,235; Oct. 20; Serial No. 301,291; published July 21, 1931. Class 46.

Perls Manufacturing Co., Inc., Florin, Pa. Peanuts. 288,234; Oct. 20; Serial No. 302,471; published Aug. 11, 1931. Class 46.

Perserverance Worsted Company, Woonsocket, R. I. Worsted cloths. 85,484; renewed Feb. 20, 1932.

Philadelphia Seed Co., Inc., The, Philadelphia, Pa. Seeds. 84,407; renewed Dec. 12, 1931.

Phillips, Herbert O., Portland, Me. Wheat flours. 37,278; renewed Nov. 5, 1931.

Phillips Sales Company, Inc., Cambridge, Md. Canned vegetables and catsup. 288,130; Oct. 20; Serial No. 299,795; published July 21, 1931. Class 46.

Physical Culture Publishing Corporation, New York, N. Y. Magazine. 287,968; Oct. 20; Serial No. 315,645; published July 21, 1931. Class 38.

Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Oil gauges. 288,183; Oct. 20; Serial No. 315,558; published Aug. 11, 1931. Class 26.

Pitt, C. M., & Sons Co., The, Baltimore, Md. Cakes. 287,950; Oct. 20; Serial No. 316,107; published Aug. 11, 1931. Class 46.

Porter, Robert D., San Francisco, Calif. Accounting forms. 288,084; Oct. 20; Serial No. 315,110; published Aug. 4, 1931. Class 37.

Pratt & Lambert, Inc., Long Island City and Buffalo, to Pratt & Lambert, Inc., Buffalo, N. Y. Enamels, varnishes, stains, etc. 85,177; renewed Jan. 30, 1932.

President Suspender Company. (See Edgarton, C. A., Mfg. Co., The, assignor.)

Procter & Gamble Company, The. (See Kirk, James S., & Company, assignor.)

Procter & Gamble Company, The, Cincinnati, Ohio. Soap. 288,302; Oct. 20; Serial No. 306,070; published July 28, 1931. Class 4.

Procter & Gamble Manufacturing Co., The. (See Aspegren & Co., assignor.)

Pruser, Henry B., Incorporated, Mount Vernon, N. Y. Coal. 287,987; Oct. 20; Serial No. 315,417; published Jul 14, 1931. Class 1.

Regelson and Rostow, New Haven, Conn. Prophylactic rubber articles. 288,194; Oct. 20; Serial No. 315,648; published July 28, 1931. Class 44.

Reid, Robert A., doing business as Ankle Deep Products Company of America, David City, Nebr. Maltless beverage, sirup and extract. 288,012; Oct. 20; Serial No. 316,663; published Aug. 11, 1931. Class 45.

Remington Rand Inc., Buffalo, N. Y. Bound books for accounts and records, etc. 288,154; Oct. 20; Serial No. 308,036; published July 28, 1931. Class 37.

Remington Rand Inc., Buffalo, N. Y. Cabinets, lockers, cupboards, etc. 288,168; Oct. 20; Serial No. 308,037; published Aug. 4, 1931. Class 32.

Republic Steel Corporation. (See United Steel Company, The, assignor.)

Rex, Clarence R., doing business as Great Lakes Industrial Laboratories, Toledo, Ohio. Plastic coating. 288,125; Oct. 20; Serial No. 297,821; published Aug. 4, 1931. Class 12.

Revelation Water Purifier Company, Ltd., Glendale, Calif. Water filters. 288,002; Oct. 20; Serial No. 315,327; published Aug. 4, 1931. Class 31.

Reynolds & Co., New York, N. Y. Cheese. 287,991; Oct. 20; Serial No. 316,506; published Aug. 11, 1931. Class 46.

Rialto Corporation, The, Long Beach, Calif. Canned fish, canned pimientos. 288,202; Oct. 20; Serial No. 282,747; published July 28, 1931. Class 46.

Richardson, Lee, Richardson Springs, Chico, Calif. Bottled mineral waters. 288,066; Oct. 20; Serial No. 315,585; published Aug. 4, 1931. Class 45.

Richmond, L., & Co., to L. Richmond & Co., (Inc.), Brockton, Mass., successor. Disinfectant. 85,495; renewed Feb. 20, 1932. Class 6.

Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Tympan paper and Bristol board. 288,073; Oct. 20; Serial No. 316,507; published Aug. 11, 1931. Class 37.

Robertson, Benjamin G., doing business as Suzanne Bags, Louisville, Ky. Hand purses or bags. 287,935; Oct. 20; Serial No. 314,300; published Aug. 4, 1931. Class 3.

Robinette, Clyde B., Cleveland, Ohio. Amusement games. 287,999; Oct. 20; Serial No. 312,785; published Aug. 11, 1931. Class 22.

Robinson Milling Company, The, Salina, Kans. Wheat flour. 287,939; Oct. 20; Serial No. 315,279; published July 14, 1931. Class 46.

Robinson Milling Company, The, Salina, Kans. Wheat flour. 287,965; Oct. 20; Serial No. 315,278; published July 28, 1931. Class 46.

Robinson Milling Company, The, Salina, Kans. Wheat flour. 288,265; Oct. 20; Serial No. 315,561; published Aug. 11, 1931. Class 46.

Rockne Motors Corporation, Indianapolis, Ind. Automotive vehicles and their structural parts. 288,062–4; Oct. 20; Serial Nos. 315,329–31; published Aug. 4, 1931. Class 19.

Rogers-Kellogg-Stillson Company, New York, N. Y. Booklets, folders, and prints. 288,028; Oct. 20; Serial No. 315,332; published Aug. 11, 1931. Class 38.

Rogers Printing Company, Baltimore, Md. Cardboard easels. 288,089; Oct. 20; Serial No. 314,210; published Aug. 4, 1931. Class 37.

Rogers, Wm. A. Limited, New York, N. Y., assignor to Oneida Community, Limited, Oneida, N. Y. Steel carving-knives. 84,131; renewed Nov. 7, 1931.

Royal Baking Powder Company, New York, N. Y. Gelatine desserts. 288,190; Oct. 20; Serial No. 315,013; published July 28, 1931. Class 46.

Royal Baking Powder Company, New York, N. Y. Gelatine desserts. 288,241; Oct. 20; Serial No. 315,014; published July 28, 1931. Class 46.

Royal Baking Powder Company, New York, N. Y. Gelatine desserts. 288,242; Oct. 20; Serial No. 315,016; published July 14, 1931. Class 46.

Royal Malt Extract Company. (See Krause, Max E.)

Royal Manufacturing Company, Toledo, Ohio. Golf clubs and balls. 287,998; Oct. 20; Serial No. 312,669; published Aug. 4, 1931. Class 22.

Rudolff, Hermann, Novato, Calif. Cheese. 84,531; renewed Dec. 19, 1931.

Ruehlman, P. G., Cincinnati, Ohio. Dry herb flavoring preparation for soft drinks. 288,057; Oct 20; Serial No. 314,129; published Aug. 11, 1931. Class 45.

Rumely, M., Company, Laporte, Ind., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, West Allis and Milwaukee, Wis. Hydrocarbon engines. 83,281; renewed Aug. 29, 1931.

Ryan, W. H., & Co. (See Gilbert, E. Warren.)

St. Mungo Manufacturing Company of America, Newark, N. J. Golf balls. 287,994; Oct. 20; Serial No. 310,190; published Aug. 4, 1931. Class 22.

Salina Products Corporation, Syracuse, N. Y. Malt syrup and malt extract. 288,224; Oct. 20; Serial No. 314,536; published July 28, 1931. Class 46.

Salubra, S. A., Basel, Switzerland. Textile wall coverings. 288,039; Oct. 20; Serial No. 315,762; published Aug. 4, 1931. Class 42.

Salubra, S. A., Basel, Switzerland. Textile wall coverings. 288,040; Oct. 20; Serial No. 315,760; published Aug. 4, 1931. Class 42.

Sanford, William W., doing business as Sanford Company, Binghamton, N. Y., assignor, by mesne assignments, to The Inhalene Corporation, Rochester, N. Y. Inhalant. 288,248; Oct. 20; Serial No. 310,260; published May 12, 1931. Class 6.

Savage, W. J., Company, Incorporated, Knoxville, Tenn. Flour and feed mill equipment, stone working equipment, etc. 288,282; Oct. 20; Serial No. 314,213; published Aug. 4, 1931. Class 23.

Scheidt, Adam, Brewing Company, Norristown, Pa. Malt syrup. 288,237; Oct. 20; Serial No. 311,458; published July 21, 1931. Class 46.

Scheinert Bros., Inc., New York, N. Y. Show case adhesive cement. 287,954; Oct. 20; Serial No. 313,390; published July 28, 1931. Class 5.

Schilling, A., & Co., San Francisco, Calif. Food flavoring extracts. 288,287; Oct. 20; Serial No. 315,567; published July 21, 1931. Class 46.

Schilling, A., & Co., San Francisco, Calif. Tea and coffee. 288,290; Oct. 20; Serial No. 315,564; published Aug. 11, 1931. Class 46.

Schilling, A., & Co., San Francisco, Calif. Spices. 288,291; Oct. 20; Serial No. 315,566; published July 21, 1931. Class 46.

Schoenberg, Julius, New York, N. Y. Golf balls, clubs, and bags, and tennis rackets. 288,011; Oct. 20; Serial No. 316,664; published Aug. 11, 1931. Class 22.

Science Press, The. (See Cattell, J. McKeen.)

Sciafani Brothers, Brooklyn, N. Y. Canned vegetables and fish. 288,218; Oct. 20; Serial No. 312,315; published July 28, 1931. Class 46.

Scull, Wm. S. Company. (See Canby, Ach & Canby Co., The, assignor.)

Sears, Roebuck and Co., Chicago, Ill. Pencils and fountain pens. 288,079; Oct. 20; Serial No. 315,875; published July 28, 1931. Class 37.

Seneca Food Products Corporation, Utica, N. Y. Cereal malt beverage. 287,995; Oct. 20; Serial No. 310,836; published Aug. 4, 1931. Class 48.

Sen-Sen Chiclet Company, New York, N. Y., assignor to American Chicle Company, Long Island City, N. Y. Chewing-gum and cachous. 84,536; renewed Dec. 19, 1931.

Sexauer J. A. Mfg. Co., Inc., New York, N. Y. Faucet seats, fuller balls, piston packing, etc. 288,175; Oct. 20; Serial No. 314,254; published Aug. 4, 1931. Class 35.

Shaddick, Robert C., doing business as Woods Mince Meat Co., Baltimore, Md. Mince meat. 288,215; Oct. 20; Serial No. 311,889; published July 14, 1931. Class 46.

Shaler Company, The, Waupun, Wis. Tire and tube patching materials. 288,169; Oct. 20; Serial No. 307,742; published Aug. 4, 1931. Class 35.

Shawnee Stone Company, Bloomington, Ind. Indiana limestone. 287,934; Oct. 20; Serial No. 313,612; published Aug. 4, 1931. Class 1.

Sherman, Falk, New York, N. Y. Cotton sheets, sheeting, pillow-cases, and quilt covers. 288,153; Oct. 20; Serial No. 306,668; published Aug. 11, 1931. Class 42.

Shoemaker, Flora H., doing business as The Frostilla Company, Elmira, N. Y. Beard softening preparations. 288,171; Oct. 20; Serial No. 307,431; published Aug 4, 1931. Class 4.

Shredded Wheat Company, The, Niagara Falls, assignor to National Biscuit Company, New York, N. Y. Cereal biscuit. 85,186; Renewed Jan. 30, 1932.

Siemens-Schukertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Sowing machines, threshing machines, and mowing machines, and parts thereof, sewing machines, etc. 288,197; Oct. 20; Serial No. 258,555; published Aug. 4, 1931. Class 23.

Siemens-Schukertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Sowing machines, threshing machines, and mowing machines, and parts thereof, sewing machines, etc. 288,205; Oct. 20; Serial No. 255,935; published Aug. 4, 1931. Class 23.

Sigma Alpha Phi Sorority, Plainfield, Newark, Paterson, Montclair, and Closter, N. J.; New Canaan, Meriden, and Waterbury, Conn.; and Washington, D. C. Books, pamphlets, bulletins, and periodic magazines. 287,955; Oct. 20; Serial No. 314,021; published July 21, 1931. Class 38.

Signal Publishing Corporation, Huntington Park, Calif. Newspaper. 288,025; Oct. 20; Serial No. 315,571; published Aug. 4, 1931. Class 38.

Silnutzer, David, doing business as Bavarian Liquid Malt Company, Philadelphia, Pa. Malt beverages. 288,008; Oct. 20; Serial No. 316,136; published Aug. 11, 1931. Class 48.

Sinclair, T. M. & Co., Limited, Cedar Rapids, Iowa. Certain foods. 84,881; renewed Jan. 9, 1932.

Siren Mills Corporation, Chicago, Ill. Chocolate bars. 288,133; Oct. 20; Serial No. 315,862; published Aug. 4, 1931. Class 42.

Smith, Juliet M., doing business as Munson School for Private Secretaries, San Francisco, Calif. Publication. 288,163; Oct. 20; Serial No. 302,056; published July 21, 1931. Class 38.

Smith, L. C. & Corona Typewriter Inc. (See Standard Typewriter Co., assignor.)

Smooth-On Manufacturing Company, Jersey City, N. J. Liquid iron compound. 85,191; renewed Jan. 30, 1932.

Social Science Publishing Company, Inc., Winfield, Kans. Periodical. 287,963; Oct. 20; Serial No. 315,213; published July 21, 1931. Class 38.

Societe Anonyme des Caves & des Producteurs Reunis de Roquefort, Roquefort, France. Cheese. 287,989; Oct. 20; Serial No. 315,936; published July 28, 1931. Class 46.

Solvay Process Company, The, Syracuse, N. Y. Cleansing compounds. 288,093; Oct. 20; Serial No. 314,968; published Aug. 4, 1931. Class 4.

Solvay Process Company, The, Syracuse, N. Y. Cleansing and scouring compound. 288,094; Oct. 20; Serial No. 314,969; published Aug. 4, 1931. Class 4.

Solvay Process Company, The, Syracuse, N. Y. Preparations used as cleansing agents. 288,151–2; Oct. 20; Serial Nos. 314,965–6; published Aug. 4, 1931. Class 4.

Spencer, Albert B. & F. J. Spernak, Monogahela, Pa. Sirups and extracts. 288,069; Oct. 20; Serial No. 315,726; published Aug. 4, 1931. Class 45.

Springfield Leather Products Company, The, Springfield, Ohio. Billfolds. 287,992; Oct. 20; Serial No. 309,827; published July 21, 1931. Class 3.

Springfield Photo Mount Company, Springfield, Mass. Paper and mailing envelopes. 288,076; Oct. 20; Serial No. 316,071; published Aug. 11, 1931. Class 37.

Stagg, Geo. T., Co., The, Frankfort, Ky., assignor to Old Quaker Company, New York, N. Y. Whiskey. 288,123; Oct. 20; Serial No. 296,781; published Aug. 11, 1931. Class 49.

Standard Brands Incorporated, New York, N. Y. Coffee and tea. 288,243; Oct. 20; Serial No. 315,117; published Aug. 4, 1931. Class 46.

Standard Oil Company of New Jersey, Wilmington, Del. Asphalt and asphalt pipe coating. 288,254; Oct. 20; Serial No. 315,705; published July 28, 1931. Class 12.

Standard Register Company, The, Dayton, Ohio. Manifolding assemblies. 288,024; Oct. 20; Serial No. 315,581; published Aug. 11, 1931. Class 37.

Standard Typewriter Co., Groton, assignor to L. C. Smith & Corona Typewriter Inc., New York, N. Y. Carbon-paper and typewriter ribbons. 84,195; renewed Nov. 14, 1931.

Stresen-Reuter, Fred'k. A., Inc., Chicago, Ill. Paint colors for screen process work. 288,216; Oct. 20; Serial No. 312,207; published July 28, 1931. Class 16.

Strohbeck, Charles W., to Charles Strohbeck, Brooklyn, N. Y. Boots and shoes. 84,884; renewed Jan. 9, 1932.

Sun-Diet Health Service, Inc., East Aurora, N. Y. Periodicals, menus, food charts, etc. 288,031; Oct. 20; Serial No. 312,538; published Aug. 11, 1931. Class 38.

Sunnymede Farms. (See Waddell, John L.)

Sunnymede Farms, Inc. (See Waddell, John L.)

Sun Rise Press. (See Bagnole, Joseph.)

Sussman, Wormser & Company, San Francisco, Calif. Canned fruits. 288,139; Oct. 20; Serial No. 315,943; published Aug. 4, 1931. Class 46.

Suzanne Bags. (See Robertson, Benjamin G.)

Swain, Lora S., to Sanford M. Swain, Memphis, Tenn., successor. Face cream, hair-dressing (cream), and shampoo-cream. 82,653; renewed July 11, 1931.

Swanson, Oliver A., doing business as New England Chemical Associates, New York, N. Y. Chemical cleaning preparation. 288,111; Oct. 20; Serial No. 315,945; published Aug. 11, 1931. Class 4.

Swift and Company, Chicago, Ill. Cleansing compound. 85,202; renewed Jan. 30, 1932.

Symington, W., & Co., Limited, Market Harborough, England. Preparation for making a sauce or dressing. 84,696; renewed Dec. 26, 1931.

Syndicate Poster & Equipment Co., Chicago, Ill. Signs and posters, window display signs, etc. 288,161; Oct. 20; Serial No. 302,651; published July 21, 1931. Class 38.

Tarbox, Edwin W., Findlay, Ohio. Minnow buckets. 288,007; Oct. 20; Serial No. 316,059; published Aug. 11, 1931. Class 22.

Tasty Baking Company, Philadelphia, Pa. Pies. 287,940; Oct. 20; Serial No. 315,373; published July 21, 1931. Class 46.

Taylor and Johnson. (See Johnson, Jennie A., assignor.)

Teacher, Wm., & Sons, assignor to Wm. Teacher & Sons, Limited, Glasgow, Scotland. Blend of straight Scotch whisky. 83,373; renewed Sept. 5, 1931.

Teichman, John G., Durand, Mich. Plastic compound. 288,188; Oct. 20; Serial No. 314,941; published July 28, 1931. Class 16.

Teitelbaum Baking Co., Inc., Brooklyn, N. Y. Bread, doughnuts, and crullers. 288,201; Oct. 20; Serial No. 282,685; published July 21, 1931. Class 46.

Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 84,419; renewed Dec. 12, 1931.

Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils and petroleum products. 84,438; renewed Dec. 12, 1931.

Tide Water Oil Company, Bayonne, N. J., and New York, N. Y. Lubricating oils and greases. 288,099; Oct. 20; 315,507; published July 28, 1931. Class 15.

Tobin, Sporn & Glaser, Inc. (See Campbell, Metzger & Jacobson, assignor.)

Togstad, Clarence I., doing business as The C. I. Togstad Company, Kokomo, Ind. Flavoring extracts for food purposes. 288,220; Oct. 20; Serial No. 314,134; published July 14, 1931. Class 46.

Torsch Packing Company, assignor to The Torsch-Stevenson Corporation, Baltimore, Md. Canned oysters, fruits, and vegetables. 84,553; renewed Dec. 19, 1931.

Travel Guild, Inc., The, Chicago, Ill. Publications. 288,016; Oct. 20; Serial No. 316,227; published Aug. 11, 1931. Class 38.

Travel Guild, Inc., The, Chicago, Ill. Publications. 288,020; Oct. 20; Serial No. 315,882; published Aug. 4, 1931. Class 38.

Triner, Joseph, assignor to Joseph Triner Company, Chicago, Ill. Tonic. 37,750; renewed Feb. 4, 1932.

Tumbler, J. A., Laboratories, Baltimore, Md. Cleaning compound for automobiles. 288,303; Oct. 20; Serial No. 306,547; published July 28, 1931. Class 4.

Ucab Distributing Corporation, Inc., Camden, N. J. Compressed air bundlers. 288,285; Oct. 20; Serial No. 315,287; published Aug. 11, 1931. Class 23.

Ullman Manufacturing Company, The, Brooklyn, N. Y. Sets of crayons. 288,085; Oct. 20; Serial No. 314,971; published July 28, 1931. Class 37.

Ulrich, Charles, & Co., to Ulrich & Co., Buffalo, N. Y., successor. Metal polish. 37,449; renewed Dec. 10, 1931.

United American Bosch Corporation, Springfield, Mass. Radio receiving sets. 288,103; Oct. 20; Serial No. 315,652; published July 28, 1931. Class 21.

United Biscuit Company of America, Chicago, Ill. Cookies. 288,261; Oct. 20; Serial No. 314,779; published Aug. 4, 1931. Class 46.

United Drug Co., assignor, by mesne assignments, to United Drug Company, Boston, Mass. Candy. 84,880; renewed Jan. 9, 1932.

United Drug Company, assignor, by mesne assignments, to United Drug Company, Boston, Mass. Writing paper, envelopes, and writing tablets. 85,696; renewed Mar. 5, 1932.

U. S. Bottlers Machinery Co., Chicago, Ill. Magazine. 287,957; Oct. 20; Serial No. 314,190; published July 21, 1931. Class 38.

United States Envelope Company, Springfield, Mass. Correspondence paper and envelopes. 288,170; Oct. 20; Serial No. 303,136; published Feb. 17, 1931. Class 37.

United States Rubber Company, New York, N. Y. Belting, hose, and packing. 288,179; Oct. 20; Serial No. 314,630; published Aug. 4, 1931. Class 35.

United Steel Company, The, Canton, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Steel bars, slabs, and billets. 84,298; renewed Nov. 21, 1931.

Universal Gear Corporation, Chicago, Ill. Clutches, speed-reducers, etc. 288,227; Oct. 20; Serial No. 315,575; published Aug. 4, 1931. Class 23.

Universal Pipe and Radiator Company, The, New York, N. Y. Heating and cooling radiators. 288,056; Oct. 20; Serial No. 313,721; published Aug. 11, 1931. Class 34.

Upjohn Company, The, Kalamazoo, Mich. Laxative preparations. 85,625; renewed Feb. 27, 1932.

Van Camp Packing Co., Incorporated, The, Indianapolis, Ind. Cotton-seed oil. 288,297; Oct. 20; Serial No. 301,533; published July 21, 1931. Class 46.

Veldown Company, Inc., New York, N. Y. Cleansing tissues. 288,145; Oct. 20; Serial No. 309,999; published June 23, 1931. Class 37.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Wire cables, cord, and rope, etc. 288,001; Oct. 20; Serial No. 315,218; published Aug. 11, 1931. Class 7.

Vernon, S. E. & M., Inc., New York, N. Y. Loose leaf binders and blank books. 288,078; Oct. 20; Serial No. 315,948; published July 28, 1931. Class 37.

Viviny Perfumers, Inc., West Haven, Conn. Shaving cream. 288,105; Oct. 20; Serial No. 315,662; published July 28, 1931. Class 4.

Vulcan Match Co., Inc., New York, N. Y. Matches. 288,010; Oct. 20; Serial No. 316,514; published Aug. 11, 1931. Class 9.

Waddell, John L., doing business as Sunnymede Farms, Highland Park, Ill., and Bismarck, Mo., assignor to Sunnymede Farms, Inc., Bismarck, Mo. Eggs, dressed poultry, butter, etc. 288,200; Oct. 20; Serial No. 282,075; published Apr. 8, 1930. Class 46.

Wallerstein Company, Inc. (See American Burtonizing Company.)

Warner Remedy Company to Warner Remedy Company, Chicago, Ill., successor. Veterinary remedy. 84,771; renewed Jan. 2, 1932.

Washington Co-Operative Egg & Poultry Association, Seattle, Wash. Cooked chicken with noodles. 288,222; Oct. 20; Serial No. 314,387; published July 28, 1931. Class 46.

Washington Planograph Company, The, Inc., Washington, D. C. Completely printed literature. 287,959; Oct. 20; Serial No. 314,523; published July 21, 1931. Class 38.

Washington Veneer Company, Olympia, Wash. Wrapped trim lumber and plywood. 288,257; Oct. 20; Serial No. 316,062; published Aug. 4, 1931. Class 12.

Waterfalls Paper Mills, New York, N. Y. Bristol paper. 288,107; Oct. 20; Serial No. 315,711; published Aug. 11, 1931. Class 37.

Watson Co., The, Attleboro, Mass. Sterling silver flatware, etc. 288,097; Oct. 20; Serial No. 315,226; published July 28, 1931. Class 28.

Waynick, Jess M., doing business as J. M. Waynick Paint Mfg. Co., Los Angeles, Calif. Paints, thinners, white lead, etc. 288,298; Oct. 20; Serial No. 301,537; published July 28, 1931. Class 16.

Weidlich Sterling Spoon Co., Bridgeport, Conn. Table silver ware. 288,104; Oct. 20; Serial No. 315,663; published July 28, 1931. Class 28.

West End Brewing Company, The, Utica, N. Y. Beer, ale, porter, half-and-half, and brown stout. 85,531; renewed Feb. 20, 1932.

West Indies Chemical Works, Limited, The, Spanish Town, Jamaica. Logwood extracts. 36,800; renewed July 23, 1931.

Whitlock Cordage Co., New York, N. Y. Rope. 288,000; Oct. 20; Serial No. 314,937; published Aug. 11, 1931. Class 7.

Wilcox-Rich Corporation, Detroit, Battle Creek, Marshall, and Saginaw, Mich. Valves. 288,286; Oct. 20, Serial No. 315,576; published Aug. 4, 1931. Class 23.

Williams, J. H., & Co., Buffalo, N. Y. Wrenches, wrench sets, wrench sockets, and tool handles. 288,281; Oct. 20; Serial No. 316,352; published Aug. 4, 1931. Class 23.

Williams, Nathan, Wilkes-Barre, Pa. Malt syrup. 288,223; Oct. 20; Serial No. 314,476; published July 14, 1931. Class 46.

Wilson, Robert A., deceased, Portland, Oreg., to Anna S. Wilson, Seattle, Wash., devisee of the Estate of Robert A. Wilson. Cure for the tobacco habit. 37,070; renewed Sept. 17, 1931.

Wolff, M., & Sons, Chicago, Ill. Food products. 288,212; Oct. 20; Serial No. 311,049; published July 14, 1931. Class 46.

Wood, J. R., & Sons, Inc., New York, N. Y. Jewelry. 288,149; Oct. 20; Serial No. 314,830; published July 28, 1931. Class 28.

Woodbury Granite Company, Hardwick, Vt., to Woodbury Granite Co., Inc., Burlington, Vt., successor. Granite. 83,622; renewed Sept. 26, 1931.

Woods Mince Meat Co. (See Shaddick, Robert C.)

Wright, J. A. & Co., Keene, N. H. Polish. 83,462; renewed Sept. 12, 1931.

Yale & Towne Manufacturing Company, The, Stamford and Branford, Conn.; New York, N. Y.; Boston, Mass.; Philadelphia, Pa.; Chicago, Ill.; and San Francisco, Calif., to The Yale & Towne Manufacturing Company, Stamford, Conn. Chain blocks. 37,699; renewed Jan. 28, 1932.

Zechnowitz, Samuel, assignor to Consolidated Tea Company, Inc., New York, N. Y. Coffee. 83,705; renewed Oct. 3, 1931.

CARNEGIE LIBRARY OF ATLANTA

LIST OF REGISTRANTS OF LABELS

American Pop Corn Company Sioux City, Iowa. Jolly Time Pop Corn is Guaranteed to Pop. For Pop Corn. 39,898; Oct. 20.

American Wire Weavers' Protective Association, Woodhaven, N. Y. American Wire Weavers' Protective Association. For Wire Cloth. 39,899; Oct. 20.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Tomato Juice. For Tomato Juice. 39,900; Oct. 20.

Boerner, Arthur, Paterson, N. J. Dr. Arthur Boerner Life Powder Herb Remedy #298. For Medicinal Preparation. 39,901; Oct. 20.

Braun Baking Co., Pittsburgh, Pa. Braun's Wheat King Bread—Jumbo. For Bread. 39,902; Oct. 20.

Bronx Coffee Company, New York, N. Y. W-O-N-D-E-R L-A-N-D Coffee. For Coffee. 39,903; Oct. 20.

Cimino, Paul, Wilkes-Barre, Pa. Veeta Nova—New Life—Magnesium Citrate Compound. For Magnesium Citrate Compound. 39,904; Oct. 20.

Columbian Art Works, Incorporated, Milwaukee, Wis. Social Success Engagement Pad. For Engagement Pads. 39,905; Oct. 20.

Comeau, F. J., Company, Seattle, Wash. Red Chief. For Canned Salmon. 39,906; Oct. 20.

Davis, Charles R., Newton Center, Mass. Chocolat Supreme. For Chocolate Preparation for Making Fudge. 39,907; Oct. 20.

Dieterich, Wm. C., doing business as Dieterich's Bakery, Cleveland, Ohio. Dieterich's Bakery. For French Pastries. 39,908; Oct. 20.

Fischer Baking Company, Newark, N. J. Fischer's Swedish Rye Bread. For Bread. 39,909; Oct. 20.

General Baking Company, New York, N. Y. Bond Bread. For Bread. 39,910; Oct. 20.

General Baking Company, New York, N. Y. Bond Bread Sliced. For Bread. 39,911; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. The Dainty Dot Shoe. For Boxes. 39,912; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. Johnny Jones. For Boxes. 39,913; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. Yap Sing y Cia. For Boxes. 39,914; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. Overglobe Shoe. For Boxes. 39,915; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. Fast Steppers. For Boxes. 39,916; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. New Era. For Boxes. 39,917; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. L. S. Co. For Boxes. 39,918; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. Hunny Girl. For Boxes. 39,919; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. Smith & Bridgman. For Boxes. 39,920; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. The Freedman Shoe Co. For Boxes. 39,921; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. The Dolly Jean Shoe. For Boxes. 39,922; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. Jungle Footwear. For Boxes. 39,923; Oct. 20.

Hoague-Sprague Corporation, Lynn, Mass. Golden and Simon, Inc. For Boxes. 39,924; Oct. 20.

Lamboy Label and Wrapper Co., Kalamazoo, Mich. CB-359. For Chocolate Layer Cakes. 39,925; Oct. 20.

Lamp Studio—Kerk Guild, The, Utica, N. Y. Alphabath Blocks. For Soap. 39,926; Oct. 20.

Manischewitz, B., Company, The, Cincinnati, Ohio. Manischewitz's Matzos. For Matzo. 39,927; Oct. 20.

Mechling Brothers Chemical Company, Camden, N. J. Mechling's Stickate the Mineralglue. For Mechanics' Water Glass. 39,928; Oct. 20.

Moore, Robert J., doing business as Moore Manufacturing Company, New Hartford, N. Y. Moore's Crow Repellent. For a Preparation for Repelling Crows. 39,929; Oct. 20.

Muller Bakeries, Inc., Grand Rapids, Mich. Butter-Nut. For Bread. 39,930; Oct. 20.

National Executive Board of the American Wire Weavers' Protective Association, Woodhaven, N. Y. American Wire Weavers' Protective Association. For Fourdrinier Wire Cloths. 39,931; Oct. 20.

Olson, Oscar M., Clifton, Tex. Dr. Olson's Magic Salve. For Salve. 39,932; Oct. 20.

Parfumerie Dollup, Inc., New York, N. Y. L'Manda. For Compacts. 39,933; Oct. 20.

Richfield Oil Company, Los Angeles, Calif. Combat. For Motor Oil. 39,934; Oct. 20.

Staley, A. E., Mfg. Co., Decatur, Ill. Staley's Corn Starch. For Corn Starch. 39,935; Oct. 20.

Staley, A. E., Mfg. Co., Decatur, Ill. Staley's Gloss Starch. For Gloss Starch. 39,936; Oct. 20.

Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Tea Town Toys. For Tea Balls. 39,937; Oct. 20.

Zimmer, Karl R., Indianapolis, Ind. Bread. For Bread. 39,938–40; Oct. 20.

LIST OF REGISTRANTS OF PRINTS

Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. The Same Woman but with Infinite Variety. For Creme de France, Lilie Lotion, Amoretta Rouge, Poudre d'Illusion, Etc. 13,448; Oct. 20.

Borden Company, The, New York, N. Y. New! Pony Malted Milk—The Double—Rich Short Drink. For Malted Milk. 13,449; Oct. 20.

Dugan Brothers, Inc., Brooklyn, N. Y. Health and Enjoyment in Dugan's 100% Whole Wheat Products. For Whole Wheat Bakery Products. 13,450; Oct. 20.

Gloeckner, William C., Albany, N. Y. Just Dial. For Flowers. 13,451; Oct. 20.

United States Watch Crystal Mfg. Co., Inc., Cincinnati, Ohio. Gem Watch Crystal Ground to fit the Bezel. For Watch Crystals. 13,452; Oct. 20.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Birds, Canary. A. Marros. 288,088; Oct. 20; Serial No. 314,624; published July 28, 1931.

Carving or sculpturing material. Milton Bradley Company. 287,988; Oct. 20; Serial No. 315,523; published July 14, 1931.

Coal. Mountain States Coal Company. 288,209; Oct. 20; Serial No. 316,538; published Aug. 11, 1931.

Coal. Henry B. Pruser, Incorporated. 287,987; Oct. 20; Serial No. 315,417; published July 14, 1931.

Coke. Koppers Company. 287,948; Oct. 20; Serial No. 316,039; published Aug. 4, 1931.

Fibers for decorating cloth, etc. Bowditch Mills, Inc. 288,264; Oct. 20; Serial No. 314,944; published July 28, 1931.

Horsehair and straw made of cellulose, Artificial. Algemeene Kunstzijde Unie N. V. 287,983; Oct. 20; Serial No. 314,889; published Aug. 4, 1931.

Household articles. Deutsche-Glühstoff-Gesellschaft mit beschrankter Haftung. 37,384; renewed Nov. 26, 1931.

Leather. Eberle Tanning Company. 287,937–8; Oct. 20; Serial No. 315,254–5; published July 28, 1931.

Leather. A. C. Lawrence Leather Co. 83,568; renewed Sept. 26, 1931.

Limestone, Indiana. Shawnee Stone Company. 287,934; Oct. 20; Serial No. 313,612; published Aug. 4, 1931.

Mineral raw products. Leichtmetallverwertungs-Gesellschaft m. b. H. 288,165; Oct. 20; Serial No. 301,661; published July 21, 1931.

Pelts, Shearlings or wool. A. C. Lawrence Leather Company. 287,952; Oct. 20; Serial No. 316,534; published Aug. 11, 1931.

Seeds. Philadelphia Seed Co. 84,407; renewed Dec. 12, 1931.

Straw and horsehair made of cellulose, Imitation. British Enka Artificial Silk Company Limited. 287,973; Oct. 20; Serial No. 316,253; published Aug. 4, 1931.

CLASS 2

Envelopes and bags, Merchandising. American Paper Goods Company. 288,053; Oct. 20; Serial No. 309,298; published Aug. 4, 1931.

CLASS 3

Bags, purses, and pocket books, Hand. Michel, Maksik & Feldman, Inc. 287,986; Oct. 20; Serial No. 315,207; published July 14, 1931.

Billfolds. Springfield Leather Products Company. 287,992; Oct. 20; Serial No. 309,827; published July 21, 1931.

Purses or bags, Hand. B. G. Robertson. 287,935; Oct. 20; Serial No. 314,300; published Aug. 4, 1931.

Saddles, bridles, sample cases, etc. De Luxe Saddlery Co. 287,936; Oct. 20; Serial No. 314,488; published July 21, 1931.

CLASS 4

Beard softening preparations. F. H. Shoemaker. 288,171; Oct. 20; Serial No. 307,431; published Aug. 4, 1931.
Buffing wheels. F. L. & J. C. Codman Company. 288,203; Oct. 20; Serial No. 284,840; published Aug. 4, 1931.
Cleaning compound for automobiles. J. A. Tumbler Laboratories. 288,303; Oct. 20; Serial No. 306,547; published July 28, 1931.
Cleansing and scouring compound. Solvay Process Company. 288 094; Oct. 20; Serial No. 314,969; published Aug. 4, 1931.
Cleansing compound. Argol Chemicals, Inc. 288,214; Oct. 20; Serial No. 311,592; published July 28, 1931.
Cleansing compound for hats. L. Angelus. 288,217; Oct. 20; Serial No. 312,253; published July 28, 1931.
Cleansing compounds. Solvay Process Company. 288,093; Oct. 20; Serial No. 314,968; published Aug. 4, 1931.
Compound, A Cleansing. Swift and Company. 85,202; renewed Jan. 30, 1932.
Compounds, Detergent cleaning. Champion & Barber, Inc. 288,110; Oct. 20; Serial No. 315,728; published Aug. 11, 1931.
Cream, Shaving. Colgate-Palmolive-Peet Company. 288,108; Oct. 20; Serial No. 315,731; published July 28, 1931.
Cream, Shaving. Colgate-Palmolive-Peet Company. 288,204; Oct. 20; Serial No. 315,730; published July 28, 1931.
Cream, Shaving. Viviny Perfumers, Inc. 288,105; Oct. 20; Serial No. 315,662; published July 28, 1931.
Polish. J. A. Wright & Co. 83,462; renewed Sept. 12, 1931.
Polish, Metal. Guerin & Lorimer. 288,098; Oct. 20; Serial No. 315,395; published July 28, 1931.
Polish, Metal. Charles Ulrich & Co. 37,449; renewed Dec. 10, 1931.
Polish, Shoe. Midway Chemical Company. 288,225; Oct. 20; Serial No. 314,572; published July 28, 1931.
Polish, Stove. R. F. Miller. 288,148; Oct. 20; Serial No. 314,652; published Aug. 4, 1931.
Powder, Felt hat cleaning. Hat-Nu Corporation. 288,112; Oct. 20; Serial No. 310,486; published Aug. 11, 1931.
Preparation, Chemical cleaning. O. A. Swanson. 288,111; Oct. 20; Serial No. 315,945; published Aug. 11, 1931.
Preparations used as cleansing agents. Solvay Process Company. 288,151–2; Oct. 20; Serial Nos. 314,965–6; published Aug. 4, 1931.
Razor sharpening device, Safety. J. Michael. 288,300; Oct. 4; Serial No. 302,128; published July 28, 1931.
Shaving cream. Colgate-Palmolive-Peet Company. 288,195; Oct. 20; Serial No. 315,989; published July 28, 1931.
Soap. Colgate-Palmolive-Peet Company. 288,189; Oct. 20; Serial No. 313,833; published July 28, 1931.
Soap. F. H. Daland. 85,086; renewed Jan. 30, 1932.
Soap. Gordon-Allen Ltd. 288,102; Oct. 20; Serial No. 315,595; published July 28, 1931.
Soap. James S. Kirk & Company. 37,037; renewed Sept. 10, 1931.
Soap. Kresge Department Store Corporation. 288,100; Oct. 20; Serial No. 315,539; published July 28, 1931.
Soap. Procter & Gamble Company. 288,302; Oct. 20; Serial No. 306,070; published July 28, 1931.
Soaps, Toilet. Parfumerie Roger et Gallet, Société Anonyme. 288,146; Oct. 20; Serial No. 314,011; published Aug. 11, 1931.

CLASS 5

Cement, Show case adhesive. Scheinert Bros., Inc. 287,954; Oct. 20; Serial No. 313,390; published July 28, 1931.
Glue. W. H. Garrett. 287,944; Oct. 20; Serial No. 315,771; published July 21, 1931.
Glues. Dooly Manufacturing Co. 287,971; Oct. 20; Serial No. 310,122; published July 28, 1931.

CLASS 6

Crackers. D. Lazzaroni & C. 288,116; Oct. 20; Serial No. 285,978; published July 21, 1931.
Cream, hair-dressing (cream), and shampoo-cream, Face. L. S. Swain. 82,653; renewed July 11, 1931.
Disinfectant. L. Richmond & Co. 83,495; renewed Feb. 20, 1932.
Flaxseed used for medicinal purposes. Kelloggs & Miller. 84,642; renewed Dec. 26, 1931.
Hair restorers. E. L. Hoffman. 36,916; renewed Aug. 20, 1931.
Inhalant. W. W. Sanford. 288,248; Oct. 20; Serial No. 310,260; published May 12, 1931.
Laxative preparations. Upjohn Company. 85,625; renewed Feb. 27, 1932.
Logwood extracts. West Indies Chemical Works, Limited. 36,800; renewed July 23, 1931.
Medicinal preparation. Bluffton Chemical Company. 85,064; renewed Jan. 30, 1932.
Medicinal preparation. H. R. Looney. 288,228; Oct. 20; Serial No. 304,620; published Aug. 11, 1931.
Medicine. R. H. N. Johnson. 36,713; renewed July 9, 1931.
Plasters and sulfur candles. Aseptic Products Company. 84,206; renewed Nov. 21, 1931.
Remedies, Stomach and blood. Chapman Manufacturing Co. 37,069; renewed Sept. 17, 1931.
Tonic. J. Triner. 37,750; renewed Feb. 4, 1932.
Veterinary remedy. Warner Remedy Company. 84,771; renewed Jan. 2, 1932.

CLASS 7

Cables, cord, and rope, etc., Wire. Vereinigte Stahlwerke Aktiengesellschaft. 288,001; Oct. 20; Serial No. 315,218; published Aug. 11, 1931.
Clothes-lines, Hemp. American Manufacturing Company. 84,402–3; renewed Feb. 20, 1932.
Rope. Whitlock Cordage Co. 288,000; Oct. 20; Serial No. 314,937; published Aug. 11, 1931.
Strands, Steel and iron. Page Steel and Wire Company. 288,003; Oct. 20; Serial No. 315,553; published Aug. 11, 1931.

CLASS 9

Dynamite and powder. Independent Powder Company of Missouri. 85,353; renewed Feb. 13, 1932.
Matches. Vulcan Match Co., Inc. 288,010; Oct. 20; Serial No. 316,514; published Aug. 11, 1931.
Pistols. I. Oppleman. 288,005–6; Oct. 20; Serial Nos. 315,920–1; published Aug. 4, 1931.

CLASS 10

Tankage. National Utilization Corporation. 84,509; renewed Dec. 19, 1931.
Tankage. National Utilization Corporation. 84,790; renewed Jan. 2, 1932.

CLASS 11

Carbon-paper and typewriter ribbons. Standard Typewriter Co. 84,195; renewed Nov. 14, 1931.

CLASS 12

Asphalt. Central Commercial Company. 85,324; renewed Feb. 13, 1932.
Asphalt and asphalt pipe coating. Standard Oil Company of New Jersey. 288,254; Oct. 20; Serial No. 315,705; published July 28, 1931.
Cement, Building. Blue Diamond Cement Co. 288,119; Oct. 20; Serial No. 289,497; published Dec. 17, 1929.
Cement, Quick hardening oil well. Oklahoma Portland Cement Company. 288,233; Oct. 20; Serial No. 308,501; published July 28, 1931.
Flooring, square-edge strips, and wood flooring-squares. Nashville Hardwood Flooring Company. 81,091; renewed Feb. 28, 1931.
Granite. Woodbury Granite Company. 83,622; renewed Sept. 26, 1931.
Lumber. Brooks-Scanlon Corporation. 288,255; Oct. 20; Serial No. 315,820; published Aug. 4, 1931.
Lumber and plywood, Wrapped trim. Washington Veneer Company. 288,257; Oct. 20; Serial No. 316,062; published Aug. 4, 1931.
Lumber, Rough. Oakland Lumber Company. 288,250; Oct. 20; Serial No. 313,751; published July 28, 1931.
Mantels. Loeb and Welch, Inc. 288,253; Oct. 20; Serial No. 315,407; published Aug. 4, 1931.
Molding, fittings, Ornamental metal. Harrington & King Perforating Company. 288,131; Oct. 20; Serial No. 311,794; published Aug. 4, 1931.
Outlets for cast metal drains. L. W. Harrington. 288,252; Oct. 20; Serial No. 315,310; published Aug. 11, 1931.
Plastic coating. C. R. Rex. 288,125; Oct. 20; Serial No. 297,821; published Aug. 4, 1931.
Weather strip. B. J. Long. 288,247; Oct. 20; Serial No. 309,824; published July 28, 1931.

CLASS 13

Brackets. A. A. Bressler. 288,059; Oct. 20; Serial No. 314,891; published Aug. 11, 1931.
Chains. Chain Belt Company. 84,211; renewed Nov. 21, 1931.
Escutcheon plates. Monocraft Products Company. 288,206; Oct. 20; Serial No. 278,053; published Aug. 11, 1931.
Floor and ceiling plates. Beaton & Corbin Manufacturing Company. 82,398; renewed June 27, 1931.
Metal bodies, Hollow cast. American Cast Iron Pipe Company. 288,068; Oct. 20; Serial No. 315,666; published Aug. 4, 1931.
Metal pipe fittings. Jefferson Union Company. 288,070; Oct. 20; Serial No. 316,092; published Aug. 11, 1931.

CLASS 14

Steel bars, slabs, and billets. United Steel Company. 84,298; renewed Nov. 21, 1931.
Tool-steel. Firth-Sterling Steel Company. 84,736; renewed Jan. 2, 1932.

CLASS 15

Lubricants. Acheson Oildag Company. 288,096; Oct. 20; Serial No. 315,174; published July 28, 1931.
Oils and greases, Lubricating. Galena Oil Corporation. 288,144; Oct. 20; Serial No. 309,268; published Mar. 17, 1931.
Oils and greases, Lubricating. W. B. McVicker Company. 83,080; renewed Aug. 15, 1931.

Oils and greases, Lubricating. Tide Water Oil Company. 288,099; Oct. 20; Serial No. 315,507; published July 28, 1931.
Oils and petroleum products, Lubricating. Texas Company. 84,438; renewed Dec. 12, 1931.
Oils for machinery, Lubricating. Bayerson Oil Works. 83,316; renewed Sept. 5, 1931.
Oils, Lubricating, Texas Company. 84,419; renewed Dec. 12, 1931.

CLASS 16

Enamels, varnishes, stains, etc. Pratt & Lambert, Inc. 85,177; renewed Jan. 30, 1932.
Iron compound, Liquid. Smooth-On Manufacturing Company. 85,191; renewed Jan. 30, 1932.
Paint colors. Fred'k. A. Stresen-Reuter Inc. 288,216; Oct. 20; Serial No. 312,207; published July 28, 1931.
Paints, paint enamels, and varnishes. Morgan Company. 288,199; Oct. 20; Serial No. 275,179; published Feb. 18, 1930.
Paints, thinners, white lead, etc. J. M. Waynick. 288,298; Oct. 20; Serial No. 301,537; published July 28, 1931.
Plastic compound. J. G. Teichman. 288,188; Oct. 20; Serial No. 314,941; published July 28, 1931.

CLASS 17

Cigars and tobacco. Leschke & Pletcher. 84,646; renewed Dec. 26, 1931.

CLASS 19

Brake shoes. American Brake Shoe and Foundry Company. 288,054; Oct. 20; Serial No. 309,794; published Aug. 4, 1931.
Devices for transmitting power for operating brakes. American Cable Company. 288,067; Oct. 20; Serial No. 315,658; published Aug. 4, 1931.
Vehicles and their structural parts, Automotive. Rockne Motors Corporation. 288,062–4; Oct. 20; Serial Nos. 315,329–31; published Aug. 4, 1931.

CLASS 21

Batteries, Storage. Atlas Supply Company. 288,232; Oct. 20; Serial No. 308,769; published Feb. 3, 1931.
Electrical appliances. Mutual Electric & Machine Company. 85,270; renewed Feb. 6, 1932.
Electron radio tubes. Hygrade Lamp Company. 288,095; Oct. 20; Serial No. 315,144; published July 28, 1931.
Radio receiving sets. Motor Melody Corporation. 288,150; Oct. 20; Serial No. 314,855; published July 28, 1931.
Radio receiving sets. United American Bosch Corporation. 288,103; Oct. 20; Serial No. 315,652; published July 28, 1931.
Wire, Steel and iron magnet core. Page Steel and Wire Company. 288,101; Oct. 20; Serial No. 315,554; published July 28, 1931.

CLASS 22

Buckets, Minnow. E. W. Tarbox. 288,007; Oct. 20; Serial No. 316,059; published Aug. 11, 1931.
Device simulating an airplane. Great Lakes Aircraft Corporation. 287,996; Oct. 20; Serial No. 311,571; published Aug. 4, 1931.
Games, Amusement. C. B. Robinette. 287,999; Oct. 20; Serial No. 312,785; published Aug. 11, 1931.
Golf balls. J. Cloyd Harlacker. 287,993; Oct. 20; Serial No. 315,140; published Aug. 11, 1931.
Golf balls. St. Mungo Manufacturing Company of America. 287,994; Oct. 20; Serial No. 310,190; published Aug. 4, 1931.
Golf balls, clubs, and bags, and tennis rackets. J. Schoenberg. 288,011; Oct. 20; Serial No. 316,664; published Aug. 11, 1931.
Golf clubs and balls. Royal Manufacturing Company. 287,998; Oct. 20; Serial No. 312,669; published Aug. 4, 1931.
Miniature theatres, figures therefor, and materials for coloring the same. Gem Clay Forming Company. 288,009; Oct. 20; Serial No. 316,154; published Aug. 11, 1931.
Snapping crackers for favors and similar uses. A. J. Caley & Son, Limited. 37,446; renewed Dec. 10, 1931.
Toy. E. W. Gilbert. 288,164; Oct. 20; Serial No. 301,757; published Aug. 4, 1931.

CLASS 23

Air bundlers, Compressed. Ucab Distributing Corporation. 288,285; Oct. 20; Serial No. 315,287; published Aug. 11, 1931.
Carving-knives, Steel. Wm. A. Rogers, Limited. 84,131; renewed Nov. 7, 1931.
Chain blocks. Yale & Towne Manufacturing Company. 37,699; renewed Jan. 28, 1932.
Churns and butter-workers, Combined. Owatonna Manufacturing Company. 83,180; renewed Aug. 22, 1931.
Clutches, speed-reducers, etc. Universal Gear Corporation. 288,227; Oct. 20; Serial No. 315,575; published Aug. 4, 1931.
Engines and parts thereof, Internal combustion. Nelson Bros. Company. 83,271; renewed Aug. 29, 1931.
Engines, Hydrocarbon. M. Rumely Company. 83,281; renewed Aug. 29, 1931.
Engines, power units, Internal combustion. Hercules Motors Corporation. 288,283; Oct. 20; Serial No. 314,694; published Aug. 4, 1931.
Graters and choppers, Vegetable. Knapp-Monarch Company. 288,256; Oct. 20; Serial No. 315,846; published Aug. 11, 1931.
Knives, Automatic. Eagle Pencil Company. 84,220; renewed Nov. 21, 1931.
Mill equipment, stone working equipment, etc., Flour and feed. W. J. Savage Company. 288,282; Oct. 20; Serial No. 314,213; published Aug. 4, 1931.
Saws and springs. J. N. Eberle & Cie. 37,833; renewed Feb. 18, 1932.
Shovels, spades, and scoops. Ames Shovel and Tool Company. 83,310–12; renewed Sept. 5, 1931.
Sowing machines, threshing machines, and mowing machines, and parts thereof, sewing machines, etc. Siemens-Schukertwerke Aktiengesellschaft. 288,205; Oct. 20; Serial No. 255,935; published Aug. 4, 1931.
Sowing, threshing, and mowing machines, and parts thereof; sewing machines, etc. Siemens-Schukertwerke Aktiengesellschaft. 288,197; Oct. 20; Serial No. 258,555; publishd Aug. 4, 1931.
Spoons, cake turners, forks, etc. A. & J. Manufacturing Co. 288,177; Oct. 20; Serial No. 314,353; published Aug. 4, 1931.
Tools, parts, replacements, and accessories. Madison-Kipp Corporation. 288,126; Oct. 20; Serial No. 298,900; publishd Aug. 4, 1931.
Vacuum cleaning apparatus. American Radiator Company. 83 205; renewed Aug. 29, 1931.
Valves. Wilcox-Rich Corporation. 288,286; Oct. 20; Serial No. 315,576; published Aug. 4, 1931.
Vaporizers, Fuel. Godward Gas Generator, Inc. 288,184; Oct. 20; Serial No. 315,660; published Aug. 4, 1931.
Vending machines. Automatic Canteen Company. 288,284; Oct. 20; Serial No. 315,081; published Aug. 11, 1931.
Wrenches, wrench sets, wrench sockets, and tool handles. J. H. Williams & Co. 288,281; Oct. 20; Serial No. 316,352; published Aug. 4, 1931.

CLASS 26

Apparatus for analyzing gaseous mixtures. Moto-Vita Corporation. 288,210; Oct. 20; Serial No. 309,917; published Aug. 4, 1931.
Brownprint papers and cloths. Keuffel and Esser Company. 288,278; Oct. 20; Serial No. 316,206; published Aug. 4, 1931.
Cameras, motion picture cameras, picture projectors, etc. Cinamette Corporation. 288,267; Oct. 20; Serial No. 315,673; published Aug. 4, 1931.
Cameras, projectors, and talking picture apparatus, etc. Cinamette Corporation. 288,185–6; Oct. 20; Serial Nos. 315,671–2; published Aug. 4, 1931.
Gauges, Oil. Pioneer Instrument Company. 288,183; Oct. 20; Serial No. 315,558; published Aug. 11, 1931.
Glasses, reading and magnifying glasses, Opera. E. B. Meyrowitz, Inc. 288,127; Oct. 20; Serial No. 299,145; published Aug. 4, 1931.
Goggles, eyeglasses, and spectacles. E. B. Meyrowitz, Inc. 288,270; Oct. 20; Serial No. 315,799; published Aug. 4, 1931.
Goggles, spectacles, and eye protectors. E. B. Meyrowitz, Inc. 288,275; Oct. 20; Serial No. 316,160; published Aug. 4, 1931.
Leveling rods, Surveyors'. Keuffel and Esser Company. 288,192; Oct. 20; Serial No. 315,149; published Aug. 4, 1931.
Measuring tapes. Lufkin Rule Co. 288,273; Oct. 20; Serial No. 316,094; published Aug. 4, 1931.
Ophthalmic mountings. Halpert & Fryxell, Inc. 288,271; Oct. 20; Serial No. 316,006; published Aug. 4, 1931.
Scientific instruments, recording instruments, etc. Johnson-Williams, Ltd. 288,280; Oct. 20; Serial No. 315,770; published Aug. 11, 1931.
Sensitized printing paper. B. K. Elliott Company. 288,193; Oct. 20; Serial No. 315,256; published Aug. 4, 1931.

CLASS 27

Watches, clocks, watch-movements, etc. Eisenstadt Manufacturing Company. 84,733; renewed Jan. 2, 1932.

CLASS 28

Flatware, etc., Sterling silver. Watson Co. 288,097; Oct. 20; Serial No. 315,226; published July 28, 1931.
Hair clasps, lingerie clasps, etc. J. H. Lancor. 288,147; Oct. 20; Serial No. 314,059; published July 28, 1931.
Jewelry and costume jewelry. Ben Felsenthal & Co. 288,106; Oct. 20; Serial No. 315,679; published July 28, 1931.
Jewelry for personal wear. J. R. Wood & Sons, Inc. 288,149; Oct. 20; Serial No. 314,830; published July 28, 1931.
Silver ware, Table. Weidlich Sterling Spoon Co. 288,104; Oct. 20; Serial No. 315,663; published July 28, 1931.

CLASS 31

Filters and refrigerator cabinets, Syrup. Crystal Refrigerator Co. 288,004; Oct. 20; Serial No. 315,783; published Aug. 4, 1931.

Filters, Water. Revelation Water Purifier Company, Ltd. 288,002; Oct. 20; Serial No. 315,327; published Aug. 4, 1931.
Metallic substance. Oligodyn A.-G. 288,114; Oct. 20; Serial No. 285,371; published Aug. 4, 1931.
Metallic substance. Oligodyn A.-G. 288,115; Oct. 20; Serial No. 285,374; published Aug. 4, 1931.

CLASS 32

Cabinet, Fireplace. Nightingale Fireplace Cabinet Manufacturing Company. 288,272; Oct. 20; Serial No. 316,048; published Aug. 4, 1931.
Cabinets, lockers, cupboards, etc. Remington Rand Inc. 288,168; Oct. 20; Serial No. 308,037; published Aug. 4, 1931.
Chairs. Briggs Manufacturing Company. 288,174; Oct. 20; Serial No. 315,242; published Aug. 11, 1931.
Chairs, Household. Adjusto Chair Corporation. 288,166; Oct. 20; Serial No. 303,758; published Aug. 4, 1931.
Furniture. Kindel Furniture Company. 288,176; Oct. 20; Serial No. 315,268; published Aug. 4, 1931.
Mattresses, bed springs, and pillows. Burton-Dixie Corporation. 288,173; Oct. 20; Serial No. 314,229; published Aug. 4, 1931.
Pillows, cushions, and mattresses. Northern Feather Works. 288,180; Oct. 20; Serial No. 315,696; published Aug. 4, 1931.

CLASS 34

Furnaces. Lennox Furnace Company. 288,058; Oct. 20; Serial No. 314,700; published Aug. 11, 1931.
Heaters, Gas water. Bastian-Morley Co. 288,071; Oct. 20; Serial No. 316,312; published Aug. 11, 1931.
Incinerator, Rubbish. Malleable Steel Range Mfg. Co. 288,055; Oct. 20; Serial No. 310,708; published Aug. 11, 1931.
Radiators. Universal Pipe and Radiator Company. 288,056; Oct. 20; Serial No. 313,721; published Aug. 11, 1931.

CLASS 35

Belting, hose, and packing. United States Rubber Company. 288,179; Oct. 20; Serial No. 314,630; published Aug. 4, 1931.
Belts and belting. Boston Woven Hose & Rubber Company. 288,258; Oct. 20; Serial No. 316,315; published Aug. 4, 1931.
Faucet seats, fuller balls, piston packing, etc. J. A. Sexauer Mfg. Co. 288,175; Oct. 20; Serial No. 314,254; published Aug. 4, 1931.
Linings, Brake. W. A. Harding. 288,277; Oct. 20; Serial No. 316,203; published Aug. 4, 1931.
Tire and tube patching materials. Shaler Company. 288,169; Oct. 20; Serial No. 307,742; published Aug. 4, 1931.
Tires, treads, tire tubes, etc. Goodyear Tire & Rubber Company. 288,121; Oct. 20; Serial No. 293,320; published Aug. 11, 1931.

CLASS 36

Violins, violas, cellos, etc. Czechoslovak Musical Instruments Company. 288,167; Oct. 20; Serial No. 308,532; published July 28, 1931.

CLASS 37

Binders and blank books, Loose leaf. S. E. & M. Vernon, Inc. 288,078; Oct. 20; Serial No. 315,948; published July 28, 1931.
Book covers, Airbrush finished. Kingsport Press, Inc. 288,083; Oct. 20; Serial No. 315,599; published July 28, 1931.
Booklets for salesmen, Memorandum. H. L. Carscadin. 288,074; Oct. 20; Serial No. 316,318; published Aug. 11, 1931.
Books for accounts and records, etc., Bound. Remington Rand Inc. 288,154; Oct. 20; Serial No. 308,036; published July 28, 1931.
Books, Scrap. C. Campbell. 288,014; Oct. 20; Serial No. 316,317; published Aug. 11, 1931.
Crayons, Sets of. Ullman Manufacturing Company. 288,085; Oct. 20; Serial No. 314,971; published July 28, 1931.
Easels, Cardboard. Rogers Printing Company. 288,089; Oct. 20; Serial No. 314,210; published Aug. 4, 1931.
Forms, Accounting. R. D. Porter. 288,084; Oct. 20; Serial No. 315,110; published Aug. 4, 1931.
Forms, typewriter paper, and stenographers' note books. Associated Stationers Supply Company. 288,092; Oct. 20; Serial No. 312,037; published July 21, 1931.
Letter heads, blank forms, and envelopes. J. Bagnole. 288,162; Oct. 20; Serial No. 302,568; published July 21, 1931.
Manifolding assemblies. Standard Register Company. 288,024; Oct. 20; Serial No. 315,581; published Aug. 11, 1931.
Paper. Butler Paper Corporations. 288,075; Oct. 20; Serial No. 316,256; published Aug. 11, 1931.
Paper and Bristol board, Tympan. Riegel Paper Corporation. 288,073; Oct. 20; Serial No. 316,507; published Aug. 11, 1931.
Paper and envelopes. Springfield Photo Mount Company. 288,076; Oct. 20; Serial No. 316,071; published Aug. 11, 1931.
Paper and envelopes, Correspondence. United States Envelope Company. 288,170; Oct. 20; Serial No. 303,136; published Feb. 17, 1931.
Paper, Bond. Crown Card and Paper Company. 288,091; Oct. 20; Serial No. 313,535; published Aug. 4, 1931.
Paper bread wrappers. Central Waxed Paper Company. 288,087; Oct. 20; Serial No. 314,683; published July 21, 1931.
Paper, Bristol. Waterfalls Paper Mills. 288,107; Oct. 20; Serial No. 315,711; published Aug. 11, 1931.
Paper Decalcomania. McLaurin-Jones Co. 288,077; Oct. 20; Serial No. 316,045; published July 28, 1931.
Paper, envelopes, and writing tablets, Writing. United Drug Company. 85,696; renewed Mar. 5 1932.
Paper, Lining. Paper Specialty Company. 288,128; Oct. 20; Serial No. 299,591; published Aug. 4. 1931.
Paper, paper napkins, and wrapping and wax paper, Toilet. Grocers & Producers Co. 288,117; Oct. 20; Serial No. 286,762; published Mar. 10, 1931.
Paper, Toilet. John Hoberg Co. 82,887; renewed Aug. 1, 1931.
Paper towels and napkins. Japanese Tissue Mills. 85,354; renewed Feb. 13, 1932.
Paper, Wall. P. Fulton. 288,018; Oct. 20; Serial No. 316,090; published Aug. 11, 1931.
Paper, Wrapping. Mosinee Paper Mills Company. 288,120; Oct. 20; Serial No. 290,269; published Nov. 4, 1930.
Paper, Wrapping, toilet, etc. Ohio and Michigan Paper Company. 288,157; Oct. 20; Serial No. 303,778; published July 28, 1931.
Paper, Writing. Mead Corporation. 288,015; Oct. 20; Serial No. 316,277; published Aug. 11, 1931.
Penholders. A. N. Palmer Company. 288,086; Oct. 20; Serial No. 314,713; published July 28, 1931.
Pens, Metallic. Eagle Pencil Company. 84,365; renewed Dec. 5, 1931.
Pencils. Richard Best Pencil Company. 288,090; Oct. 20; Serial No. 313,626; published July 21, 1931.
Pencils and fountain pens. Sears, Roebuck and Co. 288,079; Oct. 20; Serial No. 315,875; published July 28, 1931.
Pencils and pen holders, Lead. American Lead Pencil Company. 288,013; Oct. 20; Serial No. 316,399; published Aug. 11, 1931.
Pencils, Lead, ink, and colored. A. W. Faber. 83,824; renewed Oct. 17, 1931.
Stencil duplicating apparatus, stencils, etc. D. Gestetner, Limited. 288,156; Oct. 20; Serial No. 303,962; published Aug. 4, 1931.
Tablets, Writing. Empire Lithographing Co. Inc. 288,021; Oct. 20; Serial No. 315,834; published Aug. 11, 1931.
Tissues, Cleansing. Veldown Company. 288,145; Oct. 20; Serial No. 309,999; published June 23, 1931.

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Advertising devices. Harry Latz Service, Inc. 288,159–60; Oct. 20; Serial Nos. 302,781–2; published Aug. 4, 1931.
Booklets, folders, and prints. Rogers-Kellogg-Stillson Company. 288,028; Oct. 20; Serial No. 315,332; published Aug. 11, 1931.
Books, pamphlets, bulletins, etc. Sigma Alpha Phi Sorority. 287,955; Oct. 20; Serial No. 314,021; published July 21, 1931.
Cards and announcements, Greeting. Keller-Dorian Paper Co., Inc. 288,022; Oct. 20; Serial No. 315,640; published July 21, 1931.
Cartoon strips. Harold Halsell Company. 288,029; Oct. 20; Serial No. 314,501; published July 28, 1931.
Circular or pamphlet. Daily Credit Broadcast. 287,960; Oct. 20; Serial No. 314,555; published July 21, 1931.
Columns or sections of daily newspapers. C. J. Kames. 287,966; Oct. 20; Serial No. 315,459; published July 21, 1931.
Magazine. J. McK. Cattell. 287,958; Oct. 20; Serial No. 314,445; published July 21, 1931.
Magazine. Macfadden Publications, Inc. 287,969; Oct. 20; Serial No. 315,753; published July 21, 1931.
Magazine. C. H. Matson. 288,027; Oct. 20; Serial No. 315,336; published Aug. 11, 1931.
Magazine. Physical Culture Publishing Corporation. 287,968; Oct. 20; Serial No. 315,645; published July 21, 1931.
Magazine. U. S. Bottlers Machinery Co. 287,957; Oct. 20; Serial No. 314,190; published July 21, 1931.
Magazine, Bi-monthly. Advertising and Selling Publishing Company. 288,032; Oct. 20; Serial No. 310,034; published Aug. 4, 1931.
Magazines. Church of the Heavenly Rest. 288,129; Oct. 20; Serial No. 299,682; published Aug. 4, 1931.
Newspaper. Signal Publishing Corporation. 288,025; Oct. 20; Serial No. 315,571; published Aug. 4, 1931.
Newspaper cartoons. Hutter & Maxwell. 288,019; Oct. 20; Serial No. 315,911; published Aug. 4, 1931.
Newspaper feature articles. Brooklyn Daily Times. 288,109; Oct. 20; Serial No. 315,107; published Aug. 4, 1931.
Periodical. Chef and Steward Co. 287,962; Oct. 20; Serial No. 315,192; published July 21, 1931.
Periodical. Cleveland Tractor Company. 287,972; Oct. 20; Serial No. 316,141; published Aug. 4, 1931.
Periodical. Edward Valve and Manufacturing Co., The. 288,030; Oct. 20; Serial No. 314,027; published July 28, 1931.

Periodical. Social Science Publishing Company. 287,963; Oct. 20; Serial No. 315,213; published July 21, 1931.
Periodicals, menus, food charts, etc. Sun-Diet Health Service, Inc. 288,031; Oct. 20; Serial No. 312,538; published Aug. 11, 1931.
Printed literature. Washington Planograph Company. 287,959; Oct. 20; Serial No. 314,523; published July 21, 1931.
Prints, Photographic. M. S. M. Developing and Printing Co. 288,080–1; Oct. 20; Serial Nos. 315,852–3; published July 21, 1931.
Publication. Conde Nast Publications, Inc. 288,023; Oct. 20; Serial No. 315,592; published Aug. 4, 1931.
Publication. Grigsby-Grunow Company. 288,017; Oct. 20; Serial No. 316,202; published Aug. 4, 1931.
Publication. Grigsby-Grunow Company. 288,082; Oct. 20; Serial No. 315,836; published July 21, 1931.
Publication. J. M. Smith. 288,163; Oct. 20; Serial No. 302,056; published July 21, 1931.
Publications. The Travel Guide, Inc. 288,016; Oct. 20; Serial No. 316,227; published Aug. 11, 1931.
Publications. The Travel Guild, Inc. 288,020; Oct. 20; Serial No. 315,882; published Aug. 4, 1931.
Signs and posters, display signs, posters in general, etc. Syndicate Poster & Equipment Co. 288,161; Oct. 20; Serial No. 302,651; published July 21, 1931.
Tickets, Scale. Consolidated Automatic Merchandising Corporation. 288,026; Oct. 20; Serial No. 315,344; published Aug. 4, 1931.

CLASS 39

Boots and shoes. Wm. Henne & Co. 83,155; renewed Aug. 22, 1931.
Boots and shoes. C. W. Strohbeck. 84,884; renewed Jan. 9, 1932.
Clothes, Work. Double Eagle Garment Co. 288,113; Oct. 20; Serial No. 285,020; published Aug. 11, 1931.
Clothing, Men's. Eagle Clothes. 288,118; Oct. 20; Serial No. 287,287; published Jan. 13, 1931.
Hats. A. I. Namm & Son. 288,246; Oct. 20; Serial No. 313,255; published July 14, 1931.
Hosiery. Chas. Chipman's Sons. 83,393; renewed Sept. 12, 1931.
Shirts. J. Danerhirsch. 288,229; Oct. 20; Serial No. 304,489; published Nov. 4. 1930.
Shirts. J. Danerhirsch. 289,230; Oct. 20; Serial No. 304,495; published Nov. 4. 1930.
Suspenders and garters. C. A. Edgarton Mfg. Co. 85,334; renewed Feb. 13, 1932.
Trousers. H. Flaster & Son. 288,231; Oct. 20; Serial No. 306,675; published Jan. 13, 1931.

CLASS 40

Goods and furnishings therefor, Fancy. Campbell, Metzger & Jacobson. 83,389; renewed Sept. 12, 1931.

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Blankets, Textile. Carson Pirie Scott & Co. 288,035; Oct. 20; Serial No. 315,441; published Aug. 11, 1931.
Cambrics, sheeting, shirting, etc. Garner Print Works & Bleachery. 84,903; renewed Jan. 9, 1932.
Cotton sheets, sheeting, pillow-cases, and quilt covers. F. Sherman. 288,153; Oct. 20; Serial No. 306,668; published Aug. 11, 1931.
Fabrics. Atlanta Knitting Mills. 288,158; Oct. 20; Serial No. 303,043; published Aug. 4, 1931.
Fabrics. Celanese Corporation of America. 288,043; Oct. 20; Serial No. 316,281; published Aug. 4, 1931.
Fabrics. Celanese Corporation of America. 288,044–5; Oct. 20; Serial Nos. 316,283–4; published Aug. 4, 1931.
Fabrics. Celanese Corporation of America. 288,046; Oct. 20; Serial No. 316,286; published Aug. 4, 1931.
Fabrics. Celanese Corporation of America. 288,249; Oct. 20; Serial No. 312,093; published Apr. 28, 1931.
Fabrics made of cellulose derivatives. Celanese Corporation of America. 288,047–8; Oct. 20; Serial Nos. 316,409–10; published Aug. 11, 1931.
Fabrics made of cellulose derivatives. Celanese Corporation of America. 288,049–52; Oct. 20; Serial Nos. 316,412–15; published Aug. 11, 1931.
Fabrics of cellulose derivatives. Celanese Corporation of America. 288,276; Oct. 20; Serial No. 316,187; published Aug. 4, 1931.
Fabrics of cellulose derivatives. Celanese Corporation of America. 288,279; Oct. 20; Serial No. 316,280; published Aug. 4, 1931.
Fabrics, Textile. Howlett & Hockmeyer Co. 288,037; Oct. 20; Serial No. 315,537; published Aug. 11, 1931.
Handkerchiefs. Carson Pirie Scott & Co. 288,036; Oct. 20; Serial No. 315,442; published Aug. 11, 1931.
Piece goods. British Enka Artificial Silk Company Limited. 288,042; Oct. 20; Serial No. 316,251; published Aug. 4, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 288,033–4; Oct. 20; Serial Nos. 315,183–4; published Aug. 4, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 288,060–1; Oct. 20; Serial Nos. 315,186–7; published Aug. 4, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 288,178; Oct. 20; Serial No. 315,189; published Aug. 4, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 288,181; Oct. 20; Serial No. 315,191; published Aug. 4, 1931.
Silk. General Silk Corporation. 288,038; Oct. 20; Serial No. 315,682; published Aug. 11, 1931.
Silk piece goods, Woven broad. M. C. Migel & Co. 84,656; renewed Dec. 26, 1931.
Textile diapers. Amoskeag Manufacturing Company. 288,041; Oct. 20; Serial No. 316,027; published Aug. 11, 1931.
Textile diapers. Amoskeag Manufacturing Company. 288,274; Oct. 20; Serial No. 316,026; published Aug. 4, 1931.
Textile fabrics. Old Bleach Linen Company. 82,714; renewed July 18, 1931.
Wall coverings, Textile. Salubra S. A. 288,039; Oct. 20; Serial No. 315,762; published Aug. 4, 1931
Wall coverings, Textile. Salubra S. A. 288,040; Oct. 20; Serial No. 315,760; published Aug. 4, 1931.
Woolen cloth. A. G. Dewey Company. 288,182; Oct. 20; Serial No. 315,397; published Aug. 4, 1931.
Woolen piece goods Forstmann & Huffmann Company. 288,268; Oct. 20; Serial No. 315,739; published Aug. 4, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 288,269; Oct. 20; Serial No. 315,741; published Aug. 4, 1931.
Worsted cloths. Perseverance Worsted Company. 85,484; renewed Feb. 20, 1932.

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Yarns. Fleisher Yarns, Inc. 288,251; Oct. 20; Serial No. 315,308; published July 28 1931.

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Absorbent cotton and dental floss. Aseptic Products Company. 84,303; renewed Nov. 28, 1931.
Rubber articles, Prophylactic. Regelson and Rostow. 288,194; Oct. 20; Serial No. 315,648; published July 28, 1931.

CLASS 45

Beverage, sirup, and extract, Maltless. R. A. Reid. 288,012; Oct. 20; Serial No. 316,663; published Aug. 11, 1931.
Beverages, Nonalcoholic maltless. California Crushed Fruit Corporation. 288,155; Oct. 20; Serial No. 309,723; published Aug. 4, 1931.
Beverages, sirups, and extracts, Maltless. S. H. McNutt, jr. 288,072; Oct. 20; Serial No. 316,655; published Aug. 11, 1931.
Beverages, sirups, and extracts, Maltless. A. B. Spencer & F. J. Spernak, 288,069; Oct. 20; Serial No. 315,726; published Aug. 4, 1931.
Beverages, Tonic. A. W. Green. 82,598; renewed July 11, 1931.
Flavoring preparation, Dry herb. P. G. Ruehlman. 288,057; Oct. 20; Serial No. 314,129; published Aug. 11,1931.
Soda, Club. Cantrell & Cochrane, Limited. 37,352; renewed Nov. 26, 1931.
Water, Bottled mineral. Distillata Company. 288,065; Oct. 20; Serial No. 315,489; published Aug. 4, 1931.
Waters, Bottled mineral. L. Richardson. 288,066; Oct. 20; Serial No. 315,585; published Aug. 4, 1931.

CLASS 46

Alfalfa leaf meal, etc. W. Mooring. 287,970; Oct. 20; Serial No. 315,864; published July 28, 1931.
Alfalfa meal. California-Hawaiian Milling Company. 287,949; Oct. 20; Serial No. 316,120; published Aug. 11, 1931.
Alimentary pastes. Eagle Macaroni Company. 288,289; Oct. 20; Serial No. 315,391; published July 21, 1931.
Artichokes, bread, cakes, etc., Fresh. J. Di Santo. 288,187; Oct. 20; Serial No. 314,985; published July 21, 1931.
Bakery products. Chicago Cream Fried Cake Company. 288,132; Oct. 20; Serial No. 300,334; published Aug. 4, 1931.
Biscuit. National Biscuit Company. 84,849; renewed Jan. 9, 1932.
Biscuit, Cereal. Shredded Wheat Company. 85,186; renewed Jan. 30, 1932.
Bread. Capital City Baking Co. 287,990; Oct. 20; Serial No. 315,988; published July 28, 1931.
Bread, cookies, crackers, etc. Davidson Biscuit Company. 287,985; Oct. 20; Serial No. 315,089; published July 21, 1931.
Bread, doughnuts, and crullers. Teitelbaum Baking Co., Inc. 288,201; Oct. 20; Serial No. 282,685; published July 21, 1931.
Butter, Creamery. Land O'Lakes Creameries, Inc. 287,975; Oct. 20; Serial No. 313,579; published July 14, 1931.
Cake. H. C. Brill Company, Inc. 287,964; Oct. 20; Serial No. 315,243; published July 28, 1931.
Cakes. New Standard Baking Company. 288,263; Oct. 20; Serial No. 314,858; published Aug. 4, 1931.
Cakes. C. M. Pitt Sons Co. 287,950; Oct. 20; Serial No. 316,167; published Aug. 11, 1931.
Candy. Chandler & Rudd Company. 83,047; renewed Aug. 15, 1931.
Candy. R. Knight. 288,295; Oct. 20; Serial No. 315,721; published Aug. 4, 1931.
Candy. R. Knight. 288,296; Oct. 20; Serial No. 315,842; published Aug. 4, 1931.
Candy. New England Confectionery Company. 288,138; Oct. 20; Serial No. 315,868; published Aug. 4, 1931.

Candy. United Drug Co. 84,889; renewed Jan. 9, 1932.
Canned fish, canned pimientos. Rialto Corporation. 288,202; Oct. 20; Serial No. 282,747; published July 28, 1931.
Canned fruit. R. B. Clark. 288,142; Oct. 20; Serial No. 316,529; published Aug. 11, 1931.
Canned fruits and vegetables. Burt Olney Canning Co. 65,799; renewed Oct. 22, 1927.
Canned fruits and vegetables, and sauerkraut. S. E. Comstock & Co. 85,416; renewed Feb. 20, 1932.
Canned fruits, vegetables, coffee, etc. A. H. Perfect & Co. 288,235; Oct. 20; Serial No. 301,291; published July 21, 1931.
Canned oysters, fruits, and vegetables. Torsch Packing Company. 84,553; renewed Dec. 19, 1931.
Canned vegetables and catsup. Phillips Sales Company, Inc. 288,130; Oct. 20; Serial No. 299,795; published July 21, 1931.
Canned vegetables and fish. Sclafani Brothers. 288,218; Oct. 20; Serial No. 312,315; published July 28, 1931.
Carcasses and cuts of fresh beef, pork, mutton, and veal. Jacob Dold Packing Co. 288,244; Oct. 20; Serial No. 315,138; published Aug. 4, 1931.
Cheese. N. Musco. 288,260; Oct. 20; Serial No. 314,122; published Aug. 4, 1931.
Cheese. Reynolds & Co. 287,991; Oct. 20; Serial No. 316,506; published Aug. 11, 1931.
Cheese. H. Rudolff. 84,531; renewed Dec. 19, 1931.
Cheese. Societe Anonyme des Caves & des Producteurs Reunis de Roquefort. 287,989; Oct. 20; Serial No. 315,936; published July 28, 1931.
Chicken with noodles, Cooked. Washington-Co-Operative Egg & Poultry Association. 288,222; Oct. 20; Serial No. 314,387; published July 28, 1931.
Chocolate bars. Siren Mills Corporation. 288,133; Oct. 20; Serial No. 315,862; published Aug. 4, 1931.
Chocolate candy. M. H. Abelson. 288,245; Oct. 20; Serial No. 315,296; published Aug. 4, 1931.
Clams and clam nectar, Canned. F. A. Bugge. 288,135; Oct. 20; Serial No. 315,894; published Aug. 4, 1931.
Coffee. S. Zechnowitz. 83,705; renewed Oct. 3, 1931.
Coffee and tea. Standard Brands Incorporated. 288,243; Oct. 20; Serial No. 315,117; published Aug. 4, 1931.
Confections, Mint. Francis H. Leggett & Company. 288,292; Oct. 20; Serial No. 315,600; published Aug. 4, 1931.
Cookies. A. M. Dortch. 287,961; Oct. 20; Serial No. 314,687; published July 28, 1931.
Cookies. United Biscuit Company of America. 288,261; Oct. 20; Serial No. 314,779; published Aug. 4, 1931.
Cotton-seed oil. Van Camp Packing Co. 288,297; Oct. 20; Serial No. 301,533; published July 21, 1931.
Cream, Heavy. H. Becker & Son. 288,207; Oct. 20; Serial No. 315,889; published Aug. 4, 1931.
Cream, Light. H. Becker & Son. 287,947; Oct. 20; Serial No. 315,890; published Aug. 4, 1931.
Cup cakes, cookies, and pastries. S. Gumpert Co., Inc. 287,967; Oct. 20; Serial No. 315,615; published July 28, 1931.
Cure for the tobacco habit. R. A. Wilson. 37,070; renewed Sept. 17, 1931.
Eggs. Pacific Egg Producers Cooperative, Inc. 287,974; Oct. 20; Serial No. 312,247; published July 28, 1931.
Eggs, dressed poultry, butter, etc. J. L. Waddell. 288,200; Oct. 20; Serial No. 282,075; published Apr. 8, 1930.
Eggs, egg yolk, and egg albumen, Dehydrated. Joe Lowe Co. Inc. 288,196; Oct. 20; Serial No. 249,011; published July 21, 1931.
Extracts for food purposes, Flavoring. C. I. Togstad. 288,220; Oct. 20; Serial No. 314,134; published July 14, 1931.
Feed, Stock. R. L. Heflin, Inc. 287,941–2; Oct. 20; Serial Nos. 315,452–3; published July 14, 1931.
Feeds, Dairy. Ohio Farm Bureau Service Company, The. 287,933; Oct. 20; Serial No. 312,196; published July 21, 1931.
Feeds, Prepared poultry. Golden Eagle Milling Co. 288,124; Oct. 20; Serial No. 297,188; published July 21, 1931.
Fish and fish meats. Indian River Fisheries. 288,236; Oct. 20; Serial No. 310,829; published Aug. 11, 1931.
Flour and wheat stock feed, Wheat. Cowgill Flour Mills, Inc. 287,953; Oct. 20; Serial No. 312,878; published July 14, 1931.
Flour compound. J. A. Johnson. 288,238; Oct. 20; Serial No. 312,345; published Aug. 11, 1931.
Flour, Wheat. Fisher Flouring Mills Company. 287,945; Oct. 20; Serial No. 315,795; published Aug. 11, 1931.
Flour, Wheat. Hubbard Milling Company. 287,951; Oct. 20; Serial No. 316,489; published Aug. 11, 1931.
Flour, Wheat. Robinson Milling Company. 287,939; Oct. 20; Serial No. 315,279; published July 14, 1931.
Flour, Wheat. Robinson Milling Company. 287,965; Oct. 20; Serial No. 315,278; published July 28, 1931.
Flour, Wheat. Robinson Milling Company. 288,265; Oct. 20; Serial No. 315,561; published Aug. 11, 1931.
Flours, Wheat. H. O. Phillips. 37,278; renewed Nov. 5, 1931.
Food, Dog. R. E. Cotter Company. 287,943; Oct. 20; Serial No. 315,732; published July 21, 1931.
Food, Dog and cat. Coast Fishing Co. 288,208; Oct. 20; Serial No. 315,900; published Aug. 4, 1931.
Food flavoring extracts. A. Schilling & Co. 288,287; Oct. 20; Serial No. 315,567; published July 21, 1931.
Food products. M. Wolff & Sons. 288,212; Oct. 20; Serial No. 311,049; published July 14, 1931.
Food, Stock. International Sugar Feed No. Two Company. 287,956; Oct. 20; Serial No. 314,114; published July 28, 1931.
Food, Stock. International Sugar Feed No. Two Company. 287,980; Oct. 20; Serial No. 314,113; published July 28, 1931.
Foods. F. B. Chamberlain Company. 84,081; renewed Nov. 7, 1931.
Foods, Certain. T. M. Sinclair & Co. 84,881; renewed Jan. 9, 1932.
Fruits, Canned. Sussman, Wormser & Company. 288,139; Oct. 20; Serial No. 315,943; published Aug. 4, 1931.
Fruits, Fresh citrus. C. Bessing. 288,134; Oct. 20; Serial No. 315,893; published Aug. 4, 1931.
Fruits, Fresh citrus. Exeter Citrus Association. 288,136; Oct. 20; Serial No. 315,905; published Aug. 11, 1931.
Fruits, Fresh citrus. International Fruit Corporation. 288,239; Oct. 20; Serial No. 313,240; published Aug. 11, 1931.
Gelatine desserts. Royal Baking Powder Company. 288,190; Oct. 20; Serial No. 315,013; published July 28, 1931.
Gelatine desserts. Royal Baking Powder Company. 288,241; Oct. 20; Serial No. 315,014; published July 28, 1931.
Gelatine desserts. Royal Baking Powder Company. 228,242; Oct. 20; Serial No. 315,016; published July 14, 1931.
Grapes, Fresh. Dougherty Grape Growers Association. 288,141; Oct. 20; Serial No. 316,424; published Aug. 11, 1931.
Gum and cachous, Chewing. Sen-Sen Chiclet Company. 84,536; renewed Dec. 19, 1931.
Gum, Chewing. American Chicle Company. 288,137; Oct. 20; Serial No. 316,181; published Aug. 11, 1931.
Ice cream. California Tropical Foods, Ltd. 288,191; Oct. 20; Serial No. 315,032; published July 21, 1931.
Ice cream cones. Maryland Baking Company. 288,299; Oct. 20; Serial No. 301,670; published July 14, 1931.
Lard (Manteca Pura De Cerdo). John Morrell & Company. 288,293; Oct. 20; Serial No. 315,602; published Aug. 4, 1931.
Lemons. California Fruit Growers Exchange. 85,069; renewed Jan. 30, 1932.
Mash, baby chick grains, etc., Laying. Mountain States Mixed Feed Company. 288,259; Oct. 20; Serial No. 313,930; published Aug. 4, 1931.
Mash, Baby chick starter, etc. Mountain States Mixed Feed Company. 287,976; Oct. 20; Serial No. 313,926; published July 28, 1931.
Mash, Baby chick starter, etc. Mountain States Mixed Feed Company. 287,977–8; Oct. 20; Serial Nos. 313,928–9; published July 28, 1931.
Mash, Baby chick starter, etc. Mountain States Mixed Feed Company. 287,979; Oct. 20; Serial No. 313,931; published July 28, 1931.
Mayonnaise. Bright Star Products Co. 288,301; Oct. 20; Serial No. 303,945; published July 14, 1931.
Meat, Mince. R. C. Shaddick. 288,215; Oct. 20; Serial No. 311,889; published July 14, 1931.
Milk. Henry Becker & Son. 288,266; Oct. 20; Serial No. 315,888; published Aug. 4, 1931.
Milk and cream. Henry Becker & Son, Inc. 287,982; Oct. 20; Serial No. 314,745; published July 14, 1931.
Milk and cream. Henry Becker & Son, Inc. 287,984; Oct. 20; Serial No. 314,747; published July 14, 1931.
Milk, Evaporated. John F. Jelke Company. 288,122; Oct. 20; Serial No. 295,269; published Apr. 15, 1930.
Milk, Raw. New Jersey Dairymen. 288,306; Oct. 20; Serial No. 308,846; published Aug. 4, 1931.
Noodles, spaghetti dinner with chicken croquettes, etc., Chicken and egg. Gelfand Manufacturing Co. of California. 288,221; Oct. 20; Serial No. 314,364; published July 14, 1931.
Oil and lard, Cotton seed. Aspegren & Co. 37,092; renewed Sept. 17, 1931.
Oil-cake and oil-meal. Kelloggs & Miller. 84,834; renewed Jan. 9, 1932.
Oil, Olive. Thomas Hedley & Company, Limited. 288,219; Oct. 20; Serial No. 313,544; published July 21, 1931.
Oils, lard, syrup, etc. Aspegren & Co. 36,938; renewed Aug. 20, 1931.
Oils, lard, syrup, etc., Seed. Aspegren & Co. 36,940; renewed Aug. 20, 1931.
Oleomargarin. Capital City Dairy Co. 83,137; renewed Aug. 22, 1931.
Oleomargarin. Capital City Dairy Co. 84,210; renewed Nov. 21, 1931.
Oleomargarine. John F. Jelke Company. 287,946; Oct. 20; Serial No. 315,839; published July 21, 1931.
Oleomargarine. John F. Jelke Company. 288,262; Oct. 20; Serial No. 314,810; published Aug. 11, 1931.
Olives. Francis H. Leggett & Co. 36,888; renewed Aug. 13, 1931.
Peanuts. Peris Manufacturing Co. 288,234; Oct. 20; Serial No. 302,471; published Aug. 11, 1931.
Pears. D. W. Leary. 288,143; Oct. 20; Serial No. 316,601; published Aug. 11, 1931.
Pies. Tasty Baking Company. 287,940; Oct. 20; Serial No. 315,373; published July 21, 1931.
Pork, Preparation of. William Moland's Sons. 84,846; renewed Jan. 9, 1932.

Poultry, Dressed. Enid Poultry & Egg Co. 288,294; Oct. 20; Serial No. 315,678; published Aug. 4, 1931.
Powders, Fudge. French Maid Chocolat Company, Inc. 288,213; Oct. 20; Serial No. 311,093; published July 21, 1931.
Preparation for making a sauce or dressiug. W. Symington & Co. 84,696; renewed Dec. 26, 1931.
Rolls, Toasted. M. J. Hubert. 287,981; Oct. 20; Serial No. 314,366; published July 21, 1931.
Sardines, olive oil, and cheese. Olaf Hertzwig Trading Co. Inc. 288,211; Oct. 20; Serial No. 310,107; published July 21, 1931.
Sauce, Table. F. Y. Hashiba. 83,332; renewed Sept. 5, 1931.
Spices. A. Schilling & Co. 288,291; Oct. 20; Serial No. 315,566; published July 21, 1931.
Spices, teas, and flavoring extracts. Canby, Ach & Canby Co. 84,165; renewed Nov. 14, 1931.
Sugar, Hard. American Sugar Refining Company. 37,051; renewed Sept. 10, 1931.
Sugar, Hard. American Sugar Refining Company. 37,082; renewed Sept. 17, 1931.
Sugar, Hard. American Sugar Refining Company. 37,177; renewed Oct. 8, 1931.
Sugar, Maple. Maple Grove Candies, Inc. 288,172; Oct. 20; Serial No. 308,994; published July 21, 1931.
Sugar, Maple. Maple Grove Candies, Inc. 288,304; Oct. 20; Serial No. 308,993; published July 21, 1931.
Syrup and malt extract, Malt. Salina Products Corporation. 288,224; Oct. 20; Serial No. 314,536; published July 28, 1931.
Syrup for food purposes, Malt. M. E. Krause. 288,198; Oct. 20; Serial No. 260,946; published Feb. 5, 1929.
Syrup, Malt. O. B. Kaplan. 288,288; Oct. 20; Serial No. 315,266; published July 21, 1931.
Syrup, Malt. Los Angeles Brewing Co. 288,226; Oct. 20; Serial No. 314,701; published July 14, 1931.
Syrup, Malt. J. C. Millett Company. 288,240; Oct. 20; Serial No. 314,375; published July 21, 1931.
Syrup, Malt. Adam Scheidt Brewing Company. 288,237; Oct. 20; Serial No. 311,458; published July 21, 1931.
Syrup, Malt. N. Williams. 288,223; Oct. 20; Serial No. 314,476; published July 14, 1931.
Tea and coffee. A. Schilling & Co. 288,290; Oct. 20; Serial No. 315,564; published Aug. 11, 1931.
Tea and compound of coffee and chicory. American Coffee Company of New Orleans, Lt'd. 81,047; renewed Feb. 28, 1931.
Tea, coffee, butter, etc. E. C. Hall Company. 288,305; Oct. 20; Serial No. 308,506; published July 14, 1931.
Vegetables, Fresh. Thos. G. Chung Co. 288,140; Oct. 20; Serial No. 316,148; published Aug. 11, 1931.
Wheat-flour. Kehlor Flour Mills Company. 85,136; renewed Jan. 30, 1932.

CLASS 48

Beer, ale, porter, half-and-half, and brown stout. West End Brewing Company. 85,531; renewed Feb. 20, 1932.
Beverage, Cereal Malt. Seneca Food Products Corporation. 287,995; Oct. 20; Serial No. 310,838; published Aug. 4, 1931.
Malt beverages. D. Silnutzer. 288,008; Oct. 20; Serial No. 316,136; published Aug. 11, 1931.
Preparations for use in brewing. American Burtonizing Company. 83,976; renewed Oct. 31, 1931.

CLASS 49

Alcohol, Grain. Los Angeles Brewing Co. 287,997; Oct. 20; Serial No. 311,742; published Aug. 4, 1931.
Anisette. Bosch & Co. 82,568; renewed July 11, 1931.
Anisette. Bosch & Co. 83,318; renewed Sept. 5, 1931.
Whiskey. Geo. T. Stagg Co. 288,123; Oct. 20; Serial No. 296,781; published Aug. 11, 1931.
Whisky, Blend of straight Scotch. Wm. Teacher & Sons. 83,373; renewed Sept. 5, 1931.

LIST OF LABELS

Alphabath Blocks. For Soap. The Lamp Studio—Kerk Guild. 39,926; Oct. 20.
American Wire Weavers' Protective Association. For Wire Cloth. American Wire Weavers' Protective Association. 39,899; Oct. 20.
American Wire Weavers' Protective Association. For Fourdrinier Wire Cloths. National Executive Board of the American Wire Weavers' Protective Association. 39,931; Oct. 20.
Beech-Nut Tomato Juice. For Tomato Juice. Beech-Nut Packing Company. 39,900; Oct. 20.
Bond Bread. For Bread. General Baking Company. 39,910; Oct. 20.
Bond Bread Sliced. For Bread. General Baking Company. 39,911; Oct. 20.
Braun's Wheat King Bread—Jumbo. For Bread. Braun Baking Co. 39,902; Oct. 20.
Bread. For Bread. K. R. Zimmer. 39,938–40; Oct. 20.
Butter-Nut. For Bread. Muller Bakeries, Inc. 39,930; Oct. 20.
CB—359. For Chocolate Layer Cakes. Lambooy Label and Wrapper Co. 39,925; Oct. 20.
Chase & Sanborn's Tea Town Toys. For Tea Balls. Standard Brands Incorporated. 39,937; Oct. 20.
Chocolat Supreme. For Chocolate Preparation for Making Fudge. C. R. Davis. 39,907; Oct. 20.
Combat. For Motor Oil. Richfield Oil Company. 39,934; Oct. 20.
Dieterich's Bakery. For French Pasteries. W. C. Dieterich. 39,908; Oct. 20.
Dr. Arthur Boerner Life Powder Herb Remedy #298. For Medicinal Preparation. A. Boerner. 39,901; Oct. 20.
Dr. Olson's Magic Salve. For Salve. O. M. Olson. 39,932; Oct. 20.
Fast Steppers. For Boxes. Hoague-Sprague Corporation. 39,916; Oct. 20.
Fischer's Swedish Rye Bread. For Bread. Fischer Baking Company. 39,909; Oct. 20.
Golden and Simon, Inc. For Boxes. Hoague-Sprague Corporation. 39,924; Oct. 20.
Hunny Girl. For Boxes. Hoague-Sprague Corporation. 39,919; Oct. 20.
Johnny Jones. For Boxes. Hoague-Sprague Corporation. 39,918; Oct. 20.
Jolly Time Pop Corn is Guaranteed to Pop. For Pop Corn. American Pop Corn Company. 39,898; Oct. 20.
Jungle Footwear. For Boxes. Hoague-Sprague Corporation. 39,923; Oct. 20.
L. S. Co. For Boxes. Hoague-Sprague Corporation. 39,918; Oct. 20.
L'Manda. For Compacts. Parfumerie Dollup, Inc. 39,933; Oct. 20.
Manischewitz's Matzos. For Matzo. B. Manischewitz Company. 39,927; Oct. 20.
Mechling's Stickate the Mineralglue. For Mechanics' Water Glass. Mechling Brothers Chemical Company. 39,928; Oct. 20.
Moore's Crow Repellent. For a Preparation for Repelling Crows. R. J. Moore. 39,929; Oct. 20.
New Era. For Boxes. Hoague-Sprague Corporation. 39,917; Oct. 20.
Overglobe Shoe. For Boxes. Hoague-Sprague Corporation. 39,915; Oct. 20.
Red Chief. For Canned Salmon. F. J. Comeau Company. 39,906; Oct. 20.
Smith & Bridgman. For Boxes. Hoague-Sprague Corporation. 39,920; Oct. 20.
Social Success Engagement Pad. For Engagement Pads. Columbian Art Works, Incorporated. 39,905; Oct. 20.
Staley's Corn Starch. For Corn Starch. A. E. Staley Mfg. Co. 39,935; Oct. 20.
Staley's Gloss Starch. For Gloss Starch. A. E. Staley Mfg. Co. 39,936; Oct. 20.
The Dainty Dot Shoe. For Boxes. Hoague-Sprague Corporation. 39,912; Oct. 20.
The Dolly Jean Shoe. For Boxes. Hoague-Sprague Corporation. 39,922; Oct. 20.
The Freedman Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,921; Oct. 20.
Veeta Nova—New Life—Magnesium Citrate Compound. For Magnesium Citrate Compound. P. Cimino. 39,904; Oct. 20.
W-O-N-D-E-R L-A-N-D Coffee. For Coffee. Bronx Coffee Company. 39,903; Oct. 20.
Yap Sing Y Cia. For Boxes. Hoague-Sprague Corporation. 39,914; Oct. 20.

LIST OF PRINTS

Gem Watch Crystal Ground to fit the Bezel. For Watch Crystals. United States Watch Crystal Mfg. Co. 13,452; Oct. 20.
Health and Enjoyment in Dugan's 100% Whole Wheat Products. For Whole Wheat Bakery Products. Dugan Brothers, Inc. 13,450; Oct. 20.
Just Dial. For Flowers. W. C. Gloeckner. 13,451; Oct. 20.
New! Pony Malted Milk—The Double—Rich Short Drink. For Malted Milk. Borden Company. 13,449; Oct. 20.
The Same Woman but with Infinite Variety. For Creme de France, Lilie Lotion, Amorette Rouge, Poudre d'Illusion, Etc. Elizabeth Arden Inc. 13,448; Oct. 20.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 20TH DAY OF OCTOBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, Charles C., Pittsfield, Mass., assignor to General Electric Company. Electric heater. 1,828,635; Oct. 20.
Abegg, Walter A., Los Angeles, Calif. Well drilling bit. 1,828,165; Oct. 20.
Adam, Auguste E., Houilles, and R. Janning, Nantes, France. Pocket manicure set. 1,828,121; Oct. 20.
Adamson, Allan A., Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio. Cigar box. 1,827,724; Oct. 20.
Addressograph Company. (See Mohler, Valentine J., assignor.)
Allman, David E., Willows, Calif. Gauge protector. 1,828,093; Oct. 20.
Aitken, Samuel, East Orange, N. J., assignor to Drag Eliminator Company, Inc., New York, N. Y. Drag eliminator for ships. 1,827,806; Oct. 20.
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Ajax Hosiery Mills. (See Hoffmann, Henry W., assignor.)
Akers, Charles W., Nashville, Tenn. Floor tile. 1,828,237; Oct. 20.
Aktiengesellschaft Brown Boveri & Cie. (See Haller, A., and Rump, assignors.)
Aktiengesellschaft Brown Boveri & Cie. (See Roebel, Ludwig, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Suter, Philipp, assignor.)
Alig, Delos A. (See Chambers, Alexander, assignor.)
Allebach, August S., North Wales, Pa. Abdominal supporter. 1,828,015; Oct. 20.
Allen, Chauncey D. (See Williston, B. T., Walch, and Allen.)
Allen, Elbert W., Milwaukee, Wis. Shoe. 1,828,453; Oct. 20.
Allen, George Y. (See Clark, G. H., and Allen.)
Allen, Robert C., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Packing gland. 1,827,866; Oct. 20.
Allen, William Y., Berkeley, Calif. Applicator for dispensing liquid from containers. 1,828,485; Oct. 20.
Alox Chemical Corporation. (See Burwell, Arthur W., assignor.)
American Bemberg Corporation. (See Hartmann, A., and Höfinghoff, assignors.)
American Cyanamid Company. (See Clark, Cyril B., assignor.)
American Electric Company. (See Anderson, Clarence A., assignor.)
American Fluid Motors Company. (See Cannon, Earl, assignor.)
American Forging and Socket Company, The. (See Sanders, Alfred B., assignor.)
American Hair & Felt Company. (See McKee, Charles R., assignor.)
American Refrigerator Car Company. (See House, S. G., and Snell, assignors.)
American Road Machinery Company. (See Schmidt, Carl G. A., jr., assignor.)
American Rolling Mill Company, The. (See Kramer, Leonard H., assignor.)
American Rolling Mill Company, The. (See Moon, Alva H., assignor.)
American Sales Book Company. (See Hagemann, Louis F., assignor.)
American Standard Watchcase Company. (See Schwarz, Rudolph J., assignor.)
American Stove Company. (See Kauffman, Lester S., assignor.)
American Stove Company. (See Moecker, H. jr., and Isaac, assignors.)
American Swiss Company, The. (See Grund, Fletcher D., assignor.)
American Telephone and Telegraph Company. (See Green, Estill I., assignor.)
American Telephone and Telegraph Company. (See Parker, Lee T., assignor.)
American Telephone and Telegraph Company. (See Thorp, Vaughn P., assignor.)
Amsden, Nelson E., Cleveland Heights, assignor to The Kaynee Company, Cleveland, Ohio. Advertising folder and display. 1,827,964; Oct. 20.
Andersen, Axel J., San Francisco, Calif. Bread packing machine. 1,828,238; Oct. 20.
Andersen, Oscar W., Oak Park, assignor to Pettibone Mulliken Company, Chicago, Ill. Dashpot mechanism. 1,828,383; Oct. 20.
Andersen, Peter J., San Francisco, Calif. Attachment for vacuum cleaners. 1,828,584; Oct. 20.
Anderson, Clarence A., assignor, by mesne assignments, to American Electric Company, Inc., Chicago, Ill. Telephone system. 1,827,734; Oct. 20.
Anderson, Evald, Alhambra, assignor to International Precipitation Company, Los Angeles, Calif. Method and apparatus for burning Portland cement. 1,828,270; Oct. 20.
Anderson, Maurice, Edgewood, Cranston, assignor to Levy, Anderson Co., Inc., Providence, R. I. Bracelet chain. Re18,230; Oct. 20.
Anderson, Oscar M. (See Juengst, F. W., and Anderson.)
Andreasen, Jens P., Bostwick, Nebr. Trailer hitch. 1,827,832; Oct. 20.
Andres, Peter, Belding, Mich. Automatic kitchen ventilator. 1,828,016; Oct. 20.
Andrewes, Humfrey, Highgate, London, England, assignor of fifty per cent to Radio Patents Corporation, New York, N. Y. Electrical frequency-changing apparatus of the thermionic type. 1,828,094; Oct. 20.
Andros, Harry E. (See Hawrylasz, Nykyfor, assignor.)
Anthony, David S., San Antonio, Tex. Automatic sharpener. 1,827,965; Oct. 20.
Appleton, Wallace N., Crafton, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa. Grinding apparatus. 1,828,212; Oct. 20.
Appling, Everette W., Joplin, Mo. Undertaker's device. 1,828,585; Oct. 20.
Archbald, Hugh, Philipsburg, Pa. Apparatus for making briquettes. 1,828,586; Oct. 20.
Arcturus Radio Tube Company. (See Delaney, Daniel J., assignor.)
Arcturus Radio Tube Company. (See Krahl, Walter L., assignor.)
Arnold, David B., Brookline, assignor, by mesne assignments, to Eastern Expanded Metal Company, Cambridge, Mass. Insulating metal lath. 1,828,351; Oct. 20.
Arnold, Edwin E., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Making gears. 1,828,271; Oct. 20.
Ashbaugh, John H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,828,273; Oct. 20.
Ashbaugh, John H., Wilkinsburg, and S. A. Staege, Pittsburgh, assignors to Westinghouse Electric & Manufacturing Company. Regulator system. 1,828,272; Oct. 20.
Aspinwall, Lewis A., La Crosse, Wis., assignor, by mesne assignments, to Oliver Farm Equipment Company. Potato planter. 1,828,274; Oct. 20.
Atta, William S., Waterbury, Conn. Curtain operating device for automobiles and the like. 1,828,166; Oct. 20.
Attinger, Leon, et al. (See Gage, Edward G., assignor.)
Atwater Kent Manufacturing Company. (See Silva, Albert D., assignor.)
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Clamp for cables or the like. 1,828,306; Oct. 20.
Autokraft Box Corporation. (See Adamson, Allan A., assignor.)
Automatic Safety Trip Corporation. (See Von Henke, Edmund J., assignor.)
Automatic Water Softener Company. (See Dotterweich, Andrew J., assignor.)
Ayars, Charles H., assignor to Ayars Machine Company, Salem, N. J. Canning machine. 1,828,167; Oct. 20.
Ayars, Charles H., assignor to Ayars Machine Company, Salem, N. J. Can delivering mechanism. 1,828,168; Oct. 20.
Ayars Machine Company. (See Ayars, Charles H., assignor.)
Baash-Ross Tool Company. (See Maxwell, William H., assignor.)
Bacheller, Raymond G., assignor to Hartford-Empire Company, Hartford, Conn. Glass handling apparatus. 1,828,213; Oct. 20.
Back, Franz G. (See Heilpern, J., and Back.)
Back, Franz G., Stamford, Conn., assignor, by mesne assignments, to The Photor Corporation, New York, N. Y. Apparatus for taking photographs of cavities of the body. 1,828,141; Oct. 20.
Backes, Clifford B., assignor to M. Backes' Sons Incorporated, Wallingford, Conn. Pistol cap. 1,828,214; Oct. 20.
Backes' M., Sons, Incorporated. (See Backes, Clifford B., assignor.)
Bacon, John J., Gasport, N. Y. Machine for manufacturing receptacles. 1,828,636; Oct. 20.
Baer, Jean, Basel, Switzerland. Manufacture of factice and the like. 1,828,587; Oct. 20.

Baker, Charles S., Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Clearance valve assembly. 1,827,725; Oct. 20.
Baker, David B. (See Johnston, E. A., and Baker.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Baker, Roy M., Chisholm, Minn. Mechanical shovel. 1,828,095; Oct. 20.
Bakkekilde, Robert S., Odense, Fyen, Denmark. Radiator construction. 1,828,637; Oct. 20.
Ball, Charles F. (See Shafer, S., jr., and Ball.)
Ballard, Arthur H., Incorporated. (See Ballard, Arthur H., assignor.)
Ballard, Arthur H., assignor to Arthur H. Ballard, Incorporated, Boston, Mass. Atmosphere regulating system. 1,827,926; Oct. 20.
Baily, Oscar, and P. Grossmann, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Amino anthraquinone derivatives and making same. 1,828,588; Oct. 20.
Balsley, James R., Beverly Hills, assignor to Fox Film Corporation, Hollywood, Calif. Volume control in sound record reproduction. 1,827,735; Oct. 20.
Bankers Utilities Co. (See Greer, John H., assignor.)
Banner Rock Corporation. (See Powell, Edward R., assignor.)
Barber, Joseph L., Greenley, Colo. Photograph print embossing machine. 1,827,927; Oct. 20.
Barclay, McClelland, New York, N. Y. Ash jar. Des. 85,362; Oct. 20.
Bare, Erwin L., Detroit, Mich., assignor to The Murray Corporation of America. Vehicle body construction. 1,828,017; Oct. 20.
Barényi, Árpád, Berlin-Lichterfelde, Germany. Photographic shutter. 1,828,215; Oct. 20.
Barker, William T., jr. (See Peller, K. E., and Barker, jr.)
Barker, William T., jr., assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for feeding molten glass. 1,828,216; Oct. 20.
Barker, William T., jr., assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for feeding molten glass. 1,828,217; Oct. 20.
Barnhart, Job R., Lakewood, assignor to The Sterling Manufacturing Company, Cleveland, Ohio. Loud speaker unit and drive mechanism therefor. 1,828,122; Oct. 20.
Barnhart, Nelson M. (See Hedgpeth, Theron L., assignor.)
Barnholdt, Harold L., Pittsburgh, and J. L. Brown, Verona, Pa., assignors to Westinghouse Electric and Manufacturing Company. Fabricated construction. 1,828,275; Oct. 20.
Barr, Roy L., assignor of one-third to W. F. Duckwitz, and one-third to H. Van Briggle, Detroit, Mich. Burial vault. 1,828,352; Oct. 20.
Barrett Company, The. (See Canavan, Edward J., assignor.)
Barrett, George E., Fort Wayne, Ind. Vehicle propulsion and steering mechanism. 1,828,638; Oct. 20.
Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Volute brake mechanism. 1,828,218; Oct. 20.
Bartus, Mike, Harrison City, Pa. Rail joint. 1,828,639; Oct. 20.
Bassett, Gerald L., assignor to The Conklin Pen Company, Toledo, Ohio. Fountain pen filling device. 1,828,018; Oct. 20.
Bassett, Gerald L., assignor to The Conklin Pen Company, Toledo, Ohio. Fountain pen filling device. 1,828,019; Oct. 20.
Batchelder, Mrs. Vera C. (See Thomas, Leslie J., assignor.)
Bates, Lee O., Dallas, Tex. Clay ball disintegrator. 1,828,589; Oct. 20.
Bauer Brothers Company, The. (See Iglehart, Richard S., assignor.)
Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of highway crossing signals. 1,827,772; Oct. 20.
Baumberger, William J., Davenport, assignor to Micro Machine Company, Bettendorf, Iowa. Grinding machine. 1,828,384; Oct. 20.
Beall, William L., Chattanooga, Tenn., assignor to International Harvester Company. Agitator for dispensing mechanisms. 1,828,519; Oct. 20.
Beamish, H. Luella. (See Gates, Benjamin L., assignor.)
Beasley, Alfred F., assignor to Bunker Hill & Sullivan Mining & Concentrating Company, Kellogg, Idaho. Igniting ore. 1,827,773; Oct. 20.
Beauregard, William G., Fall River, Mass., assignor, by mesne assignments, to Line Material Company, Milwaukee, Wis. Bonding mold. 1,828,020; Oct. 20.
Becher, Theodor, Gustavsburg, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Nuremberg, Bavaria, Germany. Lateral packing for weirs. 1,828,219; Oct. 20.
Beckett Paper Company, The. (See Wildman, A. J., and Latimer, assignors.)
Been, Paul, assignor to Harnischfeger Corporation, Milwaukee, Wis. Apparatus for handling and storing. 1,828,307; Oct. 20.
Been, Paul, assignor to Harnischfeger Corporation, Milwaukee, Wis. Apparatus for handling and storing automobiles and the like. 1,828,308; Oct. 20.
Beers, George L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Connecting device. 1,828,276; Oct. 20.
Bell Telephone Laboratories, Incorporated. (See Bode, Hendrik W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Borgmann, Charles, assignor.)
Bell Telephone Laboratories, Incorporated. (See Heising, Raymond A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Lutomirski, Karel, assignor.)
Bell Telephone Laboratories, Incorporated. (See Murphy, Paul B., assignor.)
Bellanca Aircraft Corporation. (See Bellanca, Giuseppe M., assignor.)
Bellanca, Giuseppe M., assignor to Bellanca Aircraft Corporation, New Castle, Del. Landing gear for airplanes. Re18,226; Oct. 20.
Bendix, Vincent, Chicago, Ill. Engine starter. 1,827,867; Oct. 20.
Benner, Harry P. (See Egloff, G., and Benner.)
Benner, Raymond C., G. J. Easter, Niagara Falls, N. Y., and C. E. Hawke, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y. Rotatable furnace. 1,827,833; Oct. 20.
Bennett, Albert W., Newark, Ohio. Collapsible shoe last. 1,828,640; Oct. 20.
Bennett, Frank. (See Hallowell, H. T., and Bennett.)
Bennett, Frank, and H. T. Hallowell, assignors to Standard Pressed Steel Co., Jenkintown, Pa. Portable sign frame. 1,828,239; Oct. 20.
Bennett, Morris H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Fuse. 1,828,277; Oct. 20.
Bergemann, Oscar, Good Thunder, Minn. Draft bar. 1,828,385; Oct. 20.
Berger, George E., Two Rivers, Wis. Structural building unit. 1,828,309; Oct. 20.
Berger, Louis, Jamaica, N. Y. Adjustable seat. 1,827,928; Oct. 20.
Berger, Samuel I., Newark, N. J. Mechanical figure wheeled toy. 1,827,774; Oct. 20.
Berger, Samuel I., Newark, N. J. Mechanical toy. 1,827,775; Oct. 20.
Bergeron, Michel, Paris, France. Braking apparatus for aircraft. 1,828,641; Oct. 20.
Bergh, Philip, assignor to Jantzen Knitting Mills, Portland, Oreg. Swimming suit. 1,828,310; Oct. 20.
Berry, Louin, Fort Worth, Tex. Match box. 1,828,698; Oct. 20.
Besler, William J., Plainfield, N. J. Brake mechanism for motor vehicles. 1,828,386; Oct. 20
Betts, Earl L., assignor to United Steel & Wire Company, Battle Creek, Mich. Display rack. 1,827,776; Oct. 20.
Betts, Robert, London, England. Perfume bottle or similar article. Des. 85,363; Oct. 20.
Bezzenberger, Fred K., Cleveland Heights, and W. R. Zimmerman, assignors to The Bishop and Babcock Manufacturing Company, Cleveland, Ohio. Thermostat for heating systems. Re18,231; Oct. 20.
Bible, Dana X., Lincoln, Nebr. Football blocking pad. 1,827,834; Oct. 20.
Bickford, Percy D., assignor of one-half to C. G. Thompson, Vancouver, British Columbia, Canada. Bottle wrapping machine. 1,828,123; Oct. 20.
Biddle, William M., Camden, N. J., assignor to Turn-Rite Process Co., Inc., Philadelphia, Pa. Shoe last. 1,827,777; Oct. 20.
Biermanns, Josef, Karlshorst, Germany, assignor to General Electric Company. Protective apparatus. 1,828,590; Oct. 20.
Bigelow, Flora E. (See Zimmerman, Benjamin F., assignor.)
Bigelow, Jonas D., Indianapolis, Ind. Lure kit. 1,827,929; Oct. 20.
Bink, Theodore, assignor to Gilson-Bolens Manufacturing Company, Port Washington, Wis. Supporting base for stools. 1,828,311; Oct. 20.
Birdsall, Albert L. (See Keeler, G. E., and Birdsall.)
Bishop and Babcock Manufacturing Company, The. (See Bezzenberger, F. K., and Zimmerman, assignors.)
Bissell, L. E., Company, Limited. (See Bissell, Lloyd E., assignor.)
Bissell, Lloyd E., assignor to T. E. Bissell Company Limited, Elora, Ontario, Canada. Land packer. 1,827,726; Oct. 20.
Bissell, Richard E., Cleveland Heights, assignor to Thompson Products, Inc., Cleveland, Ohio. Fuel loss indicator. 1,827,930; Oct. 20.
Bissell, T. E., Company Limited. (See Wardley, Timothy C., assignor.)
Black & Decker Manufacturing Company. (See Decker, Alonzo G., assignor.)
Black, William L., Austin, Tex. Antifriction guide roller. 1,827,835; Oct. 20.
Blanchard, Arthur H., Arlington, Mass. Fire truck. 1,828,169; Oct. 20.
Blankenstein, Edward E., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing carbon granules. 1,827,931; Oct. 20.
Bleicher, Charles S. (See Watzka, Otto, assignor.)

Bleser, Joseph F., Springfield, Ill. Internal combustion motor. 1,828,353; Oct. 20.
Bliss, E. W., Company. (See Kruse, Peter, assignor.)
Blizard, John, Garden City, assignor to Foster Wheeler Corporation, New York, N. Y. Conduit system. 1,827,727; Oct. 20.
Bock, Wilhelm, and H. W. Matthews, assignors to Dexdale Hosiery Mills, Lansdale, Pa. Knitting and in knitting machines. 1,828,220; Oct. 20.
Bode, Hendrik W., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission network. 1,828,454; Oct. 20.
Boeckling, Ewald. (See Kindelmann, A., and Boeckling.)
Bolton, Harry D., assignor to Taylor Instrument Companies, Rochester, N. Y. Thermometer. 1,827,778; Oct. 20.
Bommer, Max. G. de Montmolin, J. Fröhlich, Basel, F. Grieshaber, Riehen, near Basel, W. Jaeck, Basel, and F. Felix, Riehen, near Basel, Switzerland, assignors to the Firm: Society of Chemical Industry in Basle, Basel, Switzerland. Preparation of dyestuffs which are of value for obtaining fast tints on the different fibers and making same. 1,828,592; Oct. 20.
Boorum & Pease Company. (See Finley, Charles A., assignor.)
Booser, Edward F., Homestead, assignor of forty per cent to R. M. Smeltzer, Pittsburgh, Pa. Scaffold. 1,828,487; Oct. 20.
Booth, Clement, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,828,387; Oct. 20.
Bordo, Samuel I., Cleveland, Ohio. Air feed mechanism for hot air furnaces. 1,828,221; Oct. 20.
Borgeson, Peter O., Miami, Fla. Window opener. 1,828,021; Oct. 20.
Borgmann, Charles, Great Neck, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone switchboard. 1,828,455; Oct. 20.
Born, Ernst O., Rabenstein, near Chemnitz, Germany. Lock for producing purl work on flat knitting machines. 1,828,240; Oct. 20.
Bosch, Robert, Aktiengesellschaft. (See Kazenmaier, August, assignor.)
Bosch, Robert, Aktiengesellschaft. (See Rall, Max, assignor.)
Boscheron, Louis, Liege, assignor to Societe Anonyme La Nouvelle Montagne, Engis, Belgium. Blende sintering process. 1,828,241; Oct. 20.
Bossart, Paul N. (See Grondahl, L. O., and Bossart.)
Bossert Corporation, The. (See Clement, Walter J., assignor.)
Botsford, Claude W., Los Angeles, Calif., assignor to W. W. Odell, Pittsburgh, Pa. Holder for small articles. 1,828,456; Oct. 20.
Boutet, René E., Paris, France. Electrical calculating machine. 1,827,836; Oct. 20.
Bower, James F., Oklahoma City, Okla. Apparatus for controlling oil and gas wells. 1,828,124; Oct. 20.
Brain, George, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Flushing tank. Des. 85,364; Oct. 20.
Brandt, Carl W., Cleveland Heights, Ohio. Scale. 1,828,022; Oct. 20.
Bratz, Otto J. (See Zeder, J. C., and Bratz.)
Braunstein, Mollie, Cedarhurst, N. Y. Double cuff for knickers and the like, and its manufacture. 1,828,457; Oct. 20.
Breer, Carl, Summit, N. J., assignor to Chrysler Corporation, Highland Park, Mich. Forming explosive mixtures. 1,827,728; Oct. 20.
Breer, Carl, Detroit, assignor to Chrysler Corporation, Highland Park, Mich. Dampener. 1,828,278; Oct. 20.
Brill, Alfred P., assignor to Ruud Manufacturing Company, Pittsburgh, Pa. Water heater. 1,828,023; Oct. 20.
Brindley, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Safety device. 1,827,779; Oct. 20.
Bristol, Carlton W., Naugatuck, assignor to The Bristol Company, Waterbury, Conn. Adjustable anchoring fitting for thermometer bulbs. 1,828,170; Oct. 20.
Bristol Company, The. (See Bristol, Carlton, W., assignor.)
Bristol, Cyrus J., assignor to Globe Machinery & Supply Company, Des Moines, Iowa. Safety latch for automobile lifts. 1,827,966; Oct. 20.
British Dyestuffs Corporation Limited. (See Tatum, William W., assignor.)
Brooks, Bloomfield H., Denver, Colo. Supporting structure for eaves of tents. 1,827,729; Oct. 20.
Brooks, Charles A. (See Young, H. S., and Brooks.)
Brown, Elmer B. (See Frey, C. N., Brown, and Craig.)
Brown, Henry L., Houston, Tex. Apparatus and method for the recovery of chemicals from pulp magma. 1,828,279; Oct. 20.
Brown, John, assignor to Scottish Farmers Corporation Limited, Glasgow, Scotland. Apparatus for facilitating the delivery of milk in bottles. 1,828,125; Oct. 20.
Brown, John L. (See Barnholdt, H. L., and Brown.)
Brown, Raymond M., Newport News, Va. Bottle opener. 1,827,868; Oct. 20.
Brown, Roy W., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Time controller. 1,828,126; Oct. 20.
Bruce, Robert L., Chicago, Ill., assignor to White Brass Castings Company. Soldering cup. 1,828,520; Oct. 20.
Brumbly, M. G. (See Lamb, Charles, assignor.)
Bryan, Julian, Lafleur, Wash. Animal trap. 1,828,486; Oct. 20.
Bryant, Blanche B., administratrix. (See Bryant, William L.)
Bryant, William L., deceased; B. B. Bryant, administratrix, Springfield, Vt. Truing mechanism for grinding wheels. 1,827,967; Oct. 20.
Bryant, William L., deceased; B. B. Bryant, administratrix, Springfield, Vt. Wheelhead and the like. 1,827,968; Oct. 20.
Bryson, Tandy A., Troy, N. Y. Centrifugal process and mechanism. 1,828,096; Oct. 20.
Buchanan, James H., Los Angeles, Calif. Phonograph sound reproducer. 1,828,171; Oct. 20.
Buchler, Clifford C., Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind. High melting point wax. 1,828,354; Oct. 20.
Buckeye Steel Castings Company, The. (See Nothacker, Edward M., assignor.)
Buckeye Steel Castings Company, The. (See Spiller, G. A., and Johnson, assignors.)
Buckeye Steel Castings Company, The. (See Whitridge, John C., assignor.)
Buckingham, William D. (See Homer, E. C., and Buckingham.)
Buckius, Albert O., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Railway truck. 1,828,280; Oct. 20.
Buckius, Albert O., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Journal box. 1,828,312; Oct. 20.
Buckius, Albert O., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Journal box. 1,828,313; Oct. 20.
Buckius, Albert O., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Journal box construction. 1,828,314; Oct. 20.
Budd Wheel Company. (See Reed, George B., assignor.)
Buffalo Pressed Steel Company. (See Haas, Lucien L., assignor.)
Bulkeley, Ralph W., Grand Rapids, Mich. Automobile body. 1,828,355; Oct. 20.
Bull, Henrik, Bergen, Norway. Treating fatty materials to obtain fats or oils therefrom. 1,828,591; Oct. 20.
Bunker, Frank P., North Manchester, Ind. Screen. 1,828,642; Oct. 20.
Bunker, H. M., & Company. (See Bunker, Horace M., assignor.)
Bunker Hill & Sullivan Mining & Concentrating Company. (See Beasley, Alfred F., assignor.)
Bunker, Horace M., assignor to H. M. Bunker & Company, Inc., New York, N. Y. Machine for forming tubular fabrics. 1,828,554; Oct. 20.
Burkhard, John J. (See Golding, B. Y., and Burkhard.)
Burnfield, Samuel E., Chicago, Ill. Lamp. Des. 85,365; Oct. 20.
Burrage, Albert C., jr., Ipswich, Mass. Preparation of sulphur-dyes. 1,828,099; Oct. 20.
Burroughs Adding Machine Company. (See Horton, Allen A., assignor.)
Burwell, Arthur W., Niagara Falls, assignor to Alox Chemical Corporation, New York, N. Y. Producing water-insoluble petroleum-soluble carboxylic acids and the product thereof. 1,828,356; Oct. 20.
Bush, A. G. (See Criner, Harry J., assignor.)
Bustos, Jorge, Santiago, Chile. Shoe cleaning machine. 1,828,388; Oct. 20.
Butler, Morgan R., Waukesha, Wis. Material handling equipment. 1,828,458; Oct. 20.
Bylin, Henry, Lankin, N. Dak. Traction wheel. 1,827,730; Oct. 20.
C-S Engineering Company. (See Schellens, Eugene L., assignor.)
C-S Engineering Company. (See Schellens, E. L., and Peckett, assignors.)
Cairns Development Company. (See Carns, Edmund B., assignor.)
Caison, David H., Supply, N. C. Plow line guide. 1,828,024; Oct. 20.
California Packing Corporation. (See Muller, W. A., and Youman, assignors.)
Calkins, William L., jr., Freeport, Ill. Adjustable display rack. 1,827,969; Oct. 20.
Callahan, James P., et al. (See Pringle, William F., assignor.)
Caloroil Burner Corporation. (See Grant, Albert E., assignor.)
Calvani, Fulvio, Newark, N. J. Saxophone. 1,828,389; Oct. 20.
Calvani, Fulvio, Newark, N. J. Saxophone. 1,828,390; Oct. 20.
Canaday, Walter A., Bridgeport, Nebr. Casket lowering apparatus. 1,828,391; Oct. 20.
Canavan, Edward J., Woodcliff, N. J., assignor to The Barrett Company. Sulphurized phenols and process of making. 1,828,172; Oct. 20.
Cannon, Earl, assignor to American Fluid Motors Company, Philadelphia, Pa. Hydraulic operating mechanism. 1,828,643; Oct. 20.
Cannon, Patrick J., New York, N. Y. Rotating means. 1,828,593; Oct. 20.
Carborundum Company, The. (See Benner, R. C., Easter, and Hawke, assignors.)

Carlson, Chester L., Crockett, Calif. Control system for sugar washing apparatus and the like. 1,828,127; Oct. 20.

Carmichael, Mead C., Sparta, Wis. Elevating device. 1,828,488; Oct. 20.

Carnelli, Francis J., New York, N. Y. Chain pipe wrench. 1,828,173; Oct. 20.

Carns, Edmund B., New York, N. Y., assignor to Cairns Development Company, Wilmington, Del. Method and machine for forming sheets. 1,828,489; Oct. 20.

Carpenter, Purdom, Barrington, R. I. Saw setting machine. 1,828,392; Oct. 20.

Carter, Haskell C., assignor to Iron Fireman Manufacturing Company, Portland, Oreg. Apparatus for removing incombustibles from stokers. 1,828,700; Oct. 20.

Carter, John R. (See Jackson, M. L., and Carter.)

Casey, Mary J., San Jose, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Apparatus for peeling fruit. 1,827,869; Oct. 20.

Cavicchioli, Dante, New York, N. Y. Stringed musical instrument. 1,828,315; Oct. 20.

Celanese Corporation. (See Seymour, George W., assignor.)

Celanese Corporation of America. (See Martin, Robert, assignor.)

Central Scientific Company. (See Lunt, J. R., and Haley, assignors.)

Chain Belt Company. (See Shafer, S., jr., and Ball, assignors.)

Chambers, Alexander, assignor of one-half to D. A. Alig, Indianapolis, Ind. Fruit spoon. 1,827,780; Oct. 20.

Champion Fibre Company, The. (See Rue, John D., assignor.)

Chandler, Franklin F., assignor to Ross Gear & Tool Company, La Fayette, Ind. Steering gear roller pin. 1,828,594; Oct. 20.

Chapin, Fenton G., East St. Louis, Mo. Elevator door locking mechanism. 1,828,316; Oct. 20.

Chase Companies, The. (See Cornell, Edward S., jr., assignor.)

Chase Companies, The. (See Spring, Fred L. V., assignor.)

Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,827,837; Oct. 20.

Chilton, Ralph H., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,807; Oct. 20.

Chilton, Ralph H., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,808; Oct. 20.

Chilton, Ralph H., assignor to The Inland Manufacturing Company, Dayton, Ohio. Storage battery. 1,828,393; Oct. 20.

Chisholm, Theodore L., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,809; Oct. 20.

Chlapowski, Peter P. (See Chlapowski, Stanislaw J. and P. P.)

Chlapowski, Stanislaw J., Gardner, and P. P. Chlapowski, Webster, Mass. Heating device. 1,828,644; Oct. 20.

Chrysler Corporation. (See Breer, Carl, assignor.)

Chrysler Corporation. (See Syrovy, A. J., and Janeway, assignors.)

Chrysler Corporation. (See Zeder, J. C., and Bratz, assignors.)

Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,828,357; Oct. 20.

Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,828,358; Oct. 20.

Chryst, William A., Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind. Engine starting apparatus. 1,828,359; Oct. 20.

Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,828,360; Oct. 20.

Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,828,394; Oct. 20.

Church, Harold D., Cleveland Heights, assignor to The White Motor Company, Cleveland, Ohio. Motor vehicle radiator. 1,827,781; Oct. 20.

Church, Harold D., Cleveland Heights, assignor to The White Motor Company, Cleveland, Ohio. Differential carrier. 1,828,025; Oct. 20.

Church, Walter L., Houston, Tex. Casing head for oil and gas wells. 1,828,555; Oct. 20.

Churchill, Ralph H., Chicago, Ill. Advertising display board. 1,827,731; Oct. 20.

Cinch Manufacturing Corporation. (See Knutson, C. L., Roby, and Kimbell, assignors.)

Cincinnati Car Corporation, The. (See Elliott, J. H., and Norbom, assignors.)

Cincinnati Grinders Incorporated. (See Booth, Clement, assignor.)

Clapp, Kenneth S., Cleveland, Ohio. Lubricator. 1,828,317; Oct. 20.

Clark, Cyril B., Scarsdale, assignor to American Cyanamid Company, New York, N. Y. Burner for the oxidation of ammonia. 1,828,318; Oct. 20.

Clark Equipment Company. (See Spatta, George, assignor.)

Clark, George H., New York, N. Y., and G. Y. Allen, Pittsburgh, Pa., assignors to Radio Corporation of America. Radio compass correcting device. 1,828,395; Oct. 20.

Clemens, Emanuel, East Orange, assignor to New Jersey Button Works, Newark, N. J. Attachment for button making machines. 1,828,174; Oct. 20.

Clement, Walter J., New Hartford, assignor to The Bossert Corporation, Utica, N. Y. Hammer mill. 1,826,490; Oct. 20.

Cleveland Co-Operative Stove Company, The. (See Kennedy, Emmett F., assignor.)

Cleveland Rock Drill Company, The. (See Shaw, N. Carter, assignor.)

Cline, Walter J., and M. F. Wagner, San Diego, Calif. Aircraft. 1,828,026; Oct. 20.

Clipper Belt Lacer Company. (See Diamond, James K., assignor.)

Cloud, Raymond T., assignor to Orchestraphone Company, Chicago, Ill. Pick-up and carrier therefor. 1,827,970; Oct. 20.

Clow, Oscar B., Tacoma, Wash. Composition roofing shingle. 1,828,222; Oct. 20.

Coarl, Frank A., Chicago, Ill. Nut picking machine. 1,827,736; Oct. 20.

Coe, Benjamin S., assignor to Steele and Johnson Manufacturing Company, Waterbury, Conn. Combination ash-receiver and match holder. Des. 85,366; Oct. 20.

Cohan, Henry. (See Seidman, H., and Cohan.)

Columbus Machine Company, The. (See Sparks, Stanley W., assignor.)

Colvin, Charles H., assignor, by mesne assignments, to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Aircraft navigation light. 1,828,097; Oct. 20.

Columbus Sucker Rod Company, The. (See Thorpe, Forest H., assignor.)

Compagnie International pour la Fabrication des Essences et Petroles. (See Joseph, Alfred, assignor.)

Condit Electrical Manufacturing Corporation. (See Edsall, William S., assignor.)

Condit Electrical Manufacturing Corporation. (See Greenwood, Talma T., assignor.)

Conklin Pen Company, The. (See Bassett, Gerald L., assignor.)

Conlan, David, Brooklyn, N. Y. Motor vehicle lock. 1,827,732; Oct. 20.

Conrads, Herm. (See Laas, Louis A., assignor.)

Consolidated Aircraft Corporation. (See Laddon, Isaac M., assignor.)

Consolidated Ashcroft Hancock Company. (See Williston, B. T., Walch, and Allen, assignors.)

Continental Can Company. (See Sedwick, Mathew M., assignor.)

Continental Silver Company. (See Wolferman, Milton J., assignor.)

Coolidge, Joseph R., 3d, Brookline, Mass., assignor to Montan, Inc., Boston, Mass. Self-lubricating bearing and making same. 1,827,737; Oct. 20.

Cooper, George S., Providence, R. I. Spring door catch. 1,827,810; Oct. 20.

Coors, Adolph, Golden, Colo. Malted milk container. Des. 85,367; Oct. 20.

Cornell, Edward S., jr., Watertown, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Tube-flanging tool. 1,827,733; Oct. 20.

Cornell, Edward S., jr., Watertown, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Tube-flanging tool. 1,827,882; Oct. 20.

Cornell, Edward S., jr., Watertown, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Tube-flanging tool. 1,828,459; Oct. 20.

Cornic, Emile, Paris, France. Umbrella. 1,828,396; Oct. 20.

Cornstalk Products Company. (See Darling, Elton R., assignor.)

Crabbs, Herbert J., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Support for switch mechanism. 1,828,281; Oct. 20.

Craig, Charles F., et al. (See Moreton, Henry H., assignor.)

Craig, Colgate. (See Frey, C. N., Brown, and Craig.)

Craighill, Preston. (See Moore, L. F., and Craighill.)

Cramer, Albert N., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Leer feeder. 1,827,738; Oct. 20.

Cramer, Raymond H. (See Williams, J. F., and Cramer.)

Cramer, Stanley S., Haddon Heights, assignor to Radio Condenser Company, Camden, N. J. Electrical condenser and assembly thereof. 1,828,027; Oct. 20.

Crary, Charles A., Wyoming, and T. F. Crary, Middleport, Ohio. Cake of soap. 1,828,361; Oct. 20.

Crary, Thomas F. (See Crary, Charles A. and T. F.)

Crawford, Charles J., Toledo, Ohio. Door holder. 1,828,242; Oct. 20.

Crémer, Michel, Paris France, assignor to General Electric Company. Rapid transmission of signals and messages. 1,828,556; Oct. 20.

Crémer, Michel, Paris France, assignor to General Electric Company. Electrical apparatus. 1,828,645; Oct. 20.

Criminins, De Forest Q., Tonawanda, N. Y. Automatic pencil. 1,828,521; Oct. 20.

Criner, Harry J., assignor of one-half to A. G. Bush, Davenport, Iowa. Luggage carrier. 1,828,128; Oct. 20.

Critz, John E., Iowa City, Iowa. Dandelion cutter. 1,828,129; Oct. 20.

Croasdale, Stuart, Denver, Colo. Extraction of mercury from mercury-bearing ores or products. 1,827,971; Oct. 20.

Cropper, William N., Lexington, Ky. Window sash fastener. 1,828,557; Oct. 20.

Crosby, Harry E., Huntington Park, assignor to Mission Dry Corporation, Ltd., Los Angeles, Calif. Gang faucet. 1,828,175; Oct. 20.

Crosman, Loring P., Maplewood, assignor to Monroe Calculating Machine Company, Orange, N. J. Spring testing machine. 1,828,176; Oct. 20.

Crowell, Erd V., Los Angeles, Calif. Well cementing. 1,828,098; Oct. 20.

Crowell, Erd V., Los Angeles, Calif. Apparatus for cementing wells. 1,828,099; Oct. 20.

Crowell, Erd V., Los Angeles, Calif. Cementing wells. 1,828,100; Oct. 20.

Culver, Edwin S., Oakland, assignor, by mesne assignments, to Oliver United Filters Incorporated, San Francisco, Calif. Flexible hose. 1,828,101; Oct. 20.

Curtis, John C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,828,491; Oct. 20.

Curtis, Thomas S., assignor to Vitrefrax Corporation, Huntington Park, Calif. High strength ceramic composition. 1,827,838; Oct. 20.

Curtiss, Merritt E., Pittsburgh, Pa. Electric display device. 1,828,177; Oct. 20.

Cutler, Charles L., jr., Marlboro, Mass. Hot air heater. 1,828,319; Oct. 20.

Cutler-Hammer, Inc. (See Meuer, George J., assignor.)

Daering, Rudolf, Norton, Alberta, Canada. Level crossing gate. 1,827,782; Oct. 20.

Daniel, Walter L., Lubbock, Tex. Photograph holder. 1,828,558; Oct. 20.

Daniels, Claude H., Newton Center, Mass. Boot or shoe and making same. 1,828,320; Oct. 20.

Danly Machine Specialties, Inc. (See Danly, Robert C., assignor.)

Danly, Robert C., assignor to Danly Machine Specialties, Inc., Chicago, Ill. Feeding mechanism. 1,828,595; Oct. 20.

Danly, Robert C., assignor to Danly Machine Specialties, Inc., Chicago, Ill. Feeding mechanism. 1,828,596; Oct. 20.

Danly, Robert C., assignor to Danly Machine Specialties, Inc., Chicago, Ill. Feeding mechanism. 1,828,597; Oct. 20.

Dantsizen, Christian, Schenectady, N. Y., assignor to General Electric Company. Refrigerant. 1,828,559; Oct. 20.

Dantsizen, Christian, Schenectady, N. Y., assignor to General Electric Company. Apparatus for and process of removing soot. 1,828,646; Oct. 20.

Dap, Jean, Puteaux, France, assignor to Dap-Motor-Patent-Gesellschaft m. b. H., Cologne-Holweide, Germany. Two-stroke cycle internal combustion engine. 1,827,932; Oct. 20.

Dap-Motor-Patent-Gesellschaft m. b. H. (See Dap, Jean, assignor.)

Darling, Elton R. (See Marx, C., and Darling.)

Darling, Elton R., Danville, assignor to Pacific Lumber Company, Chicago, Ill. Production of sheathing boards from redwood bark. 1,828,028; Oct. 20.

Darling, Elton R., assignor to Cornstalk Products Company, Inc., Danville, Ill. Pulping farm wastes. 1,828,242; Oct. 20.

Darnell, Walter R., Long Beach, Calif. Desk leg glide shoe. 1,827,972; Oct. 20.

d'Arx, Louis E., Clayfield, Brisbane, Queensland, Australia. Venetian blind. 1,828,598; Oct. 20.

Dattner, Max. (See Weintraub, Harry H., assignor.)

David, Wilhelm, Hamburg, assignor to E. P. Lehmann, Brandenburg-on-the-Havel, Germany. Seesaw toy. 1,828,244; Oct. 20.

Davidson, William W., Evanston, Ill. Rotary pump. 1,828,245; Oct. 20.

Davies, David R., Didsbury, England, assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,828,522; Oct. 20.

Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing machine element. 1,828,102; Oct. 20.

Davis, McClellan, Portland, Ore. Aeroplane control device. 1,827,933; Oct. 20.

Davis, Ray H., Wheeling, W. Va. Working barrel packing means. 1,828,030; Oct. 20.

Davis, Walter T., Parkersburg, W. Va. Plant protector. 1,828,031; Oct. 20.

Dawson, George H., Cambridge, Mass., assignor to Wilson-Jones Company, Chicago, Ill. Drawer pull and label holder. 1,827,934; Oct. 20.

Day, J. H., Company, et al. (See Kirchhoff, William G., assignor.)

Day, J. H., Company, The, et al. (See Sisson, Orville, assignor.)

Deca Disc Phonograph Company. (See Moore, William R., jr., assignor.)

Decaux, René, assignor to Societe des Etablissements, Gaumont, Paris, France. Moving picture machine. 1,828,032; Oct. 20.

Decker, Alonzo G., Baltimore County, Md., assignor to Black & Decker Manufacturing Company. Stud setter. 1,828,523; Oct. 20.

Deere & Company. (See Huddle, Edwin F., assignor.)

Deere & Company. (See Strandlund, Carl G., assignor.)

Delaney, Daniel J., East Newark, assignor to Arcturus Radio Tube Company, Newark, N. J. Heater type vacuum tube. 1,828,524; Oct. 20.

Delco Products Corporation. (See Chryst, William A., assignor.)

Delco Products Corporation. (See Harris, Mark, assignor.)

Delco Products Corporation. (See Neidermayer, Carl, assignor.)

Delco Products Corporation. (See Rossman, Edwin F., assignor.)

Delco-Remy Corporation. (See Hardman, Frederick J., assignor.)

Delco-Remy Corporation. (See Hartzell, Herman L., assignor.)

Delco-Remy Corporation. (See Holmes, John Q., assignor.)

Delco-Remy Corporation. (See Norviel, Harry E., assignor.)

Delco-Remy Corporation. (See Poole, Lora E., assignor.)

Delco-Remy Corporation. (See Poole, L. E., Holmes, and Goad.)

Delco-Remy Corporation. (See Teeter, Wilford H., assignor.)

De Liefde, William C., assignor to Naamlooze Vennootschap: Electro Zuurstofen Waterstoffabriek, Amsterdam, Netherlands. Polymerization product of acetylene and producing the same. 1,828,560; Oct. 20.

De Montmollin, Guillaume. (See Bommer, de Montmollin, Frohlich, Grieshaber, Jaek and Felix.)

De Montmollin, Guillaume, Basel, and M. Schmid, Riehen, near Basel, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Aza-dyestuffs of the pryazolone series and making same. 1,828,599; Oct. 20.

Denniss, Jeffrey, and T. Reid, Sydney, New South Wales, Australia. Tanning hides and skins. 1,828,130; Oct. 20.

Densmore, Benjamin V., Ridley Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reaction blading. 1,828,409; Oct. 20.

De Pree, Dick J., assignor to Herman Miller Clock Company, Zeeland, Mich. Clock case. Des. 85,368; Oct. 20.

Derbyshire, William, Los Angeles, Calif. Baby crib. 1,827,739; Oct. 20.

Derrick, William I., assignor to Westco Pump Company, Davenport, Iowa. Bearing for rotary pumps. 1,827,811; Oct. 20.

Derryberry, Ben F., Lewisburg, Tenn. Pencil sanding machine. 1,827,839; Oct. 20.

Destro, Joseph J., Cleveland, Ohio. Heel protector. 1,828,246; Oct. 20.

Devon Manufacturing Company. (See Lundgard, Ivar, assignor.)

De Witt, Arthur R., assignor of one-half to C. L. Wright, Harbor Springs, Mich. Boat plank fitting method. 1,828,103; Oct. 20.

Dexdale Hosiery Mills. (See Bock, W., and Matthews, assignors.)

Dezendorf, Richard L., Hollis, N. Y. Gas meter. 1,827,973; Oct. 20.

Dezendorf, Richard L., Hollis, N. Y. Gas meter. 1,827,974; Oct. 20.

Diamond, James K., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Belt and coupling therefor. 1,827,783; Oct. 20.

Dickerson, Byram S., Indianapolis, Ind. Rail joint. 1,827,840; Oct. 20.

Dickinson, Paul, Incorporated. (See Knutson, Harold, assignor.)

Dictaphone Corporation. (See Johnson, Arthur A., assignor.)

Diebold Safe & Lock Company. (See Paca, John P., assignor.)

Dimick, W. T. (See Emenhiser, Asa H., assignor.)

Ditchfield, Frank, assignor to The Youngstown Steel Door Co., Cleveland, Ohio. Car. 1,827,784; Oct. 20.

Ditto, Incorporated. (See Moll, Wilhelm K., assignor.)

Divekey, Harvey J., assignor to Illinois Supply Company, Aurora, Ill. Drinking apparatus for poultry. 1,828,104; Oct. 20.

Dochler Die-Casting Co. (See Morin, Louis H., assignor.)

Doroghy, Steven, Buffalo, N. Y. Band saw guide. 1,828,131; Oct. 20.

Dorr Company, The. (See Kivari, Arthur M., assignor.)

Dorr Company, The. (See Marriott, Alexander D., assignor.)

Doser, Arnold, Cologne-Mulheim, G. Mauthe, Cologne-Holweide, and A. Thauss, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New products obtainable from resins. 1,828,033; Oct. 20.

Dotterweich, Andrew J., assignor to Automatic Water Softener Company, Pittsburgh, Pa. Water softener. 1,828,282; Oct. 20.

Douthitt, Frank W., Ortonville, Minn. Cutter head for corn cutting machines. 1,828,647; Oct. 20.

Douthitt, Frank W., Ortonville, Minn. Cutter head for corn cutting machines. 1,828,648; Oct. 20.

Douthitt, Frank W., Ortonville, Minn. Cutter head for corn cutting machines. 1,828,649; Oct. 20.

Dover, David L., Seattle, Wash. Calendar attachment for fountain pens. 1,828,132; Oct. 20.

Dow Chemical Company, The. (See Ward, Louis E., assignor.)

Drag Eliminator Company. (See Aitken, Samuel, assignor.)
Dressler, Philip d'H., Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa. Kiln heating. 1,828,492; Oct. 20.
Dreyfus, Camille, New York, N. Y. Stiffening fabric and making the same. 1,828,397; Oct. 20.
Driemeyer, George F., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Electric motor truck. 1,827,975; Oct. 20.
Driver-Harris Company. (See Sammon, Joseph, assignor.)
Dubbs, Carbon P., Willmette, assignor to Universal Oil Products Company, Chicago, Ill. Treating oils. 1,828,398; Oct. 20.
Duckwitz, Walter F., et al. (See Barr, Roy L., assignor.)
Duer, Victor, and O. S. Hassing, Copenhagen, Denmark; said Hassing assignor to said Duer. Regulating device for engines. 1,828,650; Oct. 20.
Dunkley, Samuel J., Oakland, Calif., assignor, by mesne assignments, to Sprague Sells Corporation, Chicago, Ill. Hydrometer. 1,827,841; Oct. 20.
Dunlop Rubber Company Limited. (See Trobridge, G. W., Murphy, Twiss, and Gorham, assignors.)
Dupont, E. I., de Nemours & Company. (See Tattersall, Harold J., assignor.)
Dura Company, The. (See Floraday, Burton S., assignor.)
Dura Company, The. (See Haskins, H. B., Floraday, and Miller, assignors.)
E. M. S. Industrial Processes Limited. (See Salerni, Edoardo M., assignor.)
Easley, John W. (See Lucka, L. O., and Easley.)
Easter, George J. (See Benner, R. C., Easter, and Hawke.)
Eastern Expanded Metal Company. (See Arnold, David B., assignor.)
Eaton, Harrison H., assignor to The Electric Auto-Lite Company, Toledo, Ohio. Armature insulation machine. 1,827,740; Oct. 20.
Ebeling, Charles W., assignor to General Talking Pictures Corporation, New York, N. Y. Photoelectric cell light ray condenser. 1,828,399; Oct. 20.
Ebert, Joseph, Westmont, N. J., assignor to The Farastan Company, Philadelphia, Pa. Iodine addition products of quinoline carboxylic acids and derivatives thereof. 1,828,525; Oct. 20.
Eclipse Machine Company. (See Whitney, Maurice P., assignor.)
Edsall, William S., Belmont, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Insulating bushing. 1,827,935; Oct. 20.
Edsall, William S., Belmont, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Combined insulating bushing and transformer. 1,827,936; Oct. 20.
Edwards, Jonathan P. (See Mead, Edward S., assignor.)
Edwards, William W., Los Angeles, Calif. Drill press feed. 1,827,937; Oct. 20.
Eesti Patendi Aktsiaselts. (See Kulzinski, Nstislav, assignor.)
Egizio, Joseph C., Allentown, Pa. Bottle. Des. 85,369; Oct. 20.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking petroleum oil. 1,828,362; Oct. 20.
Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Treating hydrocarbon oils. 1,827,883; Oct. 20.
Einfalt, Johann, Nuremberg, Germany. Toy swimming animal. 1,828,034; Oct. 20.
Eisler, Charles, assignor to Eisler Electric Corporation, Newark, N. J. Disk valve for burners. 1,828,493; Oct. 20.
Eisler Electric Corporation. (See Eisler, Charles, assignor.)
Electrical Industries Manufacturing Company et al. (See Gage, Edward G., assignor.)
Electric Auto-Lite Company, The. (See Eaton, Harrison, H., assignor.)
Electro Metallurgical Company. (See Marshall, James G., assignor.)
Elliott, Joseph H., and R. A. Norbom, assignors to The Cincinnati Car Corporation, Cincinnati, Ohio. Truck for high speed interurban cars. 1,828,133; Oct. 20.
Ellis, Carleton, Montclair, N. J. Recovery of oil from spent fuller's earth. 1,828,035; Oct. 20.
Ellison, Edward H., Jamestown, N. Y. Fastening articles together. 1,827,884; Oct. 20.
Embree, Herbert, Hamilton, Ontario, Canada. Stove pipe. 1,828,105; Oct. 20.
Emenhiser, Asa H., Tulsa, assignor to W. T. Dimick, Oklahoma City, Okla. Coin controlled basket ball game. 1,827,885; Oct. 20.
Emerson, John H., Cambridge, Mass. Micro-manipulator. 1,828,460; Oct. 20.
Emery, Charles E., Los Angeles, Calif. Illuminated number plate for vehicles. 1,828,223; Oct. 20.
Endorf, Charles, Chicago, Ill. Toaster. 1,828,400; Oct. 20.
Englisch, O. B., et al. (See Moreton, Henry H., assignor.)
Enos, Elmer E., Spokane, Wash. Vehicle brake. 1,827,976; Oct. 20.
Ericson, Carl H., Boston, Mass. Internal combustion motor. 1,827,938; Oct. 20.
Erl, Otto, assignor to Otto Food Machinery Company, Oakland, Calif. Vegetable slicer. 1,827,977; Oct. 20.
Ertola, Sylvio C., San Francisco, Calif. Tool. 1,828,106; Oct. 20.
Evans, Edwin R., Chicago, Ill. Control mechanism for burners. 1,828,651; Oct. 20.
Evans, Owen B., assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Manufacture of water gas. 1,828,461; Oct. 20.
Evans Products Company. (See Snyder, Clifford L., assignor.)
Everts, Frank O., Kansas City, Mo. Reflector for telephone dials. 1,828,107; Oct. 20.
Ewins, Dossa D., Davenport, Iowa. Musical instrument. 1,827,978; Oct. 20.
Fabrenwald, Frank A., Chicago, Ill. Heat treating. 1,828,036; Oct. 20.
Fehrney, Emery H., Chicago, Ill. Carburetor. 1,828,134; Oct. 20.
Fairchild, E. E., Corporation, The. (See Villeré, Joseph S., assignor.)
Faragher, Warren F. (See Morrell, J. C., and Faragher.)
Faraston Company. (See Ebert, Joseph, assignor.)
Farrand, Hiram A., assignor to Hiram A. Farrand, Inc., Berlin, N. H. Resilient rules. 1,828,401; Oct. 20.
Farrand, Hiram A., Inc. (See Farrand, Hiram A., assignor.)
Fasulo, Louis, Brooklyn, N. Y. Tailoring implement-set. 1,828,494; Oct. 20.
Fausek, Arthur J., and I. F., St. Louis, Mo. Torch. 1,828,135; Oct. 20.
Fausek, Irwing F. (See Fausek, Arthur J. and I. F.)
Faverty, Clyde B., assignor to Ryan Mnfg. Corporation, Chicago, Ill. Road grader main frame. 1,828,526; Oct. 20.
Faverty, Clyde B., Hammond, Ind., and W. J. Schlacks, assignors to Ryan Manufacturing Corporation, Chicago, Ill. Double reversible moldboard for graders. 1,828,711; Oct. 20.
Fedco System, Inc. (See Pvalski, Bernard J., assignor.)
Federal Telegraph Company. (See Kolster, Frederick A., assignor.)
Federal Telegraph Company. (See Kolster, F. A., and Kruesi, assignors.)
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,370; Oct. 20.
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,371; Oct. 20.
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,372; Oct. 20.
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,373; Oct. 20.
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,374; Oct. 20.
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,375; Oct. 20.
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,376; Oct. 20.
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,377; Oct. 20.
Fehr, Fred, Palisade, N. J. Embroidered lace edging. Des. 85,378; Oct. 20.
Felix, Friedrich. (See Bommer, M., de Montmollin, Frohlich, Griesbaber, Jaeck, and Felix.)
Ferrier, Paul, Paris, France. Apparatus for the molding of long objects by centrifugal treatment. 1,828,037; Oct. 20.
Fibre Specialty Manufacturing Company. (See Scarlett, George B., assignor.)
Finley, Charles A., Rutherford, N. J., assignor to Boorum & Pease Company, New York, N. Y. Loose leaf ledger binder. 1,828,600; Oct. 20.
Firestone Steel Products Company, The. (See Swain, Joseph G., assignor.)
Firestone Tire and Rubber Company, The. (See Brown, Roy W., assignor.)
Firestone Tire and Rubber Company, The. (See Pade, Max H., assignor.)
Fischer, Howard L., St. Paul, Minn. Pencil. 1,828,527; Oct. 20.
Fisher, Ernest S., assignor to Utah Metals Flux Company, Salt Lake City, Utah. Improving metals, and product thereof. 1,828,701; Oct. 20.
Fleming, William J. (See Jones, B. W., and Fleming.)
Flintkote Company, The. (See Levin, Harold L., assignor.)
Floraday, Burton S. (See Haskins, H. B., Floraday, and Miller.)
Floraday, Burton S., assignor to The Dura Company, Toledo, Ohio. Locking handle assembly. 1,827,979; Oct. 20.
Florex Gardens, The. (See Müller, Otto A., assignor.)
Flower, Arthur H. (See Geyer, H. D., Flower, and Housekeeper.)
Flowers, Thomas E., Memphis, Tenn. Magazine gun. 1,828,108; Oct. 20.
Föhl, Carl, Berlin, assignor to Ruthsaccumulator Aktiebolag, Berlin, Germany. Power plant. 1,828,528; Oct. 20.
Foo, Lee S., Manchester, N. H. Automatic humidifier. 1,828,702; Oct. 20.
Forbes, Henry C., assignor to Zenith Radio Corporation, Chicago, Ill. System of radio communication. 1,828,529; Oct. 20.

Ford, Hannibal C., Jamaica, assignor to Ford Instrument Company, Inc., New York, N. Y. Range and bearing keeper. 1,827,812; Oct. 20.
Ford Instrument Company. (See Ford, Hannibal C., assignor.)
Forster, Thomas E., Wichita, Kans. Apparatus for dislodging hard-pressed flour from bran. 1,828,247; Oct. 20.
Fort Pitt Bedding Company. (See Wolf, Harry E., assignor.)
Foster Wheeler Corporation. (See Blizard, John, assignor.)
Foster Wheeler Corporation. (See Keenan, Walter F., jr., assignor.)
Fouts, Samuel E., Los Angeles, Calif. Heating system. 1,828,038; Oct. 20.
Fowler, Ralph S., San Francisco, Calif. Fastening means for belts. Re18,232; Oct. 20.
Fox Automotive Products Corporation. (See Henke, Frederick W., jr., assignor.)
Fox, Edgar N., assignor to The Garlock Packing Company, Palmyra, N. Y. Piston rod packing and scraping device. 1,828,178; Oct. 20.
Fox Film Corporation. (See Balsley, James R., assignor.)
Fox, William H., Minneapolis, Minn. Tennis racket. 1,828,109; Oct. 20.
Fraser, Warren F., Westboro, Mass. Work supporting mechanism for grinding machines. 1,828,530; Oct. 20.
Frederics, E., Inc. (See Pinnock, Douglas R., assignor.)
Frederics, Ernest O., New York, N. Y. Sectional treatment in permanent waving of hair. 1,827,785; Oct. 20.
Freedlander, Abraham L., Dayton, Ohio. Pulley. 1,828,136; Oct. 20.
Freeman, Samuel, Boston, Mass. Closure for containers. 1,828,224; Oct. 20.
Frey, Charles N., and E. B. Brown, New York, and C. Craig, Peekskill, N. Y., assignors, by mesne assignments, to Standard Brands, Incorporated, Dover, Del. Food product. 1,828,283; Oct. 20.
Friedberg, Leonard, assignor to Furlage Manufacturing Company, Inc., New York, N. Y. Vanity case. 1,828,652; Oct. 20.
Frigidaire Corporation. (See Chilton, Ralph H., assignor.)
Frigidaire Corporation. (See Chisholm, Theodore L., assignor.)
Frigidaire Corporation. (See Gardner, Charles F., assignor.)
Frigidaire Corporation. (See Henney, Charles F., assignor.)
Frigidaire Corporation. (See Horlacher, Elmer L., assignor.)
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigidaire Corporation. (See Keighley, Lloyd M., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frigidaire Corporation. (See Riedel, Walter W., assignor.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frohlich, Jaroslaw. (See Bommer, M., de Montmollin, Frohlich, Griesbaber, Jaeck, and Felix.)
Frost, Thomas H., Cambridge, Mass. Fine edged blade. 1,827,870; Oct. 20.
Frost, Thomas H., Cambridge, Mass. Fine edged blade. 1,827,871; Oct. 20.
Frost, Thomas H., Cambridge, Mass. Fine edged blade. 1,827,872; Oct. 20.
Fry, Charles A., C. Harsh, and R. M. Schory, Minerva, assignors to The Metropolitan Paving Brick Company, Canton, Ohio. Ceramic block cutting apparatus and process. 1,828,462; Oct. 20.
Frye, Richard T., Blauvelt, N. Y. Floor drain. 1,828,601; Oct. 20.
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle. Des. 85,379; Oct. 20.
Fuller, Charles H., Portland, Oreg. Davit for lifeboats. 1,828,363; Oct. 20.
Furlager Manufacturing Company. (See Friedberg, Leonard, assignor.)
Gage, Edward G., Brooklyn, assignor of one-half to Electrical Industries Manufacturing Company, and one-half to L. Attinger, New York, N. Y. Radiant energy distance determining system and apparatus. 1,828,531; Oct. 20.
Galassi, Pasquale, New York, N. Y. Composite floor dividing strip. 1,828,653; Oct. 20.
Galbarini, Antonio, Milan, Italy. Acoustic instrument. 1,828,654; Oct. 20.
Galetzky, Joseph, New York, N. Y. Electric advertising device. 1,827,980; Oct. 20.
Gallagher, Samuel J., Brawley, Calif. Refrigerated produce package. 1,828,179; Oct. 20.
Garbutt, Frank E., Hollywood, Calif., assignor to Paramount Publix Corporation. Film contact system. 1,828,364; Oct. 20.
Gardner, Arthur. (See Kiliani, Richard B. T., assignor.)
Gardner, Charles F., New Carlisle, assignor, by mesne assignments, to Frigidaire Corporation, Dayton, Ohio. Expansion chamber for refrigerating apparatus. 1,827,741; Oct. 20.
Gardner, Clyde, deceased, by E. B. Gardner, administratrix, assignor to Gardner Company, Ebensburg, Pa. Calculating machine. 1,828,180; Oct. 20.
Gardner Company. (See Gardner, Clyde, assignor.)
Gardner, Edna B., administratrix. (See Gardner, Clyde.)
Garlock Packing Company, The. (See Fox, Edgar N., assignor.)
Garrison, Vance C., Nebish, Minn. Wrench. 1,828,561; Oct. 20.
Gates, Benjamin L., assignor of one-half to H. L. Beamish, Spokane, Wash. Control mechanism for refrigerating systems. 1,827,981; Oct. 20.
Gay, Stephen H., Dallas, Tex. Closure operator. 1,828,137; Oct. 20.
General Aniline Works, Inc., (See Doser, A., Mauthe, and Thauss, assignors.)
General Aniline Works, Inc. (See Krzikalla, Hans., assignor.)
General Electric Company. (See Abbott, Charles C., assignor.)
General Electric Company. (See Biermanns, Josef, assignor.)
General Electric Company. See Crémer, Michel, assignor.)
General Electric Company. (See Dantsizen, Christian, assignor.)
General Electric Company. (See Hardesty, Llewellyn C., assignor.)
General Electric Company. (See Hinds, Henry P., assignor.)
General Electric Company. (See Jones, B. W., and Fleming, assignors.)
General Electric Company. (See Kell, Ray D., assignor.)
General Electric Company. (See Kellogg, Edward W., assignor.)
General Electric Company. (See Langmuir, Irving, assignor.)
General Electric Company. (See Müller, Gustav W., assignor.)
General Electric Company. See Obermaier, Carl F., assignor.)
General Electric Company. (See Riggs, Leland W., assignor.)
General Electric Company. (See Rupprecht, Konrad, assignor.)
General Electric Company. (See Thearle, Ernest L., assignor.)
General Electric Company. (See Townsend, George R., assignor.)
General Electric Company. (See Weiske, P., and Rupprecht, assignors.)
General Electric Company. (See Whitney, Willis R., assignor.)
General Electric X-Ray Corporation. (See Wantz, J. B., and Grobe, assignors.)
General Motors Corporation. (See Schwarze, Herman, assignor.)
General Motors Corporation. (See Williams, J. F., and Cramer, assignors.)
General Steel Castings Corporation. (See Driemeyer, George F., assignor.)
General Steel Castings Corporation. (See Travilla, James C., jr., assignor.)
General Talking Pictures Corporation. (See Ebeling, Charles W., assignor.)
Georgas, Christos. (See Nenna, Gennaro, assignor.)
Getty, Fred I., Jennings, La. Well packer. 1,827,842; Oct. 20.
Geyer, Harvey D., A. H. Flower, and J. C. Housekeeper, assignors to The Inland Manufacturing Company, Dayton, Ohio. Heat insulating material. 1,828,365; Oct. 20.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Flexible connecter. 1,828,402; Oct. 20.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Steering wheel and horn button mounted therein. 1,828,403; Oct. 20.
Gilbert, A. C., Company, The. (See Hornby, Frank, assignor.)
Gillespie Auto Laundry System, Inc. (See Gillespie, Bee K., assignor.)
Gillespie, Bee K., assignor to Gillespie Auto Laundry System, Inc., Chicago, Ill. Apparatus for cleaning and polishing automobiles. 1,827,886; Oct. 20.
Gillespie, Bee K., assignor to Gillespie Auto Laundry System, Inc., Chicago, Ill. Apparatus for treating vehicle tops. 1,827,887; Oct. 20.
Gillespie, James P., New York, N. Y. Concrete transporting apparatus. 1,828,181; Oct. 20.
Gliling, Preston E., Haddon Heights, assignor to Radio Condenser Company, Camden, N. J. Electrical condenser. 1,827,939; Oct. 20.
Gilpin, Victor L., Baltimore, Md. Ignition circuit and other lock. 1,828,562; Oct. 20.
Gilson-Bolens Manufacturing Company. (See Bink, Theodore, assignor.)
Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical signaling. 1,827,786; Oct. 20.
Globe Machinery & Supply Company. (See Bristol, Cyrus J., assignor.)
Goad, Louis C. (See Poole, L. E., Holmes, and Goad.)
Goldberg, Herman, Washington, D. C. Direction indicating signal. 1,828,404; Oct. 20.
Golding, Bert Y., Long Beach, and J. J. Burkhard, Anaheim, Calif. Sealing paste. 1,828,182; Oct. 20.
Goodwin, Ernest G., Pelham, assignor to Standard Coupler Company, New York, N. Y. Car construction. 1,828,563; Oct. 20.

Goodwin, William G., Royal Oak, Mich. Casting. 1,828,495; Oct. 20.
Gorham, Walter G. (See Trobridge, G. W., Murphy, Twiss, and Gorham.)
Granat, Joseph, San Francisco, Calif. Finger ring. Des. 85,380; Oct. 20.
Granat, Joseph, San Francisco, Calif. Finger ring. Des. 85,381; Oct. 20.
Grant, Albert E., New York, N. Y., assignor to Caloroil Burner Corporation. Oil burner. 1,828,183; Oct. 20.
Green, Estill I., East Orange, N. J., assignor to American Telephone and Telegraph Company. Piezo electric frequency eliminator. 1,827,843; Oct. 20.
Greenwood, Talma T., East Templeton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Magnetically engaged contact members for electric switches. 1,827,940; Oct. 20.
Greer, Frederick W., Cambridge, Mass. Confection coating machine. 1,828,405; Oct. 20.
Greer, John H., assignor to Bankers Utilities Co., San Francisco, Calif. Bank. 1,827,888; Oct. 20.
Grenagle, James B., assignor of one-half to W. W. Varney, Baltimore, Md. Mold lining. 1,827,742; Oct. 20.
Greunlesen, Emil N., Sioux City, Iowa. Submarine aircraft carrier. 1,828,655; Oct. 20.
Grieshaber, Fritz. (See Bommer, M., de Montmollin, Frohlich, Grieshaber, Jaeck, and Felix.)
Grill, Albert, Watkins, Minn. Egg saver trap. 1,828,406; Oct. 20.
Grobe, Julius J. (See Wantz, J. B., and Grobe.)
Groehn, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Metal automobile body. 1,827,743; Oct. 20.
Grondahl, Lars O., Pittsburgh, and P. N. Bossart, assignors to The Union Switch & Signal Company, Swissvale, Pa. Electric train signaling apparatus. 1,828,039; Oct. 20.
Gross, Henry J., Chicago, Ill. Electric log. 1,827,941; Oct. 20.
Grossgebauer, John, Paterson, N. J. Identification means for ribbons and the like. 1,827,744; Oct. 20.
Grossman, Herman P., Boonville, Ind. Lubricant dispenser. 1,827,844; Oct. 20.
Grossmann, Paul. (See Bally, O., and Grossmann.)
Grosso, Dante, assignor to Officine Meccaniche Fratelli Grosso & Tribola, Sagiano Micca, Biella, Italy. Shock absorber for vehicles. 1,828,602; Oct. 20.
Grund, Fletcher D., Weston, assignor to The American Swiss Company, Toledo, Ohio. Dog releasing device for door latches. 1,827,982; Oct. 20.
Guinzburg, Victor, assignor to I. B. Kleiner Rubber Company, New York, N. Y. Extensible band. 1,827,942; Oct. 20.
Gustafson, Axel E., Salem, S. Dak. Elevating grader. 1,828,532; Oct. 20.
Guth, Edwin F., Webster Groves, Mo. Lighting unit for reflected illumination. Des. 85,382; Oct. 20.
Guy, Henry L., Hale, England, assignor to Westinghouse Electric & Manufacturing Company. Turbine support. 1,828,407; Oct. 20.
Guy, Henry L., Hale, England, assignor to Westinghouse Electric & Manufacturing Company. Elastic fluid turbine casing. 1,828,408; Oct. 20.
Gwinn, Joseph M., jr., Buffalo, N. Y. Aircraft. 1,828,184; Oct. 20.

Haas, Lucien L., assignor to Buffalo Pressed Steel Company, Buffalo, N. Y. Muffler. 1,828,110; Oct. 20.
Haga, Sojiro, Tokyo-Shi, Japan. Protecting steam boilers against flowing back of boiler water when feeding system leaks. 1,828,138; Oct. 20.
Hagen, John H., assignor to The H. H. Miller Industries Company, Canton, Ohio. Freezing machine. 1,827,873; Oct. 20.
Hagemann, Louis F., assignor to American Sales Book Company, Limited, Niagara Falls, N. Y. Lever feed autographic register. 1,827,745; Oct. 20.
Hahm, George H., Metuchen, N. J. Fuel tank for outboard motors. 1,828,040; Oct. 20.
Haley, Dennis C. (See Lunt, J. R., and Haley.)
Hall, Randolph F., Ithaca, N. Y. Airplane. 1,827,845; Oct. 20.
Haller, Arnold, Baden, and S. Rump, Zurich, assignors to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Tap switch. 1,828,496; Oct. 20.
Hallowell, Howard T. (See Bennett, F., and Hallowell.)
Hallowell, Howard T., and F. Bennett, assignors to Standard Pressed Steel Co., Jenkintown, Pa. Portable work bench. 1,828,248; Oct. 20.
Hamacher, Wilhelm, Berlin-Wilmersdorf, Germany. Garter construction. 1,828,041; Oct. 20.
Hammers, Morgan J., Wilmette, Ill. Restricting atomized fluid discharge. 1,828,463; Oct. 20.
Hammond, Gordon, Ashland, Va. Holder for flower containers. 1,828,249; Oct. 20.
Handler, Oscar, New York, N. Y. Tent. 1,828,656; Oct. 20.
Hanna, Clinton R., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vibratory system. 1,828,284; Oct. 20.
Hansen, A. L., Mfg. Company. (See Hansen, Augie L., assignor.)
Hansen, Augie L., assignor to A. L. Hansen Mfg. Company, Chicago, Ill. Window regulator for vehicle bodies. 1,827,746; Oct. 20.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Air line oiler. 1,828,185; Oct. 20.
Hansgirg, Fritz. (See Stransky, S., and Hansgirg.)
Hapgood, Clarence H., assignor to Toledo Scale Company, Toledo, Ohio. Scale indicating means. 1,828,225; Oct. 20.
Harbison, Clarence B., assignor to The Ohio Steel Foundry Company, Lima, Ohio. Side frame section. 1,827,787; Oct. 20.
Hardesty, Llewellyn C., Scotia, N. Y., assignor to General Electric Company. System of motor control. 1,828,564; Oct. 20.
Harding, William N., and A. H. Krugman, Elyria, Ohio. Removable faceplate for vise jaws. 1,828,042; Oct. 20.
Hardman, Frederick J., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Engine starting apparatus. 1,828,366; Oct. 20.
Hardman, Frederick J., Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind. Windshield cleaner. 1,828,410; Oct. 20.
Hardy, Charles, assignor to Wales Novelties Corporation, New York, N. Y. Pocket cigar lighter. 1,828,111; Oct. 20.
Harnischfeger Corporation. (See Been, Paul, assignor.)
Harris, Mark, Detroit, Mich., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Friction spring brake. 1,828,367; Oct. 20.
Harrison, William R., Massillon, assignor to The Spun Steel Corporation, Canton, Ohio. Roller spun metal manufacture. 1,828,464; Oct. 20.
Harsh, Clarence. (See Fry, C. A., Harsh, and Schory.)
Hartford-Empire Company. (See Bacheller, Raymond G., assignor.)
Hartford-Empire Company. (See Barker, William T., jr., assignor.)
Hartford-Empire Company. (See Hiller, Everett O., assignor.)
Hartford-Empire Company. (See Lorenz, William A., assignor.)
Hartford-Empire Company. (See Marsh, Gilbert C., assignor.)
Hartford-Empire Company. (See Miller, William J., assignor.)
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford-Empire Company. (See Peiler, K. E., and Barker, assignors.)
Hartford-Empire Company. (See Rankin, Carl H., assignor.)
Hartford-Empire Company. (See Rowe, George E., assignor.)
Hartmann, August, Wuppertal-Oberbarmen, and W. Höfinghoff, Wuppertal-Barmen, Germany, assignors to American Bemberg Corporation, New York, N. Y. Spinning cuprammonium silk by the stretch process. 1,828,497; Oct. 20.
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition coil. 1,828,411; Oct. 20.
Harvard Company, The. (See Monnot, Edward L., assignor.)
Harvey, Leo M., Los Angeles, Calif. Metal strap for boxes, bales, or the like. 1,828,186; Oct. 20.
Haskins, Howard B., B. S. Floraday, and D. Miller, assignors, by mesne assignments, to The Dura Company, Toledo, Ohio. Window guideway. 1,827,983; Oct. 20.
Hassensall, Louis W., Toledo, Ohio. Carrier. 1,828,412; Oct. 20.
Hassing, Oluf S. (See Duer, V., and Hassing.)
Hawke, Clarence E. (See Benner, R. C., Easter, and Hawke.)
Hawkes, Albert J., North Cambridge, Mass. Handle clamp. 1,828,250; Oct. 20.
Hawrylasz, Nykyfor, assignor of one-half to H. E. Andros, Minot, N. Dak. Window cleaning squeegee. 1,828,139; Oct. 20.
Hawthorn, John B., and S. L. Levar, Cairo, Ga. Motor. 1,828,657; Oct. 20.
Haynes, George P., Brooklyn, assignor to Todd Dry Dock, Engineering & Repair Corporation, New York, N. Y. Pulverized coal burner. 1,828,465; Oct. 20.
Heany, John A., New Haven, Conn., assignor to World Bestos Corporation, Paterson, N. J. Asbestos tape and yarn and making the same. 1,828,112; Oct. 20.
Heat Treating Company. (See Laird, Wilbur G., assignor.)
Hedgpeth, Theron L., assignor of one-half to N. M. Barnhart, Oakland, Calif. Adjustable support for portable power saws. 1,828,043; Oct. 20.
Hegeler Zinc Company, The. (See McCreary, Miller A., assignor.)
Heilpern, Josef, and F. G. Back, Vienna, Austria, assignors, by mesne assignments, to The Photor Corporation, New York, N. Y. Apparatus for taking photos of the cavities of the body. 1,828,140; Oct. 20.
Heising, Raymond A., Millburn, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N.Y. Oscillation circuits. 1,828,498; Oct. 20.
Helland, Martin, Tacoma, Wash. Cup-cake dropping machine. 1,828,565; Oct. 20.
Hemp, Paul L., Winona, Minn. Massaging machine. 1,827,874; Oct. 20.

Henderson, Curtis L., Wichita, Kans. Oil refining. 1,828,466; Oct. 20.
Henke, Frederick W., jr., assignor to Fox Automotive Products Corporation, Philadelphia, Pa. Antitheft tire lock. 1,828,658; Oct. 20.
Henney, Charles F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,827,747; Oct. 20.
Herdman, George H., Erie, Pa. Combination drift pin and wrench. 1,828,142; Oct. 20.
Herrick, Ralph R., Pittsburgh, Pa., assignor to Universal Oil Products Company, Chicago, Ill. Expansion drum. 1,828,368; Oct. 20.
Herweg, Fred G., Chicago, Ill. Necktie clasp. 1,827,889; Oct. 20.
Hess, Sylvan E., et al. (See Stevens, Perley E., assignor.)
Hesse, Leonard, Plymouth, Wis. Circuit control. 1,828,321; Oct. 20.
Hickey, Artemas S., Los Angeles, Calif. Thermo-air cooled pipe stem. 1,828,044; Oct. 20.
Hickok, Arthur S. (See Myers, Hubert A., assignor.)
Hicks, William W., San Francisco, Calif. Electric heater. 1,827,788; Oct. 20.
Hill, Leland H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Flow indicator. 1,827,813; Oct. 20.
Hiller, Everett O., assignor to Hartford Empire Company, Hartford, Conn. Method and apparatus for feeding glass charges of different colors. 1,828,226; Oct. 20.
Hilpot, William F., Frenchtown, N. J. Incubator mechanism. 1,827,984; Oct. 20.
Hinds, Henry P., Pittsfield, Mass., assignor to General Electric Company. Electric fuse. 1,828,659; Oct. 20.
Hines, Edward W., trustee. (See McFadin, Searcy L., assignor.)
Hirsch, Paul A., New York, N. Y. Outfeeding means for fuel pulverizing machines. 1,828,712; Oct. 20.
Hlavac, Anthony, Chicago, assignor to E. J. Hubbard, Berwyn, Ill. Bobbin. 1,827,875; Oct. 20.
Hobbs, Elbert R., Castleford, Idaho, and A. V. Stombaugh, Holbrook, Nebr. 1,828,143; Oct. 20.
Hodges, Vera C., Los Angeles, Calif. Engine starter. 1,828,369; Oct. 20.
Hoe, R., & Co. (See Schmidt, Louis A., assignor.)
Hoffman High Pressure Equipment Company. (See Mahoney, Burton J., assignor.)
Hoffman Specialty Company. (See Simpson, William K., assignor.)
Hoffmann, Henry W., Weissport, assignor to Ajax Hosiery Mills, Phoenixville, Pa. Full fashioned stocking and producing same. 1,828,533; Oct. 20.
Höfinghoff, Walter. (See Hartmann, A., and Höfinghoff.)
Holland, Clinton H., Groveland, Mass. Cake turner. 1,828,187; Oct. 20.
Holley, Cecil C., Charleston, W. Va. Trolley meat hook. 1,828,603; Oct. 20.
Holman, Arthur J., Boston, Mass. Apparatus for grinding and polishing spherical lenses. 1,827,748; Oct. 20.
Holmes, John Q. (See Poole, L. E., Holmes, and Goad.)
Holmes, John Q., assignor to Delco-Remy Corporation, Anderson, Ind. Apparatus for making coils of insulated wire. 1,828,413; Oct. 20.
Holmgren, Oscar F. (See Holmgren, Otto W., assignor.)
Holmgren, Otto W., New York, assignor to O. F. Holmgren, White Plains, N. Y. Automatic multirecord expression mechanism. 1,827,814; Oct. 20.
Holmquist, Fred N., Phoenix, Ariz. Apparatus for distilling liquids. 1,827,846; Oct. 20.
Homer, Edward C., and W. D. Buckingham, Southampton, assignors to The Western Union Telegraph Company, New York, N. Y. Method of and apparatus for driving tuning forks. 1,828,660; Oct. 20.
Horlacher, Elmer L., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerator. 1,827,749; Oct. 20.
Hormel, August. (See Wagner, Charles, and Hormel.)
Hornby, Frank, Liverpool, England, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Constructional toy. 1,828,045; Oct. 20.
Horton, Allen A., Plymouth, assignor to Burroughs Adding Machine Company, Detroit, Mich. Calculating machine. 1,827,890; Oct. 20.
Hosking, Richard T., Wilmette, Ill., assignor, by mesne assignments, to H. R. Hough Company. Lock washer. Re18,227; Oct. 20.
Hough, H. R., Company. (See Hosking, Richard T., assignor.)
House, Samuel G., and R. C. Snell, assignors, by mesne assignments, to American Refrigerator Car Company, Miami, Fla. Automatic control for refrigerators. 1,828,566; Oct. 20.
Housekeeper, Jacob C. (See Geyer, H. D., Flower, and Housekeeper.)
Howard, Frank H., Reading, assignor to The Push Button Electric Control Corporation, Reading, Pa. Motor control. 1,828,113; Oct. 20.
Howard, Russell S., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing carbon granules. 1,828,046; Oct. 20.
Howell Electric Motors Company. (See Yost, Norman S., assignor.)
Hubbard, Eber J. (See Hlavac, Anthony, assignor.)
Hubbard, William H., Muncie, Ind. Mating spur gear. 1,828,114; Oct. 20.

Huddle, Edwin F., assignor to Deere & Company, Moline, Ill. Slip clutch. 1,828,370; Oct. 20.
Hudson Motor Car Company. (See Groehn, Otto J., assignor.)
Hueber, Henry, assignor to Trico Products Corporation, Buffalo, N. Y. Dual wiper windshield cleaner. 1,828,713; Oct. 20.
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,750; Oct. 20.
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,815; Oct. 20.
Hullings, Otis H., Alexandria, Va. Truck. 1,827,847; Oct. 20.
Humphreys, Ira B., Denver, Colo. Hydraulic drill. 1,828,604; Oct. 20.
Humphreys, Ira B., Denver, Colo. Drilling mechanism. 1,828,605; Oct. 20.
Hunkele, Jacob A., Pittsburgh, Pa. Laundry shaking out table. 1,827,985; Oct. 20.
Hurlbut, Francis A. (See Pryor, Eric A. C., and Hurlbut.)
Husted, H. A., Company, The. (See Husted, Harry A., assignor.)
Husted, Harry A., Cleveland, Ohio, assignor to The H. A. Husted Company, Detroit, Mich. Steering wheel. 1,828,047; Oct. 20.
Hutto Engineering Company. (See Hutto, Marsden C., assignor.)
Hutto, Marsden C., Detroit, Mich., assignor to Hutto Engineering Company, Inc. Device for grinding external cylindrical surfaces. 1,827,789; Oct. 20.
Hyde, Ralph E., Cleveland, and D. Schappi, Lakewood, assignors to The Osther Manufacturing Company, Cleveland, Ohio. Machine for cutting off pipe, bar stock, and the like. 1,828,371; Oct. 20.
I. G. Farbenindustrie Aktiengesellschaft. (See Jochheim, Hermann, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Müller-Cunradi, Martin, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Rotger, H., and Stoewener, assignors.)
Iglehart, Richard S., assignor to The Bauer Brothers Company, Springfield, Ohio. Grinding mill. 1,827,986; Oct. 20.
Illingworth, William and W. H., Scarborough, Ontario, Canada. Turntable. 1,828,414; Oct. 20.
Illingworth, William H. (See Illingworth, W. and W. H.)
Illinois Supply Company. (See Divekey, Harvey J., assignor.)
Ilnicki, Klemens, Stryj, Poland. Heat-transmitting support for cooking utensils. 1,827,816; Oct. 20.
Ingersoll, Howard L., Stamford, Conn. Electric locomotive. 1,827,817; Oct. 20.
Ingersoll-Rand Company. (See Baker, Charles S., assignor.)
Ingersoll-Rand Company. (See Curtis, John C., assignor.)
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Ingersoll-Rand Company. (See Simmons, Charles W., assignor.)
Inland Manufacturing Company, The. (See Chilton, Ralph H., assignor.)
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
Inland Manufacturing Company, The. (See Geyer, H. D., Flower, and Housekeeper, assignors.)
Inland Manufacturing Company. (See Van Deventer, Harry R., assignor.)
International Combustion Engineering Corporation. (See Jackson, George P., assignor.)
International Combustion Engineering Corporation. (See Wood, Wilfred R., assignor.)
International Harvester Company. (See Beall, William L., assignor.)
International Harvester Company. (See Johnston, E. A., and Baker, assignors.)
International Harvester Company. (See Sandstrom, Felix C., assignor.)
International Motor Company. (See Loeffler, Bruno, assignor.)
International Motor Company. (See Matthews, Philip E., assignor.)
International Patents Development Company. (See McCoy, R. O., and Sjostrom, assignors.)
International Precipitation Company. (See Anderson, Evald, assignor.)
International Projector Corporation. (See Kindelmann, A., and Boecking, assignors.)
International Resistance Company. (See Pender, Harold, assignor.)
Irgens, Finn T., assignor to Outboard Motors Corporation, Milwaukee, Wis. Internal combustion engine. 1,827,818; Oct. 20.
Iron Fireman Manufacturing Company. (See Carter, Haskell C., assignor.)
Isaac, Harold B. (See Moecker, H., jr., and Isaac.)

Jackson, George P., Flushing, assignor to International Combustion Engineering Corporation, New York, N. Y. Steam generating installation. 1,828,467; Oct. 20.
Jackson, Martin L., and J. R. Carter, Winston-Salem, N. C. Dispensing, measuring and computing device. 1,828,188; Oct. 20.

Jueck, Wolfgang. (See Bommer, M., de Montmollin, Frohlich, Griesshaber, Jaeck, and Felix.)
Janeway, Robert N. (See Syrovy, A. J., and Janeway,)
Janik, Eduard, Vienna, Austria. Automatic variable speed gear. 1,828,606; Oct. 20.
Janning, René. (See Adam, A. E., and Janning.)
Jantzen Knitting Mills. (See Bergh, Philip, assignor.)
Jarvis, W. B., Company. (See Ruppel, Frederick C., assignor.)
Jasinski, Wladyslaw, Chicago, Ill. Walking cane. 1,828,144; Oct. 20.
Jenkins Bros. (See Yardley, Farnham, assignor.)
Jensen, Friedrich, Hanover, Germany. Syringe. 1,828,661; Oct. 20.
Jevons, William, Wakefield, Kans. Baby chick waterer. 1,828,048; Oct. 20.
Jochheim, Hermann, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of acetaldehyde and acetic acid. 1,828,372; Oct. 20.
Johns, George M., Sappington, Mo. Retort. 1,828,499; Oct. 20.
Johnson, Arthur A., assignor to Dictaphone Corporation, Bridgeport, Conn. Sound receiving device. 1,827,943; Oct. 20.
Johnson, Chester F., Detroit, Mich. Carburetor. 1,828,415; Oct. 20.
Johnson, Frederick H., Detroit, Mich. Advertising sign. 1,828,703; Oct. 20.
Johnson, George T. (See Spiller, G. A., and Johnson.)
Johnson, Wilmott W. (See Novotny, E. E., and Johnson.)
Johnston, Clarence W. H., Dallas, Tex. Apparatus for bracing vehicles in freight cars. 1,828,145; Oct. 20.
Johnston, Edward A., and D. B. Baker, Chicago, Ill., assignors to International Harvester Company. Doffing mechanism for cotton pickers. 1,828,534; Oct. 20.
Joksch, Rudolf, Vienna, Austria. Indicating mechanism for weighing apparatus. 1,827,848; Oct. 20.
Jones, Allan H., assignor to Roller Bearing Company of America, Trenton, N. J. Feeder. 1,828,662; Oct. 20.
Jones, Benjamin W., and W. J. Fleming, Schenectady, N. Y., assignors to General Electric Company. Controller for electric motors. 1,828,567; Oct. 20.
Jones Gas Process Corporation. (See Jones, L. B., assignor.)
Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Friction gearing. 1,827,891; Oct. 20.
Jones, Leon B., San Francisco, Calif., assignor to Jones Gas Process Corporation. Apparatus for the manufacture of gas from oil. 1,828,704; Oct. 20.
Jopp, August, Zella-Mehlis, Germany. Machine for grinding simultaneously two opposed surfaces of articles of prismatic or other shape especially nuts. 1,828,663; Oct. 20.
Joseph, Alfred, Enghein, assignor to Compagnie Internationale pour la Fabrication des Essences et Petrols, Paris, France. Apparatus for the treatment of gas or a mixture of gas and vapor in the presence of catalytic agents and for the reactivation of such agents. 1,828,146; Oct. 20.
Juengst, Fred W., and O. M. Anderson, assignors to Landers, Frary & Clark, New Britain, Conn. Safety device for centrifugal driers. 1,828,227; Oct. 20.
K-D Lamp Co., The. (See Phillips, Charles C., assignor.)
Kadow Foundation Inc. (See Smith, David C., assignor.)
Kahlhofer, Heinz, Vienna, Austria. Hot air hair waving device. 1,828,664; Oct. 20.
Kamman, William H., St. Paul, Minn. Portable bath house. 1,828,147; Oct. 20.
Kane, George A., South Orange, and J. E. McCafferty, Newark, N. J. Bottle carrier. 1,828,416; Oct. 20.
Kapperman, Henry F., Bassett, Nebr. Brake mechanism. 1,828,568; Oct. 20.
Kardad, Inc. (See Weintraub, Harry H., assignor.)
Kass, Julius, New York, N. Y. Portable display stand. 1,828,555; Oct. 20.
Kauffman, Lester S., Richmond Heights, assignor to American Stove Company, St. Louis, Mo. Gas range construction. 1,828,665; Oct. 20.
Kauffman, Lester S., assignor to American Stove Company, St. Louis, Mo. Oven flue outlet. 1,828,666; Oct. 20.
Kawalle, William E., Manitowoc, Wis. Spring wheel. 1,828,322; Oct. 20.
Kawneer Company, The. (See Plym, Francis J., assignor.)
Kay, Lloyd D., Los Angeles, Calif. Truck wheel. 1,828,500; Oct. 20.
Kaynee Company, The. (See Amsden, Nelson E., assignor.)
Kazenmaier, August, assignor to Robert Bosch, Aktiengesellschaft, Stuttgart, Germany. Brake mechanism. 1,827,849; Oct. 20.
Keeler Brass Company. (See Keeler, G. E., and Birdsall, assignors.)
Keeler, George E., and A. L. Birdsall, assignors to Keeler Brass Company, Grand Rapids, Mich. Locking latch. 1,828,468; Oct. 20.
Keenan, Walter F., Jr., Pelham, assignor to Foster Wheeler Corporation, New York, N. Y. Superheater. 1,827,892; Oct. 20.
Keighley, Lloyd M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,751; Oct. 20.
Keighley, Lloyd M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,752; Oct. 20.
Keleher, Emma. (See Keleher, Michael R., assignor.)
Keleher, Michael R., assignor to Emma Keleher, Norfolk, Nebr. Mail holder. 1,828,417; Oct. 20.
Kell, Ray D., Schenectady, N. Y., assignor to General Electric Company. Transmission of pictures. 1,828,667; Oct. 20.
Keller, Charles G., Poughkeepsie, N. Y. Vehicle wheel. 1,827,790; Oct. 20.
Keller, Charles G., Poughkeepsie, N. Y. Vehicle wheel. 1,827,791; Oct. 20.
Keller, Charles G., Poughkeepsie, N. Y. Vehicle wheel. 1,827,792; Oct. 20.
Keller, Charles G., Poughkeepsie, N. Y. Vehicle wheel. 1,827,793; Oct. 20.
Kellogg, Edward W., Moorestown, N. J., assignor to General Electric Company. Film stopping apparatus. 1,828,569; Oct. 20.
Kempton, Clarence W., Los Angeles, Calif. Gas engine. 1,828,228; Oct. 20.
Kennedy, Albert H., Rockport, Ind. Operating unit for double-acting pumps. 1,828,570; Oct. 20.
Kennedy, Emmett F., assignor to The Cleveland Co-Operative Stove Company, Cleveland, Ohio. Stove. Des. 85,383; Oct. 20.
Kennerson Manufacturing Co. (See Palm, Arthur C., assignor.)
Kern, Lillian M., Portland, Me. Holder. 1,828,668; Oct. 20.
Kiesel, William F., jr., Hollidaysburg, Pa. Locomotive frame. 1,828,418; Oct. 20.
Kiliani, Richard B. T., assignor of one-fourth to A. Gardner, Detroit, Mich. Recording and reproducing wave frequencies. 1,828,189; Oct. 20.
Kiliani, Richard B. T., assignor of one-fourth to A. Gardner, Detroit, Mich. Preparing a magnetizable body to receive and reproduce wave frequencies. 1,828,190; Oct. 20.
Kimbell, Arthur W. (See Knutson, C. L., Roby, and Kimbell.)
Kindelmann, Albert, Floral Park, and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Take up reel slip device. 1,827,893; Oct. 20.
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,819; Oct. 20.
Kingsbury, George P., Hollis, N. Y., assignor to Mergenthaler Linotype Company. Typographical distributing machine. 1,828,419; Oct. 20.
Kingsley, Henry E., Chicago, Ill. Glider. 1,827,987; Oct. 20.
Kinney, Fay D., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sheet separating apparatus. 1,827,753; Oct. 20.
Kirchhoff, William G., assignor of one-half to The J. H. Day Company, Cincinnati, Ohio, and one-half to Thomson Machine Company, Belleville, N. J. Adjustable guide for dough molders. 1,828,049; Oct. 20.
Kirchner, Ernst A., Minneapolis, Minn. Scarfpin safety clutch and point protector. 1,828,420; Oct. 20.
Kirsebom, Gustaf N., Brooklyn, N. Y. Reduction of metallic compounds and production of arsenates. 1,827,754; Oct. 20.
Kirsebom, Gustaf N., Gottenborg, Sweden. Treatment of cadmium bearing material. 1,827,755; Oct. 20.
Kirsebom, Gustaf N., Trollhattan, Sweden. Treatment of metals and/or their compounds. 1,827,820; Oct. 20.
Kirsebom, Gustaf N., Trollhattan, Sweden. Reduction of metal compounds. 1,827,821; Oct. 20.
Kitson Company. (See Lovekin, Luther D., assignor.)
Kivari, Arthur M., Los Angeles, Calif., assignor, by mesne assignments, to The Door Company, New York, N. Y. Rotary drum screen. 1,828,469; Oct. 20.
Kiwull, Woldemar, Riga, Latvia. Device for taking up and setting down floating bodies, particularly aircraft, on or from platforms such as ships or landing stages. 1,828,251; Oct. 20.
Klein, Karl, St. Louis, Mo. Sewing machine. 1,828,115; Oct. 20.
Kleinert, I. B., Rubber Company. (See Guinzburg, Victor, assignor.)
Kleinmann, Ernst. (See Mendel, A., and Kleinmann.)
Klintworth, Glen, Scribner, Nebr. Tire chain keeper. 1,828,714; Oct. 20.
Klopp, Friedrich, Wald, Germany. Guard. 1,828,050; Oct. 20.
Kneher, Muller Company, Inc. (See Muller, Otto, assignor.)
Knorr, Fred, Denver, Colo. Ironing board. 1,828,051; Oct. 20.
Knutson, Carl L., Maywood, W. G. Roby, Chicago, and A. W. Kimbell, Park Ridge, assignors to Cinch Manufacturing Corporation, Chicago, Ill. Valve for cushion structures. 1,828,191; Oct. 20.
Knutson, Harold, Chicago, Ill., assignor to Paul Dickinson, Incorporated. Pipe damper. 1,828,052; Oct. 20.
Koerber, John C., South Orange, N. J. Trackway for toy railways. 1,828,536; Oct. 20.
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio system. 1,828,705; Oct. 20.

Kolster, Frederick A., and G. G. Kruesi, Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Oscillation generator and method. 1,828,706; Oct. 20.
Kolts, John H., Crafton, assignor to Pittsburg Water Heater Company, Pittsburgh, Pa. Thermostatic control valve. 1,828,501; Oct. 20.
Kopp Glass, Incorporated. (See Kopp, Nicholas, assignor.)
Kopp, Nicholas, Pittsburgh, assignor to Kopp-Glass, Incorporated, Swissvale, Pa. Lighting fixture bowl or similar article. Des. 85,384; Oct. 20.
Koun, Young H., New York, N. Y. Dirigible helicopter. 1,828,607; Oct. 20.
Kourtzman, Per A., Vartan, Sweden. Speedometer. 1,827,988; Oct. 20.
Kourtzman, Per A., Vartan, Sweden. Alarm apparatus for speedometers for vehicles. 1,827,989; Oct. 20.
Kourtzman, Per A., Vartan, Sweden. Locking device for speedometers for vehicles. 1,827,990; Oct. 20.
Kourtzman, Per A., Vartan, Sweden. Speed limit signal or indicating device for speedometers for vehicles. 1,828,053; Oct. 20.
Kouyoumjian, Haroutiun K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,828,054; Oct. 20.
Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Harrison, N. Y. Thermionic tube. 1,828,537; Oct. 20.
Kramer, Leonard H., Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio. Sheet feeding device. 1,828,323; Oct. 20.
Krewson, Floyd H., Jake Prairie, Mo. Tool for removing tires. 1,827,850; Oct. 20.
Krogstad, Hilda A., Knox, N. Dak. Hen's nest. 1,827,944; Oct. 20.
Kruesi, Geoffrey G. (See Kolster, F. A., and Kruesi.)
Krugman, Arnold H. (See Harding, W. N., and Krugman.)
Kruse, Peter, Brooklyn, assignor to E. W. Bliss Company, New York, N. Y. Can feeding machine. 1,828,324; Oct. 20.
Krzikalla, Hans, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Chromiferous azo dyestuffs. 1,828,055; Oct. 20.
Kucher, Andrew A., Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company. Refrigerator fan. 1,828,538; Oct. 20.
Kulzinski, Mstislav, Reval, Tallinn, assignor to Eesti Patendi Aktsiaselts, Tallinn, Estonia. Closing shutter for tunnel ovens. 1,828,669; Oct. 20.
Kurz, Heinrich, Duisburg-Ruhrort, Germany. Manufacture of rails with hardened heads. 1,828,325; Oct. 20.
Laas, Louis A., Maxwell, assignor of one-half to H. Conrads, Caldwell County, Tex. Agricultural apparatus. 1,828,670; Oct. 20.
Laddon, Isaac M., assignor to Consolidated Aircraft Corporation, Buffalo, N. Y. Aircraft. 1,828,192; Oct. 20.
Laffey, William J. (See Moore, Ray K., assignor.)
Lagergren, Karl A., Stockholm, Sweden. Rail joint. 1,828,502; Oct. 20.
Laird, Wilbur G., assignor to Heat Treating Company, New York, N. Y. Producing fuel gas and carbonized coal. 1,828,148; Oct. 20.
Lamb, Charles, Los Angeles, Calif., assignor of one-half to M. G. Brumbly, Walnut Park, Calif. High pressure pump piston. 1,828,056; Oct. 20.
Lamson Company, The. (See MacMartin, Frank W., assignor.)
Land, George E., Pittsburgh, assignor to H. E. Marks Corporation, Pittsburgh, Pa. Base for plastic material. 1,827,945; Oct. 20.
Landers, Frary & Clark. (See Juengst, F. W., and Anderson, assignors.)
Landis, Mae V. (See Mikota, Archie R., assignor.)
Lang, Edward P., assignor to Oxford Varnish Corporation, Detroit, Mich. Apparatus for applying pigment coatings. 1,827,876; Oct. 20.
Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Picture transmission apparatus. 1,828,571; Oct. 20.
Langston, Samuel M. (See Sieg, Karl, assignor.)
Lanser, Alfred, Corseaux-Vevey, Switzerland. Burner. 1,828,326; Oct. 20.
Larsson, Sven, Sandviken, Sweden. Discharging arrangement in sharpening machines for razor blades. 1,828,671; Oct. 20.
Latimer, Homer H. (See Wildman, A. J., and Latimer.)
Lawrence, Maude S., Alameda, Calif. Adjustable trousers protector. 1,828,572; Oct. 20.
Leamy, Alan H., Auburn, Ind., assignor to Manning & Co., Chicago, Ill. Front drive automobile. 1,828,327; Oct. 20.
Leavitt Machine Company, The. (See Swendeman, Joseph E., assignor.)
Ledbetter, James C. (See Yanchenko, Basil J., assignor.)
Leedy Manufacturing Company. (See Strupe, Cecil H., assignor.)
Legg, Joseph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Photographic device. 1,828,328; Oct. 20.
Lehmann, E. P. (See David, Wilhelm, assignor.)
Leo, Albert, Chicago, Ill. Jelly preparation. 1,827,794; Oct. 20.
Leo, Albert, Chicago, Ill. Jelly preparation. 1,827,991; Oct. 20.
Levar, Sam L. (See Hawthorn, J. B., and Levar.)
Levin, Harold L., Nutley, N. J., assignor to The Flintkote Company, Boston, Mass. Laminated flooring. 1,828,193; Oct. 20.
Levinsky, Stanley, Naugatuck, Conn. Collar holder. 1,828,421; Oct. 20.
Levy, Anderson Co. (See Anderson, Maurice, assignor.)
Levy, Leo, Kaiserslautern, Germany. Toothbrush. 1,828,422; Oct. 20.
Lewis, George K., assignor to Met-L-Wood Corporation, Chicago, Ill. Joint for laminated panels. 1,828,285; Oct. 20.
Lewis Invisible Stitch Machine Company. (See Mueller, Charles W., assignor.)
Lietz, Adolph, San Francisco, Calif. Transparent mariner's compass. 1,828,194; Oct. 20.
Linderman, Stuart H., Nutley, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriter backing sheet. 1,827,902; Oct. 20.
Line Material Company. (See Beauregard, William G., assignor.)
Loeffler, Bruno, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Clutch brake. 1,828,423; Oct. 20.
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,828,329; Oct. 20.
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,828,330; Oct. 20.
Lord, Hugh C., Erie, Pa. Vibration dampener. 1,828,539; Oct. 20.
Lorenz, William A., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for feeding molten glass. 1,828,726; Oct. 20.
Lovekin, Luther D., Wynnewood, assignor to Kitson Company, Philadelphia, Pa. Valve controlling means. 1,828,424; Oct. 20.
Low Temperature Carbonisation Limited. (See Parker, Jack F., assignor.)
Lower, Nathan M., Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y. Locomotive stoker. 1,828,116; Oct. 20.
Lowitz, Martin, New York, N. Y. Vegetable or fruit slicer or the like article. Des. 85,385; Oct. 20.
Lucka, Louis O., Champaign, and J. W. Easley, Decatur, Ill. Vehicle direction signal. 1,827,851; Oct. 20.
Lundgaard, Ivar, Worcester, assignor to Devon Manufacturing Company, Boston, Mass. Stuffing box. 1,828,286; Oct. 20.
Lunt, Joseph R., Wakefield, and D. C. Haley, Roslindale, Mass., assignors to Central Scientific Company, Chicago, Ill. Instruction apparatus for astronomy. 1,828,057; Oct. 20.
Lutomirski Karel, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Reducing interference in electrical circuits. 1,828,503; Oct. 20.
Lynch, James E., Texarkana, Tex. Hydraulic gear puller. 1,828,252; Oct. 20.
Lyons, Benjamin F. (See Robinson, Walter W., assignor.)
MacBean, Thomas L., assignor to Weldbuilt Corporation, New York, N. Y. Making bolts and similar connecting devices. 1,828,287; Oct. 20.
Mack, Richard F., Astoria, N. Y. Interrupter for warning signals. 1,828,608; Oct. 20.
MacMartin, Frank W., Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y. Carrier for dispatch systems. 1,828,504; Oct. 20.
Madeira, Hill & Company. (See Wetter, John W., assignor.)
Mahon, R. C., Company, The. (See Mahon, Russell C., assignor.)
Mahon, Russell C., assignor to The R. C. Mahon Company, Detroit, Mich. Spray booth. 1,828,609; Oct. 20.
Mahoney, Burton J., Chicago, Ill., assignor to Hoffman High Pressure Equipment Company. Coupling. 1,828,505; Oct. 20.
Malwurm, Paul, San Diego, Calif. Aircraft control mechanism. 1,828,258; Oct. 20.
Malleable Iron Fittings Company. (See Williams, Rolland G., assignor.)
Mallett, Hugh, Bradford, Ill. Pipe. 1,828,149; Oct. 20.
Mallinckrodt Chemical Works. (See Mallinckrodt, Edward, jr., assignor.)
Mallinckrodt, Edward, jr., assignor to Mallinckrodt Chemical Works, St. Louis, Mo. Filler mechanism. 1,828,117; Oct. 20.
Malsbary, Job F., Fresno, Calif. Blow-off valve for hot-water systems. 1,828,195; Oct. 20.
Manning & Co. (See Leamy, Alan H., assignor.)
Marks, H. E., Corporation. (See Land, George E., assignor.)
Marriott, Alexander D., Denver, Colo., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Classification apparatus. 1,827,894; Oct. 20.
Marschke Manufacturing Company. (See Marschke, William A., assignor.)
Marschke, William A., assignor to Marschke Manufacturing Company, Indianapolis, Ind. Buffer or grinder. 1,828,540; Oct. 20.
Marsh, Gilbert C., Akron, Ohio, assignor to Hartford-Empire Company, Hartford, Conn. Feeding molten glass. 1,828,229; Oct. 20.
Marshall Asbestos Corporation. (See Slade, Edward, assignor.)

Marshall, James G., Niagara Falls, N. Y., assignor to Electro Metallurgical Company. Apparatus for feeding electric furnace electrodes. 1,827,852; Oct. 20.
Martin, Robert, Spondon, near Derby, England, assignor to Celanese Corporation of America. Apparatus for holding textile packages. 1,827,756; Oct. 20.
Marx, Carl, Chicago, and E. R. Darling, Danville, assignors to Pacific Lumber Company, Chicago, Ill. Wall board, sheathing lumber, and the like. 1,828,029; Oct. 20.
Marx, Louis, New York, N. Y. Toy. 1,828,288; Oct. 20.
Maschinenfabrik Augsburg-Nürnberg A. G. (See Becher, Theodor, assignor.)
Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Hard grainless fiber product and process of manufacture. Re18,233; Oct. 20.
Masonite Corporation. (See Mason, William H., assignor.)
Masterson, Theodore L., Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Indigo powder and making the same. 1,827,757; Oct. 20.
Matteson Machine Works. (See Richardson, Jairus S., assignor.)
Matthews, Howard W. (See Bock, W., and Matthews.)
Matthews, Milton J., Detroit, Mich. Collet. 1,827,795; Oct. 20.
Matthews, Philip E., Plainfield, N. J., assignor to International Motor Company, New York, Stabilizing device for steering knuckles. 1,828,425; Oct. 20.
Matthews, Thomas, F., Manchester, N. H. Combination shoe rack. 1,828,331; Oct. 20.
Mattingley, Harold W., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,827,796; Oct. 20.
Mauthe, Gustav. (See Doser, A., Mauthe, and Thauss.)
Maxfield, Joseph P., Maplewood, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Sound recording method. Re18,228; Oct. 20.
Maxwell, William H., Beverly Hills, assignor to Baash-Ross Tool Company, Incorporated, Los Angeles, Calif. Bearing mounting. 1,828,118; Oct. 20.
Maynard, Vance R., Greensboro, N. C., assignor to The Stafford Company, Readville, Mass. Harness connecter for looms. 1,828,058; Oct. 20.
Mayr, Karl A., Chicago, Ill. Furnace. 1,827,946; Oct. 20.
McCafferty, James E. (See Kane, G. A., and McCafferty.)
McCandliss, Edgar S., Topeka, Kans. Awning support. 1,828,332; Oct. 20.
McCann, Thomas J., Warren, R. I. Belt. 1,828,196; Oct. 20.
McCormick, Charles P., Chicago, Ill. Tire boot. 1,828,333; Oct. 20.
McCoy, Charles W., Syracuse, N. Y. Picture frame. Des. 85,386; Oct. 20.
McCoy, Rush O., Berwyn, and O. A. Sjostron, Chicago, Ill., assignors to International Patents Development Company, Wilmington, Del. Manufacturing starch. 1,828,334; Oct. 20.
McCreary, Miller A., assignor to The Hegeler Zinc Company, Danville, Ill. Rolling mill installation. 1,828,426; Oct. 20.
McFadin, Searcy L., Borger, Tex., assignor to E. W. Hines, trustee, Cordell, Okla. Radio control system. 1,828,672; Oct. 20.
McJoynt, Thomas L., Janesville, Wis. Pad filling apparatus. 1,828,673; Oct. 20.
McKay Company, The. (See Appleton, Wallace N., assignor.)
McKee, Charles R., Milwaukee, Wis., assignor to American Hair & Felt Company, Chicago, Ill. Coating. 1,827,822; Oct. 20.
McKim, Wilmer E., New Kensington, assignor to W. E. Spill, trustee, Pittsburgh, Pa. Scale apparatus. 1,827,758; Oct. 20.
McKinley, Edwin W., assignor to Merit Water Heater Co. Ltd., Los Angeles, Calif. Burner control 1,827,993; Oct. 20.
McLaughlin, Belknap. (See Sacerdote, Guido M., assignor.)
McMichael, Floyd J., Brownsville, Tex. Mask. 1,828,427; Oct. 20.
McPherson, William L., U. S. Army, Dover, N. J. Explosive composition. 1,827,895; Oct. 20.
Meachem, Ernest A., Oakland, Calif. Saw filing machine. 1,828,150; Oct. 20.
Mead, Edward S., assignor of one-half to J. P. Edwards, Philadelphia, Pa. Distillation of coal. 1,827,896; Oct. 20.
Meeker, John H., Somerville, N. J., and E. K. Skonberg, Brooklyn, N. Y. Power hammer. 1,827,877; Oct. 20.
Mekler, Lev A., assignor to Universal Oil Products Company, Chicago, Ill. Heating and furnace used therewith. 1,828,373; Oct. 20.
Meletio, Monroe L., Washington, D. C. Mount for range finders or other attachments. 1,828,541; Oct. 20.
Mendel, Alfred, and E. Kleinmann, Berlin-Lichtenberg, Germany. Hair slide. 1,828,254; Oct. 20.
Mendel, William, Beverly, N. J. Trade marking carbon paper. 1,828,374; Oct. 20.
Mergenthaler Linotype Company. (See Kingsbury, George P., assignor.)
Merit Water Heater Co. Ltd. (See McKinley, Edwin W., assignor.)
Metlox Corporation, Ltd. (See Pronty, Willis O., assignor.)
Met-L-Wood Corporation. (See Lewis, George K., assignor.)
Metropolitan Paving Brick Company, The. (See Fry, C. A., Harsh, and Schory, assignors.)
Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric snap switch. 1,828,059; Oct. 20.
Michael, Arnold J., Plymouth, Vt. Internal combustion engine. 1,828,060; Oct. 20.
Michell, Anthony G. M. Melbourne, Victoria, Australia, assignor, by mesne assignments, to Michell-Crankless Engines Corporation, New York, N. Y. Bush for reciprocating members. 1,828,289; Oct. 20.
Michell-Crankless Engines Corporation. (See Michell, Anthony G. M., assignor.)
Mickelsen, Canute H. Lava Hot Springs, Idaho. Restraining device. 1,828,610; Oct. 20.
Micro Machine Company. (See Baumberger, William J., assignor.)
Mikota, Archie R., Minneapolis, assignor of one-half to M. V. Landis, St. Paul, Minn. Garment hanger. 1,828,611; Oct. 20.
Miller, Dorr. (See Haskins, H. B., Floraday, and Miller.)
Miller, H. H., Industries Company, The. (See Hagen, John H., assignor.)
Miller, Hans R., Fergus Falls, Minn. Road building machine. 1,827,897; Oct. 20.
Miller, Herbert W., Beverly Hills, Calif. Direction signal. 1,828,119; Oct. 20.
Miller, Herman, Clock Company. (See De Pree, Dick J., assignor.)
Miller, William J., Swissvale, Pa. Method of and apparatus for feeding and forming plastic material in the manufacture of pottery. 1,827,759; Oct. 20.
Miller, William J., Swissvale, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Mechanism for manufacturing glassware. 1,828,674; Oct. 20.
Millspaugh, William H., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Centrifugal casting method. 1,828,335; Oct. 20.
Milsk, George. (See Rymal, Cecil H., assignor.)
Minneapolis-Honeywell Regulator Company. (See Worth, William E., assignor.)
Minton, John P., White Plains, N. Y., assignor to Radio Corporation of America. Loud speaker. 1,827,994; Oct. 20.
Mission Dry Corporation, Ltd. (See Crosby, Harry E., assignor.)
Moecker, Henry, jr., Flossmoor, and H. B. Isaac, Harvey, Ill., assignors to American Stove Company, St. Louis, Mo. Counterbalancing device. 1,828,675; Oct. 20.
Mohler, Valentine J., River Forest, Ill., assignor to Addressograph Company, Wilmington, Del. Printing plate blank. 1,827,995; Oct. 20.
Moll, Wilhelm K., assignor to Ditto, Incorporated, Chicago, Ill. Swinging margin bar. 1,827,760; Oct. 20.
Monnot, Edward L., assignor to The Harvard Company, Canton, Ohio. Auxiliary foot rest. 1,828,470; Oct. 20.
Monroe Calculating Machine Company. (See Chase, George C., assignor.)
Monroe Calculating Machine Company. (See Crosman, Loring P., assignor.)
Montan, Inc. (See Coolidge, Joseph R., 3d, assignor.)
Moon, Alva H., assignor to The American Rolling Mill Company, Middletown, Ohio. Band tightening tool. 1,828,290; Oct. 20.
Moore, John T., Reading, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y. Wheel guide. 1,828,375; Oct. 20.
Moore, Lewis F., Roanoke, and P. Craighill, Lynchburg, assignors to Walker Machine & Foundry Corporation, Roanoke, Va. Chair. Des. 85,387; Oct. 20.
Moore, Ray K., Freeport, assignor of one-half to W. J. Laffey, Chicago, Ill. Vehicle for highway and railway travel. 1,827,898; Oct. 20.
Moore, William R., jr., Hagerstown, Md., assignor to Deca Disc Phonograph Company, Waynesboro, Pa. Synchronizing talking motion picture machines. 1,827,947; Oct. 20.
Moreton, Henry H., Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to C. F. Craig, Los Angeles Calif. Method of reclaiming contaminated oils. 1,828,428; Oct. 20.
Moreton, Henry H., Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to C. F. Craig, Los Angeles, Calif. Treating oils to remove suspended impurities. 1,828,429; Oct. 20.
Moreton, Henry H., Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to C. F. Craig, Los Angeles, Calif. Purifying oils. 1,828,430; Oct. 20.
Morgan, Mathew B., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Adjusting brakes and other devices. 1,827,948; Oct. 20.
Morgan, Mathew B., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Vehicle brake. 1,828,061; Oct. 20.
Morgan, Theodore H., Palo Alto, Calif. Inductive reactive power compounding. 1,828,062; Oct. 20.
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Radio tuning device. 1,828,197; Oct. 20.
Morrell, Jacque C., and W. F. Faragher, assignors to Universal Oil Products Company, Chicago, Ill. Hydrocarbon oil conversion. 1,827,899; Oct. 20.

Morrison, George, Poughkeepsie, N. Y. Machine for vending articles. 1,827,900; Oct. 20.
Morse, Frank L., Ithaca, N. Y. Chain manufacture. 1,828,506; Oct. 20.
Morton, André A., assignor to Societe d'Installation de Lumiere et de Force Electriques, Paris, France. Device for injecting fuel into internal combustion engines. 1,828,676; Oct. 20.
Morton, James, Cramond Bridge, West Lothian, Scotland. Jacquard mechanism. 1,828,336; Oct. 20.
Mossberg, Frank, Attleboro, Mass. Cop holder. 1,828,337; Oct. 20.
Motor Products Corporation. (See Pritchard, William S., assignor.)
Mountz, Ray C., Altoona, Pa. Brake mechanism. 1,828,612; Oct. 20.
Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Needle thread controlling mechanism. 1,827,949; Oct. 20.
Müller, Gustav W., Berlin-Charlottenburg, Germany, assignor to General Electric Company. Electrical apparatus. 1,828,573; Oct. 20.
Muller, Lucien, Florange, France. Adjustable searchlight. 1,827,797; Oct. 20.
Muller, Otto, Richmond Hill, assignor to Kneber, Muller Company, Inc., New York, N. Y. Cigar band. 1,827,761; Oct. 20.
Müller, Otto A., Ambler, assignor to The Florex Gardens, North Wales, Pa. Carnation. Pl. Pat. No. 3; Oct. 20.
Muller, Wesley A., Monterey, and B. C. Youman, assignors to California Packing Corporation, San Francisco, Calif. Fish cleaning machine. 1,828,725; Oct. 20.
Müller-Cunradi, Martin, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of iron carbonyl. 1,828,376; Oct. 20.
Mulligan, Paul C., Seattle, Wash. Oil burner system. 1,827,950; Oct. 20.
Murphy, Edward A. (See Trobridge, G. W., Murphy, Twiss, and Gorham.)
Murphy, Paul B., Nyack, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Circuit controlling device. 1,828,507; Oct. 20.
Murray Corporation of America, The. (See Bare, Erwin L., assignor.)
Murray, Emslie E., Schenectady, N. Y. Steam drier. 1,827,798; Oct. 20.
Murray, Howard J., Brooklyn, N. Y. Synchronizer device. 1,828,508; Oct. 20.
Murray, Larkin A., Des Moines, Iowa. Ventilating door or like. 1,827,996; Oct. 20.
Mussey, William H., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill. Railway dump car. 1,827,997; Oct. 20.
Mussey, William H., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill. Shock absorber. 1,828,063; Oct. 20.
Myers, Hubert A., assignor of one-half to A. S. Hickok, Toledo, Ohio. Pavement construction. 1,827,823; Oct. 20.
Mummery, Clyde W., Detroit, Mich. Stove. 1,827,951; Oct. 20.
Naamlooze Vennootschap: Electro Zuurstofen Waterstofabriek. (See de Liefde, Willem C., assignor.)
Nasmith, John W., Heaton Mersey, England. Combing machine. 1,828,377; Oct. 20.
National Aniline & Chemical Co. (See Masterson, Theodore L., assignor.)
National Aniline & Chemical Company. (See Spalding, William L., assignor.)
National Malleable and Steel Castings Company. (See Buckius, Albert O., assignor.)
National Rail Joint Corporation. (See Wilbur, Lawrence S., assignor.)
National Supply Company, The. (See Wright, Clyde S., assignor.)
Naumburg, Robert E., Winchester, Mass. Apparatus for translating impressions. 1,828,198; Oct. 20.
Nee, Daniel J., et al. (See Pringle, William F., assignor.)
Neff, Frank M., Los Gatos, Calif. Hearing appliance. 1,828,151; Oct. 20.
Nelson, Oscar F., Chicago, Ill. Door silencer. 1,828,431; Oct. 20.
Nenna, Gennaro, assignor to C. Georgas, Owen Sound, Ontario, Canada. Vehicle parking device. 1,827,853; Oct. 20.
Neukam, Joseph, Jasper, Ind. Minnow plug bait. 1,828,574; Oct. 20.
Neumann, John, Chicago, Ill. Fiber bleaching. 1,828,338; Oct. 20.
New England Wood Heel Co. (See Shaw, Wesley J., assignor.)
New Jersey Button Works. (See Clemens, Emanuel, assignor.)
Niedermayer, Carl, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Regulating safety valve for hydraulic shock absorbers. 1,828,432; Oct. 20.
Nolan, Claude, and W. J. Ray, Jackson, Fla. Starter mechanism lock. 1,828,575; Oct. 20.
Nonamaker, William B., Oakland, Calif. Push button latch. 1,828,152; Oct. 20.
Norbom, Ragnar A. (See Elliott, J. H., and Norbom.)
Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Electric induction furnace. 1,828,291; Oct. 20.
Norton, Swan E., Rockford, Ill. Ice removing system. 1,828,613; Oct. 20.
Norviel, Harry E., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Ignition apparatus. 1,828,378; Oct. 20.
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Switch. 1,828,433; Oct. 20.
Nothacker, Edward M., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Railway rolling stock. 1,827,854; Oct. 20.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Blank holder. 1,827,901; Oct. 20.
Novotny, Emil E., Logan, Philarelphia, and W. W. Johnson, Philadelphia, assignors to J. S. Stokes, Huntingdon Valley P. O., Pa. Furfural-urea resin and making the same. 1,827,824; Oct. 20.
Noyes, Hazlehurst R., Los Angeles, Calif. Folding furniture. 1,827,952; Oct. 20.
Oberdier, Frank R., assignor, by mesne assignments, to himself and W. D. Wood, Lafayette, Ohio. Hydraulic clutch. 1,828,677; Oct. 20.
Obermaier, Carl F., York, Pa., assignor to General Electric Company. Electric conductor. 1,828,614; Oct. 20.
O'Connor, Clara B., San Francisco, Calif. Airplane. 1,827,953; Oct. 20.
Odell, Albert B., assignor to The Strong, Carlisle & Hammond Company, Cleveland, Ohio. Combined table and truck. 1,828,434; Oct. 20.
Odell, William W. (See Botsford, Claude W., assignor.)
Oesterle, Oscar A., Henryetta, Okla. Ore sintering car 1,827,799; Oct. 20.
Offenhauser, Christopher, Philadelphia, Pa. Machine for cooking sausages. 1,827,902; Oct. 20.
Officine Meccaniche Fratelli Grosso & Tribola. (See Grosso, Dante, assignor.)
O'Hagan, Bernard E., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuit apparatus. 1,827,825; Oct. 20.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Oil Company, The. (See Skinner, Alva L., assignor.)
Ohio Steel Foundry Company, The. (See Harbison, Clarence B., assignor.)
Ohm, Johannes, Bottrop, Westphalia, Germany. Apparatus for producing nystagmus. 1,827,954; Oct. 20.
Ohnesorge, O., Bochum, Germany. Rope gearing and the like. 1,828,255; Oct. 20.
Olshel, John R., assignor to Trico Products Corporation, Buffalo, N. Y. Sleet blade. 1,828,715; Oct. 20.
Olshel, William E., and F. Wieland, assignor to Trico Products Corporation, Buffalo, N. Y. Sign. 1,828,716; Oct. 20.
Oliver Farm Equipment Company. (See Aspinwall, Lewis A., assignor.)
Oliver United Filters Incorporated. (See Culver, Edwin S., assignor.)
Orchestraphone Company. (See Cloud, Raymond T., assignor.)
Orme, Wilber L., Cambridge, Ohio. Goblet or similar article. Des. 85,388; Oct. 20.
Orme, Wilber L., Cambridge, Ohio. Goblet or similar article. Des. 85,389; Oct. 20.
Oster Manufacturing Company, The. (See Hyde, R. E., and Schappi, assignors.)
Otte, Otho M., Tarentum, Pa. Refrigerator tray support. 1,828,435; Oct. 20.
Otto Food Machinery Company. (See Erl, Otto, assignor.)
Otwell, Ralph B., Detroit, Mich. Heater for motor vehicles. 1,827,998; Oct. 20.
Outboard Motors Corporation. (See Irgens, Finn T., assignor.)
Oven, Frank J., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,828,471; Oct. 20.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Toy talking movie device. 1,828,199; Oct. 20.
Owens-Illinois Glass Company. (See Cramer, Albert N., assignor.)
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Oxford Varnish Corporation. (See Lang, Edward P., assignor.)
Paca, John P., assignor to Diebold Safe & Lock Company, Canton, Ohio. Vault door. 1,828,436; Oct. 20.
Pacific Clay Products. (See Saunders, William H., assignor.)
Pacific Lumber Company. (See Darling, Elton R., assignor.)
Pacific Lumber Company. (See Marx, C., and Darling, assignors.)
Pade, Max H., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Apparatus for manipulating inner tubes. 1,828,153; Oct. 20.
Padelford, Lester E., assignor to The Republic Metalware Company, Buffalo, N. Y. Method of toasting. 1,828,542; Oct. 20.
Paine, Beaumont C., Glen Ellyn, Ill. Electrical outlet box. 1,828,064; Oct. 20.

Paladino, Dominick, Brooklyn, N. Y. Garter. Des. 85,390; Oct. 20.
Palatini, Thomas, Belmar, N. J. Troweling machine. 1,828,576; Oct. 20.
Palm, Arthur C., assignor to Kennerson Manufacturing Co., San Francisco, Calif. Elevator door. 1,828,065; Oct. 20.
Pannier Brothers Stamp Company. (See Pannier, William J., jr., assignor.)
Pannier, William J., jr., assignor to Pannier Brothers Stamp Company, Pittsburgh, Pa. Stamp. 1,828,230; Oct. 20.
Panyard, George V., Muskegon, Mich. Piston packing. 1,827,903; Oct. 20.
Paper & Textile Machinery Company, The. (See Millspaugh, William H., assignor.)
Paramount Publix Corporation. (See Garbutt, Frank E., assignor.)
Parducci, Gustavo, Atco, N. J. Building structure. Des. 85,391; Oct. 20.
Park, Robert L., Darden, Tenn. Bean harvester. 1,828,437; Oct. 20.
Parker, Jack F., Codsall, assignor to Low Temperature Carbonisation Limited, London, England. Closure mechanism for retort doors. 1,827,800; Oct. 20.
Parker, Lee T., West Orange, N. J., assignor to American Telephone and Telegraph Company. Reeling device. 1,827,855; Oct. 20.
Parsons, Philip D., Swarthmore, Pa., assignor to Scott Paper Company. Dispensing cabinet. 1,827,904; Oct. 20.
Patterson, Edwin S., Sharon, Pa. Water elevator. 1,828,231; Oct. 20.
Paul, Bryan B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulating material and making the same. 1,828,292; Oct. 20.
Paulson, John E., Minneapolis, Minn. Potato grader. 1,828,066; Oct. 20.
Pearce, Allen A., Beeville, Tex. Cotton chopper. 1,828,615; Oct. 20.
Peckett, Robert P., jr. (See Schellens, E. L., and Peckett.)
Peller, Karl E., West Hartford, assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Method and apparatus for feeding molten glass. 1,828,438; Oct. 20.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Conical stirrer. 1,828,718; Oct. 20.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Conical stirrer. 1,828,719; Oct. 20.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for feeding molten glass. 1,828,720; Oct. 20.
Peller, Karl E., West Hartford, and W. T. Barker, jr., assignors to Hartford-Empire Company, Hartford, Conn. Suction feeder. 1,828,717; Oct. 20.
Pekar, Frank, Bridgeport, Conn. Sash lock. 1,828,439; Oct. 20.
Pender, Harold, Merion, Pa., assignor to International Resistance Company, Philadelphia, Pa. Electrical resistance device. 1,828,577; Oct. 20.
Pennsylvania Globe Company. (See Shaw, Arthur E., assignor.)
Perez, Pascual, New York, N. Y. Reshaping device for ties. 1,828,472; Oct. 20.
Perlman, A., Iron Works, Inc. (See Perlman, Abraham, assignor.)
Perlman, Abraham, New York, N. Y., assignor to A. Perlman Iron Works, Inc. Door locking and operating mechanism. 1,828,721; Oct. 20.
Perry, Ira D., Chicago, Ill., assignor to Perry Products, Inc., Elkhart, Ind. Antirattler for doors and the like. 1,828,120; Oct. 20.
Perry, John E., Sharon, assignor to Valley Mould and Iron Corporation, Sharpsville, Pa. Ingot mold and making same. 1,828,200; Oct. 20.
Perry Products, Inc. (See Perry, Ira D., assignor.)
Peterman, Ralph B., Lansing, and F. V. Stevenson, East Lansing, Mich. Weighted pin for draperies, curtains, and the like. 1,828,678; Oct. 20.
Peters, Frederick J., Babylon, N. Y. Bowl or like article. Des. 85,392; Oct. 20.
Peters, Frederick J., Babylon, N. Y. Pitcher or like article. Des. 85,393; Oct. 20.
Peters, Henry W., Boston, Mass. Finger ring and the like. 1,828,616; Oct. 20.
Peters, Henry W., Boston, Mass. Key charm. 1,828,617; Oct. 20.
Pettibone Mulliken Company. (See Andersen, Oscar W., assignor.)
Phillips, Charles C., Memphis, Tenn., assignor to The K-D Lamp Co., Cincinnati, Ohio. Telephone light. 1,828,543; Oct. 20.
Photor Corporation, The. (See Back, Franz G., assignor.)
Photor Corporation, The. (See Heilpern, J., and Back, assignors.)
Picker, Charles, Albany, N. Y. Cleaning machine. 1,827,905; Oct. 20.
Pieper, Henri, Brussels, Belgium. Transmission system. 1,828,679; Oct. 20.
Pierce, Walter H., South Poland, Me., assignor, by mesne assignments, to United-Carr Fastener Corporation. Nut and screw fastening. Re18,229; Oct. 20.
Pieters, Ivon S., assignor to Plibrico Jointless Firebrick Company, Chicago, Ill. Anchor for furnace linings. 1,828,618; Oct. 20.
Pinnock, Douglas R., Bayonne, N. J., assignor to E. Frederics, Inc., New York, N. Y. Hair treating method and composition. 1,827,801; Oct. 20.
Pioneer Instrument Company. (See Colvin, Charles H., assignor.)
Pistner, Leopold, et al. (See Stevens, Perley E., assignor.)
Pitcher, Elmer C., Hayward, Calif. Imbedding staples. 1,828,067; Oct. 20.
Pitts, Jacob J., New York, N. Y. Extension windshield wiper. 1,827,906; Oct. 20.
Pittsburg Water Heater Company. (See Kolts, John H., assignor.)
Plibrico Jointless Firebrick Company. (See Pieters, Ivon S., assignor.)
Plym, Francis J., assignor to The Kawneer Company, Niles, Mich. Store front construction. 1,828,509; Oct. 20.
Pollard, Elmer L., and J. E. Sherrill, Chino, Calif. Thornless young dewberry. Pl. Pat. 4; Oct. 20.
Pollock, Robert T., Boston, Mass., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating hydrocarbon oil. 1,828,440; Oct 20.
Pomeroy, George G. (See Watts, Vilas E., assignor.)
Poole, Lora E., assignor to Delco-Remy Corporation, Anderson, Ind. Metal working machine. 1,828,379; Oct. 20.
Poole, Lora E., J. Q. Holmes, Anderson, and L. C. Goad, Muncie, assignors to Delco-Remy Corporation, Anderson, Ind. Apparatus for making commutators. 1,828,441; Oct. 20.
Pope, Lee S., Greensboro, N. C. Alternating refrigeration bottled drink cooler. 1,827,856; Oct. 20.
Popenoe, Charles H. (See Wyson, Ansel S., assignor.)
Potdevin, Adolph, Garden City, assignor to Potdevin Machine Company, Brooklyn, N. Y. Pasting mechanism. 1,827,907; Oct. 20.
Potdevin Machine Company. (See Potdevin, Adolph, assignor.)
Povalski, Bernard J., Jersey City, N. J., assignor to Fedco System, Inc. Anchorage. 1,827,762; Oct. 20.
Powell, Edward R., assignor to Banner Rock Corporation, Alexandria, Ind. Economizer furnace for mineral wool production. 1,828,293; Oct. 20.
Pratt, Clifton J., Tulsa, Okla., assignor to Universal Oil Products Company, Chicago, Ill Converting hydrocarbons. 1,827,908; Oct. 20.
Prestigiacomo, Gaetano, New York, N. Y. Automobile body. Des. 85,394; Oct. 20.
Prima Manufacturing Company. (See Waterworth, Robert J., assignor.)
Pringle, William F., Oakland, Calif., assignor of one-third to J. P. Callahan, and one-third to D. J. Nee. Cigarette extinguisher. 1,828,068; Oct. 20.
Pritchard, William S., assignor to Motor Products Corporation, Detroit, Mich. Windshield. 1,828,069; Oct. 20.
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Prosperity Company, Inc., The. (See Schremp, Edward J., assignor.)
Prouty, Willis O., Hermosa Beach, assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif. Marquise ceiling. Des. 85,395; Oct. 20.
Provencal, Elphege, St. Hyacinthe, Quebec, Canada. Electric heating plant. 1,828,294; Oct. 20.
Pryor, Eric A. C., Beckenham, and F. A. Hurlbut, Strand, assignors to The United Glass Bottle Manufacturers Limited, London, England. Glass annealing leer. 1,828,070; Oct. 20.
Pugh, John D., Baltimore, Md. Manipulator for ingots, blooms, and the like. 1,828,619; Oct. 20.
Pullman Car and Manufacturing Corporation. (See Mussey, William H., assignor.)
Pumphrey, Walter H., New York, N. Y. Vacuum tube socket. 1,827,909; Oct. 20.
Purchio, Amico M., Buffalo, N. Y. Antiglare shield for windshields or the like. 1,828,339; Oct. 20.
Push Button Electric Control Corporation, The. (See Howard, Frank H., assignor.)
Radio Condenser Company. (See Cramer, Stanley S., assignor.)
Radio Condenser Company. (See Gilling, Preston E., assignor.)
Radio Corporation of America. (See Clark, G. H., and Allen, assignors.)
Radio Corporation of America. (See Minton, John P., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Patents Corporation. (See Andrewes, Humfrey, assignor.)
Rado, Leopold, Berlin-Halensee, Germany. Attaching sealing or labeling strips or the like to boxes, cases, and wrappings made of metal-foil-covered paper, cardboard, and the like. 1,828,680; Oct. 20.
Rall Max, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Electric ignition system for internal combustion engines. 1,828,620; Oct. 20.
Ralls, James C., Sheffield, England. Lock. 1,828,544; Oct. 20.

Ramsey, Joseph H., Albany, N. Y. Highway guard rail. 1,828,071; Oct. 20.
Rand, James H., jr., Buffalo, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Card index or record device. 1,827,999; Oct. 20.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Analyzing system for picture transmission. 1,828,000; Oct. 20.
Rankin, Carl H., Wellsburg, W. Va., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Glass feeder. 1,828,442; Oct. 20.
Rankin, Carl H., Wellsburg, W. Va., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Apparatus for feeding molten glass. 1,828,443; Oct. 20.
Ratliff, Sturgill F., Mobile, Ala. Combination green marker and advertising device. 1,827,826; Oct. 20.
Ray, William J. (See Nolan, C., and Ray.)
Reed, Arthur J., Philadelphia, Pa. Draft appliance for furnaces. 1,827,910; Oct. 20.
Reed, George B., assignor to Budd Wheel Company, Philadelphia, Pa. Hub construction. 1,828,340; Oct. 20.
Reid, Thomas. (See Denniss, J., and Reid.)
Reinking, Henry M., assignor of one-half to O. J. Williams, San Francisco, Calif. Road planing machine. 1,828,681; Oct. 20.
Reiter, Daniel L., New York, N. Y. Fastener slide. 1,828,256; Oct. 20.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,827,878; Oct. 20.
Remington Arms Company. (See Loomis, Crawford, C., assignor.)
Remington Rand Inc. (See Rand, James H., jr., assignor.)
Republic Metalware Company, The. (See Padelford, Lester E., assignor.)
Rex-Watson Corporation. (See Moore, John T., assignor.)
Rhodes, Charles J., Wakefield, England. Press for sheet metal. 1,828,201; Oct. 20.
Richardson, Jairus S., Sheboygan Falls, Wis., assignor, by mesne assignments, to Matteson Machine Works, Rockford, Ill. Turning machine chuck. 1,827,763; Oct. 20.
Riedel, Walter W., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,764; Oct. 20.
Riggs, Leland W., Schenectady, N. Y., assignor to General Electric Company. Synchronous motor. 1,828,578; Oct. 20.
Roberts, John A., Rolfe, Iowa. Roofing paper cutter. 1,828,621; Oct. 20.
Robinson, Frederick G., Kingston-upon-Hull, England. Mounting of tags for can-like containers. 1,828,682; Oct. 20.
Robinson, Joseph, New York, N. Y. Interchange device for automatic connecters for railway cars. 1,828,072; Oct. 20.
Robinson, Orville R., Ventura, Calif. Driving mechanism for automotive vehicles. 1,828,073; Oct. 20.
Robinson, Walter W., Beloit, Wis., assignor of one-half to B. F. Lyons, Chicago, Ill. Container construction. 1,828,088; Oct. 20.
Roby, William G. (See Knutson, C. L., Roby and Kimbell.)
Rodanet, Henri, Versailles, France. Electrical timing device. 1,828,202; Oct. 20.
Rodriguez, Ramon, New York, N. Y. Sound amplifier and clarifier. 1,827,955; Oct. 20.
Roebbel, Frederick W., and H. E. Rogers, St. Louis, Mo. Method and tool for lapping or honing. 1,828,074; Oct. 20.
Roebel, Ludwig, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electrical switch. 1,827,765; Oct. 20.
Roesch Enamel Range Company. (See Roesch, Joseph P., assignor.)
Roesch, Joseph P., assignor to Roesch Enamel Range Company, Belleville, Ill. Range. Des. 85,396; Oct. 20.
Rogers, Harry E. (See Roebbel, F. W., and Rogers.)
Roller Bearing Company of America. (See Jones, Allan H., assignor.)
Rollman, Michael A., Mount Joy, Pa. Electric-heater kit. 1,828,257; Oct. 20.
Rom, William, Berwyn, Ill. Method of and apparatus for recording sound on motion picture films. 1,828,444; Oct. 20.
Root, Joseph J., jr., Chicago, Ill. Valve. 1,827,911; Oct. 20.
Rosenburgh, Durwood D., assignor to Taylor Instrument Companies, Rochester, N. Y. Forming capillary tubing. 1,827,766; Oct. 20.
Rosenstein, Ludwig, San Francisco, Calif. Removing hydrogen sulphide from oils and other substances. 1,827,912; Oct. 20.
Ross Gear & Tool Company. (See Chandler, Franklin F., assignor.)
Rossman, Edwin F., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,828,445; Oct. 20.
Rossman, Edwin F., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,828,446; Oct. 20.
Rötger, Hans, and F. Stoewener, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Catalytic process. 1,828,380; Oct. 20.
Routledge, John I., Ettrick, Ontario, Canada. Glazier's point. 1,828,341; Oct. 20.
Rowe, George E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Cleat conveyer. 1,828,232; Oct. 20.
Roy, William O., Montreal, Quebec, Canada. Flower holder. 1,828,295; Oct. 20.
Ruben, Samuel, New York, N. Y., assignor to Ruben Tube Company. Electron discharge tube. 1,828,203; Oct. 20.
Ruben, Samuel, New York, N. Y., assignor to Ruben Tube Company. Vacuum tube and its elements. 1,828,545; Oct. 20.
Ruben Tube Company. (See Ruben, Samuel, assignor.)
Rue, John D., Asheville, assignor to The Champion Fibre Company, Canton, N. C. Purification of chemical wood pulp. 1,827,857; Oct. 20.
Rump, Sigurd. (See Haller, A., and Rump.)
Ruppel, Frederick C., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Radiator for motor vehicles. 1,827,767; Oct. 20.
Rupprecht, Konrad. (See Weiske, P., and Rupprecht.)
Rupprecht, Konrad, Berlin, Germany, assignor to General Electric Company. Automatic grinder control. 1,828,622; Oct. 20.
Ruthsaccumulator Aktiebolag. (See Fohl, Carl, assignor.)
Ruud Manufacturing Company. (See Brill, Alfred P., assignor.)
Ryan Mnfg. Corporation. (See Faverty, Clyde B., assignor.)
Ryan Manufacturing Corporation. (See Faverty, C. B., and Schlacks, assignors.)
Ryan Mnfg. Corporation. (See Schlacks, William J., assignor.)
Rymal, Cecil H., assignor of one-half to G. Milsk, Chicago, Ill. Back-water and check valve. 1,827,913; Oct. 20.
Sacerdote, Guido M., Bayside, assignor to McLaughlin, Flushing, N. Y. Winding apparatus for rolling screens. 1,828,623; Oct. 20.
Sachs, Max, Far Rockaway, N. Y. Hand bag. 1,828,342; Oct. 20.
Sailer, Rudolph J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Work guiding means for sewing machines. 1,828,722; Oct. 20.
Sakier, George, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Spout. Des. 85,397; Oct. 20.
Salerni, Edoardo M., Paris, France, assignor to E. M. S. Industrial Processes Limited, London, England. Distillation or heat treatment of carbonaceous or like materials. 1,828,683; Oct. 20.
Sammon, Joseph, Kearny, N. J., assignor to Driver-Harris Company, Harrison, N. J. Shaft for heat-treating furnaces. 1,828,510; Oct. 20.
Sanders, Alfred B., assignor of one-tenth to The American Forging and Socket Company, Pontiac, Mich. Adjustable connection for steering gear members. 1,828,707; Oct. 20.
Sandstrom, Felix C., Milwaukee, Wis., assignor to International Harvester Company. Cream separator. 1,828,546; Oct. 20.
Saunders, William H., assignor to Pacific Clay Products, Los Angeles, Calif. Apparatus for caulking pipe. 1,828,075; Oct. 20.
Sawyer, Emerson D., Chicago, Ill. Yieldable barrier. 1,828,296; Oct. 20.
Scarlett, George B., assignor to Fibre Specialty Manufacturing Company, Kennett Square, Pa. Collapsible truck. 1,828,684; Oct. 20.
Scavullo, Angelo C., Great Kills, N. Y., assignor to Arthur Schiller & Son. Plate or similar article. Des. 85,398; Oct. 20.
Scavullo, Angelo C., Great Kills, N. Y., assignor to Arthur Schiller & Son. Plate or similar article. Des. 85,399; Oct. 20.
Scavullo, Angelo C., Great Kills, N. Y., assignor to Arthur Schiller & Son. Plate or similar article. Des. 85,400; Oct. 20.
Schappi, Daniel. (See Hyde, R. E., and Schappi.)
Schelderman, John, Cincinnati, Ohio. Demountable tire rim. 1,828,076; Oct. 20.
Schellens, Eugene L., Ridgewood, assignor to C-S Engineering Company, Englewood, N. J. Feed water heating apparatus. 1,828,473; Oct. 20.
Schellens, Eugene L., Ridgewood, and R. P. Peckett, jr., assignors to C-S Engineering Company, Englewood, N. J. Locomotive feed water apparatus. 1,828,474; Oct. 20.
Schering Kahlbaum A. G. (See Wlicke, Fritz, assignor.)
Schiller, Arthur, & Son. (See Scavullo, Anego C., assignor.)
Schlacks, William J. (See Faverty, C. B., and Schlacks.)
Schlacks, William J., assignor to Ryan Mnfg. Corporation, Chicago, Ill. Gear box control. 1,828,547; Oct. 20.
Schmid, Alfred, Basel, Switzerland. Electric battery. 1,828,204; Oct. 20.
Schmid, Max. (See de Montmollin, G., and Schmid.)
Schmidt, Carl G. A., jr., assignor to American Road Machinery Company, Inc., Kennett Square, Pa. Transporting concrete. 1,828,343; Oct. 20.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Propeller. 1,828,258; Oct. 20.
Schmidt, Louis A., Brooklyn assignor to R. Hoe & Co., Inc., New York, N. Y. Web roll support. 1,828,297; Oct. 20.

Schmitt, Edwin B., anud A. Thuillier, Los Angeles, Calif. Actuating and locking means for cameras. 1,828,205; Oct. 20.
Schneider, George, Saginaw, assignor to Wilcox-Rich Corporation, Detroit, Mich. Piston ring. 1,828,001; Oct. 20.
Schneider, Heinrich, Zurich, Switzerland. Driving mechanisms for flyers. 1,828,259; Oct. 20.
Schneider, Henry J., Boston, Mass. Water heater and condenser. 1,828,344; Oct. 20.
Schofield, Percy F., Miami, Fla. Gas control for motor vehicles. 1,828,685; Oct. 20.
Schönhöfer, Fritz. (See Schulemann, W., Wingler, and Schönhöfer.)
Schory, Ralph M. (See Fry, C. A., Harsh, and Schory.)
Schremp, Edward J., Miami, Fla., assignor, by mesne assignments, to The Prosperity Company, Inc. Hosiery press. 1,828,345; Oct. 20.
Schulemann, Werner, Vohwinkel-Hammerstein, Wingler, and F. Schönhöfer, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Aminoalkyl derivatives of amino-triphenylmethane compounds. 1,828,077; Oct. 20.
Schuyler, Robe t J., Duncan, assignor to F. Shipley, Lawton, Okla. Self adjusting and expanding plug for wells and the like. 1,828,381; Oct. 20.
Schwarz, Rudolph J., assignor to American Standard Watchcase Company, Providence, R. I. Watch. 1,828,686; Oct. 20.
Schwarz, Rudolph J., assignor to American Standard Watchcase Company, Providence, R. I. Watch. 1,828,687; Oct. 20.
Schwarze, Herman, Pontiac, assignor to General Motors Corporation, Detroit, Mich. Method and apparatus for operating an internal combustion engine. 1,828,447; Oct. 20.
Schwender, Wilhelm A., St. Louis, Mo. Air washing and tempering machine. 1,827,768; Oct. 20.
Scism, John N., Wilkinsburg, Pa. Sealing-off machine for glass objects. 1,827,914; Oct. 20.
Scott, Don O. (See Stone, Earl A., assignor.)
Scott Paper Company. (See Parsons, Philip C., assignor.)
Scottish Farmers Corporation Limited. (See Brown, John, assignor.)
Scovill Manufacturing Company. (See Bennett, Morris H., assignor.)
Seeley, David A., East Orange, N. J. Making concrete floors or roofs. 1,828,078; Oct. 20.
Sedwick, Mathew M., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Feeding and timing mechanism for containers. 1,828,624; Oct. 20.
Segal, Irving H., Detroit, Mich. Animated advertising apparatus. 1,828,475; Oct. 20.
Segerfelt, Bror N., Bohmisch. Krumau, Czechoslovakia. Producing cellulose. 1,828,511; Oct. 20.
Seguy, Jean D., assignor to Universal Oil Products Company, Chicago, Ill. Treating hydrocarbons. 1,827,915; Oct. 20.
Seidel, Gotthelf M., Northhampton, Mass. Cardboard plant box. 1,828,448; Oct. 20.
Seidman & Cohan, Inc. (See Seidman, H., and Cohan, assignors.)
Seidman Hyman, and H. Cohan, Brooklyn, assignors to Seidman & Cohan, Inc., New York, N. Y. Articulated device. 1,828,476; Oct. 20.
Seligman, Richard, Wimbledon, England. Plate apparatus for heat exchanges. 1,828,477; Oct. 20.
Sentinal Printing Company. (See Swan, James M., assignor.)
Serla, John, Brooklyn, N. Y. Shoe strap. 1,828,512; Oct. 20.
Service Station Equipment Company. (See Woodford, Joseph C., assignor.)
Seymour, George W., Cumberland, Md., assignor to Celanese Corporation of America. Composition containing a derivative of cellulose. 1,828,449; Oct. 20.
Shafer, Samuel, jr., and C. F. Ball, assignors to Chain Belt Company, Milwaukee, Wis. Batch meter. 1,827,879; Oct. 20.
Shaffer, Charles M., Deep River, Iowa. End gate for trucks and other vehicles. 1,828,450; Oct. 20.
Shapley, Cooper, Bishop, Calif. Centrifugal machine. 1,828,548; Oct. 20.
Sharpe, Carlton B., Saginaw, Mich. Vacuum ventilating stove hood. 1,827,956; Oct. 20.
Sharples Specialty Company, The. (See Jones, Leo D., assignor.)
Shaver, James E., jr., Philadelphia, Pa., assignor to Underwood Elliott Fisher Company, New York, N. Y. Stenciling machine. 1,828,298; Oct. 20.
Shaw, Arthur E., assignor to Pennsylvania Globe Company, Philadelphia, Pa. Globe holder. 1,828,625; Oct. 20.
Shaw, N. Carter, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Sheathing driving tool. 1,827,957; Oct. 20.
Shaw, Wesley J., assignor to New England Wood Heel Co., Haverhill, Mass. Guard for wood heel turning machines. 1,828,089; Oct. 20.
Shepard, Ernest, Conception Junction, Mo. Lantern burner. 1,828,090; Oct. 20.
Sherrill, Jubal E. (See Pollard, E. L., and Sherrill.)
Shipley, Frank. (See Schuyler, Robert J., assignor.)
Shoemaker, William D., Drummond, Chevy Chase, Md. Tractor equipment combination. 1,828,079; Oct. 20.
Shreffler, Elwyne O., Manteno, Ill. Automobile fender. 1,828,451; Oct. 20.
Shuey, Paul F., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Latching relay. 1,828,299; Oct. 20.
Sieg, Karl, Brooklawn, N. J., assignor to Samuel M. Langston Co. Paper winding machine. 1,827,802; Oct. 20.
Silberstein, Sydney G., Brooklyn, N. Y. Display device. 1,827,803; Oct. 20.
Silva, Albert D., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Amplifying system. 1,828,688; Oct. 20.
Simmons, Charles W., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Device for pressure fluid control valves. 1,828,206; Oct. 20.
Simpson, William K., assignor to Hoffman Specialty Company, Waterbury, Conn. Thermostatic steam trap. 1,828,080; Oct. 20.
Singer Manufacturing Company, The. (See Sailer, Rudolph J., assignor.)
Sigveland, Ivar E., St. Paul, Minn. Collapsible tube holder. 1,828,154; Oct. 20.
Sisson, Orville, Herington, Kans., assignor of one-half to Thomson Machine Company and one-half to The J. H. Day Company, Cincinnati, Ohio. Adjustable curler apron for dough molding machines. 1,827,958; Oct. 20.
Sjostrom, Otto A. (See McCoy, R. O., and Sjostrom.)
Skinner, Alva L., Bridgeport, Ill., assignor to The Ohio Oil Company, Findley, Ohio. Pumping power. 1,828,689; Oct. 20.
Skonberg, Eric K. (See Meeker, J. H., and Skonberg.)
Slade, Edward, New York, assignor to Marshall Asbestos Corporation, Troy, N. Y. Shock eliminator. 1,828,549; Oct. 20.
Slepian, Joseph, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Flame splitter. 1,828,300; Oct. 20.
Sloan, Elgan S., Shippensville, Pa. Well plunger packing. 1,827,880; Oct. 20.
Smeltzer, Robert M. (See Booser, E. F., assignor.)
Smith, Cora J., Olympia, Wash. Hosiery protector. 1,828,081; Oct. 20.
Smith, David C., assignor to Kadow Foundation Inc., Toledo, Ohio. 1,828,233; Oct. 20.
Smith, John H., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,827,827; Oct. 20.
Smithe, F. L., Machine Co. (See Novick, Abraham, assignor.)
Smythe, Edwin H., Evanston, Ill. Sound reproducer. 1,828,513; Oct. 20.
Snell, Rex C. (See House, Samuel G., and Snell.)
Snyder, Clifford L., assignor to Evans Products Company, Detroit, Mich. Wheel chock. 1,828,579; Oct. 20.
Societe Anonyme La Nouvelle Montagne. (See Boscheron, Louis, assignor.)
Societe des Etablissements Gaumont. (See Decaux, René, assignor.)
Societe d'Installation de Lumiere et de Force Electriques. (See Morton, André A., assignor.)
Society of Chemical Industry in Basle. (See Bally, O., and Grossmann, assignors.)
Society of Chemical Industry in Basle. (See Bommer, M., de Montmollin, Frohlich, Grieshaber, Jaeck, and Felix, assignors.)
Society of Chemical Industry in Basle. (See De Montmollin, G., and Schmid, assignors.)
Sommers Bros. Appliance Co. (See Sommers, Sylvester A., assignor.)
Sommers, Sylvester A., Frankenmuth, assignor to Sommers Bros. Appliance Co., Saginaw, Mich. Leg fastening for stools and the like. 1,828,550; Oct. 20.
Spafford, Lewis B., Chicago, Ill. Game apparatus. 1,828,091; Oct. 20.
Spalding, William L., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Treatment of ind-xyl. 1,827,828; Oct. 20.
Sparks, Stanley W., Summit, N. J., assignor to The Columbus Machine Company, Columbus, Ohio. Gate valve and making the same. 1,828,478; Oct. 20.
Spatta, George, assignor to Clark Equipment Company, Buchanan, Mich. Making wheels. 1,828,155; Oct. 20.
Spatta, George, assignor to Clark Equipment Company, Buchanan, Mich. Making wheels. 1,828,156; Oct. 20.
Spatta, George, assignor to Clark Equipment Company, Buchanan, Mich. Making wheels. 1,828,157; Oct. 20.
Spatta, George, assignor to Clark Equipment Company, Buchanan, Mich. Making wheels. 1,828,158; Oct. 20.
Spatta, George, assignor to Clark Equipment Company, Buchanan, Mich. Making wheels. 1,828,159; Oct. 20.
Spencer, Harry E., New Haven, Conn., assignor to Universal Gear Shift Corporation, New York, N. Y. Cover plate. 1,827,881; Oct. 20.
Spill, Walter E., trustee. (See McKim, Wilmer E., assignor.)
Spiller, George A., and G. T. Johnson, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Railroad car end. 1,828,160; Oct. 20.
Spivey, Samuel C., Birmingham, Ala. Electric starting system for automobiles. 1,828,514; Oct. 20.
Sprague-Sells Corporation. (See Casey, Mary J., assignor.)
Sprague Sells Corporation. (See Dunkley, Samuel J., assignor.)

Spring, Fred L. V., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Pump-type oiler. 1,828,479; Oct. 20.
Spun Steel Corporation, The. (See Harrison, William R., assignor.)
Stacks, Homer, Detroit, Mich. Detachable vehicle top. 1,828,480; Oct. 20.
Staege, Stephen A. (See Ashbaugh, J. H., and Staege.)
Stafford Company The. (See Maynard, Vance R., assignor.)
Stabelin, Jay J., Chicago, Ill. Windshield wiper. 1,827,959; Oct. 20.
Stammreich, Hanns, Charlottenburg, near Berlin, Germany. Metal arc lamp. 1,828,346; Oct. 20.
Standard Brands Incorporated. (See Frey, C. N., Brown, and Craig, assignors.)
Standard Brands Incorporated. (See Wilhelm, Karl L., assignor.)
Standard Coupler Company. (See Goodwin, Ernest G., assignor.)
Standard Oil Company. (See Buchler, Clifford C., assignor.)
Standard Pressed Steel Co. (See Bennett, F., and Hallowell, assignors.)
Standard Pressed Steel Co. (See Hallowell, H. T., and Bennett, assignors.)
Standard Sanitary Manufacturing Company. (See Brain, George, assignor.)
Standard Sanitary Manufacturing Company. (See Sakler, George, assignor.)
Standard Stoker Company Inc., The. (See Lower, Nathan M., assignor.)
Steele and Johnson Manufacturing Company. (See Coe, Benjamin S., assignor.)
Sterling Manufacturing Company, The. (See Barnhart, Job R., assignor.)
Stettiner Chamotte-Fabrik Actien-Gesellschaft vormals Didier. (See Wolfshols, August, assignor.)
Stevens, Perley E., Chicago, Ill., assignor of one-third to S. E. Hess and one-third to L. Pistner, St. Paul, Minn. Bascule bridge. 1,827,916; Oct. 20.
Stevenson, Frank V. (See Peterman, R. B., and Stevenson.)
Stewart, Daniel W., Ottawa, Ontario, Canada. Utilizing magnesian rock in the preparation of calcium-magnesium bisulphite liquor in towers. 1,828,690; Oct. 20.
Stille, Curt, assignor to Telegraphie-Patent-Syndikat G. m. b. H., Berlin, Germany. Reproducing magnet for telegraphones. 1,828,260; Oct. 20.
Stoewener, Fritz. (See Rotger, H., and Stoewener.)
Stokes, John S. (See Novotny, E. E., and Johnson, assignors.)
Stoltenberg, Louis, Oakland, Calif. Combined potato digger and sorter. 1,828,261; Oct. 20.
Stombaugh, Arch V. (See Hobbs, Elbert R., assignor.)
Stone, Earl A., Detroit, Mich., assignor of one-half to D. O. Scott. Window for motor vehicles. 1,828,515; Oct. 20.
Stone, Frederick, Rapid City, S. Dak. Rotary engine. 1,828,207; Oct. 20.
Stonebridge, William E., New York, N. Y. Doorcheck. 1,828,082; Oct. 20.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Wheeled cultivator. 1,828,301; Oct. 20.
Stransky, Sigmund, and F. Hansgirg, Vienna, Austria. Process and apparatus for cracking hydrocarbon oils or their distillates by distillation under pressure. 1,828,691; Oct. 20.
Straus, Sylvan M., Gloversville, N. Y. Mechanism for connecting pieces of material. 1,828,347; Oct. 20.
Strong, Carlisle & Hammond Company, The. (See Odell, Albert B., assignor.)
Stroud, Ernest, London, England. Glass panel for luminaire. Des. 85,401; Oct. 20.
Stroud, Ernest, London, England. Glass panel for luminaire. Des. 85,402; Oct. 20.
Strupe, Cecil H., assignor to Leedy Manufacturing Company, Indianapolis, Ind. Snare drum. 1,828,083; Oct. 20.
Suchofsky, Frank, Hoboken, N. J. Wing brake for aeroplanes. 1,828,161; Oct. 20.
Summers, Otto M., Dayton, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,827,769; Oct. 20.
Suter, Philipp, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rotary fan. 1,827,770; Oct. 20.
Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Dual wheel and demountable rim. 1,828,162; Oct. 20.
Swan, James M., assignor to Sentinal Printing Company, Indianapolis, Ind. Combination display and information book. 1,828,084; Oct. 20.
Swanson, Reinhold J., Chicago, Ill. Wrist compact. Des. 85,403; Oct. 20.
Swendeman, Joseph E., Boston, assignor, by mesne assignments, to The Leavitt Machine Company, Orange, Mass. Removal of moisture from compressed air. 1,828,626; Oct. 20.
Swift, George W., jr., Inc. (See Swift, George W., jr., assignor.)
Swift, George W., jr., assignor to George W. Swift, jr., Inc., Bordentown, N. J. Blank creasing device. 1,828,234; Oct. 20.
Swindell-Dressler Corporation. (See Dressler, Philip d'H., assignor.)
Symington Company, The. (See Barrows, Donald S., assignor.)
Syrovy, Augustine J., and R. N. Janeway, Detroit, Mich., assignors, by mesne assignments, to Chrysler Corporation. Crank case ventilator. 1,828,085; Oct. 20.
Tannery, Clifton W., San Augustine, Tex. Mattress box. 1,827,858; Oct. 20.
Tate, Kenneth L., assignor to Taylor Instrument Companies, Rochester, N. Y. Pressure responsive instrument. 1,827,804; Oct. 20.
Tattersall, Harold J., Swinton, Manchester, England, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Prevention of the development of rancidity in vegetable oils. 1,828,708; Oct. 20.
Tatum, William W., assignor to British Dyestuffs Corporation Limited, Manchester, England. Manufacture and production of anthraquinone intermediates. 1,828,262; Oct. 20.
Taylor, Andrew R., Pepin, Wis. Wheel. 1,828,163; Oct. 20.
Taylor, David W., Washington, D. C. Tunnel boat. 1,827,859; Oct. 20.
Taylor Instrument Companies. (See Bolton, Harry D., assignor.)
Taylor Instrument Companies. (See Rosenburgh, Durwood D., assignor.)
Taylor Instrument Companies. (See Tate, Kenneth L., assignor.)
Taylor, Lee J., Snohomish, Wash. Storage means. 1,828,208; Oct. 20.
Teeter, Wilford H., assignor to Delco-Remy Corporation, Dayton, Ohio. Engine starting apparatus. 1,828,709; Oct. 20.
Telegraphie-Patent-Syndikat G. m. b. H. (See Stille, Curt, assignor.)
Thauss, Alfred. (See Doser, A., Mauthe, and Thauss.)
Thearle, Ernest L., Schenectady, N. Y., assignor to General Electric Company. Balancing steam locomotives. 1,828,627; Oct. 20.
Thomas, Leslie J., Arlington Heights, assignor to Mrs. V. C. Batchelder, Arlington, Mass. Piston ring. 1,828,209; Oct. 20.
Thompson, Campbell G. (See Bickford, Percy D., assignor.)
Thompson, Earl A., Portland, Oreg. Transmission. 1,827,960; Oct. 20.
Thompson, Howard A., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical signaling. 1,827,829; Oct. 20.
Thompson Manufacturing Company. (See Thompson, Walter Van E., assignor.)
Thompson Products, Inc. (See Bissell, Richard E., assignor.)
Thompson, Walter Van E., Los Angeles, assignor to Thompson Manufacturing Company, Los Angeles, Calif. Sprinkler for narrow areas. 1,827,961; Oct. 20.
Thomson Machine Company, et al. (See Kirchhoff, William G., assignor.)
Thomson Machine Company, et al. (See Sisson, Orville, assignor.)
Thorp, Vaughn P., River Edge, N. J., assignor to American Telephone and Telegraph Company. Carrier telegraph system. 1,827,860; Oct. 20.
Thorpe, Forest H., assignor to The Columbus Sucker Rod Company, Columbus, Ohio. Wood rod coupling. 1,828,164; Oct. 20.
Thuillier, Adolphie. (See Schmitt, E. B., and Thuillier.)
Timken-Detroit, Axle Company, The. (See Morgan, Mathew B., assignor.)
Titania Corporation. (See von Bichowsky, Foord, assignor.)
Todd Dry Dock, Engineering & Repair Corporation. (See Haynes, George P., assignor.)
Toledo Scale Company. (See Hapgood, Clarence H., assignors.)
Torgerson, Theodore C., Alexander, N. Dak. Baby bottle steam heater. 1,828,628; Oct. 20.
Townley, Erwin, New York, N. Y. Suet cage. Des. 85,404; Oct. 20.
Townsend, George R., Schenectady, N. Y., assignor to General Electric Company. Roller double contact mechanism. 1,828,692; Oct. 20.
Trane, Reuben N., La Crosse, Wis. Vacuum heating system. 1,828,302; Oct. 20.
Travilla, James C., jr., Philadelphia, Pa., assignor to General Steel Castings Corporation, Granite City, Ill. Railway truck centering device. 1,828,002; Oct. 20.
Travilla, James C., jr., Philadelphia, Pa., assignor to General Steel Castings Corporation, Granite City, Ill. Locomotive spring equalizing system. 1,828,003; Oct. 20.
Travis, Simeon E., jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co. Truck body. 1,828,629; Oct. 20.
Trent Process Corporation. (See Trent, Walter E., assignor.)
Trent, Walter E., assignor to Trent Process Corporation, New York, N. Y. Process of cracking coal and oil. Re18,234; Oct. 20.
Trico Products Corporation. (See Hueber, Henry, assignor.)
Trico Products Corporation. (See Oishei, John R., assignor.)

Trico Products Corporation. (See Oishei, W. E., and Wieland, assignors.)
Trobridge Geoffrey W., Sutton Coldfield, E. A. Murphy, Erdington, Birmingham, F. Twiss, Wylde Green, and W. G. Gorham, Erdington, Birmingham, assignors to Dunlop Rubber Company Limited, Birmingham, England. Making articles from organic dispersions. 1,828,481; Oct. 20.
Trussell, Homer A., Chicago, Ill. Fuel distribution and vaporization. 1,827,830; Oct. 20.
Turnbull, Wallace R., Rothesay, New Brunswick, Canada. Variable pitch propeller. 1,828,303; Oct. 20.
Turnbull, Wallace R., Rothesay, New Brunswick, Canada. Variable pitch propeller. 1,828,348; Oct. 20.
Turn-Rite Process Co. (See Biddle, William M., assignor.)
Tweedie, Charles, Jefferson City, Mo. Arch support. 1,828,086; Oct. 20.
Twiss, Douglas F. (See Trobridge, G. W., Murphy, Twiss, and Gorham.)
U. G. I. Contracting Company, The. (See Evans, Owen B., assignor.)
Underwood, Cyrus W., Crowley, La. Photographic camera. 1,828,630; Oct. 20.
Underwood Elliott Fisher Company. (See Linderman, Stuart H., assignor.)
Underwood Elliott Fisher Company. (See Shaver, James E., jr., assignor.)
Union Switch & Signal Company, The. (See Baughman, George W., assignor.)
Union Switch & Signal Company, The. (See Gilson, Robert M., assignor.)
Union Switch & Signal Company, The. (See Grondahl, L. O., and Bossart, assignors.)
Union Switch & Signal Company, The. (See O'Hagan, Bernard E., assignor.)
Union Switch & Signal Company, The. (See Thompson, Howard A., assignor.)
Union Switch & Signal Company, The. (See Williamson, Arba G., assignor.)
Union Switch & Signal Company, The. (See Young, H. S., and Brooks, assignors.)
United-Carr Fastener Corporation. (See Pierce, Walter H., assignor.)
United Glass Bottle Manufacturers Limited. (See Pryor, E. A. C., and Hurlbut, assignors.)
United Shoe Machinery Corporation. (See Kinney, Fay D., assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Cornelis F. M., assignor.)
United Steel & Wire Company. (See Betts, Earl L., assignor.)
Universal Gear Shift Corporation. (See Spencer, Harry E., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Egloff, G., and Benner, assignors.)
Universal Oil Products Company. (See Herrick, Ralph R., assignor.)
Universal Oil Products Company. (See Mekler, Lev A., assignor.)
Universal Oil Products Company. (See Morrell, J. C., and Faragher, assignors.)
Universal Oil Products Company. (See Pollock, Robert T., assignor.)
Universal Oil Products Company. (See Pratt, Clifton J., assignor.)
Universal Oil Products Company. (See Seguy, Jean D., assignor.)
Utah Metals Flux Company. (See Fisher, Ernest S., assignor.)
Valley Mould and Iron Corporation. (See Perry, John E., assignor.)
Van Berkel, Cornelis F. M., Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Weighing mechanism for slicing machines. 1,827,917; Oct. 20.
Van Berkel, Cornelis F. M., Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Combined slicing and weighing machine. 1,827,918; Oct. 20.
Van Brigple, Howard, et al. (See Barr, Roy L., assignor.)
Van Deventer, Harry R., New York, N. Y., assignor, by mesne assignments, to Inland Manufacturing Company, Dayton, Ohio. Apparatus for molding ice. 1,828,693; Oct. 20.
Van Doren, Harold L., Toledo, Ohio. Scale chart. Des. 85,405; Oct. 20.
Van Hattum, Arie, The Hague, Netherlands. Joint system for tubular framework or similar metal constructions. 1,828,235; Oct. 20.
Van Wagenen, James H., Washington D. C. Electromagnetic sound-producing device. 1,827,919; Oct. 20.
Varney, William W. (See Grenagle, James B., assignor.)
Veth, Noel D., assignor to The Watt Car and Wheel Co., Barnesville, Ohio. Mine car. 1,828,263; Oct. 20.
Vetter, Brady S., Moorefield, W. Va. Device for sharpening rock drills. 1,828,580; Oct. 20.
Victor Manufacturing & Gasket Company. (See Oven, Frank J., assignor.)
Villeré, Joseph S., assignor to The E. E. Fairchild Corporation, Rochester, N. Y. Display receptacle. 1,828,264; Oct. 20.
Vitrefrax Corporation. (See Curtis, Thomas S., assignor.)
Vlcek, John J., Wilson, Kans. Nonchattering valve grinder stem. 1,828,087; Oct. 20.
Volkhardt, William, Staten Island, N. Y. Hydrant cock. 1,827,861; Oct. 20.
Von Bichowsky, Foord, Glendale, assignor to Titania Corporation, Los Angeles, Calif. Producing titanium compounds. 1,828,710; Oct. 20.
Von Henke, Edmund J., assignor to Automatic Safety Trip Corporation, Chicago, Ill. Safety device. 1,828,723; Oct. 20.
Wagner, Charles, Litho. Machinery Company, Inc. (See Wagner, C., and Hormel, assignors.)
Wagner, Charles, Grantwood, and A. Hormel, Jersey City, N. J., assignors to Charles Wagner Litho. Machinery Company, Inc. Drying apparatus for plates of metal and other material. 1,828,516; Oct. 20.
Wagner, Martin F. (See Cline, W. J., and Wagner.)
Walch, Frederick W. (See Williston, B. T., Walch, and Allen.)
Wales Novelties Corporation. (See Hardy, Charles, assignor.)
Walker Machine & Foundry Corporation. (See Moore, L. F., and Craighill, assignors.)
Walters, Jesse H., Hebron, Ohio. Stock rack for vehicles. 1,828,551; Oct. 20.
Walther, Heinrich, Frankfort-on-the-Main-Oberrad, Germany. Machine for the manufacture of glued shoes. 1,828,265; Oct. 20.
Wantz, Julius B., Oak Park, and J. J. Grobe, assignors to General Electric X-Ray Corporation, Chicago, Ill. Tube holder. 1,828,092; Oct. 20.
Ward Leonard Electric Company. (See Kouyoumjian, Haroutfun K., assignor.)
Ward, Louis E., assignor to The Dow Chemical Company, Midland, Mich. Electrolytic cell curtain. 1,828,004; Oct. 20.
Ward, Louis E., Midland, Mich., assignor to The Dow Chemical Company. Curtain for electrolytic cells. 1,828,005; Oct. 20.
Ward, Louis E., assignor to The Dow Chemical Company, Midland, Mich. Curtain for electrolytic cells. 1,828,006; Oct. 20.
Wardley, Timothy C., assignor to T. E. Bissell Company Limited, Elora, Ontario, Canada. Disk harrow. 1,827,920; Oct. 20.
Waterworth, Robert J., assignor to Prima Manufacturing Company, Inc., Sidney, Ohio. Power drive device for washing machines. 1,828,007; Oct. 20.
Watson, Arthur C., Marietta, Ohio. Producing visual effects. 1,828,236; Oct. 20.
Watson, Frank H., Jonesboro, Ark. Cotton picker head. 1,828,581; Oct. 20.
Watt Car and Wheel Co., The. (See Veth, Noel D., assignor.)
Watt Car and Wheel Co., The. (See Watt, Charles W., assignor.)
Watt, Charles W., assignor to The Watt Car and Wheel Co., Barnesville, Ohio. Mine car. 1,828,266; Oct. 20.
Watts, Vilas E., assignor of one-third to G. G. Pomeroy, Sacramento, Calif. Transverse testing machine. 1,827,805; Oct. 20.
Watzka, Otto, Vienna, Austria, assignor to C. S. Bleicher, New York, N. Y. Automatic contrivance for receiving written messages by telephone. 1,827,902; Oct. 20.
Weber, Emil, Evansville, Ind. Umbrella and parasol handle. 1,827,862; Oct. 20.
Weingartner, Anthony E., Bethlehem, Pa. Pressing device. 1,828,582; Oct. 20.
Weintraub, Harry H., assignor to Kardad, Inc., Wilkes-Barre, Pa. Set of playing cards. Des. 85,406; Oct. 20.
Weintraub, Harry H., assignor of one-half to M. Dattner, Wilkes-Barre, Pa. Set of playing cards. Des. 85,407; Oct. 20.
Weiske, Paul, and K. Rupprecht, Berlin, Germany, assignor to General Electric Company. Motor control system. 1,828,583; Oct. 20.
Weldbuilt Corporation. (See MacBean, Thomas L., assignor.)
Weldmech Steel Products Co., The. (See Travis, Simeon E., jr., assignor.)
Wennegal, George F., Baltimore County, Md. Trolley car. 1,828,008; Oct. 20.
Westco Pump Company. (See Derrick, William I., assignor.)
Western Electric Company. (See Blankenstein, Edward E., assignor.)
Western Electric Company. (See Howard, Russell S., assignor.)
Western Electric Company. (See Maxfield, Joseph P., assignor.)
Western Electric Company. (See Westhafer, Terrence O., assignor.)
Western Union Telegraph Company, The. (See Homer, E. C., and Buckingham, assignors.)
Westhafer, Terrence O., Downers Grove, Ill., assignor to Western Electric Company, Incorporated New York, N. Y. Producing carbon granules. 1,828,009; Oct. 20.
Westinghouse Electric & Manufacturing Company. (See Allen, Robert C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Arnold, Edwin E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ashbaugh, John H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Ashbaugh, J. H., and Staege, assignors.)
Westinghouse Electric & Manufacturing Company. (See Barnholdt, H. L., and Brown, assignors.)
Westinghouse Electric & Manufacturing Company. (See Beers, George L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brindley, William E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Crabbs, Herbert J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Davies, David R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Densmore, Benjamin V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Guy, Henry L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hanna, Clinton R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hill, Leland H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kucher, Andrew A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mattingly, Harold W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Paul, Bryan B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Shuey, Paul F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Slepian, Joseph, assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, John H., assignor.)
Westling, William, Minneapolis, Minn. Auxiliary spring for an engine support. 1,828,452; Oct. 20.
Weter, John W., Phillipsburg, assignor to Madeira, Hill & Company, Philadelphia, Pa. 1,828,482; Oct. 20.
White Brass Castings Company. (See Bruce, Robert L., assignor.)
White, Gordon W., West Hartford, Conn. Flush valve. 1,828,517; Oct. 20.
White, Lazarus, New York, N. Y. Producing substructures for structures. 1,827,921; Oct. 20.
White, Lazarus, New York, N. Y. Hydraulic pile driving mechanism. 1,827,922; Oct. 20.
White Motor Company, The. (See Church, Harold D., assignor.)
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,828,010; Oct. 20.
Whitney, Willis R., Schenectady, N. Y., assignor to General Electric Company. Soot disposal process and apparatus. 1,828,631; Oct. 20.
Whitridge, John C., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Metallic door. 1,827,863; Oct. 20.
Wickwire Spencer Steel Company. (See Woodman, Francis N., assignor.)
Widman, George D., Los Angeles, Calif. Soap dispenser. 1,828,011; Oct. 20.
Wieland, Frank. (See Oishei, W. E., and Wieland.)
Wilbur, Lawrence S., Evanston, assignor to National Rail Joint Corporation, Chicago, Ill. Mobile reforming plant. 1,828,382; Oct. 20.
Wilcke, Fritz, Berlin-Adlershof, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Production of sebacic acid dinitrile. 1,828,267; Oct. 20.
Wilcox-Rich Corporation. (See Schneider, George, assignor.)
Wildman, Alexander J., and H. H. Latimer, assignors to The Beckett Paper Company, Hamilton, Ohio. Manufacture of paper. 1,827,923; Oct. 20.
Wilhelm, Karl L., assignor to Standard Brands Incorporated, New York, N. Y. Bag or analogous article. Des. 85,408; Oct. 20.
Wilhelm, Karl L., assignor to Standard Brands Incorporated, New York, N. Y. Bag or analogous article. Des. 85,409; Oct. 20.
Wilkes, Traub, New York, N. Y. Conveyer. 1,828,268; Oct. 20.
Williams, Frank D., Los Angeles, Calif. Aircraft. 1,827,771; Oct. 20.
Williams, Frank D., Los Angeles, Calif. Picture process. 1,827,924; Oct. 20.
Williams, Frank M., Watertown, N. Y. Freeness tester. 1,828,210; Oct. 20.
Williams, James F., Lyndhurst and R. H. Cramer, Newark, N. J., assignors to General Motors Corporation, Detroit, Mich. Feed mechanism. 1,828,552; Oct. 20.
Williams, Oliver J. (See Reinking, Henry M., assignor.)
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Automatic compensating device for highway guard fence cables. 1,828,349; Oct. 20.
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Fence anchor. 1,828,350; Oct. 20.
Williamson, Arba G., Carnegie, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Train control system. 1,828,632; Oct. 20.
Williston, Belvin T., and F. W. Walch, Somerville, Mass., and C. D. Allen, Philadelphia, Pa. assignors to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y. Injector for feeding water to steam boilers. 1,828,633; Oct. 20.
Wilson-Jones Company. (See Dawson, George H., assignor.)
Wingler, August. (See Schulemann, W. Wingler, and Schönhöfer.)
Winkler, George W., Grantwood, N. J. Salvaging apparatus for sunken ships. 1,828,694; Oct. 20.
Winthrop Chemical Company. (See Schulemann, W., Wingler, and Schönhöfer, assignors.)
Wolcott, Edson R., Los Angeles, Calif. Apparatus for pumping liquids. 1,827,925; Oct. 20.
Wolf, Harry E., Pittsburgh, Pa., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa. Cushion seat construction. 1,828,634; Oct. 20.
Wolferman, Milton J., New York, assignor to Continental Silver Company, Brooklyn, N. Y. Sugar dispensing container. 1,828,695; Oct. 20.
Wolfsholz, August, Milan, Italy, assignor to Stettiner Chamotte-Fabrik Actien-Gesellschaft vormals Didier, Berlin-Wilmersdorf, Germany. Fire and acid-proof plastic substance. 1,828,211; Oct. 20.
Wompey, John J., Denver, Colo. Illuminating device. 1,827,963; Oct. 20.
Wood, Wilfred R., London, England, assignor to International Combustion Engineering Corporation, New York, N. Y. Steam generation. 1,828,483; Oct. 20.
Wood, William D., et al. (See Oberdier, Frank R., assignor.)
Woodford, Joseph C., Ardmore, assignor to Service Station Equipment Company, Conshohocken, Pa. Fluid dispensing apparatus. 1,828,696; Oct. 20.
Woodman, Francis N., Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y. Hinged conveyer belt. 1,828,304; Oct. 20.
Woodward, Lewis A., Frederick, Md. Organ valve. 1,827,864; Oct. 20.
World Bestos Corporation. (See Heany, John A., assignor.)
Worth, William E., North Pelham, N. Y., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Heat regulating device. 1,828,553; Oct. 20.
Wragg, Laura A., New London, Conn. Drapery pin. 1,828,012; Oct. 20.
Wright, Carl L. (See De Witt, Arthur R., assignor.)
Wright, Clyde S., assignor to The National Supply Company, Toledo, Ohio. Spudding shoe. 1,828,269; Oct. 20.
Wright, Paul, Birmingham, Ala. Boiler. 1,827,865; Oct. 20.
Wysong, Ansel S., Los Angeles Calif., assignor of one-half to C. H. Popenoe, Silver Spring, Md. Preservation of fresh fruits and vegetables from mold and decay. 1,828,518; Oct. 20.
Yanchenko, Basil J., assignor to J. C. Ledbetter, New York, N. Y. Temperature controlling device. 1,827,831; Oct. 20.
Yardley, Farnham, West Orange, N. J., assignor to Jenkins Bros., New York, N. Y. Check valve structure. 1,828,697; Oct. 20.
Yingling, Frank B., Hamilton, Ohio. Tile assembling and pasting machine. 1,828,013; Oct. 20.
Yost, Norman S., Howell, assignor to Howell Electric Motors Company, Howell, Mich. Alternating current motor. 1,828,724; Oct. 20.
Youman, Burt C. (See Muller, W. A., and Youman.)
Young, Henry S., Wilkinsburg, and C. A. Brooks, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,828,014; Oct. 20.
Youngstown Steel Door Co., The. (See Ditchfield, Frank, assignor.)
Zeder, James C., and O. J. Bratz, assignors to Chrysler Corporation, Detroit, Mich. Gear. 1,828,305; Oct. 20.
Zenith Radio Corporation. (See Forbes, Henry C., assignor.)
Zimmerman, Benjamin F., New Haven, Conn., assignor to F. E. Bigelow, Detroit, Mich. Filtering device. 1,828,484; Oct. 20.
Zimmerman, William R. (See Bezzenberger, F. K., and Zimmerman.)
Zupnik, Edward, Washington, D. C. Cellophane container. Des. 85,410; Oct. 20.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 20TH DAY OF OCTOBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acetaldehyde and acetic acid, Production of. H. Jochheim. 1,828,372; Oct. 20.
Acetylene and producing the same, Polymerization product of. W. C. de Liefde. 1,828,560; Oct. 20.
Acid dinitrile, Production of sebacic. F. Wilcke. 1,828,267; Oct. 20.
Acids and the product thereof, Producing water-insoluble petroleum soluble carboxylic. A. W. Burwell. 1,828,356; Oct. 20.
Acoustic instrument. A. Galbarini. 1,828,654; Oct. 20.
Adjustable seat. L. Berger. 1,827,928; Oct. 20.
Advertising apparatus, Animated. I. H. Segal. 1,828,475; Oct. 20.
Advertising device, Electric. J. Galetzky. 1,827,980; Oct. 20.
Aeroplane control device. M. Davis. 1,827,933; Oct. 20.
Agitator for dispensing mechanisms. W. L. Beall. 1,828,519; Oct. 20.
Agricultural apparatus. L. A. Laas. 1,828,670; Oct. 20.
Aircraft. W. J. Cline and M. F. Wagner. 1,828,026; Oct. 20.
Aircraft. J. M. Gwinn, jr. 1,828,184; Oct. 20.
Aircraft. I. M. Laddon. 1,828,192; Oct. 20.
Aircraft. F. D. Williams. 1,827,771; Oct. 20.
Aircraft carrier, Submarine. E. N. Greunlesen. 1,828,655; Oct. 20.
Aircraft control mechanism. P. Maiwurm. 1,828,253; Oct. 20.
Airplane. R. F. Hall. 1,827,845; Oct. 20.
Airplane. C. B. O'Connor. 1,827,953; Oct. 20.
Air washing and tempering machine. W. A. Schwender. 1,827,768; Oct. 20.
Alarm apparatus for speedometers for vehicles. P. A. Kourtzman. 1,827,989; Oct. 20.
Aminoanthraquinone derivatives and making same. O. Bally and P. Grossmann. 1,828,588; Oct. 20.
Amplifying system. A. D. Silva. 1,828,688; Oct. 20.
Anchor, Fence. R. G. Williams. 1,828,350; Oct. 20.
Anchor for furnace linings. I. S. Pieters. 1,828,618; Oct. 20.
Anchorage. B. J. Povalski. 1,827,762; Oct. 20.
Animal trap. J. Bryan. 1,828,486; Oct. 20.
Anthraquinone intermediates, Manufacture and production of. W. W. Tatum. 1,828,262; Oct. 20.
Anti-rattler for doors and the like. I. D. Perry. 1,828,120; Oct. 20.
Applicator for dispensing liquid from containers. W. Y. Allen. 1,828,485; Oct. 20.
Armature insulation machine. H. H. Eaton. 1,827,740; Oct. 20.
Articles from organic dispersions, Making. G. W. Trobridge, E. A. Murphy, D. F. Twiss, and W. G. Gorham. 1,828,481; Oct. 20.
Articles together, Fastening. E. H. Ellison. 1,827,884; Oct. 20.
Articulated device. H. Seidman and H. Cohan. 1,828,476; Oct. 20.
Ash jar. M. Barclay. Des. 85,362; Oct. 20.
Ash-receiver and match holder, Combination. B. S. Coe. Des. 85,306; Oct. 20.
Astronomy, Instruction apparatus for. J. R. Lunt and D. C. Haley. 1,828,057; Oct. 20.
Atmosphere regulating system. A. H. Ballard. 1,827,926; Oct. 20.
Autographic register, Lever feed. L. F. Hagemann. 1,827,745; Oct. 20.
Automobile body. R. W. Bulkeley. 1,828,355; Oct. 20.
Automobile body. G. Prestigiacomo. Des. 85,394; Oct. 20.
Automobile body, Metal. O. J. Groehn. 1,827,743; Oct. 20.
Automobile, Front drive. A. H. Leamy. 1,828,327; Oct. 20.
Automobiles and the like, Apparatus for handling and storing. P. Been. 1,828,308; Oct. 20.
Automobiles, Apparatus for cleaning and polishing. B. K. Gillespie. 1,827,886; Oct. 20.
Azo-dyestuffs of the pyrazolone series and making same. G. de Montmollin and M. Schmid. 1,828,599; Oct. 20.
Bag: *See*—
Hand bag.
Bag or analogous article. K. L. Wilhelm. Des. 85,408–9; Oct. 20.
Bar: *See*—
Draft bar. Swinging margin bar.
Band, Extensible. V. Guinzburg. 1,827,942; Oct. 20.
Bank. J. H. Greer. 1,827,888; Oct. 20.
Barrier, Yieldable. E. D. Sawyer. 1,828,296; Oct. 20.
Bascule bridge. P. E. Stevens. 1,827,916; Oct. 20.
Base for plastic material. G. E. Land. 1,827,945; Oct. 20.
Base for stools, Supporting. T. Bink. 1,828,311; Oct. 20.
Battery: *See*—
Electric battery. Storage battery.
Batch meter. S. Shafer, jr., and C. F. Ball. 1,827,879; Oct. 20.
Bath house, Portable W. H. Kamman. 1,828,147; Oct. 20.
Bearing and making same, Self lubricating. J. R. Coolidge, 3d. 1,827,737; Oct. 20.
Bearing for rotary pumps. W. I. Derrick. 1,827,811; Oct. 20.
Belt. T. J. McCann. 1,828,196; Oct. 20.
Belt and coupling therefor. J. K. Diamond. 1,827,783; Oct. 20.
Belt, Hinged conveyer. F. N. Woodman. 1,828,304; Oct. 20.
Bench: *See*—
Work bench.
Binder, Loose leaf ledger. C. A. Finley. 1,828,600; Oct. 20.
Bit: *See*—
Well drilling bit.
Blade, Fine edged. T. H. Frost. 1,827,870–2; Oct. 20.
Blading, Reaction. B. V. Densmore. 1,828,409; Oct. 20.
Blank creasing device. G. W. Swift, jr. 1,828,234; Oct. 20.
Blank, Printing plate. V. J. Mohler. 1,827,995; Oct. 20.
Blende sintering process. L. Boscheron. 1,828,241; Oct. 20.
Blind, Venetian. L. E. d'Arx. 1,828,589; Oct. 20.
Block cutting apparatus and process, Ceramic. C. A. Fry, C. Harsh, and R. M. Schory. 1,828,462; Oct. 20.
Board: See—
Display board. Ironing board.
Board, sheathing lumber and the like, Wall. C. Marx and E. R. Darling. 1,828,029; Oct. 20.
Boards from redwood bark, Production of sheathing. E. R. Darling. 1,828,028; Oct. 20.
Boat plank fitting method. A. R. De Witt. 1,828,103; Oct. 20.
Boat, Tunnel. D. W. Taylor. 1,827,859; Oct. 20.
Bobbin. A. Hlavac. 1,827,875; Oct. 20.
Bodies, particularly aircraft, on or from platforms such as ships or landing stages. Device for taking up and setting down floating. W. Kiwull. 1,828,251; Oct. 20.
Body to receive and reproduce wave frequencies, Preparing a magnetizable. R. B. T. Killiani. 1,828,190; Oct. 20.
Boiler. P. Wright. 1,827,865; Oct. 20.
Boilers against flowing back of boiler water when feeding system leaks, Protecting steam. S. Haga. 1,828,188; Oct. 20.
Bolts and similar connecting devices, Making. T. L. MacBean. 1,828,287; Oct. 20.
Bonding mold. W. G. Beauregard. 1,828,020; Oct. 20.
Book, Combination display and information. J. M. Swan. 1,828,084; Oct. 20.
Boot or shoe and making same. C. H. Daniels. 1,828,320; Oct. 20.
Booth, Spray. R. C. Mahon. 1,828,609; Oct. 20.
Bottle. J. C. Egizio. Des. 85 369; Oct. 20.
Bottle. E. W. Fuerst. Des. 85,379; Oct. 20.
Bottle carrier. G. A. Kane and J. E. McCafferty. 1,828,416; Oct. 20.
Bottle or similar article, Perfume. R. Betts. Des. 85,363; Oct. 20.
Bottle wrapping machine. P. D. Bickford. 1,828,123; Oct. 20.
Bowl or like article. F. J. Peters. Des. 85,392; Oct. 20.
Box: *See*—
Cigar box. Outlet box.
Journal box. Plant box.
Match box. Stuffing box.
Mattress box.
Bracelet chain. M. Anderson. Re18,230; Oct. 20.
Brake: *See*—
Clutch brake. Vehicle brake.
Spring brake.
Brake for aeroplanes, Wing. F. Suchofsky. 1,828,161; Oct. 20.
Brake mechanism. H. F. Kapperman. 1,828,568; Oct. 20.
Brake mechanism. A. Kazenmaier. 1,827,849; Oct. 20.
Brake mechanism. R. C. Mountz. 1,828,612; Oct. 20.
Brake mechanism for motor vehicles. W. J. Besler. 1,828,386; Oct. 20.
Brake mechanism, Volute. D. S. Barrows. 1,828,218; Oct. 20.
Braking apparatus for aircraft. M. Berkeron. 1,828,641; Oct. 20.

Brakes and other devices, Adjusting. M. B. Morgan. 1,827,948; Oct. 20.
Bread packing machine. A. J. Andersen. 1,828,238; Oct. 20.
Briquettes, Apparatus for making. H. Archbald. 1,828,586; Oct. 20.
Buffer or grinder. W. A. Marschke. 1,828,540; Oct. 20.
Building structure. G. Parducci. Des. 85,391; Oct. 20.
Building unit, Structural. G. E. Berger. 1,828,309; Oct. 20.
Burners: *See*—
Coal burner. Oil burner.
Lantern burner.
Burner. A. Lanser. 1,828,326; Oct. 20.
Burner control. E. W. McKinley. 1,827,993; Oct. 20.
Burner for the oxidation of ammonia. C. B. Clark. 1,828,318; Oct. 20.
Burner system, Oil. P. C. Mulligan. 1,827,950; Oct. 20.
Bush for reciprocating members. A. G. M. Michell. 1,828,289; Oct. 20.
Bushing and transformer, Combined insulating. W. S. Edsall. 1,827,936; Oct. 20.
Bushing, Insulating. W. S. Edsall. 1,827,935; Oct. 20.
Button making machines, Attachment for. E. Clemens. 1,828,174; Oct. 20.
Cabinet, Dispensing. P. D. Parsons. 1,827,904; Oct. 20.
Cage, Suet. E. Townley. Des. 85,404; Oct. 20.
Calculating machine. G. C. Chase. 1,827,837; Oct. 20.
Calculating machine. C. Gardner. 1,828,180; Oct. 20.
Calculating machine. A. A. Horton. 1,827,890; Oct. 20.
Calculating machine, Electrical. R. E. Boutet. 1,827,836; Oct. 20.
Camera, Photographic. C. W. Underwood. 1,828,630; Oct. 20.
Cameras, Actuating and locking means for. E. B. Schmitt and A. Thuillier. 1,828,205; Oct. 20.
Can feeding machine. P. Kruse. 1,828,324; Oct. 20.
Can delivering mechanism. C. H. Ayars. 1,828,168; Oct 20.
Cane, Walking. W. Jasinski. 1,828,144; Oct. 20.
Canning machine. C. H. Ayars. 1,828,167; Oct. 20.
Car. F. Ditchfield. 1,827,784; Oct. 20.
Car construction. R. G. Goodwin. 1,828,563; Oct. 20.
Car end, Railroad. G. A. Spiller and G. T. Johnson. 1,828,160; Oct. 20.
Car, Mine. N. D. Veth. 1,828,263; Oct. 20.
Car, Mine. C. W. Watt. 1,828,266; Oct. 20.
Car, Ore sintering. O. A. Oesterle. 1,827,799; Oct. 20.
Car, Railway dump. W. H. Mussey. 1,827,997; Oct. 20.
Carbon granules, Producing. E. E. Blankenstein. 1,827,931; Oct. 20.
Carbon granules, Producing. R. S. Howard. 1,828,046; Oct. 20.
Carbon granules, Producing. T. O. Westhafer. 1,828,009; Oct. 20.
Carbon paper, Trademarking. W. Mendel. 1,828,374; Oct. 20.
Carburetor. E. H. Fahrney. 1,828,134; Oct. 20.
Carburetor. C. F. Johnson. 1,828,415; Oct. 20.
Cards, Set of playing. H. H. Weintraub. Des. 85,406–7; Oct. 20.
Carnation. O. A. Miller. Pl. Pat. No. 3; Oct. 20.
Carrier: *See*—
Aircraft carrier. Differential carrier.
Bottle carrier. Luggage carrier
Carrier. L. W. Hassensall. 1,828,412; Oct 20.
Carrier for despatch systems. F. W. MacMartin. 1,828,504; Oct. 20.
Cars, Interchange device for automatic connecters for railway. J. Robinson. 1,828,072; Oct. 20.
Case: *See*—
Vanity case.
Casing, Elastic fluid turbine. H. L. Guy. 1,828,408; Oct. 20.
Casing head for oil and gas wells. W. L. Church. 1,828,555; Oct. 20.
Casket lowering apparatus. W. A. Canaday. 1,828,391; Oct. 20.
Casting. W. G. Goodwin. 1,828,495; Oct. 20.
Casting method, Centrifugal. W. H. Millspaugh. 1,828,335; Oct. 20.
Catalytic process. H. Rötger and F. Stoewener. 1,828,380; Oct. 20.
Catch, Spring door. G. S. Cooper. 1,827,810; Oct. 20.
Ceiling, Marquise. W. O. Prouty. Des. 85,395; Oct. 20.
Cellulose, Producing. B. N. Segerfelt. 1,828,511; Oct. 20.
Cement, Method and apparatus for burning Portland. E. Anderson. 1,828,270; Oct. 20.
Centrifugal process and mechanism. T. A. Bryson. 1,828,096; Oct. 20.
Centrifugal machine. C. Shapley. 1,828,548; Oct. 20.
Ceramic composition, High strength. T. S. Curtis. 1,827,838; Oct. 20.
Chain manufacture. F. L. Morse. 1,828,506; Oct. 20.
Chain pipe wrench. F. J. Carnelli. 1,828,173; Oct. 20.
Chair. L. F. Moore and P. Craighill. Des. 85,387; Oct. 20.
Charm, Key. H. W. Peters. 1,828,617; Oct. 20.
Chart, Scale. H. L. van Doren. Des. 85,405; Oct. 20.
Chemicals from pulp magma, Apparatus and method for the recovery of. H. L. Brown. 1,828,279; Oct. 20.
Chopper: *See*—
Cotton chopper.
Chuck, Turning machine. J. S. Richardson. 1,827,763; Oct. 20.
Cigar band. O. Muller. 1,827,761; Oct. 20.
Cigar box. A. A. Adamson. 1,827,724; Oct. 20.
Cigarette extinguisher. W. F. Pringle. 1,828,068; Oct. 20.
Circuit and other lock, Ignition. V. L. Gilpin. 1,828,562; Oct. 20.
Circuit apparatus, Railway track. B. E. O'Hagan. 1,827,825; Oct. 20.
Circuit control. L. Hese. 1,828,321; Oct. 20.
Circuit controlling device. P. B. Murphy. 1,828,507; Oct. 20.
Circuits, Oscillation. R. A. Heising. 1,828,498; Oct. 20.
Circuits, Reducing interference in electrical. K. Lutomirski. 1,828,503; Oct. 20.
Clamp: *See*—
Handle clamp.
Clamp for cables or the like. A. O. Austin. 1,828,306; Oct. 20.
Clasp: *See*—
Necktie clasp.
Classification apparatus. A. D. Marriott. 1,827,894; Oct. 20.
Clay ball disintegrator. L. O. Bates. 1,828,589; Oct. 20.
Cleaner: *See*—
Windshield cleaner.
Cleaning machine. C. Picker. 1,827,905; Oct. 20.
Clock case. D. J. De Pree. Des. 85,368; Oct. 20.
Closure for containers. S. Freeman. 1,828,224; Oct. 20.
Closure mechanism for retort doors. J. F. Parker. 1,827,800; Oct. 20.
Closure operator. S. H. Gay. 1,828,137; Oct. 20.
Clutch and point protector, Scarf pin safety. E. A. Kirchner. 1,828,420; Oct. 20.
Clutch brake. B. Loeffler. 1,828,423; Oct. 20.
Clutch, Hydraulic. F. R. Oberdier. 1,828,677; Oct. 20.
Clutch, Slip. E. F. Huddle. 1,828,370; Oct. 20.
Coal and oil, Cracking. W. E. Trent. Re18,234; Oct. 20.
Coal burner, Pulverized. G. P. Haynes. 1,828,465; Oct. 20.
Coal distillation. R. S. Mead. 1,827,896; Oct. 20.
Coating. C. R. McKee. 1,827,822; Oct. 20.
Cock, Hydrant. W. Volkhardt. 1,827,861; Oct. 20.
Coil, Ignition. H. L. Hartzell. 1,828,411; Oct. 20.
Coils of insulated wire, Apparatus for making. J. Q. Holmes, and L. C. Goad. 1,828,441; Oct. 20.
Collet. M. J. Matthews. 1,827,795; Oct. 20.
Combing machine. J. W. Nasmith. 1,828,877; Oct. 20.
Commutators, Apparatus for making. L. E. Poole, J. Q. Holmes, and L. C. Goad. 1,828,441; Oct. 20.
Compact, Wrist. R. J. Swanson. Des. 85,403; Oct. 20.
Compass, Transparent mariner's. A. Lietz. 1,828,194; Oct. 20.
Compensating device for highway guard fence cables. R. G. Williams. 1,828,349; Oct. 20.
Composition containing a derivative of cellulose. G. W. Seymour. 1,828,449; Oct. 20.
Compounds, Aminoalkyl derivative of aminotriphenyl methane. W. Schulemann, V. Hammerstein, A. Wingler, and F. Schönhöfer. 1,828,077; Oct. 20.
Concrete, Transporting. C. G. A. Schmidt, jr. 1,828,343; Oct. 20.
Concrete transporting apparatus. J. P. Gillespie. 1,828,181; Oct. 20.
Condenser. J. H. Smith. 1,827,827; Oct. 20.
Condenser and assembly thereof, Electrical. S. S. Cramer. 1,828,027; Oct. 20.
Condenser, Electrical. P. E. Gilling. 1,827,939; Oct. 20.
Condenser, Photoelectric cell light ray. C. W. Ebeling. 1,828,399; Oct. 20.
Conductor, Electric. C. F. Obermaier. 1,828,614; Oct. 20.
Conduit system. J. Blizard. 1,827,727; Oct. 20.
Confection coating machine. F. W. Greer. 1,826,405; Oct. 20.
Connecter, Flexible. H. D. Geyer. 1,828,402; Oct. 20.
Connecting device. G. L. Beers. 1,828,276; Oct. 20.
Connection for steering gear members, Adjustable. A. B. Sanders. 1,828,707; Oct. 20.
Contact members for electric switches, Magnetically engaged. T. T. Greenwood. 1,827,940; Oct. 20.
Container, Cellophane. E. Zupnik. Des. 85,410; Oct. 20.
Container construction. W. W. Robinson. 1,828,088; Oct. 20.
Container, Malted milk. A. Coors. Des. 85,367; Oct. 20.
Container, Sugar dispensing. M. J. Wolferman. 1,828,695; Oct. 20.
Containers, Feeding and timing mechanism for. M. M. Sedwick. 1,828,624; Oct. 20.
Contrivance for receiving written messages by telephone, Automatic. O. Watzka. 1,827,962; Oct. 20.
Control, Automatic grinder. K. Rupprecht. 1,828,622; Oct. 20.
Control for refrigerators, Automatic. S. G. House and R. C. Snell. 1,828,566; Oct. 20.
Control, Gear box. W. J. Schlacks. 1,828,547; Oct. 20.
Control mechanism for burners. E. R. Evans. 1,828,651; Oct. 20.
Control mechanism for refrigerating systems. B. L. Gates. 1,827,981; Oct. 20.
Control system for sugar washing apparatus and the like. C. L. Carlson. 1,828,127; Oct. 20.
Controller for electric motors. B. W. Jones and W. J. Fleming. 1,828,567; Oct. 20.
Conveyer. J. W. Wetter. 1,828,482; Oct. 20.

Conveyer. T. Wilkes. 1,828,268; Oct. 20.
Conveyer, Cleat. G. E. Rowe. 1,828,232; Oct. 20.
Cooler: *See*—
Drink cooler.
Cotton chopper. A. A. Pearce. 1,828,615; Oct. 20.
Cotton picker head. F. H. Watson. 1,828,581; Oct. 20.
Coupling: *See*—
Rod coupling.
Counterbalancing device. H. Moecker, jr., and H. B. Isaac. 1,828,675; Oct. 20.
Coupling. B. J. Mahoney. 1,828,505; Oct. 20.
Cover plate. H. E. Spencer. 1,827,881; Oct. 20.
Crank case ventilator. A. J. Syrovy and R. N. Janeway. 1,828,085; Oct. 20.
Cream separator. F. C. Sandstrom. 1,828,546; Oct. 20.
Crib, Baby. W. Derbyshire. 1,827,739; Oct. 20.
Cuff for knickers and the like, and its manufacture, Double. M. Braunstein. 1,828,457; Oct. 20.
Cultivator, Wheeled. C. G. Strandlund. 1,828,301; Oct. 20.
Cup: *See*—
Soldering cup.
Cup cake dropping machine. M. Helland. 1,828,565; Oct. 20.
Current motor, Alternating. N. S. Yost. 1,828,724; Oct. 20.
Curtain for electrolytic cells. L. E. Ward. 1,828,005–6; Oct. 20.
Curtain operating device for automobiles and the like. W. S. Atta. 1,828,166; Oct. 20.
Cutter: *See*—
Dandelion cutter. Paper cutter.
Cutter head for corn cutting machines. F. W. Douthitt. 1,828,647–9; Oct. 20.
Dampener. C. Breer. 1,828,278; Oct. 20.
Damper, Pipe. H. Knutson. 1,828,052; Oct. 20.
Dandelion cutter. J. E. Critz. 1,828,129; Oct. 20.
Dash pot mechanism. O. W. Andersen. 1,828,383; Oct. 20.
Davit for lifeboats. C. H. Fuller. 1,828,363; Oct. 20.
Desk leg glide shoe. W. R. Darnell. 1,827,972; Oct. 20.
Dewberry, Thornless young. E. L. Pollard and J. E. Sherrill. Pl. Pat. No. 4; Oct. 20.
Differential carrier. H. D. Church. 1,828,025; Oct. 20.
Digger and sorter, Combined potato. L. Stoltenberg. 1,828,261; Oct. 20.
Direction indicating signal. H. Goldberg. 1,828,404; Oct. 20.
Direction signal. H. W. Miller. 1,828,119; Oct. 20.
Dirigible helicopter. Y. H. Koun. 1,828,607; Oct. 20.
Disk harrow. T. C. Wardley. 1,827,920; Oct. 20.
Dispenser, Lubricant. H. P. Grossman. 1,827,844; Oct. 20.
Dispenser, Soap. G. D. Widman. 1,828,011; Oct. 20.
Dispensing apparatus, Fluid. J. C. Woodford. 1,828,696; Oct. 20.
Dispensing, measuring, and computing device. M. L. Jackson and J. R. Carter. 1,828,188; Oct. 20.
Display board, Advertising. R. H. Churchill. 1,827,731; Oct. 20.
Display device. S. G. Silberstein. 1,827,803; Oct. 20.
Display rack. E. L. Betts. 1,827,776; Oct. 20.
Display rack, Adjustable. W. L. Calkins. 1,827,969; Oct. 20.
Display stand, Portable. J. Kass. 1,828,555; Oct. 20.
Distillation or heat treatment of carbonaceous or like materials. E. M. Salerni. 1,828,683; Oct. 20.
Door, Elevator. A. C. Palm. 1,828,065; Oct. 20.
Door, Metallic. J. C. Whitridge. 1,827,863; Oct. 20.
Door or like, Ventilating. L. A. Murray. 1,827,996; Oct. 20.
Door silencer. O. F. Nelson. 1,828,431; Oct. 20.
Door, Vault. J. P. Paca. 1,828,436; Oct. 20.
Doorcheck. W. E. Stonebridge. 1,828,082; Oct. 20.
Dough molding machine, Adjustable curler apron for. O. Sisson. 1,827,958; Oct. 20.
Draft bar. O. Bergemann. 1,828,385; Oct. 20.
Drain, Floor. R. T. Frye. 1,828,601; Oct. 20.
Drapery pin. L. A. Wragg. 1,828,012; Oct. 20.
Drier: *See*—
Steam drier.
Drill: *See*—
Hydraulic drill.
Drill press feed. W. W. Edwards. 1,827,937; Oct. 20.
Drilling mechanism. I. B. Humphreys. 1,828,605; Oct. 20.
Drills, Device for sharpening rock. B. S. Vetter. 1,828,580; Oct. 20.
Drink cooler, Alternating refrigeration bottled. L. S. Pope. 1,827,856; Oct. 20.
Drinking apparatus for poultry. H. J. Divekey. 1,828,104; Oct. 20.
Drive device for washing machines, Power. R. J. Waterworth. 1,828,007; Oct. 20.
Driving mechanism for automotive vehicles. O. R. Robinson. 1,828,073; Oct. 20.
Driving mechanisms for flyers. H. Schneider. 1,828,259; Oct. 20.
Drum, Expansion. R. R. Herrick. 1,828,368; Oct. 20.
Drum screen, Rotary. A. M. Kivari. 1,828,469; Oct. 20.
Drum, Snare. C. H. Strupe. 1,828,083; Oct. 20.
Drying apparatus for plates of metal and other material. C. Wagner and A. Hormel. 1,828,516; Oct. 20.
Dyes, Preparation of sulphur. A. C. Burrage, jr. 1,828,699; Oct. 20.
Dyestuffs, Chromiferous azo. H. Krzikalla. 1,828,055; Oct. 20.
Dyestuffs which are of value for obtaining fast tints on the different fibers and making same, Preparation of. M. Bommer, G. de Montmollin, J. Fröhlich, F. Grieshaber, W. Paeck and F. Felix. 1,828,592; Oct. 20.
Egg saver trap. A. Grill. 1,828,406; Oct. 20.
Electric battery. A. Schmid. 1,828,204; Oct. 20.
Electric controlling apparatus. H. K. Kouyoumjian. 1,828,054; Oct. 20.
Electric display device. M. E. Curtiss. 1,828,177; Oct. 20.
Electric frequency eliminator, Piezo. E. I. Green. 1,827,843; Oct. 20.
Electric heater. C. C. Abbott. 1,828,635; Oct. 20.
Electric heater. W. W. Hicks. 1,827,788; Oct. 20.
Electric log. H. J. Gross. 1,827,941; Oct. 20.
Electrical apparatus. M. Cremer. 1,828,645; Oct. 20.
Electrical apparatus. G. W. Müller. 1,828,573; Oct. 20.
Electrical resistance device. H. Pender. 1,828,577; Oct. 20.
Electrical signaling. R. M. Gilson. 1,827,786; Oct. 20.
Electrical signaling. H. A. Thompson. 1,827,829; Oct. 20.
Electrical switch. L. Roebel. 1,827,765; Oct. 20.
Electrical timing device. H. Rodanet. 1,828,202; Oct. 20.
Electrodes, Apparatus for feeding electric furnace. J. G. Marshall. 1,827,852; Oct. 20.
Electrolytic cell curtain. L. E. Ward. 1,828,004; Oct. 20.
Electron discharge tube. S. Ruben. 1,828,203; Oct. 20.
Elevating device. M. S. Carmichael. 1,828,488; Oct. 20.
Elevator: *See*—
Water elevator.
Elevator control system. H. W. Mattingley. 1,827,796; Oct. 20.
End gate for trucks and other vehicles. C. M. Shaffer. 1,828,450; Oct. 20.
Engine: *See*—
Gas engine. Rotary engine.
Internal combustion engine
Engine, Method and apparatus for operating an internal combustion. H. Schwarze. 1,828,447; Oct. 20.
Engine starting apparatus. W. A. Chryst. 1,828,359; Oct. 20.
Engine starting apparatus. F. J. Hardman. 1,828,366; Oct. 20.
Engines, Regulating device for. V. Duer and O. S. Hassing. 1,828,650; Oct. 20.
Explosive composition. W. L. McPherson. 1,827,895; Oct. 20.
Explosive mixtures, Forming. C. Breer. 1,827,728; Oct. 20.
Fabric and making the same, Stiffening. C. Dreyfus. 1,828,397; Oct. 20.
Fabricated construction. H. L. Barnholdt and J. L. Brown. 1,828,275; Oct. 20.
Factice and the like, Manufacture of. J. Baer. 1,828,587; Oct. 20.
Fan, Refrigerator. A. A. Kucher. 1,828,538; Oct. 20.
Fan, Rotary. P. Suter. 1,827,770; Oct. 20.
Farm wastes, Pulping. E. R. Darling. 1,828,243; Oct. 20.
Fastener slide. D. I. Reiter. 1,828,256; Oct. 20.
Fastener, Window sash. W. N. Cropper. 1,828,557; Oct. 20.
Fastening for stools and the like, Leg. S. A. Sommers. 1,828,550; Oct. 20.
Fastening means for belts. R. S. Fowler. Re18,232; Oct. 20.
Faucet, Gang. H. E. Crosby. 1,828,175; Oct. 20.
Feed mechanism. J. F. Williams and R. H. Cramer. 1,828,552; Oct. 20.
Feeder. A. H. Jones. 1,828,662; Oct. 20.
Feeding mechanism. R. C. Danly. 1,828,595–7; Oct. 20.
Fender, Automobile. E. O. Shreffler. 1,828,451; Oct. 20.
Fiber bleaching. J. Neumann. 1,828,338; Oct. 20.
Fiber product and manufacture, Hard grainless. W. H. Mason. Re18,233; Oct. 20.
Filler mechanism. E. Mallinckrodt, jr. 1,828,117; Oct. 20.
Film contact system. F. E. Garbutt. 1,828,364; Oct. 20.
Film stopping apparatus. E. W. Kellogg. 1,828,569; Oct. 20.
Filtering device. B. F. Zimmerman. 1,828,484; Oct. 20.
Finger ring. J. Granat. Des. 85,380–1; Oct. 20.
Firearm. C. C. Loomis. 1,828,329–30; Oct. 20.
Fish-cleaning machine. W. A. Muller and B. C. Youman. 1,828,725; Oct. 20.
Flame splitter. J. Slepian. 1,828,300; Oct. 20.
Flooring, Laminated. H. L. Levin. 1,828,193; Oct. 20.
Floors or roofs, Making concrete. D. A. Scaley. 1,828,078; Oct. 20.
Flour from bran, Apparatus for dislodging hard-pressed. T. E. Forster. 1,828,247; Oct. 20.
Flow indicator. L. H. Hill. 1,827,813; Oct. 20.
Flue outlet, Oven. L. S. Kauffman. 1,828,666; Oct. 20.
Fluid discharge, Restricting atomized. M. J. Hammers. 1,828,463; Oct. 20.
Flushing tank. G. Brain. Des. 85,364; Oct. 20.
Folder and display, Advertising. N. E. Amsden. 1,827,964; Oct. 20.
Food product. C. N. Frey, E. B. Brown, and C. Craig. 1,828,283; Oct. 20.
Foot rest, Auxiliary. E. L. Monnot. 1,828,470; Oct. 20.
Football blocking pad. D. X. Bible. 1,827,834; Oct. 20.
Frame: *See*—
Locomotive frame. Sign frame.
Freeness tester. F. M. Williams. 1,828,210; Oct. 20.

Freezing machine. J. H. Hagen. 1,827,873; Oct. 20.
Frequency-changing apparatus of the thermionic type, Electrical. H. Andrews. 1,828,094; Oct. 20.
Fruit, Apparatus for peeling. M. J. Casey. 1,827,869; Oct. 20.
Fruits and vegetables from mold and decay, Preservation of fresh. A. S. Wysong. 1,828,518 Oct. 20.
Fuel distribution and vaporization. H. A. Trussell. 1,827,830; Oct. 20.
Fuel into internal combustion engines, Device for injecting. A. A. Morton. 1,828,676; Oct. 20.
Fuel loss indicator. R. E. Bissell. 1,827,930; Oct. 20.
Fuel pulverizing machines, Outfeeding means for. P. A. Hirsch. 1,828,712; Oct. 20.
Furnace: *See*—
Induction furnace. Rotatable furnace.
Furnace. K. A. Mayr. 1,827,946; Oct. 20.
Furnace for mineral wool production, Economizer. E. R. Powell. 1,828,293; Oct. 20.
Furnaces, Air feed mechanism for hot air. S. I. Bordo. 1,828,221; Oct. 20.
Furnaces, Draft appliance for. A. J. Reed. 1,827,910; Oct. 20.
Furnaces, Shaft for heat treating. J. Sammon. 1,828,510; Oct. 20.
Furniture, Folding. H. R. Noyes. 1,827,952; Oct. 20.
Fuse. M. H. Bennett. 1,828,277; Oct. 20.
Fuse, Electric. H. P. Hinds. 1,828,659; Oct. 20.
Game apparatus. L. B. Spafford. 1,828,091; Oct. 20.
Game, Coin controlled basket ball. A. H. Emenhiser. 1,827,885; Oct. 20.
Garment hanger. A. R. Mikota. 1,828,611; Oct. 20.
Garter. D. Paladino. Des. 85,390; Oct. 20.
Garter construction. W. Hamacher. 1,828,041; Oct. 20.
Gas and carbonized coal, Producing fuel. W. G. Laird. 1,828,148; Oct. 20.
Gas engine. C. W. Kempton. 1,828,228; Oct. 20.
Gas from oil, Apparatus for the manufacture of. L. B. Jones. 1,828,704; Oct. 20.
Gas, Manufacture of water. O. B. Evans. 1,828,461; Oct. 20.
Gas meter. R. L. Dezendorf. 1,827,973–4; Oct. 20.
Gas or a mixture of gas and vapor in the presence of catalytic agents and for the reactivation of such agents, Apparatus for the treatment of. A. Joseph. 1,828,146; Oct. 20.
Gasket. F. J. Oven. 1,828,471; Oct. 20.
Gear. J. C. Zeder and O. J. Bratz. 1,828,305; Oct. 20.
Gear, Automatic variable speed. E. Janik. 1,828,606; Oct. 20.
Gear for airplanes, Landing. G. M. Bellanca. Re18,226; Oct. 20.
Gear, Mating spur. W. H. Hubbard. 1,828,114; Oct. 20.
Gear puller, Hydraulic. J. E. Lynch. 1,828,252; Oct. 20.
Gearing and the like, Rope. O. Ohnesorge. 1,828,255; Oct. 20.
Gearing, Friction. L. D. Jones. 1,827,891; Oct. 20.
Gears, Making. E. E. Arnold. 1,828,271; Oct. 20.
Generator and method, Oscillation. F. A. Kolster and G. G. Kruesi. 1,828,706; Oct. 20.
Glass, Apparatus for feeding molten. K. E. Peiler. 1,828,720; Oct. 20.
Glass, Apparatus for feeding molten. C. H. Rankin. 1,828,443; Oct. 20.
Glass charges of different colors, Method and apparatus for feeding. E. O. Hiller. 1,828,226; Oct. 20.
Glass feeder. C. H. Rankin. 1,828,442; Oct. 20.
Glass, Feeding molten. G. C. Marsh. 1,828,229; Oct. 20.
Glass handling apparatus. R. G. Bacheller. 1,828,213; Oct. 20.
Glass, Method and apparatus for feeding molten. K. E. Peiler. 1,828,438; Oct. 20.
Glass, Method of and apparatus for feeding molten. W. T. Barker, jr. 1,828,216–17; Oct. 20.
Glass, Method of and apparatus for feeding molten. W. A. Lorenz. 1,828,726; Oct. 20.
Glass panel for luminaires. E. Stroud. Des. 85,401–2; Oct. 20.
Glassware, Mechanism for manufacturing. W. J. Miller. 1,828,674; Oct. 20.
Glazier's point. J. I. Routledge. 1,828,341; Oct. 20.
Glider. H. E. Kingsley. 1,827,987; Oct. 20.
Goblet or similar articles. W. L. Orme. Des. 85,388–9; Oct. 20.
Grader, Elevating. A. E. Gustafson. 1,828,532; Oct. 20.
Grader, Potato. J. E. Paulson. 1,828,066; Oct. 20.
Graders, Double reversible moldboard for. C. B. Faverty and W. J. Schlacks. 1,828,711; Oct. 20.
Gate: *See*—
Level crossing gate.
Grinder, Feed. E. R. Hobbs and A. V. Stombaugh. 1,828,143; Oct. 20.
Grinding apparatus. W. N. Appleton. 1,828,212; Oct. 20.
Grinding machine. W. J. Baumberger. 1,828,384; Oct. 20.
Grinding machine. C. Booth. 1,828,387; Oct. 20.
Grinding machines, Work supporting mechanism for. W. F. Fraser. 1,828,530; Oct. 20.
Grinding mill. R. S. Iglehart. 1,827,986; Oct. 20.
Guard. F. Klopp. 1,828,050; Oct. 20.
Guard for wood heel turning machines. W. J. Shaw. 1,828,089; Oct. 20.
Guide, Band saw. S. Doroghy. 1,828,131; Oct. 20.
Guide for dough molders, Adjustable. W. G. Krichhoff. 1,828,049; Oct. 20.
Guide, Plow line. D. H. Calson. 1,828,024; Oct. 20.
Guide roller, Antifriction. W. L. Black. 1,827,835; Oct. 20.
Guide, Wheel. J. T. Moore. 1,828,375; Oct. 20.
Gun, Magazine. T. E. Flowers. 1,828,108; Oct. 20.
Hair, Sectional treatment in permanent waving of. E. O. Frederics. 1,827,785; Oct. 20.
Hair slide. A. Mendel and E. Kleinmann. 1,828,254; Oct. 20.
Hair treating method and composition. D. R. Pinnock. 1,827,801; Oct. 20.
Hair waving device, Hot air. H. Kahlhofer. 1,828,664; Oct. 20.
Hammer mill. W. J. Clement. 1,828,490; Oct. 20.
Hammer, Power. J. H. Meeker and E. K. Skonberg. 1,827,877; Oct. 20.
Hand bag. M. Sachs. 1,828,342; Oct. 20.
Handle. *See*—
Umbrella and parasol handle.
Handle assembly, Locking. B. S. Floraday. 1,827,979; Oct. 20.
Handle clamp. A. J. Hawkes. 1,828,250; Oct. 20.
Handling and storing, Apparatus for. P. Been. 1,828,307; Oct. 20.
Hanger: *See*—
Garment hanger.
Harvester, Bean. R. L. Park. 1,828,437; Oct. 20.
Heating appliance. F. M. Neff. 1,828,151; Oct. 20.
Heat insulating material. H. D. Geyer, A. H. Flower, and J. C. Housekeeper. 1,828,365; Oct. 20.
Heat regulating device. W. E. Worth. 1,828,553; Oct. 20.
Heat treating. F. A. Fahrenwald. 1,828,036; Oct. 20.
Heater: *See*—
Electric heater. Steam heater.
Hot air heater. Water heater.
Heater and condenser, Water. H. J. Schneider. 1,828,344; Oct. 20.
Heater for motor vehicles. R. B. Otwell. 1,827,998; Oct. 20.
Heating and furnace used therewith. L. A. Mekler. 1,828,378; Oct. 20.
Heating apparatus, Feed water. E. L. Schellens. 1,828,473; Oct. 20.
Heating device. S. J. and P. P. Chlapowski. 1,828,644; Oct. 20.
Heating plant, Electric. E. Provencal. 1,828,294; Oct. 20.
Heating system. S. E. Fouts 1,828,038; Oct. 20.
Heating system, Vacuum. R. N. Trane. 1,828,802; Oct. 20.
Hides and skins, Tanning. J. Dennis and T. Reid. 1,828,130; Oct. 20.
Holder. L. M. Kern. 1,828,668; Oct. 20.
Holder, Blank. A. Novick. 1,827,901; Oct. 20.
Holder, Collapsible tube. I. E. Siqveland. 1,828,154; Oct. 20.
Holder, Collar. S. Levinsky. 1,828,421; Oct. 20.
Holder, Cop. F. Mossberg. 1,828,337; Oct. 20.
Holder, Door. C. J. Crawford. 1,828,242; Oct. 20.
Holder, Drawer pull and label. G. H. Dawson. 1,827,934; Oct. 20.
Holder, Flower. W. O. Roy. 1,828,295; Oct. 20.
Holder for flower containers. G. Hammond. 1,828,249; Oct. 20.
Holder for small articles. C. W. Botsford. 1,828,456; Oct. 20.
Holder, Globe. A. E. Shaw. 1,828,625; Oct. 20.
Holder, Nail. M. R. Keleher. 1,828,417; Oct. 20.
Holder, Photograph. W. L. Daniel. 1,828,558; Oct. 20.
Holder, Tube. J. B. Wantz and J. J. Grobe. 1,828,092; Oct. 20.
Hook: *See*—
Meat hook.
Hose, Flexible. E. S. Culver. 1,828,101; Oct. 20.
Hosiery press. E. J. Schremp. 1,828,345; Oct. 20.
Hot air heater. C. L. Cutler, jr. 1,828,319; Oct. 20.
House: *See*—
Bath house.
Hub connection. G. B. Reed. 1,828,340; Oct. 20.
Humidifier, Automatic L. S. Foo. 1,828,702; Oct. 20.
Hydraulic drill. I. B. Humphreys. 1,828,604; Oct. 20.
Hydraulic operating mechanism. E. Cannon. 1,828,643; Oct. 20.
Hydrocarbons, Converting. C. J. Pratt. 1,827,908; Oct. 20.
Hydrocarbons, Treating. J. D. Seguy. 1,827,915; Oct. 20.
Hydrogen sulphide from oils and other substances, Removing. L. Rosenstein. 1,827,912; Oct. 20.
Hydrometer. S. J. Dunkley. 1,827,841; Oct. 20.
Ice, Apparatus for molding. H. R. Van Deventer. 1,828,693; Oct. 20.
Ice removing system. S. E. Norton. 1,828,613; Oct. 20.
Identification means for ribbons and the like. J. Grossegebauer. 1,827,744; Oct. 20.
Ignition apparatus. H. E. Norviel. 1,828,378; Oct. 20.
Ignition system for internal combustion engines, Electric. M. Rall. 1,828,620; Oct. 20.
Illuminating device. J. J. Wompey. 1,827,963; Oct. 20.
Impressions, Apparatus for translating. R. E. Naumberg. 1,828,198; Oct. 20.

Incombustibles from stokers, Apparatus for removing. H. C. Carter. 1,828,700; Oct. 20.
Incubator mechanism. W. F. Hillpot. 1,827,984; Oct. 20.
Index or record device, Card. J. H. Rand, jr. 1,827,999; Oct. 20.
Indicating mechanism for weighing apparatus. R. Joksch. 1,827,848; Oct. 20.
Indicator: *See*—
Flow indicator. Fuel loss indicator.
Indigo powder and making the same. T. L. Masterson. 1,827,757; Oct. 20.
Indoxyl, Treatment of. W. L. Spalding. 1,827,828; Oct. 20.
Induction furnace, Electric. E. F. Northrup. 1,828,291; Oct. 20.
Injector for feeding water to steam boilers. B. T. Williston, F. W. Walch, and C. D. Allen. 1,828,633; Oct. 20.
Insulating material and making the same. B. B. Paul. 1,828,292; Oct. 20.
Internal combustion engine. F. T. Irgens. 1,827,818; Oct. 20.
Internal combustion engine. A. J. Michael. 1,828,060; Oct. 20.
Internal combustion engine, Two stroke cycle. J. Dap. 1,827,932; Oct. 20.
Internal combustion motor. J. F. Bleser. 1,828,353; Oct. 20.
Internal combustion motor. C. H. Ericson. 1,827,938; Oct. 20.
Iodine addition products of quinoline carboxylic acids and derivatives thereof. J. Ebert. 1,828,525; Oct. 20.
Iron carbonyl, Manufacture of. M. Müller-Cunradi. 1,828,376; Oct. 20.
Ironing board. F. Knorr. 1,828,051; Oct. 20.
Jacquard mechanism. J. Morton. 1,828,336; Oct. 20.
Jelly preparation. A. Leo. 1,827,794; Oct. 20.
Jelly preparation. A. Leo. 1,827,991; Oct. 20.
Joint: *See*—
Rail joint.
Joint for laminated panels. G. K. Lewis. 1,828,285; Oct. 20.
Joint system for tubular framework or similar metal constructions. A. van Hattum. 1,828,235; Oct. 20.
Journal box. A. O. Bucklus. 1,828,312–3; Oct. 20.
Journal box construction. A. O. Bucklus. 1,828,314; Oct. 20.
Kiln heating. P. d'H. Dressler. 1,828,492; Oct. 20.
Kit, Electric heater. M. A. Rollman. 1,828,257; Oct. 20.
Kit, Lure. J. D. Bigelow. 1,827,929; Oct. 20.
Kitchen ventilator, Automatic. P. Andres. 1,828,016; Oct. 20.
Knitting and in knitting machines. W. Bock and H. W. Matthews. 1,828,220; Oct. 20.
Lace edging, Embroidered. F. Fehr. Des. 85,370–8; Oct. 20.
Lamp. S. E. Burnfield. Des. 85,365; Oct. 20.
Lamp, Metal arc. H. Stammreich. 1,828,346; Oct. 20.
Land packer. L. E. Bissell. 1,827,726; Oct. 20.
Lantern burner. E. Shepard. 1,828,080; Oct. 20.
Last, Shoe. W. M. Biddle. 1,827,777; Oct. 20.
Latch for automobile lifts, Safety. C. J. Bristol. 1,827,966; Oct. 20.
Latch, Locking. G. E. Keeler and A. L. Birdsall. 1,828,468; Oct. 20.
Latch, Push button. W. B. Nonamaker. 1,828,152; Oct. 20.
Latches, Dog releasing device for door. F. D. Grund. 1,827,982; Oct. 20.
Lath, Insulating metal. D. B. Arnold. 1,828,351; Oct. 20.
Laundry shaking out table. J. A. Hunkele. 1,827,985; Oct. 20.
Leer feeder. A. N. Cramer. 1,827,738; Oct. 20.
Leer, Glass annealing. E. A. C. Pryor and F. A. Hurlbut. 1,828,070; Oct. 20.
Lens. D. C. Smith. 1,828,233; Oct. 20.
Lenses, Apparatus for grinding and polishing spherical. A. J. Holman. 1,827,748; Oct. 20.
Level crossing gate. R. Daering. 1,827,782; Oct. 20.
Light: *See*—
Navigation light. Telephone light.
Light unit for reflected illumination. E. F. Guth. Des. 85,382; Oct. 20.
Lighter, Pocket cigar. C. Hardy. 1,828,111; Oct. 20.
Lighting fixture bowl or similar article. N. Kopp. Des. 85,384; Oct. 20.
Lining, Mold. J. B. Grenagle. 1,827,742; Oct. 20.
Liquids, Apparatus for distilling. F. N. Holmquist. 1,827,846; Oct. 20.
Liquids, Apparatus for pumping. E. R. Wolcott. 1,827,925; Oct. 20.
Lock: *See*—
Sash lock. Tire lock.
Starter mechanism lock. Vehicle lock.
Lock. J. C. Ralls. 1,828,544; Oct. 20.
Lock for producing purl work on flat knitting machines. E. O. Born. 1,828,240; Oct. 20.
Lock washer. R. T. Hosking. Re18,227; Oct. 20.
Locking and operating mechanism, Door. A. Perlman. 1,828,721; Oct. 20.
Locking device for speedometers for vehicles. P. A. Kourtzman. 1,827,990; Oct. 20.
Locking mechanism, Elevator door. F. G. Chapin. 1,828,316; Oct. 20.
Locomotive, Electric. H. L. Ingersoll. 1,827,817; Oct. 20.
Locomotive feed water apparatus. E. L. Schellens and R. P. Peckett, jr. 1,828,474; Oct. 20.
Locomotive frame. W. F. Kiesel, jr. 1,828,418; Oct. 20.
Locomotive spring equalizing system. J. C. Travilla, jr. 1,828,003; Oct. 20.
Locomotives, Balancing steam. E. L. Thearle. 1,828,027; Oct. 20.
Looms, Harness connecter for. V. R. Maynard. 1,828,058; Oct. 20.
Loud speaker. J. P. Minton. 1,827,994; Oct. 20.
Loud speaker unit and drive mechanism therefor. J. R. Barnhart. 1,828,122; Oct. 20.
Lubricator. K. S. Clapp. 1,828,317; Oct. 20.
Luggage carrier. H. J. Criner. 1,828,128; Oct. 20.
Machine for cooking sausages. C. Offenhauser. 1,827,902; Oct. 20.
Machine for cutting off pipe, bar stock, and the like. R. E. Hyde and D. Schappi. 1,828,371; Oct. 20.
Machine for forming tubular fabrics. H. M. Bunker. 1,828,554; Oct. 20.
Machine for grinding simultaneously two opposed surfaces of articles of prismatic or other shape, especially nuts. A. Jopp. 1,828,663; Oct. 20.
Machine for manufacturing receptacles. J. J. Bacon. 1,828,636; Oct. 20.
Machine for the manufacture of glued shoes. H. Walther. 1,828,265; Oct. 20.
Machine for vending articles. G. Morrison. 1,827,900; Oct. 20.
Manicure set, Pocket. A. E. Adam and R. Janning. 1,828,121; Oct. 20.
Manipulator for ingots, blooms, and the like. J. D. Pugh. 1,828,619; Oct. 20.
Marker and advertising device, Combination green. S. F. Ratliff. 1,827,826; Oct. 20.
Mask. F. J. McMichael. 1,828,427; Oct. 20.
Massaging machine. P. L. Hemp. 1,827,874; Oct. 20.
Match box. L. Berry. 1,828,698; Oct. 20.
Material handling equipment. M. R. Butler. 1,828,458; Oct. 20.
Material in the manufacture of Pottery, Method of and apparatus for feeding and forming plastic. W. J. Miller. 1,827,759; Oct. 20.
Material, Mechanism for connecting pieces of. S. M. Straus. 1,828,347; Oct. 20.
Material, Treatment of cadmium bearing. G. N. Kirsebom. 1,827 755; Oct. 20.
Materials to obtain fats or oils therefrom, Treating fatty. H. Bull. 1,828,591; Oct. 20.
Mattress box. C. W. Tannery. 1,827,858; Oct. 20.
Meat hook, Trolley. C. C. Holley. 1,828,603; Oct. 20.
Mechanical shovel. R. M. Baker. 1,828,095; Oct. 20.
Mercury from mercury-bearing ores or products, Extraction of. S. Croasdale. 1,827,971; Oct. 20.
Metal compounds, Reduction of. G. N. Kirsebom. 1,827,821; Oct. 20.
Metal manufacture, Roller spun. W. R. Harrison. 1,828,464; Oct. 20.
Metal working machine. L. E. Poole. 1,828,379; Oct. 20.
Metallic compounds and production of arsenates. Reduction of. G. N. Kirsebom. 1,827,754; Oct. 20.
Metals and/or their compounds, Treatment of. G. N. Kirsebom. 1,827,820; Oct. 20.
Metals, and product thereof, Improving. E. S. Fisher. 1,828,701; Oct. 20.
Meter: *See*—
Batch meter. Gas meter.
Micro-manipulator. J. H. Emerson. 1,828,460; Oct. 20.
Milk in bottles, Apparatus for facilitating the delivery of. J. Brown. 1,828,125; Oct. 20.
Mill: *See*—
Grinding mill. Hammer mill.
Mill installation, Rolling. M. A. McCreary. 1,828,426; Oct. 20.
Minnow plug bait. J. Neukam. 1,828,574; Oct. 20.
Mobile reforming plant. L. S. Wilbur. 1,828,382; Oct. 20.
Moisture from compressed air, Removal of. J. E. Swendeman. 1,828,626; Oct. 20.
Mold and making same, Ingot. J. E. Perry. 1,828,200; Oct. 20.
Mold: *See*—
Bonding mold.
Molding of long objects by centrifugal treatment. Apparatus for the. P. Ferrier. 1,828,037; Oct. 20.
Motor: *See*—
Current motor. Synchronous motor.
Internal combustion motor.
Motor. J. B. Hawthorn and S. L. Levar. 1,828,657; Oct. 20.
Motor control. F. H. Howard. 1,828,113; Oct. 20.
Motor control system. P. Weiske and K. Rupprecht. 1,828,583; Oct. 20.
Motor control, System of. L. C. Hardesty. 1,828,564; Oct. 20.
Mount for range finder or other attachment. M. L. Meletio. 1,828,541; Oct. 20.
Mounting, Bearing. W. H. Maxwell. 1,828,118; Oct. 20.
Mounting of tags for can-like containers. F. G. Robinson. 1,828 682; Oct. 20.
Muffler. L. L. Haas. 1,828,110; Oct. 20.
Multirecord expression mechanism, Automatic. O. W. Holmgren. 1,827,814; Oct. 20.
Musical instrument. D. D. Evins. 1,827,978; Oct. 20.
Musical instrument, Stringed. D. Cavicchioli. 1,828,315; Oct. 20.

Navigation light, Aircraft. C. H. Colvin. 1,828,097; Oct. 20.
Necktie clasp. F. G. Herweg. 1,827,889; Oct. 20.
Needle thread controlling mechanism. C. W. Mueller. 1,827,949; Oct. 20.
Nest, Hen's. H. A. Krogstad. 1,827,944; Oct. 20.
Number plate for vehicles, Illuminated. C. E. Emery. 1,828,223; Oct. 20.
Nut and screw fastening. W. H. Pierce. Re18,229; Oct. 20.
Nut picking machine. F. A. Coari. 1,827,736; Oct. 20.
Nystagmus, Apparatus for producing. J. Ohm. 1,827,954; Oct. 20.
Oil burner. A. E. Grant. 1,828,183; Oct. 20.
Oil conversion, Hydrocarbon. J. C. Morrell and W. F. Faragher. 1,827,899; Oct. 20.
Oil from spent fuller's earth, Recovery of. C. Ellis. 1,828,035; Oct. 20.
Oil, Process and apparatus for treating hydrocarbon. R. T. Pollock. 1,828,440; Oct. 20.
Oil refining. C. L. Henderson. 1,828,466; Oct. 20.
Oiler, Air line. C. C. Hansen. 1,828,185; Oct. 20.
Oiler, Pump type. F. L. V. Spring. 1,828,479; Oct. 20.
Oils or their distillates by distillation under pressure, Process and apparatus for cracking hydrocarbon. S. Stransky and F. Hansgirg. 1,828,691; Oct. 20.
Oils, Prevention of the development of rancidity in vegetable. H. J. Tattersall. 1,828,708; Oct. 20.
Oils, Purifying. H. H. Moreton. 1,828,430; Oct. 20.
Oils, Reclaiming contaminated. H. H. Moreton. 1,828,428; Oct. 20.
Oils to remove suspended impurities, Treating. H. H. Moreton. 1,828,429; Oct. 20.
Oils, Treating. C. P. Dubbs. 1,828,398; Oct. 20.
Oils, Treating hydrocarbon. G. Egloff and H. P. Benner. 1,827,883; Oct. 20.
Opener, Bottle. R. M. Brown. 1,827,868; Oct. 20.
Opener, Window. P. O. Borgeson. 1,828,021; Oct. 20.
Ore, Igniting. A. F. Beasley. 1,827,773; Oct. 20.
Outlet box, Electrical. B. C. Paine. 1,828,064; Oct. 20.
Ovens, Closing shutter for tunnel. M. Kulzinski. 1,828,069; Oct. 20.
Packages, Apparatus for holding textile. R. Martin. 1,827,756; Oct. 20.
Packing and scraping device, Piston rod. E. N. Fox. 1,828,178; Oct. 20.
Packing for weirs, Lateral. T. Becher. 1,828,219; Oct. 20.
Packing, Gland. R. C. Allen. 1,827,866; Oct. 20.
Packing means, Working barrel. R. L. Davis. 1,828,030; Oct. 20.
Packing, Piston. G. V. Panyard. 1,827,903; Oct. 20.
Packing, Well plunger. E. S. Sloan. 1,827,880; Oct. 20.
Pad: *See*—
Football blocking pad.
Pad filling apparatus. T. L. McJoynt. 1,828,673; Oct. 20.
Paper cutter, Roofing. J. A. Roberts. 1,828,621; Oct. 20.
Paper manufacture. A. J. Wildman. 1,827,923; Oct. 20.
Paper winding machine. K. Sieg. 1,827,892; Oct. 20.
Parking device, Vehicle. G. Nenna. 1,827,853; Oct. 20.
Paste, Sealing. B. Y. Golding. 1,828,182; Oct. 20.
Pasting mechanism. A. Potdevin. 1,827,907; Oct. 20.
Pavement construction. H. A. Myers. 1,827,823; Oct. 20.
Pen filling device, Fountain. G. L. Bassett. 1,828,018–19; Oct. 20.
Pens, Calendar attachment for fountain. D. L. Dover. 1,828,132; Oct. 20.
Pencil. H. L. Fischer. 1,828,527; Oct. 20.
Pencil, Automatic. D. Q. Crimmins. 1,828,521; Oct. 20.
Pencil sanding machine. B. F. Derryberry. 1,827,839; Oct. 20.
Petroleum oil, Cracking. G. Egloff. 1,828,362; Oct. 20.
Phenols and process of making, Sulphurized. E. J. Canavan. 1,828,172; Oct. 20.
Phonograph sound reproducer. J. H. Buchanan. 1,828,171; Oct. 20.
Photograph print embossing machine. J. L. Barber. 1,827,927; Oct. 20.
Photographic device. J. W. Legg. 1,828,328; Oct. 20.
Photographic shutter. A. Barenyi. 1,828,215; Oct. 20.
Photographs of cavities of the body, Apparatus for taking. F. G. Back. 1,828,141; Oct. 20.
Photos of the cavities of the body, Apparatus for taking. J. Heilpern and F. G. Back. 1,828,140; Oct. 20.
Pick-up and carrier therefor. R. T. Cloud. 1,827,970; Oct. 20.
Pickers, Doffing mechanism for cotton. E. A. Johnston and D. B. Baker. 1,828,534; Oct. 20.
Picture frame. C. W. McCoy. Des. 85,386; Oct. 20.
Picture machine, Moving. R. Decaux. 1,828,032; Oct. 20.
Picture machines, Synchronizing talking motion. W. R. Moore, jr. 1,827,947; Oct. 20.
Picture process. F. D. Williams. 1,827,924; Oct. 20.
Picture transmission, Analyzing system for. R. H. Ranger. 1,828,000; Oct. 20.
Picture transmission apparatus. I. Langmuire. 1,828,571; Oct. 20.
Pictures, Transmission of. R. D. Kell. 1,828,667; Oct. 20.
Pigment coatings, Apparatus for applying. E. P. Lang. 1,827,876; Oct. 20.
Pile driving mechanism, Hydraulic. L. White. 1,827,922; Oct. 20.
Pin: *See*—
Drapery pin. Roller pin.
Pin and wrench, Combination drift. G. H. Herdman. 1,828,142; Oct. 20.
Pin for draperies, curtains and the like, Weighted. R. B. Peterman and F. V. Stevenson. 1,828,678; Oct. 20.
Pipe. H. Mallett. 1,828,149; Oct. 20.
Pipe, Apparatus for calking. W. H. Saunders. 1,828,075; Oct. 20.
Pipe stem, Thermo-air cooled. A. S. Hickey. 1,828,044; Oct. 20.
Pistol cap. C. B. Backes. 1,828,214; Oct. 20.
Piston, High pressure pump. C. Lamb. 1,828,056; Oct. 20.
Piston ring. G. Schneider. 1,828,001; Oct. 20.
Piston ring. L. J. Thomas. 1,828,200; Oct. 20.
Pitch propeller, Variable. W. R. Turnbull. 1,828,303; Oct. 20.
Pitch propeller, Variable. W. R. Turnbull. 1,828,348; Oct. 20.
Pitcher or like article. F. J. Peters. Des. 85,393; Oct. 20.
Plant box, Cardboard. G. M. Seidel. 1,828,448; Oct. 20.
Planter, Potato. L. A. Aspinwall. 1,828,274; Oct. 20.
Plastic substance, Fire and acid-proof. A. Wolfsholz. 1,828,211; Oct. 20.
Plate apparatus for heat exchanges. R. Seligman. 1,828,477; Oct. 20.
Plate for vise jaws, Removable face. W. N. Harding and A. H. Krugman. 1,828,042; Oct. 20.
Plate or similar article. A. C. Scavullo. Des. 85,398–400; Oct. 20.
Plug for wells and the like, Self adjusting and expanding. R. J. Schuyler. 1,828,381; Oct. 20.
Power compounding, Inductive reactive. T. H. Morgan. 1,828,062; Oct. 20.
Power plant. C. Föhl. 1,828,528; Oct. 20.
Press: *See*—
Hosiery press.
Press for sheet metal. C. J. Rhodes. 1,828,201; Oct. 20.
Pressing device. A. E. Weingartner. 1,828,582; Oct. 20.
Pressing machine element. E. Davis. 1,828,102; Oct. 20.
Pressure responsive instrument. K. L. Tate. 1,827,804; Oct. 20.
Produce package, Refrigerated. S. J. Gallagher. 1,828,179; Oct. 20.
Propeller. H. F. Schmidt. 1,828,258; Oct. 20.
Protective apparatus. J. Biermanns. 1,828,590; Oct. 20.
Protector, Adjustable trousers. M. S. Lawrence. 1,828,572; Oct. 20.
Protector, Gauge. D. E. Allman. 1,828,093; Oct. 20.
Protector, Heel. J. J. Destro. 1,828,246; Oct. 20.
Protector, Hosiery. C. J. Smith. 1,828,081; Oct. 20.
Protector, Plant. W. T. Davis. 1,828,031; Oct. 20.
Puller: *See*—
Gear puller.
Pulley. A. L. Freedlander. 1,828,136; Oct. 20.
Pump, Rotary. W. W. Davidson. 1,828,245; Oct. 20.
Pumping power. A. L. Skinner. 1,828,689; Oct. 20.
Pumps, Operating unit for double acting. A. H. Kennedy. 1,828,570; Oct. 20.
Rack: *See*—
Display rack. Shoe rack.
Rack for a vehicle, Stock. J. H. Walters. 1,828,551; Oct. 20.
Racket, Tennis. W. H. Fox. 1,828,109; Oct. 20.
Radiant energy distance determining system and apparatus. E. G. Gage. 1,828,531; Oct. 20.
Radiator construction. R. S. Bakkekilde. 1,828,637; Oct. 20.
Radiator for motor vehicles. F. C. Ruppel. 1,827,767; Oct. 20.
Radiator, Motor vehicle. H. D. Church. 1,827,781; Oct. 20.
Radio communication, System of. H. C. Forbes. 1,828,529; Oct. 20.
Radio compass correcting device. G. H. Clark and G. Y. Allen. 1,828,395; Oct. 20.
Radio control system. S. L. McFadin. 1,828,672; Oct. 20.
Radio system. F. A. Kilster. 1,828,705; Oct. 20.
Radio tuning device. L. H. Morin. 1,828,197; Oct. 20.
Rail, Highway guard. J. H. Ramsey. 1,828,071; Oct. 20.
Rail joint. M. Bartus. 1,828,639; Oct. 20.
Rail joint. B. S. Dickerson. 1,827,840; Oct. 20.
Rail joint. K. A. Lagergren. 1,828,502; Oct. 20.
Railway rolling stock. E. M. Nothacker. 1,827,854; Oct. 20.
Rails with hardened heads, Manufacture of. H. Kurz. 1,828,325; Oct. 20.
Range. J. P. Roesch. Des. 85,396; Oct. 20.
Range and bearing keeper. H. C. Ford. 1,827,812; Oct. 20.
Range construction, Gas. L. S. Kauffman. 1,828,665; Oct. 20.
Receptacle, Display. J. S. Villeré. 1,828,264; Oct. 20.
Reel slip device, Take up. A. Kindelmann and E. Boecking. 1,827,893; Oct. 20.
Reeling device. L. T. Parker. 1,827,855; Oct. 20.
Reflector for telephone dials. F. O. Everts. 1,828,107; Oct. 20.
Refrigerant. C. Dantsizen. 1,828,559; Oct. 20.
Refrigerating apparatus. R. H. Chilton. 1,827,807–8; Oct. 20.
Refrigerating apparatus. T. L. Chisholm. 1,827,809; Oct. 20.

Refrigerating apparatus. C. F. Henney. 1,827,747; Oct. 20.
Refrigerating apparatus. H. B. Hull. 1,827,750; Oct. 20.
Refrigerating apparatus. H. B. Hull. 1,827,815; Oct. 20.
Refrigerating apparatus. L. M. Keighley. 1,827,751–2; Oct. 20.
Refrigerating apparatus. J. G. King. 1,827,819; Oct. 20.
Refrigerating apparatus. W. W. Riedel. 1,827,764; Oct. 20.
Refrigerating apparatus. O. M. Summers. 1,827,769; Oct. 20.
Refrigerating apparatus, Expansion chamber for. C. F. Gardner. 1,827,741; Oct. 20.
Refrigerator. E. L. Horlacher. 1,827,749; Oct. 20.
Register: *See*—
Autographic register.
Regulator for vehicle bodies, Window. A. L. Hansen. 1,827,746; Oct. 20.
Regulator system. J. H. Ashbaugh. 1,828,273; Oct. 20.
Regulator system. J. H. Ashbaugh and S. A. Staege. 1,828,272; Oct. 20.
Relay, Latching. P. F. Shuey. 1,828,299; Oct. 20.
Resin and making the same, Furfural-urea. E. B. Novotny and W. W. Johnson. 1,827,824; Oct. 20.
Resins, New products obtainable from. A. Doser, G. Mauthe, and A. Thauss. 1,828,033; Oct. 20.
Restraining device. C. H. Mickelsen. 1,828,610; Oct. 20.
Retort. G. McD. Johns. 1,828,489; Oct. 20.
Rim, Demountable tire. J. Scheideman. 1,828,076; Oct. 20.
Ring: *See*—
Piston ring.
Ring and the like, Finger. H. W. Peters. 1,828,616; Oct. 20.
Road building machine. H. R. Miller. 1,827,897; Oct. 20.
Road grader main frame. C. B. Faverty. 1,828,526; Oct. 20.
Road planing machine. H. M. Reinking. 1,828,681; Oct. 20.
Rock in the preparation of calcium-magnesian bisulphite liquor in towers, Utilizing magnesium. D. W. Stewart. 1,828,690; Oct. 20.
Rod coupling, Wood. F. H. Thorpe. 1,828,164; Oct. 20.
Roller: *See*—
Guide roller.
Roller double contact mechanism. G. R. Townsend. 1,828,692; Oct. 20.
Roller pin, Steering gear. F. F. Chandler. 1,828,594; Oct. 20.
Rotary engine. F. Stone. 1,828,207; Oct. 20.
Rotatable furnace. R. C. Benner, G. J. Easter, and C. E. Hawke. 1,827,833; Oct. 20.
Rotating means. P. J. Cannon 1,828,593; Oct. 20.
Rule, Resilient. H. A. Farrand. 1,828,401; Oct. 20.
Safety device. W. E. Brindley. 1,827,779; Oct. 20.
Safety device. E. J. von Ilenke. 1,828,723; Oct. 20.
Safety device for centrifugal driers. F. W. Juengst and O. M. Anderson. 1,828,227; Oct. 20.
Salvaging apparatus for sunken ships. G. W. Winkler. 1,828,694; Oct. 20.
Sash lock. F. Pekar. 1,828,439; Oct. 20.
Saw filing machine. E. A. Meacham. 1,828,150; Oct. 20.
Saw setting machine. P. Carpenter. 1,828,392; Oct. 20.
Saxophone. F. Calvani. 1,828,389–90; Oct. 20.
Scaffold. E. F. Booser. 1,828,487; Oct. 20.
Scale. C. W. Brand. 1,828,022; Oct. 20.
Scale apparatus. W. E. McKim. 1,827,758; Oct. 20.
Scale indicating means. C. H. Hapgood. 1,828,225; Oct. 20.
Screen: *See*—
Drum screen.
Screen. F. P. Bunker. 1,828,642; Oct. 20.
Sealing-off machine for glass objects. J. N. Selsm. 1,827,914; Oct. 20.
Searchlight, Adjustable. L. Muller. 1,827,797; Oct. 20.
Seat: *See*—
Adjustable seat.
Seat construction, Cushion. H. E. Wolf. 1,828,634; Oct. 20.
Separator: *See*—
Cream separator.
Sewing machine. K. Klein. 1,828,115; Oct. 20.
Sewing machines, Work guiding means for. R. J. Sailer. 1,828,722; Oct. 20.
Sharpener, Automatic. D. S. Anthony. 1,827,965; Oct. 20.
Sharpening machines for razor blades, Discharging arrangement in. S. Larsson. 1,828,671; Oct. 20.
Sheet blade. J. R. Oishei. 1,828,715; Oct. 20.
Sheet feeding device. L. H. Kramer. 1,828,323; Oct. 20.
Sheet separating apparatus. F. D. Kinney. 1,827,753; Oct. 20.
Sheet, Typewriter backing. S. H. Linderman. 1,827,992; Oct. 20.
Sheets, Method and machine for forming. E. B. Carns. 1,828,489; Oct. 20.
Shield for windshields or the like, Antiglare. A. M. Purchio. 1,828,339; Oct. 20.
Shingle, Composition roofing. O. B. Clow. 1,828,222; Oct. 20.
Ships, Drag eliminator for. S. Aitken. 1,827,806; Oct. 20.
Shock absorber. W. A. Chryst. 1,828,357–8; Oct. 20.
Shock absorber. W. A. Chryst. 1,828,360; Oct. 20.
Shock absorber. W. A. Chryst. 1,828,394; Oct. 20.
Shock absorber. W. H. Mussey. 1,828,063; Oct. 20.
Shock absorber. E. F. Rossman. 1,828,445–6; Oct. 20.
Shock absorber for vehicles. D. Grosso. 1,828,602; Oct. 20.
Shock eliminator. E. Slade. 1,828,549; Oct. 20.
Shoe. E. W. Allen. 1,828,453; Oct. 20.
Shoe cleaning machine. J. Bustos. 1,828,388; Oct. 20.
Shoe last, Collapsible. A. W. Bennett. 1,828,640; Oct. 20.
Shoe rack, Combination. T. F. Matthews. 1,828,331; Oct. 20.
Shoe, Spudding. C. S. Wright. 1,828,269; Oct. 20.
Shoe strap. J. Serla. 1,828,512; Oct. 20.
Shovel: *See*—
Mechanical shovel.
Side frame section. C. B. Harbison. 1,827,787; Oct. 20.
Sign. W. E. Oishei and F. Wieland. 1,828,716; Oct. 20.
Sign, Advertising. F. H. Johnson. 1,828,703; Oct. 20.
Sign frame, Portable. F. Bennett and H. T. Hallowell. 1,828,239; Oct. 20.
Signal: *See*—
Direction signal. Vehicle direction signal.
Direction indicating signal.
Signal or indicating device for speedometers for vehicles, Speed limit. P. A. Kourtzman. 1,828,053; Oct. 20.
Signaling, Railway. H. S. Young and C. A. Brooks. 1,828,014; Oct. 20.
Signals and messages, Rapid transmission of. M. Cremer. 1,828,556; Oct. 20.
Signals, Apparatus for the control of highway crossing. G. W. Baughman. 1,827,772; Oct. 20.
Signals, Interrupter for warning. R. F. Mack. 1,828,608; Oct. 20.
Silk by the stretch process, Spinning cuprammonium. A. Hartmann and W. Höfinghoff. 1,828,497; Oct. 20.
Slicer or the like article, Vegetable or fruit. M. Lowitz. Des. 85,385; Oct. 20.
Slicer, Vegetable. O. Erl. 1,827,977; Oct. 20.
Slicing and weighing machine, Combined. C. F. M. van Berkel. 1,827,918; Oct. 20.
Snap switch, Electric. G. J. Meuer. 1,828,059; Oct. 20.
Soap, Cake of. C. A. and T. F. Crary. 1,828,361; Oct. 20.
Socket, Vacuum tube. W. H. Pumphrey. 1,827,909; Oct. 20.
Soldering cup. R. L. Bruce. 1,828,520; Oct. 20.
Soot, Apparatus for and process for removing. C. Dantsizen. 1,828,646; Oct. 20.
Soot disposal process and apparatus. W. R. Whitney. 1,828,631; Oct. 20.
Sound amplifier and clarifier. R. Rodriguez. 1,827,955; Oct. 20.
Sound on motion picture films, Method of and apparatus for recording. W. Rom. 1,828,444; Oct. 20.
Sound producing device, Electromagnetic. J. H. van Wagenen. 1,827,919; Oct. 20.
Sound receiving device. A. A. Johnson. 1,827,943; Oct. 20.
Sound record reproduction, Volume control in. J. R. Balsley. 1,827,735; Oct. 20.
Sound recording method. J. P. Maxfield. Re18,228; Oct. 20.
Sound reproducer. E. H. Smythe. 1,828,513; Oct. 20.
Speedometer. P. A. Kourtzman. 1,827,988; Oct. 20.
Spoon, Fruit. A. Chambers. 1,827,781; Oct. 20.
Spout. G. Sakler. Des. 85,397; Oct. 20.
Spring brake, Friction. M. Harris. 1,828,367; Oct. 20.
Spring for an engine support, Auxiliary. W. Westling. 1,828,452; Oct. 20.
Spring testing machine. L. P. Crosman. 1,828,176; Oct. 20.
Spring wheel. W. E. Kawalle. 1,828,322; Oct. 20.
Sprinkler for narrow areas. W. Van E. Thompson. 1,827,961; Oct. 20.
Squeegee, Window cleaning. N. Hawrylasz. 1,828,139; Oct. 20.
Stabilizing device for steering knuckles. P. E. Matthews. 1,828,425; Oct. 20.
Stamp. W. J. Pannier, jr. 1,828,230; Oct. 20.
Stand: *See*—
Display stand.
Staples, Imbedding. E. C. Pitcher. 1,828,067; Oct. 20.
Starch, Manufacturing. R. O. McCoy and O. A. Sjostrom. 1,828,334; Oct. 20.
Starter, Engine. V. Bendix. 1,827,867; Oct. 20.
Starter, Engine. V. C. Hodges. 1,828,369; Oct. 20.
Starter, Engine. M. P. Whitney. 1,828,010; Oct. 20.
Starter mechanism lock. C. Nolan and W. J. Ray. 1,828,575; Oct. 20.
Starting apparatus, Engine. W. H. Teeter. 1,828,709; Oct. 20.
Starting system for automobiles, Electric. S. C. Spivey. 1,828,514; Oct. 20.
Steam drier. E. E. Murray. 1,827,798; Oct. 20.
Steam generating installation. G. P. Jackson. 1,828,467; Oct. 20.
Steam generation. W. R. Wood. 1,828,483; Oct. 20.
Steam heater, Baby bottle. T. C. Torgerson. 1,828,628; Oct. 20.
Steam trap, Thermostatic. W. K. Simpson. 1,828,080; Oct. 20.
Steering wheel. H. A. Husted. 1,828,047; Oct. 20.
Steering wheel and horn button mounted therein. H. D. Geyer. 1,828,403; Oct. 20.
Stenciling machine. J. E. Shaver, jr. 1,828,298; Oct. 20.
Stirrer, Conical. K. E. Peller. 1,828,718–19; Oct. 20.

Stocking and producing same, Full fashioned. H. W. Hoffman. 1,828,533; Oct. 20.
Stoker, Locomotive. N. M. Lower. 1,828,116; Oct. 20.
Storage battery. R. H. Chilton. 1,828,393; Oct. 20.
Storage means. L. J. Taylor. 1,828,208; Oct. 20.
Store front construction. F. J. Plym. 1,828,509; Oct. 20.
Stove. E. F. Kennedy. Des. 85,383; Oct. 20.
Stove. C. W. Mummery. 1,827,951; Oct. 20.
Stove hood, Vacuum ventilating. C. B. Sharpe. 1,827,956; Oct. 20.
Stovepipe. H. Embree. 1,828,105; Oct. 20.
Strap: *See*—
Shoe strap.
Strap for boxes, bales, or the like, Metal. L. M. Harvey. 1,828,186; Oct. 20.
Strip, Composite floor dividing. P. Galassi. 1,828,653; Oct. 20.
Strips or the like to boxes, cases, and wrappings made of metal-foil-covered paper, cardboard, and the like, Attaching sealing or labeling. L. Rado. 1,828,680; Oct. 20.
Stud setter. A. G. Decker. 1,828,523; Oct. 20.
Stuffing box. I. Lundgaard. 1,828,286; Oct. 20.
Substructures for structures, Producing. L. White. 1,827,921; Oct. 20.
Suction feeder. K. E. Peller and T. Barrier, jr. 1,828,717; Oct. 20.
Suit, Swimming. P. Bergh. 1,828,510; Oct. 20.
Superheater. W. F. Keenan, jr. 1,827,892; Oct. 20.
Support, Arch. C. Tweedie. 1,828,086; Oct. 20.
Support, Awning. E. S. McCandliss. 1,828,332; Oct. 20.
Support for cooking utensils, Heat transmitting. K. Ilnicki. 1,827,816; Oct. 20.
Support for portable power saws, Adjustable. T. L. Hedgpeth. 1,828,043; Oct. 20.
Support for switch mechanisms. H. J. Crabbs. 1,828,281; Oct. 20.
Support, Refrigerator tray. O. M. Otte. 1,828,435; Oct. 20.
Support, Turbine. H. L. Guy. 1,828,407; Oct. 20.
Support, Web roll. L. A. Schmidt. 1,828,297; Oct. 20.
Supporter, Abdominal. A. S. Allebach. 1,828,015; Oct. 20.
Supporting structure for eaves of tents. B. H. Brooks. 1,827,729; Oct. 20.
Surfaces, Device for grinding external cylindrical. M. C. Hutto. 1,827,789; Oct. 20.
Swinging margin bar. W. K. Moll. 1,827,760; Oct. 20.
Switch: *See*—
Electrical switch. Tap switch.
Snap switch.
Switch. H. E. Norviel. 1,828,433; Oct. 20.
Switch mechanism. D. R. Davies. 1,828,522; Oct. 20.
Synchronizer device. H. J. Murray. 1,828,508; Oct. 20.
Synchronous motor. L. W. Riggs. 1,828,578; Oct. 20.
Syringe. F. Jensen. 1,828,661; Oct. 20.
Table and truck, Combined. A. B. Odell. 1,828,434; Oct. 20.
Tailoring implement set. L. Fusulo. 1,828,494; Oct. 20.
Tank for out-board motors, Fuel. G. H. Hahm. 1,828,040; Oct. 20.
Tap switch. A. Haller and S. Rump. 1,828,496; Oct. 20.
Tape and yarn and making the same, Asbestos. J. A. Heany. 1,828,112; Oct. 20.
Telegraph system, Carrier. V. P. Thorp. 1,827,860; Oct. 20.
Telegraphones, Reproducing magnet for. C. Stille. 1,828,260; Oct. 20.
Telephone light. C. C. Phillips. 1,828,543; Oct. 20.
Telephone switchboard. C. Borgmann. 1,828,455; Oct. 20.
Telephone system. C. A. Anderson. 1,827,734; Oct. 20.
Temperature controlling device. B. J. Yanchenko. 1,827,831; Oct. 20.
Tent. O. Handler. 1,828,656; Oct. 20.
Testing machine, Transverse. V. E. Watts. 1,827,805; Oct. 20.
Thermionic tube. W. L. Krahl. 1,828,537; Oct. 20.
Thermometer. H. D. Bolton. 1,827,778; Oct. 20.
Thermometer bulbs, Adjustable anchoring fitting for. C. W. Bristol. 1,828,170; Oct. 20.
Thermostat for heating systems. F. K. Bezzenberger and W. R. Zimmerman. Re18,231; Oct. 20.
Ties, Reshaping device for. P. Perez. 1,828,472; Oct. 20.
Tile assembling and pasting machine. F. B. Yingling. 1,828,013; Oct. 20.
Tile, Floor. C. W. Akers. 1,828,237; Oct. 20.
Time controller. R. W. Brown. 1,828,126; Oct. 20.
Tire boot. C. P. McCormick. 1,828,333; Oct. 20.
Tire chain keeper. G. Klintworth. 1,828,714; Oct. 20.
Tire lock, Anti-theft. F. W. Henke, jr. 1,828,658; Oct. 20.
Titanium compounds, Producing. F. von Bichowsky. 1,828,710; Oct. 20.
Toaster. C. Endorf. 1,828,400; Oct. 20.
Toasting. L. E. Padelford. 1,828,542; Oct. 20.
Tool. S. C. Ertola. 1,828,106; Oct. 20.
Tool, Band tightening. A. H. Moon. 1,828,290; Oct. 20.
Tool for lapping or honing, Method and. F. W. Roebbel and H. E. Rogers. 1,828,074; Oct. 20.
Tool for removing tires. F. H. Krewson. 1,827,850; Oct. 20.
Tool, Sheathing driving. N. C. Shaw. 1,827,957 Oct. 20.
Tool, Tube flanging. E. S. Cornell, jr. 1,827,733; Oct. 20.
Tool, Tube flanging. E. S. Cornell, jr. 1,827,882; Oct. 20.
Tool, Tube flanging. E. S. Cornell, jr. 1,828,459; Oct. 20.
Toothbrush. L. Levy. 1,828,422; Oct. 20.
Torch. A. J. and I. F. Fausek. 1,828,135; Oct. 20.
Toy. L. Marx. 1,828,288; Oct. 20.
Toy, Constructional. F. Hornby. 1,828,045; Oct. 20.
Toy, Mechanical. S. I. Berger. 1,827,775; Oct. 20.
Toy, Mechanical figure wheeled. S. I. Berger. 1,827,774; Oct. 20.
Toy railways, Trackway for. J. C. Koerber. 1,828,536; Oct. 20.
Toy, Seesaw. W. David. 1,828,244; Oct. 20.
Toy swimming animal. J. Einfalt. 1,828,034; Oct. 20.
Toy talking movie device. F. H. Owens. 1,828,199; Oct. 20.
Traction wheel. H. Bylin. 1,827,730; Oct. 20.
Tractor equipment combination. W. D. Shoemaker. 1,828,079; Oct. 20.
Trailer hitch. J. P. Andreasen. 1,827,832; Oct. 20.
Train control system. A. G. Williamson. 1,828,632; Oct. 20.
Train signaling apparatus, Electric. L. O. Grondahl and P. N. Bossart. 1,828,039; Oct. 20.
Transmission. E. A. Thompson. 1,827,960; Oct. 20.
Transmission network. H. W. Bode. 1,828,454; Oct. 20.
Transmission system. H. Pieper. 1,828,679; Oct. 20.
Trap: *See*—
Animal trap. Steam trap.
Egg saver trap.
Trolley ear. G. F. Wennagel. 1,828,008; Oct. 20.
Troweling machine. T. Palatini. 1,828,576; Oct. 20.
Truck. O. H. Hullings. 1,827,847; Oct. 20.
Truck body. S. E. Travis, jr. 1,828,629; Oct. 20.
Truck centering device, Railway. J. C. Travilla, jr. 1,828,002; Oct. 20.
Truck, Collapsible. G. B. Scarlett. 1,828,684; Oct. 20.
Truck, Electric motor. G. F. Driemeyer. 1,827,975; Oct. 20.
Truck, Fire. A. H. Blanchard. 1,828,160; Oct. 20.
Truck for high speed interurban cars. J. H. Elliott and R. A. Norbom. 1,828,133; Oct. 20.
Truck, Industrial. E. H. Remde. 1,827,878; Oct. 20.
Truck, Railway. A. O. Buckius. 1,828,280; Oct. 20.
Truck wheel. L. D. Kay. 1,828,500; Oct. 20.
Truing mechanism for grinding wheels. W. L. Bryant. 1,827,967; Oct. 20.
Tube: *See*—
Electron discharge tube. Vacuum tube.
Thermionic tube.
Tubes, Apparatus for manipulating inner. M. H. Pade. 1,828,153; Oct. 20.
Tubing, Forming capillary. D. D. Rosenburgh. 1,827,766; Oct. 20.
Tuning forks, Method of and apparatus for driving. E. C. Homer and W. D. Buckingham. 1,828,660; Oct. 20.
Turner, Cake. C. H. Holland. 1,828,187; Oct. 20.
Turntable. W. and W. H. Illingworth. 1,828,414; Oct. 20.
Typographical distributing machine. G. P. Kingsbury. 1,828,419; Oct. 20.
Umbrella. E. Cornic. 1,828,396; Oct. 20.
Umbrella and parasol handle. E. Weber. 1,827,862; Oct. 20.
Undertaker's device. E. W. Appling. 1,828,585; Oct. 20.
Vacuum cleaners, Attachment for. P. J. Anderson. 1,828,584; Oct. 20.
Vacuum tube and its elements. S. Ruben. 1,828,545; Oct. 20.
Vacuum tube, Heater type. D. J. Delaney. 1,828,524; Oct. 20.
Valve. J. J. Root, jr. 1,827,911; Oct. 20.
Valve and making the same. S. W. Sparks. 1,828,478; Oct. 20.
Valve assembly, Clearance. C. S. Baker. 1,827,725; Oct. 20.
Valve, Back-water and check. C. H. Rymal. 1,827,913; Oct. 20.
Valve controlling means. L. D. Lovekin. 1,828,424; Oct. 20.
Valve, Device for pressure fluid control. C. W. Simmons. 1,828,206; Oct. 20.
Valve, Flush. G. W. White. 1,828,517; Oct. 20.
Valve for burner, Disk. C. Eisler. 1,828,493; Oct. 20.
Valve for cushion structure. C. L. Knutson, W. G. Roby, and A. W. Kimbell. 1,828,191; Oct. 20.
Valve for hot water systems, Blow-off. J. F. Malsbery. 1,828,195; Oct. 20.
Valve for hydraulic shock absorbers, Regulating safety. C. Niedermayer. 1,828,432; Oct. 20.
Valve for rock drills. J. C. Curtis. 1,828,491; Oct. 20.
Valve grinder stem, Nonchattering. J. J. Vicek. 1,828,087; Oct. 20.
Valve, Organ. L. A. Woodward. 1,827,864; Oct. 20.
Valve structure, Check. F. Yardley. 1,828,697; Oct. 20.
Valve, Thermostatic control. J. H. Kolts. 1,828,501; Oct. 20.
Vanity case. L. Friedberg. 1,828,652; Oct. 20.
Vault, Burial. R. L. Barr. 1,828,352; Oct. 20.
Vehicle body construction. E. L. Bare. 1,828,017; Oct. 20.
Vehicle brake. E. E. Enos. 1,827,976; Oct. 20.
Vehicle brake. M. B. Morgan. 1,828,061; Oct. 20.
Vehicle direction signal. L. O. Lucka and J. W. Easley. 1,827,851; Oct. 20.

Vehicle for highway and railway travel. R. K. Moore. 1,827,898; Oct. 20.
Vehicle lock, Motor. D Conlan. 1,827,732; Oct. 20.
Vehicle propulsion and steering mechanism. G. E. Barrett. 1,828,638; Oct. 20.
Vehicle top, Detachable. H. Stacks. 1,828,480; Oct. 20.
Vehicle tops, Apparatus for treating. B. K. Gillespie. 1,827,887; Oct. 20.
Vehicle wheel. C. G. Keller. 1,827,790; Oct. 20.
Vehicle wheel. C. G. Keller. 1,827,791–3; Oct. 20.
Vehicles, Gas control for motor. P. F. Schofield. 1,828,685; Oct. 20.
Vehicles in freight cars, Apparatus for bracing. C. W. H. Johnston. 1,828,145; Oct. 20.
Ventilator: *See*—
Crankcase ventilator. Kitchen ventilator.
Vibration dampener. H. C. Lord. 1,828,539; Oct. 20.
Vibratory system. C. R. Hanna. 1,828,284; Oct. 20.
Visual effects, Producing. A. C. Watson. 1,828,236; Oct. 20.
Washer: *See*—
Lock washer.
Watch. R. J. Schwarz. 1,828,686–7; Oct. 20.
Water elevator. E. S. Patterson. 1,828,231; Oct. 20.
Water heater. A. P. Brill. 1,828,023; Oct. 20.
Water softener. A. J. Dotterweich. 1,828,282; Oct. 20.
Waterer, Baby chick. W. Jevons. 1,828,048; Oct. 20.
Wave frequencies, Reco ding and reproducing. R. B. T. Kiliani. 1,828,189; Oct. 20.
Wax, High melting point. C. C. Buchler. 1,828,354; Oct. 20.
Weighing mechanism for slicing machines. C. F. M. van Berkel. 1,827,917; Oct. 20.
Well cementing. E. V. Crowell. 1,828,098; Oct. 20.
Well drilling bit. W. A. Abegg. 1,828,165; Oct. 20.
Well packer. F. I. Getty. 1,827,842; Oct. 20.
Wells, Apparatus for cementing. E. V. Crowell. 1,828,099; Oct. 20.
Wells, Apparatus for controlling oil and gas. J. F. Bower. 1,828,124; Oct. 20.
Wells, Cementing. E. V. Crowell. 1,828,100; Oct. 20.
Wheel: *See*—
Spring wheel. Truck wheel.
Steering wheel. Vehicle wheel.
Traction wheel.
Wheel. A. R. Taylor. 1,828,163; Oct. 20.
Wheel and demountable rim, Dual. J. G. Swain. 1,828,162; Oct. 20.
Wheel chock. C. L. Snyder. 1,828,579; Oct. 20.
Wheelhead and the like. W. L. Bryant. 1,827,968; Oct. 20.
Wheels, Making. G. Spatta. 1,828,155–9; Oct. 20.
Winding mechanism for rolling screens. G. M. Sacerdote. 1,828,623; Oct. 20.
Window for motor vehicles. E. A. Stone. 1,828,515; Oct. 20.
Window guideway. H. B. Haskins, B. S. Floraday, and D. Miller. 1,827,983; Oct. 20.
Windshield. W. S. Pritchard. 1,828,069; Oct. 20.
Windshield cleaner. F. J. Hardman. 1,828,410; Oct. 20.
Windshield cleaner, Dual wiper. H. Hueber. 1,828,713; Oct. 20.
Wiper, Extension windshield. J. J. Pitts. 1,827,906; Oct. 20.
Wiper, Windshield. J. J. Stahelin. 1,827,959; Oct. 20.
Wood pulp, Purification of chemical. J. D. Rue. 1,827,857; Oct. 20.
Work bench, Portable. H. T. Hallowell and F. Bennett. 1,828,248; Oct. 20.
Wrench: *See*—
Chain pipe wrench.
Wrench. V. C. Garrison. 1,828,561; Oct. 20.

CLASSIFICATION OF PATENTS

ISSUED OCTOBER 20, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

1—	2:	1,828,067	29—157.	1:	1,828,478	51—	73:	1,827,789	74—	7:	1,828,359
	56:	1,827,901		174:	1,828,155		76:	1,828,671			1,828,366
2—	23:	1,827,834			1,828,156		90:	1,828,384			1,828,369
	41:	1,828,015			1,828,157		103:	1,828,387			1,828,709
	67:	1,828,310			1,828,158			1,828,530		14:	1,827,959
	231:	1,828,572			1,828,159		108:	1,828,212			1,828,570
	237:	1,827,942			1,828,340		112:	1,828,663			1,828,689
5—	99:	1,827,739	30—	12:	1,827,870		140:	1,827,839		21:	1,828,136
7—	1:	1,828,142			1,827,871		165:	1,828,552			1,828,255
8—	2:	1,827,857			1,827,872		184.3:	1,828,074		26:	1,827,891
	2:	1,828,338		22:	1,827,780		215:	1,828,595		33:	1,828,047
	6:	1,827,757	33—	137:	1,828,401			1,828,596			1,828,403
	6:	1,828,592		223:	1,828,194			1,828,597		39:	1,827,881
9—	22:	1,828,363	35—	3:	1,828,057			1,828,662			1,828,685
10—	27:	1,828,287	36—	3:	1,828,320	52—	5:	1,827,895		41:	1,828,114
12—	37:	1,828,265		17:	1,828,453	53—	5:	1,827,902		56:	1,828,050
	139:	1,827,777		58.5:	1,828,512			1,828,400		58:	1,827,960
	139:	1,828,640		71:	1,828,086	54—	73:	1,828,024		79:	1,828,594
13—	14:	1,827,852		72:	1,828,081	55—	51:	1,824,261		83:	1,828,575
	21:	1,827,833			1,828,246		77:	1,827,726		97:	1,828,606
	26:	1,828,291	37—	108:	1,828,681		83:	1,827,920		99:	1,828,025
14—	31:	1,827,916		110:	1,827,897	56—	1:	1,828,437		105:	1,828,089
15—	21:	1,827,887			1,828,532		32:	1,828,581		109:	1,827,880
	28:	1,828,388		118:	1,828,095		44:	1,828,534			1,827,903
	70:	1,827,905		156:	1,828,526		229:	1,828,129			1,828,001
	134:	1,828,485			1,828,547	58—	88:	1,828,686			1,828,056
	190:	1,828,422			1,828,711			1,828,687			1,828,209
	245:	1,828,139	39—	1:	1,828,296	59—	80:	R.18,230	75—	17:	1,827,754
	253:	1,828,410	40—	2.2:	1,827,762			1,828,476			1,827,755
	255:	1,827,906		7:	1,828,682	60—	52:	1,828,643			1,828,701
		1,828,713		8:	1,827,934		54.5:	1,828,679			1,827,820
		1,828,715		21:	1,827,761	61—	22:	1,828,219			1,827,821
16—	42:	1,827,972		52:	1,828,236		51:	1,827,921		60:	1,828,241
	86:	1,828,120		85:	1,828,558		76:	1,827,922	76—	5:	1,828,580
		1,828,431		96:	1,828,504			1,827,957		33:	1,828,150
17—	3:	1,828,725		108:	1,828,132	62—	1:	1,827,749		66:	1,828,392
18—	2:	1,828,153		125:	1,828,239			1,828,179	77—	32:	1,827,937
	47.5:	1,828,292		126:	1,827,731		5:	1,827,747	79—	17:	1,828,174
	48:	1,828,365			1,828,475		101:	1,827,750	80—	44:	1,828,323
	53:	1,828,481			1,828,716			1,827,856			1,828,426
	54:	1,828,497		130:	1,828,703		108.5:	1,828,693		48:	1,828,619
19—	121:	1,828,377		132:	1,827,963		115:	1,828,538	81—	3.2:	1,828,106
	144:	1,827,858			1,827,980			1,828,566		38:	1,828,042
20—	15:	1,828,285			1,828,177		126:	1,827,741		53:	1,828,523
	40.5:	1,828,515		133:	1,828,223			1,827,751		65:	1,828,173
	56.4:	1,828,509		145:	1,827,826			1,827,752		157:	1,828,561
22—	65:	1,828,335	41—	1:	1,827,927			1,827,764	83—	11:	1,827,986
	86:	1,828,520	42—	3:	1,828,108			1,827,769			1,828,143
	116:	1,828,020		25:	1,828,329			1,827,807			1,828,490
	139:	1,828,200			1,828,330			1,827,808			1,828,589
	189:	1,827,742		57:	1,828,214			1,827,809		44:	1,828,458
	204:	1,828,271	43—	31:	1,827,920			1,827,815		73:	1,828,181
23—	132:	1,828,690		46:	1,828,574			1,827,819			1,828,343
	175:	1,828,380		69:	1,828,486	63—	15:	1,828,616		75:	1,828,622
	202:	1,828,710	45—	11:	1,827,952		23:	1,828,617	84—	39:	1,827,814
	203:	1,828,376		106:	1,828,642	64—	98:	1,828,305		263:	1,828,315
	288:	1,828,146	46—	35:	1,828,309		106:	1,828,370		338:	1,827,864
		1,828,318		37:	1,827,964	65—	46:	1,827,868		351:	1,827,978
24—	8.22:	1,828,233			1,828,244	66—	63:	1,828,240		385:	1,828,389
	20:	1,828,186		40:	1,828,034		82:	1,828,220			1,828,390
	33:	1,827,783		45:	1,827,774		172:	1,828,457		409:	1,828,660
	56:	1,827,889		48:	1,828,288		173:	1,828,533		415:	1,828,083
	66:	1,828,456	47—	1:	Pl. Pat. 3	67—	7.1:	1,828,111	85—	2.4:	R.18,229
	77:	1,828,256			Pl. Pat. 4		53:	1,828,090		15:	1,828,341
	81:	1,828,417		30:	1,828,031	68—	9:	1,828,102	87—	6:	1,828,591
		1,828,421		37:	1,828,448		10:	1,828,051		9:	1,828,708
	135:	1,828,306		41:	1,828,295		11:	1,827,985		12:	1,828,035
	150:	1,828,012	48—	74:	1,828,704	70—	69:	1,828,544		23:	1,828,361
	153:	1,828,420		205:	1,828,461		90:	1,828,658	88—	16:	1,827,924
	242:	1,828,714	49—	1:	1,827,914		91:	1,827,979			1,828,541
	243:	1,828,041		5:	1,828,717			1,828,468		16.2:	1,827,947
25—	26:	1,827,759		47:	1,828,070		127:	1,827,732			1,828,199
	30:	1,828,037			1,828,213	72—	66:	1,828,237			1,828,444
	105:	1,828,462		55:	1,828,216		70:	1,828,078		16.8:	1,828,032
	127:	1,828,075			1,828,217		101:	1,828,618		20:	1,827,954
	142:	1,828,492			1,828,226		116:	1,827,945		40:	1,828,460
		1,828,669			1,828,229	73—	1:	1,827,973		61:	1,828,667
27—	6:	1,828,352			1,828,438			1,827,974	90—	24:	1,827,965
	13:	1,828,585			1,828,442		31:	1,828,093	91—	3:	1,828,405
	32:	1,828,391			1,828,443		51:	1,828,210		44:	1,827,876
28—	1:	1,828,397			1,828,674		52:	1,827,778		50:	1,827,907
29—	38:	1,828,379			1,828,720			1,827,804		60:	1,828,609
	84:	1,827,740			1,828,726			1,828,170	92—	2:	1,828,279
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PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

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Bulova Watch Company, Inc., New York, N. Y. Watches. 318,693–7; Oct. 27. Class 27.

Burnett, Sir Robert, & Company, Limited, London, England. Gin. 316,831; Oct. 27. Class 49.

Byron, W. D., & Sons, Inc., Williamsport, Md. Leather. 318,902; Oct. 27. Class 1.

Cameron and Company, Napa, Calif. Shirts. 317,156; Oct. 27. Class 39.

Carey Salt Company, The, Hutchinson, Kans. Salt. 316,919; Oct. 27. Class 6.

Carnac Cottons, Inc., New York, N. Y. Cotton piece goods. 319,236–7; Oct. 27. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 317,159–60; Oct. 27. Class 42.

Chaves, Dom'ngos F., Cambridge, Mass. Healing salve. 317,453; Oct. 27. Class 6.

Chicago Granitine Manufacturing Company, Chicago, Ill. Benches, seats, chairs, etc. 317,507; Oct. 27. Class 32.

Codman, F. L. & J. C., Company, Boston and South Boston, Mass. Buffing wheel disks. 319,059; Oct. 27. Class 23.

Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving soap and sticks. 318,349; Oct. 27. Class 4.

Columbus Fireworks Display Company, Inc., Newfield, N. J. Torpedoes in the nature of firecrackers. 318,821; Oct. 27. Class 9.

Cowen, Annette, New York, N. Y. Dresses, underwear, coats, etc. 317,973; Oct. 27. Class 39.

Curran, George W., St. Louis, Mo. Pitch carbon coke. 318,904; Oct. 27. Class 1.

Dai Nihon Jincohiryo Kabushiki Kaisha, Tokyo, Japan. Soy, liquid sauce, vinegar, and liquid condiment. 315,302; Oct. 27. Class 46.

Dalton Hat Co., Inc., Yonkers, N. Y. Men's hats. 306 641; Oct. 27. Class 39.

Deming, Wm. L., Salem, Ohio. Maps. 318,942; Oct. 27. Class 38.

De Nobili Cigar Company, Long Island City, N. Y. Cigars. 318,510; Oct. 27. Class 17.

"Diamco" Akt. Ges. Für Glühlicht, Berlin, Germany. Incandescent mantles. 314,558; Oct. 27. Class 34.

Dixie Chemical Co. Cincinnati, Ohio. Disinfectant and insecticide. 318,394; Oct. 27. Class 6.

Dixie Rush Company. (See Edmunds, George B.)

Ducharne, F., Silk Co., Inc., New York, N. Y. Silk piece goods. 319,204; Oct. 27. Class 42.

Duffy-Mott Company, Inc., New York, N. Y. Apple products. 306,883. Oct. 27. Class 46.

Edelstein, Irving A., doing business as London Pharmacal Co., New York, N. Y. Ointment. 317,165; Oct. 27. Class 6.

Edison, Thomas A., Incorporated, West Orange, N. J. Machines for shaving sound record tablets and accessories therefor. 319,080; Oct. 27. Class 23.

Edmunds, George B., doing business as Dixie Rush Company, New York, N. Y. Laxative. 318,237; Oct. 27. Class 6.

Emdee Laboratories Co., et. al. (See Sontag Chain Stores Co. Ltd.)

Empire Silk Company, New York, N. Y. Piece goods. 318,398; Oct. 27. Class 42.

Endo, T. G., doing business as Okuhira Produce Co., Los Angeles, Calif. Fresh deciduous fruits and vegetables. 319,021; Oct. 27. Class 46.

Epstein, Barnet, doing business as Modern-Method Laboratories, Cleveland, Ohio. Washing tablets and powder and cleansing compounds. 317,597; Oct. 27. Class 4.

Erie Malleable Iron Company, Erie, Pa. Ferrous metal castings. 304,319; Oct. 27. Class 14.

Erminie Manufacturing Co., Miami, Fla. Glue. 318,867. Oct. 27. Class 5.

Etablissements Tripette & Renaud Fils Societe Anonyme, Paris, France. Silk bolting cloth and silk grit gauze. 318,646; Oct. 27. Class 42.

Ethyl Laboratories. (See Klibanow, Henry.)

Feinstein, Goldie, doing business as Zorex Chemical Company, Philadelphia, Pa. Preparation for cleaning tile, etc. 318,399; Oct. 27. Class 4.

Ferry, Walter, New York, N. Y. Hair shampoo. 318,400; Oct. 27. Class 6.

Filikwik Company, Attleboro, Mass. Combination perfume atomizers and compacts. 314,843; Oct. 27. Class 44.

Foley Manufacturing Company, Minneapolis, Minn. Abrasive lawn mower sharpening compounds. 318,057; Oct. 27. Class 4.

Freres Laboratories, Inc., New York, N. Y. Skin lotions and creams. 318,588; Oct. 27. Class 6.

Gas and Electric Heater Co., La Porte, Ind. Electric water heaters. 301,756; Oct. 27. Class 21.

Gaver, Francis L., doing business as Nas-O-Dent Co., Washington, D. C. Dentifrice. 318,443; Oct. 27. Class 6.

Geiger, Otto, Jersey City, N. J. Pies and tarts. 312,340; Oct. 27. Class 46.

Geigy Company, Inc., New York, N. Y. Dyestuffs, lakes, and chemical products. 317,714; Oct. 27. Class 6.

General Petroleum Corporation of California, Los Angeles, Calif. Lubricating greases. 317,762; Oct. 27. Class 15.

General Printing Ink Corporation, Wilmington, Del. Printing ink. 318,590; Oct. 27. Class 11.

Gilby Wire Company, Newark, N. J. Radio filament wires. 318,946; Oct. 27. Class 21.

Golden Age Corporation, New York, N. Y. Noodles. 317,764; Oct. 27. Class 46.

Grant Apparel Mfg. Co. Ltd., Los Angeles, Calif. Dresses, smocks, aprons, etc. 316,265; Oct. 27.

Graziano, James P., Chicago, Ill. Olive oil. 318,142; Oct. 27 Class 46.

Greenert, Carolyn A., Louisville, Ky. Salve. 318,143; Oct. 27. Class 6.

Griffith, Martin, doing business as Worthmore Products Co., Shenandoah, Iowa. Auto cleaner. 314,846; Oct. 37. Class 4.

Grimberg, John, New York, N. Y. Garment hangers. 317,879; Oct. 27. Class 50.

Gross, Jacob G., doing business as National Latex Company, Southgate, Calif. Prophylactic rubber articles. 319,064; Oct. 27. Class 44.

Grossmith, J. & Son, Limited, London, England. Toilet soap. 318,240; Oct. 27. Class 4.

Hall Brothers, Wallingford, Conn. Live chicks. 314,848; Oct. 27. Class 46.

Hanes Hosiery Mills Co., Winston-Salem, N. C. Hosiery. 318,106; Oct. 27. Class 39.

Hastings Manufacturing Company, Hastings, Mich. Piston rings. 319,026; Oct. 27. Class 35.

Hebco, Inc., New York, N. Y. Emergency induction coil kit. 318,403; Oct. 27. Class 21.

Henrietta Shoppe, Inc., New York, N. Y. Underwear and dresses. 318,146; Oct. 27. Class 39.

Heppenstall Company, Pittsburgh, Pa. Razor blades. 319,141; Oct. 27. Class 23.

Hoffman Beverage Company, Newark, N. J. Maltless beverages. 309,430; Oct. 27. Class 45.

Holland-Rantos Co., Inc., New York, N. Y. Vaginal diaphragms. 318,310; Oct. 27. Class 44.

House of Tre-Jur, Inc., New York, N. Y. Face creams. 301,926; Oct. 27. Class 6.

Hubinger Co., The, Keokuk, Iowa. Starch. 314,367; Oct. 27. Class 6.

Illinois Zinc Company, Chicago, Ill. Radio shields, lamps, and tubes and bases and sockets therefor, etc. 317,253; Oct. 27. Class 21.

Illustrated Fashion Features, Inc., New York, N. Y. Magazine. 318,872; Oct. 27. Class 38.

Imperial Type Metal Company, Philadelphia, Pa. Compound used as a flux. 315,970; Oct. 27. Class 6.

Indian Mineral Wells, Inc., Saint Matthews, Ky. Maltless beverages. 318,404; Oct. 27. Class 45.
Jackson, Peter, (Tobacco Manufacturer) Limited, London, England. Cigarettes, smoking tobacco, cigars, and snuff. 318,651; Oct. 27. Class 17.
John's Barber Shop. (See Lekowsky, John C.)
Johnson & Johnson, New Brunswick, N. J. Surgical dressings. 318,525; Oct. 27. Class 44.
K. L. G. Sparking Plugs, Limited, London, England. Sparking plugs. 318,367; Oct. 27. Class 21.
Katten, Arthur A., Co. Inc., New Orleans, La. Coats, suits, trousers, and vests. 318,279; Oct. 27. Class 39.
Kellom, Chas. F., & Co., Inc., Philadelphia, Pa. Non-explosive liquid, used as a cleaner and an insecticide. 304,411; Oct. 27. Class 4.
Kleiner Cigar Manufacturing Company, Detroit, Mich. Cigars. 304,920–2; Oct. 27. Class 17.
Klibanow, Henry, doing business as Ethyl Laboratories, Dallas, Tex. Automobile cleaner and polish. 318,596; Oct. 27. Class 16.
Knapp-Monarch Company, Belleville, Ill. Electric heaters, grill stoves, hot plates, etc. 315,845; Oct. 27. Class 21.
Knapp-Monarch Company, Belleville, Ill. Jugs and bottles. 318,654; Oct. 27. Class 2.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Maltless beverage, particularly ginger ale. 317,122; Oct. 27. Class 45.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co. Cincinnati, Ohio. Maltless beverages, particularly orange soda, lemon lime soda, and root beer. 317,123; Oct. 27. Class 45.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Ice cream. 318,626; Oct. 27. Class 46.
Kuner Pickle Company, The, Brighton, Colo. Peas, sugar, corn, pork and beans, etc. 318,150–1; Oct. 27. Class 46.
Laboratoires Ladell. (See Levy, Samuel.)
Ladue, Emma M., doing business as American Fur Breeder Publishing Company, St. Peter, Minn. Periodical. 318,950; Oct. 27. Class 38.
Le Barque Company. (See Barker, Raymond L.)
Lekowsky, John C., doing business as John's Barber Shop, Sioux City, Iowa. Ointment. 317,522; Oct. 27. Class 6.
Levin & Root, New York, N. Y. Maltless beverages. 318,742; Oct. 27. Class 45.
Levy, Samuel, doing business as Laboratoires Ladell, New York, N. Y. L'quid tonic. 318,662; Oct. 27. Class 6.
Levy, Samuel, doing business as Laboratoires Ladell, New York, N. Y. Lotion with a powder base. 318,664; Oct. 27. Class 6.
Levy, Samuel, doing business as Laboratoires Ladell, New York, N. Y. After shaving lotion. 319,214; Oct. 27. Class 6.
London Pharmacal Co. (See Edelstein, Irving A.)
Lyon, Lynn A., Findlay, Ohio. Laundry washing machines. 309,436; Oct. 27. Class 24.
Marathon Company, Attleboro, Mass. Cases. 318,807; Oct. 27. Class 28.
Mason, Blanche, Phoenix, Ariz. Chocolate covered citrus fruit. 313,441; Oct. 27. Class 46.
McClellan Products, Ltd., Los Angeles, Calif. Mouth spray. 318,247; Oct. 27. Class 6.
McDaniel Milling Co., Carthage, Mo. Wheat flour. 319,155; Oct. 27. Class 46.
McGinnis, Ada, doing business as Triple Valve Products Co., St. Louis, Mo. Vanishing cream, skin lotion, and hair gloss. 317,849; Oct. 27. Class 6.
McKeon, Wilfred S., doing business as Sulphur Products Company, Greensburg, Pa. Medicinal product. 317,130; Oct. 27. Class 6.
McKesson & Robbins, Incorporated, Bridgeport, Conn. Malt general tonic. 305,491; Oct. 27. Class 6.
McLeod, L. B., Williston, Fla. Poultry mineral. 279,415; Oct. 27. Class 1.
Meritol Corporation, The, Des Moines, Iowa. Shampoo, powder, cream, toilet waters, and perfumes. 281,309; Oct. 27. Class 6.
Miller Furniture Company, Lebanon, Pa. Chest of drawers, dressing table, and chifforobe combined. 318,715; Oct. 27. Class 32.
Minneapolis Knitting Works, Minneapolis, Minn. Underwear and sleeping garments, infants' shirts and bands, etc. 318,598; Oct. 27. Class 39.
Miracle Eye Drop Company, Detroit, Mich. Eye medicine. 318,528; Oct. 27. Class 6.
Misner, Jon F., Kokomo, Ind. Anaphrodisiac. 316,798; Oct. 27. Class 6.
Mitchell, Ovela J., doing business as Ovee's Co., Hartford, Conn. Salve. 315,547; Oct. 27. Class 6.
Modern-Method Laboratories. (See Epstein, Barnet.)
Morgan, William Duane. (See Neer, Homer, and William Duane Morgan.)
Morgenstern, Felix, doing business as Morgenstern Chemical Co., New York, N. Y. Medicinal preparation. 318,670; Oct. 27. Class 6.
Mueller Brass Co., Port Huron, Mich. Nuts, glands, stems, couplings, etc. 315,003; Oct. 27. Class 13.
N. V Maatschappy "De Veluwe", Nunspeet, Netherlands. Paints, paint enamels, and varnishes. 301,680; Oct. 27. Class 16.
Nas-O-Dent Co. (See Gaver, Francis L.)
National Ammonia Company, Inc., Wilmington, Del. Carbonate and bicarbonate of ammonium. 318,407; Oct. 27. Class 6.
National C. M. A. Stores, Inc., New York, N. Y. Coffee and wheat flour. 314,246; Oct. 27. Class 46.
National Enameling & Stamping Co., Milwaukee, Wis. Woven wicks. 317,852; Oct. 27. Class 34.
National Latex Company. (See Gross, Jacob G.)
Neer, Homer, and William Duane Morgan, Springfield, Ohio. Maltless beverages and sirups and extracts. 318,717; Oct. 27. Class 45.
Niacet Chemicals Corporation, Niagara Falls, N. Y. Synthetic tanning materials. 313,256; Oct. 27. Class 6.
Nirenberg, A. H., Trading Corporation, New York, N. Y. Pelts. 318,812; Oct. 27. Class 1.
Odora Company, Inc., New York, N. Y. Moth preventative. 317,529; Oct. 27. Class 6.
Okuhira Produce Co. (See Endo, T. G.)
Orange Manufacturing Company, Orlando, Fla. Insecticide household spray. 305,952; Oct. 27. Class 6.
Orr & Sembower, Inc., Reading, Pa. Under feed stoker mechanism. 317,675; Oct. 27. Class 34.
Ovee's Co. (See Mitchell, Ovela J.)
Owensboro Milling Co. Incorporated, Owensboro, Ky. Wheat flour, stock and poultry feeds. 316,938; Oct. 27. Class 46.
Pacific Wire Rope Company, Los Angeles, Calif. Wire strand. 318,071; Oct. 27. Class 7.
Papier Poudrè, Limited, London, England. Cream, perfume, lipsticks, etc. 317,952; Oct. 27. Class 6.
Penn-State Petroleum Company, Warren, Pa. Lubricating oils. 317,569; Oct. 27. Class 15.
Penny, Geo. T., doing business as Penny's Chemical Co., Greensboro, N. C. Medicinal preparation. 317,677; Oct. 27. Class 6.
Pepperell Manufacturing Company, Boston, Mass. Broadcloth. 316,610; Oct. 27. Class 42.
Pepperell Manufacturing Company, Boston, Mass. Sheetings, shirtings, denims, etc. 316,611; Oct. 27. Class 42.
Pharis Tire and Rubber Company, The, Newark, Ohio. Rubber tires. 319,151; Oct. 27. Class 35.
Phoenix Publishing Co., The, Chicago, Ill. Magazines. 316,099; Oct. 27. Class 38.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Paints, primers, and paint enamel. 319,216; Oct. 27. Class 16.
Poirette Corsets, Inc., New York, N. Y. Corsets, brassières, and combinations of the same. 317,533; Oct. 27. Class 39.
Pollack, Max, & Co. Inc., New York, N. Y. Sewing threads. 319,218; Oct. 27. Class 43.
Priestley, B., & Co., Inc., New York, N. Y. Cotton fabrics. 309,982; Oct. 27. Class 42.
RCA Victor Company, Inc., Camden, N. J. Line terminating units, resistor units, etc. 319,080; Oct. 27. Class 21.
Raisin Crisp Co., Not Inc., Chicago, Ill. Candy popcorn and raisin confection. 313,093; Oct. 27. Class 46.
Recess Company, The, Cincinnati, Ohio. Salt. 318,461; Oct. 27. Class 6.
Regal Knitting Co. Inc., New York, N. Y. Garments. 317,678; Oct. 27. Class 39.
Riverside & Dan River Cotton Mills, Inc., Danville, Va. Cotton broadcloth. 319,296–8; Oct. 27. Class 42.
Roche, Edward J., San Francisco, Calif. Endocrine-glandular product. 317,376; Oct. 27. Class 6.
Rogola Chemical Company, The, Reading, Pa. Medicinal preparation. 314,017; Oct. 27. Class 6.
Rurup, Ernest G., doing business as Scientific Laboratories of America, San Francisco, Calif. Preparations in liquid and tablet form. 317,574; Oct. 27. Class 6.
Sakowitz Brothers, Houston, Tex. Hosiery, underwear, pajamas, etc. 318,079; Oct. 27. Class 39.
Santonine Company of America, Inc., doing business as Vermisan Company, New York, N. Y. Preparation for the expulsion of worms. 318,171; Oct. 27. Class 6.
Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. 318,464; Oct. 27. Class 39.
Scientific Laboratories of America. (See Rurup, Ernest G.)
Sears, Roebuck and Co., Chicago, Ill. Magazine. 319,038; Oct. 27. Class 38.
Selby Shoe Company, The, Portsmouth, Ohio. Shoes. 316,222; Oct. 27. Class 39.
"Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft, Vienna, Austria. Bathing mats. 318,724; Oct. 27. Class 50.
Shaler Company, The, Waupun, Wis. Tires and tire repair kits. 313,308–9; Oct. 27. Class 35.
Shawinigan Products Corporation, New York, N. Y. Synthetic resinous material. 319,041; Oct. 27. Class 6.
Shrage & Pines, New York, N. Y. Shirts. 317,486; Oct. 27. Class 39.
Siegel Bros. Kiki Maid Coats Inc., New York, N. Y. Coats. 318,570; Oct. 27. Class 39.
Singer Manufacturing Company, The, Elizabeth, N. J., and New York, N. Y. Sewing machines, their parts and attachments. 317,689; Oct. 27. Class 23.

Slanlus Company, Inc., The, Covington, Ky. Preparation for hay fever, etc. 304,350; Oct. 27. Class 6.
Snap-on Tools, Inc., Kenosha, Wis. Wrenches, wrench sets, sockets, etc. 309,445; Oct. 27. Class 23.
Socony Specialties, Inc., New York, N. Y. Gasoline, blended gasoline, motor fuel compounds, etc. 318,492; Oct. 27. Class 15.
Sontag Chain Stores Co. Ltd., doing business as Studio Products Co., and Emdee Laboratories Co., Los Angeles and Hollywood, Calif. Shampoos. 315,940; Oct. 27. Class 6.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Chemical rust preventive. 317,139; Oct. 27. Class 6.
Sterling Engineering Company, Milwaukee, Wis. Thermostatic temperature regulator. 311,629; Oct. 27. Class 26.
Studio Products Co. et al. (See Sontag Chain Stores Co. Ltd.)
Sulphur Products Company. (See McKeon, Wilfred S.)
Sun Printing & Publishing Association, The, New York, N. Y. Nom de plume for a column in a newspaper. 316,854; Oct. 27. Class 38.
Sun, Wong, Billings, Mont. Preparation for cancer. 318,324; Oct. 27. Class 6.
Swann Corporation, The, Birmingham, Ala. Artificial abrasives. 317,827; Oct. 27. Class 4.
Swisher, John H., & Son, Inc., Jacksonville, Fla. Cigars. 318,537; Oct. 27. Class 17.
Tiger Products Co., Inc., Buffalo, N. Y. Solvent and cleaner. 315,880; Oct. 27. Class 6.
Totem Hat Company, New York, N. Y. Hats. 316,226; Oct. 27. Class 39.
Trent Laboratories, Cleveland, Ohio. Mouth wash. 318,184; Oct. 27. Class 6.
Triple Value Products Co. (See McGinnis, Ada.)
Union Refining Company, The, Denver, Colo. Motor oils and greases. 317,908; Oct. 27. Class 15.
United Shoe Machinery Corporation, Paterson, N. J., and Boston, Mass. Cement solvent or softener. 318,927; Oct. 27. Class 6.
United States Gypsum Company, Chicago, Ill. Gypsum. 318,606; Oct. 27. Class 1.
U. S. Postal Meter Corporation, New York, N. Y. Metering machines. 304,593; Oct. 27. Class 26.
United States Steel Corporation, New York, N. Y. House organ. 319,012; Oct. 27. Class 38.
Vermisan Company. (See Santonine Company of America, Inc.)
Warren, W., Thread Works, Westfield, Mass. Thread. 319,158; Oct. 27. Class 43.
Webster Cigar Company, New York, N. Y. Cigars. 304,933–4; Oct. 27. Class 17.
Weldtite Products Company, Mishawaka, Ind. Glue. 318,890; Oct. 27. Class 5.
Wellington Sears Company, Boston, Mass. Twilled piece goods. 318,631–2; Oct. 27. Class 42.
Wesco Foods Co. (See Kroger Grocery & Baking Co., The.)
Western Clock Company, Peru, Ill. Electrical motors. 314,730–5; Oct. 27. Class 21.
Western Clock Company, Peru, Ill. Electrical motors. 314,737–9; Oct. 27. Class 21.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Electric toasters. 319,090; Oct. 27. Class 21.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Electric fans. 319,091; Oct. 27. Class 21.
Worthmore Products Co. (See Griffith, Martin.)
Yuma Mesa Fruit Growers Association, Yuma, Ariz. Fresh grapefruit. 317,655; Oct. 27. Class 46.
Zorex Chemical Company. (See Feinstein, Goldie.)

LIST OF REGISTRANTS OF TRADE-MARKS

Abraham & Straus, Inc., New York, N. Y. China dinner sets. 288,525; Oct. 27. Class 30.
Ajax Trunk & Sample Case Co., Inc. (See Kallis, Isidore S.)
Alberts, Max M., doing business as The Alreit Co., Brooklyn, N. Y. Preparation for repelling moths. 288,339; Oct. 27; Serial No. 310,151; published Aug. 4, 1931. Class 6.
Allis, Amber, Milwaukee, Wis. Electrical headlights. 288,376; Oct. 27; Serial No. 302,313; published Aug. 4, 1931. Class 21.
Alpha Laboratory. (See Clark, Gertrude.)
Alreit Co., The. (See Alberts, Max M.)
American Chemical Products Co. (See Cohen, Samuel J.)
American Colloid Corporation, New York, N. Y. Chemicals for clarifying water of rust, etc. 288,433; Oct. 27; Serial No. 315,175; published Aug. 4, 1931. Class 6.
American Yvette Company, Inc., New York, N. Y. Permanent waving pads. 288,421; Oct. 27; Serial No. 315,959; published Aug. 11, 1931. Class 44.
Amory, Brown & Company. (See Meffert, Benjamin F., assignor.)
Animal Trap Co., Abington, Ill., assignor, by mesne assignments, to Animal Trap Company of America, Lititz, Pa. Animal traps and tack hammers. 37,602; renewed Dec. 31, 1931.
Animal Trap Company of America, Lititz, Pa. Animal traps. 288,526; Oct. 27. Class 50.
Arrow Bottle Cap Corp., Brooklyn, N. Y. Bottle caps. 288,454; Oct. 27; Serial No. 313,526; published June 9, 1931. Class 50.
Atlantic & Gulf Fertilizer Co., Jacksonville, Fla. Fertilizer. 288,394; Oct. 27; Serial No. 316,076; published Aug. 4, 1931. Class 10.
Bailey, Elpha E., Denver, Colo. Dental metal alloy. 288,487; Oct. 27; Serial No. 315,240; published Aug. 4, 1931. Class 44.
Baldwin, Frank H., Ticonderoga, N. Y. Preparation for the treatment of eczema. 288,377; Oct. 27; Serial No. 302,665; published Aug. 11, 1931. Class 6.
Ballif Distributing Company, The, Portland, Oreg. Malt syrup. 288,491; Oct. 27; Serial No. 315,588; published Aug. 4, 1931. Class 46.
Barker Bros. Incorporated, Los Angeles, Calif. Furniture and upholstery. 288,521; Oct. 27. Class 32.
Batschari, A. Cigarettenfabrik A. G., Baden-Baden, Germany. Cigarettes. 288,445; Oct. 27; Serial No. 315,337; published Aug. 11, 1931. Class 17.
Batt Brothers, New York, N. Y. Cigarettes. 288,378; Oct. 27; Serial No. 302,666; published July 21, 1931. Class 17.
Bear Brand Hosiery Co. (See Paramount Knitting Company, assignor.)
Beatrice Creamery Company, Chicago, Ill. Ice cream. 288,434; Oct. 27; Serial No. 315,182; published Aug. 11, 1931. Class 46.
Beattie Manufacturing Company, The, Little Falls, N. J. Velvet rugs. 85,642; renewed Mar. 5, 1932.
Becker, Henry, & Son, Inc., Roseland, N. J. Milk, cream, butter, etc. 288,319; Oct. 27; Serial No. 314,746; published Aug. 4, 1931. Class 46.
Behr Manischewitz, assignor to The B. Manischewitz Company, Cincinnati, Ohio. Matzos, being flat squares of unleavened bread. 85,066; renewed Mar. 5, 1932.
Bejean, Etienne, doing business as The Bejean Laboratories, New York, N. Y. Salve. 288,478; Oct. 27; Serial No. 314,837; published Aug. 4, 1931. Class 6.
Bendiage, Theodore J., doing business as Tenex Laboratories, Cedar Rapids, Iowa. Medicine. 288,313; Oct. 27; Serial No. 314,680; published Aug. 4, 1931. Class 6.
Bi-Bi Products Company, Tulsa, Okla. Insecticide. 288,443; Oct. 27; Serial No. 315,299; published Aug. 4, 1931. Class 6.
Binney & Smith Company, New York, N. Y. Chemicals and compositions. 288,423; Oct. 27; Serial No. 316,117; published Aug. 4, 1931. Class 6.
Biosol Products Company. (See Cohen, Samuel J., assignor.)
Bishop & Company, Los Angeles, Calif., assignor to National Biscuit Company, New York, N. Y. Crackers. 83,889; renewed Oct. 24, 1931. Class 46.
Boeker, Bernard, New York, N. Y. Medicinal preparation. 288,489; Oct. 27; Serial No. 315,383; published Aug. 4, 1931. Class 6.
Bonicot Warenvertriebsgesellschaft m. b. H., Vienna, Austria. Apparatus for the introduction and injection of liquid into tobacco or tobacco products; pipes, etc. 288,341; Oct. 27; Serial No. 310,933; published July 14, 1931. Class 8.
Boon Manufacturing Co., Inc., New York, N. Y. Ink. 288,368; Oct. 27; Serial No. 298,372; published Sept. 9, 1930. Class 11.
Bourjois, Inc., New York, N. Y. Perfume, toilet water, bath crystals, etc. 288,504; Oct. 27; Serial No. 315,784; published Aug. 4, 1931. Class 6.
Bowey's, Inc., Chicago, Ill. Combination of bananas, other canned fruits, flavors and colors. 288,398; Oct. 27; Serial No. 316,185; published Aug. 11, 1931. Class 46.
Bowey's, Inc., Chicago, Ill. Hot chocolate powder. 288,401; Oct. 27; Serial No. 316,248; published Aug. 11, 1931. Class 46.
Bre-Carbo Mfg. Co., New York, N. Y. Preparation for the treatment of constipation. 288,479; Oct. 27; Serial No. 314,890; published July 28, 1931. Class 6.
Breslauer, A., Inc., New York, N. Y. Skin freshener, tissue creams, cleansing cream, etc. 288,389; Oct. 27. Serial No. 308,720; published Aug. 4, 1931. Class 6.
Bridgeport Brass Company, Bridgeport, Conn. Bronze. 288,369; Oct. 27; Serial No. 298,427; published Apr. 7, 1931. Class 14.
Broward Cigar Company, Pompano, Fla. Cigars. 288,510; Oct. 27; Serial No. 315,987; published Aug. 11, 1931. Class 17.
Brown, Rose A., doing business as Brown Mfg. Co., St. Paul, Minn. Foot lotion. 288,340; Oct. 27; Serial No. 310,508; published Aug. 4, 1931. Class 6.

Brown, Walter M., doing business as The Mapo Company, Yakima, Wash. Medicinal preparation. 288,416; Oct. 27; Serial No. 315,669; published Aug. 4, 1931. Class 6.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Cigarette paper and booklets. 288,407; Oct. 27; Serial No. 316,477; published Aug. 11, 1931. Class 8.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Tobacco. 288,408; Oct. 27; Serial No. 316,479; published Aug. 11, 1931. Class 17.
Buffalo Electro-Chemical Co., Inc., Tonawanda, N. Y. Hydrogen peroxide, ammonium persulphate, and potassium persulphate. 288,414; Oct. 27; Serial No. 315,624; published Aug. 4, 1931. Class 6.
Bulova Watch Company, Inc., New York, N. Y. Bracelets and wrist bands and straps. 288,379; Oct. 27; Serial No. 302,671; published Aug. 4, 1931. Class 28.
Bulova Watch Company, Inc., New York, N. Y. Watches. 288,505; Oct. 27; Serial No. 315,822; published July 28, 1931. Class 27.
Burk, Fried & Company, Baltimore, Md. Men's clothes. 84,898; renewed Jan. 9, 1932.
Busy Bee Candy Company. (See Candy, Walter W., assignor.)
California Packing Corporation. (See Prince, H. G., & Company, assignor.)
Candy, Walter W., assignor to Busy Bee Candy Company, St. Louis, Mo. Molasses candy. 37,319; renewed Nov. 19, 1931.
Cascadon Laboratories. (See Zally, Anthony K.)
Case, J. I., Plow Works, Racine, Wis., assignor to The Massey-Harris Company, Baltimore, Md. and Racine, Wis. Machinery and parts thereof. 83,220; renewed Aug. 29, 1931.
Champion Blower & Forge Co., Lancaster, Pa. Portable forges and blowers therefor. 83,715; renewed Oct. 10, 1931.
Chapman, William O., Washington, D. C. Frozen confection. 288,493; Oct. 27; Serial No. 315,630; published Aug. 11, 1931. Class 46.
Chemische Fabrik Flörsheim Dr. H. Noerdlinger A. G. Florsheim-on-the-Main, Germany. Preparations. 288,355; Oct. 27; Serial No. 312,291; published Aug. 11, 1931. Class 6.
Chevrolet Motor Company, Detroit, Mich. Polish and cleaner. 288,418; Oct. 27; Serial No. 315,787; published Aug. 11, 1931. Class 16.
Chicago Macaroni Co., Chicago, Ill. Macaroni. 288,333; Oct. 27; Serial No. 309,064; published Aug. 4, 1931. Class 46.
Chicago Retort & Fire Brick Co., Chicago and Ottawa, Ill. Fire-brick and fire-brick for heat resisting purposes. 84,816; renewed Jan. 9, 1932.
Cine-A-Graph Corporation, New York, N. Y. Electrical display signs. 288,417; Oct. 27; Serial No. 315,674; published Aug. 4, 1931. Class 21.
Clark, Gertrude, doing business as Alpha Laboratory, Chicago, Ill. Antiseptic in jelly form. 288,365; Oct. 27; Serial No. 295,207; published July 8, 1930. Class 6.
Coated Paper Products Company, The, Minerva, Ohio. Paraffin paper. 288,517; Oct. 27. Class 37.
Cohen, Samuel J., doing business as American Chemical Products Co., assignor to Richard M. Freer, doing business as The Biosol Products Company, Rochester, N. Y. Bacteriological and biological stains and reagents. 288,373; Oct. 27; Serial No. 301,584; published July 8, 1930. Class 6.
Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. 288,501; Oct. 27; Serial No. 315,729; published Aug. 4, 1931. Class 6.
Colorado Milling & Elevator Company. (See Twin Falls Milling & Elevator Co., assignor.)
Columbian Rope Company, Auburn, N. Y. Manila and sisal rope. 84,727; renewed Jan. 2, 1932.
Commercial Chemical Company of Tennessee, Memphis, Tenn. Calcium arsenate. 288,360; Oct. 27; Serial No. 313,108; published July 28, 1931. Class 6.
Condossis Tobacco Corporation, New York, N. Y. Cigars, cigarettes, etc. 288,428; Oct. 27; Serial No. 315,036; published July 28, 1931. Class 17.
Cook & Leary, Brooklyn, N. Y. Preparation for burns. 288,460; Oct. 27; Serial No. 313,589; published Aug 11, 1931. Class 6.
Coté, Irene D., New York, N. Y. Cold creams, depilatories, powder, etc. 288,308; Oct. 27; Serial No. 314,397; published Aug. 11, 1931. Class 6.
Crown Cap Manufacturing Company, Inc., Dover, Del., and Brooklyn, N. Y. Bottles, caps, and stoppers. 288,354; Oct. 27; Serial No. 312,325; published July 7, 1931. Class 50.
Crystal Tissue Company, The, Middletown, Ohio. Waxed and tissue papers. 288,527; Oct. 27. Class 37.
Cuyahoga Soap Company, The. (See Stadler, August W., assignor.)
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Silver alloys for dental use. 288,384–5; Oct. 27; Serial Nos. 305,780–1; published Aug. 4, 1931. Class 44.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Mercury and for noble metal alloys. 288,386; Oct. 27; Serial No. 305,806; published Aug. 4, 1931. Class 44
Dougherty Cake Products, Incorporated, Muncie, Ind. Cakes. 288,371; Oct. 27; Serial No. 299,961; published July 14, 1931. Class 46.
Drug Products Co., Inc., The, Long Island City, N. Y. Preparation used as an alkaline gargle. 288,436; Oct. 27; Serial No. 315,253; published Aug. 4, 1931. Class 6.
Du Puis, J. G., doing business as White Belt Dairy, Miami, Fla. Pasteurized milk and cream and raw milk. 288,387; Oct. 27; Serial No. 306,117; published Apr. 28, 1931. Class 46.
Dwarf Radio Manufacturing Co. Ltd., Los Angeles, Calif. Radio receiving sets and parts thereof and accessories thereto. 288,455; Oct. 27; Serial No. 313,538; published Aug. 4, 1931. Class 21.
"Electra" Lightning Rod Co., by change of name to Electra Manufacturing Company, Chicago, Ill. Lightning-rods. 81,969; renewed May 23, 1931.
Elgin National Watch Company, Chicago and Elgin, Ill. Watches, watch movements, etc. 288,383; Oct. 27; Serial No. 305,348; published July 28, 1931. Class 27.
Elgin National Watch Company, Chicago and Elgin, Ill. Watches, watch movements, and watch cases. 288,528; Oct. 27. Class 27.
Empire Malt Products Co., Los Angeles, Calif., and Brooklyn, N. Y. Malt syrup. 288,409; Oct. 27; Serial No. 316,483; published Aug. 11, 1931. Class 46.
Empire Silk Company, New York, N. Y. Silk piece goods. 288,419; Oct. 27; Serial No. 315,794; published Aug. 11, 1931. Class 42.
Enameled Steel Sign Company, Chicago, Ill. Advertising signs. 288,331; Oct. 27; Serial No. 278,785; published July 21, 1931. Class 50.
En-Vé Incorporated, Detroit, Mich. Cleansing cream and toilet powder. 288,363; Oct. 27; Serial No. 294,716; published July 28, 1931. Class 6.
Faultless Manufacturing Company, The. (See Rosenfeld. E. & Company, assignor.)
Fils de R. Picard & Cie., La Chaux-de-Fonds, Switzerland. Watches, watchcases, watch movements and parts of the same. 288,330; Oct. 27; Serial No. 282,467; published July 21, 1931. Class 27.
Fishel, R. G., Inc., Chicago, Ill. Gaseous content glow lamps. 288,351; Oct. 27; Serial No. 312,047; published Aug. 4, 1931. Class 21.
Freer, Richard M. (See Cohen, Samuel J., assignor.)
French Mfg. Company, The, Chicago, Ill. Hair pomade. 288,336; Oct. 27; Serial No. 309,927; published Aug. 4, 1931. Class 6.
Frictionless Metal Company, St. Louis, Mo. Bearing metal. 288,399; Oct. 27; Serial No. 316,199; published Aug. 4, 1931. Class 14.
Fuld, William, to William A. Fuld, doing business as William Fuld, Baltimore, Md., successor. Pool tables. 83,828; renewed Oct. 17, 1931.
Fullerton Lumber Company, Minneapolis, Minn. Coal. 288,335; Oct. 27; Serial No. 309,424; published Feb. 10, 1931. Class 1.
General Cable Corporation, New York, N. Y. Tinsel, tinsel ribbon and cord, mica snow, etc. 288,329; Oct. 27; Serial No. 285,453; published July 21, 1931. Class 50.
General Dyestuff Corporation, New York, N. Y. Dyes and dyestuffs. 288,496; Oct. 27; Serial No. 315,681; published Aug. 4, 1931. Class 6.
Ginsburg, Nathaniel, doing business as Para Rubber Company, assignor to Para Manufacturing Company, Newark, N. J. Chemically treated fabrics. 288,523; Oct. 27. Class 50.
Glatzer, Gustave, New York, N. Y. Cream. 288,382; Oct. 27; Serial No. 303,280; published Aug. 11, 1931. Class 6.
Gly-Tex Co., Brookville, Ind. Preparation for treating piles. 288,490; Oct. 27; Serial No. 315,402; published Aug. 4, 1931. Class 6.
Goldblatt Bros., Inc., Chicago, Ill. Malt syrup. 288,410; Oct. 27; Serial No. 316,589; published Aug. 11, 1931. Class 46.
Gourock Ropework Company, Limited, The, Port Glasgow, Scotland. Linen and hemp piece goods. 84,957; renewed Jan. 16, 1932.
Grabosky, Louis B., Philadelphia, Pa. Cigars. 288,480; Oct. 27; Serial No. 314,908; published July 14, 1931. Class 17.
Grace, Tom W., Company, Dallas, Tex. Fountain syringes, water bottles, etc. 288,411; Oct. 27; Serial No. 315,403; published Aug. 11, 1931. Class 44.
Graff, May, doing business as Bluekamel Manufacturing Company, Detroit, Mich. Cleansing creams. 288,437; Oct. 27; Serial No. 315,258; published Aug. 4, 1931. Class 6.
Graff, May, doing business as Bluekamel Manufacturing Company, Detroit, Mich. Nose creams. 288,438; Oct. 27; Serial No. 315,260; published Aug. 4, 1931. Class 6.
Grafree Products Company, Long Beach, Calif. Hair color restorer and tonic. 288,461; Oct. 27; Serial No. 313,710; published Aug. 4, 1931. Class 6.
Greenwald, Abraham A., doing business as Jacob Stahl Jr. & Co., New York, N. Y. Cigars. 288,466; Oct. 27; Serial No. 313,914; published July 14, 1931. Class 17.
Greenwald, Abraham A., doing business as Jacob Stahl Jr. & Co., New York, N. Y. Cigars. 288,467; Oct. 27; Serial No. 313,915; published Aug. 4, 1931. Class 17.
Greenwald, Abraham A., doing business as Jacob Stahl Jr. & Co., New York, N. Y. Cigars. 288,468; Oct. 27; Serial No. 313,917; published July 14, 1931. Class 17.

Greiner Chemical Corporation, The, Fort Wayne, Ind. Plant food and fertilizing preparation. 288,471; Oct. 27; Serial No. 314,756; published July 28, 1931. Class 10.
Gulf States Steel Company, Birmingham, Ala. Sheets, roofing, and siding, etc. 288,396; Oct. 27; Serial No. 316,144; published Aug. 4, 1931. Class 14.
H. & S. Publishing Company. (See Western Magazine Co., Inc.)
Haas, Joseph, doing business as National Poultry Band Co., Newport, Ky. Identification tags for poultry and animals. 288,439; Oct. 27; Serial No. 315,094; published July 14, 1931. Class 50.
Harper, Martha M., assignor to Martha Matilda Harper, Inc., Rochester, N. Y. Hair tonics. 84,096; renewed Nov. 7, 1931.
Harper, Martha Matilda, Inc., Rochester, N. Y. Acne or pimple lotion, bluing, etc. 288,462; Oct. 27; Serial No. 313,782; published July 28, 1931. Class 6.
Harris Drug Co. Inc., New York, N. Y. Capsules for reducing congestion of the mucous membranes, etc. 288,502; Oct. 27; Serial No. 315,746; published Aug. 4, 1931. Class 6.
Hartsuch, Earl R., doing business as Hartsuch, Chicago, Ill. Salad dressing. 288,435; Oct. 27; Serial No. 315,198; published Aug. 4, 1931. Class 46.
Hawaiian Pineapple Company, Ltd., Honolulu, Territory of Hawaii, and San Francisco, Calif. Canned pineapple. 84,829; renewed Jan. 9, 1932.
Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii, and San Francisco, Calif. Canned pineapple. 85,113; renewed Jan. 30, 1932.
Heller-Deltah, Inc., New York, N. Y. Perfumes, toilet waters, face powders, etc. 288,328; Oct. 27; Serial No. 291,616; published July 28, 1931. Class 6.
Heller-Deltah, Inc., New York, N. Y. Perfumes, toilet waters, etc. 288,342; Oct. 27; Serial No. 291,617; published July 28, 1931. Class 6.
Hildreth Varnish Co., to Hildreth Varnish Company, Inc., New York, N. Y., successor. Thinner for paints and varnishes. 85,117; renewed Jan. 30, 1932.
Hillwood Manufacturing Company, The, Cleveland, Ohio. Nails. 288,515; Oct. 27. Class 13.
Hirschberg, Hermann M., New York, N. Y., assignor, by mesne assignments, to Siemens-Planiawerke A. G. für Kohlefabrikate, Berlin-Lichtenberg, Germany. Carbons for electric lamps and carbon electrodes for smelting purposes. 85,246; renewed Feb. 6, 1932.
Horn, William H., & Brother, Incorporated, Philadelphia, Pa. Metallic devices for elastic hosiery. 288,415; Oct. 27; Serial No. 315,637; published Aug. 11, 1931. Class 44.
Houghton, E. F., & Co., Philadelphia, Pa. Compounds used in softening textile fabrics. 288,412; Oct. 27; Serial No. 315,456; published Aug. 4, 1931. Class 6.
House of Crane, The, Indianapolis, Ind. Smoking pipes. 288,314; Oct. 27; Serial No. 314,696; published July 14, 1931. Class 8.
Hozform Company, The, Los Angeles, Calif. Garment drying forms. 288,519; Oct. 27. Class 24.
Hudnut, Richard, New York, N. Y. Toilet preparations. 84,487; renewed Dec. 19, 1931.
Hughes Chemical Company, The, Cleveland, Ohio. Chemical disinfectant and germicide. 288,346; Oct. 27; Serial No. 311,310; published Aug. 11, 1931. Class 6.
Hupp Motor Car Co., assignor to Hupp Motor Car Corporation, Detroit, Mich. Automobiles. 85,247; renewed Feb. 6, 1932.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Nonferrous light metal alloys and castings and forgings thereof. 288,375; Oct. 27; Serial No. 302,164; published Aug. 12, 1930. Class 14.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Calcium compound. 288,432; Oct. 27; Serial No. 315,099; published Aug. 4, 1931. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Salt substitute. 288,440; Oct. 27; Serial No. 315,098; published Aug. 4, 1931. Class 6.
Illinois Canning Co., The, Hooneston, Ill. Canned corn. 83,840; renewed Oct. 17, 1931.
Illinois Canning Co., The, Hooneston, Ill. Canned corn. 84,005; renewed Oct. 31, 1931.
Ingraham, E., Company, The, Bristol, Conn. Clocks and watches. 288,514; Oct. 27. Class 27.
International Printing Ink Corporation, The, New York, N. Y. Process printing inks. 288,403; Oct. 27; Serial No. 316,327; published Aug. 11, 1931. Class 11.
Jaramillo, Rafael R. (See Pacatá Hair Remedy.)
Jensen, Franz G., assignor to F. G. Jensen & Sons, Incorporated, Springfield, Mass. Candy. 85,131; renewed Jan. 30, 1932.
Jergens, Andrew, Co., The, New York, N. Y., and Cincinnati, Ohio, assignor to The Andrew Jergens Company, Cincinnati, Ohio. Toilet soap. 85,132; renewed Jan. 30, 1932.
Jergens, Andrew, Co., The, New York, N. Y., and Cincinnati, Ohio, assignor to The Andrew Jergens Company, Cincinnati, Ohio. Toilet preparations. 85,133; renewed Jan. 30, 1932.
Jergens, Andrew, Company, The, Cincinnati, Ohio. Perfume. 288,494; Oct. 27; Serial No. 315,639; published Aug. 4, 1931. Class 6.
Jones, La Vern P., doing business as Liquilox Company, Burbank, assignor to Liquilox Company, Ltd., Los Angeles, Calif. Paints. 288,426; Oct. 27; Serial No. 316,597; published Aug. 11, 1931. Class 16.
K-Mol Laboratories. (See Lange, Ralph H.)
K. P. & B. Co., Decatur, Ill. Cleaning devices. 288,452; Oct. 27; Serial No. 313,191; published July 14, 1931. Class 29.
Kallis, Isidore S., to Ajax Trunk & Sample Case Co., Inc., New York, N. Y., successor. Automobile trunks. 84,181; renewed Nov. 14, 1931.
Katakura Seshi Boseki Kabushiki Kaisha, New York, N. Y. Raw silk. 288,513; Oct. 27. Class 1.
Kedrovich, Vladimir K., doing business as Old Dutch Mustard Company, New York, N. Y. Mustard. 288,372; Oct. 27; Serial No. 300,527; published Aug. 4, 1931. Class 46.
Kemet Laboratories Company, Inc., New York, N. Y. Metals and/or alloys. 288,347; Oct. 27; Serial No. 311,785; published July 14, 1931. Class 14.
Kinetic Chemicals, Inc., Wilmington, Del. Fluorinated hydrocarbons and fire extinguishing preparations. 288,481; Oct. 27; Serial No. 314,913; published Aug. 4, 1931. Class 6.
Kiya, Seishin, Los Angeles, Calif. Tooth brushes. 288,358; Oct. 27; Serial No. 312,584; published July 21, 1931. Class 29.
Kleinert, I. B., Rubber Company, New York, N. Y. Shower curtains and window drapes in sets of waterproofed fabrics. 288,359; Oct. 27; Serial No. 313,042; published July 21, 1931. Class 50.
Koenig, Harry D., doing business as Harry D. Koenig & Co., New York, N. Y. Face powder, lip stick, cream, etc. 288,485; Oct. 27; Serial No. 314,996; published Aug. 4, 1931. Class 6.
Kom-Fut Arch Support Co., Inc., New York, N. Y. Arch supports. 288,352; Oct. 27; Serial No. 312,105; published Aug. 4, 1931. Class 44.
Koos, N. S., & Son Co., Kenosha, Wis. Lawn and plant food. 288,395; Oct. 27; Serial No. 316,093; published Aug. 11, 1931. Class 10.
Koppers Products Company, Pittsburgh, Pa. Paints. 288,337; Oct. 27; Serial No. 310,178; published Aug. 11, 1931. Class 16.
Lancaster Co. Ltd., Los Angeles, Calif. Unguent. 288,429–30; Oct. 27; Serial Nos. 315,054–5; published Aug. 4, 1931. Class 6.
Lange, Ralph H., doing business as K-Mol Laboratories, Chicago, Ill. Mouth wash. 288,343; Oct. 27; Serial No. 311,013; published Aug. 11, 1931. Class 6.
Lazaros, Joseph, Detroit, Mich. Medicine. 288,448; Oct. 27; Serial No. 315,543; published Aug. 4, 1931. Class 6.
Lees Manufacturing Co., New York, N. Y., and Westport, Conn., to The Lees Manufacturing Co., New York, N. Y. Seine twines. 84,645; renewed Dec. 26, 1931.
Leffingwell Rancho Company, Whittier, Calif. Fertilizers. 288,449; Oct. 27; Serial No. 315,544; published July 21, 1931. Class 10.
Lehman, A. J., Company, The, doing business as A. J. Lehman & Company, Cincinnati, Ohio. Tomato juice food drink. 288,380; Oct. 27; Serial No. 302,861; published Dec. 30, 1930. Class 46.
Lehman, A. J., Company, The, Cincinnati, Ohio. Tomato juice food drink. 288,381; Oct. 27; Serial No. 302,862; published Aug. 11, 1931. Class 46.
Lehne, John C., doing business as John C. Lehne Sales Company, New York, N. Y. Flavoring compounds. 288,334; Oct. 27; Serial No. 309,135; published Aug. 11, 1931. Class 46.
Lilly, Eli, and Company, Indianapolis, Ind. P-carbaminophenyl arsonic acid. 288,422; Oct. 27; Serial No. 316,013; published Aug. 4, 1931. Class 6.
Lilly, Eli, and Company, Indianapolis, Ind. Jelly miscible with water containing tannic acid and merthiolate. 288,476; Oct. 27; Serial No. 314,812; published Aug. 4, 1931. Class 6.
Linkman, M. & Company, Chicago, Ill. Smoking pipes. 288,512; Oct. 27. Class 8.
Liquilox Company. (See Jones, La Vern P.)
Los Angeles Brewing Co., Los Angeles, Calif. Malt syrup. 288,503; Oct. 27; Serial No. 315,752; published Aug. 11, 1931. Class 46.
Ludlow Laboratories Inc., Chicago, Ill. Deodorant. 288,366; Oct. 27; Serial No. 295,523; published Mar. 18, 1930. Class 6.
M D Laboratories, The. (See Weinstein, Joseph A.)
Macy, R. H., & Co., Inc., New York, N. Y. Watches. 288,524; Oct. 27. Class 27.
Mapo Company, The. (See Brown, Walter M.)
Market & Hammacher Company, New York, N. Y. Saws. 83,503; renewed Sept. 19, 1931.
Marvel Window Cleaner Incorporated, Cleveland, Ohio. Window cleaning devices. 288,321; Oct. 27; Serial No. 314,005; published Aug. 11, 1931. Class 29.
Mason, Emma B., Santa Monica, Calif. Solid perfume. 288,497–8; Oct. 27; Serial Nos. 315,694–5; published Aug. 4, 1931. Class 6.
Massey-Harris Company, The. (See Case, J. I., Plow Works, assignor.)
Mautz Paint & Glass Co., Green Bay and Madison, Wis. Paint, varnish, turpentine, etc. 288,413; Oct. 27; Serial No. 315,466; published Aug. 11, 1931. Class 16.

McCabe, John, doing business as John McCabe & Co., New York, N. Y. Carbon paper, typewriter ribbons, writing inks, etc. 288,397; Oct. 27; Serial No. 316,158; published Aug. 11, 1931. Class 11.

McKesson & Robbins, Incorporated, Bridgeport, Conn. Electric fans. 288,469; Oct. 27; Serial No. 313,966; published Aug. 4, 1931. Class 21.

Meehan, Clarence M., Philadelphia, Pa. Special publications. 288,361; Oct. 27; Serial No. 313,143; published July 21, 1931. Class 38.

Meffert, Benjamin F., New York, N. Y., assignor to Amory, Brown & Company, New York, N. Y. Cotton piece goods. 288,531; Oct. 27. Class 42.

Miller, Irving, Company, New York, N. Y. Clocks. 288,391; Oct. 27; Serial No. 316,046; published July 28, 1931. Class 27.

Miller Wholesale Drug Company, Cleveland, Ohio. Liquid laxative preparations. 288,431; Oct. 27; Serial No. 315,060; published Aug. 4, 1931. Class 6.

Montana Flour Mills Co., Harlowton, Mont., to Montana Flour Mills Company, Great Falls, Mont. Wheat-flour. 84,847–8; renewed Jan. 9, 1932.

Munson Steamship Line, New York, N. Y. Cigars. 288,406; Oct. 27; Serial No. 316,371; published Aug. 11, 1931. Class 17.

Naamlooze Vennootschap Eau de Cologne Fabriek Voorheen J. C. Boldoot, by change of name to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands. Eau de cologne, soaps, etc. 37,923; renewed Mar. 11, 1932.

National Biscuit Company. (See Bishop & Company, assignor.)

National Poultry Band Co. (See Haas, Joseph.)

National Social Science Honor Society, Pi Gamma Mu, Incorporated, The, Winfield, Kans. Jewelry not including watches. 288,477; Oct. 27; Serial No. 314,815; published Aug. 4, 1931. Class 28.

National Water Company, by change of name to White Rock Mineral Springs Company, Waukesha, Wis., and New York, N. Y. Natural spring drinking water. 84,658; renewed Dec. 26, 1931.

Nice, Eugene E., Philadelphia, Pa. Varnishes and oil-finishes. 83,506; renewed Sept. 19, 1931.

Oachs, Milford H., New York, N. Y. Brass-polish and oil-polish. 83,431; renewed Sept. 12, 1931.

Okasa G. m. b. H., Berlin, Germany. Medicine in tablet form. 288,362; Oct. 27; Serial No. 313,148; published Aug. 4, 1931. Class 6.

Okasa G. m. b. H., Berlin, Germany. Medicine. 288,451; Oct. 27; Serial No. 313,149; published Aug. 4, 1931. Class 6.

Old Dutch Mustard Company. (See Kedrovich, Vladimir K.)

Pacatá Hair Remedy, assignor to Rafael R. Jaramillo, San Francisco, Calif. Liquid tonic for the treatment of the hair. 288,350; Oct. 27; Serial No. 312,027; published Aug. 11, 1931. Class 6.

Package Paper Company, Holyoke, Mass. Waxed paper. 288,518; Oct. 27. Class 37.

Paddock Cork Company, Inc., New York and Brooklyn, N. Y. Cork stoppers. 288,446; Oct. 27; Serial No. 315,365; published July 28, 1931. Class 50.

Page Steel and Wire Company, Adrian, Mich., and Bridgeport, Conn. Steel and iron rods, wire, single wire strand, etc. 288,450; Oct. 27; Serial No. 315,552; published July 21, 1931. Class 14.

Paine Drug Company, The, Rochester, N. Y. Preparation used in the treatment of heart affections. 288,441; Oct. 27; Serial No. 315,159; published Aug. 4, 1931. Class 6.

Para Manufacturing Company. (See Ginsburg, Nathaniel.)

Para Rubber Company. (See Ginsburg, Nathaniel.)

Paramount Knitting Company, Chicago, Ill., assignor to Bear Brand Hosiery Co., Kankakee, Ill. Hosiery. 84,035; Oct. 31, 1931. Class 39.

Paramount Knitting Company, Chicago, Ill., assignor to Bear Brand Hosiery Co., Kankakee, Ill. Hosiery. 84,914; renewed Jan. 9, 1932.

Parfumerie Roger et Gallet, Société Anonyme, Paris, France. Perfumery. 288,322; Oct. 27; Serial No. 314,010; published Aug. 11, 1931. Class 6.

Parker Products Co., Needham Heights, Mass. Sandwich spread. 288,402; Oct. 27; Serial No. 316,296; published Aug. 11, 1931. Class 46.

Permozone Inc., New York, N. Y. Preparation for use as a disinfectant, insecticide, and deodorant. 288,324; Oct. 27; Serial No. 314,072; published Aug. 4, 1931. Class 6.

Perseverance Worsted Company, Woonsocket, R. I. Worsted cloths. 85,679; renewed Mar. 5, 1932.

Peteb Corporation, The, New York, N. Y. Cleansing cream. 288,486; Oct. 27; Serial No. 315,062; published Aug. 11, 1931. Class 6.

Phillips, Dr. P., Company, Orlando, Fla. Canned grape fruit. 288,532; Oct. 27. Class 46.

Pierce, Robert J., Inc., New York, N. Y. Prophylactic rubber articles. 288,484; Oct. 27; Serial No. 314,962; published Aug. 11, 1931. Class 44.

Pinaud Incorporated, New York, N. Y. Filled powder compacts. 288,332; Oct. 27; Serial No. 278,603; published Dec. 31, 1929. Class 6.

Pittsburgh Plate Glass Company, Pittsburgh, Pa. Painters' brushes. 288,456–7; Oct. 27; Serial Nos. 313,554–5; published July 21, 1931. Class 29.

Pittsburgh Plate Glass Company, Pittsburgh, Pa. Painters' brushes. 288,458–9; Oct. 27; Serial Nos. 313,557–8; published July 21, 1931. Class 29.

Polar Ware Company. (See Porcelain Enameling Ass'n of America.)

Pope, Charles L., doing business as The Tannol Company, Yonkers, N. Y. Tooth powder. 288,349; Oct. 27; Serial No. 311,925; published Aug. 4, 1931. Class 6.

Popsicle Corporation of the United States, The, New York, N. Y. Mailless syrups. 288,393; Oct. 27; Serial No. 316,074; published Aug. 11, 1931. Class 46.

Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections. 288,507; Oct. 27; Serial No. 315,924; published Aug. 11, 1931. Class 46.

Porcelain Enameling Ass'n of America, by change of name to Polar Ware Company, Sheboygan, Wis. Household utensils and plumbing supplies. 85,486; renewed Feb. 20, 1932.

Porges, Oscar, Binghamton, N. Y. Frozen confections. 288,374; Oct. 27; Serial No. 302,014; published Aug. 11, 1931. Class 46.

Porter Chemical Company, The, Hagerstown, Md. Painting sets. 288,520; Oct. 27. Class 50.

Powers, John O., Nutley, assignor to A. N. Stollwerck, Inc., Camden, N. J. Cocoa. 85,615; renewed Feb. 27, 1932.

Prince, H. G., & Company, Fruitvale, assignor to California Packing Corporation, San Francisco, Calif. Canned fruits. 85,286–7; renewed Feb. 6, 1932.

Radial Oil Corporation, Oklahoma City, Okla. Gasoline, lubricating oil and grease. 288,326; Oct. 27; Serial No. 314,126; published Aug. 4, 1931. Class 15.

Ralston Purina Company, St. Louis, Mo. Disinfectant. 288,499–500; Oct. 27; Serial Nos. 315,698–9; published Aug. 4, 1931. Class 6.

Ray-Glo Chemical Company. (See Tumbler, J. A., Laboratories.)

Redmond, H. R., Bassfield, Miss. Internal medicine. 288,530; Oct. 27. Class 6.

Rhodes Ranch Egg Company, The, Denver, Colo. Eggs. 288,388; Oct. 27; Serial No. 307,631; published Dec. 30, 1930. Class 46.

Rhodey Corporation, The, Baltimore, Md. Plant stimulant tablets. 288,506; Oct. 27; Serial No. 315,887; published July 28, 1931. Class 10.

Richmond Hosiery Mills, Chattanooga, Tenn., and Rossville, Ga., to Richmond Hosiery Mills, Rossville, Ga. Hosiery. 85,617; renewed Feb. 27, 1932.

Ritsert, Eduard, doing business as Dr. Eduard Ritsert, Fabrik Pharmazeutischer Praparate, and Fa. Dr. E. Ritsert, Frankfurt A. M., Frankfort-on-the-Main, Germany. Sulphophenylic aminobenzoldethylester. 288,463; Oct. 27; Serial No. 313,799; published Aug. 4, 1931. Class 6.

Rogers & Hubbard Company, The, Portland, Conn. Plant food. 288,323; Oct. 27; Serial No. 314,032; published July 14, 1931. Class 10.

Röhm & Haas Company, Philadelphia, Pa. Opacifying materials. 288,338; Oct. 27; Serial No. 310,660; published May 26, 1931. Class 16.

Rorer, William H., Inc., Philadelphia, Pa. Medicine. 288,508; Oct. 27; Serial No. 315,927; published Aug. 4, 1931. Class 6.

Rorer, William H., Inc., Philadelphia, Pa. Medicine. 288,509; Oct. 27; Serial No. 315,929; published Aug. 4, 1931. Class 6.

Rosenfeld, E., & Company, assignor, by mesne assignments, to The Faultless Manufacturing Company, Baltimore, Md. Cotton, linen, silk, etc., piece goods. 85,684; renewed Mar. 5, 1932.

Royal Baking Powder Co., Jersey City, N. J., to Royal Baking Powder Company, New York, N. Y. Cream of tartar. 37,851; renewed Feb. 2, 1932.

Rubens & Marble, to Rubens & Marble, Inc., Chicago, Ill., successor. Knitted undershirts. 85,008; renewed Jan. 16, 1932.

St. Clair Rubber Company, Marysville and Detroit, Mich. Roofing deck. 288,427; Oct. 27; Serial No. 315,019; published Aug. 4, 1931. Class 50.

St. Martin Preserving Company Limited, London, England. Jams, marmalades, preserves, etc. 288,356; Oct. 27; Serial No. 312,574; published Aug. 4, 1931. Class 46.

Saladino, C., & Sons, Chelsea, Mass. Racket strings. 288,511; Oct. 27. Class 22.

San-O-Tabs Co. (See Somylo, Elmer M.)

Sayell Laboratories, New York, N. Y. Medicinal preparation. 288,453; Oct. 27; Serial No. 313,307; published Aug. 4, 1931. Class 6.

Schering-Kahlbaum, A. G., Berlin, Germany. Dental compounds. 288,425; Oct. 27; Serial No. 316,220; published Aug. 4, 1931. Class 44.

Scull, William S., Company, Camden, N. J. Blended coffee. 85,688; renewed Mar. 5, 1932.

Scull, William S., Company, Camden, N. J. Coffee and blended coffee. 85,832; renewed Mar. 19, 1932.

Sedberry, J. B., Inc., Utica, N. Y. Mills for grinding various materials as grains, coal, etc. 288,522; Oct. 27. Class 23.

Shaddick, Robert C., doing business as Woods Mince Meat Co., Baltimore, Md. Mince meat. 288,348; Oct. 27; Serial No. 311,890; published Aug. 11, 1931. Class 46.

Shimizu, Toshio, Los Angeles, Calif. Medicine preparation. 288,345; Oct. 27; Serial No. 311,120; published Aug. 4, 1931. Class 6.

Shinn, Edward, doing business as Sinol Company, Darby, Pa. Medicament and lubricant for treatment of sinus ailments. 288,367; Oct. 27; Serial No. 297,153; published Aug. 19, 1930. Class 6.

Siemens-Planiawerke A. G. für Kohlefabrikate. (See Hirschberg, Hermann M., assignor.)

Sinol Company. (See Shinn, Edward.)

Solvay Process Company, The, Syracuse, N. Y. Chemical preparation. 288,309; Oct. 27; Serial No. 314,584; published Aug. 4, 1931. Class 6.

Somylo, Elmer M., doing business as San-O-Tabs Co., Los Angeles, Calif. Antiseptic, germicidal, and therapeutic composition. 288,447; Oct. 27; Serial No. 315,371; published Aug. 4, 1931. Class 6.

Spalding, A. G., & Bros., Jersey City, N. J., and New York, N. Y. Tennis rackets. 85,509; renewed Feb. 20, 1932.

Spool Cotton Company, The, New York, N. Y. Display devices for spools of thread. 288,370; Oct. 27; Serial No. 299,808; published July 14, 1931. Class 50.

Spraley, Gregory A., Dayton, Ohio. Frozen confection. 288,312; Oct. 27; Serial No. 314,628; published Aug. 4, 1931. Class 46.

Stadler, August W., assignor to The Cuyahoga Soap Company, Cleveland, Ohio. Soap. 84,052; renewed Oct. 31, 1931.

Stahl, Jacob, Jr., & Co. (See Greenwald, Abraham A.)

Standard Medicine Company, The, Lakeland, Fla. Medicine. 288,492; Oct. 27; Serial No. 315,619; published Aug. 4, 1931. Class 6.

Stearns, Frederick, & Company, Detroit, Mich. Preparation used for treating various forms of infection. 288,444; Oct. 27; Serial No. 315,334; published Aug. 4, 1931. Class 6.

Stephens, McKinley, doing business as The McK. Stephens Company, St. Louis, Mo. Dental powder and deodorant application. 288,311; Oct. 27; Serial No. 314,588; published Aug. 4, 1931. Class 6.

Sterling Products (Incorporated), Wheeling, W. Va. Analgesic. 288,472–3; Oct. 27; Serial Nos. 314,776–7; published Aug. 4, 1931. Class 6.

Stickstoffwerke Gesellschaft mit beschränkter Haftung, Berlin, Germany. Compounds for use in the calcium therapy. 288,357; Oct. 27; Serial No. 312,577; published Aug. 4, 1931. Class 6.

Stolberg, Gregory B., doing business as Stolberg Laboratories, New York, N. Y. Medicinal compounds. 288,307; Oct. 27; Serial No. 314,133; published Aug. 4, 1931. Class 6.

Stollwerck, A. N., Inc. (See Powers, John O., assignor.)

Stout, Charles B., doing business as Washington Flour Mill, Washington, Mo. Wheat flour. 288,327; Oct. 27; Serial No. 290,285; published Nov. 5, 1929. Class 46.

Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Talking machines, automatic record shifting devices, etc. 288,310; Oct. 27; Serial No. 314,634; published Aug. 4, 1931. Class 36.

Suntex Corporation, The, Brooklyn, N. Y. Painted and waterproof fabrics. 288,392; Oct. 27; Serial No. 316,058; published Aug. 4, 1931. Class 50.

Takara Laboratories, Portland, Oreg. Hygienic powder, laxative pills, liniment, etc. 288,464; Oct. 27; Serial No. 313,812; published Aug. 4, 1931. Class 6.

Tannol Company, The. (See Pope, Charles L.)

Tenex Laboratories. (See Bendlage, Theodore J.)

Thermo Instrument Company, Inc., Norfolk, Va. Service recording attachments for automobiles and the like. 288,364; Oct. 27; Serial No. 294,901; published May 27, 1930. Class 19.

Troiani, Serafino, Newton, Mass. Medical preparation. 288,424; Oct. 27; Serial No. 316,171; published Aug. 4, 1931. Class 6.

Tumbler, J. A., Laboratories, doing business as Ray-Glo Chemical Company, Baltimore, Md. Polish. 288,315; Oct. 27; Serial No. 314,726; published Aug. 11, 1931. Class 16.

Twin Falls Milling & Elevator Co., The, Twin Falls, Idaho, assignor to The Colorado Milling & Elevator Company, Denver, Colo., and Twin Falls, Idaho. Wheat-flour. 85,695; renewed Mar. 5, 1932.

Twin Falls Milling & Elevator Co., The, Twin Falls, Idaho, assignor to The Colorado Milling & Elevator Company, Denver, Colo., and Twin Falls, Idaho. Wheat-flour. 85,778; renewed Mar. 12, 1932.

Uddeholm Company of America, Inc., New York, N. Y. Tool steel. 288,404–5; Oct. 27; Serial Nos. 316,346–7; published Aug. 11, 1931. Class 14.

Underwood Elliott Fisher Company, New York, N. Y. Typewriting machines and typewriting machine parts. 288,533; Oct. 27. Class 23.

United Drug Company, Boston, Mass. Medicinal preparation. 288,420; Oct. 27; Serial No. 315,883; published Aug. 4, 1931. Class 6.

United States Cigar Co. Inc., York, Pa. Cigars. 288,320; Oct. 27; Serial No. 313,982; published July 28, 1931. Class 17.

United States Cigar Co. Inc., York, Pa. Cigars. 288,470; Oct. 27; Serial No. 313,981; published July 28, 1931. Class 17.

Upsher Smith, Frederick A., doing business as Upsher Smith Company, Minneapolis, Minn. Medicinal preparations. 288,344; Oct. 27; Serial No. 311,114; published Aug. 4, 1931. Class 6.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Flag and radio masts of steel or iron. 288,442; Oct. 27; Serial No. 315,222; published July 14, 1931. Class 50.

Washington Flour Mill. (See Stout, Charles B.)

Watson-Standard Co., The, Pittsburgh, Pa. Varnishes and paint enamels. 288,482; Oct. 27; Serial No. 314,936; published Aug. 11, 1931. Class 16

Weinstein, Joseph A., doing business as The M D Laboratories, Cleveland, Ohio. Disinfectants, deodorants, and germicides. 288,325; Oct. 27; Serial No. 314,088; published Aug. 4, 1931. Class 6.

Weller, S. A., Co., The, Zanesville, Ohio. Pottery. 288,516; Oct. 27. Class 30.

Western Clock Company, Peru, Ill. Electrical motors. 288,316; Oct. 27; Serial No. 314,736; published Aug. 4, 1931. Class 21.

Western Clock Company, Peru, Ill. Electrical motors. 288,317–8; Oct. 27; Serial Nos. 314,740–1; published Aug. 4, 1931. Class 21.

Western Magazines Co., Inc. to The H. & S. Publishing Company, Chicago, Ill., successor. Magazines. 82,189; renewed June 6, 1931.

White Belt Dairy. (See Du Puis, J. G.)

White Rock Mineral Springs Company. (See National Water Company.)

White-Washburne Company, Inc., Hinsdale, N. H. Toilet paper, paper towels, and napkins. 288,529; Oct. 27. Class 37.

Winthrop Chemical Company, Inc., New York, N. Y. Preparation for the treatment of malaria. 288,495; Oct. 27; Serial No. 315,656; published Aug. 4, 1931. Class 6.

Wolferman, Fred, Incorporated, Kansas City, Mo. Butter, eggs, jam, jellies, etc. 288,353; Oct. 27; Serial No. 312,120; published Aug. 4, 1931. Class 46.

Woods Mince Meat Co. (See Shaddick, Robert C.)

Worcester Bleaching Water Co., Worcester, Mass. Bleaching water. 288,465; Oct. 27; Serial No. 313,878; published Aug. 11, 1931. Class 6.

Worcester Salt Company, New York, N. Y. Salt. 288,488; Oct. 27; Serial No. 315,289; published July 28, 1931. Class 6.

Y-Age-Cosmetics, Inc. New York, N. Y. Face creams, manicure and hair preparations, etc. 288,483; Oct. 27; Serial No. 314,938; published July 28, 1931. Class 6.

Ybry, Inc., New York, N. Y. Lipsticks. 288,474; Oct. 27; Serial No. 314,781; published Aug. 4, 1931. Class 6.

Zally, Anthony K., doing business as Cascadon Laboratories, Jersey City, N. J. Preparation for the treatment of dyspepsia, etc. 288,475; Oct. 27; Serial No. 314,783; published July 28, 1931. Class 6.

Zapon Company, The, Wilmington, Del. Leather cloth. 288,400; Oct. 27; Serial No. 316,234; published Aug. 4, 1931. Class 50.

LIST OF REGISTRANTS OF LABELS

Axton-Fisher Tobacco Co., Inc., The, Louisville, Ky. Himyar. For Cigarette tobacco. 39,941; Oct. 27.

Barteldes Seed Company, The, Lawrence, Kans. T N T. For Pop Corn Cakes. 39,942; Oct. 27.

Blue Rock Chemical Corporation, Norfolk, Va. Blue Rock Titeseal. For Joint Sealing Compound. 39,943; Oct. 27.

Borden's Farm Products Company, Inc., New York, N. Y. Borden's Grade B Milk. For Pasteurized Fluid Milk. 39,944; Oct. 27.

Colombo Extract Co., New York, N. Y. Genuine. For Malt syrup. 39,945; Oct. 27.

Corliss Limb Spec. Co. Inc., N. Y., New York, N. Y. Trio Left—N. Y. Corliss Limb Spec. Co.—Right. For Surgical Stocking. 39,946; Oct. 27.

Crosse & Blackwell Inc., Baltimore, Md. 'Good Morning' Marmalade. For Marmalade. 39,947; Oct. 27.

Crosse & Blackwell Inc., Baltimore, Md. 'Good Morning' Pure Preserve. For Preserves. 39,948; Oct. 27.

Cubbison Cracker Company, Inc., Los Angeles, Calif. Melbetts. For Toast. 39,949; Oct. 27.

Curtiss Candy Company, The, Chicago, Ill. Wunderbar For Candy. 39,950; Oct. 27.

Eccles, M. B., Omaha, Nebr. Orange Melba. For Dry Compounds from Which Beverages are Prepared. 39,951; Oct. 27.

Ettelbrick Shoe Co., Greenup, Ill. Nursery Rhyme Stitchdowns. For Stitchdowns. 39,952; Oct. 27.

Evangeline Parish Products Co., Inc., Ville Platte, La. Lusian Brand. For Cut Stringless Beans. 39,953; Oct. 27.

Flick & Kupfer, Los Angeles, Calif. Attention. For Fresh Tomatoes. 39,954; Oct. 27.

Forlizzo, Joseph, Brooklyn, N. Y. La Stella. For Cans for Medicinal Compounds. 39,955; Oct. 27.

Gosnell, Mrs. M. B. Minneapolis, Minn. Tell Her With Candy. For Candy. 39,956; Oct. 27.

Hoague-Sprague Corporation, Lynn, Mass. James McCreery & Co. For Boxes. 39,957; Oct. 27.
Hoague-Sprague Corporation, Lynn, Mass. Tom Tucker. For Boxes. 39,958; Oct. 27.
Holman Paper Box Co., Inc., St. Louis, Mo. The May Company Los Angeles. For Footwear. 39,959; Oct. 27.
Johnson, Robert F., Wenatchee, Wash. Johnson's Airtite Brush Keeper. For Container for Keeping Brushes. 39,960; Oct. 27.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Polar-Pak. For Ice Cream. 39,961; Oct. 27.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB—351. For Caramel Layers. 39,962; Oct. 27.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB—354. For Toasted Cocoanut Cakes. 39,963; Oct. 27.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB—355. For Caramel Cakes. 39,964; Oct. 27.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB—357. For Devilsfood Bars. 39,965; Oct. 27.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB—358. For Chocolate Layer Cake. 39,966; Oct. 27.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB—362. For Orange Loaf Cake. 39,967; Oct. 27.
Mahoning Valley Flour Company, The. (See Santangelo, Sylvester E.)
Oswald Jaeger Baking Co., Milwaukee, Wis. Snowballs. For Cakes. 39,968; Oct. 27.
Pollock Paper & Box Company, Dallas, Tex. Crazy Crystals. For Mineral Water Crystals. 39,969; Oct. 27.
Prendergast, Patrick F., Pasadena, Calif. Fec-Line Fish Cat Food. For Fish Cat Food. 39,970; Oct. 27.
Reisman, Glass, Fitzgerald Shoe Company, Boston, Mass. Regia-Fit. For Boxes. 39,971; Oct. 27.
Reisman, Glass, Fitzgerald Shoe Company, Boston, Mass. Rap Ups. For Boxes. 39,972; Oct. 27.
Santangelo, Sylvester E., doing business as The Mahoning Valley Flour Company, Youngstown, Ohio. Cream. For Self Rising Biscuit Flour. 39,973; Oct. 27.
Stearns & Foster Co., The, Cincinnati, Ohio. Mountain Mist Quilting Cotton. For Cotton Filling for Quilts. 39,974; Oct. 27.

LIST OF REGISTRANTS OF PRINTS

Borden Company, The, New York, N. Y. Borden's Richer Malted Milk. For Malted Milk. 13,453; Oct. 27.
Chemical Accessories Company, Des Moines, Iowa. Perfection. For Preparation for Removing Corrosion from Automobile Radiators. 13,454; Oct. 27.
Comet Envelope & Printing Company, New York, N. Y. Latex Pro-Medica. For Rubber Goods. 13,455; Oct. 27.
Hi-Gene Company, Newark, N. J. Corn Fly. For Preparations for Corns and Bunions. 13,456; Oct. 27.
Oneida Community, Limited, Oneida, N. Y. Tudor Plate Three Piece Child's Set $2.00 Each. For Silver Plated Flatware. 13,457; Oct. 27.
Oneida Community, Limited, Oneida, N. Y. Tudor Plate Baby Spoon. For Baby Spoons. 13,458; Oct. 27.
Van Raalte Company, New York, N. Y. Van Raalte 1931 Hosiery Colors Autumn-Winter. For Stockings. 13,459; Oct. 27.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Fullerton Lumber Company. 288,335; Oct. 27; Serial No. 309,424; published Feb. 10, 1931.
Raw silk. Katakura Seshi Boseki Kabushiki Kaisha. 288,513; Oct. 27.

CLASS 3

Trunks, Automobile. I. S. Kallis. 84,181; renewed Nov. 14, 1931.

CLASS 4

Chemical preparation. Solvay Process Company. 288,309; Oct. 27; Serial No. 314,584; published Aug. 4, 1931.
Eau de Cologne, soaps, etc. Naamlooze Vennootschap Eau de Cologne Fabriek Voorheen J. C. Boldoot. 37,923; renewed Mar. 11, 1932.
Polish and oil-polish, Brass. M. H. Oachs. 83,431; renewed Sept. 12, 1931.
Soap. A. W. Stadler. 84,052; renewed Oct. 31, 1931.
Soap, Toilet. Andrew Jergens Co. 85,132; renewed Jan. 30, 1932.

CLASS 6

Acid, P-carbaminophenyl arsonic. Eli Lilly and Company. 288,422; Oct. 27; Serial No. 316,013; published Aug. 4, 1931.
Analgesic. Sterling Products (Incorporated). 288,472–3; Oct. 27; Serial Nos. 314,776–7; published Aug. 4, 1931.
Antiseptic in jelly form. G. Clark. 288,365; Oct. 27; Serial No. 295,207; published July 8, 1930.
Bacteriological and biological stains and reagents. S. J. Cohen. 288,373; Oct. 27; Serial No. 301,584; published July 8, 1930.
Bleaching water. Worcester Bleaching Water Co. 288,465; Oct. 27; Serial No. 313,878; published Aug. 11, 1931.
Calcium arsenate. Commercial Chemical Company of Tennessee. 288,360; Oct. 27; Serial No. 313,108; published July 28, 1931.
Calcium compound. I. G. Farbenindustrie Aktiengesellschaft. 288,432; Oct. 27; Serial No. 315,099; published Aug. 4, 1931.
Capsules for reducing congestion of the mucous membranes, etc. Harris Drug Co. Inc. 288,502; Oct. 27; Serial No. 315,746; published Aug. 4, 1931.
Chemical disinfectant and germicide. The Hughes Chemical Company. 288,346; Oct. 27; Serial No. 311,310; published Aug. 11, 1931.
Chemicals and compositions. Binney & Smith Company. 288,423; Oct. 27; Serial No. 316,117; published Aug. 4, 1931.
Chemicals for clarifying water. American Colloid Corporation. 288,433; Oct. 27; Serial No. 315,175; published Aug. 4, 1931.
Composition, Antiseptic, germicidal, and therapeutic. E. M. Somylo. 288,447; Oct. 27; Serial No. 315,371; published Aug. 4, 1931.
Compounds for use in the calcium therapy. Stickstoffwerke Gesellschaft mit beschränkter Haftung. 288,357; Oct. 27; Serial No. 312,577; published Aug. 4, 1931.
Compounds used in softening textile fabrics. E. F. Houghton & Co. 288,412; Oct. 27; Serial No. 315,456; published Aug. 4, 1931.
Cream. G. Glatzer. 288,382; Oct. 27; Serial No. 303,280; published Aug. 11, 1931.
Cream and toilet powder, Cleansing. En-Vé Incorporated. 288,363; Oct. 27; Serial No. 294,716; published July 28, 1931.
Cream, Cleansing. Peteb Corporation. 288,486; Oct. 27; Serial No. 315,062; published Aug. 11, 1931.
Cream, Dental. Colgate-Palmolive-Peet Company. 288,501; Oct. 27; Serial No. 315,729; published Aug. 4, 1931.
Cream of Tartar. Royal Baking Powder Co. 37,851; renewed Feb. 2, 1932.
Creams, Cleansing. M. Graff. 288,437; Oct. 27; Serial No. 315,258; published Aug. 4, 1931.
Creams, depilatories, powder, etc., Cold. I. D. Coté. 288,308; Oct. 27; Serial No. 314,397; published Aug. 11, 1931.
Creams, manicure preparations, etc., Face. Y-Age-Cosmetics, Inc. 288,483; Oct. 27; Serial No. 314,938; published July 28, 1931.
Creams, Nose. M. Graff. 288,438; Oct. 27; Serial No. 315,260; published Aug. 4, 1931.
Deodorant. Ludlow Laboratories Inc. 288,366; Oct. 27; Serial No. 295,523; published Mar. 18, 1930.
Disinfectant. Ralston Purina Company. 288,499–500; Oct. 27; Serial Nos. 315,698–9; published Aug. 4, 1931.
Disinfectants, deodorants, and germicides. J. A. Weinstein. 288,325; Oct. 27; Serial No. 314,088; published Aug. 4, 1931.
Dyes and dyestuffs. General Dyestuff Corporation. 288,496; Oct. 27; Serial No. 315,681; published Aug. 4, 1931.
Hair color restorer and tonic. Grafree Products Company. 288,461; Oct. 27; Serial No. 313,710; published Aug. 4, 1931.
Hair tonics. M. M. Harper. 84,096; renewed Nov. 7, 1931.
Hydrocarbons and fire extinguishing preparations, Fluorinated. Kinetic Chemicals, Inc. 288,481; Oct. 27; Serial No. 314,913; published Aug. 4, 1931.
Hydrogen peroxide, ammonium persulphate, and potassium persulphate. Buffalo Electro-Chemical Co. 288,414; Oct. 27; Serial No. 315,624; published Aug. 4, 1931.
Insecticide. Bi-Bi Products Company. 288,443; Oct. 27; Serial No. 315,299; published Aug. 4, 1931.
Jelly miscible with water containing tannic acid and merthiolate. Eli Lilly and Company. 288,476; Oct. 27; Serial No. 314,812; published Aug. 4, 1931.
Laxative preparations, Liquid. Miller Wholesale Drug Company. 288,431; Oct. 27; Serial No. 315,060; published Aug. 4, 1931.
Lipsticks. Ybry, Inc. 288,474; Oct. 27; Serial No. 314,781; published Aug. 4, 1931.
Lotion, bluing, etc., Acne or pimple. Martha Matilda Harper, Inc. 288,462; Oct. 27; Serial No. 313,782; published July 28, 1931.

Lotion, Foot. R. A. Brown. 288,340; Oct. 27; Serial No. 310,508; published Aug. 4, 1931.
Medical preparation. S. Troiani. 288,424; Oct. 27; Serial No. 316,171; published Aug. 4, 1931.
Medicament and lubricant for treatment of sinus ailments. E. Shinn. 288,367; Oct. 27; Serial No. 297,153; published Aug. 19, 1930.
Medicinal compounds. G. B. Stolberg. 288,307; Oct. 27; Serial No. 314,133; published Aug. 4, 1931.
Medicinal preparation. B. Boeker. 288,489; Oct. 27; Serial No. 315,383; published Aug. 4, 1931.
Medicinal preparation. W. M. Brown. 288,416; Oct. 27; Serial No. 315,669; published Aug. 4, 1931.
Medicinal preparation. Sayeli Laboratories. 288,453; Oct. 27; Serial No. 313,307; published Aug. 4, 1931.
Medicinal preparation. United Drug Company. 288,420; Oct. 27; Serial No. 315,883; published Aug. 4, 1931.
Medicinal preparations. F. A. Upsher Smith. 288,344; Oct. 27; Serial No. 311,114; published Aug. 4, 1931.
Medicine. T. J. Bendiago. 288,313; Oct. 27; Serial No. 314,680; published Aug. 4, 1931.
Medicine. J. Lazaros. 288,448; Oct. 27; Serial No. 315,548; published Aug. 4, 1931.
Medicine. Okasa G. m. b. H. 288,362; Oct. 27; Serial No. 313,148; published Aug. 4, 1931.
Medicine. Okasa G. m. b. H. 288,451; Oct. 27; Serial No. 313,149; published Aug. 4, 1931.
Medicine. H. R. Redmond. 288,530; Oct. 27.
Medicine. William H. Rorer Inc. 288,508; Oct. 27; Serial No. 315,927; published Aug. 4, 1931.
Medicine. William H. Rorer Inc. 288,509; Oct. 27; Serial No. 315,929; published Aug. 4, 1931.
Medicine. Standard Medicine Company. 288,492; Oct. 27; Serial No. 315,619; published Aug. 4, 1931.
Medicine preparation. T. Shimizu. 288,345; Oct. 27; Serial No. 311,120; published Aug. 4, 1931.
Mouth wash. R. H. Lange. 288,343; Oct. 27; Serial No. 311,013; published Aug. 11, 1931.
Perfume. Andrew Jergens Company. 288,494; Oct. 27; Serial No. 315,639; published Aug. 4, 1931.
Perfume, Solid. E. B. Mason. 288,497–8; Oct. 27; Serial Nos. 315,694–5; published Aug. 4, 1931.
Perfume, toilet water, bath crystals, etc. Bourjois, Inc. 288,504; Oct. 27; Serial No. 315,784; published Aug. 4, 1931.
Perfumery. Parfumerie Roger et Gallet, Société Anonyme. 288,322; Oct. 27; Serial No. 314,010; published Aug. 11, 1931.
Perfumes, toilet waters, face powders, etc. Heller-Deltah, Inc. 288,328; Oct. 27; Serial No. 291,616; published July 28, 1931.
Perfumes, toilet waters, etc. Heller-Deltah Company. 288,342; Oct. 27; Serial No. 291,617; published July 28, 1931.
Pomade, Hair. French Mfg. Company. 288,336; Oct. 27; Serial No. 309,927; published Aug. 4, 1931.
Powder and deodorant application, Dental. M. Stephens. 288,311; Oct. 27; Serial No. 314,588; published Aug. 4, 1931.
Powder compacts, Filled. Pinaud Incorporated. 288,332; Oct. 27; Serial No. 278,603; published Dec. 31, 1929.
Powder, laxative pills, liniment, etc., Hygienic. Takara laboratories. 288,464; Oct. 27; Serial No. 313,812; published Aug. 4, 1931.
Powder, lip stick, cream, etc., Face. H. D. Koenig. 288,485; Oct. 27; Serial No. 314,996; published Aug. 4, 1931.
Preparation for burns. Cook & Leary. 288,460; Oct. 27; Serial No. 313,589; published Aug. 11, 1931.
Preparation for repelling moths. M. M. Alberts. 288,339; Oct. 27; Serial No. 310,151; published Aug. 4, 1931.
Preparation for the treatment of constipation. Bre-Carbo Mfg. Co. 288,479; Oct. 27; Serial No. 314,890; published July 28, 1931.
Preparation for the treatment of dyspepsia, etc. A. K. Zally. 288,475; Oct. 27; Serial No. 314,783; published July 28, 1931.
Preparation for the treatment of eczema. F. H. Baldwin. 288,377; Oct. 27; Serial No. 302,665; published Aug. 11, 1931.
Preparation for the treatment of malaria. Winthrop Chemical Company. 288,495; Oct. 27; Serial No. 315,656; published Aug. 4, 1931.
Preparation for treating piles. Gly-Tex Co. 288,490; Oct. 27; Serial No. 315,402; published Aug. 4, 1931.
Preparation for use as a disinfectant, insecticide, and deodorant. Permozone Inc. 288,324; Oct. 27; Serial No. 314,072; published Aug. 4, 1931.
Preparation used as an alkaline gargle. Drug Products Co. 288,436; Oct. 27; Serial No. 315,253; published Aug. 4, 1931.
Preparation used for treating various forms of infection. F. Stearns & Company. 288,444; Oct. 27; Serial No. 315,334; published Aug. 4, 1931.
Preparation used in the treatment of heart affections. Paine Drug Company. 288,441; Oct. 27; Serial No. 315,159; published Aug. 4, 1931.
Preparations for diseases or disorders of the skin. Chemische Fabrik Flörsheim Dr. H. Noerdlinger A. G. 288,355; Oct. 27; Serial No. 312,291; published Aug. 11, 1931.
Salt. Worcester Salt Company. 288,488; Oct. 27; Serial No. 315,289; published July 28, 1931.
Salt substitute. I. G. Farbenindustrie Aktiengesellschaft. 288,440; Oct. 27; Serial No. 315,098; published Aug. 4, 1931.
Salve. E. Bejean. 288,478; Oct. 27; Serial No. 314,887; published Aug. 4, 1931.
Skin freshener, tissue creams, cleansing cream, etc. A. Breslauer, Inc. 288,389; Oct. 27; Serial No. 308,720; published Aug. 4, 1931.
Sulphonphenylic aminobenzoldethylester. E. Ritsert. 288,463; Oct. 27; Serial No. 313,799; published Aug. 4, 1931.
Toilet preparations. R. Hudnut. 84,487; Dec. 19, 1931.
Toilet preparations. Andrew Jergins Co. 85,133; renewed Jan. 30, 1932.
Tonic for the treatment of the hair, Liquid. Pacata Hair Remedy. 288,350; Oct. 27; Serial No. 312,027; published Aug. 11, 1931.
Tooth powder. C. L. Pope. 288,349; Oct. 27; Serial No. 311,925; published Aug. 4, 1931.
Unguent. Lancaster Co. Ltd. 288,429–30; Oct. 27; Serial Nos. 315,054–5; published Aug. 4, 1931.

CLASS 7

Rope, Manila and sisal. Columbian Rope Company. 84,727; renewed Jan. 2, 1932.
Twines, Seine. Lees Manufacturing Co. 84,645; renewed Dec. 26, 1931.

CLASS 8

Apparatus for the introduction and injection of liquid into tobacco or tobacco products; pipes, etc. Bonicot Warenvertriebgesellschaft m. b. H. 288,341; Oct. 27; Serial No. 310,933; published July 14, 1931.
Cigarette paper and booklets. Brown & Williamson Tobacco Corporation. 288,407; Oct. 27; Serial No. 316,477; published Aug. 11, 1931.
Pipes, Smoking. House of Crane. 288,314; Oct. 27; Serial No. 314,696; published July 14, 1931.
Pipes, Smoking. M. Linkman & Company. 288,512; Oct. 27.

CLASS 10

Fertilizer. Atlantic & Gulf Fertilizer Co. 288,394; Oct. 27; Serial No. 316,076; published Aug. 4, 1931.
Fertilizers. Lemingwell Rancho Company. 288,449; Oct. 27; Serial No. 315,544; published July 21, 1931.
Lawn and plant food. N. S. Koos & Son Co. 288,395; Oct. 27; Serial No. 316,093; published Aug. 11, 1931.
Plant food. Rogers & Hubbard Company. 288,823; Oct. 27; Serial No. 314,032; published July 14, 1931.
Plant food and fertilizing preparation. Greiner Chemical Corporation. 288,471; Oct. 27; Serial No. 314,756; published July 28, 1931.
Plant stimulant tablets. Rhodey Corporation. 288,506; Oct. 27; Serial No. 315,887; published July 28, 1931.

CLASS 11

Carbon paper, typewriter ribbons, writing inks, etc. J. Mccabe. 288,397; Oct. 27; Serial No. 316,158; published Aug. 11, 1931.
Ink. Boon Manufacturing Co. 288,368; Oct. 27; Serial No. 298,372; published Sept. 9, 1930.
Inks, Process printing. The International Printing Ink Corporation. 288,403; Oct. 27; Serial No. 316,327; published Aug. 11, 1931.

CLASS 12

Brick and fire-brick for heat resisting purposes, Fire. Chicago Retort & Fire Brick Co. 84,816; renewed Jan. 9, 1932.

CLASS 13

Nails. Hillwood Manufacturing Company. 288,515; Oct. 27.
Utensils and plumbing supplies, Porcelain. Porcelain Enameling Ass'n of America. 85,486; renewed Feb. 20, 1932.

CLASS 14

Alloys and castings and forgings thereof, Nonferrous light metal. I. G. Farbenindustrie Aktiengesellschaft. 288,375; Oct. 27; Serial No. 302,164; published Aug. 12, 1930.
Bronze. Bridgeport Brass Company. 288,369; Oct. 27; Serial No. 298,427; published Apr. 7, 1931.
Metal, Bearing. Frictionless Metal Company. 288,399; Oct. 27; Serial No. 316,199; published Aug. 4, 1931.
Metals and/or alloys. Kemet Laboratories Company. 288,347; Oct. 27; Serial No. 311,785; published July 14, 1931.
Sheets, roofing, and siding, etc. Gulf States Steel Company. 288,396; Oct. 27; Serial No. 316,144; published Aug. 4, 1931.
Steel and iron rods, wire, single wire strand, etc. Page Steel and Wire Company. 288,450; Oct. 27; Serial No. 315,552; published July 21, 1931.
Steel, Tool. Uddeholm Company of America. 288,404–5; Oct. 27; Serial Nos. 316,346–7; published Aug. 11, 1931.

CLASS 15

Gasoline, lubricating oil, and grease. Radial Oil Corporation. 288,326; Oct. 27; Serial No. 314,126; published Aug. 4, 1931

CLASS 16

Opacifying Materials. Rohm & Haas Company. 288,338; Oct. 27; Serial No. 310,660; published May 26, 1931.
Paint, varnish, turpentine, etc. Mautz Paint & Glass Co. 288,413; Oct. 27; Serial No. 315,466; published Aug. 11, 1931.
Paints. L. P. Jones. 288,426; Oct. 27; Serial No. 316,597; published Aug. 11, 1931.
Paints. Koppers Products Company. 288,337; Oct. 27; Serial No. 310,178; published Aug. 11, 1931.
Polish. J. A. Tumbler Laboratories. 288,315; Oct. 27; Serial No. 314,726; published Aug. 11, 1931.
Polish and cleaner. Chevrolet Motor Company. 288,418; Oct. 27; Serial No. 315,787; published Aug. 11, 1931.
Thinner for paints and varnishes. Hildreth Varnish Co. 85,117; renewed Jan. 30, 1932.
Varnishes and oil finishes. E. E. Nice. 83,506; renewed Sept. 19, 1931.
Varnishes and paint enamels. Watson-Standard Co. 288,482; Oct. 27; Serial No. 314,936; published Aug. 11, 1931.

CLASS 17

Cigarettes. A. Batschari Cigarettenfabrik A. G. 288,445; Oct. 27; Serial No. 315,337; published Aug. 11, 1931.
Cigarettes. Batt Brothers. 288,378; Oct. 27; Serial No. 302,666; published July 21, 1931.
Cigars. Broward Cigar Company. 288,510; Oct. 27; Serial No. 315,987; published Aug. 11, 1931.
Cigars. L. B. Grabosky. 288,480; Oct. 27; Serial No. 314,908; published July 14, 1931.
Cigars. A. A. Greenwald. 288,466; Oct. 27; Serial No. 313,914; published July 14, 1931.
Cigars. A. A. Greenwald. 288,467; Oct. 27; Serial No. 313,915; published Aug. 4, 1931.
Cigars. A. A. Greenwald. 288,468; Oct. 27; Serial No. 313,917; published July 14, 1931.
Cigars. Munson Steamship Line. 288,406; Oct. 27; Serial No. 316,371; published Aug. 11, 1931.
Cigars. United States Cigar Co. Inc. 288,320; Oct. 27; Serial No. 313,982; published July 28, 1931.
Cigars. United States Cigar Co. Inc. 288,470; Oct. 27; Serial No. 313,981; published July 28, 1931.
Cigars, cigarettes, etc. Condossis Tobacco Corporation. 288,428; Oct. 27; Serial No. 315,036; published July 28, 1931.
Tobacco. Brown & Williamson Tobacco Corporation. 288,408; Oct. 27; Serial No. 316,479; published Aug. 11, 1931.

CLASS 19

Automobiles. Hupp Motor Car Co. 85,247; renewed Feb. 6, 1932.
Automobiles and the like, Service recording attachments for. Thermo Instrument Company. 288,364; Oct. 27; Serial No. 294,901; published May 27, 1930.

CLASS 21

Carbons for electric lamps and carbon electrodes. H. M. Hirschberg. 85,246; renewed Feb. 6, 1932.
Electric fans. McKesson & Robbins, Incorporated. 288,469; Oct. 27; Serial No. 313,966; published Aug. 4, 1931.
Electrical display signs. Cine-A-Graph Corporation. 288,417; Oct. 27; Serial No. 315,674; published Aug. 4. 1931.
Electrical headlights. A. Allis. 288,376; Oct. 27; Serial No. 302,313; published Aug. 4, 1931.
Electrical motors. Western Clock Company. 288,316; Oct. 27; Serial No. 314,736; published Aug. 4, 1931.
Electrical motors. Western Clock Company. 288,317–18; Oct. 27; Serial Nos. 314,740–1; published Aug. 4. 1931.
Lamps, Gaseous content glow. R. G. Fishel Inc. 288,351; Oct. 27; Serial No. 312,047; published Aug. 4, 1931.
Lightning-rods. "Electra" Lightning Rod Co. 81,969; renewed May 23, 1931.
Radio receiving sets and parts thereof and accessories thereto. Dwarf Radio Manufacturing Co. Ltd. 288,455; Oct. 27; Serial No. 313,538; published Aug. 4, 1931.

CLASS 22

Racket strings. C. Saladino & Sons. 288,511; Oct. 27.
Rackets, Tennis. A. G. Spalding & Bros. 85,509; renewed Feb. 20, 1932.
Pool tables. W. Fuld. 83,828; renewed Oct. 17, 1931.

CLASS 23

Machinery and parts thereof. J. I. Case Plow Works. 83,220; renewed Aug. 29, 1931.
Mills for grinding various materials as grains, coal, etc. J. B. Sedberry, Inc. 288,522; Oct. 27.
Saws. Markt & Hammacher Company. 83,503; renewed Sept. 19, 1931.
Traps and tack hammers, Animal. Animal Trap Co. 37,602; renewed Dec. 31, 1931.
Typewriting machines and typewriting machine parts. Underwood Elliott Fisher Company. 288,533; Oct. 27.

CLASS 24

Drying forms, Garment. Hozform Company. 288,519; Oct. 27.

CLASS 27

Clocks. Irving Miller Company. 288,391; Oct. 27; Serial No. 316,046; published July 28, 1931.
Clocks and watches. E. Ingraham Company. 288,514; Oct. 27.
Watches. Bulova Watch Company. 288,505; Oct. 27; Serial No. 315,822; published July 28, 1931.
Watches. R. H. Macy & Co. 288,524; Oct. 27.
Watches, watchcases, watch movements and parts of the same. Fils de R. Picard & Cie. 288,330; Oct. 27; Serial No. 282,467; published July 21, 1931.
Watches, watch movements, etc. Elgin National Watch Company. 288,383; Oct. 27; Serial No. 305,348; published July 28, 1931.
Watches, watch movements, and watch cases. Elgin National Watch Company. 288,528; Oct. 27.

CLASS 28

Bracelets and wrist bands and straps. Bulova Watch Company. 288,379; Oct. 27; Serial No. 302,671; published Aug 4, 1931.
Jewelry not including watches. National Social Science Honor Society, Pi Gamma Mu, Incorporated. 288,477; Oct. 27; Serial No. 314,815; published Aug. 4, 1931.

CLASS 29

Brushes, Painters'. Pittsburgh Plate Glass Company. 288,456–7; Oct. 27; Serial No. 313,554–5; published July 21, 1931.
Brushes, Painters'. Pittsburgh Plate Glass Company. 288,458–9; Oct. 27; Serial No. 313,557–8; published July 21, 1931.
Brushes, Tooth. S. Kiya. 288,358; Oct. 27; Serial No. 312,584; published July 21, 1931.
Cleaning devices. K. P. & B. Co. 288,452; Oct. 27; Serial No. 313,191; published July 14, 1931.
Window cleaning devices. Marvel Window Cleaner Incorporated. 288,321; Oct. 27; Serial No. 314,005; published Aug. 11, 1931.

CLASS 30

China dinner sets. Abraham & Straus, Inc. 288,525; Oct. 27.
Pottery. S. A. Weller Co. 288,516; Oct. 27.

CLASS 32

Furniture and upholstery. Barker Bros. Incorporated. 288,521; Oct. 27.

CLASS 34

Forges and blowers therefor, Portable. Champion Blower & Forge Co. 83,715; renewed Oct. 10, 1931.

CLASS 36

Talking machines, automatic record shifting devices, etc. Stromberg-Carlson Telephone Manufacturing Company. 288,310; Oct. 27; Serial No. 314,634; published Aug. 4, 1931.

CLASS 37

Paper, paper towels and napkins, Toilet. White-Washburne Company. 288,529; Oct. 27.
Paper, Paraffin. Coated Paper Products Company. 288,517. Oct. 27.
Paper, Waxed. Package Paper Company. 288,518; Oct. 27.
Papers, Waxed and tissue. Crystal Tissue Company. 288,527; Oct. 27.

CLASS 38

Magazines. Western Magazines Co. 82,189; renewed June 6, 1931.
Publications, Special. C. M. Meehan. 288,361; Oct. 27; Serial No. 313,143; published July 21, 1931.

CLASS 39

Clothes, Men's. Burk, Fried & Company. 84,898; renewed Jan. 9, 1932.
Hosiery. Paramount Knitting Company. 84,035; renewed Oct. 31, 1931.
Hosiery. Paramount Knitting Company. 84,914; renewed Jan. 9, 1932.
Hosiery. Richmond Hosiery Mills. 85,617; renewed Feb. 27, 1932.
Undershirts, Knitted. Rubens & Marble. 85,008; renewed Jan. 16, 1932.

CLASS 42

Cotton, linen, silk, etc., piece goods. E. Rosenfeld & Company. 85,684; renewed Mar. 5, 1932.
Cotton piece goods. B. F. Meffert. 288,531; Oct. 27.
Linen and hemp piece goods. Gonrock Ropework Company. 84,957; renewed Jan. 16, 1932.
Rugs, Velvet. Beattie Manufacturing Company. 85,642; renewed Mar. 5, 1932.
Silk piece goods. Empire Silk Company. 288,419; Oct. 27; Serial No. 315,794; published Aug. 11, 1931.
Worsted cloths. Perseverance Worsted Company. 85,679; renewed Mar. 5, 1932.

CLASS 44

Alloys for dental use, Silver. Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. 288,384; Oct. 27; Serial Nos. 305,780–1; published Aug. 4, 1931.
Arch supports. Kom-Fut Arch Support Co. 288,352; Oct. 27; Serial No. 312,105; published Aug. 4, 1931.
Dental compounds. Schering-Kahlbaum, A. G. 288,425; Oct. 27; Serial No. 316,220; published Aug. 4, 1931.
Dental metal alloy. E. E. Bailey. 288,487; Oct. 27; Serial No. 315,240; published Aug. 4, 1931.
Mercury and for noble metal alloys. Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. 288,386; Oct. 27; Serial No. 305,806; published Aug. 4, 1931.
Metallic devices for elastic hosiery. William H. Horn & Brother, Incorporated. 288,415; Oct. 27; Serial No. 315,637; published Aug. 11, 1931.
Prophylactic rubber articles. Robert J. Pierce, Inc. 288,484; Oct. 27; Serial No. 314,962; published Aug. 11, 1931.
Syringes, water bottles, Fountain. Tom W. Grace Company. 288,411; Oct. 27; Serial No. 315,403; published Aug. 11, 1931.
Waving pads, Permanent. American Yvette Company. 288,421; Oct. 27; Serial No. 315,959; published Aug. 11, 1931.

CLASS 45

Water, Natural spring, Drinking. National Water Company. 84,685; renewed Dec. 26, 1931.

CLASS 46

Bananas, other canned fruits, flavors and colors, Combination of. Bowey's, Inc. 288,398; Oct. 27; Serial No. 316,185; published Aug. 11, 1931.
Butter, eggs, jam, jellies, etc. F. Wolferman, Incorporated. 288,353; Oct. 27; Serial No. 312,120; published Aug. 4, 1931.
Cakes. Dougherty Cake Products, Incorporated. 288,371; Oct. 27; Serial No. 299,961; published July 14, 1931.
Candy. F. G. Jensen. 85,131; renewed Jan. 30; 1932.
Candy, Molasses. W. W. Candy. 37,319; renewed Nov. 19, 1931.
Canned corn. Illinois Canning Co. 83,840; renewed Oct. 17, 1931.
Canned corn. Illinois Canning Co. 84,005; renewed Oct. 31, 1931.
Canned fruits. H. G. Prince & Company. 85,286–7; renewed Feb. 6, 1932.
Canned grape fruit. Dr. P. Phillips Company. 288,532; Oct. 27.
Canned pineapple. Hawaiian Pineapple Company. 84,829; renewed Jan. 9, 1932.
Canned pineapple. Hawaiian Pineapple Company. 85,113; renewed Jan. 30, 1932.
Chocolate powder, Hot. Bowey's, Inc. 288,401; Oct. 27; Serial No. 316,248; published Aug. 11, 1931.
Cocoa. J. O. Powers. 85,615; renewed Feb. 27, 1932.
Coffee, Blended. William S. Scull Company. 85,688; renewed Mar. 5, 1932.
Coffee, Blended. William S. Scull Company. 85,832; renewed Mar. 19, 1932.
Confection, Frozen. W. O. Chapman. 288,493; Oct. 27; Serial No. 315,630; published Aug. 11, 1931.
Confections, Frozen. Popsicle Corporation of the United States. 288,507; Oct. 27; Serial No. 315,924; published Aug. 11, 1931.
Confections, Frozen. O. Porges. 288,374; Oct. 27; Serial No. 302,014; published Aug. 11, 1931.
Confection, Frozen. G. A. Spraley. 288,312; Oct. 27; Serial No. 314,628; published Aug. 4, 1931.
Crackers. Bishop & Company. 83,889; renewed Oct. 24, 1931.
Eggs. Rhodes Ranch Egg Company. 288,388; Oct. 27; Serial No. 307,631; published Dec. 30, 1930.
Flavoring compounds. J. C. Lehne. 288,334; Oct. 27; Serial No. 309,135; published Aug. 11, 1931.
Flour, Wheat-. Montana Flour Mills Co. 84,847–8; renewed Jan. 9, 1932.
Flour, Wheat. O. B. Stout. 288,327; Oct. 27; Serial No. 290,285; published Nov. 5, 1929.
Flour, Wheat-. Twin Falls Milling & Elevator Co. 85,695; renewed Mar. 5, 1932.
Flour, Wheat-. Twin Falls Milling & Elevator Co. 85,778; Mar. 12, 1932.
Food drink, Tomato juice. A. J. Lehman Company. 288,380; Oct. 27; Serial No. 302,861; published Dec. 30, 1930.
Food drink, Tomato juice. A. J. Lehman Company. 288,381; Oct. 27; Serial No. 302,862; published Aug. 11, 1931.
Ice cream. Beatrice Creamery Company. 288,434; Oct. 27; Serial No. 315,182; published Aug. 11, 1931.
Jams, marmalades, preserves, etc. St. Martin Preserving Company Limited. 288,356; Oct. 27; Serial No. 312,574; published Aug. 4, 1931.
Macaroni. Chicago Macaroni Co. 288,333; Oct. 27; Serial No. 309,064; published Aug. 4, 1931.
Matzos being flat squares of unleavened bread. Behr Manischewitz. 85,666; renewed Mar. 5, 1932.
Milk and cream. J. G. Du Puis. 288,387; Oct. 27; Serial No. 306,117; published Apr. 28, 1931.
Milk, cream, butter, etc. Henry Becker & Sons, Inc. 288,319; Oct. 27; Serial No. 314,746; published Aug. 4, 1931.
Mince meat. R. C. Shaddick. 288,348; Oct. 27; Serial No. 311,890; published Aug. 11 1931.
Mustard. V. K. Kedrovich. 288,372; Oct. 27; Serial No. 300,527; published Aug. 4, 1931.
Salad dressing. E. R. Hartsuch. 288,435; Oct. 27; Serial No. 315,198; published Aug. 4, 1931.
Sandwich spread. Parker Products Co. 288,402; Oct. 27; Serial No. 316,296; published Aug. 11, 1931.
Syrup, Malt. Ballif Distributing Company. 288,491; Oct. 27; Serial No. 315,588; published Aug. 4, 1931.
Syrup, Malt. Empire Malt Products Co. 288,409; Oct. 27; Serial No. 316,483; published Aug. 11, 1931.
Syrup, Malt. Goldblatt Bros., Inc. 288,410; Oct. 27; Serial No. 316,589; published Aug. 11, 1931.
Syrup, Malt. Los Angeles Brewing Co. 288,503; Oct. 27; Serial No. 315,752; published Aug. 11, 1931.
Syrups, Maltless. Popsicle Corporation of the United States. 288,393; Oct. 27; Serial No. 316,074; published Aug. 11, 1931.

CLASS 50

Animal traps. Animal Trap Company of America. 288,526; Oct. 27.
Bottle caps. Arrow Bottle Cap Corp. 288,454; Oct. 27; Serial No. 313,526; published June 9, 1931.
Bottle caps and stoppers. Crown Cap Manufacturing Company. 288,354; Oct. 27; Serial No. 312,325; published July 7, 1931.
Chemically treated fabrics. N. Ginsburg. 288,523; Oct. 27.
Cork stoppers. Paddock Cork Company. 288,446; Oct. 27; Serial No. 315,365; published July 28, 1931.
Display devices for spools of thread. Spool Cotton Company. 288,370; Oct. 27; Serial No. 299,808; published July 14, 1931.
Flag and radio masts of steel and iron. Vereinigte Stahlwerke Aktiengesellschaft. 288,442; Oct. 27; Serial No. 315,222; published July 14, 1931.
Identification tags for poultry and animals. J. Haas. 288,439; Oct. 27; Serial No. 315,094; published July 14, 1931.
Leather cloth. Zapon Company. 288,400; Oct. 27; Serial No. 316,234; published Aug. 4, 1931.
Painted and waterproof fabrics. Suntex Corporation. 288,392; Oct. 27; Serial No. 316,058; published Aug. 4, 1931.
Painting sets. Porter Chemical Company. 288,520; Oct. 27.
Roofing deck. St. Clair Rubber Company. 288,427; Oct. 27; Serial No. 315,019; published Aug. 4, 1931.
Shower curtains and window drapes in sets of waterproofed fabrics. I. B. Kleinert Company. 288,359; Oct. 27; Serial No. 313,042; published July 21, 1931.
Signs, Advertising. Enameled Steel Sign Company. 288,331; Oct. 27; Serial No. 278,785; published July 21, 1931.
Tinsel, tinsel ribbon and cord, mica snow, etc. General Cable Corporation. 288,329; Oct. 27; Serial No. 285,453; published July 21, 1931.

LIST OF LABELS

Attention. For Fresh Tomatoes. Flick & Kupfer. 39,954; Oct. 27.
Blue Rock Titeseal. For Joint Sealing Compound. Blue Rock Chemical Corporation. 39,943; Oct. 27.
Borden's Grade B Milk. For Pasteurized Fluid Milk. Borden's Farm Products Company. 39,944; Oct. 27.
CB—351. For Caramel Layers. Lambooy Label and Wrapper Co. 39,962; Oct. 27.
CB—354. For Toasted Cocoanut Cakes. Lambooy Label and Wrapper Co. 39,963; Oct. 27.
CB—355. For Caramel Cakes. Lambooy Label and Wrapper Co. 39,964; Oct. 27.
CB—357. For Devilsfood Bars. Lambooy Label and Wrapper Co. 39,965; Oct. 27.
CB—358. For Chocolate Layer Cake. Lambooy Label and Wrapper Co. 39,966; Oct. 27.
CB—362. For Orange Loaf Cake. Lambooy Label and Wrapper Co. 39,967; Oct. 27.
Crazy Crystals. For Mineral Water Crystals. Pollock Paper & Box Company. 39,969; Oct. 27.
Cream. For Self Rising Biscuit Flour. S. E. Santangelo. 39,973; Oct. 27.
Fee-Line Fish Cat Food. For Fish Cat Food. P. F. Prendergast. 39,970; Oct. 27.
Genuine. For Malt Syrup. Colombo Extract Co. 39,945; Oct. 27.
'Good Morning' Marmalade. For Marmalade. Crosse & Blackwell Inc. 39,947; Oct. 27.
'Good Morning' Pure Preserve. For Preserves. Crosse & Blackwell Inc. 39,948; Oct. 27.
Himyar. For Cigarette Tobacco. Axton-Fisher Tobacco Co. 39,941; Oct. 27.
James McCreery & Co. For Boxes. Hoague-Sprague Corporation. 39,957; Oct. 27.
Johnson's Airtite Brush Keeper. For Container for Keeping Brushes. R. F. Johnson. 39,960; Oct. 27.

La. Stella. For Cans for Medicinal Compounds. J. Forlizzo. 39,955; Oct. 27.
Lusian Brand. For Cut Stringless Beans. Evangeline Parish Products Co. 39,953; Oct. 27.
Melbetts. For Toast. Cubbison Cracker Company. 39,949; Oct. 27.
Mountain Mist Quilting Cotton. For Cotton Filling for Quilts. Stearns & Foster Co. 39,974; Oct. 27.
Nursery Rhyme Stitchdowns. For Stitchdowns. Ettelbrick Shoe Co. 39,952; Oct. 27.
Orange Melba. For Dry Compounds from Which Beverages are Prepared. M. B. Eccles. 39,951; Oct. 27.
Polar-Pak. For Ice Cream. Kroger Grocery & Baking Co. 39,961; Oct. 27.
Rap-Ups. For Boxes. Reisman, Glass, Fitzgerald Shoe Company. 39,972; Oct. 27.
Regla-Fit. For Boxes. Reisman, Glass, Fitzgerald Shoe Company. 39,971; Oct. 27.
Snowballs. For Cakes. Oswald Jaeger Baking Co. 39,968; Oct. 27.
T N T. For Pop Corn Cakes. Barteldes Seed Company. 39,942; Oct. 27.
Tell Her With Candy. For Candy. Mrs. M. B. Gosnell. 39,956; Oct. 27.
The May Company Los Angeles. For Footwear. Holman Paper Box Co. 39,959; Oct. 27.
Tom Tucker. For Boxes. Hoague-Sprague Corporation. 39,958; Oct. 27.
Trio Left—N. Y. Corliss Limb Spec. Co.—Right. For Surgical Stocking. N. Y. Corliss Limb Spec. Co. Inc. 39,946; Oct. 27.
Wunderbar. For Candy. Curtiss Candy Company. 39,950; Oct. 27.

LIST OF PRINTS

Borden's Richer Malted Milk. For Malted Milk. Borden Company. 13,453; Oct. 27.
Corn Fly. For Preparation for Corns and Bunions. Hi-Gene Company. 13,456; Oct. 27.
Latex Pro-Medica. For Rubber Goods. Comet Envelope & Printing Company. 13,455; Oct. 27.
Perfection. For Preparation for Removing Corrosion from Automobile Radiators. Chemical Accessories Company. 13,454; Oct. 27.
Tudor Plate Three Piece Child's Set $2.00 Each. For Silver Plated Flatware. Oneida Community, Limited. 13,457; Oct. 27.
Tudor Plate Baby Spoon. For Baby Spoons. Oneida Community, Limited. 13,458; Oct. 27.
Van Raalte 1931 Hosiery Colors Autumn-Winter. For Stockings. Van Raalte Company. 13,459; Oct. 27.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 27TH DAY OF OCTOBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Kamrath, Herbert G., assignor.)
A & J Manufacturing Company. (See Kali, Charles E., assignor.)
Abel, Max, Bronx, N. Y., assignor to Frankart, Inc., New York, N. Y. Ash tray or similar article. Des. 85,411; Oct. 27.
Abell, Roilin, Milton, Mass. Engine starter. 1,829,624; Oct. 27.
Ace Humidifying Ventilating and Sheet Metal Works. (See Kaplan, A. W., and Hauser, assignors.)
Adams Bros. Mfg. Co. (See Steffen, Adolf, assignor.)
Adams, Daniel B. (See Adams, Samuel L. and D. B.)
Adams, Samuel L. and D. B., Pickens, S. C. Automatic water conveyer or carrier. 1,829,625; Oct. 27.
Adleman, Martin M., Putnam, Conn. Electrical socket. 1,829,207; Oct. 27.
Adler, Friedrich, Hamburg, Germany. Printing textile fabrics. 1,829,700; Oct. 27.
Adler Underwear and Hosiery Company, The. (See Floyd, Elijah L., assignor.)
Agfa Ansco Corporation. (See Bornmann, Carl., assignor.)
Agfa Ansco Corporation. (See Lummerzheim, H., and Schnitzler, assignors.)
Aitchison, William, Compton, Calif. Tile breaker. 1,828,796; Oct. 27.
Aktiengesellschaft Brown Boveri & Cie. (See Roebel, Ludwig, assignor.)
Aland, Florenz O. (See Aland, Thomas V. and F. O.)
Aland, Thomas V., and F. O., West View Borough, Allegheny county, Pa. Window seat. 1,829,324; Oct. 27.
Albert, Edward J., assignor to Thwing Instrument Company, Philadelphia, Pa. Driving mechanism for recording apparatus. 1,829,466; Oct. 27.
Alfred, Theodore, C., Lancaster, Ohio. Hammer mill. 1,829,325; Oct. 27.
Allen, Francis M. (See Overpeck, C. F., and Allen.)
Allen, Hugh E., Chicago, assignor of one-half to A. G. McCaleb, Evanston, Ill. Condimentation of ground meats. 1,829,431; Oct. 27.
Allerton, Samuel E., Chicago, Ill.; M. Hopkins, administrator of said S. E. Allerton, deceased. Receptacle and cover construction. 1,828,991; Oct. 27.
Alling, Edward R., Kenmore, assignor to Rice & Adams Corporation, Buffalo, N. Y. Crate or case. 1,829,383; Oct. 27.
Alma Manufacturing Company. (See Kerngood, Allen H., assignor.)
Alvord, Charles C., assignor to Worcester Loom Works, Worcester, Mass. Gripper locking and unlocking mechanism. 1,829,326; Oct. 27.
Alvord, Clinton, assignor to Worcester Loom Works, Worcester, Mass. Gripper for tuft weaving. 1,829,327; Oct. 27.
Amco, Incorporated. (See Morton, W. A., and Geer, assignors.)
American Bicheroux Company, The. (See Genenger, Richard, assignor.)
American District Telegraph Company. (See Hopkins, Richard M., assignor.)
American Electric Furnace Company. (See Juthe, K. A., and Hanson, assignors.)
American Electrical Company. (See Mason, W. K., and Stevens, assignors.)
American Glanzstoff Corporation. (See Schulz, W., and Hoffman, assignors.)
American Hardware Corporation, The. (See Hurd, Norman B., assignor.)
American Hardware Corporation, The. (See Stone, Elmer B., assignor.)
American Laundry Machinery Company, The. (See Taylor, James H., assignor.)
American Slicing Machine Company. (See Wolff, Wallace B., assignor.)
American Telephone and Telegraph Company. (See Freeman, A. E., and Livermore, assignors.)
American Telephone and Telegraph Company. (See Herman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Taylor, Edmund R., assignor.)
American Voith Contact Company. (See Lang, Richard T., assignor.)
Andersen, Lauritz W., Waterbury, Conn. Twin socket lamp fixture. 1,829,328; Oct. 27.
Anderson, Arthur J., Binford, N. Dak. Adhesive tape or bandage box. 1,829,577; Oct. 27.
Anderson, Edwin, Los Angeles, Calif. Venetian blind bracket. 1,829,718; Oct. 27.
André, Henri G., Paris, France. Conductor of high negative temperature coefficient. 1,829,553; Oct. 27.
Andre, Theodore B., London, England. Fastening device. 1,829,432; Oct. 27.
Andrews, Frank W., Fort Wayne, Ind., assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,384; Oct. 27.
Andrews, John, Oakland, Calif. Rotary kiln. 1,828,727; Oct. 27.
Anheuser, Ernest A., Milwaukee, Wis., assignor to Heller Brothers Company, Newcomerstown, Ohio. File cutting apparatus and making files. 1,829,385; Oct. 27.
Anthony, Willis J., Escanaba, Mich. Automatic safety stop mechanism. 1,829,626; Oct. 27.
Archangelsky, Alexander, and R. Goldberg, Berlin, Germany. Contact device for movable electrical apparatus. 1,828,917; Oct. 27.
Arcturus Radio Tube Company. (See Krahl, Walter L., assignor.)
Armbrust Chain Company. (See Armbrust, Ferdinand, assignor.)
Armbrust, Ferdinand, North Providence, assignor to Armbrust Chain Company, Providence, R. I. Bracelet. 1,829,493; Oct. 27.
Armstrong, George J., Maple Creek, Saskatchewan, Canada. Tire changer. 1,829,433; Oct. 27.
Arnold, James C., Los Angeles, Calif., assignor to Frigidaire Corporation, Dayton, Ohio. Fastening mechanism. 1,829,030; Oct. 27.
Arnold, James C., Los Angeles, Calif., assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,386; Oct. 27.
Arnold, James C., Los Angeles, Calif., assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,387; Oct. 27.
Arnold, Pearl C., West Hanover, and W. C. Vizard, Brockton, Mass., assignors to P. E. Barbour, Quincy, Mass., trading as Barbour Welting Company, Brockton, Mass. Shoe welting and its manufacture. 1,828,728; Oct. 27.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Lighter construction. 1,828,887; Oct. 27.
Arrow-Hart & Hegeman Electric Company. (See Haerling, Norbert G., assignor.)
Art Metal Works, Inc. (See Aronson, Louis V., assignor.)
Asch, Abraham B., New York, N. Y. Regulating device. 1,829,254; Oct. 27.
Ashton, James T., Battle Creek, Mich., assignor, by mesne assignments, to Oliver Farm Equipment Company, Wilmington, Del. One man controlled combined harvester and thrasher. 1,829,388; Oct. 27.
Atkinson, Daniel E., Tallahassee, Fla. Plow handle. 1,829,467; Oct. 27.
Atlas-Werke Aktiengesellschaft, The Firm. (See von Beulwitz, Gustav, assignor.)
Atteslander, Edouard, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Diesel-electric locomotive. 1,828,992; Oct. 27.
Atwater Kent Manufacturing Company. (See Reiher, Martin H., assignor.)
Atwood, Francis C., Newton, Mass. Method and apparatus for producing mica products. 1,829,031; Oct. 27.
Auflero, John M., Brooklyn, N. Y. Motor horn. 1,829,494; Oct. 27.
Auger, Eugene T. (See Schmidt, Walter, assignor.)
Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Outlet for high potential cable. 1,829,032; Oct. 27.
Austin, Harvey B., Wayne, assignor to The Pringle Electrical Manufacturing Company, Philadelphia, Pa. Switch lock. 1,829,329; Oct. 27.
Austin Manufacturing Co. (See Wilson, Fred D., assignor.)
Auto Compressor Company, The. (See Bahner, C., and Crady, assignors.)
Automatic Coal Burner Company. (See Schweickart, William M., assignor.)
Automobile Storage Elevator Company, The. (See Goddard, Charles F., assignor.)
Automotive Development Corporation. (See Kingsley, Henry M., assignor.)
Automotive Maintenance Machinery Co. (See Zimmerman, Herman W., assignor.)
B R E Manufacturing Co. (See Leslie, Howard C., assignor.)
Babcock & Wilcox Company, The. (See Baker, H. H., and Davy, assignors.)
Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)

Back, Goldie, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Making turbine blades. 1,829,179; Oct. 27.
Badische Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff. (See Nagel, O., and Kaempfer, assignors.)
Bagsar, Aaron B. (See Shoffstall, A. S., Mudge, Bagsar, and Bieber.)
Bahner, Clement, Wilmington, and C. H. Grady, Springfield, assignors to The Auto Compressor Company, Wilmington, Ohio. Positive unloading device. 1,829,330; Oct. 27.
Behr, Moritz, Houston, Tex. Cigarette and match container. 1,829,628; Oct. 27.
Bailey, James, and J. L. Miller, assignors to Corning Glass Works, Corning, N. Y. Chuck. 1,829,180; Oct. 27.
Bailey, James N., Chorlton-cum-Hardy, England, assignor to Metropolitan-Vickers Electrical Company Limited. Apparatus for the heat treatment of pulverulent materials. 1,829,495; Oct. 27.
Bair, Jacob D., Montgomery, Pa. Chair. 1,829,434; Oct. 27.
Baird Machine Company, The. (See Lewis, Arthur J., assignor.)
Baker, Herbert H., Monkseaton, Northumberland, and C. S. Davy, Dulwich, London, England, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Distributing means for fuel to stokers. 1,828,729; Oct. 27.
Baker Perkins Company. (See Reese, Louis C., assignor.)
Baker, W. J., Company, The. (See Dodds, Luise E., and W. J., assignors.)
Baker, William W., Cincinnati, Ohio. Hydraulic rotary power transmitter. 1,829,554; Oct. 27.
Baldwin Company, The. (See Trinkle, Carl, assignor.)
Ball, Harry V., Concord, Mass., and A. J. Horton, White Plains, assignors to R. Hoe & Co., Inc., New York, N. Y. Web roll controlling mechanism. 1,828,898; Oct. 27.
Ball, James A. (See Shryock, R. B., and Ball.)
Ballou, B. A., & Co. (See Morehouse, Eugene, assignor.)
Ballou, Harry R., Canton, Ohio, assignor to The Hoover Company. Suction cleaner. 1,829,255; Oct. 27.
Balthasar, Arthur, Cumberland, Md., assignor to Celanese Corporation of America. Yarn tensioning device. 1,828,918; Oct. 27.
Bamford, Cyril J. (See Bamford, Joseph and C. J.)
Bamford, Joseph and C. J., Uttoxeter, England. Machine for distributing manure or other material. 1,829,627; Oct. 27.
Barber-Colman Company. (See Kessler, Charles L., assignor.)
Barbour, Howard C., and R. H. Zellman, assignors to The Thew Shovel Company, Lorain, Ohio. Grapple. 1,828,919; Oct. 27.
Barbour, Perley E. (See Arnold, P. C., and Vizard, assignors.)
Barbour Welting Company. (See Arnold, P. C., and Vizard.)
Barclay, William R., and W. T. B. Roberts, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Fastener-inserting mechanism. 1,829,389; Oct. 27.
Bareham, Nelson. (See Schelle, H. M., Fisher, Bareham, and Savage.)
Baritone Radio Corporation, et al. (See Macy, Alfred J., assignor.)
Barker, Harry E., and A. F. Baum, assignors to Henry Weis Manufacturing Company, Inc., Elkhart, Ind. Construction unit. 1,829,331; Oct. 27.
Barnett, William, Los Angeles, Calif. Ladder and carrier therefor. 1,829,468; Oct. 27.
Barnhart, Vern A., Millington, assignor to Utility Block, Inc., Newark, N. J. Hollow building block. 1,829,435; Oct. 27.
Barr, John H., Ithaca, N. Y., assignor to Barr-Morse Corporation. Typewriter and the like. 1,829,390; Oct. 27.
Barr-Morse Corporation. (See Barr, John H., assignor.)
Barrett Company, The. (See Smith, Marshall C., assignor.)
Barrow, E. P., administrator. (See Beach, John R.)
Barrows, Donald S., Rochester, N. Y., assignor to The Symington Company, New York, N. Y. Car truck. 1,829,578; Oct. 27.
Bartels, Carl. (See Goebel, C. J., and Bartels.)
Bartels, Reinhard B., Melrose, Mass. Manufacturing shoe shank stiffeners. 1,829,496; Oct. 27.
Bartels, Reinhard B., Marblehead, Mass. Shoe having shank stiffeners and making such shoes. 1,829,497; Oct. 27.
Bartlett Hayward Company, The. (See Jagschitz, K., and Kuehn, assignors.)
Bartholomew, Robert J., Germantown, assignor to Fletcher Works, Incorporated, Philadelphia, Pa. Whorl latch. 1,828,993; Oct. 27.
Basic Patents Corporation. (See Dormon, James L., assignor.)
Bates, Mortimer F., Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc. Gun fire control system. 1,829,181; Oct. 27.
Bauer, Walter, assignor to Röhm & Haas Aktiengesellschaft, Darmstadt, Germany. Producing acrylic acid esters. 1,829,208; Oct. 27.
Baum, Arthur F. (See Barker, H. E., and Baum.)
Bay, Charles A., Morristown, N. J., assignor to James R. Kearney Corporation, St. Louis, Mo. Tool and jig for cable work. 1,829,033; Oct. 27.
Bayerlein, John, Maspeth, and A. A. Seiler, New York, N. Y. Aircraft. 1,829,080; Oct. 27.
Beach, Jonh R., Lawrenceville, Va.; E. P. Barrow, administrator of said J. R. Beach, deceased. Duplicating machine. 1,829,579; Oct. 27.
Bearly, Fred D., Oklahoma City, Okla. Derrick. 1,829,081; Oct. 27.
Beaumont Manufacturing Company. (See Beaumont, Robert H., assignor.)
Beaumont, Robert H., Radnor, Pa., assignor to Beaumont Manufacturing Company, Philadelphia, Pa. Hopper gate actuating mechanism. 1,829,182; Oct. 27.
Beaver, Charles J., Bowdon, assignor to W. T. Glover and Company Limited, Manchester, England. Conduit for laying electric cables. 1,829,580; Oct. 27.
Beck, Alwin H., assignor to Folmer Graflex Corporation, Rochester, N. Y. Method of and apparatus for holding photographic films in flat position during exposure. 1,829,332; Oct. 27.
Becker, George F., Albany, N. Y. Tail gate latch. 1,828,797; Oct. 27.
Beidler, George C., Rochester, N. Y. Film treating apparatus. 1,828,798; Oct. 27.
Belcher, Donald M., Arlington, assignor to Coffin Valve Company, Neponset, Mass. Controlling device for power operated valves. 1,829,708; Oct. 27.
Bell, William R., Terre Haute, Ind. Poster copy conditioning machine. 1,828,759; Oct. 27.
Beloit Iron Works. (See Berry, Earl E., assignor.)
Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Benenati, Nicholas, New York, N. Y. Foot rest. Des. 85,412; Oct. 27.
Benford, David M., New York, N. Y. Electric necktie restorer. Des. 85,452; Oct. 27.
Bennett, James H. (See Fisher, Thomas, assignor.)
Benziger, Bernard A., South Orange, N. J. Tabernacle safe. 1,829,256; Oct. 27.
Berg, Frederick A., Chicago, Ill. Toy aircraft liner. 1,829,034; Oct. 27.
Bergen, Gustav, F. Engelhardt, and R. Steckham, Brunswick, Germany. Manufacturing colored Portland cement. 1,829,082; Oct. 27.
Bergs, Frederick J., assignor to Bergs Manufacturing Company, Milwaukee, Wis. Safe. 1,829,333; Oct. 27.
Bergs Manufacturing Company. (See Bergs, Frederick J., assignor.)
Berkshire Knitting Mills. (See Hemmerich, Hugo, assignor.)
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Paper winding apparatus. 1,828,888; Oct. 27.
Berry, Walter M. (See Gercich, F. A., and Berry.)
Besal, Joseph A., and L. Medaris, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill. Board control mechanism. 1,829,035; Oct. 27.
Best, Alfred E., and J. C. Zook, assignors of one-half to J. Kearns and E. A. Forrest, Conshohocken, Pa. Combined level and inclinometer. 1,829,257; Oct. 27.
Betancourt, George, Alhambra, Calif. Carrying device. 1,829,629; Oct. 27.
Bieber, Clarence G. (See Shoffstall, A. S., Mudge, Bagsar, and Bieber.)
Biehler, Louis A., Stanhope, N. J. Integrating device. 1,829,036; Oct. 27.
Bingham, William, Newllano, La. Violin mute. 1,829,469; Oct. 27.
Birdsboro Steel Foundry and Machine Company. (See Peterson, Edward T., assignor.)
Birkenbeuel, Edward B., Portland, Oreg. Spring mattress. 1,829,083; Oct. 27.
Birkhahn, Robert C. (See Van Epps, Margaret E., assignor.)
Birmingham Electric Furnaces Limited. (See Lobley, Alfred G., assignor.)
Birtch, Fred W., Lexington, Mich. Water heater. 1,829,334; Oct. 27.
Bishop & Babcock Mfg. Company, The. (See Lippitt, George R., assignor.)
Blackburn, McMaster S., assignor to Geophysical Petroleum Corporation, San Antonia, Tex. Gravity calculator. 1,828,954; Oct. 27.
Blanchard, Eugene W., Tulsa County, Okla., assignor of one-half to D. S. Bowers, Tulsa, Okla. Pipe threading machine. 1,829,183; Oct. 27.
Blatch, Francis H., Hazleton, Pa. Apparatus for washing coal. 1,828,760; Oct. 27.
Blaw-Knox Company. (See McCrery, Harold E., assignor.)
Blue, James W., Fife Lake, Mich. Sod cutter. 1,829,335; Oct. 27.
Bobroff, Bornett L., Racine, Wis. Switch for signaling systems. 1,829,037; Oct. 27.
Boehler, Raymond F., jr. (See Robbins, W. H., and Boehler.)
Boehm, John, assignor to The W. S. Tyler Company, Cleveland, Ohio. Woven wire screen and making same. 1,829,498; Oct. 27.
Boggs, Charles R., Waban, assignor to Simplex Wire & Cable Company, Boston, Mass. Insulation. 1,829,209; Oct. 27.
Bohmer, Henry, jr., Haddonfield, assignor to Flexitallic Gasket Co., Camden, N. J. Gasket. 1,829,709; Oct. 27.
Bohner, Chance E., East Orange, and A. M. Trogner, Maplewood, N. J., assignors to Wired Radio, Inc., New York, N. Y. Anticapacity switch. 1,829,336; Oct. 27.

Bolton, Archer L., North Andover, assignor to John W. Bolton and Sons, Inc., Lawrence, Mass. Paper making roll and covering it. 1,829,630; Oct. 27.
Bolton, John W., and Sons, Inc. (See Bolton, Archer L., assignor.)
Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuit. 1,828,994; Oct. 27.
Boos, William, Mineola, N. Y. Fur knife. 1,829,499; Oct. 27.
Borden Company, The. (See Sprague, Alson J., assignor.)
Bornmann, Carl, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Film package. 1,828,955; Oct. 27.
Bossard, Theodore, Salt Lake City, Utah, assignor to Research Engineering Laboratories, Inc. Fueling system. 1,828,730; Oct. 27.
Bourn, Stephen W., Bristol, R. I., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe surface coating. 2,828,855; Oct. 27.
Bourquardez, Alfred P. (See Seailles, S., and Seailles, assignor.)
Bouton, Edgar M., East Pittsburgh, and F. E. Lewis, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Elevator control system. 1,829,470; Oct. 27.
Bowers, D. S. (See Blanchard, Eugene W., assignor.)
Boyce, Samuel F., New York, N. Y. Display stand. Des. 85,456; Oct. 27.
Bradshaw, Lawrence, and H. V. Dunham, Bainbridge, assignors, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y. Retarding the setting of casein glue and dry glue base for use in such processes. 1,829,258; Oct. 27.
Bradshaw, Lawrence, and H. V. Dunham, Bainbridge, assignors, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y. Making slow-setting casein glue, and dry base for use in such processes. 1,829,259; Oct. 27.
Branch, William E., Fort Worth, Tex. Radio transmission system. 1,828,920; Oct. 27.
Brawner, George H., assignor of one-third to W. J. Bryan, and one-hundred fifty-one three-hundredths to J. E. Sellers, Dallas, Tex. Brake shield. 1,828,761; Oct. 27.
Breitling, Ernst, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Blocking the setting means of cash registers. 1,829,084; Oct. 27.
Bridges, Lewis B., Brooklyn, assignor, by mesne assignments, to Dardelet Threadlock Corporation, New York, N. Y. Screw-thread coupled member. 1,828,856; Oct. 27.
Brimhall, Lee H., Jacksonville, Fla. Surf sled. 1,829,471; Oct. 27.
Brincil, Joseph, Reading, Pa. Making partially lined bearings. 1,828,731; Oct. 27.
Brinton, Cecil C., assignor of one-half to Brintons Limited, Kidderminster, England. Tuft cutting mechanism of Axminster carpet and other tufted fabric looms. 1,828,921; Oct. 27.
Brintons Limited. (See Brinton, Cecil C., assignor.)
British-American Tobacco Company. (See Gilliam, James D., assignor.)
Broslus, Edgar E., Pittsburgh, Pa. Material handling apparatus. 1,828,762; Oct. 27.
Brown, Carl D., assignor to Draper Corporation, Hopedale, Mass. Weft feeler for looms. 1,829,260; Oct. 27.
Brown Company. (See Richter, George A., assignor.)
Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)
Brown, John H., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Trimming machine. 1,828,829; Oct. 27.
Brown, William, Irvington, N. J. Landing wheel. 1,829,500; Oct. 27.
Brownell, James L., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Combined radiator and guard. 1,828,995; Oct. 27.
Bruckner, Robert E., Hastings upon Hudson, N. Y. Apparatus for control of variable cut-off valve gears. 1,828,956; Oct. 27.
Bruckner, Robert E., Hastings upon Hudson, N. Y. Power transmitting mechanism. 1,829,261; Oct. 27.
Bruehl, Lawrence, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa. Evaporator for refrigerating apparatus. 1,829,501; Oct. 27.
Brueshaber, Martin W., Chicago, Ill., assignor to Goss Printing Press Company. Web supplying and controlling mechanism. 1,829,337; Oct. 27.
Bruson, Herman A., assignor to Röhm & Haas Company, Philadelphia, Pa. Mixed ester of benzophenone-poly carboxylic acid. 1,829,038; Oct. 27.
Bryan, Artis C., Syracuse, N. Y. Oil burning heater. 1,829,125; Oct. 27.
Bryan, Fred. (See Young, J. A., and Bryan.)
Bryan, William J., et al. (See Braner, George H., assignor.)
Buck, George C., Hickman, Ky. Valve system for internal combustion engines. 1,829,581; Oct. 27.
Buck, Theodore C., jr., Baltimore, Md. Colony counting apparatus for laboratory use. 1,829,472; Oct. 27.
Buckwell, Arthur W. (See Morss, E. L., Buckwell, and Smith.)
Bucyrus-Erie Company. (See Fuller, F. A., and Moore, assignors.)
Budd, Edward G., assignor to Budd Wheel Company, Philadelphia, Pa. Rolling mill. 1,829,126; Oct. 27.
Budd, Edward G., Manufacturing Company. (See Ledwinka, Joseph, assignor.)
Budd Wheel Company. (See Budd, Edward G., assignor.)
Budd Wheel Company. (See Tarbox, J. P., Ekserglan, and Farr, assignors.)
Bullington, Frank A., assignor to Bullington Motors, Kansas City, Mo. Rotary internal combustion engine. 1,829,391; Oct. 27.
Bullington Motors. (See Bullington, Frank A., assignor.)
Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Positive let-back mechanism for looms. 1,828,957; Oct. 27.
Burhop, Emil, Geneva, Switzerland. Explosive engine. 1,829,631; Oct. 27.
Burke, Harry R., et al. (See Carnes, James R., assignor.)
Burroughs Adding Machine Company. (See Smith, Aurile T., assignor.)
Buschmann, Hans, Stettin, Germany. Printing plate. 1,829,085; Oct. 27.
Bush, A. G. (See Criner, Harry J., assignor.)
Büttner, Artur, assignor to Schnellpressenfabrik Aktiengesellschaft Heidelberg, Heidelberg, Germany. Cylinder printing press. 1,829,436; Oct. 27.
Bynum, Hugh R., Memphis, Tenn. Auto chiropodist. 1,829,338; Oct. 27.
Cable Radio Tube Corporation. (See Grossman, J. J., and Steinharter, assignors.)
Cade, Alice J., Luray, Kans. Ornamenting surfaces. 1,829,262; Oct. 27.
Calcott, William S., Pennsgrove, F. B. Downing, Carney's Point, and D. H. Powers, Pennsgrove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Rubber-like product and making same. 1,829,502; Oct. 27.
Caldwell, Frank B., Oak Park, assignor to Link-Belt Company, Chicago, Ill. Flexible bearing for screw conveyers. 1,829,392; Oct. 27.
California Corrugated Culvert Co. (See Hutton, Arthur R. assignor.)
Cambridge Paper Box Co., The. (See Seckendorf, Richard P., assignor.)
Camel Company. (See Tobin, K. J., and Eklind, assignors.)
Camel Company. (See Tobin, K. J., and Wasberg, assignors.)
Cammack, Horace, St. Louis, Mo. Lamp socket. 1,829,127; Oct. 27.
Campbell, Murdock J. (See Wade, William J., assignor.)
Candee, L., & Company. (See Shinkle, Seaphes D., assignor.)
Canton, Allen A., New York, N. Y. Producing polychromatic screens and the like. 1,828,958; Oct. 27.
Caps, Arthur W. (See Greene, J. S., and Caps.)
Carbide and Carbon Chemicals Corporation. (See Davidson, J. G., and Reid, assignors.)
Carbide & Carbon Chemicals Corporation. (See Harvey, Norman D., jr., assignor.)
Carborundum Company, The. (See Hawke, Clarence E., assignor.)
Carlotti, Charles J., New York, N. Y. Hangar for dirigibles. 1,829,503; Oct. 27.
Carlotti, Charles J., New York, N. Y. Hangar. 1,829,504; Oct. 27.
Carlsen, Leonard O., assignor to Gleason Works, Rochester, N. Y. Gear cutting machine. 1,829,263; Oct. 27.
Carlson, Carl T., Erie, Pa. Heat exchanger. 1,828,799; Oct. 27.
Carnes, James R., assignor of one-fourth to C. F. Spence and one-fourth to H. R. Burke, Knoxville, Tenn. Fire hydrant vent valve. 1,828,763; Oct. 27.
Carroll, William E., assignor to Morgan Construction Company, Worcester, Mass. Wire drawing capstan. 1,828,922; Oct. 27.
Carson, Jesse F., assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Vacuum cleaner. 1,829,582; Oct. 27.
Carter, Alva J. (See Schmidling, Gilbert T., assignor.)
Carter, Ray L., Phoenix, N. Y., assignor to The Stanley Works, New Britain, Conn. Combined router and shaper. 1,829,393; Oct. 27.
Caruso, Mario, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y. Removable roof for toy cars. 1,829,505; Oct. 27.
Case, Philip S., Niagara Falls, N. Y., assignor to Electro Metallurgical Company. Spray gun. 1,828,732; Oct. 27.
Casein Manufacturing Company of America, Inc., The. (See Bradshaw, L., and Dunham, assignors.)
Castetter, Roy E., Wyoming, Ohio. Aquarium. Des. 85,413; Oct. 27.
Cayo, Eugene F. (See Sadtler, S. S., and Cayo.)
Celanese Corporation of America. (See Balthasar, Arthur, assignor.)
Celanese Corporation of America. (See Dreyfus, C., and Miles, assignors.)
Celanese Corporation of America. (See Ellis, George H., assignor.)
Central Trust Company of Illinois, et al., executors. (See Friendly, Herbert M.)
Chanard, Auguste, Ruell, France. Carburetor. 1,829,632; Oct. 27.
Chant, John, Felixstowe, England. Single or stand up collar ironing and curling machine. 1,828,923; Oct. 27.

Chardell, James J., and L. J. Ferdinand, Hazleton, Pa. Combination spotlight and observation device. 1,828,924; Oct. 27.

Charman, Frederick J. H. (See Willans, P. W., and Charman.)

Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Automatic carriage shifting mechanism for calculators. 1,829,210; Oct. 27.

Checker Cab Manufacturing Corporation. (See Brownell, James L., assignor.)

Chew, Yee L., Gopeng, Perak, Federated Malay States. Wrench. 1,829,473; Oct. 27.

Chicago-Cleveland Car Roofing Company. (See Swanson, Earl R., assignor.)

Chicago Forging & Manufacturing Co. (See Hynes, Dibrell P., assignor.)

Chicago Forging & Manufacturing Co. (See Mears, N. A., and Hynes, assignors.)

Chicago Pneumatic Tool Company. (See Stevens, Edward W., assignor.)

Chicago Railway Equipment Company. (See Moore Ambrose C., assignor.)

Chilowsky, Constantin, Paris, France. Method and device for establishing communication between aircraft in full flight and the ground. 1,829,474; Oct. 27.

Chretien, Henri, St. Cloud, France. Taking and projection of motion pictures and films therefor. 1,829,634; Oct. 27.

Chretien, Henri, St. Cloud, assignor to Societe Anonyme Francaise dite Societe Technique D'Optique et de Photographie (S. T. O. P.), St. Ouen, France. Taking or projecting photographic or cinematographic panoramic views or views extending in height. 1,829,633; Oct. 27.

Christopher, Philip H., Fairmont, W. Va. Ice cabinet. 1,828,996; Oct. 27.

Christopherson, William G., Grosse Pointe Park, assignor to Morgan & Wright, Detroit, Mich. Joint and making the same. 1,828,925; Oct. 27.

Chrysler Corporation. (See Lee, Roger K., assignor.)

Church, Harold D., assignor to The White Motor Company, Cleveland, Ohio. Automobile. 1,829,506; Oct. 27.

Citrano, Louis, Huntsville, Ala. Stitch picking device. 1,828,764; Oct. 27.

Clark, Lee H., Rosemont, assignor to The Sharples Specialty Company, Philadelphia, Pa. Purifying dielectric liquids. 1,829,712; Oct. 27.

Clarkson, Bowen E., Kingstree, S. C. Animal trap. 1,829,264; Oct. 27.

Clay, Noble S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Propeller. 1,829,437; Oct. 27.

Clough, Newsome H., Hanwell, London, England, assignor to Radio Corporation of America. Damping control. 1,829,706; Oct. 27.

Coberly, Clarence J., Los Angeles, assignor to Kobe, Inc., Huntington Park, Calif. Deep well fluid motor pump. 1,828,857; Oct. 27.

Coffin Valve Company. (See Belcher, Donald M., assignor.)

Cohen, Daniel R. (See Rohn, Frederick G., assignor.)

Coley, Henry E., London, England. Reduction of ores, oxides, and the like. 1,829,438; Oct. 27.

Collins, Arthur E., Cuyahoga Falls, Ohio, assignor, by mesne assignments, to The Miller Rubber Company, Inc., Wilmington, Del. Apparatus for reenforcing the seams of bathing caps and other articles. 1,828,907; Oct. 27.

Collins, Arthur E., Cuyahoga Falls, Ohio, assignor, by mesne assignments, to The Miller Rubber Company, Inc., Wilmington, Del. Method of and apparatus for making bathing caps and similar articles. 1,829,211; Oct. 27.

Collins, James L., Dallas, Tex. Automatic telephone responding apparatus. 1,828,733; Oct. 27.

Collyer Insulated Wire Co. (See Walker, Lawrence D., assignor.)

Communication Patents, Inc. (See Nicolson, Alexander M., assignor.)

Compagnie de Fives-Lille. (See Théry, René V. S., assignor.)

Condit Electrical Manufacturing Corporation. (See Jansson, Gustav E., assignor.)

Condit Electrical Manufacturing Corporation. (See O'Keeffe, George W., assignor.)

Conklin, Earl B., Syracuse, assignor, by mesne assignments, to The Solvay Process Company, Solvay, N. Y. Side-chain chlorination of benzene derivatives. 1,828,858; Oct. 27.

Conklin, Earl B., Syracuse, assignor, by mesne assignments, to The Solvay Process Company, Solvay, N. Y. Chlorination apparatus. 1,828,859; Oct. 27.

Conklin, Roscoe D., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Mechanism for reversing motive devices for operating doors and the like. 1,828,860; Oct. 27.

Continental Motors Corporation. (See Niven, Archie M., assignor.)

Cook, Egbert C., Puente, Calif. Turntable. 1,828,959; Oct. 27.

Cook, Harry, Huntington Park, assignor to C. E. Maris, jr., and R. M. Hadley, Los Angeles, Calif. Method and apparatus for making reenforced pipe. 1,828,890; Oct. 27.

Corbart Refractories Company. (See Schroeder, Frederic W., assignor.)

Cornelius, Hermann. (See Sölter, Hugo, and Cornelius.)

Corning Glass Works. (See Bailey, J., and Miller, assignors.)

Corning Glass Works. (See Woods, William J., assignor.)

Coronitti, Domenick, et al. (See Dicola, Rocco, assignor.)

Corrigan, Michael C., Massillon, and D. E. Jenkins, Canton, assignors, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Rolling metal. 1,829,339; Oct. 27.

Cory, M. M. (See Jerl, John, assignor.)

Coutin, Jean, assignor to Préparation Industrielle des Combustibles (Societe Anonyme), Nogent-Sur-Marne, France. Cushioning device for reciprocating sieves and other apparatus. 1,829,340; Oct. 27.

Cowardin, Harry A., Marion, Ohio, assignor of one-half to S. P. Cowardin, Richmond, Va. Oil relay governor. 1,829,701; Oct. 27.

Cowardin, Samuel P. (See Cowardin, Harry A., assignor.)

Cox, John L., and B. M. Fine, Philadelphia, Pa. Projectile provided with windshield. 1,829,212; Oct. 27.

Crabbe, George N. (See Lantrup, G. W., and Crabbe.)

Crabbe, Percy G. (See Wylie, H. N., and Crabbe.)

Crafts, Irving M., Glidersleeve, Conn., assignor to The Pickering Governor Company, Portland, Conn. Governor. 1,829,507; Oct. 27.

Crago, Paul H., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Controlling apparatus for highway crossing signals. 1,828,926; Oct. 27.

Crawford, Frederick C., and M. P. Graham, Detroit, Mich., assignors to Thompson Products Inc., Cleveland, Ohio. Tie-rod construction. 1,828,891; Oct. 27.

Criner, Harry J., assignor of one-half to A. G. Bush, Davenport, Iowa. Driving mechanism for washing machines. 1,829,555; Oct. 27.

Crist, Ruth A., Fortville, Ind. Doll. 1,828,765; Oct. 27.

Croft, Hiram D. (See Perkins, J. L., Oakley, and Croft.)

Crouse-Hinds Company. (See Olley, Raymond H., assignor.)

Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Valve inside. 1,829,556; Oct. 27.

Crowley, Joseph P., assignor to The Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass melting furnace. 1,828,830; Oct. 27.

Crown Cork & Seal Company. (See Huntley, George J., assignor.)

Curtis Companies, Inc. (See Madsen, Sern, assignor.)

Cushing, George H., Washington, D. C. Projecting lamp bulb. 1,829,475. Oct. 27.

Cyclone Manufacturing Company, The. (See Speicher, Daniel E., assignor.)

Daly, Joseph P., assignor to The Prosperity Company, Inc., Syracuse, N. Y. Power actuating mechanism. 1,829,184; Oct. 27.

Dardelet Threadlock Corporation. (See Bridges, Lewis B., assignor.)

Dauch, Alan D., Pittsburgh, Pa., and J. Sandberg, Detroit, Mich., assignors to George J. Hagan Company, Pittsburgh, Pa. Carburizing and annealing furnace. 1,829,710; Oct. 27.

Davenport, John, Franklin, N. C. Producing mica powder. 1,829,039; Oct. 27.

Davey, Wheeler P., State College, Pa., assignor to General Electric Company. Making alloys. 1,829,635; Oct. 27.

Davidson, Joseph G., Yonkers, N. Y., and E. W. Reid, Pittsburgh, Pa., assignors to Carbide and Carbon Chemicals Corporation. Removing finish coatings. 1,829,583; Oct. 27.

Davis, Augustine, jr. (See Shield, Paul S., assignor.)

Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Head checking means for power operated pressing machines. 1,829,394; Oct. 27.

Davis, Richard F., Berkeley, assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif. Treating hydrocarbons. 1,829,213; Oct. 27.

Davis, Tenney L., and E. H. Huntress, Cambridge, Mass, assignors to Swann Research, Inc. Preparation of diazonium perchlorates of aminodiphenyl. 1,828,960; Oct. 27.

Davy, Christopher S. (See Baker, H. H., and Davy.

Day, J. H., Company, The. (See Kirchhoff, William G., assignor.)

Dearborn, Richard J., Summit, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Decomposing organic materials. 1,828,998; Oct. 27.

De Back, William, San Leandro, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Cooking apparatus. 1,828,961; Oct. 27.

Deere & Company. (See Metcalf, Edgar E., assignor.)

De Forest Radio Telephone & Telegraph Company. (See Verpent, Victor J., assignor.)

De Frettas, August, Honolulu, Hawaii. Portable lunch carrier. 1,829,636; Oct. 27.

De Hart, Charles B., assignor of one-half to C. W. De Hart, Chicago, Ill. Hydraulic clutch. 1,828,861; Oct. 27.

De Hart, Charles W. (See De Hart, Charles B., assignor.)

Delco-Light Company. (See Federle, Joseph C., assignor.)

Demary, Albert, Endicott, N. Y. Shovel. 1,829,584; Oct. 27.

De Montmollin, Guillaume. (See Gubler, H., de Montmollin, and Spieler.)

Denison, William C., Cleveland Heights, Ohio. Air conditioning device. 1,829,341; Oct. 27.

Dentler, Arnold E., assignor to W. H. Miner, Inc., Chicago, Ill. Apparatus for testing draft gears. 1,829,128; Oct. 27.

Detrick, M. H., Company. (See Sheahan, Frank L., assignor.)

Detroit Steel Products Company. (See Loucks, James F., assignor.)

Deutschmann, Tobe. (See Yates, Raymond F., assignor.)

Devereaux, William C., assignor to Ferro Stamping & Manufacturing Company, Detroit, Mich. Door latch mechanism. 1,828,927; Oct. 27.

De Vore, Henry B. (See De Vore, Henry C., assignor.)

De Vore, Henry C., Monongahela, Pa., assignor to H. B. De Vore, Wilmington, Del. Method and apparatus for broadcasting and receiving radio signals. 1,828,831; Oct. 27.

De Waele, Armand, assignor to D. Gestetner, Limited, London, England. Production of stencil sheets for use in duplicating. 1,828,766; Oct. 27.

Dewend, William D., South Bend, Ind., assignor to Oliver Farm Equipment Company. Disk harrow. 1,829,342; Oct. 27.

De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Spring motor. 1,829,265; Oct. 27.

Diamond, Grant S., Hamburg, assignor to Electro Refractories Corporation, Buffalo, N. Y. Glazing refractory articles. 1,828,767; Oct. 27.

Dicola, Rocco, assignor of twenty-five percent to himself, twenty percent to Ulric J. McHale, Forest City, Pa.; eighteen and one-third percent to Frank Renda, eighteen and one-third percent to Vito Varano, and eighteen and one-third percent to Domenick Coronitti, Scranton, Pa. Submarine rescue device. 1,829,476; Oct. 27.

Diemolding Corporation. (See Ross, Wallace B., assignor.)

Dill Manufacturing Company, The. (See Crowley, John C., assignor.)

Dillon, Albert F., assignor to P. Lorillard Company, Richmond, Va. Transfer mechanism. 1,829,129; Oct. 27.

Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Film guide. 1,828,768; Oct. 27.

Dirkes, Robert F. (See Hoover, R., and Dirkes.)

Ditchfield, Frank, assignor to The Youngstown Steel Door Co., Cleveland, Ohio. Metal wall structure for cars. 1,829,508; Oct. 27.

Dodds, Louise E., and W. J., Detroit, Mich., assignors to The W. J. Baker Company Incorporated, Newport, Ky. Screened window operating device. 1,829,343; Oct. 27.

Dodds, Wilbert J. (See Dodds, Louise E and W. J.)

Doherty Research Company. (See Lee, Charles A., jr., assignor.)

Donahue, A. J., Corporation, The. (See Jacobs, Joseph, assignor.)

Dormon, James L., assignor to Basic Patents Corporation, Shreveport, La. Gas and vapor treating apparatus. 1,828,734; Oct. 27.

Douthitt, Frank H., Chicago, Ill. Process of and apparatus for drying liquids. 1,829,477; Oct. 27.

Dow Chemical Company, The. (See Prutton, Carl F., assignor.)

Downing, Frederick B. (See Calcott, W. S., Downing, and Powers.)

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,828,832; Oct. 27.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass melting furnace. 1,828,833; Oct. 27.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Producing sheet glass. 1,828,834; Oct. 27.

Drake, John L., and W. E. Nobbe, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for producing sheet glass. 1,828,835; Oct. 27.

Draper Corporation. (See Brown, Carl D., assignor.)

Draper Corporation. (See Burdett, Horace, assignor.)

Drew, Mitchell N., Quincy, Fla. Match box. 1,828,962; Oct. 27.

Drew, William F., and J. W. Martinet, Los Angeles, Calif. Amusement device. 1,829,266; Oct. 27.

Dreyfus, Camille, New York, N. Y., and G. W. Miles, Boston, Mass., assignors to Celanese Corporation of America. Preparing impregnating paper products. 1,829,585; Oct. 27.

Driest, Charles, Marlboro, N. J. Fuse and switch box. 1,829,214; Oct. 27.

Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Converting hydrocarbons. 1,829,637; Oct. 27.

Duchosal, Pierre, Pregny-Village, assignor of one-half to R. Luthi, Geneva, Switzerland. Apparatus for recording electric currents produced by living organisms. 1,829,267; Oct. 27.

Dugdale, Richard M., Dedham, assignor to Farrington Manufacturing Company, Boston, Mass. Stamping device. 1,829,586; Oct. 27.

Duhamel, Michel, Roubaix, France. Automatic tensioning device for flexible transmission members. 1,828,769; Oct. 27.

Dulany, G. W., Trust, The. (See Page, C. B., and Kalk, assignors.)

Dunham, Henry V. (See Bradshaw, L., and Dunham.)

Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., Downing, and Powers, assignors.)

Du Pont, E. I., de Nemours & Company. (See Lazier, Wilbur A., assignor.)

Dur-O-Lite Pencil Company. (See Lynn, John P., assignor.)

Durren, Merle P., Dowagiac, Mich. Air filter. 1,829,344; Oct. 27.

Dwyer, Thomas F., jr. (See Whelan, F. J., and Dwyer.)

Eagles, Reginald H., Hastings upon Hudson, N. Y. Finely divided metallic compounds and process therefor. 1,829,395; Oct. 27.

Eastman, Joseph P., Manitowock, Wis. Bumper for electric lamps. 1,829,345; Oct. 27.

Edwin, Emil, Trondhjem, assignor to Norsk Staal Elektrisk-Gas-Reduktion, Oslo, Norway. Shaft furnace for treating solid materials with gases. 1,829,268; Oct. 27.

Egler, Andrew G., Youngstown, Ohio. Electrically welded jarred steel pipe. 1,829,638; Oct. 27.

Ebemann, Joseph J., sr., and B. F. Singer, Lancaster, Pa. Safety device. 1,829,478; Oct. 27.

Eisenwerk Weserhütte Aktiengesellschaft. (See Sölter, H., and Cornelius, assignors.)

Eklind, Carl E. (See Tobin, K. J., and Eklind.)

Ekman, Andrew, assignor to Grand Rapids Brass Company, Grand Rapids, Mich. Hardware fixture. 1,829,509; Oct. 27.

Eksergian, Carolus L. (See Tarbox, J. P., Eksergian, and Farr.)

Electric Vacuum Cleaner Company. (See Carson, Jesse F., assignor.)

Electro Metallurgical Company. (See Case, Philip S., assignor.)

Electro Refractories Corporation. (See Diamond, Grant S., assignor.)

Elkins, Harry H., Philadelphia, Pa. Plastering machine. 1,829,479; Oct. 27.

Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Dyeing or coloring of cellulose acetate. 1,829,130; Oct. 27.

Emerson, John, Toledo, Ohio. Headwear. 1,829,040; Oct. 27.

Empire Hood Seal Corporation. (See O'Neill, Frank, jr., assignor.)

Empire Oil and Refining Company. (See Walker, John C., assignor.)

Emsco Derrick and Equipment Company. (See Stevenson, Edward E., assignor.)

Engelhardt, Felix. (See Bergen, G., Engelhardt, and Steckhan.)

Enstrom, August, assignor to Pettibone Mulliken Company, Chicago, Ill. Switch point rail. 1,829,439; Oct. 27.

Erickson, Edward S., Salem, Ohio. Portable grinding and polishing device. 1,829,440; Oct. 27.

Erstein, Jesse H., Larchmont, N. Y. Lining for hats. 1,829,269; Oct. 27.

Escaffre, Joseph, Courbevoie, France. Carburetor for heavy fuels in internal combustion engines. 1,828,770; Oct. 27.

Eternit, Inc. (See Plessevaux, Georges, assignor.)

Etheridge, Locke, assignor of one-half to J. M. Rogers, Louisville, Ky. Radio receiving system. 1,829,131; Oct. 27.

Evans Products Company. (See Miller, Edward, assignor.)

Evans Products Company. (See Seeley, Fay L., assignor.)

Ever Ready Company (Great Britain) Limited. (See Lister, John, assignor.)

Ewing, Herbert O., Middleport, Ohio, assignor of one-half to Thomas W. Field, Charleston, W. Va. Tool. 1,829,557; Oct. 27.

Fahrenwald, Frank A., Chicago, Ill. Metallurgical furnace. 1,828,836; Oct. 27.

Fairbanks, Morse & Co. (See Schneider, Henry C., assignor.)

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automatic train pipe coupling. 1,828,963; Oct. 27.

Farr, Henry V. (See Mallinckrodt, E., jr., and Farr.)

Farr, Warren H. (See Tarbox, J. P., Eksergian, and Farr.)

Farrington Manufacturing Company. (See Dugdale, Richard M., assignor.)

Federle, Joseph C., assignor to Delco-Light Company, Dayton, Ohio. Carburetor for internal combustion engines. 1,828,800; Oct. 27.

Felton, William T., Buffalo, N. Y. Warning signal. 1,828,892; Oct. 27.

Ferdinand, Louis J. (See Chardell, J. J., and Ferdinand.)

Ferngren, Enoch T., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, Method and apparatus for drawing sheet glass. 1,829,639; Oct. 27.

Ferngren, Enoch T., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, Method and apparatus for forming sheet glass. 1,829,640; Oct. 27.

Ferngren, Enoch T., assignor to The Libbey-Owens-Ford Glass Company, Toledo, Ohio. Downflow sheet drawing apparatus. 1,829,641; Oct. 27.

Ferro Stamping & Manufacturing Company. (See Devereaux, William C., assignor.)

Fickett, Ernest L., Fitchburg, Mass., and A. W. Munsell, Teaneck, N. J., assignors, by mesne assignments, to said A. W. Munsell. Vibrator. 1,829,441; Oct. 27.

Field, Thomas W. (See Ewing, Herbert O., assignor.)

Fine, Bernard M. (See Cox, J. L., and Fine.)

Fink, Gail J. (See Kern, H. A., and Fink.)

Finkbeiner, Adolf, Woodmont, Conn. Detachable curtain fixture. 1,829,510; Oct. 27.
Fjulayson, Frank M., Worcester, Mass. Cable clamp. 1,828,801; Oct. 27.
Finnel System, Inc. (See Finnell, Walter S., assignor.)
Finnell, Walter S., assignor to Finnel System, Inc., Hannibal, Mo. Floor treating machine. 1,820,132; Oct. 27.
Fisch, Jacob, Wattwil, Switzerland, assignor to Heberlein Patent Corporation, New York, N. Y. Apparatus for treating fabrics. 1,828,893; Oct. 27.
Fisher, Herman G. (See Schelle, H. M., Fisher, Barebam, and Savage.)
Fisher, Roy, Montebello, Calif. Aerial delivery device. 1,828,928; Oct. 27.
Fisher, Thomas, assignor of one-third to J. H. Bennett, Carl Junction, Mo. Safety device for mine buckets. 1,829,587; Oct. 27.
Flegel, Harrison D., assignor, by mesne assignments, to Hamilton Beach Manufacturing Company, Racine, Wis. Ice cream disher. 1,829,442; Oct. 27.
Fletcher Works, Incorporated. (See Bartholomew, Robert J., assignor.)
Flexitallic Gasket Co. (See Bohmer, Henry, jr., assignor.)
Flexlume Corporation. (See Wiley, Roy R., assignor.)
Flintkote Company, The. (See Kirschbraun, L., and Overbury, assignors.)
Flockhart Co., The. (See Flockhart, James, assignor.)
Flockhart, James, assignor to The Flockhart Co., Inc., San Francisco, Calif. Stencil printing apparatus. 1,828,771; Oct. 27.
Flower, John W., Wimborne, England. Bottle filling and crowning machine. 1,828,802; Oct. 27.
Floyd, Elijah L., assignor to The Adler Underwear and Hosiery Company, Cincinnati, Ohio. Knitting machine. 1,828,999; Oct. 27.
Fogelson, Samuel J., Chicago, Ill. Physiological mucin preparation. 1,829,270; Oct. 27.
Foley, Dora, Los Angeles, Calif. Ornament for automobile radiator cap or the like. Des. 85,414; Oct. 27.
Follmer, Clegg & Co. (See Knight, Samuel H., assignor.)
Follmer, Emile P., et al. (See Guthmuller, George L., assignor.)
Follmer, Frederick R., et al. (See Guthmuller, George L., assignor.)
Folmer Graflex Corporation. (See Beck, Alwin H., assignor.)
Folmer Graflex Corporation. (See Wheeler, Arthur, assignor.)
Fonda Container Company. (See Ross, John, assignor.)
Forney, Clarence H., Jersey City, N. J., assignor to Sonoco Products Company, Hartsville, S. C. Paper packing spool. 1,829,642; Oct. 27.
Forney, Clarence H., Jersey City, N. J., assignor to Sonoco Products Company, Hartsville, S. C. Paper packing spool. 1,829,643; Oct. 27.
Forrest, E. Arnold, et al. (See Best, A. E., and Zook, assignors.)
Forsyth, Harry, Prosser, Wash. File guide. 1,829,588; Oct. 27.
Fortman, Gustave D., Philadelphia, Pa. Leather composition. 1,829,511; Oct. 27.
Foster, Edward E., Beverly, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Lasting jack positioning device. 1,829,000; Oct. 27.
Fowler, Fred D., Newton, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Tire bead covering machine. 1,829,041; Oct. 27.
Fowler, Robert G. (See Parker, Francis F., assignor.)
Fowlkes, Thomas W., et al. (See Parrish, Washington B., assignor.)
Fox, David, Bronx, N. Y. Method and means for producing castellated nuts and the like. 1,829,215; Oct. 27.
France, represented by the Minister of the National Navy, State of. (See Perrin, René, assignor.)
Frankart, Inc. (See Abel, Max, assignor.)
Franklin Development Corporation. (See Marks, Edward S., assignor.)
Frantz, Ezra A., Fort Worth, Tex. Bale tie buckle. 1,829,644; Oct. 27.
Frayer, Lee A., and C. L. Harvey, assignors to R. H. Smith, Kent, Ohio. Making nut blanks. 1,829,558; Oct. 27.
Frederick, Urban A. (See Witter, V. F., and Frederick.)
Frederickson, Otto A., Wethersfield, Conn., assignor to National Electric Products Corporation, Pittsburgh, Pa. Electric conductor. 1,828,772; Oct. 27.
Frederickson, Otto A., Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y. Bushing for armored cable. 1,829,512; Oct. 27.
Frederics, E., Inc. (See Frederics, Ernest O., assignor.)
Frederics, Ernest O., assignor to E. Frederics, Inc., New York, N. Y. Hair treating device. 1,829,216; Oct. 27.
Freeman, Albert E., East Orange, and W. T. Livermore, Westfield, N. J., assignors to American Telephone and Telegraph Company. Multiple drive apparatus. 1,828,803; Oct. 27.
French, Guy M., Renfrew, Ontario, Canada. Door operating means. 1,829,513; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,415; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,416; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,417; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,418; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,419; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,420; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,421; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,422; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,423; Oct. 27.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 85,424; Oct. 27.
Freye, William H., Springfield, Ohio. Pickle tongs. 1,829,271; Oct. 27.
Freygang, Gustav G., Weehawken, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y. Supervisory system for detecting suspended matter in fluids. 1,828,894; Oct. 27.
Fried, Krupp Aktiengesellschaft. (See Breitling, Ernst, assignor.)
Fried. Krupp Aktiengesellschaft. (See Strauss, Benno, assignor.)
Frieland, Harry W., Newark, N. J. Combination foundation garment. 1,829,217; Oct. 27.
Frigid Fluid Company. (See Kaiser, Ernest, assignor.)
Frigidaire Corporation. (See Andrews, Frank W., assignor.)
Frigidaire Corporation. (See Arnolds, James C., assignor.)
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigidaire Corporation. (See Keighley, Lloyd M., assignor.)
Frigidaire Corporation. (See Keyes, Frederick G., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frigidaire Corporation. (See Miller, Ralph K., assignor.)
Frigidaire Corporation. (See Slagel, Franklin G., assignor.)
Friendly, Herbert M., deceased, Portland, Oreg.; M. S. Friendly and Central Trust Company of Illinois, executors. Telephone system. 1,828,964; Oct. 27.
Friendly, Milton S., et al., executors. (See Friendly, Herbert M.)
Frommeyer, James G., Cincinnati, Ohio. Stepladder. 1,829,346; Oct. 27.
Fruit Belt Preserving Cimpany. (See Wegner, Walter F., assignor.)
Frykman, August, Bottineau, N. Dak. Wheel aligning device. 1,829,133; Oct. 27.
Fuller, Frank A., and C. M. Moore, Erie, Pa., assignors to Bucyrus-Erie Company, South Milwaukee, Wis. Dipper trip. 1,828,965; Oct. 27.
Fuller, Ora F., South Bend, Ind. Recorder. 1,829,272; Oct. 27.
G. & G. Atlas Systems, Inc. (See Stoetzel, Joseph J., assignor.)
Gagen, Thomas H., assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio. Carton. 1,828,837; Oct. 27.
Galuten, Max. (See Kimbrig, L., and Galuten.)
Garric, André, Layrac, France. Agricultural machine. 1,828,773; Oct. 27.
Gas Refrigeration Corporation. (See Bruehl, Lawrence, assignor.)
Gas Research Company, The. (See Smith, Harry F., assignor.)
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Neutralizing system for radio transmitters. 1,829,273; Oct. 27.
Geer, Paul L. (See Morton, W. A., and Geer.)
Geiky, J. R., S. A. (See Richard, Bernhard, assignor.)
Gemex Company. (See Roy, Wilfrid J., assignor.)
Genenger, Richard, Aachen-Forst, Germany, assignor, by mesne assignments, to The American Bicheroux Company. Take off and leering conveyer for sheet glass forming machines. 1,829,134; Oct. 27.
General Aniline Works, Inc. (See Hentrich, W., Knoche, and Tietze, assignors.)
General Cable Corporation. (See Roux, Adrian P., assignor.)
General Electric Company. (See Davey, Wheeler P., assignor.)
General Electric Company. (See Jones, Benjamin W., assignor.)
General Electric Company. (See Morrill, Weston, assignor.)
General Electric Company. (See Rosenlocher, Otto, assignor.)
General Electric Company. (See Runner, Claude C., assignor.)
General Electric Company. (See Schwennker, Charles F., assignor.)
General Electric Company. (See Stansel, Numan R., assignor.)
General Electric Company. (See Ward, Montague W., assignor.)
General Electric Company. (See Wright, James G. E., assignor.)
General Motors Corporation. (See Le Jeune, Frank H., assignor.)
General Motors Research Corporation. (See Hutchinson, Roland V., assignor.)
General Motors Research Corporation. (See Summers, C. E., and Lee, assignors.)

Geophysical Petroleum Corporation. (See Blackburn, McMaster S., assignor.)
Georgas, John N., Gary, Ind. Painting apparatus. 1,829,589; Oct. 27.
Gercich, Frederick A., Oakland, and W. M. Berry, Los Angeles, assignors to Hammer-Bray Company, Oakland, Calif. Kindling burner installation. Re18,235; Oct. 27.
Geromanos, Hercules W., Boston, Mass. Spectra demonstrator. 1,829,001; Oct. 27.
Gerth, William H., New York, N. Y., assignor to Oneida Community Limited, Oneida, N. Y. Dish or similar article. Des. 85,426; Oct. 27.
Gesellschaft für Drahtlose Telegraphie M. b. H. (See Osnos, Mendel, assignor.)
Gesellschaft für Drahtlose Telegraphie M. b. H. (See Tod, Erich, assignor.)
Gesellschaft für Drahtlose Telegraphie M. b. H. (See von Arco, Georg, assignor.)
Gesteiner, D., Limited. (See de Waele, Armand, assignor.)
Ghiselli, Guido, San Francisco, Calif. Tractor attachment. 1,828,929; Oct. 27.
Giard, Napoleon, Rougemont, Quebec, Canada. Table. 1,829,590; Oct. 27.
Gibbens, Emma R., Godfrey, Ill., assignor to Paas Dye Company, Newark, N. J. Method of and preparation for coloring eggs and the like. 1,829,645; Oct. 27.
Giglia, Ernesto F., Scarsdale, and L. F. Pelletier, East Bronx, assignors of one-fourth to W. W. Irwin, New York and one-fourth to V. von Schlegell, White Plains, N. Y. Carburetor. 1,828,889; Oct. 27.
Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)
Gilbert, Alfred C., North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn. Construction toy element. Des. 85,427; Oct. 27.
Gilbert, Alfred C., North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn. Construction toy element. Des. 85,428; Oct. 27.
Gilbert, Alfred C., North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn. Construction toy element. Des. 85,429; Oct. 27.
Gilliam, James D., London, England, assignor to British-American Tobacco Company, Limited, New York, N. Y. Cigarette and making same. 1,829,559; Oct. 27.
Gillogly, John M., Orange, Calif. Ball shaper for nurserymen. 1,829,002; Oct. 27.
Gilmont Products Corporation. (See Hopkins, Nevil M., assignor.)
Gilroy, Myles J., Wilkinsburg, Pa. Patient's transfer carriage. 1,829,274; Oct. 27.
Ginn and Company. (See Morss, E. L., Buckwell, and Smith, assignors.)
Givone, William, East Paterson, and H. Jahn, Garfield, N. J. Playing card holder. 1,828,735; Oct. 27.
Gleason Works. (See Carlsen, Leonard O., assignor.)
Gleichmann, Hans, Falkenhain, near Spandau, and W. Gumz, Berlin-Charlottenburg, assignors to Siemens-Schuckertwerke, Gesellschaft mit beschrankter Haftung in Liquidation, Berlin-Siemensstadt, Germany. Automatic stoker for circular grates. 1,829,275; Oct. 27.
Glover, W. T., and Company Limited. (See Beaver, Charles J., assignor.)
Gobereau, Robert R., and L. E. Maujole, Paris, France. Propeller. 1,829,443; Oct. 27.
Goddard, Charles F., Denver, Colo., assignor to The Automobile Storage Elevator Company, Denver, Colo. Road file. 1,829,591; Oct. 27.
Godward, Ernest R., New York, N. Y. Exhaust manifold for internal combustion engines. 1,828,774; Oct. 27.
Goebel, Clayton J., and C. Bartels, assignors to The Mosier Safe Company, Hamilton, Ohio. Dial cover. 1,829,444; Oct. 27.
Goerz, C. P., optische anstalt Aktiengesellschaft Akciova Spolecnost K. P. Goerz opticky ustav. (See Schier, Johann, assignor.)
Goldberg, Rudolf. (See Archangelsky, A., and Goldberg.)
Goodman, Leo A., New York, N. Y. Treating fibrous material. 1,829,702; Oct. 27.
Goodrich, B. F., Company, The. (See Schade, James W., assignor.)
Goodrich, B. F., Company, The. (See Wilson, George F., assignor.)
Goodrich, B. F., Company, The. (See Zimmerli, W. F., and Semon, assignors.)
Goss Printing Press Company. (See Brueshaber, Martin W., assignor.)
Goss Printing Press Company. (See Schroeder, Hans C., assignors.)
Goss Printing Press Company, The. (See Smith, Ernest J., assignor.)
Gould, Harry G., Oshkosh, Wis. Rocking toy. Des. 85,430; Oct. 27.
Gould, Harry G., Oshkosh, Wis. Rocking toy. Des. 85,431; Oct. 27.
Grady, Charles H. (See Bahner, C., and Grady.)
Graham, Matthew P. (See Crawford, F. C., and Graham.)
Grand Rapids Brass Company. (See Ekman, Andrew, assignor.)
Grant, John. (See Raymond, Edward F., assignor.)
Grasham, Anderson C., assignor of one-half to G. D. Smith, Burlington, N. C. Supporting means for hosiery, etc. 1,829,086; Oct. 27.
Gray, Ralph B., Chicago, Ill. Windshield wiping mechanism. 1,829,396; Oct. 27.
Greene, John S., and A. W. Caps, Rochester, N. Y., assignors to Photostat Corporation, Providence, R. I. Photographic apparatus. 1,829,347; Oct. 27.
Griffith, Earl G., Glendale, Calif. Conveyer control. 1,829,087; Oct. 27.
Grossman, Jacob J., and J. J. Steinbarter, New York, assignor to Cable Radio Tube Corporation, Brooklyn, N. Y. Snap switch. 1,829,514; Oct. 27.
Grozi, Wesely, Indianapolis, Ind. Combination square and protractor. 1,828,930; Oct. 27.
Gubelmann, Ivan, and C. O. Henke, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. Organic ester and making the same. 1,829,480; Oct. 27.
Gubelmann, Ivan, and C. O. Henke, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. Preparing an ester. 1,829,481; Oct. 27.
Gubler, Hans, and G. de Montmollin, Basel, and J. Spieler, Laufen, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Metalliferous azodyestuffs and making same. 1,829,646; Oct. 27.
Gulliford, Archibald T., administrator. (See Gulliford, Nicholas L.)
Gulliford, Nicholas L., deceased, Peabody; A. T. Gulliford, administrator, assignor to Gulliford Wood Heel Company, Lynn, Mass. Machine for forming heel blocks. 1,829,711; Oct. 27.
Gulliford Wood Heel Company. (See Gulliford, Nicholas L., assignor.)
Gulliford Wood Heel Company. (See Taft, Sydney E., assignor.)
Gumz, Wilhelm. (See Gleichmann, H., and Gumz.)
Gustafson, Carl A., assignor, by mesne assignments, to Pioneer Gravel Equipment Manufacturing Company, Minneapolis, Minn. Screening apparatus. 1,829,348; Oct. 27.
Gustafson, Henry A., Dorchester, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Closure holding device. 1,829,135; Oct. 27.
Guthmuller, George L., assignor of one-third to F. R. Fullmer, River Vale, and one-third to E. P. Follmer, Jersey City Heights, N. J. Device for controlling the gasoline supply to internal combustion engines. 1,829,276; Oct. 27.
Gutiérrez, Manuel S. (See Zubia, J. D., and Gutiérrez.)
Haase, Frederick A., and A. H. Wewerka, Baltimore, Md. Gasoline reserve supply device. 1,829,277; Oct. 27.
Hackett, Robert W., Kirklyn, and A. G. Worrall, Wyncote, Pa., assignors to L. J. Kolb, Philadelphia, Pa., trading as Safetee Glass Company. Making the border seal of laminated glass. 1,829,647; Oct. 27.
Hadley, Robert M., et al. (See Cook, Harry, assignor.)
Haering, Norbert G., Cincinnati, Ohio, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Electric receptacle baffle. 1,829,648; Oct. 27.
Hagan, George J., Company. (See Dauch, A. D., and Sandberg, assignors.)
Hair, Joseph L. (See Smithson, W. D., and Hair.)
Halberg, Harry L. (See Halberg, Samuel and H. L.)
Halberg, Samuel, and H. L., New York, N. Y. Sewing machine attachment. 1,828,966; Oct. 27.
Hale, Willis W., Cleveland, Ohio. Weiner steamer. 1,829,088; Oct. 27.
Hall, Herbert E., Rumford, Me. Mixer. 1,829,089; Oct. 27.
Hallerberg, Theodore W., assignor to Lubrication Devices, Incorporated, Battle Creek, Mich. Pump for lubricating systems and the like. 1,829,042; Oct. 27.
Halley, Elton P., Sanderson, Tex. Key ring retainer. 1,829,136; Oct. 27.
Halliburton, Erle P. (See Hollingsworth, Homer J., assignor.)
Hamilton Beach Manufacturing Company. (See Flegel, Harrison D., assignor.)
Hamilton, William L., Bangor, Mich. Sprayer. 1,829,043; Oct. 27.
Hammer-Bray Company. (See Gercich, F. A., and Berry, assignors.)
Hampton, John C., Ardmore, and E. D. Shell, Healdton, Okla. Apparatus for testing oil sands. 1,828,838; Oct. 27.
Hanley, John A., Irvington, N. J., assignor, by mesne assignments, to Schick Dry Shaver, Inc., Stamford, Conn. Electric motor. 1,828,895; Oct. 27.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Chuck for broaching steel. 1,828,862; Oct. 27.
Hanson, Albert J. (See Juthe, K. A., and Hanson.)
Harnischfeger Corporation. (See Mitchell, H. L., and Ljungkull, assignors.)
Harp, Charles, Barnesville, Ohio. Vanity case. 1,828,863; Oct. 27.
Harps, James A., Greenfield, Ohio. Container or the like. 1,829,003; Oct. 27.
Harris, Carl C., Orange, Mass. Swimming float. 1,829,090; Oct. 27.
Harris, Carl C., Orange, Mass. Bathing float. 1,829,137; Oct. 27.
Harris, Henry H., Detroit, Mich. Metal concrete for hearth plates and the like. 1,829,218; Oct. 27.
Harris, Howard C., Akron, Ohio. Pivotal connection. 1,829,720; Oct. 27.
Harrison Radiator Corporation. (See Saunders, Laurence P., assignor.)

Harrison, Thomas R., assignor to The Brown Instrument Company, Philadelphia, Pa. Electrical gas analyzing apparatus. 1,829,649; Oct. 27.
Hart, Lester C., Cleveland, Ohio, assignor to Hi-Voltage Equipment Company. Switch. 1,829,349; Oct. 27.
Harvey, Carl L. (See Frayer, L. A., and Harvey.)
Harvey, Norman D., jr., Pittsburgh, Pa., assignor to Carbide & Carbon Chemicals Corporation. Degumming silk. 1,828,736; Oct. 27.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,829,138; Oct. 27.
Hasse, Frank C., La Grange, assignor to The Oxweld Railroad Service Company, Chicago, Ill. Blowpipe apparatus. 1,829,592; Oct. 27.
Hatch, Mellen C. M., Boston, Mass., assignor to The Standard Stoker Company, Incorporated. Locomotive. 1,829,044; Oct. 27.
Hauber, Alfred R., Cleveland, Ohio. Convertible vehicle seat. 1,828,931; Oct. 27.
Hauser, Henry F. (See Kaplan, A. W., and Hauser.)
Haveaux, Emile, Valenciennes, assignor to Societe d'Electricite de la Region de Valenciennes-Anzin, Paris, France. Pulverized fuel furnace and operating the same. 1,829,445; Oct. 27.
Hawie, Michael, Greens Farms, Conn. Buckle. 1,829,278; Oct. 27.
Hawie, Michael, Greens Farms, Conn. Buckle. 1,829,279; Oct. 27.
Hawke, Clarence E., Metuchen, N. J., assignor to The Carborundum Company, Niagara Falls, N. Y. Furnace and operating the same. 1,828,839; Oct. 27.
Hayden, Arthur C., Brockton, Mass. Motion picture projector. 1,829,482; Oct. 27.
Hazeltine Corporation. (See Pressley, Jackson H., assignor.)
Healy, Francis D., Newark, N. J. Flying machine. 1,829,350; Oct. 27.
Heames, Richard M., Grosse Pointe, Mich. Forming blanks. 1,829,397; Oct. 27.
Heames, Richard M., Grosse Pointe, and B. W. Lindquist, Detroit, Mich. Apparatus for heading blanks. 1,829,351; Oct. 27.
Heames, Richard M., Grosse Pointe, and H. Stark, Detroit, Mich. Heating device. 1,829,352; Oct. 27.
Heberlein Patent Corporation. (See Fisch, Jacob, assignor.)
Hegg, Edward C., Buffalo, N. Y., assignor to Mojonnier Bros. Co. Wrapping machine paper feed mechanism. 1,829,515; Oct. 27.
Heiber, William G., Rochester, N. Y. Child's shoe. Des. 85,432; Oct. 27.
Heider, Henry J., Carroll, Iowa. Wagon tongue hound. 1,829,091; Oct. 27.
Heider, Henry J., Carroll, Iowa. Vehicle tongue coupling. 1,829,092; Oct. 27.
Heina, William M., Long Island City, N. Y., assignor, by mesne assignments, to Transitone Automobile Radio Corporation, Philadelphia, Pa. Portable radio apparatus. 1,829,219; Oct. 27.
Heinitz, Woldemar, Chemnitz, assignor to Schubert & Salzer Maschinenfabrik, Aktiengesellschaft, Chemnitz, Germany. Knitting hosiery on flat knitting machines. 1,829,650; Oct. 27.
Heller Brothers Company. (See Anheuser, Ernest A., assignor.)
Hem, Halvor O., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing and counting scale. 1,829,516; Oct. 27.
Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Knitted fabric. Des. 85,453; Oct. 27.
Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Knitted fabric. Des. 85,454; Oct. 27.
Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Knitted fabric. Des. 85,455; Oct. 27.
Hemphill, Manley P., Los Angeles, Calif. Vehicle spring. 1,829,280; Oct. 27.
Henderson, Ellis W., Charlotte, N. C. Assembling machine. 1,829,651; Oct. 27.
Henderson, Hiram L., Syracuse, N. Y. Dry kiln. 1,829,139; Oct. 27.
Henke, Clyde O. (See Gubelmann, I., and Henke.)
Henley, Dennie B., Yakima, Wash. Packing stand. 1,829,281; Oct. 27.
Henning, Malcolm E., assignor to Penn Electric Switch Co., Des Moines, Iowa. Compressor control structure. 1,829,593; Oct. 27.
Hentrich, Winfrid, Wiesdorf-on-the-Rhine, R. Knoche, Leverkusen-on-the-Rhine, and E. Tietze, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Monoazodyestuffs. 1,828,737; Oct. 27.
Hercules Powder Company. (See Stoops, Buren I., assignor.)
Herman, Joseph, Westfield, N. J., assignor to American Telephone and Telegraph Company. Measuring distortion of telegraph signals. 1,829,185; Oct. 27.
Herman-Nelson Corporation, The. (See Shurtleff, Wilfred, assignor.)
Hershey, Orville S., Waukegan, assignor to Oakes Products Corporation, North Chicago, Ill. Indicator. 1,828,896; Oct. 27.
Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Operation of pressure stills. 1,829,220; Oct. 27.
Hess, Otto, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Synchronizing means for time measuring mechanism. 1,829,398; Oct. 27.
Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Check valve. 1,828,967; Oct. 27.
Hibbert, Ernest, Goulburn, New South Wales, assignor to The Pioneer Cell Tyre Company Limited, Sydney, New South Wales, Australia. Pneumatic tire. 1,829,483; Oct. 27.
Hilger, George, Chicago, Ill. Automatic valve. 1,829,517; Oct. 27.
Hill, Ada A., Cleveland, Ohio. Attachment for trucks. 1,829,652; Oct. 27.
Hill, C. W., Printing Company. (See Kimble, Charles H., jr., assignor.)
Hiller, Stanley, Oakland, Calif., and A. E. Ozouf, Chicago, Ill. Screw press. 1,828,968; Oct. 27.
Hinde & Dauch Paper Company, The. (See Gagen, Thomas H., assignor.)
Hinlein, J. H., & Sons. (See Hinlein, Stanley H., assignor.)
Hinlein, Stanley H., Elkins Park, assignor to J. H. Hinlein & Sons, Philadelphia, Pa. Chenille yarn. 1,829,446; Oct. 27.
Hitchman, Albert, Butler, Ohio. Store service apparatus. 1,829,140; Oct. 27.
Hi-Voltage Equipment Company. (See Hart, Lester C., assignor.)
Hixon, James F., Los Angeles, Calif. Cigar and cigarette holder. 1,829,141; Oct. 27.
Hockman, Jacob. (See Rosenberg, S., and Hochman.)
Hochman, Julius C. (See Samburg M., and Hochman.)
Hoe, R., & Co. (See Ball, H. V., and Horton, assignors.)
Hoe, R. & Co. (See Horton, Albert J., assignor.)
Hoefer, Herman W., Watervliet, N. Y. Wall construction. 1,828,969; Oct. 27.
Hoffman, Hellmut. (See Schulz, W., and Hoffman.)
Hogan, George F., Chicago, Ill. Support for liquid receptacles. 1,829,353; Oct. 27.
Hollingsworth, Homer J., Long Beach, assignor to E. P. Halliburton, Los Angeles, Calif. Traveling block and system. 1,828,897; Oct. 27.
Hollins, Frederick E., Winchester, Mass. Golf bag and attachment therefor. 1,829,093; Oct. 27.
Holmberg, Albert W. (See Watkins, P. H., and Holmberg.)
Hood, Robert D., Sausalito, Calif. Mortar spreader. 1,828,738; Oct. 27.
Hood Rubber Company. (See Foster, Edward E., assignor.)
Hood Rubber Company. (See Fowler, Fred D., assignor.)
Hoover Company, The. (See Ballou, Harry R., assignor.)
Hoover Company, The. (See Smellie, D. G., White, and Nulsen, assignors.)
Hoover Company, The. (See Studer, Clair W., assignor.)
Hoover, Ray, North Plainfield, N. J., and R. F. Dirkes, Jamaica, assignors to The Western Union Telegraph Company, New York, N. Y. Sending alternating currents to multiplex lines. 1,829,653; Oct. 27.
Hopkins, Marion, administrator. (See Allerton, Samuel E.)
Hopkins, Nevil M., New York, N. Y., assignor, by mesne assignments, to Gilmont Products Corporation. Filling bicompartment collapsible tubes. 1,828,864; Oct. 27.
Hopkins, Nevil M., New York, N. Y., assignor, by mesne assignments, to Gilmont Products Corporation. Apparatus for filling multicompartment containers. 1,828,865; Oct. 27.
Hopkins, Richard M., Rutherford, assignor to American District Telegraph Company, Jersey City, N. J. Alarm system and cumulative control device therefor. 1,829,721; Oct. 27.
Hopper, William, Old Kilpatrick, Scotland, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine frame. Des. 85,433; Oct. 27.
Hopper, William, Old Kilpatrick, Scotland, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Decalcomania transfer sheet. Des. 85,434; Oct. 27.
Hopper, William, Old Kirkpatrick, Scotland, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine frame. Des. 85,435; Oct. 27.
Horton, Albert J. (See Ball, H. V., and Horton.)
Horton, Albert J., White Plains, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y. Web roll changer. 1,829,719; Oct. 27.
Horton, Ralph D., Gregory, S. Dak. Mirror bracket. 1,828,804; Oct. 27.
Houde, Victor F., Winnipeg, Manitoba, assignor of one-half to F. R. La Fleche, Headingly, Manitoba, Canada. Insulator. 1,829,354; Oct. 27.
Hough Shade Corporation. (See Steffen, Leroy J., assignor.)
Houghton, Vernon T., Bronxville, N. Y., assignor to Lektophone Corporation, Jersey City, N. J. Acoustic diaphragm. 1,829,355; Oct. 27.
Howard, Stanley R., East Milton, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Printing press. 1,829,004; Oct. 27.

Hudson, Richard J. H., London, England. Collapsible hull for light boats, floats for aircraft and the like. 1,828,805; Oct. 27.
Huebner-Bleistein Patents Company. (See Huebner, William C., assignor.)
Huebner, William C., Chicago, Ill., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y. Plate holder for photographic printing machines. 1,828,739; Oct. 27.
Huffman, Mervin C., Claremont, N. H., assignor to Sullivan Machinery Company. Rock drill. 1,829,654; Oct. 27.
Hugershoff, Reinhard, Dresden, Germany, assignor to the firm Ikarus Internationale Patentverwertungs-Aktien-Gesellschaft, Vaduz, Liechtenstein. Device for continuously recording the path of flight of aircraft. 1,829,594; Oct. 27.
Hughes, George W., Monessen, Pa. Tuyère. 1,829,356; Oct. 27.
Huguenin, Albert, Paris, France. Apparatus for distant hydraulic control. 1,829,655; Oct. 27.
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,399; Oct. 27.
Humason, Granville A., Houston, assignor of one-half to J. A. Logan, Harris County, Tex. Sample taking apparatus. 1,828,775; Oct. 27.
Hunt, Andrew M. (See Roesch, F. P., and Hunt.)
Huntley, George J., Baltimore, Md., assignor to Crown Cork & Seal Company, New York, N. Y. Water cooler. 1,828,970; Oct. 27.
Huntoon, Cullen L., Los Angeles, Calif. Rubber band cushion shoe sole press. 1,829,221; Oct. 27.
Huntress, Ernest H. (See Davis, T. L., and Huntress.)
Hurd, Norman B., assignor to The American Hardware Corporation, New Britain, Conn. Lock. 1,829,713; Oct. 27.
Hutchinson, Roland V., Lansing, assignor to General Motors Research Corporation, Detroit, Mich. Supercharger. 1,829,400; Oct. 27.
Hutton, Arthur R., assignor to California Corrugated Culvert Co., Berkeley, Calif. Drain culvert. 1,828,866; Oct. 27.
Hyde, Harold G., Masury, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Constant current regulator. 1,829,484; Oct. 27.
Hyden, Carl, Dayton, Ohio. Aerial camera mount. 1,829,142; Oct. 27.
Hynes, Dibrell P. (See Mears, N. A., and Hynes.)
Hynes, Dibrell P., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,829,447; Oct. 27.
I. G. Farbenindustrie Aktiengesellschaft. (See Weise, P., and Specht, assignors.)
Igou, Dennis T. (See Stover, Frank E., assignor.)
Ikarus Internationale Patentverwertungs-Aktien-Gesellschaft. (See Hugershoff, Reinhard, assignor.)
Illinois Tool Works. (See Olson, Carl G., assignor.)
Ingalls, Willis A., Syracuse, N. Y. Knitting machine. 1,829,094; Oct. 27.
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Ingersoll-Rand Company. (See Smith, William A., jr., assignor.)
Ingersoll-Rand Company. (See Smith, W. A., sr., and W. A., jr., assignors.)
International Motor Company. (See Jupp, W. B., and Queeney, assignors.)
International Nickel Company, The. (See Shoffstall, A. S., Mudge, Bagsar, and Bieber, assignors.)
International Projector Corporation. (See Dina, Augusto, assignor.)
Intertype Corporation. (See Sperry, Samuel E., assignor.)
Intertype Corporation. (See Willis, Le Roy W., assignor.)
Iron Fireman Manufacturing Company. (See Parker, Cyrus J., assignor.)
Irwin, Eugene F., Medford, Mass. Daily plan book. 1,829,232; Oct. 27.
Irwin, Walter W., et al. (See Ciglia, E. F., and Pelletier, assignors.)
Isbills, William L., Westfield, N. J. Method and apparatus for projecting multicolor rays. 1,828,971; Oct. 27.
Jackson, Paul F., assignor to The Radio Products Company, Dayton, Ohio. Tube testing device. 1,829,448; Oct. 27.
Jacobs, Joseph, Bridgeport, Conn., assignor to The A. J. Donahue Corporation. Suspenders. 1,829,518; Oct. 27.
Jagschitz, Konrad, Mainz, Germany, and P. M. Kuehn, Baltimore, Md., assignors of one-half to Maschinenfabrik Augsburg-Nurnberg, A. G., Nuremberg, Germany, and one-half to The Bartlett Hayward Company, Baltimore, Md. Gasometer. 1,829,519; Oct. 27.
Jahn, Herbert. (See Givone, W., and Jahn.)
Jansson, Gustav E., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and condenser. 1,828,840; Oct. 27.
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Scanning device. 1,828,867; Oct. 27.
Jenkins, David E. (See Corrigan, M. C., and Jenkins.)
Jenkins Laboratories. (See Jenkins, Charles F., assignor.)
Jenkins Television Corporation. (See Nason, Charles H. W., assignor.)
Jensen, Gustav B., assignor to Vadsco Sales Corporation, New York, N. Y. Toilet accessory container. Des. 85,436; Oct. 27.
Jette, David K., Midskog, Sweden. Flying machine. 1,829,595; Oct. 27.
Johnson, Alvin L., Worcester, Mass., assignor to Walker Manufacturing Company, Racine, Wis. Lifting jack. 1,829,656; Oct. 27.
Johnson, Luther. (See Pierson, Charles U., assignor.)
Joint Manfg. Co. (See Wambsgans, William H., assignor.)
Jones, Allan H., assignor to Roller Bearing Company of America, Trenton, N. J. Securing element. 1,829,657; Oct. 27.
Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Motor control. 1,829,658; Oct. 27.
Jones, La Verne R., Oneida, N. Y. Direction indicator for aeroplane fields. Des. 85,437; Oct. 27.
Jordan, James R., South Bend, Ind. Conduit tractor. 1,829,143; Oct. 27.
Jordan, Roscoe E. (See Spikes, Richard B., assignor.)
Jupp, William B., New York, N. Y., and F. E. Queeney, Teaneck, N. J., assignors to International Motor Company, New York, N. Y. Manual control of electric transmissions for gas electric drives. 1,829,222; Oct. 27.
Juthe, Kristian A., Newton, and A. J. Hanson, Arlington, assignors to American Electric Furnace Company, Boston, Mass. Apparatus for supplying heated oil. 1,829,186; Oct. 27.
Kaempfer, Wilhelm. (See Nagel, O., and Kaempfer.)
Kail, Charles E., assignor to A & J Manufacturing Company, Binghamton, N. Y. Egg beater. 1,828,932; Oct. 27.
Kaiser, Ernest, assignor to Frigid Fluid Company, Chicago, Ill. Aspirating and embalming device. 1,829,144; Oct. 27.
Kalbach, Morgan D., Silver Spring, Md. Table desk. 1,829,449; Oct. 27.
Käli-Chemie Aktiengesellschaft. (See Rüsberg, F., and Schmid, assignors.)
Kalk, Albert C. (See Page, C. B., and Kalk.)
Kalnitz, Joseph, Buffalo, N. Y. Folding box. 1,829,005; Oct. 27.
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Air cleaner. 1,829,401; Oct. 27.
Kanla, Rudolph, assignor of fifty per cent to A. Urayasz, Bowers Hill, Va. Sanitary cooking vessel. 1,828,806; Oct. 27.
Kantenwein, Oscar E., Oak Park, Ill., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Dump car. 1,829,560; Oct. 27.
Kaplan, Arthur W., and H. F. Hauser, assignors to Ace Humidifying Ventilating and Sheet Metal Works, Minneapolis, Minn. Humidifying-radiator unit. 1,829,520; Oct. 27.
Kaptuller, Alexander F. (See Nixon, Moses C., and Kaptuller.)
Karitzky, John, assignor to H. B. Newhall Corporation, Garwood, N. J. Spring toggle. 1,829,357; Oct. 27.
Karpati, Nandor. (See Lality, G., and Karpati.)
Karron, David, Brooklyn, N. Y. Ornamental trim for hand bags and similar articles. 1,829,145; Oct. 27.
Katzman, Aaron, and L. Katzman, Brooklyn, N. Y. Mirror door. 1,829,521; Oct. 27.
Katzman, Louis. (See Katzman, Aaron and L.)
Kautzky, Joe, jr., Fort Dodge, Iowa. Free-spool fishing reel. 1,829,006; Oct. 27.
Kearney, James R., Corporation. (See Bay, Charles A., assignor.)
Kearns, John, et al. (See Best, A. E., and Zook, assignors.)
Keffo, Albert F., Muscatine, Iowa. Tubular saw. 1,829,659; Oct. 27.
Kégresse, Adolphe, Courbevoie, France. Shock absorbing roll for motor vehicles. 1,828,933; Oct. 27.
Keighley, Lloyd M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,402; Oct. 27.
Kellner, Alexis, Berlin, Germany. Top structure for vehicles. 1,829,146; Oct. 27.
Kellogg Switchboard and Supply Company. (See Stazak, Michael R., assignor.)
Kellogg Switchboard and Supply Company. (See Willet, George R., assignor.)
Kelsey-Hayes Wheel Corporation. (See White, John W., assignor.)
Kennedy, Robert E., Los Angeles, Calif. Compass course and ground speed indicator. 1,828,807; Oct. 27.
Kent, Arthur A., Ardmore, and R. T. Kingsford, Wyncote, Pa.; said Kingsford assignor to said A. A. Kent. Radio speaker. 1,829,007; Oct. 27.
Kern, Herbert A., Hinsdale, and G. J. Fink, Oak Park, assignors to National Aluminate Corporation, Chicago, Ill. Detergents and in washing. 1,829,522; Oct. 27.
Kerngood, Allen H., assignor to Alma Manufacturing Company, Baltimore, Md. Buckle with loop and lock. 1,829,223; Oct. 27.
Kessler, Charles L., assignor to Barber-Colman Company, Rockford, Ill. Adjustable reamer. 1,829,485; Oct. 27.
Keyes, Frederick G., Cambridge, Mass., assignor, by mesne assignments, to Frigidaire Corporation. Electrical control system for refrigeration. 1,829,403; Oct. 27.
Kidde, Walter & Company. (See Freygang, Gustav G., assignor.)

Kimble, Charles H., jr., assignor to C. W. Hill Printing Company, Spokane, Wash. Changeable exhibitor. 1,828,808; Oct. 27.

Kimbrig, Louis, Brooklyn, and M. Galuten, New York, N. Y. Hat and coat holder. 1,829,486; Oct. 27.

King, Harold A., Birmingham, Mich. Closure for pedal shank openings. 1,828,868; Oct. 27.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,828,776; Oct. 27.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,404; Oct. 27.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,405; Oct. 27.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,406; Oct. 27.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,407; Oct. 27.

King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,829,408; Oct. 27.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,410; Oct. 27.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,411; Oct. 27.

King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,829,412; Oct. 27.

King, Walter G., and M. E. Krause, Chicago, Ill. Film reel. 1,829,095; Oct. 27.

Kingsford, Russell T. (See Kent, A. A., and Kingsford.)

Kingsley, Charles B., Clairton, Pa., assignor to Mississippi Glass Company. Method and apparatus for producing sheet glass. 1,829,409; Oct. 27.

Kingsley, Henry M., Indianapolis, Ind., assignor, by mesne assignments, to Automotive Development Corporation, Dover, Del. Four wheel drive vehicle construction. 1,828,841; Oct. 27.

Kintner, Alcuin E., Painesville, Ohio. Railroad track and railroad truck. 1,829,358; Oct. 27.

Kip, Frederic E., Montclair, N. J. Golf cup. 1,829,283; Oct. 27.

Kirby, Charles H., assignor to Marvel Carbureter Company, Flint, Mich. Carburetion system. 1,828,899; Oct. 27.

Kirchhoff, William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Sifter structure. 1,829,707; Oct. 27.

Kircof, Charles H. (See Schilling, F., and Kircof.)

Kirsch, Charles W., assignor to Kirsch Company, Sturgis, Mich. Coupling or splicing devices for curtain poles and ornaments therefor. 1,829,147; Oct. 27.

Kirsch Company. (See Kirsch, Charles W., assignor.)

Kirschbraun, Lester, Leonia, and F. C. Overbury, Hillsdale, N. J., said Overbury assignor of his entire right to The Flintkote Company, Boston, Mass. Process of making aqueous bituminous emulsions. 1,829,722; Oct. 27.

Kittredge, Rufus W., Chicago, Ill. Picture projecting machine cabinet. 1,829,359; Oct. 27.

Kitzmiller, Charles A., Oakland, Calif. Slipping box for hounds. 1,829,224; Oct. 27.

Kleinert, I. B., Rubber Company. (See Mergentime, Charles B., assignor.)

Kline, Edward C., Streator, Ill. Boiler. 1,829,148; Oct. 27.

Knickerbocker Stamping Company. (See Lange, George, assignor.)

Knight, Samuel H., Lancaster, Pa., assignor to Follmer, Clogg & Co. Automatically opening parachute. 1,829,561; Oct. 27.

Knoche, Rudolf. (See Hentrich, W., Knoche, and Tietze.)

Knopp, Gumal, Berlin-Wilmersdorf, Germany. Machine for manufacturing multiple course papers, cardboards, and the like. 1,829,660; Oct. 27.

Kobe, Inc. (See Coberly, Clarence J., assignor.)

Koblwey, Irvin J., assignor to Phoenix Hosiery Company, Milwaukee, Wis. Transfer printing machine. 1,829,562; Oct. 27.

Kolb, Louis J. (See Hackett, R. W., and Worrall, assignors.)

Kouyoumjian, Haroutiun K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,828,900; Oct. 27.

Kozlay, Clarence V., New York, N. Y. Rigging for sailboats. 1,829,413; Oct. 27.

Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Compensating device and compensating. 1,829,225; Oct. 27.

Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Power conversion means for radio apparatus. 1,829,226; Oct. 27.

Kramer, George, assignor to M. S. Kramer, New York, N. Y. Lubricating apparatus for automobiles and the like. 1,828,934; Oct. 27.

Kramer, Gustav A., Concord, assignor to Shell Development Company, San Francisco, Calif. Refrigerating system. 1,829,096; Oct. 27.

Kramer, Marie S. (See Kramer, George, assignor.)

Krause, Max E. (See King, W. G., and Krause.)

Krautzberger, Albert, Holzhausen, near Leipzig, Germany. Spraying or squirting process and apparatus therefor. 1,829,661; Oct. 27.

Krenzke, William F., assignor to Walker Manufacturing Company, Racine, Wis. Lifting jack. 1,829,662; Oct. 27.

Kroger, Fred H., Ridgewood, N. J., assignor to Radio Corporation of America. Preventing interference. 1,829,523; Oct. 27.

Kruse, Otto V., St. Davids, and C. W. Larner, Philadelphia, Pa., assignors to I. P. Morris & De La Vergne, Incorporated. Intake pipe and valve. 1,829,704; Oct. 27.

Kuehn, Paul M. (See Jagschitz, K., and Kuehn.)

Kurek, John J., deceased, South Bend, Ind.; F. Wisniewski, administrator of said J. J. Kurek. Brake. 1,829,487; Oct. 27.

Laboratoires Sevigne-Pearl. (See Pearl, Azariah Y., assignor.)

La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Vehicle wheel. 1,828,972; Oct. 27.

Lach, Joseph S., Bridgeport, Conn. Internal radial multiple spindle drilling machine. 1,829,045; Oct. 27.

La Fleche, Ferdinand R. (See Houde, Victor F., assignor.)

Lality, Georg, and N. Karpati, Budapest, Hungary. Lock. 1,829,596; Oct. 27.

Lambert, Joseph E., New York, N. Y. Card stand or holder. 1,829,360; Oct. 27.

Landis & Gyr, A.-G. (See Hess, Otto, assignor.)

Landis & Gyr, A.-G. (See Mettler, Josef, assignor.)

Landis & Gyr, A.-G.) (See Pudelko, R., and Moos, assignors.)

Landis, Hugh G., Los Angeles, Calif. Electric heater. 1,828,809; Oct. 27.

Landis, Hugh G., Los Angeles, Calif. Electric wall heater. 1,828,810; Oct. 27.

Lane, Richard D., assignor to The F. A. Nelder Company, Augusta, Ky. Pronged tufting button. 1,829,361; Oct. 27.

Lang, Richard T., Weehawken, N. J., assignor to American Voith Contact Company, Incorporated, New York, N. Y. Conveying device for paper pulp. 1,829,563, Oct. 27.

Lange, George, New York, N. Y., assignor to Knickerbocker Stamping Company, Parkersburg, W. Va. Coupler for ice manufacturing apparatus. 1,828,811; Oct. 27.

Lanning, Howard H., Topeka, Kans. Fire door. 1,829,008; Oct. 27.

Lapkin, Harry D., San Francisco, Calif. Hot water bottle thermometer. 1,829,414; Oct. 27.

Larner, Chester W., Philadelphia, Pa. Valve. 1,829,703; Oct. 27.

Larner, Chester W. (See Kruse, O. V., and Larner.)

Larson, Gustaf, Hollywood, assignor to Los Angeles Brick Company, Los Angeles, Calif. Tile-shaping and trimming machine. 1,828,869; Oct. 27.

Laskin, Benjamin, Philadelphia, Pa. Splice for elastic webbing. 1,828,812; Oct. 27.

Lautrup, George W., Yonkers, N. Y., and G. N. Crabbe, Cresskill, assignors to Otis Elevator Company, Jersey City, N. J. Elevator control system. 1,829,524; Oct. 27.

Lava Crucible Company of Pittsburgh. (See White, Harold E., assignor.)

Lawson, Alden B., Baltimore, Md. Air pressure water system for passenger cars. 1,829,450; Oct. 27.

Lazier, Wilbur A., Elmhurst, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Catalytic process of hydrogenating and dehydrogenating carbon compounds. 1,829,046; Oct. 27.

Lebby, States L., Corning, N. Y. Determining headlight adjustments. 1,829,097; Oct. 27.

Lederer, Jac., Inc. (See Lederer, Samuel F., assignor.)

Lederer, Samuel F., assignor to Jac. Lederer, Inc., Chicago, Ill. Lunch room stool. 1,829,564; Oct. 27.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Windbreak and securing means therefor. 1,829,597; Oct. 27.

Lee, Charles A., jr., Westport, Conn., assignor to Doherty Research Company, New York, N. Y. Air lock method of increasing tunnel capacities. 1,829,525; Oct. 27.

Lee Engineering Research Corporation. (See Lee, Royal., assignor.)

Lee, Roger K. (See Summers, C. E., and Lee).

Lee, Roger K., assignor to Chrysler Corporation, Highland Park, Mich. Engine mounting. Re18,236; Oct. 27.

Lee, Royal, assignor to Lee Engineering Research Corporation, Milwaukee, Wis. Ore concentration. 1,829,565; Oct. 27.

Legge, Peter S., Pompton Lakes, N. J. Tool for cutting stone. 1,828,740; Oct. 27.

Lehmann, Paul H., Dallas, Tex. Air extractor and tube repairing tool. 1,828,813; Oct. 27.

Leister, Grover D., San Francisco, Calif. Portable gin pole structure. 1,828,973; Oct. 27.

Le Jeune, Frank H., Jackson, assignor to General Motors Corporation, Detroit, Mich. Tire carrier lock. 1,829,415; Oct. 27.

Lektophone Corporation. (See Houghton, Vernon T., assignor.)

Le Sauvage, George R., Buffalo, N. Y. Waste can. 1,828,741; Oct. 27.

Leslie, Howard C., Milton, assignor to B R E Manufacturing Co., Hyde Park, Mass. Closet seat and the like. 1,829,526; Oct. 27.

Leventhal, Julius H., Cincinnati, Ohio. Ophthalmic test chart apparatus. 1,828,777; Oct. 27.

Leveque, Bernard T., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Take up mechanism for sewing machines. 1,829,227; Oct. 27.

Lewis, Arthur J., Stratford, assignor to The Baird Machine Company, Bridgeport, Conn. Chucking machine. 1,829,284; Oct. 27.

Lewis, Charles, New York, N. Y. Comb. 1,829,228; Oct. 27.

Lewis, Frank E. (See Bouton, E. M., and Lewis.)

Lewis, George K., assignor to Met-L-Wood Corporation, Chicago, Ill. Counter construction. 1,829,285; Oct. 27.

Lewis, George K., assignor to Met-L-Wood Corporation, Chicago, Ill. Vehicle body construction. 1,829,527; Oct. 27.

Lewis, Harlen B., Camp Kilby, Ala. Knotter. 1,829,047; Oct. 27.

Lewis, Wilbur S., assignor to The Nestle-Le Mur Company, Cleveland, Ohio. Hair waving heater. 1,829,362; Oct. 27.

Libbey-Owens-Ford Glass Company, The. (See Crowley, Joseph P., assignor.)

Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)

Libbey-Owens-Ford Glass Company. (See Drake, J. L., and Nobbe, assignors.)

Libbey-Owens-Ford Glass Company. (See Ferngren, Enoch T., assignor.)

Libbey-Owens-Ford Glass Company. (See Mambourg, Leopold, assignor.)

Libbey-Owens-Ford Glass Company. (See Neenan, Joseph M., assignor.)

Lieberknecht, Paul, assignor of one-half to Maschinen-Fabrik Einsiedel Gesellschaft mit beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Producing fashioned goods on straight bar knitting machines. 1,828,935; Oct. 27.

Lind, Carl A., Marathon, Iowa. Box cover fastener. 1,829,598; Oct. 27.

Lindquist, Birger W. (See Heames, R. M., and Lindquist.)

Link-Belt Company. (See Caldwell, Frank B., assignor.)

Link-Belt Company. (See Waechter, Ferdinand F., assignor.)

Lionel Corporation, The. (See Caruso, Mario, assignor.)

Lippitt, George R., assignor to The Bishop & Babcock Mfg. Company, Cleveland, Ohio. Soda fountain. Des. 85,438; Oct. 27.

Lister, John, London, assignor to The Ever Ready Company (Great Britain) Limited, London, England. Electric torch. 1,828,778; Oct. 27.

Livermore, William T. (See Freeman, A. E., and Livermore.)

Ljungkull, Rolf. (See Mitchell, H. L., and Ljungkull.)

Loblcy, Alfred G., Chapel-en-le-Frith, England, assignor of one-half to Birmingham Electric Furnaces Limited, Erdington, Birmingham, England. Control of temperature in electric furnaces and the like. 1,829,416; Oct. 27.

Loeffler, Frank X., Oklahoma City, Okla. Portable steam condensing apparatus. 1,829,528; Oct. 27.

Logan, J. A. (See Humason, Granville A., assignor.)

London Valve Company, The. (See McGeorge, James A., assignor.)

Loney, John W., Brockton, Mass., assignor to O. A. Miller Treeing Machine Company, Portland, Me. Shoe stretcher. 1,828,742; Oct. 27.

Long, Archie O., Kansas City, Mo. Pressing buck. 1,829,566; Oct. 27.

Long, William E., New York, N. Y. Control device for receipt printing machine. 1,829,286; Oct. 27.

Lorillard, P., Company. (See Dillon, Albert F., assignor.)

Los Angeles Brick Company. (See Larson, Gustaf, assignor.)

Lotter, Adolph G., assignor to Stationers Loose Leaf Co., Milwaukee, Wis. Loose leaf binder. 1,829,363; Oct. 27.

Loucks, James F., Cleveland, Ohio, assignor to Detroit Steel Products Company, Detroit, Mich. Building construction. 1,828,842; Oct. 27.

Loudy, Flavius E., Akron, Ohio. Inverted stick control. 1,829,098; Oct. 27.

Lovell, John G., Spokane, Wash. Body frame. 1,828,743; Oct. 27.

Lovett, Daniel M., Trenton, N. J. Cleaning device. 1,829,287; Oct. 27.

Lubrication Devices, Incorporated. (See Hallerberg, Theodore W., assignor.)

Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Single circuit water tube boiler. 1,828,814; Oct. 27.

Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Double circuit forced circulation water tube boiler. 1,828,870; Oct. 27.

Lucking, Thomas M. (See Walker, George C., assignor.)

Lummerzheim, Hermann, Dessau-Ziebigk, and E. Schnitzler, Dessau in Anhelm, Germany, assignors, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Photographic film with visible reproducible inscriptions. 1,828,974; Oct. 27.

Lundberg, John R., Maplewood, N. J. Embroidered scarf. Des. 85,439; Oct. 27.

Luthi, Robert. (See Duchosal, Pierre, assignor.)

Lynch, Joseph L., et al. (See Macy, Alfred J., assignor.)

Lynn, John P., assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Pencil. 1,828,871; Oct. 27.

Macy, Alfred J., Evanston, assignor of nineteen-sixtieths to J. L. Lynch, Oak Park, and forty-one sixtieths to Baritone Radio Corporation, Chicago, Ill. Multiple radio control. 1,828,901; Oct. 27.

Madsen, Sern, assignor to Curtis Companies, Inc., Clinton, Iowa. Shelf rest. 1,829,009; Oct. 27.

Magarian, Masick C., Fresno, Calif. Coat hanger. 1,828,975; Oct. 27.

Mager, Jörg, Berlin-Neukolln, Germany. Electro-acoustic musical instrument. 1,829,099; Oct. 27.

Magrath, George H., Whitinsville, Mass. Bobbin clutch. 1,829,229; Oct. 27.

Maier, William G., Los Angeles, Calif. Bathing suit. 1,829,100; Oct. 27.

Malcom, Robert, Chicago, Ill. Goggle headband fastening means. 1,829,010; Oct. 27.

Mallinckrodt Chemical Works. (See Mallinckrodt, E., jr., and Farr, assignors.)

Mallinckrodt, Edward, jr., St. Louis, and H. V. Farr, Ferguson, assignors to Mallinckrodt Chemical Works, St. Louis, Mo. Method and apparatus for preserving ether. 1,829,529; Oct. 27.

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Furnace construction. 1,828,843; Oct. 27.

Marasco, Pasquale, Newark, N. J. Burner. 1,828,779; Oct. 27.

Maratti Société Anonyme. (See Seifert, Otto, assignor.)

Marbelite Corporation of America. (See Waggoner, Ralph, assignor.)

Marks, Edward S., assignor, by mesne assignments, to Franklin Development Corporation, Syracuse, N. Y. Thermostatically operated shutter for air cooled engines. 1,829,048; Oct. 27.

Marris, Charles E., jr., et al. (See Cook, Harry, assignor.)

Marsh, Clarence W., Cos Cob, Conn. Electrolytic cell. 1,828,872; Oct. 27.

Marshall, Lelia, Buffalo, N. Y. Necktie supporter. 1,829,049; Oct. 27.

Martinet, James W. (See Drew, W. F., and Martinet.)

Marvel Carbureter Company. (See Kirby, Charles H., assignor.)

Maschinenfabrik Augsburg-Nurnberg, A. G., et al. (See Jagschitz, K., and Kuehn, assignors.)

Maschinen-Fabrik Einsiedel Gesellschaft mit beschrankter Haftung. (See Lieberknecht, Paul, assignor.)

Mason, William K., Malden, and E. Stevens, Cambridge, assignors to American Electrical Company, Boston, Mass. Thermostat. 1,829,149; Oct. 27.

Mast, Albert B., Shanesville, Ohio. Apparatus for generating oil gas. 1,829,663; Oct. 27.

Master Domestic Refrigerating Company. (See Strong, Archie H., assignor.)

Matter, Gustave O., Portland, Oreg. Advertising display apparatus. 1,828,744; Oct. 27.

Maujole, Lucien E. (See Gobereau, R. R., and Maujole.)

May, Edward A., assignor to Technical Supply Company, Scranton, Pa. Drafting table. 1,829,288; Oct. 27.

Maynard, Joseph A., Boston, Mass. Vacuum relief valve. 1,829,567; Oct. 27.

McCaleb, Albert G. (See Allen, Hugh E., assignor.)

McClure, Harry W., Ann Arbor, Mich. Operating internal combustion engines. 1,829,050; Oct. 27.

McCormick, Thomas J., Detroit, Mich. Tire cover. 1,829,011; Oct. 27.

McCrery, Harold E., Apollo, assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa. Method and apparatus for cleaning sheet metal. 1,829,599; Oct. 27.

McElroy, Robert L., Daytona, Fla., and J. E. Shepherd, Charlottesville, Va., assignors to McElroy, Shepherd & Company, Dover, Del. Fire fighting and fire protection. 1,829,714; Oct. 27.

McElroy, Shepherd & Company. (See McElroy, R. L., and Shepherd, assignors.)

McFarlin, William K., East Orange, N. J. Hydraulic ram system. 1,829,051; Oct. 27.

McGeorge, James A., New Cross, London, assignor to The London Valve Company, Limited, Great Bridge, Staffordshire, England. Connection for pipes, tubes, bars, and the like. 1,829,101; Oct. 27.

McGregor, Archie G., Caldwell, Ohio. Anæsthetic holding and heating accessory. 1,829,600; Oct. 27.

McHale, Ulric J. (See Dicola, Rocco, assignor.)

McKay, Donald, Flatonia, Tex. Citrus fruit holder. 1,829,664; Oct. 27.

McKee, Garnet W., Rockford, Ill. Fuel mixing device. 1,829,102; Oct. 27.

McKnight, Samuel H., Jersey City, N. J., assignor to Troy Laundry Machinery Co. Inc., New York, N. Y. Collapsible conveyer. 1,828,780; Oct. 27.

McLaren-Consolidated Cone Corporation. (See Turnbull, Werd W., assignor.)

McMurty, Donald H., Los Angeles, Calif. Lawn mower sharpener. 1,829,289; Oct. 27.

McNab Absorbolift, Inc. (See McNab, Alexander, assignor.)

McNab, Alexander, Bridgeport, Conn., assignor to McNab Absorbolift, Inc., New York, N. Y. Hydraulic jack or shock absorber for vehicles. 1,829,451; Oct. 27.

McNally, Joseph F. (See Toomey, P. F., and McNally.)

McNaught, Robert P., San Francisco, Calif. Constant compression combustion engine. 1,828,976; Oct. 27.

Mears, Norton A., and D. P. Hynes, assignors to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,829,601; Oct. 27.
Medaris, Le Roy. (See Besal, J. A., and Medaris.)
Meer, Edward F., Monrovia, Calif. Packing fruit. 1,829,230; Oct. 27.
Meninno, Vincent, Nashua, N. H. Shoe heel base. 1,829,150; Oct. 27.
Mergentime, Charles B., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Sanitary napkin. 1,829,231; Oct. 27.
Merle, André N. Vincennes, assignor to Pathe Cinema Anciens Etablissements Pathe Freres, Paris, France. Loading device for view taking cinematographic apparatus. 1,829,103; Oct. 27.
Merrill, Josiah L., Media, Pa. Electric kiln. 1,829,290; Oct. 27.
Merrill, Ralph L., Brooklyn, assignor, by mesne assignments, to Merrill Super-Power System, Inc., New York, N. Y. Apparatus for distilling solid carbonaceous material. 1,828,781; Oct. 27.
Merrill Super-Power System, Inc. (See Merrill, Ralph L., assignor.)
Mertes, Robert G., Cleveland, Ohio, assignor, by mesne assignments, to The Pittsburgh Plate Glass Company, Pittsburgh, Pa. Cup shaped rotary brush. 1,829,665; Oct. 27.
Messer, Edward, Cincinnati, Ohio. Making edible bar brittles. 1,829,568; Oct. 27.
Messler, Matie C., assignor to M. Messler, Providence, R. I. Cushioning insole for boots and shoes. Re18,237; Oct. 27.
Messler, Madge. (See Messler, Matie C., assignor.)
Metcalf, Edgar E., Moville, Iowa, assignor to Deere & Company, Moline, Ill. Harvester. 1,828,844; Oct. 27.
Met-L-Wood Corporation. (See Lewis, George K., assignor.)
Metropolitan-Vickers Electrical Company Limited. (See Bailey, James N., assignor.)
Mettler, Josef, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Switch controlling mechanism. 1,829,364; Oct. 27.
Meyer, Charles F., Bridgeport, Conn. Safety gas cock. 1,829,365; Oct. 27.
Midland Steel Products Company, The. (See Sneed, John, assignor.)
Miles, George W. (See Dreyfus, C., and Miles.)
Miller, Charles, and L. Sholtz, New York, N. Y. Shoe. Des. 85,440; Oct. 27.
Miller, Charles, and L. Sholtz, New York, N. Y. Shoe. Des. 85,441; Oct. 27.
Miller, Earl C., Gadsden, Ala. Roof covering. 1,829,488; Oct. 27.
Miller, Edward, Huntington Park, Calif., assignor to Evans Products Company, Detroit, Mich. Riving machine. 1,828,873; Oct. 27.
Miller, Edward D., Inwood, W. Va., assignor to The C. H. Musselman Company, Biglerville, Pa. Can filling machine. 1,828,936; Oct. 27.
Miller, John L. (See Bailey, J., and Miller.)
Miller, O. A., Treeing Machine Company. (See Loney, John W., assignor.)
Miller, Ralph K., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,829,417; Oct. 27.
Miller, Robert H., Los Angeles, assignor to Shell Oil Company, San Francisco, Calif. Inclination recording device. 1,829,104; Oct. 27.
Miller Rubber Company Inc., The. (See Collins, Arthur E., assignor.)
Miller, Samuel W., Hollis, N. Y., assignor to Oxweld Acetylene Company. Annealing fusion welds. 1,828,977; Oct. 27.
Millers Falls Company. (See Moretti, Whitfield, assignor.)
Milne, William M., jr., Brooklyn, N. Y. Vanity box. 1,829,105; Oct. 27.
Miner, Henry A., Evanston, assignor to W. H. Miner, Inc., Chicago, Ill. Door operating mechanism. 1,829,106; Oct. 27.
Miner, W. H., Inc. (See Dentler, Arnold E., assignor.)
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Miner, Henry A., assignor.)
Miner, W. H., Inc. (See O'Conner, John F., assignor.)
Minneapolis-Moline Power Implement Company. (See Seaholm, John P., assignor.)
Minster, Norman P., Parma, Idaho. Valve structure. 1,829,666; Oct. 27.
Mirafuentes, Alfonso F., Guadalupe, Mex. Tonsorial device. 1,829,667; Oct. 27.
Mississippi Glass Company. (See Kingsley, Charles B., assignor.)
Mitchell, Holger L., and Rolf Ljungkull, assignor to Harnischfeger Corporation, Milwaukee, Wis. Excavator crane. 1,829,569; Oct. 27.
Mittleburg, Samuel S., Brooklyn, N. Y. Ensemble unit for furniture and the like. 1,829,366; Oct. 27.
Moan, Leo H., and M. Waddell, Wichita, Kans. Bailer. 1,829,151; Oct. 27.
Moe, Carl L., Salinas, Calif. Water cooling system for internal combustion engines. 1,828,978; Oct. 27.
Mojonnier Bros. Co. (See Hegg, Edward C., assignor.)
Moll, Harry C., Honolulu, Hawaii, assignor to Pressed Steel Car Company, Pittsburgh, Pa. Stake releasing pocket. 1,829,570; Oct. 27.
Monitor Controller Company. (See Whittingham, George H., assignor.)
Monosmith, Clayton E., administrator. (See Monosmith, Clayton E. and D. J.)
Monosmith, Clayton E. and D. J., deceased, assignors of one-fourth to G. W. Saywell, Cleveland, Ohio; C. E. Monosmith, administrator, assignor of three-eighths to C. E. Monosmith. Carburetor. 1,828,902; Oct. 27.
Monosmith, David J. (See Monosmith, Clayton E. and D. J.)
Monroe Calculating Machine Company. (See Chase, George C., assignor.)
Moore, Ambrose C., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake beam support. 1,829,418; Oct. 27.
Moore, Carl M. (See Fuller, F. A., and Moore.)
Moos, Paul. (See Pudelko, R., and Moos.)
Morehouse, Eugene, Providence, R. I., assignor to B. A. Ballou & Co., Inc. Clasp. 1,829,232; Oct. 27.
Moretti, Whitfield, Montague, assignor to Millers Falls Company, Millers Falls, Mass. Electric tool. 1,828,903; Oct. 27.
Morgan Construction Company. (See Carroll, William E., assignor.)
Morgan & Wright. (See Christopherson, William G., assignor.)
Morrill, Weston, Pittsfield, Mass., assignor to General Electric Company. Aluminum alloy. 1,829,668; Oct. 27.
Morris, Fred C., San Francisco, Calif. Steering column bushing. 1,829,530; Oct. 27.
Morris, I. P., & De La Vergne, Incorporated. (See Kruse, O. V., and Larner, assignors.)
Morss, Edward L., Needham, A. W. Buckwell, Quincy, and C. G. Smith, Watertown, assignors to Ginn and Company, Boston, Mass. Machine for preparing typewritten copy. 1,829,233; Oct. 27.
Morton, Brayton, Fall River, and G. P. Welch, Cambridge, Mass. Gas turbine. 1,828,782; Oct. 27.
Morton, William A., Pittsburgh, and P. L. Geer, Bellevue, assignors to Amco, Incorporated, Pittsburgh, Pa. Heat treatment chamber. 1,828,904; Oct. 27.
Mossay & Company. (See Mossay, Paul A. H., assignor.)
Mossay, Paul A. H., Ipswich, assignor to Mossay & Company, Limited, London, England. Motor propelled crane. 1,828,905; Oct. 27.
Motorenfabrik Deutz, Aktiengeellschaft. (See Winterlin, Karl, assignor.)
Mount, Ellsworth L. (See Post, C. W., and Mount.)
Mudge, William A. (See Shoffstall, A. S., Mudge, Bagsar, and Bieber.)
Muhvic, Matthew, Cleveland, Ohio. Animal trap. 1,829,602; Oct. 27.
Mularkey, John W., Fernandina, Fla. Gasoline gauge for automobiles. 1,829,489; Oct. 27.
Mulder, Johannes G. W., and E. Oosterhuis, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Rectifying installation. 1,829,603; Oct. 27.
Munsell, Albert W. (See Fickett, E. L., and Munsell.)
Murray Corporation of America, The. (See Northup, Amos E., assignor.)
Musselman, C. H., Company, The. (See Miller, Edward D., assignor.)
Myers, Frederick J., Kansas City, Kans. Hydraulic riveting and bending machine. 1,828,874; Oct. 27.
N. V. Philips' Gloeilampenfabrieken. (See Mulder, J. G. W., and Oosterhuis, assignors.)
Naamlooze Vennootschap Maatschappi tot Vervaardiging van Snipmachines volgens Van Berkel's Patent en van andere Werktuigen. (See van Berkel, Cornelis F. M., assignor.)
Nagel, Otto, and W. Kaempfer, Durlach, assignor to Badische Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff, Durlach, Bade, Germany. Conduit for projecting sand. 1,829,291; Oct. 27.
Nason, Charles H. W., New York, N. Y., assignor to Jenkins Television Corporation, Jersey City, N. J. Electro-optical translation system. 1,828,875; Oct. 27.
Natalis, Friedrich, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric and Manufacturing Company. Oil immersed fuse. 1,829,604; Oct. 27.
National Aluminate Corporation. (See Kern, H. A., and Fink, assignors.)
National Carbon Company. (See Yngve, Victor, assignor.)
National Cash Register Company, The. (See Sburlino, Pascal, assignor.)
National Electric Products Corporation. (See Frederickson, Otto A., assignor.)
National India Rubber Company. (See Watkins, P. H., and Holmberg, assignors.)
National Penumatic Company. (See Conklin, Roscoe D., assignor.)
Need, Leslie R., South Bend, Ind., assignor to Westinghouse Electric and Manufacturing Company. Lamp standard. Des. 85,442; Oct. 27.
Neenan, Joseph M., Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass drawing apparatus. 1,828,845; Oct. 27.
Neider, F. A., Company, The. (See Lane, Richard D., assignor.)

Neilsen, Peter C., assignor of twenty-five per cent to Christian Stockholm and twenty-five per cent to O. K. Simonsen, Chicago, Ill. Scraper. 1,829,531; Oct. 27.
Nestle-Le-Mur Company, The. (See Lewis, Wilbur S., assignor.)
Newhall, Henry B., Corpofation. (See Karitzky, John, assignor.)
Newman, Samuel S., Winfield, Kans. Alarm. 1,828,979; Oct. 27.
Newport Company, The. (See Gubelmann, I., and Henke, assignors.)
Nicolson, Alexander M., assignor to Communication Patents, Inc., New York, N. Y. Piezo-electric crystal transformer. 1,829,234; Oct. 27.
Niemi, Andrew, Hancock, Mich. Boot tree. 1,828,937; Oct. 27.
Nison, Moses C., and A. F. Kaptuller, Chicago, Ill., said Kaptuller assignor to said Nixon. Crank means for bed operating mechanism. 1,828,980; Oct. 27.
Nitardy, Ferdinand W., Brooklyn, assignor to E. R. Squibb and Sons, New York, N. Y. Production of cod-liver oil. 1,829,571; Oct. 27.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Engine construction. 1,828,745; Oct. 27.
Nobbe, William E. (See Drake, J. L., and Nobbe.)
Nordström, Abel, Buenos Aires, Argentina. Roller for crushing clods. 1,829,605; Oct. 27.
Norsk Staal Elektrisk-Gas-Reduktion. (See Edwin, Emil, assignor.)
Northup, Amos E., Detroit, Mich., assignor to The Murray Corporation of America. Vehicle body construction. 1,829,052; Oct. 27.
Nuerwell, Frederick W., Tulsa, Okla. Transplanter. 1,829,107; Oct. 27.
Nulsen, Marvin E. (See Smellie, D. G., White, and Nulsen.)
Nunns, John W. (See Stone, B., Redshaw, and Nunns.)
O. & S. Bearing Co. (See Skillman, Newton, assignor.)
Oakes Products Corporation. (See Hershey, Orville S., assignor.)
Oakley, John. (See Perkins, J. L., Oakley, and Croft.)
O'Bannon, Walter, Co. (See O'Bannon, Walter A., assignor.)
O'Bannon, Walter A., Tulsa, Okla., assignor to Walter O'Bannon Co. Combination sucker rod socket. 1,828,938; Oct. 27.
Oberlin, Max, Darmstadt, Germany. Production of 1-M-amidophenyl-) 1 - hydroxy - 2 - methylamido - propane. 1,829,452; Oct. 27.
Oberst, Frank, Fosterdale, N. Y., assignor to Wilbur Products Company. Automatic stop device. 1,829,053; Oct. 27.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,829,152; Oct. 27.
Oehmichen, Etienne, Valentigney, France. Lifting device. 1,828,783; Oct. 27.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
O'Keeffe, George W., Milton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Rotary control switch. 1,829,606; Oct. 27.
Oliver Farm Equipment Company. (See Ashton, James T., assignor.)
Oliver Farm Equipment Company. (See Dewend, William D., assignor.)
Olley, Raymond H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Conduit outlet box. 1,829,054; Oct. 27.
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Hob cutter and making same. 1,829,292; Oct. 27.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Screw lock. 1,829,293; Oct. 27.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Rotary cutting apparatus. 1,829,532; Oct. 27.
Olthoff, Frank H., Pearl City, Ill. Lug fastening means. 1,828,815; Oct. 27.
O'Malley, John F., Flushing, N. Y. Safety attachment for aeroplanes. 1,829,607; Oct. 27.
Ondricek, Adolph, Astoria, N. Y. Package handle. 1,829,533; Oct. 27.
Onelda Community Limited. (See Gerth, William H., assignor.)
O'Neill, Frank, jr., assignor to Empire Hood Seal Corporation, New York, N. Y. Container cover and forming and applying same. 1,828,906; Oct. 27.
Oosterhuis, Ekko. (See Mulder, J. G. W., and Oosterhuis.)
Osnos, Mendel, assignor to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Frequency multiplication. 1,829,419; Oct. 27.
Ostrey, Joseph M., Los Angeles, Calif. Typewriter keyboard. 1,828,939; Oct. 27.
Otis Elevator Company. (See Lautrup, G. W., and Crabbe, assignors.)
Otto, Carl, Essen-Ruhr, Germany. Vertical chamber coke oven. 1,829,608; Oct. 27.
Overbury, Frederick C. (See Kirschbraun, L., and Overbury).
Overpeck, Charles F., and F. M. Allen, Greensburg, Ind. Coin controlled gasoline pump. 1,829,584; Oct. 27.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Slit-forming device for photographic sound apparatus. 1,829,235; Oct. 27.
Oxweld Acetylene Company. (See Miller, Samuel W., assignor.)
Oxweld Railroad Service Company, The. (See Hasse, Frank C., assignor.)
Ozouf, Arthur E. (See Hiller, S., and Ozouf.)
Paas Dye Company. (See Gibbens, Emma R., assignor.)
Paas Dye Company. (See Townley, Philip B. and W. R., assignors.)
Paasche, Jens A., Wilmette, Ill. Explosionproof ventilating unit. 1,828,746; Oct. 27.
Pacific Mills. (See Walen, Ernest D., assignor.)
Page, Charles B., Evanston, and A. C. Kalk, assignors, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill. Water heater. 1,829,535; Oct. 27.
Papeteries Navarre. (See Thiriet, André, assignor.)
Parker, Cyrus J., deceased, Portland, Oreg.; M. E. Parker, executrix, assignor to Iron Fireman Manufacturing Company, Portland, Oreg. Tuyère. 1,829,055; Oct. 27.
Parker, Francis F., Los Gatos, assignor of one-half to R. G. Fowler, San Jose, Calif. Aeroplane. 1,828,981; Oct. 27.
Parker, John N., Fort Dodge, Iowa, assignor to United States Gypsum Company, Chicago, Ill. Expansion coupling for screw conveyers. 1,829,453; Oct. 27.
Parker, Mary E., executrix. (See Parker, Cyrus J., assignor.)
Parrish, Robert B., et al. (See Parrish, Washington B., assignor.)
Parrish, Washington B., Kenbridge, assignor of one-half to R. B. Parrish, Nassawadox, and one-half to T. W. Fowlkes, Victoria, Va. Log lifter and holder. 1,829,490; Oct. 27.
Pathe Cinema Anciens Etablissements Pathe Freres. (See Merle, André N., assignor.)
Patton, Herschel E., Grangeville, Idaho. Pipe crimping device. 1,829,012; Oct. 27.
Pavesi, Ugo, Milan, Italy. Vehicle for the transport of artillery and especially antiaerial artillery. 1,829,669; Oct. 27.
Pawson, William H., Hemet, Calif. Agricultural implement. 1,829,294; Oct. 27.
Pearl, Azariah Y., assignor to Laboratories Sevigne-Pearl, Windsor, Vt. Apparatus for coating and treating sheet material. 1,829,153; Oct. 27.
Pedersen, Oscar A., New York, N. Y. Method of construction. 1,828,907; Oct. 27.
Pelletier, Louis F. (See Ciglia, E. F., and Pelletier.)
Penn Electric Switch Co. (See Henning, Malcolm E., assignor.)
Perkins, Albert G., Buffalo, N. Y. Pipe joint. 1,829,236; Oct. 27.
Perkins, Julian L., West Springfield, and J. Oakley, and H. D. Croft, Springfield, assignors to Perkins Machine & Gear Company, West Springfield, Mass. Tub. 1,828,908; Oct. 27.
Perkins Machine & Gear Company. (See Perkins, J. L., Oakley, and Croft, assignors.)
Perl, John, Los Angeles, assignor to M. M. Cory, San Diego, Calif. Activating cellulose bearing material preparatory to hydrolysis. 1,828,982; Oct. 27.
Perrin, René, Toulon, assignor to the State of France, represented by the Minister of the National Navy, Paris, France. Pressure fluid generator. 1,828,784; Oct. 27.
Perry, Ira D., Chicago, Ill. Ignition lock and the like. 1,828,747; Oct. 27.
Petersen, Edward, Des Moines, Iowa. Camping device for motor vehicles. 1,829,056; Oct. 27.
Petersen, Leslie T., Denison, Iowa. Twin hog trough. 1,829,108; Oct. 27.
Peterson, Edward T., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Plate turnover mechanism. 1,828,909; Oct. 27.
Pettibone Mulliken Company. (See Enstrom, August, assignor.)
Pfeifer, Paul J., Cleveland Heights, assignor to The John C. Virden Company, Cleveland, Ohio. Globe holder. 1,829,572; Oct. 27.
Phagans, Floyd O., Ryan, Okla. Device for teaching arithmetic. 1,829,295; Oct. 27.
Phelps, Boyd, Graamere, Staten Island, N. Y., assignor, by mesne assignments, to H. E. Thompson Manufacturing Company. Controlling or preventing oscillations in vacuum tube circuits. 1,829,013; Oct. 27.
Phoenix Hosiery Company. (See Kohlwey, Irvin J., assignor.)
Photostat Corporation. (See Greene, J. S., and Caps, assignors.)
Pickering Governor Company, The. (See Crafts, Irving M., assignor.)
Pierce, James B., jr., Charleston, W. Va. Manufacture of blanc fixe. 1,828,846; Oct. 27.
Pierson, Charles U., Moscow, Idaho, assignor of one-half to L. Johnson, Spokane, Wash. Air filter. 1,828,816; Oct. 27.
Piessevaux, Georges, assignor to Eternit, Inc., St. Louis, Mo. Making colored composition slabs. 1,829,187; Oct. 27.
Pioneer Cell Tyre Company Limited, The. (See Hibbert, Ernest, assignor.)
Pioneer Gravel Equipment Manufacturing Company. (See Gustafson, Carl A., assignor.)
Pittsburgh Plate Glass Company, The. (See Mertes, Robert G., assignor.)

Place, Roland P., Co. (See Place, Roland P., assignor.)
Place, Roland P., Midland, assignor to Roland P. Place Co., Midland, Mich. Combination dressing and grinding wheel. 1,829,057; Oct. 27.
Pneumatic Scale Corporation. (See Gustafson, Henry A., assignor.)
Pneumatic Scale Corporation. (See Howard, Stanley R., assignor.)
Pohu, Georges E. A., London, England. Electric circuit coupling device. 1,829,109; Oct. 27.
Pollack, Joseph O., Chicago, Ill. Clutch and brake. 1,829,536; Oct. 27.
Polzer, Fridolin, South Norwalk, Conn. Stapling machine. 1,829,537; Oct. 27.
Pomeranz, Jacob J., Brooklyn, N. Y. Folding eyeglass frame. 1,828,847; Oct. 27.
Pomeroy, Roy J., Hollywood, Calif. System for correcting sound records. 1,828,940; Oct. 27.
Pomeroy, Roy J., Los Angeles, Calif. System for correcting sound records. 1,828,941; Oct. 27.
Pomeroy, Roy J., Los Angeles, Calif. Production of corrected sound records. 1,828,942; Oct. 27.
Post, Charles W., and E. L. Mount, Orange, Calif. Drier roll polishing device. 1,829,154; Oct. 27.
Postermatic Limited. (See Shannon, John, assignor.)
Powers, Donald H. (See Calcott, W. S., Downing, and Powers.)
Pratt, Charles R., Upper Montclair, N. J. Hoisting apparatus. 1,828,748; Oct. 27.
Préparation Industrielle des Combustibles (Societe Anonyme). (See Coutin, Jean, assignor.)
Pressed Steel Car Company. (See Kantenwein, Oscar E., assignor.)
Pressed Steel Car Company. (See Moll, Harry C., assignor.)
Pressley, Jackson H., Marion, Ind., assignor to Hazeltine Corporation, Jersey City, N. J. High frequency transformer. 1,829,058; Oct. 27.
Prestek, Louis A., Seattle, Wash. Valve grinding refacing and reseating device. 1,829,059; Oct. 27.
Prichard, Percy T., Dannevirke, New Zealand. Eyeshade for use in playing golf. 1,829,538; Oct. 27.
Pride, William F., Tampa, Fla. Producing cigars, cigarettes, or the like. 1,829,454; Oct. 27.
Primakow, Joseph E., Milwaukee, Wis. Lighting fixture. Des. 85,443; Oct. 27.
Primakow, Joseph E., Milwaukee, Wis. Lighting fixture. Des. 85,444; Oct. 27.
Primakow, Joseph E., Milwaukee, Wis. Lighting fixture. Des. 85,445; Oct. 27.
Pringle Electrical Manufacturing Company, The. (See Austin, Harvey B., assignor.)
Prosperity Company Inc., The. (See Daly, Joseph P., assignor.)
Prosperity Company, The. (See Davis, Ernest, assignor.)
Protectu Corporation, The. (See Walker, Crawford J., assignor.)
Prutton, Carl F., Cleveland, Ohio, assignor to The Dow Chemical Company, Midland, Mich. Treating brine. 1,829,539; Oct. 27.
Pudelko, Riccard, and P. Moos, Zug, Switzerland, assignors to Landis & Gyr, A.-G. Electricity meter. 1,829,367; Oct. 27.
Purcell, John, Chicago, Ill. Metal door. 1,829,014; Oct. 27.
Pyrene-Minimax Corporation. (See Schnabel, Rudolf, assignor.)
Queeney, Frank E. (See Jupp, W. B., and Queeney.)
Quendoz, Albert. (See Ramseier, Albert, assignor.)
Quick, Floyd R. (See Vogel, N. J., and Quick.)
Radio Corporation of America. (See Clough, Newsome H., assignor.)
Radio Corporation of America. (See Kroger, Fred H., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Corporation of America. (See Vermeulen, Roelof, assignor.)
Radio Products Company, The. (See Jackson, Paul F., assignor.)
Rail Joint Company, The. (See Thomson, William P., assignor.)
Rak, Jaroslav, Chicago, Ill., assignor to Variety Fire Door Company. Elevator door. 1,829,155; Oct. 27.
Ramseier, Albert, assignor to A. Quendoz, Zurich, Switzerland. Thread knotting device. 1,828,817; Oct. 27.
Randall, Rex R., Gibbon, Nebr. Barrel filling device. 1,829,296; Oct. 27.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Synchronization of facsimile telegraph apparatus. 1,829,420; Oct. 27.
Ranz, Jacob, St. Louis, Mo. Heat distributor and toaster. 1,829,368; Oct. 27.
Rapp, August, Iserlohn, Germany. Device for drawing curtains and the like. 1,829,297; Oct. 27.
Raven, Albert L., Mount Vernon, N. Y. Motion picture screen. 1,828,749; Oct. 27.
Rawlings, William E., Santa Clara County, Calif. Float. 1,828,983; Oct. 27.
Raymond Concrete Pile Company. (See Schroeder, Frederick A., assignor.)
Raymond, Edward F., assignor to J. Grant, Los Angeles, Calif. Underreamer. 1,828,750; Oct. 27.
Redshaw, Herbert. (See Stone, B., Redshaw, and Nunns.)
Reed, Edward F., Neosho, Mo. Cabinet. Des. 85,446; Oct. 27.
Reel, Herbert W., Hinsdale, assignor to United States Gypsum Company, Chicago. Building construction. 1,829,156; Oct. 27.
Reese, Louis C., assignor to Baker Perkins Company, Incorporated, Saginaw, Mich. Baking oven. 1,829,670; Oct. 27.
Reeves, Orwell C., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Dashpot for weighing scales. 1,829,540; Oct. 27.
Reid, Andrew T., Camellia, near Sydney, New South Wales, Australia. Cement pipe. 1,829,491; Oct. 27.
Reid, Ernest W. (See Davidson, J. G., and Reid.)
Reiher, Martin H., Glenside, assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Electric condenser. 1,829,015; Oct. 27.
Renda, Frank, et al. (See Dicola, Rocco, assignor.)
Republic Steel Corporation. (See Corrigan, M. C., and Jenkins, assignors.)
Republic Steel Corporation. (See Rutter, Clyde M., assignor.)
Research Engineering Laboratories, Inc. (See Bossard, Theodore, assignor.)
Rettman, Cornelius L., Merchantville, N. J. Leather polishing wheel. 1,829,492; Oct. 27.
Rhodes, Jay B., Kalamazoo, Mich. Sharpening device for safety razor blades and the like. 1,829,016; Oct. 27.
Rhodes, Jay B., Kalamazoo, Mich. Sharpening device for safety razor blades and the like. 1,829,060; Oct. 27.
Rhodes, Jay B., Kalamazoo, Mich. Sharpening device for razor blades. 1,829,061; Oct. 27.
Ribera, Lucien, New York, N. Y. Dispenser. 1,829,671; Oct. 27.
Rice & Adams Corporation. (See Alling, Edward R., assignor.)
Richard, Bernhard, assignor to Firm of J. R. Geigy S. A., Basel, Switzerland. Manufacture of substantive polyazodyestuffs. 1,829,672; Oct. 27.
Richard, Bernhard, assignor to Firm of J. R. Geigy S. A., Basel, Switzerland. Manufacture of substantive polyazodyestuffs. 1,829,673; Oct. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Production of chemical wood pulps. 1,828,848; Oct. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Purification of cellulose fiber. 1,829,110; Oct. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Composite sheet material. 1,829,157; Oct. 27.
Rider, Granville S., Flushing, assignor to Nathan Schoenthal, New York, N. Y. Directory board for office buildings. 1,829,541; Oct. 27.
Ridgeway, Oscar H., Sacramento, Calif. Contact button for automobile horns. 1,828,785; Oct. 27.
Riley Frank W., Pensacola, Fla. Score pad holder. 1,829,455; Oct. 27.
Rimedio, James E., Dover, Ohio. Plant spraying apparatus. 1829,298; Oct. 27.
Ritz Woller, Oliver C., Chicago, Ill. Accelerator pedal. 1,829,028; Oct. 27.
Robbins, William H., and R. F. Boehler, jr., Springfield, assignors to The Williams Company, London, Ohio. Take-off mechanism for wire cutting machines. 1,829,456; Oct. 27.
Roberts, William T. B. (See Barclay, W. R., and Roberts.)
Robinson, Frank R., Philadelphia, Pa. Pneumatic hammer. 1,829,609; Oct. 27.
Robison, Marion T., Springfield, Ohio. Shoe stretcher and tree. 1,829,369; Oct. 27.
Roe, William C., assignor to Telkor, Inc., Elyria, Ohio. Screw driver. 1,829,421; Oct. 27.
Roebel, Ludwig, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Thrust bearing. 1,829,542; Oct. 27.
Roesch, Frank P., Chicago, Ill., and A. M. Hunt, New York, N. Y., assignors to Standard Stoker Company, Incorporated. Stoker. 1,828,818; Oct. 27.
Rogers, Joseph M. (See Etheridge, Locke, assignor.)
Röhl, Hans, assignor to Schwarzwaldwerke Lanz, G. m. b. H., Mannheim, Germany. Refrigerating apparatus. 1,829,370; Oct. 27.
Röhm & Haas Aktiengesellschaft. (See Bauer, Walter, assignor.)
Röhm & Haas Company. (See Bruson, Herman A., assignor.)
Rohn, Frederick G., assignor of one-half to D. R. Cohen, St. Louis, Mo. Electric conduit securing device. 1,828,876; Oct. 27.
Roller Bearing Company of America. (See Jones, Allan H., assignor.)
Rolls Royce Limited. (See Royce, Frederick H., assignor.)
Rose, Morris. (See Zigelman, P., and Rose.)
Roseman, Leo, Newark, N. J. Fastener tape. 1,828,786; Oct. 27.
Rosenberg, Sandor, New York, and J. Hochman, Brooklyn, N. Y. Flying machine. 1,828,819; Oct. 27.
Rosenlöcher, Otto, Berlin, Germany, assignor to General Electric Company. Elastic fluid turbine and the like. 1,829,674; Oct. 27.
Rosenstein Bros. & Hook. (See Rosenstein, Charles, assignor.)

Rosenstein, Charles, Paterson, N. J., assignor to Rosenstein Bros. & Hook, New York, N. Y. Woven fabric. 1,829,299; Oct. 27.
Ross, Jean R., executrix. (See Ross, John.)
Ross, John, deceased; J. R. Ross, executrix, assignor to Fonda Container Company, Inc., Utica, N. Y. Cover assembling machine. 1,829,111; Oct. 27.
Ross, Wallace B., Syracuse, assignor to Diemolding Corporation, Canastota, N. Y. Valve handle. 1,829,371; Oct. 27.
Rossman, Allen M., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill. Adjustable speed drive. 1,828,943; Oct. 27.
Rossman, Allen M., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill. Adjustable speed drive. 1,828,944; Oct. 27.
Rossman, Allen M., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill. Trolley system for electric railways. 1,828,945; Oct. 27.
Rossman, Allen M., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill. Track and changeover mechanism for electric railway systems. 1,828,946; Oct. 27.
Rossman, Allen M., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill. Drive. 1,828,947; Oct. 27.
Rossman, Allen M., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill. Adjustable speed drive adapted for traction purposes. 1,828,948; Oct. 27.
Rossman, Allen M., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill. Electric traction. 1,828,949; Oct. 27.
Rossman Patents, Incorporated. (See Rossman, Allen M., assignor.)
Rothschild, Joseph, Buffalo, N. Y. Airplane. 1,829,372; Oct. 27.
Roux, Adrian P., Oriskany, N. Y., assignor to General Cable Corporation, New York, N. Y. Metallurgical apparatus. 1,829,158; Oct. 27.
Roy, Walter M., Devon, Pa. Turning signal switch. 1,828,950; Oct. 27.
Roy, Wilfrid J., East Orange, assignor to Gemex Company, Newark, N. J. Foldable extension device. 1,829,675; Oct. 27.
Royce, Frederick H., Elmstead, West Wittering, near Chichester, assignor to Rolls Royce Limited, Derby, England. Suspension of engines for self propelled road vehicles. 1,829,676; Oct. 27.
Royce, Frederick H., Elmstead, West Wittering, near Chichester, assignor to Rolls Royce Limited, Derby, England. Mounting engines in motor vehicles. 1,829,677; Oct. 27.
Ruben, Samuel, New York, N. Y., assignor to Ruben Tube Company. Heater element and making it. 1,829,237; Oct. 27.
Ruben Tube Company. (See Ruben, Samuel, assignor.)
Runner, Claude C., Schenectady, N. Y., assignor to General Electric Company. Switch. 1,829,610; Oct. 27.
Rüsberg, Friedrich, Berlin-Niederschoneweide, and P. Schmid, Berlin-Baumschulenweg, assignors to Kali-Chemie Aktiengesellschaft, Berlin, Germany. Making barium sulphide. 1,829,188; Oct. 27.
Rust, Philip G., Wilmington, Del., assignor to The Viscose Company, Marcus Hook, Del. Treating yarn. 1,829,678; Oct. 27.
Rutter, Clyde M., Massillon, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Charging blast furnaces and the like. 1,829,300; Oct. 27.
Ryan, Edwin P., Somersworth, N. H. Composition. 1,829,611; Oct. 27.
Saben Lock Nut Co. (See Saben, William E., assignor.)
Saben, William E., Taunton, Mass., assignor to Saben Lock Nut Co., Inc., Taunton, Mass. Lock nut. 1,829,017; Oct. 27.
Sabin, Ford L., Cleveland Heights, assignor to The Wellman Engineering Company, Cleveland, Ohio. Ingot turning machine. 1,829,573; Oct. 27.
Sackin, Allen L., New York, N. Y. Combination clothes hanger. 1,829,301; Oct. 27.
Sadtler, Samuel S., Springfield Township, Montgomery County, and E. F. Cayo, Philadelphia, Pa. Making patent, japan, and enamel leathers. 1,829,302; Oct. 27.
St. Joseph Iron Works. (See Swigert, Clyde, assignor.)
Samburg, Maurice, and J. C. Hochman, New York, N. Y. Multiple totalizer attachment for typewriters. 1,829,543; Oct. 27.
Samson, Frank N., Elgin, Ill. Valve burnishing tool. 1,829,373; Oct. 27.
Sandberg, Ivar O. E., Stockholm, Sweden. Cigar machine. 1,829,238; Oct. 27.
Sandberg, Joseph. (See Dauch, A. D., and Sandberg.)
Sato, Ryuji, New York, N. Y. Auxiliary insole. 1,829,612; Oct. 27.
Sato, Ryuji, New York, N. Y. Fastener. 1,829,613; Oct. 27.
Saunders, Laurence P., assignor to Harrison Radiator Corporation, Lockport, N. Y. Fan housing. 1,829,374; Oct. 27.
Savage, Edward S. (See Schelle, H. M., Fisher, Bareham, and Savage.)
Saywell, George W. (See Monosmith, C. E. and D. J., assignors.)
Sburlino, Pascal, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,828,849; Oct. 27.
Schaber, Ralph F., Detroit, Mich. Heater. 1,829,303; Oct. 27.
Schade, James W., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Vulcanizing method and apparatus. 1,829,018; Oct. 27.
Schell, Johan H., Rotterdam, Netherlands. Cutting, sawing, slotting, and similar apparatus. 1,829,679; Oct. 27.
Schelle, Helen M., and H. G. Fisher, Rochester, and N. Bareham, Churchville, and E. S. Savage, Rochester, N. Y. Figure toy. 1,829,680; Oct. 27.
Schick Dry Shaver, Inc. (See Hanley, John A., assignor.)
Schier, Johann, Vienna, Austria, assignor to C. P. Goerz Optische Anstalt Aktiengesellschaft Akciova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia. Vertical and horizontal angle measurer. 1,829,614; Oct. 27.
Schilling, Frederick, Philadelphia, Pa., and C. H. Kircoaf, West Collingswood, N. J. Separator. 1,829,544; Oct. 27.
Schmid, Paul. (See Rüsberg, F., and Schmid.)
Schmidling, Gilbert T., assignor to A. J. Carter, Chicago, Ill. Photo-electric tube. 1,829,019; Oct. 27.
Schmidt, Georg, Ludenscheid, Germany. Toy figure. 1,829,112; Oct. 27.
Schmidt, Walter, assignor, by mesne assignments, to E. T. Auger, Denver, Colo. Electric soldering means. 1,829,457; Oct. 27.
Schnabel, Rudolf, Berlin, Germany, assignor by mesne assignments, to Pyrene-Minimax Corporation. Producing foam from foam generating substances. 1,829,715; Oct. 27.
Schneider, Henry C., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Wind-wheel vane. 1,829,062; Oct. 27.
Schnellpressenfabrik Aktiengesellschaft Heidelberg. (See Büttner, Artur, assignor.)
Schnitman, Charles R., Waterbury, Conn. Golf bowling game. 1,829,239; Oct. 27.
Schnitzler, Eduard. (See Lummerzheim, H., and Schnitzler.)
Schock, Clarence, Mount Joy, Pa. Dispensing pump. 1,829,240; Oct. 27.
Schoenthal, Nathan. (See Rider, Granville S., assignor.)
Schon, Lester. (See Shoenberg, M. H., and Schon.)
Schreiber, August, Friedersdorf, near Jagerndorf, Czechoslovakia. Display apparatus. 1,829,113; Oct. 27.
Schroeder, Frederic W., assignor to Corhart Refractories Company, Louisville, Ky. Mold for casting refractories. 1,829,114; Oct. 27.
Schroeder, Frederick A., Rochelle Park, assignor to Raymond Concrete Pile Company, New York, N. Y. Drilling apparatus. 1,829,304; Oct. 27.
Schroeder, Hans C., La Grange, Ill., assignor to Goss Printing Press Company. Inking roller. 1,829,189; Oct. 27.
Schubert & Salzer Maschinenfabrik, Aktiengesellschaft. (See Heinitz, Woldemar, assignor.)
Schulse, H. E., Inc. (See Schulse, Herman E., assignor.)
Schulse, Herman E., New York, N. Y., assignor to H. E. Schulse Inc. Shoe shining installation and the elements thereof. 1,828,820; Oct. 27.
Schulz, Walter, and H. Hoffman, Sydowsaue, near Stetting, Germany, assignor, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Working up of centrifuge silk. 1,829,190; Oct. 27.
Schwarz, August, assignor to the firm: J. S. Staedtler, Nuremberg, Germany. Decorating lead pencils. 1,829,115; Oct. 27.
Schwarzaldwerke Lanz, G. m. b. H. (See Röhl, Hans, assignor.)
Schweickart, William M., Ramsey, N. J., assignor to Automatic Coal Burner Company, Seattle, Wash. Coal conveyor. 1,828,984; Oct. 27.
Schwennker, Charles F., Schenectady, N. Y., assignor to General Electric Company. Circuit controlling mechanism. 1,829,615; Oct. 27.
Scoggins, Reb M., Shreveport, La. Pipe joint reamer. 1,829,458; Oct. 27.
Scott, Elmer, Dayton, Ky. Refrigerating system. 1,828,877; Oct. 27.
Seaholm, John P., assignor to Minneapolis-Moline Power Implement Company, Moline, Ill. Variable-width plow. 1,829,545; Oct. 27.
Seailles, Jean. (See Seailles, S., and Seailles.)
Seailles, Speranza, nee Calogeropoulos, and J. Seailles, Paris, France, assignors, by mesne assignments, to A. B. Bourquardez. Coating of metals upon cement surfaces. 1,829,116; Oct. 27.
Seckendorf, Richard P., Somerville, assignor to The Cambridge Paper Box Co., Cambridge, Mass. Machine for covering boxes. 1,829,063; Oct. 27.
Seeley, Fay L., assignor to The Evans Products Company, Detroit, Mich. Staging or semidecking apparatus for automobile shipping. 1,829,681; Oct. 27.
Segal, Hyman R., assignor to Segal Safety Razor Corporation, New York, N. Y. Safety razor frame. 1,829,546; Oct. 27.

Segal Safety Razor Corporation. (See Sagal, Hyman R., assignor.)
Seifert, Otto, Burgstadt, Germany, assignor to Maratti Société Anonyme, Geneva, Switzerland. Circular knitting machine. 1,828,878; Oct. 27.
Seiler, Anton A. (See Bayerlein, J., and Seiler.)
Sell, Otto R., Colorado Springs, Colo. Combination switch and head lamp control. 1,829,191; Oct. 27.
Sellers, J. Earl, et al. (See Brawner, George H., assignor.)
Selsemeyer, Anton. (See Speaker, J. W., and Selsemeyer.)
Seltzer, Alexander, Philadelphia, Pa. Face-plate for flush receptacles and the like and its manufacture. 1,829,422; Oct. 27.
Semon, Waldo L. (See Zimmerli, W. F., and Semon.)
Shafter, Adolph F., assignor to U. S. Manufacturing Corporation, Decatur, Ill. Folding implement. 1,829,192; Oct. 27.
Shainline, Joseph B., assignor of one-half to H. Siemmer, Norristown, Pa. Aircraft propelling means. 1,829,064; Oct. 27.
Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)
Shannon, John, assignor to Postermatic Limited, Birmingham, England. Advertising or display apparatus. 1,829,459; Oct. 27.
Sharman, Meave W., San Diego, Calif. Piano key reflecting device. 1,829,065; Oct. 27.
Sharples, Laurence P., Chester, assignor to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal process and apparatus. 1,829,547; Oct. 27.
Sharples Specialty Company, The. (See Clark, Lee H., assignor.)
Sharples Specialty Company, The. (See Sharples, Laurence P., assignor.)
Sheahan, Frank I., assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,829,159; Oct. 27.
Shelburne, Arthur, Terre Haute, Ind., assignor to Sullivan Machinery Company. Material handling apparatus. 1,828,751; Oct. 27.
Shell Development Company. (See Kramer, Gustav A., assignor.)
Shell, Emmett D. (See Hampton, J. C., and Shell.)
Shell Oil Company. (See Miller, Robert H., assignor.)
Shelton, Harry J., University City, Mo. Cold molasses feeder. 1,829,066; Oct. 27.
Shepherd, John E. (See McElroy, R. L., and Shepherd.)
Sherwood, Lester L., Los Angeles, Calif. Certificate holder. 1,829,193; Oct. 27.
Shield, Paul S., assignor to A. Davis, jr., Cincinnati, Ohio. Fluid pressure control of vehicle tank valves. 1,829,020; Oct. 27.
Shinkle, Seaphes D., New Haven, assignor to L. Candee & Company, New Haven, Conn. Superficially finishing rubber articles. 1,828,985; Oct. 27.
Shoe Form Co. (See De Witt, William J., assignor.)
Shoenberg, Milton H., and L. Schon, San Francisco, Calif.; said Schon assignor to said Shoenberg. Circuit controlling device. 1,829,194; Oct. 27.
Shoffstall, Arthur S., W. A. Mudge, A. B. Bagsar, and C. G. Bieber, Huntington, W. Va., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y. Desulphurizing nickel-containing matter. 1,828,752; Oct. 27.
Sholtz, Leo. (See Miller, C., and Sholtz.)
Shore-Line Builders, Inc. (See Weber, Carl, assignor.)
Short, Albert E., and H. O. Short, Rochester, England. Mooring buoy. 1,828,821; Oct. 27.
Short, Hugh O. (See Short, Albert E., and H. O.)
Shryock, Harry W., Seattle, Wash. Eyeglass shield. 1,828,850; Oct. 27.
Shryock, Robert B., and J. A. Ball, Fort Worth, Tex. Automatic fire alarm. 1,829,067; Oct. 27.
Shurtleff, Wilfred, assignor to The Herman-Nelson Corporation, Moline, Ill. Assembling radiators. 1,829,241; Oct. 27.
Siegel, Joseph, Detroit, Mich. Girdle. 1,829,160; Oct. 27.
Siemens-Schuckertwerke. Gesellschaft mit beschrankter Haftung in Liquidation. (See Gilchmann, H., and Gumz, assignors.)
Sigoda, Victor J., Brooklyn, N. Y. Hemstitch attachment for sewing machines. 1,828,879; Oct. 27.
Simmen, Oscar, Erlach, assignor to Firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Cooling of internal combustion engines for vehicles. 1,829,195; Oct. 27.
Simonsen, Ole K., et al. (See Neilsen, Peter C., assignor.)
Simplex Wire & Cable Company. (See Boggs, Charles R., assignor.)
Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Sinclair, William S., Phoenix, Ariz. Heavy liquid applicator. 1,829,021; Oct. 27.
Singer, Benjamin F. (See Ehemann, J. J., sr., and Singer.)
Singer Manufacturing Company, The. (See Hopper, William, assignor.)
Skillman, Newton, Highland Park, assignor to O. & S. Bearing Co., Detroit, Mich. Self-lubricating fabric bushing and forming the same. 1,829,574; Oct. 27.
Slagel, Franklin G., Buffalo, N. Y., assignor, by mesne assignments, to Frigidaire Corporation. Cooling tank for domestic refrigerator systems. 1,829,375; Oct. 27.
Slemmer, Harold. (See Shainline, Joseph B., assignor.)
Smellie, Donald G., Maywood, Ill., H. B. White and M. E. Nulsen, Canton, Ohio, assignors to The Hoover Company. Suction sweeper. 1,829,548; Oct. 27.
Smith, Aurile T., assignor to Burroughs Adding Machine Company, Detroit, Mich. Coil winding machine. 1,828,822; Oct. 27.
Smith, Carl G. (See Morss, E. L., Buckwell, and Smith.)
Smith, Ernest J., London, England, assignor to The Goss Printing Press Company. Sheet folding and delivering mechanism. 1,829,242; Oct. 27.
Smith, Ernest J., London, England, assignor to The Goss Printing Press Company. Sheet folding and delivering mechanism. 1,829,243; Oct. 27.
Smith, Ernest J., London, England, assignor to The Goss Printing Press Company. Sheet folding and delivering mechanism. 1,829,244; Oct. 27.
Smith, George D. (See Grasham, Anderson C., assignor.)
Smith, George L., Hyde Park, Mass. Flag holder. 1,828,851; Oct. 27.
Smith, H. B., Company, The. (See Smith, Stanley K., assignor.)
Smith, Harry F., assignor to The Gas Research Company, Dayton, Ohio. Gas purification. 1,829,068; Oct. 27.
Smith, Marshall C., Philadelphia, Pa., assignor to The Barrett Company. Ball bearing stuffing box. 1,828,880; Oct. 27.
Smith, Roy H. (See Frayer, L. A., and Harvey, assignors.)
Smith, Stanley C. (See Webb, George W. C., assignor.)
Smith, Stanley K., assignor to The H. B. Smith Company, Westfield, Mass. Boiler. 1,829,196; Oct. 27.
Smith, Stanley K., assignor to The H. B. Smith Company, Westfield, Mass. Combustion apparatus. 1,829,197; Oct. 27.
Smith & Stone Limited. (See Stone, B., Redshaw, and Nunns, assignors.)
Smith, William A., jr. (See Smith, W. A., sr., and W. A., jr.
Smith, William A., jr., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Blowing device for rock drills. 1,829,245; Oct. 27.
Smith, William A., sr., Easton, Pa., and W. A. Smith, jr., Phillipsburg, assignors to Ingersoll-Rand Company, Jersey City, N. J. Percussive tool. 1,829,246; Oct. 27.
Smithson, William D., and J. L. Hair, Wichita Falls; said Smithson assignor to O. G. Stephens, C. V. Stephens, M. D. Stephens, L. W. Stephens, and M. L. Stephens, Wichita County, Tex. Reel. 1,829,161; Oct. 27.
Sneed, John, Ferndale, Mich. Tire rod. 1,829,305; Oct. 27.
Sneed, John, Ferndale, Mich. Tie rod. 1,829,306; Oct. 27.
Sneed, John, Ferndale, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio. Brake assembly. 1,829,307; Oct. 27.
Snodgrass, Benjamin W., Denver, Colo. Auxiliary unit for mining machines. 1,829,549; Oct. 27.
Societe Anonyme Francaise dite Societe Technique d'Optique et de l'Photographic (S. T. O. P.). (See Chretien, Henri, assignor.)
Societe d'Electricite de la Region de Valenciennes-Anzin. (See Haveaux, Emile, assignor.)
Society of Chemical Industry in Basle. (See Gubler, H., de Montmollin, and Spieler, assignors.)
Soehner, Andreas, Westwood, N. J. Sample tab card. 1,829,308; Oct. 27.
Sölter, Hugo, and H. Cornelius, assignors to Eisenwerk Weserhütte Aktiengesellschaft, Bad Oeynhausen, Germany. Cable laying machine and laying cable. 1,829,162; Oct. 27.
Solvay Process Company. (See Conklin, Earl B., assignor.)
Sonoco Products Company. (See Forney, Clarence H., assignor.)
Southern Prison Company. (See White, Lloyd J., assignor.)
Sparks, Charles F., St. Louis, Mo. Bag turning apparatus. 1,828,881; Oct. 27.
Speaker, John W., and A. Selsemeyer, Whitefish Bay, Wis. Aerial eliminator. 1,828,910; Oct. 27.
Specht, Franz. (See Weise, P., and Specht.)
Speer, Clarence, San Francisco, Calif. Delivery mechanism for snowplows. 1,829,198; Oct. 27.
Speicher, Daniel E., assignor to The Cyclone Manufacturing Company, Urbana, Ind. Poultry feeder. 1,829,682; Oct. 27.
Speidel, Albert E. R., Edgewood, R. I. Bracelet chain. Des. 85,447; Oct. 27.
Speidel, Albert E. R., Edgewood, R. I. Bracelet chain. Des. 85,448; Oct. 27.
Spence, Cary F., et al. (See Carnes, James R., assignor.)
Sperry Gyroscope Company. (See Bates, Mortimer F., assignor.)
Sperry, Samuel E., Hollis, assignor to Intertype Corporation, Brooklyn, N. Y. Typographical machine. 1,829,683; Oct. 27.
Spieler, Joseph. (See Gubler, H., de Montmollin, and Spieler.)
Spikes, Richard B., San Francisco, Calif., assignor by mesne assignments, to R. E. Jordan, Alameda County, Calif. Method and apparatus for obtaining average samples and temperature of tank liquids. 1,828,753; Oct. 27.
Spina, John V., New York, N. Y. Doll or similar article. Des. 85,449; Oct. 27.
Sprague, Alson J., Middletown, assignor to The Borden Company, New York, N. Y. Machine for closing cans. 1,829,199; Oct. 27.

Sprague-Sells Corporation. (See de Back, William, assignor.)
Sprong, William J., Alhambra, assignor to United States Spring and Bumper Company, Inc., Los Angeles, Calif. Vehicle spring construction. 1,829,163; Oct. 27.
Squibb, E. R., and Sons. (See Nitardy, Ferdinand W., assignor.)
Staedtler, J. S., The firm. (See Schwarz, August, assignor.)
Stalker, Edward A., Ann Arbor, Mich. Airplane. 1,829,616; Oct. 27.
Standard Oil Company of California. (See Davis, Richard F., assignor.)
Standard Stoker Company, The. (See Hatch, Mellen C. M., assignor.)
Standard Stoker Company, The. (See Roesch, F. P., and Hunt, assignorrs.)
Standard Stoker Company, The. (See Turner, Edwin A., assignor.)
Standlee, Harvey R., Tulsa, Okla. Control valve. 1,829,069; Oct. 27.
Stanley Works, The. (See Carter, Ray L., assignor.)
Stansel, Numan R., Schenectady, N. Y., assignor to General Electric Company. Furnace. 1,829,684; Oct. 27.
Stark, Harold. (See Heames, R. M., and Stark.)
Stationers Loose Leaf Co. (See Lotter, Adolph G., assignor.)
Stazak, Michael B., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system. 1,829,070; Oct. 27.
Stazak, Michael B., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system. 1,829,071; Oct. 27.
Stead, Harold J., assignor to Steadfast Mfg. Co., Inc., Geneva, N. Y. Spring checking device. 1,829,376; Oct. 27.
Steadfast Mfg. Co. (See Stead, Harold J., assignor.)
Steckham, Richard. (See Bergen, G., Engelhardt, and Steckham.)
Steffen, Adolf, assignor to Adams Bros. Mfg. Co., Inc., Pittsburgh, Pa. Radiant heater. Des. 85,450; Oct. 27.
Steffen, Leroy J., Evanston, Ill., assignor to Hough Shade Corporation. Wood splint shade. 1,829,617; Oct. 27.
Steinharter, Joseph J. (See Grossman, J. J., and Steinharter.)
Stephens, C. V., et al. (See Smithson, W. D., and Hair, assignors.)
Stephens, L. W., et al. (See Smithson, W. D., and Hair, assignors.)
Stephens, M. D., et al. (See Smithson, W. D., and Hair, assignors.)
Stephens, M. L., et al. (See Smithson, W. D., and Hair, assignors.)
Stephens, O. G., et al. (See Smithson, W. D., and Hair.)
Stevens, Edward. (See Mason, W. K., and Stevens.)
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Rivet cutting gun. 1,829,309; Oct. 27.
Stevens, Golder E., Seminole, Okla. Dilating irrigator. 1,828,986; Oct. 27.
Stevenson, Edward E., Los Angeles, assignor to Emsco Derrick and Equipment Company, Los Angeles, Calif. Constructing valve. 1,829,022; Oct. 27.
Stifel, J. L., & Sons, Inc. (See Whitehead, Holbrook, assignor.)
Stoetzel, Joseph J., Bellaire, assignor to G. & G. Atlas Systems, Inc., New York, N. Y. Pneumatic dispatch tube system. 1,828,787; Oct. 27.
Stokholm, Christian, et al. (See Heilsen, Peter C., assignor.)
Stone, Barnet, H. Redshaw, and J. W. Nunns, assignors to Smith & Stone Limited, Georgetown, Ontario, Canada. Producing thermal and electrical insulating pads. 1,829,685; Oct. 27.
Stone, Elmer B., assignor to The American Hardware Corporation, New Britain, Conn. Suit case lock. 1,829,310; Oct. 27.
Stoops, Buren I., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Explosive. 1,828,788; Oct. 27.
Stover, Frank E., assignor of one-half to D. T. Igou, Springfield, Ohio. Circuit maker and breaker.
Strauss, Benno, Essen, assignor to Fried-Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Making steel insensible to the action of hot gases and vapors. 1,829,118; Oct. 27.
Stresau, Richard, Wauwatosa, assignor to Swifton Manufacturing Company, West Allis, Wis. Feed preparing apparatus. 1,828,987; Oct. 27.
Strobel, Alfons, Munich, Germany. Blindstitch sewing machine. 1,828,789; Oct. 27.
Strong, Archie H., Flushing, N. Y., assignor to Master Domestic Refrigerating Company, Inc. Refrigerating apparatus. 1,829,377; Oct. 27.
Strong, Archie H., Norristown, assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa. Refrigerator. 1,829,716; Oct. 27.
Studer, Clair W., North Canton, Ohio, assignor to The Hoover Company. Filter material and making it. 1,829,618; Oct. 27.
Sullivan Machinery Company. (See Huffman, Mervin C., assignor.)
Sullivan Machinery Company. (See Shelburne, Arthur, assignor.)
Sulzer Freres Societe Anonyme, The Firm of. (See Ateslander, Edouard, assignor.)
Sulzer Freres Societe Anonyme. (See Simmen, Oscar, assignor.)
Summers, Caleb E., and R. K. Lee, assignors to General Motors Research Corporation, Detroit, Mich. Engine mounting. 1,829,723; Oct. 27.
Sundstrand Corporation. (See Sundstrand, Oscar J., assignor.)
Sundstrand Machine Tool Co. (See Svenson, Ernest J., assignor.)
Sundstrand, Oscar J., Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del. Control printing of signals. 1,829,461; Oct. 27.
Superior Engineering Company. (See Whelan, F. J., and Dwyer, assignors.)
Sutherlin, Lee, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Filament support. 1,829,423; Oct. 27.
Sutherlin, Lee, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Hot cathode electron discharge tube. 1,829,460; Oct. 27.
Svenson, Ernest J., assignor to Sundstrand Machine Tool Co., Rockford, Ill. Chuck. 1,829,619; Oct. 27.
Swan, John C., Marietta, Ohio. Apparatus for condensing hydrocarbon vapors and the like. 1,829,424; Oct. 27.
Swann Research, Inc. (See Davis, T. L., and Huntress, assignors.)
Swanski, Joseph, Worcester, Mass. Door aligning and cushioning device. 1,829,462; Oct. 27.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,829,164; Oct. 27.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,829,165; Oct. 27.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,829,166; Oct. 27.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,829,167; Oct. 27.
Swartout, Ross E., Los Angeles, Calif. Automobile storage apparatus. 1,829,023; Oct. 27.
Sweetland, William H., San Diego, Calif. Cooling apparatus. 1,829,072; Oct. 27.
Swendsen, Johan W., Oslo, Norway. Induction motor. 1,829,686; Oct. 27.
Swifton Manufacturing Company. (See Stresau, Richard, assignor.)
Swigert, Clyde, assignor, by mesne assignments, to St. Joseph Iron Works, St. Joseph, Mich. Apparatus for making baskets or other receptacles. 1,828,911; Oct. 27.
Symington Company, The. (See Barrows, Donald S., assignor.)
Symons, Arthur H., assignor to Symons Clamp & Mfg. Company, Chicago, Ill. Shore. 1,829,550; Oct. 27.
Symons Clamp & Mfg. Company. (See Symons, Arthur H., assignor.)
Tabor, Leroy, Riverton, N. J., and F. R. Wallace, assignors to The Tabor Manufacturing Company, Philadelphia, Pa. Adjustable hinged yoke for squeezing machines. 1,828,882; Oct. 27.
Tabor Manufacturing Company, The. (See Tabor, L., and Wallace, assignors.)
Taft, Sydney E., Framingham, assignor to Gulliford Wood Heel Company, Lynn, Mass. Cutting tool. 1,829,200; Oct. 27.
Takiguchi, Paul, New York, N. Y. Arboreal article. 1,829,687; Oct. 27.
Tarbox, John P., Philadelphia, Pa., C. L. Eksergian and W. H. Farr, Detroit, Mich., assignors to Budd Wheel Company, Philadelphia, Pa. Wheel. 1,829,168; Oct. 27.
Taylor, Edmund R., New York, N. Y., assignor to American Telephone and Telegraph Company. Combined telephone and telegraph system. 1,828,823; Oct. 27.
Taylor, Henry P., Winston-Salem, N. C. Compressing tobacco. 1,828,790; Oct. 27.
Taylor, James H., New York, N. Y., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Garment press. 1,828,951; Oct. 27.
Ten, Peter L., Yonkers, N. Y. Apparatus for investigating and demonstrating the laws of centrifugal force. 1,829,311; Oct. 27.
Teasley, Daniel O., Denver, Colo. Refrigerator and hydrator and fruits and vegetables. 1,829,024; Oct. 27.
Technical Supply Company. (See May, Edward A., assignor.)
Telkor, Inc. (See Roe, William C., assignor.)
Texas Company, The. (See Dearborn, Richard J., assignor.)
Théry, René V. S., St. Nazaire, assignor to Compagnie de Fives-Lille, Paris, France. Water tube boiler. 1,829,119; Oct. 27.
Thew Shovel Company, The. (See Barbour, H. C., and Zellman, assignors.)
Thieman, William B., Albert City, Iowa. End gate for wagon boxes. 1,829,169; Oct. 27.
Thiriet, André, assignor to Papeteries Navarre, Lyon, France. Treatment of cellulose materials. 1,829,378; Oct. 27.
Thomas, Adolph A., New York, N. Y. Safety door. 1,829,312; Oct. 27.
Thomas, Paul C., Scranton, Pa. Calendar pad. 1,829,688; Oct. 27.
Thompson, Joseph S., San Francisco, Calif. Positioning device. 1,828,791; Oct. 27.

Thompson Products Inc. (See Crawford, F. C., and Graham, assignors.)
Thompson, R. E., Manufacturing Company. (See Phelps, Boyd., assignor.)
Thomson, William P., assignor to The Rail Joint Company, New York, N. Y. Reforming oil rail joint bars. 1,829,247; Oct. 27.
Thwing Instrument Company. (See Albert, Edward J., assignor.)
Tietze, Ernst. (See Hentrich, W., Knoche, and Tietze.)
Tobin, Kenneth J., and C. E. Eklind, Chicago, Ill., assignors to Camel Company. Locking means for car doors. 1,828,912; Oct. 27.
Tobin, Kenneth J., and A. Wasberg, assignors to Camel Company, Chicago, Ill. Latching means for drop end gondola cars. 1,829,073; Oct. 27.
Tod, Erich, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Tube transmitter keying method. 1,828,852; Oct. 27.
Toews, Peter J., New York, N. Y. Dough former. 1,829,120; Oct. 27.
Toledo Scale Manufacturing Company. (See Hem, Malvor O., assignor.)
Toledo Scale Manufacturing Company. (See Reeves, Orwell C., assignor.)
Tompkins, Jesse J., Houston, Tex. Woodworking machine. 1,829,313; Oct. 27.
Toomey, Jeremiah F., New York, and J. F. McNally, Brooklyn, N. Y. Automobile jacking device. 1,828,913; Oct. 27.
Torance, William, Calgary, Alberta, Canada. Grain stooking machine. 1,828,754; Oct. 27.
Torrance, Wilfred J., Cleveland, Ohio. Method and apparatus for using crude oil as a motor fuel. 1,829,074; Oct. 27.
Townley, Philip B., Rumson, and W. R. Townley, East Orange, N. J., assignors to Paas Dye Company. Coloring eggs or the like. 1,829,689; Oct. 27.
Townley, William R. (See Townley, Philip B., and W. R.)
Transitone Automobile Radio Corporation. (See Heina, William M., assignor.)
Trinkle, Carl, assignor to The Baldwin Company, Cincinnati, Ohio. Grand piano action. 1,829,314; Oct. 27.
Trogner, Arthur M. (See Bohner, C. E., and Trogner.)
Troy Laundry Machinery Co. Inc. (See McKnight, Samuel H., assignor.)
Tuck, George A., San Francisco, Calif. Fuel supply control mechanism for gas burners. 1,828,883; Oct. 27.
Turnbull, Werd W., assignor to McLaren-Consolidated Cone Corporation, Dayton, Ohio. Ice cream cone. 1,829,201; Oct. 27.
Turner, Alvin M., Spartanburg, S. C. Electric lawn mower. 1,829,090; Oct. 27.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive and tender. 1,829,425; Oct. 27.
Tuthill, Edwin A. (See Whittington, L. E., and Tuthill.)
Tutierrez, Manuel S. (See Zubia, J. D., and Gutierrez.)
Tverbakk, Hakon A. P., Kjerringoy in Salten, Norway. Valve for internal combustion engines and the like. 1,828,792; Oct. 27.
Tyler, W. S., Company, The. (See Boehm, John, assignor.)
Underwood Elliott Fsher Company. (See von Reppert, Richard, assignor.)
Union Switch & Signal Company, The. (See Bone, Herbert L., assignor.)
Union Switch & Signal Company, The. (See Crago, Paul H., assignor.)
United Shoe Machinery Corporation. (See Barclay, W. R., and Roberts, assignors.)
United Shoe Machinery Corporation. (See Bourn, Stephen W., assignor.)
United Shoe Machinery Corporation. (See Brown, John H., assignor.)
United Shoe Machinery Corporation. (See Leveque, Bernard T., assignor.)
United Shoe Machinery Corporation. (See Wentworth, Frank T., assignor.)
United States Gypsum Company. (See Besal, J. A., and Medaris.)
United States Gypsum Company. (See Parker, John N., assignor.)
United States Gypsum Company. (See Reel, Herbert W., assignor.)
United States Gypsum Company. (See Vogel, N. J., and Quick, assignors.)
U. S. Manufacturing Corporation. (See Shafter, Adolph F., assignor.)
United States Spring and Bumper Company. (See Sprong, William J., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Urayasz, Antony. (See Kania, Rudolph, assignor.)
Utility Block, Inc. (See Barnhart, Vern A., assignor.)
Vadsco Sales Corporation. (See Jensen, Gustav B., assignor.)
Van Berkel, Adrianus W., Rotterdam, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands. Weighing apparatus. 1,829,316; Oct. 27.
Van Berkel, Cornelis F. M., Wassenaar, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands. Weighing apparatus. 1,829,315; Oct. 27.
Van Buren, John, Brooklyn, N. Y. Apparatus for feeding and cutting material. 1,828,793; Oct. 27.
Vance, John W., Detroit, Mich. Machine for making radiating tubes. 1,829,202; Oct. 27.
Van Epps, Margaret E., Floral Park, New York, assignor of one-third to R. C. Birkhahn, Woodmere, Long Island, N. Y. Studio dress. 1,829,170; Oct. 27.
Van Epps, Margaret E., Floral Park, N. Y., assignor of one-third to R. C. Birkhahn, Woodmere, Long Island, N. Y. Studio dress. 1,829,171; Oct. 27.
Van Tassel, Charles H., Philadelphia, Pa. Mattress. 1,829,620; Oct. 27.
Varano, Vito, et al. (See Dicola, Rocco, assignor.)
Variety Fire Door Company. (See Rak, Jaroslav, assignor.)
Vermeulen, Roelof, Eindhoven, Netherlands, assignor to Radio Corporation of America. Carbon grain microphone. 1,829,203; Oct. 27.
Verpent, Victor J., assignor to De Forest Radio Telephone & Telegraph Company, Jersey City, N. J. Wire bending machine. 1,828,884; Oct. 27.
Vethe, Anders, Oslo, Norway. Computing machine. 1,829,379; Oct. 27.
Victor, John H., Evanston, assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,829,248; Oct. 27.
Victor Manufacturing & Gasket Company. (See Victor, John H., assignor.)
Vinson, Elliott R., Cottage Grove, Oreg. Sound recording apparatus. 1,829,121; Oct. 27.
Vinson, Wayland J., Portsmouth, Va. Ham hanger. 1,828,988; Oct. 27.
Virden, John C., Company, The. (See Pfeifer, Paul J., assignor.)
Viscose Company, The. (See Rust, Philip G., assignor.)
Vizard, William C. (See Arnold, P. C., and Vizard.)
Vogel, Nicholas J., and F. R. Quick, Fort Dodge, Iowa, assignor to United States Gypsum Company, Chicago, Ill. Board cutting machine. 1,829,075; Oct. 27.
Vogt, Clarence W., assignor to Vogt Instant Freezers, Inc., Louisville, Ky. Process and apparatus for cooling or freezing ice cream and the like. 1,828,853; Oct. 27.
Vogt Instant Freezers, Inc. (See Vogt, Clarence W., assignor.)
Voit, William J., Los Angeles, Calif. Marginal reenforcement for pockets of rubber balls. 1,829,380; Oct. 27.
Von Arco, Georg, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Berlin, Germany. Interference elimination. 1,829,204; Oct. 27.
Von Beulwitz, Gustav, Bremen, assignor to the Firm Atlas-Werke Aktiengesellschaft, Breman, Germany. Gear protection. 1,829,249; Oct. 27.
Von Brethorst, Karl, Loda, Ill. Scraper for tractor wheels. 1,828,824; Oct. 27.
Von Reppert, Richard, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,828,755; Oct. 27.
Von Schlegell, Victor, et al. (See Ciglia, E. F., and Pelletier, assignors.)
Vorech, Stephen, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Strainer baffle. 1,828,952; Oct. 27.
Waddell, Miller. (See Moan, L. H., and Waddell.)
Wade, Jethro T., High Wycombe, England. Turbine pump and the like. 1,829,122; Oct. 27.
Wade, William J., assignor of one-half to M. J. Campbell, Fort Madison, Iowa. Heating system for automobiles. 1,828,989; Oct. 27.
Waechter, Ferdinand F., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Loading and unloading mechanism for elevators. 1,829,317; Oct. 27.
Waggoner, Ralph, assignor to Marbelite Corporation of America, Los Angeles, Calif. Apparatus for forming cementitious bodies. 1,828,914; Oct. 27.
Wagner, Friedrich, Limbach, Germany. Circular knitting machine. 1,829,691; Oct. 27.
Walen, Ernest D., Andover, assignor to Pacific Mills, Lawrence, Mass. Fabric measuring apparatus and method. 1,829,318; Oct. 27.
Walker, Crawford J., assignor to The Protectu Corporation, Indianapolis, Ind. Non-readable carbon paper. 1,829,250; Oct. 27.
Walker, George C., Wayne, Mich., assignor of one-half to T. M. Lucking, Detroit, Mich. Traffic signal. 1,829,025; Oct. 27.
Walker, Herbert S., Bacolod, Occidental Negros, Philippine Islands. Settling tank. 1,828,794; Oct. 27.
Walker, John C., El Dorado, Kans., assignor to Empire Oil and Refining Company, Dover, Del. Treating oil-water emulsions. 1,829,205; Oct. 27.
Walker, John C., El Dorado, Kans., assignor to Empire Oil & Refining Company, Dover, Del. Prevention of corrosion in oil wells. 1,829,705; Oct. 27.
Walker, Lawrence D., Pawtucket, R. I., assignor to Collyer Insulated Wire Co. Electric plug. 1,829,692; Oct. 27.
Walker Manufacturing Company. (See Johnson, Alvin L., assignor.)
Walker Manufacturing Company. (See Krenzke, William F., assignor.)

Wallace, Frank R. (See Tabor, L., and Wallace.)
Walter, Ernest, Newark, N. J. Making porous cement. 1,829,381; Oct. 27.
Walters, Horace, Center Township, Calhoun County, Iowa. Wheel scraping attachment for tractors. 1,829,172; Oct. 27.
Wambsgans, William H., assignor to Joint Manfg. Co., Peoria, Ill. Knee-joint for artificial limbs. 1,829,551; Oct. 27.
Ward Leonard Electric Company. (See Kouyoumjian, Haroutium K., assignor.)
Ward, Montague W., Erie, Pa., assignor to General Electric Company. Caustic bath. 1,829,603; Oct. 27.
Warren, William C., Austell, Ga. Imitation shingle roof. 1,829,123; Oct. 27.
Wasberg, Axel. (See Tobin, K. J., and Wasberg.)
Watkins, Parke H., Leonia, and A. W. Holmberg, South Orange, N. J., assignors to National India Rubber Company, Bristol, R. I. Making rubber articles by deposition. 1,828,990; Oct. 27.
Weatherhead, Albert J., jr., Cleveland, Ohio. Piston and connecting rod. 1,829,552; Oct. 27.
Webb, George W. C., London, assignor of one-half to S. C. Smith, Bedfordshire, England. Form of reduction gear. 1,828,795; Oct. 27.
Webb, Harry A., Hamden, assignor to The Wemith Corporation, New Haven, Conn. Attachment for smoking pipes. 1,829,076; Oct. 27.
Webb, Harry N. (See Webb, H. R. and H. N.)
Webb, Harry R. and H. N., Grantham, England. Device for balancing bodies having a rising and falling movement. 1,829,694; Oct. 27.
Weber, Carl, assignor to Shore-Line Builders, Inc., Jacksonville, Fla. Concrete retaining wall. 1,829,463; Oct. 27.
Wegner, Walter F., assignor to Fruit Belt Preserving Company, East Williamson, N. Y. Cooling canned goods and apparatus used in such method. 1,829,717; Oct. 27.
Weir, Claude V., Toronto, Ontario, Canada. Apparatus for proportioning the components of aggregate material by weight measurement. 1,829,026; Oct. 27.
Weis, Henry, Manufacturing Company. (See Barker, H. E., and Baum, assignors.)
Weisberg, Leon, Philadelphia, Pa. Composition of matter for putty. 1,828 885; Oct. 27.
Weise, Paul, Wiesdord-on-the-Rhine, and F. Specht, Cologne-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Refining of chromium ores. 1,828,756; Oct. 27.
Weisner, Harry, Philadelphia, Pa. Sewing machine. 1,828,886; Oct. 27.
Weiss, Carl W., Brooklyn, N. Y. Transmission device. 1,828,825; Oct. 27.
Welch, George P. (See Morton, B., and Welch.)
Welch, Walter H., Bristol, England. Device for use when testing or adjusting brakes. 1,829,426; Oct. 27.
Wellman, Engineering Company, The. (See Sabin, Ford L., assignor.)
Welter, Adolf, Krefeld-Rheinhafen, Germany. Production of soap threads. 1,828,826; Oct. 27.
Wemith Corporation, The. (See Webb, Harry A., assignor.)
Wensley, Roy J., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic hydro-electric generating station. 1,829,427; Oct. 27.
Wentworth, Frank T., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Buttonhole making machine. 1,828,915; Oct. 27.
Wertz, Austin L., Lakewood, Ohio. Combined flusher and lubricant dispenser. 1,829,173; Oct. 27.
Western Union Telegraph Company, The. (See Hoover, R., and Dirkes, assignors.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See Hewitt, Ellis E., assignor.)
Westinghouse Air Brake Company, The. (See Vorech, Stephen, assignor.)
Westinghouse Electric & Manufacturing Company. (See Back, Goldie, assignor.)
Westinghouse Electric and Manufacturing Company. (See Bouton, E. M., and Lewis, assignors.)
Westinghouse Electric & Manufacturing Company. (See Clay, Noble S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hyde, Harold G., assignor.)
Westinghouse Electric and Manufacturing Company. (See Natalis, Friedrich, assignor.)
Westinghouse Electric and Manufacturing Company. (See Need, Leslie R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sutherlin, Lee, assignor.)
Westinghouse Electric & Manufacturing Company. (See Wensley, Roy J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wheeler, Brian, assignor.)
Westinghouse Electric & Manufacturing Company. (See Wolf, Lester J., assignor.)
Wewerka, August H. (See Haase, F. A., and Wewerka.)
Wheeler, Arthur, assignor to Folmer Graflex Corporation, Rochester, N. Y. Camera. 1,829,319; Oct. 27.
Wheeler, Brian, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Locomotive truck. 1,829,464; Oct. 27.
Whelan, Frank J., New York, N. Y., and T. F. Dwyer, jr., Cambridge, assignors to Superior Engineering Company, Boston, Mass. Soot blower. 1,829,174; Oct. 27.
White, Harold E., Butler, assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa. Crucible furnace lining. 1,829,320; Oct. 27.
White, Harry B. (See Smellie, D. G., White, and Nulsen.)
White, John W., Buffalo, N. Y., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wheel. 1,829,575; Oct. 27.
White, Lloyd J., assignor to Southern Prison Company, San Antonio, Tex. Window for jails and the like. 1,828,827; Oct. 27.
White Motor Company, The. (See Church, Harold D., assignor.)
Whiteford, Guy L., Salina, Kans. Device for holding fire hose nozzles. 1,829,621; Oct. 27.
Whitehead, Holbrook, Baltimore, Md., assignor to J. L. Stifel & Sons, Inc., Wheeling, W. Va. Textile fabric. Des. 85,451; Oct. 27.
Whitson, Ralph A., Glosgow, Scotland. Apparatus for molding hollow bodies by centrifugal force. 1,828,916; Oct. 27.
Whittingham, George H., assignor to Monitor Controller Company, Baltimore, Md. Friction switch mechanism. Re18,238; Oct. 27.
Whittington, Louis, E., and E. A. Tuthill, Silvis, Ill. Engine mounting for automotive vehicles. 1,829,251; Oct. 27.
Whitworth, Sir W. G. Armstrong, Aircraft Limited. (See Wylie, H. N., and Crabbe, assignors.)
Wilbur Products Company. (See Oberst, Frank, assignor.)
Wilcox, Lewis T., Peekskill, N. Y., assignor to Wilcox Patents Corporation. Oil burner. 1,829,027; Oct. 27.
Wilcox Patents Corporation. (See Wilcox, Lewis T., assignor.)
Wiley, Roy R., Buffalo, assignor to Flexlume Corporation, Tonawanda, N. Y. Electric sign. 1,829,321; Oct. 27.
Willans, Peter W., Pattisball, Towcester, and F. J. H. Charman, Bedford, England. Radio receiving set. 1,829,175; Oct. 27.
Willet, George R., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Plug seat. 1,829,077; Oct. 27.
Williams Company, The. (See Robbins, W. H., and Boheler, jr., assignors.)
Williams, Harrison R., New York, N. Y. Conveying means. 1,829,322; Oct. 27.
Willis, Le Roy W., Stamford, Conn., assignor to Intertype Corporation, Brooklyn, N. Y. Matrix for typographical machines. 1,829,695; Oct. 27.
Wilson, Fred D., Harvey, assignor to Austin Manufacturing Co., Chicago, Ill. Four wheel drive road machine. 1,829,622; Oct. 27.
Wilson, George F., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Stuffing box. 1,829,206; Oct. 27.
Wilson, Leroy A., Salt Lake City, Utah. Metallurgical process. 1,829,124; Oct. 27.
Winship, Ross, Valparaiso, Ind. Folding shoe blacking kit. 1,828,854; Oct. 27.
Wintterlin, Karl, Cologne, assignor to Motorenfabrik Deutz, Aktiengesellschaft, Cologne-Deutz, Prussia, Germany. Gearing device for internal combustion multi-cylinder oil engines. 1,829,078; Oct. 27.
Wired Radio, Inc. (See Bohner, C. E., and Trogner, assignors.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wisniewski, Frank, administrator. (See Kurek, John J.)
Wissheier, John, West Philadelphia, Pa. Building stud. 1,828,953; Oct. 27.
Witter, Victor F., Akron, and U. A. Frederick, Fremont, Ohio. Micrometer. 1,829,323; Oct. 27.
Wolf, Albert, et al. (See Wolf, Howard A., assignor.)
Wolf, Benjamin, et al. (See Wolf, Howard A., assignor.)
Wolf Brothers, et al. (See Wolf, Howard A.)
Wolf, Elias, et al. (See Wolf, Howard A., assignor.)
Wolf, Howard A., assignor to B. Wolf, L. Wolf, A. Wolf, H. A. Wolf, and E. Wolf, copartners trading as Wolf Brothers, Philadelphia, Pa. Box. 1,828,757; Oct. 27.
Wolf, Howard A., et al. (See Wolf, Howard A., assignor.)
Wolf, Lester J., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Radio system. 1,829,465; Oct. 27.
Wolf, Louis, et al. (See Wolf, Howard A., assignor.)
Wolff, Wallace B., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,829,428; Oct. 27.
Wolfsheim, Sylvan, New York, N. Y. Watch display box. Des. 85,425; Oct. 27.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Double-barrelled auto shaver. 1,829,176; Oct. 27.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woods, William J., assignor to Corning Glass Works, Corning, N. Y. Drawing glass. 1,829,429; Oct. 27.
Worcester Loom Works. (See Alvord, Charles C., assignor.)
Worrall, Arthur G. (See Hackett, R. W., and Worrall.)
Wright, James G. E., Alplaus, N. Y., assignor to General Electric Company. Treating metals. 1,829,623; Oct. 27.

Wylie, Hamilton N., and P. G. Crabbe, assignors to Sir W. G. Armstrong Whitworth Aircraft Limited, Coventry, England. Riveting tool. 1,829,696; Oct. 27.
Wylie, Hamilton N., and P. G. Crabbe, assignors to Sir W. G. Armstrong Whitworth Aircraft Limited, Coventry, England. Riveting machine. 1,829,697; Oct. 27.
Yates, Raymond F., Buffalo, N. Y., assignor, by mesne assignments, to T. Deutschmann, trustee. Electrodynamically-controlled figure. Re18,239; Oct. 27.
Yevseyeff, George F., Detroit, Mich. Shock absorber. 1,829,382; Oct. 27.
Yevseyeff, George F., Detroit, Mich. Shock absorber for vehicles. 1,829,430; Oct. 27.
Yngve, Victor, Niagara Falls, N. Y., assignor to National Carbon Company, Inc. Electrolyte for electrolytic condensers. 1,829,177; Oct. 27.
Yngve, Victor, Niagara Falls, N. Y., assignor to National Carbon Company, Inc. Electrolyte for electrolytic condensers. 1,829,178; Oct. 27.
Yost, Frederick W., Cleveland, Ohio. Mechanical overload release mechanism. 1,829,576; Oct. 27.
Young, James A., and F. Bryan, Scio, Oreg. Meat saw. 1,829,079; Oct. 27.
Youngstown Steel Door Co., The. (See Ditchfield, Frank, assignor.)
Zajtman, Alfred A., New York, N. Y. Watchmaker's micrometric gauge. 1,829,698; Oct. 27.
Zeh, Edmund W., Newark, N. J. Emergency stop for friction screw presses. 1,828,828; Oct. 27.
Zeilman, Roy H. (See Barbour, H. C., and Zeilman.)
Zigelman, Philip, and M. Rose, New York, N. Y. Control for valves and switches. 1,829,699; Oct. 27.
Zimmerli, William F., Akron, and W. L. Semon, Cuyahoga Falls, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Composition of matter and making same. 1,829,029; Oct. 27.
Zimmerman, Herman W., assignor to Automotive Maintenance Machinery Co., Chicago, Ill. Spring jack. 1,828,758; Oct. 27.
Zook, John C. (See Best, A. E., and Zook.)
Zubia, Joseph D., and M. S. Gutierrez, Los Angeles, Calif. Detachable heel. 1,820,252; Oct. 27.
Zubia, Joseph D., and M. S. Gutierrez, Los Angeles, Calif. Detachable shoe heel. 1,829,253; Oct. 27.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 27TH DAY OF OCTOBER, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid esters, Producing acrylic. W. Bauer. 1,829,208; Oct. 27.
Acid, Mixed ester of benzophenone-poly carboxylic. H. A. Bruson. 1,829,038; Oct. 27.
Acoustic diaphragm. V. T. Houghton. 1,829,355; Oct. 27.
Adhesive tape or bandage box. A. J. Anderson. 1,829,577; Oct. 27.
Advertising display apparatus. G. O. Matter. 1,828,744; Oct. 27.
Advertising or display apparatus. J. Shannon. 1,829,459; Oct. 27.
Aerial delivery device. R. Fisher. 1,828,928; Oct. 27.
Aerial eliminator. J. W. Speaker and A. Selsemeyer. 1,828,910; Oct. 27.
Aeroplane. F. F. Parker. 1,828,981; Oct. 27.
Agricultural implement. W. H. Pawson. 1,829,294; Oct. 27.
Agricultural machine. A. Garric. 1,828,773; Oct. 27.
Air cleaner. H. G. Kamrath. 1,829,401; Oct. 27.
Air conditioning device. W. C. Denison. 1,829,341; Oct. 27.
Aircraft. J. Bayerlein and A. A. Seiler. 1,829,080; Oct. 27.
Aircraft, Device for continuously recording the path of flight of. R. Hugershoff. 1,829,594; Oct. 27.
Aircraft propelling means. J. B. Shainline. 1,829,064; Oct. 27.
Air lock method of increasing tunnel capacities. C. A. Lee, jr. 1,829,525; Oct. 27.
Airplane. J. Rothschild. 1,829,372; Oct. 27.
Airplane. E. A. Stalker. 1,829,616; Oct. 27.
Air pressure water system for passenger cars. A. B. Lawson. 1,829,450; Oct. 27.
Alarm: *See*—
Fire alarm.
Alarm. S. S. Newman. 1,828,079; Oct. 27.
Alarm system and cumulative control device therefor. R. M. Hopkins. 1,829,721; Oct. 27.
Alloys, Making. W. P. Davey. 1,829,635; Oct. 27.
Aluminum alloy. W. Morrill. 1,829,668; Oct. 27.
Amusement device. W. F. Drew and J. W. Martinet. 1,829,266; Oct. 27.
Anæsthetic holding and heating accessory. A. G. McGregor. 1,829,600; Oct. 27.
Animal trap. B. E. Clarkson. 1,829,264; Oct. 27.
Animal trap. M. Muhvic. 1,829,002; Oct. 27.
Angle measurer, Vertical and horizontal. J. Schier. 1,829,614; Oct. 27.
Anticapacity switch. C. E. Bohner and A. M. Trogner. 1,829,336; Oct. 27.
Applicator, Heavy liquid. W. S. Sinclair. 1,289,021; Aquarium. R. E. Castetter. Des. 85,413; Oct. 27.
Arboreal article. P. Takiguchi. 1,829,687; Oct. 27.
Arithmetic, Device for teaching. F. O. Phagans. 1,829,295; Oct. 27.
Aspirating and embalming device. E. Kaiser. 1,829,144; Oct. 27.
Assembling machine. E. W. Henderson. 1,829,651; Oct. 27.
Automobile. H. D. Church. 1,829,506; Oct. 27.
Automobile jacking device. J. F. Toomey and J. F. McNally. 1,828,913; Oct. 27.
Automobile storage apparatus. R. E. Swartout. 1,829,023; Oct. 27.
Auto shaver, Double barrelled. H. A. W. Wood. 1,829,176; Oct. 27.
Bag turning apparatus. C. F. Sparks. 1,828,881; Oct. 27.
Bailer. L. H. Moan and M. Waddell. 1,829,151; Oct. 27.
Ball shaper for nurserymen. J. M. Gillogly. 1,829,002; Oct. 27.
Barium sulphide, Making. F. Rüsberg and P. Schmid. 1,829,188; Oct. 27.
Barrel filling device. R. R. Randall. 1,829,296; Oct. 27.
Baskets or other receptacles, Apparatus for making. C. Swigert. 1,828,911; Oct. 27.
Bath: *See*—
Caustic bath.
Bearing for screw conveyers, Flexible. F. B. Caldwell. 1,829,392; Oct. 27.
Bearing, Thrust. L. Roebel. 1,829,542; Oct. 27.
Bearings, Making partially lined. J. Brincil. 1,828,731; Oct. 27.
Beater, Egg. C. E. Kail. 1,828,932; Oct. 27.
Bed operating mechanism, Crank means for. M. C. Nelson and A. F. Kaptuller. 1,828,980; Oct. 27.
Benzene derivaties, Side chain combination of. E. B. Conklin. 1,828,858; Oct. 27.
Binder, Loose leaf. A. G. Lotter. 1,829,363; Oct. 27.
Blanc fixe, Manufacture of. J. B. Pierce, jr. 1,828,846; Oct. 27.
Blanks, Apparatus for heading. R. M. Heames and B. W. Lindquist. 1,829,351; Oct. 27.
Blanks, Forming. R. M. Heames. 1,829,397; Oct. 27.
Blind bracket, Venetian. E. Anderson. 1,829,718; Oct. 27.
Block: *See*—
Building block.
Block and system, Traveling. H. J. Hollingsworth. 1,828,897; Oct. 27.
Blowpipe apparatus. F. C. Hasse. 1,829,592; Oct. 27.
Board control mechanism. J. A. Besal and L. R. Medaris. 1,829,035; Oct. 27.
Board cutting machine. N. J. Vogel and F. R. Quick. 1,829,075; Oct. 27.
Bodies by centrifugal force, Apparatus for molding hollow. R. A. Whitson 1,828,916; Oct. 27.
Bodies having a rising and falling movement, Device for balancing. H. R. and H. N. Webb. 1,829,694; Oct. 27.
Body frame. J. G. Lovell. 1,828,743; Oct. 27
Boiler: *See*—
Water tube boiler.
Boiler. E. C. Kline. 1,829,148; Oct. 27.
Boiler. S. K. Smith. 1,829,196; Oct. 27.
Book, Daily plan. E. F. Irwin. 1,829,282; Oct. 27.
Boot tree. A. Niemi. 1,828,937; Oct. 27.
Bottle filling and crowning machine. J. W. Flower. 1,828,802; Oct. 27.
Box: *See*—
Adhesive tape or bandage box.
Folding box.
Fuse and switch box.
Match box.
Outlet box.
Stuffing box.
Vanity box.
Box. H. A. Wolf. 1,828,757; Oct. 27.
Box for hounds, Slipping. C. A. Kitzmiller. 1,829,224; Oct. 27.
Bracelet. F. Armbrust. 1,829,493; Oct. 27.
Bracelet chain. A. E. R. Speidel. Des. 85,447–8; Oct. 27.
Bracket: *See*—
Blind bracket.
Mirror bracket.
Brake. J. J. Kurek. 1,829,487; Oct. 27.
Brake assembly. J. Sneed. 1,829,307; Oct. 27.
Brakes, Device for use when testing or adjusting. W. H. Welch. 1,829,426; Oct. 27.
Brine, Treating. C. F. Prutton. 1,829,539; Oct. 27.
Brittles, Making edible bar. E. Messer. 1,829,568; Oct. 27.
Brush, Cup shaped rotary. R. G. Mertes. 1,829,665; Oct. 27.
Buckle. M. Hawie. 1,829,278–9; Oct. 27.
Buckle, Bale-tie. E. A. Frantz. 1,829,644; Oct. 27.
Buckle with loop and lock. A. H. Kerngood. 1,829,223; Oct. 27.
Building block, Hollow. V. A. Barnhart. 1,829,435; Oct. 27.
Building construction. J. F. Loucks. 1,828,842; Oct. 27.
Building construction. H. W. Reel. 1,829,156; Oct. 27.
Bumper for electric lamps. J. P. Eastman. 1,829,345; Oct. 27.
Buoy, Mooring. A. E. and H. O. Short. 1,828,821; Oct. 27.
Burner: *See*—
Oil burner.
Burner. P. Marasco. 1,828,779; Oct. 27.
Burner installation, Kindling. F. A. Gercich and W. M. Berry. Re18,235; Oct. 27.
Burners, Fuel supply control mechanism for gas. G. A. Tuck. 1,828,883; Oct. 27.
Bushing and forming the same, Self lubricating fabric. N. Skillman. 1,829,574; Oct. 27.
Bushing for armored cable. O. A. Frederickson. 1,829,512; Oct. 27.
Bushing, Steering column. F. C. Morris. 1,829,530; Oct. 27.
Button for automobile horns, Contact. O. H. Ridgeway. 1,828,785; Oct. 27.
Button, Pronged tufting. R. D. Lane. 1,829,361; Oct. 27.
Buttonhole making machine. F. T. Wentworth. 1,828,915; Oct. 27.
Cabinet. E. F. Reed. Des. 85,446; Oct. 27.
Cabinet, Ice. P. H. Christopher. 1,828,996; Oct. 27.
Cabinet, Picture projecting machine. R. W. Kittredge. 1,829,359; Oct. 27.
Cable clamp. F. M. Finlayson. 1,828,801; Oct. 27.
Cable laying machine and laying cable. H. Sölter and H. Cornelius. 1,829,162; Oct. 27.
Calculator, Gravity. M. S. Blackburn. 1,828,954; Oct. 27.

Calculators, Automatic carriage shifting mechanism for. G. C. Chase. 1,829,210; Oct. 27.
Calendar pad. P. C. Thomas. 1,829,688; Oct. 27.
Camera. A. Wheeler. 1,829,319; Oct. 27.
Camera mount, Aerial. C. Hyden. 1,829,142; Oct. 27.
Camping device for motor vehicles. E. Petersen. 1,829,056; Oct. 27.
Can: *See*—
Liquid dispensing can. Waste can.
Can filling machine. E. D. Miller. 1,828,936; Oct. 27.
Canned goods and an apparatus used in such method. Cooling, W. F. Wegner. 1,829,717; Oct. 27.
Caps and similar articles, Method of and apparatus for making bathing. A. E. Collins. 1,829,211; Oct. 27.
Capstan, Wire drawing. W. E. Carroll. 1,828,922; Oct. 27.
Car, Dump. O. E. Kantenwein. 1,829,560; Oct. 27.
Car, Railway. E. R. Swanson. 1,829,104–7; Oct. 27.
Carbon paper, Nonreadable. C. J. Walker. 1,829,250; Oct. 27.
Carbonaceous material, Apparatus for distilling solid. R. L. Merrill. 1,828,781; Oct. 27.
Carburation system. C. H. Kirby. 1,828,899; Oct. 27.
Carburetor. A. Chanard. 1,829,632; Oct. 27.
Carburetor. E. F. Giglia and L. F. Pelletier. 1,828,889; Oct. 27.
Carburetor, C. E. and D. J. Monosmith. 1,828,902; Oct. 27.
Carburetor for heavy fuels in internal combustion engines. J. Escaffre. 1,828,770; Oct. 27.
Carburetor for internal combustion engines. J. C. Federle. 1,828,800; Oct. 27.
Carburizing and annealing furnace. A. D. Dauch and J. Sandberg. 1,829,710; Oct. 27.
Card, Sample tab. A. Soehner. 1,829,308; Oct. 27.
Carriage, Patient's transfer. M. J. Gilroy. 1,829,274; Oct. 27.
Carrier: *See*—
Lunch carrier.
Carrying device. G. Betancourt. 1,829,629; Oct. 27.
Carton. T. H. Gagen. 1,828,837; Oct. 27.
Case: *See*—
Vanity case.
Cash register. P. Sburlino. 1,828,849; Oct. 27.
Cash registers, Blocking the setting means of. E. Breitling. 1,829,084; Oct. 27.
Catalytic process of hydrogenating and dehydrogenating carbon compounds. W. A. Lazier. 1,829,046; Oct. 27.
Caustic bath. M. W. Ward. 1,829,693; Oct. 27.
Cellulose acetate, Dyeing or coloring. G. H. Ellis. 1,829,130; Oct. 27.
Cellulose fiber, Purification of. G. A. Richter. 1,829,110; Oct. 27.
Cellulose materials, Treatment of. A. Thiriet. 1,829,378; Oct. 27.
Cement, Making porous. E. Walter. 1,829,381; Oct. 27.
Cement, Manufacturing colored Portland. G. Bergen, F. Engelhardt, and R. Steckhan. 1,829,082; Oct. 27.
Cement pipe. A. T. Reid. 1,829,491; Oct. 27.
Cementitious bodies, Apparatus for forming. R. Waggoner. 1,828,914; Oct. 27.
Centrifugal process and apparatus. L. P. Sharples. 1,829,547; Oct. 27.
Chair. J. D. Bair. 1,829,434; Oct. 27.
Chart apparatus, Ophthalmic test. J. H. Leventhal. 1,828,777; Oct. 27.
Chronodist. Auto. H. R. Bynum. 1,829,338; Oct. 27.
Chlorination apparatus. E. B. Conklin. 1,828,859; Oct. 27.
Chuck. J. Bailey and J. L. Miller. 1,829,180; Oct. 27.
Chuck. E. J. Svenson. 1,829,619; Oct. 27.
Chuck for broaching steel. C. C. Hansen. 1,828,862; Oct. 27.
Chucking machine. A. J. Lewis. 1,829,284; Oct. 27.
Cigar machine. I. O. E. Sandberg. 1,829,238; Oct. 27.
Cigarette and making same. J. D. Gilliam. 1,829,559; Oct. 27.
Cigars, cigarettes, or the like, Producing. W. F. Pride. 1,829,454; Oct. 27.
Circuit controlling device. M. H. Shoenberg and L. Schon. 1,829,194; Oct. 27.
Circuit controlling mechanism. C. F. Schwennker. 1,829,615; Oct. 27.
Circuit coupling device, Electric. G. E. A. Pohn. 1,829,109; Oct. 27.
Circuit maker and breaker. F. E. Stover. 1,829,117; Oct. 27.
Circuit, Railway track. H. L. Bone. 1,828,994; Oct. 27.
Clamp: *See*—
Cable clamp.
Clasp. E. Morehouse. 1,829,232; Oct. 27.
Cleaner: *See*—
Air cleaner. Suction cleaner.
Cleaning device. D. M. Lovett. 1,829,287; Oct. 27.
Closure for pedal shank openings. H. A. King. 1,828,868; Oct. 27.
Closure holding device. H. A. Gustafson. 1,829,135; Oct. 27.
Clothes hanger, Combination. A. L. Sackin. 1,829,301; Oct. 27.
Clutch and brake. J. O. Pollack. 1,829,536; Oct. 27.
Clutch, Bobbin. G. H. Magrath. 1,829,229; Oct. 27.
Clutch, Hydraulic. C. B. De Hart. 1,828,861; Oct. 27.
Coal, Apparatus for washing. F. H. Blatch. 1,828,760; Oct. 27.
Coat hanger. M. C. Magarian. 1,828,975; Oct. 27.
Coating, Shoe surface. S. W. Bourn. 1,828,855; Oct. 27.
Coatings, Removing finish. J. G. Davidson and E. W. Reid. 1,829,583; Oct. 27.
Cock, Safety gas. C. F. Meyer. 1,829,365; Oct. 27.
Cod liver oil, Production of. F. W. Nitardy. 1,829,571; Oct. 27.
Coil winding machine. A. T. Smith. 1,828,822; Oct. 27.
Collar ironing and curling machine, Single or stand-up. J. Chant. 1,828,923; Oct. 27.
Colony counting apparatus for laboratory use. T. C. Buck, jr. 1,829,472; Oct. 27.
Comb. C. Lewis. 1,829,228; Oct. 27.
Combustion apparatus. S. K. Smith. 1,829,197; Oct. 27.
Combustion engine. Constant compression. R. P. McNaught. 1,828,976; Oct. 27.
Communication between aircraft in full flight and the ground, Method and device for establishing. C. Chilowsky. 1,829,474; Oct. 27.
Compass course and ground speed indicator. R. E. Kennedy. 1,828,807; Oct. 27.
Compensating device and method of compensating. W. L. Krahl. 1,829,225; Oct. 27.
Composition. E. P. Ryan. 1,829,611; Oct. 27.
Compounds and process therefor, Finely divided metallic. R. H. Eagles. 1,829,395; Oct. 27.
Compressor control structure. M. E. Henning. 1,829,593; Oct. 27.
Computing machine. A. Vethe. 1,829,379; Oct. 27.
Concrete retaining wall. C. Weber. 1,829,463; Oct. 27.
Condenser, Electric. M. H. Reiber. 1,829,015; Oct. 27.
Conductor, Electric. O. A. Frederickson. 1,828,772; Oct. 27.
Conductor of high negative temperature coefficient. H. G. André. 1,829,553; Oct. 27.
Conduit for laying electric cables. C. J. Beaver. 1,829,580; Oct. 27.
Conduit for projecting sand. O. Nagel and W. Kaempfer. 1,829,291; Oct. 27.
Conduit securing device, Electric. F. G. Rohn. 1,828,876; Oct. 27.
Connection for pipes, tubes, bars, and the like. J. A. McGeorge. 1,829,101; Oct. 27.
Connection, Pivotal. H. C. Harris. 1,829,720; Oct. 27.
Construction, Method of. O. A. Pedersen. 1,828,907; Oct. 27.
Construction unit. H. E. Barker and A. F. Baum. 1,829,331; Oct. 27.
Container, Cigarette and match. M. Behr. 1,829,628; Oct. 27.
Container or the like. J. A. Harps. 1,829,003; Oct. 27.
Container, Toilet accessory. G. B. Jensen. Des. 85,436; Oct. 27.
Containers, Apparatus for filling multicompartment. N. M. Hopkins. 1,828,865; Oct. 27.
Control, Combination switch and head lamp. O. R. Sell. 1,829,191; Oct. 27.
Control device for receipt printing machine. W. E. Long. 1,829,286; Oct. 27.
Control for valves and switches. P. Zigelman and M. Rose. 1,829,699; Oct. 27.
Control, Inverted stick. F. E. Loudy. 1,829,098; Oct. 27.
Control of electric transmissions for gas electric drives, Manual. W. B. Jupp and F. E. Queeney. 1,829,222; Oct. 27.
Control of vehicle tank valves, Fluid pressure. P. S. Shield. 1,829,020; Oct. 27.
Control switch, Rotary. G. W. O'Keeffe. 1,829,606; Oct. 27.
Controlling apparatus for highway crossing signals. P. H. Crago. 1,828,926; Oct. 27.
Controlling device for power operated valves. D. M. Belcher. 1,829,708; Oct. 27.
Conveyer, Coal. W. M. Schweickart. 1,828,984; Oct. 27.
Conveyer, Collapsible. S. H. McKnight. 1,828,780; Oct. 27.
Conveyer control. E. G. Griffith. 1,829,087; Oct. 27.
Conveyer for sheet glass forming machines, Take off and leering. R. Genenger. 1,829,134; Oct. 27.
Conveyer or carrier, Automatic water. S. L. Adams and D. B. Adams. 1,829,625; Oct. 27.
Conveyers, Expansion coupling for screw. J. N. Parker. 1,829,453; Oct. 27.
Conveying device for paper pulp. R. T. Lang. 1,829,563; Oct. 27.
Conveying means. H. R. Williams. 1,829,322; Oct. 27.
Cooking apparatus. W. de Back. 1,828,961; Oct. 27.
Cooler: *See*—
Water cooler.
Cooling apparatus. W. H. Sweetland. 1,829,072; Oct. 27.
Copy conditioning machine, Poster. W. R. Bell. 1,828,759; Oct. 27.
Corrosion in oil wells, Prevention of. J. C. Walker. 1,829,705; Oct. 27.
Counter construction. G. K. Lewis. 1,829,285; Oct. 27.
Coupler for ice manufacturing apparatus. G. Lange. 1,828,817; Oct. 27.
Coupling: *See*—
Vehicle tongue coupling. Pipe coupling.
Coupling for splicing device for curtain poles and ornaments therefor. C. W. Kirsch. 1,829,147; Oct. 27.
Cover and forming and applying same, Container. F. O'Neill, jr. 1,828,906; Oct. 27.
Cover assembling machine. J. Ross. 1,829,111; Oct. 27.

Cover, Dial. C. J. Goebel and C. Bartels. 1,829,444; Oct. 27.
Cover, Tire. T. J. McCormick. 1,829,011; Oct. 27.
Crane, Excavator. H. L. Mitchell and R. Ljungkull. 1,829,569; Oct. 27.
Crane, Motor propelled. P. A. H. Mossay. 1,828,905; Oct. 27.
Crate or case. E. R. Alling. 1,829,383; Oct. 27.
Culvert, Drain. A. R. Hutton. 1,828,866; Oct. 27.
Cup: *See*—
Golf cup.
Current regulator, Constant. H. G. Hyde. 1,829,484; Oct. 27.
Current to multiplex lines, Sending alternating. R. Hoover and R. F. Dirkes. 1,829,653; Oct. 27.
Currents produced by living organisms, Apparatus for recording electric. P. Duchosal. 1,829,267; Oct. 27.
Curtain fixture, Detachable. A. Finkbeiner. 1,829,510; Oct. 27.
Curtains and the like, Device for drawing. A. Rapp. 1,829,297; Oct. 27.
Cushioning device for reciprocating sieves and other apparatus. J. Coutin. 1,829,340; Oct. 27.
Cutter: *See*—
Sod cutter.
Cutter and making same, Hob. C. G. Olson. 1,829,292; Oct. 27.
Cutting apparatus, Rotary. C. G. Olson. 1,829,532; Oct. 27.
Cutting, sawing, slotting, and similar apparatus. J. H. Schell. 1,829,679; Oct. 27.
Damping control. N. H. Clough. 1,829,706; Oct. 27.
Decalcomania transfer sheet. W. Hopper. Des. 85,434; Oct. 27.
Derrick. F. D. Bearly. 1,829,081; Oct. 27.
Desk, Table. M. D. Kalbach. 1,829,449; Oct. 27.
Detergents and in washing. H. A. Kern and G. J. Fink. 1,829,522; Oct. 27.
Dipper trip. F. A. Fuller and C. M. Moore. 1,828,965; Oct. 27.
Directory board for office buildings. G. S. Rider. 1,829,541; Oct. 27.
Discharge tube, Hot cathode electron. L. Sutherlin. 1,829,460; Oct. 27.
Dish or similar article. W. H. Gerth. Des. 85,426; Oct. 27.
Disk harrow. W. D. Dewend. 1,829,342; Oct. 27.
Dispatch tube system, Pneumatic. J. J. Stoetzel. 1,828,787; Oct. 27.
Dispenser. L. Ribera. 1,829,671; Oct. 27.
Display apparatus. A. Schreiber. 1,829,113; Oct. 27.
Display stand. S. F. Boyce. Des. 85,456; Oct. 27.
Distributing means for fuel to stokers. H. H. Baker and C. S. Davy. 1,828,729; Oct. 27.
Doll. R. A. Crist. 1,828,765; Oct. 27.
Doll or similar article. J. V. Spina. Des. 85,449; Oct. 27.
Door aligning and cushioning device. J. Swanski. 1,829,462; Oct. 27.
Door, Elevator. J. Rak. 1,829,155; Oct. 27.
Door, Fire. H. H. Lanning. 1,829,008; Oct. 27.
Door, Metal. J. Purcell. 1,829,014; Oct. 27.
Door, Mirror. A. and L. Katzman. 1,829,521; Oct. 27.
Door operating means. G. M. French. 1,829,513; Oct. 27.
Door operating mechanism. H. A. Miner. 1,829,106; Oct. 27.
Door, Safety. A. A. Thomas. 1,829,312; Oct. 27.
Doors and the like, Mechanism for reversing motive devices for operating. R. D. Conklin. 1,828,860; Oct. 27.
Dough former. P. J. Toews. 1,829,120; Oct. 27.
Draft rigging, Railway. J. F. O'Connor. 1,829,152; Oct. 27.
Drafting table. E. A. May. 1,829,288; Oct. 27.
Dress, Studio. M. E. Van Epps. 1,829,170–1; Oct. 27.
Dressing and grinding wheel, Combination. R. P. Place. 1,829,057; Oct. 27.
Drier roll polishing device. C. W. Post and E. L. Mount. 1,829,154; Oct. 27.
Drill: *See*—
Rock drill.
Drills, Blowing device for rock. W. A. Smith, jr. 1,829,245; Oct. 27.
Drilling apparatus. F. A. Schroeder. 1,829,304; Oct. 27.
Drive. A. M. Rossman. 1,828,947; Oct. 27.
Drive adapted for traction purposes, Adjustable speed. A. M. Rossman. 1,828,948; Oct. 27.
Drive, Adjustable speed. A. M. Rossman. 1,828,943–4; Oct. 27.
Drive apparatus, Multiple. A. E. Freeman and W. T. Livermore. 1,828,803; Oct. 27.
Driving mechanism for recording apparatus. E. J. Albert. 1,829,466; Oct. 27.
Driving mechanism for washing machines. H. J. Criner. 1,829,555; Oct. 27.
Duplicating machine. J. R. Beach. 1,829,579; Oct. 27.
Dyestuffs and making same, Metalliferous azo. H. Gugler G. de Montmollin, and J. Spieler. 1,829,646; Oct. 27.
Dyestuffs, Manufacture of substantive polyazo. B. Richard. 1,829,672–3; Oct. 27.
Eggs or the like, Coloring. P. B. and W. R. Townley. 1,829,689; Oct. 27.
Eggs or the like, Method of and preparation for coloring. E. R. Gibbens. 1,829,645; Oct. 27.
Electric controlling apparatus. H. K. Kouyoumjian. 1,828,900; Oct. 27.
Electric heater. H. G. Landis. 1,828,809; Oct. 27.
Electric motor. J. A. Hanley. 1,828,895; Oct. 27.
Electric traction. A. M. Rossman. 1,828,949; Oct. 27.
Electric wall heater. H. G. Landis. 1,828,810; Oct. 27.
Electrical apparatus, Contact device for movable. A. Archangelsky and R. Goldberg. 1,828,917; Oct. 27.
Electrical control system for refrigeration. F. G. Keyes. 1,829,403; Oct. 27.
Electricity meter. R. Pudelko and P. Moos. 1,829,367; Oct. 27.
Electrodynamically controlled figure. R. F. Yates. Re18,239; Oct. 27.
Electrolyte for electrolytic condensers. V. Yngve. 1,829,177–8; Oct. 27.
Electrolytic cell. C. W. Marsh. 1,828,872; Oct. 27.
Electrooptical translation system. C. H. W. Nason. 1,828,875; Oct. 27.
Elevator control system. E. M. Bouton. 1,829,470; Oct. 27.
Elevator control system. G. W. Lautrup and G. N. Crabbe. 1,829,524; Oct. 27.
Elevators, Loading and unloading mechanism for. F. Waechter. 1,829,317; Oct. 27.
Emulsions, Making aqueous bituminous. L. Kirschbraun and F. C. Overbury. 1,829,722; Oct. 27.
Emulsions, Treating oil-water. J. C. Walker. 1,829,205; Oct. 27.
End gate for wagon boxes. W. B. Thieman. 1,829,169; Oct. 27.
Engine: *See*—
Combustion engine. Internal combustion engine.
Explosive engine.
Engine construction. A. M. Niven. 1,828,745; Oct. 27.
Engines, Device for controlling the gasoline supply to internal combustion. G. L. Guthmuller. 1,829,276; Oct. 27.
Engines for self propelled road vehicles, Suspension of. F. H. Royce. 1,829,676; Oct. 27.
Engines for vehicles, Cooling of internal combustion. O. Simmen. 1,829,195; Oct. 27.
Engines in motor vehicles, Mounting. F. H. Royce. 1,829,677; Oct. 27.
Engines, Operating internal combustion. H. W. McClure. 1,829,050; Oct. 27.
Engines, Thermostatically operated shutter for air cooled. E. S. Marks. 1,829,048; Oct. 27.
Engines, Water cooling system for internal combustion. C. L. Moe. 1,828,978; Oct. 27.
Ester and making the same, Organic. I. Gubelmann and C. O. Henke. 1,829,480; Oct. 27.
Ester, Preparing an. I. Gubelmann and C. O. Henke. 1,829,481; Oct. 27.
Ether, Method of and apparatus for preserving. E. Mallinckrodt, jr., and H. V. Farr. 1,829,529; Oct. 27.
Evaporator for refrigerating apparatus. L. Bruehl. 1,829,501; Oct. 27.
Exhibiter, Changeable. C. H. Kimble, jr. 1,828,808; Oct. 27.
Explosive. B. F. Stoops. 1,828,788; Oct. 27.
Explosive engine. E. Burhop. 1,829,631; Oct. 27.
Extension device, Foldable. W. J. Roy. 1,829,675; Oct. 27.
Eyeglass frame, Folding. J. J. Pomeranz. 1,828,847; Oct. 27.
Fabric: *See*—
Woven fabric.
Fabrics, Apparatus for treating. J. Fisch. 1,828,893; Oct. 27.
Fan housing. L. P. Saunders. 1,829,374; Oct. 27.
Fastener. R. Sato. 1,829,613; Oct. 27.
Fastener, Box cover. C. A. Lind. 1,829,598; Oct. 27.
Fastener inserting mechanism. W. R. Barclay and W. T. B. Roberts. 1,829,389; Oct. 27.
Fastening device. T. B. Andre. 1,829,432; Oct. 27.
Fastening means, Goggle headband. R. Malcom. 1,829,010; Oct. 27.
Fastening mechanism. J. C. Arnold. 1,829,030; Oct. 27.
Feed preparing apparatus. R. Stresau. 1,828,987; Oct. 27.
Feeder, Poultry. D. E. Speicher. 1,829,682; Oct. 27.
Fibrous material, Treating. L. A. Goodman. 1,829,702; Oct. 27.
File cutting apparatus and making files. E. A. Anheuser. 1,829,385; Oct. 27.
File guide. H. Forsyth. 1,829,588; Oct. 27.
File, Road. C. F. Goddard. 1,829,591; Oct. 27.
Film package. C. Bornmann. 1,828,955; Oct. 27.
Film reel. W. G. King and M. E. Krause. 1,829,095; Oct. 27.
Film treating apparatus. G. C. Beidler. 1,828,798; Oct. 27.
Film with visible reproducible inscriptions, Photographic. H. Lummerzheim and E. Schnitzler. 1,828,974; Oct. 27.
Films in flat position during exposure, Method of and apparatus for holding photographic. A. H. Beck. 1,829,332; Oct. 27.
Filter, Air. M. P. Durren. 1,829,344; Oct. 27.
Filter, Air. C. U. Pierson. 1,828,816; Oct. 27.
Filter material and making it. C. W. Studer. 1,829,618; Oct. 27.
Fire alarm, Automatic. R. B. Shryock and J. A. Ball. 1,829,067; Oct. 27.
Fire fighting and fire protection. R. L. McElroy and J. E. Shepherd. 1,829,714; Oct. 27.
Fishing reel, Free-spool. J. Kautzky, jr. 1,829,006; Oct. 27.

Float. W. E. Rawlings. 1,828,983; Oct. 27.
Float, Bathing. C. C. Harris. 1,829,137; Oct. 27.
Float, Swimming. C. C. Harris. 1,829,090; Oct. 27.
Floor treating machine. W. S. Finnell. 1,829,132; Oct. 27.
Flusher and lubricant dispenser, Combined. A. L. Wertz. 1,829,173; Oct. 27.
Flying machine. F. D. Healy. 1,829,350; Oct. 27.
Flying machine. D. K. Jette. 1,829,595; Oct. 27.
Flying machine. S. Rosenberg and J. Hochman. 1,828,819; Oct. 27.
Foam from foam generating substances, Producing. R. Schnabel. 1,829,715; Oct. 27.
Folding box. J. Kalnitz. 1,829,005; Oct. 27.
Folding implement. A. F. Shafter. 1,829,192; Oct. 27.
Foot rest. N. Benenati. Des. 85,412; Oct. 27.
Frame: *See*—
Body frame. Razor frame.
Eyeglass frame.
Fruit, Packing. E. F. Meer. 1,829,230; Oct. 27.
Fuel mixing device. G. W. McKee. 1,829,102; Oct. 27.
Fueling system. T. Bossard. 1,828,730; Oct. 27.
Furnace: *See*—
Carbonizing and annealing furnace. Glass melting furnace.
Metallurgical furnace.
Furnace. N. R. Stansel. 1,829,684; Oct. 27.
Furnace and operating the same. C. E. Hawke. 1,828,839; Oct. 27.
Furnace and operating the same, Pulverized fuel. E. Havenux. 1,829,445; Oct. 27.
Furnace construction. L. Mambourg. 1,828,843; Oct. 27.
Furnace construction. F. I. Sheahan. 1,829,150; Oct. 27.
Furnace for treating solid materials with gases, Shaft. E. Edwin. 1,829,268; Oct. 27.
Furnaces and the like, Charging blast. C. M. Rutter. 1,829,300; Oct. 27.
Furniture and the like, Ensemble unit for. S. S. Mittleburg. 1,829,366; Oct. 27.
Fuse and switch box. C. Driest. 1,829,214; Oct. 27.
Fuse, Oil immersed. F. Natalis. 1,829,604; Oct. 27.
Garment. Combination foundation. H. W. Frieland. 1,829,217; Oct. 27.
Garment press. J. H. Taylor. 1,828,951; Oct. 27.
Gas analyzing apparatus, Electrical. T. R. Harrison. 1,829,649; Oct. 27.
Gas and vapor treating apparatus. J. L. Dormon. 1,828,734; Oct. 27.
Gas purification. H. F. Smith. 1,829,068; Oct. 27.
Gasket. H. Bohmer, jr. 1,829,709; Oct. 27.
Gasket. J. H. Victor. 1,829,248; Oct. 27.
Gasoline reserve supply device. F. A. Haase and A. H. Wewerka. 1,829,277; Oct. 27.
Gasometer. K. Jagschitz and P. M. Kuehn. 1,829,519; Oct. 27.
Gate actuating mechanism, Hopper. R. H. Beaumont. 1,829,182; Oct. 27.
Gauge: *See*—
Micrometric gauge.
Gauge for automobiles, Gasoline. J. W. Mularkey. 1,829,489; Oct. 27.
Gear cutting machine. L. O. Carlsen. 1,829,263; Oct. 27.
Gear, Form of reduction. G. W. C. Webb. 1,828,795; Oct. 27.
Gear protection. G. von Beulwitz. 1,829,249; Oct. 27.
Gears, Apparatus for control of variable cut-off valve. R. E. Bruckner. 1,828,956; Oct. 27.
Gears, Apparatus for testing draft. A. E. Dentler. 1,829,128; Oct. 27.
Gearing device for internal combustion multi-cylinder oil engines. K. Winterlin. 1,829,078; Oct. 27.
Generator: *See*—
Pressure fluid generator.
Gin pole structure, Portable. G. D. Leister. 1,828,973; Oct. 27.
Girdle. J. Siegel. 1,829,160; Oct. 27.
Glass apparatus, Sheet. J. L. Drake. 1,828,832; Oct. 27.
Glass, Drawing. W. J. Woods. 1,829,429; Oct. 27.
Glass drawing apparatus, Sheet. J. M. Neenan. 1,828,845; Oct. 27.
Glass, Making the border seal of laminated. R. W. Hackett and A. G. Worrall. 1,829,647; Oct. 27.
Glass melting furnace. J. P. Crowley. 1,828,830; Oct. 27.
Glass melting furnace. J. L. Drake. 1,828,833; Oct. 27.
Glass, Method and apparatus for drawing sheet. E. T. Ferngren. 1,829,639; Oct. 27.
Glass, Method and apparatus for forming sheet. E. T. Ferngren. 1,829,640; Oct. 27.
Glass, Method and apparatus for producing sheet. J. L. Drake and W. E. Nobbe. 1,828,835; Oct. 27.
Glass, Method and apparatus for producing sheet. C. B. Kingsley. 1,829,409; Oct. 27.
Glass, Producing sheet. J. L. Drake. 1,828,834; Oct. 27.
Glue and dry glue base for use in such processes, Retarding the setting of casein. L. Bradshaw and H. V. Dunham. 1,829,258; Oct. 27.
Glue, and dry base for use in such processes, Making slow setting casein. L. Bradshaw and H. V. Dunham. 1,829,259; Oct. 27.
Golf bag and attachment therefor. F. E. Hollins. 1,829,093; Oct. 27.
Golf cup. F. E. Kip. 1,829,283; Oct. 27.
Golf bowling game. C. R. Schnitman. 1,829,239; Oct. 27.
Goods on straight bar knitting machines, Producing fashioned. P. Lieberknecht. 1,828,935; Oct. 27.
Governor. I. M. Crafts. 1,829,507; Oct. 27.
Governor, Oil relay. H. A. Cowardin. 1,829,701; Oct. 27.
Grain stooking machine. W. Torance. 1,828,754; Oct. 27.
Grapple. H. C. Barbour and R. H. Zellman. 1,828,919; Oct. 27.
Grinding and polishing device, Portable. E. S. Erickson. 1,829,440; Oct. 27.
Gripper for tuft weaving. C. Alvord. 1,829,327; Oct. 27.
Guide, Film. A. Dina. 1,828,768; Oct. 27.
Gun fire control system. M. F. Bates. 1,829,181; Oct. 27.
Hair treating device. E. O. Frederics. 1,829,216; Oct. 27.
Hair waving heater. W. S. Lewis. 1,829,362; Oct. 27.
Ham hanger. W. J. Vinson. 1,828,988; Oct. 27.
Hammer mill. T. C. Alfred. 1,829,325; Oct. 27.
Hammer, Pneumatic. F. R. Robinson. 1,829,609; Oct. 27.
Handle: *See* —
Package handle. Valve handle.
Plow handle.
Hangar for dirigibles. C. J. Cariotti. 1,829,503–4; Oct. 27.
Hanger: *See*—
Clothes hanger. Ham hanger.
Coat hanger.
Hardware fixture. A. Ekman. 1,829,509; Oct. 27.
Harvester. E. E. Metcalf. 1,828,844; Oct. 27.
Harvester and thrasher, One man controlled combined. J. T. Ashton. 1,829,388; Oct. 27.
Headlight adjustments, Determining. S. L. Lebby. 1,829,097; Oct. 27.
Headwear. J. Emerson. 1,829,040; Oct. 27.
Heat distributor and toaster. J. Ranz. 1,829,368; Oct. 27.
Heat exchanger. C. T. Carlson. 1,828,799; Oct. 27.
Heat treatment chamber. W. A. Morton and P. L. Geer. 1,828,904; Oct. 27.
Heat treatment of pulverulent materials, Apparatus for the. J. N. Bailey. 1,829,495; Oct. 27.
Heater: *See*—
Electric heater. Oil burning heater.
Electric wall heater. Water heater.
Hair waving heater.
Heater. R. F. Schaber. 1,829,303; Oct. 27.
Heater element and making it. S. Ruben. 1,829,237; Oct. 27.
Heating device. R. M. Heames and H. Stark. 1,829,352; Oct. 27.
Heating system for automobiles. W. J. Wade. 1,828,989; Oct. 27.
Heel base, Shoe. V. Meninno. 1,829,150; Oct. 27.
Heel, Detachable. J. D. Zubia and M. S. Gutierrez. 1,829,252; Oct. 27.
Heel, Detachable shoe. J. D. Zubia and M. S. Gutierrez. 1,829,253; Oct. 27.
Hoisting apparatus. C. R. Pratt. 1,828,748; Oct. 27.
Holder, Certificate. L. L. Sherwood. 1,829,193; Oct. 27.
Holder, Cigar and cigarette. J. F. Hixon. 1,829,141; Oct. 27.
Holder, Citrus fruit. D. McKay. 1,829,664; Oct. 27.
Holder, Flag. G. L. Smith. 1,828,851; Oct. 27.
Holder, Hat and coat. L. Kimbrig and M. Galuten. 1,829,486; Oct. 27.
Holder, Globe. P. J. Pfeifer. 1,829,572; Oct. 27.
Holder, Playing card. W. Givone and H. John. 1,828,735; Oct. 27.
Holder, Score pad. F. W. Riley. 1,829,455; Oct. 27.
Horn, Motor. J. M. Auflero. 1,829,494; Oct. 27.
Hosiery on flat knitting machines, Knitting. W. Heinitz. 1,829,650; Oct. 27.
Hull for light boats, floats for aircraft and the like, Collapsible. R. J. H. Hudson. 1,828,805; Oct. 27.
Hydraulic control, Apparatus for distant. A. Huguenin. 1,829,655; Oct. 27.
Hydrocarbon vapors and the like, Apparatus for condensing. J. C. Swan. 1,829,424; Oct. 27.
Hydrocarbons, Converting. C. P. Dubbs. 1,829,687; Oct. 27.
Hydrocarbons, Treating. R. F. Davis. 1,829,213; Oct. 27.
Hydroelectric generating station, Automatic. R. J. Wensley. 1,829,427; Oct. 27.
Ice cream and the like, Process and apparatus for cooling or freezing. C. W. Vogt. 1,828,853; Oct. 27.
Ice cream cone. W. W. Turnbull. 1,829,201; Oct. 27.
Ice cream disher. H. D. Flegel. 1,829,442; Oct. 27.
Indicator: *See*—
Compass course and ground speed indicator.
Indicator. O. S. Hershey. 1,828,896; Oct. 27.
Indicator for aeroplane fields, Direction. La V. R. Jones. Des. 85,437; Oct. 27.
Induction motor. J. W. Swendsen. 1,829,686; Oct. 27.
Ingot turning machine. F. L. Sabin. 1,829,573; Oct. 27.
Inking roller. H. C. Schroeder. 1,829,189; Oct. 27.
Insole, Auxiliary. R. Sato. 1,829,612; Oct. 27.
Insole for boots and shoes, Cushioning. M. C. Messler. Re18,237; Oct. 27.
Installation, Rectifying. J. G. W. Mulder and E. Oesterhuis. 1,829,603; Oct. 27.
Insulating pads, Producing thermal and electrical. B. Stone, H. Redshaw, and J. W. Nunns. 1,829,685; Oct. 27.
Insulation. C. R. Boggs. 1,829,209; Oct. 27.
Insulator. V. F. Houde. 1,829,354; Oct. 27.

Integrating device. L. A. Biehler. 1,829,036; Oct. 27.
Interference elimination. G. von Arco. 1,829,204; Oct. 27.
Interference, Preventing. F. H. Kroger. 1,829,523; Oct. 27.
Internal combustion engine, Rotary. F. A. Bullington. 1,829,391; Oct. 27.
Irrigator, Dilating. G. E. Stevens. 1,828,986; Oct. 27.
Jack: *See*—
Lifting jack. Spring jack.
Jack or shock absorber for vehicles, Hydraulic. A. McNab. 1,829,451; Oct. 27.
Joint: *See*—
Pipe joint.
Joint and making the same. W. G. Christopherson. 1,828,925; Oct. 27.
Joint bars, Reforming old rail. W. P. Thomson. 1,829,247; Oct. 27.
Joint for artificial limbs, Knee. W. H. Wambsgans. 1,829,551; Oct. 27.
Key ring retainer. E. P. Halley. 1,829,136; Oct. 27.
Kiln, Dry. H. L. Henderson. 1,829,139; Oct. 27.
Kiln, Electric. J. L. Merrill. 1,829,290; Oct. 27.
Kiln, Rotary. J. Andrews. 1,828,727; Oct. 27.
Kit, Folding shoe blacking. R. Winship. 1,828,854; Oct. 27.
Knife, Fur. W. Boos. 1,829,499; Oct. 27.
Knitted fabric. H. Hemmerich. Des. 85,453–5; Oct. 27.
Knitting machine. E. L. Floyd. 1,828,999; Oct. 27.
Knitting machine. W. A. Ingalls. 1,829,094; Oct. 27.
Knitting machine, Circular. O. Seifert. 1,828,878; Oct. 27.
Knitting machine, Circular. F. Wagner. 1,829,691; Oct. 27.
Knotter. H. V. Lewis. 1,829,047; Oct. 27.
Ladder and carrier therefor. W. Barnett. 1,829,468; Oct. 27.
Lamp bulb, Projecting. G. H. Cushing. 1,829,475; Oct. 27.
Lamp fixture, Twin socket. L. W. Andersen. 1,829,328; Oct. 27.
Lamp standard. L. R. Need. Des. 85,442; Oct. 27.
Landing wheel. W. Brown. 1,829,500; Oct. 27.
Lasting jack positioning device. E. E. Foster. 1,829,000; Oct. 27.
Latch, Hood. D. P. Hynes. 1,829,447; Oct. 27.
Latch, Hood. N. A. Mears and D. P. Hynes. 1,829,601; Oct. 27.
Latch mechanism, Door. W. C. Devereaux. 1,828,927; Oct. 27.
Latch, Tail gate. G. F. Becker. 1,828,797; Oct. 27.
Latch, Whorl. R. J. Bartholomew. 1,828,993; Oct. 27.
Latching means for drop and gondola cars. K. J. Tobin and A. Wasberg. 1,829,073; Oct. 27.
Laws of centrifugal force, Apparatus for investigating and demonstrating the. P. L. Tea. 1,829,311; Oct. 27.
Leather composition. G. D. Fortman. 1,829,511; Oct. 27.
Leathers, Making patent, japan, and enamel. S. S. Sadtler and E. F. Cayo. 1,829,302; Oct. 27.
Level and inclinometer, Combined. A. E. Best and J. C. Zook. 1,829,257; Oct. 27.
Lifter and holder, Log. W. B. Parrish. 1,829,490; Oct. 27.
Lifting device. E. Oehmichen. 1,828,783; Oct. 27.
Lifting jack. A. L. Johnson. 1,829,656; Oct. 27.
Lifting jack. W. F. Krenzke. 1,829,662; Oct. 27.
Lighter construction. L. V. Aronson. 1,828,887; Oct. 27.
Lighting fixture. J. E. Primakow. Des. 85,443–5; Oct. 27.
Lining, Crucible furnace. H. E. White. 1,829,320; Oct. 27.
Lining for hats. J. H. Erstein. 1,829,269; Oct. 27.
Liquids, Method and apparatus for obtaining average samples and temperature of tank. R. B. Spikes. 1,828,753; Oct. 27.
Liquids, Process of and apparatus for drying. F. H. Douthitt. 1,829,477; Oct. 27.
Liquids, Purifying dielectric. L. H. Clark. 1,829,712; Oct. 27.
Loading device for view-taking cinematographic apparatus. A. N. Merle. 1,829,108; Oct. 27.
Lock: *See*—
Screw lock. Switch lock.
Suit case lock. Tire carrier lock.
Lock. N. B. Hurd. 1,829,713; Oct. 27.
Lock. G. Lality and N. Karpati. 1,829,596; Oct. 27.
Lock and the like, Ignition. I. D. Perry. 1,828,747; Oct. 27.
Locking and unlocking mechanism, Gripper. C. C. Alvord. 1,829,326; Oct. 27.
Locking means for car doors. K. J. Tobin and C. E. Eklind. 1,828,912; Oct. 27.
Locomotive. M. C. M. Hatch. 1,829,044; Oct. 27.
Locomotive and tender. E. A. Turner. 1,829,425; Oct. 27.
Locomotive, Diesel-electric. E. Atteslander. 1,828,992; Oct. 27.
Looms, Positive let-back mechanism for. H. H. Burdett. 1,828,957; Oct. 27.
Looms, Tuft cutting mechanism of Axminster carpet and other tufted fabric. C. C. Brinton. 1,828,921; Oct. 27.
Looms, Weft feeler for. C. D. Brown. 1,829,260; Oct. 27.
Lubricating apparatus for automobiles and the like. G. Kramer. 1,828,934; Oct. 27.
Lug fastening means. F. H. Olthoff. 1,828,815; Oct. 27.
Lunch carrier, Portable. A. De Freitas. 1,829,636; Oct. 27.
Machine for closing cans. A. J. Sprague. 1,829,199; Oct. 27.
Machine for covering boxes. B. P. Seckendorf. 1,829,068; Oct. 27.
Machine for distributing manure or other material. J. and C. J. Bamford. 1,829,627; Oct. 27.
Machine for forming heel blocks. N. L. Gulliford. 1,829,711; Oct. 27.
Machine for making radiating tubes. J. W. Vance. 1,829,202; Oct. 27.
Machine for manufacturing multiple course papers, cardboards, and the like. G. Knopp. 1,829,660; Oct. 27.
Machine for preparing typewritten copy. E. L. Morse, A. W. Buckwell, and C. G. Smith. 1,829,233; Oct. 27.
Manifold for internal combustion engines, Exhaust. E. R. Godward. 1,828,774; Oct. 27.
Marginal reenforcement for pockets of rubber balls. W. J. Volt. 1,829,380; Oct. 27.
Match box. M. N. Drew. 1,828,962; Oct. 27.
Material, Apparatus for feeding and cutting. J. Van Buren. 1,828,793; Oct. 27.
Material by weight measurement, Apparatus for proportioning the components of aggregate. C. V. Weir. 1,829,026; Oct. 27.
Material handling apparatus. E. E. Brosius. 1,828,762; Oct. 27.
Material handling apparatus. A. Shelburne. 1,828,751; Oct. 27.
Material preparatory to hydrolysis, Activating cellulose bearing. J. Perl. 1,828,982; Oct. 27.
Materials, Decomposing organic. R. J. Dearborn. 1,828,998; Oct. 27.
Matrix for typographical machines. L. W. Willis. 1,829,095; Oct. 27.
Matte, Desulphurizing nickel-containing. A. S. Shoffstall, W. A. Mudge, A. B. Bagsar, and C. G. Bieber. 1,828,752; Oct. 27.
Matter and making same, Composition of. W. F. Zimmerli and W. L. Semon. 1,829,029; Oct. 27.
Matter for putty, Composition of. L. Weisberg. 1,828,885; Oct. 27.
Mattress. C. H. Van Tassel. 1,829,620; Oct. 27.
Mattress, Spring. E. B. Birkenbeuel. 1,829,083; Oct. 27.
Measuring apparatus and method, Fabric. E. D. Walen. 1,829,318; Oct. 27.
Meats, Condimentation of ground. H. E. Allen. 1,829,481; Oct. 27.
Metal concrete for hearth plates and the like. H. H. Harris. 1,829,218; Oct. 27.
Metal, Method and apparatus for cleaning sheet. H. E McCrery. 1,829,599; Oct. 27.
Metal, Rolling. M. C. Corrigan and D. E. Jenkins. 1,829,339; Oct. 27.
Metals, Treating. J. G. E. Wright. 1,829,623; Oct. 27.
Metals upon cement surfaces, Coating of. S. Seailles, née Calogeropoulos, and J. Seailles. 1,829,116; Oct. 27.
Metallurgical apparatus. A. P. Roux. 1,829,158; Oct. 27.
Metallurgical furnace. F. A. Fahrenwald. 1,828,836; Oct. 27.
Metallurgical process. L. A. Wilson. 1,829,124; Oct. 27.
Meter: *See*—
Electricity meter.
Mica powder, Producing. J. Davenport. 1,829,039; Oct. 27.
Mica products, Method and apparatus for producing. F. C. Atwood. 1,829,031; Oct. 27.
Micrometer. V. F. Witter and U. A. Frederick. 1,829,323; Oct. 27.
Micrometric gauge, Watchmaker's. A. A. Zajtman. 1,829,698; Oct. 27.
Microphone, Carbon grain. R. Vermeulen. 1,829,203; Oct. 27.
Mill: *See*—
Hammer mill. Rolling mill.
Mining machines, Auxiliary unit for. B. W. Snodgrass. 1,829,549; Oct. 27.
Mirror bracket. R. D. Horton. 1,828,804; Oct. 27.
Mixer. H. E. Hall. 1,829,089; Oct. 27.
Molasses feeder, Cold. H. J. Shelton. 1,829,066; Oct. 27.
Mold for casting refractories. F. W. Schroeder. 1,829,114; Oct. 27.
Monozodyestuffs. W. Hentrich, R. Knoche and E. Tietze. 1,828,737; Oct. 27.
Mortar spreader. R. D. Hood. 1,828,738; Oct. 27.
Motor: *See*—
Electric motor. Spring motor.
Induction motor.
Motor control. B. W. Jones. 1,829,658; Oct. 27.
Mounting, Engine. R. K. Lee. Re18,236; Oct. 27.
Mounting, Engine. C. E. Summers and R. K. Lee. 1,829,723; Oct. 27.
Mounting for automotive vehicles, Engine. L. E. Whittington and E. A. Tuthill. 1,829,251; Oct. 27.
Mower, Electric lawn. A. M. Turner. 1,829,690; Oct. 27.
Mucin preparation, Physiological. S. J. Fogelson. 1,829,270; Oct. 27.
Multiplication, Frequency. M. Osnos. 1,829,419; Oct. 27.
Musical instrument, Electro-acoustic. J. Mager. 1,829,099; Oct. 27.
Necktie restorer, Electric. D. M. Benford. Des. 85,452; Oct. 27.
Nozzles, Device for holding fire hose. G. L. Whiteford. 1,829,621; Oct. 27.

Nut blanks, Making. L. A. Frayer and C. L. Harvey. 1,829,558; Oct. 27.
Nut, Lock. W. E. Saben. 1,829,017; Oct. 27.
Nuts and the like, Producing castellated. D. Fox. 1,829,215; Oct. 27.
Oil, Apparatus for supplying heated. K. A. Juthe and A. J. Hanson. 1,829,186; Oct. 27.
Oil as a motor fuel, Method and apparatus for using crude. W. J. Torrance. 1,829,074; Oct. 27.
Oil burner. L. T. Wilcox. 1,829,027; Oct. 27.
Oil burning heater. A. C. Bryan. 1,829,125; Oct. 27.
Oil gas, Apparatus for generating. A. B. Mast. 1,829,663; Oct. 27.
Oil sands, Apparatus for testing. J. C. Hampton and E. D. Shell. 1,828,838; Oct. 27.
1-(m-amidophenyl-)1-hydroxy-2-methylamido-propane, Production of. M. Oberlin. 1,829,452; Oct. 27.
Ore concentration. R. Lee. 1,829,565; Oct. 27.
Ores, oxides, and the like, Reduction of. H. E. Coley. 1,829,438; Oct. 27.
Ores, Refining of chromium. P. Weise and F. Specht. 1,828,756; Oct. 27.
Ornament for automobile radiator cap or the like. D. Foley. Des. 85,414; Oct. 27.
Oscillations in vacuum tube circuits, Controlling or preventing. B. Phelps. 1,829,013; Oct. 27.
Outlet box, Conduit. R. H. Olley. 1,829,054; Oct. 27.
Outlet for high potential cables. A. O. Austin. 1,829,032; Oct. 27.
Oven, Baking. L. C. Reese. 1,829,670; Oct. 27.
Oven, Vertical chamber coke. C. Otto. 1,829,608; Oct. 27.
Overload release mechanism, Mechanical. F. W. Yost. 1,829,576; Oct. 27.
Package handle. A. Ondricek. 1,829,533; Oct. 27.
Packing stand. D. B. Henley. 1,829,281; Oct. 27.
Pad: *See*—
Calendar pad.
Painting apparatus. J. N. Georgas. 1,829,589; Oct. 27.
Paper making roll and covering it. A. LeR. Bolton. 1,829,630; Oct. 27.
Paper products, Preparing and impregnating. C. Dreyfus and G. W. Miles. 1,829,585; Oct. 27.
Paper winding apparatus. E. E. Berry. 1,828,888; Oct. 27.
Parachute, Automatically opening. S. H. Knight. 1,829,561; Oct. 27.
Pedal, Accelerator. O. C. Ritz Woller. 1,829,028; Oct. 27.
Pencil. J. P. Lynn. 1,828,871; Oct. 27.
Pencils, Decorating lead. A. Schwarz. 1,829,115; Oct. 27.
Perchlorates of aminodiphenyl, Preparation of diazonium. T. L. Davis and E. H. Huntress. 1,828,960; Oct. 27.
Photo-electric tube. G. T. Schmidling. 1,829,019; Oct. 27.
Photographic apparatus. J. S. Greene and A. W. Caps. 1,829,347; Oct. 27.
Photographic or cinematographic panoramic views or views extending in height, Taking or projecting. H. Chretien. 1,829,633; Oct. 27.
Piano action, Grand. C. Trinkle. 1,829,314; Oct. 27.
Piano key reflecting device. M. W. Sharman. 1,829,065; Oct. 27.
Picture projector, Motion. A. C. Hayden. 1,829,482; Oct. 27.
Picture screen, Motion. A. L. Raven. 1,828,749; Oct. 27.
Pictures and films therefor, Taking and projection of motion. H. Chretien. 1,829,634; Oct. 27.
Pipe: *See*—
Cement pipe. Steel pipe.
Pipe and valve, Intake. O. V. Kruse and C. W. Larner. 1,829,704; Oct. 27.
Pipe coupling, Automatic train. C. C. Farmer. 1,828,963; Oct. 27.
Pipe crimping device. H. E. Patton. 1,829,012; Oct. 27.
Pipe joint. A. G. Perkins. 1,829,236; Oct. 27.
Pipe joint reamer. R. M. Scoggins. 1,829,458; Oct. 27.
Pipe, Method and apparatus for making reenforced. H. Cook. 1,828,890; Oct. 27.
Pipe threading machine. E. W. Blanchard. 1,829,183; Oct. 27.
Pipes, Attachment for smoking. H. A. Webb. 1,829,076; Oct. 27.
Piston and connecting rod. A. J. Weatherhead. 1,829,552; Oct. 27.
Plant spraying apparatus. J. E. Rimedio. 1,829,298; Oct. 27.
Plastering machine. H. H. Elkins. 1,829,479; Oct. 27.
Plate turnover mechanism. E. T. Peterson. 1,828,909; Oct. 27.
Plow handle. D. E. Atkinson. 1,829,467; Oct. 27.
Plow, Variable-width. J. P. Seaholm. 1,829,545; Oct. 27.
Plug, Electric. L. D. Walker. 1,829,692; Oct. 27.
Plug seat. G. R. Willet. 1,829,077; Oct. 27.
Polishing wheel, Leather. C. L. Rettman. 1,829,492; Oct. 27.
Positioning device. J. S. Thompson. 1,828,791; Oct. 27.
Power actuating mechanism. J. P. Daly. 1,829,184; Oct. 27.
Power conversion means for radio apparatus. W. L. Krahl. 1,829,226; Oct. 27.
Power transmitter, Hydraulic rotary. W. W. Baker. 1,829,554; Oct. 27.
Power transmitting mechanism. R. E. Bruckner. 1,829,261; Oct. 27.
Press: *See*—
Garment press. Screw press.
Printing press. Shoe sole press.
Pressing buck. A. O. Long. 1,829,566; Oct. 27.
Pressing machines, Head checking means for power operated. E. Davis. 1,829,394; Oct. 27.
Pressure fluid generator. R. Perrin. 1,828,784; Oct. 27.
Printing apparatus, Stencil. J. Flockhart. 1,828,771; Oct. 27.
Printing machines, Plate holder for photographic. W. C. Huebner. 1,828,739; Oct. 27.
Printing of signals, means to control. O. J. Sundstrand. 1,829,461; Oct. 27.
Printing plate. H. Buschmann. 1,829,085; Oct. 27.
Printing press, Cylinder. A Büttner. 1,829,436; Oct. 27.
Printing press. S. R. Howard. 1,829,004; Oct. 27.
Projectile provided with windshields. J. L. Cox and B. M. Fine. 1,829,212; Oct. 27.
Propeller. N. S. Clay. 1,829,437; Oct. 27.
Propeller. R. R. Gobereau and L. E. Maujole. 1,829,443; Oct. 27.
Pump and the like, Turbine. J. T. Wade. 1,829,122; Oct. 27.
Pump, Coin controlled gasoline. C. F. Overpeck and F. M. Allen. 1,829,534; Oct. 27.
Pump, Deep well fluid motor. C. J. Coberly. 1,828,857; Oct. 27.
Pump, Dispensing. C. Schock. 1,829,240; Oct. 27.
Pump for lubricating systems and the like. T. W. Hallerberg. 1,829,042; Oct. 27.
Radiant heater. A. Steffen. Des. 85,450; Oct. 27.
Radiator and guard, Combined. J. L. Brownell. 1,828,995; Oct. 27.
Radiator unit, Humidifying. A. W. Kaplan and H. F. Hauser. 1,829,520; Oct. 27.
Radiators, Assembling. W. Shurtleff. 1,829,241; Oct. 27.
Radio apparatus, Portable. W. M. Heina. 1,829,219; Oct. 27.
Radio control, Multiple. A. J. Macy. 1,828,901; Oct. 27.
Radio receiving set. P. W. Willans and F. J. H. Charman. 1,829,175; Oct. 27.
Radio receiving system. L. Etheridge. 1,829,131; Oct. 27.
Radio signals, Method and apparatus for broadcasting and receiving. H. C. De Vore. 1,828,831; Oct. 27.
Radio speaker. A. A. Kent and R. T. Kingsford. 1,829,007; Oct. 27.
Radio system. L. J. Wolf. 1,829,465; Oct. 27.
Radio transmission system. W. E. Branch. 1,828,920; Oct. 27.
Radio transmitters, Neutralizing system for. L. A. Gebhard. 1,829,273; Oct. 27.
Rail, Switch point. A. Enstrom. 1,829,439; Oct. 27.
Ram system, Hydraulic. W. K. McFarlin. 1,829,051; Oct. 27.
Rays, Method and apparatus for projecting multicolor. W. L. Isbills. 1,828,971; Oct. 27.
Razor frame, Safety. H. R. Segal. 1,829,546; Oct. 27.
Reamer, Adjustable. C. L. Kessler. 1,829,485; Oct. 27.
Receptacle and cover construction. S. E. Allerton. 1,828,991; Oct. 27.
Receptacle baffle, Electric. N. G. Haering. 1,829,648; Oct. 27.
Receptacles and the like and its manufacture, Face-plate for flush. A. Seltzer. 1,829,422; Oct. 27.
Recorder. O. F. Fuller. 1,829,272; Oct. 27.
Recording device, Inclination. R. H. Miller. 1,829,104; Oct. 27.
Reel: *See*—
Film reel. Fishing reel.
Reel. W. D. Smithson and J. L. Hair. 1,829,161; Oct. 27.
Refractory articles, Glazing. G. S. Diamond. 1,828,767; Oct. 27.
Refrigerating apparatus. F. W. Andrews. 1,829,384; Oct. 27.
Refrigerating apparatus. J. C. Arnold. 1,829,386–7; Oct. 27.
Refrigerating apparatus. H. B. Hull. 1,829,399; Oct. 27.
Refrigerating apparatus. L. M. Keighley. 1,829,402; Oct. 27.
Refrigerating apparatus. J. G. King. 1,828,776; Oct. 27.
Refrigerating apparatus. J. G. King. 1,829,404–8; Oct. 27.
Refrigerating apparatus. J. G. King. 1,829,410–12; Oct. 27.
Refrigerating apparatus. R. K. Miller. 1,829,417; Oct. 27.
Refrigerating apparatus. H. Röhl. 1,829,370; Oct. 27.
Refrigerating apparatus. A. H. Strong. 1,829,377; Oct. 27.
Refrigerating system. G. A. Kramer. 1,829,096; Oct. 27.
Refrigerating system. E. Scott. 1,828,877; Oct. 27.
Refrigerator. A. H. Strong. 1,829,716; Oct. 27.
Refrigerator and hydrator for fruits and vegetables. D. O. Tensley. 1,829,024; Oct. 27.
Register: *See*—
Cash register.
Regulating device. A. B. Asch. 1,829,254; Oct. 27.
Regulator: *See*—
Current regulator.
Rigging for sailboats. C. V. Kozlay. 1,829,413; Oct. 27.
Rivet cutting gun. E. W. Stevens. 1,829,309; Oct. 27.
Riveting and bending machine, Hydraulic. F. J. Myers. 1,828,874; Oct. 27.

Riveting machine. H. N. Wylie and P. G. Crabbe. 1,829,697; Oct. 27.
Riving machine. E. Miller. 1,828,873; Oct. 27.
Rod: *See*—
Piston and connecting rod. Tie rod.
Roof covering. E. C. Miller. 1,829,488; Oct. 27.
Road machine, Four wheel drive. F. D. Wilson. 1,829,622; Oct. 27.
Rock drill. M. C. Huffman. 1,829,654; Oct. 27.
Roller: *See*—
Inking roller.
Roller for crushing clods. A. Nordström. 1,829,605; Oct. 27.
Rolling mill. E. G. Budd. 1,829,126; Oct. 27.
Roof, Imitation shingle. W. C. Warren. 1,829,123; Oct. 27.
Router and shaper, Combined. R. L. Carter. 1,829,393; Oct. 27.
Rubber articles by deposition, Making. P. H. Watkins and A. W. Holmberg. 1,828,990; Oct. 27.
Rubber articles, Superficially finishing. S. D. Shinkle. 1,828,985; Oct. 27.
Rubber-like product and making same. W. S. Calcott, F. B. Downing, and D. H. Powers. 1,829,502; Oct. 27.
Safe. F. J. Bergs. 1,829,333; Oct. 27.
Safe, Tabernacle. B. A. Benziger. 1,829,256; Oct. 27.
Safety attachment for aeroplanes. J. F. O'Malley. 1,829,607; Oct. 27.
Safety device. J. J. Ehemann, sr., and B. F. Singer. 1,829,478; Oct. 27.
Safety device for mine buckets. T. Fisher. 1,829,587; Oct. 27.
Sample taking apparatus. G. A. Humason. 1,828,775; Oct. 27.
Sanitary cooking vessel. R. Kania. 1,828,806; Oct. 27.
Sanitary napkin. C. B. Mergentime. 1,829,231; Oct. 27.
Saw, Meat. J. A. Young and F. Bryan. 1,829,079; Oct. 27.
Saw, Tubular. A. F. Keffo. 1,829,659; Oct. 27.
Scale, Weighing and counting. M. O. Hem. 1,829,516; Oct. 27.
Scales, Dashpot for weighing. O. C. Reeves. 1,829,540; Oct. 27.
Scanning device. C. F. Jenkins. 1,828,867; Oct. 27.
Scarf, Embroidered. J. R. Lundberg. Des. 85,439; Oct. 27.
Scraper. P. C. Nellsen. 1,829,531; Oct. 27.
Scraper for tractor wheels. K. von Brethorst. 1,828,824; Oct. 27.
Screen: *See*—
Picture screen.
Screen and making same, Woven wire. J. Boehm. 1,829,498; Oct. 27.
Screens and the like, Producing polychromatic. A. A. Canton. 1,828,958; Oct. 27.
Screening apparatus. C. A. Gustafson. 1,829,348; Oct. 27.
Screw driver. W. C. Roe. 1,829,421; Oct. 27.
Screw lock. C. G. Olson. 1,829,293; Oct. 27.
Screw press. S. Hiller and A. E. Ozouf. 1,828,968; Oct. 27.
Screw thread coupled member. L. B. Bridges. 1,828,856; Oct. 27.
Seams of bathing caps and other articles, Apparatus for reenforcing the. A. E. Collins. 1,828,997; Oct. 27.
Seat: *See*—
Plug seat. Window seat.
Vehicle seat.
Seat and the like, Closet. H. C. Leslie. 1,829,526; Oct. 27.
Securing element. A. H. Jones. 1,829,657; Oct. 27.
Separator. F. Schilling and C. H. Kircouf. 1,829,544; Oct. 27.
Settling tank. H. S. Walker. 1,828,794; Oct. 27.
Sewing machine. H. Weisner. 1,828,886; Oct. 27.
Sewing machine attachment. S. and H. L. Halberg. 1,828,966; Oct. 27.
Sewing machine frame. W. Hopper. Des. 85,433; Oct. 27.
Sewing machine frame. W. Hopper. Des. 85,435; Oct. 27.
Sewing machine, Blindstitch. A. Strobel. 1,828,789; Oct. 27.
Sewing machines, Hemstitch attachment for. V. J. Sigoda. 1,828,879; Oct. 27.
Sewing machines, Take off mechanism for. B. T. Leveque. 1,829,227; Oct. 27.
Shade for use in playing golf, Eye. P. T. Prichard. 1,829,538; Oct. 27.
Shade, Wood splint. L. J. Steffen. 1,829,617; Oct. 27.
Sharpener, Lawn mower. D. H. McMurtry. 1,829,289; Oct. 27.
Sharpening device for razor blades. J. B. Rhodes. 1,829,061; Oct. 27.
Sharpening device for safety razor blades and the like. J. B. Rhodes. 1,829,016; Oct. 27.
Sharpening device for safety razor blades and the like. J. B. Rhodes. 1,829,060; Oct. 27.
Sheet drawing apparatus, Downflow. E. T. Ferngren. 1,829,641; Oct. 27.
Sheet folding and delivering mechanism. E. J. Smith. 1,829,242–4; Oct. 27.
Sheet material, Apparatus for coating and treating. A. Y. Pearl. 1,829,153; Oct. 27.
Sheet material, Composite. G. A. Richter. 1,829,157; Oct. 27.
Shelf rest. S. Madsen. 1,829,009; Oct. 27.
Shield, Brake. G. H. Brawner. 1,828,761; Oct. 27.
Shield, Eyeglass. H. W. Shryock. 1,828,850; Oct. 27.
Shock absorber. G. F. Yevseyeff. 1,829,382; Oct. 27.
Shock absorber for vehicles. G. F. Yerseyeff. 1,829,430; Oct. 27.
Shock absorbing mechanism, Friction. S. B. Haseltine. 1,829,138; Oct. 27.
Shoe. C. Miller and L. Sholtz. Des. 85,440–1; Oct. 27.
Shoe, Child's. W. G. Heiber. Des. 85,432; Oct. 27.
Shoe having shank stiffeners and making such shoes. R. B. Bartels. 1,829,497; Oct. 27.
Shoe shank stiffeners, Manufacturing. R. B. Bartels. 1,829,496; Oct. 27.
Shoe shining installation and the elements thereof. H. E. Schulse. 1,828,820; Oct. 27.
Shoe sole press, Rubber band cushion. C. L. Huntoon. 1,829,221; Oct. 27.
Shoe stretcher. J. W. Loney. 1,828,742; Oct. 27.
Shoe welting and its manufacture. P. C. Arnold and W. C. Vizard. 1,828,728; Oct. 27.
Shore. A. H. Symons. 1,829,550; Oct. 27.
Shovel. A. Demary. 1,829,584; Oct. 27.
Sifter structure. W. G. Kirchhoff. 1,829,707; Oct. 27.
Sign, Electric. R. R. Wiley. 1,829,321; Oct. 27.
Signal: *See*—
Traffic signal. Warning signal.
Signal switch, Turning. W. M. Roy. 1,828,950; Oct. 27.
Silk, Degumming. N. D. Harvey, Jr. 1,828,736; Oct. 27.
Silk, Working up of centrifuge. W. Schulz and H. Hoffmann. 1,829,190; Oct. 27.
Slabs, Making colored composition. G. Plessevaux. 1,829,187; Oct. 27.
Sled, Surf. L. H. Brimhall. 1,829,471; Oct. 27.
Slicing machine. W. B. Wolff. 1,829,428; Oct. 27.
Snap switch. J. J. Grossman and J. J. Steinharter. 1,829,514; Oct. 27.
Snowplows, Delivery mechanism for. C. Speer. 1,829,198; Oct. 27.
Soap threads, Production of. A. Welter. 1,828,826; Oct. 27.
Socket, Combination sucker rod. W. A. O'Bannon. 1,828,938; Oct. 27.
Socket, Electrical. M. M. Adleman. 1,829,207; Oct. 27.
Socket, Lamp. H. Cammack. 1,829,127; Oct. 27.
Sod cutter. J. W. Blue. 1,829,335; Oct. 27.
Soda fountain. G. R. Lippitt. Des. 85,438; Oct. 27.
Soldering means, Electric. W. Schmidt. 1,829,457; Oct. 27.
Soot blower. F. J. Whelan and T. F. Dwyer, jr. 1,829,174; Oct. 27.
Sound apparatus, Slit-forming device for photographic. F. H. Owens. 1,829,235; Oct. 27.
Sound recording apparatus. E. R. Vinson. 1,829,121; Oct. 27.
Sound records, Production of corrected. R. J. Pomeroy. 1,828,942; Oct. 27.
Sound records, System for correcting. R. J. Pomeroy. 1,828,940–1; Oct. 27.
Spectra demonstrator. H. W. Geromanos. 1,829,001; Oct. 27.
Spindle drilling machine, Internal radial multiple. J. S. Lach. 1,829,045; Oct. 27.
Splice for elastic webbing. B. Laskin. 1,828,812; Oct. 27.
Spool, Paper packing. C. H. Forney. 1,829,642–3; Oct. 27.
Spotlight and observation device, Combination. J. J. Chardell and L. J. Ferdinand. 1,828,924; Oct. 27.
Spray gun. P. S. Case. 1,828,732; Oct. 27.
Sprayer. W. L. Hamilton. 1,829,043; Oct. 27.
Spraying and squirting process and apparatus therefor. A. Krantzberger. 1,829,661; Oct. 27.
Spring: *See*—.
Vehicle spring.
Spring construction, Vehicle. W. J. Sprong. 1,829,163; Oct. 27.
Spring checking device. H. J. Stead. 1,829,376; Oct. 27.
Spring jack. H. W. Zimmerman. 1,828,758; Oct. 27.
Spring motor. W. J. De Witt. 1,829,265; Oct. 27.
Spring toggle. J. Karitzky. 1,829,357; Oct. 27.
Square and protractor, Combination. W. Grozi. 1,828,930; Oct. 27.
Squeezing machines, Adjustable hinged yoke for. L. Tabor and F. R. Wallace. 1,828,882; Oct. 27.
Staging or semi-decking apparatus for automobile shipping. F. L. Seeley. 1,829,681; Oct. 27.
Stake releasing pocket. H. C. Moll. 1,829,570; Oct. 27.
Stamping device. R. M. Dugdale. 1,829,586; Oct. 27.
Stand: *See*—
Packing stand.
Stand or holder, Card. J. E. Lambert. 1,829,360; Oct. 27.
Stapling machine. F. Polzer. 1,829 537; Oct. 27.
Starter, Engine. R. Abell. 1,829,624; Oct. 27.
Steam condensing apparatus, Portable. F. X. Loeffler. 1,829,528; Oct. 27.
Steamer, Weiner. W. W. Hale. 1,829,088; Oct. 27.
Steel insensible to the action of hot gases and vapors, Making. B. Strauss. 1,829,118; Oct. 27.
Steel pipe Electrically welded jarred. A. G. Egler. 1,829,638; Oct. 27.
Stencil sheets for use in duplicating, Production of. A. de Waele. 1,828,766; Oct. 27.
Stepladder. J. G. Frommeyer. 1,829,346; Oct. 27.
Stills, Operation of pressure. E. C. Herthel. 1,829,220; Oct. 27.
Stitch picking device. L. Citrano. 1,828,764; Oct. 27.
Stoker. F. P. Roesch and A. M. Hunt. 1,828,818; Oct. 27.

Stoker for circular grates, Automatic. H. Gleichmann and W. Gumz. 1,829,275; Oct. 27.
Stool, Lunch room. S. F. Lederer. 1,829,564; Oct. 27.
Stop device, Automatic. F. Oberst. 1,829,053; Oct. 27.
Stop for friction screw presses, Emergency. E. W. Zeh. 1,828,828; Oct. 27.
Stop mechanism, Automatic safety. W. J. Anthony. 1,829,626; Oct. 27.
Store service apparatus. A. Hitchman. 1,829,140; Oct. 27.
Strainer baffle. S. Vorech. 1,828,952; Oct. 27.
Stretcher and tree, Shoe. M. T. Robison. 1,829,369; Oct. 27.
Stud, Building. J. Wissheier. 1,828,953; Oct. 27.
Stuffing box. G. F. Wilson. 1,829,206; Oct. 27.
Stuffing box, Ball bearing. M. C. Smith. 1,828,880; Oct. 27.
Submarine rescue device. R. Dicola. 1,829,476; Oct. 27.
Suction cleaner. H. R. Ballou. 1,829,255; Oct. 27.
Suit, Bathing. W. G. Maier. 1,829,100; Oct. 27.
Suit case lock. E. B. Stone. 1,829,310; Oct. 27.
Supercharger. R. V. Hutchinson. 1,829,400; Oct. 27.
Supervisory system for detecting suspended matter in fluids. G. G. Freygang. 1,828,894; Oct. 27.
Support, Brake beam. A. C. Moore. 1,829,418; Oct. 27.
Support, Filament. L. Sutherlin. 1,829,423; Oct. 27.
Support for liquid receptacles. G. F. Hogan. 1,829,353; Oct. 27.
Supporter, Neckwear. L. Marshall. 1,829,049; Oct. 27
Supporting means for hosiery, etc. A. C. Grasham. 1,829,086; Oct. 27.
Surfaces, Ornamenting. A. J. Cade. 1,829,262; Oct. 27.
Suspenders. J. Jacobs. 1,829,518; Oct. 27.
Sweeper, Suction. D. G. Smellie, H. B. White, and M. E. Nulsen. 1,829,548; Oct. 27.
Switch; *See*—
Anticapacity switch. Signal switch.
Control switch. Snap switch.
Switch. L. C. Hart. 1,829,349; Oct. 27.
Switch. C. C. Runner. 1,829,610; Oct. 27.
Switch and condenser, Electric. G. E. Jansson. 1,828,840; Oct. 27.
Switch controlling mechanism. J. Mettler. 1,829,364; Oct. 27.
Switch for signaling systems. B. L. Bobroff. 1,829,037; Oct. 27.
Switch lock. H. B. Austin. 1,829,329; Oct. 27.
Switch mechanism, Friction. G. H. Whittingham. Re18,238; Oct. 27.
Synchronizing means for time measuring mechanism. O. Hess. 1,829,398; Oct. 27.
Table; *See*—
Drafting table.
Table. N. Giard. 1,829,590; Oct. 27.
Take-off mechanism for wire cutting machines. W. H. Robbins and R. F. Boehler, jr. 1,829,456; Oct. 27.
Tank; *See*—
Settling tank.
Tank for domestic refrigerator systems, Cooling. F. G. Slagel. 1,829,375; Oct. 27.
Tape, Fastener. L. Roseman. 1,828,786; Oct. 27.
Telegraph apparatus, Synchronization of facsimile. R. H. Ranger. 1,829,420; Oct. 27.
Telegraph signals, Measuring distortion of. J. Herman. 1,829,185; Oct. 27.
Telephone and telegraph system, Combined. E. R. Taylor 1,828,823; Oct. 27.
Telephone responding apparatus, Automatic. J. L. Collins. 1,828,733; Oct. 27.
Telephone system. H. M. Friendly. 1,828,964; Oct. 27
Telephone system. M. B. Stazak. 1,829,070–1; Oct. 27
Temperature in electric furnaces and the like, Control of A. G. Loblev. 1,829,416; Oct. 27.
Tensioning device for flexible transmission members, Automatic. M. Duhamel. 1,828,769; Oct. 27.
Textile fabric. H. Whitehead. Des. 85,451; Oct. 27.
Textile fabric or a similar article, Embroidered. E. W Freudenberg. Des. 85,415–24; Oct. 27.
Textile fabrics, Printing. F. Adler. 1,829,700; Oct. 27.
Thermometer, Hot water bottle. H. D. Lapkin. 1,829,414; Oct. 27.
Thermostat. W. K. Mason and E. Stevens. 1,829,149; Oct. 27.
Thread knotting device. A. Ramseier. 1,828,817; Oct. 27.
Tie rod. J. Sneed. 1,829,305–6; Oct. 27.
Tie rod construction. F. C. Crawford and M. P. Graham. 1,828,891; Oct. 27.
Tile breaker. W. Aitchison. 1,828,796; Oct. 27.
Tile shaping and trimming machine. G. Larson. 1,828,869; Oct. 27.
Tire bead covering machine. F. D. Fowler. 1,829,041; Oct. 27.
Tire carrier lock. F. H. Le Jeune. 1,829,415; Oct. 27.
Tire changer. G. J. Armstrong. 1,829,433; Oct. 27.
Tire, Pneumatic. L. Hibbert. 1,829,483; Oct. 27.
Tobacco, Compressing. H. P. Taylor. 1,828,790; Oct. 27.
Tongs, Pickle. W. H. Freye. 1,829,271; Oct. 27.
Tonsorial device. A. F. Mirafuentes. 1,829,667; Oct. 27.
Tool. H. O. Ewing. 1,829,557; Oct. 27.
Tool, Air extractor and tube repairing. P. H. Lehmann. 1,828,813; Oct. 27.
Tool and jig for cable work. C. A. Bay. 1,829,033; Oct. 27.
Tool, Cutting. S. E. Taft. 1,829,200; Oct. 27.
Tool, Electric. W. Moretti. 1,828,903; Oct. 27.
Tool for cutting stone. P. S. Legge. 1,828,740; Oct. 27.
Tool, Percussive. W. A. Smith, sr., and W. A. Smith, jr. 1,829,246; Oct. 27.
Tool, Riveting. H. N. Wylie and P. G. Crabbe. 1,829,696; Oct. 27.
Tool, Valve burnishing. F. N. Samson. 1,829,373; Oct. 27.
Top structure for vehicles. A. Kellner. 1,829,146; Oct. 27.
Torch, Electric. J. Lister. 1,828,778; Oct. 27.
Toy aircraft liner. F. A. Berg. 1,829,034; Oct. 27.
Toy cars, Removable roof for. M. Caruso. 1,829,505; Oct. 27.
Toy element, Construction. A. C. Gilbert. Des. 85,427–9; Oct. 27.
Toy, Figure. H. M. Schelle, H. G. Fisher, N. Barcham, and E. S. Savage. 1,829,680; Oct. 27.
Toy figure. G. Schmidt. 1,829,112; Oct. 27.
Toy, Rocking. H. G. Gould. Des. 85,430–1; Oct. 27.
Track and change-over mechanism for electric railway systems. A. M. Rossman. 1,828,946; Oct. 27.
Track and railroad truck, Railroad. A. E. Kintner. 1,829,358; Oct. 27.
Tractor attachment. G. Ghiselli. 1,828,929; Oct. 27.
Tractor, Conduit. J. R. Jordan. 1,829,143; Oct. 27.
Tractors, Wheel scraping attachment for. H. Walters. 1,829,172; Oct. 27.
Traffic signal. G. C. Walker. 1,829,025; Oct. 27.
Transfer mechanism. A. F. Dilon. 1,829,129; Oct. 27.
Transfer printing machine. I. J. Kohlwey. 1,829,562; Oct. 27.
Transformer, High frequency. J. H. Pressley. 1,829,058; Oct. 27.
Transformer, Piezo electric crystal. A. Mc. Nicolson. 1,829,234; Oct. 27.
Transmission device. C. W. Weiss. 1,828,825; Oct. 27.
Transplanter. F. W. Nuerwell. 1,829,107; Oct. 27.
Trap; *See*—
Animal trap.
Tray or similar article, Ash. M. Abel. Des. 85,411; Oct. 27.
Trim for handbags or similar articles, Ornamental. D. Karron. 1,829,145; Oct. 27.
Trimming machine. J. H. Brown. 1,828,829; Oct. 27.
Trolley system for electric railways. A. M. Rossman. 1,828,945; Oct. 27.
Trough, Twin hog. L. T. Petersen. 1,829,108; Oct. 27.
Truck, Attachment for. A. A. Hill. 1,829,652; Oct. 27.
Tub. J. L. Perkins, J. Oakley, and H. D. Croft. 1,828,908; Oct. 27.
Truck, Car. D. S. Barrows. 1,829,578; Oct. 27.
Truck, Locomotive. B. Wheeler. 1,829,464; Oct. 27.
Tube; *See*—
Discharge tube. Photo-electric tube.
Tube testing device. P. F. Jackson. 1,829,448; Oct. 27.
Tube transmitter keying method. E. Tod. 1,828,852; Oct. 27.
Tubes, Filling bicompartment collapsible. N. M. Hopkins. 1,828,864; Oct. 27.
Turbine and the like, Elastic fluid. O. Rosenlöcher. 1,829,674; Oct. 27.
Turbine blades, Making. G. Back. 1,829,179; Oct. 27.
Turbine, Gas. B. Morton and G. P. Welch. 1,828,782; Oct. 27.
Turntable. E. C. Cook. 1,828,959; Oct. 27.
Tuyère. C. J. Parker. 1,829,055; Oct. 27.
Tuyères. G. W. Hughes. 1,829,356; Oct. 27.
Typewriter and the like. J. H. Barr. 1,829,390; Oct. 27.
Typewriter keyboard. J. M. Ostrey. 1,828,939; Oct. 27.
Typewriters, Multiple totalizer attachment for. M. Samburg and J. C. Hochman. 1,829,543; Oct. 27.
Typewriting machine. R. Von Reppert. 1,828,755; Oct. 27.
Typographical machine. S. E. Sperry. 1,829,683; Oct. 27.
Underreamer. E. F. Raymond. 1,828,750; Oct. 27.
Unloading device, Positive. C. Bahner and C. H. Grady. 1,829,330; Oct. 27.
Vacuum cleaner. J. F. Carson. 1,829,582; Oct. 27.
Valve. C. W. Larner. 1,829,703; Oct. 27.
Valve, Automatic. G. Hilger. 1,829,517; Oct. 27.
Valve cages, Constructing. E. E. Stevenson. 1,829,022; Oct. 27.
Valve, Check. E. E. Hewitt. 1,828,967; Oct. 27.
Valve, Control. H. R. Standlee. 1,829,069; Oct. 27.
Valve, Fire hydrant vent. J. R. Carnes. 1,828,763; Oct. 27.
Valve for internal combustion engines and the like H. A. P. Tverbakk. 1,828,792; Oct. 27.
Valve grinding refacing and reseating device. L. A. Prestek. 1,829,059; Oct. 27.
Valve handle. W. B. Ross. 1,829,371; Oct. 27.
Valve inside. J. C. Crowley. 1,829,556; Oct. 27.
Valve structure. N. P. Minster. 1,829,666; Oct. 27.
Valve system for internal combustion engines. G. C. Buck. 1,829,581; Oct. 27.
Valve, Vacuum relief. J. A. Maynard. 1,829,567; Oct. 27.
Vanity box. W. M. Milne, jr. 1,829,105; Oct. 27.
Vanity case. C. Harp. 1,828,863; Oct. 27.
Vehicle body construction. G. K. Lewis. 1,829,527; Oct. 27.
Vehicle body construction. A. E. Northup. 1,829,052; Oct. 27.

Vehicle construction. Four wheel drive. H. M. Kingsley. 1,828,841; Oct. 27.
Vehicle for the transport of artillery and especially anti-aerial artillery. U. Pavesi. 1,829,669; Oct. 27.
Vehicle seat, Convertible. A. R. Hauber. 1,828,931; Oct. 27.
Vehicle spring. M. P. Hemphill. 1,829,280; Oct. 27.
Vehicle tongue coupling. H. J. Helder. 1,829,092; Oct. 27.
Vehicle wheel. L. E. La Brie. 1,828,972; Oct. 27.
Vehicles, Shock absorbing roll for motor. A. Kégresse. 1,828,933; Oct. 27.
Ventilating unit, Explosionproof. J. A. Pausche. 1,828,746; Oct. 27.
Vibrator. E. L. Fickett and A. W. Munsell. 1,829,441; Oct. 27.
Violin mute. W. Bingham. 1,829,469; Oct. 27.
Vulcanizing method and apparatus. J. W. Schade. 1,829,018; Oct. 27.
Wagon tongue hound. H. J. Helder. 1,829,091; Oct. 27.
Wall construction. H. W. Hoefer. 1,828,969; Oct. 27.
Wall structure for cars, Metal. F. Ditchfield. 1,829,508; Oct. 27.
Warning signal. W. T. Felton. 1,828,892; Oct. 27.
Waste can. G. R. Le Sauvage. 1,828,741; Oct. 27.
Watch display box. S. Wolfsheim. Des. 85,425; Oct. 27.
Water cooler. G. J. Huntley. 1,828,970; Oct. 27.
Water heater. F. W. Birtch. 1,829,334; Oct. 27.
Water heater. C. B. Page and A. C. Kalk. 1,829,535; Oct. 27.
Water tube boiler. R. V. S. Théry. 1,829,119; Oct. 27.
Water tube boiler, Double circuit forced circulation. C. E. Lucke. 1,828,870; Oct. 27.
Water tube boiler, Single circuit. C. E. Lucke. 1,828,814; Oct. 27.
Web roll changer. A. J. Horton. 1,829,719; Oct. 27.
Web roll controlling mechanism. H. V. Ball and A. J. Horton. 1,828,898; Oct. 27.
Web supplying and controlling mechanism. M. W. Brueshaber. 1,829,337; Oct. 27.
Weighing apparatus. C. F. M. van Berkel. 1,829,315–16; Oct. 27.
Welds, Annealing fusion. S. W. Miller. 1,828,977; Oct. 27.
Wheel; *See*—
Dressing and grinding wheel. Polishing wheel.
Landing wheel. Vehicle wheel.
Wheel. J. P. Tarbox, C. L. Eksergian and W. H. Farr. 1,829,168; Oct. 27.
Wheel. J. W. White. 1,829,575; Oct. 27.
Wheel aligning device. A. Frykman. 1,829,133; Oct. 27.
Windbreak and securing means therefor. J. Ledwinka. 1,829,597; Oct. 27.
Window for jails and the like. L. J. White. 1,828,827; Oct. 27.
Window operating device, Screened. L. E. and W. J. Dodds. 1,829,343; Oct. 27.
Window seat. T. V. and F. O. Aland. 1,829,324; Oct. 27.
Windshield wiping mechanism. R. B. Gray. 1,829,396; Oct. 27.
Wind-wheel vane. H. C. Schneider. 1,829,062; Oct. 27.
Wire bending machine. V. J. Verpent. 1,828,884; Oct. 27.
Wood pulps, Production of chemical. G. A. Richter. 1,828,848; Oct. 27.
Woodworking machine. J. J. Tompkins. 1,829,313; Oct. 27.
Woven fabric. C. Rosenstein. 1,829,299; Oct. 27.
Wrapping machine paper feed mechanism. E. C. Hegg. 1,829,515; Oct. 27.
Wrench. Y. L. Chew. 1,829,473; Oct. 27.
Yarn, Chenille. S. H. Hinlein. 1,829,446; Oct. 27.
Yarn tensioning device. A. Balthasar. 1,828,918; Oct. 27.
Yarn, Treating. P. G. Rust. 1,829,678; Oct. 27.

CLASSIFICATION OF PATENTS

ISSUED OCTOBER 27, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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Notices of Cancellation

U. S. Patent Office, *Washington, Sept. 22, 1931.*

The Floyd-Paramount, Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of F. A. Martoccio Company, 102 South Cedar Lake Road, Minneapolis, Minn., to effect the cancellation of the trade-mark registrations of The Floyd-Paramount, Inc., of 204 Morris Avenue, Newark, N. J., Nos. 217,166 and 225,362, dated August 24, 1926, and March 15, 1927, respectively, and the notice of such proceeding sent by registered mail to The Floyd-Paramount, Inc., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless The Floyd-Paramount, Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, Sept. 17, 1931.*

St. Louis Piston Ring Corporation, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Ramsey Accessories Manufacturing Corp., 3693 Forest Park Boulevard, St. Louis, Mo., to effect the cancellation of the trade-mark registration of the St. Louis Piston Ring Corporation, of 2638 Locust Street, St. Louis, Mo., No. 138,713, dated January 4, 1921, and the notice of such proceeding sent by registered mail to the said St. Louis Piston Ring Corporation at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said St. Louis Piston Ring Corporation, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

M. J. MOORE.
Acting Commissioner.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,586,592, R. Wild, Manufacture of unstainable iron and steel, decided July 28, 1931, claims 1, 2, 4, 6, 7, 9, 10, 15, and 16.

Pat. 1,718,927, C. A. B. Halvorson, Searchlight, decided September 17, 1931, claims 1, 2, and 3.

Pat. 1,754,626, R. J. Holzhausen, Washing machine impeller, decided September 14, 1931, claim 2.

Adjudicated Patents

(C. C. A. N. Y.) Trussell patent, No. 1,025,170, for loose-leaf binder, claims 6, 7, and 8 *Held* valid and infringed. *Trussell Mfg. Co.* v. *Wilson-Jones Co.*, 50 F.(2d) 1027.

Suggestion for the Use of Coupons

The execution of orders for printed copies of U. S. patents, trade-marks, etc., will be considerably expedited if coupons are used. Such coupons may be purchased at the Patent Office in lots of 20 at $2.00 and 100 at $10.00.

Coupon orders do not have to be accompanied by letters of transmittal. They require nothing but the filling in of the patent number, the name of the inventor, the date of issue, and the name and address of the party desiring the service.

Condition of Applications Under Examination at Close of Business September 19, 1931

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 94,531; Trade-Mark Division, 1,160. Oldest new case, Jan. 19, 1931; oldest amended, Jan. 19, 1931. DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action		No. of applications awaiting action
		New	Amended	
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	May 1	May 1	857
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Mar. 27	Apr. 6	1,384
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	May 1	May 15	995
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 15	Apr. 16	867
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 25	Mar. 30	738
318	6. LEWERS, A. M., Carbon Chemistry	Jan. 31	Feb. 6	2,264
106	7. JARBOE, C. G., Optics; Photography	Mar. 3	Mar. 3	2,068
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Feb. 24	Feb. 26	1,672
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Mar. 30	Apr. 2	1,280
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 19	Apr. 17	1,171
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Apr. 21	Apr. 21	761
380	12. HENRY, C. C., Machine Elements	Feb. 9	Mar. 3	1,145
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 21	Apr. 4	1,145
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 23	Mar. 31	1,552
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Mar. 2	Mar. 2	2,503
242*	16. SPENCER, C. J., Telegraphy; Telephony	June 8	June 2	872
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Feb. 16	Feb. 16	1,553
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants, Speed-Responsive Devices	Mar. 27	Mar. 30	1,095
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Jan. 26	Feb. 3	2,197
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	May 12	May 14	996
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 21	Mar. 30	1,009
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	May 2	May 13	834
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 29	Jan. 19	1,097
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 27	Mar. 30	1,056
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Mar. 21	Mar. 21	1,635
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 21	Mar. 20	987
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Mar. 23	Mar. 21	1,137
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 20	Feb. 23	1,805
260*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	May 18	May 20	605
148	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 20	May 15	886
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Jan. 19	Jan. 19	2,625
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Apr. 14	Apr. 20	1,240
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Mar. 20	Mar. 21	2,315
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	May 5	May 12	923
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	July 6	July 6	697
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Feb. 7	Jan. 30	2,231
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 2	Mar. 12	1,623
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	May 22	June 1	604
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 23	Mar. 20	1,671
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Feb. 17	Feb. 28	3,209
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	May 12	May 13	789
223*	42. CUTTING, H. O., Electric Signaling	Feb. 21	Feb. 24	1,527
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 23	Mar. 25	1,538
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Jan. 21	Jan. 26	2,162
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Feb. 16	Feb. 19	2,166
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Apr. 3	Apr. 11	1,101
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 19	Mar. 19	2,189
212*	48. ROEPKE, O. B., Electricity, General Applications	Mar. 19	Mar. 19	1,062
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 25	Mar. 26	1,506
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 19	Jan. 26	2,682
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Feb. 5	Feb. 5	2,109
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Apr. 5	Apr. 8	1,423
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 17	Apr. 17	745
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Jan. 30	Jan. 30	2,915
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery {Designs	July 24	July 24	273
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 29	Sept. 11	163
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Feb. 16	Feb. 19	1,881
270*	58. DOWELL, E. F., Abrading; Typewriting	Mar. 23	Mar. 23	920
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Feb. 19	Feb. 19	1,610
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Mar. 18	Mar. 26	1,717
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Feb. 20	Feb. 20	2,063
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Jan. 28	Jan. 30	2,082
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 24	Jan. 26	2,618
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND, {Trade-Marks {Labels and Prints	Feb. 4	Feb. 4	2,356
		Aug. 6	Sept. 4	1,074
		Aug. 31	Sept. 8	86

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

JAMES *v.* STIMSON

No. 2,567. Decided April 27, 1931

1. INTERFERENCE—PRIORITY—REDUCTION TO PRACTICE—HIGHWAY DANGER SIGNAL—TESTS UNDER WORKING CONDITIONS NECESSARY.

The making of a model of a highway danger signal and testing it with a ceiling lamp or a flash-light ten feet distant therefrom *Held* not sufficient to establish a reduction to practice of the invention since such a device could be satisfactorily tested only under actual working conditions.

2. SAME—SAME—DILIGENCE.

Evidence reviewed and *Held* insufficient to establish that J., who was the first to conceive the invention but the last to reduce it to practice, was diligent in such reduction to practice from the time S. entered the field and that priority was properly awarded the latter.

APPEAL from the Patent Office. Affirmed.

Mr. Joshua R. H. Potts and *Mr. T. Bertram Humphries* for James.

Mr. John H. Bruninga for Stimson.

GRAHAM, *P. J.:*

This is an appeal by the appellant from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner of Interferences in awarding priority to the party Stimson. An interference was declared on June 12, 1926, between the patent of the appellant, dated September 1, 1925, No. 1,552,166, and the application of the appellee, Serial No. 92,025, filed March 3, 1926.

The subject matter of the interference is contained in one count, which reads as follows:

> In a highway danger signal the combination of two reflectors placed at right angles to each other and with their reflecting surfaces facing one another, one of the reflectors having a plane surface, the other being grooved, the grooves running at right angles to the plane reflector, and each groove being composed of two plane surfaces placed at right angles to one another.

The said patent to the appellant was issued on an application filed September 2, 1924, for improvements in highway danger reflectors, the scope of the invention being sufficiently shown by the facts hereinafter stated. The appellee Stimson filed his application for an improvement in highway signals, as has been stated, on March 3, 1926. In this application he states that the same is a continuation in part of application, Serial No. 7,164, filed February 5, 1925. The said last named application went to patent on July 6, 1926. The disclosure and the claims in said patent are for a process of making reflecting glass for highway signals, and for a mold of the necessary character to make the same. No contention is made here that the appellee is not entitled to prosecute his present application as a continuation of said prior application, if the said prior disclosure is sufficient to read upon the count of the interference here.

One of the principal contentions in this matter arises from a motion of the party James to dissolve the interference herein on the grounds that the party Stimson could not make the count. This motion was decided adversely to James by the Law Examiner, the Examiner of Interferences, and by the Board of Appeals in its final decision on the merits. Appellant contends that the original Patent No. 1,591,572, granted to the appellee on his application filed February 5, 1925, does not disclose the subject matter of the interference count, and hence that the present application can be extended no further than the disclosures in said patent. Appellant contends, with much insistence, that his disclosure, as shown by his Patent No. 1,552,166, shows a continuous plane reflecting surface with another reflector placed at right angles thereto, the latter being grooved and consisting of two plane reflecting surfaces placed at right angles to one another and at right angles to said first mentioned plane reflecting surface.

On the other hand he insists that the Stimson disclosure shows a series of half cubes, the interior portions of said half cubes having reflecting surfaces, and that light reflected from such a series of half cubes will be reflected in a different manner than that which will result from the use of the single plane surface of appellant's disclosure. In connection with this, appellant goes into an exhaustive discussion of the laws of physics as regards reflected light, to demonstrate the correctness of his position.

The Board of Appeals held, and we think properly, that Stimson's disclosure in his Patent No. 1,591,572, reads upon the count of the interference. The patent in question was for a mold for making reflecting glass. The original molds are offered in evidence as Stimson's Exhibits J and AA, together with samples of glass made therefrom, some of which glass was used in the Moorlands sign, hereinafter referred to, and other pieces of which were used in a railroad crossing sign offered in evidence as Exhibit MM. Both these molds and the glass made therefrom and offered in evidence, show along one or more sides thereof a continuous plane surface which, if appellant's contentions are correct, fully satisfy the requirements of the count, which must be read broadly. *Stern et al.* v. *Schroeder et al.*, 17 C. C. P. A. (Patents) 690, 36 F.(2d) 518, 393 O. G. 4.

It will be observed that the count of the interference is confusingly drawn. It is a copy of claim 1 of appellant's Patent No. 1,552,166. The count first recites that there are but two reflectors, with their surfaces facing one another, one of the reflectors being plane and the other being grooved; then, having recited subject matter which would seem to be covered by a combination of but three reflecting surfaces, the count further proceeds with a state-

ment: "the grooves running at right angles to the plane reflector." This latter statement seems to indicate that instead of being two reflecting surfaces, one grooved and the other plane, there are at least four of such reflectors, otherwise there could be no *grooves*. In fact, we are satisfied, from an examination of the drawings and the specification in the James patent, as well as by an examination of his first models, James' Exhibits Nos. 1 and 3, that the inventor intended to have a multiplicity of these opposed reflecting surfaces. The glass which he finally manufactured commercially indicates the same thing.

It is argued that if the party Stimson has any such continuous plane surface, it was accidental and not intended or comprehended by Stimson. While this may not have been Stimson's primary design, his disclosure fully shows the necessary existence of such a continuous plane surface in his product. In his specification he calls attention to the fact that such a continuous plane surface will exist:

> • • • The outer rows of hexagonal elements along the sides of the box 35 are not surfaced with the three faces 20, 21, 22, but the elements of the bottom row (Figure 2) are given only one angularly cut face and those of the top row two angularly cut faces.

We find no error in the ruling of the Board of Appeals affirming the action of the Examiner of Interferences in denying the motion to dissolve the interference.

The record testimony offered on behalf of the party Stimson is sufficient to establish, in our opinion, the facts alleged by him in his preliminary statement. The party Stimson testifies that he had been working upon the problem of a glass reflector for use in road signs and other articles, and that, on June 11, 1923, he conceived the idea involved in the count of the interference here, his conception at that time being that of a plate reflector, every unit of which should be a complete half cube; that on the same day he made a rough model of wood preliminary to plans for making a mold to carry out his invention. His conception on this date is amply corroborated by a diary kept by him, by other documentary evidence, by the testimony of his father and his brother, to whom he communicated the same, by the testimony of his attorney, to whom he made disclosure of it, and by others whose testimony is stipulated into the record. He made a drawing of his invention on or about June 25, 1923, and proceeded at once thereafter to procure the necessary materials and molds for carrying out his invention.

His testimony shows that a mold was completed and delivered to Stimson on July 10, 1923, from which, thereafter, numerous plates of glass with reflecting surfaces were made. This is corroborated by the proprietor of the machine works where the same was made, as well as by the mechanic who did the work. The witnesses Roach and Witherow testified that a full and complete disclosure of the invention was made to them in August, 1923, and that samples of the glass reflectors were shown to them at that time.

Some attempt was made by Stimson to test the reflective power of these glasses in the shop, but the testimony shows that full and complete tests were made of them on the public highway and otherwise, in the fall of 1923. Highway signals were made up and placed in position along public highways in the early part of September, 1923, and signs were installed, thus made up, in Jefferson City, Missouri, and Richmond, Indiana, at about the same time.

Certain of the signs which were put up locally in St. Louis County, Missouri, were tested by Stimson and others, by the use of the automobile headlights of passing automobiles, with spot lights and otherwise, at such distances as would show their availability for ordinary highway use.

In addition to this, in August, 1923, a large sign was erected by Stimson containing letters made from his reflecting glass and put up to advertise a real estate development known as "Moorlands." The sign was about 35 feet long and the letters were each about 5 feet high. This sign was kept in service until after snow-fall in the fall of 1923. A railway crossing sign was also made and put in use at about the same time. All of these signs were thoroughly tested, and proved satisfactory in every respect.

There is therefore no question from the record that Stimson made a complete reduction to practice of his invention, not later than August 10, 1923, when he erected the Moorlands sign.

The record made by the party James shows that in the month of April, 1923, James had a conference with one Edger A. Miller, during which James disclosed to Miller, for the purpose of obtaining financial assistance, his idea of a highway danger reflector composed of a "plane surface and a surface composed of 90° grooves and these surfaces being placed at right angles to one another." James testifies that he had conceived the subject matter of said conference in 1921, the idea being suggested to him by the reflection of the lights from his automobile headlights by the corner of a tin box lying along the highway. Miller corroborated James in this disclosure as of the date mentioned by James. At that time the party James' idea was incorporated in a tin model which is in evidence as James' Exhibit No. 1, which consists of a flat piece of tin plate to which is attached, at right angles thereto, a piece of tin plate in the form of three rectangular grooves, the side of each of said grooves being made by a fold of said tin plate. Between these upright grooves and the lower flat reflected surface, was interposed a sheet of red celluloid. James relies to a large degree for his early date of conception upon this exhibit.

In August, 1923, James constructed a model of a reflector which is in evidence, and known as James' Exhibit No. 3, and which was used by him in demonstrating his idea. It consisted of a wooden frame containing therein an enlargement of the old tin model, Exhibit 1, but was constructed of silvered mirror plates of glass, and had four upright grooves instead of three, as in the original tin model. In the center of each groove was placed a piece of red glass. This model was, to some degree, broken up and lost, but was reconstructed and identified for the purposes of this interference proceeding.

James also constructed several other reflectors of nickel plated material in the fall of 1923, according to his testimony, one of which, Exhibit No. 7, he states was "tried out in the house and on the highway." There is, however, no corroboration of this statement by the testimony of the other witnesses.

On August 13, 1923, James testifies that the demonstrated the use of his invention by means of Exhibit No. 3, and that members of his family and the witness Miller were present. It appears from the testimony that in making this demonstration the model reflector was placed on the back of a davenport, and that it was caused to be illuminated by an electric light chandelier in the ceiling, and sometimes by a flash-light, the demonstrator standing about ten feet away from the reflector during the test. It is stated that the test was satisfactory. This test is corroborated and sufficiently shown by the record.

The witness Miller states that he saw a demonstration of the nickel plated reflectors, Exhibits Nos. 5 and 7, in the fall of 1923, in the cellar or basement of the party James' home. This test was conducted by placing the reflector at one end of the cellar, and with the aid of a mirror and a gas jet a light beam was projected onto the plane surface of the reflector. These nickel plated reflectors had strips of red celluloid inserted so that the reflected light was red in color.

No other tests of any kind are shown by James' record of his device prior to Stimson's reduction to practice on August 10, 1923. In fact, the tests which were made, as last above stated, of Exhibits 5 and 7, may have been after August 10, 1923, so far as the record discloses.

[1] We are of opinion that the Board of Appeals committed no error in holding that James had not shown reduction to practice prior to his constructive reduction to practice on the filing of his application for patent on September 2, 1924. There has been much discussion in the case as to what was necessary to constitute reduction to practice in this case. It is sufficient for us to observe that the parties here were both trying to perfect highway danger signals and light reflecting glass for similar purposes. It is quite apparent that a test of a highway danger signal to be used to catch and reflect the light from automobile headlights at night cannot be satisfactorily made except under actual working conditions. Such a test would be easy of accomplishment and would be the natural and reasonable thing to do. To test such a device with a small contrivance made of tin plate, or of small mirrors contained in a temporary wooden frame by the light of a ceiling electric light, or by flash light, in a room, at a distance of ten feet or thereabouts, is not such a test as is required to prove that the device will work satisfactorily under actual working conditions. In the same way the tests claimed to have been made by James, in his cellar, were equally inefficient. The physical laws involved in the reflection of light from surfaces disposed as they were in James' device, were well-known long prior to his experiments, and nothing could be claimed as inventive in this line. If, however, in the adaptation of this known principle to actual conditions, something of invention had occurred, it was necessary that this be demonstrated by a test under such conditions as would show this to be true.

In *Bennett* v. *Fitzgerald*, 18 C. C. P. A. (Patents) ——, 48 F.(2d) 917, we had occasion to comment somewhat upon the amount of proof required for reduction to practice in various cases, and it will not be necessary to repeat what was there said. This, in our opinion, is one of the cases where a test was required under actual working conditions. The cases in point are *Jardine* v. *Hartog*, 17, C. C. P. A. (Patents) 764, 36 F.(2d) 606, 392 O. G. 738; *Wickers* v. *McKee*, 29 App. D. C. 4, 129 O. G. 869; *Sherwood* v. *Drewson*, 29 App. D. C. 161, 173, 130 O. G. 657; *Malcom* v. *Richards*, 47 App. D. C. 582, 250 O. G. 1000; *Van Auken, etc.* v. *Cummings*, 18 C. C. P. A. (Patents) ——, 49 F.(2d) 490.

We come to the conclusion, therefore, that the party Stimson, although being the last to conceive, reduced his invention to practice not later than August 10, 1923, and that the party James constructively reduced his invention to practice on September 2, 1924.

Appellant was required to be diligent from the period immediately prior to appellee's reduction to practice to the time of filing his application, which was his constructive reducton to practice. *Beidler* v. *Caps*, 17 C. C. P. A. (Patents) 703, 36 F.(2d) 122, 392 O. G. 241; *Blunt* v. *Grace*, 18 C. C. P. A. (Patents) ——, 45 F.(2d) 140.

[2] During the period above mentioned, appellant did nothing toward further reducing his invention to practice, except to make some variations of his design such as James' Exhibits 5 and 7, out of nickel plated metal, and to exhibit the same to a few persons. No excuse is given for his failure to file an application sooner, nor is any reason suggested why this could not have been done. We are of opinion that his actions in this matter did not constitute such diligence as the law requires.

The decision of the Board of Appeals in awarding priority to the party Stimson is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE TOBOLD

No. 2,689. Decided April 22, 1931

PATENTABILITY—DEVICE FOR USE IN STORING VALVE INSIDES.

Claims relating to a device for storing valve insides *Held* unpatentable in view of the prior art.

Appeal from the Patent Office. Affirmed.

Messrs. Kwis, Hudson, & Kent, Mr. A. J. Hudson, Mr. W. E. Williams, and *Mr. W. T. Estabrook* for Tobold.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the devision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, 4 to 7, inclusive, in appellant's application for a patent for an alleged invention relating to a device adapted for use in connection with the storing of "valve insides for pneumatic tires," and comprising a relatively thin flat plate—"separator member"—provided with one or more reentrant slots of proper dimensions to engage the enlargement on the valve stem and the end of the casing, thus separating the valve proper from its seat.

Claim 4 is illustrative. It reads:

4. The combination with a valve insides comprising a casing, a stem within the casing, a valve proper carried by the stem and adapted to cooperate with the lower end of the casing as a seat, an enlargement of the valve stem on the valve proper, a spring within the casing and normally holding the valve proper to its seat, of a separator member having a portion adapted to engage the enlargement on the valve stem and the end of the casing to thereby separate the valve proper and the seat, the separator being retained under the spring action of the aforesaid spring.

The reference is: Kingsbury, 1,558,484, October 27, 1925.

In the reference the separator member comprises a channel shaped member consisting of a base and sides, one of the sides having a series of slots so arranged therein as to be directly above pockets in a receptacle in which the separator member and the valves are to be placed.

In his specification the patentee stated that:

Before such insertion, the several valves of the set are mounted upon the support, first lifting the heads and inserting the stems in the cutouts. Under the force of the spring 19, the end of the body portion and the head clamp upon the support, as clearly indicated in Figs. 1 and 4.

In this relation the support and the valves may be handled as a unit to be inserted in the receptacle. It should be noted that the length of the valve stem is such that in this position, the head end of the stem is spaced from the side portion 28, and the distance from the said side portion to the other end of the stem is slightly greater than the interior transverse dimension of the receptacle. When inserted in the receptacle the stem must therefore be pressed inwardly, so that it engages the side of the receptacle, (Fig. 5) and moves the valve head from contact with the portion 27 of the support with the advantageous result that the valves are securely held under spring pressure against rattling or becoming loose, and the rubber gaskets 25 are retained out of contact with the surface of the support and the valve bodies. When removed from the container the rubber gasket, which is vital to the proper operation of the valve is undeteriorated, and free from distortion, and will therefore function perfectly.

It is argued by counsel for appellant that the slots in the separator member, disclosed in the application, are of a—

width greater than the diameter of the small end of the enlargement on the stem, but of a width less than the diameter of the larger end of such enlargement;

and that this arrangement is not disclosed in the reference.

It may be observed that appellant's claims do not specify the size of the slots in the separator member. They merely call for a separator member having a portion adapted to engage the enlargement on the valve stem and the end of the casing to maintain the "valve proper" out of contact with its seat.

In its decision, the Board of Appeals, among other things, said:

The claims distinguish from the disclosure of Fig. 4 of the patent only in specifying that the strap engages the enlargement on the stem. We fail to see that this is a material difference over the structure shown in the reference as the strip shown there prevents the valve casing from pressing upon the yielding material of the valve thus causing it to become indented and deformed. The spring will be under no greater tension when held in the manner shown in Fig. 4 of the patent than in appellant's structure.

There is nothing in the reference to indicate that the separator member therein disclosed is not adapted to engage the enlargement on the valve stem and the end of the casing, and, in our opinion, the involved claims are sufficiently broad to read on the reference.

The Patent Office tribunals concurred in holding that the involved claims are not patentably distinguishable from the reference. We are in accord with this conclusion, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE PEABODY

No. 2,695. Decided April 22, 1931

PATENTABILITY—FUEL BURNERS.

Claims relating to improvements in fuel burners *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Meyers & Jones and *Mr. Charles S. Jones* for Peabody.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, Nos. 33 to 55, inclusive, in appellant's application for a patent for an alleged invention relating to improvements in a fuel burner.

Claims 34 and 54 are illustrative. They read:

34. In combination, a furnace having a wall with an opening therein, means for delivering a body of air for combustion with a whirling motion to said opening, and means for projecting fuel in a converging cone into said air from a source outside thereof at substantially the entrance to said opening.

54. A fuel burner comprising a chamber provided with a frusto conical wall for directing air, and an annular slot in the wall thereof, said wall and said slot converging in the same direction and at an angle to the axis of the chamber.

The references are: Schutte, 391,865, October 30, 1888; Case, 950,996, March 1, 1910; Lindsay, 1,378,248, May 17, 1921; O'Neill et al., 1,429,090, September 12, 1922; Leps, 858,189, June 25, 1907.

Claim 34 defines a combination including a—

furnace having a wall with an opening therein, [shown in the patent to O'Neill] means for delivering a body of air for combustion with a whirling motion to said opening, [shown in the patent to Schutte] and means for projecting fuel in a converging cone into said air from a source outside thereof at substantially the entrance to said opening [also shown in the patent to Schutte].

Claims 44, 46, 47, 54, and 55 define, generally, a burner having a frusto-conical wall for directing air and an annular discharge opening converging in the same direction and at an angle to the axis of the chamber.

With reference to these claims, the Board of Appeals said:

The claims above mentioned by number all call for the delivery of the air through a gradually decreasing air passage. The patent to Lindsay discloses a burner having a gradually decreasing air passage in substantially the same relationship as appellant's. The gas is delivered to the air column through an annular slot burner but the slot is not inclined as in appellant's structure and that of Schutte. An oil burner is found in Lindsay at substantially the same relative location as in appellant's structure. There are auxiliary air feed openings in Lindsay and appellant contends that the constricted passage is only for atomizing the liquid fuel but inasmuch as the specification of Lindsay in the second paragraph clearly states that either of the fuels may be employed alone it seems apparent that when the oil is not being fed, some of the air will be delivered to the gas burner through the constricted passage. In any event, we do not consider that it would involve invention to give the air passage of Schutte slight constriction if desired, especially in view of the disclosure of Lindsay. In our opinion, therefore, the claims which include the constricted air passage do not patentably distinguish from Schutte.

Other features of appellant's burner are clearly shown in the other references and we deem it unnecessary to discuss them.

It may be, as claimed by appellant in his affidavit of record, that his fuel burner is more efficient than any other burner of its class on the market, and that it is a commercial success. It may likewise be true that appellant's specification might support patentable claims. However, after giving the matter careful consideration, we are of opinion that the involved claims are sufficiently broad to read on the references or on obvious combinations thereof, and, therefore, are not patentable.

We are in accord with the conclusion reached by the Patent Office tribunals, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE WEEKS

No. 2,636. Decided April 22, 1931

1. PATENTABILITY—INVENTION MUST BE PRESENT.

"One may not patent an idea of an article unless that idea is expressed in some physical entity, and that entity must be something new and useful and must involve invention."

2. SAME—PORTABLE CRANE AND METHOD OF UNLOADING A SHIP.

Claims for a portable crane and for a method of unloading a ship on which such a crane is used *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Louis Burgess for Weeks.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.:*

Appellant has here appealed from a decision of the Board of Appeals of the Patent Office sustaining the action of the Examiner in rejecting his 11 claims numbered 20 to 30, inclusive, for "new and useful improvements in portable hoisting apparatus."

Appellant's claimed invention relates primarily to stevedoring, that is, to the unloading of ships, particularly ocean-going vessels.

Claim No. 26 is for the method; the remainder are directed to the article.

From appellant's brief we quote the following:

Claims 20 to 23, 27, 29 and 30 are descriptions of the variants of structure which basically characterize the invention.

Claims 24 to 28 introduce as an additional element the hopper and chute carried by the tower to receive the discharge from the bracket and direct it into the barge.

Claims 25 and 30 introduce as an additional feature that the power unit is integral with the platform and by its weight contributes to the general stability of the structure on shipboard.

Claim 26 defines broadly the method of unloading a ship which comprises simultaneously operating from a plurality of hatches by means of a portable crane of the Weeks type.

With the foregoing statements in mind it is sufficient to quote in full only claims 20 and 26.

20. In a portable crane, supporting means comprising a tower freely and selectively positionable on the deck of a ship with relation to the hatch, a beam carried by the tower adapted to extend over the hatch, hoisting mechanism carried by the beam, a power unit carried by said supporting means for actuating the hoisting mechanism, the entire assembly being liftable as a unit to and from the deck of the ship and readily movable from hatch to hatch thereof.

26. In a method of unloading a ship with a plurality of small cranes, each of which comprises an assembly of a tower small enough to be placed on the deck of the ship between the hatch and adjacent side of the ship, a beam, hoisting mechanism and a power unit for operating the hoisting mechanism; the steps comprising lifting a plurality of the cranes onto the deck and placing the tower of each crane on the deck alongside the respective hatches of the ship with the beam of each crane extending over the respective hatch, operating the cranes, for simultaneously unloading the ship from a plurality of hatches and thereby lightening it evenly, and after the unloading is completed, lifting the small cranes off the deck of the ship.

The references cited are: Messier, 237,571, February 8, 1881; Bogle, 419,630, January 21, 1890; Sinclair, 658,810, October 2, 1900; Hutchings, 700,051, May 13, 1902; Titcomb, 738,084, September 1, 1903; Titcomb, 742,101, October 20, 1903; Hammond, 845,461, February 26, 1907; McIntyre, 1,010,291, November 28, 1911; Zimmerman, 1,428,809, September 12, 1922; Von Haase, 1,565,875, December 15, 1925; Engineering News, July 17, 1913, page 119.

In presenting the case before us counsel for appellant greatly aided the court by using models, not only of appellant's own structure, but of several of the devices of the most material references. We were and are impressed with the idea that appellant's mechanism is a valuable contribution to the art for use in which it was designed. He has developed a device which, in the form made and used, appears to have a number of advantages over any of the patents referred to in the record. It can be moved freely from place to place upon the deck of a vessel without the use of track or rails for its wheels and, apparently, more readily and rapidly positioned by the hatches, in a situation best adapted for hoisting the cargoes from the hold, than can any of the devices of the prior art.

But, notwithstanding this, the law is that an applicant's "*claims* define the measure of his invention" (italics ours), and if the disclosures of the references read upon his claims, patentability must be denied.

None of the claims are specified as being for the combination, but, by reason of the wording, some of them, at least, seem, in fact, to be of a character which makes it proper to regard them as combination claims, and we so treat them.

In the brief of the Solicitor for the Patent Office there is found a concise description of appellant's device which, omitting the numerals, we quote:

The application on appeal discloses a portable hoisting apparatus or crane, and comprises a tower mounted on wheels, so that it can be freely and selectively positionable on the deck of a ship with relation to the hatch. A beam is

carried by the tower and is adapted to extend over the hatch. The beam carries hoisting mechanism including trolley and cable arrangement for raising and lowering the grab bucket. The supporting tower carries a power unit for actuating the hoisting mechanism, including the power winch. A hopper is provided on the tower into which the bucket drops its load, the hopper being supported from the tower by chains and having a chute for delivering matter from the hopper to the barge or lighter. The beam is provided at one end with a supporting post pivoted to the beam.

There are four elements of structure in claim 20, to wit:

First, "supporting means comprising a tower freely and selectively positionable on the deck of a ship with relation to the hatch."

The patent to Zimmerman shows a structure designated therein as a "crane" and described, in part, as "comprising two pairs of obliquely disposed adjustable supporting legs, one pair adjacent either side of the boat * * *."

These supporting legs, so obliquely disposed, are pivotally united at their upper ends and form the support for the mechanism utilized in the unloading operation.

In appellant's specifications it is said:

In the embodiment shown I use a tower 10 which can be any frame capable of carrying the hoisting apparatus and of a sufficient height to facilitate the work.

Elsewhere in the specifications we find:

* * * in using the term "portable crane" I mean to include the ordinary or any preferred structure carrying hoisting mechanism, * * *.

We assume, although it was not specifically so stated in the decisions of the Patent Office tribunals, that the tower of appellant was regarded as the mechanical equivalent of the crane or frame of Zimmerman, particularly in view of the above-quoted excerpts from appellant's specifications. They do seem to be equivalent, although it is not necessary so to hold, in view of the fact that the tower structure itself is disclosed in prior art relating to the loading and unloading of vessels. The patent to Messier shows this, as does the illustration from the "Engineering News."

Second. "A beam carried by the tower and adapted to extend over the hatch."

This, or an obvious equivalent thereof, is shown in Zimmerman's elements, numbered 10 in his drawings, and, apparently, is also present in Titcomb and Hammond.

Third. "Hoisting mechanism carried by the beam."

Zimmerman shows this in his features numbered 30 to 34. It is an element old in the art, though, of course, different mechanisms might have varying details. Appellant's claim is not limited to any detail of structure but calls broadly for "hoisting mechanism."

Fourth. "A power unit carried by said supporting means for actuating the hoisting means."

Zimmerman disclosed this also in the features numbered 20 and 21.

In addition to the four elements of structure, claim 20 adds that the entire assembly is "liftable as a unit to and from the deck of the ship" and is "readily movable from hatch to hatch thereof."

The patent to McIntyre discloses:

An eye * * * at the top of the frame to receive a suspension rope from a derrick by which the frame is swung into position on the side of the ship.

The Engineering News has a photographic illustration of a 25-ton crane being lifted by another crane of 250-tons capacity.

The hopper, chute and bucket elements referred to in claims 24 and 28 are shown respectively by McIntyre, Hammond, Titcomb, and Von Haase.

The adjustment of the power unit in such a way as that "its weight contributes to the general stability of the structure on shipboard," referred to in appellant's brief as being contained in claims 25 and 30, is not regarded as patentable.

Emphasis has been placed upon the fact that the Zimmerman structure must have a track upon which its supporting wheels operate, and its movements are limited to the track, while appellant uses casters by means of which his device can be moved in any direction requiring no rails upon which to run.

We find no claim which is limited to such a structure. It is true that in claim 27 it is said:

* * * being operable * * * and requiring no rails or other modifications on the deck of the ship for its use.

But nothing is said there or elsewhere in the claims about casters or other means whereby the device is rendered movable without rails, or, as is stated in some of the claims, rendered "freely and selectively positionable with reference to the hatch."

So, even if the substitution of casters for the track wheels and movement without rails could be held patentable, appellant presents no claim for means of accomplishing these ends.

It seems obvious that appellant's product claims are so broad as that they are anticipated in the prior art cited.

The method claim does not relate in any way to the moving of the tower or crane upon the deck, but to the unloading operation. We are unable to see wherein it discloses any new way of handling the material which is taken from the vessel. At most the claim does no more than describe the method by specifying the apparatus used in the operation. This is not sufficient. *In re Weston*, 17 App. D. C. 431, 442, 94 O. G. 1786, declared:

* * * a process which amounts to no more than the mere function of a machine, is not patentable; * * *

So far as the use of several of the devices for "simultaneously unloading the ship from a plurality of hatches" is concerned, surely there is no invention in that. Even if it were an inventive idea, Titcomb discloses it.

Appellant's brief says:

The concept that a new and useful purpose would be served by creating the new device is peculiar to Weeks and even though the structure per se involves no invention whatsoever, he is an inventor and entitled to a patent.

[1] This contention, as stated, we think, is entirely too broad. One may not patent an idea of an article unless that idea is expressed in some physical entity, and that entity must be something new and useful and must involve invention.

We have examined the cases cited by appellant as authorities upon this contention, viz: *Hobbs* v. *Beach*, 180 U. S. 383, 94 O. G. 2357; *National Cash Register Co.* v. *Boston Cash Indicator and Recorder Co.*, 156 U. S. 502, 70 O. G. 1793; *Cutler-Hammer Mfg. Co.* v. *Union Electric Mfg. Co. et al.*, 147 Fed. 266; *Comptograph Co.* v. *Mechanical Accountant Co.*, 145 Fed. 331. We have also examined the authorities which were referred to in that part of the opinion in the last-named case quoted in appellant's brief.

They do not sustain so broad a principle as appellant seems here to contend for.

[2] With a single exception (that of *Krementz* v. *Cottle*, 148 U. S. 556, 69 O. G. 241), the claims involved in the several cases thus brought to our attention were combination claims, and in each instance they were so worded as that it was held that prior art did not read upon them in the combination disclosed. In the instant case, as we have shown, the wording of the claims is such as that the disclosures of the prior art do read upon them, even when treated as constituting a combination. As stated, appellant seems to have produced an improvement over prior art but his claims are not so formulated in the application now at issue as that we can feel justified in holding that there was error in the decisions of the Patent Office tribunals.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE LAUGHLIN

No. 2,684. Decided April 22, 1931

1. PATENTABILITY—DOUBLE PATENTING.

Claims for a method of treating metallic castings and the like *Held* unpatentable as covering the same invention as that claimed in applicant's patent for a method of hardening the surfaces of car-wheels.

2. SAME—SAME.

"Appellant's method invention lies in the steps described. These steps, in their patentable aspects, are the same whether applied in the tempering of only the tread surfaces of car wheels or in the tempering of the entire surfaces of metallic or steel castings. The one inventive idea was disclosed in the patent as fully, except in details not patentable, as it was, or is in the application."

APPEAL from the Patent Office. Affirmed.

Mr. Joshua R. H. Potts, Mr. Eugene Vincent Clarke, Mr. Basel H. Brune, and *Mr. Howard L. Laughlin* for Laughlin.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

Laughlin appealed from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner denying seven claims, numbered 12 to 18, inclusive, being all the claims of the application, for a "method of hardening the surfaces of steel castings."

We quote Nos. 12, 13 and 17, as being fairly representative:

12. The method of treating metallic castings or the like comprising the steps of first heating the casting to a tempering temperature, then substantially, uniformly and simultaneously subjecting the surface thereof to be treated to a quenching fluid for a few seconds, then removing the casting from the quenching fluid to permit the treated surface to reheat to approximately a tempering temperature by conduction from the unaffected portion of said casting, and then again quenching said casting.

13. The method of treating metallic castings or the like comprising the steps of first heating the casting to a tempering temperature, then substantially, uniformly and simultaneously subjecting the surface thereof to be treated to a quenching fluid for from three to six seconds, then removing the casting from the quenching fluid to permit the treated surface to reheat by conduction from the unaffected portion of said casting for about ten seconds, and then again quenching said casting.

17. The method of treating the surfaces of steel objects of low carbon content comprising the steps of first heating the object to a temperature from 1600° to 2200° F. inversely as to the carbon content, then immersing said object in a quenching fluid until the surfaces of the same are chilled to the desired depth, but leaving the interior substantially unaffected, then removing the object from quench to permit the surface thereof to reheat by conduction to approximately 200° F. below the temperature at the first quench, and then requenching the object to cool the same.

As references there are cited: Pease et al., 1,276,106, Aug. 20, 1918; Schaffer, 1,362,147, Dec. 14, 1920; Laughlin, 1,527,418, Feb. 24, 1925.

There are nineteen assignments of error, a number of them being merely formal.

It will be observed that one of the references is for a patent to appellant himself. This was for a method and an apparatus limited to hardening the surfaces of car wheels, filed July 28, 1923, and will be later more specifically analyzed.

The claims here at issue involve only the process, no apparatus being disclosed or claimed.

The tribunals of the Patent Office held that the grant of the instant application would, as the Board expresses it, "give appellant a second patent for his invention and prolong the term of his monopoly," it being the opinion there was no patentable difference in the subject matter of the claims of the application and that of the patent claims, in view of the prior art as revealed by Pease et al.

The present application was filed November 9, 1921, and contained seven claims for which, during the course of the proceedings, the claims at issue were finally substituted by amendment. This substitution was on February 8, 1928, and was accompanied by a supplemental oath of appellant.

It is stated in the brief for appellant that after the application here involved had been on file for about a year and eight months, he "discovered that car wheels could be effectually tempered and treated by an entirely different process, necessitating the employment of an especially designed apparatus," and consequently on July 28, 1923, he filed an application directed to both "method and apparatus for hardening the surfaces of car wheels." This application eventuated in the patent, No. 1,527,418, of February 14, 1925, above referred to and which is cited as a reference against the instant application.

The process claims of this Laughlin patent are Nos. 1 and 2, respectively. It is sufficient to quote No. 1:

1. The method of hardening the surfaces of car wheels which consists in first heating the same, then substantially uniformly and simultaneously quenching the entire tread surfaces of the wheel for a short time; then discontinuing the quenching for a sufficient length of time to permit said surfaces to reheat by conduction from the interior of the wheel; and then finally and completely quenching the same, substantially as described.

It will be observed that the claims of the patent do not provide for the quenching of the entire wheel surface, but are limited to the "entire *tread* surfaces of the wheels." (Italics ours).

It will be observed also that no definite time is fixed for the first quenching operation. Both claims state, "for a short time." The specifications say:

> This supply of water [used in the quenchings] is continued for a short period only usually from 15 to 30 seconds depending upon the depth of hardness desired in the tread portions of the wheel.

It is the insistence of appellant that in the method of the involved application the initial quenching step relates to the *entire* surface of the castings, and we take this to be the correct construction of the language, because of the wording of the explanations of the process, although neither the claims nor the specifications use the word "entire".

It is also insisted in the brief for appellant that in the application the initial quenching step is "for a short time 'usually from three to six seconds. * * * '."

We find by examining the claims that only two of them, Nos. 13 and 15, use the expression, "from three to six seconds." Nos 12 and 14 say "for a few seconds," and Nos. 16, 17 and 18 say "until the surfaces of the same are chilled to the desired depth."

The patent of appellant on the car wheel device seems to have been by him assigned or sold to American Steel Foundries. The original application, here involved in its amended form, was still pending in the Patent Office, and at some period during its pendency there, the exact date not being disclosed by the record, American Steel Foundries brought a proceeding in equity in the District Court of the United States for the Eastern Division of the Northern District of Illinois, in which it sought to compel the assignment to it of the pending application, claiming its right thereto by virtue of the car wheel device assignment. From the final decree of the United States District Court in that case, we assume that Laughlin was, for a time, enjoined from prosecuting his application, now at issue here. American Steel Foundries also, apparently, sought in that proceeding a decree requiring Laughlin to file an application for reissue of his car wheel patent, and include in the reissue application the subject matter of his then pending, and now here involved, application.

The United States District Court denied the plaintiff, American Steel Foundries, any part of the relief sought and dismissed the bill. *American Steel Foundries* v. *Laughlin*, 30 F.(2d) 137. Its decree was affirmed, December 27, 1928, by the Circuit Court of Appeals of the Seventh Circuit, in an opinion by Circuit Judge Evans, reported in 30 F.(2d) 139.

It is unnecessary to consider, in this proceeding, all the issues and adjudications thereon in the American Steel Foundries case, supra.

Appellant here insists that the decisions of those courts constituted a finding that the claims of the application were not for the same invention as the claims of the patent, and that (we presume under the doctrine of stare decisis) this court should be bound by that holding. There is no claim of res adjudicata, and we think could be none.

This court, as of course, would be bound by an adjudication upon an issue which was inherent in those proceedings and which it was necessary for those courts to decide if the issue and the parties were the same. But, in the statement by them that the claims were not the same, there was no adjudication of patentability, so far as we can determine from the record. There was no occasion for those courts to determine that question and we do not understand that they attempted or proposed to pass upon it.

That question is before us in the regular and usual way and must be determined by us.

At one time, that is, July 20, 1926, three of the claims, as then formulated, were definitely stated by the Examiner to be allowable. Those three, as given in appellant's brief, seem to correspond quite closely in their subject matter to his present claim 17, quoted supra, and, in part, to present claim 16.

The claims, in which the degrees of temperature to which the objects are to be heated were first specifically stated, seem to have been injected into the application October 15, 1925, together with an amendment of the description. This appears to have been done in response to a suggestion or requirement of the Examiner "that the applicant should set forth in detail, the *approximate temperature* to which the surface is allowed to reheat * * * ." (Italics quoted). The three claims, which, for a time, stood allowed, embraced this feature. Subsequently, the Examiner, on August 26, 1926, withdrew the allowance and rejected them, along with the others, as constituting double patenting over appellant's car wheel patent.

In the end their subject matter, as claims 16 and 17, was rejected, not only upon the ground of double patenting, but because not disclosed in the original or first application as it read at the time of its filing.

The prior art shown in the references, other than the Laughlin reference, is:

Schaffer shows a method and apparatus relating to the hardening of manganese steel articles. It was cited by the Examiner at an early period but is not referred to by the Board of Appeals. We do not regard it as being in point.

The Pease et al. patent was cited as showing that it was old in the art "to harden the tread surface of car wheels by quenching" and the board says:

> Consequently, any novelty in the method claims of appellant's patent must reside in the *steps* of the method * * *. (Italics ours).

This, we think, is correct and since the steps of the Laughlin patent, and of his application here involved, differ from the steps of Pease et al., the latter is not a reference as to appellant's step phase.

[1] The issue before us is accordingly narrowed to the question of whether the application should be denied upon the Laughlin patent, because double patenting of the process will result from granting it.

After thorough consideration, it is our conclusion that, upon both reason and authority, the application must be rejected upon this ground.

What is appellant's invention? What was his concept? It was that of a process to accomplish a desired end by the taking of certain steps, that end being the tempering of the surfaces of certain metal articles to a greater degree of hardness than the interior, so that, in the article, there would be wrought desirable variations in strength, or tensility, or other characteristics. The steps to accomplish this which appellant conceived were: (*a*) heating the entire article to a degree of temperature well known in the art; (*b*) quenching the article for a time so brief as that the lowering of the heat extends to only a limited depth; (*c*) permitting the quenched surface to reheat from the unquenched interior to a degree also known in the art; and (*d*) again quenching, this time, the entire object.

That is the method as applied to the tread surfaces of the car wheels in the patent; that is the method, in no particular changed (except, perhaps, by the manner of its application called for—that is the apparatus), to be applied to the entire surfaces of metal castings in the claims at issue here.

Appellant's counsel insists with great earnestness that the inventions are different. We are unable to see wherein the *methods* differ. They are applied to different objects, but the methods remain the same, except, perhaps, as differences of degrees in temperature may be required, according to the nature of the metals, and variations necessary in the depth of the initial quench, because of the difference in the character of the objects that are to be made. These exceptions are known to those skilled in the art.

It is true that the car wheel, or patent claims call for the initial quenching of only the tread portion of the surface, while the claims of the application may be construed as applying the initial quench to the entire surface, but the method or process is, in all respects, the same. The method, we think, must be considered by itself, that is, it is not to be measured simply by the individual objects to which applied. Had appellant secured the allowance of the application now at issue before the granting of the patent which he did obtain, we are unable to see how the method claims of the latter could have been allowed, or, if allowed, how held valid. The reverse of this seems equally true, since, in both instances, the steps of the method are in all material respects identical.

In re Woodsome et al., 56 App. D. C. 138, 10 F.(2d) 1003, 349 O. G. 4, is cited by the Solicitor for the Patent Office and is in point.

There an original application contained numerous claims. Certain of these were specific in character and others generic. A division was required by the Examiner between the two classes of claims. The applicants did not appeal from this requirement but cancelled the broad claims and the case went to issue on the narrow ones. A patent was granted, but before its issuance the applicants filed, as a divisional proceeding, an application containing the broad claims theretofore cancelled. This application was denied by the Patent Office and upon appeal to the Court of Appeals of the District of Columbia the decision of the final Patent Office tribunal was affirmed, the court saying:

> We agree with the lower tribunals that there was but a single inventive idea, and that it was embodied in a single structure, and accordingly that the applicants are not entitled to extend the period of their patent upon the invention on the ground of a mere difference in the scope of the claims contained in the two applications. *Fassett* v. *Ewart Mfg. Co.*, 62 F. 404, 10 C. C. A. 441; *Otis Elevator Co.* v. *Portland Co.*, 127 F. 557, 62 C. C. A. 339; *Union Typewriter Co.* v. *L. C. Smith & Bros. Typewriter Co.* (C. C.) 173 F. 288; *Morse Chain Co.* v. *Link Belt Machinery Co.*, 164 F. 333, 90 C. C. A. 650; *Gold* v. *Gold*, 187 F. 273, 109 C. C. A. 615.

In the case at bar the claims, in their essence, do not differ from the patent claims. It is only in the objects to which the method is applied that the difference is found.

In the Woodsome case, supra, the court said:

> * * * the disclosure of the two applications is identical, both as to drawings and descriptions.

In the instant case, there are no drawings, of course, but, in all features that might constitute invention in the method, the disclosures have exactly the same purport and meaning.

The case of *In re Hutter*, 55 App. D. C. 210, 4 F.(2d) 176, 337 O. G. 721, is also cited by the Solicitor for the Patent Office. We are inclined to agree with counsel for appellant that the Hutter case is probably distinguishable from the one at bar. Of course, the facts of the Woodsome case, supra, differ somewhat from the case before us, but we see no distinction in the principles of the two.

The numerous authorities cited, and, in several instances quoted from, by counsel for appellant have been carefully scrutinized and considered, such as *Thomson-Houston Co.* v. *Ohio Brass Co.*, 80 Fed. 712; *Wirebounds Patents Co.* v. *Saranac*, 37 F.(2d) 830; *Thomson-Houston Electric Co.* v. *Elmira*, 71 Fed. 396; *Southern Textile Machinery Co.* v. *United Hosiery Mills*, 33 F.(2d) 862; and many others, with their contained references.

In no one of these do we find anything inconsistent with our position as stated here.

The case of *Thomson-Houston Electric Co.* v. *Ohio Brass Co.*, supra, is particularly stressed by appellant's counsel, as supporting his position in this case. The opinion there was by the late Chief Justice Taft, who then was a United States Circuit Judge, and sitting with him in the hearing, and concurring with him in the opinion, were United States Circuit Judge Lurton and United States District Judge Clark, both of whom later become Associate Justices of the United States Supreme Court. Certainly an opinion coming from so distinguished a tribunal may be taken as a most positive announcement of law, but it must be taken as a whole and detached phrases or sentences may not be accepted as fully disclosing the doctrine there announced. Also we must know the state of facts upon which the doctrine was pronounced. The suit was an infringement proceeding and one of the defenses was "that the patents relied on are void because the inventions covered by them were patented in prior patents to the same patentee."

The involved patents were for a mechanism; not for a process.

In the application for the patent which was first issued the applicants expressly stated that it was for an improvement on certain parts of the application then pending and which later became the second patent. The court said:

> An examination of the drawings and specifications leaves no doubt that this statement is true. * * * The

claims, all of them, include and refer to one or the other of these improvements. Now, it is not material to this discussion whether these improvements are patentable or not. They are expressly claimed as improvements, and no attempt is made by the patentee to cover anything but them. If inventions at all, then they are separable from the old switch and trolley combinations, and, if they are not inventions, the patents are void, and cover nothing. • • •

After stating that the law had become well settled that "a patent may issue for an improvement on an earlier invention either to the original inventor or to a stranger," the court continued:

• • • but it is said that if, by some chance, the application for the fundamental patent is delayed in its course through the Patent Office until a patent on the *avowed improvement* has issued, then the patent on the fundamental invention is void. (Italics ours.)

The court held that such was not the law, but the facts of the instant case do not square with the facts of that case.

It was not an improvement over his original application which appellant claimed for the *method* of his patent. It was the same method applied to a different, or at least to a specific object. The claims of his application are no more generic than are the claims of his patent. They differ only in the objects of their application.

Therein, it seems to us, lies the great and decisive distinction, which renders what was held in the case from which we have quoted inapplicable to the case at bar.

[2] Appellant's method invention lies in the steps described. These steps, in their patentable aspects, are the same whether applied in the tempering of only the tread surfaces of car wheels or in the tempering of the entire surfaces of metallic or steel castings. The one inventive idea was disclosed in the patent as fully, except in details not patentable, as it was, or is, in the application.

It is not deemed necessary to lengthen this already long opinion by attempting an analysis of the other cases cited by appellant. Each of them, we feel sure, is distinguishable in its facts from the case at bar.

Under the view we hold, there is no necessity of our passing upon the question of whether claims 16 and 17 were properly rejected on the ground of insufficient disclosure. Since they were inserted by an amendment which appears to have been, at least, invited, if not required, by the Examiner, we should certainly feel disposed to go as far as we might, under the law, in upholding them, so far as that particular ground is concerned.

We do not, however, regard those features of them which differ from the features of the other claims as presenting patentable matter. All the claims are subject to the objection that to grant them would result in double patenting, or a second patent for precisely the same principle of the first in no way claimed to be improved or altered in any patentable regard.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,076,617, W. M. White, Spiral casing, D. C., N. D. Ga. (Atlanta), Doc. E 376, *Allis-Chalmers Mfg. Co. et al.* v. *Columbus Electric & Power Co. et al.* Patent held valid and infringed (notice Aug. 15, 1931).

1,089,405, W. S. Ferguson, Reinforced concrete dock or pier, D. C., W. D. Wash., N. Div., Doc. 806, *The Dock & Terminal Engineering Co. et al.* v. *American Can Co. et al.* Dismissed with prejudice Aug. 20, 1931.

1,146,988, M. Arendt, Depositing repair metal across an alternating current arc, D. C., N. D. Calif. (San Francisco), Doc. E 2892, *F. C. Owen* v. *Steel-Weld Equipment Corp. et al.* Dismissed without prejudice Aug. 12, 1931.

1,206,742, 1,206,743, J. S. Wheeler, Pipe bending machine; 1,263,301, 1,462,673, same, Bending machine; 1,326,999, Wallace and Fox, Work holder; 1,342,363, same, Gear clutch for bending machines, D. C., N. D. Calif. (San Francisco), Doc. E 1843, *J. S. Wheeler* v. *U. S. Pipe Bending Co. et al.* Dismissed for want of prosecution Aug. 10, 1931.

1,206,743. (See 1,206,742.) 1,263,301. (See 1,206,742.)

1,266,988, Pridham and Jensen, Amplifying receiver; 1,448,279, 1,579,392, same, Electro-dynamic receiver, D. C., N. D. Calif. (San Francisco), Doc. E 2166, *The Magnavox Co.* v. *Thompson & Holmes, Ltd.* Claims 8 and 9 of 1,266,988, claims 4, 8, 9, and 10 of 1,448,279, and claim 4 of 1,579,392 held valid and infringed Aug. 10, 1931.

1,307,734, A. V. Guilborg, Lubricating means, filed Aug. 21, 1931, D. C. Kans. (Wichita), Doc. E 641–N, *Alemite Corp.* v. *The Air Shot Mfg. Co.*

1,317,431, L. P. Clutter, Ditching or excavating machine; 1,476,121, G. E. Wagner, Excavating scoop; 1,511,114, R. R. Downe, Excavating machine, filed Aug. 22, 1931, D. C., N. D. Ohio, E. Div., Doc. E 3942, *Keystone Driller Co.* v. *Harnischfeger Corp.*

1,326,999. (See 1,206,742.) 1,342,363. (See 1,206,742.)

1,398,584, W. D. Bradford, Box for pouring steel ingots, filed Aug. 20, 1931, D. C., E. D. Mich., S. Div., Doc. 4940, *W. D. Bradford* v. *Ford Motor Co.*

1,408,499, Casterline and Brien, Roll paper holder, D. C., N. D. Calif. (San Francisco), Doc. E 2747, *Handy-Roll Co.* v. *General Appliance Corp. et al.* Patent held valid and infringed Aug. 12, 1931.

1,448,279. (See 1,266,988.)

1,460,716, B. F. Greer, Book form savings bank, filed Aug. 20, 1931, D. C., S. D. N. Y., Doc. E 61/294, *B. B. Deitel et al.* v. *Zell Products Corp.*

1,462,673. (See 1,206,742.)

1,470,272, R. I. Belcia, Engine controlled clutch releasing means, filed Aug. 20, 1931, D. C., E. D. Mich., S. Div., Doc. 4937, *R. I. Belcia et al.* v. *E. R. Blake et al.* (*Detroit, De Luxe Co.*). Doc. 4938, *R. I. Belcia et al.* v. *F. H. Fuller* (*Fuller Motor Sales*). Doc. 4939, *R. I. Belcia et al.* v. *New Process Gear Co., Inc., et al.*

1,476,121. (See 1,317,431.) 1,511,114. (See 1,317,431.)

1,517,035. (See Re. 16,103.)

1,538,274, V. R. Despard, Switch mounting, filed Aug. 19, 1931, D. C., S. D. N. Y., Doc. E 61/290, *McGill Mfg. Co.* v. *I. Eisner* (*New York Gas Lighting Co.*).

1,541,350, Goss and Rawson, Method and means for drying lumber; 1,663,982, same, Method and means for drying by air circulation, filed Aug. 12, 1931, D. C., W. D. Wash. (Tacoma), Doc. E 460, *O. P. Goss et al.* v. *H. McCleary Timber Co.*

1,579,392. (See 1,266,988.)

1,648,249, Winters and Crampton, Hinge, filed Aug. 16, 1930, and 1,710,321, G. E. Roedding, Furniture fixture, included by cross-bill Sept. 8, 1930, D. C., W. D. Mich., S. Div., Doc. 2372, *Winters & Crampton Mfg. Co.* v. *Grand Rapids Brass Co.* Claims 1 and 2 of 1,648,249 held invalid, claim 1 of 1,710,321 held not infringed; bill and cross-bill dismissed for want of equity Aug. 18, 1931.

1,663,982. (See 1,541,350.) 1,664,096. (See Re. 16,103.)

1,667,448. (See Re. 16,103.) 1,710,321. (See 1,648,249.)

1,764,794, Johnson and Leach, Fuel oil burner, filed Aug. 22, 1931, D. C. Mass., Doc. E 3448, *Lynn Products Co.* v. *General Oil Burners, Inc., et al.*

1,794,653, L. Storch, Traveling trunk, filed Aug. 18, 1931, D. C., S. D. N. Y., Doc. E 61/277, *L. Storch* v. *White Luggage Co., Inc.*

1,816,700, A. W. Rosen, Automobile mirror, filed Aug. 24, 1931, D. C., S. D. N. Y., Doc. E 61/299, *A. W. Rosen & Co.* v. *Moswell Mfg. Co., Inc.*

Re. 16,103, J. L. Sullivan, Wire fastening device; 1,517,035, G. F. Voight, Furring nail; 1,667,448, same, Furring unit; 1,664,096, same, Furring and fastening device, D. C., N. D. Calif. (San Francisco), Doc. E 2167, *Economy Products Corp. et al.* v. *R. H. Buck et al.* Dismissed for want of prosecution Aug. 10, 1931.

Re. 17,375, S. J. Nordstrom, Valve, filed Aug. 19, 1931, D. C., S. D. N. Y., Doc. E 61/291, *Merco Nordstrom Valve Co.* v. *Wolcorth Co.*

Disclaimers

1,418,782.—*Owen B. Evans* and *Harutyun G. Tersian*, Philadelphia, Pa. USING HEAVY OIL IN GAS MAKING. Patent dated June 6, 1922. Disclaimer filed September 16, 1931, by the assignee, *The United Gas Improvement Company.*

Therefore, disclaims: The process of using heavy oil in the manufacture of gas specified in each of the four claims, except in the manufacture of carbureted water gas.

1,752,438.—*Franklin A. Korn*, Elizabeth, N. J. TELEPHONE SYSTEM. Patent dated April 1, 1930. Disclaimer filed September 18, 1931, by the assignee, *Bell Telephone Laboratories, Incorporated.*

Hereby enters this disclaimer to the said claims of said Letters Patent, which are in the following words to wit:

"1. In a telephone system, a switch, an operator's position, a trunk, and means responsive to the passage of current over said trunk for establishing and maintaining a busy condition at the operator's position and a holding circuit for the switch regardless of subsequent changes of current over said trunk.

"2. In a telephone system, a switch, an operator's position, a trunk, means responsive to the passage of current in either direction over said trunk for establishing and maintaining a busy condition at the operator's position and a holding circuit for the switch regardless of subsequent reversals of current over said trunk.

"3. In a telephone system, a selector switch, an operator's position, a trunk terminating at one end in said switch and at said position, and means in said trunk responsive on the seizure of the trunk by said switch and the transmission of current thereover for establishing a busy condition for said trunk at the operator's position and for establishing a holding circuit for the switch, said means being maintained actuated regardless of the direction of the current transmitted over said trunk at the time of the seizure thereof and of subsequent reversals in the direction of said current."

1,239,099.—*William Augustus Hall*, New York, N. Y. HYDROCARBON PRODUCT. Patent dated September 4, 1917. Disclaimer filed September 5, 1931, by the assignee, *The Texas Company.*

Hereby enters this disclaimer to the following:

To that part of the specification beginning on page 5, line 107, and ending on line 25, page 6, reading as follows:

"The determination of the calorific value of a highly volatile liquid of this character is fraught with many difficulties and the use of a bomb calorimeter is unsatisfactory owing to the difficulty in preventing loss by escape of vapor during the weighing of the liquid and the violence of the explosion.

"Vaporizing the spirit in any form of lamp or burner from a wick cannot be employed owing to the heavy fractions of high boiling point present and this difficulty was finally surmounted by atomizing the spirit by pressure in a small reservoir mounted on a balance and burning the volatilized spray in a burner properly dimensioned to insure complete combustion in a Junker calorimeter.

"Three determinations, in each of which 10 grams of the fuel were consumed were made, the temperature readings being closely concordant and the calorific value (per 10 grams) calculated from them being:—

	My fuel	
	Gross	
1	10,462 calories	9,841 calories
2	10,560 "	9,940 "
3	10,493 "	9,873 "
Mean	10,505 "	9,884.7 "
	18,906.6 B. T. U.	17,622 B. T. U.
1	10,330 calories	9,709 calories
2	10,145 "	9,463 "
3	10,132 "	9,226 "
Mean	10,202.3 "	9,466 "
	18,366 B. T. U.	17,046.3 B. T. U.

"While figures given for Pratt's spirit by several observers are higher than these determinations, the latter are strictly comparative and show the calorific value of my fuel to be slightly higher than that of No. 1 petrol, (about 3% higher in this test) a result borne out by bench tests."

To the words "has a higher calorific value than gasolene and" on page 9, lines 16 and 17 of the specification

To claims 1, 3, 4, 29 and 30, reading as follows:

"1. A liquid fuel for use in automobile engines having larger fractions boiling at temperatures below 80° C. than any hydrocarbon distillate of the paraffin series with a similar specific gravity and having an initial boiling point at least as low as that of ordinary gasolene, and a calorific value and specific gravity both higher than that of ordinary gasolene, said fuel being relatively free from liability to pre-ignite."

"3. A crude motor fuel produced from mineral oil, said fuel having a yellow coloration and peculiar odor and depositing resinous sticky matter on evaporation, the coloring matter and odor being substantially all removable by filtration through fuller's earth, said fuel having a gravity not below about .76, and a calorific value greater than ordinary gasolene.

4. A motor fuel characterized by the properties of slow burning, rapid ignition, flash point and initial boiling point at least as low as those of ordinary gasolene, and having relatively large fractions volatile at low temperature, said fuel having a greater calorific value than ordinary gasolene."

"29. A motor fuel consisting essentially of hydrocarbon materials, and containing aromatic hydrocarbons, open-chain saturated hydrocarbons, olefin hydrocarbons, and acetylene hydrocarbons, said fuel having a carbon to hydrogen ratio not far from 6.73 to 1, having a gravity above .76, and having a lower flash point than a saturated distillate of the paraffin series of the same gravity and a higher calorific value than such a distillate.

30. A hydrocarbon liquid having a calorific value about 3% greater than that of a gasolene of the same gravity."

1,765,765.—*Grafton E. Luce*, Chicago, Ill. BRICK HANDLING APPARATUS. Patent dated June 24, 1930. Disclaimer filed September 8, 1931, by the patentee and the assignee, *Lancaster Iron Works Inc.*

Hereby enters this disclaimer to that part of the claims in said specification which is in the following wording, to wit:

"5. A brick handling fork comprising an upper supporting frame, a vertical frame depending therefrom, a plurality of fingers pivotally mounted to the lower end of said vertical frame and extending substantially horizontally therefrom for supporting a load of bricks, a locking element slidably mounted in said upper supporting frame, and means for operatively connecting said element with said fingers for normally maintaining said fingers in supporting position and releasing said fingers so as to permit them to move about their pivotal mounting into dumping position when actuated."

"10. A brick handling fork for loading railroad containers comprising a support having a downwardly extending portion, brick-supporting fingers pivotally mounted on the lower end of said downwardly extending portion, means for locking said fingers in brick-supporting position, and releasing means for releasing said locking means to permit dumping of the brick, said releasing means being operable from a point exterior of said railroad container when said brick handling fork is positioned within said container, and said locking means and said releasing means being positioned within the vertical projection of the dimensions of said support.

"11. An apparatus for loading brick into railroad containers including a dumping fork adapted to support a stack of brick thereon and adapted to be positioned within said container without dumping of brick, means for so positioning the same, and means for actuating said fork for dumping of brick when so positioned.

"12. An apparatus for loading brick into railroad containers including a dumping fork adapted to support a stack of brick thereon and adapted to be positioned within

said container without dumping of brick, means for so positioning the same, and means for conditioning said fork when so positioned for dumping of brick by the removal of said fork from said container.

"13. An apparatus for loading brick into railroad containers including a dumping fork adapted to support a stack of brick thereon and adapted to be positioned within said container, means for so positioning the same, means for actuating said fork for dumping of brick when so positioned, and means for protecting said actuating means against contact with the sides of said container.

"14. An apparatus for loading brick into railroad containers including a dumping fork adapted to support a stack of brick thereon and adapted to be positioned within said container without dumping of brick, and means for actuating said fork for dumping of brick when so positioned.

"15. An apparatus for loading brick into railroad containers including a dumping fork adapted to support a stack of brick thereon and adapted to be positioned within said container without dumping of brick, and means for conditioning said fork when so positioned for dumping of brick by the removal of said fork from said container.

"16. An apparatus for loading brick into railroad containers including a dumping fork adapted to support a stack of brick thereon and adapted to be positioned within said container, and means for actuating said fork for dumping of brick when so positioned, said actuating means being protected against contact with the sides of said container.

"17. An apparatus for loading brick into railroad containers including a frame, a plurality of dumping fingers attached thereto and adapted to support a stack of brick thereon, said frame and said fingers being adapted to be positioned within said container without dumping of brick, and means for actuating said fingers for dumping of brick when so positioned.

"18. An apparatus for loading brick into railroad containers including a frame, a plurality of dumping fingers attached thereto and adapted to support a stack of brick thereon, said frame and said fingers being adapted to be positioned within said container without dumping of brick, and means for conditioning said fingers when so positioned for dumping of brick by the removal of said frame and fingers from said container.

"19. An apparatus for loading brick into railroad containers including a frame, a plurality of dumping fingers attached thereto and adapted to support a stack of brick, means for locking said fingers to prevent dumping of brick, means for protecting said locking means against contact with the sides of said container, whereby said apparatus may be positioned within said container without dumping of brick, and means for releasing said locking means for dumping of brick when so positioned."

1,779,747.—*Alexander McLean Nicolson*, New York, N. Y. METHOD AND APPARATUS FOR TELEVISION AND THE LIKE. Patent dated October 28, 1930. Disclaimer filed September 5, 1931, by the assignee, *Communication Patents Inc.*

Hereby enters a disclaimer restricting claims 1, 3, 6, 7, and 16, as listed below to scanning apparatus in which the scanning speed is faster than that necessary to cover the area to be scanned in one tenth of a second:

"1. Scanning apparatus for television and the like, comprising in combination, means for producing a self-luminous electrical discharge corresponding to a unit area of the subject, and means for causing said discharge to travel progressively over the area to be scanned in a predetermined scanning pattern."

"3. Scanning apparatus for television and the like, comprising in combination, means for producing a self-luminous electrical discharge corresponding in position to a predetermined unit area of the subject, and corresponding in luminous intensity to the light value of the corresponding unit area of the subject, and means for causing said discharge to travel progressively over the area to be scanned in a predetermined scanning pattern."

"6. Scanning apparatus for television and the like, comprising a screen electrode system, and a second electrode system maintained out of contact therewith and insulated therefrom only by space insulation movable relatively thereto, means for producing an electrical discharge between said electrode systems, said electrode systems being so arranged that said discharge progressively travels over all unit areas of said screen in a predetermined scanning pattern.

"7. Scanning apparatus for television and the like, comprising a screen electrode system, and a second electrode system maintained out of contact therewith and insulated therefrom only by space insulation movable relatively thereto, means for producing an illuminating electrical discharge between said electrode systems, said electrode systems being so arranged that said discharge progressively travels over all unit areas of said screen in successive concentric arcs."

"16. Scanning apparatus for television and the like, comprising means for producing a luminous electrical discharge of relatively high frequency currents, means for causing travel of said discharge in a predetermined scanning pattern, and means for modulating said high frequency currents to control the luminous intensity of said discharge."

Your petitioner further enters a disclaimer restricting claims 12, 13, 14, 17 and 18, as listed below to the method of scanning in which the scanning speed is faster than that necessary to cover the area to be scanned in one tenth of a second.

"12. The method of scanning for television and the like, which comprises successively illuminating unit areas of the area to be scanned by a self-luminous electrical discharge progressively travelling in a predetermined scanning pattern over the area to be scanned.

"13. The method of scanning for television and the like, which comprises successively illuminating unit areas of the area to be scanned by a self-luminous electrical discharge progressively travelling in a predetermined scanning pattern comprising adjacent paths over the area to be scanned.

"14. The method of scanning for television and the like, which comprises successively illuminatign unit areas of the area to be scanned by a self-luminous electrical discharge progressively travelling in a predetermined scanning pattern over the area to be scanned, and controlling the luminous intensity of said discharge at each unit area in accordance with the light intensity desired at such area."

"17. The method of scanning for television and the like, which comprises producing a self-luminous illuminating electrical discharge by passing relatively high frequency currents between a pair of spaced and relatively moving electrode systems, and modulating said high frequency currents to control the luminous intensity of said discharge.

"18. The method of scanning for television and the like, which comprises producing a self-luminous electrical discharge by passing relatively high frequency currents between a pair of relatively moving electrode systems, producing travel of said discharge in a predetermined path at a predetermined speed, and modulating said high frequency currents to control the luminous intensity of said discharge."

TRADE-MARKS

OFFICIAL GAZETTE, OCTOBER 6, 1931

[VOL. 411. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 274,890. PETRO-GLAZE PRODUCTS, INC., Los Angeles, Calif. Filed Nov. 6, 1928.

PETRO GLAZE

No claim is made to the word "Glaze" apart from the mark as shown.

For Compound of Raw Materials Used in the Manufacture of Ceramics.

Claims use since Feb. 1, 1928.

CLASS 2

Receptacles

Ser. No. 316,152. FIBREBOARD PRODUCTS INC., San Francisco, Calif. Filed June 23, 1931.

FIBREBOARD PRODUCTS INC.

For Containers and Receptacles and Parts Thereof Made from Paper, Cardboard, Fibreboard, Tag Board, and Corrugated Board—Namely, Folding Cartons, Solid Fibre Cases, Corrugated Cases, Grape Pails, Tin End Cans, Telescope Mailing Tubes, Fruit Jar Cases, Photo Mailers, Bread Trays, Oyster and Ice Cream Pails, Egg Cartons, Clothing Boxes, Millinery Boxes, Cake Boxes, Folding Hat Boxes, Laundry Boxes, Florist Boxes, Candy Boxes, Egg Carton Fillers, Grape Lug Covers, Chip Board Fig Partitions, Chip Board Fruit Packing, Corrugated Fruit Packing, and Corrugated Rolls.

Claims use since Nov. 1, 1927.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 312,999. PRONTO, INC., Ballardvale, Mass. Filed Apr. 6, 1931.

PRONTO

For Cleaner or Polish for Dishes, Glassware, Silverware, Aluminum, and Metals.

Claims use since Sept. 1, 1930.

Ser. No. 315,747. LINDLEY S. HARTWELL, doing business as Household Helps Co., Burlington, Vt. Filed June 12, 1931.

SUN-GLO

For Metal Polish and a General Cleaner for Painted Surfaces, Walls, and Other Surfaces Which Soap and Water Will Not Injure.

Claims use since June 1, 1929.

Ser. No. 315,869. PUROX PRODUCTS COMPANY, Chicago, Ill. Filed June 15, 1931.

PUROX

For Cleaning Compound for General Household and Laundry Use.

Claims use since June 1, 1931.

Ser. No. 316,526. H. TH. BOHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed July 1, 1931.

Hartol

For Soap and Soap Preparations.
Claims use since May 19, 1931.

Ser. No. 316,671. DAVID TROMPETER, Baldwin, N. Y. Filed July 6, 1931.

POT-RASSLER

For Abrasive Hand Tool for Cleaning Metal Household Cooking Utensils Such as Aluminum Pots, Pans, Kettles, Etc.
Claims use since July 15, 1930.

Ser. No. 316,934. THOMAS P. MCLAUGHLIN, doing business as Southern Products Corporation, Inc., New Orleans, La. Filed July 14, 1931.

SOPROCO

For Cleaning Compound in Powder Form for General Household Cleaning Purposes as Well as for Laundry Use.
Claims use since Feb. 20, 1931.

Ser. No. 317,701. BETTA-DRESS AUTO TOP DRESSING MANUFACTURING CO., Anadarko, Okla. Filed Aug. 6, 1931.

BETTA-DRESS

For Automobile Top Dressing.
Claims use since June 20, 1931.

Ser. No. 318,298. J. A. TUMBLER LABORATORIES, doing business as Ray-Glo Chemical Company, Baltimore, Md. Filed Aug. 21, 1931.

RAY-GLO

For Cleaner for Automobiles and Furniture.
Claims use since Aug. 1, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 304,790. TEEBEEBAN COMPANY, Manheim, Pa. Filed Aug. 19, 1930.



The representation of the female figure shown in the drawing is fanciful.
For Medical Compound for Asthma, Consumption, Stomach and Respiratory Ailments.
Claims use since Aug. 13, 1930.

Ser. No. 309,719. JACOB TESMAN, Philadelphia, Pa. Filed Jan. 7, 1931.

SOL-IN

For Liniment for Treating Pain Due to Local Congestion—Namely, for Bronchitis, Neuritis, Pleurisy, Rheumatism, Lumbago, Sprains, and Bruises.
Claims use since May 20, 1930.

Ser. No. 311,913. MAUD CLYDE, doing business as NaVo Products, Kansas City, Mo. Filed Mar. 9, 1931.

NAVO

For Depilatory.
Claims use since Jan. 15, 1931.

Ser. No. 313,414. JOSEPH BACHMANN, doing business as Bachmann Pharmacy, Granville, Iowa. Filed Apr. 16, 1931.

BACHMANN'S DICALSODINE

For Preparation Used for Stomach Disorders, Acid, Indigestion, Sour Stomach, Nausea, Belching, Bloating, Heart Burn, Gaseous Disturbances, and Constipation.
Claims use since Feb. 13, 1931.

Ser. No. 314,001. GOODRICH-GAMBLE COMPANY, St. Paul, Minn. Filed Apr. 30, 1931.

MIST-TOX

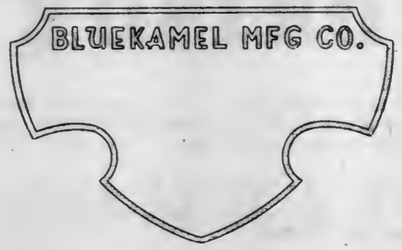
The word "Tox" is disclaimed apart from the mark as shown on the drawing.
For Insecticide.
Claims use since Mar. 31, 1931.

Ser. No. 314,764. JIMCO CHEMICAL CO. INC., Laurelton, N. J. Filed May 19, 1931.



The word "Wash" is disclaimed apart from the other features of the mark shown.
For Solution for Cleaning and Whitening Clothes and for Use as a Stain Remover, Deodorant, Germicide, and Disinfectant.
Claims use since Apr. 30, 1930.

Ser. No. 316,837. MAY GRAFF, doing business as Bluekamel Manufacturing Company, Detroit, Mich. Filed July 11, 1931.



The trade-mark is lined to indicate blue.
For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches; Skin Whitener in Liquid, Cream, and Solid Form; Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Adapted for Darkening Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Body Powders, Sachets, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Sept. 25, 1930.

Ser. No. 317,145. THE BLACK FLAG COMPANY, Baltimore, Md. Filed July 21, 1931.



Apart from the words "Black Flag" and "Bandera Negra," no claim is made for the purposes of this registration, but without waiving any common-law rights thereto, to the wording appearing on the drawing apart from the mark as shown.
For Insecticides.
Claims use since April, 1929.

Ser. No. 317,273. DRISOX CHEMICAL COMPANY, INCORPORATED, Raleigh, N. C. Filed July 24, 1931.

DRISOX

For Liquid Preparation for the Correction of Excessive Perspiration of the Feet and Eradication of Foot Odors.
Claims use since July 6, 1931.

Ser. No. 317,325. L. MCGLOTHLEN, Salt Lake City, Utah. Filed July 25, 1931.



The representation of the female figure forming a feature of the mark is fanciful.
For Preparation for Holding Permanent Waves in Place.
Claims use since June 15, 1931.

Ser. No. 317,349. CLAIR DE SOLEIL CORPORATION, New York, N. Y. Filed July 27, 1931.



The drawing is lined to indicate the color violet. The signature is that of Clair de Soleil. No claim is made to the exclusive use of the representation of the container per se.
For Cosmetics—Namely, Skin Tonics, Cold Cream, Astringents, and Perfumes.
Claims use since May 10, 1931.

Ser. No. 317,559. INTRAVENOUS PRODUCTS CO. OF AMERICA, INC., doing business as Endo Products, Inc., New York, N. Y. Filed Aug. 1, 1931.

ENDO-BIS-ARPHEN

For Bismuth and Organic Arsenic Preparation Used in the Treatment of Syphilis Used Intramuscularly.
Claims use since May 31, 1929.

Ser. No. 317,603. G. H. HYLAND, doing business as Hyland's Home Health Service, Los Angeles, Calif. Filed Aug. 3, 1931.

URINEX

For Kidney Diuretic.
Claims use since July 1, 1931.

Ser. No. 317,727. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed Aug. 6, 1931.

HEPTEEN

For Mixture of Oil and a Condensation Product of Heptaldehyde and Aniline Useful as an Accelerator in the Vulcanization of Rubber.
Claims use since Mar. 28, 1931.

Ser. No. 317,876. BENJAMIN-BROADUS STEEDLY, Taylors, S. C. Filed Aug. 11, 1931.

KOLPOSINE

For Antiseptic, Astringent, and Healing Preparation for use in Subacute and Chronic Vulvitis and Vaginitis with Leucorrhea as a Vaginal Douche.
Claims use since June 1, 1930.

Ser. No. 318,574. E. W. BAIRD, Jr., doing business as Free State Laboratories, Baltimore, Md. Filed Aug. 31, 1931.

jitters

For an Adsorbent or Absorbent Preparation for the Relief of Over-Indulgence in Food or Drink.
Claims use since Aug. 15, 1931.

Ser. No. 318,600. IRA J. SHAPIRO, New York, N. Y. Filed Aug. 31, 1931.

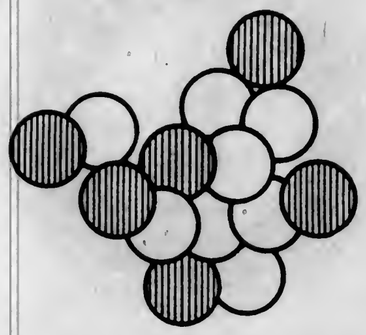
Lucky Camel

For Tooth Paste and Tooth Powder.
Claims use since Aug. 22, 1931.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 318,592. HERCULES POWDER COMPANY, Wilmington, Del. Filed Aug. 31, 1931.



No claim is made to the representation of powder grains as shown in the drawing. The trade-mark consists of coloring the surface of some of the grains of powder of a mass red and the drawing is lined for red.
For Propellent Powder for Shot Guns, Rifled Arms, etc.
Claims use since Mar. 25, 1931.

CLASS 15

Oils and Greases

Ser. No. 313,576. WRIGHT, STEPHENSON & CO. LIMITED, Wellington, New Zealand. Filed Apr. 17, 1931.



For Benzine, Gasoline, Kerosene, Lubricating Oils and Lubricating Greases.
Claims use since Feb. 1, 1930.

Ser. No. 316,902. SINCLAIR REFINING COMPANY, New York, N. Y. Filed July 13, 1931.

TRACT-A-ROLLER

For Lubricating Oils and Greases.
Claims use since June 3, 1931.

Ser. No. 317,572. RICHFIELD OIL COMPANY, Los Angeles, Calif. Filed Aug. 1, 1931.

COMBAT

For Petroleum and Petroleum Products—Namely, Gasoline, Kerosene, Motor Fuel Oil, Furnace Fuel Oil, and Road Dressing Oil; Lubricating Oils and Lubricating Greases.
Claims use since Apr. 23, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 317,610. MASURY-YOUNG COMPANY, Charlestown, Mass. Filed Aug. 3, 1931.

MYCO GLOSS

No exclusive right to the word "Gloss," apart from the other features of the mark as shown on the drawing is claimed.
For Liquid Preparation for Waxing Floors, Wood Work, Metal Work, and Like Surfaces.
Claims use since Feb. 14, 1931.

Ser. No. 317,625. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Aug. 4, 1931.



The words "Color Products" are disclaimed apart from the mark shown on the drawing.
For Tempera Colors and Water Colors.
Claims use since Dec. 18, 1930.

Ser. No. 318,174. SOUTHERN MINERAL PRODUCTS CORPORATION, New York, N. Y. Filed Aug. 19, 1931.

PRIMOS

For Titanium Dioxide Pigments for Paints, and Ferric Oxide Pigments for Paints.
Claims use since June, 1931.

CLASS 17

Tobacco Products

Ser. No. 313,823. THE AMERICAN TOBACCO COMPANY, New York, N. Y. Filed Apr. 27, 1931.



In the accompanying drawing the diagonally parallel lines appearing on the two larger panels of the label indicate the color green and the vertical parallel lines appearing in the two small ribbons running through the broken cross-hatch lines on the top and bottom of the label and appearing within the two circular zones in the green panels indicate the color red, while the broken cross-hatch lines otherwise appearing on the label indicate gold. No claim is made herein to the representation of the label as such, the word "Cigarettes" or the other reading matter appearing on the drawing, with the exception of the words "Lucky Strike", "It's Toasted", and "The American Tobacco Company", the applicant specifically reserving all its common-law rights in and to the various parts or features of the mark as shown.
For Cigarettes, Smoking, and Chewing Tobacco.
Claims use since Jan. 1, 1883.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 296,266. DURIRAN, INC., Cincinnati, Ohio. Filed Feb. 20, 1930.

WINKER

For Electric Direction Signal Indicator Applied Upon Automobiles.
Claims use since Jan. 24, 1930.

Ser. No. 298,157. EDDIE MANUFACTURING CO., doing business as Hot Shot Electric Water Heater Corporation, Chicago, Ill., assignor to E. J. Vogt, Grand Rapids, Mich. Filed Mar. 31, 1930.

HOT SHOT

For Electrically Energized Hot Water Heaters.
Claims use since Jan. 1, 1930.

Ser. No. 304,332. THE KOHLER-LIEBICH COMPANY, Chicago, Ill. Filed Aug. 7, 1930.



For Combination Lamp and Chime.
Claims use since May 1, 1930.

Ser. No. 312,212. WILLIAM J. CAMERON, doing business as Cameron's Surgical Specialty Co., Not Inc., Chicago, Ill. Filed Mar. 14, 1931.

SURGIMOLD

For Compound Used for Electric Insulating Purposes.
Claims use since Jan. 15, 1931.

Ser. No. 315,075. DAY & NIGHT WATER HEATER CO., LTD., Monrovia, Calif. Filed May 26, 1931.



For Electric Water Heaters Having Electric Heating Elements.
Claims use since Apr. 1, 1923.

Ser. No. 316,636. GENERAL CABLE CORPORATION, New York, N. Y. Filed July 6, 1931.

ALECTRAL

For Electric Wires, Cables, and Terminals Therefor.
Claims use since Jan. 12, 1931.

Ser. No. 318,035. ALPINE ELECTRIC CORPORATION, Schenectady, N. Y. Filed Aug. 17, 1931.

ALPINE

For Electric Lamp Sockets.
Claims use since July 15, 1931.

Ser. No. 318,118. TRAFFIC STORAGE BATTERY CO., Los Angeles, Calif. Filed Aug. 18, 1931.

RECUPERATOR

For Storage Batteries.
Claims use since Feb. 24, 1931.

Ser. No. 318,183. TEXLITE, INC., Dallas, Tex. Filed Aug. 19, 1931.

TEXLITE

For Electric Signs.
Claims use since December, 1930.

Ser. No. 318,344. CARL G. ALDRICH, Cambridge, Mass. Filed Aug. 24, 1931.

SOFRAY

For Electrical Headlights, Especially Glare-Preventing Attachments for Headlights of the Character Referred to.
Claims use since June 15, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 306,151. GRACE W. VAN BRUNT, Belton, Mo. Filed Sept. 27, 1930.

FOXY FOLK

For Dolls' Clothing.
Claims use since August, 1929.

Ser. No. 309,582. DIRECT TOY SALES CORPORATION, New York, N. Y. Filed Jan. 3, 1931.

Playit TRADE MARK

The words "Trade Mark" are disclaimed apart from the mark as shown.
For Toys—Namely, Miniature Toy Hothouses.
Claims use since Jan. 1, 1930.

Ser. No. 317,147. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed July 21, 1931.

CONQUEROR

For Billiard Tables and Parts Thereof.
Claims use since July 28, 1930.

Ser. No. 317,148. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed July 21, 1931.

DEFIANCE

For Billiard Tables and Parts Thereof.
Claims use since July 28, 1930.

Ser. No. 317,150. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed July 21, 1931.

MEDALIST

For Billiard Tables and Parts Thereof.
Claims use since July 28, 1930.

Ser. No. 317,153. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed July 21, 1931.

ROYAL

For Billiard Tables and Parts Thereof.
Claims use since July 28, 1930.

Ser. No. 317,528. NESTOR JOHNSON MANUFACTURING COMPANY, Chicago, Ill. Filed July 31, 1931.

HI-SPEED

For Ice Skates.
Claims use since Apr. 17, 1931.

Ser. No. 317,941. INTERNATIONAL GAMES, INC., New York, N. Y. Filed Aug. 13, 1931.

OFFICIAL TABLE HOCKEY

Applicant disclaims any exclusive right to the words appearing on the drawing except in the association shown.
For Apparatus Used in Playing the Game of Table Hockey—Namely, Tables, Clubs, and Pucks.
Claims use since July 16, 1931.

Ser. No. 317,951. PEO MANUFACTURING CORPORATION, Rochester, N. Y. Filed Aug. 13, 1931.

The Duece is Wild!

For Game Played with Balls on a Spiral Run-Way.
Claims use since Apr. 1, 1931.

Ser. No. 318,339. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Aug. 22, 1931.

BOBBLER

For Rubber Toys Simulating Animals.
Claims use since Oct. 15, 1930.

Ser. No. 318,353. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Aug. 24, 1931.

Tarpsail

For Fish Lines.
Claims use since Aug. 1, 1931.

Ser. No. 318,416. CHARLES M. SCHRAEDER, Brookline, Mass. Filed Aug. 25, 1931.

ALGYDYCE

For Dice Bearing Numbers and Symbols and Games Played with Dice or Other Articles Bearing Numbers and Symbols.
Claims use since Aug. 22, 1931.

Ser. No. 318,585. W. J. DOUGHTY, Detroit, Mich. Filed Aug. 31, 1931.

STANRITE

For Supports for Golf Bags.
Claims use since July 15, 1931.

Ser. No. 318,603. SOUTH BEND BAIT COMPANY, South Bend, Ind. Filed Aug. 31, 1931.

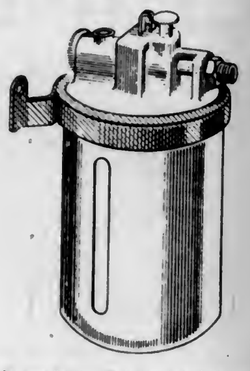
BEST-O-LUCK

For Fishing Tackle—Namely, Fishing Rods, Fishing Reels, Fishing Lines, Fishing Lures, and Fish Stringers.
Claims use since June 1, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 271,232. DECROW AUTOMOTIVE SPECIALTIES, INC., Lockport, N. Y. Filed Aug. 18, 1928.



No claim is made to the representation of the goods. The trade-mark consists of a green band around the head or upper part of the device. The diagonal lining on the drawing represents the color green.
For Lubricating Devices for Internal Combustion Motors.
Claims use since Aug. 16, 1926.

Ser. No. 312,184. GLOBE OIL TOOLS COMPANY, Los Nietos, Calif. Filed Mar. 16, 1931.



No claim is made to the representation of the drilling tool apart from the mark as shown.
For Well Drilling Equipment—Namely, Coring Equipment, Underreamers, Drilling Bits, Rock Bits, Reamers, Drill Pipe Stabilizers, Tubing Swabs, Slush Pump Pistons, Slush Pump Valves, Valve Seat Pullers, Liner Pullers, Wire Line Controls, Back-Pressure Float Valves, Casing Protectors; Also Fingerboards for Well Derricks.
Claims use since February, 1930.

Ser. No. 312,185. GLOBE OIL TOOLS COMPANY, Los Nietos, Calif. Filed Mar. 16, 1931.

GLOBE

For Well Drilling Equipment—Namely, Coring Equipment, Underreamers, Drilling Bits, Rock Bits, Reamers, Drill Pipe Stabilizers, Tubing Swabs, Slush Pump Pistons, Slush Pump Valves, Valve Seat Pullers, Liner Pullers, Wire Line Controls, Back-Pressure Float Valves, Casing Protectors; Also Fingerboards for Well Derricks.
Claims use since February, 1930.

Ser. No. 317,595. DILLE & MCGUIRE MANUFACTURING CO., Richmond, Ind. Filed Aug. 3, 1931.

NOBRAKO

For Lawn Mowers.
Claims use since July 1, 1931.

Ser. No. 318,838. TUBULAR TEXTILE MACHINERY CORPORATION, New York, N. Y. Filed Aug. 22, 1931.

tube-tex

For Machines for Treating Tubular Textile Fabrics.
Claims use since July 27, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 317,736. PRIMA MANUFACTURING COMPANY, INC., Philadelphia, Pa. Filed Aug. 6, 1931.

Quickway

For Electric Laundry Washing Machines.
Claims use since July 15, 1931.

CLASS 25

Locks and Safes

Ser. No. 317,205. CHARLES L. HABER, New York, N. Y. Filed July 22, 1931.



Dr. Locksmith

For Locks and Keys.
Claims use since Mar. 25, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 304,707. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed Aug. 18, 1930.

SOLINEAR

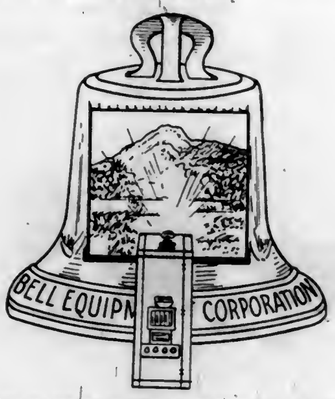
For Photographic Cameras.
Claims use since June 1, 1930.

Ser. No. 308,012. FIRST NATIONAL PICTURES, INC., New York, N. Y. Filed Nov. 18, 1930.

VITASCOPE

For Sound-Picture Apparatus—Namely, Apparatus for Recording and Reproducing Sound and Light Effects, Motion-Picture Films Which Have Records of Sound, Words and/or Music Thereon, and Motion-Picture Films Adapted for Synchronization with Sound, Words and/or Music Records.
Claims use since Oct. 19, 1930.

Ser. No. 317,268. BELL EQUIPMENT CORPORATION, New York, N. Y. Filed July 24, 1931.



No claim is made to the representation of the goods apart from the mark shown.

For Machines for Use in Recording and Reproducing Sound and Motion Pictures and Parts Therefor.

Claims use since Feb. 28, 1931.

Ser. No. 318,242. GUNITE CONCRETE & CONSTRUCTION COMPANY, Kansas City, Mo. Filed Aug. 20, 1931.

SANDROMETER

For Graduated Measuring Receptacle.

Claims use since June 17, 1931.

Ser. No. 318,302. WINKLER FILM CORPORATION, New York, N. Y. Filed Aug. 21, 1931.



For Series of Different Animated Motion Picture Cartoons.

Claims use since Jan. 15, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 274,220. BENJAMIN & EDWARD J. GROSS CO., INC., New York, N. Y. Filed Oct. 24, 1928.

LUCKY GIRL

For Finger Rings and Mountings Therefor.

Claims use since June 15, 1927.

CLASS 31

Filters and Refrigerators

Ser. No. 317,709. WHITNEY M. FRYE, doing business as E. B. Frye & Son, Wilton, N. H. Filed Aug. 8, 1931.

AURORA

For Ice-Cream Freezers.

Claims use since July 24, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 317,994. BEATRICE C. TWICHELL, Miami, Fla. Filed Aug. 14, 1931.

FLORIDART

For Art Pictures.

Claims use since July 1, 1929.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 308,080. WILLIAM H. MCKENZIE, doing business as Red Top Oil Burner Co., Chicago, Ill. Filed Nov. 19, 1930.

RED-TOP

For Oil Burners.

Claims use since Sept. 10, 1923.

Ser. No. 311,263. CONSOLIDATED CAR HEATING COMPANY, INC., Albany, N. Y. Filed Feb. 20, 1931.

The Furnace Master

For Stokers.

Claims use since Dec. 2, 1930.

Ser. No. 314,728. UNITED STOVE COMPANY, Ypsilanti, Mich. Filed May 18, 1931.

Savoil

For Oil Stoves, Ranges, Ovens, and Heaters.

Claims use since August, 1924.

Ser. No. 317,739. REVERE COPPER AND BRASS INCORPORATED, Rome, N. Y. Filed Aug. 6, 1931.

ROCOP

For Heating Radiators.

Claims use since June 11, 1931.

CLASS 37

Paper and Stationery

Ser. No. 311,159. REMINGTON RAND BUSINESS SERVICE, INC., Buffalo, N. Y. Filed Feb. 17, 1931.

LINEDEX

For Index Cards, Index Strips and Sheets, Index Strips in Sheet Form and Holders Therefor, Including Holders, Sheets, Panels, and Folders.

Claims use since Dec. 19, 1930.

CLASS 39

Clothing

Ser. No. 291,402. NIRENBERG & SALZMAN, INC., New York, N. Y. Filed Oct. 22, 1929.



For Men's, Boys' Dress, Negligee, Sport, and Work Shirts and Athletic Goods—Namely, Athletic Outer Shirts.

Claims use since Jan. 10, 1926.

Ser. No. 299,305. FAMOUS BATHROBE COMPANY, INC., New York, N. Y. Filed Apr. 23, 1930.

FAMOUS BABY

For Infants' Bathrobes and Buntings.

Claims use since Mar. 15, 1930.

Ser. No. 303,611. POSNER HOSIERY, INC., New York, N. Y. Filed July 18, 1930.



The word "Undee" is disclaimed apart from the mark as shown.

For Knitted, Netted, and Textile Fabric Underwear for Men, Women, and Children.

Claims use since July 5, 1930.

Ser. No. 304,496. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y. Filed Aug. 12, 1930.

Sport Club

For Men's Dress and Work Shirts.

Claims use since November, 1918.

Ser. No. 310,743. WINSHIP, BOIT & Co., Wakefield, Mass. Filed Feb. 4, 1931.



Color is not an essential feature of the trade-mark. No claim is here made to the words "Mérode" or "Silk & Wool."

For Bathing Suits, Underwear, and Children's Play Suits.

Claims use since Jan. 20, 1931.

Ser. No. 311,746. McELWEE AND McELWEE, Philadelphia, Pa. Filed Mar. 4, 1931.

Stylemaid

For Hosiery.
Claims use since December, 1929.

Ser. No. 313,254. A. I. NAMM & SON, Brooklyn, N. Y. Filed Apr. 11, 1931.

Poplin-tex

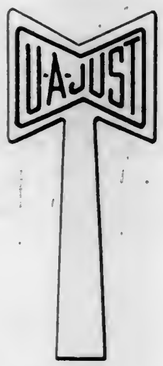
No registration rights are claimed for the word "Poplin."
For Men's Dress, Negligee, and Work Shirts.
Claims use since Mar. 13, 1931.

Ser. No. 313,763. ZIMMERMAN APPAREL SHOP INC., Wilkes-Barre, Pa. Filed Apr. 24, 1931.

Rose Art
MODES

No claim is made to the exclusive use of the word "Modes" appearing on the drawing.
For Dresses, Coats, Suits, Raincoats, Hats, Hosiery, and Underwear for Women and Girls.
Claims use since Aug. 15, 1929.

Ser. No. 317,051. SOL SHERMAN, New York, N. Y. Filed July 17, 1931.



For Bow-Ties.
Claims use since May 1, 1931.

Ser. No. 317,245. CHURCH & COMPANY, LIMITED, Northampton, England. Filed July 23, 1931.

CHURCH

For Boots, Shoes, Gaiters, and Spats Made Wholly or in Part of Leather or Fabric.
Claims use since 1880.

Ser. No. 317,354. THOMAS D. GRANT, Jackson, Mich. Filed July 27, 1931.



No claim is made to the words "Tom Grant" apart from the mark as shown in the drawing.
For Men's and Boys' Suits, Top Coats, Overcoats, and Raincoats.
Claims use since Jan. 1, 1906.

Ser. No. 317,413. VOGUE BRASSIÈRE MFG. CO., Newark, N. J. Filed July 28, 1931.

★ ★
★ KNO-BELT ★
★ ★

No claim is made to the phrase "Kno-Belt" apart from the mark shown in the drawing.
For Corsets, Brassières, Girdles, Foundations—Namely, Corset and Brassière Combinations; Garter Belts, Bandeaux, and Combinations—Namely, Girdles and Brassière Combinations and Sanitary Belts.
Claims use since June 15, 1931.

Ser. No. 317,664. COMMODORE SHIRT CO., INC., New York, N. Y. Filed Aug. 5, 1931.

WILLOW
Saybrooke

For Men's and Boys' Dress and Work Shirts.
Claims use since June 29, 1931.

Ser. No. 317,685. VAN RAALTE COMPANY, New York, N. Y. Filed Aug. 5, 1931.

SLENDARE

For Underwear of Knitted Fabric for Women and Children.
Claims use since July 18, 1931.

Ser. No. 317,686. VAN RAALTE COMPANY, New York, N. Y. Filed Aug. 5, 1931.

TRIQUETTE

For Underwear of Knitted Fabric for Women and Children.
Claims use since July 18, 1931.

Ser. No. 317,744. I. SCHNEIERSON & SONS, INC., New York, N. Y. Filed Aug. 6, 1931.

LOOMRAY

For Ladies' Chemises, Princess Slips, Bloomers, Step-Ins, Nightgowns, Pajamas, and Step-In Drawers of a Textile Fabric.
Claims use since July 10, 1929.

Ser. No. 317,745. I. SCHNEIERSON & SONS, INC., New York, N. Y. Filed Aug. 6, 1931.

LOOMWEAR

For Ladies' Chemises, Princess Slips, Bloomers, Step-Ins, Nightgowns, Pajamas, and Step-In Drawers of a Textile Fabric.
Claims use since July 10, 1929.

Ser. No. 317,751. WAYNESBORO KNITTING COMPANY, Waynesboro, Pa. Filed Aug. 6, 1931.

MILENE

For Knitted and Textile Underwear for Men, Women, and Children, and Nightgowns, Pajamas, and Slips.
Claims use since July 31, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 315,816. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed June 2, 1931.

Satin Jango

The term "Satin" is hereby disclaimed apart from the mark shown.
For Silk Fabrics in the Piece.
Claims use since May 19, 1931.

Ser. No. 315,709. L. & E. STIEN, New York, N. Y. Filed June 11, 1931.



No claim is made to the word "Zephyr" apart from the mark shown in the drawing.
For Velveteen in the Piece.
Claims use since Jan. 1, 1905.

Ser. No. 316,186. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 24, 1931.

GLORANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 20, 1931.

Ser. No. 317,568. PEARCE MANUFACTURING CO., Latrobe, Pa. Filed Aug. 1, 1931.



No claim is made to the word "Fabric" apart from the mark.
For Woolens and Cotton Piece Goods and Mixtures Thereof.
Claims use since April, 1931.

Ser. No. 317,927. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Aug. 13, 1931.

Kashmiroya

For Woolen Piece Goods.
Claims use since May 15, 1931.

Ser. No. 318,421. E. F. TIMME & SON, New York, N. Y. Filed Aug. 25, 1931.

Lapinlaine

For Pile Fabrics in the Piece.
Claims use since Aug. 19, 1931.

Ser. No. 315,519. HAHLO & SOLOMON, INC., New York, N. Y. Filed Aug. 28, 1931.

GOLFCLUB

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Aug. 19, 1931.

Ser. No. 318,521. HOFFMAN-KLEIN COMPANY, New York, N. Y. Filed Aug. 28, 1931.

Goldenbrook

For Woolen Piece Goods, Silk Piece Goods, Cotton Piece Goods.
Claims use since Jan. 1, 1931.

CLASS 43

Thread and Yarn

Ser. No. 317,919. CHATHAM MANUFACTURING COMPANY, Portland, Conn. Filed Aug. 13, 1931.

DRI-KLEEN

For Rubber Thread.
Claims use since July 25, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 307,916. HARRY B. BALTHASER, Philadelphia, Pa. Filed Nov. 15, 1930.

CLAW

For Nippers, Cutters, Scissors, Shears, and Clippers, for Manicure, Pedicure, Surgical, and Dental Purposes.
Claims use since Nov. 1, 1930.

Ser. No. 311,099. MILLER DRUG SUNDRY COMPANY, Baltimore, Md. Filed Feb. 16, 1931.

Royal Satin

For Prophylactic Rubber and Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since 1912.

Ser. No. 315,377. S. HOFFMAN, Los Angeles, Calif. Filed June 3, 1931.

LUXRITE

For Manicure Implements—Namely, Nail Files, Tweezers, Scissors, Nail and Cuticle Nippers, Shears, Nail Buffers, Emery Boards, and Orange Wood Sticks.
Claims use since July 1, 1929.

Ser. No. 317,490. WALGREEN CO., Chicago, Ill. Filed July 30, 1931.

TEXCEL

For Sanitary Napkins.
Claims use since June 10, 1931.

Ser. No. 318,117. THE STERILEK COMPANY, INC., Brooklyn, N. Y. Filed Aug. 18, 1931.

CASHMERE

For Sanitary Napkins.
Claims use since May 12, 1931.

Ser. No. 318,276. INDEPENDENT DRUGGISTS' ALLIANCE DISTRIBUTING CO., Chicago, Ill. Filed Aug. 21, 1931.

PETITES

For Sanitary Napkins.
Claims use since July 7, 1931.

CLASS 45

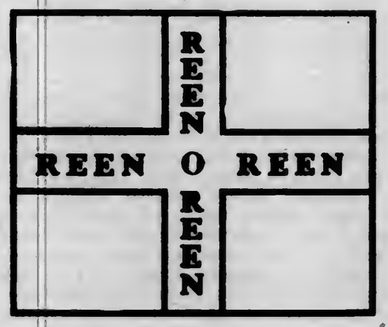
Beverages, Nonalcoholic

Ser. No. 317,270. CEREAL PRODUCTS REFINING CORPN., doing business as California Bottling Assn., San Francisco, Calif. Filed July 24, 1931.

ACME

For Nonalcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since June 27, 1931.

Ser. No. 317,882. WILLIAM TRAUGOTT, doing business as Southern Specialty Company, St. Louis, Mo. Filed Aug. 6, 1931.



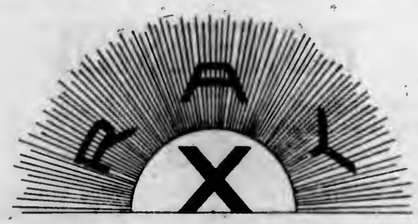
For Non-Alcoholic, Non-Cereal, Maltless Beverage, Sold as a Soft Drink.
Claims use since Dec. 1, 1930.

Ser. No. 317,897. LA SALLE BOTTLING COMPANY, St. Louis, Mo. Filed Aug. 12, 1931.

Sarsa

For Non-Alcoholic Maltless Beverage, Sold as a Soft Drink.
Claims use since May 1, 1931.

Ser. No. 317,904. RAY-X-WATER CORPORATION, Toledo, Ohio. Filed Aug. 12, 1931.



For Drinking Water.
Claims use since August, 1928.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 310,336. FIDALGO ISLAND PACKING COMPANY, Anacortes, Wash. Filed Jan. 24, 1931.

SWEET PEA

For Canned Salmon.
Claims use since 1906.

Ser. No. 310,370. EMULSOL CORPORATION, Chicago, Ill. Filed Jan. 26, 1931.

ARGOLE

For Emulsion and Margarine Improving Substances Particularly Emulsifying Agents, and Substances for Preventing "Weeping" or "Leaking", and for Preventing Sputtering During Frying.
Claims use since Jan. 2, 1930.

Ser. No. 310,371. EMULSOL CORPORATION, Chicago, Ill. Filed Jan. 26, 1931.

EMARGOL

For Emulsion and Margarine Improving Substances, Particularly Emulsifying Agents, and Substances for Preventing "Weeping" or "Leaking" and for Preventing Sputtering During Frying.
Claims use since Dec. 2, 1929.

Ser. No. 310,372. EMULSOL CORPORATION, Chicago, Ill. Filed Jan. 26, 1931.

EMULGOL

For Emulsion and Margarine Improving Substances, Particularly Emulsifying Agents, and Substances for Preventing "Weeping" or "Leaking" and for Preventing Sputtering During Frying.
Claims use since Jan. 2, 1930.

Ser. No. 310,810. RED BAND COMPANY, INC., Johnson City, Tenn. Filed Feb. 6, 1931.

"TASTE-TESTED"

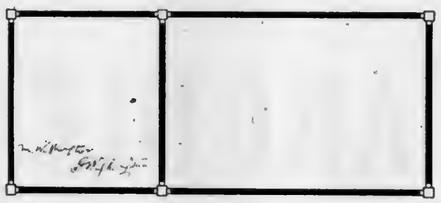
For Wheat Flour.
Claims use since Jan. 14, 1931.

Ser. No. 312,675. CARL J. WENDLING, doing business as Ninetynine Malt Company, Buffalo, N. Y. Filed Mar. 28, 1931.

99

For Malt Extract.
Claims use since Dec. 31, 1930.

Ser. No. 312,966. MARTHA WASHINGTON CANDIES COMPANY, Chicago, Ill. Filed Apr. 4, 1931.



For Candies.
Claims use since Mar. 1, 1931.

Ser. No. 314,039. E. CERRUTI, INC., New York, N. Y. Filed May 1, 1931.

BERMO

For Olive Oil.
Claims use since September, 1930.

Ser. No. 314,087. THE VISKING CORPORATION, Chicago, Ill. Filed May 1, 1931.

ויסקינג'ס

The Hebrew notation comprising applicant's mark is translated "Visking's."
For Sausage Casings.
Claims use since Mar. 19, 1931.

Ser. No. 314,859. NORTHERN JOBBING COMPANY, New York, N. Y., St. Paul, Minn., and Highland, Ill. Filed May 21, 1931.

MOTHER'S CANNING

No claim is made to the word "Canning" apart from the mark.
For Canned Fruits and Berries.
Claims use since Feb. 1, 1930.

Ser. No. 315,156. NATIONAL GROCERY COMPANY, Jersey City, N. J. Filed May 28, 1931.

GLEN BROOK

For Butter.
Claims use since Feb. 27, 1931.

Ser. No. 315,715. THE CITIZENS' WHOLESALE SUPPLY COMPANY, Columbus, Ohio. Filed June 1, 1931.

GOLDEN RULE

For Bay Leaves, Dried Beans, Beef Extract, Bird Seed, Buckwheat Flour, Oatmeal, Rolled Oats, Breakfast Food (A Breakfast Cereal), Pan Bran, Garlic Salt, Mace Whole and Ground, Nutmegs Whole and Ground; Raspberry, Cherry, and Almond Flavors for Foods; Candy, Bitter Chocolate, Desiccated Cocoanut, Cocoa, Milk-Cocoa, Coffee, Corn Starch, Whipping Powder, Doughnut Flour, Vanilla Flavoring for Foods, Orange Flavoring for Foods, Lemon Flavoring for Foods, Rose Flavoring for Foods, Bitter Almond Flavoring for Foods, Wintergreen True Flavoring for Foods, Peppermint Flavoring for Foods, Tropical Fruit Flavoring for Foods, Imitation Maple Flavoring for Foods, Imitation Vanilla Flavoring for Foods, Imitation Black Walnut Flavoring for Foods, Canned Apricots, Canned Cherries, Canned Peaches, Canned Pears, Canned Medley of Fruit Salad, Canned Pineapple, Canned Grapefruit, Dried Prunes, Seeded Raisins, Seedless Raisins, Dried Currants, Pineapple Glacé, Crystallized Ginger, Leghorn Citron Peel, Leghorn Lemon Peel, Leghorn Orange Peel; Assorted Orange, Lemon, and Citron Peel; Crystal Gelatin, Macaroni, Spaghetti, Egg Noodles, Marshmallow Creme, English Walnuts, Canned Blanched Whole Peanuts, Nut Butter, Vitamin Nut Butter, Olive Oil, Olives, Pancake Flour, Canned Pimentos, Shelled Pop Corn, Rice, Worcestershire Style Sauce, Chili Sauce, Mint Sauce, Chow Chow Sauce, French Type Dressing, Prepared Mustard, Mayonnaise, Tomato Catsup, Horseradish Mustard, Caraway Seed, Celery Salt, Chili Powder, Celery Seed, Currie Powder, Onion Salt, Poultry Dressing or Spiced Seasoning, Turmeric, Bouillon Cubes, Cream of Tomato Soup, Allspice Whole and Ground, Cloves Whole and Ground, Cinnamon Whole and Ground, Ginger Whole and Ground, Mace Mixture Whole and Ground, Ground Mustard, Peppers Whole and Ground, Ground Paprika, Sage Whole and Ground, Pancake Dip Syrup, Imitation Maple Syrup, Barbadoes Molasses, Pearl and Ready Tapioca, Natural Leaf Tea, Mixed Tea, Extra Fancy Orange Pekoe Tea, Special Darjeeling Ceylon Tea, Silver Leaf Tea, Young Hyson Tea, Gunpowder Tea, English Breakfast Tea, Formosa Oolong Tea, Ceylon Tea, High Grade Mixed Tea, Orange Pekoe Tea, Jasmine Tea, Canned Asparagus Tips, Canned Red Kidney Beans, Canned Lima Beans, Canned Golden Wax Beans, Canned Stringless Refugee Beans, Canned Beets, Canned Corn, Canned Hominy, Canned Peas, Canned Pumpkin, Canned Spinach, Canned Tomatoes, Canned Succotash, and Vinegar.
Claims use since Oct. 31, 1894.

Ser. No. 315,716. THE CITIZENS' WHOLESALE SUPPLY COMPANY, Columbus, Ohio. Filed June 1, 1931.

GOLDEN RULE CO.

For Bay Leaves, Dried Beans, Beef Extract, Bird Seed, Buckwheat Flour, Oatmeal, Rolled Oats, Breakfast Food (A Breakfast Cereal), Pan Bran, Garlic Salt, Mace Whole and Ground, Nutmegs Whole and Ground; Raspberry, Cherry, and Almond Flavors for Foods; Candy, Bitter Chocolate, Desiccated Cocoanut, Cocoa, Milk-Cocoa, Coffee, Corn Starch, Whipping Powder, Doughnut Flour, Vanilla Flavoring for Foods, Orange Flavoring for Foods, Lemon Flavoring for Foods, Rose Flavoring for Foods, Bitter Almond Flavoring for Foods, Wintergreen True Flavoring for Foods, Peppermint Flavoring for Foods, Tropical Fruit Flavoring for Foods, Imitation Maple Flavoring for Foods, Imitation Vanilla Flavoring for Foods, Imitation Black Walnut Flavoring for Foods, Canned Apricots, Canned Cherries, Canned Peaches, Canned Pears, Canned Medley of Fruit Salad, Canned Pineapple, Canned Grapefruit, Dried Prunes, Seeded Raisins, Seedless Raisins, Dried Currants, Pineapple Glacé, Crystallized Ginger, Leghorn Citron Peel, Leghorn Lemon Peel, Leghorn Orange Peel; Assorted Orange, Lemon, and Citron Peel; Crystal Gelatin, Macaroni, Spaghetti, Egg Noodles, Marshmallow Creme, English Walnuts, Canned Blanched Whole Peanuts, Nut Butter, Vitamin Nut Butter, Olive Oil, Olives, Pancake Flour, Canned Pimentos, Shelled Pop Corn, Rice, Worcestershire Style Sauce, Chili Sauce, Mint Sauce, Chow Chow Sauce, French Type Dressing, Prepared Mustard, Mayonnaise, Tomato Catsup, Horseradish Mustard, Caraway Seed, Celery Salt, Chili Powder, Celery Seed, Currie Powder, Onion Salt, Poultry Dressing or Spiced Seasoning, Turmeric, Bouillon Cubes, Cream of Tomato Soup, Allspice Whole and Ground, Cloves Whole and Ground, Cinnamon Whole and Ground, Ginger Whole and Ground, Mace Mixture Whole and Ground, Ground Mustard, Peppers Whole and Ground, Ground Paprika, Sage Whole and Ground, Pancake Dip Syrup, Imitation Maple Syrup, Barbadoes Molasses, Pearl and Ready Tapioca, Natural Leaf Tea, Mixed Tea, Extra Fancy Orange Pekoe Tea, Special Darjeeling Ceylon Tea, Silver Leaf Tea, Young Hyson Tea, Gunpowder Tea, English Breakfast Tea, Formosa Oolong Tea, Ceylon Tea, High Grade Mixed Tea, Orange Pekoe Tea, Jasmine Tea, Canned Asparagus Tips, Canned Red Kidney Beans, Canned Lima Beans, Canned Golden Wax Beans, Canned Stringless Refugee Beans, Canned Beets, Canned Corn, Canned Hominy, Canned Peas, Canned Pumpkin, Canned Spinach, Canned Tomatoes, Canned Succotash, and Vinegar.
Claims use since Oct. 31, 1894.

Ser. No. 315,884. WOFFORD SYRUP CO. INC., Houston, Tex. Filed June 15, 1931.

UNCLE BOB'S

For Cane Syrup.
Claims use since Apr. 3, 1930.

Ser. No. 316,140. KARL VON LADAU, New York, N. Y. Filed June 22, 1931.



No claim is made to the representation of the pie or to the words "Old English," "Meat Pies," and "Individual Style" apart from the mark as shown in the drawing.
For Meat Pie.
Claims use since September, 1930.

Ser. No. 316,159. ME CHIN COMPANY, San Francisco, Calif. Filed June 23, 1931.

MEGIN

For Bean Cake.
Claims use since June 2, 1931.

Ser. No. 316,662. REID ICE CREAM CORPORATION, Brooklyn, N. Y. Filed July 6, 1931. Under 10-year proviso.

Reid's "SPECIAL"

No claim is made to the exclusive use of the word "Special" except and apart from the mark as shown in the drawing.
For Ice Cream and Frozen Confections.
Claims use since 1892.

Ser. No. 316,677. IRWIN HILSENRATH, New York, N. Y. Filed July 2, 1931.



Applicant disclaims the words "Old Dutch Mayonnaise" except in the association and arrangement shown on the drawing.

For Mayonnaise.

Claims use since Mar. 15, 1929.

Ser. No. 316,939. BENJAMIN HARRISON RAUFF, Brooklyn, N. Y. Filed July 14, 1931.

PUREKIST

For Candies.

Claims use since June 1, 1930.

Ser. No. 317,306. GENERAL MILLS, INC., Minneapolis, Minn. Filed July 25, 1931.

HEARTIES

For Cereal Breakfast Food.

Claims use since July 10, 1931.

Ser. No. 317,344. AMERICAN SEED & FOOD PRODUCTS, Chicago, Ill. Filed July 27, 1931.

AMERICAN



No claim is made to the exclusive use of the word "American" apart from the mark. The lining on the drawing is for shading only.

For Imported Select Bird Seed, Love Bird Seed, Wild Grass Seed, Egg Bread and Nestling Food, Canary Bird Food, Color and Pepper Food, Moulting Food, Hemp and Peppers; Birdie Packs—Namely, a Food Package for Canaries; Thistle Seed, Hemp Seed, Steel Cut Oats, Flax Seed, Poppy Seed, and Lettuce Seed.

Claims use since January, 1914.

Ser. No. 317,456. DISTRICT GROCERY STORES, INC., Washington, D. C. Filed July 30, 1931.

GOLD BAG

No claim is made to the exclusive use of a bag colored gold.

For Coffee.

Claims use since July 1, 1922.

Ser. No. 317,608. LIFE SAVERS, INC., Port Chester, N. Y. Filed Aug. 3, 1931.

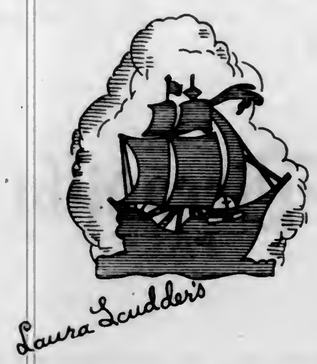
CRYST-O-MINT

No claim is made to the word "Mint" except in connection with the mark as shown.

For Peppermint Flavored Boiled Hard Candy.

Claims use since June 19, 1931.

Ser. No. 317,781. SCUDDER FOOD PRODUCTS INC., Los Angeles, Calif. Filed Aug. 7, 1931.



The name "Laura Scudder's" is the facsimile signature of the secretary-treasurer of the applicant and the representation of the ship is lined for the color blue.

For Potato Chips.

Claims use since Nov. 10, 1926.

Ser. No. 317,888. THE GEORGE CLOSE CO., doing business as Close's, Cambridge, Mass. Filed Aug. 12, 1931.

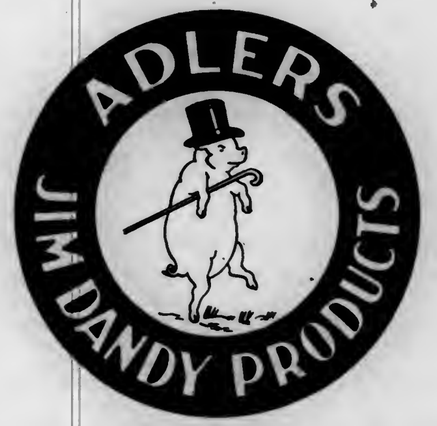
Close

FRIEND

For Candy.

Claims use since Jan. 1, 1931.

Ser. No. 317,966. J. C. ADLER CO., Joliet, Ill. Filed Aug. 14, 1931.



Exclusive right to the word "Products" is disclaimed.

For Hams, Bacons, Sausages, and Lard.

Claims use since June 1, 1907.

Ser. No. 318,007. H. C. HEMINGWAY & COMPANY, INC., Syracuse, N. Y. Filed Aug. 15, 1931.

Alpine

For Canned Fruits and Vegetables and Frosted, Frozen, and Iced Fresh Fruits and Vegetables.

Claims use since Mar. 25, 1883, on canned fruits and vegetables; since July, 1929, on frosted, frozen, and iced fruits and vegetables.

Ser. No. 318,140. ARTHUR GONZALEZ, New York, N. Y. Filed Aug. 19, 1931.

EL CHARRO



GARBANZO MEXICANO GENUINO
(GENUINE MEXICAN CHICK PEAS)

The drawing is lined to indicate the color red. No claim is made to the exclusive use of the words "Trade-Mark," "Garbanzo Mexicano Genuino (Genuine Mexican Chick Peas)," apart from the mark as shown in the drawing.

For Mexican Chick Peas.

Claims use since Jan. 7, 1926.

Ser. No. 318,337. SWIFT AND COMPANY, Chicago, Ill. Filed Aug. 22, 1931.

FORMAY

For Vegetable Shortening.

Claims use since July 30, 1931.

Ser. No. 318,386. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Filed Aug. 24, 1931.

PLUS ONE

For Chewing Gum.
Claims use since Aug. 20, 1931.

Ser. No. 318,455. JOHN MACKINTOSH & SONS LTD., INC., Boston, Mass. Filed Aug. 26, 1931.

MickleMac

For Candy.
Claims use since Apr. 1, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 318,014. PABST CORPORATION, Milwaukee, Wis. Filed Aug. 15, 1931.

Piccadilly PALE

No claim is made to the word "Pale" apart from the mark as shown.
For Malt Beverage Containing Less Than One-Half of One Percent Alcohol by Volume.
Claims use since Aug. 7, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

OCTOBER 6, 1931

287,683. BOLT CLIPPERS. WILLIAM M. KEITH, Youngstown, Ohio.
Filed May 26, 1931. Serial No. 315,053. PUBLISHED JULY 14, 1931. Class 23.

287,684. LAWN MOWERS. THE F. & N. LAWN MOWER COMPANY, Richmond, Ind.
Filed May 19, 1931. Serial No. 314,752. PUBLISHED JULY 14, 1931. Class 23.

287,685. TRACTORS AND INTERNAL COMBUSTION ENGINES. BÜSSING-NAG VEREINIGTE NUTZKRAFTWAGEN AKTIENGESELLSCHAFT, Brunswick, Germany.
Filed May 4, 1931. Serial No. 314,146. PUBLISHED JULY 14, 1931. Class 23.

287,686. MOULDING KNIVES AND SAWS AND KNIVES AND OTHER SPECIAL TOOLS MADE TO SPECIFICATION. TOLAND & SON, INC., Baltimore, Md.
Filed May 20, 1931. Serial No. 314,825. PUBLISHED JULY 21, 1931. Class 23,

287,687. PHOTOGRAPHIC DRY PLATES AS USED IN NEWSPAPER WORK. HERMAN SEGAL, doing business as Colora Products Company Inc., New York, N. Y.
Filed May 22, 1931. Serial No. 314,931. PUBLISHED JULY 14, 1931. Class 26.

287,688. LENSES. ACUTONE CORPORATION, New York, N. Y.
Filed May 23, 1931. Serial No. 314,942. PUBLISHED JULY 14, 1931. Class 26.

287,689. PORTABLE FLOOR AND TABLE LAMPS. THE MILLER COMPANY, Meriden, Conn.
Filed May 22, 1931. Serial No. 314,922. PUBLISHED JULY 14, 1931. Class 21.

287,690. ELECTRICALLY OPERATED AIR DEODORIZER, FILTER, AND PURIFIER. THE PERMANENT ELECTRIC COMPANY, Cleveland, Ohio.
Filed April 27, 1931. Serial No. 313,865. PUBLISHED JULY 14, 1931. Class 21.

287,691. RADIO RECEIVING SETS AND PARTS THEREOF, TRANSFORMERS, CONDENSERS, LOUD SPEAKERS, AND RHEOSTATS. WHOLESALE RADIO SERVICE CO. INC., New York, N. Y.
Filed May 14, 1931. Serial No. 314,594. PUBLISHED JULY 21, 1931. Class 21.

287,692. STORAGE BATTERIES. TRAFFIC STORAGE BATTERY CO., Los Angeles, Calif.
Filed April 18, 1931. Serial No. 313,584. PUBLISHED JULY 14, 1931. Class 21.

287,693. PORTABLE FLOOR AND TABLE LAMPS. THE MILLER COMPANY, Meriden, Conn.
Filed May 22, 1931. Serial No. 314,923. PUBLISHED JULY 14, 1931. Class 21.

287,694. PLOWS. EMPORIA MACHINE CO. INC., Emporia, Va.
Filed May 22, 1931. Serial No. 314,901. PUBLISHED JULY 14, 1931. Class 23.

287,695. FRICTION MATERIALS FOR BRAKE LININGS AND CLUTCH FACINGS. FERODO AND ASBESTOS INCORPORATED, New Brunswick, N. J.
Filed May 22, 1931. Serial No. 314,904. PUBLISHED JULY 21, 1931. Class 35.

287,696. LAMINATED GASKETS COMPOSED MAINLY OF RUBBER OR RUBBER COMPOSITIONS. VICTAULIC COMPANY OF AMERICA, Jersey City, N. J.
Filed May 20, 1931. Serial No. 314,827. PUBLISHED JULY 14, 1931. Class 35.

287,697. REEDS FOR CLARINETS AND SAXOPHONES. THE WOODWIND COMPANY, New York, N. Y.
Filed May 7, 1931. Serial No. 314,312. PUBLISHED JULY 14, 1931. Class 36.

287,698. FINGER RINGS, BRACELETS, BELT BUCKLES, ETC. NATHANIAL M. KIRSHNER, Los Angeles, Calif.
Filed April 22, 1931. Serial No. 313,662. PUBLISHED JULY 21, 1931. Class 28.

287,699. SPARK PLUGS. HURLEY-TOWNSEND CORPORATION, New York, N. Y.
Filed May 26, 1931. Serial No. 315,052. PUBLISHED JULY 21, 1931. Class 21.

287,700. ELECTRICAL APPARATUS AND MACHINES. CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y.
Filed May 7, 1931. Serial No. 314,271. PUBLISHED JULY 14, 1931. Class 21.

287,701. RADIO ELECTRON TUBES, RADIO CHASSIS, RADIO RECEIVING SETS, AND RADIO SPEAKERS. STANDARD STORES, INCORPORATED, Boston, Mass.
Filed May 6, 1931. Serial No. 314,255. PUBLISHED JULY 21, 1931. Class 21.

287,702. PHOTOGRAPHIC FILM. DU PONT PATHÉ FILM MANUFACTURING CORPORATION, New York, N. Y.
Filed May 22, 1931. Serial No. 314,899. PUBLISHED JULY 21, 1931. Class 26.

287,703. PYROMETER TUBES, MUFFLES. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y.
Filed January 23, 1931. Serial No. 310,283. PUBLISHED JULY 14, 1931. Class 26.

287,704. ELECTRIC TOOLS CONSISTING IN DRILLS, HAMMERS, SCREW DRIVERS, GRINDERS (BENCH, AERIAL AND PEDESTAL), SAWS, SHEARS, AND SANDERS. THE STANLEY WORKS, New Britain, Conn.
Filed March 11, 1931. Serial No. 312,020. PUBLISHED JULY 21, 1931. Class 21.

287,705. COMPOUNDED LUBRICATED GASOLINE FUEL FOR USE IN INTERNAL-COMBUSTION ENGINES. ROBERT B. LEWIS, doing business as State Line Oil Service, Unionville, N. Y.
Filed March 27, 1931. Serial No. 312,609. PUBLISHED JULY 21, 1931. Class 15.

287,706. LENSES AND FRAMES FOR EYE GLASSES. JOHN D. BROCK, doing business as Specialty Optical Company, Kansas City, Mo.
Filed June 1, 1931. Serial No. 315,244. PUBLISHED JULY 14, 1931. Class 26.

287,707. EYE GLASS LENSES. JOHN D. BROCK, doing business as Specialty Optical Company, Kansas City, Mo.
Filed June 1, 1931. Serial No. 315,247. PUBLISHED JULY 14, 1931. Class 26.

287,708. TABLE KNIVES, TABLE FORKS, TABLE SPOONS, TICKET PUNCHES, PLIERS, CAN OPENERS, NUT CRACKERS, INDUSTRIAL NAIL CLIPS, AND SLIP JOINT PLIERS, ALL MADE OF BASE METAL. THE H. C. HART MFG. CO., Unionville, Conn.
Filed March 13, 1931. Serial No. 312,128. PUBLISHED JUNE 21, 1931. Class 23.

287,709. SHEAVES FOR BELT DRIVES. L. H. GILMER CO., Philadelphia, Pa.
Filed March 12, 1931. Serial No. 312,048. PUBLISHED JULY 21, 1931. Class 23.

287,710. PORTABLE WATER PUMP FOR FIRES. FENWICK REDDAWAY MFG., CO., Newark, N. J.
Filed March 10, 1931. Serial No. 311,958. PUBLISHED JULY 21, 1931. Class 23.

287,711. CENTRIFUGAL MACHINES AND PARTS THEREOF. THE SHARPLES SPECIALTY COMPANY, Philadelphia, Pa.
Filed May 4, 1931. Serial No. 314,170. PUBLISHED JULY 14, 1931. Class 23.

287,712. BIFOCAL LENSES. PERFECTED BIFOCALS, INC., Indianapolis, Ind.
Filed June 12, 1931. Serial No. 315,722. PUBLISHED JULY 21, 1931. Class 26.

287,713. LENSES. THE FAIR, Chicago, Ill.
Filed May 25, 1931. Serial No. 314,986. PUBLISHED JULY 14, 1931. Class 26.

287,714. GASOLINES. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed May 21, 1931. Serial No. 314,861. PUBLISHED JULY 21, 1931. Class 15.

287,715. GASOLINE. SIGNAL OIL & GAS COMPANY, Los Angeles, Calif.
Filed April 6, 1931. Serial No. 313,008. PUBLISHED JULY 21, 1931. Class 15.

287,716. KEROSENE. SINCLAIR REFINING COMPANY, New York, N. Y.
Filed May 28, 1931. Serial No. 315,162. PUBLISHED JULY 21, 1931. Class 15.

287,717. LUBRICATING OILS AND LUBRICATING OIL COMPOSITIONS. JOEL B. CLARK, doing business as J. B. Clark Oil Company, Buffalo, N. Y.
Filed May 23, 1931. Serial No. 314,947. PUBLISHED JULY 14, 1931. Class 15.

287,718. LUBRICATING OIL. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed May 1, 1931. Serial No. 314,084. PUBLISHED JULY 14, 1931. Class 15.

287,719. ANTI-SEIZE COMPOUND. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed May 14, 1931. Serial No. 314,541. PUBLISHED JULY 14, 1931. Class 15.

287,720. ANTI-SEIZE COMPOUND. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.
Filed May 14, 1931. Serial No. 314,542. PUBLISHED JULY 14, 1931. Class 15.

287,721. ROLLER BEARINGS. TYSON ROLLER BEARING CORPORATION, Massillon, Ohio.
Filed March 28, 1931. Serial No. 312,673. PUBLISHED JULY 14, 1931. Class 23.

287,722. PLOWS. EMPORIA MACHINE CO. INC., Emporia, Va.
Filed May 22, 1931. Serial No. 314,902. PUBLISHED JULY 14, 1931. Class 23.

287,723. PLOWS. EMPORIA MACHINE CO. INC., Emporia, Va.
Filed May 22, 1931. Serial No. 314,903. PUBLISHED JULY 21, 1931. Class 23.

287,724. FINGER RINGS MADE OF PRECIOUS AND SEMIPRECIOUS METALS. M. H. SHIMAN & CO., INC., New York, N. Y.
Filed March 14, 1931. Serial No. 312,164. PUBLISHED JULY 21, 1931. Class 28.

287,725. FINGER RINGS. H. W. PETERS CO., INC., Boston, Mass.
Filed May 7, 1931. Serial No. 314,293. PUBLISHED JULY 14, 1931. Class 28.

287,726. ELECTRON TUBES, PHOTOELECTRIC CELLS, DISCHARGE TUBES, RECTIFIER TUBES, AND ASSEMBLED CURRENT RECTIFYING UNITS. OTTO PRESSLER THÜRINGER VACUUMRÖHRENFABRIK, Leipsig, Germany.
Filed October 23, 1930. Serial No. 307,112. PUBLISHED JULY 14, 1931. Class 21.

287,727. DIAMOND RINGS. WILLIAM R. NEUMANN, doing business as W. R. Neumann & Co., Chicago, Ill.
Filed November 24, 1930. Serial No. 308,263. PUBLISHED JULY 14, 1931. Class 28.

287,728. ELECTRIC LIGHTING FIXTURE UNITS. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed December 5, 1930. Serial No. 308,676. PUBLISHED JULY 21, 1931. Class 21.

287,729. FLUID OPERATED HORNS. TRICO PRODUCTS CORPORATION, Buffalo, N. Y.
Filed November 28, 1930. Serial No. 308,402. PUBLISHED JULY 21, 1931. Class 28.

287,730. CONVEYORS AND CONVEYING SYSTEMS. UNITED CONVEYOR CORPORATION, Chicago, Ill.
Filed November 24, 1930. Serial No. 308,273. PUBLISHED JULY 21, 1931. Class 28.

287,731. SCREW DRIVERS. THE STANLEY WORKS, New Britain, Conn.
Filed November 22, 1930. Serial No. 308,226. PUBLISHED JULY 14, 1931. Class 23.

287,732. PHONOGRAPHIC APPARATUS DESIGNED TO PRODUCE GROOVED SOUND RECORDS AND TO REPRODUCE SOUND FROM SUCH RECORDS. THOMAS A. EDISON, INCORPORATED, West Orange, N. J.
Filed November 29, 1930. Serial No. 308,436. PUBLISHED JULY 14, 1931. Class 36.

287,733. SENSITIZED PHOTOGRAPHIC PAPERS, PLATES, FILMS, ETC. GEVAERT PHOTO-PRODUCTEN NAAMLOOZE VENNOOTSCHAP (PHOTO-PRODUITS GEVAERT SOCIÉTÉ ANONYME), Oude-God, near Antwerp, Belgium.
Filed June 11, 1931. Serial No. 315,686. PUBLISHED JULY 21, 1931. Class 26.

287,734. SENSITIZED PHOTOGRAPHIC PAPERS, PLATES, FILMS, ETC. GEVAERT PHOTO-PRODUCTEN NAAMLOOZE VENNOOTSCHAP (PHOTO-PRODUITS GEVAERT SOCIÉTÉ ANONYME), Oude-God, near Antwerp, Belgium.
Filed June 11, 1931. Serial No. 315,685. PUBLISHED JULY 21, 1931. Class 26.

287,735. SENSITIZED PHOTOGRAPHIC PAPERS, PLATES, FILMS, ETC. GEVAERT PHOTO-PRODUCTEN NAAMLOOZE VENNOOTSCHAP (PHOTO-PRODUITS GEVAERT SOCIÉTÉ ANONYME), Oude-God, near Antwerp, Belgium.
Filed June 11, 1931. Serial No. 315,684. PUBLISHED JULY 21, 1931. Class 26.

287,736. SENSITIZED PHOTOGRAPHIC PAPERS, PLATES, FILMS, ETC. GEVAERT PHOTO-PRODUCTEN NAAMLOOZE VENNOOTSCHAP (PHOTO-PRODUITS GEVAERT SOCIÉTÉ ANONYME), Oude-God, near Antwerp, Belgium.
Filed June 11, 1931. Serial No. 315,683. PUBLISHED JULY 21, 1931. Class 26.

287,737. RADIO ITEMS AND PARTS—NAMELY, IGNITION FILTER SYSTEMS OF AUTOMOBILE RADIOS, SPARK PLUG SUPPRESSORS, DISTRIBUTOR SUPPRESSORS, RESISTORS, RESISTOR KITS, CONDENSERS, AND CONDENSER KITS. BENJAMIN A. COVER, JR., doing business as Tilton Manufacturing Company, New York, N. Y.
Filed May 4, 1931. Serial No. 314,153. PUBLISHED JULY 21, 1931. Class 21.

287,738. OIL FOR USE IN FLUSHING CRANK CASES OF INTERNAL COMBUSTION ENGINES. SUN OIL COMPANY, Philadelphia, Pa.
Filed April 24, 1931. Serial No. 313,758. PUBLISHED JULY 14, 1931. Class 15.

287,739. MOTOR LUBRICATING OILS. RADBILL OIL COMPANY, Philadelphia, Pa.
Filed April 30, 1931. Serial No. 314,015. PUBLISHED JULY 14, 1931. Class 15.

287,740. JEWELRY AND FLAT AND HOLLOW TABLEWARE. ELGIN AMERICAN MANUFACTURING CO., Elgin, Ill.
Filed April 23, 1931. Serial No. 313,709. PUBLISHED JULY 21, 1931. Class 28.

287,741. LUBRICATING OILS AND GREASES. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill.
Filed May 21, 1931. Serial No. 314,869. PUBLISHED JULY 14, 1931. Class 15.

287,742. ELASTIC FABRIC MATERIAL FOR USE IN THE MANUFACTURE OF FOUNDATION GARMENTS—NAMELY, CORSETS, BODISETTES, GIRDLES, AND BRASSIÈRES. THE STROUSE, ADLER COMPANY, New Haven, Conn.
Filed April 2, 1931. Serial No. 312,868. PUBLISHED JULY 14, 1931. Class 42.

287,743. FRATERNITY BADGES, LAPEL BUTTONS, SCARF PINS, ETC. BETA THETA PI, New York, N. Y.
Filed January 19, 1931. Serial No. 310,084. PUBLISHED JULY 21, 1931. Class 28.

287,744. FRATERNITY PINS AND BADGES MADE OF OR PLATED WITH PRECIOUS METALS. THE PHI KAPPA TAU FRATERNITY, Oxford, Ohio.
Filed March 7, 1931. Serial No. 311,885. PUBLISHED JULY 21, 1931. Class 28.

287,745. LUBRICATING OILS AND GREASES. LUBRIPLATE CORP., New York, N. Y.
Filed May 8, 1931. Serial No. 314,389. PUBLISHED JULY 21, 1931. Class 15.

287,746. PETROLEUM AND PRODUCTS OF PETROLEUM. STANDARD OIL COMPANY OF NEW YORK, New York, N. Y.
Filed February 21, 1931. Serial No. 311,346. PUBLISHED JULY 21, 1931. Class 15.

287,747. MOTION PICTURE FILMS AND MOTION PICTURES. TRAVELTONE PICTURES, INC., San Diego, Calif.
Filed May 9, 1930. Serial No. 300,245. PUBLISHED JULY 21, 1931. Class 26.

287,748. STEAK KNIVES, FORKS, SPOONS, ETC. ALBERT PICK-BARTH COMPANY, INC., New York, N. Y., and Chicago, Ill.
Filed May 21, 1930. Serial No. 300,965. PUBLISHED JULY 14, 1931. Class 28.

287,749. CHAIRS, TABLES, DAVENPORTS, ETC. ALBERT PICK-BARTH COMPANY, INC., New York, N. Y., and Chicago, Ill.
Filed May 21, 1930. Serial No. 300,969. PUBLISHED JULY 14, 1931. Class 32.

287,750. MOTOR LUBRICATING OILS AND GASOLINE. BLUMENFELD ICE & COAL COMPANY, doing business as Blumenfeld Oil Company, Memphis, Tenn.
Filed May 3, 1930. Serial No. 299,893. PUBLISHED JULY 14, 1931. Class 15.

287,751. CARPET SWEEPERS AND SUCTION CLEANERS. THE SCOTT AND FETZER COMPANY, Cleveland, Ohio.
Filed May 12, 1930. Serial No. 300,368. PUBLISHED JULY 7, 1931. Class 23.

287,752. COMPOSITE SOLID NON-METALLIC CASTER TIRES HAVING A SOFT RUBBER OUTER ANNULUS AND AN INNER ANNULUS OF HARDER MATERIAL. JARVIS & JARVIS, INC., Palmer, Mass.
Filed December 23, 1930. Serial No. 309,273. PUBLISHED JULY 21, 1931. Class 35.

287,753. HANDLES FOR SHOVELS, FORKS, RAKES, AND HOES. COLUMBUS HANDLE & TOOL CORPORATION, Columbus, Ohio.
Filed December 30, 1930. Serial No. 309,460. PUBLISHED JULY 14, 1931. Class 23.

287,754. OIL-WELL DERRICKS AND STRUCTURAL PARTS THEREOF. PETROLEUM DERRICK COMPANY, LTD., Los Angeles, Calif.
Filed June 8, 1931. Serial No. 315,556. PUBLISHED JULY 14, 1931. Class 28.

287,755. ELECTRIC WELDERS. UNA WELDING & BONDING COMPANY, Cleveland, Ohio.
Filed July 11, 1930. Serial No. 303,407. PUBLISHED JULY 21, 1931. Class 21.

287,756. RADIO RECEIVING APPARATUS. GUY E. RIEGEL, Spokane, Wash.
Filed July 18, 1930. Serial No. 303,613. PUBLISHED JULY 14, 1931. Class 21.

287,757. ELECTRIC WATER SUPPLY HEATERS. GAS AND ELECTRIC HEATER CO., La Porte, Ind.
Filed June 28, 1930. Serial No. 302,941. PUBLISHED JULY 21, 1931. Class 21.

287,758. DENTAL FILLING ALLOY. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed July 26, 1930. Serial No. 303,867. PUBLISHED SEPTEMBER 9, 1930. Class 44.

287,759. FRUIT JUICE EXTRACTORS. IDEAL CLAMP MFG. CO. INC., Brooklyn, N. Y.
Filed June 11, 1931. Serial No. 315,688. PUBLISHED JULY 21, 1931. Class 23.

287,760. FIELD AND OPERA GLASSES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed June 12, 1931. Serial No. 315,725. PUBLISHED JULY 21, 1931. Class 26.

287,761. COMBINATION TURNSTILES AND REGISTERING FARE BOXES. PEREY MANUFACTURING COMPANY, INC., New York, N. Y.
Filed March 30, 1931. Serial No. 312,720. PUBLISHED JULY 21, 1931. Class 26.

287,762. JEWELERS' TOOLS AND APPLIANCES. WILLIAM DIXON, INCORPORATED, Newark, N. J.
Filed July 1, 1929. Serial No. 286,425. PUBLISHED MARCH 17, 1931. Class 23.

287,763. PLIERS, ENGRAVING TOOLS, FILES, AND SAWS. WILLIAM DIXON, INCORPORATED, Newark, N. J.
Filed March 7, 1930. Serial No. 296,960. PUBLISHED DECEMBER 2, 1930. Class 23.

287,764. ENAMELED METAL WARE—NAMELY, ENAMELED METAL SPOONS. THE VOLLRATH COMPANY, Sheboygan, Wis.
Filed November 15, 1929. Serial No. 202,473. PUBLISHED JULY 21, 1931. Class 28.

287,765. FINGER RINGS AND MOUNTINGS THEREFOR. BENJAMIN & EDWARD J. GROSS CO. INC., New York, N. Y.
Filed April 23, 1930. Serial No. 299,317. PUBLISHED JULY 21, 1931. Class 28.

287,766. COTTON MATTRESSES, SPRINGS, AND PILLOWS. ELLISON FURNITURE & CARPET CO., Fort Worth, Tex.
Filed October 1, 1927. Serial No. 255,502. PUBLISHED NOVEMBER 4, 1930. Class 32.

287,767. LINIMENT FOR TREATING HEADACHES, TOOTHACHES, COUGHS, STOMACH DISORDERS, NEURALGIA, AND HAY FEVER. LAU BROS., Berwyn, Ill.
Filed October 31, 1929. Serial No. 291,835. PUBLISHED JULY 14, 1931. Class 6.

287,768. MEDICINE AND DISINFECTANTS FOR TREATMENT OF ORAL INFECTIONS. THE G. R. POWELL CHEMICAL COMPANY, Cleveland, Ohio.
Filed August 9, 1930. Serial No. 304,427. PUBLISHED OCTOBER 14, 1930. Class 6.

287,769. MOULDED PARADICHLORBENZINE FOR USE AS A MOTH PREVENTATIVE AND DESTROYER. VAPORET CORPORATION OF AMERICA, New York, N. Y.
Filed May 16, 1930. Serial No. 300,697. PUBLISHED JULY 22, 1930. Class 6.

287,770. MEDICATED ADHESIVE PLASTERS. P. BEIERSDORF & CO. INC., New York, N. Y.
Filed May 31, 1930. Serial No. 301,785. PUBLISHED JULY 14, 1931. Class 6.

287,771. MEDICINAL PREPARATION—NAMELY, PETROLEUM JELLY. PLOUGH, INC., doing business as The St. Joseph's Laboratories, Memphis, Tenn.
Filed April 6, 1931. Serial No. 313,001. PUBLISHED JULY 14, 1931. Class 6.

287,772. MEDICINE IN LIQUID AND ALSO IN TABLET FORM FOR TREATMENT OF GONORRHEA. NIP-IT COMPANY, Brunswick, Ga.
Filed March 26, 1931. Serial No. 312,568. PUBLISHED JULY 14, 1931. Class 6.

287,773. HAIR TONIC. ISIDOR TUCKER, Beacon, N. Y.
Filed January 16, 1931. Serial No. 310,031. PUBLISHED JULY 21, 1931. Class 6.

287,774. OINTMENT FOR TREATING SKIN DISEASES. WILLIAM A. WALLACE, doing business as Wallace Chemical Company, Savannah, Ga.
Filed February 13, 1931. Serial No. 311,048. PUBLISHED JULY 14, 1931. Class 6.

287,775. CATTLE POWDERS, HOG POWDERS, ETC. BUCKEYE MINERALIZED STOCK POWDERS COMPANY, Gettysburg, Ohio.
Filed March 3, 1931. Serial No. 311,645. PUBLISHED JULY 14, 1931. Class 6.

287,776. MEDICINAL PREPARATIONS FOR THE TREATMENT OF THE FEET. DR. J. L. BLISS BATES, Washington, D. C., and Revere, Mass.
Filed May 26, 1931. Serial No. 315,027. PUBLISHED JULY 14, 1931. Class 6.

287,777. TOILET ARTICLES—NAMELY, FACE CREAM, BEAUTIFYING CREAMS, ETC. OLGA BENOS, doing business as Onaida Turkish Beauty Preparations, New York, N. Y.
Filed May 25, 1931. Serial No. 314,978. PUBLISHED JULY 14, 1931. Class 6.

287,778. TOOTH POWDER. KERMIT LINDAHL, doing business as Dentalade Co., New York, N. Y.
Filed May 16, 1931. Serial No. 314,651. PUBLISHED JULY 14, 1931. Class 6.

287,779. PERFUME, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,615. PUBLISHED JULY 14, 1931. Class 6.

287,780. PERFUME, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,612. PUBLISHED JULY 14, 1931. Class 6.

287,781. PERFUME, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,608. PUBLISHED JULY 14, 1931. Class 6.

287,782. PERFUME, TOILET WATER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,607. PUBLISHED JULY 14, 1931.

287,783. PREPARATION FOR KILLING FLIES AND INSECTS. EDWARD WALRATH, doing business as Sirocco Manufacturing Co., La Fargeville, N. Y.
Filed May 12, 1931. Serial No. 314,474. PUBLISHED JULY 14, 1931. Class 6.

287,784. ANTISEPTIC PREPARATION IN POWDER FORM, MEDICATED ANTISEPTIC SUPPOSITORIES AND MEDICATED ANTISEPTIC JELLY. RICHARD F. SAVELLI, doing business as Ovacide Laboratories, Oakland, Calif.
Filed May 6, 1931. Serial No. 314,252. PUBLISHED JULY 14, 1931. Class 6.

287,785. LIQUID MASSAGE PREPARATION. ABRAM JAMES BECKER, Lansing, Mich.
Filed May 8, 1931. Serial No. 314,317. PUBLISHED JULY 14, 1931. Class 6.

287,786. INTESTINAL BACTERICIDES. MAXWELL & TENNYSON, Washington, D. C.
Filed May 1, 1931. Serial No. 314,065. PUBLISHED JULY 14, 1931. Class 6.

287,787. MENTHOL CHEWING GUM FOR THE RELIEF OF COLDS, COUGHS, HOARSENESS, AND THROAT TICKLE. THE SHELBY GUM COMPANY, Shelby, Ohio.
Filed April 29, 1931. Serial No. 313,979. PUBLISHED JULY 14, 1931. Class 6.

287,788. OINTMENTS OR SALVES FOR THE RELIEF OF COLDS, CHEST CONGESTION, LUNG IRRITATIONS, HOARSENESS, AND SORE THROAT. MUTSU VAPOR BALM COMPANY, Memphis, Tenn.
Filed April 23, 1931. Serial No. 313,719. PUBLISHED JULY 14, 1931. Class 6.

287,789. PREPARATION FOR TREATING COCCIDIOSIS IN POULTRY. JOSEPH E. LAYTON, doing business as Red-Hed Laboratories, Seattle, Wash.
Filed April 16, 1931. Serial No. 313,439. PUBLISHED JULY 14, 1931. Class 6.

287,790. DISINFECTANTS, LIQUIDS, AND SOLUTIONS AND PREPARATIONS FOR RENDERING HARMLESS POISONS AND NICOTINE. BONICOT WARENVERTRIEBSGESELLSCHAFT M. B. H., Vienna, Austria.
Filed February 11, 1931. Serial No. 310,932. PUBLISHED JULY 14, 1931. Class 6.

287,791. PREPARATIONS FOR PURIFYING LIQUIDS IN PARTICULAR WATER. N. V. STANDARD WATER MAATSCHAPPIJ, Amsterdam, Netherlands.
Filed March 4, 1931. Serial No. 311,748. PUBLISHED JULY 14, 1931. Class 6.

287,792. COMMON SOAP AND LAUNDRY SOAP IN SPRAY FORM. GOLD DUST CORPORATION, New York, N. Y.
Filed June 4, 1931. Serial No. 315,393. PUBLISHED JULY 28, 1931. Class 4.

TRADE-MARK REGISTRATIONS RENEWED

35,975. CERTAIN NAMED MEDICINES. Registered February 26, 1901. DR. RICHARDS DYSPEPSIA TABLET ASSOCIATION, New York, N. Y. Renewed February 26, 1931, to Dr. Richards Association, Inc., Norwalk, Conn., a Corporation of Connecticut, successor.

36,113. CERTAIN NAMED MACHINES. Registered March 19, 1901. WERNER & PFLEIDERER. Renewed March 19, 1931, to Baker Perkins Company, Inc., Saginaw, Mich, a Corporation of New York, successor.

36,707. TOILET SOAP, PERFUMES, TOILET WATER, COSMETICS AND FACE POWDER. Registered July 9, 1901. MÜLHENS & KROPFF, New York, N. Y. Renewed July 9, 1931, to Peter Mülhens, Cologne-on-the-Rhine, Germany, assignee.

36,708. TOILET SOAP, PERFUMES, TOILET WATER, COSMETICS AND FACE POWDER. Registered July 9, 1901. MÜLHENS & KROPFF, New York, N. Y. Renewed July 9, 1931, to Peter Mülhens, Cologne-on-the-Rhine, Germany, assignee.

37,104. SHIRTS. Registered September 24, 1901. S. LIEBOVITZ & SON. Renewed September 24, 1931, to S. Liebovitz & Sons, Inc., New York, N. Y., a Corporation of New York, assignee.

37,263. CHAINS. Registered October 29, 1901. J. F. STURDY'S SONS. Renewed October 29, 1931, to J. F. Sturdy's Sons Co., Attleboro Falls, Mass., a Corporation of Massachusetts, assignee.

37,640. CIGARETTE PAPERS. Registered January 14, 1902. MAISON PIERRE-BARDOU JOB, Perpignan, France. Renewed January 14, 1932, to Societe Job Anciens Etablissements Bardou-Job et Paulilhac, Perpignan and Toulouse, France, a Corporation of France, assignee.

82,474. HAMS, SHOULDERS, AND BACON. Registered June 27, 1911. T. M. SINCLAIR & CO., LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed June 27, 1931.

82,927. MEN'S, WOMEN'S, AND CHILDREN'S HOSE. Registered August 1, 1911. UNION MANUFACTURING CO., Frederick, Md., a Corporation of Maryland. Renewed August 1, 1931.

82,928. MEN'S, WOMEN'S, AND CHILDREN'S HOSE. Registered August 1, 1911. UNION MANUFACTURING CO., Frederick, Md., a Corporation of Maryland. Renewed August 1, 1931.

82,929. MEN'S, WOMEN'S, AND CHILDREN'S HOSE. Registered August 1, 1911. UNION MANUFACTURING CO., Frederick, Md., a Corporation of Maryland. Renewed August 1, 1931.

82,983. RAZORS, SHEARS AND SCISSORS, AND POCKET-KNIVES. Registered August 8, 1911. HERFARTH BROS., New Orleans, La. Renewed August 8, 1931.

83,012. SHERRY-WINE. Registered August 8, 1911. ALEX. D. SHAW & CO., New York, N. Y. Renewed August 8, 1931.

83,279. RICE. Registered August 29, 1911. RIDENOUR BAKER GROCERY CO., Kansas City, Mo., a corporation of Missouri. Renewed August 29, 1931.

83,577. COVERED WIRES, CABLES, AND CORES FOR ELECTRICAL PURPOSES. Registered September 26, 1911. HABIRSHAW WIRE COMPANY, Yonkers and New York, N. Y. Renewed September 26, 1931, to Habirshaw Cable & Wire Corporation, New York, N. Y., a Corporation of New York, assignee.

83,689. BAKING-POWDER. Registered October 3, 1911. PRICE BAKING POWDER COMPANY. Renewed October 3, 1931, to Royal Baking Powder Company, Chicago, Ill., a Corporation of New Jersey, assignee.

83,821. MINING, BLASTING, AND SAFETY FUSE. Registered October 17, 1911. E. I. DU PONT DE NEMOURS POWDER COMPANY, Hoboken, N. J., and Wilmington, Del. Renewed October 17, 1931, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware, assignee.

83,995. MINING, BLASTING, AND SAFETY FUSE. Registered October 31, 1911. E. I. DU PONT DE NEMOURS POWDER COMPANY, Hoboken, N. J., and Wilmington, Del. Renewed October 31, 1931, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware, assignee.

84,138. ZINC SHEETS. Registered November 7, 1911. SOCIETE ANONYME DES MINES & FONDERIES DE ZINC DE LA VIEILLE MONTAGNE, Angleur, Belgium, a Corporation of Belgium. Renewed November 7, 1931.

84,139. SPELTER. Registered November 7, 1911. SOCIETE ANONYME DES MINES ET FONDERIES DE ZINC DE LA VIEILLE MONTAGNE, Angleur, Belgium, a Corporation of Belgium. Renewed November 7, 1931.

84,152. CERTAIN TOILET PREPARATIONS. Registered November 7, 1911. ALBERT F. WOOD, Detroit, Mich. Renewed November 7, 1931.

84,417. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,418. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,420. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,421. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,423. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,425. LUBRICATING OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,426. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,427. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,428. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,429. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,430. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,431. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,432. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,433. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,434. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,435. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,437. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,714. TALKING-MACHINES AND PARTS THEREOF. Registered January 2, 1912. AMERICAN GRAPHOPHONE COMPANY. Renewed January 2, 1932, to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York, assignee.

84,772. A DISINFECTING FLUID. Registered January 2, 1912. WEST DISINFECTING COMPANY, New York, N. Y. Renewed January 2, 1932, to West Disinfecting Company, Long Island City, N. Y.

84,774. MUSICAL STRINGS. Registered January 2, 1912. THE RUDOLPH WURLITZER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed January 2, 1932.

84,799. MOLASSES. Registered January 9, 1912. AMERICAN MOLASSES CO. Renewed January 9, 1932, to The American Molasses Co. of New York, New York, N. Y., a Corporation of New York, assignee.

84,811. CONFECTIONS AND CHOCOLATES. Registered January 9, 1912. PAUL F. BEICH COMPANY, Bloomington and Chicago, Ill., a Corporation of Illinois. Renewed January 9, 1932.

84,819. CANNED PINEAPPLE. Registered January 9, 1912. THEO. H. DAVIES & COMPANY, LTD., Honolulu, Territory of Hawaii. Renewed January 9, 1932, to Peter Pan, Incorporated, Chicago, Ill., a Corporation of Illinois, assignee by mesne assignments.

84,985. BEDSPREADS AND COUNTERPANES. Registered January 16, 1912. MONUMENT MILLS, Housatonic, Mass., and New York, N. Y. Renewed January 16, 1932, to Monument Mills, New York, N. Y., a Corporation of Massachusetts.

84,990. SMOKED BEEF AND BACON. Registered January 16, 1912. NEWARK PACKING COMPANY, Newark, N. J., a Corporation of New Jersey. Renewed January 16, 1932.

85,018. HOSIERY. Registered January 16, 1912. E. SUTRO & SON COMPANY. Renewed January 16, 1932, to E. Sutro & Son Company, Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee by mesne assignments.

85,049. FLY-KILLERS OR HAND DEVICES FOR KILLING FLIES AND OTHER INSECTS. Registered January 23, 1912. UNITED STATES WIRE MAT COMPANY. Renewed January 23, 1932, to U. S. Manufacturing Corporation, Decatur, Ill., a Corporation of Illinois, by change of name.

85,156. WHEAT-FLOUR. Registered January 30, 1912. MOSELEY & MOTLEY MILLING CO., Rochester, N. Y., a Corporation of New York. Renewed January 30, 1932.

LABELS

REGISTERED OCTOBER 6, 1931

39,820.—*Title:* BEECH-NUT BRAND CHOCOLATE DROPS. For Candy. BEECH NUT PACKING COMPANY, Canajoharie, N. Y. Published August 13, 1931.

39,821.—*Title:* BLUE BYRD. For Cantaloupe Preserves (with Spices). BLUE BYRD SPECIALTY COMPANY, Dallas and Fort Worth, Tex. Published August 29, 1931.

39,822.—*Title:* BLUE BYRD. For Salad Dressing. BLUE BYRD SPECIALTY COMPANY, Dallas and Fort Worth, Tex. Published August 29, 1931.

39,823.—*Title:* BLUE BYRD. For Grape Jelly. BLUE BYRD SPECIALTY COMPANY, Dallas and Fort Worth, Tex. Published August 29, 1931.

39,824.—*Title:* BLUE BYRD. For Sandwich Spread. BLUE BYRD SPECIALTY COMPANY, Dallas and Fort Worth, Tex. Published August 29, 1931.

39,825.—*Title:* NUN'S FADEPROOF AND MOTHPROOF. For Yarns for Rug Making, Embroidering, Crocheting, and Knitting. T. BUETTNER & CO. INC., Chicago, Ill. Published March 4, 1931.

39,826.—*Title:* DEL MONTE LIQUID SPREADER. For Liquid Spreader for Making Liquid Sprays, Quicker Wetting and Better Spreading. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published April 2, 1931.

39,827.—*Title:* WEED KILLER. For Preparation for Killing Weeds. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published May 17, 1931.

39,828.—*Title:* GARDEN SULPHUR. For Garden Sulphur. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published May 17, 1931.

39,829.—*Title:* GARDEN BUG-GO. For a Poisoned Bait for Use in Controlling Snails, Slugs, Sow Bugs, Earwigs, Grasshoppers, Etc. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published June 5, 1931.

39,830.—*Title:* GARDEN BORDO. For Fungicide. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published February 26, 1931.

39,831.—*Title:* GARDEN WHALE OIL SOAP. For Garden Whale Oil Soap. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published March 2, 1931.

39,832.—*Title:* GREENHOUSE SPECIAL VOLCK. For Greenhouse Special Volck for Control of Greenhouse Pests. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published May 17, 1931.

39,833.—*Title:* GARDEN PY'RUM. For Spray for Killing Insect Pests. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published March 9, 1931.

39,834.—*Title:* POISONED BARLEY. For Poisoned Barley for Killing Squirrels, Gophers, and Prairie Dogs. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published May 17, 1931.

39,835.—*Title:* GARDEN FLUOSILICATE DUST. For Garden Fluosilicate Dust for Control of Beetles and Other Leaf Eating Insects. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published May 17, 1931.

39,836.—*Title:* GARDEN VOLCK. For Nicotine-Oil Spray. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published April 5, 1929.

39,837.—*Title:* LEAD ARSENATE. For Lead Arsenate. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published February 26, 1931.

39,838.—*Title:* PARA-DI-CHLORO-BENZENE. For Soil Fumigant for the Control of Peach Root Borer, Wire Worms, and Termites. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published May 17, 1931.

39,839.—*Title:* NURSERY VOLCK. For a Spray for the the Control of Nursery and Greenhouse Pests. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published September 2, 1930.

39,840.—*Title:* GARDEN TENDUST, A NICOTINE DUST. For a Nicotine Dust for Killing Aphis and Thrips. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published February 26, 1931.

39,841.—*Title:* QUALITY POULTRY. For Poultry. CALIFORNIA SPRAY-CHEMICAL COMPANY, Berkeley, Calif. Published September 1, 1931.

39,842.—*Title:* WHITE CROSS QUININE & IRON TONIC. For Quinine and Iron Tonic. J. H. CASH, doing business under the name of the American Drug Company, Mobile, Ala. Published May 12, 1930.

39,843.—*Title:* COLUMBUS SCHOOL SERIES. For Writing Tablets. THE CENTRAL TABLET MFG. CO., Columbus, Ohio. Published August 6, 1931.

39,844.—*Title:* HANDETRAY. For Sanitary Food Containers. THE CHAMPION NO-LEAK PAPER DISH COMPANY, Toledo, Ohio. Published July 29, 1931.

39,845.—*Title:* COLUMBIA. For Radio Tubes. COLUMBIA PHONOGRAPH COMPANY, INC., New York, N. Y. Published August 1, 1931.

39,846.—*Title:* RUST-OFF. For Compound Which Removes Rust from Porcelain and Enamel Ware and Metals. FAUST-KENNEDY COMPANY, Ann Arbor, Mich. Published August 24, 1931.

39,847.—*Title:* FACE MASSAGE AND FACE CREAM. For Face Massage and Face Cream. SALVATORE FAVITTA, Rome, N. Y. Published May 28, 1931.

39,848.—*Title:* FRANCES FOX LIQUID HERBAL SHAMPOO. For Liquid Herbal Shampoo. FRANCES FOX, Ridgewood, N. J. Published August 28, 1931.

39,849.—*Title:* SIR THOMAS. For Whiskey. THE FRANKFORT DISTILLERY, INC., Louisville, Ky. Published July 30, 1931.

39,850.—*Title:* HOFFMANS BUTTERMILK RYE BREAD. For Bread. HOFFMAN'S CAKE SPECIALTIES CO., Detroit, Mich. Published June 1, 1931.

39,851.—*Title:* TIGER BRAND CORN STARCH. For Corn Starch. THE HUBINGER COMPANY, doing business as The J. C. Hubinger Bros. Co., Keokuk, Iowa. Published July 10, 1928.

39,852.—*Title:* OLD NORTH STATE. For Watermelons. J. T. JOHN COMPANY, Johns, N. C. Published July 23, 1931.

39,853.—*Title:* COMB HONEY FRAGILE—COMB HONEY REMOVE FROM CASE AND DISPLAY. For Honey. G. B. LEWIS COMPANY, Watertown, Wis. Published July 10, 1931.

39,854.—*Title:* JUMBO BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published September 1, 1931.

39,855.—*Title:* L'MANDA. For Cologne. PARFUMERIE DOLLUP, INC., New York, N. Y. Published June 24, 1931.

39,856.—*Title:* SURE SEAL. For Pipe Joint Compound. ALBERT H. SACKS, doing business as Algus Company, New York, N. Y. Published July 28, 1931.

39,857.—*Title:* SHEA'S MAGIC WAXINE. For Dance Floor Wax. PETER JNO. SHEA, doing business as Shea Floor Surfacing Co., Detroit, Mich. Published May 27, 1931.

39,858.—*Title:* OLD EGYPTIAN TURTLE OIL CREAM. For Turtle Oil Cream. SMART & COMPANY, INC., doing business as Old Egyptian Laboratories, Los Angeles, Hollywood, Calif., and New York, N. Y. Published August 20, 1931.

39,859.—*Title:* SUBLIMEREST. For Mattresses. SOUTHERN MATTRESS COMPANY, New Orleans, La. Published June 16, 1931.

39,860.—*Title:* SWANWHITE. For Dyes, Bleaches, and Finishes. THE STANDARD BLEACHERY AND PRINTING CO., Carlton Hill, East Rutherford, N. J. Published August 20, 1931.

39,861.—*Title:* RAZORLINE. For Strop Dressing. HARRY J. STEINBRUNN, Philadelphia, Pa. Published July 13, 1931.

39,862.—*Title:* "X" BOILER LIQUID. For Liquid for Repairing Leaky Boilers. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Published August 4, 1931.

39,863.—*Title:* "X" RADIATOR LIQUID. For Liquid for Repairing Leaky Radiators. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Published August 4, 1931.

39,864.—*Title:* "X" BOILER LIQUID. For Liquid for Repairing Leaky Boilers. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Published August 4, 1931.

39,865.—*Title:* "X" RADIATOR LIQUID. For Liquid for Repairing Leaky Radiators. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Published August 4, 1931.

39,866.—*Title:* THE TALK OF THE TOWN. For Ice Cream. TOWN TALK ICE CREAM CO., INC., Brooklyn, N. Y. Published August 15, 1931.

39,867.—*Title:* LIONEL ROGERS UNIVERSITY CLUB. For Shaving Cream. VIVINY PERFUMERS, INC., West Haven, Conn. Published June 9, 1931.

39,868.—*Title:* MARY KING PEACH BLOOM NOURISHING CREAM. For Nourishing Cream. THE J. R. WATKINS COMPANY, doing business under the name of Watkins, Winona, Minn. Published May 15, 1931.

39,869.—*Title:* WORLD'S BEST COCKTAIL SAUCE—RED-HOT BARBECUE HORSE RADISH. For Barbecue Horse-Radish. MRS. BYRON WILLCUTS, Topeka, Kan. Published June 4, 1931.

PRINTS

REGISTERED OCTOBER 6, 1931

13,434.—*Title:* BEECH NUT CHOCOLATE FLAVORED DROPS. For Candy. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published August 13, 1931.

13,435.—*Title:* ARISTOCRAFT. For Porch Enclosures. GROVER C. LAMPHERE, Oneonta, N. Y. Published April 15, 1931.

13,436.—*Title:* McKESSON'S YODORA. For Delicate Deodorant Cream. McKESSON & ROBBINS, INCORPORATED, Fairfield, Conn. Published January 14, 1931.

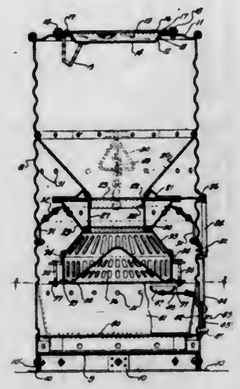
13,437.—*Title:* MINNEHAHA. For Beverages. MINNEHAHA WATER CO., Cleveland, Ohio. Published July 15, 1931.

13,438.—*Title:* VOSINE. For Mouth Wash. THE VOSINE CO., Lynn, Mass. Published August 13, 1931.

REISSUES

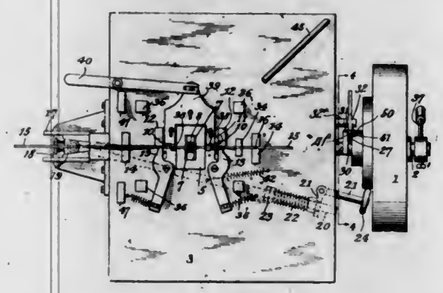
OCTOBER 6, 1931

18,218. HEATER. JULIUS J. GOETZ, Shorewood, Wis., assignor to Western Metal Specialty Co., Milwaukee, Wis., a Corporation of Wisconsin. Original No. 1,757,042, dated May 6, 1930, Serial No. 1,160,630, filed January 12, 1927. Application for reissue filed March 12, 1931. Serial No. 521,116. 12 Claims. (Cl. 126—50.)



1. In a car heater, a feed throat, a fire pot and grate assembly adapted to be suspended as a unit upon the feed throat and comprising fire pot body having a downwardly and outwardly flaring and perforated top formed at its upper end with an attaching and supporting flange adapted to be permanently interconnected with the lower end of the feed throat, said fire pot body also including a side having its upper portion interconnected with the lower end of the top, a grate having supporting engagement with the lower end of the side of the fire pot body, and releasable fastening devices extending between the top and the grate.

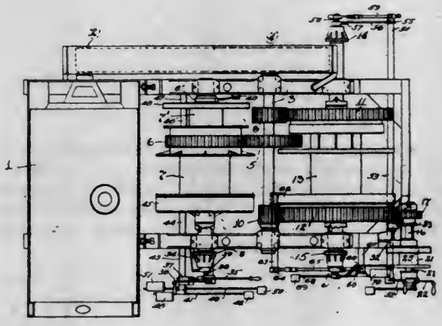
18,219. WIRE TYING APPLIANCE. JOHN SHERMAN MCCHESNEY, Chicago, Ill., assignor, by mesne assignments, to The Gerrard Company, Inc., San Francisco, Calif., a Corporation of Delaware. Original No. 1,360,236, dated Nov. 23, 1920, Serial No. 130,941, filed Nov. 13, 1916. Application for reissue filed Oct. 31, 1922. Serial No. 598,200. 75 Claims. (Cl. 100—31.)



31. In a wire loop closing machine two separated jaws adapted for the reception of two side by side disposed wires and to prevent the twisting of said wires, means for engaging and twisting said wires intermediate of said jaws, and a movable member cooperating with one of said wire holding jaws to form a wire cutter therewith.

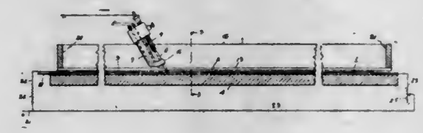
48. In a wire-tying machine, the combination of retaining means for holding terminal portions of a wire loop in side by side relation, automatically acting means operable with a step by step motion for tensioning said loop to a predetermined degree of tension, and means for uniting said terminal portions of the loop.

18,220. WINDING ENGINE. JOHN R. MCGIFFERT, Duluth, Minn., assignor to Clyde Iron Works, Duluth, Minn., a Corporation of Maine. Original No. 1,744,389, dated Aug. 26, 1930. Application filed Feb. 21, 1928, Serial No. 255,911. Renewed Dec. 6, 1929. Application for reissue filed Feb. 9, 1931. Serial No. 514,637. 5 Claims. (Cl. 254—185.)



1. In combination with a yarding engine comprising a motor unit, a yarding drum, a haulback drum, a straw drum, and means for selectively driving said drums from said motor unit including a gear loosely mounted on the shaft carrying said yarding drum, a shaft mounted adjacent to and parallel with said drum-carrying shaft, a rigging drum loosely mounted on said last-named shaft, and a pinion slidably mounted on said last-named shaft and adapted to be slid into or out of mesh with said gear.

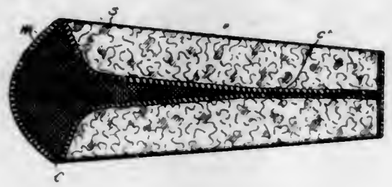
18,221. ARC WELDING. JAMES F. LINCOLN, East Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,774,023, dated Aug. 26, 1930, Serial No. 649,246, filed July 3, 1923. Application for reissue filed June 16, 1931. Serial No. 544,889. 49 Claims. (Cl. 219—8.)



1. In metal working by electricity, the steps which consist in establishing an arc between the work and a suit-

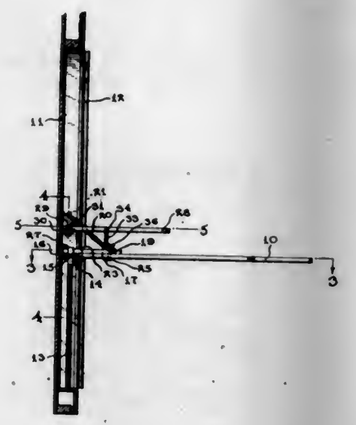
able electrode, relatively moving such work and electrode to cause the latter to follow the line to be welded, and surrounding such arc with a closed circuit for flux set up by flow of current through such arc.

18,222. NECKTIE. SAMUEL SCHWARTZ, Albany, N. Y., assignor to Si-Wo Corporation, a Domestic Corporation of New York. Original No. 1,741,345, dated Dec. 31, 1929, Serial No. 314,442, filed Oct. 23, 1928. Application for reissue filed June 23, 1931. Serial No. 546,399. 4 Claims. (Cl. 2—146.)



1. A necktie made of a composite fabric having a face fabric of relatively crushable material and a backing of relatively non-crushable material which is interwoven with said face fabric, said fabric being sufficiently heavy to make a separate filler piece unnecessary, said necktie having its edges stitched together.

18,223. FOLDING IRONING-BOARD. STEPHEN F. SLAWSKI, Culver City, Calif. Original No. 1,688,289, dated Oct. 16, 1928, Serial No. 144,282, filed Oct. 26, 1926. Application for reissue filed June 3, 1929. Serial No. 368,128. 5 Claims. (Cl. 68—10.)

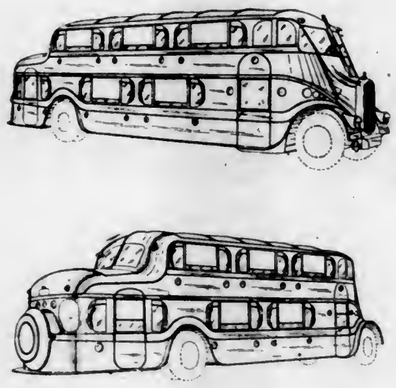


2. A folding ironing table comprising a board having a transverse plate with which the board is pivotally connected for angular adjustment in a horizontal plane, a rocker bar connected with said plate and provided with trunnions at its extremities, side walls having grooves for guiding the trunnions, and a folding supporting member connected with the plate at a point remote from the rocker bar and having pivotal mountings in the side walls.

DESIGNS

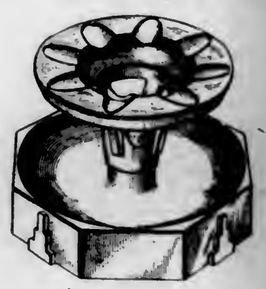
OCTOBER 6, 1931

85,273. VEHICLE. DWIGHT E. AUSTIN, Los Angeles, Calif. Filed Aug. 20, 1930. Serial No. 36,720. Term of patent 14 years.



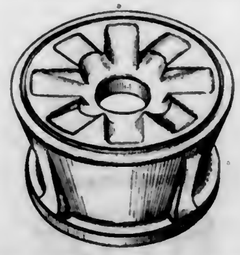
The ornamental design for a vehicle substantially as shown.

85,274. ASH TRAY, OR ARTICLE OF SIMILAR NATURE. STEPHEN D. BAKER, New York, N. Y. Filed Aug. 11, 1931. Serial No. 40,819. Term of patent 3½ years.



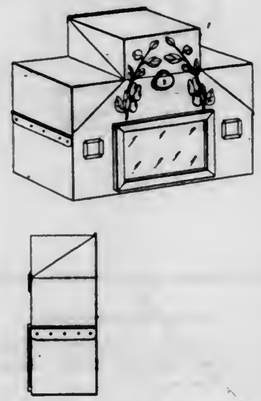
The ornamental design for an ash tray, or article of similar nature, as shown.

85,275. ASH RECEIVER, OR ARTICLE OF SIMILAR NATURE. STEPHEN D. BAKER, New York, N. Y. Filed Aug. 5, 1931. Serial No. 40,791. Term of patent 3½ years.



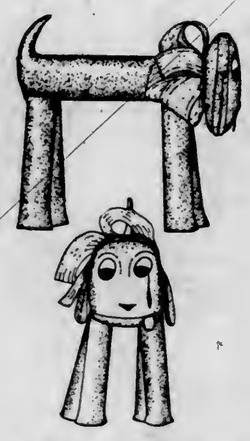
The ornamental design for an ash receiver, or article of similar nature, as shown.

85,276. STERILIZER KIT. RANSOM A. BARNES, Antioch, Calif. Filed July 23, 1931. Serial No. 40,688. Term of patent 7 years.



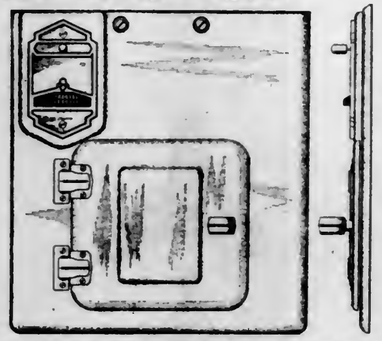
The ornamental design for a sterilizer kit, as shown.

85,277. NOVELTY DOG. CLARA B. BICKEL, San Francisco, Calif. Filed May 23, 1931. Serial No. 39,950. Term of patent 3½ years.



The ornamental design for a novelty dog as shown.

85,278. BAFFLE SHIELD. HOWARD E. BLOOD, Detroit, Mich., assignor to Norge Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 26, 1930. Serial No. 38,126. Term of patent 3½ years.



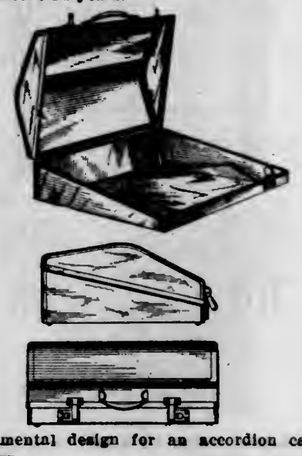
The ornamental design for a baffle shield, or similar article, as shown.

85,279. SERVICE BOTTLE. GALE E. BROOKE, Minneapolis, Minn. Filed July 17, 1930. Serial No. 36,378. Term of patent 14 years.



The ornamental design for a service bottle, as shown.

85,280. ACCORDION CASE OR THE LIKE. MORRIS BROOKS, East Orange, N. J., and JOHN CARNER, New York, N. Y. Filed June 13, 1931. Serial No. 40,208. Term of patent 14 years.



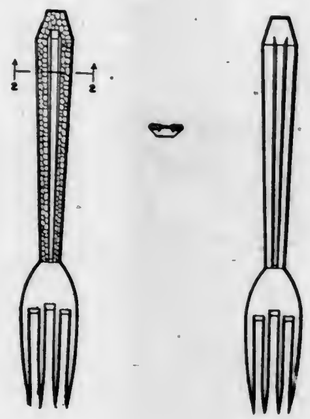
The ornamental design for an accordion case or the like, as shown.

85,281. LAMP. BAZEL E. CARRM, Chicago, Ill. Filed Aug. 6, 1931. Serial No. 40,792. Term of patent 7 years.



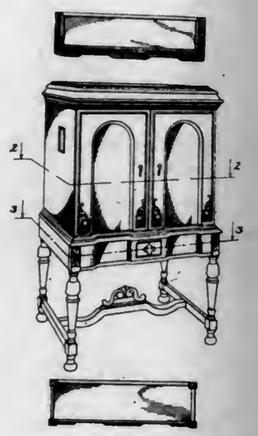
The ornamental design for a lamp, as shown.

85,282. FORK OR ANALOGOUS ARTICLE. PAUL C. GALLAGHER, Omaha, Nebr. Filed Apr. 17, 1931. Serial No. 39,535. Term of patent 3½ years.



The ornamental design for a fork or analogous article substantially as shown.

85,283. CABINET. LIONEL L. GINSBURG, Saginaw, Mich., assignor to Saginaw Furniture Shops, Saginaw, Mich., a Corporation of Michigan. Filed Mar. 26, 1930. Serial No. 35,035. Term of patent 3½ years.



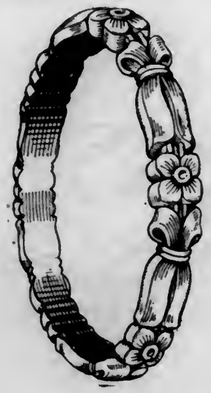
The ornamental design for a cabinet, as shown and described.

85,284. DOLL. NADESHDA J. GIVAGO-GRISHINA, Los Angeles, Calif. Filed July 21, 1931. Serial No. 40,615. Term of patent 7 years.



The ornamental design for a doll as shown.

85,285. FINGER RING. JOSEPH GRANAT, San Francisco, Calif. Filed July 22, 1931. Serial No. 40,621. Term of patent 3½ years.



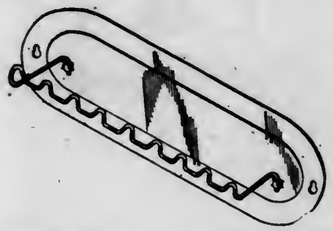
The ornamental design for a finger ring substantially as shown.

85,286. DISPLAY STAND. JAMES D. HASKINS, Brooklyn, N. Y. Filed June 9, 1931. Serial No. 40,136. Term of patent 3½ years.



The ornamental design for a display stand, as shown and described.

85,287. TIE RACK. JOHN H. HORSTMAN, Dayton, Ohio. Filed Feb. 6, 1931. Serial No. 38,572. Term of patent 3½ years.



The ornamental design for a tie rack, as shown.

85,288. DISPENSING MACHINE CASING. EDWARD KANTER, Cleveland Heights, Ohio. Filed July 14, 1931. Serial No. 40,540. Term of patent 14 years.



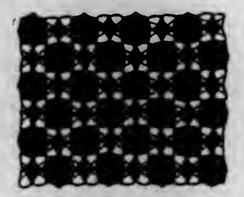
The ornamental design for a dispensing machine casing, as shown.

85,289. DISPENSING APPARATUS. EDWARD KANTER, Cleveland Heights, Ohio. Filed July 14, 1931. Serial No. 40,541. Term of patent 14 years.



The ornamental design for a dispensing apparatus, as shown.

85,290. LACE. GILBERT M. KING, Pawtucket, R. I., assignor to Seekonk Lace Company, a Corporation of Rhode Island. Filed Feb. 18, 1931. Serial No. 38,713. Term of patent 3½ years.



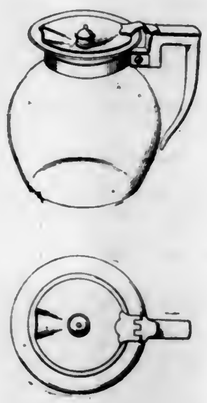
The ornamental design for lace substantially as described and shown.

85,291. STOP LIGHT FOR AUTOMOBILES. ALBERT KOTLAN, Cicero, Ill. Filed Aug. 4, 1931. Serial No. 40,782. Term of patent 3½ years.



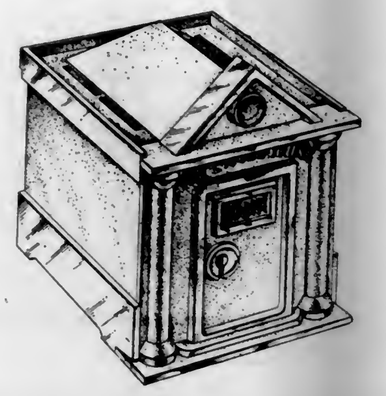
The ornamental design for a stop light for automobiles as shown.

85,292. TEAPOT. CHARLES D. LA FOLLETTE and HAROLD A. JAHRAUS, Corning, N. Y., assignors to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed July 9, 1931. Serial No. 40,478. Term of patent 14 years.



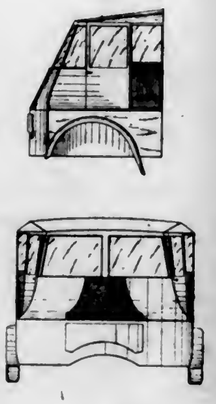
The ornamental design for a tea pot, as shown.

85,293. MONEY BANK. JOSEPH LAURENCE, Cleveland, Ohio. Filed Mar. 19, 1931. Serial No. 39,142. Term of patent 14 years.



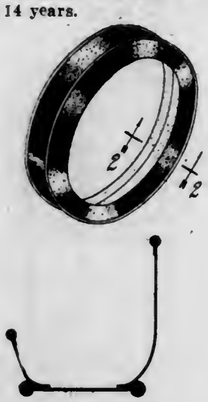
The ornamental design for a money bank as shown and described.

85,294. INCLOSED AUTOMOBILE CAB. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 9, 1930. Serial No. 37,927. Term of patent 14 years.



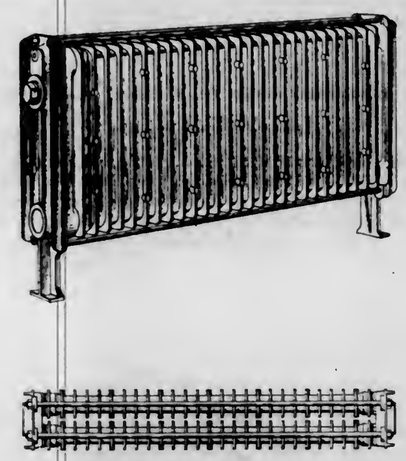
The ornamental design for an inclosed automobile cab, as shown.

85,295. TIRE COVER. THOMAS J. MCCORMICK and ROBERT E. LINN, Detroit, Mich.; said Linn assignor to said McCormick. Filed Mar. 2, 1931. Serial No. 38,908. Term of patent 14 years.



The ornamental design for a tire cover, substantially as shown and described.

85,296. RADIATOR. JAMES F. MCINTIRE, Detroit, Mich., assignor to United States Radiator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 3, 1931. Serial No. 40,762. Term of patent 14 years.



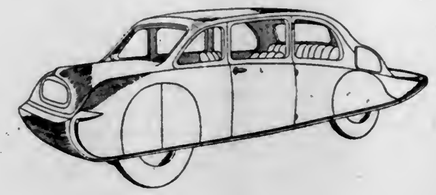
The ornamental design for a radiator substantially as shown and described.

85,297. HATCHET. JOSEPH J. R. MEYERS, New York, N. Y. Filed June 26, 1931. Serial No. 40,336. Term of patent 7 years.



The ornamental design for a hatchet, substantially as shown and described.

85,298. AUTOMOBILE. DONALD H. MONTGOMERY, Berlin, Conn. Filed Feb. 12, 1931. Serial No. 38,634. Term of patent 14 years.



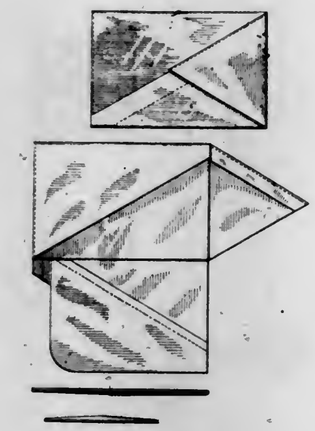
The ornamental design for an automobile as shown and described.

85,299. PANEL FABRIC FOR FURNITURE OR SIMILAR ARTICLES. GEORGE E. O'HEARN, Gardner, Mass., assignor to O'Hearn Manufacturing Company, Gardner, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1931. Serial No. 38,280. Term of patent 7 years.



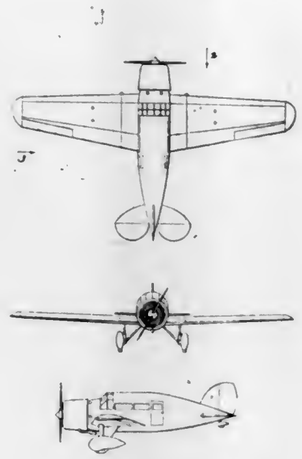
The ornamental design for a panel fabric for furniture or similar articles, as shown.

85,300. FOLDER OR SIMILAR CONTAINER CONSTRUCTED OF FLEXIBLE MATERIAL. NATHAN OTTINGER, New York, N. Y. Filed Apr. 22, 1931. Serial No. 39,595. Term of patent 14 years.



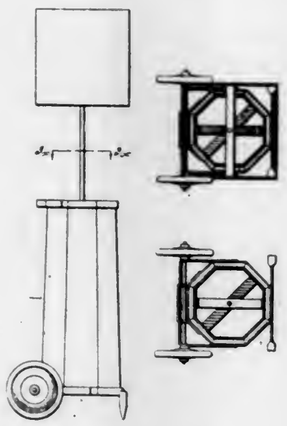
The ornamental design for a folder or similar container, constructed of flexible material, as herein shown.

85,301. AEROPLANE. ELMER C. PATZKOWSKI, Compton, Calif., assignor to Elmer C. Patzkowski, Edgar Truett, and Herbert Owsley, trustees. Filed Dec. 29, 1930. Serial No. 38,136. Term of patent 7 years.



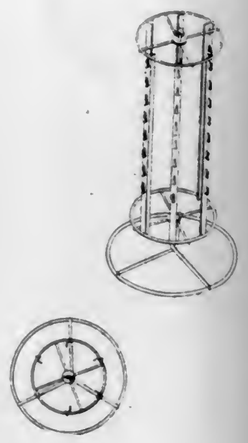
The ornamental design for an aeroplane, as shown.

85,302. TRAFFIC SIGNAL. THOMAS R. PAVELSKY, Rochester, N. Y. Filed May 27, 1931. Serial No. 40,003. Term of patent 14 years.



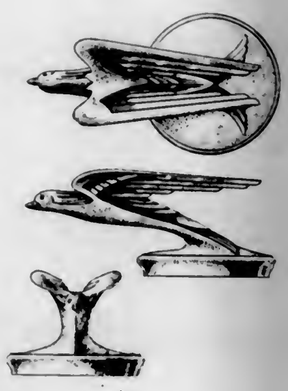
The ornamental design for a traffic signal as shown and described.

85,303. DISPLAY RACK. CHARLES A. PETERSON, Cleveland, Ohio, assignor to The Peterson Nut Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 16, 1931. Serial No. 40,573. Term of patent 14 years



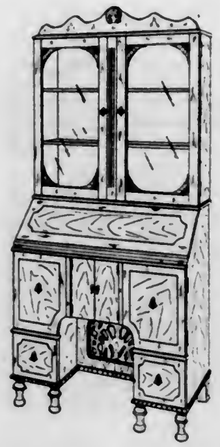
The ornamental design for a display rack as shown.

85,304. RADIATOR CAP OR SIMILAR ARTICLE FOR AN AUTOMOTIVE VEHICLE. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 2, 1931. Serial No. 38,516. Term of patent 7 years.



The ornamental design for a radiator cap or similar article for an automotive vehicle substantially as shown.

85,305. RADIOCABINET. RAY REGINALD SHEARER, Cleveland, Ohio. Filed Aug. 8, 1931. Serial No. 40,803. Term of patent 7 years.



The ornamental design for a radiocabinet substantially as shown and described.

85,306. RADIOCABINET. RAY REGINALD SHEARER, Cleveland, Ohio. Filed Aug. 14, 1931. Serial No. 40,856. Term of patent 7 years.



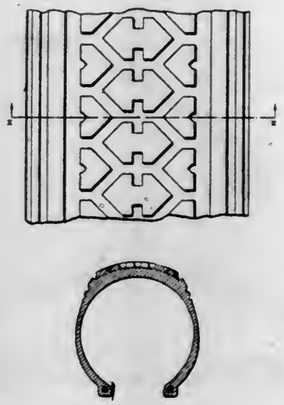
The ornamental design for a radiocabinet as shown.

85,307. BOTTLE. MILTON SIERAD, New York, N. Y., assignor to George W. Button Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 6, 1931. Serial No. 40,794. Term of patent 3½ years.



The ornamental design for a bottle substantially as shown.

85,308. TIRE. DONALD K. SLOTEMAN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 22, 1931. Serial No. 40,620. Term of patent 3½ years.



The ornamental design for a tire, as shown.

85,309. SUPPORT FOR SMOKERS' AND SIMILAR ARTICLES. ARTHUR VON FRANKENBERG, New York, N. Y. Filed May 9, 1931. Serial No. 39,796. Term of patent 3½ years.



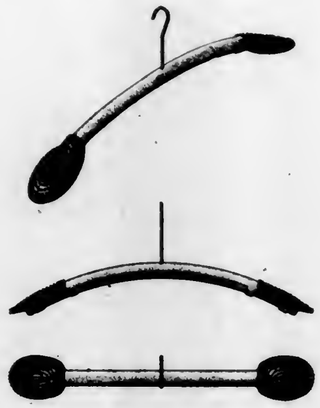
The ornamental design for a support for smokers' and similar articles, as shown.

85,310. COMBINED LAMP AND SUPPORTING BASE. ARTHUR VON FRANKENBERG, New York, N. Y. Filed May 9, 1931. Serial No. 39,798. Term of patent 3½ years.



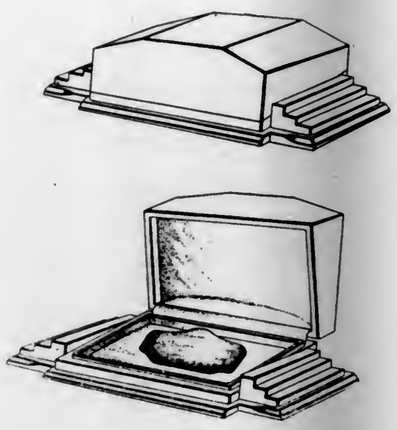
The ornamental design for a combined lamp and supporting base, as described and shown.

85,311. GARMENT HANGER. AMOS A. WYCKOFF and BERNICE L. YAUNEY, Oakland, Calif. Filed July 22, 1931. Serial No. 40,636. Term of patent 7 years.



The ornamental design for a garment hanger substantially as shown.

85,312. WATCH DISPLAY BOX. SYLVAN WOLFSHEIM, New York, N. Y. Filed Aug. 3, 1931. Serial No. 40,759. Term of patent 3½ years.

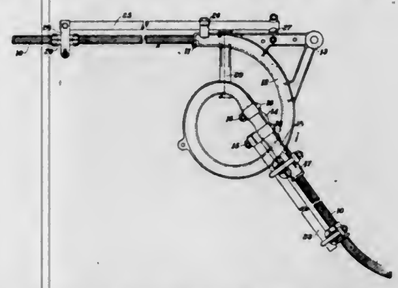


The ornamental design for a watch display box, as shown.

PATENTS

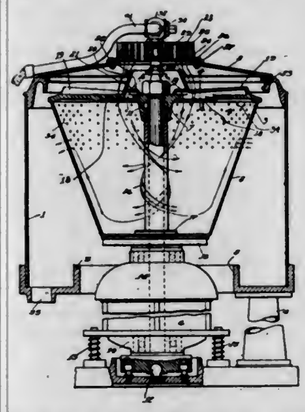
GRANTED OCTOBER 6, 1931

1,825,650. CLAMP FOR CABLES OR THE LIKE. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Feb. 12, 1929. Serial No. 339,304. 8 Claims. (Cl. 24—135.)



1. A cable clamp comprising a snubbing member having a curved seat for receiving the cable, said seat being disposed in a loop, the axis of which is substantially normal to the load end of the cable, the load end of said cable extending away from said seat in a direction substantially tangent to the curvature of said seat, means for securing a support to said clamp substantially in alignment with the load end of said cable, the radius of curvature of said seat being decreased progressively, said seat being extended to form more than a complete turn and having a substantially straight portion extended from the end thereof, having the lesser radius of curvature, said straight portion being directed away from the load end of said cable at an oblique angle to said cable, and means for securing said cable to said straight portion of said seat.

1,825,651. CENTRIFUGAL WASHER AND DRIER. LEON J. BARRETT, Worcester, Mass. Filed May 3, 1928. Serial No. 274,916. 3 Claims. (Cl. 68—18.)

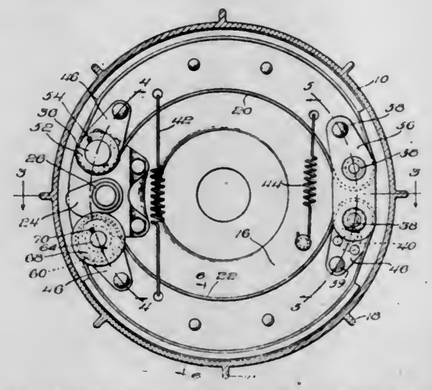


1. In a machine of the class described, a casing having an opening in its top, an article container rotatably mounted in said casing having radial slots in the top thereof, means for supplying liquid through the opening in the top of said casing and directing it downwardly to the inner ends of the slots in the top of said container, and means for rotating said container to cause air to be drawn in through the outer portions of said radial slots simultaneously with the delivery of liquid to the inner portions of said slots whereby to set up a swirling current of air and liquid within said container.

1,825,652. METALLIC BELLOWS AND METHOD OF PRODUCING THE SAME. WILLIAM H. BUELL, New Haven, Conn. Filed Dec. 3, 1927. Serial No. 237,976. 1 Claim. (Cl. 148—32.)

As a new article of manufacture, a thin wall metallic bellows of brass composed of approximately 80 per cent copper and 20 per cent zinc, and having a uniform grain structure sufficiently small to prevent or minimize slippage and distortion of the structure upon flexing of the bellows within normal working limits.

1,825,653. SHOE FOR AEROPLANE BRAKES. JOHN R. CAUTLEY, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 15, 1928. Serial No. 261,727. 8 Claims. (Cl. 188—78.)



1. A brake shoe comprising, in combination, a body portion comprising two channel-section elements secured back to back, separately-formed plates secured within and flush with the edges of said channels on opposite sides of the shoe, and parts on opposite sides of the shoe separated by said elements and said plates sufficiently to clear the shoe end.

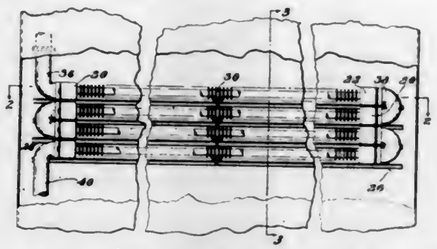
1,825,654. TERTIARY AMINE ANTIOXIDANTS. LUDWIG J. CHRISTMANN, Jersey City, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Aug. 28, 1928. Serial No. 302,641. 3 Claims. (Cl. 18—50.)

2. The process of retarding oxidation of an oxidizable organic compound which comprises mixing therewith tribenzylamine.

1,825,655. METHOD OF MANUFACTURING CELLULOSE. JOAQUIN JULIO DE LA ROZA, Sr., Tuinucu, Cuba. Filed Oct. 16, 1928. Serial No. 312,936. 5 Claims. (Cl. 92—11.)

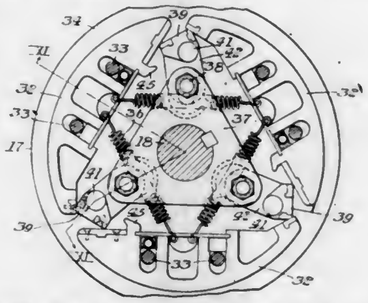
1. A method of treating vegetable fiber to produce cellulose, which includes, treating the fiber with a dilute sulphurous acid solution and, subsequently, treating the fiber with a solution that includes a base and is of an acid reaction.

1,825,656. HEAT EXCHANGE APPARATUS AND METHOD OF OPERATING THE SAME. GARDNER C. DERBY, Sharon, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed July 21, 1928. Serial No. 294,484. 21 Claims. (Cl. 257—230.)



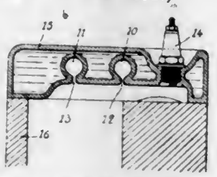
1. A heat exchange apparatus comprising a plurality of sections each having a front header and a rear header and tubes connecting the headers, the headers having diagonally opposed openings for inlet and outlet whereby the paths through all tubes of the section are of substantially equal length, and a connection between the inlet opening of one section and the outlet opening of another section.

1,825,657. APPARATUS FOR COILING STRIPS, ETC. EMIL DUKES, Pittsburgh, Pa., assignor to Gears & Forgings, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 24, 1928. Serial No. 249,166. 3 Claims. (Cl. 242—78.)



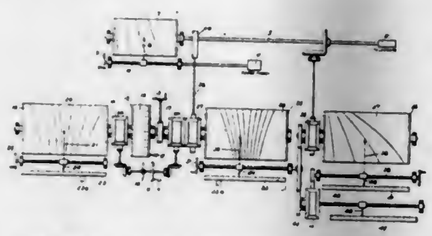
1. Coiling apparatus comprising a driving motor, a shaft, drum segments around said shaft and movable radially thereof, means pivotally mounted adjacent to the said segments for expanding the segments upon a rotative movement thereof, and a rotatable lost motion driving connection between said shaft and said segments operable to rotate said means in one direction to expand the segments during the initial rotative movement of the shaft, and operable to rotate said means in the other direction and to contract the segments during deceleration of said shaft.

1,825,658. INTERNAL COMBUSTION ENGINE. EMILE PAUL DUMANOIS, Boulogne-sur-Seine, France. Filed Mar. 3, 1928, Serial No. 258,799, and in France Mar. 15, 1927. 6 Claims. (Cl. 123—191.)



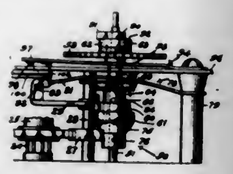
1. In a cylinder of internal combustion engine the provision of means whereby the dead space is divided in a plurality of separate spaces, each of which is in permanent communication through a small passage with a common space, the outline of said passage is drawn so as to be substantially perpendicular in each of its points to the direction of travel of the explosive way at the same point.

1,825,659. DATA COMPUTER. RALPH L. GOETZENBERGER, Philadelphia, Pa. Filed Sept. 29, 1926. Serial No. 138,561. 2 Claims. (Cl. 235—61.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



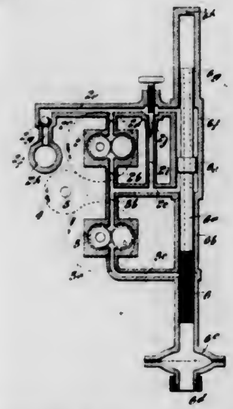
1. In a data computer, a member controllable from a sighting telescope and adapted to be moved proportional to angular height of a target, said member bearing a chart of curves of time of flight, a member movable proportional to slant range and indicating on the preceding member the time of flight, a member adjustable to said determination, means for combining with said member a movement proportional to engine speed, a pair of cylinders bearing curves of constant angle of approach receiving this combined movement, means for indicating lateral deflection correction from one of said cylinders, means for introducing into the other cylinder an additional movement whose function is log sin S, means for indicating vertical deflection correction from said last named cylinder, a member having a movement resulting from combining the functions of angular height and vertical deflection correction, said member bearing a chart of curves of constant slant range, means for indicating from said member the angle of superelevation and means for combining the function of superelevation and vertical deflection correction and indicating the total value.

1,825,660. ADJUSTABLE ACCESSORY TIME SWITCH. ROBERT R. GONSETT, Los Angeles, Calif., assignor of one-sixteenth to Virgil V. Ullom, one-sixteenth to Wesley D. Spencer, one-sixteenth to Howard A. Burrell, and one-sixteenth to Buck Walter, Los Angeles, Calif. Filed Feb. 1, 1928. Serial No. 251,111. 10 Claims. (Cl. 200—40.)



1. In combination with a timing device of the alarm clock type: a normally open switch member; switch operating means including a shaft having a drive spring mounted thereon; switch governing means; and clock means for operating said switch governing means, said governing means comprising a setting shaft provided with time indicating means, means for manually rotating said shaft in opposite directions, a forward and a rearward cam member rotatably mounted on said shaft and rigidly connected one with the other, a rearward engagement member rotatably mounted on said shaft and laterally movable relative to said cam members, means yieldably holding said rearward engagement member in engagement with said rear cam member, and means operable by the downward movement of said engagement member permitting a limited primary rotation of said switch operating shaft.

1,825,661. PUMPING APPARATUS. ADOLF EWALD GULL, London, England. Filed June 22, 1928. Serial No. 287,538, and in Great Britain July 26, 1927. 9 Claims. (Cl. 103—11.)

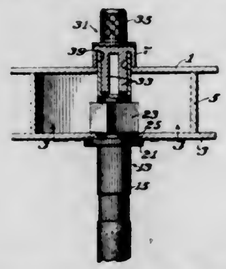


3. Pump regulating apparatus comprising two mechanically coupled pumps connected in series, a delivery outlet from the second pump of the series, a cylinder, a floating piston, a regulatable bye-pass, a variable resistance to flow from the pump, the cylinder being connected at one end to the suction side of the first pump and at the other end to the delivery side of the said pump, the piston moving freely in the said cylinder and mechanically connected to the variable resistance which moves freely in the delivery outlet of the second pump, and the said regulatable bye-pass being connected at one end to one end of the cylinder and at the other end to the other end of the cylinder.

1,825,662. MANUFACTURE OF THIOHYDROXY ORGANIC COMPOUNDS. WILLIAM J. HALE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 4, 1928. Serial No. 303,957. 6 Claims. (Cl. 260—154.)

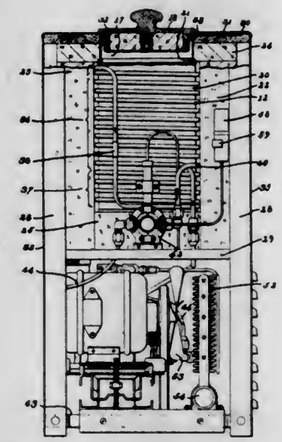
1. In a process for the manufacture of a thiohydroxy compound, the step which consists in reacting between hydrogen sulphide and a monohalogenated hydrocarbon while including the corresponding thioether with the reacting ingredients.

1,825,663. FILM REEL AND SPINDLE. ARTHUR C. HAYDEN, Brockton, Mass. Filed Dec. 20, 1927. Serial No. 241,428. 6 Claims. (Cl. 242—70.)



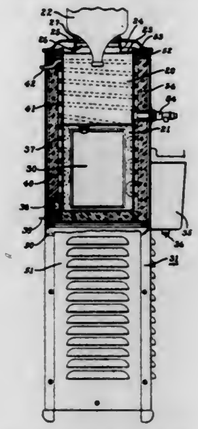
1. The combination of a film reel comprising a pair of plates and a hub between said plates adapted to have a film wound thereon, one of said plates having a hole therein and the other of said plates having an opening with tongues therein projecting toward but not to the center of the plate; and a spindle in said hole and opening and having a groove for receiving said tongues to prevent movement of the reel axially of the spindle.

1,825,664. REFRIGERATING APPARATUS. HARRY B. HULL and GEORGE F. HOFFERBERTH, Dayton, Ohio, assignors to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 29, 1928. Serial No. 257,990. 7 Claims. (Cl. 62—116.)



6. Refrigerating apparatus comprising in combination, a condensing element and an evaporating element connected in closed circuit relation, the evaporating element being above the level of the condensing element and including a pair of coils of tubing connected in series and disposed at different levels, the coils being so arranged that refrigerant flows upward through the higher coil and then upward through the lower coil.

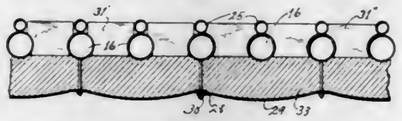
1,825,665. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 30, 1928. Serial No. 289,548. 2 Claims. (Cl. 62—116.)



1. A water cooler comprising a water cooling compartment adapted to receive a demijohn, a food compartment in alignment below said water cooling compartment, an

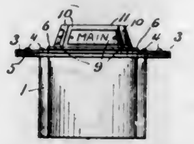
automatic refrigerant expansion valve, an expansion coil with its portion adjacent said expansion valve in thermal contact with said foot compartment and with another portion beyond said first named portion in contact with said water cooling compartment.

1,825,666. TUBE SUPPORTED FURNACE WALL. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 10, 1926. Serial No. 122,803. 3 Claims. (Cl. 122—6.)



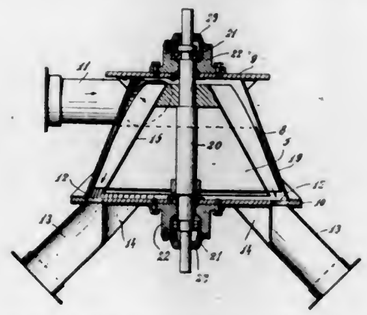
1. In a furnace wall, a row of spaced water tubes, tile extending between said tubes and forming a wall having recesses opening towards the inner surface of the wall and receiving said tubes, and superheater tubes extending into said recesses between the water tubes and said inner surface.

1,825,667. STREET MARKER. LAURENCE A. JOHNSON, Kansas City, Mo. Filed Dec. 12, 1928. Serial No. 325,464. Renewed Aug. 21, 1931. 2 Claims. (Cl. 40—125.)



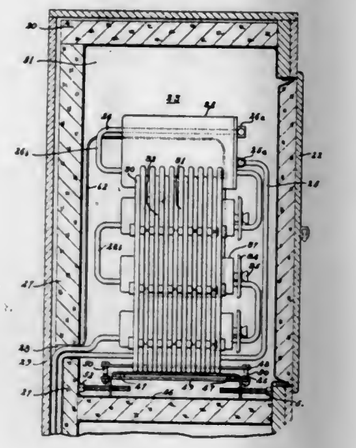
1. In a street marker, a housing adapted to be embedded in the pavement at a street intersection, a member vertically movable and sufficiently loosely fitted in said housing as to be tiltable therein in two directions at angles to each other and depressible by a vehicle from a raised position projecting above said pavement, resilient means in said housing firmly supporting said member in the depressed position, and means for normally forcing said member to the raised position.

1,825,668. MIXER AND DISTRIBUTOR FOR PNEUMATIC TRANSPORTED PULVERIZED MATERIAL. JOSEPH E. KENNEDY, New York, N. Y. Filed Mar. 16, 1928. Serial No. 262,097. 16 Claims. (Cl. 302—28.)



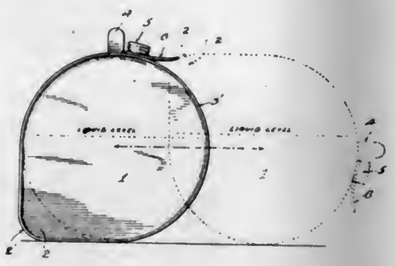
1. In a mixer and distributor for pulverized material transported in suspension in an air stream, a casing having an inlet and outlet means arranged for connection in a conduit, a head of less cross sectional area than and rotatable in the casing, a shell extended about and spaced from the head in the casing with the space between said head and shell in communication with the inlet and outlet means of the casing for the passage of the pulverulent material laden air stream therethrough, and means to unite said shell with the head to rotate therewith and arranged to agitate the pulverulent material laden air in its passage through the casing.

1,825,669. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Original application filed Oct. 3, 1923, Serial No. 666,257. Divided and this application filed Dec. 15, 1927. Serial No. 240,285. 6 Claims. (Cl. 62—169.1.)



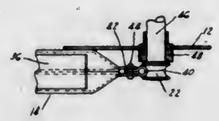
1. An iceless cooling unit having a pair of oppositely extensible members for aiding in fastening said unit within a refrigerator.

1,825,670. CONTAINER. HENRY G. KUCK, Peoria, Ill. Filed May 3, 1928. Serial No. 274,712. 7 Claims. (Cl. 221—1.)



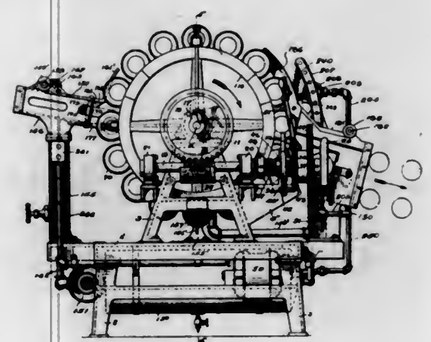
1. A container for a liquid having a cylindrically curved wall and adapted to roll on said wall moving its axis along a substantially horizontal line, such container including a liquid holding extension the walls of which are extensions of the said cylindrically curved wall substantially tangent thereto, and walls closing the ends of the container conforming to the said extension, the latter acting as a weight to move the container to an upright position and to prevent the same from moving in one direction.

1,825,671. BRAKE SHOE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 25, 1927. Serial No. 235,405. 4 Claims. (Cl. 188—250.)



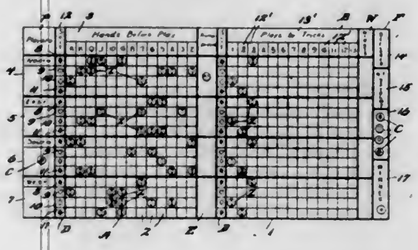
1. A brake shoe having a recess at its end, in combination with a thrust member comprising a piece of sheet metal doubled on itself and forming a cylindrical thrust end and a double-thickness portion seated in said recess.

1,825,672. APPARATUS FOR TESTING SEALED CONTAINERS. FRANCIS H. LANDRUM, San Francisco, Calif. Filed Oct. 10, 1927, Serial No. 225,134. Renewed May 24, 1930. 22 Claims. (Cl. 73—51.)



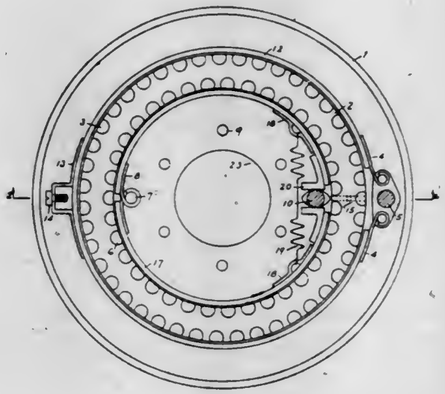
1. A machine for testing sealed containers, comprising a drum rotating about a horizontal axis and having a peripheral series of container receiving pockets, means carried by the drum for subjecting the containers successively to reduced fluid pressure, means associated with the drum for moving the containers in the pockets successively into engagement with the reduced pressure applying means, and means controlled by the movement of the walls of containers having vacuum deficiencies to segregate said containers from those having normal vacuum conditions.

1,825,673. GAME BOARD. ALBERT N. LATIMER, New York, N. Y. Filed Mar. 22, 1928. Serial No. 263,878. 2 Claims. (Cl. 273—136.)



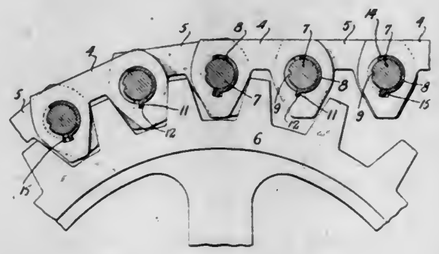
1. In combination a game board and a plurality of game pieces, certain of which constitute markers denoting, respectively, trumps, no trump, dealer, and winner, the face of said board being divided into four divisions representing players indicated as North, East, South, and West, respectively, each division divided into two sections by a trump declared column, all of said sections being divided into four longitudinal columns designating the respective game piece suits, and into thirteen vertical columns representing the game piece face designations and forming 52 squares adapted to receive the respective game pieces according to their suit and face designations, the other complemental section being similarly divided into 52 squares representing suit and trick numbers, each square adapted to receive and record a respective game piece according to its suit and number of trick in which played, and a space adjacent each of said latter sections adapted to receive a game piece representing the winner.

1,825,674. BRAKE CONSTRUCTION. FREDERICK H. LEEK, Cleveland, Ohio. Filed Apr. 23, 1928. Serial No. 272,002. 8 Claims. (Cl. 188—74.)



1. In a brake construction, a brake band, a brake flange having recesses in its periphery, Babbitt-metal carried in said recesses, and means whereby said band is forced into contact with said Babbitt-metal.

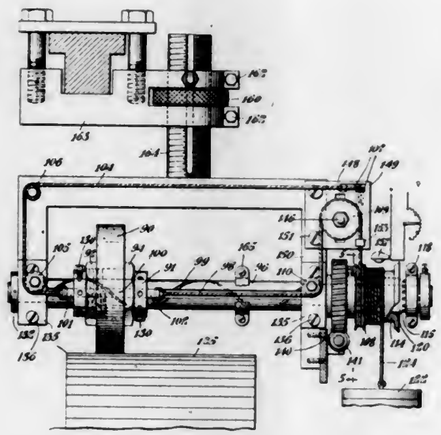
1,825,675. POWER TRANSMISSION CHAIN. FRANK L. MORSE, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed May 17, 1928. Serial No. 278,424. 4 Claims. (Cl. 74—32.)



1. A chain comprising, in combination, a series of links composed of plates, and joints for said links comprising

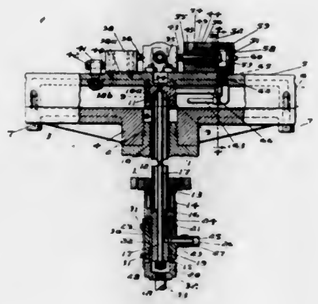
cylindrical pins secured against rotation in apertures at one end of the links, spring bushes, means for securing said bushes in apertures at the other end of the links, comprising projecting means on the bushes, and means for receiving said projecting means in the apertures in which the bushes are secured.

1,825,676. METHOD AND MEANS FOR TRUING COMMUTATORS. HORACE D. MUNDAY, Schenectady, N. Y. Filed May 18, 1928. Serial No. 278,748. 13 Claims. (Cl. 51—244.)



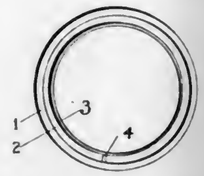
9. In a dynamo electric machine having a commutator, a guiding member positioned adjacent to said commutator, an abrasive block, means for automatically passing the abrasive block slowly between the member and the commutator as the latter revolves.

1,825,677. WORKHOLDING APPARATUS. DWIGHT C. PAGE, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 19, 1928. Serial No. 320,350. 6 Claims. (Cl. 279—4.)



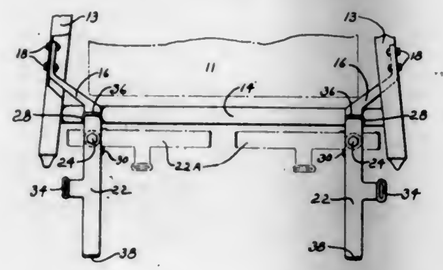
1. In apparatus of the class described, the combination with a pair of movable work-holding members cooperating with each other and fluid pressure means to operate them, of means to insure movement of one of said work-holding members prior to movement of the other of said work-holding members.

1,825,678. CYLINDER LINING. CLOVIS C. PITTMAN, New York, N. Y., assignor of one-half to Thomas G. McClatchey, New York, N. Y. Filed May 7, 1928. Serial No. 275,625. 2 Claims. (Cl. 74—108.)



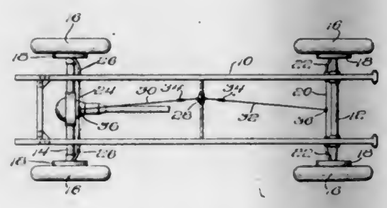
1. An engine cylinder comprising a hollow cylindrical body portion, a cylindrical lining of a heat insulating and hard wearing material, and a slit intermediate cylindrical portion of ductile material between the body portion and lining.

1,825,679. TRUNK RACK. FREDERICK A. SELJE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 17, 1927. Serial No. 233,756. 4 Claims. (Cl. 224—29.)



1. A device of the class described comprising, a pair of brackets each having a depressed portion adapted to seat on the rear cross member of a vehicle frame and adapted to be secured to side frame members of said frame, supporting arms pivoted intermediate their ends on said brackets adapted to swing in a horizontal plane, seats on said arms extending on opposite sides of their pivots for supporting a trunk and means for securing said arms in one of several positions.

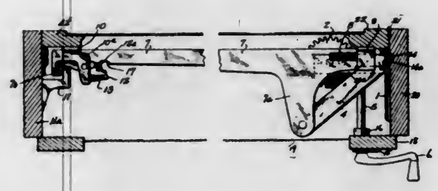
1,825,680. BRAKE-OPERATING CONNECTION. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Aug. 15, 1922, Serial No. 581,945. Divided and this application filed Apr. 16, 1928. Serial No. 270,194. 18 Claims. (Cl. 188—10.)



5. Braking mechanism for vehicles, having a plurality of pairs of wheels, a brake for each wheel provided with

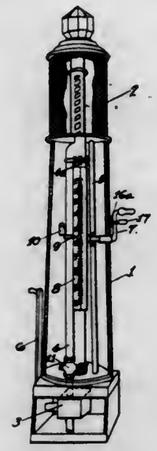
actuating means and manually-controlled power-applying means, comprising unyielding tension members connecting said power-applying means to said brake-actuating means, including a fully floating system of unyielding power-transmitting tension elements applied by the brake lever and connected to all of the respective brake-actuating means to transmit such power unyieldingly to the respective brakes.

1,825,681. WINDOW ADJUSTER. ANTON C. SINNES, Miami, Fla. Filed July 11, 1928. Serial No. 291,753. 13 Claims. (Cl. 268—105.)



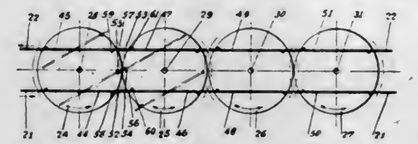
3. In a window adjuster, the combination with a longitudinally sliding member, of a window sash, means for supporting the said member movably upon the window sash, a window jamb, devices carried by the jamb for engaging one end of the said member to lock the sash when the member is moved longitudinally, means for locking the other end of the said member when the member is moved longitudinally, and mechanism for actuating the said member to release the locks and for swinging the member to open the sash.

1,825,682. LIQUID DISPENSING APPARATUS. WALTER E. SPLAIN, Terrace Park, Ohio, assignor to William B. Grischy, Cincinnati, Ohio. Filed Sept. 18, 1928. Serial No. 306,632. 4 Claims. (Cl. 221—100.)



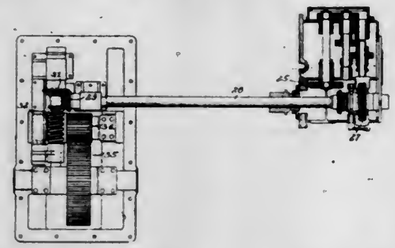
1. A fluid dispensing assembly comprising a gravity dispensing reservoir, means for filling said reservoir, a pipe through which said filling means may fill said reservoir, a movable member controlling the quantity dispensed from said reservoir, said member operatively connected with means for registering the movement thereof, means for blocking the passage of fluid through said first mentioned pipe, and means operatively connected with said movable member for opening said fluid blocking means at a predetermined position of movement of said movable member.

1,825,683. TURNING ARRANGEMENT FOR MONORAIL SUSPENDED VEHICLES. CURT STEDEFELD and WILLY BLACK, Heidelberg, Germany; said Black assignor to said Stedefeld. Filed Apr. 27, 1928, Serial No. 273,349, and in Germany May 4, 1927. 12 Claims. (Cl. 104—99.)



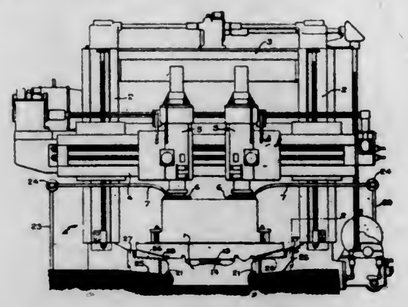
1. A turning arrangement for mono rail suspended vehicles, in particular for propeller driven high speed trains, in which a plurality of turning bridges are arranged in series, each of which takes a part of the vehicle train and turns it into the new running direction.

1,825,684. MILLING MACHINE. ALFRED TROSCH, Rochester, N. Y., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed July 26, 1928. Serial No. 295,540. 15 Claims. (Cl. 90—15.)



1. The combination with a rotary tool of a milling machine and an electric motor therefor, of work feeding mechanism, an independent electric motor operating the work feeding mechanism, and means controlling said motors whereby stopping the tool motor automatically causes the work feeding motor to stop simultaneously with the tool motor.

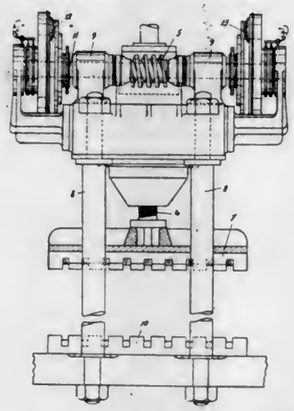
1,825,685. MACHINE TOOL. ALFRED TROSCH, Rochester, N. Y., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed Oct. 8, 1928. Serial No. 311,029. 2 Claims. (Cl. 90—11.)



1. A machine tool comprising in combination a bed having liquid conducting channels along the sides thereof, upright columns, said bed including central bridge portions connecting with the columns, the bridge portions being inclined downwardly toward the bed and terminating in gutters extending longitudinally of the bed above

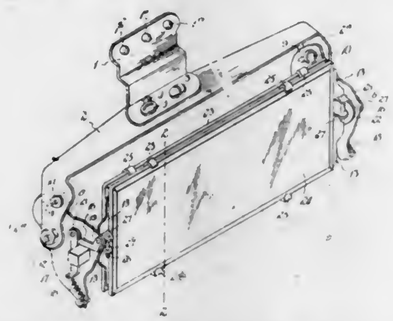
the aforesaid channels and emptying into the same, and a work table including a perforate top and an imperforate bottom spaced therefrom, and transverse vertical walls connecting the top and bottom, said bottom serving to conduct any cooling medium falling from said top to the aforementioned channels alongside the bed.

1,825,686. SCREW PRESS. MALCOLM WALKER, Glasgow, Scotland, assignor to James Livingstone, Ardbeg, Scotland. Filed May 18, 1928, Serial No. 278,756, and in Great Britain May 11, 1927. 3 Claims. (Cl. 192—84.)



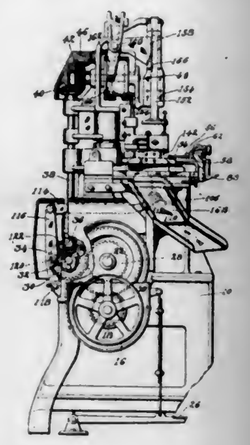
1. In a press having a press platen, a main shaft, mechanism for operating said platen from said shaft, a pair of electro-magnetically actuated friction clutches on said shaft, a driving pulley carried by each clutch, a driving motor, means for rotating said pulleys in opposite directions from said motor, an adjustable electro-magnet device in the current supply to the motor, and mechanism operated by said device at a predetermined moment to interrupt the current supply to the clutch of the forward-drive belt pulley, when the pressure of the press platen has reached a predetermined maximum.

1,825,687. REVERSIBLE-NONGLARING REAR-VISION MIRROR FOR AUTOMOBILES. JOHN WILCZYNSKI, Buffalo, N. Y. Filed Mar. 28, 1928. Serial No. 265,382. 7 Claims. (Cl. 45—97.)



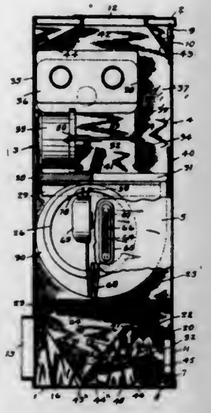
1. A reversible rear vision device for automobiles, comprising a supporting bracket having openings with walls disposed at right angles to each other, a reversible double mirror having squared pivots at its ends received in the aforesaid openings for supporting the mirror in the bracket and adapted to engage the angular disposed walls in either position of the mirror, and means yieldingly engaging the flat surfaces of said pivots permitting the mirrors to be reversed and held in different positions.

1,825,688. MACHINE AND METHOD FOR FORMING AND ATTACHING RANDS. FRED ASHWORTH, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 29, 1927. Serial No. 202,446. 26 Claims. (Cl. 12—67.)



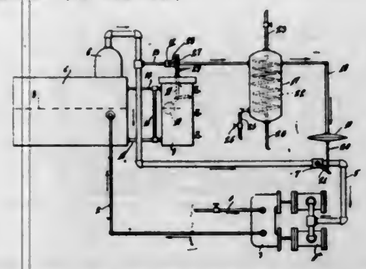
1. In a machine of the class described, a combination of a former having an internal face of a predetermned shape which it is desired to impart to a rand, and means for forcing the outer edge of a rand strip into conformity with said face of the former.

1,825,689. THERMAL CONTROL FOR DAMPERS FOR HEATING AND VENTILATING UNITS. MICHAEL J. CALLAHAN, New York, N. Y.; Arthur V. Deardon and Elmer E. Wigg, executors of said Michael J. Callahan, deceased, assignors to Peerless Unit Ventilation Co. Inc., Bridgeport, Conn. Filed Apr. 15, 1927. Serial No. 184,023. 8 Claims. (Cl. 236—38.)



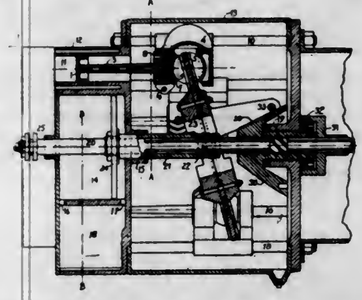
1. A heating and ventilating unit having recirculating means including a damper and mechanical means for actuating the same, a motor and blowers actuated thereby, a source of electric energy for actuating the motor, a shunt circuit including a solenoid and a thermostatic device, means operated by the thermostatic device for opening and closing the shunt circuit, and mechanical means between the solenoid and the damper for actuating the latter.

1,825,690. BOILER CONTROL DEVICE. ALBERT D. GRIFFIS, Los Angeles, Calif., assignor of one-third to H. L. Horton and one-third to E. M. Buckius, Los Angeles, Calif. Filed Jan. 27, 1927. Serial No. 163,919. 6 Claims. (Cl. 103—18.)



6. In a device of the class described, the combination of a boiler, a boiler water supply line, a pump, a steam line from said boiler to said pump, a control valve mounted in said pump steam line, a means for automatically actuating said control valve, a float chamber connected with said boiler, a float operatively mounted in said float chamber, a steam valve actuated by said float, a steam line connecting said float actuated valve and said means for automatically actuating said control valve, and a condenser for condensing the steam in the last named steam line when the float actuated steam valve is closed whereby a predetermined water level is automatically maintained in said boiler.

1,825,691. INTERNAL COMBUSTION ENGINE. EDWIN SYDNEY HALL, New Haven, Conn. Filed Sept. 8, 1927. Serial No. 218,223. 10 Claims. (Cl. 74—14.)



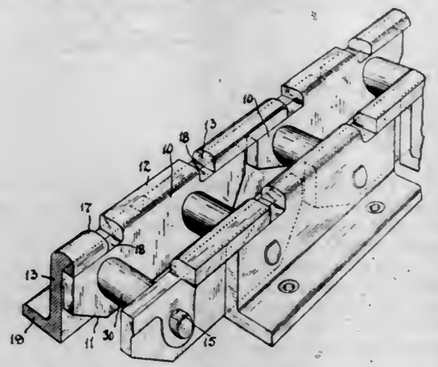
1. In an internal combustion engine, a rotatable shaft, cylinders disposed about said shaft and having their axes parallel thereto, a swash plate rotatable with said shaft and mounted thereon, pistons reciprocatory in said cylinders and operably connected to said swash plate, and means for varying the length of stroke of said pistons while maintaining their compression ratio in said cylinders substantially constant.

1,825,692. HEEL. ARTHUR C. HAYDEN, Brockton, Mass. Filed Mar. 24, 1926. Serial No. 97,090. 3 Claims. (Cl. 36—35.)



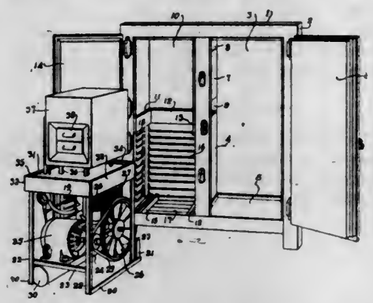
1. A rubber heel for application to a shoe comprising an elastic rubber body having a tread face with a shallow recess of substantial area therein, an elastic rubber member fitting into said recess having an outer face flush with the tread face of the body, a flanged socket embedded in the rubber member, and a nail having a rounded head seated in said socket and a shank projecting out from the member into the body with a hook at the end thereof for securing the member into the recess.

1,825,693. TRACTOR BELT LINK. CLARENCE ALVIN HENNEUSE, Bucyrus, Ohio. Filed May 19, 1927. Serial No. 192,697. 2 Claims. (Cl. 305—10.)



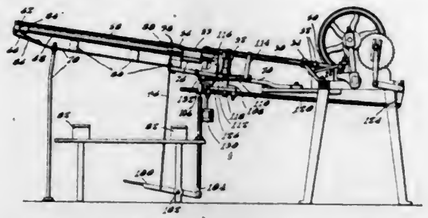
1. In an endless track, the combination of tread shoes, longitudinally contiguous links consisting of spaced members having laterally projecting flanges extending longitudinally medially on one edge thereof, connecting means for said links consisting of angle members each having one leg in contact with one of said link members, and the other leg secured to a tread shoe, said laterally projecting flanges overlapping said first-mentioned legs of the angle members, registering openings in said link members and said connecting members, and connecting pins carried in said openings.

1,825,694. REFRIGERATOR. EDWARD A. HOBART, Troy, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 25, 1926. Serial No. 97,430. 5 Claims. (Cl. 62—116.)



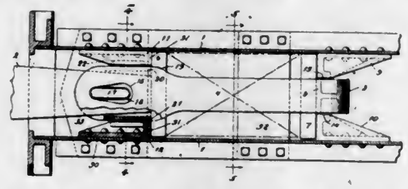
1. A refrigerator comprising a cabinet including walls having insulated and non-insulated portions, and a unitary structure comprising an insulating wall cooperating with said insulating portions adjacent the edge thereof for dividing said cabinet walls into a compartment, all of the walls of which are insulated, and a compartment in which all of the outside walls are non-insulated, said unitary structure also including a heat absorbing element disposed on one side of said insulating wall and within the insulated compartment and including a heat dissipating element disposed on the other side of said insulating wall and within the other of said compartments, a part of the insulating wall portion of the cabinet being movable and said other compartment having an opening, said unitary structure being movable from or into the cabinet in planes substantially parallel with said insulating wall when said part is moved.

1,825,695. NAIL PLATE FEEDER. WILLIAM H. JOHNSON, Arlington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 3, 1925. Serial No. 41,299. 21 Claims. (Cl. 10—171.)



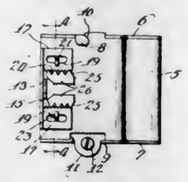
1. A nail plate feeding device for a nail machine comprising a rod, means connected with said rod for urging the same forward, a nipper jaw rigidly connected thereto, a second nipper jaw pivoted to the first so that the two jaws will grip a nail plate to present the nail plate to a nail machine and arranged so that by squeezing the nipper jaws at the side of the pivot remote from their nail engaging portions the jaws will be opened and by releasing the squeezing the jaws will close.

1,825,696. DRAFT RIGGING. BYERS W. KADEL and PERCY R. DRENNING, Baltimore, Md., assignors to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Mar. 19, 1925, Serial No. 16,649. Renewed Feb. 10, 1931. 14 Claims. (Cl. 213—50.)



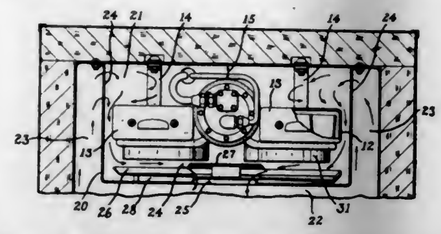
1. In a draft rigging, the combination with draft sills, of a coupler, a yoke pivotally connected thereto and provided with means for limiting said pivotal motion, and means on the draft sills, adjacent said limiting means and presenting flat faces thereto for reinforcing the same.

1,825,697. OUTLET BOX. LOUIS KELLNER, Chicago, Ill., assignor to Jefferson Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 27, 1925. Serial No. 39,928. 11 Claims. (Cl. 247—19.)



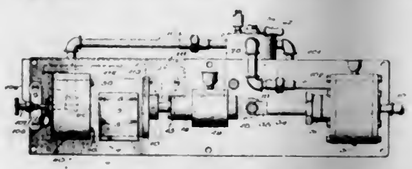
1. An outlet box having, in combination, a box, a bracket having a pair of legs fitting against said box, said legs being formed with slots and with notches on their edges, the notches on each leg being aligned in parallel relation to said slots, plates on said box having notches engaging said first mentioned notches to position said bracket selectively in different positions of adjustment on said box, and a pair of clamping members permanently and rotatably secured to said box, one of said clamping members extending through each slot and being adapted to be rotated into and out of interlocking relation with the associated leg.

1,825,698. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Sept. 30, 1927. Serial No. 223,076. 5 Claims. (Cl. 62—126.)



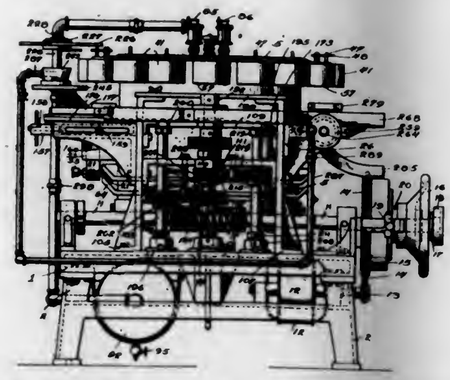
5. An evaporator for refrigerating apparatus including a header forming a reservoir for liquid refrigerant, a conduit means connected to the header and disposed entirely below the liquid level thereof and in a substantially horizontal plane at one side of the header, and a compartment for an ice-making container supported on the upper side of the tube.

1,825,699. MEANS FOR TESTING SEALED CONTAINERS. FRANCIS H. LANDRUM, Honolulu, Territory of Hawaii, assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii, a Corporation of Hawaii. Filed June 30, 1925. Serial No. 40,608. 11 Claims. (Cl. 73—51.)



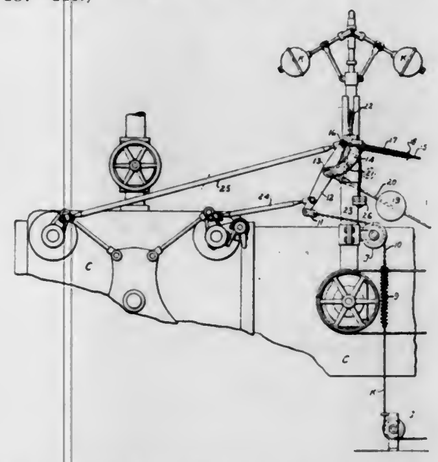
1. A machine for testing the vacuum in sealed containers, comprising means for subjecting the containers to fluid pressure below atmospheric pressure, and means actuated by the movement of the walls of the containers under such reduced pressure to indicate vacuum deficiencies in said containers.

1,825,700. METHOD AND APPARATUS FOR TESTING SEALED CONTAINERS. FRANCIS H. LANDRUM, Honolulu, Territory of Hawaii. Filed Oct. 10, 1927. Serial No. 225,133. 55 Claims. (Cl. 73—51.)



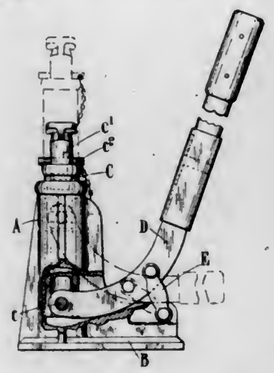
55. The method of testing sealed containers having flexible sections capable of outward movement under abnormal internal pressure, which comprises applying a force externally of said sections of a character to cause said sections to be moved outwardly by the internal pressure only when the internal pressure exceeds a predetermined amount, and segregating the containers whose sections respond to the applied force from those having normal internal pressure conditions.

1,825,701. SPEED CONTROLLING MEANS FOR ENGINES. MICHAEL B. MENNIGES, St. Louis, Mo. Filed Jan. 12, 1927. Serial No. 160,559. 2 Claims. (Cl. 137—140.)



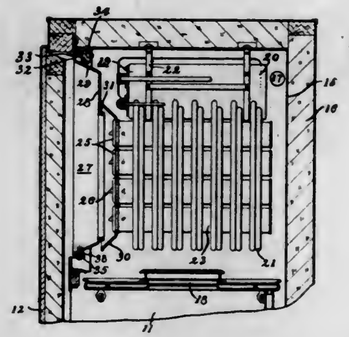
1. In a device of the character described, an engine having means for regulating the speed thereof, a device for controlling the speed of said engine, said device comprising a double arm loosely mounted upon a shaft, one end of said double arm being connected to a device located on an operator's platform, a single arm keyed to said shaft, a rod connected to one end of said double arm and extended through an opening in said single arm, a spring interposed between the free end of said single arm and the free end of said rod for restoring the double arm to normal position when the pull on said double arm is released, and elements for connecting the ends of said double arm to the speed-regulating means of said engine.

1,825,702. LIFTING JACK. HERBERT EDWIN NEWTON, Tonbridge, England. Filed June 18, 1927, Serial No. 199,683, and in Great Britain Mar. 3, 1927. 4 Claims. (Cl. 254—114.)



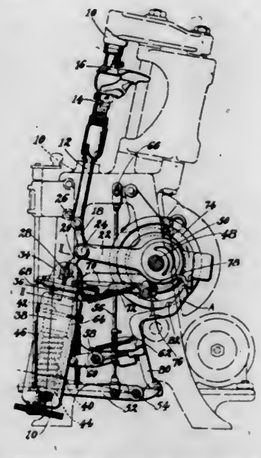
1. A lever jack comprising a frame, a ram slidable vertically therein, a link hinged to said frame and having an inwardly inclined position when the ram is lowered, and a lever including operating and power arms for operating said ram, said lever fulcrumed in said link and locked thereby when its power arm is fully operated by a single movement of the operating arm to completely raise the ram, said link having an inward movement during the operation of said lever to raise the ram, and the movement of said link during operation of said lever being limited to prevent passage of the link beyond the vertical plane through its hinge connection with said frame.

1,825,703. REFRIGERATING APPARATUS. JOHN T. RAUEN, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,663. 2 Claims. (Cl. 62—1.)



2. In combination, a refrigerator having a cooling compartment, a cooling unit in said compartment, an ice cube tray sleeve structure in said cooling unit, a flange secured to said sleeve structure, a cover plate adjacent said cooling unit provided with an ice tray opening overlapping said flange, and a spring catch and a slotted pivot member for removably securing said cover plate to said refrigerator.

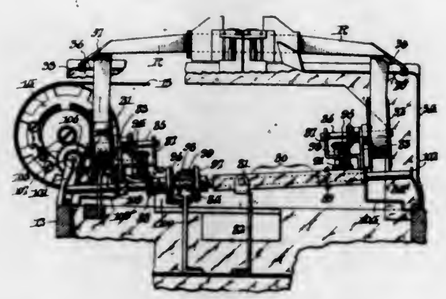
1,825,704. PRESSURE MECHANISM. THOMAS H. SEELY, Melrose, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 2, 1926. Serial No. 152,282. 8 Claims. (Cl. 12—126.)



1. In a pressure-supporting device, two pressure-supporting members, and a wedge arranged to be inserted between them to hold them at varying distances, said wedge having one of its faces beveled along the edges, and the corresponding said pressure member being provided with surfaces correspondingly formed to engage the beveled

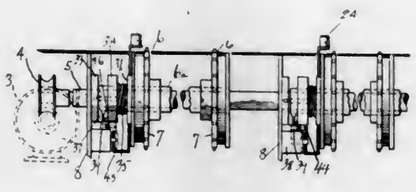
face of the wedge, the angle of the bevel being such as to set the beveled wedging face at an angle of less than 45° to the direction of the pressure exerted by the pressure supporting membera.

1,825,705. RIBBON MECHANISM FOR TYPEWRITERS. ROBIE SEIDELINGER, Philadelphia, Pa. Filed Oct. 28, 1926. Serial No. 144,689. 3 Claims. (Cl. 197—160.)



1. Ribbon mechanism for typewriters comprising a pair of winding spools between which the ribbon travels; means for rotating each spool; a tiltably-supported and axially-shiftable member operative to alternately drive the respective spool rotating means; means for tilting said member when ribbon is exhausted from either spool and alternately active leaf-springs responsive to the tilting of said axially-shiftable member effective to shift the member axially and thereby couple-up an exhausted spool rotating means and concurrently uncouple the full spool driving means, respectively to and from the shiftable member aforesaid.

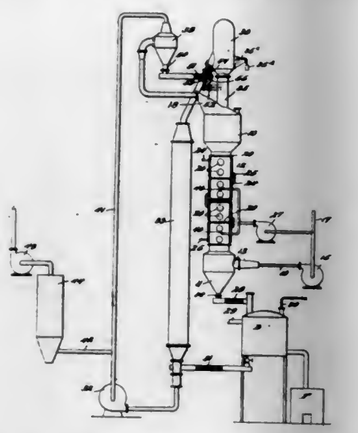
1,825,706. MULTIPLE MANIFOLDING MACHINE. JOHN Q. SHERMAN, Dayton, Ohio, assignor, by direct and mesne assignments, to The Standard Register Company. Filed May 22, 1926. Serial No. 111,056. 11 Claims. (Cl. 282—21.)



1. In a manifolding machine having a single power means, a series of units each having an individual paper feed, and a paper support exposed so as to permit marking upon the paper fed thereover by each feed, individual controls for each unit, said controls comprising a clutch and a stop arranged together with the unit to permit only single cycles of operation of a released unit upon each operation of the control thereof.

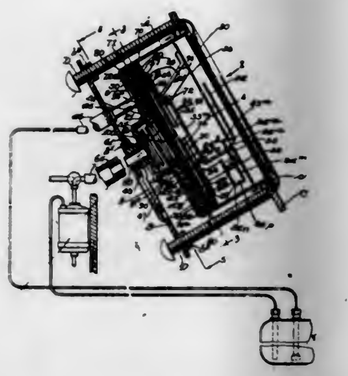
1,825,707. METHOD OF ADSORBING A GAS IN A SOLID ADSORBENT. FRED H. WAGNER, Jr., Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore Md., a Corporation of Maryland. Filed May 24, 1927. Serial No. 193,932. 5 Claims. (Cl. 183—4.)

1. The method of causing a required quantity of pulverized material per unit of time to gravitate counter to an upward flow of gas capable of lifting in suspension a fixed quantity of said material at a definite velocity of flow, comprising delivering into the upper end of the gas flow a quantity of material per unit of time equivalent to the sum of said required and known quantities and con-



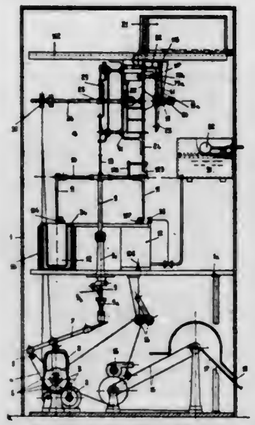
tinuously separating the fixed quantity as it is lifted by said gas, and returning it to the upper end of the gas flow.

1,825,708. DEPTH GAUGE AND PUMP. LEONARD H. WHEELER, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed May 2, 1927. Serial No. 188,379. 9 Claims. (Cl. 73—54.)



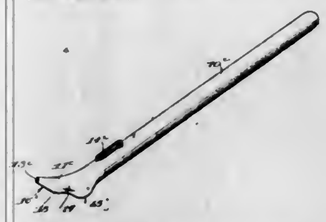
1. A device for the purpose indicated comprising a casing and a pressure-responsive element therein including a plate having at its opposite sides a first and a second diaphragm between which diaphragm and the respectively proximate surfaces of the plate, a first and a second chamber, expansible and reducible by flexure of the diaphragms respectively, are enclosed; means yieldingly resisting the expansion of said chambers respectively and tending to reduce the same when expanded; the casing and the plate of the pressure-responsive element having ports affording access of air to the first chamber through the second, and valve means controlling said ports opening for air inflow and seating against outflow; a conduit communicating with the first chamber adapted for communicating with the bottom of the liquid whose depth is to be indicated; means for alternating higher and lower fluid pressures on the outer side of the second diaphragm, and an indicating device having a moving member and means operatively connecting its moving member with said first diaphragm for actuation thereby.

1,825,709. COIN-OPERATED PHOTOGRAPHIC APPARATUS. MARIO BACINO, Turin, Italy. Filed Sept. 25, 1929, Serial No. 395,082, and in Italy Sept. 26, 1928. 9 Claims. (Cl. 95—14.)



1. In an automatic photographic apparatus, in combination, with a plate receptacle, a plate-carrying frame, an objective, and means for transferring the plates one at a time from said receptacle to said frame, of means for displacing the plate frame behind the objective in a direction for making a row of photographs on the plate, means for displacing the plate stepwise in the plate frame in a direction perpendicular to the aforesaid direction to make further rows of photographs parallel to the former, means for developing the exposed plate, and means for delivering the developed plate.

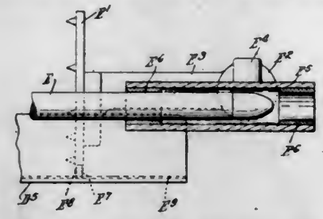
1,825,710. SPATULA. DAVID R. BIDDLE, Albuquerque, N. Mex. Filed Feb. 15, 1930. Serial No. 428,818. 3 Claims. (Cl. 32—10.)



1. A spatula comprising a tubular body having one end outwardly tapered, one side of said body having an opening therein for the placing of a material within the bore of the body and at a point adjacent the connected end of said tapered portion for subsequent discharge outwardly of the bore opening through the latter, said tapered portion being angularly offset to one side of the longitudinal axis of the body to present the outer side thereof for spatulation purposes, and an upstanding lip surrounding the said filling opening and adapted for use in trimming models made from the discharged material.

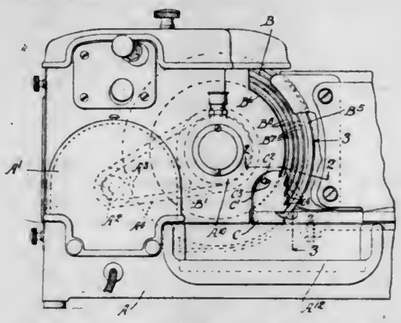
1,825,711. PUSHER PLATE FOR SLICING MACHINES. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed July 12, 1929. Serial No. 377,844. 4 Claims. (Cl. 146—102.)

1. In association with a slicing machine including a rotary knife and means for rotating it, and a work support movable across the face of the knife, a pusher plate associated with said work support, means for guiding it and supporting it for ready movement toward and away from the cutting plane of the knife, including a guide pin, a sleeve adapted to slide on said guide pin, bearings at the opposite ends of said sleeve adapted closely to en-



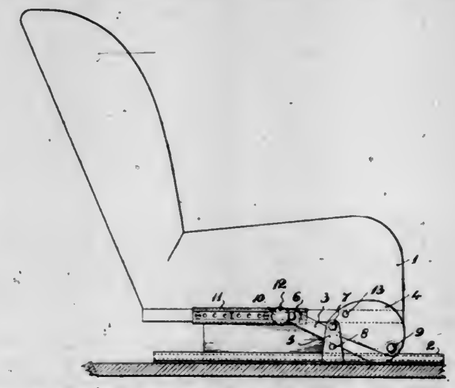
gage said guide pin, the intermediate portion of the sleeve being spaced away from the guide pin, the guide pin being adapted to permit one of said bearings to slide beyond the end thereof, and thereby cramp the other bearing upon the pin.

1,825,712. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,265. 12 Claims. (Cl. 146—102.)



1. In a slicing machine, a rotary knife, having a plurality of concentric channels formed in a face thereof, and a scraper, opposed to said knife, and including portions adapted to penetrate said channels.

1,825,713. VEHICLE SEAT. ARTHUR SAM CHESTON, Birmingham, and CHARLES COWARD and CHARLES FRANK COWARD, Maidenhead, England. Filed Mar. 3, 1928, Serial No. 258,794, and in Great Britain Dec. 20, 1927. 7 Claims. (Cl. 155—14.)



7. A vehicle seat, means for slidably mounting the seat on the vehicle floor, a pair of links pivotally connected

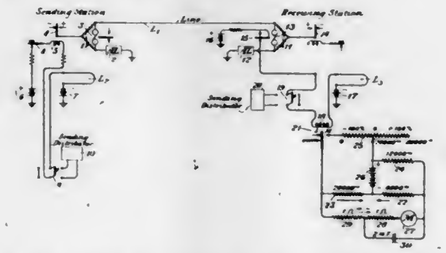
at their ends, means for pivoting the free end of one of the links to the seat, a bracket fixed to the vehicle floor, means for pivoting the free end of the other link to said bracket, and means on said bracket contacted by the first-mentioned link for limiting the rearward movement of the seat on the slide when said seat is in its forward position.

1,825,714. REENFORCING SLEEVE FOR BULL AND CALF WHEEL SHAFTS. IA RUE B. CHEVALIER, Iola, Kans. Filed Oct. 17, 1929. Serial No. 400,306. 6 Claims. (Cl. 242—117.)



6. In a bull wheel including a brake wheel, a sheave wheel, and a member connecting the wheels, a reenforcing sleeve mounted on said connecting member having cut-away portions forming spaced end and intermediate bosses engaging the connecting member, flanges on the ends of said sleeve, means for securing said flanges respectively to the brake and sheave wheels, and means for securing the sleeve to the connecting member.

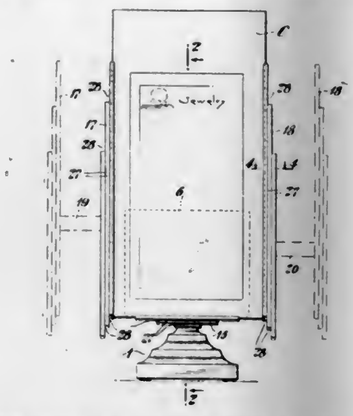
1,825,715. TELEGRAPH TRANSMISSION MEASURING SYSTEM. SAMUEL I. CORY, Towaco, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,728. 5 Claims. (Cl. 178—69.)



1. In a system for measuring bias of telegraph signals, the combination with a source of such signals of a relay connected therewith, having an armature and a contact, a network comprising a plurality of resistances connected with said armature and contact, a source of potential and a galvanometer, the said source of potential and said galvanometer being so connected with said resistances and the magnitudes being so chosen that the voltages impressed across said galvanometer during the reception of a mark will be equal and opposite to that applied during a space for unbiased signals.

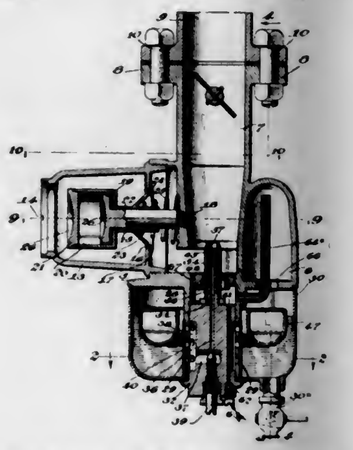
1,825,716. EASEL. FREDERIC D. COURTENAY, East Orange, N. J., assignor to Embosograf Corporation of America, New York, N. Y., a Corporation of New York. Filed Feb. 14, 1930. Serial No. 428,380. 8 Claims. (Cl. 40—146.)

1. An easel structure for supporting a display sheet comprising a base; a standard supported by said base; an easel body supported by said standard; a bar carried by the easel body to support the lower edge of the display sheet; a plurality of side bars to extend along the opposite side edges of the sheet, said bars being longitudinally grooved along their opposed sides to receive the edges of the sheet; means carried by the easel body supporting said side bars for lateral shifting toward and



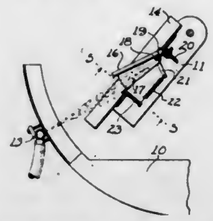
from each other to accommodate sheets of different width; and means manually operable at the back of the easel body to shift said side bars toward and from each other equally and in unison, and thereby center cards of different width upon the easel.

1,825,717. CARBURETOR FOR INTERNAL COMBUSTION ENGINES. FRED DAY, Alcester, S. Dak. Filed Dec. 18, 1928. Serial No. 326,839. 5 Claims. (Cl. 261—72.)



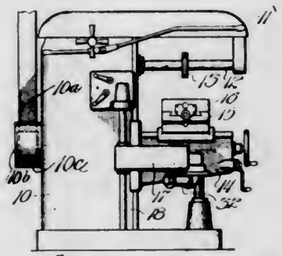
1. In a carburetor, a liquid fuel reservoir, a conduit arranged above the same for communication with an internal combustion engine, means for conducting liquid fuel from the reservoir to the conduit, an open ended air inlet housing supported laterally of the conduit and communicating with the latter, a fixed piston supported within and longitudinally of said housing, a movable hollow piston received on the fixed piston, a valve element connected to and movable with the hollow piston and controlling the passage of air through the housing, said movable piston being disposed forwardly of said valve and in the path of air passing through said housing, the valve element being actuated to open position by vacuum produced in the conduit, movement of the hollow piston towards either face of the fixed piston causing compression in the hollow piston whereby to eliminate vibration of the valve incident to the opening and closing movements of the latter.

1,825,718. PRERINSE DEFLECTOR. LAWRENCE ONEAL DUFFORD, Harrisonburg, Va., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed Sept. 16, 1929. Serial No. 393,103. 6 Claims. (Cl. 141—7.)



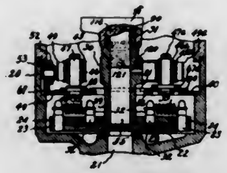
1. In a pre-rinse device or the like, a tilting table over which the bottles slide grooved to form bottle seats, means for directing a rinsing spray thereon, a deflector on each bottle seat for intercepting the rinsing spray thereto and capable of being depressed out of position by the weight of a bottle thereon.

1,825,719. CONTROL MECHANISM. SOL EINSTEIN, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 31, 1927. Serial No. 195,289. 19 Claims. (Cl. 74—58.)



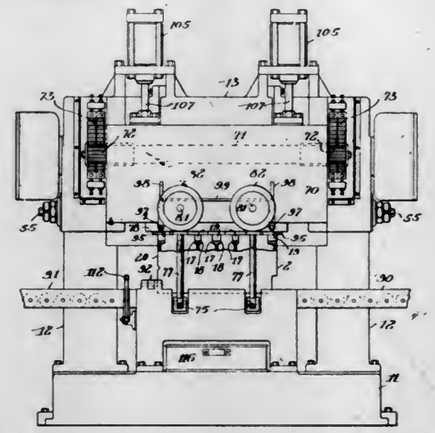
1. A speed and feed control for the movable members of a milling machine and the like having a speed variator including shiftable gears and a table portion overlying the variator and effected by shifting movements thereof, a control member for the speed variator having an operating portion selectively positionable for actuation from front or rear of the table.

1,825,720. IGNITION TIMER. JOHN T. FITZSIMMONS, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 18, 1927, Serial No. 234,100. Renewed Aug. 17, 1931. 11 Claims. (Cl. 200—21.)



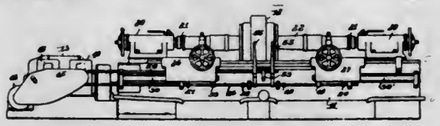
1. An ignition timer comprising two circuit interrupters each having a cam rubbing block, a rotatable cam for engaging the rubbing block, a stationary plate carrying one of the interrupters, an adjustable plate carrying the other interrupter, one of said plates providing a bearing coaxial with respect to the cam and the other plate providing a journal received by said bearing, and means for securing the adjustable plate in the desired position.

1,825,721. MILLING MACHINE. WORTHY J. F. FORWARD and ROLAND RUSSELL ROBERTS, Rochester, N. Y., assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed Sept. 15, 1927. Serial No. 219,742. 16 Claims. (Cl. 90—16.)



1. In a milling machine having a frame, the combination with a milling cutter spindle, of a work support located above the spindle and extending downwardly on both sides of its axis, work clamping means connected to the work support on both sides of the spindle axis, and hydraulic means located above the spindle for moving the work support to bring the work into cooperative relationship with said cutter, the work support being guided on the frame on both sides of the spindle axis during its vertical travel.

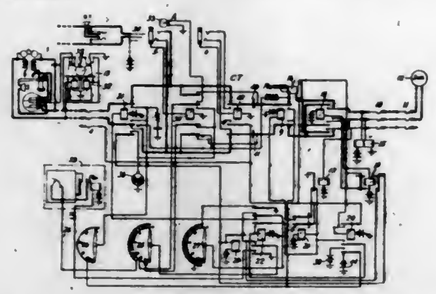
1,825,722. HYDRAULICALLY DRIVEN LATHE FOR CAR WHEEL AXLES AND THE LIKE. WORTHY J. F. FORWARD and SHERMAN A. HARDING, Rochester, N. Y. assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed Sept. 15, 1927. Serial No. 219,743. 6 Claims. (Cl. 82—8.)



1. In a lathe, the combination with work supporting and rotating means, a plurality of reciprocable tool carriers, of hydraulic means including a separate pump for moving each tool carrier, separate control means for controlling the character of action of each pump independently of the others, means actuated by the reciprocation of the tool carriers for actuating said separate control means, and common control means for controlling the rate of action of all of said pumps simultaneously.

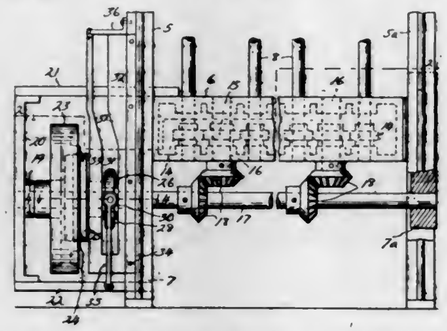
5. A hydraulically driven lathe for car wheel axles and the like including a bed having vertical side walls and longitudinal ways, work supporting and rotating means, a reciprocable tool carrier movable on said ways and having a tool stationarily mounted thereon and extending transversely of the line of travel of the tool carrier, hydraulic cylinders fixedly located with their longitudinal axis approximately in the same vertical planes with the outer edges of said ways and at unequal distances from the cutting edge of the tool, and pistons movable in said cylinders and fixedly connected to the tool carrier at opposite points thereof, the cylinder and piston nearest to the cutting edge of the tool being formed to transmit greater power to the tool carrier than the cylinder and piston farthest from said cutting edge.

1,825,723. TELEPHONE SYSTEM. OTTO A. FRIEND, New York, N. Y., and WILLIAM J. HEITSMITH, Ridgefield Park, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 3, 1929. Serial No. 352,127. 10 Claims. (Cl. 179—6.3.)



1. In a telephone system, a calling station, a coin collecting device thereat, a called subscriber's station, means including a trunk for establishing a connection between said stations, an operator's cord, means for connecting said cord with the trunk, and means associated with the trunk and responsive to the connection of the cord with the trunk for actuating the coin collecting device a predetermined interval after the called subscriber has answered the call.

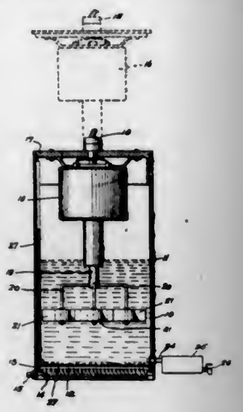
1,825,724. BOTTLE BRUSHING MECHANISM. GEORGE A. FULLIPS, Detroit, Mich., assignor to George J. Hewlett, Cleveland, Ohio. Filed Mar. 26, 1928. Serial No. 264,693. 2 Claims. (Cl. 15—60.)



2. In a bottle brushing machine, a plurality of rotatable brushes, a drive mechanism for said brushes comprising a main drive shaft, a mounting for said brushes and mechanism reciprocatory to simultaneously enter said brushes in and withdraw them from a plurality of bottles, a clutch controlling the drive to said shaft having a member slidable on said shaft, a yoke operatively engaging said sliding member, a pair of pins oppositely projecting from said yoke, rollers journaled on said pins, an arm transverse to said shaft and pivotally engaging one of said pins, means pivotally supporting the other end of said arm, said yoke being restrained from rotation by said arm, and cam means arranged at opposite sides of said shaft coacting with said rollers to engage or disengage said clutch according as said mounting is advanced toward or withdrawn from said bottles.

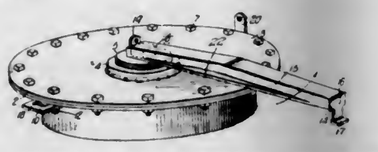
1,825,725. APPARATUS FOR TESTING LUBRICATING OILS. JAMES H. GONDER, Liberty, Mo. Filed Nov. 2, 1928. Serial No. 316,852. 5 Claims. (Cl. 73—51.)

4. An oil testing device comprising a container having a transparent side wall and a heat transmitting bottom wall, a heating device supported by and acting on said bottom wall, a thermometer mounted in the container adjacent said transparent side wall, a power driven agitator including an arm mounted for swinging movement within the container, a vaned agitator member rotatably mounted on said arm and adapted to be rotated by a body of oil in the container when immersed therein and moved there



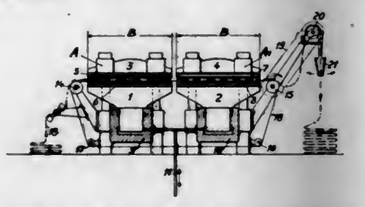
against by swinging movement of said arm, and a bearing member interposed between said agitator member and said arm and adapted to be abraded by rotation of the agitator member, whereby said agitator member serves both for agitating the body of oil and for causing abrasion of said bearing member, and a petcock at the bottom of the container for drawing off the body of oil.

1,825,726. MANHOLE COVER. OTTO N. GREDELL, Kansas City, Mo., assignor to Standard Steel Works, North Kansas City, Mo., a Corporation of Missouri. Filed Sept. 26, 1929. Serial No. 395,417. 11 Claims. (Cl. 220—55.)



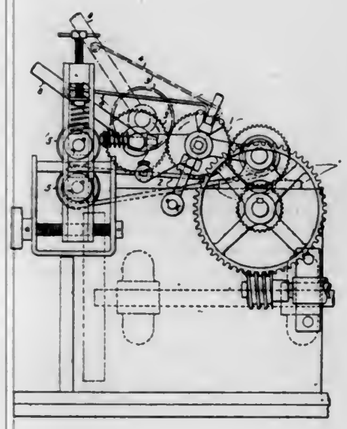
9. In combination with a manhole cover including a ring and a cover plate having an opening, a plug closing the opening and fastening devices securing the cover plate to the ring, a wrench comprising an elongated member, means on said member for receiving the plug and for covering the fastening devices, and means for locking the wrench in position over the fastening devices and the plug to prevent their unauthorized removal.

1,825,727. FLAT-PRESSING OF TEXTILE FABRICS. MATHIAS HAHN, Aachen, Germany, assignor to Hubert Krantz, Aachen, Germany. Filed Oct. 12, 1929, Serial No. 399,335, and in Germany Oct. 20, 1928. 6 Claims. (Cl. 26—38.)



1. A method of flat-pressing fabrics consisting in intermittently conveying the fabric forwardly ahead in a substantially even plane through separate hot and cold presses and during the conveying and pressing supporting the fabric so as to prevent stretching of the fabric and mutual displacement of the fabric fibres.

1,825,728. APPARATUS FOR DEVELOPING PHOTOGRAPHIC PRINTS AND THE LIKE. BENJAMIN JAMES HALL, London, England, assignor to B. J. Hall & Company, Ltd., London, England. Filed Aug. 20, 1928, Serial No. 300,845, and in Great Britain Nov. 24, 1927. 12 Claims. (Cl. 95—94.)



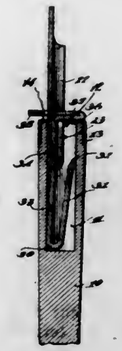
1. An apparatus of the character described comprising means for moving a sensitized sheet, two developer applying members arranged to contact in succession with the sensitized surface of the sheet, both of said members having a rubbing action on the sheet, the first member being mounted for movement to and from said means, and means for delaying the movement of said first member toward the first named means.

1,825,729. DIAZONIUM SALTS OF COMPLEX METALLO HYDROFLUORIC ACID. WINFRID HENTRICH and MAX HARDTMANN, Wiesdorf-on-the-Rhine, and ERNST TIETZE, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 10, 1929, Serial No. 362,126, and in Germany Apr. 8, 1928. 8 Claims. (Cl. 260—12.)

5. As a dyestuff intermediates and insecticides, the diazonium salts of complex metallo-hydrofluoric acids, being generally stable, well crystallizing substances, soluble in water.

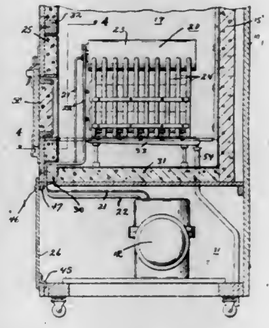
1,825,730. PEN CLIP. HENRY E. HOKE, Hanover, Pa. Filed Dec. 6, 1928. Serial No. 324,155. 3 Claims. (Cl. 120—101.)

1. A device for removably retaining a pen in the socket of a holder comprising a metal member formed of resilient material and having means received within the socket for frictionally engaging the walls of said socket, an arm projecting from said friction means and extending at right angles to the axis of the holder and across the open end of the socket and provided with a passage through



which is adapted to be inserted the shank of a pen, said arm adapted to be manipulated across the outer end of the holder for releasing the pen point.

1,825,731. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 25, 1928. Serial No. 302,043. 22 Claims. (Cl. 62—116.)

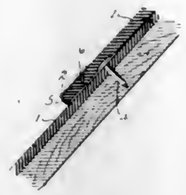


18. In a self contained mechanical refrigerator having a cabinet having superposed compartments open at one side; a unitary mechanical refrigerating apparatus including a frame entirely supporting an evaporator and machinery in different elevations for association with different compartments, said apparatus being insertible laterally into said cabinet, and a movable closure for closing the opening leading to the refrigerated compartment.

1,825,732. ROOFING CLIP. GEORGE A. HOLMAN, Dayton, Ohio. Filed Sept. 7, 1927. Serial No. 217,957. 2 Claims. (Cl. 108—33.)

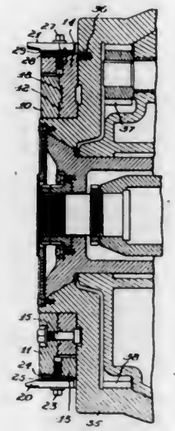
1. In a roofing clip of the character described, a flat strip of metal capable of being medially bent upon itself substantially to parallelism about the margin of a roofing sheet of the flexible type, one end of which is adapted to be engaged with the roof structure beneath the roofing sheet, the exposed end of the strip having therein a substantially triangular perforation in inwardly spaced relation with the terminal and lateral margins of the strip, the apex of which is directed longitudinally of the strip,

and an integral spur comprising the material removed from said triangular perforation, said spur projecting angularly from the said plane of the strip a distance less than the thickness of the roofing sheet to be secured, and a flat bearing surface thereabout resting upon the roofing



sheet, formed by the adjacent portion of said strip intermediate said spur and the terminal and lateral margins of the strip said perforation being formed and disposed to receive therein the roofing material displaced by the hammer blows in driving the spur into engaging position.

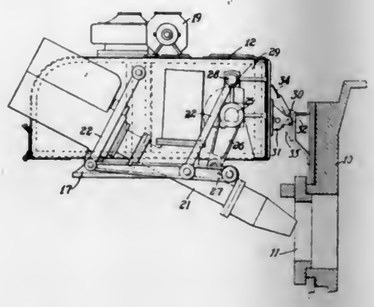
1,825,733. GEAR CUTTER AND METHOD OF EMPLOYING SAME. MAGNUS H. JOHANSON, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed June 13, 1929. Serial No. 370,616. 13 Claims. (Cl. 90—4.)



1. A gear cutter comprising a rotatable head formed in two parts, a blade secured to one of said parts adapted to cut one side of the teeth of the gear blank and a blade secured to the other of said parts adapted to cut the opposite side of the gear teeth, each of said blades being formed and arranged on its respective part to cut successively on different tooth faces of the blank during rotation of the head, and said parts being adjustable relative to each other about the axis of the head to vary the angular distance between opposite side cutting blades whereby gears having teeth of different widths may be cut.

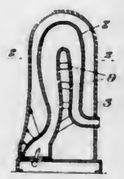
8. A method of cutting longitudinally curved tooth gears which comprises employing a face mill cutter having a plurality of outside and inside cutting blades, adjusting the blades radially of the axis of the cutter head to secure the desired lengthwise tooth curvature and then adjusting the inside cutting blades angularly relative to the outside cutting blades in accordance with the width of teeth desired to cut on the blank, and rotating the cutter in engagement with the blank while rotating the blank continuously on its axis so that successive blades of the cutter cut successively on different tooth faces of the blank.

1,825,734. CLAY GUN. WILLIAM JOHNSTON, Jr., Pittsburgh, Pa. Filed Apr. 20, 1929. Serial No. 356,865. 20 Claims. (Cl. 266—42.)



1. A clay gun operating mechanism having in combination a gun supporting carriage, a pedestal post, a sleeve rotatably mounted on said pedestal post, a pivotal support for said carriage on said sleeve and an adjustable connection between said carriage and said sleeve for adjusting said carriage about said pivotal support.

1,825,735. HEATING STOVE. HUGO JUNKERS, Dessau, Germany. Filed Sept. 3, 1926, Serial No. 133,492, and in Germany Aug. 8, 1925. 7 Claims. (Cl. 257—172.)



7. Heating stove comprising an inner shell arranged to be traversed by hot gases, said inner shell being formed with a bend between two substantially parallel parts, and an outer shell spaced from and surrounding said inner shell, said shells being connected in a gas-tight manner, the space enclosed between the two shells being secured against the entrance of air and of the hot gases traversing said inner shell.

1,825,736. METHOD FOR THE PRODUCTION OF RUBBER GOODS DIRECTLY FROM LATEX. PAUL KLEIN, Budapest, Hungary, and ANDREW SZEGVARI, Akron, Ohio, assignors, by mesne assignments, to American Anode Inc., a Corporation of Delaware. Filed May 29, 1926, Serial No. 112,677, and in Hungary May 30, 1925. 21 Claims. (Cl. 18—58.)

1. The method of producing rubber goods directly from aqueous dispersions of rubber which comprises associating with a mold a substance capable of agglomerating rubber particles of the dispersion, and immersing the mold in the aqueous rubber dispersion for such time as to permit some of the agglomerating substance to diffuse into the dispersion to form about the mold a coherent layer of deposited rubber.

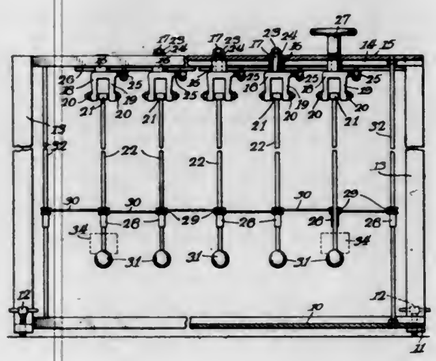
1,825,737. PROCESS OF DRYING PRODUCTS PRODUCED FROM AQUEOUS DISPERSIONS OF ORGANIC SUBSTANCES PARTICULARLY OF CAOUTCHOUC OR CAOUTCHOUC LIKE SUBSTANCES BY AGGLOMERATION UPON A BASE. PAUL KLEIN, Budapest, Hungary, assignor to American Anode Inc., Akron, Ohio. Filed Jan. 16, 1928, Serial No. 247,267, and in Germany Jan. 17, 1927. 6 Claims. (Cl. 18—58.)

1. The process of making a product comprising a layer produced by agglomeration from aqueous dispersions of organic material particularly of caoutchouc or caoutchouc-like substances which on drying become practically impermeable to water, which includes depositing a layer of said organic material containing a high percentage of water upon a mold, permitting at one side of said layer a relatively free escape of moisture, and maintaining a higher temperature at the side of the layer remote from the side permitting escape of moisture than at the latter side.

1,825,738. PRODUCING DIPPED GOODS FROM ORGANIC DISPERSIONS. PAUL KLEIN and FRANCIS GÁBOR, Budapest, Hungary, assignors, by mesne assignments, to American Anode Inc., a Corporation of Delaware. Filed Jan. 21, 1928, Serial No. 248,556, and in Hungary and Germany Feb. 23, 1927. 7 Claims. (Cl. 18—58.)

1. A process for the production of goods from aqueous or other dispersions of organic substances particularly from natural or artificial rubber dispersions by repeated dipping in which the dipping mould is heated during the intervals between the individual dippings and if desired also during the dipping into the dispersion.

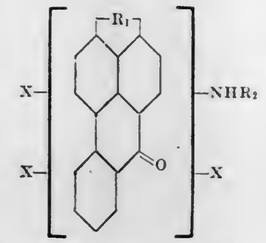
1,825,739. WAVE MACHINE. PAUL E. KLOPSTEG, Chicago, Ill. Filed May 16, 1929. Serial No. 363,689. 9 Claims. (Cl. 35—16.)



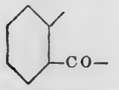
5. In a device of the class described, a series of pendulums in a row, means to mount the pendulums to swing about horizontal axes on a level, and to rotate on vertical axes, and an elastic connection between adjacent pendulums.

1,825,740. VAT DYESTUFFS AND PROCESS OF PREPARING THEM. GEORG KRÄNZLEIN, HEINRICH VOLLMANN, and MARTIN CORELL, Frankfort-on-the-Main-Hoechst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1929, Serial No. 342,661, and in Germany Mar. 23, 1928. 12 Claims. (Cl. 260—60.)

6. As new products, compounds of the following general formula:

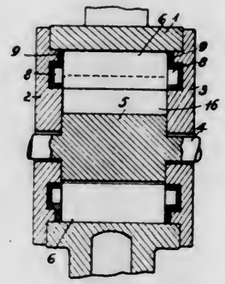


wherein R_1 stands for the bivalent residue



R_2 for aryl or aroyl and X for hydrogen or $NH.R_2$.

1,825,741. ROTARY ENGINE. WILHELM KÜHN, Frankfort-Eschersheim, Germany. Filed June 17, 1926, Serial No. 116,649, and in Germany July 7, 1925. 6 Claims. (Cl. 103—136.)



1. A rotary engine comprising a casing, a fly wheel adapted to rotate in said casing, piston vanes adapted to reciprocate in said casing and in grooves of said fly wheel and to rotate bodily with said fly wheel, races rotatably carried in said casing, and a projection on each of said vanes adapted to engage continuous circular grooves in said races, said races being connected with each other by a liner inserted in said casing and adapted to cooperate with the outer ends of said vanes, the outer diameter of said races being equal to the effective inner diameter of said cylinder.

1,825,742. WRIST-PIN INSERTING TOOL. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed May 29, 1930. Serial No. 457,028. 8 Claims. (Cl. 29—88.2.)

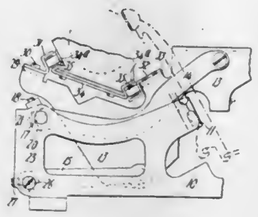
1. A tool for inserting a tubular element in a bore and displacing a part in a radial direction from said bore,

said tool comprising a stem adapted to extend through said tubular element, and a part immovable with relation to said stem and adapted to engage the adjacent end face of said tubular element at a plurality of points concentric with, and on opposite sides of, its axis and in a single plane perpendicular to the axis of said tubular element, in combination with a pilot-sleeve adapted to be fitted endwise on said stem and making a snug sliding fit thereon, said sleeve having a frusto-conical external face and having its portion of greatest external diameter presented toward said immovable part and of substantially the same external diameter as said tubular element interposed between said immovable part and said pilot-



sleeve, there being an axially outwardly extending radially inwardly converging centering face formed in the inner end face of said pilot-sleeve concentric with the axis thereof and extending from the external peripheral face thereof and being adapted to engage the external peripheral face of the adjacent end of said tubular element to center the same, said stem having its free end portion screw-threaded and adapted to protrude axially beyond said pilot-sleeve, and a nut adapted to be turned on said screw-threaded portion of said stem to engage said pilot-sleeve and move the latter axially toward said immovable part to clamp said tubular element between said pilot-sleeve and immovable part and to maintain said tubular element in proper centered relation with said pilot-sleeve.

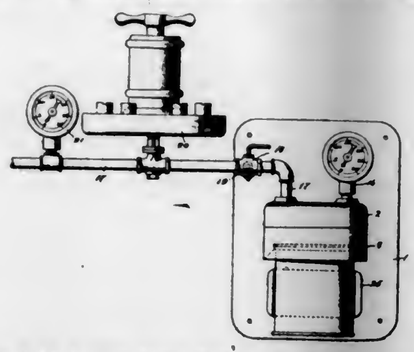
1,825,743. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed Mar. 15, 1924, Serial No. 699,420. Divided and this application filed Nov. 13, 1926. Serial No. 148,286. 28 Claims. (Cl. 197—149.)



1. In a typewriting machine, a main frame, a carriage-shift-frame, pairs of swinging connections between the ends of the frames to constrain the shift-frame to move rearwardly as it is shifted upwardly, and means to increase or diminish the effective length of any of the connections.

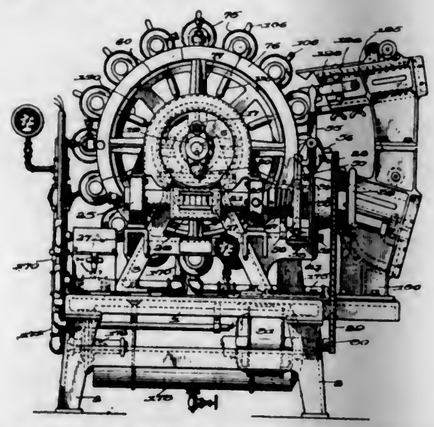
1,825,744. METHOD OF TESTING SEALED CONTAINERS. FRANCIS H. LANDRUM, Honolulu, Territory of Hawaii. Filed Aug. 31, 1927. Serial No. 216,660. 4 Claims. (Cl. 73—51.)

1. The method of testing sealed containers having flexible sections capable of outward movement under excessive lateral pressure, which comprises locally reducing the extraneous pressure on said sections to an extent sufficient to cause the sections to move outwardly and



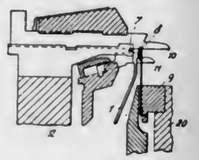
produce an audible sound when the internal pressure is excessive, and segregating those containers emitting such sound.

1,825,745. METHOD AND APPARATUS FOR TESTING SEALED CONTAINERS. FRANCIS H. LANDRUM, San Francisco, Calif. Filed June 11, 1928. Serial No. 284,355. 21 Claims. (Cl. 73—51.)



1. A machine for testing sealed containers having flexible sections, comprising means for repeatedly flexing said sections to substantially standardize the resiliency thereof, means for effecting a final outward movement of said sections in containers having vacuum deficiencies, and means controlled by said final movement to segregate the containers from those having normal internal pressures.

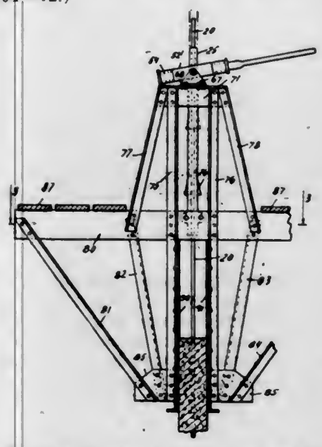
1,825,746. KNITTING MACHINE. FRITZ LÄSSIG, Chemnitz, Germany, assignor to the Firm Schubert & Salzer Maschinenfabrik Aktiengesellschaft, Chemnitz, Germany. Filed Jan. 29, 1930, Serial No. 424,304, and in Germany Feb. 5, 1929. 1 Claim. (Cl. 66—98.)



A flat knitting hosiery machine comprising a presser-head frame, a needle bar, needles in said bar, sinkers

adapted to cooperate with said means, a divided presser plate in said frame for each needle and means for moving said frame and said needle bar at the same velocity and in the same direction while the members of said divided presser plate are in contact with their respective needles.

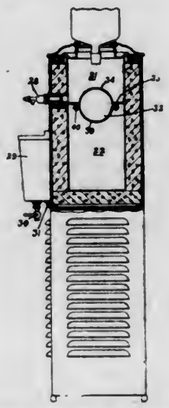
1,825,747. ADJUSTABLE SUPPORT FOR CONCRETE FORMS AND SCAFFOLDING. FERDINAND J. LITTER, New York, N. Y., assignor to Frederick Snare Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1929. Serial No. 354,162. 13 Claims. (Cl. 304—12.)



7. In combination, a reinforcing rod, a sleeve slidable on said rod, said sleeve having a tapered end, a pair of wedge shaped blocks in said tapered end, and means for forcing said blocks into gripping engagement with said rod.

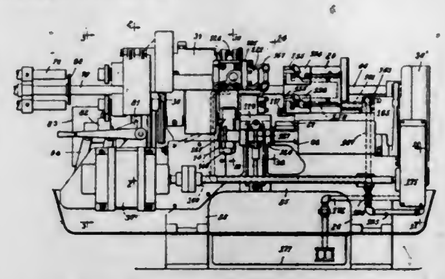
8. In combination, a reinforcing rod, a sleeve adjustably supported thereon, a yoke mounted on said sleeve, and pawls carried by the yoke engageable with the sleeve to support the yoke thereon.

1,825,748. REFRIGERATING APPARATUS. JOHN A. MACREADY and HARRY H. HODGSON, Dayton, Ohio, assignors to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 30, 1928. Serial No. 289,422. 5 Claims. (Cl. 62—141.)



1. A water cooler comprising a water cooling compartment, a food storage compartment in alignment with said water cooling compartment and having a common dividing wall, an evaporator in one of said compartments in contact with said wall.

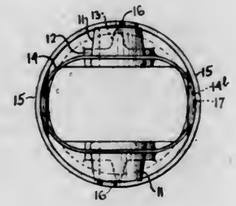
1,825,749. SCREW MACHINE. JUDSON H. MANSFIELD and CHESTER F. PENROSE, Rockford, Ill., assignors to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed Aug. 8, 1927. Serial No. 211,387. 27 Claims. (Cl. 29—37.)



1. In a screw machine, the combination of a multiple spindle head adapted to be indexed, an upper and a lower cross-slide at the front of the machine, an upper and a lower cross-slide at the back of the machine, a cam shaft at the front and another at the back of the machine connected by a cross-shaft and gearing so as to be operated in timed relation, and separate cams on each cam shaft connected respectively with the upper and lower slides at the adjacent side of the machine for imparting feed and return movements thereto.

20. An automatic multiple spindle screw machine comprising a multiple spindle head adapted to be indexed, indexing mechanism, a main tool slide, a cam shaft at the rear of the machine for operating the indexing mechanism, a cross-slide tool holder at the front of the machine, a cam shaft at the front of the machine beneath the cross-slide ways, a cross-shaft connecting the front and rear cam shafts and having an operating connection with the main tool slide, a lever fulcrumed beneath the front cam shaft and connected at its upper end to the cross-slide, an advancing and a retracting roller in spaced relation on said lever, and a cam on the front cam shaft arranged to operate between said rollers for advancing and retracting the cross-slide.

1,825,750. PISTON. WILLIAM C. MCCOY, Shaker Heights, Ohio, assignor to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 25, 1926. Serial No. 143,879. 13 Claims. (Cl. 74—108.)

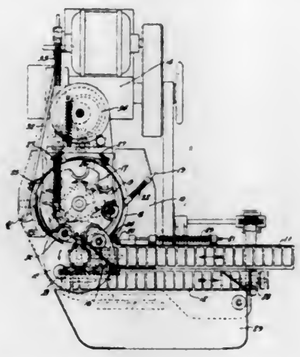


1. In a piston, a head, wrist pin bosses, a separate sectional skirt of aluminum alloy, and a steel strut extending transversely of each of the piston pin bosses across the interior of the skirt and uniting the sections to each other and to the head, said strut having its opposite ends buried in the lateral central zone of the respective skirt sections.

1,825,751. BOTTLE FEEDER. GEORGE J. MEYER and OTTO DREHER, Milwaukee, Wis., assignors to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 6, 1926. Serial No. 146,647. 8 Claims. (Cl. 198—22.)

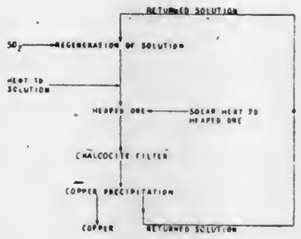
1. In a bottle-handling machine having an intermittently rotated star wheel, means for moving bottles into and

out of said star wheel, guard means disposed adjacent the periphery of said star wheel for confining the bottles therein during the intermittent rotation of said star wheel, said guard means including a shiftable part adapted to pre-



vent the discharge of a bottle during the rotation of said star wheel, and means for retracting said shiftable part to permit the discharge of a bottle during the dwell in the rotation of the star wheel."

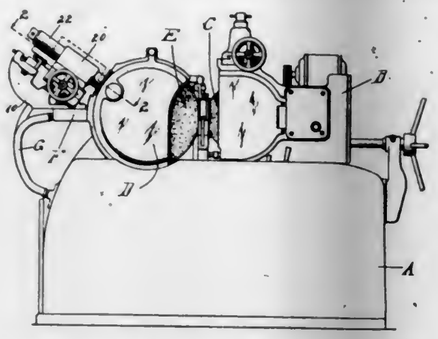
1,825,752. ORE LEACHING PROCESS. GARRET MOTT, Yonkers, N. Y., assignor to Pinto Valley Co., New York, N. Y., a Corporation of Delaware. Filed Mar. 2, 1927. Serial No. 171,918. 11 Claims. (Cl. 75—18.)



1. A leaching process for the treatment of copper ores which consists in passing a leaching solution containing ferric sulphate through a heap of the ore under such conditions that atmospheric air is in contact with the solution as the solution moves in open drainage in contact with the ore, whereby a metal of the ore is leached and a constituent of the leaching solution is oxidized and thereby ferric sulphate regenerated in situ, and separating metal from the charged solution.

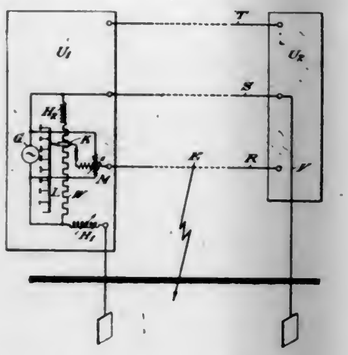
1,825,753. TRUING MECHANISM. LESTER F. NENNINGER, Cincinnati, Ohio, assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 17, 1926. Serial No. 88,960. 1 Claim. (Cl. 125—11.)

A mechanism of the character described including a base or support, a carriage transversely shiftable thereon, a slide mounted on the carriage for in and out movement relative to carriage and base, means for imparting in and out movement to the slide during transverse movement of the carriage, said means including a template carried by the base, a follower carried by the slide for engagement with the template and a spring-pressed plunger carried by the slide and engaging the template in opposition to the contact for retaining the parts in operative relation, a tool-holding sleeve adjustably mounted on the slide, a truing tool carried thereby for adjustment therewith and relative thereto, and a shield member carried



by said support and encircling the sleeve, said shield being transversely shiftable with the sleeve on movement of the carriage.

1,825,754. APPARATUS FOR DETERMINING THE DISTANCE TO GROUND CONNECTIONS IN ELECTRIC CONDUCTORS. HANS POLECK, Berlin-Lichterfelder, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Nov. 26, 1927, Serial No. 235,920, and in Germany Dec. 3, 1926. 4 Claims. (Cl. 175—183.)

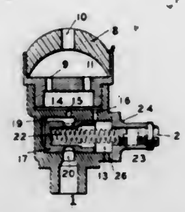


1. An apparatus for determining the distance to a ground connection located between two points or stations of an electric line having a plurality of conductors, comprising a resistance grounded at one end and adapted to be connected at the other end with a sound conductor of such line at one of said stations, a source of alternating current the terminals of which are connected with the respective ends of said resistance, a contact adjustable along said resistance, and an electric current-indicating instrument one terminal of which is connected with said contact while its other terminal is adapted for connection with the defective conductor, said sound conductor being adapted to be grounded at the other station so as to form a Wheatstone bridge arrangement in a diagonal of which said defective conductor is located and in which said instrument is situated.

1,825,755. FLUID PRESSURE REGULATOR. GEORGE REMNSNIDER, Belleville, Ill. Filed Dec. 24, 1928. Serial No. 328,122. 2 Claims. (Cl. 50—14.)

1. In a device of the class described, the combination with a valve casing provided with an inlet passage, said casing being provided with a cylindrical bore intersecting

the inlet passage, a discharge passage of less area than the inlet passage leading from the side of the bore opposite the inlet passage to an outlet, a piston in said bore provided with a peripheral groove, a spring normally holding said piston in position to connect the passages by

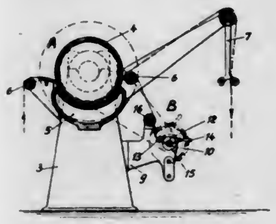


means of said groove, and a port leading from a point adjacent said discharge passage and extending between the periphery of the piston and the wall of the bore, said port supplying pressure at one end of the piston to move it against said spring to regulate the flow of water between the passages.

1,825,756. PROCESS OF BRIQUETTING FINELY DIVIDED COAL, FUEL, OR OTHER PULVERULENT MATERIALS. OTTO REYNARD, London, England. Filed Mar. 15, 1928, Serial No. 262,059, and in Great Britain Apr. 4, 1927. 13 Claims. (Cl. 44—16.)

1. A process of briquetting consisting in mixing a finely divided pulverulent material and a solid bituminous material and adding thereto an emulsion of the water-in-oil type comprising an oil having an affinity for the bituminous material and an emulsifying agent capable of forming stable emulsions with the oil, and subsequently heating and pressing the mixture.

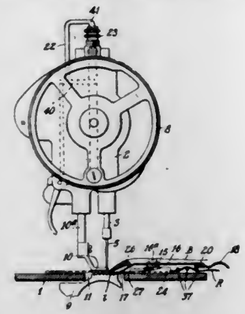
1,825,757. ROTARY CLUTCH PRESS. ALBERT H. SCHUMACHER, Passaic, N. J. Filed Oct. 7, 1929. Serial No. 397,958. 3 Claims. (Cl. 26—40.)



1. The combination with a rotary cloth press, of a cloth winding device comprising a winding roll consisting of a perforated steaming roll, bearings for rotatably and removably supporting this roll, a shaft for driving the roll, means for coupling this shaft with the roll, a driving wheel loosely mounted on the said shaft, friction disks carried by this wheel, friction disks carried by the said shaft, and adjustable means for pressing the disks of the shaft with a predetermined pressure into frictional engagement with the disks of the driving wheel.

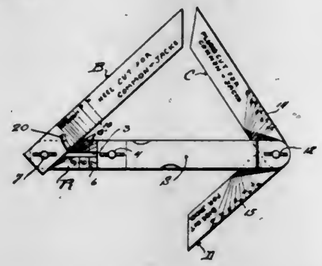
1,825,758. SHIRRING ATTACHMENT. CHARLES SEAMAN, Hollis, N. Y. Filed Dec. 24, 1927. Serial No. 242,508. 27 Claims. (Cl. 112—134.)

1. The combination with a sewing machine having a single feeding dog, a presser foot and a needle, of an attachment removably secured on the machine comprising a spring finger adapted to cooperate with a portion of the feeding dog independently of the movement of the presser foot, means for guiding a ruffle strip between said feeding



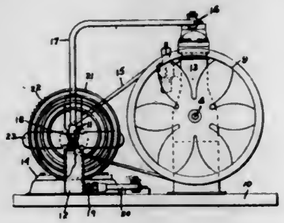
dog and finger, said finger being associated with said presser foot so as to permit other material to be fed over said finger and under said presser foot.

1,825,759. BEVEL SQUARE. ARTHUR E. SMITH, Selma, Ala., assignor of one-half to Hjalmar J. Koski, Selma, Ala. Filed Dec. 18, 1928. Serial No. 326,765. 2 Claims. (Cl. 33—98.)



1. A bevel square for use in connection with roof construction comprising, in combination, a stock, an elongated run blade engaged with the stock for endwise movement lengthwise of the stock, said blade being provided with graduations for coaction with an end of the stock to compute the rise in inches per foot upon requisite withdrawal of the run blade, and a heel blade in pivotal connection with the outer end portion of the run blade, a marginal portion of the heel blade being provided with graduations for coaction with a longitudinal edge of the run blade, said graduations being spaced apart to denote the required heel cut in accordance with the extension of the run blade, said graduations of the run blade and heel blade being similarly identified.

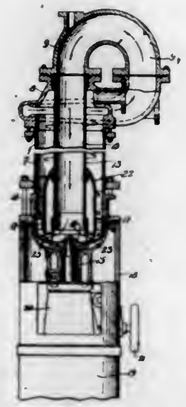
1,825,760. CONDENSER FOR REFRIGERATING APPARATUS. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 3, 1927. Serial No. 196,300. 5 Claims. (Cl. 257—39.)



1. An air cooled refrigerant condenser comprising a vertically extending header for distributing gaseous re-

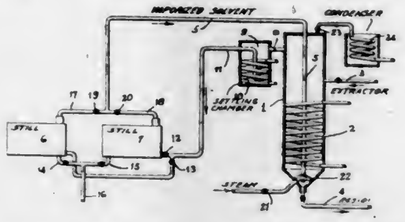
frigerant and storing condensed refrigerant, and condenser tube sections each having their ends communicating with and secured on opposite sides of and to the upper portion of said header, said tube sections being arranged to permit compressed refrigerant to flow therein from said header and to flow by gravity back into said header when condensed.

1,825,761. METHOD OF HEATING FLUIDS IN A SPINNING COLUMN AND APPARATUS USED IN CONNECTION THEREWITH. CHARLES WALCOTT STRATFORD, Oakland, Calif. Filed Feb. 2, 1928. Serial No. 251,350. 5 Claims. (Cl. 122—411.)



4. A method of heating fluids comprising the steps of mechanically applying a high rotative spin to a cylinder of liquid and subjecting the spinning liquid to radiant and convection heat applied to the exterior of the cylinder, converting the spinning energy into straight line movement and pressure, diverting a portion of the fluid from the cylinder and redirecting the remainder into an axial column and thence to the spinning body.

1,825,762. EXTRACTION PROCESS. RENÉ DE M. TAVEAU, Elizabeth, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed May 15, 1925. Serial No. 30,430. 1 Claim. (Cl. 196—13.)

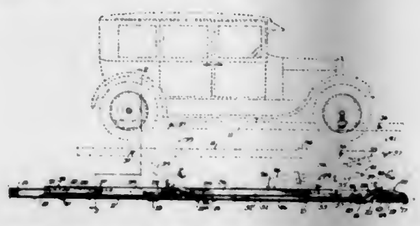


A process for the recovery of valuable lubricating oil from an asphalt base residuum which comprises treating the residuum with isopropyl alcohol, separating the oil-alcohol solution from the undissolved asphaltic matter, and evaporating the isopropyl alcohol to recover the lubricating oil.

1,825,763. METHOD OF PLATING METALS. WILLIAM E. WATKINS, New York, N. Y., assignor to Copper Plate Sheet & Tube Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 9, 1929. Serial No. 353,893. 14 Claims. (Cl. 91—70.3.)

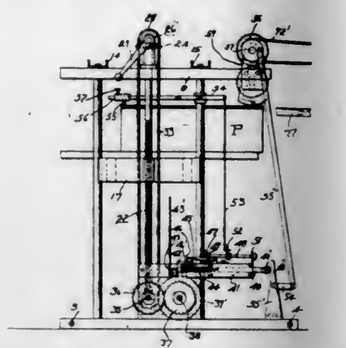
1. The process of plating metals, which consists of the following steps: applying to the metal to be plated a coating comprising a finely divided plating material, and a suitable liquid vehicle therefor; subjecting the metal to be plated together with the coating thereon to heat, the quantity of said coating and the intensity and duration of the heat being sufficient to form a plating layer of the plating metal adherent to the metal to be plated and subsequently applying a second plating layer of metal by passing the plated metal through a molten bath of a metal having a lower melting point than the first plating metal at a speed of from 250 to 400 feet per minute.

1,825,764. AUTOMOBILE LIFTING APPLIANCE. GAILARD E. WEAVER and ALBERT R. SQUYER, Springfield, Ill., assignors to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed May 26, 1928. Serial No. 280,884. 4 Claims. (Cl. 254—93.)



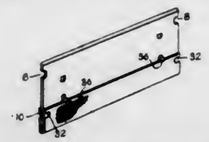
1. In an automobile elevating and lowering appliance, the combination of a base-frame, a lifting-frame adapted to support an automobile, link-means spaced apart lengthwise said frames and each having a hinge connection with said lifting frame and a fulcrum connection with said base-frame movable downwardly and lengthwise the latter during at least a portion of the lifting-frame elevating operation, inclined track-means disposed lengthwise of said base-frame, and means on each of said link-means cooperating with the corresponding track-means to rock said link-means upwardly during the movements of said fulcrum connections longitudinally of said base-frame, and power-means to operate said link-means and lifting-frame.

1,825,765. VACUUM PAPER FEEDER. JOSEPH ZANETTI, San Francisco, Calif. Filed Dec. 24, 1928. Serial No. 328,296. 1 Claim. (Cl. 271—28.)



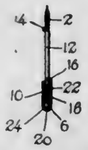
A machine of the class described comprising means to maintain a pile of paper sheets with the upper sheet at a predetermined level, a segmental feeding arm having its peripheral side adapted to contact the top of the pile of sheets, means to continuously rotate said feeding arm, the peripheral side of said feeding arm having a plurality of spaced openings therein, and a port in said feeding arm having an air pressure below atmospheric and adapted to progressively register with each of the openings in the peripheral side of said feeding arm as the feeding arm rotates.

1,825,766. SAFETY RAZOR BLADE. MERRILL ANDERSON, New York, N. Y. Filed Jan. 18, 1928. Serial No. 247,669. 1 Claim. (Cl. 30—12.)



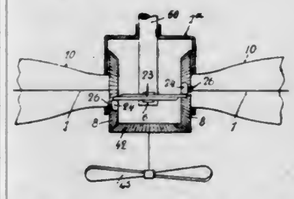
A safety razor blade made of thin metal, having two sharpened edges, and provided with a notch in each corner thereof, the notches opening endwise of the blade, the blade being further provided with a plurality of outstruck lugs adjacent the sharp edges of the blade, two of the notches serving to engage with a suitable holder, while the other two notches furnish exposed gripping points useful in extracting the blade from the holder, the outstruck lugs being adapted to rest on the upper edge of the holder for limiting the inward movement of the blade with respect to the holder.

1,825,767. SAFETY RAZOR BLADE. MERRILL ANDERSON, New York, N. Y. Filed Jan. 18, 1928. Serial No. 247,670. 1 Claim. (Cl. 30—12.)



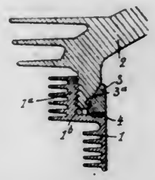
In combination, a relatively thin, flat-jawed, U-shaped holder made of springy metal and provided with inwardly struck lugs, and a substantially rectangular, double-edged razor blade having an aperture in each corner thereof, the blade being adapted to be held in the holder with the lugs of the holder in engagement with two of said apertures in the blade, while the other two apertures of the blade serve to receive a wire or the like for extracting the blade from its holder, the blade being further provided with a plurality of outstruck lugs near the sharp edges thereof, said lugs being adapted to rest on the upper edge of the U-shaped holder for limiting the inward movement of the blade with respect to the holder.

1,825,768. PROPELLER WITH VARIABLE PITCH. MARIUS JEAN-BAPTISTE BARBAROU, Paris, France. Filed Mar. 1, 1930, Serial No. 432,449, and in France Mar. 19, 1929. 5 Claims. (Cl. 170—162.)



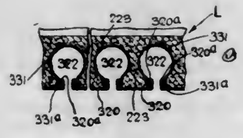
1. A propeller unit comprising in combination a propeller shaft, a main propeller frame keyed to said shaft, propeller blades pivotally mounted on said frame, an auxiliary propeller of constant pitch transmission, means for operatively connecting said auxiliary propeller with said propeller blades whereby rotation of said auxiliary propeller relatively to said frame causes pivotation of said blades relatively to said frame, said transmission means having a constant motion transmitting ratio and yielding means for resiliently opposing said relative movements.

1,825,769. CONSTRUCTION OF THE CYLINDERS OF INTERNAL COMBUSTION ENGINES. MARIUS JEAN-BAPTISTE BARBAROU, Paris, France. Filed July 17, 1930, Serial No. 468,479, and in France Sept. 16, 1929. 4 Claims. (Cl. 123—171.)



1. In an air-cooled internal combustion engine, a cylinder having an internally screwthreaded enlarged upper end, a cylinder head screwed in said enlarged end, and an internal hoop of a metal having substantially the same coefficient of expansion as the cylinder, located within said cylinder head, opposite said enlarged end.

1,825,770. SOUND ABSORBING CONSTRUCTION. LOUIS BARNETT, Brooklyn, N. Y., assignor of one-half to Arthur Sitzman, Lynbrook, Long Island, N. Y., and one-half to Adolph Hamburger, Flushing, Long Island, N. Y. Filed July 3, 1929. Serial No. 375,711. 6 Claims. (Cl. 20—4.)



5. An article of manufacture comprising an acoustical correcting structure formed of a sound absorbent layer having recesses extending inwardly from the surface thereof exposed to sound, said recesses being of relatively increasing cross-sectional areas inwardly from said exposed surface whereby sound waves reaching the walls of said recesses will be absorbed, said recesses being closed rearwardly of said exposed surface.

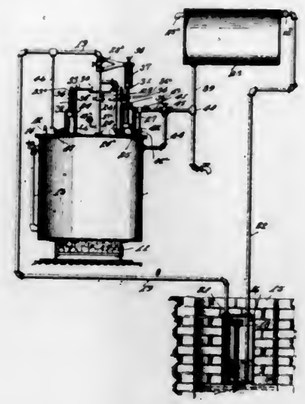
1,825,771. REVERSIBLE AND IRREVERSIBLE THERMO PLASTIC BONDED ABRASIVE ARTICLES. RAYMOND C. BENNER, Niagara Falls, and GARNETT H. PORTER, La Salle, N. Y., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Mar. 24, 1928. Serial No. 264,568. 12 Claims. (Cl. 51—280.)

1. A composition comprising abrasive grains and reaction product of vulcanized rubber, halogen, phenol and aldehyde.

1,825,772. AUTOMATIC VACUUM, PRESSURE GRAVITY WATER SYSTEM. HUGH L. BOGGS, Savannah, Ga., assignor of one-fourth to Frank Piotti and one-fourth to Karrey Moomjian, Savannah, Ga. Filed Sept. 11, 1930. Serial No. 481,300. 8 Claims. (Cl. 103—255.)

1. Means for elevating water comprising in combination, a steam generator, a storage tank, a pressure tank having a suction pipe disposed within the water to be elevated, a pipe for transferring steam from said generator to said pressure tank for creating a pressure in said suction pipe, means connecting said pressure and storage tanks whereby water elevated through said suc-

tion pipe will be conducted to said storage tank, a valve in said pipe between said generator and said pressure tank, and automatic means to close said valve upon the

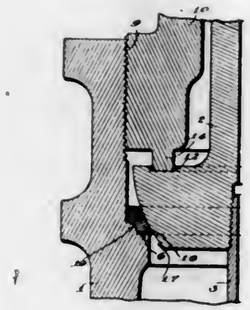


establishment of a vacuum in said system, and to open said valve upon decrease of steam pressure in said generator and said pressure tank.

1,825,773. STABLE HOMOGENEOUS NITROCELLULOSE-DRYING OIL MIXTURES AND PROCESS OF MAKING SAME. JAMES ELIOT BOOGE, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 8, 1925. Serial No. 61,264. 7 Claims. (Cl. 134—79.)

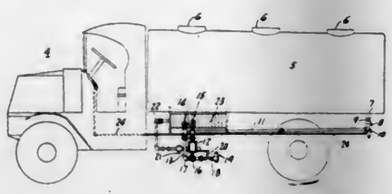
4. In the process of making a permanent mixture of nitrocellulose and a drying oil, the step which comprises heating the oil, and blowing the hot oil with air until it has become so miscible with nitrocellulose as to form therewith a permanent homogeneous mixture and then mixing the blown oil with the nitrocellulose.

1,825,774. CASING HEAD. ALEXANDER BOYNTON, San Antonio, Tex. Filed Nov. 21, 1927. Serial No. 234,777. 1 Claim. (Cl. 285—22.)



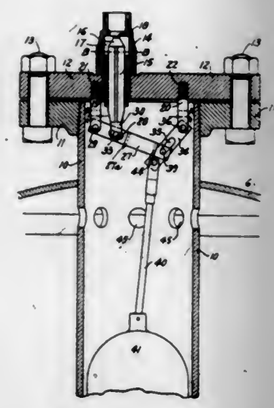
A casing head comprising a main body, a tubing carrier fitted upon the main body, means to compose a fluid seal at the point of connection of the tubing carrier with the main body, and a pressure member covering the joint between said carrier and body preventing the admission of foreign matter to the sealing means and being operable upon the casing head and against said carrier to tighten said sealing means.

1,825,775. AUTOMATIC CONTROL FOR PUMP EQUIPPED METER SYSTEMS. WALTER S. BRUBAKER, Oakland, Calif., assignor to Granberg Meter Corporation, San Francisco, Calif., a Corporation of California. Filed Jan. 24, 1928. Serial No. 249,188. 14 Claims. (Cl. 221—95.)



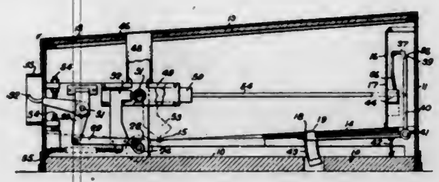
1. In combination, a liquid reservoir, a liquid discharge line leading therefrom, a liquid meter in said discharge line, a pump in said line for discharging liquid through the latter and the meter, and means for automatically effecting stopping of the pump upon emptying of the reservoir, thereby preventing said pump from discharging air from the reservoir through the meter and causing false registering of the latter.

1,825,776. FLOAT-CONTROLLED VALVE. WALTER S. BRUBAKER, Oakland, Calif., assignor to Granberg Meter Corporation, San Francisco, Calif., a Corporation of California. Filed Nov. 7, 1928. Serial No. 317,797. 1 Claim. (Cl. 137—69.)



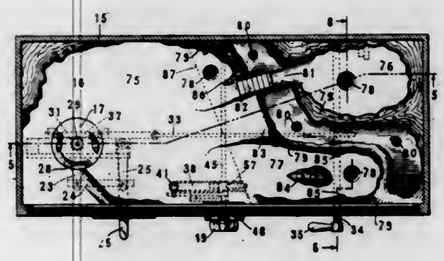
In a gas escape means, a horizontal support having a vertical gas escape passage, said passage being provided with a valve seat, a valve slidable in said passage and adapted for coaction with said seat, said valve projecting downwardly from said support, one post secured to and projecting downwardly from said support at one side of and relatively close to said valve, a second post secured to and projecting downwardly from said support at the other side of and comparatively distant from said valve, one lever fulcrumed at one of its ends to said one post and having a pin and slot connection with said valve, said lever having a yoke-like portion near its other end and being bifurcated from said yoke-like portion to said other end, a second lever fulcrumed at one of its ends to said second post, the intermediate portion of said second lever being straddled by and having a pin and slot connection with said bifurcated portion of said one lever, and a float connected with the other end of said second lever, a portion of the latter being adapted for reception in said yoke-like lever portion when the float ascends to effect valve closing.

1,825,777. GAME. FRANK R. CHESTER, New York, N. Y., assignor, by mesne assignments, to Chesterfield Control Company, Dover, Del., a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,056. 11 Claims. (Cl. 194—81.)



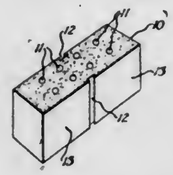
1. A golf game, including a deck and a back-stop, each formed with an opening, a missile-impelling member mounted upon said deck, means for actuating said member to toss a missile supported upon the deck surface toward the opening in the back-stop or move said missile over said deck toward the opening in the latter, and means associated with each of said openings and connected to alternately obstruct one of the same.

1,825,778. GAME. FRANK R. CHESTER, New York, N. Y., assignor, by mesne assignments, to Chesterfield Control Company, Dover, Del., a Corporation of Delaware. Filed Apr. 18, 1928. Serial No. 270,855. 19 Claims. (Cl. 273—87.)



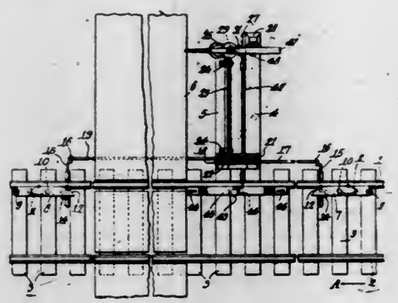
2. A game including a deck having target, hazard and ramp portions disposed in line with each other, a missile-impelling member mounted upon said deck and in advance of said ramp portion whereby a properly impelled missile will traverse said ramp, avoid said hazard portion and be disposed upon said target portion and means forming a part of the deck bridging said hazard portion and extending from the target portion of the deck to connect the same with that deck portion which mounts said impelling member, the portions of said deck presenting surfaces inclined towards said missile-impelling member.

1,825,779. WALL BEARING CERAMIC TILE. PATRICK J. CONLEY, Canton, Ohio. Filed Dec. 9, 1929. Serial No. 412,713. 1 Claim. (Cl. 72—36.)



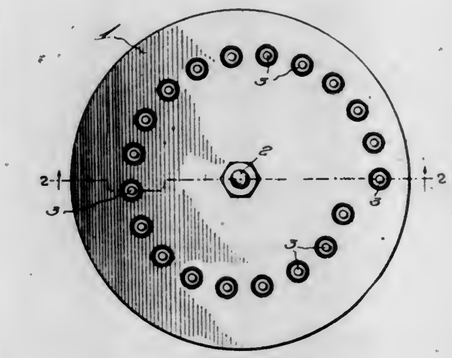
A wall bearing brick provided on a side surface with a vertical dovetail groove forming a false mortar joint and dividing said surface into two substantially square areas each of which is surface finished to represent a tile, whereby a wall built of said bricks will have a finished inner surface having the appearance of tiles provided with continuous vertical and horizontal mortar joints.

1,825,780. CROSSING GATE. EVERETT DANIEL, Moultrie, Ga. Filed Feb. 10, 1930. Serial No. 427,303. 4 Claims. (Cl. 246—293.)



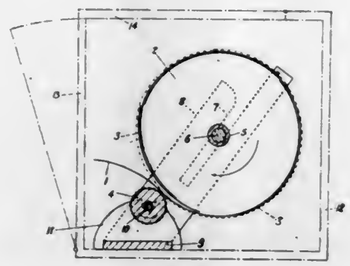
1. In a device of the class described, a track rail, a ramp, means for mounting the ramp at one end for swinging movement both vertically and horizontally, spring means for raising the ramp whereby a car wheel going in one direction will depress it, spring means for swinging the ramp horizontally against the rail, the ramp being beveled on its opposite end whereby a car-wheel going in an opposite direction will swing it horizontally without depressing it, a gate mounted for vertical swinging movement, a slide sustaining the gate in open position when the slide is advanced, and means for connecting the slide with the ramp, whereby when the ramp is depressed, it will retract the slide as the gate closes.

1,825,781. TELEVISION SCANNING DEVICE. LEO H. DAWSON, Washington, D. C. Filed July 30, 1929. Serial No. 382,162. 19 Claims. (Cl. 178—6.)



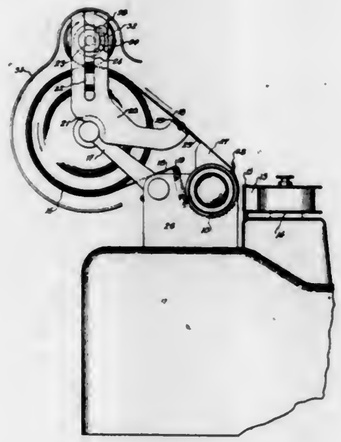
1. A scanning device for television systems comprising in combination an opaque member adapted to be moved in a path of light, said member having a plurality of light conducting and concentrating members and said last mentioned members comprising individual conical shaped sections of material having a relatively high refractive index.

1,825,782. DEVICE FOR DELIVERING SQUARES OR OTHERWISE SHAPED PIECES OF CLOTH OR OTHER SHEET MATERIAL. ROBERT PENDER DUFF, Dundee, Angus, Scotland. Filed Jan. 14, 1931, Serial No. 508,684, and in Great Britain Jan. 23, 1930. 3 Claims. (Cl. 242—55.2.)



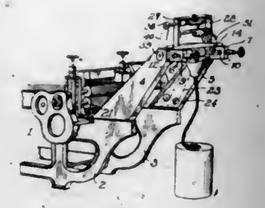
1. A device for delivering pieces of sheet material comprising a revoluble magazine of pieces wound in overlapping relation in roll form, a binder wound exterior to the overlapping pieces, and a winder rotatable with said roll for winding up said binder as said roll is unwound.

1,825,783. ADDING MACHINE. WILLIAM E. DUNNING and RAY MIDDLETON, Alliance, Ohio, assignors to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Feb. 11, 1930. Serial No. 427,530. 3 Claims. (Cl. 242—55.)



1. In an adding machine or the like, a record strip roll shaft mounted on the adding machine, a record strip roll journaled on the shaft, an adjacent platen roll around which the strip from the record strip roll is adapted to be passed, a bracket supported on the shaft and provided with a slot, and a rewind strip roll slidably and rotatably mounted in the slot and adapted to frictionally engage the record strip roll, the rewind strip roll being adapted to receive the strip after it has passed around the platen roll.

1,825,784. MEANS FOR MAKING ROUND PILES OF SLIVER IN CORDAGE MACHINES. FREDERICK ENGEL, Miamisburg, Ohio. Filed May 12, 1930. Serial No. 451,578. 10 Claims. (Cl. 19—159.)

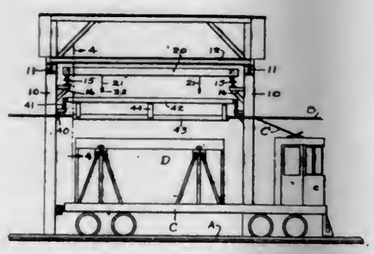


1. In a cordage machine, the combination with mechanism for preparing sliver, of a guider for the latter, means operated by said mechanism for moving said guider through a circular path, and means for periodically changing the diameter of the circular path of said guider for the purpose specified.

1,825,785. PROCESS OF COATING, VENEERING OR GLAZING CANDLES WITH A PERMANENT COLOR. JOHN FINN, Jr., San Francisco, Calif., assignor to Benjamin C. Mickle, San Francisco, Calif. Filed May 19, 1930. Serial No. 453,862. 2 Claims. (Cl. 87—21.)

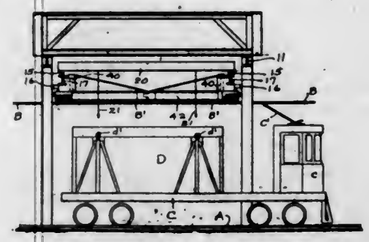
1. The method of coating candles which consists in grinding a pigment in fine particles, melting a mass of wax and raising the same to a temperature of approximately 150° F., adding the ground pigment to the wax, stirring the ground pigment into the wax until the mass is cool, allowing the wax and pigment mixtures to set, remelting the said mass, straining the mass to remove the oversize particles of pigments therefrom, raising the strained mixture to a temperature of approximately 180° F., adding stearic acid thereto, and dipping candles into the resultant solution for applying a permanently colored coating of film-like material thereto.

1,825,786. APPARATUS FOR TRANSFERRING FREIGHT. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,448. 10 Claims. (Cl. 191—36.)



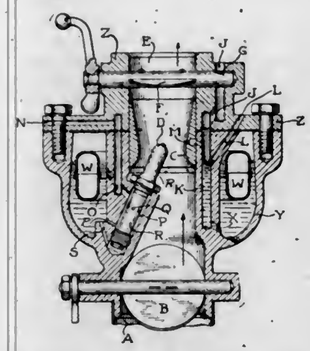
1. In a freight transferring apparatus, the combination of a crane trackway spanning an open space, a crane adapted to move on said trackway and having a depending cable, a carriage trackway spanning such space, a carriage movable on its trackway, trolley wires leading from opposite directions to points adjacent the transferring apparatus, and a trolley guide adapted to align with the two sections of the trolley wire and supported by said carriage, said cable being adapted to pass through the normal position of the trolley wheel guide.

1,825,787. APPARATUS FOR TRANSFERRING FREIGHT. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,450. 8 Claims. (Cl. 191—36.)



1. In an apparatus for transferring freight, the combination of a superstructure, a traveling crane mounted thereon and having depending raising cables adapted to engage and lift a removable body from a vehicle, a pair of members pivotally carried by the superstructure and adapted to stand in alignment with their free ends adjacent or be turned out of alignment, and trolley wheel guides carried by said pivotally mounted members, the cables of the traveling crane being adapted to pass through the normal position of the trolley wheel guides.

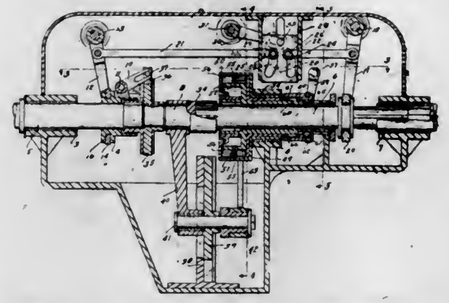
1,825,788. CARBURETOR. DALE GARDNER, Detroit, Mich., assignor to George M. Holley, Detroit, Mich. Filed Feb. 24, 1930. Serial No. 430,498. 2 Claims. (Cl. 261—41.)



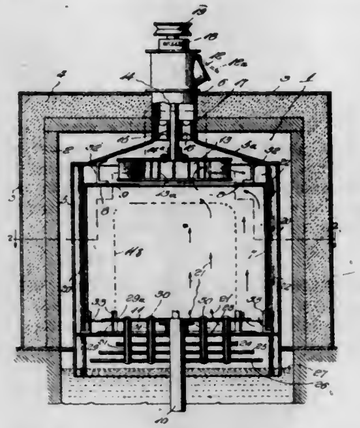
1. In a carburetor having a constant level fuel supply reservoir, an air entrance, a mixture chamber, a fuel nozzle fed from said reservoir, a mixture outlet and a throttle valve therein, an indefinite power jet located so as to discharge into the mixture chamber, a fuel passage through which said power jet communicates with said fuel reservoir, a passage leading from the atmosphere to said power jet, valve means in said passage controlled by said throttle so that the atmospheric passage is gradually restricted and finally eliminated as the throttle is opened for the purpose described, a second passage leading from the atmosphere into the fuel passage between the power jet and the float chamber at a point below the level in said fuel reservoir.

1,825,789. AUTOMATIC GEARLESS TRANSMISSION. THEODORE GENSMER, Portland, Oreg. Filed Apr. 9, 1928. Serial No. 268,723. 3 Claims. (Cl. 74—53.)

1. In a device of the class described, the combination of a relatively lubricant tight housing element, a plurality of shafts disposed within the housing and journaled relative thereto, said shafts being disposed in continuous alignment one being a driven shaft and the other a driving shaft, means for shifting one of the shaft elements longitudinally to make and break the shaft continuity as a driving element, a guide head shiftable transversely of the shaft alignment, a driving arm for said head, a cross head, a connecting rod disposed between the guide head and the cross head for imparting a reciprocating movement to the cross head as the rotatable guide head is rotated an over-running clutch element, and arms coacting with the over-running clutch element and the cross head for imparting rotation to the over-running clutch as the cross head is reciprocated to change the speed ratios between the driving shaft and the driven shaft to which the over-running clutch is indirectly secured.



1,825,790. RETORT FURNACE. FRED A. HANSEN, Milwaukee, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 10, 1929. Serial No. 384,952. 16 Claims. (Cl. 263—2.)

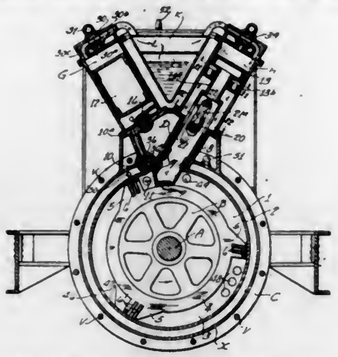


1. A retort furnace comprising a housing, a retort having an open bottom positioned within said housing, a lining for said retort, flues formed by said retort and said lining, a liquid seal at the base of said retort, and an elevator supporting a load, said elevator being movable through the open bottom of said retort and carrying a multiplicity of baffle plates thereon adapted to be aligned normal to the aforementioned flues for directing the circulation of air currents within said retort.

1,825,791. ROTARY INTERNAL COMBUSTION ENGINE. JOHN I. HAYNES, St. Louis, Mo. Filed Nov. 8, 1926. Serial No. 147,005. 27 Claims. (Cl. 123—14.)

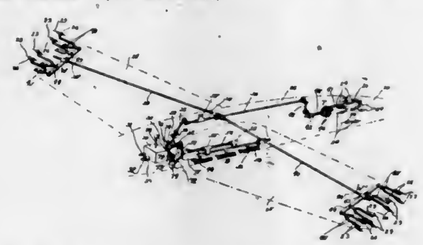
1. A rotary internal combustion engine of the turbine type, comprising a rotor rotatably mounted in a raceway and provided with a piston portion, an abutment member that is adapted to be introduced into said raceway so as

to co-operate with said piston portion to form opposed walls of a combustion chamber, a means for compressing an expansible medium separate and distinct from the fuel



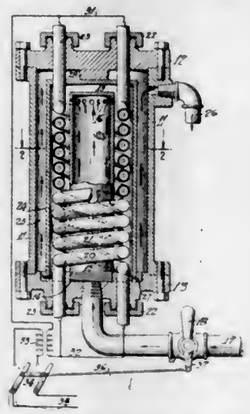
used to operate the engine, and a charging piston operated by said compressed expansible medium for forcing a compressed charge of fuel into the combustion chamber.

1,825,792. AIRPLANE. AUGUSTUS M. HENRY, Brooklyn, N. Y., assignor of thirty per cent to Frank J. Kent, Montclair, N. J. Filed June 5, 1929. Serial No. 368,474. 19 Claims. (Cl. 244—30.)



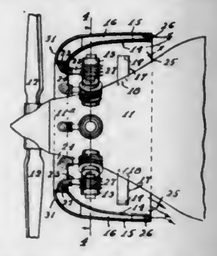
1. In an airplane, the combination with a subdivision thereof, said subdivision of the covered, internally braced type; of means including crumpleable elements normally non-crumpleable and normally housed within said cover, and means for at will conditioning said elements thereby to render them elements of a crumpleable.

1,825,793. ELECTRIC HEATING SYSTEM FOR FLUIDS. HERBERT HEROY, Belmar, N. J. Filed Nov. 28, 1930. Serial No. 498,875. 2 Claims. (Cl. 219—39.)



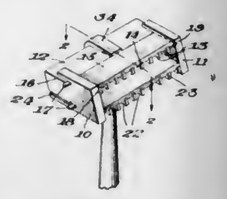
1. An electrical heating system for fluids comprising a cylindrical housing, a pair of end caps for said cylinder, a central tube in said housing having one end screwed into one of said caps opposite a fluid supply pipe and the opposite end closed but provided with perforations at the closed end, an electric heating coil surrounding said central tube, an outer tube of smaller diameter than said cylindrical housing and longer than said center tube enclosing said heating coil and having one end closed and the opposite end provided with perforations at the end in the opposite position to the perforated end of said central tube and resting in a groove in one of said end caps and a fluid delivery pipe connected to an aperture in said cylindrical housing.

1,825,794. COWL MUFFLER FOR AEROPLANE ENGINES. ASHLEY C. HEWITT, Essex Fells, N. J., assignor to Engineering Development Associates, Plainfield, N. J., a Corporation of Delaware. Filed Oct. 30, 1929. Serial No. 403,495. 11 Claims. (Cl. 244—31.)



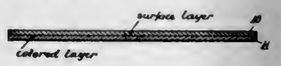
1. In a muffler eductor cowl for aeroplane engines an inner cowl shell, an outer cowl shell, coaxial with said inner shell, interior stiffening ribs, disposed in radial planes lengthwise of said cowl shells therebetween and secured thereto, thereby joining said shells to each other, leaving a muffling space therebetween, a means for establishing a communication between the exhaust of said engines and said space and a discharge passage from said space at the follower ends of said shells.

1,825,795. SAFETY RAZOR. GEORGE H. HEYMANN, Louisville, and EDWARD D. ROSE, Bowling Green, Ky. Filed Apr. 27, 1931. Serial No. 533,334. 2 Claims. (Cl. 30—12.)



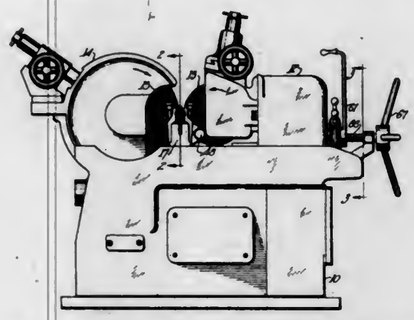
1. A safety razor comprising a head having sides, a top and bottom, the top and bottom being formed with outwardly and upwardly extending guard teeth in sets, the individual teeth of which are respectively staggered, blades abutting the said guard teeth, a handle detachably secured to said head and means carried by said handle for holding said blades in abutting relation to said guard teeth.

1,825,796. SAFETY PAPER. SAMUEL S. HIMMELL, New York, N. Y. Filed Sept. 18, 1930. Serial No. 482,091. 3 Claims. (Cl. 283—8.)



1. A safety paper comprising a paper layer having an identifying marking, said paper layer having a surface coating of non-paper material which constitutes a surface layer which covers said marking, the outer surface of said surface layer being adapted to be printed upon, said surface coating being light-permeable, so that said identifying marking is visible.

1,825,797. GRINDING MACHINE. CECIL W. HOPKINS, Cincinnati, Ohio, assignor to The Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 13, 1930. Serial No. 428,172. 13 Claims. (Cl. 51—103.)

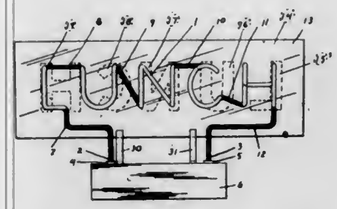


1. In a device of the class described the combination of a pair of opposed grinding and regulating wheels forming a grinding throat therebetween, a work rest blade within the throat, a positioning and ejecting member within the throat for limiting the insertion of the work piece therein and for axially ejecting same therefrom and hydraulic means for actuating the said member including an intermittently operable pump.

1,825,798. STENCIL SHEET. SHINJIRO HORII, Kanda-Ku, Tokyo, Japan. Filed Sept. 6, 1930. Serial No. 480,193. 9 Claims. (Cl. 41—38.6.)

1. A stencil sheet adapted for stencilizing by pressure, consisting of a base of fibrous material having a coating comprising esters of polysaccharides and blown camelia oil.

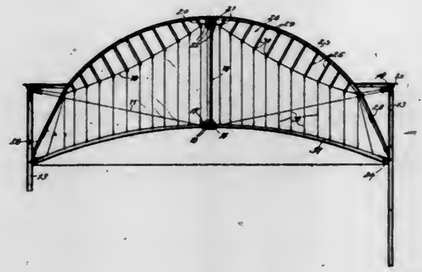
1,825,799. LUMINOUS DISPLAY. FRED HOTCHNER, Los Angeles, Calif. Filed Mar. 11, 1931. Serial No. 521,754. 12 Claims. (Cl. 40—130.)



10. In a display, a luminous tube in the form of a display pattern and a sheet of opalescent glass in cooperative relation thereto and forming a background therefor and means on said glass to delineate a second display pattern in the opposite direction.

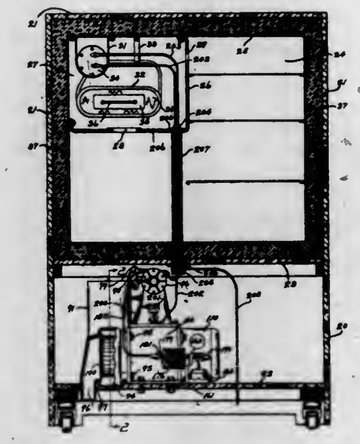
1,825,800. ROOF CONSTRUCTION. MARTIN L. HOUSEMAN, Hollywood, Calif., assignor of one-half to John Goben, Los Angeles, Calif. Filed May 6, 1929. Serial No. 360,937. 4 Caims. (C. 108—32.)

1. A roof structure comprising a king post, a vertical wall structure surrounding and delineating an area to be covered by a roof, a plurality of tension cables secured by their outer ends to the wall and extending across said area and beneath the king post for the support of the same, a plurality of guy cables in substantially the same plane with said tension cables and secured to said wall and passing substantially upwardly over the upper end of the king post, a plurality of roof cables disposed above the guy cables in the same plane therewith and secured



by their outer ends to the wall and secured to the king post, and a plurality of rigid struts of graded lengths interposed between the guy cables and the roof cables, for cooperating therewith to form roof supporting trusses extending from the upper end of the king post to the upper ends of the wall, the said struts gradually decreasing in length from near the middle to the ends of each truss to maintain the roof cable in outwardly convex shape.

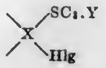
1,825,801. REFRIGERATING APPARATUS. JESSE G. KING and HARRY B. HULL, Dayton, Ohio, assignors, by mesne assignments, to General Motors Research Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 7, 1923. Serial No. 637,136. 13 Claims. (Cl. 62—116.)



1. In refrigerating apparatus, a unitary structure comprising in combination a frame having end walls, a compressor supported by the frame, a draft tube attached to one end wall, a condenser located in the draft tube and supported by the frame and connected with the high-pressure side of the compressor, a motor mounted on the opposite end wall, a rotatable blower located in the draft tube, and means extending through the frame for connecting the motor and blower.

1,825,802. TANNING SUBSTANCE AND PROCESS OF PREPARING SAME. GEORG KRÄNZLEIN and ARTHUR VOSS, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 7, 1924, Serial No. 691,274, and in Germany Feb. 7, 1923. 20 Claims. (Cl. 260—2.)

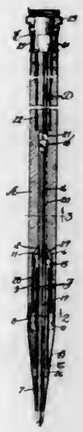
1. Process of preparing tanning substances which comprises reacting an organic compound containing the atom grouping:



wherein Hlg stands for a replaceable halogen, Y for hydrogen or a salt-forming residue, and X for a chain of two or more carbon atoms, with an alkali-soluble condensation product of a phenol and a compound of the group consisting of aldehydes, phenols and sulfur chloride in the presence of water and an alkaline agent which is capable of dissolving the phenol condensation product.

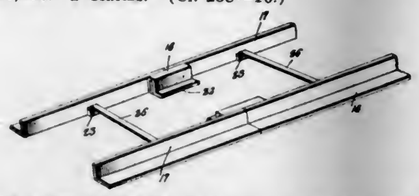
4. Process of preparing tanning substances which comprises reacting a sodium benzyl-chloride sulfonate with an alkali-soluble phenol-aldehyde condensation product in the presence of water and an alkaline agent which is capable of dissolving the phenol-aldehyde condensation product.

1,825,803. PENCIL. JOHN P. LYNN, Chicago, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 8, 1929. Serial No. 405,678. 10 Claims. (Cl. 120—18.)



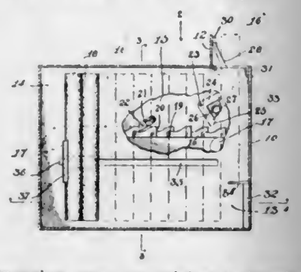
5. In a pencil comprising a barrel, a tip therefor at the writing end having a tapered portion together with a reduced sleeve portion, the latter being rotatively engaged in said barrel and both the tapered and sleeve portions being hollow to provide therewithin a magazine for reserve leads which are movable into and out of the magazine through an opening in the sleeve portion, said sleeve being formed of resilient material with a portion thereof initially deformed requiring a bending thereof when entered into the barrel whereby to insure frictional resistance to its rotation relative to the barrel.

1,825,804. SECTIONAL TRACK. THOMAS MACCALLUM, North Lima, Ohio. Filed Sept. 9, 1929. Serial No. 391,256. 2 Claims. (Cl. 238—10.)



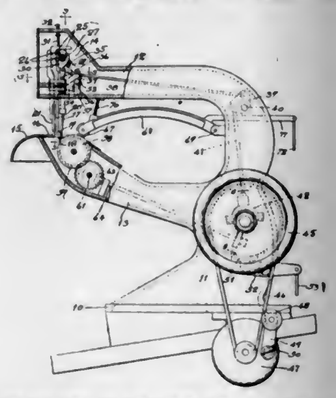
1. A sectional track of angular cross section rails, spacing bars having their opposite ends removably engaged therewith, lugs spaced from and parallel with the rail sections at opposite ends thereof, pins connecting the lugs and rail sections, and means removably positioned over the lugs of the ends of adjacent track sections and engaging the pins to detachably connect the sections.

1,825,805. DISPENSING CASE. CLEMENS J. MARKSON, Philadelphia, Pa. Filed Apr. 4, 1930. Serial No. 441,080. 19 Claims. (Cl. 206—41.)



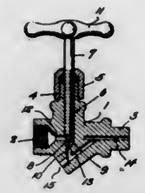
1. A dispensing case comprising a housing having a partition therein forming a slideway and dividing the chamber into major and minor compartments, said partition having a slot therethrough forming communication between the compartments, an endless carrier mounted wholly within the minor compartment upon pulleys, the axes of which are perpendicular to the partition, a pusher carried by the endless carrier operating through the slot and along the slideway, a closure common to both compartments, means tending to open the closure when released, means connected with the closure to operate the endless carrier with a step by step motion, and an elevator connected with the closure.

1,825,806. MACHINE FOR MENDING RUNS IN FABRICS. RALPH M. MARKUS, Chicago, Ill. Filed July 14, 1930. Serial No. 467,904. 11 Claims. (Cl. 66—1.)



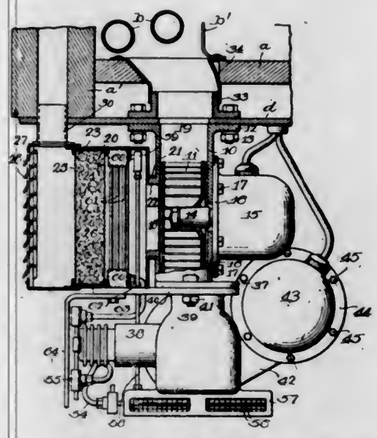
1. In mechanism of the class described, the combination of a reciprocally mounted looping needle, a pair of feeding fingers, means for reciprocating the looping needle, and means for alternately actuating the feeding fingers to impart a step by step movement thereto to present successive cross threads to the looping needle.

1,825,807. VALVE. BRUNO MARTIN, Saginaw, Mich. Filed Dec. 21, 1929. Serial No. 415,751. 6 Claims. (Cl. 251—155.)



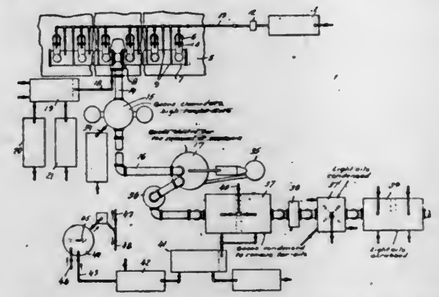
1. A valve comprising a body having aligned fluid passages leading from its front and rear ends and terminating in spaced relation to each other, said body having a neck intermediate its ends and axially of the neck being formed with a threaded bore communicating with the inner end of the rear passage and having its inner portion formed with a tapered valve seat and a reduced passage leading therefrom, a connecting passage being formed longitudinally in said body at an incline to the reduced passage and communicating therewith intermediate its ends and having its front end opening into the front passage and its rear end opening through the rear portion of the body, a removable plug closing the rear end of the connecting passage, and a stem threaded through said bore and having its inner end tapered to seat against said valve seat when closed.

1,825,808. AIR CONDITIONING APPARATUS. LEE W. MELCHER, Winnetka, Ill. Filed Sept. 2, 1930. Serial No. 479,227. 7 Claims. (Cl. 62—117.)



1. In an air conditioning apparatus of the character described, the combination of a supporting structure, an air filter supported on the structure, a motor-driven fan also supported on the structure and operative to force air through the filter and to discharge the filtered air under pressure, and a refrigerating unit connected detachably to the supporting structure and comprising a compressor and a refrigerant line positioned to cool the air forced through the filter by the fan and adapted to be removed from its operative position upon detachment of the unit from the supporting structure.

1,825,809. RECOVERY OF TAR ACIDS. STUART PARMELEE MILLER, Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1927. Serial No. 206,870. 7 Claims. (Cl. 260—154.)



1. The method of treating hot coal distillation gases, which comprises cooling the gases to a regulated temperature such that when cleaned with an electrical precipitator, there will be directly separated therefrom a pitch having a melting point of about 105° to 110° F., and a considerable amount of tar acid oils will be left in the vapor state, cleaning the gases by electrical precipitation subsequently treating the resulting cleaned gases for the recovery of ammonia at a sufficiently high temperature to leave tar acids in vapor form, treating the resulting gases for the recovery of tar acid oils therefrom, and extracting tar acids from such oils.

1,825,810. CAP SUPPORT. HOWARD H. MORGAN, Hollywood, Calif. Filed June 27, 1930. Serial No. 464,354. 2 Claims. (Cl. 2—199.)



1. A cap having its top made up of substantially segmental sections whose edges are brought together and connected, reinforcing strips in the cap at the edges of the segmental members, a reinforcing rib centrally secured to each of said strips and each of said ribs being substantially T-shaped in cross section and of elastic material.

1,825,811. THERMORESPONSIVE FUSE. NELS S. NELSON, Detroit, Mich., assignor of one-half to Frederick G. Meyer, Detroit, Mich. Substitute for application filed Nov. 22, 1926, Serial No. 149,949. This application filed Mar. 5, 1929. Serial No. 344,576. 4 Claims. (Cl. 200—113.)

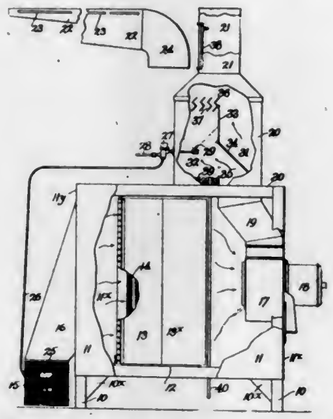


1. A thermo-flexible bimetallic circuit breaker arm, retaining its power of recovery from flexure at temperatures in excess of 1500 degrees Fahrenheit, said arm comprising two rigidly connected metal strips differing as to their coefficients of expansion, the strip of lesser expansion coefficient containing a predominance of iron, more than thirty per cent of nickel, less than ten per cent of silicon, and less than one per cent each of manganese and carbon.

1,825,812. ACYLATED K-STROPHANTHIDINE AND PROCESS OF PRODUCING SAME. WILHELM NEUMANN, Wurzburg, Germany, assignor to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Filed Mar. 21, 1929, Serial No. 348,992, and in Germany Apr. 5, 1928. 15 Claims. (Cl. 260—106.)

1. The process of producing compounds of k-strophanthidine comprising acting on k-strophanthidine with an acylating agent of the aliphatic series.

1,825,813. AIR TEMPERING AND HUMIDIFYING UNIT. GEORGE W. NITCHY, Kansas City, Mo. Filed Jan. 14, 1931. Serial No. 508,664. 8 Claims. (Cl. 257—9.)



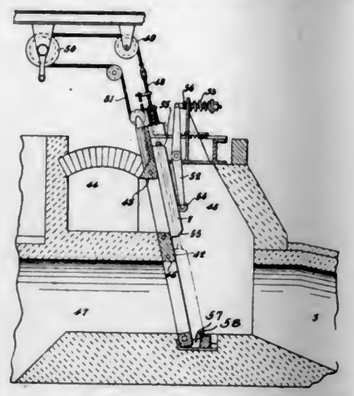
1. Means for producing a forced air circulation of tempered and humidifying air in a chamber including a cabinet within the chamber and an air tempering assemblage within the cabinet; an air intake at or near the floor level of the chamber in communication with the air tempering assembly and a fan operative to remove air from the floor of the chamber and suck said air through the air tempering assembly and thence force said tempered air upwardly to the upper portion of the chamber and means connecting to said cabinet to receive said tempered air and adjusted to discharge said air throughout the upper portions of the chamber; and a humidifier associated with the cabinet intermediate the fan and said discharging means; said humidifier comprising two vertical compartments separated by a division wall and a movable baffle; a spray in one compartment for adding moisture to the air after tempering, said baffle serving upon adjustment to divert measured quantities of the circulated tempered air to enter either or both of said compartments and an air mixing chamber above the compartments delivering into the air discharging means.

1,825,814. PURIFICATION OF SYNTHETIC OR SUBSTITUTION PRODUCTS SUCH AS ALKYL HALIDES. JAMES F. NORRIS, Boston, Mass., assignor, by mesne assignments, to Petroleum Chemical Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1923. Serial No. 671,387. 6 Claims. (Cl. 260—162.)

1. A process for the purification of an impure liquid alkyl halide which comprises adding a non-volatile liquid mineral acid thereto, raising the temperature of the resulting mixture, and separating the purified alkyl halide from the remaining mixture.

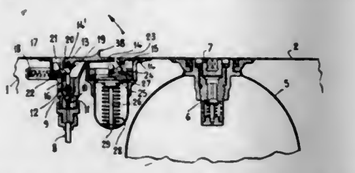
1,825,815. REVERSING VALVE AND EQUIPMENT FOR COMBUSTION CONTROL. RALPH D. NYE, Columbus, Ohio. Filed June 11, 1928. Serial No. 284,308. 4 Claims. (Cl. 158—7.5.)

4. Reversing valve structure including a double ported valve seat, a gate valve slidably mounted thereon, means for slidably moving the valve to close either port, a chamber for preheating incoming gases communicating with one port, a discharge duct communicating with the other port, a duct for transmitting incoming or outgoing gases and adapted to communicate with both ports, means for forcing gases into the preheating chamber, lever actuated roller means for holding the valve in contact with the valve



seat when closing the one port, and wedge means for holding the valve in contact with the valve seat when closing the other port, the pressure of the outgoing gases in the duct adapted to communicate with both ports when the valve registers with the preheating chamber port acting to force the valve against its valve seat and counter-balance the pressure of the incoming gases in the preheating chamber.

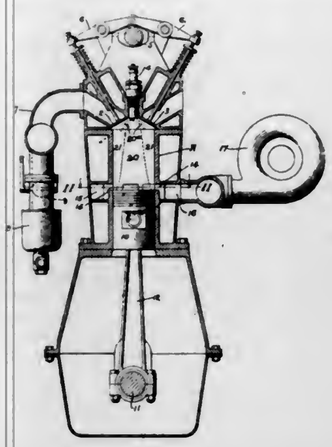
1,825,816. TORPEDO. PAOLO ORLANDO, Fiume, Italy, assignor to Silurificio Whitehead Di Fiume Societa Anonima, Fiume, Italy, a Company of Italy. Filed Aug. 20, 1930, Serial No. 476,651, and in Italy Aug. 30, 1929. 6 Claims. (Cl. 114—20.)



1. A device for expelling balast water in the bow compartment of torpedoes when the same are slowing under a predetermined rate, comprising a compressed air vessel having an outlet in said compartment, a water exhaust duct leading from said compartment to the outside, a valve controlling said outlet, a member subject to hydrodynamic reaction of the water through which the torpedo travels, sping means acting on said member in opposition to said reaction, said member being capable of acting on the valve to open said outlet when the hydrodynamic action falls under a predetermined value, and means under the control of the hydrostatic pressure for maintaining initially said member in inactive position.

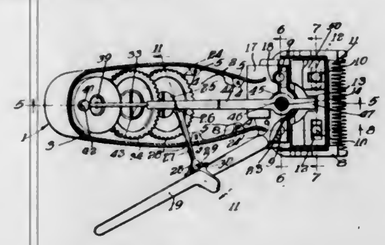
1,825,817. STRATIFYING ARRANGEMENT FOR INTERNAL COMBUSTION ENGINES. JOHN PATTERSON, Oakland, Calif., assignor of one-fourth to Brooks Walker and one-fourth to Clinton L. Walker, Piedmont, Calif. Filed Nov. 15, 1926. Serial No. 148,352. 3 Claims. (Cl. 123—75.)

1. In an internal combustion engine of the character described, a cylinder, a piston reciprocally mounted therein, a head on the cylinder, a substantially symmetrically shaped combustion chamber formed between the head and the cylinder, means whereby an explosive charge is admitted to the cylinder during the suction stroke of the piston, means whereby air is admitted to the cylinder through a port which is arranged on an angle with relation to a radial line of the cylinder so that the explosive



charge will be partially enclosed by a rotating body of air prior to compression and ignition of the charge, and an ignition device positioned substantially in the center of the combustion chamber.

1,825,818. SPEED-UP HAIR CLIPPER. ELBERT RICHARD POTTER, Villa Park, Ill., assignor to Harry A. Hirst, Chicago, Ill. Filed Aug. 15, 1928. Serial No. 299,823. 5 Claims. (Cl. 30—1.)

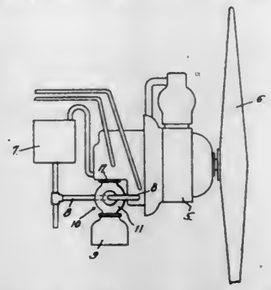


1. In a speed-up hair clipper, a casing forming a handle, a stationary cutter blade carried by the casing, a movable cutter blade slidable on the stationary cutter blade, a lever pivoted on the casing and normally spring-pressed outwardly, a gear train mounted in the casing, a connecting rod between the lever and gear train operating through an opening in one side of the casing handle adapted to oscillate and impart rotation to the gear train in opposite directions, said gear train including a crank disk in the rear part of the handle, and a rock lever pivoted near the forward end of the casing, operatively connected to the movable cutter blade extending over the gear train and slidably connected to the crank disk at its free rear end.

1,825,819. LUBRICANT HEAT DISSIPATING DEVICE. GEORGE A. POTTER, Dallas, Tex. Filed Nov. 29, 1930. Serial No. 499,053. 1 Claim. (Cl. 261—11.)

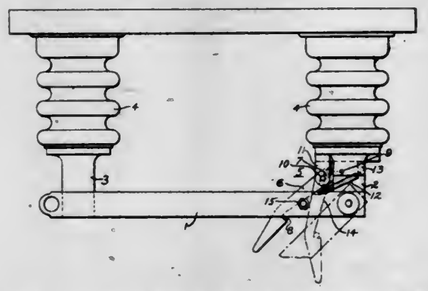
A lubricant cooling device for interposition between the carbureter and engine of the power plant comprising a globe having flanges upon two of its opposing sides connected to the engine and to a carbureter, a tubular member passing through the globe and having its axis located at right angles to the longitudinal axis of the globe, said

tubular member projecting slightly beyond the sides of the globe and having its end closed, and a centrally arranged opening in each end for connection to a lubricant line both



of the ends of the tubular member being formed integral with the sides of the globe and exterior fins formed on the tubular member.

1,825,820. DISCONNECTING SWITCH. ERNEST K. READ, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 7, 1926. Serial No. 114,109. 4 Claims. (Cl. 200—169.)



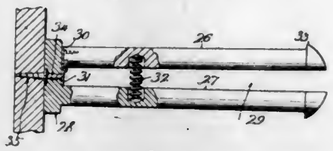
1. The combination with a contact member and a switch blade pivoted thereon, of a pivoted position lock for the switch blade having a lost-motion connection with the stationary contact member, and means for biasing the position lock to one of the limiting positions of the lost-motion connection.

1,825,821. APPARATUS AND PROCESS FOR PRINTING LETTERHEADS. ARTHUR ROSENTHAL, Grand Rapids, Mich. Filed Nov. 8, 1928. Serial No. 317,906. 8 Claims. (Cl. 101—198.)



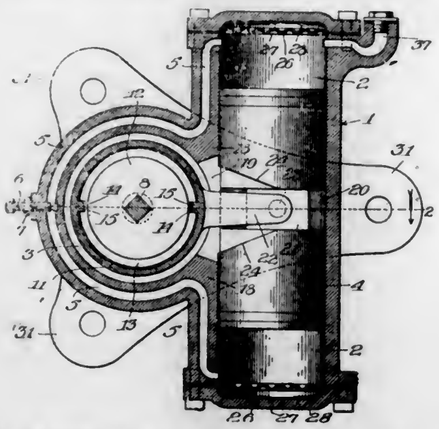
1. An apparatus for multiple printing, comprising a plurality of presses for printing different colors disposed in spaced relation and in alinement, means for delivering a web of paper from a roll through the said presses, drier means between the said presses, a web feeding and cutting means beyond the said presses comprising two pairs of spaced holder jaws with timed means for opening and closing the same, two pairs of feed jaws one adapted to engage the end of the web and the other between the said holding jaws, means for reciprocating the said feed jaws and causing them to engage and feed the said sheet, cut off shears disposed beyond the holding jaws and timed to permit the said feed jaws to act, and throw out fingers for the sheets beyond each of the said cut off shears with connections for actuating the same as the sheets are severed from the web, as specified.

1,825,822. PAPER ROLL HOLDER. RAYMOND R. RUNDELL, Waterville, Conn. Filed Nov. 4, 1929. Serial No. 404,798. 5 Claims. (Cl. 242—55.2.)



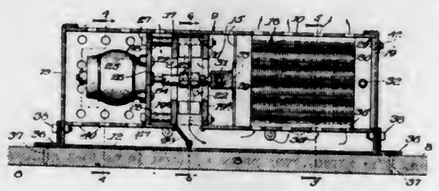
1. A holder for paper rolls, including a base, a supporting member fixed to said base and projecting therefrom, a cooperating supporting member and a hinge for pivotally connecting said last mentioned supporting member to said base, a spring tending to move said second supporting member away from said first supporting member, said supporting members being adapted to receive a roll of paper thereover and having a locking flange adjacent the free end to project at one end of the roll after the same has been placed on said supporting members.

1,825,823. SHOCK ABSORBING MECHANISM. ELMER RYDER, Elgin, Ill. Filed Oct. 31, 1927. Serial No. 229,886. 11 Claims. (Cl. 188—88.)



1. In a shock absorbing mechanism, the combination of hydraulic means for absorbing light shocks, and friction means operable independently of the hydraulic means for absorbing those shocks which can not be quickly compensated for by the hydraulic means.

1,825,824. MOTOR VEHICLE HEATER. ELMER RYDER, Elgin, Ill. Filed Apr. 22, 1929. Serial No. 357,236. 9 Claims. (Cl. 257—137.)



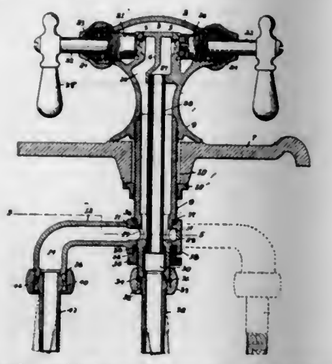
6. A motor vehicle heater, comprising an elongated casing having top, bottom and side walls, a partition wall in the casing adjacent its bottom wall and forming therewith an air duct extending substantially the full length of the casing, a heating element and a motor driven blower therefor, located within the casing above said partition wall in longitudinal alignment, said partition wall being perforated beneath the blower, motor and heating element, respectively, and valve means for the air duct whereby the air from the blower may be directed toward either end of said duct.

1,825,825. COUPLING CONNECTION. FRED SCHULDER, Cleveland, Ohio. Filed Mar. 16, 1927. Serial No. 175,708. 2 Claims. (Cl. 285—95.)



1. A tubular member having a spherical enlargement of differential diameter embodying an annular shoulder, a second tubular member adapted to seat the smaller portion of said spherical enlargement having a V-shaped end face adapted to prevent the movement of said first member in one plane more than in another plane, and coupling means for said members.

1,825,826. LAVATORY FAUCET. FRED SCHULDER, Cleveland, Ohio. Filed Aug. 31, 1927. Serial No. 216,522. 3 Claims. (Cl. 137—111.)



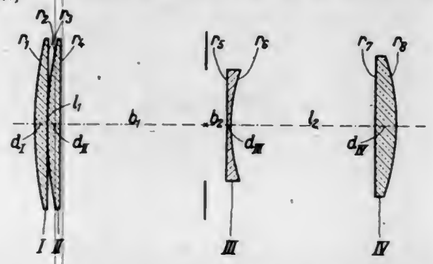
1. A valved combination fixture for distributing fluids, comprising a hollow screw-threaded shank containing a plurality of fluid passages and having a reduced and smoothly finished portion containing openings in its side and terminating in a screw-threaded extension, a nut sleeved upon said screw-threaded shank adapted to clamp said fixture to a support, a hollow branch having rotatable connection with said open-sided reduced portion, a nut sleeved upon the screw-threaded extension of said shank adapted to affix said branch removably thereto, and means adapted to connect separate supply pipes to the outer ends of said branch and shank, respectively.

1,825,827. SINGLE TEXTURE FABRIC AND PROCESS OF MAKING THE SAME. PAUL S. SMITH, Madison, N. J., assignor, by mesne assignments, to Lea Fabrics Inc., Newark, N. J., a Corporation of Delaware. Filed Oct. 16, 1924, Serial No. 743,960. Renewed May 25, 1929. 13 Claims. (Cl. 154—2.)



6. A step in the process for making fabrics which consists in applying a layer of fibres to one face of a fabric base; projecting sufficient portions of said fibres through the base to the other face thereof so as to form a pile surface thereon; and uniting the base and fibrous layer on the face from which said fibres are projected with an adhesive substance.

1,825,828. PHOTOGRAPHIC LENS. AUGUST SONNEFELD, Jena, Germany, assignor to the Firm of Carl Zeiss, Jena, Germany. Filed Aug. 30, 1930, Serial No. 479,017, and in Germany Sept. 10, 1929. 2 Claims. (Cl. 88—57.)



1. A photographic lens consisting of four parts, viz. a dispersive part enclosed at comparatively great air spaces between two converging parts and a further, converging, part placed in front of the said three parts, all converging lenses being of crown glass of a refractive index inferior to 1.52, and the distance between the front lens vertex and the rear lens vertex being greater than one third of the focal length.

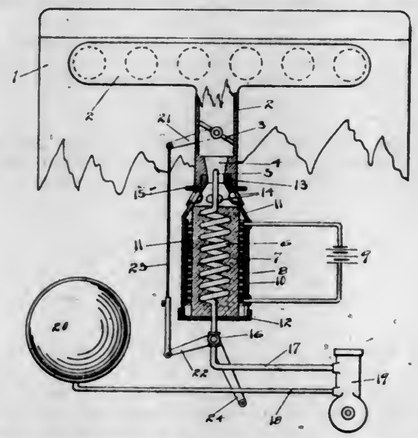
1,825,829. WELDING ROD. WINSTON F. STOODY and SHELLEY M. STOODY, Whittier, Calif., assignors to Stoody Company, Whittier, Calif., a Corporation of California. Filed Nov. 13, 1929. Serial No. 406,868. 4 Claims. (Cl. 219—8.)



1. A welding rod comprising a plurality of particles of tungsten carbide, said particles being held in a form suitable for welding purposes by a material containing iron, the majority of said particles being capable of passing through a thirty mesh screen.

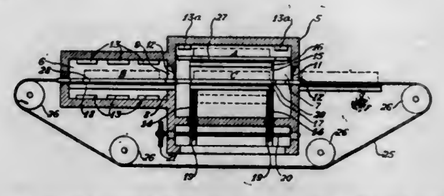
1,825,830. GASIFIER. TIMOTHY G. SULLIVAN, Portland, Oreg. Filed Mar. 23, 1929. Serial No. 349,383. 1 Claim. (Cl. 261—15.)

In a gasifier for internal combustion engines: a Venturi tube; a nozzle within said tube; an electric insulating member of high heat conductivity; a coiled pipe embedded within said member and connected with said nozzle; an electric heating coil upon said member and connected with a source of electric current; an insulating sleeve surrounding said heating coil; a shell encasing said sleeve and connected with said Venturi tube; air admitting orifices



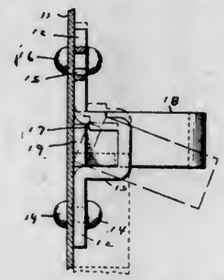
in said shell adjacent said Venturi tube; a closure member for said orifices mounted upon said shell; and means for forcing liquid fuel through said pipe coil.

1,825,831. FURNACE. DAVID L. SUMMEY, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 5, 1929. Serial No. 337,569. 8 Claims. (Cl. 263—36.)



1. A furnace comprising means forming a heating chamber and a preheating chamber communicating therewith, heating means for said heating chamber, charge-handling mechanism including vertically movable elements cooperating therewith for extracting a cooled treated charge from the preheating chamber, conveying a heated charge from the heating chamber to the preheating chamber and a preheated charge from the preheating chamber to the heating chamber, and adding a fresh charge to the preheating chamber.

1,825,832. STAKE POCKET. JOHN J. TATUM, Baltimore, Md. Filed Oct. 5, 1929. Serial No. 397,654. 15 Claims. (Cl. 105—391.)

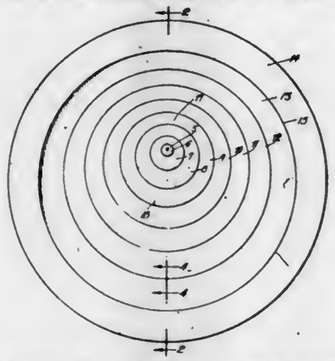


1. In a folding stake pocket, brackets, bearings on said brackets, a stake holding loop having trunnions mounted

in said bearings and normally held against rotation therein, and a yieldable connection between the bearings and car yieldable under pressure of the trunnions, whereby the loop is allowed to turn for movement to a folded position.

2. In a folding stake pocket, supporting brackets, and a stake loop mounted on said brackets, said loop embodying a part under spring tension and engaging a bracket to support the loop in an adjusted position.

1,825,833. ACOUSTIC DIAPHRAGM. HANS TENNESSE and FREDERICK BASSE, New York, N. Y. Filed June 21, 1929. Serial No. 372,759. 4 Claims. (Cl. 181—32.)

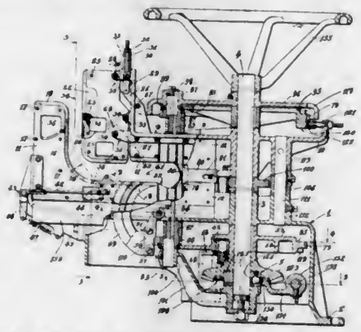


1. An acoustic diaphragm, comprising a main body portion formed to provide a plurality of circumferentially extending vibrating areas, each increasing in width and decreasing in thickness from a minimum dimension to a maximum dimension.

1,825,834. COMPOSITION AND PROCESS FOR PRODUCING AND USING IT. EDWARD THOMAS, New York, N. Y. Filed Jan. 17, 1924. Serial No. 686,895. 7 Claims. (Cl. 92—21.)

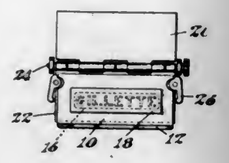
1. The process of making a shaped plastic mass from a finely divided substance bound together with a petroleum product in liquid form which is insoluble in water and normally has no affinity for the substance, consisting in agitating an aqueous pulp of the substance with an affinity-modifying material and with the petroleum product so as to finely disseminate the latter in the water and cause the substance to take it up in such a film that the petroleum product is substantially imperceptible and serves as a binding medium, and shaping the coated substance as a plastic mass.

1,825,835. FRUIT PITTING APPARATUS. ALBERT R. THOMPSON, San Jose, Calif., assignor to Pacific Machinery Company, San Francisco, Calif., a Corporation of California. Filed May 6, 1929. Serial No. 360,863. 15 Claims. (Cl. 146—28.)



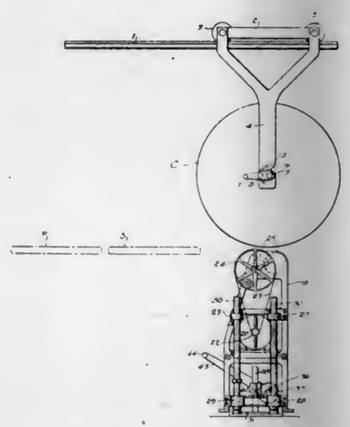
1. In a machine for pitting fruit, the combination of means for halving the flesh of the fruit, means adapted to pass around the pit of the fruit to free said halves from the pit, and means to actuate said pit-freeing means to eject the pit from the machine.

1,825,836. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 21, 1930. Serial No. 497,240. 6 Claims. (Cl. 30—12.)



2. A safety razor blade having an elongated substantially rectangular opening in the material of its body, and a paper-like sheet secured to one surface and extending across said opening.

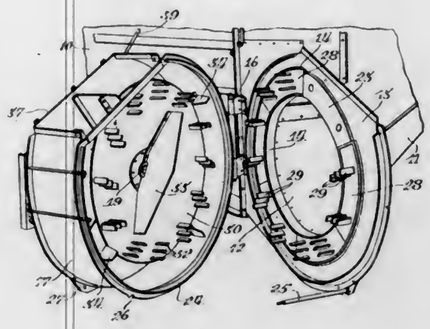
1,825,837. ROLL CLEANING MACHINE. GUIDO VON WEBERN, Dayton, Ohio, assignor to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 12, 1930. Serial No. 451,594. 5 Claims. (Cl. 101—425.)



1. In combination, a composition roll, means arranged to carry the roll into contact with a pattern and a subject, said means being arranged to carry the roll to a suspended cleaning position, and a cleaning mechanism comprising a scraper arranged to contact with the roll, means to advance the roll surface over the scraper and means to elevate said mechanism whereby the vertical adjustment of the roll does not have to be altered to complete the cleaning operation.

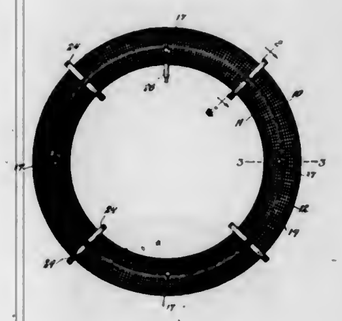
1,825,838. INTERCHANGEABLE STRAW BRUISER AND WIND-STACKER. ARNT W. WESSMAN, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Dec. 28, 1929. Serial No. 417,132. 8 Claims. (Cl. 146—107.)

1. A straw bruiser for threshers having an open ended straw chute, said bruiser comprising a wall surrounding the straw chute opening, a track on the wall surrounding the opening, plates carrying bruising means, said plates



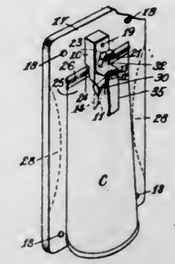
being removably and slidingly supported by the track, a fan housing enclosing the wall, and a windstacker fan and cooperable bruising means in said fan housing.

1,825,839. HIGH PRESSURE LEAK DETECTOR FOR AUTOS. WILLIAM A. WINDER, Portland, Oreg. Filed Oct. 3, 1928. Serial No. 310,103. 1 Claim. (Cl. 73—51.)



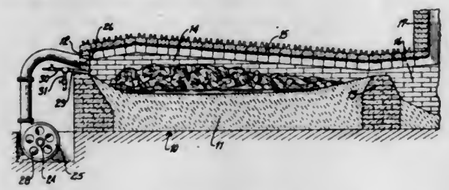
In a device of the character described, a casing adapted to receive an inner tube, said casing including two annular semi-circular members formed of mesh material, edge flanges associated with each of said mesh members to provide a pair of co-operating flanges on each side of said casing, the one pair of said flanges having registering struck-out and cut-out portions, said mesh members being adapted to be secured together with their co-operating flanges in abutting relation, means adapted to secure said flanges in said abutting relation, said means including a retaining bracket for one pair of said flanges said retaining bracket being substantially U-shaped in cross-section and angular in configuration and T-bolts secured to one of the flanges of the opposite pair of said struck-out portions of said flange, said T-bolts being received in said registering cut-out portions of the co-operating flange, and U-shaped operating handles fastened at their extremities to said flanges, said handles being bent to lie over and extend beyond said mesh members for a portion of the length of said handles.

1,825,840. MEANS FOR PERFORATING CONTAINERS. LEWIS B. WINTON, Greenwich, Conn., assignor, by mesne assignments, to American Sealcone Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1930. Serial No. 423,508. 6 Claims. (Cl. 164—119.)



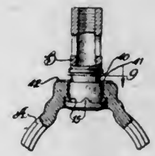
1. In means for perforating containers, a piercing and incising tool, and a support for the tool, said support being adapted to position the container with the wall to be perforated at an angle intersecting the longitudinal plane of the tool.

1,825,841. METHOD OF MELTING METALS. LOTHAR R. ZIFFERER, Columbia, Pa.; Mabel C. Zifferer, Harry E. Champion, and H. Nelson Albright, executors of said Lothar R. Zifferer, deceased, assignors to Columbia Malleable Castings Corporation, Columbia, Pa., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 444,996. 7 Claims. (Cl. 75—14.)



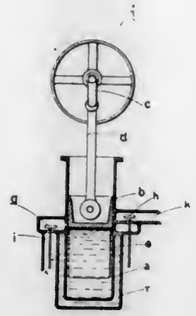
1. The method of melting metals in a furnace which consists in injecting fluid fuel into the furnace to heat the metal substantially to melting, and thereafter injecting finely divided solid fuel to raise the temperature of the liquid metal.

1,825,842. PIPE HANGER. LOTHAR R. ZIFFERER, Columbia, Pa.; Mabel C. Zifferer, Harry E. Champion, and H. Nelson Albright, executors of said Lothar R. Zifferer, deceased, assignors to Columbia Malleable Castings Corporation, Columbia, Pa., a Corporation of New York. Filed May 27, 1930. Serial No. 456,016. 4 Claims. (Cl. 248—31.)



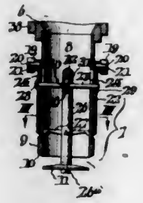
1. In a pipe hanger having a collared pipe receiving ring, a supporting sleeve for said ring having a stop at one end adapted to cooperate with one side of the collar of said ring, locking means on said stop adapted to cooperate with said collar to normally resist rotation of the collar and sleeve, and detachable means spaced from said stop to provide for limited sliding movement of said ring for releasing said locking means.

1,825,843. APPARATUS FOR COMPRESSING AND EXPANDING FLUIDS. HANS JOSEPH ZIMMERMANN, Mannheim, Germany. Filed June 23, 1928, Serial No. 287,871, and in Germany June 25, 1927. 6 Claims. (Cl. 230—208.)



1. In an air compressing machine, the combination of a cylinder, a piston adapted to reciprocate in said cylinder, partitions of heat-conducting material subdividing the space of said cylinder into a plurality of chambers, and means for cooling said cylinder on the outside.

1,825,844. ALIMENT FORMING DEVICE. MORRIS D. AINSLIE, Binghamton, N. Y., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 20, 1929. Serial No. 415,428. 2 Claims. (Cl. 107—14.)

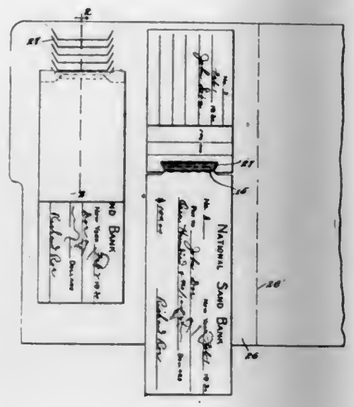


1. An aliment forming device comprising a dough hopper having a tubular discharge outlet at the bottom; a co-axial cutter disk with a stem extending up into the outlet; a removable cross pin engaging an aperture adjacent the top of the stem and extending through diametrically opposite longitudinal guide slots in the discharge outlet, yielding means for insuring engagement of the stem centrally of the cross pin; and means for reciprocating the cross pin in its guide slot to effect actuation of the cutter disk.

1,825,845. FILING SYSTEM. ALBERT A. AINSWORTH, Ossining, N. Y. Filed May 2, 1930. Serial No. 449,330. 8 Claims. (Cl. 129—19.)

3. Check and stub members adapted to be temporarily separated and subsequently filed together, said members being provided one with a tongue and the other with a slot corresponding in size to said tongue and adapted to receive the tongue when the members are filed together.

5. The combination with a filing device comprising a sheet having a tab cut out from the material of the sheet intermediate the edges thereof, of a stub or other sheet



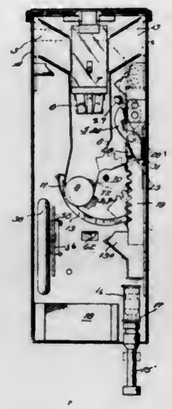
having a slot in which the tab is received when the stub is filed, and separate means secured to the tab for holding the stub in place.

1,825,846. CHAIR. FRANK HARTLEY ANDERSON, Birmingham, Ala. Filed June 20, 1929. Serial No. 372,440. 1 Claim. (Cl. 155—99.)



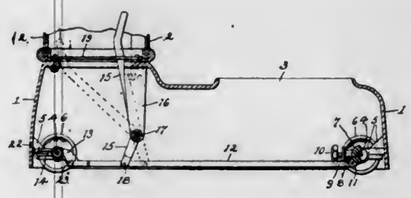
A chair having curved side supporting members whose ends constitute feet, brackets anchored to the under surfaces of the supporting members, a hub-like element held by the brackets of each supporting member, a shaft having its ends anchored in the hubs, an interchangeable back and seat each comprising a frame having brackets oscillatively mounted on the shaft, pairs of segmental racks on the inner side of each supporting member, an assembly on each side of the interchangeable back and seat adapted to coact with the segmental racks for holding the interchangeable back and seat in different positions of adjustment, each assembly comprising suitable members mounted for reciprocation transversely of the chair, a device connecting said members, means for exerting force on the last mentioned device for moving it inwardly, means for urging the reciprocating members transversely of the chair in the opposite direction, and elements on said members adapted to engage the segmental racks.

1,825,847. VENDING MACHINE. MARSELIUS T. ASHE, Chicago, Ill. Filed Dec. 30, 1922. Serial No. 609,841. 5 Claims. (Cl. 194—85.)



1. A vending machine comprising an outer casing, a removable inner casing, two substantially parallel racks carried by said inner casing, a handle connected with one rack, a discharge device connected with the other rack, mechanism between the racks, normally disconnected, the coin which is put into the machine forming one of the elements of said latter mechanism which makes it operative to connect the two racks.

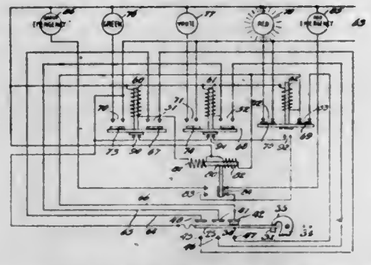
1,825,848. LEVELING DEVICE. HARRY S. BENJAMIN, Utica, N. Y. Filed Oct. 31, 1929. Serial No. 403,725. 11 Claims. (Cl. 265—27.)



1. The combination with a base member having supporting wheels, of auxiliary supporting members adapted to be brought into contact with the floor and lift certain of said wheels therefrom to rigidly support said base member, and lever operated means for moving said auxiliary members into operative position, said auxiliary members being adjustable to effect a leveling of said base.

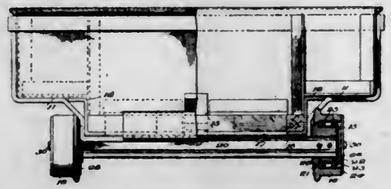
1,825,849. REGULATING APPARATUS. PERAY A. BORDEN, Waterbury, Conn., assignor to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 18, 1929. Serial No. 356,278. 13 Claims. (Cl. 175—320.)

8. In regulating apparatus of the nature set forth, including measuring apparatus and a movable element actuated thereby: two sets of contact elements, one set being normally closed and the other set normally open and carried by a movable boom of the measuring apparatus, relays corresponding to the contact elements of the normally open set and adapted to be controlled thereby, mechanically operated means for periodically effecting opening in unison of all of the contact elements of the set of normally closed contact elements and the closing of a relay circuit at a selected contact of the other set and including in the latter instance the movable element of the measuring apparatus, retaining circuits for said relays adapted to be closed at the said normally closed set of contact elements, a double actuating-coil auxiliary relay having oppositely



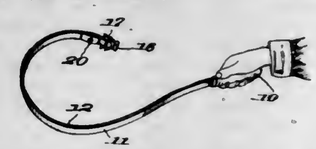
disposed contacts and electrical means controlled thereby, and additional contacts for the respective said retained relays adapted to be closed when the latter are de-energized to energize thereby circuits controlled through the said auxiliary relay, the said additional contacts of said respective relays being connected in series.

1,825,850. MINE CAR. EDGAR H. BOSTOCK, Nutley, N. J. Original application filed Nov. 25, 1929, Serial No. 409,685. Divided and this application filed Oct. 1, 1930. Serial No. 485,727. 5 Claims. (Cl. 295—41.)



1. In mine cars and the like, the combination of an axle having a comparatively broad bearing surface, a car body having a metal bottom directly mounted on said surface of the axle, wheel hubs cast on the ends of said axles, the upper surface of said ends of the axles being in the same horizontal plane as the body bearing portions of said axles and wheel rims revolubly mounted on said hubs.

1,825,851. CLEANING DEVICE. JAMES BROPSON, Cleveland, Ohio. Filed July 26, 1929. Serial No. 381,214. 5 Claims. (Cl. 15—104.30.)

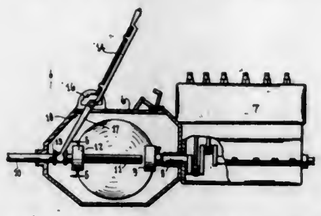


2. A cleaning device of the character described comprising a handle, a pair of flexible elements projecting from said handle, and a head having a flattened portion secured to and between the opposite ends of said elements, the flattened portion of said head having a rounded nose portion.

1,825,852. TRANSMISSION MECHANISM. JAMES CASSELMAN, Hartsmere, Ontario, Canada. Filed Oct. 7, 1929, Serial No. 397,871, and in Canada Oct. 8, 1928. 1 Claim. (Cl. 74—26.)

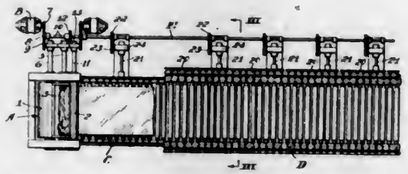
A variable friction transmission mechanism comprising the combination with the crank shaft of a power unit and an aligned drive shaft; of a friction wheel fixed on an end

of said crank shaft; a second friction wheel rotatable with and longitudinally slidable on said aligned drive shaft; a housing for encasing said mechanism; means for moving said second friction wheel longitudinally on its shaft; a pair of opposed friction disks parallel with each other and in planes at right angles to said friction wheels and mounted on the inner ends of respective aligned stub shafts journalled in opposite sides of said housing; coil springs compressed between the housing and said friction disks for normally holding said disks in engagement with the peripheries of said friction wheels; a transverse rod extending across said housing from side to side and above the same; a pair of depending rods on opposite sides of said housing; radial arms carried by said transverse rod



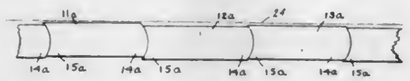
and pivoted to the upper ends of said depending rods, one on either side of the housing so as to straddle the same; a foot pedal fastened exteriorly to said transverse rod at one side of said housing; stationary bearings on said housing surrounding said stub shafts and having outer cam faces; collars rigid with said stub shafts and spaced from said last mentioned bearings; sleeves working on said stub shafts between said last mentioned bearings and said collars; and radial arms carried by said sleeves and pivoted to the lower ends of said depending rods; said sleeves having cam faces opposed to and riding on the said cam faces of said last mentioned bearings to move said stub shafts outwardly and thus disengage said friction disks from said friction wheels.

1,825,853. APPARATUS FOR MAKING PLATE GLASS. ROBERT L. CLAUSE, Sewickley, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Sept. 20, 1929. Serial No. 394,034. 3 Claims. (Cl. 49—3.)



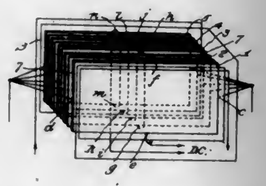
1. In apparatus for making sheets of glass, a roller leer, vertically movable lifting bars interspersed between the leer rolls and lying in raised position with their upper sides above the rolls and in lowered position having such sides below the tops of the rolls, an intermittent sheet rolling apparatus in alignment with the leer, and means for raising and lowering said bars.

1,825,854. METHOD OF MAKING METAL STRIPS. WILLIAM C. CORYELL, Youngstown, Ohio, assignor to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Dec. 9, 1929. Serial No. 412,782. 6 Claims. (Cl. 29—148.)



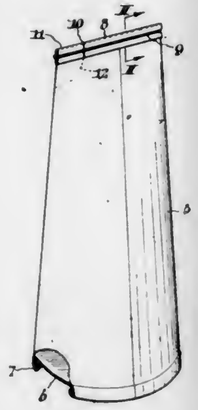
6. The method of conserving rolled material which consists in giving contours to the ends of each constituent piece, the one contour being concave and the other convex, the said contours conforming closely to the contours of the ends of the piece when it comes hot roled from the mill, and then welding such pieces end to end, the convex end of one piece being fitted to the concave end of the next piece.

1,825,855. SYSTEM AND APPARATUS EMPLOYING THE "HALL EFFECT". PALMER HUNT CRAIG, Cincinnati, Ohio, assignor to Invex Corporation, a Corporation of New York. Original application filed July 9, 1926. Serial No. 121,394. Divided and this application filed Jan. 14, 1929. Serial No. 332,545. 7 Claims. (Cl. 250—24.)



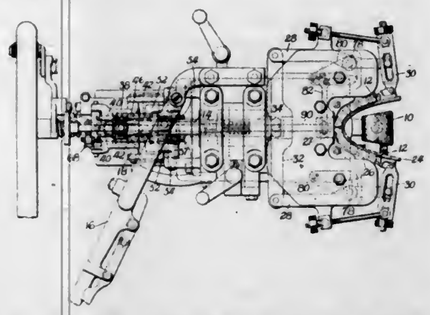
1. In a radio system, a radio frequency energy collecting circuit, a responsive system and means interposed between said radio frequency energy collecting circuit and said responsive system comprising a stack of alternately positioned conductive and dielectric films, each of said conductive films having longitudinal and transverse axes, a winding enclosing said films for establishing a magnetic filed normal to the surface thereof, said winding being connected in series with the longitudinal axes of said films in parallel, a circuit connection between said radio frequency energy collecting circuit and said winding, and a circuit connection between the transverse axes of said conductive films and said responsive system whereby incoming signaling energy may be rectified and observed.

1,825,856. LIQUID CONTAINER. FRANKLIN M. DIETZ, Hutchinson's Mills, Hamilton Township, Mercer County, N. J. Filed July 17, 1929. Serial No. 378,845. 7 Claims. (Cl. 229—1.5.)



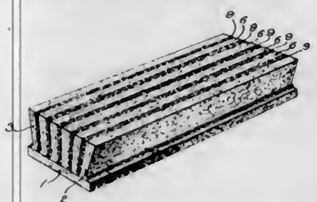
1. A liquid container of the character described made taperingly tubular from paper and closed by collapsing and sealing its mouth end, said mouth end having one corner thereof scored to facilitate tearing off of a portion of the sealed mouth to form an opening of predetermined size through which the contents may be readily poured.

1,825,857. LASTING MACHINE. FRED C. EASTMAN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 3, 1930. Serial No. 479,434. 26 Claims. (Cl. 12—14.)



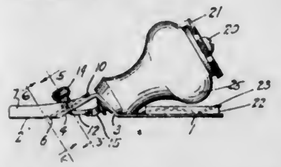
1. In a lasting machine, the combination with endlasting wipers, and operating means for moving said wipers inwardly over the bottom of a shoe at one end thereof and for retracting them from over the shoe, of a device for clamping the upper about the end of the shoe, and mechanism for operating said clamping device by the movement of the wiper-operating means to clamp the upper after the beginning of the movement of the wipers inwardly over the shoe bottom, said mechanism being so constructed as to permit the wipers to be retracted from over the shoe by their operating means while the clamping device remains in clamping relation to the shoe.

1,825,858. BLACKBOARD ERASER. ANTHONY A. ELNETT, New York, N. Y. Filed Aug. 9, 1930. Serial No. 474,244. 1 Claim. (Cl. 15—223.)



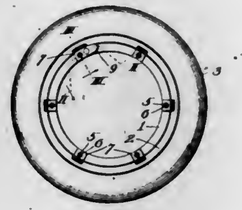
A black board eraser having a base composed of felt, felt finger protecting walls extending at right angles from said base, alternate sections of felt and steel wool extending at right angles from said base between said finger protecting walls with the exposed ends thereof terminating in a face parallel with said base, and means securing said finger protecting walls and sections of felt and steel wool to said base, the felt sections being less compressible than the steel wool sections to act as a guard for the surface being erased.

1,825,859. PLANE. EDWARD NICHOLAS FOX, Twin Buttes, Ariz., assignor of one-tenth to George A. Kennedy, Denver, Colo. Filed Apr. 29, 1930. Serial No. 448,407. 9 Claims. (Cl. 145—5.)



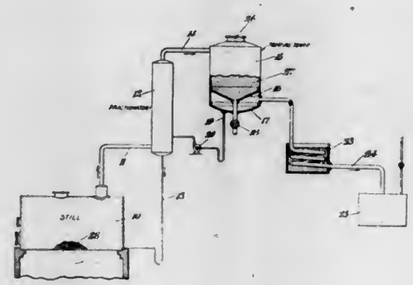
1. In a plane, a stock having a bottom face comprising toe and heel portions in a common plane and an upstanding central portion having relatively angular sides, a blade seated on one of said sides, a handle seated on another of said sides and means for adjusting said blade, said means being positioned partly in said handle and partly in engagement with said blade and linking means between said sides for operatively connecting said parts of said adjusting means.

1,825,860. WHEEL RIM LOCK. BONY GRAY, Kansas City, Mo., assignor of one-half to James S. Warren, Kansas City, Mo. Filed Oct. 29, 1928. Serial No. 315,686. 2 Claims. (Cl. 70—90.)



1. The combination of a circular support, a wheel rim surrounding the same, a rod extending non-rotatably and transversely through the support and provided at one end with an enlargement abutting the inner side of the support and with a socket near the other end, a wedge lug fitting on the socketed end of the rod and engaging the support and rim to clamp the latter in place, and a lock carried by the lug and engagable with the socket of the rod.

1,825,861. REFINING HYDROCARBONS. THOMAS T. GRAY, Elizabeth, N. J., assignor to Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Original application filed Nov. 12, 1926, Serial No. 147,866. Divided and this application filed Apr. 23, 1929. Serial No. 357,465. 2 Claims. (Cl. 196—26.)

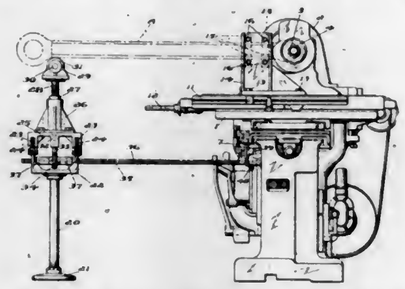


1. The process of refining a hydrocarbon product containing sour sulphur compounds and unstable hydrocarbon compounds which comprises contacting the product in liquid form with mercury acetate and then contacting the product in vapor form with a solid adsorptive treating material.

1,825,862. WORK SUPPORTING FIXTURE. FRANK W. GREEN, Framingham, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 5, 1929. Serial No. 368,637. 5 Claims. (Cl. 51—231.)

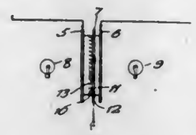
1. In apparatus of the class described, a work support, a carriage to said work support, a channel shaped mem-

ber whose edges provide tracks for supporting and guiding said carriage, a rack on said carriage, a shaft, a gear



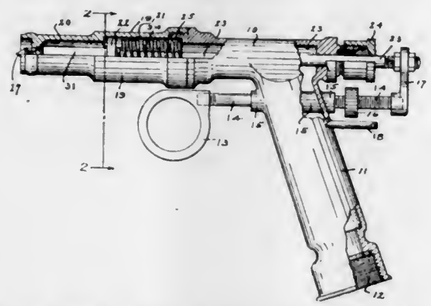
slidably mounted on but rotatable with said shaft, and in mesh with said rack, a second gear mounted on said shaft to rotate it, and means to rotate said second gear.

1,825,863. COLOR PHOTOGRAPHY. JOSEPH B. HARRIS, Jr., Los Angeles, Calif. Filed Mar. 22, 1929. Serial No. 349,244. 3 Claims. (Cl. 95—2.)



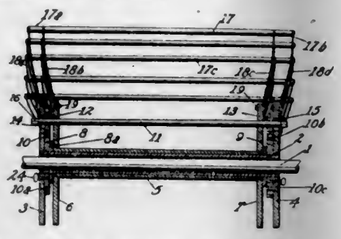
1. The method of producing a color photograph from suitable color selection negatives which consists in first forming latent images therefrom within the body of a layer of material containing a light sensitive substance on a transparent carrier, one adjacent outside face of the material, the other adjacent the carrier, then developing and toning with ferric salts the outside image and then resensitizing to development, developing and toning the other image.

1,825,864. NOZZLE. EDWIN S. HARTER, Indianapolis, Ind. Filed July 15, 1929. Serial No. 378,311. 4 Claims. (Cl. 299—131.)



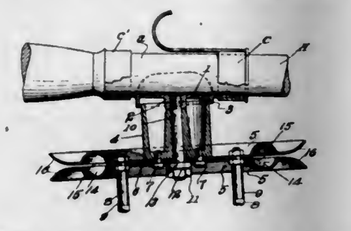
1. In a nozzle, a liquid supply barrel serving as a hand grip, a second barrel in communication with the extending at an angle from the first barrel, a nozzle on the end of the second barrel, a valve needle within the nozzle, a rod slidingly carried transversely of said first barrel, a second rod axially extending through said second barrel and into said nozzle, means interconnecting said rods, said needle being carried axially by said second bar upon travel thereof, and spring means normally returning said needle to close said nozzle, said interconnecting means being without both barrels, and an adjustable stop on said rod between said first barrel and said interconnecting means.

1,825,865. EXPANSION MANDREL. SAMUEL L. HAYS, Covington, Ky. Filed Jan. 10, 1929. Serial No. 331,603. 15 Claims. (Cl. 82—44.)



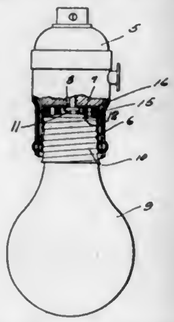
6. In an expansion mandrel, a tube bearing a set of toggle plates, second tube concentric with the first and revolvably mounted thereon bearing a second set of toggle plates, elements substantially parallel with said tubes to form the mandrel surface, and pairs of toggles connecting each of said elements with each of said plates, whereby upon opposite rotation of said plates, said elements are caused to move radially and means for adjusting said plates relative to each other.

1,825,866. FISHING REEL. ALBERT E. HIESER and EDWARD R. HIESER, Pekin, Ill. Filed June 15, 1929. Serial No. 371,160. 2 Claims. (Cl. 242—84.1.)



1. A fishing reel comprising a body made of separable disk-like members, means to secure said members together, each of the said members provided with corresponding annular seats spaced inwardly from their peripheries which coact to provide a well, and the matching faces of said members at said well and from there to their peripheries being spaced apart substantially the thickness of a fishing line, and the peripherial portions of the members being flared outwardly to provide a circumferential throat in communication with the said well.

1,825,867. ELECTRIC SOCKET LOCK. RAYMOND R. HOPLAND, Rockport, Wash.; Robert J. Hopland administrator of said Raymond R. Hopland, deceased. Filed Mar. 13, 1929. Serial No. 346,712. 2 Claims. (Cl. 173—356.)



1. A lock for an electric receptacle comprising a compressible disc for insertion in the socket of the receptacle between the end wall of the socket and a member mounted in the socket, said member having a convex end disposed in the socket, said disc having its outer periphery spaced from the side wall of the socket when uncompressed and bulged for frictional engagement with said side wall when compressed between the member and the end wall of the socket, the disc being further provided with a centrally disposed opening for the reception of contact members in the socket and on the member, the disc being still further provided with a plane side for abutting engagement with the end wall of the socket and a concave side for engagement by the member.

1,825,868. PROPELLER. HORACE HULL, Denver, Colo. Filed July 18, 1929. Serial No. 379,090. 8 Claims. Cl. 170—159.)



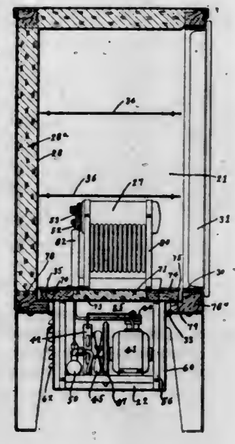
1. In a propeller, a blade possessing an edge portion along the tip and trailing edge thereof more acutely concaved on the vacuum side than the remainder of the blade area to form a maximum concavity adjacent to the tip and trailing edge with a substantially complemental convexly shaped slip face.

1,825,869. PROCESS OF PRODUCING FELTED MATERIALS CONTAINING BITUMEN. CHARLES L. KELLER, Cincinnati, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed May 21, 1929. Serial No. 364,940. 4 Claims. Cl. 92—21.)

1. That process of making felted sheets of bituminous pulp, containing soft bitumen, which comprises forming a bituminous pulp containing a harder bitument, and mixing with the said pulp a quantity of a softer bitumen, which has been rendered non-adhesive, felting the combined stock upon a screen and drying and heating the felted product whereby the two bitumens flux together into a homogenous saturant of the required characteristics.

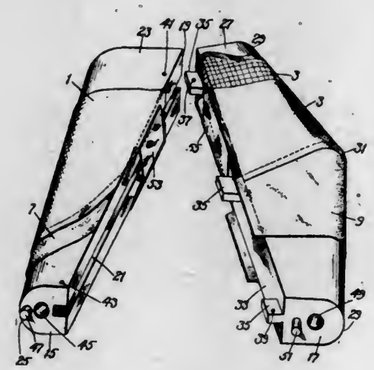
1,825,870. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,581. 15 Claims. (Cl. 62—116.)

1. Refrigerating apparatus comprising in combination a cabinet having a door opening in a wall thereof and an opening in a second wall, closure means for said second opening, a refrigerating element within said cabinet, and a refrigerant circulating element depending from and



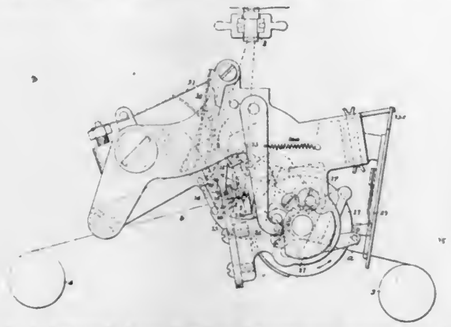
secured to said closure means, said closure means and said circulating element being removable from said cabinet through said door opening.

1,825,871. METHOD OF ASSEMBLING THE UPPERS OF RUBBER SHOES. FAY D. KINNEY, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 23, 1929. Serial No. 334,551. 11 Claims. (Cl. 12—146.)



1. The method of assembling parts of a rubber shoe to form a closed upper which comprises mounting certain parts upon one section of a form, mounting other parts upon another section, putting the sections together and thereby uniting parts on one section with parts on the other section, and removing the assembled parts from the form.

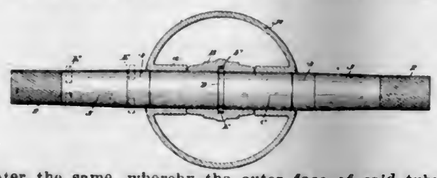
1,825,872. MECHANISM FOR KNOTTING TOGETHER THREADS. FREDERICK KLEIN, College Point, and FRED WALSLEBEN, Oceanside, N. Y., assignors to Warp Twisting-in Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 23, 1930. Serial No. 446,610. 15 Claims. (Cl. 289—3.)



12. A weaver's knot-forming mechanism comprising, in combination, means to form in one of the two strands to be knotted together a loop around the other, the latter strand being elastic, spaced means to maintain the elastic strand stretched, means to pass the portion of said elastic strand between the loop and one of said spaced means across the loop and thereby store up elastic force in the elastic strand, means temporarily to hold the portion of the elastic strand between the loop and the other spaced means against relaxing, and means to pass the first portion between the loop and said elastic strand to thereby form a noose in the latter around the loop during the temporary holding of the second-named portion, whereby when said holding ceases the elastic force stored up in the elastic strand will cause the latter to slip through the loop and constrict the noose.

1,825,873. WRIST-PIN INSERTING TOOL. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed June 3, 1929. Serial No. 368,058. 5 Claims. (Cl. 29—88.2.)

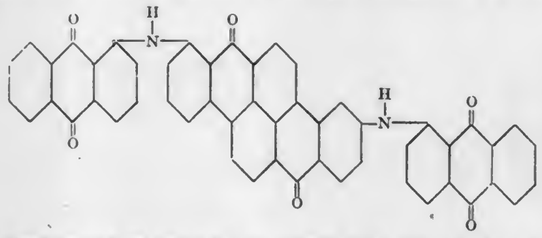
1. A tool for inserting a tubular element in a bore and displacing a part in a radial direction from said bore, said tool comprising a centering element having an inner radial face formed with a radially disposed axially outwardly extending radially inwardly converging centering face concentric with its axis an having an outer face tapering from a small diameter outer end portion toward its large diameter inner end portion and being at its inner end of substantially the same dinmeter as the external diameter of said tubular part, said centering face extending to the external peripheral face of said centering element and being adapted to engage the external peripheral face of the adjacent end of said tubular element to



center the same, whereby the outer face of said tubular element and the adjacent portion of the outer face of said centering element will lie flush, and concentric, with each other and will present in an axial direction a smooth composite substantially uninterrupted surface for insertion in said bore and movement past and in contact with said radially displaceable part.

1,825,874. NEW VAT DYESTUFFS. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1929. Serial No. 347,444. 3 Claims. (Cl. 260—61.)

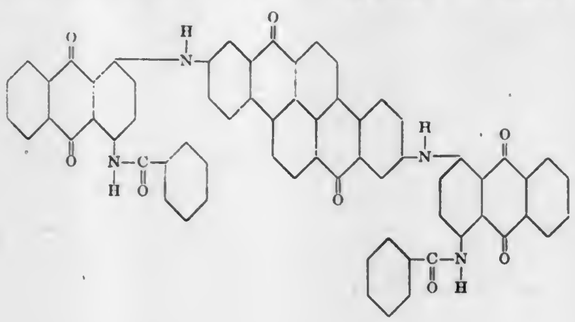
3. As a new article of manufacture, the vat dyestuff probably corresponding to the formula



which dyes cotton from a brown red vat strong currant shades of excellent fastness, dissolves to a blue red solution in concentrated sulphuric acid, and which is obtainable by condensing 2 molecular proportions of alpha-amino-anthraquinone with 1 molecular proportion of the dibromo-3.4.8.9-dibenzopyrene-5.10-quinone which is obtainable by dissolving 33 parts of pure 3.4.8.9-dibenzopyrene-5.10-quinone in 330 parts of chlorosulphonic acid, adding from 1.65 to 2.3 parts of iodine and then at room temperature 20 parts of bromine, and heating to from 70° to 80° C. until the bulk of the bromine has been taken up.

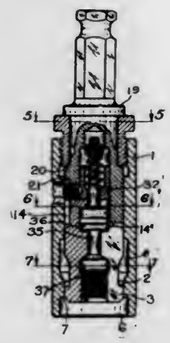
1,825,875. VAT DYESTUFFS. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1929. Serial No. 347,445. 5 Claims. (Cl. 260—61.)

3. As a new article of manufacture, the vat dyestuff corresponding to the formula



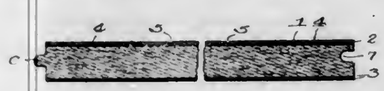
which dyestuff is a bluish grey powder dissolving to a blue red solution in concentrated sulphuric acid, dyes cotton from a brown red vat strong bulish grey shades of excellent fastness, and which is obtainable by condensing two molecular proportions of 1-amino-4-benzoylamino-anthraquinone with one molecular proportion of the dibromo-3.4.8.9-dibenzopyrene-5.10-quinone obtainable by dissolving 33 parts of pure 3.4.8.9-dibenzopyrene-5.10-quinone in 300 parts of chlorosulphonic acid, adding from 1.65 to 2.3 parts of iodine and then at room temperature 20 parts of bromine, and heating to from 70° to 80° C. until the bulk of the bromine has been taken up.

1,825,876. STUD SETTER. CHARLES R. LEITER, Rochester, N. Y., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed Aug. 18, 1930. Serial No. 476,080. 9 Claims. (Cl. 81—53.)



1. In a stud setter, the combination with a revoluble shank, of a hollow casing mounted thereon, a plurality of separate jaws movably mounted in said casing and adapted to engage and turn a stud to be set in a work piece, the jaws being moved relatively to the casing by the stud to a position to disengage the stud when the casing engages the work piece, and means arranged between the hollow casing and the shank for adjusting the casing thereon to vary the relative position of the jaws in the casing and the depth to which the stud is set when the jaws are moved to disengage the same.

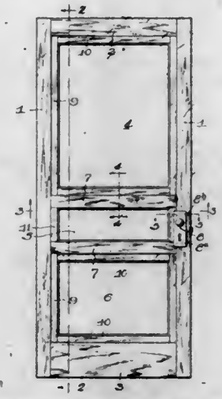
1,825,877. COMPOSITION FLOORING AND METHOD OF MAKING THE SAME. EMIL C. LOETSCHER, Dubuque, Iowa. Filed June 7, 1930. Serial No. 459,642. 10 Claims. (Cl. 154—49.)



1. A flooring composition comprising a base of fibrous material, having its surfaces impregnated with bakelite and a layer composed of a granular mineral substance and fused bakelite covering one surface of said base material.

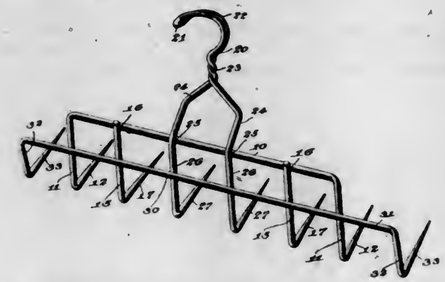
1,825,878. DOOR CONSTRUCTION. JOHN A. LOETSCHER, Dubuque, Iowa, assignor to Farley & Loetscher Mfg. Co., Dubuque, Iowa, a Corporation of Iowa. Filed Mar. 13, 1930. Serial No. 435,402. 5 Claims. (Cl. 20—35.)

1. A door construction comprising vertical stiles, top, bottom, and intermediate cross-rails consisting of relatively narrow lengths of material joined toegther edge-to-edge, and thin panels fitted into the spaces surrounded by said stiles and rails, the material forming the inner portions of said stiles and rails on opposite sides of the cross-



rails being of reduced thickness, and the portions forming the stiles of the panel intermediate said cross-rails being of equal thickness.

1,825,879. HANGER FOR SUPPORTING STRIPS OF BACON. PAUL J. LOUTHIAN, Hutchinson, Kan. Filed Sept. 23, 1930. Serial No. 483,947. 2 Claims. (Cl. 17—44.)



1. A hanger for bacon comprising a main supporting bar having depending members, penetrating prongs extending laterally and upwardly from the ends of the depending members, rods spaced from the depending members and having the upper ends thereof secured to the main bar, penetrating prongs projecting laterally from the free ends of the rods and located in substantially the same plane with the first mentioned prongs, a supporting means for the hanger including a hook and depending arms secured to the bar, the free ends of the arms being provided with laterally disposed penetrating prongs, a reinforcing bar secured ot the depending members, rods and arms and provided with penetrating prongs located in the same plane with the first-mentioned prongs.

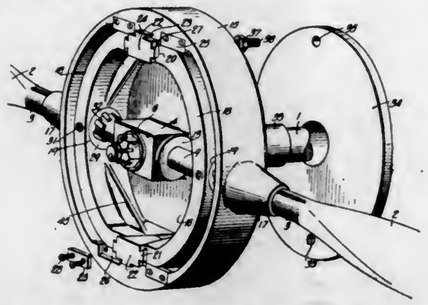
1,825,880. ATTACHMENT FOR DENTAL TOOLS. IRVING W. MARGULIES, New York, N. Y. Filed Jan. 25, 1929. Serial No. 334,970. 2 Claims. (Cl. 32—10.)



1. As an article of manufacture, an integral member having a spring arm, a split collar clamp for one end of the arm, and a guard holder for the other end of the arm

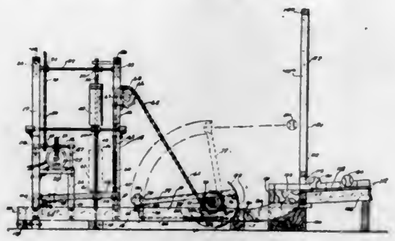
comprising an arcuately curved plate disposed transversely of the arm, and having its sides and one end bent downwardly and inwardly to form a channel to removably contain a moistening element.

1,825,881. VARIABLE PITCH AIRPLANE PROPELLER. WILLIAM A. MATTHEY, Kansas City, Mo. Filed July 27, 1929. Serial No. 381,463. 11 Claims. (Cl. 170—163.)



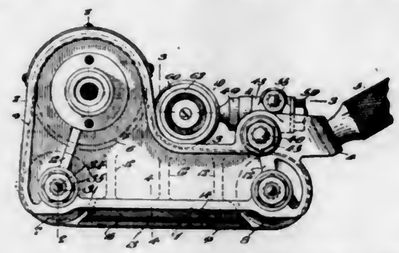
1. In a variable pitch propeller including a motor shaft, a hub, and propeller blades rotatable in the hub, yoke members slidable in the hub, means including wedge members engaged with the hub for moving the yoke members, and means effecting change of pitch of the blades when the yoke members are moved slidably in the hub.

1,825,882. BALL-THROWING MACHINE. WILLIAM CLYDE MAUNEY, Gastonia, N. C. Filed May 31, 1930. Serial No. 458,065. 4 Claims. (Cl. 273—26.)



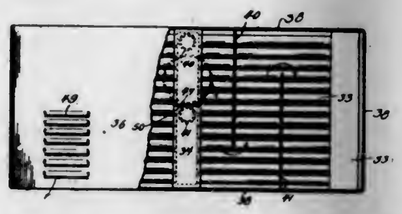
1. A base ball thrower having a pitching arm, means for operating said pitching arm intermittently by the falling of a weight and means for raising said weight intermittently.

1,825,883. GRINDING HEAD OR ATTACHMENT. FRANK R MOORE, Upper Darby, Pa. Filed Nov. 18, 1929. Serial No. 407,823. 1 Claim. (Cl. 51—170.)



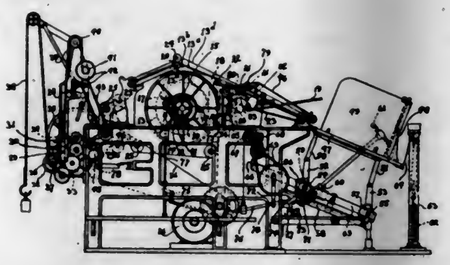
In a device of the character stated, an integral, substantially triangular housing, front and rear bottom idle rolls carried thereby, a front upper drive roll carried by said housing, driving connections for said drive roll, rear upper tension rolls pivotally carried by said housing, an endless abrasive belt passing over said drive roll and said idler rolls and beneath said tension roll, means for retaining said tension rolls in operative position with respect to said belt, means for effecting lateral adjustment of said tension rolls to maintain the effective surface portion of said belt in a true horizontal plane, an operating handle carried by said housing in advance of said tension rolls, and yieldable pad carried by the bottom of said housing between said idler rolls and adapted to coact with said belt.

1,825,884. AUTOMOTIVE VEHICLE HEATER. AUGUST J. MUELLER, Yankton, S. Dak. Filed Feb. 6, 1929. Serial No. 337,834. 3 Claims. (Cl. 257—136.)



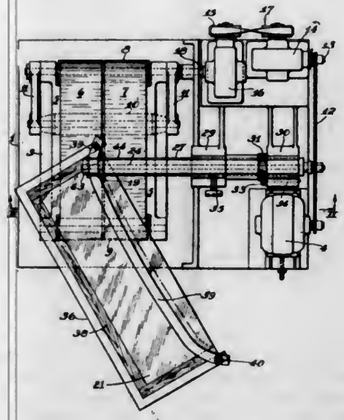
3. In an automotive vehicle heater, a casing, a hot water radiator mounted in the casing and having water inlet and outlet connections extending through the casing, said radiator including spaced pipes, the casing being provided with partitions extending transversely of said pipes, each partition being attached to three walls of the casing and spaced from a fourth, said partitions being staggered to form tortuous passages, an air inlet pipe communicating with the casing near the center, the casing being perforated at points remote from the air pipe, and means for attaching the heater to an automobile dash.

1,825,885. SHEET COLLECTING MACHINE. JOHN J. MURRAY, Rye, N. Y., assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed Jan. 19, 1929. Serial No. 333,685. 16 Claims. (Cl. 271—3.)



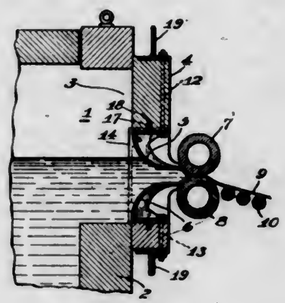
1. A sheet collecting machine embodying therein bearings for a supply reel having wound thereon a continuous web inclosing printed sheets, a delivery belt, a collecting shelf adapted to receive such sheets from said belt, a rewind mechanism, bearings for a rewind reel adjacent said mechanism, and web guiding means, including a collating roller adjacent said supply reel about which different portions of the web in contacting parallel reaches are passed, separating rollers adjacent said belt, whereby the portions of the web in said parallel reaches respectively are led in opposite directions, an upper collating roller whereby one of the parallel reaches, after passing about one of said separating rollers, is directed into contact relation with the roll of web upon said supply reel, and rollers between the other of said separating rollers and said rewind mechanism.

1,825,886. MACHINE FOR SEVERING COMPOSITE GLASS SHEETS AND THE LIKE. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Dec. 22, 1928. Serial No. 328,018. 8 Claims. (Cl. 125—13.)



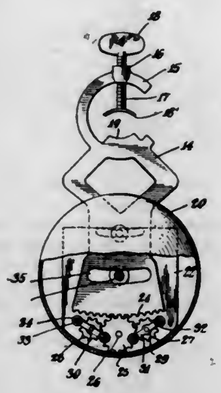
3. In combination, a machine for cutting curves in sheets of hard material, comprising a thin driven cutting disc, a supporting table, a tray for carrying the sheet to be cut over the table having a depth approximately equal to the thickness of the sheet and provided with a template lying over the sheet and holding it down, means preventing lateral movement of the sheet in the tray, and a flanged guide roller mounted with its axis of rotation in fixed relation with respect to the axis of rotation of the disc, and adapted to fit over said template bar and guide the tray and sheet carried thereby over the table beneath the disc.

1,825,887. GLASS TANK CONSTRUCTION. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed May 21, 1929. Serial No. 364,862. 7 Claims. (Cl. 49—33.)



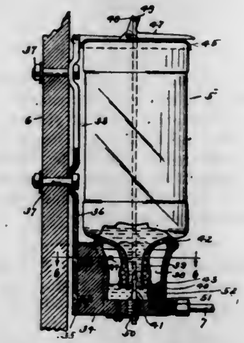
1. The combination with a tank adapted to carry a bath of molten glass, and rolling means at one side thereof for forming a sheet or ribbon of glass, of a clay outlet member between the glass bath and the rolling means provided with a slot extending longitudinally thereof, slotted metal holding members fixed in the outlet member at the ends of the slot, and a lip member of metal mounted in the slot with its ends in interlocking engagement with the slots in the end members, such lip member being positioned to direct the glass from the tank to the pass between the rolls.

1,825,888. DOOR ALARM. ZYGMUNT PEHEL, New York, N. Y., and GEORGE ZYCH, Linden, N. J. Filed Dec. 20, 1930. Serial No. 503,656. 2 Claims. (Cl. 116—79.)



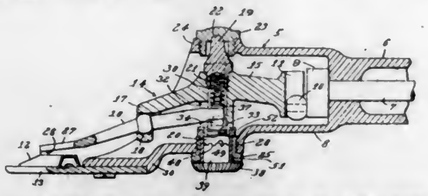
1. An attachment for door knob spindles comprising a body member adapted to be clamped to the spindle having an arcuate slot formed therein, a toothed segment at the lower end of said body member, a sounding member, a pin for receiving the same to a support passing through the slot in said body member to limit the lateral movements of said body participating in the turning movements of the door knob spindle, a gear in said sounding member in mesh with the teeth of said segment, smaller gears in mesh with said gear, and clapper elements operated from said smaller gears to alternately engage the sounding element upon the rotation of the door knob spindle.

1,825,889. LUBRICATING SYSTEM FOR INTERNAL COMBUSTION ENGINES. EARLE C. PIPER, Columbus, Ohio, assignor to The Lubretor Company, Columbus, Ohio, a Corporation of Ohio. Filed May 29, 1929. Serial No. 367,068. 5 Claims. (Cl. 123—196.)



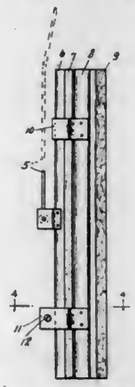
1. In an auxiliary lubricating system for internal combustion engines, a support formed to include a lubricant receiving well, an inverted lubricant containing bottle having the neck portion thereof positioned within said well and spaced from the bottom thereof, a penetrable cap closing the neck of said bottle, means in the bottom of said well for penetrating said cap and establishing communication between the interior of said bottle and said well, clamping means for removably holding the bottle in connection with said support, and a conduit leading from the bottom of said well to the fuel intake passageway of an associated engine.

1,825,890. SHEEP SHEARS. FRANK W. SCOTT, Kirkland, Ill. Filed Aug. 7, 1929. Serial No. 384,164. 11 Claims. (Cl. 30—1.)



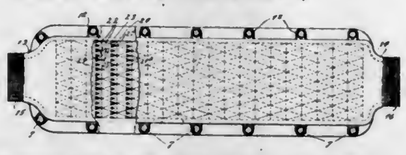
3. In a shearing tool, the combination with a frame by which the tool is grasped for use, a fixed cutter comb on said frame, a reciprocating cutter cooperating therewith, and a vibratory member for reciprocating said cutter, of a screw mounted in a part oscillating with the vibrator member arranged when adjusted to vary the tension of the cutter on the comb, said screw having a stem extending therefrom, and a manually rotatable thumb nut mounted on said steam so as to be capable of communicating rotation thereto but adapted to have endwise movement realtive thereto to be locked and unlocked, said thumb nut having a portion arranged to be interlocked directly with a part oscillating with the vibrator member.

1,825,891. WINDSHIELD WIPER ATTACHMENT. GEORGE S. SMITH, Edwardsville, Ill. Filed May 31, 1930. Serial No. 458,373. 2 Claims. (Cl. 15—251.)



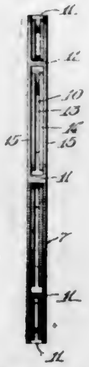
1. An attachment of the class described including an elongated holder of U-shaped cross section, a wick in the open side of the holder, a pair of straps secured to the sides of the holder adjacent one end, a second pair of straps similarly secured to the holder adjacent the other end said second pair of straps having openings in the ends thereof, and a bolt through said openings for clamping said straps to a windshield wiper.

1,825,892. FUEL-MIXING DEVICE. JOHN WILLIAM SMITH, Syracuse, N. Y. Filed May 16, 1929. Serial No. 363,632. 8 Claims. (Cl. 48—180.)



1. A mixing device of the character described composed of two horizontal sections forming a conduit, each section having formed thereon a plurality of rows of interceptor blades, the rows of blades of each section opposing one another and interlacing with one another, the blades having impact faces and receding rarefaction creating faces.

1,825,893. PISTON AND PISTON RING. RALPH R. TEETOR, Hagerstown, Ind., assignor to The Perfect Circle Company, Hagerstown Ind., a Corporation of Indiana. Filed June 16, 1930. Serial No. 461,319. 6 Claims. (Cl. 74—109.)



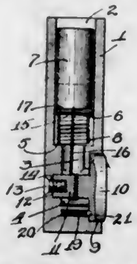
1. An oil ring for the piston of an internal combustion engine having elongated slots extending through the ring and from the exterior face to the inner face of the ring, with their ends closely adjacent but separated by bridges extending to the exterior face of the ring, the inner portions of the slots being narrow and the outer portions being shallow and of substantially uniform depth and also being substantially wider than the inner portions to provide on either side of the outer portions substantially continuous, parallel and narrow ribs having cylinder contacting surfaces of a combined area substantially less than one-half of the entire area of the exterior face of the ring.

1,825,894. LILY POOL TANK. CHARLES G. WATSON, Youngstown, Ohio. Filed Apr. 25, 1930. Serial No. 447,289. 3 Claims. (Cl. 47—34.)



1. In a device of the class described, a metal tank, an inlet and outlet for said tank, a plurality of frame sections extending outwardly around the sides and ends of said tank, a plurality of anchor members welded to the under side of said frame sections, an upturned flange formed on said sections, anchor members welded to each lower corner of said tank and projecting beyond the base portion of said tank, substantially as described.

1,825,895. LIP-STICK HOLDER. JAMES LESLIE YOUNGHUSBAND, Chicago, Ill. Filed May 10, 1929. Serial No. 362,013. 4 Claims. (Cl. 206—56.)



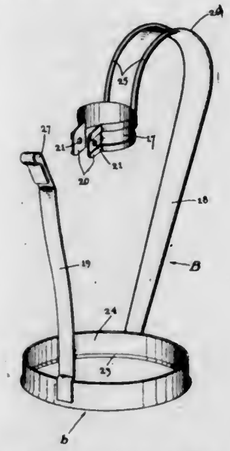
1. A lipstick holder including a body having an open ended central bore, a lipstick cup movable within said bore, a hand wheel in said body operable outwardly thereof,

flexible connections between said wheel and said cup for moving said cup, means housed in a wall of the said body for locking said wheel in substantially any position to which the same is rotated.

1,825,896. PROCESS OF DETERMINING MOISTURE CONTENT. SAMUEL C. BOND, Hollyoak, Del., assignor to The Henry P. Scott Company, a Corporation of Delaware, trustee. Filed Mar. 11, 1929. Serial No. 346,062. 3 Claims. (Cl. 23—230.)

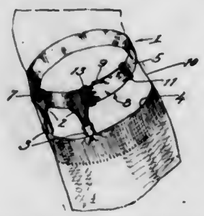
1. The process of determining the moisture content of cork which consists in mixing predetermined quantities of cork and sulphuric acid at known temperatures, ascertaining the increased temperature of said mixture, and comparing the difference between those temperatures with variances of temperature in mixtures of similar quantities of cork of known water content with similar quantities of sulphuric acid under like conditions.

1,825,897. SERVICE BOTTLE. GALE E. BROOKE, Minneapolis, Minn. Filed July 17, 1930. Serial No. 468,508. 2 Claims. (Cl. 215—100.)



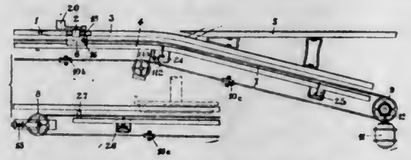
2. In an article of the character described, a bottle, a carrier for the bottle comprising a split ring removably applicable to the neck thereof, said ring having outstanding lugs at its ends formed with registering apertures, a lower ring forming a seal receiving the lower portion of the bottle, a handle secured at its upper end to the split ring and at its lower end to the lower ring, a strap secured at its lower end to said lower ring, the upper end of said strap being formed with an eye adapted to be received between the lugs of said split ring, and a bolt removably received by the apertures in said lugs and by the eye of said strap, said bolt securing together the ends of said split ring and forming a hanger for said strap.

1,825,898. GARMENT SUPPORTER. SAMUEL N. COULTER, Los Angeles, Calif. Filed Jan. 18, 1930. Serial No. 421,760. 7 Claims. (Cl. 241—1.)



1. A garter having a band of substantially unextensible material, a pad attached to one end of the band and having means for attaching the same to the hose, a buckle disposed relatively near to the pad and having the band woven through the same, said band having a loop, an outer buckle in said loop relatively far from the pad, said band being woven back from the outer buckle and looped through the first-named buckle so as to present a loose end beyond the first-named buckle and projecting away from the pad, a resilient tension member connecting the pad and the first-named buckle and overlying the portion of said band between the same, said first-named buckle being adjustable along the band in either direction so as to vary the distance between the pad and the first-named buckle to adjust the limit of tension in the tension member, and said loose end of the band being adjustable through said first-named buckle to adjust the over all length of the band, said outer buckle having means for attaching the same to the pad.

1,825,899. RAILWAY CAR RETARDER. FERNAND DELOISON, La Delivrance par Lomme, France. Filed Jan. 3, 1930, Serial No. 418,373, and in France Jan. 7, 1929. 7 Claims. (Cl. 188—62.)



1. In a brake-shoe with electro-mechanical control for the braking of wagons on shifting tracks, the combination of a main track, a siding track, a shoe adapted to slide on the two tracks, an endless cable adapted to draw the said shoe on to the main track and a spring clip for coupling said shoe with said cable.

1,825,900. EDUCATIONAL PICTURE EXHIBITOR. HENRY C. ENGLAND, Flint, Mich. Filed May 11, 1931. Serial No. 536,594. 2 Claims. (Cl. 40—86.)

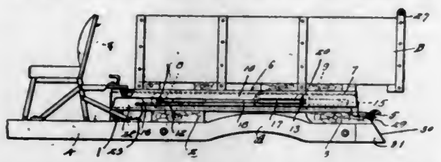


1. A picture exhibitor comprising a stand having spaced side walls, a picture roll adapted to be journaled in the side walls, a winding shaft journaled in the side walls, and adapted to be connected with the picture, said roll and winding shaft having means for rotation disposed beyond the outer surface of one of the side walls and means for drawing the side walls inwardly to establish friction between said walls and the picture roll and winding shaft.

1,825,901. ROLLER DUMP BODY FOR TRUCKS. HOUSTON C. GENTRY, Sheridan, Ark. Filed Apr. 6, 1929. Serial No. 353,030. 1 Claim. (Cl. 298—14.)

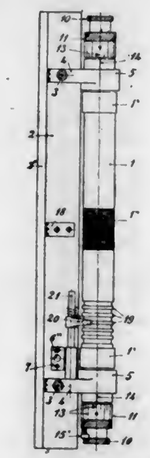
In combination with a truck frame, longitudinally slotted stationary angle bars fastened thereto, a dump body, longitudinally slotted angle bars fastened to the dump body and

working over said stationary angle bars, front and rear supporting rollers for the dump body, said rollers arranged with their ends extending through the slots of the first and second mentioned angle bars, connecting bars for the ends of the supporting rollers, a crank handle for turning one of



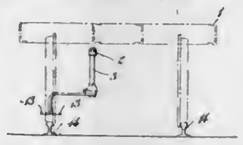
said rollers, a pair of hooks fastened to the bottom of the body and adapted to hook over the rear supporting roller when the body is in dumping position and oblong metal straps secured to the truck frame and serving as additional supporting means for the rear roller when the body is in dumping position.

1,825,902. ROLLING PARALLEL RULER. GIUSEPPE GIANOLIO, Turin, Italy. Filed Dec. 1, 1928, Serial No 323,062, and in Italy Aug. 6, 1928. 3 Claims. (Cl. 33—109.)



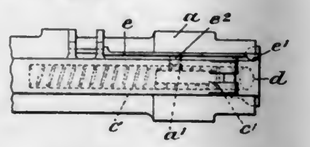
1. A drawing apparatus comprising a roll having an enlarged bearing surface near each end, journals on the roll, collars mounted on said journals, arms on said collars and a rule secured to the arms inclined to the supporting surface of the apparatus for edge contact with said surface and said collars being external of and of larger diameter than the roll bearing surfaces for protecting said rollers from injury and cut away at their bottom to a distance less than the diameter of the bearing surfaces.

1,825,903. TRAIN BRAKING SYSTEM. GEORGE FRANCIS GLOSTER, Makurdi North, Northern Nigeria, West Africa. Filed Mar. 30, 1931, Serial No. 526,518, and in Great Britain Apr. 15, 1930. 5 Claims. (Cl. 246—171.)



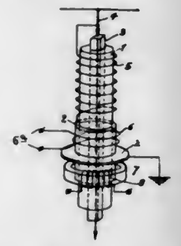
1. A train braking system comprising a train pipe, a suspended pipe carried by said train pipe, a pivoted closing member for said suspended pipe, said closing member being provided with jointing washers adapted to project outwardly upon the tripping of said pivoted closing member.

1,825,904. AUTOMATIC FIREARM. KARL HEINEMANN, Dusseldorf, Germany, assignor to Rheinische Metallwaaren und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Dec. 26, 1929, Serial No. 416,572, and in Germany Apr. 29, 1929. 2 Claims. (Cl. 42—3.)



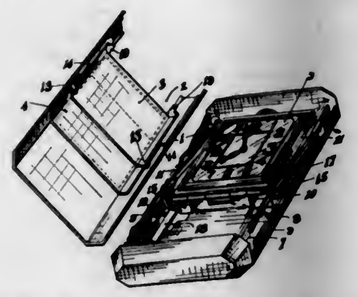
1. In an automatic gun, a compression spring tending to close the breech, a plate at one end of said spring through which the latter acts, a spring latch for said plate to hold said spring compressed, a pivoted flap for the rear end of the casing, and a nose on the end of said latch in position to be engaged by said flap when the latter is in closed position and thereby unlatch said plate and spring.

1,825,905. LEADING-IN INSULATOR. ALFRED IMHOF, Hongg, near Zurich, Switzerland. Filed Nov. 9, 1929. Serial No. 406,072, and in Germany Nov. 15, 1928. 7 Claims. (Cl. 175—358.)



1. In combination, a bushing or wall duct with induction device for feeding low-voltage appliances from high voltage mains, including an insulator bushing, a grounded frame for the insulator, a ferro-magnetic core located in the interior of the insulator and subjected to the potential of the high-voltage line, a primary winding on the insulator connected at one end with the high tension main and at the other end with the grounded frame of the insulator, a secondary winding located on the frame, the bushing insulating both the windings from the ferro-magnetic core.

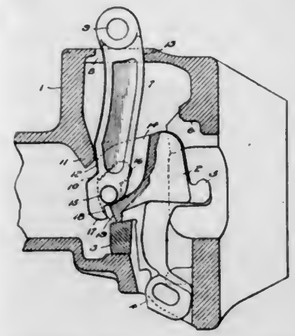
1,825,906. TIMEPIECE. ABRAM LOUIS JEANNERET, La Chaux-de-Fonds, Switzerland, assignor to Jean Weil, Geneva, Switzerland. Filed Nov. 15, 1929, Serial No. 407,531, and in Switzerland Apr. 11, 1929. 6 Claims. (Cl. 206—37.)



1. A pocket casing adapted to contain an article to be alternately disclosed and concealed, comprising in combination, a substantially flat, hollow casing body having

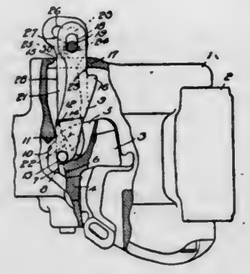
an opening in one face, said article being mounted within the casing beneath said opening, and a plurality of cooperating lid members slidably mounted on said casing body in overlapping relation with each other and movable along the casing body to cover or expose said opening.

1,825,907. CAR COUPLER. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 2, 1928, Serial No. 282,446. 2 Claims. (Cl. 213—127.)



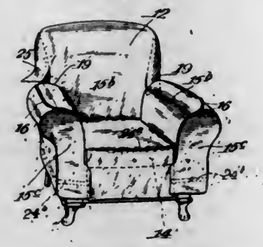
2. In a car coupler, the combination with a coupler head, of a vertically sliding and rearwardly swinging lock, for the coupler knuckle, a lifter for actuating the lock to cause it to assume unlocked position, said lock being formed with an upwardly and rearwardly opening slot for receiving the lifter and the latter being adapted to slide and rotate with respect to the lock, said coupler head being provided on its interior with a lock-down lug for cooperating with the lifter to prevent accidental unlocking of said lock, said lifter having an upwardly facing shoulder adapted to engage said lug and having at its lower end a downward extension formed with an undercut forward face, said lock being recessed below said slot to provide a bevelled face adapted to cooperate with said undercut face to cause the lower end of the lifter to move rearwardly with respect to said lug, and the said faces being in spaced relation when the lock and lifter are in normal locked position and the upper end of said bevelled face being in advance of the lower end of said undercut face to thereby permit said lifter to execute a normal unlocking movement.

1,825,908. CAR COUPLER MECHANISM. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1928. Serial No. 308,732. 5 Claims. (Cl. 213—127.)



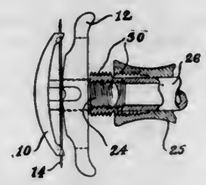
5. In car coupler mechanism, the combination of a coupler head, a rotatable knuckle, a lock for the knuckle, a lock lifter movably connected to said lock and extending upwardly therefrom through the coupler head, said lock being provided with a slot for receiving the lower end of said lifter, said head having upon its interior a lockdown lug, said lifter having a lower shoulder adapted to project under said lug to retain said lock in locked position and having an upper shoulder for cooperating with the coupler head to prevent accidental withdrawal of said lower shoulder from beneath said lug, said shoulders being disposed upon opposite sides of said lifter and being rigidly connected, and means cooperating with said lifter and the coupler head for normally retaining said upper shoulder in cooperating relation to said head.

1,825,909. FURNITURE COVER. JULIUS LEVI, Chicago, Ill., assignor to Sam Pass, Chicago, Ill. Filed Oct. 24, 1930. Serial No. 491,039. 3 Claims. (Cl. 155—182.)



2. A slip cover for an article of furniture having a back, arms and seat, comprising a cover section for each arm and a section for the back and seat having panels depending therefrom at the front and rear of said article of furniture, elastic strings fastened to said depending panels and disposed beneath the respective arm cover sections and extending to the rear of said article for holding said panels in place, and elastic strings connecting said arm sections and extending across said back to hold said arm sections in place, said cover sections having contacting portions whereby said article of furniture is substantially covered.

1,825,910. SAFETY RAZOR. FELIX J. LEWANDO, South Boston, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 18, 1930. Serial No. 496,451. 7 Claims. (Cl. 30—12.)

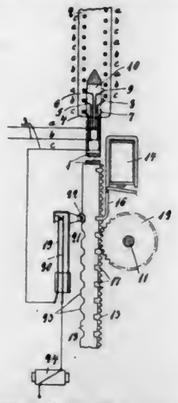


6. A safety razor comprising cap and guard members, a flexible blade clamped therebetween, and coextensive, concentric handle members having threaded connections whereby either may be rendered effective to engage the guard with clamping pressure.

1,825,911. SELECTOR. DAVID LAURENTIUS LIENZÉN, Stockholm, Sweden, assignor to Telefon-Aktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Feb. 12, 1930, Serial No. 427,849, and in Sweden Oct. 23, 1929. 12 Claims. (Cl. 179—27.53.)

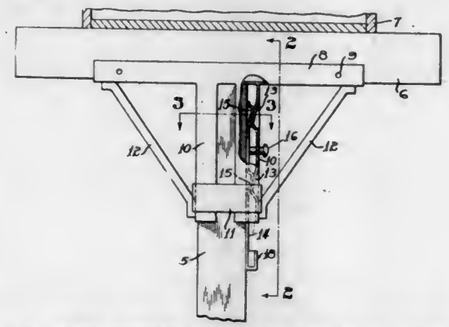
1. A selector arrangement comprising a number of selectors, a contact field consisting of parallel bare conductors and common to a plurality of selectors, a longi-

tudinally displaceable contact arm on each selector, means to move said contact arm into the contact field between the bare conductors thereof to select any of the lines con-



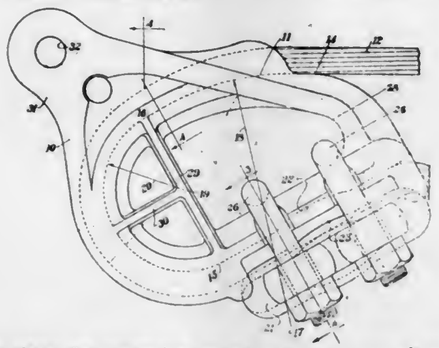
nected to the contact field, the test conductors of said lines being equally distributed on both sides of the path of the contact arm and equally spaced on each side.

1,825,912. SHORE HEAD BRACKET. CHARLES M. MARKHAM, Toledo, Ohio. Filed Oct. 14, 1929. Serial No. 399,485. 5 Claims. (Cl. 248—30.)



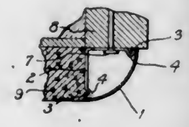
1. A bracket comprising a casing adapted to receive the end of a beam, a transverse member rigidly secured to said casing and adapted to receive a cross head, said casing having an interior longitudinally inclined surface, and a plate provided with wedging means cooperating with said inclined surface to clamp the casing to the beam.

1,825,913. DEAD END CLAMP. HAMILTON E. MCDOWELL, New York, N. Y. Filed Oct. 1, 1930. Serial No. 485,666. 1 Claim. (Cl. 24—135.)



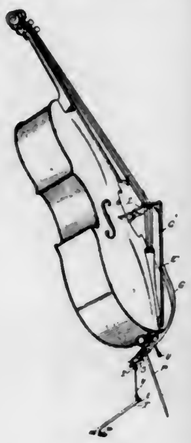
A clamp for conductors or the like comprising a snubbing block having a snubbing seat therein which is V-shaped in cross section and which increases in curvature from the point of entry of the taut end of the cable toward the slack end of the cable, said snubbing block having a clamping seat adjacent the slack end of the cable, and a keeper for pressing the cable against the clamping seat, said clamping seat and keeper having a dip therein curved in the opposite direction to the curvature of the snubbing seat, said keeper having a plurality of contact grooves therein of different contours for engaging conductors of different diameters.

1,825,914. METAL CORNER BEAD WITH ATTACHMENT. JOHN RAMEY MIDCAP, St. Louis, Mo. Filed June 22, 1929. Serial No. 373,031. 3 Claims. (Cl. 72—121.)



1. A metal corner bead comprising a body portion, whose edges have inwardly opening grooves, in combination with angular metal clips whose ends are bent into outward flanges which engage the said grooves, one side of such clip having a button hole adapted to co-operate with beaded fastening devices on the supporting structure.

1,825,915. MUTE FOR STRINGED INSTRUMENTS. FRANCISCO QUINTANA MIRANDA, Cordoba, Argentina. Filed Dec. 30, 1929, Serial No. 417,502, and in Argentina Nov. 28, 1929. 7 Claims. (Cl. 84—311.)



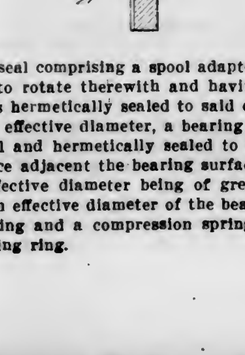
1. A mute for a stringed musical instrument, comprising a coupling pivoted at the tail of the instrument, an arm connected to the coupling, a damper saddle attached to the other end of the arm and adapted to contact with the bridge of the instrument, means for resiliently flexing the arm to keep the saddle normally out of contact with the bridge, and means controlled by the player for overcoming the resilient means and for contacting the saddle with the bridge, the whole attachment being movable about the coupling as a pivot.

1,825,916. ICE TRAY FOR ELECTRIC REFRIGERATORS. HUGO MOCK, New York, N. Y. Filed Nov. 19, 1929. Serial No. 408,217. 3 Claims. (Cl. 62—108.5.)

1. In an ice tray for electric refrigerators, a tray, a cover fitting said tray, a series of intersecting plates attached to the underside of said cover and contacting with the bottom of the tray, the top of said cover having its

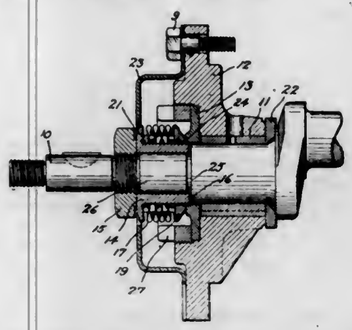
surface beneath the top edge of the tray, and a complete marginal flange on said tray encircling the edges of the tray.

1,825,917. CIRCUIT CLOSER FOR AUTOMOBILE REAR LIGHTS. LEON E. OBEE, Whitehouse, Ohio. Filed Nov. 4, 1929. Serial No. 404,579. 2 Claims. (Cl. 200—59.)



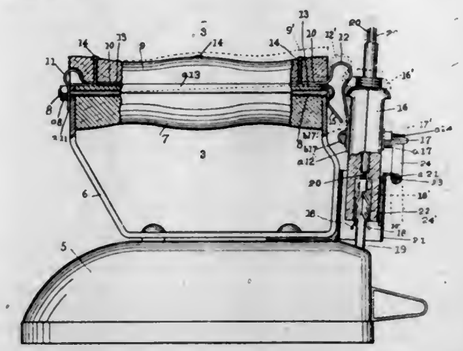
1. The combination with a gear shift slide and a housing therefor, of a light controlling switch mounted on the upper face of the housing, spring means normally operable to open the switch, and a longitudinally slidable member extending through the housing in position to be advanced by the slide as the latter is shifted to operative position, said slidable member having an upturned end connected to the switch to close the latter when said member is advanced.

1,825,918. SHAFT SEAL. FRANK DESNOYERS PELTIER and ELMER WIDERBORG, Evansville, Ind., assignors, by mesne assignments, to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 8, 1927. Serial No. 166,656. 7 Claims. (Cl. 286—11.)



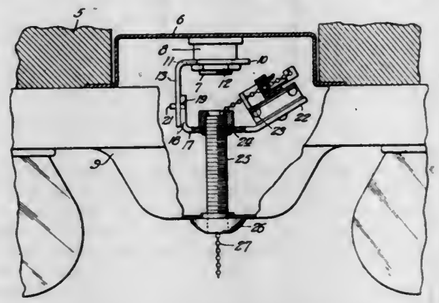
1. A shaft seal comprising a spool adapted to fit snugly to the shaft to rotate therewith and having an enlarged end, a bellows hermetically sealed to said end and having a given mean effective diameter, a bearing ring surrounding said spool and hermetically sealed to said bellows, a bearing surface adjacent the bearing surface of said ring, said mean effective diameter being of greater dimension than the mean effective diameter of the bearing surface of the bearing ring and a compression spring between said end and bearing ring.

1,825,919. AUTOMATIC SWITCH ELECTRIC SADIRON. ANTHONY PETTICORE, Sedro Woolley, Wash. Filed May 7, 1930. Serial No. 450,418. 1 Claim. (Cl. 219—25.)



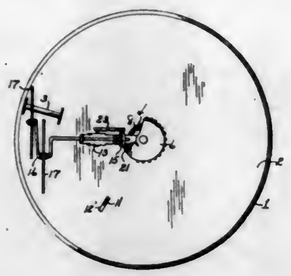
An electric sad iron including a sad iron base, an electric heating element within said base, front and rear handle shanks fastened to said base projected upward therefrom, the bottom part of a sad iron handle fastened to the tops of said handle shanks, the top part of said handle disposed on top of said bottom part thereof, a spring fastened to the front end of said top handle part and to said front handle shank mounting thereby said top handle part for oscillation and tending to separate the said handle parts at the rear ends thereof, an intervening plate fastened to the bottom surface of said top handle part having its edges bent downward adjacent the sides of said bottom handle part covering the opening therebetween when said handle parts are separated by said spring reaction, heating element terminals projected upward from said base, and an electric contact plug fastened to the rear end of said top handle part disposed for making electric connections with said heating element terminals when said top handle part is turned down against said spring reaction and for breaking said connections when said top handle part oscillates upward under said spring reaction.

1,825,920. FIXTURE MOUNTING HICKEY. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, a Corporation of Indiana. Filed Mar. 18, 1929. Serial No. 348,011. 2 Claims. (Cl. 240—85.)



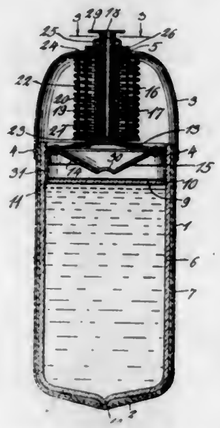
1. A device for supporting lighting fixtures comprising a member adapted for connection to a wiring outlet, a member having means for supporting a lighting fixture and means on said members detachably connecting them together, said connecting means comprising a compound slot in one of said members made up of a pair of intersecting rectangular slots of different lengths and a projecting portion on the other member having an end portion of a width exceeding the length of the shorter slot and less than the length of the longer slot, and an intermediate portion of a width to fit in the shorter slot.

1,825,921. TOY. WILLIAM O. ROEDER, Oshkosh, Wis. Filed Apr. 18, 1931. Serial No. 531,182. 6 Claims. (Cl. 46—40.)



1. A toy comprising a circular track, a hurdle on said track, a post located centrally of said track, a segmental gear carried by said post, combined supporting and propelling means journalled on the post, a shaft journalled to said means, a gear secured to said shaft and engaging the segmental gear to rotate the shaft during the rotation of said combined supporting and propelling means, means for rotating said last named means, cranks on said shaft, and figures carried by the cranks.

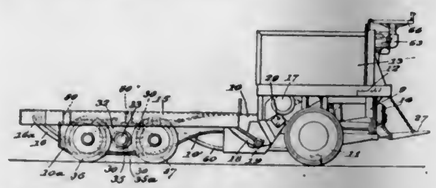
1,825,922. FIRE EXTINGUISHER. WILLIAM L. ROESSNER, EMMA WHEELER, and VICTOR CLYDE SMEDLEY, Denver, Colo.; said Emma Wheeler and Victor Clyde assignors to said William L. Roessner. Filed May 12, 1930. Serial No. 451,797. 7 Claims. (Cl. 169—26.)



1. A fire extinguisher comprising, in combination, a hermetically sealed container formed from a single piece of glass, a fire extinguishing liquid in the container, said liquid being normally not subjected to pressure, means for breaking the container when the temperature exceeds a predetermined value, means for putting the liquid under pressure after the container has been broken and means for discharging the liquid from the container through an opening in the pressure producing means.

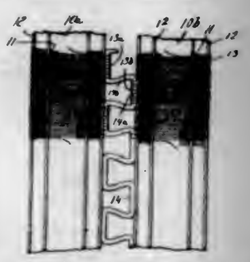
3. A fire extinguisher comprising, in combination, a metal housing, a hermetically sealed container of glass or the like, located within the housing, said container being cylindrical and having one end open, a quantity of fire extinguishing liquid within the container, one end of the container being sealed by a breakable partition located within the container a short distance from the open end thereof, a piston located within the housing and in the open end of the container, resilient means for moving the piston towards the partition and into the container, heat responsive means for holding the piston in inoperative position while the temperature is below a predetermined value and for releasing it when the temperature exceeds the predetermined value whereby the partition is broken and the piston moved against the liquid and a nozzle carried by the piston and in communication with the liquid whereby when the piston is moved inwardly, the liquid will be put under pressure and forced outwardly through the nozzle.

1,825,923. INDUSTRIAL TRUCK. ROBERT T. ROMINE, Mount Clemens, Mich. Filed Feb. 2, 1929. Serial No. 337,062. 6 Claims. (Cl. 180—22.)



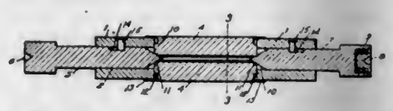
1. An industrial power driven truck comprising a main frame having a low forwardly extending load supporting frame portion, formed of angle bars arranged to provide flanges extending laterally from the body of the frame, a platform surmounting said frame portion, a pair of sub-frame bars one at each outer side of said frame portion, in the vertical planes of said flanges, means carried by said frame portion for pivotally supporting said bars to rock independently of each other about a horizontal axis, and a pair of longitudinally spaced relatively small diameter dirigible load wheels mounted on each sub-frame member beneath said platform.

1,825,924. VENTILATED WEBBING. GEORGE H. SAUERMANN, Middletown, Conn., assignor to The Russell Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed July 12, 1930. Serial No. 467,403. 13 Claims. (Cl. 139—421.)



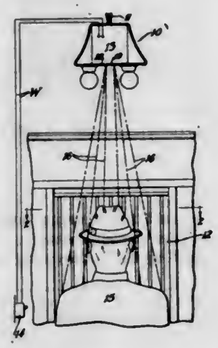
1. A fabric which comprises a pair of webs lying side by side with a space between them, and a connecting warp strand having spaced portions woven into the webs in alternation, the intermediate portions of said strand extending across said space, said space being free of filling strands and said webs and strand all adapted to lie in a single plane.

1,825,925. EXPANDING MANDREL. CHARLES J. SHENK, Westminster, Pa. Filed Mar. 29, 1929. Serial No. 351,073. 5 Claims. (Cl. 82—44.)



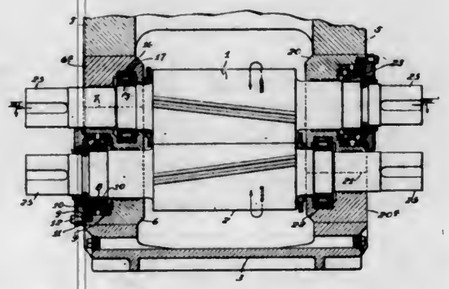
1. In an expanding mandrel, the combination of radially movable work supporting plates having work engaging surfaces on their peripheral edges; and an axially contractible carrier for the plates having radially extending guides in which the plates are slidably mounted and comprising tapered surfaces engaging the plates said carrier having centering ends and actuating the plates through the contraction of the carrier in response to pressure on the centering ends.

1,825,926. PROTECTIVE SHOOTING MECHANISM. SAMUEL K. SHUSTER, Sandyville, Ohio, assignor of one-half to Ira B. Shuster, Louisville, Ohio. Filed May 7, 1931. Serial No. 535,613. 7 Claims. (Cl. 89—1.)



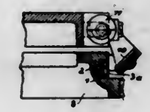
2. In a cartridge firing mechanism adapted to be located overhead in a bank and the like, a vertically disposed cartridge magazine, having a plurality of cartridge chambers disposed in different angular directions calculated to distribute shots over a given area, cartridges in said chambers, hammer means for firing one of the cartridges, means for intermittently rotating the magazine to bring successive cartridges under the hammer means, timing means cooperatively associated with said magazine rotating means for actuating said hammer means as successive cartridges are moved thereunder, and remote control means for operating the magazine rotating means.

1,825,927. PINION STAND. JOHN A. SMITMANS, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 11, 1929. Serial No. 391,834. 4 Claims. (Cl. 80—54.)



1. A pinion stand comprising a housing, a pair of intermeshing pinions therein each having bearing necks at their ends, a two-part cartridge at each end of the pinions, each cartridge being divided in the horizontal axial plane of one pinion and receiving the adjacent bearing necks of both pinions, and roller bearings for the necks of the pinions arranged in staggered overlapping relationship in said cartridges.

1,825,928. POSITIONING MEANS IN PAPER CUTTING MACHINES AND THE LIKE. KARL STEGMANN, Bautzen, Germany, assignor to Johne-Werk Grafische Maschinen-Aktiengesellschaft, Bautzen, Germany. Filed Aug. 7, 1930, Serial No. 473,653, and in Germany Oct. 25, 1929. 3 Claims. (Cl. 164—59.)



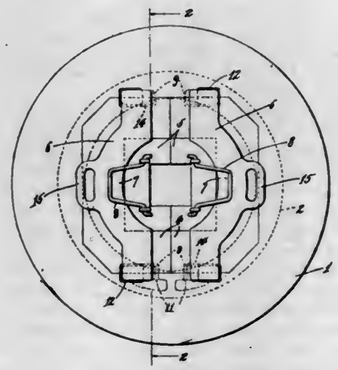
1. In a device of the kind described in combination, a sheet support and a movable sheet-confining saddle-plate, movable on said support, rotatable feeding means for the plate and substantially tape-like, loop-shaped graduated flexible measuring means, displaceably engaging the feeding means, and a reflecting member on said support, optically confronting the flexible measuring means.

1,825,929. BRUSH. GUST H. VOIGT, Holgate, Ohio. Filed Apr. 14, 1930. Serial No. 444,019. 2 Claims. (Cl. 15—206.)



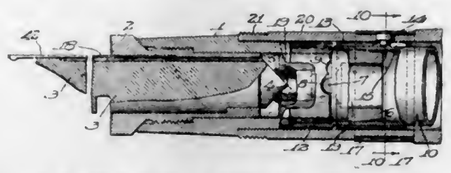
1. A brush comprising a plurality of bent wires with their bight portions intertwined and forming a loop to constitute a handle, the remaining portion of each wire being twined to form a flexible shank with a part of the other wire, and the last wire being continued beyond the other to form a more flexible shank portion, and bristles carried at the end of said last mentioned shank portion.

1,825,930. LOCKING BAR FOR BUSHINGS. LEWIS EMANUEL ZERBE, Moneta, Calif., assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 20, 1930. Serial No. 489,928. 8 Claims. (Cl. 255—28.)



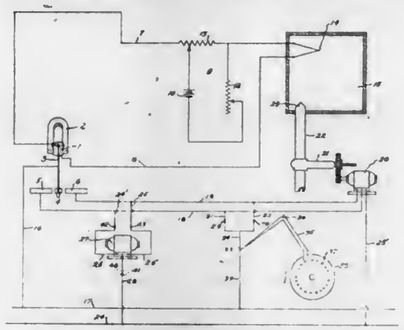
1. In a rotary drilling equipment, the combination of a rotary table, a split bushing loosely mounted in the central opening of said table, the table and the bushing being provided with complementary slots defining an L-shaped lock slot, and a locking bar extending over the bushing and provided at either end with depending hooks adapted to loosely fit in the L-shaped slots to key the bushing to the rotary table.

1,825,931. FOUNTAIN PEN. WALTER J. BAKER, Chicago, Ill., assignor to The Wahl Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 163,034. 33 Claims. (Cl. 120—48.)



1. In a fountain pen a barrel, a reservoir within the barrel having an outlet and provided with a valve member, and means extending to the exterior of the barrel to operate the valve for regulating said outlet.

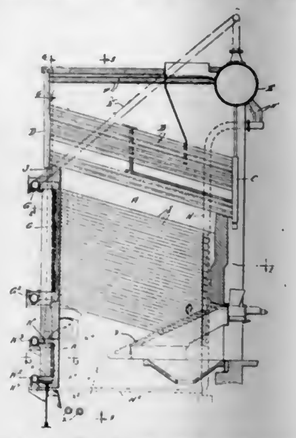
1,825,932. CONTROL METHOD AND APPARATUS. ROSCOE D. BEAN, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 6, 1928. Serial No. 259,588. 34 Claims. (Cl. 236—70.)



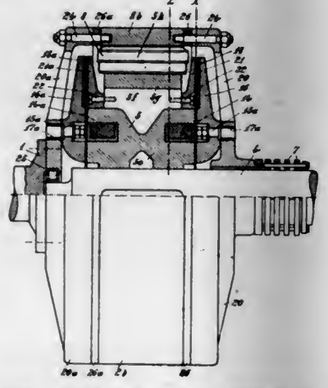
1. The method of temperature control which comprises operating a first control in accordance with the rate of temperature changes for opposing temperature changes and operating a second control in accordance with temperature variations from a predetermined value for restoring the temperature to said value.

1,825,933. WATER BACK FOR STEAM GENERATORS. JOHN E. BELL, Brooklyn, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed July 26, 1924. Serial No. 728,806. 9 Claims. (Cl. 122—235.)

1. A steam generator comprising elements forming a boiler, wall structure enclosing a combustion chamber, stoker apparatus within said wall structure and defining the lower extent of the combustion chamber, said wall structure extending below the combustion chamber and providing an ash pit and including a water wall positioned to be contacted by residue resulting from burning of fuel on the stoker, said water wall being positioned and having sufficient vertical extent to provide a water wall surface for substantially the vertical extent of the ash pit, an upper horizontally disposed header for said water wall outside said wall structure, a lower horizontally disposed header for said water wall outside said wall structure, said water wall comprising tubes having vertically extending heat absorbing portions and end portions extending through the wall structure and connected to the upper and lower horizontally disposed headers outside said wall structure and metal blocks contacting the vertical heat absorbing portions of the water wall tubes and having smooth exposed faces forming a substantially smooth continuous inside wall surface of the ash pit for contact with said residue and transmitting heat from the residue to the water wall tubes, a downflow conduit connecting the boiler with the lower horizontal header, an upflow conduit connecting the upper horizontal header with the boiler, and the vertical extent of the heat absorbing portions of the water wall tubes being sufficient to induce gravity circulation therethrough due to heat supplied to said vertically extending heat absorbing portions.



1,825,934. POWER TRANSMISSION DEVICE. JULIUS BING, Eisenach, Germany, assignor to the Firm Magnet-Werk G. m. b. H. Eisenach Spezialfabrik Fur Elektromagnet-Apparate, Eisenach, Germany. Filed Mar. 22, 1928, Serial No. 263,813, and in Germany Mar. 28, 1927. 2 Claims. (Cl. 172—284.)

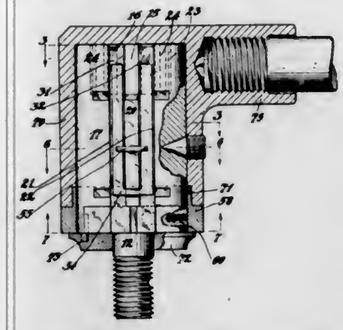


1. A power transmission device, especially for Diesel-motor locomotives, comprising in combination, an eddy-current-clutch, an electro-magnetically operative friction clutch, energizing coils for actuating said clutches and being positioned within the field-body of the eddy-current clutch, a cylindrical casing enclosing said energizing coils, bearing shields mounted on either end of said casing, and armatures guided in said bearing shields.

1,825,935. LIQUID COATING COMPOSITION AND PROCESS OF MAKING SAME. JAMES ELIOT BOOGE, Wilmington, Del., assignor to E. I. Du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 20, 1925. Serial No. 70,221. 19 Claims. (Cl. 134—79.)

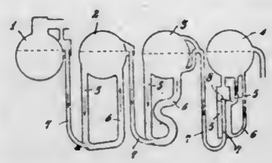
1. The process of making a liquid coating composition which comprises blowing a drying oil with air until it becomes compatible with the desired proportion of nitrocellulose, and then mixing the thus treated oil with nitrocellulose and with a drier for the oil.

1,825,936. RATCHET MECHANISM. CHRISTIAN BODMER, New Britain, Conn., assignor to The Stanley Works, New Britian, Conn., a Corporation of Connecticut. Filed Sept. 4, 1926. Serial No. 133,560. 1 Claim. (Cl. 192—431.)



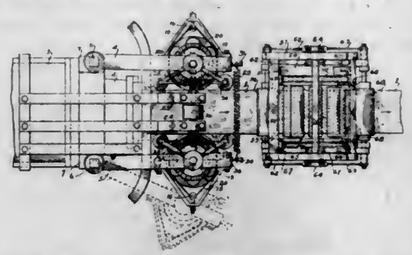
In a ratchet tool, including a cylindrical block having a recess for a ratchet and two sets of grooves for receiving pawls, the portion of the block defining the recess being cut away to form abutment walls in continuation of the outer walls of said grooves, and a spindle, a ratchet thereon with its teeth and grooves paralleling the axis of the spindle, the ratchet being located in said recess, two reverse-acting pawls positioned in the grooves of each set and having their ends extending over the ratchet, spring means for normally holding the pawls seated on the groove bottoms, the block being cut away at the rear of said grooves to provide a ledge over which the pawls may tilt, selective means for simultaneously tilting one pawl of each pair into inactive position, the groove bottoms of one set being at such an angle to the groove bottoms of the other set that when one active pawl is in driving engagement with a ratchet tooth the active pawl of the other pair is offset from driving position with a ratchet tooth by substantially one half the angular distance between ratchet teeth, whereby said second active pawl takes driving position with its adjacent tooth upon a back idle stroke of the carrier substantially half the angular distance necessary to place the first active pawl into driving engagement with its next tooth.

1,825,937. DEVICE FOR INTERCONNECTING THE EVAPORATION ELEMENTS OF EVAPORATION PLANTS. BALTUS BOULOGNE, Pasoeroean, Java, Dutch East Indies. Filed June 21, 1928, Serial No. 287,307, and in the Netherlands June 25, 1927. 1 Claim. (Cl. 159—43.)



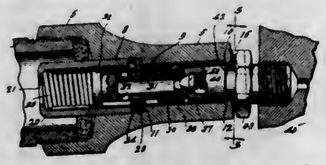
In an evaporating plant having a series of evaporating elements, an individual U-shaped circuit member for all but the first of said elements, said circuit members depending below the units and opening into said units near the bottom thereof, and an overflow pipe connection from the side and above the bottom of one of the elements to the lowermost point of the U-shaped member of the next element in the series, whereby the level of the liquid in each element is kept constant and the liquid passing through an overflow pipe connection from one element to the next is pre-cooled in the circuit member of the next element before entering the latter.

1,825,938. BRICK EMBOSSING MACHINE. JOHN J. FRED BRAND, Roseville, Ohio. Filed Nov. 3, 1928. Serial No. 317,064. 7 Claims. (Cl. 25—1.)



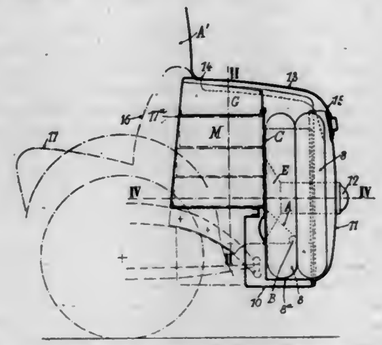
1. Apparatus for embossing a face of plastic brick ribbon while it is travelling beyond the extruding point of an extruding machine, comprising a rotatable carrier, a plurality of embossing rollers mounted in said carrier on axes parallel to the face to be embossed, and adapted to be brought into operative relation to said face by the rotation of said carrier, means for rotating said carrier in such direction as to translate the rollers adjacent said ribbon longitudinally of said ribbon, and means for rotating said rollers while in operative relation to said ribbon in the opposite direction to, and at the same peripheral speed as the translatory movement of, the parts of said rollers coacting with said ribbon.

1,825,939. GREASE GUN COUPLING. CLYDE G. BUTLER, Cincinnati, Ohio, assignor, by Mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 21, 1927. Serial No. 207,532. 14 Claims. (Cl. 284—19.)



1. The combination with a lubricant receiving nipple, a compressor having a nozzle adapted to be engaged over the nipple, and interlockingly connected therewith only while the nozzle is canted from a longitudinally aligned position of the parts.

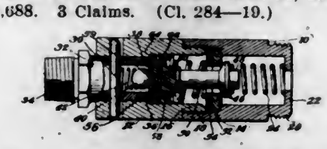
1,825,940. LUGGAGE AND LIKE CARRIER FOR MOTOR VEHICLES. EMILE HENRI COQUILLE, Paris, France, assignor to Societe Anonyme Des Usines Chausson, Asnieres, France. Filed Apr. 8, 1929, Serial No 353,638, and in France May 5, 1928. 4 Claims. (Cl. 296—37.)



1. In a luggage and like carrier arrangement for motor vehicles, a case formed integral with and at the

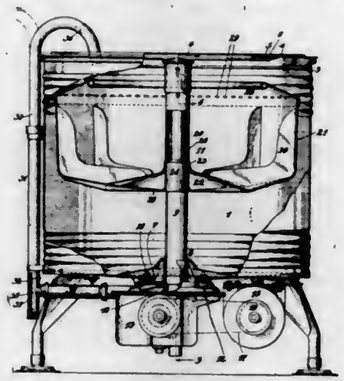
rear of the vehicle body and adapted to open at the rear and a trunk and spare wheel carrier structure within said case and supported by the vehicle frame, the rear wall of said trunk being adapted to pivot about a horizontal axis and the spare wheel carrier being attached to said rear wall.

1,825,941. COUPLING. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 18, 1926. Serial No. 95,688. 3 Claims. (Cl. 284—19.)



1. A lubricant coupling comprising inlet and outlet sleeves, a valve seat clamped between the juxtaposed ends of said sleeves, a lubricant receiving fitting, a bayonet joint connection between said outlet sleeve and said fitting, an inwardly opening check valve on said seat, and a spring in said inlet sleeve for holding said check valve closed.

1,825,942. WASHING MACHINE. GEORGE W. DUNHAM, Utica, N. Y., assignor to Whirldry Corporation, New Haven, Conn., a Corporation of New York. Filed Sept. 4, 1926. Serial No. 133,678. 12 Claims. (Cl. 68—18.)

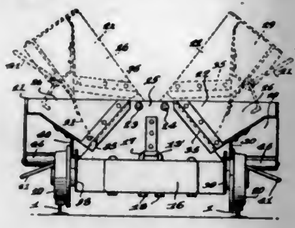


2. A laundry machine comprising a tank, a receptacle mounted in said tank, a plurality of agitator elements disposed in and secured to said receptacle, a pair of shafts extending from said tank to said receptacle, clutch means for selectively connecting said shafts to said receptacle, and means for imparting to one of said shafts a continuous rotary motion and to the other of said shafts an oscillatory rotary motion.

8. A laundry machine comprising a tank, a pedestal in said tank, a receptacle journalled on said pedestal to rotate about a substantially fixed vertical axis during both washing and drying, drive shafts extending to said receptacle, clutch means on said receptacle for selectively connecting said shafts to said receptacle, and means for imparting motions to said shafts so that when the receptacle is connected to one of said shafts, the articles of loundry will be washed and when the receptacle is connected to the other of said shafts, the articles of laundry will be dried.

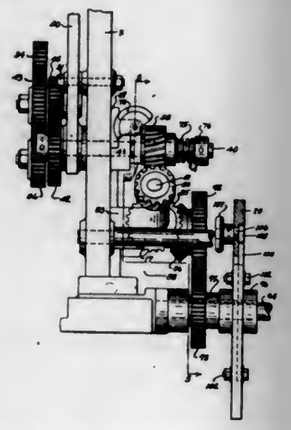
12. A laundry machine comprising a laundry receptacle, a tank surrounding said receptacle, agitator elements flexedly mounted in said receptacle projecting upwardly from the bottom wall thereof, means for imparting an oscillatory rotary motion to said receptacle for washing to cause the agitator elements to tumble the laundry, and means for imparting a continuous rotary motion to said receptacle for drying.

1,825,943. MINE CAR. THOMAS R. EVANS, Petros, Tenn. Filed Mar. 28, 1928. Serial No. 265,463. 7 Claims. (Cl. 105—262.)



1. A car of the character described including pivoted sections normally held in closed position by gravity but adapted to be swung into open position, the sections being of a formation that the contents of the car will normally aid in holding them in lowered position but will tend to swing them into open position after an initial swinging movement given to the sections, said formation of each section including a substantially horizontal portion adjacent the outer side edge of the section to support a portion of the contents.

1,825,944. PRINTING PRESS. WILLIAM EVENSEN, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Original application filed Aug. 18, 1923, Serial No. 658,052. Divided and this application filed Oct. 1, 1926. Serial No. 138,822. 8 Claims. Cl. 93—93.)

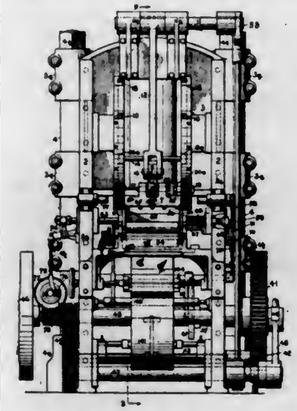


1. A newspaper counting mechanism including in combination a rotary fly, a flipper finger for displacing a newspaper to mark a group of a predetermined number, a shaft, a hub having a circular flange keyed to the shaft, a cam supported on the circular flange and adapted to move with relation to it, and means to adjust the cam in any desired position on the circular flange.

1,825,945. EMBOSSING AND PRINTING PRESS. WALTER C. FELLOWS, Philadelphia, Pa., assignor to C. R. Carver Company, a Corporation of Pennsylvania. Filed Oct. 30. 1928. Serial No. 315,973. 15 Claims. (Cl. 101—165.)

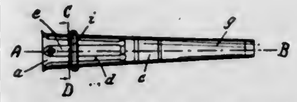
1. In a press of the character stated, the combination of vertical guiding means, a stationary head above the said guidings means and formed on its underside with a bed, rearwardly extending arcuate shaped guides terminating at the forward ends in the head adjacent to the bed and having the rearward portions curved upwardly, a die carrying slide having lateral guides adapted to the arcuate

shaped guides whereby the slide may be reciprocated from a position immediately below the head and bed thereof to a rearward position, power means for reciprocating the



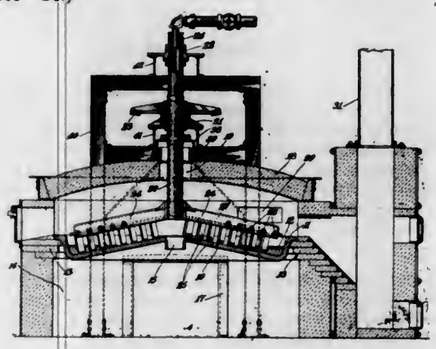
slide, a vertically reciprocating plunger guided in the vertical guides, and power means for reciprocating the plunger connected in timed relation with the power means for reciprocating the slide.

1,825,946. CIGAR AND CIGARETTE HOLDER. OTTO FOEHR, Karlsruhe, Germany. Filed Aug. 28, 1929, Serial No. 389,036, and in Germany Aug. 29, 1928. 3 Claims. (Cl. 131—10.)



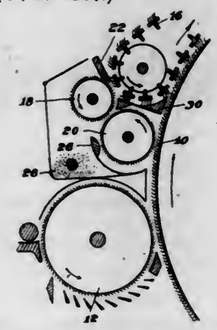
1. In a cigar or cigarette holder a conical tube for insertion of the cigar or cigarette at the larger end thereof, consisting of a rolled sheet of springy metal with overlapping edges, not fastened at the seam, and tending to expand, and a slidable member embracing said tube, adjustable lengthwise thereof, limiting its expansion.

1,825,947. ROASTING APPARATUS. EDWARD J. FOWLER, deceased, Redwood City, by Edith Mary Fowler, executrix, Redwood City, Calif., and DUDLEY BAIRD, Berkeley, Calif., assignors to Nichols Copper Company, New York, N. Y., a Corporation of New York. Filed May 16, 1928. Serial No. 278,220. 5 Claims. (Cl. 263—26.)



3. A furnace construction adapted for the treatment of molten materials comprising a hearth having an annular depression for receiving the molten material surrounded by cylindrical furnace walls, means for introducing a flame substantially tangentially of the hearth whereby the flame is directed circumferentially of the furnace around the annular body of molten material on the hearth, trough means for replenishing the supply of material at the outside of the hearth, and a discharge opening at the center of the hearth.

1,825,948. STAPLE FIBER RECLAIMING DEVICE FOR REVOLVING FLAT CARDS. CHARLES GÉGAUFF and JULES PFLIMLIN, Mulhouse, France. Filed May 10, 1930, Serial No. 451,292, and in France May 23, 1929. 5 Claims. (Cl. 19—107.)



1. A carding engine for cotton and like fibre having, in combination, a revolving flat, a cylinder and the following devices at the feed side of said cylinder, a licker-in, a needle clothed roll working with the flats before their reentrance to working position on the cylinder, a stationary knife intermediate said roll and the flats, and a second needle clothed roll working with both said first needle clothed roll and the cylinder disposed above the licker-in.

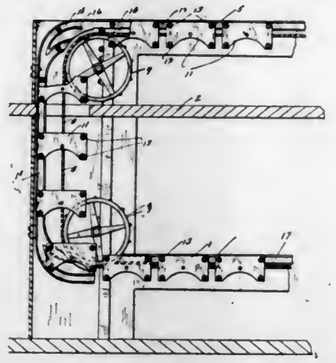
1,825,949. PROCESS OF TREATING ORES. CHARLES C. HAAS, Whitewood, S. D. Filed May 28, 1928. Serial No. 281,362. 4 Claims. (Cl. 75—18.)

1. A process of treating an ore which contains iron and a metal of the group consisting of copper, zinc, lead, the proportion of iron to such other metal being such as to lead to the formation of insoluble refractory compounds of such other metal with ferric oxide, upon subjecting to an oxidizing roast, which process comprises roasting such ore under oxidizing conditions whereby a roasting product containing such insoluble refractory compounds results, subjecting such roasted product to the action of reducing gases, in the absence of solid carbonaceous material, at about 400 to 600° C., sufficient to reduce the iron sesquioxide component of the insoluble refractory compounds therein only to the stage of ferro-ferric oxide, and thereafter subjecting the product to action of a liquid solvent for said copper, zinc, lead group metal.

1,825 950. WAITERLESS RESTAURANT. CHARLES G. HALL, Boise, Idaho, assignor to Automatic Food Machinery Corporation, Boise, Idaho. Filed Aug. 17, 1928. Serial No. 300,251. 2 Claims. (Cl. 198—163.)

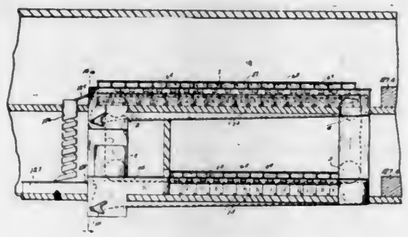
1. In conveying apparatus, pairs of sprockets, disposed in different horizontal planes and in spaced relation with each other, pairs of horizontal and pairs of vertical guideways disposed in direct alignment with the pairs of sprockets, a pair of endless sprocket chains trained about said sprockets, carriages removably journaled to said chains and guided through their travels by the guideways and the chains, said carriages having two pairs of rollers extending outwardly from each of their side walls, the upper pairs of rollers adapted to ride upon the horizontal guideways when the carriages are traveling in a horizontal plane, and the upper pairs and lower pairs of rollers of one side of the carriages being adapted to ride at one time

upon the vertical guideways when the carriages are traveling in a vertical plane, the vertical guideways having bifurcated ends turned inwardly in the direction of and in



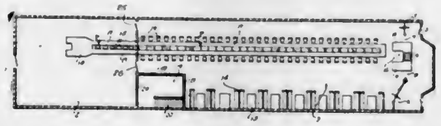
the line of travel of all the pairs of rollers, said bifurcated ends being adapted to transfer the carriages from their horizontal to their vertical travel without in any way tilting the carriages.

1,825,951. WAITERLESS RESTAURANT. CHARLES G. HALL, Boise, Idaho, assignor to Automatic Food Machinery Corporation, Boise, Idaho. Filed Feb. 3, 1930. Serial No. 425,701. 15 Claims. (Cl. 186—1.)



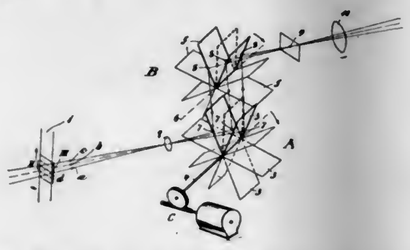
1. In a device of the class described, the combination of primary and secondary conveyors driven by a common prime mover, one of the secondary conveyors being disposed at either side of the primary conveyor, the secondary conveyors being at a lower elevation than that of the primary conveyor and running in opposite directions to that of the primary conveyor, means for maintaining the conveyors under cover throughout their line of travel, means for permitting the placing and/or removal of materials from the primary conveyor, means for permitting the placing of materials upon the secondary conveyors, means for removing such materials from the secondary conveyors at the end of their line of travel, means for sterilizing the secondary conveyors, means for scrubbing the secondary conveyors, and a reconditioning head disposed at one end of all the conveyors.

1,825,952. LAYOUT FOR RESTAURANTS. CHARLES G. HALL, Boise, Idaho, assignor to Automatic Food Machinery Corporation, Boise, Idaho. Filed Feb. 3, 1930. Serial No. 425,702. 2 Claims. (Cl. 186—1.)



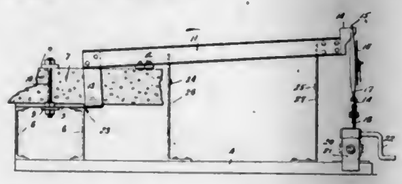
1. In a restaurant of the class described, the combination of an eating compartment and a kitchen compartment separated by a partition, an endless conveyor running longitudinally of each compartment and through the partition, a reconditioning head disposed at one end of the conveyor and a pay station disposed at the oppositely disposed end of the conveyor, entrance ways disposed at the street end of the eating compartment, and exit passageways disposed at the entrance end, said exit passageways leading past the pay station and tables and booths disposed within the eating compartment and in spaced relation with the endless conveyor.

1,825,953. DEVICE FOR PERMITTING THE CONTINUOUS FEEDING OF THE FILM IN PROJECTING APPARATUS. PER GEORG HALVAR HALLONGREN, Stockholm, Sweden. Filed Feb. 12, 1927, Serial No. 167,857, and in Sweden Feb. 16, 1926. 2 Claims. (Cl. 88—16.8.)



1. In a device for projecting from a continuously fed film through a projecting apparatus having means for projecting a light through said film, the combination of a group of plane reflecting members arranged on a rotating axis, a second group of plane reflecting members also arranged on a rotating axis and means for rotating the said groups synchronously with each other in the same direction for reflecting the picture rays successively, the reflecting surfaces of each group facing one and the same peripheral direction, the reflecting surfaces of one of the groups facing the direction of rotation and the reflecting surfaces of the other group facing the opposite direction.

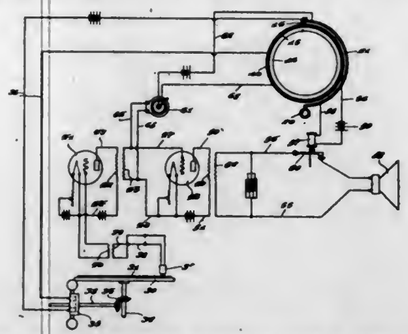
1,825,954. CONCRETE TESTING APPARATUS. OAREN HARDIN HANSARD and DONALD DAVID MCGUIRE, Nashville, Tenn. Filed Sept. 1, 1927. Serial No. 216,845. 8 Claims. (Cl. 265—19.)



1. Apparatus for testing concrete comprising means for holding a test piece horizontally, a horizontal lever engaging one end of the test piece held by said holding means, means connected with the free end of the lever for depressing the lever to break the test piece, and a measuring instrumnet associated with said last named means adapted to indicate the amount of force required to break the test piece.

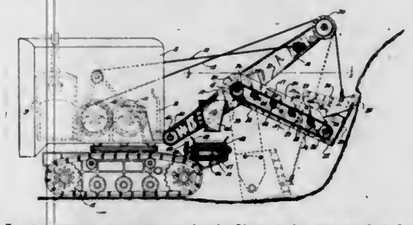
1,825,955. RECORDING AND REPRODUCING TALKING MOTION PICTURES. EUGENE S. HAYFORD, New Orleans, La. Filed Nov. 14, 1928. Serial No. 319,420. 2 Claims. (Cl. 88—16.2)

1. Apparatus for synchronizing a sound record with a picture record comprising a cylinder of conducting material mounted for simultaneous movement with the picture record, a sleeve of non-conducting material carried upon said cylinder and having an opening, a stylus mounted for movement along said cylinder and normally engaging said sleeve and adapted to enter the opening



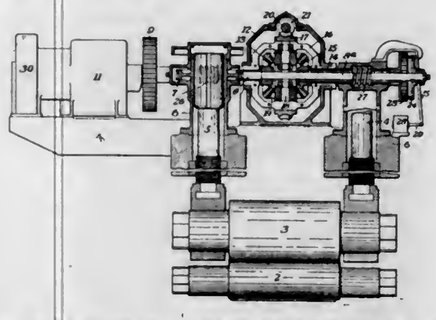
therein and an electrically operated actuating device connected in circuit with said stylus and said cylinder for operating said sound record.

1,825,956. CONVEYER EXCAVATOR. ALPHONSE V. HUENNEKENS, Milwaukee, Wis. Filed Dec. 12, 1929. Serial No. 413,516. 2 Claims. (Cl. 214—90.)



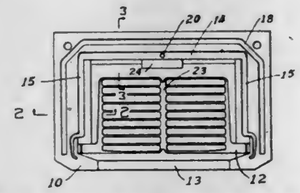
2. In a power excavator including a boom and a hollow arm pivotally carried by the boom, an excavating member for digging and shoveling operations angularly adjustably carried by the outer end portion of the arm, an endless conveyer movably mounted within the arm and the excavating member and forming a movable bottom for the latter and extending to the inner end portion of the arm, a hopper mounted through the boom adjacent the inner end portion of the arm, and a second endless conveyer movably carried by the excavator adjacent said hopper and extending outwardly of the excavator for discharging material.

1,825,957. DIFFERENTIAL ADJUSTMENT FOR ROLLS. JANE JOHNSON, Pittsburgh, Pa., assignor to United Engineering and Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 20, 1927. Serial No. 162,338. 17 Claims. (Cl. 80—56.)



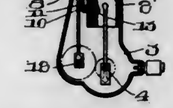
15. In a rolling mill, having an adjusting roll, and an adjusting mechanism for each end of the adjustable roll, the said mechanisms being reversed, a shaft for driving one mechanism, a second shaft for driving the other mechanism, a reversing gear operably interposed between the two shafts, a motor for driving one of the shafts, and electric brake for said motor, a selectively operable clutch for directly connecting the two shafts to render the reversing gear inoperative, electromagnetic means for operating the clutch, and a second motor for driving the two shafts when said clutch is in operative position, said brake, electromagnetic clutch operating means, and the second motor being electrically interconnected.

1,825,958. MAKING METAL ARTICLES. AUGUST KADOW, Toledo, Ohio, assignor to The Vacuum Casting Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 10, 1927. Serial No. 160,020. 2 Claims. (Cl. 22—73.)



1. A two part mold having the meeting surfaces of its parts cut away to form a casting cavity having its greatest cross-section along the parting plane, an inlet opening into the bottom of the cavity, vacuum grooves along the sides and top of the cavity, an overflow space outside of the sides and top of the casting cavity, and a communicating slit between the vacuum groove and the overflow space.

1,825,959. OPERATING SYSTEM OF INTERNAL COMBUSTION ENGINES. RENNOSUKE KONDO, Tokyo, Japan. Filed Apr. 3, 1928, Serial No. 266,986, and in Japan Jan. 18, 1928. 1 Claim. (Cl. 123—64.)

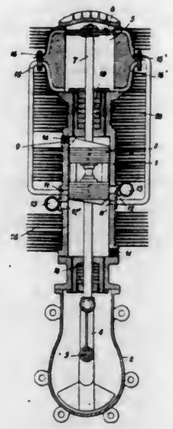


An internal combustion engine including a cylinder, a piston slidable in said cylinder, an exhaust port in said cylinder above the lowermost position of said piston, an admission port in said cylinder opposite said exhaust port, a blower connected with said admission port, a port in said cylinder below said admission port, a slide valve adapted to control the inlet and exhaust of scavenging air and explosive mixture, said valve sliding over said admission port and said port therebelow and a port in said piston registering with the port below said admission port at the lowermost position of said piston.

1,825,960. METHOD OF TREATING ARTIFICIAL SILK CAKES MADE BY THE SPINNING CAN PROCESS. HUGO KÜTTNER, Dresden, Germany, assignor to Kuttner Aktiengesellschaft, Pirna Elbe, Germany. Filed Oct. 23, 1928, Serial No. 314,547, and in Germany Nov. 5, 1927. 2 Claims. (Cl. 18—54.)

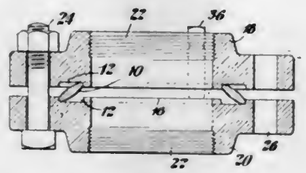
1. A process for the additional treatment of cakes of artificial silk manufactured by the known spinning can process of pressing the cakes flat and rinsing them, said treatment consisting in thereupon drying the cakes without tension while still in the form of cakes and without any inner support of the annular filament layers, before unwinding and reeling the silk thread.

1,825,961. DOUBLE ACTING INTERNAL COMBUSTION ENGINE. VICENTE ORTELLS LACAMBRA, Barcelona, Spain. Filed June 27, 1929, Serial No. 374,109, and in Spain Jan. 4, 1929. 1 Claim. (Cl. 23—57.)



A double-action two-stroke cycle internal combustion engine comprising a working cylinder a double-acting piston for the cylinder, a double-acting pump cylinder for the working cylinder, a piston in the pump cylinder, a piston rod connecting said pump piston to its adjacent working cylinder piston, a crankshaft, a connecting rod, and a piston rod for the working piston connecting the working piston to the crankshaft on the side opposite the pump cylinder, so that the working cylinder is situated between the pump cylinder and the crankshaft, gas-tight glands at either end of the working cylinder through which pass the piston rods coupling the working piston to its pump piston above and connecting rod below, ducts leading from each end of the pump cylinder to the working cylinder, ducts leading from a carburetor to each end of the pump cylinder and non-return valves in each of said ducts

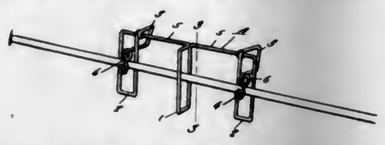
1,825,962. GASKET. WILBUR G. LAIRD, New York, N. Y. Filed July 30, 1927. Serial No. 209,420. 9 Claims. (Cl. 285—137.)



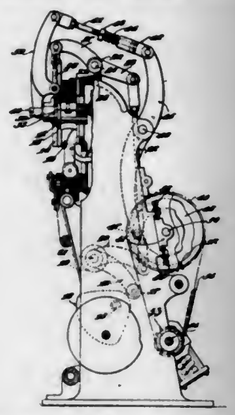
2. A pipe joint comprising connecting members having opposing faces, circular shallow shoulders arranged in the faces, the shoulders being opposed and of unequal diameters, an annular gasket arranged to extend obliquely to the faces and having its edges in engagement with the opposing shoulders, and means for drawing the faces toward one another.

1,825,963. CLOTHESPIN. WILLIAM B. LAKE, Commerce, Tex. Filed Dec. 29, 1930. Serial No. 505,421. 1 Claim. (Cl. 24—139.)

A clothes pin formed of a single piece of material having its central part bent to form a substantially rectangular loop for receiving the line, portions of the wire extending in opposite direction in a horizontal plane from one of the upper corners of said central loop, the end portions of the horizontal parts being bent to form a pair of substantially rectangular loops arranged at right angles to the first loop, the inner limb of each end loop being twisted around a horizontal bar and then shaped to form a loop extending outwardly at right angles from the end loop, the lower part of the outwardly extending loop extending inwardly into an end loop and twisted into a coil and terminating in a depending part for clamping the line with clothes thereon between the core part and each end loop.



1,825,964. COUNTER MOLDING MACHINE. ROSWELL A. LANCEY, Townsend, Mass., assignor to Spaulding Fibre Company, Inc., North Rochester, N. H., a Corporation of New Hampshire. Filed Mar. 23, 1928. Serial No. 264,124. 10 Claims. (Cl. 12—66.)



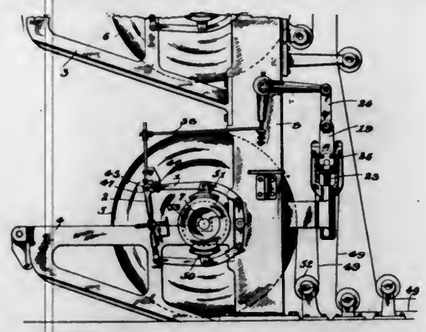
1. A counter molding machine having, in combination, a center mold having a recessed face and side molds relatively movable to mold the counter portion of a counter, wiping means for turning the heel-seat flange of the counter towards the recessed face of the center mold and for then holding said flange in its inturned position, and means in addition to the wiping means for pressing all portions of the surface of the flange to be molded simultaneously into engagement with said recessed face.

1,825,965. PRODUCTION OF DISODIUM PHOSPHATE. PETER A. LANG, Carteret, N. J., assignor to Bowker Chemical Company, New York, N. Y., a Corporation of New Jersey. Filed July 14, 1928. Serial No. 292,916. 3 Claims. (Cl. 23—107.)

1. A process for the production of pure crystals of disodium phosphate, which comprises neutralizing a dilute solution of phosphoric acid with a basic sodium solution, concentrating the resulting solution to 40 to 42° Bé., and heating it to about its boiling point at normal pressures, diluting the solution to a suitable concentration for filtering and crystallization, filtering the diluted solution and permitting crystallization to take place.

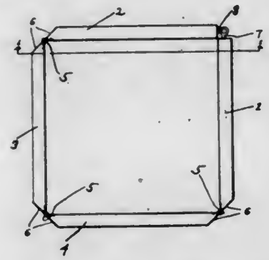
1,825,966. PAPER TENSION CONTROL DEVICE FOR PRINTING PRESSES. KENNETH G. LAYCOCK, Kingston Township, Luzerne County, Pa., assignor to Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 11, 1926. Serial No. 154,249. 12 Claims. (Cl. 242—75.)

1. The combination with a tension device for roll paper on printing presses having a roller member over which the paper passes mounted at each end on a spring tension element, a spindle for holding the roll of paper and a tension brake for the spindle, of automatic means connecting



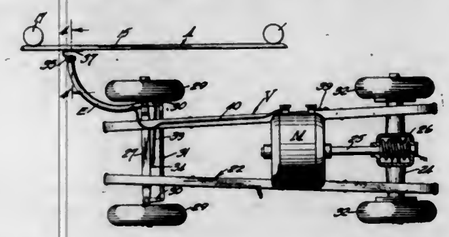
with the brake for receiving the different tension effects from each end of the roller and transmitting the resultant effect to the brake.

1,825,967. TOY. WOODWARD BRYANT LE GANGER, Buck Hill Falls, Pa. Filed Sept. 22, 1930. Serial No. 483,660. 2 Claims. (Cl. 46—37.)



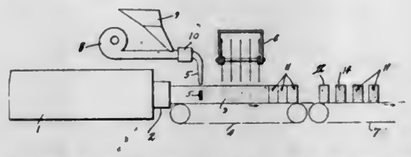
1. A toy mold comprising a plurality of sections of material thickness, hinge means pivotally connecting said sections together for swinging movement in a manner to invert the mold and to provide a substantially closed joint between the sections when in either operative position, said sections having indentations in their opposite sides of a depth less than the thickness of the sections for forming ornamentations on the product of the mold when said mold is in either operative position.

1,825,968. MOTOR VEHICLE TOY APPARATUS. ROBERT L. MAPSON, Los Angeles, Calif., assignor of one-half to Robert L. Greer, San Diego, Calif. Filed Mar 24. 1928. Serial No. 264,509. 16 Claims. (Cl. 104—63.)



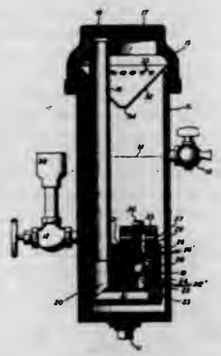
1. In combination, a vehicle, yieldable means for moving the front wheels of the vehicle to one of their extreme steering positions, a horizontally extending abutment rising from a horizontal surface over which said vehicle is adapted to move, and means on the vehicle disposed wholly above the plane of said surface and having movable contact with said abutment to oppose the first means, whereby, the front wheels will be maintained in a position to cause the vehicle to travel in a path paralleling the abutment.

1,825,969. BRICK AND METHOD OF MAKING THE SAME. WILLIAM MCCLINTOCK, Los Angeles, Calif., assignor to Pacific Clay Products, Los Angeles, Calif., a Corporation of California. Filed Sept. 19, 1927. Serial No. 220,346. 4 Claims. (Cl. 25—156.)



1. In a method of continuously producing brick having an irregular roughened surface, the steps of forming a substantially smooth clay column of stiff mud characteristics, blasting a dry, hard, granular material into the surfaces of said clay column whereby said dry, hard, granular material is caused to be partially but firmly embedded in said surfaces, and cutting the column thus treated to form a brick and drying the brick thus formed.

1,825,970. HYDRAULIC FLASH ARRESTER. WILLIAM F. MESINGER, Indianapolis, Ind., assignor to Prest-O-Lite Co. Inc., a Corporation of New York. Filed Oct. 4, 1927. Serial No. 224,018. 1 Claim. (Cl. 48—192.)

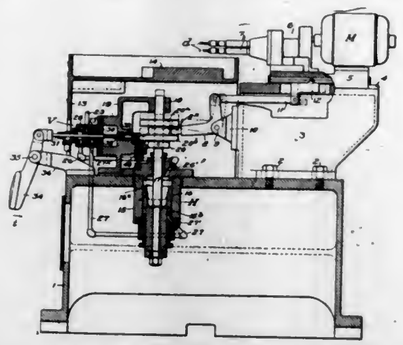


A flash back arrester for combustible gases comprising a chamber, a conduit extending downwardly from the top of said chamber, a valve body supported by said conduit and in communication therewith, a valve member within said valve body, valve seats above and below said valve member, and a resilient member for holding said valve member against the lower seat, said chamber being provided with a filling means having an effective opening above the level of said liquid.

1,825,971. DRILL UNIT WITH COMMON FEED. CHARLES H. MUHL, Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed June 1, 1928. Serial No. 282,141. 7 Claims. (Cl. 77—26.)

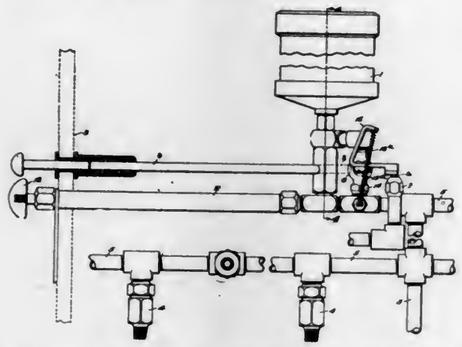
1. A machine tool combining a main frame; a plurality of sub-frames adjustably secured to said main frame each of said sub-frames affording a guideway; a tool-head translatably mounted on each of said guideways; a differential hydraulic motor supported by said frame with its axis transverse to the paths of movement of said tool-heads and adapted to reciprocate said tool-heads in opposite directions at different rates; individual operative con-

nections between said motor and said tool-heads; a hydraulic pressure system comprising a reservoir formed in said main frame; a continuously acting pump adapted to draw fluid from said reservoir; conduits to transmit fluid



under pressure from said pump into opposite ends of said motor; a valve to control the flow of fluid through said conduits; manual means to shift said valve to start said motor; and automatic means to shift the valve to stop said motor.

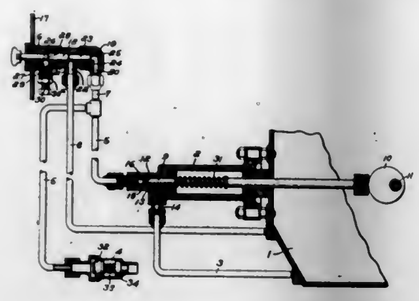
1,825,972. LUBRICATING APPARATUS. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 9, 1926. Serial No. 80,244. 8 Claims. (Cl. 184—7.)



1. A lubricating system comprising, in combination, a supply reservoir, a plurality of charge-determining devices for supplying a predetermined quantity of lubricant under pressure to each of a plurality of parts to be lubricated, conduits connecting said supply with said devices, pump means for forcing the lubricant from said reservoir through said conduits to said devices under pressure, valve means preventing return of lubricant from the conduits to said reservoir, a by-pass valve between the conduits and said reservoir, and lubricant pressure operated valve opening means for opening said by-pass valve to permit lubricant to pass from said conduits to said reservoir thereby to reduce the pressure of the lubricant in said conduits only after a predetermined quantity of lubricant has been forced from said devices.

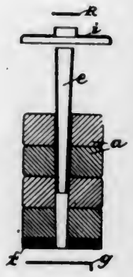
1,825,973. LUBRICATING SYSTEM. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 9, 1926. Serial No. 140,516. 11 Claims. (Cl. 184—7.)

1. A central lubricating system comprising, in combination, a lubricant measuring cup for supplying a predetermined quantity of lubricant to a part to be lubricated, a source of lubricant supply, pump means for forcing lubricant from said source of supply to said lubricant cup, a conduit from said pump to said cup and a single control device manually operable to admit flow of lubricant from



said pump to said cup and automatically operable by the pressure of the lubricant acting upon said device to prevent building up of the pressure of lubricant at said cup subsequent to said cup supplying a predetermined quantity of lubricant to the part to be lubricated.

1,825,974. METHOD OF DYEING TEXTILE FIBER LAPS. OTTO JULIUS OBERMAIER, Neustadt-on-the-Hardt, Germany. Filed Feb. 21, 1929, Serial No. 341,677, and in Germany July 24, 1928. 1 Claim. (Cl. 8—17.)



As a method of dyeing textile fibers in the form of laps, charging a number of lap packages upon a perforated tapered tube, detachably connected by its narrower end to a carrier plate, the lap packages being passed over the wider end of the said tube; pressing the mass of lap packages downwardly upon the carrier plate the packages being compressed to the dimensions to which they would ultimately shrink if wetted in their normal condition, treating the mass with fluid under pressure, disconnecting the carrier plate and the tapered perforated tube, and withdrawing the said tube from the carrier plate and from the mass of lap packages.

1,825,975. MILK BOTTLE SUPPORT. ROBERT PATENGE, Los Angeles, Calif. Filed Oct. 7, 1929. Serial No. 397,862. 1 Claim. (Cl. 248—65.)

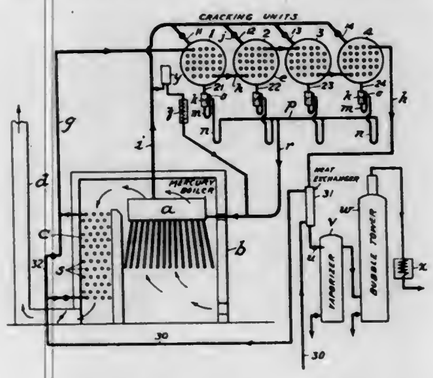
A milk bottle support comprising a back plate in form of a metal strip with spring members near the top end to fit around the neck of a milk bottle and a slot in the bottom-end, a bracket having a supporting plate for the bottom end of the bottle and having spring members with the lower edges spaced above the top surface of the said supporting plate for the larger portions of the spring

members, and a comparatively smaller portion between the spring members resting against the said back-plate, the back portion of the bracket having an aperture, and



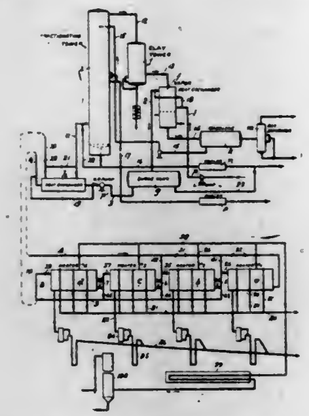
means whereby the bracket is adjustably held to the said back-plate embodying a bolt inserted through the aperture of the bracket and the slot of the back-plate.

1,825,976. PROCESS OF CRACKING MINERAL OIL. ARTHUR E. PEW, Jr., Bryn Mawr, and HENRY THOMAS, Ridley Park, Pa., assignors to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Nov. 9, 1927. Serial No. 232,024. 2 Claims. (Cl. 196—58.)



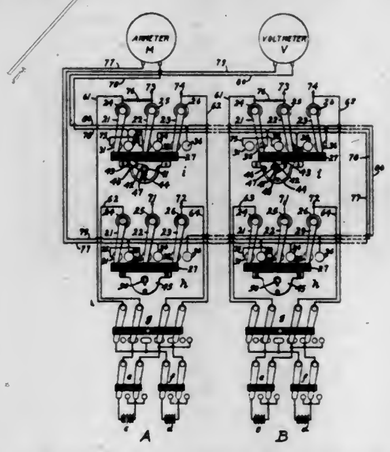
1. The process of cracking mineral oil which comprises establishing a flowing stream of oil of great length and small tickness in series through a number of confined spaces, flowing mercury vapor into one or more confined spaces of the series in heat exchange relation with the flowing elongated stream of oil, maintaining in said confined space or spaces such relatively high superatmospheric pressure of mercury vapor as to establish a temperature of condensation sufficient to heat the oil through a range of cracking temperatures to a temperature substantially in excess of 830° F. with resultant fractional conversion of oil to vapor and substantial cracking of the oil and with resultant condensation of mercury vapor, and flowing mercury vapor into one or more confined spaces in heat exchange relation with a more advanced part of the length of the flowing stream of oil and maintaining in such last named confined space or spaces a relatively low absolute pressure of mercury vapor but a pressure sufficiently high to maintain the oil at a cracking temperature substantially in excess of 830° F. throughout substantially the greater part of the length of the oil stream.

1,825,977. PROCESS OF CRACKING MINERAL OIL. ARTHUR E. PEW, Jr., Bryn Mawr, and HENRY THOMAS, Ridley Park, Pa., assignors to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 18, 1928. Serial No. 300,441. 13 Claims. (Cl. 196—47.)



7. The process of cracking mineral oil which comprises establishing a rapidly flowing stream of oil of great length and small thickness, heating the oil through a range of cracking temperatures, during its flow along a part of the stream, to a temperature just below the critical temperature at which the oil is convertible into a true gas, and as the critical temperature of the oil rises as it flows through a more advanced part of the stream, raising the temperature of the oil so as to maintain it just below its increased critical temperature until the cracking is substantially completed.

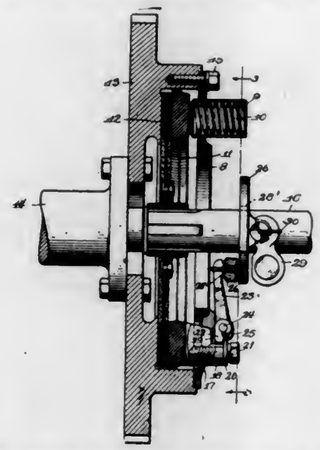
1,825,978. MULTICIRCUIT TESTING MECHANISM. FREDERICK B. PHILBRICK, Needham, Mass., assignor to The Gamewell Company, Newton Upper Falls, Mass., a Corporation of Massachusetts. Filed Oct. 28, 1926. Serial No. 144,792. 4 Claims. (Cl. 175—183.)



1. In a storage battery system having a plurality of independent working circuits each having a charging battery and a discharging battery,—a volt meter, an ammeter, means operable for simultaneously connecting said volt meter and ammeter with either the charging or discharging battery of any circuit, comprising three pole switches each associated with a respective one of said charging or working batteries, mechanism associated with each switch for retaining same in ineffective condition, and means

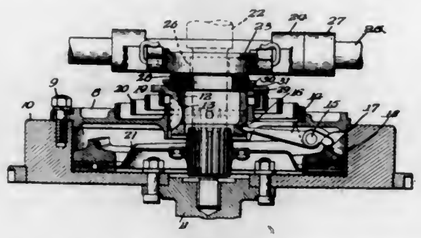
whereby said switches may be individually moved to effective position only when all of the other of said switches are ineffectively positioned.

1,825,979. FRICTION CLUTCH. HAROLD V. REED, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 3, 1927. Serial No. 158,502. 10 Claims. (Cl 192—110.)



1. In a friction clutch, the combination of a plurality of clutch levers, a clutch release device, said clutch levers as a unit and said device being relatively revoluble, and antifriction means interposed between the clutch levers and said device and comprising a plurality of shoes made of composition material, one shoe for each clutch lever, and means for mounting the shoes on the clutch levers so that they may automatically and bodily adjust themselves with relation to the levers for proper contact with said device.

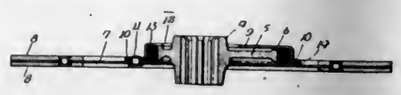
1,825,980. FRICTION CLUTCH. HAROLD V. REED, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed June 2, 1927. Serial No. 195,990. 10 Claims. (Cl. 192—113.)



1. A sleeve for a friction clutch having an annular shoulder at one end, said shoulder being provided with a plurality of slots, an antifriction bearing arranged in the shouldered end of the sleeve and having oppositely disposed slots, and means engaging the slots in the bearing and in the shoulder for securing the bearing to the sleeve and against relative rotation on the sleeve.

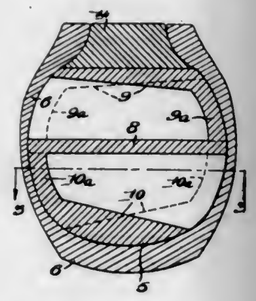
1,825,981. DRIVEN PLATE FOR FRICTION CLUTCHES. HAROLD V. REED. Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed June 28, 1927. Serial No. 202,038. 5 Claims. (Cl. 192—68.)

1. A driven plate for friction clutches comprising a hub member, a friction member yieldably mounted on the hub member and comprising a plate ring, an insulator plate interposed between the hub member and the plate



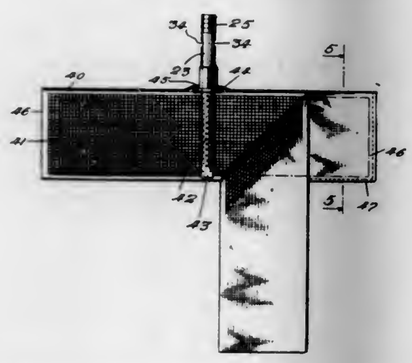
ring, and means for securing the insulator plate to the plate ring whereby said insulator plate will be movable relative to the hub member.

1,825,982. CUSHION TIRE. ANSON J. REYNOLDS, St. Paul, Minn. Filed Aug. 22, 1927. Serial No. 214,514. 4 Claims. (Cl. 152—5.)



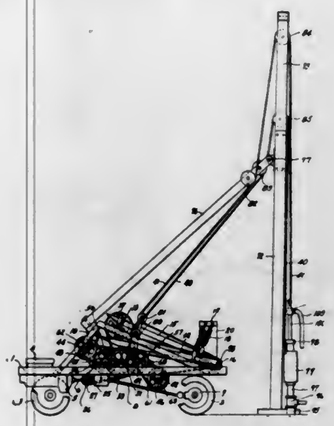
1. A cushion tire comprising a body of resilient material having substantially toric form, a series of radially extending piers formed by two series of openings extending in from the sides of said body, each of said piers being continuous in a radial direction from the rim to the tread of the tire and being substantially uniform in width from its inner to its outer end, one of said series of openings being located radially outward from the other series and each opening extending in from one side of the tire substantially to the other side, leaving a continuous tread of substantial width, and leaving transverse connecting members extending between said piers and forming an annular reinforcement between the outer and inner series of openings.

1,825,983. REPLACEABLE ELEMENT FILTER. ERNEST J. SWEETLAND, Hazleton, Pa. Filed Sept. 21, 1926. Serial No. 136,757. 11 Claims. (Cl. 210—164.)



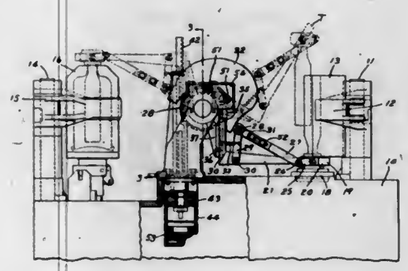
1. A flexible drainage member for filter elements comprising fabric woven with coarse strands in the direction of flow of the filtrate and fine strands in the other direction.

1,825,984. WELL DRILLING MACHINERY. HENRY TRAEGER, Auburn,, and FREDERICK H. JENSEN, Seattle, Wash. Filed Nov. 22, 1927. Serial No. 235,048. 6 Claims. (Cl. 255—12.)



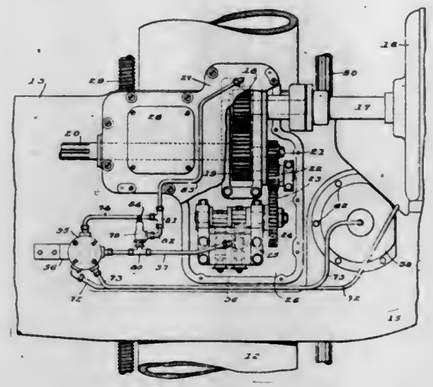
1. In a drilling machine of the character described, a two-throw, driven crank shaft, a pair of walking beams adapted to be oscillated thereby, a derrick provided at its upper end with a vertical guideway, a pair of cable guide pulleys disposed in vertically spaced relation and provided with supporting frames that are slidable in the guideway, a drill tool cable and a driving tool cable having operative connection, respectively, with the walking beams and extended over said pulleys, drilling and driving tools suspended and adapted to be actuated by said cables incident to operation of the walking beams, resilient supports for each of the pulley frames and resilient buffers fixed in the guideway against which the pulley frames may abut to limit their upward travel.

1,825,985. PARISON TRANSFER AND INVERSION MECHANISM AND METHOD. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 28, 1928. Serial No. 329,065. 21 Claims. (Cl. 49—14.)



1. In a glass bottle forming machine, a divided parison mold and a divided blow mold mounted respectively in neck-down and neck-up positions, a combined neck ring and transfer mechanism adapted to cooperate with both of said molds, means for moving the neck ring from a position below the parison mold to a position above the blow mold including a pair of neck ring carriers, means for rotating the carriers about a horizontal axis, and means for rotating the neck ring within said carriers during the rotation of the carriers.

1,825,986. HYDRAULIC COLUMN CLAMP. LARKIN R. WILLIAMSON, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed April 16, 1927. Serial No. 184,352. 8 Claims. (Cl. 77—28.)



1. A drilling machine combining a support; a major machine element movably mounted thereon; means for clamping said element in adjusted position; drill operating mechanism carried by said element; and hydraulic operating and lubricant supplying means carried wholly by said member comprising a pump having driving connections from said mechanism, a reservoir, a hydraulic motor having connections for operating said clamping means, fluid connections from said pump to said motor, fluid connections from said motor adapted to conduct the exhaust fluid therefrom to said drill operating mechanism for lubrication thereof, and fluid control means for said motor.

1,825,987. RADIUS GAUGE. EUGENE J. WITCHGER, Saginaw, Mich., assignor to Lufkin Rule Co., Saginaw, Mich., a Corporation of Michigan. Filed Aug. 9, 1929. Serial No. 384,581. 1 Claim. (Cl. 33—178.)

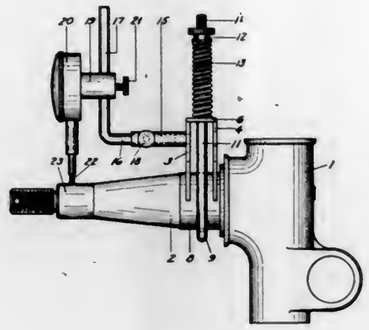


A radius gauge comprising a single piece of metal formed to present two leg members whose marginal edges are disposed at right angles to each other, and provided with an internal and an external formed gauge at their respective inner and outer intersecting margins, the end of one leg shaped to a concave gauge form, the end of the other leg shaped to a convex gauge form and the side member of one of said legs, intermediate its ends, shaped to concave gauge form, all of said gauge forms being of the same radius.

1,825,988. SPINDLE GAUGE FOR AUTOMOBILE AXLES. HENRY WOCHNER, Rock Island, Ill., assignor to Bear Manufacturing Company, Rock Island, Ill., a Corporation. Filed Dec. 3, 1928. Serial No. 323,246. 1 Claim. (Cl. 33—193.)

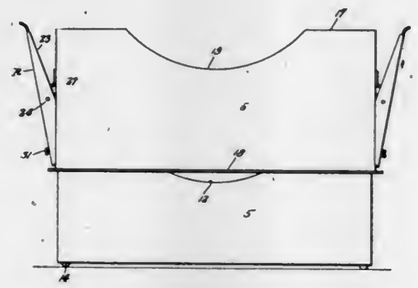
A gauge for a spindle comprising a pair of separable frame members adapted to engage a spindle so as to be rotatable thereon, a tubular support projected from one side of one of said frame members in parallel relation

with an axis of such spindle, an L-shaped rod held at one end in said support, means for holding said rod in adjustable positions in said support, a gauge mechanism at-



tached to the free end of said rod, and means for holding said gauge mechanism in adjusted positions on said rod to or from such spindle.

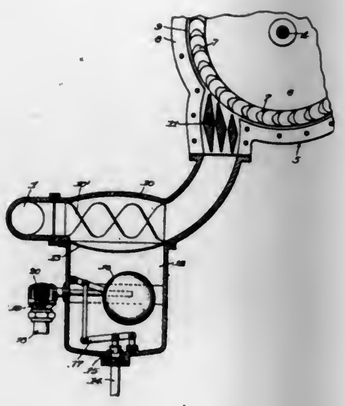
1,825,989. ADJUSTABLE HEADREST FOR MORTICIANS. WILLIAM ADDINGTON and CHARLES G. ADDINGTON, Redwing, Colo. Filed May 19, 1930. Serial No. 453,706. 3 Claims. (Cl. 27—13.)



1. A head rest of the class described comprising a pair of box like sections, one slidable over the other, said one section having its bottom end open to receive said other section, and means for holding said one section in different adjusted positions in respect to said other other section, the top of said one section having its central portion arcuated downwardly, the top wall of said other section having its central portion similarly arcuated downwardly for the reception of the arcuated portion of said one section.

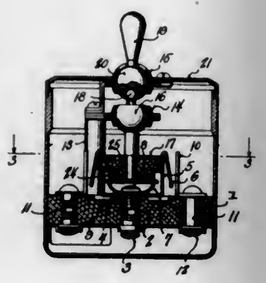
1,825,990. SEPARATOR. RICHARD C. ALAND, Cleveland, Ohio, assignor to William Edgar Baker and George Alton Frantz, trustees of the Web Engineering Company, Cleveland, Ohio. Filed Jan. 18, 1926. Serial No. 81,967. 2 Claims. (Cl. 183—90.)

1. In combination, a chamber, a steam line arranged above said chamber and having an opening communicating with said chamber, a screen for said opening, a spiral in said line above said opening, a float pivoted at the side of the chamber, linkage pivoted to the bottom of said chamber and to said float, a valve pivoted to a part of said linkage and controlled by said float, thermosensitive means arranged outside of said chamber and at the side thereof,



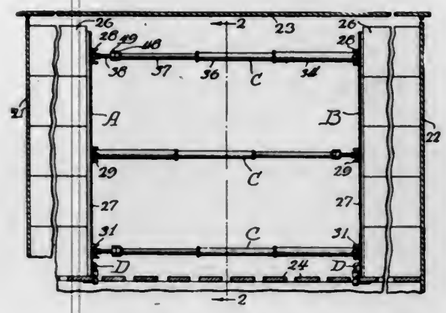
a fluid line communicating with said thermosensitive means and said chamber, and a valve controlled by said thermosensitive means.

1,825,991. SWITCH FOR SIGNALING SYSTEMS. BORNETT L. BOBROFF, Racine, Wis. Filed July 18, 1929. Serial No. 379,144. 8 Claims. (Cl. 200—1.)



1. A signaling switch comprising a body portion, a universally mounted member carried by said body portion, a plurality of stationary contacts surrounding said member, and a spider-like movable contact member secured to said body portion and having a plurality of integral arms adapted to be selectively engaged by said universally mounted member and forced into contact with a stationary contact.

1,825,992. LOAD BRACING DEVICE. CHARLIE A. CHANDLER, Wapato, Wash., assignor of eighty-five one-hundredths to Chandler Equipment Co., a Corporation of Washington, and fifteen one-hundredths to Leonard O. Cockrill. Filed Aug. 16, 1929. Serial No. 386,438. 19 Claims. (Cl. 105—369.)



1. In a load bracing device a bulkhead, bracing means secured to the bulkhead and means for folding the bulkhead and housing the bracing means.

2. In a load bracing device, for a refrigerator car having the usual floor racks, a bulkhead, means for bracing the bulkhead against the load, and adjustable means for securing the bulkhead to the floor racks for preventing vertical movement thereof.

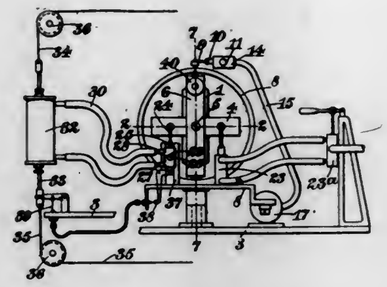
1,825,993. EMBALMING IMPLEMENT. ALAN CLAPP, Davenport, Iowa. Filed July 7, 1928. Serial No. 290,982. 9 Claims. (Cl. 27—24.)



1. In an embalming implement, a straight pipe having means for attachment to a source of fluid supply and a delivery opening, a second straight pipe intersecting the first pipe at an acute angle and having its delivery end directed backwardly in the general direction of the attaching means of the first named pipe, and a valve reciprocable longitudinally in the second named pipe for selectively determining through which delivery opening fluid will be delivered when forced into the first named pipe.

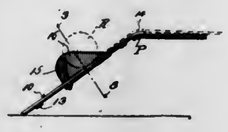
1,825,994. GYROSCOPIC SYSTEM FOR CONTROLLING DIRIGIBLE CRAFT. PHILIP ANDREW COOKE, South Farnborough, England. Filed Aug. 18, 1930, Serial No. 476,099, and in Great Britain July 18, 1925. 14 Claims. (Cl. 244—29.)

1. A gyroscopic control system for dirigible craft, moving in a fluid medium, comprising a single gyroscopic rotor, a universal mounting by which the rotor is supported to rotate normally about an axis fixed in the craft and extending in the direction of the length of the craft, a device for actuating the rudder of the craft, a device for actuating the elevator of the craft, controlling connections between said device and the rotor for bringing said devices into action as the result of, and in accordance with, a deviation of the rotor axis from said fixed axis, means for detecting



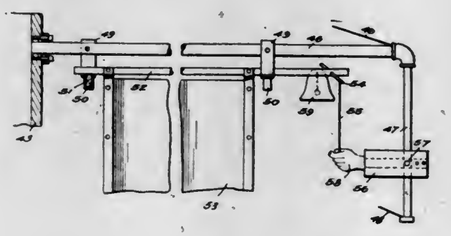
acceleration of the craft in the direction of said fixed axis and torque-applying means operable under the control of the detecting means to apply a torque to the rotor to precess the rotor axis in the vertical plane containing said fixed axis.

1,825,995. CANVAS HOLDER. FERD G. DIESCH, Hayfield, Minn. Filed May 6, 1930. Serial No. 450,272. 2 Claims. (Cl. 242—55.2.)



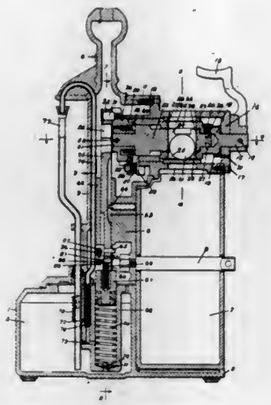
1. A device for facilitating the handling of canvas for the platforms of combined harvesters and threshers and like machines comprising a pair of like members each of which are independent of the other, hooks formed on the upper ends of the members for engaging the platforms, outstanding arms carried by said members intermediate the ends thereof for supporting a roll of canvas, and guards carried by the outer sides of said members for engaging the ends of the roll of canvas.

1,825,996. SIGN. JOHN CHRISTOPHER EHLENFELD, Danville, Ill. Filed Nov. 11, 1930. Serial No. 494,963. 5 Claims. (Cl. 40—138.)



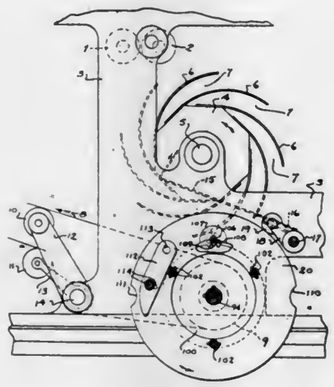
1. In an advertising device, a shaft supported for rocking movement, a wind-actuated sign on the shaft, a pointer mounted for swinging movement, and an operative connection between the shaft and the pointer, whereby the pointer will be moved by the sign when the sign is actuated by the wind.

1,825,997. CASING. EARL E. EICKMEYER, Dayton, Ohio, assignor to The Dayton Pump & Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Original application filed June 20, 1929, Serial No. 372,246. Divided and this application filed Aug. 11, 1930. Serial No. 474,425. 4 Claims. (Cl. 194—1.)



1. In combination, a reservoir base, a coin box mounted thereon, a pump casing mounted on said base and holding said coin receptacle in locked position on the base and operating mechanism casing mounted on said pump casing.

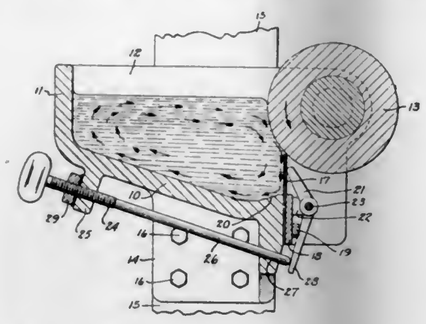
1,825,998. PRINTING PRESS. WILLIAM EVENSEN, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Aug. 18, 1923. Serial No. 658,052. 17 Claims. (Cl. 93—93.)



1. A newspaper counting mechanism including in combination means operable independently of the presence of the newspapers for designating a newspaper to indicate a group consisting of a predetermined number of papers, and controlling means for causing said designating means to indicate groups consisting of different numbers of newspapers.

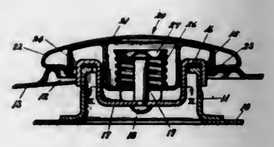
1,825,999. INKING MECHANISM. HARLAND FANKBONER, Chicago, Ill., assignor to The Goss Printing Press Company, a Corporation of Illinois. Filed Aug. 24, 1929. Serial No. 388,091. 8 Claims. (Cl. 101—365.)

1. In an ink fountain for printing presses the combination of a fountain roller, a resilient fountain blade normally tensioned and positioned to press against the fountain roller and to cut the surplus ink from the fountain



roller as the roller rotates, and means for variably positioning the blade along the length of the roller to vary the amount of ink fed along the fountain.

1,826,000. CAP FOR SEALING CONTAINERS. WALTER S. FISHER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed June 5, 1928. Serial No. 283,114. 13 Claims. (Cl. 220—24 R. C.)



1. The combination with an outer shell having an aperture therein and a container disposed within the shell including a neck portion adjacent the aperture, of a cap including a cover member adapted to be secured to the neck, an outer cover member adapted to engage the shell adjacent the aperture and means for interconnecting said cover members whereby the outer cover is adapted to undergo relative universal movement with respect to the other cover.

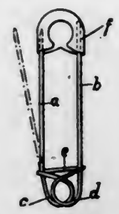
1,826,001. COLOR PHOTOGRAPHY. JOHN NAISH GOLDSMITH, London, and THOMAS THORNE BAKER, Hatch End, England, assignors to Spicers Limited, London, England, a British Company. Filed June 20, 1930, Serial No. 462,697, and in Great Britain July 30, 1929. 19 Claims. (Cl. 95—2.)

1. A method of preparing a film comprising a cellulose derivative for color photography which comprises coating the film base first with an isolating material to inhibit the penetration of solutions of dyes and discharging agents into the film base, then with a surface layer of a material amenable to dyes and to discharging agents, and finally applying to the said surface layer of the film thus prepared a multi-color screen.

1,826,002. PLASTIC COMPOUND. SHERMAN C. JENNINGS, Winston-Salem, N. C.; Mrs. S. C. Jennings administratrix of said Sherman C. Jennings, deceased. Filed May 9, 1929. Serial No. 361,837. 1 Claim. (Cl. 106—8.)

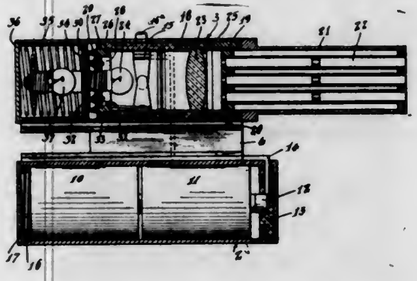
As a new product of manufacture, a plastic compound for general repair work of the class described, comprising a mixture of materials, combined in the following proportions; silex two ounces, lacquer four ounces, cornstarch three ounces; wheat flour three ounces, and glue two ounces.

1,826,003. SAFETY PIN. OTTO KERSTENS, Bremen, Germany. Filed May 9, 1930, Serial No. 451,138, and in Germany Sept. 23, 1929. 1 Claim. (Cl. 24—161.)



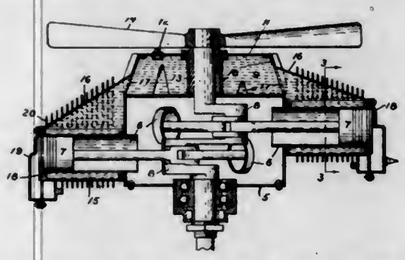
A safety pin comprising a pair of overlapping eyes, spaced apart arms extending from the eyes, a cross bar connecting the two eyes and extending therefrom in opposite directions toward the respective arms and bent around same to form an embracing clip around said arms, and a cap having a recess and secured to one of the arms, the recess forming a catch for reception of the free end of the opposite arm.

1,826,004. NIGHT SIGHT FOR FIREARMS. JAMES FRANCIS KEY, Pasadena, Calif., assignor of one-half to Leonard S. Lyon, Los Angeles, Calif. Filed June 1, 1929. Serial No. 367,657. 5 Claims. (Cl. 240—6.41.)



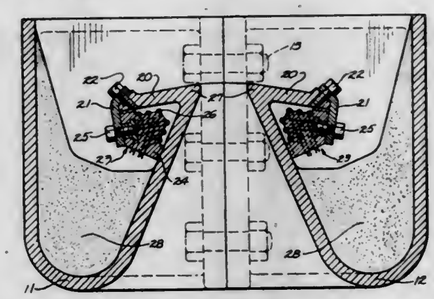
1. A night sighting device for a firearm comprising, a source of light, means for emitting the light from said source as a narrow ray, and a firearm rest constructed to register the barrel of the firearm with said narrow ray when the firearm is engaging said rest, said rest being constructed so that the firearm will separate from the rest when recoiling without imposing a substantial shock on the rest.

1,826,005. COOLING SYSTEM FOR MOTORS. HARRY A. KNOX and BERT F. BAKER, Davenport, Iowa. Filed Dec. 21, 1929. Serial No. 415,801. 8 Claims. (Cl. 123—170.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



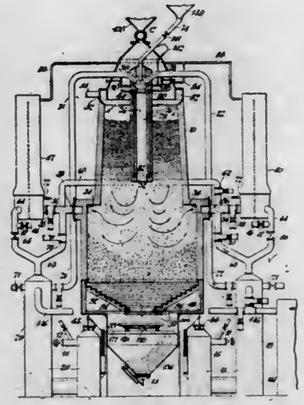
1. In a motor, a main casing, radiating cylinders associated therewith, an annular jacket abutting one end of the casing, a jacket surrounding each of the cylinders and abutting the casing, said jacket including an inclined portion extending to the annular jacket to afford communication therewith, a crank-shaft extending centrally through the annular jacket, and a fan on said shaft.

1,826,006. SHEET GLASS APPARATUS. KARL KUPFERSCHMID, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio; a Corporation of Ohio. Filed Apr. 3, 1929. Serial No. 352,111. 8 Claims. (Cl. 49—17.)



1. In sheet glass apparatus, a deputer embodying a selected member, means arranged internally thereof for heating the same, and insulating means also disposed within said member.

1,826,007. APPARATUS FOR MANUFACTURING COMBUSTIBLE GAS. HENRY O. LOEBELL, New York, N. Y., assignor to Henry L. Doherty, New York, N. Y. Filed Dec. 7, 1923. Serial No. 679,133. 16 Claims. (Cl. 202—99.)



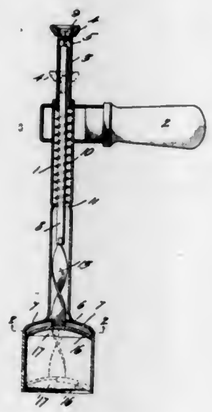
1. In a gas generator, an upright gas generating shaft, means for introducing solid fuel into the top of the shaft, a blast introducing member mounted in approximately the central axis of the shaft with an outlet into the midportion of the shaft, means for concurrently introducing solid fuel and air into said blast introducing member, means positioned in the bottom of said shaft for supporting a column of solid fuel therein and means for removing fuel and ash corradially from the bottom of said column.

7. In a gas generator, a stationary gas generating shaft, a solid fuel charging device in the top of the shaft, a fuel and ash discharging device at the bottom of the shaft, and a movable false bottom positioned in the lower portion of the shaft above said discharging device for positively supporting a column of solid fuel in the shaft and for advancing the fuel therethrough comprising two elements vertically spaced from each other and movable independently of each other.

1,826,008. PROCESS OF AND COMPOUND FOR HARDENING THE SURFACE OF MILD STEELS. HENRY J. LORANG, St. Louis, Mo., assignor of one-half to Frank J. Kuna, St. Louis, Mo. Filed May 27, 1929. Serial No. 366,529. 2 Claims. (Cl. 148—19.)

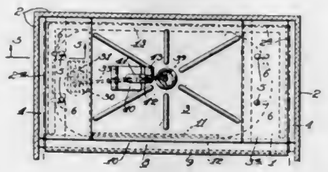
1. The herein described compound for use in hardening the surface of cold rolled and other mild steels, consisting of the following ingredients used in the proportions by weight named, to wit: lamp black 3⅛%; ferrochrome, 3⅛%; ferromanganese, 1¼%; charcoal, 92½%.

1,826,009. ICE CREAM DIPPER. EDWARD J. MARTINEAU, Seattle, Wash. Filed June 14, 1930. Serial No. 461,180. 2 Claims. (Cl. 107—48.)



1. An ice cream dipper comprising a cup member, an ejector plate, ribs formed on the bottom of said plate, and means for reciprocating and rotating the plate simultaneously in the cup member whereby the ribs on said ejector plate will cause the plate to clear the ice cream upon continued rotation of said plate after ice cream has filled a container.

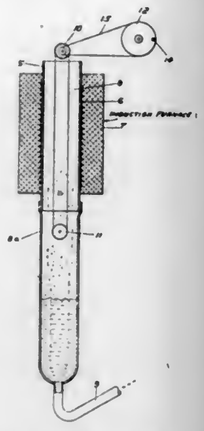
1,826,010. PROTECTIVE COVER FOR PLUMBING FIXTURES. JOHN H. MCCANN, Chicago, Ill. Filed Mar. 27, 1929. Serial No. 350,284. 6 Claims. (Cl. 4—173.)



1. In combination with a plumbing fixture having an upwardly open cavity and a laterally exposed surface, a protective cover including a main cover portion dimensioned to serve as a closure for said cavity and a depending flange adapted to substantially cover said laterally exposed surface of the fixture; and locking means for securing said cover against unauthorized removal.

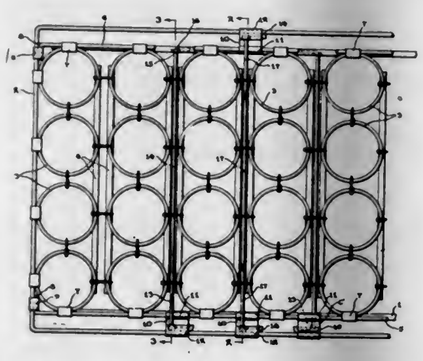
1,826,011. ELECTRON EMITTING CATHODE AND METHOD OF FORMING SAME. FREDERICK S. MCCULLOUGH, Wilkinsburg, Pa. Filed Sept. 17, 1923. Serial No. 663,143. 4 Claims. (Cl. 91—70.)

1. The method of forming a cathode structure to increase the normal electron emission of its core which consists in raising the temperature of the metal core while subjecting the core to a mist of coating material



produced by passing a gas through a solution of said coating material which said material is at a temperature below its boiling point.

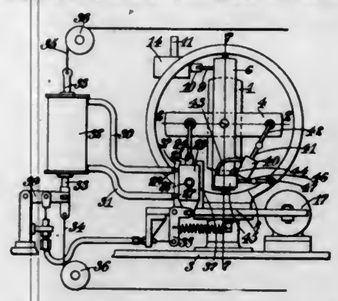
1,826,012. SPRING STRUCTURE. ROBERT E. MCELROY, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich. Filed Jan. 18, 1930. Serial No. 421,767. 4 Claims. (Cl. 155—181.)



2. In a spring structure, a base frame, an upper frame, rows of springs arranged between said frames, the upper frame extending forwardly beyond the front of the base frame, a straight wire secured to the upper frame and extending in parallelism with the front of the upper frame and spaced therefrom and secured to the front row of springs, stay wires arranged between rows of springs and having their forward ends bent and lying in engagement with the front of the upper frame, and clips securing the front of the upper frame and said wire and the forward bent ends of the stay wires together.

1,826,013. GYROSCOPIC CONTROL SYSTEM FOR DIRIGIBLE CRAFT. FREDERICK WILLIAM MEREDITH, Farnborough, England. Filed Aug. 18, 1930, Serial No. 476,107, and in Great Britain July 18, 1925. 14 Claims. (Cl. 244—29.)

1. A gyroscopic control system for a dirigible craft moving in a fluid medium, comprising an azimuth gyroscope having its axis of spin arranged in the direction of the length of the craft but inclined to the longitudinal axis of the craft in a substantially vertical plane, a servomotor for actuating the rudder of the craft in accordance with relative turning movement of the longitudinal axis of the craft and the axis of spin about an erect axis, and a second servomotor for actuating the elevator plane of the craft in accordance with relative turning movement of the longitudinal axis of the craft and the axis of spin about a transverse axis.



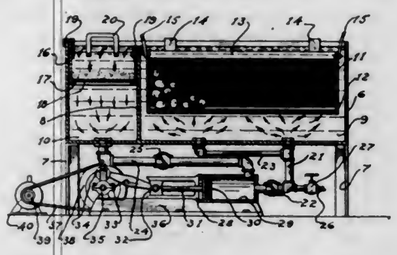
1,826,014. DENTURE RETAINING DEVICE. FELIX C. MONTUORI, Washington, D. C., assignor to Baker & Company, Inc., a Corporation of New Jersey. Filed Mar. 18, 1930. Serial No. 436,653. 13 Claims. (Cl. 32—4.)



1. The method of making a denture retaining device, which consists in shaping or fitting a pliable body part to a model, and applying a reinforcing stiffening to the shaped body part.

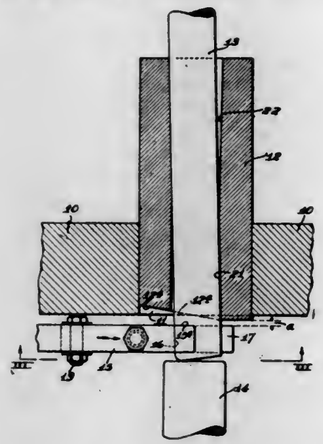
13. As an article of manufacture, a body part for a denture retaining device comprising a strip of pliable sheet metal to be shaped or fitted to a model and having an elongated recess in one side thereof to receive stiffening and reenforcing material after said body part has been shaped.

1,826,015. FRUIT WASHER. ALBERTA IRENE MORTON, New York, N. Y. Filed May 26, 1930. Serial No. 455,701. 1 Claim. (Cl. 146—200.)



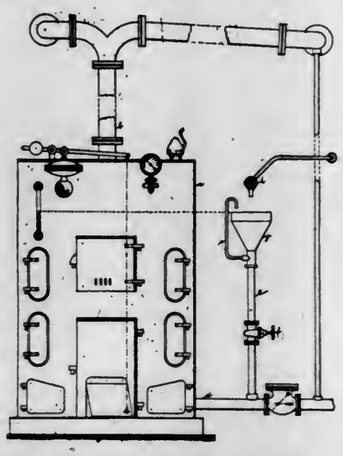
A fruit washer including a fluid tank; supporting means for said fluid tank; a transverse partition in said fluid tank with its upper edge below the upper edge of said fluid tank dividing said fluid tank into a main compartment and a second compartment; a fruit tray removably suspended in said main compartment of the fluid tank; said fruit tray being formed of a reticulated material; a waste gathering tray removably suspended in the said second compartment of the fluid tank and provided with a reticulated bottom; said waste gathering tray being partly supported on said transverse partition; and means for supplying a washing fluid to the bottom of said main compartment of the fluid tank and causing a constant circulation of said washing fluid upwardly through said main compartment and through the fruit tray and drawing the washing fluid downwardly through said waste collecting tray and outwardly through the bottom of the second compartment of said fluid tank to thoroughly agitate and wash the fruit within the fruit tray and separate twigs, leaves, bugs and other foreign substances from said fruit and carry the same out of said fruit tray over the upper edge thereof and over the partition plate into said waste gathering tray.

1,826,016. APPARATUS FOR SHEARING ALUMINUM SECTIONS. WILLIAM FRANK NAYLOR, Bergen, Field, and EMERY LAWRENCE SPONSELLER, Grantwood, N. J., assignors to Aluminum Screw Machine Products Company, Edgewater, N. J., a Corporation of New Jersey. Filed June 7, 1929. Serial No. 369,097. 7 Claims. (Cl. 164—47.)



1. An apparatus for shearing aluminum sections, comprising a pair of dies mounted for relative shearing movement and having work-engaging portions, one of said dies having its face which is opposed to the other die inclined, in advance of its work-engaging portion, away from a plane parallel with the direction of such movement.

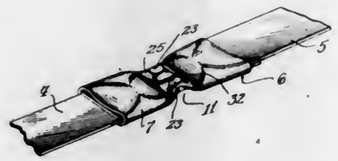
1,826,017. BOILER FEEDING DEVICE. LAJOS NEMÉNYI, Mount Vernon, N. Y. Filed Dec. 19, 1925. Serial No. 76,373. 2 Claims. (Cl. 122—451.)



1. The combination with a steam generating boiler having a water holding chamber and arranged for operation with a predetermined maximum water level in said water holding chamber, of a water supply main, and means for supplying feed water from said main to the lower portion

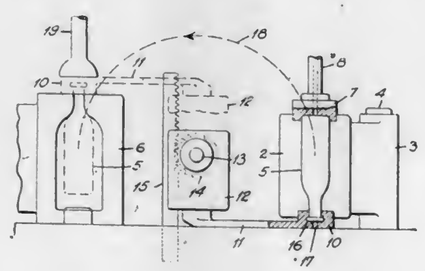
of said water holding chamber comprising a conduit connection extending between said main and said boiler and having a section arranged above and below the maximum water level to be maintained in said water holding chamber, the above mentioned section of said conduit connection having an atmospheric interruption at a level corresponding to the predetermined maximum water level to be maintained in said water holding chamber, a control valve in said conduit connection between said interruption and said main, and a normally closed manually operable valve between said water holding chamber and said interruption, whereby said water holding chamber may not be filled with water above said predetermined maximum water level and whereby water may not be supplied from said main to said water holding chamber while the boiler is under pressure.

1,826,018. SEAL. ERNEST C. PAGEL, Chicago, Ill., assignor to Signode Steel Strapping Company, Chicago, Ill., a Corporation of Delaware. Filed July 7, 1930. Serial No. 466,054. 12 Claims. (Cl. 24—23.)



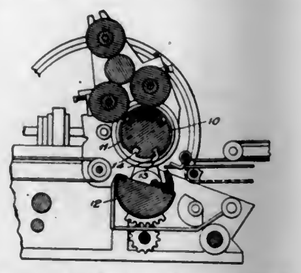
12. A tension resisting joint for package strapping comprising in combination, the portion of the strapping to be joined, and a sealing sleeve embracing said strapping and comprising two flanges in which crimped deformations are made, such that the inner edges of said flanges at the center extend substantially vertically, the portion of the strapping between the vertical portions of said flanges being crimped downwardly by a longitudinal deformation, there being a conjoint substantially H-shaped deformation in the top of the sleeve and strap ends, to interlock them against tensional stress.

1,826,019. METHOD OF AND APPARATUS FOR TRANSFERRING GLASS PARISONS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Aug. 11, 1924. Serial No. 731,296. 30 Claims. (Cl. 49—9.)



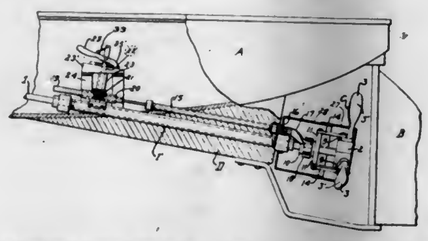
1. In the manufacture of glassware, the method of transferring a glass blank from a blank-forming mold to a finishing mold, that comprises inverting the blank by force applied to the neck of the blank and varying the speed of the inverting movement to cause the centrifugal force developed by the inverting movement to balance the action of gravity to any desired extent throughout the inverting movement, thereby preventing lateral distortion of the blank through the action of gravity during the inverting movement.

1,826,020. FEEDING DEVICE. CLAUDE L. POST, Chicago, Ill. Original application filed Oct. 3, 1924, Serial No. 741,428, and Aug. 29, 1928, Serial No. 302,831. Divided and this application filed May 23, 1929. Serial No. 365,369. 10 Claims. (Cl. 271—51.)



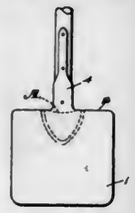
1. An element of a feeding device including a roller, said element consisting of a split ring having means formed thereon for engaging the roller to provide for holding said ring against rotation relatively to said roller.

1,826,021. PROPELLER. JAMES F. RANDALL, Ozark, Mo. Filed Mar. 1, 1926. Serial No. 91,383. 1 Claim. (Cl. 170—163.)



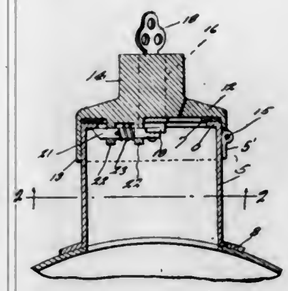
A propeller comprising, in combination, a driving shaft a hub rigidly affixed to one extremity of the driving shaft, blades pivotally secured to the hub, means for imparting pivotal movement to the blades, and a protective housing composed of a plurality of telescoping sections located exteriorally of a vessel to which the propeller is attached for covering the blade actuating means, one of said sections being arranged to rotate with the propeller, and the other section being maintained in a fixed position with respect to the vessel, and said telescoping sections being independent of the blade-adjusting means.

1,826,022. SHOVEL AND THE LIKE. WILLIAM A. READY, Brookline, Mass. Filed Oct. 8, 1929. Serial No. 398,200. 2 Claims. (Cl. 294—49.)



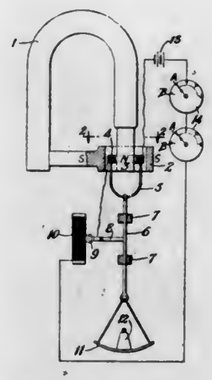
1. A welded strap shovel having a blade and a strap of substantially the same thickness, said strap and blade having abutting cooperating edges welded along a line offset with relation to a line at right angles to the center line of the said strap, whereby substantially all of the stresses exerted upon the shovel adjacent to the joint between the blade and the strap are exerted upon unwelded portions of the shovel.

1,826,023. LOCKED CLOSURE FOR FUEL TANKS. HARRY L. ROBERTS, Keokuk, Iowa. Filed Nov. 19, 1929. Serial No. 408,294. 1 Claim. (Cl. 70—90.)



In a structure of the class described, a filler neck provided at its top end portion with a flat inturned keeper flange, a cover having a marginal depending surface telescopically fitting over the filler end of said neck and hingedly connected thereto, a pair of eye lugs formed on the under side of the cover, a spring pressed bolt slidably mounted in said lugs for lock engagement with said keeper flange a lock barrel rotatably arranged in the cover and a crank at the lower end of the barrel to which the inner end of the bolt is pivoted.

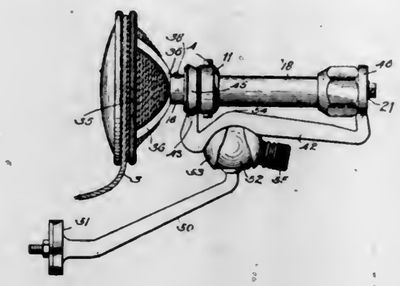
1,826,024. ELECTRIC WEIGHING APPARATUS. FRANK W. ROLLER, East Orange, N. J., assignor to Roller-Smith Company, a Corporation of New York. Filed Oct. 31, 1925. Serial No. 65,911. 4 Claims. (Cl. 177—351.)



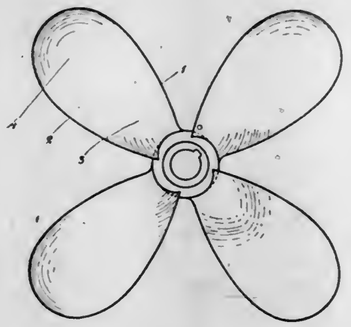
4. Measuring apparatus comprising a member having a limited range of movement in opposite directions, an electromagnetic means tending to move said member in one direction, means whereby said member may be subjected to a force to be measured tending to move it in the opposite direction, a variable resistance mechanically connected to said member whereby said last mentioned movement decreases its effective resistance, a source of electric current, a measuring instrument and a circuit connecting said electro-magnetic means, variable resistance, source of current and measuring instrument in series.

1,826,025. DIRIGIBLE LIGHT. CHESTER ROSE, Glenns Ferry, Idaho. Filed Jan. 28, 1929, Serial No. 335,709. Renewed Aug. 21, 1931. 12 Claims. (Cl. 140—61.12.)

1. In a dirigible light the combination of a support, a lamp-holding member, a housing therefor a portion of said housing comprising a hand grip, a reflector, means disposed about the posterior portion of the reflector providing a reel for electric cord, said light being securely held by a support but manually detachable therefrom by pulling of the hand grip in a direction away from the support.



1,826,026. PROPELLER. ARVID RUDEBERG, Stockholm, Sweden, assignor to Aktiebolaget Menitor, Stockholm, Sweden. Filed July 24, 1929, Serial No. 380,487, and In Sweden Aug. 8, 1928. 1 Claim. (Cl. 170—159.)

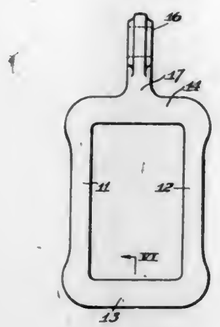


A propeller having a hub and blades extending therefrom, each of said blades having a root portion adjacent the hub of flatly ovate form arranged with its longer axis in a plane radial to the axis of the hub and at an acute angle thereto, the outer portion of each blade being convexly curved on one side and concavely curved on the other side in both longitudinal and transverse directions with the curved surfaces merging smoothly in the root portion of the blade whereby the rear surface of the blade is reversely curved from hub to tip in longitudinal section, the front and rear faces of said blade tapering gradually toward each other from hub to tip longitudinally and from the center to the leading and trailing edges transversely, the tip of said blade being located substantially in a plane perpendicular to the axis of the hub and passing through the center of the blade root at the hub.

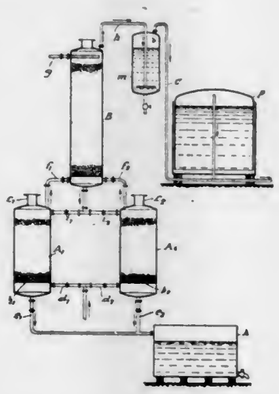
1,826,027. METHOD OF MANUFACTURING CLOSED-LINK BRAKE HANGERS. FREDERIC SCHAEFER, Pittsburgh, Pa. Filed Apr. 21, 1930. Serial No. 445,899. 4 Claims. (Cl. 29—164.)

1. The method of manufacturing a closed link brake hanger, comprising forging from a blank of unidirectional rolled steel an elongate hanger blank having spaced par-

allel hanger sides in which the fibers of the steel extend longitudinally and having outwardly-extending yoke-forming ends in the extremities of which the fibers of the steel extend transversely, and spreading said sides laterally to straighten said ends.



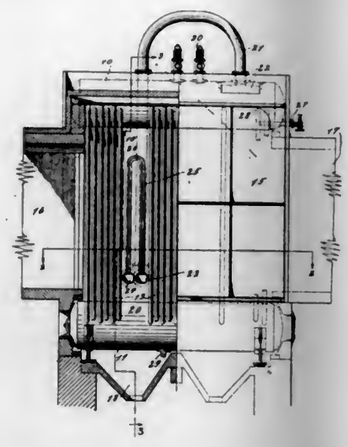
1,826,028. PROCESS FOR THE PRODUCTION OF SULPHITE LIQUOR. MAX GEORG THEODOR SCHROEDER, Berlin, Germany. Filed Feb. 29, 1928, Serial No. 258,118, and in Germany Aug. 16, 1927. 4 Claims. (Cl. 23—129.)



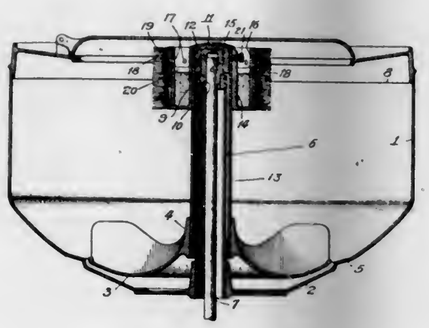
1. The method of producing sulphite liquor and pure carbon dioxide comprising extracting a gas containing sulphur dioxide with water under pressure for the recovery of SO_2 from said gas, acting with the SO_2-solution thus obtained on a decomposable carbonate and collecting the carbon dioxide gas.

1,826,029. WASTE HEAT BOILER. HERMAN B. SMITH, Plainfied, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 23, 1926. Serial No. 83,187. 1 Claim. (Cl. 122—7.)

In combination, a boiler comprising an upper and a lower drum having their axes disposed substantially in the same plane, a casing enclosing the boiler and forming a single straight gas pass longitudinally of said drums with an inlet and an outlet adjacent opposite ends of the drums, said inlet adapted to be connected to a source of heat outside the casing, two banks of tubes connecting the drums and disposed on opposite sides of said plane and spaced apart, baffles disposed in said space to prevent laning of gases therethrough, the tubes in said banks being arranged in groups spaced lengthwise of the drums and a superheater extending transversely of the drums and disposed in spaces between said groups and across the space between said banks.



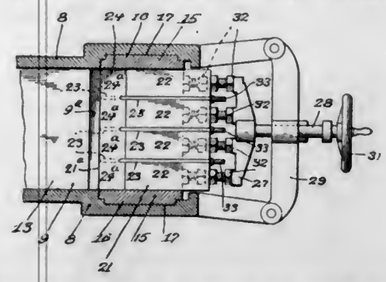
1,826,030. SOAPER AND BRUSHER FOR WASHING MACHINE TUBS. HOWARD F. SNYDER, Newton, Iowa, assignor, by mesne assignments, to The Maytag Company, Newton, Iowa, a Corporation of Delaware. Filed Oct. 5, 1925. Serial No. 60,479. 6 Claims. (Cl. 68—15.)



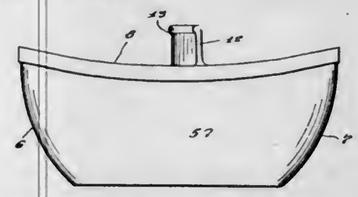
1. In a washing machine, a tub, a rotatable support therein, a container for fluid provided with an external wall enclosed by a brush constructed with outwardly extended bristles, said wall and said brush having perforations so that the contents of the container may be fed to said brush, said container having a central hub engageable with said rotatable support.

1,826,031. DOUGH DIVIDER. FRANK STREICH, Joliet, Ill., assignor to Union Machinery Company, Joliet, Ill., a Corporation of Illinois. Filed Dec. 24, 1930. Serial No. 504,517. 15 Claims. (Cl. 107—15.)

5. In a dough divider, the combination of a charging chamber and a charging plunger therein, a reciprocating head having a cavity therein adapted, in one position of the carrier, to coincide with the end of the charging chamber, ejecting plungers in said cavity and dough dividing members interposed between said ejecting plungers, said ejecting plungers and dough dividing members providing a receding end wall for said cavity, whereby the charging plunger may force a charge of dough into said cavity, and means for advancing said dough dividing members through said dough while under pressure exerted by said charging plunger, whereby the charge of dough is divided into smaller individual lumps.

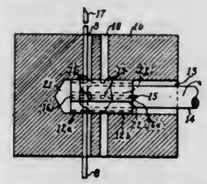


1,826,032. KITCHEN UTENSIL. WALTER A. TROTH, Brooklyn, N. Y. Filed July 19, 1929. Serial No. 379,544. 2 Claims. (05—15.)



1. A kitchen utensil comprising a body portion presenting converging ends serving as snouts to facilitate the pouring of liquids therefrom and a partition arcuately disposed within the said body portion, said partition extending above the sides being spaced from the bottom of said body portion and being adapted to permit the passage of a liquid from one side of said partition to the other.

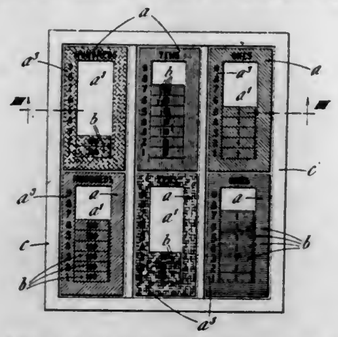
1,826,033. SEALING DEVICE. RICHARD H. WEBSTER, Richmond Heights, Mo. Filed July 14, 1930. Serial No. 467,991. 6 Claims. (Cl. 292—307.)



1. A sealing device comprising a block having a chamber therein and transverse holes therethrough, and a collapsible sheet roller in one piece having a cross partition for temporary engagement with winding means and oppositely disposed edges adapted to engage the walls of said chamber and prevent backward rotation and provided with holes to receive a sealing band as described and matching said transverse holes.

1,826,034. DEVICE FOR TEACHING ARITHMETIC. ROBERT MARSHALL WILLIAMSON, Burley, Ringwood, England. Filed Mar. 27, 1929, Serial No. 350,373, and in Great Britain Mar. 28, 1928. 2 Claims. (Cl. 35—2.)

1. An arithmetical teaching device, comprising a rectangular base member; a plurality of trough-like receivers removably arranged side by side and end to end thereon in recess spaces, said receivers being identifiable each from the others by different coloring and indicia of different powers or multiples of 10 and each having the Figures 9 to 1 applied in descending order from top to bottom along one margin; a plurality of sets of separate digit-bearing tablets, each of said sets bearing numerical denominations differing from the others and fitting in column arrangement within said receivers to a maximum of nine and each of said sets being colored correspondingly to the receiver to which it is related by the value of the digits borne thereby.



1,826,035. REVERSIBLE NECKTIE. ISADORE DAVID WOLFSON, New York, N. Y., assignor to Apparel Ingenuities Corporation, New York, N. Y., a Corporation of New York. Filed June 11, 1929. Serial No. 370,138. 2 Claims. (Cl. 2—146.)

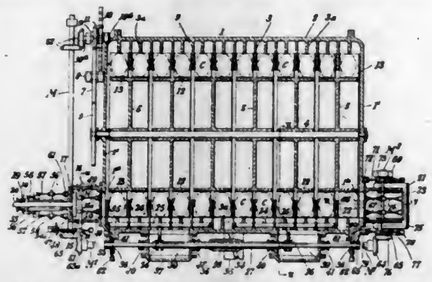


1. A reversible four-in-hand necktie comprising two outer plies, a lining between the said plies, said plies and lining being co-extensive in width and having their longitudinal edges inturned, stitching wholly between the plies connecting the said inturned edges of the said plies and lining together said stitching and said inturned edges permitting folding of the tie in either direction adjacent the longitudinal edges of the tie to expose either ply without wrinkling the plies or the lining, the said lining being of less length than said plies and being unsecured at its ends whereby the said lining may be shifted to a lateral position without wrinkling.

1,826,036. PROCESSING PLANT. WILLIAM SYDNEY YARROW, Harrow, England, assignor to Carrier Engineering Company, Limited, London, England. Filed Feb. 18, 1930, Serial No. 429,415, and in Great Britain Nov. 4, 1929. 14 Claims. (Cl. 126—272.)

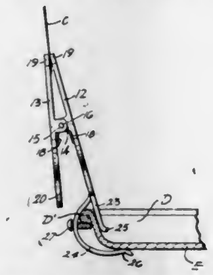
1. Apparatus for processing articles having in combination a closed cylindrical chamber provided with an inlet

and an outlet for the articles to be treated, a rotatable drum member in said chamber, a plurality of brackets on the external periphery of the drum member to form a plurality of channels parallel with the axis of the drum member, a plurality of spaced locating ribs on the internal periphery of the chamber disposed to intersect the channels to form a plurality of peripheral series of cages laterally aligned on the drum member for the articles during treatment, a gap in each of the ribs aligned with the inlet



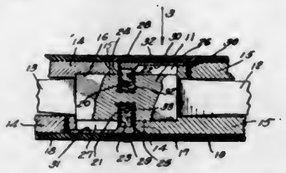
and the outlet of the chamber to form an uninterrupted passage laterally through a series of cages when the drum member is at rest, and gearing for rotating the drum member step by step to bring the laterally aligned cages successively into registered location with the inlet and outlet of the chamber with a period of rest at each step for the introduction of an article to be treated through the inlet into a cage on the drum member and the discharge of an article simultaneously through the outlet from a cage on the drum member.

1,826,037. CHECK HOLDER AND SERVING TRAY. DONALD G. ALLEN, Dallas, Tex. Filed Mar. 17, 1930. Serial No. 436,362. 3 Claims. (Cl. 40—11.)



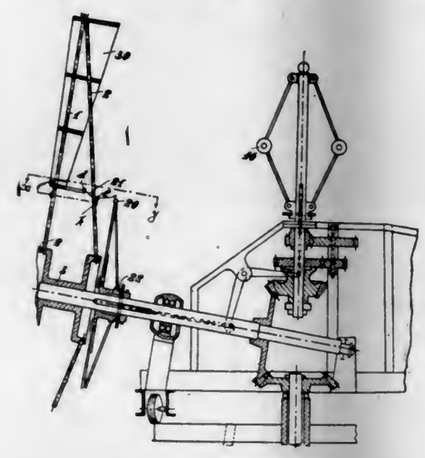
1. A check holder for serving trays comprising, a pair of members hinged together for clamping a check therebetween, a spring for urging the members into clamping relation, clamp means on the lower end of one of the members for engaging the rim of a service tray and retaining means carried by the clamp means and engaging under the bead of the rim of a tray to retain the clamp against upward displacement from the tray.

1,826,038. HAND TOOL. OTTO ALTENBACH, Los Angeles, Cal. Filed May 17, 1927. Serial No. 192,028. 1 Claim. (Cl. 7—15.)



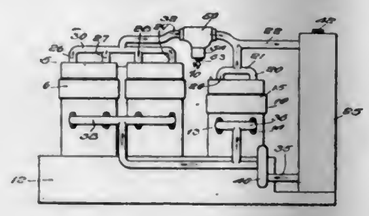
In a hand tool, a shank having tool extensions at each end, a pair of cylindrical casing sections enclosing said extensions and meeting at the shank to form a closed box-like enclosure, an insulation covering for each section, a spring lock located in the shank for each section, and a releasing insulated button for each section operable outside the insulation covering for permitting the section to be removed, and whereby the other section can serve as an insulated handle for operating the exposed tool.

1,826,039. WIND MOTOR. JULIUS D'ASSELER, Ghent, Belgium. Filed Dec. 22, 1927, Serial No. 241,940, and in Belgium Dec. 29, 1926. 3 Claims. (Cl. 170—67.)



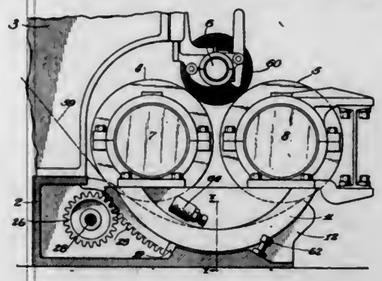
1. In a wind-motor of the type herein set forth, a vane wheel adapted to rotate under the action of the wind and having the vanes pivotally mounted thereon, a member adapted to rotate with the vane wheel and to slide in a direction at right angles to the plane of rotation, the position of said member being controlled by the speed of rotation of the vane wheel, flexible connections between each vane and said member, guide pulleys for said flexible connections revolving with the vane wheel and supported directly forward of the point of attachment of the flexible connections to said member and elastic means to return the vanes to working position upon decrease of the speed of rotation.

1,826,040. COOLING SYSTEM. WILLIAM A. BEIMLING and FLOYD B. PETERSON, Milwaukee, Wis., assignors to National Brake & Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 11, 1926. Serial No. 87,572. 6 Claims. (Cl. 123—178.)



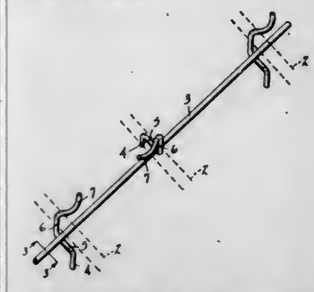
1. In an internal combustion engine and compressor combination wherein the mechanisms have different operating temperature requirements, the method of cooling the mechanisms which comprises delivering a common cooling medium to the mechanisms, varying the delivery to the mechanism having the higher temperature requirement, and maintaining the delivery to the mechanism having the lower temperature requirement substantially constant.

1,826,041. PAPER WINDING APPARATUS. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Sept. 14, 1928. Serial No. 306,018. 12 Claims. (Cl. 242—66.)



1. In a web winding machine, a pair of under surface winding drums, a winding shaft cooperatively associated therewith and means for rocking said drums about a common longitudinal axis intermediate said drums to discharge said winding shaft.

1,826,042. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Aug. 16, 1929. Serial No. 386,280. 1 Claim. (Cl. 72—122.)



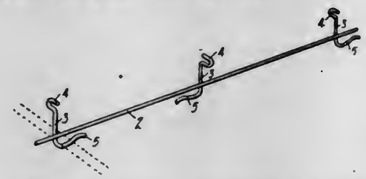
A structural unit comprising a longitudinal supporting rod, and a plurality of legs having arms at their upper ends disposed transversely of the rod and fixedly secured to the under side thereof, said arms terminating in upwardly extending attaching members having reinforce engaging portions disposed longitudinally of the rod and in spaced relation thereto.

1,826,043. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Aug. 16, 1929. Serial No. 386,281. 3 Claims. (Cl. 72—101.)



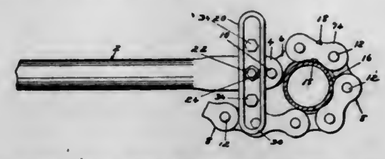
1. A structural unit comprising a longitudinal supporting rod of springable material, and a plurality of support engaging members disposed in spaced coacting pairs transversely thereof and fixedly secured thereto and having hooks at their lower ends adapted to be engaged with the flange of a beam or like structural element by springing the longitudinal rod and held in engagement therewith by the resilience of the rod, the hooks of adjacent pairs of support engaging members facing oppositely, the upper ends of said support engaging members terminating in eyes facilitating the attachment thereto of a sleeper or like element.

1,826,044. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Aug. 16, 1929. Serial No. 386,282. 6 Claims. (Cl. 72—118.)



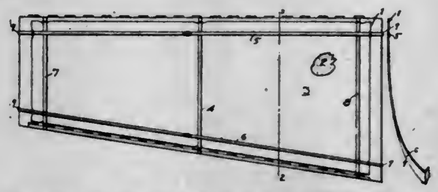
6. A structural element comprising a springable longitudinal supporting rod, and a plurality of hangers fixed in spaced relation transversely of said rod and having hooks at their inner ends disposed with the hooks of adjacent hangers facing in opposite directions and engageable with opposite edges of a structural element by springing the longitudinal rod.

1,826,045. DUPLEX GRIP TOOL. ORRIN C. BLAKESLEE, Compton, Calif. Filed Sept. 30, 1929. Serial No. 396,060. 4 Claims. (Cl. 81—66.)



1. A duplex tool comprising an operating member, a link chain connected to said member, one of said links being of substantially greater thickness than the others, removable and replaceable means on both edges of said link for holding the work, and a swinging arm, pivoted at its mid-point to said member, and providing means to lock said chain and to engage and guide said chain to locking position on both sides of said arm.

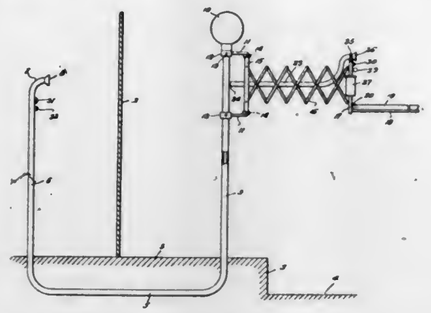
1,826,046. INSULATOR FOR AUTOMOBILE HOODS. EDWARD BOLLINGER, San Francisco, Calif. Filed Apr. 26, 1927. Serial No. 186,618. 2 Claims. (Cl. 180—69.)



1. A device of the class described comprising a sheet of heat insulating material, a thin metal sheet to cover said insulating sheet, spaced verical steel straps on said metal strip, spaced horizontal steel straps on said metal sheet, clips on the edges of said metal sheet adapted to clamp said steel straps in place on said sheet, the end portions of said steel straps extending beyond the edges of said metal sheet and having hooks adapted to engage the edges of an automobile hood, said horizontal straps comprising two parts having overlapping ends, said overlapping ends

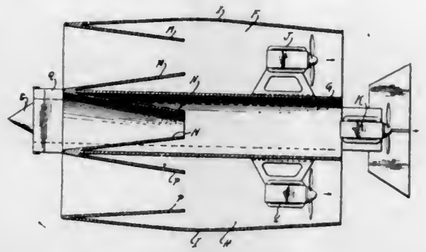
having spaced holes therein, a locking lever to engage said holes to adjust the length of said horizontal straps to tighten said hooks on said hood, and a clip to slide over the end of said lever and said straps to hold the lever in a locked position.

1,826,047. CURB SERVICE DEVICE. JAMES H. BRISTOW, Evansville, Ind. Filed Apr. 30, 1930. Serial No. 448,765. 3 Claims. (Cl. 181—22.)



1. A curb service device of the character described comprising a rigid speaking tube adapted to be inserted in the ground and having vertically disposed end portions projecting above the ground, an extensible support on one of the end portions adjacent its free upper end, a flexible speaking tube mounted on the support having one end communicating with the rigid tube and mouth pieces on the free end of the fixible tube and on the other end of the rigid tube.

1,826,048. AEROPLANE. AMEL B. BROLUSKA, Detroit, Mich. Refile of abandoned application Serial No. 260,329, filed Mar. 9, 1928. This application filed Apr. 19, 1930. Serial No. 446,116. 10 Claims. (Cl. 244—18.)



1. In an aeroplane, in combination with a frame and wing structure forming a plurality of substantially lengthwise passages open at each end, inwardly tapering vane members extending from the front end of each passage a portion of the distance to the rear thereof, for aiding in the creation of vacuum conditions incident to the travel of the plane through the air, a combined propelling and vacuum-creating fan appurtenant the rear end of each of said passages, and angularly adjustable vane members appurtenant the front end of the central passage, whereby the direction of impact of the indrawn air is caused to influence the angular direction of movement of the aeroplane relatively to the horizon.

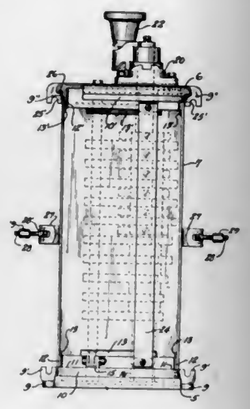
1,826,049. CAR DOOR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 24, 1929. Serial No. 334,014. 8 Claims. (Cl. 189—46.)

7. A metallic car door of appreciable depth and having an offset lower edge construction comprising a plurality of plies of sheet metal shaped to provide a tubular formation with depending flanges, the outer defining wall of



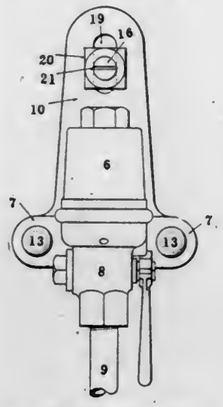
said tubular formation being offset outwardly beyond the main plane of the door and the depending flanges being offset outwardly of the inner plane of the door.

1,826,050. DRUM CONTROLLER BOX. HARRY E. CAMPBELL, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Jan. 21, 1929. Serial No. 333,899. 10 Claims. (Cl. 220—66.)



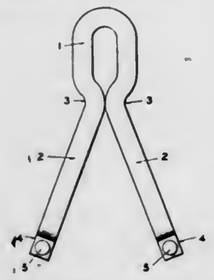
1. An enclosing case for electric drum controllers, comprising a cast metal top member having an opening for a drum controller shaft, a cast metal bottom member having a bearing recess for one end of the controller shaft, flanges integral with the adjacent faces of the top and bottom members respectively, a sheet metal body member of U-shape in cross section, said body member being interposed between said top and bottom members and rigidly secured to the flanges on the latter whereby an open-front box-like structure is provided, said top member having a peripheral groove in the lower face thereof, a sheet metal front cover member of U-shape in cross section, the upper edge of said cover member being insertable within said groove, the lower portion of said cover member being adapted to engage the flange on said bottom member, and means for removably securing said cover member in position.

1,826,051. RETAINING VALVE FASTENING. STERLING H. CAMPBELL, St. Louis, Mo., assignor to Western Railway Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 23, 1927. Serial No. 186,019. 2 Claims. (Cl. 303—1.)



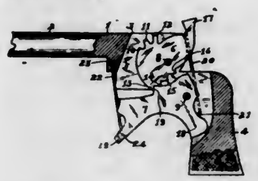
1. In a device of the class described, the combination with a retaining valve, of a plate permanently secured thereto and having a central part projecting above the body of the valve, said central part being provided with a vertical slot, and means adapted to be carried by a car and engaging said slot to adjustably secure the valve in position on the car.

1,826,052. RETAINING VALVE FASTENING. STERLING H. CAMPBELL, St. Louis, Mo., assignor to Western Railway Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed May 2, 1929. Serial No. 359,975. 4 Claims. (Cl. 303—1.)



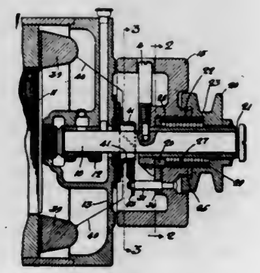
1. A retaining valve fastening comprising a bar bent to form a pair of spaced arms and an elongated central loop, each of said arms having its end turned over at right angles to form a stud to engage a retaining valve.

1,826,053. TOY PISTOL. CHALMER CARPENTER, Pittsburgh, Pa. Filed July 7, 1930. Serial No. 465,937. 2 Claims. (Cl. 124—14.)



1. A toy pistol for projecting elastic bands comprising a body portion provided with a slot having open upper and lower ends, an operating member shiftably mounted in said slot, a plurality of lips carried by the upper edge of said operating member normally projecting through the open upper end of said slot, each of said lips adapted for securing the rear end portion of an elastic band thereto, a control member operatively mounted in said slot for controlling the movements of said operating member for successively releasing the elastic bands from said lips, and a pair of flexible resilient elements for automatically returning said operating and control members to their normal positions.

1,826,054. ELECTRIC MOTOR AND FRICTION CLUTCH THEREFOR. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to L. G. S. Devices Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Nov. 18, 1927. Serial No. 234,112. 21 Claims. (Cl. 172—279.)



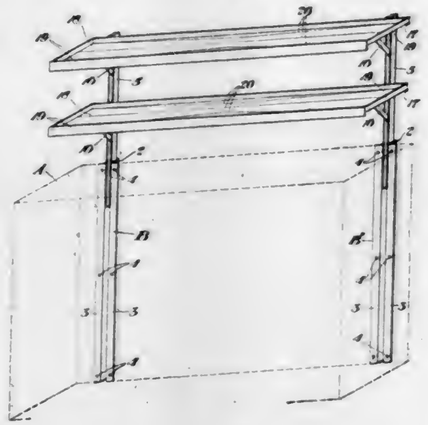
4. In an electric motor, in combination, an armature, a shaft fixed to and driven by said armature, a fixed flywheel and a loose pulley on said shaft in running contact with each other, said flywheel and pulley having equidiameter axial recesses on their abutting sides forming an annular chamber about said shaft, a coil clutch spring within said chamber having one end engaging said pulley, and its opposite end fixed to a loose ring within said recess in said flywheel, and a centrifugally actuated lever mounted upon said flywheel for frictionally engaging said loose ring at a predetermined speed and thereby cause said clutch spring to partially unwind and clutch said flywheel and pulley together, and a starting coil for said motor having a switch therefor adjacent said flywheel, the movable member of said switch being actuated by said centrifugally actuated lever.

11. In combination, a rotatable driving member, a rotatable driven member, said driving member being provided with an axial cylindrical recess, a helical spring located in said recess and operatively connected at one end to said driven member, a clutch-actuating member rotatable with said driving member and connectible to and disconnectible from the other end of said spring, and means carried by said driving member and responsive to centrifugal force for connecting said clutch-actuating member with or disconnecting it from said spring.

1,826,055. SHELVING. ALBERT B. CORNWALL, Pittsburgh, Pa. Filed Apr. 28, 1930. Serial No. 447,801. 2 Claims. (Cl. 211—136.)

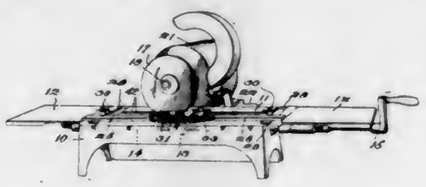
1. In a shelf structure, a vertical support of U-shaped cross-section, said support being adapted to be fixedly mounted on the back of a counter, show-case or other fixed structure so that said structure closes its open side, a second vertical support of U-shaped cross-section telescopically mounted in said first named support and adapted to be moved vertically relative to said first named support, means for locking said second named support in various extended vertical positions, at least one shelf-supporting bracket arm of U-shaped cross-section pivotally mounted in said second named support and adapted to

normally lie within the confines of said support and to be swung upwardly into shelf-supporting position, a diagonal brace member pivotally mounted in said bracket arm and adapted to normally lie within the confines of said arm



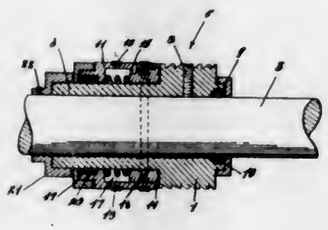
when said arm is collapsed within the confines of said second named support, and means for securing the free end of said brace to said second named support when said bracket arm is moved into horizontal shelf-supporting position.

1,826,056. TILE CUTTING MACHINE. JOHN W. DENMEAD, Akron, Ohio. Filed July 28, 1928. Serial No. 295,959. 2 Claims. (Cl. 125—13.)



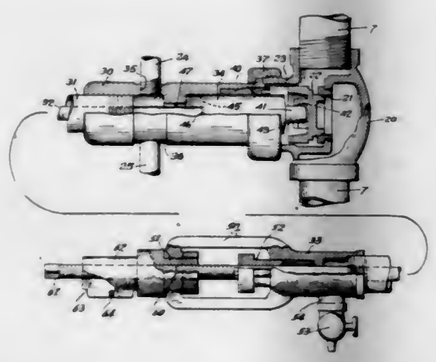
1. A tile cutting machine comprising a portable base, a motor mounted on the base having a shaft, a thin rotary cutter connected with said shaft, a reciprocal table mounted to slide horizontally at the top of the base, a gauge bar adjustable transversely on said table and a notched tile-engaging plate mounted on said gauge bar.

1,826,057. PACKING RING FOR PUMPS. JAMES G. DOBBINS, Long Beach, Calif. Filed May 19, 1928. Serial No. 278,977. 6 Claims. (Cl. 286—7.)



1. A packing for pumps and the like, including a pump housing, and an impeller shaft extending therefrom, a packing ring including a sleeve, a head formed on the inner end of said sleeve, means securing said sleeve to the shaft, a tubular packing member surrounding said sleeve, said tubular packing member being secured in the housing and non-rotatably held therein, a disc in one end of said member adapted to bear against said head, a pin extending through said tubular member into said disc, and a lock nut screwed onto the outer end of said sleeve to prevent end-wise movement between the tubular packing mmber and said sleeve.

1,826,058. FEED WATER REGULATOR. BENJAMIN F. DOWD, Long Beach, Calif. Filed July 17, 1928. Serial No. 293,465. 4 Claims. (Cl. 122—451.1.)

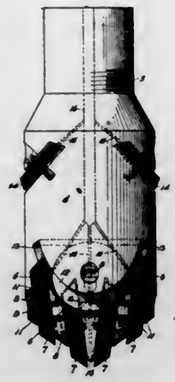


1. In combination, a container for liquid, a conduit for delivering liquid to the container, a valve in said conduit, a stem for the valve, a substantially horizontally disposed sleeve fixed at one end relative to the conduit and surrounding the valve stem, a tube projecting substantially horizontally from the opposite end of the sleeve, a connection between the container and sleeve for maintaining the same liquid level in the container, sleeve and tube; said tube being adapted for expansion and contraction in accordance with the liquid level therein, a rod extending through the tube and sleeve, with one end of the rod fixed relative to that end of the tube which is remote from the sleeve so that said rod is axially shifted in accordance with expansion and contraction of the tube, the opposite end of the rod operatively engaging the valve stem for controlling opening and closing of the valve in accordance with axial shifting of the rod.

2. In a feed water control for a boiler, a valvular control in the feed water line, conduits leading from the boiler above and below the normal water level, and a thermostatic means connected at one end to both of said conduits for reception of water or steam in accordance with the water level in the boiler for contracting or expanding said thermostatic means, said contraction and expansion controlling the closing and opening of the valvular control, and said conduits being disposed for drainage of condensate so as to maintain circulation through said aforementioned end of the thermostatic means via said conduits, and the thermostatic means slanting downwardly toward its aforementioned end for said drainage of the condensate through the conduits without it backing-up in the thermostatic means.

1,826,059. DRILLING HEAD. WILLIAM TRACY DUNN, Houston, and JOHN ELGIN SHOWS, Harrisburg, Tex. Filed Sept. 7, 1927. Serial No. 218,050. 2 Claims. (Cl. 255—71.)

1. In a drilling tool, a head having a substantially cone-shape operative end, the said cone shape portion having downwardly converging recesses therein disposed upon opposite sides of the axis of the head in pairs, the recesses of each pair being parallel to each other, disc cutters ar-

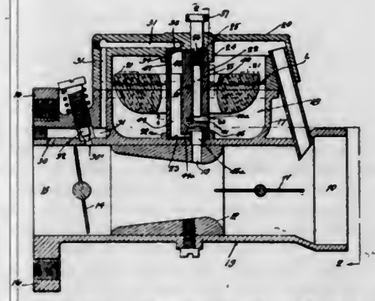


ranged in said recesses and protruding beyond the end of said head, and the edges of said cutters bevelled so as to be disposed parallel to said cone-shaped portion.

1,826,060. METHOD OF MAKING HELICAL SPRINGS. GEORGE M. EATON, Pittsburgh, Pa. Filed May 19, 1927. Serial No. 192,597. 4 Claims. (Cl. 29—173.)

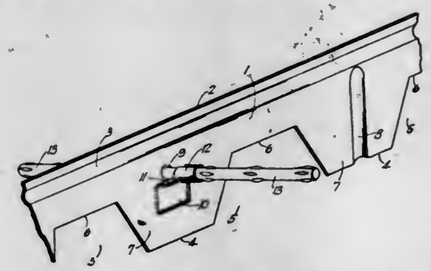
1. The method of forming helical springs, which comprises, twisting a steel rod to a predetermined angle about its own axis and coiling said twisted rod.

1,826,061. CARBURETOR. ROY F. ENSION, South Pasadena, Calif., assignor to Ensign Carburetor Co. Ltd., Los Angeles, Calif., a Corporation of California. Filed July 2, 1927. Serial No. 203,226. 5 Claims. (Cl. 261—41.)



1. In a carburetor, the combination of a body having therein a mixture passage and a fuel chamber, a cap for the fuel chamber, a fuel passage leading through the bottom wall of the fuel chamber to the mixture passage, and a passage block confined vertically between the bottom wall and the cap of the fuel chamber, said passage block having vertical bores therethrough forming vertical passages, one of said vertical passage bores extending through the block from end to end and communicating at its lower end with the said passage which leads to the mixture passage of the carburetor, a suction chamber in the upper end of the block communicating with said mentioned passage bore and the upper end of another passage bore, the lower end of said last mentioned passage bore having communication with the fuel chamber below the fuel level therein, said communication being formed by a lateral fuel orifice, the passage block having also a vertical valve stem bore extending down from its upper end and intersecting said lateral fuel orifice, and a valve stem in said valve stem bore and extending out through the fuel chamber cap.

1,826,062. JOINT FORM FOR PAVING. ROSCOE D. FARMER, Oklahoma City, Okla. Filed Jan. 23, 1930. Serial No. 422,849. 7 Claims. (Cl. 94—17.)



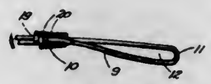
1. A joint form for pavement, embodying a thin strip of suitable material having a straight upper edge and having a longitudinal and continuous corrugation below and parallel to said edge, said strip having a plurality of spaced legs downstanding from and in a plane with its body, and outstanding means carried by some of said legs for rigidly supporting a tie bar laterally therethrough.

1,826,063. DROP CATCHING DEVICE FOR UMBRELLAS. HUGO FRENCK, Nesekow, Post Arnshagen, Germany. Filed June 17, 1930, Serial No. 461,782, and in Germany May 6, 1929. 7 Claims. (Cl. 135—33.)



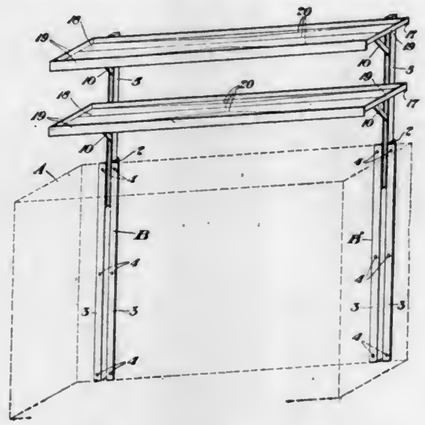
1. A drop cover for an umbrella of porous material, such as sponge rubber, fastened around the outer edge of the umbrella cover so that it covers the outer edge and is adapted to absorb the water running off the umbrella cover.

1,826,064. CLOTHESLINE. HAROLD FULTON, West Dover, Ohio. Filed June 19, 1930. Serial No. 462,859. 2 Claims. (Cl. 68—3.)



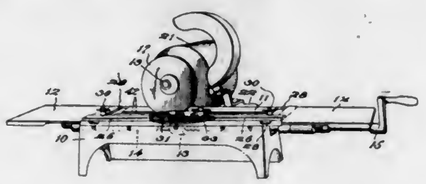
2. In a pinless clothes line, a wire link having an article-retaining portion comprising a pair of twisted strands, one of said strands having one end portion bent back

normally lie within the confines of said support and to be swung upwardly into shelf-supporting position, a diagonal brace member pivotally mounted in said bracket arm and adapted to normally lie within the confines of said arm



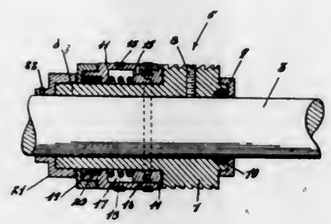
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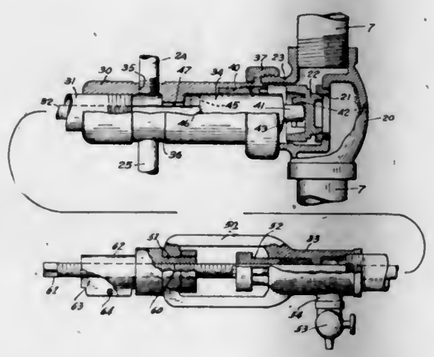
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1. A packing for pumps and the like, including a pump housing, and an impeller shaft extending therefrom, a packing ring including a sleeve, a head formed on the inner end of said sleeve, means securing said sleeve to the shaft, a tubular packing member surrounding said sleeve, said tubular packing member being secured in the housing and non-rotatably held therein, a disc in one end of said member adapted to bear against said head, a pin extending through said tubular member into said disc, and a lock nut screwed onto the outer end of said sleeve to prevent end-wise movement between the tubular packing mmber and said sleeve.

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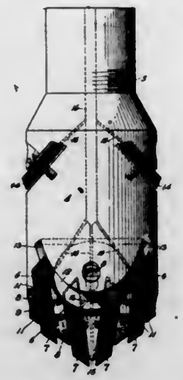


1. In combination, a container for liquid, a conduit for delivering liquid to the container, a valve in said conduit, a stem for the valve, a substantially horizontally disposed sleeve fixed at one end relative to the conduit and surrounding the valve stem, a tube projecting substantially horizontally from the opposite end of the sleeve, a connection between the container and sleeve for maintaining the same liquid level in the container, sleeve and tube; said tube being adapted for expansion and contraction in accordance with the liquid level therein, a rod extending through the tube and sleeve, with one end of the rod fixed relative to that end of the tube which is remote from the sleeve so that said rod is axially shifted in accordance with expansion and contraction of the tube, the opposite end of the rod operatively engaging the valve stem for controlling opening and closing of the valve in accordance with axial shifting of the rod.

2. In a feed water control for a boiler, a valvular control in the feed water line, conduits leading from the boiler above and below the normal water level, and a thermostatic means connected at one end to both of said conduits for reception of water or steam in accordance with the water level in the boiler for contracting or expanding said thermostatic means, said contraction and expansion controlling the closing and opening of the valvular control, and said conduits being disposed for drainage of condensate so as to maintain circulation through said aforementioned end of the thermostatic means via said conduits, and the thermostatic means slanting downwardly toward its aforementioned end for said drainage of the condensate through the conduits without it backing-up in the thermostatic means.

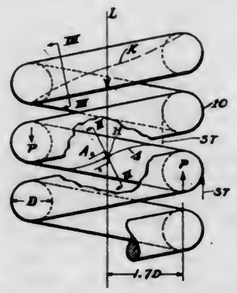
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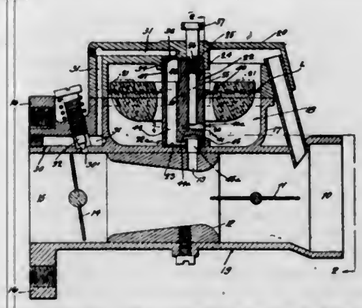
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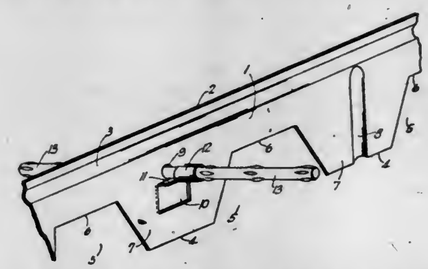
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1,826,061. CARBURETOR. ROY F. ENSIGN, South Pasadena, Calif., assignor to Ensign Carburetor Co. Ltd., Los Angeles, Calif., a Corporation of California. Filed July 2, 1927. Serial No. 203,226. 5 Claims. (Cl. 261—41.)



1. In a carburetor, the combination of a body having therein a mixture passage and a fuel chamber, a cap for the fuel chamber, a fuel passage leading through the bottom wall of the fuel chamber to the mixture passage, and a passage block confined vertically between the bottom wall and the cap of the fuel chamber, said passage block having vertical bores therethrough forming vertical passages, one of said vertical passage bores extending through the block from end to end and communicating at its lower end with the said passage which leads to the mixture passage of the carburetor, a suction chamber in the upper end of the block communicating with said mentioned passage bore and the upper end of another passage bore, the lower end of said last mentioned passage bore having communication with the fuel chamber below the fuel level therein, said communication being formed by a lateral fuel orifice, the passage block having also a vertical valve stem bore extending down from its upper end and intersecting said lateral fuel orifice, and a valve stem in said valve stem bore and extending out through the fuel chamber cap.

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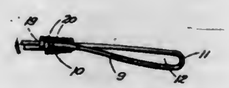
1. A joint form for pavement, embodying a thin strip of suitable material having a straight upper edge and having a longitudinal and continuous corrugation below and parallel to said edge, said strip having a plurality of spaced legs downstanding from and in a plane with its body, and outstanding means carried by some of said legs for rigidly supporting a tie bar laterally therethrough.

1,826,063. DROP CATCHING DEVICE FOR UMBRELLAS. HUGO FRENCK, Nesekow, Post Arnshagen, Germany. Filed June 17, 1930, Serial No. 461,782, and in Germany May 6, 1929. 7 Claims. (Cl. 135—38.)



1. A drop cover for an umbrella of porous material, such as sponge rubber, fastened around the outer edge of the umbrella cover so that it covers the outer edge and is adapted to absorb the water running off the umbrella cover.

1,826,064. CLOTHESLINE. HAROLD FULTON, West Dover, Ohio. Filed June 19, 1930. Serial No. 462,359. 2 Claims. (Cl. 68—3.)



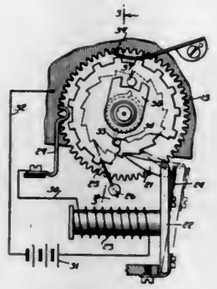
2. In a pinless clothes line, a wire link having an article-retaining portion comprising a pair of twisted strands, one of said strands having one end portion bent back

upon itself to form an attaching eye, said bent back end portion being flattened and tapered divergently towards its end and a coil being formed in the adjacent end of the other of said strands and disposed around said first strand and said bent back end to prevent pulling out of said eye and protruding of said end.

1,826,065. INSECTICIDE AND FUNGICIDE MIXTURE. KARL H. FULTON and MARCUS T. INMAN, Jr., Pittsburgh, Pa., assignors to Clarence P. Byrnes, trustee, Sewickley, Pa. Filed Jan. 14, 1926. Serial No. 81,316. 4 Claims. (Cl. 167—22.)

1. An emulsificable liquid insecticide and fungicide composition containing a toxic oily liquid comprising partially oxidized hydrocarbons of the aliphatic type in the range from alcohols to organic acids, and a toxic material having insecticidal or fungicidal properties capable of admixture therewith, the partially oxidized hydrocarbons being sufficient in quantity to spread the mixture in use.

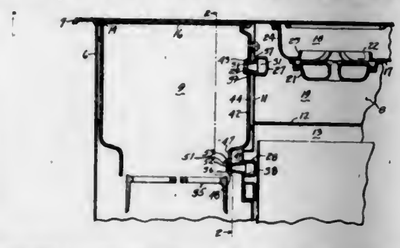
1,826,066. ELECTRICAL HOROLOGY. JEAN GEISSLINGER, Forest Hills, N. Y., assignor, by direct and mesne assignments, to Arthur K. Kempton, Jackson Heights, N. Y. Filed Dec. 21, 1928. Serial No. 327,581. 6 Claims. (Cl. 185—40.)



1. In mechanism of the kind described, a driving gear having an axle rotatable therewith, tensional spring means for transmitting torque to said gear and axle, and means for intermittently restoring expended tension of said spring, said latter means comprising a ratchet wheel connected with the winding end of said spring, an electromagnetic element having a movable armature, a pawl carried by said armature to operatively engage said ratchet wheel, an electric circuit for said element, a circuit make and break means including a rotatable contact means and a stationary contact means, means actuated by said axle for moving said rotatable contact means into circuit closing relation to said stationary contact means, and means actuated by said ratchet wheel for moving said rotatable contact means into circuit breaking relation to said stationary contact means.

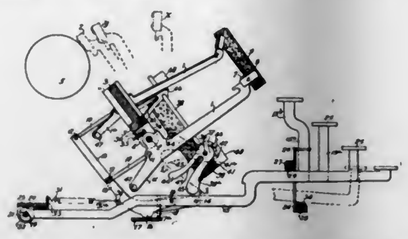
1,826,067. KINDLING BURNER INSTALLATION. FREDERICK A. GERCICH and JOHN C. WEISMAN, Oakland, Calif., assignors to Hammer-Bray Company, Oakland, Calif., a Corporation of California. Filed Oct. 8, 1927. Serial No. 224,812. 3 Claims. (Cl. 126—36.)

1. In a burner of the class described, a body having a rib portion extending therealong and parallel therewith and provided with a row of aligned ports in an outer portion thereof, said body having a longitudinal gas distributing chamber defined therein, and said rib portion having a longitudinal chamber defined therein communicating with said ports and forming a lateral extension of and communicating with said first chamber substantially along the entire length thereof, said body being provided at an end of its chamber with an inlet passage, and a baffle wall



extending inwardly from the end wall of said rib at said inlet passage to separate said chambers for a relatively short distance from said end.

1,826,068. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Dec. 24, 1927. Serial No. 242,898. 27 Claims. (Cl. 197—27.)



1. In type actuating mechanism, the combination of a type bar, a device fixed to said type bar, key operated means for actuating the type bar, and means normally disconnected from the type bar and rendered effective by said device for controlling said type bar near the end of the printing stroke, said last recited means comprising a member having a fixed pivot and formed with an open-mouth slot for receiving said device.

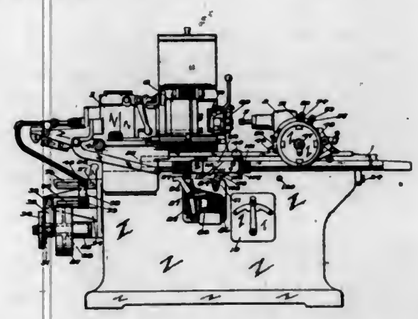
1,826,069. METHOD OF SUBSTITUTION OF RAILROADS BY MEANS OF SUBSTITUTION-TRAINS, AND MECHANICAL APPARATUS CONSTITUTING THE SAME. PAUL GUILBERT, Rouen, JULES LEGRAND, St. Mande, and MAURICE LEMAIRE, Paris, France. Filed June 9, 1928, Serial No. 284,080, and in France June 27, 1927. 3 Claims. (Cl. 104—2.)



1. A train for relaying railroads, comprising in combination a group of platform cars, two cranes on each platform car for picking up the elements of the cleared track, an excavator car, an excavator on said car, the guide frame of said excavator consisting of a deformable triangle the sides of which can be lengthened or shortened, a hollow pivot axle of said excavator frame through which the dredged ballast is discharged, a conveyor, a screener car, a screener on said car supplied with ballast from said conveyor of said excavator car to free the ballast of its fine elements and of the earth which it may contain, an endless conveyor on said car adapted to receive the screened ballast, a transverse conveyor adapted to receive the reclaimed ballast and to deliver it onto the foundation of the cleared track, a conveyor adapted to receive

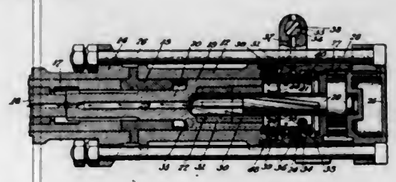
and convey the detritus from screening, hopper cars, a conveyor on each of said hopper cars adapted to to receive the detritus from screening and to discharge the same over the entire length of said hopper car, a platform car carrying the elements of the fresh track, and two cranes mounted adjacent the ends of said platform car and designed to deposit said track elements on the cleared road-bed.

1,826,070. GRINDING MACHINE. WALDO J. GUILD, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 31, 1929. Serial No. 367,399. 13 Claims. (Cl. 51—50.)



1. In a grinding machine, the combination with a grinding wheel, a workhead, and a reciprocatory table or carriage carrying one of said parts, of mechanical devices associated with said carriage to control its reciprocations in the grinding or working range of said wheel, and fluid pressure means to move said carriage to and from said range.

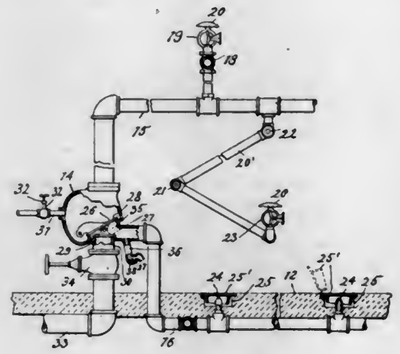
1,826,071. ROCK DRILL. HJALMER CLARENCE GUSTAFSON, Denver, Colo., assignor to Gardner-Denver Company. Filed Oct. 7, 1927. Serial No. 224,617. 14 Claims. (Cl. 121—6.)



1. In a tool of the character set forth, the combination with a cylinder member and a reciprocatory piston therein, of a reciprocatory tubular distributing valve that receives the rear end of the piston, means controlled by the valve for supplying actuating fluid to its interior to act on the piston, and means in the valve controlled by the piston when in the valve, for directing the actuating fluid against a portion of the valve to shift said valve.

14. In a tool of the character set forth, the combination with a cylinder member and a reciprocatory piston therein, of a holder for a tool to be struck by the piston, a passageway though the piston for delivering fluid from the rear end thereof to the tool for hole cleansing purposes, an automatic valve for distributing fluid to the piston to reciprocate it, said valve having a flange, a chamber in which the flange operates, an exhaust passageway for the piston actuating fluid controlled by the valve, a branch leading from the exhaust passageway to the flange chamber, and a valve for closing the exhaust passageway outside the branch whereby exhausting fluid is caused to operate on the flange and hold the valve in a position to admit actuating fluid behind the piston to maintain said piston against the tool and supply hole-cleansing fluid through the piston passageway to the tool.

1,826,072. FIRE PROTECTION APPARATUS. JOHN R. HAMILTON, Cleveland, Ohio, assignor to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed Apr. 27, 1929. Serial No. 358,698. 8 Claims. (Cl. 169—21.)



1. In fire extinguishing apparatus for a building having a substantially smooth floor upon which objects are freely movable, the combination of an overhead distributing pipe system having means for discharging fire extinguishing agent downwardly, a floor distributing pipe system located below the surface of said floor, and having means for discharging fire extinguishing agent upwardly, the last mentioned discharge means being disposed in pockets provided in the surface of said floor, means for automatically supplying fire extinguishing agent to said systems, and closure means for said recesses normally flush with the surface of said floor and adapted to be moved by the flow of extinguishing agent.

4. In apparatus of the character described the combination of a distributing pipe extending near an article to be protected, a flexible pipe extension connected to said distributing pipe, a heat responsive sprinkler head carried by said flexible pipe and adapted to be selectively positioned with respect to said article, and means for automatically supplying fire extinguishing agent to said pipes.

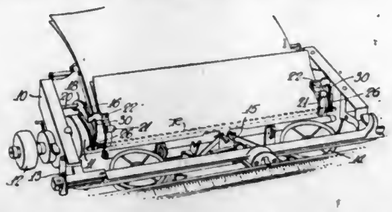
6. In apparatus of the character described the combination of a distributing pipe arranged below a floor surface, discharging means associated with said distributing pipe and adapted to extend into recesses formed in the surface of said floor, means for automatically supplying fire extinguishing agent to said distributing pipe, and means for closing said recesses, said closing means being adapted to be moved by the flow of extinguishing agent from said discharge means.

1,826,073. TIRE PATCH. PAUL E. HAWKINSON, Minneapolis, Minn., assignor to Kehawke Manufacturing Co., Minneapolis, Minn., a Corporation of Minnesota. Original application filed Aug. 25, 1925, Serial No. 52,474. Patent No. 1,697,955, dated Jan. 8, 1929. Divided and this application filed Dec. 16, 1927. Serial No. 240,353. 1 Claim. (Cl. 152—26.)



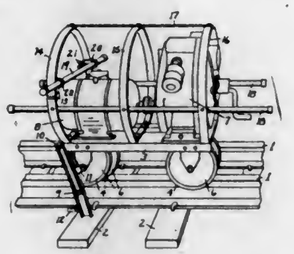
As a new article of manufacture, a tire repair sheet or shoe formed from an old tire casing and comprising a plurality of fabric plies united by vulcanized rubber and provided on its convex side with a vulcanized rubber film filling the spaces between the threads of the outer fabric ply and forming a surface that is relatively smooth and uniform as characterized by being cut from the tire casing, substantially as described.

1,826,074. TYPEWRITER RIBBON DEVICE. JULIUS C. HOCHMAN, New York, N. Y. Filed Nov. 8, 1930. Serial No. 494,239. 41 Claims. (Cl. 197—153.)



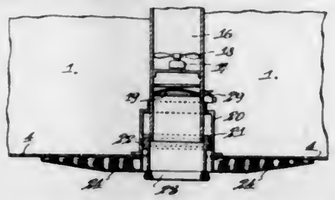
34. In a typewriting machine, a moving carriage, and a plurality of independent ribbon holders, each ribbon holder including a pair of ribbon carrying arms, removably resting upon a carriage element and in juxtaposed relation, each of said holders having a ribbon between the arms thereof mounted to extend contiguous to the platen and along the writing line of the machine.

1,826,075. POWER UNIT OR PLANT FOR TRACK APPARATUS. CORWILL JACKSON, Chicago, Ill. Filed Nov. 8, 1930. Serial No. 494,289. 13 Claims. (Cl. 105—142.)



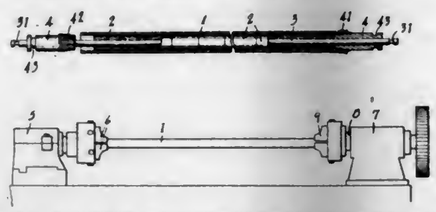
1. In a machine of the class described, the combination of a truck provided with alined wheels having central rail grooves and relatively wide flanges providing ground wheels, a motor and generator mounted on said truck in longitudinal alinement, spaced transversely disposed curved guards mounted on said truck and constituting supporting members when the truck is upset or rolled from a rail, struts mounted on said truck at one end and adapted when in erected position to support the truck in upright position on a rail, longitudinally disposed handle bars arranged on the inner sides of said guards to project at each end of the truck, and a transversely disposed handle bar mounted for longitudinal adjustment on one of said guards.

1,826,076. AIRCRAFT. ALBERT SHEPHARD JAMES, Eureka, Calif. Filed Aug. 4, 1930. Serial No. 472,993. 14 Claims. (Cl. 244—7.)



7. In air craft of the buoyant type, a body having a flat bottom for landing purposes, pneumatic means causing said body to approach the landing field in a direction vertically downward, means cooperating with said causing means for making said body to adhere to the landing surface.

1,826,077. METHOD AND APPARATUS FOR TREATING DRAWN TUBES. ALFRED J. JOHNSON, Grand Rapids, Mich., assignor to York Band Instrument Company, Grand Rapids, Mich. Filed July 29, 1929. Serial No. 381,849. 10 Claims. (Cl. 153—78.)



7. An apparatus for turning the grain of a drawn tube, consisting of cylindrical mandrels for disposition within the tube, and means for clamping the ends of the tube throughout the periphery and turning the same.

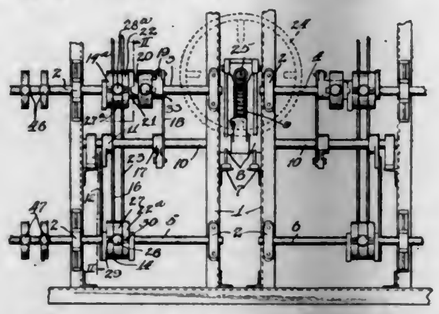
9. The method of twisting the grain in a drawn tube, consisting in filling the interior with a sectional cylindrical support, grasping the opposite ends of the said tube and twisting the same until they grip on the said central support.

1,826,078. PERMANENT WAVE APPARATUS. PAUL KUNIAN and JOHN STEN, Minneapolis, Minn.; said Sten assignor to said Kunian. Filed Dec. 22, 1928. Serial No. 327,926. 6 Claims. (Cl. 132—36.)



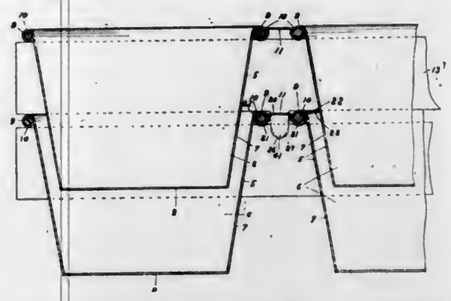
1. In permanent wave apparatus, a winding device comprising a spool, an implement for winding said spool, a brake drum associated with one end of said spool and means associated with said drum for frictionally connecting said drum and said spool when it is adapted to turn said spool in one direction and for permitting said spool to be turned independently of said drum in the opposite direction, and a holding element in which one end of said spool may be journaled and in which said drum may be non-rotatably mounted.

1,826,079. MASTER LEVER. ALBERT R. LOCKE, Oak Park, Ill. Filed Sept. 28, 1928. Serial No. 309,115. 4 Claims. (Cl. 175—312.)



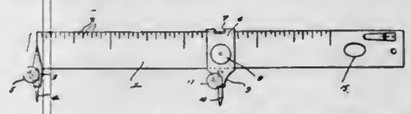
1. In combination, a plurality of spaced shafts, means for actuating all of said shafts simultaneously, a lever, means on said lever for rendering said actuating means inoperative, and means for actuating said shafts through said lever.

1,826,080. BAKING PAN UNIT. HARRY A. LOCKWOOD, Cincinnati, Ohio, assignor to The Lockwood Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 10, 1930. Serial No. 443,056. 5 Claims. (Cl. 53—6.)



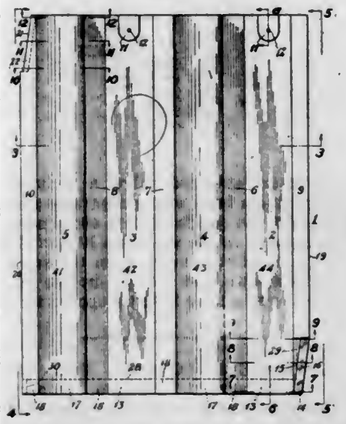
1. In combination a plurality of spaced pans secured together to form a unitary structure, side rails connecting the pans, and a stop finger on one of the side rails for entry into the space between pans of a similar unit.

1,826,081. COMBINATION RULE AND COMPASS. HENRY BRADY MAGERS, Santa Fe, N. Mex. Filed June 9, 1930. Serial No. 459,953. 1 Claim. (Cl. 33—158.)



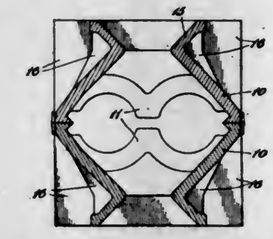
In a structure of the character described, a graduated rule, a pivot point on one end of the rule, one side of the opposite end portion of the rule being inwardly offset in a manner to provide a reduced portion, a sleeve mounted for longitudinal sliding movement on the rule, and means for securing the sleeve in adjusted positions, said sleeve adapted for disposition on the reduced end portion of the rule in a manner to dispose one side thereof substantially flush with the corresponding side of the rule.

1,826,082. ROOFING TILE. EDWIN A. MASTICK, Rocky River, Ohio. Filed Dec. 31, 1927. Serial No. 243,862. 16 Claims. (Cl. 108—10.)



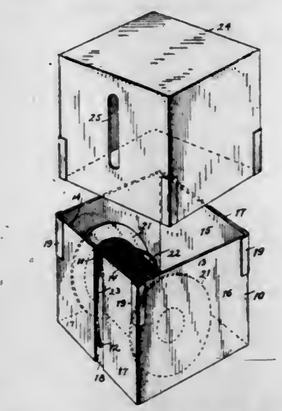
1. A roofing tile having opposite edge portions respectively downwardly inclined and upwardly inclined, a trough-like portion forming a joint member secured to said upwardly-inclined edge, the latter forming one side of said trough-like portion, a concave portion connected to said downwardly-inclined edge, and intermediate concave and trough-like portions connected to each other and to said two first-mentioned portions, respectively, said first-mentioned trough-like portion and the portion second removed therefrom being formed with tile-attaching means, the two other and alternate concave portions being shallower than said tile-attaching portions.

1,826,083. PIPE FLASK. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Sept. 9, 1929. Serial No. 391,441. 7 Claims. (Cl. 22—96.)



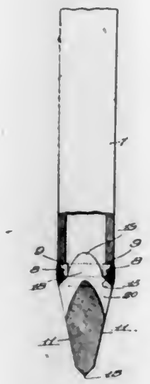
1. A flask section for molding elongated casting such as pipe, comprising an elongated body having side walls and end walls; and a sand hopper integral with the body and having its side walls directly joined onto the upper edges of the side walls of the body and extending for the length of said side walls; said sand hopper being so constructed and arranged as to minimize deflection of the flask section when lifted at its ends.

1,826,084. CARTON. HUBERT C. MOHR, Warren, Ohio, assignor to The Packard Electric Company, Warren, Ohio, a Corporation of Ohio. Filed Aug. 8, 1929. Serial No. 384,424. 1 Claim. (Cl. 206—52.)



A carton comprising inner and outer telescoping parts, said inner part being adapted to receive a spool of cable and having two vertically spaced openings in one of its walls through which the cable may be threaded so as to expose a section thereof on the outer side of said wall, one of said openings comprising a V-shaped guide notch cut in the edge of the wall adjacent the mouth of the inner part, and said outer part having an elongated window which registers with the space between said openings, said window being shorter than the distance between said openings but wider than the cable, and so positioned that the wall of said outer member at the ends of said elongated window is adapted to clamp the cable against the wall of said inner part.

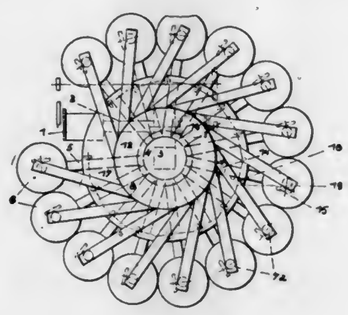
1,826,085. DRILL POINT AND METHOD OF MAKING THE SAME. FRED S. MULOCK, San Gabriel, Calif., assignor to United States Smelting, Refining & Mining Company, Portland, Me., a Corporation of Maine. Filed Aug. 17, 1927. Serial No. 213,579. 16 Claims. (Cl. 76—108.)



1. A drill point comprising a tubular shank and a tip, the shank having an end wall substantially at right angles to the axis of the shank and a notch in said wall and the tip having a groove in its side, the tip being secured to the shank with the groove and notch in register to provide a passage from the interior of the shank to the exterior of the tip.

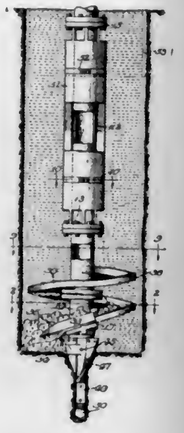
10. The method of making a drill point which consists in welding high carbon steel to low carbon steel to form a blank, drop forging the blank to form a wedge-shaped tip with open grooves extending divergingly from one end of the tip to the sides of the tip, and securing the tip in the end of a tubular shank by autogenous welding.

1,826,086. WIND SEPARATOR FOR COCOA POWDER. RICHARD G. NEUMANN, Wandsbek, near Hamburg, Germany. Filed Aug. 1, 1930, Serial No. 472,332, and in Germany Nov. 6, 1929. 4 Claims. (Cl. 209—142.)



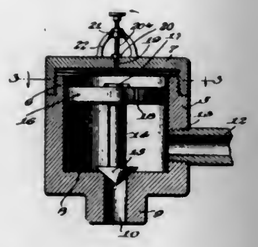
1. A wind separator for cocoa powder and other pulverous materials, comprising in combination an air filter, separators arranged raised in a circle around said filter, riser pipes connecting said separators to said filter, a cell-wheel air excluder in the bottom end of each separator, an exhauster, a suction pipe for said exhauster, drop pipes one for each of said air excluders connecting same with said suction pipe, and a throttle valve arranged in each of said drop pipes.

1,826,087. APPARATUS FOR DRILLING WELLS. WILLIAM J. NEWMAN, Chicago, Ill. Filed Mar. 19, 1928. Serial No. 262,802. 3 Claims. (Cl. 255—70.)



1. The combination with a pipe which is adapted to be rotated, of a cylindrical head secured to the lower end of the pipe and having a plurality of radially arranged flat arms with their upper surfaces at an angle to the direction of rotation, conduits leading from the cylindrical head and formed integrally with said arms and having outlet holes, one or more teeth secured to one of said arms, cutter blades and plates secured to the other arms, a spiral conveyor coacting with one of the arms and adapted to convey the material upwardly for a predetermined distance, and advance drilling members carried by said cylindrical head and adapted to guide the cylinder head with its excavating devices.

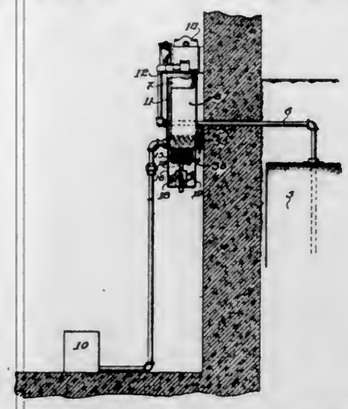
1,826,088. PRESSURE OPERATED VALVE. OSCAR JOEL OSTLIND, Marshfield, Oreg. Filed Mar. 11, 1929. Serial No. 346,225. 2 Claims. (Cl. 137—139.)



1. In a pressure actuated valve, a reciprocable valve member comprising a head with a separable stem, a casing having a port for the escape of fluid above said head, and a screw for connecting the separable head and stem, said screw having a head upstanding from the valve head and a slot registrable with said port to provide an avenue of fluid escape when said head is in its uppermost position.

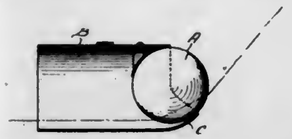
1,826,089. PRESSURE CONTROL FOR AUTOMATIC PUMPS. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 5, 1926. Serial No. 127,253. 22 Claims. (Cl. 103—25.)

1. A liquid fuel feeding system including the combination of a pump, an electric motor for driving said pump, a receptacle for receiving the liquid fuel supplied by said pump, and circuit breaker mechanism operated by



the pressure of the liquid fuel in said receptacle for opening the motor circuit when the pressure rises or falls beyond predetermined limits.

1,826,090. TRAFFIC SIGNAL INDICATOR FOR AUTOMOBILES. WILL E. PHELPS, Cleveland Heights, Ohio. Filed Aug. 23, 1926. Serial No. 130,981. 5 Claims. (Cl. 88—1.)



4. The combination with an automobile, of a bracket secured thereto and a signal light indicator carried by the bracket and comprising a transparent body constituting a lens of very short focal length presenting forward and rear convex surfaces, said lens forming an image of the signal light on the rear surface thereof.

1,826,091. METHOD OF RECLAIMING WASTE RUBBER AND PRODUCT OF SAME. WILLIAM BEACH PRATT, Wellesley, Mass., assignor, by mesne assignments, to Dispersions Process, Inc., Dover, Del., a Corporation of Delaware. Filed Feb. 17, 1926. Serial No. 88,934. 11 Claims. (Cl. 18—52.)

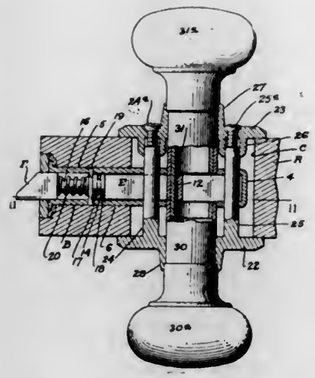
1. A process of reclaiming vulcanized rubber stock, which comprises first agitating such stock in the presence of moisture and causing the absorption of moisture thereby to cause a swelling of the rubber particles, and then kneading such moistened stock in the presence of a softener until a plastic mass is formed.

1,826,092. METHOD FOR MAKING FLEXIBLE INSULATED WIRE. HAROLD DE BLOIS RICE, Bristol, R. I., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed Oct. 23, 1926. Serial No. 143,791. 1 Claim. (Cl. 173—264.)



An electrical cable comprising a core of electrical conducting material, insulating material composed of latex paper spirally wrapped around the conducting material, and a covering of an in-situ deposit of the solids of an aqueous dispersion of rubber over the latex paper.

1,826,093. POST ANCHORED DOOR LATCH. WALTER R. SCHLAGE, San Francisco, Calif., assignor to Schlage Lock Company, San Francisco, Calif., a Corporation of California. Filed July 18, 1928. Serial No. 293,561. 3 Claims. (Cl. 292—124.)



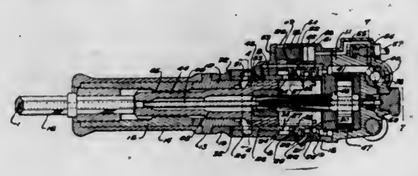
1. In a door latch of the character described a latch housing, a pair of escutcheon plates one on each side thereof, a spindle journalled in the escutcheon plates and extending through the housing and at right angles thereto, a post extending through the housing and secured at one end to one escutcheon plate, a guide member on the opposite escutcheon plate receiving the other end of the post, and means whereby the post is secured to the guide member.

1,826,094. PRODUCTION OF SYNTHETIC TANNING AGENTS. HERMANN SCHUETTE, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 14, 1929, Serial No. 347,157, and in Great Britain July 9, 1928. 11 Claims. (Cl. 260—4.)

1. The process of producing water-soluble synthetic tanning agents which comprises condensing a methylol compound of an aromatic hydroxy-carboxylic acid with resorcinol at a temperature below 50° C. in the presence of water.

8. As a new article of manufacture, a water-soluble condensation product of a methylol compound of an aromatic hydroxy-carboxylic acid with resorcinol.

1,826,095. FLUID OPERATED TOOL. BARTON R. SHEETS and CHARLES M. STEWART, Denver, Colo., assignors to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,853. 11 Claims. (Cl. 121—6.)



1. In a tool of the character set forth, the combination with a cylinder member having a piston chamber and a reciprocatory piston therein, of a holder for a tool to be operated on by the piston, means for supplying actuating fluid to the cylinder member, an automatic valve for distributing such actuating fluid to the piston chamber to operate the piston, means for directing actuating fluid from

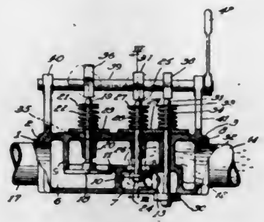
a point in advance of its entry into the piston chamber, against the valve to hold it in a position to maintain the supply of actuating fluid against the rear end of the piston, an exhaust passageway from the rear end of the piston, and a secondary valve operated by the holding fluid, for closing said exhaust passageway.

1,826,096. CLOSURE FOR CONTAINERS. ARTHUR E. SMITH, Los Angeles, Calif. Filed Jan. 27, 1930. Serial No. 423,764. 15 Claims. (Cl. 221—60.)



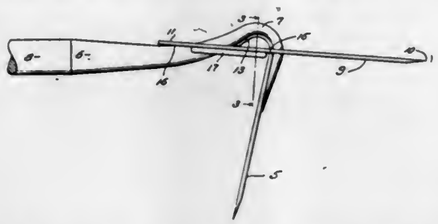
1. In combination with a receptacle having an eccentric discharge aperture, a cap rotatably mounted on said receptacle, said cap having an eccentric aperture in the top wall, said cap aperture being adapted in one position of said cap to register with said discharge aperture and a valve in said discharge aperture.

1,826,097. VALVE MECHANISM. CLYDE J. SMITH, Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Apr. 5, 1927. Serial No. 181,046. 2 Claims. (Cl. 277—1.)



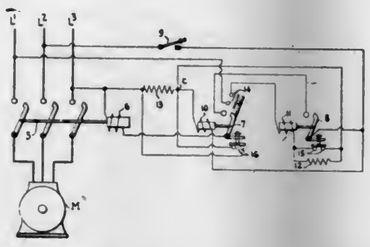
1. A valve control mechanism comprising a casing having a main and a first and second auxiliary chamber, independently operable valves for connecting the main chamber to the first auxiliary chamber and for opening the first auxiliary chamber to the atmosphere, a single valve means for alternately opening the second auxiliary chamber to the main chamber and to the atmosphere.

1,826,098. TOOL ATTACHMENT MEANS. EDWARD A. STEPHENS, Los Angeles, Calif. Filed Aug. 8, 1930. Serial No. 473,921. 5 Claims. (Cl. 306—23.)



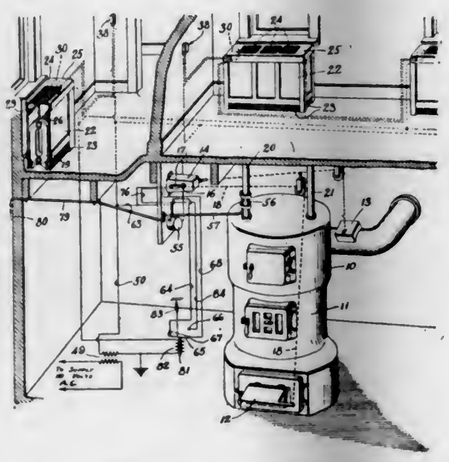
1. In combination with a tool having a looped shank extending therefrom; an auxiliary device having a slotted plate portion through which the loop of the shank is passed; and a wedge inserted through said loop, bearing against the plate and forcing it against other portions of the tool.

1,826,099. PHASE FAILURE AND PHASE REVERSE PROTECTIVE DEVICE FOR POLYPHASE ALTERNATING CURRENT CIRCUITS. WILLIAM C. STEVENS, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,262. 8 Claims. (Cl. 175—294.)



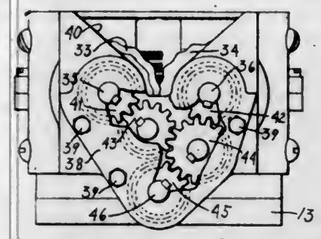
1. A protective device for polyphase circuits comprising electromagnetic switches each having a single phase magnetic circuit, a resistance, a star connection for said switches and said resistance and means associated with one of said switches to communicate said resistance to thereby cause said switches to respond in accordance with the condition of phase rotation of such circuit.

1,826,100. HEATING SYSTEM AND CONTROL THEREFOR. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Jan. 13, 1930. Serial No. 420,325. 4 Claims. (Cl. 236—9.)



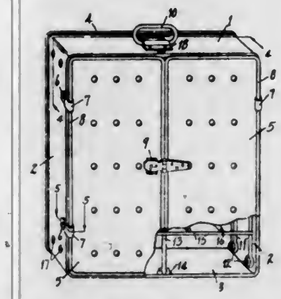
1. A heating system for a building combining means providing a chamber for confining a body of air, said chamber having an outlet for discharging air into a room to be heated, a thermostat in said room controlling the automatic opening and closing of said outlet to admit or interrupt the flow of heated air into the room, means for maintaining a predetermined temperature of the air in said chamber for a given temperature outside of the building and a lower temperature of the air when the outside air rises above said given temperature, said last mentioned means comprising a heater, means containing a body of fluid for transferring heat from said heater to the air in said chamber, two thermo-sensitive elements, one responsive to the temperature of said fluid, the other being responsive to the temperature outside of the building, and a control-device governed by the joint action of said thermo-sensitive elements and regulating the operation of said heater.

1,826,101. COTTON BOLL GATHERER. LOUIS C. STUKENBORG, Memphis, Tenn. Filed Aug. 29, 1929. Serial No. 389,274. 4 Claims. (Cl. 56—32.)



1. In a cotton boll gatherer, a head having an open mouth manually directable into engagement with the bolls, and having means therewithin for engaging and transferring a detached boll, and boll detaching means comprising a pair of rotatable knives mounted on the forward end of said head, said knives having facing and overlapping cutting edges, diverging upwardly apart to form a knife edged slot, and means for rotating said knives, whereby said knives may be moved against the stem of said boll to sever said stem.

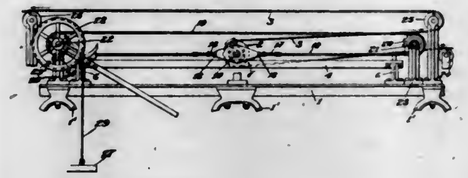
1,826,102. CARTAGE OR DISPLAY CABINET. EARLE A. TOWNE, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Aug. 24, 1928. Serial No. 301,724. 5 Claims. (Cl. 45—71.)



1. A structure of the class described, the combination of a casing open at the front and comprising top, bottom, side and rear walls, doors hinged to the edges of the side walls of the casing to provide a full front opening when the doors are open, a rack comprising end uprights formed of wire and having eyes at the ends thereof, intermediate front and rear uprights formed of wire and having inwardly turned horizontal eyes at the ends thereof, and shelves comprising longitudinal wires welded to the outer sides of said uprights and cross wires welded to said longitudinal wires, the several parts of said rack being assembled and secured together as a unit, said end uprights being secured to the side walls of the casing by bolts engaging the eyes thereof, said intermediate uprights being secured to the top and bottom walls of the casing by bolts engaging the eyes thereof.

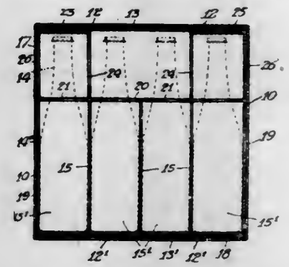
1,826,103. AUTOMATIC COMPENSATOR FOR TRAVELING FELT IN PAPER MAKING MACHINES. WILLIAM J. TREMPE, North Billerica, Mass. Filed July 14, 1930. Serial No. 467,793. 12 Claims. (Cl. 92—49.)

1. A paper making machine including a traveling felt of variable length due to the varying degrees of moisture to which the felt is subjected, an automatic compensator to maintain relative constant tension in the felt during normal running conditions including a pair of tracks, a sheave having a groove in the periphery thereof guided on said tracks, a shaft on which said sheave is rotatably mounted, a roller over which said felt is guided, said roller



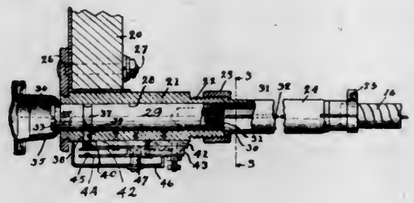
being mounted on said shaft, compensator means automatically to vary the position of said sheave to maintain substantially constant felt tension.

1,826,104. SHIPPING BOX. JOHN C. VAN CLEAF, Maplewood, N. J., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed Apr. 23, 1928. Serial No. 272,006. 14 Claims. (Cl. 229—14.)



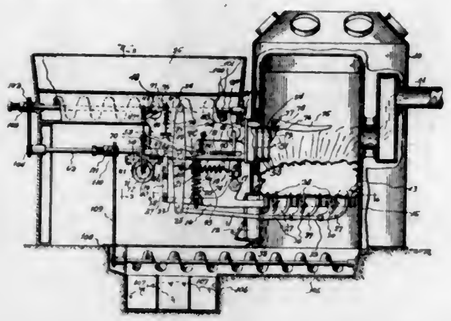
1. In a box for the shipment of bottled goods, the combination of box bottom, side and end walls; flaps hinged to said box end and side walls and foldable to provide a cover; means for supporting the bottles within the box in separated relation; and a device for anchoring the bottles to prevent endwise movement thereof comprising a single piece of material formed to provide a base engageable with said bottles and said separating means and having end wall and side wall members extending upwardly against said cover flaps when the latter are in box-closing position.

1,826,105. SPOTLIGHT SWITCH. GEORGE W. VEALE, Cleveland Heights, Ohio, assignor to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 14, 1929. Serial No. 392,562. 10 Claims. (Cl. 200—165.)



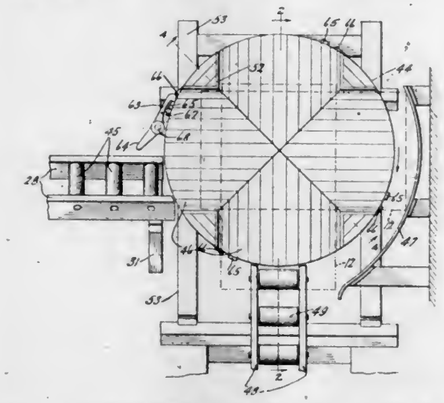
1. In combination with an actuating member mounted for sliding and rotary movement, a torsion transmission element connected to said member, an electrical switch, means for closing said switch in response to the initial part of said sliding movement of said member and maintaining said switch closed during the remainder of said sliding movement or rotation of said member.

1,826,106. AUTOMATIC STOKER. FREDERICK W. VODOZ, Wilmette, Ill. Filed May 2, 1927. Serial No. 188,228. 8 Claims. (Cl. 110—101.)



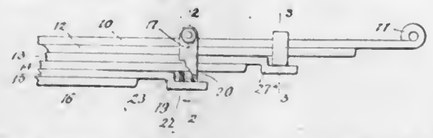
1. In a stoking device, and in combination with a fire box, a grate, shaking means for said grate, and means responsive to a drop in weight of fuel on said grate below a predetermined value for actuating said shaking means.

1,826,107. ROLL HANDLING APPARATUS. FREDERICK VON DER HORST, Chicago, Ill., assignor to The Tribune Company, Chicago, Ill., a Corporation of Illinois. Filed June 25, 1927. Serial No. 201,381. 8 Claims. (Cl. 193—43.)



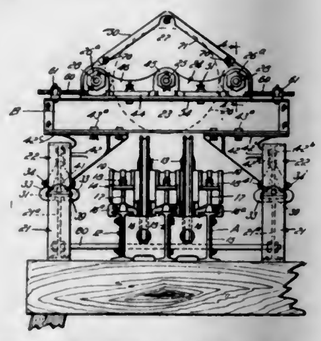
1. In a roll handling apparatus, the combination of means for directing a roll from an upper to a lower level by gravity including a track or skidway, a transfer device comprising a turn-table mounted in an inclined plane and adapted to receive a roll from said track and to be turned by the weight of the roll to change the direction of travel of the latter, and a second track onto which the roll is directed from said turn-table for delivery to a predetermined location.

1,826,108. SPRING. WILLIAM H. WALLACE, Detroit, Mich., assignor, by mesne assignments, to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 5, 1928. Serial No. 290,539. 2 Claims. (Cl. 267—53.)



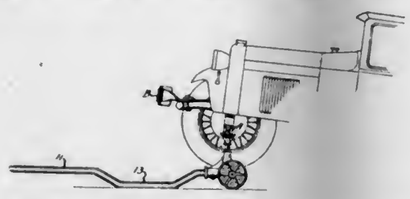
1. In a multiple-leaf spring, the combination of a plurality of leaves of different lengths one of the shorter of which has its end offset from the adjoining longer leaf to provide a space therebetween, and a clip extending through said space and around a plurality of said leaves to secure them together, the thickness of the portion of said clip that extends through said space being greater than the depth of said offset so that the clip will be clamped between the leaves forming said space, said clip and one of said leaves having interengaging means comprising a projection on one and an opening in the other whereby said clip is retained in position and said shorter leaf being free from the clamping action of said clip.

1,826,109. CROWN BLOCK. HARRY P. WICKERSHAM, Walnut Park, Calif., assignor to Baash-Ross Tool Company, Incorporated, Los Angeles, Calif., a Corporation of California. Filed June 11, 1929. Serial No. 370,111. 16 Claims. (Cl. 254—190.)



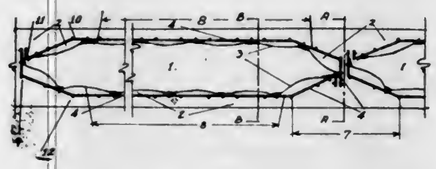
1. A crown block including, spaced base members to be mounted directly on a derrick, blocks adjustably supported on the base members, spaced beams extending between the blocks, sheaves, a shaft supporting the sheaves, spacer plates between the sheaves, a rod supporting the spacer plates, and unitary members on the beams supporting the shaft and rod.

1,826,110. VEHICLE JACK. HENRY J. WICKMAN, Howell, Mich.; Leora M. Wickman administratrix of said Henry J. Wickman, deceased. Filed Apr. 19, 1930. Serial No. 445,575. 1 Claim. (Cl. 280—61.)



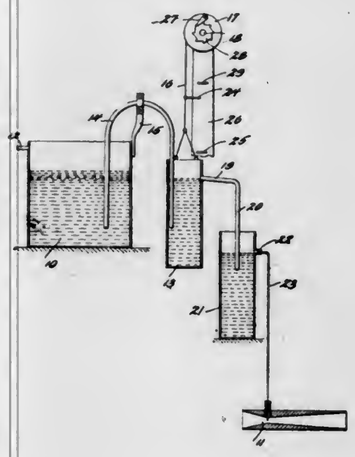
In a jack of the fulcrum lever type, the combination of a body, supporting ground wheels for the body forming the fulcrum of the jack, a pedestal integral with said body and extending upwardly therefrom and offset on said body laterally of the axis of said wheels, said pedestal being formed with a longitudinal internally screw-threaded bore, a load carrying screwthreaded shaft in said bore of said body free to turn therein, said body being also formed with a socket extending substantially at right angles to said bore and laterally from said body at the same side of said wheel axis as said pedestal, a head on said shaft, and a long lever handle engaged at one end in said socket and bent laterally intermediate its ends to engage the ground along said bend when said body is turned to bring said load carrying shaft into upright load carrying position and to permit said handle to be swung upwardly opposite a car bumper to a position to engage said head on said shaft, beneath a car axle.

1,826,111. HOLLOW CONCRETE WALL CONSTRUCTION. GEORGE WESLEY WILLIAMS, Burlingame, Calif. Filed Sept. 13, 1927. Serial No. 219,305. 11 Claims. (Cl. 72—48.)



11. A form comprising two identical halves having flat bodies to which ends are attached at an oblique angle, said ends having end portions extending substantially at right angles to the flat body portions.

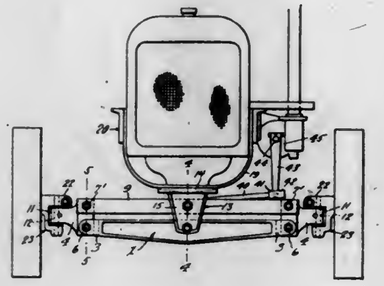
1,826,112. CONSTANT UNIFORM DELIVERY SIPHON. ALVIN CHESLEY WILSON, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Feb. 2, 1929. Serial No. 336,987. 14 Claims. (Cl. 137—78.)



14. In a device for delivering a constant uniform supply of liquid, in combination, a reservoir for said liquid, a receiving vessel having an overflow near its top, a conduit connecting the containers below the liquid level therein, and automatic means to lower the vessel at such a rate as to maintain a constant difference in head between the liquid levels in said containers.

1,826,113. STEERING MEANS AND AXLE ASSEMBLY FOR VEHICLES. ROY J. WINSOR, Bucyrus, Ohio. Filed Feb. 13, 1929. Serial No. 339,570. 2 Claims. (Cl. 280—93.)

1. In combination, an axle, a spindle bracket pivotally connected to each end of the axle, a pair of bars pivotally connected at their ends to said spindle brackets and in spaced parallel relation to said axle, the center-to-center distance between the pivotal mountings of the respective bars being substantially the same and substantially equal to that between the axle mountings, a vehicle supporting unit pivotally mounted on both bars and the axle at points substantially midway of the pivotal mountings thereof, a wheel spindle pivotally mounted on each bracket, a steering arm rigidly secured to each spindle and extending rearwardly therefrom, each steering arm having a reduced threaded section on the outer end thereof, a tie rod having its ends bifurcated, and means for securing



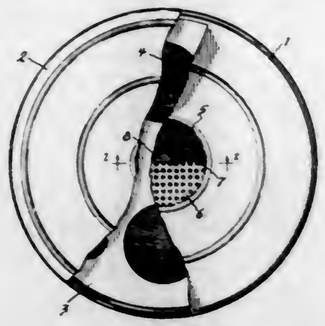
each end of said tie-rod to the outer end of a steering arm, said means comprising a trunnion adapted to be received within the bifurcation, means for vertical pivotal mounting of said trunnion within the bifurcation, said trunnion being provided with a horizontally extending opening for the reception of said reduced end of a steering arm, and a nut for threaded engagement with said arm to lock said trunnion and arm in operative engagement.

1,826,114. INSULATING PANEL. GEORGE A. YOUNG, Detroit, Mich., assignor to Young Brothers Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 5, 1929. Serial No. 411,875. 5 Claims. (Cl. 72—16.)



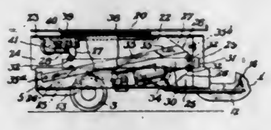
1. An insulating panel comprising a pair of spaced plates forming side walls, perforated transverse partitions extending from wall to wall and secured to said walls, and insulating material packed between said walls and through said partitions.

1,826,115. HUMIDOR. CHARLES A. ZIEBARTH, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 12, 1929. Serial No. 385,428. 6 Claims. (Cl. 99—2.)



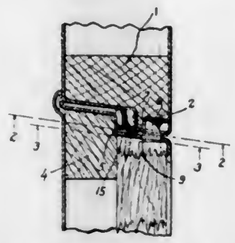
1. In a humidor the combination with an absorbent humidifying element having different appearances when wet or dry, of an indicating element adapted to indicate by comparison of its appearance with that of said humidifying element the moisture condition of said humidifying element.

1,826,116. LIFT-PLATFORM TRUCK. DONALD S. ANDREWS, Rumson, N. J., assignor to Andrews Crane Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1927. Serial No. 183,638. 2 Claims. (Cl. 254—5.)



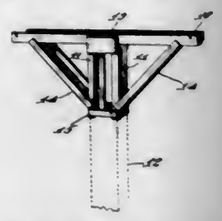
1. A lift-platform truck comprising a tractor frame rigidly connected with a platform-supporting frame, the latter frame being depressed with respect to the former, tractive means mounted in the tractor-supporting frame, rolling supporting means for the platform-supporting frame, a rotatable and vertically movable platform mounted on the platform-supporting frame and spaced from the tractor-supporting frame a distance sufficient to permit free rotation thereof, and means for elevating the platform a distance at least equal to the normal distance above the floor of that part of the frame which lies between the rotatable platform and the tractor frame.

1,826,117. DOOR LOCK FOR VEHICLES. SYLVESTER ARMITAGE, Highland Park, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,588. 7 Claims. (Cl. 292—2.)



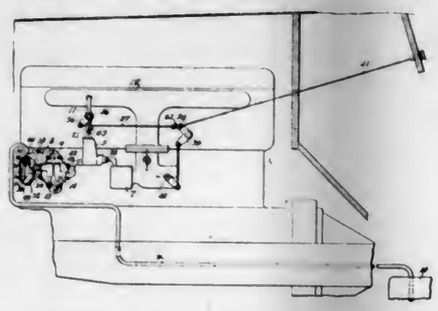
1. In a door lock, the combination of a striker having a shoulder, a lock bolt adapted to move longitudinally and to engage the shoulder of said striker plate, a bolt guide having a beveled side for said lock bolt, said bolt having a loose fit in said guide, pressure means for holding the lock bolt in tight engagement with the shoulder of the striker plate and in tight engagement with the sides of the guide, whereby the bolt engages in wedging relation the said guide when stressed by said pressure means.

1,826,118. T-HEAD FOR SHORES. HUGH J. BAKER, Indianapolis, Ind. Filed May 4, 1929. Serial No. 360,355. 2 Claims. (Cl. 248—30.)



2. A T-head for shores, comprising a horizontal leg, a vertical leg having a socket for the reception of a shore, and braces extending from near the ends of said horizontal leg to near the bottom of said vertical leg, said braces abutting against the under face of said horizontal leg and the faces of said vertical leg and having flanges overlapping and secured to the sides of said horizontal and vertical legs.

1,826,119. LIQUID FUEL SUPPLY SYSTEM. ALBERT E. BERDON, Detroit, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Corporation of Michigan. Filed Nov. 9, 1928. Serial No. 318,163. 27 Claims. (Cl. 123—119.)



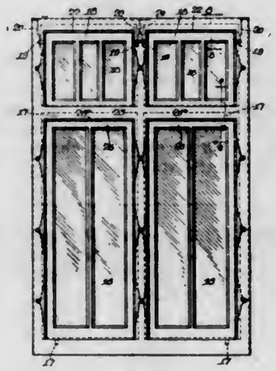
1. In a liquid fuel supply system for internal combustion engines, reciprocatory liquid fuel pumping means connected to supply the engine, a vapor separator interposed in said connections and a vapor take-off extending from said separator directly to the intake manifold of the engine.

1,826,120. LINEMAN'S PLATFORM. BURNETT C. BOOTH, Los Angeles, Calif. Filed June 25, 1928. Serial No. 288,256. 6 Claims. (Cl. 304—28.)



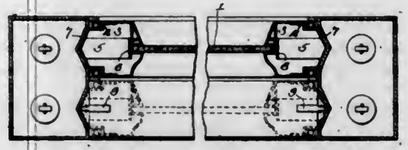
1. A lineman's platform comprising a platform member, collapsible supporting members mounted adjacent one end of said platform member to swing from position alongside the platform to position perpendicular thereto, collapsible bracing means for holding said supporting members in said last-named position, and securing means adapted to embrace a pole and hold both the upper and lower ends of said supporting members inwardly against said pole when said supporting members are in position perpendicular to the platform, said supporting members, bracing means, and securing means, being adapted to lie substantially in the plane of said platform when collapsed.

1,826,121. WINDOW CONSTRUCTION. RICHARD S. BROGIE, Chicago, Ill., assignor to Brogie Window Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 13, 1929. Serial No. 354,845. 6 Claims. (Cl. 20—53.)



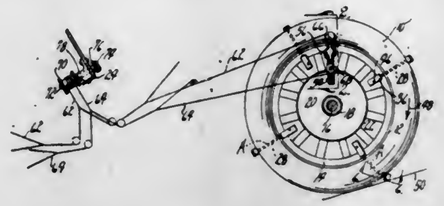
1. In a window structure, a frame provided with a sash opening with the top and side edges of the frame jambs longitudinally recessed, movable strips loosely located in the recesses, resilient means normally holding the strips at the limit of movement toward the sash opening, the sash being pivoted on a line permitting it to swing on said pivots, in combination with a pivot transom member, positioned in the frame above the sash, the jambs in proximity to the transom being likewise recessed with cooperating movable strips in said recesses substantially as described.

1,826,122. WINDOW CONSTRUCTION. RICHARD S. BROGIE, Chicago, Ill., assignor to Brogie Window Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1929. Serial No. 359,107. 2 Claims. (Cl. 189—73.)



1. A window structure comprising sliding sash members provided with a recess formed in the longitudinal edges thereof, in combination with laterally movable members slidably mounted in and closely fitting said recesses, a plurality of relatively flat V-shaped strips of material each having its apex fastened to the sash member and its ends fastened to said slidable member to provide resilient means arranged to force said slidable members toward their outer limit of movement with the adjacent faces of the slidable member and the window jamb in cooperating relation, one of said faces having a convex bevel and the other a concave bevel.

1,826,123. QUICKLY APPLIED NONSKID DEVICE. ABROM D. BRUNER, Rockwell City, Iowa. Filed July 16, 1930. Serial No. 468,356. 9 Claims. (Cl. 152—14.)

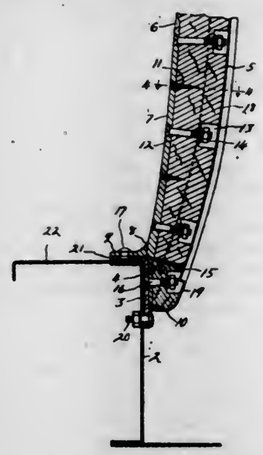


1. In a quickly applied non-skid device, a non-skid member pivoted to swing selectively within the outline of a tire or over the tread of the tire, a thrust pin operatively associated with said non-skid member and means independent of said thrust pin and having a cam surface for engaging said thrust pin during its rotation with said tire and thereby causing said member to swing to either of such positions.

1,826,124. METHOD OF REMOVING CARBONACEOUS MATTER FROM SULPHUR AND IMPROVING ITS COLOR. LYMAN S. BUSHNELL and RITA MORALES, Freeport, Tex., assignors to Freeport Sulphur Company, a Corporation of Texas. Filed July 31, 1928. Serial No. 296,625. 2 Claims. (Cl. 23—229.)

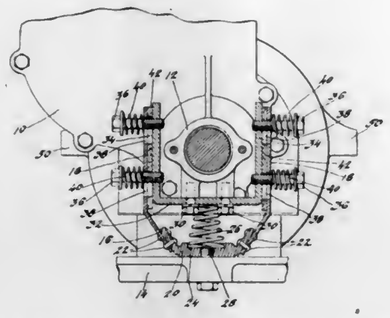
1. A process of treating sulphur containing carbonaceous impurities, comprising reducing the sulphur to a liquid state, intimately mixing therewith a small percentage of charcoal and powdered iron sulphide, and filtering the resulting mass.

1,826,125. BODY CONSTRUCTION. ALBERT A. CRIPPS, Detroit, Mich., assignor, by mesne assignments, to Chrysler Corporation, a Corporation of Delaware. Filed July 2, 1928. Serial No. 289,889. 3 Claims. (Cl. 298—28.)



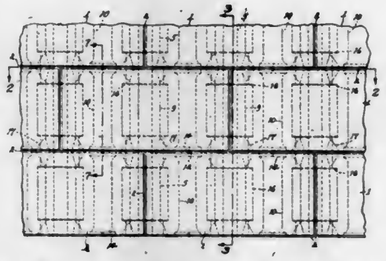
1. In a vehicle framework, the combination with a main sill substantially channel-shape in cross section, of an auxiliary still substantially inverted L-shape in cross section secured to said main sill and forming therewith a chassis framework, a pillar, and means for connecting said pillar to the auxiliary sill including a pillar iron secured to the pillar and provided with a yoke at its lower end having portions secured to the legs of said auxiliary sill.

1,826,126. MOTOR SUPPORT. EDWARD J. DELAHANTY, Lake St. Clair, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 19, 1926. Serial No. 123,361. 7 Claims. (Cl. 248—14.2.)



7. In a motor support of the class described, resilient means for yieldably holding a motor against downward movement, and lateral supports for frictionally engaging said motor so as to dampen downward movement thereof and positively secure said motor against movement about its longitudinal axis.

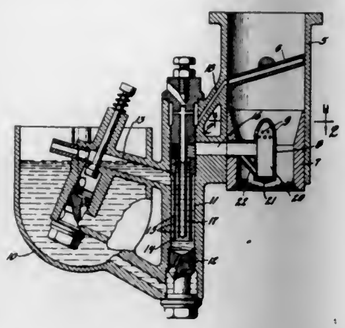
1,826,127. WALL CONSTRUCTION. EMMA L. EWING, Detroit, Mich., assignor of one-third to Alfred M. Lamar and one-third to Russell H. Jenkins, Detroit, Mich. Filed Oct. 27, 1930. Serial No. 491,417. 8 Claims. (Cl. 72—29.)



1. A wall comprising a plurality of units arranged in pairs with the units of each pair in opposed relation to form the outer sides of the wall, a rib adjacent each end of each unit projecting laterally from the inner side of the unit to meet like ribs on an opposed unit for spacing the units of each pair apart and forming vertical passages at the abutting ends of adjacent pairs of units and vertical air passages between the units of each pair intermediate the ends thereof, and cement columns formed in said vertical passages for uniting the units of each pair at the ends thereof and for uniting the abutting ends of adjacent pairs of units, and separate tubular means extending transversely of said ribs adjacent the abutting ends of adjacent pairs of units and horizontally through said cement columns with the ends thereof opening into said vertical air passages and forming horizontal air passages extending longitudinally of the wall and connecting said vertical air passages.

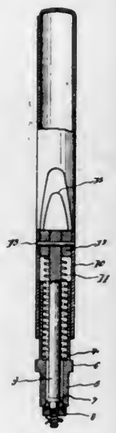
1,826,128. CARBURETOR. GEORGE FRANCIS GIBSON, Luton, England, assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,941. 4 Claims. (Cl. 261—34.)

1. In a carburetor having a main mixing passage with an air inlet, a mixture outlet and a throttle valve in the mixture outlet; means for forming an emulsion of fuel and a small quantity of air; means for discharging said emulsion into the main mixing passage, and means connected



with said discharging means for collecting liquid fuel from the passing stream of emulsion and discharging the collected fuel as an accelerating charge upon a sudden opening of the throttle valve.

1,826,129. WHISTLE. ALBIN W. GRONQUIST, Brainerd, Minn., assignor of one-half to Isaac Ginsburg, Brainerd, Minn. Filed Nov. 24, 1930. Serial No. 497,679. 3 Claims. (Cl. 116—137.)

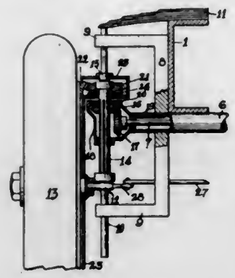


1. A whistle having in combination a hollow body adapted to be placed in communication with a source of fluid under pressure, a bell slidably engaging said body along a telescoping portion of the same, said bell being formed with a sound producing lip, a valve closure having a seat in said body and means for operatively connecting said bell and closure and for normally retaining said closure on its seat comprising a valve stem and a coiled spring confined on said stem within the telescoping portions of said bell and body.

1,826,130. FRONT WHEEL DRIVE MECHANISM FOR VEHICLES. SIDNEY C. HALVERSEN, San Francisco, Calif. Filed Dec. 2, 1930. Serial No. 499,469. 5 Claims. (Cl. 180—43.)

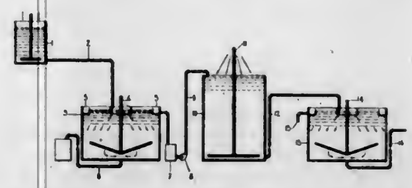
1. In a front wheel drive mechanism for vehicles, a vehicle frame, a bracket secured to the vehicle frame, a substantially upright rod movably mounted on the bracket, an axle secured to the rod, a vehicle wheel mounted on

the axle, a splined sleeve slidably mounted on the rod having a gear thereon which is adapted to move up and downwardly independently of the sleeve but which is adapted to rotate with the sleeve, a drive shaft for rotat-



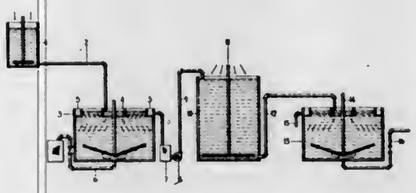
ing the sleeve, having a gear thereon in mesh with the gear movably mounted on the sleeve, and means associated with the sleeve and the vehicle wheel for transmitting rotary motion to the said wheel from the sleeve.

1,826,131. LITHOPONE AND PROCESS OF MAKING SAME. MARION L. HANAHAN, Newark, N. J., assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 163,213. 8 Claims. (Cl. 134—78.)



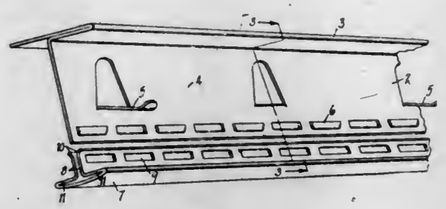
3. The process of separating calcined lithopone composed of particles of various sizes into two or more fractions in each of which the particles are substantially within a limited range of sizes, which comprises deflocculating an aqueous slurry of calcined lithopone and elutriating said deflocculated slurry.

1,826,132. LITHOPONE PIGMENT SUITABLE FOR FLAT WALL PAINTS AND ENAMELS. MARION L. HANAHAN, Newark, N. J., assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 7, 1927. Serial No. 173,531. 1 Claim. (Cl. 134—78.)



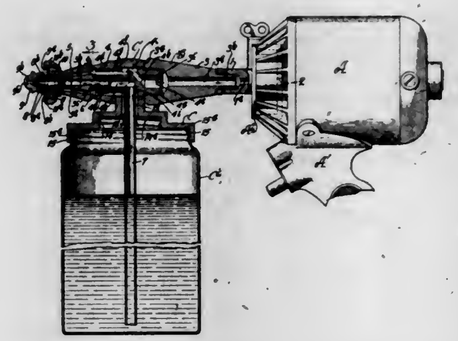
A calcined lithopone pigment which when mixed with oil to produce a flat wall paint produces a paint which when dry shows substantially complete diffused reflection of light, said lithopone pigment being substantially identical with the fraction of pigment which settles out against the flow in elutriating a deflocculated aqueous slurry of calcined lithopone at a rate of more than 6 inches and less than 6 feet per hour.

1,826,133. STRUCTURAL DEVICE. CHARLES T. HATCH, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed May 9, 1930. Serial No. 450,898. 11 Claims. (Cl. 189—35.)



1. In a structural device, the combination of a support member of T cross section having a series of lugs struck from the web portion thereof adjacent its outer edge with adjacent lugs projecting oppositely, said web portion also having a plurality of laterally projecting fingers struck therefrom with adjacent fingers projecting oppositely, said fingers being rearwardly curved at their ends, and an attaching member having a transversely curved body portion and spaced support member engaging flanges inwardly offset from its edges, each of said flanges having a plurality of lugs struck inwardly therefrom to coact with the lugs on said support member.

1,826,134. SPRAYING DEVICE. WOLFGANG HERMANN, Chicago, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1928. Serial No. 326,135. 6 Claims. (Cl. 91—45.)

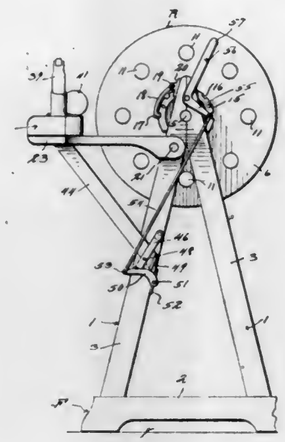


1. In combination: a container cover equipped with a ring; and a nozzle comprising a pair of sections, one of said sections having a bearing extending through said ring, said sections having screw connections and having shoulders clamping the ring between them, said bearing having an annular air-passage communicating with the interior of said cap.

1,826,135. RACK FOR OILCLOTH. EDWARD P. JOHNSON, Sagamore, Pa. Filed May 5, 1928. Serial No. 275,446. 2 Claims. (Cl. 242—55.4.)

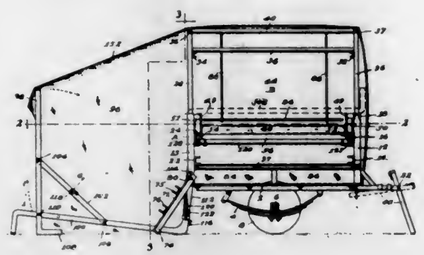
1. An apparatus of the class described comprising a supporting structure, a reel rotatably mounted thereon, means for supporting a plurality of rolls of material upon the reel, a cutting table having swinging connection with the supporting structure for movement in a vertical direction with respect to the reel, brace arms operatively connected with the table, coacting means carried by the supporting structure and the arms for holding the table

in its raised or working position, means for releasing the arms when the table is raised to permit the table to swing downwardly, a severing member slidable across the table



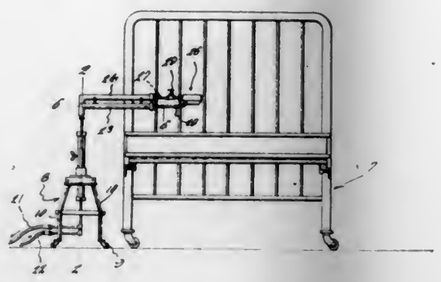
for severing the material thereon, and means for maintaining said severing member at one end portion of the table and outwardly of the adjacent end of the reel.

1,826,136. CAMP TRAILER. AMZIE E. JORDAN, Beloit, Kans. Filed Nov. 12, 1928. Serial No. 318,918. 3 Claims. (Cl. 206—23.)



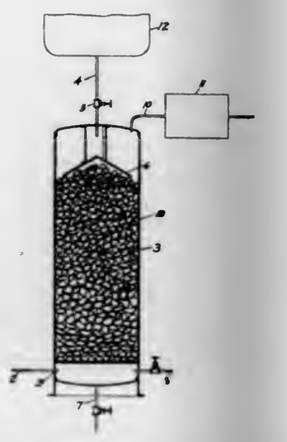
1. The combination with a trailer, a main frame mounted upon said trailer, a vertically adjustable secondary frame mounted upon said main frame, and an extension consisting of a U-shaped member bent upwardly at its ends and operably connected to the main frame so that it can be adjusted to a substantially horizontal position for use or folded over the secondary frame for traveling, an arched member operably connected to the rear portion of said U-shaped member so that it can be adjusted to an upright position or folded against the U-shaped member, and braces operably connected at their ends to the U-shaped member and said arched member for securing the latter in upright position, said braces being jointed intermediate their ends so that they may be folded with the arched member.

1,826,137. INVALID'S CUSPIDOR. ANDREW S. KUSHNER, Beccaria, Pa. Filed July 1, 1930. Serial No. 465,217. 5 Claims. (Cl. 4—262.)



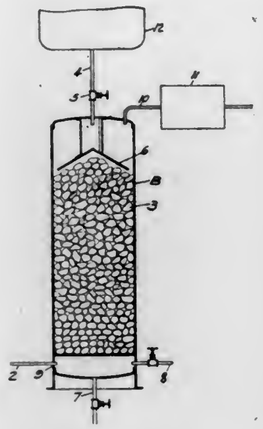
1. In a structure of the class described, a wheel supported stand including a plurality of suspension legs, and a top attached to said legs, a disc-like member fastened on said top and provided with vertical guide holes, and set screws projecting into said guide holes, a mounting including portions adjustable through said guide holes, and a circulating conduit embodying piping having portions mounted for adjustment in said mounting, the conduit mounting being bodily adjustable as a single unit, and the conduit being individually adjustable with respect to the mounting when the latter is in fixed position on said disc.

1,826,138. PROCESS OF REFINING HYDROCARBON OILS WITH SULPHONIC ACID SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,523. 19 Claims. (Cl. 196—36.)



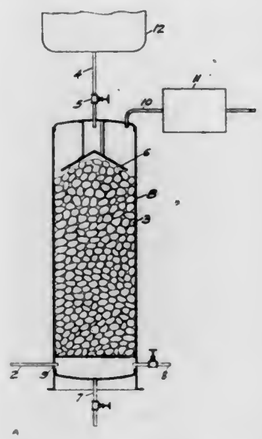
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized mineral oil with a water solution of a sulphonic acid salt of zinc, and then condensing the vapor.

1,826,139. PROCESS OF REFINING HYDROCARBON OILS WITH COPPER SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,514. 17 Claims. (Cl. 196—36.)



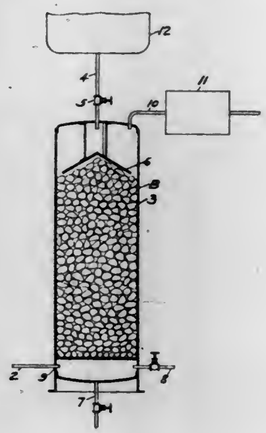
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a water solution of a copper salt maintained in solution and then condensing purified oil vapor separated from products of reaction and treating agent.

1,826,140. PROCESS OF REFINING HYDROCARBON OILS WITH CADMIUM SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,515. 17 Claims. (Cl. 196—36.)



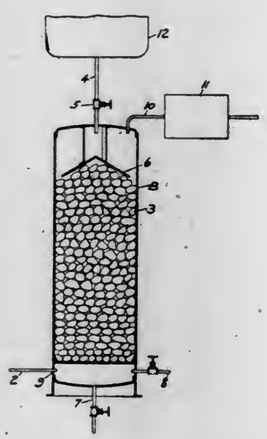
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a water solution of a cadmium salt maintained in solution, and then condensing purified oil vapor separated from products of reaction and treating agent.

1,826,141. PROCESS OF REFINING HYDROCARBON OILS WITH MERCURY SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,516. 17 Claims. (Cl. 196—36.)



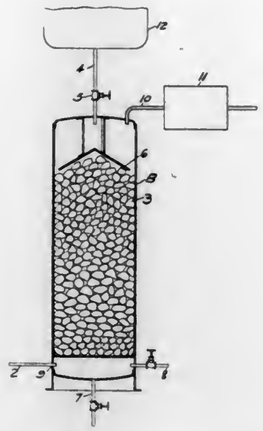
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a water solution of a mercury salt maintained in solution, and then condensing purified oil vapor separated from products of reaction and treating agent.

1,826,142. PROCESS OF REFINING HYDROCARBON OILS WITH IRON SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,517. 17 Claims. (Cl. 196—36.)



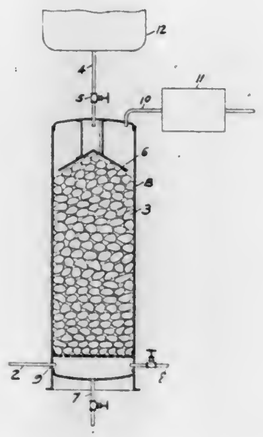
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a maintained water solution of an iron salt, and then condensing purified oil vapor separated from products of reaction and treating agent.

1,826,143. PROCESS OF REFINING HYDROCARBON OILS WITH CHROMIUM SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,518. 17 Claims. (Cl. 196—36.)



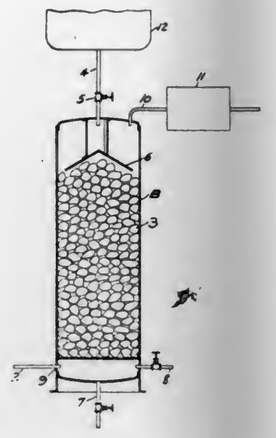
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a maintained water solution of a chromium salt, and then condensing purified oil vapor separated from products of reaction and treating agent.

1,826,144. PROCESS OF REFINING HYDROCARBON OILS WITH MANGANESE SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,519. 16 Claims. (Cl. 196—36.)



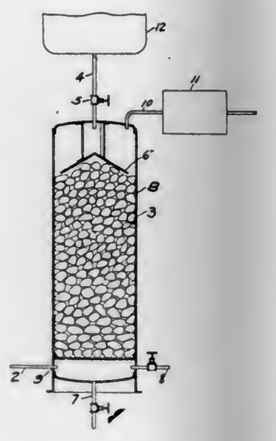
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a maintained water solution of a manganese salt, and then condensing purified oil vapor separated from products of reaction and treating agent.

1,826,145. PROCESS OF REFINING HYDROCARBON OILS WITH ALUMINUM SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8 1929. Serial No. 361,520. 17 Claims. (Cl. 196—36.)



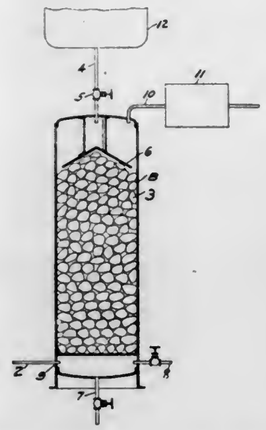
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a maintained water solution of an aluminum salt, and then condensing purified oil vapor separated from products of reaction and treating agent.

1,826,146. PROCESS OF REFINING HYDROCARBON OILS WITH NICKEL SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,521. 17 Claims. (Cl. 196—36.)



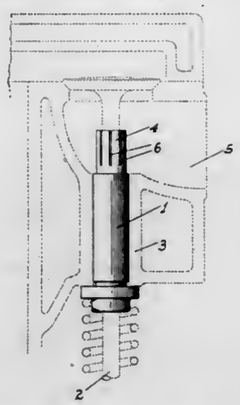
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a maintained water solution of a nickel salt, and then condensing purified oil vapor separated from products of reaction and treating agent.

1,826,147. PROCESS OF REFINING HYDROCARBON OILS WITH COBALT SALTS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Original application filed May 8, 1929, Serial No. 361,513. Divided and this application filed May 8, 1929. Serial No. 361,522. 17 Claims. (Cl. 196—36.)



1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a maintained water solution of a cobalt salt and then condensing purified oil vapor separated from products of reaction and treating agent.

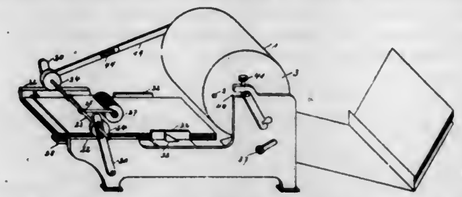
1,826,148. VALVE STEM GUIDE. WILLIAM P. LOWTHER, Merced, Calif. Filed Dec. 27, 1929. Serial No. 416,843. 3 Claims. (Cl. 308—4.)



1. A valve stem guide comprising a body member through which a stem is adapted to project, and outwardly yieldable bearing means for the stem formed as a unitary extension of the inner end of the body.

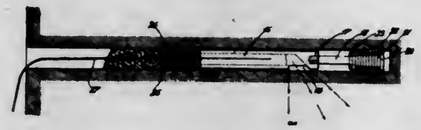
1,826,149. STENCILING MACHINE. JOHANN ARTHUR MUELLER, Berlin, Germany. Filed Nov. 2, 1929, Serial No. 404,440, and in Germany July 13, 1929. 2 Claims. (Cl. 101—119.)

1. A demountable printing drum for a stenciling machine, having a part of its surface perforated like a sieve and forming a closed cylinder for taking a stock of ink inside, eliminating internal ink trough and distributing means, said perforated surface being of smaller area than the stencil printing-surface, said perforated area being perforated less at its edges than at its center, said cylinder



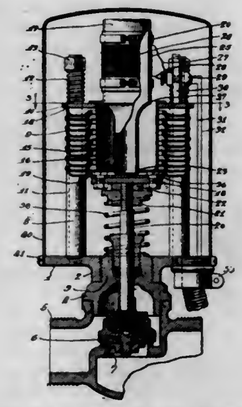
being so designed that the stock of ink will lie in an imperforated part of the drum when the machine is stopped and ink being introduced through a hole in a drum-side-plate fitting to the ink-package.

1,826,150. BLASTING CARTRIDGE AND TAMPER. ERLE ORMSBY, St. Louis, Mo., assignor to Central Mine Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed June 27, 1928. Serial No. 288,587. 12 Claims. (Cl. 102—11.)



12. A blasting cartridge adapted to be inserted in a hole in the mineral to be blasted and to contain explosives to be exploded and having an outlet for the explosive forces, means for engaging in the mineral at the sides of the hole in which the cartridge is mounted to limit extent of longitudinal movement of the cartridge toward the opening from said hole under the impulse of the explosive force, a device for retaining said means in cooperative relationship with the cartridge, and a device for spreading said means to engage in the mineral at the sides of the hole in which the cartridge is mounted actuated under the impulse of the explosive force.

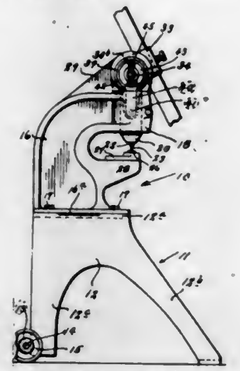
1,826,151. THERMOELECTRIC CONTROL VALVE. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 16, 1927. Serial No. 213,305. 3 Claims. (Cl. 236—68.)



1. A regulator for controlling the operation of a valve including a fitting carried by the body of said valve and having abutments extending therefrom, a plate normally resting on said abutments, spring means for exerting a pressure against said plate, an expansible and contractible

vessel hermetically sealed to said plate and having an opposed movable wall abutting against the outer end of the stem of said valve, a volatile fluid in said vessel, and a heating device therefor whereby the initial operation of said vessel moves said wall to operate said valve and subsequent operation exerts a pressure against said plate to overcome said spring pressure.

1,826,152. PUNCH PRESS. THEODORE F. PHILIPPI, St. Louis, Mo. Filed Feb. 21, 1929. Serial No. 341,606. 4 Claims. (Cl. 74—14.)

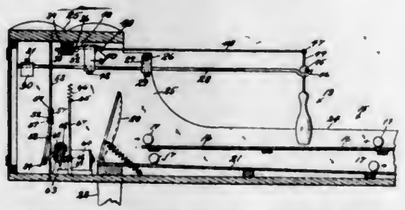


1. In a punch press the combination with a reciprocating plunger and an actuating shaft therefor, of a mounting for said shaft, said mounting having an integral bearing at one end for journaling the remote end of said shaft, the other end of said mounting being enlarged and flared outwardly, a ball bearing arranged within said enlarged end flush with the outer face thereof, and supporting the shaft adjacent to said plunger, an eccentric formed integral with said shaft and projecting outwardly therefrom, a ball bearing mounted on said eccentric, a pitman pivotally connected at the lower end to said plunger, and a ring carried by the upper end of said pitman and mounted on the ball bearing of said eccentric, said ring being juxtaposed to and having sliding contact with the flushed faces of said enlarged end and the shaft ball bearing arranged therein.

1,826,153. LIGHT RESISTANT LITHOPONE. JAMES A. SINGMASTER, Bronxville, N. Y., and HENRY SEYMOUR COLTON, Wilmington, Del., assignors, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Feb. 7, 1929. Serial No. 338,324. 18 Claims. (Cl. 134—78.)

3. Lithopone resistant to light and containing a compound of an element of the group consisting of vanadium, chromium, tungsten and uranium.

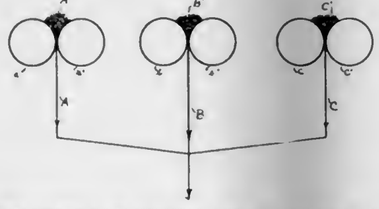
1,826,154. PIN RESETTING APPARATUS. FRANK D. TALBERT, Los Angeles, Calif. Filed Oct. 18, 1930. Serial No. 489,514. 17 Claims. (Cl. 273—44.)



1. A pin resetting apparatus including a cross bar arranged under a pivotally mounted lever for moving it from an inclined to a horizontal position to reset a pin over a ball course, a crank shaft arranged under said bar, links pivotally connecting said crank shaft to said cross bar, and an electric motor for rotating said shaft.

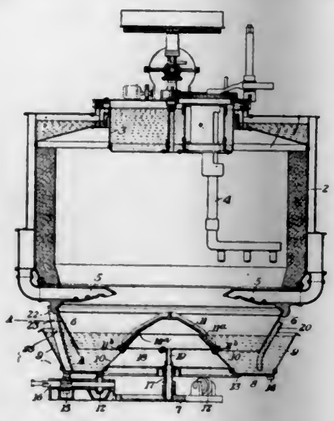
8. In a pin resetting apparatus the combination with a pivotally mounted lever, a pin pivotally connected to one end of said lever, a latch for normally holding said lever in a horizontal position so said pin is suspended adjacent a ball course in position to be struck by a ball, means whereby said latch is released when said pin is struck by a ball so that said lever will move from a horizontal to an inclined position to lift said pin from the ball course, of a resetting bar arranged under said lever, and electrically operated means for actuating said resetting bar to move said lever from an inclined to a horizontal position to reset said pin.

1,826,155. METHOD OF MAKING LINOLEUM. JOHN B. THOMPSON, Kearny, N. J., assignor to Congoleum-Nairn, Inc., a Corporation of New York. Filed Aug. 11, 1930. Serial No. 474,404. 4 Claims. (Cl. 154—26.)



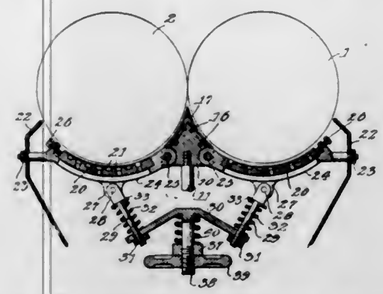
1. The method of producing from plastic material, a sheet of continuous indefinite length, having a substantially uniform variegated effect from end to end, which comprises the steps of forming a plurality of series of differently colored primary sheets of plastic composition, the primary sheets of each series being of the same coloring but differing from the coloring of the primary sheets of another series; positioning, in predetermined order and in superimposed overlapping relation, primary sheets selected from the respective series to form a laminated sheet of a thickness substantially greater than that intended for the finished product and of continuous indefinite length; maintaining a continuous supply of said overlapping primary sheets; and consolidating the overlapping primary sheets to form a variegated sheet of reduced thickness and of continuous indefinite length.

1,826,156. GAS PRODUCER. FRANCIS H. TREAT, Bellevue, Ohio, assignor to Duff Patents Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 12, 1926. Serial No. 147,945. 4 Claims. (Cl. 48—66.)



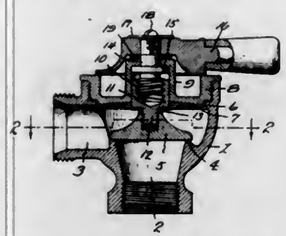
4. A gas producer comprising a relatively rotatable concentric body adapted to contain a solid fuel bed, an ash pan, said ash pan having a central inverted cone-shaped member extending up into the body for supporting most of the fuel and ashes within the body, and means for causing water within the ash pan to overflow directly under said cone-shaped member at a predetermined level, and means other than said cone-shaped member for exclusively supplying the fuel bed in said body with air.

1,826,157. APPARATUS FOR MILLING WHEAT. PAUL TURUCZ, Chicago, Ill. Filed May 31, 1930. Serial No. 458,114. 2 Claims. (Cl. 83—14.)



1. In a device of the character described, the combination of a pair of break-rolls, a substantially inverted V-shaped screen disposed between said break-rolls and immediately below their point of contact, said screen being adapted to cooperate with said break-rolls for increasing the working surface of said device, and means pivotally supported adjacent each end of said screen adapted for further increasing the working surface of said device, said last mentioned means comprising a segment having a plurality of inclined, spaced, ribbed portions and openings provided between said ribbed portions, and adjustable means for supporting said segments in operative position with respect to said break-rolls.

1,826,158. VALVE MECHANISM. WILLIAM S. VALMORE, Mansfield, Ohio. Filed Dec. 7, 1928. Serial No. 324,423. 1 Claim. (Cl. 251—31.)

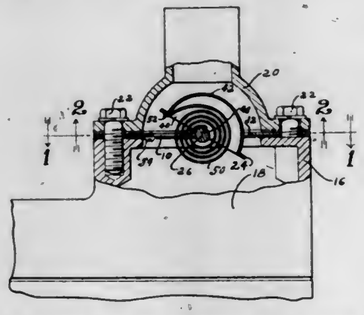


A valve mechanism comprising a casing having a valve chamber therein, an inlet passageway leading into said valve chamber, an outlet passageway leading from said valve chamber, an annular valve seat formed integral with said casing, a valve adapted to be moved into engagement with said valve seat, a peripheral shoulder formed on said valve casing and defining a diaphragm seat, a diaphragm resting on said diaphragm seat, a valve bonnet comprising a plug threadedly secured in the upper end of said casing and holding said diaphragm in place and having a centrally disposed hollow annular, upstanding portion, a plug slidably and non-rotatably mounted in said portion and having a threaded opening therein, said plug extending through said diaphragm and threadedly connected with said valve, a valve stem threadedly secured in said plug and having an annular flange thereon having a working fit within the upstanding portion of said plug and a valve handle non-rotatably secured to said valve stem.

1,826,159. ELECTROPLATING. LEON R. WESTBROOK, Cleveland Heights, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed July 11, 1927. Serial No. 205,038. 6 Claims. (Cl. 204—1.)

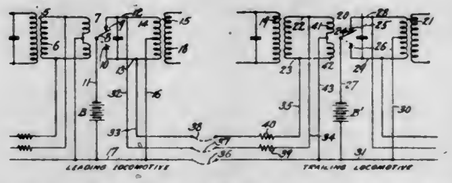
5. A composition of matter adapted for use in the preparation of an electroplating bath consisting of a mixture of 48 parts cadmium hydroxide, 120 parts sodium cyanide, 60 parts sodium sulfate, 1.5 parts crystallized nickel sulfate, and 12 parts Turkon oil.

1,826,160. VALVE. HARRY T. WOOLSON, Detroit, Mich., and ANDREW O. BURGESS, Brooklyn, N. Y., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 11, 1929. Serial No. 346,181. 8 Claims. (Cl. 236—34.)



1. In a member having a passageway therein, a valve comprising a substantially planular body portion extending transversely of said passageway and having an opening therein, a closure for the opening pivotally supported on said body portion, a depressed portion on said closure, and a coiled bimetallic connection between said closure and said body portion in said depressed portion.

1,826,161. RAILWAY TRAFFIC CONTROLLING APPARATUS. LESLIE R ALLISON, Wilkinsburg, and FRANK H. NICHOLSON, Edgewood Borough, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1930. Serial No. 481,616. 12 Claims. (Cl. 246—63.)

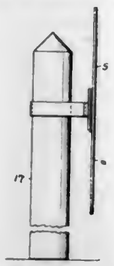


1. In combination, signalling means on a locomotive, said means comprising a master relay having an armature movable between contacts at variable rates in accordance with the frequency of coded impulses corresponding to traffic conditions in advance of said locomotive; signalling means on a trailing locomotive, comprising a master relay having an armature movable between contacts at variable rates; and connections whereby the armature of the second master relay is caused to move at the same rate as that of the first master relay.

1,826,162. SIGN. WILLIAM H. BALK, Cleveland, Ohio. Filed Apr. 30, 1931. Serial No. 533,909. 3 Claims. (Cl. 40—125.)

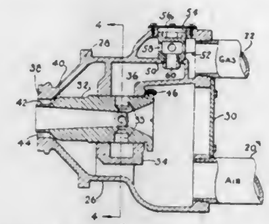
1. A sign comprising a body having a hanger member attached thereto, a bracket member, co-operating interlocking means on said members for slidably securing said

members together, a flanged leaf spring on said bracket member for automatically locking said members against relative longitudinal movement when said members have



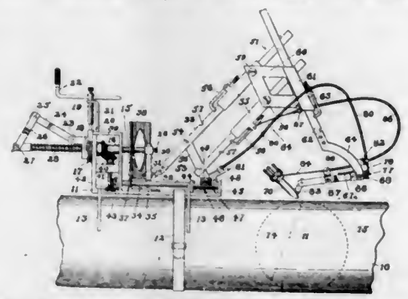
been slid to interlocking position, and registering openings in said body and said hanger member adjacent the flanged leaf spring.

1,826,163. COMBINED GAS BURNER AND MIXING APPARATUS. HUGH B. BARBER and WILLIAM M. HEPBURN, Toledo, Ohio, assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Feb. 13, 1930. Serial No. 428,094. 12 Claims. (Cl. 158—99.)



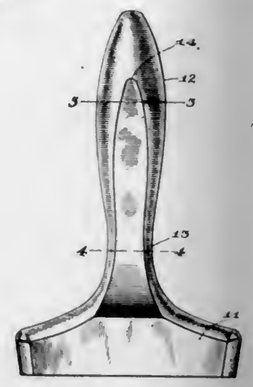
1. In apparatus adapted to utilize air under pressure to induce a flow of gas under lesser pressure, the combination with an entraining tube having a gas intake intermediate its ends, of a gas chamber wherein the gas intake portion of said tube is contained, a casing forming an air chamber about said tube and having a nozzle adjacent which the discharge end of the tube terminates, means for supplying gas to said gas chamber, means for supplying air to said air chamber, the space relationship between said nozzle and the adjacent end of the tube being such as to form a passage through which air from within the casing may flow for supporting combustion in the mixture issuing from said tube.

1,826,164. APPARATUS FOR THE GUIDING OF TOOLS IN THREE DIMENSIONS. ROBERT M. CARRIER, Jr., and MAURICE G. WHITLEY, Louisville, Ky. Filed Feb. 5, 1931. Serial No. 513,760. 27 Claims. (Cl. 266—23.)



26. Apparatus for guiding a tool in three dimensions which comprises an adjustable ratio arm carrying the tool, and means for so guiding the said arm that the tool is carried in a predetermined three-dimensional path.

1,826,165. BRUSH HANDLE. RAYMOND H. CARTWRIGHT, Kane, Pa., assignor to Holgate Brothers Company, Kane, Pa. Filed July 9, 1930. Serial No. 466,873. 2 Claims. (Cl. 15—143.)

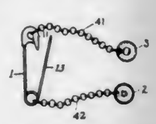


1. A handle for paint brushes or the like, having a wide bristle end from which extends a neck terminating in a shank, said shank forming a grip and being substantially oval-shaped in cross section, opposite sides of the neck being provided with flat surfaces, and parallel flat surfaces on the faces of the shank.

1,826,166. CONCRETE ADMIXTURE COMPOSITION. CLAUDE D. CORY, Seattle, Wash. Filed Sept. 13, 1930. Serial No. 481,797. 5 Claims. (Cl. 106—27.)

1. A concrete admixture composition comprising fused resinous manganese salt, caustic soda solution, silicate of soda, and tar.

1,826,167. SECURING DEVICE FOR CLOTHING. SARA DAVID, West View, Pa. Filed Oct. 3, 1930. Serial No. 486,114. 1 Claim. (Cl. 24—73.)

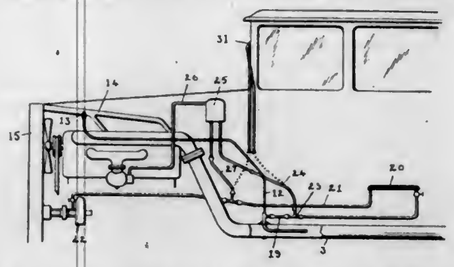


A securing device for clothing including a safety pin, two equal lengths of chain of links of relatively small diameter and of light weight, secured one to each of the two ends of the safety pin, and a snap fastener composed of two complementary parts of relatively large diameter and great weight, as compared with the links of the chain, secured one part to each of the lengths of chain at the otherwise free ends thereof.

1,826,168. STEAM HEATING SYSTEM FOR AUTOMOBILES. JAMES S. DOUGLASS, Jr., Canandaigua, N. Y. Filed June 13, 1927. Serial No. 198,411. 5 Claims. (Cl. 257—241.)

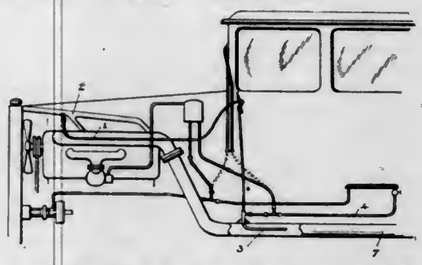
1. In a steam heating system for automobiles the combination of a steam generator adapted to be mounted in the exhaust pipe of the internal combustion engine of the automobile and comprising an outer tube having one end closed and the other end open and bent to one side thereof, to project thru an opening in the exhaust pipe, a base-plate having an opening therein, a nipple on said base plate forming a continuation of the opening in said base plate, a shoulder formed within said nipple, a flange formed on the end of said outer tube and adapted to rest on said shoulder within said nipple, a pipe connection threaded into said nipple to form a continuation of said outer tube and force said flange of said outer tube in

place on said shoulder and form a steam tight joint between said outer tube, said base plate and said pipe connection, a smaller inner tube held suspended within said



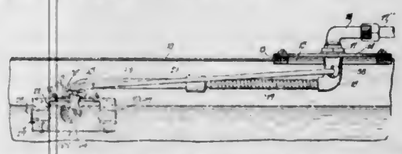
outer tube both inside and outside of the exhaust pipe, said inner tube being connected to a uniform water supply to feed water into said outer tube.

1,826,169. HEATING SYSTEM FOR AUTOMOBILES AND COUPLING THEREFOR. JAMES S. DOUGLASS, Jr., Canandaigua, N. Y. Filed Sept. 24, 1928. Serial No. 307,802. 5 Claims. (Cl. 257—241.)



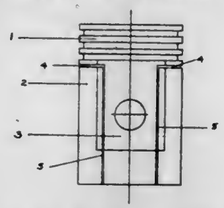
1. A coupling for a heating system comprising an exhaust pipe having a large hole therein, an apertured block adapted to cover said hole, fork extensions on each side of said block having an opening between them, a strap adapted to pass under the pipe opposite to said hole, said strap having a stud on each end thereof, nuts engaging with said stud by which the block and strap are drawn close against the exhaust pipe, the block closing the large opening in the pipe two openings in said block, a U shaped pipe extending through said openings, packing material on top of said block surrounding said U shaped pipe, a washer having two holes in it on top of said packing material, a ring cap threaded to said block and adapted to squeeze the packing material between the washer and the block and seal the joint between the block and the U shaped pipe.

1,826,170. FLUID STRAINER. JOHN P. DUGGAN, Long Island City, N. Y. Filed Aug. 28, 1930. Serial No. 478,450. 3 Claims. (Cl. 210—97.)



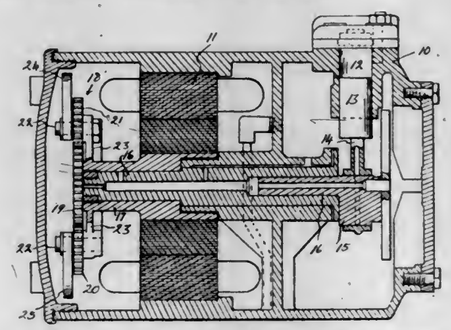
1. In combination with a liquid fuel supply tank, a float member within said tank having a chamber therein opening to the outside of said float member, a flexible supply pipe having its inlet end extending into said tank and terminating in said chamber, means for facilitating the vertical and lateral movements of said float member due to the changing of the liquid level in said tank, and brace means associated with the inlet end of said pipe and automatically adjustable to the vertical and lateral movements of said pipe.

1,826,171. PISTON. GUSTAVE E. FRANQUIST, Rochester, N. Y., Margaret Louise Franquist, executrix of said Gustave E. Franquist, deceased, assignor to The Cleveland Trust Company, Cleveland, Ohio. Filed May 26, 1922. Serial No. 563,782. 16 Claims. (Cl. 74—108.)



1. A piston for an internal combustion engine, comprising, a head and a skirt, piston pin bosses projecting from the interior of said skirt, said skirt having longitudinally disposed grooved ribs arranged between said wrist pin bosses and the cylinder engaging walls of the skirt having its cylinder wall engaging section separated from said head by circumferentially arranged slots, the external surface of said skirt being relieved continuously and from points opposite said wrist pin bosses to points beyond the walls of said longitudinal groove at either side of each said boss.

1,826,172. POWER TRANSMITTING DEVICE. HAROLD A. GREENWALD, Detroit, Mich., assignor to Thomas C. Whitehead, Detroit, Mich. Filed Sept. 8, 1930. Serial No. 480,561. 3 Claims. (Cl. 74—34.)

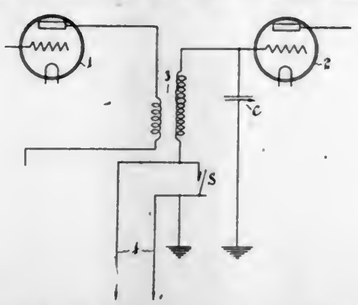


1. An article of manufacture comprising a housing of substantially tubular formation having a transversely extending web provided with a tubular portion constituting a bearing, a compressor shaft journaled in the bearing, a split phase motor within the housing and having a rotor hub rotatable freely on said shaft and substantially abutting the bearing, and means substantially free from friction for transmitting motion positively from the rotor hub to said shaft at a one to one ratio after the rotor hub has accelerated from zero speed to a predetermined speed less than the normal running speed thereof, comprising only a sun gear fixed directly to said shaft and rotatable planet gears carried by the rotor hub and meshing with the sun gear, said planet gears being individually unbalanced but arranged symmetrically with respect to the axis of the shaft so that the gearing as a whole is always in balance.

1,826,173. APPARATUS FOR REPRODUCING RADIO BROADCASTS OR RECORDED AUDIO FREQUENCIES. DUGALD HEPBURN, Toronto, and MILTON L. THOMPSON, East York Township, York County, Ontario, Canada, assignors to De Forest Crosley Radio Company, Limited, Toronto, Canada. Filed Dec. 15, 1930. Serial No. 502,398. 2 Claims. (Cl. 250—20.)

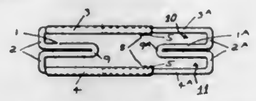
1. A radio receiving set including two vacuum tubes and a transformer coupling the plate circuit of one tube with the grid circuit of a succeeding tube: means for con-

necting the secondary circuit of the transformer with an audio-frequency circuit; a switch for opening the normal secondary circuit; and a variable condenser permanently



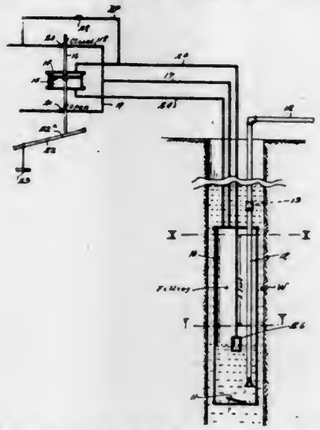
shunting the grid circuit of the said succeeding tube, serving when the switch is closed to tune the grid circuit and when the switch is open as a tone control.

1,826,174. SLIDE BUCKLE. ROBERT J. HODGE, West Haven, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed Nov. 3, 1930. Serial No. 493,032. 7 Claims. (Cl. 24—163.)



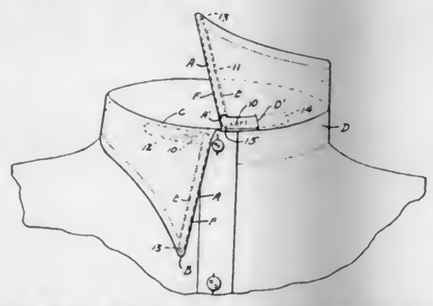
1. An expansible slide buckle comprising a two-section structure so assembled as to adapt the sections for a relative sliding movement, the sections together providing a rectangular frame having upper and lower bars and side structures; and an intermediate bar structure provided and supported by each of the side structures.

1,826,175. COMPRESSED AIR OPERATED PUMP. WALTER S. HULSE, Merchantville, N. J. Filed Nov. 15, 1930. Serial No. 495,973. 15 Claims. (Cl. 103—245.)



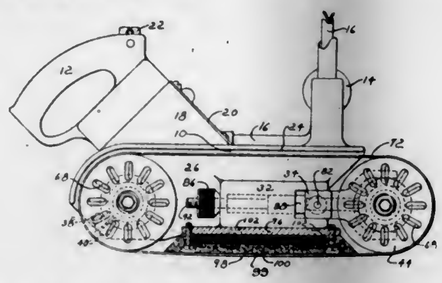
1. In a pump of the character described, a tank having an inwardly opening check valve, a discharge pipe extending from the bottom of the tank, a pipe leading from a source of compressed fluid into the tank and having a valve, and an exhaust pipe leading from the tank and having a valve, means positively acting to urge the air supply valve to a closed position and the exhaust valve to an open position, and fluid pressure operated means acting against the force of said urging means, when the tank is filled to a predetermined degree, to shift the air supply valve to an open position and the exhaust valve to a closed position against the action of said urging means, the means urging the air supply valve to a closed position and the exhaust valve to an open position acting automatically when the liquid has fallen in the tanks to such a degree that the pressure of air is less than the force exerted by said urging means to open the air exhaust valve and close said air supply valve, the shifting of said valves resulting solely from changes in the magnitude of the force exerted by said fluid pressure operated means caused by the rise and fall of the liquid level in said tank.

1,826,176. COLLAR SUPPORTER. DELBERT T. HUTCHISON, Baton Rouge, La., assignor to George A. Ripley, Dallas, Tex. Filed Jan. 30, 1931. Serial No. 512,321. 5 Claims. (Cl. 2—132.)



1. A flexible collar supporter including a long narrow shank, and a wing integral with and extending from the upper end of the shank at a wide angle thereto, the wing being twisted longitudinally.

1,826,177. SANDING MACHINE. FREDERICK H. JOHNSON, Detroit, Mich. Filed May 14, 1927. Serial No. 192,473. 2 Claims. (Cl. 51—170.)

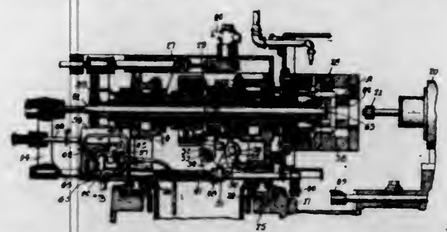


1. In a device of the class described comprising a housing adapted to be manually supported, a pair of pulleys rotatably supported by said housing, a belt having an abrasive surface around said pulleys, means for rotating one of said pulleys, a resilient shoe carried by said housing comprising an outer yieldable felt pad and an inner resilient rubber pad, said shoe being adapted to urge said belt against relief irregularities on a piece of work with greater intensity than against surrounding regular surfaces.

1,826,178. GRINDING MACHINE. HERBERT E. KEMPTON and KEITH F. GALLIMORE, Fond du Lac, Wis., assignors, by mesne assignments, to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 22, 1925. Serial No. 38,629. 21 Claims. (Cl. 51—50.)

2. A grinding machine having, in combination, a carriage having a grinding wheel, a headstock adapted to support the work, a gage arranged to coact with the work, means for effecting a relative intermittent approaching movement, a relative reciprocation and a separation at the

completion of said reciprocation between said grinding wheel and the work, said separating movement being instituted by said gage, means set in operation by said gage for slowing down the speed of said reciprocation during



the last part of the grinding operation, and means set in operation by said gage for effecting a separation between said grinding wheel and the work surface before said first mentioned separation between said grinding wheel and the work is completed.

1,826,179. REMOVING PRINTING INK FROM PAPER. MINNIE E. KINYON and BRICE W. KINYON, South Bend, Ind. Filed July 23, 1930. Serial No. 470,241. 7 Claims. (Cl. 92—18.)

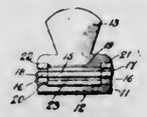
1. The process of removing printing ink from paper which comprises subjecting said paper to the action of a soluton of naphtha soap in soft water whereby the ink is loosened from the paper and removable from the resulting paper pulp by simple filtration of said pulp, the carbon particles from the ink passing through with the filtrate.

1,826,180. EDUCATIONAL APPARATUS. PAUL E. KLOPSTEG, Chicago, Ill. Filed May 11, 1929. Serial No. 362,345. 9 Claims. (Cl. 35—12.)



1. In apparatus of the class described, a track, means for leveling the track, a pair of cars, a friction buffer adjacent to each end of the track adapted to cooperate with the cars to bring them to rest without rebound, means for urging the cars apart with equal force applied to each car, and means for coupling the cars against the resistance of the last named means and suddenly uncoupling them.

1,826,181. CLASP. CATHERINE C. KULP, Philadelphia, Pa. Filed Mar. 11, 1931. Serial No. 521,691. 3 Claims. (Cl. 24—255.)



1. A clasp embodying an integral spring having three substantially parallel sections joined by end sections, a leaf having end loops embracing the intermediate section and a central loop embracing one remote section and a second leaf having end loops embracing the other remote section, and a central loop embracing the intermediate section.

1,826,182. WIRE-SECURING MEANS FOR FENCE POSTS. DELMER C. LEE, Maplewood, Mo., assignor to Missouri Rolling Mill Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 17, 1931. Serial No. 516,412. 3 Claims. (Cl. 256—57.)

2. A fence post having an upper and a lower opening, and a wire-fastening clip comprising a substantially vertical stiff wire having one end bent laterally to provide a hook for passage through one of said openings, the other end of said wire being bent laterally to form a finger for passage through the other of said openings, said finger being provided with a hump between its ends, the bill of said hook being in diverging relation with the body of the clip to allow the bight portion of said hook to rest pivotally

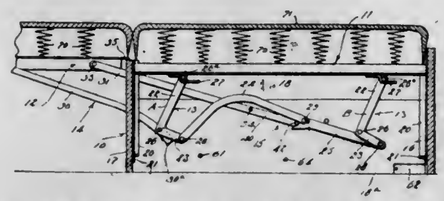


upon the inner end of said one opening during movement of said finger through said other opening, the shortest distance between said bight portion and said hump being less than the shortest distance between said openings, whereby the clip will momentarily expand and said hump will snap past the inner end of said other opening when forcibly swinging the clip to operative position.

1,826,183. PROCESS OF TREATING METALLURGICAL SLIMES. HANS LEHRECKE, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed June 18, 1930, Serial No. 462,149, and in Germany June 28, 1929. 4 Claims. (Cl. 75—65.)

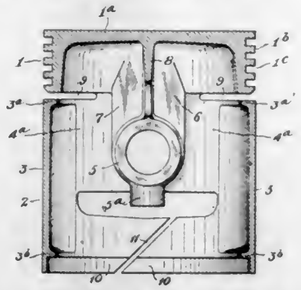
1. It dispenses with drying prior to sintering, the drying being effected by the fuel during the sintering process.

1,826,184. FOLDING BED. WILLIAM A. MOELLER, Los Angeles, Calif., assignor to The Los Angeles Spring Bed Company, Los Angeles, Calif. Filed Feb. 28, 1927. Serial No. 177,502. 3 Claims. (Cl. 5—22.)



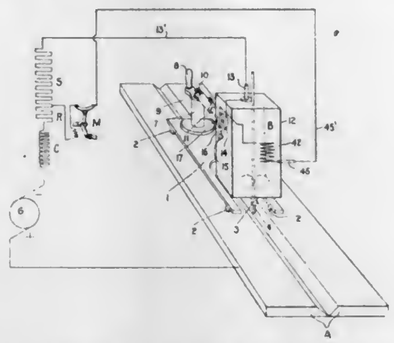
1. A bed of the character described including, a base, an inner frame, bell cranks mounting the inner frame in the base to be movable vertically, members pivotally connected with the cranks and pivotally connected together whereby the cranks operate together, an outer bed frame, a link connecting the outer frame with the base whereby the outer frame is movable up and forward from the base to an up position and then downward and forward from the up position to a position at the front of the base, and an arm on the link co-operating directly with one of the said members when the outer frame is operated between the up position and the position at the front of the base whereby the frames operate together during the downward and forward movement of the outer frame.

1,826,185. PISTON. LOUIS P. MOOERS, Tonawanda, N. Y., assignor to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 5, 1923. Serial No. 649,481. 10 Claims. (Cl. 74—108.)



1. A piston for an internal combustion engine comprising a head section, a guide section having diametrically opposite rigid cylinder-engaging portions with circumferentially extending ribs on their inner sides and separated from the head section by air gaps and intermediate portions formed with opposite wrist pin bosses, means connecting the upper end of the said intermediate portions to the head section, said intermediate portions being exteriorly relieved so as not to contact with the cylinder wall from their upper ends to points below the wrist pin bosses, and resilient cylinder-engaging means at the lower ends of the intermediate portions adapted by flexing to accommodate the thermal expansion of the piston parts and at the same time to effectively hold the lower end of the piston against lateral movement transversely of the plane of the connecting rod.

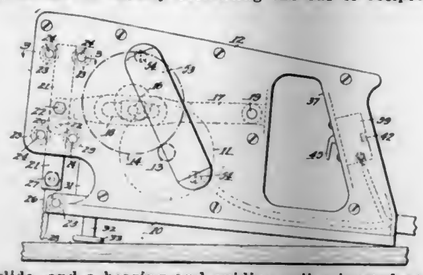
1,826,186. METALLIC ELECTRODE ARC WELDING. HARRY D. NORTON, Detroit, Mich., assignor to Automatic Arc Welding Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 2, 1918. Serial No. 264,927. 46 Claims. (Cl. 219—8.)



8. An automatic arc welding device comprising a welding circuit, a fusible welding electrode and the work connected thereto, a carriage supported upon the work for traversing over the work an electric arc maintained between said electrode and work, an independent rotatable motor for feeding said electrode relatively toward the work, and a regulating circuit for said motor operative to vary the speed thereof to maintain the potential of a welding arc substantially constant.

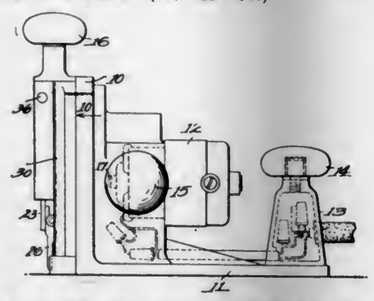
1,826,187. JIG SAW. ALBERT V. PICKERING, Woonsocket, R. I., assignor, by mesne assignments, to Portable Electric Tool Corporation, Fitchburg, Mass., a Corporation of Massachusetts. Filed Jan. 17, 1929. Serial No. 333,191. 3 Claims. (Cl. 143—68.)

1. In a jig saw, the combination with a supporting base adapted to be moved freely on the surface of the material to be sawed, of a pivoted bar, a reciprocable slide pivotally connected with the bar, a saw blade carried by the slide, means for rapidly oscillating the bar to reciprocate



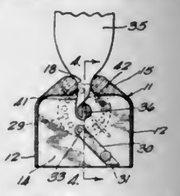
the slide, and a bearing and guiding roller located at the back of the saw at a point close to the bottom of the base, said roller having a groove for receiving the slide and saw.

1,826,188. JIG SAW. ALBERT V. PICKERING and ALBERT H. MOORE, Fitchburg, Mass., assignors to Portable Electric Tool Corporation, Fitchburg, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 457,872. 3 Claims. (Cl. 143—72.)



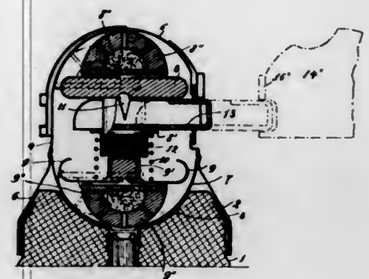
1. In a jig saw, the combination with a base, a motor mounted on the base, and means for operating a saw from the motor, of a pair of headed plungers reciprocably mounted on the frame in vertical position, springs for normally lowering the plungers and raising the base relative to the work to keep the saw out of contact with the work, a spring latch for holding the plungers in retracted position where they do not project through the bottom of the base, and a hand operated member for applying and releasing the latch.

1,826,189. DISPENSING DEVICE. RALPH B. ROTHWELL, Los Angeles, Calif. Filed Mar. 24, 1931. Serial No. 524,817. 4 Claims. (Cl. 221—60.)



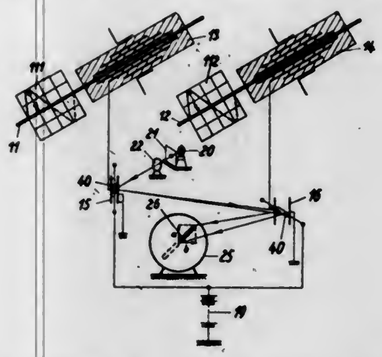
1. In a portable base for supporting a collapsible tube, the combination of: walls having lower edges adapted for engagement with a supporting surface; curved exuding walls forming an opening through which the collapsible tube may pass into said base, the opening being wider than the combined wall thickness of the collapsible tube in order that there may be a layer of paste remaining in such portion of the collapsible tube to act as a support for the wall of the collapsible tube to prevent same from bending; and rolling means inside said base for rolling up the end of said collapsible tube and to completely exude the past therefrom.

1,826,190. PERCUSSION FUSE FOR BOMBS AND OTHER PROJECTILES. LUIGI SAVANI, Milan, Italy, assignor to Societa Italiana Ernesto Breda Per Costruzioni Meccaniche, Milan, Italy. Filed June 25, 1930, Serial No. 463,768, and in Germany July 24, 1929. 4 Claims. (Cl. 102—39.)



1. A percussion fuse for bombs and similar projectiles, comprising a striker, a detonating charge, two tubular members to which the striker and detonating charge are respectively attached, said two members being slidably mounted so as to telescope, a spring for spacing said two members, a slide also spacing said two members and adapted to be withdrawn before the bomb is cast, and two hemispheres independent of the two tubular members, the striker and the detonating charge, and bearing against the two tubular members, said two hemispheres being hollow to receive the explosive charge.

1,826,191. APPARATUS FOR COMPARING QUANTITIES OF ALTERNATING-CURRENT SYSTEMS. KURT AUGUST STERZEL, Dresden, Germany, assignor to the Firm Koch & Sterzel, Aktiengesellschaft, Dresden, Germany. Filed Oct. 11, 1929, Serial No. 398,909, and in Germany Oct. 16, 1928. 9 Claims. (Cl. 172—245.)

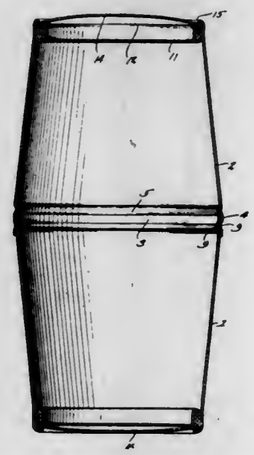


1. An apparatus for comparing electrical quantities of two alternating current systems comprising two oscillating mirrors controlled by electrostatic fields produced by the currents of each system, a source of light and a screen, said mirrors, said source of light and said screen being arranged in such manner that the light rays emitted by said source are reflected by said mirrors, one after the other, and then strike said screen.

1,826,192. METHOD OF THICKENING AND STABILIZING LATEX AND PRODUCT. MERWYN C. TEAGUE, Elmhurst, N. Y., assignor to American Rubber Company, East Cambridge, Mass., a Corporation of Massachusetts. Filed June 9, 1924. Serial No. 719,015. 15 Claims. (Cl. 18—50.)

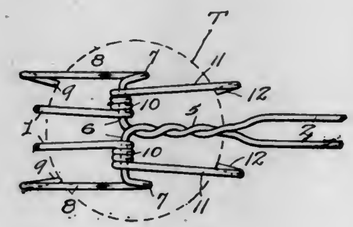
15. The process of treating latex which comprises thickening the continuous phase and stabilizing the latex without substantial modification of the colloidal condition of the rubber hydrocarbon by adding to the latex a substance selected from the group comprising lead thiosulphate, basic lead acetate, lead acetate with a protective agent, litharge, lead hydroxide, the reaction products of lead oxides or salts with mono, di and poly-saccharoses, lead chloride, bismuth hydrate, ferric oxide, ferrous lactate, basic ferric acetate, ferrous oxalate, stannous oxalate, cadmium sulphide.

1,826,193. SANITARY CONTAINER. GEORGE E. WEST, Dallas, Tex. Filed Aug. 5, 1931. Serial No. 555,356. 2 Claims. (Cl. 229—4.5.)



1. A container of the class described, comprising a base and a top, having telescoped end portions which are coated both internally and externally with a quick-drying cement and are softened somewhat thereby, the exposed layer of said cement drying more quickly than the rest of the cement, due to the exposure of said layer, whereby the said end portions are buckled to form interengaged, substantially circumferential depressions therein, which supplement the cement in holding the telescoped end portions together.

1,826,994. JAR LIFTER. EUGENE W. WHEELER, Salem, Oreg. Filed Aug. 11, 1930. Serial No. 474,471. 1 Claim. (Cl. 294—27.)



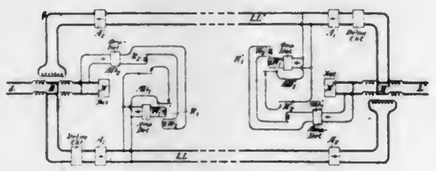
A jar lifter comprising two pieces of wire each fashioned with a looped handle, one of said handles having a twist and oppositely extended trunnions projected from the twist, U-shaped loops adapted to provide a fulcrum and formed at the outer ends of the trunnions, outer side arms extended from said loops and jaws on the ends of said arms, the other handle having spaced bearing coils surrounding the trunnions, inner side arms projected from the coils, and hooks on said inner side arms extending toward the first pair of hooks.

1,826,195. FOUNTAIN PEN. WILLIAM J. WOOLBRIDGE, Mansfield, Ohio. Filed Feb. 20, 1931. Serial No. 517,279. 14 Claims. (Cl. 120—42.)



1. In a fountain pen comprising a pen stock and a barrel detachably connected therewith, an ink cartridge removably supported in said barrel and having an opening in that end adjacent to said pen stock, a closure for said opening adapted to be inserted therein from the outer side thereof, and means carried by said pen stock to engage said closure and move the same from said opening and beyond one end thereof when said pen stock is attached to said barrel.

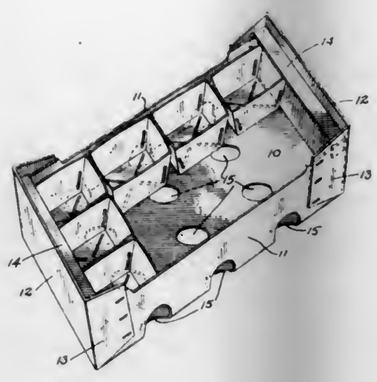
1,826,196. ECHO SUPPRESSOR. LEONARD G. ABRAHAM, Teaneck, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 5, 1929. Serial No. 390,540. 10 Claims. (Cl. 179—170.)



1. In a two-way telephone circuit including paths adapted for transmission in opposite directions, apparatus associated with each of two distant points at or relatively near the respective ends of the circuit, said apparatus comprising means operable by voice currents in the receiving path for disabling the transmitting path, means operable by voice currents in the transmitting path for preventing the disabling of said path, and circuit arrangements connecting said first named means with said second named means in such a manner as to oppose the operation of the latter while the former is in process of operation.

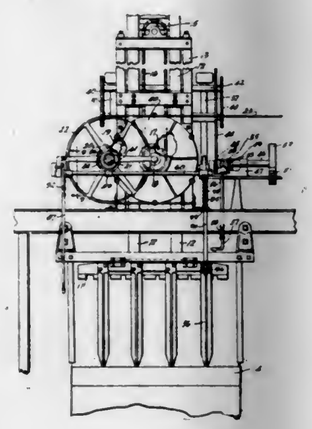
1,826,197. FRUIT BASKET CRATE. WALLACE A. ADAMS, Petaluma, Calif. Filed June 24, 1929. Serial No. 373,152. 5 Claims. (Cl. 229—28.)

1. A crate for berry baskets and the like comprising a single piece of fibrous material having upwardly extending sides and upwardly extending end portions which fold around and overlap said side portions at the ends of the crate, said end portions and overlapping side portions being adapted to extend upwardly beyond the upper



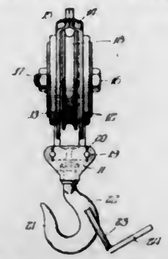
limits of the crate, and means associated with the side portions adjacent said upwardly extending end portions adapted to support a second crate out of contact with the contents of said first crate.

1,826,198. AUTOMATIC TRAMPER CONTROL MECHANISM. JOSEPH BEHLE, GEORGE E. KING and HENRY C. BLACKMON, Dallas, Tex., assignors to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed May 29, 1930. Serial No. 457,370. 6 Claims. (Cl. 100—25.)



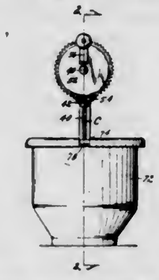
1. In a driven tramper, a driving shaft connected to a tramper plunger, a driven member, a clutch connection between said shaft and member, a depending actuating rod disposed above said plunger, a lever connected to said rod, a pivoted link connecting the lever and movable member of the clutch, a movable gate beneath the plunger, and a connection from the gate for rendering said link inoperative to transmit motion from the lever to the plunger clutch while said gate is under pressure.

1,826,199. POSITIONING BRACKET FOR SNATCH BLOCKS. FRANK BORTOLUS, Eveleth, Minn. Filed May 19, 1928. Serial No. 279,105. 1 Claim. (Cl. 254—195.)



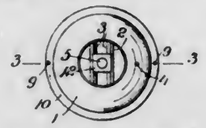
A supporting hook for a pulley block comprising a swivel member adapted to be connected to the pulley block, a hook connected to the swivel member, a bracket having sides at right angles to each other and one of said sides being substantially tangent to a curved portion of said hook, said bracket being integral with the hook.

1,826,200. ROTARY WIRE WHISK. KATHERINE BYERS and JOHN HUG, Ames, Iowa. Filed Mar. 31, 1930. Serial No. 440,327. 1 Claim. (Cl. 259—134.)



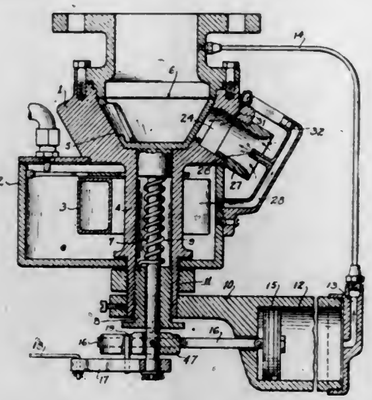
In a rotary whisk for whipping comparatively light substances such as eggs, a rotor comprising an open frame, trunnions projecting from the ends of the frame, a pair of substantially parallel wires extended lengthwise of said frame on opposite sides of its axial center and spaced materially therefrom and also spaced from the sides of the frame, and other wires arranged between the first mentioned wires and the respective sides of the frame, said pair of wires defining between them a clear open space from end to end of the frame and extending laterally a material distance on each side of the axis of rotation as defined by said trunnions, through which open space material may pass freely during the whipping operation.

1,826,201. CONCRETE INSERT. MARTIN CARROLL, Kansas City, Mo. Filed Mar. 20, 1930. Serial No. 437,322. 3 Claims. (Cl. 72—105.)



1. In a concrete insert, a housing adapted for mounting in a form and having an open end adapted to bear against the inner side of said form, a bolt and an anchor member in and adapted for limited rotation relatively to said housing, and having means adapted to hold said bolt radially and longitudinally adjustable thereon and from complete withdrawal and rotation relatively thereto, said means permitting said bolt to be moved longitudinally to and from a position in which its threaded end portion will extend through said open end, said bolt being adjustable to a position in which it will be wholly within said housing.

1,826,202. CARBURETOR. FRANK A. COLE, Altoona, Pa. Filed Apr. 12, 1930. Serial No. 443,820. 8 Claims. (Cl. 261—41.)



1. A carburetor comprising a series of throttle controlled carburetting units, each including a mixture nozzle communicating on the one hand with a source of liquid fuel and on the other hand having a passage communicating with an air source, venturis surrounding said nozzles, open at one end to the atmosphere, a throttle valve controlling the opposite ends of said venturis, arranged to open them successively to a mixture chamber said throttle valve having a port positioned so as to begin to open a venturi prior to its having fully opened the adjacent preceding venturi, the air passage of each mixture nozzle opening into the venturi of the next succeeding carburetting unit.

1,826,203. CLOSURE FOR OPENINGS IN BUILDINGS. WILLIAM CUNNINGHAM, Mount Kisco, N. Y. Filed Mar. 26, 1930. Serial No. 439,182. 1 Claim. (Cl. 20—56.2.)

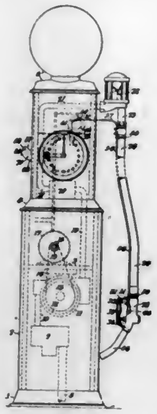


A convertible storm window or door for wall opening reveals comprising top, bottom and intermediate rails connected by stiles, rabbets about the window openings formed by said rails, and spaced slots at intervals in the length of the rear stile corresponding in length and position to the window openings whereby a sheet-like closure element may be readily placed in each of said openings, removed therefrom or interchanged with another, and means on the rear stile adjacent each slot and cooperating with the side of the wall opening reveal to draw the slotted length of the stile into contact therewith to close said slots and prevent unauthorized removal of said removable closure elements.

1,826,204. LIQUID DISPENSING APPARATUS. CORNELIUS A. DESIMONE, Ventnor, N. J., assignor to John Wood Manufacturing Company, Conshohocken, Pa., a Corporation of Pennsylvania. Filed Jan. 24, 1931. Serial No. 511,031. 10 Claims. (Cl. 221—95.)

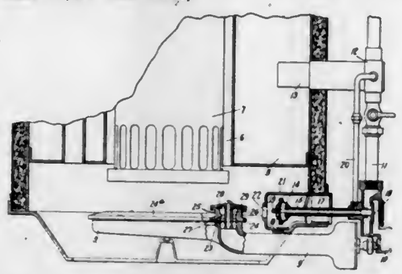
1. In liquid dispensing apparatus; the combination with a stationary pump stand; of a liquid dispensing pump in said stand; an electric motor operatively connected with said pump; an electric switch adapted to control the energizing circuit of said motor; a liquid discharge conduit in communication with said pump and including a flexible hose; a nozzle on said hose; and switch operating means extending from said nozzle to said switch, including a lever at said nozzle and a flexible connector extending from said nozzle to said switch, and a link pivotally con-

necting said lever with said flexible connector, extending transversely to the latter, and constructed and arranged to oscillate on said lever and permit flexure of said hose



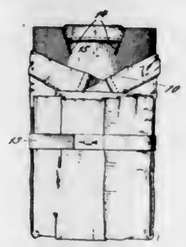
and relative movement of said flexible connector and link, without movement of said switch, when said lever is in idle position.

1,826,205. GAS BURNER AND THE LIKE. WILLIAM C. EPSTEIN, Dayton, Ohio, assignor to The Duo-Tor Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 19, 1929. Serial No. 400,795. 8 Claims. (Cl. 158—115.)



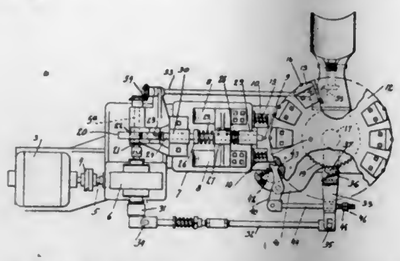
1. In an apparatus comprising a main burner having separated fuel outlets, and a pilot burner arranged adjacent to one of said fuel outlets, a supplemental burner having a fuel outlet arranged adjacent to said pilot burner and to the other fuel outlet of said main burner.

1,826,206. SHIRT PROTECTING SUPPORT. PATRICK FARRELLY, Belmont, Calif. Filed Jan. 11, 1928. Serial No. 245,931. 4 Claims. (Cl. 223—18.6.)



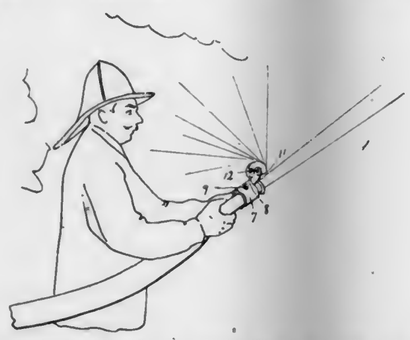
4. A shirt support for soft collar shirts comprising a substantially rectangular body portion of relatively stiff material having a pair of slots extending into one end thereof sufficiently distant from each side of the body portion to form a tongue therebetween of sufficient width to project under the back fold of the collar and provide tongues adjacent thereto which protect the shirt against wrinkling.

1,826,207. WELDING MACHINE. PETER W. FASSLER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,357. 11 Claims. (Cl. 219—4.)



1. A welding machine comprising in combination, a movable welding point, means automatically moving the point, a rotary table, a plurality of work carriers on the table, a welding point associated with each work carrier and carried by the table, means for rotating the table with step by step movement to successively present the work to the movable welding point, said welding point moving in timed relation to the step by step movement of the table so that it moves into welding relation to the welding point presented to it during the period of rest of the table.

1,826,208. FAN AND SPRAY WHEEL ATTACHMENT FOR HOSE NOZZLES. FRANK P. GIBSON, San Francisco, Calif. Filed Apr. 15, 1930. Serial No. 444,473. 1 Claim. (Cl. 299—126.)

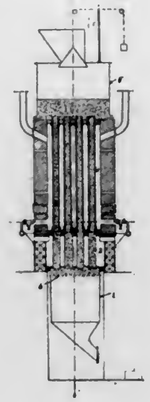


In combination with the nozzle of a fire hose, a clamp encircling part of the nozzle, a pair of arms connected with the clamp and extended forwardly above the outer end of the nozzle and a paddle wheel journalled in said arms and arranged to have the extremities of the paddle engaged by the stream of water leaving the nozzle so that the wheel will be rotated by the water and caused to throw some of the water and a current of air against the person using the nozzle.

1,826,209. APPARATUS FOR THE PRODUCTION OF ACTIVATED CARBON. ALBERT GODEL, Lagnieu, France, assignor to Société de Recherches et d'Exploitations Petrolifères, Paris, France, a French Société Anonyme. Filed Oct. 18, 1926, Serial No. 142,407, and in France Apr. 15, 1926. 1 Claim. (Cl. 202—114.)

Apparatus for the production of activated carbon, comprising a plurality of narrow chambers, walls of porous

material surrounding said chambers, means for feeding carbonaceous material into one end of said chambers, means for discharging material from the other end of said



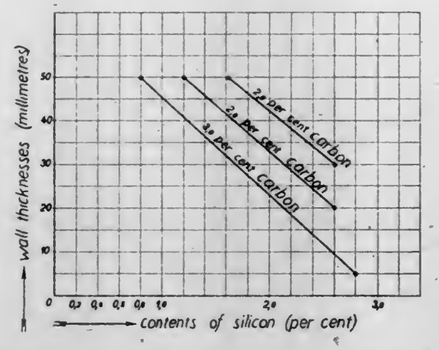
chambers, and means for heating said chambers and the enclosed material by an external activating atmosphere having access to said porous walls but excluded from direct entrance to said chambers.

1,826,210. MEANS FOR DRAINING LIQUID FROM WELL TUBING. PAUL H. GRANGER, Los Angeles, Calif. Filed Jan. 30, 1930. Serial No. 424,469. 3 Claims. (Cl. 103—221.)



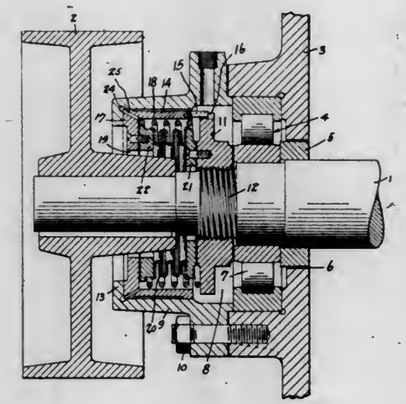
1. In combination with a well tubing string and a working barrel at the lower end thereof, said working barrel being provided with a standing valve, tubular means attached to the lower end of the working barrel, a valve operating member movably mounted within said tubular means and provided at its lower end with means for engaging in the bottom of the well to elevate said means relative to the standing valve, said valve operating means being adapted to engage the movable member of the standing valve when so elevated so as to open the standing valve catch means for holding said valve operating member in raised position and a member movably mounted below the standing valve and adapted to be operated by outflow of liquid from the standing valve and adapted to operate said catch means to position for holding the valve operating member in raised position to retain the standing valve in open position.

1,826,211. PROCESS OF MANUFACTURING GRAY PIG IRON. FRITZ GREINER, Stuttgart-Cannstatt, Germany, assignor to Maschinenfabrik Esslingen, Esslingen, Germany. Filed May 14, 1928, Serial No. 277,746, and in Germany May 27, 1927. 3 Claims. (Cl. 22—200.)



1. The process of producing a gray iron casting of any desired structure which consists in first preparing a molten mixture of iron, carbon and silicon, the proportion of silicon being adjusted in accordance with a curve which rises substantially in a straight line as the wall thickness of the article to be cast decreases, the proportion of carbon being maintained substantially the same for all wall thicknesses, and then pouring said molten mixture into a mold.

1,826,212. ROTARY SPRING STUFFING BOX. ERNEST GREMMINGER, Mill Valley, Calif. Filed May 6, 1929. Serial No. 360,901. 9 Claims. (Cl. 286—11.)

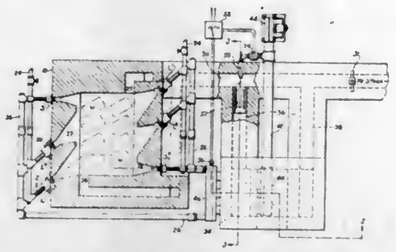


1. The combination with a shaft, of a housing encircling said shaft and having an inwardly-extending flange, a cup-shaped member slidably mounted within said housing and rotatable on the flange, yielding means for keeping the cup seated on the flange and a diaphragm sealed to the shaft and to the cup.

1,826,213. CONTROLLING MEANS FOR HEAT EXCHANGE APPARATUS. WILLIAM M. HEPBURN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Apr. 2, 1930. Serial No. 441,087. 9 Claims. (Cl. 257—2.)

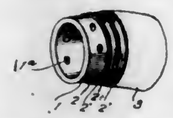
1. In combination, a heat exchange apparatus through which air and flue gases may be passed in separate streams

for heat exchange, means independent of said apparatus forming a flow path for high temperature flue gas, means



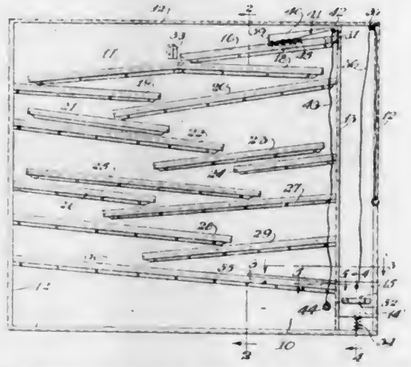
for by-passing regulatable amounts of said gas through said apparatus, and means for tempering the gas so by-passed.

1,826,214. FORM FOR RUBBER ARTICLES. ERNEST HOPKINSON, New York, N. Y., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Mar. 13, 1928. Serial No. 261,218. 3 Claims. (Cl. 18—41.)



1. A form for the manufacture of inner tubes from rubber dispersions, which comprises an apertured metallic support, wrappings of cords overlying the support, and a relatively smooth surfacing of clay slip overlying the cords, said cords being alternated with strands of wire.

1,826,215. GAME. THOMAS S. HUTCHISON, Chicago, Ill. Filed Feb. 25, 1929. Serial No. 342,349. 10 Claims. (Cl. 273—138.)



1. In a game, the combination of a base, runways in zig-zag arrangement and inclined downwardly on said base to receive and guide a plurality of rolling counters from an upper part to a lower part of said base, certain of said runways having outlets at both ends, upper ones of said runways having their lower ends adjacent to and in counter delivering relation with lower ones of said runways successively, and rolling counters.

8. In a game, the combination of a base, runways in zig-zag arrangement and inclined downwardly on said base to receive and guide a plurality of rolling counters from an upper part to a lower part of said base, some of said runways delivering said counters to succeeding ones of said runways nearer the lower ends of the latter than their upper ends, tending to effect a rearrangement of the sequence of the counters as they travel downwardly on said runways, certain of said runways having outlets at both ends, further tending to effect change in sequence of said counters.

1,826,216. SELF-SUPPORTING GOLF-BAGS AND THE LIKE. HENRY THEOPHILUS JOHNSON, London, England. Filed July 27, 1929, Serial No. 381,612, and in Great Britain Sept. 5, 1928. 12 Claims. (Cl. 150—1.5.)



1. The combination in a golf bag or like receptacle of the kind described, of a spiking device and a hand grip operating said spiking device, and a member carried by said hand grip dividing the mouth of the bag.

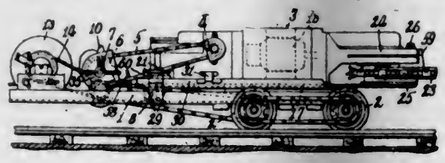
1,826,217. LINOLEUM PRODUCT AND METHOD OF MAKING SAME. MERLE S. MCCONOUGHEY, East Orange, N. J., assignor to Congoleum-Nairn, Inc., a Corporation of New York. Filed Sept. 10, 1927. Serial No. 218,606. 10 Claims. (Cl. 154—25.)



1. The method of making linoleum, which includes first waterproofing the individual threads or yarns in open-mesh fabric, while preventing any substantial retention of the waterproofing material in the normally open meshes, and then associating the fabric with the linoleum composition.

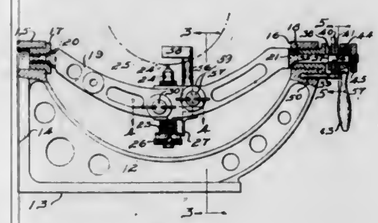
7. A floor covering comprising a wearing surface of linoleum-like composition and an open mesh backing fabric, the individual threads of said fabric being impregnated with a semi-solid adhesive waterproofing material, and the mesh openings of said fabric being substantially devoid of said waterproofing material.

1,826,218. MINING APPARATUS. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 24, 1930. Serial No. 423,170. 18 Claims. (Cl. 262—28.)



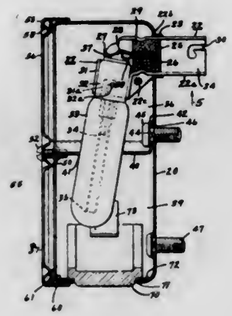
13. In a mining apparatus, a transport truck having means adapted to receive a mining machine, a self-contained mining machine of the type adapted to normally operate on its own bottom directly on the mine bottom during cutting supported on said truck and including a pivoted cutter bar and a motor for driving the same, and self-contained mechanism on said truck entirely separate from the mining machine and mounted independently of the latter on the truck and driven from said mining machine motor for driving the truck wheels at a predetermined slow cutting speed.

1,826,219. GRINDING WHEEL TRIMMING FIXTURE. JOHN W. PARKER, Detroit, Mich. Filed Dec. 14, 1929. Serial No. 414,004. 5 Claims. (Cl. 125—11.)



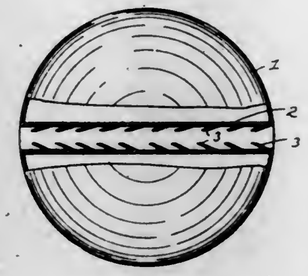
1. In a device of the type described, in combination, a main frame, an auxiliary frame swiveled thereon, a grinding wheel trimming tool carried by said auxiliary frame, a pair of stop members rotatably mounted on said auxiliary frame, a single means for locking said stop members in any one of a plurality of rotatably adjustable positions against rotation relative to said auxiliary frame, and a stop member on said main frame in co-operative relationship with respect to said stop members.

1,826,220. SIGNAL LAMP. LESLIE O. PARKER, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 13, 1927. Serial No. 198,403. 1 Claim. (Cl. 173—344.)



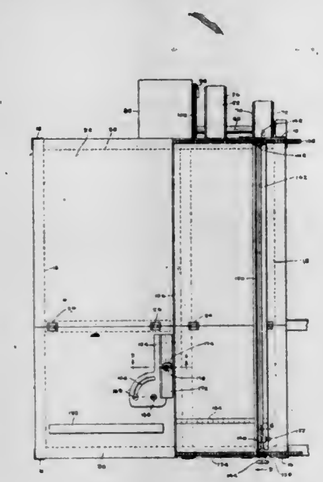
A lamp socket comprising a pair of similar semi-tubular members secured together to form angularly related bores, one of said bores being adapted to receive a lamp having a plurality of contacts on the base thereof, an insulating plug secured in the other member and provided with a plurality of spring contact fingers arranged in superposed relation and having their ends axially spaced for engagement with the contacts.

1,826,221. BALL. HENRY C. PEARSON, Pasadena, Calif. Filed May 1, 1929. Serial No. 359,616. 1 Claim. (Cl. 273—58.)



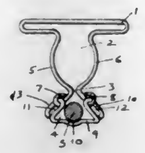
In an article of the class described, a ball having an aperture therethrough, the wall of said aperture having spurs extending obliquely inward therefrom.

1,826,222. SAWING MACHINE. AXEL PETERSON, Minneapolis, Minn. Filed May 7, 1930. Serial No. 450,425. 1 Claim. (Cl. 143—169.)



A sawing machine comprising a table containing an elongated slot, a disk saw having its upper portion projecting through said slot and adapted to reciprocate longitudinally therein, a support adjacent one side only of said slot, a vertical pivot attaching said support to said table whereby the free end of said support may be adjusted toward and away from said slot, a semi-cylindrical member mounted rockably adjustable upon and positioned longitudinally of said support, said member having a flat longitudinal face, and means for holding said member in differently adjusted positions on said support, the flat longitudinal face of said member constituting a rest for the material to be cut and said adjustments providing for cutting the material with various angles of bevel both transversely and longitudinally by a single forward movement of said saw.

1,826,223. BUTTON LOOP. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed June 6, 1930. Serial No. 459,472. 5 Claims. (Cl. 24—224.)

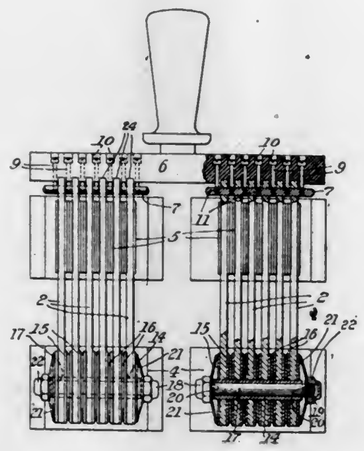


5. A two-part expansible button loop, one part being of resilient wire structure providing a button receiving loop having an expansible and contractible throat portion and depending wire terminals looped substantially in the plane of the resilient part, the other part being of rigid structure providing fixedly spaced terminals looped substantially in said plane and within the looped terminals of the resilient part, the looped terminals of one of the parts being elongated and relatively converging toward said throat portion.

1,826,224. METHOD OF TREATING TALLOEL. WILLI SCHULTZE, Halle-on-the-Saale, Germany. Filed Nov. 29, 1927, Serial No. 237,329, and in Germany, Dec. 4, 1926. Renewed Aug. 6, 1931. 2 Claims. (Cl. 202—52.)

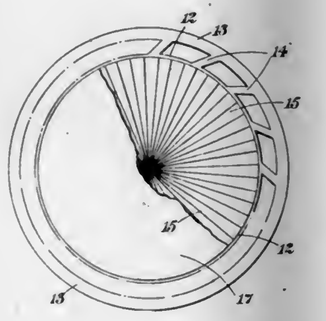
1. The process of decomposing talloel to obtain the liquid fatty acids therefrom substantially free of resinic acid which comprises distilling talloel at a decomposing temperature in high vacuum, which means a vacuum of 8 millimenters mercury column or less in the absence of steam and foreign gases until the first traces of resinic acid begin to come over and then discontinuing the distillation so as to obtain a distillate substantially free of resinic acid.

1,826,225. KNIFE BLADE SWITCH AND METHOD OF MAKING THE SAME. CARL SCHUSTER, Pittsburgh, Pa. Filed June 14, 1928. Serial No. 285,271. 11 Claims. (Cl. 200—162.)



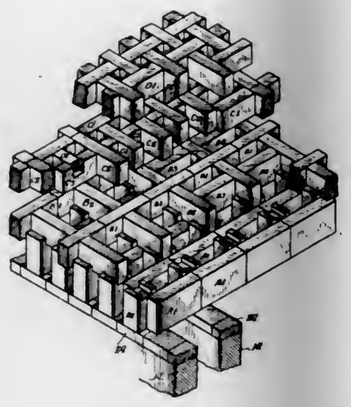
1. In a single-pole knife blade switch, a break jaw, a plurality of blades having openings therethrough, a hinge jaw comprising a plurality of studs having openings therethrough, a metal tube extending through the openings in the studs and blades, and clamping means extending through the tube.

1,826,226. LOUD-SPEAKER FOR WIRELESS APPARATUS OR THE LIKE. GEORGE REX SEARLE, London, England. Filed Apr. 15, 1929, Serial No. 355,346, and in Great Britain Apr. 21, 1928. 4 Claims. (Cl. 181—31.)



1. In or for a loud-speaker a composite diaphragm comprising in combination a core of sheet material folded to form radial cavities, two plain sheets applied to opposite sides of the core in such manner as to enclose substantially the whole of the said core, and a perforated peripheral strip attached to one of the aforesaid plain sheets between which the core is sandwiched.

1,826,227. CHECKERWORK. GEORGE E. STEUDEL, Chicago, Ill. Filed Sept. 23, 1929. Serial No. 394,666. 11 Claims. (Cl. 263—51.)



10. A checker brick construction for use in blast furnace stoves and the like, comprising, in combination, a course of standard bricks disposed immediately above the arches in the stove, a course of standard bricks arranged to occupy the upper part of the stove, and an intermediate course of specially formed bricks interposed between the upper and lower courses of standard bricks.

1,826,228. DECALCOMANIA. ROGER TULL, Los Angeles, Calif., assignor to Western Lithograph Company, Los Angeles, Calif., a Corporation of California. Filed Nov. 7, 1928. Serial No. 317,703. 6 Claims. (Cl. 41—33.)



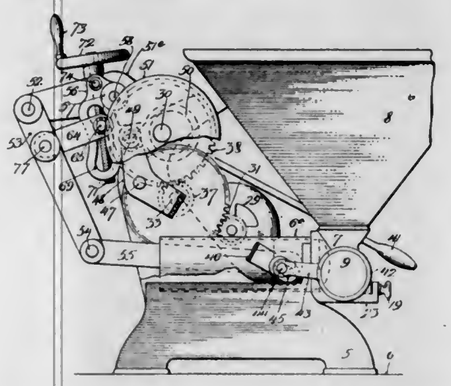
1. A decalcomania characterized in that it includes decalcomania paper, and a design thereon having a coat including nitro-cellulose, gum, plasticizer, a solvent and color pigments, and having a second coat including oil paint ground in varnish.

1,826,229. SHIP'S HULL. PIETER VAN WIENEN, Hamburg, Germany. Filed Jan. 29, 1930, Serial No. 424,381, and in Germany Jan. 24, 1928. 4 Claims. (Cl. 114—66.5.)



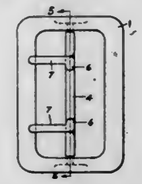
1. A hull for a ship or boat with a steep V-shaped bottom at the front, which gradually becomes flatter toward the middle, still remaining V-shaped, and is flat at the rear, and at the end is somewhat drawn down and cut off sharply at the stern, which approximately in the neighborhood of half the length of the ship has amidships a water displacing bulge which merges into the bottom of the ship, increases from the ends to the middle, and is widest about amidships, and by the arrangement of which the ship's keel is considerably downwardly displaced.

1,826,230. EXTRUDING MACHINE. THOMAS S. VIBROW, Jersey City, N. J. Filed Aug. 16, 1928. Serial No. 299,980. 7 Claims. (Cl. 107—28.)



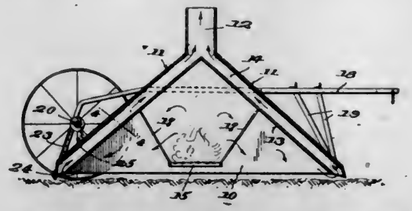
6. An extruding machine including a cylinder and a piston for drawing dough into and extruding it from said cylinder, a housing having a circular seat in which a valve is adapted to oscillate, a cylindrical valve arranged to oscillate in said seat for the purpose of controlling the feed of dough into and the discharge thereof from said cylinder, and a removable die member detachably secured to said housing and having an arcuate recess conforming to and in contact with the periphery of said oscillating valve, said die member having a discharge opening through said recess portion and defined by a sharp edge, said valve having a recess to permit the passage of dough from said cylinder to said die, and having an undercut sharp edge co-operating with the sharp edge of the die member whereby said valve oscillating within said housing and said die member will control the opening and closing of said discharge opening of said die member.

1,826,231. BUCKLE. FOREST L. WILLIAMS, Portsmouth, Ohio, assignor to Williams Manufacturing Company, Portsmouth, Ohio, a Corporation of Ohio. Filed May 22, 1930. Serial No. 454,574. 2 Claims. (Cl. 24—75.)



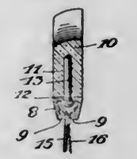
1. In a buckle, a rim and a tongue member pivotally mounted on said rim, said tongue member having a hook-engaging portion and a shoulder adapted to hold an object engaged by the tongue member free from the hook-engaging portion.

1,826,232. SOIL STERILIZING APPARATUS. AMPS P. YOUNG, Cave City, Ky. Filed Apr. 11, 1929. Serial No. 354,311. 8 Claims. (Cl. 126—271.3.)



1. Soil sterilizing apparatus comprising means for holding fuel while burning and an enclosing casing for said means open at the bottom for the application of heat to the ground within the casing, the whole being portable, said casing including a roof with double walls providing a space that opens into and extends from the bottom of the casing upward and communicating with the external air at the top.

1,826,233. PURSE, HAND BAG OR POCKETBOOK. WILLIAM H. ZACHMAN, Woodhaven, N. Y., assignor to Frank J. Quigan, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 20, 1929. Serial No. 341,281. 2 Claims. (Cl. 150—29.)



1. In a hangbag or purse, a frame member consisting of a sheet metal strip bent into channel shaped form in

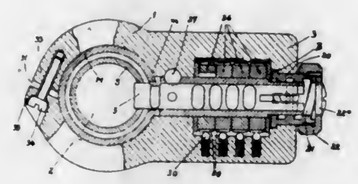
cross section and having its intermediate wall provided with spaced openings, an ornamental trim member adapted to be arranged in the plane of said strip and in contact with said wall thereof, said member having spaced bores registering with said openings in the frame wall, and anchoring pins positioned through said openings and within the bores and having headed ends positioned in the channel of the frame strip.

1,826,234. TOOTHBRUSH. JAMES M. ACHESON, Los Angeles, Calif. Filed Feb. 4, 1929. Serial No. 337,344. 2 Claims. (Cl. 15—194.)



1. A tooth brush structure comprising, in combination a bodily insertible and bodily demountable bundle of strands which are held together by a rubber band which permits the cluster to be readily flattened in a direction transverse to the strands, and a handle device comprising a pair of semi-cylindrical complementary members meeting face to face scissors-fashion on an axial plane and pivotally connected medially across the axis and having handle portions at one end and at the opposite end parts provided with elongated, jaw faces each of which are recessed to receive the said band when the jaws are closed thereon, and one of said jaw end parts having a backing ledge closing over the butt of the inserted bundle of strands.

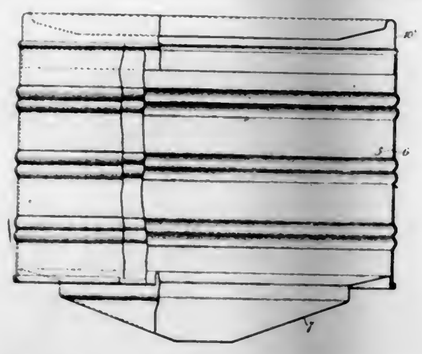
1,826,235. COMBINATION LOCK. HEINRICH BECK, Vienna, Austria. Filed Mar. 9, 1929, Serial No. 345,671, and in Austria Mar. 13, 1928. 8 Claims. (Cl. 70—127.)



4. A combination lock for locking the steering pillar of motor vehicles, comprising in combination a casing provided with a bore for the steering pillar, a lateral extension on the said casing, a combination device arranged in the said extension, and a locking bolt slidably arranged in the said extension transversely to the steering pillar and cooperating with the said combination device, a slot in the locking bolt, a spring arranged in the said slot, and a slide located in the said slot, for the purpose specified.

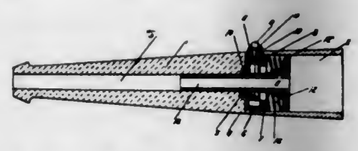
1,826,236. WASHING MACHINE TUB. THOMAS W. BEHAN, Binghamton, N. Y., assignor to Nineteen Hundred Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 12, 1928. Serial No. 246,141. 2 Claims. (Cl. 220—63.)

1. A washing machine tub comprising separate side wall and bottom members, said side wall consisting of a laminated sheet having an outer steel sheet capable of resisting indentation and a thin inner copper sheet extending below said steel sheet, the bottom member consisting of a relatively heavy sheet of copper only, the adjoining edges of said inner copper sheet of the side wall and said bottom member being folded together around the lower end of



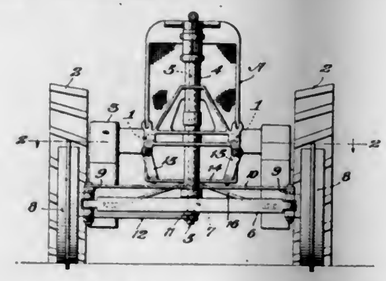
said steel sheet to form an air and water tight joint exposing within the tub only a copper surface and excluding air from between the laminæ.

1,826,237. CIGARETTE AND CIGAR HOLDER. EMILE BOECKEL, Paris, France. Filed Sept. 7, 1929, Serial No. 391,017, and in France Aug. 22, 1929. 2 Claims. (Cl. 131—10.)



1. In a holder for cigars and cigarettes means for expelling stub ends comprising a piston adapted to slide in a recess in the holder, a slidable smoke tube carrying said piston a spring disposed exteriorly of said smoke tube adapted for propelling said piston, a housing in said holder, a ring mounted for lateral movement in said housing, a stud carried by said ring said stud normally projecting laterally to the exterior of the holder, means for retaining said ring eccentrically of the holder, and means upon the smoke tube for engaging said eccentrically disposed ring to retain the piston in its retracted position said ring being moved into concentric position to release said piston upon pressing said stud.

1,826,238. TRACTOR ATTACHMENT. HENRY BUSE, Parker, S. Dak. Filed Oct. 29, 1929. Serial No. 403,308. 3 Claims. (Cl. 280—87.)



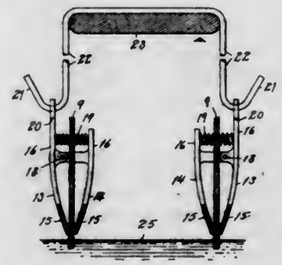
1. A steering attachment for tractors including a centrally disposed steering column supported upon the front of the tractor, a shaft mounted within said steering column and having a portion extending below the lower end of said column, a wheeled axle of substantially the same

width as the rear wheels of the tractor, said wheeled axle being provided with an opening formed to receive the lower end of said shaft, a U-shaped member disposed rearwardly of the steering column and having its ends connected to the sides of the tractor frame, V-shaped bracing means connected at its apex to the bight of the U-shaped member having its free ends connected to the axle.

1,826,239. WHITE BRONZE. JOSEPH H. CHEETHAM, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Apr. 16, 1929. Serial No. 355,671. 1 Claim. (Cl. 75—1.)

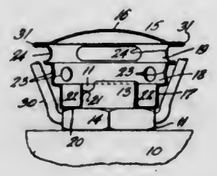
An alloy of the class described, comprised copper 52 to 55%, tin 1.5 to 2.5%, lead 10 to 12%, zinc 15 to 19%, nickel 15 to 18%, iron in substantial amounts up to 0.75% and manganese in substantial amounts up to 0.25%.

1,826,240. METHOD OF ANCHORING THE ELASTIC STRANDS OF ELASTIC FABRICS. LESTER B. CHISHOLM, Waterbury, Conn., assignor to The American Mills Company, Waterbury, Conn., a Corporation. Filed June 26, 1930. Serial No. 464,098. 4 Claims. (Cl. 91—68.)



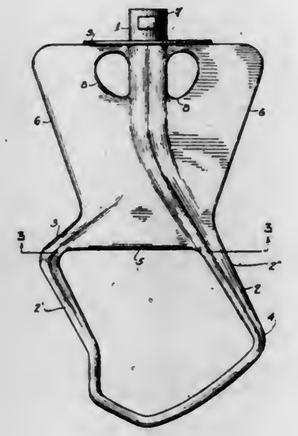
1. A method of locally anchoring the elastic strands of elastic fabrics, consisting in first compressing the fabric at a point where it is desired to limit the penetration of an anchoring adhesive and thereafter applying a liquid adhesive to the areas of the fabric in which it is desired to anchor the elastic strands; whereby the penetration of the said adhesive is limited to an area lying to one side of the compressed portion of the fabric.

1,826,241. COMBUSTION CONE OR PROTECTOR FOR TORCHES. ROBERT A. CURRIE, Syracuse, N. Y., assignor to R. E. Dietz Company, New York, N. Y. Filed Mar. 29, 1929. Serial No. 350,935. 13 Claims. (Cl. 67—55.)



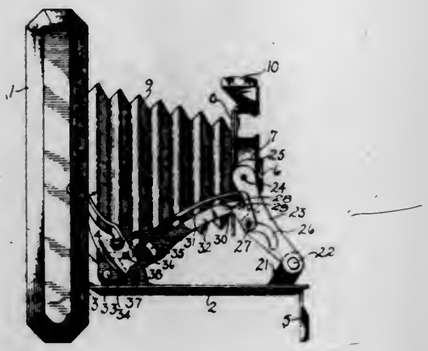
2. The combination with a torch having a burner, of a hollow protector which provides a combustion chamber surrounding the upper end of said burner, and having flame exit openings in its sides at an elevation above the upper end of the burner, and means for the admission of air to said chamber below said flame exit openings and adjacent the upper end of the burner, the cross sectional area of the portion of said chamber in which said exit flame openings are located being more than twice that of the burner.

1,826,242. DOUGH MIXER. WALTER F. DEHUFF, Glen Rock, Pa. Filed July 27, 1929. Serial No. 381,522. 14 Claims. (Cl. 259—134.)



1. A dough mixer comprising a shaft, a hollow loop in the form of an agitator secured to said shaft, a shearer blade secured at the top of said loop.

1,826,243. SELF ERECTING FRONT FOCUSING CAMERA. CARL C. FUERST, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 21, 1929. Serial No. 408,687. 12 Claims. (Cl. 95—40.)

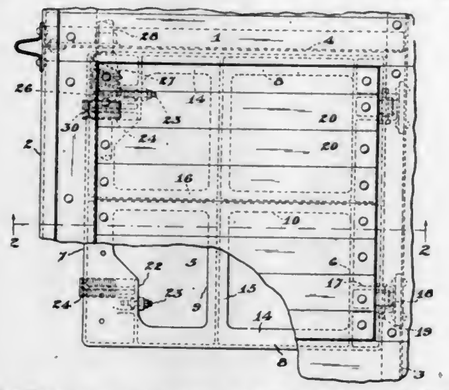


1. In a folding camera the combination with a camera body and a bed hinged thereto, of a bed brace for supporting the bed, a foldable lens carriage hingedly attached to the bed, a hinged brace for holding the carriage erect, and connections between said hinged brace and said bed brace including a cam slot and a cam follower, and means for holding the cam follower tightly against one side of the slot.

1,826,244. DOOR FOR CARS. KARL M. HAMILTON, Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Dec. 2, 1929. Serial No. 410,979. 10 Claims. (Cl. 105—280.)

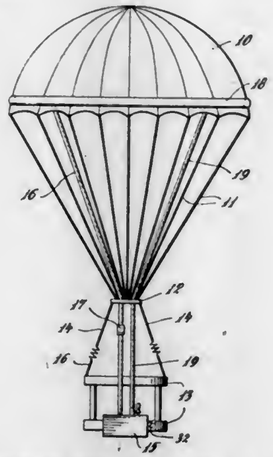
1. In a railway car, in combination with the floor of the car having a discharge opening, a door adapted to close said opening comprising a one-piece cast metal frame

having bars extending along the inner and outer edges of the door and spaced bars connecting said inner and outer bars, hinge members connected to the inner of said bars,



and a face portion composed of abutting floor boards attached at their opposite ends to said inner and outer frame bars.

1,826,245. PARACHUTE. JOSEF HAMMERLE, New York, N. Y. Filed May 5, 1930. Serial No. 449,858. 3 Claims. (Cl. 244—21.)



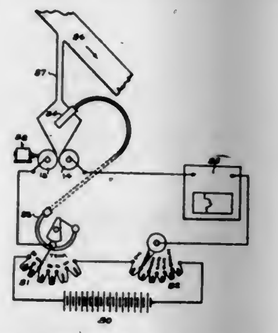
3. In combination with a parachute, a tube attached to the umbrella of the parachute, a gas container secured to the harness of the parachute, resilient means connecting the harness with the parachute, a tube connecting said container with said first-named tube, a valve mounted in said second-named tube, and means for opening said valve comprising a rod or the like passing through said second-named tube and attached to said valve and said tank.

1,826,246. CLOSURE FOR SELF-FILLING PENS. MAX HEERKLOTZ, Hamburg, Germany, assignor to Firm Simplo Fullfeder Gesellschaft Voss, Lausen & Dziambor, Hamburg, Germany. Filed May 29, 1930, Serial No. 457,146, and in Germany Sept. 4, 1929. 1 Claim. (Cl. 120—46.)



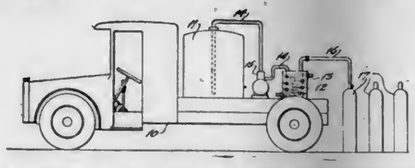
A fountain pen, comprising in combination with a holder, a rubber tube in said holder, a blade spring adapted to compress said tube, a square block movably mounted in the end of said holder adapted to actuate said spring, a screw plug having external right hand screw threads and a bore in the outer end of said plug having internal left hand screw threads bearing against the outer end of said square block, a screw threaded sleeve screwed on said screw plug, a screw in said sleeve and screwed into said screw plug and a closing cap adapted to screw tightly on said screw sleeve.

1,826,247. PROCESS AND APPARATUS FOR DETERMINING THE MOISTURE CONTENT OF SUBSTANCES. THOMAS E. HEPPENSTALL, Longview, Wash. Filed Dec. 9, 1929. Serial No. 412,818. 7 Claims. (Cl. 175—183.)



1. In a device of the character described, the combination of two roller electrodes electrically insulated from each other and disposed positively in a predetermined minimum spaced relation as respects each other thereby providing for the passing of hydroscopic material in small body form therebetween while the moisture content of said material is being determined; means for actuating said rollers to draw in and compress the material to be tested; a hopper operatively disposed immediately above said roller electrodes; a conduit connecting said hopper to a material chute; and an electrical conductivity indicating device on which the conductivity values of the material being tested may be continuously indicated.

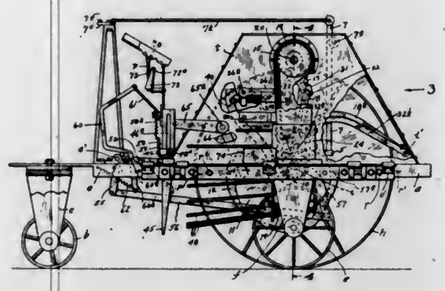
1,826,248. GAS SUPPLYING METHOD AND DEVICE THEREFOR. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Lankwitz, Germany. Filed Feb. 16, 1928, Serial No. 254,912, and in Germany Feb. 24, 1927. 3 Claims. (Cl. 62—1.)



1. A process of handling high pressure gases which consists in passing at intervals liquefied gas from a low pressure storage container into a high pressure vaporizer, applying heat to said vaporizer and thereby converting said liquid into gas of high pressure and storing said high pressure gas in suitable containers.

1,826,249. BUNDLE SHOCKING MACHINE. JOHN G. HOLIFER and VICTOR S. LANDESS, Portland, Oreg., assignors of one-fourth to Edward Owen Blazier and one-fourth to Harold Emery Blazier, Portland, Oreg. Filed Oct. 7, 1929. Serial No. 397,832. 23 Claims. (Cl. 56—423.)

1. In a bundle shocking machine a frame, a rotatable arm normally pendent carried by the frame, a cradle rotatably carried by the free end of said arm, manually controlled operating means adapted to rotate the cradle into its discharging position, and to rotate said cradle arm rearwardly with reference to the direction of travel of the machine, and upwardly after the cradle has assumed its discharging position, thereby to move the cradle rearwardly away from and lift the same over the discharged bundles during the continued forward motion of the machine, and finally to return all operated parts to their initial positions.



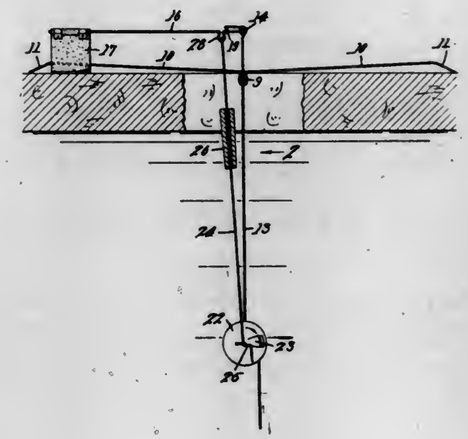
1,826,250. HAY KNIFE. JENS W. JENSEN, Fairfield, Idaho. Filed Apr. 29, 1930. Serial No. 448,286. 2 Claims. (Cl. 30—8.)



1. A hay knife comprising a flat elongated blade having a point on one end disposed laterally of the longitudinal median of said blade, said blade further having a curved cutting edge coextensive with the length thereof, a lateral fin secured to one face of the blade intermediate the point and the end of the blade and above the cutting edge and said fin being inclined downwardly towards the cutting edge, and a handle connected with the blade.

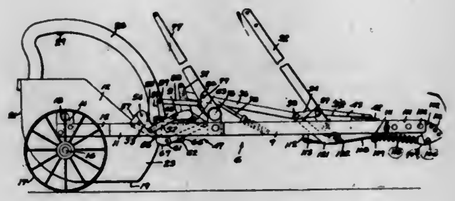
1,826,251. TIP-UP. FRANS HJALMAR LAURILA, Worcester, Mass. Filed Aug. 28, 1930. Serial No. 478,465. 6 Claims. (Cl. 43—17.)

1. In a tip-up, the combination with a wire adapted to rest on the ice and having ends extending angularly in different directions to engage the ice, and a spring-pressed signal device mounted thereon, of a support pivoted to the wire, a reel carried by the support and having an arm, a rod depending from the signal device, a slide on



the rod having a passage for the rod filled with grease, and a trigger on the reel for releasing rod to display the signal device.

1,826,252. REVOLVING SCRAPER. CHARLES LE BLEU, Los Angeles, Calif. Filed May 29, 1929. Serial No. 366,960. 4 Claims. (Cl. 37—140.)

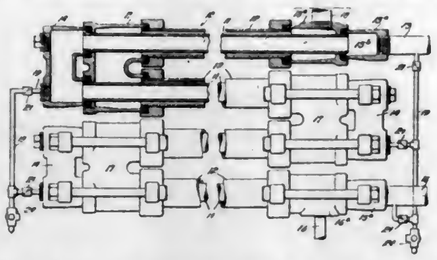


1. In a scraper construction, a frame, a scoop pivotally mounted thereon and having a scraping nose facing forward when in operating position, a detent movably mounted in said frame and engageable with said scoop forward of the axis of rotation thereof, operating means for optionally raising or lowering said detent, a draft connection pivoted to said frame, a cable attached at one end to said frame and at the other end to said connection, and a lever coupled to said operating means and engaging said cable to draw the draft connection rearwards of the frame as the detent is lowered.

1,826,253. LIQUID COOLING APPARATUS. HENRY H. MARSHALL, Highland Park, N. J., assignor to Brunswick-Kroeschell Company, New Brunswick, N. J., a Corporation of New Jersey. Filed June 25, 1930. Serial No. 463,077. 5 Claims. (Cl. 62—1.)

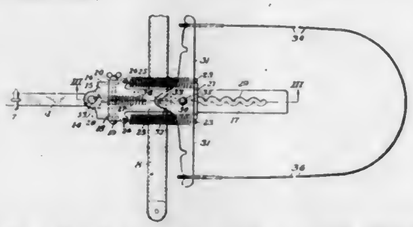
1. In liquid cooling apparatus including a tube to conduct the liquid to be cooled through a refrigerant con-

tainer, the combination of said tube and means for preventing damage to the apparatus by the freezing of the liquid in the tube, including chambers at the inlet and



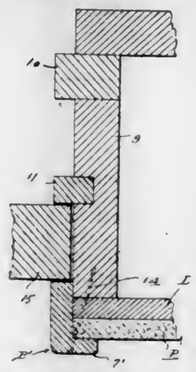
outlet ends of the tube and outside of the refrigerant container to accommodate the liquid forced out of the ends of said tube.

1,826,254. EXERCISING DEVICE. HARRY E. MCCOY, Pittsburgh, Pa., assignor to Specialties Manufacturing Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Feb. 21, 1930. Serial No. 430,230. 13 Claims. (Cl. 272—57.)



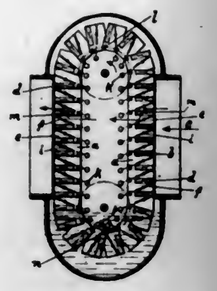
1. In an exercising device, a relatively fixed member, a relatively movable member reciprocable along the fixed member, yieldable means for biasing said member to an initial position, and means for imparting an oscillatory movement to the movable member when it is reciprocated with respect to the fixed one.

1,826,255. SANITARY BEAD OPENING. WILLIAM T. MORGAN, Neodesha, Kans. Filed Jan. 15, 1930. Serial No. 420,920. 5 Claims. (Cl. 20—11.)



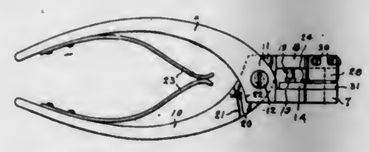
1. A wall having an opening, a closure supporting frame in the opening, a bead formed of wood, said bead being of L-shaped formation in cross section, and having one flange thereof secured to the frame, and the other flange thereof extending in spaced parallelism to the frame, a plaster coat on the wall abutting the first mentioned flange of said bead, the last mentioned flange of said bed being disposed in overlapping relation with the adjacent edge of said plaster coat and the first mentioned flange of said bead providing a closure stop for the frame.

1,826,256. ROTATABLE GAS FILTER. BERNHARD RICHTER, Berlin, Germany. Filed July 29, 1929, Serial No. 381,914, and in Germany Aug. 27, 1928. 5 Claims. (Cl. 183—21.)



1. A filter for cleansing air and gas with a movable travelling band composed of filter elements, comprising in combination an endless band, a plurality of filter elements arranged horizontally around said travelling band so that the fluid to be cleansed passes through said filter elements in approximately vertical direction, a plate mounted on the travelling band for guiding the flow of the fluid fitted between each two filter elements, said plate passing from the inner lower edge of an upper filter element to the outer top edge of the lower filter element, said plate acting to prevent the fluid to be cleaned from passing through the endless band without passing through the filter elements.

1,826,257. COMBINED PUNCH AND SLITTING DEVICE. GALE S. ROBINSON, Seattle, Wash. Filed Sept. 17, 1930. Serial No. 482,483. 6 Claims. (Cl. 164—81.)



1. In a combined punch and slitting tool, two relatively opposed jaws movable toward and away from each other, a punch member carried by one of said jaws, a die block on the other jaw having a receptacle for said punch member and having two shearing edges disposed in relatively inclined relation on opposite sides of said punch receptacle, and two slitting knives carried by the jaw opposite said die member and cooperating with the shearing edges of said die block.

1,826,258. OIL COMPOSITION AND PROCESS OF RETARDING DEVELOPMENT OF RANCIDITY THEREIN. THOMAS HUNTON ROGERS, Wilmington, Del., assignor to E. I. Du Pont De Nemours & Co., Wilmington, Del., a Corporation of Delaware. Filed Aug. 21, 1922, Serial No. 583,365. Renewed Mar. 5, 1927. 17 Claims. (Cl. 134—79.)

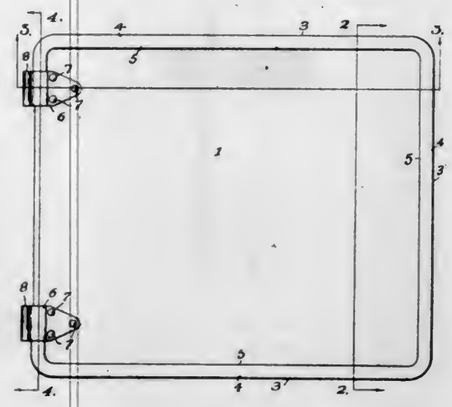
2. The process of retarding the development of rancidity in unsaturated fatty oils which comprises mixing with such an oil an alkali-metal oxalate.

11. A coating composition containing nitrocellulose, a softener for said nitrocellulose comprising a substance having a tendency to undergo oxidation when exposed to air, and a compound capable of inhibiting said oxidation whose molecule contains the following atomic grouping:

$$-O.OC.CO.O-R$$

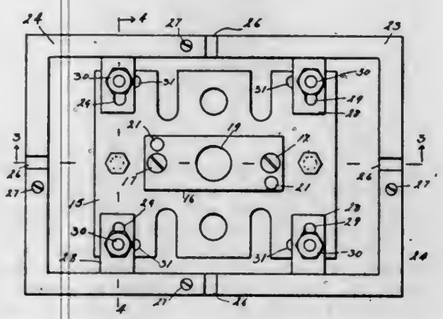
where R stands for the radical of a member of a group which includes hydrogen and the alkali-metals.

1,826,259. BOOK COVER. FRANK S. SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Oct. 28, 1930. Serial No. 491,652. 4 Claims. (Cl. 281—37.)



1. A book cover having a channeled strip positioned around the edges of the covers and secured under tension by means of metal clips which embrace the end portions of said strip and are fastened to the cover.

1,826,260. ADJUSTABLE FORM FOR MAKING PAPER BOXES. CARL SCHWARZ and PAUL PANHORST, Philadelphia, Pa. Filed Oct. 5, 1929. Serial No. 397,521. 6 Claims. (Cl. 93—59.)

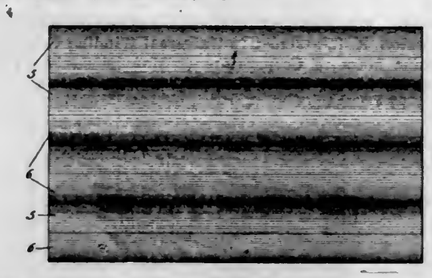


1. In a device of the character described, an expansion form comprising four angle sections, certain of said sections having tongues and certain of said sections having grooves into which said tongues fit, the tongues being slotted for the passage of clamping screws and a suspension plate to which the angle sections are adjustably secured.

1,826,261. METHOD OF REFINING FERROCHROME. KENNETH M. SIMPSON, New York, N. Y. Filed Apr. 10, 1929. Serial No. 354,169. 5 Claims. (Cl. 75—18.)

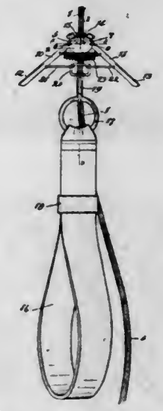
1. The method of refining ferro-chrome which comprises dissolving the ferro-chrome in hydrochloric acid, filtering out impurities, evaporating the acid, and subjecting the residue to the action of hydrogen at a temperature of approximately 1550° C.

1,826,262. METHOD OF PRODUCING DESIGNS ON TILE. LEON V. SOLON, Trenton, N. J., assignor to Robertson Art Tile Co., Trenton, N. J., a Corporation of New Jersey. Filed Mar. 16, 1929. Serial No. 347,532. 1 Claim. (Cl. 41—24.)



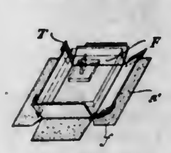
The method of making tile which comprises forming a tile blank having an undulating surface, consisting of angularly elated plane surfaces, applying a glaze evenly over the surface of said tile, firing the tile, and maintaining said tile with its glazed surface in a generally horizontal position during firing so that the glaze in molten state flows toward the lower parts of the surface to produce a desired design.

1,826,263. FIRE ESCAPE. ROBERT M. STEPHENS, Winnipeg, Manitoba, Canada. Filed Apr. 8, 1930. Serial No. 442,571. 5 Claims. (Cl. 227—25.)



1. In a fire escape, the combination with a suspending line, of a head slidably mounted on the line and embodying a compressible friction member engageable with the line, a pair of levers pivotally carried by the head, a binding member enveloping the friction member and attached to the levers and means for suspending a person from the levers.

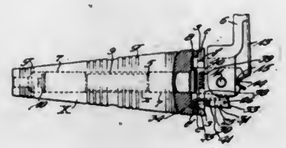
1,826,264. METHOD OF WRAPPING STAYED BOXES. JOHN S. STOKES, Huntingdon Valley, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1928. Serial No. 303,688. 22 Claims. (Cl. 93—54.)



1. The method of producing a stayed box which comprises adhesively securing tabs to box structure, and

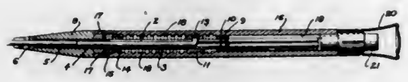
substantially immediately thereafter and before material setting of the adhesive, applying an individual wrapper to the box structure.

1,826,265. WINDING MACHINE. ERNEST R. SWANSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed July 11, 1930. Serial No. 467,302. 12 Claims. (Cl. 242—27.)



1. In a winding machine, the combination of a cop-tube having an annular rim with a radial slot extending therethrough, means for rotatively supporting the cop-tube, means for rotating the cop-tube in a predetermined direction to wind strand-material thereon, and means engageable with the slot in the rim of the cop-ture when its rotation is arrested to prevent it from turning in a direction reverse to normal.

1,826,266. PENCIL. CHARLES E. WEHN, Alameda, Calif., assignor to Listo Pencil Corporation, Alameda, Calif., a Corporation of California. Filed Feb. 19, 1929. Serial No. 314,217. 6 Claims. (Cl. 120—18.)



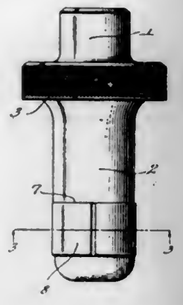
6. A lead controlling mechanism for a pencil of the character described comprising a tube adapted to contain a lead, a head member secured to the tube, a sleeve rotatably mounted on the tube adjacent the head member, said sleeve being adapted to support a rotatable pencil barrel, a collar on the tube adjacent the sleeve whereby longitudinal movement of the sleeve upon the tube is prevented, and means whereby rotation of the barrel and sleeve with relation to the head member will cause the lead to be pushed outwardly from the tube.

1,826,267. BRUSH. HARRY B. WHITE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Jan. 24, 1929. Serial No. 334,618. 8 Claims. (Cl. 15—195.)



1. A brush comprising a metal back formed with tuft seats and longitudinally extending diverging hollow channel portions opening into said tuft seats, tufts of bristles seated in said tuft seats and staples connected with the tufts and extending into the channels for securing said tufts in place.

1,826,268. FLANGING TOOL. JAMES M. WILKINS, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed May 15, 1929. Serial No. 363,244. 17 Claims. (Cl. 153—79.)



1. A flanging tool comprising a head, a longitudinal body having a circumferential groove therein, and a ring to fit in said groove.

1,826,269. ELECTROMAGNETIC VALVE. GABRIEL W. ANDERSON, Chula Vista, Calif., assignor to Gas Furnace Control Co., a Corporation of California. Filed Sept. 26, 1928. Serial No. 308,411. 24 Claims. (Cl. 137—139.)



1. In an electrically operated valve, the combination of: a valve body providing a seat therein; a plunger member normally engaging said seat; electromagnetic means for moving said plunger member away from said seat; stationary cam surfaces carried by said valve body; a guide member carried by said plunger member and adapted to successively engage said cam surfaces to partially rotate said plunger member when said electromagnetic means is energized; and adjustable means for determining the maximum position to which said plunger member moves after each partial rotation thereof.

1,826,270. ARTIFICIAL TOOTH. BENJAMIN L. BROOKS, Lynchburg, Va. Filed May 16, 1925. Serial No. 30,860. 3 Claims. (Cl. 32—9.)



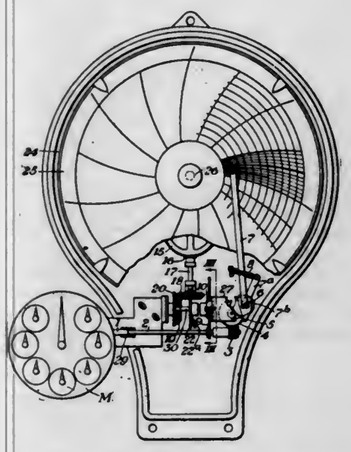
1. An artificial porcelain tooth facing having an all porcelain glazed root end, the lingual side of said facing being provided beyond said root end with flat surfaces forming a dihedral angle whose apex extends transversely of the facing, said facing being formed with a vertically elongated slot opening in said surfaces and extending toward the labial portion of said facing, said slot intersecting the apex of the angle formed by said surfaces, and a metal backing coincident with said plane surfaces having a plate fitting said slot, said slot being concealed by said backing when the latter is in place.

1,826,271. ARTIFICIAL TOOTH. BENJAMIN L. BROOKS, Lynchburg, Va. Filed July 8, 1926. Serial No. 121,208. 1 Claim. (Cl. 32—9.)



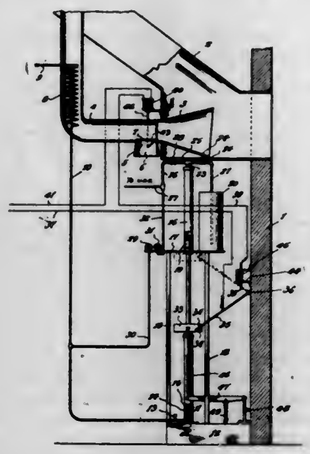
In an artificial tooth, an anchorage comprising a facing having a root extension, two surfaces on the lingual side, a metal backing to fit thereon, a base surface extending from the lingual side approximately at right angles to the long axis of the tooth toward the labial and buccal surfaces and adapted to merge with a second surface extending from the incisal edge toward the root end thereby forming an angle having two surfaces at approximately right angles to each other, the base surface and second surface having a slot therein adapted to receive a tongue portion of the backing.

1,826,272. DEMAND METER. HORACE CHRISMAN, Swissvale, Pa., assignor, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 20, 1926. Serial No. 155,903. 2 Claims. (Cl. 234—1.)



2. In a demand meter, a pivoted chart-supporting plate having a circular rack on its rear face, a shaft arranged adjacent said rack and parallel with the plane of said plate, a disk secured to said shaft having the peripheral rim thereof engaging the teeth of said circular rack, a notch and an offset portion in the rim of said disk, and means to drive said shaft and the disk secured thereto whereby said chart-supporting plate is intermittently rotated as said offset portion engages a tooth of the rack thereof.

1,826,273. POWER PLANT. NIELS CHRISTIANSEN, Newport News, Va., assignor of one-half to Charles H. Shepler, Ridley Park, Pa. Filed Jan. 20, 1928. Serial No. 248,209. 6 Claims. (Cl. 60—23.)



1. The combination with the smoke flue of a heat generator, of a by-pass tube in communication with the smoke flue and having an opening to establish communication with the atmosphere, a closed coil within said tube containing a temperature responsive fluid, a piston arranged to be actuated by expansion and contraction of said fluid, a damper within the by-pass tube controlling the admission of the atmosphere and of the gases from the smoke flue, and means whereby said damper will be operated with the movements of the piston.

1,826,274. TREATMENT OF ARTIFICIAL SILKS. RENÉ CLAVEL, Basel-Augst, Switzerland. Original application filed May 27, 1927, Serial No. 194,859, and in Germany Sept. 17, 1926. Divided and this application filed Mar. 27, 1928. Serial No. 265,284. 18 Claims. (Cl. 8—13.)

1. Process for weighting artificial silks comprising successively treating them with a plurality of weighting agents, without intermedite washing and neutralizing, and employing at least one substance adapted to hinder premature precipitation.

1,826,275. RUBBER PRODUCT AND PRODUCTION THEREOF. FRANCIS CLIFFORD DYCHE-TEAGUE, London, England. Filed Jan. 18, 1929, Serial No. 333,529, and in Great Britain Sept. 13, 1927. 2 Claims. (Cl. 260—1.)

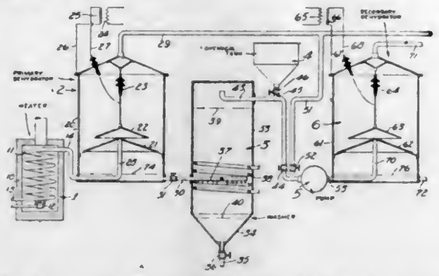
1. A process for the production of a chlorinated rubber product consisting in oxidizing the rubber and passing chlorine through a solution of said oxidized rubber.

2. A process for the production of a chlorinated rubber product consisting in oxidizing rubber, disaggregating the oxidized product by rolling in a mill, making a solution of the disaggregated product, and passing chlorine through said solution.

1,826,276. METHOD OF SALVAGING OIL FROM SLUDGE. HAROLD C. EDDY, Los Angeles, Calif., assignor to Petroleum Rectifying Company of California, Los Angeles, Calif., a Corporation of California. Filed Dec. 28, 1926. Serial No. 157,531. 14 Claims. (Cl. 204—24.)

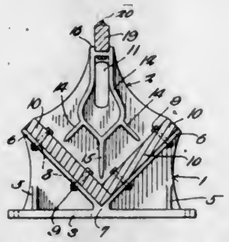
6. A process of completely dehydrating emulsified oil and recovering substantially all the oil, comprising: sub-

jecting an emulsion to the action of a primary electric field, thus dividing said emulsion into a clean oil and a sludge; washing said sludge in hot water to separate the residue emulsion and foreign matter; mixing said residue emulsion with a modifying agent; and subjecting said residue emulsion to the action of a secondary electric field to separate the oil and water of said residue emulsion, said secondary field being of different potential gradient from said primary field.



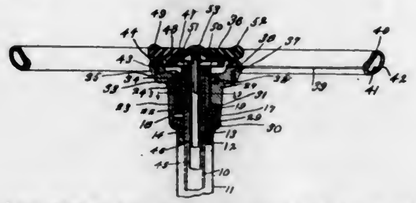
14. A process of completely dehydrating an emulsion, which includes: electrically treating said emulsion in a primary electric field; removing sludge from the treated emulsion; removing foreign matter from said sludge so as to leave a residual emulsion; and electrically treating said residual emulsion in a secondary field spaced from said primary field.

1,826,277. TROUGH. GEORGE W. ERICSON, Galesburg, Ill. Filed Aug. 4, 1927. Serial No. 210,596. 1 Claim. (Cl. 119—61.)



An article of manufacture, for use in the making of a trough, embodying an end plate provided along its lower edge with a rectangular foot extended unbrokenly across the plate, buttresses connecting the end plate with the foot, outstanding ledges projecting from the plate and located at an angle to each other, the ledges being connected together integrally, and to the foot, at a point between the buttresses, the plate being provided at its upper end with an outstanding, loop-shaped, reinforcing flange extended into the space between the ledges, the upper ends of the flange being extended upwardly beyond the top portion of the plate to form a seat for the handle of a trough.

1,826,278. STEERING WHEEL. CHARLES R. FLANIGAN, Cleveland, Ohio, assignor to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 14, 1928. Serial No. 299,479. 3 Claims. (Cl. 74—39.)



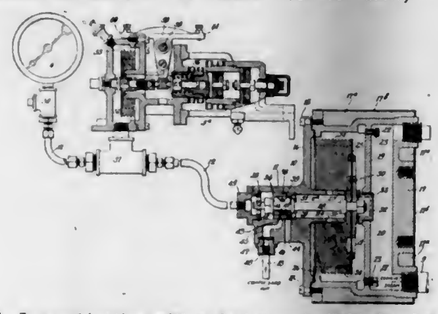
1. In a device of the class described, a steering column formed with a groove adjacent its upper end, a spring ring mounted in said groove, a washer mounted on said column, said washer being formed with a groove cooperating with said ring, a bushing mounted on said column and bearing on said washer, a wheel having a hub mounted on said column surrounding said bushing and connected thereto, and means securing said washer and bushing against axial movement away from said ring.

1,826,279. AUTOMOBILE CHAIN. KIRBY R. GARNER, Prud'homme, Saskatchewan, Canada. Filed May 26, 1928. Serial No. 280,903. 1 Claim. (Cl. 152—14.)



The combination with a rim and tire mounted thereon, of side chains located at opposite sides of the tire and formed from a series of detachably connected flat links positioned substantially at right angles to the tire means for tightening and fastening the ends of the chains, cross bars bent to span the tread side of the tire and having outstanding ends permanently riveted to selected links of the chains and stop fingers permanently secured to the side chains and opposing the rim and adapted by contact with the rim to arrest undue rotation of the bars in respect to the tire.

1,826,280. INDICATING AND CONTROLLING MECHANISM. CHARLES W. HARRIS, Proctor, Minn., assignor to Transportation Devices Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Nov. 4, 1927. Serial No. 230,965. 15 Claims. (Cl. 60—62.5.)



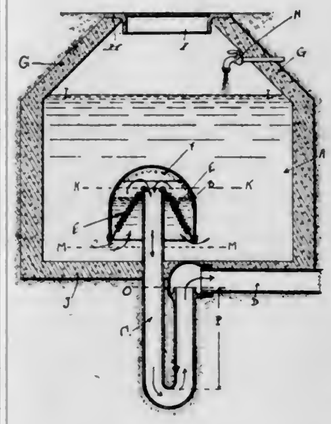
1. In combination with a device controllable by changes in back-pressure, movable means acted upon on one side by said back-pressure, and an air conduit between the other side of said means and said device containing compressed air balancing said back-pressure, together with air supply and exhaust means for said conduit having valve means controlling the same actuated by movement of said movable means to maintain the balance of pressures.

1,826,281. FASTENER. GEORGE A. HOLMES, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 29, 1928. Serial No. 265,750. 1 Claim. (Cl. 24—219.)



A snap fastener installation comprising, in combination, a rigid support having an aperture therethrough, a snap fastener member having a flange engaging the front face of said rigid support, a cup-shaped attaching portion extending from said flange through said aperture in said rigid support, said attaching portion having an imperforate annular wall and an imperforate bottom to prevent the passage of dust and moisture through said fastener member and to prevent noises and said wall portion, beyond the inner face of said rigid support, being expanded laterally by flattening a preformed hump in the bottom of said attaching portion thereby to provide the only means for attaching said snap fastener member to the rigid support in cooperation with said flange and apertured means extending from said flange and providing one of the elements of a separable snap fastener through which access may be had to the hump in the bottom of the attaching portion.

1,826,282. AIR BOUND SIPHON FLUSH TANK. HARMON D. MOISE, Sumter, S. C., assignor to Michael B. Cross, Eutawville, S. C., and Raymon Schwartz, W. Yates Yeadon, Sophia Brunson, and Marion W. Seabrook, Sumter, S. C. Filed Jan. 9, 1929. Serial No. 331,218. 4 Claims. (Cl. 137—106.)



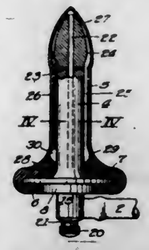
1. In an air bound siphon flushing apparatus, a movable bell forming part of a siphon, and a yieldably resistant means utilizing the downward pull exerted upon the air bell by the discharging liquid during the flushing operation to store up energy, and means timed to release said energy to restore the air bell, after the flushing operation, to its normal position.

1,826,283. BRAKE SHOE AND METHOD OF MAKING SAME. LOUIS P. MOOERS, Cleveland, Ohio, assignor to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 23, 1927. Serial No. 221,456. 1 Claim. (Cl. 188—250.)



A pressed steel brake shoe comprising a curved band of flattened cross section and end portions rebent inwardly, and a reinforcing plate disposed at right angles to said band, said plate being confined by and held from displacement by said rebent ends.

1,826,284. DILATOR. FRANK H. NEWTON, Los Angeles, Calif., assignor to The Electro Thermal Company, Steubenville, Ohio, a Corporation of Ohio. Filed Nov. 16, 1928. Serial No. 319,916. 7 Claims. (Cl. 128—344.)



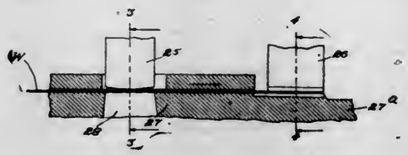
1. A dilator of the class described comprising a centrally perforated supporting base member having a cylindrical tapered end body provided with an air inlet valve and an unseating device therefor, and an elastic covering for the base member provided with inner longitudinal ribs.

1,826,285. ATTACHMENT FOR BOTTLES. VERNON C. PORTER, New York, N. Y., assignor to Charles M. Higgins & Co., New York, N. Y., a Copartnership composed of Charles M. Higgins and Tracy Higgins. Filed Dec. 10, 1927. Serial No. 239,025. 1 Claim. (Cl. 120—4.)



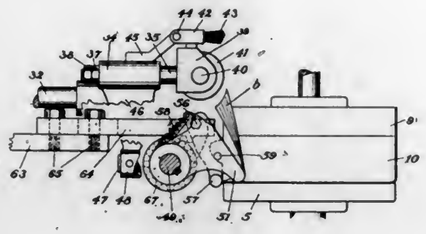
An attachment for ink bottles, comprising a strip of sheet metal bent on three parallel lines to provide a bottom plate, a side bar perpendicular to the bottom plate, a top bar inclined inwardly from the side bar, and a neck piece inclined outwardly from the top bar and perpendicular to the bottom plate, the neck piece having integral lateral projections which are bent around to provide a spring clip to embrace a cylindrical bottle neck and the top bar being provided with integral lateral projections having at their ends upturned tabs which cooperate with the neck piece to provide three points of support for a rod-like object placed horizontally across the attachment.

1,826,286. EXPANDED METAL LATH MACHINE. EDWARD T. REDDING, Parkersburg, W. Va., assignor to Penn Metal Company, Cambridge, Mass., a Corporation of Massachusetts. Filed May 12, 1926. Serial No. 108,649. 6 Claims. (Cl. 164—6.5.)



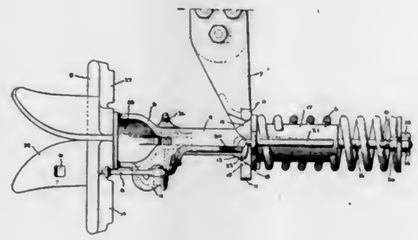
1. In apparatus for preparing a lath blank for expansion the combination of a pair of cooperating press members adapted for the intermittent feed of a blank therethrough, cooperating slitting elements mounted in the press members and cooperating ribbing elements mounted in the said press members, said elements being relatively disposed and arranged to cause the ribbing elements to form ribs in the blank while the slitting elements remain in the slits produced thereby.

1,826,287. BOX WRAPPING MECHANISM. ERNEST G. RIDER, Philadelphia, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1927. Serial No. 221,202. 19 Claims. (Cl. 93—54.)



1. In a wrapping machine or the like, means for folding a wrapper panel into engagement with a box side wall, a support, a shaft rotatably mounted thereon; a plurality of turn-in tools carried by said shaft, and means to effect, positively, rotation of said shaft in both directions of movement.

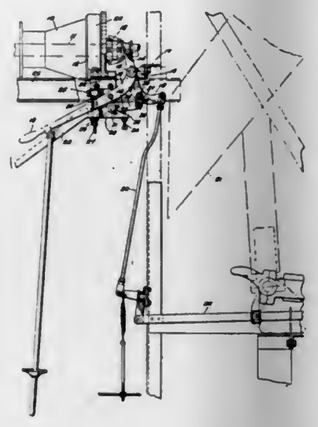
1,826,288. AUTOMATIC AIR AND STEAM HOSE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Filed June 18, 1928. Serial No. 286,266. 10 Claims. (Cl. 285—58.)



1. In an automatic train pipe connecter, the combination of a coupling head, a bracket, a member projecting from the head rearwardly past the bracket, a spring pressing the member forward against the rear side of said bracket, a support for said spring mounted on the bracket for rocking movement thereon, and a lock for automatically locking said head to a companion head when the cars couple up, said lock including a latch pivoted behind the front face of the head, and a plunger extending from the rear end of said spring support forwardly through an opening in said member into operating relation to said latch.

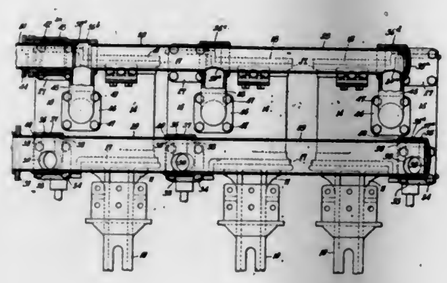
1,826,289. CONCRETE MIXER. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 17, 1929. Serial No. 333,074. 3 Claims. (Cl. 192—17.)

1. The combination with a rotatable element having a braking surface, a clutch for transmitting power to said element, a brake member for engaging said braking surface to prevent rotation of said element, a control lever for said clutch, and a control lever for said brake member, of an intermediate lever engaging said brake lever adapted



to transmit motion to said brake lever in one direction only; and a toggle link connecting said clutch and intermediate levers.

1,826,290. LOCOMOTIVE STEAM DISTRIBUTION. HERBERT W. SNYDER and ROBERT B. KRUEGER, Lima, Ohio. Filed June 15, 1928. Serial No. 285,541. 19 Claims. (Cl. 105—37.)

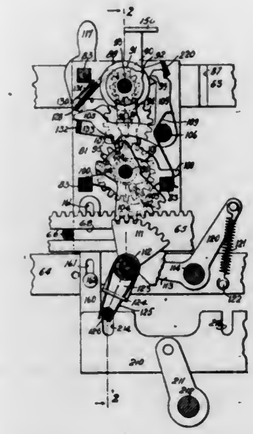


1. Steam distribution means for the cylinders and valve-chests of a geared locomotive comprising main steam conduit means extending along a row of cylinders, main exhaust conduit means extending along said row, and branch conduits having flexible means of connection to the chests of said cylinders.

1,826,291. CALCULATING MACHINE. ROBERT H. STROTHER, Montclair, N. J., assignor to Remington Accounting Machine Corporation, New York, N. Y., a Corporation of New York. Original application filed Aug. 21, 1922, Serial No. 583,391. Divided and this application filed July 30, 1925. Serial No. 47,132. 24 Claims. (Cl. 235—133.)

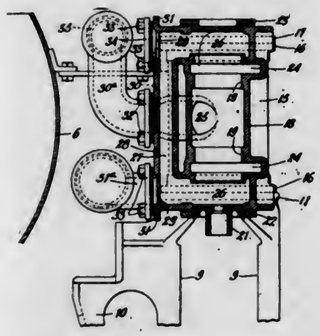
1. In a calculating machine, the combination of a pair of register gear wheels, a gear for driving the gear wheel of higher denomination differentially in one direction for addition and in the opposite direction for subtraction,

spring means for moving on occasion the axis of said higher gear wheel one-half space to transfer, means for causing said spring means to act on said axis in one direction for addition and in the opposite direction for subtraction, a detent for resisting the action of said spring means, and means whereby the lower register wheel trips the detent of the higher register wheel.



8. In a calculating machine, the combination with actuating mechanism and a detachable totalizer, of transfer devices in said totalizer, and individual means in said actuator for operating each of said transfer devices by power other than that derived from the totalizer wheels, said transfer devices and their operating means being separated when the totalizer is detached from the machine.

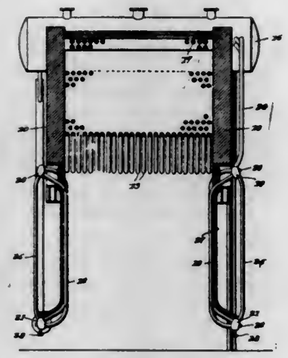
1,826,292. GEARED LOCOMOTIVE ENGINE CONSTRUCTION. DAVID B. THORNBURN and ROBERT G. KRUEGER, Lima, Ohio. Filed June 15, 1928. Serial No. 285,560. 20 Claims. (Cl. 105—42.)



1. A steam engine cylinder and valve-chest construction having means whereby the exhaust from both ends may be discharged laterally at either end.

1,826,293. SOLID WATER WALL FOR BOILERS AND THE LIKE. CARL F. WEIGEL, Chattanooga, Tenn., assignor to The Walsh & Weidner Boiler Co., Chattanooga, Tenn., a Corporation of Tennessee. Filed Dec. 2, 1927. Serial No. 237,247. 3 Claims. (Cl. 122—235.)

1. A tubular wall forming the wall of a space through which heated gases flow, including upper and lower headers each having a pair of front tube receiving faces one disposed at an angle to the other, top and bottom tube receiving faces and rear faces; a row of upright spaced water tubes; a second row of upright spaced water tubes, the tubes of which are interspersed with and in juxtaposition to the tubes of the first row; the tubes of said rows having bent ends and the tubes of the first row being connected at their upper ends into one front face of the upper header and at their lower ends into the corresponding



front face of the lower header, and the tubes of the second row being connected at their upper ends into the other front face of the upper header and at their lower ends into the corresponding front face of the lower header; tubes outside of said gas space for connecting said headers the upper ends of which are connected into the bottom face of the upper header and the lower ends of which are connected into the top face of the lower header; upcomer tubes connected into the upper header at its top face; hand holes in the rear face of said headers; and closures for said holes.

1,826,294. TAKE UP DEVICE FOR ELECTRIC FIXTURES. OTHO P. WILKIN, South Pasadena, Calif. Filed Dec. 20, 1926. Serial No. 155,930. 4 Claims. (Cl. 173—367.)

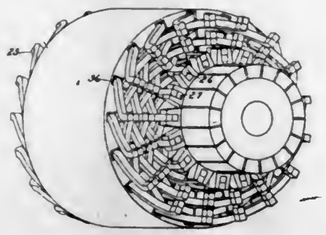


1. A take-up device for electric fixtures including a housing, a pair of reels mounted therein and having spaced parallel axes, electrical conductors wound on and electrically connected with the sides of said reels, said sides of one reel being in electrical contact with the sides of the other reel for connecting said conductors in series.

1,826,295. DYNAMO ELECTRIC MACHINE ELEMENT. VINCENT G. APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,359. 6 Claims. (Cl. 171—206.)

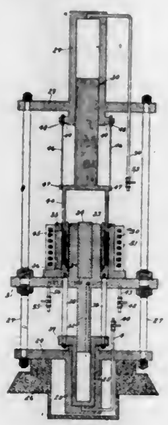
1. A dynamo electric machine element comprising a core having winding apertures and a plurality of conductor bars arranged in said apertures in several concentric layers with the ends of the bars extending from the said apertures at both ends of the core, bent so as to join

angularly spaced apart bars together in pairs, said pairs at one end of the core all being composed of bars of adjacent layers and said pairs at the other end of the core



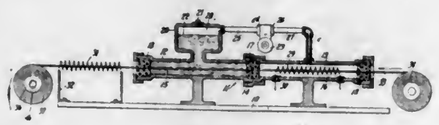
being partly composed of bars of the outer layer coming together with bars of the inner layer and the remainder of bars of adjacent layers.

1,826,296. DYNAMO ELECTRIC MACHINE MEMBER. VINCENT G. APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,363. 17 Claims. (Cl. 171—206.)



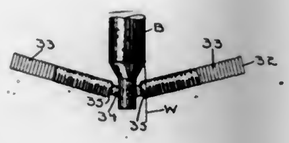
2. Steps in the method of making a dynamo electric machine member, which consists of coating the conductors with an insulating compound, susceptible of vitrification assembling the conductors into the winding apertures of the core laminæ and applying intense heat thereto thus vitrifying the compound in situ.

1,826,297. METHOD OF MAKING ELECTRIC COILS. VINCENT G. APPLE, Dayton, Ohio. Filed May 24, 1930. Serial No. 455,296. 12 Claims. (Cl. 175—21.)



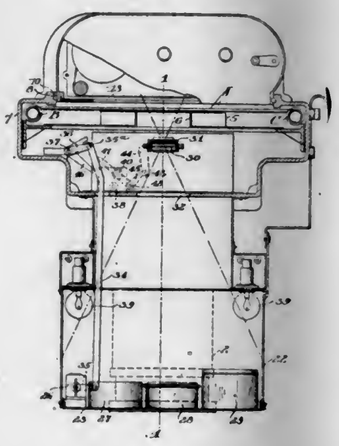
1. A method of imbedding the turns of an electric coil in a mass of insulation, which consists of impregnating and coating the fibrous covering on the wire with insulating material in liquid form, partly hardening the coating, winding the wire into a coil, heating the coil to first unite the coatings on the several turns of the wire into a single mass, then further heating it to harden the mass.

1,826,298. BOBBIN SUPPORT FOR WEFT REPLENISHING LOOMS. CARL PHILIP BERGSTROM, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1930. Serial No. 443,190. 12 Claims. (Cl. 139—251.)



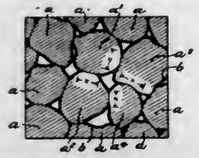
1. In a weft replenishing loom wherein a bobbin moves by gravity to transfer position, a pair of inclined bobbin supports to coact and assist in holding a bobbin in transfer position, a shoulder formed on the upper portion as an integral part of one of said supports to engage a bobbin rolling down the other support and prevent the bobbin from moving by reason of its momentum substantially beyond proper transfer position, said supports being resilient throughout their length.

1,826,299. PHOTOGRAPHIC CAMERA. BENJAMIN D. CHAMBERLIN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Original application filed Jan. 29, 1921, Serial No. 440,908. Divided and this application filed Jan. 22, 1929. Serial No. 334,180. 7 Claims. (Cl. 88—16.)



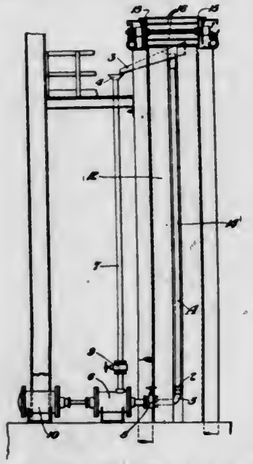
1. In an aerial camera, the combination with a camera body having a lens, a separate dark chamber adjacent to said body and a lens in the dark chamber, of a registering instrument in the latter in the focus of the chamber lens, means for feeding sensitive material into position for exposure to light from both lenses, a shutter normally protecting the sensitive material and means for periodically lighting the dark chamber in timed relation to actuations of the shutter.

1,826,300. ABRASIVE WHEEL. REVERE CHAPELL, Cincinnati, Ohio. Filed Aug. 10, 1929. Serial No. 384,988. 4 Claims. (Cl. 51—206.)



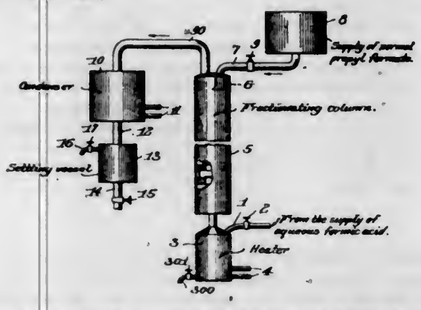
1. A high speed abrasive wheel composed of particles of abrasive material unitarily and rigidly united together by a bonding material, the proportion of bonding material to the abrasive being progressively greater radially outwardly from the inner diameter of the wheel to the periphery thereof.

1,826,301. METHOD OF COATING. EUGENE L. CHAPPELL, McKeesport, Pa., assignor to National Tube Company, a Corporation of New Jersey. Filed May 31, 1928. Serial No. 281,789. 4 Claims. (Cl. 91—68.)



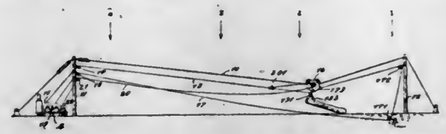
2. The method of coating the surfaces of metal pipe with mineral cement which consists in forcing an excess of plastic cement in a confined flow-body over the surface to be coated, and then withdrawing the excess cement from the pipe by suction.

1,826,302. METHOD FOR THE DEHYDRATION OF FORMIC ACID. HANS T. CLARKE and DONALD F. OTHMER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 8, 1928. Serial No. 304,706. 9 Claims. (Cl. 202—42.)



1. In the process of removing water from aqueous formic acids the steps of mixing therewith normal propyl formate and distilling water and normal propyl formate from the mixture at a temperature below the boiling point of water.

1,826,303. VARIABLE SPEED SKIDDING DEVICE. MERIAN H. DICKINSON, Seattle, Wash., assignor to Lidgerwood Pacific Company, Tacoma, Wash., a Corporation of Washington. Filed July 11, 1929. Serial No. 377,421. 7 Claims. (Cl. 104—112.)



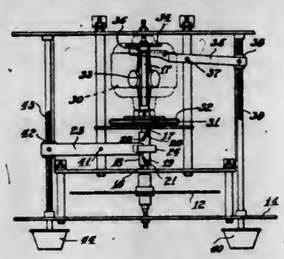
1. In combination, a main cable, a carriage mounted thereon and adapted to be moved therealong, a driving member, an inhaul and an outhaul drum on which cables are wound, said cables being connected to and adapted to move said carriage in opposite directions, means for driving said inhaul and outhaul drums in interlocked relation in the inhaul direction, and means for changing the speed ratio of said drums while rotating in the inhaul direction by changing the speed of rotation both of said inhaul and of said outhaul drums.

1,826,304. PAD, CUSHION OR THE LIKE. CONRAD DIEHL, Heroldsberg, Germany. Filed Mar. 13, 1931, Serial No. 522,361, and in Germany Feb. 5, 1931. 5 Claims. (Cl. 132—78.5.)



1. A pad, cushion or the like consisting of layers which are united by pressure near their circumference along a line of compression of wave-shaped conformation.

1,826,305. TELEVISION APPARATUS. HAROLD P. DONLE, Meriden, Conn. Filed July 18, 1928. Serial No. 293,676. 5 Claims. (Cl. 178—6.)

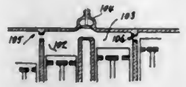


1. A television reproduction apparatus comprising a scanning disc, a shaft therefor having two alined parts, controlled means for rotating one part of the shaft relative to the other part and a motor for rotating the other part, a friction disc on the latter part, a controlled brake coacting with said friction disc, a ball governor rotatable with said disc, and a driving connection between said motor and that part of said shaft to which said governor is connected.

1,826,306. INTERNAL COMBUSTION ENGINE. PAUL DUCELAY, Paris, France, assignor to Societe Des Moteurs Dugelay, Paris, France, a Limited Company of France. Filed Aug. 23, 1928, Serial No. 301,649, and in France Sept. 16, 1927. 3 Claims. (Cl. 123—53.)

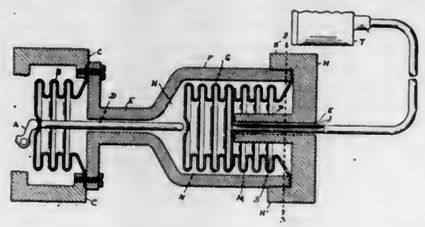
3. A two-cycle internal combustion motor comprising in combination, a plurality of cylinders, means for admit-

ting the carbureted gases under controllable pressure, means for admitting the scavenging air under controllable pressure, and an intercommunication canal maintained permanently open between certain of said cylinders having



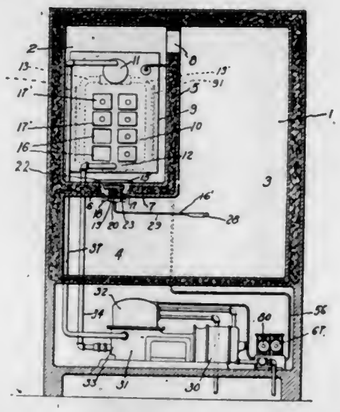
narrowed calibrated portions and controlled cut-offs between others of said cylinders whereby suitable loss of kinetic energy and the necessary lag are effected for obtaining the proper retardation of ignition in the successive cylinders.

1,826,307. REGULATABLE BELLOWS MECHANISM OF REFRIGERATION SYSTEMS. PATTERSON FARMER, Detroit, Mich. Filed Aug. 28, 1929. Serial No. 388,905. 7 Claims. (Cl. 297—8.)



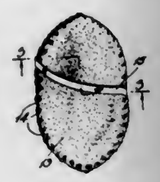
7. In combination with a pair of terminally connected bellows members, a terminally apertured surrounding shell wherein said bellows members are located and with an adjacent wall portion whereof one end of one of said bellows members is connected, thereby isolating the space thus enclosed from the remainder of the interior portion of said shell, and means operable against the end of the bellows member first above mentioned whereby the degree of possible response by it to transmitted thermal variations from a point exterior of said shell may be regulatably varied.

1,826,308. REFRIGERATOR. JONATHAN P. B. FISKE, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 14, 1921. Serial No. 452,015. 5 Claims. (Cl. 62—95.)



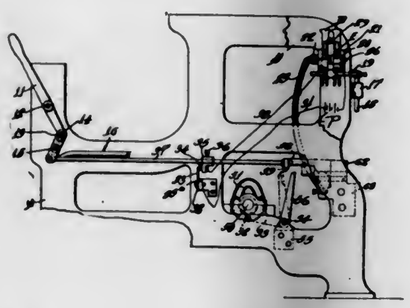
5. A refrigerant evaporating unit comprising elongated and horizontally disposed refrigerant distributing means arranged in different horizontal planes in substantially parallel relation, a pair of groups of refrigerant distributing ducts connected between the upper and lower means, each of such groups of ducts being connected to the upper means longitudinally thereof and projecting downwardly in continuous substantially parallel vertical planes thence inwardly adjacent the opposite ends of the ducts, said ends there communicating with the lower means longitudinally of the latter, and a freezing tray disposed in the region between the groups of ducts for exchanging heat therewith.

1,826,309. EAR PAD. MITTIE O. GASTON and THOMAS R. JAMES, Dallas, Tex. Filed Mar. 9, 1931. Serial No. 521,349. 8 Claims. (Cl. 132—45.)



1. An ear protector of the class described, comprising a pad of absorbent porous material of a size and shape sufficient to cover an ear of a person, and an extension on said pad to cover the surface at the back of the head behind and beyond the ear.

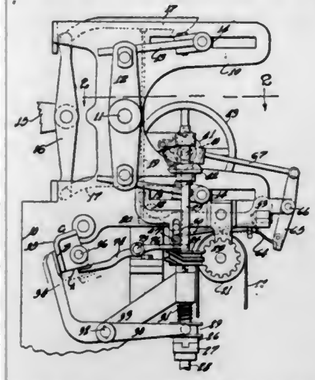
1,826,310. KNOCK-OFF FOR ELECTRIC WARP STOP MOTION. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 5, 1929. Serial No. 390,620. 9 Claims. (Cl. 139—353.)



1. In a warp stop motion for a loom having a rod to be moved longitudinally to effect loom stoppage, a regularly moving actuator, a head on the rod, a pivoted latch located under the rod and engaging the head to support the same, means upon occurrence of warp fault to rock the latch out of supporting position with respect to the head, the head thereupon falling into engaging position with the actuator to be moved by the latter to stop the loom, means operative during the stopping of the loom to restore the latch to normal position, and coacting inclined faces formed on the head and latch, whereby movement of the rod to running position will effect raising of the head to normal position where it is supported by the latch.

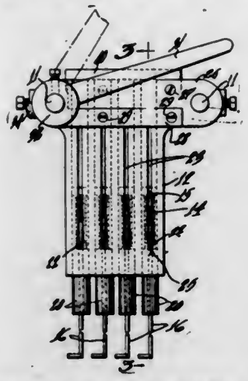
1,826,311. LOOM DOBBY. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1930. Serial No. 430,419. 4 Claims. (Cl. 139—74.)

1. In a loom dobby, a series of indicating members, a perforated pattern sheet effective to determine operative or inoperative positions for said members, driving mechanism therefor, and a manually operated device by which



all of said indicating members may be rendered inoperative and by which said driving mechanism may be simultaneously disconnected.

1,826,312. COMBINED THREAD HOLDER AND CUTTER. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 28, 1930. Serial No. 447,873. 12 Claims. (Cl. 139—247.)



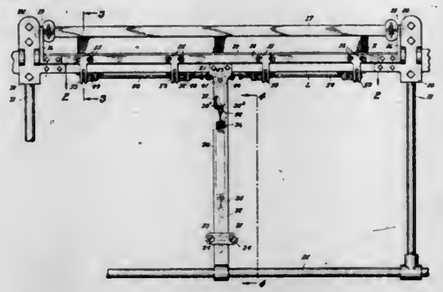
1. In a weft replenishing mechanism operating with a plurality of reserve weft bobbins from which extend weft ends, a thread holder for the weft ends, and a thread cutter located beyond the holder with respect to the bobbins and positioned to sever excess length of weft ends extending from the reserve bobbins.

1,826,313. DOBBY FINGER FOR LOOMS. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 19, 1930. Serial No. 503,539. 7 Claims. (Cl. 139—331.)



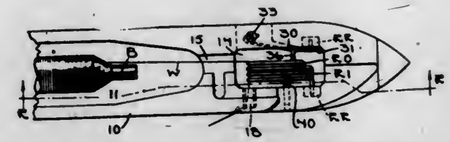
1. In a dobby finger, an inclosing sheath of U-shaped cross section, one of the sides of the U having an opening therein, and a peg run set into the opening and secured with respect to the sheath.

1,826,314. LOOSE REED FOR LOOMS. ELBRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1929. Serial No. 347,047. 15 Claims. (Cl. 139—191.)



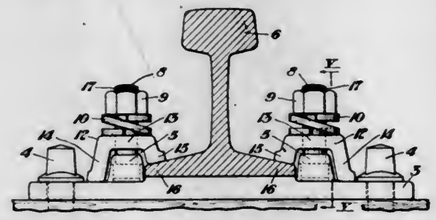
1. In a lay for a loom, a reed movable with respect to the lay, a single resilient element, and means acting in tension to operatively connect said element to the reed at a plurality of different points along the length of the reed, said element acting through said means to offer equal degrees of resistance to movement of the reed with regard to the lay at all of the points.

1,826,315. WEFT TENSION DEVICE FOR SHUTTLES. ALLAN S. HUTCHINS, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 9, 1930. Serial No. 501,094. 4 Claims. (Cl. 139—215.)



1. In a loom shuttle having a recess at its delivery end, a pair of tension members mounted in said recess to swing vertically on axes transverse to said shuttle and engaging the weft at a series of spaced points, a slotted delivery eye mounted in the front wall of said shuttle and communicating with said recess, and means to limit upward swinging movement of that tension member which engages the weft at a point nearest the delivery eye.

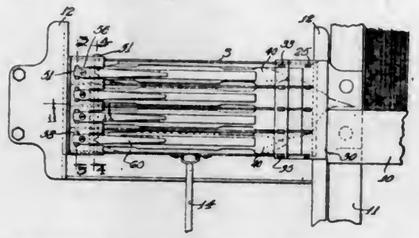
1,826,316. RAIL FASTENING. ARTHUR C. JACK, Pittsburgh, Pa. Filed Mar. 19, 1931. Serial No. 523,819. 5 Claims. (Cl. 238—304.)



1. In a rail fastening having a rail seat with rib-like projections between which the rail can rest, said projections being provided with undercut transverse recesses, clips bestriding said projections and having one leg engaging said rail seat and the other leg positioned to engage the base flange of the rail, bolts for holding down said clips, said bolts having their heads inserted in said transverse recesses in said ribs and having their shanks projecting

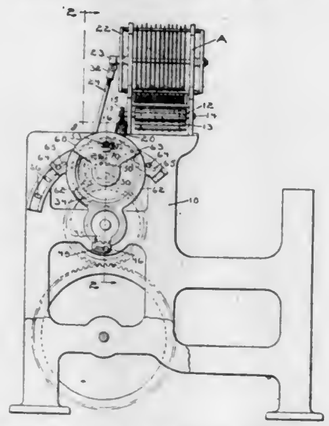
a material distance above said clips, spring washers mounted around said bolts, said bolts having their upper ends threaded and having an unthreaded portion of shank extending above said clips, said unthreaded portion of bolt shank being of less length than the extended vertical dimension of said springs and of a greater length than the collapsed vertical dimension of said springs, and nuts threaded on the upper threaded ends of said bolts to the limit of the threads to tension said spring washers uniformly.

1,826,317. SHUTTLE BOX FOR DROP BOX LOOMS. CARL J. LINDEGREN, Provluence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1929. Serial No. 384,821. 6 Claims. (Cl. 139—184.)



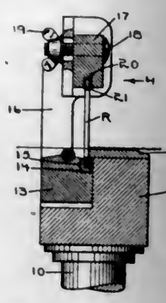
1. In a drop box loom, a multiple shuttle box comprising front and back end plates and a plurality of top and bottom plates, said end plates being provided with openings and said top and bottom plates being provided with projecting portions extending through said openings and rigidly secured therein, one of said front end plates being provided with additional openings and said top and bottom plates having additional portions projecting a substantial distance through said openings, and a flat bar in which said projecting portions are secured, said flat bar spaced from said end plate and forming a guard for the ends of a plurality of binders.

1,826,318. DRIVING CONNECTION FOR LOOM DOBBIES. WILLIAM E. LUNDGREN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 11, 1929. Serial No. 399,059. 10 Claims. (Cl. 139—66.)



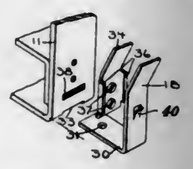
1. In a dobby loom having a loom side and a main driving shaft, in combination, a crankshaft geared to said main shaft, driving connections from said crankshaft to said dobby, a bearing for said crankshaft, a stand for said bearing angularly adjustable about the axis of said main driving shaft, and means to secure said stand to said loom side.

1,826,319. REED HOLDER FOR LOOMS. WILLIAM E. LUNDGREN and JOHN G. SODERBERG, Worcester, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 7, 1930. Serial No. 442,076. 9 Claims. (Cl. 139—353.)



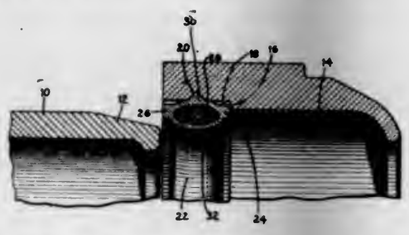
1. In a loom lay having a hand rail with a groove therein and a reed with a longitudinal bar, a reed cap formed of resilient material located in the groove and interposed between the hand rail and the bar and having a portion normally held under a tress exerted transverse of the plane of the reed by the bar to hold the latter resiliently in position.

1,826,320. TUBE FRAME FOR AXMINSTER LOOMS. WILLIAM E. MCLEARY, Worcester, Mass., assignor to Crompton & Knowles Loom Work, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1930. Serial No. 420,769. 8 Claims. (Cl. 139—10.)



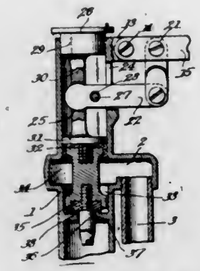
1. In an Axminster tube frame having a longitudinal bar and a chain engaging bracket carried by the bar, a chain engaging hook formed of two resilient members one of which is secured directly to the bracket and having spaced wings transverse of the bar and the other member held to the bar and being located between said wings and restrained thereby against angular movement with respect to the first member in a direction transverse of the bar.

1,826,321. PIPE JOINT. JOHN C. MITCHELL, Bloomfield, N. J., assignor to Lock Joint Pipe Company, Ampere, N. J., a Corporation of New Jersey. Filed Sept. 28, 1928. Serial No. 308,920. 4 Claims. (Cl. 285—163.)



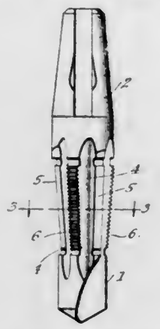
2. In a pipe joint of the kind described, a bell pipe, a spigot pipe, said bell pipe having an internal circumferential groove therein, an annular gasket adapted to extend substantially eqnal axial distances on both sides of said groove, a circumferential projection on the outer surface of said gasket and adapted to fill said groove while the gasket is in normal uncompressed shape, and a resilient annular core completely embedded in the middle of said gasket whereby when said gasket is flattened within the bell by the forcible insertion of the spigot pipe, said core will resiliently maintain said projection in said groove.

1,826,322. BALL COCK. ROBERT H. MUELLER, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Feb. 11, 1929. Serial No. 339,198. 20 Claims. (Cl. 137—104.)



4. A valve of the ball cock type having a valve casing comprising an upper cylindrical chamber, a lower cylindrical chamber and an intermediate enlarged chamber, a removable pin extending through said upper cylindrical chamber and substantially to one side of the vertical median thereof, a series of inter-connected levers attached to the upper cylindrical chamber and fulcrumed on said pin, a slotted valve stem movable within the upper cylindrical chamber and detachably secured to said interconnecting levers, and a valve head connected to said valve stem.

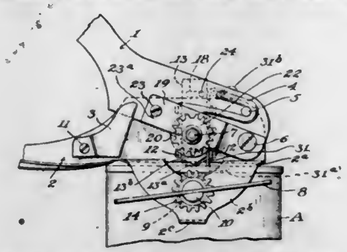
1,826,323. COMBINED DRILL, REAMER, AND TAP. FRANK H. MUELLER, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Feb. 19, 1930. Serial No. 429,664. 3 Claims. (Cl. 10—140.)



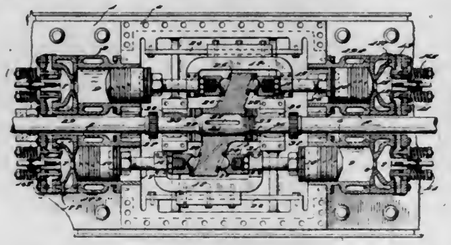
1. A tool for the purpose described, comprising a lower drill section, a plurality of circumferentially spaced, longitudinally tapered, reamer blades above the drill section, adapted to provide a tapering enlargement of an opening formed by said drill section, and a series of cutters in each of the spaces between the reamer blades for threading the tapered surface formed by said blades, the edges of the blades and thread cutters being so related that the cutters only remove from the tapered surface sufficient metal to form the thread.

1,826,324. CAN OPENER. ELON A. ORMSBY, Centerville, Calif. Filed Apr. 15, 1931. Serial No. 530,364. 2 Claims. (Cl. 30—3.)

1. A can opener comprising a pair of pivoted handles one of which has guides, a blade slidable in said guides and operatively connected to the other handle, whereby it may be forced into the top of a can to which the handles are applied, wheels carried by the respective handles in opposed relation to grip the bead of the can, and means to turn the wheels and rotate the can and thereby cut the head after the knife is inserted.

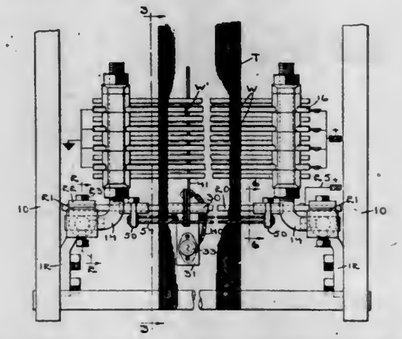


1,826,325. WOBBLE WHEEL POWER TRANSMISSION. WILLIAM F. PAUL, Oaklyn, N. J. Filed Sept. 2, 1930. Serial No. 479,130. 8 Claims. (Cl. 74—14.)



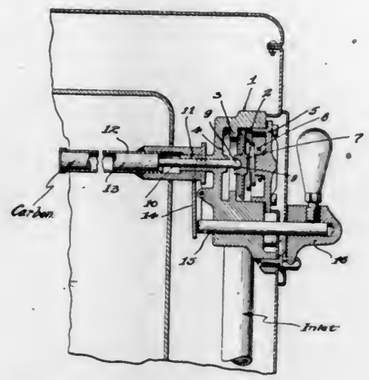
1. In a wobble wheel power transmission, a shaft, a wobble wheel operatively connected therewith, said wheel having surfaces to function as tracks, said tracks being eccentrically disposed relative to the axis of said wheel, instrumentalities cooperating with said wheel to transmit power, and means adjacent the outer edges of said tracks and forming a part of said wheel to prevent said instrumentalities from becoming locked with said wheel.

1,826,326. INDICATOR FOR FALLEN DROP WIRES. OSCAR V. PAYNE, Worcester, Mass, assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1930. Serial No. 430,407. 11 Claims. (Cl. 139—351.)



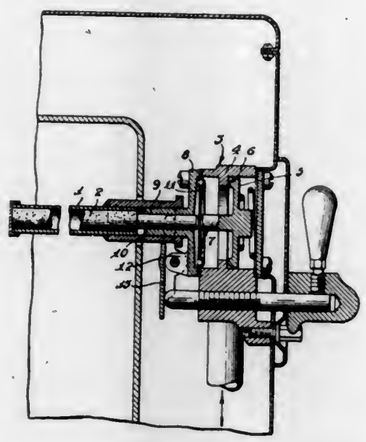
1. In a loom having a warp stop motion using a plurality of drop wires, an indicating device comprising a contact member separate and additional to said warp stop motion and manually movable along a predetermined path crosswise of the loom below the stop motion, and means to give a visual indication when said member engages a fallen drop wire.

1,826,327. SELF-ALIGNING THERMOSTATIC VALVE ASSEMBLY. ALVEY G. SHERMAN, Grosse Pointe, Mich. assignor to The Detroit Vapor Stove Company, Detroit, Mich., a Corporation of Michigan. Filed July 2, 1926. Serial No. 120,042. 4 Claims. (Cl. 236—102.)



1. A self-aligning thermostatic valve assembly, comprising in combination a seat, and a unitary valve therefor, a heat responsive device for controlling the actuation of said valve, a valve stem of uniform cross section for connecting said heat responsive device with said valve, said valve stem having a snug fit within a guide positioned between the valve casing and the heat responsive device, and a ball and socket connection between said valve and valve stem, said socket being of greater diameter than the ball.

1,826,328. THERMOSTATIC CONTROL FOR OVENS. ALVIN G. SHERMAN, Grosse Pointe, Mich., assignor to The Detroit Vapor Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 27, 1930. Serial No. 491,360. 4 Claims. (Cl. 236—102.)

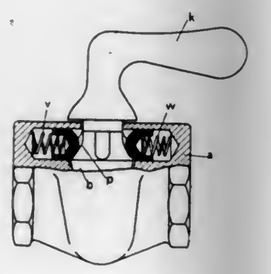


1. A self-aligning thermostatic valve assembly, comprising in combination, a valve casing having a valve seat, a cap for said casing including an integrally formed extension for supporting heat responsve elements, said extension also forming the bearing for a connecting pin which fits loosely within said bearing, a diaphragm positioned in place upon the casing by said cap, and a freely floating valve having a single machined annular edge for contacting with said valve seat and having a valve stem extension adapted to contact with one side of said diaphragm.

1,826,329. ABSORBENT FOR BREATHING CARTRIDGES. GERHARD KARL EMIL HEINRICH STAMPE, Lubeck, Germany, assignor, by mesne assignments, to Heinrich Otto Drager, Lubeck, Germany. Filed Jan. 5, 1928, Serial No. 244,778, and in Germany Jan. 7, 1927. 3 Claims. (Cl. 252—25.)

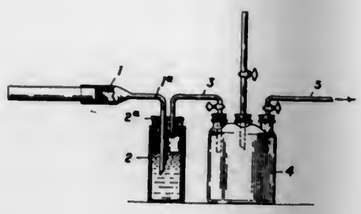
1. A breathing cartridge material devoid of reactive water and capable of absorbing carbon dioxide and aqueous vapors while simultaneously liberating oxygen, comprising an anhydrous peroxide of a metal of the alkaline groups and a hydroxide of a metal of such groups in homogeneous, intimate admixture.

1,826,330. COCK. HANS THIELE, Berlin-Friedenau, Germany. Filed Feb. 25, 1930, Serial No. 431,289, and in Germany Mar. 5, 1929. 4 Claims. (Cl. 251—163.)



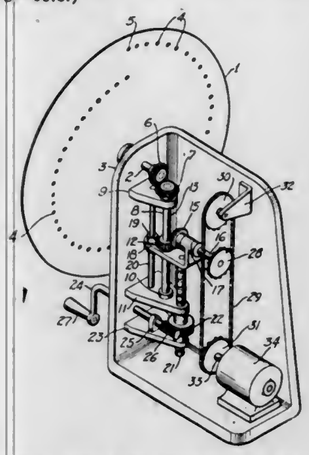
1. A gas cock, comprising, in combination with the plug and its neck which is located above the passage of the plug, a casing having in its top a chamber surrounding said plug neck, and elastically yieldable means arranged in said chamber transversely with respect to the axis of turning of the plug, the walls co-operating with said means being so shaped that an axially acting pressure tending to press the plug upon its seat is produced.

1,826,331. METHOD OF DOING AWAY WITH THE NICOTINE AND THE METHYLALCOHOL WHEN SMOKING TOBACCO. ISIDOR TRAUBE, Berlin, Germany. Filed Dec. 12, 1928, Serial No. 325,552, and in Germany June 23, 1927. 2 Claims. (Cl. 131—52.)



1. Method of obviating the injurious influence of nicotine and methyl alcohol in tobacco smoke, comprising bringing the tobacco smoke, between the burning tobacco and the mouth of the smoke, into contact with silica gel, whereby the nicotine and methyl alcohol are adsorbed on the silica gel as set forth.

1,826,332. TELEVISION APPARATUS. CHARLES O. VERMILLION, Bloomfield, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,120. 3 Claims. (Cl. 178—69.5.)



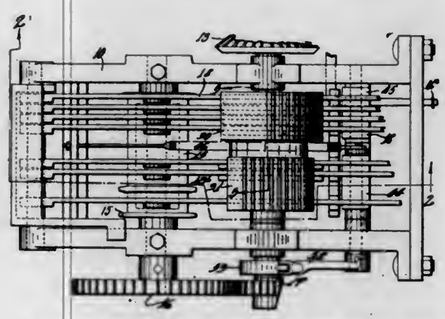
1. Television apparatus comprising, a scanning disk, a motor, an endless chain adapted to be driven by said motor, a sprocket wheel adapted to engage with said chain, said sprocket wheel being adapted to drive said scanning disk; and means adapted to linearly move said sprocket wheel along said chain.

1,826,333. BOBBIN FOR AUTOMATIC LOOMS. WALTER H. WAKEFIELD, Worcester, Mass, assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 5, 1928. Serial No. 310,599. 8 Claims. (Cl. 139—247.)



1. A bobbin for use in a weft replenishing loom, the butt of the bobbin having two longitudinal holes therein which lie on opposite sides of the axis of the bobbin so that the latter is balanced, and a weighted mass located in one of said holes and acting by gravity to hold the bobbin in a given position when in the weft replenishing loom.

1,826,334. REVERSIBLE DOBBY FOR HARNESS AND BOX MOTION. WILLIAM M. WATTIE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1930. Serial No. 433,112. 6 Claims. (Cl. 139—77.)

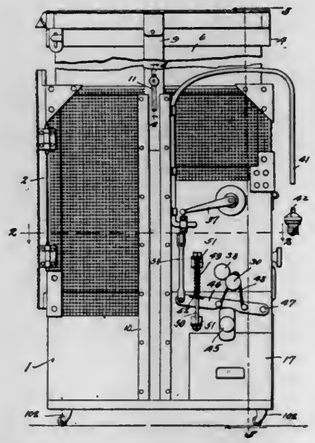


1. In a reversible dobby having harness levers and drop box levers, means to shift the harness levers, means to shift the drop box levers after the movement of the harness levers has begun, and means to preserve the same sequence of movements when the dobby is reversed.

1,826,335. PROCESS FOR THE HYDROLYSIS OF CELLULOSE ACETATE. CHARLES S. WEBBER, Springfield, Mass., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1929. Serial No. 414,206. 4 Claims. (Cl. 260—102.)

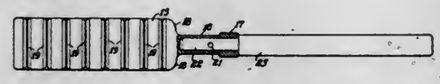
1. In the process for the production of cellulose acetate the step which comprises hydrolyzing cellulose acetate in the presence of 1-4 dioxan.

1,826,336. SHOWER BATH. HOWARD CLAYTON WOOLWINE, Fayetteville, W. Va. Filed Sept. 25, 1930. Serial No. 484,445. 5 Claims. (Cl. 4—146.)



2. In a shower bath, a cabinet, a removable tank in the rabinet, a bathing place in the cabinet and discharging into the tank, a pump in the tank and discharging into the bathing place, means for raising the pump out of the tank to permit the tank to be removed, and a drip trough slidable on the cabinet to a position beneath the pump, when the pump is raised, the drip trough discharging into the bathing place.

1,826,337. CLOTHES STICK. ANTON YURKOVITCH, Pittsburgh, Pa. Filed Feb. 4, 1931. Serial No. 513,281. 1 Claim. (Cl. 68—6.)

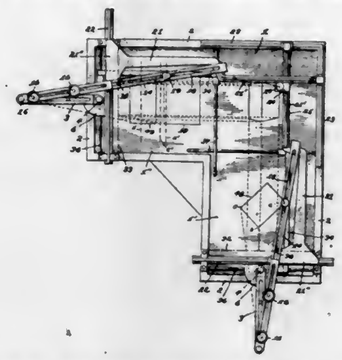


A clothes stick comprising a head and a handle, the head being paddle shaped and composed of metal, said head having a terminal socket and spaced corrugations extending over its flat surfaces, and said handle having an end portion fitted into said socket.

1,826,338. PERSPECTOGRAPH. CARL W. ACKERBERG, San Francisco, Calif. Filed Mar. 25, 1930. Serial No. 438,774. 16 Claims. (Cl. 33—77.)

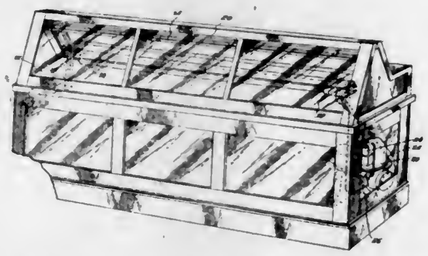
2. A perspectograph comprising a drawing surface having areas to receive elevation views of an object to be drawn in perspective and an area to receive a perspective view of said object, and provided with vision lines representing the intersection of horizontal and vertical planes

of vision intersecting at right angles with the plane of the perspective view; means for projecting points of the elevations in perspective projection onto the vision lines;



and means for projecting the points along the vision lines in orthographic projection onto the plane of the perspective view to locate said points in the perspective area.

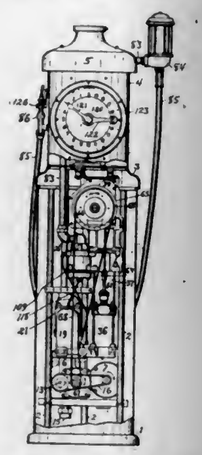
1,826,339. MECHANICAL REFRIGERATING APPARATUS. RICHARD O. ASHTON, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 18, 1927. Serial No. 206,469. 2 Claims. (Cl. 62—101.)



1. In a refrigerating apparatus the combination with an evaporator associated in circuit with refrigerant compressing and condensing means, of a brine circulating system comprising a closed container within said evaporator and a circuitous conduit, said container having a removable end through which the open ends of said conduit extend.

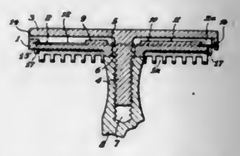
1,826,340. LIQUID DISPENSING APPARATUS. REUBEN E. BECHTOLD, Fort Wayne, Ind., assignor to The Tokheim Oil Tank and Pump Company, a Corporation of Indiana. Filed July 18, 1930. Serial No. 468,807. 31 Claims. (Cl. 221—95.)

1. In liquid dispensing apparatus, a supply pump having a restrained by-pass valve and port controlled thereby between its suction and discharge chambers; an air and gas separating unit having a receiving chamber connected with the discharge chamber of said supply pump, and a float chamber having communication with the upper end of the receiving chamber through a restricted opening, said float chamber having a vent at its top and a float valve controlled connection with the suction chamber of said supply pump; a measuring pump having valvular plungers therein, an inlet duct connecting at one of its ends with the receiving chamber of said separating unit, and an outlet chamber at its opposite end provided with a discharge pipe; a regulating means having a chamber containing a spring sustained compressible cup, a connection with the inlet duct of the measuring pump whereby said cup is compressed in opposition to its spring by pressure developed by said supply pump, and a valve operatively related with said cup controlling the discharge from the outlet chamber of the measuring pump; a mechanism operatively related with said plungers; a friction clutch adapted to apply torque yieldingly to said mechanism; a switch controlled motor having operative relation with said supply pump



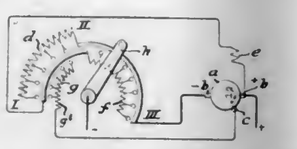
and said clutch; a dispensing hose in connection with said discharge pipe and having a valve controlled nozzle; means for suspending said nozzle adapted to cause opening of the motor switch upon suspension of the nozzle; and recording means operatively related with said measuring pump.

1,826,341. SAFETY RAZOR. IRVING S. BODKIN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Sept. 26, 1929. Serial No. 395,225. 14 Claims. (Cl. 30—12.)



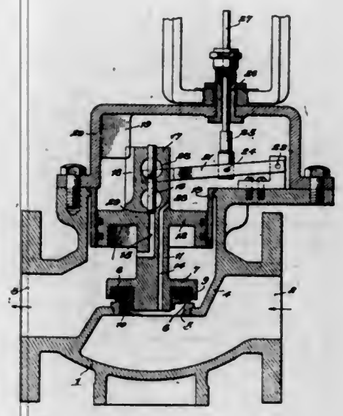
2. A safety razor as set forth in claim 1 in which the member having the studs is provided with a bar to enter an opening and the slot of the blade.

1,826,342. DIRECT CURRENT ELECTROMOTOR. FRIEDRICH BÖHM, Stuttgart, Germany. Filed Mar. 8, 1929, Serial No. 345,465, and in Germany Dec. 29, 1928. 5 Claims. (Cl. 172—179.)



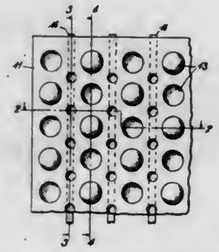
1. In a direct current electromotor the combination, with an armature circuit including a commutator, a positive and a negative brush on said commutator and a main starting resistance, of a third brush on said commutator, an auxiliary starting resistance connected to said third brush, and means for gradually cutting said main resistance out of said armature circuit and simultaneously putting said auxiliary resistance gradually into circuit in series with said third brush and one of said other brushes.

1,826,343. PILOT CONTROLLED PISTON-OPERATED VALVE. WILLIAM W. CARSON, Jr., Knoxville, Tenn., assignor, by mesne assignments, to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Nov. 29, 1926. Serial No. 151,544. 7 Claims. (Cl. 137—139.)



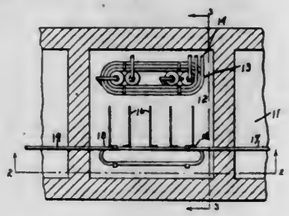
1. In a pilot-controlled piston-operated valve, in combination with a valve casing providing a valve port and having inlet and outlet openings and a valve member adapted to cooperate with said port, a piston operatively connected to said valve member, a passage leading from the pressure side of said valve member to the remote side of said piston, a passage of greater cross section leading from said last-named side of said piston to the low pressure side of said valve member, a pilot valve cooperating with said last-named passage, said pilot valve being wholly mounted on and guided by said piston for movement independently of said valve member and piston, and means for variably positioning said pilot valve with respect to said last mentioned passage.

1,826,344. HEAT EXCHANGE ELEMENT. HERBERT V. DALGLIESH, Atlanta, Ga., assignor, by mesne assignments, to Research & Development Corporation, Atlanta, Ga., a Corporation of Georgia. Filed Sept. 23, 1930. Serial No. 483,943. 5 Claims. (Cl. 257—263.)



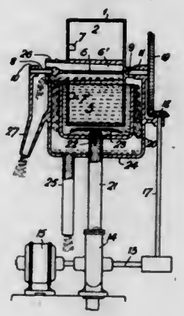
1. A heat exchange element comprising, in combination spaced plates having projections from their surfaces provided by cupped deformed portions of the plates, certain of said projections extending outwardly and others thereof extending inwardly of the space between the plates, spacing and heat conducting strips between said plates in contact with and secured to certain of said inwardly extending projections, the bodies of said strips between said points of contact standing clear of said plates whereby to be immersed in a medium flowing between said plates.

1,826,345. FLUID COOLER. FREDERICK R. ERBACH, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 11, 1927. Serial No. 182,650. 3 Claims. (Cl. 62—95.)



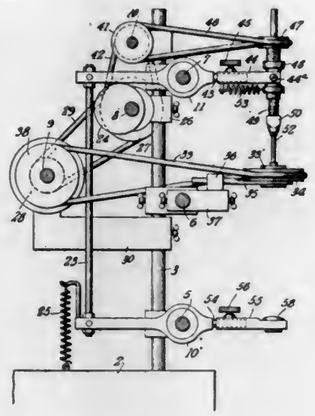
2. A refrigerator unit for refrigerating soft drink fluid required to be maintained at a temperature higher than freezing, comprising: a cabinet having a refrigerated compartment containing a heat transfer liquid, container means for the liquid to be refrigerated located in said compartment, refrigerant expander means located in said compartment at a distance from said container means, and fin means carried by one of said means and extending outwardly therefrom into the space between said container means and said expander means adjacent the other of said means.

1,826,346. FLUID METER. MIGUEL ENRIQUE GUERMONT, London, England, assignor to S. I. A. M. Limited, London, England, a Company of Great Britain. Filed May 10, 1930, Serial No. 451,469, and in Germany Sept. 13, 1929. 10 Claims. (Cl. 221—97.)



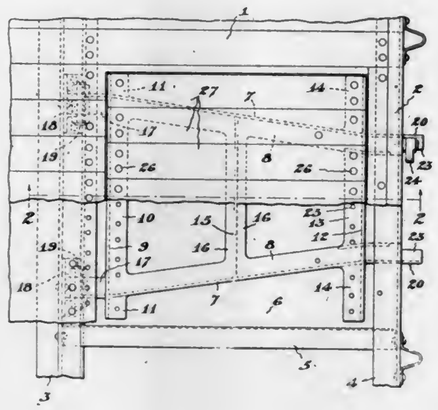
1. A fluid meter of the dipping class for use in garages and other filling stations comprising a vessel adapted to contain the fluid to be measured, a drum meter mounted in said vessel, a pump adapted to supply fluid to said vessel, and means for operating said pump and simultaneously rotating said drum meter in said vessel at a speed which is proportional to the speed of said pump and which ensures that the pump delivers more fluid to the vessel than the drum meter takes up from said vessel.

1,826,347. DIE LAPPING MACHINE. WILLIAM HADDOW, Ossining, N. Y. Filed Dec. 23, 1930. Serial No. 504,260. 5 Claims. (Cl. 51—31.)



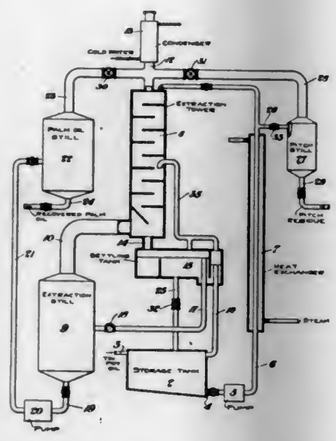
1. In a machine of the character described, a tiltably mounted die holder, means for rotating the die holder, a lever, means for oscillating the lever, a lapping rod supported by the lever, the oscillation of the lever imparting a reciprocatory movement to the rod, and means to rotate the rod.

1,826,348. RAILWAY CAR FLOOR DOOR. KARL M. HAMILTON, Chicago, Ill., assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Dec. 2, 1929. Serial No. 410,980. 6 Claims. (Cl. 105—280.)



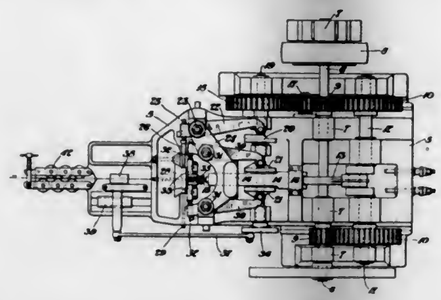
1. In combination with a railway car having a center sill, a side sill and a floor having a door opening between the center and side sill, a door for closing said opening comprising a cast metal frame having inner and outer members and connecting members adjacent the ends thereof and integral therewith, said frame having integral hinge members projecting from one edge, integral fastener engaging and door supporting arms projecting from its opposite edge, and a floor portion of a size to fit in said opening attached to said frame.

1,826,349. METHOD OF RECOVERING OIL. CLARKE T. HARDING, Baton Rouge, La., and JOSHUA C. WHETZEL, Pittsburgh, Pa., assignors to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Oct. 24, 1929. Serial No. 402,145. 6 Claims. (Cl. 87—6.)



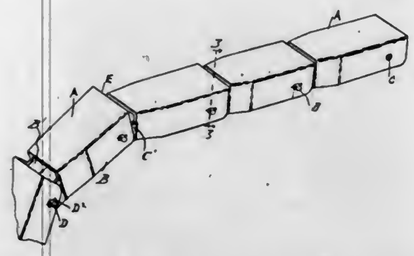
1. The method of recovering commercially pure palm oil from hot refuse palm oil which has been used in a tin pot or the like which consists in causing a thorough contact between said hot refuse oil and a hot vaporized solvent which is of the alcohol, ketone or ester type, said contact between said hot refuse oil and said hot vaporized solvent causing a mixture of said solvent with said refuse oil so as to dissolve the oil from the tarry and foreign matters of the refuse oils, separating said refuse oil and solvent mixture in the form of a mixture of said solvent and palm oil and a mixture of solvent and tarry and foreign matters, and finally separating said solvent from said palm oil so as to recover commercially pure palm oil.

1,826,350. APPARATUS AND METHOD FOR MAKING SPOKES. GLENN C. HAWK, East Cleveland, Ohio, assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed June 21, 1930. Serial No. 462,825. 3 Claims. (Cl. 29—34.)



1. In a machine for producing steel spoke blanks in combination, a set of pinch dies, a set of cutting and bending dies, a hammer, means for intermittently advancing the stock from which the blanks are formed to a position between said pinch dies, a pitman for reciprocating said hammer to form a head on the blank, and cam means for actuating said cutting and bending dies to simultaneously sever and bend the blank.

1,826,351. CONVEYER CHAIN. WALTER V. HOEFEN, Detroit, Mich., assignor to Brown-Hutchinson Iron Works, Detroit, Mich., a Corporation of Michigan. Filed Mar. 22, 1930. Serial No. 438,132. 11 Claims. (Cl. 74—32.)

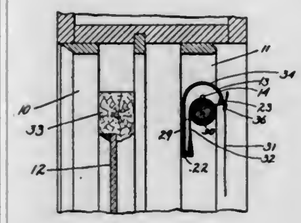


1. A carrier chain, composed of a plurality of links of cross-sectionally channel bar contour, each link being inbent at one end as to each of its lateral web portions and having its bridging top portion cut away therebetween, thereby permitting the projection therebeyond of the ends of the lateral web portions for engagement in the broader end portion of the next adjacent link and protectedly under the web portion thereof, and pintle stems passing through registeringly apertured portions of the meeting end portions of the lateral webs of adjacent links at relatively remote points from the exposed lines of meeing of the webs of the links, whereby said links are operatively correlated and whereby there are provided suitably spaced transversely-extending parts with which the teeth of an actuating sprocket wheel may operatively engage.

1,826,352. DYEING AND PRINTING. JAMES IVOR MORGAN JONES and WILLIAM KILBY, Lancaster, England, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed June 27, 1927, Serial No. 201,959, and in Great Britain June 28, 1926. 3 Claims. (Cl. 8—5.)

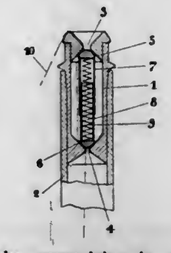
1. The process which comprises the padding of soluble ester derivatives of leuco vat dyestuffs on to textile fibres together with an oxidizing agent which is substantially inactive under the conditions of steaming, then freeing the padded goods from superfluous liquor and next without drying, steaming the goods subsequently treating them in a developing bath and rinsing.

1,826,353. VENTILATOR. BURNETT KAVANAGH, New York, N. Y. Filed Mar. 5, 1930. Serial No. 433,231. 4 Claims. (Cl. 98—98.)



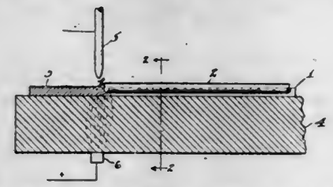
4. A ventilator of the character described comprising a plurality of sheets of suitable material each having an upwardly extending back wall portion and a forwardly curved hood portion adapted to cover a shade with the forward edge of the hood terminating to provide a hood of substantially semi-circular formation and means for connecting said portions in overlapping adjustable relation, and having end portions each of which has means to support one end of a shade roller, with the shade roller removable while the hood is in mounted position.

1,826,354. THREAD BRAKE FOR TWISTING SPINDLES. WILHELM LENK, Remscheid-Lennep, Germany, assignor to Barmer Maschinenfabrik Aktiengesellschaft, Remscheid-Lennep, Germany. Filed Jan. 5, 1931, Serial No. 506,795, and in Germany Jan. 23, 1930. 3 Claims. (Cl. 117—23.)



1. A thread brake, comprising in combination with a twister spindle an outer sleeve having an admission and a discharge aperture, two inner, telescopable sleeves in said outer sleeve adapted to close said apertures, and a spring in said telescopable sleeves adapted to force apart said inner telescopable sleeves.

1,826,355. ARC-WELDING. JAMES F. LINCOLN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 12, 1923. Serial No. 612,229. 9 Claims. (Cl. 219—8.)



1. The method of electric arc welding which comprises adjustably controlling the angular relation of the arc to the work by directing a line of current flow through the work or its support from a point adjustably movable with respect to the electrode.

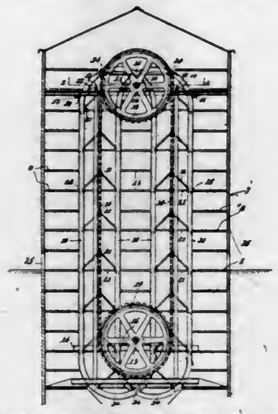
1,826,356. BEATER FOR FOODSTUFFS. WILLIAM JAMES MAHONY, Montreal, Quebec, Canada. Filed Dec. 22, 1930. Serial No. 503,945. 6 Claims. (Cl. 259—135.)



1. In a beater for foodstuffs, a spirally grooved shaft carrying beaters at the lower end portion, balance weights

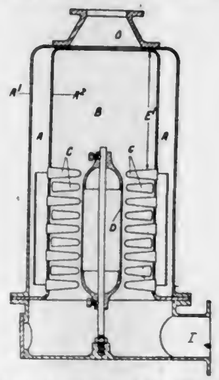
fixedly mounted on said shaft and forming a momentum member, and a driving member containing a loose operating disk engaging a fixed disk under pressure and having means to effect rotation of said shaft when moved in one direction and to provide a freely movable connection therewith when moved in the opposite direction whereby the shaft is maintained in continued rotation by said balanced weights.

1,826,357. ELEVATOR CONSTRUCTION. RALPH WILLIAM MAKUTCHAN, Chicago, Ill. Filed May 24, 1926. Serial No. 111,112. 3 Claims. (Cl. 214—16.1.)



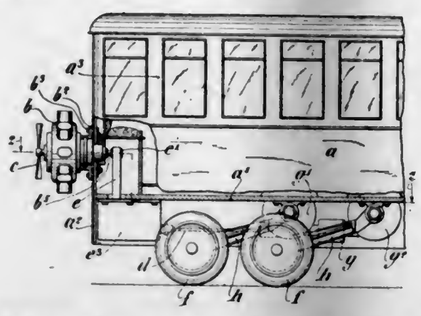
1. In an elevator construction, the combination with a series of storage floors, arranged at different levels; of a pair of wheel supported endless chains intersecting said floors; axis shafts supported by and connecting said chains at intervals; a platform swingably depending from each axis shaft between said chains; vertical shafts arranged for rotation in relation to the path of said platforms; and means on said vertical shafts for engaging said platforms and adjusting them to said floors, substantially as described.

1,826,358. STEAM GENERATOR OR WATER HEATER. HUGH FREDERICK MARRIOTT, London, England. Filed July 21, 1928, Serial No. 294,385, and in Great Britain Oct. 21, 1927. 3 Claims. (Cl. 122—173.)



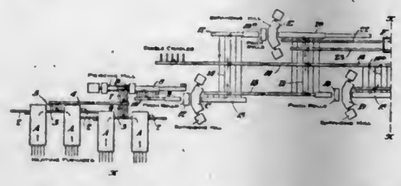
1. A steam generator including an outer casing, an inner casing spaced therefrom, said inner casing defining with said outer casing an annular water chamber and itself defining a central heating space for the passage of hot gases, short closed-end tubes projecting radially from said inner casing into said heating space, and baffle members in said heating space vertically adjustable within wide limits in order to control the velocity of gases at different points of the space occupied by the closed-end tubes.

1,826,359. VEHICLE DRIVE FOR RADIAL ENGINES. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 26, 1929. Serial No. 395,283. 1 Claim. (Cl. 180—54.)



In a vehicle, a relatively high speed radial air cooled motor secured to the rear wall of the vehicle on the outside thereof and reduction gearing secured to the floor of the vehicle and operatively connected to the motor and to the driving wheels of the vehicle.

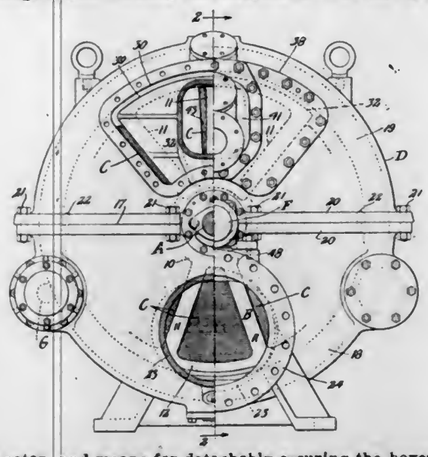
1,826,360. SEAMLESS TUBE MILL. JAMES V. MAZURIE, and THOMAS PATTERSON, Gary, Ind., assignors to National Tube Company, a Corporation of New Jersey. Filed Apr. 18, 1930. Serial No. 445,431. 4 Claims. (Cl. 80—11.)



1. A seamless tube mill comprising in combination a plurality of blank heating furnaces, a piercing mill arranged in close proximity to said furnaces, conveying and transfer apparatus for conveying blanks from all of said furnaces to said piercing mill, an expanding mill located in advance of said piercing mill, means for transferring all of the pierced blanks from said piercing mill to said expanding mill, a second and third expanding mill arranged successively in advance of said first named expanding mill, at least said second named mill being out of line with said first named expanding mill, a reheating furnace located to receive the expanded blanks from said second named expanding mill when desired, and conveying and transfer apparatus arranged between said first, second and third named expanding mills and said second named expanding mill and said reheating furnace whereby expanded blanks from said first named mill may be passed through either said second or third named mill, or through said second and third named mills successively, or through said second named mill to said reheating furnace and thence to said third named mill, or may be passed by both of said second and third named mills at the will of the operator.

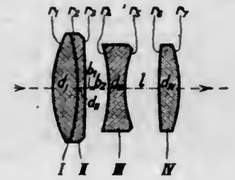
1,826,361. ROTARY STRAINER. DANIEL RAYMOND MCNEAL, Abington, Pa., assignor to Andale Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 17, 1930. Serial No. 436,272. 4 Claims. (Cl. 210—196.)

1. In a rotary liquid strainer, the combination, of a shaft, a strainer rotor carried thereby, a casing split in a direction longitudinally of the shaft into a straining unit and a cleaning unit, an inlet opening and an outlet opening in the straining unit, an inlet opening and an outlet opening in the cleaning unit, a cleaning box for each of the openings in said cleaning unit adapted to fit closely against



the rotor, and means for detachably securing the boxes for ready removal from the cleaning unit through their respective openings.

1,826,362. PHOTOGRAPHIC LENS. WILLY MERTÉ, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Oct. 12, 1929, Serial No. 399,344, and in Germany Oct. 23, 1928. 4 Claims. (Cl. 88—57.)

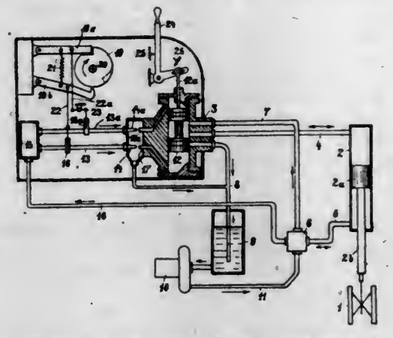


r_1 = + 41.6		d_1 = 8.0	
r_2 = − 66.1		d_2 = 2.0	
r_3 = − 378.0		d_3 = 2.5	
r_4 = − 53.8		d_4 = 5.0	
r_5 = + 38.0		d_5 = 5.0	
r_6 = + 252.5		l = 32.0	
r_7 = − 47.1		d_6 = 6.9	
	I		II
n_d =	1.62177		1.52547
ν =	56.8		52.8
	III		IV
n_d =	1.62559		1.62177
ν =	35.7		56.8

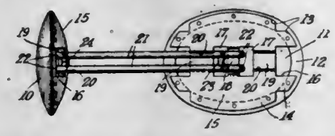
1. A photographic lens consisting of a diverging bi-concave part and of two converging parts that enclose the former, of which latter the one next to the incident light is so composed of two members cemented together that the cemented surface is converging and the other of the two converging parts is a non-cemented single part, the vertex distance between the front surface of the part next to the incident light and the front surface of the diverging part being greater than one tenth of the total focal length of the photographic lens, and the clear distance between the back vertex of the part next to the incident light and the front vertex of the dispersive part being greater than one twentieth of the focal length of the photographic lens.

1,826,363. AUTOMATIC REVERSING APPARATUS FOR CONTROLLING THE CLOSURE MEMBERS OF PERIODICALLY OPERATING GAS PRODUCERS. CARL MIEDBRODT, Berlin-Rosenthal, Germany, assignor to Bamag-Meguin Aktiengesellschaft, Berlin, Germany. Filed Apr. 16, 1930, Serial No. 444,849, and in Germany Mar. 28, 1929. 4 Claims. (Cl. 137—145.)

1. Means for controlling the pressure fluid actuated closure members of periodically operating gas producers, comprising in combination, a control cylinder with a piston displaceable therein by pressure fluid supplied through ports in the cylinder, nozzles spaced from the port inlets, means for supplying the pressure fluid to said nozzles and across the intervening space to said ports, throttle members for controlling the supply to said nozzles, and mechanism for periodically and successively opening and closing said throttle members, said space providing a means of fluid escape from said control cylinder when said throttle members are closed.



1,826,364. CUFF LINK. GUY MURCHIE, Jr., Dedham, Mass. Filed Dec. 3, 1930. Serial No. 499,710. 5 Claims. (Cl. 24—102.)



1. A cuff link comprising a pair of buttons, spaced spring rods hingedly engaging the backs of said buttons to permit turning on a transverse axis, and a seat formed on the back of one of said buttons for receiving said rods, said seat having inwardly extending beads at its outer edges for engaging and resiliently confining said rods to said seat when disposed in a plane parallel with the back of said button.

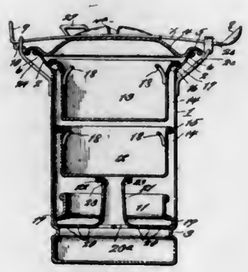
1,826,365. CORN THINNER. ALFRED H. ROSEN, Alcoma, Va. Filed Nov. 28, 1930. Serial No. 498,795. 1 Claim. (Cl. 55—65.)



A plant puller comprising an elongated handle, a shank having a socket at one end for receiving the lower end of the handle, and a jaw forming plate at its other end,

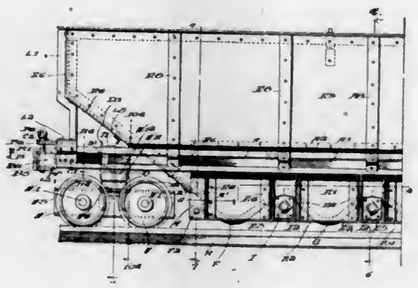
said shank having an elongated slot therein, a second shank passing through the slot pivoted therein and having one end curving downwardly, a jaw forming plate connected with said curved end, a spring connected with the curved part and with the upper part of the first shank normally holding the jaws apart, a collar adjustably arranged on the handle, the upper end of the handle having an enlarged part forming a hand grasp, a sleeve slidably arranged on the handle and located between the collar and the lower end of the enlargement, a pin on the lower end of the sleeve, a plate having a hole therein for receiving the pin and a link pivotally connected to the plate and to the second shank at that end of the second shank which is opposite the jaw carrying part.

1,826,366. PRESSURE STEAM COOKER. VINZENT RUDOLF ROSTEK, Philadelphia, Pa. Filed Oct. 20, 1930. Serial No. 490,080. 3 Claims. (Cl. 53—2.)



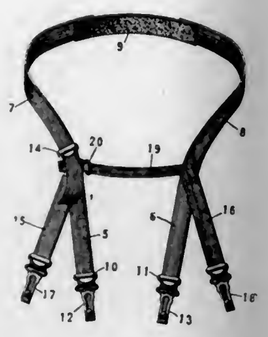
1. In a pressure steam cooker, the combination with a main casing having a tightly fitting cover, with means for holding it in position on the casing, of an interior pan provided on the marginal edge of its bottom with a rib, the wall of the main casing near its bottom having an inwardly extending rib, with which the rib of the marginal edge of the bottom of the pan engages, whereby the pan may be supported in a spaced position above the bottom of the main casing, said pan having its bottom perforated, whereby the steam may pass therethrough, an open ended tubular extension rising from the center of said pan and extending above the outer marginal upper edge of the pan, acting as a support for a superimposed pan.

1,826,367. RAILWAY CAR. HUGH W. SANFORD, Knoxville, Tenn. Filed May 8, 1928. Serial No. 276,016. 36 Claims. (Cl. 105—253.)



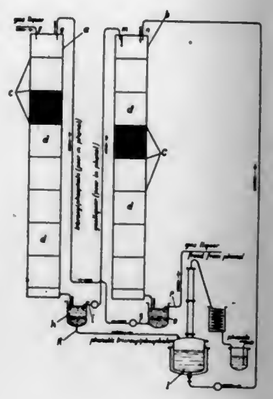
1. In a car of the kind described, the combination of sidewise tilted side sills, end structures joining the ends of the side sills, slanting body plates supported by the side sills, and automatic hinged bottom doors.

1,826,368. HOSE SUPPORTER. LAURA M. SCHNEIDER, New York, N. Y. Filed Feb. 9, 1925. Serial No. 7,791. 2 Claims. (Cl. 241—2.)



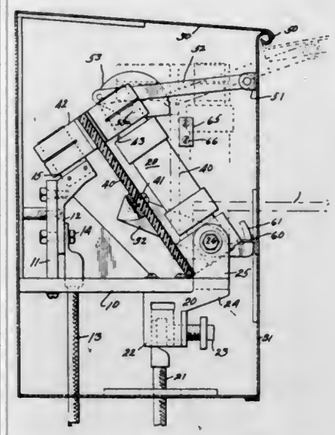
1. A hose supporting girdle comprising a central member adapted to engage the back of the wearer when in use, the said member extending laterally in both directions from its central part, straps extending downwardly and toward each other from the extremities of the central member, and a transversely arranged member connecting the said straps and adapted to occupy a position below the abdomen of the wearer and out of contact therewith, the straps extending downwardly a sufficient distance for the purpose.

1,826,369. RECOVERY OF PHENOLS FROM GAS LIQUORS. CURT SCHOENBURG and GERHARD VON DER BAUCK, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 26, 1929, Serial No. 409,938, and in Germany Jan. 3, 1929. 9 Claims. (Cl. 260—154.)



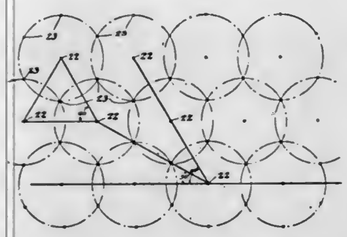
1. In a process for recovering phenols from gas liquors by an extraction method making use of a water-insoluble organic liquid capable of dissolving phenols and being easily separable by means of gravity from the watery liquor, the improvement which comprises bringing the gas liquors into intimate contact with tricresylphosphate, allowing the tricresylphosphate containing the phenols dissolved therein to separate from the residual liquor by means of gravity, separating the resulting liquid liquid layers and separating the phenols from the tricresylphosphate.

1,826,370. ELECTRIC SWITCH. RICHARD E. SCHWARZ, Royal Oak, and GEORGE A. MATTHEWS, Detroit, Mich. Filed Nov. 7, 1929. Serial No. 405,469. 8 Claims. (Cl. 200—50.)



1. An electric switch comprising a fixed insulating support, a second insulating support hinged thereto, a "live" terminal carried by said fixed support, a pair of contact members, one of which is connected to said terminal and the other of which is carried by said hinged support, upon the side adjacent said terminal, a fuse clip on the other side of said hinged support and connected to said other member, a movable fuse clip in alignment with the hinges of said hinged support, means for electrically connecting said latter clip to a load line terminal, and means for swinging said hinged support and a fuse carried thereby to "close" and "open" said pair of contact members, one end of the fuse and the hinged clip moving as a unit, without disengagement, the hinged clip always being in connection with the terminal to which it is attached.

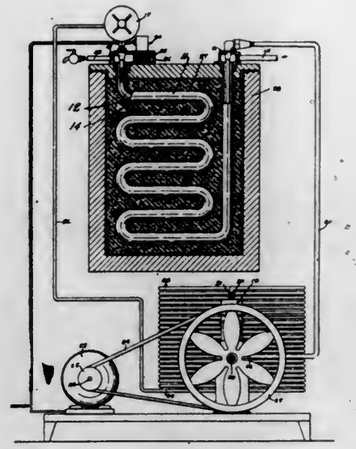
1,826,371. METHOD OF TREATING OIL FIELDS. PETER J. SPINDLER, Olean, N. Y. Filed Apr. 4, 1930. Serial No. 441,606. 8 Claims. (Cl. 166—21.)



1. The method of working oil fields which comprises simultaneously introducing a flooding fluid into an oil bearing strata at substantially equidistant intervals in the strata, and venting the oil from the strata at a distance from the flooding entry, which distance is substantially the same as that of the flooding intervals.

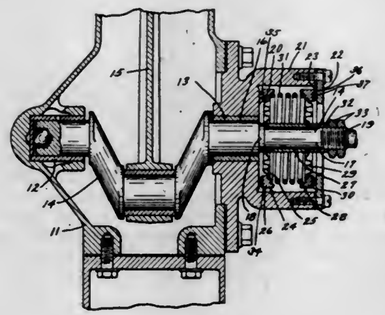
1,826,372. FLUID COOLER. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 1, 1926. Serial No. 145,411. 1 Claim. (Cl. 62—4.)

In a fluid cooler, a heat insulated receptacle, a fluid outlet casing secured exteriorly of a wall of said receptacle, a fluid conduit in said receptacle connected to said outlet casing, refrigerant expansion tubing of mechanical refrigerating apparatus interiorly of said conduit, and a thermostat within said outlet casing for controlling the



operation of the refrigerating apparatus, said thermostat being directly responsive to the temperature of the fluid in said outlet casing.

1,826,373. SEAL FOR JOURNAL BEARINGS. CHARLES C. SPREEN, Detroit, Mich. Filed Dec. 30, 1926. Serial No. 157,937. 1 Claim. (Cl. 286—11.)

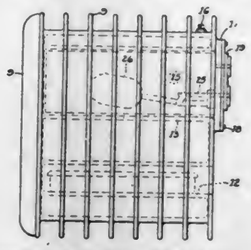


In a journal bearing seal, the combination of a casing, bearings within said casing, a shaft journaled within said bearings, spaced resilient disks sealed to said shaft, annular members secured to said disks, bearing rings attached to the outer faces of said annular members and bearing upon said casing, and a spring disposed intermediate said annular members and adapted to seat thereon for exerting a thrust thereon.

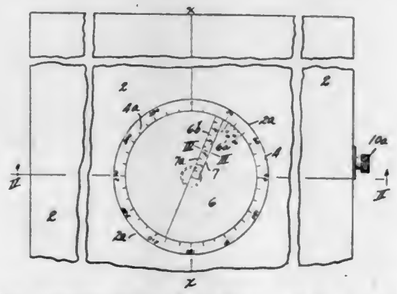
1,826,374. REFRIGERATION. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 21, 1927. Serial No. 169,759. 10 Claims. (Cl. 62—95.)

2. A refrigerant cooling unit comprising a heat absorbing means having a recess formed interiorly thereof a refrigerant vaporizer disposed within the recess the exterior walls of the vaporizer contacting intimately with the walls of the recess means for controlling the admission of refrigerant

to the vaporizer, and conduits operatively associated with the vaporizer for supplying refrigerant thereto and withdrawing refrigerant therefrom, said vaporizer being removable from the recess while operatively connected to the refrigerant conduits.

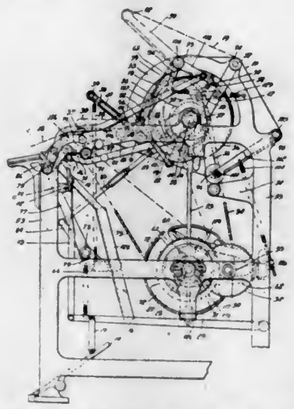


1,826,375. APPARATUS FOR DRAWING TOPOGRAPHIC MAPS. PAUL R. VAN BUSKIRK, Detroit, Mich. Filed Mar. 8, 1930. Serial No. 434,393. 4 Claims. (Cl. 33—78.)



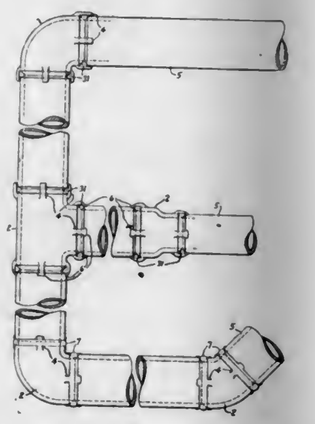
1. The combination of a drawing board, a rotatable disc set in said drawing board with its surface flush with the surface of the drawing board, said disc and drawing board being provided with an index and scale respectively, adapted to indicate the angular position of said disc relative to said board and a radial scale upon said disc as and for the purpose described.

1,826,376. MACHINE FOR STRIPPING TOBACCO LEAVES. FRIEDRICH WILHELM WEHMANN, Stockholm, and ERNST RUBEN DAHLSTRÖM, Alsten, Sweden, assignors to Aktiebolaget Formator, Stockholm, Sweden, a Corporation of Sweden. Filed Apr. 9, 1928, Serial No. 268,685, and in Germany Apr. 29, 1927. 12 Claims. (Cl. 131—56.)



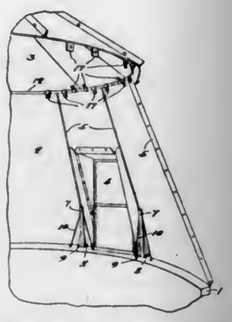
1. In a machine for stripping the stem from a tobacco leaf, the combination of a device for gripping the leaf and feeding it into the machine, a gripper adapted to seize the stem and movable relatively to said leaf gripping device, said gripper comprising three shanks, the one of which is adapted to engage the leaf on the one side of the stem, while two others are adapted to engage the leaf on the opposite side of the stem, the one of these latter two shanks being pivotally and the other rigidly connected with the first named shank.

1,826,377. METHOD OF INSTALLING WELDED PIPE SYSTEMS AND FITTINGS THEREFOR. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 13, 1928. Serial No. 246,450. 6 Claims. (Cl. 285—111.)



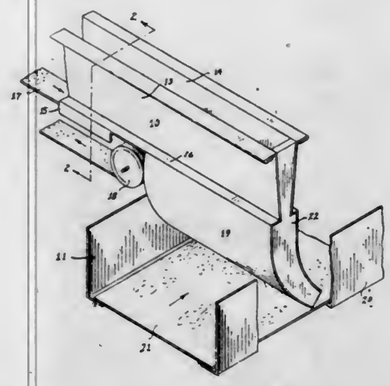
1. A preformed pipe fitting for erection and installation of welded piping systems, said fitting being designed to be strongly weldable to pipe by fusion welding and having a plurality of locating lugs, more than two in number, at several points around its outlets to receive the ends of adjoining nipples or pipe lengths for temporary support and to facilitate alining, said lugs adapted for fusing down in making tack-welds to adjoining pipe prior to the actual welding of the joints.

1,826,378. SILO TOP. WILLIAM D. BAYLEY, Springfield, Ohio. Filed June 15, 1928. Serial No. 285,604. 13 Claims. (Cl. 108—32.)



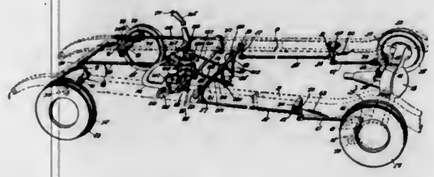
1. A silo top of the mansard type comprising a truncated conical subsection formed from sheet metal and having standing seams, and triangular foot rest members interposed in said seams at the lower interior portion of the section to support the roof section upon the side walls of the silo.

1,826,379. TRANSFER MEANS FOR BELT CONVEYERS. PAUL J. BIRKMEYER, Brooklyn, N. Y., MICHAEL V. CREEDON, Westfield, N. J., and WILLIAM C. CHADBOURNE, Elmhurst, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1929. Serial No. 406,074. 3 Claims. (Cl. 198—26.)



1. In a conveyer system, a conveyer adapted to transport sheet material in a substantially vertical position, a second conveyer disposed at an angle to said first conveyer, a belt for said first conveyer terminating adjacent the edge of the second conveyer, a guiding trough for said first conveyer extending beyond said belt and terminating at the opposite side of said conveyer, said trough having a discharge outlet in the bottom thereof above said second conveyer.

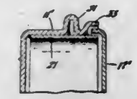
1,826,380. FRONT BRAKE CONTROL SHAFT. CARL J. BOCK, Pontiac, Mich., assignor to Yellow Truck and Coach Manufacturing Company, Pontiac, Mich., a Company of Maine. Filed Feb. 6, 1928. Serial No. 252,253. 9 Claims. (Cl. 188—10.)



1. In a brake, a first brake operating rock shaft, a second brake operating rock shaft, an arm on each rock shaft, an equalizer pivoted to one rock shaft arm, a link connecting said equalizer to the other rock shaft arm, a manually operable lever, means pivotally connected to said manually operable lever and to said equalizer, said means and said lever having, in addition to the pivotal connection, a lost motion connection whereby the means and the lever may act at times as a unitary member.

1,826,381. BRAKE DRUM. THERON P. CHASE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,435. 6 Claims. (Cl. 188—218.)

1. In combination, a brake drum, a wear-resisting liner therefor, said liner having adjacent angularly related ends, and an angular plate member located between said ends and spreading said liner against the drum periphery.



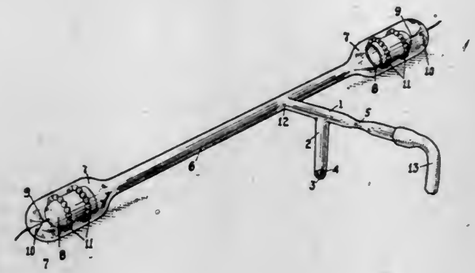
6. A brake drum having an axial flange, said flange being folded to provide a double thickness radial flange whereby the drum is reinforced, said drum being formed of low carbon steel and a liner in said drum of high carbon steel.

1,826,382. VACUUM DISCHARGE TUBE. GEORGES CLAUDE, Boulogne-sur-Seine, France, assignor to Claude Neon Lights, Inc., a Corporation of New York. Filed Jan. 12, 1926, Serial No. 80,707, and in France Jan. 22, 1925. 15 Claims. (Cl. 176—122.)



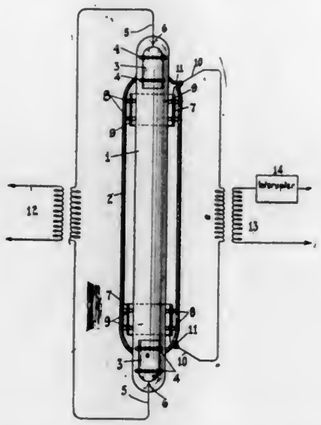
1. The method of creating a plurality of distinct colors in a positive column tube light, which consists in forming in said tube regions or spaces relatively small in cross section alternating with regions or spaces which are relatively large in cross section, supplying said tube with a luminescent gas and with a volatilizable substance.

1,826,383. METHOD AND APPARATUS FOR INTRODUCING FOREIGN SUBSTANCES INTO VACUUM TUBE LIGHTS. ROBERT C. SMALLEY, Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed May 1, 1926. Serial No. 105,894. 9 Claims. (Cl. 176—2.)



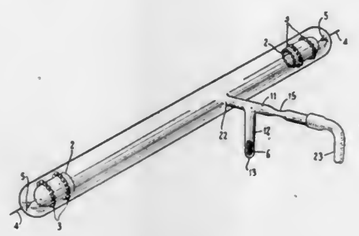
3. The method of making a lumineacent tube containing a rare gas and a foreign substance, which comprises sealing in communication with a luminescent tube a container into which the foreign substance is introduced, exhausting the luminescent tube, introducing a rare gas into the luminescent tube, transferring the foreign substance from the container to the luminescent tube while in the non-gaseous condition, and separating the said container from the said luminescent tube.

1,826,384. COLOR FLASHER. LEO L. BECK, Linden, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed May 1, 1926. Serial No. 105,908. 13 Claims. (Cl. 176—124.)



7. An illuminating device comprising a luminescent tube containing electrodes in direct contact with a rare gas, a second tube likewise provided and at least partly enclosed by the first tube, electrical discharge means of low frequency for illuminating the gas in each tube including means for interrupting the illumination of the said first tube.

1,826,385. NONHARDENING VACUUM TUBE LAMP. LEO L. BECK, Linden, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed June 2, 1926. Serial No. 113,147. 8 Claims. (Cl. 176—125.)



1. A method of increasing the life of neon positive column tube lamps comprising a column of gas containing neon, energized by an electric current, which comprises sealing in contact with the gas in the lamp envelope a foreign substance which will maintain a slow evolution of water vapor into the interior space of said lamp.

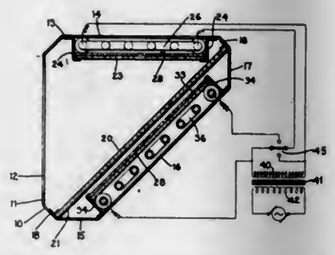
1,826,386. METHOD OF CONTROLLING THE COLOR IN VACUUM TUBE LAMPS. LEO L. BECK, Jackson Heights, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 10, 1927. Serial No. 167,373. 6 Claims. (Cl. 176—122.)

4. A glow discharge luminescent tube containing mercury and neon, the filling pressure of the neon being in excess of 8 millimeters of mercury.

1,826,387. METHOD OF DEADENING MERCURY IN BLUE NEON TUBES. LEO L. BECK, Jackson Heights, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 10, 1927. Serial No. 167,374. 5 Claims. (Cl. 176—122.)

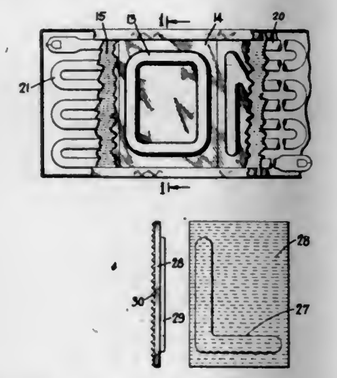
1. A glow discharge luminescent tube containing an amalgam of mercury and an alkali metal, said tube, when on open circuit, having the mercury distributed over the interior surface thereof in the form of small globules, whereby the mercury is readily vaporized upon the passage of current.

1,826,388. SIGN. ROBERT C. SMALLEY, Arlington, N. J., and WILLIAM E. MOOREFIELD, Flushing, N. Y., assignors to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 7, 1928. Serial No. 297,941. 14 Claims. (Cl. 40—130.)



14. A display device comprising sources of light, a screen interposed between said sources and adapted to reflect light from one source and transmit light from the other source, a stencil interposed between each source of light and the said screen, and means to alternately illuminate each source of light.

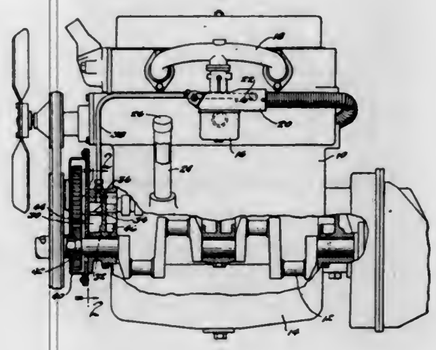
1,826,389. ILLUMINATING DEVICE. STEPHEN W. FULLERTON, Flushing, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1929. Serial No. 337,805. 2 Claims. (Cl. 40—132.)



1. In an illuminating device, in combination, a casing having an open side, a screen disposed across the open side, a discharge tube grid within the casing and adapted to illuminate the screen and diffusing means between the discharge tube and the screen formed with ribs parallel to the axes of the tube.

2. A screen for an illuminating device comprising a background plate, a solid raised symbol moulded on said background plate, diffusing ribs formed on the other face of said background plate, said background plate, with the exception of the symbol, being opaque.

1,826,390. CRANK CASE VENTILATION. LEROY V. CRAM, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 274,129. 2 Claims. (Cl. 123—119.)



1. An engine having a crankcase serving as a lubricant reservoir, a chamber arranged adjacent one end of the crankcase and communicating therewith, a gear housing forward of the chamber, said chamber being in communication with both the crankcase and the housing, an air inlet for the housing and a suction tube leading from the said chamber.

1,826,391. ODOMETER. CLARENCE B. DINSMORE, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 7, 1928. Serial No. 324,405. 2 Claims. (Cl. 135—95.)

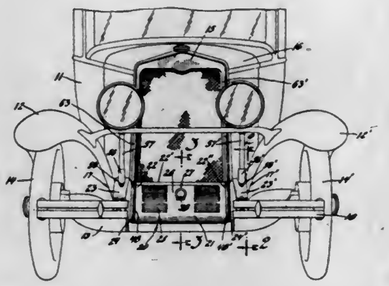
1. In a measuring instrument, a plurality of coaxial figure wheels, said figure wheels having their hubs in contact, internal transfer mechanism for said wheels including a pinion carrier freely mounted on one of said hubs, said carrier being substantially of the same radial dimension as said wheels, means to hold said carrier from rotation, said hubs being dimensioned to space the wheel peripheries from said carrier.

1,826,392. RUBBER LATEX PREPARATION AND MANUFACTURE OF GOODS THEREFROM. ROBERT A. DUNHAM, Long Beach, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed Oct. 17, 1928. Serial No. 313,182. 21 Claims. (Cl. 18—50.)

16. A rubber latex for the preparation of rubber goods, said latex containing sludge oil.

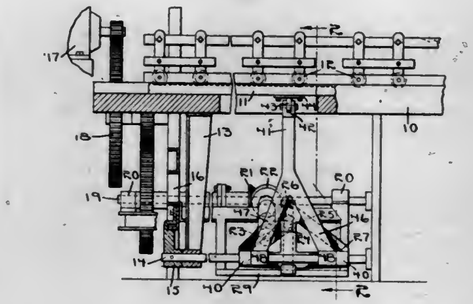
17. A rubber latex for the preparation of rubber goods, said latex containing Edeleanu extract.

1,826,393. FRONT SPLASH GUARD WITH COVERED CRANK HOLE. HARLEY J. EARL and JOHN F. WILSON, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,782. 7 Claims. (Cl. 180—54.)



1. In a splash guard organization: a forwardly inclined and laterally flanged apron element comprising a depressed area having less lateral breadth than the distance between chassis horn elements extending forwardly of a radiator shell; and a pair of flanged horn-concealing wing elements respectively provided with flanges at opposite sides thereof, the inner flanges thereof being secured to flanges upon said apron.

1,826,394. SHUTTLE MOTION FOR NARROW WARE LOOMS. MAURICE J. FLYNN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 7, 1930. Serial No. 473,592. 7 Claims. (Cl. 139—136.)

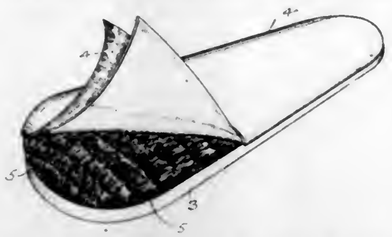


1. In a loom, a rack rod to be reciprocated, a lay on which the rack rod is mounted, means defining a pivot for the lay substantially parallel to the lay, an actuator reciprocable in a direction having a component parallel to the rack rod, and a rigid transmitter of power held against angular movement in a plane parallel to the direction of movement of the actuator and movable pivotally about the pivot of the lay and connected to the rack rod and operatively connected to the actuator to be moved by the latter.

1,826,395. PRESSING MACHINE PAD. CHARLES E. GALVIN, Springfield, Ohio. Filed Nov. 5, 1927. Serial No. 231,382. 3 Claims. (Cl. 68—9.)

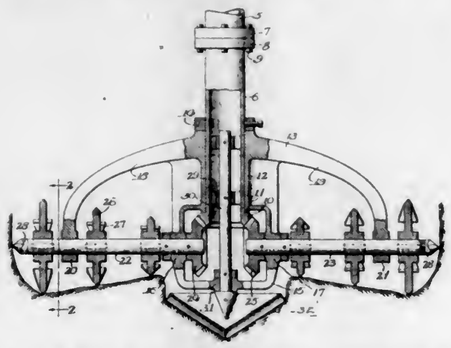
1. A pressing pad comprising a foraminous body of steel wool having its strands arranged in substantially parallel

relation, tie strands disposed in parallel paths transversely to the steel wool strands and extending on opposite sides of the body with portions of said tie strands



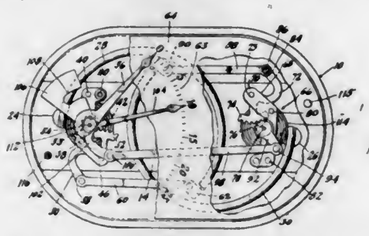
interconnected through said body at spaced intervals confining the body in predetermined form, and a porous nonmetallic cover therefor.

1,826,396. WELL DRILLING APPARATUS. JOHN J. GAULT, Chicago, Ill., assignor to W. J. Newman Company, Chicago, Ill. Filed Oct. 9, 1929. Serial No. 398,371. 4 Claims. (Cl. 255—71.)



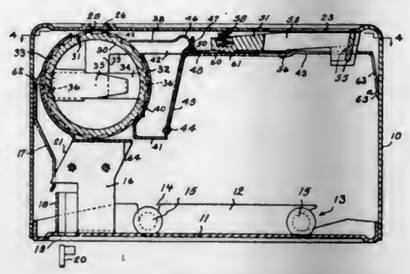
1. In a well drilling apparatus, the combination of a vertical rotating driving shaft, a cutter head revolubly mounted on said shaft, laterally arranged shafts mounted in the cutter head, means for rotating the lateral shafts by the first named shaft and cutting devices secured to said lateral shafts.

1,826,397. DUPLEX PRESSURE GAUGE. EDMUND E. HANS, Detroit, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan: Filed May 7, 1928. Serial No. 275,726. 5 Claims. (Cl. 73—109.)



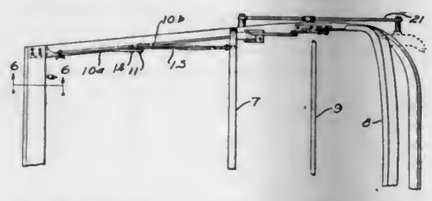
1. In a gauge, a base plate, a plurality of studs mounted on said plate, a mounting frame on said plate adjacent each stud, pointer operating mechanism mounted on each of said frames, a pressure responsive member mounted on each of said studs, means interconnecting each pressure responsive member to a corresponding pointer operating mechanism, and pointers swinging on a common axis and operated by each of said mechanisms.

1,826,398. MONEY BANK. ROBERT B. HAYDEN, Seattle, Wash., assignor to H. L. J. Specialty Co., a Corporation of Washington. Filed Mar. 28, 1931. Serial No. 526,019. 15 Claims. (Cl. 235—100.)



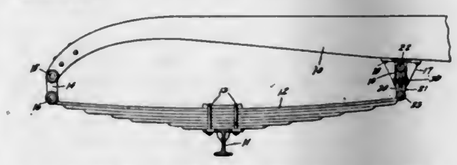
1. In a money bank, coin operated registering mechanism embodying registering members and holding devices frictionally engaging the exterior of said registering members whereby said registering members are supported for rotary movement.

1,826,399. COLLAPSIBLE BOW CONSTRUCTION FOR AN AUTOMOTIVE VEHICLE. FRANK HUMER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 14, 1930. Serial No. 428,282. 2 Claims. (Cl. 296—107.)



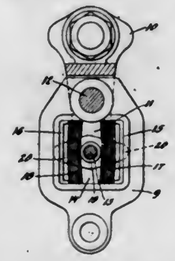
1. A collapsible bow construction for an automotive vehicle comprising in combination a forward bow pivotally mounted on the vehicle body, a rear bow comprising two pivotally connected sections the lower of which is pivotally mounted on the vehicle body, a link pivotally connecting the forward bow with the lower section of the rear bow forwardly of the pivot connection of the lower section of the rear bow with the vehicle body, and a brace comprising two sections having a lock joint, one section of the brace being pivotally connected to the front bow and the other section being pivotally connected to the vehicle body whereby when the said brace is collapsed the front bow pivots rearwardly toward collapsed position and automatically through the link connection with the rear bow simultaneously collapses and draws the rear bow forwardly.

1,826,400. RUBBER CUSHION SHACKLE. HENRY IHSIG, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 29, 1929. Serial No. 367,020. 4 Claims. (Cl. 267—54.)



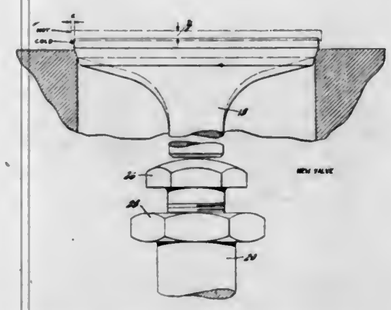
1. In a device of the class described, a bracket, a lug depending from the bracket, a link positioned on each side of the bracket, a pivot member extending through extremities of the links and the base of the lug, registering openings in intermediate portions of the links and the outer end of the lug, a resilient unit consisting of a resilient sleeve encased in metallic sleeves fixed in the opening in the lug, a member extending through the openings in the links and the inner sleeve, and a pivot member connecting the other extremities of the links.

1,826,401. STEERING PITMAN ARM. CHARLES WILLIAM ISELER, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 13, 1929. Serial No. 362,610. 7 Claims. (Cl. 74—38.)



1. Motion transmitting means including a forked lever, a second lever located between and pivoted to the forks of the first lever, a member carried by said forks and projecting through the second lever, and elastic means associated with the second lever on opposite sides of the member.

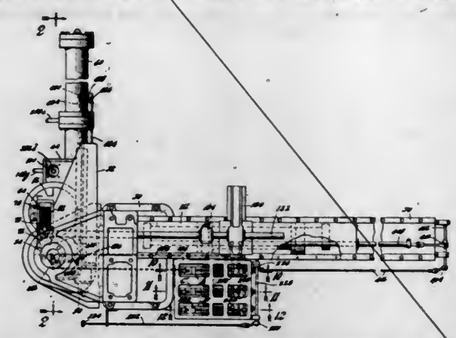
1,826,402. CONSTANT CLEARANCE POPPET VALVE. WILLIAM H. MANNING, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 26, 1930. Serial No. 470,984. 3 Claims. (Cl. 123—188.)



1. An internal combustion engine comprising an engine block having a combustion chamber, an exhaust valve of the poppet type for the chamber, a seat for the valve, mechanism for operating valve, the seating angle of the valve being such that the upward movement of the valve on its seat as a result of expansion of the head of the valve is sufficient to compensate for the effects of expansion of the block and operating mechanism to give substantially fixed or zero variation in lash.

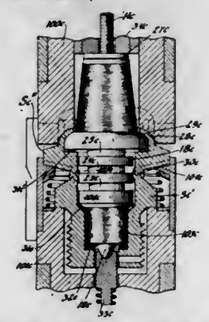
1,826,403. PROCESS AND APPARATUS FOR BENDING TUBING. FRANK O'BRIEN, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 28, 1929. Serial No. 374,328. 16 Claims. (Cl 153—40.)

1. Tube bending apparatus comprising, in combination, a support adapted to be inserted inside the tubing, a device adapted to grip the tubing, means to rotate said device so that the tubing is drawn over said support in one direction to form a bend in the tubing, and means to



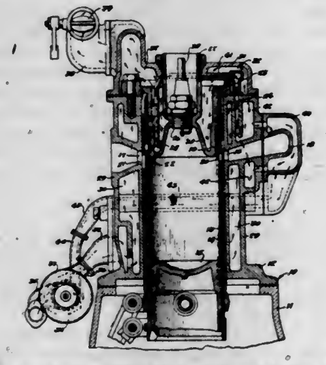
swing said device so that the tubing is drawn in another direction over said support to form a second bend in the tubing.

1,826,404. SPARK PLUG WITH A RUFF NECK BUSHING. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 7, 1928. Serial No. 324,510. 17 Claims. (Cl. 29—155.5.)



1. In a spark plug: an electrode; a compressible insulating sleeve disposed thereon; and a so-called ruff-neck bushing surrounding said sleeve element and providing a plurality of spaced deformation zones which compress the sleeve against said electrode.

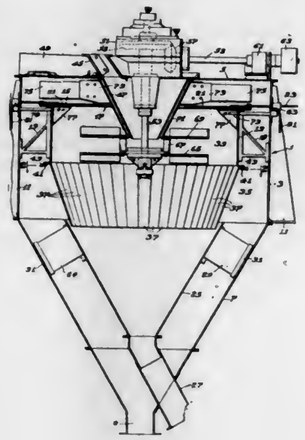
1,826,405. COOLING SYSTEM. ERIC OLLE SCHJOLIN, Birmingham, Mich., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed June 4, 1928. Serial No. 282,681. 9 Claims. (Cl. 123—173.)



1. In an internal combustion engine having a cylinder and a cylinder head having therein a recess adapted to

receive a cooling medium, means to conduct a cooling medium into the recess, and means extending into the recess, and through which a portion of the cooling medium is adapted to be removed therefrom.

1,826,406. AIR SEPARATOR. THOMAS J. STURTEVANT, Wellesley, Mass., assignor to Sturtevant Mill Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 1, 1930. Serial No. 425,100. 12 Claims. (Cl. 209—139.)

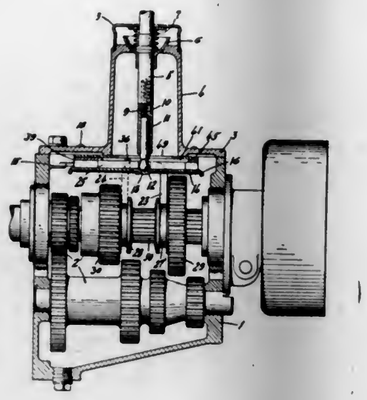


3. An air separator of the type comprising separating and settling chambers having inlet and outlet openings between them, means to cause air to circulate through said chambers and openings and move up in the separating chamber and down in the settling chamber, said separating chamber being characterized by an upper cylindrical portion and a lower frusto conical portion, the wall of said upper cylindrical portion being impenetrable and the wall of said lower conical portion being formed by a circular series of spaced overlapping vanes, the openings therebetween forming said inlet opening from the settling chamber to the separating chamber.

8. An air separator comprising a cylindrical covered casing, a smaller cylindrical covered casing within said first casing, said inner casing having a centralized outlet in its cover and an inlet at its bottom for establishing communication between said two casings, means for causing air to whirl and circulate up in the inner casing, through said outlet, down between the two casings and through said inlet, and a series of baffles located in the upper corner of said inner casing outside of said outlet opening.

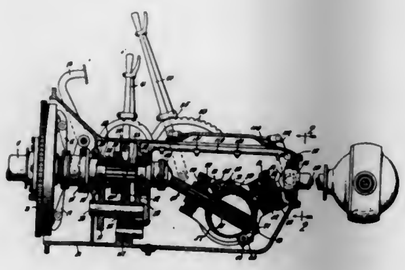
1,826,407. TRANSMISSION SHIFTING MECHANISM. PERRY L. TENNEY, Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 13, 1926. Serial No. 154,483. 22 Claims. (Cl. 74—39.)

1. In a gear shifting mechanism in combination with a transmission housing, a supporting member for the mechanism, shifter devices supported by said member, a shiftable table overlying said shifter devices, said table having recesses, projecting studs on said devices for engagement in said recesses to permit the movement of only one of said



devices at a time, means for securing said member to the transmission housing, and means for moving said table and selectively moving said devices.

1,826,408. VARIABLE SPEED TRANSMISSION. PERRY L. TENNEY, Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 9, 1929. Serial No. 338,719. 11 Claims. (Cl. 74—26.)



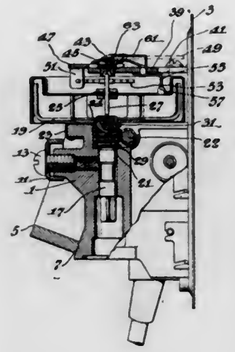
1. In combination, a driving shaft, a driven shaft, means to simultaneously change the axial direction of both shafts to thereby vary the angular relation between said shafts, mechanism coupling the adjacent ends of said shafts, said mechanism including a spherical member carried by one of said shafts and gripping members engaging said spherical member and carried by the other of said shafts whereby when in alignment a direct drive is transmitted, and whereby when angularly disposed a ratio drive is transmitted.

1,826,409. MOUNTING OF SPEED CUP AND ROTOR SHAFT. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Mar. 11, 1926. Serial No. 94,096. 2 Claims. (Cl. 264—13.)

1. In a magnetic measuring instrument, a frame, a rotor shaft therein, a magnet, holding means therefor, a clip for retaining the rotor shaft, the magnet holder positioned to prevent the escape of the retaining clip.

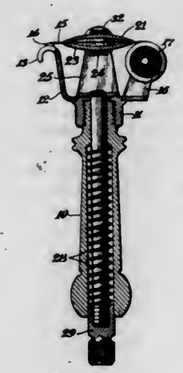
2. A measuring instrument, a rotary indicating member, a frame member thereover, the frame member having a

jewel carrier mounted therein for the spindle of the indicating member, the carrier extending slightly above the frame, a hair spring adjusting lever journalled about the



projection of the jewel carrier, a U-shaped resilient member, one arm retaining the spindle from axial movement and the other arm engaging the lever to hold it in adjusted position.

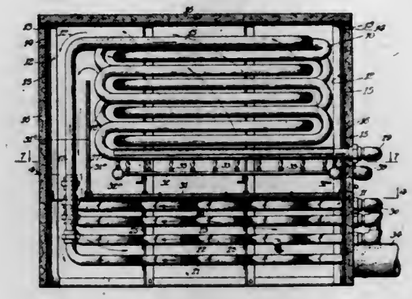
1,826,410. COMBINED SAFETY RAZOR AND SHARPENING MECHANISM. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Feb. 16, 1931. Serial No. 516,034. 11 Claims. (Cl. 30—12.)



9. In a combined safety razor and sharpening device, the combination of a sharpening element, means for clamping a double edged safety razor blade with one edge exposed for shaving and the other edge at the same time extending along and adapted to contact with said sharpening element, and means for pivotally supporting said clamping means on an axis extending longitudinally of said blade.

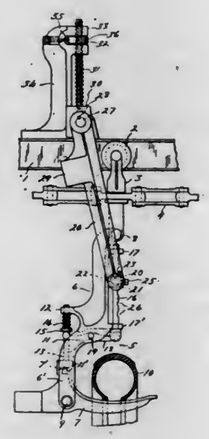
1,826,411. TUBULAR BOILER. HARRY T. BELLAMY, River Forest, and JULIAN C. SMITH, Wilmette, Ill. Filed Apr. 11, 1927. Serial No. 182,567. 8 Claims. (Cl. 122—356.)

1. In a gas fired boiler, upper and lower coil sections connected together for circulating a heating medium, a gas burner disposed therebetween over an extended area of said boiler and supplied with a mixture of gas and air under pressure, and means for directing the hot gases in a



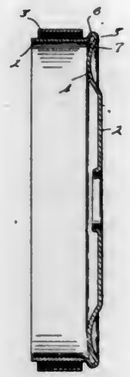
tortuous path about said coils whereby said hot gases are kept in a restricted state and a maximum heat transmission is obtained in said boiler.

1,826,412. TROLLEY CONVEYER. WALTER E. BENNETT and LEONARD J. BISHOP, Detroit, Mich., assignors to Mechanical Handling Systems, Inc., Detroit, Mich., a Corporation of Michigan. Filed Feb. 20, 1928. Serial No. 255,780. 9 Claims. (Cl. 214—60.)



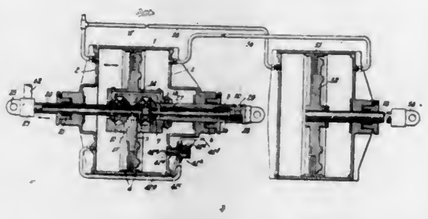
1. In a trolley conveyer, the combination with a support, of a work holder mounted upon and adapted to be moved along said support, said work holder having a pivotal work holding member, a locking bolt for normally holding said work holding member in operative position, and a longitudinally movable rod carried by said work holder in alignment with the longitudinal axis of the latter and operable to release said locking bolt, and a member upon said support for moving said rod to release the work carried by said work holding member during the advancement of said work holder.

1,826,413. BRAKE DRUM. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Nov. 22, 1926. Serial No. 150,085. 7 Claims. (Cl. 188—218.)



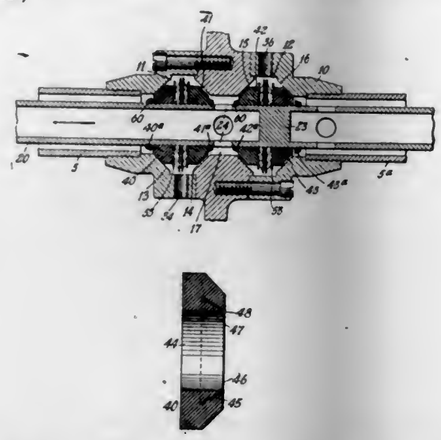
1. A brake drum having a brake flange, a web, and a U-shaped rib integral with and connecting said flange and web for reinforcing the drum, said rib extending transversely of said flange and having relatively wide side walls adjacent to each other.

1,826,414. BRAKE MECHANISM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG and VICTOR W. KLIESRATH, Long Island City, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed May 19, 1925, Serial No. 31,281. Renewed Mar. 6, 1931. 40 Claims. (Cl. 188—152.)



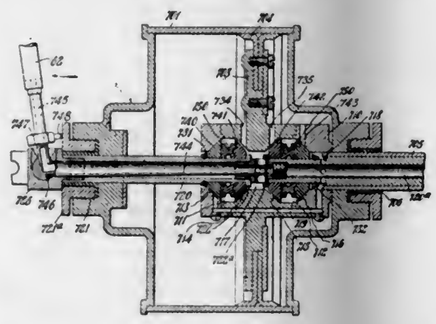
17. The combination with an automotive vehicle, and a plurality of brake mechanisms therefor, of a main power actuator comprising a cylinder, a double acting picton therein, and means including reversing valve mechanism for establishing differential pressures in said cylinder on opposite faces of said piston, said valve mechanism being constructed to hold said piston in balanced condition in an interjacent position of said valve mechanism, an auxiliary valveless actuator comprising a cylinder and a double acting piston therein, a tubular connection between the portion of the main actuator cylinder on each side of the piston therein with the corresponding portion of the auxiliary actuator cylinder, connections from the main actuator piston to certain of said brake mechanisms, and connections from said auxiliary actuator piston to other of said brake mechanisms, and an operator operated part for controlling the reversing valve mechanism connected with the main piston by means permitting lost motion, whereby the operator may add his physical force to the brake mechanism connected with the main actuator and may operate said valve mechanism to vent the main actuator cylinder and apply the brakes, connected with the main actuator in case of failure of the power actuators to function by power.

1,826,415. POPPET VALVE MECHANISM FOR POWER ACTUATORS. CALEB S. BRAGG and VICTOR W. KLIESRATH, Long Island City, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Oct. 2, 1925, Serial No. 60,018. Renewed Dec. 3, 1930. 12 Claims. (Cl. 121—41.)



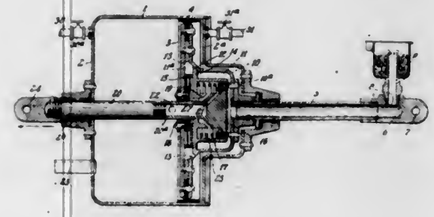
1. The combination with a valve seat, of a poppet valve having an angular seat engaging portion, and provided with a central aperture, a longitudinally movable valve actuating part fitting said central aperture in the valve, and supporting it coaxially with the seat, said part being movable through the valve and being provided with means for engaging the valve to open it when moved in one direction, yielding means normally pressing said valve toward its seat, said valve being provided with sealing means forming part of the valve surrounding said central aperture for making an air tight connection between the valve and said valve operating part while permitting its longitudinal movement with respect to the valve.

1,826,416. POWER ACTUATOR. CALEB S. BRAGG and VICTOR W. KLIESRATH, Long Island City, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Original application filed Jan. 5, 1925, Serial No. 506. Divided and this application filed Aug. 30, 1926, Serial No. 132,367. Renewed Dec. 10, 1930. 15 Claims. (Cl. 121—41.)



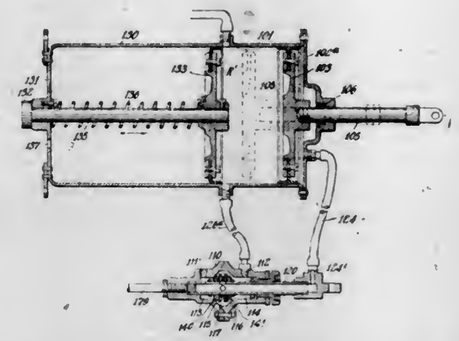
1. In a power actuator, the combination of a cylinder closed at both ends, a double acting piston in said cylinder, reversing valve mechanism, means for connecting said reversing valve mechanism with sources of high and low fluid pressure, a longitudinally movable valve operating part provided with valve engaging devices fixed in relation thereto, for operating certain of said valves, an operator operated part connected with said valve operating part, a retracting spring operatively connected with said valve operating part, means for arresting said valve operating part when the piston is in retracted position, in position to hold one of said valves open to connect the cylinder on one side of the piston with the low pressure source, means carried on said valve actuating part and, movable independently with respect to said valve actuating part for operatively engaging another of said valves, and means for arresting said independently movable valve engaging means part when the piston is in normal retracted position to effect the opening of said other valve and place the cylinder on the opposite side of the piston in connection with the low pressure source.

1,826,417. POWER ACTUATOR. CALEB S. BRAGG and VICTOR W. KLIESRATH, Long Island City, N. Y., assignors to Bragg-Kliesrath Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 7, 1927, Serial No. 231,725. Renewed Dec. 3, 1930. 17 Claims. (Cl. 121—41.)



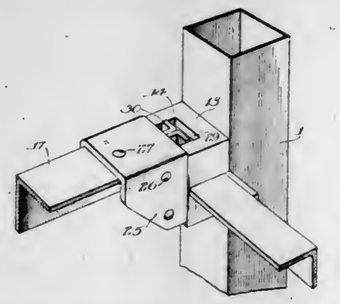
1. Valve mechanism for controlling the operation of fluid pressure actuators comprising among its members a valve casing, provided with a valve seat within the same, and a higher fluid pressure inlet communicating with a portion of the casing on one side of said seat, and a passage communicating with a portion of said actuators and the casing on the other side of said seat, a higher pressure valve and a lower pressure valve of different sizes in said casing, said higher pressure valve being the larger and normally engaging said seat and having opposite faces of unequal effective pressure areas, a portion of one of said faces being always exposed to the higher fluid pressure, said valve face being provided with an aperture, a recess and a valve seat, and the lower pressure valve being movable within said recess with respect to the higher pressure valve into and out of engagement with said seat and having its outer face subjected at all times to the higher fluid pressure, sealing means between the low pressure valve and said recess, a hollow valve stem for said lower pressure valve passing through said aperture and provided with an aperture communicating with said recess, and an aperture communicating with a source of lower fluid pressure, the other face of said higher pressure valve being exposed to the lower fluid pressure when said valve is seated, and the lower pressure valve is open, yielding resistance means on the opposite face of the higher pressure valve from said recess for normally seating said valve against the maximum differential of fluid pressures thereon, said resistance means being capable of offering material resistance to the movement of said valve in a direction away from its seat when the fluid pressures on opposite faces of said valve are equalized, and being nearly counterbalanced by the maximum differential of fluid pressures thereon and being interposed between said valve and a part connected with the valve casing, said valve stem being provided with means for connecting it with an operator operated part, the movement of said operator operated part in a direction to seat said lower pressure valve effecting a connection between said valve and said higher pressure valve in a direction to open the higher pressure valve.

1,826,418. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Feb. 16, 1928. Serial No. 254,649. 15 Claims. (Cl. 188—152.)



1. The combination with an internal combustion engine provided with a throttle controlled suction passage from the carburetor to the engine cylinders, a power actuator comprising relatively movable parts, at least one of which is provided with means for connecting it with a part to be operated, controlling valve mechanism for the actuator, and means for connecting the power actuator between relatively movable parts thereof with the suction passage of the engine between the throttle valve and the engine cylinders, and with a source of higher pressure fluid under the control of said valve mechanism, of a variable volume vacuum reservoir communicating with said connecting means and connected at all times with the suction passage, and being held by suction in its position of substantially minimum capacity when the engine is running, and constructed to expand to increased capacity when higher pressure fluid is withdrawn therethrough from the actuator, to temporarily accommodate quantities of said higher pressure fluid so withdrawn, to insure rapidity of operation of the actuator and prevent material interference with the operation of the engine, or stalling it if idling.

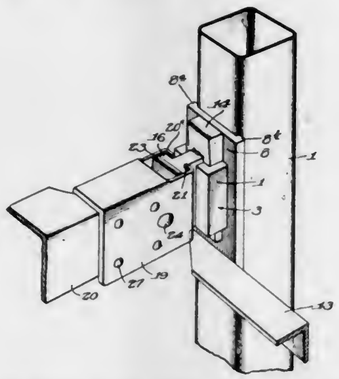
1,826,419. FURNITURE CORNER CONSTRUCTION. JOSEPH A. BUTKUS, Chicago, Ill., assignor to Gustavus A. E. Kohler, Chicago, Ill. Filed Aug. 24, 1927. Serial No. 215,076. 3 Claims. (Cl. 5—300.)



1. A furniture corner construction comprising a hollow support having an opening in one side thereof, a support connecting member having a part adapted to be inserted in said opening and a part which projects from the opening, said support connecting member consisting of metal of substantially uniform thickness comprising a body portion longer than the opening in the hollow support and when in position engaging the hollow support beyond the opening and parts integral with the body portion and extend-

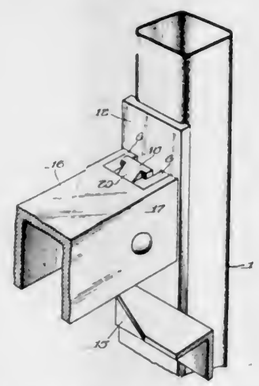
ing substantially at right angles thereto, the ends of said parts extending inwardly substantially at right angles to said parts and being separated by a space, a rail, a rail connecting member connected with said rail, said rail connecting member consisting of two sheet metal pieces connected together between their ends, one end of each sheet metal piece being bent laterally and adapted to engage the inwardly extending ends of the support connecting member, the other ends of said sheet metal pieces being substantially parallel with the middle portions thereof and being connected with the middle portions thereof by portions bent substantially at right angles thereto, and a connecting piece to which said latter ends are connected, said connecting piece being connected with said rail.

1,826,420. FURNITURE CORNER CONSTRUCTION. JOSEPH A. BUTKUS, Chicago, Ill., assignor to Gustavus A. E. Kohler, Chicago, Ill. Filed Aug. 24, 1927. Serial No. 215,077. 5 Claims. (Cl. 5—300.)



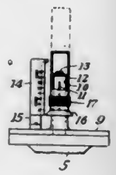
5. A furniture corner construction comprising a hollow support, a support connecting member removably connected therewith, said support connecting member having two separated projecting parts, a cross-bar supporting member having a plate with openings therein through which said projecting members pass, and a wedge device engaging said projecting parts and said plate.

1,826,421. FURNITURE CORNER CONSTRUCTION. JOSEPH A. BUTKUS, Chicago, Ill., assignor to Gustavus A. E. Kohler, Chicago, Ill. Filed Aug. 24, 1927. Serial No. 215,078. 5 Claims. (Cl. 5—288.)



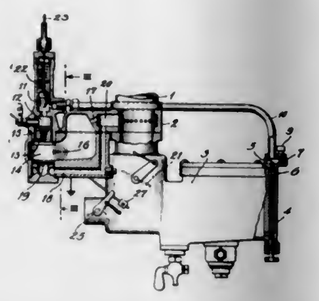
1. A corner construction for furniture comprising a hollow support, having an opening in the side thereof, a removable support connecting member adapted to be inserted through said opening and having two projecting engaging parts projecting outwardly therefrom, a cross bar connecting member engaging said support and supported by said support connecting member a rail provided with side pieces, a clamping device connected to the side pieces of said rail and received between the projecting engaging parts of th support connecting member, said clamping device and projecting engaging parts of the support connecting member having engaging faces.

1,826,422. APPARATUS FOR MEASURING FLUIDS. RAYMOND N. EHRHART, Edgewood, Pa., assignor to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 11, 1925. Serial No. 8,430. 10 Claims. (Cl. 73—167.)



1. A fluid meter comprising a guide having an exhaust port, and a bell co-operating with said port and adapted to cover and uncover the same, there being a restricted communication between the interior of said guide and the interior of said bell forming a dashpot intermediate the guide and the bell, substantially as described.

1,826,423. LIQUID FUEL BURNER. MICHEL GOOD, Garden City, N. Y., assignor to Good Inventions Co., New York, N. Y., a Corporation of New York. Filed June 3, 1926. Serial No. 113,385. 19 Claims. (Cl. 123—122.)

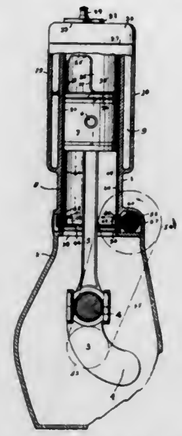


1. Mixture-producing apparatus comprising a combustion chamber provided with means for delivering a spray mixture thereinto and having an outlet for said mixture therefrom opening through a screen, and provided with another outlet for said mixture, the first outlet conducting a large portion of unburned fuel and the second a large portion of combustion products.

1,826,424. INTERNAL COMBUSTION ENGINE. FRANK R. HIGLEY, Cleveland Heights, Ohio. Filed Nov. 4, 1927. Serial No. 231,025. 12 Claims. (Cl. 123—190.)

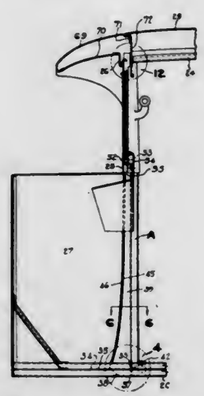
1. In an internal combustion engine having a cylinder with a plurality of ports arranged on one side thereof, a valve arranged in said cylinder to control said ports, and a hollow head for said cylinder having a portion extending within said valve, with a mask portion of substantial volume projecting into the zone of said ports to mask that

valve portion opposite the ports and cut away on the side of said ports to form a combustion chamber thereadjacent, whereby said cylinder head mask portion and said



combustion chamber are oppositely offset with respect to said cylinder and separated by a face of said mask portion extending across said cylinder.

1,826,425. PRESSED METAL BODY FRAME. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 18, 1925. Serial No. 69,734. 9 Claims. (Cl. 296—28.)

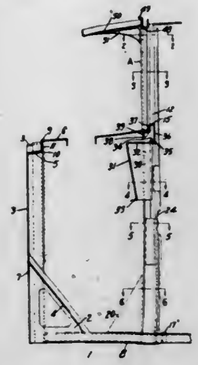


1. A pressed metal body post of channel cross section having a dubbed-off end closed by a flange from one of its adjacent walls, and a jog on the inner corner of the dubbed-off end adapted to receive a sill.

1,826,426. PRESSED METAL VEHICLE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 8, 1927. Serial No. 159,825. 11 Claims. (Cl. 296—28.)

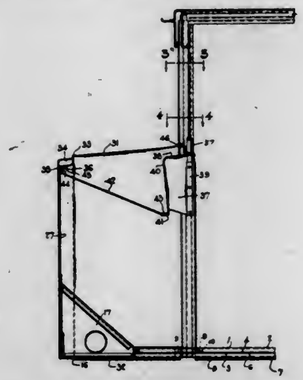
1. In a pressed metal automobile body construction, an inwardly facing channel member forming a door post at the rear of the cowl, the inner wall of said post being formed to receive a door centering means and having a strengthening and securing member secured interiorly thereof, and an angle member having one arm secured to the forward wall of the post and its other arm extending across the post to the said strengthening and securing member, whereby a substantially box girder construction is formed.

9. In a pressed metal automobile body construction, body side sills, a cross brace extending between said sills, a transverse member secured to one of the sills and ex-



tending toward the other, and longitudinally extending seat risers between the cross brace and the transverse member, one of said seat risers being secured to and supported by one of the sills and the other of said risers being secured to said cross brace and transverse member inwardly of the body from the other of said sills.

1,826,427. AUTOMOBILE BODY CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1927. Serial No. 180,445. 4 Claims. (Cl. 296—28.)

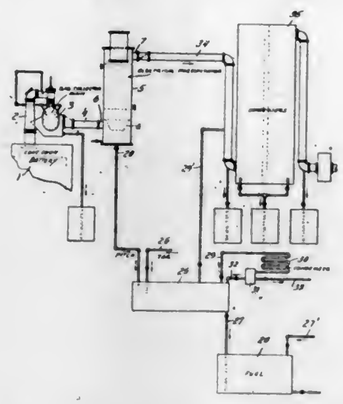


1. In an automobile body construction, inwardly presenting channel members forming posts and having their forward side walls of substantially less depth than their rear side walls, and members secured across the openings of said channel members having grooves formed therein adapted to house glass run channels, the front side wall and groove of a post being of an aggregate depth not substantially greater than the rear side wall of the post.

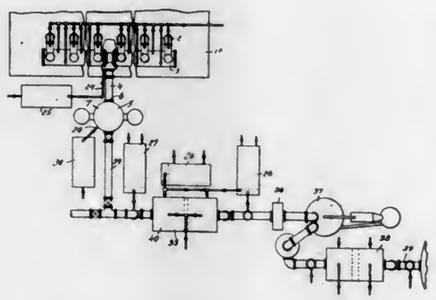
1,826,428. PITCH COMPOSITION AND METHOD FOR MAKING THE SAME. STUART P. MILLER, Tenafly, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 17, 1927. Serial No. 199,451. 9 Claims. (Cl. 202—30.)

1. The method of producing a composite pitch-product, comprising subjecting fresh hot coal distillation gases containing entrained particles to treatment with an electrical discharge so as to remove said entrained particles at a

sufficiently high temperature to give a pitch of high melting point and to leave oils, including high boiling oils, in the form of vapors carried by the gases, continuously collecting and drawing off the directly recovered pitch and continuously blending or admixing coal tar therewith while it is still hot and thinly fluid to give a composite and substantially homogeneous mixture.



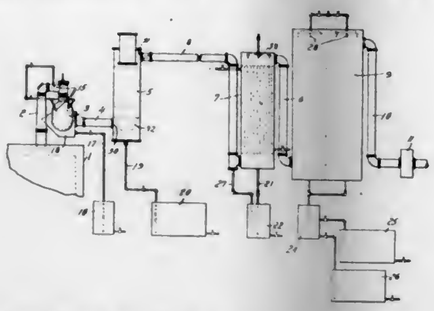
1,826,429. METHOD OF PRODUCING CREOSOTE OILS. STUART PARMELEE MILLER, Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1927. Serial No. 206,366. 7 Claims. (Cl. 183—114.)



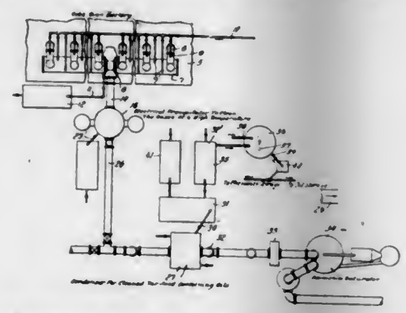
1. The method of treating coal distillation gases, which comprises subjecting them to a regulated cooling treatment to cool them to a temperature such that pitch particles of relatively high melting point are carried in suspension therein, while creosote oils are contained in vapor form, then cleaning the gases without cooling them to separate pitch particles therefrom and to leave clean gases containing creosote oil vapors and cooling the cleaned gases to separate therefrom an oil suitable for use as creosote oil, before passing the gases through an ammonia absorber.

1,826,430. RECOVERY OF CREOSOTE OILS, TAR ACIDS, ETC. STUART PARMELEE MILLER, Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1927. Serial No. 206,367. 7 Claims. (Cl. 183—114.)

1. The method of treating coal distillation gases whereby creosote oil and carbolic oil are produced directly from the gases, which comprises subjecting coal distillation gases to cleaning at a sufficiently high temperature to separate therefrom a pitch of relatively high melting point and to effect substantially complete elimination of suspended pitch particles therefrom while leaving a large amount of heavy oils in the form of vapors, the cleaning operation being effected without substantial cooling of the gases, subsequently cooling the cleaned gases to a temperature around 80–100° C. to separate therefrom a creosote oil and subsequently cooling the gases to a lower temperature around 25–35° C. to separate therefrom a carbolic oil before passing the gases thru an ammonia absorber.

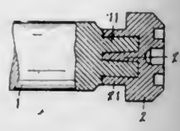


1,826,431. RECOVERY OF TAR ACIDS AND OTHER PRODUCTS. STUART PARMELEE MILLER, Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1927. Serial No. 206,368. 6 Claims. (Cl. 260—154.)



1. The method of recovering tar acids, which comprises bringing tar-acid-containing oils or tars into intimate contact with hot coal distillation gases at a temperature sufficient to vaporize such oils and to enrich the gases in such oil vapors, subjecting the enriched gases to a cleaning operation to remove heavy tar and pitch constituents therefrom at a sufficiently high temperature to leave tar acid oils in the form of vapors, cooling the enriched gases to separate tar acid oil therefrom, and extracting tar acids from such oil.

1,826,432. CARPET SWEEPER BRUSH AND PULLEY. IRA J. OWEN, Grand Rapids, Mich., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Filed Sept. 18, 1926. Serial No. 136,309. 3 Claims. (Cl. 287—53.)



1. A carpet sweeper brush having a roll with a projecting tenon divided longitudinally, and an expansible pulley therefor of rubber composition with a projecting hub in which is formed a divided socket with a wedge-shaped partition shrunk on said tenon, the said wedge shaped partition engaging and expanding the said divided tenon, as specified.

1,826,433. PROCESS OF SIMULTANEOUSLY VOLATILIZING PHOSPHORUS AND PRODUCING LATENT HYDRAULIC BINDERS. GUSTAV PISTOR, Leipzig, and ROBERT SUCHY and EMIL REUBKE, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 10, 1928, Serial No. 253,516, and in Germany Feb. 10, 1927. 5 Claims. (Cl. 23—223.)

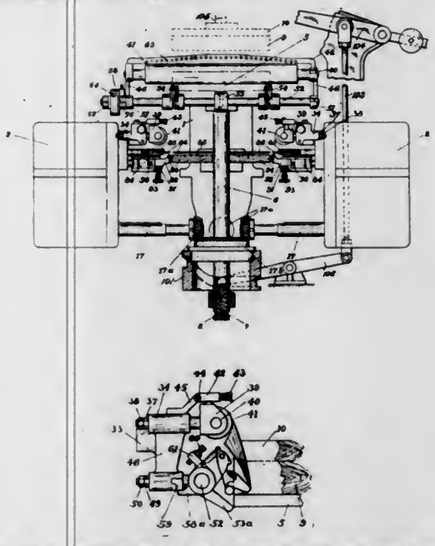
1. A process for simultaneously volatilizing phosphorus and producing a slag having the properties of a latent hydraulic binder, which comprises melting in the presence of carbon a mixture of a phosphate containing silicon dioxide and calcium oxide with an aluminous material, at least a part of the aluminium contents of said material being combined with phosphorus oxide and the total amounts of the calcium oxide, aluminium oxide and silicon dioxide contents of said mixture being in such proportions as to constitute after elimination of the phosphorus a slag containing aluminium oxide, silicon dioxide and calcium oxide in the proportions of about 16.5 to 18.7% Al_2O_3, 30.8 to 33.5% SiO_2, and 40 to 50% CaO.

1,826,434. VIBRATING DEVICE. WALTER A. REISS, Linden, Md. Filed Apr. 5, 1927. Serial No. 181,082. 8 Claims. (Cl. 128—32.)



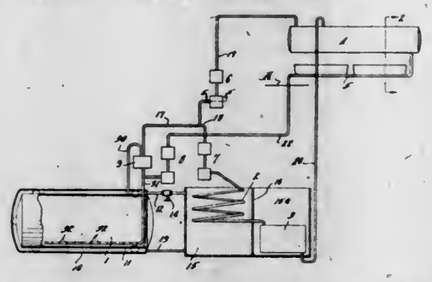
1. A device of the kind described comprising an elastic pad having an opening, a pair of loosely connected plates adapted to be inserted within said opening having substantially semi-circular portions and an eccentric arranged within said opening and adapted to rotate therein for vibrating and oscillating said plates.

1,826,435. BOX WRAPPING MECHANISM. ERNEST G. RIDER, Philadelphia, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1927. Serial No. 221,201. 18 Claims. (Cl. 93—54.)



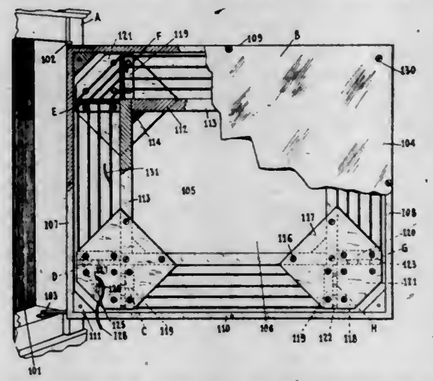
1. In a wrapping machine or the like, form block structure for passing a box and wrapper along a path, rotary structure to fold a section of a wrapper panel into engagement with a box wall, means, simultaneously operative therewith, to wipe the wrapper panel into intimate engagement with an adjacent box wall, and means actuated by said form block structure to operate said rotary structure.

1,826,436. REFRIGERATING SYSTEM. ALBERT C. SCHICKLER, Cleveland, Ohio, assignor to Edmund E. Allyne, Cleveland, Ohio. Filed Nov. 15, 1926. Serial No. 148,501. 7 Claims. (Cl. 62—118.)



5. Refrigerating apparatus of the intermittent absorption type including a still-absorber, a condenser, and an evaporator connected in operative cycle, liquid sealing means for directing the gas in its proper course through said apparatus during the several cycles of operation, and means in said apparatus, normally ineffective upon the flow of the various agents therein, for maintaining the effectiveness of said liquid sealing means in spite of previous inversion of the apparatus.

1,826,437. RADIOCABINET WITH ADJUSTABLE LOOP. LAZARUS SHAPIRO, New York, N. Y., and PAUL J. LARSEN, Cranford, N. J., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 7, 1925. Serial No. 945. 11 Claims. (Cl. 250—33.)

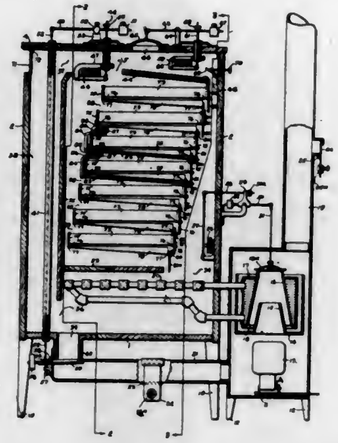


1. In a loop aerial construction, the combination of a recessed panel member, a hinged mounting for one edge of said panel member whereby said panel is adapted to swing through an arc of 180°, a plurality of sets of blocks each formed in a multiple layer and disposed in said recessed portion and about the periphery of said panel member, and a multiple layer loop winding secured in said recessed panel by said blocks.

1,826,438. INCUBATOR. FRANK E. STOVER, Luray, Va., assignor of one-third to Whitney E. Bundy and one-third to Frank G. Davis, Springfield, Ohio. Filed July 23, 1926. Serial No. 124,528. 13 Claims. (Cl. 119—42.)

1. In an incubator, the combination of an incubator cabinet, a tray for supporting eggs having a bottom for

passing air therethrough, a scoop below said tray for directing air therethrough from one end to the other, and a damper for controlling the opening between the

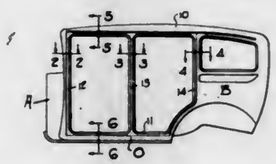


bottom of the tray and the top of the scoop through which the incoming air passes, and thermostatic means located adjacent the point of exit of air through the tray connected to said damper for controlling it.

1,826,439. MOTOR FUEL. DANIEL STRYKER, White Plains, N. Y., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 21, 1927. Serial No. 241,729. 6 Claims. (Cl. 44—9.)

1. A fuel for internal combustion engines comprising a liquid hydrocarbon fuel and a small proportion of oxidized paraffin wax which is completely soluble therein.

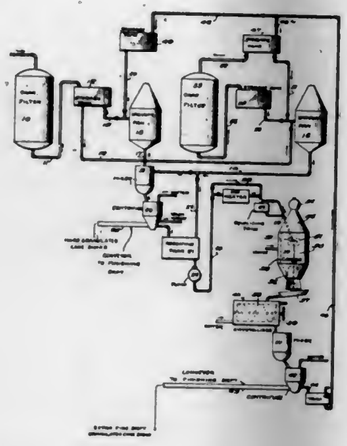
1,826,440. VEHICLE BODY WALL CONSTRUCTION. JOHN P. TARBOX, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 1, 1927. Serial No. 216,908. 5 Claims. (Cl. 296—28.)



1. A vehicle body wall embodying inner and outer panels joined together to form a hollow wall structure including framing and paneling, at least one of which panels extends entirely around a doorway opening, and each of which panels is flanged transversely in the margins of the opening and laterally along the edges of the transverse flanges into the doorway opening, the panels being joined together through said lateral flanges.

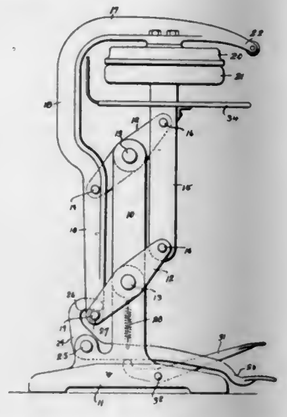
1,826,441. PROCESS FOR MANUFACTURE OF EXTRA FINE, SOFT GRANULATED CANE SUGAR. BERNARD H. VARNAU and TRUMAN B. WAYNE, Sugar Land, Tex. Filed Sept. 4, 1926. Serial No. 133,595. 13 Claims. (Cl. 127—58.)

1. The process of producing extra fine, soft, granulated cane sugar from the syrups derived from the centrifugal machines during the purging of high grade strikes of hard granulated cane sugar which comprises rapidly cooling said syrup to induce a substantially instantaneous



and substantially complete and regular grain setting, maintaining said syrup at a crystallizing temperature, and separating the crystals formed from the mother liquor.

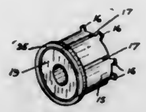
1,826,442. GARMENT PRESS. BASIL J. YANCHENKO, New York, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 14, 1925, Serial No. 50,172. Renewed June 26, 1929. 19 Claims. (Cl. 68—9.)



2. A pressing machine comprising in combination, cooperating jaws, a vertical support standard fixed to each jaw, parallel motion means movably mounting each vertical support, and operating means for producing jaw compression.

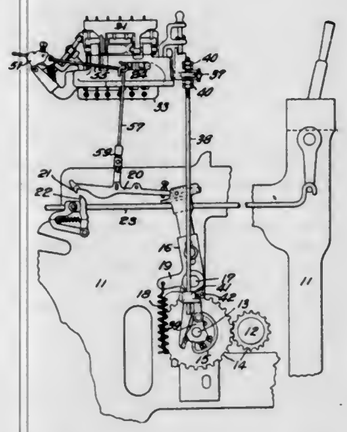
19. In a garment or laundry press, a frame, a coacting press head and buck, operating means for the head including an upright the upper end of which has an integral forwardly directed portion which is attached to the head, a radius link pivotal connection made between the lower end of the upright and frame, a second radius link swingable connection made between the upright and the frame and spaced above the first named radius link, and means cooperating with the lower end of the upright to produce jaw compression and including a cam actuated by the means, and a roller journaled on the upright and engaged by the cam to draw down on the upright.

1,826,443. COMMUTATOR AND METHOD OF MAKING THE SAME. JOHN M. AUFIERO, Brooklyn, and JOHN H. SMOOT, New York, N. Y., assignors to E. A. Laboratories, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 21, 1929. Serial No. 334,058. 1 Claim. (Cl. 171—321.)



A method of forming a commutator which includes providing a strip of metal formed with slits in one of its edges, curving said strip to form a cylinder, placing a mass of insulating material within said cylinder, causing said material to extend beyond said strip in the form of a ring overlying the strip adjacent one edge thereof and covering portions of said slits, and finally in cutting the cylinder in line with said slits and through to the opposite edge of said strip.

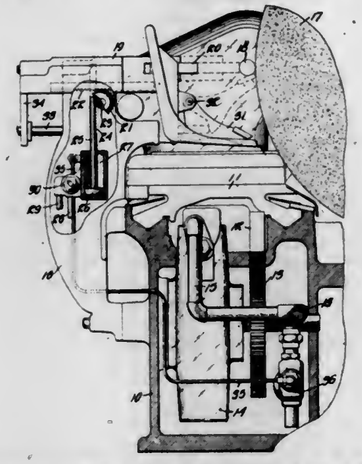
1,826,444. STOPPING MECHANISM FOR LOOMS. WILLIAM H. BAKER, Montreal, Quebec, Canada. Filed July 19, 1929. Serial No. 379,536. 17 Claims. (Cl. 139—365.)



1. In a loom or the like including a normally stationary knock-off element, a normally reciprocating element for engagement with said knock-off element to stop the loom, a shaft, and operative connection between said shaft and the reciprocating element, the combination of a warp stop motion including longitudinally reciprocating feeler bars, operative connection between said shaft and said bars for reciprocation thereof, and operative connection between said bars and said reciprocating element normally holding the reciprocating element out of engagement with the knock-off element and operative upon arrest of movement of any feeler bar to permit engagement of the reciprocating element and knock-off element.

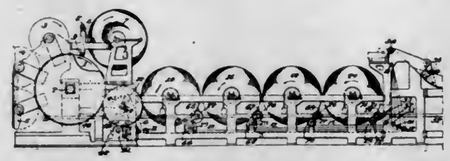
1,826,445. SAFETY DEVICE FOR GRINDING MACHINES. HAROLD E. BALSIGER, Waynesboro, Pa., assignor to Landis Tool Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed June 13, 1928. Serial No. 285,113. 8 Claims. (Cl. 51—238.)

1. In combination, a grinding machine, a work carriage on said machine, an abrasive wheel, a work rest adapted to support the work against the pressure of the abrasive wheel, means for reciprocating the work carriage, means for moving the work rest to and from operative position,



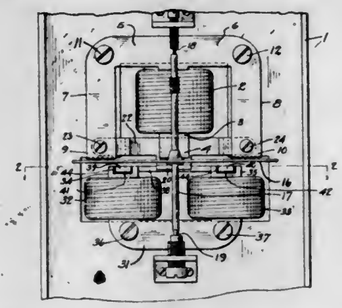
and means controlled by the movement of said work rest to render the said carriage reciprocating means operative or inoperative, substantially as set forth.

1,826,446. MULTIWEB HANDLING MACHINE. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Dec. 1, 1928. Serial No. 323,039. 6 Claims. (Cl. 93—20.)



1. In a multiweb handling machine, an element around which a plurality of associated webs are passed, a plurality of web feeding rolls arranged to feed the webs to said element at predetermined successively increased speeds, and means beyond the said element for exerting a slip pull on the webs to keep them taut.

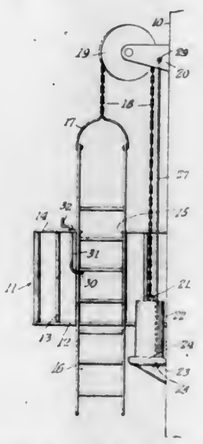
1,826,447. INDUCTION METER. WILLI BEUSCH, Zug, Switzerland, assignor to Landis & Gyr, A.-G., Zug, Switzerland, a Limited Joint-Stock Company of Switzerland. Filed May 24, 1928, Serial No. 280,261, and in Switzerland June 22, 1927. 1 Claim. (Cl. 171—264.)



In combination in an induction meter, a current core having slotted pole pieces, the slots being positioned to

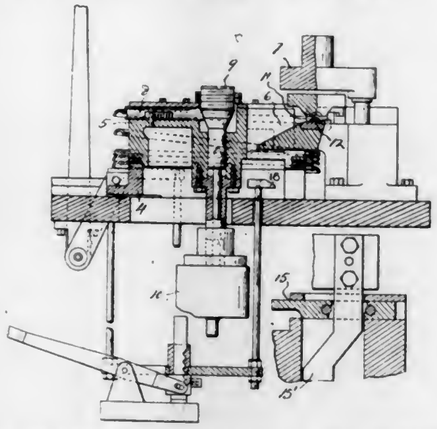
leave the adjacent edges of the pole pieces intact, a U-shaped magnetic shunt piece carried in the slots, a bushing of non-magnetic material spacing the shunt piece from the pole pieces and supporting it in the slots, and a counterpole for the voltage magnet of the meter lying between the pole pieces of the current core.

1,826,448. SAFETY FIRE BALCONY EXIT. ERNEST BOCCHINO, Newark, N. J. Filed May 9, 1928. Serial No. 276,273. 2 Claims. (Cl. 227—5.)



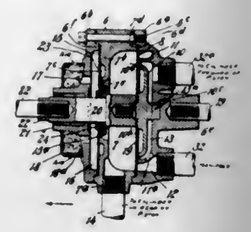
1. In combination with a safety fire escape balcony having a serving ladder movable vertically with respect thereto, a molded cement counter-balance of said ladder, a tube disposed longitudinally in the counter-balance, and a fixed rod passing through the tube to act as a guide therefor.

1,826,449. METHOD OF FORMING VEHICLE WHEEL RIM MEMBERS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 23, 1928. Serial No. 272,167. 7 Claims. (Cl. 29—159.1.)



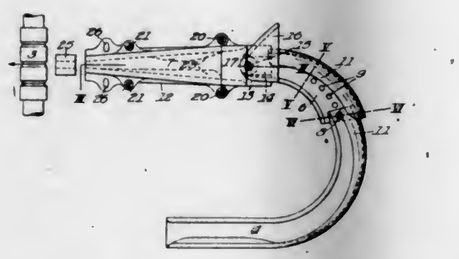
1. The method of forming a vehicle wheel rim member, which consists in forming with a constant curvature stock having a section substantially of the completed rim member and of a length to produce a plurality of rim members, deflecting the formed stock out of the path of the stock to be formed and into a helix, applying radial pressure to the convolutions of the helical stock to size the same, and severing the sized convolutions.

1,826,450. POWER ACTUATOR. CALEB S. BRAGG and VICTOR W. KLIESRATH, Long Island City, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed June 20, 1928, Serial No. 286,803. Renewed March 6, 1931. 21 Claims. (Cl. 121—41.)



1. In valve mechanism for controlling power actuators, the combination with a valve casing provided with adjacent chambers provided with an aperture for placing them in communication, valve means for controlling said communicating aperture having oppositely disposed faces subjected at all times to the pressures in said respective chambers, means for connecting one of said chambers at all times with a source of lower fluid pressure, means for connecting said lower pressure chamber at all times with a portion of an actuator on one side of a movable member thereof, means for connecting the other of said chambers with the actuator on the other side of said movable member, said last mentioned chamber having an aperture for admitting higher pressure fluid to said second chamber, a second valve means for closing said aperture having its outer face exposed at all times to the higher fluid pressure and normally holding said second valve means in closed position, valve actuating means connecting said second means with said first mentioned valve means and holding the latter in position to connect said chambers when said former valve member is held in closed position by the higher pressure fluid to connect the actuator on both sides of its said movable member with the source of lower pressure, whereby whenever either of said valve means is in closed position, a differential of pressures will exist on opposite faces thereof tending to hold it firmly closed, and an operator operated part connected with said valve actuating part.

1,826,451. ROLLING MILL REPEATER. ALBERT C. BRAUER and GEORGE W. WEIMER, Girard, Ohio. Filed Oct. 4, 1928. Serial No. 310,272. 9 Claims. (Cl. 80—52.)



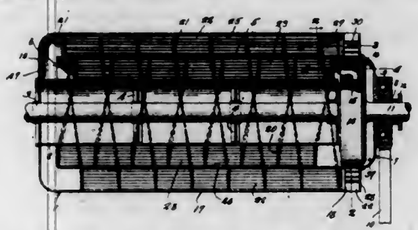
1. In combination with the delivery end of a repeater trough for rolling mills, a delivery terminal composed of two interfitting shell members joined by a lateral seam providing inner upper and lower continuous bearing faces, one of said members having its inner face inwardly deflected for action on a rolled section passing therethrough.

1,826,452. SHEET METAL LOCKING MEANS. ROBERT F. CARPENTER and THOMAS F. ANDERSON, Cleveland, Ohio, assignors to The Sanymetal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 15, 1929. Serial No. 363,318. 2 Claims. (Cl. 189—36.)



1. A locking device for joining the adjacent turned-back edge portions of a pair of sheet metal plates, comprising a sheet metal strip bent in folds providing a reinforced body portion having a plurality of thicknesses of the strip material, with its edges bent toward each other and spaced from said body portion to form therewith a slot of T-section to receive th eturned-back edges of the plates to be joined, whereby to join the plates the locking strip may be driven without deformation over said plate edge portions in the direction of the joint, and the joint will be reinforced by said folds.

1,826,453. TURBINE. ROSCOE A. COFFMAN, Hollywood, Calif. Filed June 13, 1928. Serial No. 285,104. 4 Claims. (Cl. 253—71.)



1. In a device of the class described, a rotor embodying oppositely inclined inner and outer spiral passages communicating at one end of the rotor, one passage being open at the opposite end of the rotor, for the admission of pressure fluid, and the other passage being also open at said opposite end of the rotor, for the discharge of pressure fluid, the passages being formed by spiral partitions, spaced impact members arranged in groups, the groups being inclined circumferentially in the passages, the impact member extending longitudinally of the rotor and being connected at their ends to the partitions, to serve as reinforcements for the partitions, means for supporting the rotor for rotation, and means for discharging fluid under pressure into the inner spiral passage at that end of the rotor which is opposite to the end where the passages communicate.

1,826,454. COMPOSITION OF MATTER. GREGORY J. COMSTOCK, Pittsburgh, Pa., assignor to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1928. Serial No. 268,389. 5 Claims. (Cl. 75—1.)

3. A sintered aggregate comprising finely divided silicon carbide bonded in a matrix of nickel, the silicon carbide constituting from a major portion to abont 95% of the aggregate.

1,826,455. COMPOSITION OF MATTER. GREGORY J. COMSTOCK, Pittsburgh, and ELMER B. WELCH, McKeesport, Pa., assignors to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1928. Serial No. 268,391. 3 Claims. (Cl. 75—1.)

3. A sintered aggregate comprising finely divided tungsten carbide particles embedded in a matrix of high speed steel, the tungsten carbide constituting the major portion of the aggregate.

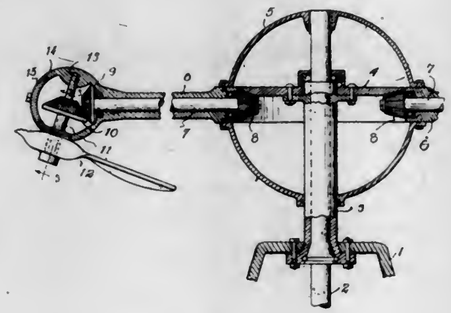
1,826,456. METAL AGGREGATES. GREGORY J. COMSTOCK, Pittsburgh, Pa., assignor to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Apr. 14, 1928. Serial No. 270,155. 5 Claims. (Cl. 75—1.)

3. A sintered aggregate comprising finely divided vitrified zirconium ixide bonded in a matrix of nickel, the zirconium oxide constituting from a major portion to about 95% of the aggregate.

1,826,457. COMPOSITION OF MATTER. GREGORY J. COMSTOCK, Pittsburgh, and ELMER B. WELCH, McKeesport, Pa., assignors to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Original application filed Apr. 9, 1928, Serial No. 268,391. Divided and this application filed Apr. 30, 1929. Serial No. 359,416. 3 Claims. (Cl. 75—1.)

1. A cutting composition comprising particles of finely divided vitrified ziroconium oxide bonded in a matrix of sintered particles of high speed steel, the ziroconium oxide constituting about 87% and the high speed steel about 13%, by weight of the tool.

1,826,458. PROPELLER MECHANISM. ERNEST COOPER, Shidler, Okla. Filed May 9, 1928. Serial No. 276,445. 1 Claim. (Cl. 170—159.)

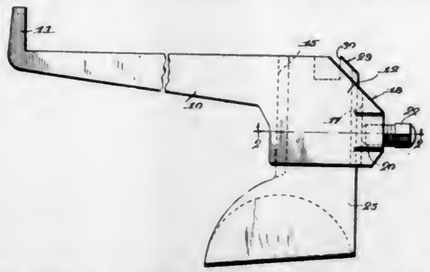


Propelling mechanism comprising a fixed sleeve, a drive shaft mounted in the sleeve and projecting beyond the ends thereof, a housing rotatable on the sleeve and connected with the shaft to rotate therewith, hollow arms projecting outwardly from the housing and revoluble therewith, a fixed gear wheel within the housing secured to the said sleeve, shafts mounted in the hollow arms and geared at their inner ends to the fixed gear wheel, a housing at the outer end of each of the hollow arms, oppositely inclined axles mounted in the housings, tubular shafts loose on the axles and geared at their inner ends to the shafts mounted in the said hollow arms, and propellers secured to the outer ends of the tubular shafts and disposed upon the same side of the arms.

1,826,459. TOOL HOLDER. KINCHEN CLYDE COUNCIL, Wananish, N. C. Filed May 2, 1929. Serial No. 359,982. 1 Claim. (Cl. 306—40.)

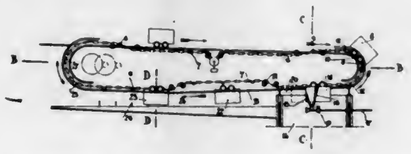
A tool holder comprising a shank portion, a head portion provided with a slot disposed at an angle to the handle, one end wall of the slot being beveled, a blade having a shank received by the slot, one edge of the shank being beveled and fitting the beveled wall of the slot, the shank of the blade being of less width than the slot, the opposite edge of said shank being beveled, a key fitted into the slot and having a beveled portion engaging the last mentioned edge of the blade shank, and means for rigidly clamping the key and blade shank against the walls of the slot, a portion of the head being

sheared off adjacent a corner of the slot whereby the shank of the blade will project beyond the head so that it will be possible to determine the proper setting



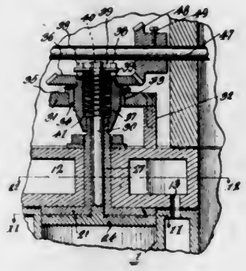
of the blade in the head, the free end of the shank being sheared off at the same angle as the head so that the sheared off portions will be substantially parallel.

1,826,460. CLEANING DEVICE FOR TRUCKS. JEAN COUTIN, Nogent-Sur-Marne, France, assignor to Preparation Industrielle des Combustibles (Societe Anonyme), Nogent-Sur-Marne, Seine, France. Filed Apr. 9, 1928, Serial No. 268,673, and in France Apr. 8, 1927. 4 Claims. (Cl. 141—1.)



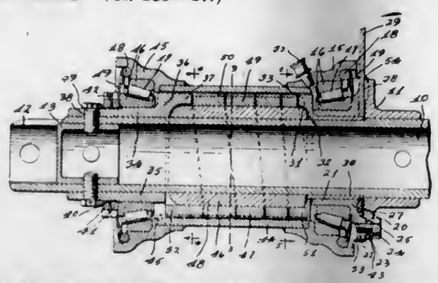
1. An automatic cleaning device for trucks comprising a track forming a loop in a vertical plane, an endless chain located in a vertical plane adjacent said track and provided with tappets adapted to engage the trucks, said track comprising an upper straight portion inclined slightly in the direction of travel of the trucks, a lower straight portion and curved connecting portions, and means for subjecting the interior of the trucks to the action of streams of water under pressure while the trucks are travelling in inverted positions over a portion of the lower part of said track.

1,826,461. ROTARY ENGINE VALVE. RICHARD S. DAVIS, Baltimore, Md. Filed May 21, 1928. Serial No. 279,469. 3 Claims. (Cl. 123—59.)



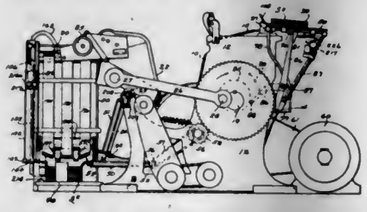
1. An engine comprising a cylinder head having intake and exhaust passages extending longitudinally thereof and provided with water spaces surrounding the passages, the head being provided in its sides with ports communicating with said water spaces, and in its bottom with ports communicating with said passages, valve seating against the bottom of the head, and means for rotating the valves.

1,826,462. BRAKE MECHANISM FOR VEHICLE WHEELS. HOWARD F. DIXON and PAUL WEILAND, Detroit, Mich. Filed May 8, 1929. Serial No. 361,480. 15 Claims. (Cl. 188—17.)



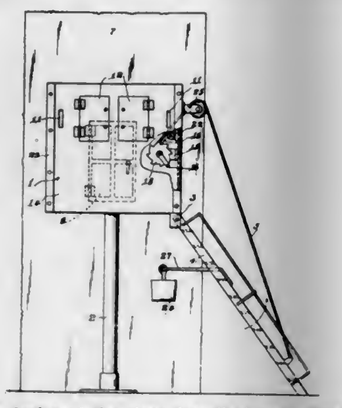
1. An apparatus of the class described, comprising a hub member, a freely rotatable sleeve within the hub member, an expansible member supported by said sleeve when in normal position, and means to force said expansible member against the hub member.

1,826,463. AUTOMATIC SHEET ASSOCIATING MECHANISM AND CONTROL. WILLIAM H. GIBSON, Cincinnati, Ohio, assignor to The Gibson Art Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 17, 1929. Serial No. 371,614. 22 Claims. (Cl. 101—419.)



1. In combination with a printing press, a sheet feeding mechanism adapted to feed sheets to the press, a sheet discharge mechanism associated with the press and a sheet associating mechanism adjacent the press and operating in timed relationship with the press and adapted to associate sheets alternately with the sheets discharged by the aforesaid discharge mechanism and in a path normal to the path of the sheet discharged by the first-named discharge mechanism.

1,826,464. SAFETY ELEVATED BANK AND VAULT PROTECTOR. WILLIAM GILLIS, Fort Worth, Tex. Filed June 5, 1929. Serial No. 368,703. 2 Claims. (Cl. 228—1.)



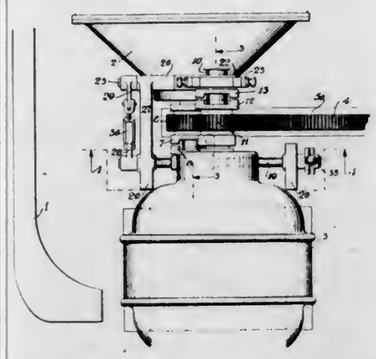
1. In a device of the class described in combination, an elevated cage supported on a pedestal, a stairway leading to said cage, said stairway pivoted where it joins the cage, an elongated arm fastened to said stairway, a counterbalance weight attached to said elongated arm, the vertical axis of said weight extending beyond the pivoting point of said stairway, a winch within the cage having a cable attached thereto, the opposite end of said cable attached to the lower end of the said stairway, said winch including a pawl and ratchet and means to disengage the pawl from the ratchet by moving said pawl sideways out of engagement with said ratchet.

1,826,465. REEL FOR PLUMB BOBS. JOHN A. GILMAN, Seattle, Wash. Filed Mar. 30, 1928. Serial No. 265,939. 5 Claims. (Cl. 242—99.)



1. A device for the purpose set forth comprising a frame having resilient sides, a pintle fitted in the sides of the frame at the centers thereof and constructed to maintain the spaced relation thereof, and a reel mounted upon said pintle and having one side normally frictionally engaged by the adjacent side of the frame and releasable therefrom by finger pressure.

1,826,466. SELECTIVE DRIVE FOR EXCAVATING MACHINES. WALTER HARNISCHFEGER, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 29, 1928. Serial No. 265,760. 1 Claim. (Cl. 74—7.)

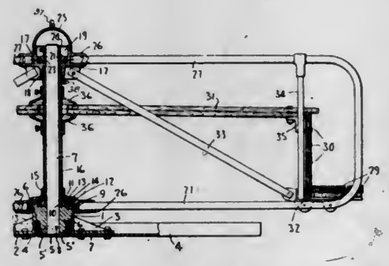


In an excavating machine of the type having a platform, an internal combustion engine mounted on the platform and having an engine shaft, and an electric motor mounted on the platform and having an armature shaft, means for selectively driving the instrumentalities of the excavating machine from the engine shaft or the armature shaft and comprising a pinion loosely mounted on the engine shaft, a clutch for connecting the pinion to the engine shaft, a pinion loosely mounted on the armature shaft, a clutch for connecting the pinion to the armature shaft, a gear wheel on the excavating machine with which the pinions constantly mesh, a single control member and means between the control member and the clutches for causing one clutch to be disengaged when the other is engaged whereby the gear wheel may driven selectively by said internal combustion engine or by said electric motor.

1,826,467. PROCESS FOR THE ACTIVATION OF PROTEASES. ARNNE HARTENECK, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 8, 1929, Serial No. 376,865, and in Germany July 14, 1928. 10 Claims. (Cl. 195—20.)

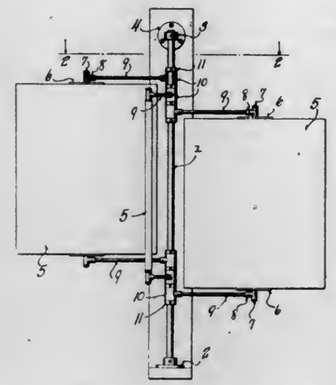
1. As new article of manufacture a vegetable protease activated by a water-soluble inorganic compound containing a thio-acid radicle.

1,826,468. PLAYGROUND APPARATUS. CHARLES E. HOPPES, Springfield, Ohio, assignor to The Everwear Manufacturing Company, Springfield, Ohio, a Corporation of Ohio. Filed Apr. 8, 1929. Serial No. 353,409. 1 Claim. (Cl. 272—33.)



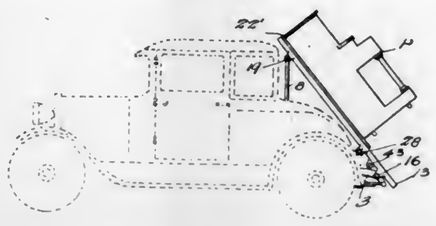
An upright support, upper and lower revoluble heads mounted upon said support, a plurality of U-shaped members each having their free ends connected with said heads, said U-shaped members projecting radially, and foot boards supported by the outer ends of said U-shaped members.

1,826,469. MULTIPLE BULLETIN BOARD. FRED E. HUNT and CHARLES LOUIS PETERS, Marinette, Wis. Filed Oct. 8, 1928, Serial No. 311,108. Renewed Feb. 26, 1931. 2 Claims. (Cl. 40—102.)



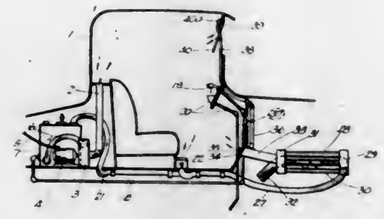
1. A multiple bulletin board comprising a vertical standard having a supporting flange at its bottom and having a laterally disposed flange at its top, whereby it may be attached to the floor, and a wall of a room, a plurality of bearing members journalled upon said standard, collars supporting said bearing members, a plurality of rods extending outwardly from said bearing members, and bulletin boards pivotally supported at the outer ends of said rods.

1,826,470. PIANO CARRIER. RUTHERFORD H. HUTCHINSON, Ogden, Utah. Filed Apr. 2, 1929. Serial No. 351,919. 2 Claims. (Cl. 224—29.)



1. The combination with a pivoted supporting frame having tubular slotted side bars of a carrier frame having rods slidable in said bars and supporting plates on said rods, of a rigid tie bar on the carrier frame, laterally adjustable bracket heads on said tie bar, and means for moving the carrier frame relatively to the supporting frame.

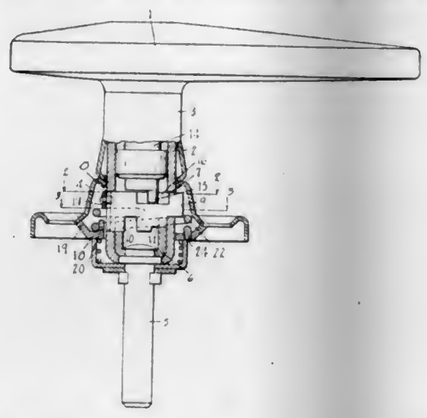
1,826,471. HEATING AND COOLING DEVICE FOR INCLOSED SPACES. LESTER A. JAMES, Oklahoma City, Okla. Filed May 14, 1928. Serial No. 277,552. 5 Claims. (Cl. 257—7.)



1. In an automobile including an inclosed car and an internal combustion engine having an exhaust manifold, the combination with air cooling means, fan means for exhausting a portion of the air from the body of the inclosed car, and forcing it through said cooling means, means for returning the cooled air to the inclosed part of said car, and means for shutting off said cooled air returning means into a by-pass for conveying the air to a heating means, said heating means, comprising a distributing heating chamber adjacent said exhaust manifold, and also comprising a plurality of hot air tubes for breaking up and better heating the air currents, and a chamber for collecting said heated air currents, conveyor means for conveying the heated air to a ventilator in the interior of the vehicle and damper means for controlling said ventilator.

1,826,472. LOCKING LATCH. GEORGE E. KEELER, Grand Rapids, Mich., assignor to Keeler Brass Company, Grand Rapids, Mich. Filed Oct. 29, 1928. Serial No. 315,736. 9 Claims. (Cl. 70—91.)

1. The combination with an escutcheon, of a handpiece provided with a sleeve having opposed openings therein, a spindle rotatably associated with the inner end of said sleeve, a bolt reciprocatingly mounted in said openings in said sleeve and adapted when in one position to connect said spindle to said sleeve, a stop plate arranged on the inner side of said escutcheon and engaged therewith whereby the stop plate is held against rotative movement, said stop plate being provided with a pair of spaced stops, and a coiled spring within said escutcheon to embrace said sleeve, one end of said spring being engaged with said stop plate and the other with said sleeve whereby the spring acts to yieldingly support said sleeve



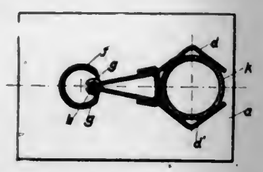
with said bolt against one of said stops, said stops coacting with the bolt to limit the rotative movement of the sleeve when the bolt is released from said spindle.

1,826,473. MECHANICAL PENCIL. CHARLES R. KEERAN, Evanston, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 4, 1928, Serial No. 303,647. Renewed Mar. 15, 1930. 11 Claims. (Cl. 120—18.)



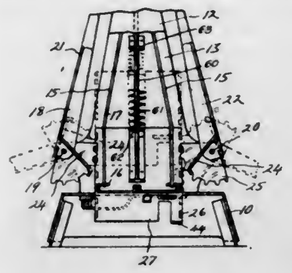
1. In a mechanical pencil, a threaded lead-propelling plunger, a barrel in which it is longitudinally movable, a hollow threaded member engaging the thread of the plunger, said hollow member being rotatable with respect to the barrel for moving the plunger, and means by which the plunger is yieldingly held against rotation in the barrel.

1,826,474. STAND OR SUPPORT. FRITZ KÖHLER, Leipzig, Germany. Filed May 31, 1929, Serial No. 367,535, and in Germany Apr. 11, 1929. 2 Claims. (Cl. 248—3.)



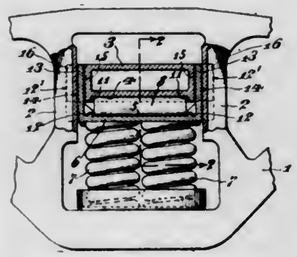
1. A support for testing glasses comprising a standard, coacting clamping members having oppositely curved ends to embrace and grip the standard, their ends being in spaced relation to each other, the said clamping members having at their opposite ends clamping jaws for partially embracing and clamping an article to be supported between them, and a curved spring embracing the standard and having its edges bearing against the aforesaid members between those portions engaging the standard and the portions holding the article, whereby the portions holding the article may be separated without disturbing the connection with the standard or the portions engaging the standard may be separated to adjust them on the standard without disturbing the portions holding the article.

1,826,475. ELECTRIC TOASTER. ROBERT KUHN, Detroit, Mich., assignor to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 22, 1928. Serial No. 314,238. 15 Claims. (Cl. 53—5.)



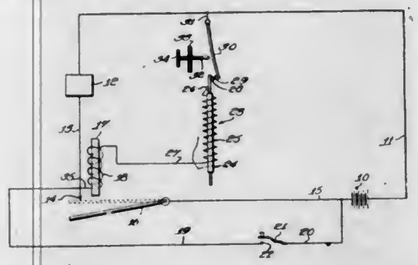
1. A toaster comprising a frame, a pair of toast holders hinged to said frame, gear segments secured to each toast holder, a slide on said frame engaging said gear segments and manually operable means for moving said slide thereby simultaneously adjusting said toast holders.

1,826,476. LATERAL MOTION DEVICE FOR RAILWAY CAR TRUCKS. MARK H. MARTIN, Reading, Pa., assignor to Birdsboro Steel Foundry & Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1928. Serial No. 325,495. 10 Claims. (Cl. 105—186.)



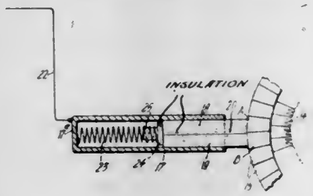
1. On a railway car truck, a roller seat member having rollers thereon, a bolster the outer end of which rests upon the said rollers and is held in spaced relation to the top side of the said member, and column guides integral with said member and embracing the opposite sides of the end portions of said bolster and constituting the sole chafing means therefor.

1,826,477. CIRCUIT CONTROLLING MEANS. ERNEST A. OLPP, New York, N. Y. Filed Apr. 4, 1929. Serial No. 352,510. 10 Claims. (Cl. 175—375.)



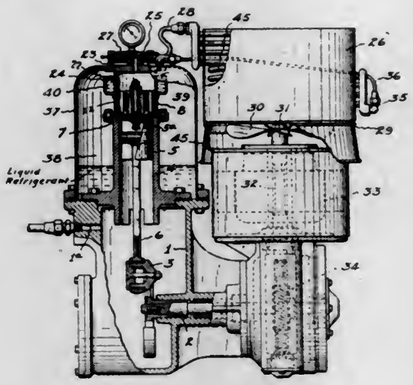
9. In an electrical control circuit, an electrically operated device and a source of current therefor, a main circuit including said source and said device, a manually controlled switch in said circuit, a shunt circuit including in part said main circuit and including a holding device for retaining said main circuit closed after actuation of said switch, said shunt circuit including a heating coil, a thermal element adapted to be heated by said coil and having one end anchored and the other end free to partake of movement under the influence of temperature changes, a switch element in said holding circuit biased toward the free end of said thermal element and normally contacting therewith, said switch element being movable with said thermal element as the temperature thereof increases, and an adjustably supported member arranged in the path of movement of said switch element to disconnect it from said thermal element.

1,826,478. BRUSH FOR ELECTRIC MOTORS. ALFRED E. OSWALD, Hackensack, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed June 27, 1924. Serial No. 722,647. Divided and this application filed May 27, 1929. Serial No. 366,194. 1 Claim. (Cl. 171—323.)



The combination with a commutator, of a spark-preventing brush made up of sections of carbon wholly separated from each other by an insulator and contacting simultaneously with successive segments of the commutator, a holder in the form of a shell housing said brush and fitting thereto and formed of conducting material and having an end, the brush mounted to slide in said holder and said sections being in electrical contact with the sides of said holder, and a line-wire, the housing constituting the conductor between the brush and the line-wire, a spring compressed within the housing and bearing against the housing, said brush being provided with an insulation against which said spring also bears, to prevent line current from flowing through the spring, and said insulation communicating the pressure of the spring to both brush-sections.

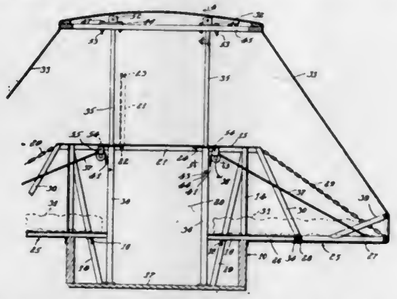
1,826,479. COMPRESSOR FOR REFRIGERATION APPARATUS. CEPHIS E. OWENS, Detroit, Mich. Filed Mar. 21, 1929. Serial No. 348,698. 4 Claims. (Cl. 230—206.)



1. In a refrigeration apparatus, a gas compressor having a gas and oil discharge opening, a cup-shaped valve for said opening, a stop member adapted to limit the opening

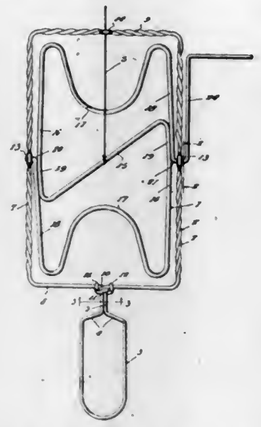
movement of said valve, and an enclosure surrounding said valve and providing a chamber for receiving gas and oil from said compressor, said closure being constructed to permit gas to discharge from said chamber and to deflect oil into said cup-shaped valve, whereby said valve may be cushioned against said stop member during opening movement.

1,826,480. CAMPING TRAILER. GEORGE F. RAPPICH, Marengo, Ill. Filed June 28, 1928. Serial No. 288,843. 1 Claim. (Cl. 296—23.)



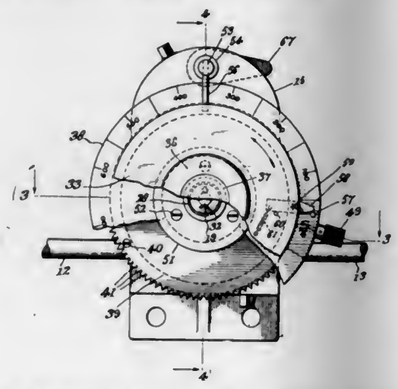
In a camping trailer, the combination of a body, hollow vertical posts on said body at opposite ends thereof, a raisable top for the body, top supporting rods telescoping in the posts, hinged sides for the body arranged to unfold outwardly to serve as mattress supports, there being suitable means for supporting the hinged sides from the body in unfolded position, pulleys adjacent the upper ends of the posts, flexible cables attached to the sides and extended over the pulleys and attached to the top supporting rods at the lower ends of the latter for raising the same in the posts in the unfolding of the sides whereby to automatically raise the top, means at the upper ends of the posts at a predetermined elevation for attaching the rods rigidly to the posts in raised position, the said rods being arranged to be raised to a predetermined elevation in the posts for the purposes of attachment thereto, and compressible spring means between the upper ends of the rods and the top permitting movement of the rods upwardly relative to the top for the attachment thereof, the said spring means being thereby compressed so as to place the canopy under a predetermined yielding tension.

1,826,481. KITE STRING REEL. HARRY ROOT, Buffalo, N. Y. Filed May 15, 1929. Serial No. 363,325. 8 Claims. (Cl. 242—96.)



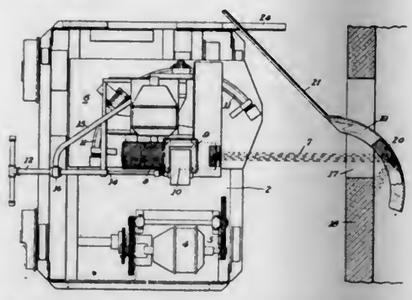
1. A reel comprising a frame, a handle for said frame, bearings at opposite sides of said frame and a spool in said frame consisting of a strand bent intermediate its length to form a diagonal cross bar for the spool and side bar sections extending in opposite directions from the ends thereof, the strand being then bent to form inwardly bowed end bars for the spool joined to the side bar sections and other side bar sections extending from the end bars and joined to the first side bar sections in overlapped relation thereto to form therewith side bars for the spool, the ends of the strand being bent to form pintles extending in opposed relation to each other from opposite sides of the spool through the bearings of said frame to rotatably mount the spool in the frame, and one pintle being extended and bent to form a turning handle.

1,826,482. POWER STOP MECHANISM. PHILIP C. RUMMEL, Jr., Glenside, Pa. Filed Apr. 24, 1929. Serial No. 357,780. 5 Claims. (Cl. 192—142.)



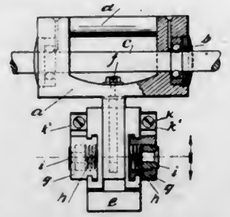
1. In an improved power stop mechanism for machines, the combination with a power control for the machine, a rock shaft, a cam on the rock shaft mounted relatively to the power control to stop the machine on movement of the cam in one direction, a trip finger on the rock shaft, a settable dial, and a settable control member concentric with the dial and driven by the machine, cooperating stop means between the dial and control member, and a trip carried by the dial for cooperating with the rock shaft trip.

1,826,483. APPARATUS FOR PROJECTING MATERIALS. BJARNE H. SCHIELDROP, London, England, assignor to Blaw Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Original application filed Sept. 29, 1927, Serial No. 222,740. Divided and this application filed May 21, 1928. Serial No. 279,305. 5 Claims. (Cl. 72—128.)



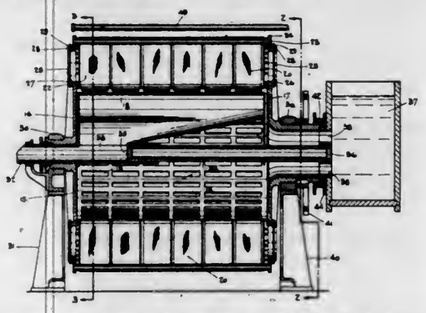
5. A deflecting tool comprising a longitudinally curved channel having a deflecting surface for deflecting material directed thereagainst, and a handle connected thereto and disposed entirely in a position offset with respect to such surface and such surface extended.

1,826,484. SHUTTLE PICKER. JOHANN BERTHOLD SCHULTZ, Glauchau, Germany. Filed May 20, 1929, Serial No. 364,474, and in Germany May 30, 1928. 3 Claims. (Cl. 139—160.)



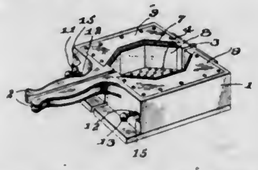
1. A shuttle picker comprising a head, a spindle journaled therein, a guide member arranged below and mounted on the head a carrier member mounted on the guide member, means for vertically adjusting said carrier member, a laterally adjustable yielding buffer mounted upon the carrier member at each side thereof, and means for laterally adjusting each buffer.

1,826,485. MEANS FOR SEPARATING PARTICLES FROM FREE WATER. CARL BUSCH THORNE, Hawkesbury, Ontario, Canada. Filed Oct. 11, 1928. Serial No. 311,838. 7 Claims. (Cl. 210—200.)



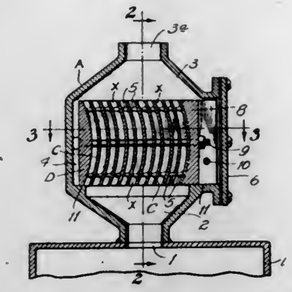
1. In means for separating particles from free water, a trough forming a sewer passage and a division in said trough separating a recovered water passage, shaft bearings supported on pedestals, a rotary screen having screen boxes communicating with a hollow centre having heads carried by hubs, journalled in said bearings, a head box adapted to contain the feed water and having a hollow shaft extending therefrom through a hub into said centre and plugged at both ends and forming a support, a hollow shaft through the other hub supported from the aforesaid hollow shaft and having an ingress opening within said centre and a fixed trough communicating with said ingress opening.

1,826,486. JAR HOLDER. ELSIE M. WALKER, Deep River, Iowa. Filed Aug. 5, 1929. Serial No. 383,533. 2 Claims. (Cl. 81—3.3.)



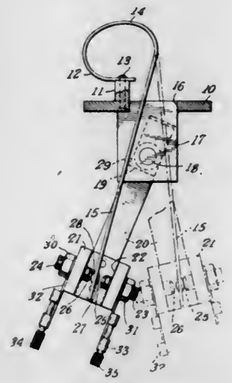
1. A jar holder comprising a pair of hinged body members adapted to be positioned about the body of a jar, jar gripping jaws slidably mounted in said members, slip preventing material on the faces of said jaws, angular cam adjusting blocks for adjusting the distance between said jaws without moving said body members, and drain means in the bottom of said members.

1,826,487. FLAME ARRESTER. JOHN H. WIGGINS, Tulsa, Okla. Filed Aug. 9, 1928. Serial No. 298,529. 4 Claims. (Cl. 220—88.)



1. A flame arrester, consisting of a housing having an inlet and an outlet, and a bundle of duplicate plates in said housing arranged edgewise in spaced relation and being curved so as to form parallel arc-shaped gas passageways for the gases traveling from the inlet to the outlet of the housing.

1,826,488. THERMOSTATIC SWITCH. GEORGE J. ZISCH, Newark, N. J. Filed Apr. 20, 1928. Serial No. 271,485. 8 Claims. (Cl. 200—138.)

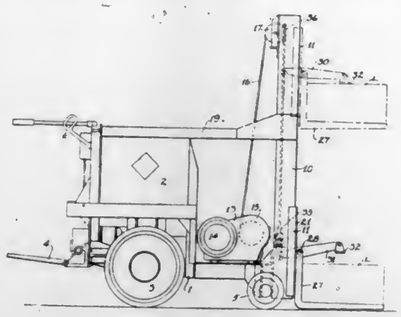


1. A thermostatic switch comprising a conductive base having an opening, a thermal element anchored to said base, its free portion extending freely through the mentioned opening, an arm pivoted on said base to extend in spaced relation parallel to said element, and a pair of insulated contacts rigid on the free end of said arm, either of said contacts engaging said element upon movement thereof to form electrical engagement whereby said arm may be swung upon its pivot.

1,826,489. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1927. Serial No. 175,394. 3 Claims. (Cl. 214—65.)

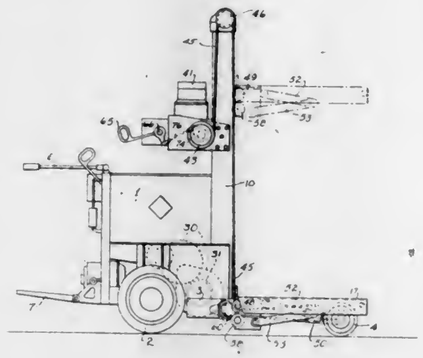
1. In combination with an industrial truck of the class described, an upright guide means disposed at the front end of the truck, a member movably supported on the guide means, a depending L-shaped load engaging member supported thereby, the foot of the L being adapted to pass beneath the load to lift it, means for preventing rearward movement of the lower end of said L-shaped member, a clamp arm positioned over the load engaging portion of the L-shaped member, said arm and L-shaped

member being coaxially pivoted to the first named member, the pivot axis being fixed with relation to said first named member, whereby the rear end of the arm may be raised



to first clamp a load in place on the foot of the L, and thereafter to raise the load, and means for so raising the rear end of the arm.

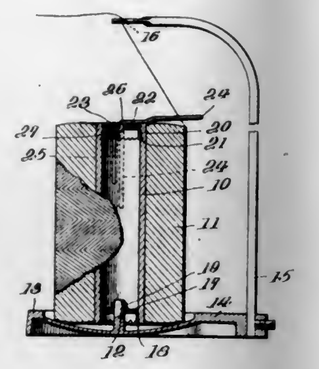
1,826,490. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 28, 1928. Serial No. 281,178. 3 Claims. (Cl. 214—121.)



1. In a load handling mechanism, the combination of an elevator and a tiltable load carrier thereon, a cable having a running connection with the elevator and load carrier so arranged that raising movement of the carrier does not affect the cable to move any part thereof lengthwise, said running connection comprising horizontally spaced guides for the cable respectively carried by the elevator and load carrier, whereby a predetermined pull on the cable causes the carrier to tilt irrespective of its raised or lowered position, a power hoist arranged to pull on the cable, manually controlled means to initiate the operation of the hoist, and means governed by a predetermined period of operation of the power hoist to automatically stop the hoist.

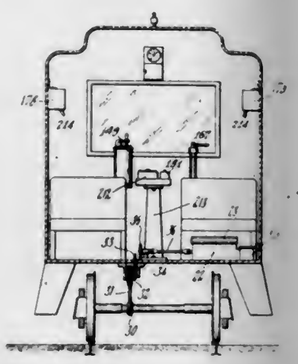
1,826,491. THREAD PACKAGE. EDWARD THOMAS ALLAN, Cincinnati, Ohio, assignor to The Union Thread Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 21, 1929. Serial No. 334,048. 7 Claims. (Cl. 242—159.)

1. In a thread package, a core to receive the thread on its outer surface and open at both ends, upper and lower reinforcing members inserted in the ends of said core and secured inside the same, said lower reinforcing member being adapted to fit over the stand pin of a thread stand whereby thread may be drawn therefrom to feed a thread consuming mechanism, said upper member being substan-



tially closed so that it cannot be fitted over the stand pin and being located adjacent the upper end of said core so that it is encountered by the stand pin and thus prevents the placing of the thread package on said stand in an upside down position.

1,826,492. AUTOMATIC CONTROL FOR SELF PROPELLED VEHICLES. ROGER W. BABSON, Wellesley, Mass. Filed Nov. 14, 1928. Serial No. 319,296. 48 Claims. (Cl. 246—182.)

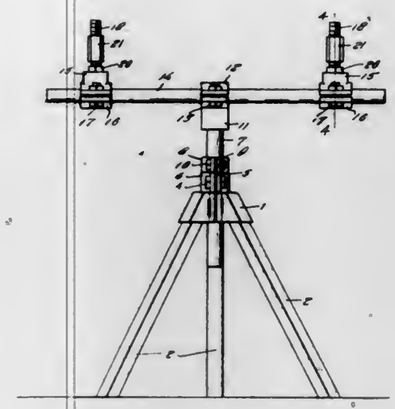


1. The combination with an electric railway car having a plurality of manually governed motor controlling circuits, of a plurality of printing devices in separate connection with the several motor controlling circuits, and means for supporting and propelling a record strip in position to receive the impression of said printing devices.

1,826,493. ENGINE HEAD STAND. S. LEONARD BAHRMAN, Cadillac, Mich. Filed July 23, 1930. Serial No. 470,129. 4 Claims. (Cl. 29—89.)

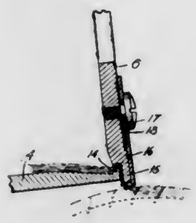
1. An engine head stand of the character described comprising a base, a post mounted for vertical adjustment on the base, a clamping head on the upper end of the post, a horizontally disposed bar adjustably mounted transversely

on the clamping head, a pair of clamps mounted for longitudinal adjustment on the bar, a threaded bolt rotatably mounted in each clamp and projecting therefrom and



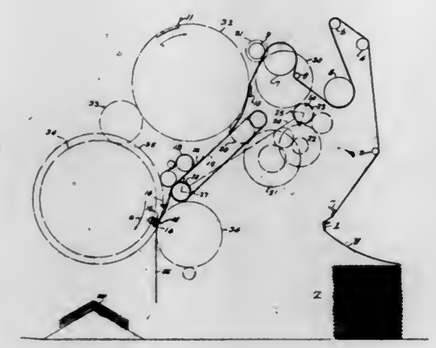
adapted for threaded engagement with an engine head, means for securing the bolts against rotation, and means on the bolts for manually rotating the same.

1,826,494. COTTON COMBER. DYSON BARKER, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Aug. 24, 1929. Serial No. 388,076. 16 Claims. (Cl. 19—121.)



12. A comber for cotton having a comb cylinder rotating on a fixed axis and bearing a needle half lap, a swinging nipper frame including a cushion plate and coacting nipper knife, a deflector lip movably associated with said knife, means carried by the nipper frame for establishing a constant working position for said lip in relation to the needle path and means for adjusting said nipper frame to adjust thereby the relation of said working position to the needle path.

1,826,495. FEEDING MECHANISM FOR CUTTING AND FOLDING MACHINES. CHARLES J. BECK, Philadelphia, Pa. Original application filed July 27, 1925, Serial No. 46,342. Divided and this application filed Apr. 27, 1929. Serial No. 358,526. 7 Claims. (Cl. 271—23.)



1. In a cutting and folding machine, a feeding unit comprising a tension roll having a roughened surface whereby the material passing through said feeding unit may be maintained at a uniform tension throughout its entire width.

1,826,496. PLASTER CUTTER. DAVID H. BEELMAN, Mount Vernon, N. Y. Filed Dec. 10, 1930. Serial No. 501,355. 6 Claims. (Cl. 72—138.)

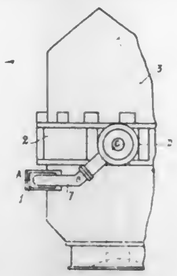


1. A cutting implement comprising a handle, a cutting tool extending from one end of said handle and projecting at an angle thereto, the end of the tool being in the form of a V-shaped point for enlarging a crack in a plastered wall and beveling the edges of the crack, and a spring tension device associated with the tool for limiting the depth of the cut.

1,826,497. PROCESS FOR DEPHOSPHORIZING IRON IN THE CONVERTER AND MEANS FOR CARRYING OUT SAID PROCESS. FRANCOIS BICHEROUX, Liege, Belgium. Filed Apr. 4, 1929, Serial No. 352,557, and in Belgium Apr. 26, 1928. 1 Claim. (Cl. 75—44.)

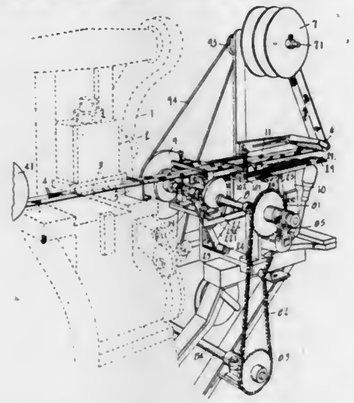
A process for dephosphorizing iron in the converter by the use of pulverized lime blown in during the decarburiz-

ing stage, characterized by the fact that an initial slag is formed by the residual slag of the preceding operation and intentionally retained in the converter, and that, after the



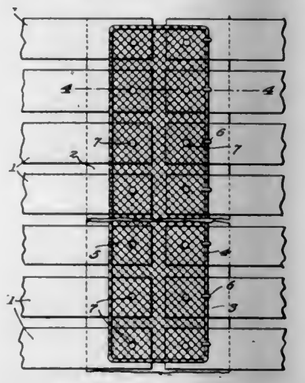
fixation of silica by said initial slag, the pulverized lime is injected continuously up to the first signs of the end of the decarburizing stage.

1,826,498. LABEL STRIP FEEDING MEANS FOR PRINTING PRESSES. GEORGE L. BIGNELL, Grand Rapids, Mich., assignor to The Rose Patch and Label Co., Grand Rapids, Mich. Filed Dec. 13, 1929. Serial No. 413,743. 8 Claims. (Cl. 271—2.5.)



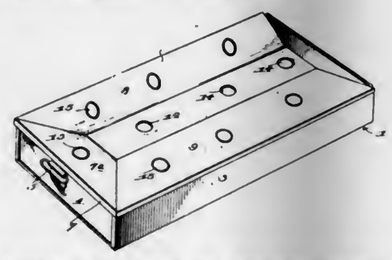
1. In a printing and feeder means for label strips, the combination of plural supply reels for label strips with guide adapted to deliver to a power printing press, a frame for the feeding means with a driving shaft, cam shaft and gear, a plurality of rewind rolls for the printed strips, a transverse guide roll adapted to receive the plural strips from the press and deliver to the rewind rolls, a driven shaft therefor on which the rewind rolls are frictionally mounted to slip under tension, a pair of feed jaws with transverse extensions across said label strips to engage and feed the same step by step, a reciprocating feed carriage for said jaws, a cam means for actuating said feed carriage comprising a cam on the cam shaft, a follower with bifurcated arms to embrace the said cam, a rocker arm connected to said cam follower, a lever arm pivoted to the frame with pitman for actuating said feed carriage, an adjustable pitman between the rocker arm and the said actuating lever for reciprocating said carriage, a jaw actuating cam with flat ends disposed between the said feed jaws to open the same, a trip lever for said cam to open the said jaws and to trip to close the same, a slide with stops disposed to act upon said lever at the end of the stroke of said feed carriage one stop timed to open said feed jaws at the end of the said stroke and one adjustably timed to trip to close the jaws at the beginning of the stroke, a pair of holding jaws fixed on the said frame with transverse extensions across the said label strips in advance of the feed jaws, a cam with trip lever between said jaws for actuating the same, the said cam having flattened ends to lock the jaws in open position, a slide with stops to actuate said cam lever, one stop timed to open the jaws during the feeding movement and a second timed to close the same at the end of the movement, and a cam for actuating said slide to open the said jaws for the feeding operation and close the same during the return, whereby the label strips are held under tension by the holding jaws during the return of the feed jaws and are delivered under tension atep by step between said jaws through the press and wound up automatically thereafter.

1,826,499. LATHING UNIT. WAYNE W. BLACKBURN, Leesburg, Fla. Filed May 19, 1930. Serial No. 453,751. 1 Claim. (72—116.)



A lathing unit comprising an elongated frame having one side hinged to the laths of a wall construction and at one side of the opposing ends of the laths that said frame may be swung to overlie said ends of the laths, foraminous material closing the frame, and headed fasteners extending through the material and driven into certain of the laths to retain the frame in said last named position.

1,826,500. FLOWER TRAY. BENJAMIN F. BLAKE, deceased, Marion, Ohio, by Ethel E. Blake, administratrix, Marion, Ohio. Filed Nov. 18, 1930. Serial No. 496,548. 6 Claims. (Cl. 47—41.)

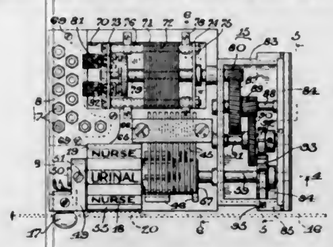


1. A tray for supporting and keeping cut flowers fresh which comprises a water containing body member having a lid mounted thereon and provided with downwardly sloping portions equipped with apertures for the passage of the flower stems.

1,826,501. SIGNALING SYSTEM. BORNETT L. BOBROFF, Milwaukee, Wis. Filed July 11, 1927. Serial No. 204,892. 11 Claims. (Cl. 177—337.)

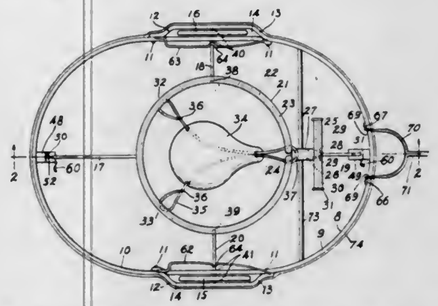
3. In a signalling system, the combination of a signal rotor formed of molded insulating material, and contact ribs embedded longitudinally in said rotor and having axially spaced contact portions.

10. In a signaling system, a signaling device comprising a base member having a channel therein, a rotary signaling member mounted on said base member, an electric driving motor having an operative connection with said rotary member and fitting in said channel against angular



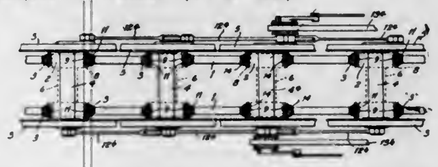
displacement for positioning said motor in predetermined position, and means for fixedly securing said motor in said channel.

1,826,502. BABY WALKER. SILAS B. BROWN, Cincinnati, Ohio, assignor to The Edwards Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 21, 1925. Serial No. 45,117. 13 Claims. (Cl. 155—22.)



13. In a baby walker the combination of an upper frame and a lower frame having central openings wherein a user may stand and walk, wheels at opposite sides of the lower frame and rotatable in parallelism with the longitudinal axis of the frame only, caster means carried by the lower frame for providing supplemental tractional support for the baby walker, and a seat flexibly supported by one of the frames whereby the seat may be shifted laterally of the frames without laterally displacing the wheels.

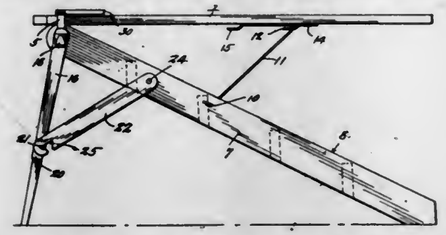
1,826,503. METHOD OF LOCATING LOCOMOTIVE AXLES. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 24, 1930. Serial No. 490,936. 5 Claims. (Cl. 29—84.)



1. The method of locating axles in a frame wherein the axles are provided with wheels which are connected with side rods, which consists in setting the side rods on one side of said frame in a dead center position, squaring one of the axles with the frame, permanently fixing both ends of said axle in said frame, then permanently fixing the ends of the remaining axles at the side of said frame on which the side rods are in the dead center position, and then setting the side rods on the other side of said frame on dead center and permanently fixing the remaining ends of said axles.

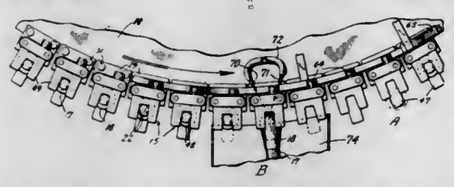
CARNEGIE LIBRARY OF ATLANTA

1,826,504. COMBINATION LADDER AND IRONING BOARD. WILLIAM CAMPBELL, Tulsa, Okla. Filed Nov. 28, 1930. Serial No. 498,887. 2 Claims. (Cl. 68—10.)



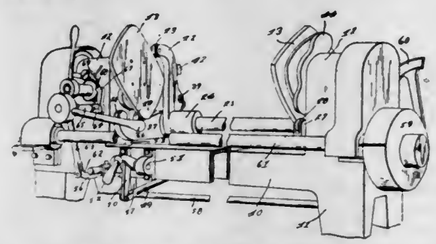
1. In a device of the class described, a body, main and auxiliary legs having a common pivotal connection with the body, a brace forming a detachable connection between the body and the main leg, and a second brace forming a connection between the main and auxiliary legs, and located on one side of the body, when the body is in a substantially horizontal position, the auxiliary leg being movable to an outstanding position on the opposite side of the body, when the body is in a substantially vertical position, the second brace being detachable from the auxiliary leg, when the body is in a horizontal position, and being movable to engage the auxiliary leg again, when the body is in a vertical position.

1,826,505. SELF ADJUSTING BASE AND BULB HOLDER. ROBERT W. CONN, Cranston, R. I., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 15, 1929. Serial No. 371,230. 15 Claims. (Cl. 18—1.)



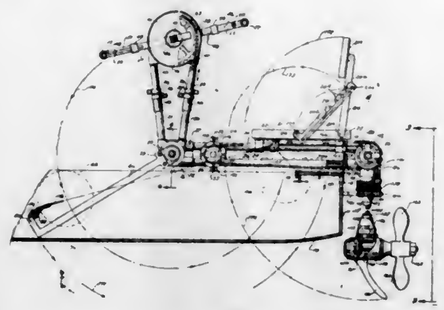
1. A device for holding a plurality of work parts in alignment comprising contact surfaces for engaging one part with its longitudinal axis in a given position, means for temporarily supporting another work part with its longitudinal axis in a given position, and means for aligning said second work part with its longitudinal axis coincident with the axis of said first part.

1,826,506. SEAM ROLLING MACHINE. WILLIAM A. COTES, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Aug. 8, 1927. Serial No. 211,567. 17 Claims. (Cl. 113—20.)



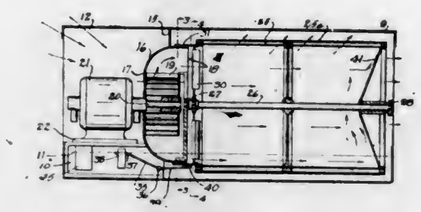
1. In a machine of the class described, means for rotating a work piece, a seam rolling member, a pressure control means therefor, means for moving the seam rolling member in conformity with the contour of the seam, and means actuated by the said movement of said seam rolling member for actuating said pressure control means.

1,826,507. PROPELLING MEANS FOR BOATS AND THE LIKE. ROY T. CROSBY, Greenville, S. C. Filed May 27, 1931. Serial No. 540,323. 8 Claims. (Cl. 115—24.)



1. A portable propelling device for small water craft comprising a bracket and means for removably securing the same to the stern of the craft, a longitudinally disposed portion, a vertically disposed portion pivotally secured to the front end of the longitudinal portion, a second vertically disposed portion pivotally secured to the rear end of the longitudinal portion, a propeller on the lower portion of the last vertical portion, driving means on the upper end of the first vertical portion, driving connections between the driving means and the propeller extending within the longitudinal and two vertical portions and connections between all of said portions permitting folding of the vertical portions into parallel relation with the longitudinal portion.

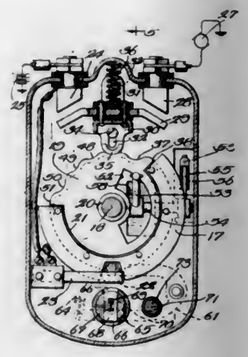
1,826,508. APPARATUS FOR HUMIDIFYING AIR. ALONZO G. DECKER, Towson, Md., assignor to The Black and Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed May 13, 1930. Serial No. 452,060. 4 Claims. (Cl. 261—80.)



1. A device of the character described, comprising in combination, a reservoir having water therein, a motor driven fan arranged to cause a moving current of air to flow across the water in the reservoir, means disposed in the path of the current of air and adapted to be moved through the water when the fan is in operation, and mechanism for automatically maintaining a uniform degree of movement of said means notwithstanding variations of the level of the water in the reservoir.

1,826,509. ELECTRIC SWITCH. HARRY A. DOUGLAS, Bronson, Mich. Filed June 14, 1929. Serial No. 370,868. 12 Claims. (Cl. 200—44.)

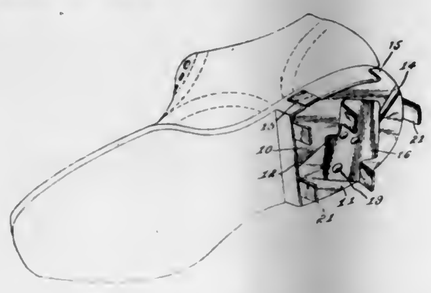
1. An electric switch including a contact actuating member adjustable to alternative positions, to effect alternative circuit adjustments; a lock; an adjustable holding member engageable with the contact actuating member to hold the latter member in one position to which it may be placed; a spring operating upon said holding member to engage it with the contact actuating member, said lock being operable upon said holding member in a releasing direction and against the force of said spring; a plunger having a recess into which said adjustable holding member may enter when this member is in holding engagement with the contact actuating member and having a portion engageable with said holding member to hold this member out of effective engagement with the contact actuating member; and a spring pressing upon the plunger in a direction to place the aforesaid plunger portion into position to engage the aforesaid holding member when this member is released from holding engagement.



1,826,510. REFRACTORY INSULATOR FOR ELECTRON DISCHARGE DEVICES. FRANK H. DRIGGS, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 15, 1928. Serial No. 306,291. 2 Claims. (Cl. 250—27.5.)

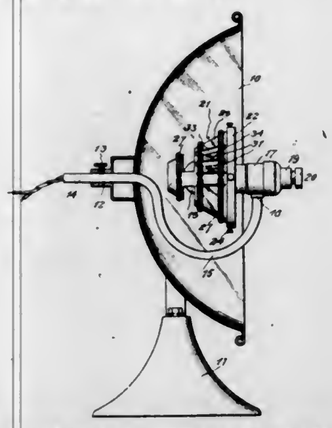
1. An electron-emitting cathode composed of a hollow metal body having a thermionically active surface, a heating element contained therein and an insulator disposed between said heating element and said hollow metal body, said insulator being comprised of substantially pure thorium oxide and approximately 5% magnesium silicate.

1,826,511. ICE CREEPER. JOSEPH DUMAS, Bristol, Conn. Filed Oct. 23, 1929. Serial No. 401,799. 2 Claims. (Cl. 36—64.)



1. An ice creeper comprising a body composed of multiple sections, said sections being separated by series of oblique and horizontally disposed cutting lines, heel engaging portions carried upon the outer portion of each of the sections, and an elongated adjusting plate having pivot pins arranged at spaced intervals in the path of a line drawn diagonally between corners thereof and pivotally connected with portions of the sections immediately adjacent the intersections of the shoulders and obliquely inclined innerside edges.

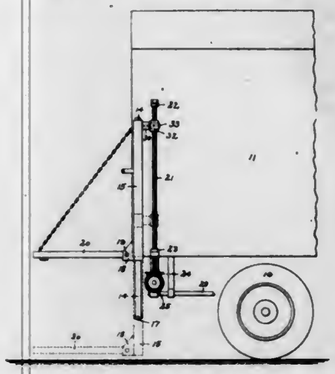
1,826,512. ILLUMINATED SIGN. ARTHUR H. ELLIS, Rochester, Minn. Filed May 28, 1930. Serial No. 456,658. 10 Claims. (Cl. 40—131.)



1. An illuminated sign comprising a concave reflector having a central guide, an elongated socket support passing through said guide for forward and rearward adjustment, a bulb socket carried by the front end of said socket support, a bulb in said socket, and a shell supported around said bulb, said shell having light-pervious portions for casting illuminated reflections upon said reflector.

10. In a sign, a character-bearing member having a thin lateral flange, the ends of said flange projecting beyond the ends of said member for reception between the convolutions of a spring.

1,826,513. MECHANICAL HOIST END GATE. EDDIE LEWIS FOSDICK, Pontiac, Ill. Filed June 11, 1930. Serial No. 460,499. 2 Claims. (Cl. 214—75.)



1. An endgate hoist comprising spaced bars having longitudinally disposed ribs attached to a support, longitudinally slotted sleeves slidably mounted upon the bars, the slots of the sleeves receiving the ribs of the bars, an endgate pivotally connected with the sleeves, rotary lifting shafts, traveler means carried by the shafts and connected with the sleeves and means for simultaneously actuating the shafts.

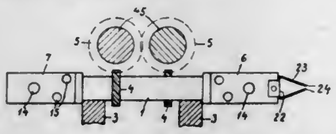
1,826,514. TUNGSTEN AND METHOD OF MANUFACTURING THE SAME. WILLIAM BENJAMIN GERO and EDMUND SHARINGTON DAVENPORT, Bloomfield, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 26, 1926. Serial No. 150,763. 5 Claims. (Cl. 176—132.)

1. The method of treating drawn thoriated tungsten filament so that the same is inherently capable of exaggerated grain growth, when incandesced to elevated temperatures, which comprises annealing the filament to a white heat



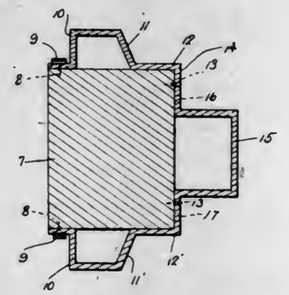
under slight tension at a definite size larger than the final size and then mechanically working the filament to the final size.

1,825,515. WIRE FENCE MAKING MACHINE. MIKLÓS HAIDEKKER, Budapest, Hungary. Filed Sept. 26, 1929, Serial No. 395,408, and in Hungary Oct. 1, 1928. 11 Claims. (Cl. 140—5.)



1. In a machine of the character described, rotatable twisters receiving the warp wires, means for guiding the warp wires arranged on the twisters, twist limiting members secured to said twisters within the shed formed by said wires adapted to clear the space necessary for the trays to be inserted into said shed, said twist limiting members having twist limiting edges.

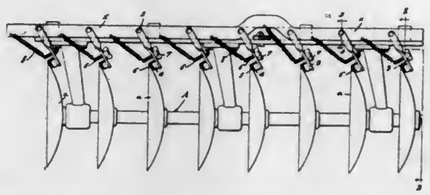
1,826,516. REVERSIBLE DOORFRAME. THOMAS P. MCHUGH and WILLIAM T. MCHUGH, Pittsburgh, Pa. Filed July 31, 1929. Serial No. 382,474. 1 Claim. (Cl. 189—46.)



In a door frame, a jamb member comprising a wooden filler block of square cross section and a sheet metal facing plate covering three sides of the block with its terminal ends secured to the block, the outer covering portions of the plate having outwardly disposed channel portions forming wall abutments on opposite sides of the filler block and the central covering portion or jamb face of the plate having an outwardly disposed door stop of

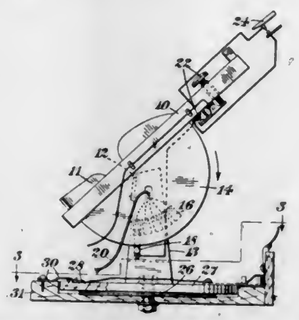
channel sections arranged closer to one side edge of the jamb face than the other to accommodate doors of different widths, said jamb face portion of said plate being slotted on opposite sides of the door stop to accommodate a keeper plate and door hinge respectively to permit direct attachment of the same to the wooden filler block.

1,826,517. AUTOMATIC DISK SHARPENER. JOHN KLOCKNER, Elkhorn, and ELZA E. THOMAS, Omaha, Nebr., assignors to Klockner-Thomas Manufacturing Company, a Corporation of Nebraska. Filed July 26, 1930. Serial No. 470,960. 1 Claim. (Cl. 51—255.)



The combination of a bar having clips for adjustable and detachable engagement with a gang frame of grouped disks, arms pivoted on the bar and depending between the disks and each having an angular extension, a sharpening stone detachably carried at the free end of the extension and operative against the disk adjacent thereto, a coiled tensioning spring attached to the bar spaced from the arm and adjustably connected with the extension, and winged bolts forming the adjustable connection of the springs with the extension.

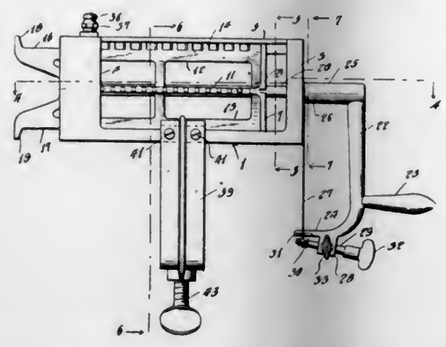
1,826,518. ORGAN. WILLIAM AUSTIN PAUL STEFF LANGSTON, Woburn, England. Filed Feb. 14, 1929, Serial No. 339,800, and in Great Britain Mar. 19, 1928. 13 Claims. (Cl. 84—340.)



12. In an organ, a table turnable about a vertical axis, a pedal mounted on said table turnable about a horizontal axis, spaced contacts associated with the table and with the pedal, so that movement thereof about their respective axes brings different contacts into control relationship, organ swells controlled by the contacts associated with the pedal, and organ stops controlled by the contacts associated with the table.

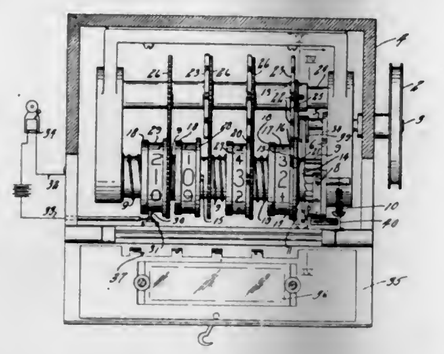
1,826,519. INDIVIDUAL BUTTER CUTTING MACHINE. SAMUEL DICKSON LOWRY, Elizabeth, N. J.; Lorene Lowry administratrix of said Samuel Lowry, deceased. Filed Jan. 31, 1929. Serial No. 336,516. 1 Claim. (Cl. 31—24.)

A butter cutter, comprising an open-ended frame adapted to receive a block of butter and the like a plunger slidably mounted in the frame, a reinforcement for said plunger comprising a cross-shaped web formed integral with said plunger and extending rearwardly thereof, spaced teeth provided on the side edges of said web adapted to engage the sides of the frame and guide the plunger, means en-



gaging said teeth to actuate the plunger, and lugs on said cross-shaped web to engage the frame and limit the forward movement of the plunger.

1,826,520. TALLY DEVICE. EDWARD M. MCGOWAN, Toledo, Ohio. Filed May 22, 1925. Serial No. 32,012. 7 Claims. (Cl. 235—117.)



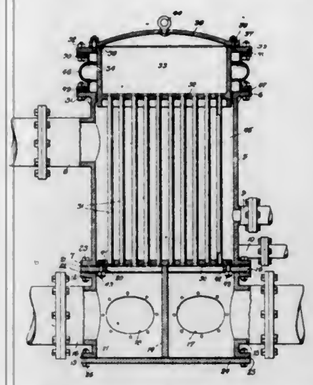
1. A tally device comprising a housing having a movable section, a shaft adjacent to said section, a gear disk on said shaft, a notation carrier also mounted on said shaft, clutch means between the disk and the carrier, and spring means normally holding said disk and said carrier in clutched engagement; said movable housing-section having means fixed thereto and movable therewith to prevent unclutching of the carrier from the disk.

6. In a counter, a counter wheel; and first and second members coaxial therewith at opposite sides thereof, the first member driving the wheel, gearing from the wheel for driving the second member; said wheel being normally spaced from the second member and axially movable into and out of driving engagement from the first member, and as movable out of driving engagement from the first member disconnecting said gearing to the second member.

1,826,521. SURFACE CONDENSER. ALBIN J. NOTT, Richmond, N. Y. Filed Apr. 3, 1930. Serial No. 441,394. 2 Claims. (Cl. 257—222.)

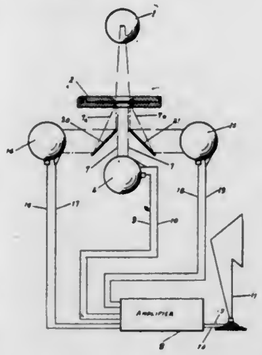
1. In a surface condenser, a tubular shell body having flanges at its opposite ends, a fixed section having a closed outer end and a flanged inner end secured to one end of the shell body, an annulus secured between the flanged connected ends of the shell body and fixed section

and extending radially inward to constitute an annular seat; and a removable unit including a fixed tube sheet disposed within and detachably connected with the annular seat to define within the fixed section a fixed circulating water box, a movable circulating water box



disposed within the opposite open end of the shell body for relative axial movement and having an inner wall constituting a tube sheet and circulating water tubes permanently sealed at their opposite ends in the tube sheets.

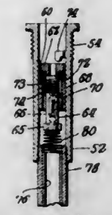
1,826,522. APPARATUS AND METHOD FOR REPRODUCING PHOTOGRAPHIC SOUND RECORDS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 20, 1929. Serial No. 348,639. 3 Claims. (Cl. 179—100.8)



1. Apparatus of the character described comprising, in combination, a film having a photographic sound record thereon, means for projecting light rays through said record, a plurality of means for translating the record-modulated light rays into electric impulses, one of said means being disposed directly in the path of said rays and the others at an angle to said path, means for diverting some of the rays of light toward said angularly disposed translating means, and means for amplifying and rendering audible all of the impulses.

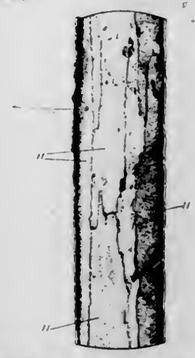
1,826,523. AUTOMATIC TIRE PRESSURE MAINTAINER. JOHN W. POORMAN, Blanchester, Ohio. Filed Mar. 8, 1929. Serial No. 345,344. 1 Claim. (Cl. 152—11.)

An automatic tire pressure maintainer comprising a casing one end of which is mounted in and in communication with a tire and the other end connected to an electrically actuated air supply means, a stationary contact carried by the interior of the casing and electrically connected to said supply means, an insulating sleeve mounted in the casing, a cushion member of insulating material in the casing and engaging one end of the sleeve, a tubular member slidable in said sleeve and cushion member and having a head to abut the cushion member when in one position, said tubular member constituting a piston subject to air pressure in the



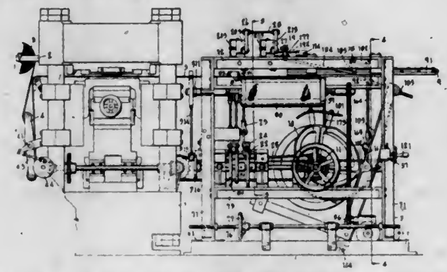
tire and forming a movable contact and electrically connected to said supply means, a valve in said tubular member to admit air under pressure to the tire and adapted to prevent escape of air from the tire, and tension means for urging the tubular member into engagement with the stationary contact when the air pressure in the tire acting against the head of the tubular member falls below a predetermined pressure.

1,826,524. TREATMENT OF METALLIC FILAMENTS. JOHN H. RAMAGE, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 10, 1927. Serial No. 232,300. 2 Claims. (Cl. 176—132.)



1. The method of treating tungsten wire to promote the development of large crystals comprising initially subjecting the drawn wire to a temperature about 800° C. and increasing the temperature at a slow rate up to a point above the normal operating temperature.

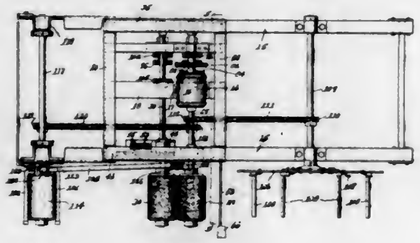
1,826,525. PRINTING MACHINE. ARTHUR ROSENTHAL, Grand Rapids, Mich. Filed Aug. 1, 1930. Serial No. 472,382. 13 Claims. (Cl. 101—292.)



4. In a machine of the class described, the combination of an intaglio press with feed rolls for a plurality of

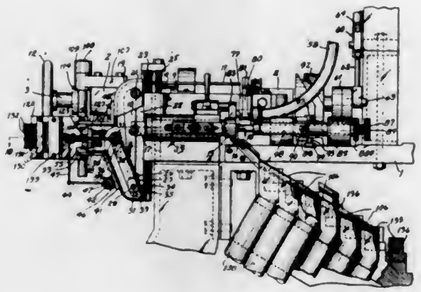
webs, a pair of holding jaws held yieldingly together by suitable springs and supported on suitable guide bars at each end, yielding spring pins carried by the lower jaw disposed to contact with the upper jaw, a cam means for actuating the guide bars to close the upper jaw onto the lower jaw and grasp the paper web at the correct elevation for cutting, said cam means being timed to raise the holding jaws above the cutting shears for the engagement of the projecting end of the web by feed jaws, a feed carriage having a pair of feed jaws to engage the projecting ends of the webs and having means to actuate the same.

1,826,526. STRIPPING MACHINE. IRVING W. ROSS and JOSEPH S. KROB, Chicago, Ill., assignors of one-half to Irving W. Ross and one-half to Joseph S. Krob, Chicago, Ill. Filed Oct. 14, 1929. Serial No. 399,434. 8 Claims. (Cl. 17—43.)



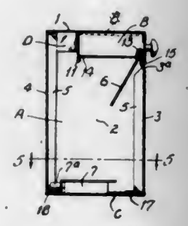
1. In a machine of the character described, cooperating pairs of primary and secondary corrugated feeding rollers, a pair of stripping rollers interposed between said pairs of feeding rollers, said stripping rollers having circumferential pointed teeth, a pair of final feeding rollers in cooperative relation to the secondary feeding rollers, and a pair of rotary cutting elements interposed between said secondary and final feeding rollers, said cutting elements having longitudinally extending circumferential cutting blades acting in meeting relation with shearing effect.

1,826,527. GAUGING MACHINE. OSWALD SCHLAUPITZ, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio., a Corporation of Ohio. Filed Aug. 27, 1928. Serial No. 302,278. 10 Claims. (Cl. 209—88.)



1. A machine for gauging the diameter of tapered rolls comprising a hollow reciprocatable member having a tapered seat adapted to receive a roll, a ram having a predetermined stroke for engaging said roll and moving said work receiving member, gauging levers actuated by the movement of said work receiving member, and a knock-out pin connected to said ram and extending into said work receiving member to eject a roll therefrom on the return stroke of said ram.

1,826,528. TOY BANK. WILLIAM C. SCHNIER, St. Louis, Mo., assignor of one-half to John S. Lemley, St. Louis, Mo. Filed Feb. 10, 1930. Serial No. 427,229. 6 Claims. (Cl. 232—4.)



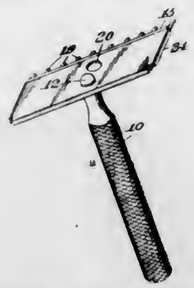
1. A toy bank, comprising a housing provided with a closure equipped with a lock, a sliding drawer in said housing that is adapted to have money deposited in same when said drawer is in its open position, means for causing the money to be discharged from said drawer when the drawer is moved into its closed position, means for limiting the outward movement of the drawer, and an anti-tilting device carried by the rear member of the drawer that is adapted to co-act with the top of the housing to prevent the drawer from being completely withdrawn from the housing.

1,826,529. METHOD OF FORMING CONCRETE STRUCTURAL UNITS. AUGUST E. SCHUTTE, Northboro, Mass., assignor to Warren Brothers Company, a Corporation of West Virginia. Filed May 16, 1929. Serial No. 363,506. 3 Claims. (Cl. 25—155.)



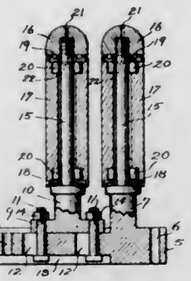
1. The method of forming structural units which comprises, preparing an ordinary cement concrete containing aggregate, hydraulic cement and water; heating said concrete before it sets; heating asphalt; mixing the heated asphalt with the heated concrete and agitating the mixture until the asphalt is thoroughly dispersed in the form of fine masses; allowing the resulting mixture to set in the form of a structural unit; and finally heating said unit to cause the dispersed masses of asphalt to diffuse and coalesce.

1,826,530. RAZOR. SAMUEL SEGAL, New York, N. Y., assignor to Segal Lock & Hardware Co., Inc., New York, N. Y., a Corporation of New York. Filed May 11, 1928. Serial No. 276,910. 7 Claims. (Cl. 30—12.)



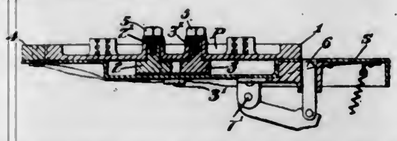
1. A razor including a guard formed with a plurality of openings, a blade associated with said guard and formed with openings offset with respect to said guard openings and means for introduction into one of said guard openings to align the same with a blade opening to shift said blade with respect to said guard.

1,826,531. GUIDE FOR ROLLING MILLS. GEORGE W. SILLS, Chicago, Ill., assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed June 22, 1927. Serial No. 200,558. 2 Claims. (Cl. 80—51.)



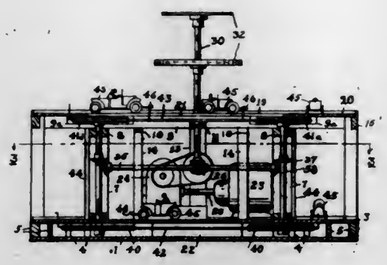
2. A rolling-mill guide comprising a base having elongated slots therethrough, a post fixed on one side of the base in line with said slots, a guide-channel in the same side of the base as and in line with said post, a second post having a foot adjustably mounted in said channel, rollers revolubly mounted on the posts and forming an open end direction-control pass, a narrow channel in the other side of said base parallel with said guide-channel, and threaded bolts in the foot passing through said slots and having their heads fitting in said narrow channel.

1,826,532. REVERSING SEAT BASE. EDWARD F. SMALL, Waltham, Mass. Filed Aug. 6, 1929. Serial No. 383,838. 7 Claims. (Cl. 155—96.)



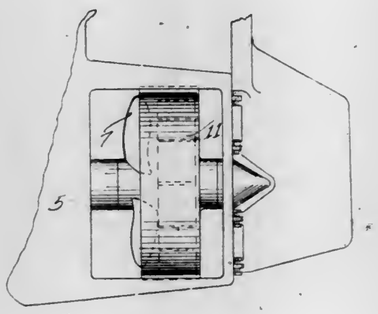
7. In a reversible chair, a base, a rotatable seat structure and a connection between said base and said seat structure to permit rotation of said seat structure and to require lateral shifting movement of the latter during its rotation, said connection comprising a pair of arms each pivoted to said base and to said seat structure.

1,826,533. DISPLAY DEVICE. RALPH W. STEELE, Madison Township, Clarion County, Pa. Filed Nov. 4, 1929. Serial No. 404,557. 7 Claims. (Cl. 211—1.6.)



1. In a display device of the character described, the combination of a pair of horizontally disposed continuous pathways disposed at different elevations and about the same vertical axis, cables associated with said pathways for causing objects to travel along the latter, and vertically disposed mirrors inclosing the space between said pathways.

1,826,534. POWER MECHANISM. IVER SYVERSTAD, San Francisco, Calif. Filed May 31, 1930. Serial No. 458,650. 4 Claims. (Cl. 115—34.)

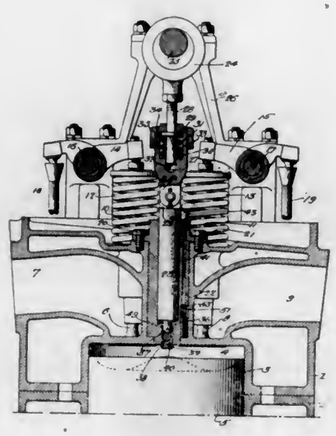


1. In a propulsion mechanism, the combination with a propeller, of an impeller having its blades aligned with the axis of rotation of the propeller, said impeller being positioned to the rear of the propeller and in axial alignment therewith and reduction gearing interposed between said propeller and said impeller.

1,826,535. INJECTING MEANS FOR INTERNAL COMBUSTION MOTORS OR FOR DIESEL ENGINES. CYRIL THOMAS, Yeadon, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1928. Serial No. 317,972. 4 Claims. (Cl. 123—33.)

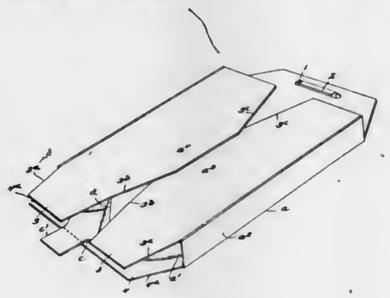
2. Fuel injection means for internal combustion engines comprising a body having a main bore and a communicating reduced bore opening through opposite ends thereof, means for supplying fuel to the main bore at the junction of the bores, a plunger operating in the main bore and having a reduced extension provided with a head fitting in the reduced bore, a passage communicating with the main bore at a point spaced above the junction of the bores and with that end of the body through which the reduced bore opens,

means for reciprocating the plunger to cause cyclic projection of said head from said end and passages in said extension in communication with the space between the end



of the plunger and the shoulder formed by the junction of the bores, said passages being opened on the projection of said head from said body.

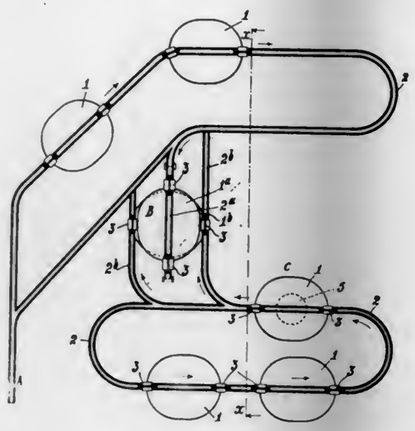
1,826,536. PACKAGING DEVICE. FRANK WATSON, Baltimore, Md. Filed June 24, 1929. Serial No. 373,217. 8 Claims. (Cl. 226—18.)



1. A packaging device for filling boxes comprising a bottom, side walls and cover flaps hinged to the side walls, the forward end portions of the flaps, and the bottom, projecting beyond the side walls and tapering toward their ends.

1,826,537. APPARATUS FOR MECHANICALLY HANDLING DOUGH DURING PROVING. JAMES ELLIOTT WILSON, SAMUEL MCCONNELL, and CAMPBELL BROWN, Belfast, Ireland. Filed June 27, 1930, Serial No. 464,204, and in Great Britain Sept. 10, 1929. 6 Claims. (Cl. 107—7.)

6. Apparatus for mechanically handling dough during the proving thereof in a bakery, comprising, in combination, a number of primary receptacles, a railway adapted to support said receptacles clear of the floor of the bakery, means for opening and closing the bottom of each receptacle at will, a number of secondary receptacles, a railway for supoprting said secondary receptacles clear of said floor, means whereby the primary receptacles can be raised one at a time, means whereby said secondary receptacles can be moved one at a time to a position below the raised primary receptacle, a chute located below the level of said



secondary receptacles, and means for opening and closing the bottom of said secondary receptacle at will so as to discharge the proved dough through said chute.

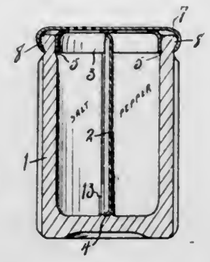
1,826,538. BILLIARD BALL. WALTER WOLLASTON, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,740. 3 Claims. (Cl. 154—16.)

8. The process of making a marker for a ball which comprises coating a layer of fabric with a composition, printing a character on said composition and applying a coating of transparent material over the first mentioned coating and said character.

1,826,539. COMBINATION SALT AND PEPPER SHAKER. EDWARD E. HARRIS, Tulsa, Okla. Filed Sept. 15, 1930. Serial No. 481,967. 1 Claim. (Cl. 65—45.)

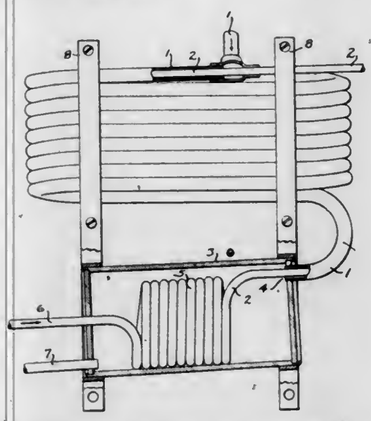
A combination salt and pepper shaker comprising a hollow body having vertical grooves in the vertical walls thereof at diametrically opposite points and a socket groove in the bottom, a partition vertically disposed in said body and occupying said grooves, an inner cap having a skirt projected within said body and having cut-outs in said skirt to receive the upper corners of said partition and having openings for receiving and discharging salt and

pepper and said cap being non-rotatable, and an outer cap rotatably and non-detachably mounted on said body and having an opening adapted to register with either



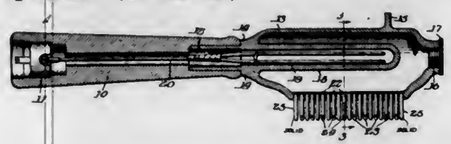
one of the openings in said inner cap and having a plurality of perforations adapted to register with either one of the openings in said inner cap and said outer cap being adapted to close both of said openings in the inner cap.

1,826,540. CONDENSER. HARRY C. HAYES, Detroit, Mich., assignor to General Necessities Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 4, 1927, Serial No. 188,832. Renewed Aug. 24, 1931. 4 Claims. (Cl. 257—32.)



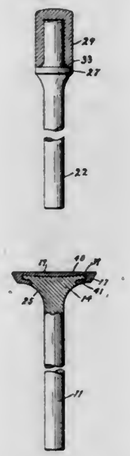
1. In combination, a refrigerant coil for use as a condenser, a reservoir connected therewith for collecting the condenser refrigerant from said coil, and a cooling fluid pipe passing into and located within said reservoir and thence passing through the interior of the refrigerant gas coil.

1,826,541. LIQUID TREATMENT COMB. JOHN HENIGE, Chicago, Ill. Filed Nov. 14, 1930. Serial No. 495,683. 12 Claims. (Cl. 132—12.)



1. In a liquid treatment comb, the combination of a head having an internal cavity and provided with a filling opening, a hollow cylinder projecting into said cavity and connected to the head only at the end opposite to said filling opening and projecting beyond said head, a handle fitted over said projection, and electric heating wires extending longitudinally through said handle and into said cylinder contained wholly within said cylinder.

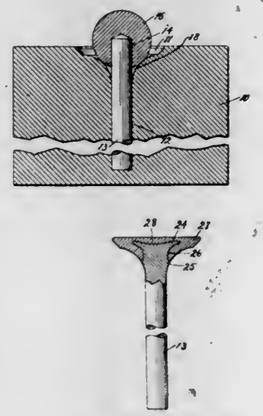
1,826,542. POPPET VALVE AND PROCESS OF MAKING SAME. RICHARD HERVIO and ROBERT JARDINE, Chicago, Ill., assignors to Rich Tool Company, Portland, Me., a Corporation of Maine. Filed May 12, 1922. Serial No. 560,302. 21 Claims. (Cl. 29—156.7.)



1. The process of making a composite metal article having a stem and expanded head which includes applying a thimble having a closed end to one end of a separately formed stem rod, and expanding the side wall of the thimble and the part of the stem rod enclosed thereby by endwise pressure between dies conforming in shape with the head.

8. A composite poppet valve comprising, in combination, a stem having an irregular portion adjacent to one end and a head interlocked therewith in the condition produced by inserting a stem into a pocket in a block of head metal and hot forging the irregular portion and the head by force exerted lengthwise to the stem.

1,826,543. COMPOSITE METAL ARTICLE AND PROCESS OF MAKING THE SAME. RICHARD HERVIO and ROBERT JARDINE, Detroit, Mich., assignors to Rich Tool Company, Chicago, Ill., a Corporation of Illinois. Filed July 9, 1924. Serial No. 725,023. 7 Claims. (Cl. 29—156.7.)



1. The process of making composite metal articles which includes forming a globular blank of head metal with a pocket therein, inserting one end of a rod into the pocket

and radially expanding the inserted portion of the rod and the blank to form a head.

6. A composite metal article of the class described consisting of a stem having a distorted portion adjacent to one end and a head interlocked with said distorted portion, the interlocked surfaces being in the condition of having been formed by inserting one end of the stem into a pocket in a globular blank and hot forging the blank and a portion of the stem to form a head.

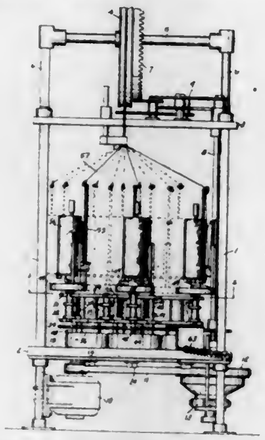
1,826,544. BLANK AND PROCESS FOR MAKING VALVE TAPPETS. RICHARD HERVIG, Detroit, Mich., assignor to Rich Tool Company, Detroit, Mich., a Corporation of Maine. Filed Jan. 11, 1926. Serial No. 80,426. 3 Claims. (Cl. 29—156.7.)



1. The process which includes forming a head blank with an annular recess on the bottom, inserting a tubular shank in the recess and forging a flange on the shank, and gripping the flange between portions of the head blank metal, the initial forging operation being directed chiefly to the marginal portion of the head blank to force the metal downwardly and inwardly against the shank.

3. A blank of the class described, having on the bottom a boss surrounded by a flange, and on top a marginal flange.

1,826,545. BRAIDING MACHINE. EUGENE HIGGINS, Jackson, Mich. Filed Aug. 11, 1930. Serial No. 474,420. 21 Claims. (Cl. 96—12.)



1. In a braiding machine, the combination with a bed, of an annular series of posts mounted on said bed, heads rotatably mounted on said posts and comprising hubs and vertically spaced plates having alined peripheral notches, coacting gears arranged on said head hubs below the lower head plates, bobbin carriers having upwardly facing annular keepers, said notches in said heads being adapted to receive said bobbin carriers, rod-like latches mounted in said head plates in radial alinement with their said notches and for vertical reciprocating movement, said latches being arranged through said gears and provided with downwardly facing keeper engaging hooks between said head plates and with laterally projecting arms, springs arranged between the upper head plates and the arms and acting to urge the latches downwardly, the upper head plate and the arms being provided with spring supporting pins, and nested cupped cam members having upwardly facing cams on the edges of their rims, said cam members having coacting lugs and recesses whereby they are positioned relative to each other, the outer cam members having lugs and the bed plate having coacting recesses for positioning the pairs of cam members thereon, the posts being provided with clamping members arranged within the inner cams and with nuts arranged below the bed plate, said clamping members constituting thrust bearings for said heads, the latches being provided with laterally projecting cam engaging pins.

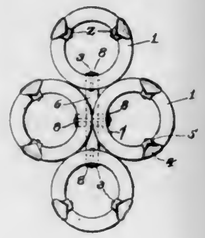
1,826,546. BLOTTING PAD. BRYAN HOWARD, Austin, Tex. Filed Oct. 9, 1929. Serial No. 398,398. 1 Claim. (Cl. 120—25.)



A blotter holder of the character described comprising an elongated, flat, substantially rectangular plate for supporting the blotter and having communicating grooves in one end and on its front and rear walls, the grooves in the front and rear walls adapted for the reception of certain of the marginal portions of the blotter, the front and rear walls being further provided with sockets adjacent the other end of the plate having curved side walls and communicating with the adjacent ends of the grooves, a substantially U-shaped resilient clamp detachably mounted in the grooves and operatively engaged with the blotter, integral, inwardly curved hooks on the ends of the clamp engageable with the adjacent curved side walls of the sockets for seating the clamp in the grooves, and means for mounting the plate on a person's wrist

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1,826,547. FLOWER BULB CONTAINER. THELMA PUTNAM JACKSON, Houston, Tex. Filed June 14, 1930. Serial No. 461,185. 2 Claims. (Cl. 47—41.)

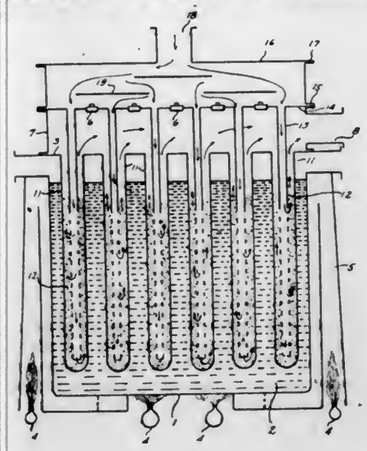


1. A flower bulb cluster holder comprising, a plurality of annular elements positioned in side opposed relation, and a plurality of resilient fingers secured to and extending upwardly from the inner peripheral face of each element, certain of said fingers being in opposed position and having their lower portions extended beneath the elements and integrally connected to secure the elements together in a cluster.

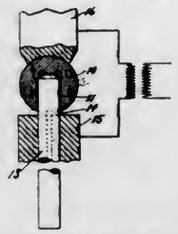
1,826,548. CATALYTIC APPARATUS. ALPHONS O. JAEGER, St. Louis, Mo., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 24, 1926. Serial No. 124,569. 10 Claims. (Cl. 23—288.)

1. A vapor phase catalysis which comprises passing a reaction gas in direct heat exchanging relation with the inner wall of a catalyst annulus, reversing the flow of gas

and causing it to pass through the catalyst annulus in an axial direction during the reversed flow, passing additional reaction gas directly through the catalyst annulus without being first circulated in direct heat exchanging relation thereto, and subjecting the outer surface of the catalyst annulus to heat exchange with a liquid heat exchanging medium.

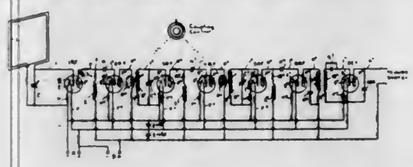


1,826,549. PROCESS OF MAKING COMPOSITE VALVES. ROBERT JARDINE, Detroit, Mich., assignor to Rich Tool Company, Chicago, Ill., a Corporation of Illinois. Filed July 9, 1924, Serial No. 725,024. Renewed Feb. 29, 1928. 3 Claims. (Cl. 29—156.7.)



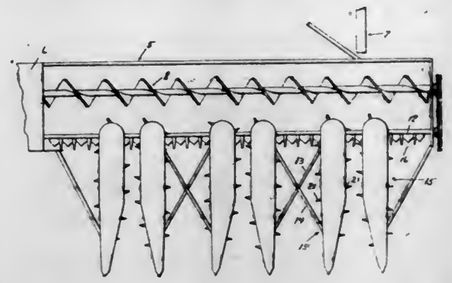
1. The process of making composite valves which includes inserting one end of a rod into a pocket in a block, homogeneously uniting the end of the rod to the end wall of the pocket and hot forging the block and rod to form a valve head.

1,826,550. RADIO FREQUENCY AMPLIFYING SYSTEM. LESTER L. JONES, Oradell, N. J. Filed July 19, 1926. Serial No. 123,346. 21 Claims. (Cl. 179—171.)



1. In a cascade system embodying a number of stages interlinked by a plurality of inductively coupled transformers, the method of varying the degree of energy transmission in the system to control the signal volume thereof which consists in conjointly varying the coupling between the primary and secondary windings of a plurality of the transformers producing thereby a range of volume variations which is the geometric product of the range of volume variation of the separate coupling transformers.

1,826,551. AGRICULTURAL MACHINE ATTACHMENT. WALTER KRENZEL, Leoti, Kans. Filed July 19, 1930. Serial No. 469,197. 1 Claim. (Cl. 56—59.)

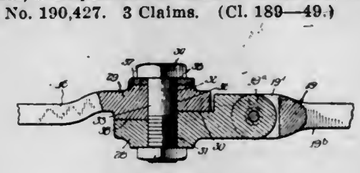


In combination with the platform of a combine, a plurality of gathering devices sloping downwardly and forwardly from the front end of the platform, each device consisting of an upper and a lower plate connected together in spaced parallelism, a connecting web at the forward end of the plates, sprockets rotatably arranged between the plates, a bracket supported from the platform and having a vertically arranged portion, a stub shaft rotatably arranged in said portion and having its upper end passing through the rear ends of the plates, a sprocket on said shaft located between the plates, an endless chain passing over said sprocket and the sprockets aforementioned, fingers on the chain, and means for rotating the stub shaft from a movable part of the combine.

1,826,552. EXTRACTION OF TIN FROM ORES, ALLOYS, SCRAP OR THE LIKE. LÉON LAMY, Annecy, EUGÈNE MATHIEU, Paris, and LÉON GAGNAUX, Marignier, France, assignors to Societe D'Electro-Chimie, D'Electro-Metallurgie et des Acieries Electriques d'Ugine, Paris, France, a Corporation of France. Filed Jan. 24, 1930, Serial No. 423,260, and in France June 22, 1929. 5 Claims. (Cl. 75—17.)

1. Process for the extraction of tin from materials containing tin and iron, consisting in adding to the material under treatment during the operation of reduction or refining silicon in determined quantity to form with the iron content a ferro-silicon compound which contains a minimum of 80% silicon.

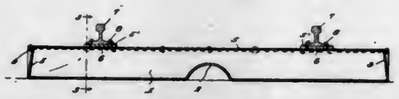
1,826,553. DOOR HOLDER ARM. DAVID R. LASIER, Chicago, Ill., assignor to Norton-Lasier Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 11, 1927. Serial No. 190,427. 3 Claims. (Cl. 189—49.)



3. In combination with a door and door frame, a pair of pivotally connected arms and means for pivotally connecting said arms to the door and door frame respectively, the relatively movable parts constituting one of said pivots comprising a head having a spiral face and a step between the high and low portions thereof; a pivot bolt rigidly carried by said head, having a surface spaced from and opposed to said face, and a second head pivotally mounted on said bolt between said face and surface, also having a spiral face and a step between the high and low portions thereof, said last named face being disposed in contact with said first face, said heads being adapted to provide freedom of pivotal action throughout a predetermined range of movement and to frictionally bind throughout a relative-

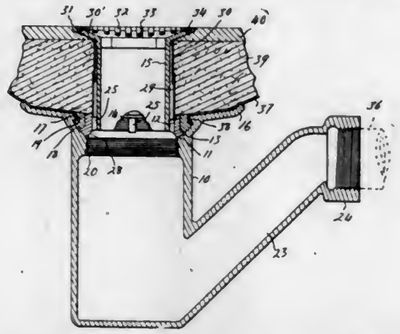
ly large contact area when the higher portions of said spiral faces come into alignment, and a fusible washer on said bolt occupying sufficient space between said first spiral face and said opposed surface to permit release of the binding action upon fusion thereof.

1,826,554. PRESSED STEEL CROSSTIE. CHARLES LEONARD, South Connellsville, Pa. Filed Oct. 13, 1930. Serial No. 488,444. 1 Claim. (Cl. 238—76.)



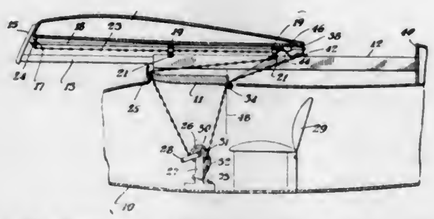
A metal tie having its body portions stamped from a single piece of metal to provide a hollow rectangular member, the ends of the member being bent inwardly between the sides thereof and the open upper portion of the member being formed with a continuous flange, said body having its bottom, at the center thereof, arched inwardly, a cover plate riveted to the flange, and rail engaging plates pivoted to the cover plate and to the flange.

1,826,555. SHOWER BATH TRAP. JOHN H. LONSKEY, Ypsilanti, Mich., assignor to Central Specialty Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 10, 1928. Serial No. 324,917. 6 Claims. (Cl. 285—37.)



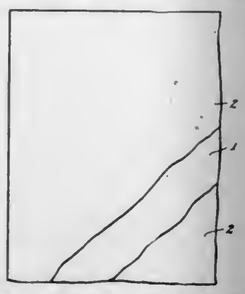
1. A shower bath trap comprising a conduit having a spherical seat therein, a ring having a spherical surface engaging said seat, a flange on said conduit extending inwardly toward said ring forming an annular recess therebetween with an enlarged bottom portion and a smaller neck portion and a cast metal joint between said ring and said flange.

1,826,556. AIRCRAFT PARACHUTE. FRANK LOSKE, Brooklyn, N. Y. Filed May 5, 1931. Serial No. 535,135. 7 Claims. (Cl. 244—21.)



1. An aeroplane-parachute comprising a gas container, means for normally holding said container inoperative, means to catapult the container forward in cases of emergency, and means for resetting the container after each operation.

1,826,557. PAPER. JOSEPH A. LOWE, Fitchburg, Mass., assignor to Falulah Paper Company, Fitchburg, Mass, a Corporation of Massachusetts. Filed Feb. 1, 1929. Serial No. 336,834. 1 Claim. (Cl. 154—46.)



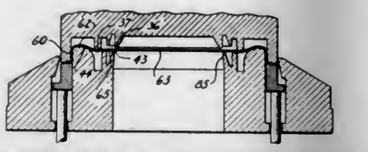
A sheet of paper comprising three attached sheets, the intermediate sheet being of long-fibred kraft paper, the outer sheets being of short fibre, and an adhesive securing the sheets together forming a single sheet, capable of scoring and bending without breaking, the intermediate sheet constituting in effect a hinge for the scored outer sheets.

1,826,558. TOILET ARTICLE. HENRY I. MATCHETT, Philadelphia, Pa. Filed June 11, 1930. Serial No. 460,484. 13 Claims. (Cl. 132—79.)



1. A cosmetic package, comprising a guiding shell and an inner sliding shell, a holder constructed from a single blank pivotally supported in the sliding shell, said holder having pockets for the reception of a plurality of cosmetic units, means on opposite sides of the holder for cooperating with the sliding and guiding shells for retaining the holder centrally disposed to prevent the cosmetic material on the units from engaging with the opposite walls of the package, and means for causing the holder to tilt on an angle when the sliding shell is moved for its greater portion from within the guiding shell.

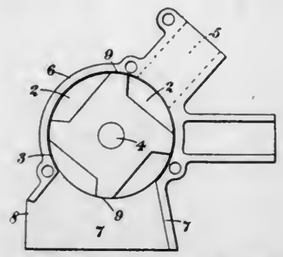
1,826,559. METHOD AND APPARATUS FOR FORMING CAN TOPS. FREDERIC MEIER, Chicago, Ill. Filed Feb. 23, 1929. Serial No. 342,237. 18 Claims. (Cl. 113—42.)



1. A punch press for forming devices, comprising two pairs of punches and dies, one of said pairs being higher than the other, and means for moving the devices from one pair to the other, said means comprising a knock-out on the die of one pair, a knock-out on the punch of that pair, and an inclined chute positioned between the two pairs, a guide for positioning the devices on the other die, and air-jet means for forcing the devices in position on the said other die.

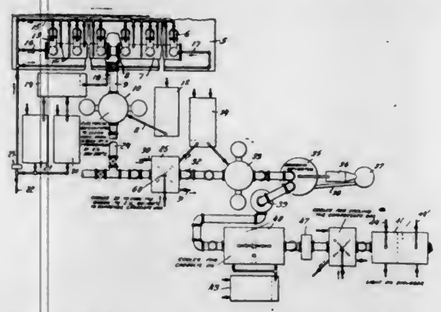
4. A method of making double friction-tite can tops, consisting in forming a ring of suitable sheet-metal material, and in forming in the central portion of the ring material a deep annular downwardly projecting loop, said loop being formed by drawing the material into the loop from both sides thereof over rounded surfaces.

1,826,560. SEED DRILL. GEORGE JAMES MILLER, Chelsfield, England. Filed Mar. 15, 1928, Serial No. 261,911, and in Great Britain Mar. 26, 1927. 4 Claims. (Cl. 221—136.)



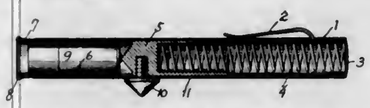
1. A seed drill arranged to deliver seeds intermittently comprising a casing having a cylindrical wall formed with intake and discharge apertures and two side walls formed with bearing apertures, a shaft extending through the bearing apertures and supported by the side walls, a rotary delivery valve having peripheral spaces constituting seed receptacles, and two side cheeks secured one to each side of the valve and arranged to fit closely at their peripheries against the cylindrical wall of the casing and to be spaced away from the side walls of the casing.

1,826,561. RECOVERY OF AMMONIA AND OTHER PRODUCTS FROM COKE OVEN GASES. STUART PARMELEE MILLER, Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1927. Serial No. 206,365. 4 Claims. (Cl. 23—196.)



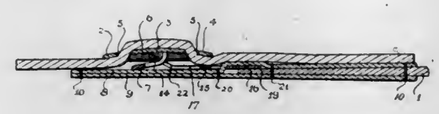
1. The method of recovering ammonia and other products from coke oven gases which comprises subjecting the hot coke oven gases to a cleaning treatment with an electrical precipitator at a sufficiently high temperature to separate pitch from the gases and leave creosote oils in the form of vapors, cooling the resulting cleaned gases to a temperature above the dew-point of water to separate clean creosote oils therefrom, and then passing the gases while still at a temperature above the dew-point of water to an ammonia saturator.

1,826,562. GAS GUN. WALLACE M. MINTO, Jersey City, N. J. Filed Apr. 23, 1931. Serial No. 532,363. 3 Claims. (Cl. 42—1.)



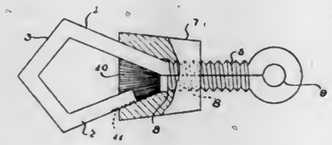
1. A gas gun in the form of a fountain pen or the like, having a barrel, a spring acting firing pin within said barrel, and a gas cartridge shell fitting within and having removable engagement with the outer end portion of said barrel.

1,826,563. BELT FOR PERSONAL WEAR. EDWIN S. MIX, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed June 7, 1928. Serial No. 283,646. 1 Claim. (Cl. 241—8.)



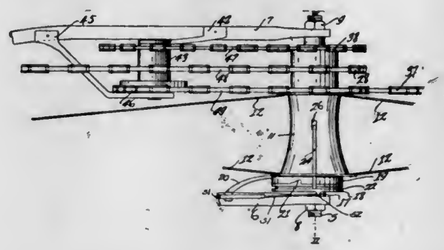
In a belt, the combination with a strap having an end piece formed of two pieces of sheet material stitched together at their edges and having the body of the strap received between them and held by said stitches, and an anchoring device having two bars, one of which lies between the two pieces of the end member, and the other of which is deflected away from the end member, and stitching passing through the two pieces on opposite sides of the first mentioned bar to secure the anchoring device to the strap end beyond such end.

1,826,564. SAFETY HOOK. EDWIN S. MIX, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Nov. 3, 1930. Serial No. 493,066. 3 Claims. (Cl. 24—238.)



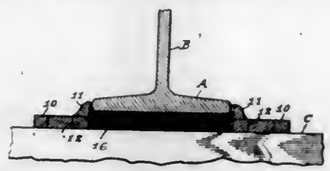
1. A hook comprising a threaded shank, an enlarged engaging element at one end of the shank, outwardly divergent arms of different lengths at the opposite end of the shank, the short arm being spaced from the shank to define a throat and the long arm being connected to the shank, a connection uniting the outer divergent ends of the arms, and a guard threaded on the shank and having a flared opening to receive the converging ends of the arms and close the said throat.

1,826,565. BICYCLE GEARING. EIICHI MURASE, San Francisco, Calif. Filed May 3, 1930. Serial No. 449,589. 3 Claims. (Cl. 208—154.)



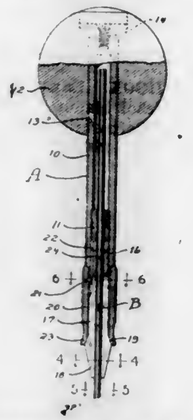
1. In combination with a bicycle hub, of a low ratio sprocket attached thereto, a main drive sprocket freely rotatable with relation to said hub, means for locking said main drive sprocket to said hub and means for holding said main drive sprocket unlocked with respect to said hub for the purpose specified.

1,826,566. RAIL SILENCING TIE PLATE. WARREN M. OSBORN, Chicago, Ill. Filed Apr. 11, 1931. Serial No. 529,865. 8 Claims. (Cl. 238—283.)



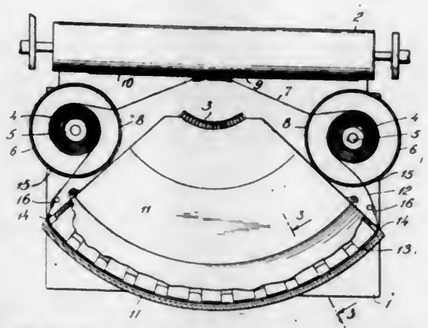
1. A metallic rail plate having a body provided with opposite shoulders and an intermediate opening through its body, and a resilient pad shaped to fit into said opening.

1,826,567. JEWEL SETTING TOOL. JACOB H. PAYER, Philadelphia, Pa. Filed Jan. 7, 1930. Serial No. 419,183. 5 Claims. (Cl. 81—7.)



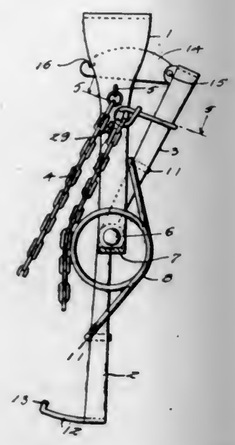
1. In a bead raising tool, a rail of channel-shape cross section and having a beveled working end, and a holder for the rail embodying a tubular stem, and a check carried by the lower end of the stem and thru which the rail extends into the tubular stem, said chuck having a rib formed longitudinally along the inner side of one jaw thereof for engaging in the channel side of the rail.

1,826,568. SUPPLYING INK TO INKING RIBBONS. GEORGE E. PELTON, Hartford, Conn. Filed Mar. 7, 1930. Serial No. 433,956. 58 Claims. (Cl. 197—171.)



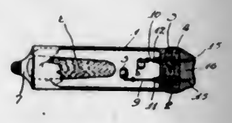
5. Ink supply means for use in writing comprising a feed spool, a writing ribbon fastened to said spool and an ink supply ribbon almost entirely interwound with the said writing ribbon and said ribbons carrying ink.

1,826,569. TRAP. MARTIN J. PETERSEN, Canyon, Minn. Filed Mar. 3, 1931. Serial No. 519,828. 6 Claims. (Cl. 43—90.)



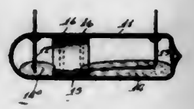
1. A trap comprising an arcuate body, studs extending laterally inward from the ends of the body, arcuate jaws having their ends pivotally engaged with the studs, arms extending laterally outward from the ends of the body, coil springs mounted upon the arms and having their terminals engaged with the jaws to normally hold the jaws in closed relation, means for latching the jaws in opened relation, a trigger for operating said latching means to effect the release of the jaws, and a bait carrier secured to the trigger.

1,826,570. ELECTRICAL SWITCH. LOUIS A. M. PHELAN, Chicago, Ill., and PAUL S. BEAR, Elkhart, Ind., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 22, 1927, Serial No. 228,043. Renewed Sept. 8, 1931. 18 Claims. (Cl. 200—152.)



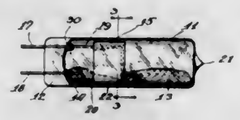
1. An electric switch comprising an envelope of fragile insulating material, leading-in wires sealed therethrough and terminating at their inner ends in electrodes, a body of mercury in said envelope, and a coating of resilient cement applied exteriorly of said envelope to protect it from mechanical shocks.

1,826,571. ELECTRICAL APPARATUS. LOUIS A. M. PHELAN, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 25, 1927. Serial No. 235,434. 6 Claims. (Cl. 200—152.)



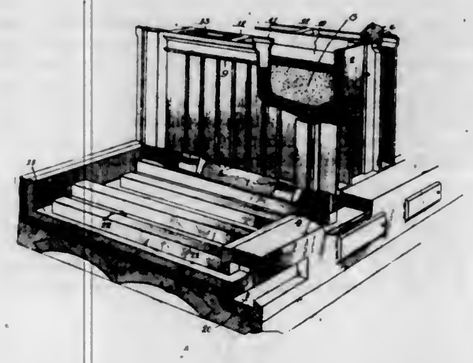
1. In an electrical contactor of the type described, a refractory dam consisting of a split tapering walled tube of refractory material.

1,826,572. ELECTRICAL DEVICE. LOUIS A. M. PHELAN and PAUL S. BEAR, Elkhart, Ind., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 3, 1928. Serial No. 258,850. 18 Claims. (Cl. 200—152.)



1. A tiltable electrical contactor comprising an hermetically sealed elongated container, electrodes of a material not adversely affected by mercury entering said container at the same end thereof and spaced from one another within said container and longitudinally thereof, a split annular dam of a refractory material nonwettable by mercury disposed within the container wholly beyond where said electrodes enter the same, and a body of metallic conducting fluid adapted to establish electrical connection between the electrodes, said body of fluid being in sufficient amount to cover said dam when the contactor is tilted to the conducting position but in insufficient amount to cover said dam when the contactor is tilted into interrupted position, one of said electrodes terminating within said dam.

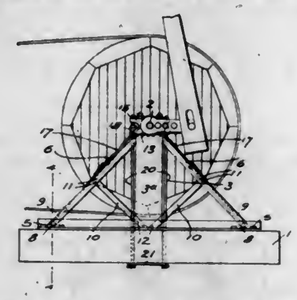
1,826,573. APPARATUS FOR CARBONIZING COAL. RICHARD LEE RODGERS, Chicago, Ill., assignor, by mesne assignments, to Charcolite Corporation, Clinton, Ind., a Corporation of Indiana. Filed Feb. 27, 1922. Serial No. 539,361. 2 Claims. (Cl. 202—219.)



1. Apparatus for carbonizing coal comprising a liquid bath, means for heating said bath, a chamber in said bath opening above said bath and means permitting discharging the contents of said chamber laterally therefrom.

1,826,574. JACK POST. ROLAND CRAIG RUMBAUGH, Shreveport, La. Filed Sept. 12, 1927. Serial No. 219,061. 7 Claims. (Cl. 308—25.)

3. A jack post construction comprising a base having laterally spaced longitudinal flanges, an upstanding post supported on said base, two pairs of brace members secured to said post near the top thereof and extending diagonally downward in opposite directions, the respective brace members of each pair lying inwardly of the flanges of said base, a bolt extending through said flanges and through said brace members, a bearing mounted upon the top of said post, tie means extending from opposite ends of said bearing, a clevis mounted on each of said bolts between the flanges of the base and between the brace members, and said clevis engaging the sides of said brace members to hold them against the inner surfaces of said flanges, each of said tie means being secured to one of said clevises.

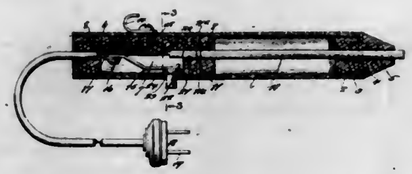


1,826,575. SHOCK ABSORBER. MASON P. RUMNEY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 1, 1928. Serial No. 316,465. 4 Claims. (Cl. 267—48.)



1. The combination with a vehicle leaf spring, of a shock absorber therefor having contact bearing means for engaging one side of said spring at longitudinally spaced points, contact bearing means for engaging the opposite side of said spring at a longitudinally intermediate point, one of said contact bearing means including a cam having an arcuate portion concentric with the axis of rotation of said cam for engaging said spring during its normal flexure and also having an adjacent cam portion for engaging said spring upon flexure thereof beyond normal, and means for rotating said cam upon flexure of said spring.

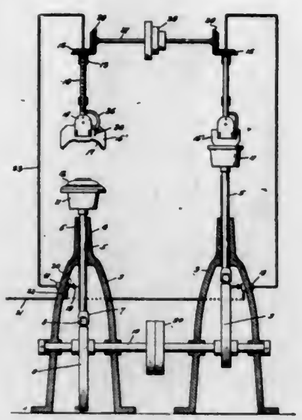
1,826,576. LIGHTER FOR GAS BURNERS AND STOVES. FRANZ A. RUMP, Philadelphia, Pa. Filed Feb. 1, 1930. Serial No. 425,252. 2 Claims. (Cl. 175—116.)



2. In a lighter as set forth, a fibre tubular housing, a core fitted and secured in one end and provided with a recess, a resistance element extending through the inner end of the core, with its extremity exposed at a point adjacent one end of the recess, means passing through the tubular housing through the core and resistance element to secure the core in position and at the same time hold all three together, means in the other end of the housing to mount and support the other end of the resistance element with its extremity exposed, a live lead with a ping at one end and its other end passing through the core and terminating a short distance within the recess, a spring contact connected to the live lead at a point within the recess and having its free end in a close position to the

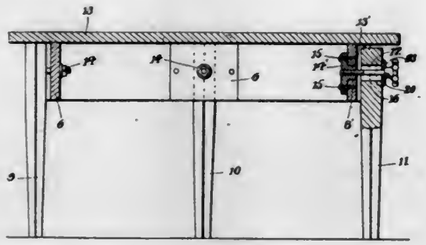
inner end of the resistance element, and means mounted in and carried by the wall of the housing to depress the free end of the spring contact against the inner end of the resistance element, whereby when the plug is engaged with a socket and the exposed end of the resistance element brought into scratching contact with the metal around a gas range, a spark may be created for igniting the escaping gas.

1,826,577. MOLDING MACHINE. HENRY SCHANTZ, New Castle, Pa. Filed Mar. 19, 1929. Serial No. 348,230. 1 Claim. (Cl. 25—26.)



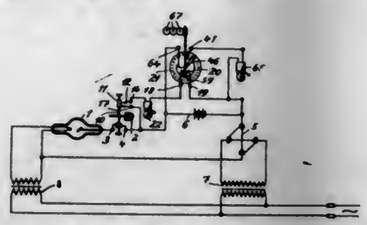
A molding machine of the class described, comprising a pair of vertically arranged shafts, means for rotating one shaft, means for moving the other shaft vertically, molding members attached to the adjacent ends of the shafts, a nozzle carried by the member of the rotary shaft, a supply pipe connected with the nozzle, a valve in said pipe, and means for opening the valve when the vertically movable shaft is in a position with the molding member in engagement with the molding member of the rotary shaft.

1,826,578. TABLE. CHARLES J. SCHMITT, Algoma, Wis. Filed Dec. 10, 1930. Serial No. 501,415. 2 Claims. (Cl. 45—48.)



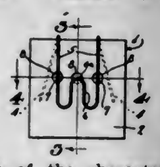
1. In a means to prevent the rocking of a table upon an uneven surface, the combination with one of the legs of the table, said leg being shorter than the other legs of the table, provided with a slot disposed lengthwise thereof and capable of being raised or lowered to compensate for the uneven surface to overcome rocking of the table, of an interiorly threaded tubular anchoring member secured to the table, an adjustable, rotatable coupling element threadedly engaging with said member, extending through said slot and having a head at its outer end, and a wedge block shifted by said head and acting on said leg for wedging the latter stationary in its shifted position when said element is adjusted inwardly.

1,826,579. X-RAY SYSTEM. GOTTFRIED SPIEGLER and FERDINAND BÜGLER, Vienna, Austria. Filed June 17, 1930, Serial No. 416,774, and in Austria Mar. 16, 1929. 1 Claim. (Cl. 250—34.)



The combination with an X-ray system and its tube, of a current-measuring device in circuit with the tube and rhythmic acoustic signalling means controlled thereby for indicating variations of the intensity of the current flowing through the tube.

1,826,580. PINLESS TICKET. EDMUND S. SPINNEY, Attleboro, Mass., assignor to The Adam Sutcliffe Company, a Corporation of Rhode Island. Filed Dec. 20, 1930. Serial No. 503,822. 6 Claims. (Cl. 40—23.)



1. In an article of the character described, a tag formed of piles and a spring clip having its ends permanently secured between the piles, the clip including a frame overlying one side of the tag and said tag having depressions therein laterally of the retained ends of the clip to receive portions of the frame intermediate the ends thereof for clamping portions of an article to which the clip is attached in said depressions.

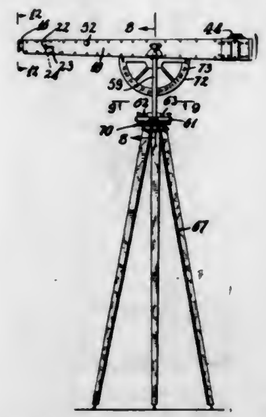
1,826,581. STREET SIGN. ABRAHAM SPRUNG, New York, N. Y., assignor to Municipal Street Sign Co., Inc., New York, N. Y., a Corporation of New York. Filed July 25, 1929. Serial No. 380,845. 9 Claims. (Cl. 40—145.)



1. A sign comprising a unitary metal frame having a bifurcated upper member and interoirly channelled end

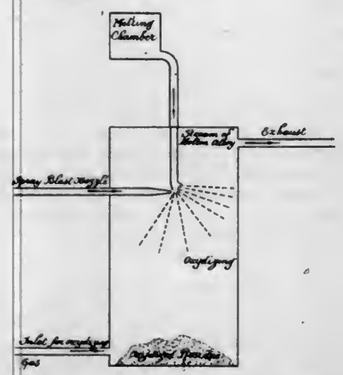
and lower members, one or more legend plates engageable in the channels through the upper member, a boss on the upper member formed equally on each side of the bifurcation, said boss containing a frusto-conical recess in its base directed toward the frame, a plug engaged in the recess, and means for clamping the plug therein.

1,826,582. DISTANCE DETERMINING INSTRUMENT. JOSEPH SZABO, Astoria, N. Y. Filed Jan. 7, 1931. Serial No. 507,087. 14 Claims. (Cl. 33—64.)



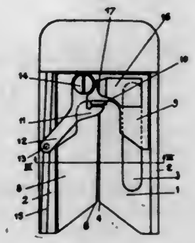
1. A distance determining instrument, comprising a tapered casing forming a dark chamber, a visor in the small end of said casing, a window glass in the large end of said casing and having a vertical and horizontal hair line crossing on the line of the axis of said visor, a pair of shutters in a plane at right angles with said axis to assume positions with adjacent edges on the vertical hair line when viewed through said visor, means for simultaneously moving said shutters apart and together, and means for accurately indicating separated positions of said shutters for obtaining a factor which is to be multiplied by the width of an object viewed through said visor and measured off by the positions of said shutters for obtaining the distance of said object to said visor.

1,826,583. PROCESS OF METALLURGICAL TREATMENT. CHRISTIAN THURNEYSSEN, Paris, France, assignor to Societe le Nickel, Paris, France. Filed Feb. 19, 1927, Serial No. 169,494, and in France Feb. 23, 1926. 2 Claims. (Cl. 75—66.)



1. Process for separating out the iron of ferro-nickel, ferro-cobalt and the like, consisting in melting the alloy to be purified, carry it to a temperature of about 1500°, appreciably above the fusion temperature of said alloy, pouring said liquid alloy in the form of a liquid thread, atomizing said liquid in an oxidizing atmosphere through a jet of gas under pressure into liquid droplets so as to oxidize the iron of these droplets during their passage through the air, collecting said solidified and oxidized droplets, remelting said droplets, carrying the degree of oxidation of the bath to the desired extent and separating the non-oxidized parts from the oxidized parts.

1,826,584. TEXTILE APPARATUS. LUCIEN VILT, Lille, France. Filed Mar. 29, 1930, Serial No. 440,132, and in France May 11, 1929. 8 Claims. (Cl. 28—70.)



1. In a textile apparatus, a support provided with a slot having divergent edges, guiding means for directing a thread into said slot, said guiding means being displaceable in the direction of the length of said slot, means for locking said guiding means in any one of a plurality of positions, a pair of spaced walls positioned to cross the direction of said divergent slot, and means operative by the displacement of said thread guiding means to displace one of said walls relatively to the other.

1,826,585. APPARATUS FOR THE GRADING OF ABRASIVES FOR USE IN CONTINUOUS GLASS GRINDING MACHINES. FREDERIC BARNES WALDRON, Prescot, and JAMES HARRIS GRIFFIN, St. Helens, England, assignors to Pilkington Brothers Limited, Liverpool, England. Filed June 19, 1930, Serial No. 462,174, and in Great Britain July 12, 1929. 6 Claims. (Cl. 209—208.)

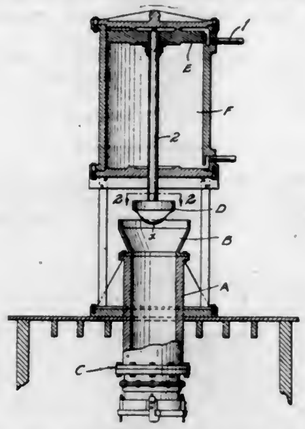


1. In apparatus for grading abrasive and supplying it continuously, the combination of a channel along which the mixture to be graded flows, said channel increasing in cross-sectional area from the inlet to the overflow, submerged partitions in the channel forming tanks in which the different grades of abrasive settle and from which said grades are continuously discharged, and tanks of greater cross-sectional area than the channel extending over a length thereof at the inlet end, in which tanks the channel is formed.

1,826,586. METHOD AND APPARATUS FOR MANUFACTURING SEWER PIPE AND SIMILAR ARTICLES. HERMAN P. WILLIAMS, St. Louis, Mo., assignor to Laclede-Christy Clay Products Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 27, 1930. Serial No. 423,765. 10 Claims. (Cl. 25—15.)

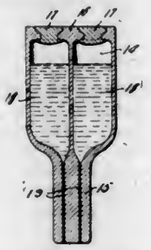
1. A method of manufacturing sewer pipe and similar articles, characterized by introducing loose material into a cylinder subjecting the material in the receiving end portion of the cylinder to pressure that is applied to

said material progressively from the center towards the side wall of the cylinder, thereby causing air that is



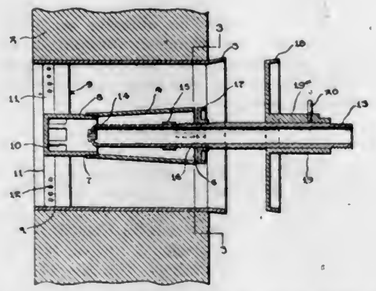
mixed with said loose material to be expelled from same, and thereafter compressing said material to a high degree and forcing it into a shaping die.

1,826,587. ERASER. LEONARD K. WRIGHT, Jackson Heights, N. Y., assignor of twenty-two per cent to Nicholas Di Marco, twenty-two per cent to Vincent Camizzi, and twenty-two per cent to Henry Viscardi, Corona, N. Y. Filed Aug. 10, 1928. Serial No. 298,734. 7 Claims. (Cl. 120—36.)



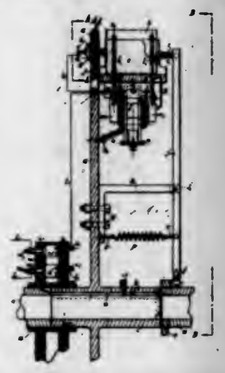
4. An eraser comprising a rubber erasing stem having an erasing surface and means to apply a controlled amount of liquid to the erasing surface of said stem during the process of erasing.

1,826,588. GAS BURNER. JOHN S. ZINK, Tulsa, Okla. Filed Apr. 10, 1930. Serial No. 443,131. 3 Claims. (Cl. 258—99.)



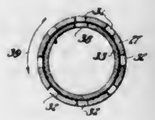
1. A burner, including a horizontal barrel open at both extremities, at least one of the walls of said barrel being flattened to facilitate its installation in the wall of a still or furnace, a spreader located in said barrel, means for feeding a mixture of air and gas under pressure to the spreader, means to allow secondary air to mix with the gas discharged from the spreader beyond the point of discharge, and independently operated means for controlling both the quantity of air induced into the mixture fed to said spreader and the secondary air mixed with the gas beyond its point of discharge from said spreader.

1,826,589. ELECTRICALLY CONTROLLED MECHANISM FOR DETECTING LEAKS IN CYLINDRICAL CANS OR CONTAINERS. HARRY A. ZUCH, New York, N. Y. Filed Jan. 30, 1928. Serial No. 250,682. 5 Claims. (Cl. 209—88.)



1. An apparatus of the character described comprising, a conveyor for cans to be tested, means for receiving cans from the conveyor at a plurality of points, electrically actuated holding means carried by the conveyor for retaining certain cans on the conveyor longer than other cans, and contact means cooperating with the ends of the cans in accordance with the shape thereof for controlling the operation of said electrically actuating holding means.

1,826,590. WINDSHIELD AND CAR HEATING DEVICE. JOHN S. ADAMS and BERT MILLER, Adams, Mass. Filed Jan. 17, 1930. Serial No. 421,473. 2 Claims. (Cl. 299—106.)

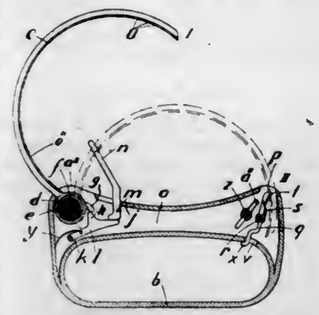


1. A fixed pipe connected to a warm air supply for the purpose described and formed with a plurality of rows of openings which are longitudinally arranged, a member rotatably mounted within the said pipe and formed with a single longitudinal opening designed to register with any one of said rows of perforations, when rotated, for changing the directions the warm air escapes from the perforated pipe, a closure end cap secured to the rotatable member for rotating the same, and spring pin means within said pipe for adjustably retaining the rotatable member in different positions in the perforated pipe, said pin entering openings in the end portion of the fixed pipe.

1,826,591. HAND-CUFF. AUGUST ALMQVIST, Idrottsplatsen, Sweden. Filed Dec. 17, 1928, Serial No. 326,535, and in Sweden Jan. 3, 1928. 2 Claims. (Cl. 70—24.)

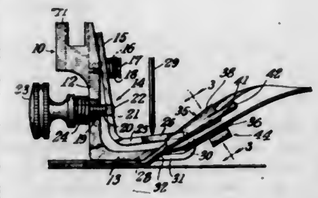
1. An automatic hand cuff, comprising a hollow casing, a shackle pivotally secured to said casing, and entering with its free end an opening in said casing, means for normally moving said shackle to closed position, a spring

operated pawl acting on the shackle pivot to maintain said shackle in open position, wrist operated means for releas-



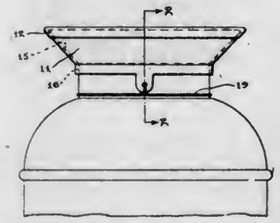
ing said pawl and said shackle to occupy the closing position, and means in said casing for automatically locking said shackle in closing position.

1,826,592. CONVERTIBLE PRESSER FOOT. HARRY AUERBACH, Brooklyn, N. Y., assignor to Abraham Auerbach, Brooklyn, N. Y. Filed June 8, 1931. Serial No. 542,864. 11 Claims. (Cl. 112—134.)



1. An attachment for sewing machines comprising, in combination, a presser foot, and hemming and closing means carried by said presser foot, said hemming means including a plate bent upon itself to form a short leg and having its shorter leg bent reentrantly, and a U-shaped pin carried by the re-entrantly bent portion, one leg of which is equally spaced from said short leg and said reentrantly bent portion.

1,826,593. SANITARY CAP FOR MILK CANS. JOHN AZAMBER, Pittsburg, Kans. Filed Apr. 1, 1929. Serial No. 351,612. 2 Claims. (Cl. 150—52.)

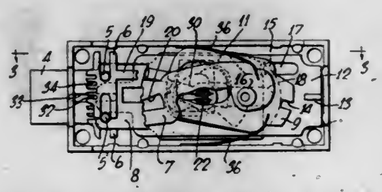


1. A sanitary cover for milk cans of elastic material of the quality of rubber and consisting of upper and lower sheets of the approximate area of the upper and lower faces of the milk can top, the lower sheet being formed with a clearance opening for the mouth of the milk can and extending onto the neck of the latter when the top is in attached position, the cover having a peripheral reinforcing strip extending from the top sheet onto the bottom sheet at the marginal edges thereof.

1,826,594. PROCESS FOR THE PRODUCTION OF POTASSIUM MANGANATE. ALFRED FELIX SEBASTIEN BELLONE, Lyon, France, assignor to Société des Usines Chimiques Rhône-Poulenc, Paris, France. Filed Apr. 28, 1928, Serial No. 273,774, and in France June 29, 1927. 4 Claims. (Cl. 23—58.)

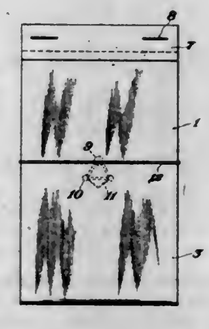
3. The process for the production of potassium manganate which consists in blowing a gas containing oxygen into an excess of melted aqueous cautic potash in which a manganese compound is suspended, and maintaining the concentration of the said melted aqueous caustic potash between 65% and 85% until practically all of the manganese compound is transformed into manganate, so that the reacting mass remains liquid throughout the operation.

1,826,595. INTERCHANGEABLE KEY LOCK. EDGAR M. BENHAM, Norwood, Ohio, assignor to The Mosler Lock Company, Covington, Ky., a Corporation of Ohio. Filed July 30, 1930. Serial No. 471,673. 8 Claims. (Cl. 70—70.)



1. In a lock of the character described, in combination, a single key tube having two key ways, a bolt bar, means for dogging said bolt bar, including three sets of tumblers adjustable separately into non-dogging position by means of appropriate keys operated in said key ways, and means for holding one of said sets of tumblers in non-dogging position after being set up by means of their key, permitting removal of said key without disturbing the set-up position of said set of tumblers.

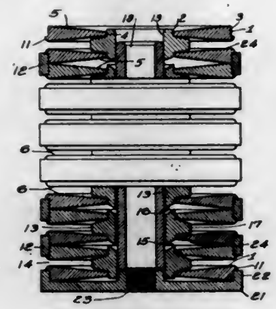
1,826,596. FOLDER. MAURICE F. BERNSON, Canadian, Tex. Filed Mar. 6, 1931. Serial No. 520,687. 1 Claim. (Cl. 281—29.)



A folder including a strip of flexible material bent upon itself to provide a front and a back arranged in parallel relation with respect to each other, a tongue formed with the back and disposed in overlapped relation with respect to the upper edge of the front, clamping members passed

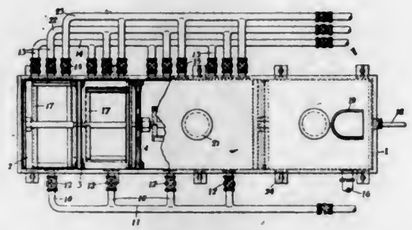
through the back and tongue for holding the latter in operative position and the contents of the folder therein, said back being provided with a pair of openings with slits extending from the openings, an elastic member arranged in the openings through the medium of the slits, said elastic member being adapted to be passed through an opening above the opening first mentioned, for disposal about the back and front for holding the folder in closed position.

1,826,597. SPRING ELEMENT. WINSTON A. BRECHT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 18, 1928. Serial No. 293,542. 8 Claims. (Cl. 267—1.)



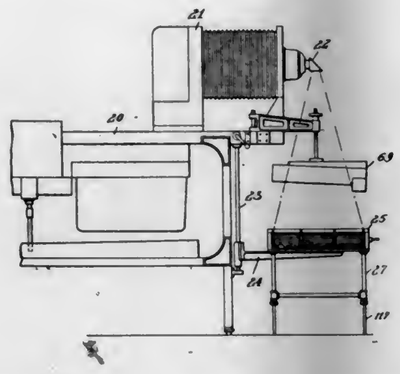
1. A spring system comprising dish shaped resilient members, each member having a central opening and being provided with fingers on its outer and inner edges, all the members being identical in construction, said resilient members being stacked with their convex sides alternately up and down in such manner that the fingers on the adjoining outer and inner edges interlock to constitute a self-sustaining spring system.

1,826,598. METHOD OF MIXING LIQUIDS. ERIC WAKEFIELD BUTLER, St. Philips, Bristol, and JOHN CHRISTOPHER MANN, Birmingham, England. Filed Apr. 16, 1930, Serial No. 444,853, and in Great Britain Jan. 19, 1929. 8 Claims. (Cl. 106—32.)



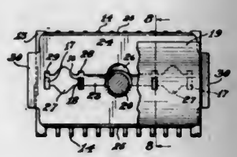
1. In a continuous process of mixing together in the liquid state a tarry substance solid at ordinary temperature and a tarry substance liquid at ordinary temperature which substances are initially at different temperatures but the mixture of which is to be kept within definite temperature limits such as to prevent stringing or frothing of one of the substances, the steps which comprise passing one substance through a series of mixing chambers selectively adding in some at least of said mixing chambers the other substance at a temperature such as would normally cause frothing but in such quantities as will give in each mixing chamber a resultant mixture having a temperature within the said temperature limits, maintaining in all of said mixing chambers a free surface of the liquid substances, and agitating the mixture during its passage through said chambers.

1,826,599. COPY CONVEYER FOR PHOTOGRAPHIC APPARATUS. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 29, 1928. Serial No. 258,015. 16 Claims. (Cl. 88—24.)



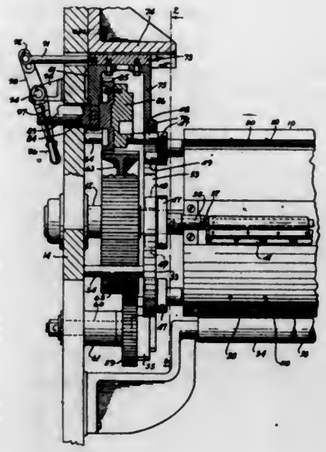
1. In a photographic apparatus, the combination with a camera and lens, of endless conveying mechanism arranged to hold objects to be copied and to carry them horizontally into the field of the lens embodying rotary supports, and supporting elements for said rotary supports on which the latter are bodily adjustable toward and from said lens.

1,826,600. SAFETY RAZOR. JACQUES G. COLEMAN, Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,632. 4 Claims. (Cl. 30—12.)



1. A safety razor comprising blade clamping members, a blade adapted to fit between said members, means to clamp said members on said blade including a screw-threaded spindle on one of said clamping members, said blade having a central longitudinal slot provided with a plurality of transverse enlargements, and positioning studs on one of said clamping members adapted to enter said blade slot in alignment with said enlargements, said spindle passing through said blade slot and said transverse enlargements being of such contour that the blade may be displaced angularly around said spindle, as a fulcrum, with reference to said blade clamping members.

1,826,601. SHEET CUTTING, COLLECTING, AND FOLDING MECHANISM. CURTIS S. CRAFTS, Oak Park, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Dec. 24, 1929. Serial No. 416,229. 29 Claims. (Cl. 270—42.)



1. A sheet collecting and folding mechanism including in combination a multi-way collecting cylinder, a folding device mounted on said cylinder, folding-off rollers, and means for causing the folding device to coact with the folding-off rollers on every passing of the folding-off rollers or only on a plurality of said passings.

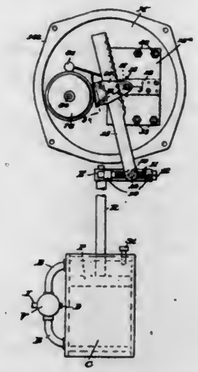
1,826,602. STRIPPER SPINDLE. HARRY DABBS, Little Rock, Ark., assignor of forty-nine one-hundredths to J. R. Whitthorne, Little Rock, Ark. Filed Apr. 26, 1928. Serial No. 273,138. 5 Claims. (Cl. 242—68.)



1. A stripper spindle for stripping cloths from compressed cakes comprising a head having a plurality of tongues secured thereto and extending therefrom in converging relation, said tongues being spaced from each other a distance to clamp by wedge action a cloth inserted therebetween, the adjacent edges of said tongues being smooth and relatively wide to prevent mutilating the cloth, and the outer ends of the tongues being rounded to facilitate insertion of the cloth, the converging relation of the tongues permitting the ready removal of cloth wound thereon.

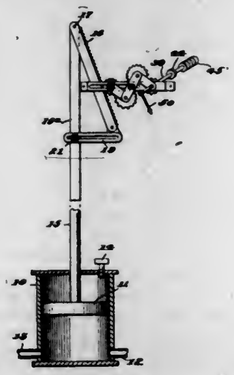
1,826,603. COUNTING AND INDICATING DEVICE. JAMES M. DAYTON, Torrington, Conn. Filed Jan. 21, 1929. Serial No. 334,034. 6 Claims. (Cl. 74—14.)

1. In a device of the class described, a member adapted to be attached to any one of a number of pumps having differing lengths of stroke for the delivery of a calibrated quantity so that the member is moved linearly in proportion to the movement of the pump, a pinion, a rack meshing with said pinion, means connecting said member and said rack so that the rack is moved with said member



to rotate said pinion, and means to adjust said rack angularly with respect to said linear movement.

1,826,604. COMPENSATING DEVICE. JAMES M. DAYTON, Torrington, Conn. Filed Jan. 21, 1929, Serial No. 334,035. Renewed Aug. 28, 1931. 11 Claims. (Cl. 235—91.)



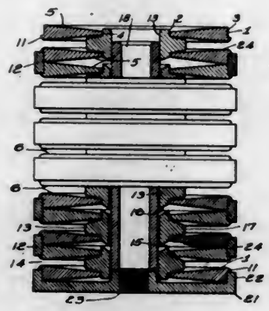
1. In a device of the class described, an element actuated by and in proportion to the movement of a selected one of a number of devices having different lengths of stroke for accomplishing a calibrated standard result, a rack secured to and moved with said element and extending at an angle to the direction of movement of such element, a pinion in mesh with said rack, means to guide said pinion for movement at a right angle to the direction of movement of said element, a counter to indicate the movement of said element, means to hold said rack rigid with respect to said element so that such angle shall have its cosine equal to a fraction in which the numerator is the actual stroke of said first member and the denominator is the length of said rack required to operate said counter to an indication corresponding to said unitary result, and a gear train for constantly connecting said pinion to said counter.

1,826,605. GRASS CATCHER FOR LAWN MOWERS. WILLIAM H. DEES, St. Louis, Mo., assignor to Canvas Products Company, St. Louis, Mo., a Corporation of Missouri. Filed July 7, 1930. Serial No. 465,895. 2 Claims. (Cl. 56—199.)

1. A grass catcher including a bottom wall, and a rigid upstanding lip at the forward edge of said bottom wall

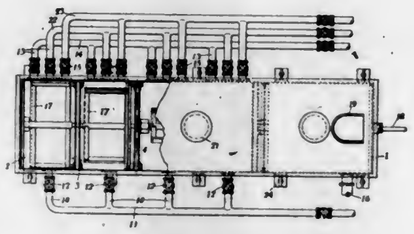
through the back and tongue for holding the latter in operative position and the contents of the folder therein, said back being provided with a pair of openings with slits extending from the openings, an elastic member arranged in the openings through the medium of the slits, said elastic member being adapted to be passed through an opening above the opening first mentioned, for disposal about the back and front for holding the folder in closed position.

1,826,597. SPRING ELEMENT. WINSTON A. BRECHT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 18, 1928. Serial No. 293,542. 8 Claims. (Cl. 267—1.)



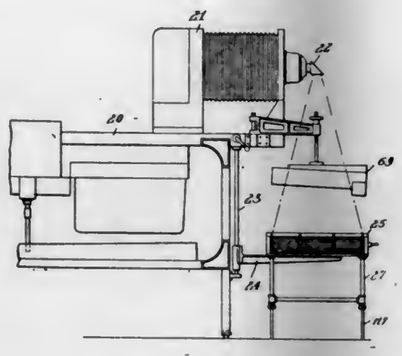
1. A spring system comprising dish shaped resilient members, each member having a central opening and being provided with fingers on its outer and inner edges, all the members being identical in construction, said resilient members being stacked with their convex sides alternately up and down in such manner that the fingers on the adjoining outer and inner edges interlock to constitute a self-sustaining spring system.

1,826,598. METHOD OF MIXING LIQUIDS. ERIC WAKEFIELD BUTLER, St. Philips, Bristol, and JOHN CHRISTOPHER MANN, Birmingham, England. Filed Apr. 16, 1930, Serial No. 444,853, and in Great Britain Jan. 19, 1929. 8 Claims. (Cl. 106—32.)



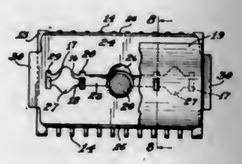
1. In a continuous process of mixing together in the liquid state a tarry substance solid at ordinary temperature and a tarry substance liquid at ordinary temperature which substances are initially at different temperatures but the mixture of which is to be kept within definite temperature limits such as to prevent stringing or frothing of one of the substances, the steps which comprise passing one substance through a series of mixing chambers selectively adding in some at least of said mixing chambers the other substance at a temperature such as would normally cause frothing but in such quantities as will give in each mixing chamber a resultant mixture having a temperature within the said temperature limits, maintaining in all of said mixing chambers a free surface of the liquid substances, and agitating the mixture during its passage through said chambers.

1,826,599. COPY CONVEYER FOR PHOTOGRAPHIC APPARATUS. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 29, 1928. Serial No. 258,015. 16 Claims. (Cl. 88—24.)



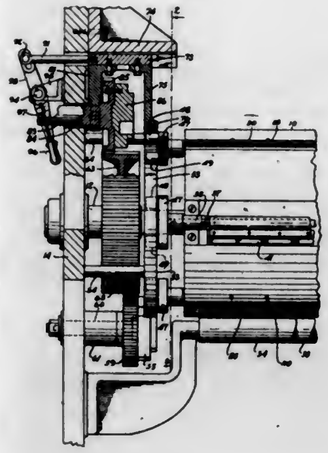
1. In a photographic apparatus, the combination with a camera and lens, of endless conveying mechanism arranged to hold objects to be copied and to carry them horizontally into the field of the lens embodying rotary supports, and supporting elements for said rotary supports on which the latter are bodily adjustable toward and from said lens.

1,826,600. SAFETY RAZOR. JACQUES G. COLEMAN, Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,632. 4 Claims. (Cl. 30—12.)



1. A safety razor comprising blade clamping members, a blade adapted to fit between said members, means to clamp said members on said blade including a screw-threaded spindle on one of said clamping members, said blade having a central longitudinal slot provided with a plurality of transverse enlargements, and positioning studs on one of said clamping members adapted to enter said blade slot in alignment with said enlargements, said spindle passing through said blade slot and said transverse enlargements being of such contour that the blade may be displaced angularly around said spindle, as a fulcrum, with reference to said blade clamping members.

1,826,601. SHEET CUTTING, COLLECTING, AND FOLDING MECHANISM. CURTIS S. CRAFTS, Oak Park, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Dec. 24, 1929. Serial No. 416,229. 29 Claims. (Cl. 270—42.)



1. A sheet collecting and folding mechanism including in combination a multi-way collecting cylinder, a folding device mounted on said cylinder, folding-off rollers, and means for causing the folding device to coact with the folding-off rollers on every passing of the folding-off rollers or only on a plurality of said passings.

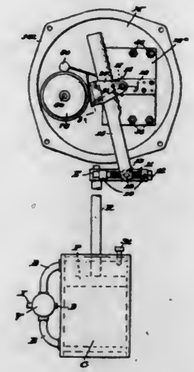
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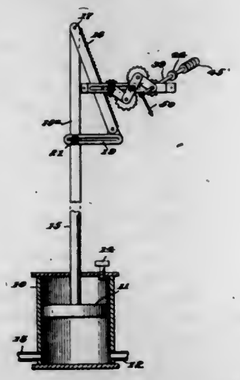
1,826,603. COUNTING AND INDICATING DEVICE. JAMES M. DAYTON, Torrington, Conn. Filed Jan. 21, 1929. Serial No. 334,034. 6 Claims. (Cl. 74—14.)

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to rotate said pinion, and means to adjust said rack angularly with respect to said linear movement.

1,826,604. COMPENSATING DEVICE. JAMES M. DAYTON, Torrington, Conn. Filed Jan. 21, 1929, Serial No. 334,035. Renewed Aug. 28, 1931. 11 Claims. (Cl. 235—91.)

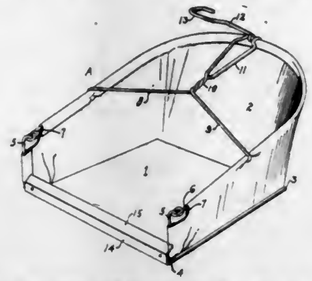


1. In a device of the class described, an element actuated by and in proportion to the movement of a selected one of a number of devices having different lengths of stroke for accomplishing a calibrated standard result, a rack secured to and moved with said element and extending at an angle to the direction of movement of such element, a pinion in mesh with said rack, means to guide said pinion for movement at a right angle to the direction of movement of said element, a counter to indicate the movement of said element, means to hold said rack rigid with respect to said element so that such angle shall have its cosine equal to a fraction in which the numerator is the actual stroke of said first member and the denominator is the length of said rack required to operate said counter to an indication corresponding to said unitary result, and a gear train for constantly connecting said pinion to said counter.

1,826,605. GRASS CATCHER FOR LAWN MOWERS. WILLIAM H. DEES, St. Louis, Mo., assignor to Canvas Products Company, St. Louis, Mo., a Corporation of Missouri. Filed July 7, 1930. Serial No. 465,895. 2 Claims. (Cl. 56—199.)

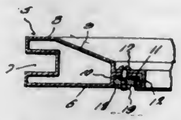
1. A grass catcher including a bottom wall, and a rigid upstanding lip at the forward edge of said bottom wall

adapted to prevent accidental discharge of grass from the grass catcher, said lip being extended transversely of said bottom wall from side to side thereof, and including a



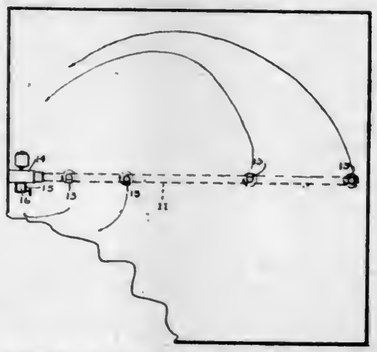
substantially vertical lower portion and an upwardly and rearwardly inclined upper portion, the inclination of said inclined upper portion of the lip being such as to prevent accumulation of grass thereon.

1,826,606. WINDOW SCREEN. JOSEPH A. DELANEY, Jersey City, N. J. Filed Mar. 31, 1931. Serial No. 526,735. 1 Claim. (Cl. 156—14.)



A window screen comprising a metallic frame, each member being formed of a single strip of material bent to form a pair of side parts and an edge part having a channel therein, the inner edge of one of the side parts being bent to form a channel and the opposite side part having its inner portion bent obliquely towards the other side part and then at an angle to form a wall which is in alinement with the outer wall of the second mentioned channel, the parts being then bent to contact the bight part of the second mentioned channel and then bent into hooked shape over the inner wall of said channel to connect the edges of the strip together, a screen sheet fitting over the frame with its edges entering the inner channel of the members thereof, strips in said inner channels for holding the edges of the screen sheet therein and fasteners passing through the strips, the parts of the screen sheet located in the channels, the bights of said channels and the aforementioned part which contact said bight parts.

1,826,607. METHOD AND APPARATUS FOR PROMOTING PLANT GROWTH IN GREENHOUSES. MICHAEL A. EIBEN, Cleveland, Ohio. Filed June 8, 1928. Serial No. 283,752. 6 Claims. (Cl. 47—17.)

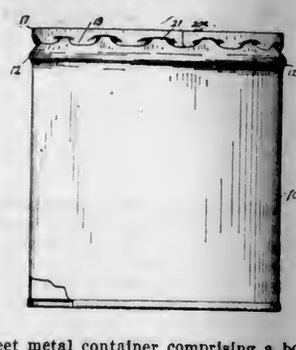


1. A method of promoting the plant growth in a greenhouse comprising, ejecting air under pressure at the mid-portion and in the upper region of the greenhouse, and alternately directing the air toward opposite ends of the greenhouse.

1,826,608. TREATMENT OF CELLULOSE ACETATE OR PRODUCTS MADE THEREWITH. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Aug. 23, 1926, Serial No. 131,104, and in Great Britain Oct. 29, 1925. 15 Claims. (Cl. 8—20.)

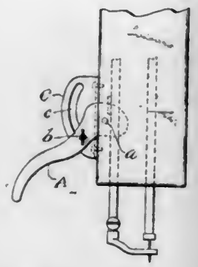
1. Process for the production of effects on fabrics comprising cellulose acetate, comprising locally applying to the fabrics substances which are mutually soluble with cellulose acetate and thereafter subjecting the fabrics to the action of delustring agents.

1,826,609. SHEET METAL CONTAINER. JAMES E. FITZGERALD, Youngstown, Ohio, assignor to The Niles Steel Products Company, Niles, Ohio, a Corporation of Ohio. Filed Aug. 19, 1926. Serial No. 130,215. 5 Claims. (Cl. 220—61.)



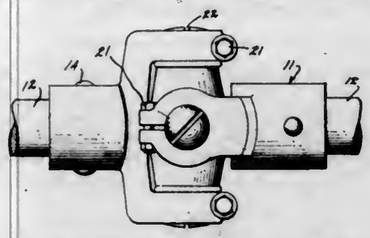
4. A sheet metal container comprising a body having a closed hollow bead at the top, closing and sealing means therefor including a cover extending over said bead, and including a continuous downwardly extending flange surrounding the bead and crimped inwardly at intervals against the underside of the bead, leaving intervening uncrimped portions.

1,826,610. MENDER ATTACHMENT FOR SEWING MACHINES. MARGARET M. FONES, New York, N. Y. Filed Jan. 5, 1929. Serial No. 330,558. 2 Claims. (Cl. 42—237.)



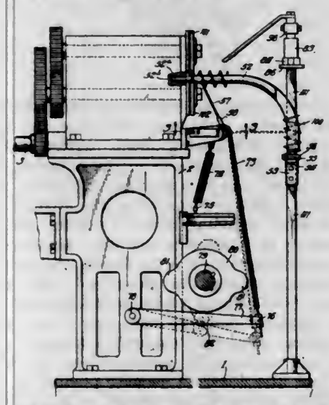
1. In a sewing machine, a head, a presser foot, a presser foot lifting lever, a member secured to the head adjacent the presser foot lifting lever, and means carried by said lever and having a yieldable, frictional, sliding engagement with said member, whereby said lever may be manipulated in the usual manner to raise and lower the presser foot and will be automatically maintained in any position in which it is put.

1,826,611. UNIVERSAL JOINT. CLAUDE E. FURGASON, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed May 17, 1926. Serial No. 109,662. 9 Claims. (Cl. 64—102.)



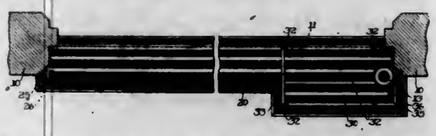
1. In a universal joint, a body, a yoke, said body and yoke having abutting surfaces for taking up the thrust upon the joint, means for lubricating said abutting surfaces, bearing pins adjustably carried by said yoke journaled in said body and means operable upon adjustment of the said bearing pins to regulate the flow of lubricant to the said abutting surfaces.

1,826,612. WIREWORKING MECHANISM. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Original application filed Feb. 26, 1926, Serial No. 90,892. Divided and this application filed Mar. 23, 1929. Serial No. 349,316. 8 Claims. (Cl. 153—65.)



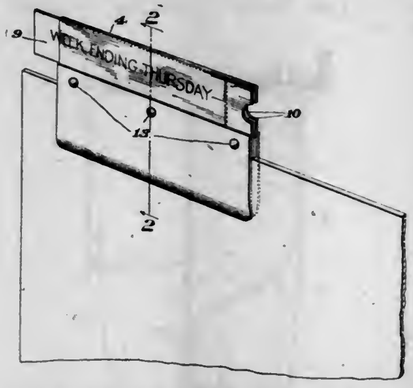
1. In combination, a spring coiler, and an elbow-shaped guide bar around which the springs are formed, said guide bar having a substantially horizontal upper end portion mounted in said coiler and a substantially vertical free lower end portion.

1,826,613. THRESHOLD. FORREST C. GARRISON, Chicago, Ill., assignor to Oscar C. Rixson Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 28, 1930. Serial No. 446,435. 11 Claims. (Cl. 20—64.)



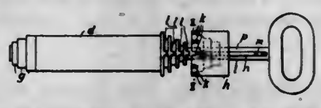
1. A threshold for a swinging door which is equipped with a door check mounted in a recess in the floor beneath the threshold comprising, in combination, a main section consisting of an integral strip of metal, arch shaped in cross section, having a flat top face and beveled longitudinal side edges, said strip having formed in its outer face a series of grooves or ribs symmetrically spaced apart laterally of said strip and extending longitudinally throughout the length thereof, a second section shorter than said main section and overlying the door check and constituting a cover therefor, said second section comprising an integral plate of cross section shape corresponding to but of greater width than said main section, said second section having formed in its outer face longitudinally extending grooves or ribs spaced to match those in the main section, the two sections being arranged in end to end abutting relation with their beveled edges at one side of the threshold in alinement, the opposite side edge of the second section thus projecting laterally beyond the adjacent side edge of the main section, the corners of both sections at their abutting ends being mitered on lines converging toward the second section, and a piece of edging stock shaped to match in external appearance the beveled edge portions of said strip and plate, said piece being located along the end portion of the second section which projects laterally beyond the main section and said piece being mitered at its ends to complement and interfit with the aforesaid mitered corners of said strip and plate.

1,826,614. INDEX TAB. LELAND S. GRAFF, Arlington, and ROBERT A. STEWART, Watertown, Mass., assignors to George B. Graff Company, Cambridge, Mass., a Corporation of Massachusetts. Filed June 11, 1931. Serial No. 543,570. 3 Claims. (Cl. 40—23.)



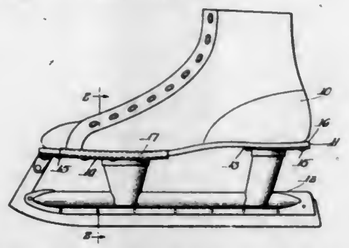
1. An index tab comprising an upper index portion consisting of a sheet of transparent material centrally folded upon itself and with its ends spaced apart by a narrow strip inserted therebetween, and a lower clip portion consisting of two parallel flat sheets of springy material with their lower edges turned toward each other and their upper edges spaced apart by the insertion therebetween of the lower part of the index portion, the whole being held together by fastening means through the parts thus overlapping.

1,826,615. KEY FOR DIFFERENT LOCKS. ELI HANSEN and IVAN PODERÅJ, Copenhagen, Denmark. Filed Aug. 5, 1929, Serial No. 383,469, and in Germany June 18, 1929. 6 Claims. (Cl. 70—9.)



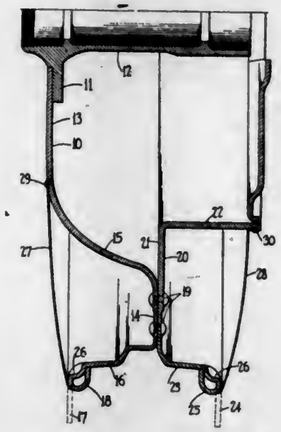
1. A lock key consisting of a shank having a handle at one end, a nested series of independently revoluble sleeves concentrically mounted to revolve on the shank and terminating forwardly in stepped relation, bits each extending laterally from the forward end of a respective sleeve, and means on the shank adjacent the handle movable longitudinally of the handle to engage the rear ends of said sleeves and hold them in adjusted positions.

1,826,616. SHOE CONSTRUCTION. ALFRED JOHNSON, Chicago, Ill. Filed Mar. 31, 1930. Serial No. 440,191. 3 Claims. (Cl. 208—183.)



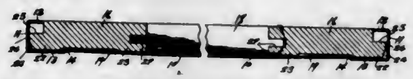
1. The combination of a shoe having a sole and a skate fastened to said sole, of a clip fastened to said sole about the outer edge thereof for protecting that part of the sole which extends outwardly from the upper of the shoe, said clip being channel-shaped and having spaced legs between which the shoe sole extends, and indentations provided in said clip for fastening it securely to a shoe sole.

1,826,617. VEHICLE WHEEL. GERHARD C. R. KUIPER, Indianapolis, Ind., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 7, 1929. Serial No. 405,305. 1 Claim. (Cl. 301—6.)



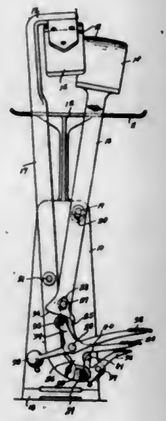
A vehicle wheel comprising, in combination, a main body in the form of a web whose inner radial portion lies in a plane spaced from the mid-plane of the wheel, said web being bent diagonally axially inwardly and then radially outwardly beyond said inner radial portion, said web terminating in a relatively thin gauge section constituting an annular portion of a rim, a second annular rim part secured to said radially outwardly extending portion of said main body and having an axially extending flange at its inner radial extremity, and fairings connecting the extremities of said rim to the inner radial portion of the main body and the axial flange of said second rim section respectively, whereby to give said wheel a stream line effect.

1,826,618. TABLE TOP. OAK LANDAW, Nappanee, Ind. Filed Mar. 25, 1929. Serial No. 349,799. 10 Claims. (Cl. 45—31.)



1. The combination with a sheet metal table top having a flanged rim and a downwardly directed ridge formed therein and spaced from the outer edges thereof, of a frame mounted in said flanged rim and comprising side bars and end bars, said side and end bars being longitudinally grooved whereby they may have bearing contact with said table top on opposite sides of said ridge.

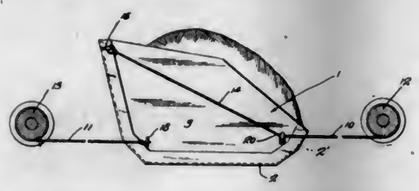
1,826,619. GARMENT PRESS. JAMES C. LEDBETTER, New York, N. Y., assignor, by mesne assignments, to the Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 5, 1924, Serial No. 730,131. Renewed Nov. 21, 1928. 26 Claims. (Cl. 68—9.)



1. A press comprising in combination, upright standards swingable in a frame, press jaws carried on the upper ends of the standards, jaw closing means carried in the frame cooperating with the lower ends of the swinging standards to move the press jaws into pressing alignment, and pressure producing means for squeezing the aligned jaws into pressing relation including means to force one standard to move slightly in relation to the other standard.

24. A press comprising a press frame, cooperating press jaws, an upright having its upper end attached to one jaw, a pin and slot connection below the jaws by which the upright is pivotally mounted upon the frame and which permits vertical movement thereof, a member pivoted to the frame and operatively connected to the upright to swing the jaw, and a second member pivoted to the frame and operatively engaging the upright to move the upright vertically to produce jaw compression and hold the jaws together.

1,826,620. MUD SLED. GWYNN L. LILLARD, Memphis, Tenn., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 15, 1930. Serial No. 428,616. 2 Claims. (Cl. 37—115.)



2. In combination, a sled bucket of suitable construction and having side walls, a haul-in line having branches extending along the side walls, connections between said branches and the upper rear corners of the bucket, a haul-back line having branches, connections between the branches of the haul-back line and the lower rear corners of the bucket, and hooks secured to the bucket at its front lower corners and engageable with the branches of the haul-in line to cause the latter to apply its pull along a line close to the base of the bucket.

1,826,621. METHOD OF MAKING ANTHRAQUINONE AND LIKE PRODUCTS. ELLIS A. LLOYD and VICTOR P. GERSHON, New York, N. Y., assignors to William M. GROSVENOR, New York, N. Y. Filed Sept. 13, 1920. Serial No. 409,811. 10 Claims. (Cl. 260—37.)

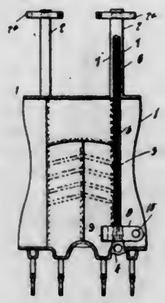
8. The process of making an anthraquinone body which comprises heating an o-aroylbenzoic-aluminum chloride compound with strong sulfuric acid.

1,826,622. METHOD OF ROLLING. PAUL F. LONGNECKER, McKeesport, Pa., assignor to Firth-Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Oct. 12, 1929. Serial No. 399,257. 15 Claims. (Cl. 80—60.)



15. The method of forming an ingot substantially free from reentrant surfaces, comprising casting a cruciform ingot, applying rolling pressure to the ingot in a direction tending to reduce the cross section thereof and to close the grooves, widening the grooves before laps have formed, and continuing the rolling.

1,826,623. FASTENER FOR INTIMATE BODY GARMENTS. MARY T. LUCAS, Whitestone, N. Y. Filed Sept. 19, 1929. Serial No. 393,722. 1 Claim. (Cl. 2—38.)



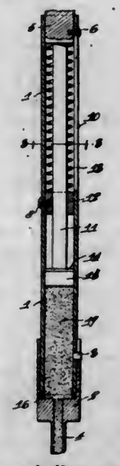
A corset comprising a body portion, shoulder straps secured to the upper edge of said body portion, said body portion being open on a line with one of said shoulder straps and the opening extending into the strap to provide for spreading the garment when unfastened to permit placing the garment on the person over the head or by stepping into it, interlocking members secured to the garment and strap at the opposite edges of said opening, said members being arranged in staggered relation, cam means slidably mounted on said interlocking members for actuating them into and out of locking engagement, a strap secured at one of its ends to the body portion adjacent to its lower edge, detachable fastening members secured to the body portion and the free end of the strap to secure the strap over the cam means when in position with the interlocking members engaged.

1,826,624. MEANS FOR TURNING SHEETS OF PAPER AND THE LIKE IN FOLDING, RULING, AND OTHER MACHINES. HAROLD MASON, Hyde, England, assignor to Spencer & Cook, Limited, Stalybridge, England. Filed June 16, 1930, Serial No. 461,288, and in Great Britain July 8, 1929. 3 Claims. (Cl. 270—81.)



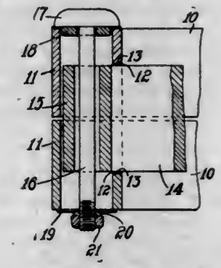
1. In machines for folding, ruling or otherwise operating upon sheets of paper or the like, the combination with means for conveying a sheet from one to the other of a pair of folding, ruling or other devices, of a gripper adapted to receive and grip a sheet after same has issued from the first of said devices and to be then rotated to turn the sheet through a desired angle and to then release the sheet and return to its original position.

1,826,625. MACHINE TOOL. CHARLES E. MASTERS, Perry, Mo. Filed June 9, 1930. Serial No. 459,954. 5 Claims. (Cl. 255—61.)



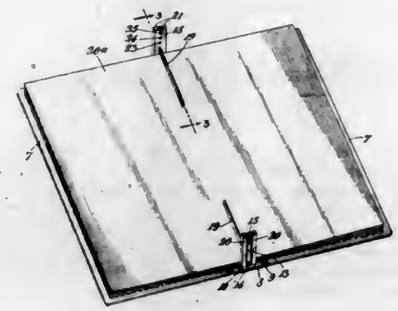
1. In combination, a hollow member, a finely divided abrasive in said hollow member, means for pressing said abrasive toward an extremity of said hollow member, and means for turning said hollow member whereby said abrasive is caused to cut a hole through work material.

1,826,626. BUMPER CONSTRUCTION. HARRY R. MCMAHON, Coraopolis, Pa., assignor to Standard Steel Spring Company, a Corporation of Pennsylvania. Filed Nov. 10, 1930, Serial No. 494,536. Renewed June 10, 1931. 20 Claims. (Cl. 293—55.)



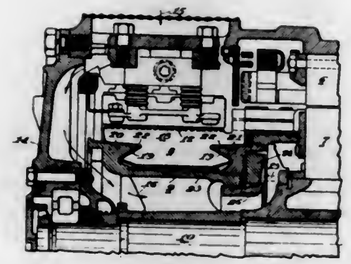
1. In a bumper, a plurality of impact bars having superposed hollow terminals and a rear bar centrally disposed relatively thereto and having its terminals within the hollow terminals of the impact bars.

1,826,627. LOOSE LEAF BINDER. MAX MEYERSON, New York, N. Y. Filed Sept. 12, 1929. Serial No. 392,024. 9 Claims. (Cl. 129—40.)



9. In a loose leaf binder, the combination with book covers and a back strip, of posts mounted upon said back strip disposed adjacent the ends of said back strip, a pair of separately formed members longitudinally slidable one upon each of said posts, each of said members having a clamping arm projecting therefrom in the direction of the other post adapted for engaging leaves of paper intended to be bound, and spring latch mechanism co-operative between said posts and said slidable members for detachably holding said slidable members in position upon said posts.

1,826,628. DISK-SPRING COMMUTATOR. GEORGE A. MOORE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 10, 1929. Serial No. 384,947. 28 Claims. (Cl. 171—321.)

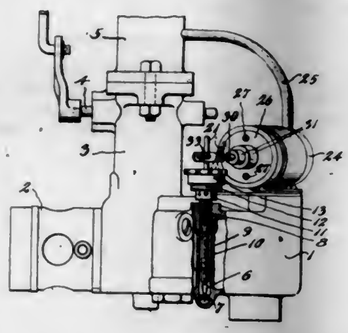


1. A commutator cylinder comprising a plurality of commutator bars subject to seasoning yielding and having V-grooves in their ends, two annular V-members for retaining the ends of said bars and means for drawing together said two V-members comprising a disk-spring applying a sufficient substantially uniform pressure around its periphery to cause slow yielding of the bars on seasoning and having a deflection at least commensurate with said yielding of the commutator on seasoning.

1,826,629. MANUFACTURE OF BLEACHING POWDER. JOSEPH WILLIAM MOORE, Runcorn, Cheshire, and ALFRED LAMBLE, Liverpool, England, assignors to Imperial Chemical Industries Limited, London, England, a British Company. Filed Apr. 19, 1929, Serial No. 356,594, and in Great Britain June 9, 1928. 3 Claims. (Cl. 23—86.)

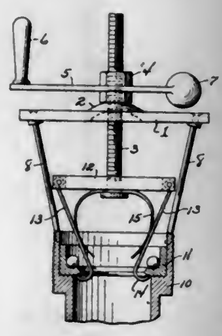
2. A one-stage process for producing substantially anhydrous bleaching powder which consists in passing dilute chlorine over agitated lime material, and keeping the chlorine so dilute, the moisture content of the inlet gas so low and the temperature such that substantially all free moisture is removed without decomposition of the bleaching powder formed during the reaction.

1,826,630. FUEL CONTROL FOR INTERNAL COMBUSTION ENGINES. MARCUS D. MOORE, Bloomington, Ind. Filed Aug. 17, 1929. Serial No. 386,724. 11 Claims. (Cl. 261—69.)



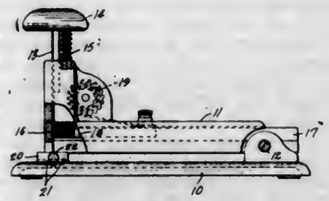
1. In fuel control apparatus for internal combustion engines, the combination, with a carburetor having a fuel supply control needle, of a cam cooperating with the needle, and means actuated by variations of vacuum acting upon the carburetor for variably shifting said cam for proportionally shifting said needle, the cam resting directly against the end of the needle and actuating the needle by relative movement of the caming face against the engaged end of the needle.

1,826,631. BEARING PULLER. CHARLES G. PAYNE, Glasgow, Ky. Filed Mar. 7, 1930. Serial No. 434,070. 1 Claim. (Cl. 29—88.2.)



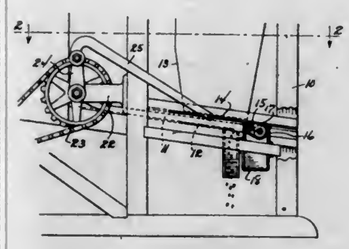
A device of the class described comprising a supporting plate having a substantially spherical projection on its upper face at the center of the plate and said plate and projection having a hole therein, a screw shaft loosely passing through the hole, a nut threaded on the shaft and resting against the projection, a handle connected with the nut, legs depending from the plate and having their extremities bent into right angle form, a cross piece supported by the lower end of the screw shaft, an arm hinged to each end of the cross piece and having a hook shaped outer end and a U-shaped spring carried by the lower end of the shaft and having its limbs engaging the arms for pressing the arms outwardly.

1,826,632. ROTARY ANVIL FOR STAPLING MACHINES. ROY E. PETERSON, East Norwalk, Conn., assignor to The E. H. Hotchkiss Company, Norwalk, Conn., a Corporation of Connecticut. Filed June 12, 1929. Serial No. 370,342. 13 Claims. (Cl. 1—3.)



1. In a stapling machine, a base, a housing pivoted to the base, a movable plunger in the housing, means for operating the plunger, a rotatable anvil in said base having a plurality of different clinching surfaces located about its longitudinal axis to cooperate with the plunger in setting staples, and means to mount said anvil with its longitudinal axis extending transversely of the base and to rotate about said longitudinal axis.

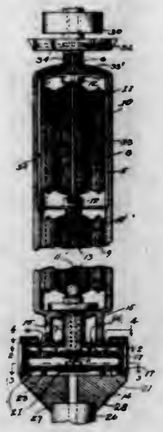
1,826,633. SHUTTLE FOR SEPARATORS. JAMES C. PETTIT, Blackstone, Va., assignor of one-third to Claude Mullinax and one-third to Benham Morriss, Blackstone, Va. Filed Nov. 8, 1929. Serial No. 405,798. 3 Claims. (Cl. 209—29.)



3. In a conveyor of the character described, an inclined chute having a foraminated portion in the bottom thereof, a suction casing arranged above said portion, a reciprocatory screen frame mounted for longitudinal movement upon the chute and spaced from the bottom thereof, a transverse shaft mounted for rotation, crank arms carried by the ends of said shaft, pins projecting laterally from the sides of said screen frame, operating rods terminally connected with said crank arms and pins for reciprocating said frame across the bottom of said suction casing, whereby the relatively light material is held against the screen by the suction created within the casing, a casing arranged transversely of the chute and having an outlet spout, a brush journaled in the latter mentioned casing for removing the material from the screen as the latter is shifted in one direction, a conveyor operating in the second mentioned casing for removing the material therefrom in the direction of the spout, and means for simultaneously operating the brush and conveyor.

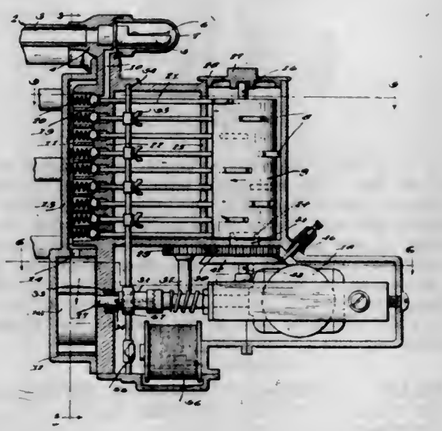
1,826,634. WELL DRILLING APPARATUS. HASKEL A. PIPPIN, Okmulgee, Okla. Filed Dec. 16, 1930. Serial No. 502,760. 4 Claims. (Cl. 255—4.)

1. A well drilling apparatus comprising a casing, two motors in the casing having armatures rotatable in opposite directions, shafts connected to said armatures, respectively, and rotatable therewith, one of said shafts extending through the entire length of the casing and through the other shaft, a turntable mounted on the



casing, connections between each shaft and the turntable tending to rotate the latter in the same direction, and a drill carried by the turntable.

1,826,635. MUSICAL SIGNALING DEVICE. LOUIS A. PAESTEK, Seattle, Wash. Filed June 6, 1930. Serial No. 459,497. 9 Claims. (Cl. 84—86.)

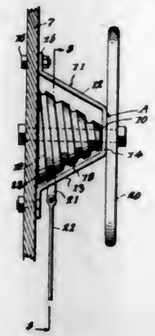


3. A signaling device comprising a plurality of horns, a pump to supply air for the blowing of the horns said pump having driving means for operating it, valve means to control the flow of air to the respective trumpets, a record in driving connection with said driving means for actuating the valve means simultaneously with the pump for the playing of a melody, and means for simultaneously disconnecting the record from the driving means and actuating predetermined ones of the valve means irrespective of the record for the sounding of a chord.

1,826,636. RAILWAY CAR HAND BRAKE. WILLIAM D. PRICE, Prince Georges County, Md. Filed Sept. 9, 1930. Serial No. 480,763. 6 Claims. (Cl. 74—112.)

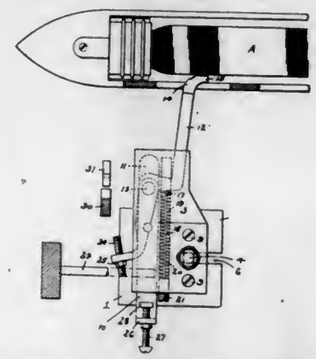
1. In a hand brake mechanism, a rotatable brake shaft, a conical drum rotatable with the brake shaft provided

with a spiral groove on its periphery, an inclined leg arranged in close proximity to the drum and stationary



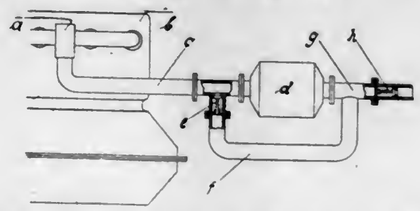
relative thereto, and a yoke slidable on the inclined plane having a portion thereof received in said groove.

1,826,637. FEELER. FRANK F. SCHMANSKA, Burlington, Vt. Filed Sept. 20, 1930. Serial No. 483,314. 3 Claims. (Cl. 139—242.)



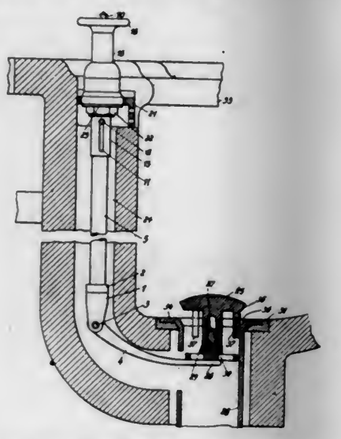
1. In a loom, including a stand, the transfer hooks and the arm on the transferrer lever, a slide on the stand, a detector lever pivoted to the slide, spring means for holding one end of the lever against the yarn on the bobbin, a part on the tail of the lever for moving one hook into engagement with the other when the lever is moved by an empty bobbin and a part on the slide engaged by the arm on the transferrer lever for moving the slide and lever out of the path of the incoming bobbin.

1,826,638. INTERNAL COMBUSTION ENGINE AND METHOD OF WORKING THE SAME. WALTER SCHWERDTFEGER, Unterturkheim, Wurttemberg, Germany, assignor to Daimler-Motoren-Gesellschaft, Unterturkheim, Germany. Filed Aug. 30, 1921, Serial No. 496,920½, and in Germany Nov. 14, 1919. Renewed June 6, 1928. 2 Claims. (Cl. 123—119.)



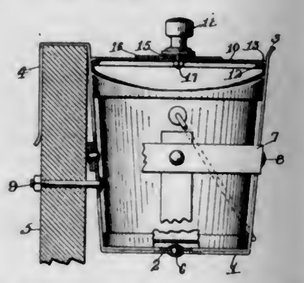
1. In combination with an internal combustion engine, a blower having its delivery pipe connected to all inlet valves of the engine for supplying a gaseous combustion medium under compression to said engine, said blower having rotary impellers with clearances between the impellers and also between the impellers and the blower casing, driving connections between said blower and the engine to cause said blower to be rotated at a speed proportional to the speed of rotation of the engine at any time, and the stroke volume of said blower being so much greater than that of the engine that at all numbers of revolutions of the engine throughout the interval between the maximum and minimum speeds, the output of the blower will be sufficient to maintain the charge delivered to the engine under a precompression pressure not lower than the highest permissible pre-compression pressure under which the engine is designed to operate and automatic pressure regulating means comprising a regulating valve associated with said blower to vary the delivery thereof and movable means operatively connected with said valve, and subjected on the one side to the atmosphere and on the other side to said pre-compression pressure thereby adjusting said regulating valve so as to maintain the pressure difference between the atmosphere and the pre-compression pressure constant.

1,826,639. VALVE LIFTER FOR BATHS, LAVATORIES, AND THE LIKE. ROLF STÖHR, Berlin-Wilmersdorf, Germany. Filed Oct. 12, 1929, Serial No. 399,276, and in Germany Oct. 18, 1928. 4 Claims. (Cl. 4—199.)



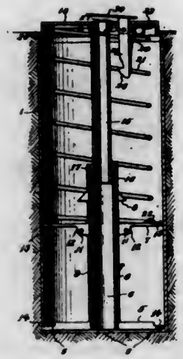
1. A valve lifter for baths, lavatories and the like, consisting of a lifting rod arranged within the overflow canal, a lifting arm pivotally linked to the bottom end of said lifting rod and susceptible of being fixed to the said rod in an angular position by means of a stop member displaceable in the lifting rod.

1,826,640. ARTICLE HOLDER. EARL G. STURGIS, Huron, S. Dak. Filed Sept. 11, 1929. Serial No. 391,851. 1 Claim. (Cl. 248—20.)



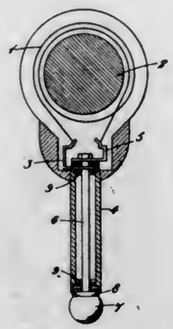
An article holder including U-shaped members arranged at right angles to each other and connected at their intermediate portions, one of said U-shaped members having its ends extending above the ends of the other member, whereby to receive an article therebetween, a cover for the article, a transverse plate arranged over the top of the article and having centrally disposed downturned tongues at the ends thereof with spaced tongues at opposite sides of the central tongues adapted to embrace the longer arm of one of said U-shaped members.

1,826,641. GOLF BALL EJECTOR. GEORGE W. WADDELL, Lapaz, Ind. Filed May 15, 1930. Serial No. 452,701. 7 Claims. (Cl. 273—34.)



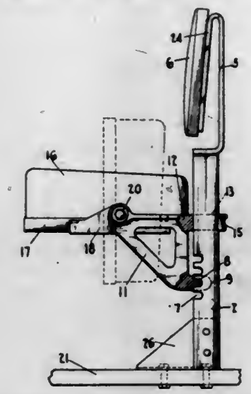
1. A golf cup comprising a hollow body open at its top and adapted to be set into the ground, a flag staff holder extending vertically in said body, a ball support slidable in the body from a retracted to an elevated position, a latch carried by said support to engage the flag staff holder and releasably retain said support in a retracted position and permit a ball to drop into the cup, and resilient means to project the support upwardly and move a ball into position for removal from the cup when the latch is released.

1,826,642. INDUCTANCE COIL. HORACE WILLIAM ADEY, London, England. Filed Oct. 3, 1929, Serial No. 397,091, and in Great Britain Nov. 3, 1928. 3 Claims. (Cl. 171—242.)



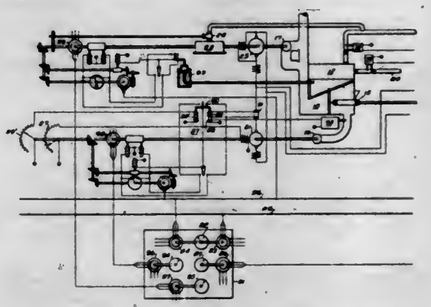
1. An inductance coil for use with radio receiving and transmitting apparatus, comprising a coil holder of insulating material, a metal tubular member secured to said coil holder, a metal rod arranged coaxially with said tubular member, means for insulating said rod from the tubular member, metal strips arranged within the coil holder and respectively secured to the tubular member and the metal rod, and a coil having its terminals respectively connected to the tubular member and to the said metal rod through said metal strips.

1,826,643. FOLDING ADJUSTABLE LOCOMOTIVE CAB SEAT. HARLEY E. ANDERSON, Kansas City, Mo., assignor to Gustin-Bacon Manufacturing Co., Kansas City, Mo., a Corporation of Missouri. Filed Feb. 1, 1930. Serial No. 425,097. 5 Claims. (Cl. 155—82.)



2. A cab seat for locomotives, comprising an inverted U-shaped frame, means to connect same to the floor of the cab and spaced from the wall of the cab, there being a plurality of notches on each upright arm of said U, a pair of triangular shaped seat supports, a collar on each seat support which slides on said upright arms, a rib at the lower end of said seat support to engage said notches.

1,826,644. COMBUSTION CONTROL. MERRILL G. BENJAMIN, Lakewood, Ohio. Filed Oct. 4, 1929. Serial No. 397,433. 7 Claims. (Cl. 236—14.)

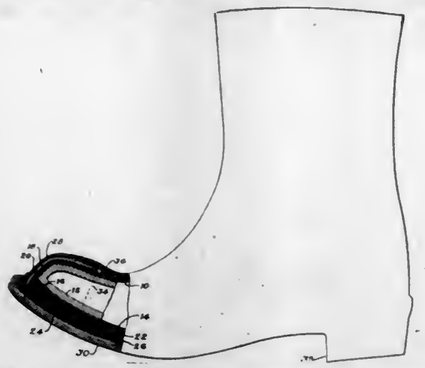


1. A control system for a plurality of boiler and furnace auxiliaries including forced-draft fans and stokers comprising a master steam regulator responsive to the pressure in said boiler, for directly controlling the speeds of said auxiliaries, an induced-draft fan, a turbine for driving said fan, means actuated by the master regulator for controlling the admission of steam from the boiler to said turbine, motors for driving said auxiliaries and a generator driven by said turbine for supplying electrical energy to said motors.

1,826,645. SHOE PAC. JOHN U. BERGQUIST, Hudson, Mass., assignor to Arthur A. Williams, Holliston, Mass. Filed Mar. 1, 1930. Serial No. 432,473. 4 Claims. (Cl. 36—4.)

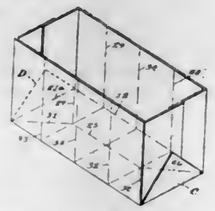
1. A rubber shoe comprising inner and outer portions extending about the toe of the shoe, a metallic box interposed therebetween and effectually bonded thereto in the vulcanizing operation, a separate supporting plate for the lower edges of the box, and inner and outer sole

portions assembled on opposite sides of the supporting plate and effectually bonded to the plate and to the



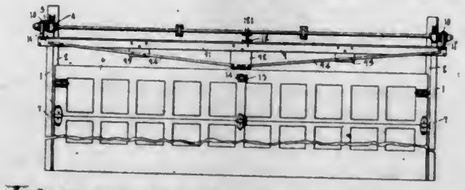
inner and outer toe portions during the vulcanizing operation.

1,826,646. PAPER BAG. ISABELLE B. BLAKE, New York, N. Y. Filed May 21, 1930. Serial No. 454,393. 3 Claims. (Cl. 229—61.)



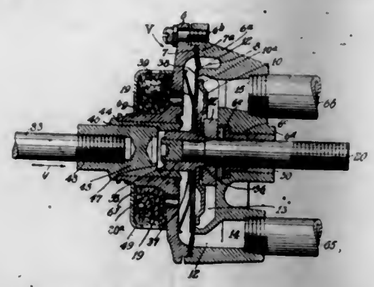
1. A paper bag having a rectangular bottom whose length is greater than its width and having diagonal fold lines extending angularly from its corners and a fold line connecting the intersections of said diagonal fold lines, the arrangement of fold lines permitting collapsing of said bottom between the sides of the bag when the ends of the latter are folded in juxtaposition.

1,826,647. OVERHEAD DOOR STRUCTURE. HERBERT CADY BLODGETT, Hartford City, Ind., assignor to Overhead Door Corporation, Hartford City, Ind. Filed Sept. 13, 1930. Serial No. 481,714. 6 Claims. (Cl. 20—20.)



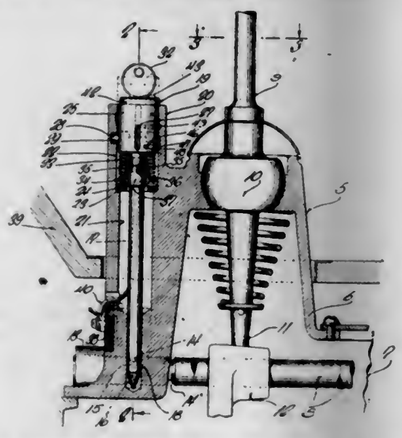
1. In an overhead door structure, vertical front tracks with supports therefor, horizontal upper side tracks having supporting angle bars therefor, intermediate curved tracks between said vertical and horizontal tracks at each side, a flexible door having rollers to travel in the said side tracks, a girder disposed transversely between the said horizontal side tracks and beneath the same and extending beyond the supporting angle bars at each side, hanger bolts through the horizontal limbs of the angle bar for supporting the opposite ends of the said girder, spacer sleeves on the said bolts to locate the same effectively as to elevation beneath the tracks, an intermediate track made up of opposed channel bars parallel with the horizontal side track and having a down-turned forward end the top surface of which constitutes a trackway, bolts through the lower limbs of the said channels and the top flange of the said girder, and braces for supporting the inner end of said intermediate track.

1,826,648. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Aug. 3, 1929. Serial No. 383,221. 10 Claims. (Cl. 121—41.)



1. In valve mechanism for controlling power actuators, the combination with a valve casing, of a diaphragm valve, a diaphragm engaging seat in said casing providing, when the diaphragm is seated, two compartments, one of which is provided with means for connecting it with a source of suction and the other of which is provided with means for connecting it with a power actuator, said diaphragm being provided with apertures for connecting said latter chamber with the atmosphere, a disc valve in said latter chamber having sealing portions for seating upon the diaphragm and disconnecting said chamber from the atmosphere, a valve actuating part connected with said diaphragm and disc valve, an initial resistance spring interposed between said valve actuating part and a part connected with the casing and holding the valve mechanism in released position, said valve casing and said valve actuating part being connected the one with a physically operable part and the other with brake mechanism of the vehicle, whereby a movement of the physically operable part will be transmitted through said spring to said brake mechanism to effect a partial operation of the same before operating the valve mechanism.

1,826,649. LOCK. STEPHEN F. BRIGGS, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 14, 1926. Serial No. 101,980. 17 Claims. (Cl. 70—127.)



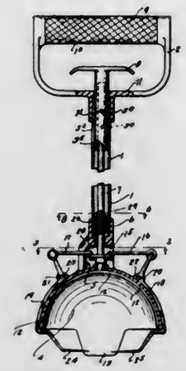
1. A lock device, comprising locking means, an actuating member for the locking means and having a key receiving opening, and means carried by the actuating member and preventing the locking of the first means when a key is in the actuating member opening.

1,826,650. WELL FISHING TOOL. ERNEST J. CARSCALLEN, Moball, N. Dak. Filed Nov. 22, 1930. Serial No. 497,545. 4 Claims. (Cl. 294—104.)



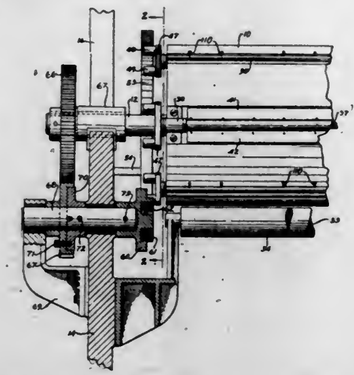
1. A fishing tool comprising a shank having spaced wings and a latch lever pivotally carried by one wing and adapted to be moved into engagement with the other wing for the support of a device being raised, and a resilient arm carried by the tool and freely engageable with the lever for positively moving the latch lever to its device supporting position.

1,826,651. ICE CREAM SCOOP. JOLLIETTE E. CHISHOLM, Portland, Oreg. Filed Sept. 11, 1930. Serial No. 481,237. 7 Claims. (Cl. 107—48.)



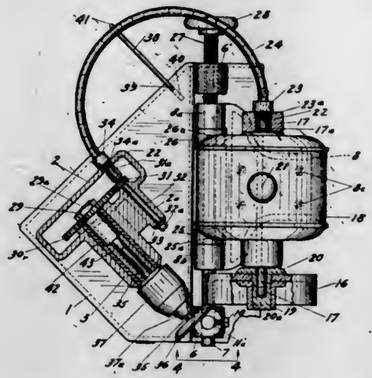
4. In a device of the class described, in combination, a hollow stem, a handle disposed at one end of the stem, a bracket disposed at the other end of the stem, a head attached to the bracket, a bar disposed through the entire length of the stem, a handle slidably disposed about one end of the bar, a shield disposed at the other end of the bar and being in intimate relation with the inner wall of the head, means for maintaining a fixed relationship between the stem and the second mentioned handle, means for rotating the bar when both handles are gripped, means for returning the bar to its normal position when the grip is released, and means disposed upon the bar and the head for releasing and determining the shape of the base of the scooped material.

1,826,652. SHEET CUTTING, COLLECTING, AND FOLDING MECHANISM. CURTIS S. CRAFTS, Oak Park, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Dec. 24, 1929. Serial No. 416,230. 19 Claims. (Cl. 270—50.)



1. A sheet collecting and folding mechanism including in combination a multi-way collecting cylinder, a rotary folding device mounted on said cylinder, folding-off rollers, and means including a rotary device at the folding-off locus settable to effect folding off of the sheets on every passage of the folding device or only on a plurality of such passings.

1,826,653. VALVE GRINDING MACHINE. HARRY J. CRINER, Davenport, Iowa, assignor of one-half to A. G. Bush, Davenport, Iowa. Filed Nov. 11, 1929. Serial No. 406,267. 4 Claims. (Cl. 51—131.)

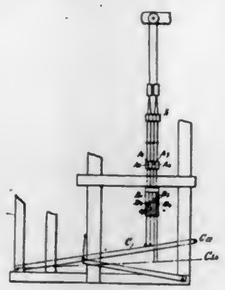


1. A valve grinding machine comprising a base, a motor saddle pivotally attached to the base, a motor secured upon the saddle, a handle united to the motor housing, a grinding wheel mounted upon one end of the motor shaft, a bearing united to the base, a valve shaft mounted in the bearing at an acute angle to the motor shaft, means secured upon the valve shaft adapted to receive and hold the stem of a valve to be ground, a flexible shaft coupled directly to the motor shaft and valve shaft, and means for adjusting the motor longitudinally.

1,826,654. PROCESS FOR WEAVING. MARCEL DELAMARE DEBOUTTEVILLE, Neuilly-sur-Seine, France. Filed Feb. 18, 1928, Serial No. 255,474, and in France Mar. 4, 1927. 4 Claims. (Cl. 139—1.)

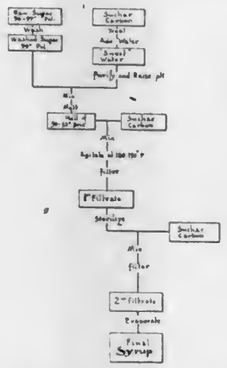
1. Process of weaving permitting the realization on an ordinary loom of designs of unlimited relation, i. e. independent of the number of the shafts of the loom, consisting,

in choosing among all the possible systems of combinations of the shafts 2 by 2, 3 by 3, 4 by 4, . . . a determined number of these combinations for making the design; in ordering or classifying the combinations thus chosen in such a determined order that each given combination is preceded and followed by at least one combination which does not contain any of the shafts of the combination considered; then in passing successively the warp



threads in the healds of the shafts of the chosen and classified combinations, according to an order of succession and of repetition depending on the kind of the design to be obtained; and lastly in raising and lowering, before each weft, successively—and in a determined order of succession and of repetition depending on the design to be obtained—the shafts belonging to each of the combinations thus chosen.

1,826,655. PROCESS FOR PREPARING REFINED SIRUPS. EUGENE N. EHRHART, Brooklyn, and LEONARD WICKENDEN, Manhasset, N. Y., assignors to John J. Naugle, Greenwich, Conn. Filed Feb. 12, 1930. Serial No. 427,680. 15 Claims. (Cl. 127—52.)

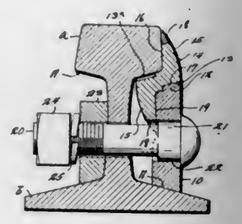


1. The method of preparing refined sucrose sirups which comprises the steps of treating a sucrose melt first with a decolorizing carbon and, after filtering the melt so treated, treating the same with an oxidizing agent capable of delivering nascent chlorine to render a part at least of the impurities therein more readily adsorbable.

1,826,656. PROCESS FOR EXTERNALLY HARDENING CAST IRON AND ARTICLE OF MANUFACTURE PRODUCED THEREBY. ADOLF FRY, Essen, Germany, assignor, by mesne assignments, to The Nitralloy Corporation, a Corporation of Delaware. Filed Jan. 30, 1928, Serial No. 250,729, and in Germany Mar. 17, 1927. 12 Claims. (Cl. 148—16.)

5. The process, comprising subjecting cast iron containing about 1 per cent of aluminium and an addition of more than one of the elements selected from the group comprising: silicon, manganese, chromium, nickel, cobalt, vanadium, molybdenum, tungsten, titanium, zirconium, at a temperature of about 500° C. to the action of a nitrogen-liberating substance.

1,826,657. REVERSIBLE SWITCH POINT GUARD. LYLE H. FULTON, Nashville, Tenn., assignor to Rail Appliance Corporation, Nashville, Tenn., a Corporation of Tennessee. Filed Nov. 30, 1929, Serial No. 410,792. Renewed July 21, 1931. 9 Claims. (Cl. 246—441.)



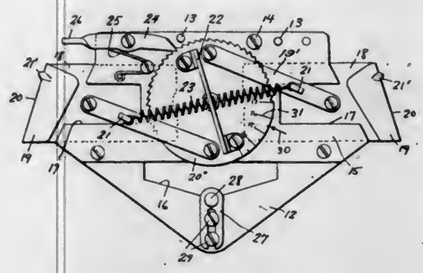
1. A railway switch point protector including a head piece having two longitudinally and vertically rounded surfaces for diverting the flange of a railway wheel from the tapering end of a switch point, and means for wedging the same between the head and base of a railway rail in advance of a switch point, such means enabling either of the rounded surfaces to be placed in operative position without removing the remainder of the device.

1,826,658. FIRE HOSE HOIST. GEORGE WILEY GARDNER and JOHN RAYFORD UNDERHILL, Greenville, N. C. Filed Apr. 10, 1930. Serial No. 443,237. 3 Claims. (Cl. 254—190.)

1. In a structure of the class described, in combination, an outer device embodying a pair of spaced parallel hooked plates, guiding rollers mounted for rotation therebetween, a retaining bolt carried by said plate, a retainer comprising a pair of spaced parallel L-shaped strap members, the horizontal arms of said members being provided with longitudinally spaced teeth engageable with said retainer bolt, and a binding screw carried by the depending arm portion of said strap.

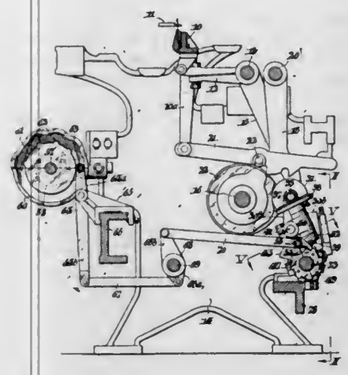
1,826,659. SHIRT COLLAR SETTING DEVICE. ADAM J. GEORGE, Kennett, Mo. Filed May 29, 1930. Serial No. 457,222. 4 Claims. (Cl. 68—1.)

1. A shirt collar setting device of the character described comprising a plate, a stud mounted for longitudinal adjustment substantially on the longitudinal center of the plate, a pair of collar engaging bars mounted for lateral



sliding movement in opposite directions on the plate, and means for simultaneously moving the bars.

1,826,660. LOOP REGULATING MECHANISM FOR FULL FASHIONED HOSIERY KNITTING MACHINES. JOSEPH HAINES, Jr., Meadowbrook, Pa., assignor to Haines Hosiery Mills, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1930. Serial No. 424,178. 13 Claims. (Cl. 66—82.)

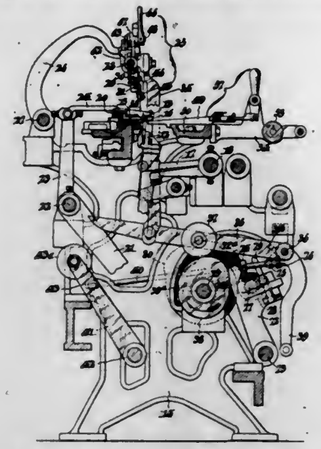


1. Loop regulating mechanism for flat knitting machines comprising in combination, a loop regulating shaft; an element on the loop regulating shaft capable of adjustment to effect changes in the size of the loops of the fabric produced by the machine; means for actuating the adjustable element; and a member with a series of stops adapted to be substituted one for another in determining different rest positions for said element in accordance with the size of the loops to be formed.

1,826,661. WELT CLOSING MECHANISM FOR FULL FASHIONED KNITTING MACHINES. JOSEPH HAINES, Jr., Meadowbrook, Pa., assignor to Haines Hosiery Mills, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1930. Serial No. 430,566. 11 Claims. (Cl. 66—96.)

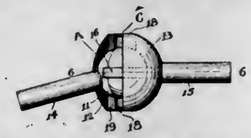
1. The combination in a full fashioned knitting machine embodying a series of needles, narrowing mechanism, and means for imparting dipping motion to the narrowing mechanism; of welt closing mechanism including a welt bar fitted with loop engaging instrumentalities and adapted to be removably attached to the narrowing mechanism for utilization of the dipping motion of the latter to effect transfer of the initial course of fabric loops on the welt bar instrumentalities back to the needles of the machine, gage means for determining the position of the

welt bar on the narrowing mechanism to preassure accurate registry of the loop engaging instrumentalities with



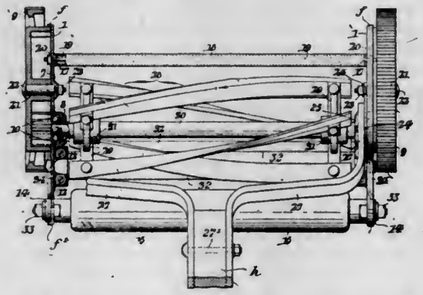
the needles, and latch means for securing the welt bar against displacement on the narrowing mechanism.

1,826,662. UNIVERSAL JOINT. EUGENE HAREL, Ottawa, Ontario, Canada, assignor of one-third to Joseph Moyneur and one-third to Simon Labarge, Ottawa, Ontario, Canada. Filed Oct. 14, 1929, Serial No. 399,508, and in Canada Sept. 12, 1929. 4 Claims. (Cl. 64—91.)



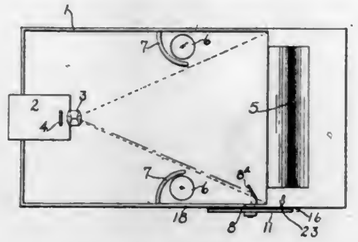
1. A universal joint, comprising a male and a female member, and an intermediate member forming part of said male member, the two forming a sphere adapted to be fitted spherically in the said female member, a rib on said intermediate member fitting in a groove in said female member, and trunnions on said intermediate member on an axis perpendicular to and centrally of the plane of said rib resting in a corresponding semi-circular recess in said female member.

1,826,663. LAWN MOWER. HERMANN M. HESSENBRUCH, Wynnewood, Pa., assignor to Philadelphia Lawn Mower Company Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 22, 1930. Serial No. 454,635. 7 Claims. (Cl. 56—249.)



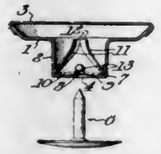
1. In a lawn mower, a pair of complemental side members each embodying an angular aperture with a lateral lug, an angular section element co-active with the lugs to align the side members, and means securing said members and element together.

1,826,664. INDICATING DEVICE FOR DOCUMENT PHOTOGRAPHING APPARATUS. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 23, 1929. Serial No. 365,377. 9 Claims. (Cl. 95—1.1.)



1. In a photographic recording machine, the combination with a camera, of an objective for focusing objects at a predetermined distance on a photographic film, an adjustable member bearing a plurality of designating marks adapted to be moved to bring one mark into the field of the objective in position to be photographed, and visible means for moving the adjustable member to a predetermined location.

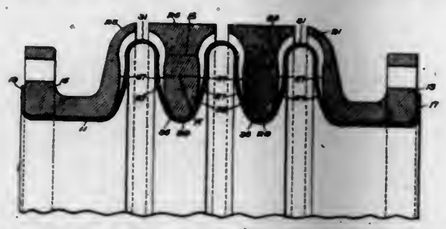
1,826,665. TACK FASTENED BUTTON. GEORGE A. KING, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 3, 1931. Serial No. 527,542. 2 Claims. (Cl. 24—108.)



1. A button utilizing a thumb-tack to fasten it to a garment or other object, said button comprising a button head provided with a hollow hub in the bottom of which is arranged a thumb-tack-engaging element having a coned, slitted and perforated base adapted to engage the shank of the tack near the head of the tack and having fingers extending from said base and opposite one another and shaped to conform to the shank of the tack and engage with and support the same in position substantially normal to the bottom of the button hub, the base of said element being stabilized and secured in fixed relation to the bottom of said hub by means of punch marks forming indentations in the tubular portion of the hub adjacent and in close proximity to its bottom and above the base of the engaging element and in engagement therewith, the relative thinness of said bose permitting location of said punch marks out of the zone of operative usefulness of the hub when the button is in use.

1,826,666. EXPANSION JOINT. ALMON R. LAWRENCE, Medford, Mass., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed July 25, 1930. Serial No. 470,607. 8 Claims. (Cl. 285—90.)

2. An expansion joint having a peripherally corrugated sleeve capable of expansion and contraction, and a circumferential member for controlling the flexing of said sleeve having an inturned annular web with convex edges seating on the concave bottom wall between adjacent corrugations and presenting curved seating surfaces for the side walls of said corrugations, said seating sur-



faces being curved from their convex edges first outwardly and then inwardly to provide inwardly dished seating surfaces near the convex arch of the corrugation.

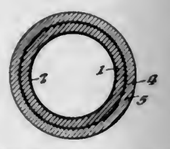
1,826,667. CELLULOSIC COMPOSITION OF MATTER CONTAINING PIPERIDINE. THOMAS F. MURRAY, Jr., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,583. 4 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose derivative and piperidine.

1,826,668. CELLULOSIC COMPOSITION OF MATTER CONTAINING ANISIDINE. THOMAS F. MURRAY, Jr., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,586. 6 Claims. (Cl. 106—40.)

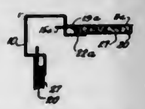
1. A composition of matter comprising a cellulose derivative and anisidine.

1,826,669. TUBE AND METHOD OF FORMING THE SAME. SAMUEL A. NEIDICH, Edgewater Park, N. J., assignor to Sanite Corporation, Burlington, N. J., a Corporation of New Jersey. Original application filed Nov. 14, 1928, Serial No. 319,274. Divided and this application filed Apr. 17, 1930. Serial No. 444,950. 3 Claims. (Cl. 41—22.)



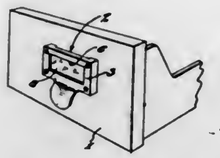
1. A tube comprising a sheet of a cellulose product evolutely rolled, and a pattern piece inclosed between the convolutions of said sheet; the portion of said sheet extending outwardly from said pattern piece being translucent, so that it is visible therethru wherein the pattern piece is translucent; and a portion of the sheet extending inwardly therefrom is opaque and conceals the contents of the tube.

1,826,670. INSULATED FURNITURE CONSTRUCTION. ENOCH OHNSTRAND, Kenmore, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 19, 1927. Serial No. 184,925. 6 Claims. (Cl. 45—6.)



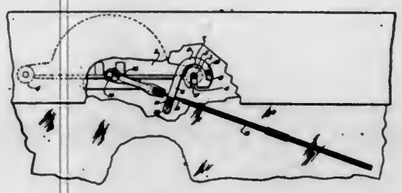
1. In a furniture construction, a plurality of leg and wall members having interlocking slots and hooks for detachably connecting said members together, a plurality of sheets of fiber board, and flanges associated with said leg members adapted to retain said fiber boards against the surfaces of said wall members when said leg and wall members are connected.

1,826,671. LABEL HOLDER. ENOCH OHNSTRAND, Kenmore, N. Y., assignor to Remington Rand Inc., New York, N. Y. Filed Nov. 15, 1927. Serial No. 233,433. 7 Claims. (Cl. 40—17.)



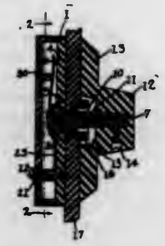
1. A label holder comprising a member formed with a label receiving recess, a label, a transparent sheet superimposed over the label, and cooperating means on the sheet and member adapted for locking inter-engagement upon the insertion of the transparent sheet and label in the recess of the member.

1,826,672. WINDSHIELD PARKER. JOHN R. OISHEI, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Oct. 26, 1928. Serial No. 315,245. 3 Claims. (Cl. 15—255.)



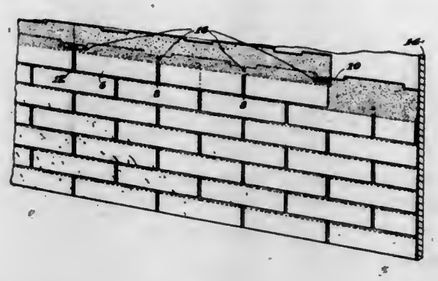
1. A windshield wiper parking clip comprising a one-piece body having a mounting base, a spring part integral at one end with the base and having its opposite end extended away from the base to provide an arm, the free end portion of said arm being provided with a shoulder comprising a pair of cam parts with which the wiper supporting arm is engageable for being held thereby in a parked position.

1,826,673. RESISTANCE APPARATUS. JOHN RAUB, Cleveland, Ohio, assignor, by mesne assignments, to McIlvaine Patent Corporation, St. Charles, Ill., a Corporation of Illinois. Filed Oct. 3, 1925. Serial No 60,165. 2 Claims. (Cl. 201—55.)



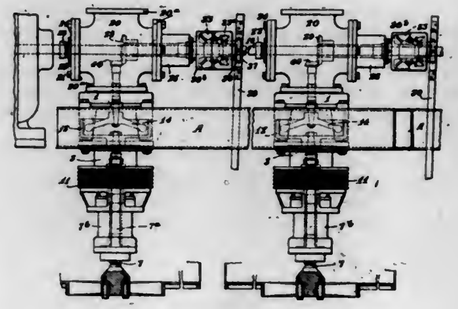
1. A resistance element consisting of a narrow patterned smear of dried graphite located upon a non-conducting support, and a round-faced button of tungsten slidable along said smear and yieldingly pressed thereon.

1,826,674. BUILDING STRIP AND CONSTRUCTION. BENJAMIN H. ROBERTS and ERICH GACH, Chicago, Ill., assignors to Bird & Son, Inc., East Walpole, Mass., a Corporation of Massachusetts. Filed May 15, 1930. Serial No. 452,608. 7 Claims. (Cl. 20—5.)



1. In a building construction, a building covering comprising overlapping courses of flexible building units, said units having a water-proofed fibrous base and a surfacing of finely divided material applied thereto, the units of each course being laid with the ends of said units in closely adjacent relation to each other, latching tongues defined by cuts formed on said ends, said tongues underlying an upper edge portion of the units of the adjacent underlying course.

1,826,675. DRIVE TRANSMISSION FOR CENTRIFUGALS. EUGENE ROBERTS, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed June 15, 1928. Serial No. 285,774. 8 Claims. (Cl. 210—71.)

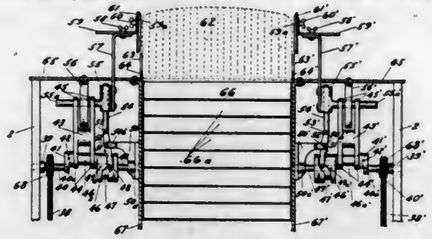


1. In a centrifugal apparatus the combination with a continuously running horizontal line shaft, of a series of gyratory vertical shaft centrifugals suspended on universal joints below the line shaft, each having independently controlled driving connection with the line shaft through a manually controlled clutch, and a second self-acting friction clutch that is energized through the agency of the manually controlled clutch.

1,826,676. BREAD HANDLING APPARATUS. OTTO F. ROHWEDDER, Davenport, Iowa, assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa, a Corporation of Delaware. Filed May 18, 1929. Serial No. 362,575. 9 Claims. (Cl. 226—14.)

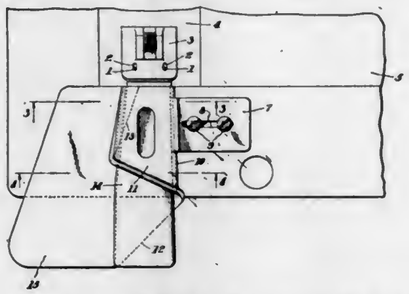
3. A packing appliance for receiving a resilient article and placing the same in a holder, comprising a delivery table having means for supporting said holder, a pair of spaced guides secured to said table for receiving the article

therebetween, spaced presser heads positioned above said guides, and means for moving said presser heads inwardly



to compress the article away from said guides and then downwardly to position the article into said holder.

1,826,677. HEMMER. RUDOLPH J. SAILER, Townley, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 5, 1929. Serial No. 368,592. 3 Claims. (Cl. 112—141.)



1. A folder comprising a fabric-supporting plate, a wall overhanging and sustained by one edge of said fabric-supporting plate, an arbor spaced above and supported by said overhanging wall and extending laterally beyond said edge of the fabric-supporting plate and a hem-scroll embracing said arbor and having a free edge disposed between said fabric-supporting plate and said overhanging wall.

1,826,678. WINDOW CONSTRUCTION. JOSEPH H. SHEARD, Philadelphia, Pa., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 27, 1928. Serial No. 288,640. 5 Claims. (Cl. 156—14.)

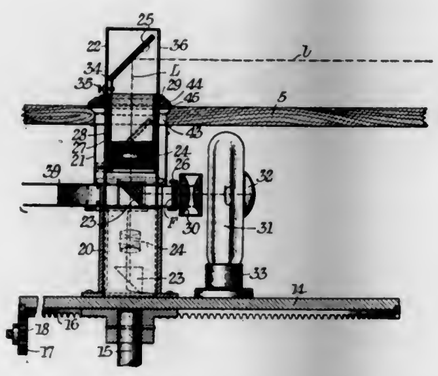


4. In a window structure comprising a sash swingable about a pivot axis intermediate its ends with a muntin rail in line therewith and stationary screens at opposite sides of said axis respectively exterior and interior of the window, the combination of a pair of sealing strips secured to the muntin rail intermediate said rail and the sash glazing, the exterior strip embodying a rectangularly configured portion with the remainder curved over concentric to the sash pivot axis, and the interior strip mainly of obtuse-angled section with the remainder upwardly and rearwardly curved concentric to said axis, and both of said curved portions adapted to contact continuously with the contiguous edges of the screens throughout the range of sash movement.

1,826,679. METHOD OF IMPROVING CELLULOSE ESTER FILMS. CYRIL J. STAUD and THOMAS F. MURRAY, Jr., Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 9, 1929. Serial No. 345,884. 2 Claims. (Cl. 18—57.)

1. The process of increasing the flexibility of cellulose nitrate films which comprises treating at least one side of the film with an aqueous ammonium hydrosulphide solution for a period necessary only to form a layer of de-esterfied cellulose nitrate on the film.

1,826,680. MOTION PICTURE PROJECTOR CABINET. ADOLPH STUBER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 2, 1927. Serial No. 217,166. 15 Claims. (Cl. 88—24.)

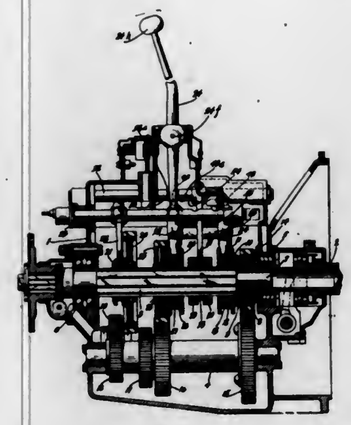


1. In combination, a frame, a support pivotally mounted on said frame on a vertical axis, a motion picture projector carried by said support and operative to project motion pictures at any desired angular position of said support and including a projection gate and an optical system for projecting a beam horizontally, a cabinet enclosing said support and projector, parts of said cabinet being movable to permit the emergence of light from said cabinet and to permit said optical system to throw a horizontal beam from the cabinet, whereby the direction of said beam may be adjusted by angular movement of the support.

1,826,681. CELLULOSE ACETATE COMPOSITION. ALBERT F. SULZER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 9, 1927. Serial No. 190,147. 6 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose derivative and a phosphoric ester of an alkyl ether of a polyethylene glycol.

1,826,682. TRANSMISSION. EARL A. THOMPSON, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Aug. 2, 1926, Serial No. 126,639. Divided and this application filed Apr. 13, 1931. Serial No. 529,700. 8 Claims. (C. 74—58.)



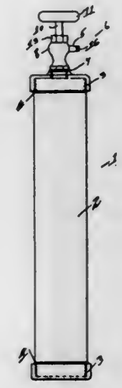
1. A variable speed-ratio transmission mechanism composed of plural gear trains, at least one of which comprises intermeshable elements and another comprises both intermeshable and synchronizing elements; means for selectively coupling either of said trains including a manual control device, the operative connections between said manual control device and the synchronizing and intermeshable elements of the latter mentioned train possessing a greater mechanical advantage than the operative connections between said manual control device and the intermeshable elements of said former mentioned train.

1,826,683. TACK FASTENED STUD FOR SNAP FASTENERS. FRANK E. WARNER, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 29, 1929. Serial No. 366,884. 2 Claims. (Cl. 24—219.)



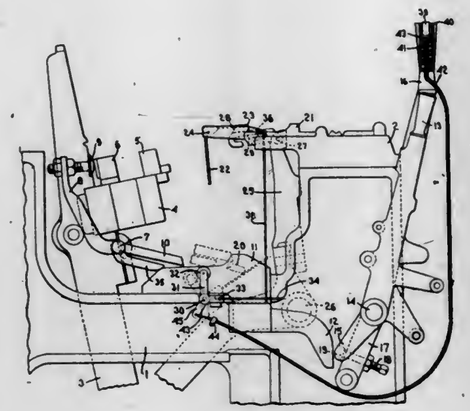
1. A snap-fastener member, having a shell, and a one-piece tack-engaging member arranged within said shell and comprising a normally flat base having a hole of less diameter than the diameter of the shank of the tack and through which the shank passes, said base being slitted radially from the hole, whereby the shank of the tack when forced through the hole in the flat base raises the adjacent slitted parts of the base and is resiliently engaged thereby, and upstanding oppositely arranged parts rising from said base and curved longitudinally and transversely and converging above said hole to engage the shank of the tack throughout substantially the extent of its projection between said upstanding parts to prevent tipping.

1,826,684. METHOD OF CONSTRUCTING FIRE EXTINGUISHERS. CHARLES L. WILLIAMS, Alhambra, Calif., assignor to Freeman Garber, Los Angeles, Calif. Filed July 16, 1928. Serial No. 292,951. 2 Claims. (Cl. 29—148.2.)



1. A method of constructing a fire extinguisher consisting of providing a seamless tube for a container attaching cast seamless heads to the tube, rendering the joints so made airtight by sweating with a solder, providing a threaded aperture in one of said heads, threading a valve for removable and threaded engagement in said aperture and utilizing a soft metal interposed between the valve and head as a sealing means, all for the retention of an extinguishing agent under pressure, providing a nozzle in said valve, and providing a soft metal seat associated with said valve to control the flow of the agent through said nozzle.

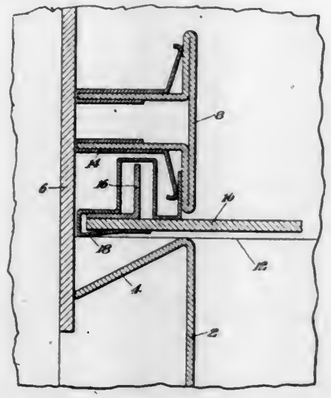
1,826,685. LOOM FILLING FORK AND PROTECTOR CONTROLLING MECHANISM. ARTHUR E. BENSON, Boston, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 22, 1930. Serial No. 483,532. 8 Claims. (Cl. 139—345.)



1. A loom comprising a lay provided with shuttle boxes, protector mechanism rendered active upon the absence of the shuttle from the shuttle box, filling fork mechanism

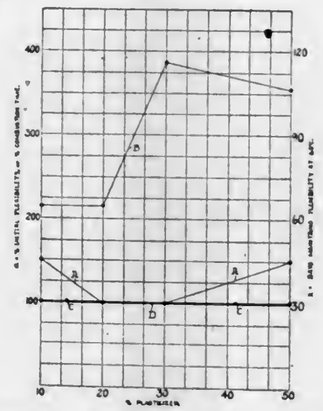
rendered active upon the absence of the filling in the shed, means acting to stop the loom whenever either the protector mechanism or the filling fork mechanism is rendered active, and manually operated means for holding both said protector and said filling fork mechanisms inactive, whereby the loom may be run without filling or without the shuttle.

1,826,686. WEATHER SEAL CONSTRUCTION FOR WINDOWS. HENRY BIANCO, Baltimore, Md., assignor to Campbell Metal Window Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 22, 1930. Serial No. 437,956. 3 Claims. (Cl. 189—65.)



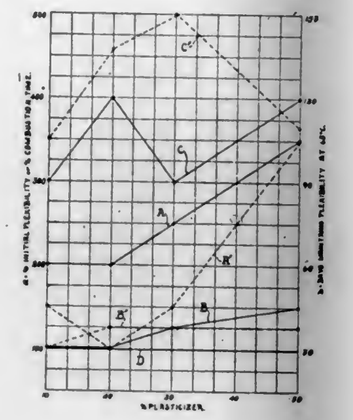
1. In a window of the type having jambs, openings through the inner walls of the jambs, a baffle forming part of the inner jamb wall between such openings, separate enlarged chambers back of such openings and sashes having plates adapted to extend through such openings, and sealing members within the jamb carried by a sash adapted to contact with the rear wall of the baffle and each adapted to contact with a sash plate at two points on the outdoors side of such sash plate and to form an enlarged space adjacent such sash plate between such points of contact.

1,826,687. CELLULOSIC COMPOSITION OF MATTER CONTAINING ACETYL PHENYL GLYCINE. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,449. 4 Claims. (Cl. 106—40.)



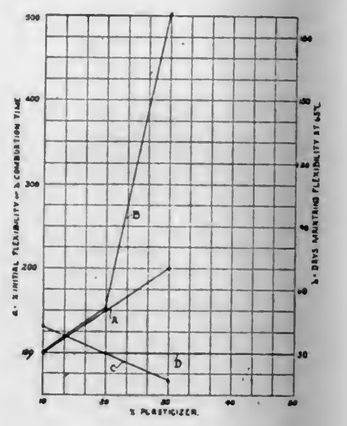
1. A composition of matter comprising a cellulose derivative and acetyl-phenyl glycine.

1,826,688. CELLULOSIC COMPOSITION OF MATTER CONTAINING A BROMO COMPOUND. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,451. 8 Claims. (Cl. 106—40.)



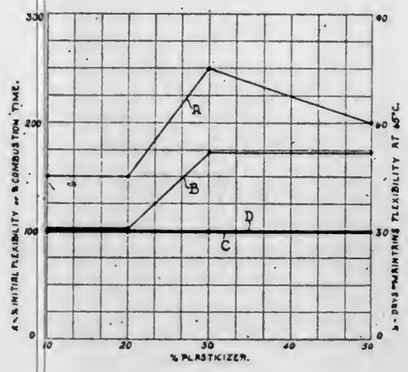
1. A composition of matter comprising a cellulose derivative and one of the bromo-compounds para-bromobenzaldehyde and methyl-meta-bromo-benzoate.

1,826,689. CELLULOSIC COMPOSITION OF MATTER CONTAINING CHLORO-CYCLOHEXANE. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,452. 4 Claims. (Cl. 106—40.)



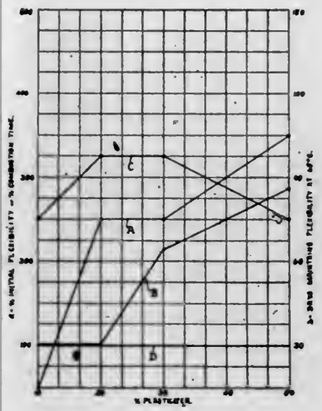
1. A composition of matter comprising a cellulose derivative and chloro-cyclohexane.

1,826,690. CELLULOSIC COMPOSITION OF MATTER CONTAINING ETHYL CHLORO-CARBONATE. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,453. 4 Claims. (Cl. 106—40.)



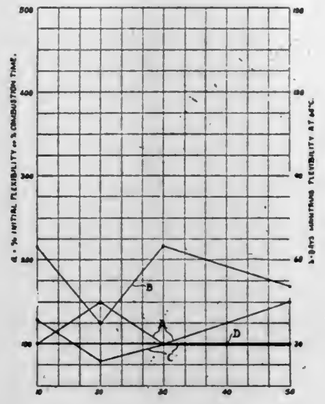
1. A composition of matter comprising a cellulose derivative and ethyl-chloro-carbonate.

1,826,691. CELLULOSIC COMPOSITION OF MATTER CONTAINING ETHYL - A - BROMO - PROPIONATE. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,455. 4 Claims. (Cl. 106—40.)



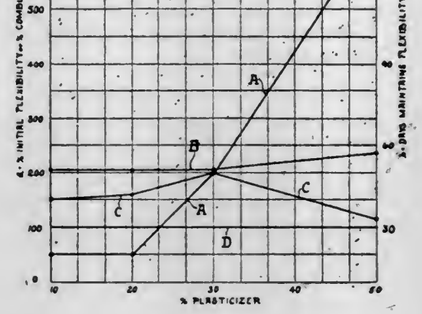
1. A composition of matter comprising a cellulose derivative and ethyl-a-bromo-propionate.

1,826,692. CELLULOSIC COMPOSITION OF MATTER CONTAINING METHYL ANISATE. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,456. 4 Claims. (Cl. 106—40.)



1. A composition of matter comprising a cellulose derivative and methyl anisate.

1,826,693. CELLULOSIC COMPOSITION OF MATTER CONTAINING TRIPROPIONIN. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,459. 4 Claims. (Cl. 106—40.)

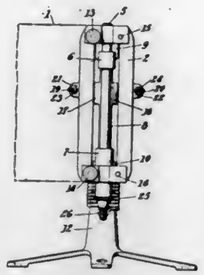


1. A composition of matter comprising a cellulose derivative and tripropionin.

1,826,694. STOCKING GUIDING DEVICE FOR USE WITH SEWING MACHINES. HERBERT CORRALL, Oakfield, Helensburgh, and JAMES HEGGIE, Clydebank, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 18, 1927, Serial No. 213,738, and in Great Britain Sept. 17, 1926. 6 Claims. (Cl. 112—20.)

1. In combination, a guide adapted to receive a tubular article and having a free and unobstructed delivery end,

a support, and means intermediate said support and the delivery end of the guide adapted to sustain the latter



for bodily endwise and sidewise swinging movement at a substantially constant level.

1,826,695. LIGHT PROTECTED MOTION PICTURE FILM. PAUL FAVOUR, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 27, 1929. Serial No. 374,248. 13 Claims. (Cl. 95—9.)



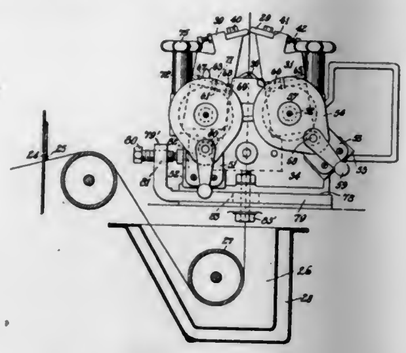
1. In a protective covering for spools of motion picture film, the combination with a film band having apertures therein, of a light protecting covering adapted to be interwound with said film, said covering being normally unperforated, but capable of being perforated as a film moving mechanism advances the film through contact with the film perforations.

1,826,696. MOISTUREPROOFING COMPOSITION. WILLIAM HALE CHARCH, Buffalo, N. Y., and KARL EDWIN PRINDLE, Cleveland, Ohio, assignors, by mesne assignments, to du Pont Cellophane Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Jan. 3, 1927, Serial No. 158,816. Divided and this application filed Sept. 27, 1928. Serial No. 308,873. 52 Claims. (Cl. 134—79.)

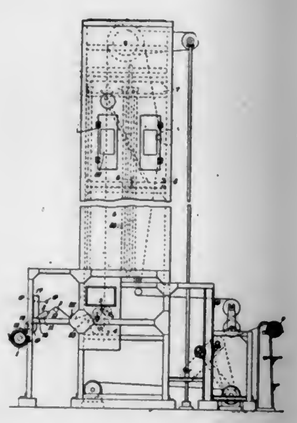
2. A flowable composition comprising a cellulose derivative, a high melting point wax and a solvent in which the ingredients are soluble, the amount of wax being less than the amount of cellulose derivative and the ingredients being present in such proportions as to form a moistureproof, transparent and non-tacky film upon evaporation of the solvent at an elevated temperature.

1,826,697. APPARATUS FOR COATING. WILLIAM H. CHARCH, Buffalo, and NORMAN A. CRAIGUE, Kenmore, N. Y., assignors, by mesne assignments, to du Pont Cellophane Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 12, 1928. Serial No. 312,041. 35 Claims. (Cl. 91—32.)

1. An apparatus for coating sheets, films, webs and the like comprising means to apply a coating composition to the material to be coated, means to only remove the excess composition from the zones adjacent the longitudinal edges of the material and means to remove the excess composition from the entire width of the material to be coated.



1,826,698. METHOD OF COATING. WILLIAM H. CHARCH, Buffalo, and NORMAN A. CRAIGUE, Kenmore, N. Y., assignors to du Pont Cellophane Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Oct. 12, 1928, Serial No. 312,041, and in Germany Oct. 7, 1929. Divided and this application filed June 18, 1930. Serial No. 461,892. 37 Claims. (Cl. 91—70.)



1. A method of coating which comprises subjecting a base to a humidifying treatment, applying a moistureproofing composition comprising a cellulose derivative, a wax and a solvent to said base, raising the temperature of said composition on said base as rapidly as possible to approximately the melting point of the wax, and evaporating the solvent at said temperature.

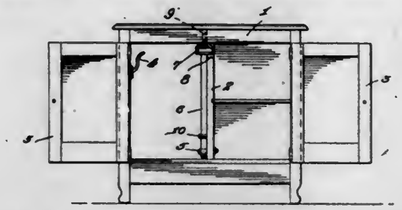
1,826,699. METHOD OF PREPARING MOISTUREPROOF MATERIALS. WILLIAM HALE CHARCH, Buffalo, N. Y., and KARL EDWIN PRINDLE, Cleveland, Ohio, assignors to du Pont Cellophane Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Jan. 3, 1927, Serial No. 158,816. Divided and application filed Sept. 27, 1928, Serial No. 308,873. This division divided and application filed May 2, 1931. Serial No. 534,688. 91 Claims. (Cl. 91—70.)

77. A method of coating which comprises applying a moistureproofing solution comprising a cellulose derivative.

a wax and a solvent to a base, and evaporating the solvent at a temperature above the melting point of the wax in the composition.

1,826,700. SHOE CABINET. CHARLES L. BRUSH, Ruth, Nev. Filed Sept. 19, 1930. Serial No. 483,078. 1 Claim. (Cl. 15—265.)

A cabinet for the purpose set forth comprising a casing, said casing having a vertical wall and an open face that is normally closed by doors, an arm having an end which is pivotally secured to one side of said wall and said arm having its upper end formed with a plate that affords a foot rest, said wall being notched at its upper end to receive one side of the foot rest when the arm is swung into the casing, a spring catch for holding the arm and foot rest in the casing and a stop element on the wall to contact with the arm for holding the same at an



acute angle to the vertical when swung outwardly from the cabinet.

Patents Nos. 1,826,701 to 1,827,723

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Labels	312
Prints	312
Reissues	313
Plant Patent	313
Designs	313
Patents Granted	322

Issue of October 13, 1931

Trade-Marks	140—No.	287,793 to No.	287,932, inclusive.
T. M. Renewals	1		
Labels	28—No.	39,870 to No.	39,897, inclusive.
Prints	9—No.	13,439 to No.	13,447, inclusive.
Reissues	2—No.	18,224 to No.	18,225, inclusive.
Plant Patents	1—No.	2.	
Designs	49—No.	85,313 to No.	85,361, inclusive.
Patents	1,023—No.	1,826,701 to No.	1,827,723, inclusive.
Total	1,253		

Adjudicated Patents

(D. C. Mo.) Peller patent, No. 1,405,936, for apparatus for feeding molten glass, claims 1, 2, 8, and 4 *Held* not infringed. *Hartford Empire Co.* v. *Obear Nester Glass Co.*, 51 F.(2d) 85.

(D. C. Mo.) Peller patent, No. 1,662,436, for apparatus for and method of feeding molten glass, claims 2, 4, 14, and 21 *Held* not infringed, claims 24, 25, 26, 27, 31, 33, and 36 *Held* invalid and claims 31 and 33 if valid, not infringed. *Id.*

(D. C. Mo.) Peller patent, No. 1,662,437, for apparatus for feeding molten glass, claims 24, 26, and 31 *Held* not infringed. *Id.*

(D. C. Mo.) Ferngren patent, No. 1,677,436, for glass feeding and delivering mechanism and process, claim 22 *Held* invalid, and, if valid, not infringed. *Id.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,556,036, E. P. Schoch, Dehydrated lignite, decided August 6, 1931, claim 1.

Pat. 1,741,941, L. G. Jacobson, Elevator entrance toe guard, decided September 18, 1931, claim 1.

Pat. 1,747,599, W. H. Poynter, Box liner tucking attachment for lidding machines, decided September 21, 1931, claims 1, 2, and 6.

Pat. 1,785,463, H. L. Strongson, Duplex receptacle, decided September 24, 1931, claims 1, 2, 9, 10, and 12.

Notices of Cancellation

U. S. Patent Office, *Washington, Sept. 17, 1931.*

St. Louis Piston Ring Corporation, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Ramsey Accessories Manufacturing Corp., 3693 Forest Park Boulevard, St. Louis, Mo., to effect the cancellation of the trade-mark registration of the St. Louis Piston Ring Corporation, of 2638 Locust Street, St. Louis, Mo., No. 138,713, dated January 4, 1921, and the notice of such proceeding sent by registered mail to the said St. Louis Piston Ring Corporation at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said St. Louis Piston Ring Corporation, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

M. J. MOORE,
Acting Commissioner.

U. S. Patent Office, *Washington, Sept. 22, 1931.*

The Floyd-Paramount, Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of F. A. Martoccio Company, 102 South Cedar Lake Road, Minneapolis, Minn., to effect the cancellation of the trade-mark registrations of The Floyd-Paramount, Inc., of 204 Morris Avenue, Newark, N. J., Nos. 217,166 and 225,362, dated August 24, 1926, and March 15, 1927, respectively, and the notice of such proceeding sent by registered mail to The Floyd-Paramount, Inc., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless The Floyd-Paramount, Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business September 26, 1931

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 93,872, Trade-Mark Division, 1,077. Oldest new case, Jan. 26, 1931; oldest amended, Jan. 26, 1931. DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	May 5	May 8	856
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Mar. 30	Apr. 9	1,388
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	May 15	May 15	974
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 15	Apr. 20	879
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Apr. 1	Apr. 1	702
318	6. LEWERS, A. M., Carbon Chemistry	Feb. 12	Feb. 20	2,270
106	7. JARBOE, C. G., Optics; Photography	Mar. 10	Mar. 10	2,044
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Mar. 2	Mar. 2	1,640
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Apr. 13	Apr. 13	1,252
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 31	Apr. 18	1,190
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Apr. 27	Apr. 27	749
380	12. HENRY, C. C., Machine Elements	Feb. 16	Mar. 4	1,122
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Apr. 1	Apr. 4	1,159
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Apr. 3	Apr. 25	1,115
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Mar. 9	Mar. 9	2,495
242*	16. SPENCER, C. J., Telegraphy; Telephony	June 16	June 5	857
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Mar. 3	Mar. 4	1,541
229	18. PORTER, M. E., Motors. Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 31	Apr. 7	1,101
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Jan. 31	Feb. 6	2,179
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	May 18	May 21	995
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 31	Apr. 25	988
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	May 6	May 19	809
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Feb. 2	Jan. 29	1,095
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 28	Apr. 4	1,023
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Mar. 30	Mar. 30	1,623
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 26	Mar. 26	973
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Mar. 28	Mar. 28	1,147
225	28. BENSON, A. R., Internal-Combustion Engines	Feb. 28	Mar. 2	1,816
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	May 26	May 27	603
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 27	May 27	853
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Jan. 26	Jan. 26	2,601
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Apr. 22	Apr. 27	1,227
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Mar. 26	Mar. 27	2,298
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	May 18	May 19	898
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	July 13	July 14	705
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Feb. 13	Feb. 7	2,220
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 4	Mar. 16	1,594
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	May 22	June 1	602
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 30	Apr. 1	1,655
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Feb. 26	Mar. 5	3,209
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	May 18	May 25	762
223*	42. CUTTING, H. O., Electric Signaling	Mar. 3	Feb. 27	1,553
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Apr. 1	Apr. 10	1,505
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Jan. 27	Jan. 29	2,147
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Feb. 26	Feb. 26	2,175
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Apr. 10	Apr. 20	1,076
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 26	Mar. 27	2,187
212*	48. ROEPKE, O. B., Electricity, General Applications	Mar. 28	Mar. 27	1,069
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 26	Mar. 26	1,543
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 31	Feb. 4	2,649
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Feb. 17	Feb. 17	2,111
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Apr. 10	Apr. 22	1,391
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 25	Apr. 30	712
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Feb. 7	Feb. 7	2,910
102	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	Aug. 1	Aug. 1	284
	{Designs	Sept. 8	Sept. 17	150
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Feb. 28	Feb. 28	1,895
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Mar. 30	Mar. 26	920
270*	58. DOWELL, E. F., Abrading; Typewriting	Feb. 26	Feb. 26	1,569
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Apr. 1	Apr. 1	1,723
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Feb. 26	Feb. 26	2,087
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Feb. 3	Feb. 3	2,085
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Feb. 5	Feb. 3	2,575
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Feb. 11	Feb. 11	2,327
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.—{Trade-Marks	Aug. 26	Aug. 16	973
	{Labels and Prints	Sept. 1	Sept. 15	104

* Refers to room numbers in the annex

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE GRUPE

No. 2,696. Decided April 27, 1931

PATENTABILITY—ENVELOPE FOR ROLLS OF MANGLES.

Certain claims for an envelope for rolls for mangles *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Mr. Henry J. Lucke, Mr. Walter F. Kaufman, Mr. Paul A. Blair, and *Mr. J. H. Kilcoyne* for Grupe.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner in rejecting claims 1 to 9, inclusive, of appellant's application for a patent upon an alleged invention of new and useful improvements in cork envelopes for laundry rolls. The rejection was made on the following references: Smith, 456,068, July 14, 1891; Smith, 484,345, October 11, 1892; Stone, 842,356, January 29, 1907; Charlton, 1,149,551, August 10, 1915; Busch, 1,532,682, April 7, 1925; Decker, 1,570,231, January 19, 1926.

We have selected three claims as typical of the claims at issue, and which are as follows:

2. An envelope for rolls of mangles and the like and subject to laundering temperature of 212° F., comprising a mass of flat cork particles bound to one another by resins natural in cork, said envelope extending substantially continuously from end to end of the roll and means for removably locking the cork envelope to the roll.

8. A padding for laundering machines and subject to laundering temperatures of 212° F., comprising a mass of cork particles of substantially flat formation bonded to one another to be disposed with their flat faces substantially parallel to one another and under pressure and at a temperature materially exceeding 300° Fahrenheit.

9. A facing for rolls for laundering machines and subject to the temperature of 212° F. comprising a mass of cork particles of substantially flat formation bonded under pressure to one another to be disposed in planes substantially radially and substantially at right angles to the axis of the roll and at a temperature materially exceeding 300° Fahrenheit.

The device involved herein is a cork padding for covering an ironing device, specifically a roll, in a pressing machine. The specification discloses that the appellant's product is composed of flat pieces of cork laid in a mold parallel to each other, and then subjected to tamping and pressing operations under heat of such a degree that the natural resins of the cork exude and form a binder by which the entire mass is cemented into one homogeneous element. The mold in which the padding is made is in a semi-cylindrical or other similar form, so that the padding, when completed, will fit the roll of the mangle upon which it is to be used. As shown by Figure 6 of applicant's drawings and as claimed in said claim 9, when this cork padding is in place upon the laundry machine, the flat particles in the padding occupy a radial position at right angles to the axis of the roll upon which the padding is placed. It is plain from a study of the specification and drawings that the cork particles are to be flat and are to be placed in the mold as above set forth.

It is claimed a material made in this way will resist high temperature and the wear and tear incident to a laundry mangle much better than any other cork material or composition ever yet devised, and therein accomplishes a new and useful result not heretofore known to, or practiced by, the art.

In connection with this claim the affidavit of Edward Cornell Emanuel, which was executed March 26, 1931, is proffered by counsel for appellant, with the request that it be filed and considered here. We said in *In re Fisher*, 17 C. C. P. A. (Patents) 864, 37 F.(2d) 628, 395 O. G. 710, and again in *In re Coley*, 17, C. C. P. A. (Patents) 1174, 40 F.(2d) 982, 40, O. G. 4, that, under the statute, this court would consider nothing except such matters as appear upon the record and were considered by the tribunals of the Patent Office. The affidavit, therefore, will not be received, filed, or considered by the court.

A consideration of the references, in view of the concurring action of the Patent Office tribunals, is essential. The reference Smith, 456,068, shows a cork composition made by taking cork particles of various sizes and shapes and subjecting the same to heat and resulting cementation together, by means of the natural resin of the cork. The reference Smith, 484,345, shows a similar process, the particles being pieces of any size, such as ordinary cork refuse. Stone shows an apparatus for, and method of, making cork sheets or strips by the use of granulated cork, which is passed in a layer through a heater, where it is compressed and by which it is cemented together into a strip. Charlton shows a squeeze roll having detachable lags carried by a core, and with a curved outer covering, preferably rubber, for use in washing machines.

Busch is said by the Patent Office tribunals to be the most pertinent reference herein. The Busch product is a covering for rolls used in textile machines, and is composed of cork. In making this cork covering for such rolls, Busch takes granules of cork of various sizes and forms and compresses the same together with a binder of glycerine-gelatine, so that the granules become flattened and bound together by the binder into one homogeneous mass. Strips of this material are then taken for the covering of such textile rolls, so that when the same are in place upon the outer surface of the rolls, the flattened granules in the layer will be disposed "edgewise to the working surface of the roll." The reference Decker shows a padding for ironing rolls composed of blocks of the desired thickness, constructed of ground cork, compressed together.

It is quite apparent there is nothing new or novel in the use of detachable padding for mangle rolls, nor is there anything new or novel in the use of a padding composed of artificial cork. The appellant insists, however, that he has added something to the art in the particular kind of a cork padding he has devised. It appears to us that in this view he is justified. None of the references shows a material such as he has produced. The nearest approach is Busch, and while Busch shows a flattening of the cork particles of which his roll is composed, it is quite apparent that the same effect is not produced by the flattening of an irregularly shaped granule of cork, as that which is produced by a particle of cork which is uniformly flattened before it is used. In the former case, the flattened granule must be and will be somewhat irregular in shape. In the latter case this will not be true. We are unable to say that this will not produce a new and useful result. It is a new product, not known to the art, and it appears that the appellant has made an invention. We also are unable to see that the products shown by the references, and appellant's product, are equivalents.

It is argued by the Solicitor for the Patent Office that appellant's claims described his product by the process of making it, and he insists that our decision in *In re Butler*, 17 C. C. P. A. (Patents) 810, 37 F(2d) 623, 394 O. G. 276, holds that the process by which the article is made is immaterial in the consideration of a product claim. The case cited goes further than the argument made, and holds that where an inventor has created a new thing which cannot be properly discriminated in a claim from the prior art otherwise than by reference to the process of producing it, such reference is proper. Even if the contention of the Solicitor were correct, omitting any portion of the claims in issue which might be held to be descriptive of the process, we are of opinion sufficient remains to describe a product which is new and inventive.

The appellant has shown in his drawings, Fig. 7, and has described in his specification, as one possible specific form of his product, a padding formed—

from a mixture of relatively thick particles 31 and thin particles 32, as by intermixing granular cork waste or ground cork disk waste with "ground" cork flakes in varying proportions, * * *.

Ths specific form of appellant's disclosure is fully anticipated by the references. The claims in issue, however, are not framed on this form.

We are of opinion that the appellant's claims 1 to 9, inclusive, should be allowed and the decision of the Board of Appeals is hereby reversed and patent will issue on said claims.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE STAGG

No. 2,702. Decided April 27, 1931

PATENTABILITY—NAILING STRIPS.

Claims for a nailing strip intended to be used to hold flashing strips in constructing roofs *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Steward and McKay, Mr. C. O. McKay, and *Mr. Melvin W. Sandmeyer* for Stagg.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

Appellant has appealed from a decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner in rejecting claims 1 to 8, inclusive, of appellant's application for a patent upon improvements in nailing strips.

Appellant's product is a nailing strip composed of a homogeneous mass of bituminous material, such as asphalt, and a filler preferably made of a fibrous material and a powdered or pulverulent mineral material, compressed into a slab. The specification and drawings show that this strip is intended to be used to hold flashing strips in constructing roofs. It is proposed to build slabs of this material into walls as a part thereof, for the purposes above stated.

Claims 1 and 7 are illustrative, and are as follows:

1. A nailing strip consisting of a preformed board like slab containing a bituminous material and a filler.

7. A nailing strip consisting of a form retaining plastic like homogeneous mass of asphalt, a fibrous material and a mineral material, compressed into a board like slab, and a nonadhesive surfacing thereon.

The claims were rejected on the following references: Johns, 76,773, April 14, 1868; Henderson, 1,040,321, October 8, 1912; Mable, 1,064,753, June 17, 1913; Banwell, 1,134,939, April 6, 1915; Pomerantz, 1,161,791, November 23, 1915; Basham, 1,187,600, June 20, 1916; Ryan, 1,269,649, June 18, 1918; Clapp, 1,379,590, May 24, 1921; Weiss, 1,387,219, August 9, 1921; Swenson, 1,428,457, September 5, 1922.

In discussing the references the Board of Appeals said:

Several of the references disclose strips and elements into which nails may be driven. Mable and Pomerantz disclose wooden nailing strips of the usual type. Henderson and Basham disclose composition strips into which nails may be driven. Henderson discloses a railroad tie and it may be assumed that spikes are driven thereinto. Basham discloses a nailing strip embedded in a concrete body and shows nails driven thereinto for the purpose of attaching other members. Ryan discloses a composition which may be molded into monolithic structures or blocks and adapted to have nails driven thereinto.

Several patents have been cited showing that compositions similar to applicant's and which anticipate the terms of the claims as to this feature are old. We believe Banwell is possibly the nearest to applicant's composition, being a mixture of bitumen and a filler of fiber and granular material. However, Johns and Clapp also disclose similar compositions.

After careful consideration we are unable to agree that invention is involved in the selection of the particular type of composition as a nailing element. Basham's composition is of tarred paper which is similar and is used as a nailing strip. It is held, therefore, that no invention is involved in constructing a nailing strip element such as shown by Basham from the composition disclosed by Banwell. This ground of rejection applies to all of the claims including claims 6 and 8 wherein a building structure is claimed.

We have examined the references and concur with the Board of Appeals in its construction thereof and conclusions thereon. No element in the product of appellant is new to the art, even the nonadhesive surfacing as described in said claim 6, being anticipated by the reference Banwell. The use of nailing strips for fastening roof flashing, built into the wall, is shown in Mable and Pomerantz. It is true none of the references show the use of a composition strip of this kind for fastening the flashing of a roof, but it would seem to be obvious to one skilled in the art to use such a composition strip when its adaptability for such use in holding nails was well-known to the prior art. If the application of such a well-known substance to one particular purpose were inventive and patentable, then its use for any other purpose might be likewise patentable, and the result would be a multiplicity of patents, only limited by the number of uses to which the product might be put.

We are of opinion no new and useful result has been accomplished, and that the disclosure of appellent lacks invention.

The decision of the Board of Appeals is therefore affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

THE GILBERT COMPANY *v.* JOHN O. GILBERT CHOCOLATE CO.

No. 2,698. Decided April 27, 1931.

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—CHEWING GUM AND CHOCOLATE CANDY.

Chewing gum *Held* goods of the same descriptive properties as chocolate candy.

2. SAME—PROPER NAME—THE RIGHT TO USE.

Registration of the term "Gilberts" upon chewing gum *Held* properly refused to appellant in view of the prior use and registration of that name by appellee upon candy.

APPEAL from the Patent Office. Affirmed.

Mr. Wm. Stecll Jackson for The Gilbert Company.

Messrs. Chappell & Earl, Mr. Fred L. Chappell, and *Mr. Otis A. Earl* for John O. Gilbert Chocolate Co.

BLAND, *J.:*

Appellant herein has appealed from a decision of the Commissioner of Patents, which reversed the decision of the Examiner of Trade-Mark Interferences, which latter decision dismissed the opposition proceeding which appellee had instituted.

In the decision of the Commissioner the facts in the case and the law applicable thereto are so clearly and, in our view, so aptly stated, that we feel it unnecessary to either set out in detail the facts or to discuss, at any great length, the law.

The opposer, appellee, of the State of Michigan, has, since 1893, engaged in the manufacture and sale of confectionery, generally designated as chocolates, its products being widely sold throughout the United States under the trade-mark "Gilberts", usually in script. Said mark was registered on March 1, 1910, under the ten-year exclusive use provision of the trade-mark act.

The Gilbert Company, appellant, applicant, is a firm composed of J. H. McGill and Gilbert B. Mustin, and it is claimed that the origin of the word "Gilberts", which appellant seeks to register, is formed by a combination of parts of the surname of J. H. McGill and the Christian name of Gilbert B. Mustin. The Gilbert Company shows use, since May, 1926, of the trade mark "Gilberts" in script, almost identical with that of appellee, upon medicated chewing gum. The mark of appellant, which it seeks to register, contains the name "Gilberts", as above indicated, as its most pronounced feature, accompanied by the words "Soda Mint Gum" and a small triangle, all placed in a rectangular black background. The words "Soda Mint Gum" are disclaimed.

The Examiner of Interferences dismissed the opposition on the ground that candy and chewing gum were not goods of the same descriptive properties. The Commissioner reversed this finding of the Examiner of Interferences and held that the goods were of the same descriptive properties, and that the marks were almost identical.

Appellant insists that its goods are in the nature of a medical preparation and that there would be no likelihood of confusion between a medicated chewing gum and chocolates.

The record establishes clearly that the chocolates of appellee, of more than 18 different varieties and of very high grade, are sold in drug stores, candy stores, cigar stores, hotels, department stores, clubs and various other places; that the said "Gilberts" chocolates are well and favorably known in such places of business; that chewing gum is displayed and sold in the same places of business as chocolates, and that the goods are usually displayed side by side.

[1] We think chewing gum such as appellant manufactures and sells is merchandise of the same descriptive properties as chocolate candies. *California Packing Corporation* v. *Tillman & Bendel*, 17 C. C. P. A. (Patents) 1048, 40 F.(2d) 108, 394 O. G. 789; *California Packing Corporation* v. *Price-Booker Mfg. Co.*, 52 App. D. C. 259, 285 Fed. 993, 308 O. G. 451; *I. E. Palmer Co.* v. *Nashua Mfg. Co.*, 17 C. C. P. A. (Patents) 583, 34 F.(2d) 1002, 389 O. G. 533; *Sun Maid Raisin Growers of California* v. *California Grocer Co.*, 17 C. C. P. A. (Patents) 1034, 40 F.(2d) 116, 395 O. G. 3; *Yale Electric Corp.* v. *Robertson*, 26 F.(2d) 972; *Aunt Jemima Mills Co.* v. *Rigney Co.*, 247 Fed. 407; *Williamson Candy Co.* v. *Ucanco Candy Co.*, 3 F(2d) 655; *Heckin Co.* v. *Lawrenceburg Roller Mills Co.*, 17 C. C. P. A. (Patents) 1093, 40 F.(2d) 119, 395 O. G. 5; *Cluett, Peabody & Co.* v. *Hartogensis*, 17 C. C. P. A. (Patents) 1166, 41 F.(2d) 94, 396 O. G. 707; *Skookum Packers Assn.* v. *Pacific Northwestern Canning Co.*, 18 C. C. P. A. (Patents) ——, 45 F.(2d) 912, 403 O. G. 515.

[2] Appellee's trade-mark "Gilberts", is taken from the name of the owner or founder of the company. Since it is in script and is registered under the ten-year exclusive use clause of the act, the right to the ownership and use of such a trade-mark is not seriously questioned here. See *Thaddeus Davids* v. *Davids and Davids*, 233 U. S. 461, 202 O. G. 952; *J. B. Williams Co. v. Williams*, 18 C. C. P. A. (Patents) ——, 48 F.(2d) 398. Appellant's claim of right to use the word "Gilberts" does not involve the question of the right of a party to use his own name in the sale of his goods. It is not claimed that the word "Gilberts" of appellant is the name of the manufacturer or seller of the goods, except as above indicated.

We think, since the goods are of the same descriptive properties, and the trade-marks are practically identical, that confusion would result within the meaning of secton 5 of the Trade-Mark Act of February 20, 1905, and that registration of appellant's mark should not be granted, and that the Commissioner of Patents properly denied registration, and his decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE PURDY

No. 2,704. Decided April 27, 1931

PATENTABILITY—VALVE GEAR.

Claims for a valve gear for a locomotive *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Owen & Owen, Mr. Malcolm W. Fraser, and *Mr. Conway P. Coe* for Purdy.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, rejecting claim 9 of appellant's application, which claim is as follows:

9. A valve gear for a locomotive having a valve stem, cross head and eccentric, said valve gear comprising a depending arm pivoted at its upper end, a combination lever pivoted to the valve stem having a downwardly extending arm and a back set upwardly extending arm, means connecting the downwardly extending arm and the cross head, a link connected to the upper end of said back arm inclining rearwardly and downwardly to the lower end of said depending arm, and means connecting said depending arm with the eccentric for oscillating said depending arm between a vertical position and a forwardly inclined position.

The references are: Allfree, 1,002,112, August 29, 1911. Wiggins, 1,025,175, May 7, 1912. Graham, 1,219,549, March 20, 1917.

The alleged invention is described in the decision of the Board of Appeals in the following language:

This application discloses a valve gear for locomotives. It is of the type employing the combination lever which lever derives movement from the piston crosshead at its lower end and from a supplemental crank on one of the drive wheel axles and through the reversing mechanism as its upper end and actuates the valve stem by a resultant of these two movements. This application is based mainly on the detail of employing the combination lever which the upper end is inclined backward or away from the valve chamber so that it will stand in a symmetrical position with respect to the reciprocating pitman-like rod which is connected to that end and which actuates it.

Appellant claims that the novelty of his invention rests in a structure having a downwardly extending arm in combination with a lever of which the upper end is inclined backward or away from the valve chamber. Appellant urges, without convincingly pointing out the underlying reason for his conclusion, that there is something about his combination of old elements which brings about a new and useful result, and, while not contesting that Wiggins shows the downwardly and backwardly inclined arm, contends that Wiggins should be eliminated as a reference because the mechanism of that patent as a whole is inoperative.

Concerning the inoperativeness the Board said:

• • • While applicant appears to demonstrate that some of the parts of Wiggins' mechanism, as shown in the drawings are not of correct proportion, we do not agree that the principle of the mechanism is inoperative. Patent drawings are not necessarily working drawings and it is considered that it is within the skill of machine designers to so proportion the dimensions of the Wiggins' mechanism as to make it accurate. However, Wiggins is considered to be a valid reference as to the feature for which it was applied aside from the question of operativeness of the dimensions of other parts as shown.

In discussing the applicability of the references, the Board's decision reads:

No patentable novelty is found in the broad substitution of this backwardly inclined end of the combination lever of Wiggins for the upper end shown by Graham in Fig. 3 of combination lever 15. Having Graham's structure it is considered merely an obvious mechanical feature for the above reasons, and especially in view of Wiggins, to incline the upper end of the combination lever backwards if the actuating pitman-like bar is inclined downwardly, so as to bring its arc of oscillation symmetrical to the line of reciprocation of the bar.

We have examined with care the references and the models presented during the argument of this case, and no useful purpose could be served by here discussing at length the different features shown in the references and appellant's disclosure. We agree with the reasoning of the Board and the conclusions reached, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE ROBINSON

No. 2,699. Decided April 27, 1931

1. PATENTABILITY—MOVABLE SUPPORTS FOR CONNECTER HEADS OF TRAIN PIPE COUPLINGS.

Claims for an automatic train pipe connecter *Held* unpatentable since they are not patentably different from the claims of appellant's patent.

2. SAME—DOUBLE PATENTING.

"An inventor may not extend his monopoly by securing the allowance of claims not differing in substance from an issued patent."

APPEAL from the Patent Office. Affirmed.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying claims 3, 4, 5, 7, 8, and 10 in appellant's application for a patent for an alleged invention relating to movable supports for connecter heads of train pipe couplings.

Claims 3 and 8 are illustrated. They read:

3. In an automatic train pipe connecter, a head, a carrier therefor having spaced arms rigid with respect to each other, a V-and-wedge joint between each arm and the head, a tie-bolt through each joint, a spring surrounding each tie-bolt and secured thereby to the head and pressing the head and carrier together at the joint, a bracket, and longitudinally resilient supporting connection between the carrier and bracket.

8. In an automatic connecter for trains, the combination of a head, a bracket, a spring and connections between the head and bracket through the spring including a clamp, having a thread of the same pitch and diameter as the spring and side walls tapered in cross-section and means acting transversely of the spring for causing the clamp to grip the spring upon the sides.

The references are: Genin, 862,068, July 30, 1907; Westinghouse, 1,120,005, December 8, 1914; Robinson, 1,507,857, September 9, 1924; Robinson, 1,660,766, February 28, 1928; Letord (British), 130,393, 1919.

The involved application is a division of an application filed December 17, 1921, No. 522,983, which matured into Patent No. 1,507,857, in which appellant disclosed two species of his invention and was allowed specific claims for one, and other claims sufficiently broad to cover both. In the involved application, appellant seeks an additional patent for the species not specifically claimed in his patent.

[1] Claims 3, 4, 5, and 10 were rejected on the patent to Genin and appellant's earlier Patent No. 1,507,857. With reference to these claims, the Board of Appeals said:

It is sufficient to state that this application is a division of the application from which appellant's Patent No. 1,507,857 eventuated and in that patent the V-shaped clamp shown at 13 in Fig. 1 of this application is claimed broadly in a general combination of this nature. In that patent, also, are specific claims covering a structure employing the two spring supports 14 and 15 of the patent instead of the single spring support 7 disclosed in this case. The Examiner has taken the position that it does not involve any invention to employ the specific clamp of appellant's prior patent with the structure of Genin which has a single spring support.

In appellant's brief, page 2, the next to the last paragraph, we find the following:

"Applicant regards as fundamental that the Office cannot cite against a copending application that species of a patent which was not claimed in it but which was divided out for the application appealed."

Appellant's position is clearly not well taken. It is the well settled practice that two patents should not be granted for different embodiments of the same invention unless there is a patentable difference between them. We find nothing in appellant's argument pointing out why the use of the clamp of Robinson's earlier patent in the structure of Genin would involve invention. The brief merely contends that the advantages of both structures result from the combination. It is the well established practice that the mere addition of elements does not produce patentable distinction when no unexpected result occurs or when no difficulty is encountered which requires the exercise of more than mechanical skill. In our opinion if one of the patents relied upon by the Examiner had not been appellant's patent, there would have been no reasonable question but that the combination was justified in making the rejection.

[2] The Board of Appeals committed no error in its ruling. An inventor may not extend his monopoly by securing the allowance of claims not differing in substance from an issued patent. *In re Isherwood,* 46 App. D. C. 507, 245 O. G. 847; *In re Swan,* 18 C. C. P. A. (Patents) ——, 46 F(2d) 572, 407 O. G. 295; *In re Peiler,* 18 C. C. P. A. (Patents) ——, 48 F(2d) 405, 409 O. G. 841.

Claims 7 and 8 were rejected on the patent to Westinghouse in view of the patent to Letord. In this connection, the Board said:

We do not regard the substitution of the usual V-shaped thread structure for the curved shape of Westinghouse as involving a patentable distinction and if additional suggestion is necessary, we regard the structure of Letord as sufficient even if the spring is compressed when it engages this structure.

We are of opinion that the tribunals of the Patent Office were right in holding that the involved claims define nothing of a patentable character over the references of record.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FRANK

No. 2,700. Decided April 27, 1931

PATENTABILITY—GROUND ROD CLAMP.

Certain claims for a ground rod clamp *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Messrs. Byrnes, Stebbins, Parmelee & Blenko and *Mr. Walter J. Blenko* for Frank.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.:*

Frank has appealed to this court from a decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner denying five claims, being all the claims in the case, for patent for alleged improvement in ground-rod clamps, whereby he compresses together a ground-rod and a ground wire for conducting electricity to the earth in electrical systems such as telephone, power and electric-railway service.

Claims 3 and 4 appear to be typical:

3. The combination with a conductor, and a ground rod of materially larger diameter than the conductor, of a clamp consisting of a continuous sleeve provided with an opening of elongate uniform cross section having a minor axis slightly larger than the diameter of said rod which is arranged in one end of said opening, the interior wall of said sleeve being provided with a groove at the other end of said opening receiving said conductor in parallel with said rod, and a side of said conductor projecting into said opening in contact with said rod, and a screw clamp extending through said sleeve and bearing upon said rod at said first-named end of said clamp opening and distorting said conductor in conformity with the contour of said groove.

4. A ground rod clamp comprising a continuous unitary sleeve having an opening therethrough of substantially constant cross section and adapted to receive a ground rod and a ground wire, said opening being elongated, the sleeve having a boss formed on one side thereof substantially midway of its length and on the long diameter of said elongated opening, and having reinforcing flanges extending from the boss around the top and bottom edges of the sleeve, the boss having a threaded opening therethrough, and a set screw in the opening in the boss whereby a ground rod and a ground wire lying in said elongated opening are compressed upon tightening of the set screw.

The references cited are: Chester, 51,144, November 28, 1865; Rodgers, 217,023, July 1, 1879; Patterson, 311,914, February 10, 1885; Lawrence, 1,001,054; August 22, 1911; Chappuis, 1,309,240, July 8, 1919; Gentsch, 1,495,017, May 20, 1924; German patent. 338,092, June 13, 1921; German patent, 351,470, April 7, 1922.

The drawings disclose a clamp in the form of a continuous sleeve with an opening extending longitudinally thereof and having a groove facing the opening. The rod and wire go through the opening, the wire fitting into the groove in position to be pressed tightly against the rod by the manipulation of a clamping screw or threaded bolt that tightens the clamp. The effect of this pressure is to distort the wire in conformity with the contour of the groove, thus insuring a good electrical contact.

The brief of appellant in an interesting and instructive manner elucidates the problem which was met by appellant and which is claimed to have been solved by the comparatively simple device at issue. Appellant's device is conceded by the Solicitor for the Patent Office to be novel and useful, but invention is denied.

Lawrence disclosed a continuous grooved sleeve for clamping the lower end of a wire to a ground rod, and Gentsch shows the clamping together of two different-sized wires by means of a set screw to form an electrical contact. The Gentsch device shows a V shaped cross section into the apex of which the small wire fits and the large wire is clamped against it by the manipulation of the screw.

Claims 3, 6 and 7 were rejected on the foregoing references.

An affidavit by one Stanton S. Hertz, who sets forth qualifications entitling him to credit as having

expert knowledge of the art, appears in the record. This affidavit gives reasons for the insistence that the Lawrence and Gentsch devices are impractical, if not wholly inoperative, and points out advantages possessed over them by appellant's device.

The Lawrence drawing shows a device which consists of a rod having a rounded head, the rod being designed for driving into the earth. Below this head is a thimble which contains a groove. The specification says:

> When the device is to be used, the wire to be grounded is passed through the groove 5 between the rod and the thimble, and the lower end of the wire is bent up, * * *. The rod is then driven into the ground until the wire is at the proper tension, thereby making a tight joint without the use of solder.

It is further stated that the wire is held at proper tension, not only by having its end turned up around the lower edge of the thimble, and by being wedged between rod and thimble, but also "owing to the fact that above the thimble 4 the wire will be given an outward bend around the head * * *."

Apparently in the Lawrence device it is intended that the thimble which clamps the conducting wire to the ground rod is to be above the ground, and tension in the ground wire is produced by driving the rod and tightening the thimble upon it by this driving process, or by driving the thimble upward independently after the rod has been driven to the required depth in the ground.

It is represented that in this art it is important that the ground wire have a straight line of discharge, and appellant's device provides this, while the Lawrence device has the wire bent at the bottom and also kinked around the head of the rod above the ground. Appellant compresses the wire against the rod, not by any driving operation, but by manipulating the screw, before the driving. After the desired assembly is secured the whole device, including the clamp, is driven into the ground, the clamp going below the surface level.

It seems to us that this presents a combination which materially differs from Lawrence, in the result produced.

The Gentsch clamp was not designed to be used in connection with ground rods but is for clamping together two conducting members, such as an ordinary electric conduit wire and a bus wire. It does show a pressing of these together by tightening a set screw, but there is no design that the combination so formed is to be used by being driven into the earth, nor does it seem to us that it would be practical, or even possible, effectively so to use it.

It seems to us that while appellant's combination as disclosed and claimed in claims 3, 6 and 7 is marked by simplicity that nevertheless he may justly be held to have exibited more than mere mechanical skill in evolving it. It is admittedly novel and useful and we think discloses patentable invention.

Claims 4 and 5 relate to the clamp per se with details of construction. They were rejected upon the German patent No. 351,470, in view of Lawrence. The Board said:

> These claims differ from the German patent No. 351,470 by stating that the opening is adapted to receive a ground rod and ground wire. It would not be a matter of invention to shape the opening in the German reference to receive a ground rod and a ground wire instead of the two conductors shown in the patent. Especially is this true in view of Lawrence. The claims further distinguish from the German patent by including reinforcing flanges around the top and bottom edges of the sleeve. It is believed that there is nothing inventive in the provision of these strengthening flanges.

In this we find no error.

The decision of the Board of Appeals is modified, being reversed as to claims 3, 6 and 7 and affirmed as to claims 4 and 5.

Modified.

U. S. Court of Customs and Patent Appeals

IN RE GREEN AND JONES

No. 2,683. Decided April 22, 1931

PATENTABILITY—RUSTPROOFING COMPOUND.

Claims for a rustproofing compound *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Owen & Owen and *Mr. Malcolm W. Fraser* for Green and Jones.

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming the rejection by the Examiner of claims 17 and 18 of appellants' application.

Said claims read as follows:

> 17. A rust-proofing compound, comprising a granular or powdery substance containing high acid ortho-phosphates of iron.
>
> 18. A rust-proofing compound, comprising a granular or powdery substance containing high acid phosphates of iron and manganese.

The references are: Emig, 1,263,395, April 23, 1918; Gravell, 1,428,084, September 5, 1912.

The application relates to a method of making a rustproofing composition and includes both process and product claims. Certain of the process claims were allowed, but the product claims, being those above quoted, were rejected. The specification discloses that the composition is used by dissolving it in water. The solution is then boiled and articles having iron surfaces are immersed in it while the solution is boiling.

If claim 17 is patentable, it is because it constitutes invention to produce high acid ortho-phosphates of iron in a granular or powdery form.

This claim was rejected upon the Emig reference. In appellants' specification it is stated:

> * * * When strong phosphoric acid contacts iron, high acid salts are formed. Weaker acid, or the acid salts, in contact with iron form the lower acid and insoluble salts.

The Solicitor for the Patent Office in his brief contends that:

> Claim 17 enumerates only one element—a well-known chemical product resulting from treating iron with phosphoric acid—in a granular or powdery form. It is submitted to be uninventive to powder any substance.

This contention would appear to be well founded. Appellants, in their brief, make the following statement:

> Ordinary commercial phosphoric acid has the formula H_3PO_4. It combines readily with iron in at least three ways indicated in the following equations:
>
> $Fe + 2H_3PO_4 = Fe(H_2PO_4)_2 + 2H$. *The product of this reaction is commonly known as dihydrogen ferrous phosphate.*
>
> $2Fe + 2H_3PO_4 = 2FeHPO_4 + 4H$. The product of this reaction is monohydrogen ferrous phosphate.
>
> $3Fe + 2H_3PO_4 = Fe_3(PO_4)2 + 6H$. The product of this reaction is normal ferrous phosphate.
>
> Each of these phosphates is normally crystalline. However, the dihydrogen phosphate is readily soluble in water, the monohydrogen phosphate is practically insoluble, its solubility being in terms of a small fraction of 1%; and the normal ferrous phosphate is even less soluble than the monohydrogen phosphate.
>
> In applicant's process iron and acid are mixed together in the proper proportion to form dihydrogen ferrous phosphate. This is the phosphate first formed when phosphoric acid attacks iron, at least when the phosphoric acid is present in sufficient quantity. * * * (Italics ours.)

The second formula above quoted describes appellants' product.

Appellants, however, insist that the said ground of rejection thus urged by the Solicitor for the Patent Office can not be considered upon this appeal because it was not considered or acted upon by the Patent Office tribunals.

It is unnecessary for us to pass upon this point because we are clear that the Emig reference clearly discloses a product of low acid ortho-phosphates of iron, and it is obvious from that disclosure that high acid ortho-phosphates of iron would be produced by reducing the percentage of iron filings employed in the combination with phosphoric acid. The Emig patent states:

> My invention relates to a coating material for iron and the like which is strongly adherent, durable and weatherproof and will protect the surface of iron, etc., to which it is applied for a very extended period from the action of the air and other oxidizing influences. In the following specification I have described in detail the preferred ingredients and proportions thereof and also the preferred manner of compounding the ingredients so as to secure the most satisfactory composition for the purpose. It is to be understood, however, that the specific disclosure is for the purpose of exemplification and that my invention in its broader aspect is not limited either to the particular ingredients, proportions or method of compounding specifically described but equivalent materials may be used the proportions and the method of compounding varied without departing from the scope of the invention as set forth in the following claims.

We agree with the Board of Appeals that there would be no invention in omitting the added ingredients disclosed by Emig and using the iron filings and phosphoric acid to produce the product described in claim 17. There is nothing in the record from which we could conclude that it constituted invention to reduce high acid ortho-phosphates of iron to a granular or powdery form.

Claim 18 was rejected upon the Emig reference and an admission by appellants that it is old to use manganese oxide in a rustproofing bath. The Solicitor for the Patent Office contends that "Where an admittedly old bath includes certain ingredients, including liquid or water, it is submitted to be ordinarily obvious that the solid ingredients may be added one at a time, or be all mixed together before being added as a unit to the liquid". This is clearly a correct statement and we can find no invention in making manganese a part of the composition instead of using it in conjunction with high acid phosphates of iron, but not as a part of the composition.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

VAN AUKEN *v.* CUMMINGS

No. 2,690. Decided April 22, 1931

1. INTERFERENCE—PRIORITY—REDUCTION TO PRACTICE.

"While it is true that reduction to practice does not require a device embodying the invention to be mechanically perfect, or a commercial success, its practical efficacy and utility must be demonstrated."

2. SAME—SAME.

Evidence reviewed and *Held* insufficient to establish that C. reduced the invention to practice prior to the filing of the application by Van A., especially as it appeared that C. discontinued his work on the specific device and endeavored to perfect another device of a similar nature.

3. SAME—SAME—DILIGENCE.

Evidence reviewed and *Held* insufficient to establish that C. who was the first to conceive the invention was diligent from the time Van A. entered the field, especially as it appeared that for several months he abandoned work upon the invention as claimed and devoted himself to experiments with a device not embodying the automatic principle of the claimed invention.

APPEAL from the Patent Office. Reversed.

Mr. Walter H. Pumphrey and *Mr. John B. Brady* for Van Auken.

Mr. Harry E. Seidel for Cummings.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office in an interference proceeding. Said decision awarded priority of invention to appellee, reversing the decision of the Examiner of Interferences, who awarded priority of invention to appellant's assignor, hereinafter called the appellant.

The invention relates to a gauge for indicating the volume of gasoline in the fuel tank of an automobile. The issue is stated in three counts which read as follows:

> 1. In apparatus of the class described, a liquid holding tank, means forming an inclosed chamber, a connection for creating a partial vacuum in said chamber, means affording communication between said chamber and the liquid in said tank at the minimum level to be gaged whereby the liquid may be drawn into said chamber by the vacuum existing therein, a valve for regulating the degree of vacuum in said chamber, and means responsive to the rise of liquid in said chamber for controlling said valve.
>
> 2. A liquid gage including a tank, a float chamber above the liquid level in the tank, a liquid conduit having its lower end submerged in the liquid in the tank and its other end in communication with the float chamber and providing a constant communication therebetween, a vacuum connection whereby a condition of low pressure may be set up in the chamber, causing flow of liquid from the tank through the conduit and into the float chamber, a float in the chamber means actuated in accordance with the position of the float for regulating pressure within the float chamber, and means controlled by the float chamber pressure for indicating the liquid level in the tank, substantially as described.
>
> 3. An apparatus for indicating the height of liquid in a tank, comprising the combination, with a tank adapted to contain liquid, of a chamber smaller in horizontal area than the tank and extending upward and downward throughout the range of levels to be indicated, said chamber having a liquid connection with said tank at a low level relatively to said range of levels, a vacuum connection whereby a condition of low pressure may be set up in the chamber, means controlled by rise of liquid in said chamber for limiting the degree of vacuum possible to be obtained therein, an indicator operable by difference between internal and external fluid pressures, and means whereby said indicator is coupled with that part of said chamber in which a vacuum is thus produced.

Appellant filed his application on October 30, 1919, and the application of appellee was filed on March 22, 1922. Appellant is, therefore, the senior party and the burden was upon appellee to establish priority of invention by a preponderance of evidence.

Appellant took no testimony and he is accordingly restricted to his filing date for conception and reduction to practice.

Appellee took testimony and established that on March 22, 1919, he filed an application in the Patent Office, which application disclosed the invention embodied in the counts here in issue. On December 6, 1920, the Primary Examiner held said application was abandoned on the ground that no full responsive amendment had been made within the period of one year from the office action of April 25, 1919.

Both tribunals of the Patent Office held that appellee was entitled to the filing date of his first application, March 22, 1919, for conception of the invention, but that such filing did not constitute a reduction to practice. No error is assigned upon the ruling giving appellee said date of March 22, 1919, for conception of the invention.

There are two questions before us for determination:

1. Did appellee reduce the invention to practice prior to appellant's filing date?

2. If the first question be determined in the negative, was appellee diligent in reducing the invention to practice at the time of appellant's filing date, and thereafter until he reduced to practice?

With regard to the first question, there is no corroboration of appellee's testimony that the invention was successfully operated by him prior to appellant's filing date, October 30, 1919.

The Board of Appeals found that the evidence established that the invention was successfully tested by appellee at least as early as June, 1920, that he was entitled to this date for reduction to practice, and that appellee was chargeable with diligence from just prior to October 30, 1919, appellant's filing date, to June, 1920.

As to appellee having reduced the invention to practice as early as June, 1920, this depends upon whether or not appellee's testimony to that effect was corroborated by the witnesses McEwen and appellee's brother.

The witness McEwen testified that appellee disclosed to him a gasoline gauge for automobiles in the early part of 1919; that—

it was essentially a hydrostatic principle rather than a mechanical one, and for the balancing of pressure and making indications of pressure;

that he saw parts of the apparatus in the laboratory; that he saw the complete invention in use on a car and saw it work at various times throughout the year 1920; that the—

visible part consisted of two glass tubes, exposed glass tubes, that were part of the manometer, contained liquid, partly filled with liquid.

With regard to the operation of the device the witness testified as follows:

• • • There were two manometer tubes, two glass tubes I suppose, one at a certain level corresponding to the mark made, and then after a certain amount of gasoline had been used the liquid in the other tube would disappear and then return. There was a periodic pulsation corresponding to certain changes of level so that you could watch it, and, in fact, I did watch that, indicating that the level had changed by a certain amount since the previous tripping of the valve. *During the time that I made these observations I noted that the device was in the process of development.* (Italics ours.)

He further testified as follows:

Q. During this period covered by process of development do you recall Mr. Cummings having experienced any material difficulty with some part or another?

A. Yes; there was leakage, I recall particularly, and the float would stick at times, and that float was in process of further development.

With regard to the devices constructed by appellee and placed by him upon his car, appellee testified that:

I used them on my own car for experimental purposes and to find out all I could about the best way in which to construct them.

Appellee's brother testified that in June, 1920, he visited appellee, who drove him about in his car, in which appellee had installed his device; that the only part of the device that he saw was as it appeared on the instrument board, a calibrated glass tube with the liquid rising or falling with the fluctuation of the amount of gasoline in the tank; that appellee, however, explained the principle of the device to him by means of a rough drawing. The witness further testified that in addition to seeing appellee in June, 1920, he saw him in December, 1920, in the fall of 1921, and in the early spring of 1922; that upon all of these occasions the witness discussed the invention with appellee and that appellee stated to him that he had not been able to fully perfect the invention because of the condition of his health.

There is no testimony that either McEwen or appellee's brother ever examined the quantity of gasoline in the tank to determine whether the device did, in fact, register even approximately the amount of gasoline therein. Both evidently assumed that the fluctuations of the liquid in the glass tubes indicated the fluctuations in the amount of gasoline in the tank, but in view of the testimony of McEwen that there was leakage and that the float would stick at times, we do not think that such assumption is proper.

Appellee himself admitted that there was occasionally trouble caused by leakage and also with the float used in the device. The more serious trouble seems to have been with the float, and this was so serious that it caused appellee temporarily to abandon a material part of the invention embodied in the counts in issue, viz., the automatic principle of having the liquid itself become the means of regulating the vacuum.

In appellee's letter to his patent attorneys under date of January 15, 1921, which is in evidence, he said:

• • • I have, however, found some difficulty in getting positive operation of the float in opening and closing the ports. Whether the difficulty could be remedied or not by better mechanical work than I have yet been able to procure I do not know, but I have decided, at least for the time being, to abandon the automatic principle, and to open and close the ports by hand, as may be required.

He then explains in the letter his new idea which, if carried to completion, would, it seems to us, have been a different invention than that here in issue, though having some common elements. He further states in the letter:

I have almost completed a model according to this new principle and believe I shall have determined its practicability within the next two weeks. • • •

Appellee testified that he experimented for several months in attempting to perfect this idea, but that he finally determined to go back to the idea of having the liquid itself become the means of regulating the vacuum, as embodied in the counts here in issue, and he finally devised the hinge type of float set out in his application filed on March 22, 1922.

We feel compelled to conclude from the evidence produced that appellee has not established by a preponderance of evidence a reduction to practice of the invention in issue prior to his filing date of March 22, 1922. This conclusion is strengthened by the fact that, although his 1919 application was pending at the date of his claimed reduction to practice, he nevertheless failed to prosecute said application and it therefore became abandoned, the application here involved being filed on March 22, 1922.

[1] While it is true that reduction to practice does not require a device embodying the invention to be mechanically perfect, or a commercial success, its practical efficacy and utility must be demonstrated. *Burson* v. *Vogel*, 29 App. D. C. 388, 131 O. G. 942.

[2] The purpose of the device here in question was to indicate upon the dashboard of an automobile, at least approximately, the amount of gasoline in the tank. In order to constitute a reduction to practice, the evidence must show that it was demonstrated that the device was operative for this purpose. Leakage or lack of operativeness of the float might well be destructive of the utility of the device. Apparently the improvement of the float used by appellee to secure the desired result was not merely a matter of mechanical skill because, according to appellee's testimony, he worked for a period of two years upon this problem and for a period of several months abandoned it entirely and endeavored to perfect another device of a similar nature, but which was not automatic in operation. However this may be, it appears that the operation of the float in his experimental device presented such difficulty that he completely abandoned the device here involved for several months. This, to us, is very significant and strongly indicates that the experimental device did not operate in such a way as to constitute a reduction to practice.

[3] Having held that there was no reduction to practice of the invention established by appellee prior to March 22, 1922, the next question is whether appellee was diligent in reducing the invention to practice from immediately prior to October 30, 1919, appellant's filing date, to March 22, 1922, appellee's filing date.

Appellee testified that his eyes were injured in 1918 in war work at the Edgewood Arsenal, Md.; that such disability continued during the entire period in question and greatly increased in the early summer of 1919 to the fall of 1924, although there were intervals in which he could use them more than at other times; that it was necessary for him to continue work at the Scripps Institution in order to make a living, and for that reason he was unable to apply himself to perfecting the invention in issue for commercial use to the extent that he would have but for such disability. He testified as follows:

• • • I could work slowly and in the course of several months could get as much done as I might ordinarily do in a very few weeks, of the type of work which did not pertain directly to my livelihood.

He also testified to a disability of dysentery which was cured in September, 1922.

His testimony with regard to his eye disability was corroborated by the witness McEwen and by appellee's brother, and we think it is established that such disability prevented him from proceeding as rapidly in perfecting the invention as he otherwise would have been able to do. We cannot, however, hold that he was diligent in reducing his invention to practice from immediately prior to October 19, 1919, to March 22, 1922, his filing date, a period of two and one-half years, especially in view of his own testimony that for a period of several months he abandoned the particular device responding to the counts here involved and devoted himself to experiments with a device that required the opening and closing of the ports by hand and did not have the automatic principle of having the liquid itself become the means of regulating the vacuum.

In the case of *Lotterhand* v. *Hanson*, 23 App. D. C. 372, 110 O. G. 861, it was held that:

• • • To delay one invention for the sake of another projected invention to be used in connection with it, and which might never be realized, cannot be construed in the patent law as an exercise of due diligence.

We are of the opinion that the decision of the Examiner of Interferences, awarding priority of invention to appellant, was correct, and the decision of the Board of Appeals is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE DOHERTY

No. 2,694. Decided April 27, 1931

PATENTABILITY—METHOD OF DEVELOPING NEW OIL FIELDS. Certain claims for a method of developing new oil fields *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Mr. Edmund G. Borden for Doherty. (*Mr. K. I. White* of counsel.)

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming a decision of the Examiner, rejecting all of the claims of appellant's application. Appellant has taken this appeal from the rejection of four claims, numbered 3, 7, 11 and 13. Claims 3 and 11 are illustrative of the claims in issue and read as follows:

3. A method of developing an oil field as a unit comprising determining the location boundary of an underground oil body, maintaining the oil in its original position in the oil sand by holding a body of gas above the oil

body under sufficient pressure to prevent oil from passing up into unwetted sand, extending oil wells into the oil body and forcing oil from that body out through the wells by raising the level of a body of water below the oil body and maintaining sufficient back pressure on the oil flowing through the wells to hold the oil body under substantially its natural pressure.

11. A method of developing new oil fields comprising determining the location boundary of an underground oil body, maintaining a body of gas above and in contact with the oil body under sufficient pressure to prevent oil from passing up into unwetted sand, extending oil wells into the oil body, and forcing oil from the oil body out through the wells by raising the level of a body of water below and in contact with the oil body.

The references are: Squires, 1,238,355, August 28, 1917; Bacon et al., The American Petroleum Industry, McGraw Hills Co., New York, 1916. Article: More efficient extraction; pages 428 and 429.

The claimed invention is described by the Examiner in his decision as follows:

The invention relates to a process of development and exploitation of oil fields. In many fields the gas is entrapped above the oil at an upper part of a dome, such dome at the upper part thereof being filled with very porous sand and gas, free of oil, constituting the region of the "unwetted sand" of this application. If a well is drilled in the region of the gas entrapped, the gas rushes out to the surface without performing the useful function of propelling the oil, dissolving therein and thereby lowering the specific gravity of the oil, as also forming bubbles in the body of oil in the process of commingling therewith and thereby assisting the further elevation of the oil to the surface in a manner well understood in the art. If an oil well should be drilled in the region of the oil, the gas pressure will be instrumental in elevating the oil through the well until the level of the oil will become sufficiently low and an open passage from the region of the gas to the mouth of the oil well will be formed, and the rest of the gas in the dome will rush out from the oil well without performing any useful function. The object of this invention is to remedy the phenomenon described above and it proposes to drill 3 wells or 3 series of wells. One well, or a series of wells, will be located in the region of the gas at the apex of the dome and are designated with the reference character 10 on Figures 2 and 3 showing different formations of the oil bearing sands; the second well, or series of wells will be located without the region of the gas and within the region of the oil and are designated on these views with the reference character 12; the 3d well, or a series of wells, will be drilled without the region of the oil and these last wells will be extended into the formation so as to reach the region below the oil and these wells are designated with the reference character 14. Water is introduced into the wells 14, oil under control is removed from the wells 12 and the wells 10 are utilized for introducing artificial gas pressure should the natural pressure in the dome become too low.

The rate of removing the oil from the wells 12 and that of introducing water into the wells 14 is such that the oil in the oil region remains above the level of the lower termination of the wells 12, the water introduced elevating the oil so as to keep the level of the oil above these lower terminations of the wells 12 so that the pressure existing in the region of the dome, or introduced therein, shall be operative in elevating the oil through wells 12 and thereby only the gas dissolved and commingled with the oil will find its way out of the wells 12 and on its way out will perform the useful function of elevating the oil to the surface, the free gas in the dome being sealed off by the oil which is kept at a sealing level by the water being introduced through the wells 14.

Appellant in his brief concedes that the above quotation correctly describes the invention claimed except that it fails to point out that his process contemplates displacing oil from the field by water while holding the upper level of the oil body substantially stationary so that oil will not enter the unwetted gas sand overlying the oil and be lost by absorption in and adsorption with the dry gas sand. We agree with appellant's counsel that said feature is disclosed by appellant's specification.

The Board of Appeals and the Examiner concurred in their finding of the unpatentability of the claims in issue, and the rule applies that such finding will not be reversed by us unless shown to be manifestly wrong. *Pengilly* v. *Copeland*, 17 C. C. P. A. (Patents) 1143, 40 F.(2d) 995, 399 O. G. 3.

The Board of Appeals in its decision said:

It is of course a matter of common knowledge that preliminary surveys are very frequently made, notwithstanding the statements of counsel to the contrary, to determine the extent of an oil field or an oil body. It is also but the usual practice to sink as many wells as are deemed necessary and, as described in the publication cited, "it is advisable to equip all drilling holes where high pressure is expected with control casing heads." This is done to take care of the excessive gas pressure which may be found, and frequently is found, above the surface of the oil body. As the oil is forced to the surface by the gas pressure, in wells of this type, the lowering of the oil body and the escape of the gases result in gradual lowering of the pressure of the gas until it is insufficient to force the oil to the surface. Under these conditions, pumping is frequently resorted to, or, as seems to us obvious enough, the pressure of the gas above the oil body is restored. The publication makes it clear that this step of keeping the pressure of the gas above the oil body level constant by introducing compressed air is old since this method is referred to in the following terms:

"In Smith and Dunn's method, the pressure gradient is further sustained by a like device of introducing compressed air into some abandoned wells."

It is apparent, in consequence, that applicant's method, if it contains any novel step, must include something more than pumping compressed air above the level of the oil body, since in our opinion this step was not only an obvious one but is clearly shown by the above quotation to have been previously practiced. This publication further does state that where the production from the wells has reached an unprofitable point "water should be turned down the well situated at the lowest point of the sand. It can be obtained either from one of the shallow sands or else introduced from the surface." Since water possesses a relatively higher specific gravity it would, as is well understood by those skilled in this art, float the oil above it and raise the surface of the oil. It would seem there is here disclosed the broad conception of introducing compressed air above the oil body and water beneath it. If the pressure of water and air were sufficient the oil would be forced out of the well and it seems to us this is what the publication teaches.

The Board then proceeds to discuss the Squires reference and finds that the only essential difference in the process disclosed by it and that disclosed by appellant is that the Squires process was for recovering oil from depleted underground oil bodies, while appellant's process is to be applied to new oil fields.

With respect to this distinction the Board said:

We see no merit in applying this old method to new oil fields, either in their entirety or to parts of them, over applying it to partly depleted oil wells. Its application is only of advantage in any event where the natural pressure of the gas is insufficient and this may be a condition existing in a new oil well or one which has become partly depleted. We think Squires teaches that the pressure of the water would be continued to keep the level of the oil body, if deemed desirable as is explained by the patentee, high enough to engage the lower end of the oil vent or venting well, and, in consequence, are not impressed by the statement of the applicant that Squires keeps "the top level of the oil body always below the bottom or inlet of the venting wells." The specification of the patent specifically negatives the contention of the applicant. The gas pressure and water pressure, when the oil is made to engage the lower end of the well vent as Squires explains, would operate to squeeze the oil body, as in applicant's arrangement, and force it out of the venting well.

We regard all the claims as defining nothing patentable over the prior art of record. Whether the water is inserted at one place or another, or from one source or another, or whether a large area of an oil body is treated all at once or only a small portion is so treated is in our judgment merely a matter of expedience or preference and involves nothing unobvious and inventive.

The principal contention of appellant is that the process of appellant and that of Squires are based upon entirely different principles; that appellant's process involves the squeezing of the oil from gas or other pressure from above and water pressure from below, forcing the oil out from the wells by reason of this squeezing process, at the same time maintaining the body of oil at a substantially constant level until it has been practically exhausted; that the Squires method does not contemplate any squeezing process at all, but provides for the sending of a current of air flowing in a free course above the

oil body, and out through the venting wells carrying with it particles of oil and gas; and further, that whereas appellant prevents the oil from rising into the unwetted sand, Squires introduces water for the specific purpose of raising the body into the more open sand through which the air stream passes in order to effect removal of the oil and gas by entrainment in the air stream.

Upon the point of whether Squires discloses a squeezing process applied to the oil body as does appellant, the Board calls attention to the following statement found in the Squires specification:

As described thus far, it is evident that the flotation method is effective no matter what the character of the streak may be. Its most effective application, however, will probably be in those sands where the roof *o* is of irregular formation so that the oil *f* is raised to a point where it actually engages the lowermost sections, as o^2, o^3, and air pockets are formed. These air pockets will increase the effectiveness of the air pressures since seals will be formed wherever the roof dips into the oil.

The Board then states:

As we view the disclosure of the patent it is deemed fully disclosed that the water introduced under pressure may raise the oil to the level where the latter engages the lower ends of the oil vents and that when this is done the method set forth in the appealed claims is fully carried out and the oil is caught between the pressure of the gas above it and the water below it and forced into the oil vent without the escape through such vent of the gas, the oil being, as stated by the patentee, "pushed along by the air to the venting well."

It seems to us that the contention of appellant is well founded in this respect, and that Squires' method does not involve a squeezing process at all. The statement in the Squires specification, upon which the Patent Office tribunals rely, that the most effective application of his method will be where the roof of the oil sands engages the top of the body of oil, forming air pockets which will increase the effectiveness of the air pressures, since seals will be formed wherever the roof dips into the oil, does not, as we view it, result in a squeezing of the oil as occurs by appellant's method. We think that Squires contemplated a stream of air flowing upon the surface of the oil, except where these air pockets were formed, and at these points the air will force the surface of the oil, where it comes in contact with the roof of the oil sands, to be blown in the direction of the oil wells, and after such point of contact is passed the air will again flow along the surface of the oil body, carrying with it gas and particles of oil.

Therefore, while the Squires process may be regarded as prior art for the introduction of air or gas to the top of the oil body, and of water below it, it does not convey the idea that the bottom of the oil wells should be below the surface of the oil, preventing the ingress of air or gas thereto apart from the body of the oil, so as to create the squeezing process of forcing the oil through the oil well, which is an essential part of appellant's method.

With regard to the reference "Bacon et al., The American Petroleum Industry", we find two statements therein material to the question before us. The first reads as follows:

It is desirable to tube a flowing well early with the perforations set low in the sand, for this does not seriously reduce the production, and it has the merit of keeping the pressure of the gas in the upper part of the sand in place, where it is valuable for its power of expulsion. But there is a small hole in the working barrel at the top of the sand to keep the top of the oil high and so not expose the sand face as long as the pressure is such that the oil is forced into the hole up to a point far above the top of the sand.

It will be observed that there is here pointed out the desirability of keeping the pressure in the upper part of the sand in place, where it is valuable for its power of propulsion. It is also stated that "In Smith and Dunn's method, the pressure gradient is further sustained by a like device of introducing compressed air into some abandoned wells." It is clear that so long as the pressure is sustained, either by the gas originally above the oil body, or by air and gas introduced above it, the oil would be prevented from passing into unwetted sand, which is an element of all of the claims, either by direct statement or by implication.

The other material statement in said reference publication is as follows:

When production has reached an unprofitable point, the well should not be abandoned, but held in reserve until the whole pool can be brought under the management of one great company or of several cooperating companies. Only by concerted action can the next effort by the water-flush method be used to extract the remaining oil. Water should be turned down the well situated at the lowest point of the sand. It can be obtained either from one of the shallow sands or else introduced from the surface. *This should be run in fast enough to keep the hole filled up to the source of the water, in order to have a good head and correspondingly rapid penetration.* Then an adjacent well should be given test pumpings, if not regularly pumped, until the on-flow of this water increases its oil output of the second well. After a period of much improved oil production, it will yield more and more water in ever-increasing proportions. Then when the amount of oil is no longer in paying quantities, this well in turn, where feasible, should serve as a point of entrance for water. In this way, the oil is gradually flushed up to the pool to the highest wells. When only these highest are producing, discontinue introducing water at the lowest wells, so as to prevent the oil being washed by the water up to the dip past these wells. (Italics ours.)

The above, we think, clearly discloses the principle involved in appellant's method of introducing water below the body of the oil, and maintaining a pressure of a greater or less degree below the body of oil. Appellant, however, insists that the method thus disclosed is applied only to depleted wells, that no one before had ever thought of drilling wells for the sole purpose of introducing water below the body of oil before the natural pressure of the gas above the body of oil had been reduced or exhausted.

The Board of Appeals and the Examiner have held that there is no invention in applying the methods disclosed by Squires and by the reference publication to new oil fields, either in their entirety or in part, over applying them to depleted wells. Upon such finding, the rule hereinbefore referred to, that we will not reverse such tribunals unless manifestly wrong, is applicable. We cannot say that such decision is manifestly wrong, but nevertheless, in order to affirm the decision of the Board we must find that all of the elements found in appellant's claims are found in the prior art, although applied to depleted oil wells in such prior art. We then come to a consideration of the elements of the claims in issue.

We think all of the elements of claims 11 and 13 are found in the prior art, and the decision of the Board of Appeals that they should be rejected should be affirmed.

Claims 3 and 7, however, contain elements not found in the prior art, and in combination with the

other elements in the respective claims, in our opinion, define invention. In claim 3 this element is expressed in the phrase "maintaining the oil in its original position" by the means therein stated, and by the phrase "maintaining sufficient back pressure on the oil flowing through the wells to hold the oil body under substantially its natural pressure." In claim 7 the same element is expressed. A method is described by which the surface of the oil body is held in substantially its original level.

In other words, in claims 3 and 7, appellant has disclosed a method by which the level of the oil body remains constant, through securing such a ratio between the pressure of the water below and the gas or air pressure above the oil body as to secure practically the same rate of flow of oil from the wells until the oil body is practically exhausted. We cannot find that this particular element has been shown or suggested in the prior art, and this element, combined with the other steps set out in the claims, in our opinion, constitutes invention. Claims 3 and 7 should be allowed.

The decision of the Board of Appeals is affirmed as to claims 11 and 13, and reversed as to claims 3 and 7.

Modified.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

714,882, O. Ernst, Monoazo dye and process of making; 741,029, Gley & Siebert, Red azo dye lake; 770,177, P. Julius, et al., Axo coloring matter and process of producing same; 807,422, K. Elbel, Manufacture of new zinc compound; 858,065, Ernst & Gullbransson, Monoazo dye for lakes and process of making, D. C., E. D. N. Y., Doc. 389–A, *Chemical Foundation Co.* v. *National Aniline & Chemical Co., Inc., et al.* Dismissed Aug. 25, 1931.

718,340. (See 892,897.) 741,029. (See 714,882.)

770,177. (See 714,882.) 807,422. (See 714,882.)

858,065. (See 714,882.)

892,897, Schirmacher & Landers, Red vat dyestuff; 916,029, 968,697, Schmidt & Bryk, Making new vat dyestuff; 965,170, K. Elbel, Process of condensing reduction products of acenaphthenequinone, etc.; 999,439, Elbel & Wray, Manufacture of vat dyeing coloring matter; 718,340, O. J. Graul, Process of making cyan-methyl derivatives of aromatic amids, D. C.; W. D. N. Y., Doc. 388–C, *Chemical Foundation Co.* v. *National Aniline & Chemical Co., Inc., et al.* Dismissed Aug. 25, 1931.

916,029. (See 892,897.)

931,598, L. Haas, Sulphur dyes and process of making same, D. C., W. D. N. Y., Doc. 390–A, *Chemical Foundation Co.* v. *National Aniline & Chemical Co., Inc., et al.* Dismissed Aug. 25, 1931.

965,170. (See 892,897.) 968,697. (See 892,897.)

999,439. (See 892,897.)

1,086,084, D. Reiser, Feeding mechanism for stitching machines; 1,086,085, same, Machine for stitching pamphlets, D. C., W. D. Mich., S. Div., Doc. E 2411, *S. R. Sagne* v. *F. P. Rosback Co.* Dismissed Aug. 25, 1931.

1,086,085. (See 1,086,084.)

1,125,476, G. Claude, System of illuminating by luminescent tubes, filed Aug. 27, 1931, D. C., W. D. Wash., N. Div., Doc. 874, *Claude Neon Electrical Products, Inc., et al.* v. *L. R. Clark.* Doc. 875, *Claude Neon Electrical Products, Inc., et al.* v. *Shaner & Wolff, Inc.*

1,147,922, W. S. Birdsall, Triplicate salesbook, filed Aug. 27, 1931, D. C., S. D. N. Y., Doc. E 61/330, *American Sales Book Co., Ltd.*, v. *International Tag Co.*

1,157,900, F. J. Plym, Window sash construction, D. C., M. D. Pa., Doc. 543, *The Kawneer Co.* v. *E. F. McHugh et al.* Decree for plaintiff Aug. 15, 1931.

1,212,840, F. J. Straub, Building block and method of making, D. C., E. D. Ill. (East St. Louis), Doc. E 4382, *Crozier-Straub, Inc., et al.* v. *J. F. Domhoff.* Dismissed Aug. 26, 1931.

1,307,734, A. V. Gullborg, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, filed Aug. 25, 1931, D. C. Minn. (Minneapolis), Doc. E 2109, *Alemite Corp.* v. *Specialty Sales & Service, Inc., et al.*

1,475,980. (See 1,307,734.)

1,475,980, O. Zerk, Lubricating apparatus, filed Aug. 25, 1931, D. C. Minn. (Minneapolis), Doc. E 2110, *Alemite Corp.* v. *Kozekar, Inc.*

1,552,326, P. J. Lunati, Lifting device for motor vehicles, filed Aug. 27, 1931, D. C., E. D. Mich., S. Div., Doc. 4942, *Rotary Lift Co. et al.* v. *C. H. Gershenson et al.* (*Ned's Auto Supply*).

1,583,415, L. F. Moody, Hydraulic turbine, filed Aug. 28, 1931, D. C., S. D. Ohio, W. Div., Doc. E 303, *I. P. Morris et al.* v. *The James Leffel & Co.*

1,633,739, Re. 17,567, H. J. Gaisman, Safety razor; 1,815,745, R. E. Thompson, same, filed Aug. 25, 1931, D. C., S. D. N. Y., Doc. E 61/310, *Gillette Safety Razor Co.* v. *D. Jacoby et al.* (*Mills Razor Blade Co.*).

1,641,620, H. P. Brown, Continuous interfold packet; 1,681,168, A. M. Bovier, Record strip; 1,736,427, E. K. Bottle, Construction facilitating multiple carbon separation and control, filed Aug. 27, 1931, D. C., S. D. N. Y., Doc. E 61/331, *American Sales Book Co., Ltd.*, v. *The Wallace Press, Inc.*

1,681,168. (See 1,641,620.) 1,736,427. (See 1,641,620.)

1,764,794, Johnson & Leach, Fuel oil burner, filed Aug. 25, 1931, D. C. Mass., Doc. E 3449, *Lynn Products Co.* v. *The Glenoil Co. et al.*

1,815,745. (See 1,633,739.) Re. 17,567. (See 1,633,739.)

Re. 17,885, J. H. Janowitch, Shirt collar stiffener, filed Aug. 25, 1931, D. C., S. D. N. Y., Doc. E 61/308, *Lakewood's Patents Corp.* v. *Stetson Shirt Co., Inc.*

Des. 83,706, I. D. Stokes, Textile fabric, D. C. Mass., Doc. E 3434, *Otis Co.* v. *Royal Textile Co., Inc.* Injunction Aug. 17, 1931.

TRADE-MARKS

OFFICIAL GAZETTE, OCTOBER 13, 1931

[VOL. 411. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 303,463. BONDED FUEL DEALERS OF AMERICA, Chicago, Ill. Filed July 14, 1930.



The wording accompanying the specimens of the trade-mark apart from the mark as shown on the drawing is disclaimed.

For Coal and Coke for Fuel for Combustion Purposes.
Claims use since June 7, 1930.

Ser. No. 317,510. DURYEA SEED CO., INC., New York, N. Y. Filed July 31, 1931.

OLD HOMESTEAD

For Farm and Lawn Grass Seed.
Claims use since July 21, 1931.

Ser. No. 317,511. DURYEA SEED CO., INC., New York, N. Y. Filed July 31, 1931.

VILLAGE GREEN

For Farm and Lawn Grass Seed.
Claims use since July 21, 1931.

Ser. No. 317,512. DURYEA SEED CO., INC., New York, N. Y. Filed July 31, 1931.

YORKSHIRE PARK

For Farm and Lawn Grass Seed.
Claims use since July 21, 1931.

CLASS 2

Receptacles

Ser. No. 304,183. BROOKINS MANUFACTURING COMPANY, Dayton, Ohio. Filed Aug. 4, 1930.

Brookins

The mark is a facsimile of the signature of Walter R. Brookins, the founder of the applicant corporation.

For Emergency Liquid Containers for Vehicles and Portable Drain Tanks.
Claims use since Jan. 5, 1922.

Ser. No. 311,305. NATIONAL METAL EDGE BOX COMPANY, Philadelphia, Pa. Filed Feb. 20, 1931. Under 10-year proviso.

"METALEDGE"

For Metal-Stayed Paper Boxes.
Claims use since Oct. 2, 1889.

Ser. No. 317,519. THE INTERSTATE FOLDING BOX COMPANY, Middletown, Ohio. Filed July 31, 1931.

FOLDOMATIC

For Paper Boxes.
Claims use since Jan. 14, 1931.

Ser. No. 318,195. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Coffin.
Claims use since Sept. 24, 1930.

Ser. No. 318,387. AL-LON MANUFACTURING COMPANY, INC., Baltimore, Md. Filed Aug. 25, 1931.

C-THRU

For Wardrobe Bags, Individual Dress Covers, Shoulder Covers, and Garment Bags.
Claims use since March, 1928.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 284,188. BRUNO D. LEVI, New York, N. Y. Filed May 17, 1929.

Cynox

For Detergent Preparation for Polishing and Cleaning Silver and Jewelry.
Claims use since Feb. 18, 1927.

Ser. No. 310,313. VELTENE LIMITED, London, England. Filed Jan. 23, 1931.

PRIOREX

For Common Soap and Detergent Soap Extracts.
Claims use since June 24, 1930.

Ser. No. 310,314. VELTENE LIMITED, London, England. Filed Jan. 23, 1931.

SILKFROID

For Common Soap and Common Soap Extracts.
Claims use since June 24, 1930.

Ser. No. 314,979. EDWARD M. BOGART, doing business as Fax Products Co., Lansing, Mich. Filed May 25, 1931.

FAX
WASHING POWDER

The words "Washing Powder" are disclaimed apart from the mark as shown on the drawing.
For Washing Powder Having Incidental Water Softening Properties.
Claims use since Dec. 1, 1930.

Ser. No. 315,643. THE NATIONAL SOAP & POLISH CO., Cleveland, Ohio. Filed June 10, 1931.

NA-ZO

For Hand Soap, Automobile Cleaner, Metal Cleaner, and Silver Polish.
Claims use since June 4, 1931.

Ser. No. 316,629. CLOROX CHEMICAL CO., Oakland, Calif. Filed July 6, 1931.

CLOROX

For Liquid Preparation for General Household Cleaning Purposes.
Claims use since 1915.

Ser. No. 317,598. THE EXPELLO CORPORATION, Dover, N. H. Filed Aug. 3, 1931.

Expello

For Volatile Dry Cleaning Liquid.
Claims use since July 27, 1931.

Ser. No. 317,670. JACIEL PERFUMERS, INC., New York, N. Y. Filed Aug. 5, 1931.

AYWON

For Shaving Cream and Washing and Hand Soap.
Claims use since Jan. 13, 1928.

Ser. No. 318,350. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.. Filed Aug. 24, 1931.

Seventeen

For Toilet Soap.
Claims use since Aug. 20, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 299,873. ATSUMORI TAMENAGA, Ebara-Gun, Tokyo, Prefecture, Japan. Filed May 2, 1930.

毛芸奇妙水

No rights are asserted to the exclusive use of the word "Water" apart from the mark shown in the drawing. The Japanese characters appearing on the drawing have the following English translation, Hair—Clouds—Wonderful—Water.
For Ointment Used for Promoting the Growth of the Hair.
Claims use since February, 1901.

Ser. No. 308,744. SONTAG CHAIN STORES CO. LTD., doing business as Studio Products Co., Los Angeles, Calif. Filed Jan. 8, 1931.

Nailart

For Manicure Preparations—Namely, Cuticle Removers, Nail Polishes and Polish Removers.
Claims use since Nov. 24, 1930.

Ser. No. 311,766. VINCENT MARCHISELLA, doing business as The Bon-E-Blu Co., New York, N. Y. Filed Mar. 3, 1931.

Bon-E-Blu

The words "Yours for Spotless Clothes", "Blu," "The Bluing Stick That Does the Trick," and "Works Like Magic" are disclaimed apart from the mark as shown on the drawing. Also no claim is made to the representation of the goods apart from the mark as shown on the drawing.
For Bluing and Bluing Sticks.
Claims use since June 15, 1929.

Ser. No. 312,895. AMERICAN TAR PRODUCTS COMPANY, INC., Pittsburgh, Pa. Filed Apr. 3, 1931.

CREOSENE

For Wood Preservers Consisting of a Chemical Preparation for Use in Preserving Woods.
Claims use since Feb. 25, 1931.

Ser. No. 313,216. R. B. SEMLER, INCORPORATED, New York, N. Y. Filed Apr. 9, 1931.

Ernest Schaufler

The trade-mark consists of a facsimile of the signature of Ernest Schaufler.
For Hair Tonic.
Claims use since Sept. 8, 1930.

Ser. No. 313,534. CHICAGO MAIL ORDER COMPANY, Chicago, Ill. Filed Apr. 20, 1931.

Miss Paris

For Face Powder.
Claims use since Feb. 17, 1931.

Ser. No. 313,838. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931. Under section 5b of the act of 1905 as amended in 1920.

Eastman

For Rubber Solution and Retouching Fluid.
Claims use since 1886 for rubber solution and since 1910 for retouching fluid.

Ser. No. 314,194. ALDEN H. BAUM, doing business as The Ti-Trinox Company, Pittsburgh, Pa. Filed May 5, 1931.



Applicant disclaims any exclusive right to the use of the wording appearing on the drawing, with the exception of the words "Ti-Trinox", separate and apart from the mark as shown. Applicant also disclaims any exclusive right to the use of the representation of the containers of the goods appearing on the drawing, separate and apart from the mark as shown.

For Antiseptic and Pain Relieving Applications for Ringworm, Athlete's Foot, Skin Infection, and Kindred Diseases.
Claims use since May 1, 1931.

Ser. No. 314,396. JAMES M. CONVEY, New York, N. Y. Filed May 11, 1931.

GYM

For Liniment for Bruises, Rheumatism, Sprains, and Like Ailments.
Claims use since Apr. 28, 1930.

Ser. No. 314,458. NOSTANE PRODUCTS CORPORATION, doing business as Dr. Browns Laboratories, Brooklyn, N. Y. Filed May 12, 1931.

DR. BROWNS

For Laxative.
Claims use since Jan. 15, 1929.

Ser. No. 314,479. GOOD PRODUCTS, Newark, N. J. Filed May 12, 1931.



No claim is made to the words "The Soapless Wash for Hair and Scalp," 'Good Products" nor to the words "Oliv Wash" apart from the mark as shown in the drawing.
For Liquid Hair Wash.
Claims use since Apr. 1, 1931.

Ser. No. 315,313. WILLIAM G. KNAPP, doing business as Winola Laboratories, Ashland, Pa. Filed June 2, 1931.

WIN-OLA

For Salves, Ointments for Relieving Rheumatic Ailments.
Claims use since July 1, 1930.

Ser. No. 315,548. S. F. MOULTON, Los Angeles, Calif. Filed June 8, 1931.

NOANT

For Insecticides.
Claims use since Mar. 18, 1931.

Ser. No. 315,573. SONTAG CHAIN STORES CO. LTD., doing business as Emdee Laboratories Co., Los Angeles, Calif. Filed June 8, 1931.

SAZON

For Cosmetics, Toilet Preparations, and Medicinal Preparations—Namely, Cold Creams, Lotions, Bandoline, Hair Tonics, Toilet Waters, and Hair-Dressing Preparations.
Claims use since Oct. 1, 1930.

Ser. No. 315,901. MARIE S. COOPER, Los Angeles, Calif. Filed June 16, 1931.

DAHLIA

For Antiseptic Douche Powder.
Claims use since Jan. 1, 1931.

Ser. No. 315,971. IMPERIAL TYPE METAL COMPANY, Philadelphia, Pa. Filed June 17, 1931.

Imperial

For Compound Used as a Flux for Removing Dross from Type Metal.
Claims use since Jan. 1, 1931.

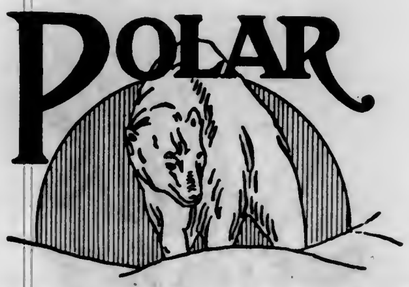
Ser. No. 316,082. CHIPMAN CHEMICAL ENGINEERING CO. INC., Bound Brook, N. J. Filed June 20, 1931.

ANOPHELEX

For Paris Green.
Claims use since June 2, 1931.

Ser. No. 316,521. THE BARRETT COMPANY, New York, N. Y. Filed July 1, 1931.

POLAR



The drawing is lined to indicate the color red, but color is not a distinctive feature of the mark.
For Insecticide and Insect Repellant and Naphthalene.
Claims use since 1916.

Ser. No. 316,522. H. TH. BOHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed July 1, 1931.

Glumin

For Moistening, Dyeing, Washing, and Bleaching Agents Used in the Textile Industry.
Claims use since May 19, 1931.

Ser. No. 316,523. H. TH. BOHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed July 1, 1931.

Printol

For Moistening, Dyeing, Washing, and Bleaching Agents Used in the Textile Industry.
Claims use since May 19, 1931.

Ser. No. 316,524. H. TH. BOHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed July 1, 1931.

Utinal

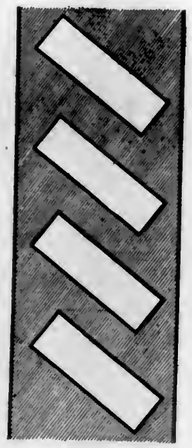
For Moistening, Dyeing, Washing, and Bleaching Agents Used in the Textile Industry.
Claims use since May 19, 1931.

Ser. No. 316,525. H. TH. BOHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed July 1, 1931.

Obesol

For Moistening, Dyeing, Washing, and Bleaching Agents Used in the Textile Industry.
Claims use since May 19, 1931.

Ser. No. 316,669. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed July 6, 1931.



Applicant is the owner of registered Trade-Mark No. 268,699.

For Phosphate and Lactate Mixture Suitable for Use with Sodium Bicarbonate for Same Purpose as Baking Powder.

Claims use since June 10, 1931.

Ser. No. 316,960. ELTASSIBUS CO., Oak Forest, Ill. Filed July 15, 1931.

Eltassibus

Super Complex

For Medicinal Preparation for Eliminating from the Body the Morbid Accumulations Present in Carcinoma, Tuberculosis, Bronchitis, Asthma, Endocarditis, Hay Fever, and Nephritis.

Claims use since Apr. 1, 1931.

Ser. No. 316,966. THE HUBINGER CO., Keokuk, Iowa. Filed July 15, 1931.



The drawing is lined for shading. Applicant is the owner of registered Trade-Mark No. 26,882.

For Starch.

Claims use since 1881.

Ser. No. 317,313. PATRICK G. HENNESSEY, Spokane, Wash. Filed July 25, 1931.



No claim is made to the representation of the bottles appearing on the drawing apart from the mark shown.

For Preparation for the Treatment and Cleansing of the Scalp and for Stimulating Hair Growth.

Claims use since June 15, 1931.

Ser. No. 317,335. CHARLES E. SCHINDLER, Coldwater, Ohio. Filed July 25, 1931.

Gen-To-Na

For a Medicinal Preparation for the Treatment of Catarrh and for Use as a General Tonic.

Claims use since July 1, 1904.

Ser. No. 317,347. HARRY R. BLAY, doing business as Harbly Products, Janesville, Wis. Filed July 27, 1931.

HAR BLY

For Preparation for the Treatment of the Hair and Scalp.

Claims use since May 1, 1931.

Ser. No. 317,356. THE HUBINGER CO., Keokuk, Iowa. Filed July 27, 1931.

ELASTIC

For Laundry Starch.

Claims use since 1881.

Ser. No. 317,388. B & W PRODUCTS CO., Toledo, Ohio. Filed July 28, 1931.

Slik

For Solvent for Attacking Foreign Matter in Fluid Passages.

Claims use since Mar. 1, 1931.

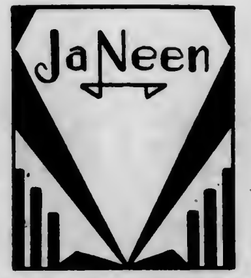
Ser. No. 317,458. ELLSWORTH P. DOTY, doing business as Doty Fertiler Company, Jordan, N. Y. Filed July 30, 1931.

FERTILER

For Hair Grower.

Claims use since July 8, 1931.

Ser. No. 317,524. LOS ANGELES DRUG COMPANY, doing business as Ja Neen Toiletries, Los Angeles, Calif. Filed July 31, 1931.



For Cleansing Cream, Tissue Cream, Rejuvenating Cream for the Skin, Foundation Cream, Pore Paste, Astringent, Refining Lotion for the Skin, Cucumber Lotion, Lemon Lotion, Acne Lotion, Eye Wrinkle Lotion, Body Powder, Muscle Oil, Face Powder, Bleaching Cream, Powder Foundation, Liquid Powder, a Cream Preparation for Giving the Skin a Satin Finish, Brilliantine, Cream Rouge, Preparation for Forming a Shadow Around the Eye, Finger Nail Enamel, Preparation for Removing Cuticle Around the Finger Nails, Lipstick, Acne Cream, Special Astringent, and a Cream Preparation in the Form of a Lotion for Application to the Skin.

Claims use since Jan. 10, 1931.

Ser. No. 317,544. ELIZABETH ARDEN, INC., New York, N. Y. Filed Aug. 1, 1931.

BLUSH ROSE

No claim being made to the word "Rose" apart from the mark shown.

For Rouge.

Claims use since May 6, 1931.

Ser. No. 317,587. SELY S. SELIGMAN, doing business as Devil Laboratories Company, Cincinnati, Ohio. Filed July 31, 1931.

DEVIL'S VAULT PROTECTOR

No claim is made to the words "Vault Protector" apart from the mark shown in the drawing.

For Rust and Stain Remover.

Claims use since Jan. 7, 1931.

Ser. No. 317,615. RUEBEL-STALLARD CO., St. Louis, Mo. Filed Aug. 3, 1931.

A Par X Product **LIMINAX**

No claim is made to the exclusive use of the words "A" and "Product" apart from the trade-mark shown.

For Preparation for the Treatment and Relief of Headaches, Colds, and Neuralgic Pains.

Claims use since July 30, 1931.

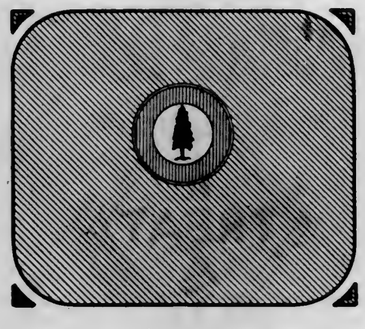
Ser. No. 317,672. JAMES G. MCLAUGHLIN, doing business as The Carey Corporation, Elmira, N. Y. Filed Aug. 5, 1931.



For Health Candy Containing Cod Liver Oil Concentrate.

Claims use since July 20, 1931.

Ser. No. 317,676. GEORGE T. PENNY, doing business as Penny's Chemical Co., Greensboro, N. C. Filed Aug. 5, 1931.



The drawing is lined to indicate the colors green and red.

For Medicinal Preparation Intended for Colds.

Claims use since July 2, 1931.

Ser. No. 317,722. FRANK W. MILLER, doing business as Radex Company, Toledo, Ohio. Filed Aug. 6, 1931.

RADEX

For Electrically Activated Water for Medicinal Purposes Containing Normal Carbonates and Sulphates.
Claims use since May 14, 1931.

Ser. No. 317,771. KARAB LABORATORIES, Petersburg, Va. Filed Aug. 7, 1931.

KARAB

For Preparation for the Treatment of Asthma, Hay Fever, and Related Bronchial and Catarrhal Diseases.
Claims use since Jan. 1, 1931.

Ser. No. 317,775. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn. Filed Aug. 7, 1931.

McKesson's

For Petroleum Products or Preparations Containing Them for Medicinal Purposes, Tooth Powder, Laxatives, Diuretics, Analgesics, Preparations for Repelling Mosquitoes, Tincture of Green Soap, Germicide Antiseptics, Zinc Stearate Plain, Zinc Stearate Compound.
Claims use since January, 1870.

Ser. No. 317,815. MEDICAL RESEARCH CORPORATION, Newark, N. J. Filed Aug. 8, 1931.

TREAT

TREAT

For Deodorant and Perspiration Corrective.
Claims use since Feb. 9, 1931.

Ser. No. 317,819. TEXACO SALT PRODUCTS COMPANY, New York N. Y. Filed Aug. 8, 1931.

TEXACO

For Salt.
Claims use since June 30, 1931.

Ser. No. 317,821. UHER & WEISS MFG. CORP., New York, N. Y. Filed Aug. 8, 1931.

REFINO

For Powdered Substance Used as a Metal Purifier and Cleanser or as an Oxide Reducing Agent for Reducing Metallic Oxides to a Metallic State.
Claims use since July 1, 1931.

Ser. No. 317,881. THE D & L PHARMACAL COMPANY, Cleveland Heights, Ohio. Filed Aug. 8, 1931.

ASTHMEX

For Medicinal Preparation for the Treatment of Hay-Fever, Asthma, Rose Fever, Head Colds, and Sinus Infections.
Claims use since June 3, 1929.

Ser. No. 317,899. MORTON MANUFACTURING CORPORATION, doing business as Whitehouse Chemical Co., Lynchburg, Va. Filed Aug. 12, 1931.

ALBORUM

For Astringent Deodorant Powder.
Claims use since Oct. 30, 1908.

Ser. No. 317,905. RICHMAR LABORATORIES INC., Elizabeth, N. J. Filed Aug. 12, 1931.

June Addam's

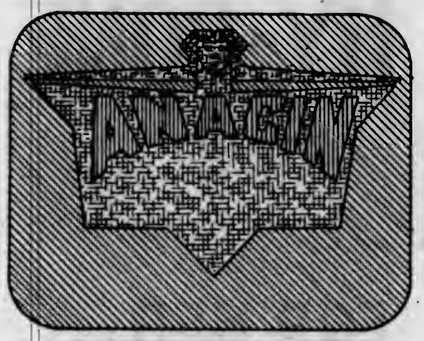
The silhouette in the drawing is merely fanciful.
For Face Powder, Lip Stick, Face Rouge, Cleansing Cream, Cold Cream, Foundation Cream, Astringent Lotion, Nail Polish, Nail Polish Removing Compound and Tissue Cream, Mascara, Eye Shadow, Hand Lotion, Cucumber Face Cream, and Dusting and Talcum Powder.
Claims use since January, 1930.

Ser. No. 317,947. MEDICAL RESEARCH COUNCIL, INC., Brooklyn, N. Y. Filed Aug. 13, 1931.

Byrol

For Antiseptic Ointment or Vaginal Jelly for Feminine Hygiene.
Claims use since Aug. 10, 1931.

Ser. No. 317,967. THE ANACIN COMPANY, Chicago, Ill. Filed Aug. 14, 1931.



The lining on the drawing indicates the colors red, yellow, and green.
For Medicinal Preparation for Internal Use, Acting as an Analgesic to Relieve Pain.
Claims use since Jan. 1, 1916, on the word "Anacin," and since Jan. 22, 1919, as to the mark shown on the accompanying drawing.

Ser. No. 317,978. HUMFELD-LEONARD CHEMICAL CORPORATION, Frankfort, Ind. Filed Aug. 14, 1931.

HUMPY

ENAMEL SLIPPER

No claim is made to the word "Enamel" apart from the mark as shown.
For Solutions for Removing Baked Enamels.
Claims use since Sept. 17, 1930.

Ser. No. 318,024. G. W. CARNRICK CO., Newark, N. J. Filed Aug. 12, 1931.

PROGESTONE

For the Active Estrus Inducing Principles Derived from Various Animal Glands and Tissues, Used to Initiate and Control the Menstrual Process in Women in Such Conditions as Amenorrhea and Dysmenorrhea.
Claims use since July 15, 1931.

Ser. No. 318,037. BREWER & COMPANY INC., Worcester, Mass. Filed Aug. 17, 1931.

EUPHORAL

For Medicinal Preparation for the Treatment of Colds, Fevers, Infectious Diseases, Headaches, Neuralgia, Rheumatism, and Generally for the Relief of Pain.
Claims use since May 19, 1931.

Ser. No. 318,038. BREWER & COMPANY INC., Worcester, Mass. Filed Aug. 17, 1931.

FERRO-COPRAL

For Tonic for the Treatment of Anemia and Allied Conditions.
Claims use since May 1, 1931.

Ser. No. 318,075. PARKE, DAVIS & CO., Detroit, Mich. Filed Aug. 17, 1931.

SKIADOL

For Radiopaque Oil.
Claims use since Aug. 4, 1931.

Ser. No. 318,092. THE AYER COMPANY, Lowell, Mass. Filed Aug. 18, 1931.

Ardeur

For Perfumes and Perfumery.
Claims use since Mar. 19, 1931.

Ser. No. 318,189. JOHN CARVELLI, doing business as Lady Onda Company, Chicago, Ill. Filed Aug. 20, 1931.

Lady Onda



QUEEN OF THE WAVES

The silhouette constituting a part of the mark is fanciful.
For Hair Waving Fluid.
Claims use since July 15, 1930.

Ser. No. 318,249. OLEIDE PRODUCTS COMPANY, Brooklyn, N. Y. Filed Aug. 20, 1931.

OLEIDE

For Spray Composed of Iodine in Oil and an Iodine Ointment.
Claims use since June 24, 1924.

Ser. No. 318,311. HOUBIGANT, INC., New York, N. Y. Filed Aug. 22, 1931.

RITOURNELLE

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Eau Vegetal.
Claims use since Aug. 14, 1931.

Ser. No. 318,486. LAVIN PARFUMES, INC., Wilmington, Del. Filed Aug. 27, 1931.

SCANDAL

For Perfume Extract.
Claims use since Aug. 20, 1931.

Ser. No. 318,586. WALDO E. DRUMMOND, doing business as Drummond Laboratories, Dayton, Ohio. Filed Aug. 31, 1931.

AVOIDA

For Medicine for the Treatment of Acid Stomach.
Claims use since Sept. 16, 1930.

Ser. No. 318,733. AIR REDUCTION SALES COMPANY, New York, N. Y. Filed Sept. 4, 1931.

HY-CONE

For Gas Mixture Used in Torches for Cutting Metals.
Claims use since Apr. 6, 1931.

Ser. No. 318,788. JEAN PATOU, INC., New York, N. Y. Filed Sept. 5, 1931.

FOR HER....
....FOR HIM

For Perfumes.
Claims use since Sept. 1, 1931.

CLASS 10

Fertilizers

Ser. No. 317,290. WIL-GRO COMPANY, Bridgeboro, N. J. Filed July 24, 1931.

WIL-GRO



For Fertilizer.
Claims use since June 1, 1930.

CLASS 11

Inks and Inking Materials

Ser. No. 316,921. THE CARTER'S INK COMPANY, doing business as Winner Chemical Co., Cambridge, Mass. Filed July 14, 1931.

WINNER

For Writing Ink.
Claims use since May 1, 1931.

CLASS 12

Construction Materials

Ser. No. 304,876. THE MASTER BUILDERS COMPANY, Cleveland, Ohio. Filed Aug. 21, 1930.

POZZOLITH

For Material in the Nature of Portland Cement but Containing Ingredients Intended to Stabilize, Strengthen, and Increase Resistance to Disintegration.
Claims use since June 23, 1930.

Ser. No. 318,002. FERROCRETE CEMENT CO. INC., New York, N. Y. Filed Aug. 15, 1931.

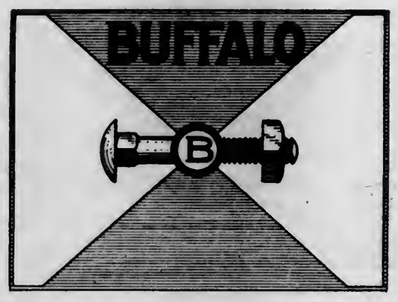
SNOWCRETE

For Portland Cement.
Claims use since July 1, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 311,225. BUFFALO BOLT COMPANY, North Tonowanda, N. Y. Filed Feb. 19, 1931.



The representation of the goods is disclaimed apart from the mark as shown. The shading on the drawing is intended to indicate form independently of any color or lack of color that may be used to create the form.
For Bolts, Nuts, Screws, Nails and Rivets.
Claims use since July 3, 1930.

Ser. No. 311,303. NATIONAL METAL EDGE BOX COMPANY, Philadelphia, Pa. Filed Feb. 20, 1931. Under 10-year proviso.

"METALEDGE"

For Metal Stays for Paper Boxes.
Claims use since Oct. 2, 1889.

Ser. No. 318,049. COLUMBUS MCKINNON CHAIN CORPORATION, Tonawanda, N. Y. Filed Aug. 17, 1931.



CLAW

For Anti-Skid Chains.
Claims use since Sept. 18, 1925.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 315,202. M. & L. TYPESETTING & ELECTROTYPING CO., Chicago, Ill. Filed May 29, 1931.

M & L CHICAGO

No claim is made to the word "Chicago" apart from the mark shown in the drawing.
For Cast Lines of Type and Printers' Type Formed of Cast Metal or Steel.
Claims use since Feb. 15, 1931.

Ser. No. 316,403. THE BIRMINGHAM ALUMINUM CASTING (1903) COMPANY LIMITED, Birmingham, England. Filed June 29, 1931.

BIRMABRIGHT

For Alloys of Aluminum Wrought and Partly Wrought in Ingots, Sheets, Bars, Rods, Strips, Tubes, Extruded Sections, Castings, Forgings, and Pressings or Stampings.
Claims use since July 25, 1928.

Ser. No. 317,332. PHELPS DODGE CORPORATION, New York, N. Y. Filed July 25, 1931.

PDM

For Copper Castings—Namely, Ingots, Ingot Bars, Cakes, Sheets, Bars, Etc.
Claims use since Jan. 29, 1929.

Ser. No. 317,460. WALTER P. EPPERS, Allentown, Pa. Filed July 30, 1931.

GRAPHO

For Babbit Metal.
Claims use since Apr. 20, 1931.

Ser. No. 317,518. INDUSTRIAL WELDED ALLOYS, INC., Newark, N. J. Filed July 31, 1931.

PLYKROME

For Sheets, Plates, Rods, and Strips of Rolled or Drawn Composite Metal.
Claims use since July 24, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 315,798. JACK HUME, doing business as Stop-O-Stain Manufacturing Company, Portland, Oreg. Filed June 18, 1931.



The drawing is lined and hatched to indicate colors red and orange. No claim is made to the word "Stop-O-Stain" apart from the mark shown on the drawing.
For Stain Cover in the Nature of Painter's Sizing.
Claims use since Apr. 15, 1925.

Ser. No. 317,720. THE MARIETTA PAINT & COLOR CO., Marietta, Ohio. Filed Aug. 6, 1931.

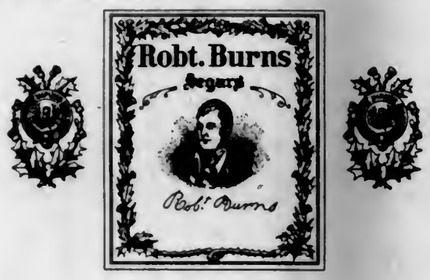
UNITONE

For Wood Stains and Paint Surfacers.
Claims use since June, 1930.

CLASS 17

Tobacco Products

Ser. No. 314,641. GENERAL CIGAR CO., INC., New York, N. Y. Filed May 16, 1931.



Robt. Burns

No claim is made to the word "Segars" apart from the mark shown in the drawing.
For Cigars.
Claims use since Feb. 10, 1931.

Ser. No. 314,798. HAVATAMPA CIGAR COMPANY, Tampa, Fla. Filed May 20, 1931.

HAV-A-TAMPA

No claim is made to the word "Tampa."
For Cigars.
Claims use since November, 1902.

Ser. No. 315,829. THE HOUSE OF CRANE, Indianapolis, Ind. Filed June 15, 1931.

NABOB

For Cigars.
Claims use since Feb. 8, 1931.

Ser. No. 317,004. MIAMI-HAVANA TRADING COMPANY, Miami, Fla. Filed July 16, 1931.

THE MOST SATISFYING SMOKE OF THE NATION

1890 LOUIS 1890

The slogan "The Most Satisfying Smoke of the Nation," being descriptive of the goods, is disclaimed apart from the other features of the mark depicted in the drawing.
For Cigars.
Claims use since April, 1914.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 297,202. MULLINS MANUFACTURING CORPORATION, Salem, Ohio. Filed Mar. 12, 1930.

Mullins

For Canoes, Row Boats, Motor Boats, Out-Board Boats, and Boat Trailers.
Claims use since Jan. 10, 1930.

Ser. No. 314,519. STERIL MANUFACTURING COMPANY, Omaha, Nebr. Filed May 18, 1931.

THE PALL-BEARER

For Casket Carriages or Trucks.
Claims use since July 15, 1930.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 306,466. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Oct. 6, 1930.

X-PERT

For Fishing Tackle—Namely, Fishing Rods, Fishing Reels, Artificial Fishing Baits, Minnow Buckets, Tackle Boxes, and Fish Lines.
Claims use since March, 1928.

Ser. No. 318,159. MELKON MURACHANIAN, West New York, N. J. Filed Aug. 19, 1931.

BANKER AND BEGGAR

For Card Game.
Claims use since June 19, 1931.

Ser. No. 318,792. STRAUSS TOY SHOPS, INC., New York, N. Y. Filed Sept. 5, 1931.

Miss NewYork

For Dolls.
Claims use since Aug. 24, 1931.

Ser. No. 318,841. MASTER MARBLE COMPANY, Clarksburg, W. Va. Filed Sept. 8, 1931.

CLEARIE

For Marbles.
Claims use since Aug. 8, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 302,485. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed June 16, 1930.

BEST MADE
EXTRA LARGE 5 BLADE MOWER

No claim is made to the words "Best Made," "Extra Large" and "Blade Mower" and the numeral "5" apart from the mark shown in the drawing.
For Lawn Mowers.
Claims use since Jan. 22, 1925.

Ser. No. 311,616. THE R. K. LEBLOND MACHINE TOOL COMPANY, Cincinnati, Ohio. Filed Mar. 2, 1931.



No claim is made to the exclusive use of the words "Built by" apart from the trade-mark as shown.
For Lathes.
Claims use since Nov. 3, 1930.

Ser. No. 315,294. OLIVER FARM EQUIPMENT COMPANY, Chicago, Ill. Filed June 1, 1931.



Applicant claims ownership of trade-mark registered Mar. 5, 1889, under No. 16,350 (renewed) and No. 44,911, registered July 25, 1905 (renewed).
For Farm Tractors, General Purpose Tractors, Orchard Tractors, Road Tractors, Industrial Tractors, Stationary Engines, Grain Threshers, Rice Threshers, Bean Threshers, Combined Harvester Threshers, Straw Spreader, Windrowers, Corn Pickers, Corn Huskers, Tractor Plows, Riding Plows, Vineyard Plows, Walking Plows, Hillside Plows, Cross Row Plows, Disc Plows, One-Way Disc Plows, Two-Way Plows, Marsh and Brush Plows, Road Plows, Sulky Plows, Middlebreaker Plows, Gang Plows, Tractor Hitches, Orchard Plows, Side Tractor Plows, Disc Harrows, Tandem Disc Harrows, Reversible Disc Harrows, Tractor Disc Harrows, Tractor Brush Harrows, Off-set Harrows, Cover Crop Harrows, Spring Tooth Harrows, Spike Tooth Harrows, Quack Grass Harrows, Pulverizers, Corn Cultivators, Motor Cultivators, Beet Cultivators, Potato Cultivators, Alfalfa Cultivators, Fallovators, Cane Cultivators, Sled Cultivators, Field Cultivators, Listed Corn Cultivators, Corn Listers, Cotton Listers, Walking Listers, Ridge Busters, Cotton Busters, Middlebreakers, Corn Planters, Cotton Planters, Peanut Planters; Two, Three, Four and Five Row Planters; Walking Planters, Picker Wheel Planters, Tractor Listers, Rotary Hoes, Riding Weeders, Walking Weeders, Potato Cutters, Potato Planters, Potato Sprayers, Potato Diggers, Grain Drills, Deep Furrow Drills, Alfalfa Drills, Grass Seed Drills, Beet Drills, Cotton Drills, Corn Drills, Pea Drills, Rice Drills, Bean Drills, Clover Drills, Fertilizer Drills, Deep Furrow Drills, Broadcast Seeders and Sowers, Broadcast Fertilizer and Lime Sowers, Manure Spreaders, Stalk Cutters, Mowers, Self Dump Rakes, Combined Rake and Tedders, Hay Loaders, Potato Harvesters, Sprayers, and Eveners.
Claims use since Nov. 8, 1929.

Ser. No. 316,050. PRE COTE CORPORATION, Indianapolis, Ind. Filed June 19, 1931.

PRE COTE

For Machines for Producing Compositions of Matter Suitable for Use in Paving and Machines for Producing Emulsions.
Claims use since Mar. 24, 1931.

Ser. No. 318,018. WILLIAM POTTER, New York, N. Y. Filed Aug. 15, 1931.

ZIP-ALL

For Wood Scrapers, Parts Thereof, and Scraper Blades.
Claims use since October, 1930.

Ser. No. 318,270. CAMBRIDGE BLADE CO., INC., New York, N. Y. Filed Aug. 21, 1931.

The NEW
HUMORESQUE

The words "The New" are disclaimed apart from the mark shown in the drawing.
For Razor Blades.
Claims use since January, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 317,088. THE NATIONAL ACME CO., Cleveland, Ohio. Filed July 18, 1931.

CHRONOLOG

For Instruments for the Combined Recording of Time and Production.
Claims use since May 27, 1931.

Ser. No. 318,730. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed Sept. 4, 1931.

NOVOCHROME

For Sensitized Photographic Film.
Claims use since July 21, 1931.

Ser. No. 318,731. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed Sept. 4, 1931.

NOVOFILM

For Sensitized Photographic Film.
Claims use since July 21, 1931.

Ser. No. 318,732. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed Sept. 4, 1931.

NOVOPAN

For Sensitized Photographic Film.
Claims use since July 21, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 303,291. ALBERT KESSLER, doing business as F. A. Kessler, Mittweida, Germany. Filed July 9, 1930.

Puritas

For Polishing Cloths Cut to Size for Use and Done Up in Packages.
Claims use since January, 1910.

CLASS 31

Filters and Refrigerators

Ser. No. 318,820. CALIFORNIA CONSOLIDATED WATER COMPANY, Wilmington, Del., and Los Angeles, Calif. Filed Sept. 8, 1931.

HYDROMATIC

For Water Coolers, Cooler Used in Connection with the Sale of Bottled Drinking Water.
Claims use since July 20, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 315,620. UNITED COMBUSTION & ENGINEERING CO. INC., Hoboken, N. J. Filed June 9, 1931.

CHEEP-HEET
THE METHOD of COMPLETE COMBUSTION

All the words shown on the drawing are disclaimed apart from the mark as shown.
For Automatic Coal Burning Equipment for Heating Purposes, Comprising Combustion Air Valves, Forced and Induced Draft Fans, Dampers, Air Valves, Automatic Mechanisms for Operating Check and Pipe Dampers, Furnaces, Piping, Boilers.
Claims use since Mar. 13, 1931.

Ser No. 315,724. NICHOLAS BARTLETT, Auburn, N. Y. Filed June 12, 1931.

HUMI-RAD

For Heating Radiators.
Claims use since Feb. 10, 1931.

Ser. No. 318,097. CLAYTON & LAMBERT MANUFACTURING COMPANY, Detroit, Mich. Filed Aug. 18, 1931.

HANDY HOUSE

No claim is made to the word "House" apart from the mark shown in the drawing.
For Liquid Fuel Blow Torches.
Claims use since Mar. 26, 1931.

Ser. No. 318,170. REAL-OIL-HEAT BURNER COMPANY, Winona, Minn. Filed Aug. 19, 1931.

SUNAIRE

For Heat Savers, Consisting of Heating Drums Through Which the Products of Combustion of Heating Plants Are Run Prior to Passage to Smoke Pipes.
Claims use since Apr. 2, 1931.

Ser. No. 318,388. BASTIAN-MORLEY CO., La Porte, Ind. Filed Aug. 25, 1931.

CONVERTO

For Gas Burners.
Claims use since July 18, 1931.

Ser. No. 318,415. GEO. D. ROPER CORPORATION, Rockford, Ill. Filed Aug. 25, 1931.

Sani-Speed

For Gas Stoves and Ranges.
Claims use since July 29, 1931.

Ser. No. 318,429. L. J. MUELLER FURNACE COMPANY, Milwaukee, Wis. Filed Aug. 24, 1931.

CLIMATOR

For Warm Air Heating and Air Conditioning Systems.
Claims use since Feb. 21, 1930.

CLASS 37

Paper and Stationery

Ser. No. 304,823. THE MEAD CORPORATION, Dayton, Ohio. Filed Aug. 20, 1930.

ROTONAMEL

For Book Printing Paper.
Clams use since Feb. 25, 1930.

Ser. No. 316,508. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y. Filed June 30, 1931.

DRUMHEAD

For Tympan Paper.
Claims use since June 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 301,385. AMERICAN BABY BONDS CORPORATION, Denver, Colo. Filed May 28, 1930.

BABY  BONDS

The pictorial part of the mark includes a portrait of the distinguished American, now deceased, Benjamin Franklin. The word "Bonds" is disclaimed apart from the other features of the mark appearing on the drawing.
For Prints and Printed Matter Comprising Trade Coupons.
Claims use since Feb. 28, 1930.

Ser. No. 301,387. AMERICAN BABY BONDS CORPORATION, Denver, Colo. Filed May 28, 1930.



Applicant disclaims all the wording appearing on the drawing.
For Prints and Printed Matter Comprising Trade Coupons.
Claims use since Feb. 28, 1930.

Ser. No. 317,880. BARTON-COTTON, INC., Baltimore, Md. Filed Aug. 8, 1931.

PHOTOCRAFT

For Advertising Folders, Pamphlets, Brochures, Magazines, and Books.
Claims use since June 1, 1931.

Ser. No. 318,006. GULF REFINING COMPANY, Port Arthur, Tex. Filed Aug. 15, 1931.

GULF TOURGIDE

For Periodical Publication.
Claims use since May 6, 1931.

Ser. No. 318,050. CONSUMER DEMAND PUBLISHING COMPANY, Seattle, Wash. Filed Aug. 17, 1931.

Consumer Demand

For Periodical Magazine Published at Regular Intervals.
Claims use since Aug. 1, 1931.

Ser. No. 318,060. GERNSBACK PUBLICATIONS, INC., New York, N. Y. Filed Aug. 17, 1931.

EVERYDAY SCIENCE AND MECHANICS

For Monthly Publication.
Claims use since Aug. 14, 1931.

Ser. No. 318,161. NEA SERVICE, INC., Cleveland, Ohio. Filed Aug. 19, 1931.

THE NEWFANGLES

For Comic Strip.
Claims use since July 21, 1931.

Ser. No. 318,162. NEA SERVICE, INC., Cleveland, Ohio. Filed Aug. 19, 1931.

Sez Hugh:

For Comic Strip.
Claims use since Feb. 25, 1930.

Ser. No. 318,168. THE PORTRE CORPORATION, San Francisco, Calif. Filed Aug. 19, 1931.

PORTRÉGRAPH

For Photomechanical Prints.
Claims use since July 15, 1931.

Ser. No. 318,563. PARK PUBLISHING COMPANY, Chicago, Ill. Filed Aug. 29, 1931.

THE COIN MACHINE JOURNAL

For Monthly Publication.
Claims use since May 1, 1931.

CLASS 39

Clothing

Ser. No. 288,184. FRUHAUF BROS. & Co., New York, N. Y. Filed Aug. 6, 1929.

Rutnan

For Men's and Young Men's Suits, Knickers, and Vests.
Claims use since July 1, 1929.

Ser. No. 303,824. JULIUS SIMON, INC., New York, N. Y. Filed July 25, 1930.

LOVE SHIRT

No claim is made to the word "Shirt" apart from the mark shown on the drawing.
For Men's Dress, Negligee, and Work Shirts.
Claims use since July 15, 1930.

Ser. No. 304,244. S. H. KRESS & Co., New York, N. Y. Filed Aug. 5, 1930.

Beau Brummel

For Suspenders and Garters
Claims use since November, 1929.

Ser. No. 311,930. THE HEROLD-BERTSCH SHOE COMPANY, Grand Rapids, Mich. Filed Mar. 9, 1931.



Applicant disclaims the right to the exclusive use of the words "Shoe" and "Pedometer Tested" except in association with the rest of the mark as shown in the drawing.
For Shoes Constructed of Leather, Rubber, or Wood Fiber, or a Combination of Those Materials.
Claims use since Feb. 1, 1931.

Ser. No. 316,501. M. PERLMAN, doing business as Ponchartrain Shirt Company, Detroit, Mich. Filed June 30, 1931.

Ponchartrain

For Men's Dress and Work Shirts, Neckties, Underwear, and Hosiery.
Claims use since Apr. 1, 1931.

Ser. No. 317,791. CONTINENTAL MILLS, INC., Philadelphia, Pa. Filed Aug. 8, 1931.



For Men's and Boys' Overcoats, Men's and Boys' Topcoats; Men's, Boys', Women's, and Girls' Cloaks and Capes; Men's, Boys', Women's, and Girls' Suits; Men's, Boys', Women's, and Girls' Jackets; Men's and Boys' Vests, and Men's and Boys' Trousers.
Claims use since Sept. 1, 1919.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 316,274. S. H. KRESS & Co., New York, N. Y. Filed June 25, 1931.

BONITA

For Buttons (Pearl and Fancy), Not Made of Precious Metal; Needles for Hand Use, Snap Fasteners, Combs of All Kinds, Not Made of Precious Metal; All Kinds of Hairpins, Not Made of Precious Metal; Bobby Pins or Clasps in Metal or Celluloid, Dress Shields, Bias Seam Tapes, Narrow Elastics, Common Pins and Safety Pins, Not Made of Precious Metal.
Claims use since May 15, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 306,063. MECHANISCHE WEBEREI SORAU VORMALS F. A. MARTIN & CO., Sorau, Nieder Lausitz, Germany. Filed Sept. 25, 1930.



For Tea Sets, Damask Sets, Table Cloths, Napkins, Doylies, Trays, Towels, and Toweling Made of Flax or of Cotton.
Claims use since Aug. 24, 1927.

Ser. No. 314,887. ALGEMEENE KUNSTZIJDE UNIE N. V., Arnhem, Holland. Filed May 22, 1931.

ENCONA

For Piece Goods Made of Cellulose.
Claims use since May 1, 1930.

Ser. No. 318,042. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Aug. 17, 1931.

CELANGESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Aug. 14, 1931.

Ser. No. 318,301. WELLINGTON SEARS COMPANY, New York, N. Y. Filed Aug. 21, 1931.



The word "Cloth" is hereby disclaimed apart from the mark as shown.
For Cloths Made All or in Part of Worsted, Wool, Mohair, Camel's Hair, Alpaca, Silk, Rayon, Cotton.
Claims use since May 10, 1917.

Ser. No. 318,366. A. & M. KARAGHEUSIAN, INC., New York, N. Y. Filed Aug. 24, 1931.



No claim is made to the representation of the label as such in the drawing.
For Textile Rugs, Carpets, Floor and Wall Coverings.
Claims use since Apr. 9, 1928.

Ser. No. 318,564. PATEX FIBRE CORPORATION, Montville, N. J. Filed Aug. 29, 1931.

PATEX

For Towels and Toweling of Textile Material.
Claims use since Sept. 1, 1929.

Ser. No. 318,622. J. A. FINN & CO., New York, N. Y. Filed Sept. 1, 1931.

FLANELA

For Cotton Piece Goods.
Claims use since Jan. 14, 1931.

Ser. No. 318,671. HUGH NELSON-COLUMBIA CARPET MILLS, INC., Philadelphia, Pa. Filed Sept. 2, 1931.

HAJISHAH

For Textile Rugs and Carpets.
Claims use since Aug. 10, 1931.

CLASS 43

Thread and Yarn

Ser. No. 313,384. MAX POLLACK & CO., INC., New York, N. Y. Filed Apr. 15 1931.

MECCA

For Sewing Threads.
Claims use since Mar 15, 1931.

Ser. No. 316,250. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed June 25, 1931.

FIDULA

For Yarns, Threads, and Fibres All Made of Cellulose.
Claims use since Mar. 26, 1931.

CLASS 44

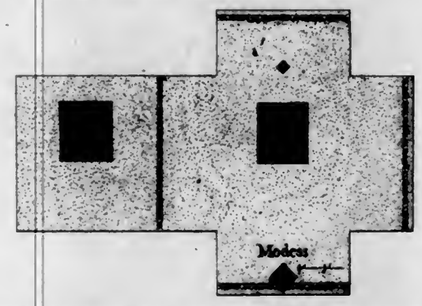
Dental, Medical, and Surgical Appliances

Ser. No. 314,188. BROADWAY DEPARTMENT STORE, INC., Los Angeles, Calif. Filed Apr. 25, 1931.

Modcraps

For Sanitary Napkins.
Claims use since Dec. 15, 1930.

Ser. No. 318,559. JOHNSON & JOHNSON, New Brunswick, N. J. Filed Aug. 29, 1931.



The shading on the drawing indicates the colors red and black. The stippled portion of the drawing indicates the color gray. No claim is made to the representation of a label or carton per se.
For Sanitary Napkins.
Claims use since June 14, 1929.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 312,971. DR. CAMILLE BAILLOD, Basel, Switzerland. Filed Apr. 6, 1931.



CITROMIEL

For Non-Alcoholic, Maltless Syrups for Beverage Purposes.
Claims use since Feb. 1, 1931.

Ser. No. 318,643. F. B. CHAMBERLAIN COMPANY, East St. Louis, Ill., and St. Louis, Mo. Filed Sept. 2, 1931.

FROSTY-ADE

For Powder Compound in Various Fruit Flavors, Particularly Orange, Grape, Strawberry, and Raspberry Used for Making Non-Alcoholic, Maltless Beverages.
Claims use since July 4, 1931.

Ser. No. 318,683. SOCIETE VINICOLE BOTRYS, SOCIETE ANONYME, Paris, France. Filed Sept. 2, 1931.

BOTRYS

For Grape Juice.
Claims use since May 3, 1929.

Ser. No. 318,780. LEWIS CARL GAEISER, Cincinnati, Ohio. Filed Sept. 5, 1931.

Honeymaid

For Non-Alcoholic, Non-Cereal, Maltless Beverages, Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since Aug. 15, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 298,220. WESTERN GROCER COMPANY, Marshalltown, Iowa. Filed Mar. 31, 1930.

PONY EXPRESS

For Coffee.
Claims use since Mar. 12, 1906.

Ser. No. 301,664. DANIEL H. MAHAR, doing business as Kwality Farm, West Windsor Township, N. J. Filed May 29, 1930.

KWALITY FARM
KF
HEAVY DUTY STRAIN

No claim is made to the words "Heavy Duty Strain" apart from the mark shown on the drawing.
For Eggs, Breeding Chickens, and Baby Chicks.
Claims use since January, 1925.

Ser. No. 311,292. UNITED BISCUIT & SPECIALTY CO. INC., Clifton, N. J., assignor to Charles J. Fay, Clifton, N. J. Filed Feb. 20, 1931.

T-BONE
DOG T-BONE FOOD

No claim is made to the words "Dog Food" apart from the mark as shown on the drawing.
For Dog Food.
Claims use since Jan. 29, 1931.

Ser. No. 311,706. SUCHAR PROCESS CORPORATION, New York, N. Y. Filed Mar. 3, 1931.

"POLAR CAP"

For Sugar and Sugar Syrups.
Claims use since Jan. 2, 1931.

Ser. No. 315,967. WM. P. HARTLEY (LONDON & AINTREE) LIMITED, doing business as Wm. P. Hartley, Liverpool and London, England. Filed June 17, 1931.

WM. P. HARTLEY'S
BITTERSWEET MARMALADE

The conventional lining on the drawing indicates the colors purple, orange, green, and red. Applicant disclaims the notations "Bittersweet Marmalade," "Fresh Seville Oranges" and "Finest Sugar Only" apart from the mark as shown on the drawing.
For Marmalade.
Claims use since November, 1930.

Ser. No. 316,350. MARTHA WASHINGTON CANDIES COMPANY, Chicago, Ill. Filed June 26, 1931.



The portraits on the drawing are those of Martha Washington, deceased, and George Washington, deceased, and the signatures appearing thereon are the facsimile signatures of the same persons.
For Ice Cream.
Claims use since May 20, 1931.

Ser. No. 317,259. P. J. RITTER COMPANY, Philadelphia, Pa. Filed July 23, 1931. Under section 5b of the act of 1905, as amended in 1920.

RITTER

For Spaghetti and Tomato Juice.
Claims use since August, 1930, on tomato juice and since November, 1924, on spaghetti.

Ser. No. 317,730. OMAHA COLD STORAGE COMPANY, Omaha, Nebr. Filed Aug. 6, 1931.

CLEARVIEW

For Eggs.
Claims use since Apr. 9, 1931.

Ser. No. 317,877. TILLMAN & BENDEL, INC., San Francisco, Calif. Filed Aug. 11, 1931.

Mandalay

For Coffee.
Claims use since 1887.

Ser. No. 317,992. LUTHER B. SELF, Portland, Oreg. Filed Aug. 14, 1931.

Self
TOS-TED N-UT-Z

No claim is made to the notation "Self Tos-Ted N-ut-z" apart from the mark.
For Salted and Unsalted Nuts of All Kinds.
Claims use since June 1, 1931.

Ser. No. 318,134. THE EMPSON PACKING COMPANY, Brighton, Colo. Filed Aug. 19, 1931.

Empson's

For Peas, Green Lima Beans, Sugar Corn, Sauerkraut, Sauerkraut Juice, Pumpkin, Pitted Red Cherries, Pork and Beans with Tomato Sauce, Hominy, Tomatoes, Red Kidney Beans, Beet Salad, Whole Beets, Sliced Beets, Quartered Beets, Green Stringless Beans, Wax Beans, Sweet Relish, Sweet Pickles, Sweet Mixed Pickles, Sliced Sweet Pickles, Sour Pickles, Dill Pickles, Tomato Puree, Tomato Catsup, Whole Sweet Gherkins, Prepared Mustard, and Sliced Dill Pickles Packed in Cans, Bottles, Kegs, and Barrels.
Claims use since Jan. 1, 1893.

Ser. No. 318,472. SAMUEL ZIMETBAUM, doing business as Trees Candy Company, Newark, N. J. Filed Aug. 26, 1931.

TREES

For Candy.
Claims use since May, 1919.

Ser. No. 318,636. JOHN MORRIS, Jr., Harlingen, Tex. Filed Sept. 1, 1931.

GREENBACK

For Fresh Deciduous Fruits, Fresh Vegetables.
Claims use since Feb. 1, 1931.

Ser. No. 318,640. TROPICAL SWEETS INCORPORATED, Davenport, Fla. Filed Aug. 31, 1931.

Sun Tot

For Candy and Candied Citrus.
Claims use since Sept. 15, 1930.

CLASS 47

Wines

Ser. No. 314,987. G. & L. FLLI CORA, Turin, Italy. Filed May 25, 1931.

CORA



The drawing is lined for red. All the wording appearing on the drawing with the exception of the word "Cora" are disclaimed apart from the mark shown on the drawing.
For Wine Vermouth.
Claims use since June 5, 1889.

Ser. No. 314,989. G. & L. FLLI CORA, Turin, Italy. Filed May 25, 1931.

CORA

For Wines, Appetizing Wines, Sparkling Wines.
Claims use since Feb. 16, 1913.

Ser. No. 318,684. SOCIETE VINICOLE BOTRYS, SOCIETE ANONYME, Paris, France. Filed Sept. 2, 1931.

Botrys

For Wines.
Claims use since 1923.

CLASS 48

Malt Beverages and Liquors

Ser. No. 302,144. THE KOCH BEVERAGE COMPANY, Wapakoneta, Ohio. Filed June 3, 1930.

A LITTLE DUTCH

No claim is made to the word "Dutch" except in the connection shown.
For Malt Beverage Containing Less Than One-Half of One Per Cent of Alcohol by Volume.
Claims use since January, 1928.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 314,988. G. & L. FLLI CORA, Turin, Italy. Filed May 25, 1931.

CORA

For Bitters, Cordials, Brandies, Whiskies, Cocktails, Syrups, Rum, and Vermouth.
Claims use since Feb. 6, 1913.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 316,545. ROBERT E. BRIGSTOCK, Battle Creek, Mich. Filed June 30, 1931.

SAN-I-KAP

The word "Kap" is disclaimed apart from the mark as shown.
For Milk Bottle Caps.
Claims use since Apr. 1, 1930.

Ser. No. 316,957. CHENEY BROTHERS, South Manchester, Conn. Filed July 15, 1931.

KEY-TO-COSTUME

For Cravat Display Device.
Claims use since June 30, 1931.

Ser. No. 317,169. GEMSCO, INC., New York, N. Y. Filed July 21, 1931.

SPORTSMAN

For Boot Hooks and Boot Jacks.
Claims use since March, 1929.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

OCTOBER 13, 1931

287,793. MALT BEVERAGE CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL BY VOLUME. BROOKLYN BEVERAGE DEALERS ASSOCIATION, INC., Brooklyn and New York, N. Y.
Filed March 4, 1931. Serial No. 311,855. PUBLISHED JULY 28, 1931. Class 48.

287,794. AN INDOOR AND OUTDOOR GAME PLAYED WITH SHUTTLECOCKS OR SHUTTLECOCK CATCHING DEVICES. HERBERT ARNOLD RIMMER, Glasgow, Scotland.
Filed April 16, 1931. Serial No. 313,446. PUBLISHED JULY 28, 1931. Class 22.

287,795. UNDERWEAR FOR MEN AND WOMEN. LUXITE SILK PRODUCTS CO., Milwaukee, Wis.
Filed May 18, 1931. Serial No. 314,705. PUBLISHED JULY 21, 1931. Class 39.

287,796. LADIES', MISSES', AND JUNIOR DRESSES, FROCKS, AND GOWNS. ROYAL DRESS CO., INC., New York, N. Y.
Filed May 18, 1931. Serial No. 314,719. PUBLISHED JULY 14, 1931. Class 39.

287,797. COLLARS. THE YORKE SHIRT COMPANY, Glens Falls and New York, N. Y.
Filed May 19, 1931. Serial No. 314,782. PUBLISHED JULY 28, 1931. Class 39.

287,798. BATHING SUITS. EARNSHAW KNITTING COMPANY, Newton, Mass.
Filed May 26, 1931. Serial No. 315,041. PUBLISHED JULY 21, 1931. Class 39.

287,799. HOSIERY. GOTHAM SILK HOSIERY COMPANY, INC., New York, N. Y.
Filed May 26, 1931. Serial No. 315,050. PUBLISHED JULY 14, 1931. Class 39.

287,800. HOSIERY. HOOVER HOSIERY COMPANY, Concord, N. C.
Filed May 26, 1931. Serial No. 315,051. PUBLISHED JULY 21, 1931. Class 39.

287,801. WOMEN'S AND CHILDREN'S DRESSES. VIDALOU, Manila, Philippine Islands.
Filed May 26, 1931. Serial No. 315,071. PUBLISHED JULY 21, 1931. Class 39.

287,802. TOP COATS, OVERCOATS, COATS, VESTS, TROUSERS, AND KNICKERBOCKERS FOR MEN, YOUTHS, AND BOYS. L. GREIF & BRO., INCORPORATED, Baltimore, Md.
Filed May 27, 1931. Serial No. 315,092. PUBLISHED JULY 21, 1931. Class 39.

287,803. DRESS, NEGLIGEE, AND WORK SHIRTS. CABINET MFG. CO., Quincy, Ill.
Filed May 28, 1931. Serial No. 315,133. PUBLISHED JULY 28, 1931. Class 39.

287,804. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. DEMI-TASSE MANUFACTURING CO., Brooklyn, N. Y.
Filed June 6, 1931. Serial No. 315,529. PUBLISHED JULY 28, 1931. Class 45.

287,805. DOLLS. AMERICAN CHARACTER DOLL CO. INC., New York, N. Y.
Filed June 23, 1931. Serial No. 316,147. PUBLISHED JULY 28, 1931. Class 22.

287,806. ARTIFICIAL BAIT. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed June 24, 1931. Serial No. 316,196. PUBLISHED JULY 28, 1931. Class 22.

287,807. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES OF FRUIT FLAVOR, SOLD AS SOFT DRINKS. PACIFIC PRODUCTS, INC., San Francisco, Calif.
Filed June 2, 1931. Serial No. 315,321. PUBLISHED JULY 28, 1931. Class 45.

287,808. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES OF FRUIT FLAVOR SOLD AS SOFT DRINKS. PACIFIC PRODUCTS, INC., San Francisco, Calif.
Filed June 2, 1931. Serial No. 315,322. PUBLISHED JULY 28, 1931. Class 45.

287,809. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES OF FRUIT FLAVOR, SOLD AS SOFT DRINKS. PACIFIC PRODUCTS, INC., San Francisco, Calif.
Filed June 2, 1931. Serial No. 315,323. PUBLISHED JULY 28, 1931. Class 45.

287,810. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. GEO. RASMUSSEN CO., Chicago, Ill.
Filed June 6, 1931. Serial No. 315,502. PUBLISHED JULY 28, 1931. Class 45.

287,811. BEVERAGE FILTERS. NICHOLAS DE GILIO, San Francisco, Calif.
Filed June 10, 1931. Serial No. 315,659. PUBLISHED JULY 28, 1931. Class 31.

287,812. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND FLAVORS AND EXTRACTS USED IN THE PREPARATION OF THE SAME. JOHN KAZIMER SZWAJKOS, doing business as Monroe Bottling Company, Rochester, N. Y.
Filed June 10, 1931. Serial No. 315,661. PUBLISHED JULY 28, 1931. Class 45.

287,813. BEDROOM FURNITURE CONSISTING OF DRESSERS, VANITY DRESSERS, WARDROBES, CHIFFONIERS, TABLES, BEDS, CHAIRS, AND BENCHES. THE UNITED FURNITURE COMPANY, Lexington, N. C.
Filed February 11, 1931. Serial No. 310,964. PUBLISHED JULY 28, 1931. Class 32.

287,814. BOXES AND CHESTS OF WOOD, PAPER, CARDBOARD, FABRIC, COMPOSITION MATERIAL, AND BASE METAL, FOR SILVERWARE. ASSOCIATED SILVER COMPANY, Chicago, Ill.
Filed April 8, 1931. Serial No. 313,070. PUBLISHED JULY 28, 1931. Class 2.

287,815. OVERALLS, PANTS, COMBINATION SUITS, WORK SHIRTS, JACKETS, BLOUSES FOR MEN AND BOYS, GIRLS AND WOMEN. NEUSTADTER BROS., San Francisco, Calif.
Filed April 27, 1931. Serial No. 313,888. PUBLISHED JUNE 30, 1931. Class 39.

287,816. PUMPS. NOVO ENGINE COMPANY, Lansing, Mich.
Filed May 4, 1931. Serial No. 314,167. PUBLISHED JULY 28, 1931. Class 23.

287,817. FELT BASE RUGS AND FLOOR COVERING. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed May 18, 1931. Serial No. 314,721. PUBLISHED JULY 28, 1931. Class 20.

287,818. GLOBE AND CHECK VALVES. CRANE CO., Chicago, Ill.
Filed May 22, 1931. Serial No. 314,898. PUBLISHED JULY 28, 1931. Class 13.

287,819. AUTOMOBILE RADIATOR SHUTTERS. THE GLOBE MACHINE & STAMPING COMPANY, Cleveland, Ohio.
Filed May 23, 1931. Serial No. 314,954. PUBLISHED JULY 28, 1931. Class 19.

287,820. JEWELRY SAWS. ISIDOR SHOR, doing business as I. Shor, New York, N. Y.
Filed May 26, 1931. Serial No. 315,067. PUBLISHED JULY 28, 1931. Class 23.

287,821. CHAIN HOISTS. COLUMBUS MCKINNON CHAIN CORPORATION, Tonawanda, N. Y.
Filed May 28, 1931. Serial No. 315,135. PUBLISHED JULY 28, 1931. Class 23.

287,822. CONTAINERS MADE OF IRON—NAMELY, COOPS, PAILS, BUCKETS, ICE CELLS, CASKS, CARBIDE DRUMS, GRAVEL BOXES. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed May 29, 1931. Serial No. 315,217. PUBLISHED JULY 28, 1931. Class 2.

287,823. MOULDED RUBBER VALVE BALL WHICH IS USED IN WATER CLOSET TANKS. WOLVERINE BRASS WORKS, Grand Rapids, Mich.
Filed May 29, 1931. Serial No. 315,228. PUBLISHED JULY 28, 1931. Class 13.

287,824. WHEEL PULLERS AND IGNITION CABLE EXTRACTORS. C. M. KING, doing business as K. and G. Manufacturing Company, Birmingham, Ala.
Filed June 1, 1931. Serial No. 315,269. PUBLISHED JULY 28, 1931. Class 23.

287,825. SHUT OFF VALVES AND STEAM VALVES. THE MUADOCK MFG. & SUPPLY COMPANY, Cincinnati, Ohio.
Filed June 8, 1931. Serial No. 315,549. PUBLISHED JULY 28, 1931. Class 13.

287,826. PAPER PATTERNS. THE NEW YORK PATTERN COMPANY, INC., New York, N. Y.
Filed June 8, 1931. Serial No. 315,551. PUBLISHED JULY 28, 1931. Class 26.

287,827. WIRE FENCING. PITTSBURGH STEEL COMPANY, Pittsburgh, Pa.
Filed June 22, 1931. Serial No. 316,132. PUBLISHED JULY 28, 1931. Class 13.

287,828. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed June 13, 1931. Serial No. 315,780. PUBLISHED JULY 28, 1931. Class 42.

287,829. PIECE GOODS MADE OF COTTON, SILK, RAYON, AND ARTIFICIAL SILK AND MIXTURES THEREOF. HENRY GLASS & CO., New York, N. Y.
Filed May 26, 1931. Serial No. 315,049. PUBLISHED JULY 28, 1931. Class 42.

287,830. FRESH CITRUS FRUITS, FRESH DECIDUOUS FRUITS, FRESH VEGETABLES. WITHERS BROTHERS, Los Angeles, Calif.
Filed May 26, 1931. Serial No. 315,073. PUBLISHED JULY 28, 1931. Class 46.

287,831. BANANAS IN THEIR NATURAL STATE. STANDARD FRUIT AND STEAMSHIP COMPANY, New Orleans, La.
Filed May 27, 1931. Serial No. 315,118. PUBLISHED JULY 28, 1931. Class 46.

287,832. MIXED ANGORA HAIR AND COTTON FABRIC FOR MEN'S, WOMEN'S, AND CHILDREN'S COATS. THE SANFORD MILLS, Sanford, Me.
Filed June 1, 1931. Serial No. 315,280. PUBLISHED JULY 28, 1931. Class 42.

287,833. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed June 2, 1931. Serial No. 315,318. PUBLISHED JULY 28, 1931. Class 42.

287,834. CANDY. CELESTE A. LIQUORI, New York, N. Y.
Filed June 5, 1931. Serial No. 315,464. PUBLISHED JULY 28, 1931. Class 46.

287,835. FRESH DECIDUOUS FRUITS, FRESH GRAPES, FRESH BERRIES. EARL FRUIT COMPANY, San Francisco, Calif.
Filed June 8, 1931. Serial No. 315,530. PUBLISHED JULY 28, 1931. Class 46.

287,836. FRESH VEGETABLES. HIMMAH & MOFFITT, Salinas, Calif.
Filed June 9, 1931. Serial No. 315,616. PUBLISHED JULY 28, 1931. Class 46.

287,837. ELASTIC WEBBING. THE ANSONIA O & C COMPANY, Ansonia, Conn.
Filed June 10, 1931. Serial No. 315,623. PUBLISHED JULY 28, 1931. Class 42.

287,838. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO., INC., New York, N. Y.
Filed June 13, 1931. Serial No. 315,779. PUBLISHED JULY 28, 1931. Class 42.

287,839. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO., INC., New York, N. Y.
Filed June 13, 1931. Serial No. 315,782. PUBLISHED JULY 28, 1931. Class 42.

287,840. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 16, 1931. Serial No. 315,897. PUBLISHED JULY 28, 1931. Class 42.

287,841. COTTON PIECE GOODS. ALBERT H. VANDAM CO., INC., New York, N. Y.
Filed June 18, 1931. Serial No. 316,022. PUBLISHED JULY 28, 1931. Class 42.

287,842. BABY DIAPER COVERS. THE HOOVER CO., San Francisco, Calif.
Filed June 8, 1931. Serial No. 315,536. PUBLISHED JULY 28, 1931. Class 39.

287,843. LADIES' SPORT AND DRESS COATS, COATEES, SUITS. HARRY ADLER COAT CO. INC., New York, N. Y.
Filed June 10, 1931. Serial No. 315,622. PUBLISHED JULY 28, 1931. Class 39.

287,844. DRESS, NEGLIGEE, AND WORK SHIRTS. JACKSON & JACKSON COMPANY, Salisbury, Md.
Filed June 16, 1931. Serial No. 315,912. PUBLISHED JULY 28, 1931. Class 39.

287,845. SILK HOSIERY. THE ARTHUR STORES, INCORPORATED, Union, S. C.
Filed June 1, 1931. Serial No. 315,236. PUBLISHED JULY 28, 1931. Class 39.

287,846. MEN'S SUITS, OVERCOATS, AND TOP COATS. S. MAKRANSKY AND SONS, INC., Philadelphia, Pa.
Filed June 6, 1931. Serial No. 315,495. PUBLISHED JULY 21, 1931. Class 39.

287,847. DRESS AND NEGLIGEE SHIRTS. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo.
Filed May 25, 1931. Serial No. 314,998. PUBLISHED JULY 28, 1931. Class 39.

287,848. CHILDREN'S UNDERWEAR. THOMAS DALBY COMPANY, Watertown, Mass.
Filed May 28, 1931. Serial No. 315,137. PUBLISHED JULY 21, 1931. Class 39.

287,849. WOMEN'S AND MISSES' DRESSES. MAX GREENBERG & CO., New York, N. Y.
Filed May 12, 1931. Serial No. 314,448. PUBLISHED JULY 14, 1931. Class 39.

287,850. CHILDREN'S, MISSES', AND LADIES' WAISTS AND FOR CHILDREN'S AND BOYS' BLOUSES, SHIRTS, PYJAMAS, AND UNDERWEAR. GREENEBAUM BROTHERS, Philadelphia, Pa.
Filed May 18, 1931. Serial No. 314,693. PUBLISHED JULY 21, 1931. Class 39.

287,851. HOSIERY. CALVIN C. MCGAUGH, Dallas, Tex.
Filed May 9, 1931. Serial No. 314,376. PUBLISHED JULY 14, 1931. Class 39.

287,852. MEN'S SUITS AND OVERCOATS. SIMON SCHWOB, doing business as The Standard Tailoring Company and The Schwob Company, Columbus, Ga.
Filed May 11, 1931. Serial No. 314,428. PUBLISHED JULY 14, 1931. Class 39.

287,853. HOSIERY. VAN RAALTE COMPANY, New York, N. Y.
Filed April 22, 1931. Serial No. 313,687. PUBLISHED JULY 21, 1931. Class 39.

287,854. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS; BLOUSES, WINDBREAKERS, UNDERWEAR, PAJAMAS, NIGHT SHIRTS, OVERALLS, MADE OF COTTON, FLANNEL, WOOL, LINEN, SILK, RAYON, AND OTHER TEXTILES OR COMBINATIONS OF ANY. H. D. BOB COMPANY, INC., New York, N. Y.
Filed May 4, 1931. Serial No. 314,141. PUBLISHED JULY 14, 1931. Class 39.

287,855. LADIES' AND MISSES' DRESSES, GOWNS, FROCKS, COATS, SKIRTS, WAISTS, AND NEGLIGEES. STURMAN DRESS CO., INC., New York, N. Y.
Filed April 16, 1931. Serial No. 313,453. PUBLISHED JULY 28, 1931. Class 39.

287,856. CONFECTIONERY—NAMELY, A SWEETMEAT COMPOSED OF WHEAT INTERIOR WITH CHOCOLATE COATING. MEADOWLAND CONFECTIONS, LIMITED, London, England.
Filed February 13, 1931. Serial No. 311,039. PUBLISHED JULY 28, 1931. Class 46.

287,857. MEN'S, WOMEN'S, AND CHILDREN'S UNDERWEAR. JANOME RAYON CORPORATION, Brooklyn, N. Y.
Filed February 20, 1931. Serial No. 311,311. PUBLISHED JULY 21, 1931. Class 39.

287,858. HOSIERY. EDWARD E. HOGUE, Los Angeles, Calif.
Filed February 24, 1931. Serial No. 311,410. PUBLISHED JULY 21, 1931. Class 39.

287,859. BRASSIÈRES, CORSELETS, CORSETS, SUSPENDER BELTS, SUSPENDERS, GIRDLES, AND GARTERS FOR WOMEN AND CHILDREN. MARGUERITE FRANCES JANE LOWENFELD, London, England.
Filed March 27, 1931. Serial No. 312,610. PUBLISHED JULY 14, 1931. Class 39.

287,860. FRESH CITRUS FRUIT. MIAMI AVOCADO & CITRUS GROWERS INC., Avocado Park Groves, Miami, Fla.
Filed April 9, 1931. Serial No. 313,215. PUBLISHED JULY 28, 1931. Class 46.

287,861. MEN'S RAYON AND COTTON HOSIERY. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed April 11, 1931. Serial No. 313,259. PUBLISHED JULY 28, 1931. Class 39.

287,862. MILITARY DRESS UNIFORMS. THE AMERICAN LEGION OF RHODE ISLAND, Providence, R. I.
Filed May 13, 1931. Serial No. 314,481. PUBLISHED JULY 14, 1931. Class 39.

287,863. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS, PAJAMAS, AND UNDERWEAR. LOUIS BASKIND & CO., INC., New York, N. Y.
Filed May 15, 1931. Serial No. 314,596. PUBLISHED JULY 21, 1931. Class 39.

287,864. MEN'S NAVAL UNIFORMS. CHARLES SALVATO, doing business as Charles Salvato & Company, Brooklyn, N. Y.
Filed May 16, 1931. Serial No. 314,636. PUBLISHED JULY 28, 1931. Class 39.

287,865. MOHAIR SUITINGS. JOSEPH BENN CORPORATION, Greystone, R. I., and New York, N. Y.
Filed May 16, 1931. Serial No. 314,636. PUBLISHED JULY 28, 1931. Class 42.

287,866. CANDY BARS. DAVID PLOTKE, doing business as Da-Lee Candy Co., Chicago, Ill.
Filed May 21, 1931. Serial No. 314,862. PUBLISHED JULY 28, 1931. Class 46.

287,867. CANDY. SAMUEL ZIMETBAUM, doing business as Trees Candy Co., Newark, N. J.
Filed May 23, 1931. Serial No. 314,973. PUBLISHED JULY 28, 1931. Class 46.

287,868. PIECE GOODS MADE OF COTTON, SILK RAYON, AND ARTIFICIAL SILK AND COMBINATIONS THEREOF. HENRY GLASS & CO., New York, N. Y.
Filed May 26, 1931. Serial No. 315,048. PUBLISHED JULY 28, 1931. Class 42.

287,869. WIRE FENCE. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo.
Filed June 9, 1930. Serial No. 302,269. PUBLISHED SEPTEMBER 16, 1930. Class 13.

287,870. ENAMELED WARE—NAMELY, BATHTUBS, SHOWER RECEPTORS, CLOSET BOWLS, DRINKING FOUNTAINS, SINKS, LAVATORIES, URINALS, AND FLUSHING TANKS. THE D. A. EBINGER SANITARY MANUFACTURING COMPANY, Columbus, Ohio.
Filed June 13, 1930. Serial No. 302,373. PUBLISHED JULY 28, 1931. Class 13.

287,871. WORK CLOTHING—NAMELY, OVERALLS, JACKETS, COMBINED JACKET AND TROUSER SUITS. THE GLOBE OVERALL COMPANY, Cincinnati, Ohio.
Filed August 2, 1930. Serial No. 304,135. PUBLISHED JULY 14, 1931. Class 39.

287,872. FISH HOOKS, SNELLED HOOKS, ETC. R. TURNER & SONS LIMITED, Warwick, England.
Filed August 9, 1930. Serial No. 304,435. PUBLISHED JULY 28, 1931. Class 22.

287,873. OPTICAL OBJECTIVES. CARL ZEISS, Jena, Germany.
Filed October 11, 1930. Serial No. 306,679. PUBLISHED JULY 28, 1931. Class 26.

287,874. CANNED FISH. AMTORG TRADING CORPORATION, New York, N. Y.
Filed December 4, 1930. Serial No. 308,570. PUBLISHED JULY 28, 1931. Class 46.

287,875. MEN'S DRESS, NEGLIGEE, AND WORK OUTER SHIRTS. CHARACTER PRODUCTS COMPANY, INCORPORATED, Danville, Va.
Filed June 6, 1929. Serial No. 285,146. PUBLISHED AUGUST 5, 1930. Class 39.

287,876. FRESH DECIDUOUS FRUITS, FRESH ASPARAGUS, AND FRESH LETTUCE. THE PIONEER FRUIT CO., San Francisco, Calif.
Filed October 1, 1929. Serial No. 290,475. PUBLISHED AUGUST 12, 1930. Class 46.

287,877. FRESH VEGETABLES. A. REICH & SONS, Kansas City, Mo.
Filed October 7, 1929. Serial No. 290,764. PUBLISHED OCTOBER 21, 1930. Class 46.

287,878. COTTON GOODS IN THE PIECE—NAMELY, BROWN AND BLEACHED PRINTED FLANNELS. CONE EXPORT AND COMMISSION COMPANY, New York, N. Y.
Filed February 19, 1930. Serial No. 296,220. PUBLISHED JULY 28, 1931. Class 42.

287,879. CANDY. THE BRADLEY, SMITH CO., New Haven, Conn.
Filed April 30, 1930. Serial No. 299,679. PUBLISHED JULY 29, 1930. Class 46.

287,880. CANNED FRUITS AND VEGETABLES. SOUTH CAROLINA PACKING CORPORATION, Fairfax, S. C.
Filed May 8, 1930. Serial No. 300,153. PUBLISHED JULY 22, 1930. Class 46.

287,881. FRESH BOXED APPLES AND PRUNES IN TUBS. C. A. GLASS CO., INC., Los Angeles, Calif.
Filed May 31, 1930. Serial No. 301,897. PUBLISHED APRIL 28, 1931. Class 46.

287,882. CHEESE CLOTH BOTH IN THE PIECE AND IN CUT LENGTHS. THE KENDALL COMPANY, Walpole, Mass.
Filed January 16, 1931. Serial No. 310,017. PUBLISHED JULY 28, 1931. Class 42.

287,883. LADIES' HOSIERY. I. MILLER & SONS, INCORPORATED, Long Island City, N. Y.
Filed March 20, 1931. Serial No. 312,347. PUBLISHED JULY 21, 1931. Class 39.

287,884. WOOLEN AND WORSTED CLOTHS MADE FOR UNIFORM PURPOSES IN THE PIECE, EXCEPT FABRICS COLORED AN OLIVE DRAB SHADE. THOMAS OAKES & Co., Bloomfield, N. J.
Filed April 2, 1931. Serial No. 312,858. PUBLISHED JULY 28, 1931. Class 42.

287,885. WOOLEN AND WORSTED CLOTHS MADE FOR UNIFORM PURPOSES IN THE PIECE, EXCEPT FABRICS COLORED AN OLIVE DRAB SHADE. THOMAS OAKES & Co., Bloomfield, N. J.
Filed April 2, 1931. Serial No. 312,860. PUBLISHED JULY 28, 1931. Class 42.

287,886. MEN'S AND BOYS' PANTS. THE WASHINGTON MFG. CO., New York, N. Y.
Filed April 9, 1931. Serial No. 313,162. PUBLISHED JULY 14, 1931. Class 39.

287,887. FRESH CITRUS FRUITS. INTERNATIONAL FRUIT CORPORATION, Orlando, Fla.
Filed April 11, 1931. Serial No. 313,239. PUBLISHED JULY 28, 1931. Class 46.

287,888. COTTON FLANNEL AND KNITTED COTTON PADDING, BOTH IN THE PIECE. SOUTHERN MILLS, INCORPORATED, Atlanta, Ga.
Filed April 25, 1931. Serial No. 313,809. PUBLISHED JULY 28, 1931. Class 42.

287,889. CERTAIN NAMED GLASS. H. PERILSTEIN, Philadelphia, Pa.
Filed April 29, 1931. Serial No. 313,969. PUBLISHED JULY 28, 1931. Class 33.

287,890. COFFEE. JAMES VAN DYK COMPANY, New York, N. Y.
Filed May 23, 1931. Serial No. 314,972. PUBLISHED JULY 28, 1931. Class 46.

287,891. CANDY. JOSHUA J. GOROV, Los Angeles, Calif.
Filed May 25, 1931. Serial No. 314,991. PUBLISHED JULY 28, 1931. Class 46.

287,892. GELATIN DESSERTS. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed May 25, 1931. Serial No. 315,015. PUBLISHED JULY 14, 1931. Class 46.

287,893. GELATIN DESSERTS. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed May 25, 1931. Serial No. 315,017. PUBLISHED JULY 14, 1931. Class 46.

287,894. GELATIN DESSERTS. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed May 25, 1931. Serial No. 315,018. PUBLISHED JULY 14, 1931. Class 46.

287,895. CANDY AND CANDY TABLETS. AMERICAN MINT CORPORATION, New York, N. Y.
Filed June 2, 1931. Serial No. 315,298. PUBLISHED JULY 28, 1931. Class 46.

287,896. SILK, COTTON, AND RAYON PIECE GOODS AND COMBINATIONS THEREOF. TIMELY FABRICS CORPORATION, New York, N. Y.
Filed June 3, 1931. Serial No. 315,374. PUBLISHED JULY 28, 1931. Class 42.

287,897. COTTON, SILK, AND RAYON PIECE GOODS AND COMBINATIONS THEREOF. TIMELY FABRICS CORPORATION, New York, N. Y.
Filed June 3, 1931. Serial No. 315,375. PUBLISHED JULY 28, 1931. Class 42.

287,898. TEXTILE FABRICS—NAMELY, SILK PIECE GOODS. CHARLES GOLDMAN, doing business as Atlas Mills, New York, N. Y.
Filed June 4, 1931. Serial No. 315,394. PUBLISHED JULY 28, 1931. Class 42.

287,899. CERTAIN NAMED PIECE GOODS. LESHER, WHITMAN & Co., INC., New York, N. Y.
Filed June 4, 1931. Serial No. 315,406. PUBLISHED JULY 28, 1931. Class 42.

287,900. PILE FABRICS IN THE PIECE. PENNSYLVANIA TEXTILE MILLS, INC., New York, N. Y.
Filed June 4, 1931. Serial No. 315,414. PUBLISHED JULY 28, 1931. Class 42.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

287,901. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BORDENTOWN DAIRY COMPANY, Bordentown, N. J. Filed Apr. 5, 1930. Serial No. 298,424.

Cream-o-health
CULTURED SWEET CREAM

For Cultured Sweet Cream.
Claims use since Jan. 25, 1930.

287,902. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE AEROFONIC COMPANY, Los Angeles, Calif. Filed June 9, 1928. Serial No. 267,735.

AEROFONIC

For Loud Speakers for Radio Receiving Sets.
Claims use since Feb. 15, 1928.

287,903. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) VICTOR TALKING MACHINE COMPANY, Camden, N. J. Filed Sept. 4, 1928. Serial No. 271,909.

PICT-UR-MUSIC

For Talking Machine Records.
Claims use since June 6, 1928.

287,904. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) GENERAL CABLE CORPORATION, New York, N. Y. Filed Aug. 29, 1929. Serial No. 289,151.

PRECISION PRECISION

For Electrical Coils.
Claims use since May 6, 1929.

287,905. (CLASS 37. PAPER AND STATIONERY.) M. P. BASSO & Co., INC., New York, N. Y. Filed Feb. 26, 1930. Serial No. 296,511.

DEAN

For Bond Paper.
Claims use since Feb. 18, 1928.

287,906. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SAM PALAZZOLO, doing business as Garfield Motor Products Co., St. Louis, Mo. Filed Feb. 26, 1930. Serial No. 296,545.

WIZARD

For Anti-Freeze Compound for Automobile Radiators.
Claims use since Oct. 1, 1929.

287,907. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) CLEAN HOME PRODUCTS CORPORATION, Chicago, Ill., assignor to Apex Products Corporation, Chicago, Ill. Filed May 31, 1930. Serial No. 301,841.

NOSUDZ

For a Cleaning, Scouring Preparation for Household Use, and for Cleaning, Scouring, and Polishing Metal, Glass, Woodwork, Machinery, Etc.
Claims use since May 19, 1930.

287,908. (CLASS 39. CLOTHING.) FRANKLIN SIMON & Co. INC., New York, N. Y. Filed July 19, 1930. Serial No. 303,660.

New Fashions First

For Women's, Misses', and Children's Dresses, Coats, and Frocks.
Claims use since July 16, 1930.

287,909. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NUTRINE CANDY CO., Chicago, Ill. Filed July 25, 1930. Serial No. 303,820.

POCKETPAK FITS THE POCKET

For Candy.
Claims use since July 2, 1930.

287,910. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Aug. 8, 1930. Serial No. 304,879.

Stovbrite

For Stove Polish.
Claims use since May 12, 1930.

287,911. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL PECTIN PRODUCTS COMPANY, Chicago, Ill. Filed Aug. 11, 1930. Serial No. 304,471.

BECK'S

For Fruit Pectin.
Claims use since Apr. 4, 1930.

287,912. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) GREENFIELD TAP AND DIE CORPORATION, Greenfield, Mass. Filed Aug. 23, 1930. Serial No. 304,951.

TRU LEDE

For Machine Screw Taps.
Claims use since May 29, 1930.

287,913. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THOMPSON-BREMER & CO., Chicago, Ill. Filed Aug. 23, 1930. Serial No. 304,978.

Everlock

For Lock Washers.
Claims use since Aug. 20, 1930.

287,914. (CLASS 3. BAGGAGE, ANIMAL EQUIPMENTS, PORTFOLIOS, AND POCKETBOOKS.) MAX DAMM COMPANY, INC., Newark, N. J. Filed Sept. 12, 1930. Serial No. 305,604.

STRAPIN-CATCH

For Gladstone Bags, Travelling Bags, and Suitcases.
Claims use since Feb. 2, 1930.

287,915. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) CHARLES D. SLOCUM, doing business as Quiklift Manufacturing Company, Wichita, Kans.; said Slocum assignor to Quiklift Manufacturing Company. Filed Sept. 22, 1930. Serial No. 305,945.

Quiklift REMOVER

For Paint and Varnish Remover.
Claims use since June 1, 1930.

287,916. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) CORTLAND LINE COMPANY, INCORPORATED, Cortland, N. Y. Filed Oct. 3, 1930. Serial No. 306,345.

Dollar Bill

For Silk Fish Lines.
Claims use since July 10, 1930.

287,917. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SPIEGEL, MAY, STERN COMPANY, INC., Chicago, Ill. Filed Oct. 27, 1930. Serial No. 307,225.

Velvette CUSHION BACK

For Rugs of Textile Material.
Claims use since Aug. 26, 1930.

287,918. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMBROSIA CHOCOLATE COMPANY, Milwaukee, Wis. Filed Nov. 8, 1930. Serial No. 307,649.

CHOC-LIT MALTED

For Candy.
Claims use since Sept. 2, 1930.

287,919. (CLASS 39. CLOTHING.) WOLSEY LTD., Leicester, England. Filed Dec. 17, 1930. Serial No. 309,104.

WOLSEY

For Articles of Under and Outer Apparel, All Being Knitted Goods for Men, Women, and Children.
Claims use since Jan. 1, 1908.

287,920. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) A. E. GONZALEZ, West Riverside, Calif. Filed Dec. 22, 1930. Serial No. 309,238.

MOCTEZUMA

For Malt Syrup.
Claims use since Mar. 1, 1927.

287,921. (CLASS 22. GAME, TOYS, AND SPORTING GOODS.) C. SALADINO & SONS, Chelsea, Mass. Filed Jan. 15, 1931. Serial No. 309,992.

EVERTITE

For Racket Strings.
Claims use since Oct. 1, 1928.

287,922. (CLASS 39. CLOTHING.) FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Apr. 7, 1931. Serial No. 313,032.

GOODHARDY FLEECE

For Coats, Vests, Pants, and Overcoats for Men and Boys.
Claims use since Apr. 2, 1928.

287,923. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) C. N. SABA, doing business as Saba Products Company, Toronto, Canada, assignor to McKesson & Robbins, Incorporated, a Corporation of Connecticut. Filed May 19, 1931. Serial No. 314,772.

SABA

For Ointment for Use in the Treatment of Eczema.
Claims use since May 5, 1930.

287,924. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OLMITO PACKING COMPANY, Olmito, Tex. Filed May 18, 1931. Serial No. 314,703.

OLMITO

For Canned Fruits and Vegetables, Fruit Juices for Food Purposes.
Claims use since Aug. 15, 1915.

287,925. (CLASS 37. PAPER AND STATIONERY.) GOTHAM TISSUE CORPORATION, New York, N. Y. Filed May 22, 1931. Serial No. 314,907.

Séda

For Toilet Paper.
Claims use since May 1, 1930.

287,926. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) CULLEN FUEL CO., INC., New York, N. Y. Filed May 25, 1931. Serial No. 314,983.

CALL CULLEN FOR CLEAN COAL

For Coal.
Claims use since 1921.

287,927. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE COLORADO FUEL AND IRON COMPANY, Denver, Colo. Filed May 27, 1931. Serial No. 315,057.

COLORADO

For Nails, Tacks, Brads, Wire-Staples, Metal Fence Stays, Metal Fence Gates, Wire Fence, Wire Netting, Metal Fence Posts, Barbed Wire, and Wire Corn Crib Netting.
Claims use since on or about May 20, 1930, on nails, tacks, brads, and staples; since on or about Aug. 1, 1930, on metal fence stays and metal fence gates; since on or about Nov. 1, 1914, on wire fence; since on or about Aug. 1, 1915, on wire netting; since on or about Aug. 20, 1928, on metal fence posts; since on or about Jan. 1, 1903, on barbed wire; since on or about Jan. 1, 1925, on wire corn crib netting.

287,928. (CLASS 37. PAPER AND STATIONERY.) THE REYNOLDS MFG. CO., Holyoke, Mass. Filed June 18, 1931. Serial No. 315,802.

NO GLARE

For Writing and Printing Paper Including Pads, Tablets, School Papers, and Blank Books Having a Non-Reflecting Surface and Being Restful to the Eyes.
Claims use since Jan. 1, 1923.

287,929. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) I. DICKMAN & SONS, Brooklyn, N. Y. Filed July 7, 1931. Serial No. 316,697.

Lewis BRAND

For Canned Salmon, Sardines, Tomatoes, Peaches, and Coffee.
Claims use since December, 1926.

287,930. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed July 21, 1931. Serial No. 317,149.

HARRISON

For Billiard Tables and Parts Thereof.
Claims use since Aug. 1, 1930.

287,931. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed July 21, 1931. Serial No. 317,151.

MONROE

For Billiard Tables and Parts Thereof.
Claims use since July 28, 1920.

287,932. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed July 21, 1931. Serial No. 317,152.

RANDOLPH

For Billiard Tables and Parts Thereof.
Claims use since Aug. 1, 1930.

TRADE-MARK REGISTRATIONS RENEWED

85,202. CERTAIN GARMENTS WORN BY BOYS, MEN, AND CHILDREN. Registered February 6, 1912. HENRY SONNEBORN & CO., Baltimore, Md. Renewed February 6, 1932, to The Henry Sonneborn Company, New York, N. Y., a Corporation of Maryland, assignee by mesne assignments.

LABELS

REGISTERED OCTOBER 13, 1931

39,870.—*Title:* BAT-LESLITE. For Flashlights. BATLES LITE CORPORATION, Albany, N. Y. Published August 22, 1931.

39,871.—*Title:* BEECH-NUT BUTTER WAFERS. For Butter Wafers. BEECHNUT PACKING COMPANY, Canajoharie, N. Y. Published June 13, 1931.

39,872.—*Title:* MONTEREY. For Lime Rickey. CAMMARANO BROS., INC., Tacoma, Wash. Published August 10, 1931.

39,873.—*Title:* DUNLAP'S CHOCOLATE COVERED FROZEN BANANAS. For Chocolate Covered Frozen Bananas. R. L. DUNLAP & COMPANY, Kokomo, Ind. Published July 20, 1931.

39,874.—*Title:* FLAMEX. For Fire Extinguishers. FLAMEX, INC., Denver, Colo. Published September 3, 1931.

39,875.—*Title:* HORTON'S ICE CREAM AND ICES. For Ice Cream and Water Ices. J. M. HORTON ICE CREAM COMPANY, INC., New York, N. Y. Published April 25, 1931.

39,876.—*Title:* SAV-A-CAR. For Preparation for stopping Leaks in Radiators. INLAND MOTOR PRODUCTS COMPANY, Des Moines, Iowa. Published June 10, 1931.

39,877.—*Title:* CAPSEAL. For Preparation for Stopping Leaks in Radiators. INLAND MOTOR PRODUCTS COMPANY, Des Moines, Iowa. Published August 20, 1931.

39,878.—*Title:* LACELASTIC, THE MODERN ELASTIC SHOE LACE. For Elastic Shoe Laces. INTERNATIONAL BRAID COMPANY, Providence, R. I. Published August 17, 1931.

39,879.—*Title:* LOMBARDY. For Prepared Mustard. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Published August 25, 1931.

39,880.—*Title:* CB—352. For Chocolate Cakes. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,881.—*Title:* HOTEL BARS. For Butter. F. F. LOWENFELS & SON, New York, N. Y. Published July 24, 1931.

39,882.—*Title:* MECHLING'S GRANULATED SAL SODA. For Granulated Sal Soda. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published May 1, 1931.

39,883.—*Title:* EVEREADY ELECTRIC CANDLE. For Electric Candle and Lights. NATIONAL CARBON COMPANY, INC., New York, N. Y. Published December 31, 1930.

39,884.—*Title:* O. K. For Insecticides. O. K. INSECT EXTERMINATING CO., INC., Chicago, Ill. Published September 1, 1931.

39,885.—*Title:* EVES. For Non-Alcoholic Beverage. DOMENICO PERNICE, doing business as Eves American Beverage Co., Brooklyn, N. Y. Published August 20, 1931.

39,886.—*Title:* PRESTO-SHAVE. For a Preparation for Use as a Beard Softener. ROBERT W. PINAULT, doing business as The Chem-Art Company, Sterling, Conn. Published March 13, 1931.

39,887.—*Title:* KATALITE COMBUSTION CATALYST CREATES AN ANTI-CARBON SUPER-FUEL FROM COMMON GASOLINE. For Catalytic Combustion Agent or Preparation. JOHN MARSDEN POOLE, doing business as Katalite Laboratories, Foxboro, Mass. Published August 12, 1931.

39,888.—*Title:* TOIL-FLUSH. For Toilet Bowl Cleanser. SERVICE LABORATORIES, INC., St. Louis, Mo. Published August 13, 1931.

39,889.—*Title:* TULCO. For Material Comprising a Combination Tooth Powder and Mouth Antiseptic. LONNIE G. SMITH, doing business as Tulco Laboratories, Tulsa, Okla. Published August 28, 1931.

39,890.—*Title:* FROZERT. For Ice Cream Confection. SOUTHWEST UTILITY DAIRY PRODUCTS COMPANY, Oklahoma City, Okla. Published May 22, 1931.

39,891.—*Title:* STAHL-MEYER. For Sauerkraut and Frankfurters. STAHL-MEYER, INC., Brooklyn, N. Y. Published May 19, 1931.

39,892.—*Title:* STAHL-MEYER. For Imported Style Frankfurters. STAHL-MEYER, INC., Brooklyn, N. Y. Published May 19, 1931.

39,893.—*Title:* STAHL-MEYER. For Imported Style Frankfurters. STAHL-MEYER, INC., Brooklyn, N. Y. Published April 24, 1931.

39,894.—*Title:* ROYAL. For Vanilla Pudding. STANDARD BRANDS INCORPORATED, New York, N. Y. Published August 13, 1931.

39,895.—*Title:* V. V. B. EGG CRATE LABEL. For Eggs. VINELAND PROGRESSIVE POULTRYMEN, INC., Vineland, N. J. Published May 29, 1931.

39,896.—*Title:* WAUKESHA PALE GINGER ALE. For Ginger Ale. WAUKESHA PURE SPRING WATER COMPANY, INC., Chicago, Ill. Published August 27, 1931.

39,897.—*Title:* TREES SHORT & SWEET. For Confection. SAMUEL ZIMETBAUM, doing business as Trees Candy Co., Newark, N. J. Published August 13, 1931.

PRINTS

REGISTERED OCTOBER 13, 1931

13,439.—*Title:* WE HAVE TO DO WITHOUT A LOT OF THINGS. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published September 5, 1931.

13,440.—*Title:* LUCKY THE CHILD WHO IS RAISED ON A FARM. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published September 5, 1931.

13,441.—*Title:* DEAR FATHERS. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published September 10, 1931.

13,442.—*Title:* LASSO 'EM, BILL. For Cowboy Chaps. KEYSTON BROS., San Francisco, Calif. Published June 25, 1931.

13,443.—*Title:* DRINK NESBITT'S CALIFORNIA ORANGE JUICE. For Orange Juice. NESBITT FRUIT PRODUCTS, INC., doing business as Nesbitt's, Los Angeles, Calif. Published June 1, 1931.

13,444.—*Title:* TYPEWRITERS RENTED—SOLD, TABLE SUPPLIED IF DESIRED. For Typewriters and Typewriter Tables. PACIFIC RAILWAYS ADVERTISING COMPANY, San Francisco, Calif. Published March 9, 1931.

13,445.—*Title:* FLIPP. For Safety Razor Guard. IVER SVARSTAD, Salem, Oreg. Published May 10, 1931.

13,446.—*Title:* FLIPP. For Safety Razor Guard. IVER SMOKING AND EATING KEEP YOUR TASTE FRESH WITH P. K. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published September 1, 1931.

13,447.—*Title:* KEEP YOUR TASTE FRESH WITH P. K. A DELICIOUS PEPPERMINT GUM CANDY DIPPED. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published September 1, 1931.

REISSUES

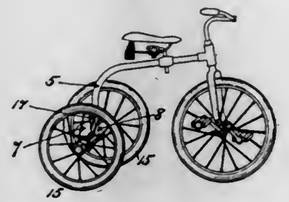
OCTOBER 13, 1931

18,224. NECKTIE. ALOYSIUS JOHN FIUMEDORO, Readville, Mass., assignor to Standard Neckwear Co., Boston, Mass., and New York, N. Y., a Corporation. Original No. 1,728,599, dated Sept. 17, 1929, Serial No. 297,752, filed Aug. 6, 1928. Application for reissue filed June 3, 1931. Serial No. 541,931. 7 Claims. (Cl. 2—155.)



1. A necktie comprising a knot, tubular end portions extending from said knot, and an elastic supporting band, passing through said tubular end portions and secured to said knot.

18,225. VELOCIPEDE. WILLIAM A. MARQUA, Cincinnati, Ohio, assignor to The Frank F. Taylor Company, Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Original No. 1,778,116, dated Oct. 14, 1930, Serial No. 339,352, filed Feb. 12, 1929. Application for reissue filed Feb. 11, 1931. Serial No. 515,146. 11 Claims. (Cl. 208—113.)



1. In a tricycle, a central master casting having a rearwardly-extending step and provided with an upright socket for the deep-seating attachment of the lower extremity of the reach of the vehicle frame and with lateral axial-extensions at whose opposite outer ends the supporting rear wheels of the vehicle are journaled.

PLANT PATENTS

GRANTED OCTOBER 13, 1931

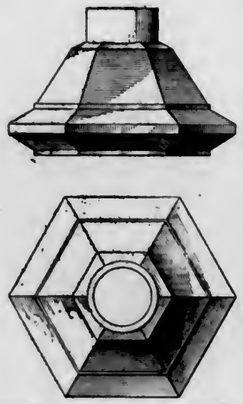
2. ROSE. FRANK SPANBAUER, North Kansas City, Mo. Filed July 1, 1930. Serial No. 465,160. 1 Claim. (Cl. 47—1.)

A rose substantially as herein shown and described, characterized and predominantly distinguished by petals which are scarlet crimson in color, semi-double in appearance, and in which the outer petals are inclined to be cordate in shape.

DESIGNS

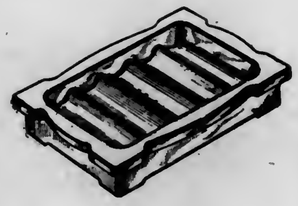
OCTOBER 13, 1931

85,313. SHADE OR REFLECTOR. HARRY AGLOW, Philadelphia, Pa., asignor to Gill Glass & Fixture Company, Philadelphia, Pa., a Corporation of Delaware. Filed Aug. 14, 1931. Serial No. 40,853. Term of patent 3½ years.



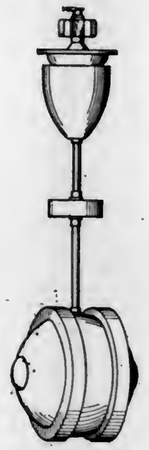
The ornamental design for a shade or reflector, substantially as shown.

85,314. SOAP DISH OR ARTICLE OF SIMILAR NATURE. STEPHEN D. BAKER, New York, N. Y. Filed Aug. 11, 1931. Serial No. 40,820. Term of patent 3½ years.



The ornamental design for a soap dish or article of similar nature, as shown.

85,315. ASH TRAY. EDGAR H. BARBÉ, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a Firm composed of Amalia Earles and Edgar H. Barbe, copartners. Filed June 8, 1931. Serial No. 40,117. Term of patent 7 years.



The ornamental design for an ash tray as shown.

85,316. ASH TRAY. EDGAR H. BARBÉ, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, Los Angeles, Calif., a Firm composed of Amalia Earles and Edgar H. Barbe, copartners. Filed June 8, 1931. Serial No. 40,118. Term of patent 7 years.



The ornamental design for an ash tray as shown.

85,317. BUILDING STRUCTURE. KENNETH E. BEMIS, Glendale, Calif. Filed June 9, 1931. Serial No. 40,139. Term of patent 14 years.



The ornamental design for a building structure as shown and described.

85,318. GAITER OR SIMILAR WATERPROOF RUBBER FOOTWEAR. LUCILLE MARTIE BITGOOD, New London, Conn., assignor to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn., a Corporation of Connecticut. Filed May 9, 1931. Serial No. 39,790. Term of patent 3½ years.



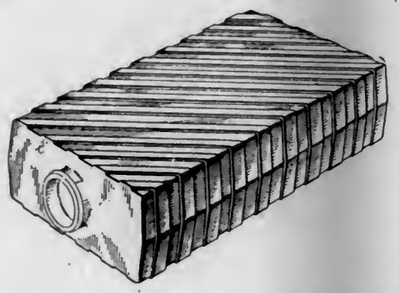
The ornamental design for a gaiter or similar waterproof rubber footwear, as shown.

85,319. GAITER OR SIMILAR WATERPROOF RUBBER FOOTWEAR. LUCILLE MARTIE BITGOOD, New London, Conn., assignor to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn., a Corporation of Connecticut, Filed June 18, 1931. Serial No. 40,264. Term of patent 3½ years.



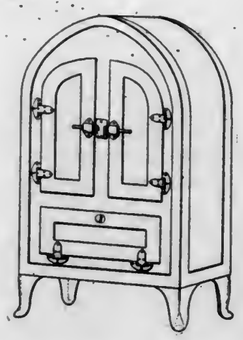
The ornamental design for a gaiter or similar waterproof rubber footwear, as shown and described.

85,320. HOLLOW GLASS BRICK. SAMUEL B. BOWMAN, Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed June 23, 1931. Serial No. 40,305. Term of patent 14 years.



The ornamental design for a hollow glass brick, as shown.

85,321. REFRIGERATOR. JOE BROWN, Granite City, Ill. Filed Aug. 17, 1931. Serial No. 40,870. Term of patent 14 years.



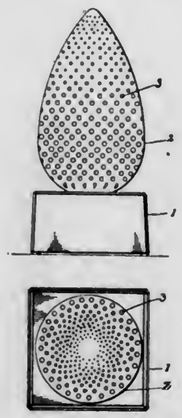
The ornamental design for a refrigerator substantially as shown.

85,322. STOVE OR RANGE. JOE BROWN, Granite City, Ill. Filed Aug. 17, 1931. Serial No. 40,871. Term of patent 14 years.



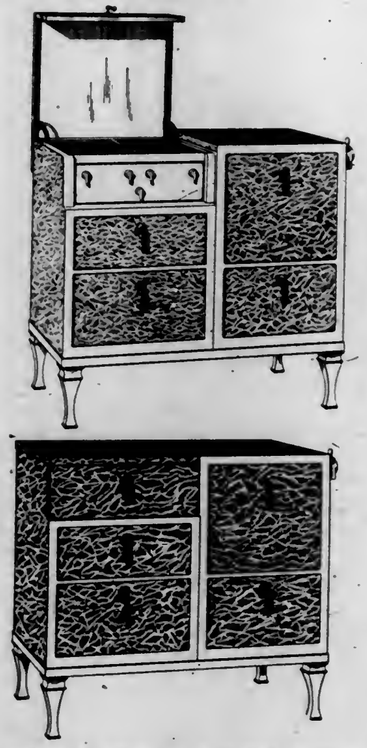
The ornamental design for a stove or range substantially as shown.

85,323. ARTICLE OF BRIC-A-BRAC. FREDERICK CARDER, Corning, N. Y. Filed Aug. 28, 1929. Serial No. 32,584. Term of patent 7 years.



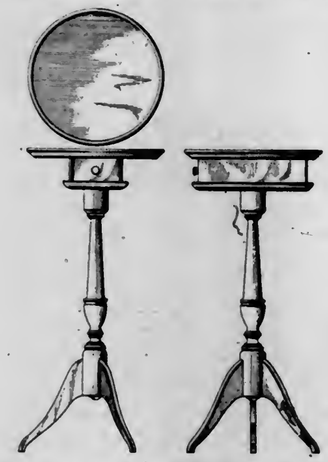
The ornamental design for an article of bric-a-brac as shown and described.

85,324. COOKING STOVE OR ARTICLE OF SIMILAR NATURE. JOSEPH C. CLARK, Columbus, Ohio, assignor to The Ohio State Stove Corporation, Columbus, Ohio, a Corporation of Ohio. Filed Feb. 28, 1931. Serial No. 38,874. Term of patent 14 years.



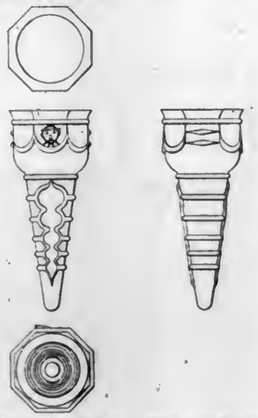
The ornamental design for a cooking stove or article of similar nature, as shown.

85,325. TABLE OR SIMILAR ARTICLE. WILLIAM C. H. CUSHMAN, North Bennington, Vt., assignor to H. T. Cushman Mfg. Co., North Bennington, Vt. Filed July 31, 1931. Serial No. 40,745. Term of patent 3½ years.



The ornamental design for a table or similar article as shown.

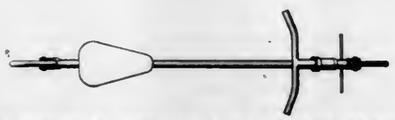
85,326. EDIBLE CONTAINER. JAMES DENARO, Cambridge, Mass. Filed Apr. 18, 1930. Serial No. 35,306. Term of patent 3½ years.



The ornamental design for an edible container as shown.

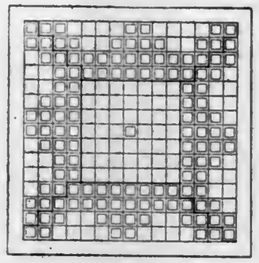
85,327. BICYCLE FRAME. GISELA DE RIZ, Vienna, Austria. Filed Jan. 26, 1931. Serial No. 38,449. Term of patent 3½ years.





The ornamental design for a bicycle frame, as shown.

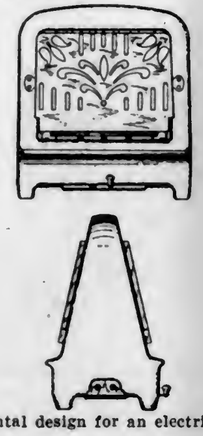
85,328. GAME BOARD OR ARTICLE OF ANALOGOUS NATURE. JOHN K. DUCEY, Chicago, Ill. Filed Jan. 12, 1931. Serial No. 38,290. Term of patent 3½ years.





The ornamental design for a game board or article of analogous nature, substantially as shown.

85,329. ELECTRIC TOASTER. GEORGE EATON, Cleveland, Ohio. Filed Mar. 10, 1930. Serial No. 34,815. Term of patent 14 years.



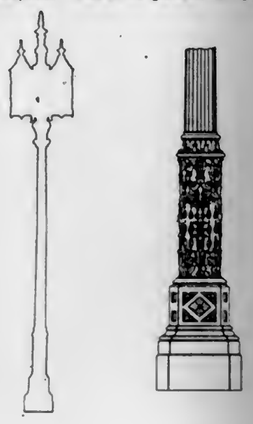
The ornamental design for an electric toaster as shown and described.

85,330. BOX. CHARLES F. FRIEDRICH, Rochester, N. Y., assignor to E. E. Fairchild Corporation, Rochester, N. Y., a Corporation of New York. Filed July 14, 1931. Serial No. 40,546. Term of patent 3½ years.

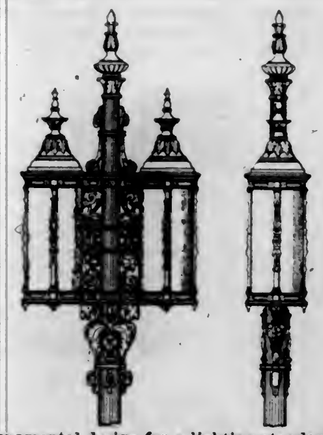


The ornamental design for a box as shown and described.

85,331. LIGHTING STANDARD. JOSEPH W. GOSLING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 24, 1931. Serial No. 40,665. Term of patent 14 years.

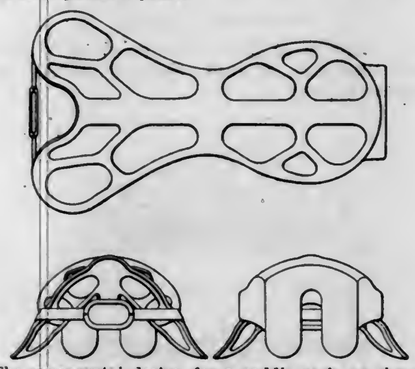


85,331—Continued



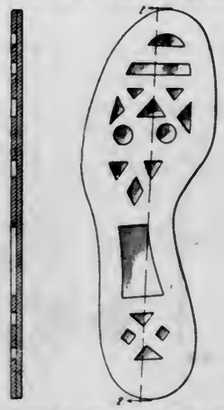
The ornamental design for a lighting standard, as shown and described.

85,332. SADDLE RACK. THORVALD F. HAMMER, Branford, Conn. Filed Aug. 12, 1931. Serial No. 40,837. Term of patent 7 years.



The ornamental design for a saddle rack, as shown.

85,333. COMBINED SOLE AND HEEL. EUGENE C. HEILHECKER, Bristol, R. I., assignor to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn., a Corporation of Connecticut. Filed July 30, 1931. Serial No. 40,729. Term of patent 7 years.



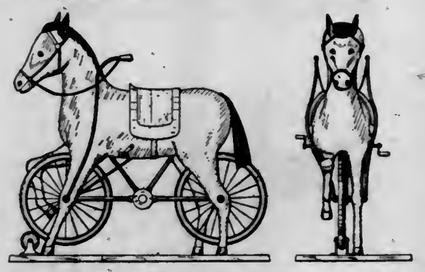
The ornamental design for a combined sole and heel, as shown.

85,334. DECALCOMANIA TRANSFER SHEET. WILLIAM HOPPER, Old Kilpatrick, Scotland, assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 18, 1931. Serial No. 40,587. Term of patent 14 years.



The ornamental design for a decalcomania transfer sheet, as shown.

85,335. AMUSEMENT DEVICE. CHARLES JACOBS, Coney Island, N. Y. Filed Mar. 10, 1931. Serial No. 39,018. Term of patent 7 years.



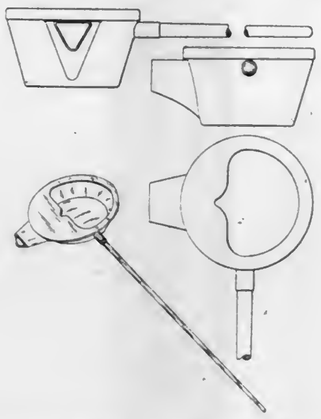
The ornamental design for an amusement device substantially as shown.

85,336. BOTTLE OR SIMILAR CONTAINER. ELMER V. KLINE, University City, Mo., assignor to Victor Pharmacal Company, Inc., St. Louis, Mo., a Corporation of Missouri. Filed July 8, 1931. Serial No. 40,459. Term of patent 14 years.



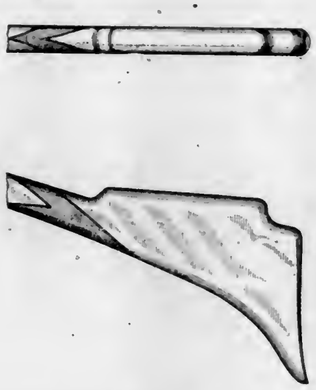
The ornamental design for a bottle or similar container, substantially as shown and described.

85,337. TEA ROASTER. GEORGE U. KOHORI, Tacoma, Wash. Filed July 18, 1931. Serial No. 40,597. Term of patent 14 years.



The ornamental design for a tea roaster, as shown.

85,338. GUN STOCK. CLAUDE W. KRESS, New York, N. Y. Filed Aug. 28, 1931. Serial No. 40,948. Term of patent 14 years.



The ornamental design for a gun stock, as shown.

85,339. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 14, 1931. Serial No. 40,846. Term of patent 3½ years.



The ornamental design for a dress substantially as shown.

85,340. BOTTLE. HARRY MCDONALD, Dunkirk, Ind., assignor to Jewett and Sherman Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 16, 1931. Serial No. 40,569. Term of patent 14 years.



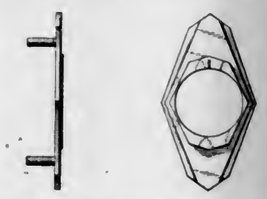
The ornamental design for a bottle, as shown.

85,341. DISPLAY PLATE. JOHN F. MEYER, Pasadena, Calif. Filed Sept. 29, 1930. Serial No. 37,088. Term of patent 14 years.



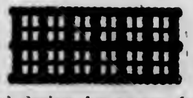
The ornamental design for a display plate as shown.

85,342. ESCUTCHEON PLATE. EDWIN W. NORTH, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed Aug. 14, 1931. Serial No. 40,852. Term of patent 7 years.



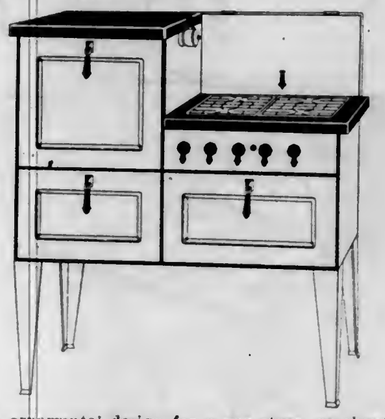
The ornamental design for an escutcheon plate as shown.

85,343. WOVEN FABRIC. GEORGE E. O'HEARN, Gardner, Mass., assignor to O'Hearn Manufacturing Company, Gardner, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1931. Serial No. 38,281. Term of patent 7 years.



The ornamental design for woven fabric as shown.

85,344. GAS STOVE. ALFRED J. REEDY, Battle Creek, Mich., assignor to A-B Stove Company, Battle Creek, Mich. Filed Mar. 14, 1931. Serial No. 39,086. Term of patent 7 years.



The ornamental design for a gas stove, as shown.

85,345. GAS STOVE. ALFRED J. REEDY, Battle Creek Mich., assignor to A-B Stove Company, Battle Creek, Mich. Filed Mar. 14, 1931. Serial No. 39,087. Term of patent 7 years.

The ornamental design for a gas stove, as shown.

85,346. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Aug. 26, 1930. Serial No. 36,777. Term of patent 7 years.



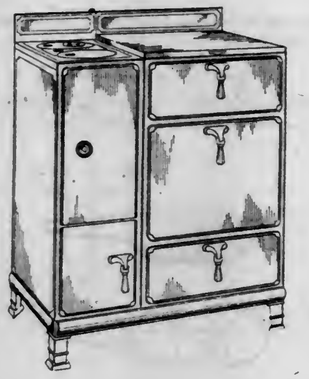
The ornamental design for a shoe ornament, as shown.

85,347. SHOE BUCKLE. SAMUEL M. RIKER, Chester, N. J. Filed Aug. 26, 1930. Serial No. 36,778. Term of patent 7 years.



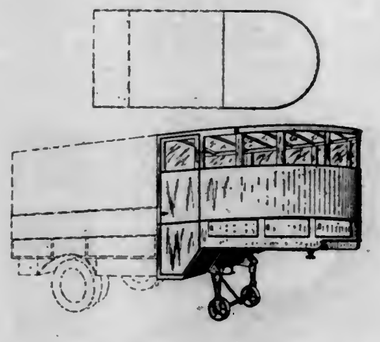
The ornamental design for a shoe buckle, as shown.

85,348. COMBINATION HEATER AND RANGE. CHARLES ROGERS and CLARENCE ROGERS, Cicero, Ill., assignors to Crown Stove Works, Cicero, Ill., a Corporation of Illinois. Filed Feb. 21, 1931. Serial No. 38,785. Term of patent 14 years.



The ornamental design for a combination heater and range, as shown.

85,349. TRAILER CAB. ELLIOTT J. SHAFFRANK, Cleveland, Ohio. Filed June 9, 1931. Serial No. 40,141. Term of patent 3½ years.



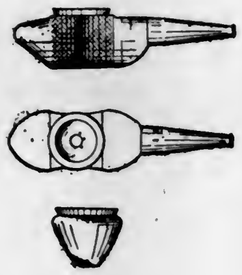
The ornamental design for a trailer cab, substantially as shown.

85,350. SASH LATCH. WILSON A. SMITH, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed July 16, 1930. Serial No. 36,365. Term of patent 7 years.



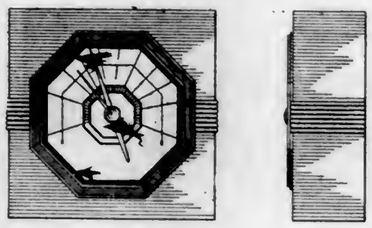
The ornamental design for a sash latch, substantially as shown and described.

85,351. SMOKING PIPE. EMIL M. SPRICH, St. Louis, Mo. Filed Feb. 19, 1931. Serial No. 38,724. Term of patent 7 years.



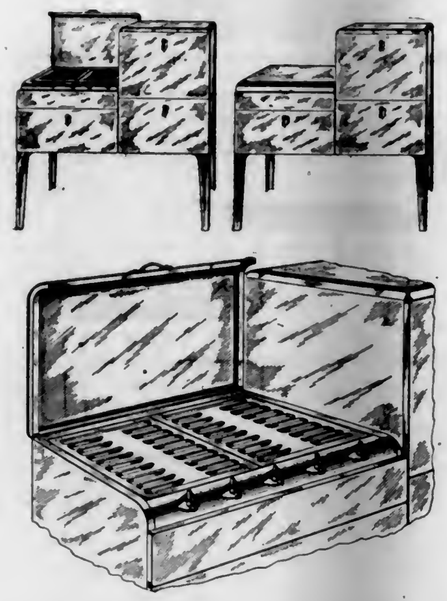
The ornamental design for a smoking pipe as shown and described.

85,352. BAROMETER. WALTER DORWIN TEAGUE, Forest Hills, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Aug. 11, 1931. Serial No. 40,822. Term of patent 3½ years.



The ornamental design for a barometer, as shown.

85,353. CABINET COOKING RANGE. JACOB TELLER, Chicago, Ill., and ARTHUR P. SCHULZ, Buffalo, N. Y., assignors to Teller Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Oct. 21, 1930. Serial No. 37,332. Term of patent 7 years.



The ornamental design for a cabinet cooking range, as shown.

85,354. GAS OR ELECTRIC CABINET COOKSTOVE OR RANGE. JACOB TELLER and ARTHUR P. SCHULZ, New York, N. Y., assignors to Teller Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed July 27, 1931. Serial No. 40,699. Term of patent 7 years.



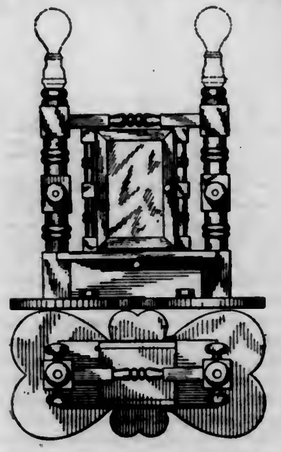
The ornamental design for a gas or electric cabinet cook stove or range, as shown.

85,355. OIL CAN. JOHN J. VOISINE, Kalamazoo, Mich. Filed Oct. 31, 1930. Serial No. 37,479. Term of patent 3½ years.



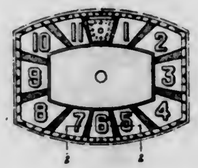
The ornamental design for an oil can, as shown.

85,356. COMBINED CABINET AND LAMP. JOSEPH WARREN, Sr., Bridgeport, Ohio. Filed May 26, 1931. Serial No. 39,987. Term of patent 3½ years.



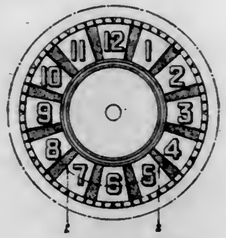
The ornamental design for a combined cabinet and lamp, as shown.

85,357. CLOCK DIAL OR SIMILAR ARTICLE. FRED WEINDEL, Jr., Allentown, Pa., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Aug. 13, 1931. Serial No. 40,839. Term of patent 7 years.



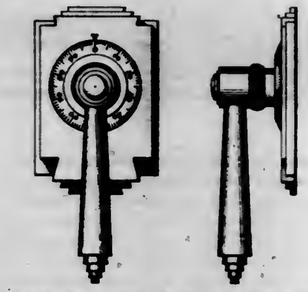
The ornamental design for a clock dial or similar article as shown.

85,358. CLOCK DIAL OR SIMILAR ARTICLE. FRED WEINDEL, Jr., Allentown, Pa., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Aug. 13, 1931. Serial No. 40,840. Term of patent 7 years.



The ornamental design for a clock dial or similar article as shown.

85,359. COMBINED CONCENTRIC DIAL PLATE, LOCK DIAL, AND HANDLE FOR SAFES. CARL F. WOLTERS, Marietta, Ohio. Filed Feb. 17, 1931. Serial No. 38,698. Term of patent 7 years.



The ornamental design for a combined concentric dial plate, lock dial and handle for safes, as shown.

85,360. REFLECTING LIGHT UNIT. WILLIAM V. BERGEN, Hillsboro, and ARTHUR C. SHUTE, Portland, Oreg., assignors to Niterday Signal Co., Portland, Oreg., a Corporation of Oregon. Filed Dec. 1, 1930. Serial No. 37,842. Term of patent 14 years.



The ornamental design for a reflecting light unit, as shown and described.

85,361. SHOE BUCKLE. ADA E. FARMER, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Aug. 20, 1931. Serial No. 40,804. Term of patent 7 years.



The ornamental design for a shoe buckle as shown.

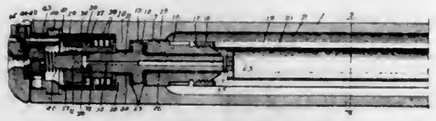
PATENTS

GRANTED OCTOBER 13, 1931

1,826,701. SPRAY-DRIED SUGAR. SHIRLEY L. AMES, Pasadena, Calif., and LEONARD DAY, New York, N. Y., assignors to Chem-Electric Engineering Corporation, a Corporation of New York. Filed Apr. 9, 1924, Serial No. 705,337. Renewed Feb. 18, 1931. 7 Claims. (Cl. 127—58.)

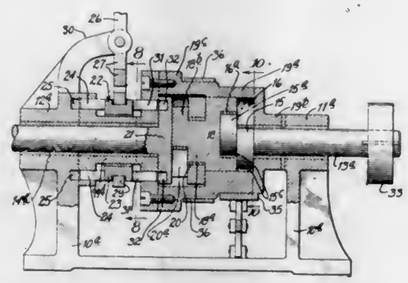
4. The process of producing a sugary substance, comprising spraying a stream of sugar containing water solution into a current of drying air suddenly to remove a large percentage of the water content of said solution; subjecting the resulting powder to heat until a vitreous mass is formed; and cooling said vitreous mass.

1,826,702. BLASTING CARTRIDGE. FRANK H. ARMSTRONG, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 7, 1929. Serial No. 398,044. 12 Claims. (Cl. 102—7.)



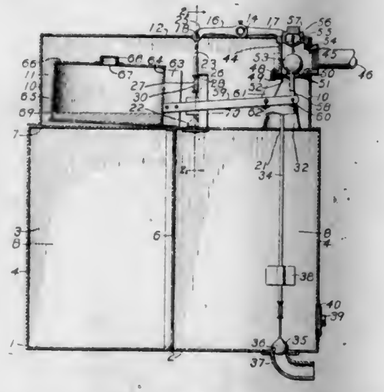
1. A blasting cartridge comprising a metallic body having an internal gas chamber, an electrode extending through an opening in said body and into said chamber, a member surrounding said electrode within the chamber and having connection with said body, means for insulating said electrode from said body and member, and an electrically energizable heater unit having terminals connecting with said electrode and member respectively.

1,826,703. POWER TRANSMISSION GEARING. JOHN E. BATTS, Chicago, Ill. Filed Oct. 18, 1928. Serial No. 313,209. 15 Claims. (Cl. 74—14.)



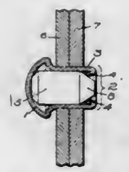
1. Power transmitting gearing comprising a drive shaft, a driven shaft in co-axial alignment therewith, an intermediate cylindrical power transmitting member into which said drive shaft extends and having on one side an unbroken radially extending slideway therein and on the other side an eccentric block, said power transmitting member being interposed between said drive and driven shafts, an eccentric block on the drive shaft running in the slideway in said power transmitting member and the eccentric block on said power transmitting member running in a radially extending unbroken slideway formed in a head on the driven shaft, and a rigid bearing member having a bearing for said power transmitting member which is eccentrically disposed with respect to the axes of the drive and driven shafts and also having bearings to mount said drive and driven shafts.

1,826,704. ICE CAN FILLER. THOMAS J. BYRNE, Tulsa, Okla. Filed May 17, 1928. Serial No. 278,441. 4 Claims. (Cl. 221—112.)



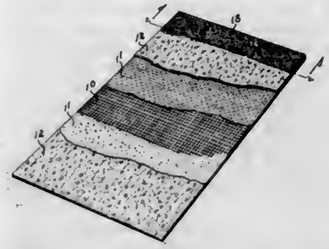
1. In an ice can filler, a measuring chamber including upper and lower horizontal walls provided respectively with an inlet and an outlet, and side walls extended above said upper wall to form an auxiliary chamber, said upper wall having a stem receiving aperture, an intake valve housing communicating with the auxiliary chamber, a valve in said chamber subject to pressure of liquid flowing through the housing, a valve controlling said measuring chamber inlet, a valve controlling said outlet having a stem extending through said aperture in the upper horizontal wall, a conical guard for said stem aperture mounted on said wall, common means for actuating the inlet and outlet valves, and intake-valve control means including a float and means for adjusting the weight of the float to the pressure of liquid against said intake valve.

1,826,705. RIVET. MOSES F. CARR, Lexington, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 5, 1928. Serial No. 310,660. 2 Claims. (Cl. 85—40.)



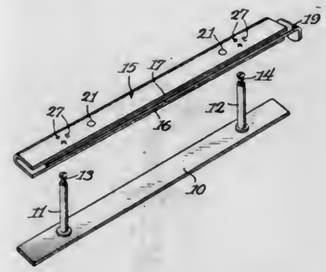
1. A rivet having a slit tubular shank portion, a hollow collapsible head portion adjacent to one end of said shank portion to close that end of the shank, inwardly bent means adjacent to the other end of said shank portion and independent shank-expanding means located within said rivet and held in assembled relation therewith by said head and said inwardly bent means whereby when said head is collapsed said shank-expanding means is forced against said inwardly bent means which in turn expands said shank.

1,826,706. METHOD OF MAKING SHEET ROOFING. ISADORE DAVIS, Marshalltown, Iowa. Filed July 12, 1929. Serial No. 377,769. 4 Claims. (Cl. 154—40.)



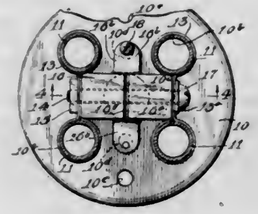
1. The method of making sheet roofing consisting of taking a base, dipping said base in liquid rubber to such an extent as to cover the said base, dipping said rubber covered base in asphalt, and applying granular material to said asphalt.

1,826,707. LOOSE LEAF BINDER MECHANISM. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed May 31, 1930. Serial No. 458,449. 6 Claims. (Cl. 129—13.)



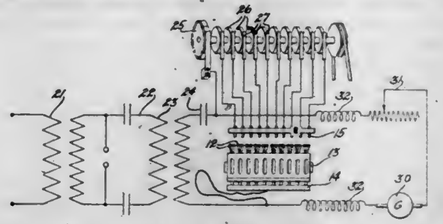
2. In a post type binder, a post having a stem portion, a reduced portion and a head portion, a binder bar bearing a plurality of projections protruding from its face a distance substantially equal to the height of the head portion, and a locking bar slidably maintained against the projections and held in spaced relation from the binder bar by the projections.

1,826,708. CONDUIT RECEPTABLE. JACOB COLITZ, Chicago, Ill. Filed Jan. 21, 1930. Serial No. 422,380. 13 Claims. (Cl. 247—25.)



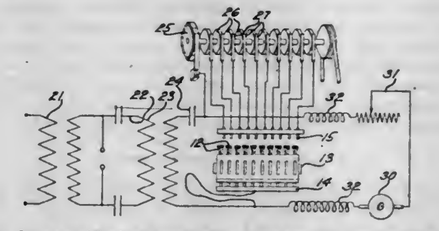
3. A dual conduit receptacle comprising a support, a jacket adjacent each end of the latter and adapted to each receive an end portion of a conduit, opposed and perforated wings extended from the jackets opposite the respective ends thereof, a bolt applied by way of the perforations in one set of wings and through the support to penetrate the other set of wings, and a nut applied to the bolt outside the latter.

1,826,709. METHOD OF SOLDERING. ARTHUR HERMAN ADAMS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 19, 1927. Serial No. 234,362. 8 Claims. (Cl. 219—12.)



1. A method of soldering, which consists of applying a portion of solder to a part, associating a second part therewith, causing a relative movement between the associated parts and an electrode to provide a predetermined distance between the parts and the electrode, producing an arc between the electrode and the parts by a high voltage, high frequency source of electrical energy, and supplying the soldering energy from a direct current source.

1,826,710. APPARATUS FOR SOLDERING. ARTHUR H. ADAMS, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Nov. 19, 1927, Serial No. 234,362. Divided and this application filed July 15, 1930. Serial No. 468,159. 6 Claims. (Cl. 219—12.)



1. In a soldering apparatus, means for connecting a part to be soldered in a soldering circuit, an enclosed electrode adapted to enclose an arc between the part and the electrode, a source of high voltage high frequency oscillations to start an arc, and a low tension source of current to supply the soldering energy.

1,826,711. METHOD OF MAKING MAGNETIC STRUCTURES. JOHN W. ANDREWS, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed August 24, 1929. Serial No. 388,082. 15 Claims. (Cl. 175—21.)

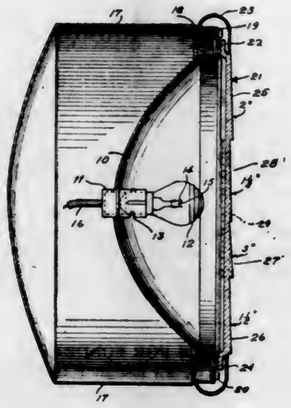


1. The method of making magnetic structures, which consists in coating particles of a magnetic material with an organic material which disintegrates upon heating to form an insulating solid, and forming a mass of the insulated particles into a homogeneous structure.

1,826,712. FIXED FOCUS HEAD LAMP. SAMUEL F. ARBUCKLE, Highland Park, Mich., assignor to Monogram Lens Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 7, 1927. Serial No. 203,948. 3 Claims. (Cl. 240—41.25.)

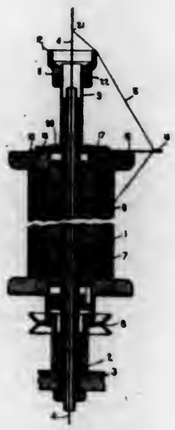
3. In a headlight, the combination of a parallelizing reflector having a focal length of approximately 1 3/4 inches,

a light bulb having two separately energizable filaments spaced apart substantially 1/8 to 9/64 of an inch located substantially in the focal plane of the reflector adjacent the focus; the focal length of the reflector being not less than 10 1/2 nor more than 15 times the distance apart of the filaments, said reflector having a primary reflecting portion located rearwardly of the focal plane and having an



extension located forwardly of the focal plane, means to support the bulb in fixed and non-adjustable relation to the reflector, and means to deflect downwardly the rays issuing from the upper and lower zones of the reflector; the construction of the headlight being such that the angle of depression between the top of the beams of light produced by the two filaments is substantially not more than 3 degrees nor substantially less than 2 degrees.

1,826,713. FLYER OR TRAVELER FOR SERVING MACHINES. HOWARD P. ARNOLD, Rockland, Mass. Filed Mar. 31, 1930. Serial No. 440,419. 3 Claims. (Cl. 117—42.)

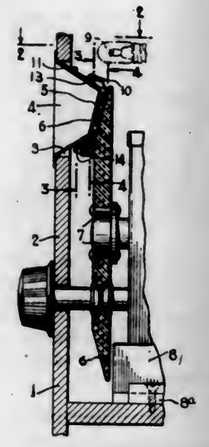


1. In a serving machine, the combination with a rotatable yarn carrier arranged coaxially with the core to be served and having a flyer-supporting flange and an upstanding tubular portion rising from said flange and through which the core extends, of a head at the upper end of the tubular portion provided with an annular thread-guiding edge situated coaxially of the yarn carrier and well spaced from the core, a flyer adapted to rest on said flange when the machine is at rest, said flyer comprising a sector-shaped body portion of paper material through which the said tubular portion extends and a wire arm extending radially from the narrow end of the body portion and terminating in a guide eye for the serving yarn, said guide eye and guiding edge of the head having such relation that the serving yarn contacts with said edge in passing from the guide eye to the core to be served and the movement of the serving yarn through said guide eye when the machine is in motion tending to raise the flyer from the flange.

1,826,714. PRIMING MIXTURE. PETER R. ARONSON, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed June 14, 1926. Serial No. 116,032. 19 Claims. (Cl. 52—3.)

4. A priming mixture containing mercury fulminate, barium nitrate, and cadmium peroxide.

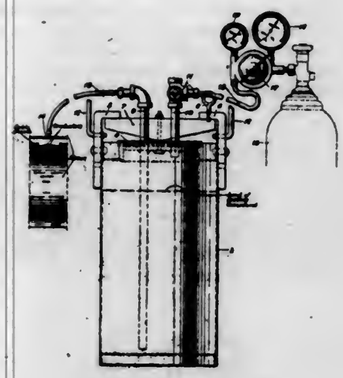
1,826,715. CLEANING DEVICE FOR RADIO TUNING DIALS. HAROLD C. BAKER and OSCAR A. ROSS, New York, N. Y. Filed Aug. 7, 1930. Serial No. 473,684. 6 Claims. (Cl. 116—124.3)



1. The combination with a radio receiving set comprising a housing having a chassis positioned therein, the housing having a viewing opening formed therein and the chassis including a tuning dial member having a dial face indicating radio broadcasting stations formed thereon positioned to be viewed through the opening for selectively tuning in the set during the movement of the dial member, of means positioned within the housing arranged to frictionally engage the dial member for effecting cleaning of the dial face thereof whereby the face will appear as dust free as it is moved before the viewing opening during the movement of the dial member.

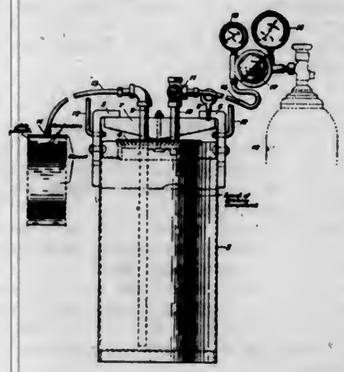
1,826,716. GAS-TIGHT PLUGGING OF CABLES AND THE LIKE. HERMAN BARTENBACH, Pittsburgh, Pa., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 11, 1929. Serial No. 346,026. 4 Claims. (Cl. 173—266.)

1. The method of plugging cables and the like against the flow of gas therethrough, which consists in forcing a molten sealing compound into the cable or other structure to be plugged by the application of a gas pressure,



terminating the application of said gas pressure, and determining the back gas pressure.

1,826,717. DISPENSING DEVICE. HERMAN BARTENBACH, Pittsburgh, Pa., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Mar. 11, 1929, Serial No. 346,026. Divided and this application filed May 24, 1930. Serial No. 455,443. 1 Claim. (Cl. 221—74.)

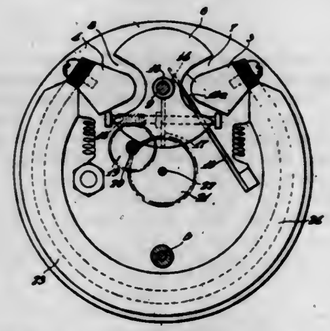


As a device for introducing a sealing compound into a cable or the like to form a gas-tight plug, a gas-tight container adapted to be partly filled with a molten sealing compound, a conduit extending from the lower portion of said container through the top thereof and having means for connection with the structure to be plugged, means associated with the upper portion of said container for introducing gas therein at a known pressure, whereby the compound is forced through said conduit, means associated with said introducing means for interrupting or terminating the introduction of the gas into the container, and means associated therewith for indicating the back gas pressure in the container upon the operation of said terminating or interrupting means.

1,826,718. MANUFACTURE OF THREADS, RIBBONS, FILMS, AND THE LIKE FROM SOLUTIONS OF CELLULOSE ESTERS AND CELLULODE ETHERS. HENRI LOUIS BARTHELEMY, Milan, Italy, assignor to Ruthaldo Company Inc., New York, N. Y., a Corporation of New York. Filed July 28, 1927, Serial No. 209,163, and in France Dec. 28, 1926. 15 Claims. (Cl. 18—54.)

1. A process of manufacturing artificial threads, films, ribbons and the like, which consists in forcing a solution of cellulose acetate in acetone into an aqueous emulsion containing a solution of ammonium oleate mixed with neat's-foot oil and mineral oil.

1,826,719. SELF-OSCILLATING ELECTRIC CLOCK. CONSTANT BATTEOAY, Levallois-Perret, France. Filed June 11, 1928, Serial No. 284,297, and in Belgium June 21, 1927. 8 Claims. (Cl. 58—28.)

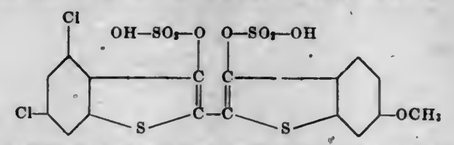


1. A system of clockwork mechanism with electric sustained oscillation, comprising in combination a balance adapted to oscillate, a member having two cams and a detent member and controlled by the motion of the balance, and a wheelwork comprising an escapement wheel driven by said cams which coact with the teeth of said escapement wheel, and said detent holding said wheel stationary when said member is in its intermediate position and both of said cams are disengaged therefrom.

3. A system of clockwork mechanism with electric sustained oscillation, comprising an electromagnet having a winding, an oscillatable armature constituting a balance and mounted in the field of said electromagnet, and coacting contact members in circuit with said winding and controlled by the motion of the balance and normally closed in the position of equilibrium of said balance and normally closed also in the mid-position of said balance in either direction of its oscillation.

1,826,720. SULPHURIC ACID ESTER OF THE LEUCO COMPOUND OF A VAT DYESTUFF. WILHELM BAUER and LUDWIG ZEH, Wiesdorf, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 3, 1930, Serial No. 465,783, and in Germany July 29, 1929. 1 Claim. (Cl. 260—53.)

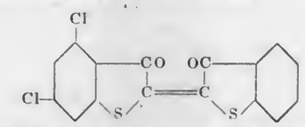
As a new product the sulphuric acid ester of the leuco compound of 4:6-dichloro-6'-methoxy-bis-thionaphthene-indigo, having in its free form the following formula



said ester being in the form of its sodium salt a stable, white crystalline substance, readily soluble in water, yielding when printed or dyed on textile fibers and developed with acid oxidizing agents, very clear scarlet shades of good fastness properties.

1,826,721. INDIGOID DYESTUFF. WILHELM BAUER and LUDWIG ZEH, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 7, 1930, Serial No. 466,340, and in Germany July 29, 1929. 1 Claim. (Cl. 260—53.)

As a new indigoid dyestuff the asymmetrical 4.6-dichloro-bis-thionaphthene indigo of the formula:

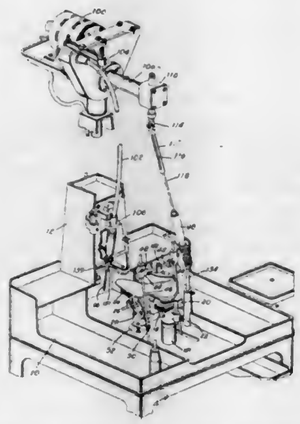


said dyestuff being a pink crystalline substance, scarcely soluble in organic solvents, difficultly soluble in sulfuric acid with a green coloration, yielding a yellow vat from which textile fibers after oxidation are dyed clear powerful ruby shades of excellent fastness properties.

1,826,722. PROCESS OF PREPARING SODA-LIME TO BE USED IN THE MANUFACTURE OF PURE HYDROGEN. JULIEN BELLAY, Brussels, Belgium. Original application filed Jan. 13, 1928, Serial No. 246,558, and in Belgium Jan. 26, 1927. Divided and this application filed Apr. 30, 1929. Serial No. 359,418. 2 Claims. (Cl. 252—2.5.)

1. A process of preparing soda-lime in the shape of porous bricks containing a high proportion of sodium hydroxide and adapted to purify hydrogen from carbon monoxide, which consists in preparing ordinary soda-lime by slaking calcium oxide by means of a solution of sodium hydroxide, calcining said soda-lime, effecting over said calcined soda-lime a series of sprinklings by means of a solution of sodium hydroxide adapted to coagulate said calcined soda-lime in the shape of solid bricks in suitable molds, removing said bricks from said molds, and partly drying said bricks before use.

1,826,723. APPARATUS FOR USE IN ATTACHING HEELS TO SHOES. FREDERIC E. BERTRAND, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed May 18, 1922, Serial No. 561,901, and in Great Britain May 25, 1921. Divided and this application filed June 3, 1927. Serial No. 196,245. 14 Claims. (Cl. 12—42.)

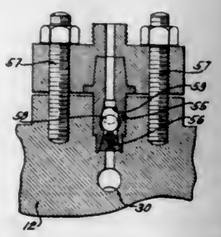


1. In a heel attaching machine, in combination, means to hold a perforated last, a shoe, and a heel assembled together right side up, and fastener-inserting means to drive a fastener through the perforation in the last and through the shoe bottom into the heel.

1,826,724. MEANS FOR PROTECTING STORAGE BATTERY GRIDS. FREDERICK E. E. BOOSS and RUFUS N. CHAMBERLAIN, Chicago, Ill., assignors, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed Nov. 12, 1927. Serial No. 232,936. 7 Claims. (Cl. 136—154.)

1. In a storage battery having lead plates immersed in an electrolyte, means for protecting the plates against corrosion comprising the combination with the plates and the electrolyte of a cobalt compound in the proportion of approximately $\frac{1}{10}$ of 1% by weight of the electrolyte.

1,826,725. COUPLING IN AN APPARATUS FOR EXTRUDING MATTER. JOHN E. BOYNTON, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed May 31, 1929, Serial No. 367,204. Divided and this application filed Mar. 7, 1930. Serial No. 433,870. 2 Claims. (Cl. 285—1.)



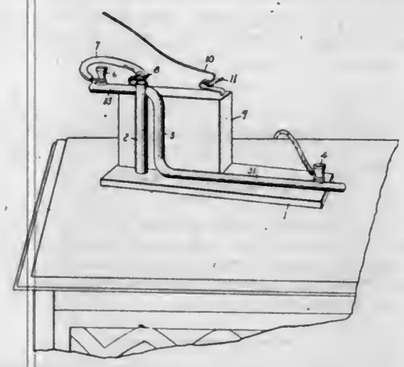
1. A coupling for fluid conduits, comprising a member provided with a recess communicating with one of the conduits, a tubular member movably mounted in said recess and provided with an inwardly tapering bore communicating with another conduit, an apertured member seated in said recess and having an outer surface shaped to engage said tapered bore in fluid-tight relation, a yoke engaging the tubular member, and means for urging the yoke toward the apertured member to maintain the parts in fluid-tight relation.

1,826,726. PAPER COATING COMPOSITION. DONALD B. BRADNER, Hamilton, Ohio, assignor to The Champion Coated Paper Company, Hamilton, Ohio, a Corporation of Ohio. Filed Aug. 30, 1928. Serial No. 303,123. 3 Claims. (Cl. 91—68.)

1. In the process of coating a web of paper with an aqueous mineral coating composition comprising besides an aqueous vehicle mineral pigment in major amount and an adhesive in minor amount, the step of reducing pin hole defects in the resulting coating which consists in dispersing a relatively small but effective amount of pine oil in said composition and coating the paper web with the resulting mixture.

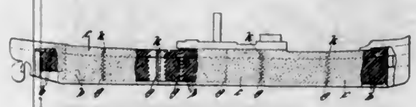
1,826,727. RADIO APPARATUS. CHANCY J. BRITTEN, Charlotte, Mich., assignor to Britten Light & Power Company, Lansing, Mich., a Corporation of Michigan. Filed Apr. 30, 1928. Serial No. 273,949. 1 Claim. (Cl. 250—20.)

The combination with a radio set comprising A, B and C batteries and an aerial of an economizer and clarifying device comprising an auxiliary battery dry cell, a base with post, a metallic tubular casing with a horizontal lower part and an upright and an upper horizontal part disposed through said post, a central conductor, a coil of wire around the conductor, the opposite ends of said conductor and coil being connected to a single binding post mounted on the upper and lower ends of the tubular casing which casing is suitably sealed at the ends, a mica insulation between the said coil and the casing, a connection from the lower binding post to the antenna connection of the radio set and from the upper binding post to the positive



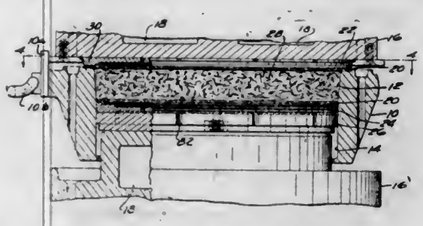
terminal of said battery dry cell, and a connection from the negative terminal of the said battery cell to the aerial or antenna of said radio set.

1,826,728. HULL STRUCTURE OF SHIPS AND THE LIKE. HAROLD EDWARD JOSCELYN CAMPS, London, England. Filed Aug. 21, 1929, Serial No. 387,324, and in Great Britain Aug. 28, 1928. 3 Claims. (Cl. 114—79.)



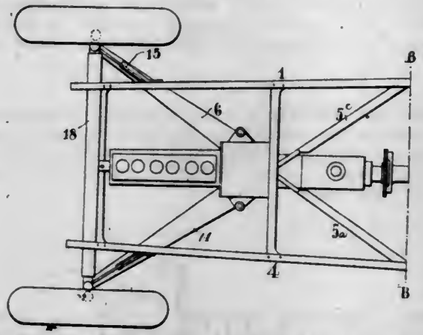
1. A main hull structure for ships and the like comprising only in combination a plurality of substantially parallel obliquely and uni-directionally arranged frames between the bulkheads, longitudinal girders at the upper part of the hull to which the frames are connected, longitudinal girders at the lower part of the hull to which the frames are connected and plating attached to the frames and the girders so as to form the side walls of the hull.

1,826,729. PRESS. FRED S. CARVER, East Orange, N. J. Filed Dec. 26, 1923. Serial No. 682,822. 5 Claims. (Cl. 100—54.)



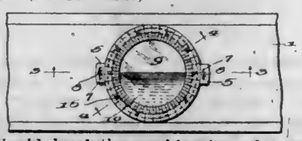
4. In a filter press, a press member for applying pressure through a removable filtering medium comprising a main pressure plate with flow openings therein and open at a face thereof, a coarse reticulated member engaging said face and bridging the openings in the main plate, and a finely foraminated strong metal plate over the reticulated member and bridging the openings thereof, the relation of the successive passages so provided being such that the expressed liquor has progressively greater freedom of flow in passing through the passages in the foraminated plate, reticulated members and main plate successively.

1,826,730. RIGID FRAME FOR MOTOR CARS. NEMORIN LAURENT CAUSAN, Suresnes, France. Filed Apr. 18, 1929, Serial No. 356,235, and in France Apr. 25, 1928. 2 Claims. (Cl. 280—106.5.)



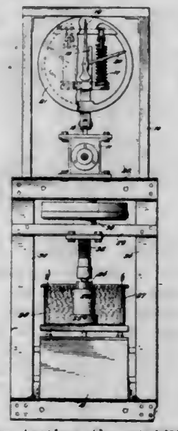
1. A chassis for motor vehicles embodying front and rear axles, and which is inherently non-warpable regardless of the distribution of the load upon the wheels, such chassis comprising a four-sided central frame; struts joining together the middle points of adjacent sides of the frame; and a set of four suspension springs, one individual to each strut carrying said frame and arranged in the vertical planes that pass through the respective struts.

1,826,731. SPIRIT LEVEL. ELISHA C. CHATHAM, Tarrant, Ala. Filed May 17, 1930. Serial No. 453,308. 6 Claims. (Cl. 33—206.)



1. In a liquid level the combination of a stock having straight edges, there being an aperture in said stock, face plates on opposite sides of said aperture, a cylindrical sealed container containing a liquid, said container having a periphery, a plaster of Paris covering for said periphery, metallic rings surrounding said plaster of Paris and supporting said container, and means for connecting said rings to said plates.

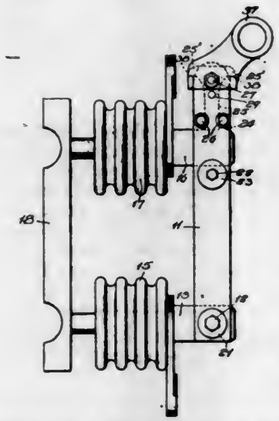
1,826,732. STABILITY TESTING APPARATUS. GEORGE E. CHATILLON, New York, N. Y., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed June 26, 1928. Serial No. 288,352. 3 Claims. (Cl. 265—11.)



1. Apparatus for testing the stability of plastic and semi-plastic materials and mixtures comprising a scale,

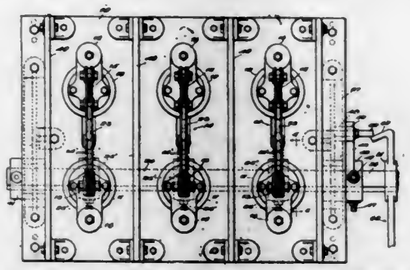
a mold having an orifice in the lower portion thereof adapted to receive a test specimen mounted on said scale, a plunger acting in said mold, means for actuating said plunger to load the test specimen, an indicator on said scale, and a push pointer actuated by said indicator to indicate the maximum resistance developed in forcing a portion of said specimen through the orifice in said mold.

1,826,733. SWITCH LOCK. CHRISTEN CHRISTENSEN, Chicago, Ill., assignor to Electrical Engineers Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1923. Serial No. 643,833. 9 Claims. (Cl. 200—169.)



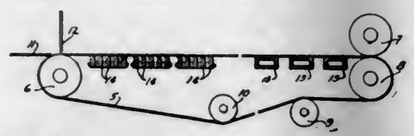
1. In combination, a pair of switch terminals, a switch blade for connecting said terminals, said blade comprising a pair of spaced floating blade members a T-shaped locking bolt carried between said switch blade members, the ends of the T-arms projecting beyond the edges of said blade members, and a lock releasing member pivotally carried on said blade and positioned outside the space between said blade members and engageable with said locking bolt projections outside the areas of the blade members and beyond the edges thereof.

1,826,734. SWITCH. CHRISTEN CHRISTENSEN, Chicago, Ill., assignor to Electrical Engineers Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 19, 1925. Serial No. 57,322. 7 Claims. (Cl. 200—48.)



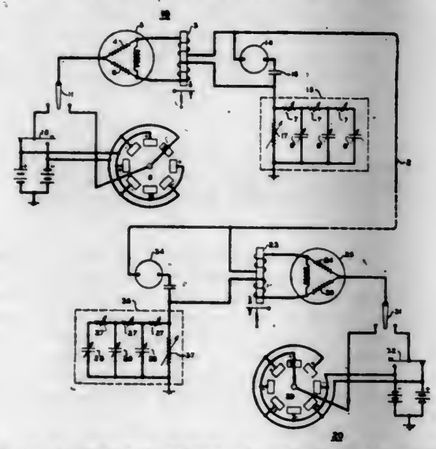
1. In combination, a switch comprising a plurality of switch units, a frame upon which the said units are disposed, a shaft common to all of these units for operating them, a lock member carried by the said shaft equipped with a pair of slots, one of the said slots being adapted to lock the switch units in their open position, and the other slot being adapted to lock the switch units in their closed position, a pawl carried by the frame of the switch having its free end in engagement with the said lock member, the said pawl being adapted to co-operate with the said slots in locking the switch units, and means for controlling the position of the pawl including an electric solenoid and an armature associated therewith.

1,826,735. PAPER MAKING MACHINE. AUSTIN E. COFRIN, Green Bay, Wis. Filed Dec. 26, 1928. Serial No. 328,453. 7 Claims. (Cl. 92—44.)



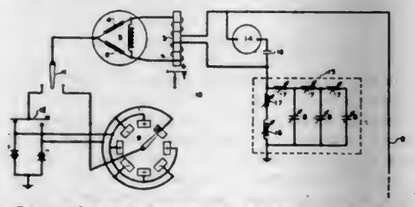
1. In a Fourdrinier paper making machine, the combination of a traveling wire, and means for removing moisture from the forming film upon said wire comprising a series of relatively narrow, closely spaced scraper members over which the wire passes.

1,826,736. ALTERNATING CURRENT BALANCE INDICATOR. ALDER F. CONNERY, Brooklyn, and RONALD S. WISHART, Rockville Center, N. Y., assignors to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed July 1, 1930. Serial No. 465,228. 12 Claims. (Cl. 178—69.)



1. In a telegraph system, a real line, an artificial line, means for indicating the resistance unbalance between said lines, and means for indicating the induction on said real line and for indicating the capacity unbalance between said lines.

1,826,737. METHOD OF AND MEANS FOR BALANCING TELEGRAPH LINES. ALDER F. CONNERY, Brooklyn, and RONALD S. WISHART, Rockville Center, N. Y., assignors to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,884. 5 Claims. (Cl. 178—69.)



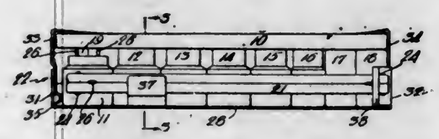
1. In a telegraph system, a real line, an artificial line containing a variable inductance, a polarized relay, a differential D. C. milliammeter connected to said lines through said relay and to a two-point switch, a key connected to one of the points of said switch, positive and negative battery under the control of said key, a commutator to provide A. C. current at a frequency within the signaling range and under the control of the other point of said switch, and a galvanometer and a condenser bridged across said lines.

1,826,738. TOBACCO PIPE. CHARLES FOSTER CORBETT, Edmonton, Alberta, Canada. Filed July 20, 1929. Serial No. 379,763. 1 Claim. (Cl. 131—12.)



A tobacco pipe comprising in combination with a bowl having a stem opening communicating therewith at a point spaced upwardly from the bottom of the bowl, said bowl being open at the bottom for the full internal diameter thereof, of a plug adapted for insertion into the open bottom of the bowl to form a closure therefor and extending upwardly into the bowl to a point above the stem opening, the upper end of the plug cupped, said cupped portion forming the bottom for the interior of the pipe bowl and the bottom of the cupped portion lying below the stem opening, the periphery of the plug formed with an annular groove registering with the stem opening, and the plug formed with a plurality of downwardly inclined passages leading from the annular groove to the bottom of the cupped portion, said downwardly inclined passages in the plug being of smaller diameter than that of the stem opening.

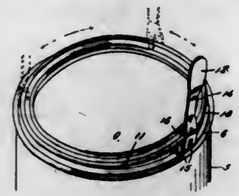
1,826,739. TOOL SET AND CONTAINER THEREFOR. WILLIAM F. COSTELLO, New Britain, Conn., assignor to The New Britain Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed July 1, 1930. Serial No. 465,104. 9 Claims. (Cl. 206—16.)



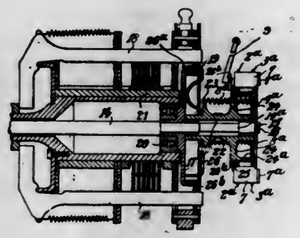
1. A frame for holding a compound tool comprising an operating member and a plurality of detachable heads therefor, said frame comprising opposed longitudinal walls and transverse end walls therebetween, the longitudinal walls being spaced to receive the detachable heads disposed in side by side relation with the operating member disposed across the end faces of the heads and along the inner side of one of the longitudinal walls, a longitudinally disposed member carried by the frame and extending along one side thereof for retaining the heads, and means releasable from the frame and disposed along the other side thereof for holding the heads therein.

1,826,740. RECEPTACLE OPENER. NICHOLAS P. COURTNEY, Passaic, N. J. Filed June 27, 1930. Serial No. 464,290. 1 Claim. (Cl. 220—43.)

As a new article of manufacture, a receptacle opener; wherein the receptacle includes a lid having a peripheral annular bead, comprising an elongated prying implement formed in one piece having a handle with a convexly curved heel end extension constituting a bearing terminating under the bead, said extension having a longitudinal intermediate portion struck therefrom and forming a tongue curved to be disposed on the other side of said bead to prevent detachment of the implement from the bead but permitting the implement to be slid around the bead for prying action at different points.

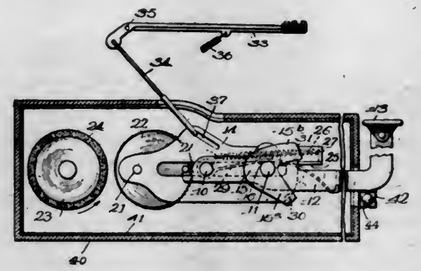


1,826,741. PRINTING WHEEL. FREDERICK GEORGE CREED, Croydon, England, assignor to Creed and Company, Limited, Croydon, England. Filed Feb. 14, 1929, Serial No. 339,871, and in Great Britain Feb. 14, 1928. 5 Claims. (Cl. 178—38.)



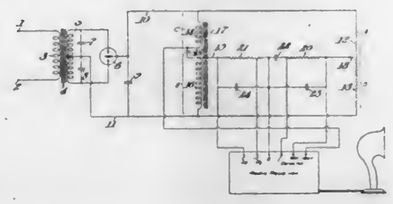
1. A printing device comprising a constantly rotating shaft, a typewheel journaled on said shaft, a clutch connection between said shaft and wheel, a plurality of character carrying members on said wheel and means for causing longitudinal movement of said members.

1,826,742. POWER DRIVE SELECTIVE MECHANISM. ROBERT A. CROOKS, Chicago, Ill. Filed July 25, 1928. Serial No. 295,189. 7 Claims. (Cl. 197—17.)



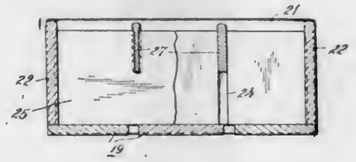
1. Mechanism of the class described comprising a manually operable lever, a catch member thereon, a slide member adapted to be held in retracted position by said catch, means for moving said slide forwardly when released by said catch, an eccentric carried by said slide, power means adapted to co-act with said eccentric for retracting said slide, an operating member actuatable by said slide upon the retraction thereof, and an oscillatable latch for preventing unintentional repeated strokes of said slide, said latch being moved to operative and inoperative positions by said slide and lever, respectively.

1,826,743. APPARATUS FOR ENERGIZING AN AUDION CIRCUIT. GEORGE B. CROUSE, Woodcliff, N. J., assignor to Conner Crouse Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 19, 1928. Serial No. 247,952. 11 Claims. (Cl. 250—27.)



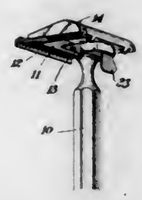
1. In apparatus for energizing an audion circuit from a source of rectified current, a plurality of impedances arranged as an alternating current Wheatstone bridge across which said source and said circuit may be connected as conjugate arms, the impedances forming two adjacent arms being resistive, and the other two arms comprising an inductance, and an inductance in series with a capacity, respectively.

1,826,744. SHIPPING CASE. AMARIAH H. CUBBERLEY, Belleville, N. J., assignor to Hoffman Beverage Company, Newark, N. J., a Corporation of New Jersey. Filed July 3, 1930. Serial No. 465,574. 12 Claims. (Cl. 217—19.)



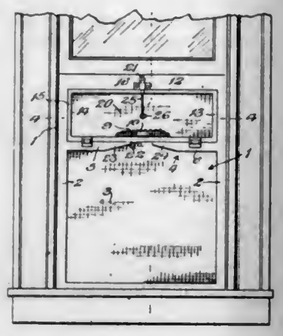
1. In a shipping case, the combination of a box frame, a partition strip having a groove extending only partially across the surface thereof, a second partition strip having a transverse slot for receiving said first partition strip at the groove thereof in interlocking, crossed relation, and means for mounting the partition thus formed in said frame.

1,826,745. RAZOR. GODFREY DALKOWITZ, New York, N. Y., assignor to American Safety Razor Corporation, Brooklyn, N. Y., a Corporation of Virginia. Filed Oct. 15, 1927. Serial No. 226,299. 19 Claims. (Cl. 30—12.)



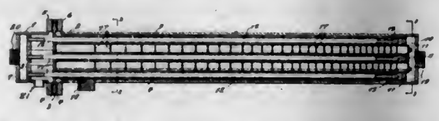
1. In a safety razor holder which includes a blade seat and a pivoted cover therefor, spring means for yieldably retaining the cover closed, means for pressing a blade forward along said seat; said last named means including an element movable against or away from the blade; and spring means for yieldably retaining said element in one or the other of said positions.

1,826,746. FLYTRAP. HENRY F. DAVIS, Walters, Okla. Filed May 20, 1929. Serial No. 364,588. 1 Claim. (Cl. 43—119.)



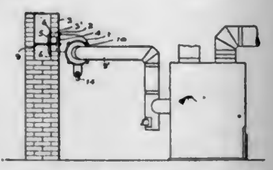
A device of the character described comprising a frame, of substantially the size of a window sash, a pair of inwardly projecting frame members, a screen covering the outer side of said frame members, said members having lugs extending up from their opposing spaced apart ends, a screen door substantially the width of said screen hinged to said members and being spaced apart from the first screen by said lugs.

1,826,747. HEAT EXCHANGER. HOWARD C. DAVIS, Elizabeth, and WILLIAM H. THOMPSON, Chatham, N. J., assignors to Davis Engineering Corporation, a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,625. 5 Claims. (Cl. 257—238.)



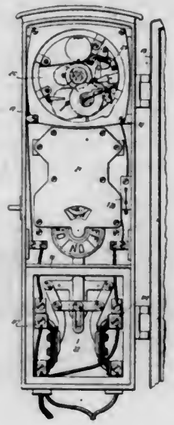
1. A heat exchanger comprising a casing having inlet and outlet openings therein, a tube sheet adjacent one end of said casing having openings therethrough, a second tube sheet in the rear of said first mentioned tube sheet having openings therethrough of greater diameter than and in alignment with the openings in said first tube sheet, tubes extending longitudinally of said casing secured in said tube openings, the tubes secured in the openings of said first mentioned tube sheet extending within the tubes secured in said second mentioned tube sheet, and means for centering the tubes secured in the first mentioned tube sheet in the tubes secured in said second mentioned tube sheet, said means including tapering guides projecting beyond the ends of the inner tubes.

1,826,748. COMBUSTION DEVICE FOR FURNACES. RUDOLF D. DELAMERE, Toronto, Ontario, Canada, assignor to Delamere & Williams Limited, Toronto, Canada. Filed Mar. 5, 1930. Serial No. 433,446. 4 Claims. (Cl. 110—162.)



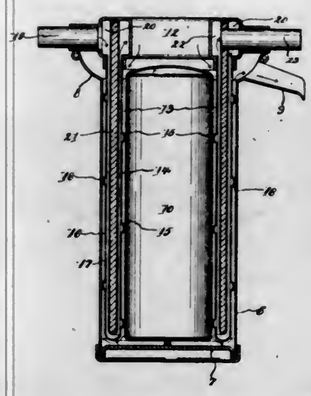
1. In a device for accelerating the draught in furnaces, the combination with a furnace and permanent flue therefor having an opening therein for the entrance of combustion gases, of a centrifugal blower having its casing directly supported from the permanent flue structure with its discharge directly connected with said flue opening, an unobstructed flue leading from the furnace directly connected with the intake of said blower casing, and a motor for operating said blower wholly supported from the casing thereof.

1,826,749. ASTRONOMICAL TIME SWITCH. CHARLES E. DE LONG, San Diego, Calif., assignor to Sangamo Electric Company, Springfield, Ill., a Corporation of Illinois. Filed Mar. 16, 1929. Serial No. 347,513. 21 Claims. (Cl. 200—40.)



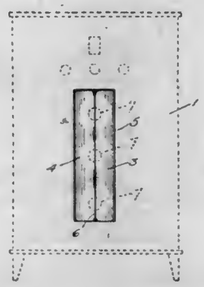
3. In a time switch of the class described, the combination of a time controlled member having movement in a cyclical path, a cooperating member adapted to be engaged thereby for effecting a switching operation, and automatic means for displacing said latter member to different points of the path of movement of said first member with seasonal variations of sunrise or sunset.

1,826,750. MILK COOLER. ISAIE J. B. DEMERS, St. Paul, Minn., assignor to Superior Metal Products Company, St. Paul, Minn., a Corporation of Delaware. Filed Oct. 6, 1930. Serial No. 486,591. 11 Claims. (Cl. 257—243.)



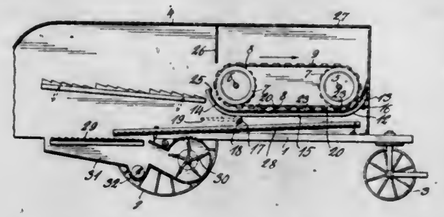
1. A cooler for fluids comprising, outer and inner casings spaced apart, a unitary cooling element located between said outer and inner casing members, means for maintaining said cooling element in spaced relation to said inner and outer casing members to provide attenuated spaces for fluid to be cooled, an inlet for supplying fluid to be cooled communicating with the space between said cooling element and inner casing, an outlet for said fluid communicating with said outer casing near its upper end, and means for circulating cooling fluid in said cooling element.

1,826,751. RADIO LOUD SPEAKER. CHARLES HUGH DUFFY, Miami, Fla. Filed Oct. 8, 1930. Serial No. 487,211. 4 Claims. (Cl. 181—31.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



1. A sound reproducing system for radio loud speakers or the like, including a cabinet having an opaque front the front of the cabinet having an opening therein, a diaphragm of translucent material arranged at the said opening in the opaque front of the cabinet, the translucent diaphragm being flexed into two roll formations having meeting portions centrally of the said opening, and a source of light within the cabinet and disposed to cast its rays upon the diaphragm to illuminate the two rolled formations of the diaphragm to cause the same to appear in the form of two glowing columns within the said opening in the opaque front of the cabinet.

1,826,752. THRASHING AND SEPARATING DEVICE. THOMAS DUGAN, Denver, Colo., assignor of one-half to Robert Benjamin Davis, Wichita, Kans. Filed Nov. 2, 1929. Serial No. 404,292. 1 Claim. (Cl. 130—27.)

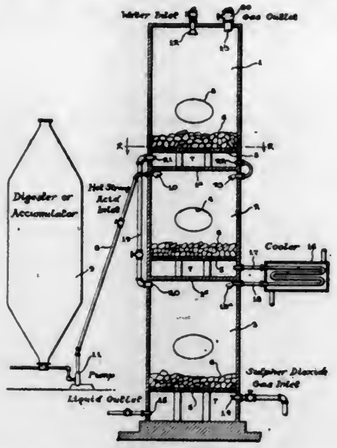


A concave for use with a thrashing device comprising, a frame comprising two spaced parallel frame members whose center portions are straight, a plurality of concave sections secured to the top of the frame, each section having its upper surface provided with spaced parallel ribs extending in the direction of the length of the frame, the spaces between the ribs being perforated, one end of the frame being supported on a stationary pivot and the other being supported on rotatable cams that serve as means for adjusting the position of the frame in a vertical direction.

1,826,753. METHOD AND APPARATUS FOR MAKING CHEMICAL SOLUTIONS. THOMAS LEONIDAS DUNBAR, Watertown, N. Y., assignor to Chemipulp Process, Incorporated, a Corporation of New York. Filed Feb. 5, 1929. Serial No. 337,599. 10 Claims. (Cl. 23—132.)

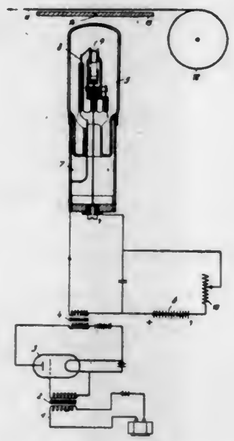
1. In the process of absorbing sulphur dioxide in aqueous solutions, the steps which comprise reacting hot sul-

phurous acid solution with solid lime containing material, cooling the resulting solution and passing sulphur dioxide



gas therein in the presence of solid lime containing material.

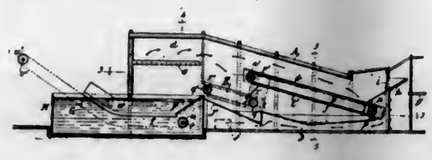
1,826,754. METHOD OF AND APPARATUS FOR MAKING PHOTOPHONOGRAPHIC RECORDS. FRANZ EHRENHAFT, Berlin-Lichtenberg, Germany. Filed Oct. 1, 1928, Serial No. 309,674, and in Germany Oct. 1, 1927. 3 Claims. (Cl. 179—100.3.)



3. The method of producing photo-phonographic records by means of a luminescent discharge controlled by sound-waves, which method consists in supplying operating current controlled by said sound-waves to said luminescent discharge, and regulating the value of said operating current to produce an increased thermo-ionization of said discharge so as to transform the latter during operation into a transitional form of glow and arc-discharge.

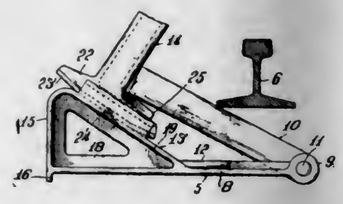
1,826,755. APPARATUS FOR RECOVERING EASILY-FUSIBLE METALS. WILLIAM F. EPPENSTEINER and HARRY MORECRAFT, Rahway, N. J., assignors to United States Metals Refining Company, Carteret, N. J., a Corporation of New Jersey. Filed Nov. 16, 1928. Serial No. 319,856. 4 Claims. (Cl. 263—10.)

1. An apparatus for separating fusible material, comprising an elongated chamber, means for introducing hot gases thereto at one end, and for withdrawing the spent gases therefrom, an endless chain conveyor for carrying articles through said chamber, the chamber divided between such gas inlet and outlet to force the circulation of the



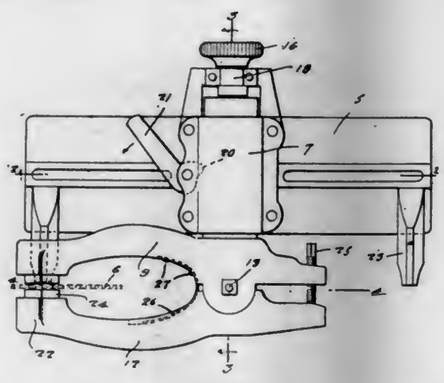
gases through the chamber above the conveyor and back beneath the conveyor, and a sealed outlet from the chamber.

1,826,756. TRACK LINERS. BENJAMIN H. FALKNER, Aurora, Ill., assignor, by direct and mesne assignments, to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed Aug. 20, 1926. Serial No. 130,422. 4 Claims. (Cl. 254—44.)



1. A track liner comprising a base adapted for setting in the road bed adjacent the track, an inclined support on said base adapted detachably to mount a track lifting jack, and a lining bar pivoted to said base and adapted to be revolved in a path extending transversely of the track through actuation of said jack.

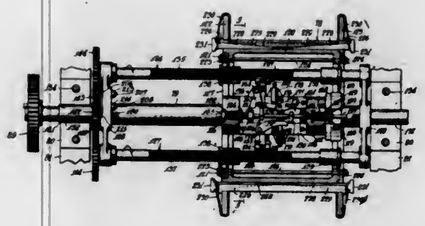
1,826,757. SAW GUIDE. JOHNSON CONRAD FALLS, St. Joseph, La. Filed Aug. 4, 1930. Serial No. 473,030. 1 Claim. (Cl. 143—166.)



A saw guide of the class described comprising a base having a bearing part thereon, a shaft rotatably and slidably arranged in said bearing part, means at one end of the shaft for moving the same longitudinally, a stationary jaw having an intermediate part on one of its sides integrally connected to the other end of the shaft, a movable jaw pivoted intermediate its ends to the opposite side of

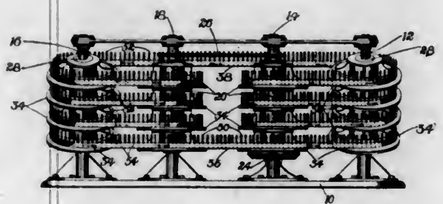
said stationary jaw, saw engaging elements carried by the jaws at one end thereof, a set screw carried by the opposite end of the stationary jaw and engaging the adjacent end of the movable jaw, said shaft having longitudinally extending grooves therein arranged diametrically opposite each other, a lever hinged to one side of the bearing part and having a cam thereon for engaging either groove to hold the shaft in either one of its two positions and an angle shaped stop at each end of the base having one arm connected with the base and its other arm extending horizontally from the base into the path of movement of the stationary jaw for supporting the jaw in operative position.

1,826,758. WINDING AND UNWINDING MECHANISM. CROSBY FIELD, Brooklyn, N. Y. Original application filed June 18, 1927, Serial No. 199,692, and in Canada June 11, 1928. Divided and this application filed Aug. 3, 1928. Serial No. 297,316. 14 Claims. (Cl. 242—158.)



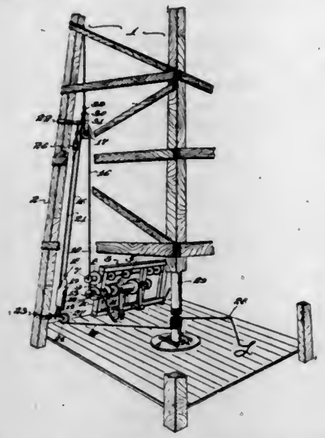
1. In combination, a reel for wire, means to rotate said reel, a shaft to support said reel, a non-rotating pinion, two screws carried bodily with said reel while it rotates, gearing to connect said screws with said pinion to rotate said screws while they are moving bodily with the rotation of the reel, and means on said reel to engage either screw to cause said reel to feed axially on its shaft in either direction.

1,826,759. CONVEYING SYSTEM. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 5, 1927. Serial No. 159,133. 24 Claims. (Cl. 198—136.)



1. In a conveying system, an endless conveyor constructed and arranged to support flat articles upon their edges, means for retaining the articles in co-operation with the conveyor, means for guiding the conveyor in an ascending spiral, means spaced from said guiding means for guiding the conveyor in a descending spiral, and means for delivering articles edge-down into co-operation with the retaining means at one of the spirals.

1,826,760. CASING SPINNING APPARATUS FOR DRILLING RIGS. WALTER W. FOSTER, Wichita Falls, Tex. Filed Feb. 1, 1929. Serial No. 336,812. 3 Claims. (Cl. 255—35.)



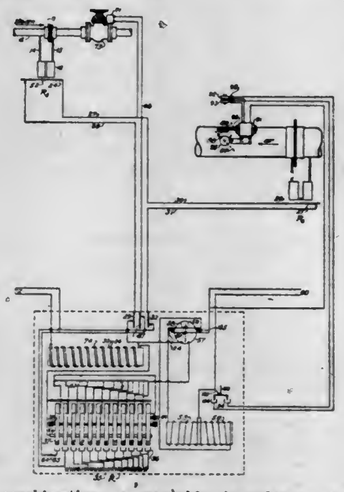
1. In an apparatus of the type set forth, pulling means, a line connected at one end to said pulling means to be pulled thereby and having its opposite end vertically disposed, a weight connected to said vertically disposed end, and a second line connected to the weight at one end and having its other end free and adapted to engage about and rotate a casing.

1,826,761. SHINGLE. DONALD F. FRADETTE, Cleveland, Ohio. Filed Mar. 16, 1929. Serial No. 347,698. 9 Claims. (Cl. 108—8.)



1. A shingle comprising a base, a surface of which has an integral scarfed portion, said surface and scarfed portion having connected to it a metal covering of less length than the base.

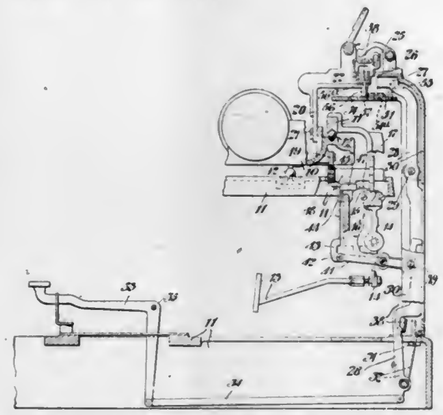
1,826,762. RATIO RECORDER. BERNARD S. FRANKLIN, Troy, N. Y. Filed Nov. 20, 1924. Serial No. 751,198. 13 Claims. (Cl. 137—78.)



1. In combination, a variable impedance, a movable element which varies said impedance in proportion to the logarithm of its own motion, an electrical instrument

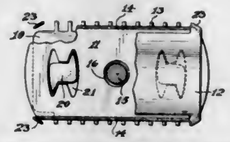
controlling the position of said element, and means operated by said element during its motion to vary the sensitivity of said electrical instrument.

1,826,763. TYPEWRITING MACHINE. CARL GABRIELSON, Syracuse, N. Y., assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y., a Corporation of New York. Filed Oct. 24, 1929. Serial No. 402,082. 2 Claims. (Cl. 197—176.)



1. In a typewriting machine having a main frame and a power-driven escapement-controlled platen carriage thereon, the combination with said frame and carriage of tabulating means comprising a pair of supports adjacent opposite ends of the carriage, a stop carrying bar rigidly secured at its ends to said supports and having its fore and aft sides vertically grooved and its under side provided with a longitudinal channel extending substantially the full length of the bar, stops each having a pair of pendent legs engaged in vertical grooves in the front and rear sides of said bar, an upstanding rigid brace member fixedly held to the main frame and having its upper end portion slidably engaged in the longitudinal channel of the bar, a stop on the main frame shiftable by its key to position an abutment portion thereof adjacent the rear side of the stop bar in the path of movement of the rear legs of the stops on the bar, escapement releasing means, key-operated means for setting the frame stop and releasing the carriage from control of its escapement, said upper end portion of the brace member and abutment portion of the frame stop both being located substantially midway the sides of the frame.

1,826,764. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 23, 1930. Serial No. 454,989. 2 Claims. (Cl. 30—12.)



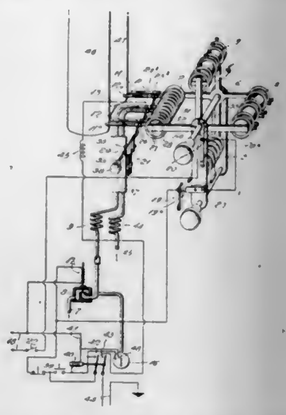
2. A safety razor, comprising a guard member, positioning studs thereon, a blade fitting upon said guard member having apertures to receive said positioning studs, a backing member for the blade, projections on said backing member adapted to engage the corners of the blade for positioning said backing member in shaving relation to said blade and said guard member, said projections simultaneously forming guard teeth at the corners of said guard member, and means to clamp said blade between said guard and backing members.

1,826,765. WRENCH. GOTTFRIED GÄNG, Uster, near Zurich, Switzerland. Filed Jan. 5, 1931, Serial No. 506,716, and in Germany Oct. 25, 1930. 1 Claim. (Cl. 81—91.)



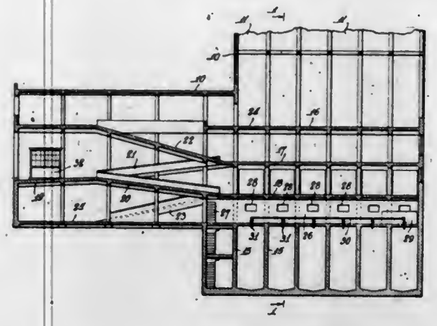
A wrench, comprising in combination a handle composed of a plurality of superposed plates, rigidly connected together, a hollow jaw body, a common axle for said plates in said jaw body, horn-like claws in said jaw body, a tongue on the end of each of said plates some of said tongues engaging in a corresponding number of said horn-like claws, a pin in said jaw body, and intermediate blades one for each of said tongues not engaging directly with claws said blades oscillatably mounted on said pin engaging with the corresponding tongues and claws so that on said handle being turned said claws are oscillated around their axle, thereby narrowing the mouth of the wrench and gripping the work inserted therein.

1,826,766. INTERLOCKING SYSTEM FOR HIGH FREQUENCY TRANSMITTERS. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 416,157. 12 Claims. (Cl. 171—242.)



1. In a frequency changing system for high frequency transmitters, means carrying a multiplicity of tubular inductance units of different inductance values, a fluid cooling system having fluid conveying conduits extending therefrom, a set of fluid supply and delivery conduits, means for registering a selected inductance unit with said fluid conveying and supply and delivery conduits, and circuit controllers actuated by said aforementioned means for electrically de-energizing the circuits of said frequency changing system until a selected inductance unit is effectively coupled with said fluid cooling system.

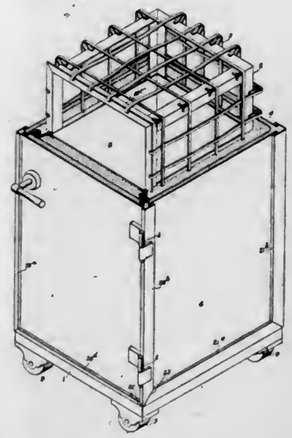
1,826,767. BUILDING CONSTRUCTION. ERNST GEIGER, Irvington, N. J. Filed May 1, 1928. Serial No. 274,193. 18 Claims. (Cl. 169—2.)



1. In a building structure including parallel vertical shaftways for an endless chain of storage elevators, and a crossway in the bottom of the building through which the elevators of the chain pass from one shaftway to the other, an inspection tunnel extending transversely of said crossway and disposed out of the path of travel of the elevators.

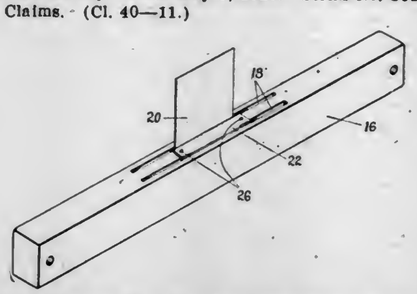
3. In a building structure a plurality of parallel vertical elevator shaftways, the lower ends of said shaftways being separated from each other by vertical partition walls, an inspection tunnel extending transversely of said shaftways, having windows therein affording a view of all of said shaftways and valved fire extinguishing nozzles projecting through said tunnel into the walled lower ends of said shaftways adapted to discharge a heavy fire extinguishing gas into said shaftways.

1,826,768. SAFE. BRUNO T. GIALDINI, Canton, Ohio, assignor to The Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 14, 1925. Serial No. 75,162. 7 Claims. (Cl. 109—2.)



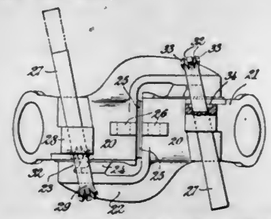
1. A safe including a main structural frame, a compartment surrounded and maintained by the frame, a monolithic shell surrounding the frame and compartment, and a slidably interlocked external case surrounding the shell, the case including angle corner pieces and walls, the angle pieces having legs and reversely extending folds thereon, and the walls having oppositely extending edge folds for slidable interlocking engagement with the angle leg folds.

1,826,769. CARD HOLDER FOR SHOE RACKS. HARVEY L. GLIDDEN, Lexington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 9, 1929. Serial No. 361,664. 4 Claims. (Cl. 40—11.)



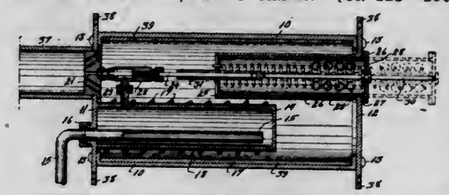
1. A card holder for shoe racks comprising a supporting member having a pair of parallel slots and a plate formed of resilient material secured to the supporting member and having leg portions which extend into the slots in position to force against the walls of the slots cards inserted in the respective slots.

1,826,770. HOSE OR PIPE COUPLER. EDWARD E. GOLD, New York, N. Y., assignor to Gold Car Heating & Lighting Company, New York, N. Y., a Corporation of New York. Filed May 20, 1927. Serial No. 192,848. 2 Claims. (Cl. 285—68.)



1. A pipe coupler comprising a head having coupling elements whereby it may be coupled with a complementary coupler, said head having a key-way therein, and a key capable of being moved through said key-way to an effective position in which its end may be cause to extend over a portion of the complementary coupler and serve as a coupler locking device, said key being split at its extended end and having portions spread apart to form a stop of gradually increasing width to prevent free withdrawal of the key from the key-way, and an intervening portion adapted to receive a blow of an instrument when the key is to be moved to its "release" position, the exit end of the key-way and the stop at the end of the key being so relatively positioned with respect to other parts of the coupler as to permit the key to be moved to its "release" position before its movement in the key-way is obstructed by the stop.

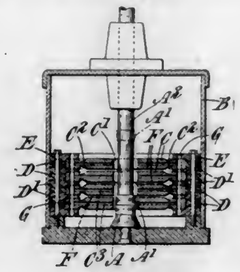
1,826,771. PRIMER FOR INTERNAL COMBUSTION ENGINES. JAMES C. GOVER, Newton, Iowa. Filed Dec. 10, 1930. Serial No. 501,243. 8 Claims. (Cl. 123—180.)



1. A primer for internal combustion engines comprising a housing, a mixing valve in one wall of said housing, separate air and fuel supply means communicating with said valve through said housing, electrical heating means

within said housing operable to simultaneously heat the air and fuel furnished by said supply means prior to their admixture, and means operatively connecting said mixing valve with the intake of an internal combustion engine.

1,826,772. ELECTRIC CIRCUIT BREAKER. LEWIS COLIN GRANT, Newcastle-upon-Tyne, England, assignor to Electrical Improvements Limited, Newcastle-upon-Tyne, England, a Company of Great Britain. Filed Oct. 26, 1928, Serial No. 315,305, and in Great Britain Nov. 7, 1927. 8 Claims. (Cl. 200—150.)

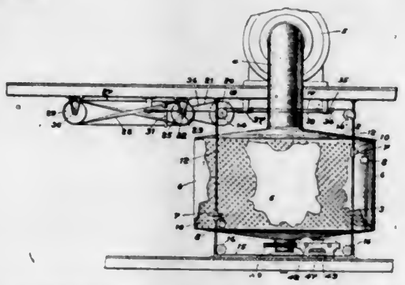


1. In an electric circuit-breaker the combination with a moving contact, of an arc-quenching device comprising a series of conducting discs insulated from one another and separated from one another by a distance which is small relative to their thickness, the edges of the discs being closely surrounded by a casing forming a boundary to the spaces between the discs, and the discs being provided with aligned apertures through which the moving contact passes.

1,826,773. ELECTROLYTIC PRODUCTION OF ALKALI AND ALKALINE EARTH METALS. JOHN J. GREBE and RAY H. BOUNDY, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 5, 1928. Serial No. 290,691. 12 Claims. (Cl. 204—21.)

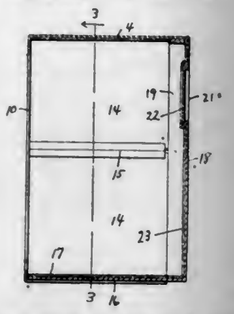
1. A method of the character described, which comprises electrolyzing a fused bath containing chiefly a halide of an alkali-forming metal, together with a minor component of at least one of the following:—a metal or compound of a metal capable of forming a metallic oxide of acidic character and further capable of reacting with the metal to be produced or with an oxide thereof to form a compound insoluble in said bath.

1,826,774. SPRAYING MACHINE. JUSTIN W. GRIESS, Cincinnati, Ohio. Filed June 26, 1928, Serial No. 288,368. Renewed July 1, 1931. 10 Claims. (Cl. 91—45.)



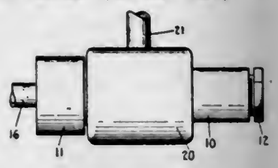
1. In a spraying machine, the combination of a support for holding the entire area of a skin simultaneously in position for the spraying operation, said support including a foraminous wall and means for applying suction to one surface of said wall to hold the entire area of a skin against the opposite surface for movement therewith, apparatus for spraying material on a skin so supported, means on which said support is mounted for movement to carry the skin past said apparatus, and power driven mechanism for traversing said spraying apparatus.

1,826,775. ELECTRIC METER PROTECTOR. ADAM H. GROSZ, New Orleans, La. Filed Dec. 22, 1927. Serial No. 241,991. 4 Claims. (Cl. 247—2.)



1. In an electric meter protector, a casing comprising a pair of side walls, a top, a removable bottom forming plate, guide channels on the lower edges of the side walls for receiving the respective edges of the bottom forming plate to support said plate, a front wall extending upwardly from the forward edge portion of the bottom forming plate, and an inwardly directed flange formed on the front wall for engagement with the inner faces of the sides and top of the casing.

1,826,776. LIQUID FUEL BURNER AND METHOD OF ATOMIZING LIQUIDS. CHARLES O. GUNTHER, Grand-View-on-Hudson, N. Y. Filed July 20, 1928. Serial No. 294,091. 11 Claims. (Cl. 299—114.)

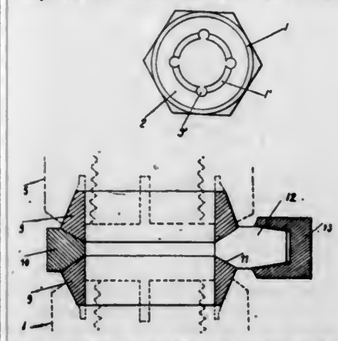


1. A liquid fuel burner, comprising a body member having a longitudinal passageway therethrough, with fuel orifice constructed and located at one end thereof to supply fuel to the burners, a casing about said body portion affording an air chamber adapted to receive air under pressure and the said body portion being provided with ports spaced around the circumference of the air chamber and extending therefrom to the fuel supply end of the passageway located to concentrate a plurality of jets of air upon the fuel issuing from said orifice and with further sets of circumferentially disposed ports affording additional communication between the air chamber and the passageway, and a succession of disk members having orifices and subdividing the passageway beyond said ports into pressure chambers of successively leser pressure values.

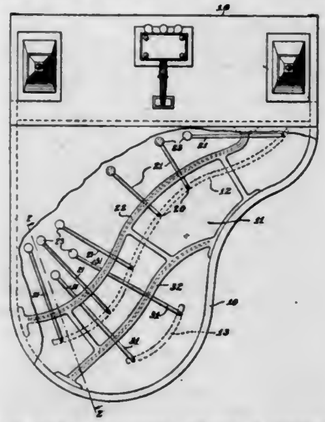
10. The method of atomization of liquids, which comprises directing air jets perpendicularly to a stream of fluid substantially at its point of issue, whirling the mixture by a series of further jets of air, and then successively expanding the said mixture.

1,826,777. LOCK NUT. AUDOIN D'HALLOY, Paris, France. assignor to International Safety Lock Nut Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 9, 1928, Serial No. 245,531, and in France Oct. 14, 1927. 7 Claims. (Cl. 151—19.)

7. A nut and bolt assembly comprising a first member adapted to contact with the parts to be secured, a second member, said members being bored and internally screw threaded and the face of one member and that face of the other member which opposes it being both provided with a concentric groove forming sleeve-like portions, each groove having walls inclined one toward the other, and said portions having one or more cavities therein whereby they are rendered resilient, and resilient helicoidal locking means of substantially wedge-shaped cross section disposed between said opposing faces and cooperating with said grooves whereby when one member is tightened upon a bolt with respect to the other member, said sleeve-like portions are forced against the bolt by a radial force exerted by said locking means, and said means also exerts a force longitudinally of the bolt against said members.



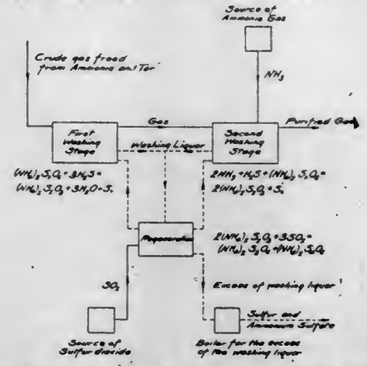
1,826,778. PIANO WITH FLOATING BRIDGE. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed June 13, 1929. Serial No. 370,485. 7 Claims. (Cl. 84—209.)



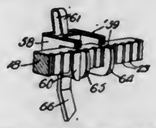
1. In a stringed instrument having a sounding board, a bridge for supporting said strings, means for supporting said bridge free from said sounding board and means for mechanically amplifying the vibrations of said bridge and transmitting said vibrations to an anti-nodal point of said sounding board.

1,826,779. PROCESS FOR THE ABSORPTION OF HYDROGEN SULPHIDE AND AMMONIA FROM GASES. CHRISTIAN HANSEN, Essen-Stadtwald, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Original application filed June 18, 1927, Serial No. 199,862, and in Germany July 21, 1926. Divided and this application filed June 19, 1928. Serial No. 286,712. 6 Claims. (Cl. 23—225.)

1. In the process for separating ammonia and hydrogen sulphide from gases containing same by washing the gases with liquors containing ammonium polythionate and ammonium thiosulfate, the steps which comprise separating from the gases at least a part of their ammonia content, washing the residual gases in two stages thereby separating from the gases in the first stage such a part of the hydrogen sulphide content that in the second stage for one molecule of hydrogen sulphide more than two molecules of ammonia are available by adding the separated ammonia to the second washing stage.



1,826,780. TYPEWRITING MACHINE. EDWIN L. HARMON, Groton, N. Y., assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 25, 1928. Serial No. 308,158. 7 Claims. (Cl. 197—70.)

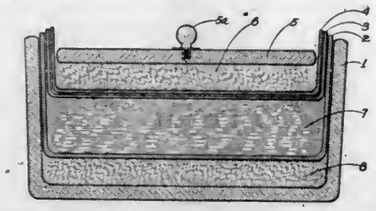


2. In a typewriting machine having a traveling carriage, the combination of a carriage stop carrying bar of rectangular cross-section having transverse notches in one face thereof, and a carriage stop mounted on and adjustable along said bar, said stop comprising an abutment member having a rigid yoke-like body portion slidable along said bar and a locking member having a rigid yoke-like body portion embracing the body portion of the abutment member slidable along said bar and also slidable transversely of the bar perpendicular to the notched face of the bar into and out of engagement with the bar notches to lock the stop against movement along the bar, the transverse parts of the yoke-like body portions of the stop members being spaced apart and located at the opposite face of the bar from the notched bar face, and the transverse part of the yoke-like body portion of the locking member being formed with an integral J-shaped spring tongue the shorter arm of which is joined with an edge of said part extending longitudinally of the bar and the free end of the longer arm of which extends between the side parts of the yoke-like body portion of said member and between the transverse parts of the yoke-like portions of the two members and is formed with a pair of wings extending in opposite directions longitudinally of the stop bar and bent toward the stop bar to bear at their ends against the traverse part of the abutment member to yieldably hold the locking member in stop-locking position.

1,826,781. FREEZING DEVICE. JAMES J. HAYES, Louisville, Ky., assignor, by direct and mesne assignments, to Ruth S. Hayes, Louisville, Ky. Filed July 3, 1930. Serial No. 465,517. 2 Claims. (Cl. 62—75.)

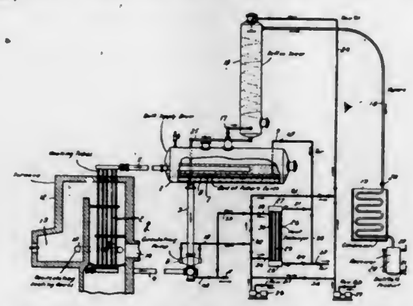
1. In a freezing device: a flat-bottom, deep receptacle made of moisture-proof material of low thermal conductivity and designed to slip-fit into the lower half of the frost chamber of a refrigerator and adapted to hold a freezing compound and to encase a telescoping food ves-

sel; a food vessel adapted to transmit temperatures readily and designed to hold a certain quantity of cream or other food ingredients, and to slip-fit down into said receptacle and rest upon the freezing compound therein; two telescoping companion vessels adapted to transmit temperatures readily, the outer one of which is designed to slip-fit down into said food vessel far enough to rest upon the cream therein, and the inner one of which is



designed to telescope into the outer one far enough to rest fully on the bottom thereof, the inner one being adapted to hold a certain quantity of freezing compound spread-out all over its bottom; and a thick lid with a boss handle, designed to slip-fit down into said inner vessel to rest upon the freezing compound therein, said lid being adapted to retard the transmission of varying temperatures through it, substantially as described.

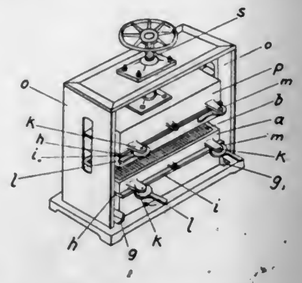
1,826,782. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Chicago, Ill., and HARRY L. PELZER, Highland, Ind., assignors to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed June 11, 1927. Serial No. 198,247. 13 Claims. (Cl. 196—59.)



1. An improved method of cracking hydrocarbon oils, which comprises circulating a charge of oil in a pressure still from a bulk supply drum through heating tubes and back to the bulk supply drum and heating it to a cracking temperature in the heating tubes, maintaining a bed of finely divided solid material extending entirely across the path of the circulating charge of oil in the bulk supply drum, taking off vapors from the bulk supply drum under pressure and subjecting them to a refluxing operation, introducing raw oil into the vapors in the refluxing operation and returning reflux therefrom together with admixed unvaporized raw oil to the circulating charge of oil, discharging pitch-laden oil from the circulating charge of oil and preheating raw oil by heat exchange therewith, and supplying raw oil so preheated directly to the circulating charge of oil.

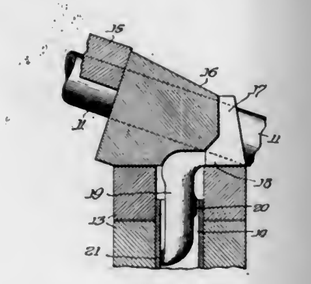
1,826,783. PROCESS AND APPARATUS FOR MANUFACTURING ANATOMICALLY ACCURATE INDIVIDUL FOOT SUPPORTS FOR SHOES. FRITZ HESS, Hagen, Westphalia, Germany. Filed Feb. 15, 1929, Serial No. 340,298, and in Germany Mar. 7, 1928. 2 Claims. (Cl. 153—51.)

1. A method of manufacturing supports for flat feet from the natural foot consisting in producing a negative mould corresponding exactly to the actual shape of the sole of a foot by pressing said foot onto a yielding surface composed of a plurality of juxtaposed elements, in mechanically fixing this mould in its position, in producing a positive mould from said negative mould by press-



ing a similarly composed yielding surface on to said negative mould, in mechanically fixing said positive mould, and in stamping a metal plate between said positive and negative moulds to form a support corresponding accurately to the shape of the foot of the wearer.

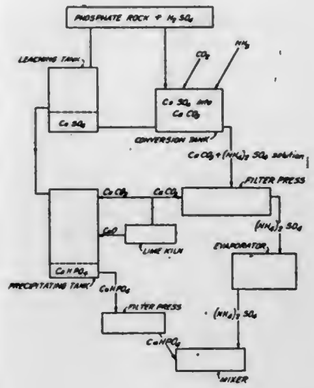
1,826,784. FIRE BOX CONSTRUCTION. RALEIGH J. HIMMELRIGHT, New Rochelle, N. Y., assignor to General Refractories Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 21, 1928, Serial No. 263,370. Renewed Mar. 6, 1931. 3 Claims. (Cl. 110—87.)



1. In a locomotive firebox, the combination with arch tubes of intersecting vertical and inclined firebrick walls the latter supported on said arch tubes, hollow metallic stiffening members projecting upwardly within said vertical wall, and a metal abutment block mounted on said vertical wall and having a projection on its lower side adapted to telescope within one of said hollow stiffening members, said block being adapted to receive the thrust of said inclined arch and to transmit said thrust to the vertical wall and stiffening members.

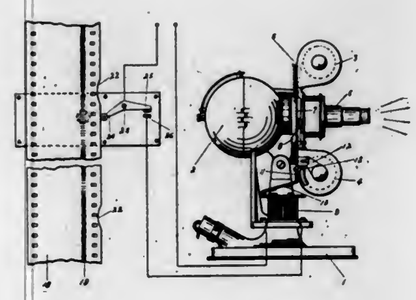
1,826,785. PROCESS OF PRODUCING FERTILIZERS. AUGUST HOLZ, Irvington, N. J., assignor to Theodore V. D. Berdell, New York, N. Y. Filed Nov. 28, 1927. Serial No. 236,369. 1 Claim. (Cl. 71—7.)

The process of preparing a chemical fertilizer which comprises treating finely powdered rock phosphate with sufficient sulphuric acid to decompose the phosphates and form calcium sulphate in a mother liquor containing phosphoric acid, separating the calcium sulphate from the mother liquor, treating the calcium sulphate with ammonium carbonate, preferably as ammonia in the presence of carbon dioxide, under pressure not exceeding two atmospheres and heat not exceeding 100 degrees C., to convert the calcium sulphate into calcium carbonate, removing the liquor containing ammonium sulphate and concentrating it, adding to the mother liquor containing phosphoric acid sufficient calcium in the form of carbonate and hydroxide to form di-calcium phosphate, removing there-



from the liquor, then adding the precipitated di-calcium phosphate to the concentrated ammonium sulphate solution and evaporating the mass to complete dryness.

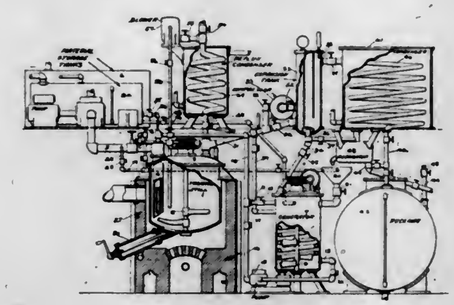
1,826,786. METHOD AND APPARATUS FOR REPRODUCING SOUND IN CONNECTION WITH PICTURES. PHILIP S. HOPKINS, Binghamton, N. Y., assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Aug. 10, 1927. Serial No. 212,024. 4 Claims. (Cl. 88—28.)



1. In combination, a photographic film having a sound record thereon, means for reproducing said record, a picture projector and a series of "still" pictures for projection, means on said projector for shifting said pictures and means on said film operable at predetermined points in relation to the reproduction of said sound record thereon to shift said pictures for projection appropriate to said sound record.

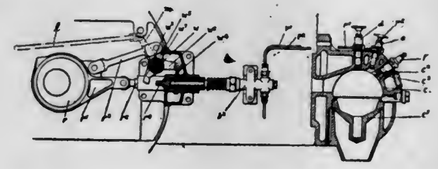
1,826,787. TREATMENT OF ALIPHATIC HYDROCARBONS. GRAYLE W. HOWLETT, Toledo, Ohio, assignor of one-half to Robert M. Corl, Maumee, Ohio. Filed Feb. 24, 1923. Serial No. 620,887. 11 Claims. (Cl. 196—52.)

1. The process consisting in treating heated petroleum hydrocarbons with a non-metallic halogen derivative containing an alkyl radical and without the aid of metallic halogen derivatives and thereby producing unstable compounds and heating the mixture at a temperature suitable



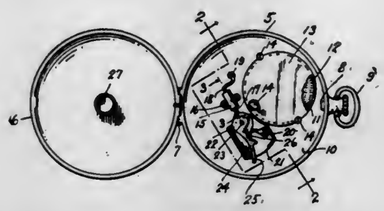
for conversion action of the alkyl halide to produce the lower boiling compounds.

1,826,788. OIL ENGINE. FRITZ HUBER, Mannheim, Germany, assignor to Heinrich Lanz Aktiengesellschaft, Mannheim, Baden, Germany, a Corporation of Germany. Filed Apr. 26, 1929, Serial No. 358,255, and in Germany May 5, 1928. 9 Claims. (Cl. 123—32.)



1. In an oil engine, the combination of a cylinder, a nozzle for injecting therein a heavy fuel oil, a nozzle for injecting therein a light fuel oil, an incandescent wire igniter operatively related to the light fuel oil nozzle, separate pumps for supplying the heavy oil and the light oil to the said nozzles respectively, and means with unitary control for selectively driving said pumps.

1,826,789. CIGAR AND CIGARETTE LIGHTER. HENRY B. IVEY, Goldsboro, N. C. Filed Sept. 4, 1929. Serial No. 390,295. 1 Claim. (Cl. 67—7.1.)

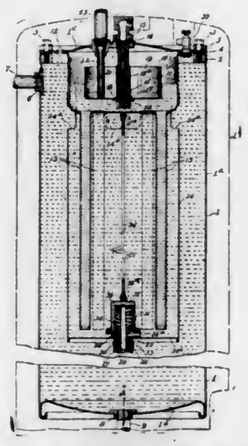


A lighter for the purpose specified comprising a circular casing, a horizontally disposed partition arranged in the casing, said partition provided with a relatively large opening, a fluid reservoir arranged in said casing and having its open upper end in registry with the opening in said partition, a cover plate on said partition substantially closing said opening, said cover plate provided with a wick accommodating aperture, a wick extending upwardly from said reservoir through said aperture, and means arranged in said casing on said partition for igniting said wick.

1,826,790. METHOD OF OBTAINING MALT ENZYMES AND BEVERAGE. EDUARD JALOWETZ and MAX HAMBURG, Vienna, Austria. Filed Dec. 17, 1928, Serial No. 326,696, and in Austria Dec. 28, 1927. 1 Claim. (Cl. 195—32.)

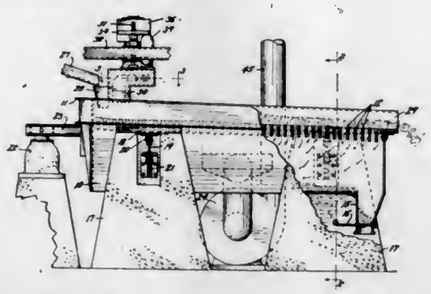
A process of preparing an enzymatic substance and a beverage of improved quality from malt, which comprises the steps of removing enzymes and other water soluble materials which cause undesirable flavors in the finished beverage by grinding the malt and dissolving said substances therefrom with water at a temperature below that at which the enzymes of the malt become active, removing the solution from the malt residue, and preparing a beverage from said residue.

1,826,791. LIQUID COOLING APPARATUS. HERBERT C. KELLOGG, Detroit, Mich., assignor to Liquid Cooler Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 5, 1929. Serial No. 344,497. 10 Claims. (Cl. 62—7.)



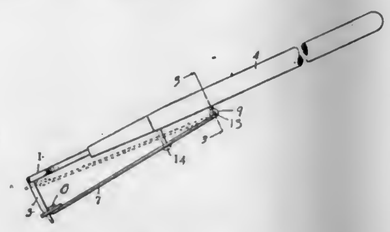
1. In apparatus for cooling liquids, the combination of a structure having a chamber in which refrigerant in the liquid state is evaporated and a chamber for liquid to be cooled, the structure comprising a wall between said chambers through which heat is conducted from the liquid to be cooled to the liquid refrigerant, and automatic means responsive to the temperature of the liquid refrigerant for controlling the rate of discharge of the liquid to be cooled from its aforesaid chamber.

1,826,792. SINTERING MACHINE. WILLIAM C. KINNON, Denver, Colo. Filed July 12, 1930. Serial No. 467,404. 9 Claims. (Cl. 266—21.)



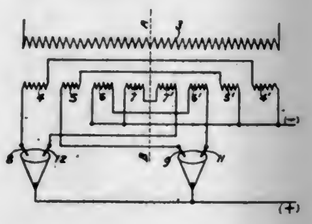
5. An igniter for sintering machines comprising: a relatively long housing adapted to extend laterally across a bed of material to be ignited; a burner positioned to project a flame longitudinally into said housing; means for deflecting said flame through a longitudinal opening in the bottom of said housing toward said bed, said means comprising: a series of diagonally placed baffles arranged to project into said flame at spaced apart positions throughout its length.

1,826,793. SELF CLEARING RAKE. IRA C. KLINGLER, Elkhardt, Ind. Filed Nov. 3, 1928. Serial No. 316,927. 1 Claim. (Cl. 55—146.)



The combination with a rake head provided with a handle, of a stripper bar provided with forwardly spaced teeth disposed between the teeth of the rake, a centrally disposed shank for said stripper bar having an upturned knuckle at its outer end, said shank having a hole therein spaced from its said knuckle, a screw-eye threaded into said handle, the end of said shank being slotted to receive said screw-eye, a pintle engaging said knuckle and screw-eye, and a headed stud arranged through said hole in said shank and driven into said handle constituting a stop limiting the outward swing of the stripper said stripper being freely movable on its pivot.

1,826,794. ELECTRICAL TRANSFORMER. JOHANNES KÜBLER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 20, 1929, Serial No. 356,653, and in Germany Apr. 30, 1928. 6 Claims. (Cl. 175—356.)

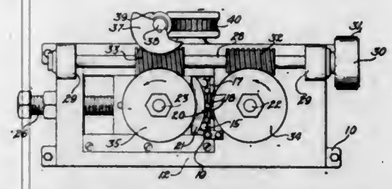


1. In an electric transformer for supplying rectifier anodes working in parallel, a primary winding, and a secondary winding divided into a plurality of coils arranged symmetrically relative to a central plane perpendicular to the primary winding for substantially neutralizing magnetic forces acting on said primary on occurrence of rectifier short-circuit conditions.

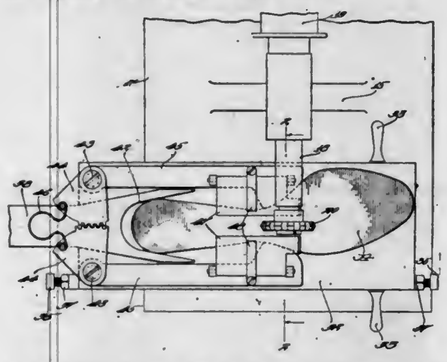
1,826,795. INDENTURING APPARATUS. HOMER WALDO LARSON, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 12, 1928. Serial No. 284,717. 10 Claims. (Cl. 80—5.1.)

8. In an apparatus for knurling rollable articles, a pair of peripherally opposed knurling rolls carried upon vertically disposed parallel shafts and arranged to engage diametrically opposed portions of a rollable article, a rotatable screw member positioned below the knurling rolls with its axis at right angles to the axes of the knurling rolls, said screw member having a spiral way formed

on its peripheral surface for advancing an article associated therewith into operative engagement with the knurling rolls and away from said rolls to a discharging position, and a guide member spaced from the screw member and cooperating with the spiral way thereof for positioning an advancing rollable article with its axis parallel to the axes of the knurling rolls.

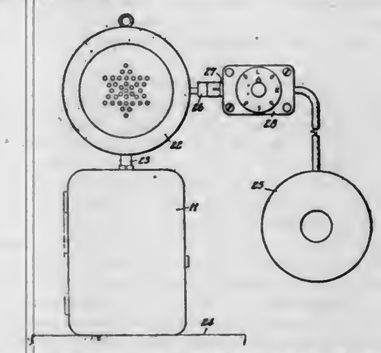


1,826,796. SOLE GROOVING MACHINE. OSCAR L. LAWSON, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 12, 1926. Serial No. 115,458. 11 Claims. (Cl. 12—40.)



1. A machine for grooving soles comprising, in combination, grooving means, a work holder guided for movement to and past the grooving means, and sole edge engaging means on said holder self adjustable to soles of different sizes and arranged to engage a sole at the forward portion of the shank for positioning the sole longitudinally on said holder and for centering said sole transversely with reference to said grooving means.

1,826,797. AUDIPHONE UNIT. HENRY G. LEACH, Red Bank, N. J., and ERNEST H. STOLZ, New Rochelle, N. Y. Filed Nov. 26, 1929. Serial No. 409,789. 6 Claims. (Cl. 179—107.)



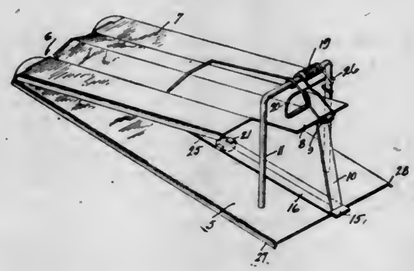
1. An audiphone, comprising a portable battery casing adapted to be opened and closed for renewal of the battery cells and having upon its exterior a double terminal connector element, a microphone transmitter adapted for connection with the battery through the casing connector element, and a receiver member and connecting cable adapted for independent electrical connection with the microphone.

1,826,798. DOMESTIC APPLIANCE. RALPH L. LEE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1923. Serial No. 635,460. 12 Claims. (Cl. 15—16.)



11. In a vacuum cleaner, a cleaner head forming a hollow chamber having an inlet and an outlet, sections movable with respect to one another, one of said sections being attached to said head, a nonflexible dust collecting receptacle removably connected with said chamber outlet and said sections and means for removably securing the sections together with the dust receptacle removably clamped between the sections, and means for causing separation of air and dust within the receptacle.

1,826,799. ANIMAL TRAP. BENEDIKT J. LEHUTA, Briarcliff Manor, N. Y. Filed Apr. 3, 1931. Serial No. 527,444. 1 Claim. (Cl. 43—81.)

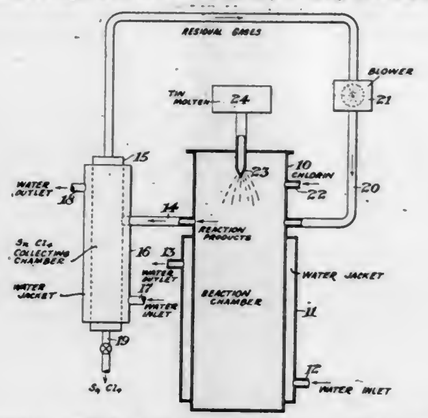


In a trap, a lower and upper plate hingedly connected at one end, the said plates being of substantially the same length and width, a bait carrying arm lying between the said plates pivotally supported on the lower plate at the hinge end, and extending beyond the opposite end of the plate, a frame at the said end, a spring on the frame in operative engagement with the top plate, means suspended from the said frame in engagement with the top plate and bait carrying arm for maintaining the trap in set position, and downwardly projecting side edges on the top plate for the purpose specified.

1,826,800. METHOD OF MAKING STANNIC CHLORIDE. WINFIELD SCHLEY LIENHARDT, Stapleton, N. Y. Filed Aug. 27, 1929. Serial No. 388,671. 2 Claims. (Cl. 23—98.)

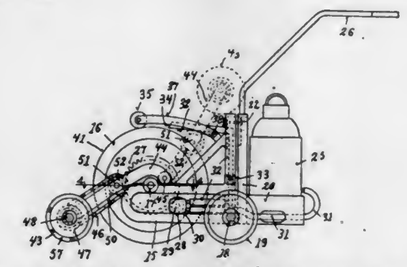
1. In the manufacture of stannic chloride from tin and chlorin in a continuous manner, the process which com-

prises spraying molten tin into an atmosphere of chlorin, withdrawing the reaction



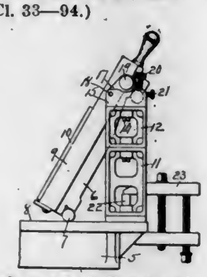
mixture to condense and separate stannic chloride from uncombined chlorin and returning the uncombined chlorin to react with another portion of molten tin.

1,826,801. ROAD MARKER. JOHN S. LITTLEFORD, Jr., Fort Thomas, Ky. Filed Feb. 27, 1928, Serial No. 257,463. Renewed July 15, 1931. 12 Claims. (Cl. 91—49.)



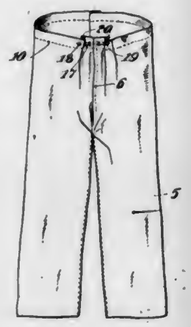
1. A road marker comprising a truck member, a truck supporting axle having wheels to support said truck member, a marker wheel supported upon said truck and adapted by rocking said truck upon its supporting axle to be engaged with and disengaged from the road surface, a propelling member hinged upon said truck supporting axle and means interposed between said propelling member and said marker wheel to yieldingly tension the application of the marker wheel to the road surface.

1,826,802. SINE BAR FIXTURE. HANS J. LOVENSTON, Detroit, Mich. Filed Dec. 31, 1927. Serial No. 243,809. 7 Claims. (Cl. 33—94.)



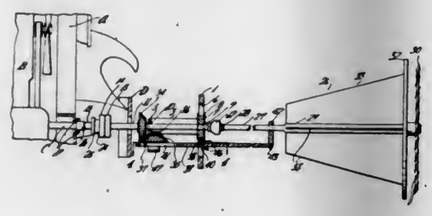
1. A sine bar fixture including a main support consisting of a plurality of interconnected stacked blocks, an end fixture including a sine bar support permanently but movably attached to an end block of said main support to support a sine bar at various angles not obtained by means of the main support, and means for adjusting the position of said sine bar support.

1,826,803. DETACHABLE TAPE ADJUSTER FOR PAJAMAS. ABRAHAM P. LUBELL, New York, N. Y. Filed July 15, 1930. Serial No. 468,032. 3 Claims. (Cl. 2—237.)



1. A device of the character described comprising a garment having a waist band defined by an enclosed casing extending thereabout provided with spaced slots and button holes, and an elastic tape separable from the garment and having buttons near its ends for engaging in said button holes with the tape being threaded through the slots and having its ends received in the casing.

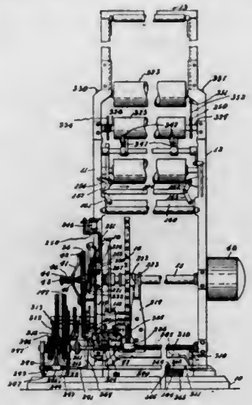
1,826,804. SNOWPLOW. DONALD A. MACDONALD, St. Peters, Nova Scotia, Canada. Filed Oct. 27, 1930. Serial No. 491,361. 5 Claims. (Cl. 37—43.)



1. In a device of the kind described, in combination with a motor vehicle and an engine therein, a supproting frame mounted on the vehicle, a drive shaft journaled in the supporting frame and detachably connected to the engine for rotation thereby, a cleaning mechanism operatably connected to the drive shaft, and cooperating means connected to the drive shaft and cleaning mechanism whereby the latter will be oscillated by the rotation of the said drive shaft.

1,826,805. BULLETIN PRINTING MACHINE. THOMAS W. MACKENZIE, New London, Conn., assignor, by mesne assignments, to The Mechanical Engineering Corporation, New London, Conn., a Corporation of Connecticut. Refiled for abandoned applicaiton Serial No. 569,702, filed June 20, 1922. This application filed Feb. 7, 1929. Serial No. 338,307. 55 Claims. (Cl. 197—1.)

2. A bulletin printing machine comprising typewriter mechanism provided with printing characters operated by a key board, a wheel having printing characters on its rim corresponding to the printing characters of the typewriter mechanism, a platen supported for engagement therewith of the printing characters of said wheel, means cooperating between the typewriter mechanism and said wheel for bringing into printing position for engagement with said platen during rotation of the wheel and operation of said key board characters of the wheel which correspond to the printing characters of the typewriter mechanism operated by said key board, and means

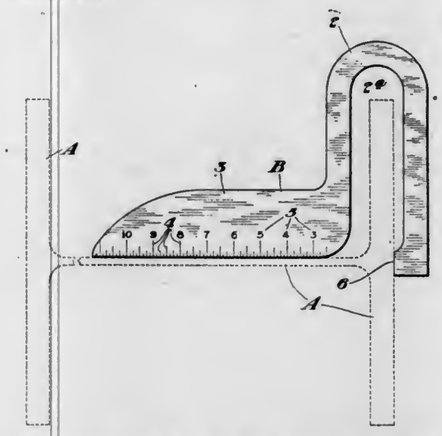


comprising a one-revolution clutch means for moving said wheel laterally on its axis of revolution for spacing the characters thereof for engagement with said platen in suitable printing sequence.

1,826,806. PREPARATION OF AN OXIDE-FREE HALIDE OF A RARE REFRACTORY METAL. JOHN WESLEY MARDEN and HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed Mar. 17, 1924, Serial No. 699,942. Divided and this application filed Feb. 16, 1927. Serial No. 168,826. 4 Claims. (Cl. 23—87.)

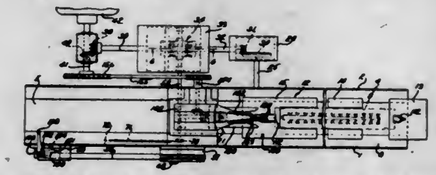
1. The method of removing water of crystallization from uranium double alkali metal fluorides which comprises fusing said compound with an alkali metal halide flux substantially non-reactive therewith and substantially free from oxygen containing compounds.

1,826,807. GAUGE. ABRAM J. MCDANEL, New Brighton, Pa. Filed June 1, 1929. Serial No. 367,713. 2 Claims. (Cl. 33—174.)



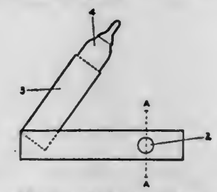
1. A one-piece integral gauge for laying out the webs of beams, comprising a substantially U-shaped jaw portion adapted to fit over the flange of the beam, said U-shaped jaw portion having a throat of sufficient dimensions to clear beam flanges of varying width and thicknesses, one leg of said U-shaped jaw being of a slightly greater length than the other leg and being provided with a projection adjacent the free end of its inner face adapted to engage the outer face of the flange of the beam being worked upon, and a scale portion extending substantially at right angles to said other leg of said U-shaped portion.

1,826,808. APPARATUS FOR REMOVING CONNECTING ELEMENTS. JOHN MCDONOUGH and LARS NORMANN, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,400. 11 Claims. (Cl. 140—2.)



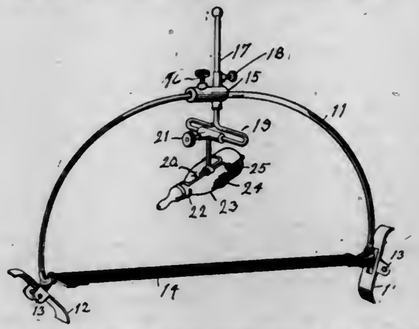
1. In an apparatus for removing connecting elements from the terminals of electrical equipment, an oscillatory member having a slotted portion for engaging connecting elements therein to break them, and means for advancing the electrical equipment past the oscillatory member and automatically retracting it to its original position.

1,826,809. RECEPTACLE FOR PACKING AMPULES. GUSTAVE P. METZ, Bayside, N. Y., assignor to H. A. Metz Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 8, 1929. Serial No. 405,716. 3 Claims. (Cl. 206—63.2.)



1. A receptacle for packing such ampules as possess at a certain place a local permanent tension being sufficient to crack the glass by slightly injuring its surface, the said receptacle being provided with a hole in at least one of its sides, the circumference of the said hole being provided with a layer of a material being as hard or harder than glass and the diameter of the hole being so that that part of the ampule which possesses the local permanent tension comes into contact with the abrasive substance applied to the periphery of the hole.

1,826,810. NURSING BOTTLE HOLDER. BUICHI MORISHITA, Los Angeles, Calif. Filed Dec. 24, 1929. Serial No. 416,286. 3 Claims. (Cl. 248—65.)



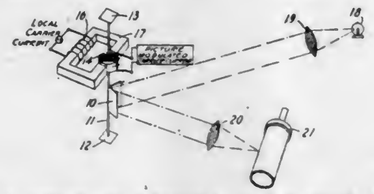
3. A nursing bottle holder, comprising a bail member, a fabric belt secured to the extremities of the bail member,

suspending elements adjustably secured to the bail member and between the extremities thereof, and a nursing bottle holder adjustably secured to the suspending elements.

1,826,811. REDUCTION OF ORGANIC CARBONYL COMPOUNDS. EDUARD MUENCH, Ludwigshafen-on-the-Rhine, Germany, and THEODOR VOLTZ, Basle, Switzerland, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 1, 1928, Serial No. 296,862, and in Germany Aug. 12, 1927. 4 Claims. (Cl. 260—1.)

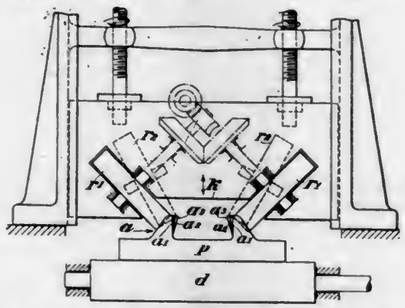
1. The process of manufacturing reduction products which comprises subjecting an organic compound containing a reducible carbonyl group to the action of sulfurous acid and a metal in the presence of an organic base.

1,826,812. ELECTROOPTICAL TRANSMISSION. HARRY NYQUIST, Millburn, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 26, 1927. Serial No. 194,381. 17 Claims. (Cl. 88—61.)



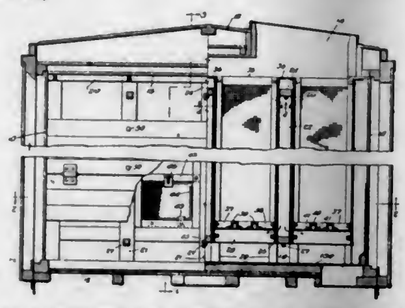
1. In combination, a source of varying energy, a source of radiant energy and means to vary the intensity of a beam of radiant energy from said source in accordance with the variations of said varying energy which means comprises a plurality of elements for successively reflecting said beam, the surfaces of said elements being in fixed angular relation, and means for moving said elements in accordance with said energy variations.

1,826,813. DEVICE FOR USE IN FORMING UNDERCUT SECTIONS OF ROLLED METAL. HERMANN OBERSCHULTE, Essen-on-the-Ruhr, Germany. Filed June 4, 1927, Serial No. 196,601, and in Germany June 9, 1926. 3 Claims. (Cl. 153—28.)



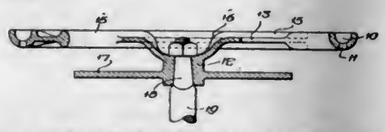
3. A device for forming undercut sections of rolled metal comprising a block or carriage supported resistively against lifting force and adapted to vertical adjustment, hardened reshaping rolls mounted in said block in successive oppositely inclined pairs along a horizontal path of movement thereunder of the bar or section of metal to be rolled so as successively to non-yieldingly apply bending force in opposite directions upon portions of the bar in a step-wise reshaping or molding operation, the said rolls being rotatably mounted on axes inclined or oblique to the travel path of the material within planes at right angles thereto, and friction reducing rollers supporting the bar in movement under said block; said device being located exteriorly of a rolling mill wherein the material is initially formed.

1,826,814. REFRIGERATOR CAR. ARTHUR F. O'CONNOR, Chicago, Ill., assignor to Union Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1928. Serial No. 326,014. 15 Claims. (Cl. 62—19.)



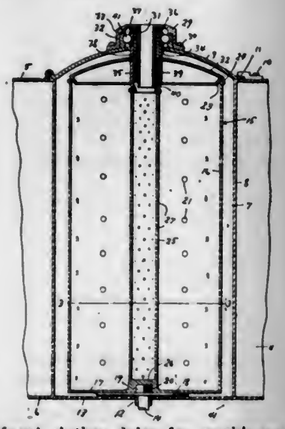
1. In a structure of the character described, the combination with a refrigerator car; of a removable bulkhead defining an ice compartment at one end of said car; means providing a support within said ice compartment; and an ice receptacle detachably arranged within said enclosure, said bulkhead being removable to permit application and removal of said ice receptacle with respect to said enclosure.

1,826,815. HAND BRAKE WHEEL. ARTHUR F. O'CONNOR, Chicago, Ill., assignor to Union Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 17, 1930. Serial No. 421,355. 4 Claims. (Cl. 74—33.)



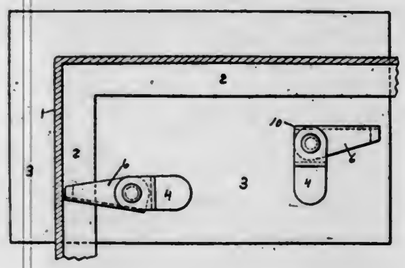
1. In a brake wheel of the class described, the combination of a rim, a hub, spokes connecting the rim with the hub and affording open spaces between the spokes, and a guard plate located behind the body of the wheel and in spaced relation thereto and extending outwardly behind said spaces to an extent sufficient to prevent the effective use of a club in operating the wheel.

1,826,816. CENTRIFUGAL CLOTHES DRIER FOR WASHING MACHINES. MATTHEW S. OGONOWSKI, Utica, N. Y. Filed Jan. 20, 1930. Serial No. 422,178. 1 Claim. (Cl. 210—67.)



A centrifugal clothes drier for washing machines comprising a fixed open top container, a perforated open top basket mounted for rotation in the container, an upstanding, perforated tube fixed centrally in the basket and having an open upper end adjacent the top of the basket, a stationary cover for the container having a centrally disposed opening therein, an upstanding housing mounted on the cover having a central opening in its top disposed coaxially with the cover opening, a stationary tube formed integrally with the housing and depending therefrom through the cover opening in spaced, concentric relation thereto, a rotatable tube encircling the stationary tube and extending through the cover opening in spaced, concentric relation thereto into the housing and having externally threaded upper and lower portions, a collar mounted on an intermediate portion of the rotatable tube, a bearing mounted in the housing and encircling the rotatable tube and engaged with the collar, a nut threaded on the upper portion of the rotatable tube and engaged with the bearing and, in conjunction with the collar, constituting means for connecting the rotatable tube with the bearing, said bearing constituting means for rotatably mounting the rotatable tube on the cover, a basket cover mounted on the rotatable tube and engaged on the basket for rotation therewith, said basket cover being engaged with the collar, and a nut threaded on the lower portion of the rotatable tube and engaged with the basket cover, said nut having a tapered extension depending below the rotatable tube and engageable with the upper end of the perforated tube.

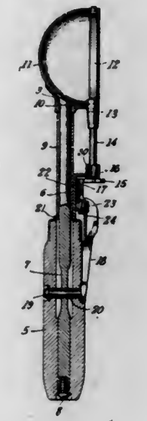
1,826,817. FASTENER FOR BOXES. EDWIN A. OLLEY and DANIEL B. WINTER, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Jan. 30, 1929. Serial No. 336,278. 3 Claims. (Cl. 292—256.)



1. A clamp comprising a support, a screw secured to said support to prevent endwise movement of the screw, a jaw threaded on the screw, and means to limit the rotary movement of the jaw by contact with the support.

1,826,818. ICE CREAM SCOOP. CHARLES G. PALMER, Irvington, N. J. Filed Nov. 1, 1930. Serial No. 492,678. 4 Claims. (Cl. 107—48.)

2. In an ice cream scoop, a rod, a bowl secured at one end to the rod, a tube surrounding the rod, a hand grip mounted on the other end of the rod, said tube being positioned between the hand grip and bowl, a bracket on the rod and positioned between the hand grip and tube, means to tightly clamp the bowl, tube, bracket and hand grip together, a stub shaft supported by the bracket and the bowl, a scraper fixed to the stub shaft, a pinion fixed to the shaft, a lever pivotally mounted on the hand grip,

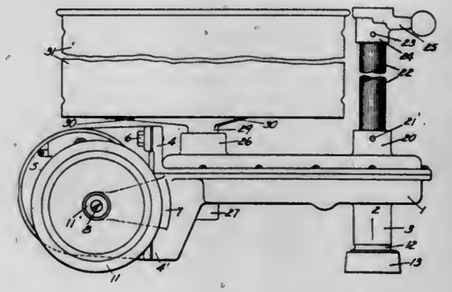


and an arcuate rack carried by the lever and engaging the pinion to rotate the scraper.

1,826,819. IGNITING COMPOSITION. JOHN PARSONS, Newton Center, Mass., and JORDAN HOMER STOVER, Nutley, N. J., assignors, by direct and mesne assignments, to Pan-Ross Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 5, 1925. Serial No. 54,796. 2 Claims. (Cl. 52—27.)

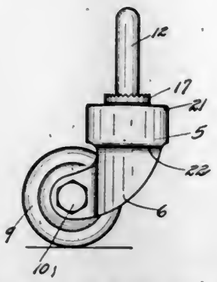
1. A safety igniting composition for self-lighting cigarettes, cigars and the like consisting of potassium chlorate, manganese dioxide, iron peroxide, potassium bichromate and sulphur, agglutinated with a nitro-cellulose substance into a plastic compound.

1,826,820. WASHING MACHINE CARRIAGE. JULIAN L. PERKINS, West Springfield, and HIRAM D. CROFT, Springfield, Mass., assignors to Perkins Machine and Gear Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 20, 1928. Serial No. 307,258. 4 Claims. (Cl. 68—37.)



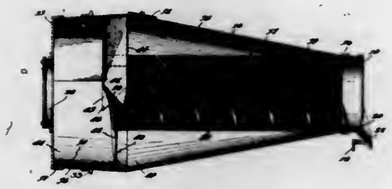
1. A portable washing machine carriage comprising in combination, a body including a case for transmission mechanism, a tub shaft extending from the upper side thereof, revolvable and anti-skid members at opposite sides of said case below the same for supporting the same against movement along a floor or for allowing rolling movements thereof.

1,826,821. SWIVEL CASTER. EDWIN H. POWERS, Saginaw, Mich., assignor to Saginaw Stamping and Tool Company, Saginaw, Mich., a Corporation of Michigan. Filed Jan. 17, 1930. Serial No. 421,353. 5 Claims. (Cl. 16—21.)



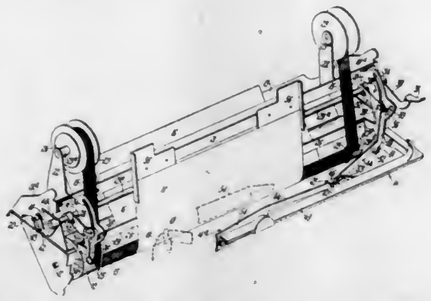
2. In a swivel caster, a wheel yoke having a wheel mounted therein, a center core having a vertically disposed stem anchored thereto, vertically spaced raceways formed in said core, a cup shaped shell, anti-friction balls interposed between said shell and core, said yoke embracing said shell and having its upper end pressed inwardly to cover the open end of the shell and balls, the lower end being constricted to form a bearing and support for the shell and core.

1,826,822. TUMBLING MILL. NATHAN RANSOHOFF, Cincinnati, Ohio. Filed Oct. 23, 1928. Serial No. 314,481. 8 Claims. (Cl. 51—164.)



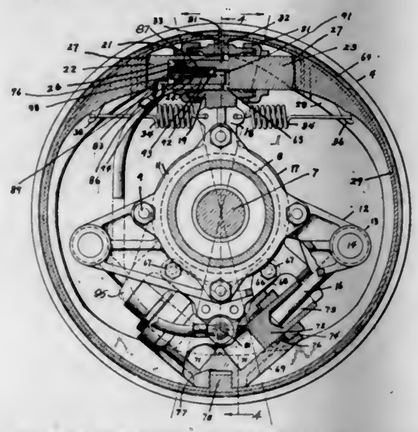
8. A tumbling mill, comprising a rotative drum interiorly partitioned to constitute a tumbling chamber and an adjacent collecting chamber, a cylindrical conveyer screen within the collecting chamber, and chutes for respectively discharging the contents of the tumbling chamber into the screen, and the screenings from the collecting chamber into the tumbling chamber.

1,826,823. TYPEWRITING MACHINE. HENRY RESCH, Bayonne, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 19, 1927. Serial No. 240,991. 13 Claims. (Cl. 197—153.)



1. In a typewriting machine, the combination with a carriage having a platen and a ribbon-mechanism having a ribbon stretch normally operative to cover the whole typing line of the platen and manually operable means for withdrawing the ribbon from the platen to a non-typing position to facilitate the insertion of a work-sheet around the platen to the typing line of a work-sheet deflector mounted upon the carriage and normally in ineffective position and having connections to the ribbon withdrawing means, effective during the withdrawing of the ribbon from the printing field, to automatically move the deflector to an effective sheet-deflecting position close to the front of the platen, for guiding the leading edge of an inserted work-sheet across the typing line out of contact with the withdrawn ribbon, between the latter and the platen.

1,826,824. MEANS FOR VEHICLE BRAKING. JOY S. REYNOLDS, San Francisco, Calif., assignor, by mesne assignments, of one-half to Joy S. Reynolds, Detroit, Mich., and one-half to Charles A. Balcolm, San Francisco, Calif. Filed Nov. 3, 1924. Serial No. 747,628. 21 Claims. (Cl. 188—152.)

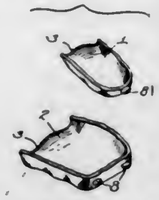


21. In brake mechanism for the wheels of a vehicle, a brake drum for a wheel, an oscillatively mounted floating brake band for the said drum, means associated with the said band for creating pressure in response to engagement of the band with the drum when rotated in either direction, a second braking unit for another wheel and means for applying the pressure created by the first brake mechanism to the second braking unit.

1,826,825. PREPARATION OF CELLULOSE FIBER FOR CONVERSION INTO DERIVATIVES. GEORGE A. RICHTER, MILTON O. SCHUR, and ROYAL H. RASCH, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Oct. 27, 1927. Serial No. 229,066. 20 Claims. (Cl. 260—146.)

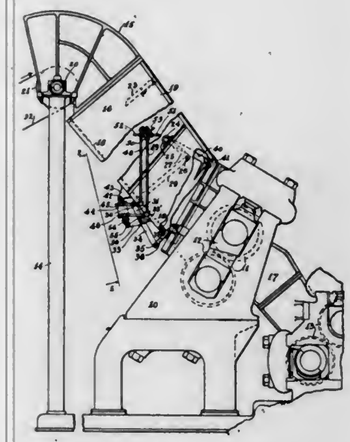
3. Material for conversion into cellulose derivatives, comprising a mass of narrow waterleaf paper strips of mercerized fiber.

1,826,826. READY-MADE CUSP. HARRY J. RUSSELL, Toronto, Ontario, Canada, assignor to Baker & Co. Inc., a Corporation of New Jersey. Filed June 14, 1929. Serial No. 370,843. 2 Claims. (Cl. 32—9.)



1. As an article of manufacture, an artificial tooth cusp comprising a sheet of metal shaped to simulate the occlusal surface of a tooth and having an integral protuberance on the exterior and inwardly of the edge thereof formed of metal stamped or displaced outwardly from the inner side so as to form a corresponding depression on said inner side, said protuberance to be embedded in a plaster mold during the soldering operation in making an artificial tooth to hold said cusp against movement in the plaster and reenforce the cusp against distortion, and said depression to receive solder so as to bond the cusp to the solder.

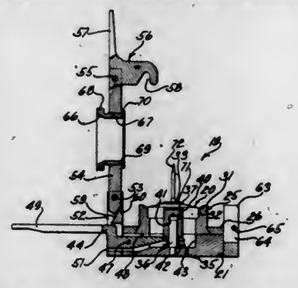
1,826,827. HYDRAULIC CANE FEED STOP AND LEVELER. HERMAN J. B. SCHARNBERG, Fort Wadsworth, N. Y. Filed Aug. 22, 1930. Serial No. 477,114. 12 Claims. (Cl. 100—47.)



9. In cane stop mechanism, in combination with a chute for a sugar mill and a conveyor to feed sugar cane into said chute; an upper horizontal shaft extending across the chute and rockable in bearings at the sides thereof near the top, a sleeve pinned to said shaft, a plurality of arms extending rearwardly from said sleeve and formed with down-bent spiked portions, a tie rod connecting the arms to brace them, a backwardly extending crank-arm fixedly connected to an extended end of said upper shaft; a lower horizontal shaft extending across under said chute; hanger bearings for said shaft; a forwardly extending crank-arm fixed to an extended end of said lower shaft, a link connecting the ends of said crank-arms, a plurality of arms rearwardly directed from and fast with the lower shaft, the central arm of this group having a downward extension, spiked pins pivoted to the ends of these last named arms, the pins operable through holes in the bottom of said chute; a power cylinder having a piston provided with a rod pivotally connected to said downward extension through which the lower shaft is rocked; a four way valve having an operating handle; and piped connections with said cylinder and said valve for operating the said mechanism.

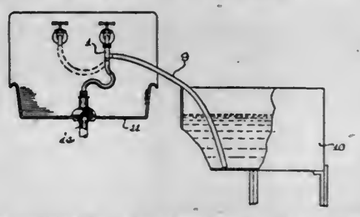
1,826,828. APPARATUS FOR GAUGING AND ADJUSTING ARTICLES. ARTHUR WILLIAM SCHOOF, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 22, 1929. Serial No. 372,999. 9 Claims. (Cl. 88—24.)

1. In an apparatus for gauging the distance between spaced portions of an article, a screen having indicated thereon calibrated tolerance limits for the distance to be gauged, means associated therewith with which one portion of the article is engaged for predeterminedly locating it with respect to the tolerance limits, and means resting freely on the article being gauged and capable of assuming



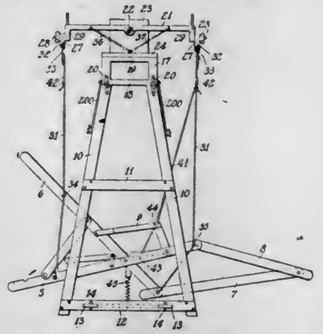
a position in accordance with the relative positions of the portions being gauged for producing an image on the calibrated screen of the resulting position thereof.

1,826,829. FILLING AND DRAINING DEVICE. WILLIAM H. SCOTT, Rochester, N. Y. Filed June 4, 1929. Serial No. 368,343. 3 Claims. (Cl. 103—262.)



1. The combination with an ejector, of two faucet connecting devices connected to the ejector, one at the intake end the other at the discharge end, a third conduit leading from the ejector at the discharge end and through which water may be drawn by water passing through the ejector, of a suction device carrying means detachably interlocking with that faucet connecting device which connects with the discharge end of the ejector.

1,826,830. STABILIZING DEVICE. FREDERICK D. W. SEARING, Newark, N. J. Filed July 26, 1929. Serial No. 381,135. 7 Claims. (Cl. 114—194.)

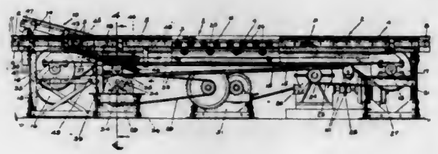


1. In a steamer deck chair, the combination with legs adapted to rest upon the deck and furnished with a head piece, of a support upstanding from the head piece, a main lever pivoted to such support and having dependent ends, a cross lever pivoted to each end of the main lever below its pivot, the cross levers having dependent ends, an upstanding post at each end of the main lever, and having at its upper end means for the attachment of springs, and a pair of coiled extension springs attached to such means and to the dependent ends of the cross levers, and a chair suspended from the ends of the cross levers.

1,826,831. PROCESS FOR THE MANUFACTURE OF CHROME ALUM. WALTER SEIDEL, Leverkusen, near Cologne-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed July 21, 1926, Serial No. 142,102, and in Germany Sept. 29, 1925. 1 Claim. (Cl. 23—118.)

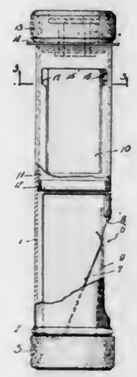
A process for the production of chrome alum from chromium sulfate solutions, which comprises adding to such a solution an amount of sulfuric acid sufficient to render the acidity of the solution eight to nine times normal, heating the acidified solution for several hours at between 30° to 45° C., adding potassium sulfate in requisite amount to the solution after the termination of the heat treatment, and causing the chrome alum to crystallize by keeping the solution in motion.

1,826,832. CONVEYER FEEDING MECHANISM. LEE SEKULSKI, Ellwood City, Pa., assignor to Mathews Conveyer Company, Ellwood City, Pa., a Corporation of Pennsylvania. Filed Oct. 4, 1929. Serial No. 397,420. 10 Claims. (Cl. 198—32.)



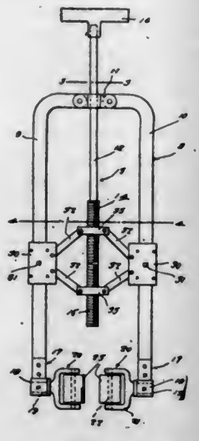
1. In combination, a main conveyer, a plurality of feeding conveyers, means for actuating said feeding conveyers, one at a time, and a stop means on each feeding conveyer adapted to allow passage of articles to the main conveyer when a feeding conveyer is conditioned for feeding articles, but operative to arrest passage of articles from the feeding conveyers when the latter are in non-feeding condition.

1,826,833. PNEUMATIC DISPATCH CARRIER. ARTHUR W. SHANNEHAN, Roslindale, Mass., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Nov. 22, 1929. Serial No. 408,979. 10 Claims. (Cl. 243—34.)



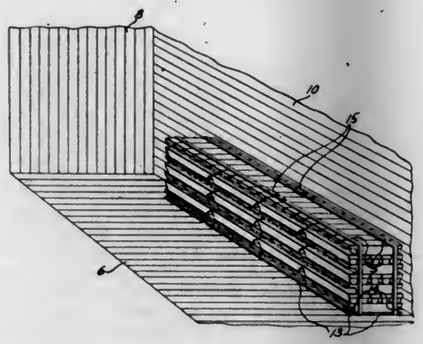
1. A carrier for pneumatic dispatch systems comprising an elongate tubular body, a transverse partition dividing the space within said body into two separate chambers, the body having openings in its side wall giving access to the respective chambers, and independent means for retaining material in each of said chambers.

1,826,834. DENT REMOVING TOOL. CLYDE M. SHAW, Manhattan, Kans. Filed Apr. 29, 1930. Serial No. 448,277. 2 Claims. (Cl. 81—15.)



1. In a repair tool of the class described, a pair of substantially duplicated L-shaped jaw supporting members having inturned short arms disposed in close spaced relationship, a pivoting and connecting device coupling said ends together, expanding and contracting means for the members, said means including sleeves slidably carried on said members, means for securing the sleeves in longitudinally adjusted position, a shaft mounted slidably and rotatably in said connecting device and having operable connection with said expanding and contracting means, and work engaging appliances carried by the free end portion of the jaw supporting members.

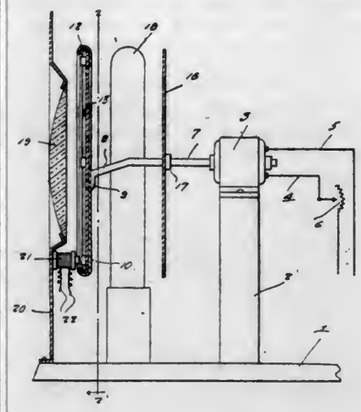
1,826,835. ASSEMBLING ARTICLES FOR TRANSPORTATION. WINSLOW CLEMENT SPOUSTA, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1929. Serial No. 354,002. 9 Claims. (Cl. 105—369.)



1. A method of assembling articles in a car for transportation, consisting in grouping the articles in individual units for handling, positioning boards on the floor of the car for receiving the individual units, depositing the individual units upon the boards, and binding the individual units together with the boards into larger units.

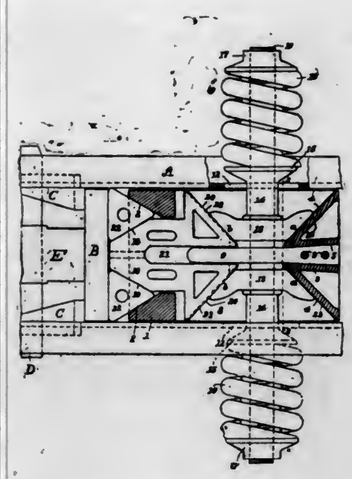
2. A method of assembling articles for transportation, consisting in stacking the articles in individual piles for handling, positioning the individual piles upon boards, and binding the individual piles and boards into large units for transportation.

1,826,836. TELEVISION SCANNING DEVICE. MICHAEL STACHO, Cleveland, Ohio. Filed May 1, 1930. Serial No. 448,965. 5 Claims. (Cl. 178—6.)



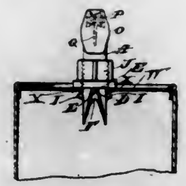
1. A television scanning device of the character described comprising a pair of rotatable disks having slots therein for the passage of light to a subject, and magnetic means for periodically retarding the rotation of one of said disks with respect to the other of said disks with each revolution thereof.

1,826,837. DRAFT AND BUFFING GEAR. FRANK E. STEBBINS, Washington, D. C. Filed Mar. 13, 1923, Serial No. 624,713. Renewed May 26, 1930. 14 Claims. (Cl. 213—26.)



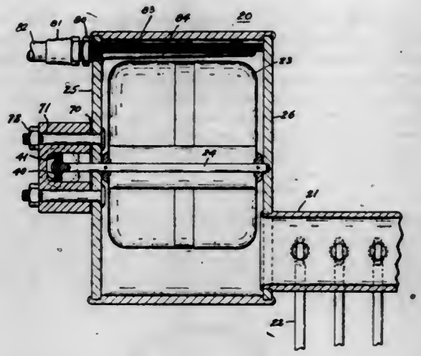
8. The combination in a friction draft and buffing gear having a frame with friction surfaces, of friction blocks, yielding means, as springs, acting at angles to the longitudinal axis of the frame and against the friction blocks, a double wedge accelerated friction block, and side wedges having simultaneous movements transversely and longitudinally of the frame, all the planes of the pressure friction contact surfaces of the said friction elements in contact with one another being obliquely disposed to the longitudinal axis of the gear, whereby when the gear is closed and pressure is removed from the side wedges the movable friction elements will be restored by the springs to their normal relative positions without sticking.

1,826,838. DRIVING FAUCET. IRA E. STUMP, East Cleveland, and THEODORE A. KNOEDLER, Shaker Heights, Ohio. Filed Nov. 30, 1929. Serial No. 410,855. 3 Claims. (Cl. 221—23.)



2. In a driven faucet, a tubular body, having diametrically opposite angular extremities forming piercing points, the sides of said points being bevelled to form cutting edges, and adapted to turn down the opposite edges of the opening produced thereby, said tubular body being provided with diametrically opposed bosses which when said body is revolved will engage underneath said turned down edges and means adjustable on said body for clamping said bosses upon said turned down edges, the recess upon one side of said tube between said piercing points being deeper than the recess upon the other side to provide an unsevered neck to prevent the total detachment of the piece partially severed from the wall of the can.

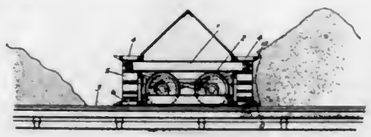
1,826,839. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed June 30, 1927. Serial No. 202,615. 20 Claims. (Cl. 62—126.)



17. In a refrigerating system of the type having a closed fluid chamber, a valve for controlling the flow of fluid through said chamber, mechanical valve actuating mechanism responsive to the condition of the fluid in said chamber for controlling said valve, said mechanism including a second valve adapted to control the flow of fluid through said chamber.

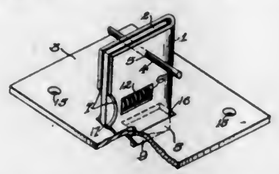
20. In a refrigerating system in which lubricant and refrigerant are circulated, an evaporator comprising a closed chamber containing a body of liquid including liquid refrigerant and a layer of lubricant floating on the refrigerant, heat conducting means associated with the chamber, the free surface of the liquid body being proportioned with respect to the surface of the heat absorbing means so that violent ebullition of the refrigerant will take place below the free surface of the layer of lubricant during normal operation of the evaporator, and means above the free surface for collecting the lubricant conveyed upwardly with the gaseous refrigerant and for conveying such lubricant out of the chamber.

1,826,840. APPARATUS FOR COLLECTING AND CONVEYING MATERIALS. GEORGE R. SYLVESTER, Columbus, Ohio, assignor to The Harrop Ceramic Service Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 2, 1928. Serial No. 309,775. 12 Claims. (Cl. 198—102.)



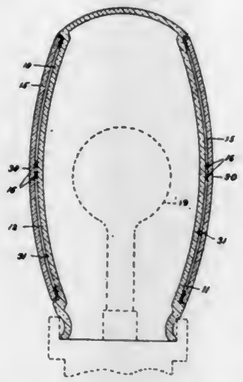
12. Apparatus for collecting material comprising traction means, a body portion mounted on said traction means, plates extending along opposing sides of said body portion, endless conveying members with their lower side portions mounted to travel along said plates and with their upper sides spaced therefrom, and spur members projecting outwardly from the sides of said conveying members for cutting into the material to be collected.

1,826,841. LOCKING DEVICE. CHARLES J. SYMMONDS, Washington, D. C. Filed Dec. 15, 1930. Serial No. 502,309. 6 Claims. (Cl. 292—128.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



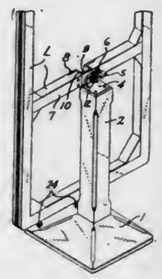
1. A lock comprising a U-shaped housing member enclosing a substantially rectangular shaped latch member pivoted thereto, means for operating said latch member comprising cut-away portions on the opposed edges of said housing member, an integral jaw portion on said latch member, a helical spring maintaining said latch member in one position and a cooperating keeper plate pierced to receive the lower portion of said housing member.

1,826,842. LUMINOUS GLOBE. SAMUEL THIES, Cincinnati, Ohio, assignor to The Cincinnati Advertising Products Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 11, 1928. Serial No. 269,094. 2 Claims. (Cl. 40—131.)



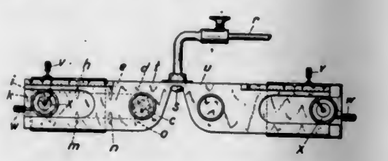
1. A day and night sign comprising a globe having side portions, an illuminator in the globe for interior illumination thereof, a translucent display panel mounted on the side portions of the globe the panel having an outer face and an inner face, and advertising indicia on the inner face of the panel, the outer face thereof being slightly but uniformly etched to an extent producing a smooth slightly misty-appearing surface for reduction of high light and glare resulting from extraneous light and a soft non-dazzling effect when illuminated from the interior.

1,826,843. SUPPORTING STRUCTURE. ADOLPH A. THOMAS, New York, N. Y. Filed Sept. 17, 1925. Serial No. 56,902. 8 Claims. (Cl. 248—41.)



1. A structure comprising a support, a plate secured on said support, a curved slotted rail formed integral with said plate and extending upwardly therefrom, a bolt hinged on said plate and projecting through the slot in said rail, said projecting end of the bolt being adjustable in said slot, a frame connected to the projecting end of said bolt, so that said frame may be adjusted on said rail to any position between the ends of said slot, and a nut on the outer end of said bolt for clamping said frame against said rail in adjusted position.

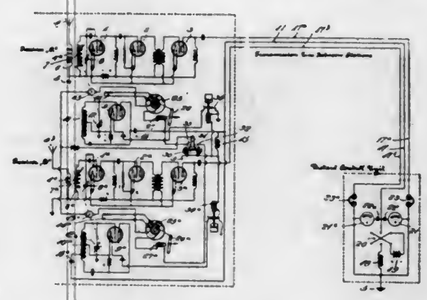
1,826,844. TELESCOPIC INSTRUMENT FOR SUBJECTIVE DETERMINATION OF THE REFRACTION OF THE EYE. WALTHER THORNER, Berlin, Germany. Filed July 22, 1929, Serial No. 380,042, and in Germany July 25, 1928. 4 Claims. (Cl. 88—20.)



1. A device for the subjective determination of the eye by measuring the variation of the focus of a lens system disposed between the eye and an object, comprising a frame, a focusing optical system on said frame, and means for varying the focus of said system, said system constituting means for directing light rays from said object in a substantially closed path lying in a plane substantially perpendicular to the line of sight.

1,826,845. REMOTE CONTROL RADIO RECEIVING SYSTEM. ARTHUR M. TROOGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 350,096. 5 Claims. (Cl. 250—40.)

1. A remote control radio receiving system comprising in combination a plurality of radio receivers having individual frequency adjusting means actuated by individual electric motors, individual audio frequency oscillators having frequency adjusting means actuated in common with the frequency adjusting means of said receivers respectively, a remote control unit adapted to selectively energize said motors, individual frequency indicating means at said remote control unit and a single control circuit extending between said receivers and said control unit and carrying control currents and audio frequency

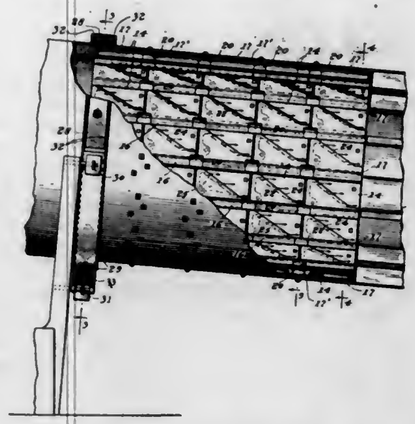


currents whereby the adjustments of said receivers may be ascertained in terms of the frequency adjustments of said oscillators.

1,826,846. ARTIFICIAL RUBBER. EDUARD TSCHUNKUR and WALTER BOCK, Cologne-Mulheim, Germany. Filed Aug. 17, 1929, Serial No. 386,730, and in Germany June 10, 1927. 7 Claims. (Cl. 106—23.)

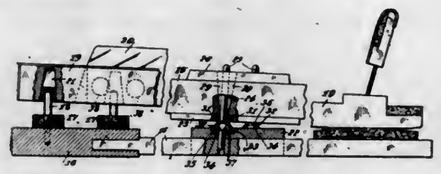
1. As new products the vulcanizates obtainable by vulcanizing a mixture of at least two different solid polymerization products of diolefines, in the presence of about 30–80% its weight of a soot variety in a finely divided form, said vulcanizates generally possessing indices of strength between about 50,000 and 190,000.

1,826,847. APPARATUS FOR MAKING CEMENT. HENRY VANDERWERP, Manitowoc, Wis., assignor to Rotary Pressure Cooler Company, Manitowoc, Wis., a Corporation of Wisconsin. Filed Apr. 4, 1928. Serial No. 267,351. 11 Claims. (Cl. 222—7.)



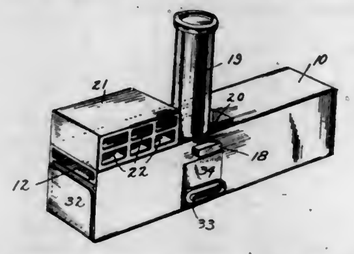
1. Apparatus for the purpose specified comprising a rotatable shell, and a lining therefor consisting of hollow tuyère blocks each provided with a passage-way which communicates with the chamber therein, said tuyère blocks being arranged in series with the passage-ways of blocks of each series in communication with one another, means for securing said tuyère blocks to said shell, and means for supplying air under pressure to said tuyère blocks, said blocks being provided with discharge orifices which communicate with the chambers therein, respectively.

1,826,848. PIANO KEY MOUNTING. FREDERICK A. VICTOR, Great Neck, N. Y., assignor to Steinway & Sons, New York, N. Y., a Corporation of New York. Filed Feb. 18, 1931. Serial No. 516,547. 4 Claims. (Cl. 84—435.)



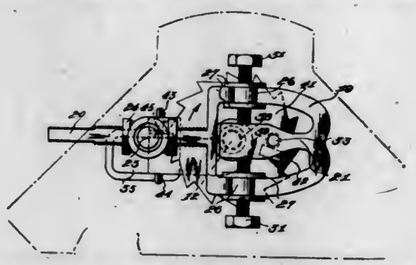
2. A piano action having, in combination, a balance rail, a balance rail pin, a key with an underneath button, said key and button having an opening therein for the passage of the pin, the walls of said opening contacting with the front and rear sides of the pin within the button and being otherwise spaced from the pin, an intermediate bearing body surrounding the pin and supporting the key and button upon the rail, said bearing body being rounded front and rear to allow unobstructed rocking of the key and button for the purpose of the piano action, and shims on the pin interposed between the bearing body and rail.

1,826,849. HEMOGLOBINOMETER. HENRY L. WALTER, Twin Falls, Idaho, assignor of one-half to Howard S. De Witt, Twin Falls, Idaho. Filed Aug. 12, 1927. Serial No. 212,600. 2 Claims. (Cl. 88—14.)



2. A hemoglobinometer having an elongated casing, a longitudinal partition dividing its interior into upper and lower compartments, a linear standard and linear scale edge to edge and slidable longitudinally in the upper compartment, an observation hole in the top of the upper compartment, sample support below said hole, and illuminating means in the lower compartment including a lamp below the sample support.

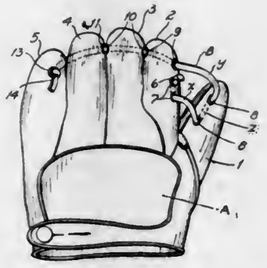
1,826,850. ADJUSTABLE TANGENT ARM FOR GAS METERS. HARRY G. WEYMOUTH, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 30, 1928. Serial No. 265,905. 4 Claims. (Cl. 73—1.)



1. In combination with the crank shaft of a meter, a tangent arm construction comprising a sheet metal stamp-

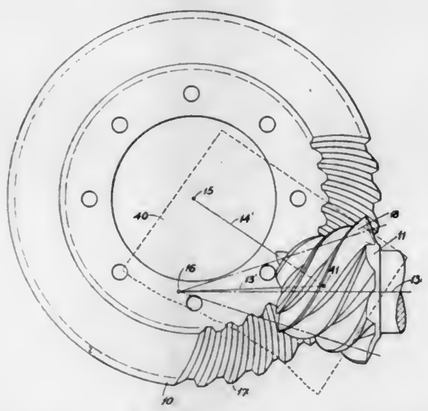
ing having a closed yoke member, a resilient crank-shaft engaging tongue integral with said yoke member and having a free end projecting into the same, said yoke member adjacent the free end of said tongue having depressions stamped therein, bushings secured within said depressions, and an adjusting screw threaded through each bushing and engaging opposite sides of said tongue.

1,826,851. BASEBALL GLOVE. WILLIAM P. WHITLEY, Clayton, Mo., assignor to Rawlings Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 5, 1927. Serial No. 173,137. 4 Claims. (Cl. 2—19.)



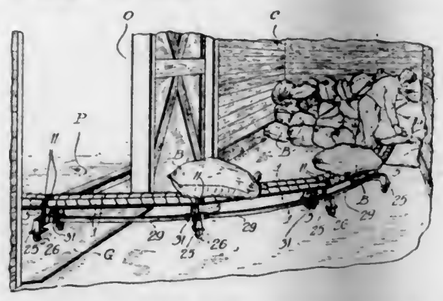
1. A baseball glove provided with a thumb and fingers, strands arranged transversely between the thumb and index finger and connected together in such a way that they are capable of moving relatively to each other so as to conform to the curvature of a ball positioned between the thumb and index finger, and an extension on one of said strands attached to the little finger of the glove and passing freely through eyelets in the side portions of the intermediate fingers, positioned so that said extension will be located in front of the intermediate fingers of the user's hand.

1,826,852. HYPOID GEAR. ERNEST WILDHABER, Brooklyn, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Original application filed May 10, 1926, Serial No. 108,036, and in Great Britain Apr. 12, 1927. Divided and this application filed May 5, 1927. Serial No. 189,129. 28 Claims. (Cl. 74—41.)



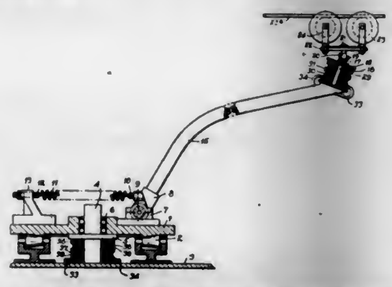
1. A pair of tapered gears meshing with axes non-intersecting and non-parallel, each of which is provided with longitudinally curved teeth having generated side tooth surfaces.

1,826,853. CONVEYER. ALFRED O. WILLIAMS and WILLIAM L. DAVIS, Battle Creek, Mich., assignors to Clark Tructractor Company, Buchanan, Mich., a Corporation of Michigan. Filed May 15, 1931. Serial No. 537,514. 18 Claims. (Cl. 198—213.)



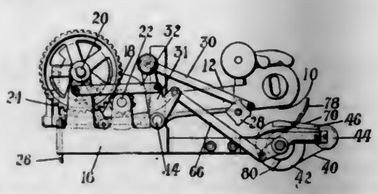
1. In conveyer means of the character described, two driven shafts disposed in spaced relation and provided with means to contact articles placed upon the shafts and propel such articles along the shafts during rotation thereof, the shafts being of flexible and telescopic construction for permitting lateral movement of a selected portion of the conveyer relative to the remainder thereof while maintaining the drive of the shafts.

1,826,854. TROLLEY. CHARLES L. WILMOT, Pittsburgh, Pa. Filed Mar. 13, 1930. Serial No. 435,498. 5 Claims. (Cl. 191—58.)



1. A trolley structure for trackless vehicles comprising in combination a base mounted for angular movement in a horizontal plane, a pole pivotally mounted on said base, a support mounted for universal movement on said pole, trolley wheels carried by said supports, movable contacts disposed between said support base and between the base and the vehicle, and current conductors connecting said trolley wheels and said movable contact members.

1,826,855. WORK PRESENTING DEVICE. REGINALD BOYD WOODCOCK, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 24, 1929, Serial No. 380,706, and in Great Britain Aug. 21, 1928. 11 Claims. (Cl. 101—287.)

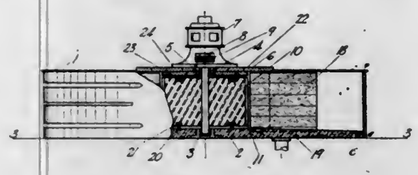


1. A device for presenting successive pieces of work to operating position between a platen and a marking tool which are relatively movable to mark the work, said device comprising a pair of rollers, the axis of one of which is substantially in line with the path of approach of the marking tool and the platen, an endless belt around said rollers to support the successive work pieces, and means for advancing said belt intermittently between the operations of the marking tool.

1,826,856. METHOD OF TREATING MATERIALS. PAUL P. ZIMMERMAN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1930. Serial No. 477,194. 12 Claims. (Cl. 148—13.)

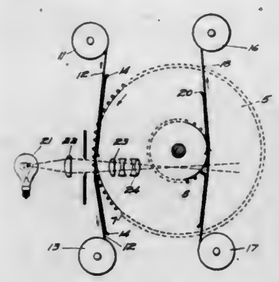
1. A method of treating materials, which consists of mixing an oil with a powdered magnetic material, and annealing the material.

1,826,857. BEATER. WALTER J. ZIMMERMAN, Dayton, Ohio, assignor to The Mead Research Engineering Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 25, 1927. Serial No. 186,298. 16 Claims. (Cl. 92—24.)



1. A beater for fibrous stock, comprising a tub, a vertically disposed beater roll for the stock in the tub mounted in fixed position, and an electric motor mounted over the tub above said beater roll and directly connected to the shaft of said beater roll.

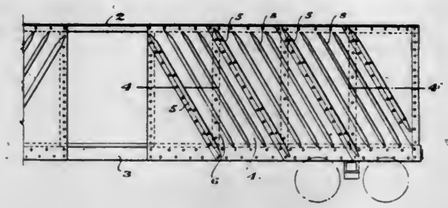
1,826,858. PHOTOGRAPHIC PRINTING APPARATUS. VLADIMIR K. ZWORYKIN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 24, 1927. Serial No. 242,346. 3 Claims. (Cl. 88—24.)



1. In a film-printing machine, a plurality of rotatable film-advancing devices having peripheral surfaces modified to cooperate with the marginal perforations in a continuous film, an axial support therefor, a plurality of similar though smaller devices mounted on said axial support intermediate said first mentioned devices, a light source, and means for causing the light from said source to traverse a portion of the space bounded by said devices.

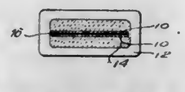
1,826,859. CORRUGATED METALLIC WALL PLATE. EMIL C. ANDERSON, Downers Grove, Ill. Filed Mar. 15, 1928. Serial No. 261,897. 12 Claims. (Cl. 105—409.)

1. A girder-wall for a railway car, comprising an upper chord, a lower chord, web plates with integral struts formed therein which overlap said chords at their opposite ends, said plates also having integral stiffeners formed therein, and separate tension members having their opposite ends secured to said web plates adjacent said upper chord and lower chord respectively.



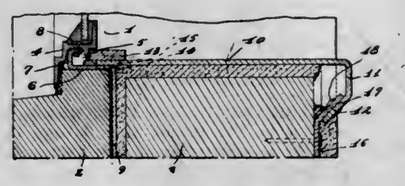
2. A girder-wall for a railway car, comprising an upper chord, a lower chord, web plates with integral struts formed therein which overlap said chords at their opposite ends, said plates also having integral stiffeners formed therein, and separate tension members having their opposite ends secured to said web plates adjacent said upper chord and lower chord respectively and also secured to said web plates between said stiffeners.

1,826,860. PROCESS OF MAKING PRODUCTS WITH WELDED FACES OF STABLE SURFACE ALLOY. PERCY A. E. ARMSTRONG, Loudonville, N. Y., assignor to Ludlum Steel Company, Watervliet, N. Y., a Corporation of New Jersey. Continuation of application Serial No. 527,225, filed Jan. 5, 1922. This application filed Jan. 16, 1924. Serial No. 686,654. 6 Claims. (Cl. 29—188.)



6. The hereindescribed process which consists in taking core sections of mild ferrous material of reduced thickness compared to the thickness of the core of the final product and placing the same back to back, casting a mass of a stable surface iron alloy in a molten condition about said sections in a quantity to provide a mass of large heating capacity compared to the heat absorbing capacity of the relatively cool sections so that upon contact of the unlike materials heat is available after absorption of a part thereof to weld the unlike materials together, separating bimetallic parts of the resulting product and arranging the same with the faces of mild ferrous material facing one another and spaced apart, and casting mild ferrous material in molten condition therebetween to weld the like materials together, and produce an ingot having a relatively thick intermediate portion of substantially homogeneous mild ferrous material and face layers of stable surface iron alloy.

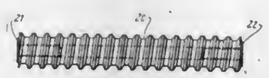
1,826,861. WINDOW CONSTRUCTION. GUSTAF IVAR BARCLAY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 19, 1928. Serial No. 320,461. 11 Claims. (Cl. 189—75.)



1. The combination with a wall having a window opening and a window sash in the opening, of a stool separate from said sash and extending into the opening beneath

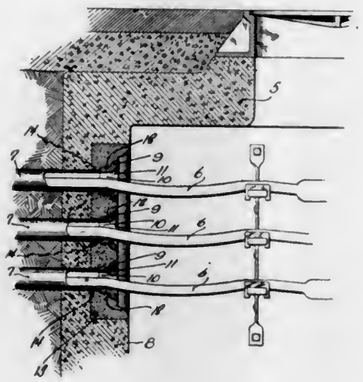
the sash, and an anchoring clip secured to the wall at the inner side thereof and having a portion for holding the stool from upward movement at its inner edge.

1,826,862. LOOM TEMPLE. LOUIS P. BATSON, Greenville, S. C. Filed Nov. 15, 1930. Serial No. 495,981. 2 Claims. (Cl. 139—296.)



1. A roll for loom temples made of one piece of cork and having a spiral groove cut into the surface thereof.

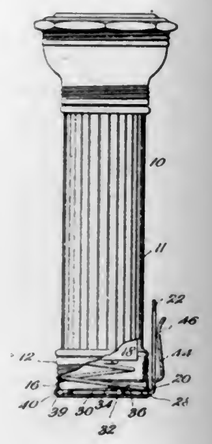
1,826,863. DUCT TERMINAL. WILLIAM BEAUREGARD, Fall River, Mass., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed July 16, 1927. Serial No. 206,219. 6 Claims. (Cl. 247—4.)



3. In combination with a conduit, a duct terminal member of substantially spool shape and having an outwardly flared smooth bore, and a mounting member cast around the duct terminal, the mounting member having an opening in axial alignment with the duct terminal to receive the end of the conduit and anchor the same in proper alignment with the duct terminal, and the outwardly flared bore being substantially tangential to the front of the mounting member.

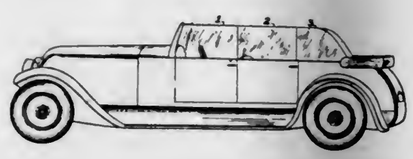
1,826,864. FLASH LIGHT. MAX E. BUCHHOLZ, Hoboken, N. J., assignor to The Bright Star Battery Company, Hoboken, N. J., a Corporation of New York. Filed Oct. 22, 1928. Serial No. 314,033. 5 Claims. (Cl. 240—10.66.)

1. Suspension means for flashlights, comprising a base-cap and a hook, said hook having a slide, and a bill on the slide at the side of the cap projecting upwardly alongside of the cap, said slide being slidably mounted upon the cap, cross-wise of its base and adapted to provide a space of adjustable width between said bill and the side of said cap when the slide is moved outwardly, said slide



being housed within said cap, and said cap having a space between its bottom and the end of the barrel to which it is connected, which in the completely engaged position of said parts is of greater depth than the thickness of said slide.

1,826,865. CONVERTIBLE BODY. RAYMOND L. CARR, Boston, Mass. Filed Apr. 12, 1927. Serial No. 183,199. 61 Claims. (Cl. 296—45.)



1. A vehicle body comprising a plurality of closure panels movable from a substantially concealed position within the vehicle to a juxtaposed position along the side of the vehicle, and resilient means stressed transversely of the vehicle and supporting at least one of said panels in said last-named position and holding it against an adjoining panel.

10. A vehicle body comprising a swinging door, a closure panel carried by said door and movable from a position wherein it is substantially concealed in said door to a position wherein it is located substantially above said door, resilient means supporting said panel and adapted to guide it in its path between said positions, means operative in response to closing of the door to flex said resilient means when the panel is located substantially above the door, whereby the panel is moved out of normal relation to the door at the instant of door closing, said means permitting subsequent return of the panel to its normal position.

24. A vehicle body comprising a substantially vertically movable panel, a top, a valance extending along the side of the top and normally located in the path of the upper end of the panel near the limit of its vertical movement, windshield standards engaging the front portion of the top and the valance being split adjoining these standards, the valance having an integral gutter portion extending

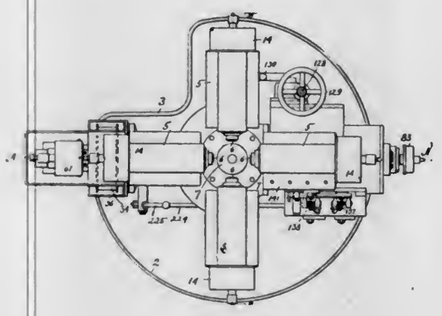
along the side of the top and outside of the windshield standards, and having its body portion inclining inwardly adjoining said standards.

45. In a vehicle body, a body wall including at least three sections, each of said sections providing pockets, two of said sections being doors, panels movable upwardly out of said pockets to a raised position thereabove wherein the panels provide a closure wall, means defining the path of the intermediate panel and causing it to move in a substantially straight vertical path between its raised and lowered positions, means defining the path of movement of the adjoining panels, each of said panels moving from its lowered position in a path substantially parallel to that of the intermediate panel and spaced therefrom, but when nearly at its raised position being movable longitudinally into contact with said intermediate panel.

1,826,866. PROOFING OF METAL AGAINST CORROSION AND PARTICULARLY OF IRON AND STEEL AGAINST RUST. WILLIAM HOWARD COLE, Paris, France. Filed Feb. 24, 1930, Serial No. 431,048, and in Great Britain Dec. 10, 1929. 3 Claims. (Cl. 148—6.5.)

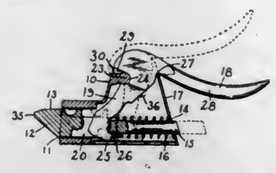
1. A composition for proofing metals against corrosion, consisting of a metallic stock solution which is a mixture of saturated solutions of iron, zinc, aluminium and chromium in an aqueous solution of phosphoric acid of concentration 12° Baumé, in the proportion of 5 parts of iron solution, 5 parts of zinc solution, 1 part of aluminium solution and ½ part chromium solution, to which metallic stock solution is added, in the proportion of 4 cc. to each litre of the former solution, an accelerator stock solution which is an aqueous solution of bichromate of potassium (5 per cent) neutral chromate of potassium (14 per cent), mono-basic phosphate of ammonium (5 per cent) and naphthalene (1 per cent), whereby a non-corrosive smooth surface is produced on a metal article being immersed in the composition.

1,826,867. MULTIPLE SPINDLE MACHINE. DAVID F. DOMIZI, Cleveland, Ohio. Filed Oct. 24, 1924. Serial No. 745,571. 18 Claims. (Cl. 77—26.)



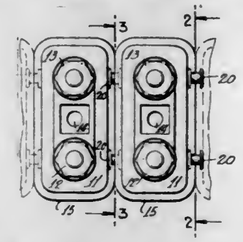
1. In a machine of the character described, a supporting frame having a central work support, a series of angularly disposed ways radiating from said support, spindle carrying heads slidably mounted on said ways, racks carried by said heads and extending parallel with said ways, a gear mounted in the frame beneath the work support and coaxial therewith, a vertical shaft journaled in the frame adjacent each of said ways, said shafts having pinions at their upper ends meshing with said racks and pinions at their lower ends meshing with said gear, and means for turning said gear alternately in opposite directions.

1,826,868. LATCH. PETER S. DUNN, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed Nov. 8, 1928. Serial No. 317,949. 10 Claims. (Cl. 292—193.)



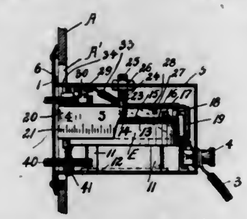
1. In a latch, a casing, a latch bolt in said casing, and means pivotally mounted in the casing for retracting said latch bolt, said means including a part normally engaging a part of the latch bolt on the remote side thereof from the pivotal mounting and retained in the casing thereby.

1,826,869. TERMINAL BLOCK. EDWARD A. EVERETT, Long Island City, N. Y. Filed Oct. 13, 1930. Serial No. 488,477. 4 Claims. (Cl. 175—371.)



1. In combination, a terminal block comprising an insulated base supporting terminals having vertical slots on one side opening upwards and vertical slots on the opposite side opening downwards and aligning with corresponding slots in adjoining blocks and a double headed rivet engaging each of said slots.

1,826,870. PARKING LIGHT TIMING DEVICE. ALVIN J. FARRAR, Cleveland, Ohio. Filed Oct. 25, 1928. Serial No. 315,005. 1 Claim. (Cl. 200—35.)



Timing mechanism for automobile lights of the class described, comprising, in combination, a casing, clock works in said casing, an abutment member included in the clock works and movable by the action of the latter, a disc positioned above the clock works, an abutment member carried by said disc complemental to the abutment member of the clock works, manually operable means for engaging or disengaging the two abutment members aforesaid, and indicia means carried by the disc, said indicia means being movable by operation of the clock work through said abutment members.

1,826,871. AUTOMOBILE TOP CONSTRUCTION. CLIFTON S. FORD, Ecorse, Mich. Filed July 5, 1928. Serial No. 290,390. 6 Claims. (Cl. 296—137.)

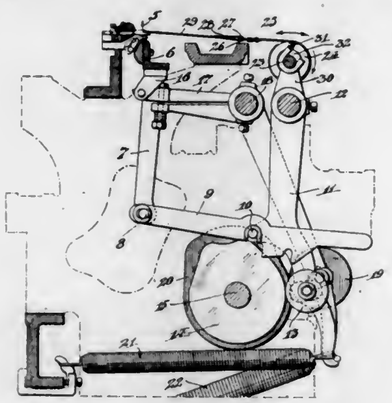
1. A sheet metal automobile top having an opening therein with flexible guide rails including inner and outer

sheet metal walls along opposite sides thereof the outer wall being corrugated, a plurality of panels slidable on said rails and having parts interengaged with the outer wall



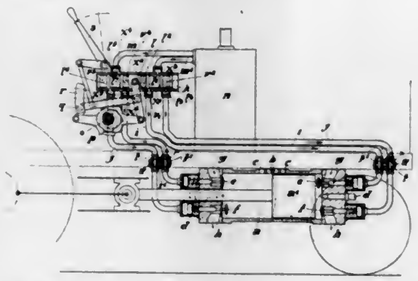
of said rails and means directly engaged with the inner walls of the rails for flexing them to impose a locking action on those parts of the panels engaged with the outer walls thereof.

1,826,872. FABRIC TAKE-OFF DEVICE FOR FULL FASHIONED KNITTING MACHINES. GUSTAV GASTRICH, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 21, 1930. Serial No. 462,801. 7 Claims. (Cl. 66—149.)



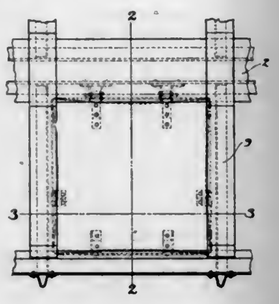
1. In a straight knitting machine, the combination with a reciprocatively operated needle bar, of a fabric take-off roll correspondingly reciprocated to maintain a relatively fixed distance between said roll and bar.

1,826,873. DIESEL LOCOMOTIVE HAVING POWER CYLINDERS CONNECTED TO THE DRIVING MECHANISM. JOSEF GEIGER, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Feb. 1, 1929, Serial No. 336,740, and in Germany Feb. 16, 1928. 6 Claims. (Cl. 105—62.)



1. In a Diesel locomotive, a driving engine comprising a Diesel cylinder, valve means for said cylinder, fluid pressure means for operating said valve means and including a control valve for controlling the fluid pressure supplied to said valve means for changing from Diesel operation to operation as an air compressor.

1,826,874. DROP DOOR FOR RAILWAY CARS. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 29, 1929. Serial No. 359,044. 3 Claims. (Cl. 105—280.)



1. A railway car drop door having a continuous flange at its perimeter formed at an acute angle to the body of the door at the middle of the opposite edges of the door.

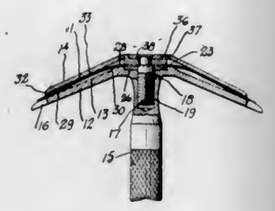
1,826,875. CAST METAL END PLATE. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 6, 1929. Serial No. 405,133. 15 Claims. (Cl. 105—410.)



1. In a railway car, the combination of side plates, and a single piece cast metal member comprising a Z-shaped portion extending between said plates formed at each end with a Z-shaped lateral extension secured to the adjacent side plate.

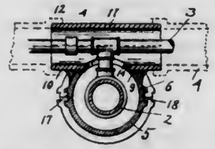
2. In a railway car, the combination of Z-shaped side plates, and a single piece cast metal member comprising a Z-shaped portion extending between said plates formed at each end with a Z-shaped lateral extension overlapping and secured to the adjacent side plate.

1,826,876. RAZOR. BENJAMIN GOLDMAN, New York, N. Y. Filed June 25, 1930. Serial No. 463,615. 4 Claims. (Cl. 30—12.)



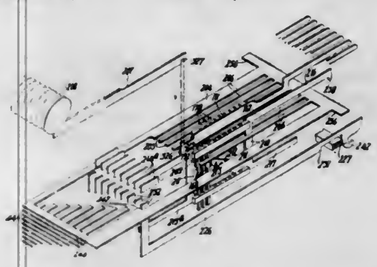
2. A razor including a single elongated blade having its opposite cutting edges at the ends of the blade, said blade having a central opening, and a holder for the blade including a base member conforming to the shape of the blade, said base member having at its opposite ends guards for the cutting edges of the blade, said base member having a seat for the blade provided with a central substantially plane portion and opposite end portions adjacent to the guards diverging from the central portion at an angle of approximately 120 degrees between said portions, said blade seating on the central and end portions and being otherwise spaced from the base member, a cover member for flexing the blade against said seat and holding the blade thereon, said cover member being formed according to the general shape of the seat and having portions having a pressure bearing action on the central part of the blade and on the portions of the blade adjacent to the cutting edges to secure the same against said seat, and central means to connect the cover to the base through the opening in the blade.

1,826,877. FITTING FOR CONDUIT SYSTEMS. CHRISTIAN GOTTWALD, Cleveland, Ohio, assignor to The Ric-Wil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 12, 1927. Serial No. 212,503. 2 Claims. (Cl. 137—75.)



1. In combination with intersecting conduits having pipes therein, a part of each conduit having an opening, said parts being separate from each other but adapted to be joined with said openings in register, means for connecting said pipes through said registering openings.

1,826,878. COMBINED TYPEWRITING AND COMPUTING MACHINE. HANS HANSON, Ivoryton, Conn., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1923. Serial No. 620,640. 107 Claims. (Cl. 235—60.)

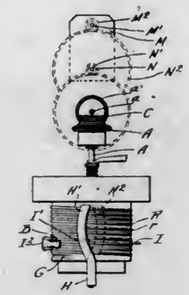


55. In a multiplying machine, the combination of a series of denominationally-arranged multiplicand-slides, a set of normally-ineffective indexing pins on each slide from 1 to 9, lateral projections on the indexing pins, a group of transverse product slides, each slide having extensions disposed between said multiplicand-slides, numeral-keys to set the indexing pins to carry the lateral projections into co-operative alignment with said extensions, a general operator, means actuable by the general operator to drive the product slides, the extensions of said product slides engaging the lateral projections of the indexed pins to drive the multiplicand slides, and dial-wheels having connections to be driven by the multiplicand slides.

97. In a multiplying mechanism, a slidable frame and a series of index-pins individually slidable transversely through the frame, each pin having a lip projecting from the side thereof and settable to be engaged by the frame-sliding means.

1,826,879. ELECTRIC MEASURING INSTRUMENT. THOMAS R. HARRISON, Wyncote, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 6, 1920. Serial No. 337,786. 6 Claims. (Cl. 235—91.)

1. In a measuring instrument, the combination with a slide wire resistance, of a contact in engagement with, and movable relative to said slide wire, a counting train, and operating means for moving said contact relative to said resistance and actuating said counting train in correspondence with the movement of the contact relative to said resistance, said means including provisions for maintaining different proportions between the extent of counting train actuation and the extent of movement of the contact relative to the resistance, in different portions of the range of movement of said contact relative to said resistance.



1,826,880. METHOD OF PURIFYING FERROUS METALS. CHARLES T. HENNIG, Barberton, Ohio. Filed Aug. 22, 1928. Serial No. 301,434. 3 Claims. (Cl. 75—46.)

1. The hereindescribed method of purifying steel in the course of its manufacture by the basic open-hearth process which consists in introducing into the molten metal a deoxidizing material in the form of an intimate mixture comprising commercial soda ash and manganese dioxide and wherein the soda ash is over three-fourths of the mixture and the manganese dioxide is an effective amount, up to five per cent, for controlling the action of the soda ash as and for the purpose described.

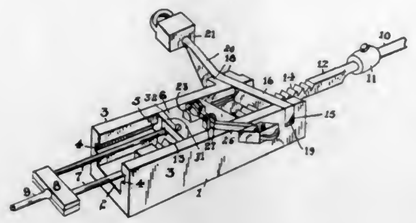
1,826,881. PURIFICATION OF STEEL IN THE BESSEMER PROCESS. CHARLES T. HENNIG, Cleveland, Ohio. Filed Aug. 16, 1929. Serial No. 386,490. 3 Claims. (Cl. 75—46.)

1. The hereindescribed method of purifying steel in the Bessemer process of manufacture which consists in treating the molten metal, after it has been blown, with a deoxidizing material in the form of an intimate mixture comprising commercial soda ash and manganese dioxide and wherein the soda ash is over three-fourths of the mixture and the manganese dioxide is an effective amount, up to five per cent, for controlling the action of the soda ash as and for the purpose described.

1,826,882. METHOD OF PURIFYING STEEL IN THE OPEN HEARTH PROCESS. CHARLES T. HENNIG, Cleveland, Ohio. Filed Aug. 16, 1929. Serial No. 386,491. 1 Claim. (Cl. 75—46.)

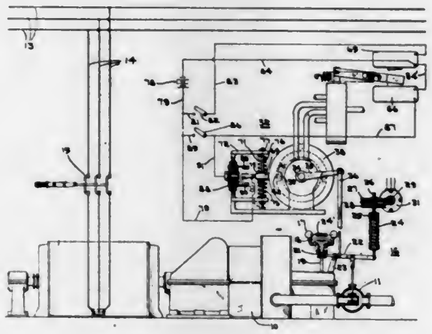
The hereindescribed method of purifying steel in the course of its manufacture by the basic open-hearth process which consists in adding to the lime charge, prior to the introduction of the metal into the open-hearth furnace, a deoxidizing material in the form of an intimate mixture comprising commercial soda ash, a calcium compound and manganese dioxide and wherein the soda ash is over three-fourths of the mixture, the calcium compound has a calcium oxide content that is an effective amount, up to ten per cent, to substantially raise the melting point of the soda ash, and the manganese dioxide is an effective amount, up to five per cent, for controlling the action of the soda ash, and thereby forming an initial slag having a relatively high sodium content to react with the metal from the beginning of the heat.

1,826,883. SAFETY HOOK-OFF. ROWLAND F. HILL, Toledo, Ohio. Filed Mar. 29, 1930. Serial No. 440,137. 5 Claims. (Cl. 74—17.)



3. In a safety hook-off for a pump, a base member, a cross-head reciprocably supported and guided thereby, a power connection, a pull-rod connection, means connecting the power connection to the cross-head, teeth on the pull-rod connection, a pawl carried by the cross-head, a pawl carried by the base member, the first pawl being adapted to interlock frictionally with the said teeth when power is applied to the power connection and the second pawl being adapted to interlock frictionally with the said teeth when power is released from the power connection, and means to automatically release the latter pawl when power is applied to the power connection.

1,826,884. LOAD LIMITING DEVICE. FRANCIS HODGKINSON, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 29, 1931. Serial No. 512,128. 13 Claims. (Cl. 264—4.)



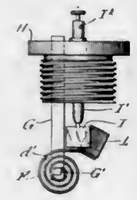
1. The combination with a prime mover and a governing mechanism responsive to the speed of the prime mover and controlling the admission of motive fluid thereto, of a device for limiting the governing mechanism to any desired maximum rate of admission comprising a clutch element movable to various positions corresponding to various rates of admission provided by the governing mechanism, means for so connecting the governing mechanism and the clutch element that the governing mechanism cannot provide a rate of admission greater than that corresponding to the position of the clutch element, a second clutch element adapted to engage the first clutch element, means for effecting engagement of said clutch elements, yieldable means for resisting movement of the second clutch element in the direction of increasing the rate of admission; and means responsive to movement of the second clutch element for disengaging said clutch element.

1,826,885. OVEN LOADER. FRIEDRICH A. HOPPE and JOSEF CYRNS, Chicago, Ill., assignors to The Petersen Oven Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 3, 1931. Serial No. 527,410. 8 Claims. (Cl. 107—57.)



1. An oven loader comprising a supporting frame having parallel tracks, a carrier supported on said tracks and movable into and out of the oven, an endless apron surrounding the bed of the carrier and upon which the goods are initially deposited, and wedging devices engaged with the edges of said apron adapted to detain the apron during the outward movement of the carrier.

1,826,886. MEASURING ELECTRIC CONDUCTIVITY OF FLUID. EARL A. KEELER, Philadelphia, Pa., assignor to Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1923. Serial No. 670,143. 2 Claims. (Cl. 175—183.)



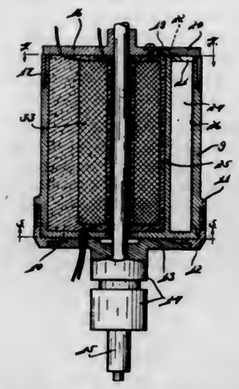
1. A device for measuring the electric conductivity of a fluid having electrodes immersed in said fluid, an obstruction movable to vary the path of electrical flow between said electrodes, and thermally responsive means in the fluid for operating the obstruction in accordance with temperature changes of the fluid.

1,826,887. CLASPING-DEVICE FOR BRACELETS. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Feb. 15, 1930. Serial No. 428,801. 3 Claims. (Cl. 24—232.)



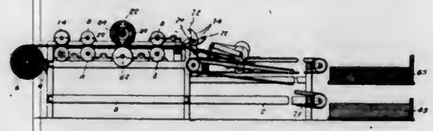
1. In a device of the type specified, the combination of a clasp-element comprising a bottom portion and upstanding sides with a hook at one end, a connecting-member for engagement with the hook of the clasp-element, a locking-member having a top portion with sides projecting downwardly therefrom to adapt them to straddle the sides of the clasp-element, and means for pivoting the sides of the locking-member to the sides of the clasp-element with the forward edge of its top portion substantially abutting the end of the beak of the hook on the clasp-element and adapted to rock into the opening of the hook to open the latter to receive the connecting-member, the forward edges of the sides of the locking-member normally extending across the hook opening to adapt them to be engaged by the connecting-member to tend to hold the locking-member closed and prevent release of the connecting-member from the hook.

1,826,888. DISTRIBUTOR. EDWARD KILPONEN, Detroit, Mich., assignor to Simplex Ignition Corporation, Detroit, Mich. Filed Sept. 21, 1928. Serial No. 307,386. 2 Claims. (Cl. 175—357.)



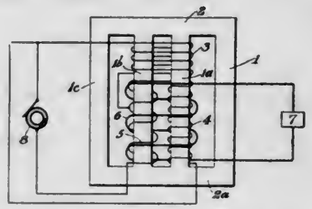
1. In a distributor of the class described, a coil receiving housing having an open end; a cover for said open end of said housing having an opening formed therein, said housing having a pair of compartments formed therein, one of said compartments registering with said opening; a retaining ring embracing the opposite end of said housing; and a disc mounted on said retaining ring.

1,826,889. CUTTER HEAD. HENRY C. KOCH, Chicago, Ill. Original application filed Dec. 31, 1926, Serial No. 158,354. Divided and this application filed Mar. 7, 1928. Serial No. 259,770. 8 Claims. (Cl. 164—68.)



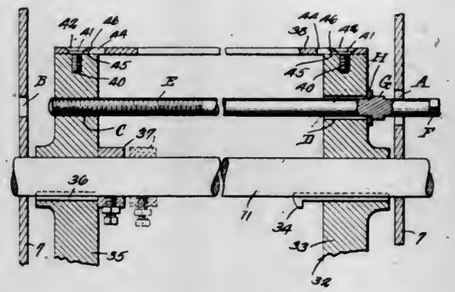
1. An apparatus for making shingles from moving strips of shingle material, comprising a rotating drum mounted adjacent the line of feed of said strip and carrying a plurality of blades arranged with their cutting edges forming a continuous cutting edge around the drum, means for adjusting said blades radially to compensate for wear during sharpening, said blades having their sides overlapping and constructed and arranged to maintain their original length and continuous character of said cutting edge when adjusted to take up wear.

1,826,890. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Mar. 5, 1929. Serial No. 344,333. 20 Claims. (Cl. 171—119.)



1. Alternating current controlling apparatus comprising a core having a plurality of outer legs and a plurality of inner legs, and a plurality of alternating current exciting windings on said inner legs, at least one of said windings tending to create a flux in opposition to that of other of said windings.

1,826,891. CUTTER. ABNER H. KROGAN, Stanley, Wis. Filed Jan. 17, 1929. Serial No. 333,079. 2 Claims. (Cl. 146—117.)



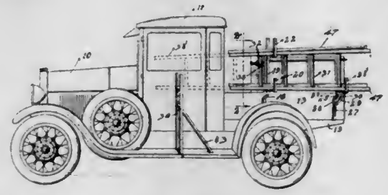
1. In a device of the class described, a cutter comprising a shaft, a head fixed on the shaft, a head adjustable on the shaft toward and away from the fixed head, a blade extended between the heads, interengaging elements on the blade and on the heads whereby the blade will be secured to the heads when the adjustable head is moved toward and away from the fixed head, and mechanism mounted in the heads and accessible from a point external to one head for moving the adjustable head toward and away from the fixed head.

1,826,892. FLOAT FOR SUPPORTING FIRE HOSE NOZZLES. ARTHUR J. LANDRY, East Boston, Mass. Filed July 25, 1930. Serial No. 470,579. 9 Claims. (Cl. 169—2.)



1. Fire fighting apparatus comprising a mobile float, a conduit supported at one end on the float and connected at its other end to a supply of fire extinguishing fluid, said conduit having an opening at the float positioned to project the fluid upwardly and means connected to the float operable to control the position thereof from a remote point.

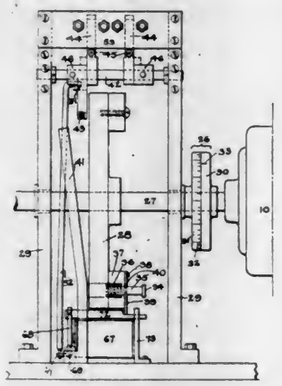
1,826,893. LADDER SUPPORT. NEIL P. LARSEN, Cleveland, Ohio, assignor to The American Coach & Body Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 25, 1928. Serial No. 314,882. 1 Claim. (Cl. 248—20.)



In a ladder supporting device of the character described, in combination with a supporting member, of spaced brackets provided with substantially horizontally aligned

ladder supporting portions and adapted to be attached to said supporting member, a member turnably mounted with respect to said supporting member and having a hooked end turnable out of engagement with said ladder and adapted to be turned to engage said ladder, and means for normally maintaining said hooked end in engagement with said ladder.

1,826,894. ALTERNATING CURRENT CIRCUIT CONTROLLING MECHANISM. FREDERICK W. LEE, Owings Mills, and MYRICK W. PULLEN, Towson, Md. Filed June 9, 1927. Serial No. 197,750. 13 Claims. (Cl. 175—294.)

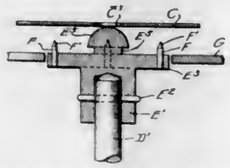


11. An alternating current circuit controlling mechanism comprising, in combination, a synchronous operator, a multiple circuit controller drum, an element associated with said drum and forming part of one of several circuits, a second element associated with said drum, means for transferring said circuit to said second element without interrupting the electrical continuity of said circuit, a circuit breaker arranged to be included in said transferred circuit, and means controlled by said synchronous operator for operating said circuit breaker to open said circuit at a predetermined instant in the current cycle.

1,826,895. PROCESS FOR THE PREPARATION OF ALUMINA. WOLF JOHANNES MÜLLER and HEINRICH HILLER, Vienna, Austria. Filed Oct. 4, 1929, Serial No. 397,442, and in Austria Sept. 21, 1927. 2 Claims. (Cl. 23—52.)

1. A process for preparing alumina from bauxite, which comprises heating bauxite with aluminate lye of approximately 20° to 22° Bé. at temperatures above 190° C. and corresponding pressures until the decomposition of the bauxite is substantially complete.

1,826,896. RECORDING CHART SUPPORT. WALTER H. PEARCE, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1926. Serial No. 146,422. 5 Claims. (Cl. 234—2.)

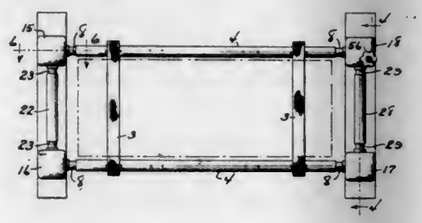


1. In recording apparatus, chart holding and rotating means comprising a rotatable driving member having a body portion and having an outer end portion in operatively fixed relation thereto and connected to said body portion by a shank smaller in diameter than said end portion whereby when said end portion is forced through a chart aperture snugly receiving said shank said chart will have its front side overhung at the margin of said opening by said end portion, and one or more chart penetrating portions of a length intermediate those of the post and its shank portion projecting from said body portion alongside said post.

1,826,897. METHOD OF TREATING FOAM COMPOUNDS. JOHN A. RICE, Berkeley, Calif., assignor to The Bubblestone Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 26, 1926. Serial No. 144,397. 7 Claims. (Cl. 252—6.)

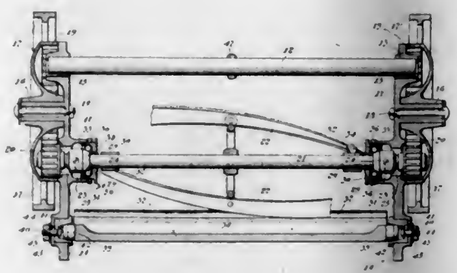
1. A composition adapted to produce a foam for use in making cellular concrete, comprising casein, calcium hydrate, water, boric acid, phosphoric acid, benzoic acid, betanapthol, tungstic acid, arsenious acid, and a radio active substance.

1,826,898. CASKET LOWERING APPARATUS. HUGO E. ROSENKRANZ, Oshkosh, Wis. Filed Jan. 22, 1929. Serial No. 334,214. 2 Claims. (Cl. 27—32.)



1. The combination with a casket lowering apparatus including casket suspending straps, side shafts turnable to let said straps off the same, and corner casings in which said shafts are turnable, of means for checking the turning of said shafts under the gravitational action of a casket, said means including meshed worms and worm gears, the worms having smooth portions, in two of said casings and positively connected together and with said side shafts, and friction creating means enclosed in two of the casings and arranged to cooperate with the smooth portions of the worms therein.

1,826,899. LAWN MOWER. LESTER BURTRAM ROTH, Prophetstown, Ill., assignor to Eclipse Lawn Mower Company, Prophetstown, Ill., a Corporation of Illinois. Filed Sept. 13, 1928. Serial No. 305,679. 13 Claims. (Cl. 56—253.)



13. A lawn mower comprising a frame; a cutter-bar having tapered trunnions at its ends; bearing bushings

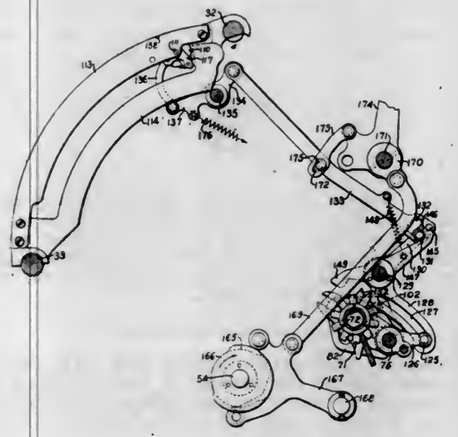
rotatably mounted in the sides of said frame and provided with eccentrically arranged tapered bearing sockets to receive said trunnions, the sides of said frame being given an initial inward bias at their rear ends thereby imparting an inward tension to hold said cutter-bar in place; a binding bolt projecting outwardly from, and coaxially with the bore of each bushing; a binding nut on the outer end of each of said bolts; and a revolving reel mounted in said frame and cooperating with said cutter-bar.

1,826,900. PROCESS OF PRODUCING EMULSIONS. HANS SCHRADER, Essen-Ruhr, Germany, assignor to The Firm of Th. Goldschmidt A.-G., Essen-Ruhr, Germany. Filed Oct. 24, 1928, Serial No. 314,837, and in Germany Aug. 27, 1927. 13 Claims. (Cl. 252—6.)

1. A process for the production of emulsions, in which polyhydric alcohols partially esterified with fatty acids of high molecular weight are emulsified with water or aqueous solutions of suitable substances in the presence of substances having an alkaline reaction.

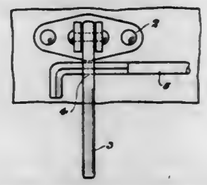
11. As a new composition of matter, an emulsion comprising water, polyhydric alcohols partially esterified with fatty acids derived from oleaginous matter selected from a class consisting of oils, fats and waxes; additional oleaginous matter selected from a class consisting of fatty acids, waxes, natural fats and oils; and also containing substances of alkaline reaction; the external phase of the said emulsion comprising water.

1,826,901. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Dec. 19, 1928. Serial No. 327,092. 7 Claims. (Cl. 235—7.)



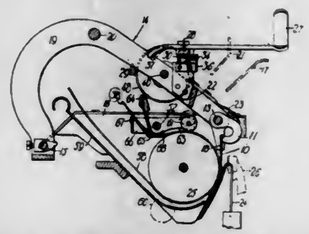
1. In a machine of the class described; the combination with a totalizer, actuators for said totalizer; and means to engage and disengage the totalizer relatively to the actuators; of a step-by-step counter; normally ineffective counter-actuating means operable by the totalizer engaging and disengaging means as said totalizer is disengaged from the actuators to actuate the step-by-step counter; and means under the control of the highest order totalizer wheel to render said actuating means effective.

1,826,902. OPERATING DEVICE FOR CAR COUPLERS. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 16, 1928. Serial No. 262,298. 5 Claims. (Cl. 213—167.)



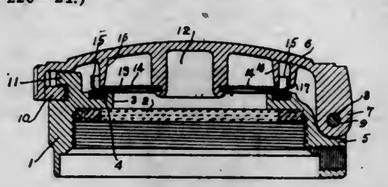
1. An operating device for a railway car coupler comprising a handle hingedly mounted upon the car to swing only in a plane substantially longitudinal of the car, and an operating rod having a slidable non-rotative connection with said handle eccentric from the axis of the handle.

1,826,903. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 16, 1925. Serial No. 23,460. 10 Claims. (Cl. 192—135.)



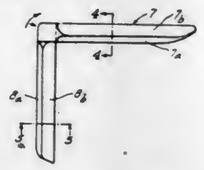
1. In a typewriting machine, the combination with a platen, a carriage therefor and types, of an overhead displaceable frame mountable upon the carriage, means for raising the frame step by step to line-space a stencil carried thereby, said means including a support attached to the frame, a lever swingable on said support, stops carried by the lever and coacting with the frame to control the stroke of the lever, a ratchet-wheel, a pawl for engaging the ratchet-wheel upon swinging said lever, and a spring associated with said pawl and the support for returning the lever to normal position and for causing said pawl to press against the teeth of said ratchet-wheel in all frame-operation positions of said lever.

1,826,904. CLOSURE APPARATUS. KYLE E. STANT, Connersville, Ind., assignor to The Stant Machine Company, Connersville, Ind., a Corporation of Indiana. Filed Nov. 28, 1928. Serial No. 322,492. 7 Claims. (Cl. 220—24.)



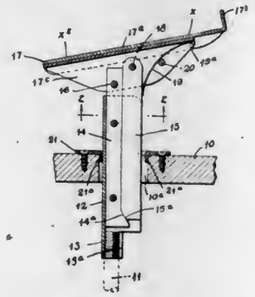
1. In a closure apparatus, a mouthpiece, a sealing element on said mouthpiece, a cap for said mouthpiece, disc means attached to said cap and adapted to engage said sealing element for close engagement between the cap and mouthpiece, said disc having a plurality of ventilating openings therein and cooperating means on the cap and the disc forming a trap for condensed vapors.

1,826,905. BOOMERANG. DON V. TANTLINGER, Sherman, Calif. Filed Apr. 3, 1928. Serial No. 266,953. 5 Claims. (Cl. 273—106.)



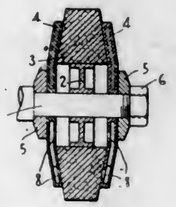
1. A boomerang having an arm which, as seen in cross section has on one side a relatively steep bevel and also a less sloping bevel, said boomerang having a second arm with similar bevels which are reversely arranged and located on the same side of the boomerang.

1,826,906. ACCELERATOR. GEORGE H. TOWNSEND, Flushing, N. Y. Filed Feb. 18, 1928. Serial No. 255,252. 10 Claims. (Cl. 74—81.)



10. In combination, a friction device, an accelerated rod, a foot operated member having operative engagement with said rod and operable to depress the same, a friction member carried by said foot operated member, means causing said friction member to be operated relative to said foot operated member, by rocking of the foot to engage the friction device to lock said foot operated member frictionally against depression, and spring means tending to maintain the friction member in a normal, fixed relation to the foot operated member in which the friction member is ineffective, and acting automatically to restore the friction member to such ineffective position immediately upon release of foot pressure from the foot operated member so that the foot operated member may rise without retardation.

1,826,907. GRINDING WHEEL. GEORGE E. VANCE, Springfield, Ohio, assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio, a Corporation of Ohio. Filed June 24, 1929. Serial No. 373,077. 1 Claim. (Cl. 51—168.)



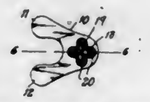
In a grinding wheel, an annular tapered abrasive element, and a pair of clamping collars one on each side of said element to clamp said element therebetween, each of said collars being formed of two sheet metal disks and a series of separate radially-extending ribs therebetween, together with means for connecting the disks and ribs together.

1,826,908. VALVE SPRING COMPRESSOR AND REPLACER. JOSEPH E. WAINWRIGHT, Brooklyn, N. Y. Filed Feb. 16, 1929. Serial No. 340,437. 12 Claims. (Cl. 29—86.3.)



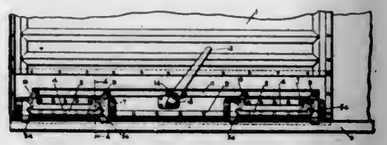
1. A spring compressor and replacer comprising a frame, a foot carried by the lower end of the frame, a head rotatably carried by the upper end of the frame and in axial alinement with said foot, a rack bar slidably carried by said head, a pinion rotatably carried by the head for actuating the rack bar, and means for holding the head in an adjusted position on the frame against accidental turning movement.

1,826,909. SEPARABLE FASTENER. NATHAN WARSHAW, Brooklyn, N. Y. Filed Aug. 21, 1930. Serial No. 476,839. 2 Claims. (Cl. 24—205.)



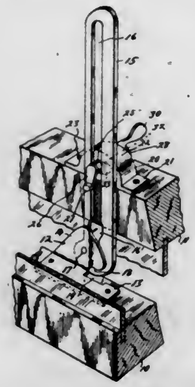
1. A member for separable fasteners, comprising a block formed at its inner end with clamping-jaws, the upper face of the outer end of the block formed with a stud comprising four equally-spaced, radially-arranged, rounded ribs and the underside of the block formed with a correspondingly-shaped recess.

1,826,910. ELEVATING MEANS FOR CAR DOORS. AXEL WAGBERG and KENNETH J. TOBIN, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 375,978. 2 Claims. (Cl. 16—99.)



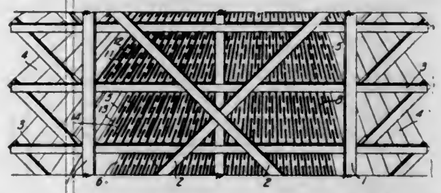
1. The combination with a track, of a door having frictional means and rolling means for alternately engaging said track, guides for retaining said rolling means for relative movement with respect to the door, said guides having terminal upwardly directed offsets for providing relative movement between said door and rollers, dogs pivoted adjacent said offsets and means for simultaneously operating said dogs for the purpose set forth.

1,826,911. WINDOW FASTENER. PETER J. WESOLOWSKI, Detroit, Mich. Filed Nov. 26, 1928. Serial No. 321,935. 5 Claims. (Cl. 292—270.)



3. A window fastener comprising two complementary sections secured respectively to movable sashes, one section comprising a bracket formed with a keeper recess and a slotted link pivotally connected to said bracket, the other section comprising a housing, a rotatable locking element supported by said housing and projecting through said slotted link, said housing and locking element being formed with cooperating cam surfaces for axially shifting said locking element, a spring for resisting said shifting movement, said locking element being shiftable for clamping the link between said element and housing, said element being also rotatable to engage said keeper recess.

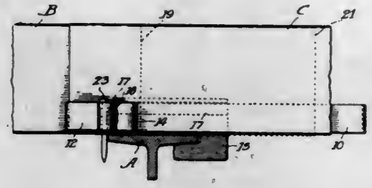
1,826,912. COOLING TOWER. WILLIAM WESTON, Independence, Mo., assignor to J. F. Pritchard & Co., Kansas City, Mo., a Corporation of Missouri. Filed Dec. 5, 1927. Serial No. 237,757. 3 Claims. (Cl. 261—113.)



1. In a cooling tower, a deck including parallel slats spaced laterally to form channels between adjacent slats, each sat having a plurality of slots extending longitudinally therein, each slot having end walls diverging to form a longer opening on one side of the slat than on the other, the slats being positioned on the support to present the sides thereof having the longer openings downwardly.

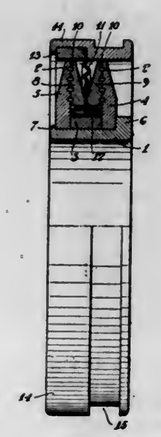
1,826,913. FASTENING FOR METAL DECKING. WILLIAM E. WHITE and PERCIVAL C. MONJAR, Chicago, Ill., assignors to Kalman Steel Company, Chicago, Ill., a Corporation of Delaware. Filed May 18, 1929, Serial No. 364,238. Renewed Mar. 4, 1931. 5 Claims. (Cl. 189—35.)

5. A fastening for nested and overlapped sections of metal decking comprising in combination, a looped member bent to provide spaces open in opposite directions to receive sections of metal of overlapped decking, means on



said member for defining a socket for a nail, and a clip having a notch adapted to engage a flange of a support and slidingly interfitting with said member.

1,826,914. PACKING DEVICE. SVEN GUSTAF WINQUIST, Gottenborg, Sweden. Filed Jan. 24, 1924. Serial No. 688,247. 4 Claims. (Cl. 286—11.)

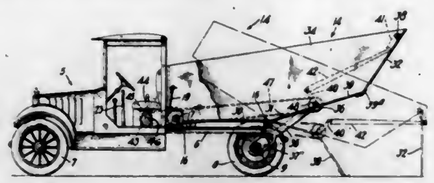


1. A packing device betwen internal and external relatively rotatable parts, said device comprising two axially stationary retaining disks secured to the internal part and a substantially rigid floating disk interposed between said axially stationary disks, the total separation between the cooperating faces of said floating and axially stationary disks being only sufficient to permit their free relative rotation, said floating disk having a circumferential annular chamber extending inward from the periphery thereof, and an annular flexible diaphragm lying within said chamber, the said diaphragm being tightly secured at its inner edge to the said floating disk and at its outer edge to the said external part, the adjacent surfaces of the diaphragm and a wall of said chamber subjected to the fluid pressure affording counterbalanced pressure-sensitive areas acting to substantially neutralize the effect of fluid pressure upon the exposed surface of said diaphragm.

1,826,915. COMBINED LOADING AND DUMP CAR. FLOYD R. WOOSTER, Walden, N. Y. Filed Aug. 17, 1927. Serial No. 213,501. 13 Claims. (Cl. 37—4.)

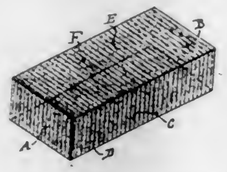
1. A truck including a frame, a scoop shaped body tiltably suported on the frame so that it may occupy a carrying position and a scooping position, the body being so arranged on the truck that it may be pushed into a pile of material by backing up the truck, means includ-

ing a brace, and means on said frame to be engaged by the brace to prevent further tilting of the body when in



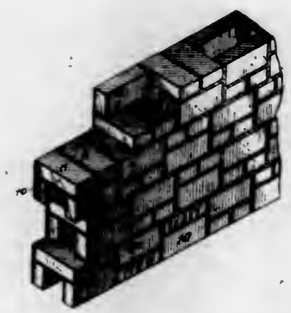
its scooping position to prevent the edge of the body from digging into the ground.

1,826,916. TEXTURED BRICK. EDWIN M. WYATT, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed Dec. 17, 1928. Serial No. 326,516. 2 Claims. (Cl. 72—36.)



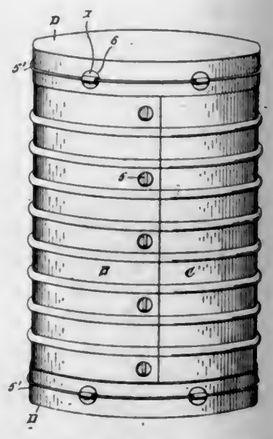
1. As a new article of manufacture, a clay brick of standard dimensions adapted to present various exposures and comprising two broad oblong rectangular faces, two short and narrow end edges and two long and narrow side edges, and having one of its broad faces produced by severing and then textured to improve the appearance of the surface, and having its two end edges and one of its side edges also textured.

1,826,917. PATTERNED BRICK WALL. EDWIN M. WYATT, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed Feb. 20, 1929. Serial No. 341,351. 6 Claims. (Cl. 72—102.)



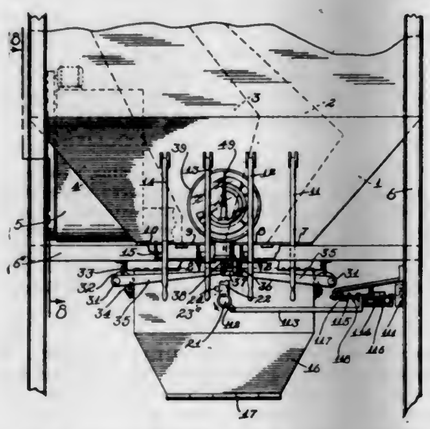
1. A brick wall consisting of superposed pattern courses, the contiguous pattern courses being separated by uninterrupted horizontal mortar lines, each pattern course including pattern units comprising a brick standing on edge as a bull stretcher and a brick laid flatwise, the superposed relation of the bull stretcher brick and the flat lying brick of each unit alternating in the pattern units in the same course to break joints between pattern units, and the pattern units in contiguous courses breaking joints to present the vertical joints between the pattern units in staggered relation in alternate courses.

1,826,918. FASTENING MEANS FOR METAL BARRELS. ROBERT J. BELL, Jacksonville, Fla., assignor to R. J. Bell Company, Inc., Jacksonville, Fla., a Corporation of Florida. Filed June 29, 1929. Serial No. 374,811. 2 Claims. (Cl. 220—5.)



1. A barrel composed of two semi-circular portions and a pair of caps, each semi-circular portion having a row of teats adjacent one side thereof and a row of teats adjacent each end thereof and a row of holes adjacent the other side edge, the holes of one section receiving the teats of the other section, each teat having a substantially flat top with a raised center forming a rib and each teat having a pair of holes therein, one at each end of the raised portion or rib, rods passing through the holes in the teats for detachably connecting the sections together and closely engaging the adjacent section and each cap having holes in its flanges for receiving the teats at the ends of the sections and a wire passing around the flange of each cap and through the holes in the teats and closely engaging the cap flange for detachably connecting the cap to the body.

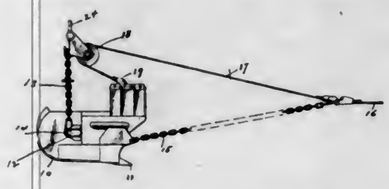
1,826,919. MEASURING APPARATUS. CARL G. BLISS, Los Angeles, Calif., assignor to Standard Boiler & Steel Works, Los Angeles, Calif., a Business Trust. Filed May 2, 1930. Serial No. 449,111. 20 Claims. (Cl. 249—14.)



1. In a measuring apparatus, storage containers, a measuring receptacle adapted to receive measured quantities of the contents of the containers, separate means for

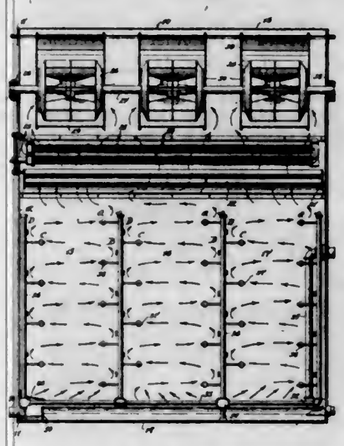
controlling the discharge of each of said containers, a plurality of contacts, one for each of the containers and each connected with one of the control means, a movable contact, the movement of the latter contact being controlled by the amount of substance in the receptacle, said movable contact being adapted sequentially to engage the first contacts for actuating in sequence the separate control means.

1,826,920. EXCAVATING SHOVEL. HERMAN J. BRENDLIN, New York, N. Y., assignor to The Hayward Company, New York, N. Y. Filed May 19, 1930. Serial No. 453,560. 6 Claims. (Cl. 37—135.)



4. A shackle having a recess adapted to receive a medial link of a hoisting bridle, said shackle presenting an integral frame to house a sheave.

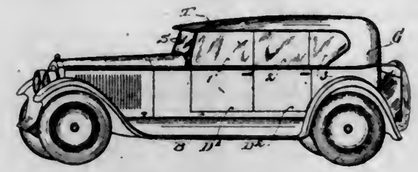
1,826,921. AIR CONDITIONER. CLAUDE A. BULKELEY, Buffalo, N. Y., assignor to Niagara Blower Company, Buffalo, N. Y., a Corporation of New York. Filed Aug. 23, 1928. Serial No. 301,479. 8 Claims. (Cl. 183—23.)



1. In a gas conditioner, a spray chamber having an inlet at one end and an outlet at the other end, means for forcing a current of gas through said chamber, a plurality of pipes extending longitudinally along the sides of said chamber, a plurality of spaced branch pipes carried by said longitudinal pipes, a nozzle carried by each of said branch pipes and arranged to direct a spray of fluid along the sides of said chamber, and means for forcing fluid through said pipes and nozzles, said sprays being disposed to deflect said current of gas to traverse a helical path through said chamber.

1,826,922. VEHICLE BODY. RAYMOND L. CARR, Boston, Mass. Filed Feb. 27, 1926. Serial No. 91,209. 68 Claims. (Cl. 296—45.)

1. A vehicle body provided with a top, said top being supported by uprights near its front and having extensions alined with the sides of the body near its rear end, and a continuous opening extending between each of said uprights



and the corresponding extension, closure panels movable into said opening to form a continuous transparent wall therein.

1,826,923. MATERIAL FOR AND METHOD OF MAKING ORNAMENTAL DEVICES. LORENZ W. F. CARSTEIN, Forest Hills, N. Y. Filed Sept. 19, 1929. Serial No. 393,617. 19 Claims. (Cl. 41—21.)



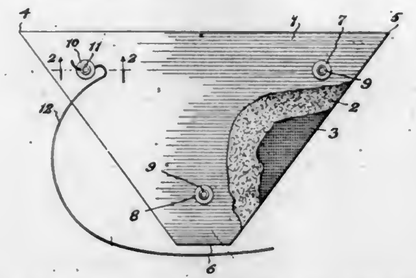
1. Imitation stained glass comprising a plate, a baked crinkled layer on said plate, and an elongated strip on said layer.

1,826,924. PHOTOGRAPHIC SOUND RECORDING MEANS. AVERY B. CHERETON, Chicago, and WILLIAM L. CUMMINGS, Berwyn, Ill., assignors to The Vitaglo Corporation, a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 447,750. 9 Claims. (Cl. 179—100.31.)



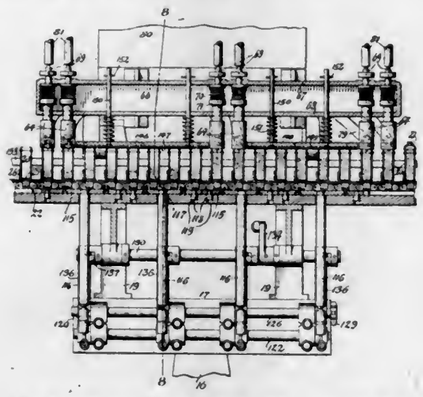
1. In sound recording means having a light subject to variable intensities in accordance with sound variations and a film having a film track upon which said light variations are recorded, the combination of a light grating interposed between said light and film, said light grating composed of a light transmitting material of prismatic formation having inclined side portions terminating in a narrow light emitting slit, and a base portion provided with a plurality of relatively small scorings of the order of two thousand per inch.

1,826,925. MACHINE FOR MAKING DIAPERS. ARTHUR E. CLARK, Freeport, N. Y., assignor to The Diapex Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 26, 1929. Serial No. 342,720. 17 Claims. (Cl. 93—1.)



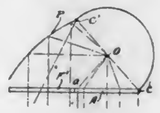
1. In a machine of the class described, sheet-feeding means, cutting means for severing the sheet fed by said means into triangulated sections, and means for applying garment-fastening members to said triangulated sections.

1,826,926. MACHINE FOR FILLING CONTAINERS. ROBERT N. CUNDALL, Blasdell, N. Y., assignor to The Hoepner Automatic Machinery Corporation, Buffalo, N. Y., a Corporation of New York. Filed Oct. 23, 1928. Serial No. 314,469. 5 Claims. (Cl. 226—72.)



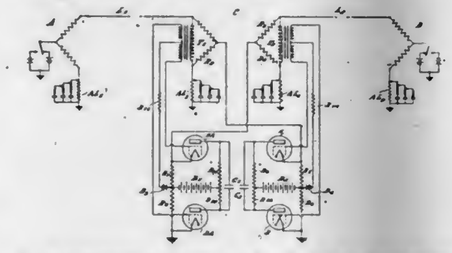
1. A machine for filling containers, comprising a conveyer for propelling containers, a filling device movable toward and from said conveyer and adapted to engage the inlet of a container, a closure arranged adjacent to said filling device and movable toward and from said conveyer and adapted to cover the inlet of the respective container, a vertically movable support, and means for yieldingly mounting said closure on said support.

1,826,927. LIGHT PROJECTOR. MAURICE EXELMANS, Paris, France, assignor to Holophane Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1929, Serial No. 410,669, and in France Dec. 5, 1928. 9 Claims. (Cl. 240—6.)



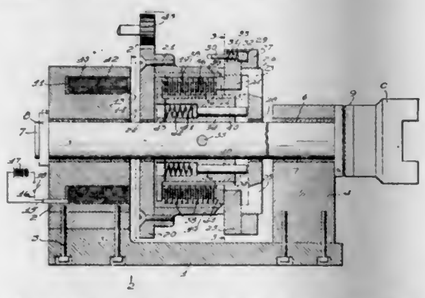
1. A light projector comprising a rectilinear light source, a cylindrical reflector, a portion of which is generated by moving a line parallel with the light source and about a circular arc, whose center coincides with the light source, and another portion merging with the edge of the first portion and extending beyond said portion, and a prismatic plate extending part way across the opening formed by the opposite edges of the reflector and with one edge adjacent to the outer edge of the circular portion of the reflector, the plate being adapted to redirect direct light rays included by it, and the extended portion of the reflector being adapted to redirect direct light received from the source and reflected light received from the circular reflector.

1,826,928. DUPLEX TELEGRAPH SYSTEM. LEE R. FOSTER, River Edge, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Oct. 13, 1930. Serial No. 488,402. 7 Claims. (Cl. 178—71.)



1. In a signaling system, a pair of line sections terminating in a repeater station and each provided with balanced transmitting and receiving circuits for duplex operation, means at the repeater station for normally impressing current upon the transmitting circuit of each line section, and means including a thyratron relay responsive to signals received over one line section for reversing the polarity of the current applied to the other line section.

1,826,929. MAGNETIC CLUTCH. WILLIAM C. FURNAS, West Allis, Wis. Filed Mar. 5, 1928. Serial No. 259,353. 8 Claims. (Cl. 192—84.)

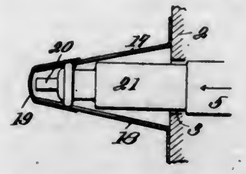


2. A magnetic clutch comprising a frame provided with an electric coil, a normally stationary shaft, a gear disposed upon said normally stationary shaft and disposed in close proximity to said frame, a clutch mechanism disposed upon said normally stationary shaft and upon that side of the gear opposite said frame, and means connected with said gear for operating said clutch mechanism, whereby said normally stationary shaft will be caused to rotate with the rotation of said gear when the latter is moved in the direction of the frame when said coil is energized.

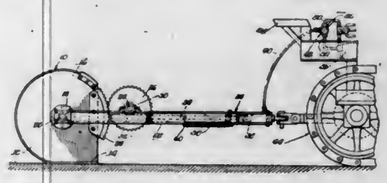
1,826,930. MACHINE FOR APPLYING CAPS TO BOTTLES. HAROLD W. GOEWEY, Baltimore, Md., assignor to Parke Davis & Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 16, 1927. Serial No. 233,615. 8 Claims. (Cl. 226—80.)

1. A device for film capping stoppered bottles, comprising a support apertured for the reception of the bottle,

an annulus formed by a series of movable fingers positioned about the support opening, said members normally converging to engage a resilient stretchable capsule at their outer ends, said cap being of a normal diameter less than the member over which it is to be placed.



1,826,931. EARTH WORKING APPARATUS. RAYMOND L. HARRISON, Albuquerque, N. Mex. Filed Oct. 18, 1930. Serial No. 489,519. 9 Claims. (Cl. 37—140.)

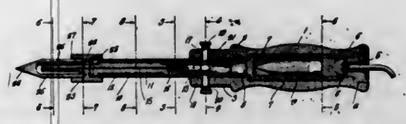


1. In an earth working apparatus adapted to be moved across the surface of the ground, the combination with an earth carrying bowl having a material receiving edge, of rotary driving means for imparting movement to said bowl, and hydraulically operable means for actuating said rotary driving means, whereby to vary the position of said material receiving edge with respect to the surface of the ground.

1,826,932. PROCESS OF TREATING ORES IN THE MANUFACTURE OF RUSTLESS STEEL. CHARLES HART, Media, Pa., assignor of one-half to Peter Shields, Washington, D. C. Filed Sept. 26, 1930. Serial No. 484,712. 1 Claim. (Cl. 75—17.)

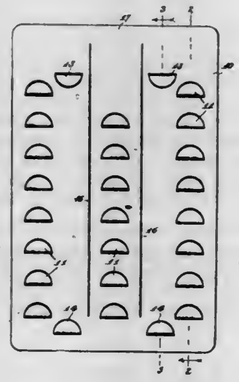
A process which comprises heating an ore containing iron in large proportion, and chromium and nickel in far smaller quantities, which comprises heating said ore to a temperature at which ferric chloride is readily volatile, and contacting the ore with a stream of gases containing free chlorine until the iron content of the ore has been substantially lowered and the chromium and nickel content of the ore has been substantially increased and thereafter adding further quantities of chromium and nickel ores, and adding zirconium ore, then reducing the material in a furnace to produce a pig iron which is particularly suitable for the production of alloy steels.

1,826,933. ELECTRIC SOLDERING IRON. RAYMOND R. HAZLETT and WILLIAM J. ALEXANDER, Linden, N. J. Filed Mar. 12, 1930. Serial No. 435,251. 2 Claims. (Cl. 219—26.)



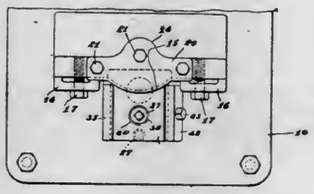
1. A soldering iron including a handle and a hollow stem extending therefrom and a hollow soldering point connected to the outer end of the stem, conductor wires directed through the handle, a resistance element in the stem, insulated therefrom and to which one of the conductor wires is connected, a second conductor wire passing centrally through the core of the resistance element, a heating element having contacts engaging with the ends of both of the said wires, a bifurcated contact with which said wire is connected, a spring influenced rod movable through one end of the handle and through the bifurcated end of the contact and to which the second wire through the handle is connected, contacts on the rod to engage with the bifurcated contact, a hollow soldering point on the outer end of the stem, and contacts for the ends thereof to engage with the wires of the resistance element.

1,826,934. EDUCATIONAL STRIP-HOLDER. WILLIAM HENRY HOLMES, Mount Vernon, N. Y. Filed May 15, 1928. Serial No. 277,983. 1 Claim. (Cl. 35—9.)



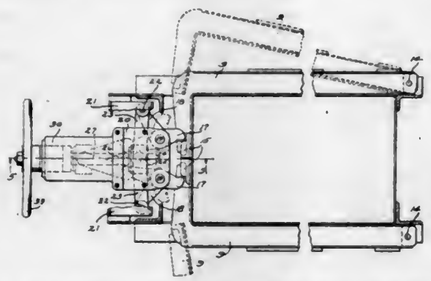
A holder of the class described comprising a plate, a plurality of spaced longitudinal series of tongues struck from the plate and lying in substantially parallel relation with and forwardly offset from the plate, said plate having a pair of longitudinal parallel slots therein between the series defining a flexible strap between them.

1,826,935. METHOD AND MACHINE FOR TRIMMING TOP LIFTS. MERTON W. HOWARD, Lynn, Mass., assignor to Howard Development Company, Lynn, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1928. Serial No. 246,734. 7 Claims. (Cl. 12—47.)



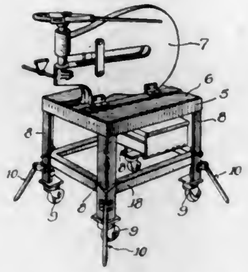
1. A machine for trimming off the projecting breast edges of toplifts attached to shoe heels, said machine comprising, in combination, a plate terminating in a shearing edge against which the toplift may rest during the trimming operation with the portion to be trimmed off projecting beyond said edge, cutting means cooperating with said shearing edge and engaging the previously formed breast of said heel to locate the toplift and determine the path of relative movement of the cutting means and work, and means for relatively moving said cutting means and plate.

1,826,936. LOCKING DEVICE FOR DOORS OF BALING PRESSES. HENRY JACOBSON and KARL AICHELEN, Milwaukee, Wis. Filed Apr. 12, 1928. Serial No. 269,375. 5 Claims. (Cl. 100—19.)



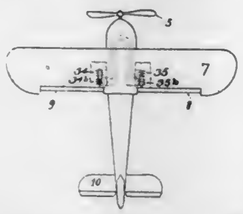
5. In a baling press, the combination with a press box having a pair of pivoted doors forming the sides and one end of the delivery end of said press box, locking mechanism for said doors comprising a pair of pivoted levers engageable with adjacent parts of the doors, and means for positively moving said locking levers to secure the doors in closed position and to maintain said levers in operative engagement with said doors on the opening movement of said doors to prevent their free opening movement under the expansive action of the bale.

1,826,937. ANCHORING MEANS FOR PORTABLE TOOL SUPPORTS. JOHN JENSEN, Rockford, Ill., assignor to Whitney Metal Tool Co., Rockford, Ill., a Corporation of Illinois. Filed Oct. 10, 1928. Serial No. 311,552. 6 Claims. (Cl. 188—6.)



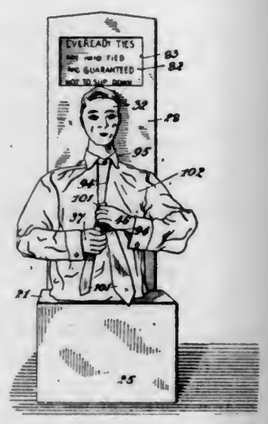
1. An anchoring means for a portable tool support comprising, in combination, a plurality of arms mounted on said support for outward vertical swinging movement relative thereto into and out of engagement with the floor, said mounting being such that the arms extend from the support substantially radially in different directions from the vertical center of said support.

1,826,938. STABILIZING DEVICE FOR AIRCRAFT. BÉLA KISS, New York, N. Y. Filed Oct. 2, 1929. Serial No. 396,030. 9 Claims. (Cl. 244—29.)



1. In an aircraft, having means to independently raise any side of the same, means to automatically return the air craft into a normal horizontal position, said means including a gravity pendulum arranged in a vertical plane transverse to the axis of the aircraft around which the horizontal equilibrium is desired to be re-established, said pendulum being rotatable around an axis intermediate of its length; a series of upper and a series of lower contacts being in successive electroconductive relation with the upper and lower ends of said pendulum, respectively, when the same are passing over them; electrical circuits conducted to the left-hand and right-hand side contacts in both of the series; resistances in said circuits gradually decreasing in the circuits further away from the vertical central line of said series of contacts; electrical devices in said circuits adapted to influence the means to raise the respective sides of the air-craft in such a manner as to simultaneously increase the lifting power of said means on the side of air craft which is lower than the normal horizontal position thereof and decrease said power on the side that is higher than its normal position, when said pendulum is caused to deviate from its center vertical position; and a source of current to complete said circuits through said pendulum and through said devices.

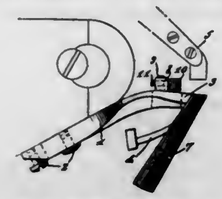
1,826,939. MECHANICAL DISPLAY DEVICE. HARUICHI KOHIROGAWA, New York, N. Y. Filed Jan. 3, 1930. Serial No. 418,274. 12 Claims. (Cl. 40—126.)



1. In a mechanical display device, in combination, a representation of the upper portion of a human figure having one stationary arm with an extended hand extremity and a movable arm having an extended hand extremity and means capable of moving the hand extremity of said movable arm in a vertical line between the hand extremity of said stationary arm and the upper part of the device.

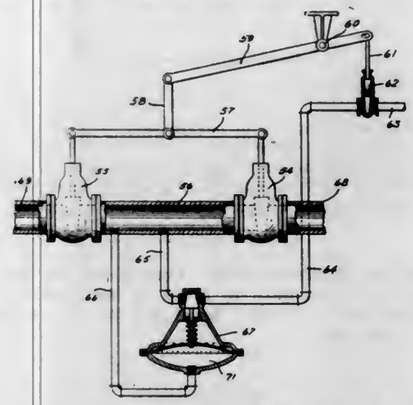
1,826,940. NEEDLE PLATE WORKTABLE. ISIDORE KRASNE, Tulsa, Okla. Filed June 3, 1929. Serial No. 368,054. 1 Claim. (Cl. 112—51.)

In combination with a welt stitching machine, a bracket having one end attached to the machine, with a substantially horizontal part at its other end which is provided with an opening through which the needle or awl passes, a slightly curved guiding bar arranged over the horizontal part and forming a stop for the edge of the sole being sewn, said guiding bar having a right angular projection adjacent one end thereof, a perforated upstanding projection on the horizontal part through the perforation of which the projection passes and a set screw for holding



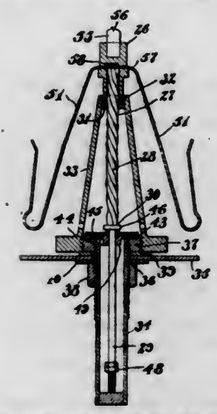
the projection in adjusted position in said perforated part.

1,826,941. METHOD AND MEANS FOR PREVENTING LEAKAGE IN VALVES. WALTER DOUGLAS LA MONT, New Rochelle, N. Y., assignor to La Mont Corporation, a Corporation of New York. Filed Apr. 2, 1926. Serial No. 99,243. 10 Claims. (Cl. 137—111.)



1. The process of preventing leakage between pressure volumes controlled by valve mechanism which consists in causing a continuous stream of fluid in volume and under pressure to flow across the path of possible valve leakage, whereby said volume of fluid acts as a vehicle to carry any leakage and prevents the flow thereof from one pressure volume to the other.

1,826,942. APPARATUS FOR CLEANING GLASSWARE. VASILIOS S. MACKRES, Brockton, Mass. Filed Sept. 20, 1927. Serial No. 220,652. 5 Claims. (Cl. 15—76.)



5. In an apparatus for cleaning glassware used in dispensing food and beverages, a vertical spindle, a plurality of resilient arms projecting laterally therefrom, a single brush supported by said spindle and two of said arms for cleaning the interior of the piece of glassware including the bottom and sides thereof, and a brush supported by at least one of the other resilient arms for cleaning the exterior of the piece of glassware.

1,826,943. TEETHING AND EXERCISING DEVICE. JOHN A. MAKER, Duluth, Minn. Filed July 19, 1928. Serial No. 293,822. 3 Claims. (Cl. 128—349.)



1. A teething and massaging device comprising a yieldable body portion formed with an elliptical ring at one end and lobular at the opposite end and having an air passageway through the lobular end communicating with the elliptical opening for the purpose described.

1,826,944. AMUSEMENT AND EXERCISING DEVICE. JAMES MCGAVIN, Springfield, Ill. Filed Nov. 12, 1929. Serial No. 406,588. 2 Claims. (Cl. 272—75.)

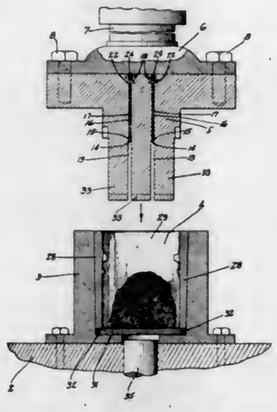


1. An amusement and exercising device comprising an elongated handle, a ball, a string connected at one end with the ball, and a cup member establishing connection between the other end of the string and said handle; said cup adapted to slip over the end of said handle and hold said string on; said ball provided with a recess adapted to accommodate the free end of said handle when not in use.

1,826,945. MOLDING APPARATUS. HOBART J. MCKAY, PAUL J. CARLSEN, and ALVIN O. FUHRMAN, St. Paul, and EDWIN UNZEL, Minneapolis, Minn., assignors to American Container Corporation, St. Paul, Minn., a Corporation of Delaware. Filed Feb. 6, 1928. Serial No. 252,316. 3 Claims. (Cl. 18—19.)

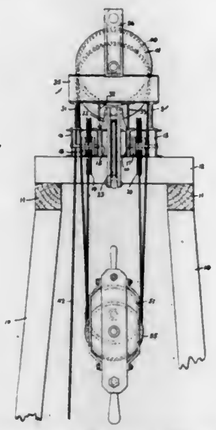
3. The combination with an apparatus for molding containers of a plastic material, comprising a mold including a male member adapted to form the interior of the container, said member having a slot therein adapted to form a partition in the container, of a normally open spring-actuated valve in said member communicating with said

slot and providing a discharge for gaseous and vaporous elements tending to accumulate in the upper portion of said slot, during the molding operation, said valve being



adapted to be seated by pressure of the composition material thereagainst, when said male member approaches the limit of its molding stroke.

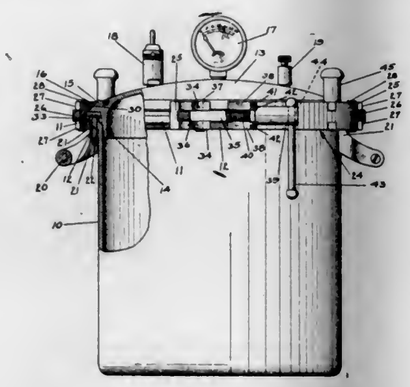
1,826,946. CROWN BLOCK. BURT STANLEY MINOR, San Pedro, Calif. Filed July 7, 1926. Serial No. 120,971. 6 Claims. (Cl. 254—190.)



1. The combination with a traveling block, of a crown block construction comprising two groups of cable sheaves disposed one above the other, the extreme face width of one group being approximately equal to the face width of the sheaves of the traveling block, the extreme face width of the other group of sheaves being approximately equal to the diametrical dimension of the sheaves of the traveling block, whereby the cable lines leading from the crown block sheaves to the sheaves of the traveling block will enter and leave the grooves of the traveling block sheaves at a minimum angle from the vertical.

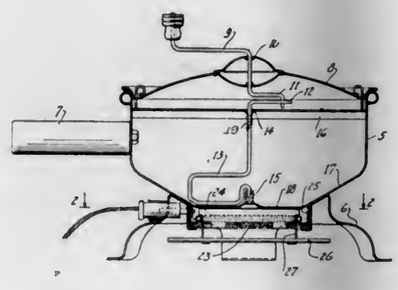
1,826,947. PRESSURE COOKER. CARL NELSON, Eau Claire, Wis., assignor to National Pressure Cooker Company, Eau Claire, Wis., a Corporation of Wisconsin. Filed Mar. 7, 1929. Serial No. 345,173. 2 Claims. (Cl. 220—61.)

1. A cooker constituted by a cooker body having an annular flange at its upper portion, a cover for said body having an annular portion situated above the annular flange of said body, handle brackets situated at the underside of the annular flange of the cooker body, and a clamping ring constituted by a plurality of pivotally connected segmental channel sections each including an upper



channel arm adapted to engage said annular portion of the cooker body cover and a lower channel arm adapted to engage the annular flange of said cooker body, a portion of a lower channel arm of a segmental section being cut away to clear a handle bracket.

1,826,948. CORN POPPER. JOHN VICTOR NELSON, Elmhurst, Ill., assignor to Franz K. Krag, Chicago, Ill. Filed July 10, 1929. Serial No. 377,169. 6 Claims. (Cl. 53—3.)

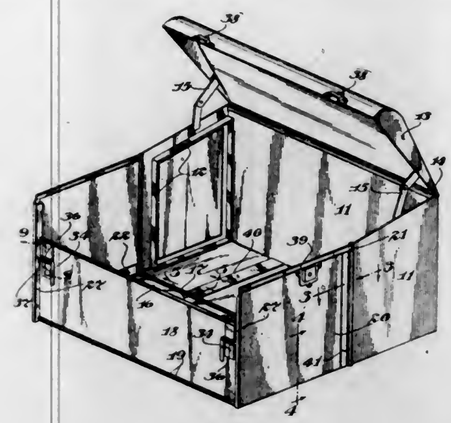


1. A corn popper comprising a vessel, a bar extending across said vessel with its ends fixed to the sides of said vessel, a shaft journaled in said bar and extending downwardly with its lower end journaled in the bottom of said vessel, a loop in said shaft immediately above and extending along the bottom of said vessel, and means for rotating said shaft.

1,826,949. EXTENSIBLE AUTO TRUNK. OTTO S. NELSON and WALTER M. WILLY, Mitchell, S. Dak., assignors to Handy-Haul Auto Trunk Company, Minneapolis, Minn., a Corporation of South Dakota. Filed May 18, 1929. Serial No. 364,163. 15 Claims. (Cl. 224—29.)

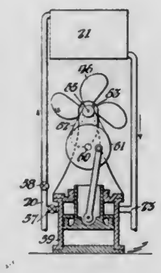
1. An extensible trunk comprising a box-like trunk body open at top and rear, side extension plates hinged to the rear edges of the side plates of said trunk body and normally cooperating to provide a closure for the rear of said body, and a bottom extension plate hinged to the

rear edge of the bottom of said trunk body and arranged to be turned down between said side extension plates



when extended to cooperate with the latter to increase the carrying capacity of the trunk.

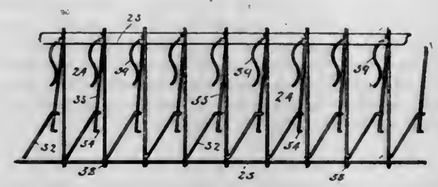
1,826,950. HEAT EXCHANGE APPARATUS. ARTHUR E. PAIGE, Philadelphia, Pa., assignor to John Wood Manufacturing Company, Conshohocken, Pa., a Corporation of Pennsylvania. Original application filed Jan. 18, 1928, Serial No. 247,696. Divided and this application filed Dec. 10, 1929. Serial No. 412,972. 2 Claims. (Cl. 257—137.)



1. The combination with a radiator structure forming separate passageways for a heating fluid and air; of conduits for heating fluid leading to and from said radiator structure; means arranged to forcibly circulate air through the air passageways, including a rotary fan and a motor operatively connected with said fan; means arranged to operate said motor by power from the heating fluid, including conduits leading to and from said fan motor and in multiple relation with said radiator conduits; and valve controlling means, respectively in said radiator and motor conduits arranged to variably determine the relative volumes of heating fluid respectively supplied to said radiator and fan motor; whereby all of the heating fluid utilized in operating said fan motor is returned into the radiator system to be reheated.

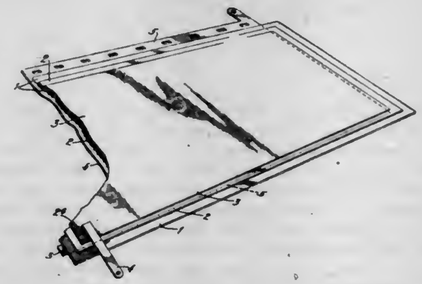
1,826,951. RACK FOR DISHWASHERS. JOHN HENRY LEGGE PATTERSON, Toronto, Ontario, Canada. Filed Apr. 4, 1929. Serial No. 352,546. 13 Claims. (Cl. 141—9.)

1. A rack for a dish washer comprising a supporting structure, and a plurality of individual dish holders oscillatably suspended from the supporting structure, each dish holder having a receptacle for containing a dish and a pressure member extending towards an adjacent dish



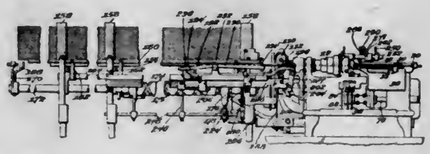
holder for engaging the dish in said adjacent holder and preventing the movement thereof in a direction lengthwise of the rack independently of the holder.

1,826,952. ACOUSTIC CONDENSER DIAPHRAGM. EARL F. POTTER, Waukegan, Ill., assignor to Ephraim Banning, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,315. 10 Claims. (Cl. 179—111.)



1. An acoustic condenser diaphragm consisting of a flexible impregnated fabric insulating sheet coated with wax and a metallic surface fastened to said sheet by said wax.

1,826,953. SCREW AND SIMILAR MACHINE. CHARLES A. RICH, Providence, R. I., assignor to Brown and Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed Jan. 16, 1929. Serial No. 332,830. 23 Claims. (Cl. 29—65.)

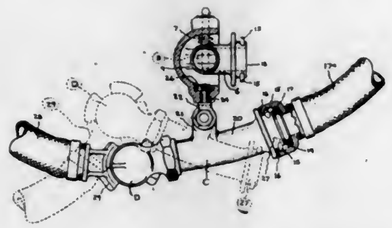


1. A machine for producing articles successively from bar stock having, in combination, a hollow spindle through which the bar stock is fed, a cutting-off tool, means for feeding a bar past the cutting-off tool the length of an article between successive cutting-off operations, a stop to engage a new piece of stock after being fed past the tool less than the length of an article to position the leading end of the bar for a preliminary trimming operation, and means acting automatically upon introducing a new bar into the machine to move said stop into operative position.

21. A machine for producing articles successively from bar stock having, in combination, a hollow rotary spindle through which the stock is fed, a stock feeding device comprising an idler lower roller fixedly mounted in the

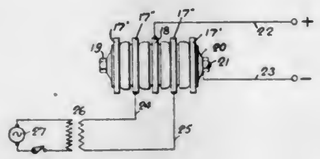
machine, a continuously driven upper roller, a bracket on which the said upper roller is mounted to permit movement of the roller towards and away from the lower roller, spring means for engaging with the bracket to force the upper roller yieldingly toward the lower roller to impart a feeding movement to the bar, a wedge actuated in timed relation to the operation of the machine to raise and release the upper roller, and roller bearings mounted respectively on a fixed portion of the machine and on the bracket to engage with the wedge.

1,826,954. AUTOMATIC TRAIN PIPE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Filed Oct. 27, 1927. Serial No. 229,235. 4 Claims. (Cl. 285—58.)



1. In combination with a coupling head support and a train pipe hose, an interchange device comprising a tubular member, means for pivotally connecting said member to said support, said means including a horizontal pivot intermediate the ends of said member, whereby up and down movement of the ends of said member is permitted, means at one end of said member for detachably connecting a train pipe hose thereto, the other end of said member having an ordinary hand hose coupling attached thereto.

1,826,955. ELECTRIC CURRENT RECTIFIER. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J., a Corporation of Delaware. Filed Mar. 30, 1927. Serial No. 179,478. 12 Claims. (Cl. 175—366.)



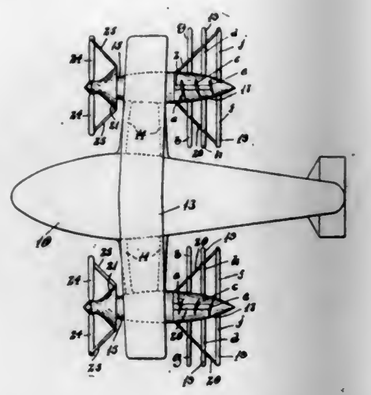
1. In dry surface-contact rectifying devices and the like, an asymmetric couple having an electronegative electrode element of metallic tellurium, and an electropositive electrode element of a relative stable highly chemically active electropositive metal formed to have a contact resistance adapted to supply the energy from resistance losses for the formation and maintenance of an inverse current-blocking film at the contacting surface, and means for maintaining said couple assembled under pressure sufficient for a relatively permanent rectifying effect.

9. A dry surface-contact rectifying device including an anode of tellurium and a cathode of a relatively highly electropositive metal.

11. A dry surface-contact rectifying device comprising an anode of tellurium and a cathode of a relatively highly electropositive metal and an oxide layer therebetween.

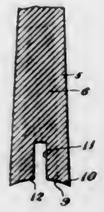
1,826,956. [WITHDRAWN].

1,826,957. PROPELLER. WALTER H. SARGENT, Malden, Mass. Filed Mar. 5, 1928. Serial No. 259,143. 1 Claim. (Cl. 170—169.)



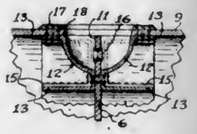
In a device of the kind described, the combination of a rotatably mounted hub, a plurality of radially extending propeller blades mounted thereon, and arranged in a helix about the axis thereof, and a plurality of combined propeller blades and struts for said propeller blades lying at an angle to the axis of rotation of said blades.

1,826,958. ICE SKATE BLADE. JOHN SAYER, Flagstaff, Ariz. Filed May 22, 1930. Serial No. 454,776. 2 Claims. (Cl. 208—172.)



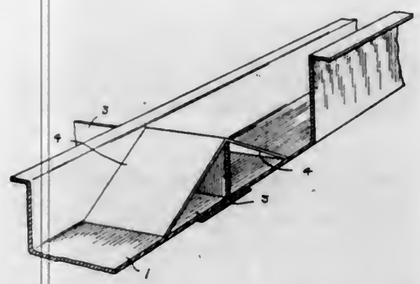
1. An ice skate blade having a concave lower face and provided with relatively hard outer walls and a relatively soft quick wearing core exposed at said face, said core being provided with a medial slot opening onto said concave lower face.

1,826,959. DEVICE FOR RAISING SUBMERGED VESSELS. EARL SEXTON, Hartford, Conn. Filed Jan. 16, 1928. Serial No. 247,139. 28 Claims. (Cl. 114—16.8.)



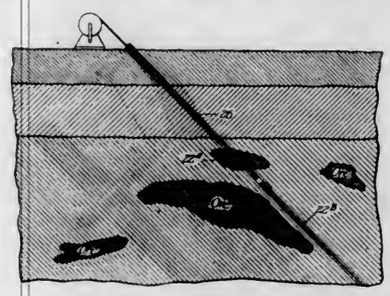
1. In combination, a vessel hull, and laterally accessible salvaging attachment means within the lines of said hull and built into a transverse frame structure thereof while maintaining the watertight integrity of said hull.

1,826,960. VEHICLE TRANSPORT CONSTRUCTION. ROY B. SIMNING, Detroit, Mich. Filed Oct. 2, 1929. Serial No. 396,009. 6 Claims. (Cl. 296—28.)



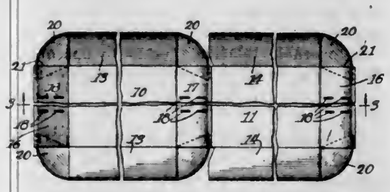
1. The combination with a vehicle body of the type described having channel shaped tracks disposed longitudinally thereof, of angular transverse girders forming a part of the body structure and extending through said tracks, completely severing the bottom of said tracks and supporting same from beneath at said severed point.

1,826,961. APPARATUS FOR EXPLORING FOR ORE. LOUIS B. SLICHTER, Madison, Wis. Filed Sept. 7, 1928. Serial No. 304,449. 3 Claims. (Cl. 175—182.)



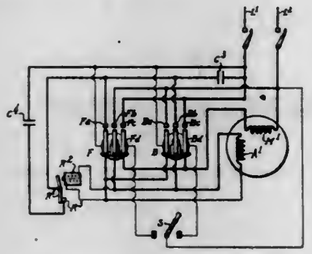
1. Apparatus for exploring the conductivity of the earth down a drill hole comprising an elongated member having four electrodes adapted to connect electrically with the earth surrounding said drill hole, means for applying current to the outermost of said electrodes, means for reversing said current at intervals, and means for measuring the potential between the intermediate electrodes of said four electrodes.

1,826,962. FOLDING BOX. ALEXANDER T. SPARE, Chicago, Ill. Filed Feb. 26, 1930. Serial No. 431,351. 4 Claims. (Cl. 229—33.)



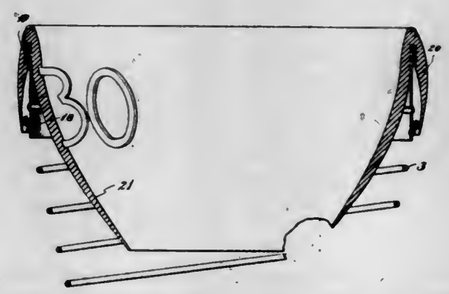
1. A folded box comprising a blank having defined therein by means of score lines, top, bottom, a connecting portion between said top and bottom forming one end, side walls, end walls formed of two sections and adapted to be doubled upon themselves and secured together to form sleeves, corner flaps extending from said side walls, and extending beyond the doubled over end walls, and beyond the width of the portion connecting the top and bottom, score lines dividing the corner flaps into two portions, and a separate piece of material doubled over upon itself and secured to the top and bottom connecting portion to form another sleeve, said corner flaps being adapted to be inserted into and held by said sleeves to form an interlocking closure between the side and end walls.

1,826,963. CONTROLLER FOR INDUCTION MOTORS. CARROLL STANSBURY, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,140. 6 Claims. (Cl. 172—279.)



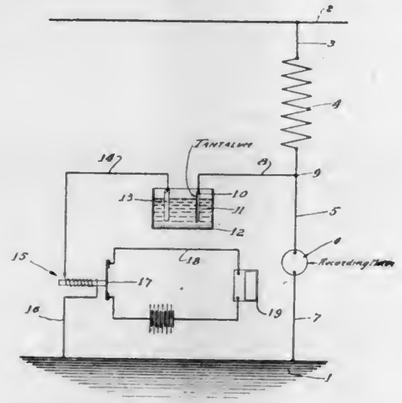
1. In a controller for an induction motor having two primary windings, in combination, a condenser permanently connected in series with one of said windings, a second condenser and a relay responsive to a voltage induced in said last mentioned winding, said relay being adapted to connect said second condenser in the circuit of said last mentioned winding in parallel with said first condenser, and alternatively remove it from said last mentioned circuit, and means to bring the motor to rest by plugging, said means comprising a pair of normally open electro-magnetic switches for controlling the connection of the motor to the source of supply and for reversing one of said windings with respect to the other winding.

1,826,964. SKEE-BALL APPARATUS. LAYMAN M. STERNBERGH, Ocean Grove, N. J. Filed May 31, 1929. Serial No. 367,452. 1 Claim. (Cl. 273—102.)



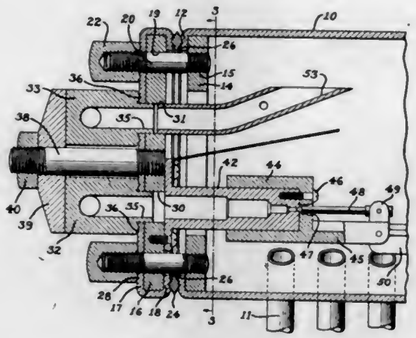
The combination with a skee-ball target, of a buffer ring of elastic material engaged over the upper edge of the target and having its inner portion extended downwardly forming an apron of conoidal form having an open bottom within the target, the target having a projection near its upper end and the buffer ring being formed internally with a recess conforming to said projection whereby to snugly enclose the same and positively abut the under side thereof.

1,826,965. ELECTRICAL SAFETY DEVICE. CLINTON E. STRYKER, Highland Park, Ill., assignor to Fansteel Products Company, North Chicago, Ill., a Corporation of New York. Filed Apr. 9, 1927. Serial No. 182,244. 1 Claim. (Cl. 175—294.)



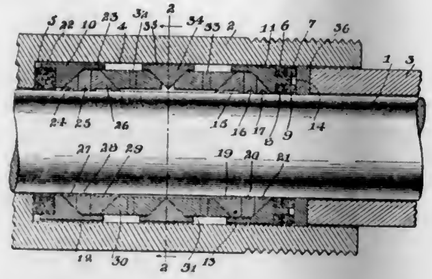
In combination, a sensitive electrical meter, an electrolytic cell having a filmed tantalum electrode immersed in sulphuric acid, the film on said tantalum electrode having an infinitely large resistance to current at safe operating potentials of said sensitive meter and having a substantially negligible resistance to current at greater than the same operating potentials of said sensitive meter, and electrical connections shunting said electrical cell across said sensitive meter for insuring the accuracy of said meter at the safe operating potentials thereof, whereby said sensitive meter is protected against greater than safe operating potentials.

1,826,966. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,748. 11 Claims. (Cl. 137—104.)



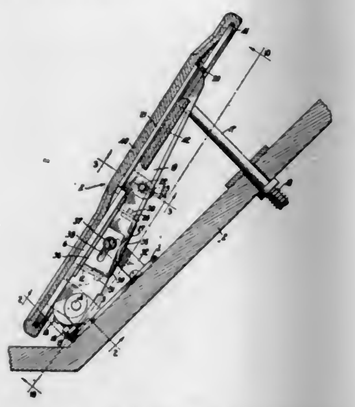
1. In an evaporator for refrigerating apparatus, a cylindrical container forming a reservoir for liquid refrigerant having a flange formed out of the body of the container and projecting substantially at right angles to the axis of the container, a ring within the container adjacent the flange, a closure for the container, tension means engaging the closure and ring to clamp the closure to the flange, and a gasket between said flange and said closure, said gasket including a bead and an inwardly extending web, said web being adapted to engage the tension means to space the bead substantially at the outer edge of said flange.

1,826,967. SELF-ADJUSTING METALLIC GLAND PACKING. CLAUD FRANKLIN THOMAS, Nashville, Tenn. Filed Dec. 8, 1926. Serial No. 153,359. 3 Claims. (Cl. 286—25.)



1. A floating metallic packing comprising in a packing gland, spaced oppositely disposed packing cups and an intermediate expansion ring, said cups and ring each of an external diameter less than the internal diameter of the gland, sector packing rings positioned within the packing cups, and oil lantern rings disposed between said packing rings and said expansion ring.

1,826,968. ACCELERATOR AND FOOT REST. GEORGE HEWLETT TOWNSEND and CORD H. BEHNKE, Flushing, N. Y. Filed July 19, 1929. Serial No. 379,382. 18 Claims. (Cl. 74—81.)

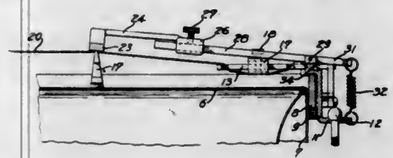


1. In combination, an accelerator rod extending upward through the floor board of a motor vehicle, and a pedal assembly for operating the same, comprising a base adapted for attachment to the floor board of the vehicle, a pedal pivoted on the base but substantially spaced from the base adjacent the pivot, an upstanding friction post carried by the base between the pivot and the accelerator rod and nearer to the pivot than to the accelerator rod, means carried by the pedal for cooperation with the friction post to lock the pedal frictionally against depression, and means normally movable with the pedal but operable relative thereto to operate the pedal carried friction means to locking position.

1,826,969. ATTACHMENT FOR STRINGED MUSICAL INSTRUMENTS. VELMA S. TRUETT and HARRY H. GEORGE, San Francisco, Calif., assignors, by direct and mesne assignments, to Trujo Banjo Co. Ltd., San Francisco, Calif., a Corporation. Filed Mar. 12, 1927. Serial No. 174,763. 5 Claims. (Cl. 84—273.)

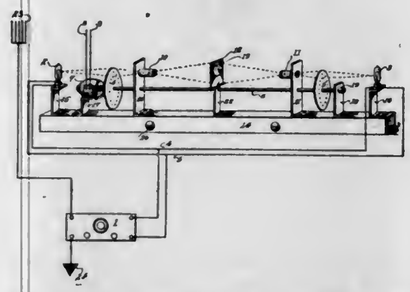
1. In a musical instrument comprising strings stretched from a tail-piece across a bridge, lugs on said tail-piece,

an arm pivotally mounted intermediate its ends on said lugs, a mute secured to the end of said arm adjacent said bridge, a spring interposed between the other end of the



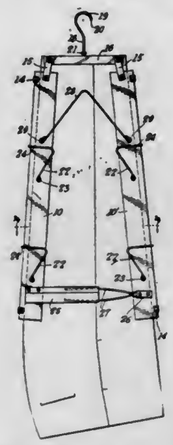
arm and the tail-piece to normally hold the mute clear of the bridge, and a latch mounted on the tail-piece for locking the mute in position upon the bridge.

1,826,970. TELEVISION AND TELEPHOTO DEVICE. JACK L. WALKER, Dallas, Tex. Filed Nov. 9, 1928. Serial No. 318,193. 7 Claims. (Cl. 178—6.)



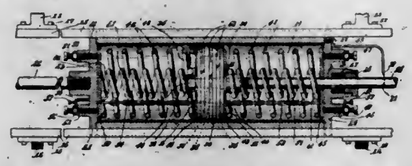
1. The method of illuminating a photographic plate or viewing screen which consists of using light from two separate light sources and projecting light from one light source upon one side and from the other light source upon the other side of said photographic plate or viewing screen and combining the illumination from two separate light sources at one point.

1,826,971. TROUSERS PRESSER AND STRETCHER. LAWRENCE J. WIDNESS, Brooklyn, N. Y. Filed Sept. 29, 1928. Serial No. 309,140. 3 Claims. (Cl. 223—19.)



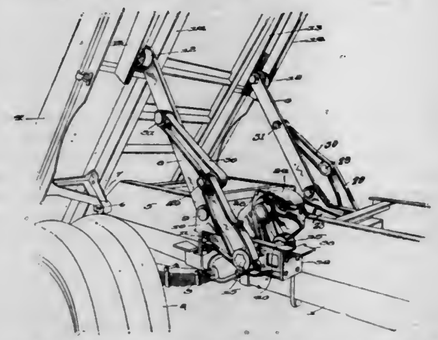
1. A trousers presser and stretcher comprising in combination with two hinged pairs of flat strips, clips pivoted to one member of each pair to embrace the strip member hinged thereto, a spring extending between the pairs to press them apart, a socket fixed to one of said pairs to extend transversely towards the other pair, and a spring element fixed to the other pair to engage within said socket.

1,826,972. SHOCK ABSORBER. LAWRENCE S. WILBUR, Evanston, Ill. Filed May 5, 1927. Serial No. 189,130. 23 Claims. (Cl. 74—48.)



1. A shock absorbing device for a locomotive reach rod; said rod having a front portion and a rear portion; a slidably mounted cylinder provided with two cylinder heads; one of said cylinder heads secured to one of said portions and movable therewith; a piston slidably mounted in said cylinder and secured to the other of said portions; resilient means disposed on each side of said piston between said piston and said cylinder heads; and means connected to said cylinder heads for confining the amplitude of movement of said resilient means.

1,826,973. HOISTING TRUCK. HUDSON T. WINNER, Trenton, N. J. Filed June 13, 1929. Serial No. 370,609. 1 Claim. (Cl. 298—19.)

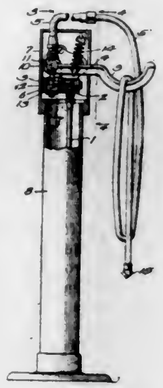


In a dump truck having its body pivoted at the rear of the vehicle frame, means for swinging the body to and from tilted relation comprising a shaft extending transversely of the frame, brackets secured to the side members of the frame and having bearings for said shaft, crank arms fixed to the ends of the shaft, levers pivoted to said brackets and having their free ends engaging the under side of the body, links connecting the crank arms with the respective levers intermediate the length of said levers, and means including reducing gearing for operating said shaft, said brackets having top surface portions to support the respective links and levers when the body is in lowered position.

1,826,974. PROCESS OF PRODUCING HYDROGEN. ROGER WILLIAMS, Wilmington, Del., assignor to Du Pont Ammonia Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed June 25, 1926, Serial No. 118,600. Divided and this application filed May 31, 1928. Serial No. 282,045. 10 Claims. (Cl. 23—212.)

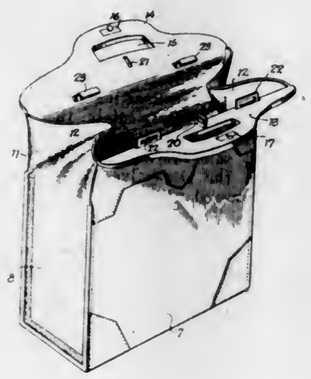
1. The process of manufacturing hydrogen which comprises passing a gaseous mixture of steam and a hydrocarbon over a heated catalytic body containing nickel and an oxide of one of the elements selected from the group consisting of glucinum, calcium, zinc and cadmium.

1,826,975. APPARATUS FOR SUPPLYING AIR UNDER PRESSURE. CHARLES G. WILSON, Bryan, Ohio, assignor to Service Station Equipment Company, Bryan, Ohio, a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,792. 1 Claim. (Cl. 299—80.)



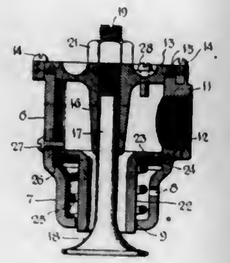
The combination with a source of air under pressure, of discharge piping shiftable into usable and restored positions, a movable support for the discharge piping and placed in one position by the piping when carried thereon and supplied with means for moving it to an alternative position when relieved of the weight of said piping, a valve casing, a packed shaft extending therefrom, said movable support being secured to said shaft outside of said valve casing for movement with the shaft, an arm extending from said shaft inside said valve casing, an air receiving cavity within said valve casing and around said arm and communicating with said discharge piping, an air supply cavity, a wall separating said air supply cavity from said air receiving cavity, a valve stem through said wall and adapted to be engaged by said arm and a valve member on said stem in said air supply cavity for engaging said wall for controlling the passage of air therethrough from said air supply cavity to said air receiving cavity.

1,826,976. TRAVELING BAG. DAVID EDWARD WRIGHT, Weyers Cave, Va. Filed Oct. 7, 1930. Serial No. 487,060. 9 Claims. (Cl. 150—1.7.)



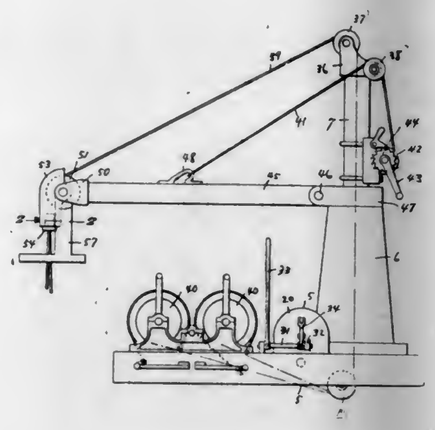
1. A traveling hand-bag comprising a body having side portions extending above its mouth with the adjacent surfaces thereof lying in close contact for the full length of the bag, said side portions formed with registering openings providing a handle, and devices for holding said handle portions in the aforesaid close contact substantially as set forth.

1,826,977. SPRAYING DEVICE. IRVING C. BAKER, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed June 10, 1930. Serial No. 460,186. 5 Claims. (Cl. 299—59.)



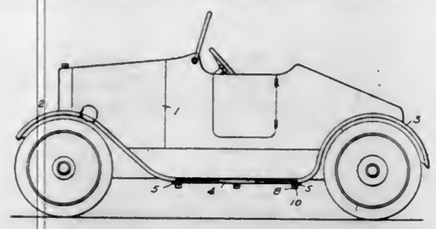
1. In a spraying device, the combination of a body having a connection for delivering liquid to the body; a spray head fixedly mounted on said body; an abutment associated with said body and movable in a forward direction toward said spray head by fluid pressure in the body; means for limiting such motion; yielding means opposing said motion; and a nozzle carried by said abutment leading from the space within the body and shiftable by forward movement of the abutment in coactive relation with said spray head.

1,826,978. CABLE GUARD. HOWARD W. BAUM, Kearny, N. J. Filed Feb. 18, 1928. Serial No. 253,985. 1 Claim. (Cl. 254—197.)



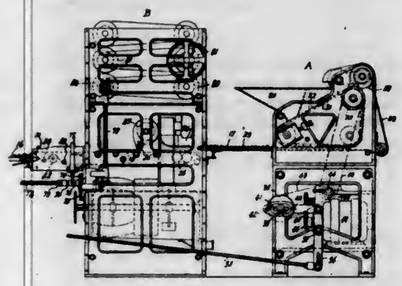
A cable guard of the character described comprising a bracket, a sheave mounted within the bracket, a vertically disposed hood pivotally secured to the bracket within which the sheave is mounted, said hood partly surrounding the sheave and being provided with a tubular depending portion, a bushing for disposition within the lower portion of the hood, and means for securing the said bushing in position.

1,826,979. AUTOMOBILE SIDE BUFFER. EDWARD A. BANSCHBACH, Madison, Wis. Substitute for abandoned application Serial No. 523,370, filed Dec. 19, 1921. This application filed Dec. 17, 1928. Serial No. 326,710. Renewed Feb. 17, 1930. 11 Claims. (Cl. 293—57.)



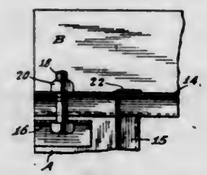
1. The combination with a vehicle, of a side buffer therefor slidably mounted at its ends at the side of the vehicle frame and resilient means for yielding inward upon impact.

1,826,980. CONFECTION MAKING MACHINE. ALONZO LINTON BAUSMAN, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 19, 1930. Serial No. 437,083. 10 Claims. (Cl. 107—1.)



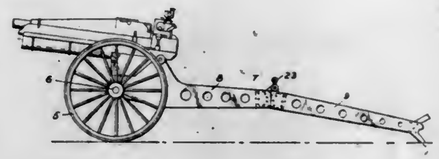
1. In a confection making machine, coating means, a conveyer for carrying in longitudinally spaced relation the pieces coated by said means, a second conveyer for successively receiving the coated pieces from the first conveyer while their coatings are still plastic, and means for driving said conveyers and causing the second conveyer to move at a sufficiently slower speed than that of the first conveyer to cause the coated pieces successively delivered to the second conveyer to engage one with another and adhere by the merging of their plastic coatings.

1,826,981. CORNER CONNECTION FOR METAL FRAMES. ISAAC A. BAUM, Chicago, Ill. Filed Aug. 5, 1929. Serial No. 383,523. 7 Claims. (Cl. 189—46.)



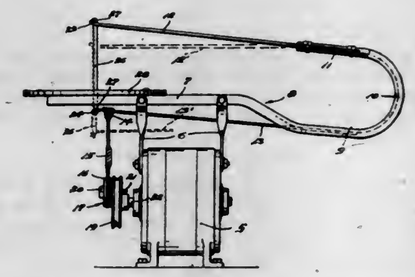
7. In combination, a frame consisting of side frames and a head frame, the head frame overlying the ends of the side frame a portion of the head frame having an opening, a tongue formed as a continuation of a part of the side frame, said tongue being adapted to enter said opening and be bent over, a transverse bolt-supporting member fixed to the side frame, and a bolt adapted to engage said supporting member and the overlying portion of the head frame.

1,826,982. COUPLING FOR SEPARABLE MEMBERS. ORIE L. BEARDSLEY, Gary, Ind. Filed Mar. 29, 1928. Serial No. 265,688. 8 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



8. A gun trail comprising rigidly spaced rail members divided intermediate their length to form two sections, a knuckle joint between the adjoining ends of each of the rail members of the sections and a double toggle mechanism carried by one of the trail sections for inserting and retracting the pivot pins of the knuckle joint.

1,826,983. JIG-SAW. ROBERT H. BEEBE, Seattle, Wash. Filed July 12, 1930. Serial No. 467,519. 16 Claims. (Cl. 143—73.)

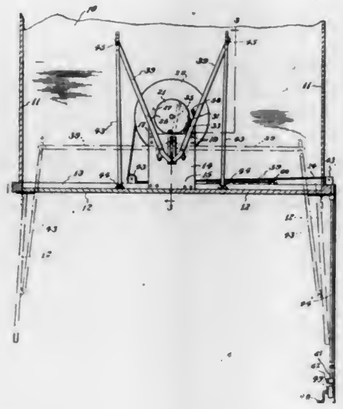


1. A jig-saw comprising a rigid motor, a standard mounted on the frame of said motor and having a horizontal arm extending over said motor, said standard being conformed to provide an offset portion below and a terminal portion above the plane of said arm, said offset and terminal being arranged parallel, one with the other, and at an inclination to the horizontal, said offset and terminal portion having leaf springs secured thereto for disposing the same in normal upwardly inclined dispositions, hooks provided in end extremities of said springs, a work supporting table mounted on said horizontal arm, said table having an aperture therein disposed in the vertical plane of said hooks, a radial slot communicatively disposed to said aperture, means for detachably engaging a saw blade inserted through said slot over said hooks, and means cooperative with spring retraction for reciprocating said saw blade to provide a working stroke from the aforesaid normal spring angularity to a horizontal disposition of the springs, said last named means comprising a pulley rigid with the arbor of the motor, a crank arm eccentrically disposed on said pulley, and a connecting rod interconnecting said crank arm to the lowermost spring.

1,826,984. GARAGE DOOR OPERATING MECHANISM. HIRAM N. BOVEE, International Falls, Minn., assignor, by direct and mesne assignments, of one-fourth to Patrick Olson and one-half to Joseph B. Rooney, International Falls, Minn. Filed Feb. 14, 1930. Serial No. 428,481. 7 Claims. (Cl. 268—62.)

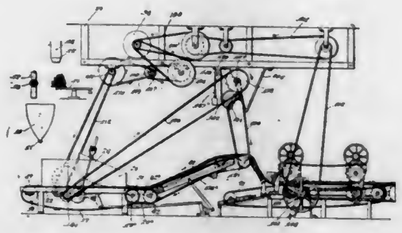
5. In a door operating mechanism, the combination of a support, a shaft thereon, a rope pulley loose on the shaft, a ratchet disk fixed on the shaft and having two pairs of oppositely disposed ratchet teeth on the edge, a pawl

carried by the support and adapted to engage one of the teeth of one pair of said ratchet teeth for holding said disk against retrograde movement, a pawl carried by said pulley and adapted to engage the other tooth of said pair of ratchet teeth for locking the disk and pulley for rotation



as a unit through one-half revolution, a spring on the shaft for returning the rope pulley to inoperative position after each actuation, a pitman carried by the disk, and means for operatively connecting the pitman to a swinging door.

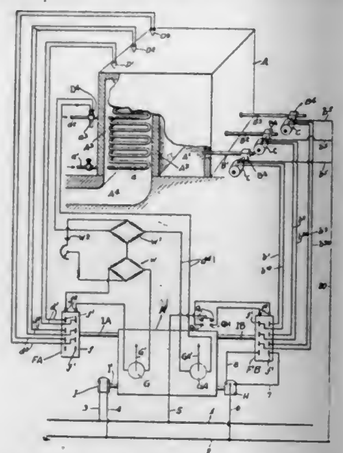
1,826,985. METHOD OF AND MACHINE FOR MANUFACTURING EXPANSION JOINTS. ARTHUR E. BROWN, Elgin, Ill., assignor to W. R. Meadows, Incorporated, Elgin, Ill., a Corporation of Illinois. Filed July 7, 1927. Serial No. 203,958. 15 Claims. (Cl. 18—4.)



7. In a machine for transforming a plastic adherent mass into a sheet of plastic material, a kneading device wherein said mass is kneaded, continuously operating sheet-forming rolls, and means for intermittently defining portions of said kneaded mass and feeding them to said rolls to produce a continuous sheet of material.

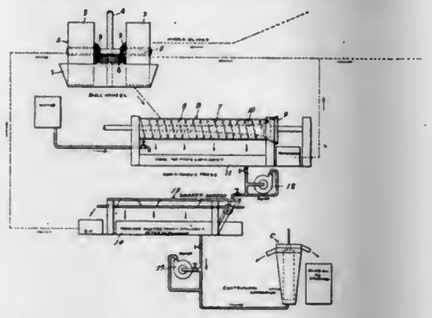
1,826,986. CONTROL METHOD AND APPARATUS. RICHARD P. BROWN, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 11, 1927. Serial No. 198,298. 52 Claims. (Cl. 236—70.)

1. In the operation of an oil heater for continuously heating oil to a refining temperature, the method which consists in regulating the relation of the rate of combustion in the heater to the rate at which oil to be heated is supplied to the heater to normally maintain an approximately constant temperature in said combustion chamber, and varying the temperature so maintained when



necessary on a departure of the temperature to which the oil is heated from a predetermined value to thereby restore the last mentioned temperature to said value.

1,826,987. METHOD OF PRODUCING OLIVE OIL. HOWARD PIERSON BURT and GRINNELL BURT, Palermo, and RALPH E. SANBORN, San Francisco, Calif., assignors to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed Sept. 13, 1926. Serial No. 135,110. 8 Claims. (Cl. 87—6.)



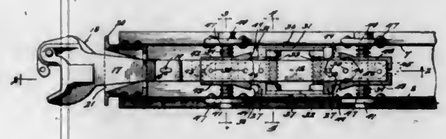
1. A method of producing olive oil which comprises crushing olives, applying pressure to the crushed material to force a mixture of oil-bearing liquid and finely divided solid matter through restricted orifices and to separate therefrom the non-oil-bearing constituents of the fruit, diluting the mixture forced through the orifices, and centrifuging the diluted mixture to separate the oil therefrom.

1,826,988. SECURING DEVICE FOR CARPETS. JAMES T. CAMPBELL, Jr., Franklin, Pa. Filed June 4, 1929. Serial No. 368,360. 1 Claim. (Cl. 16—4.)



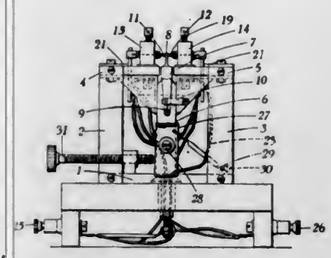
A securing device for carpets comprising two members, namely, a socket member provided with an internal screw thread in the bore thereof, and a pin member the pin of which is provided with an external screw thread for cooperation with said internal thread, either one of said members being adapted to be rigidly carried by the structure the surface of which is to be covered by the carpet to be secured, the carpet being secured to said carried member by the screwed assembly therewith and the consequent cooperative action of the other member.

1,826,989. DRAFT APPLIANCE AND THE LIKE. CHARLES E. CARPENTER, Chicago, Ill. Filed Sept. 27, 1928. Serial No. 308,624. 6 Claims. (Cl. 213—22.)



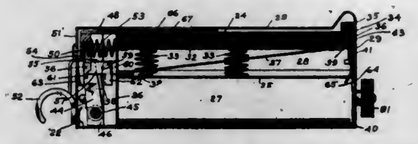
2. The combination with the underframing of a car including the central longitudinally extending parallel frame bars, of a bifurcated yoke movably mounted between said frame bars for backward and forward movement, a coupler pivotally connected to the front end of said yoke, front and rear end blocks rigidly secured within said yoke, and separated from each other a distance to establish a box space between them, friction devices within said box space and travelling with the yoke, means for frictionally engaging the friction devices with the parallel frame bars aforesaid, said end blocks being provided with endwise projecting central wedge lugs having wedge faces on the inner and outer ends of said lugs, there being longitudinally extending slots in the wedge lugs, transverse pins fixedly located with respect to the frame bars and extending through said slots, wedge blocks slidably mounted on said pins and having wedge faces cooperating with the wedge faces on the wedge lugs, and springs located between the wedge blocks and the frame bars and serving to force the wedge blocks towards each other, substantially as described.

1,826,990. ELECTROMAGNETIC DEVICE. RUPERT EVAN HOWARD CARPENTER, Purley, England. Filed Apr. 4, 1929, Serial No. 352,494, and in Great Britain Apr. 25, 1928. 14 Claims. (Cl. 175—339.)



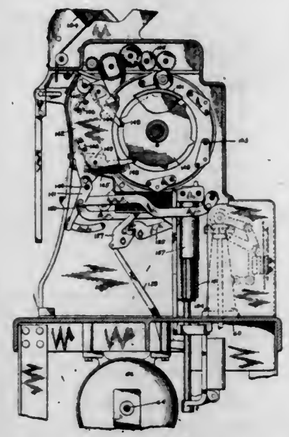
1. An electromagnetic device of the class set forth comprising a magnetic structure consisting in the combination of a magnetic circuit of low reluctance containing the effective air gap of the device, a movably-mounted armature included in said magnetic circuit, a coil linked with said magnetic circuit to carry fluctuating electric currents and a magnetic member co-operating with a part of said magnetic circuit to form a circuit for a substantially steady polarizing flux with two paths in parallel and of substantially higher reluctance than said magnetic circuit.

1,826,991. RECORD CARD CONTAINER. FRED M. CARROLL, Yonkers, N. Y., and JAMES SHIRLEY EATON, Ridgefield, N. J., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1928. Serial No. 318,881. 5 Claims. (Cl. 282—4.)



4. In a record card carrying case having a base, a record card supply compartment and an aperture, a card picker mechanism positioned exterior of the compartment but within the card carrying case, a picker plate of the picker mechanism normally contacting with the edge of a record to eject a record by an initial movement of the picker mechanism, said picker mechanism being mounted on the base plate of the carrying case and manually operable through its aperture.

1,826,992. CARD HANDLING DEVICE FOR TABULATING MACHINES. FRED M. CARROLL, Yonkers, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Original application filed Dec. 19, 1922, Serial No. 607,847, and in Canada Jan. 11, 1923. Divided and this application filed Feb. 12, 1929. Serial No. 339,483. 13 Claims. (Cl. 271—44.)

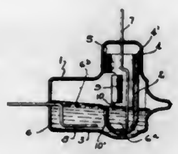


1. In a card handling machine, in combination, a card feeding drum, a plurality of controlling contact devices, means carried by said drum for feeling for and determining the absence or presence of cards thereon, and means operated by the aforesaid means for actuating the contact devices in one direction each time a card is properly fed by the drum and for actuating said contact devices in a different direction upon the absence of cards properly positioned on the drum.

1,826,993. MERCURY SWITCH. PAUL K. CRAMBLET, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,570. 5 Claims. (Cl. 200—152.)

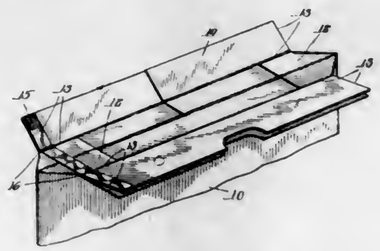
1. A mercury switch comprising an outer envelope having a laterally displaced supporting portion, a protective element having one end yieldably supported thereon, said protective element being of tubular form and having its

lower end closed and providing a well and having an intermediate portion partially separated from the main portion and displaced inwardly to provide an opening between the well and the interior of the envelope and to provide a shield, a body of mercury having a portion in



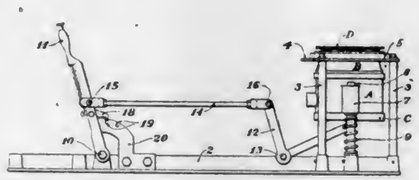
the well and having a shiftable portion making and breaking contact with the portion in the well, an electrode sealed through the outer envelope and projecting into the well behind the shield and an electrode sealed through the outer envelope and immersed in the shiftable portion of the mercury.

1,826,994. REENFORCED VALVE BAG. ANDREW E. CURRIER, Leominster, Mass., assignor, by mesne assignments, to Cornell Bag Corporation, a Corporation of Delaware. Filed May 20, 1929. Serial No. 364,419. 3 Claims. (Cl. 150—9.)



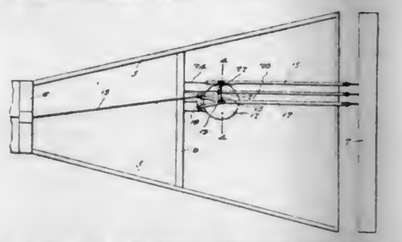
1. A valve bag of the character described, comprising a tube provided with longitudinal slits at its end and at the location of the valve opening, and having an end flap between said slits and side flaps on each side of said slits, and a reinforcing strip secured across the top of said end flap and on the inside of said side flaps along the edges of said slits, said side flaps being folded inwardly and secured in overlapped relationship.

1,826,995. DISAPPEARING ROTARY HYDROCARBON FUEL BURNER. TRAYHARN DAVIS, Berkeley, Calif. Filed Mar. 14, 1928. Serial No. 261,597. 5 Claims. (Cl. 158—77.)



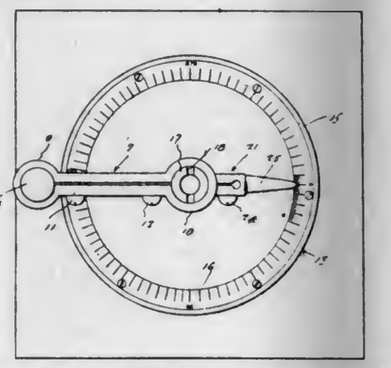
1. In a hydrocarbon fuel burner of the rotary type, a burner susceptible of fixed adjustments up and down, a pressure member for holding said burner in operative position, guides for said burner, and means for changing said burner to an inoperative position and for retaining the same in a fixed inoperative position against the action of said pressure member for cooling purposes.

1,826,996. LACE MACHINE. LOUIS H. DEBAENE, Philadelphia, Pa. Filed Oct. 27, 1927. Serial No. 229,078. 2 Claims. (Cl. 96—20.)



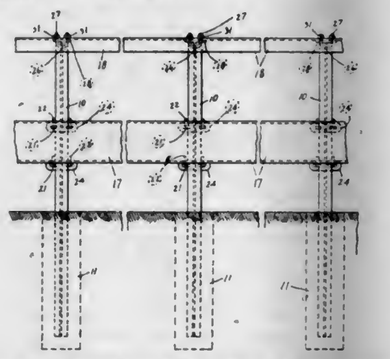
1. A control attachment interposed between a lace machine and its operating jacquard comprising a flexible bar, operating means therefor, means releasably retaining said bar and means attached to the jacquard for periodically releasing said bar retaining means.

1,826,997. MOTOR TIMING AND CORRECTING DEVICE. FRED E. DIETRICH, Salamanca, N. Y. Filed Jan. 26, 1931. Serial No. 511,363. 4 Claims. (Cl. 116—124.)



1. In a timer testing and correcting device of the class described, a relatively stationary dial graduated to embody 360 degrees, a rotary pointer cooperable with the graduations, means for connecting the relatively rotatable parts of the mechanism of the timer with said pointer, and means for maintaining the timer shell and its contact points relatively stationary with respect to said pointer.

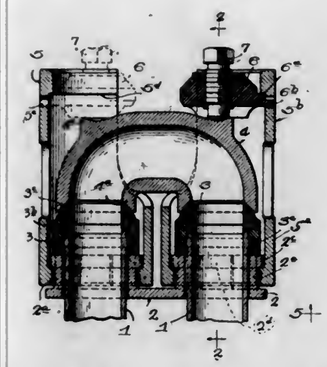
1,826,998. HIGHWAY GUARD. JAMES M. DODDRIDGE, Milton, Ind. Filed Nov. 29, 1929. Serial No. 410,298. 8 Claims. (Cl. 256—13.1.)



1. In a protective fence for highways the combination of an upright supporting post having a hole therethrough

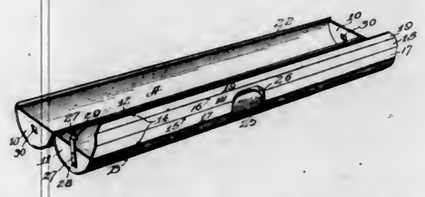
adjacent its upper end, a plate for the top of said post, an angle iron guard rail having one leg resting upon said plate and a bolt passing through the said hole in said post for fastening said guard rail and plate to said post.

1,826,999. RETURN HEADER. PAUL Y. DUFFEE, Springfield, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed Jan. 27, 1930. Serial No. 423,806. 5 Claims. (Cl. 285—20.)



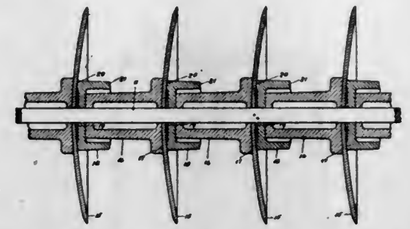
3. A return header for connecting the ends of parallel tubes comprising a base member consisting of connected collars adapted to be slipped over the ends of said tubes, end fittings permanently fixed to the ends of said tubes, sleeves having demountable connection with said collars and extending axially beyond said tube end fittings, a U-fitting adapted to connect said tubes with openings seating upon said end fittings, and locking fixtures removably supported at the outer ends of said sleeves and adapted to exert pressure on said U-fitting axially of said tubes.

1,827,000. CONTAINER FOR PAPER IN ROLLS. JOHN V. DUFFIN, Chicago, Ill. Filed Apr. 8, 1929. Serial No. 353,319. 3 Claims. (Cl. 242—555.)



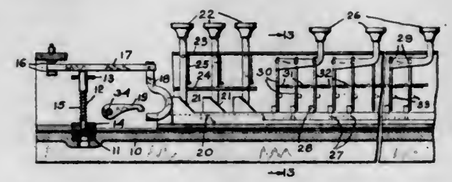
1. A portable dispensing container of the character described for use in the hand and for holding a roll of paper, comprising a hollow body of thin fibrous sheet material such as cardboard, having end walls formed from the material and integral therewith, being substantially circular in cross view and substantially cylindrical, and comprising two main body parts, one thereof being joined to the other thereof by an integral hinge-like connection whereby one body part may be swung in a direction away from the other thereof to provide for inserting a roll of paper loosely in the hollow interior, one body part having an extension adapted to underlie portions of the other body part in close relation thereto when the device is in closed position, the arrangement providing that a section of paper from a roll thereof within the device may extend between such extension and the adjacent main body portions, there being an edge of the outermost main body portion where the paper emerges from the device adapted for tearing away that part of the paper withdrawn from the device, there being means for holding the body portions in normally closed position.

1,827,001. PLOW. ERNST E. ENGLUND, Bellevue, Ohio, assignor to The Ohio Cultivator Company, Bellevue, Ohio, a Corporation of Ohio. Filed May 22, 1930. Serial No. 454,564. 16 Claims. (Cl. 97—220.)



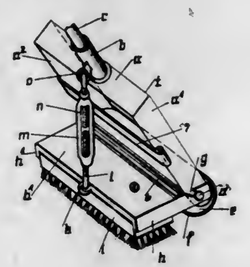
1. In a disc plow, means for supporting a plurality of discs, and means for maintaining the discs in spaced relation, said last means consisting of a barrel member and a reversible cup member.

1,827,002. PERFORATING DEVICE. BERNHARD KARL FRITZ EWALD, Villingen, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Jan. 6, 1928, Serial No. 244,797, and in Germany June 30, 1927. 5 Claims. (Cl. 164—112.)



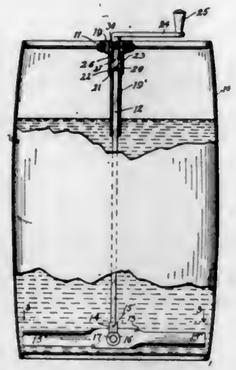
1. A perforating device including a plurality of punches, slidable bars for effecting actuation of said punches, keys for operating said bars, and means provided on said bars and adjustable thereon into cooperation with any one of the keys for adapting said bars for actuation singly or in different combinations upon the operation of any one of said keys.

1,827,003. FLOOR AND THE LIKE POLISHING APPLIANCE. JOSEPH GAILHOFER, Mannheim, Germany, assignor, by mesne assignments, to Self-Spread Waxer Corporation, New York, N. Y. Filed Nov. 12, 1928, Serial No. 318,922, and in Germany May 11, 1928. 7 Claims. (Cl. 91—39.)



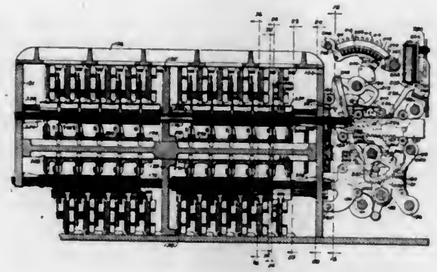
1. A machine of the class described, having a weighted rubbing element, a roller mounted for rotation and arranged near one side of said rubbing element, means to supply polishing material to said roller a handle whereby said machine may be manipulated, said weighted rubbing element when bearing on a floor operating by its superior weight and in coaction with the handle to hold said roller in elevated position above the floor.

1,827,004. AGITATOR. SAMUEL H. GIBSON, Lakewood, Ohio, assignor to The Fanner Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 15, 1929. Serial No. 386,198. 1 Claim. (Cl. 259—135.)



In an agitator of the type to be inserted through a container opening, the combination of a shaft, a paddle having a central portion with blades extending laterally therefrom in opposite directions, a single means for maintaining said shaft in alignment with the axis of said container comprising an elongated sleeve extending into the container around said shaft and having one end thereof secured in said opening, and means connecting said shaft and said paddle whereby the latter is movable from a position substantially parallel to said shaft to a position at substantially right angles to said shaft, said connecting means comprising a member having a socket portion adapted to receive the lower end of said shaft and an integral flattened portion to which the central portion of said paddle is pivoted.

1,827,005. AUDITING MACHINE. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 19, 1924. Serial No. 700,305. 23 Claims. (Cl. 235—58.)

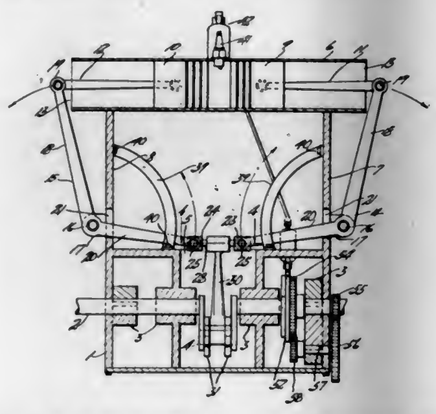


4. In a machine of the class described, the combination of a plurality of contact banks each having a single set of contacts and a single line contact, a plurality of differentials each carrying a single movable contact adapted to connect the bank contacts with the line contact, a single mechanical switch for selecting one of the contact banks, and a single mechanical switch for controlling the differential.

11. In a machine of the class described, the combination of groups of totalizers, electro-magnetic controlled means for selecting any totalizer of any group, and two independent groups of circuits for energizing the electro-magnetic controlled selecting means.

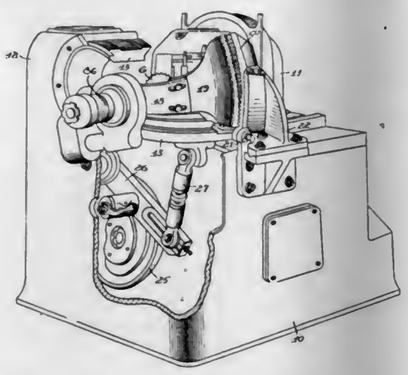
21. The combination of a switch normally closed, a bell crank, a switch controlling arm pivotally mounted on the bell crank, a pitman for rocking the bell crank and the arm about a common pivot, and a projection on said arm adapted to engage the top of a stack of cards for rocking said arm to open said switch.

1,827,006. INTERNAL COMBUSTION ENGINE. JOHN L. HENDERSON, Boone Grove, Ind. Filed Oct. 1, 1930. Serial No. 485,690. 5 Claims. (Cl. 74—14.)



1. In a device of the kind described, a cylinder having open ends, a crank shaft journaled parallel with the cylinder, a pair of opposed pistons in the cylinder, piston rods extended from the pistons out through the open ends of the cylinder, bell crank levers connected at one end to the said piston rods, bearing blocks pivoted in the other ends of the bell crank levers, a slide rod slidably mounted through the said bearing blocks and a connecting rod connecting the said slide rod and crankshaft.

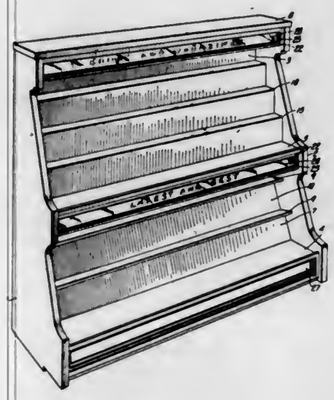
1,827,007. INDEXING MECHANISM. MAXWELL H. HILL, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Dec. 4, 1929. Serial No. 411,566. 19 Claims. (Cl. 90—9.)



1. In a machine for producing gears, tool mechanism, a work support, a sleeve oscillatably mounted on the work support, a work spindle journaled in said sleeve, means for oscillating said sleeve, gearing connecting the sleeve with the work spindle, means for locking said gearing against rotation during cutting, and means whereby the oscillatory motion of the sleeve operates to rotate said gearing periodically to index the work spindle.

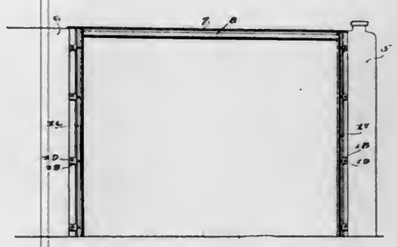
19. In a machine for producing gears, a tool mechanism, a work support, a pair of members rotatably mounted on the work support, one of said members being arranged to carry a gear blank, means for oscillating one of said members, a stationary gear, gearing carried by the oscillating member meshing with said stationary gear and rotated thereby as the oscillatory member oscillates, locking means for securing said members to rotate together during cutting, and means for periodically releasing said locking means and connecting said gearing to the other members to produce relative movement between said members to index the work carrying member.

1,827,008. DISPLAY RACK. JOHN F. HUCKEL, Kansas City, Mo. Filed Nov. 15, 1929. Serial No. 407,514. 4 Claims. (Cl. 211—134.)



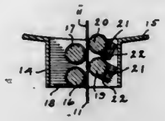
1. In a display cabinet, a housing including a bottom member having spaced seats, stop means in the cabinet, and a rack including supporting backs in a common inclined plane but in offset relation to each other, and lateral supporting shelves connecting said backs, said rack being adapted for selective location in said seats and for leaning support on said stop means.

1,827,009. WATER DEFLECTOR. ALOIS JOSEPH JANALIK, New York, N. Y. Filed July 30, 1929. Serial No. 382,244. 3 Claims. (Cl. 180—69.01.)



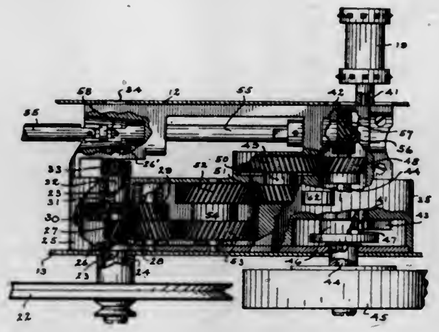
1. An attachment for automobiles comprising a trough disposed beneath the hood of the automobile and having brackets therein and a hanger for the trough composed of a pair of complementary clamping members pivotally attached to said brackets and pivotally attached to each other intermediate their ends for cooperatively engaging the pintle rod of the hood.

1,827,010. FILM FLAME STOP. LLWRENCE D. KOHLMEYER, Indianapolis, Ind. Filed Aug. 29, 1929. Serial No. 389,271. 2 Claims. (Cl. 88—17.)



1. A frame having a vertical passageway therethrough, a pair of rollers carried on fixed axes in said passageway, a second pair of rollers, a pair of frames each separating and rockably secured to said frame in said passageway and rotatably carrying said second rollers, said pair of frames being mounted in said first frame to permit said second rollers to swing downwardly by gravity toward and be stopped tangentially against said first rollers.

1,827,011. POWER TRANSMISSION AND FRAMING MECHANISM FOR MOTION PICTURE MACHINES. LAWRENCE D. KOHLMEYER, Indianapolis, Ind. Filed Aug. 29, 1929. Serial No. 389,272. 6 Claims. (Cl. 88—18.)

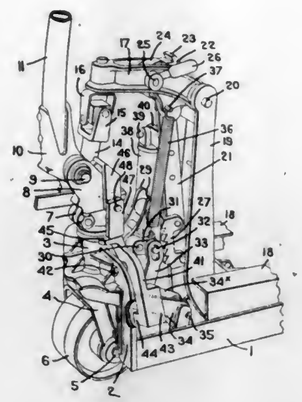


1. In a picture projecting machine, a main frame, a gear frame rockably supported by said main frame, an intermittently rotated film-feed spool supported by the gear frame, constantly rotated film-feed spools supported by the main frame at appreciable distances from the center of oscillation of said gear frame, a shutter supported by said main frame to rotate in a fixed plane, and a shutter drive from said gear frame, a driving shaft in said gear frame on its axis of oscillation, a train of gears carried by said gear frame, driven by said driving shaft, and means between said gears and said intermittently rotated spool for causing intermittent rotation thereof upon rotation of said driving shaft, said shutter drive being operated by said gears, and gears between said driving shaft and said constantly rotated spools.

1,827,012. ELEVATING TRUCK WITH SAFETY LOCK. DANIEL E. HENNESSY, Watertown, Mass., assignor to Lewis-Shepard Company, Watertown, Mass., a Corporation of Massachusetts. Filed July 23, 1929. Serial No. 380,294. 8 Claims. (Cl. 254—2.)

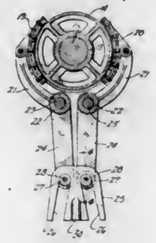
1. An elevating truck comprising load supporting means, means for lifting said load supporting means including a lifting lever mounted to swing vertically, releasable means for locking said load supporting means in raised position, and means normally engaging said locking

means and acting to prevent release of said locking means while said lifting lever is so co-ordinated with the lifting



means that the descent of the load supporting means will cause the lifting lever to swing vertically.

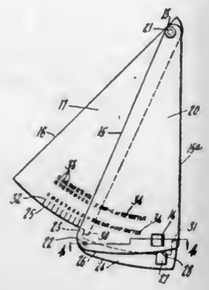
1,827,013. TRANSMISSION MECHANISM. ARTHUR G. HENRICKS, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 31, 1927. Serial No. 164,696. 7 Claims. (Cl. 188—75.)



3. Means for retarding the rotation of a clutch band control drum comprising a pair of relatively fixed complementary shoes arranged to engage said drum to oppose rotation thereof, an actuating member supported for reciprocatory movement and provided with a pair of slots converging toward the line of movement thereof, means fitting loosely in said slots and operatively connected to said shoes whereby movement of said member in opposite directions causes simultaneous movement of said shoes into and out of gripping engagement with said drum, and operating means for imparting positive movement to said member in both directions.

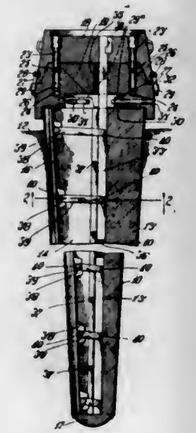
1,827,014. BEVEL PROTRACTOR FOR RAFTERS. LESLIE D. JANNELL, Sherborn, Mass. Filed Apr. 27, 1928. Serial No. 273,230. 5 Claims. (Cl. 33—93.)

4. A bevel protractor for rafters, comprising a comparatively thin holder having a straight edge and internally recessed inwardly from said edge to receive and enclose a protractor arm, fixed stops on said holder arranged to bear on a side face of a rafter, a swingable protractor arm having a straight edge swingably secured to said holder and movable into and out of the recess of said holder, there being graduations on the protractor arm denoting the rise of the rafter to each foot of run, said graduations being so arranged that when any one of them is brought into registry with the straight edge of the holder,



the straight edge of the protractor arm will be in proper relation to the stops to give the proper angle for the side-cuts of the rafters.

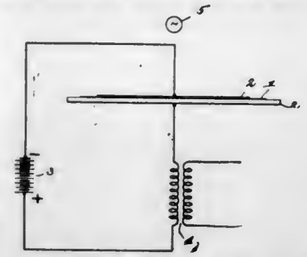
1,827,015. EXPANDING PILE CORE. FORREST L. JENKINS, Wheaton, Ill., assignor to Western Foundation Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 3, 1928. Serial No. 317,055. 3 Claims. (Cl. 61—79.)



1. A collapsible core for driving forms for concrete piles comprising two pairs of longitudinally divided sections, the sections of one pair being of substantially equal size and the sections of the other pair being of unequal sizes and arranged opposite to each other between the sections of the first described pair, and means for drawing the sections of the last described pair together to bring about the collapsing of the core.

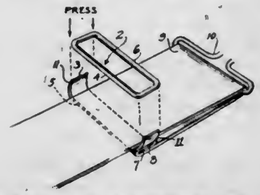
1,827,016. PHOTOELECTRIC CELL. ABRAHAM JOFFÉ, Leningrad, Russia, assignor to Industrial Research Company, Cambridge, Mass., a Corporation of Massachusetts. Filed July 2, 1927. Serial No. 203,023. 9 Claims. (Cl. 201—63.)

6. In an electrical device, two electrodes spaced by an insulating medium whose thickness is not greater than the order of several times that of the mean free path of ions in that medium, means associated with said insulating medium to liberate electrons by photoelectric action, and a source of potential impressed across said electrodes,



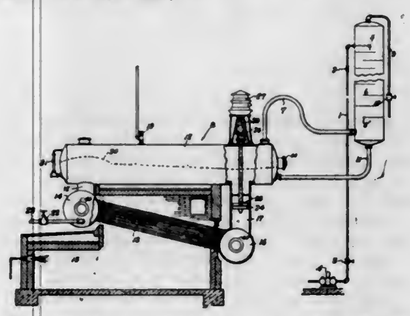
said potential being sufficiently great to cause said electrons to have ionizing collisions with atoms of said medium.

1,827,017. MANUFACTURE OF SUSPENDERS. LYNDON W. JOYCE, Greensboro, N. C., assignor to Joyce-Venning Manufacturing Co., Inc., Greensboro, N. C., a Corporation of Delaware. Filed Nov. 8, 1930. Serial No. 494,378. 2 Claims. (Cl. 241—14.)



1. Method of assembling a suspender web and slide in operative relation comprising, pinching the free end of a suspender web in a trough-shaped fold of a middle bar, arranging the frame and the middle bar of the slide in unassembled relation, and in inter-folded relation to the suspender web, with the free end of said web secured to said middle bar as defined, the suspender web being folded so as to form the adjustable fold for a button engaging loop, and pressing together the parts of both slide and web, inter-folded as defined, so as integrally to assemble the slide parts with a fold of the web slidably disposed between said frame and middle bar.

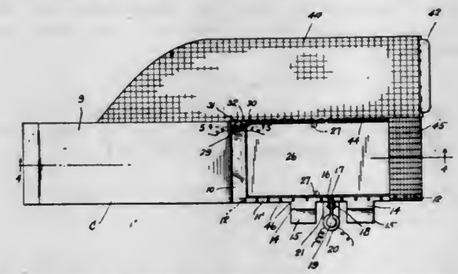
1,827,018. PROCESSES AND APPARATUS FOR TREATING HEAVIER HYDROCARBONS. CHARLES HOWARD JENKINS, Chicago, Ill., assignor to Jenkins Petroleum Process Company, a Corporation of Wisconsin. Filed May 10, 1928. Serial No. 276,676. 11 Claims. (Cl. 196—59.)



1. The process of continuously producing gasoline and other light oils from charging stock comprising heavier hydrocarbons, which consists in continuously heating such charging stock at a cracking temperature in a closed still; supplying during the run additional charging stock to the still; continuously taking off vapors; rejecting during the run part of the still contents; and forcing the entire liquid contents of the still therethrough under the action of circulating means adapted to create and translate whirling vortex effects into a positive driving force whereby such high velocity is obtained that the conditions throughout such still contents are, as to temperature and composition, so nearly identical that variation as to these characteristics in different parts of the still approaches the zero or vanishing point.

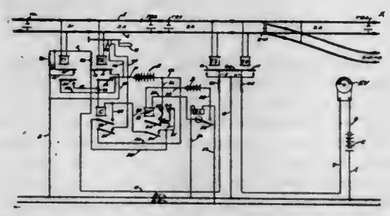
4. In an oil cracking still having a circulating passage for the oil undergoing cracking, a propeller having blades operating in said passage, a tapered means in said passage immediately above the propeller for directing oil toward the center of said blades and a rim surrounding said blades and in close proximity to the walls of said passage for preventing slippage of oil from said propeller blades back along the walls of said passage.

1,827,019. ANIMAL TRAP. ALEXANDER JOSEPH, Jacksonville, Fla., assignor to L. A. Joseph, Jacksonville, Fla. Filed Mar. 21, 1930. Serial No. 437,810. 1 Claim. (Cl. 43—70.)



A trap of the character described comprising a casing open at its top and including a bottom, a vertical end wall and vertical side walls, portions of the upper edges of the side walls being inclined, an inclined wall on the inclined edge portions of the side walls, constituting a runway, said runway terminating in a horizontal extension formed integrally on its upper end, a door hingedly mounted longitudinally on one of the side walls for swinging movement in a vertical plane into the casing, one side portion of the door being engageable with the extension for limiting the swinging movement of the door in an upward direction, a rockable platform pivoted transversely on the door, electrically actuated means for releasably retaining the door in substantially horizontal position, and a circuit closing switch electrically connected with said means mounted on the extension and engageable by the platform for actuation thereby.

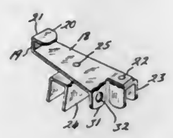
1,827,020. MEANS FOR LOCATING A TRAIN AND INSTRUCTING IT TO TAKE A SIDING. ALLEN B. KENDALL, Maywood, Ill., assignor to Archibald G. Shaver, Chicago, Ill. Filed Oct. 3, 1927. Serial No. 223,663. 19 Claims. (Cl. 246—3.)



1. The combination with a track having insulated sections, each with a battery and a relay controlled thereby and by the passing of a train, of a series of resistances, each controlled by one of said relays, and an indicating

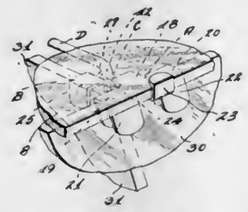
instrument in series with said resistances whereby the latter may be short circuited successively by a moving train to cause a predetermined reading of said instrument corresponding to the location of said train.

1,827,021. CLIP CONSTRUCTION. LEO W. KENNEDY, Detroit, Mich. Filed Oct. 2, 1929. Serial No. 396,852. 4 Claims. (Cl. 312—140.)



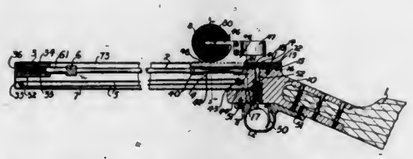
4. In a show case construction, the combination with top, end and front lights, of a clip at the juncture thereof comprising a member extending beneath said top light and having a return-bent end portion engaging said top light, and a pair of substantially U-shaped members independently connected to said first member and engaging the edges of said end and front lights respectively, one of said U-shaped members being pivotally connected to said first member, for the purpose set forth.

1,827,022. SHOW CASE LIGHT ASSEMBLY. LEO W. KENNEDY, Detroit, Mich. Filed Apr. 14, 1930. Serial No. 444,222. 6 Claims. (Cl. 312—140.)



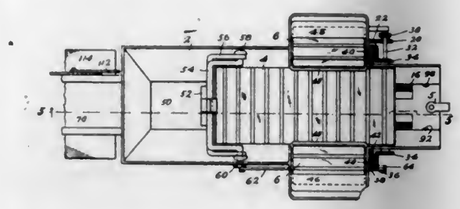
1. A clip of the class described formed of only two stampings, swivelly connected together, one of said stampings having a base for supporting a show case light and provided at certain edges of the base with means for holding show case lights, the other stamping also having means for holding a show case light.

1,827,023. TOY GUN. FADER KESELEFF, Seattle, Wash. Filed Mar. 11, 1930. Serial No. 434,899. 7 Claims. (Cl. 124—14.)



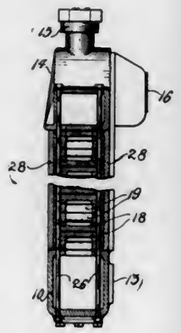
2. In combination, a toy gun, a breech member, a casing adapted to represent the barrel of a gun and having a narrow slot in its upper side for a portion of its length, means interengageable between the breech end of the casing and said breech member by longitudinal movement of the casing to hold the casing to the breech, guide means, a screw positioned at the forward end of said guide means and engaging said casing to hold it in position, a slide upon said guide means, and means for projecting said slide forwardly and for checking its advance, all within the casing, and a projectile carrier extending through the slot in the casing and adapted to support and propel a ball forwardly outside the casing.

1,827,024. BALING PRESS. CHARLES A. KISBY, Morganville, Kans., assignor of one-third to James H. Griffin, Clay Center, Kans. Filed Apr. 28, 1928. Serial No. 273,578. 1 Claim. (Cl. 100—25.)



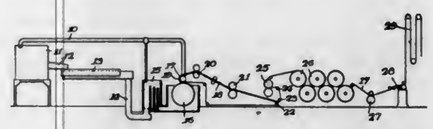
In a baling press a feed chamber, a plunger operably mounted in said feed chamber, a horizontally disposed conveyer located immediately over said plunger and arranged to discharge into the feed chamber, two short horizontally disposed conveyers located above and at opposite sides of the first-mentioned conveyer for discharging upon the latter, and a hopper extending above and around three sides of the first mentioned conveyer and having lateral extensions projecting above and extending around three sides of said short conveyers.

1,827,025. SECTIONAL AUTOMOBILE RADIATOR. CLAUDE D. LARMER and BENJAMIN E. DETTMAN, Chicago, Ill. Filed Oct. 8, 1927. Serial No. 224,817. 1 Claim. (Cl. 257—131.)



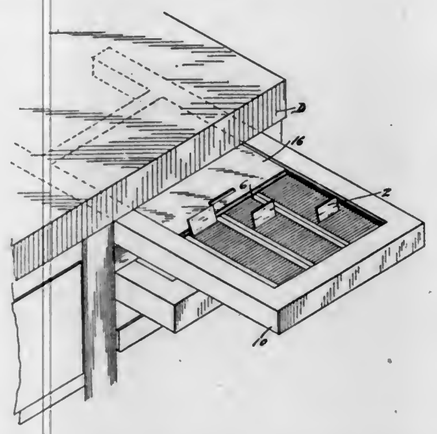
A sectional automobile radiator comprising top and bottom tanks, a plurality of interchangeable sections arranged therebetween, every one of said sections comprising a tube having flattened ends each entered and expanded in a solid block apertured to receive one end of the tube, the block at one end having an unobstructed passage opening at its upper face communicating with said tube, the block at the other end having an unobstructed passage opening at its lower face communicating with said tube, said sections being positioned adjacent each other with the passage in one block communicating with the passage in an adjoining block, whereby said sections are connected in series and water may circulate freely from section to section, and bolts passing through said blocks and at opposite ends thereof and engaging said tanks for securing said parts together in assembled relation.

1,827,026. PROCESS FOR MAKING ROOFING, SATURATED FELTS, AND THE LIKE. ARTHUR G. LEONARD, Jr., Wilmington, Ill. Filed Jan. 28, 1928. Serial No. 250,165. 6 Claims. (Cl. 92—40.)



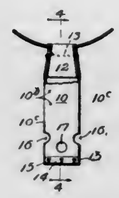
1. The process of making saturated felts and the like which includes continuously making felt in a continuous sheet, continuously drying the same with heat and continuously passing the dried sheet through a saturant free of aqueous moisture, before it can absorb moisture from the atmosphere.

1,827,027. SLIDING DESK LEAF INDEX. MARIE MABER, Glendale, Calif. Filed Mar. 10, 1928. Serial No. 260,675. 1 Claim. (Cl. 129—16.)



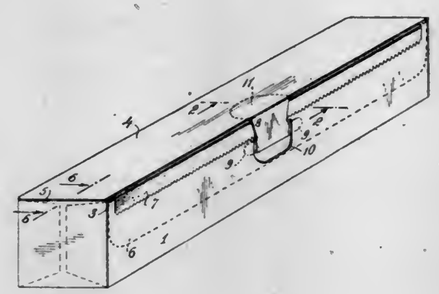
A desk having a sliding leaf comprising a frame, a bottom sheet fastened to the frame, a top comprising over and under sliding sections which when extended to opposite extremes close the frame opening, and index card holding means disposed in the frame and which are accessible by adjustment of superadjacent sections together toward the front or toward the back of the leaf as needed.

1,827,028. RESPIRATOR. ROBERT MALCOM, Chicago, Ill. Filed Nov. 30, 1928. Serial No. 322,683. 1 Claim. (Cl. 251—122.)



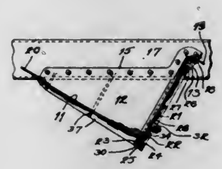
A respirator exhaust valve of the character described comprising a piece of thin, soft and flexible material in tubular form with its sides lying face to face one upon the other, one end of said piece being open and adapted to be secured operatively to the respirator body and the other end thereof having a substantially stiff clip compressed thereon and holding the sides together substantially from lateral edge to lateral edge thereof at the bottom of the body, with a vent in the vicinity of said sealed end adapted to open and provide exhaust therethrough on expiration into the valve body at the respirator.

1,827,029. WAX PAPER PACKAGE. NICHOLAS MARCALUS, Lynbrook, N. Y., assignor to Automatic Paper Machinery Co., Inc., a Corporation of New Jersey. Filed Feb. 7, 1929. Serial No. 338,143. 1 Claim. (Cl. 206—58.)



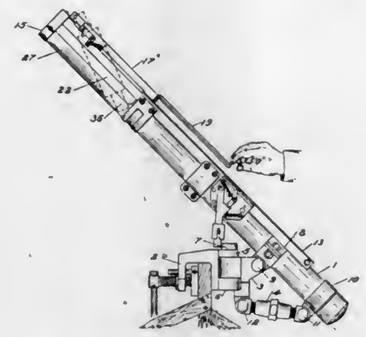
A box for dispensing roll paper comprising side walls and a cover, a cutting edge along the top of the front wall, an opening in the front wall below the cutting edge, a flap on the cover lying behind the cutting edge and forming with the front wall a guide for paper to be dispensed, a tuck cut from the flap and hinged along the upper edge thereof, tongues on the tuck extending through the opening and behind the front wall to keep the box closed, and a section of the cover immediately adjacent the tuck and of substantially the size of the opening in the front wall defined by scoring so that after removal of the tuck and the scored section of the cover, paper can be drawn upward between the front wall and the flap.

1,827,030. CAR HOPPER. MARK H. MARTIN, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Dec. 29, 1928. Serial No. 329,099. 9 Claims. (Cl. 105—249.)



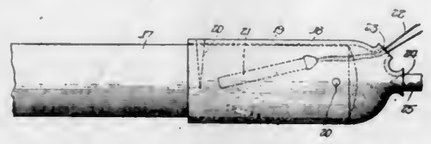
1. A car hopper comprising a bottom, sides, a cargo discharge opening defined by said bottom and sides, webs extending outwardly from the lower edges of said bottom and sides, and flanges on said webs offset from said opening including a beveled surface along said bottom and sides lying in planes spaced within the edges of said flanges.

1,827,031. MECHANICAL LOADER FOR MUZZLE-LOADING MORTARS. LEWIS M. MCBRIDE, Fort Sill, Okla. Filed Jan. 15, 1930. Serial No. 420,991. 17 Claims. (Cl. 89—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



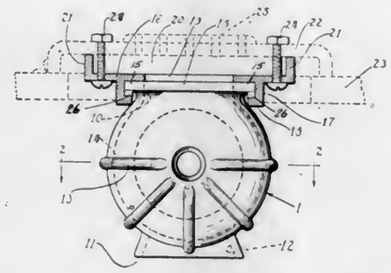
1. A muzzle loading weapon comprising, a barrel, means on the end of the barrel for receiving a projectile and means associated with the rear of the weapon and outside thereof to drop the projectile on the receiving means.

1,827,032. FERRULE FOR BLASTING CARTRIDGES. WILLIAM A. MCCURDY, Duluth, Minn. Filed June 15, 1928. Serial No. 285,588. 1 Claim. (Cl. 102—7.)



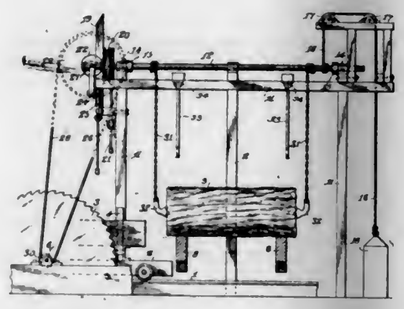
A blasting article comprising, in combination, a cartridge, a hollow member mounted upon the cartridge and adapted to hold in proper position the detonating cap, and a cushion inserted between the hollow member and the blasting cartridge.

1,827,033. HEAT INTENSIFIER FOR BOILERS. WILLIAM F. MCI'HEE and HENRY C. KRUEGER, Chicago, Ill., assignors, by mesne assignments, to Thomas H. Hulbert. Filed May 11, 1928. Serial No. 277,019. 7 Claims. (Cl. 110—60.)



1. A combustion device of the character described comprising walls forming a hollow bulbous outer body having an intake port and a discharge port substantially at opposite ends of the body respectively and having means for securing the body to a furnace at an air intake opening thereof with such intake opening in communication with said intake port and with said body extending into the firebox of such boiler there being walls forming an inner hollow bulbous body within and spaced from the walls of the outer body to provide a substantially shallow passageway substantially surrounding the inner body and extending between and opening into said ports respectively, there being at least two tubular devices connecting the interior of said inner body with the exterior of said outer body at widely spaced-apart intervals circumferentially of the outer body for the purpose specified.

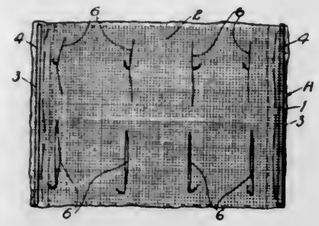
1,827,034. CANT HOISTER. CHARLES HEATH MENDENHALL, Homer, La. Filed Mar. 26, 1930. Serial No. 439,145. 1 Claim. (Cl. 143—104.)



In a device of the class described, a track, a sawmill carriage movable along the track, a saw at the side of the sawmill carriage, a foundation, skids carried by the foundation and leading to the saw, a saw arbor carrying the saw and journaled on the foundation, the saw arbor being disposed at right angles to the tracks and to the saw, a frame upstanding above the skids, a first shaft disposed at right angles to the saw arbor and journaled on the frame, above the saw shaft, first flexible elements wound about the first shaft, log-engaging means carried by the flexible elements, in operative relation to the skids, a second flexible element wound about the first shaft and operating counter to the first flexible elements, a weight attached to the second flexible element, a second shaft disposed at right angles to the first shaft and journaled on the frame, means for rotating the saw arbor, an operative connection between the second shaft and the saw arbor, a first bevelled wheel loose on the first shaft, a clutch connecting the first bevelled wheel with the first shaft, a yoke slidable longitudinally on the second shaft, means under the control of an operator for sliding the yoke, bevelled wheels on the second shaft and movable, one at a time, by the yoke, into engagement with the first bevelled wheel, and suspension elements on the frame, above the carriage, the first flexible elements constituting turners for logs on the skids, and constituting means for hoisting a sawn timber from the carriage to the suspension elements.

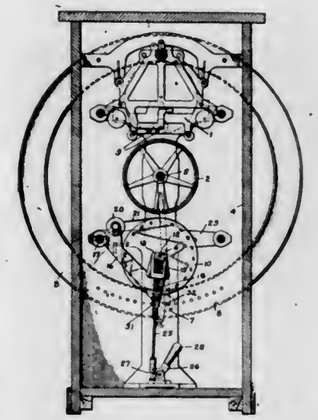
1,827,035. INSULATING JACKET. OLIVER F. MOTTWEILER and DANIEL C. DRILL, Alexandria, Ind., assignors to General Insulating and Manufacturing Company, Alexandria, Ind., a Corporation of Indiana. Filed Nov. 25, 1927. Serial No. 235,554. 4 Claims. (Cl. 154—44.)

1. An insulating structure comprising a body portion formed of insulating material having its opposite sides formed with continuous surfaces, a continuous layer of material arranged in contact with one continuous surface of said body portion, rods attached to said continuous layer of material at opposite ends thereof, a plurality of strips of material arranged in spaced relation in contact with the opposite continuous surface of said body portion, and



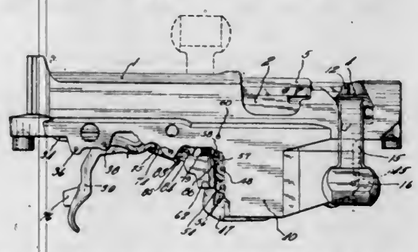
fastening means extending through said body portion, said layer of material and said strips of material whereby a unitary insulating structure is produced.

1,827,036. PRINTING ATTACHMENT FOR PAY ROLL RECORDERS. JAMES S. OGSBURY, Dayton, Ohio, assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Sept. 24, 1928. Serial No. 307,951. 6 Claims. (Cl. 101—247.)



1. In combination, a carrier having a sheet fixed thereto, said sheet having a plurality of divisions and a printing roll having a plurality of removable, interchangeable devices, each intended for printing in one of said divisions, and means for preventing free removal until desired of said devices from the roll.

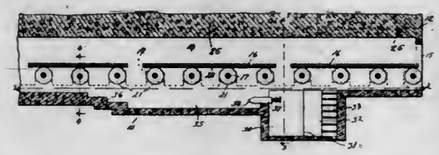
1,827,037. FIREARM. JOHN D. PEDERSEN, Springfield, Mass. Filed July 18, 1928, Serial No. 293,537. Renewed Mar. 3, 1931. 29 Claims. (Cl. 42—3.)



10. In a gun, the combination with a breech action comprising a reciprocating member, of a buffer comprising a flat spring having a portion extending into the path of said member at an inclination of approximately 20° to said path.

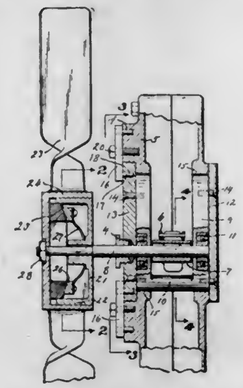
25. In a breach action of a gun in combination, a receiver, a rotary and reciprocatory bolt therein, means for locking said bolt to the breech adapted to be automatically unlocked by the firing pressure, comprising helical bearing surfaces on said bolt and receiver adapted for coacting engagement, the helix angle of said bearing surfaces being approximately twice the angle of repose for said surfaces when unlubricated.

1,827,038. APPARATUS FOR NORMALIZING STEEL SHEETS. FREDERICK W. PITTS, Detroit, Mich., assignor to Michigan Steel Corporation, Detroit, Mich., a Corporation of New Jersey. Filed Jan. 28, 1929. Serial No. 335,643. 2 Claims. (Cl. 263—6.)



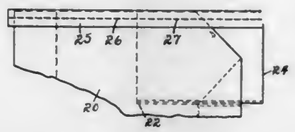
2. In a furnace for normalizing a sheet of steel including in combination an elongated open-ended heating chamber, means arranged at longitudinally spaced points adjacent the upper portion of the chamber for effecting combustion therein above the articles passing therethrough, a baffle extending longitudinally of the chamber and positioned in the path of the products of combustion for deflecting the same downwardly toward the upper surface of the articles passing through the furnace, a second chamber arranged below the first mentioned chamber in communication therewith and extending longitudinally thereof, means positioned in one end wall of the second mentioned chamber for effecting combustion in the direction of the movement of the articles and the opposite end wall fashioned for deflecting the products of combustion upwardly toward the under surface of the articles.

1,827,039. FAN REGULATING DEVICE. RALPH RAGAN, Atlanta, Ga. Filed Dec. 15, 1924. Serial No. 755,974. 3 Claims. (Cl. 230—270.)



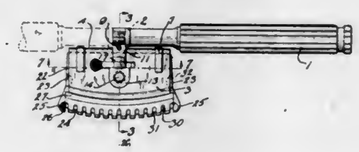
3. In a fan regulating device for internal combustion engines, the combination of a shaft, means for driving the same, a fan assembly hub rotatable with the shaft, a fan including a hub rotatable with respect to the fan assembly hub, a centrifugally controlled spring pressed weight rotatable with the fan assembly hub and carried therein, friction transfer means between the weight and the fan hub, and means for adjusting the fan hub relative to the weight.

1,827,040. VALVE BAG AND METHOD OF CLOSING THE SAME. JOHN C. REDINGTON, Geneva, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Mar. 9, 1928. Serial No. 260,436. 15 Claims. (Cl. 150—9.)



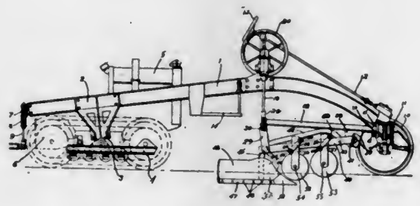
1. A paper bag having one corner tucked in, a sleeve in the tucked-in corner, and a seam closing the end of the bag, except for said tucked-in corner, and holding the sleeve in position in the valve, the sleeve extending into the seam between the walls of the bag.

1,827,041. SAFETY RAZOR. HARRY O. SECREST, Cleveland, Ohio; Harold K. Baumgardner and Myra O. Secrest, administrators of said Harry O. Secrest, deceased, assignors to The Secrest Safety Razor Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 26, 1928. Serial No. 315,199. 10 Claims. (Cl. 30—12.)



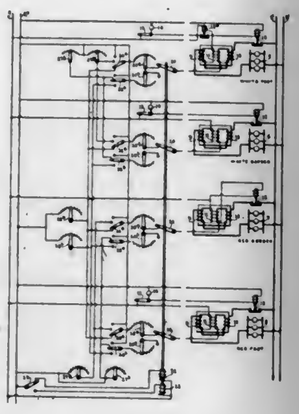
1. A blade holder for safety razors, comprising a U-shaped frame including a body plate and a backing plate connected by a back bend, the edge of the backing plate projecting beyond the edge of the body plate, and clamping means carried by one of said plates for holding the blade in place, comprising a pivoted lever having cam lobes, one of the lobes having greater height than the other.

1,827,042. ROAD GRADER. GEORGE D. SHAEFFER, Bucyrus, Ohio, assignor to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Nov. 14, 1929. Serial No. 407,102. 4 Claims. (Cl. 37—155.)



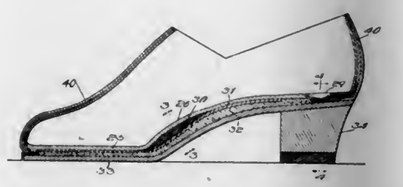
1. In a road grader, the combination of a frame; a plow and supporting means therefor; a moldboard for said plow, said mold-board formed as a scraper blade; and a plurality of discs longitudinally disposed in front of said plow, said discs adapted to successively cut the earth in front of said plow to different depths.

1,827,043. ILLUMINATION CONTROL SYSTEM. ARTHUR SIMON, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Dec. 31, 1923, Serial No. 683,645. Renewed July 14, 1930. 33 Claims. (Cl. 175—312.)



1. The method of controlling the intensity of illumination of the sets of lamps of a plurality of circuits to be subjected jointly to a common proportional regulative influence, which comprises individually controlling at will the proportional regulative effect of such influence upon each of the several circuits.

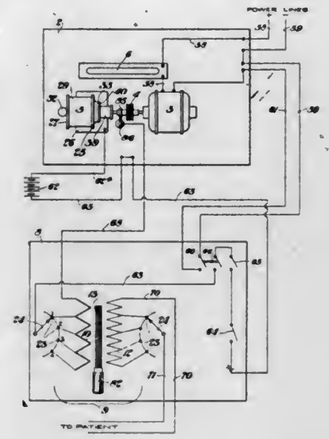
1,827,044. METHOD OF MAKING SHOES, INNERSOLES, AND THE LIKE. ISIDORE SIMON, Chicago, Ill. Original application filed Oct. 12, 1927, Serial No. 225,763. Divided and this application filed Dec. 9, 1929. Serial No. 412,746. 4 Claims. (Cl. 12—142.)



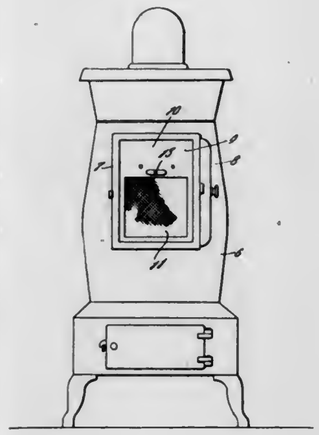
1. A method of making shoes which consists in permanently embossing the innersole opposite the metatarsal bones, providing a greater thickness on the inner side of the heel, forming a depression in the floor of the innersole at the heel for receiving the medial tubercle of the oscalsis, applying the innersole to a last, and completing the operations of making a shoe.

1,827,045. ELECTROMEDICAL APPARATUS. MORTON SMART, London, England. Filed Jan. 31, 1930. Serial No. 425,030. 2 Claims. (Cl. 174—177.)

2. In an electro medical apparatus for producing alternating current adapted to cause muscular contraction on a patient, an inductance coil, and an interrupter in the primary circuit of said coil, said interrupter comprising a cylindrical mercury chamber having glass side walls and metal end walls, a shaft journaled in the rear end wall and insulated therefrom, a double end contact blade mounted on the inner end of said shaft and adapted to make and break contact with the mercury in said chamber when said shaft is rotated, an insulating sleeve surrounding the inner portion of said shaft, and an insulating support for the inner end of said shaft, a mercury level modifier comprising a block of non-conducting material mounted in said chamber and adapted to be moved into and out of the mercury to raise and lower the mercury level.

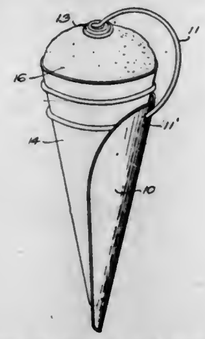


1,827,046. STOVE CLOSURE. JOHN M. SNYDER, Fairfield, Ill. Filed Jan. 24, 1930. Serial No. 423,107. 1 Claim. (Cl. 126—190.)



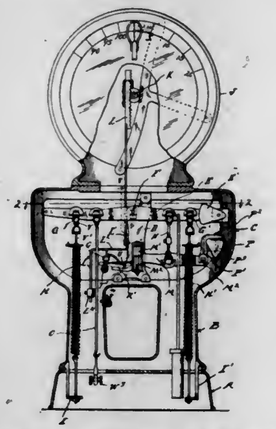
A removable closure for a stove opening comprising a plate including a solid portion and an opening, a screen covering the opening, said solid portion restricting the opening of the stove, a pair of latch members slidably arranged on the inner face of the plate engaging the inner walls of the stove opening when the plate is placed in said opening and an operating member passing through the solid portion of the plate and connected with the latch members for projecting and retracting the same.

1,827,047. COATING IMPLEMENT. THOMAS M. SPINKS, Shubuta, Miss. Filed Nov. 1, 1930. Serial No. 492,810. 5 Claims. (Cl. 91—60.)



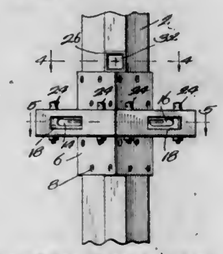
1. An implement for holding the filling within an ice cream cone, comprising a body portion to engage with the side of the cone, and a filling engaging and molding element carried by the body portion.

1,827,048. SCALE. WALTER F. STIMPSON and WILLIS E. FINCH, Louisville, Ky.; said Finch assignor to said Stimpson. Filed Dec. 12, 1927. Serial No. 239,588. 14 Claims. (Cl. 26—69.)



1. In a scale, the combination with a lever of opposed weighing springs connected to said lever for partially compensating for temperature changes and thermostatically operated means for supplementing the compensation.

1,827,049. ENGINEER'S PLUMB ROD. WALTER M. TENNEY, Chicago, Ill. Filed Apr. 4, 1928. Serial No. 267,360. 3 Claims. (Cl. 33—74.)



1. In a device of the class described, the combination of a relatively long rod having a pointed base and carrying a graduating mark longitudinally along its front face,

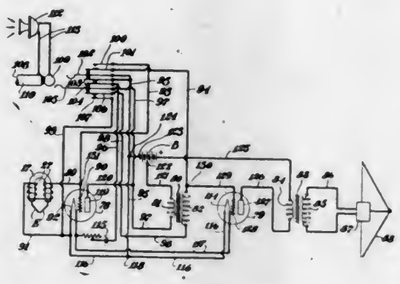
said rod having its rear face provided with two walls disposed at right angles one to the other, with their junction diagonally opposite the graduating mark on the front face, and two bubble indicators mounted on said rod, said bubble indicators having their longitudinal axes substantially parallel to the right angularly disposed faces of the rod at such point.

1,827,050. FASTENING MEANS. HENRY S. THEYS and LOUIS HOROWITZ, Brooklyn, N. Y. Filed Aug. 2, 1930. Serial No. 472,676. 1 Claim. (Cl. 24—203.)



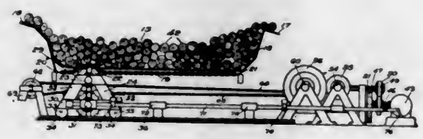
In a fastener of the class described comprising a box-shaped socket member, an attaching member having a shank and a base portion, a ring member surrounding said box-shaped socket member, said shank passing through an aperture in one side of the box-like socket member and riveted in place, an elastic ribbon looped around the wall of said ring member, the looped edge of said ribbon held in place between said ring and said box-like socket member, said box-like socket member having an opening in its opposite side for receiving the head of a stud, the free ends of said elastic ribbon attached to an edge of an article to be fastened.

1,827,051. RECORDING AND REPRODUCING SYSTEM AND APPARATUS. ADOLPH A. THOMAS, New York, N. Y. Filed Mar. 8, 1928. Serial No. 259,976. 29 Claims. (Cl. 179—100.11.)



1. A magnetic recording and reproducing unit having a magnet provided with a tubular pole piece for supporting a magnetic needle inserted therein, and stop means for positively limiting the insertion of the needle.

1,827,052. LOG BARKER. CARL BUSCH THORNE, Hawkesbury, Ontario, Canada. Filed June 27, 1930. Serial No. 464,240. 3 Claims. (Cl. 144—208.)



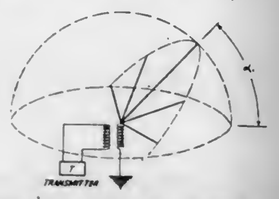
1. In a log barker, a log pocket having feed and discharge ends and a bottom having longitudinal openings therein, slack chains secured at each end and extending along said openings and a carriage having driven sprocket members engaging said chains and lifting the logs in said pocket and reciprocating beneath said pocket.

1,827,053. LAVATORY CONSTRUCTION. CARL C. VENEMAN, Los Angeles, Calif. Filed Nov. 10, 1930. Serial No. 494,654. 4 Claims. (Cl. 4—166.)



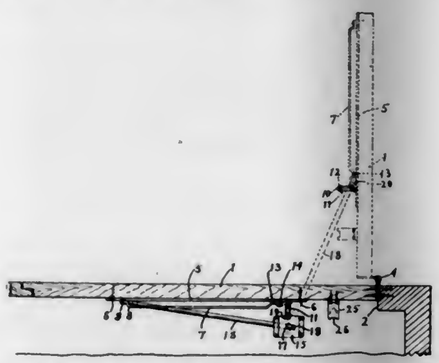
2. A lavatory construction comprising a metallic base member consisting of a rim having an inwardly directed flange, a base plate adapted to rest on said flange, said base plate having an opening adapted to receive a bowl, a bowl supported in said opening, said bowl having an outwardly extending top flange, a layer of plastic material hardened in situ surrounding said bowl in spaced relation to the top portion of the body part thereof, and a non-plastic material inserted between said base plate and the flange of the bowl within said space to support the bowl.

1,827,054. COMMUNICATION BY ELECTROMAGNETIC WAVES. GEORG VON ARCO, Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Gérmany. Filed Oct. 18, 1926, Serial No. 142,453, and in Germany Oct. 20, 1925. 2 Claims. (Cl. 250—33.)



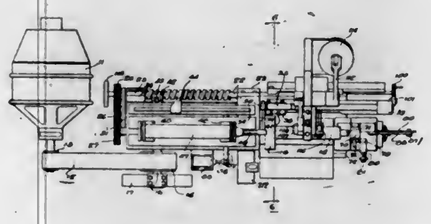
1. An antenna system for transmitting electromagnetic waves comprising a number of antennæ positioned in the directions of the radii of a sphere, groups of the antennæ being connected together, a reactance at the intersection of the radii of the sphere for coupling the groups together, a transmitter, and means coupling the transmitter to the different component antennæ through said reactance at the intersection of the radii of the sphere.

1,827,055. DOORSTOP. HARRIS M. WHITCOMB, Albany, Wis., assignor to Albany Hardware Specialty Manufacturing Company, Albany, Wis., a Corporation of Wisconsin. Filed June 18, 1928. Serial No. 286,099. 12 Claims. (Cl. 292—274.)



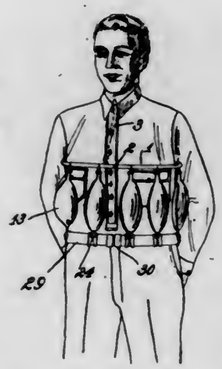
1. A stop device interposed between a swinging closure member and the structure in which it is mounted comprising a stop member movably connected to the closure member and structure, latching means engageable with said member for yieldably holding the closure member in an open position, and a manually operable locking member engageable with the latching means for positively holding the same against movement and locking the closure member in open position.

1,827,056. COILING MACHINE. KEITH WILLIAMS, Buffalo, N. Y., assignor to Pratt & Letchworth Company, Buffalo, N. Y., a Corporation of Ohio. Filed July 3, 1929. Serial No. 375,622. 13 Claims. (Cl. 153—67.)



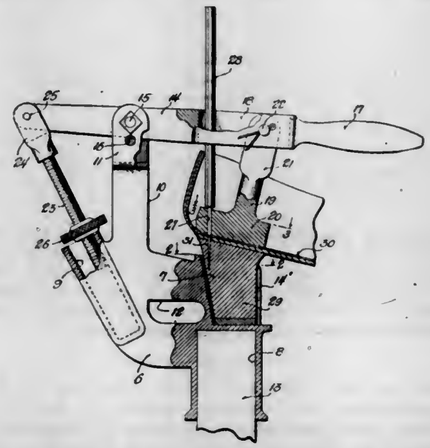
1. In a machine for forming helical springs, having the free ends of the coils tapering, the combination with a rotary mandrel; of guiding means for feeding a bar having the opposite ends reversely beveled to the mandrel; means for continuously advancing said guiding means during the coiling operation; clamping means for clamping the work to the mandrel; a reciprocating breakdown roller for finishing the end of the coil spring, said roller having means thereon for squaring the end of the coil to dispose the outer face of the beveled portion parallel to the outer face of the beveled portion at the opposite end of the coil; and fluid-operated means for actuating said breakdown roller.

1,827,057. LIFE BELT. SILAS D. WILLS, Birmingham, Ala. Filed July 28, 1930. Serial No. 471,315. 3 Claims. (Cl. 9—17.)



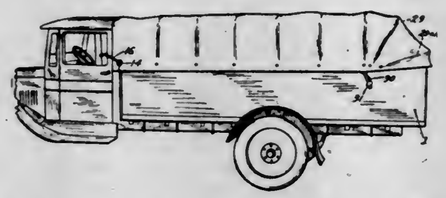
1. In a life saving device, a tubular belt, elastic air bags having their neck portions coupled to the belt, spring influenced valves between the air bags and the belt to permit of all the bags being inflated when air is introduced through the belt, slotted plates on the outer ends of the bags, substantially rectangular clamps having spring hooks to engage the slotted plates, stop elements on the spring hooks and said clamps designed to have passed therethrough a waist belt.

1,827,058. HEEL ATTACHING DEVICE. JACOB WOLF, Milwaukee, Wis., assignor of one-half to Isadore Sax and Marcus Sax, copartners doing business as Sax Bros. Filed Dec. 11, 1930. Serial No. 501,522. 5 Claims. (Cl. 12—125.)



1. In a device of the character described, the combination of a support having a heel receiving portion, an arm projecting above said portion, said support having a recess adjacent said arm, a lever pivotally mounted on said arm, a clamping member pivotally mounted on one end of said lever and adapted to engage the shoe to clamp the same against the heel while attaching the heel, a screw shaft operatively connected with the other end of said lever and having its free end working in said recess, and a nut on said screw shaft cooperating with said support to move said shaft and lever to bring and maintain said clamping member in a clamped position.

1,827,059. WEATHERPROOF ADJUSTABLE CANOPY FOR VEHICLES. WILLIAM WOOLCOTT, Winchester, Ky. Filed Mar. 26, 1930. Serial No. 439,170. 14 Claims. (Cl. 296—105.)

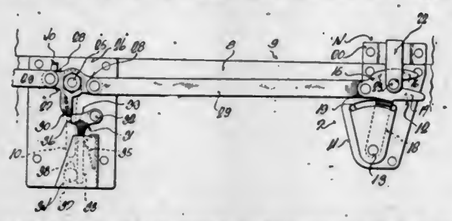


1. In combination with an automotive vehicle, mechanism for actuating an extension cover comprising a series of horizontally spaced, vertically supported bows held firmly against tipping movement, channels on each side of the truck body, said bows being supported in said channels and mechanism for extending and retracting said bow supports, and said supports comprising slidable members with slidable extensions rigidly attached thereto bracing said members against rattling movement.

1,827,060. TRUNK LOCKING DEVICE. CARL P. ALBERT, Racine, Wis., assignor to Greene Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Mar. 29, 1930. Serial No. 439,952. 8 Claims. (Cl. 70—115.)

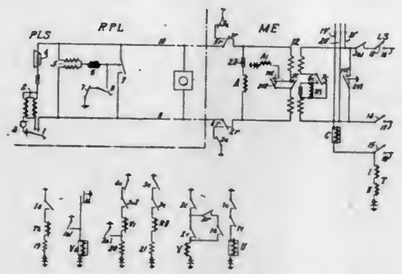
1. The combination with a trunk having a body portion and a cover therefor, of a plurality of locks, each lock comprising a U-shaped member having a roller mounted

between the parallel legs thereof and secured to said cover, a forked member pivotally mounted on said body portion for engagement with said roller, the prongs of said forked member having a double cam action on said roller and acting to force the cover tightly on the body portion in locked position and partially open the cover during un-



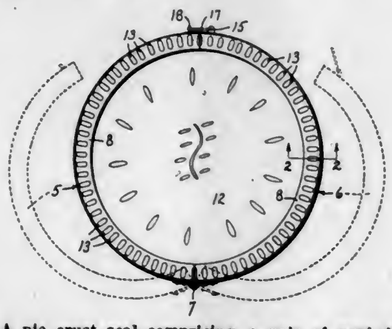
locking and actuating means to simultaneously lock and unlock both locks, said actuating means comprising a rotatable member having arms thereon cooperating with links pivotally connected to said arms and to said forked members to form a toggle joint whereby turning of said rotatable member actuates both locking means.

1,827,061. TELEPHONE SYSTEM. OTTO ANDERS, Berlin-Schmargendorf, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt bei Berlin, Germany. Filed Feb. 27, 1928, Serial No. 257,202, and in Germany Aug. 15, 1927. Renewed Apr. 7, 1930. 18 Claims. (Cl. 179—17.)



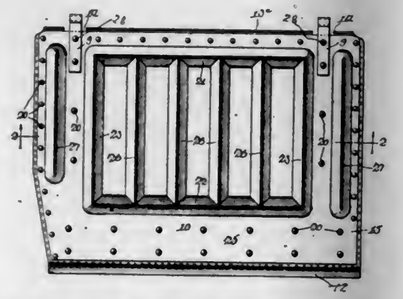
1. In a telephone system, a party line, an automatic exchange, a line provided for extending calls from said party line to said exchange, a time switching device at said exchange, means for transmitting ringing current of particular duration over said call extending line, and means responsive to said ringing current for actuating said time switching device to effect a connection between said party line and said exchange.

1,827,062. PIE CRUST SEAL. AGNES W. AUSTEN, Bovill, Idaho. Filed Apr. 7, 1930. Serial No. 442,106. 2 Claims. (Cl. 53—6.)



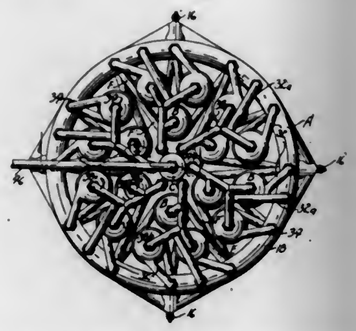
1. A pie crust seal comprising, a pair of semi-circular members pivotally connected together and having its ends at the pivotal connection overlapping and slidably connected together, one of said members having its end opposite the pivotal connection offset in concentric relation with the corresponding end of the other member, and having a laterally projecting extension, and said latter member being provided with a series of spaced perforations to selectively receive said extension.

1,827,063. DUMP DOOR FOR RAILWAY CARS. ALLAN S. BARROWS, Los Angeles, Calif., assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 7, 1925. Serial No. 48,816. 14 Claims. (Cl. 105—280.)



1. As an article of manufacture, a dump door comprising a plurality of sheets rigidly secured together, one of said sheets being of hardened wear resisting steel and the other of said sheets being of lower grade material and including integral reinforcing means for strengthening said first sheet.

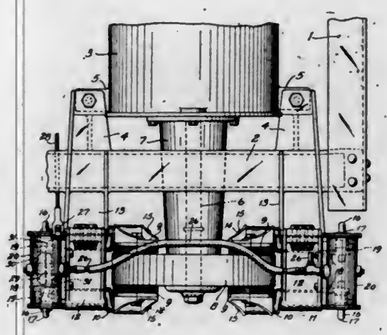
1,827,064. STEAM GENERATOR AND METHOD OF GENERATION. CARL E. BISHOP, Mitchellville, Iowa. Filed Apr. 14, 1930. Serial No. 444,248. 15 Claims. (Cl. 122—250.)



13. In a steam generator, a water cage having a series of upright tubular circumferentially spaced elements, and a series of coils, each connected at one end with an element at the extreme lower part thereof, and at the other end with another element at the extreme upper part thereof, whereby water will be caused to circulate from the bottom end of one element to the top end of another circumferentially spaced element.

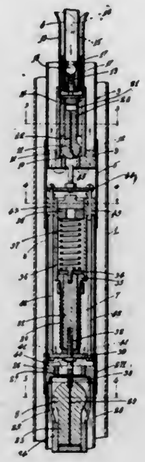
1,827,065. BRAKE. NELSON R. BROWNYER, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Mar. 19, 1930. Serial No. 436,983. 12 Claims. (Cl. 188—106.)

1. A rotary member, pairs of brake members adapted to frictionally engage said rotary member, fluid operated means for simultaneously applying said brake members against said rotary member with equal pressure; and manually operated means cooperating with said fluid



operated means for one pair of brake members for applying them against said rotary member with equal pressure.

1,827,066. GAS LIFT MEANS. MARK P. BURKE, Los Angeles, Calif. Filed June 18, 1928. Serial No. 286,124. 9 Claims. (Cl. 103—240.)

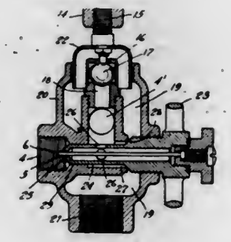


1. In an apparatus of the class described, the combination of a closed chamber adapted to be submerged in a column of liquid, means for admitting gas under pressure into the chamber, an outlet pipe extending from the chamber, means for admitting liquid from the column of liquid into the said chamber, and automatically fluid actuated means interposed between the said gas inlet, and liquid inlet means to actuate the liquid inlet means to a closed position after a predetermined quantity of liquid has been admitted into said chamber and open said gas inlet means.

1,827,067. HYDRAULIC REGULATOR. RAGNAR CARLSTEDT, Stockholm, Sweden. Filed Oct. 25, 1930, Serial No. 491,128, and in Sweden Apr. 8, 1929. 8 Claims. (Cl. 121—38.)

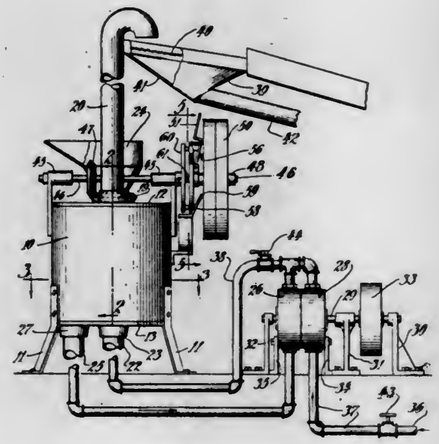
1. A hydraulic regulator comprising a servo-motor operating with a non-compressible regulation liquid, a movable member, such as a piston, diaphragm or the like,

pertaining to said servo-motor and actuated by said regulation liquid, an impeding member controlling the discharge of said liquid from said servo-motor and actuated by the condition which is to be controlled, a housing, a supply conduit for said regulation liquid leading to said housing, a discharge conduit for said liquid leading from said housing, a conduit for said liquid leading from said housing to said servo-motor, and a throttling member in



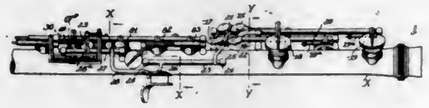
said housing for throttling the regulation liquid before it enters the servo-motor, said throttling member forming a regulation valve arranged between said supply conduit and said discharge conduit and forming a communication between said supply conduit and the conduit leading to the servo-motor, so as to facilitate draining of the servo-motor as well as scavenging of said conduits, and said throttling member being further so secured to said housing as to be removable from the outside thereof.

1,827,068. ELEVATOR. MEAD S. CARMICHAEL, Sparta, Wis. Filed Oct. 10, 1928. Serial No. 311,479. 11 Claims. (Cl. 302—14.)



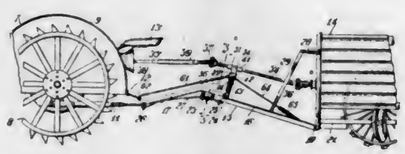
1. In a hydraulic elevating device for articles of appreciable size, a unit comprising a plurality of chambers, a liquid inlet pipe communicating with the unit and adapted to discharge into said chambers, a discharge pipe extending therefrom, means whereby said chambers may be loaded, and suction means for removing liquid from said chambers.

1,827,069. CLARINET CONSTRUCTION. ANDREA CICIOTTI, Rochester, N. Y., assignor of one-half to Alphonse Santarelli, Rochester, N. Y. Filed July 7, 1930. Serial No. 466,121. 17 Claims. (Cl. 84—382.)



7. In a clarinet the combination with a high "G" sharp cover, of a "C" cover, an "F" sharp cover, a "B" cover, and means operatively connected to said "C", "F" sharp and "B" covers for operating said "G" sharp cover when any one of the said "C", "F" sharp or "B" covers are operated.

1,827,070. POWER TAKE-OFF MECHANISM FOR TRACTORS. WILBUR J. COULTAR and ROBERT C. LIVESAY, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 23, 1928. Serial No. 248,679. 20 Claims. (Cl. 180—14.)



1. The combination with a tractor and an implement, of power take-off mechanism extending between said tractor and said implement comprising an articulated shaft, and means for swinging the intermediate portion of said articulated shaft away from the steering angle between the tractor and implement in the steering movement of said tractor.

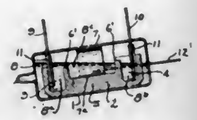
1,827,071. MERCURY SWITCH METAL CLIP TYPE. PAUL K. CRAMBLET, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,567. 11 Claims. (Cl. 200—152.)



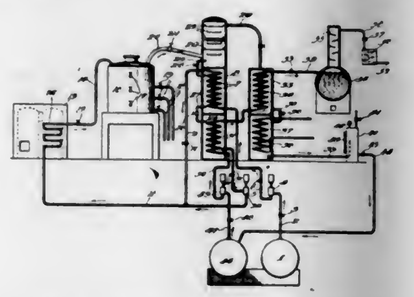
1. A mercury switch comprising an outer envelope, a trap of arc-resistant material therein, a body of mercury having a portion confined in said trap and a shiftable portion making and breaking contact with the portion in the trap, and means for holding the trap in position in the envelope including a resilient metallic ring like retaining element tensioned to frictionally engage the envelope and cooperable with the trap.

1,827,072. MERCURY SWITCH. PAUL K. CRAMBLET, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,569. 8 Claims. (Cl. 200—152.)

1. A mercury switch including an outer envelope, an inner protective structure of molded arc resistant material and having a peripheral portion engaged with the lower portion only of the inner wall of the outer envelope, a resilient ring like metallic retaining element interposed between and coacting with the upper portion of the envelope and with the upper portion of the protective structure to complete the holding of the protective structure in proper position in the envelope, and a body of mercury in said envelope and having portions making and breaking contact on a surface of the protective structure.

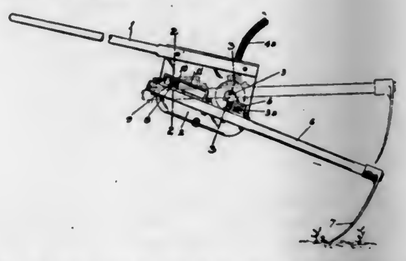


1,827,073. PROCESS FOR CRACKING PETROLEUM OIL. AUBREY D. DAVID, Chicago, Ill., assignor to The Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 7, 1923, Serial No. 617,447. Renewed Sept. 14, 1928. 1 Claim. (Cl. 196—48.)



A process of treating hydrocarbon oil consisting in continuously passing the oil through a heating zone wherein it is raised to a conversion temperature, in discharging the oil into an expansion zone wherein substantial vaporization occurs, in passing the vapors issuing from said expansion zone to a dephlegmator, in condensing the dephlegmated vapors as pressure distillate in passing the hot reflux condensate from said dephlegmator to a zone of heat interchange through which the incoming raw oil is passed, in withdrawing the reflux condensate from said zone of heat interchange and in returning it under applied pressure to the heating zone for retreatment, in redistilling the pressure distillate and in utilizing the heat of the vapors issuing from the dephlegmator to preheat the pressure distillate prior to such redistillation.

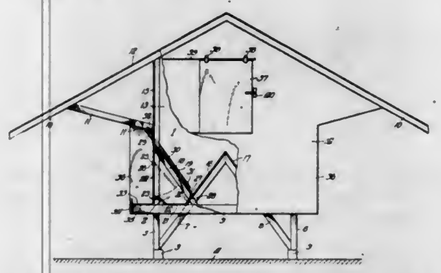
1,827,074. POWER OPERATED HOE. JENS CARL DITLEVSEN, Antioch, Calif. Filed Oct. 4, 1929. Serial No. 397,225. 2 Claims. (Cl. 97—36.)



1. In a hand power operated hoe having handle-supported bearing plates, a hoe-shank projecting between the plates, and means for reciprocating the shank including

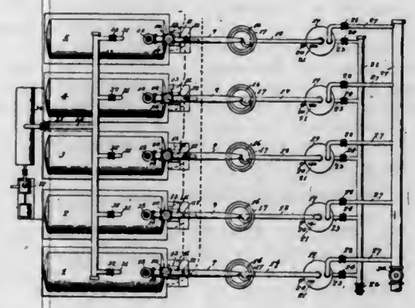
a crank-shaft journaled at its ends in the plates and having its crank engaging the shank; a bevel gear fixed on one end of the crankshaft outwardly of the adjacent plate, another bevel gear engaging said first gear and disposed with its axis projecting upwardly therefrom, and a flexible driving shaft connected to and projecting upwardly from the last named gear.

1,827,075. ANIMAL FEEDER. DUANE HOWARD DOANE, St. Louis, Mo., assignor to Walter P. Paepcke, Chicago, Ill. Filed Nov. 23, 1929. Serial No. 409,226. 6 Claims. (Cl. 119—53.)



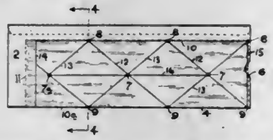
1. An animal feeder comprising in combination a primary storage compartment and a feeding compartment, said primary storage compartment comprising end walls and an outer side wall, a feeding compartment located below said primary compartment and separated therefrom by an inclined partition wall having an opening therein to permit grain to flow from said primary compartment to said feeding compartment, said feeding compartment having an outer wall which forms a continuation of the outer side wall of said primary compartment, an upwardly inclined floor for said primary compartment adapted to direct grain to said opening, a floor section for said feeding compartment extending from said opening to the outer side wall of said feeding compartment, a displaceable door in said feeding compartment adapted to permit access of the head of an animal to said compartment, an upright frame member to which the outer side walls of said primary compartment and said feeding compartment are secured, said upright frame member extending below said feeding compartment a substantial distance to maintain said feeder, out of contact with the ground, and an inclined frame member extending upwardly from the lower end of said upright frame member and forming a support for the inclined floor of said primary compartment.

1,827,076. PROCESS AND APPARATUS FOR TREATING HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 30, 1920, Serial No. 420,674. Renewed Jan. 28, 1929. 5 Claims. (Cl. 196—47.)



1. A process for cracking hydrocarbon oil, consisting in maintaining a plurality of independent bodies of oil at a cracking temperature, normally under a uniform self-generated superatmospheric vapor pressure, in taking off vapors evolved from each of said bodies of oil, in subjecting such vapors to independent dephlegmation and condensation under a uniform superatmospheric gaseous pressure, lower than the superatmospheric pressure maintained on said independent bodies of oil, and in supplying to said oil bodies an extraneous uncondensable gas in the event of a decrease in the self-generated vapor pressure on said independent bodies of oil, to maintain the pressure conditions on said bodies of oil constant.

1,827,077. DENTAL FOIL CONTAINER. LAWRENCE W. DUNHAM, New York, N. Y., assignor to The Dentists' Supply Company of New York, a Corporation of New York. Filed Jan. 17, 1930. Serial No. 421,339. 6 Claims. (Cl. 206—46.)



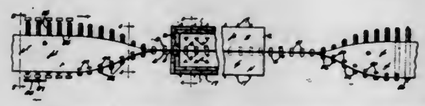
1. A combined foil and container consisting of a flattened envelope having an open end and a transparent face having markings thereon as a guide for cutting the container and its foil contents, wherein said markings are extended to one closed edge of the container and also parallel to and adjacent to the open end of the container.

1,827,078. ASH RECEIVER. CLAUDE ELLIS, Springville, N. Y. Filed Aug. 21, 1929. Serial No. 387,357. 7 Claims. (Cl. 131—51.)



1. An individual ash receiver comprising a member formed for attachment to a finger of one's hand, and an ash receiving receptacle supported by said member in upright position and adjustable relatively to said member and laterally of said finger into different positions relatively to said finger, while remaining in its upright position, whereby said receptacle may be adjusted into positions most convenient for the reception of ashes from a cigarette carried by fingers of the same hand.

1,827,079. FURNACE. FRANK A. FAHRENWALD, Chicago, Ill. Filed Sept. 16, 1927. Serial No. 219,886. 18 Claims. (Cl. 263—6.)



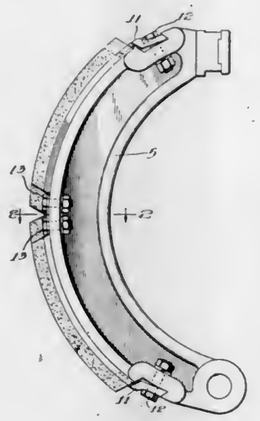
1. In a metallurgical furnace the combination with a heated chamber of a plurality of vertical rolls supported in a plurality of horizontal rows in said chamber, and means for rotating in the same direction the rolls of one of said rows, the length of the rolls being less than the height of the chamber.

1,827,080. TREATING SULPHITE LIQUOR SPIRIT. MAX GADE, Mannheim-Waldhof, Germany, assignor of one-half to Zellstoffabrik Waldhof, Mannheim-Waldhof, Germany, a German Company. Filed Apr. 11, 1930, Serial No. 443,614, and in Germany Apr. 24, 1929. 4 Claims. (Cl. 195—20.)

4. Process for the removal of the aldehyde fractions passing over with the first runnings in the distillation

of sulphite liquor spirit, comprising fermenting a series of mashes, distilling the alcohol from each mash, separating the first runnings as a part of said distillation, continuously conducting the first runnings from one mash into a second mash which is fermenting and subjecting them therein to fermentation, whereby the aldehydes produced in each mash are removed during the fermentation in the next succeeding mash.

1,827,081. BRAKE SHOE. HUGH A. GILLIES, Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 519,289. 2 Claims. (Cl. 188—251.)



1. A friction block comprising a back and a composition body mounted thereon, said body being recessed at one end between its side edges and at the corners of its other end to receive means for fastening the block to a support.

1,827,082. TREATMENT OF ARSENICAL SOLUTIONS. HERBERT A. GOLLMAR, East Orange, N. J., assignor to The Koppers Company, a Corporation of Delaware. Filed Mar. 17, 1927. Serial No. 176,299. 7 Claims. (Cl. 23—53.)

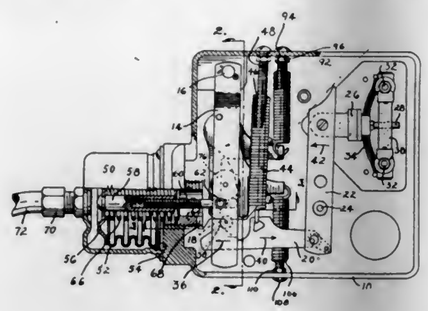
7. The process of removing arsenic from a liquid containing a thio-arsenic compound of an alkali-forming element which comprises acidifying the liquid with carbon dioxide, and removing the precipitate formed thereby.

1,827,083. MILDEWPROOF FABRIC AND PROCESS OF MAKING SAME. RAYMOND HARVEY, New York, N. Y., and HARRY V. DAY, Pequannock Township, Morris County, N. J., assignors to The Pantasote Leather Company, Passaic, N. J., a Corporation of New Jersey. Filed Nov. 21, 1928. Serial No. 321,032. 4 Claims. (Cl. 91—68.)

2. The method which comprises coating a fabric with a pyroxylin dope containing zinc resinate.

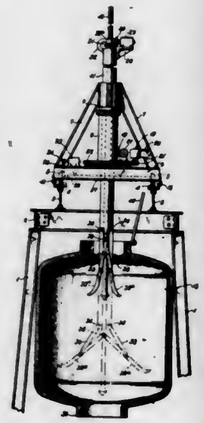
1,827,084. DIFFERENTIAL ADJUSTING MECHANISM. MALCOLM E. HENNING, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Jan. 28, 1929. Serial No. 335,470. 3 Claims. (Cl. 74—14.)

1. In a device of the class described, a support; an actuating arm pivoted thereto, means responsive to pressure for moving said actuating arm, a control device actuated by said actuating arm and means for modifying the differential of operation of said actuating arm comprising a lever pivoted thereadjacent a stop for said lever, spring means constraining said lever to engage said stop and an



abutment on said actuating arm adapted to engage said lever and move the same away from said stop against the action of said spring means thereon.

1,827,085. METHOD FOR CLEANING STILLS. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Aug. 30, 1923, Serial No. 660,098. Divided and this application filed Mar. 23, 1927. Serial No. 177,813. 1 Claim. (Cl. 15—269.)

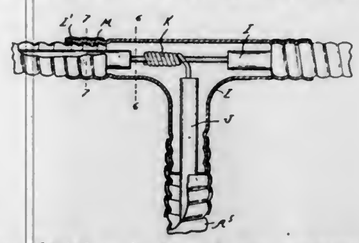


A method of removing substantially solid carbonaceous deposits from the interior of enlarged chambers employed in hydrocarbon oil cracking processes, which comprises initially penetrating the mass of such material forming a passage having an access opening of relatively small cross sectional area, and thereafter uniformly expanding the diameter of said passage beyond the access opening from a minimum diameter near said access opening to a maximum diameter near the inner end of said passage, by taking rotary cuts of uniformly increasing diameter as the mass is penetrated.

1,827,086. CONDUIT SYSTEM. JOSEPH H. HUNTER, Detroit, Mich., assignor, by mesne assignments, to General Cable Corporation, a Corporation of New Jersey. Filed Apr. 13, 1925. Serial No. 22,852. 6 Claims. (Cl. 247—3.)

1. A conduit system comprising a plurality of conduit sections each formed of a spirally wound strip forming

external and internal screw-threads and a coupling for said sections of a similar spirally wound strip of different



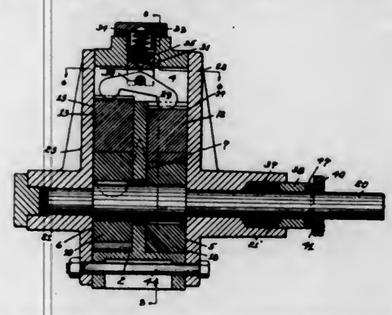
diameter adapted to be screwed into engagement with the threads formed by the spiral windings of said sections.

1,827,087. ELECTRIC WATER HEATER. LEE P. HYNES, Albany, N. Y., assignor to Hynes & Cox Electric Corporation, Albany, N. Y., a Corporation of New York. Filed May 20, 1926. Serial No. 110,480. 10 Claims. (Cl. 219—38.)



1. An electric water heater comprising a tank, heat insulation completely enclosing the tank, water tight tubes located within said tank and open at their upper ends outside of the tank and the insulation, electric heating elements located within the respective tubes, said heating elements being of appreciably shorter length than said tubes, so as to provide a heating space of substantial length and volume above the positions of the heater elements, a thermostat positioned to be influenced by the temperature of the water within the tank and controlling the circuit to the heating elements, and means for supporting the thermostat within the tank.

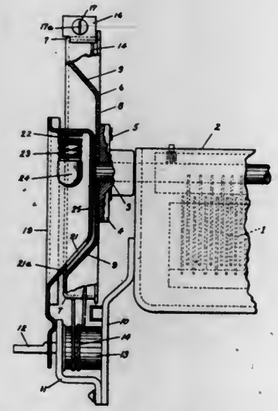
1,827,088. ROTARY PUMP. JOSEPH F. JAWOROWSKI, Cleveland, Ohio, assignor, by direct and mesne assignments, of two-ninths to Samuel E. Dettelbach, one-third to Sam W. Emerson, and one-ninth to Edgar A. Hahn, Cleveland, Ohio. Filed Dec. 31, 1927. Serial No. 243,810. 2 Claims. (Cl. 103—123.)



1. A double-acting rotary pump, comprising a body having a pair of circular working chambers separated by a central division wall, said body also having an unob-

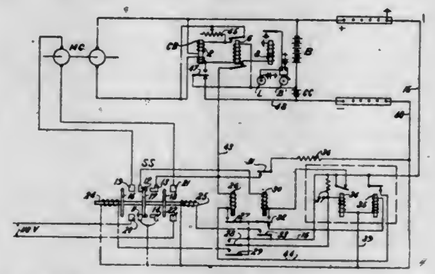
structed cross passage at its top and vertical slots connecting said passage with said chambers, said body being further provided with separate inlet and outlet openings having ports communicating with said working chambers adjacent the slots, said ports being elongated and open at one end to the bottom end of said slots, a pair of rotatable pistons eccentrically mounted within said circular chambers having a peripheral sector thereof of substantial length engaging the circular walls of said chambers, a pair of piston blades slidably confined within said slots and engaging said pistons, an equalizing lever pivotally mounted within said cross passage and engaged at its opposite ends with said blades, and a compression spring for said lever to force said piston blades in self-adjusting contact with said pistons.

1,827,089. CONTROLLING AND INDICATING DEVICE FOR RADIO SETS. RALPH H. LANGLEY and JULIUS K. DREXELIUS, Cincinnati, Ohio, assignors to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed July 11, 1930. Serial No. 467,276. 8 Claims. (Cl. 116—124.4.)



1. Controlling and indicating means comprising a shaft, means for rotating said shaft, and a dial member on said shaft, said dial member having an inwardly extending truncated cone shape, a face plate with an aperture for the inspection of a portion of said dial, and a light located behind the front surface of said face plate and above said aperture.

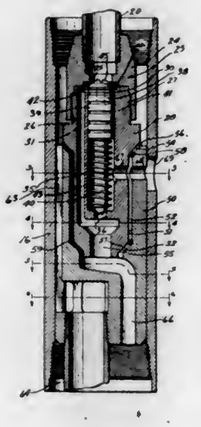
1,827,090. VOLTAGE CONTROL EQUIPMENT. CLARENCE E. LOMAX, Oak Park, Ill., assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 11, 1925. Serial No. 74,675. 6 Claims. (Cl. 177—311.)



3. In a battery charging system, a circuit breaker having an operating winding, a motor-generator set, an operating circuit for the motor thereof, an electro-responsive con-

necting switch, a relay having contacts biased to the closed position, a storage battery, circuit means to supply said relay with current from said battery to energize the same to hold said contacts open as long as the potential of said battery remains above a certain value, circuit means for operating said connecting switch upon the closure of said relay contacts when the battery potential drops below said certain value, means operated by said switch for completing the operating circuit for the motor of said set, circuit means including said operating winding for operating said circuit breaker by current from the generator of said set, circuit connections completed by said circuit breaker when operated for connecting said generator to said battery to charge said battery, an alarm signal, and means operated if said connecting switch, said motor-generator set or said circuit breaker fails to operate following the closure of said contacts for actuating said alarm signal.

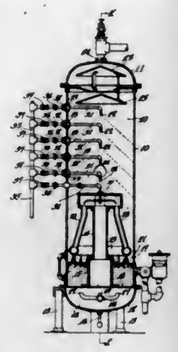
1,827,091. VALVE CONSTRUCTION FOR GAS PUMPS. GLENN E. MAKINSTER, Los Angeles, Calif., assignor, by mesne assignments, to Jordan & Taylor, Inc., Los Angeles, Calif., a Corporation of California. Filed Nov. 19, 1928. Serial No. 320,372. 17 Claims. (Cl. 103—234.)



1. In a displacement pump for pumping wells, the combination of walls forming a displacement chamber adapted to be submerged in a liquid to be pumped, there being vent means communicating between said displacement chamber and the exterior of said walls, a piston slidable in a cylinder formed by said walls and operating, when the pressure pumping fluid exceeds a predetermined value, to admit said pressure fluid to said displacement chamber and to simultaneously close said vent means, and means for operating said piston when said pressure fluid is shut off to simultaneously close said pressure fluid passage and open said vent means.

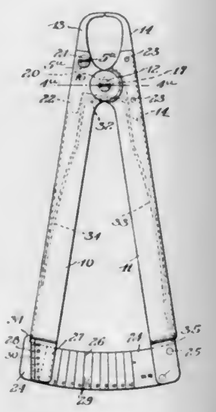
1,827,092. SPRAY DEHYDRATOR. JOSEPH A. MARTOCELLO, Philadelphia, Pa. Filed June 15, 1926. Serial No. 116,096. 2 Claims. (Cl. 183—23.)

1. In a dehydrator for air, the combination of a casing having an outlet near the top thereof, a surface condenser in the lower part of the casing, a succession of vertically spaced downwardly directed spray pipes in the casing intermediate the outlet and the condenser, means for delivering air against the surface of the surface condenser and connections for passing the air from the surface



condenser into an intermediate portion of the casing for upward passage through the sprays to the outlet.

1,827,093. MEASURING INSTRUMENT. JOSEPH J. MCCABE, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 9, 1925. Serial No. 7,766. 8 Claims. (Cl. 33—148.)

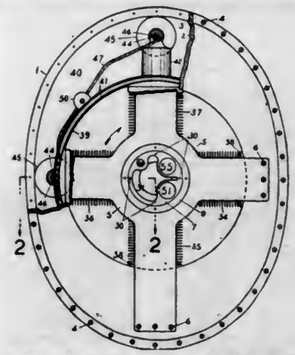


6. In a measuring instrument, a pair of pivoted arms extending in a common plane, jaws disposed in said plane upon said arms, one of the jaws being adapted to swing to different positions of adjustment upon and relative to the arm upon which it is mounted, and means for holding said jaw in its different positions of adjustment.

1,827,094. RADIAL INTERNAL COMBUSTION ENGINE. CHARLES S. MCCANN, near Dayton, Ohio, assignor of one-half to George B. McCann, Montgomery County, near Dayton, Ohio. Filed Feb. 13, 1928. Serial No. 254,006. 4 Claims. (Cl. 123—44.)

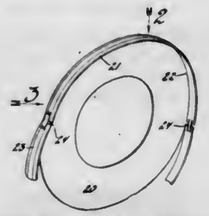
2. In an engine of the type described, an axial valve member, a hub block rotatable around said valve member, radial cylinders arranged in said hub block and open through it to the valve member, pistons reciprocable in said cylinders, a fixed cam having a curved surface, means carried by the outer ends of said pistons for engagement with the curved surface of said cam, one fourth of the periphery of said valve member being a continuous curve to provide a gas compression means, the next quadrant

being formed with a recess to provide an explosion space, the next quadrant formed with a larger recess to provide



an exhaust space, and the next quadrant formed with a deep, wide recess to provide a gas intake space.

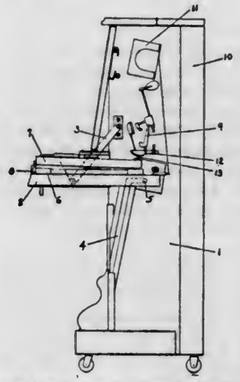
1,827,095. TIRE COVER. THOMAS J. MCCORMICK, Detroit, Mich. Filed July 14, 1930. Serial No. 467,988. 19 Claims. (Cl. 150—54.)



1. In a tire cover, a continuous annular face element and a tread element, the latter including a substantially semi-circular channelled portion integrally secured to said face element and to arcuate channelled members hingedly connected thereto and adapted to come together to form a second substantially semi-circular portion.

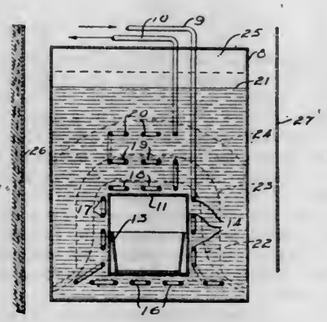
16. In a tire cover having slots between which are disposed spring-hinge-forming sections, beads encompassing and in alignment with said slots, and a finishing strip between said beads and having its margins disposed in said slots and retained by said beads.

1,827,096. FOLDING KEY BED FOR PIANOS. ARTHUR H. MORSE, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Mar. 9, 1931. Serial No. 521,205. 6 Claims. (Cl. 84—431.)



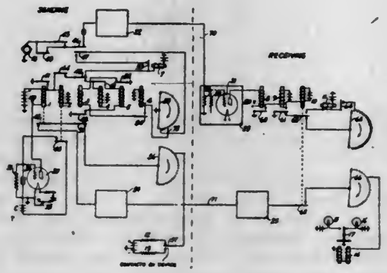
5. A piano case having a folding keybed, keys pivoted on the keybed, balance springs attached to the sides of the case and the back of the keybed, guides up and down the sides of the case with a cross guide at the upper end, projections on the ends of the keybed for engaging the guides, swinging arms pivoted to the case sides and to the ends of the keybed in such position that the front of the keybed will swing outward and downward and rear of the keybed will rise upward and inward.

1,827,097. REFRIGERATING APPARATUS. GLENN MUFFLY, Richmond, Mich., assignor to Copeland Products, Inc., Detroit, Mich., a Corporation of Michigan. Filed Feb. 14, 1930. Serial No. 428,264. 4 Claims. (Cl. 62—95.)



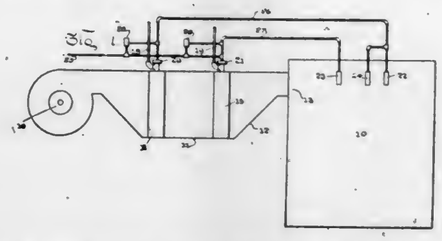
3. In refrigerating apparatus, a tank, brine in said tank adapted to be frozen during normal operation of said apparatus and comprising an eutectic mixture which expands upon freezing, and a refrigerant circulating system comprising an inlet, an outlet and an expansion coil, the tubes of said coil at the inlet end thereof being located at the lower central portions of said tank, and a preponderance of said tubes being located in the lower part of said tank.

1,827,098. SUPERVISORY SYSTEM. MARTIN L. NELSON, Park Ridge, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Oct. 18, 1928. Serial No. 313,294. 5 Claims. (Cl. 172—293.)



2. In a synchronizing system, devices having normal positions, means for stepping said devices, a relay associated with one of said devices, means responsive to one of said devices reaching a predetermined position for preparing a circuit to said relay, means responsive to said one device stepping off of said predetermined position for operating said relay, and means controlled by said relay for causing said devices to automatically step to their normal positions to synchronize them.

1,827,099. EFFECTIVE TEMPERATURE CONTROL APPARATUS. GERALD E. OTIS, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Sept. 28, 1928. Serial No. 309,048. 4 Claims. (Cl. 236—44.)



1. In temperature control mechanism in combination with the room to be conditioned, air conditioning means comprising a cooling unit for varying the temperature of the incoming air and a heating unit, means for directing all of the air first through the cooling unit and afterwards through the heating unit, and finally into the room controlling means within the room for regulating the cooling capacity of the cooling unit, temperature responsive means within the room adapted when the room temperature rises above a predetermined point to disable the action of the said controlling means, and controlling means within the room for regulating the heating capacity of the heating unit.

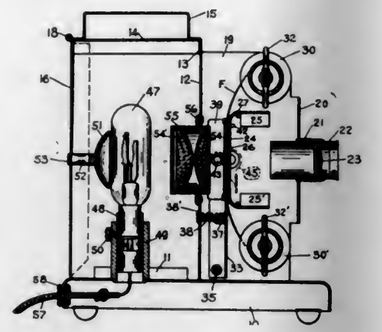
1,827,100. AIR VALVE FOR NURSING BOTTLES AND NIPPLES. GEORGE A. PARDEE, Omaha, Nebr. Filed Sept. 26, 1927. Serial No. 222,062. 1 Claim. (Cl. 215—11.)



The combination with a nursing receptacle having therein an opening other than that through which the liquid food is withdrawn, of a valve for controlling admission of air to the receptacle through said opening, said valve comprising a head portion arranged to cover said opening within the receptacle, a stem connected with said head and extending through said opening, a spring connected with said stem outside the receptacle and adapted to pull outwardly upon said stem, and adjusting means for varying the tension of said spring.

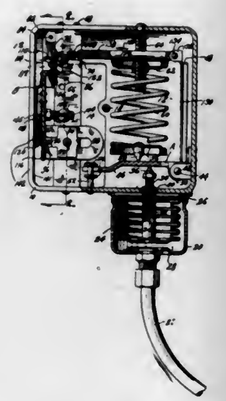
1,827,101. PROJECTOR FOR STRIP FILMS. WILLIAM L. PATTERSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 13, 1928. Serial No. 261,362. 7 Claims. (Cl. 88—28.)

3. In a projector, the combination of a lamp housing, an aperture plate, means for mounting said aperture plate in cooperative relationship to said housing, a movably mounted presser plate, yieldable means for normally holding said presser plate in contact with said aperture plate,



and cam means pivotally mounted on said first named means and adapted to engage said presser plate for moving and holding said presser plate away from said aperture plate.

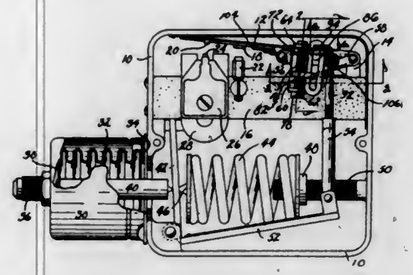
1,827,102. PRESSURE ACTUATED SWITCH. RALPH PENN, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed May 21, 1927. Serial No. 193,316. 4 Claims. (Cl. 200—83.)



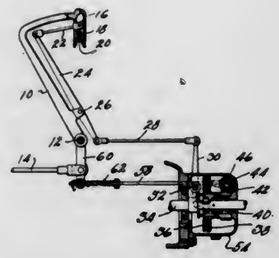
1. In an automatic controlling device, a power unit, a switch unit including an armature arm and an operative connection between said units including a lever adapted to be moved by the power unit and a connection between said lever and said armature arm, said connection when moving in one direction serving to rigidly connect the arm and lever together and when moving in the opposite direction allowing independent movement of the lever relative to said arm and means for varying the differential as to when said armature arm operates.

1,827,103. DIFFERENTIAL WIDENING MEANS. RALPH PENN, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Jan. 28, 1929. Serial No. 335,653. 11 Claims. (Cl. 200—83.)

1. The combination with an actuating means, a movable member, means for operatively connecting said means with said member and a force coacting with said movable member to influence the action thereof in varying degrees according to the position of the movable member, said movable member normally operating at a predetermined minimum differential, of means for widening such differential of operation comprising a lost motion connection included in said means for connecting the actuating means with the movable member and means acting upon said movable member to hold it in a position where said force does not act thereupon.



1,827,104. BRAKE OPERATING MECHANISM. HENRI PERROT, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1927, Serial No. 230,091, and in France Nov. 2, 1926. 24 Claims. (Cl. 188—140.)

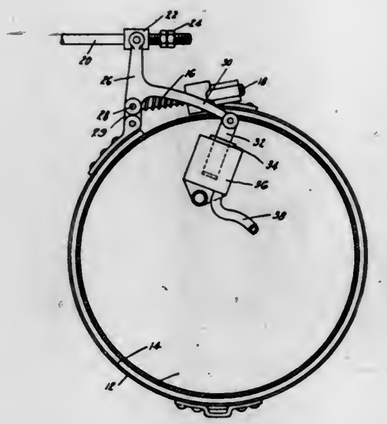


1. Brake operating mechanism for a motor vehicle having a driven power shaft comprising in combination, a brake operating connection, a manually operable control member coupled therewith to mechanically actuate the connection, a servo device including a clutch coupled with said shaft, control means for bringing said clutch into operation to be driven by the shaft and means connecting the clutch with said control member to move the same to actuate said connection.

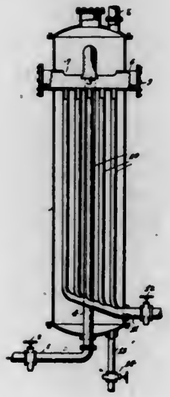
21. In combination with a vehicle having brakes and a power rotated shaft, means for manually applying the brakes, clutch means for coupling said power driven shaft with said brakes to actuate the same, and means associated with the manual actuating means for selectively actuating said clutch.

1,827,105. BRAKE MECHANISM. HENRI PERROT, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Jan. 29, 1924, Serial No. 689,218. Divided and this application filed Nov. 5, 1927. Serial No. 231,313. 8 Claims. (Cl. 188—106.)

1. A brake having a drum, friction means engageable therewith to retard its rotation, a pivotally supported member connected directly with the friction means to apply the same to the drum, two applying devices each having an overrunning connection with said member to actuate said member to apply the friction means to the drum independently of the other applying device and without actuation of such other applying device.

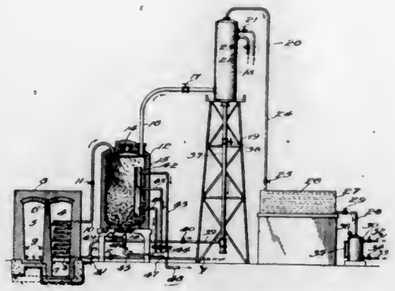


1,827,106. VAPOR CHAMBER. ROBERT T. POLLOCK, Boston, Mass., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 11, 1921, Serial No. 460,526. Renewed Oct. 15, 1929. 3 Claims. (Cl. 196—104.)



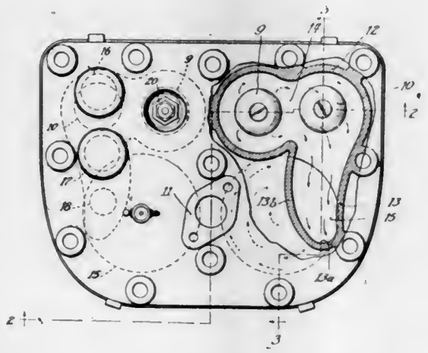
1. In a vaporizing chamber, the combination with a plurality of tubes communicating with an open liquid receptacle, located at least in part within the upper part of said vapor chamber, the part exterior thereof being closed, means for introducing the liquid to be vaporized to the liquid receptacle, and means for removing the vaporized portion from the chamber simultaneously with the drawing off of the unvaporized portion through the tubes.

1,827,107. PROCESS AND APPARATUS FOR HYDROCARBON OIL CONVERSION. CLIFTON J. PRATT, Tulsa, Okla., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed May 13, 1925, Serial No. 29,857. Renewed Apr. 30, 1929. 2 Claims. (Cl. 196—58.)



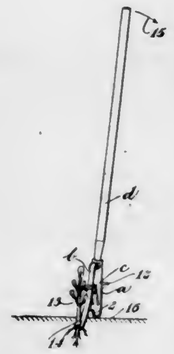
2. A method for treating hydrocarbon oil which comprises heating the oil to a cracking temperature in a heating zone, delivering the heated oil to an enlarged chamber wherein oil accumulates in a body, preventing return of oil from said enlarged chamber to said heating zone, depositing coke from said body in the bottom of said chamber, maintaining a second relatively quiescent body of oil in said enlarged chamber, admitting liquid oil to said second body from said first mentioned body through the coke adjacent the bottom of said chamber, permitting vapors separated from said second body to unite with vapors separated from the first body, and removing unvaporized residue from said second body to be isolated from the process.

1,827,108. INTERNAL COMBUSTION ENGINE. ENOCH RECTOR, New York, N. Y., assignor to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Mar. 18, 1927. Serial No. 176,324. 10 Claims. (Cl. 123—191.)



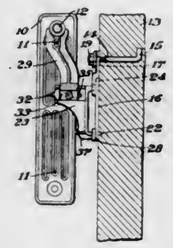
4. In an engine of the character described, a cylinder, a piston, a cylinder head provided with a primary valve controlled combustion chamber to one side of the cylinder, said cylinder head also provided with a secondary combustion chamber above a portion of the cylinder communicating with the primary chamber, said secondary chamber extending above a portion of the piston face to one side of the piston face center, said cylinder head having a wall providing minimum clearance above the remainder of the piston face when the piston is at the upper limit of its stroke.

1,827,109. EXTRACTOR. WILLIAM A. RICE, Los Angeles, Calif. Filed June 22, 1929. Serial No. 372,979. 3 Claims. (Cl. 254—132.)



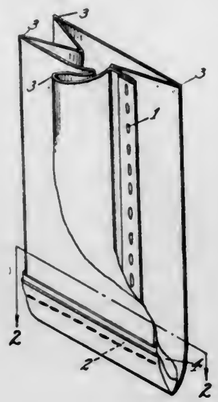
2. In an extractor, a support formed with a curved foot, a handle for said support, a fork swingingly carried by the support, resilient means between said support and fork whereby when the fork engages an object and the handle is moved, the curved foot acts as a fulcrum to cause the resilient means to be placed in compression.

1,827,110. RADIATOR HANGER. THOMAS A. RIDDER, Whitman, Mass. Filed May 27, 1929. Serial No. 366,169. 3 Claims. (Cl. 248—17.)



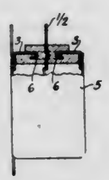
1. A radiator hanger, comprising in combination, a wall plate secured to a wall for vertical adjustment, a bracket provided with a tongue for removably securing the bracket to said plate so that the bracket may be readily disengaged from the plate without disturbing the position of the latter and an abutment on the bracket adapted to engage the plate and to cooperate with said tongue to support the bracket for lateral adjustment upon the plate, a steady rest upon said bracket for engagement by the rear face of a radiator, and a radiator supporting arm adjustably mounted upon said bracket and supported by the bracket and wall plate for adjustment in the three geometric planes.

1,827,111. BARREL LINER AND PROCESS OF FORMING SAME. WILLIAM WALLACE ROWE, Cincinnati, Ohio, assignor to The Paper Service Company, Lockland, Ohio, a Corporation of Ohio. Filed Jan. 21, 1928. Serial No. 248,488. 8 Claims. (Cl. 229—53.)



3. A bag liner for containers, having the lower corner edges thereof folded inwardly and laid freely against the inside of the bottom of the bag.

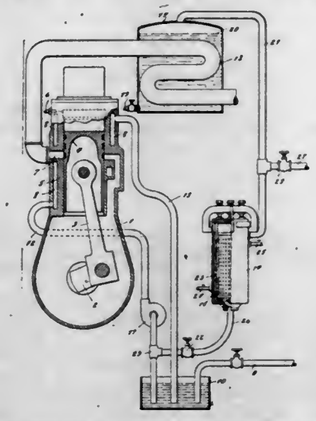
1,827,112. DAMP-PROOF CONDENSER. WALTER RÜDIGER, Berlin-Karlshorst, Germany, assignor to Telephon-Apparat Fabrik E. Zweitusch and Company, Berlin, Germany. Filed Nov. 21, 1928, Serial No. 320,828, and in Germany Mar. 22, 1928. 1 Claim. (Cl. 175—41.)



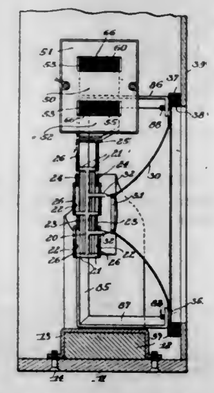
A container for electrical equipment having a cover comprising a cup-shaped metal body having its sides secured to said container and having a centrally located aperture the edges of said aperture being bent inward and then parallel to the surface of said body, terminal pieces projecting through said aperture and molded insulating material binding said terminal pieces and said body into a rigid unitary structure, said insulating material entirely encasing said bent edges to form a long creep path for moisture.

1,827,113. APPARATUS FOR USE IN PREVENTING INCRUSTATION OF WATER COOLED ENGINES. JOSEPH F. SANFTLEBEN, New York, N. Y., assignor to Filtrators Company, Inc., New York, N. Y., a Corporation of New York. Filed May 15, 1928. Serial No. 277,830. 5 Claims. (Cl. 123—170.)

1. In combination, an engine having a part cooled by water, a boiler heated by waste heat from said engine, a container for material adapted to form a water treating substance, means to discharge steam from said boiler into said container to act on said material to form said substance, and means to discharge said substance from the container into the water entering said part of the engine.

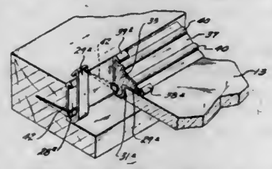


1,827,114. ACOUSTIC DEVICE. VESPER A. SCHLENKER, Rochester, N. Y. Filed Sept. 20, 1928. Serial No. 307,238. 8 Claims. (Cl. 179—115.5.)



1. An acoustic device comprising a magnet having an air gap, a conductor mounted for movement within the air gap, a transformer having a flux-generating winding, and a conducting member linking a part only of the flux generated by said winding, said conducting member being electrically connected to the conductor in the air gap.

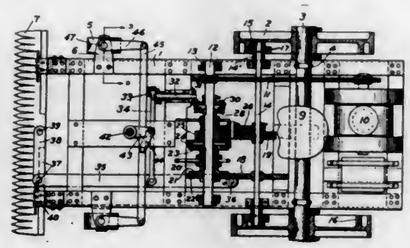
1,827,115. PUTTY SHIELD. JOHN G. SHODRON, Fort Atkinson, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Original application filed Mar. 6, 1929, Serial No. 344,640. Divided and this application filed Apr. 21, 1930. Serial No. 445,939. 7 Claims. (Cl. 20—56.4.)



1. The combination with a support, of a member in jointed connection therewith, a body of putty covering the

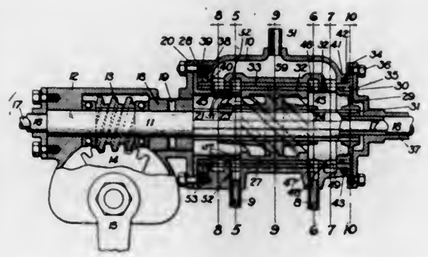
joint, and a thin strip of metal covering the putty and separately anchored to the support at intervals along each side margin, said body of putty being in adhesive engagement with the support and said member between said points of anchorage.

1,827,116. LAWN MOWER. MARK SOSS, Spokane, Wash. Filed Jan. 22, 1929. Serial No. 334,244. 1 Claim. (Cl. 56—25.)



The combination in a lawn mower with a motor, a sprocket driving mechanism operated by the motor, a power shaft journaled transversely of the mower and operated by the driving mechanism, and a reciprocable cutter at the forward end of the mower, of an oscillating lever having an intermediate pivot on and extending longitudinally of the mower, said lever having a pivotal connection at its forward end to the reciprocable cutter, a driving clutch on the power shaft, eccentric transmission mechanism actuated by said clutch, and a pitman connecting the eccentric mechanism and the rear end of the oscillating lever.

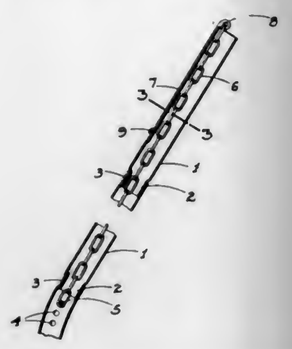
1,827,117. HYDRAULIC STEERING MECHANISM FOR POWER PROPELLED VEHICLES. EDWIN G. STAUDE, Minneapolis, Minn. Filed May 16, 1925. Serial No. 30,883. 17 Claims. (Cl. 180—79.2.)



1. A hydraulic steering mechanism for motor vehicles comprising a steering post, a reciprocating piston splined to said post and having a sliding movement and provided with spiral grooves on its periphery, a sleeve having internal threads adapted to cooperate with said spiral grooves, a pair of circulating pumps each having a fluid circulating system and adapted to cause a pressure on the exhaust side of said pump and actuate the aforesaid piston, and a valve adapted to check the flow of fluid on one side or the other of said piston.

8. A structure including a hollow portion, a first steering post section, a piston splined to the steering post section, and spirally splined to a wall of the hollow portion, to divide it into two chambers, a second steering post section, and valves movable with the steering post sections and cooperable for controlling the flow through the chambers, and means for obtaining a pressure circulation of fluid on both sides of said piston.

1,827,118. FIRE FIGHTING TOOL. LUCIEN A. STEPHENS, Angels Camp, Calif. Filed May 18, 1931. Serial No. 538,385. 9 Claims. (Cl. 294—57.)



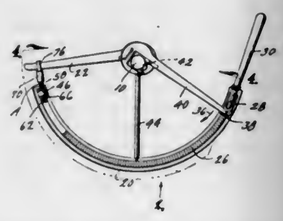
1. An implement handle structure comprising separable handle sections adapted for telescoping engagement at their adjacent ends, and means to then releasably tie all the sections together simultaneously.

1,827,119. POST FOR INTERCHANGEABLE TEETH. BENJAMIN K. TAKENAKA, New Rochelle, N. Y. Filed Apr. 10, 1929. Serial No. 353,959. 2 Claims. (Cl. 32—9.)



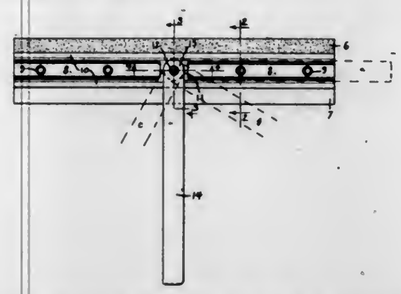
1. An artificial tooth construction comprising a cast backing, a substantially flat plate anchored in and having a flat surface flush with a surface of said backing, said plate being anchored by projecting portions interlocking with said backing, a web extending from said plate, a post formed on said web and being substantially narrower than said plate, and a slotted facing longitudinally slidable along said post and against the flush surfaces of said plate and backing.

1,827,120. TOOL JACK. THOMAS W. THORPE and GEORGE E. THORPE, Des Moines, Iowa. Filed Mar. 28, 1928. Serial No. 265,249. 1 Claim. (Cl. 255—35.)



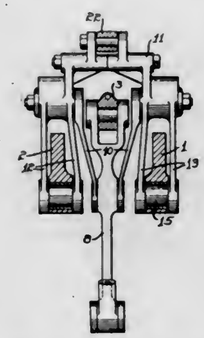
In a tool manipulating device, an arc-shaped track, a tool jack and a bracket thereon, said tool jack having a tool engaging portion, said bracket having a tapered opening and a concave seat around said opening, a threaded rod through said opening, a convex shoulder thereon and engageable with said concave seat and an eye member having a tool receiving eye portion to receive an end of a tool and an internally threaded sleeve portion threaded on said rod.

1,827,121. WINDOW CLEANER. RAYMOND TRANE, Omaha, Nebr. Filed June 8, 1931. Serial No. 542,860. 2 Claims. (Cl. 15—121.)



1. In a device of the class described, a holder comprising a symmetrical pair of oppositely disposed rectangular plates having the longitudinal side portions thereof spaced apart and bowed convergently toward their edges, intermediate longitudinal portions of said plates being swaged inwardly to abutting relation, means fixedly securing said inwardly swaged portions together, and a substantially U-shaped handle straddling said holder and having its ends pivotally connected therewith at the center thereof, said handle being adapted to swing about the pivotal axis past the ends of the holder.

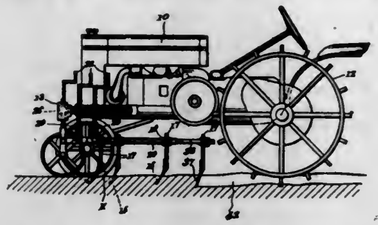
1,827,122. REVERSE YOKE FOR LOCOMOTIVE VALVE GEARS. KLINE S. TRENT, Roanoke, Va., assignor to The Pilliod Company, Swanton, Ohio, a Corporation of Ohio. Filed Feb. 28, 1929. Serial No. 343,280. 2 Claims. (Cl. 121—163.)



2. In a valve gear, a frame having two laterally spaced side bars, a reverse yoke formed of two similar sections each having a laterally extending tubular part, members projecting upwardly from said parts, means to connect the members together, a bolt extending through the tubular parts for connecting same, a reach rod connected centrally to the yoke, a bearing connected to each side of the yoke and disposed below said tubular parts thereof, radius bars pivoted in the respective bearings, a pair of spaced depending legs formed integral with each bearing and straddling the respective side bars of the frame, and pivot pins extending through the lower ends of the legs and through the respective side bars to connect said parts together.

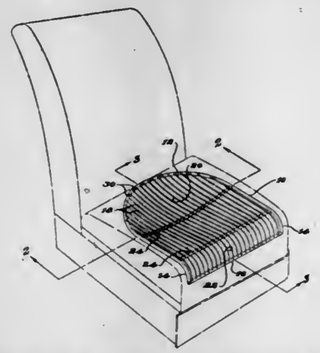
1,827,123. TRACTOR GUIDE. ROLLAND A. TRIVELY, Randolph, Iowa, assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 10, 1929. Serial No. 385,035. 15 Claims. (Cl. 97—41.)

1. In a tractor guide, the combination with a tractor and a soil engaging implement, of a plow point secured to said implement and adjustable laterally thereon to position it in front of and in alignment with a traction wheel of



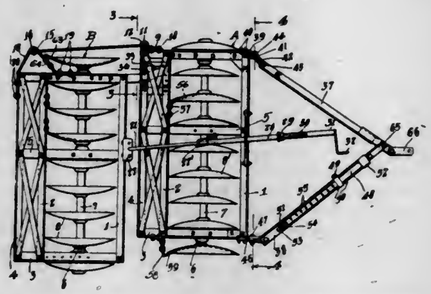
said tractor, and means for raising and lowering said implement.

1,827,124. REMOVABLE SEAT. EUGENE F. TRUDO, Weston, Mass. Filed Jan. 6, 1931. Serial No. 506,881. 2 Claims. (Cl. 155—182.)



1. A removable seat comprising a continuous outer frame portion formed entirely of metal tubing vented to the atmosphere and having the entire interior throughout its length in free communication, the rim portion normally encompassing a sufficient area to avoid direct contact with the body, and a series of hollow spaced metal longitudinals connected at opposite ends of the rim portion and in free communication therewith, the hollow spaced longitudinals being curved to form a generally concave seat portion terminating at the front edge in a rounded and downwardly extending front portion and serving as the sole support for the body.

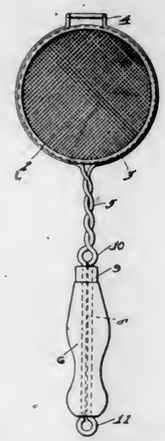
1,827,125. DISK HARROW. HEBER FRED TOWNER, Santa Ana, Calif.; P. G. Beissel, executor of said Heber Fred Towner, deceased, assignor to B. V. Curry, trustee. Filed Feb. 14, 1928. Serial No. 254,186. 12 Claims. (Cl. 55—83.)



1. In a single tandem disk barrow, the combination of a forward gang of disks and a rearward gang of disks, the disks of the forward gang being positioned therein opposed

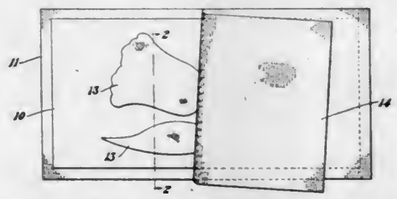
to the positioning of the disks of the rearward gang, a hinge connection at one end of the harrow including a bar and means for pivotally connecting the respective ends of the bar to the front and rear gangs, an arcuate holding arm secured to one of said gangs, means for slidably connecting the said holding arm to the other gang, means for adjusting the angular relation of said gangs, a pair of longitudinally extensible rigid draft arms secured to the forward gang, and means for connecting the said draft connections with a draft clevis.

1,827,126. HANDLE CONSTRUCTION FOR CULINARY UTENSILS. REGINALD WASHBURN, Worcester, Mass., assignor to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 2, 1929. Serial No. 383,096. 3 Claims. (Cl. 210—161.)



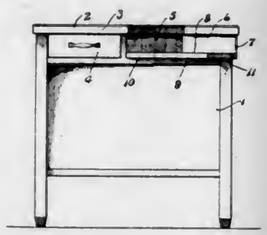
1. A handle construction for culinary utensils comprising a body supporting wire ring, a stiff shank formed by twisting the wires extending from one side of said ring, oppositely extending offsets in said wires at the end of said twisted shank, and parallel straight wires extending from said offsets for receiving a handle having a metallic ferrule at the end nearest said shank, one of said wires being deflected beyond said handle for holding the end of said ferrule against said offsets to prevent its removal.

1,827,127. METHOD OF ORNAMENTING RUBBER MATS. PAUL M. WEAMER, Gladwyne, Pa., assignor to Lee Rubber & Tire Corporation, Conshohocken, Pa., a Corporation of New York. Filed Dec. 27, 1929. Serial No. 416,820. 2 Claims. (Cl. 18—61.)



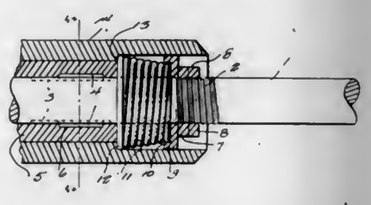
2. The method of making ornamented sponge-rubber sheets which comprises superimposing upon a foundation sheet of sponge-rubber composition a smaller ornamenting sheet of solid-rubber composition having a backing of holland, overlying the two with a cloth molding sheet, vulcanizing the two together against said cloth sheet and embedding the ornamenting sheet in the face of the foundation sheet by the swelling and flow of the latter, removing the cloth sheet and then stripping off the holland sheet.

1,827,128. CALCULATOR DESK CONSTRUCTION. PETER M. WEGE, Grand Rapids, Mich., assignor to Metal Office Furniture Company, Grand Rapids, Mich., a Corporation of Michigan. Filed May 29, 1929. Serial No. 366,797. 4 Claims. (Cl. 45—6.)



1. A construction of the class described, comprising an under support, a flat horizontal top carried on and above said support, said top at its right hand end having an angular shaped part cut away so as to form a recess in the top, said recess having an edge inclined at an obtuse angle to the front edge of the top and a second edge parallel to and spaced from the back edge of the top, said supporting structure being correspondingly cut away and recessed, a horizontal table carried by said support a distance below the top and located in said recess and having its front portion extending forwardly of the front edge of the top and having its front corners cut away so that the front edge of the table at its inner front corner is disposed substantially at right angles to said inclined edge of the top and plate means on the side portion of the horizontal table for the purpose described.

1,827,129. FLEXIBLE COUPLING. VILLOR P. WILLIAMS, Baltimore, Md., assignor, by mesne assignments, to Estelle P. Williams, Baltimore, Md. Filed Apr. 2, 1930. Serial No. 441,144. 6 Claims. (Cl. 64—89.)

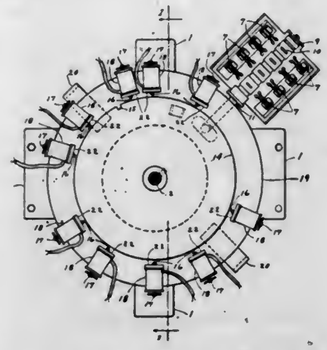


1. A coupling between driving and driven elements comprising a flexible connection between the elements for permitting some axial play therebetween, a pair of stop members on one element, a spring confined between the stop members, and a casing about the stop members and spring and provided with means for fixing the position of one stop member, and means carried by the said element for adjusting and limiting the movement of the other stop member, whereby the play of the latter element with respect to the first mentioned element is against the tension of the spring and limited thereby.

1,827,130. SELECTOR MECHANISM. HARRY A. YEIDER, Grand Rapids, Mich., assignor to Automatic Musical Instrument Company, Grand Rapids, Mich., a Corporation of Delaware. Filed Aug. 6, 1928. Serial No. 297,817. 5 Claims. (Cl. 172—239.)

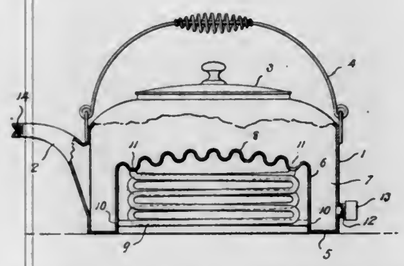
1. A selector of the class described, comprising an induction motor, a switch for reversing said motor, a wheel rotated by said motor, said wheel having a notch

in the periphery thereof, a lug carried by said wheel for actuating said switch to reverse said motor at each



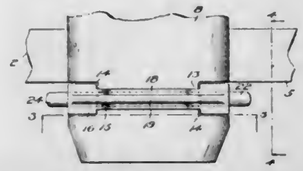
revolution of said wheel, a series of detents adjacent the periphery of said wheel and means for moving said detents to enter said notch for stopping said wheel.

1,827,131. TEAKETTLE AND LIKE DOMESTIC BOILER. FREDERICK DAVID AUSTIN, Port Chester, N. Y., assignor of one-half to David J. Kelly, Jr., Port Chester, N. Y. Filed May 21, 1929. Serial No. 364,843. 4 Claims. (Cl. 53—9.)



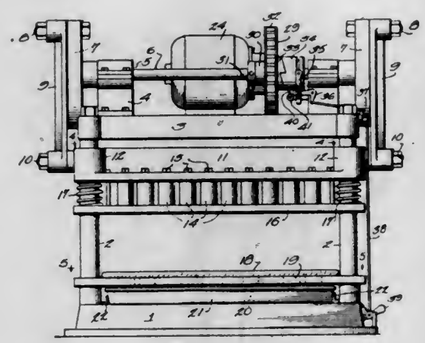
1. A portable water heater comprising an enclosing body, a dome within the body opening through the bottom thereof, and a plurality of water circulating coils within the dome, each communicating at one end at a lower point and at the other end at an upper point of the interior of the body, said coils being laterally spaced with respect to each other and each comprising superimposed and alined flights, all parts of each coil with its connections being entirely free from and spaced laterally of the adjacent coils.

1,827,132. DRAFT KEY RETAINER. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Dec. 3, 1925. Serial No. 72,969. 8 Claims. (Cl. 85—7.)



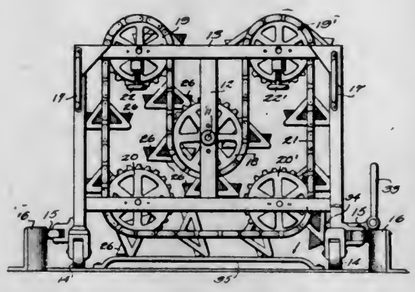
1. In combination, a flat draft key elongated in cross section and having intermediate its ends a portion of reduced cross section, and retaining means embracing said key at said portion of reduced section, said means comprising a member with an intermediate portion seated on the key, depending arms wider than said intermediate portion in the direction of the axis of the key, and rigidified by a rib extending from end to end along the upper face thereof and detachable means extending between the free ends of said arms on the other side of said key.

1,827,133. MACHINE FOR CUTTING AND PANNING BISCUITS. CARL BECKER, Nashville, Tenn., assignor of fifteen per cent to Robert E. Garrett, Nashville, Tenn. Filed Apr. 22, 1930. Serial No. 446,372. 3 Claims. (Cl. 107—24.)



1. A machine of the character and for the purpose described, consisting of a base, a platform above said base, a follower having a vertical movement with reference to said base and mounted between said base and platform, a motor and means operated thereby for raising and lowering said follower, said motor and said means being mounted on said platform, biscuit cutting means carried by said follower, means for receiving and containing the biscuits after being operated upon by the cutting means, means for controlling the vertical movement of said follower and cutting means, said controlling means comprising a clutch for throwing the driving mechanism into and out of operation, said clutch being manually operated and controlled and comprising a freely rotatable clutch collar, a sliding clutch collar, connections leading from said clutch collar, and a manually controlled hand lever for operating said clutch through said connections.

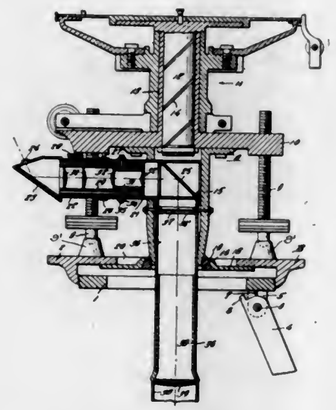
1,827,134. BAKERY MACHINERY. CARL BECKER, Nashville, Tenn., assignor of one-fourth to Robert E. Garrett, Nashville, Tenn. Filed June 18, 1930. Serial No. 462,022. 2 Claims. (Cl. 107—57.)



1. In baking machinery of the character described, the combination of an oven having a base or bed, vertical tracks upon said bed forming guides, a frame having vertical

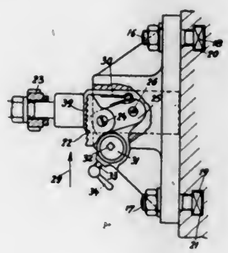
and horizontal casters for traveling upon the bed and guides, a motor driven shaft extending through the rear wall of said oven, a gear wheel on the inner end of said shaft, a driving shaft mounted in said frame and having one end extended, a gear wheel on said end adapted to mesh with the gear wheel on the motor driven shaft in the oven, and an endless carrier operated from said driving shaft, a series of pan containers connected to said endless carrier.

1,827,135. TRANSIT. LOWELL A. BLAKE, Wheelersburg, Ohio. Filed July 22, 1930. Serial No. 469,758. 1 Claim. (Cl. 88—2.2.)



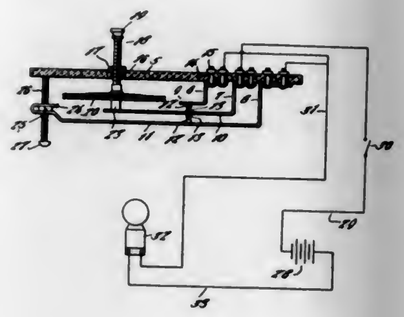
A transit of the character described comprising a supporting structure including a base member having a centrally disposed opening, supporting screws extending upwardly from the base member, a plate adjustably mounted on the supporting screws in vertically spaced relation to the base member, a transit head adjustably mounted for rotation on the plate, a metallic sleeve anchored to the plate and extending therefrom in vertical alignment with the opening in the base member, a horizontally disposed telescope section extending into the tube, said telescope section having reflecting prisms at its opposite end and lenses intermediate said prisms, and a telescope section extending through the base and longitudinally through the tube and connected to the first named section and depending therefrom.

1,827,136. DRIVER FOR WHEEL LATHES. ERNST BLAU, Berlin, Germany. Filed Sept. 14, 1929, Serial No. 392,718, and in Germany Nov. 28, 1928. 8 Claims. (Cl. 82—40.)



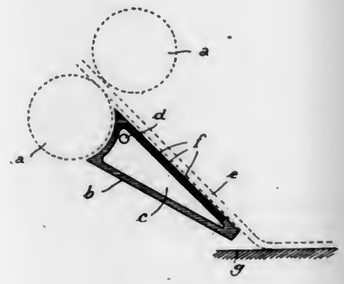
1. A driver for wheel lathes, comprising a support adapted to be secured to the face-plate of the lathe, self-tightening gripping means movably connected to said support and adapted to grip the wheel, clamping means adapted to engage the wheel and mounted on said support, fastening means to movably and removably mount said clamping means on said support, said clamping means further adapted to be extended between two spokes and the rim of the wheel and to take up the axial pressure exerted upon the wheel by said gripping means.

1,827,137. THERMOSTATIC ALARM. HARRY L. BLOME, Stonington, Ill. Filed Mar. 21, 1930. Serial No. 437,918. 2 Claims. (Cl. 200—140.)



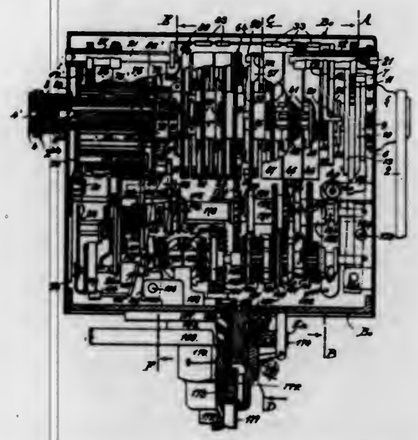
1. A thermostatic switch comprising a support, a thermostatic element on the support, a contact arm carried by the thermostatic element, a stationary contact strip having one end secured to the support, a threaded protuberance on the support, the opposite end of the contact strip being provided with a U-shaped formation, the opposed portions of the U-shaped formation being provided with registering openings through which the threaded protuberance extends, and a nut on the threaded protuberance between the apertured portions of the contact strip.

1,827,138. PROCESS OF AND APPARATUS FOR ROLLING GLASS. ARTHUR BRANCART, Ronquieres, Belgium. Filed Feb. 14, 1930, Serial No. 428,444, and in Belgium Feb. 23, 1929. 4 Claims. (Cl. 49—33.)



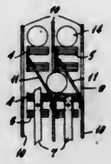
4. In apparatus for the manufacture of glass plates and sheets, the combination of a pair of rolls for rolling glass in a plastic condition, a receiving table, an inclined guide plate between said rolls and said table, the permanent inclination of said plate being such that the glass will not stay thereon, said plate being hollow and having a perforated upper surface, the perforations in said surface being distributed over the whole length thereof, and a gas supply pipe opening into the inside of said plate.

1,827,139. TAXIMETER. JEAN ALBERT FRANÇOIS BRUN, Paris, France. Filed Sept. 11, 1922, Serial No. 587,319, and in France Sept. 19, 1921. 23 Claims. (Cl. 235—30.)



1. In a taximeter, a controlling shaft, fare drums, extra drums and a tariff drum supported by said shaft, said drums being of uniform diameter, a clock spring and barrel mounted concentrically with said shaft and means for tensioning the spring by movement of the shaft.

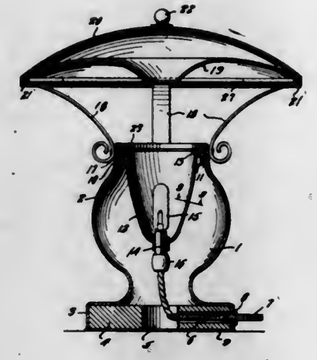
1,827,140. APPARATUS FOR CLEANING BOTTLES AND THE LIKE. JAN GERARDUS CUPEDO, Rotterdam, Netherlands. Filed Nov. 2, 1929, Serial No. 404,334, and in the Netherlands Nov. 12, 1928. 1 Claim. (Cl. 141—7.)



In a bottle washing machine, a receptacle adapted to contain liquid, a shaft rotatably journaled in the receptacle, a drum fixed to and rotatable with the shaft, said drum having circumferential rows of bottle compartments formed by radially outwardly extending arms being fixed to the drum and provided with pins parallel to said shaft for supporting bottles, partitions separating the circumferential rows of compartments, each partition having a passage therein, inclined fingers fixed to each partition adjacent the said passage and extending between the circular paths of the supporting pins for positively discharging the bottles supported by the pins through said passages successively from a compartment of one circumferential row of compartments to a compartment of the next row.

1,827,141. ILLUMINATING APPARATUS. GEORGE H. CUSHING, Washington, D. C. Filed June 15, 1929. Serial No. 371,258. 1 Claim. (Cl. 240—81.)

A household lamp comprising a hollow base member, a foot portion therefor, a deep parabolic primary reflector positioned within the base member, the mouth of said reflector being supported upon the upper end of said base member, a light source positioned at the apex of said primary reflector, a plurality of arms extending upwardly from the upper end of the base member, an annular opaque parabolic secondary reflector having a reflecting

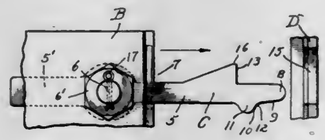


surface formed of a plurality of segregated flats and an opaque cover member for said secondary reflector both supported by said arms, said secondary reflector being so positioned with respect to the primary reflector as to intercept and redirect all of the light reflected thereby and also all of the unreflected light emanating from said light source.

1,827,142. PROCESS FOR THE TREATMENT OF ALUMINUM. MARTIN KRISTENSEN DE TRAIRUP, London, England. Filed Dec. 4, 1929, Serial No. 411,697, and in Great Britain Sept. 3, 1929. 5 Claims. (Cl. 204—3.)

1. A process for preparing the surface of aluminum for receiving subsequent treatment of the nature of electroplating, dry-tinning and soldering, consisting in depositing an amalgam on to the aluminum surface in an electrolytic bath containing a solution of salts of mercury and tin.

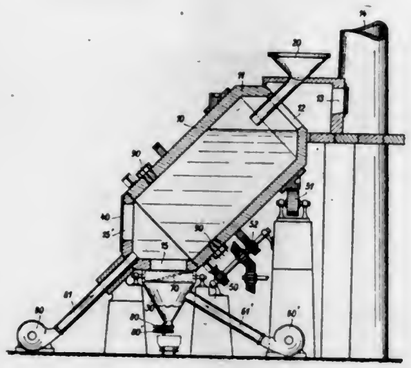
1,827,143. DOORCHECK. JOSEPH BERNARD DOYLE, Mount Vernon, N. Y., assignor to James L. Howard & Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 14, 1928. Serial No. 319,425. 8 Claims. (Cl. 16—83.)



1. The combination with a door and its post, the latter having an opening therein, of an arm pivoted to the door, such arm being provided with a cam surface on its lower edge adapted to engage the lower edge of the opening and to throw the arm upwardly when the door is slammed to, the said arm being provided on its upper edge with a shoulder adapted to engage the upper edge of the opening when the arm is thrown upwardly, said shoulder being located slightly rearwardly of the said cam surface, the opening being of greater vertical dimension than the combined vertical dimensions of the arm including the said cam surface and the shoulder, the opening being of greater horizontal dimension than that of the arm, to

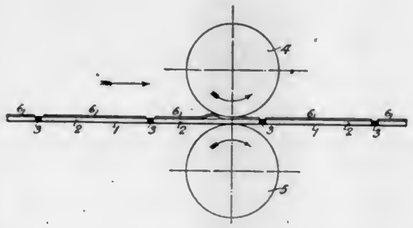
permit the arm to pass therethrough, the said arm being adapted, after having been thrown upwardly, to return by gravity to its normal position, thereby allowing the door to move into closed position.

1,827,144. KILN FOR THE PRODUCTION OF CEMENT. HANS ENGEL, Stettin, Germany. Filed May 29, 1930, Serial No. 457,298, and in Germany June 25, 1928. 6 Claims. (Cl. 222—7.)



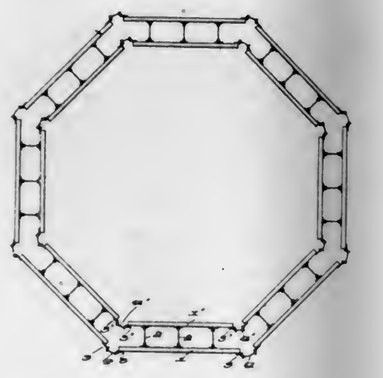
1. In a rotary kiln for the production of cement or the like, in combination, a heating chamber of substantially uniform cross-section having its axis inclined at an angle of substantially 45° to the horizontal whereby said chamber is normally substantially filled with material, a lid fixed to the upper end of said chamber and having an exhaust opening therein, means for charging raw material into said chamber, a bottom member secured to the lower end of said chamber and having discharge openings therein, a hopper mounted below said bottom and adapted to receive material escaping through the openings in the lower part thereof, a plate adjacent said bottom and closing the remaining openings therein, and means for rotating said chamber and for introducing air into the lower part thereof.

1,827,145. MANUFACTURE OF LINOLEUM. ALFRED ARTHUR GODFREY, London, England, assignor to Linoleum Manufacturing Company, Limited, London, England. Filed Nov. 2, 1929, Serial No. 404,372, and in Great Britain Nov. 20, 1928. 3 Claims. (Cl. 154—26.)



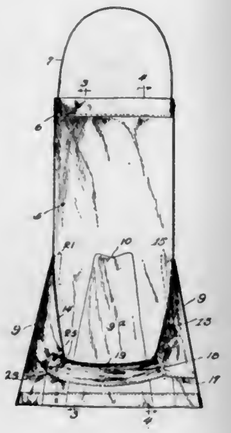
1. The method of manufacturing linoleum having a patterned surface with the pattern in relief or vice versa, which consists in placing pieces of linoleum to form the pattern, and pieces of linoleum to form the background, of the same thickness as those which form the pattern, upon a backing of canvas or other suitable material, rolling or pressing the said pieces forming the pattern and the background to consolidate them, superimposing a second layer of pieces of linoleum to form a portion in relief and rolling or pressing it to consolidate it with the pieces forming the first layer.

1,827,146. CRIB, CAISSON, AND THE LIKE. ALFRED H. GRUPPE, Milwaukee, Wis., assignor of one-half to Thomas L. Durocher, Detour, Mich. Filed July 6, 1929. Serial No. 376,363. 4 Claims. (Cl. 61—34.)



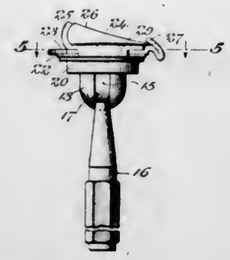
1. A metal structure for cribs, caissons and the like, comprising wall panels of channel beams in abutted parallel relation united flange to flange, and sheet piling sections secured to and uniting the vertical edges of adjacent panels.

1,827,147. UNDERGARMENT. RENÉE HALL, Detroit, Mich. Filed Dec. 19, 1928. Serial No. 327,146. 1 Claim. (Cl. 2—73.)



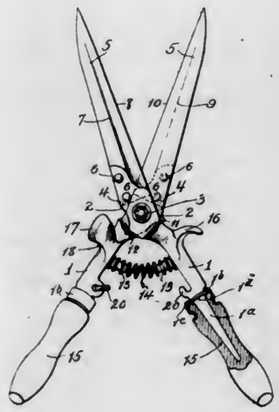
An undergarment comprising a waist portion and a skirt portion, shoulder supporting means in the waist portion, and inserts including front and back inserts in the skirt portion, all of said inserts extending to the bottom of the skirt portion and all having a notched top and tapered toward the waist, said front and back inserts each overlying an underportion and a flap connecting the underportions to form drawers.

1,827,148. SAFETY RAZOR. HARRY BUXTON HARTMAN, Buffalo, N. Y. Filed June 17, 1929. Serial No. 371,462. 4 Claims. (Cl. 30—12.)



3. In a safety razor, a member with which the handle of the razor is connected, a blade holding plate rigidly secured to the outer end of said member, a slotted blade guard having abutments at its front edge and slidably arranged beneath the inner face of said plate, means for guiding the blade guard with reference to the blade holding plate, and a spring disposed within the slot of the guard and having a portion engaging said member, and the ends thereof bearing against said guard.

1,827,149. COMBINED HEDGE CLIPPER AND GRASS CUTTER. WILLIAM G. HEIMERDINGER, Louisville, Ky. Filed Mar. 13, 1929. Serial No. 346,713. 1 Claim. (Cl. 30—11.)

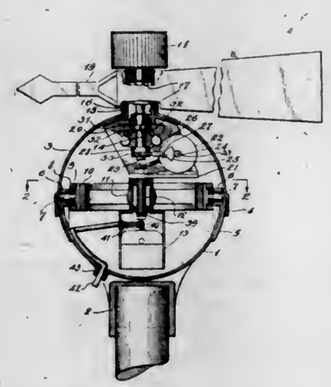


A combined hedge clipper and grass cutter, including a pair of pivotally connected crossed handles, each handle comprising a substantially horizontal finger, an upwardly and rearwardly extending intermediate portion, and an upwardly and rearwardly extending shank, the shank being offset relatively to said intermediate portion, cutting blades secured to the fingers, hook-shaped elements fixed to the handles substantially at the points where the intermediate portions merge into the fingers, gripping members surrounding the offset shanks and having their outer surfaces in substantial alignment with the outer surfaces of said intermediate portions, a spring interposed between the shanks for forcing the gripping members away from each other, and means for spacing the gripping members apart and for maintaining them in upwardly diverging relation, whereby the gripping members may be grasped by the hands of the operator for actuating the cutter without liability of pinching the fingers.

1,827,150. PROCESS OF DYEING ORGANIC CELLULOSE ESTERS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Feb. 4, 1927, Serial No. 166,013. Patent No. 1,695,654, and in Germany Feb. 26, 1926. Divided and this application filed Oct. 18, 1927. Serial No. 227,052. 3 Claims. (Cl. 8—5.)

1. Process for dyeing cellulose esters which comprises contacting the same with a non-alkaline aqueous solution of a dyestuff substantially identical with a dyestuff obtainable by coupling the diazo-compound of a dinitro-amino phenol with an unsulfonated and noncarboxylated amino naphthol in the presence of an agent capable of binding mineral acids.

1,827,151. WIND INTENSITY AND DIRECTION TRANSMITTER AND INDICATOR. JOSEPH S. JONES, Brooklyn, N. Y., assignor to Chas. Cory Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 17, 1927. Serial No. 176,040. 4 Claims. (Cl. 177—351.)

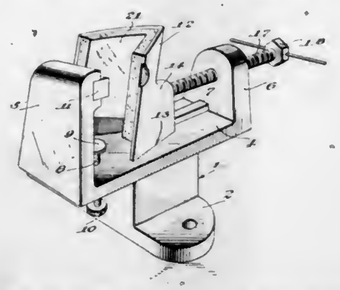


1. In a device of the class described, in combination, a main support, a gimbal ring having bearings in said support, a second gimbal ring having a bearing support in said first-named gimbal ring, a transmitter having relatively stationary and rotatable elements, means for supporting the transmitter centrally of and below the second-named ring, a shaft connected to the rotating element of the transmitter, means for rotatably mounting said shaft with respect to the second-named ring, supporting means mounted on said shaft above the latter and including a supporting portion and a bearing sleeve in vertical alignment with the shaft, a wind motor, a shaft for said wind motor rotatably mounted in said sleeve, a transmitter including relatively stationary and movable members mounted on said supporting portion, and means operatively connecting said wind motor shaft and said relatively movable transmitter member for moving the latter in accordance with the speed of the wind motor, said device having casing means for the mechanism including a movable member connected to the supporting means and permitting universal movement of the latter with respect to the main support, and a wind vane connected to the supporting member between the wind motor and the movable casing member.

1,827,152. ADJUSTABLE HEEL CLAMP FOR SHOEMAKERS. PHILIP KAPLAN and JACOB KOHN, Kokomo, Ind. Filed May 10, 1929. Serial No. 361,966. 6 Claims. (Cl. 12—123.)

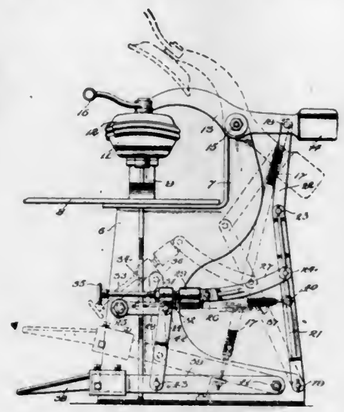
1. A work holder comprising a frame having a fixed jaw, provided with a resilient gripping member in its upper portion, a longitudinally movable jaw carried by said

frame, said movable jaw comprising a substantially V-shaped gripping member, said V-shaped member having a tapered portion extending from its upper edge inwardly toward the fixed jaw to accommodate work of various con-



figuration, a flexible lining carried by said movable jaw suspended from its upper portion, the lower parts of said jaws being offset from their upper portions, whereby the work is held by the upper portions of said gripping members.

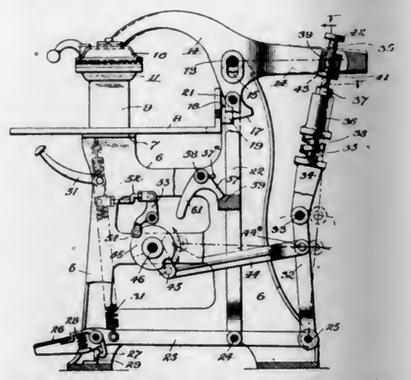
1,827,153. PRESS. SANFORD JAY LOCKE and FLOYD RAY WEBSTER, Syracuse, N. Y., assignors to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 5, 1928. Serial No. 317,422. 2 Claims. (Cl. 68—9.)



1. In a press, the combination of a support; a buck mounted thereon; a head adapted to cooperate with the buck; a member movably mounted on the support and arranged to support and guide the head in movements toward and from the buck; a toggle connected to react between said member and support and so dimensioned that the toggle approaches but does not reach a straightened position when the head exerts its maximum pressure against the buck; a second toggle arranged to actuate the first toggle; means for adjusting the second toggle, said means extending forwardly of the toggle in a position where it may be readily adjusted by the operator; and means for straightening the second toggle.

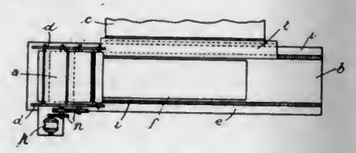
1,827,154. GARMENT PRESS. SANFORD J. LOCKE, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 24, 1929. Serial No. 357,827. 6 Claims. (Cl. 68—9.)

1. The combination of a frame; a buck supported thereby; a head-carrying lever; a head carried thereby; a support for said head-carrying lever including a fulcrum member and interfering stops to constrain the lever to move in an arcuate path during a predetermined movement of the lever; means on said lever coacting with said member to afford pivotal movement thereof when said stops are in engaging relation and rectilinear movement of the lever with respect to the fulcrum member when



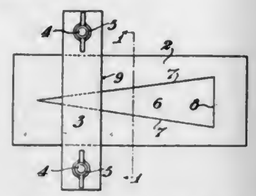
said stops are in disengaged relation; a toggle mechanism interposed between the head-carrying lever and frame; means for moving said head through its arcuate and part of its right line motion to press closing position; means for locking the parts against press opening motion; and means for straightening said toggle.

1,827,155. APPARATUS FOR ROLLING GLASS. CLAUDE LOCREILLE, Fanquez, Belgium. Filed Mar. 31, 1930, Serial No. 440,551, and in Belgium Apr. 6, 1929. 6 Claims. (Cl. 49—3.)



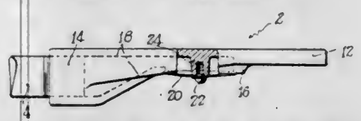
6. In a glass rolling plant, the combination with a glass annealing furnace, of a table in front of said furnace extending at right angles thereto, a base for said table, said base being of greater width than said table, there being a gap between said table and said furnace, a rolling train movable on said base, said rolling train comprising a frame resting on said base on either side of said table, rolls mounted in said frame, a motor carried by said frame, a driving connection between said motor and said rolls, means for moving said frame along said table, a driving connection between said motor and said means, and a guard for closing said gap, said guard being secured to said frame.

1,827,156. DOVETAIL-MARKER. ALFRED OWEN MARTIN, Ringwood, England. Filed Dec. 3, 1929, Serial No. 411,344, and in Great Britain Nov. 1, 1929. 3 Claims. (Cl. 33—174.)



1. A dovetail marker comprising a plate, a fence, the plate having elongated scribing edges forming between them an acute angle corresponding to the usual angle between the side faces of a dovetail formation, and means for securing the fence against the plate in different positions of adjustment along and in crossed angular relation to said scribing edges.

1,827,157. SPRAYING EQUIPMENT. FRANK J. MARTIN, Turners Falls, Mass. Filed Feb. 12, 1930. Serial No. 427,926. 3 Claims. (Cl. 299—111.)



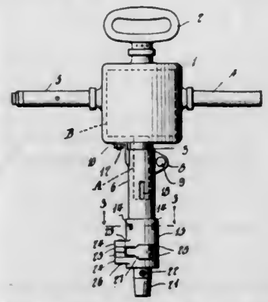
1. A portable spraying apparatus for inserting in an ash pit comprising in combination, a spray head including a substantially thin plate having a flat upper face, a boss extending downwardly from the central portion of said plate on its lower face and a hub on the lower face of said plate adjacent the marginal edge thereof, the said boss and hub being hollowed out and in communication with one another, a lug extending downwardly from the plate within said hollowed-out portion of said boss having its outer end disposed concentrically relative to the marginal edges of said boss, a perforated spray disc on said lug and the lower side of said boss which is secured thereto by a screw in threaded engagement with said lug, a handle having relatively offset portions one end of which is receivable in said hub, the said plate extending outwardly on all sides of said boss and disc to provide a shield therearound.

1,827,158. SWING-RAIL SWITCH. WILBER E. MCELDOWNEY, Denver, Colo. Filed Aug. 5, 1929. Serial No. 383,437. 14 Claims. (Cl. 246—387.)



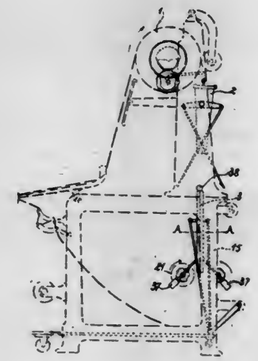
1. In a swing-rail switch, a swing rail, means to prevent vertical displacement of the rail during swinging, comprising a member in contact with the rail and a relatively fixed bearing block keeping the member in position, the member and block having adjoining arcuate surfaces for rotary movement of the member in and relative to the block.

1,827,159. AIR WRENCH. ROY H. MINER, Lansing, Mich., assignor of one-half to Daniel Levett Smith, Lansing, Mich. Filed May 29, 1930. Serial No. 457,163. 3 Claims. (Cl. 81—53.)



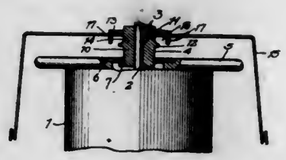
1. In an air wrench including a motor and casing, the motor having a shaft, a tubular member on said casing surrounding the shaft, a tubular housing adapted to be secured to said tubular member, a wrench member rotatable in said housing, said wrench member including a stem arranged axially of and adapted to engage said shaft, an annular ratchet secured to said wrench member, and a pawl mounted on said housing and cooperating with said ratchet.

1,827,160. MACHINE FOR FOLDING OR PLAITING FABRICS. JOSEPH NANTERME, Lyon, France. Filed Nov. 13, 1928, Serial No. 319,155, and in France Nov. 24, 1927. 9 Claims. (Cl. 270—79.)



1. In a machine for folding or plaiting fabrics, a presser-device comprising a rotatable frame located in the neighborhood of the end of the folds; means to rotate the same in synchronism with the folding operation; a pressing member loosely supported by said frame and adapted to friction on said folds to pull the fabric towards the end of the fold; and spring means connecting said rotatable frame with said pressing member.

1,827,161. FLYER CONSTRUCTION. MICHAEL J. MCHALE, Scranton, Pa. Filed Oct. 17, 1930. Serial No. 489,401. 10 Claims. (Cl. 117—23.)

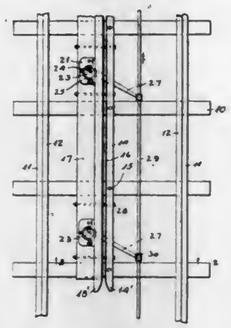


1. A flyer including an apertured body having a uniform aperture diameter, an offset flange at the bottom of the body, and a skirted flanged flyer wire support having wire retaining means therein encircling the body and integral therewith.

1,827,162. BRAKE STRUCTURE. JOHN A. MILLER, Homewood, Ill. Filed May 10, 1928. Serial No. 276,606. 3 Claims. (Cl. 188—62.)

1. In brake structure of the class described the combination of a stationary brake beam, a movable brake beam, a plurality of stationary bearing bases alongside of said movable beam, a cylindrical cam disk on each base and a shaft extending eccentrically therefrom through the base,

a cylindrical bearing frame receiving each disk and secured to said movable beam, a lever extending from each

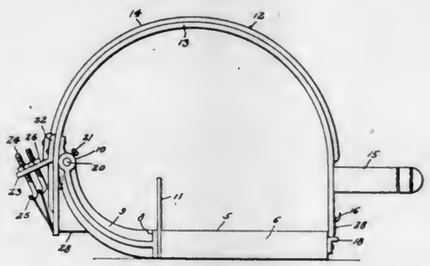


shaft, and an actuating rod connected directly with said levers.

1,827,163. LUSTERING LEATHER. GEORGE R. PENSEL and SVEN H. FRIESTEDT, Amsterdam, N. Y., assignors to Ritter Chemical Company, Amsterdam, N. Y., a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,808. 15 Claims. (Cl. 149—5.)

2. The process of lustering formaldehyde or chrome tanned suede or mocha leather, which comprises subjecting it to the action of an organic compound containing available chlorine.

1,827,164. CHEESE CUTTER. EDWARD P. PERUN, Toronto, Ohio. Filed Jan. 14, 1931. Serial No. 508,775. 1 Claim. (Cl. 31—22.)

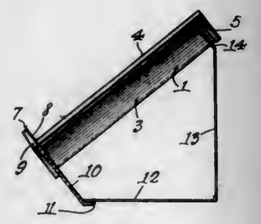


A cutter device of the class described comprising a platform having parallel grooves in its upper face, brackets connected to the rear edge of the platform and having upwardly curved arms thereon extending rearwardly, and an inverted U-shaped frame having its rear limb hinged to the free end of the arms, a distance from the lower end of said limb, the ends of the limbs having notches therein, wires stretched across the frame and passing through the notches, means for connecting the front ends of the wires to the front limb of the frame, an outwardly extending flange on the rear limb and located an appreciable distance from the end of said limb, and hooks carried by said flange and engaging the rear ends of the wire.

1,827,165. SEPARATION OF OIL FROM BLEACHING CLAY. JOHANN KONRAD PFAFF, Uetze Kreis Burgdorf, Hanover, and ADOLF SIEWECKE, Kreis Burgdorf, Hanover, Germany, assignors to the Firm Deutsche Gasolin Aktiengesellschaft, Berlin, Charlottenburg, Germany. Filed Apr. 3, 1930, Serial No. 441,422, and in Germany May 16, 1927. 2 Claims. (Cl. 196—47.)

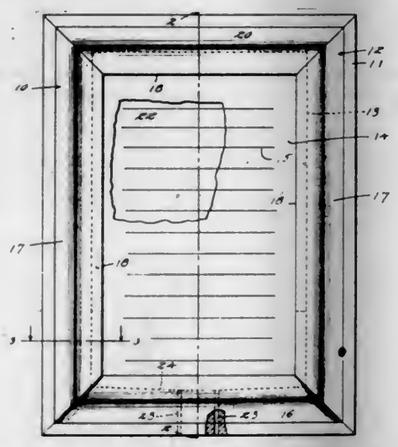
1. A process for recovering mineral oil from spent bleaching clay which has been used to refine mineral oil and which contains oil both adsorbed therein and mechanically adherent thereto, which process comprises mixing with the spent clay a dilute aqueous solution of mineral acid of the order of 30% sulfuric acid heating the mixture to a temperature above the boiling point of the mineral acid solution under the vapor pressure of the solution to effect a physical separation of mineral oil from the clay, allowing the material to stand for a time, thereby causing stratification thereof into an upper layer of recovered mineral oil, an intermediate layer of clear aqueous liquid having an acid reaction, and a lower layer of water-saturated bleaching clay completely freed from oil, and finally withdrawing the mineral oil layer by means of the vapor pressure generated during the heating.

1,827,166. BOOKHOLDER. CLYDE PHARR, Nashville, Tenn. Filed July 12, 1930. Serial No. 467,564. 2 Claims. (Cl. 45—57.)



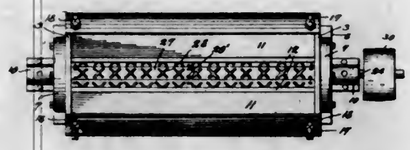
1. A bookholder formed in one integral structure and made of sheet material including a body having forwardly diverging side portions, means for stiffening the sides of the body, a channeled ledge at the lower edge of the body, stiffening means therein, and supports at the upper and lower portions of the body for holding the body elevated and inclined, said supports including a front apron, fixed to the body, a rear support having a head connected to the body, and a tongue connecting the support and apron.

1,827,167. ADVERTISING DEVICE. PAUL H. REGAN, Fitchburg, Mass. Filed Nov. 4, 1930. Serial No. 493,392. 3 Claims. (Cl. 40—64.)



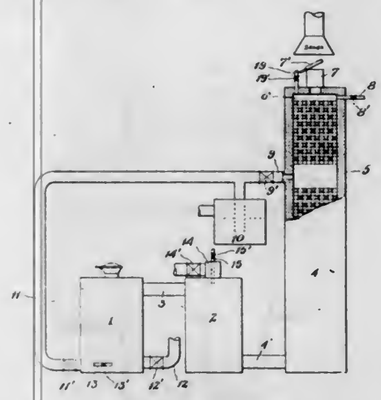
1. An advertising device of the character described, comprising a frame having a rabbeted inner edge portion constituting a guide, a back secured to the frame, said frame having a bottom member provided with an inwardly offset outer face portion and outwardly and downwardly inclined slots in the side members thereof, and a removable placard positioned in said rabbeted portion.

1,827,168. SHELLING MACHINE. BEN HILL ROBERTS, Cordele, Ga. Filed Sept. 6, 1929. Serial No. 390,832. 3 Claims. (Cl. 130—30.)



3. In a shelling machine the combination with a concave including spaced slats, of a cylinder partly surrounded by the concave, and crossed outstanding ribs integral with the cylinder and disposed at acute angles to their planes of rotation.

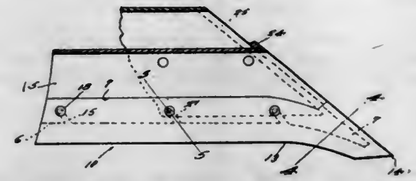
1,827,169. PROCESS OF MANUFACTURING WATER GAS. WALTER M. RUSSELL, Wellesley, Mass., assignor to The Gas Machinery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 18, 1925. Serial No. 24,126. 5 Claims. (Cl. 48—208.)



4. A process of making carbureted water gas in a set comprising a single generator having a solid fuel bed, a single carburetor having checkerbrick therein, and a single superheater having checkerbrick therein; which process comprises air blasting the fuel bed, burning the blast gases and heating the checkerbrick in the carburetor and superheater, then passing steam through the highly heated fuel bed in the generator and generating water gas, passing the water gas through the carburetor and enriching the water gas by adding oil thereto, passing the enriched water gas to the lower portion of the superheater and fixing the oil vapors mixed with the water gas, withdrawing the carbureted water gas from an intermediate portion of the superheater, then passing steam from the heated checkerbrick in the upper portion of the superheater above the intermediate gas offtake downwardly through the superheater, through the carburetor and through the heated fuel bed in the generator, and with drawing the resulting water gas directly from the generator.

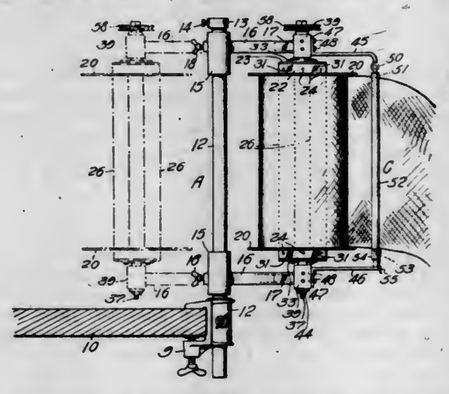
1,827,170. PLOWSHARE. GUNDER RUST, Alkabo, N. Dak. Filed May 14, 1929. Serial No. 362,945. 2 Claims. (Cl. 97—125.)

2. In a sectional plow share, a body section having a longitudinally extending centrally disposed tongue extending downwardly therefrom and provided with rearwardly inclined notches, a cutter blade section having a longitudinally extending recess adapted to receive the tongue, aligned apertures formed in the walls of the recess, bolts adapted to extend through the aligned apertures and the notches in the tongue, and a frog adapted to extend along one face of said body section and said



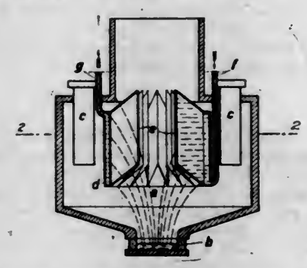
blade section, said frog having inclined notches formed thereon and engageable with the bolts to provide an interlocking connection between the respective sections and the frog.

1,827,171. CLOTH UNROLLING DEVICE. MOSES SCHNEIDER, Bayonne, N. J. Filed Aug. 10, 1929. Serial No. 384,993. 3 Claims. (Cl. 242—62.)



1. A device for winding and unwinding cloth around a cloth board, comprising a vertically disposed supporting rod having a bore in its upper end thereof, a detachably mounted and laterally extending arm carried by the supporting rod having a bore in its free end, a headed bearing member provided with a laterally extending and reduced shank portion adapted to be detachably secured, either, within the bore in said supporting arm or the bore in the free end of said laterally extending arm, and a bolt reel revolvably mounted within said headed bearing member.

1,827,172. METAL VAPOR RECTIFIER. OSKAR SEITZ, Baden, Switzerland, assignor to Aktiengeselischaft Brown, Boveri and Cie., Baden, Switzerland. Filed June 27, 1928, Serial No. 288,749, and in Germany June 30, 1927. 3 Claims. (Cl. 250—27.5.)



1. A mercury vapor rectifier containing a ring of anodes and within said ring of anodes a double-walled

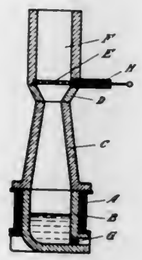
closed hollow body for the reception of cooling fluid, the outer wall of the said body being cylindrical and the inner wall so arranged in radial folds as to form cooling pockets for the mercury vapor.

1,827,173. GATE. JOHN W. STREET, Litchfield, Ill., assignor to Street Gate Co., Litchfield, Ill. Filed Jan. 28, 1930. Serial No. 424,004. 1 Claim. (Cl. 39—34.)



The combination with a gate having an extension, of a pintle, a sleeve on the pintle, fixedly connected superposed plates secured on the extension, said pintle and sleeve being positioned within the extension and plates, a disk mounted on the sleeve and secured fixedly to the upper plate, a drum mounted for rotation on the disk, flexible latch operating connections between diametrically opposed portions of the drum and the gate, a fixed structure mounted on the pintle and clamped against the sleeve, guides carried by said structure, and flexible operating devices extending through the respective guides and partly around and secured to the drum, said latch operating connections constituting means for transmitting motion from the drum to the gate.

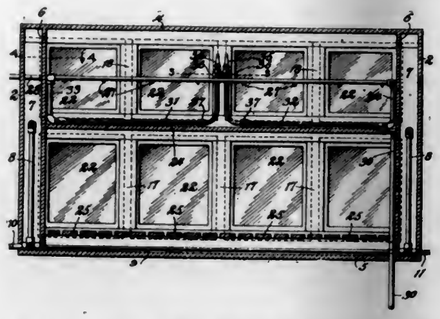
1,827,174. METHOD OF MELTING OXIDIZABLE MATERIAL. CYRANO TAMA, Eberswalde, Germany, assignor to Firm: Hirsch, Kupfer- and Messingwerke, A. G., Finow/Mark, Germany. Filed June 10, 1929, Serial No. 369,653, and in Germany June 16, 1928. 4 Claims. (Cl. 75—17.)



1. In an apparatus for melting oxidizable material, in combination, a melting pot, means for heating said melting pot, a preheating chamber arranged above said melting pot and connected to it by a funnel of refractory material and a perforated plate provided between the melting pot and the preheating chamber, the perforated plate being adapted to be removed and provided with means for closing the openings of said plate.

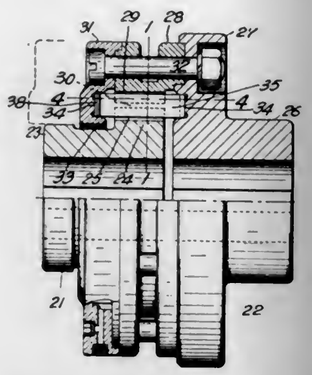
1,827,175. DISPLAY CASE. CLIFFORD JOHN TAYLOR and WILLIAM HENRY DUNN, Lubbock, Tex. Filed Apr. 28, 1930. Serial No. 447,951. 2 Claims. (Cl. 312—115.)

1. A display case having a compartment, a substantially horizontal water pipe coil in said compartment constituting a shelf and disposed at a distance from the top and bottom thereof, said coil being imperforate at the upper surface and having sprinkling outlets in the lower surface thereof, a down-pipe at one end of said coil engaging the bottom wall of the compartment, and a pipe leading from the free end of said down-pipe adapted for use in localizing the spray of water particularly on goods supported



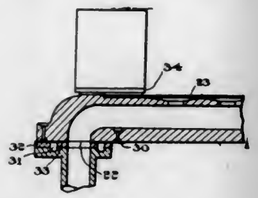
by the said pipe coil, said down-pipe functioning dually to aid in supporting the coil and to supply water to said pipe from the same source which supplies the coil.

1,827,176. FLEXIBLE COUPLING. CECIL OLDRIEVE THOMAS, Montreal, Quebec, Canada. Filed June 11, 1927. Serial No. 198,172. 44 Claims. (Cl. 64—96.)



1. In a coupling, outer and inner members having concentrically related surfaces provided with mating grooves disposed parallel with the axis of the members and a series of springs carried by the outer member and engaged only at their central parts in the grooves of both members and forming flexible driving connections between the members.

1,827,177. PAPER MAKING MACHINE. WILLIAM R. THOMSON, Westmount, Quebec, Canada. Filed Oct. 20, 1928. Serial No. 313,794. 13 Claims. (Cl. 92—44.)



5. In a Fourdrinier machine, a flexible resilient endless mat having internal channels extending in the transverse direction of the mat and terminating in downwardly projecting apertures in proximity to the edges of the mat,

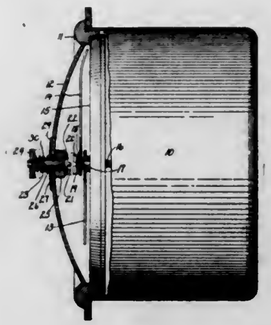
said mat having a plurality of upwardly extending apertures flaring outwardly from the channels, guide rolls for said mat, side frames extending between same and provided with suction chambers communicating with the downwardly projecting apertures in the mat, means to control the degree of suction in said chambers and a stock supporting wire contacting with the mat and adapted to travel therewith.

1,827,178. RECORDING DEVICE. SIMON TONIETTI, Cougar, Calif. Filed July 8, 1929. Serial No. 376,716. 2 Claims. (Cl. 234—1.)



1. A recording device comprising means for holding a blank; a pair of movable styli adapted to inscribe separate marks thereupon corresponding to values to be recorded; a member adapted to operate said styli selectively according to the direction of its movement; and means for indicating the extent of said movement.

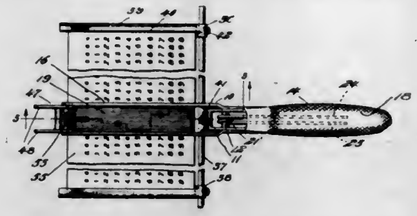
1,827,179. CLOCK. RICHARD H. WHITEHEAD and WILSON E. PORTER, New Haven, Conn., assignors to The New Haven Clock Co., New Haven, Conn., a Corporation. Filed June 13, 1927. Serial No. 198,314. 1 Claim. (Cl. 58—80.)



In a clock, the combination with the center-arbor, hands and crystal thereof, of setting-means installed in the crystal in line with the center-arbor, and normally-separated clutch-members having symmetrically-arranged contacting portions, said clutch-members being interposed between the said setting-means and the outermost of the hands and respectively carried by the center-arbor and the setting-means, the clutch-member carried by the center-arbor being located in front of the plane of the outermost hand, whereby the fouling of the outermost hand by the inter-engagement of the clutch members is avoided.

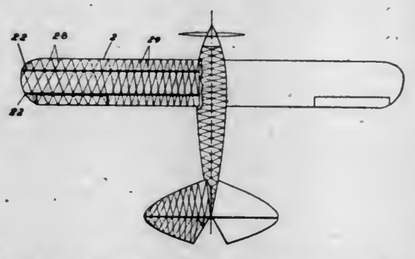
1,827,180. PUNCHING MECHANISM. RAYMOND G. WILLIAMS, Providence, R. I., assignor to The Tabulating Machine Co., New York, N. Y., a Corporation of New Jersey. Filed Aug. 13, 1923. Serial No. 657,218. 10 Claims. (Cl. 164—121.)

1. The combination of a hand punch for punching index holes on record cards for mechanical accounting systems, comprising two cooperating members one of which is bent to form a handle and a punch carrying jaw, and the other bent to form a handle and a die carrying jaw, said members being pivotally joined together, and a rod transversely and adjustably mounted on said punch adapted to receive adjustable guiding and retaining wings at each



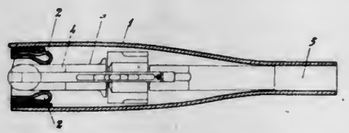
end thereof to guide the record cards into a fixed predetermined position thereon, and so retain them between said jaws during the punching operation.

1,827,181. AEROPLANE CONSTRUCTION. HERACLIO ALFARO, East Cleveland, Ohio. Filed Oct. 30, 1930. Serial No. 492,235. 20 Claims. (Cl. 244—31.)



15. In an aeroplane, a wing having longitudinal beams which have top and bottom members and webs composed of crossing diagonal braces, connecting the top and bottom members, and inclined braces extending across the top and bottom of the wing and joined to said beams, the outer braces at the top of the wing being inclined at an angle opposite that of the outer brace members at the bottom of the wing.

1,827,182. HOLDER FOR FIREARMS. MANUEL MARIA ARIAS, Buenos Aires, Argentina. Filed July 12, 1928, Serial No. 292,138, and in Argentina Mar. 23, 1928. 1 Claim. (Cl. 224—2.)

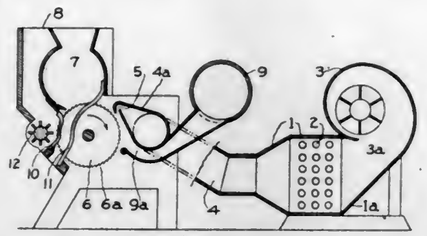


In a holster for revolvers and similar weapons a pair of opposed flexible, resilient loops, located adjacent the upper inner edge of the holster and extending downward into the same, adapted to make frictional surface contact with the weapon and hold it firmly in position and to be enlarged or doubled back to increase the resistance upon withdrawal of the weapon from the holster.

1,827,183. PROCESS AND METHOD FOR GINNING COTTON WITH AIR-BLAST GINS. CHARLES ABEL BENNETT, Tallulah, La. Filed Apr. 10, 1930. Serial No. 443,100. 4 Claims. (Cl. 19—59.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757)

1. An improvement in the process of doffing lint cotton from the saw teeth of air blast cotton gins comprised of decreasing the relative humidity of an air blast

to not exceeding approximately 40% and propelling such conditioned air blast against gin saw teeth carrying lint

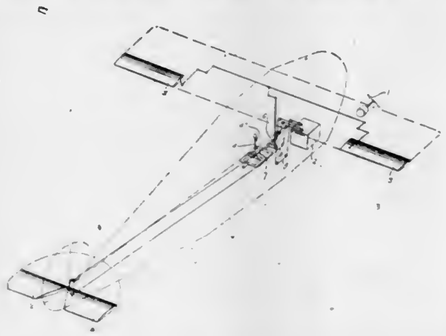


cotton, immediately after said saw teeth and cotton have passed the gin ribs, such air blast being applied to said saw teeth at linear velocity exceeding that of the gin saw teeth.

1,827,184. METHOD OF TESTING. ROBERT D. BONNEY, Glen Ridge, and WILLIAM B. COLEMAN, Kearny, N. J., assignors to Congoleum-Nairn, Inc., a Corporation of New York. Filed Jan. 21, 1930. Serial No. 422,483. 6 Claims. (Cl. 23—230.)

3. A method of determining the suitability of concrete floors for the reception of an installation of linoleum which comprises the steps of admixing a determined amount of a pulverized sample of the concrete floor with a substance capable of reacting exothermically with the moisture in said sample and ascertaining the maximum increase in temperature of the mix.

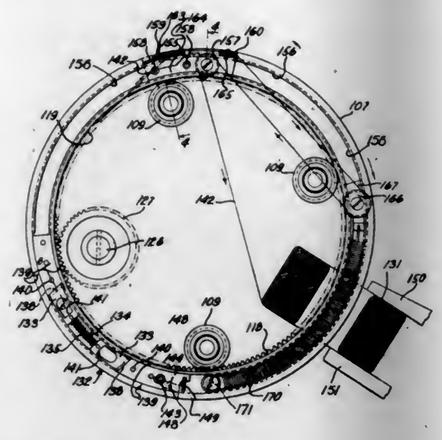
1,827,185. CONTROL APPARATUS. GAIL BORDEN, 2d., and ERIC CARLTON, New York, N. Y. Filed June 7, 1930. Serial No. 459,620. 6 Claims. (Cl. 244—29.)



1. Control apparatus comprising a pendularly supported motor, a plurality of driven members, means interposed between said motor and said members to operatively connect the motor with said driven members at predetermined positions of the motor, and means for starting said motor after the same has been operatively connected with a driven member.

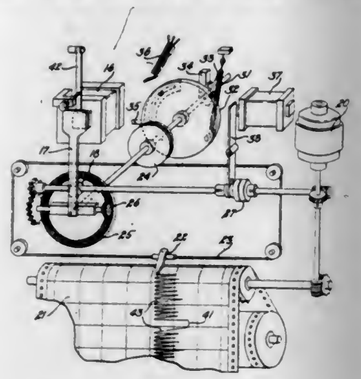
1,827,186. WINDING MACHINE. SIDNEY ELMER BORGESON, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1928. Serial No. 326,963. 2 Claims. (Cl. 242—4.)

1. In a machine for winding strand material around closed cores, a rotary spool ring and a winding ring, each having a segment removable in a direction parallel to the axis of the ring to permit the interlinking of the ring with the core, and latch members reciprocably mounted within the segment, each of the latch members co-



operating with a latch surface formed on a portion of the ring which extends within and overlaps each end of the segment for locking the segment to the ring.

1,827,187. RECORDING APPARATUS. GEORGE ROMAINE BROWN, Chicago, and CARL LOESCHE, Congress Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1927. Serial No. 236,615. 8 Claims. (Cl. 234—1.5.)

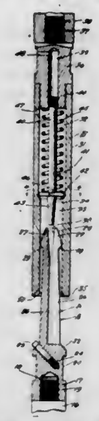


1. In a recording apparatus having a recording surface movable at a predetermined constant rate, a recording element, means for moving the recording element transversely to the direction of movement of the recording surface during the production of an article, and means effected by an article for reversing the direction of movement of the recording element upon the completion of an article.

1,827,188. COUPLING FOR CONNECTING PUMP RODS AND PLUNGERS. LYSLE P. BURGESS, Los Angeles, Calif., assignor, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 27, 1925. Serial No. 52,831. 17 Claims. (Cl. 287—119.)

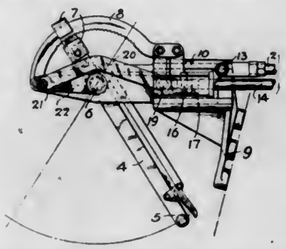
1. A coupling for automatically connecting a pump rod or the like to a pump plunger or the like, embodying a member carried by a plunger element, and a member carried by the pump rod, one of the members including a radially expansive stem, and the other member including a

sleeve adapted to slide over the stem when the members are moved longitudinally together, an external shoulder on the stem, an internal shoulder on the sleeve, the stem being adapted to expand radially and engage its shoulder with the sleeve shoulder when the sleeve and stem are



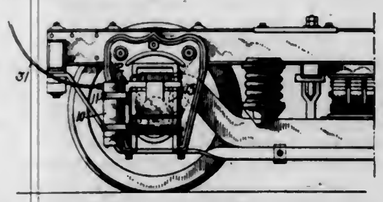
moved to have a predetermined amount of longitudinal overlap, the shoulder engagement being adapted to resist subsequent separative longitudinal movement of the sleeve and stem; and spring actuated means mounted in the sleeve and adapted to hold the stem in expanded condition when the shoulders are so engaged.

1,827,189. THROTTLE VALVE OPERATING MECHANISM. ALFRED W. BRUCE, New York, N. Y. Filed Jan. 16, 1928. Serial No. 247,027. 17 Claims. (Cl. 74—39.)



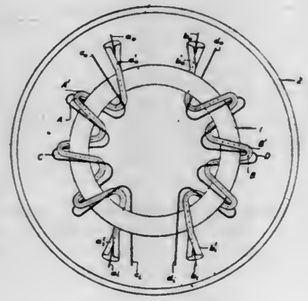
1. In a locomotive throttle valve operating mechanism, the combination with the valve-shaft, of a throttle lever having a floating fulcrum, a rod connecting said fulcrum to said shaft, and connections from said lever to said shaft on the opposite side of its axis from said rod connection.

1,827,190. LOW RAIL JOINT RECORDER. LESLIE F. CARTER, Leonia, N. J., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 9, 1929. Serial No. 353,805. 7 Claims. (Cl. 234—1.)



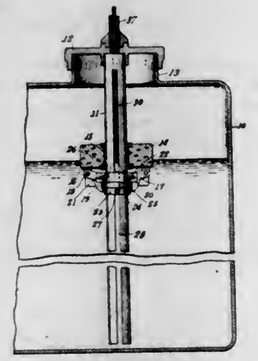
1. In a low rail joint recorder, a member movable in response to differences in elevation at rail joints, a vertically movable and yieldably supported inertia member relative to which said first member operates, said first member being adapted to return to initial position after responding to a low rail joint, and means for locking said inertia member to said responsive member when said responsive member contacts with said inertia member before reaching the initial position.

1,827,191. SHIELDED INDUCTANCE. WILLIAM L. CASPER, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1930. Serial No. 459,449. 6 Claims. (Cl. 175—359.)



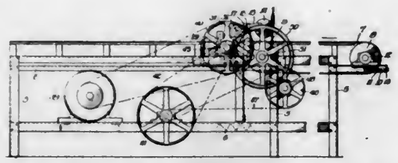
1. In a transformer having sectionalized primary and secondary windings, means for reducing unbalanced capacity effects which comprises a hollow conductor concentric with and insulated from the conductor of another section, said hollow conductor itself comprising a winding section.

1,827,192. LIQUID LEVEL GAUGE. CHARLES H. CUNO and SIDNEY L. WOLFSON, Meriden, Conn., assignors to The Cuno Engineering Corporation, Meriden, Conn., a Corporation of Connecticut. Filed Oct. 1, 1927. Serial No. 223,414. 9 Claims. (Cl. 73—82.)



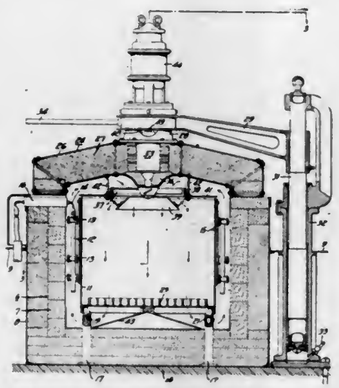
1. A liquid level gauge comprising a float, a guide therefor, gripping jaws suspended from said float, a cross piece having a pin and slot connection with said jaws, a slide on said guide below said float, and means for raising said slide to engage said cross piece and tilt said jaws into engagement with said guide.

1,827,193. CUTTING EQUIPMENT FOR PLASTIC SHEET MATERIAL. ALBERT C. FISCHER, BURNS A. STEWART, and HENRY W. HERBST, Chicago, Ill., assignors, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Oct. 16, 1926. Serial No. 142,028. 16 Claims. (Cl. 164—61.)



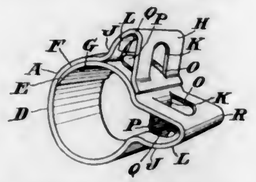
1. In an apparatus for cutting strips from sheets, a rotary shaft, a plurality of knives adjustably mounted on said shaft to slide longitudinally therealong into spaced relation to determine the width of the strip to be cut but to be rotated therewith in all positions of adjustment, and means comprising a slotted member through which said knives project for maintaining the knives in spaced relation.

1,827,194. TEMPERING FURNACE. WALTER GROTHE, San Leandro, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Aug. 27, 1928. Serial No. 302,303. 11 Claims. (Cl. 263—2.)



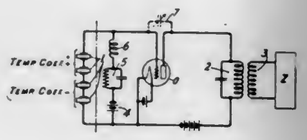
9. In a furnace, a fluid circulating unit comprising a fan, a support independent of the furnace for the fan, a motor carried by the support for driving the fan, and a cover upon which the fan is mounted, the cover being carried by the support.

1,827,195. CLAMP. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 14, 1930. Serial No. 420,692. 9 Claims. (Cl. 24—19.)



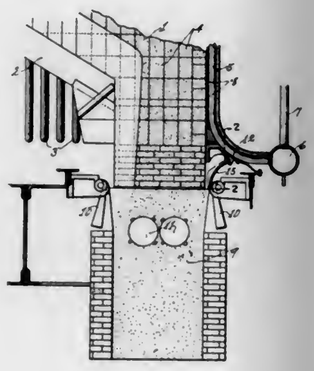
8. A clamp comprising a split band adapted to be looped around a conduit and having a pair of open folds therein, the free end of one fold terminating between said folds, means cooperating with the folds to tighten the band on a conduit, and means in each fold to resist closing thereof when said band is tightened.

1,827,196. PIEZO ELECTRIC OSCILLATOR. RAYMOND A. HEISING, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 1, 1929. Serial No. 359,571. 16 Claims. (Cl. 250—36.)



7. An oscillating system comprising an oscillator having input and output circuits, and a plurality of piezo-electric crystals of opposite temperature coefficients connected in series in said input circuit for compensating the effect of temperature variations.

1,827,197. BOILER FURNACE. LEWIS W. HELLER, Oak Harbor, Ohio, assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed July 24, 1928. Serial No. 294,984. 9 Claims. (Cl. 122—235.)

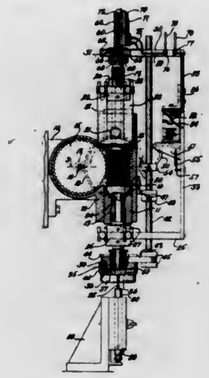


1. In a stoker fired boiler furnace, a wall having water tubes therein curved outwardly at the bottom, blocks attached to said tubes at the lower portions thereof and plates suspended from said blocks by means of a pivoted connection.

1,827,198. THREADING APPARATUS. ROBERT HOFSTETTER, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 15, 1927. Serial No. 240,111. 3 Claims. (Cl. 10—95.)

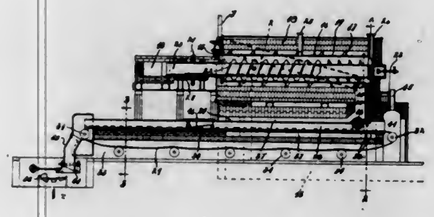
1. In a threading apparatus, a rotatable hollow spindle, a self-opening threading die carried thereby, means including a spring pressed latch member for normally holding the threading die in its closed position, an electrical circuit including an electromagnet for rendering

the latch member ineffective, and a pilot rod slidably mounted within the spindle and actuated by the part be-



ing threaded to close the electrical circuit when the threading has proceeded to a predetermined point.

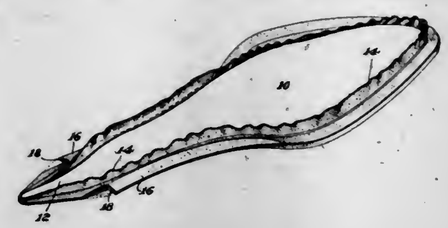
1,827,199. MULTISTAGE LOW TEMPERATURE COKE APPARATUS. HENRY C. HOLTHOFF, Long Beach, Calif., assignor to Benjamin S. Thayer, Philadelphia, Pa. Filed May 23, 1927. Serial No. 193,699. 7 Claims. (Cl. 202—103.)



1. A multi-stage low temperature coke apparatus comprising a furnace, a drying and pre-heating unit, a screw conveyor in said unit, means to drive said screw conveyor, a retort, a conveyor from said drying and pre-heating unit to said retort, conveyor means in said retort, means to actuate said conveyor from the drying and pre-heating unit to said retort, a muffle, said muffle being open to the retort, and means to drive said conveyor means in the retort, said furnace having a heating chamber about said muffle, and a second heating chamber about said retort means to heat said second heating chamber, a duct connecting said above named chambers, means to heat said first named chamber, said furnace having a heating chamber about the drying and pre-heating unit, a duct connecting said last named chamber and the chamber surrounding the retort.

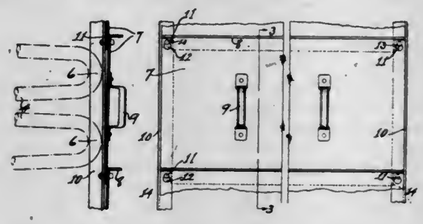
1,827,200. MANUFACTURE OF BOOTS AND SHOES. JOHN P. KEEFE, Manchester, N. H., assignor to International Shoe Company, St. Louis, Mo., a Corporation of Delaware. Filed Jan. 23, 1929. Serial No. 334,488. 10 Claims. (Cl. 12—142.)

1. The method of attaching wood heels to shoes having a short outsole with heel gaging shoulders at the ends of the breast line which comprises forming a channel flap on the outsole which overlies said shoulders and extends rearwardly thereof, and depressing said flap behind said



shoulders by the pressure of the breast corners of the heel during the heel attaching operation.

1,827,201. ECONOMIZER WITH OVERLAPPING PLATES. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 5, 1928. Serial No. 310,510. 7 Claims. (Cl. 257—240.)



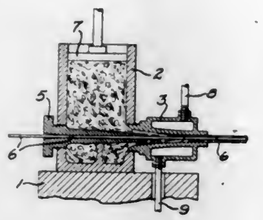
1. In an economizer setting, a wall comprising overlapping plates, a support for said plates, and means whereby said plates can be readily removed from said support.

1,827,202. RATCHET WRENCH. WALTER F. KLEIN, Milwaukee, Wis., assignor to Snap-on Wrench Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 13, 1927. Serial No. 225,928. 2 Claims. (Cl. 81—60.)



1. In a ratchet wrench, the combination with a wrench body having a head portion provided with communicating cylindrical recesses of a toothed ratchet-wheel journalled in one of said recesses, an oscillatory pawl having diametrically disposed circularly curved portions conforming to and rotatively engageable with the corresponding circular curved confining wall of the other recess for pivotal movement therein abont a substantially fixed center, a toothed portion between said circularly curved portions and within the circle thereof, and engageable with the ratchet-wheel, there being a spring receiving bore disposed with its axis in substantially parallel alignment between correspondingly directional circumferential and central tangential lines of said circular pawl, and spring means in said bore for rotatively urging said pawl in toothed engagement with said ratchet, said spring receiving bore offering minimum interruption to said circumferential bearing outline of said pawl, the thrust line of the toothed portion intersecting the remote curved surface so that the reaction of the ratchet is transmitted in substantially diametral alignment through said curved portion of said pawl.

1,827,203. CELLULOSE-CONTAINING ARTICLES AND METHOD OF PRODUCING SUCH ARTICLES. JOHN SHIRLEY LITTLE, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 11, 1928. Serial No. 253,570. 6 Claims. (Cl. 92—54.)

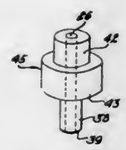


1. A method of producing articles, which consists in working four to six parts of fibrous material in ninety-six to ninety-four parts of water until it becomes highly hydated, adding a sufficient quantity of a filling material thereto to alter the water content of the mixture to about 80%, and forming the resulting mixture into an article of the desired shape.

1,827,204. METHOD OF PROTECTING METAL SURFACES. SUMNER REDWAY MASON, Wilmette, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1927. Serial No. 227,061. 7 Claims. (Cl. 204—1.)

1. A process for protecting surfaces of metal articles, which consists in subjecting an article as a cathode in a bath containing 65 grams of potassium dichromate per liter to an electric current of a cathode current density below the range in which chromium is deposited for from 5 to 15 minutes and maintaining the bath at room temperature.

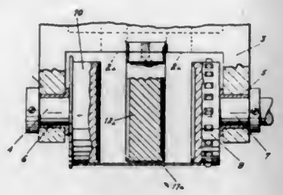
1,827,205. COMPOSITE RELAY STUD. ROBERT PRINDLE MIDDLEKAUFF, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Aug. 30, 1927. Serial No. 216,465. Divided and this application filed July 11, 1928. Serial No. 291,917. 4 Claims. (Cl. 200—166.)



1. A composite stud member for electromagnetic relays comprising a core having a surface indentation, and a cylindrical covering of insulating material co-extensive with the core and filling the indentation, a portion of said covering material being reduced in diameter.

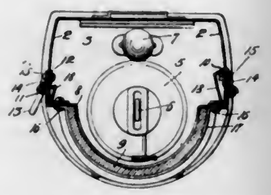
1,827,206. FILM SUPPORT FOR PHOTOGRAPHIC APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 18, 1930. Serial No. 429,324. 4 Claims. (Cl. 179—100.3.)

1. A support for traveling films, comprising a pair of axially aligned movable members, one of said members being adapted to engage a film and cause the same to travel over the other member, and a stationary member disposed between said movable members and spaced therefrom to



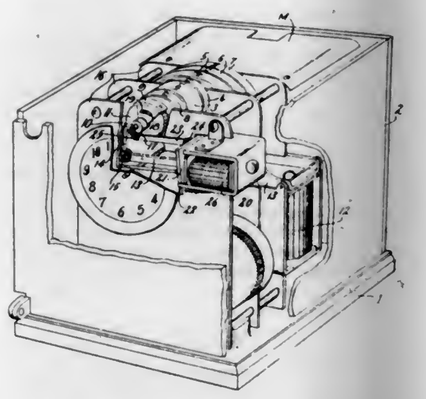
permit the passage of light to said film between said stationary and movable members and on each side of said stationary member.

1,827,207. MARINE LAMP. LOUIS E. PERKINS, Brooklyn, N. Y., assignor to Perkins Marine Lamp Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,750. 2 Claims. (Cl. 240—7.5.)



2. In a device of the class described, a casing with a door opening, a door mounted in said opening, with hinges at one side and loops at the other, Z-irons at each side and secured to the interior of the door, said irons adapted to engage the interior of the casing so as to form an air tight joint in connection therewith when the door is closed.

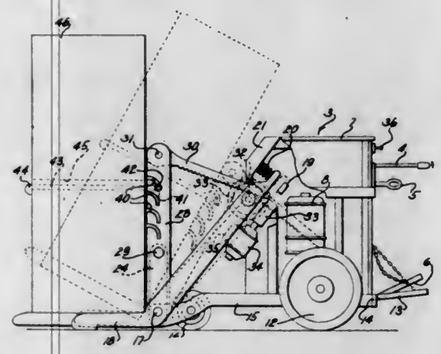
1,827,208. TIME RECORDING DEVICE. THEODORE C. RIEBE, Chicago, Ill., assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 19, 1927. Serial No. 214,068. 2 Claims. (Cl. 234—36.5.)



1. In a recording device, having a recording tape and printing means, an auxiliary plate, carrying a printing character, associated with the device and having only two positions for bringing said character into and out of printing relation with the tape, a magnet for controlling said

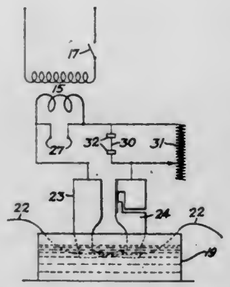
plate, an armature for the magnet, and lever means linking the armature and the plate, said lever means operating to bring the character into printing relation with the tape only when the magnet is energized.

1,827,209. INDUSTRIAL TRUCK. CHARLES WILLIAM ROBBINS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 27, 1929. Serial No. 366,157. 7 Claims. (Cl. 214—65.4.)



1. In an industrial truck, a supporting framework, a resiliently supported member pivoted thereto, arms for supporting an object to be transported pivoted to the supporting framework, and means for causing a relative movement between said arms and the resiliently supported member to tilt an object to be transported into a conveying position.

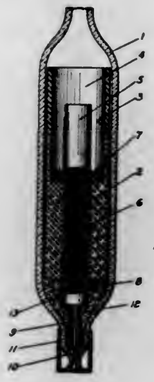
1,827,210. METHOD OF WELDING. CLAUDE THEODORE SIEBS, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed May 22, 1926, Serial No. 110,888. Divided and this application filed Dec. 4, 1928. Serial No. 323,591. 7 Claims. (Cl. 219—10.)



7. In electric welding wherein the parts to be welded are forced together under pressure when at welding temperature, the step of protecting from oxidation the parts to be welded by surrounding them with carbon tetrachloride.

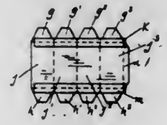
1,827,211. ELECTRODE STRUCTURE. ALFRED HENRY STAIGER, New York, N. Y. Filed Oct. 25, 1929. Serial No. 402,374. 6 Claims. (Cl. 176—126.)

1. An electrical discharge device comprising an envelope, a block of insulating material positioned in one end thereof and substantially filling the opening therein, an electrode mounted centrally of said block and projecting therethrough, a lead-in wire for said electrode sealed through the end of said envelope, and a quantity of glass



wool, treated with an alkaline earth bromide, packed between said block and said seal.

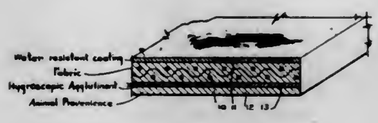
1,827,212. FORMING AND APPLYING TABBED WRAPPERS TO BOXES. JOHN S. STOKES, Huntingdon Valley, Pa. Original application filed Jan. 8, 1926, Serial No. 79,936. Divided and this application filed Mar. 12, 1930. Serial No. 435,329. 10 Claims. (Cl. 229—87.)



6. A tabbed wrapper having tabs held thereto by adhesive each of which is in position for application around the edge formed by abutting sides of a box, and corners formed by said sides and the bottom of said box.

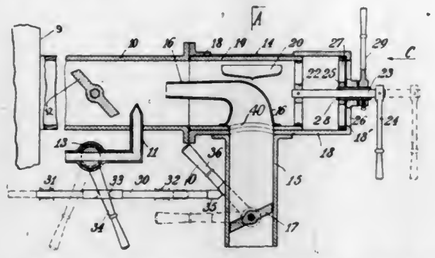
10. The method of applying a tabbed wrapper to a box which comprises bridging corner-notches of the wrapper by tab structure adhesively secured to the box-engaging face of the wrapper, and before setting of the adhesive applying the tabbed wrapper to a box with the tabs overlying corners thereof.

1,827,213. METHOD OF MANUFACTURING GAS TIGHT MATERIAL. HANS STROBL, Berlin-Tempelhof, Germany, assignor, by mesne assignments, to Luftschiffbau Zeppelin G. m. b. H., Friedrichshafen, Bodensee, Germany. Filed Nov. 12, 1927, Serial No. 232,942, and in Germany Nov. 29, 1926. 3 Claims. (Cl. 154—40.)



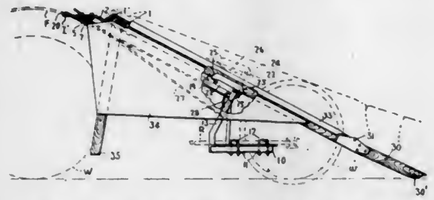
1. A method of manufacturing gas cell material which comprises impregnating a layer of fabric by applying a weather-proofing substance on one side thereof and subsequently gluing animal skins to the other side of the fabric by means of a hygroscopic agglutinant for rendering the material impervious to gas, said agglutinant also serving to close the pores of the animal skins.

1,827,214. CARBURETOR FOR INTERNAL COMBUSTION ENGINES. FRITZ STURM, Friedrichshafen, Bodensee, Germany, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Friedrichshafen, Bodensee, Germany. Filed Dec. 10, 1927, Serial No. 239,200, and in Germany Dec. 14, 1926. 6 Claims. (Cl. 261—16.)



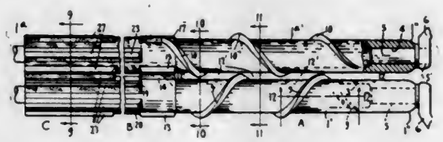
1. A carburetor for an internal combustion engine comprising a mixing chamber having an air inlet valve connected thereto, a connection for supplying liquid fuel to the mixing chamber, a connection for supplying gaseous fuel to the mixing chamber, valves in both of said connections, one of said valves being open while the other is closed, and means connecting the last-mentioned valves to provide for simultaneous operation thereof, either valve being progressively opened while the other valve is being progressively closed by the operation of said means.

1,827,215. CORN LIFTER ATTACHMENT FOR TRACTORS. HENRY SYNCK, Coldwater, Ohio, assignor to The New Idea Spreader Company, Coldwater, Ohio, a Corporation of Ohio. Filed Mar. 5, 1929. Serial No. 344,177. 5 Claims. (Cl. 56—119.)



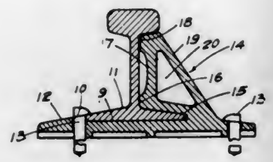
1. In a device of the character described, a plant lifter member arranged at the side of a tractor, means for supporting said lifter member from said tractor including a support secured to the radius rods of the tractor and projecting between a front and rear wheel of said tractor, and connections between said support and lifter member.

1,827,216. SNAPPING ROLLS FOR CORN PICKERS. HENRY SYNCK, Coldwater, Ohio, assignor to The New Idea Spreader Company, Coldwater, Ohio, a Corporation of Ohio. Filed June 10, 1929. Serial No. 369,884. 3 Claims. (Cl. 130—5.)



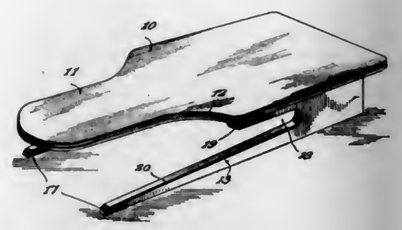
1. In a corn gathering and snapping apparatus, a pair of snapping rolls, a plurality of individual ribs on one roll adapted to intermesh with a plurality of pairs of ribs on the other roll to engage and pull the stalks therebetween, said rolls having pronounced peripheral mating plain portions between the ribs.

1,827,217. RAIL CHAIR. ROBERT BLUME, Hood, Calif. Filed July 7, 1930. Serial No. 465,984. 6 Claims. (Cl. 238—293.)



1. A rail chair comprising a tie plate and rail brace of unitary construction, said rail brace being adapted to engage the lower portion of the web of a rail and to slightly clear the upper portion of the web and undersurface of the ball of a rail.

1,827,218. IRONING BOARD. HOSEA E. BRADSTREET, Methuen, Mass., assignor to Archibald Wheel Company, Lawrence, Mass., a Corporation of Massachusetts. Filed Sept. 3, 1930. Serial No. 479,555. 4 Claims. (Cl. 68—10.)



1. A folding ironing board comprising a board reduced in width at one end, substantially J-shaped supports hinged to the underneath face of the board longitudinally thereof and foldable flat against said underneath face, and a swivel bar on said underneath face adapted to be extended transversely of said face and engage said supports to hold them in operative upright position.

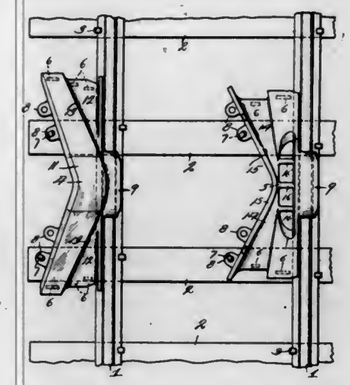
1,827,219. ART OF PRESERVING FRESH FRUITS. ERNEST M. BROGDEN, Winter Haven, Fla., assignor to Brogdex Company, Winter Haven, Fla., a Corporation of Florida. Filed Nov. 20, 1922. Serial No. 602,240. 3 Claims. (Cl. 99—8.)

2. The method of treating fresh fruit in preparing same for market which comprises applying to different portions of a lot of unripe fruit preservative material of differing composition whereby to delay ripening of the several portions for correspondingly differing periods.

1,827,220. DOUBLE SLOPE RE-RAILING FROG. RODERICK W. BRYANT, Omaha, Nebr. Filed Nov. 14, 1928. Serial No. 319,243. 1 Claim. (Cl. 104—265.)

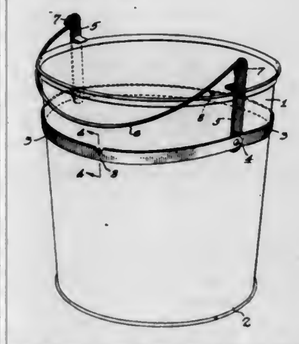
A double slope re-railing block comprising an elongated body member adapted to be disposed to one side of a rail in engagement therewith, an outward and downwardly extending member carried by the body member and adapted to arch the tread of a rail, upwardly inclined recesses carried by the ends of the body member, whereby wheel flange guide shoulders are formed for guiding a wheel flange onto the outwardly and downwardly extending member adapted to arch a rail substantially centrally of

a rail tread, said recess formed shoulders merging together above the outwardly and downwardly extending



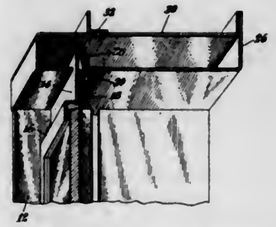
rail engaging member at a point substantially centrally of a rail tread beneath the outwardly and downwardly extending member.

1,827,221. BUCKET HOLDER. VIVIAN N. BURROWS, Big Beaver, Mich. Filed Feb. 1, 1930. Serial No. 425,314. 3 Claims. (Cl. 220—34.)



1. A bucket holder comprising a pair of curved members pivoted together end to end to form a band adapted to receive a bucket, a ball connected to the pivotal connections between said members, and prongs formed on said members and extending inwardly of said band, whereby to engage a bucket received in the band.

1,827,222. WINDOW HEAD CONSTRUCTION. HARRY E. CAMPBELL, Baltimore, Md., assignor to Campbell Metal Window Corporation, Baltimore, Md., a Corporation of Maryland. Filed Nov. 5, 1929. Serial No. 404,893. 5 Claims. (Cl. 189—65.)

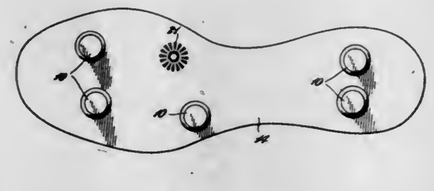


1. In a window of the type having jambs and openings in the inner wall of the jambs, enlarged chambers back of such openings and an upper sash having side portions adapted to extend through such openings into such chambers, a hollow lintel connecting the jambs having an opening in its lower face substantially in line with the opening in the inner jamb walls for the upper sash, an upwardly extending plate in the lintel adjacent such opening, a flexible weather-strip member carried thereby but flaring away from such plate near its lower edge, and a top portion on the upper sash adapted to enter said lintel opening and contact with said weather-strip to deflect the same away from said plate.

1,827,223. TREATMENT OF IRON AND STEEL. CLARK M. DENNIS, Montclair, N. J. Filed Feb. 2, 1928. Serial No. 251,461. 3 Claims. (Cl. 91—68.)

1. The method of treating iron and steel articles which comprises subjecting the same to an alkaline bath containing borax and a small amount of a soluble chromate and drying the resulting articles.

1,827,224. BOOT AND SHOE. FREDERICK WILLIAM EAST, Petersfield, England, assignor to I. T. S. Rubber Company Limited, Petersfield, England. Filed Nov. 23, 1929, Serial No. 409,357, and in Great Britain May 27, 1929. 1 Claim. (Cl. 36—59.)



In sport footwear, a ferrule embedded in the sole and having an upper flange to be embedded in and interlocked with the material of the sole coincident with the upper surface thereof, said ferrule including a hollow threaded section extending toward and terminating short of the outer surface of the sole, the opening in the sole beyond the threaded portion being substantially coincident with the opening in the threaded portion to thereby provide a portion of the sole underlying the free edge of the threaded portion, the outer surface of the sole surrounding the opening being integrally formed with locking projections, and a stud having an upper surface substantially coincident in area with that portion of the sole formed with the locking projections, said upper surface of the stud being formed with projections adapted to interlock with the projections of the sole, and a shank embedded in the stud and extended above the upper surface thereof as a threaded projection to cooperate with the threaded portion of the ferrule, the projecting length of the shank beyond the stud being less than the threaded portion of the ferrule whereby the shank may be united to the ferrule to compel a pressure interfit of the locking projections on the sole and on the stud.

1,827,225. CENTRIFUGAL PROPELLER FOR DIRIGIBLE BALLOONS. ROLLA B. FERREBY, Los Angeles, Calif. Filed Jan. 14, 1929. Serial No. 332,537. 10 Claims. (Cl. 170—159.)

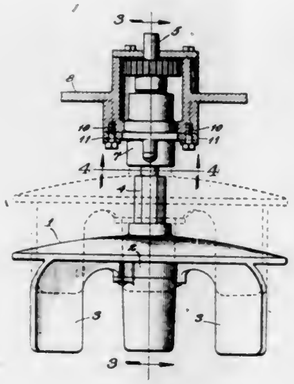
1. A propeller for dirigible balloons having a plurality of centrifugally acting trough-shaped blades adapted to be driven by a rotary shaft, each of said blades having the leading edge forward of the trailing edge considered

in the direction of rotation and the leading edge being turned rearwardly considered in relation to the forward



movement of the propeller from the side structural part of the trough of each blade.

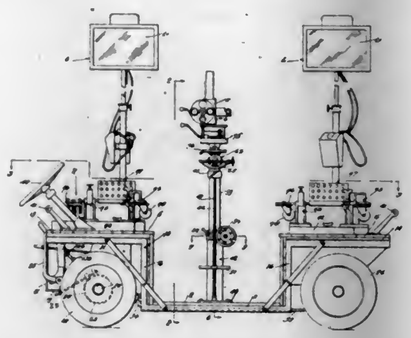
1,827,226. METALLIC DOLLY. JOHN B. FLETCHER, Newport, Ky. Filed Oct. 12, 1929. Serial No. 399,337. 1 Claim. (Cl. 259—101.)



An all metal dolly for washing machines, comprising, a disc having a central hub, plane faced arms extending from the lower side of the disc in radial lines, a polygonal-sided sleeve slidably engaged through said hub, providing a movable stem for the disc and the polygonal-sided contour rotatedly connecting the sleeve and disc, a sleeve flange at one end providing a head for connecting the sleeve to the hub against longitudinal displacement and dependingly sustaining the disc and a shaft engaged into the opposite end of the sleeve and fixed thereto.

1,827,227. CAMERA TRANSPORT CAR. ARMIN FRIED, Los Angeles, Calif., assignor to William Fox Vaudeville Company, Los Angeles, Calif., a Corporation of New York. Filed Mar. 15, 1926. Serial No. 94,720. 3 Claims. (Cl. 180—1.)

1. In a camera transport car, traction wheels, a frame supported on said wheels, a shaft rotatably supported by said frame and drivingly connected to one of said traction wheels, a carrier mounted on the frame for pivotal movement about an axis parallel to said shaft and movable pivotally towards and away from said shaft, a fly wheel carried by said carrier and movable into and out of driven relationship with said shaft by pivotal movement

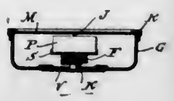


of the carrier respectively towards and away from said shaft, and means for pivotally moving the carrier.

1,827,228. BEATER BAR. FRANK M. GLOYD, Dayton, Ohio, assignor to Simonds Worden White Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 10, 1931. Serial No. 514,811. 11 Claims. (Cl. 92—22.)

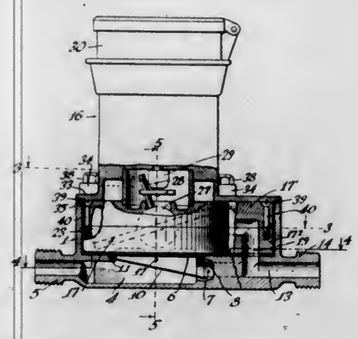
1. A beater bar traversed from front to rear by a series of holes adapted to serve as vents to prevent air being pocketed in spaces between adjacent bars in a beater roll equipped with such bars, said holes being isolated from the working edge of the bar.

1,827,229. CAPSULE OF MICROPHONES. JOSEF GREINER, Vienna, Austria, assignor to G. A. Ungar and Eric Benjamin, New York, N. Y. Filed Nov. 27, 1929, Serial No. 410,060, and in Austria, Nov. 29, 1928. 1 Claim. (Cl. 179—122.)



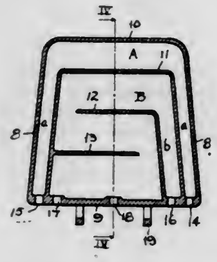
Microphone box comprising a casing and a microphone body, which is loosely inserted and may be removed and replaced, the casing consisting of two portions, a diaphragm provided at its center with a coneshaped projection being arranged on one of the said portions and a spring carried by the second portion, which spring serves for leading current to the microphone body and presses the latter slightly to the diaphragm, said second portion being arranged so that it may be readily detached from the first named portion for the purpose of removing and replacing the microphone body the interchangeable microphone body consisting of a ring made up of felt or other resilient or elastic material, which ring is covered at both sides with a current conducting plate, so that a chamber is formed for receiving the microphonic particles.

1,827,230. WATER METER. LEO G. HAASE, Long Beach, Calif. Filed Dec. 15, 1927. Serial No. 240,180. 3 Claims. (Cl. 73—98.)



1. A water meter construction comprising means providing an open topped casing, means providing a water inlet and a water outlet to and from the casing, both of which terminate in openings on the bottom portion of the casing, there being a water supply chamber in the water inlet having an open top exposed on the bottom of the casing, a screen frame receivable through the open top of the water supply chamber, a screen carried by the screen frame and positioned thereby in an inclined position across the water supply chamber, a measuring mechanism adapted to fit within the casing and to be detachably secured thereto, said measuring mechanism having a bottom in which there are openings adapted to be caused to register with the openings in the bottom portion of the casing, and a gasket between the bottom of the casing and the bottom of the measuring mechanism for forming a fluid tight connection therebetween, said gasket extending over the open top of the water supply chamber.

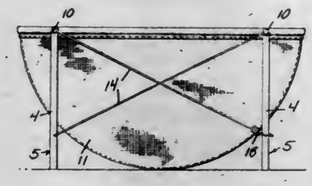
1,827,231. HEAT EXCHANGING DEVICE. WILLIAM A. HAVEN, Youngstown, Ohio. Filed Dec. 4, 1929. Serial No. 411,461. 3 Claims. (Cl. 122—6.)



1. A bosh plate, comprising a shallow metallic body having upper and lower masonry-engaging walls and containing partitioning forming a fluid chamber at the forward end of the body, and another independent chamber rearwardly of the first-named chamber having transverse staggered baffles arranged to produce a sinuous circulation of the cooling fluid, and an inlet and outlet for each chamber independently.

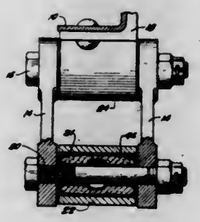
1,827,232. FOLDING TIRE TUBE TESTER AND BUCKET. WILLIAM A. HENRY, Hollywood, Calif. Filed Dec. 16, 1926. Serial No. 155,288. 1 Claim. (Cl. 150—49.)

A collapsible tire tube tester and bucket comprising a support including a top frame having spaced parallel side bars and connecting end bars, U-shaped members each including side legs and a connecting handle bight portion, pivot pins connecting the inner ends of the legs to the side bars adjacent to the opposite ends thereof whereby to permit the U-shaped members to be swung above or below the top frame, flexible brace rods provided with



eyes at their inner ends rockably mounted upon the pivot pins for permitting swinging movement of said brace rods, means formed on the lower ends of the brace rods for detachably engaging the legs of the U-shaped members adjacent to the outer ends thereof, when said legs are at right angles and below the top frame, and a flexible receptacle secured to and carried by said top frame.

1,827,233. RUBBER SPRING BUSHING AND METHOD OF MAKING THE SAME. VICTOR HUGHES, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 15, 1927. Serial No. 219,721. 11 Claims. (Cl. 29—88.2.)



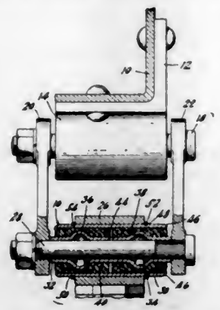
1. A joint comprising a bolt and arms, a shell surrounding said bolt and locked to said bolt, a second shell surrounding the first shell, the end of the inner shell abutting said arms, a resilient material under compression arranged between said shells but out of contact with said arms, said second shell swedged onto the first to compress the rubber and an eye member surrounding said second shell.

3. A method of making a bearing consisting of assembling the central core and an elastic cylinder inside an outer shell, placing the assembly in a die and then forcing the assembly into a smaller die, thereby swaging the outer shell and causing the elastic material to flow.

1,827,234. RUBBER SPRING SHACKLE AND METHOD OF PRODUCING THE SAME. VICTOR HUGHES, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,282. 13 Claims. (Cl. 29—88.2.)

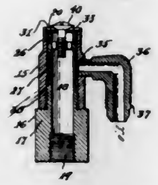
1. In a joint, a core member, a plurality of resilient elements placed over said core in spaced relation, and an outer shell over said elements and swedged thereon to cause said elements to flow and fill substantially all the space between the shell and core.

13. The method of making a joint consisting in assembling a plurality of rubber blocks over a central hollow



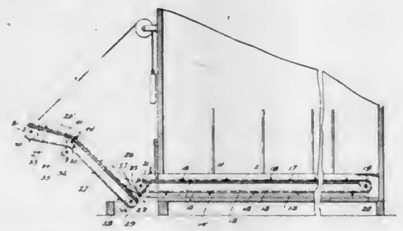
core, placing a hollow shell over said cylinder, and then swedging the shell into place to cause said rubber to flow or spread into the space between said shell and core.

1,827,235. ADJUSTABLE FUEL BURNING NOZZLE. GRAHAM WYLIE JARVIS, Charlottesville, Va., assignor of one-half to John E. Shepherd, Charlottesville, Va. Filed Jan. 24, 1928. Serial No. 249,084. 5 Claims. (Cl. 299—116.)



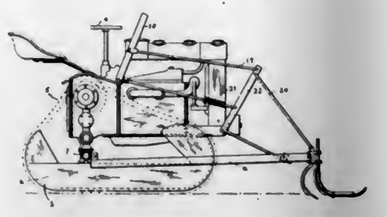
3. A burner embodying outer and inner tubular members having conically alined upper end faces and having threaded engagement, the outer member having a lateral fuel inlet, the inner member having a circumferential channel and a wall provided with slanting parallel grooves, a screw adjustable relative to the conically alined faces of the said members, the screw having a head formed with opposed upper and lower conical faces and having a diameter substantially equal to the outer diameter of the inner member.

1,827,236. LITTER REMOVER. FREDOLPH JOHNSON, HARRY W. JOHNSON, and ARTHUR F. JOHNSON, Little Falls, Minn. Filed Aug. 12, 1927. Serial No. 212,546. 4 Claims. (Cl. 198—168.)



1. A litter remover comprising a gutter, two movable endless carrying members, each carrying member comprising two chains and flights connecting the chains, one of the carrying members having an upper portion in the gutter and a lower portion below the gutter and means extending longitudinally of the carrier and between the chains and in position to receive and support the flights during movement beneath the gutter.

1,827,237. PUSHED AGRICULTURAL IMPLEMENT. GEORGE DOUGLAS JONES, Cleveland, Ohio, assignor to The Cleveland Tractor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 28, 1927. Serial No. 243,053. 9 Claims. (Cl. 97—47.)

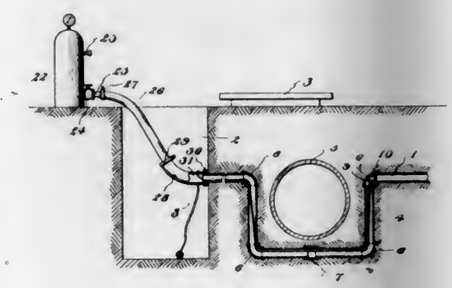


1. In an implement adapted to be pushed ahead of a power tractor and adapted to be bodily swung responsive to turning movements thereof, a transverse implement frame beam, a tillage implement secured thereto and projecting downwardly therefrom and a support for said frame beam secured thereto, comprising a leg and a longitudinally extending relatively narrow elongated skid having an upturned forward end adapted to rest upon and space the beam from the ground, said skid being vertically swivelable on said leg.

1,827,238. PROCESS OF SOLIDIFYING PERMEABLE ROCK, LOOSELY SPREAD MASSES OR BUILDING STRUCTURES. HUGO JOOSTEN, Nordhausen, Germany, assignor of one-third to Tiefbau- und Kälteindustrie-Aktiengesellschaft vormals Gebhardt & Koenig, Nordhausen im Harz, Germany, a Corporation of Germany, and one-third to Siemens-Bauunion Gesellschaft mit beschrankter Haftung Kommanditgesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Nov. 14, 1929, Serial No. 407,298, and in Germany Nov. 14, 1928. 4 Claims. (Cl. 61—36.)

1. The process of solidifying permeable strata, loose masses or porous building structures, which consists in introducing into the mass to be treated silicic acid containing materials and a gas which reacts upon said materials to release silicic acid, which gels in situ from the nascent state and thus integrates the treated mass.

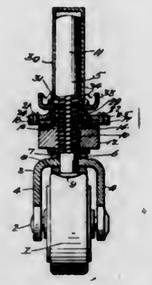
1,827,239. PRESSURE-OPERATED DEVICE FOR LEADING WIRES THROUGH CONDUITS. CHARLES W. KELLEY, Purcellville, Va. Filed July 26, 1928. Serial No. 295,533. 1 Claim. (Cl. 175—378.)



Apparatus of the character described comprising a leader consisting of a hollow body having a head at its forward end and walls extending rearwardly therefrom, the body being open at its rear and the walls flaring

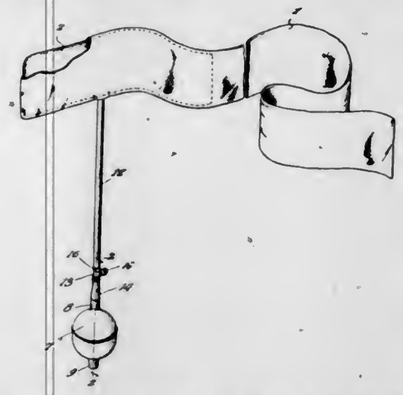
towards its rear end and rolled outwardly to form a bead about the rear end of the body, recesses being formed in said bead in spaced relation to each other circumferentially of the body, rollers in said recesses, a ring housed in the bead and passing axially through the rollers to retain them in the recesses, and a stem extending longitudinally in said body with one end connected thereto and its other end adapted to have a cord secured thereto.

1,827,240. CASTER. JOSEPH KEMME, Philadelphia, Pa., assignor to Charles R. Nalle, Philadelphia, Pa. Filed Aug. 16, 1930. Serial No. 475,775. 9 Claims. (Cl. 16—19.)



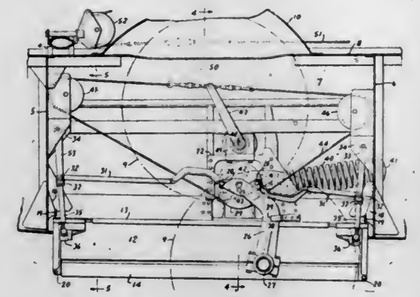
1. A device of the class described having a threaded upstanding shank, a guide slidably and rotatably receiving said shank, a weight supporting nut threaded adjustably on said shank under said guide, and a yoke surrounding said nut and supporting said guide.

1,827,241. TOURNIQUET. ARTHUR R. KEMPF, Springfield, Tenn. Filed Oct. 24, 1929. Serial No. 402,140. 1 Claim. (Cl. 128—327.)



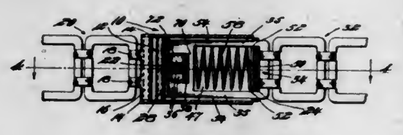
A tourniquet comprising a binding strip having one portion formed with a longitudinally extending pocket, a bladder in the pocket of said strip, and means to inflate said bladder consisting of a tube extending from the bladder intermediate the ends thereof, a bulb for forcing air through said tube into said bladder having an inlet at its outer end and an outlet at its inner end, an inwardly opening check valve for the inlet of said bulb, a tubular coupling leading from said tube and connected with the outlet end of said bulb, a neck leading transversely from said coupling intermediate the ends thereof constituting an air outlet, and a cap threaded upon said neck and having its walls formed internally with a longitudinally extending groove constituting an air passage open at its ends, and a pad in said cap to close the outer end of said neck when the cap is tightened upon the neck.

1,827,242. LANDING-GEAR. BORIS V. KORVIN-KROUKOVSKY, Beechhurst, N. Y., assignor to Edo Aircraft Corporation, College Point, Long Island, N. Y. Filed June 6, 1930. Serial No. 459,513. 16 Claims. (Cl. 244—2.)



1. A landing-gear float for airplanes, containing an internal wheel chamber isolated from the principal buoyancy compartments of the float, and a wheel housed in said chamber with means for projecting and retracting said wheel through the bottom of the float, said chamber being constructed as an air-tight bell.

1,827,243. STRAP TIGHTENER. WILHELM KUEHNER, Providence, R. I. Filed Sept. 2, 1930. Serial No. 479,286. 6 Claims. (Cl. 24—71.)

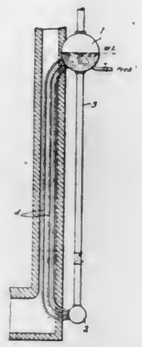


6. A tightener adapted to be inserted in a strap for expanding or contracting the length of the strap, consisting of a back connector section having hinge means at the inner end thereof for securing a strap end thereto, an intermediate connector section, means to secure said connector sections together when said intermediate connector section is brought into closed position overlying said back connector section, a front connector comprising a top plate having downwardly projecting sides and an opening extension at the inner end thereof, an open member adapted to slide within said top plate having means at the outer end thereof for securing a strap end thereto, a back plate having an upstanding outer wall having open portions for passage of the sides of the slidable member therethrough, means abutting the outer wall of the back plate and the outer edge of the inner wall of the slidable member to normally urge said member inwardly, and means to secure said back plate within said top plate, hinge means to secure the outer end of the back connector section to the inner end of the intermediate connector section, hinge means to secure the outer end of said intermediate connector section to the inner end of the front connector section.

1,827,244. GENERATION OF STEAM AND OTHER VAPORS. WALTER DOUGLAS LA MONT, Larchmont, N. Y., assignor to La Mont Corporation, a Corporation of New York. Filed June 16, 1926. Serial No. 116,305. 8 Claims. (Cl. 122—235.)

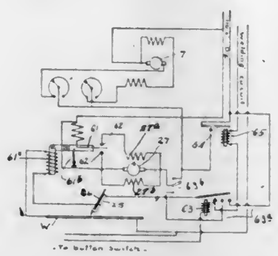
1. Apparatus for the generation of steam and other vapors comprising in combination relatively long generating tubes exposed to heat throughout their lower reaches at least, and means including a conduit for providing a path of unrestricted return flow and for maintaining a

water level in the generator so located as continuously to provide a head of water above said lower reaches at such a height that the water within the tubes in said lower reaches is subjected to pressure considerably above that corresponding to the temperature of the steam generated and discharged from the tubes, the amount of water main-



tained in the tubes, the proportions of the tubes in relation to the capacity of said conduit and their relation to the heat source being such that a relatively high velocity is produced therein and the reduction in pressure of the water as it rises in the tubes causes vigorous geyser action therein.

1,827,245. ARC WELDING. JAMES F. LINCOLN, East Cleveland, and CECIL C. PECK, Cleveland, Ohio, assignors to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 20, 1922, Serial No. 545,123. Renewed Sept. 8, 1928. 27 Claims. (Cl. 219—8.)

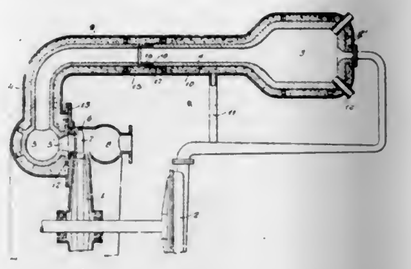


1. In arc-welding mechanism, the combination of a trackway, a carriage movable therealong, a member mounted on said carriage so as to be movable transversely of said trackway, a reversely operable electric motor on said carriage intergeared with said member to move the same, and an electrode-holder mounted on said member.

27. In electric arc welding mechanism, the combination of a welding electrode, means for rotating said electrode, a conductor member constituting the main current supply for the arc engaging said electrode close to the working end thereof, and means for cooling said conductor member.

1,827,246. GAS TURBINE. CHRISTIAN LORENZEN, Berlin-Treptow, Germany, assignor to Bendix Aviation Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 16, 1930, Serial No. 453,009, and in Germany June 7, 1927. 11 Claims. (Cl. 60—41.)

5. In combination with a turbine, a combustion chamber for producing hot gases under pressure, an air compressor driven by said turbine and arranged to deliver air under pressure to said chamber, a refractory conduit for conveying the hot gases from said combustion chamber to the turbine, and a jacket surrounding said conduit at a distance, said jacket being connected only with the

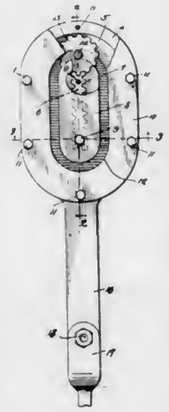


delivery side of said compressor, whereby said jacket will be filled with a stagment body of air under the delivery pressure of the compressor.

1,827,247. METHOD OF PROTECTING METAL SURFACES. SUMNER REDWAY MASON, Wilmette, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1927. Serial No. 227,060. 3 Claims. (Cl. 204—1.)

1. A process for protecting surfaces of metal articles, which consists in connecting an article as a cathode in an electrolytic cell including a bath containing chromic acid as an electrolyte, passing an electric current of a cathode current density below the range in which chromium is deposited through the cell for from three to fifteen minutes, and maintaining the temperature of the bath at room temperature.

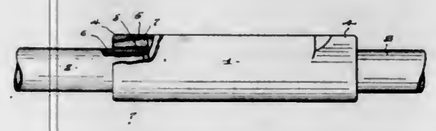
1,827,248. GEARED ROD. JOHN C. MCCLURKIN and AUBREY STALLARD, Lakin, Kans. Filed Dec. 27, 1927. Serial No. 242,688. 1 Claim. (Cl. 74—14.)



A gearing of the class described, comprising a solid block provided on one side with an outer recess and with an inner recess at the base of the outer recess, the outer recess being of greater area than the inner recess, whereby the base of the outer recess will form a table about the inner recess, there being a lug on the base of the inner recess and cooperating with the edge of the inner recess to define

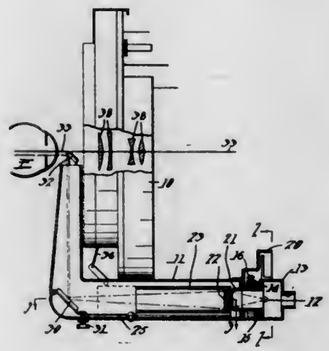
a loop-shaped groove about the lug, the outer recess forming a marginal rib at said side of the block, a removable cover ring on the outer surface of the rib and overhanging the table, securing elements connecting the ring with the rib, a removable bar on the lug, a removable cover plate on the bar and of greater area than the bar, securing elements connecting the bar and the cover plate with the lug, the cover plate extending into the ring and having its outer surface flush with the outer surface of the ring, a shaft movable in the groove, and between the outer edge of the cover plate and the inner edge of the ring, and a pinion on the shaft, the pinion being extended between the ring and the table, and between the lug and the cover plate, the bar and the rib constituting constituent portions of the gearing, and one of said constituent portions having a rack wherewith the pinion meshes.

1,827,249. ELECTRIC CONDUIT COUPLING. JAY W. MCCOY, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Aug. 17, 1929. Serial No. 386,685. 8 Claims. (Cl. 247—25.)



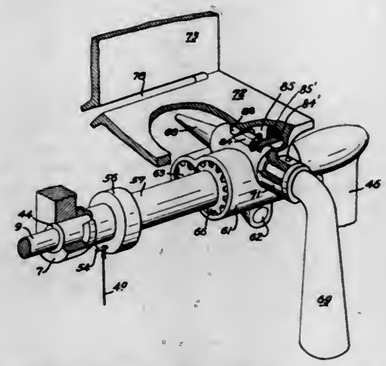
1. The combination of two conduit sections, one having a bore for receiving the other, the section provided with the bore being also formed with a passage extending in a direction lengthwise of the bore and opening through the wall of the bore and a wedge member slidably movable endwise into said passage and coacting with the other section where the passage opens through the wall of the bore.

1,827,250. KATOPTER. FAY MCFADDEN, Rutland, Vt. Filed May 25, 1928. Serial No. 280,603. 4 Claims. (Cl. 88—20.)



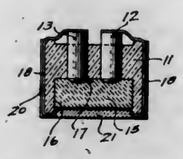
1. In a device of the character described, the combination with a frame and a source of light located therein, of a focusing tube in said frame having a lens through which the light from the source passes, means for moving the tube forward and back, means for tilting it to change its direction and mirrors for reflecting the light into the eye of the patient.

1,827,251. SLICING MACHINE. FERD H. MEYER, Oakland, Calif., assignor of one-half to George H. Roberts and one-half to Joseph Schor, San Francisco, Calif. Filed Sept. 28, 1926. Serial No. 138,146. 10 Claims. (Cl. 31—20.)



6. A slicing machine comprising a trough for holding the material to be sliced, a shaft journaled on said trough, an arm mounted on said shaft, a cutting element spaced from the arm and connected therewith for rotation across the end of said trough, a pusher actuated by the shaft for advancing the material in the trough to the cutting element, a stacker bracket fixed between the cutting element and the arm, a slice stacker comprising a short trough demountably held on said bracket, and means interposed between the stacker and bracket for enforcing an upward movement of the receiving end of the stacker prior to its release from the bracket.

1,827,252. THERMOPILE. THOMAS A. MOLLARD, Oakland, Calif., assignor to Pacific Fire Extinguisher Company, San Francisco, Calif., a Corporation of California. Filed Aug. 22, 1928. Serial No. 301,406. 7 Claims. (Cl. 136—4.)



2. In a thermopile, a series of connected thermocouples, means totally embedding one end only of each thermocouple, and means whereby only sudden temperature variations near the open or the embedded ends cause material current generation.

1,827,253. AIRPLANE. ROBERT S. MOORE, Silver Spring, Md. Filed Nov. 25, 1927. Serial No. 235,657. 6 Claims. (Cl. 244—31.)



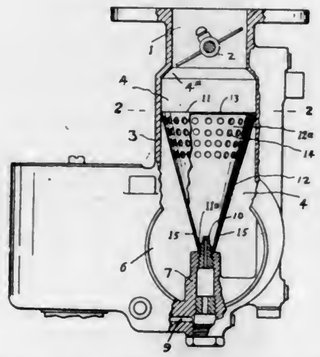
5. An airplane including a wing having its upper and lower surfaces spaced apart to receive an engine in the interior of the wing, the opposed surfaces of the wing adjacent the engine being provided with a series of shutter controlled openings, the whole arranged whereby the upward pressure or lift acting against the under surface of the wing positively forces the air into the lower slots,

and the negative pressure or lift acting upon the upper surface of the wing positively draws the air surrounding the engine out of the wing.

1,827,254. PRODUCTION OF FLAVANTHRONE. WILFRED M. MURCH, Hamburg, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 19, 1925. Serial No. 63,557. 16 Claims. (Cl. 260—42.)

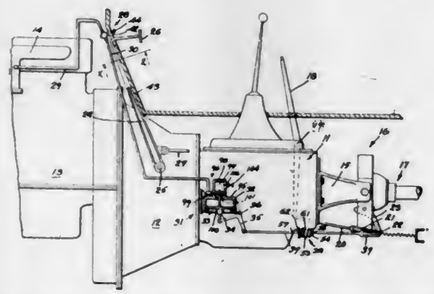
13. In the production of flavanthrone by heating 2-aminoanthraquinone with antimony pentachloride in the presence of nitrobenzene, the process which comprises completing the reaction to form flavanthrone and then separating the precipitated flavanthrone from the nitrobenzene at a temperature of about 110°–115° C.

1,827,255. CARBURETOR. HENRY F. NELSON, Muncie, Ind., assignor of one-fourth to Robert E. Moore, Muncie, Ind. Filed Apr. 30, 1929. Serial No. 359,219. 3 Claims. (Cl. 261—75.)



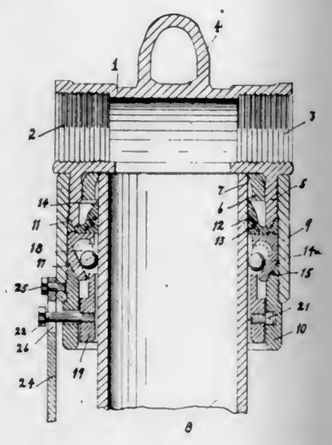
1. In a carburetor, having its air intake opening intercommunicating with the fuel chamber, a cone shaped compartment device retained with its base portion adjacent to the outlet and to span the bore of the fuel chamber, the head portion of the compartment device having a mouth into which the gasoline nozzle of the carburetor projects there being perforations in the base portion and in the portions of the walls adjacent to the base portion of the compartment, and there being apertures of relatively small size near the said mouth.

1,827,256. SAFETY DEVICE FOR EMERGENCY BRAKES. WLADIMIRE J. OBIDINE, Los Angeles, Calif. Filed July 15, 1929. Serial No. 378,549. 16 Claims. (Cl. 188—106.)



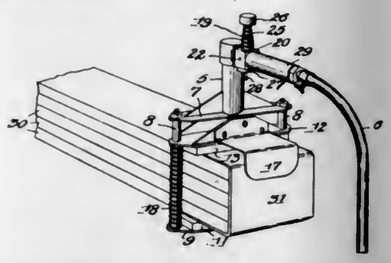
15. In the art described, a method of applying emergency brakes, comprising applying service brakes by the movement of the foot of an operator, on the failure of the service brakes the movement of the operator's foot controlling a power fluid, such power fluid being controlled independently of the movement to apply the service brakes, and such power fluid applying the emergency brakes.

1,827,257. CIRCULATING HEAD. LLOYD A. PARKER, Long Beach, Calif., assignor to John Grant, Los Angeles, Calif. Filed Mar. 16, 1928. Serial No. 262,209. 20 Claims. (Cl. 285—161.)



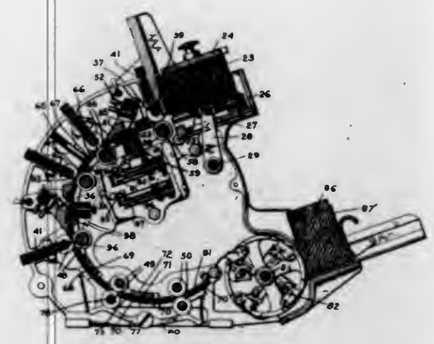
1. In a circulating head adapted to be mounted on casing and the like, having intake ports therein, a plurality of balls mounted in the head adapted to engage the casing to prevent the removal of the head means providing inclined wedge seats for said balls, and means adapted to engage the balls to lift the same out of engagement with the casing, and fluid pressure actuated packing means in the head adapted to engage the outer surface of the casing.

1,827,258. PNEUMATIC CLAMP. HENRY H. PAYZANT, Everett, Wash., assignor to Weyerhaeuser Timber Company, Tacoma, Wash., a Corporation of Washington. Filed May 8, 1929. Serial No. 361,419. 3 Claims. (Cl. 144—289.)



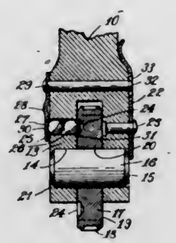
1. A portable pneumatic clamp comprising an air cylinder, frame members projecting laterally from the bottom of said cylinder, a pair of rods depending in spaced, parallel relation from said frame members, a stationary clamping jaw rigidly secured to the lower ends of said rods, a movable clamping jaw slidable upon said rods, means normally urging said jaws apart, a piston in said cylinder operatively connected to said movable jaw, a handle projecting laterally from the upper end of said cylinder, said handle having a passage therethrough for the admission of air to said cylinder and a valve near the junction of said handle and cylinder for controlling the operation of said piston in said cylinder.

1,827,259. CARD FEEDING MECHANISM. JOHN ROYDEN PEIRCE, New York, N. Y., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 15, 1929. Serial No. 332,678. 15 Claims. (Cl. 271—4.)



1. In a record card controlled machine, a card magazine, a stationary circumferential feeding track for guiding the record cards and means for feeding the cards from said magazine to said feeding track.

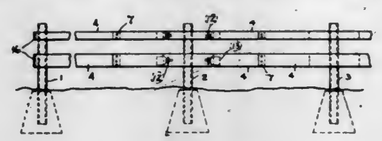
1,827,260. MULTIPLE STAMP DEVICE. TIMOTHY B. POWERS, Brooklyn, N. Y., assignor to Numberall Stamp and Tool Co., Inc., New York, N. Y., a Corporation of New York. Filed July 15, 1930. Serial No. 468,018. 3 Claims. (Cl. 101—28.)



1. A stamp device having a driving shank provided with a slot extending upward from one end to form a pair of bars each provided with a cross bore, an impression member provided with a series of radial stamps and also provided with an axial bore, a shaft removably inserted in the cross bores of the bars and projecting through the bore of the impression member whereby the member swings in the slot between the bars and is adapted to receive the impact of the driving blow on the shank, one of said bars having a flange at the outer end of the bore to limit the insertion of the shaft from the opposite end of the cross bore, a clip pivoted on one of the bars to swing across the end of the shaft and prevent its removal, the impression member having a series of cavities on one side face, and retaining means arranged to engage the impression member at the said cavities, and hold it in adjusted positions.

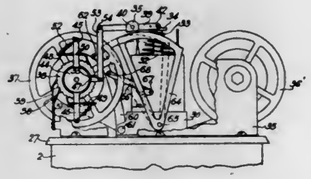
1,827,261. GUARD RAIL CONSTRUCTION. HERBERT R. RICK, Kent, Ohio. Filed June 4, 1930. Serial No. 459,140. 4 Claims. (Cl. 256—13.1.)

3. A guard-rail construction, comprising flexible plate sections connected end to end and extending alongside a high-way, a series of posts for carrying the respective sections, resilient means connecting said guard rail with



said posts, and means providing longitudinal slippage between said guard rail relative to the resilient post-connecting means.

1,827,262. REELING DEVICE. THEODORE C. RIEBE, Chicago, Ill., assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Aug. 19, 1927, Serial No. 214,068. Divided and this application filed May 31, 1928. Serial No. 281,817. 2 Claims. (Cl. 242—55.)

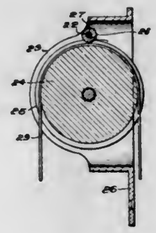


1. In a tape reeling device, a quantity of tape, a reel, a ratchet and pawl device for rotating said reel to wind a length of said tape thereon, means for periodically operating said ratchet and pawl device to periodically rotate said reel, a movable eccentric segment for varying the operation of said ratchet and pawl device to vary the amount of rotation of said reel, and means for moving said segment in accordance with the amount of tape on said reel to vary the operation of said ratchet and pawl device and the amount of rotation of said reel so that each periodic rotation thereof shall wind an equal length of tape thereon.

1,827,263. COMPOSITION FOR FLAMEPROOFING INFLAMMABLE MATERIALS. FRANK LOUIS ROMAN, Chicago; Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Filed May 21, 1927. Serial No. 193,383. 5 Claims. (Cl. 134—78.6.)

2. A flameproofing composition comprising a plurality of ammonium phosphates, gum arabic, glycerol, and water.

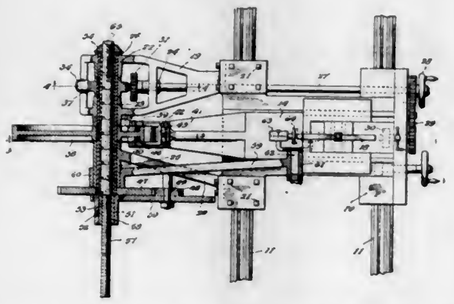
1,827,264. TAPE SUSPENSION FOR WINDOW SASH AND THE LIKE. SAMUEL ROSENBERG, New York, N. Y. Filed Dec. 29, 1928. Serial No. 329,251. 1 Claim. (Cl. 16—211.)



A sash suspension comprising a case adapted to be mounted in a window frame, and including a vertical face plate, cheek plates extended inwardly therefrom, a wheel mount-

ed between the cheek plates having a flat-bottomed groove and having its periphery closely adjacent and outward of the plane of said plate at the front side of the roller, and a pilot roller of cylindrical form revolubly mounted between the said cheek plates at the upper side of the wheel, and set in the groove a substantial distance adapted to lie close to a tape in the groove, and close to the sides of the groove, and a tape closely confined in the bottom of the groove under the roller.

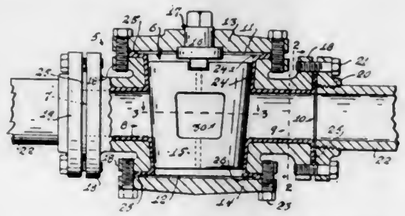
1,827,265. DEPTH CUT INDICATOR. ANTON SCHMID, Huntington, W. Va., assignor of two-thirds to Herbert Lang, James Yerkeson, and Grant Yerkeson, Huntington, W. Va. Filed Dec. 31, 1929. Serial No. 417,789. 9 Claims. (Cl. 82—34.)



1. The combination with the carriage and the tool supporting cross slide of a lathe, of a cam carried by the carriage and actuating the cross slide, a micrometer bar slidable transversely of the cam and operatively connected to the cam for indicating the movement of the cross slide whereby to indicate the depth of cut made by the cutting tool, and means for simultaneously actuating the cam and the micrometer bar.

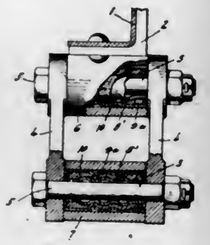
2. The combination with the carriage and the tool supporting cross slide of a lathe, of a tubular shaft, a cam on the tubular shaft for actuating the cross slide, a cross feed shaft for actuating the tubular shaft, a sleeve within said tubular shaft terminating in a micrometer collar, a micrometer bar slidable longitudinally within said sleeve, means operatively connecting said sleeve and said tubular shaft and means operatively connecting said tubular shaft and said micrometer bar.

1,827,266. VALVE BODY. MARION R. SHIPLEY, Hermosa Beach, Calif., assignor to A. H. Shipley, Fresno, Calif. Filed Sept. 20, 1928. Serial No. 307,312. 2 Claims. (Cl. 251—103.)



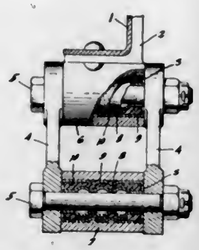
1. In a valve, a housing having a valve chamber, both ends of which are open, there being inlet and outlet passages formed in the valve housing and communicating with the valve chamber therein, a one piece lining for the chamber in the valve housing, which lining extends through the inlet and outlet openings, portions of said lining being extended around the outer ends of said inlet and outlet openings to form flanges, portions of which flanges are increased in thickness to form gaskets, portions of the lining being extended around the openings at the ends of the valve chamber within the housing to form flanges, portions of which flanges are increased in thickness to form gaskets and closures secured to the ends of the valve housing and bearing on said last mentioned gaskets.

1,827,267. METHOD OF MAKING RESILIENT JOINTS. CHARLES R. SHORT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 4, 1927. Serial No. 165,887. 3 Claims. (Cl. 29—149.5.)



1. A method for the manufacture of a resilient joint constituted by two cylinders having the same axis and a tube made of a firmly compressed resilient material, between these two cylinders, which method consists: in introducing the tube of resilient material between the two cylinders, and in modifying the diameter of at least one of the said cylinders for producing a high radial compression of the tube made of resilient material.

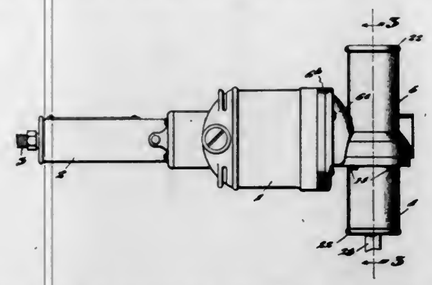
1,827,268. RUBBER SPRING SHACKLE. CHARLES R. SHOAT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Feb. 4, 1927, Serial No. 165,887. Divided and this application filed July 23, 1931. Serial No. 552,590. 5 Claims. (Cl. 267—54.)



1. A joint comprising a bolt and arms, a shell surrounding said bolt, a second shell surrounding the first shell, the ends of both shells abutting said arms, a resilient material under compression arranged between said shells but out of contact with said arms, and an eye member surrounding said second shell.

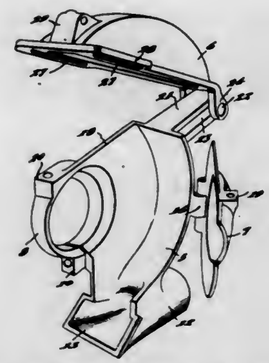
1,827,269. TOOL DRIVING APPARATUS. GEORGE E. SMITH, Park Hills, Ky., assignor to The United States Electrical Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 30, 1928. Serial No. 296,200. 1 Claim. (Cl. 81—54.)

A tool driving device of the class described comprising a T-shaped casing, a power device located in the shank of said T-shaped casing, a driven element connected to said power device and rotatably mounted in axial alignment with and within the head of the T-shaped casing, said driven element having clutch teeth disposed toward the respective ends of the head of said T-shaped casing, tool spindles reciprocably mounted in the respective ends of said head and each including clutch teeth engageable with the respectively adjacent clutch teeth of said driven element, said spindles each having ratchet teeth at their outer ends said casing including ratchet teeth formed



inwardly at the ends of said head thereof for engagement with the respectively adjacent ratchet teeth of said driven element, springs for normally maintaining said spindles out of engagement with the driven element and in ratchet engagement, and a handle extended from the shank of the T-shaped casing for oscillating the said casing on the axis of the head for manipulation of a particular ratchet for manually operating the particular tool whereby the tools may be manually operated in normal spring urged position or power actuated by depression of the spindles into engagement with the driven element.

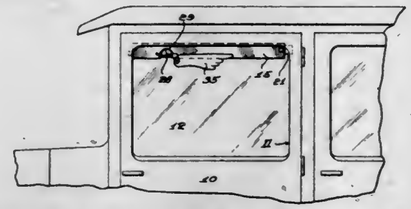
1,827,270. GRINDING WHEEL GUARD. GEORGE E. SMITH, Covington, Ky., assignor to The United States Electrical Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 13, 1929. Serial No. 392,392. 3 Claims. (Cl. 51—273.)



1. In combination with a grinding wheel of a grinder, a cover for the grinding wheel, comprising, a main casing mounted on the frame of the grinder concentric to the grinding wheel for rotative adjustment relative thereto, and a one-piece cap hinged on the main casing for enclosing the upper portion of the wheel and having its front edge adjustable toward and from the peripheral surface of the grinding wheel, said adjustment movement of the cap adapted to be imparted entirely independent of the hinged movement thereof.

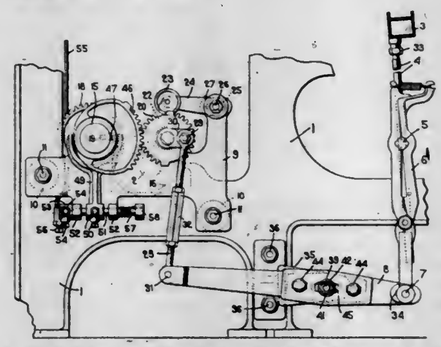
1,827,271. DIRECTION SIGNAL FOR VEHICLES. HENRY G. SPRAKER, Muskogee, Okla. Filed May 29, 1930. Serial No. 457,119. 4 Claims. (Cl. 116—52.)

1. A signal device for the uses indicated comprising a plate-like mounting of tubular construction, adapted to be incorporated in a vehicle opening, formed of sheet metal bent substantially into U-shape in cross section, the longitudinal edges of one side portion being turned at right angles against the other side portion, forming a bottom flange, an opening formed through the plate and through the lower edge thereof, a rock shaft across the



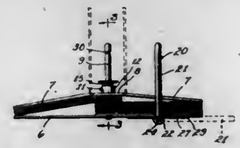
opening on the said bottom flange, a lever pivotally connected to the shaft on an axis at right angles to the shaft and having concentric parts fitting the opening, a handle on the lever projected at the inner side of the plate, and a signal piece at the opposite end of the lever without the mounting.

1,827,272. SHUTTLE BOX MOTION FOR LOOMS. HARRY W. THATCHER, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 8, 1930. Serial No. 426,802. 5 Claims. (Cl. 139—178.)



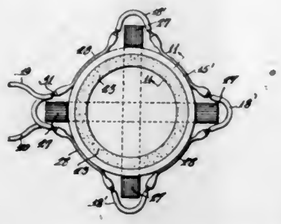
1. In a loom, a shiftable shuttle box structure, a pair of gears having parallel axes and one of which is shiftable on its axis into and out of mesh with the other, means including a lever connecting one of said gears to the shuttle box structure to impart shifting motion thereto, means for rotating the other gear, and means for adjusting the fulcrum of the said lever both longitudinally of and with respect to the lever thus to vary the effect of the lever in transmitting movement to the shuttle box structure without altering the position of the lever.

1,827,273. LOOSE-LEAF FILE. ROBERT R. WEBB, Los Angeles, Calif., assignor to Charles R. Hadley Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 1, 1930. Serial No. 499,150. 12 Claims. (Cl. 129—12.)



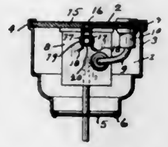
1. A loose-leaf file comprising a base plate, a post projecting up from the base plate, and a guide hinged to the base plate and provided with arms at opposite edges of the base plate.

1,827,274. ELECTRIC INDUCTION FURNACE. DUDLEY WILLCOX, Lawrenceville, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Aug. 13, 1928, Serial No. 299,156, and in Great Britain Sept. 8, 1927. 6 Claims. (Cl. 13—27.)



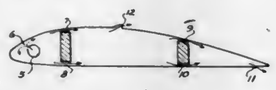
1. In a cooling system for furnace coils, an inductor and water-cooled tabs at intervals on the outside of the inductor adapted to cool the inductor and protected from the furnace charge by the body of the inductor.

1,827,275. NEON SIGN. EDWARD S. WOOLRICH, Cleveland Heights, Ohio, assignor, by mesne assignments, to Flexlume Corporation, Tonawanda, N. Y., a Corporation of New York. Filed Sept. 22, 1928. Serial No. 307,686. 4 Claims. (Cl. 40—130.)



4. A neon tube sign comprising a casing having a top wall and a bottom wall, a neon tube sign having an intermediate sign portion beneath the casing and upright end portions extending through the bottom wall, the upper ends of said upright portions being bent laterally and having contact terminals attached thereto, spaced sockets attached to the under side of the top wall of the casing to receive said terminals and support said sign, and means for supplying current to said tube through said sockets.

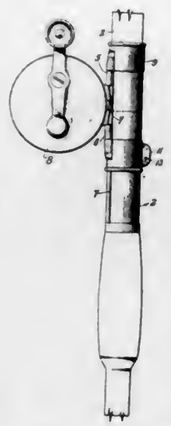
1,827,276. AEROPLANE. HERACLIO ALFARO, East Cleveland, Ohio. Filed Dec. 21, 1927. Serial No. 241,482. 2 Claims. (Cl. 244—31.)



1. In an aeroplane having hollow wings, an air heater, means for delivering the heated air from the heater to the interior of the wings adjacent the forward edges thereof, and openings in the upper and lower walls of the wings which are directed rearwardly whereby the air streams along the exterior surfaces of the wings exert an entraining action on the heated air within the wings.

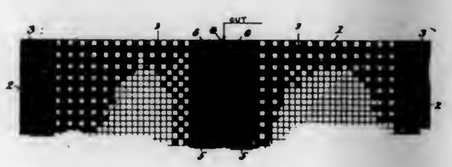
1,827,277. REEL CONNECTING MEANS FOR FISHING RODS. ORSON W. BRENIZER, Philadelphia, Pa. Filed July 10, 1930. Serial No. 466,969. 5 Claims. (Cl. 43—22.)

1. The combination of a rod, a connecting member fixed thereon, a collar slidable on the rod toward and from the member, a reel having parts constructed to be received by said member and said collar and to be thereby secured to the rod when the collar is moved toward the member, an eccentric pivoted on the collar to engage and bind against the rod when turned in one direction and to



free the rod when turned in the reverse direction and a spring holding the eccentric in engagement with the rod, the eccentric permitting the collar to be moved toward and preventing it from being moved from the member.

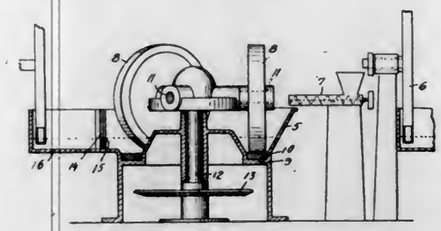
1,827,278. FABRIC FOR CURTAINS. STEPHEN H. BAICE, South Orange, N. J., assignor to Wm. Anderson Textile Mfg. Co., Inc., New York, N. Y. Filed July 9, 1930. Serial No. 466,818. 2 Claims. (Cl. 139—407.)



1. In an article of manufacture, a sheet of fabric having a motif woven therein and having panels of darkened hue woven along the sides thereof, said fabric having also a median line woven therein to indicate where the same may be cut to produce two equal sections, said fabric also having woven therein a central panel of darkened hue extending an equal distance on each side of said median line and providing inner borders for the sections of the fabric when cut along said median line, the borders at the inner and marginal sides of the sections of the fabric when cut being woven to form fold lines whereby the borders may be folded and stitched to form hems of an even width, each border having one face displaying a continuation of a portion of the motif and the other face of the border having the portion between its outer side edge and its fold line marked to blend with the first mentioned face when the hem is formed.

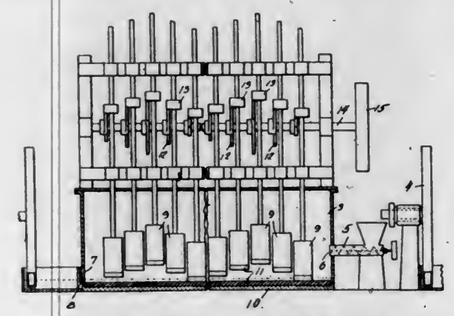
1,827,279. METHOD AND APPARATUS FOR REFINING PULP. GEORGE HOLMES CARNAHAN, New York, N. Y., assignor to Rubber Surfacers, Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,698. 5 Claims. (Cl. 92—20.)

1. The method of treating fibrous material, which comprises subjecting such material to a combined squeezing and rubbing treatment in a kollergang having contacting roll and bed plate surfaces, one at least of said surfaces being of substantial thickness and resilient and yieldable, whereby the fibrous material is subjected to the squeezing and rubbing action of the contacting surfaces having a substantial area of surface yieldably contacting with each other.



3. A kollergang comprising rolls and a bed plate therefor, said rolls having resilient yieldable surfaces of substantial thickness which have a substantial surface contact with the bed plate during operation.

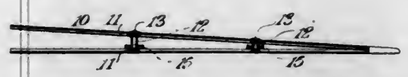
1,827,280. METHOD AND APPARATUS FOR TREATING PULP. GEORGE HOLMES CARNAHAN, New York, N. Y., assignor to Rubber Surfacers, Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 24, 1929. Serial No. 416,254. 11 Claims. (Cl. 92—20.)



1. A stamping machine for fibrous material, comprising a mortar and stamps, one at least of which is provided with yielding resilient stamping elements adapted to beat the fibrous material passing between the mortar and stamps by a crushing and rubbing and kneading action without substantial cutting action.

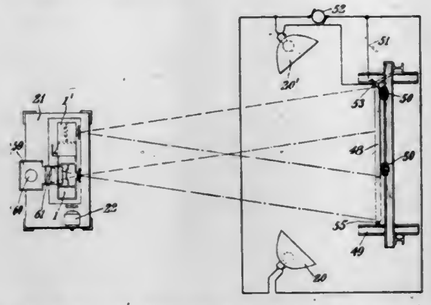
9. The method of treating fibrous material, which comprises subjecting such material to regular successive blows in a stamping machine between stamping members, one at least of said members having resilient yieldable surfaces of substantial thickness, said surfaces being of substantial area and substantially parallel to each other.

1,827,281. WING OR PLANE FOR AIRCRAFT. EDMUND B. CARNS, New York, N. Y., assignor to Cairns Development Company, Wilmington, Del., a Corporation of Delaware. Filed July 21, 1927. Serial No. 207,845. 8 Claims. (Cl. 244—31.)



1. A wing for aircraft having sections hinged together near the top, opposed abutments on the aforesaid sections, limiting pins extending through the abutments, and tension cushions to limit the movement of the abutments and the wing sections of which they form a part.

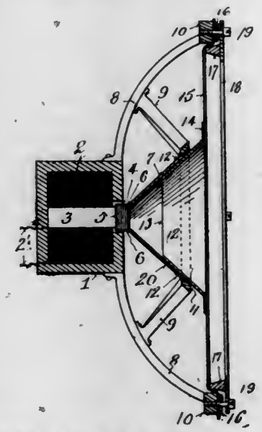
1,827,282. METHOD OF AND APPARATUS FOR PRODUCING MOTION PICTURE FILMS. OSCAR CHOUINARD, New York, N. Y., assignor to Motion Picture Improvements, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 7, 1924. Serial No. 784,312. 31 Claims. (Cl. 88—16.)



6. The method of producing motion picture films, which comprises, having in a projecting camera a developed film containing a series of images of objects in varying positions, having in a recording camera an undeveloped exposed film bearing latent images of a similar series of identical objects, projecting an image of an object from the developed film onto a screen having an actinic scenic effect and while the image of the object is projected on the screen producing an altered actinic scenic effect registering with respect to the image of the projected object on the screen, said scenic effect being complementary with respect to said image, then moving said scenic effect with respect to the position occupied by the projected image, and then taking a picture of said scenic effect in proper registration on the frame of the undeveloped film in the recording camera containing the object corresponding to that one projected from the developed film.

22. In apparatus for producing motion picture films, two cameras mounted in co-operative relation, a screen movable transversely to the focal axes of said cameras, projecting means associated with one of said cameras, illuminating means for lighting said screen, and means co-operatively associated with said screen and adapted to be controlled by the movement of said screen for operating said cameras and said illuminating means.

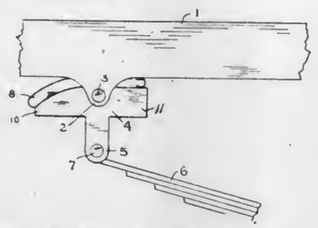
1,827,283. SOUND REPRODUCER. LEE DE FOREST, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation, a Corporation of Delaware. Filed Jan. 29, 1927. Serial No. 164,582. 9 Claims. (Cl. 181—31.)



1. In a loud speaking device the combination with a support of a tympanum thereon, a conical diaphragm se-

cured thereto, and means to vibrate said tympanum and diaphragm.

1,827,284. RUBBER CUSHIONED SPRING SHACKLE. NORMAN L. DOOTSON, San Francisco, Calif., assignor of one-fifth to Chas. W. Bassett and W. B. Juett, Antioch, Calif. Filed May 26, 1930. Serial No. 455,604. 8 Claims. (Cl. 267—30.)

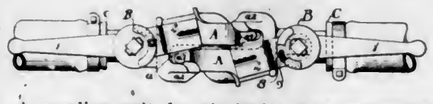


1. A spring shackle of T-shape having an upright portion with a shackle bolt hole at the base, a crosspiece, one end of which is at right angles to the upright, and the other having an upper surface dropping away in a curve to form a rocker, a second shackle bolt hole in the center of the crosspiece; and a rubber cushion attached to the top of the crosspiece.

1,827,285. POLYMERIZATION PRODUCTS OF DIOLEFINES. GEORG EBERT, FRIEDRICH AUGUST FRIES, and WALTER REPPE, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 24, 1929, Serial No. 416,298, and in Germany Jan. 22, 1929. 7 Claims. (Cl. 260—6.)

1. In the polymerization of a diolefine in the presence of an alkali metal, the steps of working in the presence of an inert organic solvent for the polymerization products, of the group consisting of hydrocarbons and ethers, and of continuously withdrawing said polymerization products in the form of their solutions as soon as they are formed.

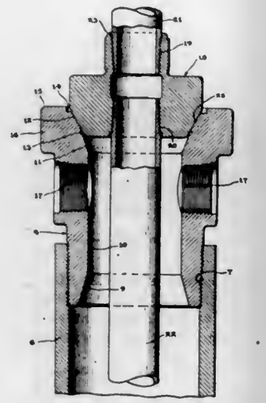
1,827,286. TRAIN PIPE COUPLING AND VALVE ARRANGEMENT. STEPHEN A. GLYNN, Gardenville, N. Y., assignor of one-half to William J. Daetsch, Buffalo, N. Y. Filed July 12, 1927. Serial No. 205,166. 5 Claims. (Cl. 284—9.)



1. A coupling unit for air brake systems comprising companion cooperating units provided with an air passage, said unit being formed with a coupling head having a recess and with an air line connecting portion in combination with a valve mounted in said connecting portion and having a stem, an operating handle fitted on said stem, a tail piece associated with said handle and movable to either of two positions in accordance with the movement of said handle to open or close said valve, said tail piece when moved to a position corresponding to the closed position of said valve being operative to prevent the coupling of said heads but being yieldable to permit uncoupling of said heads when the tail piece is in said closed position.

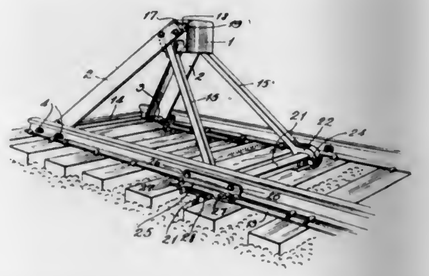
1,827,287. CASING HEAD. EDWARD F. GUIDINGER, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed Jan. 6, 1930. Serial No. 418,853. 2 Claims. (Cl. 166—14.)

1. A casing head comprising a metal tubular member having in the upper portion of its bore an upwardly flaring ground contact surface, the bore being provided with an annular recess spacing the upper end of said surface from the top of the head, an upwardly flared guide sur-



face arranged below said contact surface, the bore having an annular groove arranged between the contact surface and the guide surface.

1,827,288. BUMPER POST. STANLEY W. HAYES, Richmond, Ind., assignor to Hayes Track Appliance Company, Richmond, Ind., a Corporation of Indiana. Filed Sept. 5, 1929. Serial No. 390,477. 19 Claims. (Cl. 104—254.)

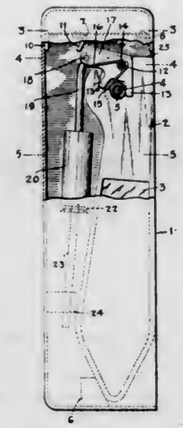


1. A bumper post having a bumper head, diverging struts transmitting thrust of impact from the head to the roadbed, a metallic cross bar between the ties extending across the track beneath the rails in substantially the plane of the track, means for securing said cross bar to the rails, and tension members secured to the bumper head and diverging therefrom to points below and adjacent the respective rail bases and there opposing themselves to the underside and front of the crossbar to deliver stress of bumper impact thereto.

1,827,289. DIRECTIONAL SIGNAL. JOHN W. HAYWOOD, New York, N. Y., assignor to Thomas R. Brooks, Scranton, Pa. Filed Mar. 25, 1930. Serial No. 438,693. 11 Claims. (Cl. 116—39.)

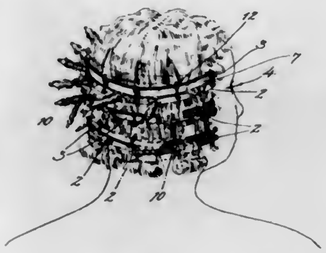
1. In combination with the circularly moving arm of a semaphore signal, means for activating the arm comprising a bell-crank lever fulcrumed to the arm, means for limiting the movement of the lever on the arm, and means

for actuating the bell-crank lever to the limit of its independent movement and through the latter actuating



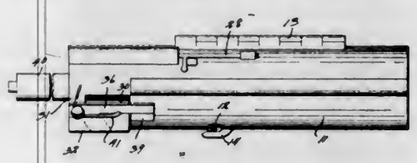
the arm including two relatively movable parts for applying power to the bell-crank lever.

1,827,290. PERMANENT WAVING PAD AND STICK APPARATUS. GRACE M. HUTCHBY, Los Angeles, Calif. Filed May 20, 1930. Serial No. 454,143. 7 Claims. (Cl. 132—36.1.)



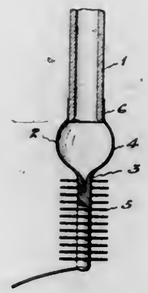
1. In a device of the class described, a band adapted to be positioned on the head on a plurality of hair receiving rods pivotally and rotatably connected to said band.

1,827,291. CURLING ROD HAIR WINDER. INA BELLE KIMMEL, Jamestown, N. Y. Filed Mar. 17, 1931. Serial No. 523,335. 15 Claims. (Cl. 132—33.)



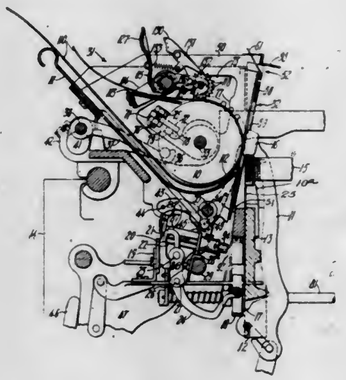
1. A hair winder of the character described comprising a cylindrical barrel adapted to be removably and rotatably disposed about a hair curling rod, guide means within the barrel for holding the rod concentrically within said barrel, and a tensioned member carried by said barrel and engaging the periphery of the curler rod whereby to tighten the hair on the curler rod during the rotation of the barrel about the curler rod.

1,827,292. ELECTRODE. LOUIS WILBUR LAUBE, East Cleveland, Ohio, assignor, by mesne assignments, to Flexlume Corporation, Tonawanda, N. Y., a Corporation of New York. Filed June 6, 1929, Serial No. 368,813. Renewed Mar. 3, 1931. 3 Claims. (Cl. 176—126.)



1. An electrode for luminous discharge tubes adapted to seal the end of a glass tube and having an open end of a diameter to fit over the end of the glass tube, said electrode being enlarged outwardly of the open end thereof to provide an interior surface flaring outwardly from the end of the glass tube.

1,827,293. TYPEWRITING MACHINE. CHARLES M. LAWRENCE, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 19, 1927. Serial No. 206,811. 28 Claims. (Cl. 197—135A.)

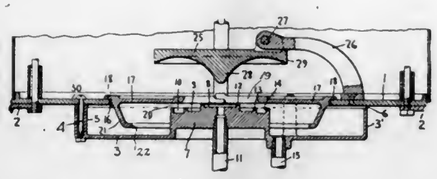


2. In a stencil-card-typing machine, the combination with typing instrumentalities including a platen, of a backing-strip-feed-roller, means for pressing the same against the platen effective to hold the strip thereon, and a finger-piece mounted to move concentrically with said roller for rotating and rocking the same, effective to feed the strip a fixed amount and rock the roller away from the platen, respectively, by movements of the finger-piece in opposite directions.

1,827,294. OIL BURNER. HENRY L. LE DAUM and LA VERNE C. STURGIS, Springfield, Ohio, assignors, by mesne assignments, to The Buckeye Incubator Manufacturing Company, Beachwood, Ohio, a Corporation of Ohio. Filed Apr. 8, 1929. Serial No. 353,312. 5 Claims. (Cl. 158—91.)

1. The combination of a base member having an aperture, a burner member including a fuel well on its upper

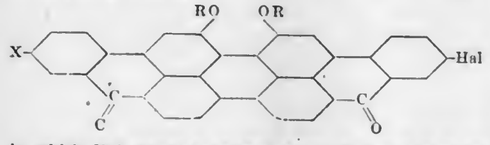
side located beneath said base in comparatively close proximity thereto and in line with said aperture, an air chamber below said base and surrounding said burner member, an annular wall depending from said base into said chamber and spaced from the bottom thereof, said wall surrounding said burner member in spaced relation there-



with and extending to a point beneath the fuel well of said burner member, there being a passage from outside atmosphere communicating with said chamber on the outside of said depending wall, the wall of said aperture partly overlying the oil well portion of the burner member to cause the air to be deflected over the same.

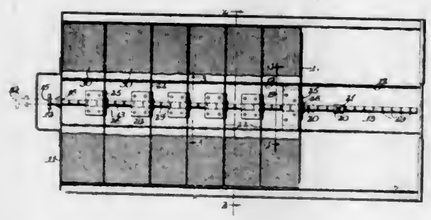
1,827,295. VAT DYESTUFFS OF THE BENZANTHRONE SERIES. ARTHUR LÜTTRINGHAUS and HUGO WOLFF, Mannheim, and HEINRICH NEUBERSHEIMER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1926, Serial No. 144,170, and in Switzerland June 17, 1926. 3 Claims. (Cl. 260—61.)

3. As new articles of manufacture coloring matters of the dibenzanthrone series which probably correspond to the general formula



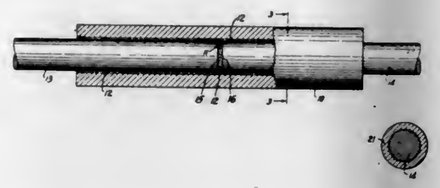
in which Hal means a halogen atom, R indicates a hydrogen atom or an alkyl group and X means a hydrogen or halogen atom.

1,827,296. FILING APPARATUS. RICHARD MCKNIGHT, Chicago, Ill. Filed Mar. 29, 1929. Serial No. 350,970. 11 Claims. (Cl. 129—16.)



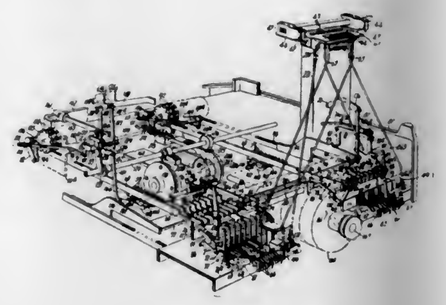
1. A filing apparatus comprising a receptacle for receiving the articles to be filed, movable compression means within the receptacle for supporting and pressing articles filed therein, and longitudinally movable actuating means operable from without the receptacle for actuating the compression means.

1,827,297. METHOD OF JOINING WIRES BY MEANS OF SLEEVES. CHARLES R. MOORE, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 3, 1930. Serial No. 418,179. 9 Claims. (Cl. 29—148.)



1. The method of making joints in wire or the like which consists in inserting the ends of the wires to be joined in a sleeve, the inner surface of which has been coated with a layer of an adhesive and an abrasive, and then forcing the sleeve into intimate contact with the wire.

1,827,298. COMBINED TYPEWRITING AND COMPUTING MACHINE. HENRY L. PITMAN, Westfield, N. J., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 2, 1926. Serial No. 113,133. 12 Claims. (Cl. 235—60.)

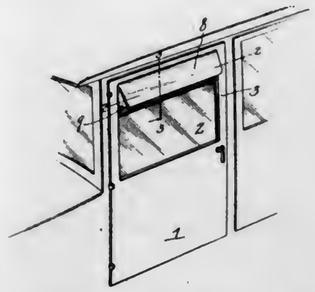


3. In a machine having numeral-keys, a letter feeding carriage, a plurality of spaced-apart registers, a set of key-indexed means for operating each register, and denomination-selecting tappets co-operative with the carriage, the combination of a plurality of groups of denomination-rods, each group connected with a series of indexing means, operable seriatim by the tappets, the tappet-operated ends of the sets of rods being arranged in parallel rows, said rows extending in the direction of travel of the carriage, and being grouped in a computing zone, from which zone the groups of rods diverge to the sets of indexing means, and means on the tappets operable to selectively engage one row of rods without engaging the rods of another row.

1,827,299. BUILT IN VISOR FOR MOTOR CARS. GEORGE A. PAITCHARD, Atlantic Beach, Fla. Filed July 27, 1928. Serial No. 295,710. 1 Claim. (Cl. 296—44.)

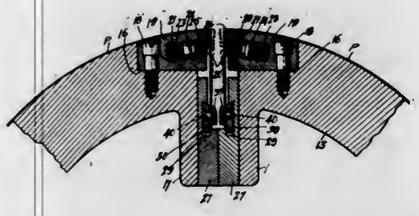
In a window frame construction having a sliding glass therein, a front plate angles to present the sides and top of the frame and a back plate secured to one of the sides of said front plate and being angled to provide grooves

for the glass and to form the bottom of the frame, one side of said front plate presenting a downwardly inclined



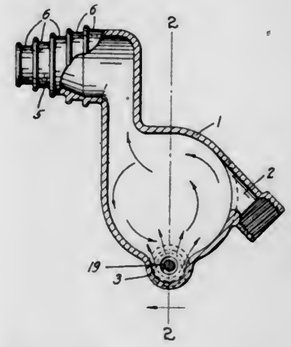
portion having side portions to form a curtain overhanging the window opening.

1,827,300. PLATE-CLAMP. CARL G. PRITCHARD, Hiram, and CHARLES W. HARROLD, Cleveland, Ohio, assignors to Harris-Seybold-Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Sept. 22, 1928. Serial No. 307,583. 15 Claims. (Cl. 101—415.1.)



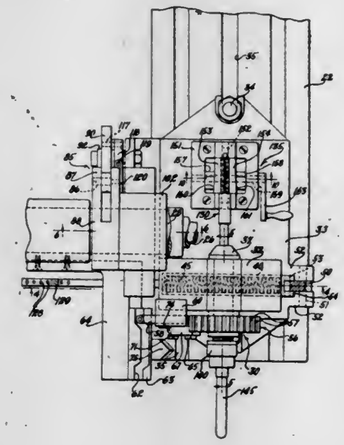
1. A plate-clamp for positioning a flexible plate on its support comprising clamping members to grip the plate ends, complementary cam members bearing on the plate adjacent the plate ends, and means to slide said cam members on each other in both directions without moving said clamping members to tension and loosen said plate on said support.

1,827,301. RADIATOR AND CYLINDER BLOCK CLEANER. STORRS H. SMITH, Portland, Oreg., and JAMES MARTIN KING, Grove City, Pa. Filed Sept. 28, 1929. Serial No. 395,808. 6 Claims. (Cl. 141—1.)



1. In a cleaner for the cooling system of internal combustion engines, a hollow mixing chamber having substantially parallel side walls joined by a substantially circular wall, the chamber having means for the connection of a water supply joined to the interior of said chamber by a water passage tangential to said circular wall, means for the connection of a compressed air supply joined to the interior of said chamber by a passage through one of said side walls and at right angles to the flow of water from said water passage, and having a manually operated, spring-closed, valve, and means forming a discharge from said chamber tangential to said circular wall.

1,827,302. MATERIAL WORKING APPARATUS. JOHN STANLEY STULL, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1927. Serial No. 168,291. 6 Claims. (Cl. 90—56.)

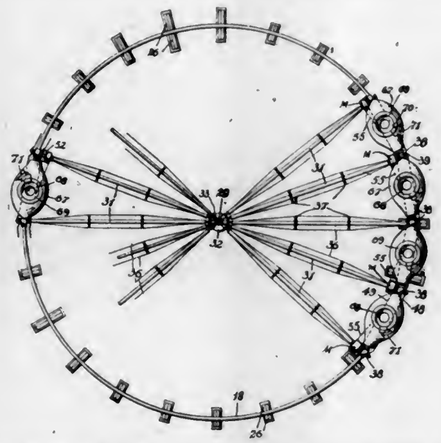


4. In a material working apparatus, a supporting frame, a carriage reciprocally mounted thereon, a rotatable spindle journaled in the carriage for holding the material, a rack having a resilient member normally compressed for actuating the spindle, a ratchet wheel connected to the spindle and regulating release of the resilient member to index the material, a pawl mounted on the carriage for engaging the ratchet wheel, a cam secured to the supporting frame designed to effect engagement of the pawl with the ratchet wheel during the working of the material, a second pawl mounted in the carriage for engaging the ratchet wheel, and a second cam secured to the supporting frame designed to advance the second pawl into engagement with the ratchet wheel before the first pawl engaged therewith is withdrawn.

1,827,303. AMUSEMENT RIDE. HARRY G. TRAVER, Beaver Falls, Pa. Filed Jan. 8, 1926. Serial No. 80,098. 10 Claims. (Cl. 272—44.)

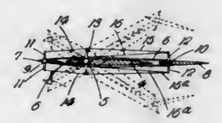
1. In amusement rides, a central vertical support, a head rotatably carried by the support, arms pivotally mounted at one end on the head to rotate with the head and the free ends to have movement in a vertical direction, a track concentric with the support having dips and rises arranged therein, wheels rotatably mounted concentrically at the outer ends of the arms and tractionally supporting the arms on the track, links connected to the outer ends of the arms at the opposite sides of the wheels to

maintain the arms in spaced relation, passenger carrying cars flexibly mounted on the links, and motive means



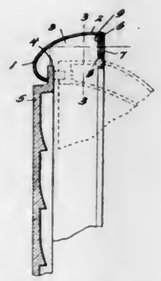
carried on the arms to rotate the wheels and thereby revolve the arms with the cars around the track.

1,827,304. MEANS FOR CONTROLLING AIRCRAFT, SUBMARINES, AND LIKE TOTALLY IMMERSED CRAFT OR STRUCTURES. ALBERT PETER THURSTON, London, England. Filed Dec. 21, 1928, Serial No. 327,595, and in Great Britain Mar. 19, 1928. 5 Claims. (Cl. 244—29.)



1. In aircraft, a control surface, a pair of rider planes mounted, respectively, in front of the entering edge and behind the trailing edge of said control surface, means for supporting the respective rider planes, and means for simultaneously and similarly altering the angular position of both planes relative the control surface.

1,827,305. HEADLIGHT RIM. EARL L. UDELL, Tallahassee, Fla., assignor of one-third to Robert Harvell and one-third to Harry W. Thompson, Tallahassee, Fla. Filed Feb. 25, 1931. Serial No. 518,065. 3 Claims. (Cl. 240—8.4.)



1. An automobile headlight rim having an integral radial pressed-out portion formed therein and lying totally within the transverse width thereof and joined smoothly with the outline of the rim, the front of said rim and pressed-out portion being continuous and unbroken, and a light transmitting opening formed in the rear face of said radial pressed-out portion and lying substantially in the plane of the rear edge of the rim.

1,827,306. ELECTRODE. WARREN B. CHAPMAN, Carthage, Mo., and HERMAN G. FISCHER, Chicago, Ill., assignors to H. G. Fischer & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 14, 1925. Serial No. 56,255. 2 Claims. (Cl. 174—189.)



2. An electrotherapeutic device, comprising an electrode including a non-insulated tip formed with a bowl to engage the cervix uteri when inserted in the vagina, an insulated stem having a shoulder thereon with which the vulval muscles engage by contraction thereabout to hold the device in place in the vagina, and means for connecting the electrode in an electric circuit.

1,827,307. CONTAINER OPENER. CARROLL E. DODSON, Kansas City, Mo., assignor to L'Art Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Dec. 29, 1927. Serial No. 243,227. 9 Claims. (Cl. 220—43.)



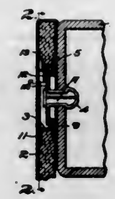
8. In a container comprising top and bottom members having edge portions substantially abutting in closed position, an opening element supported by one of the members, and having a wedge portion adapted to be moved transversely of said edges between the same to effect separation of the members.

1,827,308. PROPELLER FOR SWIMMERS. LEWIS R. DORRIS, Pensacola, Fla. Filed Jan. 5, 1931. Serial No. 506,513. 1 Claim. (Cl. 9—21.)



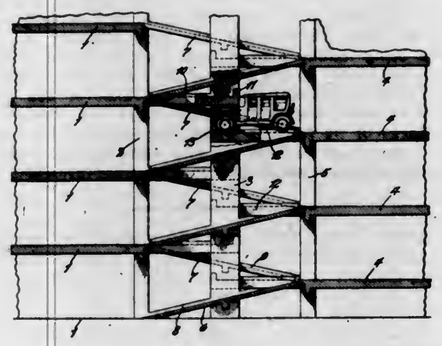
A device of the character described comprising an elastic band adapted to encircle the leg of the wearer above the ankle, a ring of non-elastic pliable material of larger diameter than said band having one end gathered and attached to said band throughout the circumference of the band and ring and having the other end detached and having fold lines extending from said band to the opposite end of said ring of pliable material, the pliability of said ring being unrestricted and unrestrained throughout its length and circumference, and a strap having its ends attached to said band within said ring and arranged to extend under the foot of the wearer.

1,827,309. FASTENER UNIT. DIDRICK DYRESEN, Somerville, Mass. Filed July 14, 1928. Serial No. 292,647. 4 Claims. (Cl. 24—213.)



1. A fastener unit comprising, in combination, a casing part and a snap fastener element, means engaging said snap fastener element and holding it in assembled relation with said casing part, a continuous flange portion extending laterally outwardly beyond the means engaging the snap fastener element and attaching means formed integral with the casing part and adapted to cooperate with said flange to secure the fastener unit to a support.

1,827,310. BUILDING. KENNETH K. ELLIS, St. Louis, Mo. Filed May 16, 1928. Serial No. 278,182. 1 Claim. (Cl. 20—1.18.)



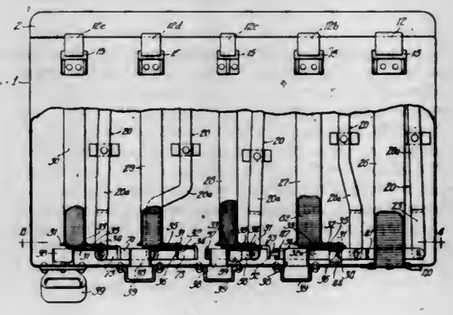
In a building, a pair of spaced supporting columns, a series of floors each having one end extending between and supported by said columns, a second series of floors at one-half story intervals relative to the floors of the first series and having their ends extending between and supported by said columns and over and under adjacent floors of the other series and spaced vertically from the floors of the other series a distance in excess of the height of the front of an automobile and less than the height of the top of the automobile, means for stopping an automobile driven on any floor of one series and under the adjacent end of the next upper floor of the upper series in a position in which the top of the automobile is in line and out of contact with the next upper floor of the adjacent series, and inclined ramps connecting the floors of each series with the floors of the other series and having their intermediate portions united with and supported by said columns and having their ends spaced from the ends of the respective floors a distance in excess of the length of any automobile for which said extended portions of said floors are extended.

1,827,311. FOUNTAIN PEN AND PENCIL. VINCENT Z. FELIPE, New York, N. Y. Filed Dec. 20, 1928. Serial No. 327,215. 5 Claims. (Cl. 120—1.)

1. A writing implement containing two points of unlike character slidable therein, a screw having right and left hand threaded sections of uniform pitch throughout their lengths, a nonrotatable nut on each section connected with each point independently, and means for rotating said screw.



1,827,312. SLUG AND CHANGE MAKING MACHINE. GEORGE A. FRANKS, Chicago, Ill., assignor of one-third to Robert W. Seymour and one-third to Merle T. Wetton, Chicago, Ill. Filed Feb. 4, 1929. Serial No. 337,401. 11 Claims. (Cl. 194—80.)



1. In a machine of the character described, a tube for articles to be dispensed, a plurality of coin receiving tubes, coin controlled means for dispensing an article from said article tube and for discharging coins from the coin tubes selectively in accordance with the value of the coin inserted into the machine and of a value equal to the difference between the price of the article and the value of such coin, and means actuated by return of the discharged article to the machine for discharging from said machine a coin equal in value to the price of such article.

1,827,313. NECKTIE. LEON FRIEDMAN, Milwaukee, Wis. Filed Oct. 8, 1928. Serial No. 311,136. 1 Claim. (Cl. 2—146.)

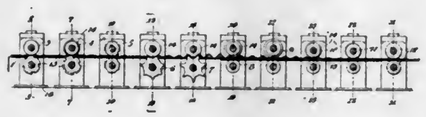
A necktie comprising an outer covering and an inner lining, the inner lining having a silk outer side and a wool inner side having a decided nap, with the nap in contact with the covering, the warp and weft threads of

the lining and covering running at a bias and at identically the same angle whereby to provide for the same



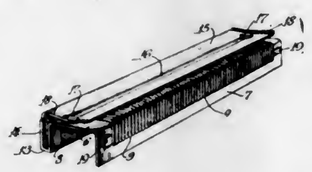
degree of simultaneous give in the lining and outer covering.

1,827,314. APPARATUS FOR THE MANUFACTURE OF EXPANDED STEEL LOAD BEARING MEMBERS. HARVEY M. GERSMAN, Chicago, Ill. Filed Feb. 19, 1925. Serial No. 10,349. 8 Claims. (Cl. 164—6.6.)



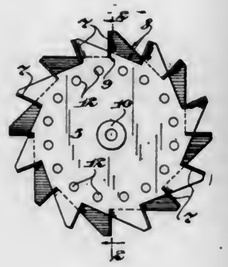
1. In apparatus for the manufacture of an expanded steel load bearing member from a rolled shape slitted to provide strand portions, opposed cooperating rolls having circumferentially spaced ribs engageable with parts of said strand portions to displace said parts in a direction at a right angle to the original central longitudinal plane of the slitted portion of the shape and by such displacement to stretch the strand portions said displaced parts being sinuous in outline, means for increasing the width of the shape after the strand portions have been stretched, and means operating during the operation of the last mentioned means for pressing the strand portions back into the plane from which they were displaced by the stretching operation.

1,827,315. HOLDING FRAME FOR STAPLES. CARL E. HALLEN, Chicago, Ill., assignor to John B. Crofoot, Mount Prospect, Ill. Filed Sept. 18, 1930. Serial No. 482,672. 3 Claims. (Cl. 1—56.)



1. A staple holding frame comprising a sheet of metal bent to form a longitudinally extending channel shaped portion having a top plate portion and lateral parallel flanges for the reception of a row of loose staples, one of said flanges turned upwardly and inwardly to provide a staple engaging portion, a longitudinally extending depression formed in said upwardly and inwardly turned portion, and a staple retaining indentation provided adjacent the ends of said inwardly turned portion.

1,827,316. ROTOR. JULIUS D. HAYNSWORTH, Minneapolis, Minn., assignor to McQuay Radiator Corporation, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 18, 1929. Serial No. 407,933. 1 Claim. (Cl. 170—173.)

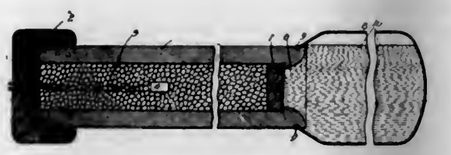


A device of the class described comprising substantially duplicate inner and outer units each formed from a single sheet of material, the body members of said units being axially aligned and having toothed peripheries, and blades on the faces of the teeth lying in planes that radiate substantially from the axes of the body members, said inner unit having radial lock notches in the backs of its teeth in which the blades of the outer unit extend and connect the two units against relative turning movement about their axes in either direction.

1,827,317. CATALYTIC DEHYDROGENATION OF ORGANIC COMPOUNDS. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Apr. 3, 1928, Serial No. 267,134. Divided and this application filed Apr. 1, 1929. Serial No. 351,826. 14 Claims. (Cl. 260—138.)

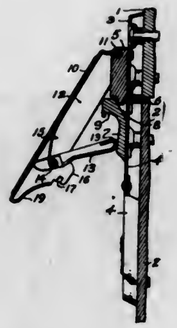
1. A method of catalytic dehydrogenation, which comprises subjecting an organic compound containing removable hydrogen to the action of a dehydrogenation contact mass containing a permutogenetic body.

1,827,318. BLASTING CARTRIDGE. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 19, 1929. Serial No. 400,838. 2 Claims. (Cl. 102—6.)



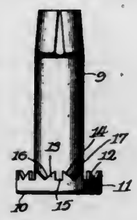
1. A blasting cartridge comprising a metallic body having a chamber open at one end and adapted to be filled with an explosive, a fluid container secured to the open end of said body, and a rupturable closure for the open end of said body to separate the interior of said container from said chamber.

1,827,319. HASP FOR TRUNK LOCKS. ALBERT J. KOMENAK, Stamford, Conn., assignor to The Excelsior Hardware Co., Stamford, Conn., a Corporation of Connecticut. Filed May 31, 1930. Serial No. 458,548. 1 Claim. (Cl. 70—115.)



In a trunk lock having a block secured to the trunk body and terminating at its top in a downwardly extending open hook, a plate member secured to the lid of the trunk, a hasp having a base and inwardly extending side portions pivotally swung from said member, a draw bar pivoted at one end between the side portions and extending toward said hook, and spring means carried by said hasp for normally urging said draw bar outwardly, said bar, when the hasp is forced downwardly, being adapted to engage said hook and draw the lid of the trunk tightly against the trunk body.

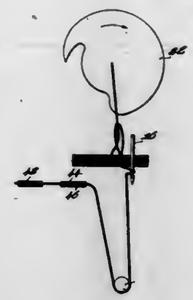
1,827,320. CASTER MOUNTING MEANS. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed July 19, 1929. Serial No. 379,376. 1 Claim. (Cl. 16—43.)



A caster element having a plurality of prongs adapted to be driven endwise into a furniture leg, or the like, said prongs being arranged in pairs having oppositely inclined outer edge portions and substantially parallel inner edge portions, whereby, when the prongs are driven into the leg, the prongs of each pair are deflected towards each other so as to form, in effect, a dovetail interlocking connection between the leg and the caster element.

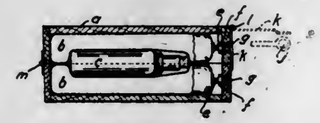
1,827,321. LOCKSTITCH SEWING MACHINE. BERNARD T. LEVEQUE, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 14, 1928. Serial No. 277,619. 5 Claims. (Cl. 112—57.)

1. A lockstitch sewing machine having, in combination, stitch forming and setting devices including a hook needle, a take-up for drawing a loop of needle thread partially down to the work to leave sufficient thread for one side of the needle loop on the next succeeding stitch, a shuttle acting to draw off thread from the supply for the next stitch and thereafter to set the stitch, a thread lock



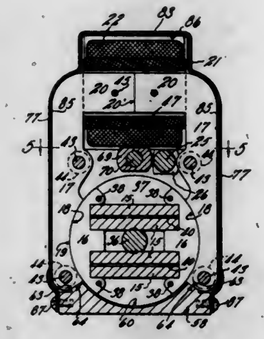
against which the stitch is set, and means for closing the thread lock at a predetermined point in the movement of the shuttle.

1,827,322. DEVICE FOR BREAKAGE-PROOF PACKING OF GLASS AND OTHER VERY FRAGILE ARTICLES. WILLY LINDERMANN, Hamburg, Germany. Filed Nov. 25, 1929. Serial No. 409,711. 1 Claim. (Cl. 206—46.)



A device for breakage-proof packing of glass and other very fragile articles by means or airfilled rubber bubbles, arranged in a strong case, and between which very fragile merchandise is bedded, characterized by the fact that the shutting device of the rubber bubbles is combined with the shutting device of the case, whereby the eye of a bent lever is pressed by the collar of a cap screw opposite another collar, against the case walls, a cone arranged in the cap screw tightening simultaneously a tube leading to the said bubble.

1,827,323. MAGNETO. TERRENCE G. LOUIS, West Springfield, Mass., assignor to Wico Electric Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 29, 1930. Serial No. 424,365. 13 Claims. (Cl. 171—209.)



2. In a magneto, two stationary sections each built up of similar and approximately L-shaped laminations and each affording a core part and a complete pole shoe, said core parts abutting end to end to form a complete core

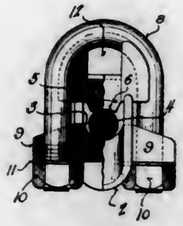
and define the proper spacing between said shoes, a coil on said core, and a rotor including a magnet and pole shoes therefor mounted to turn in the space between said stationary pole shoes.

1,827,324. CLIP FOR POCKET INSTRUMENTS. JOHN P. LYNN, Chicago, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 30, 1929. Serial No. 417,291. 1 Claim. (Cl. 24—11.)



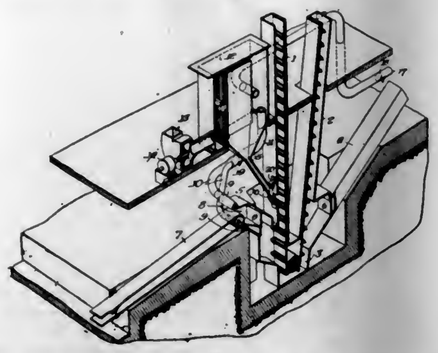
In a pocket instrument having a chambered body and a sleeve forming a lining therefor, the body and lining having registering openings with threads formed in the lining opening, a clip having an apertured head with an inturned tooth at one end thereof adapted to bite into the body of the instrument, and a screw passing through the openings in the clip head and instrument body for screw-threaded engagement with the threaded opening in the lining, whereby to draw the clip head toward the lining and inbed the tooth into the body to immovably secure the units together.

1,827,325. SUSPENSION CLAMP. EDWARD A. MACK, Huntington, W. Va., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,340. 4 Claims. (Cl. 24—135.)



4. A suspension clamp comprising a body portion having a longitudinally extending channeled part provided with outward turned ends and having laterally projecting apertured ears, an auxiliary member having a longitudinally extending portion located opposite the longitudinally extending part of the body portion, said auxiliary member having a laterally extending portion provided with a curved channel, a U-bolt having a curved yoke portion seated within the curved channel and having its arms projecting through the apertured ears of said body portion, and nuts screwed upon the arms of said U-bolt, said auxiliary member having a notch formed in the laterally extending portion for the reception of a support.

1,827,326. MATERIAL CONVEYING SYSTEM. RAYMOND H. MOORE, Chicago, Ill. Filed Apr. 19, 1926. Serial No. 102,852. 15 Claims. (Cl. 209—147.)



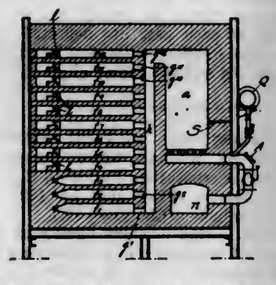
1. In apparatus of the class specified, in combination, a belt conveyor, a bucket elevator, and a circulating system adapted to remove light material from the conveyor and deliver it to the bucket elevator.

1,827,327. BELT CLAMP. ELMER C. NOBLE, Tulsa, Okla., assignor of one-half to Reade V. Noble, Tulsa, Okla. Filed Apr. 19, 1930. Serial No. 445,606. 3 Claims. (Cl. 24—37.)



1. A belt fastener including an inner curved plate, an outer plate having a body portion curved on the arc of the inner plate and having reversely curved ends projecting beyond the ends of the inner plate, a cushioning member on the concave face of the inner plate, and means for securing the plates and cushioning member together and to the ends of a belt.

1,827,328. VERTICAL CHAMBER OVEN. CARL OTTO, Hellerup, Denmark. Filed Dec. 7, 1925, Serial No. 73,610, and in Germany Jan. 20, 1025. 7 Claims. (Cl. 202—123).



1. In a vertical chamber oven the combination of a substantially horizontal series of alternate vertical oven

chambers, and heating walls therefor each of said heating walls having horizontal heating flues therein, regenerators for supplying air and gas to the flues and adapted to receive waste heat therefrom, said regenerators arranged side by side and extending in a vertical direction at one side only of the oven chambers, pairs of vertical channels, one end of the members of each pair of which connect with one end of the gas and with one end of the air regenerators respectively, the heating flues of the heating walls being connected with said vertical channels, thus connecting the heating flues with the regenerators, and horizontal cross-channels connecting the heating flues of a plurality of heating walls, so that the regenerators for supplying air and gas are connected with an equal number of regenerators for receiving waste heat.

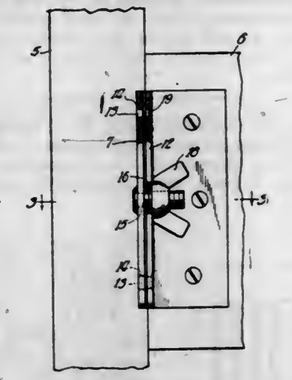
1,827,329. COKE OVEN DOOR. CARL OTTO, Essen-Ruhr, Germany. Filed Nov. 26, 1928, Serial No. 321,826, and in Germany Dec. 3, 1927. 4 Claims. (Cl. 202—248).



1. A coke oven door comprising in combination a stationary door frame, an elastic sheet metal plate fitting thereto, sealing means arranged between said door frame and said plate, a plurality of re-inforcing members successively fixed on the outside of said plate in its longitudinal direction, a rigid structure hingedly mounted on several of said re-inforcing members one of the hinges having clearance in the longitudinal direction of said plate, and means arranged on said structure for pressing said plate against said door frame in sections each corresponding in length to the respective reinforcing member.

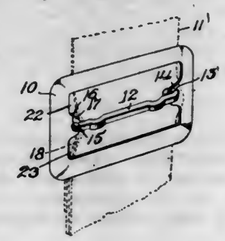
1,827,330. SIDE RAIL LOCK FOR BEDSTEADS AND THE LIKE. WILLIAM H. PARRY, Sr., Kenosha, Wis., assignor to Simmons Company, Kenosha, Wis., a Corporation of Wisconsin. Filed July 8, 1929. Serial No. 376,711. 3 Claims. (Cl. 5—298.)

1. In a bedstead, the combination of an end frame, a side rail, and means for detachably connecting said end frame and side rail comprising a bracket carried by said end frame, a bracket carried by said side rail, said brackets having mutually overlapping flange portions, and being provided with spaced, interfitting dowel means for relatively positioning the parts, shoulders on said dowel means for maintaining said flanges in spaced relation to each other, and clamping means intermediate said dowel means for locking said flanges together, one of said flanges being sufficiently resilient to yield under



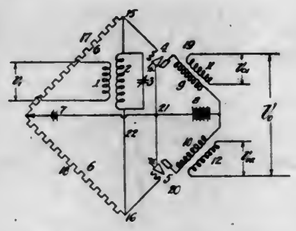
the pressure of said clamping means, the resiliency of said part serving to maintain said clamping means in operative position.

1,827,331. SLIDE. CARL E. PETERSON, Upper Montclair, N. J., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed May 17, 1928. Serial No. 279,418. 5 Claims. (Cl. 24—248.)



1. A slide comprising a frame and a tongue extending across the frame, said tongue being pivotally connected at one end to the frame to allow the tongue to swing to and from the frame, said pivotal connection between the tongue and the frame being loose enough to allow lateral movement of the tongue sufficient to enable the tongue to pass through the frame, the frame having an inside dimension to permit such passage.

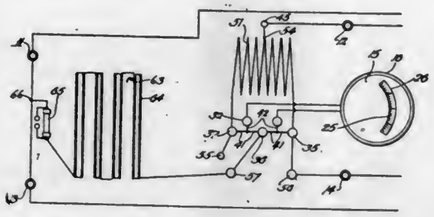
1,827,332. RADIO CIRCUITS. WLADIMIR J. POLYDOROFF, Chicago, Ill., assignor to Johnson Laboratories, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed July 6, 1926. Serial No. 120,733. 4 Claims. (Cl. 179—171.)



1. In a radio-frequency apparatus, means for balancing the inter-electrode capacities of two audions consisting of two audions disposed in two branches of a Wheat-

stone bridge, two non-inductively related plate windings also disposed in said branches of said Wheatstone bridge, adjustable impedances disposed in the other two branches of said Wheatstone bridge, an input circuit constituting one diagonal of said bridge, and sources of current and filaments of said audions constituting the other diagonal of said bridge.

1,827,333. HIGH FREQUENCY WATTMETER. DONALD E. RICHARDSON, Chicago, Ill., assignor to H. G. Fischer & Co. Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 2, 1929. Serial No. 383,075. 3 Claims. (Cl. 171—95.)



1. An apparatus for measuring electrical power comprising high frequency supply leads, high frequency load leads, connections between said supply leads and said load leads which include a divided and balanced resistance connected at its center to a supply lead and at one side to a load lead and at the other side to a thermo-couple and from said thermo-couple to the other supply lead through a resistance, a second thermo-couple connected to the first mentioned side of said resistance and to the connection between the first mentioned thermo-couple and the last mentioned supply lead.

1,827,334. METHOD OF PREPARING AND APPLYING TABBED WRAPPERS. ERNEST G. RIDER, Philadelphia, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 20, 1928. Serial No. 294,088. 25 Claims. (Cl. 93—54.)



2. A tabbed wrapper comprising a composite wrapper of adhesively attached components, and tabs additionally to attach adjacent components.

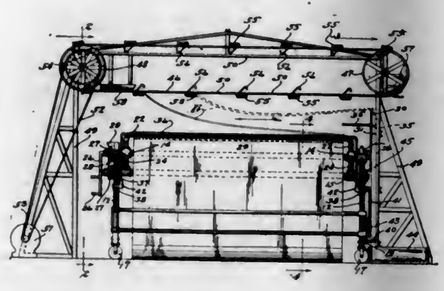
8. The method of preparing a tabbed composite wrapper which comprises, attaching wrapper components to each other by adhesive, and applying tabs additionally to connect adjacent components and to bridge the corner notch formed therebetween.

1,827,335. COLLAPSIBLE UMBRELLA. LUC ROCHEFORT, New York, N. Y. Filed Sept. 6, 1929. Serial No. 390,690. 6 Claims. (Cl. 135—20.)



1. A device of the character described comprising a substantially circular member, a plurality of semi-rigid strips secured thereto at spaced intervals, said strips having as parts thereof members foldable toward the center of said circular member and adapted to be connected together, said device also having additional foldable members forming a handle for the device when collected together.

1,827,336. LAUNDRY FLAT PIECE SPREADER AND RACK. LEE R. SAGER, Minneapolis, Minn., assignor, by direct and mesne assignments, of one-third to Antone Wayne Julien, Minneapolis, Minn., and one-third to Merton A. Pocock, Minneapolis, Minn. Filed Jan. 2, 1929. Serial No. 329,822. 25 Claims. (Cl. 68—11.)



1. A device of the class described, having a narrow upright spreader over which a flat piece may be drawn to spread the same, and a rack forward of the spreader arranged to receive the piece as the same is drawn thereover from the spreader.

20. A device of the class described comprising a crowned spreader over which a flat piece may be drawn longitudinally with the transverse center of said piece at the apex of the spreader and with the side portions of said piece hanging down from the outer ends of the spreader, the outer end portions of the spreader being unobstructed and below the crown thereof.

1,827,337. ELECTRIC CURRENT CONDUCTING BOND. MORRIS SCHWARTZ, Chicago, Ill. Filed Mar. 17, 1926. Serial No. 95,303. 12 Claims. (Cl. 173—283.)

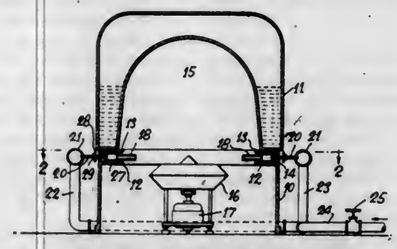


8. An electric current conducting bond including a shell having a circular outer periphery and an inner irregular periphery, said inner periphery surrounding a pair of rod elements disposed side by side, and forming thickened portions constituting ribs extending longitudinally thereof for distorting and for gripping said rod elements.

1,827,338. BURNER DEVICE FOR DOMESTIC FURNACES. CARL C. SHIPPEE, Fair Haven, N. J. Filed Feb. 23, 1929. Serial No. 341,927. 6 Claims. (Cl. 158—11.)

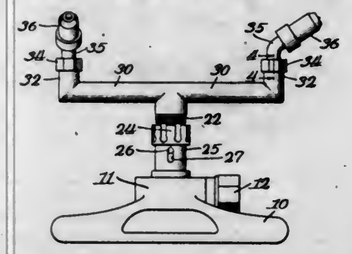
3. In a domestic heating device of the character described having a combustion chamber, the combination with a burner disposed in said chamber arranged to burn a mixture of air and hydrocarbon fuel, of an electric motor

to actuate said burner, a plurality of burner tubes horizontally disposed about said first named burner in the base of said combustion chamber adjacent a wall of the same, a jet tube projecting into each of said burner tubes



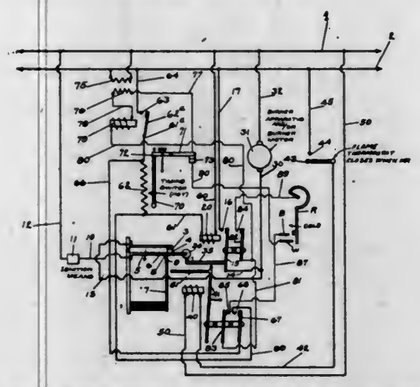
adapted to effect cone-like distribution of the gas in said burner tubes, and a manifold device adapted to supply gas to said tubes at a substantially constant head of pressure.

1,827,339. LAWN SPRINKLER. WILLIAM STEININGER, Berwyn, Ill., assignor to W. D. Allen Manufacturing Company, Chicago, Ill., a Corporation. Filed July 27, 1929. Serial No. 381,455. 5 Claims. (Cl. 299—69.)



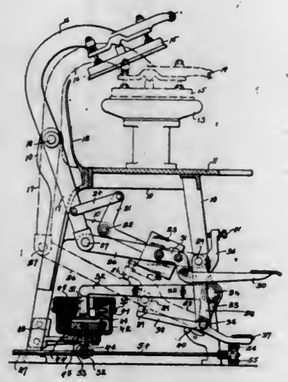
1. A sprinkler of the class described embodying the combination with a base, of a tubular post extending from said base, a hollow stem rotatably mounted in said post and having a corrugated annular portion, and means for locking said sprinkler head comprising a band encircling said post and movable axially thereof, said band being provided with a finger engageable with said corrugated portion to lock the sprinkler head against rotation.

1,827,340. HEAT REGULATING DEVICE. DANIEL G. TAYLOR, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,465. 16 Claims. (Cl. 158—28.)



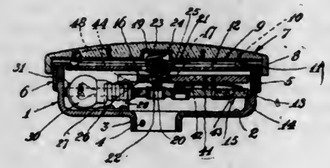
1. In a device of the class described, a burner apparatus and ignition means therefor including a switch, means for controlling the operation of the burner apparatus including mechanical means operable to close the ignition switch as the burner apparatus ceases to operate, and means operating to open the ignition switch as the result of flame produced by the burner apparatus.

1,827,341. GARMENT PRESS. MORRIS M. TITTERINGTON, Brooklyn, N. Y., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed June 9, 1924. Serial No. 718,681. 13 Claims. (Cl. 68—9.)



9. A press comprising, a frame, a cooperating press buck and head, a vertical press lever including an upper arch reaching over the buck and attached to the head to open the press and including a downwardly extending arm, a frame pivot carrying the press lever to the rear and below the buck and head; press head balancing means including, a bell crank pivoted on the frame underneath the buck and head, a weight on one end of the bell crank, a link connecting the bell crank to the press lever; and mechanism to operate the press lever to open and close the press.

1,827,342. ELECTRICAL SIGNALING SWITCH. WILLIAM W. WOODROOF, Pittsburgh, Pa. Filed Nov. 3, 1927. Serial No. 230,743. 1 Claim. (Cl. 177—311.)



In a switch, the combination of an electrically grounded housing having a lamp-socket electrically connected thereto; an electric lamp for said socket, a stationary contact-plate and a rotatable contact-plate, a plurality of contact elements positioned on the stationary plate and cooperating with said contact elements for establishing specific electric circuits, said stationary and rotatable contact-plates having peripherally disposed cut-away portions for accommodating said lamp socket and lamp.

1,827,343. SOCK SUPPORTER. LEONARD WOODS, St. Louis, Mo. Filed Sept, 26, 1930. Serial No. 484,520. 4 Claims. (Cl. 2—240.)

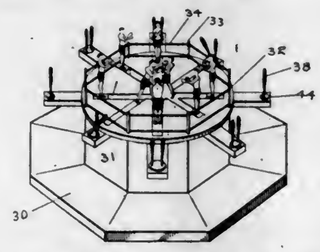
1. A sock supporter comprising a vertical flat rigid strip having a horizontal arm at the top adapted to be disposed respectively lengthwise and circumferentially at

the top on the inside of a sock and having a protective fabric covering, flexible bands at the ends of said arm adapted to extend over the top of the sock and provided



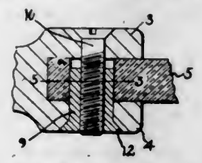
with snap fasteners adapted to engage the interposed sock, and means to support the lower end of said strip on the inside of the sock, substantially as described.

1,827,344. AMUSEMENT DEVICE. DONALD D. ANDERSON, Clackamas, Oreg. Filed Apr. 23, 1928. Serial No. 272,340. 10 Claims. (Cl. 46—40.)



1. In an amusement device: a platform constituting a pugilistic ring; operators' stations adjacent said platform; oppositely disposed carriages slidably mounted within said ring; turntables upon said carriages; pugilistic manikins mounted upon certain of said turntables, and having movable arms; operating handles upon other of said turntables adjacent said operators' stations; mechanism connecting said handles with their respective manikin to operate the latter and mechanism whereby rotation of the turntable respective to said handles will rotate the turntable respective to the corresponding manikin.

1,827,345. OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 28, 1928. Serial No. 250,217. 2 Claims. (Cl. 88—42.)



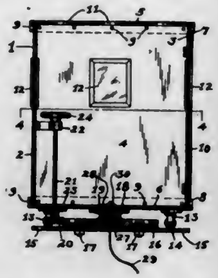
1. Means for uniting the parts of an ophthalmic mounting comprising a pair of spaced members having aligned openings therein, one of said openings having a contour shape which departs from a full circle, a secured member extending between the spaced members and having an opening therein aligned with the openings in said spaced members, a tubular member in the aligned openings, said tube having an enlarged portion engaging with one of the spaced members, a relatively long portion extending into the opening in the secured member, and an intermediate shouldered portion of substantially the same contour shape as the opening having its contour shape departing from a full circle and extending therein substantially the full length of said opening and means extending through the opening in the spaced member opposite the spaced member engaged by the enlarged portion of the tube adapted to engage with the tubular member to draw the two spaced members together.

1,827,346. OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 3, 1929. Serial No. 397,053. 3 Claims. (Cl. 88—43.)



1. In a device of the character described, a pair of lens holding members, a bridging member extending between the lens holding members, said bridging member having a plurality of separated enlarged portions connected by a relatively small neck portion, a bifurcated member on each lens holding member having its bifurcation spaced to admit the neck portion and having a seat adacent the bifurcation to seat the enlarged portion, and cap members engaging the lens holding members and extending between the bifurcated member and lens holding means to retain the enlarged portion of the bridge in its seat.

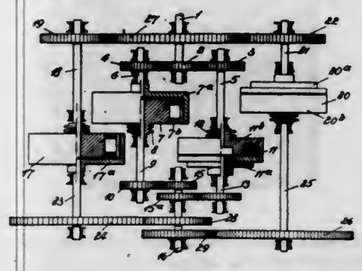
1,827,347. GUARD BOOTH. LASLO BAROTA, Perryopolis, Pa. Filed Mar. 23, 1931. Serial No. 524,603. 1 Claim. (Cl. 89—36.)



In combination, a guard booth comprising a front wall, a rear wall, a pair of side walls, a top including a flange overlapping and being secured to the upper ends of all of said walls, a floor including a flange overlapping and being secured to the lower ends of all of said walls, a door carried by one of said walls, a window mounted in said front and side walls and in said door, a fixed base plate, casters supporting the booth on said base plate, said front wall being provided with a comparatively small opening disposed adjacent to the window in said front wall,

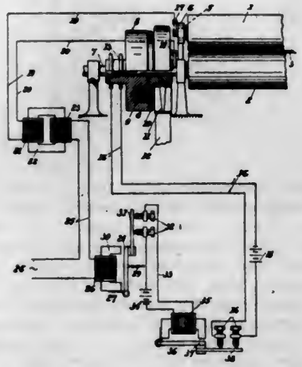
means operable from within the booth for rotating the latter in either direction on said base plate, a wheel gear fixed on said base plate, a pinion gear meshing with said wheel gear, and an operating element connecting with said pinion gear for rotating the latter to impart rotation to the booth on said base plate.

1,827,348. POWER TRANSMISSION DEVICE. JULIUS BING, Eisenach, Germany, assignor to the Firm Magnet-Werk G. m. b. H., Eisenach Spezialfabrik für Elektromagnet-Apparate, Eisenach, Thuringia, Germany. Filed Aug. 8, 1928, Serial No. 298,206, and in Germany Sept. 1, 1927. 12 Claims. (Cl. 74—58.)



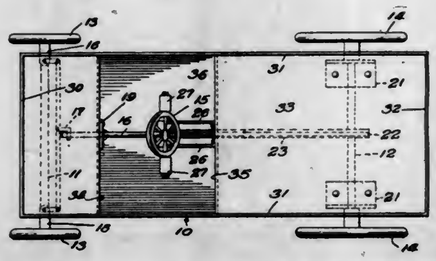
1. A power transmission device comprising a driving shaft, a driven shaft, two counter shafts each being in effective connection with said driving and said driven shaft, a transmission gear for positively connecting said counter shafts with said driving and driven shafts, an eddy-current clutch being intercalated in one of the said counter shafts and having a primary and a secondary member, mechanically engaging coupling means having a primary and a secondary member, both of such coupling means being adapted independently from each other to transmit power from the driving to the driven shaft, and transmission means adapted to impart to one member of said mechanically engaging coupling means a speed of rotation from one member of said yieldingly engaging coupling means substantially to an extent corresponding with the normal slip of said yieldingly engaging coupling means.

1,827,349. METHOD AND APPARATUS FOR TRACING METALLIC BODIES IN FABRICS. JULIUS BING, Eisenach, Germany, assignor to the Firm Magnet-Werk G. m. b. H. Eisenach Spezialfabrik für Elektromagnet-Apparate, Eisenach, Germany. Filed Dec. 11, 1928, Serial No. 325,168, and in Germany Mar. 3, 1928. 10 Claims. (Cl. 192—127.)



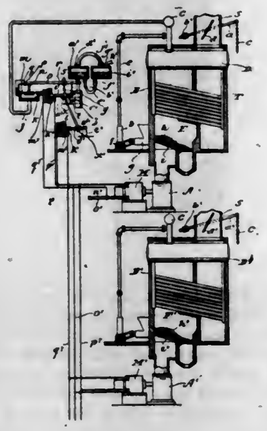
1. An apparatus for automatically searching for metallic bodies such as needles in textile fabrics, comprising an electric circuit, electrodes in said circuit, one of said electrodes forming a driven roller adapted to convey the fabric to be examined, an electric transformer having a high voltage winding and a low voltage winding, the high voltage winding being inclosed in the said electric circuit, an electromagnetic clutch adapted to interrupt the rotation of the said roller and an electric relay in the said low voltage winding adapted to disengage the said clutch.

1,827,350. CHILD'S VEHICLE. BRUNO BODEREK, Chicago, Ill. Filed Aug. 9, 1930. Serial No. 474,248. 3 Claims. (Cl. 208—32.)



1. A pedally operable child's vehicle including front and rear axles, a body, a downwardly extending compartment in said body, a crank shaft and sprocket wheel therein, bearings for said crank shaft mounted at the rear wall of said compartment, said bearings constituting guards on both sides of said sprocket wheel, a sprocket wheel on said rear axle, and a sprocket chain connecting both of said sprocket wheels, the rear wall of said compartment having an opening at a point between said bearings for permitting passage of said sprocket chain.

1,827,351. CONTROL SYSTEM. EDWARD S. BRISTOL, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 9, 1929. Serial No. 345,858. 11 Claims. (Cl. 236—26.)



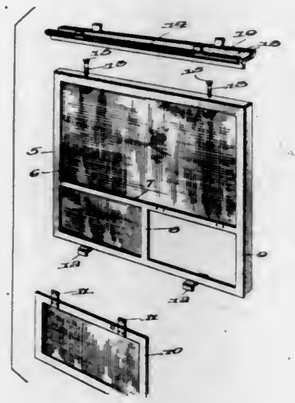
6. The combination with a vapor generator and means for controlling the rate of vapor generation thereby, said control means closely following changes in vapor demand substantially immediately to change the rate of vapor generation to an extent determined by the change in vapor demand, of means operable upon controlling action of said control means in either sense to effect further change in the rate of vapor generation and at a slower rate of change.

1,827,352. CUTTER FOR DEFIBERIZING OR SHREDDING REDWOOD BARK, WOOD, AND MILL WASTE. CHARLES H. BROWN and JUDD A. BROWN, Eureka, Calif. Filed Aug. 12, 1929. Serial No. 385,241. 1 Claim. (Cl. 83—75.)



A cutter of parallel faces, tapering sides, terminating at the small end in a square like manner substantially at right angles to the two faces, and the large end or base rounded off and equipped with a punched hole for holding proper position when in use.

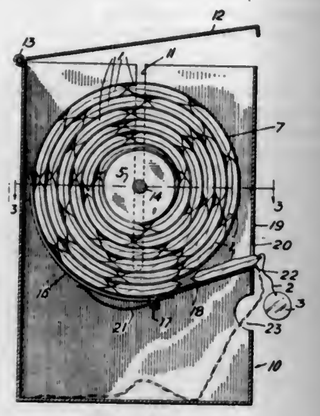
1,827,353. VEHICLE SCREEN. ANDREW H. CARD, Jr., Pineville, Ky. Filed July 26, 1929. Serial No. 381,266. 6 Claims. (Cl. 156—14.)



4. A screen comprising a metallic frame, approximately L-shape in cross section, screen material carried by the arm of said L, the base of the L on at least one side of the frame having out-turned edge flanges carried thereby to embrace a side if a window opening, and a locking strip adjustably carried by the opposite side of the screen frame for engaging the opposite side of the window opening.

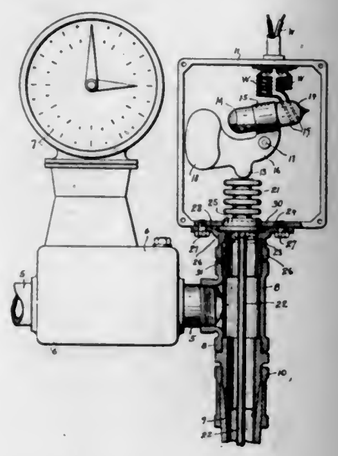
1,827,354. PACKET-PACKAGE AND DISPENSING APPARATUS. SIMON COOPER, Brooklyn, N. Y., assignor to Cooper Tea Packet Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 3, 1929. Serial No. 352,154. 11 Claims. (Cl. 312—74.)

11. A dispensing apparatus for the purpose described comprising a box adapted to receive a packet roll, said box being provided with vertical guides to receive a roll shaft, means resiliently forced against the periphery of the packet roll, movable in response to change if diameter of the



roll to prevent substantial distortion of the roll, and said box being provided with an aperture for passage of the roll strip and packets.

1,827,355. NOZZLE-CONTROLLED SWITCH. FREDERICK GEORGE FARR, deceased, Garden City, N. Y., by Helen R. Farr, executrix, Garden City, N. Y., assignor to Farr Hydraulic Systems, Inc., New York, N. Y., a Corporation of Michigan. Filed Mar. 30, 1929. Serial No. 351,348. 13 Claims. (Cl. 221—95.)

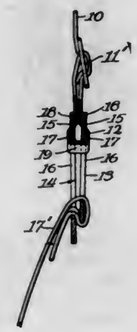


1. In liquid dispensing apparatus, a conduit having a manually-operated valve and dispensing nozzle at one end thereof, an electrical switch proximate the other end of the conduit, and motion-transmitting means carried within and concealed and protected by the conduit and operatively connected with the manually-operated valve and with the switch; whereby manual operation of the valve, to directly open and close the nozzle, is transmitted to the switch to reversely close and open it; and bearing anchorage means for mounting and holding the motion-transmitting means in free operative position in the conduit whereby said motion-transmitting means is relieved of torsional strains.

1,827,356. TREATMENT OF ANIMAL FIBERS. ANTONIO FERRETTI, Milan, Italy, assignor to Società Invenzioni Brevetti Anonima-Torino, Turin, Italy. Filed Dec. 30, 1929. Serial No. 417,601. 12 Claims. (Cl. 92—2.)

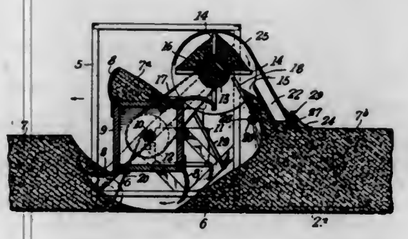
1. The process which comprises adding a vulcanizing agent to a slurry of animal fibers and a latex binder therefor in aqueous suspension, and before vulcanization has proceeded to a detrimental degree extracting the liquids of the slurry.

1,827,357. FASTENER. ARTHUR W. GAVITT, Chicago, Ill., assignor to A. Stein & Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 16, 1929. Serial No. 400,120. 6 Claims. (Cl. 24—193.)



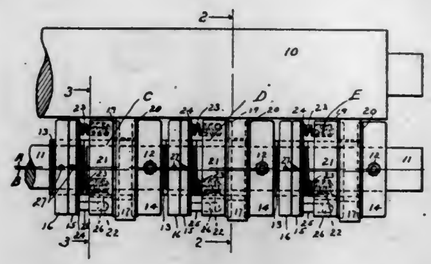
5. In a device of the class described, a loop member formed of two folds of relatively flexible material, a pair of clasps, each clasp having an opening adjacent the upper end thereof and a second opening spaced from said first opening to provide a transverse bar, the folds of said loop extending between said clasps at the upper portion thereof, thence passing outwardly through said first openings around said bars and through said second openings so as to join each other, and means provided on said loop member for tightening the engagement thereof with said clasps.

1,827,358. MACHINE FOR TURNING MANURE PILES. JOHN GILETTI, New York, N. Y. Filed Nov. 5, 1929. Serial No. 404,892. 3 Claims. (Cl. 259—144.)



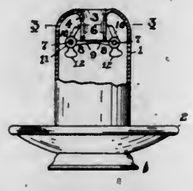
1. A machine for turning manure or the like, comprising forking devices for lifting the material, means for advancing said forking devices to the pile of material, means for re-depositing the material lifted by the forking devices in back of said forking devices as the machine advances through the pile of material and controllable means for variously wetting the re-deposited stack material.

1,827,359. SELF-ADJUSTING FEED ROLLER. FRED GITZENDANNER, New York, N. Y. Filed Apr. 21, 1930. Serial No. 445,849. 7 Claims. (Cl. 271—51.)



1. In a feed roller unit, a sleeve having an enlarged head, a roller having a larger outside diameter than that of said head and a bore of a larger diameter than the outside diameter of the sleeve, a collar slidably mounted on the sleeve, and means mounted upon the sleeve for clamping said roller yieldingly between said head and said collar.

1,827,360. EXTINGUISHER FOR CIGARETTES AND THE LIKE. GEORGE D. GLOMB, Bradford Woods, Pa., assignor to John C. Glomb, Bradford Woods, Pa. Filed Mar 17, 1931. Serial No. 523,213. 8 Claims. (Cl. 131—51.)



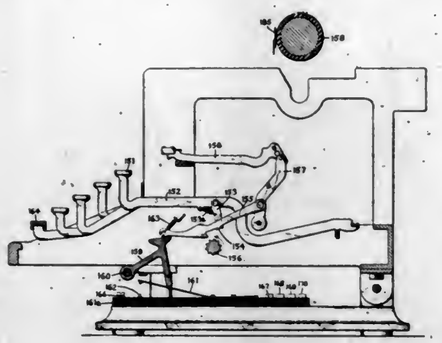
1. An extinguisher for cigarettes and the like which comprises the combination of a casing having an aperture in its top for the insertion of a cigarette, and a pair of coacting cutters pivotally mounted beneath said opening and arranged to be thrust apart by the insertion of the cigarette, said cutters being brought together to cut off the lower end of the cigarette when the cigarette is withdrawn.

1,827,361. PRINTING PLATE AND METHOD OF MAKING THE SAME. CHARLES G. HAYES, Chicago, Ill., assignor to Chicago Carton Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1930. Serial No. 441,746. 5 Claims. (Cl. 101—401.3.)



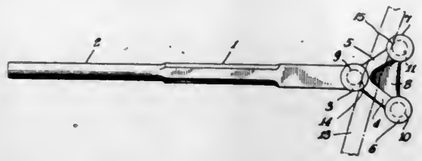
1. A printing plate provided with a halftone printing surface and having a groove in its lower face beneath a portion of the edge of the printing surface, the metal of the plate, along the edge of the printing surface and above the groove being depressed, substantially as described.

1,827,362. PRINTING TELEGRAPH SYSTEM. GEORGE S. HILTZ, Brooklyn, N. Y., and WILLIAM F. PURCELL, Hoboken, N. J., assignors to Stock Quotation Telegraph Company, New York, N. Y., a Corporation of New York. Filed Mar. 21, 1928. Serial No. 263,362. 9 Claims. (Cl. 164—113.)



1. In tape-punching mechanism for tape-controlled printing telegraph systems, the combination with a typewriter having type bars, a rotating ratchet, pawls connected with the type bars to actuate the same, and finger keys connected with the pawls to engage the pawls singly with said ratchet, of a plurality of punch-controlling circuits, contacts associated with the controlling circuits to open and close the latter and connected with the type bar actuating pawls for actuation thereby.

1,827,363. CLAW CROWBAR. ANDRE JACQUESSON, Morris Cove, New Haven, Conn., assignor, by direct and mesne assignments, of one-half to John Arthur Newman, Morris Cove, New Haven, Conn., and one-half to Morris Graham Jenkins, Morris Cove, New Haven, Conn. Filed Dec. 9, 1930. Serial No. 501,002. 2 Claims. (Cl. 81—15.)



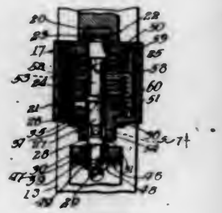
1. A tool comprising a bar having at one end a boss, arms diverging from said boss and terminating each in a boss, and respective lugs projecting laterally from all said bosses, said lugs being arranged in spaced, triangular relation.

1,827,364. FASTENING DEVICE FOR BRACELETS. EMIL L. JOHNSON and OLOF LUNDSTEN, Attleboro, Mass. Filed Sept. 24, 1930. Serial No. 484,062. 4 Claims. (Cl. 24—71.)



2. In an extension device for a bracelet, a plurality of hingedly connected sections hingedly connected to one end of a cover and foldable upon said cover, the end hingedly connected section being attached to one end of the bracelet, a second end section secured to the cover and to the other end of the bracelet, a catch on the hingedly connected section adjacent said cover, and a latch on the end hingedly connected section, the intermediate hingedly connected sections having openings to permit releasable engagement of the latch and catch.

1,827,365. SPRING PIVOT HINGE. WILLIAM J. KEENE, Chicago, Ill., assignor to Chicago Spring Hinge Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1920. Serial No. 331,495. 3 Claims. (Cl. 16—182.)

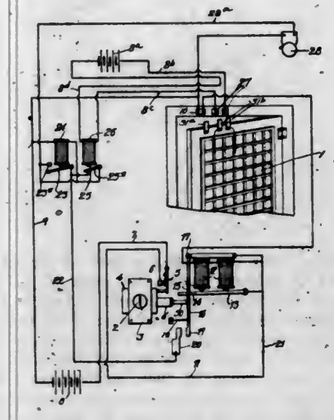


1. In a spring pivot hinge, a bracket adapted to be secured to a support, a casing adapted to be secured to a swinging element having a bearing at the top, a pintle pivoted in the bearing and having its lower end engaged in the bracket with means for lateral adjustment and held against turning movement, an abutment on the pintle, the casing having an internal rib, collars loosely engaged on the upper and lower portions of the pintle and each provided with a flange having a groove, one collar flange having a shoulder adapted to engage the abutment, said collar also having a lateral projection adapted to engage the rib, a coil spring extending between the collars and having its ends bent inwardly to engage the grooves to hold the shoulder against the abutment and the projection against the rib, a bottom plate on the casing having a depending circular flange with a cut-away portion and a central circular opening much larger than the pintle, the lower collar being formed with a sleeve bearing in the flange around the pintle and having a series of radial holes, the pintle having a peripheral recess in line with the holes producing end shoulders, and a pin disposed in the cut-away portion for engagement with one of said holes and the recess, said pin normally engaging a shoulder in one end of the cut-away portion of the flange and at one end of the recess and adapted to be interchangeably engaged in another of said holes for adjusting the tension of the spring.

1,827,366. BURGLAR ALARM. JAMES J. KEATZ, Jamaica, N. Y., assignor of one-half to Peter Roeder, Brooklyn, N. Y. Filed Oct. 18, 1924. Serial No. 744,483. 1 Claim. (Cl. 177—314.)

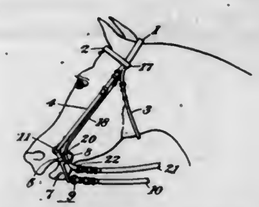
In a protective burglar alarm system, the combination comprising a main circuit, an alarm circuit in shunt of the main circuit and a wholly independent auxiliary circuit, a manually controlled main switch, including a lock for preventing surreptitious operation of said switch, an electro-magnetic drop interposed in the main circuit including an armature for said drop, a supplemental switch which is normally held open by said armature when the magnet circuit of said electro-magnetic drop is dead, a plurality of contacts adapted to be located adjacent the entrance door to the premises to be protected, two of said contacts comprising the terminals of an auxiliary circuit including a source of electricity, said auxiliary circuit having interposed therein an electro-magnetic switch, a screen for the entrance of said premises comprising a continuous conductor terminating in two separate contacts,

which contacts are adapted, when the entrance door is being closed, to respectively engage the two last mentioned contacts and thereby effect the opening of said electro-magnetic switch, a door switch interposed in the main circuit and adapted to be located adjacent the entrance to the premises, said switch being adapted to be closed subse-



quent to the closing of the circuit through the aforesaid screen, another electro-magnetic switch interposed in the alarm circuit and closable upon the closing of the other electro-magnetic switch in the alarm circuit, means for connecting the alarm circuit to a source of electricity and an alarm interposed in the alarm circuit.

1,827,367. RIDING BRIDLE. MARTHA J. KNOUD, Flushing, N. Y. Filed Sept. 23, 1930. Serial No. 483,826. 1 Claim. (Cl. 54—6.)

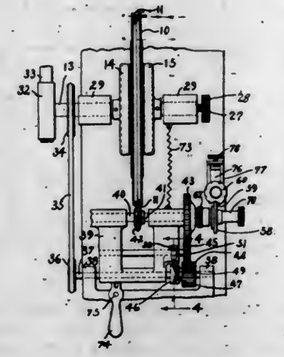


In a riding bridle, the combination with the usual head piece having depending cheek straps, of a bit comprising a mouth bar having end bars connected at their upper terminals with said cheek straps and at their lower terminals having rings for connection with a riding rein, said end bars also having integral cheek members in the form of rings located opposite the ends of the mouth bar and each having aligned eyes at the upper and lower sides thereof, a loop strap for passing over the poll of the horse with its ends running loosely through the said eyes on the cheek members and terminating in a riding rein, and a second riding rein connecting with said rings at the lower terminals of the end bars.

1,827,368. LENS EDGING MACHINE. ALBERT E. MAYNARD, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed May 7, 1926. Serial No. 107,375. 1 Claim. (Cl. 125—11.)

A device of the character described for use in honing the shaped grinding edge of a grindstone, means to hold the hone in engagement with the grindstone, means to reciprocate the hone across the shaped edge of the grind-

stone, a slide having a threaded portion on said hone holding means, a former member mounted on the slide, a former shoe having a portion shaped to correspond with the shaped edge of the grindstone and adapted to guide the movement of the hone over the face of the grindstone and a threaded collar on said hone holding means adapted



to engage the threaded portion of the slide and move said slide and former upon rotation of the collar to regulate the distance between said hone and former member so that said former member may be positioned in the former shoe to correspond with the position of the hone on the shaped edge of the grindstone.

1,827,369. TOGGLE BOLT FOR TRUNKS AND OTHER LUGGAGE, ETC. HENRY R. NAYLOR, Derby, Conn., assignor to The H. A. Matthews Manufacturing Company, Seymour, Conn., a Corporation. Filed Oct. 10, 1930. Serial No. 487,782. 5 Claims. (Cl. 292—100.)

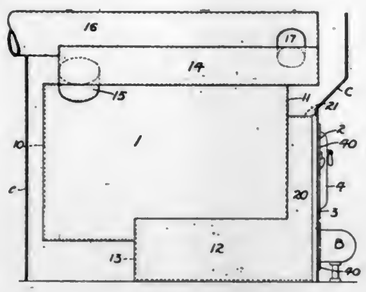


1. In a device of the class described, the combination with a toggle-link; of a mounting-plate to which the said toggle-link is pivotally connected; a detent-member carried by the said mounting-plate; a complementary detent-member carried by the said toggle-link in position to engage the first-mentioned detent-member when the parts are in their fully-latched positions; and a toggle-lever pivotally connected between its ends to the said toggle-link for forcibly disengaging the aforesaid detent-members one from the other.

1,827,370. FURNACE. ANDREW FRISTOE NELSON, Seattle, Wash. Filed Feb. 19, 1929. Serial No. 341,252. 8 Claims. (Cl. 126—114.)

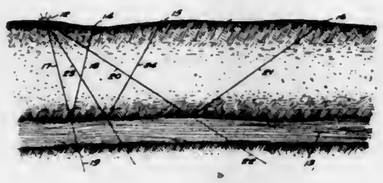
1. In a furnace, a shell including a horizontal drum having a head secured thereto at the front end, and cut away within its top and side margins to define an open-

ing, and a snout comprising two sides, a continuous front and a top fitted and secured to the cut-awy edges of said head and projecting forwardly, the front of said



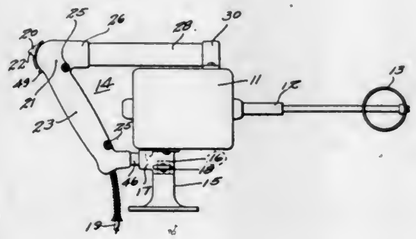
snout having apertures adapted to receive doors and their frames, and the sides extending continuously from the top to a point below the drum's lower surface.

1,827,371. METHOD AND MEANS FOR GEOLOGICAL EXPLORATIONS. FRANK RIEBER, San Francisco, Calif. Filed Mar. 14, 1925. Serial No. 15,528. 13 Claims. (Cl. 181—0.5.)



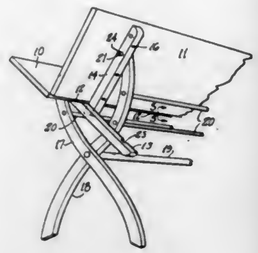
9. In a system for geologic exploration, the process of creating abrupt pressure impulses in the earth, which comprises detonating o highly explosive material, and transmitting the pressures to the earth through a liquid.

1,827,372. HAND CONTROL FOR ELECTRIC MOTORS. ARTHUR M. RIDDELL, Los Angeles, Calif. Filed May 31, 1928. Serial No. 281,707. 5 Claims. (Cl. 172—36.)



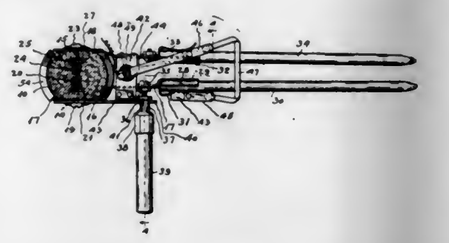
1. In apparatus of the character described, a motor, a handle for the motor including a hollow tubular portion, a carbon pile in said portion for varying the speed of the motor, and means for varying the pressure on the pile, said means being arranged to be controlled by the same hand that grasps the handle.

1,827,373. FOLDING TABLE. ERNST AUGUST ROSEN, Portland, Oreg. Filed Dec. 27, 1930. Serial No. 505,109. 2 Claims. (Cl. 45—116.)



1. A folding table comprising a pair of hinged leaves, bars secured to adjacent leaves, the ends of the bars attached to one leaf extending over and under the adjacent leaves to form a support for the latter when the table is open, ogee legs pivoted together at their middle portions and pivoted to the outer ends of the respective bars to support the leaves when in open position, and latching means on the bars attached to one leaf to cooperate with the adjacent bars on the other leaf to prevent spreading when the leaves are in open position.

1,827,374. ELECTRIC ARC LAMP. THOMAS C. RUSSELL, Chicago, Ill., assignor to Ultra Violet Generator Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1928. Serial No. 253,548. 7 Claims. (Cl. 176—103.)

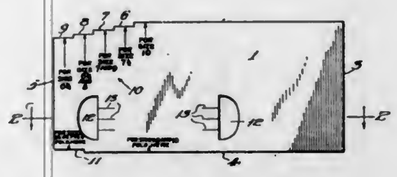


1. An electrode supporting structure comprising a base of insulating material, means on said base for connecting to an electric circuit, a resilient bar, an electrode receiving socket connected with said base by said resilient bar, a comparatively rigid bar, an electrode receiving socket connected with said base by said comparatively rigid bar, a plate adjacent to said resilient bar having a slot, a lever extending through said slot and having a threaded bore, a screw extending from said resilient bar and threaded into said bore, and an abutment collar on said lever engaging said plate, said resilient bar tending to swing away from said rigid bar, rotation of said lever relative to said screw causing swing of said resilient bar toward the rigid bar or permitting relaxing thereof to swing away from said rigid bar.

1,827,375. GUIDE CARD. FRANZ P. SCHNEIDER, Chicago, Ill., assignor to Transo Envelope Company, Chicago, Ill., a Corporation of Delaware. Filed June 9, 1928. Serial No. 284,057. 2 Claims. (Cl. 33—168.)

1. A guide card for the purpose described, comprising a flat substantially rectangular blank having one corner cut away to form a series of right angular steps whose

alternate edges are parallel to the adjacent side edges of the card respectively, and having a cutout within the body of the card for indicating the position of a window



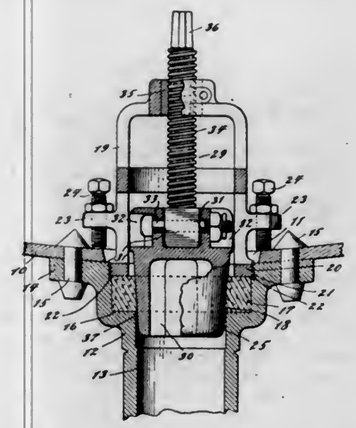
to be placed on a window envelope, the position of the cutout with respect to the right angular steps on one corner being similar to and defining the position of the window relative to the edge of the envelope.

1,827,376. METHOD OF MAKING MAGNETIC CORES. RALPH C. SHERMUND, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Oct. 3, 1928. Serial No. 309,967. 3 Claims. (Cl. 175—21.)



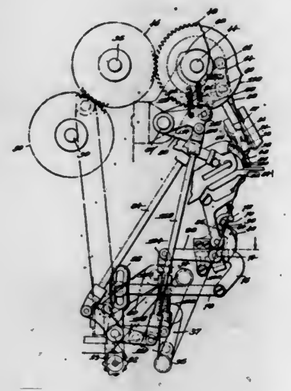
1. The method of making a magnetic core which comprises grinding together finely comminuted magnetic material and mica and compressing the resultant mass into a self sustaining solid.

1,827,377. VALVE. HERMAN L. STONE, Philadelphia, Pa., assignor to Union Tank Car Company, Chicago, Ill., a Corporation of New Jersey. Filed Nov. 19, 1927. Serial No. 234,349. 9 Claims. (Cl. 137—21.)



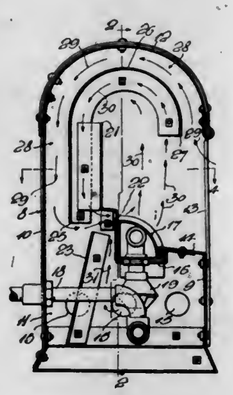
1. In a valve device comprising a main valve seat of resilient material and an auxiliary seat formed of non-resilient material, a valve member adapted to engage either of said seats, and means for rotating said valve member and seating the same against said seat formed of resilient material, the parts benig constructed and arranged to cause said valve member to engage said seat of resilient material only during normal operation and to engage said seat of non-resilient material under abnormal conditions only.

1,827,378. SEWING MACHINE. ERASTUS E. WINKLEY, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 12, 1928. Serial No. 277,113. 20 Claims. (Cl. 112—57.)



1. A lockstitch sewing mechine having, in combination, a hook needle, a loop taker for passing the needle thread around the bobbin thread, a work support, a thread take-up for drawing down the needle loop after it has passed over the bobbin thread, a loop detaining finger adapted to engage with the needle loop a predetermined distance above the surface of the work, and an auxiliary take-up for setting the stitch in the work prior to the formation of the next needle loop.

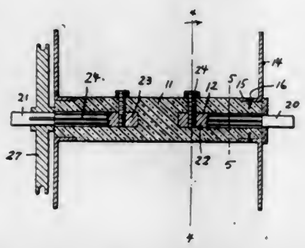
1,827,379. GAS HEATER. BENJAMIN C. BARTLEBAUGH, Wheeling, W. Va. Filed Jan. 7, 1931. Serial No. 507,259. 2 Claims. (Cl. 126—84.)



1. A gas heater comprising a casing comprising front, back and end walls and a top arched from front to rear on a curved line merging into said front and back walls,

said front wall having an opening, a horizontally elongated burner mounted longitudinally in said casing near the lower end of said opening, a longitudinal fire wall extending upwardly from the rear portion of said burner, spaced forwardly from said rear casing wall and spaced downwardly from said arched casing top, said fire wall having a free upper end having air perforations near the upper extremity of the burner, and a vertical longitudinal partition in said casing disposed between and spaced from said back wall and said fire wall, the lower end of said partition being free and extending downwardly as far as said perforations of said fire wall, the upper end of said partition being provided with a forwardly projecting transversely curved cowl spaced upwardly from said fire wall and spaced inwardly from said arched top, the rear portion of said cowl merging into said partition and the front end of said cowl being free.

1,827,380. CABLE REEL FOR MINING MACHINES. HOWIE BOGOS, Pound, Va. Filed Mar. 8, 1930. Serial No. 434,324. 1 Claim. (Cl. 173—367.)



In a reel structure of the class described for electric cables, a core formed on non-conducting material and having reduced end portions, a pair of end disks having inwardly directed cylindrical collars at their centers fitting on the reduced portions, means for detachably connecting the collars to the reduced portions, said core being provided with a pair of inwardly directed bores from the ends thereof terminating equi-distant from the center thereof, the walls of the bores being provided with a plurality of longitudinally extending grooves, trunnions having shanks extending into the bores and formed with longitudinally extending ribs to be received in the grooves, and bolts extending transversely partly through the core and the inner ends of the shanks having openings therein to receive the inner ends of the bolts, the outer end of each bolt projecting from the core for forming a terminal for a conductor.

1,827,381. TUBING. HARRY W. BUNDY, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 18, 1927. Serial No. 234,088. 4 Claims. (Cl. 137—75.)



1. As a new article of manufacture, a coil bent on a relatively small radius, comprising a thin walled longitudinally fashioned tube of non-corrodible metal covered by a thin strip of metal wound as a helix on said tube with the edges of adjacent convolutions of the helix in substantially abutting relation.

1,827,382. METAL SCREEN. WILSON P. CHAMBERLAIN, Jr., Corry, Pa., assignor to Corry Metal Corporation, Corry, Pa. Filed Jan. 14, 1931. Serial No. 508,787. 9 Claims. (Cl. 156—14.)



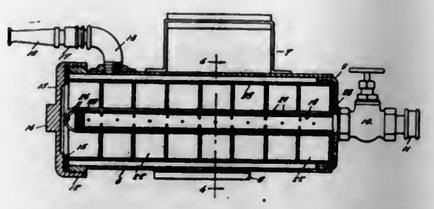
2. A hollow metallic window screen comprising side and end sections, each side section having a guide groove formed along the outer edge thereof, and the outer edges of the guide groove being enlarged and yieldable, to grip a guide strip.

1,827,383. GAME BOARD. ROBERT L. CLARK, Oskosh, Wis. Filed May 20, 1931. Serial No. 538,830. 1 Claim. (Cl. 273—109.)



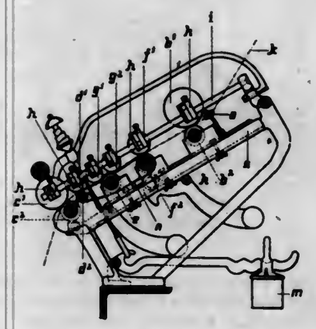
A game board having a circumferential flange extending above and below the top and bottom faces thereof to form respectively a piece or ball retaining rim and a tilt controlling stop, said board having a plurality of spaced compressible and expansible feet depending from its lower face adjacent its periphery whereby the board may be tilted by slight pressure exerted adjacent its periphery without moving it from its support.

1,827,384. SPRAY NOZZLE DISSOLVER. JOHN F. CORBETT, Long Beach, Calif. Filed June 18, 1930. Serial No. 462,112. 3 Claims. (Cl. 299—83.)



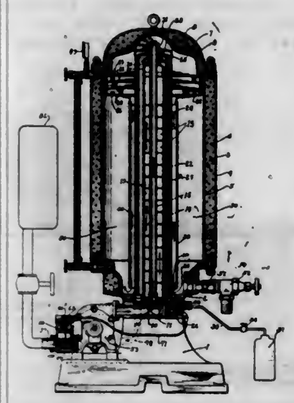
1. In a structure of the class described, in combination, an open ended cylinder, closures fitted on the ends of the cylinder, a pipe carried by one closure and projecting into the interior of the cylinder, said pipe being provided with a multiplicity of water discharge and distributing ports, a valve connection carried by said closure and communicating with said pipe and provided with a hose connection, a plurality of compound containing receptacles assembled on said pipe, each receptacle housing certain of the water discharging and distributing parts, the receptacles being spaced from the inner face of the cylinder and being provided with discharge ports to permit the water to mix with the chemical and discharge through said latter ports, and a chemical solution discharge nozzle mounted on said cylinder and in communication with the interior of the cylinder.

1,827,385. PULL-THROUGH DRAWING FRAME FOR MEDIUM AND LONG FIBROUS MATERIAL, MORE PARTICULARLY, COMBED WOOL, ARTIFICIAL SILK, RAMIE. PIERRE CORNIBERT, Turin, Italy, assignor, by mesne assignments, to Sächsische Textilmaschinenfabrik vorm. Rich. Hartman, Aktiengesellschaft, Chemnitz, Germany, a Joint-Stock Company of Germany. Filed Mar. 25, 1930, Serial No. 438,797, and in Germany Apr. 5, 1929. 5 Claims. (Cl. 19—131.)



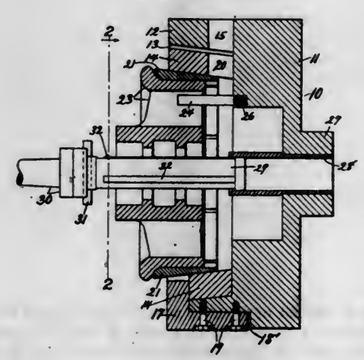
1. A pull through drawing frame for drawing medium and long staple, comprising in combination: a pair of feed rollers; a pair of drawing rollers; a conveyer band arranged between the said pair of feed rollers and said pair of drawing rollers; intermediate driven lower rollers for guiding and driving the said conveyer band; non-gripping top rollers co-operating with said intermediate lower rollers; an additional lower roller arranged between the said intemediate lower rollers for guiding said conveyer band; and two non-gripping top rollers arranged oppositely on both sides of the said additional lower roller and co-operating with the additional intermediate roller and the conveyer band in forming a curved path for the conveyer band and the material to be drawn, substantially as described.

1,827,386. CARBONATOR. LOUIS DE MARKUS, Pittsburgh, Pa., assignor to The Liquid Carbonic Corporation, Chicago, Ill. Filed Dec. 21, 1928. Serial No. 327,609. 6 Claims. (Cl. 261—19.)



1. A device of the type described comprising a casing, a cylindrical column disposed vertically within the casing, a nozzle carried at the bottom of the column, a water inlet communicating with the nozzle, means for forcing the water in the inlet through the nozzle, means for introducing a carbonating gas into the interior of the casing under pressure, a gas tube disposed centrally within said column and having communication at its top with the interior of the casing, a series of perforated baffle plates between the gas tube and the walls of the column, an inner sleeve surrounding and being spaced from said column, a cover for said inner sleeve secured to said gas tube, said inner sleeve terminating short of the bottom of the casing, an intermediate sleeve surrounding said inner sleeve and secured to the bottom of the casing at one end and being open to the interior of the casing at the upper end, an outer sleeve surrounding said intermediate sleeve and spaced therefrom, said outer sleeve terminating short of the bottom of the casing, means connecting with the top of the outer sleeve for directing water into the space between the outer sleeve and the intermediate sleeve, and means for establishing communication with the bottom of the gas tube and said nozzle, whereby gas is mixed with the water entering said column.

1,827,387. CHUCK. GEORGE J. EVELO, Terre Haute, Ind., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed May 28, 1929. Serial No. 366,628. 5 Claims. (Cl. 279—55.)

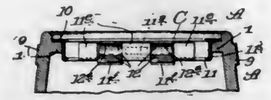


1. In a chuck for holding a wheel, the combination of a body member having an axially extending, annular hub portion adapted to be connected with a rotatable lathe part, means providing a supporting surface on the body member concentric to the axis of rotation of the rotatable lathe part, a resilient ring having concentric surfaces adapted to yieldably fit the supporting surface of the body member and a surface of the wheel, respectively, and tubular means concentrically disposed in the body member for receiving the pilot portion of a boring bar whereby the boring bar is maintained concentric with respect to the said supporting surfaces.

1,827,388. SAVINGS BANK. CHARLES FISHER, Yonkers, N. Y., assignor to The Automatic Recording Safe Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 23, 1929. Serial No. 342,121. 6 Claims. (Cl. 232—4.)

1. A savings bank closure comprising an outer plate provided with a coin-slot; an inner plate having an upturned peripheral flange abutting against the outer plate, and spacing said plates, said inner plate being provided with a coin-slot and with upturned lugs adjacent thereto;

means connecting said plates rigidly together; and a slot-guard comprising a U-shape plate having a shank secured to said inner plate and having resilient arms adjacent the



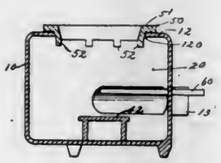
inner surface of the outer plate extending across the coin-slot of the outer plate and working in the spaces between said lugs.

1,827,389. METAL BLACKBOARD SHEET. KEITH FRIEND, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed May 22, 1931. Serial No. 539,280. 8 Claims. (Cl. 35—15.)



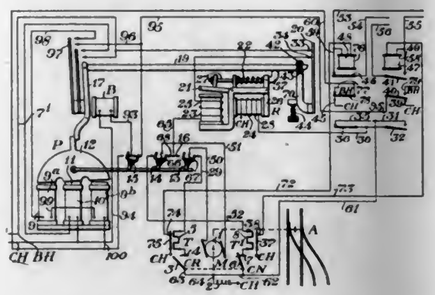
8. The method of making a cylindrical metal sheet section having a fused vitreous enamel surface comprising firing the sheet in the enameling process while the sheet is retained in the cylindrically curved position.

1,827,390. FUEL OIL BURNER. ALONZO W. GEARHART, Fresno, Calif. Filed Mar. 18, 1929. Serial No. 347,860. 4 Claims. (Cl. 158—28.)



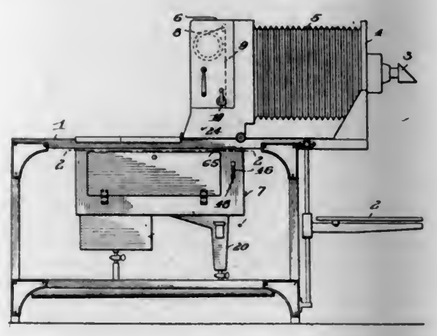
1. In combination with an oil burner having a circular chamber, a circular outlet opening at the top of the chamber, a fuel inlet into said chamber, means to introduce fluid into said chamber so that the fluid will have a swirling movement within the chamber and will mix the fuel therein, of a bushing fitted within the outlet opening, said bushing having a plurality of baffles depending from said bushing and within the chamber.

1,827,391. RAILWAY TRAFFIC CONTROLLING APPARATUS. ROBERT M. GILSON, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 28, 1930, Serial No. 491,727. Renewed Apr. 9, 1931. 19 Claims. (Cl. 246—242.)



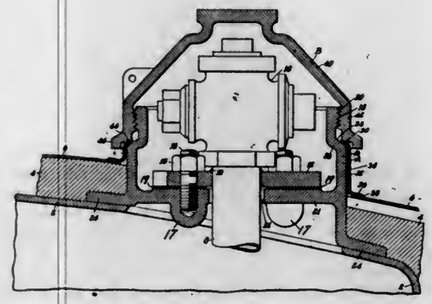
1. In combination, a railway switch, an electric motor for operating said switch, a normal and a reverse thermal relay each including a heating winding and a normally closed contact, a normal and a reverse circuit for said motor including the heating windings of said normal and reverse thermal relays respectively, two circuit controllers, one included in said normal circuit and closed in all positions of the switch except the reverse and the other included in said reverse circuit and closed in all positions of the switch except the normal, a circuit breaker having a first and a second core for controlling the supply of current to said motor, a winding on the first core of said circuit breaker included in both of said circuits and constituting a means for tripping said circuit breaker, a holding winding on the second core of said circuit breaker connected across the field of said motor and when energized acting to prevent tripping of said circuit breaker, a normal and a reverse stick relay for closing one or the other of said circuits to cause rotation of the motor in one direction or the other, and a pick-up and a stick circuit for each of said stick relays each circuit including the contact of the associated thermal relay.

1,827,392. PHOTOGRAPHIC APPARATUS. JOHN S. GREENE and ARTHUR W. CAPS, Rochester, N. Y., assignors to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Nov. 7, 1928. Serial No. 317,771. 37 Claims. (Cl. 95—94.)



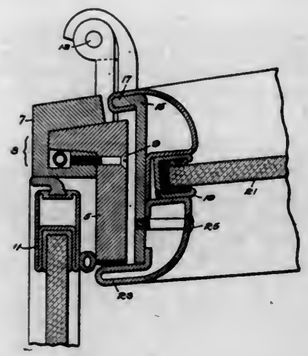
1. In a photographic liquid treating apparatus for exposed prints, the combination with a driving element, of a liquid holding receptacle, mechanism for depositing a photographic print in said receptacle, and means for transmitting a reciprocatory movement to the receptacle from the driving element to produce a turbulence in the liquid sufficient to immerse a photographic print deposited therein.

1,827,393. CONTAINER CONSTRUCTION. CHARLES I. HUMMER, Jersey City, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 30, 1930. Serial No. 424,568. 11 Claims. (Cl. 220—67.)



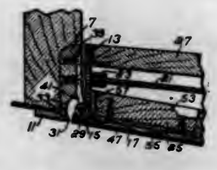
1. In a container, a housing extending through the upper wall thereof and having an externally arranged annular shoulder, a cap forming a part of the housing and provided with an internally arranged seat adjacent its lower edge, and an annular flashing secured to the upper wall of the container and surrounding the housing, said flashing having an inturned annular flange overlying the shoulder and clamped between the shoulder and seat.

1,827,394. VEHICLE BODY. FREDERICK J. KUBLER, New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed July 24, 1928. Serial No. 294,989. 4 Claims. (Cl. 296—44.)



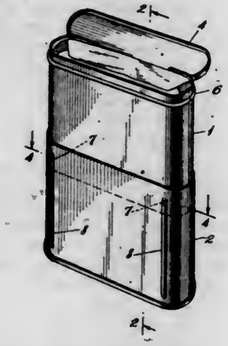
1. In an automobile body a body hinge pillar, a door of the type having a sliding window therein, the hinge pillar of said door being hung on the body hinge pillar and having at one side thereof a glass channel, a garnish molding carried by said pillar at the inner side of said channel and having a flange extending over and beyond the inner side of the pillar to extend over the door joint when the door is closed.

1,827,395. VEHICLE BODY CONSTRUCTION. FREDERICK J. KUBLER, New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed Oct. 17, 1929. Serial No. 400,234. 9 Claims. (Cl. 296—44.)



1. In a vehicle a door case including a body hinge pillar, a door closing into said case having a door hinge pillar forming a door joint with said body pillar, the door having an overlap flange to cover said joint, the body hinge pillar being recessed to pass the flange in the swinging movement of the door, a hinge leaf secured to the body pillar having knuckles underlying said flange substantially in the plane of the door joint, and a leaf having cooperating knuckles, said latter leaf extending longitudinally of the vehicle into the door structure inwardly of the exterior face thereof.

1,827,396. TELESCOPICALLY COLLAPSIBLE BOX. WILLIAM S. LUCKETT, New York, N. Y., assignor to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 22, 1929. Serial No. 357,102. 3 Claims. (Cl. 220—8.)

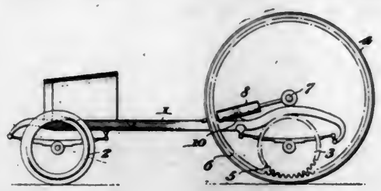


1. A pocket tobacco box composed of two telescopic sections, one provided with a bottom, and the other with a hinged cover, the sections having complemental stamped out bosses and grooves, the grooves in one section extending longitudinally of the section from near the bottom to near the top, the bosses of the other section fitting within the grooves of the first section, thereby to provide a slidable connection between the sections.

1,827,397. MOTOR VEHICLE. JUAN CARLOS MOLINA MASSEY, Odrogue, Argentina. Filed June 9, 1927. Serial No. 197,728. 3 Claims. (Cl. 180—10.)

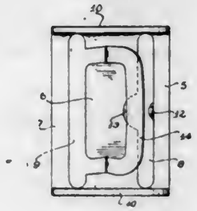
1. A motor vehicle comprising a frame; a driving wheel mounted in said frame for upward yielding movement; a circular rail, said wheel being adapted to contact on the inside of and drive said rail; a bushing for mounting

guiding said rail for forward and backward movement on said frame; and means in said bushing for permitting



longitudinal-tensioned movement of the rail relative to the frame.

1,827,398. FASTENER. EDWIN S. MIX, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Dec. 20, 1930. Serial No. 503,802. 8 Claims. (Cl. 24—75.)



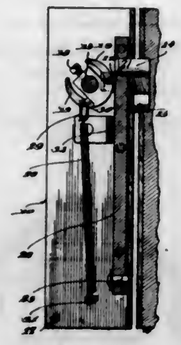
1. A slide formed from sheet metal and having a slot through which a strap may pass, and an anchoring device arranged on the rear of the slide to one side of the slot, said anchoring device being formed from a U shaped member cut from the stock of the slide, the central portion being formed from metal cut from the slot and the end portions being cut from metal to one side of the slot and having ends therein which throw the central portion in the rear of the slide and to one side of the slot.

1,827,399. DROP BOTTOM MINE CAR. HERMAN HENRY PANCAKE, Huntington, W. Va., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 19, 1931. Serial No. 523,778. 14 Claims. (Cl. 105—253.)



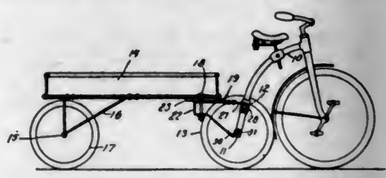
1. In a drop bottom car, a plurality of doors adapted to swing to open position by gravity, and means for holding said doors in closed position comprising latch elements pivotally connected to the car and having portions engaged beneath the doors, lever arms extending laterally from said latches, vertically shiftable actuators supported by said lever arms for shifting the latter, means guiding said actuators during shifting thereof, and spring means for returning the actuators to normal position whereby to restore the latch elements to normal position.

1,827,400. DOOR LATCH. JAMES J. PIPER, Spokane, Wash. Filed Mar. 14, 1930. Serial No. 435,851. 6 Claims. (Cl. 292—220.)



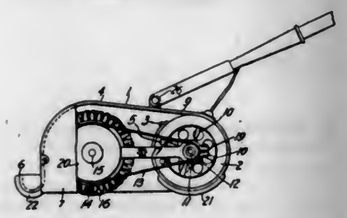
1. A door latch comprising a supporting structure, an arm pivoted to oscillate on said structure and normally urged to swing in one direction, a locking member carried by said arm, a door knob having a shank mounted to turn in said structure, a cam mounted on said shank, a cooperating element carried by said arm in the path of said cam adapted to be engaged by the cam on the turning of the shank to move said arm into unlocking position, said cam being adjustable on said shank to compensate for wear when necessary, and means to return said knob to normal position when released.

1,827,401. VELOCIPEDE TRAILER. ROBERT J. RADER, New Rochelle, N. Y., assignor to J. C. Penney Company, a Corporation of Delaware. Filed Nov. 21, 1930. Serial No. 497,181. 14 Claims. (Cl. 208—45.)



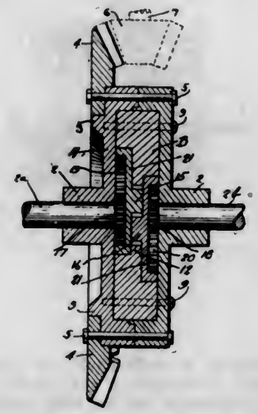
1. In a trailer attachment for a velocipede, the combination of a member mounted upon the rear of the velocipede and extending rearwardly of the rear wheels thereof, a trailer having at least two wheels, and a pivot connecting the trailer to the rear end of said member.

1,827,402. FLOOR TREATING MACHINE. CHARLES E. REDDIG, Kew Gardens, N. Y., assignor to Graybar Electric Company, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1927. Serial No. 179,456. 6 Claims. (Cl. 91—39.)



1. A floor treating machine comprising a brush, a motor for driving the brush, a housing for the brush, said housing having a body formed by bending a flat sheet of metal into the desired shape, one end of said body conforming to the contour of the motor and resilient means for supporting said housing.

1,827,403. DIFFERENTIAL MECHANISM. GEORGE RODRIGUES, Castroville, Calif. Filed Dec. 18, 1930. Serial No. 503,301. 4 Claims. (Cl. 74—99.)



1. The combination with two alined axles: of a differential carrier concentric to said axles; a disc element within the carrier concentric thereto and revoluble therewith; two off-set floating annular gears journaled in the element, pinions fixed on the axles respectively and engaging respectively with said annular gears; external pinions carried concentrically by said annular gears, said pinions arranged to mesh with each other.

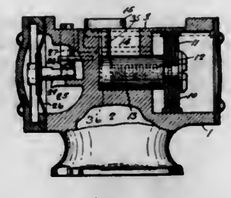
1,827,404. BOLSTER AND METHOD OF MAKING SAME. JOHN M. ROHLFING, Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed June 15, 1928. Serial No. 285,745. 15 Claims. (Cl. 29—164.)



3. A welded bolster comprising sheet metal cover plates and sheet metal web plates internally and externally welded together, a king pin barrel welded to the inner surface of one of said cover plates and projecting beyond the other cover plate and welded to the latter, a center plate welded to the outer surface of one of said cover plates and through which the king pin barrel extends, and reinforcing elements welded to the web plates and cover plates.

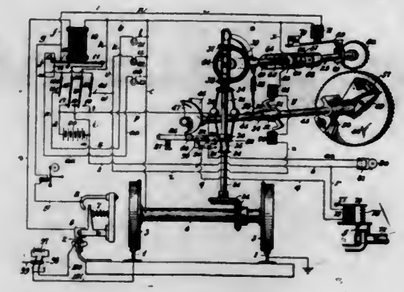
5. The method of forming bolsters which comprises pressing sheet metal blanks to form top and bottom cover plates, cutting a sheet metal blank to form pieces for two web plates, a king pin key, a king pin barrel socket and a plurality of braces, superimposing the web plates in spaced relation on the top cover plate and welding them externally and internally thereto, welding a king pin barrel to said top cover plate, welding the sheet metal braces to the top cover plate and said web plates, forming the king pin barrel socket from the before-mentioned piece cut from the aforesaid sheet metal blank and welding the same to the bottom cover plate, and then positioning the bottom cover plate on the previously formed bolster part and welding it thereto.

1,827,405. PULSATOR. JOHN A. SCHMITT, Waukesha, Wis., assignor to The Universal Milking Machine Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Oct. 15, 1928. Serial No. 312,545. 8 Claims. (Cl. 31—62.)



5. In a pulsator mechanism, a cylinder, a piston therein, a pulsator valve connected with and movable to and fro in unison with the piston, said pulsator being operable to alternately open and close independent ports communicating with a distant mechanism, a control valve pivoted for to and fro swinging motion, ports controlled thereby communicating with the cylinder on opposite sides f the piston for admitting actuating fluid to and exhausting same from the cylinder, a second fluid pressure chamber, a vibratory diaphragm therein, ports leading to said chamber on opposite sides of the diaphragm alternately opened and closed by the pulsator valve in addition to said pulsator ports, for admitting actuating fluid to and exhausting same from the chamber, and an operative connection between the vibratory diaphragm and said swinging control valve for alternating said valve.

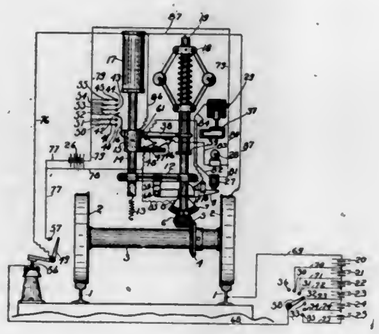
1,827,406. SYSTEM FOR CONTROLLING MOVING VEHICLES COMPRISING MULTIPLE SIGNALS. PAUL J. SIMMEN, Eden, N. Y., assignor to Simmen Automatic Railway Signal Company, Eden, N. Y., a Corporation of Arizona. Filed Mar. 13, 1915. Serial No. 14,075. Renewed Jan. 28, 1927. 53 Claims. (Cl. 246—49.)



1. In a railway signal system, signal rails arranged along the track and adapted to be energized positively or negatively, or deenergized, an electromagnet on the vehicle, three signals on the vehicle, connections between them and the electro-magnet whereby one signal is displayed when the electro-maguet is positively energized, a second signal is displayed when it is negatively energized, and a third signal is displayed when it is deenergized, a device on the vehicle moving in accordance with its actual speed, means whereby the vehicle may be retarded, a device on the vehicle to determine a permissible speed for the vehicle and adapted when actuated to move from a higher speed position to a lower speed position, means for actuating the permissible speed device from the actual speed de-

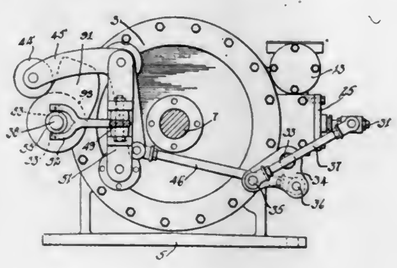
vice through power-transmitting mechanism, electrical connections brought into play to actuate the retarding device whenever the actual speed equals the permissible speed, and means for interrupting the function of the said power-transmitting mechanism whenever the electro-magnet on the vehicle is energized.

1,827,407. AUTOMATIC SPEED CONTROL SYSTEM. PAUL J. SIMMEN, Buffalo, N. Y., assignor to Simmen Automatic Railway Signal Company, Eden, N. Y., a Corporation of Arizona. Filed July 20, 1917. Serial No. 181,918. 12 Claims. (Cl. 246—49.)



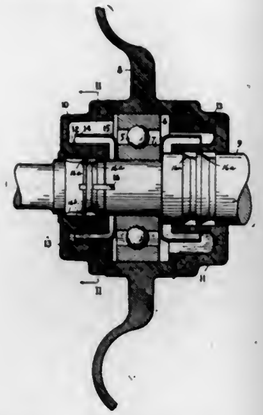
1. In a speed control system for railway vehicles, a track, a vehicle thereon, a permissible speed device on the vehicle, an actual speed device on the vehicle, intermittent means along the trackway for setting said permissible speed device in a plurality of different permissible speed positions, means including electrical devices on the vehicle for maintaining said device in the position in which it has been set by the means along the trackway after the vehicle has passed said means, means for retarding the vehicle, and slow acting means for actuating the retarding means when the actual speed of the vehicle exceeds the prmissible speed at which the permissible speed device is set.

1,827,408. ROTARY ENGINE. S. SAGUE VIDETTO, Minatare, Nebr. Filed June 21, 1926. Serial No. 117,438. 18 Claims. (Cl. 121—75.)



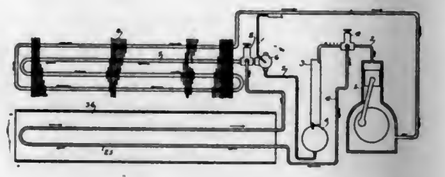
1. A rotary engine comprising a stator, a rotor rotatably mounted in said stator, a piston rigidly mounted upon said rotor extending radially therefrom and engaging with the inner walls of said stator, an abutment, steam-actuated means for moving said abutment into and out of engagement with said rotor, and positive means for rigidly holding said abutment in engagement with said rotor until said rotor reaches a predetermined point in its rotative travel.

1,827,409. SHAFT BEARING. EDWARD H. WARING, Essex Fells, N. J., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J., a Corporation of New Jersey. Filed July 9, 1925. Serial No. 42,385. 7 Claims. (Cl. 308—134.)



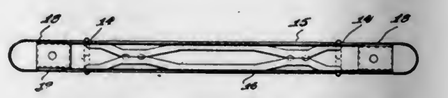
1. In a bearing, a shaft having a beveled shoulder inclined toward the bearing, a cap for the bearing with an opening therethrough for the shaft which is suitably spaced from the shaft opposite the shoulder to maintain a capillary seal, the shaft having an air-vent groove under the seal.

1,827,410. DEFROSTING REFRIGERATION SYSTEM. VIRGIL P. WARREN, Atlanta, Ga. Filed Apr. 18, 1930. Serial No. 445,371. 9 Claims. (Cl. 62—103.)



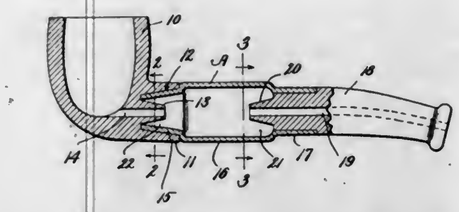
1. Defrosting refrigeration circulation system including a compressor and a refrigerating coil, a pan underlying said coil, a drain from said pan, and parallel branches between the pressure side of said compressor and said coil, one of said branches including a condenser, and the other of said branches having a portion arranged adjacent the drain of said pan and in heat exchanging relation thereto, and means for selectively determining the path of flow of said refrigerant through one or the other of said branches.

1,827,411. BASE MEMBER FOR LOOSE LEAF BINDERS. RICHARD M. WATSON, Detroit, Mich. Filed Nov. 11, 1927. Serial No. 232,493. 9 Claims. (Cl. 129—24.)



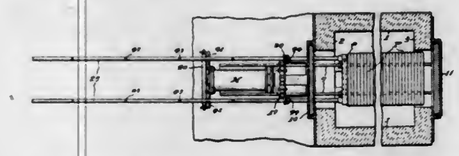
1. A hook carrying toggle plate for loose leaf binders, comprising a single length of wire having its ends bent to form spaced retaining hooks, substantially oval in cross section and having the portion between the retaining means flattened.

1,827,412. SMOKING PIPE. ROY J. C. WELCH, Boston, Mass., assignor of one-third to Dudne Murray Breeze, Cambridge, Mass. Filed Nov. 15, 1927. Serial No. 233,502. 1 Claim. (Cl. 131—12.)



A smoking pipe comprising a bowl member made adjacent its lower end and upon its exterior with a socket and having an outlet conduit communicating at its inner end with the interior of said bowl near the bottom thereof, and having its outer end portion constituted in part by an integral tubular extension of said bowl member centrally disposed within said socket and projecting outwardly well beyond the bottom of the latter; a single tubular one-piece intermediate stem member that is circular in cross section of relatively large interior diameter having one end portion thereof reduced in diameter telescopically fitted directly within said socket around but out of contact with said tubular extension and so that it is directly coupled to said bowl member, and a mouthpiece member having an end portion of reduced diameter telescopically fitted within the outer end of said intermediate stem member.

1,827,413. FURNACE DISCHARGING APPARATUS. EDWARD F. AMENT, Youngstown, Ohio. Filed Mar. 1, 1930. Serial No. 432,499. 9 Claims. (Cl. 214—23.)



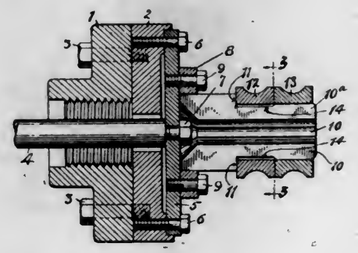
1. Apparatus of the character described, comprising a pusher platen adapted to extend transversely of the skids in a furnace, spaced plungers extending rearwardly from the platen, and a guide plate adapted for operative connection with the pusher platen of the furnace charging mechanism and provided with spaced openings for the passage of the plungers.

1,827,414. WAGON GRADER. CHARLES E. BALL, Turlock, Calif. Filed Sept. 16, 1929. Serial No. 393,069. 2 Claims. (Cl. 37—127.)



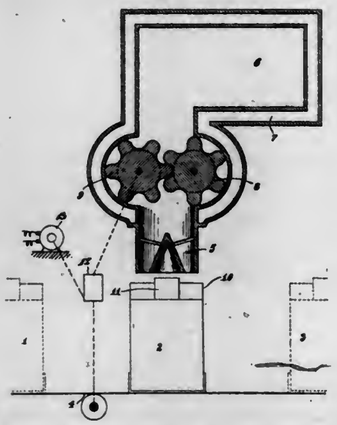
1. In a machine of the kind specified, a traction wheel, a shaft, a sprocket wheel rigid with the latter, a pulley rigid with said traction wheel, a sprocket chain trained over the latter and said sprocket wheel and normally disengaged from the former, a crankshaft, an idler on the crank thereof disposed to tighten said chain about said pulley to cause the latter to propel said chain, a lever on said crank-shaft for rocking the same to throw said idler into and out of engagement with said chain, means associating said first-named shaft with a tiltable scoop, a ratchet wheel on said shaft, a spring-held pawl normally engaging said ratchet wheel, a rocking lever operatively associated with said pawl for disengaging the same from said ratchet wheel, a hand lever pivotally mounted on said first-named lever, a rod connecting said hand lever with the lever associated with said pawl, the connection between the last-named lever and said rod being such that said crank-shaft rocking lever may be operated without disturbing the relation of the pawl and ratchet wheel while enabling the said hand lever to be operated at any point in the movement of said crank-shaft rocking lever to cause the said pawl to be disengaged from the ratchet wheel.

1,827,415. CHUCK. CLARENCE G. BIDWELL, Bristol, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 12, 1929. Serial No. 399,134. 9 Claims. (Cl. 279—46.)



1. In a chuck of the character described, a head, a flexible diaphragm, a plurality of sets of concentric chuck jaws mounted thereon at their inner ends only for engaging a plurality of work pieces thereon.

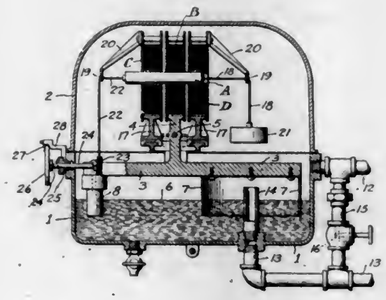
1,827,416. DRY CELL SEALING DEVICE. WILFRED T. BIRDSALL, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 27, 1925. Serial No. 26,027. 4 Claims. (Cl. 226—80.)



1. In a device for sealing dry cells having centrally exposed electrodes, a reservoir of sealing material, a gear

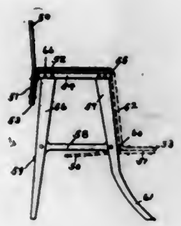
pump, a connection between said reservoir and said gear pump, an annular nozzle leading from said gear pump toward a dry cell to be sealed, means for moving said dry cell into registry with said nozzle, said pump being effective to rotate in one direction to exert pressure on the material in said nozzle only while said dry cell is stationary, and to rotate in the opposite direction to apply suction to said material to prevent it leaving the nozzle only while said dry cell is in motion.

1,827,417. CONTROL SYSTEM. EDWARD S. BRISTOL, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 19, 1927, Serial No. 234,410. Renewed Mar. 7, 1931. 18 Claims. (Cl. 236—14.)



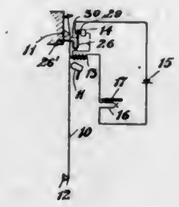
1. In a balance structure, the combination with a deflecting arm, of means for exerting upon said arm a force representative of the magnitude of a condition, relatively fixed and movable control members exerting an opposing force upon said arm, one of said members being a coil and another of said members being means for effecting a magnetic field, and means for adjusting the force exerted by said control members per unit of control current comprising a magnetizable core member adjustable with respect to said coil.

1,827,418. CHAIR. WILLIAM H. BROWN, Cleveland, Ohio. Filed Oct. 10, 1929. Serial No. 398,615. 10 Claims. (Cl. 155—42.)



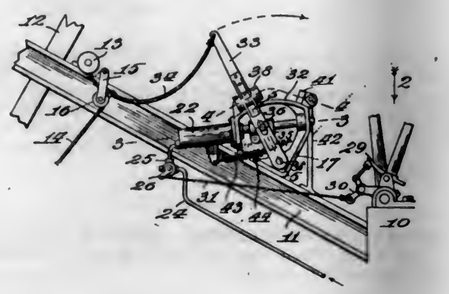
3. In a device of the character described, a stool portion, a movable member including a seat portion and operatively connected to said stool portion, said device including means whereby in one position of said movable member it provides a lower step and said stool portion provides an upper step and in another position of said movable member it provides a seat and covers a portion of said step, said lower step being superposed upon said upper step in the second mentioned position.

1,827,419. ELECTRICAL SOSTENUTO PIANO. SIMON COOPER, Brooklyn, N. Y. Filed Mar. 25, 1927, Serial No. 178,207. Renewed Mar. 14, 1931. 25 Claims. (Cl. 84—261)



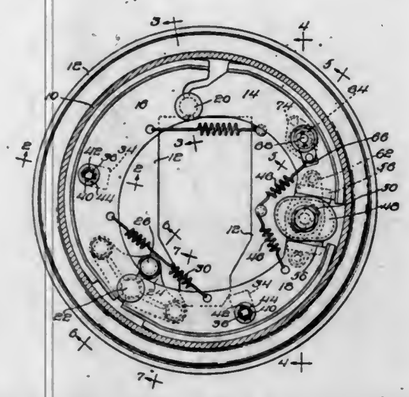
1. In a device of the kind described, a vibratile string, a resilient support mounted to vibrate in sympathy with the string, a pulsator, means for coupling the pulsator to the string for vibration therewith and including said support, a magnet in circuit with the pulsator and adapted to actuate the string, and an auxiliary means for coupling the pulsator to the string for vibration therewith including a mechanical connection between the pulsator and its support, and the string.

1,827,420. DIPPER DOOR LATCH RELEASE. LAGAR R. CULVER, Los Angeles, Calif., assignor to Frederick Falkner, Los Angeles, Calif. Filed July 17, 1929. Serial No. 378,905. 6 Claims. (Cl. 214—146.)



1. In a dipper door latch release, a frame adapted to be positioned on the boom of a steam or gas-air shovel, an arm mounted for swinging movement on said frame, an arcuate member at the top of said frame, which arcuate member is concentric with the axis of the swinging arm, a connection from said arm to the latch of the dipper door that is carried by said boom, fluid pressure actuated means for moving said arm in one direction, a spring connected to said arm for moving same in the opposit direction, and cooperating means carried by said arm and arranged on the ends of the arcuate top member of the frame for cushioning said swinging arm at both ends of its swinging movement.

1,827,421. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 6, 1928. Serial No. 283,239. 7 Claims. (Cl. 188—78.)



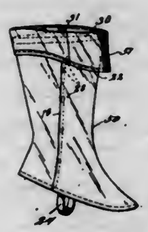
1. A brake comprising, in combination, a stationary support, a bracket adjustably mounted on the support and having a boss formed with a spool-shaped portion, and friction means including shoes having their webs formed with semi-circular sockets embracing the spool-shaped portion of said boss.

1,827,422. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Sept. 27, 1928. Serial No. 308,600. 11 Claims. (Cl. 188—79.5.)



1. A brake comprising, in combination, friction means, and a stop determining the released position of the friction means and including a part engaged by the friction means when the brake is released and which part is adjustable angularly in a plane substantially perpendicular to the plane of the brake.

1,827,423. HOSIERY PROTECTOR. JOSEPH DRAIKIN, Chicago, Ill. Filed Sept. 19, 1928. Serial No. 306,829. 1 Claim. (Cl. 36—2.)



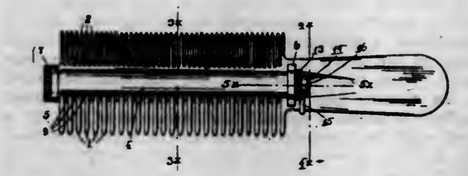
A protector for hosiery constructed of a very thin and transparent water proof material, which is adapted to snugly fit around the leg of a person for protecting the hosiery, the uppermost portion of said protector flaring upwardly and outwardly, whereby the said upper portion may be turned down to give the appearance of a pirate boot, and a strap provided on the inner side of the protector adjacent the upper edge thereof adapted to surround the calf portion of the leg and to be securely fastened thereabouts for maintaining the said protector in an upstanding position, said protector being adapted to be folded into a small and compact package which may readily fit into a lady's handbag.

1,827,424. SHOE LACE FASTENING DEVICE. FRANCIS P. ELLSWORTH, New York, N. Y. Filed Jan. 14, 1931. Serial No. 508,585. 7 Claims. (Cl. 24—120.)



7. In a lace fastening device of the character described, clamping means for releasably holding portions of a lace spaced from each end and comprising relatively movable parts, a cam lever carried by one of said parts adapted to clamp and release said parts with respect to each other, and means for fixedly securing the end portions of the lace.

1,827,425. COMB. VERNON S. ELLZEY, Rochester, N. Y. Filed Dec. 22, 1930. Serial No. 503,996. 2 Claims. (Cl. 132—13.)

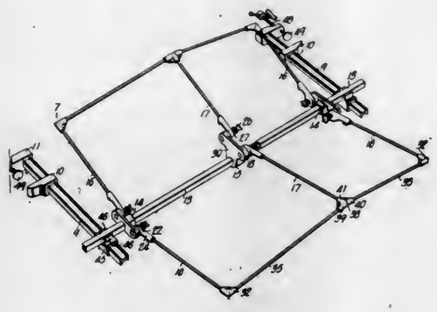


1. A comb having a longitudinal channel provided therein, teeth projecting from the edge of said longitudinal channel with grooves provided between the inner ends of said teeth and leading out of said channel, a reservoir located in said channel, said reservoir having outlet openings therein in line with the grooves between said teeth and controlling means for controlling the flow of liquid from the reservoir into said grooves.

1,827,426. MOLDING MATERIAL AND MOLD. CARL HUGO MAGNUS ELMQUIST, Stockholm, Sweden. Filed Jan. 25, 1930, Serial No. 423,551, and in Sweden Jan. 31, 1929. 6 Claims. (Cl. 22—188.)

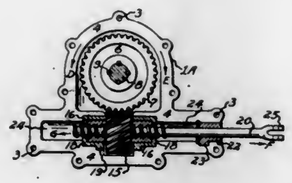
1. Molding material, consisting of a mixture of solid substances suspended in a suitable liquid, said mixture comprising a highly refractory material, a cement, a silicate and a glycerine.

1,827,427. CANOPY. WALTER G. FINCHER, Kansas City, Mo. Filed Aug. 23, 1929. Serial No. 387,953. 9 Claims. (Cl. 135—5.)



9. A canopy including a roof inclined downwardly toward the longitudinal edges thereof and inclined downwardly inwardly from the end edges thereof.

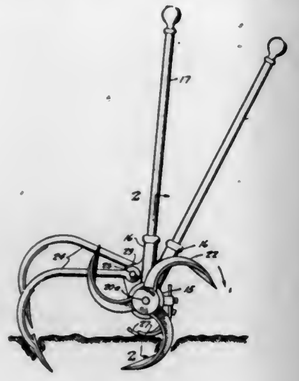
1,827,428.. STEERING DEVICE FOR AUTOMOBILES. ROBERT A. FRONE, Detroit, Mich. Filed June 9, 1930. Serial No. 459,998. 1 Claim. (Cl. 74—79.)



A steering device in combination with a housing enclosure therefor, a mechanism within the said housing comprising a spiraliformed driving gear, the said gear mounted and keyed upon a horizontal shaft that is journaled within the said housing, the said shaft connected to the steering mechanism of the vehicle through intermediate elements, a spiraliformed driven gear directly in mesh with the aforesaid driving gear, a laterally extending integral sleeve portion upon each side of the said driven gear, the said sleeve portions journaled within respective bushings, and the said bushings forming end thrust bearings for the said sleeve portions, the said bushings being stationary with the aforesaid enclosure; a horizontal shaft disposed at right angles to the first-named shaft, and having spiraliformed external threads upon a portion of the same, and the said threads to engage a similar internally threaded sleeve through the atoresaid driven gear of the device; the outer end of the last-named shaft secured to an arm, and the opposite end of the said arm secured to the tie rod of the vehicle, and both of the said joints being free to oscillate, in order that the front wheels of the vehicle may be controlled by the mechanism of the device in direct response to the action of the steering wheel of the vehicle.

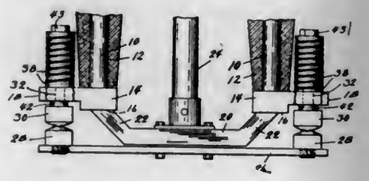
1,827,429. MECHANICAL SPADER. HAROLD H. GLASIER, Los Angeles, Calif. Filed June 3, 1929. Serial No. 367,914. 9 Claims. (Cl. 97—58.)

1. A tillage device comprising a frame, a pair of propellers journalled on said frame and having involute shaped arms with spading surfaces, a pair of operating levers oscillatable on said frame, and one way clutch



means connecting each lever to said propellers whereby the levers may be oscillated to and from each other to cause said propellers to be rotated.

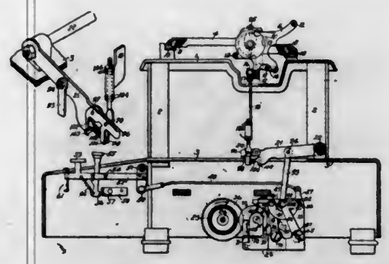
1,827,430. ELECTRIC SWITCH AND CONTACT STRUCTURE. TALMA T. GREENWOOD, East Templeton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed June 29, 1929. Serial No. 374,837. 28 Claims. (Cl. 200—87.)



1. An electric switch including the combination of a fixed current conducting stud terminated in a main contact block, a resilient solenoid having one end fixed to and electrically connected with said block and its other end free, an auxiliary contact member carried by the free end of said solenoid and disposed below said main contact block, a second and relatively unyieldingly supported auxiliary contact member adapted to be moved into engagement with the contact member of said solenoid whereby to include said solenoid in the electric circuit including said auxiliary contact members, said solenoid adapted when traversed by heavy currents to flex in a direction toward said second auxiliary contact member and urge said auxiliary contact members into engagement by reason of the magnetic reactions set up by the current traversing the turns thereof.

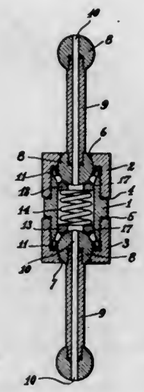
1,827,431. TYPEWRITING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Dec. 28, 1927, Serial No. 242,992. Renewed Feb. 24, 1931. 2 Claims. (Cl. 197—17.)

1. In case shift mechanism, the combination with a part to be shifted, of a continuously rotating driver, a cam, a clutch adapted to connect said cam intermittently with said driver, a case shift key, means controlled by said key for closing said clutch during a partial operation of said cam and then opening the clutch by the downstroke of the key and for closing the clutch during the completion of the operation of the cam and opening it at



the end of such operation by the up stroke of the key, and means whereby the first partial operation of the cam shifts said part and whereby the second partial operation of the cam results in the restoration of said part.

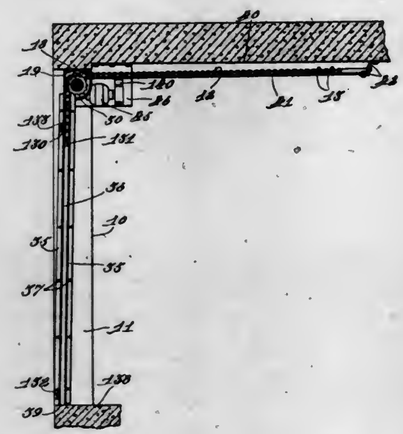
1,827,432. FLEXIBLE JOINT. WALTER F. HUNDEMER, Alameda, Calif., assignor, by mesne assignments, to Gat Gun Lubricating Corporation, Oakland, Calif., a Corporation of California. Filed Dec. 27, 1923. Serial No. 682,933. 2 Claims. (Cl. 285—92.)



1. A flexible joint comprising two tubes terminating in balls, an annular cup slidable on each tube and formed with a central seat in the bottom allowing one-half of the ball to revolvably rest therein, while the side of the cup is spaced from the projecting half of the ball so as to form an annular groove therewith, a cup washer in the groove having flanges fitting the walls of the grooves respectively, a sleeve allowing two cups to be threaded thereon from opposite sides, and having its inner edge tapered to bear on the outer flanges of the cup washer, while exposing the inner flanges to a pressure medium passing thru the joint, and spring-separated presser rings bearing against the projecting sections of the ball and grooved along the ball surface to allow the pressure medium to pass below the same to the cup washer.

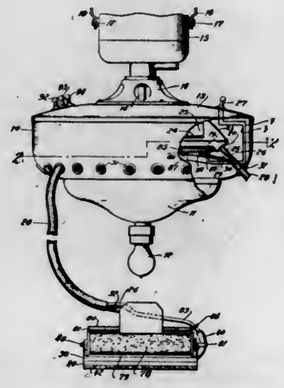
1,827,433. SLIDING DOOR. WALTER H. KENDALL, Chicago, Ill., assignor to Nathan T. Ladenson, Evanston, Ill. Filed Sept. 5, 1929. Serial No. 387,141. 11 Claims. (Cl. 189—51.)

10. The combination with a rotatable shaft, of a flexible door mounted for sliding movement relative to said shaft, cooperating means on said door and shaft to establish a driving connection therebetween, motor power means for rotating said shaft to elevate or lower said door, and transversely spaced longitudinal series of anti-



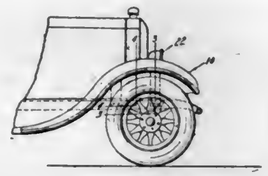
friction means disposed between and along said door and shaft to effect the support of said door intermediate the edges thereof.

1,827,434. METHOD AND APPARATUS FOR HAIR WAVING. CHRISTIAN H. MCINTIRE, Chicago, Ill. Filed Apr. 5, 1929. Serial No. 352,685. 10 Claims. (Cl. 132—36.)



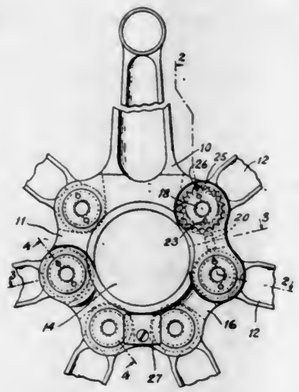
1. A device of the kind described comprising a housing, electrical distribution devices therein and having conductors extending through the walls thereof that have remote ends beyond said housing, an air chamber within said housing, air tubes leading from said chamber through the housing to adjacent the remote ends of said conductors, a fan within said chamber, heating elements connected with the remote ends of said conductors, devices associated with said heating elements for holding strands of hairs to be treated, and means connected to said devices and communicating with said tubes whereby a current of air is passed over scalp adjacent said devices.

1,827,435. RESILIENT AUTOMOBILE FENDER. MATTHEW NASTRI, Akron, Ohio. Filed Sept. 12, 1927. Serial No. 218,911. 2 Claims. (Cl. 280—152.)



2. A fender for automobiles said fender comprising a body of laminated, rubberized material, the edges of said fender where it is to be connected to the adjacent parts of the vehicle having rigid strips embedded therein and overlain by laminations of the body of the fender so that a portion of said strip is exposed for attachment, said strips being anchored by said laminations and also by vulcanization to the body of the fender.

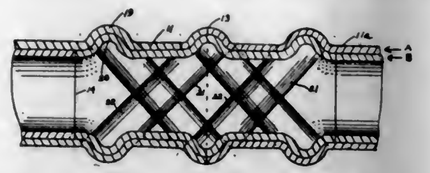
1,827,436. CONNECTING ROD FOR RADIAL ENGINES. PHILIP P. NEWCOMB, Hartford, Conn., assignor to The Pratt & Whitney Aircraft Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 10, 1929. Serial No. 391,558. 7 Claims. (Cl. 74—17.)



1. A connecting rod construction comprising in combination, a master rod, a strap member on one end of said master rod, a plurality of articulating rods, pins pivotally connecting said articulating rods to said master rod and to said strap member, a hinge connection between said master rod and strap member on one side of said strap member, one of said pins forming the pintle of said hinge, and means connecting the opposite side of said strap member to said master rod.

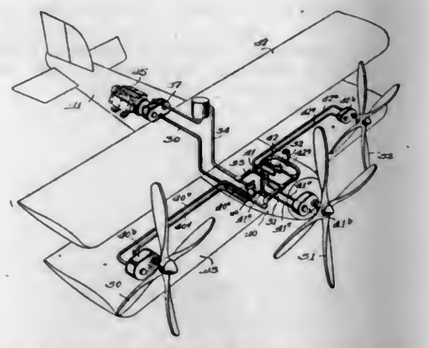
1,827,437. METHOD OF MAKING REENFORCED DRILL PIPE CASINGS. ALFRED H. PASCOE, Los Angeles, Calif. Filed Dec. 7, 1929. Serial No. 412,403. 9 Claims. (Cl. 29—156.)

1. The method of producing drill pipe casings which consists in nesting telescoping tubular sections in a manner to provide an outer and an inner length of metal tubing, the inner sections being staggered with relation to the outer sections and both the outer and inner sections having their opposing edges abutting, next upsetting both



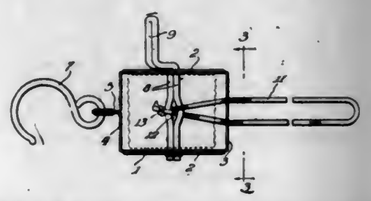
lengths of metal tubing internally to produce intersecting rows of spiral beads longitudinally of both tubings, and lastly resistance-welding the spiral beads as they are progressively made.

1,827,438. AIRPLANE. JOHN D. RAUCH, Lima, Ohio. Filed Sept. 10, 1928. Serial No. 305,061. 3 Claims. (Cl. 244—25.)



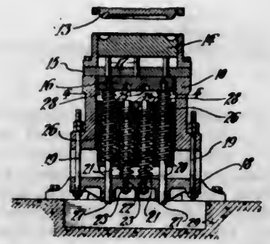
1. In an airplane having laterally extending wings, a plurality of propellers each provided with a hydraulic motor supported in laterally spaced relation on said wings and hydraulic transmission system for said propeller motors including a centrally disposed motor and a pump driven thereby, a high pressure line, a pressure valve, a low pressure line, and independent control means operatively connected with each of said propeller motors and interposed in parallel between said high and low pressure lines.

1,827,439. CLOTHESLINE REEL. GEORGE H. REIMER, Fulton, Ill., assignor to Patent Novelty Company, Fulton, Ill., a Corporation of Illinois. Filed Apr. 18, 1929. Serial No. 356,033. 4 Claims. (Cl. 242—100.)



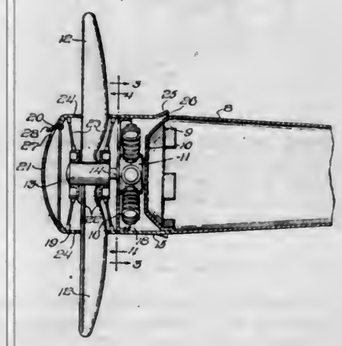
4. In a clothes line reel, means forming a body, and a wire bent back upon itself to provide a rotary double portion forming the axle or drum of the reel, and to provide a handle comprising parallel portions of the wire, together with a double line attached with its two portions extending oppositely between the wires at the middle of the drum.

1,827,440. SPRING CUSHION FOR PRESSES. FREDRICH J. RODE, Chicago, Ill., assignor to Marquette Tool & Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1929. Serial No. 336,303. 12 Claims. (Cl. 267—1.)



1. In combination, a press, a reciprocable ram, a pressure pad with which the ram cooperates, a cushion for resisting the movement of the pad in one direction, said cushion embodying an abutment member, a fixed support, and between which support and pad said member is disposed, springs the opposite ends of which engage the said abutment member and said pad, and additional springs, the opposite ends of which latter respectively engage said abutment member and said support, all of said springs being of substantially the same resistance stress.

1,827,441. AIRPLANE. JOHN SQUIRES, Detroit, Mich. Filed Mar. 8, 1929. Serial No. 345,302. 5 Claims. (Cl. 244—14.)



2. In an aircraft, in combination, a fuselage, an engine supported at the forward end thereof, a propeller in advance of said engine driven therefrom, a hood encircling said engine, a hood encircling the central portion of said propeller and merging into the first mentioned hood, the last mentioned hood being rotatable with said propeller and being provided with a nose, and means comprising scoops secured to and rotatable with said nose for inducing a flow of air through said hoods upon rotation of said propeller.

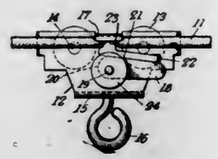
1,827,442. METHOD OF PRODUCING AND APPLYING TABBED WRAPPERS. JOHN S. STOKES, Huntingdon Valley, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 21, 1928. Serial No. 294,483. 19 Claims. (Cl. 93—54.)

14. The method of applying a tabbed wrapper to a box which comprises, adhesively securing tab structure to the box-engaging face of the wrapper along lines forming boundaries of wrapper panels having turn-in flaps, and before setting of the adhesive, applying the wrapper and tab structure to the exterior of a box with the tab structure overlying the box edges formed by the box bottom and the walls covered by said wrapper panels.



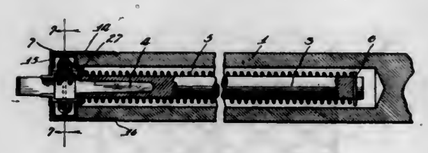
19. A tabbed wrapper comprising a wrapper having tabs thereon at least one of which is disposed along a line extending between corner notches at opposite ends of a wrapper panel having turn-in flaps.

1,827,443. CURTAIN CARRIER. WALTER H. TOELLE, Wallingford, Conn., assignor to H. L. Judd Company, Inc., Wallingford, Conn., a Corporation of Delaware. Filed Jan. 15, 1931. Serial No. 508,918. 5 Claims. (Cl. 56—20.)



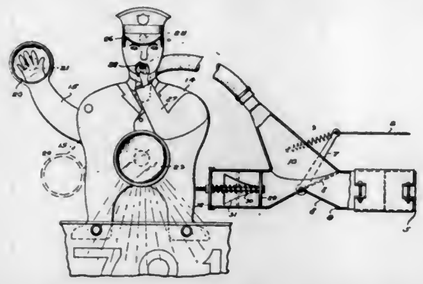
5. A curtain carrier comprising, a carrier body, an anti-friction roller pivoted thereto, a clamping lever pivoted to said carrier body, and a shoe pivoted to said carrier body, said clamping lever having a cam surface adjacent to one end thereof, said cam surface coacting with said shoe so that when said clamping lever is operated a curtain cord will be clamped between said shoe and said carrier body.

1,827,444. SHADE ROLLER. JOHN K. TOMLINSON, Chicago, Ill. Filed Feb. 13, 1928, Serial No. 253,855. Renewed Mar. 2, 1931. 4 Claims. (Cl. 156—36.)



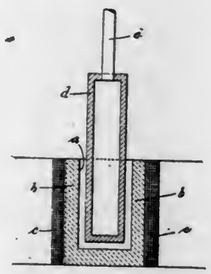
2. A shade roller construction comprising a roller, a pawl carrier, a pawl mounted on said carrier and housing means for said pawl carrier and pawl, said pawl carrier comprising a disk on which said pawl is pivotally mounted, said housing means comprising two cup members embracing between them said pawl carrier and pawl, said housing means and pawl carrier being secured to rotate with said roller, said pawl comprising a portion operating in the space between said disk and one of said cup members.

1,827,445. AUTOMATIC QUICK STOP SIGNAL. PAUL WILLIAM TOYE, New Orleans, La. Filed May 6, 1930. Serial No. 450,217. 9 Claims. (Cl. 116—39.)



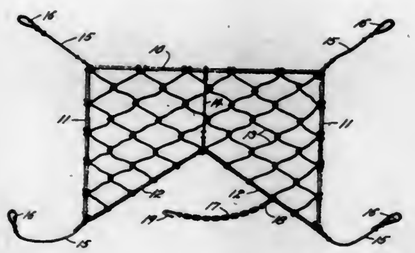
1. A warning signal comprising the representation of a human figure, a pivoted rigid swinging arm and a vane secured to said arm, a pressure chamber in which said vane moves, and means for directing the exhaust fluid of the motor vehicle into said chamber.

1,827,446. PROCESS OF MAKING REFRACTORY LININGS. SIGURD WESTBERG, Oslo, Norway. Filed Aug. 14, 1928, Serial No. 299,577, and in Germany Apr. 26, 1928. 9 Claims. (Cl. 25—157.)



4. The method of preparing refractories for use in furnaces which includes baking the refractory by placing an induction coil to the outside thereof and a core on the inside, and applying current to the coil.

1,827,447. SLING FOR MOVING TREES. CHARLES C. WILMORE, Wheatridge, Colo. Filed Jan. 20, 1931. Serial No. 509,946. 9 Claims. (Cl. 55—119.)



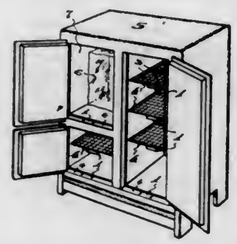
1. A lifting sling comprising: a flexible fabric-like member, one side of said member being inset adjacent its midportion; and a tie member for securing the two sides of the inset portion together.

1,827,448. MANIFOLDING PAPER HOLDER. WILLIAM J. WISWALL, Portland, Oreg., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Canada. Filed May 27, 1925. Serial No. 33,263. 10 Claims. (Cl. 282—12.)



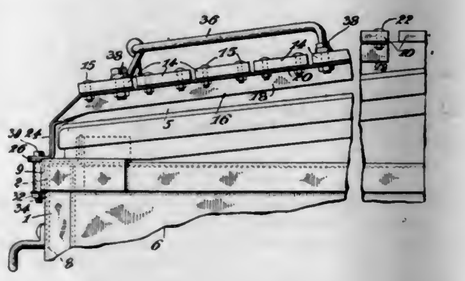
1. In an autographic register, in combination, a writing table over which one or more record strips may be led into writing position, supports mounted on the register having channels disposed at an angle to the surface of the writing table and facing each other, a floating strip guide and support mounted in said channels, said channels extending to points substantially flush with the writing surface of the writing table, one of said channels being permanently closed at its outer end and a retractable retaining member for said floating guide closing the outer end of the other channel.

1,827,449. METHOD OF DESIGNATING TEMPERATURE ZONES IN ICEBOXES. BURRIS D. WOOD and WILLIS WILLIAM RODGERS, Dallas, Tex. Filed July 15, 1930. Serial No. 468,078. 2 Claims. (Cl. 40—2.)



1. The herein described method which consists initially in predetermining the varying degrees of temperature at different points in said ice box and in affixing a label at each of said points designating the temperature and specifying the commodities best suited for the designated temperature.

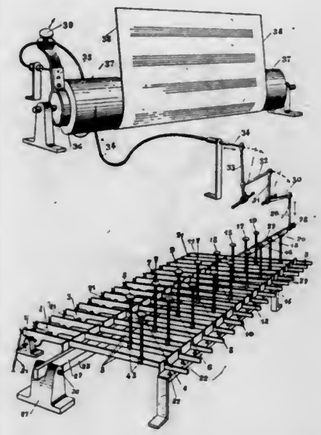
1,827,450. RUNNING BOARD FOR CARS. JOSEPH C. ABEL, Westwood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 14, 1930. Serial No. 428,383. 15 Claims. (Cl. 105—457.)



1. In a car having a body frame member and a running board, a rail supporting said running board and resting on said frame member, a portion of said rail extending beyond the bearing on said frame member and means attaching said rail to said frame member.

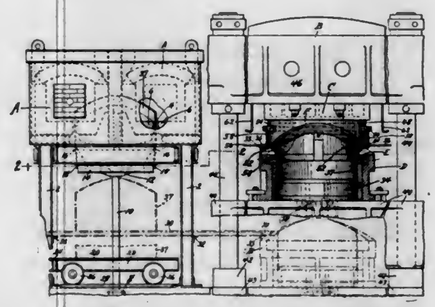
2. In a car having a body frame member and a running board, a rail supporting said running board and bearing on said frame member, a bracket attached to said frame member and a connection between said rail and bracket.

1,827,451. MACHINE FOR TYPEWRITING MUSIC. LOUIS AILLARD, Plan de Cuques, near Marseilles, France. Filed Aug. 30, 1929. Serial No. 389,399, and in France July 23, 1929. 5 Claims. (Cl. 197—8.)



1. A device for use with any ordinary typewriter to enable music as well as ordinary text to be typed therewith, comprising in combination: a set of keys, a plurality of control levers actuated by said keys, springs controlling said control levers, a single transmitting lever adapted to be depressed to different extents by said control levers, a collar detachably fixed to the platen of the typewriter, and a flexible cable for transmitting motion from said transmitting lever to said collar in such manner as to turn the collar and the platen, substantially as and for the purpose specified.

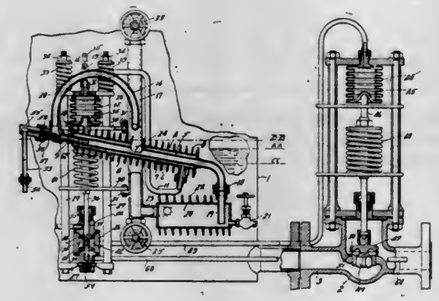
1,827,452. METHOD OF AND APPARATUS FOR FLANGING METAL. CHARLES J. ANCHOR, Milton, Pa., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 16, 1929. Serial No. 347,555. 14 Claims. (Cl. 153—21.)



1. In a press, initial formers adapted to be interposed between the die members thereof for initially acting on the work at spaced predetermined portions only, said formers being removable to inoperative position to permit normal action of the die members.

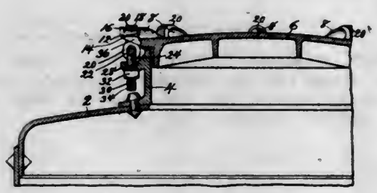
11. The method of flanging tank dome sheets which includes heating one end of a dome sheet and then subjecting said heated end to at least two pressings one of which flanges diametrically opposite portions only and the other of which flanges the entire circumference of the heated end including the previously flanged portions.

1,827,453. DRAINAGE CONTROL SYSTEM. JOSEPH M. BARRETT, Cleveland Heights, Ohio, assignor to Bailey Meter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,333. 13 Claims. (Cl. 236—54.)



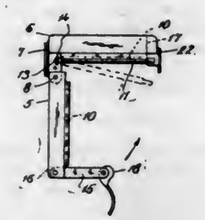
1. The combination of a container for water and steam, a generator spanning the normal water level therein and having a pipe communicating with the steam and water spaces in said container and a trapped generator chamber member in heat conducting relaton with said pipe, valve means controlling the water in said container, a movable abutment for actuating said valve, connecting means for applying the effect of container pressure to said abutment, and means controlled by variation in the pressure in said trapped chamber for varying the application of said effect to said abutment for regulating actuation of said valve means.

1,827,454. SECURING MEANS FOR CAR TANK DOME CLOSURES. JOHN BEYER, Bayonne, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 4, 1929. Serial No. 352,422. 11 Claims. (Cl. 220—55.)



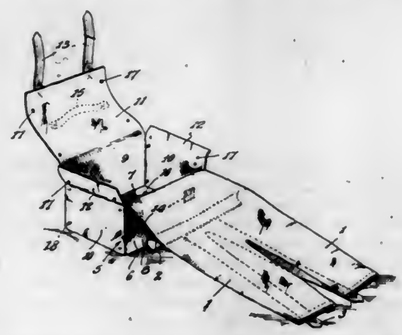
1. In a container, a cover therefor, a cover support, and means for securing the cover to the support comprising projections extending radially of the cover, bolts connected with the cover support and longitudinally movable relative thereto, and yokes pivotally secured to the bolts and engaging the projections.

1,827,455. METHOD AND APPARATUS FOR WAVING HAIR. HARRY BONAT, New York, N. Y. Filed July 17, 1929. Serial No. 378,880. 4 Claims. (Cl. 132—36.1)



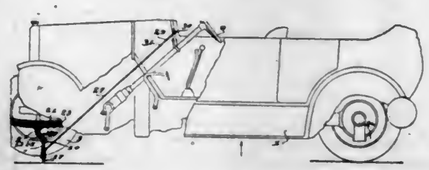
1. In a device for permanently waving hair, a clamp having opposed relatively movable arms each provided with a groove, a rod supporting resilient means in one of the grooves, the resilient means being adapted to co-operate with the groove in the opposite arm to firmly grip the hair, and means for locking the arms in closed position.

1,827,456. COMBINATION GARMENT AND KIT. ROBERT J. BOOTH, Dannemora, N. Y. Filed Sept. 9, 1929. Serial No. 391,400. 1 Claim. (Cl. 2—227.)



A combination garment and kit comprising a bifurcated nether garment, the nether garment at the front thereof being provided with a relatively long extension and at the back thereof with a pair of straps, the extension intermediate the ends thereof being provided with side flaps, the outer end of said extension and said flaps being adapted to be folded inwardly to provide a bib which in combination with said nether garment provides overalls, the extension being provided with means for engagement by said straps for holding said bib in wearing position, and the extension and flaps being adapted to be folded and secured together to provide a kit.

1,827,457. PARKING DEVICE. RUSSELL WILSON BRANSON, Kansas City, Mo., assignor of one-half to John E. Schultz, Groesbeck, Tex. Filed June 13, 1929. Serial No. 370,637. 6 Claims. (Cl. 180—1.)



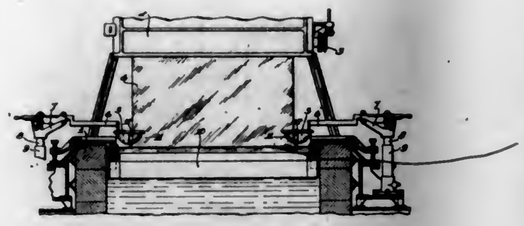
1. In combination with an axle and a drag link, a frame hinged to the axle for movement toward the ground, a shaft journaled on the frame, a wheel to touch the ground and cause the lifting of the axle through the frame and its hinge connection when moving the axle in one direction, said wheel having bearing at one end of the shaft to roll in the direction of the length of the axle, and means on the other end of the shaft to couple the shaft with the drag link enabling turning of the shaft hence steering of the wheel.

1,827,458. BEVERAGE MIXING FAUCET. WILLIAM T. COMER, Atlanta Ga., assignor to Crystal Carbonic Laboratory, Atlanta, Ga., a Corporation of Georgia. Filed Jan. 6, 1930. Serial No. 418,781. 5 Claims. (Cl. 225—26.)



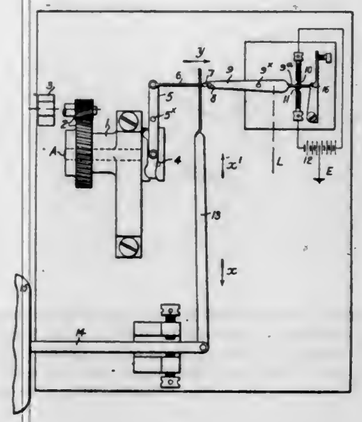
1. A beverage dispensing faucet comprising, in combination, a cylindrical faucet body having aligned syrup measuring, syrup dispensing, and water chambers, each except the last having an outlet delivering to the next in the order named, means to control said outlets, the syrup measuring outlet being normally open and the remaining outlets normally closed, common means to actuate said controlling means to reverse their condition whereby to discharge syrup into the water chamber and the mixture from the water chamber outlet.

1,827,459. APPARATUS FOR MAKING SHEET GLASS. ROY C. CONN, Clarksburg, W. Va., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed May 27, 1930. Serial No. 456,256. 2 Claims. (Cl. 49—17.)



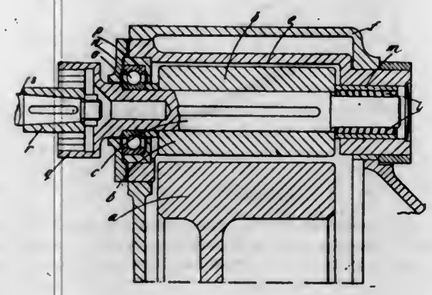
1. The combination with apparatus arranged to draw a glass sheet from a pool of molten glass, of means for preventing an inward movement of the edge of the sheet in said pool comprising a shielding bowl of metal above the surface of the pool, but closely adjacent thereto, and having a slot extending inward from its edge and fitting around the edge of the sheet, said bowl having an opening cut through its walls on each side of the slot adjacent thereto.

1,827,460. REGENERATOR. FREDERICK GEORGE CREED and REGINALD DENNIS SALMON, Croydon, England, assignors to Creed and Company, Limited, Telegraph Works, Croydon, England. Filed Dec. 22, 1928, Serial No. 327,938, and in Great Britain Dec. 24, 1927. 27 Claims. (Cl. 178—69.5)



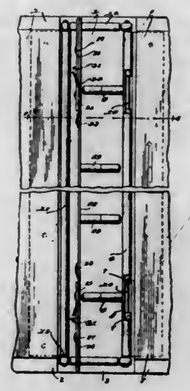
1. Telegraphic reproducing apparatus comprising signal reproducing means adapted to remain in the position into which it was last moved, independent means positioned in accordance with received signals, and means subsequently acting once in each signal period to cause the said independent means to act on the signal reproducing means.

1,827,461. DEVICE FOR STARTING INTERNAL COMBUSTION ENGINES. LOUIS PAUL CROSET, Strood, England. Filed Nov. 19, 1929, Serial No. 408,239, and in Great Britain Nov. 19, 1928. 5 Claims. (Cl. 74—7.)



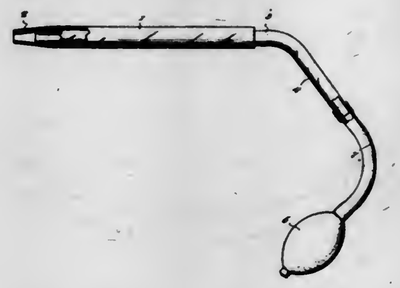
4. An internal combustion engine comprising a flywheel and a starting device mounted adjacent the said flywheel, the said starting device comprising a substantially cylindrical housing rotatable about its longitudinal axis, a friction driving member rotatably and eccentrically mounted in the housing, means for rocking the housing about its longitudinal axis to cause the friction driving member to move into and out of contact with the flywheel and means for rotating the friction driving member through the medium of annular gearing, one of the members of the latter being co-axial with the housing and the other being co-axial with the friction driving member.

1,827,462. LOOSE LEAF BINDER. FRANK H. CRUMP, Los Angeles, Calif. Filed Mar. 5, 1930. Serial No. 433,354. 11 Claims. (Cl. 129—8.)



1. In a loose leaf binder, top and bottom cover sections, a back section connecting the top and bottom cover sections, longitudinally extensible and contractible posts hingedly connected at each end to said top and bottom cover sections, binding posts hingedly secured to the bottom cover section and extending upwardly therefrom to cooperate with openings in sheets inserted between the top and bottom cover sections, a separate bar adapted to overlie the inserted sheets having binding posts depending downwardly therefrom to extend through other openings in the inserted sheets and cooperating with said upstanding posts to secure the sheets within the cover, and means on said separate bar for releasably interlocking said hinged extensible and contractible posts therewith.

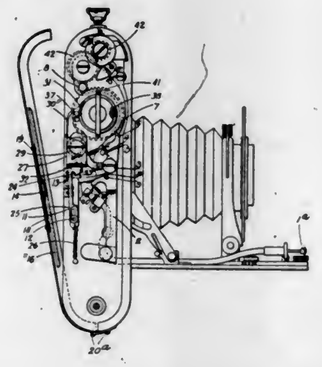
1,827,463. MEDICAL POWDER APPLICATOR. FRANK P. C. DAVIS, Kelso, Wash., assignor to The Lawrence Products Company, Incorporated, Kelso, Wash., a Corportion of Washington. Filed Apr. 21, 1930. Serial No. 446,083. 1 Claim. (Cl. 128—266.)



An asceptic medical powder applicator comprising a straight outer tube having its forword end portion tapered, a removable inner tube having a straight portion tele-

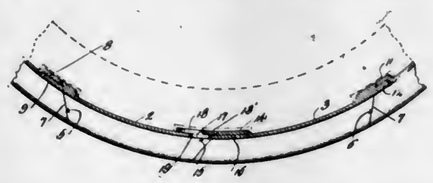
scoping into the outer tube, the straight portion of the inner tube being of less diameter than the rear end of the tapered portion of the outer tube and of greater length than the outer tube whereby the inner tube may be slid freely through the other tube and have its front end engaged with the walls of the tapered forward end portion of the outer tube to form a tight joint, a sleeve fitting snugly in the rear end of the outer tube and fitting closely about the inner tube to form a closed joint between the tubes and guide sliding movement of the inner tube, and a bulb connected to the rear end of the inner tube.

1,827,464. PRESSURE PLATE OR PAD FOR PHOTOGRAPHIC CAMERAS. ALFRED JOSEPH DENNISS, Chingford, and VALENTINE WILLIAM EDWARDS, Walthamstow, London, England, assignors to The Houghton-Butcher Manufacturing Company Limited, London England, an English Limited Liability Company. Filed Oct. 25, 1929, Serial No. 402,490, and in Great Britain Jan. 19, 1929. 4 Claims. (Cl. 95—32.)



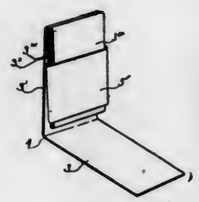
1. In a roll film photographic camera including a shutter-release, means for locating flat in the focal plane that portion of film which is in position for exposure comprising a plate mounted behind the film, spring means normally holding said plate away from the film, and means in operative connection with said shutter-release for moving said plate into contact with the film to press the same flate in the focal plane when the shutter-release is actuated, the plate being returned to normal position by the spring means when said shutter-release is freed.

1,827,465. DEMOUNTABLE RIM. LEE DOTY and RALEIGH S. CARROLL, Klamath Falls, Oreg.; said Doty assignor, by direct and mesne assignments, of three-tenths to Selwyn W. Kesler, Jackson County, Oreg., and one-fifth to Harold W. Herrick, Winfield, Kans. Filed Feb. 27,1928. Serial No. 257,466. 1 Claim. (Cl. 301—30.)



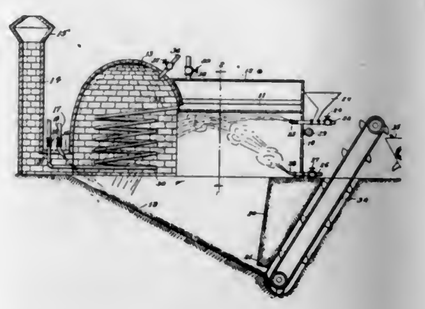
In a demountable rim of the character set forth, a pair of sections having abutting end portions, one section having a transversely extending slot and the portion thereof adjacent the slot off-set inwardly to form a raised bridge, the other section having a struck up pocket an elongated tongue secured in said pocket and extending beyond the end portion of the last mentioned section in the same plane as the surface of the section, the outer end portion of the tongue being off-set inwardly at a distance from the section supporting it, a lip extending from the tongue at the junction of the off-set and parallel to but spaced from the off-set end, whereby said tongue will fit under the bridge and extend through said slot to fit upon the section adjacent the slot, while the lip engages the opposite surface of the same section, as and for the purposes set forth.

1,827,466. POCKET PENCIL AND PEN HOLDER. FRANK N. GILBERT, Binghamton, N. Y. Filed Mar. 5, 1928. Serial No. 259,309. 3 Claims. (Cl. 150—34.)



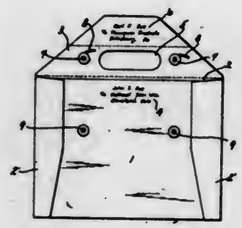
1. A pocket holder comprising a strip of flexible material folded intermediate its ends to form a plurality of sections, the first and second sections of the folded strip forming the cover with the other folded sections adapted to be folded between the cover sections, and a sleeve slidably mounted over the folded sections between the covers, said sleeve being formed with overlapping free inner ends which are pressed together between the cover sections.

1,827,467. APPARATUS FOR RECOVERING GOLD AND SILVER. STELLE A. GILES, Hutchinson, Kans. Filed Nov. 26, 1929. Serial No. 409,928. 2 Claims. (Cl. 266—20.)



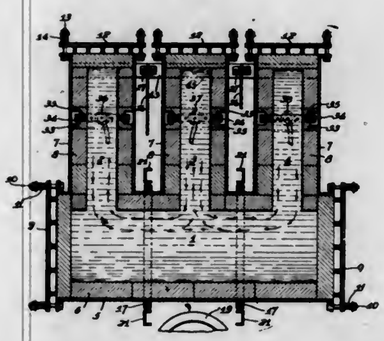
2. An apparatus of the class described comprising an oxidizing chamber, a reducing chamber communicating with the oxidizing chamber, a stack having a horizontal portion venting the reducing chamber, a collection pit beneath and communicating with both of said chambers and having a downwardly sloping bottom extending from said horizontal portion of the stack to substantially the front end of said oxidizing chamber, a water spray pipe entering said horizontal portion of the stack substantially at the upper end of said inclined bottom, a cooling coil disposed in said reducing chamber, a fuel supply pipe entering said oxidizing chamber, and a pipe for supplying finely ground material under air pressure to said oxidizing chamber.

1,827,468. ENVELOPE. WILLIAM E. GUINA, Detroit, Mich., assignor to The W. S. Gilkey Printing Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 26, 1930. Serial No. 463,967. 4 Claims. (Cl. 229—73.)



1. An article of manufacture comprising an envelope embodying a main body portion having an address space thereon, a flap or closure having an opening therein through which the said address space is normally visible when the flap is in closed position, and an address space on the under side of said flap, said flap being movable into or out of open or closed position and selectively foldable to cover the address space on said main body portion and present the address space on said flap when in closed position.

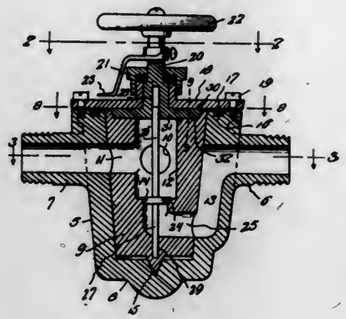
1,827,469. GLASS MELTING APPARATUS. ALFRED L. HARRINGTON, Rosslyn Farms, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Feb. 28, 1930. Serial No. 432,071. 4 Claims. (Cl. 13—6.)



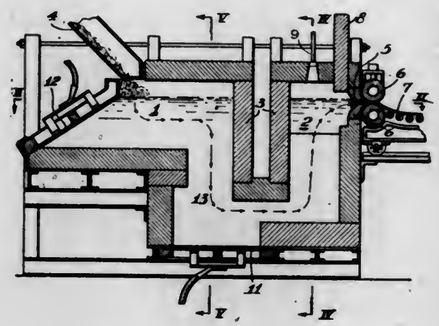
1. In combination, a glass melting tank mounted for tilting movement about a horizontal axis, provided with a pouring spout, and comprising a collecting chamber and a plurality of reducing chambers extending laterally from one side of the collecting chamber, means for feeding bath into each of the reducing chambers, electrodes in such chambers, means for causing a flow of current between the electrodes through the contents of reducing and collecting chambers to melt the batch and maintain it in molten condition, and means for tilting the tank at intervals to discharge the melted glass which accumulates in the collecting chamber.

1,827,470. REVERSIBLE CHECK VALVE AND CUT-OFF. CHARLES D. HARRISON and PARREN D. LINDSEY, Hominy, Okla. Filed Jan. 17, 1928. Serial No. 247,341. 4 Claims. (Cl. 277—25.)

1. A check valve and cut-off comprising a casing formed with two opposite inlet and outlet ports, a rotary plug fitted in said casing and having an open transverse passage adapted to place said ports in communication with each other to permit flow in either direction when the rotary plug is adjusted to one position, said rotary plug further having an axial bore and a radial passage extending from said bore to the periphery of the rotary plug in the same plane as the casing ports, and midway between the ends of said transverse passage, said casing being formed with a vertical passage which communicates at its upper end with the inlet port, means to place the lower end of said vertical passage in communication with the lower end of the axial bore of the rotary plug when the latter is adjusted to another position with the radial passage registered with the outlet port, and a check valve for controlling the flow through the axial bore of the turn plug.

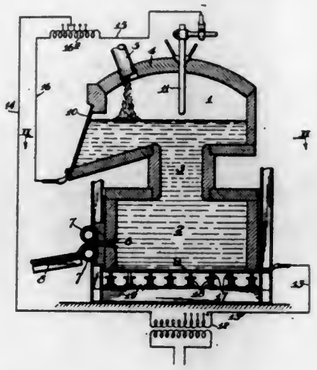


1,827,471. APPARATUS FOR MAKING GLASS. HARRY F. HITNER, Oakmont, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Dec. 22, 1928. Serial No. 327,997. 13 Claims. (Cl. 13—6.)



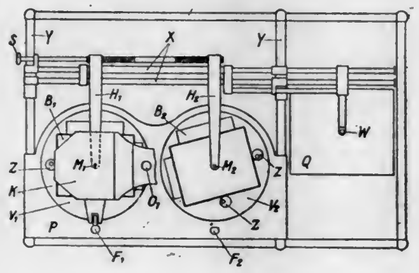
1. In combination in apparatus for making glass, a tank having a melting end and a refining end with an interposed wall extending down into the glass so that the two ends communicate beneath the lower edge of such wall, an outlet for withdrawing molten glass from the refining end of the tank, means for supplying batch to the melting end of the furnace, a metal electrode plate forming a part of the side wall of the tank adjacent the point where batch is supplied and extending in an inclined position downwardly and to the rear from the surface of the glass, a second metal electrode plate forming a part of the bottom wall of the furnace at the outlet of the melting end of the furnace, and means for supplying current to the electrodes.

1,827,472. APPARATUS FOR MAKING GLASS. HARRY F. HITNER, Oakmont, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Feb. 28, 1930. Serial No. 432,072. 6 Claims. (Cl. 13—6.)



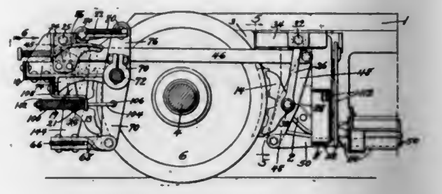
1. In combination in an electric furnace for making glass, a vertical tank having means for supplying batch to the upper end thereof and for withdrawing the melted glass from the lower end thereof, an electrode contacting with the glass in the lower end of the tank, an arc electrode above the surface of the glass at the upper end of the tank and remote from the side walls thereof, and means for supplying current to the electrodes.

1,827,473. TRACING APPLIANCE FOR PAIRS OF MEASURING PICTURES. REINHARD HUGERSHOFF, Dresden, Germany, assignor to the Firm Ikarus Internationale Patentverwertungs-Aktien-Gesellschaft, Vaduz, Liechtenstein. Filed Aug. 30, 1929, Serial No. 389,589, and in Germany Sept. 10, 1928. 4 Claims. (Cl. 33—20.)



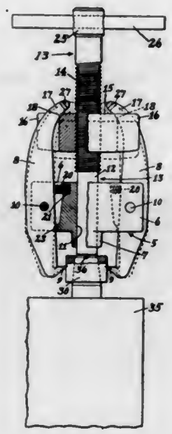
1. A tracing device for pairs of measuring pictures, and more particularly for pairs of aerial photographs taken in a substantially vertical direction, comprising a mirror stereoscope, inspection eyepieces, two real measuring marks connected with one another, sliding directly over the image plane and displaceable independently of the inspection eyepieces, means for regulating the distance between the measuring marks, a marking implement such as a pencil, the measuring marks being rigidly connected with the marking implement and a parallel motion for moving the measuring marks and the marking implement collectively, to enable layer lines and situation lines to be obtained freehand and continuously from pairs of measuring pictures.

1,827,474. RAILWAY CAR BRAKE. ROBERT W. JOY, Brooklyn, N. Y., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 8, 1928. Serial No. 324,646. 19 Claims. (Cl. 188—56.)



1. In a railway brake, a brake beam, a torsion shaft connected to said beam and a radius bar operatively connected to said shaft.

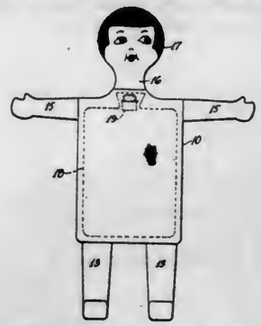
1,827,475. BATTERY TERMINAL PULLER. CHARLES H. KEEFER, Andrews, Ind., assignor of one-half to Edward J. Keefer, Los Angeles, Calif. Filed Oct. 29, 1929. Serial No. 403,236. 2 Claims. (Cl. 29—84.)



1. In a pulling tool, a cross bar having a transverse bore, an operating stem having a working fit within said bore, a pair of gripping jaws pivotally secured to said cross bar in parallelism with said stem and one on each side thereof, said jaws having gripping portions on one side of said cross bar and cam operable portions directed towards each other on the other side of said cross bar, a head having a screw threaded engagement with said stem and an engagement with said jaws to prevent its rotation upon said stem, said head being adapted for axial movement by the rotation of said stem to engage the cam portions of said jaws to move them to a gripping position, said cross bar having near one side thereof stop means to limit the approach of the gripping portions of said jaws toward each other, and compression springs mounted upon said cross bar to yieldingly hold said jaws in contact with said stop means.

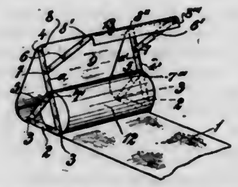
1,827,476. DOLL. MILDRED A. KOLAR, Portland, Oreg. Filed Feb. 17, 1930. Serial No. 429,030. 1 Claim. (Cl. 46—40.)

A doll consisting of a casing in the form of a doll's body, said casing consisting of a material adapted to retard the flow of heat therefrom and having an opening therein through which a hot water bottle may be passed,



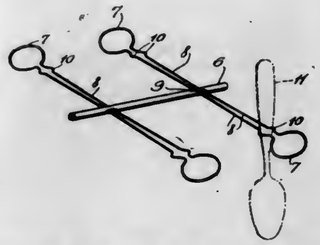
a hot water bottle occupying the torso of said body, and means in the closure of said bottle for inflating same when not filled with water.

1,827,477. REPOSING MAT WITH FOLDABLE SUN-BLIND. JOSEF KOTAUSEK, Vienna, Austria. Filed Apr. 10, 1930, Serial No. 443,076, and in Austria Oct. 9, 1929. 2 Claims. (Cl. 5—344.)



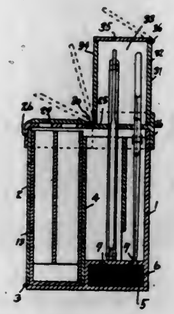
1. A reposing mat with foldable sun-blind, comprising in combination with the mat proper, two foldable lateral frames removably fixed on the sides of said mat, a pocket on the head end of said mat, a length of fabric forming the sun-blind extending from said pocket and adapted to be attached to said lateral frames, and an air cushion in said pocket adapted to serve as head rest.

1,827,478. HANGER FOR ARTICLES TO BE PLATED. LOUIS LICHTMAN, New York, N. Y., assignor to Chromeplate, Inc., New York, N. Y., a Corporation of New Jersey. Filed Oct. 3, 1929. Serial No. 397,028. 4 Claims. (Cl. 204—5.)



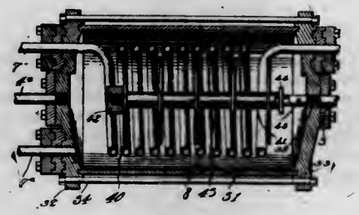
1. In a device of the class described, a holder for articles to be electro-plated, comprising a substantially U-shaped member including resilient arms lying alongside each other and connected at one end, the other ends of the arms being adapted for connection with a support for the member, said arms having cooperating means near their said connection to engage the opposite edges of an article to be plated, and having registering outwardly bent portions adjacent to said means to facilitate the engagement of the article therewith.

1,827,479. STERILIZER FOR BARBERS' TOOLS. OTTO J. LIERMAN, San Francisco, Calif., assignor of one-half to Chris J. Schlag, San Francisco, Calif. Filed June 28, 1929. Serial No. 374,514. 4 Claims. (Cl. 167—3.)



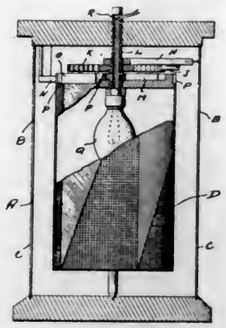
3. A sterilizer for barbers' tools comprising a rear compartment divided into a plurality of sections for containing barbers' tools and a front compartment of similar shape adapted to contain an antiseptic fluid, means for holding the compartments in adjacent relation, a passage between them to allow fumes rising from the fluid of the front compartment to enter the rear compartment, a common cover for both compartments having guide openings leading to the various sections with a superstructure for the first compartment for covering the tools when in place and a hinged cover plate for the second compartment, the superstructure including a hinged front plate adapted to be dropped on the front cover plate for giving access to the tools in the rear compartment.

1,827,480. LIQUEFIED GAS COOLER FOR REFRIGERATING APPARATUS. JAMES RIVERS MARTIN, Winter Haven, Fla., assignor to Henry C. Frierson, Winter Haven, Fla. Filed Oct. 29, 1928. Serial No. 315,751. 2 Claims. (Cl. 257—229.)



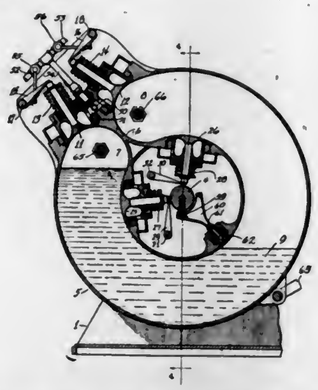
1. A liquefied gas cooler for freezing apparatus comprising a cylindrical member closed fluid tight at both ends, a liquefied gas coil located within said cylinder and having its ends extending through the ends of the cylinder, means for supplying liquid gas to said coil, means for supplying expanded gas from a cooling coil to said cylinder, said means comprising a pipe extending longitudinally through said coil, and a plurality of baffle plates carried by said pipe within said coil for distributing the expanded gas in regard to the coil.

1,827,481. AUTOMATIC SIGNAL LIGHT. HARVEY G. MOSHER, Detroit, Mich. Filed Dec. 16, 1929. Serial No. 414,606. 8 Claims. (Cl. 116—63.)



1. In an automatic light signal the combination with means for alternately and periodically displaying contrasting colors, of means for progressively decreasing the extent of one color throughout its period of duration at a uniform rate to a predetermined limit of area and suddenly for the remainder of the area.

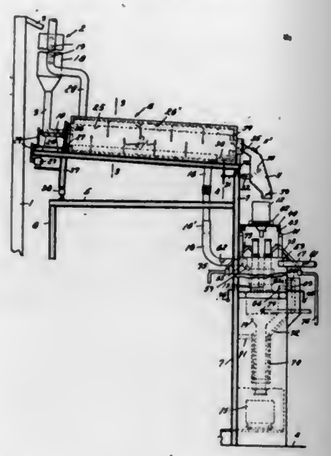
1,827,482. INTERNAL COMBUSTION ENGINE. LOCKWOOD MYRICK, Jr., Honolulu, Territory of Hawaii. Filed July 23, 1928. Serial No. 294,711. 8 Claims. (Cl. 123—19.)



8. In an engine, a fixed shaft, an arcuate-shaped cylinder oscillatable thereon, a fluid in said cylinder and constituting a piston, means for alternately exploding a combustible charge in each end of the cylinder, a funnel communicating with said cylinder, a check valve for the funnel, and a fluid conduit leading through the shaft and emptying into the funnel.

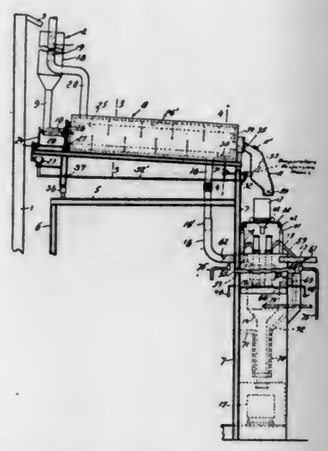
1,827,483. APPARATUS FOR COKING COAL. SAMUEL W. PARR and THOMAS E. LAYNG, Urbana, Ill., assignors to Urbana Coke Corporation, Urbana, Ill., a Corporation of Delaware. Original application filed Jan. 2, 1926, Serial No. 78,959. Divided and this application filed Mar. 26, 1926. Serial No. 97,518. 6 Claims. (Cl. 202—122.)

1. An apparatus for coking coal, comprising an inclined rotatable drum for tumbling and advancing the coal and having a discharge end, means for supplying heat to said drum to preheat the coal therein, a chute arranged near the discharge end of said drum and arranged to receive the preheated coal from said drum, a plurality of coking retorts, a movable lorry for receiving the preheated coal from said chute and means whereby said lorry can be moved close to any one of said retorts to discharge coal into the same.



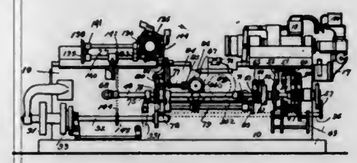
2. An apparatus of the type described, comprising a coking retort, a chamber adapted to receive coke from the retort, a burner for supplying hot gases to the exterior of the retort, means for conveying air to the burner, said means being arranged to bring the air into heat exchanging relation to the coke in said chamber and to at least a portion of the gases which have previously been supplied to the exterior of said retort.

1,827,484. APPARATUS FOR COKING COAL. SAMUEL W. PARR and THOMAS E. LAYNG, Urbana, Ill., assignors to Urbana Coke Corporation, Urbana, Ill., a Corporation of Delaware. Original application filed Jan. 2, 1926, Serial No. 78,959. Divided and application filed Mar. 26, 1926, Serial No. 97,518. Divided and this application filed Mar. 2, 1928. Serial No. 258,490. 3 Claims. (Cl. 202—218.)



1. An apparatus for heating solid fuel, comprising a drum rotatable about the axis thereof and having a discharge end, said drum being adapted to tumble and advance the fuel, means for rotating said drum, means for supplying heat to said drum, and means responsive to the temperature at a point within the drum adjacent the discharge end thereof for regulating the means for rotating said drum.

1,827,485. MULTIPLE SPINDLE METAL TURNING MACHINE. JAMES C. POTTER, Pawtucket, R. I. Filed Mar. 28, 1925. Serial No. 19,056. 13 Claims. (Cl. 29—44.)



1. The combination of a work spindle, a cross slide, a cam drum for the latter, a turret slide, a turret on the turret slide, a feed shaft for operating both slides, a clutch to control the connection between said cam drum and said feed shaft, and means under the control of the turret for actuating said clutch.

13. The combination of a plurality of work-spindles each having a chuck and arranged in the same horizontal plane, a motor-driven shaft, gearing between said shaft and said spindles that rotates the spindles simultaneously and at the same speed, hand change gears for the spindles to change the spindle speeds to suit the work requirements, means for supporting a plurality of sets of tool-holders in the same horizontal plane, means for slidably supporting said plurality of sets of tool-holders for movement towards and from the spindle chucks, mechanism for producing such sliding movement by which the plurality of sets of tool-holders are moved at the same time towards and from the spindle chucks and comprising a cam drum and a feed shaft, means for operating the cam drum at high and constant speed during the non-cutting action of the tools and means to change the speed of said shaft to vary the rate of tool speed.

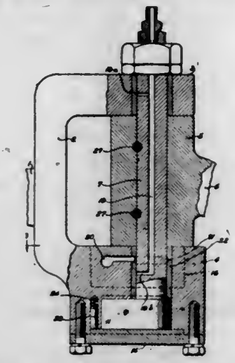
1,827,486. TENT. EILER POULSEN, Chicago, Ill.; Halbert O. Crews administrator of said Eiler Poulsen, deceased. Filed Aug. 6, 1928. Serial. No. 297,701. 3 Claims. (Cl. 135—1.)



1. A tent having a top portion and side portions, an inflatable member, retainer means for detachably connecting the inflatable member with the top and side portions, said means comprising a casing member formed of sheet material and folded for providing a pair of wing portions and flap portions, one of said wing portions being connected with the top portion of the tent, the other of said wing portions being connected with the side portions of the tent, and means connected with the flap portions whereby said flap portions may be fastened together for retaining the inflatable member within the casing.

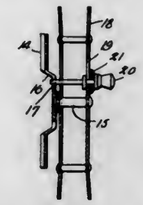
1,827,487. STEERING STABILIZER. CUTHBERT E. REEVES, Buffalo, N. Y. Filed Aug. 28, 1929. Serial No. 388,971. 5 Claims. (Cl. 280—90.)

1. A steering knuckle assembly for motor vehicles embodying a yoke and a pivotally connected cooperating knuckle, a fluid chamber formed in one of said elements, a vane fixed to the other of said elements and operating in the chamber, a boss within the chamber having normally a substantially fluid-tight contact with the free end of the vane and coacting therewith to divide the chamber into two compartments into which the vane may move upon lateral movement in opposite directions to compress the fluid in



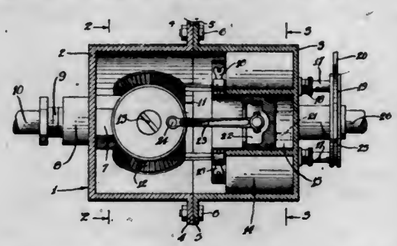
the chamber in advance of said vane, a transfer passage establishing restricted communication between the two compartments of the chamber at opposite sides of the vane, and a pressure responsive impediment blocking said passage and movable to an inoperative position to free said passage by actuation of fluid under a predetermined pressure in either of said chamber compartments.

1,827,488. FISHING LINE REEL. BUATUS UGIEN ROACH, Bronson, Mich. Filed July 17, 1929. Serial No. 378,974. 2 Claims. (Cl. 242—84.1.)



1. In a reel, a bracket having an offset portion, formed with a slot, a shaft extending from the bracket, a reel rotatably mounted on the shaft, said reel having elongated openings, a pin slidably mounted in the elongated openings and adapted to extend into the slot of the bracket to hold the reel against rotary movement, and means for normally holding the pin against movement.

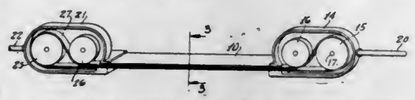
1,827,489. VARIABLE SPEED TRANSMISSION. WILLIAM L. SAUNDERS, Chicago, Ill. Filed Aug. 15, 1930. Serial No. 475,499. 3 Claims. (Cl. 74—34.)



1. The combination with a driving shaft and a driven shaft, of a variable speed mechanism comprising a cas-

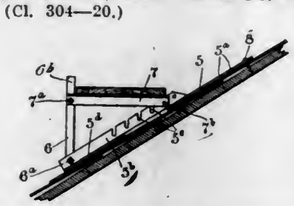
ing adapted for containing a fluid and rigidly connected with the driven shaft, said driving shaft extending within the casing and rotatable with respect thereto, a driving gear fixedly mounted on the driving shaft, driven gears rotatably mounted within the casing and in mesh with said driving gear, said casing being provided with cylindrical chambers therein, the walls of said chambers having openings therein for providing communication therebetween, cylindrical sleeves disposed within the cylindrical chambers and slidable with respect thereto, pistons slidably disposed within said sleeves, piston rods connecting said pistons with the driven gears, and means whereby said cylinder sleeves may be moved for varying the openings in said cylinder walls.

1,827,490. BAND SAW. HAROLD M. SPENCER, Crescent City, Calif. Filed May 27, 1930. Serial No. 456,026. 2 Claims. (Cl. 143—17.)



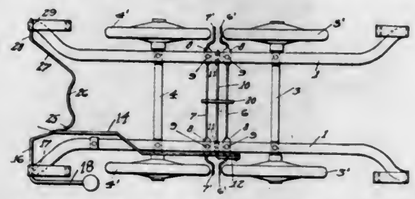
1. A band saw consisting of an elongated double raceway, a pair of sheaves mounted at each end of said raceway, one side of each sheave lying tangent to its respective raceway, one sheave of each pair having saw-engaging teeth projecting therefrom, and a perforated band saw passing around said toothed sheaves and through said raceways, the teeth on said band saw having uniform set on both sides thereof.

1,827,491. BRACKET FOR ROOFING SCAFFOLDS. EDWARD T. SPILLMAN, Columbus, Ohio, assignor, by mesne assignments, to Russell E. Forshee, Columbus, Ohio. Filed Feb. 20, 1930. Serial No. 429,858. 2 Claims. (Cl. 304—20.)



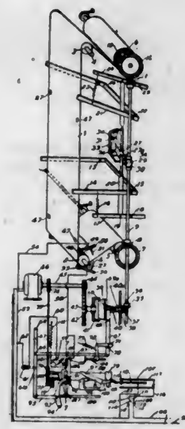
1. A bracket for a roofing scaffold consisting of a base member, having means thereon for engaging it with the roof and hooks intermediate its upper and lower ends, an upright supporting member permanently hinged at its lower end to the lower end of said base member, a plank-receiving member hinged at its outer end to the upper end of said upright member, said plank-receiving member having a pin at its inner end to engage said intermediate hooks of the base member.

1,827,492. RUNNING GEAR FOR BABY CARRIAGES. GEORGE STINSON, Gardner, Mass., assignor to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 20, 1930. Serial No. 437,519. 4 Claims. (Cl. 188—20.)



1. Braking mechanism for a baby carriage or the like, comprising a pair of adjacent substantially parallel transverse braking members, each adapted by flexure to engage its ends with a pair of wheels of the carriage, a shaft extending transversely of the carriage between said members, and means carried by said shaft to flex both members when said shaft is rocked, thereby to obtain the braking of all four wheels of the carriage.

1,827,493. DISPLAY DEVICE. WILHELM SWENSON and GORDON C. SWENSON, Erie, Pa. Filed June 19, 1929. Serial No. 371,996. 4 Claims. (Cl. 40—53.)



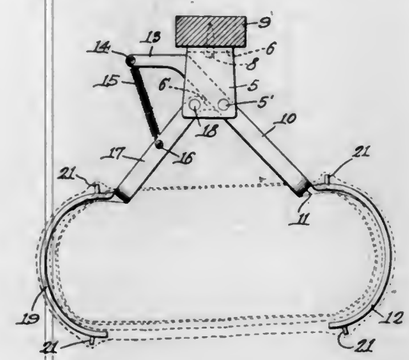
1. In a display device, the combination of a display strip; mountings for the strip; automatic means for advancing the strip intermittently comprising a clutch; a spring setting the clutch, an electric device moving the clutch to release it, and a latch holding the clutch in release position; and a timing devce controlling the interval between the advances, said timing device controlling the release of the clutch.

1,827,494. COMBINATION WINDOW AND SCREEN. GEORGE IRVING THOMSON, Kansas City, Mo. Filed Oct. 31, 1929. Serial No. 403,884. 4 Claims. (Cl. 156—14.)



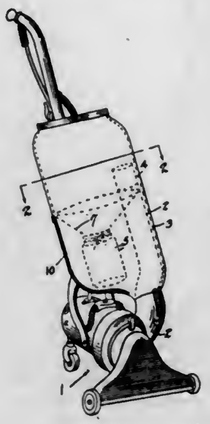
1. The combination with a window frame having sides, a sill portion and a lintel portion, of means whereby a screen may be disposed within the window frame, said means comprising a bar member U-shaped in formation and connected with the sides and lintel portion of the window frame, said bar member being spaced away from the edge of said window frame, each side of the window frame being provided with a bar member mounted on the lower portion adjacent the edge thereof, each of said bar members being disposed in offset and parallel relationship with the U-shaped bar member.

1,827,495. GRAIN BAG HOLDER. CHARLES C. TIPPETT, Luckey, Ohio. Filed May 3, 1929. Serial No. 360,176. 1 Claim. (Cl. 83—26.)



A bag holder comprising a supporting member, a pair of supporting arms pivotally mounted on the supporting member and extending forwardly therefrom, one of the arms being substantially long and having its inner end extended laterally beyond the supporting member, the inner end of the opposite arm being curved and adapted to engage one edge of the first mentioned arm to restrict movement of the arms towards each other, the outer ends of the arms being curved, to engage the mouth of the bag, and yieldable means connected with the arms for moving the arms away from each other.

1,827,496. DUST COLLECTING BAG FOR VACUUM SWEEPERS. BERT VANDERWILT, Everett, Wash. Filed Oct. 1, 1929. Serial No. 396,515. 3 Claims. (Cl. 183—51.)



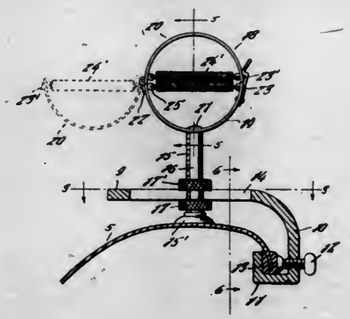
1. In combination, a dust collecting bag, a conical-shaped partition disposed in said bag, a non-pourous refuse bag removably secured to the open end of the partition for receiving dirt from the main bag, a conduit for delivering dirt to the main bag at a point above the partition, said conduit having a flexible end portion extending above the partition, and means for opening the main bag below the partition for gaining access to the non-porous bag.

1,827,497. SPECULUM. WILLIAM THOMAS VARNEY, Vancouver, British Columbia, Canada. Filed May 22, 1929. Serial No. 365,138. 1 Claim. (Cl. 128—345.)



A speculum comprising a retaining ring having centrally located threaded opening, a plurality of dilator arms mounted within said ring, one end of the arms being in the form of a segment of a sphere a pair of spaced transversely extending members formed on the other end of the arms, a prong formed on the last mentioned end of said arms to limit the dilation of the arms, said arms being mounted within the ring between said transversely extending members and a threaded sleeve in engagment with the threaded projection of the ring for dilating said arms.

1,827,498. POLE CARRIER ATTACHMENT FOR VEHICLES. ERNEST B. WEEKS, Biloxi, Miss. Filed Aug. 29, 1929. Serial No. 389,249. 6 Claims. (Cl. 224—29.)

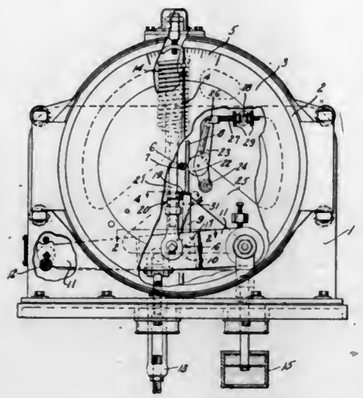


1. In a clamp of the class described, a pair of clamping sections, means for hingedly securing said sections to each other at one end, the opposite ends of said sections adapted to be disposed in abutting relation when said sections are in a clamping position, a resilient member carried by each of said sections, said resilient members adapted to cooperate with one another for bindingly receiving therebetween the member to be clamped when said clamp sections are in a closed clamping position.

1,827,499. SCALE MECHANISM. WARD W. WEIDLER, Cleveland, Ohio, assignor to The Atlas Bolt & Screw Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 15, 1929. Serial No. 378,545. 2 Claims. (Cl. 265—68.)

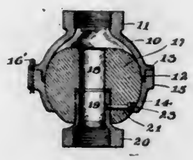
1. Scale mechanism comprising a weighing lever having a knife edge, a movable indicating member, an operating pinion therefor, and means for operatively connecting said weighting lever and said pinion including a rack member having a heavy counter-weighted base loosely supported on the knife edge of said lever, an adjustable backing member for said rack member, and a light tension

spring extending from said rack member diagonally downwardly to a relatively fixed point and effective directly



upon said rack member for pressing the same towards said pinion and also holding the rack member yieldingly to its seat on said knife edge.

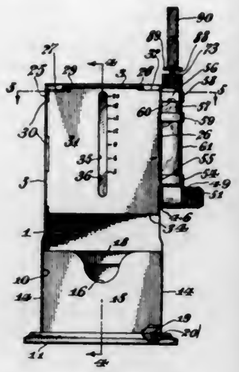
1,827,500. FLEXIBLE PIPE JOINT. WALTER C. WHITE, Los Angeles, Calif., assignor to International Couplers Co., Pittsburgh, Pa., a Common Law Trust. Filed Oct. 26, 1927. Serial No. 228,960. 1 Claim. (Cl. 285—95.)



A flexible pipe joint comprising a ball formed of absorbent swellable material approximating wood in rigidity, said ball being flattened at diametrically opposite points thereof and having an axial bore opening through the flattened portions of the ball, a socket receiving the ball and comprising a cup and a nut threaded together, one flattened portion of the ball protecting exteriorly of said nut and forming a seat, and the other flattened portion of the ball opposing the inner face of the cup and forming an extended space between the cup and ball for subjecting the ball to direct contact with the moisture and pressure of the fluid passing through the joint, an interiorly threaded nipple integral with said cup and having wrench faces, and an exteriorly threaded nipple screwed into the axial opening of the ball in alinement with said cup nipple and having an internally threaded end provided with wrench faces and seated on the seat provided by said exposed flat portion of the ball.

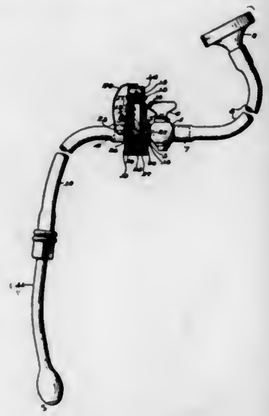
1,827,501. CIGARETTE DISPENSER AND LIGHTER WITH DETACHABLE SUPPORT. MAURICE ALLAND, Atlantic City, N. J. Filed Oct. 11, 1928. Serial No. 311,828. 2 Claims. (Cl. 312—84.)

1. A cigarette holder, comprising a hollow portion having a discharge outlet, a hinged closure for said hollow portion having a flange defining one side of said outlet, a rotatable member supported by said hollow portion to effectively close said outlet, said member being provided with recess adapted to receive a cigarette from within said holder and upon being rotated a given distance being operative to discharge the cigarette through said outlet, a knob connected to said member for manually rotating



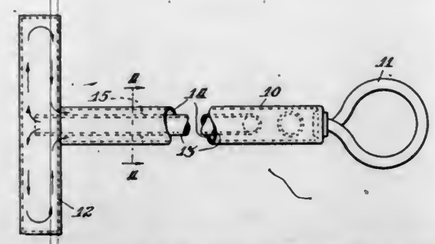
the same, normally aligned rings carried by said hollow portion and said hinged closure, and a removable lighter reservoir unit normally extending through said rings to secure said hollow portion and closure in operative relation.

1,827,502. COMBINED VALVE AND MIXING DEVICE. MAURICE ALLAND, Atlantic City, N. J. Filed June 18, 1929. Serial No. 371,758. 1 Claim. (Cl. 299—83.)



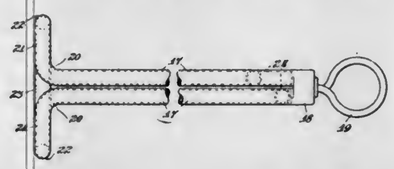
A mixing devcie, comprising an outer container having a bore provided with a peripheral shoulder beyond which there is an enlargement of said bore into which lead inlet and outlet ports, a second container reciprocable longitudinally within said bore and having inlet and outlet apertures which in one relative position of said containers communicate with said ports, and when said containers are in another relative position the apertures of said second container being closed within and by the slidably contacting wall of said bore, and a gasket larger than said bore carried by said inner container and when in cooperation with said shoulder being operative to both limit the relative movement of said containers in one direction and to maintain said apertures closed by preventing them from emerging from and beyond the surrounding wall of said first container, and to prevent fluid escaping from within said bore enlargement past said shoulder and said inner container.

1,827,503. SKIMMING TOOL. RUSSELL J. ANDERSON, Racine, Wis., assignor to Belle City Malleable Iron Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 15, 1930. Serial No. 475,481. 5 Claims. (Cl. 266—37.)



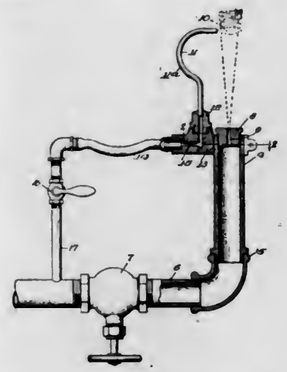
1. In a skimmer, a closed hollow skimmer head, a hollow shaft connected thereto and in communication therewith, a conduit arranged axially within the shaft in a manner to provide a passageway between it and the shaft, said conduit communicating with the interior of the head, and an outlet from the passageway into said head.

1,827,504. SKIMMER. RUSSELL J. ANDERSON, Racine, Wis., assignor to Belle City Malleable Iron Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 15, 1930. Serial No. 475,482. 7 Claims. (Cl. 266—37.)



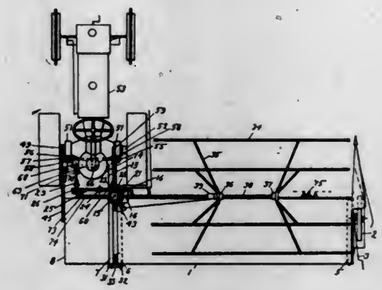
2. In a skimmer, a skimmer head part, a shaft connected thereto said shaft comprising a pair of spaced, substantially parallel pipes arranged substantially side by side and connected to the head, and means whereby a cooling liquid may be circulated through one pipe, thence through the head part and back through the other pipe.

1,827,505. GAS BURNER. FRANK J. C. BLUHM, Chicago, Ill., assignor of one-half to William C. Kleiner, Chicago, Ill. Filed June 25, 1928. Serial No. 288,053. 2 Claims. (Cl. 158—99.)



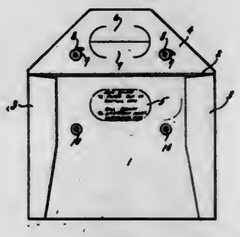
1. In a gas burner, the combination of a pipe adapted to receive gas under pressure, a jet connected to the pipe so as to receive gas therefrom before it is mixed with air and adapted to project the gas into the atmosphere in a stream, a split clamping collar mounted slidably on the pipe, a pilot-pipe connected to the collar and arranged to project a flame across the stream to retard the latter and facilitate combustion, and means for supplying gas to the pilot-pipe, comprising a flexible pipe between and connecting the gas-pipe and the collar.

1,827,506. BINDER. PAWEL Y. BORODIN, Moscow, Union of Socialist Soviet Republics. Filed July 3, 1928. Serial No. 290,121. 5 Claims. (Cl. 56—23.)



1. In a binder, the combination with a frame, of a conveyor operatively mounted on said frame, a cutter bar on said frame, a binding deck, hinged connections between said frame and said binding deck, means to support said binding deck with said frame on a tractor, means to adjust the height of said binding deck, a roller adapted to transmit grain stalks from said conveyor to said binding deck, and means to operate said conveyor, said roller, and said cutter bar by said tractor.

1,827,507. ENVELOPE. BLUFORD W. BROCKETT, Cleveland Heights, Ohio, assignor to The Gilkey Printing Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 30, 1930. Serial No. 464,859. 3 Claims. (Cl. 229—73.)

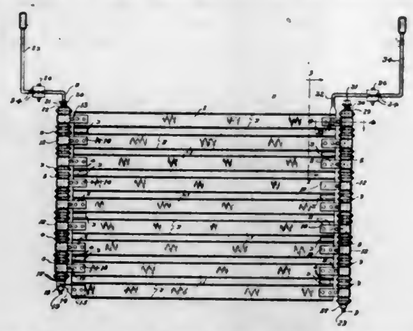


1. An article of manufacture comprising an envelope embodying a main body portion having a plurality of address spaces thereon, and a flap or closure slit to produce a plurality of flaps individually and selectively movable into and out of a position whereby one of the address spaces on the forward wall of the envelope is visible while the remainder of the address spaces are covered when the flap or closure is in closed position.

1,827,508. METALLIC RESISTOR. FRANK T. COPE, Salem, Ohio, assignor to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Filed July 26, 1927. Serial No. 208,501. 1 Claim. (Cl. 201—63.)

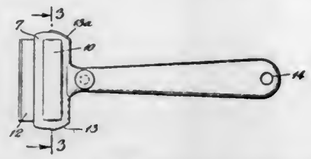
A metallic resistor including a plurality of straight resistor bars of channel cross-section throughout their lengths and connected at alternate ends, the flange of said channel resistor bars being located at a right angle to the

normal plane of the resistor and extending outward therefrom, a supporting rod at each end of the resistor, insulator spools upon each supporting rod and clamping



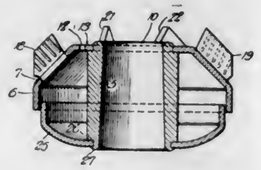
means at each end of each straight bar for detachable connection to one of the spools, each of said spools having an enlarged rib, and terminal connections for the resistor.

1,827,509. HANDLE MEMBER FOR RAZOR BLADES. ARTHUR W. ERICSSON, Brooklyn, N. Y. Filed Jan. 21, 1930. Serial No. 422,253. 4 Claims. (Cl. 30—9.)



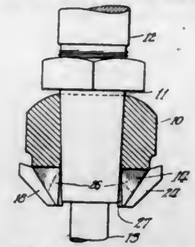
1. A tool of the class described comprising two substantially similar tool parts, each part comprising an elongated handle member and a crosshead at one end thereof forming a jaw member, said jaw member having an elongated recess on the inner face and terminating short of the side walls thereof, means cooperating with the handle member of each part adjacent the jaw members for coupling said tool parts together and for clamping a tool within and between said jaw members, said means comprising a screw in threaded engagement with one of said tool parts and a head on said screw cooperating with the other tool part, means for tensionally separating the jaw members when said screw is operated to release said parts, and means for retaining said screw against displacement from the first named part.

1,827,510. VALVE SEAT REAMER. WILLIAM H. EVANS, Chicago, Ill., assignor to Evans Flexible Reamer Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 4, 1926. Serial No. 146,258. 7 Claims. (Cl. 29—103.)



1. A device of the character described comprising a support and a cutter member yieldingly mounted thereon, said cutter member being provided with yieldable teeth thereon inclined to the axis of said cutter member, certain of said teeth having grooves intersecting their cutting edges and extending inwardly toward said cutting member along the forward faces of the teeth.

1,827,511. REAMER. WILLIAM H. EVANS, Chicago, Ill., assignor to Evans Flexible Reamer Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 28, 1929. Serial No. 388,925. 9 Claims. (Cl. 29—103.)



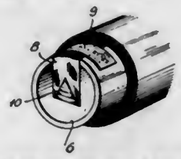
1. In a reamer of the character described, a reamer head having a tapered longitudinal opening for friction application to a tapered shank, a portion of the opening being shaped to form a clearance with the shank, and a plurality of teeth carried by the head adjacent said clearance so that such teeth may flex into said clearance when under pressure.

1,827,512. CABINET AIR HEATER. JOHN M. FRANK and STANLEY STACK, Chicago, Ill., assignors to Ilg Electric Ventilating Company, Chicago, Ill., a Corporation of Louisiana. Filed Aug. 8, 1929. Serial No. 384,345. 9 Claims. (Cl. 257—137.)



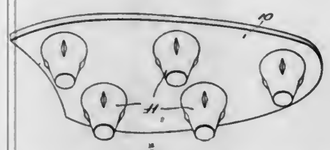
6. In a device for circulating and humidifying air, the combination of an upright cabinet formed with upper and lower openings in its front wall, a water pan mounted in said cabinet between said openings, a filling tube for said pan extending from said upper opening downwardly into said pan, and a fan and fan motor mounted in said cabinet opposite said upper opening and operating to draw air through said lower opening and over said water holder, and expel the same through said upper opening.

1,827,513. METHOD AND MEANS OF IDENTIFYING FABRICS. ERNEST C. GEIER, New York, N. Y., assignor to Duplan Silk Corporation, New York, N. Y., a Corporation of Delaware. Filed June 28, 1930. Serial No. 464,533. 2 Claims. (Cl. 206—50.)



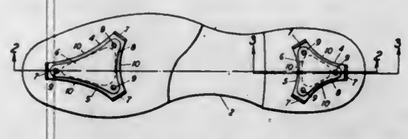
1. In an identifying device for fabrics, the combination with a roll, and a length of fabric wound thereon with an edge spaced from one end of said roll to expose a portion of the latter; of a strip of said length partially detached therefrom and extended over the exposed portion of said roll, and a seal securing said strip to said exposed portion and extending over said strip.

1,827,514. ATHLETIC SHOE. DANIEL J. GOLDEN, Brockton, Mass. Filed Jan. 20, 1931. Serial No. 509,936. 2 Claims. (Cl. 36—59.)



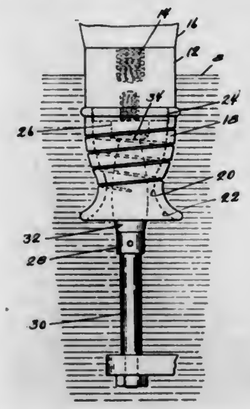
2. An integral metallic cleat structure including a base plate, a ground engaging body depending therefrom, a threaded shank projected upwardly from the base plate adapted to be received in a threaded socket provided in a shoe sole, and a narrow upstanding rim portion on the base plate for indenting the shoe sole.

1,827,515. ANTISLIP SHOE. MICHAEL GOLDENBERG, Philadelphia, Pa. Filed Aug. 16, 1929. Serial No. 386,369. 6 Claims. (Cl. 36—59.)



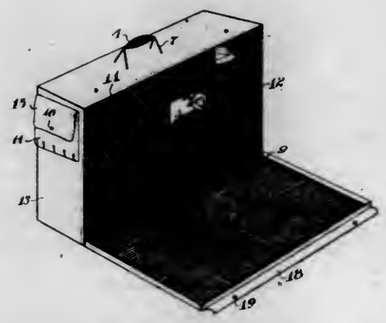
1. The combination of a shoe, anti-slipping means having an opening formed therein carried by the said shoe, and means for closing the said opening in the said anti-slipping means whereby the accumulation of foreign substances in the said opening in the said anti-slipping means is obviated.

1,827,516. ELECTRIC SWITCH. TALMA T. GREENWOOD, East Templeton, Mass., assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 11, 1924. Serial No. 755,353. 18 Claims. (Cl. 200—147.)



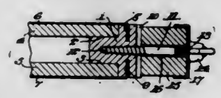
1. In an electric switch, the combination of a fixed annular arcing surface, a cooperating annular arcing surface movable within and along the axis of said first annular arcing surface, both arcing surfaces being immersed in oil, and a solenoid disposed approximately along the axis of and comprising a part of said first annular arcing surface to exert its arc-rotating magnetic field transversely of the arc zone between said arcing surfaces.

1,827,517. PRESERVING GAME AND FOOD CARRIER. LEE HALL, St. Paul, Minn. Filed June 8, 1928. Serial No. 283,985. 2 Claims. (Cl. 45—132.)



1. A carrier cooler of the class described comprising a rigid ventilated casing having a plurality of open work upright partitions and connecting open work shelves extending from front to rear of said casing, a door hinged to the bottom of the front side of said casing, a porous water absorbent covering for said hinged side of the casing, a second porous water absorbent covering for the end walls of said casing, a water pocket secured to the upper portion of the covering of said side of said casing and water pockets secured to the upper portion of the end walls of said casing.

1,827,518. LAP TABLE. WILLIAM HANLEY, East Orange, N. J., assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 12, 1929. Serial No. 354,535. 6 Claims. (Cl. 45—46.)

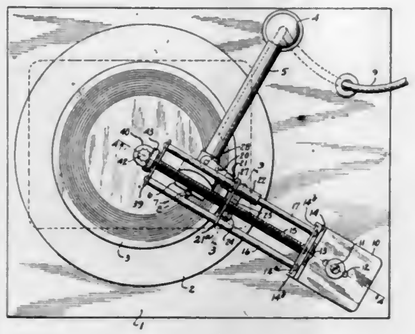


2. A lap table comprising a table top, a longitudinally adjustable leg pivoted to the front edge of the table top whereby the leg may be swung into the plane of the table top to its inoperative position along said front edge or to substantially right angles to the plane of the table top to its operative position, and a common means for locking the leg in its said inoperative and operative positions.

1,827,519. APPARATUS FOR RADIO RECORDING AND REPRODUCTION. EDMUND H. HANSEN, New York, N. Y. Filed June 14, 1928. Serial No. 285,458. 3 Claims. (Cl. 179—100.11.)

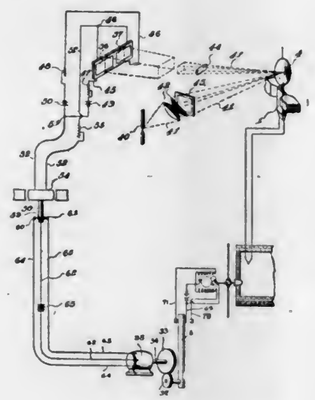
1. In combination with a radio receiving set and a phonograph, means between the two for cutting a record of

the radio output and for reproducing the record through the radio set, said means including a supporting bracket, a feed screw mounted therein, a removable coupling to



the record-receiving pin of the phonographic turntable, a flexible connection from the feed screw to the phonographic sound box, and means connecting the latter with the radio amplifier.

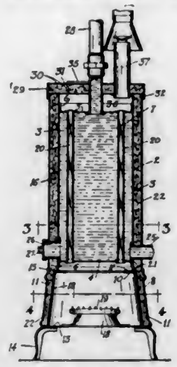
1,827,520. RECORDING AND CONTROL SYSTEM AND APPARATUS THEREFOR. THOMAS RANDOLPH HARRISON, Wyncote, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 1, 1926. Serial No. 145,583. 18 Claims. (Cl. 236—69.)



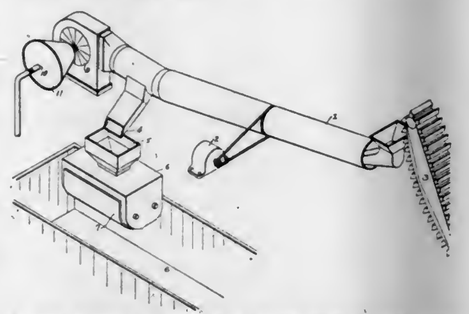
1. In combination, a galvanometer, a source of light projecting a beam of light, a member carried by said galvanometer, for directing said beam, light sensitive means responsive to said beam, and means operable by said light sensitive means tending to maintain said light sensitive means in the path of said beam.

1,827,521. WATER HEATER. EDWARD M. HEATHMAN, Columbus, Ohio, assignor to F. O. Schoedinger, Columbus, Ohio. Filed Feb. 11, 1930. Serial No. 427,609. 3 Claims. (Cl. 122—19.)

1. In a water heater, a vertically disposed tank, a base for effecting the support of said tank, said base including an inner collar terminating at its upper edge in an inwardly directed horizontal flange, an outer collar formed of a plurality of sections spaced from the inner collar to provide an insulating space therebetween, insulating material in said space, inwardly directed horizontal flanges formed with the lower ends of said sections for the support of said inner collar, and a burner structure arranged within said base and secured to the flanges of said sections.



1,827,522. STONE ASPHALT ROAD AND METHOD OF PREPARING AND LAYING THE SAME. DONALD MCKNIGHT HEPBURN, Philadelphia, Pa., assignor to Amiesite Asphalt Company of America, Philadelphia, Pa., a Corporation of New Jersey. Original application filed Nov. 3, 1925, Serial No. 66,586. Divided and this application filed Mar. 29, 1926. Serial No. 98,383. 3 Claims. (Cl. 106—31.)



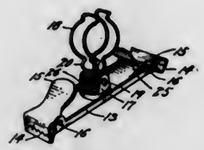
1. The method of mixing a bituminous paving composition, which consists in taking a stone aggregate, subjecting said aggregate to a current of air carefully regulated as to temperature so as to thoroughly dry the aggregate without materially increasing its temperature, thereafter applying to the stone a bitumen solvent, and subsequently adding bitumen to the aggregate.

1,827,523. MOP. HARRY HERTZBERG, Brooklyn, N. Y. Filed July 27, 1929. Serial No. 381,593. 4 Claims. (Cl. 15—229.)



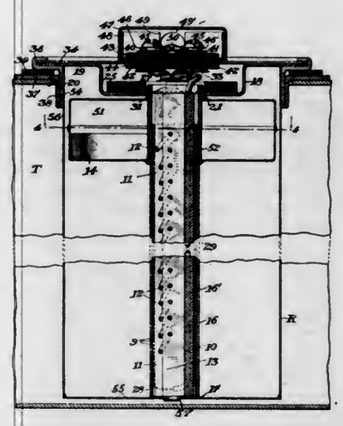
4. A mop frame made of a single piece of wire bent to form a pair of arms and portions extending from said arms toward each other and terminating in an interconnecting loop forming a bearing opening, said loop being disposed in a plane perpendicular to the plane of said frame.

1,827,524. UMBRELLA HOLDER. FREDERICK HILBURGER, Castle Rock, Colo. Filed May 13, 1930. Serial No. 451,935. 8 Claims. (Cl. 135—13.)



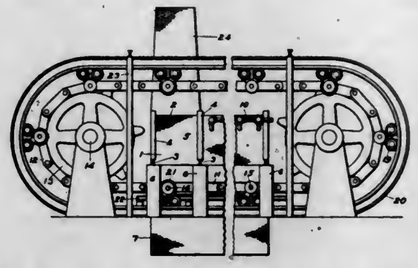
3. An umbrella holder comprising: a backing member; garment engaging jaws at each extremity of said backing member; and a spring clamp for engaging an umbrella positioned intermediate said jaws.

1,827,525. ELECTRIC LIQUID MEASURING AND INDICATING MEANS. MERION J. HUGGINS, Upper Saddle River, N. J., assignor to Autometer Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 11, 1926. Serial No. 134,906. 8 Claims. (Cl. 201—48.)



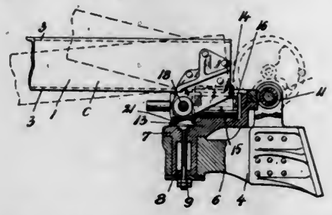
5. In a quantity indicating device for liquid tanks, a rod of insulator material having a recess extending longitudinally thereof, a resistance coil wound about said rod in bridging relation to the recess, a conductor mounted in the rod recess, contacts of magnetizable material pivotally mounted on and connected in series through said conductor, said contacts being spaced longitudinally of the conductor in opposed relation to the coil windings bridging the rod recess and normally out of contact with the coil and adapted to have movement into contact with the coil, a tubular housing of electric conducting and non-magnetic material and open at one end carrying said coil and contact carrying rod, said housing being insulated from the coil and in electrical connection with said contact carrying conductor, means to which the housing is connected at the open end to suspend the same from an opening in the tank containing the liquid to be measured, said suspending means being arranged to serve as a closure for the tank opening and the open end of the housing, a float movable longitudinally of the housing, and a magnet carried by the float operative to attract and move the contacts into contact with the coil.

1,827,526. ORE ROASTING FURNACE. CHARLES E. KEATING, Indianapolis, Ind., assignor of one-half to George E. Golding, Indianapolis, Ind. Filed Dec. 15, 1930. Serial No. 502,285. 3 Claims. (Cl. 263—24.)



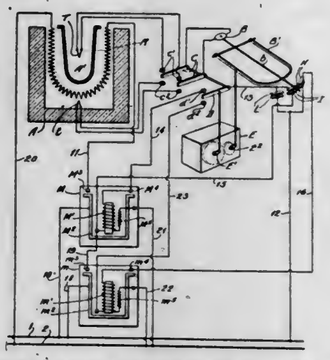
2. In an ore roasting device, a furnace structure having slots extending lengthwise of said furnace through the side walls thereof, shafts extending transversely of said furnace and adapted to travel through said slots, and chains adapted to travel within said slots and form closures therefor.

1,827,527. BOOM CONSTRUCTION FOR PAVING MACHINES. PHILIP A. KOEHRING, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Apr. 1, 1929. Serial No. 351,774. 13 Claims. (Cl. 104—92.)



1. A boom construction of the class described, comprising, in combination, a boom, a bracket device affixed to the boom, a pivotal mounting for the bracket device, a pivotal mounting for the first named pivotal mounting, and a third rotatable mounting carrying the first two pivotal mountings, and a distributing bucket disposed to operate on the boom.

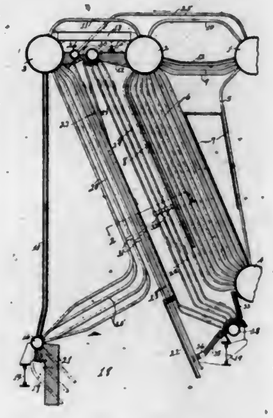
1,827,528. CONTROL APPARATUS. ANKER E. KROGH, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 28, 1929. Serial No. 350,782. 12 Claims. (Cl. 236—70.)



1. Control apparatus comprising in combination a deflecting meter, devices selectively actuated by said meter

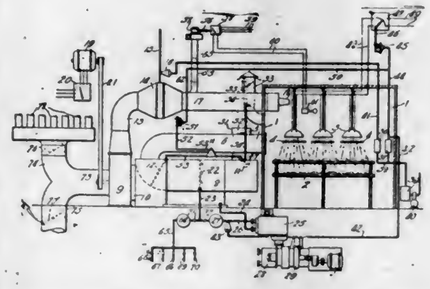
accordingly as the meter deflection is at a low, high, or intermediate value, a work thermo-couple, a heater thermo-couple, means for connecting said meter to said thermo-couples alternately, furnace control mechanism and connections through which said devices actuate said mechanism to normally increase and decrease the furnace heat supply accordingly as the temperature of one of said thermo-couples is less than or as great as a predetermined temperature for said one thermo-couple and for maintaining the heat supply at less than its maximum value throughout any period in which the temperature of the other thermo-couple is not less than a predetermined value for the last mentioned thermo-couple.

1,827,529. STEAM BOILER AND SUPERHEATER. IVAR L. LANGVAND, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 10, 1928. Serial No. 268,823. 7 Claims. (Cl. 122—478.)



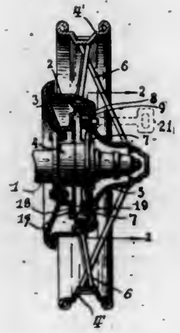
1. In a boiler of the Stirling type, upper and lower drums, banks of tubes connecting said drums, a superheater behind the first bank of boiler tubes, and means to cause gases from the furnace of said boiler to cross some of the tubes of said first bank twice before crossing said superheater tubes.

1,827,530. METHOD AND APPARATUS FOR PRODUCING ARTIFICIAL CLIMATES. JOSEPH M. LE GRAND, Newark, N. J., assignor to Carrier Engineering Corporation, Newark, N. Y. Filed Dec. 27, 1927. Serial No. 242,954. 5 Claims. (Cl. 128—1.)



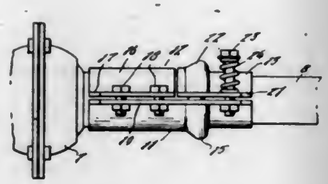
1. A process for conditioning substances independently of local climatic conditions which comprises enclosing said substances, subjecting said enclosed substances to gas conditioned as to temperature and relative humidity, subjecting said substance to light rays, and varying the intensity of the light rays with variations in relative humidity of said gas.

1,827,531. DEMOUNTABLE WHEEL. ARTHUR LONGPRÉ, St. Joseph, Quebec, Canada. Filed Apr. 25, 1931, Serial No. 532,867, and in Canada July 31, 1930. 6 Claims. (Cl. 301—9.)



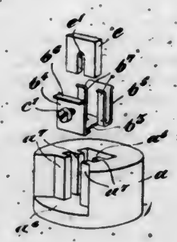
1. A demountable wheel structure comprising a wheel having a hub, a body on which said hub is adapted to fit, spring hooks carried by said hub and adapted to pass through apertures into said body, said hooks being adapted to expand in said body beyond the margins of said apertures, and means for compressing said hooks within said body to permit them to be drawn outwardly through said apertures.

1,827,532. BELL HOUSING SUPPORT. CHIEL W. MARLOW and HENRY G. MARLOW, Atlanta, Ga. Filed Aug. 30, 1929. Serial No. 389,476. 6 Claims. (Cl. 64—91.)



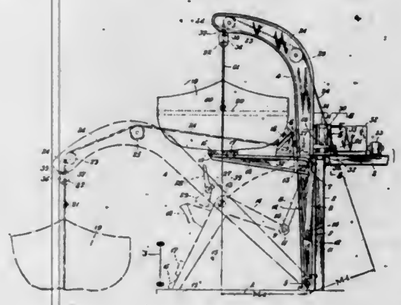
1. In a structure of the class described, in combination, a universal joint, a bell housing, a drive shaft housing having a bell joint, a drive shaft in the drive shaft housing and connected with the universal joint, and a bell housing support comprising a bottom section, a pair of top sections recessed portions in said bottom section and in one of the top sections for accommodating the bell joint, one of said top sections being rigidly fastened to the bottom section and the other of said top sections being yieldably fastened to the bottom section.

1,827,533. ELECTRIC SWITCH CONTACT. THOMAS RICHARD MARTIN, Tyseley, Birmingham, England. Filed Apr. 9, 1928. Serial No. 268,647. 11 Claims. (Cl. 173—363.)



1. An electric switch contact comprising a base, a cover and a contact member adapted to be clinched between said cover and base and comprising a ∩ shaped locating and a U-shaped socket portion, one limb of said socket portion being constituted by a portion bent from an adjacent limb of said locating portion.

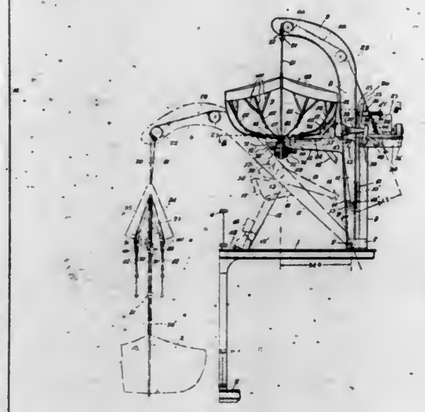
1,827,534. LOAD-CARRYING AND LAUNCHING DEVICE. ANGUS D. MCKENZIE, Mansfield, Ohio, assignor to The American Safety Navigation Company, Canton, Ohio, a Corporation of Ohio. Filed Jan. 20, 1930. Serial No. 421,920. 21 Claims. (Cl. 9—22.)



1. A load-carrying and launching device comprising, a main support, a boom pivoted adjacent its lower end to said support and adapted to move outwardly under the force of gravity, a load-support pivoted to the boom and connected by a link to said main support so as to be capable of movement away from the latter, pulleys mounted on the boom, a cable carried over said pulleys and adapted to carry the load during launching, stop means for limiting the upward movement of the cable relative to the boom, said stop means permitting downward movement of the cable at all times, means for controlling the cable movement, and means for detachably locking the boom in raised position to the main support, the construction being such as to cause said load-support to move away from the supported load during the initial launching movement of the boom.

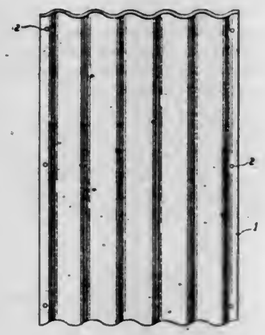
1,827,535. BOAT-LAUNCHING DEVICE. ANGUS D. MCKENZIE, Mansfield, Ohio, assignor to The American Safety Navigation Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 4, 1930. Serial No. 472,801. 38 Claims. (Cl. 9—22.)

1. A boat-launching device comprising a main support; a boat-lowering davit pivoted to said support; means for holding the davit in normal inoperative position; a boat cover; a boat support secured to the davit and adapted to support a boat when the davit is in inoperative position; lashings for the cover and lashings for the boat; locking means for the lashings carried by said boat



support; means permitting the davit to move for the launching operation; and unitary means for unfastening the lashings actuated by movement of said boat support at the commencement of the launching operation.

1,827,536. FLEXIBLE VITREOUS COATING FOR METALS. HENRY C. MILLIGAN, Canton, Ohio. Filed Jan. 16, 1930. Serial No. 421,192. 8 Claims. (Cl. 91—73.)

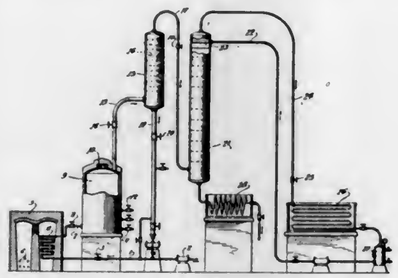


1. The method of coating steel and iron sheets with enamel which consists in cleaning the surfaces of the sheets with pickling solution containing iron sulphide, coating the sheets with metal oxides and silicates, and then submitting the coated sheets to a high temperature to thoroughly fuse the coating and weld it upon the sheets.

1,827,537. DESULPHURIZATION AND PURIFICATION OF HYDROCARBON OIL. JACQUE C. MORRELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 28, 1926. Serial No. 119,074. 5 Claims. (Cl. 196—23.).

5. The process of preparing marketable products from a mixture of hydrocarbons consisting chiefly of compounds of the gasoline range, which comprises subjecting the mixture in vapor form to partial condensation to produce a first condensate requiring relatively drastic chemical treatment and a second vapor which requires no such

drastic chemical treatment and has a lower end point than said first condensate, separating the second vapor into liquid products substantially free of normal gaseous hydrocarbons and into a gas, drastically chemically treat-

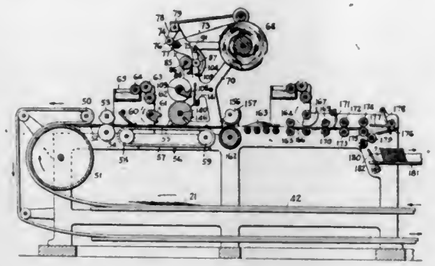


ing the first condensate and mildly chemically treating said liquid products, and blending the treated condensate with the treated liquid products separated from the second vapor.

1,827,538. PLASTIC COMPOSITION. ALEXANDER M. NASTUKOFF, Moscow, Union of Socialist Soviet Republics. Original application filed Mar. 21, 1927, Serial No. 177,217. Divided and this application filed Nov. 1, 1928. Serial No. 316,629. 1 Claim. (Cl. 260—3.)

A process of producing a solid dielectric body which consists in adding to four volumes of petroleum oil containing both unsaturated and saturated hydrocarbons, first at least two volumes of concentrated sulfuric acid, and then at least one volume of formalin, heating the mixture to the boiling point of water, adding water to the heated mixture, and then evaporating light hydrocarbons by introducing steam, thereby enabling the reaction to go to completion, then separating from the liquid the resultant precipitate, washing, neutralizing and drying the precipitate and finally dissolving from the precipitate, the absorbed saturated hydrocarbons.

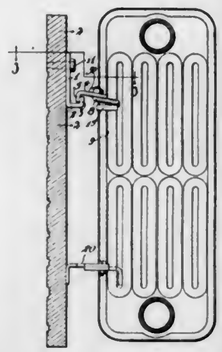
1,827,539. MAKING ENVELOPES AND MACHINE THEREFOR. ABRAHAM NOVICK, Flushing, N. Y. Filed Sept. 1, 1927, Serial No. 216,821. Renewed Jan. 23, 1931. 42 Claims. (Cl. 93—61.)



1. The method of making window envelopes, comprising continuously advancing envelope blanks in flat overlapping relation with the seal flaps thereof exposed and trailing, gumming the exposed seal flaps, moving the blanks so overlapped and gummed continuously for a sufficient period to dry the gummed seal flaps while retaining full control of each blank, separating the blanks from their overlapped position, applying gum about the periphery of the window opening of the blank, severing a patch of transparent material and applying the patch to the gummed window opening during the continuous movement of the blank after the seal flaps have dried and before the blank is folded, and completing the folding of the blank into an envelope while said blank is in motion.

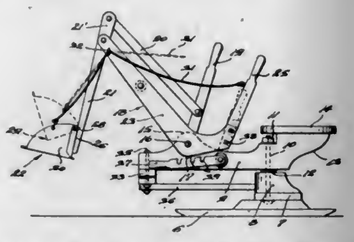
7. In a machine for making window envelopes, means for removing one blank at a time from the top of a stack in rapid succession, means for feeding the blanks in overlapped relation with the seal flaps thereof exposed at the rear of the overlapped blanks, means for continuously gumming the exposed seal flaps, continuously moving means for gripping each of said blanks individually while maintaining said blanks in overlapped relation, means for separating the leading blank from the remaining blanks intermittently operating means for severing a patch from a roll, a revoluble suction cylinder for applying the severed patch to the separated blank while said blank is in motion, means for creasing said blank, and means for folding said blank.

1,827,540. RADIATOR HANGER. THOMAS O'CONNELL, St. Paul, Minn. Filed May 26, 1930. Serial No. 455,505. 5 Claims. (Cl. 248—17.)



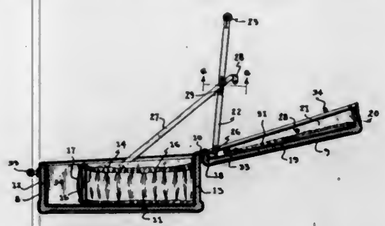
1. A radiator hanger comprising a wall element having an upwardly projecting flange thereon, a radiator supporting plate supported by said wall element and adapted to engage the rear face of a radiator element, and a U-bolt adapted to encircle said radiator element to have interlocking engagement with said radiator supporting plate to bind the radiator element against downward displacement.

1,827,541. CHILD'S POWER SHOVEL. OTTO F. OPPERMAN, Seattle, Wash. Filed Aug. 25, 1930. Serial No. 477,557. 14 Claims. (Cl. 214—138.)



11. In a toy of a character affording swivel activity about a vertical axis, a base, a frame mounted for swivel activity on said base and having a seat member, a hand-operable tool-supporting arm movably mounted relative to said base and frame, a tool supported by said arm, and means for controlling the swivel activity of said frame comprising a foot-contacting cross-bar pivoted medially of its length to the frame, and a link pivoted to one arm of said cross-bar and to the base.

1,827,542. WARDROBE HATBOX. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 20, 1929. Serial No. 408,500. 4 Claims. (Cl. 190—41.)



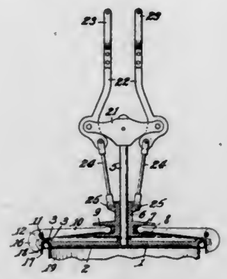
1. A luggage case, comprising a body section, a cover section hingedly connected thereto, a clothes rack pivotally mounted within the inner corner portions of the cover section and extending therein lengthwise of the cover section and movable outwardly of the outer end portion of the cover section when the latter is open, and flexible means connected to the body section, the clothes rack and the cover section for maintaining a certain relationship between said members when the case is open.

1,827,543. KILN FOR DECORATING CERAMIC WARE AND OTHER PURPOSES. HARRY M. ROBERTSON, Cleveland, Ohio. Filed Jan. 15, 1930. Serial No. 420,993. 13 Claims. (Cl. 25—142.)



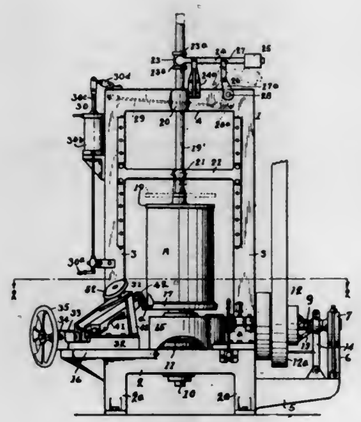
1. In a kiln structure, the combination of a heating and firing section and a cooling section, a transverse separating wall structure between the inner ends of said sections and having insulation means, said wall structure having a longitudinal opening through it, a muffle in each section in line with said opening and connected thereto to form a continuous muffled passage for loaded conveyors, means for supporting each said muffle in spaced relation to the walls of the adjacent section, and means for supplying heat to the inner end portion of said heating section.

1,827,544. APPARATUS FOR ATTACHING COVERS ON PAILS. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Apr. 11, 1930. Serial No. 443,463. 8 Claims. (Cl. 113—18.)



1. Apparatus for attaching covers to pails, comprising a base plate having a portion for seating upon the rim of the cover, radially disposed levers having pivotal connection intermediate their ends with said plate and having jaws at their outer ends, an upright standard carried centrally by said plate, a yoke of cross-arm form rigidly mounted on the upper end of said standard, a member shiftable on said standard, said member having the inner ends of said levers operatively engaged therewith whereby the latter are actuated in shifting movements of the former to move said jaws to and from bending relation to the attaching flange of said cover, and means for manually effecting shifting of said member, said means comprising operating levers pivoted intermediate their ends on the opposite ends of said yoke, and links connecting the lower ends of said operating levers to the upper end of said shiftable member.

1,827,545. MACHINE FOR MAKING CONTAINERS. ANTHONY SCHROEDER, Cleveland, Ohio, assignor of one-half to James Merle Finney, Cleveland, Ohio; Albert Y. Beckwith, administrator of said Anthony Schroeder, deceased, assignor to Mollie Schroeder, Cleveland, Ohio. Original application filed May 20, 1925, Serial No. 31,530, Patent No. 1,635,506. Divided and this application filed July 5, 1927. Serial No. 203,558. 1 Claim. (Cl. 113—22.)

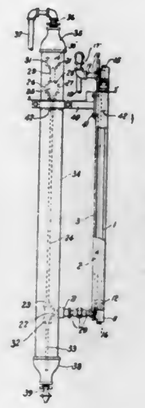


In a seaming apparatus for joining a head having an upwardly inclined flange and a body having an inclined flange of less width than said flange and seated within and in face to face relation with the latter, the combination of a plane support arranged to engage with and support the head and body means for rotating said support, a seaming device, and means for moving said device substantially in an inclined inwardly direction in the plane of said flanges to curl the head flange over said body flange.

1,827,546. SELF-LEVELING U-GAUGE. GEORGE R. STEERE, Owosso, Mich., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1927. Serial No. 215,911. 10 Claims. (Cl. 73—31.)

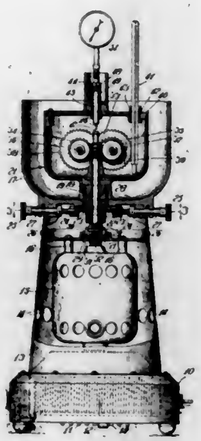
4. A pressure indicating device comprising a gauge-tube arranged to contain a pressure indicating liquid and connected to a source of pressure, an outer tube in communication with a source of lower pressure and a tube within said outer tube, said inner tube having its lower portion extending to substantially the bottom of the outer tube, being connected intermediate its ends with said gauge tube and being vented at both the top and

bottom to said outer tube, whereby an abnormal pressure in the gauge-tube causes a discharge of the pressure indicating liquid into the outer tube and a decrease of said



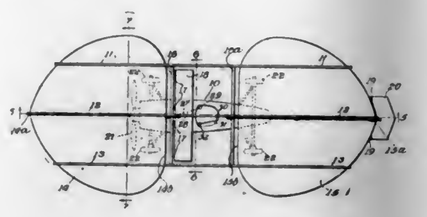
abnormal pressure causes a return of the liquid into the gauge-tube through said lower extending portion of the inner tube thereby preventing the formation of bubbles in said gauge-tube.

1,827,547. TESTING DEVICE. ELTON S. STEPHENS, Chicago, Ill., assignor to Central Commercial Company, a Corporation of Illinois. Filed Aug. 29, 1925. Serial No. 53,392. 4 Claims. (Cl. 73—5.)



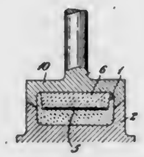
2. In a device of the class described, a hollow base adapted to contain a rheostat, a support mounted on said base, a motor within said support, a container mounted on said support and adapted to contain a freezing element, a bearing formed on said container, a receptacle, a depending journal on said receptacle for engaging said bearing on said container, gear mechanism rotatably mounted within said receptacle, means operated by said motor and including a member rotatable in said journal, for operating said mechanism and thereby, due to friction, rotating said receptacle, and brake mechanism for preventing the rotation of said receptacle.

1,827,548. AEROPLANE. ERWIN STUDER, Chicago, Ill. Filed Apr. 24, 1930. Serial No. 446,811. 14 Claims. (Cl. 244—12.)



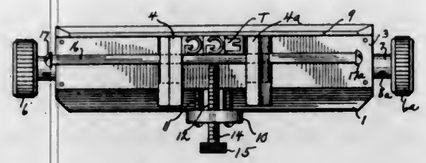
1. In an aeroplane, the combination of a fuselage, spars supported in substantially parallel relation above said fuselage and projecting beyond the front and rear ends thereof, the front ends of said spars being curved upwardly and the rear ends thereof being curved downwardly, front and rear heart-shaped wings supported in tandem relation by said spars, the apex of said front wing being at its forward edge and the apex of said rear wing being at its rear edge, a wing flap having a hinged support along its front edge adjacent the rear edge of said front wing and of a length substantially equal to the base of said wing, the bases of said wings being spaced a substantial distance from each other affording a clearance space between the rear edge of said wing flap and the base of said rear wing greater than the width of said wing flap, an elevator hinged on a horizontal axis adjacent the rear edge of the rear wing, a rudder hinged on a vertical axis adjacent the rear end of said fuselage, the front portion of said front wing having substantially the upward curvature of the front ends of said spars and the rear portion of the rear wing having substantially the downward curvature of the rear ends of said spars, the rear portion of the front wing and the front portion of the rear wing being substantially in the same horizontal plane, and mechanism for operating said wing flap, said elevator and said rudder.

1,827,549. MANUFACTURE OF TRANSPARENT SOAP TABLETS CONTAINING ADVERTISEMENTS. ENA VILLAIN, Dulwich, London, England. Filed Jan. 31, 1930, Serial No. 424,771, and in Great Britain Jan. 15, 1930. 1 Claim. (Cl. 18—59.)



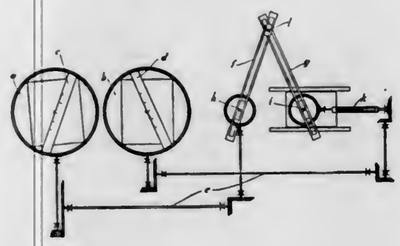
A process for making a transparent soap tablet with an advertisement embedded therein, comprising enveloping said advertisement in a transparent envelope of very thin sheet cellulose sulphate forming a basic tablet of transparent soap with a depression in the top face extending to the medial plane of said basic tablet, laying the enveloped advertisement in the bottom of said depression, warming up said basic tablet to soften it, filling up said depression with molten transparent soap of the same kind as the transparent soap constituting said basic tablet, and finally compressing the whole by means of the soap press to form the complete tablet.

1,827,550. ATTACHMENT TO EMBOSSING OR STAMPING MACHINE. FRANK WILLIAMS, New York, N. Y., assignor to Simplex Gold Stamping Press Co., New York, N. Y., a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,638. 4 Claims. (Cl. 101—29.)



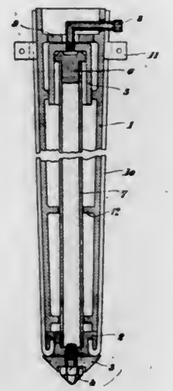
1. A device of the type specified, having a wall against which a plurality of type members are adapted to be clamped, movable jaws associated with said wall, means adapted to actuate said jaws to clamp the type members, an additional clamping member adapted to be forced against said type members in a direction perpendicular to said wall, at least one end of said additional clamping member projecting beyond the adjacent jaw, and means adapted to actuate said additional clamping member, the end of said additional clamping member which projects beyond the adjacent jaw extending through an opening in said adjacent jaw.

1,827,551. STEREOISOHYPSOGRAPH. KARL WULKOW, Berlin-Neukolln, Germany, assignor to the Firm Photo-Grammetrie G. m. b. H., Munich, Germany. Filed July 16, 1928, Serial No. 293,274; and in Germany July 28, 1927. 1 Claim. (Cl. 33—20.)



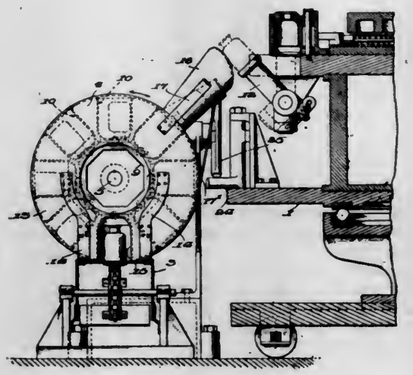
In a device for determining the plan of points and lines from two overlapping air-photographs, the combination of a pair of ruling members, each ruling member being mounted to rotate about a fixed axis in a plane parallel with the drawing surface of one of the photographs, a second pair of ruling members remote from the first pair, means for slidably coupling the members of the second pair together, a marking device at the coupling point of the members, and means for coordinating the movements of each ruling member of the first pair with that of a corresponding member of the second pair, whereby the direction changes of the first pair of rulers are transmitted to the second pair in the same proportions.

1,827,552. ARRANGEMENT FOR FORCING AWAY THE PILE CORE FROM THE POINT OF THE PILE. IGNAZ ZEISSL, Vienna, Austria, assignor to Stern-Gesellschaft fur Moderne Grundbautechnik m. b. H., Vienna, Austria, a Company of Austria. Filed Mar. 26, 1930, Serial No. 439,135, and in Germany Feb. 10, 1930. 4 Claims. (Cl. 61—79.)



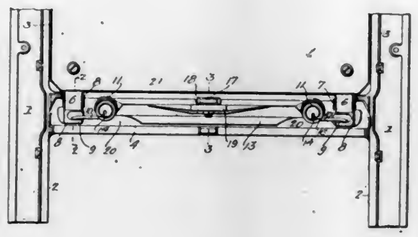
1. Pile comprising in combination a pile core, a removable pile-point attached thereto and provided with an annular recess therein, bands extending along the pile core, the bottom ends of said bands engaging said recess, and a repulsion press arranged at the top end of the pile core.

1,827,553. TRANSFER APPARATUS. ALBERT M. ALGEO, GEORGE R. HAUB, and JAMES W. ROSS, Washington, Pa., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Aug. 14, 1925. Serial No. 50,332. 6 Claims. (Cl. 198—25.)



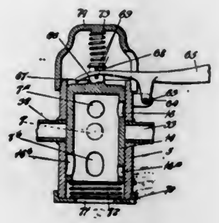
1. In a transfer mechanism for transferring bottles from a forming machine to a conveyer, a rotary carrier having pockets to receive the bottles in neck-down position, means for directing the bottles radially into said carrier, and a mechanical conveyer for removing the bottles laterally from said carrier in neck-up position.

1,827,554. OVEN DOOR SPRING FOR RANGES. WILLIAM D. ANTRIM, Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1930. Serial No. 424,955. 5 Claims. (Cl. 126—191.)



1. The combination in an oven, of a frame; a door pivotally mounted thereon; a hinge projection on the door having an extension in which is a socket; a post at the back of the frame; and a coil spring on the post, one end of the spring being secured to the post and the other extending into the socket on the hinge projection of the door.

1,827,555. APPARATUS FOR DISPENSING LIQUIDS. JAMES ALFRED BOLTON, Lower Plenty, via Heidelberg, near Melbourne Victoria, Australia. Filed Apr. 2, 1930, Serial No. 441,139, and in Australia Aug. 13, 1929. 2 Claims. (Cl. 225—6.)



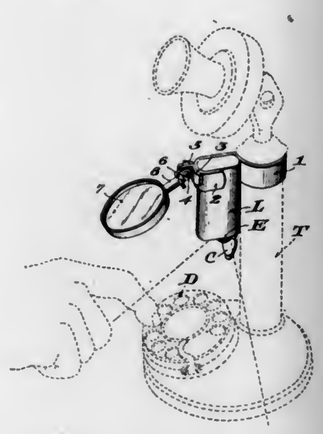
1. Apparatus for dispensing liquids comprising a fixed female member internally bored having inlet pipes from a water supply and from two sources of juice supply, the inlet ports of the female member being normally in horizontal line, a male member internally bored from the underside adapted to slide in said female member and a connecting lever adapted to move the male member in either direction, water inlet ports in said male member normally positioned so that one is above and the other below the water inlet port of the female member, a substantially long port on one side of the male member adapted to move over one of the juice supply ports of the female member and two ports on the other side of the male member normally spaced one above and the other below the inlet port of the female member of the other juice supply, the male member being slidably operated so that one or two of the juice supplies are opened and the water supply is opened for the simultaneous delivery of a mixed drink as herein described.

1,827,556. PISTON FOR INTERNAL COMBUSTION ENGINES. CARLO BORGO and ELISSIO ROSAZZA MANUEL, Turin, Italy. Filed Dec. 1, 1930, Serial No. 499,346, and in Italy Dec. 20, 1929. 1 Claim. (Cl. 74—108.)



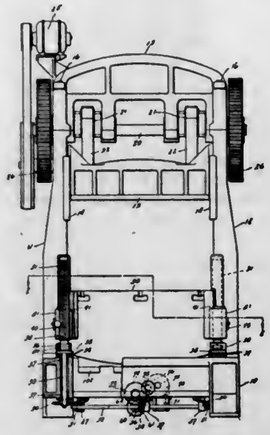
A piston for internal combustion engines, particularly of the hollow cast aluminum type, in which a number of grooves are provided on the cylindrical wall of the piston, these grooves being limited to the two zones below the supports for the connecting gudgeon pin at the head of the connecting rod, and being substantially normal to the generating lines of the said cylindrical wall, and presenting a maximum depth and width in line with the middle part of said zones and diminishing to zero both in depth and width at each side of this middle part until they vanish at the boundary between the said zones and intermediate zones for supporting the piston against the cylinder walls, with the object of preventing all danger of seizing of the piston at the said zone.

1,827,557. MAGNIFYING GLASS ATTACHMENT FOR DIAL TELEPHONES. ADA G. BRADFORD, San Francisco, Calif. Filed May 28, 1930. Serial No. 456,692. 1 Claim. (Cl. 248—20.)



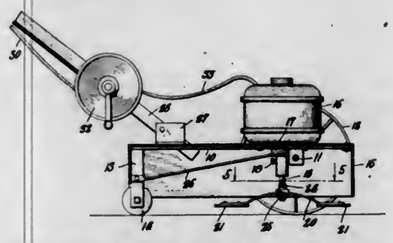
A magnifying glass attachment for dial telephones including a support formed for attachment to the telephone column, a projection carried by the support and extending outwardly therefrom, a substantially L-shaped holder having a substantially vertical U-shaped slot in one of its arms which extends through the top thereof and which forms a pair of spaced opposed walls, means to connect the other arm of the holder to the projection of the support to enable the holder to have vertical swinging movement whereby to position the glass in a plane parallel to the plane of the dial and a member for supporting a magnifying glass having a pair of spaced opposed slots which receive the walls of the slot of the holder so as to support the member against turning and to permit same to be removed from the holder by mere upward movement out of the slot.

1,827,558. PRESS. ARTHUR A. BYERLEIN, Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed May 29, 1928. Serial No. 281,550. 26 Claims. (Cl. 113—38.)



1. A press of the character described comprising a frame having bed guiding surfaces, an operating shaft rotatably supported at an upper part of said frame, an upper slide guided in said frame and operated by said shaft and adapted to support an upper die and a bed member adjustable within said frame along said surfaces throughout a large range of adjustment and wedge means for wedging the bed tightly against the bed guiding surfaces of said frame to hold the bed rigidly in any desired position of adjustment.

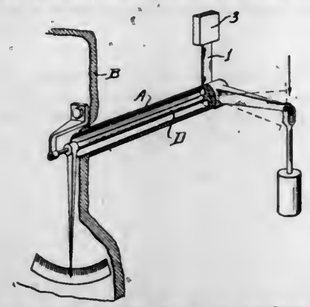
1,827,559. POWER OPERATED LAWN MOWER. WILLIAM E. BEAZLEY, St. Petersburg, Fla., assignor to Beazley Power Mower Co. (Incorporated), St. Petersburg, Fla. Filed June 15, 1929. Serial No. 371,232. 1 Claim. (Cl. 56—25.)



A power operated lawn mower comprising a portable carriage, a power source carried by the carriage, a shaft diven by the power source and depending therfrom under the carriage, oppositely disposed and downwardly curved arms having the inner ends thereof adjustably secured to the shaft, cutting blades secured to the arms adjacent the free ends thereof and having curved cutting edges disposed laterally of the arms, and oppositely disposed fan blades adjustably secured to the shaft above the cutting blades to create a suction to the uncut grass to draw the grass into the path of rotation of the cutting blades.

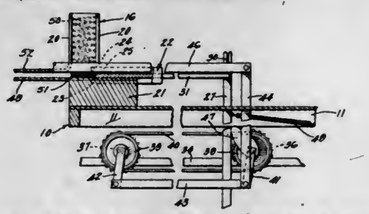
1,827,560. MEANS FOR TRANSMISSION OF MOTION. GEORGE S. BINCKLEY, Los Angeles, Calif. Filed Oct. 29, 1928. Serial No. 315,881. 2 Claims. (Cl. 74—14.)

1. In a device for transmitting motion, a tube, a wall fixed to and in effect integral with each end of said tube, a rod extending through said tube, means securing said tube, means securing the rod to said tube between said



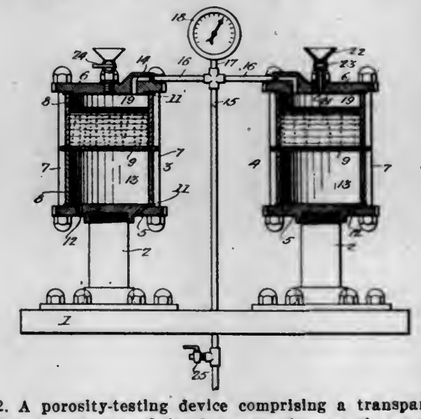
walls, means for applying force to produce elastic deformation of the tube, and means for utilizing the motion of said rod produced by said elastic deformation.

1,827,561. SPRING HANDLING MACHINE. WILLIAM S. BULLOCK, Chicago, Ill. Filed Nov. 18, 1929. Serial No. 408,058. 5 Claims. (Cl. 226—18.)



1. In a device of the character stated, a container having diametrically opposed slots therein, an arm, another arm connected to said arm, another arm connected to said last named arm and extended parallel to said first named arm, links pivotally connected to said last named arm, means for supporting said links for movement in a circular path whereby said arms may be moved in a circular path, said first named arm moving through said slots to compress a member in said container during a portion of the downward movement thereof in said circular path, and means for moving the member compressed in said container therefrom.

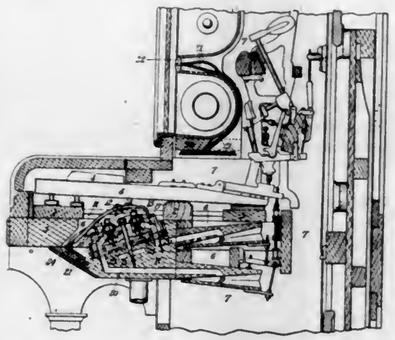
1,827,562. POROSITY TESTER. CHARLES E. CARPENTER, Philadelphia, Pa., assignor to E. F. Houghton & Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1927. Serial No. 220,193. 7 Claims. (Cl. 73—51.)



2. A porosity-testing device comprising a transparent-walled open-bottomed hood, means for securing a test

specimen across the bottom of the hood, means whereby liquid may be introduced into the chamber thus formed, and means for evacuating the chamber of its air or gas content.

1,827,563. PNEUMATICALLY OPERATED PIANOFORTE. ROBERT HENRY COLLEN, Blackwater, East Ham, England, assignor of one-half to John Broadwood & Sons Limited, London, England. Filed Mar. 29, 1930, Serial No. 540,091, and in Great Britain July 25, 1929. 2 Claims. (Cl. 84—50.)



1. In pneumatically operated pianofortes, the provision of means whereby access is obtained to any of the valvular devices for the adjustment, removal or replacement thereof upon removal of the adjacent finger keys of the instrument, the said means comprising the finger keys and key frame and valvular devices, the key frame having an unobstructed opening therein of sufficient length and breadth to enable the whole of the said valvular devices to be passed therethrough on removal of the keys, the valvular devices being housed within the said opening in a position adjacent to and beneath the underside of the said finger keys.

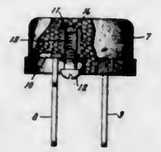
1,827,564. DISPENSING DEVICE. ROBERT DUNCAN COMRIE, Southampton, England. Filed May 17, 1928, Serial No. 278,481, and in Great Britain June 8, 1927. 12 Claims. (Cl. 221—61.)



1. A receptacle for powder, comprising a container provided with a slot, a strip of elastic material adapted to receive a layer of powder on its upper surface and having its inner end secured within the container so as to be movable through the slot into and out of said container, and means for securing the inner end of said strip of material to the wall of the container.

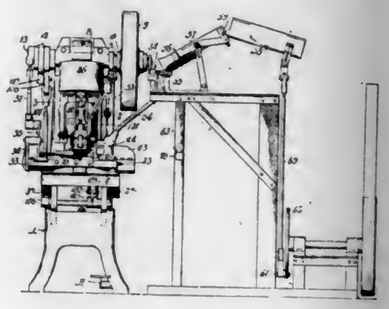
1,827,565. METAL INSERT FOR MOLDED PARTS AND METHOD OF MAKING THE SAME. FRANK C. DE REAMER, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Nov. 22, 1929. Serial No. 409,164. 2 Claims. (Cl. 173—361.)

1. In a device of the character described, the combination of a base of molded insulating material, a contact carried thereby, a hollow insert for securing the contact to the base which is enclosed within said material except at one end and is threaded to receive a wire clamping screw, and an expanded plug of metal located at the



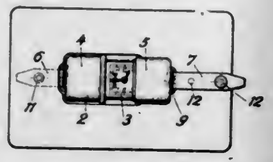
inner end of the insert and held by the threads to prevent the material forming the base from entering the inner end of the insert during the molding operation.

1,827,566. NAIL HEAD CAPPING MACHINE. GEORGE E. DICKSON, Evanston, Ill. Filed Dec. 28, 1928. Serial No. 328,874. 12 Claims. (Cl. 10—158.)



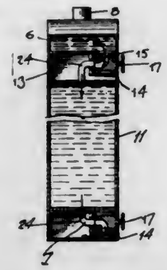
1. In a nail head capping machine, a die adapted to receive and hold a nail during the capping thereof and which nail projects through the bottom of said die, a member engaging the bottom end of the nail for imparting an initial upward movement to said capped nail in removing it from the die and other means for grasping the cap for imparting the final upward movement to the nail for removing it from the die member.

1,827,567. WATCH NOVELTY. ISIDORE DITESHEIM, La Chaux-de-Fonds, Switzerland. Filed July 14, 1930, Serial No. 467,905, and in Switzerland Nov. 26, 1929. 2 Claims. (Cl. 150—34.)



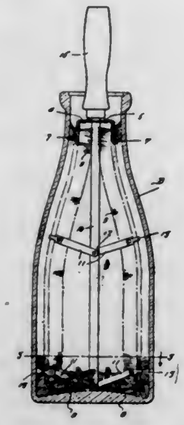
1. A watch holder comprising a casing formed of two parts adapted to slide over the case of the watch in the plane of the latter, said parts being normally joined together and adapted to be moved apart for rendering the indicating members of the watch visible, said casing containing the watch being partly fixed in a cavity formed in the watch holder, fastenings upon the external end of each part of said casing secured to the watch holder so as to be able by means of one of the fastenings to detach from the holder one of the parts of the casing, to disengage the latter partly from the said cavity and to move the two parts of the casing apart for rendering the indicating members of the watch visible.

1,827,568. AUTOMOBILE RADIATOR. AMERICO DONADIO, Rome, Italy. Filed Nov. 14, 1929. Serial No. 407,195. 1 Claim. (Cl. 257—125.)



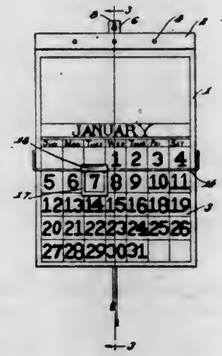
A cooling radiator for automobiles comprising a rectangular casing having an upper water chamber, a valve chamber located immediately below the same and having a flat bottom part devoid of connecting bosses and formed with apertures, rotary valves and valve casings located in said valve chamber and communicating with ports leading respectively to the water chamber and to the apertures in the bottom of the valve chamber, a plurality of slidably attachable and detachable water cooling sections located below said valve chamber and communicating with the upper chamber by way of the valve connections, a lower valve chamber, valves located therein and communicating with the cooling sections and with suitable outlets leading to the circulating system.

1,827,569. BOTTLE CLEANING BRUSH. PAUL T. EDGAR, Arcola, Ill. Filed Apr. 9, 1931. Serial No. 528,892. 1 Claim. (Cl. 15—165.)



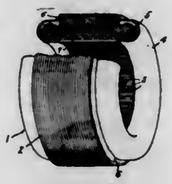
A bottle cleaning brush comprising an inverted substantially U-shaped frame formed of spring wire and consisting of a pair of spaced oppositely disposed L-shaped leg members connected at their upper ends by a bridge portion and having a respective lower bent portion disposed inwardly of the frame and laterally of each other, an opening bar extending centrally and longitudinally of the frame with its upper end disposed slidably through the bridge portion of the frame, longitudinally spaced pairs of oppositely disposed arms pivoted at their respective inner ends to said bar for relatively opening and closing movement inwardly of the frame, U-shaped members pivotally secured to the outer ends of said arms and fixedly embracing adjacent portions of said leg members, said frame being tensioned to normally hold the leg members close together, and the said arms in relatively closed relation, said bar being shiftable relative to the frame for opening the said arms and separating the said leg members.

1,827,570. CALENDAR ATTACHMENT. JOHN F. EYNCK, Guatemala City, Guatemala. Filed Sept. 19, 1930. Serial No. 483,103. 3 Claims. (Cl. 40—110.)



1. A device of the class described comprising a backing member having a vertical row of spaced slots, means for attaching a calendar sheet thereto, a horizontal member supported for sliding movement by the backing sheet and having a resilient tongue selectively engageable in any one of the slots, a bar carried by the horizontal member and extending over the calendar sheet, and a frame slidably arranged on the bar and adapted to frame a figure on the calendar sheet.

1,827,571. INSULATION OF ELECTRICAL APPARATUS. MARCUS E. FIENE, Ballston Lake, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,304. 12 Claims. (Cl. 175—21.)

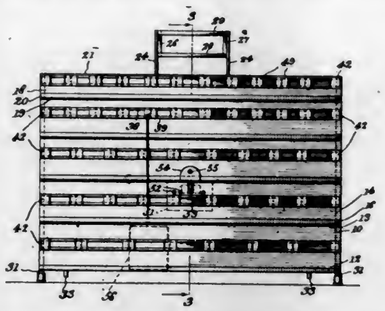


1. The process of making and insulating a coil for electrical purposes, said coil consisting of fibrous covered conductors, which includes the steps of filling the spaces between the turns of the conductors with an inert filling material, impregnating with an agent adapted to coat the conductors and bind the filling material, and heating said coil so treated, in an inert environment, to cause the impregnating agent to bond the filling material and conductors in place and to decompose said fibrous covering to a stable insulating product.

1,827,572. RACK. GERALD A. FITZGIBBONS, St. Louis, Mo. Filed Dec. 4, 1929. Serial No. 411,525. 1 Claim. (Cl. 211—55.)

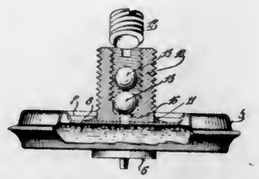
A display rack comprising a succession of sheet metal base sections disposed in edge-wise abutting and superposed relation, each base section having at its lower edge an out-turned shelf portion and at its upper edge an out-

turned retaining flange abutting the lower side of the shelf portion of the adjacent base section, and reinforcing



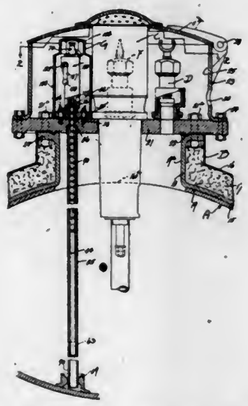
and supporting members secured to and extending across the rear sides of said base sections to hold the same together and in upright position.

1,827,573. RECEPTACLE CLOSURE. JOHN FRASER, Jr., Milwaukee, Wis., assignor to Milwaukee Valve Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 27, 1928. Serial No. 295,681. 5 Claims. (Cl. 220—24.)



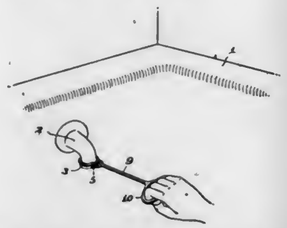
3. A closure for sealing a receptacle opening comprising a pellet of deformable metal adapted to be compressed to fill the opening, and means forming part of the closure for compressing the pellet.

1,827,574. METHOD AND APPARATUS FOR GAUGING THE CONTENTS OF TANK CARS AND THE LIKE. LUCIUS E. FRAZIER, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Feb. 25, 1928. Serial No. 256,958. 18 Claims. (Cl. 73—120.)



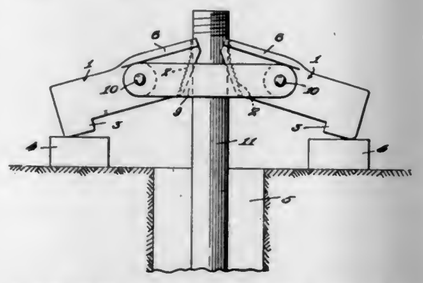
1. In a tank car gauging device the combination with a tank car, of a hollow tube, means mounting the tube for upright slidable movement in the tank car for partial insertion thereinto to various degrees, a housing externally on the tank car for enclosing the exposed portion of the tube, means to seal the compartment in the housing against release of pressure therefrom, said housing and said last mentioned means cooperating in structure to provide vent ducts which open to release pressure from within the housing during removal of the latter and prior to entire removal thereof.

1,827,575. BATHTUB GRIP. JOSEPH H. GERMERSHAUSEN, Plainfield, N. J. Filed Mar. 6, 1931. Serial No. 520,651. 2 Claims. (Cl. 4—185.)



1. A bathtub grip comprising a clamp adapted to clamp a bathtub fixture, said clamp comprising a pair of arc-shaped members having ears at each end, a clamping screw extending through the respective pairs of ears, a rod swingably mounted on one of said screws and a hand grip merging into said rod at the outer end thereof.

1,827,576. PIPE CLAMP. JOSEPH GURSCHKE, San Francisco, Calif. Filed Jan. 7, 1931. Serial No. 507,252. 2 Claims. (Cl. 24—248.)

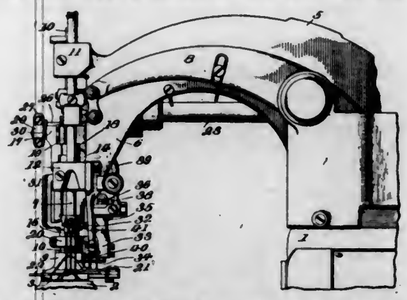


1. A pipe clamp comprising two clamp members having their confronting ends concaved and arranged at opposite angles and formed with gripping teeth, said clamps from their jaw ends having their upper edges flanged outwardly and having their sides formed with annular depressions which the flanges overlie, connecting bars for the pair of clamps, each having widened ends rounded in the same direction and received in the depressions and pivoted to the clamps and the outer edges of the said bars being in the path of engagement with the flanges of the clamps.

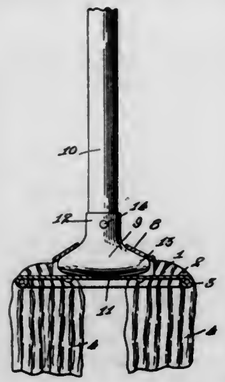
1,827,577. FEED-OFF-THE-ARM SEWING MACHINE. WALTER M. HANNEMAN, Evansville, Ind., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 14, 1928. Serial No. 305,945. 4 Claims. (Cl. 112—100.)

3. In a sewing machine the combination of a work support, a needle head directly above the free end of said work support, a presser bar mounted in spaced lugs in said needle head, a sleeve surrounding said presser bar and extending through said lower lug and free to oscillate therein, means for limiting the endwise movement on the presser bar, a trimming blade carried by said sleeve,

a yoke surrounding said sleeve and straddling the lower supporting bearing for said sleeve, a thread hook carried by said yoke, a horizontal rock shaft, an arm carried by the rock shaft, a link connecting said arm to said sleeve for oscillating the sleeve, a second arm depending from said rock shaft, and a link connecting said second arm with said yoke for oscillating the thread hook.

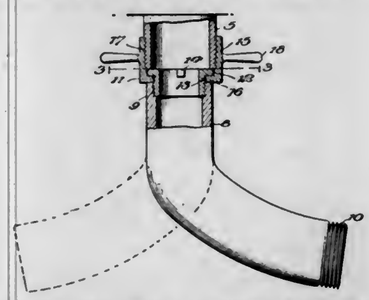


1,827,578. MOP. ANNA HARDER, Idaho Falls, Idaho. Filed July 14, 1930. Serial No. 467,868. 1 Claim. (Cl. 15—228.)



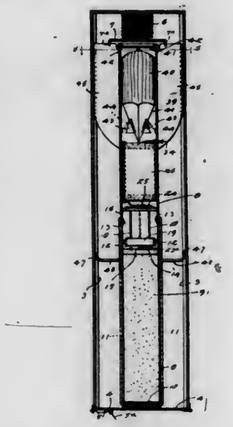
A mop comprising a head having a plurality of slots, cleaning cloths passed through the slots, closely related teeth formed on one of the walls of the slots to bite into the cloths to detachably secure the cloths intermediate their ends to the head, and a handle on the head.

1,827,579. COUPLING FOR PUMPING FIRE ENGINES. FRANCIS J. HARRIS, Johnstown, Pa. Filed Feb. 28, 1930. Serial No. 432,131. 2 Claims. (Cl. 285—9.)



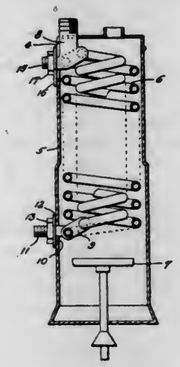
1. A coupling for placing a pumping fire engine and a fire hydrant in communication at close range, including a flexible non-collapsing hose for attachment at one end with a hydrant, a relatively rigid coupling member detachably engaged at one end with the other end of the hose and having a swivel connection at its other end with the engine, said rigid coupling member being bent intermediate its ends at an angle less than a right angle to provide for disposing the flexible hose in substantial parallelism to the engine when in coupling relation.

1,827,580. AIRPLANE PARACHUTE FLARE. THURMAN L. HOEHN and HARRY WILLIAM HOEHN, Lancaster, Pa. Filed Apr. 22, 1930. Serial No. 446,352. 13 Claims. (Cl. 102—24.)



1. An airplane parachute flare of the character described, comprising a cylinder, a light producing chemical in the cylinder, a main parachute in the cylinder, a pilot parachute in the cylinder, means for causing the pilot parachute to be blown from the cylinder after the flare has been released from a plane, said pilot parachute being connected to the main parachute for extracting the same from the cylinder, means for delaying the release of the main parachute until the polot parachute has opened, and means for igniting the light producing chemical after the main parachute has been released and has opened.

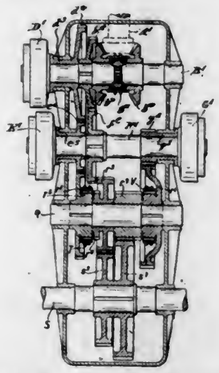
1,827,581. COPPER COIL WATER HEATER CONSTRUCTION. HARRY HOWELL, Cleveland, Ohio. Filed Nov. 11, 1930. Serial No. 494,978. 2 Claims. (Cl. 122—250.)



2. In combination, a water heater including a casing, a multiple water circulating coil arranged within the cas-

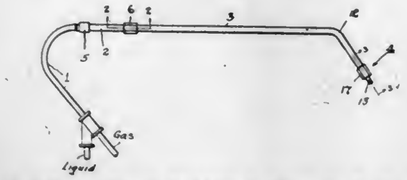
ing and provided with an inlet manifold and an outlet manifold, and means for mounting said coil within the casing, said means including a projection provided on said inlet manifold and projecting through a slot provided in the wall of the casing, means engageable with said projection for normally retaining the same against casual movement relative to the slot, a projection provided on the outlet manifold and extending through a second slot provided in the wall of said casing, and means engageable with the second mentioned projection and slidably contacting the wall of said casing, whereby said second projection may be moved longitudinally of its slot for expanding or contracting the circulating coil to facilitate coupling of the outlet manifold to a conduit pipe of a boiler.

1,827,582. VARIABLE SPEED GEAR. WERNER JACOBS, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Oct. 25, 1928, Serial No. 315,067, and in Germany Nov. 18, 1927. 2 Claims. (Cl. 74—59.)



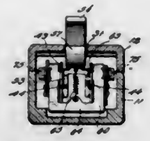
1. In a variable speed gear of the class described a driving shaft and a driven shaft, a plurality of intermediate shafts arranged between said driving and driven shaft, clutches mounted on the first two intermediate shafts and adapted to be operated during running, a toothed wheel rigid on the one half of each of these clutches and adapted to be coupled with its intermediate shaft by said clutch, the halves of the clutches of the second intermediate shaft being in direct permanent gear connection with the clutch halves of the preceding intermediate shaft at least one of the halves of each of the clutches of said second intermediate shaft being also in direct permanent gear connection with the next intermediate shaft, and a variable gear connection between said next intermediate shaft and said driven shaft and means for selectively throwing-in the speed-varying members of said connection.

1,827,583. METHOD OF SPRAYING LIQUIDS. THOMAS W. JAMES, Cleveland, Ohio, assignor to Lubri-Graph Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 11, 1931. Serial No. 521,667. 4 Claims. (Cl. 299—107.)



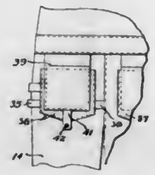
1. The method of spraying a liquid in finely divided particles which consists of atomizing a mixture of such liquid and a gas, bringing the fog formed by such atomization into contact with the stream of atomized liquid to cause the same to be absorbed thereby, and then discharging such stream.

1,827,584. INCLOSED TUMBLER SWITCH. GEORGE A. JOHNSON, Fairfield, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 17, 1928. Serial No. 278,447. 1 Claim. (Cl. 200—67.)



In an electric switch, a carrier having an off-set portion, a switch bar slotted to receive said off-set portion, said portion having an aperture of greater extent than the thickness of said switch bar, and a spring clip extending through said aperture on the side of said bar away from the carrier and engaging said bar and said off-set portion to hold the bar against the carrier.

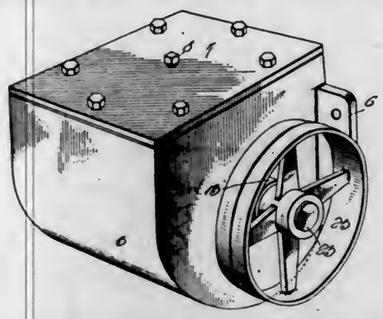
1,827,585. OVERALLS. JACOB KAUTZ, Chicago, Ill. Filed Oct. 31, 1928. Serial No. 316,177. 1 Claim. (Cl. 2—247.)



In an overall, the combination of a stationary pocket adjacent the upper end of the leg portion of the garment on the rear side thereof and having an open upper end, a swinging pocket stitched to the garment above the open upper end of said stationary pocket and insertible therewithin, a conecting element on the leg portion below the stationary pocket, a tab depending from the lower end of the swinging pocket, a connecting element on said tab adapted to be connected to said first named element whereby said swinging pocket may serve as a flap for said stationary pocket, and loops extended around the side of the leg to provide tool supports, said lops having the front ends thereof secured to the front side of the leg portion and having the rear ends thereof disposed between said stationary pocket and the leg portion and stitched thereto at the outer seam line of said stationary pocket whereby to reenforce said loops.

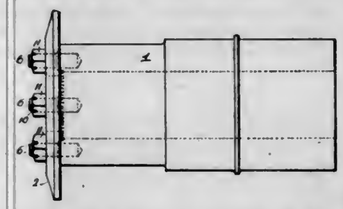
1,827,586. VIBRATING MECHANISM. WALTER L. KEEFER, Chambersburg, Pa. Filed Oct. 18, 1930. Serial No. 489,669. 6 Claims. (Cl. 259—72.)

1. A vibrating mechanism comprising a support for connection with a part to be vibrated, a bearing carried rigidly by said support, a shaft rigidly secured to said support and projecting toward the inner end of said bearing in axial alinement with the latter, a rotatable shaft passing through said bearing, bearing means whereby the inner end of said rotatable shaft is supported by the inner end of said fixed shaft, an off-center weight secured to the rotatable shaft, a second off-center weight rotatable upon the rigidly secured shaft, two beveled gears co-axial with said shafts and rotatable bodily with said weights respectively, a beveled connecting gear meshing with the



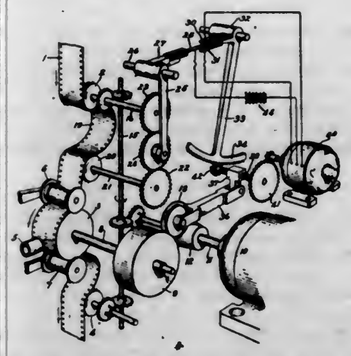
first named beveled gears respectively, and means rotatably mounting said connecting gear on said rigidly secured shaft on an axis perpendicular to the latter.

1,827,587. MAIN CRANK PIN COLLAR FOR LOCOMOTIVES. JOHN S. KEEN, Philadelphia, Pa. Filed Oct. 25, 1928. Serial No. 315,092. 4 Claims. (Cl. 74—38.)



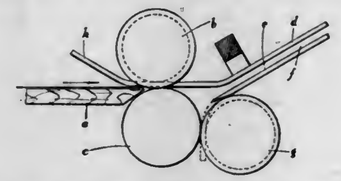
1. The combination of a hollow crank pin having a plurality of openings; a collar on the end of said pin, said collar having an open centre and perforated between the centre and periphery for stud bolts; a series of stud bolts screwed into the openings in the end of the pin and extending through the perforations in the collar; and nuts on said stud bolts retaining the collar on the pin.

1,827,588. FILM DRIVE. EDWARD W. KELLOGG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,284. 8 Claims. (Cl. 271—2.3.)



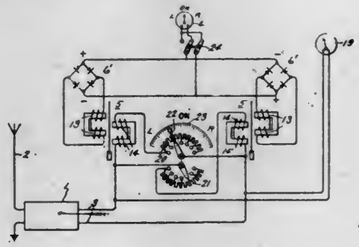
1. Apparatus for driving a film having sprocket tooth openings therein comprising a sprocket member and a drum member arranged in successive engagement with the film, driving means for said sprocket and drum members, and means responsive to a difference in speed of those portions of the film moved by the respective sprocket and drum members as determined by the sprocket tooth openings and independently of the length of film between said members for varying the speed of one of said members.

1,827,589. PAPER FOLDING MACHINE. OSCAR KLEINSCHMIT, Leipzig-Plagwitz, Germany, assignor to Gebruder Brehmer, Maschinen-Fabrik, Leipzig-Plagwitz, Germany. Filed Mar. 6, 1930, Serial No. 438,684, and in Germany Nov. 2, 1929. 3 Claims. (Cl. 270—68.)



1. In a folding machine, having feeding rollers and a folding roller, upper and lower pocket frame bars having extensions passing between the adjacent operative feeding and folding rollers.

1,827,590. COURSE FINDING SYSTEM FOR AIRCRAFT. HALSEY W. KLINE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 21, 1930. Serial No. 497,215. 4 Claims. (Cl. 250—11.)

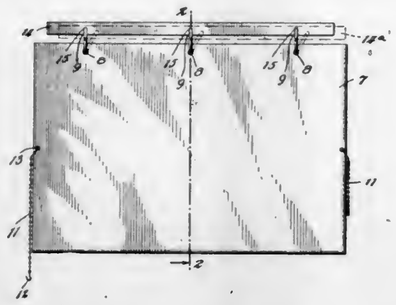


1. In a course finder for aircraft, a plurality of vibratory members carried by an aircraft, each of said members having a natural period of vibration, exciting means therefor, means for supplying to said exciting means currents transmitted from a ground station having different frequencies and having relative intensity dependent upon the position of the craft with reference to a predetermined course, the natural period of each of said members corresponding to one of said frequencies whereby each member vibrates with amplitude dependent upon the intensity of the supplied current having its respective frequency, means associated with each vibratory member for producing a unidirectional electromotive force having magnitude dependent upon the amplitude of vibration of the respective vibratory member, and means responsive to the relative magnitudes of said uni-directional electromotive forces.

1,827,591. DYEING TRANSFER AND TRANSFER INK. WINTHROP STANLEY LAWRENCE, Brooklyn, N. Y., assignor to Kaumagraph Company, New York, N. Y., a Corporation of New York. Filed Apr. 14, 1928. Serial No. 270,157. 9 Claims. (Cl. 134—36.)

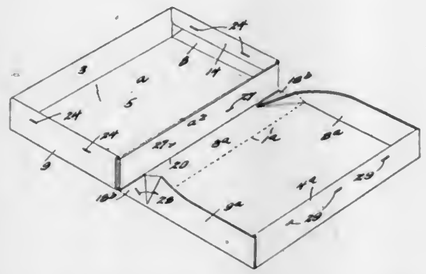
1. A fusible marking composition comprising a fusible and resinous vehicle having coloring matter therein, said coloring matter being releasable from said vehicle under the action of steam when said composition is on the object to be marked, said vehicle being decomposable under the action of steam.

1,827,592. LOOSE LEAF RING BOOK. HARRY B. LEWIS, Brooklyn, N. Y., assignor to Boorum & Pease Company, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 23, 1929. Serial No. 409,395. 3 Claims. (Cl. 129—1.)



1. A loose leaf ring book having two covers, a plurality of free rings passing therethrough and a member outside the two covers through which said rings pass permitting said rings to flop but maintaining them in parallel planes.

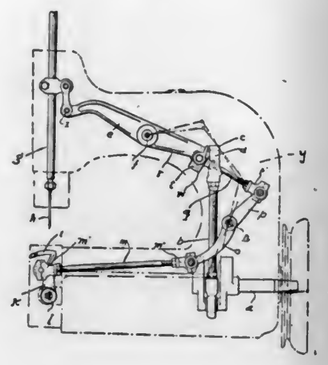
1,827,593. FOLDING BOX. ELMER H. LUPTON, Baltimore, Md. Filed Aug. 7, 1930. Serial No. 473,609. 1 Claim. (Cl. 229—34.)



A folding box formed from a single blank, comprising top and bottom sections and a hinge piece connecting said sections, both sections having side and end walls and diagonally creased corner-pieces, the bottom section having inwardly turned flaps on its end walls and said hinge-piece being folded downwardly against and secured to one of its side walls, one side wall of the top section having an inwardly turned flap, the other side wall of the top section being without a flap and hinged directly to the lower edge of the hinge section, the corner pieces on the bottom section adapted to fold against the end walls of the bottom section and the corner pieces of the top section adapted to fold against the side walls of the top section and the ends of the various flaps folding over the adjacent corner pieces, the flaps being fastened at their central portions to their adjacent walls and the ends of the flaps being free.

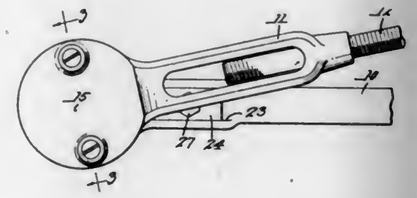
1,827,594. LOOPER OPERATING MECHANISM FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Feb. 5, 1929. Serial No. 337,606, and in Germany Feb. 8, 1928. 4 Claims. (Cl. 112—200.)

1. In a sewing machine the combination of a needle bar, a needle carried thereby, a needle lever pivoted intermediate its ends and connected to said needle bar for reciprocating the same, a driving connection to said needle lever at the end thereof opposite the needle bar, a thread carrying looper cooperating with said needle, an oscillating member, a link connected to said oscillating member and to a ball stud adjacent the actuated end of the needle lever,



a link connecting said member to said looper for oscillating the same, and means whereby said ball stud may be adjusted on said needle lever in a direction substantially at right angles to the length of the lever for varying the dwell given to the looper at the forward end of its stroke.

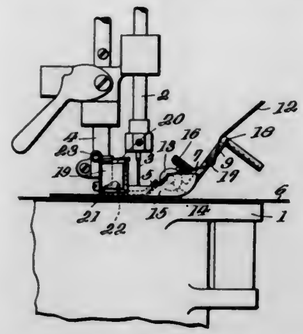
1,827,595. DOORCHECK. ANDREW C. MACGUIRE, Fitchburg, Mass., assignor to Independent Lock Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Aug. 25, 1930. Serial No. 477,532. 4 Claims. (Cl. 16—49.)



1. The combination with a pair of arms pivoted together, of a disc mounted between them in frictional engagement with both arms and having a seat, a spring-pressed holding device carried by one arm and adapted to engage in said seat, and means carried by the other arm for holding said disc in different angular positions, whereby the arms will be held at a desired angle from each other.

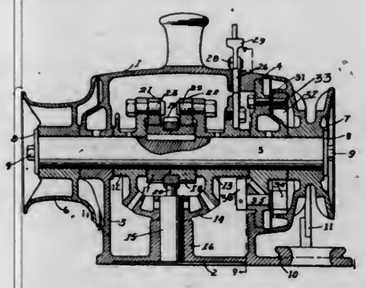
1,827,596. STRIP GUIDE FOR SEWING MACHINES. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Nov. 26, 1927, Serial No. 235,870, and in Germany Dec. 31, 1926. 7 Claims. (Cl. 112—152.)

1. The combination of a presser foot having a yielding edge guiding member at one side thereof, and a strip guiding mechanism mounted on said edge guiding member and including a plurality of spaced rods extending in a direction substantially at right angles to the line of feed, said rods being disposed relative to the normal path of travel of the strip whereby the strip when led over and under said rods as it passes to the presser foot will be brought into contact with the rods and tension placed thereon, said



strip guiding mechanism being capable of adjustment to various set positions whereby the tension exerted on the strip may be varied.

1,827,597. HAND-OPERATED WINDLASS. JAMES AUGUSTINE MELLON, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 5, 1928. Serial No. 304,016. 8 Claims. (Cl. 74—54.)

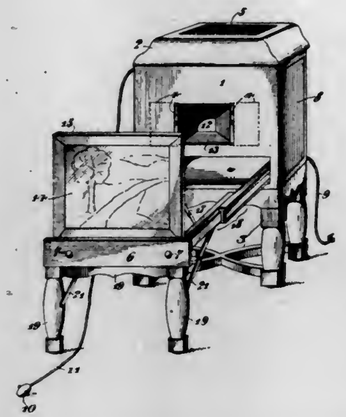


1. In a windlass or like machine, the combination with a rotary shaft, of a rotary head attached to said shaft, ratchet mechanism for driving said shaft, means for disconnecting said ratchet mechanism to permit free rotation of the shaft, a brake for controlling the free movement of said shaft following release from said ratchet mechanism, and a common operating lever for the ratchet mechanism, the disconnecting means, and the brake.

4. In a windlass or like machine, the combination with a rotary shaft, of a rotary head attached to said shaft, a pawl and ratchet mechanism operatively associated with the shaft, an actuating member for said ratchet mechanism, a cam operatively associated with said ratchet mechanism, and having a low portion which defines the operating limits of the ratchet mechanism and a high portion adapted to elevate the pawl from the ratchet upon a predetermined overtravel of said actuating member, and an adjustable stop operatively associated with said ratchet mechanism and adapted in adjusted position to limit the travel of said actuating member to the operating limits defined by the cam.

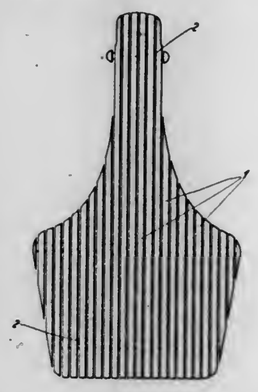
1,827,598. MOVING PICTURE CABINET. ARTHUR G. MERRIMAN, Philadelphia, Pa. Filed May 2, 1928. Serial No. 274,473. 4 Claims. (Cl. 88—24.)

1. In a moving picture apparatus, a housing comprising a plurality of walls one of which is vertical, a plurality of horizontal compartments within said walls in superposed relation, said vertical wall having an upper and a lower opening, means in one of said compartments for projecting a cinematic beam outwardly through one of said openings in said vertical wall, a screen external to said housing and spaced opposite said vertical wall for



receiving said beam, a support for said screen comprising a folding framework, said framework and said screen adapted to fold into a substantially horizontal plane and slide into another of said compartments through the other of said openings.

1,827,599. CUT OUT FIGURES CONSTITUTED BY STRIPS OR RODS. JOAQUIN GASA MOMPOU, Barcelona, Spain. Filed June 22, 1929. Serial No. 372,985. 8 Claims. (Cl. 40—126.)

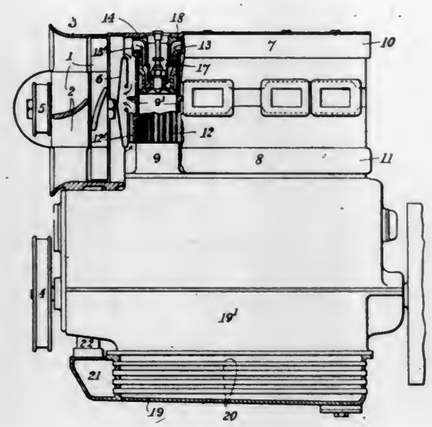


1. A device of the character described comprising a plurality of strips disposed in parallel relation but slightly spaced from each other to provide air passages therebetween, means fixedly securing said strips together and the marginal outer sides and ends of said assembled strips being cut out to simulate the contour of a figure.

1,827,600. AIR-COOLED INTERNAL COMBUSTION ENGINE. BENJAMIN HOWELL MORGAN and GEORGE FREDERICK JONES, Westminster, London, England. Filed May 19, 1930, Serial No. 453,742, and in Great Britain Nov. 22, 1929. 9 Claims. (Cl. 123—171.)

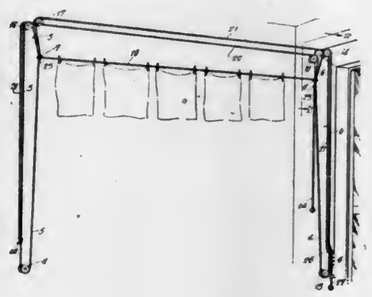
1. In an air-cooled internal combustion engine, the combination of members providing air passages one at each side of the upper ends of the engine cylinders, mem-

bers providing air passages one at each side of the lower ends of the engine cylinders, and other members providing passages in communication with the said air passages



and extending inwardly from the ends of the engine cylinders so as to direct air from the said air passages longitudinally of the engine cylinders and in contact with the cylinder walls.

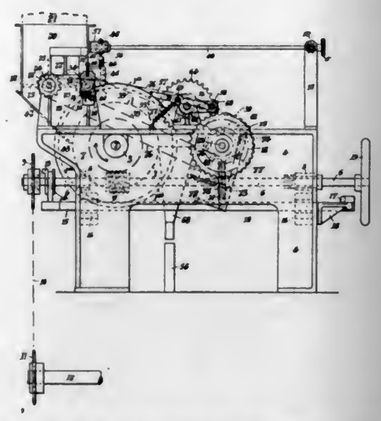
1,827,601. CLOTHES DRIER. FRED NEHSMANN, New York, N. Y. Filed May 28, 1930. Serial No. 456,550. 5 Claims. (Cl. 68—3.)



1. A clothesline, a pair of spaced endless members to which said clothesline is attached at its ends, separate supporting means for each of said endless members and means for simultaneously operating said endless members to raise and lower the clothesline.

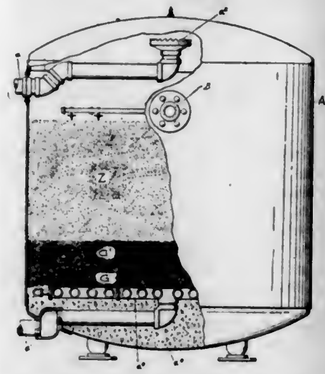
1,827,602. MEASURING APPARATUS. SIDNEY NEWALL, Brantwood, Moore, England, assignor to Joseph Crosfield & Sons Limited, Warrington, England, a British Company. Filed Dec. 5, 1928, Serial No. 324,015, and in Great Britain Feb. 9, 1928. 4 Claims. (Cl. 221—95.)

1. In an apparatus for measuring and conveying finely divided material from bulk, a rotating flanged drum, means delivering material to said drum, means to scrape off material from said drum said scraping means comprising, a rod, and a crank, a scraper plate secured on one end of said rod, the other end of said rod being secured



to said crank, said crank causing said rod to reciprocate and to scrape a quantity of material from said drum at each reciprocation.

1,827,603. METHOD OF AND MEANS FOR FEEDING A REGENERATING BRINE SOLUTION TO THE TOP SURFACE OF A ZEOLITE BED IN A ZEOLITE WATER SOFTENER OF THE FILTER TYPE. ESKEL NORDELL and WALTER J. HUGHES, Fort Wayne, Ind., assignors, by mesne assignments, to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 5, 1925. Serial No. 48,286. 6 Claims. (Cl. 23—112.)



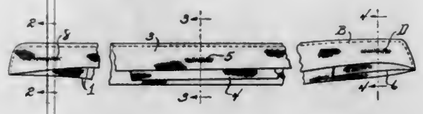
1. The method of feeding brine to the top of a bed of zeolites to regenerate them, which consists in admitting the brine immediately over said bed at points so spaced from each other as to lay down a substantially uniform layer thereof, leaving the surface of the zeolite bed undisturbed.

5. A water-softening apparatus having a zeolite container, a zeolite bed in said container, a space above said bed, a brine supply pipe disposed across and above and near said bed, branch pipes running from said brine supply pipe, openings leading from the bottom of said branch pipes and horizontally disposed baffle plates depending from said branch pipes immediately below said openings, said branch pipes, openings and baffles being adapted to lay down a substantially uniform stratum of brine on the zeolite bed.

1,827,604. VULCANIZATION OF RUBBER. BIRGER W. NORDLANDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 16, 1927. Serial No. 191,935. 5 Claims. (Cl. 18—53.)

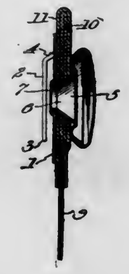
1. The process of vulcanizing rubber at a relatively low temperature which consists in acting thereon with stable chemically active selenium sulphide.

1,827,605. SHIRT. WILLIAM PARKER, Jr., Ben Avon, Pa. Filed May 28, 1930. Serial No. 456,698. 1 Claim. (Cl. 2—127.)



A shirt band consisting of inner and outer strips each folded upon itself to provide closely related walls with some of their edges folded back upon themselves to provide attaching portions and said attaching portions engaging the inner walls of the respective strips, a third strip folded upon itself to provide closely related walls with some of their edges folded upon themselves and in opposite directions to provide attaching portions engaging between the first named attaching portions with the third strip positioned between said inner and outer strips and extending from one end of the latter to a point adjacent the other end, stitching securing said attaching portions together, said inner and outer strips adjacent one end having aligned slots and stitched together about said slots to provide an end buttonhole, said outer strip adjacent the end remote to said buttonhole and at a point intermediate the ends thereof provided with slots to form another end buttonhole and a back buttonhole, said third strip overlying the last named end buttonhole and the back buttonhole to prevent collar buttons when inserted therethrough from contacting with the neck of a person.

1,827,606. PRONGED PLATE DEVICE FOR ATTACHING SEAT COVERS. ARTHUR DICKMAN PATCHEN, Bloomfield, N. J., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 10, 1928. Serial No. 298,841. 1 Claim. (Cl. 24—150.)



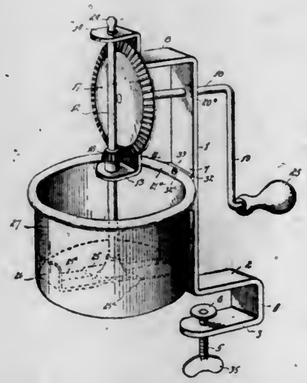
A pronged plate device for attaching seat covers and other movable articles, comprising a plate having a parallel pair of pointed prongs incised therein and integral therewith and pointing in one and the same direction and arranged wholly within the circumferential limits of the plate and extending rearwardly and downwardly from the back of the plate and offstanding from the upper portion of the back of the plate so as to afford room between the back of the plate and said prongs for the entrance of the substance to which the movable article is applied and also afford a limit to such entrance, and an attaching device having a clinching element, said plate having a hole to receive and be engaged by said clinching element for fastening the plate in fixed position upon said movable article, said prongs projecting from the plate in position to engage an article to which said movable article is applied.

1,827,607. WRIST PIN CUSHION. FRANK PFAFFINGER, Chicago, Ill. Filed Jan. 12, 1931. Serial No. 508,224. 2 Claims. (Cl. 24—8.)



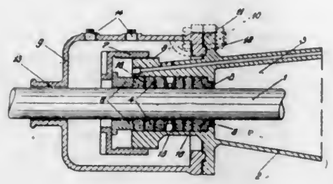
2. In a pin holder, a curved plate having openings therein, a flanged base curved to conform to the shape of the plate, a pin cushion secured to the flanged base, bendable tongues extending from the base for passage through the openings of the plate to secure the pin cushion to the plate, and spring influenced gripping arms pivotally secured to diametrically opposite sides of the plate.

1,827,608. OIL SALAD DRESSING MIXER. FRANK PICKARD, Havelock, Nebr. Filed July 21, 1928. Serial No. 294,457. 1 Claim. (Cl. 259—108.)



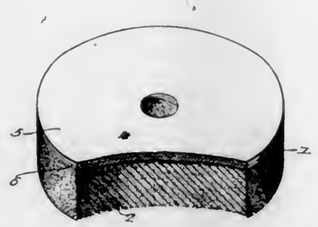
In a salad dressing mixer the combination with a supporting frame having spaced apart arms with bearings at their outer ends, a vertical stirrer-shaft supported in said bearings and having a sliding movement therein, a pinion secured to said vertical shaft, and a crank shaft carrying a gear-wheel in mesh with the pinion; of a bracket secured to the supporting frame and having a horizontal plate extending laterally at opposite sides of said supporting frame and curved in the arc of a circle at its inner edge, a pin projecting upwardly from the center of the plate, and a pan having an outwardly projecting rim flange at its upper edge adapted to overlie the plate with the inner curved edge of the latter bearing against the body of the pan, the aforesaid rim flange having a hole with which the pin on the bracket engages to hold the pan against the plate.

1,827,609. METHOD OF JOINING THE ENDS OF HIGH-TENSION ELECTRIC CABLES AND AN IMPROVED JUNCTION BOX THEREFOR. CORNELIS FREDERIK PROOS, Delft, Netherlands, assignor to Naamlooze Venootschap Nederlandsche Kabelfabriek, Delft, Netherlands, a Dutch Company. Filed Jan. 16, 1928, Serial No. 247,245. and in the Netherlands Mar. 29, 1927. 2 Claims. (Cl. 247—18.)



1. In combination with a junction box having a main casing, a stuffing box, an outer casing through which the cable passes, fixed to said main casing and enclosing said stuffing box, of a plurality of soft metallic packing rings arranged in said stuffing box around said cable and a plurality of hard metallic rings spacedly interposed between said soft metallic packing rings.

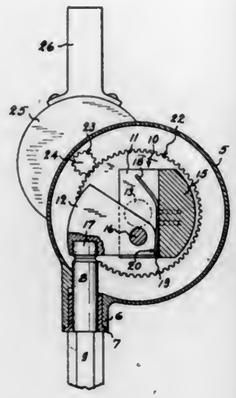
1,827,610. VALVE SEAT FOR GAS GOVERNORS AND THE LIKE. CHARLES W. QUIMBY, Philadelphia, Pa., assignor to E. F. Houghton and Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 26, 1928. Serial No. 328,627. 4 Claims. (Cl. 251—160.)



4. A valve seat for gas governors and the like, which is impervious to the passage of gases, comprising a leather base and a fibrous sheet securely bound on the surface of the leather by means of cellulose esters, the fibrous sheet and the cellulose ester co-operating to render the leather gas-impermeable.

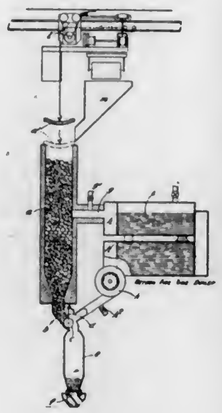
1,827,611. ELECTRIC HAMMER. JAMES E. BRYAN, Seattle, Wash. Filed Mar. 12, 1928. Serial No. 261,104. 4 Claims. (Cl. 125—33.)

1. A power hammer having a rotatable hammer block bifurcated deeper than its axis of rotation to provide a rear wall and an integral counter-balancing portion rearwardly of said wall, and a hammer member pivotally supported between said bifurcations in offset disposition of the block axis to accommodate a retractive movement of a portion of said hammer member past the axis of said block, said hammer member being conformed, cooperatively with the rear wall of said block, so as to normally position the



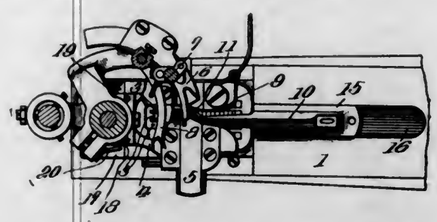
plane of the striking face in approximate right angular disposition to a plane taken through the block and the hammer axes.

1,827,612. COOLING COKE. JAMES WILSON REBER, London, England. Filed May 21, 1926, Serial No. 110,707, and in Great Britain May 25, 1925. 1 Claim. (Cl. 202—228.)



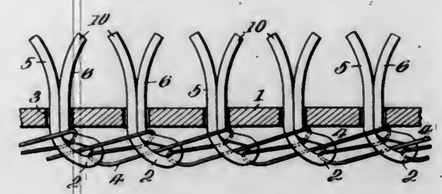
A process of cooling hot coke, comprising forming the hot coke into a substantially vertical column, continuously withdrawing coke from the lower part of the column and thereby causing the coke to continuously move downwardly, passing a stream of cooling gases chemically inert towards hot coke into the lower part of the column to cause said gases to traverse the column longitudinally and in countercurrent to the moving coke, withdrawing the gases from the column at a point a substantial distance below the upper end of the column, feeding hot coke to the upper end of the column so as to maintain a substantial mass of hot coke above the portion of the column traversed by the gases, extracting heat from the gases withdrawn from the column, and returning the withdrawn gases to the lower part of the column for re-use in the process.

1,827,613. FLAT SEAM SEWING MACHINE. ALBERT S. RIVIERE and CHARLES F. RUBEL, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1928. Serial No. 305,435. 8 Claims. (Cl. 112—63.)



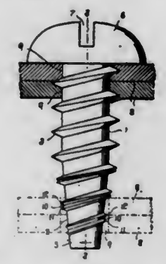
4. In a sewing machine, the combination of a work supporting arm, a presser foot having a channel for receiving and directing the upturned edge portions of fabric sections, horizontally disposed trimming devices movable up and down with the presser foot for trimming said edge portions, cover seaming mechanism for joining and covering the edge portions after they are trimmed, said presser foot having a cut-away portion in rear of the stitching mechanism, and a yielding section located therein and extending all the way across the presser foot, said yielding section being capable of movement above and below the plane of the bottom of the presser foot.

1,827,614. TUFTED FABRIC AND METHOD OF MAKING THE SAME. ALBERT S. RIVIERE, Chicago, Ill., assignor to Union Special Machine Company, Chicago Ill., a Corporation of Illinois. Filed Sept. 20, 1928 Serial No. 307,160. 3 Claims. (112—262.)



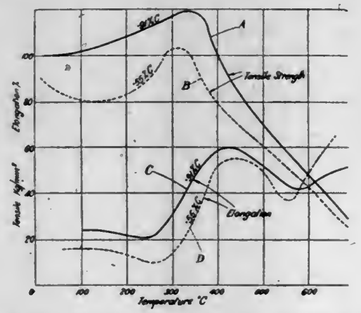
1. A tufted fabric comprising a fabric base, tufting thread lengths looped midway between their ends and extending through the openings in the fabric base at closely spaced intervals in a zig-zag line, the loop in one tufting thread length being secured to the fabric base by the next formed loop in a tufting thread length.

1,827,615. FASTENER. HEYMAN ROSENBERG, New York, N. Y. Filed May 14, 1928. Serial No. 277,607. 5 Claims. (Cl. 85—41.)



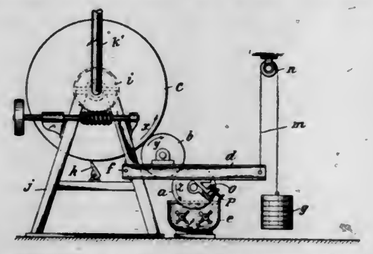
1. A screw-threaded fastener for use in metal work comprising a substantially cylindrical body and a thread outstanding therefrom, a portion of said thread being of constant or uniform outstanding depth, and the entering end portion of the thread tapering in the sense of constantly narrowing in the dimension of outstanding depth, and the body having a piloting taper at its entering end onto which the tapered portion of the thread extends, the tapering of the piloting taper being only sufficient to facilitate and guide positioning in a pre-formed opening in work and insufficient for endangering canting in being inserted in work.

1,827,616. MANUFACTURE OF RAILWAY AND TRAMWAY RAILS. CHRISTER PETER SANDBERG, OSCAR FRIDOLF ALEXANDER SANDBERG, and NILS PERCY PATRICK SANDBERG, London, England, assignors to the Firm of Messrs. Sandberg, London, England. Continuation of application Serial No. 367,082, filed May 29, 1929, and in Great Britain Sept. 29, 1928. This application filed June 10, 1931. Serial No. 543,478. 10 Claims. (Cl. 148—21.)



1. In a process for treating a rail, the steps of subjecting at least a portion of the rail to an accelerating cooling through the critical range and then before any consequential portion of the metal of the rail head has cooled to 500° C. subjecting the rail to temperature equalizing conditions.

1,827,617. APPARATUS FOR DRYING LIQUID OR PULPY MATERIAL. WILHELM SASSE, Charlottenburg, Germany. Filed July 28, 1928, Serial No. 295,934, and in Germany Aug. 2, 1927. 10 Claims. (Cl. 159—11.)

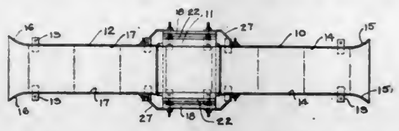


3. A drying apparatus, comprising a rotary drum, heating means for said drum, an applying roller in surface contact with said drum, a feed roller in peripheral transferring relation to said applying roller and out of contact with the drum, means for applying the material to be dried to said feed roller, said feed roller insulating said material applying means from the drum, and means for varying the distance between the feed roller and the applying roller.

1,827,618. SEALING APPARATUS. JOSEPH M. SAUERBECK, Danville, Va. Filed Oct. 5, 1928. Serial No. 310,613. 3 Claims. (Cl. 93—2.)

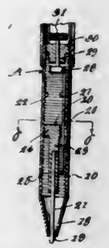
1. In a sealing apparatus of the character described, in combination, a pair of longitudinally alined trough

members constituting respectively the entering and discharge ends of the apparatus, a channel member arranged intermediate said trough members and in longitudinal alinement therewith, said channel member being of greater depth and width but considerably less length than either of said trough members, a horizontal heating plate overlying the bottom of said channel member, a pair of ver-



tical side heating plates extending above said horizontally arranged plate, a plurality of bolts secured to said side heating plates and projecting through the side walls of said channel member, springs interposed between said walls and plates and surrounding said bolts for urging said plates inwardly and toward each other, and means for limiting the inward movement of said plates.

1,827,619. PENCIL. FRED SCHROEDER, West St. Paul, and ALBERT RADDATZ, St. Paul, Minn.; said Raddatz assignor to said Schroeder. Filed May 24, 1930. Serial No. 455,391. 2 Claims. (Cl. 120—18.)



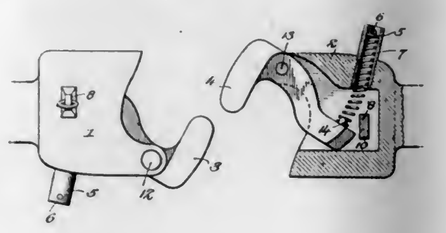
1. An automatic collapsible pencil comprising a main barrel section, an intermediate barrel section, and an end barrel section, the main barrel section telescoping within the intermediate barrel section and the intermediate barrel section telescoping within the end barrel section, the intermediate and end barrel sections being provided with longitudinally extending bayonet slots opening out through the outer ends thereof, means carried respectively by the main barrel section and the intermediate barrel section for engaging in said bayonet slots, the end barrel section forming a stop for the bayonet slot in the intermediate barrel section, and a closure cap for the end barrel section forming a stop for the bayonet slot of said end section.

1,827,620. REENFORCED CONCRETE PIPE AND THE LIKE. JOHN C. SCHULZE, Croton-on-Hudson, N. Y., and GEORG WILHELM EGERER, Westwood, N. J. Filed Feb. 27, 1929. Serial No. 343,169. 1 Claim. (Cl. 72—53.)



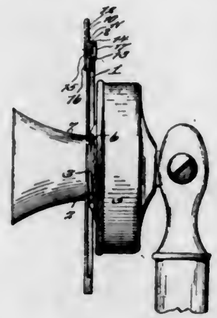
A reenforced concrete pipe comprising a hollow cylinder of concrete, a self-contained core formed of a plurality of contiguous windings of a mesh-like reenforcement and embedded in the wall of the cylinder, the concrete impregnating the openings of the mesh and bonding together the adjacent windings of the reenforcement.

1,827,621. AUTOMATIC CAR COUPLER. ORA C. SHAFFER, Van Wert, Ohio, assignor of one-half to John A. Roberts, Ravenna, Ky. Filed Oct. 7, 1927. Serial No. 224,578. 1 Claim. (Cl. 213—116.)



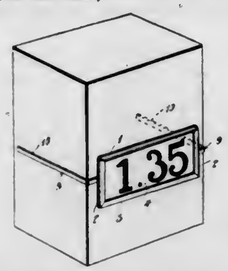
A coupling, comprising a body portion, a jaw pivotally mounted therein and having an off-set portion arranged on the end of the jaw within the body portion, a nib formed integral on the jaw and adapted to enter an opening in the body portion, a tubular member threaded in the aperture of the body portion, a spring adapted to surround the nib and to be confined in the aperture of the body portion by the tubular member, means formed in one end of the tubular portion and adapted to engage one end of the spring, a coupling pin adapted to enter a slot in the body portion and having an off-set so constructed and arranged that by coacting with a portion of the jaw the spring is normally held under tension and further adapted to release the tension of the spring by movement of the pin so as to rest in the corresponding off-set portion of the body, substantially as and for the purpose specified.

1,827,622. DEVICE FOR KEEPING COUNT OF TELEPHONE CALLS. JOSEPH J. SHERIDAN, Philadelphia, Pa. Filed Apr. 30, 1930. Serial No. 448,680. 2 Claims. (Cl. 235—121.)



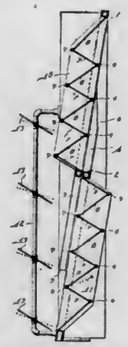
1. A telephone call counting device comprising a disc body adapted for engagement with a supporting piece of a telephone, said body having one face adjacent the peripheral edge provided with a series of numbers arranged in a circle, a clip conforming to and movable around the peripheral edge of the disc body, and provided with a tongue adapted to cover one number at a time thereby counting the calls as executed, and cooperative means associated with the clip and the marginal portion of the disc body for retaining the clip movable adjacent the peripheral edge.

1,827,623. PRICE TAG HOLDER. JOHN P. SIEBE, Sacramento, Calif. Filed Aug. 28, 1930. Serial No. 478,415. 4 Claims. (Cl. 40—21.)



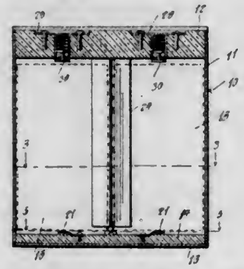
1. A price tag holder, comprising a plate of sheet metal having means to hold a price card, rods slidably mounted on said plate and adapted to engage an article of merchandise to hold the plate in position thereon, and guide means on said plate enclosing and slidably mounting said rods for adjustment relatively thereto.

1,827,624. LIGHT REFLECTING WINDOW. CLARENCE E. SMITH and JOHN F. PAGEL, Jr., Detroit, Mich. Filed May 27, 1920. Serial No. 386,111. 5 Claims. (Cl. 88—60.)



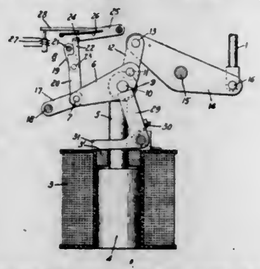
1. A window comprising a plurality of transparent panels of glass extending inwardly and downwardly, a plurality of translucent panels of glass extending inwardly and upwardly, said transparent panels being arranged in alternate relation to said translucent panels, and means for supporting all of said panels in said positions whereby light is reflected upwardly from said translucent panels through said transparent panels.

1,827,625. BATTERY CASE. FRANK R. STERK, Kansas City, Mo. Filed July 19, 1928. Serial No. 293,960. 3 Claims. (Cl. 136—173.)



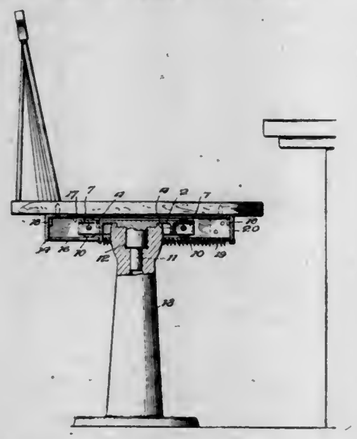
1. A device of the character described, comprising a case, first and second contacts carried by the case, a closure for said case, first and second contacts carried by the closure, said first contacts being adapted to engage opposite poles of a dry cell, said second contacts being adapted to engage opposite poles of another dry cell, a partition in the case, insulation carried by the partition, first and second contacts mounted on the insulation and adapted for electrical connection with the first and second contacts on the closure, respectively, first and second binding posts on the case, the first binding post being electrically connected with the first contact on the case, the second binding post being electrically connected with the second contact on the partition insulation, and the second contact on the case being electrically connected with the first contact on the partition insulation.

1,827,626. SWITCH OPERATING MECHANISM. CARL THUMIM, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 20, 1930. Serial No. 454,109. 10 Claims. (Cl. 200—89.)



1. Switch operating mechanism comprising a switch operating member, actuating means therefor, a floating lever operatively related to said actuating means, tripping means for holding a portion of said floating lever stationary, said lever adapted to be rotated by said actuating means with respect to said stationary portion during the switch closing movement, and means including a toggle interconnecting said floating lever and switch operating member for transmitting closing movement to the operating member, said toggle including a lever arm of decreasing effective length for maintaining substantially constant the resultant of the switch reacting force transmitted from the floating lever to said tripping means, concurrent with increase in said force during said switch closing movement.

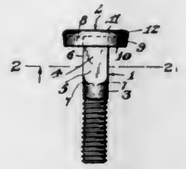
1,827,627. ADJUSTABLE CHAIR SEAT. GEORGE B. TRAVIS, Santa Paula, Calif. Filed May 29, 1930. Serial No. 457,049. 6 Claims. (Cl. 155—95.)



4. In an adjustable seat, a seat mounting having a plurality of rollers rotatably mounted and arranged in

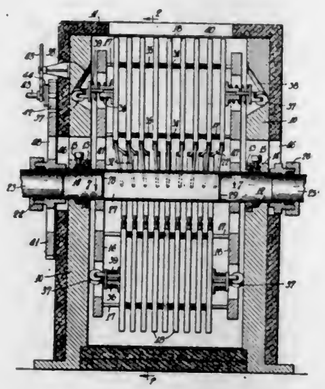
a horizontal plane and suitably supported upon the seat mounting, and a track structure between which the seat mounting is interposed, said track structure being provided with upper and lower tracks, the upper track containing the upper surface of certain of said rollers and lower track contacting the lower surface of the other of said rollers.

1,827,628. BOLT. EDWARD M. TWEDELL, Van Buren, Ark. Filed Aug. 13, 1930. Serial No. 475,048. 1 Claim. (Cl. 85—9.)



In a bolt adapted to be countersunk in wood, a shank having a head formed integral therewith, said head having a concaved lower face providing a skirt overlapping a portion of the shank in concentric, spaced relation thereto, said skirt having its outer face extending at an inward inclination and in an unbroken line from the upper face of the head and merging into the inner face of the skirt whereby a relatively sharp edge is formed to enable the skirt to freely enter the wood and whereby the wood will be continuously compressed outwardly from said edge to the upper face of the head without splintering the wood when the head is drawn into the wood to countersink the bolt.

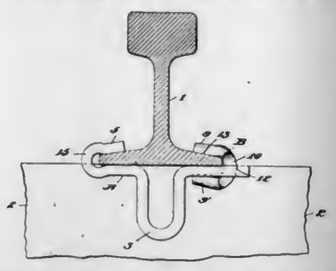
1,827,629. REFRIGERATING APPARATUS FOR PACKAGE GOODS. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky., a Corporation of Delaware. Filed Sept. 13, 1930. Serial No. 481,614. 20 Claims. (Cl. 62—104.)



1. An apparatus for freezing packaged goods, including a pair of annular coaxially spaced relatively movable refrigerated conveyors adapted to receive the packages therebetween.

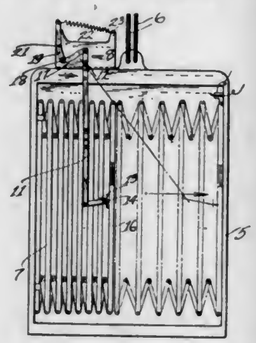
1,827,630. TWO-PIECE RAILWAY RAIL ANCHOR. THEODORE F. VON DORN, New York, N. Y. Filed Dec. 18, 1930. Serial No. 503,302. 5 Claims. (Cl. 238—321.)

1. A railway rail anchor comprising two members, one of said members being formed from a plate of high grade spring steel having a downwardly extended central portion with an overhanging jaw member at one end portion and an opening formed therethrough at its other end portion, and a fastening clip adapted to be inserted through



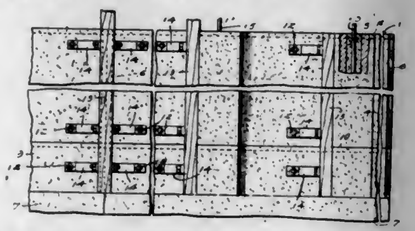
said opening and to intensely clamp the upper surface of the rail base and the lower face of said member, the said member being under extreme tension at all times when in its secured condition.

1,827,631. ELEVATOR DOOR CLOSING DEVICE. ALEXANDER A. WAYNE, San Francisco, Calif. Filed Jan. 19, 1931. Serial No. 509,810. 2 Claims. (Cl. 268—56.)



1. In a device of the character described, the combination of a door opening, having a door closure slidably positioned in said door opening, of a plate positioned above said door opening, of an arm pivoted to said plate and having its lower extremity extending in front of said door opening, of a link pivoted to said arm and to said door, of a link pivoted to the upper extremity of said arm, of a lever pivoted to said plate and to said last mentioned link, and a spring interposed between the free end of said lever and said plate for the purpose specified.

1,827,632. BUILDING WALL SLAB. ROBERT CAREL WEBB, Baton Rouge, La. Filed Sept. 30, 1930. Serial No. 485,484. 10 Claims. (Cl. 72—16.)



1. In a wall construction, a plurality of slabs of precast material disposed vertically in edge to edge abutting relation, vertically aligned columns cast integral

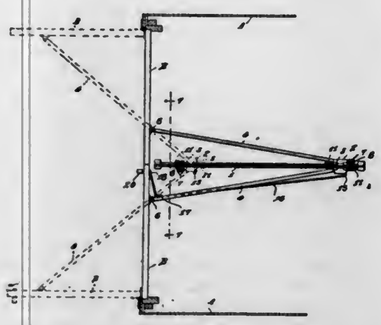
with the slabs, vertically disposed members positioned against said columns and extending across the joints between the slabs, and means for securing said members in position against the columns and the slabs.

1,827,633. RAILWAY TRACK SIGNAL. RONALD M. WILSON, West Chester, Pa., assignor to The Huffman Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 17, 1930. Serial No. 482,458. 13 Claims. (Cl. 246—477.)



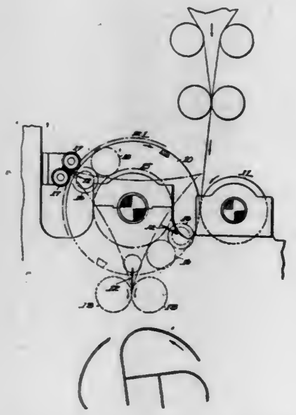
1. In a railway track signal comprising two members connected one to the other at a point spaced from the lower ends thereof and each having at its lower end a rail engaging part, said parts being so arranged that one of said parts will engage the base flange of the rail on one side of the rail and the other of said parts will engage the lower side of the rail head on the other side of the rail, one of said members having a laterally extending part the weight of which will hold said rail engaging parts in operative engagement with the respective parts of the rail, and a signal carried by one of said members.

1,827,634. DOOR HOLDER. EDMUND M. WINEGAR, Willoughby, and JOHN C. SHUTT, Wickliffe, Ohio, assignors to The Willoughby Mfg. Co., Willoughby, Ohio, a Corporation of Ohio. Filed Jan. 20, 1930. Serial No. 422,117. 1 Claim. (Cl. 292—263.)



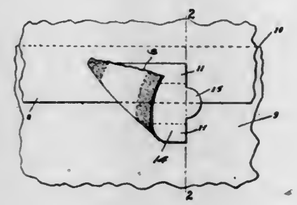
In combination with a pair of doors, a track, a carriage sliding thereon and consisting of a plate having ears thereon which are bent over the edges of the track, a bar pivotally connected to each door, with the inner ends of the bars pivoted to the carriage, a pair of stops slidably arranged on the track, clamping means for holding the stops in adjusted position on the track, keepers on the stops, a double latch pivoted to the carriage and having oppositely arranged keeper engaging members at its ends, spring means for normally holding the latch in latching position, a cable having one end connected with a part of the latch, a rotary handle on one door to which the other end of the cable is connected and guiding means on one of the bars for the cable.

1,827,635. FOLDING BLADE CLEANING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 14, 1928, Serial No. 285,305. Renewed Mar. 9, 1931. 7 Claims. (Cl. 270—77.)



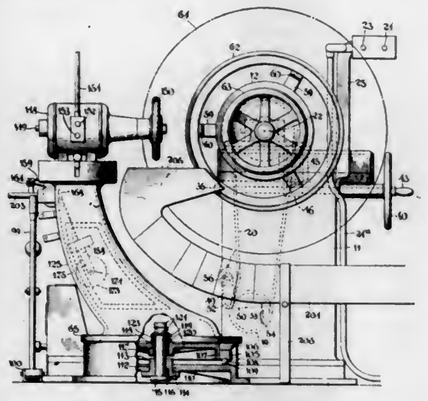
1. The combination with a folding cylinder having a folding blade, of means located adjacent to the cylinder for engaging the side of the blade and wiping the ink therefrom.

1,827,636. MEANS FOR SEALING PACKAGES. CHARLES H. AMES, Worcester, Mass. Filed Mar. 7, 1929. Serial No. 345,075. 4 Claims. (Cl. 229—51.)



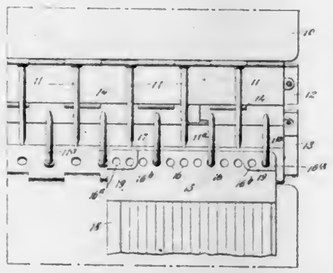
1. A sealed package comprising a container having an edge portion thereof adjacent some other portion of said container, and a separate sealing means consisting of a sheet having two integral, longitudinally extended edge portions secured to said two adjacent portions of said container respectively, and a middle longitudinal portion integral with said edge portions, said middle portion of said sealing means being free from said container but overlying the extreme outer edge of one portion thereof, said free portion of the sealing means having an integral tab by means of which it may be readily grasped and severed from said attached portions of the sealing means.

1,827,637. MACHINE FOR BUFFING AIRBAGS. GEORGE G. ANDREWS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 11, 1925. Serial No. 43,017. 3 Claims. (Cl. 51—33.)



1. In a machine of the character described, a substantially hollow driven rotatable pedestal provided with an opening adjacent its upper end, a relatively rotatable support carried upon the pedestal, a cable secured at one end to said support and freely extending through said opening into the pedestal and weight means carried on the portion of the cable within the pedestal, the arrangement being such that movement of the weight means is within the pedestal and tends constantly to rotate the support in one direction.

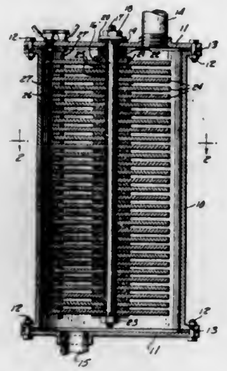
1,827,638. VISIBLE INDEX SHEET. FREDERICK C. BINGHAM, New York, N. Y., assignor to Boorum & Pease Company, New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,868. 7 Claims. (Cl. 129—1.)



2. A prong binder having successive prongs alternately on opposite sides thereof, said prongs being spaced apart a uniform multiple of a unit of linear measurement, in combination with a sheet having a series of perforations along one side at uniform intervals of said unit of linear measurement and a reinforcement at each end of said perforated side, each reinforcement surrounding a number of perforations equal to said multiple.

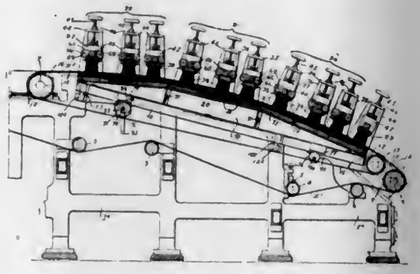
1,827,639. HEATER. VINCENZO BOSCHETTI, Union City, N. J. Filed May 10, 1929. Serial No. 362,051. 3 Claims. (Cl. 219—40.)

1. In a fluid heater having an enclosure with an inlet and an outlet; a pair of continuously threaded current conducting rods mounted within and to one side of the casing, a plurality of electrodes occupying the casing, said electrodes having ears alternately threaded on the respective rods and being spaced from each other by the



threads, a shaft affixed to the casing and passing through the electrodes to stabilize the center of the assemblage, and means to insulate the successive electrodes from each other and from said shaft.

1,827,640. COATING TABLE FOR COATING MACHINES. LYNN B. CASE, New Brunswick, N. J., assignor to John Waldron Corporation, New Brunswick, N. J., a Corporation of New Jersey. Original application filed June 11, 1926, Serial No. 115,398. Divided and this application filed Dec. 13, 1928. Serial No. 325,761. 1 Claim. (Cl. 91—60.)

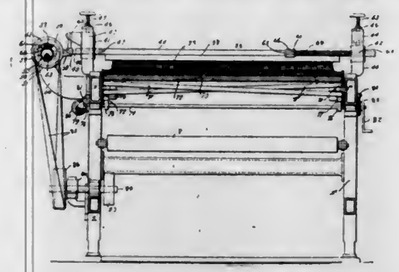


In a machine for coating web material, comprising side frames; a coating table having an arched top mounted intermediate said side frames; a pair of transverse shafts rotatably mounted in said side frames below said table; eccentrics on said shafts; bearing blocks on the said table engaging said eccentrics; a longitudinally extending shaft operatively connected to said transversely extending shafts; means for rotating said shafts, to raise or lower said table and means for retaining the table in the position to which it has been moved.

1,827,641. DISTRIBUTING BRUSH FOR COATING MACHINES. LYNN B. CASE, New Brunswick, N. J., assignor to John Waldron Corporation, New Brunswick, N. J., a Corporation of New Jersey. Original application filed June 11, 1926, Serial No. 115,398. Divided and this application filed Dec. 13, 1928. Serial No. 325,762. 2 Claims. (Cl. 91—37.)

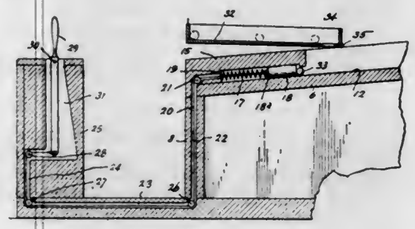
1. In a machine for coating web material, comprising side frames; a coating table intermediate said side frames; a coating table intermediate said side frames, a distributing brush reciprocably mounted above said table:

means at each end of the brush, for slidably supporting said brush; a shaft rotatably mounted at one end of the brush; an eccentric secured on said shaft; a strap on said eccentric; and means for operatively connecting the eccentric strap with the reciprocating brush comprising a



link pivotally connected at one of its ends to the brush and at its opposite end of the eccentric strap, and a second link pivotally connected at one end to the brush supporting means and at its opposite end to the common pivot where the first said link connects to the said eccentric strap.

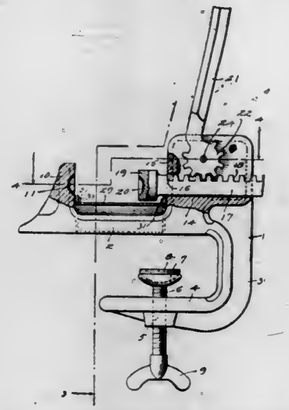
1,827,642. BALL GAME. YASO DAIMARU, New York, N. Y. Filed Nov. 7, 1929. Serial No. 405,489. 3 Claims. (Cl. 273—124.)



1. A game apparatus consisting of an inclined game board having a field provided with a series of ball receiving pockets, a runway located on one side of the field, means to propel a ball along said runway, said means including a plunger slidably mounted in line with said runway, a compressible spring engaging one end of the plunger, a lever pivoted distantly of the plunger, a concealed connection between the lever and the plunger for compressing the spring, and means for presenting a ball in advance of said plunger, said ball presenting means including a tiltable chute above said runway, said chute having an aperture to permit a ball to drop down in advance of said plunger when said chute is tilted.

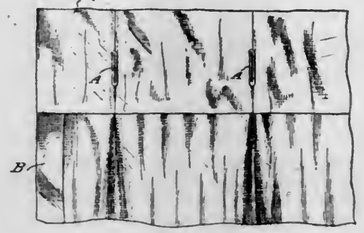
1,827,643. NUTCRACKER. DANIEL OTIS DE LOACH, Savannah, Ga. Filed Dec. 14, 1929. Serial No. 414,188. 1 Claim. (Cl. 146—16.)

A nut cracking machine comprising a base, means for securing the base in working position, a fixed jaw carried by the base, spaced upstanding plates disposed on the base in spaced relation to the fixed jaw, a plunger formed to provide a rack shiftably mounted between said plates and having a head constituting a shiftable jaw adapted to move relative to the fixed jaw, a block disposed between the plates above the plunger maintaining the latter in position, a gear pinion pivotally mounted between the plates for engagement with the rack, a lever carried by the pinion having its movement limited to said block, a nut supporting trough disposed between the fixed jaw and the opposed edges of said plates comprising a bottom, a back flange and end flanges one arranged against the fixed jaw and the other arranged against a plate, means for securing the end flanges to the adjacent bodies, abutment lugs for said back flange carried upon the opposing faces of the fixed jaw and plate, and vertically adjustable



supporting members passing through said end flanges, one thereof being mounted in the fixed jaw and the other being mounted in a plate.

1,827,644. DRAPERY HOOK. BEULAH B. FICK, Baltimore, Md. Filed Dec. 6, 1929. Serial No. 412,158. 2 Claims. (Cl. 156—21.)

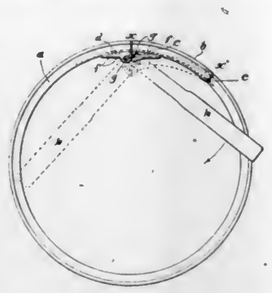


1. A drapery hook comprising a member of substantially inverted U shape and formed of one piece of wire, the wire that forms one limb of the U being bent upon itself with the extremity twisted around the bight of said U and extending upwardly from the bight, said upwardly extending portion being sharpened to form a point, the wire that forms the other limb of the U being pointed and extended beyond the inverted U to be disposed at a point remote from the upwardly extended portion of the first mentioned limb.

1,827,645. RIM FOR AUTOMOBILE WHEELS. JACINTO FOLGAROLAS and ANTONIO FOLGAROLAS, Mexico, Mexico. Filed Dec. 27, 1929, Serial No. 416, 951, and in Mexico July 9, 1929. 1 Claim. (Cl. 301—34.)

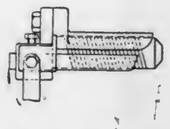
In combination, a tire rim split at two spaced points to provide a pair of rim sections, means for hinging one end of one of said sections to one end of the other of said sections, a pair of oppositely disposed endwise opposed coupling elements, each secured to the inner face of one of said sections, the free ends of said elements projecting beyond the free ends of said sections, one of said elements having at its free end a tongue and a pair of shoulders, said tongue and shoulders inclining forwardly from their inner to their outer ends with respect to the

free end of that rim section to which such element is secured, the other of said elements having its free end provided with a groove inclining rearwardly from its inner to its outer end with respect to the free end of that rim section to which such element is secured and into which extends said tongue, the free end of that element



provided with the groove opposing said shoulders, and each of said elements provided with an opening, one of said openings being farther inward radially from the rim web than the other, and said openings adapted to receive a shiftable tool to provide for the fulcruming of said elements relatively to each other to demount and close the rim.

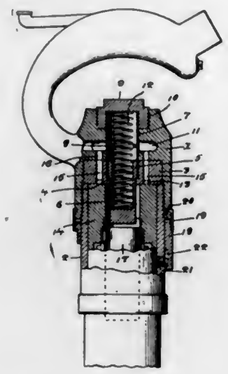
1,827,646. WEFT HOLDING DEVICE. JOHANN GABLER, Ettlingen, Germany. Filed Nov. 10, 1927, Serial No. 232,397, and in Germany Nov. 16, 1926. 2 Claims. (Cl. 139—127.)



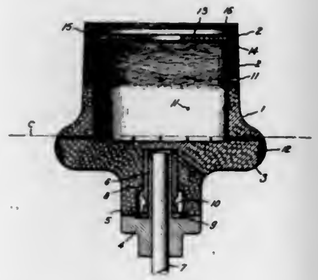
1. In combination with gripper weaving looms, a weft holding device comprising a slay carrier, a slay, a reed, a guide piece suitably mounted on a support, a regulating screw with an externally threaded end portion screwed into the internally threaded rear portion of said guide piece the remaining portion of said screw being smooth, a slotted slide free-movably mounted in said guide piece, the rear portion of said slide provided with an internal thread being mounted on the regulating screw, an intermediate disk mounted on said regulating screw, a flexible strap suitably fixed with its one end to the slay carrier and with its other end on the regulating screw, a centrally bored fixation screw slidably mounted on said regulating screw and carrying the one end of said strap and the intermediate disk, an externally threaded small end portion of said fixation screw screwed into the internal thread of the rear portion of the slide so as to slide, to and fro as a whole, on the smooth portion of the regulating screw, which latter may regulate the degree of movement of said slide by being tightened or untightened.

1,827,647. ATTACHMENT FOR PNEUMATIC HAMMERS. JUAN GALAZ, Los Angeles, Calif. Filed Nov. 9, 1928. Serial No. 318,237. 1 Claim. (Cl. 121—13.)

An attachment for pneumatic hammers including a handle carrying member having an air pressure chamber and a tubular portion to receive and be secured to a body for reciprocating the driving member actuated by air pressure from the chamber, an annular member positioned between the handle carrying member and the body, an annular shoulder on said annular member, a recessed plug removably secured to the handle carrying member, a sleeve seated in the recessed plug and engaging the shoulder and provided with apertures in communication with the air pressure chamber, a recessed plunger slidable in the sleeve to be moved in one direction by the driving member, a flange on the plunger to engage the shoulder to limit the movement of the plunger in an opposite direction, and a cushioning spring engaging the plug and seated in the recess of the plunger to retard the movement of said plunger in the first named direction, said plunger during the last named movement adapted to trap air between itself, the sleeve and the plug to absorb shocks from the driving member to the handle carrying member.



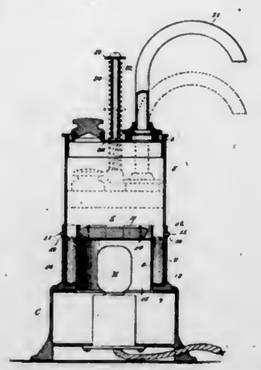
1,827,648. CENTRIFUGE BUCKET. OLIVER W. GREENE, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 13, 1929. Serial No. 392,415. 6 Claims. (Cl. 118—49.)



1. A molded centrifuge bucket having its upper portion formed of circumferentially extending cord of twisted spinnable fibers united by a resinous compound.

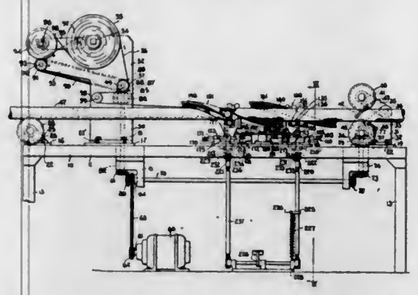
1,827,649. DEVICE FOR PRODUCING AND DISPENSING LATHER. FRANK P. GALLIPOLI and THOMAS A. KINGSLEY, Sr., Englewood, N. J. Filed June 10, 1929. Serial No. 369,873. 3 Claims. (Cl. 299—92.)

1. In a device of the character set forth including a cylindrical body, a plunger having a discharge spout and normally disposed at the upper end of the body for downward movement to dispense the contents through the discharge spout, a bottom carried by said body having an upwardly projecting centrally disposed inverted cup shaped portion of lesser diameter than the body and defining a recess in the under side of the device constituting a chamber for the reception of a heating device and defining internally of the body an annular water compartment



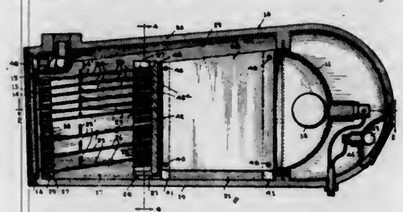
surrounding the chamber, the upper end of said cup shaped portion having upwardly projecting spaced marginal lugs serving as a soap receptacle.

1,827,650. MACHINE FOR BUILDING RUBBER CONDUITS. JORGEN I. HASSE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 27, 1929. Serial No. 381,664. 9 Claims. (Cl. 154—6.)



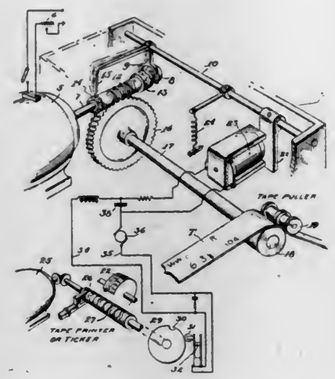
8. In a conduit building machine, a mandrel about which fabric or the like is to be folded, and a pair of brushes spiralled about the mandrel in opposite directions.

1,827,651. HEADLIGHT. FRANK C. HACHENEY, Vancouver, Wash. Filed Feb. 11, 1929. Serial No. 339,077. 3 Claims. (Cl. 240—48.4.)



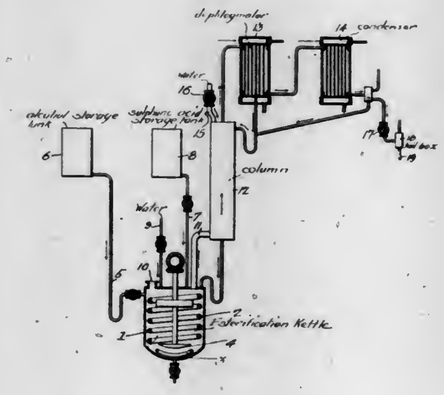
2. A headlight comprising a casing having an opening at the front, a source of light and a reflector in said casing at the rear, a lens in said front opening for converging some of the light from said light source and for laterally spreading some of the light from said light source, said lens comprising an upper portion having means for converging the light and a lower portion having a plurality of prisms for spreading the light, and reflector plates for directing said light downwardly.

1,827,652. TAPE FEED MECHANISM FOR PRINTING TELEGRAPH APPARATUS. HAKON H. HAGLUND, Flushing, and ALBERT W. DICKEY, Mount Vernon, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 9, 1929. Serial No. 384,709. 6 Claims. (Cl. 178—42.)



1. In combination with a telegraph tape printer adapted to operate in response to received code combinations of electrical conditions, means for feeding the tape through the printer, comprising a continuously operating motor, a friction roller in engagement with the tape, a driving connection between said motor and said roller including a clutch device, an electromagnet controlling the engagement and disengagement of said clutch device, a circuit connecting said magnet with a source of power and including a switch actuated by an element in said printer which operates in response to each code combination.

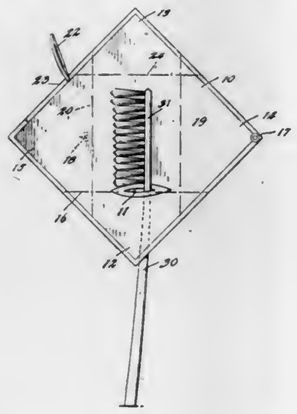
1,827,653. PROCESS OF MANUFACTURING ESTERS. CARL HANER, Moylan, Pa., assignor to Publicker, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed May 17, 1929. Serial No. 363,962. 16 Claims. (Cl. 260—106.)



1. The process of concentrating aliphatic esters which comprises distilling the crude mixture of aliphatic ester, alcohol, and water through a column, bringing additional water into contact with the vapor in the column near the

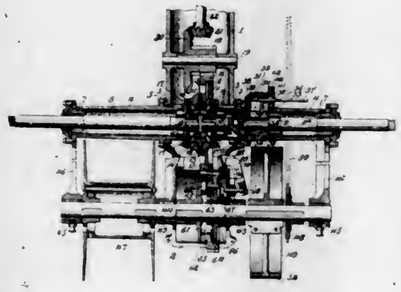
top thereof in amounts sufficient to reduce the alcohol content of the vapor in said column to a point below that of the constant boiling mixture of ester, water and alcohol, condensing the distillate, allowing the condensed distillate to settle and separate into two layers, and thereafter removing the top concentrated ester layer.

1,827,654. TOOTHBRUSH COVER. LESTER J. HARPER, St. George, N. Y. Filed Nov. 22, 1929. Serial No. 409,053. 1 Claim. (Cl. 150—52.)



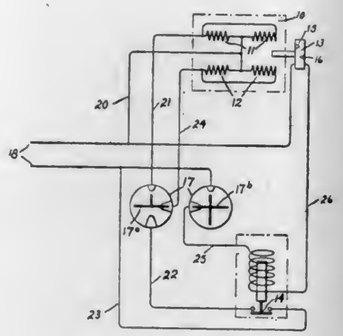
A tooth brush cover comprising a substantially rectangular piece of flexible, waterproof material slit adjacent one corner to receive the handle of a tooth brush, and adapted to be folded about the head of the tooth brush, along fold lines across the corners, the fold lines across parallel corners being parallel to each other and at right angles to the fold lines across the corners next to them, and the two sets of parallel fold lines crossing each other.

1,827,655. POWER DELIVERING ATTACHMENT FOR AUTOMOBILE TRUCKS OR TRACTORS. LEO HAUBERT, Tulsa, Okla., assignor of one-third to John A. Wolfe and one-third to John Charles Bennett, Tulsa, Okla. Filed Mar. 9, 1926. Serial No. 93,401. 5 Claims. (Cl. 180—53.)



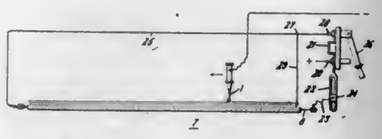
5. In combination with a motor vehicle of the class described, a winding drum mounted on the vehicle; mechanism including connections to the vehicle transmission for driving the drum in one direction; a high speed reverse drive for the drum driven by the vehicle motor independently of said transmission mechanism; and a clutch for controlling said connections.

1,827,656. ELECTRIC OVEN. GEORGE W. HEINBUCH, Toronto, Ontario, Canada, assignor to General Electric Company, a Corporation of New York. Filed Nov. 22, 1928, Serial No. 321,215, and in Canada Dec. 23, 1927. 5 Claims. (Cl. 219—20.)



5. An oven heating system or the like comprising an oven having a pair of heating units, a supply circuit therefor, a single control switch in the supply circuit having a plurality of contacts whereby said pair of heating units are selectively connected to the supply circuit to give different rates of heating, a thermostatically operated switch under the influence of the oven temperature, an electromagnetic contactor having an armature and an operating coil therefor, the armature being operative to complete the circuit to said heating units at one point when the coil is energized, a circuit including the thermostatically operated switch and the contactor coil and under the control of said control switch whereby when said control switch is at the off position the contactor coil circuit is broken and whereby when the control switch is at any of its heating positions the contactor coil circuit is closed.

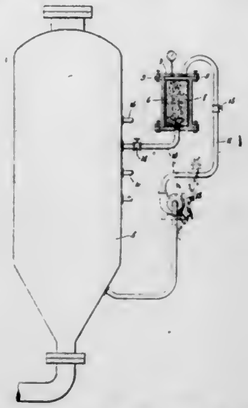
1,827,657. ELECTRIC ARC WELDING. CARL L. IPSEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 2, 1926. Serial No. 126,395. 12 Claims. (Cl. 219—8.)



1. An arc welding machine comprising means for traversing the arc and work relatively along the line of the seam to be welded, a substantially non-resistant conductor in non-conductive relation with the work over the length of the seam extending along the line of the seam and in proximity to the work, and means for energizing said conductor and for producing a magnetic field in front of and behind the arc directed across and extending along the seam in a direction to deflect the arc in the direction of its travel along the seam.

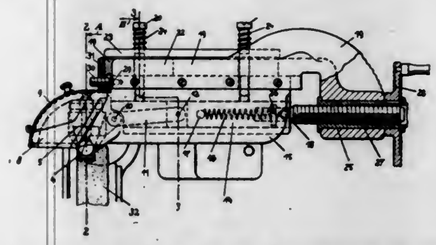
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1,827,658. METHOD AND APPARATUS FOR DETERMINING THE RESULT OF TREATMENT OF MATERIAL. BJARNE JOHNSEN, Erie, Pa., assignor to Hammermill Paper Company, Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 7, 1929. Serial No. 384,109. 8 Claims. (Cl. 92—7.)



1. An apparatus for treating material comprising a main digester, an auxiliary chamber adapted to receive a small quantity of the raw material to be treated, and means for maintaining a circulation of liquor from the main digester through the auxiliary chamber, substantially as described.

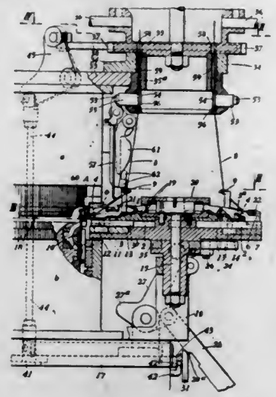
1,827,659. DEVICE FOR SURFACING GRINDSTONES. KARL JUNG, Berlin, Germany. Filed Jan. 4, 1929, Serial No. 330,372, and in Germany Feb. 29, 1928. 5 Claims. (Cl. 125—11.)



1. A device for the surfacing of grindstones the outer contour line of which consists of a circular curve joining a straight line, said device comprising, in combination, a surfacing tool, a rocking member to which it is attached, a casing in which said rocking member is supported, a slide with which said casing is connected, a second slide shiftable with respect to the first-mentioned slide; elastic means connecting the two slides with one another, a link connecting said second slide with said rocking member, a casing in which said slides move, and means for moving both slides and being common to them, said arrangement and combination of parts being adapted to operate substantially as set forth.

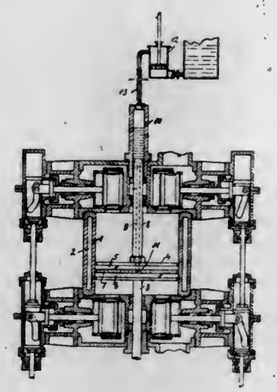
1,827,660. YARN CHANGING MEANS FOR CIRCULAR KNITTING MACHINES. ALFRED WOODWARD KENT, Leicester, England, assignor to William Spiers Limited, Leicester, England, a British Company. Filed Oct. 3, 1929, Serial No. 397,032, and in Great Britain Oct. 11, 1928. 11 Claims. (Cl. 66—131.)

1. In a circular knitting machine a series of independent needles, yarn changing means comprising a rotary feeder carrier arranged outside the needle circle, a number of yarn feeders individually movable radially on said carrier, yarn engaging members associated and movable with said feeders respectively, means for rotating the carrier to bring the feeders into feeding position as required,



means for advancing each feeder and the associated member as they approach the feeding position whereby a length of yarn held at separated points is carried to the needles and laid transversely to the stems below the hooks, and means for retracting the feeder and member upon leaving the feeding position.

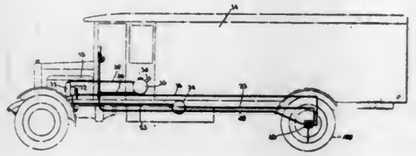
1,827,661. MEANS FOR LUBRICATING THE PISTON OF ENGINES. FREDERICO ANTON KOWARICK, Sao Paulo, Brazil. Filed Jan. 9, 1929, Serial No. 331,262, and in Germany Jan. 16, 1928. 2 Claims. (Cl. 184—18.)



1. Means for lubricating the piston of engines, more particularly high pressure steam engines, comprising a prolongation of the piston rod beyond the piston, a longitudinal bore in the said prolongation, which bore projects into the piston itself, piston rings on said piston, a circumferential groove on the piston intermediate the said piston rings, and channels for connecting the said longitudinal bore with the said circumferential groove, a casing mounted on the cover of the cylinder into which casing the said prolongation of the piston rod is adapted to project, said casing forming an air chamber and being partially filled with lubricant which is adapted to enter the longitudinal bore by way of the said channels into the circumferential groove of the piston on the upward stroke of said piston

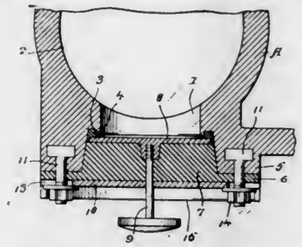
owing to the air pressure created thereby in the casing whereby lubricant will also be supplied upon the downward stroke of said piston due to the compressed air expanding in said casing.

1,827,662. PNEUMATIC TIRE INFLATION SYSTEM. ELOV F. MAAS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 16, 1927. Serial No. 233,732. 6 Claims. (Cl. 152—11.)



2. A tire inflation regulating system comprising means for supplying fluid under pressure, a conduit having a branch portion in communication with the atmosphere, extending between the fluid supplying means and a tire casing, a valve for closing the branch, a valve between the branch and the fluid supplying means for closing the conduit, a normally balanced member for operating the valves alternately, tire fluid pressure actuated means for displacing the member from its normal balanced position for opening the valve in the branch and variable fluid pressure means tending constantly to displace the member in the opposite direction for opening the valve in the conduit.

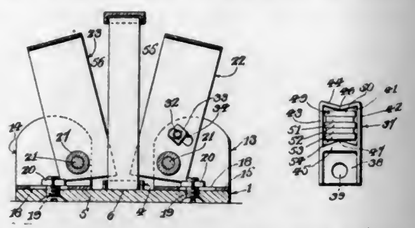
1,827,663. CLEAN-OUT CLOSURE. JOSEPH MASTRILLO, Trenton, N. J. Filed Nov. 4, 1929, Serial No. 404,703. Renewed May 11, 1931. 1 Claim. (Cl. 4—257.)



In combination with a toilet bowl having an opening in one side thereof which is in communication with the vent or discharge passage of the bowl, the outer end of the opening being enlarged and formed with beveled side walls, a shoulder formed at the junction of the enlarged part of the opening with the small part thereof, said shoulder having a groove therein, a gasket in said groove, a flanged plug of resilient material filling the beveled part of the opening, a plate on the inner face of the plug contacting the gasket, a handle having a shank connected with the plate and passing through the plug, an outer plate on the plug through which the handle passes, said outer plate being of the same diameter as the flanged part of the plug, said flange resting upon a part of the bowl which surrounds the opening, removable bolts in said part of the bowl which surrounds the opening and passing through the flange and the plate and nuts on the outer ends of the bolts for clamping the parts in closing position.

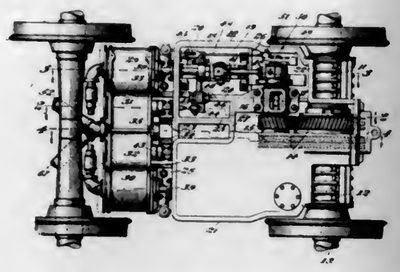
1,827,664. SHARPENING DEVICE. MARIAN A. MATTHEWS, Newburgh, N. Y. Filed Feb. 18, 1930. Serial No. 429,422. 9 Claims. (Cl. 76—86.)

1. A sharpening device comprising a bodily shiftable sharpening unit formed of a set of blades, the alternate blades of the set being of the same width and of a different width than the width of the other blades of the set, a mounting for said set to provide for the fulcruming of the set for movement in opposite directions during the



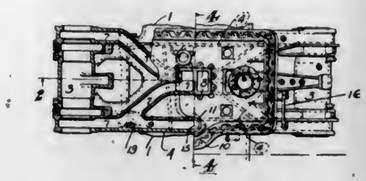
sharpening operation, and adjustable means opposing the edges of the blades of said set to provide passages for the objects to be sharpened during the sharpening operation, said adjustable means being angularly disposed with respect to said set.

1,827,665. LOCOMOTIVE BOOSTER FRAME. JOHN A. MCGREW, Albany, N. Y., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Original application filed July 14, 1927, Serial No. 205,680. Patent No. 1,742,610, dated Jan. 7, 1930. Divided and this application filed Feb. 21, 1929. Serial No. 341,711. 9 Claims. (Cl. 105—115.)



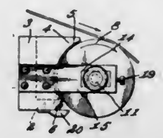
1. In an engine frame, the combination of a cylinder having ports, a steam chest, a piston within said cylinder, a crank shaft, a rod connecting the latter to said piston, said steam chest being provided with a steam inlet passageway and a steam outlet passageway, said outlet passageway being open to said cylinder and sloped downwardly so that condensate formed in the cylinder will flow therefrom by gravity, a valve within said steam chest for controlling said passageways, and means to connect said valve to said crank shaft.

1,827,666. LOCOMOTIVE CONSTRUCTION. LOREN P. MICHAEL, Elmhurst, Ill., assignor of one-half to The Baldwin Locomotive Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 3, 1929. Serial No. 360,193. 28 Claims. (Cl. 105—44.)



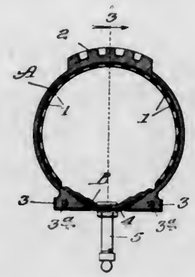
1. In a locomotive cylinder saddle, a front wall, and an exhaust steam passage-way extending along said wall and having a side formed by said wall.

1,827,667. PAPER OILER, WAXER AND MOISTENER. RALPH MOWREY, Camas, Wash. Filed Nov. 15, 1929. Serial No. 407,484. 1 Claim. (Cl. 91—49.)



A device of the character set forth including horizontally disposed and relatively spaced supports, a tank carried by the supports and having an open front wall with portions of the forward edges of the end walls concave and the remaining portions of said end walls disposed angularly to the concave portions and at an inclined plane thereto, a strip secured to said last named portions of the end walls, absorbent material closing the front wall and secured to the tank by said strip, a rotatable roller adjustably secured to the supports and having a portion of the periphery always in contact with the absorbent material to receive fluid therefrom, means supplying fluid to the tank, a drip pan carried by the tank below the strip, and means to permit the surplus fluid to be removed from the tank and pan.

1,827,668. PNEUMATIC TIRE. ALVIN J. MUSSELMAN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 1, 1928. Serial No. 309,487. 2 Claims. (Cl. 152—13.)



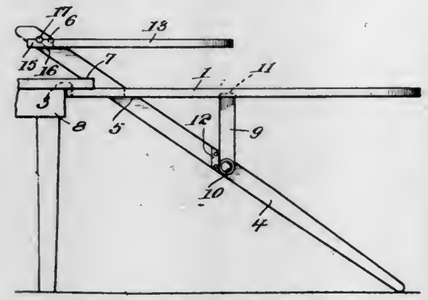
2. A pneumatic tire comprising a high capacity rubber casing, the sidewalls and a tread of the casing being composed of solid homogeneous elastic rubber of a type designed to resist wear, and diagonally disposed ribs extending substantially from bead to bead of the carcass, said ribs being composed of rubber compound which has high resistance to tensional force and constituting a substitute for the usual fabric re-enforcing elements in pneumatic tires.

1,827,669. SUGAR ROLL MILL. CULBERT JAMES PENDER, Lautoka, Fiji. Filed Feb. 25, 1929, Serial No. 342,543, and in Australia Mar. 8, 1928. 2 Claims. (Cl. 100—47.)



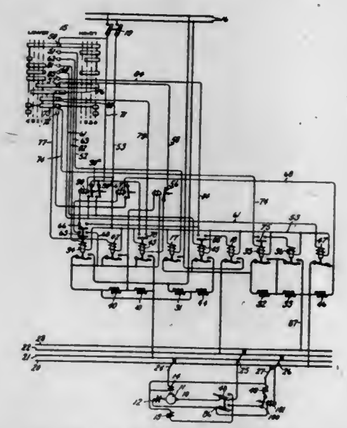
2. A feed pusher for sugar mills adapted to act on material entering the expressing rollers including a reciprocable body of hollow form having perforations therein to admit extracted juice, said body having terminal perforations permitting the discharge of extracted juice from the pusher.

1,827,670. IRONING BOARD. THOMAS C. PETRI and DIXIE W. PETRI, Nashville, Tenn. Filed Feb. 28, 1930. Serial No. 432,175. 1 Claim. (Cl. 68—10.)



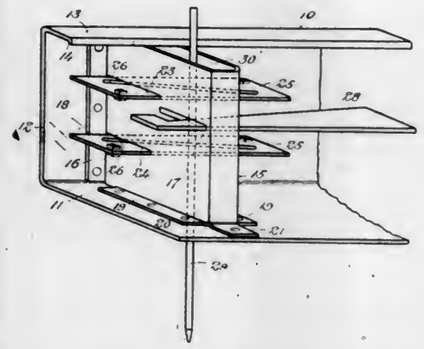
An ironing board comprising a board having a slot extending inwardly of one end thereof and having said end disposed under a table top, a notched leg extending through the slot with one notch thereof in engagement with the end wall of the slot and another notch receiving the edge of the table top, said board having a depression, a brace pivoted to the leg with the free end thereof fitting in the depression, and a cleat secured to the leg to be engaged by the cleat.

1,827,671. CONTROL SYSTEM FOR ELECTRIC MOTORS. WILLIAM C. RAUBE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 28, 1928. Serial No. 322,520. 7 Claims. (Cl. 172—152.)



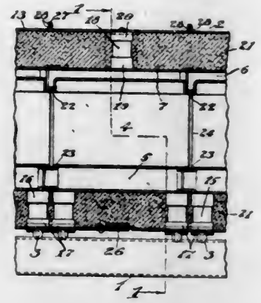
1. A control system for an electric motor provided to operate a member in two directions comprising a reversing controller for said motor, means responsive to movement of said member to a predetermined limit of travel in one direction for interrupting the motor power circuit and for establishing a dynamic braking circuit for said motor so as to bring said motor rapidly to rest, means responsive to the operation of said reversing controller to establish a power circuit for said motor to move said member in the opposite direction for establishing a second dynamic braking circuit for said motor and control means for interrupting said first dynamic braking circuit when said controller is energized to effect the movement of said member in said opposite direction.

1,827,672. ADJUSTMENT FOR ALIGNMENT OF ROAD OR SIMILAR FORMS. JACOB BRUMBAUGH ROGERS, Altoona, Pa. Filed Sept. 23, 1929. Serial No. 395,105. 4 Claims. (Cl. 25—118.)



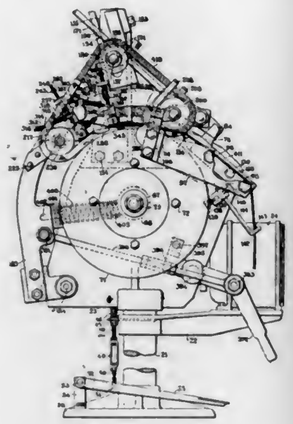
3. An adjustable U shaped metallic rond form, a U shaped yoke positioned on the body of the form, a plurality of key slots in the sides of the yoke, an intermediate slot, positioned between and parallel with the said key slots, a key having an inclined locking pin engaging surface, a locking pin co-acting with the locking key, rectangular keys positioned in the key slots, diagonally disposed slots positioned in the keys, means for shifting the top and the bottom of the form through the position of said keys with reference to the locking pin.

1,827,673. GLASS ANNEALING LEER WITH INSULATED TUNNEL. ALAN W. RUSSELL, Worcester, Mass., and HAROLD A. WADMAN, Hartford, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 14, 1927. Serial No. 239,874. 12 Claims. (Cl. 49—47.)



5. A leer for annealing glassware comprising a tunnel formed of a plurality of sections having telescoping end portions, a sheet metal casing surrounding but spaced from said sections, a plurality of pairs of socket members located respectively on the top and bottom of the tunnel sections and on the inside of the top and bottom of said casing, blocks of low heat conductivity positioned in said sockets to support said tunnel sections and position them with respect to said casing, said sockets extending beyond the blocks in a direction longitudinal of said tunnel, to permit maintenance of the blocks in the sockets upon the differential movements of said tunnel sections and said casing, and loose heat insulating material filling the remainder of the space between said tunnel sections and said casing.

1,827,674. MACHINE FOR FLIPPING COVERS ON BELTS. JESS A. SHIVELY, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 25, 1928. Serial No. 314,996. 16 Claims. (Cl. 154—3.)

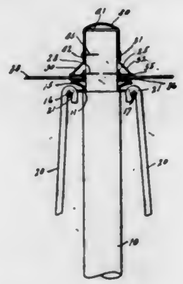


9. The combination with a frame, of a plurality of spaced rollers mounted on the frame in polygonal relation, said rollers being adapted to receive an endless driven article, means for driving the article, and means for applying a cover to the article during its movement.

1,827,675. AMMONIUM NITRATE SENSITIZED BY AMINO COMPOUNDS. WALTER O. SNELLING and JOSEPH A. WYLER, Allentown, Pa., assignors to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1928. Serial No. 264,953. 15 Claims. (Cl. 52—14.)

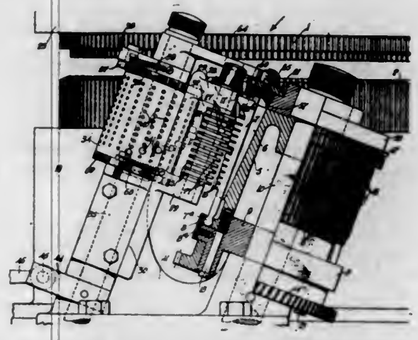
4. An explosive comprising ammonium nitrate sensitized with a compound selected from the following group,—aniline, toluidine, naphthylamine, anthramine, diphenylamine, ditolylamine, phenylenediamine, tolylenediamine, benzidine, tolidine, phenylhydrazine, diphenylhydrazine, tolylhydrazine, phenylhydroxylamine, azobenzene, azoxybenzene.

1,827,676. UMBRELLA CONSTRUCTION. CLARENCE G. SNOOK, Troy, Ohio, assignor to The Troy Sunshade Company, Troy, Ohio, a Corporation of Ohio. Filed Apr. 27, 1928. Serial No. 273,265. 5 Claims. (Cl. 135—28.)



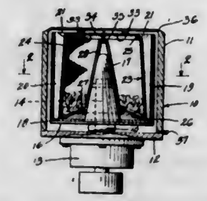
4. In an umbrella of the character described, an umbrella rod, a notch member carried on said rod for supporting the umbrella ribs, means for holding the notch member in place and against rotation on said rod, a rain cap positioned about said rod on the outer side of said notch member, and metal cap means having a socket receiving and engaging the end of said rod and secured to said rod, said cap means extending inwardly about the rod a substantial distance to exert reinforcing pressure against the rain cap and the notch member to prevent impact of the end of the rod from jarring the notch member from its position on the rod.

1,827,677. CIRCULAR KNITTING MACHINE. ERNEST SPIERS, Leicester, England, assignor to William Spiers Limited, Leicester, England, a British Company. Filed June 14, 1929. Serial No. 370,831. 9 Claims. (Cl. 66—14.)



1. A circular knitting machine having coaxially opposed needle cylinders, a series of independent slidable double-ended needles, a series of sliders operable for transferring desired needles from one cylinder to the other to vary the character of the knitted fabric, a rotary patterning device, a series of movable elements in said device for selecting sliders to cause same to transfer their needles; and means operative selectively upon the elements in the patterning device for moving said elements automatically to vary the selective action thereof upon the sliders.

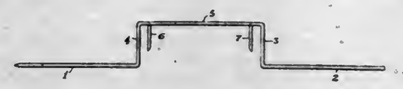
1,827,678. LAUNDRY DEVICE. NICOLA STRAMAGLIA, Chicago, Ill. Filed Nov. 18, 1929. Serial No. 408,024. 8 Claims. (Cl. 210—76.)



1. In laundry apparatus, a basket having an open bottom, sections of material each having a free end and an end attached to said basket, and a member in said basket to which said free ends may be removably attached to close said bottom.

1,827,679. CAN PUNCH. CLYDE W. STUART, New York, N. Y. Filed Oct. 23, 1929. Serial No. 401,810. 1 Claim. (Cl. 164—119.)

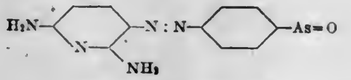
A can punch, comprising in a single flat piece of sheet metal, a pressure bar, a pair of depending sections depending from the respective ends of said bar, the walls of said depending sections being adapted to engage the walls of a can for guiding the punch, a pair of handles, said handles extending at right angles to said depending sections and parallel to the pressure bar, and a pair of



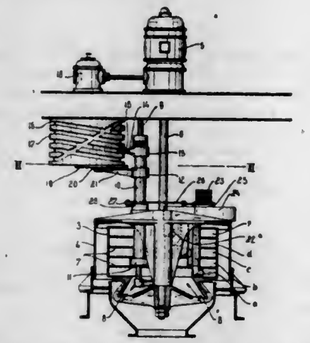
pressed-out sections pressed from said pressure bar and presenting punching prongs, said prongs being of less length than said depending sections.

1,827,680. ARSINE OXIDE SUBSTITUTION PRODUCTS OF PHENYL-AZO-ALPHA - ALPHA - DIAMINO - PYRIDINE. EDMOND T. TISZA and BERNARD JOOS, Yonkers, N. Y., assignors to The Pyridium Corporation, Nepera Park, N. Y., a Corporation of New York. Filed May 7, 1929. Serial No. 361,266. 4 Claims. (Cl. 260—14.)

4. As a new article of manufacture, para-arsine-oxide-phenyl-azo-alpha-alpha-diaminopyridine, having the following formula:—

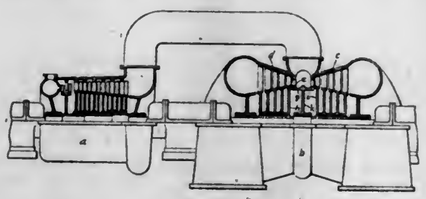


1,827,681. CENTRIFUGAL SEPARATOR. EVERT VAN DER MOLEN, Groningen, Holland. Filed Oct. 17, 1929, Serial No. 400,322, and in Germany Oct. 20, 1928. 11 Claims. (Cl. 210—74.)



1. A centrifugal separator comprising a casing, a rotor in said casing, a fixed spindle mounted parallel to the axis of said rotor, discharging means for said rotor mounted upon said spindle and means for oscillating said discharging means and intermittently sliding the same along said spindle.

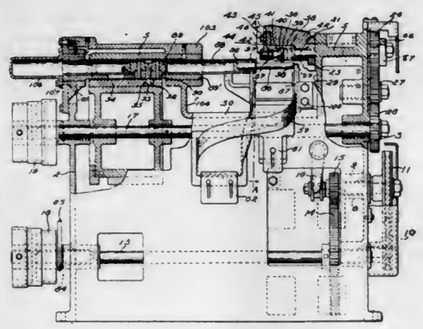
1,827,682. ELASTIC FLUID TURBINE. GEORG WEIDEHOFF, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 17, 1929, Serial No. 371,694, and in Germany July 12, 1928. 3 Claims. (Cl. 253—69.)



1. A turbine installation comprising a high pressure single-flow element and a low-pressure double-flow ele-

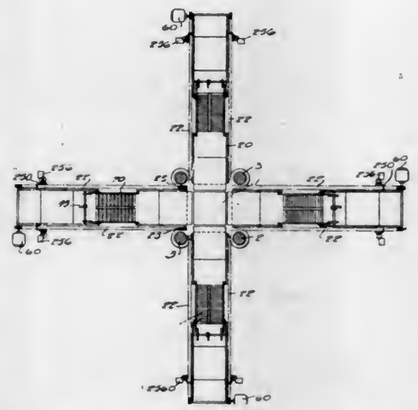
ment, said elements having separate casings and being mounted on a common shaft, said double-flow element having its two sections arranged with their high pressure ends adjacent to each other, and with a common elastic fluid supply chamber, and means for subjecting one of said two low-pressure sections to an axial pressure greater than that to which the other section is subjected for balancing the axial thrust of the single-flow element.

1,827,683. STAMPING MACHINE. GEORGE F. YAGER, Toledo, Ohio, assignor to The Bunting Brass and Bronze Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 10, 1930. Serial No. 434,800. 20 Claims. (Cl. 101—7.)



1. In a stamping machine, a rotatable stamp arbor, means for conducting the work adjacent the arbor, a stop for the work adjacent the conducting means, a driven shaft, a driving connection between the shaft and arbor, means associated with said driving connection for actuating said stop, and means independent of said driving connection establishing a driving connection between said shaft and conducting means.

1,827,684. INTAGLIO PRINTING PRESS. ARTHUR T. CHESTER and A. CLAXTON CARY, Rye, N. Y. Filed Aug. 13, 1929. Serial No. 385,504. 31 Claims. (Cl. 101—164.)



1. In an intaglio printing press, the combination with a fluid pressure container having a flexible wall through which the fluid pressure is applied to a printing plate, of means for automatically positioning a plate for printing and removing it after printing.

1,827,685. PRESSURE UNIT FOR INTAGLIO PRINTING. ARTHUR T. CHESTER and A. CLAXTON CARY, Rye, N. Y. Filed Oct. 9, 1929. Serial No. 398,289. 7 Claims. (Cl. 101—163.)



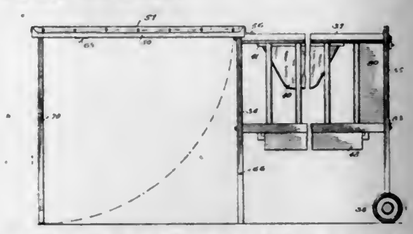
1. A pressure unit for printing from an intaglio plate, said unit including a substantially inflexible base, a confined flexible medium adjacent the pressure face of the base, and a material overlying said flexible medium and through which the printing pressure is applied to the plate, said medium having such flexibility that it will distribute the pressure over the surface of the plate and said material having such flexibility that it will transmit the pressure to the plate as determined by the distortion of the medium and conform to the surface variations of the plate, but not sufficiently flexible to readily conform to the engraved portions thereof.

1,827,686. FOLDABLE RULE. ARTHUR A. GABRIELSON, Minneapolis, Minn. Filed Dec. 8, 1928. Serial No. 324,624. 6 Claims. (Cl. 33—105.)



1. A foldable rule comprising a plurality of elongated sections, each of triangular shape in transverse section, and hinges connecting the ends of said sections so that when the rule is in folded condition the same comprises a regular polygon and the angles of said sections having vertices at said edges equalling substantially 360° divided by the number of sections in cross section with certain longitudinal edges of said sections disposed adjacent the center of said polygon.

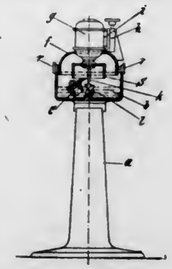
1,827,687. COMBINATION CRIB, BATHTUB AND DRESSING TABLE. HARRY E. MCCANDLESS, Rochester, N. Y. Filed Dec. 22, 1927. Serial No. 241,865. 12 Claims. (Cl. 45—31.)



7. The combination with a frame including two side members and a cross member, of a guiding member including a transverse portion pivoted to said cross member and two side portions fixed to said transverse portion, said side portions extending substantially parallel to and outside of said side members of the frame and terminating in inwardly bent portions adapted to overlie said side members of the frame so as to prevent downward movement of said side portions, and a dressing table removably secured to said guiding member and slidable along the side portions thereof.

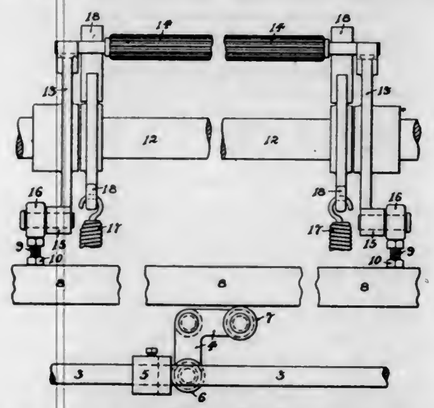
1,827,688. GRINDING MACHINE. EMIL LEY, Muttens, near Basel, Switzerland. Filed Nov. 23, 1929, Serial No. 409,307, and in Switzerland Nov. 26, 1928. 4 Claims. (Cl. 51—56.)

4. A grinding machine comprising in combination a stand, an elongated liquid tank supported horizontally upon the stand and having a track way provided along its longitudinal sides, a dome-like carriage movable along the track ways, a motor vertically adjustable in the carriage including a shaft depending into the tank, a work holder



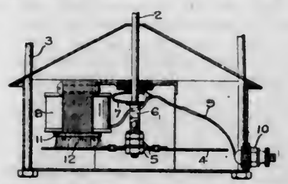
mounted longitudinally in the tank, a grinding element carried by the motor shaft above the work holder, and a spraying screw extended spirally about the lower end of the motor shaft for spraying the liquid upwardly upon the grinding element and work holder.

1,827,689. COMBING MACHINE FOR TEXTILE FIBERS. JOHN WILLIAM NASMITH, Heaton Mersey, Manchester, England. Filed Dec. 11, 1929, Serial No. 413,341, and in Great Britain Aug. 13, 1929. 9 Claims. (Cl. 19—116.)



1. In a combing machine, a detaching roller, fulcrumed lever bearings for such roller, a rod movable in the direction of its length, and means for converting any such longitudinal movement of the rod into movement of the roller-bearing levers around their fulcra.

1,827,690. ELECTRIC MOTOR. ARTHUR E. RITTENHOUSE, Honeoye Falls, N. Y. Filed June 4, 1930. Serial No. 459,164. 6 Claims. (Cl. 172—126.)

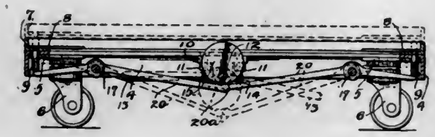


1. A motor comprising a rotor of resilient material, a flexible resilient finger engaging said rotor, and an electro-magnet for flexing the rotor toward and from said flexible finger.

1,827,691. PROCESS OF TREATING ORES OF TITANIUM CONTAINING CHROMIUM AND RECOVERING THE SULPHURIC ACID. NORBERT SPECHT, Oranienburg, near Berlin, Germany, assignor, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J., a Corporation of Delaware. Filed Apr. 6, 1929, Serial No. 353,259, and in Germany Apr. 14, 1928. 3 Claims. (Cl. 23—172.)

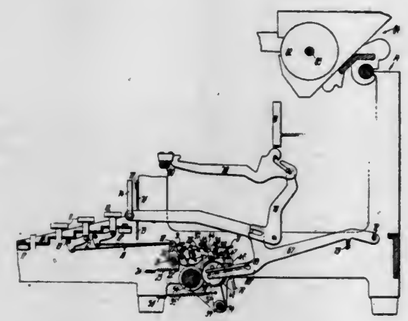
1. The process which consists in treating impure chromium-bearing titanium ores with sulphuric acid, concentrating the resulting impure sulphuric acid to at least 92 per cent, subjecting such concentrated acid to a temperature of about 300 degrees centigrade for an extended period of time, and separating the resulting purified sulphuric acid from the solids.

1,827,692. LIFTING TRUCK. OLAV VIK, Minneapolis, Minn. Filed Jan. 19, 1931. Serial No. 509,649. 6 Claims. (Cl. 254—2.)



1. A lifting truck comprising a lower wheeled frame, an upper frame normally resting on said lower frame, a shaft mounted in said lower frame, a cam carried by said shaft, levers pivoted in said lower frame and having arms bearing against said cam and arms bearing against portions of said upper frame, and means for swinging said shaft to rotate said cam and swing said levers to raise said upper frame from said lower frame.

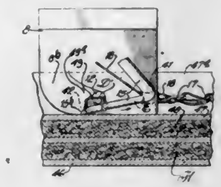
1,827,693. TYPEWRITING MACHINE. RICHARD VON REPPERT, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 5, 1928. Serial No. 317,226. 24 Claims. (Cl. 197—17.)



1. In a key-controlled power mechanism, the combination of a power-driven friction roller, a lever having a spring tension, a key-mechanism operable to restrain the tensioned lever, a friction disk rotatably mounted on said lever and disconnected from the power-roller, said key-mechanism having means to release the disk-lever to its spring to frictionally connect the disk with the power-roller to be rotated thereby, said disk having pivotal characteristics that render the rotating disk operable to restore the lever to its normal position, said key-mechanism

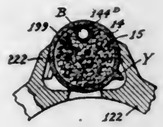
having other means operable to again restrain the tensioned lever independently of the key-released means, and means engageable by the disk to operate such devices as may be connected with said means.

1,827,694. SEWING MECHANISM. FREDERICK N. ROSS, Grosse Pointe Park, and HAROLD M. RATLEY, Highland Park, Mich., assignors to National Automotive Fibres, Inc., Oakland, Calif., a Corporation of Delaware. Filed July 13, 1929. Serial No. 378,161. 8 Claims. (Cl. 112—2.)



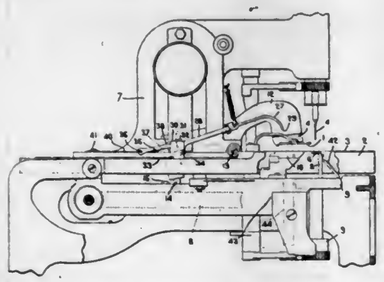
1. Sewing mechanism comprising a head equipped with a seam-engaging shoe provided with a needle passage and with a hook having an upwardly extending fin adjacent thereto; a sewing-needle working through said passage; and a looper-needle describing a movement about said passage and hook.

1,827,695. COMPOSITE GEM AND JEWEL. HORACE H. WELCH, New York, N. Y. Original application filed Aug. 22, 1924, Serial No. 733,472. Divided and this application filed Nov. 25, 1925. Serial No. 71,312. 4 Claims. (Cl. 63—32.)



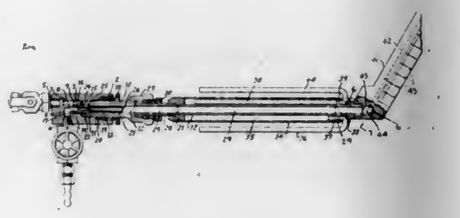
1. A composite gem including a closed transparent housing of glass; means associated with said housing to define a jewel chamber and a movable air chamber in the housing; a plurality of opal fracture fragments in said jewel chamber; and a transparent colorless liquid of substantial viscosity disposed in said jewel chamber.

1,827,696. BUTTONHOLE SEWING MACHINE. JOHN KIEWICZ, Boston, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Mar. 29, 1929. Serial No. 351,071. 19 Claims. (Cl. 112—68.)



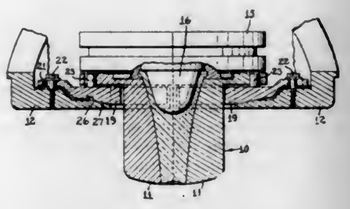
1. In a buttonhole sewing machine, the combination with work-holding means, of buttonhole-cutting mechanism constructed to cut a buttonhole slit with an eye at one end, and means separate from the buttonhole-cutting mechanism and operating from above the work to displace from the eye of the buttonhole the cloth fragment produced by the cutting of said eye.

1,827,697. TORCH. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 5, 1929. Serial No. 397,542. 8 Claims. (Cl. 158—27.4.)



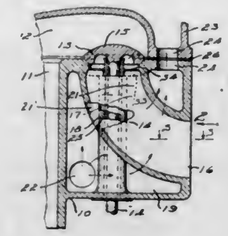
1. A positive-proportioning oxyacetylene torch, having supply passages for oxygen and fuel gas respectively, a long conduit, a tip member connected with said conduit, a tube in rearward continuation with said conduit and in communication with said fuel gas supply passage, and an inner tube in communication with said oxygen supply passage, said tubes forming between them a fuel gas passage surrounding the oxygen gas passage through the inner tube, said oxygen gas passage enlarging gradually to its forward open end where the two gases are separately delivered to said conduit.

1,827,698. GLASSWARE FORMING MACHINE. JOSEPH P. BENOIT, Alton, Ill., assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed June 27, 1930. Serial No. 464,363. 7 Claims. (Cl. 49—41.)



7. In combination, a neck mold, a partible two section blank mold arranged in a plane below the neck mold, a horizontally disposed flange at the upper end of each mold section, said flange having a vertical opening therein, a holder for each mold section having a stud extending upwardly through the corresponding opening, mold arms supporting the holders and mold sections and operative to alternately open and close the mold, means whereby the movement of the mold arms inwardly beyond the point necessary to close the blank mold causes upward movement of the holders and blank mold sections, bringing said mold sections and neck molds into sealing contact with one another, and means whereby said relative movement between the mold arms and holders follows a definite predetermined path.

1,827,699. DUAL EXHAUST PORT AND VALVE COOLING ARRANGEMENT. ROBERT JARDINE, Detroit, Mich., assignor to Wilcox-Rich Corporation, a Corporation of Michigan. Filed June 26, 1930. Serial No. 464,042. 11 Claims. (Cl. 123—177.)



1. In an internal combustion engine: a block providing a space for cooling water and having an opening which provides a seat for an exhaust valve; and a plurality of divergent exhaust passages leading from said opening through said water space to separate outlet ports from said block.

1,827,700. WATERPROOF PAPER AND PROCESS OF MAKING SAME. LESTER KIRSCHBRAUN, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed May 13, 1929. Serial No. 362,877. 5 Claims. (Cl. 92—21.)

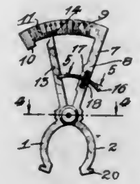
1. In the process of making a felted water-resistant sheet on a paper making machine, the steps which comprise subjecting fibrous material in an aqueous vehicle to the action of a beater to thereby produce a fibrous pulp, introducing into said pulp a normally adhesive, fusible, waterproof binder in heat liquefied condition, effecting agitation of said binder in the presence of said pulp whereby to distribute the binder substantially uniformly through the pulp, adding regulated quantities of a protective colloid to the stock of pulp and bitumen to stabilize the bitumen and prevent sticking thereof to the paper-forming instrumentalities, running off the stock on the paper-making machine, and finally removing the water from the stock to cause the bitumen to regain its adhesive character and coalesce and unite with the fibers.

1,827,701. WATERPROOF FELTED SHEET. LESTER KIRSCHBRAUN, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Original application filed May 13, 1929, Serial No. 362,877. Divided and this application filed May 6, 1930. Serial No. 450,322. 16 Claims. (Cl. 92—21.)

15. A fibrous product consisting of wet pulp intimately associated with a water proof binder, the binder having been converted into discrete particles in the presence of the pulp and being prevented from substantial aggregation by the wet pulp.

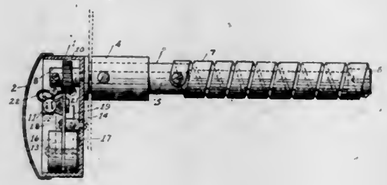
1,827,702. COMBINED FINGER AND RING GAUGE. KAREKIN H. KOOYOOMJIAN, Providence, R. I. Filed Aug. 10, 1928. Serial No. 298,653. 1 Claim. (Cl. 33—148.)

A combined finger and ring gauge comprising, a pair of arms pivoted together at their intermediate portions, said arms having their opposing end portions on one side of their pivotal point, curved to converge towards each other for engaging a finger; means formed upon the extremities of said converging end portions of the arms for engaging the inner periphery of a ring; a measurement indicating member carried by one of said arms on the other side of the pivot, said member having graduations on one face thereof to indicate the finger sizes and different graduations on its other face to indicate ring sizes; means carried by the remaining arm and cooperating with said measurement indicating member to determine the size of the finger or ring engaged at the engaging end of the arms; an arcuate shank screw threaded throughout its length,



pivotally secured at one end to one of said arms and slidably connected at its free end to the other arm; and, an adjusting nut received on said shank and adapted to act upon the latter for imparting a relative movement to the arms and adjusting the same, said nut being in bearing engagement with the arm having slidable connection with said shank, for locking the arms in their adjusted positions and preventing their relative movement in any direction.

1,827,703. STACK CONTROL DEVICE FOR OIL BURNER SYSTEMS. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed Dec. 21, 1925. Serial No. 76,581. 18 Claims. (Cl. 200—138.)

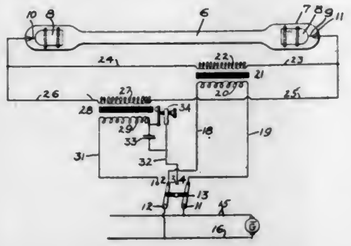


1. In a thermostatic controlled electric switch, a rotatable operating element, a thermal element adapted upon expansion and contraction to rotate the operating element, in opposite directions, a pivoted member, an electric circuit closed mounted upon said member, a plurality of engaging members mounted on the operating element adapted to engage one end of the pivoted circuit closed carrying member and upon rotation of the operating element to turn it about its pivot to open or close the circuit through the circuit closed and upon further rotation in the same direction, to move out of engagement but maintain the circuit closure in the same position.

1,827,704. METHOD OF AND APPARATUS FOR MODIFYING COLOR OF VACUUM TUBE LIGHTS. LEO L. BECK, Jackson Heights, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 8, 1927. Serial No. 218,182. 10 Claims. (Cl. 176—124.)

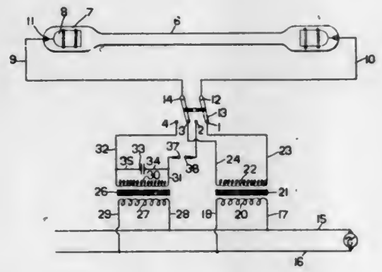
1. A lighting system comprising the combination with a luminescent tube and a source of alternating current at low frequency and low voltage, of a transformer whereof

the secondary coil is connected with the tube terminals, a high frequency oscillatory circuit including the primary



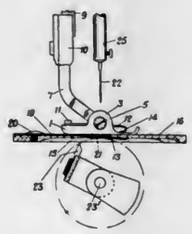
coil of the transformer and a circuit closing device selectively connecting the source of current at low frequency and voltage with the high frequency oscillatory circuit.

1,827,705. METHOD OF MODIFYING COLOR IN VACUUM TUBE LIGHTS. GEORGES CLAUDE and JEAN M. E. DE BEAUFORT, Boulogne-sur-Seine, France, assignors to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 15, 1927, Serial No. 226,502, and in France Oct. 18, 1926. 9 Claims. (Cl. 176—124.)



1. A lighting system comprising a tube of raefied gas, two sources of high potential alternating current, electrical connections between said sources and the tube, a frequency changer included in the circuit of one of the sources and means to selectively connect either of the two sources to the tube.

1,827,706. MACHINE FOR DRAWING THREADS IN FABRICS. HERBERT CORRALL, Helensburgh, and JAMES HEGGIE, Clydebank, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 30, 1930, Serial No. 478,808, and in Great Britain Sept. 4, 1929. 2 Claims. (Cl. 112—78.)

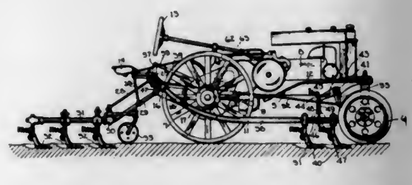


1. In a thread drawing machine, in combination, a throat plate presenting slots, a rotary cutter below said throat plate, a reciprocatory fabric piercer adapted to penetrate said throat-plate, a presser-bar above said throat plate, a presser-foot carried by said presser-bar, said presser-foot formed as an open frame having sides extending in the direction of feed, and reflex springs each having one limb secured to said frame adjacent to one of said longitudinal sides, the other limb of each spring being free and projecting beneath the lower face of said presser foot and adapted to enter one of said slots.

1,827,707. PROCESS OF CURING TOBACCO. WILHELM R. NAGEL and FRIEDRICH L. NAGEL, Paducah, Ky., assignors to W. R. Nagel & Company, Paducah, Ky., a Partnership composed of Wilhelm R. Nagel and Friedrich L. Nagel. Filed Oct. 16, 1930. Serial No. 489,227. 4 Claims. (Cl. 131—55.)

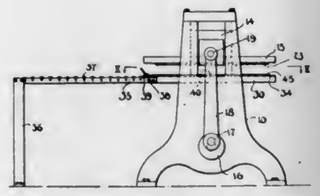
3. The process of curing and flavoring leaf tobacco by subjecting it to live steam to soften it, coating it with a mixture of petroleum jelly, glycerine, and oil of sassafras, packing the coated tobacco in layers in a container and subjecting it to pressure of the order of four thousand pounds per square inch to reduce it to about forty percent of its original volume, and subjecting the pressed tobacco in said container to uniform heat of approximately 250° F. for a period of about ten days, substantially as described.

1,827,708. CULTIVATOR. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 1, 1930. Serial No. 485,588. 23 Claims. (Cl. 97—47.)



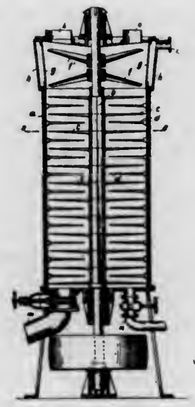
1. In a tillage implement, the combination of a wheeled supporting frame, including a transverse supporting bar at the rear thereof, forwardly and rearwardly extending cultivator rigs connected respectively with said bar, and earth working tools carried by said rigs.

1,827,709. MACHINE FOR MANUFACTURING FLOOR MATS FOR MOTOR VEHICLES. WILLIAM H. LEAVENWORTH, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 14, 1929. Serial No. 414,049. 4 Claims. (Cl. 164—23.)



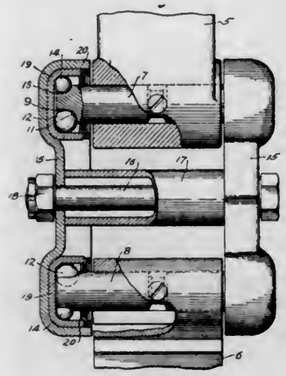
1. In apparatus for cutting sheet material, a pair of relatively movable platens, one of which is provided with die means for cutting sheet material, the other of which is provided with a pin projecting toward the first platen, the pin being adapted to fit in an opening in the sheet material for positioning the latter between the platens, said die means including a cutting blade so aligned with the pin that the die when cutting an aperture in the material, cuts around the pin.

1,827,710. PROCESS FOR TREATING FIBROUS MATERIALS. CARL LEYST-KUCHENMEISTER, Berlin-Schlachtensee, Germany. Filed June 10, 1929, Serial No. 369,869, and in Germany July 28, 1928. 10 Claims. (Cl. 92—6.)



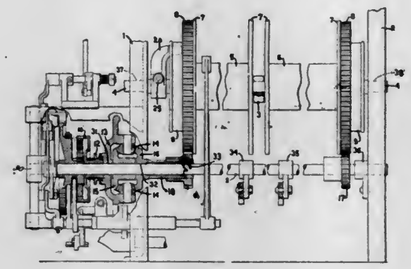
1. Process of working up raw cellulosic materials into semi-cellulose, which comprises subjecting the raw material to combined hydrodynamic and frictional heating treatment.

1,827,711. SPRING CONNECTION. RAYMOND R. SEARLES, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 13, 1929. Serial No. 354,720. 8 Claims. (Cl. 267—54.)



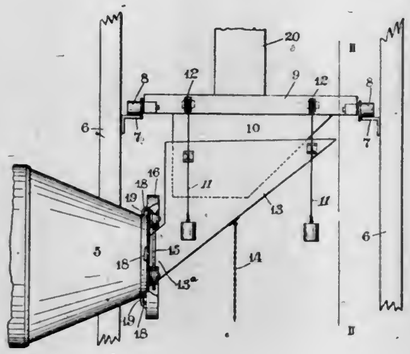
1. A spring connection for connecting the frame and spring of a motor vehicle, pin means to be carried by one of said connected parts, said pin means having at the side of each end an outwardly opening curved angular contact bearing cup seat, an antifriction bearing member on each of said seats, and angular contact raceway means carried by the other of said connected members for engagement with said antifriction bearing members whereby both radial and end thrust loads will be carried by said antifriction bearing members.

1,827,712. LET-OFF MECHANISM FOR LOOMS. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Dec. 31, 1929. Serial No. 417,689. 6 Claims. (Cl. 139—103.)



1. A let-off mechanism for a loom having two warp beams comprising a positively rotated let-off member, a shaft journalled in the loom frame and having both warp beams journalled thereon, differential driving connections between the let-off member and both warp beams whereby the tension on the warp on both beams is continuously equalized and means acting to oppose any tendency of one beam to be driven faster than the other due to unequal resistance offered to said driven let-off member by said differential driving connections.

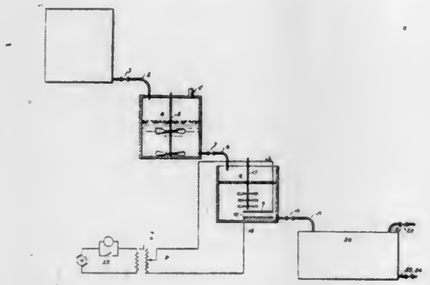
1,827,713. MEANS FOR CHARGING CONCRETE MIXING OR TRANSPORTING VESSELS. JOSEPH EGGERT, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed June 24, 1929. Serial No. 373,441. 1 Claim. (Cl. 214—17.)



In means for supplying concrete materials to a mixing or transporting drum including a tower, a frame carrying a funnel, means supporting said frame in said tower for horizontal movement, a hopper provided with a discharge spout into which hopper the funnel discharges, and weighted flexible nearly counterbalancing means for

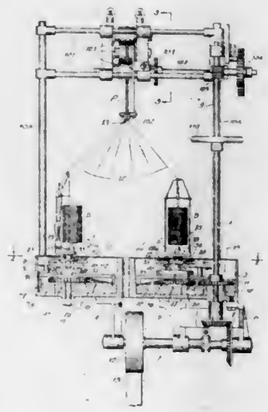
suspending said hopper on said horizontally movable frame, said hopper-suspending means adapted to permit universal movement of said hopper, a rotary coupling means on said discharge spout for communicatingly attaching the same to the mixing or transporting drum, said coupling means being detachable from said drum.

1,827,714. DEHYDRATION OF EMULSIFIED OIL. JACQUE C. MORRELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 5, 1929. Serial No. 411,798. 4 Claims. (Cl. 204—24.)



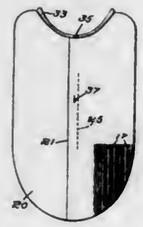
1. Steps in the dehydration of emulsified oil, which consists in suspending water-insoluble conducting material in finely divided condition in the emulsion, then passing an electric current through said emulsion to effect separation and permitting the water to separate from the oil in a settling stage.

1,827,715. STOP MECHANISM FOR BRAIDING MACHINES. HARRY G. ROBINSON, Waterbury, Conn., assignor to Industries of America, Inc., a Corporation of Delaware. Original application filed Sept. 24, 1926, Serial No. 137,395, and in Germany and France Sept. 9, 1927. Divided and this application filed Feb. 20, 1928. Serial No. 255,728. 13 Claims. (Cl. 96—19.)



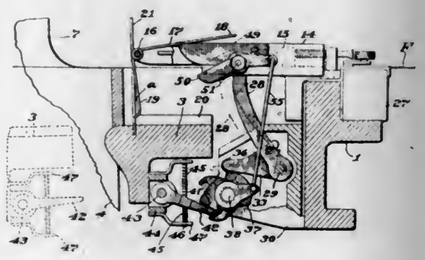
3. A braiding machine having braiding devices or carriers and rotary drivers adapted to operate upon said braiding devices or carriers, actuating mechanism for said rotary drivers, and controlling mechanism therefor, said controlling mechanism comprising means adapted to permit actuation of said rotary drivers by said actuating mechanism, at times, and to stop said actuation of said drivers at times, and detector means comprising centrally arranged plungers on said carriers individually adapted to actuate said stopping means, when the supply of braiding material upon a carrier is exhausted or fails to function normally.

1,827,716. DETACHABLE SHIRT BOSOM. WILLIAM B. SNOW, Boston, Mass., assignor to Reversible Collar Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 22, 1930. Serial No. 503,990. 8 Claims. (Cl. 2—119.)



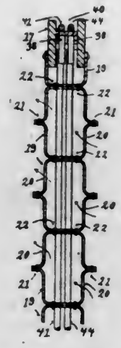
7. A detachable shirt bosom formed of paper having a cloth facing and having impressed into it a series of transversely parallelly arranged depressions indenting the cloth facing and the sub-surface of paper thereunder and imparting a design and measure of longitudinal flexibility to the bosom.

1,827,717. FILLING REPLENISHING LOOM. PAUL J. ST. JEAN, Thompsonville, Conn., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Sept. 19, 1930. Serial No. 482,995. 14 Claims. (Cl. 139—377.)



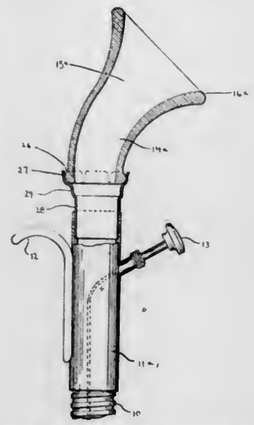
1. In a loom, the combination of the lay, a filling fork, means for supporting the fork in position to detect the presence or absence of filling, a lever adapted to engage and shift the fork when filling is absent on a detecting beat, a filling end parter, and means operable by the lay movement for actuating the parter and for imparting detecting movement to said lever.

1,827,718. VENTILATED WINDOW AND PORCH SHADE. KARL H. WHITNEY, Kirksville, Mo., assignor to Whitmanis Manufacturing Company, Inc., Kirksville, Mo., a Corporation of Missouri. Filed June 21, 1928. Serial No. 287,206. 4 Claims. (Cl. 156—16.)



1. A shade comprising a top rail, a bottom rail, and an intermediate portion built up from a series of horizontally directed strips, each having its edges connected to the edges of one next adjacent strip and its central portion connected to the central portion of the other next adjacent strip.

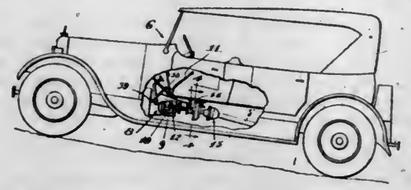
1,827,719. SOUND COLLECTING AND TRANSMITTING. CHARLES K. WOODBRIDGE, New York, N. Y., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Original application filed May 29, 1924, Serial No. 716,626, and in Great Britain Apr. 20, 1925. Divided and this application filed Apr. 21, 1927. Serial No. 185,570. 3 Claims. (Cl. 181—21.)



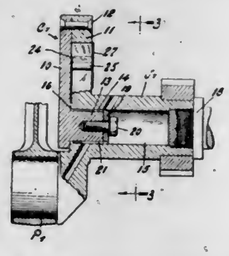
2. A sound-collector having a mouthpiece portion and a horn portion integral therewith, and having the lip of the mouthpiece portion disposed at an angle with relation to the base of the horn portion, the walls of said mouthpiece being of greater thickness adjacent the lip engaging portion than adjacent the base of the horn portion.

1,827,720. MOTOR VEHICLE BRAKE. FRANK C. LAMB, Los Angeles, Calif. Filed June 2, 1924. Serial No. 717,276. 7 Claims. (Cl. 192—4.)

1. In a motor vehicle having a transmission mechanism and traction wheels, a shaft interposed between said transmission mechanism and wheels and rotatable by power applied through either the transmission mechanism or wheels, said shaft being rotatable directly from said mechanism, a brake member carried by said shaft and turnable freely therewith in one direction, and a stationary brake member adapted to cooperate with said movable brake member to immediately inhibit reverse rotation of said shaft at all times on reverse rotative effort being applied thereto through said traction wheels, and means whereby the movable brake member may be placed out of cooperative relation with the shaft to permit reverse rotation of the shaft.

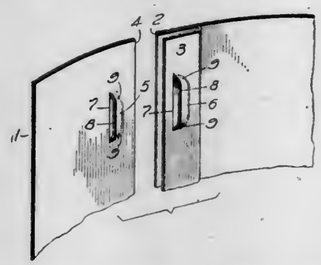


1,827,721. MEANS FOR COUNTERBALANCING AND FOR COUNTERACTING TORSIONAL VIBRATION IN CRANK SHAFTS. CALEB E. SUMMERS, Detroit, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 31, 1926. Serial No. 98,774. 11 Claims. (Cl. 74—38.)



11. In a crank shaft having a crank arm provided with an extension, a counterweight pivoted to the end of said arm, and spring means connecting the counterweight to the extension to oppose movement of the counterweight relative to the arm.

1,827,722. STOVEPIPE. EBER J. HAYMAN, Parkersburg, W. Va. Filed Feb. 15, 1927. Serial No. 168,405. 11 Claims. (Cl. 126—309.)



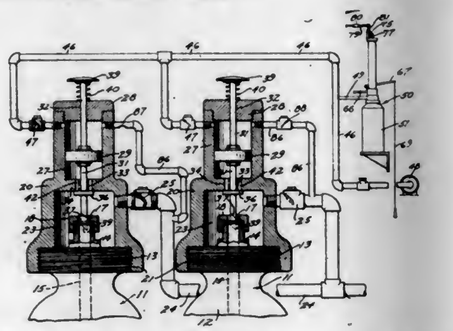
1. A pipe section comprising a sheet of metal, one longitudinal edge portion thereof being bent upon itself to form an enclosing channel, and adapted to receive the other longitudinal edge portion therein, similarly placed offset locks in each edge portion adapted to engage each other.

1,827,723. PRESSURE-OPERATED MEANS FOR PUNCTURING CLOSURE DIAPHRAGMS. SCOTT E. ALLEN and OZRO N. WISWELL, Los Angeles, Calif., assignors, by mesne assignments, to C-O-Two Fire Equipment Company, Los Angeles, Calif., a Corporation of California. Filed July 27, 1927. Serial No. 208,795. 37 Claims. (Cl. 169—11.)

10. In combination: a pair of receptacles containing a fluid under pressure, and having closed discharge openings, a fluid actuated means for each of said discharge openings to open the same; means for delivering operating fluid to operate said fluid actuated means; and delivery means into which said fluid is delivered when said fluid is released; and by-pass means connecting said delivery means to each of said fluid actuating means.

14. In combination, a pair of receptacles holding fluid under pressure, fluid pressure actuated means in connection with each receptacle for controlling the discharge of fluid therefrom, and a connection between the said means through which pressure released from one receptacle will operate the means controlling the other receptacle.

26. In combination, a pair of receptacles, a frangible closure means for each receptacle for retaining fire-extinguishing fluid under pressure therein, means for rupturing one of the frangible closure means to permit the discharge of fluid from a receptacle, and means operable by the fluid thus discharged for rupturing the other frangible closure means.



35. A device for opening a fluid container, including an opening member, means for operating the opening member to open the container, and means whereby fluid released from the container acts in a manner to insure return of the opening member to normal position.

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Issue of October 20, 1931

Trade-Marks	374	No. 287,933 to No.	288,306,	inclusive.
T. M. Renewals	106			
Labels	43	No. 38,898 to No.	39,940,	inclusive.
Prints	5	No. 13,448 to No.	13,452,	inclusive.
Reissues	9	No. 18,226 to No.	18,234,	inclusive.
Designs	49	No. 85,362 to No.	85,410,	inclusive.
Plant Patents	2	No. 3 to No.	4,	inclusive.
Patents	1,003	No. 1,827,724 to No.	1,828,726,	inclusive.
Total	1,591			

Trade-Marks Canceled

90,491. Metal-polish. James D. Waterman, Oakland, Calif. Registered February 25, 1913. Canceled October 2, 1931.

130,612. Cement, stucco, and plaster. American Pozzolana Company, Indianapolis, Ind. Registered May 4, 1920. Canceled August 17, 1931.

144,055. Certain articles of clothing. Franklin Simon & Co. Inc., New York, N. Y. Registered June 21, 1921. Canceled September 25, 1931.

169,680. Medicinal preparation for cramps, diarrhea, and colds. Walker Bros. Co., Boston, Mass., assignor to Za-Rex Food Products Inc., Boston, Mass. Registered June 26, 1923. Canceled September 8, 1931.

179,512. Candies. Sophie Mae Candy Corporation, doing business as Sophie Mae, Atlanta, Ga. Registered February 12, 1924. Canceled October 2, 1931.

206,331. Canned barley malt. Andrew Leonforte, New York, N. Y. Registered November 24, 1925. Canceled September 8, 1931.

219,370. Certain named toilet preparations. Societe Francaise des Produits de Beaute, Paris, France. Registered October 19, 1926. Canceled August 17, 1931.

220,985. Medicated chewing gum. The National Gum Co., Inc., Newark, N. J. Registered November 23, 1926. Canceled August 17, 1931.

223,931. Paints, varnishes, japans, etc. Paint Products Co., Memphis, Tenn. Registered February 15, 1927. Canceled September 25, 1931.

244,585. Ladies' hats. Quaker Hat Co., Inc., New York, N. Y. Registered July 24, 1928. Canceled October 2, 1931.

251,223. Automobiles and their structural parts. Plymouth Motor Corporation, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich. Registered January 1, 1929. Canceled September 9, 1931.

257,895. Salves and ointments for the treatment of certain ailments. Florence McGregor, Winnipeg, Manitoba, Canada. Registered June 18, 1929. Canceled October 2, 1931.

265,878. Shoe cream or dressing. Whittemore Bros. Corp., Cambridge, Mass. Registered January 7, 1930. Canceled September 25, 1931.

268,003. Certain named foods, all of which products are packed in glass. Lush'us Products Co., Chicago, Ill., assignor to Lush'us Products Company, Chicago, Ill. Registered March 4, 1930. Canceled September 8, 1931.

269,403. Certain named canned foods. Vincennes Packing Corporation, Vincennes, Ind. Registered April 8, 1930. Canceled September 8, 1931.

273,114. Bituminous concrete. The Carter-Waters Corporation, Kansas City, Mo. Registered July 22, 1930. Canceled October 2, 1931.

279,314. Motion-picture cameras, projectors, and parts thereof. Cine Products Corporation, New York, N. Y. Registered January 13, 1931. Canceled September 25, 1931.

281,336. Liquids used in the water-proofing of fabric materials. The Hettrick Manufacturing Company, Toledo, Ohio. Registered March 17, 1931. Canceled October 2, 1931.

Patents Issued Without Fees

U. S. PATENT OFFICE, *Washington, October 9, 1931.*
(ORDER No. 3,205)

Hereafter, when an application, filed under the provisions of the act of April 30, 1928, which provides for the issuance of a patent without the payment of fees under certain conditions, is allowed, the Issue Division will mark such application, "Patent to be granted within three (3) months, or such earlier time as applicant requests," and indicate that the issue has been deferred to the last issue date within said three months.

Upon request by the attorney of record or the applicant, if there is no attorney, the patent will be issued at an earlier date.

THOMAS E. ROBERTSON,
Commissioner.

Condition of Applications Under Examination at Close of Business October 3, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 93,748; Trade-Mark Division, 1,057. Oldest new case, Feb. 4, 1931; oldest amended, Feb. 4, 1931.

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	May 11	May 16	853
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Apr. 9	Apr. 9	1,415
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	May 26	June 1	979
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 1	May 1	884
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Apr. 6	Apr. 6	690
318	6. LEWERS, A. M., Carbon Chemistry	Feb. 27	Mar. 3	2,276
106	7. JARBOE, C. G., Optics; Photography	Mar. 19	Mar. 19	2,064
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Mar. 9	Mar. 11	1,632
221	9. ADAMS, R. E., Pumps: Fluid and Fluid-Current Motors	Apr. 21	Apr. 25	1,230
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Apr. 6	Apr. 21	1,184
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	May 4	May 4	734
380	12. HENRY, C. C., Machine Elements	Feb. 28	Mar. 6	1,069
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing: Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Apr. 4	Apr. 8	1,187
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Apr. 10	Apr. 25	1,068
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Mar. 17	Mar. 17	2,479
242*	16. SPENCER, C. J., Telegraphy; Telephony	June 18	June 17	875
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Mar. 9	Mar. 14	1,546
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Apr. 13	Apr. 22	1,106
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Feb. 12	Feb. 13	2,198
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	May 23	May 28	995
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Apr. 4	Apr. 30	978
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	May 13	May 29	804
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Feb. 9	Feb. 5	1,099
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Apr. 6	Apr. 9	996
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Apr. 8	Apr. 8	1,613
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Apr. 3	Apr. 3	968
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Apr. 6	Apr. 3	1,177
225	28. BENSON, A. R., Internal-Combustion Engines	Mar. 6	Mar. 9	1,832
260*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	June 3	June 3	579
148	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	May 4	June 5	834
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Feb. 5	Feb. 7	2,582
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	May 4	May 4	1,227
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Apr. 3	Apr. 3	2,282
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	May 25	May 27	896
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	July 25	July 3	699
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Feb. 18	Feb. 19	2,231
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 11	Mar. 23	1,571
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	June 13	June 8	604
220	39. COWLES, A. W., Fluid-Pressure Regulators: Multiple Valves; Valves; Water Distribution	Apr. 4	Apr. 4	1,669
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Mar. 5	Mar. 12	3,207
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	May 27	May 27	737
223*	42. CUTTING, H. O., Electric Signaling	Mar. 5	Feb. 27	1,563
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Apr. 8	Apr. 18	1,499
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Feb. 4	Feb. 4	2,132
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Mar. 5	Mar. 5	2,143
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Apr. 14	Apr. 24	1,054
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Apr. 6	Apr. 6	2,170
212*	48. ROEPKE, O. B., Electricity, General Applications	Apr. 3	Apr. 3	1,058
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Apr. 3	Apr. 3	1,546
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Feb. 9	Feb. 12	2,647
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Feb. 26	Feb. 26	2,111
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Apr. 19	Apr. 22	1,366
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	May 2	May 6	716
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Feb. 16	Feb. 16	2,930
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery	Sept. 16	Sept. 24	182
	{Designs	Aug. 6	Aug. 5	281
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Mar. 7	Mar. 7	1,928
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Apr. 8	Apr. 4	921
270*	58. DOWELL, F. F., Abrading; Typewriting	Mar. 5	Mar. 5	1,607
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Apr. 10	Apr. 10	1,729
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Mar. 3	Mar. 3	2,113
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Feb. 6	Feb. 17	2,091
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Feb. 6	Feb. 11	2,545
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Feb. 18	Feb. 24	2,340
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND, {Trade-Marks	Sept. 8	Sept. 24	959
	{Labels and Prints	Sept. 14	Sept. 29	98

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE RUNDELL

No. 2,710. Decided April 29, 1931

PATENTABILITY—BUNCH CONCENTRATORS.

Certain claims relating to bunch concentrators used in the manufacturing of cigars *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Sydney I. Prescott and *Mr. George S. Hastings* for Rundell.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

Appellant has invented an improvement in bunch concentrators used in the manufacture of cigars. In connection with his application he filed 17 claims, the first 14 of which were allowed by the Examiner. Claims 15, 16, and 17 were rejected by the Examiner, which decision was affirmed by the Board of Appeals of the United States Patent Office. These three claims are as follows:

15. The combination with intermittently rotating cigar bunch concentrating means and automatic operating means therefor, of means for loading bunches into said concentrating means comprising a bunch carrier and an ejector therefor and means for moving both to and from loading position.

16. The combination with intermittently rotating cigar bunch concentrating means and automatic operating means therefor, of means for loading bunches into said concentrating means comprising a yielding bunch carrier and an unyielding ejector therefor and means for moving both to and from loading position.

17. The combination with intermittently rotating cigar bunch concentrating means and automatic operating means therefor, of means for loading bunches into said concentrating means comprising a bunch carrier and an ejector therefor and a gearing actuated mechanism for swinging both to and from loading positions.

The references relied on for rejection are Huttger, 1,263,673, April 23, 1918, and Elges, 375,616, December 27, 1887.

Appellant's device is a complicated piece of automatic machinery. No beneficial result would follow a description of it in detail. It is sufficient for the purposes of this case to state that it consists of a revolving turret containing female molds for receiving bunches of tobacco and which turret is rotated intermittently. The female portions of the molds in the turret are loaded by means of an arm which automatically places the bunches of tobacco in said molds as the respective molds come to the top of the mechanism. Another arm on the other side of the machine inserts a male portion of the mold after the bunch has been inserted, and the turret then revolves, bringing another female mold into position. The male portion of this mold is then removed by the arm provided for this purpose, the concentrated bunch in said mold is ejected and it is, in turn, loaded by the means aforesaid, with another bunch.

The arm which loads those molds is so arranged that the end portion thereof, which clasps the loading bunches, is yieldable when pressure is exerted thereon, this character of yieldability being furnished by a spring.

The reference Elges shows a revolving turret in a hand-operated concentrator, with female molds and removable male molds.

The reference Huttger shows a cigar bunching and forming machine with a series of molds in an element with a plane surface. A transferring element is provided, which receives bunches of tobacco for concentration between a pair of yieldable jaws, provided for that purpose. By proper mechanism this transferring element, after receiving such bunch, swings into a horizontal position and the bunch of tobacco is pressed into the mold by means of an ejector, which is caused to be thrust forward between the said yieldable jaws to such a degree as to press the bunch of tobacco in place in its mold. This being done, the transferring element returns to its original position for another bunch and thereafter the process is repeated.

We are of opinion that the Board of Appeals committed no error in holding claims 15, 16, and 17 to be properly rejected on these references. It will be observed the claims in question are very broad, and are not limited to the exact mechanism shown by the applicant, and which were fully covered by his allowed claims. As the Board states, it must be evident that the device shown by Huttger must operate intermittently. Whether the molds are arranged in a plane surface or in a rotating turret can hardly be inventive in view of the disclosures in the references. The means for loading bunches into the concentrator means, comprising a bunch carrier and an ejector, is shown by Huttger.

Appellant argues that his rejected claims rest upon an automatic mechanism. The mere statement that a device is to be operated automatically instead of by hand, without a claim specifying any particular automatic mechanism, is not the statement of an invention. *Marchand* v. *Emken*, 132 U. S. 195, 49 O. G. 1841; *In re Gill*, 17 C. C. P. A. (Patents) 700, 36 F.(2d) 128, 392 O. G. 493.

One other element is suggested by the Board of Appeals, namely, the "yielding bunch carrier," in rejected claim 16. It would appear to be obvious to anyone who was constructing a mechanical device of this kind, if it was feared that injury would result from the contact of a moving arm with another surface, by means of which arm a certain function was to be performed, that this danger might be avoided by the interposition of a spring or other yieldable means. We assume the appellant does not rely particularly upon this feature, as it was not referred to in his oral argument, or in his brief filed herein.

Much of the argument made here is directed to the various elements of appellant's automatic mecha-

nism. It is sufficient to say that however inventive these elements may be, they are not mentioned in the rejected claims, and hence can have no effect upon our conclusion thereon.

The decision of the Board of Appeals is affirmed. Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HUGHES

No. 2,719. Decided April 29, 1931

1. PATENTABILITY—COMBINATION OF A MACHINE AND THE MATERIAL OPERATED UPON.
"If the material which appellant uses here for printing is new to the art, then such material may be patentable, but he may not take advantage of this in applying for a patent upon a mechanism to apply it. Any feature of the mechanism which is particularly constructed for the use of such a fluid might be patentable in combination or otherwise. Appellant cannot, however, properly claim a combination of device and material worked upon."

2. SAME—MECHANISM FOR PRINTING A TRADE-MARK ON CARBON PAPER AND THE LIKE.
Claims for a mechanism for printing a trade-mark upon carbon paper and the like *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Arthur E. Paige for Hughes.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

Appellant filed his application for an improvement in mechanism for trade-marking transfer webs. Fifteen claims were originally attached to the application, all of which were rejected by the Examiner. The appellant appealed to the Board of Appeals of the United States Patent Office, which affirmed the decision of the Examiner. The appellant has brought here, on appeal, claims 11, 12, 13, 14, and 15, having abandoned the others.

Claim 12 is typical of all the claims, and is as follows:

12. In mechanism for trade marking transfer webs, the combination with a rotary printing couple, one of which has an arcuate cameo alphabetical printing face, reading from left to right; of means arranged to direct such a web between said couple; means arranged to automatically repeatedly coat said printing face with a fugitive liquid film, capable of forming a superficial imprint upon said web substantially impervious to transfer material, and including a distributing roller, arranged to contact with said face, and means arranged to supply said distributing roller with such a film, including a receptacle for the liquid to form said film, and a pick-up roller mounted to rotate in said receptacle and in contact with said distributing roller.

The claims were rejected on the following references: Kennedy, 1,010,635, December 5, 1911; Stamm, 848,064, March 26, 1907; Temple, 1,479,337, January 1, 1924; Guthrie (Brit.), 970, April 18, 1864, Spec. Abridg.

The appellant seeks a patent on a mechanism for printing trade-marks on carbon paper and the like, in such a way as to show the trade-mark on the back of the sheet, while the mark does not interfere in any way with the carbon coating on the front side of the paper. His mechanism consists of using an arcuate soft rubber type plate inserted in a roller, with typed matter thereon reading from left to right. This roller, having a number of such arcuate plates set therein, revolves, and the type faces are thinly coated by means of intervening rollers, from a fluid reservoir, with a film of volatile dye solvent or phenolic tar, and thereafter said arcuate type sections print upon the front of a web of paper which is being drawn between the printing roll and a platen roll, on the front side of the paper. The volatile liquid passes through the paper and thereafter, when the front side of the paper is coated with carbon or other similar coating, the letters impressed by the type appear upon the back of the sheet in lighter surfaces than the surrounding surface upon which no such impress was made, and reading from left to right.

[1] Appellant's claims involve several elements. Taking, for illustration, said claim 12, it will be observed that an attempted combination is made of the machine and the material or dye solvent used therewith. We have held in *In re Smith*, 17 C. C. P. A. (Patents) 644, 36 F.(2d) 302, 391 O. G. 247, that a person may not patent a combination of a device and the material upon which the device works, nor limit other persons from the use of similar material by claiming a device patent. If the material which appellant uses here for printing is new to the art, then such material may be patentable, but he may not take advantage of this in applying for a patent upon a mechanism to apply it. Any feature of the mechanism which is particularly constructed for the use of such a fluid might be patentable in combination or otherwise. Appellant cannot, however, properly claim a combination of device and material worked upon. In fact, this is conceded in appellant's brief, as we understand it.

[2] We agree with the Board of Appeals that the references cited anticipate the claims in issue. Guthrie shows type cut in the reverse way, so that they may be read through the paper upon which the printing is done. Yielding print rollers are shown by Stamm, and reversed type. As said by the Examiner, rubber type is old in the printing trade, and there certainly can be nothing inventive in making an arcuate plate of such type. The system of rollers, fountain, and other mechanical arrangements of appellant's device are those well-known to the art of printing, as shown by the references.

The decision of the Board of Appeals is affirmed. Affirmed.

U. S. Court of Customs and Patent Appeals

MODEL BRASSIERE CO., INC., *v.* BROMLEY-SHEPARD CO., INC.

No. 2,648. Decided April 29, 1931

1. TRADE-MARKS — DESCRIPTIVENESS—"ENSEMBLE" FOR LADIES' UNDERGARMENTS.
The term "Ensemble" as used upon "garter-brassières" and as used upon ladies' combination undergarments *Held* descriptive of the goods and therefore not registrable.

2. SAME—CANCELLATION PROCEEDINGS—SHOWING OF INJURY.
There is a distinction between the proof required to show injury where the petitioner for cancellation of a registration claims to be the owner of a valid trade-mark and the proof required where he merely disputes the right of ownership in anyone. In the former case he must show ownership and use at the time the petition is filed and in the latter case he must show injury but he need not show that on the date of filing his application he was actually using the descriptive term on, or in connection with, his goods.

3. SAME—SAME—SAME.
Where in a petition to cancel the registration of the term "Ensemble" it appears that the petitioner had used that mark and had been sued by the registrant, although that suit had been withdrawn, it was not necessary in order to show injury that he establish that he was actually using the mark at the time that the petition for cancellation was filed.

HATFIELD, *J.*, and LENROOT, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Messrs. Briesen & Schrenk, *Mr. Louis Alexander*, and *Mr. Conway P. Coe* for Model Brassiere Co., Inc.

Mr. Geo. P. Kimmel and *Mr. Samuel Bogorad* for Bromley-Shepard Co., Inc.

BLAND, *J.*:

This is an appeal in a trade-mark cancellation proceeding from the decision of the Commissioner of Patents affirming the decision of the Examiner of Interferences sustaining appellee's application for the cancellation of the registration of appellant's trade-mark "Ensemble" for use on "garter-brassières."

Appellant's trade-mark, No. 197,197, was registered April 14, 1925, on an application filed December 26, 1924.

In its petition for cancellation, appellee alleged that it was engaged in the manufacture and sale of ladies' "undergarments and garments" which "might be designated as garter-brassières"; that in the year 1924, it adopted and began the use of the word "Ensemble," not as a trade-mark, but as a term descriptive of a certain type or style of combination undergarment for ladies, comprising what "might be termed as a brassière, chemise, and step-in"; that it has continuously used said name on, and in advertising, its goods from the year 1924 to the present time; that the term "Ensemble" is descriptive; that immediately after appellant had registered the word "Ensemble" as its trade-mark, it challenged the right of appellee to use that term to describe its combination garment; that, on or about October 6, 1926, appellant filed a suit against appellee in the United States District Court, Southern District, New York, and alleged in its bill of complaint that appellee was guilty of trade-mark infringement by reason of its use of the word "Ensemble"; that, on December 7, 1926, appellee's motion to dismiss the bill of complaint was denied by the court; that on February 18, 1927, the court granted appellee's motion for the filing of a bill of particulars by appellant as to the charge of unfair competition; that counsel for appellant, although frequently requested to do so, never filed a bill of particulars, but, on October 7, 1927, dismissed the bill of complaint without prejudice; and that appellee deemed itself injured by the registration of the word "Ensemble" to appellant.

In its answer, appellant admitted that it had requested appellee to discontinue using the involved trade-mark in connection with merchandise like that covered by appellant's registration; that appellant filed suit against appellee on or about October 6, 1926; that appellee filed a motion to dismiss the suit; that said motion was heard on December 7, 1926, and denied by the court; and that the bill of complaint was withdrawn without prejudice and without cost to either party, in accordance with a stipulation entered into by counsel for the parties and filed in the district court on October 24, 1927. All other allegations contained in appellee's application were denied by appellant. It was alleged in the answer that, at the request of appellant, appellee agreed to discontinue the use of the word "Ensemble" on goods similar to those covered by appellant's registration; and that, when appellee subsequently made some further use of the word "Ensemble" in violation of its agreement, appellee apologized to appellant and claimed that such use was inadvertent and would not be repeated.

Appellant submitted no testimony.

The only testimony submitted by appellee is that of its counsel of record, George P. Kimmel, who testified that he was attorney for appellee, and that the word "Ensemble" was commonly used by merchants and others to describe combination garments prior to, and since, appellant first used "Ensemble" as a trade-mark. Thereupon, the witness identified and introduced in evidence copies of a newspaper, The Evening Star, Washington, D. C., dated, respectively, September 14, 16, 17, 20, 22, 23,, and 26, October 7, 10, 13, 14, 17, 18, and 26, and November 4, 6, 7, 13, and 18, 1924, eight copies of "Vogue" magazine published during various months of the year 1924, and a copy of The Corset and Underwear Review, dated January, 1925, in each of which appeared an advertisement by others showing the use of the word "Ensemble" to describe various ladies' garments. The witness then testified as follows:

Q. 9. What name has petitioner used on any of its garments?
A. Snuggleband-Ensemble.
* * * * * * *
Q. 10. Have you a specimen of petitioner's garment?
A. I have and hand you a specimen of the same the label which was on the same having been removed by me.

Thereupon, the garment identified by the witness was offered in evidence as appellee's Exhibit No. 7.

The witness then testified in detail regarding the suit filed by appellant against appellee in the District Court, Southern District, New York, which, in a general way, substantiated the allegations in regard thereto contained in appellee's petition for cancellation. Certain correspondence between counsel for the parties, relating to the suit in the

district court, together with certain affidavits filed in that case with appellee's motion to dismiss were offered in evidence. The witness then testified as follows:

> Q. 12. Are there any other statements you wish to make in connection with this case and if so, please make them.
> A. I find among my papers a folder published by Bromley-Shepard Company, Inc. which on the fifth page shows the manner of use for advertising of the word "Ensemble" by petitioner. Also a clipping from The Corset and Underwear Review on which the date does not appear, but which shows the same thing as shown in the folder.

The documents referred to in the answer of the witness were introduced in evidence as appellee's Exhibits Nos. 9 and 10. Neither of these exhibits shows the date of its publication or use.

Counsel for appellant objects to all of the testimony of the witness on the ground that it was hearsay, and that the witness had not shown any knowledge of the facts to which he directed his testimony. Objection was also made to each of the exhibits introduced in evidence.

Upon this record, the Examiner of Interferences sustained the petition for cancellation.

Upon appeal, the Commissioner, after referring to the allegations contained in appellee's petition for cancellation, said:

> This is clearly such a statement of facts from which, if true, it may reasonably be inferred that the petitioner will be damaged unless the mark is cancelled.
> The petitioner having established legal standing in the cancellation proceeding it may properly challenge the validity of the registrant's registration.

He held that, as applied to garter-brassières, the word "Ensemble" was descriptive; that it had been used by others in connection with ladies' garments before its adoption and use by appellant; and that appellant was not entitled to the exclusive use of the word as a trade-mark, and, accordingly, affirmed the decision of the Examiner of Interferences.

In his decision the Commissioner cited the case of *Andrews Radio Co.* v. *Timmons Radio Products Corp.*, 345 O. G. 798, 1926 C. D. 39, as authority for the proposition that one who seeks cancellation of a registration of a descriptive mark need not establish that he was using it at the time his application was filed; but that, on the contrary, it is sufficient that he "shall have used said mark in describing the article which he manufactures or owns."

Section 13 of the Trade-Mark Act of 1905, under authority of which appellee filed its petition for cancellation, reads, in part, as follows:

> That whenever any person *shall deem himself injured* by the registration of a trade-mark in the Patent Office he may at any time apply to the Commissioner of Patents to cancel the registration thereof. The Commissioner shall refer such application to the Examiner in charge of interferences, who is empowered to hear and determine this question, and who shall give notice thereof to the registrant. If it appear, after a hearing before the Examiner, that the registrant was not entitled to the use of the mark at the date of his application for registration thereof, or that the mark is not used by the registrant, or has been abandoned, and the Examiner shall so decide, the Commissioner shall cancel the registration. * * * (Italics ours.)

In this court appellant makes two contentions:

First, that the Commissioner erred in holding that the mark "Ensemble" is descriptive of the goods specified in the registration; that the registered mark is prima facie valid and that the record fails to show that it is invalid by reason of being descriptive.

Second, that the petitioner "has failed to establish by proper evidence that *it was using at the time of the filing of the petition* for cancellation, the word Ensemble either descriptively or otherwise for garter brassières, the goods covered by the registration sought to be cancelled or for merchandise of the same descriptive properties." (Italics ours.)

[1] We agree with the decision of the Commissioner that the word "Ensemble," as applied to the merchandise of both parties, is descriptive and is, therefore, not subject to the exclusive ownership and use by anyone, and that the same should not have been registered.

"Ensemble" is defined in Webster's New International Dictionary (1925) as follows: "The whole; all the parts taken together; * * *"

The word "Ensemble" clearly describes and is applicable to ladies' underwear which both parties hereto manufacture and sell. The goods are referred to by the Commissioner as "a combination undergarment for ladies, comprising what might be termed a brassière, chemise, and step-in".

Section 5 of the Trade-Mark Act provides that no mark which consists merely in words or devices which are descriptive of the goods with which they are used, or of the character or quality of such goods shall be registered. The Supreme Court of the United States in the "Ruberoid" case, *Standard Paint Co.* v. *Trinidad Asphalt Mfg. Co.*, 220 U. S. 446, 453, 165 O. G. 971, has declared the settled rule to be that:

> * * * no one can appropriate as a trade-mark a generic name or one descriptive of an article of trade, its qualities, ingredients or characteristics, or any sign, word or symbol, which from the nature of the fact it is used to signify others may employ with equal truth.

The statute provides a procedure for cancellation of an offending mark of this character and the sole question remaining for decision is to determine whether or not appellant is right in its second contention that the petitioner has not proven sufficient facts to show that it is a proper party in interest, and that it will be injured by the registration of the mark.

[2] It is clear to us that there is a distinction between the proof required to show the statutory authority to petition for cancellation and the injury or damage which would be resultant from an invalid registration in a case where the petitioner claimed to be the owner of a valid trade-mark, and a case where he disputed the right of ownership in anyone. In the former it is clear that he should show such facts as would show his ownership and use at the time the petition was filed. In that case it would be important for him to allege and prove that he was making a trade-mark use of the mark at the time of filing the petition, since, if he was not using it at that time, it would be possible that he had abandoned its use altogether.

In respect to this issue, we think it is sufficient, in this kind of case, for the petitioner to allege and show facts sufficient to establish the injury and his statutory right to file the petition. To do this, in our judgment, he is not required to show that he, on the date of filing the petition, was actually using the descriptive term on or in connection with his goods, as he would be required to do if he claimed ownership in a valid mark.

Appellant's fifth paragraph of his answer admits and concedes appellee's use of the term "Ensemble", and reads as follows:

> 5. Further answering the petition for cancellation registrant alleges as an affirmative defense that petitioner for cancellation upon registrant's request agreed to discontinue using the word ENSEMBLE in violation of registrant's trade mark rights evidenced by the certificate of registration herein sought to be cancelled, and that petitioner, when it subsequently made some further use of the word ENSEMBLE in violation of registrant's said rights apologized to registrant claiming that said use was inadvertent and would not be repeated.

[3] Furthermore, it states that appellee continued to use the word "Ensemble" although it apologized to appellant for doing so and promised that it would not be repeated. Appellant sued appellee for using the word in connection with its goods, and the record shows that appellant was insistent that appellee desist from the use of the same. It now bases its grounds of defense upon the fact that appellee was not using the word at the time it filed the petition. Although no definite dates were given, the testimony is positive that the petitioner used the term "Ensemble" on its goods.

We think the record sufficiently shows that appellee was a proper party in interest to file a petition, and that its allegation and proof show the injury contemplated by the statute.

According to the contention of appellant, in order for appellee to be in a position to cancel the illegally registered mark (which, of course, appellant contends is valid), it was necessary for the appellee to show that it had braved all the dangers of infringement suits and was using the mark at the time it filed the petition.

This contention is entirely plausible, if applied to a valid mark, the ownership and use of which is in question, but, since we conclude, as the Commissioner concluded, that the mark is descriptive within the meaning of the statute, appellant's contention that it must be shown that appellee used the descriptive mark on the day it filed its petition is wholly untenable. Words merely descriptive of goods to be sold, not being subject to exclusive appropriation and ownership, do not have to be used in a trade-mark manner in connection with goods in interstate commerce in order to entitle anyone to their use, and one who desires to use the same obviously does not have to assert ownership or facts from which ownership may be determined.

As long as the word "Ensemble" is a registered trade-mark, it is a threat, not only against the party who manufactures and sells merchandise like that of the parties to this suit, but to all who buy of them for the purpose of resale. Its continuance as a registered trade-mark, which mark appellant urges is *prima facie* legal, thus has the tendency to interfere with and hamper the commerce of the country and the clearly defined rights of tradesmen. See *Electro Steel Co.* v. *Lindenberg Steel Co.*, 43 App. D. C. 270, 215 O. G. 977, 5 T. M. Rep. 295.

That appellee was not required to show use on the date the petition was filed, and that the record shows injury to appellee, and its right to petition is supported by *Andrews Radio Co* v. *Timmons Radio Products Corp.*, supra; *Elishewitz* v. *Leyser Green Co.*, 47 App. D. C. 193, 247 O. G. 479, 8 T. M. Rep. 34; *Hydraulic Press Brick Co.* v. *Hocking Valley Products Co.*, 120 Ms. Dec. 196, 7 T. M. Rep. 155; *Electro Steel Co.* v. *Lindenberg Steel Co.*, supra. While we are of the opinion that the petitioner was not required to show that he used the term on the date the petition was filed, he is, of course, required to show a statement of facts from which it may be found that he was being injured at that time. He would have no right to complain about the registration of the offending mark if, at the time he filed his petition, he was not being injured by it. *Elishewitz* v. *Leyser Green Co.*, supra.

In the Andrews Radio Co. case, supra, it was held that it was sufficient for the appellant to show that he had used the mark in describing the article.

In the Elishewitz case, supra, the Court of Appeals of the District of Columbia, in an opinion by Mr. Justice Robb, sustained the action of the Commissioner in cancelling the registration of the mark and said:

> * * * The petitioner for cancellation shows injury by the registration, though injury will be presumed to follow the improper registration of any descriptive word.

In *Hydraulic Press Brick Co.* v. *Hocking Valley Products Co.*, supra, the Commissioner, in cancelling the descriptive trade-mark "Rug" for bricks, held:

> * * * Use by the petitioner in a descriptive sense is sufficient. It is enough that the petitioner may be injured by the claim of exclusive right and in fact the injury is sufficiently established in this instance, the petitioner having been sued in the Supreme Court of the District of Columbia for infringement.

The case most analogous to the case at bar is *Electro Steel Co.* v. *Lindenberg Steel Co.*, supra, which affirmed the action of the Commissioner in cancelling the descriptive trade-mark "Electro" as applied to steel. The court, in a very well considered opinion by Mr. Justice Shepard, held the word "Electro" to be descriptive and said:

> * * * Should registrants be permitted to retain their registration they would be in a position to prevent others from applying said mark to steel manufactured in the electric furnace and would be in a position to institute expensive and troublesome litigation basing their suits upon said registration and *attacking both the petitioner's purchasing trade as well as the purchasing public in general*, and they would be in a position to threaten and intimidate the purchasing public. In this way the business of petitioner would be seriously and permanently damaged; its sales of "Electro" steel would necessarily fall off, and the purchasing public would be at a loss how to identify or designate the steel manufactured in the electric furnace, without circumlocution, if they wished to purchase such steel from other than registrants and the trade and business of petitioner would be seriously injured were the registrants to be allowed to retain their registration of the word "Electro". (Italics ours.)

The court further said:

> * * * It is contended that the petitioner fails to show that it has ever affixed on its goods the word "Electro" as a trade-mark or as a description of the goods, and has had consequently no such use of the word as would give it standing in this proceeding.
> It is quite true that to have a right to cancel or oppose the registration of a trade-mark is dependent upon a showing of interest. (*McIlhenny Sons Co.* v. *New Iberia Tabasco Pepper Co.*, 30 App. D. C. 337, 339; 133 O. G. 995; 1908 C. D. 325.)
> It is not essential in all cases however, that there should have been a strictly trade-mark use of the words by complainant. Injury to its business might be otherwise shown. (*Natural Food Co.* v. *Williams*, 30 App. D. C. 348, 350; 133 O. G. 232; 1908 C. D. 320.)

Appellant in support of its contention that the petitioner should show that it used the term at the time of filing the petition relies upon *McIlhenny Sons Co.* v. *New Iberia Tabasco Pepper Co.*, 30 App. D. C. 337. 133 O. G. 995, which it styles "the leading case." We have no quarrel with the holding in the McIlhenny case. In that case we find the following, which is quoted in appellant's brief:

> The right of the petitioner to intervene was dependent upon a showing of interest. The statute does not contemplate that any one may petition the Commissioner to cancel a trade-mark regularly registered, but it does provide that any one who "shall deem himself injured" may do so. The petition, therefore, must contain a statement of fact on this jurisdictional question sufficiently full to show that the petitioner has been injured by the registry of the mark he seeks to have cancelled, and this fact must not be left to conjecture, but must affirmatively appear. * * *
>
> The petition of the appellee does not contain an averment that it had used the word "Tabasco" as a trade-mark for pepper-sauce. The averment that it had used the word as a trade-mark is not sufficient for the obvious reason that unless the word had been used in the same business as that in which it was used by appellant, no injury contemplated by the statute would have resulted, and no right to intervene would have followed.

In the McIlhenny case, supra, appellant was complaining about being damaged in the use of its trade-mark "Tobasco". It claimed to have used the word "Tobasco" as a trade-mark. Therefore, since the petitioner in that case claimed a trade-mark right, it was important to show facts to sustain such a right.

The Commissioner's decision in this case has fully distinguished between the proof required in a case where the petitioner claims a trade-mark right, and the proof required in a case where the trade-mark is descriptive, and the petitioner seeks only to preserve its right to use same in a descriptive way, and his decision is sound.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

HATFIELD, *J.*: dissenting:

The majority opinion holds that, in a case of this character, although it is necessary that injury be established as of the date of the filing of the petition for cancellation, a petitioner need not establish that, at that time, he was using the registered mark, nor one similar thereto, in a trade-mark sense or otherwise, nor that he was prevented from so doing by the registration of which he complains. If that is so, then a petitioner is not required to show legal injury. On the contrary, it is sufficient if he allege and prove that he thinks, or possibly imagines, that he has been, or may be, injured by the registration of an alleged trade-mark.

The doctrine upon which the court bases its decision is not only in defiance of the plain mandates of the statute—section 16 of the Trade-Mark Act of February 20, 1905, 15 U. S. C. A. section 87, and this is a purely statutory action—but it is contrary to established procedure in all legal and equitable actions. It is never a matter of mere formality, which a court may waive in its discretion, to require a party to a suit, either *in law* or *in equity*, to establish facts essential to his right to relief. Of course, in a case where it is obvious, as in the case at bar, that a registered trade-mark is descriptive, the decision can do no harm. However, in close cases, and in those where the marks are obviously not descriptive, an owner of a registered trade-mark may be harassed by petitions for the cancellation of trade-mark registrations.

In the instant case the petitioner failed to show any legal or other interest in the registered trade-mark, but was content to submit the case upon the testimony of its attorney of record, who apparently had but little, if any, knowledge of the issues raised by the petition for cancellation.

I have read the record with care, and, although it is alleged in appellee's petition for cancellation that it had continuously used the word "Ensemble" to describe its goods since the year 1924 to the date of filing its application, in my opinion, there is absolutely no evidence, nor any admission by appellant, to establish that appellee was using the registered mark in a descriptive sense or otherwise at the time it filed its application.

It is argued by counsel for appellee, and agreed to by the majority of the court, that appellant is estopped to deny that appellee was using the registered mark at the time it filed its application, because of the suit commenced by appellant in the United States District Court, on or about October 6, 1926, and withdrawn by appellant on October 7, 1927, about three and one-half months prior to the filing of appellee's application for cancellation.

It is sufficient to say in this connection that appellee's application for cancellation was filed more than two years after appellant filed its bill of complaint in the district court, and that, although it may be presumed that appellee was using the mark at the time the suit was instituted, there is nothing in the record to show that it used the registered mark at any time thereafter.

Only four of the cases cited in the majority opinion appear to have any bearing on the issues in this case.

In the Andrews Radio Co., case, the Commissioner of Patents held that it was sufficient for a petitioner for cancellation of a registered descriptive mark to establish that he had used the mark, the time of such use apparently being immaterial.

In the case of *Elishcwitz* v. *Leyser Green Company* 47 App. D. C. 193, 247 O. G. 479, 8 T. M. Rep. 34, the court affirmed the decision of the Commissioner of Patents holding that the registered trade-mark "Leghornette" for use on hats was descriptive. In his decision, the Commissioner, among other things, said:

> The petitioner for cancellation shows injury by the registration, though injury will be presumed to follow the improper registration of any descriptive word.

No authorities were cited in support of the Commissioner's holding, nor was the matter discussed in his opinion. The court of appeals gave no expression of approval of the quoted language, but concurred in the proposition that the registered mark was descriptive. The question now before us was apparently not considered by the court of appeals. In any event, it was not discussed in the court's decision.

In the case of *Electro Steel Co.* v. *Lindenberg Steel Co.*, 43 App. D. C. 270, 215 O. G. 977, 5 T. M. Rep. 295, referred to in the majority opinion as the "case most analogous to the case at bar," the court of appeals held that it was not necessary to establish on the trial in a trade-mark cancellation proceeding, involving a descriptive mark, that the petitioner had "*ever affixed on its goods* the word 'Electro' as a trade-mark or as a description of the goods," and that it was "not essential in all cases" that "there should have been a strictly trade-mark use of the words by complainant," but that "Injury to its business might be otherwise shown." (Italics mine.) The court cited the case of *Natural Food Co.* v. *Williams*, 30 App. D. C. 348, 133 O. G. 232, in support of its holding.

The court was obviously right. In such cases it is necessary only that the petitioner show that he was using the registered mark in a descriptive sense in *connection with* his goods. It is not necessary that he show a strictly trade-mark use or that the mark was *affixed to his goods*.

In the case of *McIlhenney's Son* v. *New Iberia Extract of Tobasco Pepper Company, Limited*, 30 App. D. C. 337, 133 O. G. 995, the Court of Appeals of the District of Columbia held that the right of a party to petition for the cancellation of a registered trade-mark was dependent upon a showing of interest, and that he must allege in his petition, and establish by competent evidence on the trial, sufficient facts "on this jurisdictional question" to show that he has "been injured by registry of the mark he seeks to have cancelled." It is true that the court there said: "The petition of the appellee does not contain an averment *that it had used* the word 'Tobasco' as a trade-mark for pepper sauce." (Italics ours.)

In the case at bar, the Commissioner construed the decision in the McIlhenney's Son case to mean that, if it is alleged in a petition for cancellation and established on the trial that the petitioner had used the registered mark at any time, the statutory requirements have been complied with, and he is not required to allege and establish use of the registered mark at the time of the filing of his petition.

As I understand the decision in that case, the court held that, unless a petitioner for cancellation of a registered trade-mark alleged in his petition and established on the trial that he had used the registered mark on goods of the same descriptive properties, and had an interest in the mark not common to the general public, the tribunals of the Patent Office had no authority to cancel the registration. If the decision in that case was sound, and I have no doubt that it was, a petitioner for cancellation must, in order to show an interest in the registered mark not common to the general public, allege in his petition and establish by competent evidence on the trial, that he was using the registered mark, or one confusingly similar thereto, on, or, under some circumstances, in connection with, goods of the same descriptive properties as those covered by the registration, at the time of the filing of his petition. In no other way could he show an interest in the mark not common to the general public or establish that he was "injured" within the statutory meaning of that term.

It is true that this court, in the case of *Skookum Packers Ass'n.* v. *Pacific Northwest Canning Company*, 18 C. C. P. A. (Patents) ——, 45 F.(2d) 912, 403 O. G. 515, held, in accordance with the decisions of this court in cases therein cited, that, in an *opposition proceeding*, the Patent Office tribunals had authority to dispose of any question relating to the proposed registration that might properly be considered in an *ex parte* case.

That decision was based upon the mandates of section 7 of the Trade-Mark Act of February 20, 1905, 15 U. S. C. A. sec. 87, which provides, in part, that the Commissioner of Patents " * * * shall direct the Examiner in charge of interferences to determine the *question of the right of registration of such trade-mark* and of the sufficiency of objections to registration * * *." (Italics ours.)

Section 7, however, has no application to cases involving the cancellation of registered trade-marks.

Section 13 of that act reads as follows:

> Sec. 13. That whenever any person shall deem himself injured by the registration of a trade-mark in the Patent Office he may at any time apply to the Commissioner of Patents to cancel the registration thereof. The Commissioner shall refer such application to the Examiner in charge of interferences, who is empowered to hear and determine this question and who shall give notice thereof to the registrant. If it appear after a hearing before the Examiner that the registrant was not entitled to the use of the mark at the date of his application for registration thereof, or that the mark is not used by the registrant, or has been abandoned, and the Examiner shall so decide, the Commissioner shall cancel the registration. Appeal may be taken to the Commissioner in person from the decision of the Examiner of Interferences.

It will be observed that section 13 provides that, whenever a person deems himself injured he may at any time apply to the Commissioner to cancel a registered trade-mark; and that the Commissioner shall refer the application to the Examiner of Interferences "*who is empowered to head and determine this question.*" (Italics ours.) Obviously, the first question to be decided is the question of injury to the petitioner by virtue of the registration of a trade-mark.

Furthermore, section 16 of that act provides "that the registration of a trade-mark under the provisions of this act shall be prima facie evidence of ownership." Accordingly, the registration of a trade-mark descriptive or otherwise, is *prima facie* evidence of ownership, and, in a proceeding to cancel the registered mark, the statutory authority of the Patent Office tribunals is, in my opinion, limited to the disposition of issues properly raised *inter partes*.

In the case at bar, appellee properly alleged in its petition that it was using the registered mark at the time it filed its application. This allegation was denied in appellant's answer and, as no evidence was submitted to substantiate the truth of that allegation, there was nothing under the law for the Patent Office tribunals to do but to refuse to cancel the registered mark.

For the reasons stated, I am of opinion that the decision of the Commissioner of Patents should be reversed.

LENROOT, *J.*: concurs in the above dissent.

U. S. Court of Customs and Patent Appeals

IN RE PERRIGO

No. 2,723. Decided April 29, 1931

1. PATENTABILITY—RESOLUTION OF DOUBT.
   "The rule of doubt may only be applied in favor of an applicant where the doubt is a reasonable one—that is one founded in reason and engendered by testing the alleged invention by known scientific laws and principles."
2. SAME—PATENTS NOT GRANTED ON MERE POSSIBILITY OF UTILITY.
   "Neither the Patent Office tribunals nor the courts may properly grant patents upon a mere possibility that a device might do the things claimed for it, and be useful."
3. SAME—OPERATIVENESS—METHOD OF PRODUCING ELECTROMOTIVE FORCE AND APPARATUS THEREFOR.
   Claims for a method of producing electromotive force and for an apparatus for doing so *Held* unpatentable as based upon an inoperative disclosure.

APPEAL from the Patent Office. Affirmed.

No appearance for Perrigo.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

The application in this case relates to "Method and apparatus for accumulating and transforming ether electric energy," and embraces 36 claims of which Numbers 1, 15, 21 and 32 seem fairly representative:

1. The production and generation of an electromotive force from the accumulation of the ether waves of an unknown potential, from the general field of ether wave electric medium.

15. The method and apparatus herein described for collecting and accumulating from the general ether field of electric medium of unknown polarity, of ether waves of electromotive force, consisting in conducting the lines of force of the ether electric waves through aerials and within groups of broken circuits, and breaking up the lines of force, then reversing the polarity of these potentials through the medium of polarized resistances.

21. A collector and accumulator of the ether electric waves, consisting of wave inductive aerial plates, and terminal contacts in opposite wave transmitting positions.

32. An ether wave transformer of electromotive force, comprising an internal body of magnetic circuits, and an external body of increased magnetic intensity, to the internal body, and having an air gap between, insulated means connecting the internal and external bodies of magnetic circuits, and conductors connecting the poles of the internal and external magnetic circuits in progressive degrees of electric induction, and polarizing and depolarizing circuits connecting the conductors from the poles of the magnetic circuits in series, and series of polarizing and depolarizing circuits connecting said series of conductors in reverse order, and polarized resistance coils in the air gap insulated from the magnetic circuits and connecting electrically the series of reversed polarizing and depolarizing circuit from the magnetic circuits.

There are no references, the claim having been rejected by the Board of Appeals of the United States Patent Office, who affirmed the decision of the Examiner, on the ground that the disclosed device is lacking in utility as a result of inoperativeness.

Appellant's structure is a very elaborate one, there being ten sheets of drawings. It would serve no good purpose to attempt a detailed description of it. There is a plate like member carrying a quite complicated system of wiring, which is referred to as a "collector," and a structure, called a "transformer," which includes superimposed layers of conductors. There is also a rheostat and load comprising a number of electric lamps.

The claims, as quoted, sufficiently indicate the purpose of the device.

Appellant has made several assignments of error, as, for example, that the Board erred in upholding the rejection by the Examiner on the ground (*a*) that the claimed invention "does not conform to any theory which is consistent with known natural laws relating to radiated energy, electro-statics, electrodynamics or electro-magnetic phenomena," (*b*) that it was implied that to support the application the discovery and development of "an entirely new world of unknown natural phenomena" would be an indispensable prerequisite, and (*c*) that it was implied that the same kind of development and public manifestations as characterized other fields of discovery (such as radio) was deemed to be an indispensable prerequisite.

These assignments of error are not well taken. Appellant's specification is long and complicated, and such explanation of operation as is given is expressed in language which, to us, as it appears to have been to the tribunals of the Patent Office, is not comprehensible, although the physical structure itself is capable of being understood. The specification does not conform to any scientific or engineering principles of which we have been able to obtain any knowledge. Should we reverse the experts and grant the patent sought it would be a "leap in the dark", so far as this court is concerned, and we would be entirely unable to say what the patent is really for, or what measure of protection appellant is receiving. We have no way of ascertaining whether the device possesses utility or whether it will do the things claimed for it. There is nothing shown us from the realm of science by which to measure it.

It is fundamental in patent law that an alleged invention, to be patentable, must be not only new but useful, and that it must appear capable of doing the things claimed in order to be a device of practical utility. *Besser* v. *Merrilat Culvert Core Co.*, 243 Fed. 611; *Coupe* v. *Royer*, 155 U. S. 565, 574, 70 O. G. 779.

[1] The rule of doubt may only be applied in favor of an applicant where the doubt is a reasonable one—that is one founded in reason and engendered by testing the alleged invention by known scientific laws and principles. *Ex parte DeBausset*, 1888 C. D. 66.

[2] Neither the Patent Office tribunals nor the courts may properly grant patents upon a mere possibility that a device might do the things claimed for it, and be useful. There must be definiteness. Neither the constitution nor the statutes contemplate the granting of patents upon theories, nor giving a monopoly upon intellectual speculations embodied in devices incapable of scientific analysis.

The question of patentable invention must ordinarily be determined by applied science, as understood by those skilled in the art to which the invention relates, and if one presents a device which cannot be tested by any known scientific principles he must, at least, demonstrate its workability and utility and make clear the principles upon which it operates.

[3] No such demonstration here appears from appellant's application, or otherwise. Three affidavits are presented of parties who claim to have seen appellant's device in operation and who vouch for its working. These affidavits, however, are brief, general in character, and give no description of the device which affiants saw. Nor do they give any explanation which contains anything tending to clarify the terminology of the specification, or to render the device measurable by engineering principles or known natural laws. One of the affiants states that he is "a member in good standing in the American Society of Electrical Engineers," but he does not attempt any scientific explanation of the device or its workings.

Appellant's fourth assignment of error is:

The Board of Appeals erred in ignoring the applicant's offers to demonstrate the operativeness of his invention and apparatus, and/or upholding the decision of the Examiner on the ground of applicant's failure to demonstrate his invention and apparatus.

It is noted that this assignment attributes to the *Board of Appeals* an "ignoring" of appellant's offer to demonstrate.

If it be meant by this that an offer was made to the Board of Appeals to make a demonstration of the device, it is sufficient to say that there is no disclosure in the record which even suggests that any such offer was ever made to that tribunal.

We do find that while the matter was pending before the *Examiner*, and after his first rejection, an attorney for appellant, on April 25, 1927, addressed a letter to the Commissioner of Patents in which it was said:

* * * it is prayed that the Examiner point out more specifically the defects required to be corrected [in the specifications], and that an opportunity be afforded the applicant to demonstrate his invention, should such action be required by the Office.

There is, in another letter of the attorney to the Commissioner, dated October 31, 1927, a discussion of the affidavits above alluded to and a suggestion that a *prima facie* showing of facts had been made justifying a "more exhaustive *consideration*, of the merits of his alleged invention, and particularly in view of his offer to further demonstrate the invention to the Office, if an opportunity be afforded him for that purpose," and the letter concludes with a prayer that:

* * * final action be not rendered without affording applicant a full and fair opportunity to demonstrate his invention to the Office to the fullest extent within his power. (Italics ours.)

In the appeal to the Board there is no reference to the matter by assignment of error or otherwise, and the Board says, "no such demonstration has been offered."

In the absence of any stronger showing than the record contains of a bona fide, earnest effort on appellant's part to secure a demonstration to or before the Patent Office tribunals, this court would not be justified in finding that the fourth assignment of error is good.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

SACHS *v.* WADSWORTH

No. 2,701. Decided April 27, 1931

1. INTERFERENCE—PRIORITY—REDUCTION TO PRACTICE—SIMPLE DEVICE.
   There are some devices so simple that a mere construction of them constitutes a reduction to practice, no actual tests of the practicability of the device being necessary.
2. SAME—SAME—SAME.
   The making of a switch box embodying the invention in issue *Held* to constitute a reduction to practice of that invention since it is so simple that it is obvious that it will work in the manner intended.
3. SAME—SAME—SUPPRESSION AND CONCEALMENT.
   Evidence reviewed and *Held* to establish that the appellee did not suppress or conceal his invention, it not being shown by the record that at the time he manufactured the device and placed it upon the market he knew anything about appellant's invention.
4. SAME—SAME—SAME.
   Estoppels not favored. "Since estoppels preclude a party from showing the truth, they are not favored and should not be applied in any case where the facts do not clearly justify their application."

APPEAL from the Patent Office. Affirmed.

Mr. S. Jay Teller (*Mr. William A. Smith, jr.*, of counsel) for Sachs.

Mr. Walter F. Murray and *Mr. Frank L. Zugelter* for Wadsworth.

LENROOT, *J.*:

This is an interference proceeding, in which appellant appeals from a decision of the Board of Appeals of the United States Patent Office awarding priority of invention to appellee, reversing the decision of the Examiner of Interferences, in which priority of invention was awarded to appellant.

The parent application of appellant, of which the application before us is a division, was filed on August 2, 1922, and the application of appellee was filed on November 17, 1923. A patent was issued to appellee upon his application on January 11, 1927. Appellant thereupon filed a divisional application in which he copied from the patent to appellee the counts here in issue and requested an interference, which was declared. Since appellant's application was pending at the time of the issuance of said patent to appellee, and disclosed the invention in issue, appellant, having been the first to file, is the senior party and the burden was upon appellee to establish priority of invention by a preponderance of evidence.

The counts in issue are three in number. Count 1 is illustrative and reads as follows:

1. In a switch box having a switch and fuses therein, a lid for the box having a fuse opening therein, a hopper mounted on the lid about the fuse opening and adapted together with the lid, to house the fuses and to isolate them from the interior of the box, and a shutter controlling access to the fuse casing when the lid is closed.

The issue relates to electric service switch boxes, wherein fuses are also installed in the box. It is stated by the Board of Appeals as follows:

* * * The essential features of the counts are a hopper-like shielding member attached to the inside of the lid of the box surrounding the fuses and positioned around an opening in the lid through which the fuses are accessible from the outside of the box and a supplemental cover or shutter over the opening in the lid and mouth of

the hopper. The hopper prevents access to any portion of the inside of the box except the exposed fuses. This avoids danger of contact or possibility of tampering with other parts of the wiring or switch elements as long as the lid is closed.

Both parties took testimony.

In his preliminary statement, appellant alleged conception on or about July 1, 1921.

Appellee testified that just prior to June 23, 1919, he had a switch box, embodying the invention, made up by his son. This box, which was provided to take cartridge fuses, was offered in evidence as Exhibit 18, and has been examined by us. A short time thereafter, appellee testified, he made a drawing, which was offered in evidence, from which another switch box, adapted to take plug fuses, was made prior to October 10, 1919. This box was not produced in evidence, and the testimony was that it had been lost.

Appellee's testimony as to the construction of Exhibit 18 was corroborated by his son, and appellee's brother testified that he saw said exhibit some time between the 6th and 15th of August, 1919. He said:

> • • • He [referring to appellee] showed me a sketch, which he was arranging to manufacture, of his 125 screw plug fuse switches, and he showed me a model of a 250 volt N. E. C. fuse, which he had already made, to overcome the criticism that was made on the switches, where by opening the lid of the box, the fuse pan barrier was all attached to the lid and there would be no trouble of removing any parts.

The Examiner of Interferences awarded appellee a date of conception of August 15, 1919, and found that said Exhibit 18 was constructed and in existence at least as early as said date; that the device was of such a character as to require tests of the same to constitute a reduction to practice, and that there was no proof that such tests had been made; that appellee was not diligent in reducing his invention to practice from the time that appellant entered the field, or thereafter until he, appellee, reduced the invention to practice in 1923. For these reasons he awarded priority of invention to appellant.

The Board of Appeals concurred in the finding of the Examiner as to date of conception by appellee, but held that a mere closing of the cover would demonstrate the practicability of the device, and that it must be assumed that it was tested by closing the cover and actuating the shutter and switch, and observing that the hopper properly surrounded the fuse pockets. It therefore found that appellee reduced the invention to practice prior to August 15, 1919, and further found that there was no evidence of concealment or abandonment by appellee, or stimulation to activity upon his part by the work of appellant.

The first question before us is, does the evidence show a reduction to practice by appellee of his invention prior to August 15, 1919, as found by the Board of Appeals? If this question be answered in the affirmative, the next question is whether there was any concealment or suppression by him of the invention which would forfeit his right to an award of priority.

[1, 2] The device in issue, so far as the invention is concerned, is exceedingly simple. Exhibit 18, which is conceded to embody the invention, is of full size and adapted for practical use. A mere inspection of it, and opening and closing of the lid, disclose that it is operative. We agree with the Board of Appeals that it must be assumed that the lid was opened and closed by both appellee and his son. The testimony shows that appellee exhibited the device to his brother, and we think it is fairly to be inferred that in doing so he mechanically manipulated the lid and shutter. The only test necessary to show that it was operative was to ascertain that it was made in accordance with appellee's conception. If it was, it was bound to be operative. Exhibit 18 before us shows that it is operative now, and we assume that it was operative then.

There are some devices so simple that a mere construction of them is all that is necessary to constitute a reduction to practice. In the case of *Lindemeyer* v. *Hoffman*, 18 App. D. C. 1, 95 O. G. 838, it was held that no actual test of the practicability of a device is needed where the device is itself complete and capable of practical use.

In the case of *Rolfe* v. *Hoffman*, 26 App. D. C. 336, 121 O. G. 1350, it was held that there is a class of simple devices as to which it is not essential that actual tests of the invention be made in order to constitute a reduction to practice. This case was not dissimilar, on the facts, to the case at bar. It involved an invention in electric circuit protectors, and the court held that the construction of three of the devices was a reduction to practice, and that actual tests were not necessary.

We agree with the Board of Appeals that appellee reduced his invention to practice prior to August 15, 1919, which is prior to appellant's entry into the field, and priority of invention must be awarded to appellee unless he concealed and suppressed his invention, thus forfeiting his right to such award.

It appears from the testimony that in November, 1922, appellee's company issued a catalogue in which devices embodying the invention in issue were shown, although the evidence also shows that appellee's company was not in a position at that time to manufacture and sell such devices. It further appears that orders to the printer for the printing of such catalogue were given on August 15, 1922; that in 1923, appellee's assignee began the manufacture of the device, and has sold more than 250,000 of the same.

The testimony shows that appellee's company was in financial straits much of the time between 1919 and 1923, and on November 15, 1919, its plant was almost wholly destroyed by fire, practically suspending operations for a period of one year.

[3] Of course, there could be no charge of suppression or concealment of appellee's invention after the publication of the catalogue in November, 1922, orders for which were given in August, 1922. Therefore, whether there was concealment and suppression of the invention must be determined from

appellee's conduct between August, 1919, and the middle of August, 1922, a period of about three years. One year of such period is fully accounted for by the fire hereinbefore referred to, and as to the other two years of such period, we do not think the evidenc warrants a finding of concealment and suppression forfeiting appellee's right to an award of priority of invention.

Appellee was not spurred to activity by any disclosure of appellant because, so far as the record shows, he knew nothing about appellant's invention at the time he (appellee) manufactured his device and placed it upon the market.

[4] Since estoppels preclude a party from showing the truth, they are not favored and should not be applied in any case where the facts do not clearly justify their application. *Miller* v. *Hayman*, 18 C. C. P. A. (Patents)—, 46 F.(2d) 188, 405 O. G. 549.

We find no error in the decision of the Board of Appeals and it is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BACH

No. 2,707. Decided April 27, 1931

PATENTABILITY—METHOD OF MAKING A CONFECTION.

Claims for a method of making a confection *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Watts T. Estabrook and *Messrs. Hazard & Miller* for Bach.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting the claims of appellant's application, four in number, for failure to define invention over the prior art.

Upon the oral argument, claims 6 and 10 were withdrawn, leaving claims 11 and 12 before us for consideration. Claim 11 is illustrative and reads as follows:

> 11. The method of making a confection which comprises employing an edible container formed of two complementary parts, each of which has outwardly inclined walls, placing a slab of edible material having vertical sides between the parts, which is of sufficient thickness to keep the parts temporarily separated, and pressing the parts toward each other until they engage, squeezing the edible material and causing it to enter the space between the outwardly inclined walls of said parts.

The references are: Gategast, 1,036,092, August 20, 1912; Cressey, 1,382,601, June 21, 1921; Broun et al., 1,446,782, February 27, 1923; Bellocchio, 1,552,671, September 8, 1925; Papageorge, 1,524,367, January 27, 1925.

The alleged invention relates to an ice cream tartlet. It is sufficiently described in the claims above quoted.

The reference Gategast discloses a method of making patty shells. Two shells are used together to make an enclosure for edible filling.

The patent to Cressey relates to a confection having a filling enclosed in a container, having two half sections made of edible material, as dough, baked crisp, and united at their adjoining edges by a seal.

The reference Broun relates to a packaged food product comprising a pie or like article, a container portion surrounding the sides of the pie, another container portion contacting with the top edges of the pie, and means for holding the container portions together and in reactive relation to the pie. The container parts are not edible.

The patent to Papageorge relates to a confection comprising an edible container formed of separable sections adapted to be filled with an edible substance, such as ice cream, and associated with each other so that the viscosity of the substances serves to secure the portions in container formation.

The questions here involved are questions upon which the tribunals of the Patent Office concurred. The rule is that in such cases we will not reverse a decision of the Patent Office unless it is manifestly wrong. *Pengilly* v. *Copeland*, 17 C. C. P. A. (Patents) 1143, 40 F.(2d) 995; 399 O. G. 3; *Beidler* v. *Caps*, 17 C. C. P. A. (Patents) 703, 36 F.(2d) 122, 392 O. G. 241.

After carefully examining the references and considering the argument of counsel, we can not, under the rule above cited, hold that the Board of Appeals erred in its decision, and it is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,038,029, H. L. Turney, Logging engine, D. C. Oreg. (Portland), Doc. L–11185, *H. L. Turney* v. *Clyde Equipment Co.* Decree for plaintiff (notice Aug. 14, 1931).

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C. Oreg. (Portland), Doc. E 9203, *Claude Neon Electrical Products, Inc., et al.* v. *Higbee-Dunlap Neon, Inc., et al.* Decree for plaintiff Aug. 18, 1931. Doc. E 9207, *Claude Neon Electrical Products, Inc., et al.* v. *Eugene Neon Sign Co. et al.* Decree for plaintiff Aug. 3, 1931.

1,209,544. (See 1,263,843.)

1,263,843, G. C. Bohn, Refrigerator door; 1,329,453, same, Refrigerator closure; 1,209,544, T. P. Bolger, Refrigerator construction, C. C. A., 8th Cir. (St. Louis), Doc. 9106, *Seeger Refrigerator Co.* v. *Bohn Refrigerator Co. et al.* Decree affirmed Aug. 28, 1931. Doc. 9107, *Bohn Refrigerator Co.* v. *Seeger Refrigerator Co.* Decree affirmed Aug. 28, 1931.

1,268,988, Pridham and Jensen, Amplifying receiver; 1,448,279, 1,579,392, same, Electro-dynamic receiver, D. C., S. D. Calif. (Los Angeles), Doc. E R–78–M, *The Magnavox Co.* v. *Grigsby-Grunow Co.* Consent decree holding claims 8 and 9 of 1,266,988, claims 4, 8, 9, and 10 of 1,448,279, and claim 4 of 1,579,392 valid and infringed Aug. 31, 1931.

1,329,453. (See 1,263,843.)

1,385,832, L. Ingersoll, Manifold form sheet, filed Sept. 2, 1931, D. C., S. D. N. Y., Doc. E 61/370, *Gilman Fanfold Corp., Ltd.*, v. *The Wallace Press, Inc.*

1,405,936, 1,662,437, K. E. Peller, Apparatus for feeding molten glass; 1,662,436, same, Apparatus for and method of feeding molten glass; 1,677,436, E. T. Ferngren, Glass feeding and delivering mechanism and process, appeal filed Aug. 15, 1931, C. C. A. 8th Cir. (St Louis), Doc. 9286, *Hartford-Empire Co.* v. *Obear-Nester Glass Co. et al.*

1,448,279. (See 1,266,988.)

1,552,326, P. J. Lunati, Lifting device for motor vehicles, filed Aug. 24, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2987–S, *Rotary Lift Co. et al.* v. *F. E. Pfister et al.* (*Acme Machine Works*).

1,555,441, Des. 68,552, H. A. Sjodahl, Shingle, filed Sept. 3, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E U–102–J, *The Patent & Licensing Corp.* v. *Star Roof Corp. et al.*

1,579,392. (See 1,266,988.)

1,653,542, J. N. Borroughs, Process for laundering towels, filed Aug. 20, 1931, D. C., N. D. Calif. (San Francisco), Doc. E 2985–K, *J. N. Borroughs* v. *Arrow Towel & Laundry Co.*

1,662,436. (See 1,405,936.) 1,662,437. (See 1,405,936.)

1,666,589, C. W. Bassett, Elevator signal system, filed Aug. 29, 1931, D. C., S. D. N. Y., Doc. E 61/345, *Elevator Supplies Co., Inc.*, v. *342 West 42d Street Corp. et al.*

1,677,436. (See 1,405,936.)

1,698,566, R. J. Simpson, Case for measuring tapes, etc.; Des. 71,257, same, Measuring tape, filed Dec. 16, 1929, D. C., S. D. N. Y., Doc. E 51/198, *The L. S. Starrett Co.* v. *Lufkin Rule Co.*

1,726,752, M. Mirking, Bath tub, filed Sept. 3, 1931, D. C., S. D. N. Y., Doc. E 61/384, *M. Mirkin et al* v. *Clason Mfg. Co., Inc.*

1,729,243, H. E. Bricker, Door sill, D. C., N. D. Ohio, E. Div., Doc. E 3396, *National Metal Products Co.* v. *E. Barringer.* Dismissed (notice Sept. 3, 1931).

1,801,128, A. E. Waller, Finding for a clasp, filed Aug. 29, 1931, D. C., S. D. N. Y., Doc. E 61/346, *A. E. Waller* v. *Apollo Die Tool & Metal Stamping Corp.*

1,801,645, A. G. Sherman, Camping trailer, D. C., E. D. Mich., S. Div., Doc. 4917, *A. G. Sherman* v. *J. Lewis (Auto Car-A-Van Co.).* Consent decree for plaintiff Aug. 29, 1931.

1,817,731, D. M. Benford, Electric necktie restorer, filed Aug. 31, 1931, D. C., S. D. N. Y., Doc. E 61/347, *D. M. Benford (Electric Novelty Mfg. Co.).* v. *C. Waechter et al. (Waechter-Lake Co.).*

Re. 17,034, L. Bloch, Four-way diverter valve, D. C., N. D. Ohio, E. Div., Doc. E 2634, *The Republic Brass Co.* v. *The Central Brass Mfg. Co.* Claims 1 and 2 held valid and infringed Aug. 29, 1931.

Re. 17,116, O. L. Coffey, Drop pit mechanism for unwheeling locomotives, filed Aug. 31, 1931, D. C., W. D. Mich. (Grand Rapids), Doc. 2463, *Whiting Corp.* v. *Manning, Maxwell & Moore, Inc.*

Des. 68,552. (See 1,555,441.) Des. 71,257. (See 1,698,566.)

Disclaimer

1,712,382.—*Louis L. Driggs, jr.*, New Rochelle, and *Henry B. Faber*, New York, N. Y. FIREARMS. Patent dated May 7, 1929. Disclaimer filed September 23, 1931, by the *patentees.*

Hereby enter a disclaimer restricting claim 1 as follows:

By restricting the element "cartridge casing" of said claim 1 to "closed at its rear end and capable of standing the strains of firing and ejecting completely a projectile therefrom without deformation of the cartridge casing".

Adjudicated Patents

(C. C. A. Mo.) Fagliuca patent, No. 1,302,205, for chocolate coating machine and the like, claims 1, 3, 10, 12, 14, and 15, *Held* valid and infringed. *United Drug Co.* v. *Ireland Candy Co.*, 51 F.(2d) 226.

(C. C. A. Ky.) Koppe patent, No. 1,396,962, for vacuum pressure frame, claims 1, 5, 8, and 12, *Held* valid but not infringed. *Directoplate Corporation* v. *Donaldson Lithographing Co.* 51 F.(2d) 199.

(C. C. A. Ohio.) Lerch patent, No. 1,462,453, for tire construction, claim 2, *Held* not infringed. *Goodyear Tire & Rubber Co.* v. *India Tire & Rubber Co.*, 51 F.(2d) 204.

(C. C. A. Colo.) Petersime patent, No. 1,562,787, for incubator, *Held* infringed by one device made by defendant but not by another. *Robbins* v. *Ira M. Petersime & Son*, 51 F. (2d) 174.

(C. C. A. Mo.) Flynn patent, No. 1,612,762, for detailing mechanism for candy-coating machines, *Held* invalid. *United Drug Co.* v. *Ireland Candy Co.*, 51 F.(2d) 226.

(C. C. A. Ky.) Koppe reissue patent, No. 16,567, for machine for making offset presa plates, claims 4, 5, 7, 20, and 23, *Held* not infringed; claims 25, 41, and 45–50, *Held* invalid. *Directoplate Corporation* v. *Donaldson Lithographing Co.*, 51 F.(2d) 199.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,708,168, Wm. J. Andres, Brake-operating connections, decided September 29, 1931, claims 1 and 2.

Pat. 1,746,811, M. T. Archer, Hydraulically-actuated pump, decided September 29, 1931, claims 5 and 6.

Pat. 1,793,016, G. T. Royden, Radio signaling system, decided September 29, 1931, claims 1, 2, and 3.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Sept. 22, 1931.*

The Floyd-Paramount, Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of F. A. Martoccio Company, 102 South Cedar Lake Road, Minneapolis, Minn., to effect the cancellation of the trade-mark registrations of The Floyd-Paramount, Inc., of 204 Morris Avenue, Newark, N. J., Nos. 217,166 and 225,362, dated August 24, 1926, and March 15, 1927, respectively, and the notice of such proceeding sent by registered mail to The Floyd-Paramount, Inc., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless The Floyd-Paramount, Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Oct. 3, 1931.*

Fred C. Zimmermann, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, of 43 Leon Street, Boston, Mass., to effect the cancellation of the trade-mark registration of Fred C. Zimmermann, of Boyle and Olive Streets, St. Louis, Mo., No. 113,214, dated October 10, 1916, and the notice of such proceeding sent by registered mail to the said Zimmermann at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Zimmermann, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Interference Notice

U. S. PATENT OFFICE, *Washington, Oct. 3, 1931.*

Joseph Johnson, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent of Joseph Johnson, 8 East Fordham Road, Bronx, New York, N. Y., No. 1,579,944, granted April 6, 1926, and an application for patent filed by Edward G. Gage, 41 Garden Place, Brooklyn, N. Y., and the notice of such declaration sent by registered mail to said Johnson at said address having been returned by the post office undeliverable, notice is hereby given that unless said Johnson, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, OCTOBER 20, 1931

[VOL. 411. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 316,732. E. J. LAVINO AND COMPANY, Philadelphia, Pa. Filed July 8, 1931.

KROMEKOTE

No claim is made to the term "Kromekote" apart from the mark as shown.

For Ores for Use for Coatings on Furnace Linings and Refractory Surfaces.

Claim use since Apr. 7, 1931.

Ser. No. 316,735. E. J. LAVINO AND COMPANY, Philadelphia, Pa. Filed July 8, 1931.

WETKROME

No claim is made to the words "Wet Krome" apart from the mark as shown.

For Ores for Use in Laying Refractory Brick.

Claims use since May 9, 1931.

Ser. No. 317,057. B. D. EISENDRATH TANNING COMPANY, Chicago, Ill. Filed July 17, 1931.

ADONIS CALF

The descriptive word "Calf" is hereby disclaimed apart from the mark as shown.

For Tanned Leather, and in Particular for Tanned Calf Skin.

Claims use since Nov. 14, 1930.

Ser. No. 317,740. J. E. RHOADS & SONS, Philadelphia, Pa. Filed Aug. 6, 1931.

STRONGHOLD

For Lace Leather in the Form of Hides.

Claims use since Mar. 9, 1931.

Ser. No. 317,808. INTERNATIONAL PULP COMPANY, New York, N. Y. Filed Aug. 8, 1931.

CASBESTILE

For Pulp or Powder Made of Ground, Pulverized, Powdered, and Prepared Materials for Use in the Manufacturing of Tiling and Ceramic Products.

Claims use since 1930.

Ser. No. 318,173. SOUTHERN MINERAL PRODUCTS CORPORATION, New York, N. Y. Filed Aug. 19, 1931.

PRIMOS

For Apatite, Ilmenite, Gypsum, and Mica.

Claims use since June, 1931.

Ser. No. 318,277. INTERNATIONAL PULP COMPANY, New York, N. Y. Filed Aug. 21, 1931.

CERAMICITE

For Pulp or Powder for Use in Manufacturing of Tiling and Ceramic Products.

Claims use since 1930.

Ser. No. 318,601. SHELL OIL COMPANY, San Francisco, Calif. Filed Aug. 31, 1931.

SHELL

For Petroleum Coke.

Claims use since Aug. 6, 1931.

Ser. No. 318,602. SHELL OIL COMPANY, San Francisco, Calif. Filed Aug. 31, 1931.



For Petroleum Coke.
Claims use since Aug. 6, 1931.

Ser. No. 318,721. "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria. Filed Sept. 3, 1931.

BELINDE

For Sponges Made of India Rubber of All Kinds.
Claims use since May 5, 1931.

CLASS 2

Receptacles

Ser. No. 311,386. KENNEDY MANUFACTURING COMPANY, Van Wert, Ohio. Filed Feb. 24, 1931.

TREASURE

For Sheet Metal Boxes for Utilitarian and Novelty Purposes.
Claims use since Aug. 28, 1930.

Ser. No. 313,712. LILY-TULIP CUP CORPORATION, New York, N. Y. Filed Apr. 23, 1931.

NESTRITE

For Receptacles—Namely, Paper Containers in the General Nature of Paper Cans.
Claims use since July 8, 1923.

Ser. No. 316,530. CLOVERDALE SPRING COMPANY, Baltimore, Md. Filed July 1, 1931.

GLASKET

For Metal Baskets for Holding Bottles, Glasses, and the Like.
Claims use since May 15, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 318,283. NATIONAL BELLAS HESS CO. INC., New York, N. Y. Filed Aug. 21, 1931.

BELLECRAFT

For Ladies' Leather Hand Bags.
Claims use since July 24, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 315 418. RUMFORD CHEMICAL WORKS, Rumford, R. I. Filed June 4, 1931.

RUSITE

For Cleaning Preparation—Namely, Washing Powder for General Cleaning Purposes.
Claims use since Nov. 1, 1930.

Ser. No. 317,747. STERLING PRODUCTS COMPANY, Easton, Pa. Filed Aug. 6, 1931.

TILITE

For a Preparation for Cleaning Tile, Porcelain, Marble Floors, Terrazzo Floors, and Brass.
Claims use since Nov. 2, 1922.

Ser. No. 317,800. THE GROCERS & PRODUCERS CO., doing business as Clover Farm Stores, Cleveland, Ohio. Filed Aug. 8, 1931.

CLOVER FARM

For Toilet Soap, Laundry Soap, Granulated Soap, Soap Chips, Borax Soap Powder, and a Powder for Cleansing, Scouring, and Polishing.
Claims use since 1882.

Ser. No. 318,009. WALTER R. KIRK, Chicago, Ill. Filed Aug. 15, 1931.

FANCY-DRESS

For Soap.
Claims use since Aug. 6, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 302,206. ALLIED DRUG PRODUCTS CO. INC., Chattanooga, Tenn. Filed June 6, 1930.



Applicant is the owner of registered Trade-Mark No. 182,821. The portrait is fanciful.
For After Shaving Lotion, Toothpaste, Cold Cream, Cleansing Cream, Vanishing Cream, Massage Cream, Tissue Cream, Lemon Cold Cream, Lemon Cleansing Cream, and Lemon Vanishing Cream.
Claims use since Jan. 1, 1928.

Ser. No. 302,237. ELMO, INCORPORATED, Philadelphia, Pa. Filed June 7, 1930.



For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Sept. 10, 1929.

Ser. No. 308,227. "TITUS" CHEMISCH-PHARMAZEUTISCHE FABRIK G. M. B. H., Berlin-Pankow, Germany. Filed Nov. 22, 1930.

„Titus-Perlen"

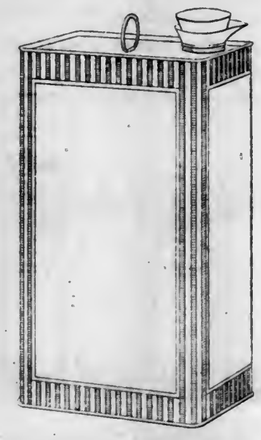
For Pharmaceutic Rejuvenation for the Treatment of Impotency, Neurasthenia, and Biological Senescence.
Claims use since Oct. 18, 1929.

Ser. No. 309,166. DOROTHY GRAY, Bloomfield, N. J. Filed Dec. 19, 1930.



Applicant is the owner of registered Trade-Mark No. 200,419 and No. 255,662. The drawing is lined to indicate the colors light and dark blue. The mark consists of a dark blue cap for the container, a lighter blue ribbon bow applied to the neck of said container and labels upon the front and rear of such container. No claim is made to the representation of a bottle, nor to the wording appearing on the label with the exception of the words "Dorothy Gray." No claim is made to the representation of a bottle cap except in association with the other features of the mark.
For Toilet Preparations—Namely, Skin and Eye Lotions, Skin Tonics; Skin, Circulation, and Massage Ointments; Astringents and Oils for the Skin, Pores, Tissues, and Muscles; Perfumes, Nail Polishes and Nail Polish Removers in Liquid Form, Depilatories, Liquid Rouges, Eye Washes, Eyebrow and Eyelash Growers, Sunburn Creams, Applications for the Treatment of Acne, Bath Oils, Talcum Powders.
Claims use since Jan. 3, 1930.

Ser. No. 311,239. CHR. HANSEN'S LABORATORY, INC., Little Falls, N. Y. Filed Feb. 19, 1931.



The trade-mark consists of spaced parallel blue stripes upon which are imposed relatively large panels. No claim is made to the representation of the can per se.
For Butter Color.
Claims use since Dec. 1, 1928.

Ser. No. 314,714. JACQUIN FRANCIS L'ESTANER, doing business as L'Ilon Hair Grower Co., New York, N. Y. Filed May 18, 1931.

PILON

The facial representation appearing as a feature of the mark is fanciful.
For Hair Grower.
Claims use since Feb. 6, 1931.

Ser. No. 314,773. MAURICE SCHOEPFER, doing business as De Dixor Paris, Paris, France. Filed May 19, 1931.

IRADIUM

For Face and Skin Lotion.
Claims use since Mar. 21, 1930.

Ser. No. 315,058. MARGARET MCNALLY, doing business as Zarina L. Labaty, Los Angeles, Calif. Filed May 26, 1931.

ZARINA

For Skin Tonic Cleansing Cream, Face Powder, Face Cream, and Mask Astringent in the Form of Paste.
Claims use since Feb. 6, 1931.

Ser. No. 315,759. THE PINETRINE COMPANY, INC., New York, N. Y. Filed June 12, 1931.



Applicant is the owner of registered Trade-Mark No. 281,354, registered March 17, 1931, by assignment recorded Feb. 20, 1931, in Liber M 147, page 212 of "Transfers of Patents." The applicant hereby disclaims any exclusive right to the words "The Universal Rub Down" without waiving any common-law rights. The applicant also disclaims any right to the geographical term "New York City" and to the representation of a carton per se.
For Liniment for the Relief of Muscular Pains and Aches, Rheumatic Conditions, Neuritis, Neuralgia, Lumbago, Arthritis, Sprains, and Similar Conditions.
Claims use since Feb. 17, 1931.

Ser. No. 315,904. ROBERT MAYS DOBBS, doing business as The Flexitone Company, Atlanta, Ga. Filed June 16, 1931.

Flexitone

For Hair Tonic, Hair Dressing, Shampoo.
Claims use since Apr. 1, 1931.

Ser. No. 316,324. EDGAR C. GADPAILLE, doing business as International Laboratories of America, Inc., New Orleans, La. Filed June 26, 1931.

Germ Inert

The descriptive words "Germ" and "Inert" are disclaimed apart from the other features of the mark depicted in the drawing.
For Antiseptic Powders in Individual Dosages.
Claims use since June 1, 1930.

Ser. No. 316,792. WHELAN DRUG CO., INC., New York, N. Y. Filed July 9, 1931.

Daudet

For Rouge, Lip Sticks, Hand Lotion, Cold Cream, and Face Powder.
Claims use since Sept. 3, 1929.

Ser. No. 317,394. THE HARROWER LABORATORY, INC. Glendale, Calif. Filed July 28, 1931.

PANOCRIN

For Solution of an Active Principle of the Pancreas Having an Influence Upon the Circulation and for Use in the Treatment of Circulatory Disorders Associated with Hypertension and Angina.
Claims use since July 6, 1931.

Ser. No. 317,428. LEO FRISCH, New York, N. Y. Filed July 29, 1931.

Bebe'

For Face Powders, Rouge, Lipstick, Toilet Waters, Face Creams, Astringent Lotion, Eyebrow Pencils, Mascara, Hand Lotion, Shampoo, Bath Salts, Sachet Powders, Perfumes, Dusting Powders, Depilatories, and Deodorants.
Claims use since June 1, 1931.

Ser. No. 317,826. THE SWANN CORPORATION, Birmingham, Ala. Filed Aug. 3, 1931.



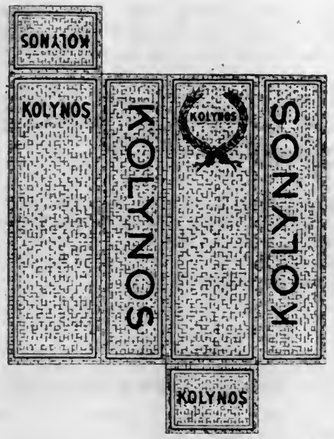
Sodium Phosphate, Tri-Sodium Phosphate, Sodium Acid Phosphoric Acid Paste, Mono Ammonium Phosphate, Di-Ammonium Phosphate, Mono Sodium Phosphate, Di-Sodium Phosphate, Tri-Sodium Phospate, Sodium Acid Pyrophosphate, Tetra Sodium Pyrophosphate, Diphenyl, Chlorinated Diphenyl, Calcium Carbide, Mono Calcium Phosphate, Baking Powder Mixtures, Di-Calcium Phosphate, Tri-Calcium Phosphate, Colloidal Alkali, Sodium Aluminum Sulphate, Bicarbonate of Soda, Anhydrous Calcium Sulphate, Bone Derived Calcium Sulphate, Commercial Black, Aluminum Phosphate, Magnesium Phosphate, Magnesium Ammonium Phosphate, Potassium Phosphate, Potassium Ammonium Phosphate, Sodium Ammonium Phosphate, Sodium Pyrophosphate, Precipitated Bone Phosphate, and Bone Ash.
Claims use since Apr. 10, 1931.

Ser. No. 317,838. PAUL C. BRAGG, doing business as O. K. Lax Mfg. Co., Los Angeles, Calif. Filed Aug. 10, 1931.

O.K.-LAX

For an Herb Laxative.
Claims use since May 1, 1930.

Ser. No. 317,870. THE KOLYNOS COMPANY, New Haven, Conn. Filed Aug. 11, 1931.



Applicant is the owner of registered Trade-Mark No. 203,225. The lining on the drawing indicates the colors yellow and green. No claim is made to the representation of a carton per se.
For Dental Cream.
Claims use since Feb. 13, 1928.

Ser. No. 318,290. MONROE T. PRATT, doing business as M. Pratt Co., Washington, D. C. Filed Aug. 21, 1931.

Brawlaps

For Preparation for the Treatment of Cuts, Bruises, and Skin Abrasions.
Claims use since June 1, 1929.

Ser. No. 318,830. ROBERT FRANKS, doing business as Ambassador Chemical Company, Los Angeles, Calif. Filed Sept. 8, 1931.

AMBASSADOR

For Insecticides.
Claims use since Mar. 1, 1930.

Ser. No. 319,008. VAPOR ICE MACHINE CORPORATION, Philadelphia, Pa. Filed Sept. 12, 1931.

MODERNICE

For Gaseous Liquid and Solid Carbon Dioxide.
Claims use since Aug. 26, 1931.

CLASS 7

Cordage

Ser. No. 318,074. PACIFIC WIRE ROPE COMPANY, Los Angeles, Calif. Filed Aug. 17, 1931.



The mark consists in painting the single wire forming the core white. No claim is made to the representation of a section of wire strand.
For Wire Strand.
Claims use since July 15, 1931.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 318,977. CHARLES DE LEON, New York, N. Y. Filed Sept. 12, 1931.

"WOW"

For Firecrackers.
Claims use since Apr. 1, 1931.

CLASS 10

Fertilizers

Ser. No. 317,693. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 3, 1931.

MUSHOFER

For Fertilizer.
Claims use since July 28, 1931.

Ser. No. 318,202. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Fertilizers.
Claims use since Sept. 24, 1930.

CLASS 11

Inks and Inking Materials

Ser. No. 317,627. BINNEY & SMITH COMPANY, New York, N. Y. Filed Aug. 4, 1931.

"MARKSET"

For Marking Ink.
Claims use since July 11, 1931.

CLASS 12

Construction Materials

Ser. No. 314,305. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed May 7, 1931.

ORIENTAL

For Slate Surfaced Asphalt Roofing, and Slate Surfaced Asphalt Shingles.
Claims use since February, 1916.

Ser. No. 315,776. ALCOA ORE COMPANY, East St. Louis, Ill. Filed June 13, 1931.

ALORCO

For Lime, Gypsum, and for Beauxite Residues Used as Cement-Manufacturing Ingredients, Cement-Forming Correctives, and Heat Insulators.
Claims use since Apr. 22, 1930.

Ser. No. 316,684. THE AMERICAN GYPSUM COMPANY, Port Clinton, Ohio. Filed July 6, 1931.



For Plaster Paris and Sanded Wood Fibre Plaster.
Claims use since 1910.

Ser. No. 317,405. THE SCHERZER LIFT BRIDGE COMPANY, Chicago, Ill. Filed July 28, 1931. Under 10-year proviso.

SCHERZER

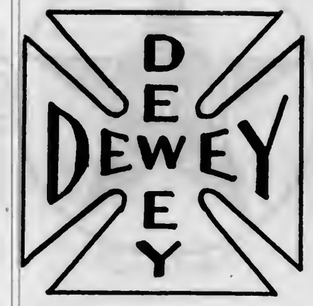
For Rolling Lift or Bascule Bridges.
Claims use since Dec. 26, 1893.

Ser. No. 317,779. THE RUBEROID CO., Bound Brook, N. J. Filed Aug. 7, 1931.

RUBESTOS

For Composition Shingles.
Claims use since July 6, 1931.

Ser. No. 317,796. DEWEY PORTLAND CEMENT COMPANY, Kansas City, Mo. Filed Aug. 8, 1931.



For Portland Cement.
Claims use since Feb. 16, 1931.

Ser. No. 318,001. FERROCRETE CEMENT CO. INC., New York, N. Y. Filed Aug. 15, 1931.

COLFERRO

For Portland Cement.
Claims use since July 1, 1931.

Ser. No. 318,272. THE FLINTKOTE COMPANY, Boston, Mass. Filed Aug. 21, 1931.

SETAB

For Asphaltic Composition Roofing Shingles Manufactured and Sold by It.
Claims use since July 31, 1931.

Ser. No. 318,292. W. RALSTON & CO., INC., Niagara Falls, N. Y. Filed Aug. 21, 1931.

RALTEX

For Reinforced Waterproof and Windproof Sheet Insulation for Building Purposes.
Claims use since Mar. 14, 1931.

Ser. No. 318,358. HARRIS MANUFACTURING COMPANY, Johnson City, Tenn. Filed Aug. 24, 1931.

HARRIS

For Oak and Maple Flooring and Interior Wood Trim.
Claims use since 1916.

Ser. No. 318,524. JOHNS-MANVILLE CORPORATION, New York, N. Y. Filed Aug. 28, 1931.

NASHKOTE

For Acoustic Material Consisting of Felts Having Decorative Finishes Used for Surfacing Walls and Ceilings For Deadening of Sound and Acoustical Correction.
Claims use since November, 1924.

Ser. No. 318,546. THE ASSOCIATED PORTLAND CEMENT MANUFACTURERS, LIMITED, London, England. Filed Aug. 29, 1931.

SNOWCRETE

For Portland Cement.
Claims use since Apr. 9, 1929.

Ser. No. 318,630. HENRY A. SCOPPETTONE, Seattle, Wash. Filed Sept. 1, 1931.

VAN TONE

For Window Frames.
Claims use since Apr. 1, 1931.

Ser. No. 318,851. SHELL OIL COMPANY, San Francisco, Calif. Filed Sept. 8, 1931.

SPRAMEX

For Asphalt.
Claims use since Aug. 17, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 305,096. WILLIAM ADAMS LTD., Hockley, Birmingham, England. Filed Aug. 28, 1930.



Registration of this trade-mark shall give no right to the exclusive use of the letters "W. A."

For Waiters, Entree Dishes, Teasets, Trays, Hot Water Jugs, Coffee Pots, Slop Basins, Kettles, Mustard Pots, Salt Cellars, Pepper Pots, Sugar Dredgers, Tea Caddies, Vases, Cups, Bowls, Sweet Dishes, Nut Dishes, Cake Baskets, Cake Stands, Breakfast Dishes, Soup Tureens, Sauce Boats, Asparagus Dishes, Vegetable Dishes, Muffin Dishes, Siphon Stands, Chop Dishes, and Hash Dishes, Made of Chromium Plate on Brass, Copper, and the Alloy Nickel-Silver, and of Nickel Plate on Brass, Copper, and the Alloy Nickel-Silver.

Claims use since 1900.

Ser. No. 316,518. AMERICAN STEEL COMPANY, Pittsburgh, Pa. Filed July 1, 1931.



EXTENDED PRONG
KELKOTTERS

The picture of the cotter pin and the words "Extended-Prong" are disclaimed apart from the mark as shown.

For Cotter Pins.

Claims use since Dec. 1, 1927.

Ser. No. 318,015. JOHN J. PETERS, New York, N. Y. Filed Aug. 15, 1931.



For Base Metal Plates for Baking Pies and Cakes.

Claims use since Mar. 1, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 302,858. HIRSCH, KUPFER- UND MESSINGWERKE A.-G., Finow/Mark, Germany. Filed June 26, 1930.

TOMBASIL

For Unwrought and Partly Wrought Copper-Silicon-Zinc-Alloys—Namely, Ingots, Sheets, Bands, Plain Insulated Wire, Welding Wire, Wollaston Wire, Stamped or Plain Castings in the Rough, Wire Rods, Rivet Rods, Rods Employed in Arc Welding, Rods (Metal) Sold from Stock for General Purposes, and Mild Steel, Iron, and High Carbon Welding Rods.

Claims use since Feb. 27, 1930.

Ser. No. 308,663. ERNEST A. WRIGHT, Grants Pass, Oreg. Filed Dec. 5, 1930.

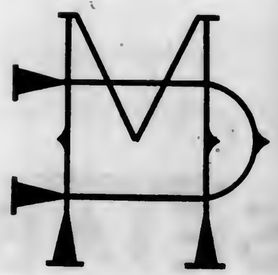


The words "Right," "Alloy," and "Terminals" are disclaimed apart from the mark as shown.

For Alloy Metals Consisting of Nickel, Lead, Antimony, and Tin.

Claims use since July 5, 1930.

Ser. No. 317,577. SOUTHERN MALLEABLE IRON COMPANY, St. Louis, Mo., and East St. Louis, Ill. Filed Aug. 1, 1931.



For Fabricated Rust Proof Malleable Iron, Either in the Rough, or in a Semi-Finished or Finished Condition.

Claims use since January, 1931.

Ser. No. 317,636. HANDY & HARMAN, New York, N. Y. Filed Aug. 4, 1931.

Sil-Fos

For Solder.

Claims use since July 9, 1931.

Ser. No. 317,970. HERMAN E. S. CHAYES, New York, N. Y. Filed Aug. 14, 1931.

CHALIAURUM

For Alloys of Gold, Silver, Nickel, Copper, and/or Other Metals.

Claims use since Aug. 10, 1931.

Ser. No. 317,971. HERMAN E. S. CHAYES, New York, N. Y. Filed Aug. 14, 1931.

CHALIMET

For Alloys of Gold, Silver, Nickel, Copper, and/or Other Metals.

Claims use since Aug. 10, 1931.

Ser. No. 318,345. THE AMERICAN ROLLING MILL COMPANY, Middletown, Ohio. Filed Aug. 24, 1931.

PAINTGRIP

For Galvanized Iron and Steel Sheets.

Claims use since July 24, 1931.

Ser. No. 318,487. LUDLUM STEEL CO., Watervliet, N. Y. Filed Aug. 27, 1931.

CARMET

For Hard Metal Composition for Use in Tools, Dies, and Parts Thereof.

Claims use since July 27, 1931.

CLASS 15

Oils and Greases

Ser. No. 311,987. VACUUM OIL COMPANY, New York, N. Y. Filed Mar. 10, 1931.

VACOMY

For Oils, Greases, and Waxes of All Kinds, and Similar Products, All for Lubricating, Illuminating, Heating, and Fuel Purposes; Also Gasoline, Naphtha, Benzine, and Kerosene.

Claims use since April, 1929.

Ser. No. 317,099. SOLO OIL COMPANY, McAlester, Okla. Filed July 18, 1931.



For Motor Lubricating Oil and Automotive Packing Grease.

Claims use since Apr. 27, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 310,400. MILRICK PRODUCTS CORPORATION, Kokomo, Ind., assignor to The Milrick Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Jan. 26, 1931.

THION

For a Polish in Powder or Liquid Form Used as a Protective Finish for All Painted, Varnished, Lacquered, or Enameled Surfaces.

Claims use since Apr. 5, 1928.

Ser. No. 310,472. JAMES HAWORTH LONGSHORE, doing business as The Iroquois Company, Chicago, Ill. Filed June 29, 1931.

Terraz-O-Var

For Filler and Finish Containing Gums and Waxes for Terrazzo Floors, Asphaltic Type Floor, Cement Floors, Wood Floors, and Composition Floors.

Claims use since July 21, 1929.

Ser. No. 318,691. THE MURALO COMPANY, INC., New Brighton, N. Y. Filed Sept. 2, 1931.

TEX-IT

For Dry Powder to be Mixed with Water and Used as a Plastic Paint for Producing Textured and Relief Decorations for Wall and Ceiling Surfaces.

Claims use since June 1, 1931.

CLASS 17

Tobacco Products

Ser. No. 317,778. SALVADOR RODRIGUEZ, INC., Tampa, Fla., and Habana, Cuba. Filed Aug. 7, 1931.

BAFFIN

For Cigars.
Claims use since Apr. 14, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 311,964. WALTER KIDDE & COMPANY, INC., New York, N. Y. Filed Mar. 10, 1931.

LUX

For Aircraft Flotation System.
Claims use since June 17, 1927.

Ser. No. 316,420. CHRYSLER CORPORATION, Highland Park, Mich. Filed June 29, 1931.

plymouth

For Automobiles and Their Structural Parts.
Claims use since June 1, 1928.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 272,474. ELECTRIC INDICATOR CORPORATION, Stamford, Conn. Filed Sept. 15, 1928.

ACCURATE REMOTE ELINCO INDICATING SYSTEMS

The use of the words "Accurate Remote Indicating Systems" apart from the mark shown, is disclaimed.

For Float Operated Electrical Regulators of the Level of Liquids in Tanks and Containers, Electrical Control Apparatus Adapted to be Operatively Associated with Motor Operated Valves or Doors Movable Between Two Extreme Positions and to Operate Switches Located at a Distant Point Controlling the Operation or Indicators Indicating the Position of Such Valves or Doors, Electrical Control Apparatus Adapted to be Operatively Associated with Electric Motors or Power Generating Units and to Operate Switches Located at a Distant Point Controlling the Operation of or Indicators Indicating the Load Upon Such Motors or Power Units, Electrical Control Apparatus Adapted to be Operatively Associated with Gas Holders and to Operate Indicators Located at a Distant Point Indicating the Position of Such Gas Holders, and Electrical Control Apparatus for the Remote Control of Indicators Indicating or Recorders Recording the Performance of Machine or Power Units Operatively Associated with Said Electrical Control Apparatus.

Claims use since July 1, 1926.

Ser. No. 315,847. KNAPP-MONARCH COMPANY, Belleville, Ill. Filed June 15, 1931.

"THERM-A-MAGIC"

For Electrical Devices Consisting of Electric Heaters, Grill Stoves, Hot Plates, Flat Irons, Heat Pads for General Use, Waffle Irons, Corn Poppers, Bread Toasters, Curling Irons, Egg Cookers, Fans, Motor Egg and Batter Whips.

Claims use since September, 1929.

Ser. No. 316,570. RCA VICTOR COMPANY, INC., Camden, N. J. Filed July 2, 1931.

Radiolette

For Radio Receiving Sets, Kits for Radio Receiving Sets, Electric Pick-Ups for Phonographs, and Accessories and Parts Consisting of Aerials, Battery Eliminators, Binding Posts, Chokes, Coils, Coil Sets, Condensers, Dials, Grid Leaks, Jacks, Loud Speakers, Panel Boards, Potentiometers, Radio Amplifying Units, Radio Rectifying Units, Rheostats, Shields, Transformers, Electron Tubes, Tube Sockets, Tuning Units, Choke Coils, and Wire and Cable for Radio Sets and Apparatus.

Claims use since June , 1931.

Ser. No. 316,583. BELSON MANUFACTURING COMPANY, Chicago, Ill. Filed July 3, 1931.

BEL SUN LITE

For Electric Lighting Equipment for Outdoor Areas, Theatre and Stage Use, Merchandise Display, Auditoriums, Industrial Plants, General Illumination, and the Like, Consisting of Floodlights, Spotlights, Flashlights, Border Lights, Footlights, Louvre and Aisle Lights, Fixtures for Such Lights, Portable Standard Lamps, Olivettes, Unitary Lamp Banks and Separable Lamps Therefor, Flashers, and Electric Signs.

Claims use since Oct. 10, 1928.

Ser. No. 316,615. THE SPARKS-WITHINGTON COMPANY, Jackson, Mich. Filed July 3, 1931.

SUPERSONNE

For Radio Receiving Sets.
Claims use since June 22, 1931.

Ser. No. 317,856. SIMPLEX WIRE & CABLE COMPANY, Boston, Mass. Filed Aug. 10, 1931.

LATOX

For Wires, Cables, Insulated Wires, Insulated Cables, Braided Wires, Braided Cables, Armoured Wires, and Armoured Cables for Electrical Use.
Claims use since Aug. 1, 1931.

Ser. No. 318,013. WILLIAM O'DONNELL, doing business as Tel-O-Flash Spark Plug Co., Upper Darby, Pa. Filed Aug. 15, 1931.

TEL-O-FLASH

For Spark Plugs.
Claims use since Jan. 1, 1930.

Ser. No. 318,384. WEBSTER PRODUCTS CORPORATION, Chicago, Ill. Filed Aug. 24, 1931.

Skylite

For Indirect Illuminating Electrical Table Lamps.
Claims use since May 5, 1931.

Ser. No. 318,436. WALTER W. BIDDICK, doing business as Moto-Matic Company, Los Angeles, Calif. Filed Aug. 26, 1931.

MOTO-MATIC

For Starting Switches for Internal Combustion Engines.
Claims use since May 24, 1930.

Ser. No. 318,614. METLOX CORPORATION, LTD., Manhattan Beach, Calif. Filed Aug. 28, 1931.

METLOX THE ETERNAL

For Luminous Tube Signs.
Claims use since July, 1929.

Ser. No. 318,805. YATES-AMERICAN MACHINE COMPANY, Beloit, Wis. Filed Sept. 3, 1931.

Y-A

For Electric Motors.
Claims use since July 10, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 285,918. THE E. P. JUNEMAN CORPORATION, Chicago, Ill. Filed June 21, 1929.

BLUE STREAK

For Gut Strings for Tennis Racquets.
Claims use since Apr. 18, 1929.

Ser. No. 285,919. THE E. P. JUNEMAN CORPORATION, Chicago, Ill. Filed June 21, 1929.

GREEN FLASH

For Gut Strings for Tennis Racquets.
Claims use since Apr. 18, 1929.

Ser. No. 305,097. THE BILLINGS & SPENCER COMPANY, Hartford, Conn. Filed Aug. 28, 1930.

Country Club

For Golf Clubs.
Claims use since Sept. 15, 1929.

Ser. No. 316,738. NATIONAL BELLAS HESS CO. INC., New York, N. Y. Filed July 8, 1931.

NATIONAL

For Tennis Rackets, Tennis Balls, Indoor and Playground Balls, Baseball Glove and Mitts, Baseball Bats, Footballs, Basketballs, Boxing Gloves, Striking Bags, and Ice Skates.
Claims use since Jan. 25, 1931.

Ser. No. 317,717. AMY-ALICE JANE HALE, doing business as Jane Hale, New York, N. Y. Filed Aug. 6, 1931.



For Dolls.
Claims use since Nov. 25, 1930.

Ser. No. 318,031. GEORGE E. ROESCH, San Francisco, Calif. Filed Aug. 14, 1931.

Roll-a-Word

For Table Board Game Played with Pieces.
Claims use since June 1, 1931.

Ser. No. 318,965. FRANK C. NIEDDALE, Chicago, Ill. Filed Sept. 11, 1931.



For Billiard Cue Tips.
Claims use since May 1, 1931.

Ser. No. 319,082. S. S. KRESGE COMPANY, Detroit, Mich. Filed Sept. 14, 1931.

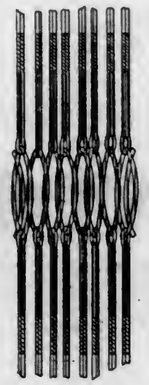
Marjorie

For Dolls.
Claims use since May 1, 1931.

CLASS 23

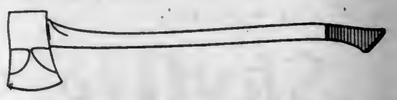
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 292,158. EMMONS LOOM HARNESS COMPANY, Lawrence, Mass. Filed Nov. 8, 1929.



The trade-mark consists in a design of three colored stripes, the two narrower border ones being green with the intervening broad band of red, the entire appearing crosswise of the middle portion of the heddle as shown in the drawing and specimens. No claim is made to the representation of the goods apart from the mark as shown.
For Loom Harnesses.
Claims use since May 8, 1929.

Ser. No. 310,835. FAYETTE R. PLUMB, Philadelphia, Pa. Filed Feb. 7, 1931.



Applicant is owner of trade-mark registration No. 157,373 issued Oct. 1, 1922. The trade-mark of the applicant consists of a red-colored band about, and covering the tip of, the free end of the handle of the tools. The drawing is lined for red. No claim is made to the representation of the goods apart from the mark as shown.
For Hatchets, Hammers, and Axes.
Claims use since Jan. 13, 1927.

Ser. No. 314,709. MISSION DRY CORPORATION, LTD., Los Angeles, Calif. Filed May 18, 1931.

DUPLEX

For Fruit Juice Dispensers and Combination Soda Fountain and Fruit Juice Dispensers.
Claims use since Dec. 1, 1930.

Ser. No. 318,305. EDWARD C. BOWERS AND CHARLES L. FELDMAN, receivers for Wickwire Spencer Steel Company, New York, N. Y. Filed Aug. 22, 1931.

DELTA

For Mechanical Conveyor Belts.
Claims use since Jan. 15, 1931.

Ser. No. 318,493. WALTER B. TEMPLETON, Chicago, Ill. Filed Aug. 27, 1931.

Spring Dancing

For Lifting Jacks of the Screw Type.
Claims use since Aug. 21, 1931.

Ser. No. 318,625. THE KINGSBY MANUFACTURING COMPANY, Cincinnati, Ohio. Filed Sept. 1, 1931.

KORN SMAX

For Corn Popping Machines.
Claims use since October, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 317,415. WILSON-MAEULEN COMPANY, INC., New York, N. Y. Filed July 28, 1931.

FLINTEX

For High Temperature Porcelain Tubes for Pyrometers and the like.
Claims use since Jan. 20, 1927.

Ser. No. 318,220. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Drawing Instruments.
Claims use since Sept. 24, 1930.

CLASS 27

Horological Instruments

Ser. No. 317,939. HELLER-DELTAH COMPANY, INC., New York, N. Y. Filed Aug. 13, 1931.

Deltah

For Clocks and Watches and Cases and Movements Therefor.
Claims use since 1926.

Ser. No. 318,222. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Watches, Clocks, and Parts Thereof.
Claims use since Sept. 24, 1930.

Ser. No. 318,441. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio. Filed Aug. 26, 1931.

ELTIME

For Time Indicating Mechanisms—Namely, Clocks and Parts Thereof.
Claims use since Aug. 6, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 317,920. COHN & ROSENBERGER, INC., New York, N. Y. Filed Aug. 13, 1931.

IMPERIAL BOUQUET

For Strings of Pearls, Necklaces, Bracelets, Earrings, Finger Rings, Brooches, Barpins, and Ornamental Hatpins, and Pins for Dress Ornaments, Ornamental Pins and Buckles for Decorating Hats, Ornamental Shoe Buckles, and Hair Ornaments, Made Wholly or in Part of or Plated with Precious Metal.
Claims use since July 15, 1931.

Ser. No. 317,958. EDWIN F. M. SPEIDEL, doing business as Automatic Gold Chain Company, Providence, R. I. Filed Aug. 13, 1931.

CORSAIR

For Jewelry for Personal Wear or Adornment, Not Including Watches.
Claims use since July 29, 1931.

Ser. No. 317,959. EDWIN F. M. SPEIDEL, doing business as Automatic Gold Chain Company, Providence, R. I. Filed Aug. 13, 1931.

TRITON

For Jewelry for Personal Wear or Adornment, not Including watches.
Claims use since Aug. 3, 1931.

Ser. No. 318,522. INTERNATIONAL SILVER COMPANY, Meriden, Conn. Filed Aug. 28, 1931.

HER MAJESTY

For Sterling Silver and Silver-Plated Flat-ware and Toilet-Ware.
Claims use since Aug. 17, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 314,208. RHORER WOOL PRODUCTS, INC., Phoenix, Ariz. Filed May 5, 1931.

RHORER Wool Washer

No claim is made to the words "Wool Washer" apart from the mark shown.
For Washing and Polishing Pads.
Claims use since Jan. 1, 1931.

Ser. No. 317,802. THE GLIDDEN COMPANY, doing business as Affiliated Brush Co., Cleveland, Ohio. Filed Aug. 8, 1931.



The trade-mark consists of a black tip and white stripe applied to the free end of paint brush handles. No claim is made to the representation of the handle.
For Paint Brushes.
Claims use since July 31, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 318,347. S. F. BOWSER & COMPANY, INC., Fort Wayne, Ind. Filed Aug. 24, 1931.

UNI-PASS

For Oil Purifying and Reclaiming Apparatus for Reclaiming, Purifying, and Filtering Oils Used in Connection with Electrical Apparatus, Particularly Transformers and Circuit Breakers.
Claims use since May 8, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 318,149. KENNEDY-MCCANDLESS CORPORATION, Rochester, N. Y. Filed Aug. 19, 1931.

TUB-A-LETTE

Applicant disclaims the word "Tub" except in combination with the other features of its trade-mark.
For Infant's Folding Combination Bath Tub and Dressing Table.
Claims use since April, 1928.

Ser. No. 318,580. WILLIAM H. BATTERSON, Washington, D. C., and Whitefield, N. H. Filed Aug. 31, 1931.

"UNCLE BILL'S BOOK SHELF"

The descriptive words "Book Shelf" are disclaimed apart from the mark as shown.
For Bookshelves.
Claims use since Nov. 1, 1930.

CLASS 33

Glassware

Ser. No. 318,125. CATARACT-SHARPE MFG. CO., Buffalo, N. Y. Filed Aug. 19, 1931.

Rock Sharpe Crystal

Applicant disclaims the words "Rock" and "Crystal" apart from the mark shown on the drawing.
For Glassware.
Claims use since July 1, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 316,557. C. A. DUNHAM COMPANY, Chicago, Ill. Filed July 2, 1931.

Sav-T-heat

The word "Heat" is disclaimed apart from the mark as shown.
For Heating Systems for Heating Buildings Which Utilizes Steam and the Product of Combustion of Either Gas or Oil Dependent upon Which is Used as the Fuel.
Claims use since May 27, 1931.

Ser. No. 318,346. BELMONT MANUFACTURING COMPANY, Worcester, Mass. Filed Aug. 24, 1931.

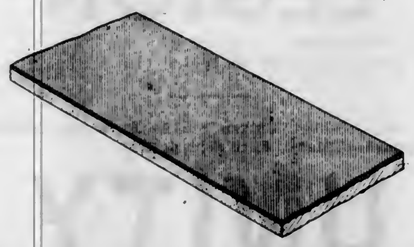
LION

For Oil Burners for Ranges and Stoves.
Claims use since May 2, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 285,855. THOMAS L. GATKE, Chicago, Ill. Filed June 20, 1929.



The mark consists in a color band covering the lateral edges of the goods, which band in itself is composed of two parallel stripes of the colors red and gray, the red stripe being narrow. No claim is made to the representation in the drawing of the friction lining.
For Brake Linings and Clutch Linings.
Claims use since Feb. 1, 1929.

Ser. No. 318,087. THE VELLUMOID COMPANY, Worcester, Mass. Filed Aug. 17, 1931.

VELBESTOS

For Sheet Packings.
Claims use since June 5, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 317,995. WILLIAMS, BROWN & EARLE, INC., Philadelphia, Pa. Filed Aug. 14, 1931.

THE ROBBINS Cinsola

For Turn Tables for Phonograph Record Discs and Phonograph Record Discs.
Claims use since Apr. 9, 1931.

Ser. No. 318,297. SIMSON & FREY, INC., New York, N. Y. Filed Aug. 21, 1931.

SAXOBOE

For Saxophones and Oboes.
Claims use since Apr. 20, 1931.

CLASS 37

Paper and Stationery

Ser. No. 308,203. EGON HASSINGER, Barcelona, Spain. Filed Nov. 22, 1930.

ROYALPLATE

Applicant disclaims the use of the word "Plate" apart from the mark shown.
For Fountain Pens Gold or Silver Plated.
Claims use since June, 1926.

Ser. No. 312,063. PHOTOREFLEX OF NEW ENGLAND, INCORPORATED, New Haven, Conn. Filed Mar. 12, 1931.

PhotoReflex

No claim is made to the word "Photo" apart from the mark shown.
For Photograph Holders and Mounts.
Claims use since Dec. 15, 1929.

Ser. No. 312,150. FLETCHER PAPER COMPANY, Alpena, Mich. Filed Mar. 16, 1931.

FLETCHER PAPER CO. ALPENA MICH.

No claim is made to the words "Alpena, Mich."
For Wrapping Paper and Letter Paper.
Claims use since Jan. 1, 1931.

Ser. No. 313,182. THE FAIR, Chicago, Ill. Filed Apr. 10, 1931.

FAIR

The trade-mark consists of the head and shoulders of a woman holding a cleansing tissue in her hand, the figure being partially inscribed within a circle, and the word "Fair."
For Cleansing Tissue Paper for Removing Cold Cream from the Skin.
Claims use since May, 1928.

Ser. No. 314,333. KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia. Filed May 8, 1931.

"Mephisto"

For Rubber Erasers, Penholders, Paper Knives or Letter Openers, Not of Metal; Elastic Bands, Tracing Paper, and Tracing Cloth.
Claims use since 1890, on rubber erasers, penholders, and paper knives; and since March, 1931, on elastic bands, tracing paper, and tracing cloth.

Ser. No. 314,911. CHARLES F. HUBBS & COMPANY, New York, N. Y. Filed May 22, 1931.

SELTEK PROCESS

No claim is made to the word "Process" apart from the mark as shown in the drawing.
For Bond Writing, and Wrapping Paper.
Claims use since Nov. 28, 1930.

Ser. No. 315,300. S. CHILTON CROCKER, doing business as Chilton Crocker Company, Boston, Mass. Filed June 2, 1931.

"Tuck-away"

For Binders Containing Money Holding Envelopes.
Claims use since May 22, 1931.

Ser. No. 318,405. JOSEPH P. MCENERY, Long Island City, N. Y. Filed Aug. 25, 1931.

=CAY=

For Pencil Holders for Use with Golf Score Cards.
Claims use since Aug. 20, 1931.

Ser. No. 318,417. SPECIAL PAPER MANUFACTURING CO., New York, N. Y. Filed Aug. 25, 1931.

Frenchvel

For Prepared Tracing Paper.
Claims use since June, 1923.

Ser. No. 318,633. WHEELER PAPER CORPORATION, Albany, N. Y. Filed Sept. 1, 1931.

LEGION

For Toilet Paper.
Claims use since July 18, 1931.

Ser. No. 318,753. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Sept. 4, 1931.

UNITY

For Toilet Paper.
Claims use since Dec. 15, 1925.

CLASS 38

Prints and Publications

Ser. No. 301,386. AMERICAN BABY BONDS CORPORATION, Denver, Colo. Filed May 28, 1930.

BABY BONDS
CINATURE BONDS FOR THRIFT AND SAVINGS FOR ALL

Applicant disclaims all of the wording except the word "Baby," apart from the trade mark shown in the drawing.
For Prints and Printed Matter Comprising Trade Coupons.
Claims use since Feb. 28, 1930.

Ser. No. 316,907. STEINMAN & STEINMAN, INC., Lancaster, Pa. Filed July 13, 1931.

LANCASTER NEW ERA

For a Newspaper.
Claims use since 1877.

Ser. No. 316,908. STEINMAN & STEINMAN, INC., Lancaster, Pa. Filed July 13, 1931.

Intelligencer Journal.

For a Newspaper.
Claims use since 1794.

Ser. No. 318,627. LAMAR & WHITMORE, BOOK AGENTS, PUBLISHING HOUSE, METHODIST EPISCOPAL CHURCH, SOUTH, doing business as The Parthenon Press, Nashville, Tenn. Filed Sept. 1, 1931.

The PARTHENON PRESS

For Periodical Publications and for Publications Issued from Time to Time.
Claims use since Feb. 15, 1931.

CLASS 39

Clothing

Ser. No. 306,644. DALTON HAT CO., INC., Yonkers, N. Y. Filed Oct. 11, 1930.

SUN-O-PLY

For Men's Hats.
Claims use since Sept. 15, 1930.

Ser. No. 311,184. DALTON HAT CO., INC., Yonkers, N. Y. Filed Feb. 18, 1931.

PARK-HILL

For Men's Hats.
Claims use since Jan. 10, 1931.

Ser. No. 313,859. MATSIL BROTHERS, New York, N. Y. Filed Apr. 27, 1931.

PALAIS ROYAL

For Apparel for Women and Children—Namely, Uniforms, Coolie Coats, Pajamas, and Bathrobes.
Claims use since Mar. 1, 1928.

Ser. No. 314,600. DRAPER HAT CORPORATION, New York, N. Y. Filed May 15, 1931.

DRAPER

For Ladies' Hats.
Claims use since November, 1930.

Ser. No. 314,602. DRAPER HAT CORPORATION, New York, N. Y. Filed May 15, 1931.

MAJESTY

For Ladies' Hats.
Claims use since November, 1930.

Ser. No. 314,753. GALLENKAMP STORES CO., San Francisco, Calif. Filed May 19, 1931.

Gallen Kamp's

For Footwear—Namely, Shoes, Boots, Slippers, Arctics, (Also Known as Galoshes), Rubbers, and Hosiery.
Claims use since July 1, 1922, on shoes, boots, and slippers; since July 1, 1924, on arctics, rubbers, and hosiery.

Ser. No. 317,593. DOROTHY BICKUM, New York, N. Y. Filed Aug. 3, 1931.

Always Young

For Undergarments for Women, Misses, and Children—Namely, Bandettes, Brassières, Garter Belts, Girdles, Step-Ins in the Nature of Corsets and Corsets with Pantie Bottoms, Corselettes, and Bloomers.
Claims use since July 5, 1931.

Ser. No. 317,687. J. WEISS SHOE CO., INC., New York, N. Y. Filed Aug. 5, 1931.

ORTHOPEDIC
CANTER-EASE
ARCH SUPPORTING
COMBINATION LAST
GOODYEAR WELT

No claim is made to the exclusive right to use the words "Orthopedic" and "Ease" and the phrases "Arch Supporting," "Combination Last," and "Goodyear Welt" apart from the mark shown.
For Leather Shoes.
Claims use since July 27, 1931.

Ser. No. 317,718. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Aug. 6, 1931.

"TWEENS"
For feet that walk in fashion from Junior High into College

Exclusive use of the words "For Feet That Walk in Fashion from Junior High to College" is not claimed except in association with the word "Tweens" and the design.
For Boots and Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since July 14, 1931.

Ser. No. 317,755. AULT-WILLIAMSON SHOE COMPANY, Auburn, Me. Filed Aug. 7, 1931.

Stylite

For Women's Shoes Made Wholly or in Part of Leather and/or Fabric.
Claims use since June 26, 1931.

Ser. No. 317,829. BRADSTONE RUBBER COMPANY, Woodbine, N. J. Filed Aug. 5, 1931.

FEET FIRST

For Rubber Heels, Soles, and Half Soles.
Claims use since June 23, 1931.

Ser. No. 317,893. HOLMES-TERHUNE COMPANY, Lewiston, Me. Filed Aug. 12, 1931.

FOOT SPRITE

For Boots and Shoes of Leather, Fabric, or Combinations Thereof.
Claims use since June 1, 1931.

Ser. No. 318,148. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Aug. 19, 1931.

Metro Craft

For Boots and Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since July 22, 1931.

Ser. No. 318,280. ARTHUR A. KATTEN CO. INC., New Orleans, La. Filed Aug. 21, 1931.

Nu Orlaens

For Men's, Youths', and Boys' Outer Clothing, Consisting of Coats, Suits, Trousers, and Vests.
Claims use since Aug. 13, 1931.

Ser. No. 318,356. FRANCINE FROCK COMPANY, Chicago, Ill. Filed Aug. 24, 1931.

Bandeleros

For Ladies' and Misses' Dresses.
Claims use since May 1, 1931.

Ser. No. 318,422. TINKHAM BROTHERS, INC., Jamestown, N. Y. Filed Aug. 25, 1931.

Chautauqua Maid

For Hosiery.
Claims use since Aug. 18, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 317,496. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed July 31, 1931.

WAVEDIP

For Hard Rubber Combs for Dressing, Ornamenting, and Cleaning the Hair.
Claims use since July 28, 1931.

411 O. G.—37

CLASS 41

Canes, Parasols, and Umbrellas

Ser. No. 318,210. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Umbrellas and Canes.
Claims use since Sept. 24, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 303,384. RALPH G. PRYOR, Warwood, W. Va. Filed July 11, 1930.

BICYCLE
BRAND

No claim is made to the exclusive use of the word "Brand" apart from the mark as shown in the drawing.
For Cotton Piece Goods.
Claims use since June 10, 1930.

Ser. No. 313,138. LUSTBERG, NAST & CO., INC., New York, N. Y. Filed Apr. 9, 1931.

BUCK SKEIN

For Cotton Suede Cloth in the Piece.
Claims use since Apr. 13, 1928.

Ser. No. 314,106. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed May 2, 1931.

Sunspun

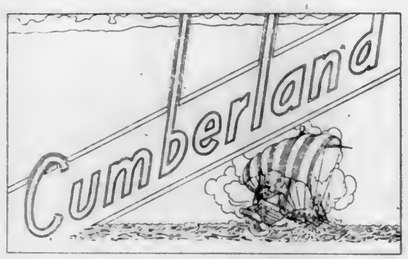
For Handkerchiefs.
Claims use since Oct. 1, 1908.

Ser. No. 315,590. BURTON BROTHERS & CO. INC., New York, N. Y. Filed June 9, 1931.

BURTON'S SPIDERWEB OXFORD

No claim is made to the words "Spiderweb Oxford," apart from the mark as shown in the drawing.
For Cotton Piece Goods and Mixtures of Cotton and Silk Piece Goods.
Claims use since April, 1930.

Ser. No. 316,043. W. S. LIBBEY COMPANY, INC., Lewiston, Me. Filed June 19, 1931.



Applicant hereby disclaims all rights to the exclusive use of the word "Cumberland" apart from the mark as shown in the drawing.
For Blankets of All-Wool, Part Wool, Cotton, or Rayon.
Claims use since May 26, 1931.

Ser. No. 318,111. NUDELMAN AND CONTI, INC., New York, N. Y. Filed Aug. 18, 1931.

Repacrepe

For Wool Cloth in the Piece.
Claims use since July 5, 1931.

Ser. No. 318,420. E. F. TIMME & SON, New York, N. Y. Filed Aug. 25, 1931.

KARALUX

For Pile Fabrics in the Piece.
Claims use since Aug. 19, 1931.

Ser. No. 318,503. ARCADIA KNITTING MILLS INC., New York, N. Y. Filed Aug. 28, 1931.

Queen-Ray

For Piece Goods—Namely, Knitted Rayon Cloth Used Principally in the Manufacture of Undergarments.
Claims use since Aug. 4, 1931.

Ser. No. 318,504. ARCADIA KNITTING MILLS INC., New York, N. Y. Filed Aug. 28, 1931.

STAR-RAY

For Piece Goods—Namely, Knitted Rayon Cloth Primarily Adapted for Use in the Formation of Undergarments.
Claims use since Aug. 4, 1931.

Ser. No. 318,863. THE BRADFORD DYERS' ASSOCIATION LIMITED, Bradford, England. Filed Sept. 9, 1931.

RIGMEL

For Cotton Piece Goods.
Claims use since July 1, 1931.

Ser. No. 318,876. J. B. MARTIN COMPANY, Norwich, Conn. Filed Sept. 9, 1931.

HESIONE

For Pile Fabrics in the Piece.
Claims use since Aug. 5, 1931.

Ser. No. 318,903. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Sept. 10, 1931.

GLOVECEL

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Sept. 8, 1931.

Ser. No. 318,971. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Sept. 12, 1931.

ETTANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Sept. 11, 1931.

Ser. No. 318,972. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Sept. 12, 1931.

FAYNESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Sept. 11, 1931.

CLASS 43

Thread and Yarn

Ser. No. 317,834. GROVES THREAD COMPANY, INC., Gastonia, N. C. Filed Aug. 7, 1931.



For Cotton Thread and Yarns.
Claims use since July 1, 1931.

Ser. No. 318,974. THE CLARK THREAD COMPANY, Newark, N. J. Filed Sept. 12, 1931.

DANDY

For Thread and Yarn.
Claims use since July 11, 1930.

Ser. No. 318,975. THE CLARK THREAD COMPANY, Newark, N. J. Filed Sept. 12, 1931.

USIT

For Thread and Yarn.
Claims use since April, 1929.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 303,373. LEO M. GELLES, doing business as Euro Trading Corporation, Battle Creek, Mich. Filed July 11, 1930.

Euro
TRADING CORPORATION
MANUFACTURERS
IMPORTERS AND EXPORTERS

The words "Manufacturers, Importers and Exporters" are disclaimed apart from the mark shown in the drawing.
For the Following Medicinal and Surgical Appliances and Supplies—Viz, Elastic Stockings, Rubber Gloves, Abdominal Supporters, Trusses, Surgical Bandages, Adhesive Tape, Corn and Bunion Pads, Hospital Cotton, Absorbent Gauze, Athletic Supporters, Suspensory Bandages, Suspensories, Fountain Syringes, Hot Water Bottles, Syringes, Ice Bags, Breast Pumps, Vaginal Douches; Colon, Rectal, and Stomach Tubes; Rubber Tubing (Surgical), Invalid Air Cushions, Rubber Nipples, Teething Bands, Sanitary Swabs, Nursing Bottles, Surgical Sponges, Seamless and Seamed Leggings for Varicose veins, Elastic Bandages, Arch Supports, Ankle and Foot Braces, Shoulder Braces, Catheters, Crutches, Urinal Bags, Gauze Bandages, Crutch Tips, Crutch Pads (Invalid), Arm Cushions, Invalid Chairs, Invalid Couches and Beds, Clinical Thermometers, Lances, Bed Pans, Surgical Splints, Truss Webbing, Truss Pads, Invalid Cushions, Sanitary Pads, Abdominal Elastic Girdles, Absorbent Cotton, Emergency Kits, Atomizers.
Claims use since November, 1929.

Ser. No. 315,066. THE SCHAAF & GOOD COMPANY, Fremont, Ohio. Filed May 26, 1931.

TRIPLE BEST-FILE FINE ☆

No claim is made to the exclusive use of the words "Triple Fine" and "Best-File" apart from the mark.
For Manicure Files.
Claims use since Mar. 30, 1931.

Ser. No. 318,608. WILLSON PRODUCTS, INC., Reading, Pa. Filed Aug. 31, 1931.

WILLSON FACELETS

For Respirator and Mask Attachments.
Claims use since Aug. 3, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 305,069. CLOVERDALE SPRING COMPANY, Baltimore, Md. Filed Aug. 27, 1930.



For Carbonated, Maltless, Non-Alcoholic Beverages Sold as Soft Drinks.
Claims use since July 1, 1897.

Ser. No. 318,480. JOSEPH DI SANTO, doing business as Di Santo & Company, Duluth, Minn. Filed Aug. 27, 1931.

MAZZINI

The name is that of Guiseppe Mazzini, the Italian patriot and statesman, born in Genoa, Italy on June 22, 1805 and who died in Pisa, Italy, on Mar. 10, 1872.
For Non-Alcoholic, Maltless, Concentrated Syrups—Namely, Grenadine Syrup, Tamarind Syrup, and Orgeat Syrup Used for Making Soft Drinks.
Claims use since Aug. 20, 1931. Owner Reg. 281,558.

Ser. No. 318,511. EUGEN DITTRICH, St. Bonifacius, Minn. Filed Aug. 28, 1931.

BROWN NETTA

For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks and Syrups for Preparing the Same.
Claims use since Aug. 13, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 292,869. SOPHIE C. CUBBISON, Los Angeles, Calif. Filed Nov. 25, 1929.

TOS-KA

For Bakery Goods—Namely, Bread and Toast.
Claims use since Nov. 14, 1929.

Ser. No. 304,179. HIJOS DE CARLOS ALBO, Candas, Arena, Lastres, Coruna, Vigo, Bermeo, and Ribadesella, Spain, and New York, N. Y. Filed Aug. 4, 1930.



No claim is made to the words "Conservas", "Santona", and "Espana" shown in the drawing.
For Preserved, Pickled, Salted, and Canned Fish.
Claims use since 1880.

Ser. No. 305,743. BOHEMIAN DISTRIBUTING CO. LTD., Los Angeles, Calif. Filed Sept. 16, 1930.

ROYAL CREST

For Malt Syrup for Food Purposes.
Claims use since June 1, 1930.

Ser. No. 306,232. JOHN CHERNUS, doing business as Chernus Fruit Co., Los Angeles, Calif. Filed Sept. 30, 1930.

DESERT SANDS

For Fresh Citrus Fruit.
Claims use since July 16, 1930.

Ser. No. 309,439. BENJAMIN MOSKOVITZ, doing business as The Midwest Flour Company, Chicago, Ill. Filed Dec. 29, 1930.



Applicant disclaims all wording except "World's Fair" apart from the mark as shown in the drawing.
For White Milled Flour for Family Trade.
Claims use since Nov. 25, 1930.

Ser. No. 309,486. SUN VITAMIN COMPANY, Oxford, Pa. Filed Dec. 30, 1930.

VI-COD

For Candy Containing Vitamins.
Claims use since Dec. 11, 1930.

Ser. No. 309,487. SUN VITAMIN COMPANY, Oxford, Pa. Filed Dec. 30, 1930.

VIRAY

For Candy Containing Vitamins.
Claims use since Dec. 11, 1930.

Ser. No. 311,324. LEO CRISOFULLI, doing business as Verginella Olive Oil Co., New York, N. Y. Filed Feb. 21, 1931.

VERGINELLA

For Olive Oil.
Claims use since June, 1930.

Ser. No. 312,311. ABRAHAM POUST, doing business as Pilzner Products Co., New York, N. Y. Filed Mar. 19, 1931.

BLUE DIAMOND MALT SYRUP

All words except the words "Blue Diamond" are disclaimed apart from the mark as shown.
For Malt Syrup.
Claims use since Mar. 1, 1921.

Ser. No. 313,416. BEATRICE CREAMERY COMPANY, Chicago, Ill. Filed Apr. 16, 1931. Under 10 year proviso.

HOLLAND



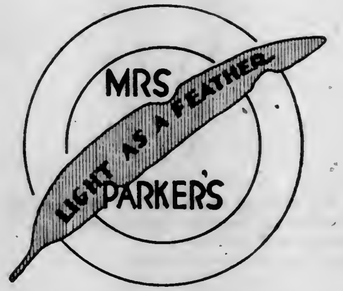
For Butter, Eggs.
Claims use since June 1, 1889.

Ser. No. 315,204. MACONOCHIE BROTHERS, LIMITED, London, England. Filed May 29, 1931.

ORMON

For Jams, Marmalade, and Sugar Confectionery Mixtures in the Nature of Candy.
Claims use since June, 1929, For Confectionery; and since October, 1929, for Jams and Marmalade.

Ser. No. 315,408. MILLIE B. PELHAM, Clinton, Iowa. Filed June 6, 1931.



EVER CRISP

Applicant disclaims the right to the exclusive use of the words "Light as a Feather" and "Ever Crisp" apart from the trade-mark as shown in the drawing. The drawing is lined for red.
For Prepared Flours for Pie Crust and Biscuits.
Claims use since May 22, 1931.

Ser. No. 316,321. DAVID A. DAVIES, Los Angeles, Calif. Filed June 26, 1931.

SEA-O-DINE

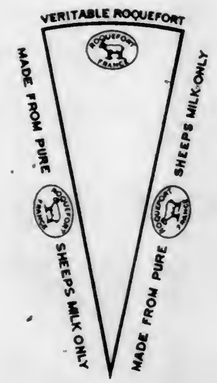
For Organic Mineral Food, or Food Supplement Consisting of a Ground Mixture of Seaweed and Sea Moss and Intended for Human Consumption.
Claims use since Mar. 17, 1931.

Ser. No. 316,812. FERROCARRIL NORD ESTE ARGENTINO, Buenos Aires, Argentina. Filed July 10, 1931.

TUCAN

For Fresh Vegetables—Namely, Lima-Beans, Peas, String Beans, Carrots, Turnips, Squash, Potatoes, Beets, Cabbage, Lettuce, Celery, Spinach, Cauliflower, Cucumbers, Onions, Corn; Fresh Fruits—Namely, Apples, Pears, Plums, Prunes, Strawberries, Grapes, Cherries, Apricots, Peaches, Oranges, Grape-Fruits, Citrons, Mandarins, Limes, Lemons, Figs; Dried Vegetables—Namely, Peas and Beans; Dried Fruits—Namely, Apricots, Apples, Peaches, Pears, Plums.
Claims use since June 22, 1928.

Ser, No. 318,133. BERNARD M. DOUGLAS, New York, N. Y. Filed Aug. 19, 1931.



All the wording appearing on the drawing is hereby disclaimed apart from the mark shown.
For Roquefort Cheese.
Claims use since Aug. 1, 1931.

Ser. No. 318,163. OHIO SUGAR COMPANY, Ottawa, Ohio. Filed Aug. 19, 1931.

SWEETMORE

For Sugar.
Claims use since Aug. 10, 1931.

Ser. No. 318,379. MORRIS L. SCHULMAN, doing business as People's Products Company, Worcester, Mass. Filed Aug. 24, 1931.

ZAMHEIT

For Malt Syrup.
Claims use since June 24, 1931.

Ser. No. 318,408. NEW ENGLAND CONFECTIONERY COMPANY, Cambridge, Mass. Filed Aug. 25, 1931.

Necco

For Chewing Gum.
Claims use since June 30, 1931.

Ser. No. 318,409. OHIO SUGAR COMPANY, Ottawa, Ohio. Filed Aug. 25, 1931.

SNOCANE

For Sugar.
Claims use since Aug. 10, 1931.

Ser. No. 318,482. AMERICAN BAKERIES COMPANY, Atlanta, Ga. Filed Aug. 26, 1931.



For Bread.
Claims use since May 18, 1931.

Ser. No. 318,725. THE STOWELL COFFEE COMPANY, Cincinnati, Ohio. Filed Sept. 3, 1931.



For Package Coffee.
Claims use since Mar. 1, 1931.

Ser. No. 318,953. REYNOLDS & CO., New York, N. Y. Filed Sept. 11, 1931.

REYNOLA

For Cheese.
Claims use since Aug. 15, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 311,516. THE COOLEY FINISHING COMPANY, Pawtucket, R. I. Filed Feb. 27, 1931.



For Waterproof Cotton Duck in the Piece Either Painted or Unpainted for Use as Awning Cloth and Similar Purposes.
Claims use since Jan. 14, 1931.

Ser. No. 316,692. AQUA-SEAL CORPORATION, New York, N. Y. Filed July 7, 1931.

AQUA SEC

For Piece Goods of Cotton, Silk, Wool, Rayon, Velour, Velvet, and Mohair Treated by a Special Process to Render the Same Waterproof and Prevent Water Spots.
Claims use since June 1, 1931.

Ser. No. 317,663. LEORA O. CLARK, doing business as Al-O-Mar Company, Oakland, Calif. Filed Aug. 5, 1931.

AL-O-MAR

For Decorative Articles or Novelties Composed of or Made with Sea Life Products Such as Algæ, Sea Shells, Etc.
Claims use since July 30, 1931.

Ser. No. 318,236. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed Aug. 20, 1931.

CAVALTEX

For Rubberized Fabric—i. e., Fabric Treated with Rubber Coating for Use in Connection with Various Kinds of Merchandise.
Claims use since Apr. 24, 1931.

Ser. No. 318,309. HAARTZ-MASON-GROWER COMPANY, Watertown, Mass. Filed Aug. 22, 1931.

HYDLYK

For Rubberized Fabrics.
Claims use since Aug. 1, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

OCTOBER 20, 1931

287,933. DAIRY FEEDS. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio.
Filed March 16, 1931. Serial No. 312,196. PUBLISHED JULY 21, 1931. Class 46.

287,934. LIMESTONE FOR BUILDING PURPOSES. SHAWNEE STONE COMPANY, Bloomington, Ind.
Filed April 21, 1931. Serial No. 313,612. PUBLISHED AUGUST 4, 1931. Class 1.

287,935. HAND PURSES OR BAGS. BENJAMIN G. ROBERTSON, doing business as Suzanne Bags, Louisville, Ky.
Filed May 7, 1931. Serial No. 314,300. PUBLISHED AUGUST 4, 1931. Class 3.

287,936. SADDLES, BRIDLES, LUGGAGE, BITS, ETC. DE LUXE SADDLERY CO., Baltimore, Md.
Filed May 13, 1931. Serial No. 314,488. PUBLISHED JULY 21, 1931. Class 3.

287,937. LEATHER. EBERLE TANNING COMPANY, Westfield, Pa.
Filed June 1, 1931. Serial No. 315,254. PUBLISHED JULY 28, 1931. Class 1.

287,938. LEATHER. EBERLE TANNING COMPANY, Westfield, Pa.
Filed June 1, 1931. Serial No. 315,255. PUBLISHED JULY 28, 1931. Class 1.

287,939. WHEAT FLOUR. THE ROBINSON MILLING COMPANY, Salina, Kans.
Filed June 1, 1931. Serial No. 315,279. PUBLISHED JULY 14, 1931. Class 46.

287,940. PIES. TASTY BAKING COMPANY, Philadelphia, Pa.
Filed June 3, 1931. Serial No. 315,373. PUBLISHED JULY 21, 1931. Class 46.

287,941. STOCK FEED. R. L. HEFLIN, INC., Sherman, Whitesboro, and Galveston, Tex.
Filed June 5, 1931. Serial No. 315,452. PUBLISHED JULY 14, 1931. Class 46.

287,942. STOCK FEED. R. L. HEFLIN, INC., Sherman, Whitesboro, and Galveston, Tex.
Filed June 5, 1931. Serial No. 315,453. PUBLISHED JULY 14, 1931. Class 46.

287,943. ANIMAL FOODS—NAMELY, DOG FOOD. R E. COTTER COMPANY, San Francisco, Calif.
Filed June 12, 1931. Serial No. 315,732. PUBLISHED JULY 21, 1931. Class 46.

287,944. GLUE. WILLIAM H. GARRETT, doing business as Garrett Manufacturing Company, Houston, Tex.
Filed June 12, 1931. Serial No. 315,771. PUBLISHED JULY 21, 1931. Class 5.

287,945. WHEAT FLOUR. FISHER FLOURING MILLS COMPANY, Seattle, Wash.
Filed June 13, 1931. Serial No. 315,795. PUBLISHED AUGUST 11, 1931. Class 46.

287,946. OLEOMARGARINE. JOHN F. JELKE COMPANY, Chicago, Ill.
Filed June 15, 1931. Serial No. 315,839. PUBLISHED JULY 21, 1931. Class 46.

287,947. LIGHT CREAM. HENRY BECKER & SON, INC., Roseland, N. J.
Filed June 16, 1931. Serial No. 315,890. PUBLISHED AUGUST 4, 1931. Class 46.

287,948. COKE. THE KOPPERS COMPANY, Pittsburgh, Pa.
Filed June 19, 1931. Serial No. 316,039. PUBLISHED AUGUST 4, 1931. Class 1.

287,949. DEHYDRATED ALFALFA LEAF MEAL AND DEHYDRATED ALFALFA MEAL. CALIFORNIA-HAWAIIAN MILLING COMPANY, San Francisco, Calif.
Filed June 22, 1931. Serial No. 316,120. PUBLISHED AUGUST 11, 1931. Class 46.

287,950. CAKES. THE C. M. PITT & SONS CO., Baltimore, Md.
Filed June 23, 1931. Serial No. 316,167. PUBLISHED AUGUST 11, 1931. Class 46.

287,951. WHEAT FLOUR. HUBBARD MILLING COMPANY, Mankato, Minn.
Filed June 30, 1931. Serial No. 316,489. PUBLISHED AUGUST 11, 1931. Class 46.

287,952. SHEARLINGS OR WOOL PELTS. A. C. LAWRENCE LEATHER COMPANY, Peabody, Mass.
Filed July 1, 1931. Serial No. 316,534. PUBLISHED AUGUST 11, 1931. Class 1.

287,953. WHEAT FLOUR AND WHEAT STOCK FEED. COWGILL FLOUR MILLS, INC., Carthage, Mo.
Filed March 19, 1931. Serial No. 312,878. PUBLISHED JULY 14, 1931. Class 46.

287,954. SHOW CASE ADHESIVE CEMENT. SCHEINERT BROS., INC., New York, N. Y.
Filed April 15, 1931. Serial No. 313,390. PUBLISHED JULY 28, 1931. Class 5.

287,955. BOOKS, PAMPHLETS, BULLETINS, AND PERIODIC MAGAZINES. SIGMA ALPHA PHI SORORITY, Meriden, Waterbury, and New Canaan, Conn.; Plainfield, Newark, Paterson, Montclair, and Closter, N. J., and Washington, D. C.
Filed April 30, 1931. Serial No. 314,021. PUBLISHED JULY 21, 1931. Class 38.

287,956. STOCK FOOD. INTERNATIONAL SUGAR FEED NO. TWO COMPANY, Memphis, Tenn.
Filed May 2, 1931. Serial No. 314,114. PUBLISHED JULY 28, 1931. Class 46.

287,957. MAGAZINE. U. S. BOTTLERS MACHINERY CO., Chicago, Ill.
Filed May 1, 1931. Serial No. 314,190. PUBLISHED JULY 21, 1931. Class 38.

287,958. MAGAZINE. J. MCKEEN CATTELL, doing business as The Science Press, New York, N. Y.
Filed May 12, 1931. Serial No. 314,445. PUBLISHED JULY 21, 1931. Class 38.

287,959. COMPLETELY PRINTED LITERATURE SOLD TO THE TRADE AS SUCH—NAMELY, PRINTED BLANKS, BOOKLETS, ETC. THE WASHINGTON PLANOGRAPH COMPANY, INC., Washington, D. C.
Filed May 13, 1931. Serial No. 314,523. PUBLISHED JULY 21, 1931. Class 38.

287,960. CREDIT CIRCULAR OR PAMPHLET PUBLISHED PERIODICALLY. DAILY CREDIT BROADCAST, INC., New York, N. Y.
Filed May 14, 1931. Serial No. 314,555. PUBLISHED JULY 21, 1931. Class 38.

287,961. COOKIES. AMBROSE M. DORTCH, Spokane, Wash.
Filed May 18, 1931. Serial No. 314,687. PUBLISHED JULY 28, 1931. Class 46.

287,962. PERIODICAL. THE CHEF AND STEWARD CO., Chicago, Ill.
Filed May 29, 1931. Serial No. 315,192. PUBLISHED JULY 21, 1931. Class 38.

287,963. PERIODICAL. THE SOCIAL SCIENCE PUBLISHING COMPANY, INC., Winfield, Kans.
Filed May 29, 1931. Serial No. 315,213. PUBLISHED JULY 21, 1931. Class 38.

287,964. CAKE. H. C. BRILL COMPANY, INC., Newark, N. J.
Filed June 1, 1931. Serial No. 315,243. PUBLISHED JULY 28, 1931. Class 46.

287,965. WHEAT FLOUR. THE ROBINSON MILLING COMPANY, Salina, Kans.
Filed June 1, 1931. Serial No. 315,278. PUBLISHED JULY 28, 1931. Class 46.

287,966. COLUMNS OR SECTIONS OF DAILY NEWSPAPERS. CRAWFORD J. KAMES, Philadelphia, Pa.
Filed June 5, 1931. Serial No. 315,459. PUBLISHED JULY 21, 1931. Class 38.

287,967. CUP CAKES, COOKIES, AND PASTRIES. S. GUMPERT CO. INC., Brooklyn, N. Y.
Filed June 9, 1931. Serial No. 315,615. PUBLISHED JULY 28, 1931. Class 46.

287,968. MONTHLY MAGAZINE. PHYSICAL CULTURE PUBLISHING CORPORATION, New York, N. Y.
Filed June 10, 1931. Serial No. 315,645. PUBLISHED JULY 21, 1931. Class 38.

287,969. MONTHLY MAGAZINE. MACFADDEN PUBLICATIONS, INC., New York, N. Y.
Filed June 12, 1931. Serial No. 315,753. PUBLISHED JULY 21, 1931. Class 38.

287,970. ALFALFA LEAF MEAL, CONCENTRATED ALFALFA MEAL, STRAIGHT ALFALFA MEAL, AND ALFALFA STEM MEAL FOR USE AS LIVE STOCK AND POULTRY FEEDS. WARD MOORING, Bryan, Tex.
Filed June 15, 1931. Serial No. 315,864. PUBLISHED JULY 28, 1931. Class 46.

287,971. GLUES. THE DOOLEY MANUFACTURING CO., INC., Piltmont, N. Y.
Filed June 22, 1931. Serial No. 316,122. PUBLISHED JULY 28, 1931. Class 5.

287,972. PERIODICAL ISSUED FROM TIME TO TIME. THE CLEVELAND TRACTOR COMPANY, Cleveland, Ohio.
Filed June 20, 1931. Serial No. 316,141. PUBLISHED AUGUST 4, 1931. Class 38.

287,973. IMITATION STRAW AND IMITATION HORSEHAIR MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed June 25, 1931. Serial No. 316,253. PUBLISHED AUGUST 4, 1931. Class 1.

287,974. EGGS. PACIFIC EGG PRODUCERS COOPERATIVE, INC., New York, N. Y.
Filed March 17, 1931. Serial No. 312,247. PUBLISHED JULY 28, 1931. Class 46.

287,975. CREAMERY BUTTER. LAND O'LAKES CREAMERIES, INC., Minneapolis, Minn.
Filed April 18, 1931. Serial No. 313,579. PUBLISHED JULY 14, 1931. Class 46.

287,976. BABY CHICK STARTER MASH, GROWING MASH, LAYING MASH, ETC. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo.
Filed April 28, 1931. Serial No. 313,926. PUBLISHED JULY 28, 1931. Class 46.

287,977. BABY CHICK STARTER MASH, GROWING MASH, LAYING MASH, ETC. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo.
Filed April 28, 1931. Serial No. 313,928. PUBLISHED JULY 28, 1931. Class 46.

287,978. BABY CHICK STARTER MASH, GROWING MASH, LAYING MASH, ETC. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo.
Filed April 28, 1931. Serial No. 313,929. PUBLISHED JULY 28, 1931. Class 46.

287,979. BABY CHICK STARTER MASH, GROWING MASH, LAYING MASH, ETC. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo.
Filed April 28, 1931. Serial No. 313,931. PUBLISHED JULY 28, 1931. Class 46.

287,980. STOCK FOOD. INTERNATIONAL SUGAR FEED NO. TWO COMPANY, Memphis, Tenn.
Filed May 2, 1931. Serial No. 314,113. PUBLISHED JULY 28, 1931. Class 46.

287,981. TOASTED ROLLS. MARYAN J. HUBERT, doing business as Hubert's Baking Co., Maspeth, N. Y.
Filed May 9, 1931. Serial No. 314,366. PUBLISHED JULY 21, 1931. Class 46.

287,982. MILK AND CREAM. HENRY BECKER & SON, INC., Roseland, N. J.
Filed May 19, 1931. Serial No. 314,745. PUBLISHED JULY 14, 1931. Class 46.

287,983. ARTIFICIAL HORSEHAIR AND ARTIFICIAL STRAW MADE OF CELLULOSE. ALGEMEENE KUNSTZIJDE UNIE N. V., Arnhem, Netherlands.
Filed May 22, 1931. Serial No. 314,889. PUBLISHED AUGUST 4, 1931. Class 1.

287,984. MILK AND CREAM. HENRY BECKER & SON, INC., Roseland, N. J.
Filed May 19, 1931. Serial No. 314,747. PUBLISHED JULY 14, 1931. Class 46.

287,985. BREAD, COOKIES, AND CRACKERS, PIES, CAKES, AND PASTRIES. DAVIDSON BISCUIT COMPANY, Mount Vernon, Ill.
Filed May 27, 1931. Serial No. 315,089. PUBLISHED JULY 21, 1931. Class 46.

287,986. HANDBAGS, PURSES, POCKETBOOKS, AND THE LIKE. MICHEL, MAKSIK & FELDMAN, INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,207. PUBLISHED JULY 14, 1931. Class 3.

287,987. COAL. HENRY B. PRUSER, INCORPORATED, Mount Vernon, N. Y.
Filed June 4, 1931. Serial No. 315,417. PUBLISHED JULY 14, 1931. Class 1.

287,988. CARVING OR SCULPTURING MATERIAL OF WAX COMPOSITION. MILTON BRADLEY COMPANY, Springfield, Mass.
Filed June 8, 1931. Serial No. 315,523. PUBLISHED JULY 14, 1931. Class 1.

287,989. CHEESE. SOCIETE ANONYME DES CAVES & DES PRODUCTEURS REUNIS DE ROQUEFORT, Roquefort, France.
Filed June 16, 1931. Serial No. 315,936. PUBLISHED JULY 28, 1931. Class 46.

287,990. BREAD. CAPITAL CITY BAKING CO., Harrisburg, Pa.
Filed June 18, 1931. Serial No. 315,988. PUBLISHED JULY 28, 1931. Class 46.

287,991. CHEESE. REYNOLDS & CO., New York, N. Y.
Filed June 30, 1931. Serial No. 316,506. PUBLISHED AUGUST 11, 1931. Class 46.

287,992. BILLFOLDS. THE SPRINGFIELD LEATHER PRODUCTS COMPANY, Springfield, Ohio.
Filed January 10, 1931. Serial No. 309,827. PUBLISHED JULY 21, 1931. Class 3.

287,993. GOLF BALLS. J. CLOYD HARLACKER, Cranston, R. I.
Filed May 28, 1931. Serial No. 315,140. PUBLISHED AUGUST 11, 1931. Class 22.

287,994. GOLF BALLS. ST. MUNGO MANUFACTURING COMPANY OF AMERICA, Newark, N. J.
Filed January 20, 1931. Serial No. 310,190. PUBLISHED AUGUST 4, 1931. Class 22.

287,995. NON-ALCOHOLIC, CEREAL, MALT BEVERAGE CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL, BY VOLUME. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y.
Filed February 7, 1931. Serial No. 310,838. PUBLISHED AUGUST 4, 1931. Class 48.

287,996. DEVICE SIMULATING AN AIRPLANE BUT NOT HAVING EITHER VERTICAL OR FORWARD MOVEMENT AND SOLD PRINCIPALLY TO AMUSEMENT PARKS OR FOR AMUSEMENT PURPOSES. GREAT LAKES AIRCRAFT CORPORATION, Cleveland, Ohio.
Filed February 28, 1931. Serial No. 311,571. PUBLISHED AUGUST 4, 1931. Class 22.

287,997. GRAIN ALCOHOL. LOS ANGELES BREWING CO., Los Angeles, Calif.
Filed March 4, 1931. Serial No. 311,742. PUBLISHED AUGUST 4, 1931. Class 49.

287,998. GOLF CLUBS AND BALLS. ROYAL MANUFACTURING COMPANY, Toledo, Ohio.
Filed March 28, 1931. Serial No. 312,669. PUBLISHED AUGUST 4, 1931. Class 22.

287,999. AMUSEMENT GAME—NAMELY, A TABLE BOARD GOLF OR BACKGAMMON GAME PLAYED WITH DICE, INDICIA, OR CARDS. CLYDE B. ROBINETTE, Cleveland, Ohio.
Filed March 31, 1931. Serial No. 312,785. PUBLISHED AUGUST 11, 1931. Class 22.

288,000. ROPE. WHITLOCK CORDAGE CO., New York, N. Y.
Filed May 22, 1931. Serial No. 314,937. PUBLISHED AUGUST 11, 1931. Class 7.

288,001. WIRE CABLES, WIRE CORD, WIRE ROPE, WIRE FOR MAKING CABLES, ALL SAID GOODS BEING NON-ELECTRIC. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed May 29, 1931. Serial No. 315,218. PUBLISHED AUGUST 11, 1931. Class 7.

288,002. WATER FILTERS. REVELATION WATER PURIFIER COMPANY, LTD., Glendale, Calif.
Filed June 2, 1931. Serial No. 315,327. PUBLISHED AUGUST 4, 1931. Class 31.

288,003. STEEL AND IRON STRANDS FOR CABLE AND ROPE. PAGE STEEL AND WIRE COMPANY, Adrian, Mich., and Bridgeport, Conn.
Filed June 8, 1931. Serial No. 315,553. PUBLISHED AUGUST 11, 1931. Class 7.

288,004. SYRUP FILTERS AND REFRIGERATOR CABINETS FOR DOMESTIC AND COMMERCIAL USE. CRYSTAL REFRIGERATOR CO., Fremont, Nebr.
Filed June 12, 1931. Serial No. 315,733. PUBLISHED AUGUST 4, 1931. Class 31.

288,005. PISTOLS. I. OPPLEMAN, doing business as L. Oppleman, New York, N. Y.
Filed June 16, 1931. Serial No. 315,920. PUBLISHED AUGUST 4, 1931. Class 9.

288,006. PISTOLS. I. OPPLEMAN, doing business as L. Oppleman, New York, N. Y.
Filed June 16, 1931. Serial No. 315,921. PUBLISHED AUGUST 4, 1931. Class 9.

288,007. MINNOW BUCKETS. EDWIN W. TARBOX, Findlay, Ohio.
Filed June 19, 1931. Serial No. 316,059. PUBLISHED AUGUST 11, 1931. Class 22.

288,008. MALT BEVERAGES, CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL BY VOLUME. DAVID SILNUTZER, doing business as Bavarian Liquid Malt Company, Philadelphia, Pa.
Filed June 22, 1931. Serial No. 316,136. PUBLISHED AUGUST 11, 1931. Class 48.

288,009. MINIATURE THEATRES, FIGURES THEREFOR, AND MATERIALS FOR COLORING THE SAME. THE GEM CLAY FORMING COMPANY, Sebring, Ohio.
Filed June 23, 1931. Serial No. 316,154. PUBLISHED AUGUST 11, 1931. Class 22.

288,010. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed June 30, 1931. Serial No. 316,514. PUBLISHED AUGUST 11, 1931. Class 9.

288,011. GOLF BALLS, GOLF CLUBS, GOLF BAGS, TENNIS RACKETS. JULIUS SCHOENBERG, New York, N. Y.
Filed July 6, 1931. Serial No. 316,664. PUBLISHED AUGUST 11, 1931. Class 22.

288,012. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGE SOLD AS A SOFT DRINK, SIRUP AND EXTRACT FOR MAKING THE SAME. ROBERT ARNOLD REID, doing business as Ankle Deep Products Company of America, David City, Nebr.
Filed July 6, 1931. Serial No. 316,663. PUBLISHED AUGUST 11, 1931. Class 45.

288,013. LEAD PENCILS AND PEN HOLDERS. AMERICAN LEAD PENCIL COMPANY, New York, N. Y.
Filed June 29, 1931. Serial No. 316,399. PUBLISHED AUGUST 11, 1931. Class 37.

288,014. SCRAP BOOKS. COURTNEY CAMPBELL, doing business as The Educational Press, New York, N. Y.
Filed June 26, 1931. Serial No. 316,317. PUBLISHED AUGUST 11, 1931. Class 37.

288,015. PRINTING PAPER. THE MEAD CORPORATION, Dayton, Ohio.
Filed June 25, 1931. Serial No. 316,277. PUBLISHED AUGUST 11, 1931. Class 37.

288,016. PUBLICATIONS RELATING TO TRAVEL ISSUED AT IRREGULAR INTERVALS. THE TRAVEL GUILD, INC., Chicago, Ill.
Filed June 24, 1931. Serial No. 316,227. PUBLISHED AUGUST 11, 1931. Class 38.

288,017. PUBLICATION IN MAGAZINE FORM. GRIGSBY-GRUNOW COMPANY, Chicago, Ill.
Filed June 24, 1931. Serial No. 316,202. PUBLISHED AUGUST 4, 1931. Class 38.

288,018. WALL PAPER. PAUL FULTON, Burlington, Iowa, assignor, by mesne assignments to R. S. Blakeslee.
Filed June 20, 1931. Serial No. 316,090. PUBLISHED AUGUST 11, 1931. Class 37.

288,019. NEWSPAPER CARTOONS. HUTTER & MAXWELL, East Palestine, Ohio.
Filed June 16, 1931. Serial No. 315,911. PUBLISHED AUGUST 4, 1931. Class 38.

288,020. PUBLICATIONS RELATING TO TRAVEL ISSUED AT IRREGULAR INTERVALS. THE TRAVEL GUILD, INC., Chicago, Ill.
Filed June 15, 1931. Serial No. 315,882. PUBLISHED AUGUST 4, 1931. Class 38.

288,021. WRITING TABLETS. EMPIRE LITHOGRAPHING CO. INC., New York, N. Y.
Filed June 15, 1931. Serial No. 315,834. PUBLISHED AUGUST 11, 1931. Class 37.

288,022. GREETING CARDS AND ANNOUNCEMENTS. KELLER-DORIAN PAPER CO., INC., New York, N. Y.
Filed June 10, 1931. Serial No. 315,640. PUBLISHED JULY 21, 1931. Class 38.

288,023. PUBLICATION PUBLISHED EVERY TWO MONTHS. THE CONDE NAST PUBLICATIONS, INC., New York, N. Y.
Filed June 9, 1931. Serial No. 315,592. PUBLISHED AUGUST 4, 1931. Class 38.

288,024. MANIFOLDING ASSEMBLIES COMPRISING SEPARABLE ALTERNATING SHEETS OF RECORD AND CARBON MATERIAL IN ZIGZAG FOLDED PACKET OR ROLL FORM. THE STANDARD REGISTER COMPANY, Dayton, Ohio.
Filed June 5, 1931. Serial No. 315,581. PUBLISHED AUGUST 11, 1931. Class 37.

288,025. A NEWSPAPER PUBLISHED EVERY EVENING EXCEPT SUNDAY. SIGNAL PUBLISHING CORPORATION, Huntington Park, Calif.
Filed June 8, 1931. Serial No. 315,571. PUBLISHED AUGUST 4, 1931. Class 38.

288,026. SCALE TICKETS. CONSOLIDATED AUTOMATIC MERCHANDISING CORPORATION, New York, N. Y.
Filed June 3, 1931. Serial No. 315,344. PUBLISHED AUGUST 4, 1931. Class 38.

288,027. MONTHLY MAGAZINE. CHARLES H. MATSON, doing business as Fisherman's News, New York, N. Y.
Filed June 2, 1931. Serial No. 315,336. PUBLISHED AUGUST 11, 1931. Class 38.

288,028. LITHOGRAPHED AND PRINTED MATTER—NAMELY, BOOKLETS, FOLDERS, AND PRINTS SOLD TO THE TRADE AS SUCH. ROGERS-KELLOGG-STILLSON COMPANY, New York, N. Y.
Filed June 2, 1931. Serial No. 315,382. PUBLISHED AUGUST 11, 1931. Class 38.

288,029. CARTOON STRIPS. HAROLD HALSELL COMPANY, Oklahoma City, Okla.
Filed May 13, 1931. Serial No. 314,501. PUBLISHED JULY 28, 1931. Class 38.

288,030. PERIODICAL. THE EDWARD VALVE AND MANUFACTURING CO., East Chicago, Ind.
Filed April 30, 1931. Serial No. 314,027. PUBLISHED JULY 28, 1931. Class 38.

288,031. PERIODICALS ISSUED SEMI-MONTHLY, MENUS, FOOD CHARTS, ETC. SUN-DIET HEALTH SERVICE, INC., East Aurora, N. Y.
Filed March 25, 1931. Serial No. 312,538. PUBLISHED AUGUST 11, 1931. Class 38.

288,032. BI-MONTHLY MAGAZINE. ADVERTISING AND SELLING PUBLISHING COMPANY, New York, N. Y.
Filed January 16, 1931. Serial No. 310,034. PUBLISHED AUGUST 4, 1931. Class 38.

288,033. PILE FABRICS. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,183. PUBLISHED AUGUST 4, 1931. Class 42.

288,034. PILE FABRICS. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,184. PUBLISHED AUGUST 4, 1931. Class 42.

288,035. TEXTILE BLANKETS. CARSON PIRIE SCOTT & CO., Chicago, Ill.
Filed June 5, 1931. Serial No. 315,441. PUBLISHED AUGUST 11, 1931. Class 42.

288,036. HANDKERCHIEFS. CARSON PIRIE SCOTT & CO., Chicago, Ill.
Filed June 5, 1931. Serial No. 315,442. PUBLISHED AUGUST 11, 1931. Class 42.

288,037. TEXTILE FABRICS—NAMELY, CORDUROYS AND VELVETEENS, ALL IN THE PIECE. HOWLETT & HOCKMEYER CO., INC., New York, N. Y.
Filed June 8, 1931. Serial No. 315,537. PUBLISHED AUGUST 11, 1931. Class 42.

288,038. SILK IN THE PIECE. GENERAL SILK CORPORATION, New York, N. Y.
Filed June 11, 1931. Serial No. 315,682. PUBLISHED AUGUST 11, 1931. Class 42.

288,039. TEXTILE WALL COVERINGS OF ALL KINDS. SALUBRA S. A., Basel, Switzerland.
Filed June 12, 1931. Serial No. 315,762. PUBLISHED AUGUST 4, 1931. Class 42.

288,040. TEXTILE WALL COVERINGS OF ALL KINDS. SALUBRA S. A., Basel, Switzerland.
Filed June 12, 1931. Serial No. 315,760. PUBLISHED AUGUST 4, 1931. Class 42.

288,041. TEXTILE DIAPERS. AMOSKEAG MANUFACTURING COMPANY, Manchester, N. H.
Filed June 19, 1931. Serial No. 316,027. PUBLISHED AUGUST 11, 1931. Class 42.

288,042. PIECE GOODS MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed June 25, 1931. Serial No. 316,251. PUBLISHED AUGUST 4, 1931. Class 42.

288,043. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 25, 1931. Serial No. 316,281. PUBLISHED AUGUST 4, 1931. Class 42.

288,044. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 25, 1931. Serial No. 316,283. PUBLISHED AUGUST 4, 1931. Class 42.

288,045. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 25, 1931. Serial No. 316,284. PUBLISHED AUGUST 4, 1931. Class 42.

288,046. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 25, 1931. Serial No. 316,286. PUBLISHED AUGUST 4, 1931. Class 42.

288,047. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 29, 1931. Serial No. 316,409. PUBLISHED AUGUST 11, 1931. Class 42.

288,048. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 29, 1931. Serial No. 316,410. PUBLISHED AUGUST 11, 1931. Class 42.

288,049. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 29, 1931. Serial No. 316,412. PUBLISHED AUGUST 11, 1931. Class 42.

288,050. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 29, 1931. Serial No. 316,413. PUBLISHED AUGUST 11, 1931. Class 42.

288,051. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 29, 1931. Serial No. 316,414. PUBLISHED AUGUST 11, 1931. Class 42.

288,052. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 29, 1931. Serial No. 316,415. PUBLISHED AUGUST 11, 1931. Class 42.

288,053. MERCHANDISING ENVELOPES AND BAGS OF THE SAME GENERAL CHARACTER AND USED FOR THE SAME GENERAL PURPOSE AS THE ENVELOPES. THE AMERICAN PAPER GOODS COMPANY, Montclair, N. J., and Kensington, Conn.
Filed December 24, 1930. Serial No. 309,298. PUBLISHED AUGUST 4, 1931. Class 2.

288,054. BRAKE SHOES. AMERICAN BRAKE SHOE AND FOUNDRY COMPANY, Wilmington, Del., and New York, N. Y.
Filed January 8, 1931. Serial No. 309,794. PUBLISHED AUGUST 4, 1931. Class 19.

288,055. RUBBISH INCINERATOR. THE MALLEABLE STEEL RANGE MFG. CO., South Bend, Ind.
Filed February 2, 1931. Serial No. 310,708. PUBLISHED AUGUST 11, 1931. Class 34.

288,056. HEATING AND COOLING RADIATORS. THE UNIVERSAL PIPE AND RADIATOR COMPANY, New York, N. Y.
Filed April 23, 1931. Serial No. 313,721. PUBLISHED AUGUST 11, 1931. Class 34.

288,057. DRY HERB FLAVORING PREPARATION FOR SOFT DRINKS. P. G. RUEHLMAN, Cincinnati, Ohio.
Filed May 2, 1931. Serial No. 314,129. PUBLISHED AUGUST 11, 1931. Class 45.

288,058. FURNACES USING FUELS SUCH AS COAL, OIL, GAS, WOOD, COKE AND SUCH MANUFACTURED FUELS AS MAY BE BURNED IN ORDINARY COAL GRATES. LENNOX FURNACE COMPANY, Marshalltown, Iowa.
Filed May 18, 1931. Serial No. 314,700. PUBLISHED AUGUST 11, 1931. Class 34.

288,059. BRACKETS USED IN CONNECTION WITH DISPLAYS FOR SUPPORTING MERCHANDISE. ALBERT A. BRESSLER, New York, N. Y.
Filed May 22, 1931. Serial No. 314,891. PUBLISHED AUGUST 11, 1931. Class 13.

288,060. PILE FABRICS. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,186. PUBLISHED AUGUST 4, 1931. Class 42.

288,061. PILE FABRICS. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,187. PUBLISHED AUGUST 4, 1931. Class 42.

288,062. AUTOMOTIVE VEHICLES—NAMELY, AUTOMOBILES, TRUCKS, ETC. ROCKNE MOTORS CORPORATION, Indianapolis, Ind.
Filed June 2, 1931. Serial No. 315,329. PUBLISHED AUGUST 4, 1931. Class 19.

288,063. AUTOMOTIVE VEHICLES—NAMELY, AUTOMOBILES, TRUCKS, ETC. ROCKNE MOTORS CORPORATION, Indianapolis, Ind.
Filed June 2, 1931. Serial No. 315,330. PUBLISHED AUGUST 4, 1931. Class 19.

288,064. AUTOMOTIVE VEHICLES—NAMELY, AUTOMOBILES, TRUCKS, ETC. ROCKNE MOTORS CORPORATION, Indianapolis, Ind.
Filed June 2, 1931. Serial No. 315,331. PUBLISHED AUGUST 4, 1931. Class 19.

288,065. BOTTLED MINERAL WATER. THE DISTILLATA COMPANY, Cleveland, Ohio.
Filed June 6, 1931. Serial No. 315,489. PUBLISHED AUGUST 4, 1931. Class 45.

288,066. BOTTLED MINERAL WATERS. LEE RICHARDSON, Richardson Springs, Chico, Calif.
Filed June 8, 1931. Serial No. 315,585. PUBLISHED AUGUST 4, 1931. Class 45.

288,067. DEVICES OF FLEXIBLE RECIPROCATING SHAFT TYPE FOR TRANSMITTING POWER FOR OPERATING BRAKES. AMERICAN CABLE COMPANY, INC., New York, N. Y., and Bridgeport, Conn.
Filed June 10, 1931. Serial No. 315,658. PUBLISHED AUGUST 4, 1931. Class 19.

288,068. HOLLOW CAST METAL BODIES—NAMELY, CAST IRON PIPES AND FITTINGS HAVING PLAIN OR FLANGED ENDS, AND WITH OR WITHOUT BELL AND SPIGOT ENDS. AMERICAN CAST IRON PIPE COMPANY, Birmingham, Ala.
Filed June 11, 1931. Serial No. 315,660. PUBLISHED AUGUST 4, 1931. Class 13.

288,069. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. ALBERT B. SPENCER & F. J. SPERNAK, Monongahela, Pa.
Filed June 12, 1931. Serial No. 315,726. PUBLISHED AUGUST 4, 1931. Class 45.

288,070. METAL PIPE FITTINGS. JEFFERSON UNION COMPANY, INC., New York, and Lockport, N. Y., and Lexington, Mass.
Filed June 20, 1931. Serial No. 316,092. PUBLISHED AUGUST 11, 1931. Class 13.

288,071. GAS WATER HEATERS. BASTIAN-MORLEY CO., La Porte, Ind.
Filed June 26, 1931. Serial No. 316,312. PUBLISHED AUGUST 11, 1931. Class 34.

288,072. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, SIRUPS AND EXTRACTS FOR MAKING THE SAME. SAMUEL HOUSTON MCNUTT, Jr., doing business as Golden Pond Ginger Ale Co., Paducah, Ky.
Filed July 6, 1931. Serial No. 316,655. PUBLISHED AUGUST 11, 1931. Class 45.

288,073. TYMPAN PAPER AND BRISTOL BOARD. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y.
Filed June 30, 1931. Serial No. 316,507. PUBLISHED AUGUST 11, 1931. Class 37.

288,074. MEMORANDUM BOOKLETS FOR SALESMEN. HENRY L. CARSCADIN, doing business as The John Henry Co., Chicago, Ill.
Filed June 26, 1931. Serial No. 316,318. PUBLISHED AUGUST 11, 1931. Class 37.

288,075. BOOK PAPER, COVER PAPER, DOCUMENT PAPER, CARDBOARD, ETC. BUTLER PAPER CORPORATIONS, Chicago, Ill.
Filed June 25, 1931. Serial No. 316,256. PUBLISHED AUGUST 11, 1931. Class 37.

288,076. WRITING AND PRINTING PAPER AND MAILING ENVELOPES. SPRINGFIELD PHOTO MOUNT COMPANY, Springfield, Mass.
Filed June 17, 1931. Serial No. 316,071. PUBLISHED AUGUST 11, 1931. Class 37.

288,077. DECALCOMANIA PAPER. MCLAURIN-JONES CO., Brookfield, Mass.
Filed June 19, 1931. Serial No. 316,045. PUBLISHED JULY 28, 1931. Class 37.

288,078. LOOSE LEAF BINDERS AND BLANK BOOKS. S. E. & M. VERNON, INC., New York, N. Y.
Filed June 16, 1931. Serial No. 315,948. PUBLISHED JULY 28, 1931. Class 37.

288,079. PENCILS AND FOUNTAIN PENS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed June 15, 1931. Serial No. 315,875. PUBLISHED JULY 28, 1931. Class 37.

288,080. PHOTOGRAPHIC PRINTS. M. S. M. DEVELOPING AND PRINTING CO., Clifton, N. J.
Filed June 15, 1931. Serial No. 215,853. PUBLISHED JULY 21, 1931. Class 38.

288,081. PHOTOGRAPHIC PRINTS. M. S. M. DEVELOPING AND PRINTING CO., Clifton, N. J.
Filed June 15, 1931. Serial No. 315,852. PUBLISHED JULY 21, 1931. Class 38.

288,082. PUBLICATION IN MAGAZINE FORM. GRIGSBY-GRUNOW COMPANY, Chicago, Ill.
Filed June 15, 1931. Serial No. 315,836. PUBLISHED JULY 21, 1931. Class 38.

288,083. AIRBRUSH FINISHED BOOK COVERS. KINGSPORT PRESS, INC., Kingsport, Tenn.
Filed June 9, 1931. Serial No. 315,599. PUBLISHED JULY 28, 1931. Class 37.

288,084. ACCOUNTING FORMS SOLD TO THE TRADE AS SUCH. ROBERT D. PORTER, San Francisco, Calif.
Filed May 27, 1931. Serial No. 315,110. PUBLISHED AUGUST 4, 1931. Class 37.

288,085. SETS OF CRAYONS. THE ULLMAN MANUFACTURING COMPANY, Brooklyn, N. Y.
Filed May 23, 1931. Serial No. 314,971. PUBLISHED JULY 28, 1931. Class 37.

288,086. PENHOLDERS. THE A. N. PALMER COMPANY, New York, N. Y.
Filed May 18, 1931. Serial No. 314,713. PUBLISHED JULY 28, 1931. Class 37.

288,087. WAXED AND PARAFFINED PAPER BREAD WRAPPERS. CENTRAL WAXED PAPER COMPANY, Chicago, Ill.
Filed May 18, 1931. Serial No. 314,683. PUBLISHED JULY 21, 1931. Class 37.

288,088. CANARY BIRDS. ARTHUR MARROS, New York, N. Y.
Filed May 15, 1931. Serial No. 314,624. PUBLISHED JULY 28, 1931. Class 1.

288,089. CARDBOARD EASELS. ROGERS PRINTING COMPANY, Baltimore, Md.
Filed May 5, 1931. Serial No. 314,210. PUBLISHED AUGUST 4, 1931. Class 37.

288,090. BLACK LEAD PENCILS; COLORED, COPYING, AND INDELIBLE PENCILS. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,626. PUBLISHED JULY 21, 1931. Class 37.

288,091. BOND PAPER. CROWN CARD AND PAPER COMPANY, New York, N. Y.
Filed April 20, 1931. Serial No. 313,535. PUBLISHED AUGUST 4, 1931. Class 37.

288,092. PRINTED FORMS, TYPEWRITER PAPER, AND STENOGRAPHER'S NOTE BOOKS. ASSOCIATED STATIONERS SUPPLY COMPANY, Chicago, Ill.
Filed March 12, 1931. Serial No. 312,037. PUBLISHED JULY 21, 1931. Class 37.

288,093. GENERAL HOUSEHOLD AND INDUSTRIAL CLEANSING COMPOUNDS. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y.
Filed May 23, 1931. Serial No. 314,968. PUBLISHED AUGUST 4, 1931. Class 4.

288,094. CLEANSING AND SCOURING COMPOUND. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y.
Filed May 23, 1931. Serial No. 314,969. PUBLISHED AUGUST 4, 1931. Class 4.

288,095. ELECTRON RADIO TUBES. HYGRADE LAMP COMPANY, Boston, Mass.
Filed May 28, 1931. Serial No. 315,144. PUBLISHED JULY 28, 1931. Class 21.

288,096. LUBRICANTS COMPRISING MIXTURES OR COMPOUNDS CONSISTING OF OR CONTAINING CASTOROIL AND COLLOIDAL GRAPHITE. ACHESON OILDAG COMPANY, Port Huron, Mich.
Filed May 29, 1931. Serial No. 315,174. PUBLISHED JULY 28, 1931. Class 15.

288,097. STERLING SILVER FLATWARE AND STERLING SILVER HOLLOWARE. THE WATSON CO., Attleboro, Mass.
Filed May 29, 1931. Serial No. 315,226. PUBLISHED JULY 28, 1931. Class 28.

288,098. METAL POLISH. GUERIN & LORIMER, New York, N. Y.
Filed June 4, 1931. Serial No. 315,395. PUBLISHED JULY 28, 1931. Class 4.

288,099. LUBRICATING OILS AND GREASES. TIDE WATER OIL COMPANY, Bayonne, N. J., and New York, N. Y.
Filed June 6, 1931. Serial No. 315,507. PUBLISHED JULY 28, 1931. Class 15.

288,100. SOAP. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed June 8, 1931. Serial No. 315,539. PUBLISHED JULY 28, 1931. Class 4.

288,101. STEEL AND IRON MAGNET CORE WIRE. PAGE STEEL AND WIRE COMPANY, Adrian, Mich., and Bridgeport, Conn.
Filed June 8, 1931. Serial No. 315,554. PUBLISHED JULY 28, 1931. Class 21.

288,102. SOAP. GORDON-ALLEN LTD., Oakland, Calif.
Filed June 9, 1931. Serial No. 315,595. PUBLISHED JULY 28, 1931. Class 4.

288,103. RADIO RECEIVING SETS. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass.
Filed June 10, 1931. Serial No. 315,652. PUBLISHED JULY 28, 1931. Class 21.

288,104. TABLE SILVER-WARE—NAMELY, HOLLOW-WARE AND FLAT-WARE. WEIDLICH STERLING SPOON CO., Bridgeport, Conn.
Filed June 10, 1931. Serial No. 315,663. PUBLISHED JULY 28, 1931. Class 28.

288,105. SHAVING CREAM. VIVINY PERFUMERS, INC., West Haven, Conn.
Filed June 10, 1931. Serial No. 315,662. PUBLISHED JULY 28, 1931. Class 4.

288,106. JEWELRY AND COSTUME JEWELRY—NAMELY, NOVELTY BEADS, PENDANTS, NECKLACES, BRACELETS, BROOCHES, PINS, EARRINGS, FINGER RINGS, MADE OF PRECIOUS, SEMI-PRECIOUS, AND ARTIFICIAL STONES, GLASS, METAL, OR COMPOSITION MATERIAL AND/OR COMBINATIONS OF THE SAME. BEN FELSENTHAL & CO., INC., New York, N. Y.
Filed June 11, 1931. Serial No. 315,679. PUBLISHED JULY 28, 1931. Class 28.

288,107. BRISTOL PAPER. WATERFALLS PAPER MILLS, New York, N. Y.
Filed June 11, 1931. Serial No. 315,711. PUBLISHED AUGUST 11, 1931. Class 37.

288,108. SHAVING CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed June 12, 1931. Serial No. 315,731. PUBLISHED JULY 28, 1931. Class 4.

288,109. NEWSPAPER FEATURE ARTICLES. THE BROOKLYN DAILY TIMES, Brooklyn, N. Y.
Filed May 28, 1931. Serial No. 315,167. PUBLISHED AUGUST 4, 1931. Class 38.

288,110. DETERGENT CLEANING COMPOUNDS. CHAMPION & BARBER, INC., doing business as Cee-Bee Products, Los Angeles, Calif.
Filed June 12, 1931. Serial No. 315,728. PUBLISHED AUGUST 11, 1931. Class 4.

288,111. CHEMICAL CLEANING PREPARATION IN POWDERED FORM. OLIVER A. SWANSON, doing business as New England Chemical Associates, New York, N. Y.
Filed June 10, 1931. Serial No. 315,945. PUBLISHED AUGUST 11, 1931. Class 4.

288,112. FELT HAT CLEANING POWDER. HAT-NU CORPORATION, Washington, D. C.
Filed June 30, 1931. Serial No. 316,486. PUBLISHED AUGUST 11, 1931. Class 4.

288,113. WORK CLOTHES—NAMELY, SERVICE COATS, OVERALLS, JUMPERS, WORK PANTS. DOUBLE EAGLE GARMENT CO., Waco, Tex.
Filed June 4, 1929. Serial No. 285,020. PUBLISHED AUGUST 11, 1931. Class 39.

288,114. METALLIC SUBSTANCE HAVING OLIGODYNAMIC ACTIVITY USED AS A STERILIZING AND WATER PURIFYING MASS IN FILTERS OR WATER COOLERS. OLIGODYN A.-G., Zug, Switzerland.
Filed June 10, 1929. Serial No. 285,371. PUBLISHED AUGUST 4, 1931. Class 31.

288,115. METALLIC SUBSTANCE HAVING OLIGODYNAMIC ACTIVITY USED AS A STERILIZING AND WATER PURIFYING MASS IN FILTERS OR WATER COOLERS. OLIGODYN A.-G., Zug, Switzerland.
Filed June 10, 1929. Serial No. 285,374. PUBLISHED AUGUST 4, 1931. Class 31.

288,116. CRACKERS. D. LAZZARONI & C., Saronno, Italy.
Filed June 22, 1929. Serial No. 285,978. PUBLISHED JULY 21, 1931. Class 46.

288,117. TOILET PAPER, PAPER NAPKINS, WRAPPING PAPER, AND WAX PAPER. THE GROCERS & PRODUCERS CO., Cleveland, Ohio.
Filed July 8, 1929. Serial No. 286,762. PUBLISHED MARCH 10, 1931. Class 37.

288,118. MEN'S CLOTHING—NAMELY, OVERCOATS, TOPCOATS, AND SUITS. EAGLE CLOTHES, New York, N. Y.
Filed July 18, 1929. Serial No. 287,287. PUBLISHED JANUARY 13, 1931. Class 39.

288,119. PORTLAND AND HYDRAULIC CEMENT. BLUE DIAMOND CEMENT CO., Los Angeles, Calif., assignor to Blue Diamond Corporation, Ltd., a Corporation of California.
Filed September 9, 1929. Serial No. 289,497. PUBLISHED DECEMBER 17, 1929. Class 12.

288,120. REINFORCED PAPER FOR WRAPPING HEAVY ARTICLES, SUCH AS MACHINERY AND THE LIKE. MOSINEE PAPER MILLS COMPANY, Mosinee, Wis.
Filed September 26, 1929. Serial No. 290,269. PUBLISHED NOVEMBER 4, 1930. Class 37.

288,121. PNEUMATIC AND CUSHION TIRES CONSTRUCTED WHOLLY OR PARTLY OF RUBBER FOR USE ON MOTOR CARS, MOTOR TRUCKS, MOTOR CYCLES, BICYCLES, LIGHTER-THAN-AIR CRAFT AND HEAVIER-THAN-AIR CRAFT OF ALL TYPES AND DESCRIPTION, TREADS, TIRE SHOES AND INNER TUBES THEREFOR, RUBBER NON-SKID DEVICES FOR SAID TIRES, INSIDE TIRE PROTECTORS, OUTSIDE TIRE PROTECTORS, PORTABLE TIRE AND TUBE REPAIR OUTFITS, AND REPAIR PATCHES AND BANDAGES THEREFOR. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed December 6, 1929. Serial No. 293,320. PUBLISHED AUGUST 11, 1931. Class 35.

288,122. EVAPORATED MILK. JOHN F. JELKE COMPANY, Hillsboro, Wis.
Filed January 27, 1930. Serial No. 295,260. PUBLISHED APRIL 15, 1930. Class 46.

288,123. WHISKEY. THE GEO. T. STAGG CO., Frankfort, Ky., assignor to Old Quaker Company, New York, N. Y., a Corporation of Maryland.
Filed March 3, 1930. Serial No. 296,781. PUBLISHED AUGUST 11, 1931. Class 49.

288,124. PREPARED POULTRY FEEDS. GOLDEN EAGLE MILLING CO., Petaluma, Calif.
Filed March 12, 1930. Serial No. 297,188. PUBLISHED JULY 21, 1931. Class 46.

288,125. PLASTIC COATING. CLARENCE R. REX, doing business as Great Lakes Industrial Laboratories, Toledo, Ohio.
Filed March 24, 1930. Serial No. 297,821. PUBLISHED AUGUST 4, 1931. Class 12.

288,126. TOOLS, PARTS, REPLACEMENTS, AND ACCESSORIES. MADISON-KIPP CORPORATION, Madison, Wis.
Filed April 15, 1930. Serial No. 298,900. PUBLISHED AUGUST 4, 1931. Class 23.

288,127. OPERA GLASSES, READING AND MAGNIFYING GLASSES. E. B. MEYROWITZ, INC., New York, N. Y.
Filed April 19, 1930. Serial No. 299,145. PUBLISHED AUGUST 4, 1931. Class 26.

288,128. LINING PAPER. PAPER SPECIALTY COMPANY, Wausau, Wis.
Filed April 28, 1930. Serial No. 299,591. PUBLISHED AUGUST 4, 1931. Class 37.

288,129. MAGAZINES. CHURCH OF THE HEAVENLY REST, New York, N. Y.
Filed April 30, 1930. Serial No. 299,682. PUBLISHED AUGUST 4, 1931. Class 38.

288,130. CANNED VEGETABLES AND CATSUP. PHILLIPS SALES COMPANY, INC., Cambridge, Md.
Filed May 1, 1930. Serial No. 299,795. PUBLISHED JULY 21, 1931. Class 46.

288,131. ORNAMENTAL METAL MOLDING, FITTINGS FOR CONNECTING ADJACENT MOLDING MEMBERS, AND RETICULATED SHEET MATERIAL, SUCH AS INTER-WOVEN WIRE MESH, PERFORATED OR CAST METAL PLATES, ETC., FOR USE AS GRILLE PANELS AND SIMILAR PURPOSES. HARRINGTON & KING PERFORATING COMPANY, Chicago, Ill.
Filed May 19, 1930. Serial No. 300,794. PUBLISHED AUGUST 4, 1931. Class 12.

288,132. BAKERY PRODUCTS COMMONLY DESIGNATED AS CAKES. CHICAGO CREAM FRIED CAKE COMPANY, Chicago, Ill.
Filed May 12, 1930. Serial No. 300,334. PUBLISHED AUGUST 4, 1931. Class 46.

288,133. CHOCOLATE BARS. SIREN MILLS CORPORATION, Chicago, Ill.
Filed June 15, 1931. Serial No. 315,862. PUBLISHED AUGUST 4, 1931. Class 46.

288,134. FRESH CITRUS FRUITS. CLARENCE BESSING, Los Angeles, Calif.
Filed June 16, 1931. Serial No. 315,893. PUBLISHED AUGUST 4, 1931. Class 46.

288,135. CANNED CLAMS, CANNED CLAM NECTAR, BOTTLED CLAM NECTAR. F. A. BUGGE, doing business as Bangor Packing Company, Bangor, Wash.
Filed June 16, 1931. Serial No. 315,894. PUBLISHED AUGUST 4, 1931. Class 46.

288,136. FRESH CITRUS FRUITS. EXETER CITRUS ASSOCIATION, Exeter, Calif.
Filed June 16, 1931. Serial No. 315,905. PUBLISHED AUGUST 11, 1931. Class 46.

288,137. CHEWING GUM. AMERICAN CHICLE COMPANY, Long Island City, N. Y.
Filed June 24, 1931. Serial No. 316,181. PUBLISHED AUGUST 11, 1931. Class 46.

288,138. CANDY. NEW ENGLAND CONFECTIONERY COMPANY, Cambridge, Mass.
Filed June 15, 1931. Serial No. 315,808. PUBLISHED AUGUST 4, 1931. Class 46.

288,139. CANNED FRUITS. SUSSMAN, WORMSER & COMPANY, San Francisco, Calif.
Filed June 16, 1931. Serial No. 315,943. PUBLISHED AUGUST 4, 1931. Class 46.

288,140. FRESH VEGETABLES. THOS. G. CHUNG CO., Chualar, Calif.
Filed June 23, 1931. Serial No. 316,148. PUBLISHED AUGUST 11, 1931. Class 46.

288,141. FRESH GRAPES. DOUGHERTY GRAPE GROWERS ASSOCIATION, Acampo, Calif.
Filed June 29, 1931. Serial No. 316,424. PUBLISHED AUGUST 11, 1931. Class 46.

288,142. CANNED FRUIT. REX B. CLARK, Norco, Calif.
Filed July 1, 1931. Serial No. 316,529. PUBLISHED AUGUST 11, 1931. Class 46.

288,143. FRESH DECIDUOUS FRUITS—NAMELY, PEARS, DENNIS W. LEARY, Walnut Grove, Calif.
Filed July 3, 1931. Serial No. 316,601. PUBLISHED AUGUST 11, 1931. Class 46.

288,144. LUBRICATING OILS AND LUBRICATING GREASES. GALENA OIL CORPORATION, Franklin, Pa.
Filed December 23, 1930. Serial No. 309,268. PUBLISHED MARCH 17, 1931. Class 15.

288,145. CLEANSING TISSUES FORMED OF PAPER. VELDOWN COMPANY, INC., New York, N. Y.
Filed January 15, 1931. Serial No. 309,999. PUBLISHED JUNE 23, 1931. Class 37.

288,146. TOILET SOAPS. PARFUMERIE ROGER ET GALLET, SOCIÉTÉ ANONYME, Paris, France.
Filed April 30, 1931. Serial No. 314,011. PUBLISHED AUGUST 11, 1931. Class 4.

288,147. HAIR CLASPS, LINGERIE CLASPS, BOW HOLDERS, AND CUFF LINKS, ALL MADE OF OR PLATED WITH PRECIOUS METAL, AND NECKLACES, BRACELETS, EAR ORNAMENTS, BROOCHES, COLLAR BUTTONS, AND FINGER RINGS. JOSEPH H. LANCOR, doing business as Lancor Manufacturing Company, Providence, R. I.
Filed May 1, 1931. Serial No. 314,059. PUBLISHED JULY 28, 1931. Class 28.

288,148. STOVE POLISH. ROBERT P. MILLER, doing business as Parlor Pride Mfg. Co. Inc., North Andover, Mass.
Filed May 16, 1931. Serial No. 314,652. PUBLISHED AUGUST 4, 1931. Class 4.

288,149. JEWELRY FOR PERSONAL WEAR, NOT INCLUDING WATCHES. J. R. WOOD & SONS, INC., New York, N. Y.
Filed May 20, 1931. Serial No. 314,830. PUBLISHED JULY 28, 1931. Class 28.

288,150. RADIO RECEIVING SETS. MOTOR MELODY CORPORATION, Chicago, Ill.
Filed May 21, 1931. Serial No. 314,855. PUBLISHED JULY 28, 1931. Class 21.

288,151. GENERAL HOUSEHOLD AND INDUSTRIAL CLEANSING PREPARATIONS. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y.
Filed May 23, 1931. Serial No. 314,965. PUBLISHED AUGUST 4, 1931. Class 4.

288,152. GENERAL CLEANSING PREPARATION. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y.
Filed May 23, 1931. Serial No. 314,966. PUBLISHED AUGUST 4, 1931. Class 4.

288,153. COTTON SHEETS, SHEETING, PILLOW-CASES AND QUILT COVERS. FALK SHERMAN, New York, N. Y.
Filed October 11, 1930. Serial No. 306,068. PUBLISHED AUGUST 11, 1931. Class 42.

288,154. BOUND BOOKS FOR ACCOUNTS AND RECORDS, ETC. REMINGTON RAND INC., Buffalo, N. Y.
Filed November 18, 1930. Serial No. 308,036. PUBLISHED JULY 28, 1931. Class 37.

288,155. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND GINGER ALE. CALIFORNIA CRUSHED FRUIT CORPORATION, Los Angeles, Calif., now by change of name Mission Dry Corporation, Ltd.
Filed January 8, 1931. Serial No. 309,723. PUBLISHED AUGUST 4, 1931. Class 45.

288,156. PAPER, STENCIL SHEETS, ETC. D. GESTETNER, LIMITED, London, England.
Filed July 29, 1930. Serial No. 303,962. PUBLISHED AUGUST 4, 1931. Class 37.

288,157. WRAPPING PAPER, TOILET PAPER, AND BOOK PAPER, AND CORRESPONDENCE AND MAILING ENVELOPES. THE OHIO AND MICHIGAN PAPER COMPANY, Toledo, Ohio.
Filed July 24, 1930. Serial No. 303,778. PUBLISHED JULY 28, 1931. Class 37.

288,158. KNITTED AND WOVEN FABRICS OF SILK, RAYON, AND COTTON. ATLANTA KNITTING MILLS, Brooklyn, N. Y.
Filed July 2, 1930. Serial No. 303,043. PUBLISHED AUGUST 4, 1931. Class 42.

288,159. COMPLETELY PRINTED ADVERTISING DEVICES SOLD TO THE TRADE AS SUCH. HARRY LATZ SERVICE, INC., New York, N. Y.
Filed June 24, 1930. Serial No. 302,782. PUBLISHED AUGUST 4, 1931. Class 38.

288,160. COMPLETELY PRINTED ADVERTISING DEVICES SOLD TO THE TRADE AS SUCH. HARRY LATZ SERVICE, INC., New York, N. Y.
Filed June 24, 1930. Serial No. 302,781. PUBLISHED AUGUST 4, 1931. Class 38.

288,161. STENCILED, PRINTED, OR LITHOGRAPHED SIGNS AND POSTERS; STENCILED, PRINTED OR LITHOGRAPHED WINDOW DISPLAY SIGNS, POSTERS IN GENERAL, ADVERTISING CARDS, AND ADVERTISING AND POSTER LETTERS. SYNDICATE POSTER & EQUIPMENT CO., Chicago, Ill.
Filed June 20, 1930. Serial No. 302,651. PUBLISHED JULY 21, 1931. Class 38.

288,162. LETTER HEADS, BLANK FORMS, AND MAILING AND CORRESPONDENCE ENVELOPES, SOLD TO THE TRADE AS SUCH. JOSEPH BAGNOLE, doing business as Sun Rise Press, Roseland, N. J.
Filed June 19, 1930. Serial No. 302,568. PUBLISHED JULY 21, 1931. Class 37.

288,163. PUBLICATION. JULIET M. SMITH, doing business as Munson School for Private Secretaries, San Francisco, Calif.
Filed May 31, 1930. Serial No. 302,056. PUBLISHED JULY 21, 1931. Class 38.

288,164. TOY. E. WARREN GILBERT, doing business as W. H. Ryan & Co., Allentown, Pa.
Filed May 30, 1930. Serial No. 301,757. PUBLISHED AUGUST 4, 1931. Class 22.

288,165. MINERAL RAW PRODUCTS USED IN THE MANUFACTURE OF PAINTS, ENAMELS, CERAMIC TILE, AND VARNISHES, MORE PARTICULARLY THE MICA SILICATES SUCH AS LEPIDOLITE AND OTHER MINERALS OF THE MICA CLASSIFICATION AND HAVING SIMILAR CHARACTERISTICS, INCLUDING LEPIDOCROCITE, LEPIDOMELANE, AND LEPIDOMORPHITE, WHETHER ISOLATED OR IN COMPOUND FORM. LEICHTMETALLVERWERTUNGS-GESELLSCHAFT M. B. H., Trier, Germany.
Filed May 29, 1930. Serial No. 301,661. PUBLISHED JULY 21, 1931. Class 1.

288,166. HOUSEHOLD CHAIRS. ADJUSTO CHAIR CORPORATION, New York, N. Y.
Filed July 24, 1930. Serial No. 303,758. PUBLISHED AUGUST 4, 1931. Class 32.

288,167. CERTAIN NAMED STRINGED, FRETTED, BRASS, REED, WIND, WOOD-WIND, AND PERCUSSION MUSICAL INSTRUMENTS AND PARTS AND SUPPLIES THEREFOR. CZECHOSLOVAK MUSICAL INSTRUMENTS COMPANY, New York, N. Y.
Filed December 3, 1930. Serial No. 308,532. PUBLISHED JULY 28, 1931. Class 36.

288,168. CABINETS, LOCKERS, CUPBOARDS, SHELVING AND BINS, ETC. REMINGTON RAND INC., Buffalo, N. Y.
Filed November 18, 1930. Serial No. 308,037. PUBLISHED AUGUST 4, 1931. Class 32.

288,169. VEHICLE TIRE AND TUBE PATCHING MATERIALS. THE SHALER COMPANY, Waupun, Wis.
Filed November 10, 1930. Serial No. 307,742. PUBLISHED AUGUST 4, 1931. Class 35.

288,170. CORRESPONDENCE PAPER AND ENVELOPES. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.
Filed July 3, 1930. Serial No. 303,136. PUBLISHED FEBRUARY 17, 1931. Class 37.

288,171. NON-SAPONACEOUS BEARD-SOFTENING PREPARATIONS. FLORA HOLMES SHOEMAKER, doing business as The Frostilla Company, Elmira, N. Y.
Filed October 31, 1930. Serial No. 307,481. PUBLISHED AUGUST 4, 1931. Class 4.

288,172. MAPLE SUGAR (PURE VERMONT MAPLE SUGAR, MAPLE HEARTS, GRANDFATHERS' STIRRED SUGAR.) MAPLE GROVE CANDIES, INC., St. Johnsbury, Vt.
Filed December 15, 1930. Serial No. 308,994. PUBLISHED JULY 21, 1931. Class 46.

288,173. MATTRESSES, BED SPRINGS, AND PILLOWS. BURTON-DIXIE CORPORATION, Chicago, Ill.
Filed May 6, 1931. Serial No. 314,229. PUBLISHED AUGUST 4, 1931. Class 32.

288,174. HOUSEHOLD AND OFFICE CHAIRS. BRIGGS MANUFACTURING COMPANY, Detroit, Mich.
Filed June 1, 1931. Serial No. 315,242. PUBLISHED AUGUST 11, 1931. Class 32.

288,175. FAUCET SEATS, FULLER BALLS, PISTON PACKING, AND NON-METALLIC GASKETS, WASHERS, FRICTION-RINGS, BALL-COCK WASHERS, AND SLIP JOINT WASHERS. J. A. SEXAUER MFG. CO., INC., New York, N. Y.
Filed May 6, 1931. Serial No. 314,254. PUBLISHED AUGUST 4, 1931. Class 35.

288,176. BEDROOM FURNITURE, ETC. KINDEL FURNITURE COMPANY, Grand Rapids, Mich.
Filed June 1, 1931. Serial No. 315,268. PUBLISHED AUGUST 4, 1931. Class 32.

288,177. SPOONS, CAKE TURNERS, FORKS, ETC. THE A. & J. MANUFACTURING CO., Binghamton, N. Y.
Filed May 9, 1931. Serial No. 314,353. PUBLISHED AUGUST 4, 1931. Class 23.

288,178. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,189. PUBLISHED AUGUST 4, 1931. Class 42.

288,179. BELTING, HOSE, AND PACKING COMPOSED OF RUBBER AND FABRIC. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed May 15, 1931. Serial No. 314,630. PUBLISHED AUGUST 4, 1931. Class 35.

288,180. PILLOWS, CUSHIONS, AND MATTRESSES. NORTHERN FEATHER WORKS, INC., Newark, N. J.
Filed June 11, 1931. Serial No. 315,696. PUBLISHED AUGUST 4, 1931. Class 32.

288,181. PILE FABRICS. SIDNEY BLUMENTHAL & CO., INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,191. PUBLISHED AUGUST 4, 1931. Class 42.

288,182. WOOLEN CLOTH IN THE PIECE. A. G. DEWEY COMPANY, Quechee, Vt.
Filed June 4, 1931. Serial No. 315,397. PUBLISHED AUGUST 4, 1931. Class 42.

288,183. OIL GAUGES. PIONEER INSTRUMENT COMPANY, INCORPORATED, Brooklyn, N. Y.
Filed June 8, 1931. Serial No. 315,558. PUBLISHED AUGUST 11, 1931. Class 26.

288,184. FUEL VAPORIZERS FOR INTERNAL COMBUSTION ENGINES. GODWARD GAS GENERATOR, INC., New York, N. Y.
Filed June 10, 1931. Serial No. 315,660. PUBLISHED AUGUST 4, 1931. Class 23.

288,185. CAMERAS, MOTION PICTURE CAMERAS, PICTURE PROJECTORS, MOTION PICTURE PROJECTORS, TALKING PICTURE APPARATUS. CINAMETTE CORPORATION, New York, N. Y.
Filed June 11, 1931. Serial No. 315,671. PUBLISHED AUGUST 4, 1931. Class 26.

288,186. CAMERAS, MOTION PICTURE CAMERAS, PICTURE PROJECTORS, MOTION PICTURE PROJECTORS, TALKING PICTURE APPARATUS. CINAMETTE CORPORATION, New York, N. Y.
Filed June 11, 1931. Serial No. 315,672. PUBLISHED AUGUST 4, 1931. Class 26.

288,187. FRESH ARTICHOKES, BREAD, CAKES, RIPE OLIVES, CATSUP, LIVE POULTRY, DRESSED POULTRY, CANNED PORK AND BEANS, AND CANNED PUMPKIN. JOSEPH DI SANTO, doing business as Di Santo & Company, Duluth, Minn.
Filed May 25, 1931. Serial No. 314,985. PUBLISHED JULY 21, 1931. Class 46.

288,188. PLASTIC COMPOUND IN THE NATURE OF SO-CALLED PUTTY. JOHN G. TEICHMAN, Durand, Mich.
Filed May 21, 1931. Serial No. 314,941. PUBLISHED JULY 28, 1931. Class 16.

288,189. SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed April 27, 1931. Serial No. 313,833. PUBLISHED JULY 28, 1931. Class 4.

288,190. GELATIN DESSERTS. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed May 25, 1931. Serial No. 315,013. PUBLISHED JULY 28, 1931. Class 46.

288,191. ICE CREAM. CALIFORNIA TROPICAL FOODS, LTD., Pasadena, Calif.
Filed May 26, 1931. Serial No. 315,032. PUBLISHED JULY 21, 1931. Class 46.

288,192. SURVEYORS' LEVELING RODS. KEUFFEL AND ESSER COMPANY, Hoboken, N. J.
Filed May 28, 1931. Serial No. 315,149. PUBLISHED AUGUST 4, 1931. Class 26.

288,193. SENSITIZED PRINTING PAPER. B. K. ELLIOTT COMPANY, Pittsburgh, Pa.
Filed June 1, 1931. Serial No. 315,256. PUBLISHED AUGUST 4, 1931. Class 26.

288,194. PROPHYLACTIC RUBBER ARTICLES. REGELSON AND ROSTOW, New Haven, Conn.
Filed June 10, 1931. Serial No. 315,648. PUBLISHED JULY 28, 1931. Class 44.

288,195. SHAVING CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed June 18, 1931. Serial No. 315,989. PUBLISHED JULY 28, 1931. Class 4.

288,196. DEHYDRATED WHOLE EGGS, DEHYDRATED EGG YOLK AND DEHYDRATED EGG ALBUMEN. JOE LOWE CO. INC., Brooklyn, N. Y.
Filed May 14, 1927. Serial No. 249,011. PUBLISHED JULY 21, 1931. Class 46.

288,197. SOWING MACHINES, THRESHING MACHINES, AND MOWING MACHINES, AND PARTS THEREOF; SEWING MACHINES, TYPEWRITING MACHINES, MACHINES FOR SCRAPING AND POLISHING FLOORS, MACHINES FOR CLEANING CARPETS AND FURNITURE, PUMPS, AND PARTS THEREOF. SIEMENS-SCHUCKERTWERKE AKTIENGESELLSCHAFT, Berlin-Siemensstadt, Germany.
Filed December 6, 1927. Serial No. 258,555. PUBLISHED AUGUST 4, 1931. Class 23.

288,198. MALT SYRUP FOR FOOD PURPOSES. MAX E. KRAUSE, doing business as Royal Malt Extract Company, Cincinnati, Ohio.
Filed January 31, 1928. Serial No. 260,946. PUBLISHED FEBRUARY 5, 1929. Class 46.

288,199. PAINTS, ENAMELS, AND VARNISHES. THE MORGAN COMPANY, Peoria, Ill.
Filed November 12, 1928. Serial No. 275,179. PUBLISHED FEBRUARY 18, 1930. Class 16.

288,200. EGGS, DRESSED POULTRY, FRESH, POWDERED, AND EVAPORATED MILK, BUTTER, CREAM, AND BUTTERMILK. JOHN L. WADDELL, doing business as Sunnymede Farms, Highland Park, Ill., and Bismarck, Mo., assignor to Sunnymede Farms, Inc., Bismarck, Mo., a Corporation of Missouri.
Filed April 8, 1929. Serial No. 282,075. PUBLISHED APRIL 8, 1930. Class 46.

288,201. BREAD AND DOUGHNUTS AND CRULLERS. TEITELBAUM BAKING CO., INC., Brooklyn, N. Y.
Filed April 19, 1929. Serial No. 282,685. PUBLISHED JULY 21, 1931. Class 46.

288,202. CANNED FISH, CANNED PIMIENTOS. THE RIALTO CORPORATION, Long Beach, Calif.
Filed April 20, 1929. Serial No. 282,747. PUBLISHED JULY 28, 1931. Class 46.

288,203. BUFFING WHEELS. F. L. & J. C. CODMAN COMPANY, Boston and South Boston, Mass.
Filed May 31, 1929. Serial No. 284,840. PUBLISHED AUGUST 4, 1931. Class 4.

288,204. SHAVING CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed June 12, 1931. Serial No. 315,730. PUBLISHED JULY 28, 1931. Class 4.

288,205. SOWING MACHINES, THRESHING MACHINES, AND MOWING MACHINES, AND PARTS THEREOF; SEWING MACHINES, ETC. SIEMENS-SCHUCKERTWERKE AKTIENGESELLSCHAFT, Berlin-Siemensstadt, Germany.
Filed October 11, 1927. Serial No. 255,935. PUBLISHED AUGUST 4, 1931. Class 23.

288,206. ESCUTCHEON PLATES. MONOCRAFT PRODUCTS COMPANY, Brooklyn, N. Y., assignor to Monocraft Products Co., Inc., New York, N. Y., a Corporation of New York.
Filed January 16, 1929. Serial No. 278,053. PUBLISHED AUGUST 11, 1931. Class 13.

288,207. HEAVY CREAM. HENRY BECKER & SON, INC., Roseland, N. J.
Filed June 16, 1931. Serial No. 315,889. PUBLISHED AUGUST 4, 1931. Class 46.

288,208. DOG AND CAT FOOD. COAST FISHING CO., Wilmington, Calif.
Filed June 16, 1931. Serial No. 315,900. PUBLISHED AUGUST 4, 1931. Class 46.

288,209. COAL. MOUNTAIN STATES COAL COMPANY, Cincinnati, Ohio.
Filed July 1, 1931. Serial No. 316,538. PUBLISHED AUGUST 11, 1931. Class 1.

288,210. APPARATUS FOR ANALYZING GASEOUS MIXTURES. MOTO-VITA CORPORATION, Wilmington, Del., and New York, N. Y.
Filed January 13, 1931. Serial No. 309,917. PUBLISHED AUGUST 4, 1931. Class 26.

288,211. SARDINES, OLIVE OIL, AND CHEESE. OLAF HERTZWIG TRADING CO. INC., New York, N. Y.
Filed January 20, 1931. Serial No. 310,107. PUBLISHED JULY 21, 1931. Class 46.

288,212. FOOD PRODUCTS—NAMELY, QUEEN OLIVES, MANZANILLA OLIVES, SWEET PICKLES, PEANUT BUTTER, AND PREPARED MUSTARD. M. WOLFF & SONS, Chicago, Ill.
Filed February 13, 1931. Serial No. 311,049. PUBLISHED JULY 14, 1931. Class 46.

288,213. FUDGE POWDERS. FRENCH MAID COCOLAT COMPANY, INC., New York, N. Y.
Filed February 16, 1931. Serial No. 311,093. PUBLISHED JULY 21, 1931. Class 46.

288,214. A CLEANSING COMPOUND. THE ARGOL CHEMICALS, INC., Baltimore, Md.
Filed March 2, 1931. Serial No. 311,592. PUBLISHED JULY 28, 1931. Class 4.

288,215. MINCE MEAT. ROBERT C. SHADDICK, doing business as Woods Mince Meat Co., Baltimore, Md.
Filed March 7, 1931. Serial No. 311,889. PUBLISHED JULY 14, 1931. Class 46.

288,216. PAINT COLORS FOR SCREEN PROCESS WORK. FRED'K. A. STRESEN-REUTER, INC., Chicago, Ill.
Filed March 16, 1931. Serial No. 312,207. PUBLISHED JULY 28, 1931. Class 16.

288,217. CLEANSING COMPOUNDS FOR HATS. LOUIS ANGELUS, doing business as Nuzone Products Co., New York, N. Y.
Filed March 18, 1931. Serial No. 312,253. PUBLISHED JULY 28, 1931. Class 4.

288,218. CANNED VEGETABLES AND CANNED FISH. SCLAFANI BROTHERS, Brooklyn, N. Y.
Filed March 19, 1931. Serial No. 312,315. PUBLISHED JULY 28, 1931. Class 46.

288,219. OLIVE OIL FOR USE AS FOOD. THOMAS HEDLEY & COMPANY, LIMITED, Newcastle-on-Tyne, England.
Filed April 20, 1931. Serial No. 313,544. PUBLISHED JULY 21, 1931. Class 46.

288,220. FLAVORING EXTRACTS FOR FOOD PURPOSES. CLARENCE I. TOGSTAD, doing business as The C. I. Togstad Company, Kokomo, Ind.
Filed May 2, 1931. Serial No. 314,134. PUBLISHED JULY 14, 1931. Class 46.

288,221. CHICKEN AND EGG NOODLES, SPAGHETTI DINNER WITH CHICKEN CROQUETTES, CHICKEN RAVIOLI, CANNED AND/OR IN GLASS. THE GELFAND MANUFACTURING CO. OF CALIFORNIA, Los Angeles, Calif.
Filed May 9, 1931. Serial No. 314,364. PUBLISHED JULY 14, 1931. Class 46.

288,222. COOKED CHICKEN WITH NOODLES. WASHINGTON CO-OPERATIVE EGG & POULTRY ASSOCIATION, Seattle, Wash.
Filed May 9, 1931. Serial No. 314,387. PUBLISHED JULY 28, 1931. Class 46.

288,223. MALT SYRUP. NATHAN WILLIAMS, Wilkes-Barre, Pa.
Filed May 12, 1931. Serial No. 314,476. PUBLISHED JULY 14, 1931. Class 46.

288,224. MALT SYRUP AND MALT EXTRACT. SALINA PRODUCTS CORPORATION, Syracuse, N. Y.
Filed May 13, 1931. Serial No. 314,536. PUBLISHED JULY 28, 1931. Class 46.

288,225. SHOE POLISH. MIDWAY CHEMICAL COMPANY, Chicago, Ill.
Filed May 14, 1931. Serial No. 314,572. PUBLISHED JULY 28, 1931. Class 4.

288,226. MALT SYRUP. LOS ANGELES BREWING CO., Los Angeles, Calif.
Filed May 18, 1931. Serial No. 314,701. PUBLISHED JULY 14, 1931. Class 46.

288,227. CLUTCHES, SPEED-REDUCERS, AND TRANSMISSION MECHANISMS. UNIVERSAL GEAR CORPORATION, Chicago, Ill.
Filed June 8, 1931. Serial No. 315,575. PUBLISHED AUGUST 4, 1931. Class 23.

288,228. MEDICINAL PREPARATION FOR EXTERNAL USE IN THE TREATMENT OF RHEUMATISM. HUBERT R. LOONEY, Portland, Oreg.
Filed August 14, 1930. Serial No. 304,620. PUBLISHED AUGUST 11, 1931. Class 6.

288,229. MEN'S DRESS AND WORK SHIRTS. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y.
Filed August 12, 1930. Serial No. 304,489. PUBLISHED NOVEMBER 4, 1930. Class 39.

288,230. MEN'S DRESS AND WORK SHIRTS. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y.
Filed August 12, 1930. Serial No. 304,495. PUBLISHED NOVEMBER 4, 1930. Class 39.

288,231. TROUSERS. H. FLASTER & SON, New York, N. Y.
Filed October 11, 1930. Serial No. 306,675. PUBLISHED JANUARY 13, 1931. Class 39.

288,232. STORAGE BATTERIES. ATLAS SUPPLY COMPANY, Wilmington, Del., and New York, N. Y.
Filed December 9, 1930. Serial No. 308,769. PUBLISHED FEBRUARY 3, 1931. Class 21.

288,233. QUICK HARDENING OIL WELL CEMENT. OKLAHOMA PORTLAND CEMENT COMPANY, Oklahoma City, Okla.
Filed December 1, 1930. Serial No. 308,501. PUBLISHED JULY 28, 1931. Class 12.

288,234. PEANUTS SALTED IN THE SHELL AND PEANUTS ROASTED NOT SALTED IN THE SHELL. PERIS MANUFACTURING CO., INC., Florin, Pa.
Filed June 16, 1930. Serial No. 302,471. PUBLISHED AUGUST 11, 1931. Class 46.

288,235. CANNED FRUIT, CANNED VEGETABLES, COFFEE, OYSTERS, ETC. A. H. PERFECT & CO., Fort Wayne, Ind.
Filed May 26, 1930. Serial No. 301,291. PUBLISHED JULY 21, 1931. Class 46.

288,236. FISH AND FISH MEATS. THE INDIAN RIVER FISHERIES, Sebastian, Fla.
Filed February 7, 1931. Serial No. 310,829. PUBLISHED AUGUST 11, 1931. Class 46.

288,237. MALT SYRUP USED AS A FOOD PRODUCT. ADAM SCHEIDT BREWING COMPANY, Norristown, Pa.
Filed February 25, 1931. Serial No. 311,458. PUBLISHED JULY 21, 1931. Class 46.

288,238. FLOUR COMPOUND, PARTICULARLY FOR MAKING PANCAKES, WAFFLES, MUFFINS, AND THE LIKE. JENNIE A. JOHNSON, Spokane, Wash., assignor to Taylor and Johnson, Spokane, Wash., a partnership consisting of Jesse E. Taylor, Spokane, Wash., and Jennie A. Johnson, Cut Bank, Mont.
Filed March 20, 1931. Serial No. 312,345. PUBLISHED AUGUST 11, 1931. Class 46.

288,239. FRESH CITRUS FRUITS. INTERNATIONAL FRUIT CORPORATION, Orlando, Fla.
Filed April 11, 1931. Serial No. 313,240. PUBLISHED AUGUST 11, 1931. Class 46.

288,240. MALT SYRUP. J. C. MILLETT COMPANY, San Francisco, Calif.
Filed May 9, 1931. Serial No. 314,375. PUBLISHED JULY 21, 1931. Class 46.

288,241. GELATIN DESSERTS. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed May 25, 1931. Serial No. 315,014. PUBLISHED JULY 28, 1931. Class 46.

288,242. GELATIN DESSERTS. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed May 25, 1931. Serial No. 315,016. PUBLISHED JULY 14, 1931. Class 46.

288,243. COFFEE AND TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed May 27, 1931. Serial No. 315,117. PUBLISHED AUGUST 4, 1931. Class 46.

288,244. DRESSED CARCASSES AND CUTS OF FRESH BEEF, PORK, MUTTON, AND VEAL. JACOB DOLD PACKING CO., Buffalo, N. Y.
Filed May 28, 1931. Serial No. 315,138. PUBLISHED AUGUST 4, 1931. Class 46.

288,245. CHOCOLATE CANDY. MEYER H. ABELSON, Wilkes-Barre, Pa.
Filed June 2, 1931. Serial No. 315,296. PUBLISHED AUGUST 4, 1931. Class 46.

288,246. MEN'S AND BOYS' HATS. A. I. NAMM & SON, doing business as The Namm Store, Brooklyn, N. Y.
Filed April 11, 1931. Serial No. 313,255. PUBLISHED JULY 14, 1931. Class 39.

288,247. WEATHER STRIP. BENJAMIN J. LONG, doing business as Forest City Bronze Company, Cleveland, Ohio.
Filed January 10, 1931. Serial No. 309,824. PUBLISHED JULY 28, 1931. Class 12.

288,248. INHALANT USED FOR COMMON COLDS AND FOR AFFECTIONS OF THE RESPIRATORY ORGANS. WILLIAM W. SANFORD, doing business as Sanford Company, Binghamton, N. Y., assignor, by mesne assignments, to The Inhalene Corporation, Rochester, N. Y., a Corporation of New York.
Filed January 22, 1931. Serial No. 310,260. PUBLISHED MAY 12, 1931. Class 6.

288,249. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 13, 1931. Serial No. 312,093. PUBLISHED APRIL 28, 1931. Class 42.

288,250. ROUGH LUMBER. OAKLAND LUMBER COMPANY, Orgas, W. Va.
Filed April 24, 1931. Serial No. 313,751. PUBLISHED JULY 28, 1931. Class 12.

288,251. CERTAIN NAMED YARNS. FLEISHER YARNS, INC., New York, N. Y.
Filed June 2, 1931. Serial No. 315,308. PUBLISHED JULY 28, 1931. Class 43.

288,252. OUTLETS FOR CAST METAL DRAINS FOR ROOFS AND FLOORS. LEWIS W. HARRINGTON, New York, N. Y.
Filed June 2, 1931. Serial No. 315,310. PUBLISHED AUGUST 11, 1931. Class 12.

288,253. MANTELS. LOEB AND WELCH, INC., Memphis, Tenn.
Filed June 4, 1931. Serial No. 315,407. PUBLISHED AUGUST 4, 1931. Class 12.

288,254. ASPHALT AND ASPHALT PIPE COATING. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed June 11, 1931. Serial No. 315,705. PUBLISHED JULY 28, 1931. Class 12.

288,255. LUMBER. BROOKS-SCANLON CORPORATION, Foley, Fla.
Filed June 15, 1931. Serial No. 315,820. PUBLISHED AUGUST 4, 1931. Class 12.

288,256. VEGETABLE GRATERS AND CHOPPERS. KNAPP-MONARCH COMPANY, Belleville, Ill.
Filed June 15, 1931. Serial No. 315,846. PUBLISHED AUGUST 11, 1931. Class 23.

288,257. WRAPPED TRIM LUMBER AND PLYWOOD. WASHINGTON VENEER COMPANY, Olympia, Wash.
Filed June 19, 1931. Serial No. 316,062. PUBLISHED AUGUST 4, 1931. Class 12.

288,258. BELTS AND BELTING OF RUBBER, FABRIC, OR A COMBINATION THEREOF. BOSTON WOVEN HOSE & RUBBER COMPANY, Cambridge, Mass.
Filed June 26, 1931. Serial No. 316,315. PUBLISHED AUGUST 4, 1931. Class 35.

288,259. BABY CHICK GRAINS, LAYING MASH, ETC. MOUNTAIN STATES MIXED FEED COMPANY, Denver, Colo.
Filed April 28, 1931. Serial No. 313,930. PUBLISHED AUGUST 4, 1931. Class 46.

288,260. CHEESE. NICOLO MUSCO, New York, N. Y.
Filed May 2, 1931. Serial No. 314,122. PUBLISHED AUGUST 4, 1931. Class 46.

288,261. COOKIES. UNITED BISCUIT COMPANY OF AMERICA, Chicago, Ill.
Filed May 19, 1931. Serial No. 314,779. PUBLISHED AUGUST 4, 1931. Class 46.

288,262. OLEOMARGARINE. JOHN F. JELKE COMPANY, Chicago, Ill.
Filed May 20, 1931. Serial No. 314,810. PUBLISHED AUGUST 11, 1931. Class 46.

288,263. CAKES. NEW STANDARD BAKING COMPANY, Philadelphia, Pa.
Filed May 21, 1931. Serial No. 314,858. PUBLISHED AUGUST 4, 1931. Class 46.

288,264. ANIMAL, VEGETABLE, AND SYNTHETIC FIBERS FOR DECORATING CLOTH AND OTHER MATERIALS. BOWDITCH MILLS, INC., Pascoag, R. I.
Filed May 23, 1931. Serial No. 314,944. PUBLISHED JULY 28, 1931. Class 1.

288,265. WHEAT FLOUR. THE ROBINSON MILLING COMPANY, Salina, Kans.
Filed June 8, 1931. Serial No. 315,561. PUBLISHED AUGUST 11, 1931. Class 46.

288,266. MILK. HENRY BECKER & SON, INC., Roseland, N. J.
Filed June 16, 1931. Serial No. 315,888. PUBLISHED AUGUST 4, 1931. Class 46.

288,267. CAMERAS, MOTION PICTURE CAMERAS, PICTURE PROJECTORS, MOTION PICTURE PROJECTORS, TALKING PICTURE APPARATUS, PARTS THEREOF AND FILMS FOR USE THEREWITH. CINAMETTE CORPORATION, New York, N. Y.
Filed June 11, 1931. Serial No. 315,673. PUBLISHED AUGUST 4, 1931. Class 26.

288,268. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,739. PUBLISHED AUGUST 4, 1931. Class 42.

288,269. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,741. PUBLISHED AUGUST 4, 1931. Class 42.

288,270. GOGGLES, EYEGLASSES AND SPECTACLES. E. B. MEYROWITZ, INC., New York, N. Y.
Filed June 13, 1931. Serial No. 315,799. PUBLISHED AUGUST 4, 1931. Class 26.

288,271. OPHTHALMIC MOUNTINGS. HALPERT & FRYXELL, INC., New York, N. Y.
Filed June 18, 1931. Serial No. 316,006. PUBLISHED AUGUST 4, 1931. Class 26.

288,272. FIREPLACE CABINET. THE NIGHTINGALE FIREPLACE CABINET MANUFACTURING COMPANY, Philadelphia, Pa.
Filed June 19, 1931. Serial No. 316,048. PUBLISHED AUGUST 4, 1931. Class 32.

288,273. MEASURING TAPES. LUFKIN RULE CO., Saginaw, Mich.
Filed June 20, 1931. Serial No. 316,094. PUBLISHED AUGUST 4, 1931. Class 26.

288,274. TEXTILE DIAPERS. AMOSKEAG MANUFACTURING COMPANY, Manchester, N. H.
Filed June 19, 1931. Serial No. 316,026. PUBLISHED AUGUST 4, 1931. Class 42.

288,275. GOGGLES, SPECTACLES, AND EYE-PROTECTORS. E. B. MEYROWITZ, INC., New York, N. Y.
Filed June 23, 1931. Serial No. 316,160. PUBLISHED AUGUST 4, 1931. Class 26.

288,276. FABRICS MADE PARTIALLY OR WHOLLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 24, 1931. Serial No. 316,187. PUBLISHED AUGUST 4, 1931. Class 42.

288,277. BRAKE LININGS. WILLIAM A. HARDING, doing business as Harding Company, New York, N. Y.
Filed June 24, 1931. Serial No. 316,203. PUBLISHED AUGUST 4, 1931. Class 35.

288,278. BROWNPRINT PAPERS AND CLOTHS. KEUFFEL AND ESSER COMPANY, Hoboken, N. J.
Filed June 24, 1931. Serial No. 316,206. PUBLISHED AUGUST 4, 1931. Class 26.

288,279. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed June 25, 1931. Serial No. 316,280. PUBLISHED AUGUST 4, 1931. Class 42.

288,280. SCIENTIFIC INSTRUMENTS, RECORDING INSTRUMENTS, INDICATING INSTRUMENTS, ETC. JOHNSON-WILLIAMS, LTD., Palo Alto, Calif.
Filed June 12, 1931. Serial No. 315,770. PUBLISHED AUGUST 11, 1931. Class 26.

288,281. WRENCHES, WRENCH SETS, WRENCH SOCKETS, AND TOOL HANDLES. J. H. WILLIAMS & CO., Buffalo, N. Y.
Filed June 26, 1931. Serial No. 316,352. PUBLISHED AUGUST 4, 1931. Class 23.

288,282. FLOUR AND FEED MILL EQUIPMENT, STONE WORKING EQUIPMENT, ETC. W. J. SAVAGE COMPANY, INCORPORATED, Knoxville, Tenn.
Filed May 5, 1931. Serial No. 314,213. PUBLISHED AUGUST 4, 1931. Class 23.

288,283. INTERNAL COMBUSTION ENGINES; POWER UNITS INCLUDING INTERNAL COMBUSTION ENGINES AND ACCESSORIES—NAMELY, REDUCTION GEARS AND CLUTCHES. HERCULES MOTORS CORPORATION, Canton, Ohio.
Filed May 18, 1931. Serial No. 314,694. PUBLISHED AUGUST 4, 1931. Class 23.

288,284. VENDING MACHINES. AUTOMATIC CANTEEN COMPANY, Chicago, Ill.
Filed May 27, 1931. Serial No. 315,081. PUBLISHED AUGUST 11, 1931. Class 23.

288,285. COMPRESSED AIR BUNDLERS. UCAB DISTRIBUTING CORPORATION, INC., Camden, N. J.
Filed June 1, 1931. Serial No. 315,287. PUBLISHED AUGUST 11, 1931. Class 23.

288,286. VALVES FOR INTERNAL COMBUSTION ENGINES. WILCOX-RICH CORPORATION, Detroit, Battle Creek, Marshall, and Saginaw, Mich.
Filed June 8, 1931. Serial No. 315,576. PUBLISHED AUGUST 4, 1931. Class 23.

288,287. FOOD FLAVORING EXTRACTS, INCLUDING VANILLA, LEMON, ROSE, PEPPERMINT, ORANGE, ALMOND, WINTERGREEN, NUTMEG, STRAWBERRY, RASPBERRY, PINEAPPLE, CHERRY, AND ANISE. A. SCHILLING & CO., San Francisco, Calif.
Filed June 8, 1931. Serial No. 315,567. PUBLISHED JULY 21, 1931. Class 46.

288,288. MALT SYRUP USED FOR BAKING BREAD AND CAKE. OSCAR B. KAPLAN, doing business as The Kay Company, New York, N. Y.
Filed June 1, 1931. Serial No. 315,266. PUBLISHED JULY 21, 1931. Class 46.

288,289. ALIMENTARY PASTES INCLUDING MACARONI, SPAGHETTI IN DIFFERENT SIZES AND SHAPES, VERMICELLI, AND EGG NOODLES. EAGLE MACARONI COMPANY, Chicago, Ill.
Filed June 4, 1931. Serial No. 315,391. PUBLISHED JULY 21, 1931. Class 46.

288,290. TEA AND COFFEE. A. SCHILLING & CO., San Francisco, Calif.
Filed June 8, 1931. Serial No. 315,564. PUBLISHED AUGUST 11, 1931. Class 46.

288,291. SPICES, AND PARTICULARLY GROUND SPICES, INCLUDING BLACK PEPPER, WHITE PEPPER, CAYENNE PEPPER, MUSTARD, CINNAMON, CLOVES, GINGER, ALLSICE, NUTMEG, MACE, SAGE, THYME, AND SAVORY. A. SCHILLING & CO., San Francisco, Calif.
Filed June 8, 1931. Serial No. 315,566. PUBLISHED JULY 21, 1931. Class 46.

288,292. MINT CONFECTIONS. FRANCIS H. LEGGETT & COMPANY, New York, N. Y.
Filed June 9, 1931. Serial No. 315,600. PUBLISHED AUGUST 4, 1931. Class 46.

288,293. LARD (MANTECA PURA DE CERDO). JOHN MORRELL & COMPANY, Ottumwa, Iowa.
Filed June 9, 1931. Serial No. 315,602. PUBLISHED AUGUST 4, 1931. Class 46.

288,294. DRESSED POULTRY. ENID POULTRY & EGG CO., INC., Enid, Okla.
Filed June 11, 1931. Serial No. 315,678. PUBLISHED AUGUST 4, 1931. Class 46.

288,295. CANDY. RAYMOND KNIGHT, New York, N. Y.
Filed June 10, 1931. Serial No. 315,721. PUBLISHED AUGUST 4, 1931. Class 46.

288,296. CANDY. RAYMOND KNIGHT, New York, N. Y. Filed June 15, 1931. Serial No. 315,842. PUBLISHED AUGUST 4, 1931. Class 46.

288,297. COTTON-SEED OIL. THE VAN CAMP PACKING CO., INCORPORATED, Indianapolis, Ind. Filed May 28, 1930. Serial No. 301,533. PUBLISHED JULY 21, 1931. Class 46.

288,298. CERTAIN NAMED PAINT PRODUCTS. JESS M. WAYNICK, doing business as J. M. Waynick Paint Mfg. Co., Los Angeles, Calif. Filed May 28, 1930. Serial No. 301,537. PUBLISHED JULY 28, 1931. Class 16.

288,299. ICE CREAM CONES. THE MARYLAND BAKING COMPANY, INC., Baltimore, Md. Filed May 29, 1930. Serial No. 301,670. PUBLISHED JULY 14, 1931. Class 46.

288,300. FLEXIBLE SAFETY RAZOR SHARPENING DEVICE. JULIUS MICHAEL, Brooklyn, N. Y. Filed May 23, 1930. Serial No. 302,128. PUBLISHED JULY 28, 1931. Class 4.

288,301. MAYONNAISE. BRIGHT STAR PRODUCTS CO., Miami, Fla. Filed July 29, 1930. Serial No. 303,945. PUBLISHED JULY 14, 1931. Class 46.

288,302. SOAP. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio. Filed September 25, 1930. Serial No. 306,070. PUBLISHED JULY 28, 1931. Class 4.

288,303. CLEANING COMPOUND FOR AUTOMOBILES. J. A. TUMBLER LABORATORIES, Baltimore, Md. Filed October 8, 1930. Serial No. 306,547. PUBLISHED JULY 28, 1931. Class 4.

288,304. MAPLE SUGAR (PURE VERMONT MAPLE SUGAR, MAPLE HEARTS, GRANDFATHER'S STIRRED SUGAR). MAPLE GROVE CANDIES, INC., St. Johnsbury, Vt. Filed December 15, 1930. Serial No. 308,993. PUBLISHED JULY 21, 1931. Class 46.

288,305. CERTAIN GOODS SUCH AS TEA, COFFEE, GELATIN DESSERT, BUTTER, SUGAR, ETC. E. C. HALL COMPANY, doing business as Nation-Wide Service Grocers and Nation-Wide Stores Co., Brockton and Hyannis, Mass., and Augusta, Me. Filed December 2, 1930. Serial No. 308,506. PUBLISHED JULY 14, 1931. Class 46.

288,306. RAW MILK. NEW JERSEY DAIRYMEN, INC., Trenton, N. J. Filed December 10, 1930. Serial No. 308,846. PUBLISHED AUGUST 4, 1931. Class 46.

TRADE-MARK REGISTRATIONS RENEWED

36,713. CERTAIN NAMED MEDICINE. Registered July 9, 1901. ROBERT H. N. JOHNSON, London, England. Renewed July 9, 1931.

36,800. LOGWOOD EXTRACTS. Registered July 23, 1901. THE WEST INDIES CHEMICAL WORKS, LIMITED, Spanish Town, Jamaica, a Corporation of Jamaica. Renewed July 23, 1931.

36,888. OLIVES. Registered August 13, 1901. FRANCIS H. LEGGETT & CO. Renewed August 13, 1931, to Francis H. Leggett & Company, New York, N. Y., a Corporation of New York, successor.

36,916. HAIR RESTORERS. Registered August 20, 1901. EDWARD L. HOFFMAN, Buffalo, N. Y. Renewed August 20, 1931.

36,938. OILS, LARD, SYRUP, DRIED AND CANNED FRUITS, AND HONEY. Registered August 20, 1901. ASPEGREN & CO., New York, N. Y. Renewed August 20, 1931, to The Procter & Gamble Manufacturing Co., Cincinnati, Ohio, a Corporation of Ohio, assignee by mesne assignments.

36,940. SEED OILS, LARD, SYRUP, DRIED AND CANNED FRUITS, AND HONEY. Registered August 20, 1901. ASPEGREN & CO., New York, N. Y. Renewed August 20, 1931, to The Procter & Gamble Manufacturing Co., Cincinnati, Ohio, a Corporation of Ohio, assignee by mesne assignments.

37,037. SOAP. Registered September 10, 1901. JAMES S. KIRK & COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 10, 1931, to The Procter & Gamble Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

37,051. HARD SUGAR. Registered September 10, 1901. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y., a Corporation of New Jersey. Renewed September 10, 1931.

37,069. STOMACH AND BLOOD REMEDIES. Registered September 17, 1901. THE CHAPMAN MANUFACTURING CO. Renewed September 17, 1931, to Chapman Manufacturing Company, Chicago, Ill., successor.

37,070. CERTAIN NAMED CURE FOR THE TOBACCO HABIT. Registered September 17, 1901. ROBERT ARTHUR WILSON, Portland, Oreg. Renewed September 17, 1931, to Anna S. Wilson, Seattle, Wash., devisee of the Estate of Robert Arthur Wilson, deceased.

37,082. HARD SUGAR. Registered September 17, 1901. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y., a Corporation of New Jersey. Renewed September 17, 1931.

37,092. COTTON SEED OIL AND LARD. Registered September 17, 1901. ASPEGREN & CO., New York, N. Y. Renewed September 17, 1931, to The Procter & Gamble Manufacturing Co., Cincinnati, Ohio, a Corporation of Ohio, assignee by mesne assignments.

37,177. HARD SUGAR. Registered October 8, 1901. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y., a Corporation of New Jersey. Renewed October 8, 1931.

37,278. WHEAT FLOURS. Registered November 5, 1901. HERBERT O. PHILLIPS, Portland, Me. Renewed November 5, 1931.

37,352. CLUB SODA. Registered November 26, 1901. CANTRELL & COCHRANE, Limited, Dublin, Ireland, a Corporation of Great Britain and Ireland. Renewed November 26, 1931.

37,384. CERTAIN NAMED HOUSEHOLD ARTICLES. Registered November 26, 1901. DEUTSCHE-GLÜHSTOFF-GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Dresden, Germany, a Corporation of Germany. Renewed November 26, 1931.

37,446. SNAPPING CRACKERS FOR FAVORS AND SIMILAR USES. Registered December 10, 1901. A. J. CALEY & SON, Limited, Norwich, England, a Corporation of Great Britain. Renewed December 10, 1931.

37,449. METAL POLISH. Registered December 10, 1901. CHARLES ULRICH & CO. Renewed December 10, 1931, to Ulrich & Co., Buffalo, N. Y., a firm, successor.

37,699. CHAIN BLOCKS. Registered January 28, 1902. THE YALE & TOWNE MANUFACTURING COMPANY, Stamford and Branford, Conn.; New York, N. Y.; Boston, Mass.; Philadelphia, Pa.; Chicago, Ill., and San Francisco, Calif. Renewed January 28, 1932, to The Yale & Towne Manufacturing Company, Stamford, Conn., a Corporation of Connecticut.

37,750. TONIC. Registered February 4, 1902. JOSEPH TRINER. Renewed February 4, 1932, to Joseph Triner Company, Chicago, Ill., a Corporation of Illinois, assignee.

37,833. SAWS AND SPRINGS. Registered February 18, 1902. J. N. EBERLE & CIE., Augsburg, Germany. Renewed February 18, 1932, to J. N. Eberle & Cie. Aktiengesellschaft, Augsburg-Pfersee, Germany, a Corporation of Germany, successor.

65,799. CANNED FRUITS AND VEGETABLES. Registered October 22, 1907. THE BURT OLNEY CANNING CO., Oneida and Albion, N. Y. Renewed October 22, 1927, to New York Canners Inc., Rochester, N. Y., a Corporation of New York, assignee.

81,047. TEA AND COMPOUND OF COFFEE AND CHICORY. Registered February 28, 1911. AMERICAN COFFEE COMPANY OF NEW ORLEANS, LT'D. Renewed February 28, 1931, to American Coffee Company, Incorporated, New Orleans, La., a Corporation of Louisiana, assignee.

81,091. FLOORING, SQUARE-EDGE STRIPS, AND WOOD FLOORING-SQUARES. Registered February 28, 1911. NASHVILLE HARDWOOD FLOORING COMPANY. Renewed February 28, 1931, to Nashville Hardwood Flooring Company, Nashville, Tenn., a Corporation of Delaware, successor.

82,398. FLOOR AND CEILING PLATES. Registered June 27, 1911. THE BEATON & CORBIN MANUFACTURING COMPANY, Southington, Conn., a Corporation of Connecticut. Renewed June 27, 1931.

82,568. ANISETTE. Registered July 11, 1911. BOSCH & Co., Badalona, near Barcelona, Spain. Renewed July 11, 1931.

82,598. NON-ALCOHOLIC TONIC BEVERAGES. Registered July 11, 1911. ADELBERT WARREN GREEN, Schenectady, N. Y. Renewed July 11, 1931.

82,653. FACE-CREAM, HAIR-DRESSING (CREAM), AND SHAMPOO-CREAM. Registered July 11, 1911. LORA S. SWAIN. Renewed July 11, 1931, to Sanford M. Swain, Memphis, Tenn., successor.

82,714. CERTAIN TEXTILE FABRICS. Registered July 18, 1911. THE OLD BLEACH LINEN COMPANY, LIMITED, Randalstown, Ireland. Renewed July 18, 1931, to The Old Bleach Linen Co. Ltd. Inc., New York, N. Y., a Corporation of New York, assignee.

82,887. TOILET-PAPER. Registered August 1, 1911. THE JOHN HOBERG CO. Renewed August 1, 1931, to Hoberg Paper and Fibre Co., Green Bay, Wis., a Corporation of Wisconsin, assignee.

83,047. CANDY. Registered August 15, 1911. THE CHANDLER & RUDD COMPANY, Cleveland, Ohio, a Corporation of Ohio. Renewed August 15, 1931.

83,080. LUBRICATING OILS AND GREASES. Registered August 15, 1911. W. B. MCVICKER COMPANY, New York, N. Y. Renewed August 15, 1931, to W. B. McVicker Company, Brooklyn, N. Y., a Corporation of New York.

83,137. OLEOMARGARIN. Registered August 22, 1911. THE CAPITAL CITY DAIRY CO. Renewed August 22, 1931, to The Capital City Products Company, Columbus, Ohio, a Corporation of Delaware, assignee by mesne assignments.

83,155. LADIES' LEATHER BOOTS AND SHOES. Registered August 22, 1911. WM. HENNE & CO., New York, N. Y. Renewed August 22, 1931, to Ground Gripper Shoe Company, Inc., Harrisburg, Pa., a Corporation of Delaware, assignee.

83,180. COMBINED CHURNS AND BUTTER-WORKERS. Registered August 22, 1911. OWATONNA MANUFACTURING COMPANY, Owatonna, Minn. Renewed August 22, 1931, to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois, assignee.

83,205. VACUUM CLEANING APPARATUS. Registered August 29, 1911. AMERICAN RADIATOR COMPANY, Chicago, Ill. Renewed August 29, 1931, to Arco Vacuum Corporation, New York, N. Y., a Corporation of Delaware, assignee.

83,271. INTERNAL-COMBUSTION ENGINES AND PARTS THEREOF. Registered August 29, 1911, to NELSON BROS. COMPANY, Alma, Mich. Renewed August 29, 1931, to Nelson Brothers Company, Saginaw, Mich., a Corporation of Michigan, successor.

83,281. HYDROCARBON ENGINES. Registered August 29, 1911. M. RUMELY COMPANY, Laporte, Ind. Renewed August 29, 1931, to Allis-Chalmers Manufacturing Company, West Allis and Milwaukee, Wis., a Corporation of Delaware, assignee by mesne assignments.

83,310. SHOVELS, SPADES, AND SCOOPS. Registered September 5, 1911. AMES SHOVEL AND TOOL COMPANY, Jersey City, N. J., and Boston, Mass. Renewed September 5, 1931, to Ames Shovel and Tool Company, North Easton, Mass., a Corporation of New Jersey.

83,311. SHOVELS, SPADES, AND SCOOPS. Registered September 5, 1911. AMES SHOVEL AND TOOL COMPANY, Jersey City, N. J., and Boston, Mass. Renewed September 5, 1931, to Ames Shovel and Tool Company, North Easton, Mass., a Corporation of New Jersey.

83,312. SHOVELS, SPADES, AND SCOOPS. Registered September 5, 1911. AMES SHOVEL AND TOOL COMPANY, Jersey City, N. J., and Boston, Mass. Renewed September 5, 1931, to Ames Shovel and Tool Company, North Easton, Mass., a Corporation of New Jersey.

83,316. LUBRICATING-OILS FOR MACHINERY. Registered September 5, 1911. BAYERSON OIL WORKS, Erie, Pa., a Corporation of Pennsylvania. Renewed September 5, 1931.

83,318. ANISETTE. Registered September 5, 1911. BOSCH & Co., Badalona, near Barcelona, Spain. Renewed September 5, 1931.

83,332. TABLE SAUCE. Registered September 5, 1911. FRANK Y. HASHIBA, New York, N. Y. Renewed September 5, 1931, to Frank Y. Hashiba, Hopkinton, R. I.

83,373. A BLEND OF STRAIGHT SCOTCH WHISKY. Registered September 5, 1911. WM. TEACHER & SONS. Renewed September 5, 1931, to Wm. Teacher & Sons, Limited, Glasgow, Scotland, a Corporation of Great Britain, assignee.

83,389. CERTAIN FANCY GOODS AND FURNISHINGS THEREFOR. Registered September 12, 1911. CAMPBELL, METZGER & JACOBSON. Renewed September 12, 1931, to Tobin, Sporn & Glaser, Inc., New York, N. Y., a Corporation of New York, assignee.

83,393. HOSIERY. Registered September 12, 1911. CHAS. CHIPMAN'S SONS, Easton and Selinsgrove, Pa. Renewed September 12, 1931, to Chas. Chipman's Sons Co., Inc., New York, N. Y., a Corporation of New York, successor.

83,462. SILVER AND METAL POLISH. Registered September 12, 1911. J. A. WRIGHT & CO., Keene, N. H., a Corporation of New Hampshire. Renewed September 12, 1931.

83,568. FINISHED LEATHER. Registered September 26, 1911. A. C. LAWRENCE LEATHER CO., Boston, Mass. Renewed September 26, 1931, to A. C. Lawrence Leather Company, Peabody, Mass., a Corporation of Maine.

83,622. QUARRIED GRANITE FOR MONUMENTAL AND BUILDING PURPOSES. Registered September 26, 1911. WOODBURY GRANITE COMPANY, Hardwick, Vt. Renewed September 26, 1931, to Woodbury Granite Co., Inc., Burlington, Vt., a Corporation of Vermont, successor.

83,705. BLENDED COFFEE. Registered October 3, 1911. SAMUEL ZECHNOWITZ. Renewed October 3, 1931, to Consolidated Tea Company, Inc., New York, N. Y., a Corporation of New York, assignee.

83,824. LEAD-PENCILS, INK-PENCILS, AND COLORED PENCILS. Registered October 17, 1911. A. W. FABER, STEIN, near Nuremberg, and Berlin, Germany. Renewed October 17, 1931, to A. W. Faber, Inc., Newark, N. J., a Corporation of New Jersey, assignee by mesne assignments.

83,976. PREPARATIONS FOR USE IN BREWING. Registered October 31, 1911. AMERICAN BUATONIZING COMPANY. Renewed October 31, 1931, to Wallerstein Company, Inc., New York, N. Y., a Corporation of New York, assignee.

84,081. CERTAIN FOODS. Registered November 7, 1911. F. B. CHAMBERLAIN COMPANY, St. Louis, Mo., and East St. Louis, Ill., a Corporation of Illinois. Renewed November 7, 1931.

84,131. STEEL CARVING-KNIVES. Registered November 7, 1911. WM. A. ROGERS, LIMITED, New York, N. Y. Renewed November 7, 1931, to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York, assignee.

84,165. SPICES, TEAS, AND FLAVORING EXTRACTS. Registered November 14, 1911. THE CANBY, ACH & CANBY CO., Dayton, Ohio. Renewed November 14, 1931, to Wm. S. Scull Company, Camden, N. J., a Corporation of New Jersey, assignee.

84,195. CARBON-PAPER AND TYPE-WRITER RIBBONS. Registered November 14, 1911. STANDARD TYPEWRITER CO., Groton, N. Y. Renewed November 14, 1931, to L. C. Smith & Corona Typewriter Inc., New York, N. Y., a Corporation of New York, assignee.

84,206. CORN AND BUNION PLASTERS, BELLADONNA PLASTERS, AND SULFUR CANDLES. Registered November 21, 1911. ASEPTIC PRODUCTS COMPANY, New York and Long Island City, N. Y. Renewed November 21, 1931, to Aseptic Products Company, Long Island City, N. Y., a Corporation of New York.

84,210. OLEOMARGARIN. Registered November 21, 1911. THE CAPITAL CITY DAIRY CO. Renewed November 21, 1931, to The Capital City Products Company, Columbus, Ohio, a Corporation of Delaware, assignee by mesne assignments.

84,211. DRIVE, POWER, AND CONVEYER CHAINS. Registered November 21, 1911. CHAIN BELT COMPANY, Milwaukee, Wis., a Corporation of Wisconsin. Renewed November 21, 1931.

84,220. AUTOMATIC KNIVES. Registered November 21, 1911. EAGLE PENCIL COMPANY. Renewed November 21, 1931, to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware, assignee.

84,298. STEEL BARS, SLABS, AND BILLETS. Registered November 21, 1911. THE UNITED STEEL COMPANY, Canton, Ohio. Renewed November 21, 1931, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey, assignee by mesne assignments.

84,303. ABSORBENT COTTON AND DENTAL FLOSS. Registered November 28, 1911. ASEPTIC PRODUCTS COMPANY, New York and Long Island City, N. Y. Renewed November 28, 1931, to Aseptic Products Company, Long Island City, N. Y., a Corporation of New York.

84,365. METALLIC PENS. Registered December 5, 1911. EAGLE PENCIL COMPANY. Renewed December 5, 1931, to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware, assignee.

84,407. CERTAIN NAMED SEEDS. Registered December 12, 1911. THE PHILADELPHIA SEED CO., INC., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed December 12, 1931.

84,419. LUBRICATING-OILS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,438. LUBRICATING-OILS AND PETROLEUM PRODUCTS. Registered December 12, 1911. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed December 12, 1931, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

84,509. TANKAGE. Registered December 19, 1911. NATIONAL UTILIZATION CORPORATION, Norfolk, Va., a Corporation of Virginia. Renewed December 19, 1931.

84,531. CHEESE. Registered December 19, 1911. HERMANN RUDOLFF, Novato, Calif. Renewed December 19, 1931.

84,536. CHEWING-GUM AND CACHOUS. Registered December 19, 1911. SEN-SEN CHICLET COMPANY, New York, N. Y. Renewed December 19, 1931, to American Chicle Company, Long Island City, N. Y., a Corporation of New Jersey, assignee.

84,553. CANNED OYSTERS, CANNED FRUITS, AND CANNED VEGETABLES. Registered December 19, 1911. TORSCH PACKING COMPANY. Renewed December 19, 1931, to The Torsch-Stevenson Corporation, Baltimore, Md., a Corporation of Maryland, assignee.

84,642. CLEANED AND GROUND FLAXSEED USED FOR MEDICINAL PURPOSES. Registered December 26, 1911. KELLOGGS & MILLER. Renewed December 26, 1931, to Kelloggs & Miller, Inc., Amsterdam, N. Y., a Corporation of New York, assignee.

84,646. CIGARS AND TOBACCO. Registered December 26, 1911. LESCHKE & PLETCHER. Renewed December 26, 1931, to Leschke & Pletcher, Hartford, Conn., a Firm, successor.

84,656. WOVEN BROAD SILK PIECE GOODS. Registered December 26, 1911. M. C. MIGEL & CO. Renewed December 26, 1931, to H. R. Mallinson & Co. Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

84,696. A PREPARATION FOR MAKING A SAUCE OR DRESSING. Registered December 26, 1911. W. SYMINGTON & CO., LIMITED, Market Harborough, England, a Corporation of Great Britain. Renewed December 26, 1931.

84,733. WATCHES, CLOCKS, WATCH-MOVEMENTS, WATCHCASES, CLOCK-MOVEMENTS, AND CLOCK-CASES. Registered January 2, 1912. EISENSTADT MANUFACTURING COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed January 2, 1932.

84,736. TOOL-STEEL. Registered January 2, 1912. FIRTH-STERLING STEEL COMPANY, McKeesport, Pa., a Corporation of Pennsylvania. Renewed January 2, 1932.

84,771. A VETERINARY REMEDY. Registered January 2, 1912. WARNER REMEDY COMPANY. Renewed January 2, 1932, to Warner Remedy Company, Chicago, Ill., a Firm, successor.

84,790. TANKAGE. Registered January 2, 1912. NATIONAL UTILIZATION CORPORATION, Norfolk, Va., a Corporation of Virginia. Renewed January 2, 1932.

84,834. OIL-CAKE AND OIL-MEAL. Registered January 9, 1912. KELLOGGS & MILLER. Renewed January 9, 1932, to Kelloggs & Miller, Inc., Amsterdam, N. Y., a Corporation of New York, assignee.

84,846. A PREPARATION OF PORK. Registered January 9, 1912. WILLIAM MOLAND'S SONS. Renewed January 9, 1932, to William Moland's Sons, Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

84,849. BISCUIT. Registered January 9, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed January 9, 1932, to National Biscuit Company New York, N. Y., a Corporation of New Jersey.

84,881. CERTAIN FOODS. Registered January 9, 1912. T. M. SINCLAIR & CO., LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed January 9, 1932.

84,884. LEATHER BOOTS AND SHOES. Registered January 9, 1912. CHARLES W. STROHBECK. Renewed January 9, 1932, to Charles Strohbeck, Brooklyn, N. Y.

84,889. CANDY. Registered January 9 1912. UNITED DRUG CO. Renewed January 9, 1932, to United Drug Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

84,903. CAMBRICS, SHEETING, SHIRTING, MUSLIN, LONGCLOTH, AND NAINSOOK. Registered January 9, 1912. GARNER PRINT WORKS & BLEACHERY, Wappingers Falls, N. Y. Renewed January 9, 1932, to Garner & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

85,064. MEDICINAL PREPARATION. Registered January 30, 1912. THE BLUFFTON CHEMICAL COMPANY, Bluffton, Ind. Renewed January 30, 1932.

85,069. LEMONS. Registered January 30, 1912. CALIFORNIA FRUIT GROWERS EXCHANGE, Los Angeles, Calif., a Corporation of Californin. Renewed January 30, 1932.

85,086. TOILET, SCOURING, AND CLEANSING SOAP. Registered January 30, 1912. FREDERICK H. DALAND, New York, N. Y. Renewed January 30, 1932.

85,136. WHEAT-FLOUR. Registered January 30, 1912. KEHLOR FLOUR MILLS COMPANY, St, Louis, Mo., and East St. Louis, Ill. Renewed January 30, 1932, to Hall Milling Company, St. Louis, Mo., a Corporation of Missouri, assignee.

85,177. ENAMELS, VARNISHES, STAINS, FILLERS. Registered January 30, 1912. PRATT & LAMBERT, INC., Long Island City and Buffalo, N. Y. Renewed January 30, 1932, to Pratt & Lambert, Inc., Buffalo, N. Y., a Corporation of New York.

85,186. CEREAL BISCUIT. Registered January 30, 1912. THE SHREDDED WHEAT COMPANY, Niagara Falls, N. Y. Renewed January 30, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey, assignee.

85,191. A LIQUID IRON COMPOUND. Registered January 30, 1912. SMOOTH-ON MANUFACTURING COMPANY, Jersey City, N. J., a Corporation of New Jersey. Renewed January 30, 1932.

85,202. A CLEANSING COMPOUND. Registered January 30, 1912. SWIFT AND COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed January 30, 1932.

85,270. CERTAIN ELECTRICAL APPLIANCES. Registered February 6, 1912. MUTUAL ELECTRIC & MACHINE COMPANY, Wheeling, W. Va. Renewed February 6, 1932, to Bulldog Electric Products Company, Detroit, Mich., a Corporation of West Virginia, by change of name.

85,324. ASPHALT. Registered February 13, 1912. CENTRAL COMMERCIAL COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed February 13, 1932.

85,334. SUSPENDERS AND GARTERS. Registered February 13, 1912. THE C. A. EDGARTON MFG. CO. Renewed February 13, 1932, to President Suspender Company, Shirley, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

85,353. DYNAMITE AND POWDER. Registered February 13, 1912. INDEPENDENT POWDER COMPANY OF MISSOURI, Joplin, Mo. Renewed February 13, 1932, to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware, assignee.

85,354. PAPER TOWELS AND PAPER NAPKINS. Registered February 13, 1912. JAPANESE TISSUE MILLS. Renewed February 13, 1932, to American Tissue Mills, Holyoke, Mass., a Corporation of Massachusetts, successor.

85,402. HEMP CLOTHES-LINES. Registered February 20, 1912. THE AMERICAN MANUFACTURING COMPANY, Charleston, W. Va., and New York, N. Y. Renewed February 20, 1932, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts, assignee.

85,403. HEMP CLOTHES-LINES. Registered February 20, 1912. THE AMERICAN MANUFACTURING COMPANY, Charleston, W. Va., and New York, N. Y. Renewed February 20, 1932, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts, assignee.

85,416. CANNED FRUITS, CANNED VEGETABLES, AND SAUERKRAUT. Registered February 20, 1912. S. E. COMSTOCK & CO. Renewed February 20, 1932, to Comstock Canneries, Inc., Newark, N. Y., a Corporation of New York, successor.

85,484. WORSTED CLOTHS. Registered February 20, 1912. PERSEVERANCE WORSTED COMPANY, Woonsocket, R. I., a Corporation of Rhode Island. Renewed February 20, 1932.

85,495. A DISINFECTANT. Registered February 20, 1912. L. RICHMOND & CO. Renewed February 20, 1932, to L. Richmond & Co., (Inc.), Brockton, Mass., a Corporation of Massachusetts, successor.

85,531. BEER, ALE, PORTER, HALF-AND-HALF, AND BROWN STOUT. Registered February 20, 1912. THE WEST END BREWING COMPANY, Utica, N. Y., a Corporation of New York. Renewed February 20, 1932.

85,625. LAXATIVE PREPARATIONS. Registered February 27, 1912. THE UPJOHN COMPANY, Kalamazoo, Mich., a Corporation of Michigan. Renewed February 27, 1932.

85,696. WRITING-PAPER, ENVELOPS, AND WRITING-TABLETS. Registered March 5, 1912. UNITED DRUG COMPANY. Renewed March 5, 1932, to United Drug Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

LABELS

REGISTERED OCTOBER 20, 1931

39,898.—*Title:* JOLLY TIME POP CORN IS GUARANTEED TO POP. For Pop Corn. AMERICAN POP CORN COMPANY, Sioux City, Iowa. Published July 29, 1931.

39,899.—*Title:* AMERICAN WIRE WEAVERS' PROTECTIVE ASSOCIATION. For Wire Cloth. AMERICAN WIRE WEAVERS' PROTECTIVE ASSOCIATION, Woodhaven, N. Y. Published July 30, 1931.

39,900.—*Title:* BEECH-NUT TOMATO JUICE. For Tomato Juice. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published August 29, 1931.

39,901.—*Title:* DR. ARTHUR BOERNER LIFE POWDER HERB REMEDY #298. For Medicinal Preparation. ARTHUR BOERNER, Paterson, N. J. Published July 18, 1931.

39,902.—*Title:* BRAUN'S WHEAT KING BREAD—JUMBO. For Bread. BRAUN BAKING CO., Pittsburgh, Pa. Published August 11, 1931.

39,903.—*Title:* W-O-N-D-E-R L-A-N-D COFFEE. For Coffee. BRONX COFFEE COMPANY, New York, N. Y. Published June 26, 1931.

39,904.—*Title:* VEETA NOVA—NEW LIFE—MAGNESIUM CITRATE COMPOUND. For Magnesium Citrate Compound. PAUL CIMINO, Wilkes-Barre, Pa. Published July 14, 1931.

39,905.—*Title:* SOCIAL SUCCESS ENGAGEMENT PAD. For Engagement Pads. COLUMBIAN ART WORKS, INCORPORATED, Milwaukee, Wis. Published July 1, 1931.

39,906.—*Title:* RED CHIEF. For Canned Salmon. F. J. COMEAU COMPANY, Seattle, Wash. Published September 17, 1931.

39,907.—*Title:* CHOCOLAT SUPREME. For Chocolate Preparation for Making Fudge. CHARLES R. DAVIS, Newton Center, Mass. Published July 7, 1931.

39,908.—*Title:* DIETERICH'S BAKER. For French Pastries. WM. C. DIETERICH, doing business as Dieterich's Bakery, Cleveland, Ohio. Published April 6, 1931.

39,909.—*Title:* FISCHER'S SWEDISH RYE BREAD. For Bread. FISCHER BAKING COMPANY, Newark, N. J. Published July 15, 1931.

39,910.—*Title:* BOND BREAD. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published July 20, 1931.

39,911.—*Title:* BOND BREAD SLICED. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published July 20, 1931.

39,912.—*Title:* THE DAINTY DOT SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 13, 1931.

39,913.—*Title:* JOHNNY JONES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 12, 1931.

39,914.—*Title:* YAP SING Y CIA. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 29, 1931.

39,915.—*Title:* OVERGLOBE SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 19, 1931.

39,916.—*Title:* FAST STEPPERS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 25, 1931.

39,917.—*Title:* NEW ERA. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 21, 1931.

39,918.—*Title:* L. S. CO. For Boxes. HOAGUE-SPRAGUE Corporation, Lynn, Mass. Published July 23, 1931.

39,919.—*Title:* HUNNY GIRL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 24, 1931.

39,920.—*Title:* SMITH & BRIDGMAN. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 13, 1931.

39,921.—*Title:* THE FREEDMAN SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 14, 1931.

39,922.—*Title:* THE DOLLY JEAN SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 4, 1931.

39,923.—*Title:* JUNGLE FOOTWEAR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published September 3, 1931.

39,924.—*Title:* GOLDEN AND SIMON, INC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 13, 1931.

39,925.—*Title:* CB—359. For Chocolate Layer Cakes. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,926.—*Title:* ALPHABATH BLOCKS. For Soap. THE LAMP STUDIO—KERK GUILD, Utica, N. Y. Published March 2, 1931.

39,927.—*Title:* MANISCHEWITZ'S MATZOS. For Matzo. THE B. MANISCHEWITZ COMPANY, Cincinnati, Ohio. Published September 15, 1930.

39,928.—*Title:* MECHLING'S STICKATE THE MINER-ALGLUE. For Mechanic's Water Glass. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published May 1, 1931.

39,929.—*Title:* MOORE'S CROW REPELLENT. For a Preparation for Repelling Crows. ROBERT J. MOORE, doing business as Moore Manufacturing Company, New Hartford, N. Y. Published May 1, 1931.

39,930.—*Title:* BUTTER-NUT. For Bread. MULLER BAKERIES, INC., Grand Rapids, Mich. Published July 24, 1931.

39,931.—*Title:* AMERICAN WIRE WEAVERS PROTECTIVE ASSOCIATION. For Fourdrinier Wire Cloths. NATIONAL EXECUTIVE BOARD OF THE AMERICAN WIRE WEAVERS PROTECTIVE ASSOCIATION, Woodhaven, N. Y. Published August 15, 1931.

39,932.—*Title:* DR. OLSON'S MAGIC SALVE. For Salve. OSCAR M. OLSON, Clifton, Tex. Published June 5, 1931.

39,933.—*Title:* L'MANDA. For Compact. PARFUMERIE DOLLUP, INC., New York, N. Y. Published August 1, 1931.

39,934.—*Title:* COMBAT. For Motor Oil. RICHFIELD OIL COMPANY, Los Angeles, Calif. Published July 1, 1931.

39,935.—*Title:* STALEY'S CORN STARCH. For Corn Starch. A. E. STALEY MFG. CO., Decatur, Ill. Published June 20, 1931.

39,936.—*Title:* STALEY'S GLOSS STARCH. For Gloss Starch. A. E. STALEY MFG. CO., Decatur, Ill. Published June 20, 1931.

39,937.—*Title:* CHASE & SANBORN'S TEA TOWN TOYS. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published July 3, 1931.

39,938.—*Title:* BREAD. For Bread. KARL R. ZIMMER, Indianapolis, Ind. Published August 24, 1931.

39,939.—*Title:* BREAD. For Bread. KARL R. ZIMMER, Indianapolis, Ind. Published August 24, 1931.

39,940.—*Title:* BREAD. For Bread. KARL R. ZIMMER, Indianapolis, Ind. Published August 24, 1931.

PRINTS

REGISTERED OCTOBER 20, 1931

13,448.—*Title:* THE SAME WOMAN BUT WITH INFINITE VARIETY. For Creme De France, Lilie Lotion, Amoretta Rouge, Poudre d'Illusion, Etc. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published June 10, 1931.

13,449.—*Title:* NEW! PONY MALTED MILK—THE DOUBLE-RICH SHORT DRINK. For Malted Milk. THE BORDEN COMPANY, New York, N. Y. Published June 24, 1931.

13,450.—*Title:* HEALTH AND ENJOYMENT IN DUGAN'S 100% WHOLE WHEAT PRODUCTS. For Whole-Wheat Bakery Products. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published July 3, 1931.

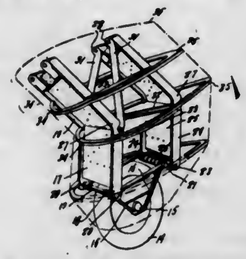
13,451.—*Title:* JUST DIAL. For Flowers. WILLIAM C. GLOECKNER, Albany, N. Y. Published August 14, 1931.

13,452.—*Title:* GEM WATCH CRYSTAL GROUND TO FIT THE BEZEL. For Watch Crystals. UNITED STATES WATCH CRYSTAL MFG. CO., INC., Cincinnati, Ohio. Published April 23, 1931.

REISSUES

OCTOBER 20, 1931

18,226. LANDING GEAR FOR AIRPLANES. GIUSEPPE M. BELLANCA, New Castle, Del., assignor to Bellanca Aircraft Corporation, New Castle, Del., a Corporation of Delaware. Original No. 1,691,105, dated Nov. 13, 1928, Serial No. 135,771, filed Sept. 16, 1926. Application for reissue filed Mar. 27, 1930. Serial No. 439,521. 28 Claims. (Cl. 244—2.)



1. In a landing gear for airplanes, a pair of girder members adapted to be removably attached at their upper ends to the fuselage of an airplane, said girder members being spaced apart longitudinally of the fuselage, strut members rigidly connecting said girder members, and a landing wheel supported between the lower ends of said girder members.

25. In a landing gear for airplanes, a pair of girder members attached to each side of the fuselage of an airplane, each pair of girder members independently carrying an axle, and strut members positioned between the girder members of each pair.

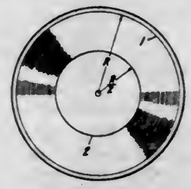
18,227. LOCK WASHER. RICHARD T. HOSKING, Wilmette, Ill., assignor, by mesne assignments, to H. R. Hough Company, a Corporation of Illinois. Original No. 1,615,382, dated Jan. 25, 1927, Serial No. 9,145, filed Feb. 14, 1925. Application for reissue filed Aug. 6, 1931. Serial No. 555,588. 10 Claims. (Cl. 151—135.)



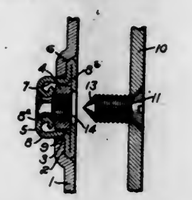
2. A lock washer comprising an annular body having substantially radial slits terminating in holes and forming a plurality of radially disposed leaves, that part only of the body of a leaf between adjacent slits being axially bent or twisted to slightly offset the edges of the leaf with respect to the plane of said washer body, and whereby said leaf is slightly flanged along lines parallel with its lateral edges, the slits being of such width that sufficient material is removed from the body between the tongues to prevent said tongues from overlapping in the event they stretch as a result of being bent obliquely.

18,228. SOUND RECORDING METHOD. JOSEPH P. MAXFIELD, Maplewood, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Original No. 1,637,082, dated July 26, 1927, Serial No. 2,971, filed Jan. 17, 1925. Application for reissue filed Apr. 4, 1931. Serial No. 527,781. 12 Claims. (Cl. 274—46.)

4. A sound record comprising a surface capable of receiving an impression and a groove in said surface, said groove having undulations corresponding to sound variations, said groove being included in a ring having an inner radius and an outer radius, said inner radius being substantially one-half the outer radius, said undulations being of such character that the normal sounds are reproduced at a record speed in revolutions per minute substantially equal to 60 times the minimum linear speed at which sounds can be efficiently recorded in said surface, divided by π times the length in inches of said outer radius of said ring.



18,229. NUT AND SCREW FASTENING. WALTER H. PIERCE, South Poland, Me., assignor, by mesne assignments, to United-Carr Fastener Corporation, a Corporation of Massachusetts. Original No. 1,690,078, dated Oct. 30, 1928, Serial No. 45,281, filed July 22, 1925. Application for reissue filed Oct. 17, 1930. Serial No. 489,467. 4 Claims. (Cl. 85—2.4.)

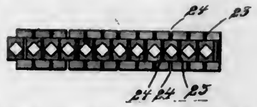


1. A nut and screw fastened installation comprising, in combination, a plurality of parts to be secured together, a nut unit passing into an aperture presented by one of said parts and extending beyond the inner face thereof, said nut unit including an initially assembled nut and nut-holder, the nut having a screw-receiving aperture and the nut-holder having a flange to prevent passage of the unit through the installation and said nut holder having a number of resilient fingers bent inwardly toward the axis of the unit at their free ends to intersect the screw-receiving aperture in the nut and a screw for passage through the aperture in the nut to engage said inbent resilient fingers, thereby to expand that portion of the nut unit extending beyond the inner face of the said apertured part and back-support said nut-holding part to prevent contraction thereof and secure said parts together.

18,230. BRACELET CHAIN. MAURICE ANDERSON, Edgewood, Cranston, R. I., assignor to Levy, Anderson Co., Inc., Providence, R. I., a Corporation of Rhode Island. Original No. 1,810,590, dated June 16, 1931, Serial No. 531,349, filed Apr. 20, 1931. Application for reissue filed July 10, 1931. Serial No. 550,016. 8 Claims. (Cl. 59—80.)

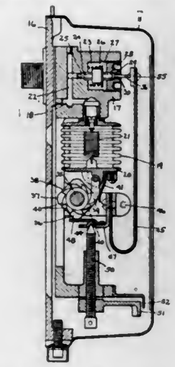
1. In a bracelet chain, a plurality of interconnected links, each link being a generally thin unit of generally rectangular form, embodying a thin sheet metal top wall with an opening therethrough, the stock of the top wall between said opening and one end of the link being de-

flected downwardly substantially the thickness of the stock of the top wall, and the stock at the other end of the link extending beyond the end thereof and folded closely about the deflected portion of the next link to have its top surface lie flush with the top surface thereof, and the sides



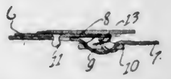
of each link being folded thereunder on an arc of short radius and continued to lie close to the under surface of said top wall and flush with the outer surface of said end extension, whereby a compact and relatively thin stiffened unit link is formed and connected in a chain with a flush top surface and a smooth back.

18,231. THERMOSTAT FOR HEATING SYSTEMS. FRED K. BEZZENBERGER, Cleveland Heights, and WILLIAM R. ZIMMERMAN, Cleveland, Ohio, assignors to The Bishop and Babcock Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,615,825, dated Feb. 1, 1927, Serial No. 752,377, filed Nov. 26, 1924. Application for reissue filed Mar. 24, 1930. Serial No. 438,619. 8 Claims. (Cl. 236—87.)



1. In a heating system, the combination of a valve controlling a heating conduit, a fluid pressure motor connected to operate said valve, a second valve controlling the flow of fluid pressure to said motor, a thermostatic element controlling the action of said second valve, a pressure responsive device actuated by fluid pressure, and connections between said device and said thermostatic element, said connections including means adapted to engage said thermostatic element to hold the same in operative position, and means actuated by the actuations of said pressure responsive device for rendering said thermostatic element inoperative.

18,232. FASTENING MEANS FOR BELTS. RALPH S. FOWLER, San Francisco, Calif. Original No. 1,785,947, dated Dec. 23, 1930, Serial No. 328,483, filed Dec. 26, 1928. Application for reissue filed Dec. 29, 1930. Serial No. 505,433. 3 Claims. (Cl. 241—8.)

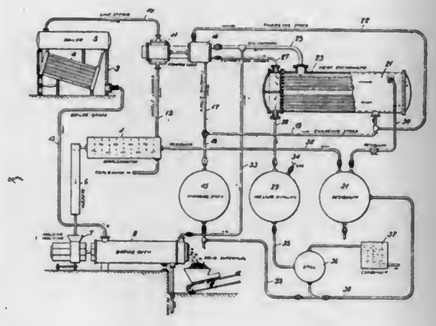


1. In a device of the character described, a belt having a buckle secured to one end thereof, and having a bar upon its rear side, a plate secured to the opposite end of said belt, said plate being in a plane parallel to the end of the belt to which it is attached, said plate having a curved hook formed integral therewith and adapted to engage said bar, and a stud secured to said plate and projecting through both ends of the belt for the purpose specified.

18,233. HARD GRAINLESS FIBER PRODUCT AND PROCESS OF MANUFACTURE. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Original No. 1,789,825, dated Jan. 20, 1931, Serial No. 285,065, filed June 13, 1928. Application for reissue filed June 10, 1931. Serial No. 543,464. 11 Claims. (Cl. 92—54.)

1. A corrugated building board of vegetable fiber hot platen pressed from a web of wet vegetable fiber until substantially dry and of substantially permanent gauge dimension and specific gravity approximately one, or more than one, same being resistant to atmospheric corrosion, and of strength, stiffness and rigidity sufficient to adapt it for use as a building material in place of corrugated iron.

18,234. PROCESS OF CRACKING COAL AND OIL. WALTER EDWIN TRENT, New York, N. Y., assignor to Trent Process Corporation, New York, N. Y., a Corporation of Delaware. Original No. 1,589,023, dated June 15, 1926, Serial No. 740,385, filed Sept. 27, 1924. Application for reissue filed Nov. 7, 1927. Serial No. 231,758. 20 Claims. (Cl. 202—3.)



1. A process for manufacturing carbonized fuels of a solid nature and converting hydrocarbon oils, comprising developing heat energy by combustion of a fuel at a single source, in utilizing said heat for subjecting hydrocarbon vapors to a heat compression sufficient to crack the same, in employing waste gases for heating the solid fuel to remove volatiles therefrom and produce a carbonized residue.

8. A method for the production of motor fuel and baked solid fuel which comprises partially distilling heavy hydrocarbon oil in a manner to form an overhead product and a liquid residue, cracking said overhead product in a manner to produce motor fuel and fractions heavier than motor fuel, separating the motor fuel from the heavier fractions, adding said heavier fractions to said liquid residue, mixing solid carbonizable material with the mixture resulting from the addition of said heavier fractions to said liquid residue thereby forming a solid-liquid mixture, baking said solid-liquid mixture and removing volatile fractions therefrom, and combining said volatile fractions with said overhead product to be cracked therewith.

PLANT PATENTS

GRANTED OCTOBER 20, 1931

3. CARNATION. OTTO A. MÜLLER, Ambler, Pa., assignor to The Florex Gardens, North Wales, Pa., a Corporation of Pennsylvania. Filed May 14, 1931. Serial No. 537,455. 1 Claim. (Cl. 47—1.)

The carnation as shown and described, characterized particularly by its white blossom slightly flecked with pink, unusually large in size and having a high center; its strongly constructed calyx; its stiff, unusually long stem; and its superior reproductive and keeping qualities.

4. THORNLESS YOUNG DEWBERRY. ELMER L. POLLARD and JUBAL E. SHERRILL, Chino, Calif. Filed Oct. 6, 1930. Serial No. 486,558. 1 Claim. (Cl. 47—1.)

A dewberry as herein shown and described characterized by the absence of thorns.

DESIGNS

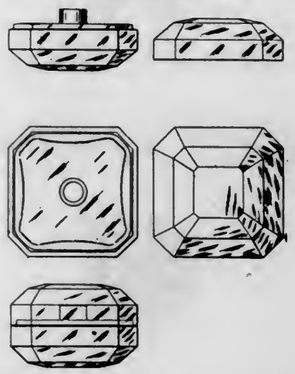
OCTOBER 20, 1931

85,362. ASH JAR. MCCLELLAND BARCLAY, New York, N. Y. Filed July 13, 1931. Serial No. 40,534. Term of patent 14 years.



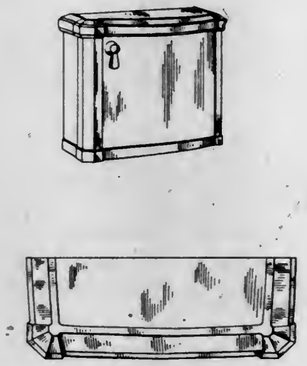
The ornamental design for an ash jar, as shown.

85,363. PERFUME BOTTLE OR SIMILAR ARTICLE. ROBERT BETTS, London, England. Filed Apr. 30, 1931. Serial No. 39,662. Term of patent 7 years.



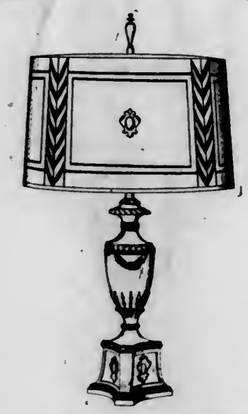
The ornamental design for a perfume bottle or similar article, as shown.

85,364. FLUSHING TANK. GEORGE BRAIN, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 18, 1931. Serial No. 40,593. Term of patent 7 years.



The ornamental design for a flushing tank, substantially as shown.

85,365. LAMP. SAMUEL E. BURNFIELD, Chicago, Ill. Filed Aug. 12, 1931. Serial No. 40,831. Term of patent 3½ years.



The ornamental design for a lamp, as shown and described.

85,366. COMBINATION ASH-RECEIVER AND MATCH HOLDER. BENJAMIN S. COE, Waterbury, Conn., assignor to Steele and Johnson Manufacturing Company, Waterbury, Conn., a Corporation. Filed June 22, 1931. Serial No. 40,299. Term of patent 7 years.



The ornamental design for a combination ash-receiver and match-holder as shown.

85,367. MALTED MILK CONTAINER. ADOLPH COORS, Golden, Colo. Filed July 13, 1931. Serial No. 40,532. Term of patent 14 years.



The ornamental design for a malted milk container, as shown and described.

85,368. CLOCK CASE. DICK J. DE PREE, Zeeland, Mich., assignor to Herman Miller Clock Company, Zeeland, Mich., a Corporation of Michigan. Filed July 20, 1931. Serial No. 40,601. Term of patent 3½ years.



The ornamental design for a clock case, as shown and described.

85,369. BOTTLE. JOSEPH C. EGIZIO, Allentown, Pa. Filed Aug. 10, 1931. Serial No. 40,810. Term of patent 7 years.



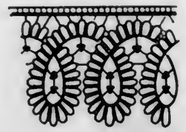
The ornamental design for a bottle, as shown and described.

85,370. EMBROIDERED LACE EDGING. FRED FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,769. Term of patent 3½ years.



The ornamental design for embroidered lace edging, as shown.

85,371. EMBROIDERED LACE EDGING. FRED FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,771. Term of patent 3½ years.



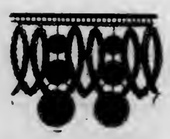
The ornamental design for embroidered lace edging, as shown.

85,372. EMBROIDERED LACE EDGING. FRED FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,772. Term of patent 3½ years.



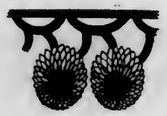
The ornamental design for embroidered lace edging, as shown.

85,373. EMBROIDERED LACE EDGING. FRED FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,773. Term of patent 3½ years.



The ornamental design for embroidered lace edging, as shown.

85,374. EMBROIDERED LACE EDGING. FRED FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,774. Term of patent 3½ years.



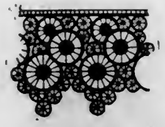
The ornamental design for embroidered lace edging, as shown.

85,375. EMBROIDERED LACE EDGING. FRED. FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,775. Term of patent 3½ years.



The ornamental design for embroidered lace edging, as shown.

85,376. EMBROIDERED LACE EDGING. FRED FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,776. Term of patent 3½ years.



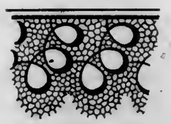
The ornamental design for embroidered lace edging, as shown.

85,377. EMBROIDERED LACE EDGING. FRED FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,777. Term of patent 3½ years.



The ornamental design for embroidered lace edging, as shown.

85,378. EMBROIDERED LACE EDGING. FRED FEHR, Palisade, N. J. Filed Aug. 4, 1931. Serial No. 40,778. Term of patent 3½ years.



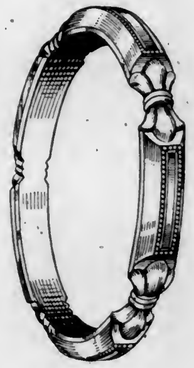
The ornamental design for embroidered lace edging, as shown.

85,379. BOTTLE. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 5, 1931. Serial No. 38,941. Term of patent 14 years.



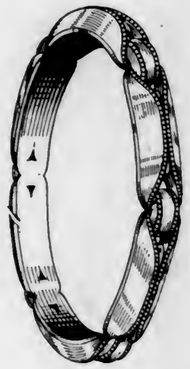
The ornamental design for a bottle substantially as shown.

85,380. FINGER RING. JOSEPH GRANAT, San Francisco, Calif. Filed July 13, 1931. Serial No. 40,528. Term of patent 3½ years.



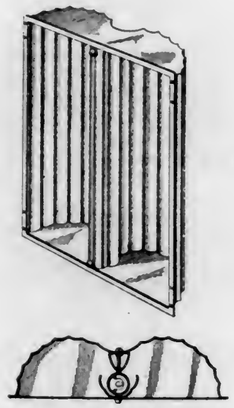
The ornamental design for a finger ring substantially as shown and described.

85,381. FINGER RING. JOSEPH CRANAT, San Francisco, Calif. Filed July 13, 1931. Serial No. 40,529. Term of patent 3½ years.



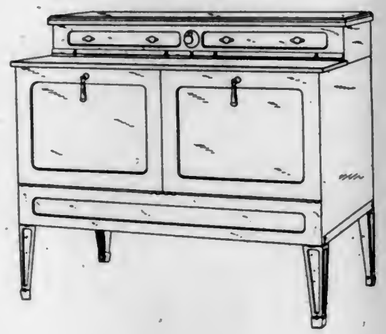
The ornamental design for a finger ring substantially as shown and described.

85,382. LIGHTING UNIT FOR REFLECTED ILLUMINATION. EDWIN F. GUTH, Webster Groves, Mo. Filed Feb. 24, 1931. Serial No. 38,794. Term of patent 14 years.



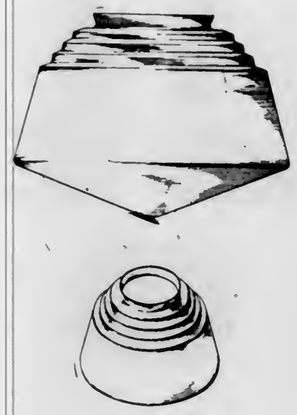
The ornamental design for a lighting unit for reflected illumination, as shown.

85,383. STOVE. EMMETT F. KENNEDY, Cleveland, Ohio, assignor to The Cleveland Co-Operative Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 3, 1931. Serial No. 40,767. Term of patent 14 years.



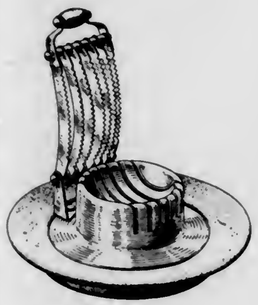
The ornamental design for a stove as shown.

85,384. LIGHTING FIXTURE BOWL OR SIMILAR ARTICLE. NICHOLAS KOPP, Pittsburgh, Pa., assignor to Kopp Glass, Incorporated, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 20, 1930. Serial No. 36,115. Term of patent 3½ years.



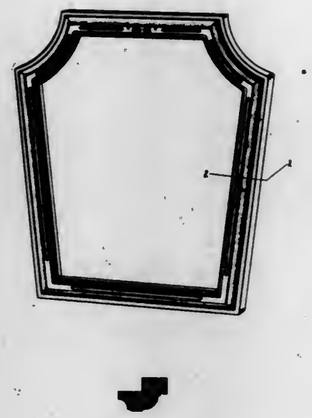
The ornamental design for a lighting fixture bowl or similar article, as shown.

85,385. VEGETABLE OR FRUIT SLICER OR THE LIKE ARTICLE. MARTIN LOWITZ, New York, N. Y. Filed July 29, 1931. Serial No. 40,710. Term of patent 7 years.



The ornamental design for a vegetable or fruit slicer or the like article, substantially as shown.

85,386. PICTURE FRAME. CHARLES W. MCCOY, Syracuse, N. Y. Filed Apr. 15, 1931. Serial No. 39,485. Term of patent 7 years.



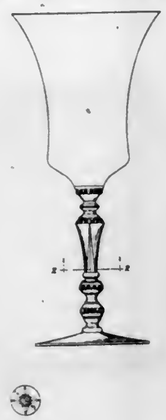
The ornamental design for a picture frame substantially as shown.

85,387. CHAIR. LEWIS F. MOORE, Roanoke, and PRESTON CRAIGHILL, Lynchburg, Va., assignors to Walker Machine & Foundry Corporation, Roanoke, Va., a Corporation of Virginia. Filed Sept. 2, 1931. Serial No. 41,002. Term of patent 14 years.



The ornamental design for a chair, substantially as shown.

85,388. GOBLET OR SIMILAR ARTICLE. WILBER L. ORME, Cambridge, Ohio. Filed Aug. 25, 1931. Serial No. 40,925. Term of patent 3½ years.



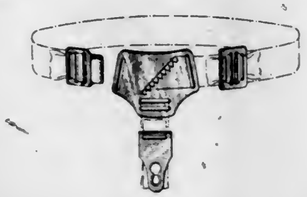
The ornamental design for a goblet or similar article substantially as shown.

85,389. GOBLET OR SIMILAR ARTICLE. WILBER L. ORME, Cambridge, Ohio. Filed Aug. 25, 1931. Serial No. 40,926. Term of patent 3½ years.



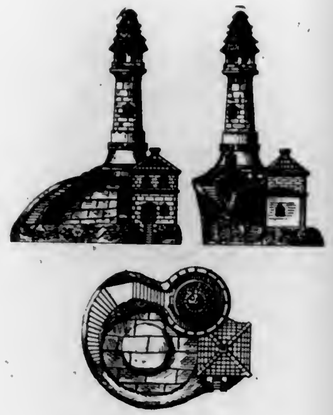
The ornamental design for a goblet or similar article, substantially as shown.

85,390. GARTER. DOMINICK PALADINO, Brooklyn, N. Y. Filed July 1, 1931. Serial No. 40,397. Term of patent 7 years.



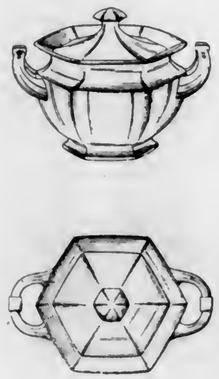
The ornamental design for a garter, as shown.

85,391. BUILDING STRUCTURE. GUSTAVO PARDUCCI, Atco, N. J. Filed June 24, 1931. Serial No. 40,314. Term of patent 14 years.



The ornamental design for a building structure, as shown.

85,392. BOWL OR LIKE ARTICLE. FREDERICK J. PETERS, Babylon, N. Y. Filed Aug. 11, 1931. Serial No. 40,826. Term of patent 7 years.



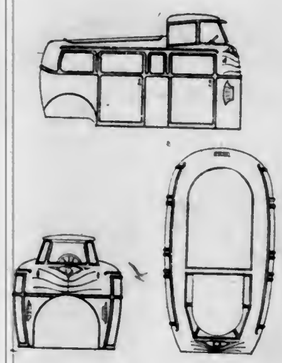
The ornamental design for a bowl or like article, as shown.

85,393. PITCHER OR LIKE ARTICLE. FREDERICK J. PETERS, Babylon, N. Y. Filed Aug. 11, 1931. Serial No. 40,827. Term of patent 7 years.



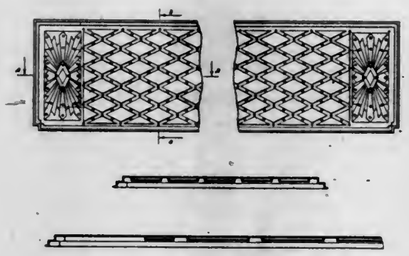
The ornamental design for a pitcher or like article, as shown.

85,394. AUTOMOBILE BODY. GAETANO PRESTIGIACOMO, New York, N. Y. Filed June 23, 1931. Serial No. 40,308. Term of patent 14 years.



The ornamental design for an automobile body, as shown.

85,395. MARQUISE CEILING. WILLIS O. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed July 24, 1931. Serial No. 40,677. Term of patent 14 years.



The ornamental design for marquise ceiling substantially as shown.

85,396. RANGE. JOSEPH P. ROESCH, Belleville, Ill., assignor to Roesch Enamel Range Company, Belleville, Ill., a Corporation of Illinois. Filed May 6, 1931. Serial No. 39,732. Term of patent 7 years.



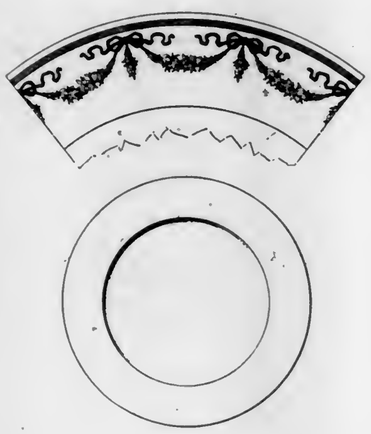
The ornamental design for a range as shown.

85,397. SPOUT. GEORGE SAKIER, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 2, 1931. Serial No. 38,532. Term of patent 14 years.



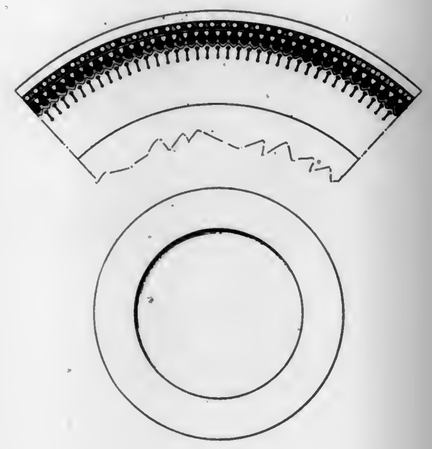
The ornamental design for a spout, as shown.

85,398. PLATE OR SIMILAR ARTICLE. ANGELO C. SCAVULLO, Great Kills, N. Y., assignor to Arthur Schiller & Son, a Corporation of New York. Filed June 16, 1931. Serial No. 40,222. Term of patent 7 years.



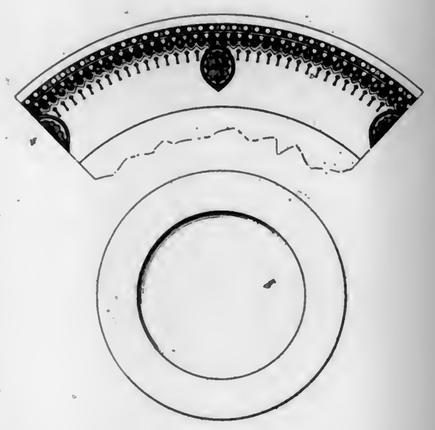
The ornamental design for a plate or similar article as shown, and described.

85,399. PLATE OR SIMILAR ARTICLE. ANGELO C. SCAVULLO, Great Kills, N. Y., assignor to Arthur Schiller & Son, a Corporation of New York. Filed June 16, 1931. Serial No. 40,223. Term of patent 7 years.



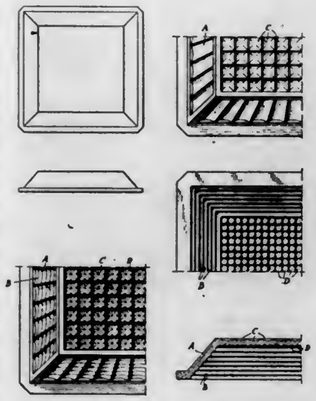
The ornamental design for a plate or similar article as shown, and described.

85,400. PLATE OR SIMILAR ARTICLE. ANGELO C. SCAVULLO, Great Kills, N. Y., assignor to Arthur Schiller & Son, a Corporation of New York. Filed June 16, 1931. Serial No. 40,224. Term of patent 7 years.



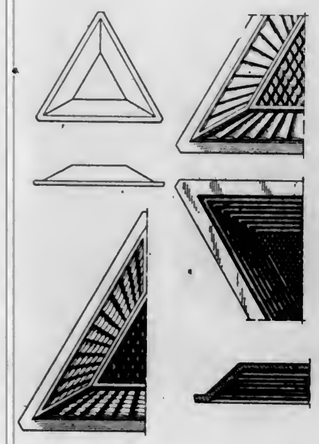
The ornamental design for a plate or similar article as shown, and described.

85,401. GLASS PANEL FOR LUMINAIRS. ERNEST STROUD, London, England. Filed Feb. 21, 1931. Serial No. 38,782. Term of patent 7 years.



The ornamental design for a glass panel for luminairs substantially as shown and described.

85,402. GLASS PANEL FOR LUMINAIRS. ERNEST STROUD, London, England. Filed Feb. 21, 1931. Serial No. 38,784. Term of patent 7 years.



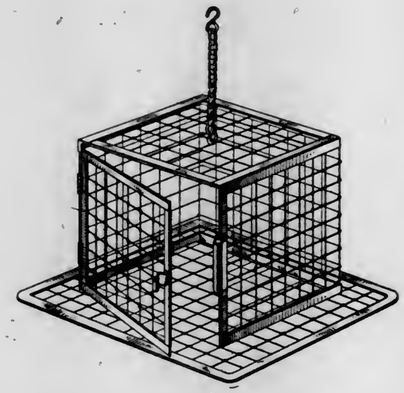
The ornamental design for a glass panel for luminairs substantially as shown and described.

85,403. WRIST COMPACT. REINHOLD J. SWANSON, Chicago, Ill. Filed Apr. 24, 1931. Serial No. 39,610. Term of patent 14 years.



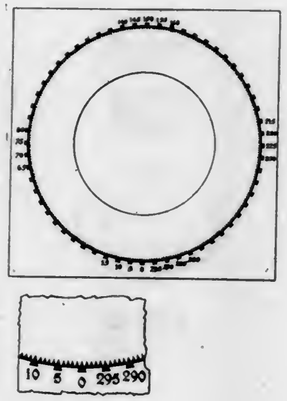
The ornamental design for a wrist compact, as shown and described.

85,404. SUET CAGE. ERWIN TOWNLEY, New York, N. Y. Filed Dec. 27, 1929. Serial No. 33,960. Term of patent 14 years.



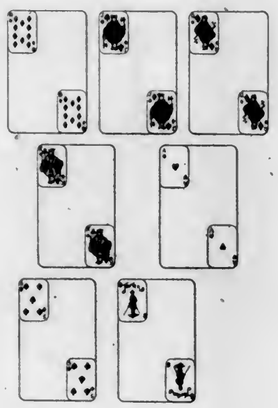
The ornamental design for a suet cage, substantially as shown.

85,405. SCALE CHART. HAROLD L. VAN DOREN, Toledo, Ohio. Filed Sept. 8, 1931. Serial No. 41,050. Term of patent 14 years.



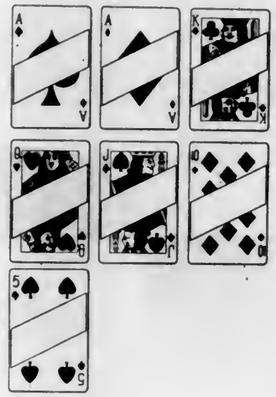
The ornamental design for a scale chart as shown and described.

85,406. SET OF PLAYING CARDS. HARRY H. WEINTRAUB, Wilkes-Barre, Pa., assignor to Kardad, Inc., Wilkes-Barre, Pa., a Corporation of Delaware. Filed Aug. 3, 1931. Serial No. 40,760. Term of patent 14 years.



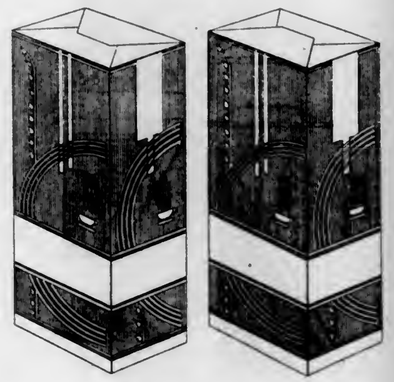
The ornamental design for a set of playing cards, as shown and described.

85,407. SET OF PLAYING CARDS. HARRY H. WEINTRAUB, Wilkes-Barre, Pa., assignor of one-half to Max Dattner, Wilkes-Barre, Pa. Filed Aug. 27, 1931. Serial No. 40,935. Term of patent 14 years.



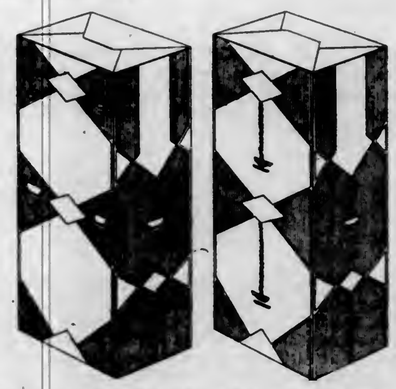
The ornamental design for a set of playing cards, as shown and described.

85,408. BAG OR ANALOGOUS ARTICLE. KARL L. WILHELM, New York, N. Y., assignor to Standard Brands Incorporated, New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1931. Serial No. 40,959. Term of patent 14 years.



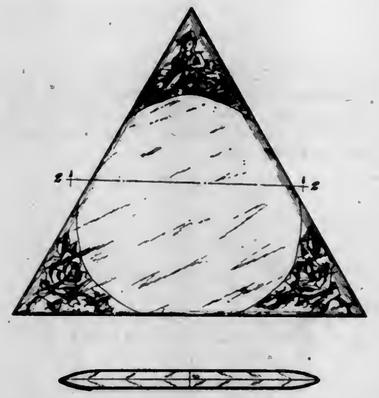
The ornamental design for a bag or analogous article, as shown and described.

85,409. BAG OR ANALOGOUS ARTICLE. KARL L. WILHELM, New York, N. Y., assignor to Standard Brands Incorporated, New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1931. Serial No. 40,960. Term of patent 14 years.



The ornamental design for a bag or analogous article, as shown and described.

85,410. CELLOPHANE CONTAINER. EDWARD ZUPNIK, Washington, D. C. Filed June 9, 1931. Serial No. 40,134. Term of patent 3½ years.

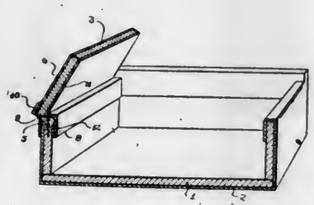


The ornamental design for a cellophane container substantially as shown.

PATENTS

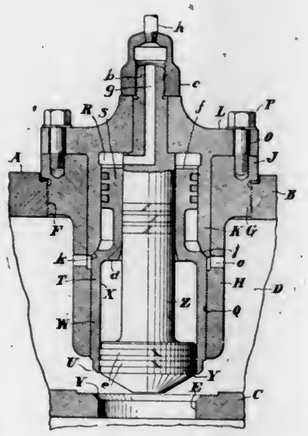
GRANTED OCTOBER 20, 1931

1,827,724. CIGAR BOX. ALLAN A. ADAMSON, Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio, a Corporation of Delaware. Filed July 11, 1928. Serial No. 291,882. 9 Claims. (Cl. 229—44.)



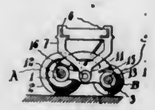
1. A cigar box comprising a box body, a separately formed flat lid for the body formed of laminated material cut in its outer face adjacent its rear edge to form a hinging strip the hinge of which is adjacent the inner face of the lid, the hinging portion being formed by some of the laminations of the material, nails fastening said hinging strip to the rear wall of the box body.

1,827,725. CLEARANCE VALVE ASSEMBLY. CHARLES S. BAKER, Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 12, 1929. Serial No. 399,242. 5 Claims. (Cl. 137—153.)



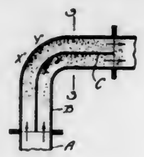
1. A clearance valve assembly, comprising a valve guide having a bore, a valve in the bore having a chamber, means for introducing pressure fluid into the bore to close the valve, and means in the valve and stationary with respect to for controlling the admission and exhaust of fluid into and from the chamber to cushion the movement of the valve.

1,827,726. LAND PACKER. LLOYD EDWARD BISSELL, Elora, Ontario, Canada, assignor to T. E. Bissell Company Limited, Elora, Ontario, Canada, a Corporation of Canada. Filed Sept. 17, 1930. Serial No. 482,600. 1 Claim. (Cl. 55—77.)



A land packer comprising two parallel rollers each consisting of an axle and a plurality of packing wheels or discs mounted thereon, a frame extending lengthwise of the packer above the rollers having a banger at the middle and at each end, a rocker arm fulcrumed to each of the end hangers provided with bearings in which the two axles are mounted for maintaining their assembly with the frame and providing for the free revolutions of the rollers and their united and individual undulations when following the contour of the land, and a center bearing brace fulcrumed to the middle hanger having bearings in which the two axles are mounted permitting of their free revolution and axial movement, maintaining their parallelism, preventing the springing of the axles and supporting the frame.

1,827,727. CONDUIT SYSTEM. JOHN BLIZARD, Garden City, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1927. Serial No. 181,075. 2 Claims. (Cl. 187—75.)

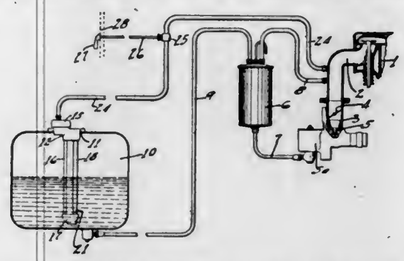


2. A tubular conduit adapted for conveying under pressure a homogeneous mixture of a fluid and an abrasive solid material in suspension therein and comprising substantially straight conduit portions and an intervening curved portion bent about a predetermined center and uniting with said straight portions to provide a smooth and unbroken flow path for said mixture, all of said portions having substantially the same cross-sectional area and being arranged in the same plane, and means for maintaining the homogeneity of said mixture and preventing excessive wear on the outer wall of said curved portion comprising a diaphragm diametrically positioned in and extending throughout said curved portion and having a substantial portion of its surface perpendicular to the radii from said predetermined center, whereby the mixture flowing through said conduit is divided into parallel flowing portions in said curved portion.

1,827,728. METHOD OF FORMING EXPLOSIVE MIXTURES. CARL BREER, Summit, N. J., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed Jan. 20, 1923. Serial No. 615,129. 3 Claims. (Cl. 123—180.)

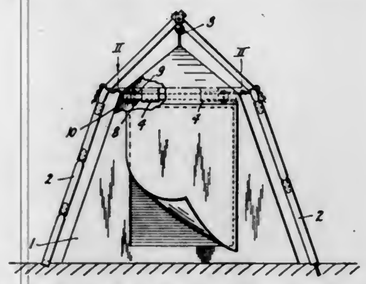
1. The method of supplying explosive mixtures to internal combustion engines which consists in passing a

stream of air in contact with a body of liquid fuel supplied by but separated from a mass of fuel, taking the lighter ends of the fuel exposed to the air to form an explosive mixture, exclusive of other mixture, then during the continuation of the formation of such mixture



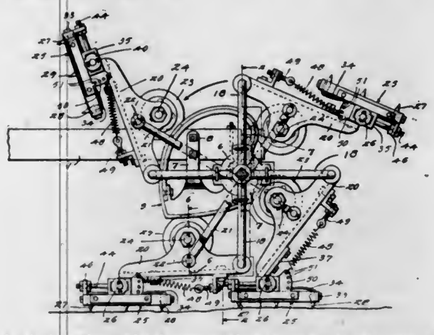
augmenting it with a mixture formed by spraying the residual liquid fuel into a stream of air, then stopping the flow of air through the liquid fuel, and continuing the formation of explosive mixture by spraying the fuel into the air.

1,827,729. SUPPORTING STRUCTURE FOR EAVES OF TENTS. BLOOMFIELD H. BROOKS, Denver, Colo. Filed Jan. 21, 1928. Serial No. 248,416. 3 Claims. (Cl. 135—4.)



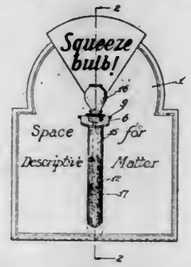
1. A framework for eaves of tents comprising a plurality of rigid bars and a plurality of sectioned bars, means for detachably and pivotally connecting said sectional bars with the rigid bars adjacent the corners of the eaves, the sections of the sectional bars being hinged together to permit folding thereof between the rigid bars and having means for locking the sections of each sectional bar in substantially rigid relative alignment.

1,827,730. TRACTION WHEEL. HENRY BYLIN, Lankin, N. Dak. Filed May 2, 1931. Serial No. 534,629. 5 Claims. (Cl. 305—12.)



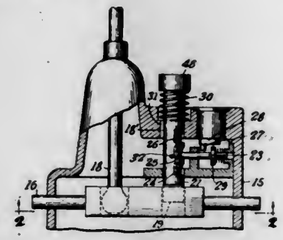
1. A traction wheel comprising a cam, arms rotatable with respect to the cam, pairs of opposed levers surrounding the cam and pivoted at corresponding ends thereof to the arms, rollers carried by the levers and contacting with the cam, links connecting the levers of each pair, shoes pivoted to the free ends of the levers, and springs connecting the levers and shoes.

1,827,731. ADVERTISING DISPLAY BOARD. RALPH H. CHURCHILL, Chicago, Ill. Filed Jan. 11, 1928. Serial No. 245,906. 4 Claims. (Cl. 40—126.)



1. In an advertising display device, a panel, a transparent receptacle carried on the panel and having liquid therein, and a compressible bulb connected with the receptacle and conveniently disposed for compression by an observer to forcibly expel fluid into the liquid, thus causing violent agitation thereof for the purpose of increasing the observer's interest.

1,827,732. MOTOR VEHICLE LOCK. DAVID CONLAN, Brooklyn, N. Y. Filed Aug. 6, 1929. Serial No. 383,927. 8 Claims. (Cl. 70—127.)

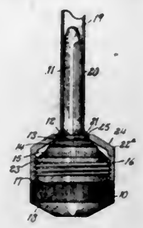


3. In combination with a motor vehicle, having a control circuit and a variable speed transmission, switch means for said control circuit, said variable speed transmission having reverse and three forward speeds, a lock having one unlocking and two locking positions, gear shift locking mechanism controlled by said lock adapted in the unlocking position of the lock to permit free shifting of the gears and in one of the locking positions to lock the second and high speed gearing, while leaving the low speed and reverse gearing free for use, and in the other locking position to lock the reverse and all forward speeds, said switch mechanism including a movable element connected with the lock mechanism and operable thereby to render the control circuit operative while the locking mechanism is in the unlocked or in the first locking position and to render the control circuit inoperative when the locking mechanism is in the second fully locked condition.

1,827,733. TUBE-FLANGING TOOL. EDWARD S. CORNELL, Jr., Watertown, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Oct. 4, 1930. Serial No. 486,318. 3 Claims. (Cl. 153—79.)

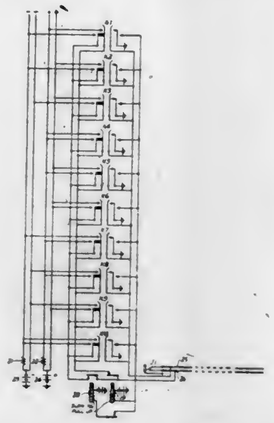
1. In a flanging-tool, the combination with a mandrel-member provided at one end with a plurality of stepped tube-deflecting surfaces; of a separately-formed stop-

sleeve axially removable from and adapted to embrace a portion of the said mandrel-member and provided with an inwardly-extending annular flange terminating in an



annular stop-shoulder located in close proximity to one of the stepped tube-deflecting surfaces of the said mandrel-member for limiting and determining the flaring of a tube or similar article thereby.

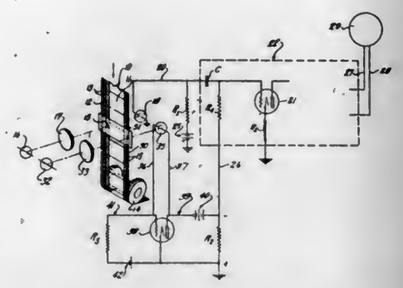
1,827,734. TELEPHONE SYSTEM. CLARENCE A. ANDERSON, Chicago, Ill., assignor, by mesne assignments, to American Electric Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 20, 1927. Serial No. 207,161. 12 Claims. (Cl. 179—27.)



1. In an impulse receiving device, a chain of differential transfer relays, a transfer-control relay, an auxiliary relay, means responsive to an operation of the transfer-control relay for bringing about the operation of the first differential relay, a circuit for said auxiliary relay controlled jointly by said transfer-control relay and any connected one of the differential relays, and circuit arrangements controlled by the auxiliary relay for preventing the operation of the next differential relay until the transfer-control relay has released and has reoperated.

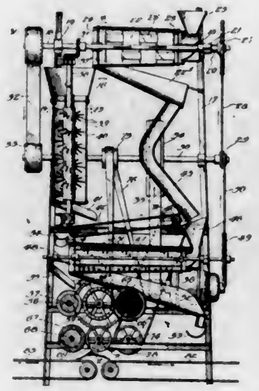
1,827,735. VOLUME CONTROL IN SOUND RECORD REPRODUCTION. JAMES R. BALSLEY, Beverly Hills, Calif., assignor to Fox Film Corporation, Hollywood, Calif., a Corporation of New York. Filed Oct. 14, 1929. Serial No. 399,464. 5 Claims. (Cl. 179—100.3.)

1. In combination with a system for reproducing sound waves from a sound record, which system includes means for driving the sound record, means for producing from the sound record varying electrical current waves corresponding to the sound waves, and means for reproducing sound from said current waves; a volume control record moved synchronously with the sound record, means for producing from the volume control record electrical currents corresponding to volume variations recorded thereon, a vacuum tube and a circuit therefor, leads connecting the varying electrical current produced from the volume control record across the grid and plate of said



vacuum tube, whereby a varying plate current corresponding thereto appears in the plate circuit of the tube, and means for modifying the volume level of the reproduced sound in accordance with the variations in said plate current.

1,827,736. NUT PICKING MACHINE. FRANK A. COARI, Chicago, Ill. Filed Apr. 14, 1928. Serial No. 269,899. 7 Claims. (Cl. 209—75.)



1. In a nut picker mechanism, means for separating particles of nut kernels and shells of cracked nuts from whole and substantially whole cracked nuts, a feeder drum for receiving said nut kernels and shells of cracked nuts, means for separating kernels from the shell particles, and a housing having agitating means therein between the said separating means and said feeder drum for breaking up substantially whole cracked nuts and separating out uncracked and substantially whole nuts from the bulk thereof.

1,827,737. SELF-LUBRICATING BEARING AND METHOD OF MAKING SAME. JOSEPH R. COOLIDGE, 3d, Brookline, Mass., assignor to Montan, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Dec. 23, 1927. Serial No. 242,299. 8 Claims. (Cl. 308—240.)

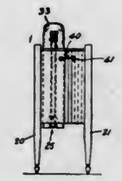
1. A self-lubricating bearing member of wood or fiber impregnated for a substantial depth with a mixture of paraffin, a lubricating oil, and a wax having a melting point above 160° F. and having the characteristic of changing abruptly from a solid to a liquid state upon melting.

1,827,738. LEER FEEDER. ALBERT N. CRAMER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 7, 1928. Serial No. 290,981. 9 Claims. (Cl. 198—31.)



1. A leer feeder comprising an endless chain, a series of ware pushers arranged at uniformly spaced points along and pivoted to said chain, said pushers normally extending laterally from one side of the chain and adapted to convey bottles along a predetermined path, and mechanical means reciprocating along a path parallel with the chain and operable to swing the pushers one at a time toward the chain to free the bottles from the influence of said pushers.

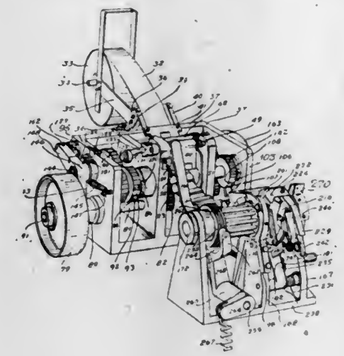
1,827,739. BABY CRIB. WILLIAM DERBYSHIRE, Los Angeles, Calif. Filed Apr. 29, 1929. Serial No. 358,890. 3 Claims. (Cl. 5—99.)



1. In a folding bed, a frame end piece supported upon upright legs, a second frame end piece supported upon upright legs, foldable frame side pieces at each side of the bed formed in sections which are hingedly connected with each other and with said frame end pieces each of said frame end pieces having at each end an extension to which the hinged sections at one side of the bed are hingedly connected, said extensions being of unequal length, supporting means on said bed frame, and a vertically foldable mattress supporting frame resting upon said supporting means and adapted for folding into the space encompassed by the bed frame and opposite to the shorter of said unequal extensions at one end of the bed frame, said mattress supporting frame being formed in sections which are foldable upon each other, one of these sections being pivotally connected with the aforesaid mattress support close to one end of the bed frame, said mattress, its supporting frame and the recited foldable frame side pieces all, when folded, coming substantially into contact with each other from end to end of the bed.

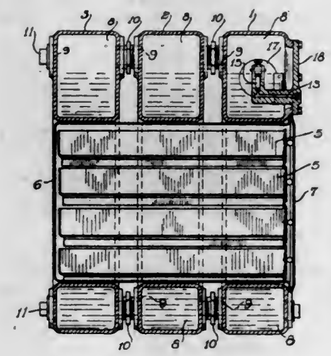
1,827,740. ARMATURE INSULATION MACHINE. HARRISON H. EATON, Toledo, Ohio, assignor to The Electric Auto-Lite Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 2, 1926. Serial No. 79,053. 33 Claims. (Cl. 29—84.)

1. Apparatus for lining armature cores with insulating material, which comprises a mounting drum having its surface divided into sections by circumferentially spaced radial grooves; means for creasing a strip of paper and mounting said strip on said drum with creases at opposite edges of said grooves and with successive lengths between creases alternately covering said surface sections and de-



pressed into said grooves; and means for pushing said strip, thus mounted, sidewise onto an armature having grooves aligned with the grooves of said drum.

1,827,741. EXPANSION CHAMBER FOR REFRIGERATING APPARATUS. CHARLES F. GARDNER, New Carlisle, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 22, 1925, Serial No. 45,395. Renewed Jan. 20, 1928. 17 Claims. (Cl. 62—126.)

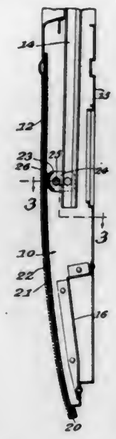


16. In a mechanical refrigerating apparatus of the compressor-condenser-flooded-expander type, an expansion unit comprising a plurality of hollow sections for liquid refrigerant, the interiors of said sections being connected in operative communication, one of said sections having a liquid refrigerant inlet, control valve means operatively positioned within said section for controlling the flow of liquid refrigerant to said expansion unit, and a suction outlet for said sections arranged to permit the discharge of refrigerant in gaseous form only from said unit.

1,827,742. MOLD LINING. JAMES B. GRENAGLE, Baltimore City, Md., assignor of one-half to William W. Varney, Baltimore, Md. Filed Sept. 26, 1929. Serial No. 395,467. 1 Claim. (Cl. 22—189.)

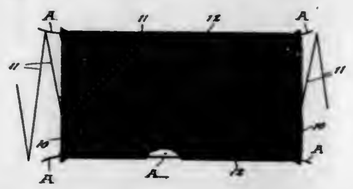
A mold lining comprising celite, asbestos and zirconium oxide.

1,827,743. METAL AUTOMOBILE BODY. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 3, 1928. Serial No. 251,668. 5 Claims. (Cl. 296—44.)



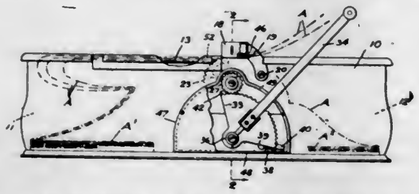
1. In an automobile body, an outer sheet metal panel shaped to have a permanent outward curvature, and an inner outwardly curved panel of non-metallic sheet material substantially co-extensive in area with the outer panel supported under tension to exert resilient pressure against said outer panel.

1,827,744. IDENTIFICATION MEANS FOR RIBBONS AND THE LIKE. JOHN GROSSGEBAUER, Paterson, N. J. Filed Oct. 3, 1929. Serial No. 397,139. 2 Claims. (Cl. 139—420.)



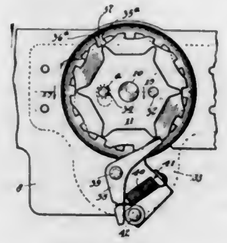
1. Identification means for ribbons and the like which comprises a thread woven within the selvage edge of the ribbon and normally hidden from view and having a distinctive color, the thread being visible only when the ribbon is slightly unravelled.

1,827,745. LEVER FEED AUTOGRAPHIC REGISTER. LOUIS F. HAGEMANN, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Niagara Falls, N. Y., a Corporation of Ontario, Canada. Filed Apr. 11, 1929. Serial No. 354,187. 16 Claims. (Cl. 271—2.4.)



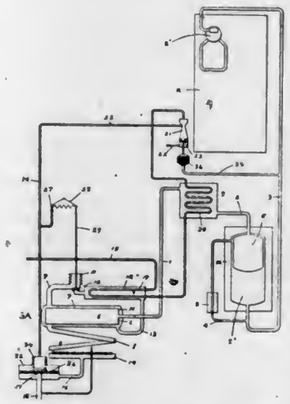
1. In an apparatus of the character described, in combination, a rotary strip engaging strip feeding member, means for actuating said strip feeding member to effect strip feed, stop mechanism including a detent cooperating with said strip feeding member to stop it at a predetermined position and separate means controlled by said actuating means for locking forward strip feeding rotation of said strip feeding member.

1,827,746. WINDOW REGULATOR FOR VEHICLE BODIES. AUGIE L. HANSEN, Chicago, Ill., assignor to A. L. Hansen Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1927. Serial No. 239,857. 3 Claims. (Cl. 192—8.)



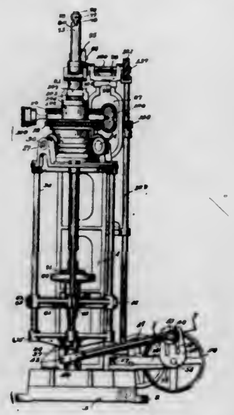
1. In a clutch, the combination of a rotative driving member, a driven member journalled on said driving member, a pair of ratchet discs, one fixed to said driving member and the other to said driven member, said discs having complementary ratchet teeth and connected together for a limited relative angular displacement in opposite directions, the teeth of said disc at one extremity of the relative displacement being in substantial coincidence and at the other extremity being spaced apart to form notches, and a spring-pressed pawl bearing against the peripheries of said discs and acting to engage a notch to lock said driven member against rotation in one direction by a force applied thereto independently of said driving member.

1,827,747. REFRIGERATING APPARATUS. CHARLES F. HENNEY, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1930. Serial No. 431,735. 8 Claims. (Cl. 62—5.)



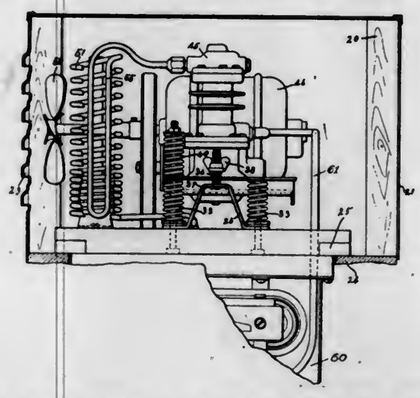
1. Refrigerating apparatus including a first circuit containing an evaporator and means for supplying liquid refrigerant to and withdrawing gaseous refrigerant from said evaporator, a second circuit including a condenser and a secondary evaporator, said secondary evaporator positioned above the bottom of said condenser and said first evaporator arranged to cool said condenser, means for storing up heat while said first named means withdraws refrigerant vapor from said first named evaporator and means operative substantially at the conclusion of said withdrawing period for permitting the liquid refrigerant in said condenser to withdraw heat from said heat storage means whereby a portion of said liquid refrigerant is vaporized and the remainder is forced upwardly into said secondary evaporator, due to said vaporization.

1,827,748. APPARATUS FOR GRINDING AND POLISHING SPHERICAL LENSES. ARTHUR J. HOLMAN, Boston, Mass. Filed Aug. 18, 1927. Serial No. 213,795. 24 Claims. (Cl. 51—55.)



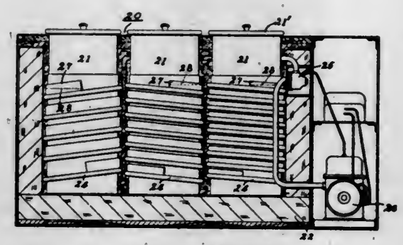
1. In a device of the character specified the combination of a lap, a rotatable universal joint supporting said lap, means for simultaneously rotating said universal joint, thereby imparting rotation to said lap, and oscillating said lap in a manner whereby no point on the lap surface may during its travel deviate from an extended spherical surface coincident with its own spherical contour, a lens chuck, and means for retaining a lens carried by said chuck in grinding contact with said lap.

1,827,749. REFRIGERATOR. ELMER L. HORLACHER, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 29, 1926. Serial No. 145,078. 4 Claims. (Cl. 62—1.)



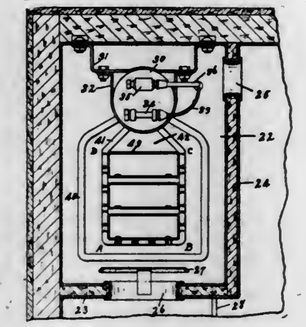
4. In a refrigerator of the character described, the combination with a cabinet; a platform supporting a motor having a pulley drivingly connected with a compressor also supported on the platform; cushioning devices supporting the platform on the cabinet; resilient means for resting upon the platform for resisting movement of the platform away from the cabinet; a condenser in rigid relation to said cabinet and a flexible connection for interchange of refrigerant between said condenser and said compressor.

1,827,750. REFRIGERATING APPARATUS. HARRY B HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 25, 1927. Serial No. 235,667. 11 Claims. (Cl. 62—101.)



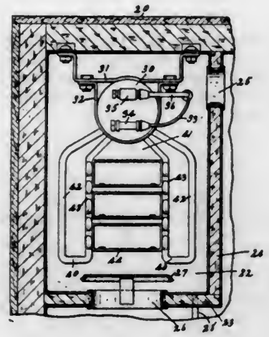
4. Refrigerating apparatus comprising in combination two series of interspersed coils surrounding a space, one of said coils having refrigerant therein, and the other having a freezing hold-over therein, said hold-over comprising a cryohydrate composition.

1,827,751. REFRIGERATING APPARATUS. LLOYD M. KEIGHLEY, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 10, 1926. Serial No. 147,550. 12 Claims. (Cl. 62—126.)



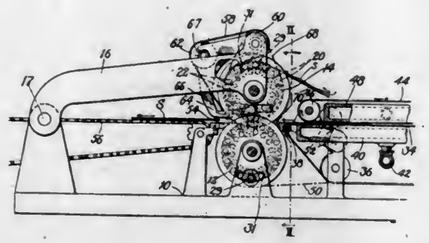
9. A cooling unit for mechanical refrigerators comprising an ice tray support, conduits each including opposed branch portions in intimate thermal contact with the opposite sides of the support and a connecting yoke portion, said yoke including a tortuous portion of flexible material lying alongside said support.

1,827,752. REFRIGERATING APPARATUS. LLOYD M. KNIGHLEY, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 10, 1926. Serial No. 147,551. 12 Claims. (Cl. 62—126.)



5. A cooling unit for mechanical refrigerators adapted to be placed in the path of medium to be cooled thereby, said cooling unit comprising opposed duct loops having tortuous branches cooperating to provide a freezing zone and other branches extending outwardly of the freezing zone in the path of the circulating medium and so constructed and arranged as a provide a shield of heat exchange material for shielding the freezing zone from the action of the circulating medium.

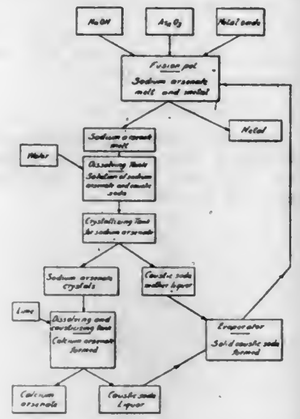
1,827,753. SHEET-SEPARATING APPARATUS. FAY D. KINNEY, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 5, 1928. Serial No. 324,027. 20 Claims. (Cl. 271—74.)



1. In a sheet-separating apparatus, co-operating rotatable separating members, means for retaining adhering sheets in engagement with each member, said means being constructed and arranged to render the retention of the sheets effective during a portion only of the rotary movement of the members, and means associated with one of the members only for further retaining the sheets in engagement with it.

1,827,754. REDUCTION OF METALLIC COMPOUNDS AND PRODUCTION OF ARSENATES. GUSTAF NEWTON KIRSEBOM, Brooklyn, N. Y. Filed July 18, 1928. Serial No. 293,709. 8 Claims. (Cl. 75—17.)

1. The method of producing metallic lead or lead alloys from flue dust containing lead oxide and arsenic trioxide which comprises causing such flue dust to react with fused caustic soda to reduce lead oxide to metallic

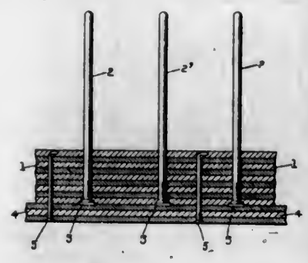


lead and to convert arsenic trioxide into sodium arsenate, and separating the reduced lead or lead alloy from the sodium arsenate melt.

1,827,755. TREATMENT OF CADMIUM-BEARING MATERIAL. GUSTAF NEWTON KIRSEBOM, Gottenborg, Sweden. Filed June 28, 1930. Serial No. 464,716. 15 Claims. (Cl. 75—17.)

1. The method of treating cadmium-bearing material which comprises causing the cadmium-bearing material to react with arsenic in the presence of a fused caustic alkali metal compound whereby the cadmium compound present in the material is reduced to metallic cadmium, and separating the resulting metallic cadmium from the alkali metal slag.

1,827,756. APPARATUS FOR HOLDING TEXTILE PACKAGES. ROBERT MARTIN, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Aug. 9, 1928, Serial No. 298,484, and in Great Britain Sept. 6, 1927. 8 Claims. (Cl. 242—130.)

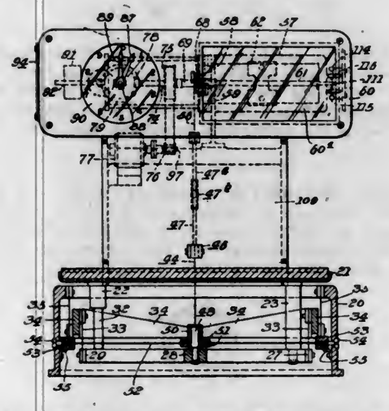


1. A device for holding yarn packages, said device comprising a base member, a plurality of prongs penetrating said base member, anchor members on the prongs adapted to engage the underside of the base member, and a backing member attached to the base member and adapted to secure the said anchor members firmly against the base member.

1,827,757. INDIGO POWDER AND METHOD OF MAKING THE SAME. THEODORE L. MASTERSON, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed June 4, 1925. Serial No. 35,018. 14 Claims. (Cl. 8—6.)

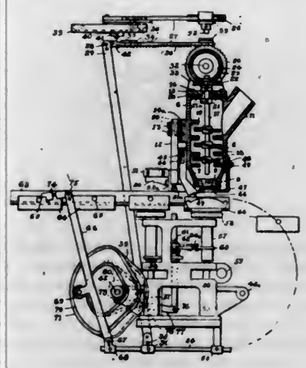
1. A process of preparing a dry indigo dyestuff, capable of being readily wetted and dispersed in water, which comprises mixing a small amount of Turkey red oil with an indigo paste and drying to substantial dryness.

1,827,758. SCALE APPARATUS. WILMER E. MCKIM, New Kensington, Pa., assignor to Walter E. Spill, trustee, Pittsburgh, Pa. Filed Sept. 14, 1928. Serial No. 305,942. 19 Claims. (Cl. 265—56.)



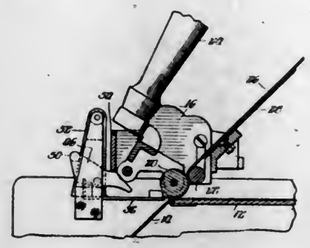
1. Scale apparatus comprising a supporting member mounted for rocking movement, a flexible suspension strip connected at its upper end to said member, and a weight-transmitting member connected to the lower end of said strip, one of said connection being pivotal, with its axis perpendicular to the plane of the strip.

1,827,759. METHOD OF AND APPARATUS FOR FEEDING AND FORMING PLASTIC MATERIAL IN THE MANUFACTURE OF POTTERY. WILLIAM J. MILLER, Swissvale, Pa. Filed Jan. 13, 1927. Serial No. 160,997. 20 Claims. (Cl. 25—26.)



1. In mechanism of the class specified, means for extruding a charge of plastic material into or on a mold, and means for segregating and preforming the charge through rotation of the mold.

1,827,760. SWINGING MARGIN BAR. WILHELM K. MOLL, Chicago, Ill., assignor to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed Oct. 9, 1929. Serial No. 398,827. 8 Claims. (Cl. 101—133.)



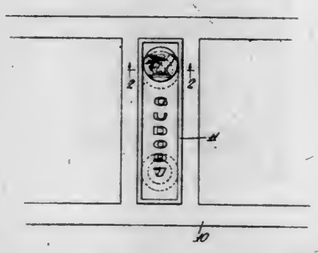
1. In a duplicating machine the combination with a printing bed, a platen carriage adapted to travel over said bed, a margin bar pivoted to said machine at one end of said bed, and adapted to swing from an operative position to an inoperative position with respect to said carriage actuating means for said bar including a pivoted dog having engagement with said bar, and means on said carriage adapted to depress or release said dog.

1,827,761. CIGAR BAND. OTTO MULLER, Richmond Hill, N. Y., assignor, by direct and mesne assignments, to Kneher, Muller Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 12, 1927. Serial No. 232,752. 5 Claims. (Cl. 40—21.)



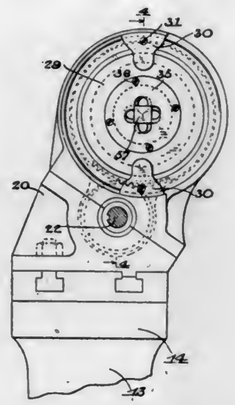
5. A cigar band of the type having a printed surface in which the ends of the band are adapted to be adhesively connected together in overlapping relation, a dry, fusible, protective covering for a portion of the printed surface of said band extending beyond the overlapping portion of the ends by which the overlapping ends of said band may be fastened together by the application of heat and pressure.

1,827,762. ANCHORAGE. BERNARD J. POVALSKI, Jersey City, N. J., assignor to Fedco System, Inc., a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 357,969. 12 Claims. (Cl. 40—2.2.)



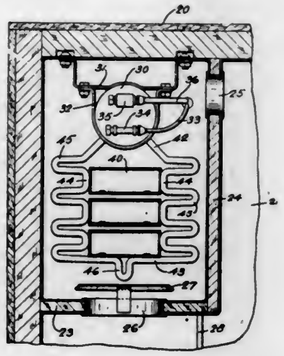
1. In combination, an identification plate, a lug welded thereon, and an anchorage device formed with a recess of the same shape as the lug in which the lug is inserted with a forced fit, the strength of the plate surrounding the lug being less than that of the frictional engagement between the lug and the anchorage device.

1,827,763. TURNING MACHINE CHUCK. JAIRUS S. RICHARDSON, Sheboygan Falls, Wis., assignor, by mesne assignments, to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed June 17, 1926. Serial No. 116,577. 24 Claims. (Cl. 279—1.)



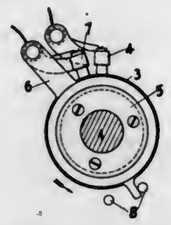
1. A chuck comprising a pair of relatively rotatable chuck members having registering apertures provided with oppositely-directed work-engaging abutments movable in opposite directions to chucking and releasing positions, means for driving one of said chuck members in work-chucking direction, means for retarding the rotation of the other of said chuck members during rotation of said driven chuck member, and means for rotating said first-named chuck member in a direction opposite to driving for effecting release of the work from chucking engagement.

1,827,764. REFRIGERATING APPARATUS. WALTER W. RIEDEL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Feb. 24, 1927. Serial No. 170,612. 20 Claims. (Cl. 62—126.)



19. In a refrigerating apparatus, a cooling unit adapted to be placed in the path of cooling medium to be cooled, said cooling unit comprising a header, ducts connected with the header, said ducts being of serpentine fashion and arranged in opposed rows extending horizontally, the loops of the serpentine of one row extending toward but spaced from the loops of the serpentine of another row providing a horizontally elongated refrigerating zone between the rows.

1,827,765. ELECTRICAL SWITCH. LUDWIG ROEBEL, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Mar. 20, 1926, Serial No. 96,120, and in Germany Apr. 3, 1925. 7 Claims. (Cl. 200—52.)



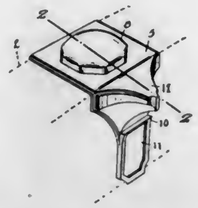
5. Switching mechanism comprising, in combination, relatively movable brushes and a commutator for conductively connecting the brushes, one of the brushes being movable to different positions relative to the other by operation of the commutator in opposite directions.

1,827,766. METHOD OF FORMING CAPILLARY TUBING. DURWOOD D. ROSENBURGH, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed July 7, 1928. Serial No. 291,111. 1 Claim. (Cl. 205—8.)



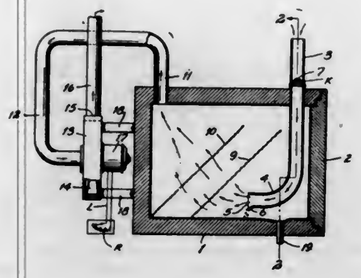
The method of forming capillary tubing for fluid transmission systems in thermometers and the like, which consists in drawing a capillary tubing of approximately the desired dimensions and then swaging the tubing upon a wire to make the bore uniformly smooth and uniform in cross-section throughout its length, conducting the swaging operation so that the wire may be withdrawn from the tubing.

1,827,767. RADIATOR FOR MOTOR VEHICLES. FREDERICK C. RUPPEL, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Mar. 10, 1928. Serial No. 260,757. 5 Claims. (Cl. 220—24.)



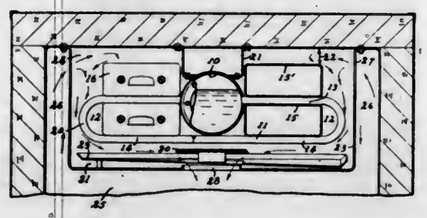
1. The combination with a radiator shell having an opening in the top thereof, a radiator disposed within said shell and having a threaded filling neck projecting through said opening therein, a flat cap plate mounted on said shell and having an opening therein fitting said neck, said cap plate having an integral name plate member depending from its front edge and overlapping the front of the shell, a retaining nut threaded upon said neck to clamp said cap plate upon said shell, and a chambered cap threaded upon said neck above said retaining nut to enclose the same and with its lower edge closing against said cap plate.

1,827,768. AIR WASHING AND TEMPERING MACHINE. WILHELM AUGUST SCHWENDER, St. Louis, Mo. Filed Aug. 8, 1930. Serial No. 473,951. 1 Claim. (Cl. 183—16.)



An air washing and tempering apparatus comprising a casing, an open end tube extending from without to within the casing, an air distributing pipe leading from the casing, means for exhausting air through the casing and tube, said means operating to discharge air from the distributing pipe, and means for creating a water mist in the tube, said last-mentioned means comprising a deflecting vane having kerfs formed on the faces thereof, and a pair of opposed water nozzles disposed to project their streams against said surfaces to form a mist.

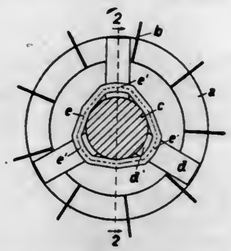
1,827,769. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 31, 1927. Serial No. 229,000. 15 Claims. (Cl. 62—126.)



1. An elevator directly exposed to air flowing thereover for cooling the same, comprising in combination, an elongated horizontal header and looped conduit means for circulating refrigerant extending laterally from the header and forming an elongated horizontal enclosure for an ice-making container substantially within the height of the header.

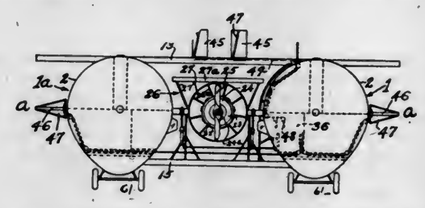
1,827,770. ROTARY FAN. PHILIPP SUTER, Baden, Switzerland, assignor to Aktiengeselischaft Brown Boveri & Cie, Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Feb. 6, 1926. Serial No. 86,596, and in Germany Feb. 6, 1925. 1 Claim. (Cl. 170—173.)

In rotary fan construction, an operating shaft, fluid-impelling structure disposed about said shaft and provided with feet portions engaging and extending axially of said shaft, said feet portions being disposed in spaced relation with respect to each other in a direction circumferentially of said shaft, and a band disposed about said shaft and said feet portions and holding the latter in firm engaging relation with said shaft, said band having a polygonal configuration comprising peripheral portions engaging said feet portions and joined by intermediate



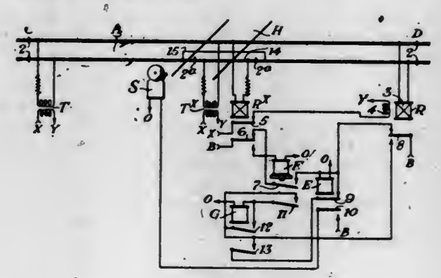
peripheral portions substantially tangential of said shaft and between which said feet portions are locked in said relation with respect to each other.

1,827,771. AIRCRAFT. FRANK DORSON WILLIAMS, Los Angeles, Calif. Filed Oct. 21, 1927, Serial No. 227,727. Renewed Mar. 14, 1931. 17 Claims. (Cl. 244—6.)



1. The combination with an air craft frame and the gliding wings and lighter-than-air floats connected to said frame, of an oscillatory frame; a motor carried by the oscillatory frame and provided with a rotary shaft extending in a plane at right angles to the axis of oscillation; a propeller direct-connected to the propeller shaft; an elevator plane fixed to the oscillatory frame in parallelism with the rotary shaft; and means for operating, controlling, and holding stationary, the oscillatory frame.

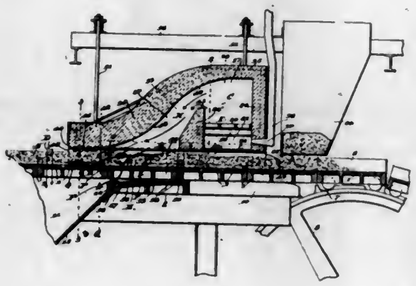
1,827,772. APPARATUS FOR THE CONTROL OF HIGHWAY CROSSING SIGNALS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 17, 1930. Serial No. 468,538. 5 Claims. (Cl. 246—130.)



2. In combination, a main section of railway track one of the rails of which is divided to form an auxiliary section, a track circuit for said main section comprising a source of current and a main track relay each of which is connected across the rails of the section, a track circuit for said auxiliary section comprising a source of current

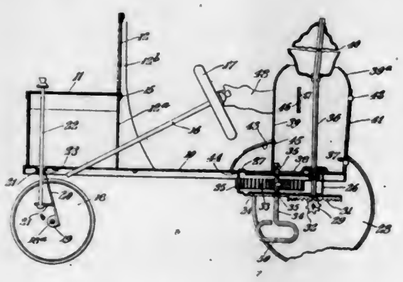
and an auxiliary track relay each of which is connected across the rails of the section, a highway intersecting said track adjacent said auxiliary section, and a signal for said highway controlled jointly by said two track relays.

1,827,773. MEANS FOR IGNITING ORE. ALFRED F. BEASLEY, Kellogg, Idaho, assignor to Bunker Hill & Sullivan Mining & Concentrating Company, Kellogg, Idaho, a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,335. 8 Claims. (Cl. 266—21.)



1. As a means of igniting ore for sintering purposes, a perforated carrier for advancing an ore bed, a flame producing device, means acting through said carrier and the ore bed thereon for elongating the flames from said device lengthwise of said ore bed, means open endwise of said bed to the outer air for gradually guiding said flames into contact with the ore bed, and means for arresting draft ingress laterally toward said flames to permit the latter to spread responsive to said first named means.

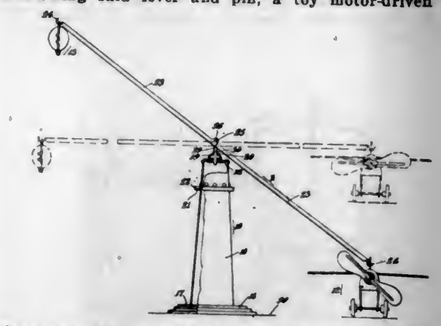
1,827,774. MECHANICAL FIGURE WHEELED TOY. SAMUEL I. BERGER, Newark, N. J. Filed Feb. 24, 1927. Serial No. 170,452. 4 Claims. (Cl. 46—45.)



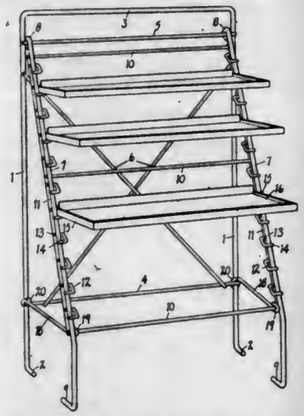
1. A toy automobile including a platform mounted on wheels, a curved plate supported on edge of the platform and simulating the sides and back of a driver's seat, a hollow generally cylindrical figure arranged within the plate and comprising a single curved sheet of metal having its edges arranged in juxta-position, and slot and tongue connections between said edges and the intermediate portion of the plate.

1,827,775. MECHANICAL TOY. SAMUEL I. BERGER, Newark, N. J. Filed Mar. 3, 1927. Serial No. 172,232. 4 Claims. (Cl. 272—31.)

1. A toy of the class described, including a central supporting column, a tilting lever rotatably fulcrumed on the upper end thereof, said column having a cap and dome at the top with vertically aligned perforations therein, a revoluble pin in said perforations, a horizontal pivot connecting said lever and pin, a toy motor-driven airplane detachably engaged with one end of the lever, and a counterbalancing toy aircraft carried by the other end of the lever.



1,827,776. DISPLAY RACK. EARL LEONAR BETTS, Battle Creek, Mich., assignor to United Steel & Wire Company, Battle Creek, Mich. Filed Mar. 9, 1931. Serial No. 521,069. 7 Claims. (Cl. 211—130.)



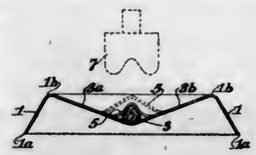
2. In a display rack, the combination of standards and connecting cross bars therefor, inclined risers and connecting cross bars therefor, truss rods disposed in parallel relation to said risers and secured to the rear sides of the riser cross bars, a plurality of U-shaped shelf supports disposed on said risers in forwardly inclined opposed pairs with one arm on the front side of the risers and the other between the risers and truss rods and secured thereto, and shelves provided with arms selectively engageable with said shelf supports.

1,827,777. SHOE LAST. WILLIAM M. BIDDLE, Camden, N. J., assignor to Turn-Rite Process Co., Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Aug. 26, 1930. Serial No. 477,821. 11 Claims. (Cl. 12—133.)



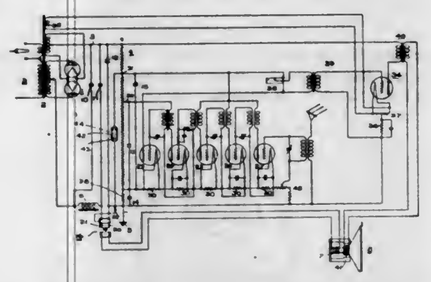
1. A shoe last having grooves formed in the sides adjacent the heel part, and extending from top to bottom.

1,827,778. THERMOMETER. HARRY D. BOLTON, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Jan. 4, 1930. Serial No. 418,533. 4 Claims. (Cl. 73—52.)



3. In a thermometer, the combination with a thermometer tube, of a base of sheet metal shaped ot define a trough, and means for securing the tube at the bottom of the trough, comprising a strap struck up from the metal of the base at the bottom of the trough, the strap being integrally connected with the base at both ends and being formed to spring into securing position with a snap action.

1,827,779. SAFETY DEVICE. WILLIAM E. BRINDLEY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1928. Serial No. 251,901. 7 Claims. (Cl. 250—27.)



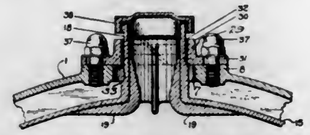
1. In combination, a source of unidirectional fluctuating current, a filter comprising a plurality of inductors and a capacitor for sensibly lessening said fluctuations, one of said inductors serving also as the field coil of a sound producing apparatus, means for disconnecting said field coil from said filter, and means for preventing the building up of abnormal potentials on said capacitor upon the disconnection of said field coil.

1,827,780. FRUIT SPOON. ALEXANDER CHAMBERS, Indianapolis, Ind., assignor of one-half to Delos A. Alig, Indianapolis, Ind. Filed May 29, 1930. Serial No. 457,007. 4 Claims. (Cl. 30—22.)



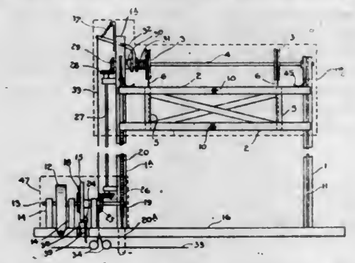
1. A spoon for eating fruit having a bowl with its front and side edges serrated, the sides of the serrations next to the handle being longer than the sides next to the front end of the bowl, those serrations on the side edges of the bowl being undercut and sharpened.

1,827,781. MOTOR VEHICLE RADIATOR. HAROLD D. CHURCH, Cleveland Heights, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 24, 1927. Serial No. 228,370. 8 Claims. ((Cl. 257—125.)



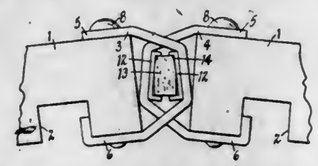
1. In a radiator assembly, the combination of a casing, a core disposed within said casing provided with a filling neck reinforced with radially extending flanges disposed on the inner periphery thereof, means for attaching said neck to said casing, and means for attaching said core at other points to said casing.

1,827,782. LEVEL CROSSING GATE. RUDOLF DAERING, Norton, Alberta, Canada. Filed Oct. 11, 1930. Serial No. 488,086. 2 Claims. (Cl. 246—293.)



1. In an automatically controlled slidable gate of the type described, a spiral spring driving motor, a ratchet and pawl check for winding the said spring in combination with a stop disc and independent stop-dog to hold the spring, a stop pin and independent stop lever to hold the said stop disc while winding, a toothed spur wheel meshing with a rack attached to the slidable gate for winding the said spring when the said gate is closing by reason of its own weight, a release lever to throw out the said stop-dog from holding the said stop disc, a lever or a bridge to operate the said release lever by a downward motion, a contact device comprising a spring depression member with a plunger post attached to automatically depress the said lever or bridge, and two pairs of meshed bevel gears for the transmission of the necessary power to raise the said gate, all as set forth.

1,827,783. BELT AND COUPLING THEREFOR. JAMES K. DIAMOND, Grand Rapids, Mich., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 19, 1931. Serial No. 509,588. 14 Claims. (Cl. 24—33.)



1. The combination with a belt of tapered cross section, of ball-like coupling members disposed in alternating overlapping relation and having straight cross portions disposed in an inwardly inclined relation, a pin of resilient material and of rectangular cross section disposed through said coupling members, and channel-shaped

shrouds embracing opposite sides of said pin, said shrouds fitting within the outer ends of said coupling members and movable therewith, the ends of said pin lying in the planes of the sides of the belt so that the pin constitutes a driving element of the belt.

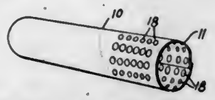
1,827,784. CAR. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Co., Cleveland, Ohio, a Corporation of Ohio. Filed May 12, 1928. Serial No. 277,209. 21 Claims. (Cl. 105—409.)



1. In a car wall, the combination with a sill; of wall-forming metal sheets secured at their lower ends to said sill; and a vertically extending element having a flat centrally disposed section and other sections at right angles thereto, the adjacent vertical edges of the sheets being overlapped and secured to the outer face of said central section, said element being disposed on the inner side of said sheets.

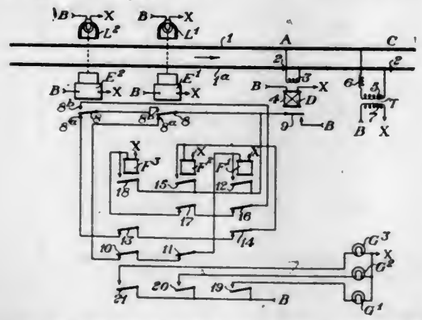
2. In a car wall, the combination with a sill; of a top plate; wall-forming metal sheets secured at their upper and lower ends to said plate and sill; and a post having a flat centrally disposed section and other sections at right angles thereto, the adjacent vertical edges of said sheets being overlapped on the outer side of and secured to the central section of the post, said post being disposed on the inner side of said sheets.

1,827,785. METHOD AND MEANS FOR SECTIONAL TREATMENT IN PERMANENT WAVING OF HAIR. ERNEST O. FREDERICS, New York, N. Y. Filed Oct. 27, 1927. Serial No. 229,142. 18 Claims. (Cl. 132—36.2.)



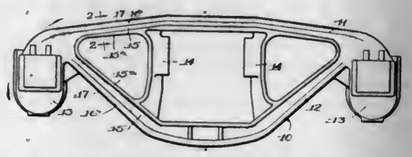
1. As an article of manufacture, a container for enclosing a tress of hair during the heating operation of a permanent-waving process comprising a gas-impervious tube adapted to be inserted in a heater and being perforated circumferentially in a manner such as to form a plurality of bands, certain ones of said plurality being separated from each other by the remainder of said plurality, certain of said bands being gas-pervious and certain other of said bands being gas-impervious.

1,827,786. ELECTRICAL SIGNALING. ROBERT M. GILSON, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 17, 1930. Serial No. 468,515. 12 Claims. (Cl. 246—29.)



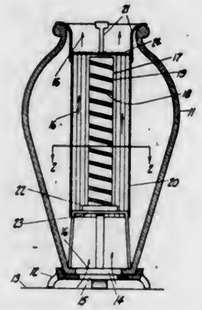
1. In combination a stretch of railway track, a first contact, means for operating said first contact when the front end of a train passes a first point along the trackway and for subsequently maintaining said first contact in its operated condition until the rear end of the train has passed beyond said first point, a second contact, means for operating said second contact when the front end of the train passes a second point along the trackway which is spaced from said first point, and means selectively controlled by said two contacts for indicating whether said train is longer or shorter than the distance between said two points.

1,827,787. SIDE FRAME SECTION. CLARENCE B. HARBISON, Lima, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed Apr. 7, 1930. Serial No. 442,052. 3 Claims. (Cl. 105—205.)



3. In a railway truck side frame, a longitudinal beam having an approximately U-shaped cross section of substantially uniform thickness, and having the sectional center lines of the two upright webs spaced apart substantially more adjacent the transverse web than adjacent the free ends of said upright webs.

1,827,788. ELECTRIC HEATER. WILLIAM WESLEY HICKS, San Francisco, Calif. Filed Nov. 27, 1926. Serial No. 151,206. 2 Claims. (Cl. 219—34.)

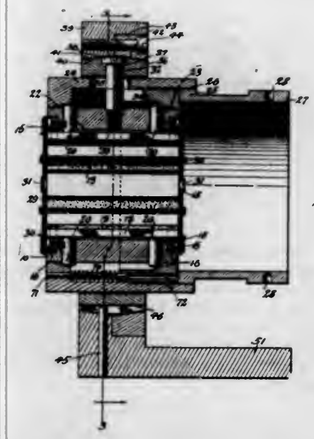


2. In an electric air heater, a hollow body having a bulging portion and open only near the top and bottom, an electric heating element arranged substantially in line with the vertical axis of the body, and a baffle surrounding the element and spaced intermediate the walls of the body and the element having a continuous uninterrupted face opposite to the interior of the body.

1,827,789. DEVICE FOR GRINDING EXTERNAL CYLINDRICAL SURFACES. MARSDEN C. HUTTO, Detroit, Mich., assignor to Hutto Engineering Company, Inc., a Corporation of Michigan. Filed July 11, 1928. Serial No. 291,784. 17 Claims. (Cl. 51—73.)

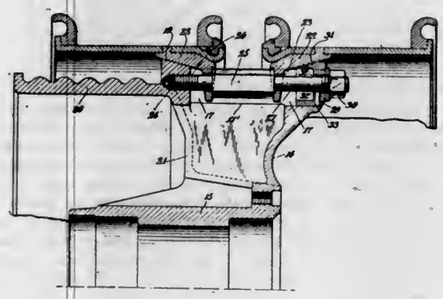
1. A grinding device comprising a body provided with a longitudinal passage for the reception of the article to be ground, a plurality of abrading members arranged in an annular row around said passage and having abrading surfaces at their inner sides adapted to engage the periphery of said articles, and a controlling device cooperating with said abrading members and having parts

arranged externally of said body and adjustably rigid relative to each other to positively fix the general limit of expansion of said members, and spring means for yieldingly drawing said abrading members laterally outward comprising relatively movable projections arranged



at opposite ends of said abrading members, relatively fixed projections arranged at opposite ends of said body and alternating with the movable projections at the respective ends of the abrasive members, and springs each engaging with the projections at the corresponding ends of the abrasive members and the body.

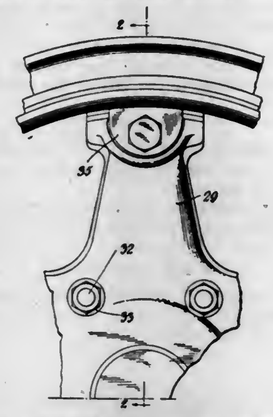
1,827,790. VEHICLE WHEEL. CHARLES G. KELLER, Poughkeepsie, N. Y. Filed Dec. 11, 1926. Serial No. 154,092. 16 Claims. (Cl. 301—6.)



1. A fellyless vehicle wheel comprising a hub, spokes integral with a hub, and a brake drum integral with the spokes, the outer end of each spoke being formed with means for attaching a rim thereto, each spoke being U-shaped in cross-section open toward and within the brake drum and having also an opening in the outer end thereof.

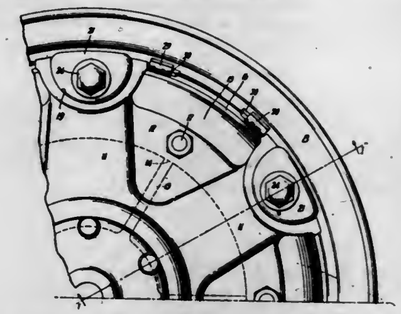
1,827,791. VEHICLE WHEEL. CHARLES GEORGE KELLER, Poughkeepsie, N. Y. Filed Apr. 26, 1927. Serial No. 186,627. 11 Claims. (Cl. 301—12.)

1. In combination a wheel body having an inclined wedge supporting surface on its periphery, a rim having an inclined wedge supporting surface, said surfaces being inclined in opposite directions and away from each other toward the inboard side of the wheel, a wedge member engaging said surfaces, means projecting from



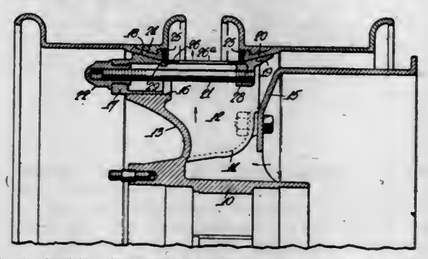
the inner side of the wheel for pulling the wedge toward the outboard side of said wheel, and resilient means for moving said wedge in the opposite direction.

1,827,792. VEHICLE WHEEL. CHARLES G. KELLER, Poughkeepsie, N. Y. Filed Mar. 21, 1928. Serial No. 263,373. 5 Claims. (Cl. 301—12.)



1. A vehicle wheel having a plurality of spokes, a pair of removable rims, each having a circumferentially facing shoulder, an annular rim-spacing member having projections for engaging two adjacent spokes to prevent rotation of said member in respect to the spokes, said projections also engaging with said shoulders to prevent relative rotation of the rims and the wheel.

1,827,793. VEHICLE WHEEL. CHARLES G. KELLER, Poughkeepsie, N. Y. Filed Apr. 5, 1929. Serial No. 352,625. 6 Claims. (Cl. 301—13.)



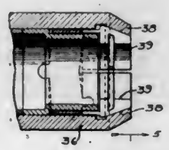
1. A double tired vehicle wheel having a pair of oppositely inclined rim seats movable axially relatively to

each other and each having a shoulder at the end thereof nearest to the axis of the wheel, rims supported on said seats, and an annular spacer engaging said shoulders and also engaging said rims to hold the latter on said seats, the engagement of the spacer with the shoulders serving to hold the rims in true aligned positions in planes at right angles to the axis of the wheel.

1,827,794. JELLY PREPARATION. ALBERT LEO, Chicago, Ill. Filed Mar. 9, 1929. Serial No. 345,890. 7 Claims. (Cl. 99—11.)

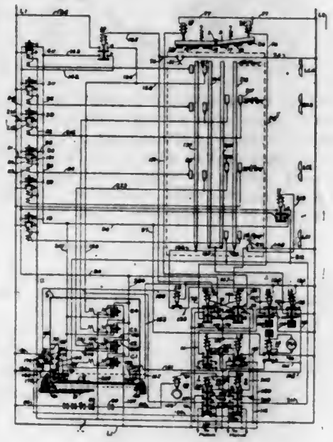
6. A jelly preparation comprising comminuted pectin, sugar, and tartaric acid crystals, said acid crystals having a coating of wax.

1,827,795. COLLET. MILTON J. MATTHEWS, Detroit, Mich. Filed Mar. 12, 1930. Serial No. 435,147. 17 Claims. (Cl. 279—38.)



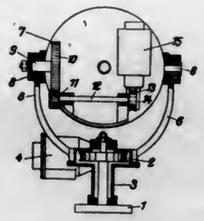
1. An equalizing collet comprising a shank member, intermediate members rockably mounted on said shank member and a plurality of jaw members radially slidable on said intermediate members.

1,827,796. ELEVATOR CONTROL SYSTEM. HAROLD W. MATTINGLY, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1929. Serial No. 393,422. 16 Claims. (Cl. 187—29.)



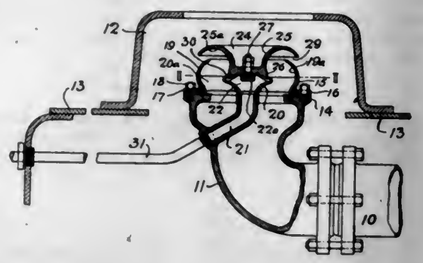
1. In an elevator-control system, a car operable in a hatchway past a plurality of floors, passenger-operated means disposed at each floor for registering calls for stopping the car at the corresponding floor and means responsive to a predetermined number of persons on the car for causing the car to by-pass the calls registered on the passenger operated means at the floors.

1,827,797. ADJUSTABLE SEARCHLIGHT. LUCIEN MULLER, Florange, France. Filed Feb. 4, 1931, Serial No. 513,431, and in France Mar. 15, 1930. 2 Claims. (Cl. 240—61.9.)



1. Adjustable searchlight, especially for vehicles and vessels and other purposes, comprising a stationary support, a casing rotatably arranged around the said support, a searchlight, forked arms secured to the said casing to carry the said searchlight, a stationary toothed rim disposed inside the said searchlight and carried by one of the said forked arms, and a pinion adapted to mesh with the said toothed rim.

1,827,798. STEAM DRIER. EMSLIE E. MURRAY, Schenectady, N. Y. Filed Feb. 6, 1930. Serial No. 426,247. 3 Claims. (Cl. 183—95.)

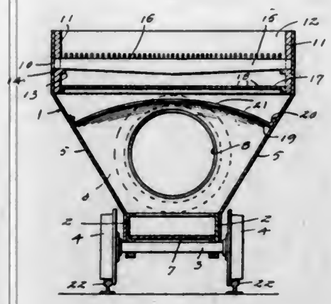


1. In an apparatus of the character described for a boiler, the combination of a dry steam pipe adapted to be disposed in the boiler and having a stand pipe section with a main passageway open at its upper end; a water collecting receptacle disposed inwardly of the wall of the passageway and fixed with relation thereto; a deflector supported on the receptacle, said deflector having an annular concave outer face for separating water from steam and conveying said water to the receptacle; an annular wall supported on the said open end of the stand pipe section, said annular wall having a concave inner face confronting and spaced from the concave outer face of the deflector providing a passageway therebetween fixed in area for the admission of steam to the stand pipe; means connecting the annular wall and receptacle to rigidly hold said receptacle in its said fixed relation and a conduit leading from the receptacle through the wall of the stand pipe section and adapted to be disposed through the wall of the boiler.

1,827,799. ORE SINTERING CAR. OSCAR A. OESTERLE, Henryetta, Okla. Filed June 12, 1930. Serial No. 460,707. 8 Claims. (Cl. 206—21.)

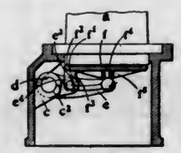
1. An ore sintering car, comprising a body having bottom, side and end walls, means for coupling a suction tube with one wall for the removal of air from the interior of the car, a grate disposed in the upper part of the car

adapted to have ore ignited thereon, and an apertured plate partitioning the upper part of the body between



the grate and said means for equalizing the air draft therethrough and the producing of uniform combustion of the ore.

1,827,800. CLOSURE MECHANISM FOR RETORT DOORS. JACK FORDHAM PARKER, Codsall, England, assignor to Low Temperature Carbonisation Limited. London, England. Filed June 4, 1927, Serial No. 196,590, and in Great Britain June 7, 1926. 4 Claims. (Cl. 202—252.)

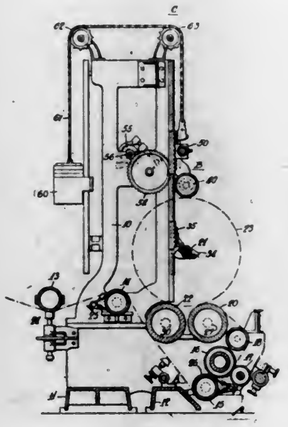


1. Closure mechanism for retort doors comprising pivotal means upon the door at a position near the edge thereof, a pivot shaft of fixed position near the said edge of the door and beside the outlet aperture of the retort, brackets mounted upon and adapted to be rotated on the said pivot shaft and with which said pivotal means are engaged, a pressure arm in fixed relation to the said brackets and adapted to be rotated therewith about the pivot shaft, said pressure arm extending beyond the said brackets and being adapted to contact with the outer face of the said door, and means for effecting rotary adjustment of the said brackets and pressure arm about the said pivot shaft for opening and closing the said door, substantially as hereinbefore described.

1,827,801. HAIR TREATING METHOD AND COMPOSITION. DOUGLAS R. PINNOCK, Bayonne, N. J., assignor to E. Frederics, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 24, 1928. Serial No. 301,935. 15 Claims. (Cl. 132—36.2.)

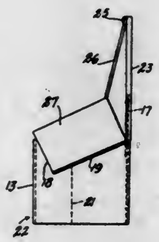
1. A method of treating hair, which includes bringing into proximity with the hair a mixture of ammonium borate which decomposes at an elevated temperature and a material which will evolve carbon dioxide at a lower temperature, and applying heat thereto so as to gradually raise the temperature thereof to said elevated temperature, while confining the evolved gases in a space surrounding the hair.

1,827,802. PAPER WINDING MACHINE. KARL SIEG, Brooklawn, N. J., assignor to Samuel M. Langston Co., a Corporation of New Jersey. Filed May 24, 1930. Serial No. 455,170. 8 Claims. (Cl. 242—66.)



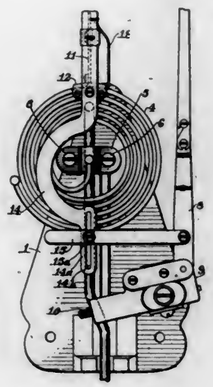
1. A winding mechanism including a pressure roller vertically movable in response to the increase in diameter of the web being wound, a rack bar proximate each end of said pressure roller and having means substantially midway between the ends thereof for supporting said roller, and causing the rack bar to move vertically in unison with the associated end of said roller, the bottom ends of said rack bars extending close to the base of the mechanism when in extreme lowermost position, and the length of said rack bars being not materially longer than the maximum diameter of the roll being wound, and means for preventing relative movement between said rack bars.

1,827,803. DISPLAY DEVICE. SYDNEY G. SILBERSTEIN, Brooklyn, N. Y. Filed Aug. 14, 1930. Serial No. 475,148. 5 Claims. (Cl. 211—72.)



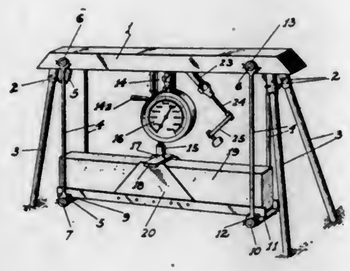
1. A cardboard display device for supporting boxes having covers thereon, said device including a continuous wall structure having rear upright end flaps which are adapted for interengagement, said end flaps having vertical portions projecting from the upper edges thereof, and a member slidably engaged with said projections, said member having means to engage the cover of the box and hold it open.

1,827,804. PRESSURE RESPONSIVE INSTRUMENT. KENNETH L. TATE, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Nov. 10, 1927. Serial No. 232,456. 4 Claims. (Cl. 73—52.)



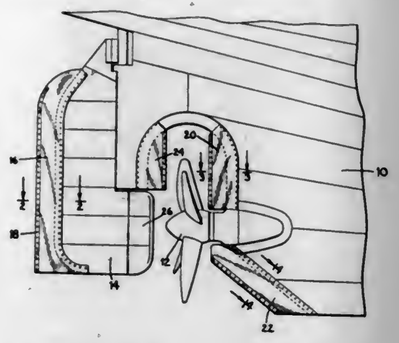
3. In instruments of the class described, the combination with a Bourdon spring having one end fixed and the other end movable, of a member movably supported near the Bourdon spring and means for translating movement from the spring to the said member, including a clamp secured to the spring for adjustment on it in the direction of its length, an arm pivoted on the clamp, a bi-metallic strip on the clamp and a connection between the strip and the arm, adjustable lengthwise of the strip and a connection between the arm and the said member.

1,827,805. TRANSVERSE TESTING MACHINE. VILAS E. WATTS, Sacramento, Calif., assignor of one-third to George G. Pomeroy, Sacramento, Calif. Filed Apr. 16, 1930. Serial No. 444,704. 9 Claims. (Cl. 265—14.)



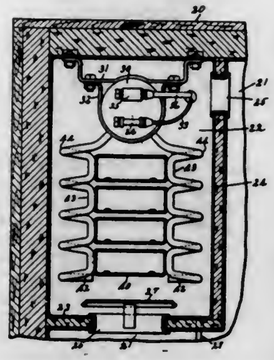
1. A beam testing machine comprising a rigid member, means for supporting said member a certain distance from the ground, longitudinally spaced bars to support a test beam adjacent its ends, means suspending the bar from said member, and means mounted on said member to exert a downward pressure on the beam intermediate the ends thereof.

1,827,806. DRAG ELIMINATOR FOR SHIPS. SAMUEL AITKEN, East Orange, N. J., assignor to Drag Eliminator Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 20, 1929. Serial No. 387,229. 12 Claims. (Cl. 115—34.)



1. In a ship, a propeller, a stern frame having upright portions thereof positioned only fore and aft of said propeller whereby the bottom of the frame is entirely open below said propeller, and means attached to said frame for stream lining said portions towards said propeller, substantially as described.

1,827,807. REFRIGERATING APPARATUS. RALPH H. CHILTON, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 18, 1926. Serial No. 149,105. 13 Claims. (Cl. 62—126.)

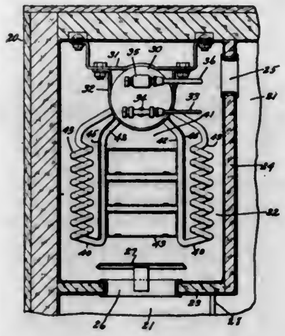


11. A cooling unit for mechanical refrigerators comprising a plurality of aligned ducts each having an upright portion and a loop, the upright portion of one duct being connected in series circuit relation with the loop of the same duct.

1,827,808. REFRIGERATING APPARATUS. RALPH H. CHILTON, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 18, 1926. Serial No. 149,106. 10 Claims. (Cl. 62—126.)

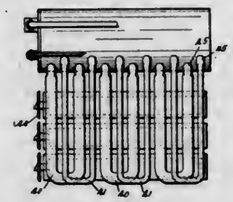
2. A cooling unit for mechanical refrigerators adapted to be placed in the path of medium to be cooled thereby, said cooling unit including ducts, said ducts having a portion arranged to provide a freezing zone, and another portion arranged to provide a cooling zone, the material

of the second-mentioned portion being tortuous and lying spaced from the freezing zone in the path of the circulating medium and so constructed and arranged as to



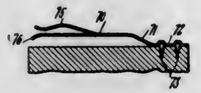
provide a shield of heat-exchange material for shielding the freezing zone from the action of the circulating medium.

1,827,809. REFRIGERATING APPARATUS. THEODORE L. CHISHOLM, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Jan. 31, 1927. Serial No. 164,746. 18 Claims. (Cl. 62—126.)



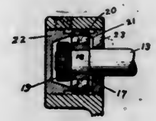
16. A cooling unit for refrigerating apparatus comprising a header and a plurality of rows of ducts extending therefrom, portions of the heat absorbing surfaces of the ducts in one or more of the rows being relatively closely spaced from one another and provide a freezing zone adapted to receive an ice tray and portions of the heat absorbing surface of the ducts in one or more other rows providing a cooling zone, said last ducts lying outwardly of the freezing zone and being relatively widely spaced from one another.

1,827,810. SPRING DOOR CATCH. GEORGE S. COOPER, Providence, R. I. Filed July 18, 1928. Serial No. 293,684. 4 Claims. (Cl. 292—76.)



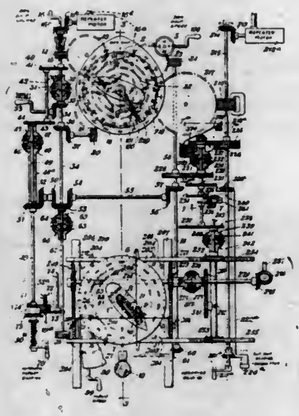
4. A door catch comprising a pair of separable members movable relatively in a patch into and out of engaging relation, one of said members being attachable to a door and the other attachable to the casing for said door, one of said members comprising a pair of spaced jaws between which the other of said members may engage and a leaf spring supporting both jaws at one end, the other end of said leaf spring being offset and fixed, said spring presenting a resilient portion of substantial length substantially parallel to said path, whereby said jaws may be moved as a unit transverse to said path in either direction from a normal position to adjust themselves into proper alinement with the other of said members.

1,827,811. BEARING FOR ROTARY PUMPS. WILLIAM I. DERRICK, Davenport, Iowa, assignor to Westco Pump Company, Davenport, Iowa, a Corporation of Delaware. Filed May 4, 1922. Serial No. 558,451. 3 Claims. (Cl. 308—233.)



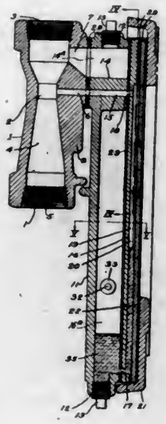
1. In combination, a fixed support, an internally threaded bore open at both ends formed in said support, a shouldered shaft, an inner ball race rigidly clamped against said shoulder and arranged between the ends of said bore, an outer race separated from said inner race by a plurality of balls, an adjusting member threaded in one end of said bore and engaging said outer race and a second adjustable member threaded in the other end of said bore and engaging said race, whereby the shaft may be adjusted axially by adjusting said members.

1,827,812. RANGE AND BEARING KEEPER. HANNIBAL C. FORD, Jamaica, N. Y., assignor to Ford Instrument Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 1, 1919, Serial No. 280,150. Renewed Nov. 19, 1925. 39 Claims. (Cl. 235—61.5.)



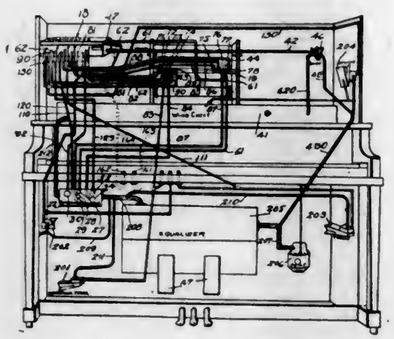
1. In an instrument of the class described, a mechanical vector representing the course and speed of a moving object, a second mechanical vector representing the course and speed of a second moving object, a part adapted to be moved proportional to the actual range between the objects, a part adapted to be moved proportional to the actual angular relation between the objects, means for generating and indicating the range and angular relation of the objects from the mechanical vectors and means for superimposing upon the indications of range and angular relation of the objects indications of the movement of said parts whereby the actual and generated ranges and the actual and generated angular relations may be compared.

1,827,813. FLOW INDICATOR. LELAND H. HILL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 8, 1923. Serial No. 661,550. 9 Claims. (Cl. 73—167.)



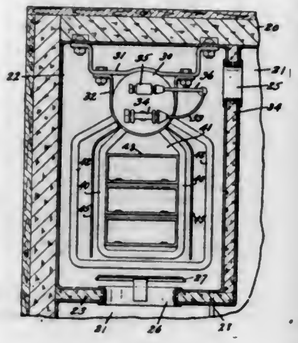
7. A flow indicator comprising means providing a vertical manometer chamber and a vertical supporting element therefor supported solely adjacent to its upper end and extending substantially throughout the length thereof, said element having spaced openings in a single mounting face adjacent its upper end and providing passages from said chamber to said openings.

1,827,814. AUTOMATIC MULTIRECORD EXPRESSION MECHANISM. OTTO W. HOLMGREN, New York, N. Y., assignor to Oscar F. Holmgren, White Plains, N. Y. Filed Jan. 24, 1924, Serial No. 688,177. Renewed Mar. 6, 1931. 17 Claims. (Cl. 84—39.)



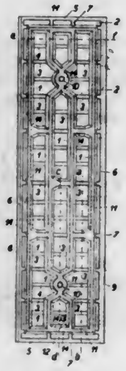
1. A record controlled musical instrument including expression producing means for use with a plurality of records having expression controlling media of different arrangement, and record controlled means associated with said expression producing means whereby to render said expression producing means operative in accordance with the expression controlling media of the record used with the instrument.

1,827,815. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 20, 1926. Serial No. 149,760. 8 Claims. (Cl. 62—126.)



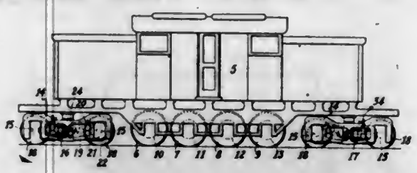
3. A cooling unit for mechanical refrigerators adapted to be placed in the path of a cooling medium to be cooled thereby, said cooling unit comprising a header and a plurality of duct means connected with the header in parallel circuit relation, said means including a portion providing a freezing zone, and another portion lying outwardly of the freezing zone, the material of the second-mentioned portion lying outwardly of the freezing zone in the path of the circulating medium, and means thermally connected with the header and providing a shield for shielding the freezing zone from the action of the circulating medium.

1,827,816. HEAT-TRANSMITTING SUPPORT FOR COOKING UTENSILS. KLEMENS ILNICKI, Stryj, Poland. Filed Oct. 30, 1929, Serial No. 403,493, and in Germany Sept. 19, 1929. 6 Claims. (Cl. 126—211.)



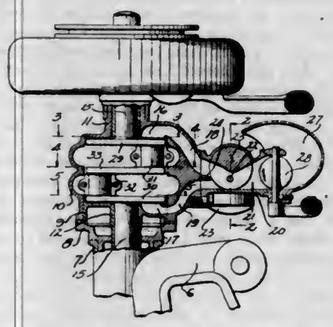
1. A cast iron supporting member for use in cooking apparatus for household purposes, comprising in combination: reinforcing ribs, and metal insertions cast into said ribs so as to be entirely enclosed within the latter and having the form of closed geometrical figures, said insertions surrounding the whole supporting surface and any apertures therein.

1,827,817. ELECTRIC LOCOMOTIVE. HOWARD L. INGERSOLL, Stamford, Conn. Filed Apr. 12, 1929. Serial No. 354,458. 16 Claims. (Cl. 105—61.)



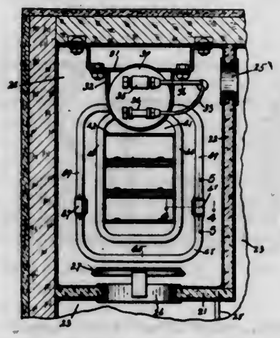
1. In an electric locomotive, the combination of a main motor, a booster motor, and electrically actuated means for automatically completing the circuit of the booster motor when the consumption of current by the main motor exceeds a predetermined standard.

1,827,818. INTERNAL COMBUSTION ENGINE. FINN T. INGENS, Milwaukee, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed Oct. 20, 1930. Serial No. 489,793. 22 Claims. (Cl. 123—73.)



1. In an internal combustion engine, the combination with a mixture receiving chamber and a plurality of mixture delivering passages leading to said chamber, of means for supplying mixture to the several passages and throttle valve means operatively controlling the several passages and adapted to open and close them successively.

1,827,819. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 20, 1926. Serial No. 149,745. 10 Claims. (Cl. 62—126.)



7. A cooling unit for mechanical refrigerators adapted to be placed in the path of the circulating medium to be cooled thereby, said cooling unit comprising a header, an inner refrigerant containing section including a set of loops connected with the header and providing a freezing zone adapted to receive an elongated ice tray, a second refrigerant containing section including a set of loops providing a cooling zone, said second set of loops being connected with the header in parallel circuit relation with the first set and lying outwardly of the freezing zone in the path of the circulating medium, said second-mentioned conduit means surrounding the freezing zone and constructed and arranged to shield the freezing zone, throughout the length thereof, from the action of the circulating medium.

1,827,820. TREATMENT OF METALS AND/OR THEIR COMPOUNDS. GUSTAF NEWTON KIRSEBOM, Trollhattan, Sweden. Filed May 29, 1929. Serial No. 367,138. 9 Claims. (Cl. 75—17.)

1. The method of treating so-called Harris salts which comprises subjecting the salts while molten to the action of arsenic trioxide in amount adapted to destroy all of the sodium nitrate present in the salts, adding further amounts of arsenic trioxide to the fused mixture whereby compounds of antimony present in the mixture are reduced, separating the antimony from the rest of the spent reagent, adding still further amounts of arsenic trioxide to the spent reagent until it becomes saturated with respect to sodium arsenate whereby any tin compounds present in the mixture are reduced to metallic tin, separating the tin from the rest of the reagent, subjecting the remaining solution appropriately diluted to lime in amount adapted to convert all of the available arsenic to calcium arsenate, and separating the calcium arsenate from the resulting caustic soda.

1,827,821. REDUCTION OF METAL COMPOUNDS. GUSTAF NEWTON KIRSEBOM, Trollhattan, Sweden. Filed July 9, 1929, Serial No. 377,065, and in Sweden May 14, 1929. 7 Claims. (Cl. 75—17.)

1. The method of producing metallic lead or lead alloys from flue dust containing lead oxide and arsenic which comprises causing such flue dust to react with fused caustic soda to reduce lead oxide to metallic lead and to convert arsenic into sodium arsenate, and separating the reduced lead or lead alloy from the sodium arsenate melt.

1,827,822. COATING. CHARLES R. MCKEE, Milwaukee, Wis., assignor to American Hair & Felt Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 322,091. 4 Claims. (Cl. 134—23.)

1. A new coating composition or sizing comprising a watery, viscous adhesive coating composed of ground glue, starch and sulphite extract and a small amount of a sulphonated oil.

1,827,823. PAVEMENT CONSTRUCTION. HUBERT A. MYERS, Toledo, Ohio, assignor of one-half to Arthur S. Hickok, Toledo, Ohio. Filed Oct. 24, 1930. Serial No. 490,927. 3 Claims. (Cl. 238—8.)



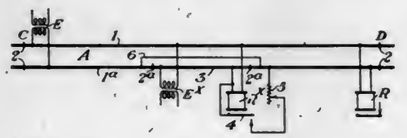
1. In a cross railroad pavement construction, a plurality of slabs extending between the webs of the rails, the ends of the slabs having downwardly extending por-

tions that rest upon the bases of the rails, the slabs formed of a plurality of sections, blocks of electric insulating material located between the sections of each slab, and means for securing a block to each section of a slab and for connecting the parts to each other through the blocks.

1,827,824. FURFURAL-UREA RESIN AND PROCESS OF MAKING THE SAME. EMIL E. NOVOTNY and WILMOTT W. JOHNSON, Philadelphia, Pa., assignors to John Stogdell Stokes, Huntingdon Valley P. O., Pa. Filed Oct. 1, 1924. Serial No. 741,058. 19 Claims. (Cl. 260—2.)

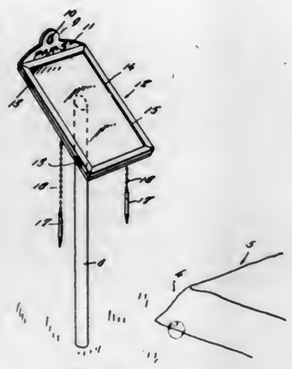
1. The herein described product comprising a plastic resinous condensation product of furfural and urea.

1,827,825. RAILWAY TRACK CIRCUIT APPARATUS. BERNARD E. O'HAGAN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 18, 1930. Serial No. 461,952. 2 Claims. (Cl. 246—40.)



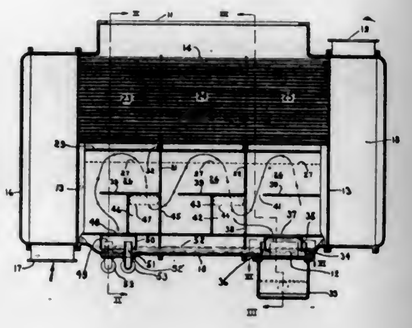
1. In combination, a main section of railway track having one rail divided by insulated joints to form a short auxiliary section, a track circuit for said main section including a source of current connected across the rails at one end of the section and a main track relay connected across the rail at the other end of the section, a track circuit for said auxiliary section including a source of current and an auxiliary track relay, and a shunt around one of said insulated joints including the back contact of the auxiliary track relay.

1,827,826. COMBINATION GREEN MARKER AND ADVERTISING DEVICE. STURGILL F. RATLIFF, Mobile, Ala. Filed Oct. 25, 1930. Serial No. 491,277. 1 Claim. (Cl. 40—145.)



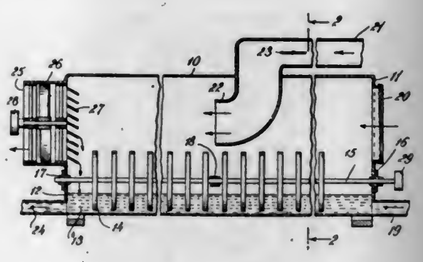
An advertising device and score card supporting table for a golf course comprising a post having an inclined upper end, a board connected to said upper end at the center of the board, a frame hinged at one edge to said board, a transparent member in the frame, a vertically arranged plate connected at its lower edge to the top edge of the board, the upper edge of the board and the upper edge of the frame being bevelled to engage the front face of the plate, indicia on the front face of the plate.

1,827,827. CONDENSER. JOHN H. SMITH, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 4, 1929. Serial No. 397,339. 15 Claims. (Cl. 257—43.)



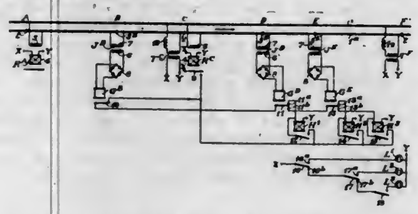
1. In a condenser, the combination of a shell structure having an inlet for gaseous media to be condensed and an outlet for condensate; a tube nest extending longitudinally through the shell structure and having tube sheets located at each end thereof; an inlet water box located at one end of the tube nest and an outlet water box located at the other end of the tube nest; said water boxes providing for the circulation of cooling media in a single direction longitudinally through the tube nest; a tube-supporting sheet or sheets located intermediate of the end tube sheets and dividing the tube nest into sections including a relatively cold section disposed adjacent the inlet water box and a relatively warm section disposed adjacent the outlet water box; passageway means for the passage of gaseous media through the tube nest sections in a direction from the warm section toward the cold section and including inner portions of the tube nest sections, the respective sections of said passageway means having inlet and outlet openings separated by the tubes thereof and conduits for conducting media from the inlet opening of a preceding section to the outlet opening of a succeeding section, said outlet openings being located in the cooling media exit ends of the respective sections; and an outlet for gaseous media communicating with the inlet opening of the cold end section.

1,827,828. TREATMENT OF INDOXYL. WILLIAM L. SPALDING, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed May 16, 1927. Serial No. 191,702. 9 Claims. (Cl. 260—50.)



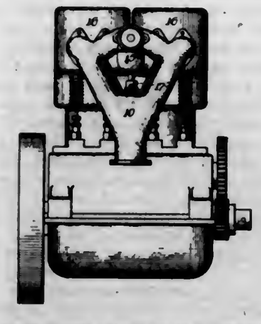
1. In the treatment of indoxyl contained in a liquid, the improvement which comprises spraying the liquid into an atmosphere containing oxygen.

1,827,829. ELECTRICAL SIGNALING. HOWARD A. THOMPSON, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 19, 1930. Serial No. 469,241. 20 Claims. (Cl. 246—34.)



1. In combination, a first contact, means for operating said first contact when the front end of a train passes a first point along the trackway and for subsequently maintaining said first contact in its operated condition until the train has passed beyond a second point along the trackway in advance of said first point, a second contact, means for operating said second contact when the front end of the train passes said second point and for subsequently maintaining said second contact in its operated condition until the train has passed beyond a third point along the trackway located in advance of said second point, a third contact, means for operating said third contact when the front end of the train passes a fourth point along the trackway located between said second and third points and for subsequently maintaining said third contact in its operated condition until said train has passed beyond said third point; a relay controlled by said first, second, and third contacts in such manner that said relay becomes energized when said first contact is in its unoperated condition and said second and third contacts are in their operated conditions, and indication means controlled by said relay.

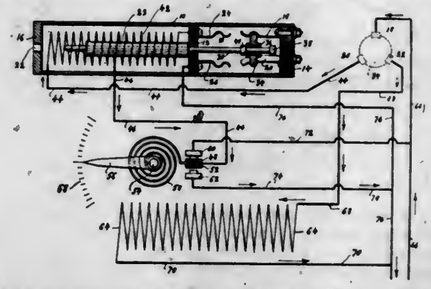
1,827,830. FUEL DISTRIBUTION AND VAPORIZATION. HOMER A. TRUSSELL, Chicago, Ill. Filed Dec. 14, 1921. Serial No. 522,419. 23 Claims. (Cl. 123—122.)



1. An internal combustion engine priming device provided with a heating element; a receptacle for a priming charge; a passage communicating with a working fluid inlet; said element being situated in said passage, and means permitting the transfer of fluid from said receptacle to said passage, said means preventing this transfer of fluid to said passage and the contact of said fluid with said element unless the suction in said passage is sufficiently high to cause rapid travel of said fluid therein.

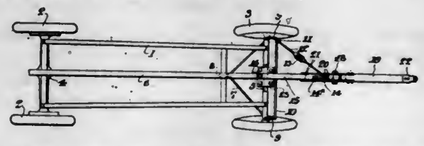
1,827,831. TEMPERATURE CONTROLLING DEVICE. BASIL J. YANCHENKO, New York, N. Y., assignor to James Camrod Ledbetter, New York, N. Y. Filed July 30, 1926. Serial No. 125,878. 15 Claims. (Cl. 236—75.)

1. A device of the class described comprising in combination, a heating circuit including a circuit breaking device, a control apparatus being connected to the heating circuit and including a circuit making device, means actuated by said control apparatus to operate said circuit breaking device upon the closing of said circuit making device; said control apparatus comprising a tubular casing, a solenoid coil therein, a plunger actuated within



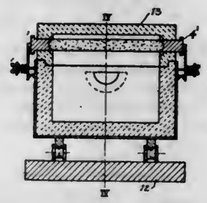
and by the solenoid, a switch means carried on the plunger, a set of contact fingers fixed within the casing on one side of the switch means, a set of contact fingers fixed in the casing on the other side of the switch means, and connections between the contact fingers and heating circuit and the circuit breaking device.

1,827,832. TRAILER HITCH. JENS PETER ANDREASEN, Bostwick, Nebr. Filed Aug. 25, 1930. Serial No. 477,655. 2 Claims. (Cl. 280—33.55.)



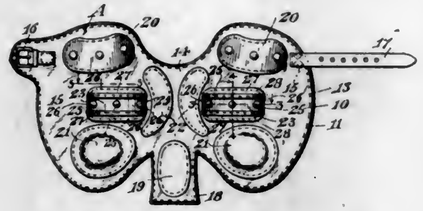
1. In a trailer hitch, the combination of a tongue, vertically disposed straps affixed to and extending rearwardly from the tongue, the straps having upright segmental extensions on the rear ends thereof, horizontally disposed bars having a block bolted between the forward ends of same tongue bars, a pivotal connection between the metal straps and the tongue bar to permit of up and down pivotal movement of the tongue, and a pivotal connection between the rear end of the tongue bars and the reach or center bar of the chassis frame to permit of lateral movement.

1,827,833. ROTATABLE FURNACE. RAYMOND C. BENNER and GEORGE J. EASTER, Niagara Falls, N. Y., and CLARENCE E. HAWKE, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,417. 8 Claims. (Cl. 13—21.)



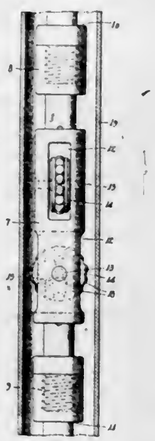
1. In a rotatable furnace, non-metallic heating elements of a rigid self-supporting character mounted to rotate with a heating chamber and supported on a removable portion thereof, said heating elements being freely accessible for replacement when said portion of the heating chamber is removed.

1,827,834. FOOTBALL BLOCKING PAD. DANA X. BIBLE, Lincoln, Nebr. Filed Feb. 14, 1930. Serial No. 428,413. 2 Claims. (Cl. 2—23.)



1. A pad of the character described, comprising a body embracing member formed with spaced relatively wide portions and an intermediate narrow portion, the latter constituting a junction between the wide portions, a tab depending from the narrow portion, rib and hip guards carried at proper localities on the wide portions, kidney guards properly disposed on the narrow portion, outwardly arched plates on the member between the rib and hip guards at the waist line of said member, backing strips rearwardly of the plates, and closure strips secured at the arched edges of the plates and to the member, these plates being arranged outmost with respect to the kidney guards and disposed to extend in their spaced relation in a horizontal direction and to project very substantially outwardly from the member.

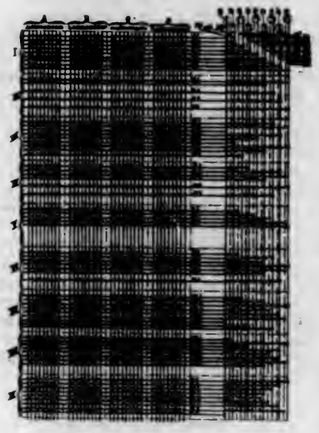
1,827,835. ANTIFRICTION GUIDE ROLLER. WILLIAM LESLIE BLACK, Austin, Tex. Filed Apr. 28, 1928. Serial No. 273,601. 3 Claims. (Cl. 308—6.)



1. A sucker rod member intended to be reciprocated in a well casing, a roller carried for rotation by said member and projecting therefrom, and balls mounted for rolling movement on the periphery of the roller to contact with the well casing and carried bodily by said roller to move with or around the roller.

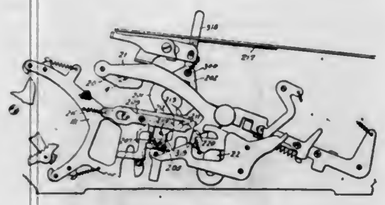
1,827,836. ELECTRICAL CALCULATING MACHINE. RENE EDMOND BOUTET, Paris, France. Filed Jan. 26, 1929, Serial No. 335,277, and in Germany Mar. 27, 1928. 7 Claims. (Cl. 235—92.)

1. In an electrical calculating machine, the combination of a first set of nine groups of circuits corresponding to the nine digits, a second set of nine groups of circuits, each group of said first set of circuits being connected to each group of said second set of circuits, a third set of circuits comprising *n* groups of nine wires each, selective means for connecting a wire of a group of said second set of circuits to the wire of every group of said third set of circuits whose digit value in its group is equal to a digit in the product obtained by multiplying the digit value of the group of said second circuit wire by the digit value of the wire of said first set of circuits to which said second circuit wire is connected, selective means for closing one of said first set of circuits, and means energized by the wires of said third set of circuits for effecting registration of the results obtained by selective closing of one of said first set of circuits and selective connection of wires of said second to wires of said third set of circuits.



7. In an electrical calculating machine, the combination of a first set of nine groups of circuits, each of said groups save the first being divided into a units and a tens section, a second set of nine groups of circuits, each units and tens section of said first set of circuits being connected to the wire of each group of said second set of circuits whose digit value in its group is equal to the corresponding units or tens digit of the product of the digit values of the groups of the second circuit wire and the first circuit section in question, a third set of circuits comprising *n* groups of nine wires each, the groups of said second circuit wires being arranged to cross the groups of said third circuit wires without being normally connected thereto, a contact key associated with each intersection square formed by two intersecting groups of said second and third set of circuits respectively, means actuated by depressing said key for simultaneously connecting each wire of the corresponding second circuit group to the wire of the intersecting third circuit group whose digit value in its group is the same as that of the second circuit wire in question, selective means for closing in succession the tens and units sections of a group of said first set of circuits, *n* groups of nine electromagnets respectively connected to the *n* groups of nine wires of said third set of circuits, a plurality of totalizing wheels, means controlled by said respective electromagnets for rotating a corresponding totalizing wheel through different angles depending on the electromagnets of the group energized,, an electrical circuit closed by said selective means between closure of the tens and units sections of a group of said first set of circuits, and means energized by said circuit for displacing said groups of electromagnets relative to said totalizing wheel controlling means whereby the units and tens digits of the products obtained from said third set of circuits are registered on different wheels.

1,827,837. CALCULATING MACHINE. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Mar. 13, 1929. Serial No. 346,686. 2 Claims. (Cl. 235—82.)

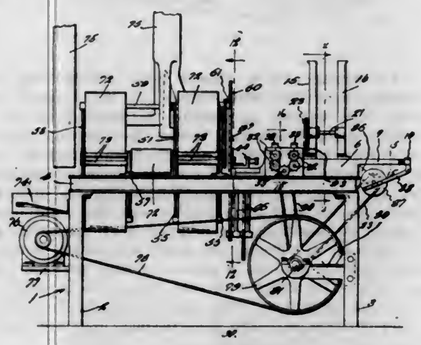


1. In a power driven calculating machine, having a product-dividend register comprising reversible numeral wheels, and actuators therefor; operation control means including a member manually settable to determine rotation of said numeral wheels in an additive direction and to initiate operation of the actuators, and means controlled by the settable means and by the numeral wheels and adopted to automatically reverse the direction of rotation of said wheels.

1,827,838. HIGH STRENGTH CERAMIC COMPOSITION. THOMAS S. CURTIS, Huntington Park, Calif., assignor to Vitrefrax Corporation, Huntington Park, Calif. Filed June 26, 1928. Serial No. 288,534. 13 Claims. (Cl. 106—9.)

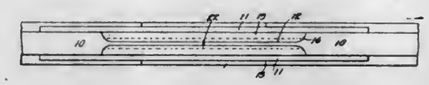
1. A ceramic composition of the class described, consisting of corundum and cobaltic oxide.

1,827,839. PENCIL SANDING MACHINE. BEN F. DERRYBERRY, Lewisburg, Tenn. Filed Mar. 27, 1930. Serial No. 439,371. 3 Claims. (Cl. 51—140.)



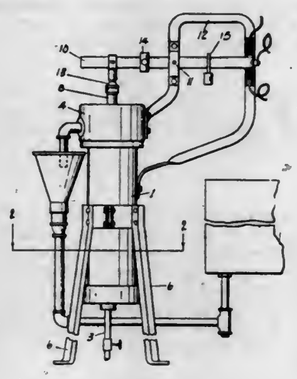
1. A pencil sanding machine of the character described comprising, in combination, a supporting stand, an elongated barrel mounted on the stand having a bore therein for the passage of the pencils, said barrel being provided, at longitudinally spaced points, with pairs of elongated, diametrically opposite openings communicating with the bore in a manner to successively expose different portions of the sides of the pencil as said pencil passes through the barrel, means for driving the pencil through the barrel, pairs of supporting members on the stand, shafts mounted between the pairs of supporting members and disposed in pairs in transverse alignment with the pairs of openings in the barrel, a sprocket gear fixed on one end portion of one shaft of each pair, an endless chain trained over the sprocket gears, another sprocket gear fixed on one of said one shafts, a chain trained over the last named sprocket gear for connecting same to a source of power, a pair of pulleys operatively mounted on the shafts, and endless sanding belts trained over the pairs of pulleys and operatively engageable with the exposed portions of the pencil in the barrel.

1,827,840. RAIL JOINT. BYRAM S. DICKERSON, Indianapolis, Ind. Filed Dec. 16, 1930. Serial No. 502,794. 9 Claims. (Cl. 238—222.)



1. A rail joint comprising the combination with two opposing rail ends, each having a portion of its head and base cut away for a desirable length from the end providing a sloping shoulder on each side of its head and base, a pair of vertical splice plates having a minimum depth at the middle section equal to the full depth of the rails, a portion of the upper edge of each plate adapted to form a part of the wheel tread in lieu of the cutaway rail heads, the inner face of each plate being fashioned to fit the contour of the rail webs and the cutaway portions of the heads and bases of the rail ends on their respective sides for the total length of the cutaway portions of both rail ends, and extending at each end in a reduced section adapted to fit snuggly against the under face of the head, the web, and top surface of the base, where the rail is of full section, and means for holding the splice plates securely against the rail ends allowing only slight longitudinal movement of the rail ends relative to the splice plates substantially as set forth.

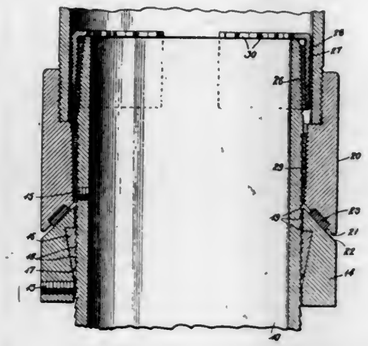
1,827,841. HYDROMETER. SAMUEL J. DUNKLEY, Oakland, Calif., assignor, by mesne assignments, to Sprague Sells Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 8, 1921. Serial No. 490,755. 2 Claims. (Cl. 200—84.)



1. An apparatus for controlling the density of a flowing solution consisting of a solution tank, a mechanism wherein the balance may be varied according to the change desired in the density of the solution, said mechanism comprising a lever pivoted near its center, two movable weights on said lever, one on each side of the center, a float connected to one end of the lever and resting on the solution in the said tank, electrical contacts carried by the other end of the lever coacting with fixed contacts

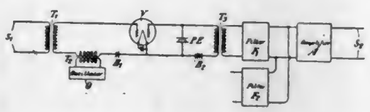
mounted adjacent thereto, the change of density of said solution resulting from a shifting of the movable weights on said lever to place more or less weight on said float and thereby require a greater or less density of solution to move the balanced lever to make and break the electrical contacts carried thereby.

1,827,842. WELL PACKER. FRED I. GETTY, Jennings, La. Filed May 31, 1930. Serial No. 458,324. 7 Claims. (Cl. 166—10.)



1. A well packer comprising, in combination, a cylinder externally threaded at its upper end and carrying upon its outer surface compressible packing means, an internally screwthreaded sleeve, means to couple said sleeve to a lowering pipe, an internally and externally threaded ring lying in assembled position between said sleeve and the upper end of said cylinder and having screwthreaded engagement with each thereof whereby revolution of said sleeve may free the same from said ring and cylinder to permit the sleeve to slide downwardly upon the cylinder and cause compression of the packing means.

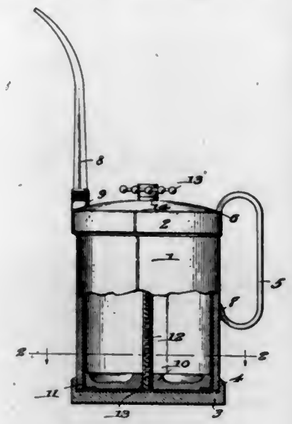
1,827,843. PIEZO ELECTRIC FREQUENCY ELIMINATOR. ESTILL I. GREEN, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 18, 1927. Serial No. 176,546. 15 Claims. (Cl. 179—171.)



1. In a signaling system, the combination of a source of signals, a source of carrier frequency, means for modulating said carrier frequency with said signals so as to produce an unmodulated carrier wave and side bands of said carrier wave corresponding to said signals, and a plurality of piezo-electric devices shunting said modulating means vibrated at a common frequency substantially equal to the frequency of the carrier wave in order to cause its suppression.

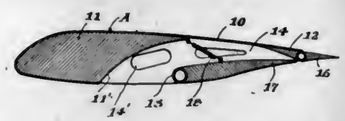
1,827,844. LUBRICANT DISPENSER. HERMAN PETER GROSSMAN, Boonville, Ind. Filed Apr. 23, 1928. Serial No. 272,307. 2 Claims. (Cl. 221—47.)

1. In a lubricant dispenser, the combination with a lubricant container, of a plunger therein, a cap detachably connected to the container, said cap completely closing the end of the container, a hollow feed screw for moving said plunger within the container, said hollow feed screw being carried by the cap and serving the double purpose of feeding said plunger to exert pressure upon the lubricant and as a conduit for delivering the lubricant from the container when said feed screw is turned, means on the cap for preventing the feed screw from shifting lengthwise when turning, and a hand wheel carried by said feed



screw outside of the container and bearing on said cap, whereby said feed screw may be rotated, and a removable cap at the end of the container opposite the cap first-named, said cap completely closing that end of the container.

1,827,845. AIRPLANE. RANDOLPH F. HALL, Ithaca, N. Y. Original application filed Oct. 18, 1926, Serial No. 142,493. Divided and this application filed Feb. 11, 1928. Serial No. 253,732. 16 Claims. (Cl. 244—12.)

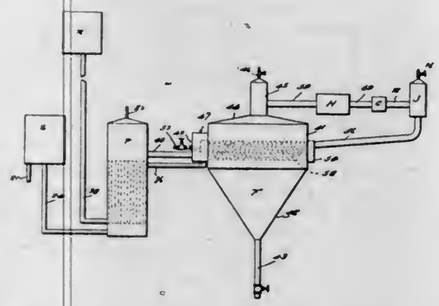


1. An airplane wing, formed with a relatively thin intermediate section with respect to the forward and leading edge section, an aerofoil pivotally mounted on said wing spaced below said intermediate section with its leading edge spaced rearwardly from said forward section, said aerofoil forming an air displacement passage between the wing and such aerofoil having its inlet end between the forward wing section and the aerofoil and swingable to positions closing the rear discharge end of the passage or opening the same, and means normally maintaining the aerofoil in passage closing position forming a part of the contour of said wing with the latter at low angles of attack, said aerofoil swung to passage opening position with the wing at high angles of attack by pressure of air in said passages.

1,827,846. APPARATUS FOR DISTILLING LIQUIDS. FRED N. HOLMQUIST, Phoenix, Ariz. Filed Jan. 8, 1930. Serial No. 419,342. 1 Claim. (Cl. 202—177.)

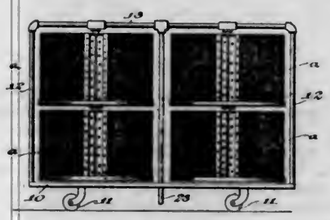
A distilling apparatus of the class described comprising a chamber having a dome at its upper end, a plurality of horizontal tubes passing through an intermediate portion of the chamber, inlet and outlet headers connected to the sides of the chamber and in communication with the tubes, a superheater, a pipe connecting the same with the dome for leading the vapors from the dome into the superheater, a compressor connected to the superheater for compressing the vapors passing therefrom, an air separator chamber, a conduit connecting the same with the compressor,

a valve control vent in the top of the separator, a conduit connecting the bottom of the separator with the inlet header, a valve control vent in the top of the dome, a second header enclosing the outlet header, said chamber having a port therein for connecting it with the second header, a cylinder, tube sheets therein dividing the same into three chambers, tubes having their ends connected with the sheets and said tubes, placing the chambers at the ends of the cylinder in communication with each other, a pipe connecting one of said chambers with the second header, a pipe connecting the outlet header with the chamber between the two sheets, an elevated receiving tank, a pipe connecting the same with the chamber between the two sheets, a tank, a pipe connecting the bottom of the tank with the third chamber in the cylinder whereby water from said tank will enter



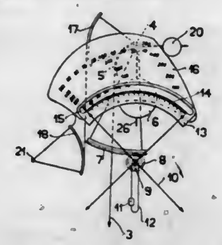
the third chamber of the cylinder and pass through the tubes therein into the other end chamber, and from this latter chamber, the water will flow through the connected pipe into the second header into the chamber where the water will be vaporized by the heat of the condensed vapors flowing through the tubes in said chamber and such vapors will pass into the dome and the vapors passing through the tubes in the chambers will be condensed and passed through the outlet header through the connecting pipe into the tube chamber of the cylinder and from this chamber the condensed water will pass into the elevated tank, means for supplying water to the tank which is connected to the third chamber and means for regulating the water level in said tank, said tank being so located relative to the chamber to control the water level in the said chamber.

1,827,847. TRUCK. OTIS H. HULLINGS, Alexandria, Va. Original application filed Mar. 14, 1928, Serial No. 261,468. Divided and this application filed Jan. 29, 1929. Serial No. 335,979. 6 Claims. (Cl. 211—144.)



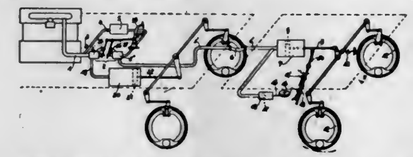
1. A truck comprising a flat wheeled base, a vertical shaft journalled at its lower end in said base, shelves fixedly mounted on said shaft in superposed relation, an open railing rising from the edges of said base and extending about the same, and a bearing carried at the upper side of said railing for the upper end of said shaft.

1,827,848. INDICATING MECHANISM FOR WEIGHING APPARATUS. RUDOLF JOKSCH, Vienna, Austria. Filed Mar. 7, 1929, Serial No. 345,098, and in Austria May 22, 1928. 6 Claims. (Cl. 265—62.)



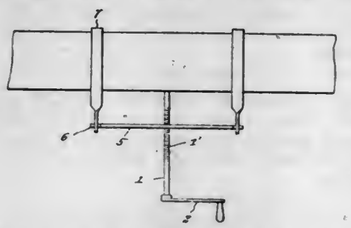
1. In a weighing scale having a load balancing weighted pendulum, an automatic indicating device comprising a fixed scale having graduations without value numerals, a pointer movable over the scale, a separate chart containing value numerals for the graduated scale and capable of moving the numerals in juxtaposition to the scale, and means for moving the chart continuously during weighing operation in proportion to the movement of the weighted pendulum, thereby ascribing varying values to the marks of the fixed graduation scale.

1,827,849. BRAKE MECHANISM. AUGUST KAZENMAIER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed June 3, 1929, Serial No. 368,104, and in Germany June 13, 1928. 14 Claims. (Cl. 188—167.)



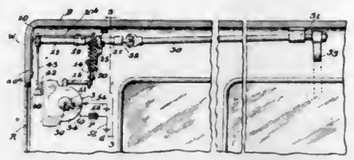
1. Brake operating mechanism for tractor and trailer vehicles comprising pumping means on a tractor vehicle, servo mechanism on the tractor vehicle adapted to apply brakes on the tractor on connection with said pumping means, servo mechanism on a trailer adapted to release brakes on the trailer on connection with said pumping means, and means for connecting said servo mechanisms one at a time to said pumping means.

1,827,850. TOOL FOR REMOVING TIRES. FLOYD HAROLD KREWSON, Jake Prairie, Mo. Filed Apr. 21, 1931. Serial No. 531,816. 1 Claim. (Cl. 157—6.)



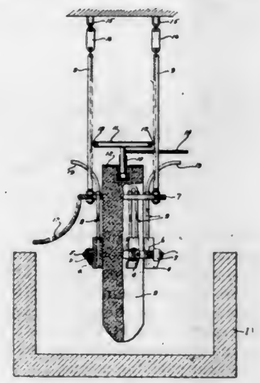
A tire tool comprising a threaded shaft, an angle shaped member pivotally connected with one end of the shaft, and having prongs forming one limb thereof, the ends of the prongs being curved downwardly and slightly beveled, a handle on the opposite end of the shaft, a cross bar having a hole at its center threaded to receive the shaft, and a hook pivoted to each end of the bar and adapted to extend over the tire.

1,827,851. VEHICLE DIRECTION SIGNAL. LOUIS O. LUCKA, Champaign, and JOHN W. EASLEY, Decatur, Ill. Filed Jan. 30, 1931. Serial No. 512,454. 15 Claims. (Cl. 116—44.)



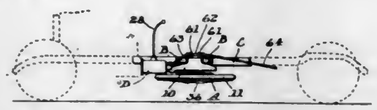
1. The combination with a vehicle and the body thereof having a window therein, of a vehicle direction indicating signal embodying a signal unit, direction indicating signals therein, said unit in normal position disposed substantially concealed from view through said window from the exterior of the vehicle, and said signal bodily movable in a vertical plane through a substantially straight path to and from visual position through said window for operation in visual position to display a direction indicating signal.

1,827,852. APPARATUS FOR FEEDING ELECTRIC FURNACE ELECTRODES. JAMES G. MARSHALL, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Mar. 31, 1930. Serial No. 440,549. 4 Claims. (Cl. 13—14.)



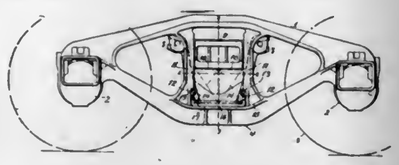
1. In an electric furnace an apparatus for feeding an electrode comprising in combination a clamp yieldingly holding said electrode, means for supporting said clamp in a stationary position with respect to the furnace, an abutment adjustably attachable to said clamp-supporting means, and means between said abutment and the end of the electrode operative to slide the electrode through said clamp.

1,827,853. VEHICLE PARKING DEVICE. GENNARO NENNA, Owen Sound, Ontario, Canada, assignor to Christos Georgas, Owen Sound, Ontario, Canada. Filed Mar. 21, 1930. Serial No. 437,876. 4 Claims. (Cl. 180—1.)



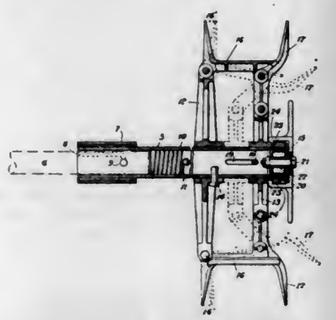
1. A device of the character described comprising an upper and a lower frame rotatably connected together, a supplementary housing mounted in the upper frame, a series of rotatable telescopically arranged shafts associated with the upper frame, gears on the shafts, a pair of threaded shafts carried by the lower frame, a conveyer member, pivotally mounted arms connecting the conveyer member with the threaded shafts, drive means for operating the conveyer and gear means connecting the upper and the lower frames for relative rotative movement.

1,827,854. RAILWAY ROLLING STOCK. EDWARD M. NOTHACKER, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Jan. 4, 1929. Serial No. 330,209. 12 Claims. (Cl. 105—208.)



9. In a car truck, a side frame having an opening, substantially vertical columns forming part of the side frame and provided with grooves forming overhanging ledges, a spring plank having one of its ends extending into the side frame and its sides arranged immediately below and spaced from said ledges, stud and aperture connections between the spring plank and the side frame, the side frame being recessed, and a portion of the spring plank projecting over said recess to permit a jack to engage the under surface of the extremity of the spring plank.

1,827,855. REELING DEVICE. LEE T. PARKER, West Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 15, 1928. Serial No. 261,807. 3 Claims. (Cl. 242—111.)



1. A reel comprising a hub having a fixed spider and a movable spider, each spider having parallel arms extending from said hub, a shaft to which one of said spiders is fixed, the other hub being slidable upon said shaft, a sectional rim between the arms of the spiders to form a support to wind a coil of wire, an extension from the ends of each sectional rim to confine said coil therebetween, means for associating the sectional rim with the arms of the spiders in toggle connection, and locking means coaxially mounted with respect to the shaft and engaging the movable hub, said locking means being rotatable independently of the shaft to slide the movable hub along the shaft to collapse said rim and said extensions to permit the release of the coil of wire formed on said rim between said extensions.

1,827,856. ALTERNATING REFRIGERATION BOTTLED DRINK COOLER. LEE S. POPE, Greensboro, N. C. Filed Oct. 6, 1928. Serial No. 310,781. 3 Claims. (Cl. 62—101.)

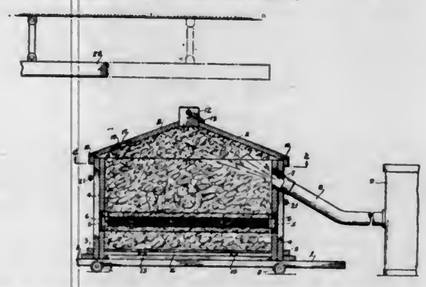


3. A refrigerator comprising tanks, refrigerating units for said tanks, and means for supplying one of the tanks with water and thereafter simultaneously withdrawing the water from said tank and discharging it into the other tank, as and for the purposes set forth.

1,827,857. PROCESS FOR THE PURIFICATION OF CHEMICAL WOOD PULP. JOHN D. RUE, Asheville, N. C., assignor to The Champion Fibre Company, Canton, N. C., a Corporation of Ohio. Filed Feb. 21, 1929. Serial No. 341,841. 15 Claims. (Cl. 8—2.)

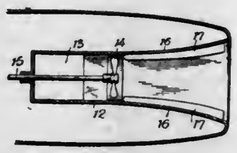
4. In the preparation of a purified chemical wood pulp using as a starting material an unbleached and unrefined alkaline process wood pulp substantially equivalent to that obtained by digesting wood in a cooking liquor characterized in that it contains active chemical in an amount corresponding to from about 70 to about 80 grams per liter, the quantity of active chemical present in said cooking liquor being equivalent to from about 28 to about 30 pounds of sodium carbonate for each 100 pounds of wood digested, and separating the resulting pulp substance from spent cooking liquor, the sequence of operations which comprises partially bleaching the pulp, adjusting the acidity of the resulting partially bleached pulp to a pH value of from 2 to 4, washing the partially bleached pulp, treating the partially bleached and washed pulp with a solution of caustic alkali, the pulp and solution being brought together in such amounts and concentrations as to give a resulting suspension having an alkalinity equivalent to that of a caustic soda solution of from about 5 per cent to about 12 per cent in strength and a pulp concentration of from about 5 per cent to about 10 per cent, continuing the treatment for from about ten minutes to about six hours and at a temperature greater than normal room temperature but less than the boiling point of water, separating caustic alkali solution from the so-treated pulp and washing the latter, adjusting the acidity of the resulting washed pulp to a pH value of from 2 to 4 and again washing the pulp, subjecting the treated and washed pulp in aqueous suspension to a second stage of bleaching treatment, adjusting the acidity of the resulting suspension to a pH value of from 2 to 4, and washing the resulting finally bleached pulp.

1,827,858. MATTRESS BOX. CLIFTON W. TANNERY, San Augustine, Tex. Filed June 14, 1930. Serial No. 461,251. 4 Claims. (Cl. 19—144.)



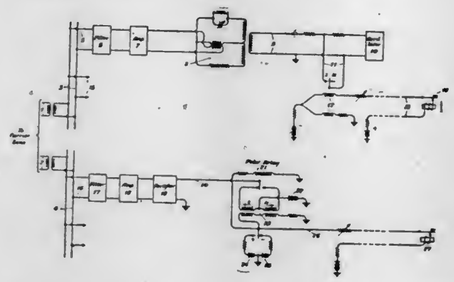
4. A mattress box comprising a base, four removable walls each having a vent slot extending adjacent its bottom, means for holding the walls in assembled relationship on the base, a pyramidal top adapted to removably seat on the walls, a vent in one side of the top, an inlet port adjacent the top of one wall, arranged to direct a stream of lint ladened air entering therethrough against the inner face of the top substantially as specified.

1,827,859. TUNNEL BOAT. DAVID W. TAYLOR, Washington, D. C. Filed Apr. 11, 1930. Serial No. 443,399. 5 Claims. (Cl. 115—16.)



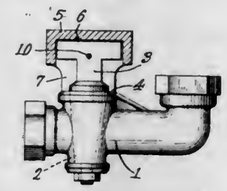
1. In a tunnel boat, the combination with a tunnel diverging at its rear end, and a propeller in the tunnel; of means in said diverging end to simultaneously check race rotation and produce a forwardly propelling component on the diverging walls of said rear end aft of the propellers.

1,827,860. CARRIER TELEGRAPH SYSTEM. VAUGHN P. THORP, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 22, 1929. Serial No. 401,517. 7 Claims. (Cl. 178—51.)



1. The method of telegraph signaling which comprises modulating a carrier frequency current with telegraph signals so as to produce pulses of current of the carrier frequency, suppressing said carrier and transmitting sidebands of the signal-modulated carrier at the beginning and end of each pulse of current of the carrier frequency which are also produced by modulation.

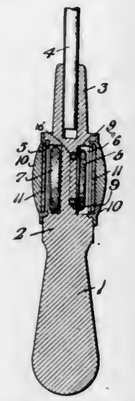
1,827,861. HYDRANT COCK. WILLIAM VOLKHARDT, Staten Island, N. Y. Filed Oct. 8, 1927. Serial No. 224,949. 1 Claim. (Cl. 137—13.)



The combination with a hydrant cock having an elongated head extending from the valve thereof and an annular shoulder concentric with the valve, of a flat, elongated recessed block having apertured sides and closed

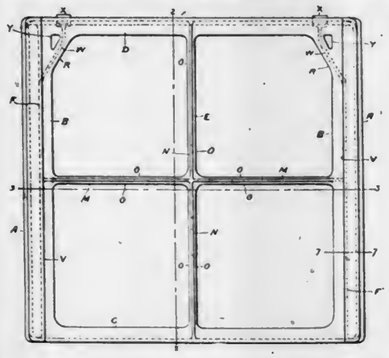
ends and having opposed arcuate wings forming a reduced portion, said wings being extended from the sides of the recess in the block and separated by a longitudinal slot for the reception of the head of the valve insertable between the wings and into the recess, said slot extending in the direction of the length of the valve head and the width of the slot being slightly greater than the thickness of the valve head, said wings providing relatively large bearing surfaces extending throughout the length thereof for sliding engagement with the annular shoulder, and means extending through the recessed portion of the block for securing the block to the head to prevent relative displacement thereof, the elongated flat portion of said block constituting means for engagment by the forked end of a valve actuating member and for supporting the weight of said member thereby to transmit thrust from said member to the annular shoulder.

1,827,862. UMBRELLA AND PARASOL HANDLE. EMIL WEBER, Evansville, Ind. Filed Mar. 20, 1930. Serial No. 437,404. 1 Claim. (Cl. 135—47.)



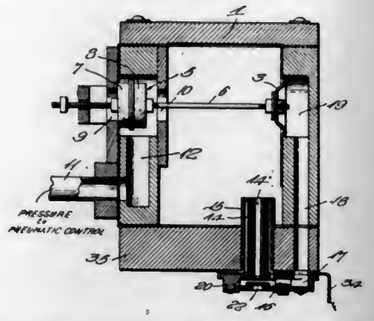
A handle provided with a cavity having a recess in its wall, and a spring-retaining-clip mounted on a removable article and frictionally received within said recess to retain the article within the cavity.

1,827,863. METALLIC DOOR. JOHN C. WHITRIDGE, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Jan. 28, 1929. Serial No. 335,571. 19 Claims. (Cl. 105—280.)



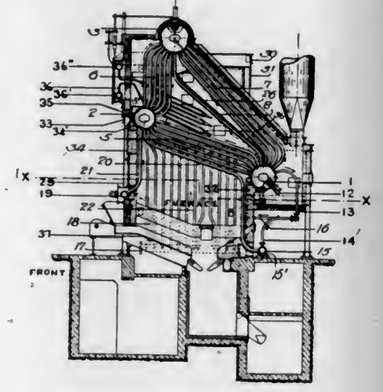
1. In a door, in combination, a cast steel framework including crossed brace bars, and a rolled steel sheet secured thereto.

1,827,864. ORGAN VALVE. LEWIS A. WOODWARD, Frederick, Md. Filed Feb. 18, 1931. Serial No. 516,778. 12 Claims. (Cl. 84—338.)



6. An electro-pneumatic valve comprising a laterally extending base, valve mechanism within said base, a cylindrical casing of magnetic material projecting rearwardly from said base, a central axially extending tube of magnetic material projecting through said casing, and a solenoid winding disposed between said casing and said tube, said tube and casing forming opposite magnetic poles for effecting the operation of said valve mechanism under control of said solenoid winding for closing and opening the air passage through said axially extending port.

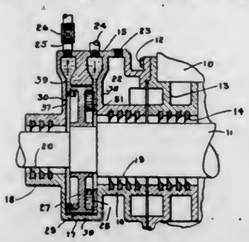
1,827,865. BOILER. PAUL WRIGHT, Birmingham, Ala. Filed May 2, 1928. Serial No. 274,624. 11 Claims. (Cl. 122—235.)



1. In a steam boiler, the combination of mud, water and steam drums, banks of tubes connecting said drums in a closed circuit, a plurality of headers exterior to the furnace, tubing connecting the mud drum with each header, and a bank of tubes extending within the furnace from each header directly to the water drum.

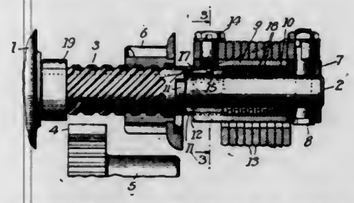
1,827,866. PACKING GLAND. ROBERT C. ALLEN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 16, 1926. Serial No. 102,518. 6 Claims. (Cl. 286—9.)

1. In a device for packing the shaft of a fluid motor, the combination of a stationary housing providing an inwardly opening annular chamber, a rotatable runner disposed within the chamber for maintaining a sealing annulus, the outer peripheral surface of the runner being disposed in closely spaced relation and the transverse surfaces of the runner being disposed in relatively widely spaced relation to the internal walls of the chamber, means for admitting a sealing medium to one end of the chamber, and means for removing the sealing medium from the



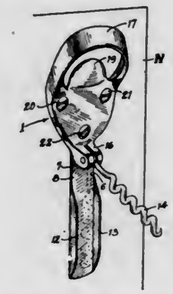
opposite end of the chamber, both of said means communicating with the chamber at points disposed radially outwardly of the inner periphery of the chamber, and providing a flow therethrough in a direction counter to the direction in which fluid leakage tends to flow through said chamber.

1,827,867. ENGINE STARTER. VINCENT BENDIX, Chicago, Ill. Filed June 25, 1923. Serial No. 647,492. 14 Claims. (Cl. 74—7.)



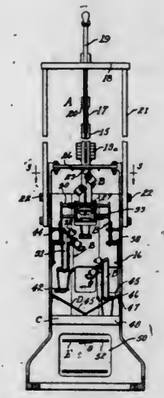
1. An engine starter drive including a driven member mounted for rotary and longitudinal movement, a member adapted to connect between a member of the engine to be started and said driven member and mounted on the latter for longitudinal movement thereof and rotary movement therewith, a driving shaft on which the driven member is mounted and a rotatable driving sleeve telescopingly connected with and keyed to the driven member for positive rotary movement together and for longitudinal movement of the driven member with respect to the sleeve, a driving head on said shaft journaled to said sleeve, and a drive spring encircling said sleeve and yieldably connecting said sleeve and driving head.

1,827,868. BOTTLE OPENER. RAYMOND M. BROWN, Newport News, Va. Filed Sept. 13, 1928. Serial No. 305,843. 3 Claims. (Cl. 65—46.)



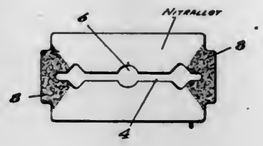
3. A wall-type bottle closure remover comprising a relatively massive part, a cork screw pivoted directly to said part, and a sheet metal cork screw guard of relatively frail construction, said relatively massive and frail members having inter-fitting portion at the rear of said relatively massive part, constructed to inhibit relative rotation between said members, and means for securing the cork remover to the wall, passing through aligned openings in said inter-fitting portions.

1,827,869. APPARATUS FOR PEELING FRUIT. MARY J. CASEY, San Jose, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill., a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,880. 3 Claims. (Cl. 146—51.)



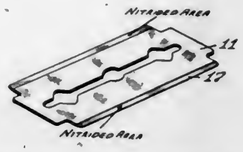
1. In a fruit peeling machine a fruit carrying mandrel, a forked extension thereon, a device for centering the fruit relative to said mandrel and means for removing the said centering device out of the line of travel of said mandrel, said mandrel mounted for reciprocation in a substantially vertical plane, a stop positioned below the centering device and in substantially the same vertical plane as the axis of the mandrel, a pair of carrier arms having a pivotal mounting adjacent one end and positioned to extend longitudinally of the axis of the mandrel, means normally urging said arms into yielding engagement with said stop, and a peeling means carried adjacent the free ends of said arms and positoned between said stop and centering device to operatively engage the fruit on the mandrel on its downward movement.

1,827,870. FINE EDGED BLADE. THOMAS H. FROST, Cambridge, Mass. Filed May 24, 1930. Serial No. 455,366. 11 Claims. (Cl. 30—12.)



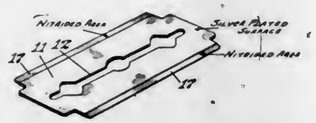
1. A thin flexible blade of nitralloy, nitrided in an area adjacent to and including its cutting edge.

1,827,871. FINE EDGED BLADE. THOMAS H. FROST, Cambridge, Mass. Filed Nov. 10, 1930. Serial No. 494,591. 14 Claims. (Cl. 30—12.)



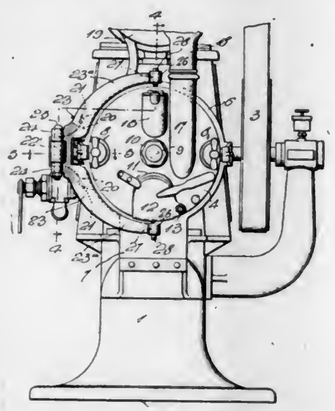
1. A fine edged blade of a nitridable ferrous alloy bevelled to form a cutting edge, and nitrided only in the narrow area defined by the bevel of the blade.

1,827,872. FINE EDGED BLADE. THOMAS H. FROST, Cambridge, Mass. Filed Nov. 14, 1930. Serial No. 495,657. 14 Claims. (Cl. 30—12.)



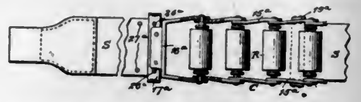
1. A fine edged blade of a nitridable alloy, bevelled to form a cutting edge, nitrided only in a narrow zone defined by the bevel and plated throughout the remainder of its surface.

1,827,873. FREEZING MACHINE. JOHN H. HAGEN, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed Apr. 28, 1927. Serial No. 187,161. 1 Claim. (Cl. 220—34.)



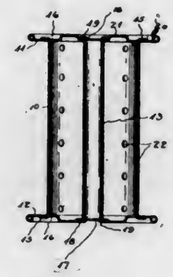
In a freezing machine, the combination with a cylinder, of a head engaging the open end of said cylinder and formed with a discharge opening in its lower portion and adapted to support the shaft mounted within said cylinder, a supporting member secured to one side portion of said cylinder, a member swingably mounted on said supporting member on an axis disposed outwardly of the wall of said cylinder and having diverging portions, trunnions between said head and the diverging portions of said swingable member disposed in a vertical plane cutting the axis of said cylinder, a wall surrounding said discharge opening and extending outwardly beyond the adjacent diverging portion of said swingable member, and a plate movable relative to the outer end of said surrounding wall to open and close the opening therethrough.

1,827,874. MASSAGING MACHINE. PAUL L. HEMP, Winona, Minn. Filed Oct. 21, 1929. Serial No. 401,181. 2 Claims. (Cl. 128—58.)



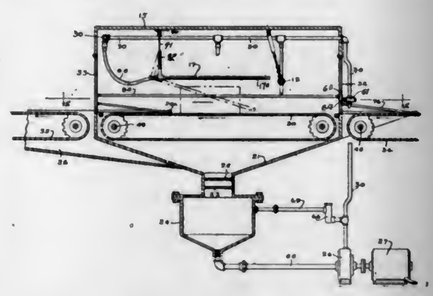
1. A device of the class described comprising a reciprocatory strap, a plurality of rollers disposed transversely at one side of and being adapted to contact with said strap, and a longitudinally flexible carrier upon which said rollers are mounted for rotation, said carrier extending longitudinally of said strap and having guides through which said strap passes slidably, whereby reciprocation of the strap will drive the rollers.

1,827,875. BOBBIN. ANTHONY HLAVAC, Chicago, Ill., assignor to Eber J. Hubbard, Berwyn, Ill. Filed May 16, 1929. Serial No. 363,648. 2 Claims. (Cl. 242—123.)



1. A bobbin of the class described comprising a sheet metal barrel having tongues at its ends, and end disks having each a circular row openings for receiving at their outer ends the respective tongues, said tongues being bent radially outwardly against the outer faces of the disks to lock the disks to the barrel, the inner ends of said openings serving to connect the interior of the barrel with the outside, said barrel having perforations for exposing the bobbin contents to the interior of the barrel.

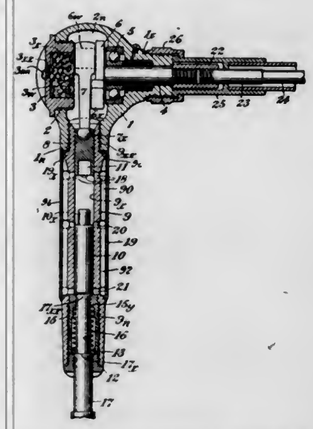
1,827,876. APPARATUS FOR APPLYING PIGMENT COATINGS. EDWARD P. LANG, Detroit, Mich., assignor to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 19, 1926. Serial No. 149,435. 5 Claims. (Cl. 91—44.)



1. A pigment applying machine having in combination oppositely disposed pigment nozzles having elongated apertures adapted to discharge films of pigment, a pigment

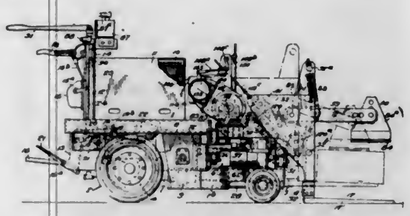
circulating system including a pump and a drip tray disposed beneath the nozzles, said nozzles being connected in the pigment circulating system by a universal connection to permit the adjustment of the nozzles whereby the nozzles may project opposed films of pigment toward the object being coated at angles obliquely to a vertical and a horizontal plane, a housing enclosing the nozzles and the drip tray, and a conveyor disposed within the housing.

1,827,877. POWER HAMMER. JOHN H. MEEKER, Somerville, N. J., and ERIC K. SKONBERG, Brooklyn, N. Y. Filed Mar. 6, 1929. Serial No. 344,711. 4 Claims. (Cl. 125—34.)



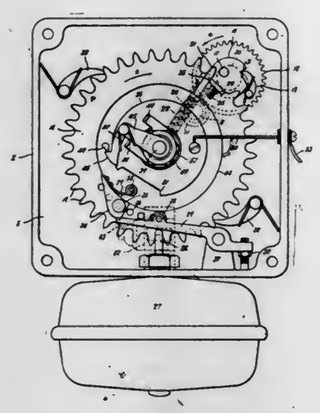
1. A power hammer comprising a cylinder, a piston reciprocal within the inner end portion of said cylinder, means for reciprocating said piston, a reciprocal tool element, and a plunger slidable within said cylinder between said piston and said tool element and adapted to be forced outward by outward movement of said piston for impact with said tool element, said cylinder having a pair of ports one of which is disposed to relieve the air pressure between said piston and said plunger when the plunger is substantially at its limit of outward movement, and the other of which is disposed to admit air between said piston and said plunger when the piston is substantially at the extreme end of its inward stroke.

1,827,878. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 13, 1926. Serial No. 148,240. 23 Claims. (Cl. 214—65.)



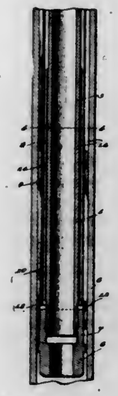
1. In a power driven industrial truck comprising a frame having a relatively low portion at one end, wheels for supporting the opposite ends of said frame, a support mounted on said low portion to move laterally at substantially right angles to the direction of travel of said frame, inclined guides mounted on the outer portion of said support, a member slidably mounted on said guides and arranged to be projected below a load to lift it, and means for operating said support and said member.

1,827,879. BATCH METER. SAMUEL SHAFER, Jr., and CHARLES F. BALL, Milwaukee, Wis., assignors to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 2, 1927. Serial No. 210,203. 17 Claims. (Cl. 192—129.)



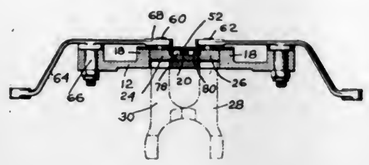
1. In a batch meter the combination of means adapted to operate a signal, gearing for operating such means, including a constantly moving driving gear member and an intermittently driven gear member, engaging one with the other, the intermittently driven member being an interrupted gear, and means for advancing the driven gear member, in its normal path of movement, from its position of rest sufficiently to bring the said gears into engaging relationship.

1,827,880. WELL PLUNGER PACKING. ELGAN S. SLOAN, Shippenville, Pa. Filed June 21, 1929. Serial No. 372,718. 4 Claims. (Cl. 74—109.)



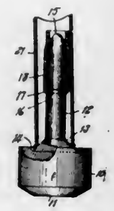
1. In combination a well plunger, a pair of concentric metallic packing sleeves encircling the plunger and having their upper ends open and their lower ends closed, each of the sleeves having rows of non-communicating slits to render the sleeves resilient whereby hydrostatic pressure in the working barrel in which the plunger is operating will at all times distort the sleeves circumferentially to effect a seal around the plunger.

1,827,881. COVER PLATE. HARRY E. SPENCER, New Haven, Conn., assignor to Universal Gear Shift Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Feb. 25, 1929, Serial No. 342,685. Divided and this application filed Mar. 29, 1929. Serial No. 351,014. 5 Claims. (Cl. 74—39.)



2. A transmission cover plate for a pneumatic gear shift, comprising a base plate, a cover plate spaced therefrom, slip rods slidably mounted between said plates, a clutch lock, comprising a pair of discs, a plurality of corresponding depressions in said slip rods, and means for forcing said discs into certain of said depressions, and in locking engagement with said slip rods, said means comprising a wedge shaped element adapted to enter between said discs and force them apart.

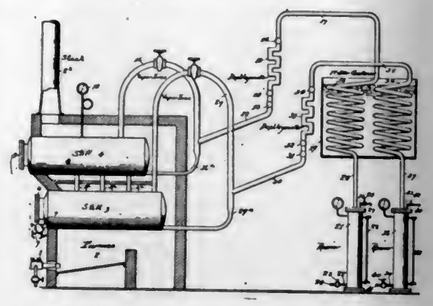
1,827,882. TUBE-FLANGING TOOL. EDWARD S. CORNELL, Jr., Watertown, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Feb. 10, 1931. Serial No. 514,778. 3 Claims. (Cl. 153—79.)



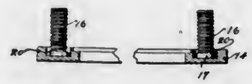
1. A tube-flanging tool comprising a body-portion; a rigid guide-stem offsetting from the said body-portion for entry into the end of a tube-to-be-flanged; a conical deflecting-surface surrounding the base of the said rigid guide-stem for flaring the end of a tube; and a resilient cushion mounted upon the said rigid guide-stem and engageable with the interior of a tube to cushion the lateral shocks incident to driving the tool into a tube.

1,827,883. PROCESS FOR TREATING HYDROCARBON OILS. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 26, 1920, Serial No. 391,926. Renewed May 29, 1928. 2 Claims. (Cl. 196—60.)

1. The process of treating hydrocarbon oils, comprising introducing a supply of oil to a still, in vaporizing oil introduced thereto, in discharging a portion of the vapors to a reflux condenser, in returning condensate from the condenser to the still, in discharging the vapors from the reflux condenser for condensation, in collecting the condensed vapors, in discharging another portion of the vapors from said still to a superheating still, in superheating the vapors therein by the furnace gases from said first still, in discharging superheated vapors from said last mentioned still to a reflux condenser, in returning reflux condensate to said superheating still and in discharging vapors from the reflux condenser to a second condenser and in separately collecting said condensed vapors.

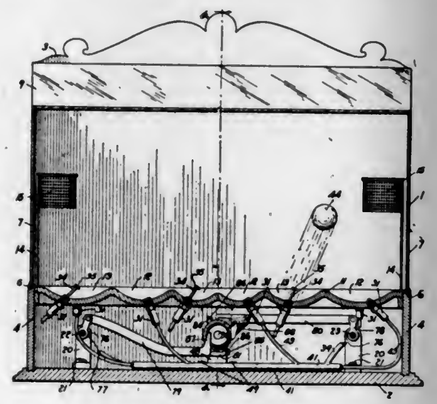


1,827,884. METHOD FOR FASTENING ARTICLES TOGETHER. EDWARD H. ELLISON, Jamestown, N. Y. Filed Dec. 18, 1929. Serial No. 414,918. 2 Claims. (Cl. 29—148.)



1. The method of permanently joining a metal screw to a plate, consisting in first, forming an annular recess in one face of said plate; second, flattening one side of the head of said screw; third, inserting said screw in said recess; and fourth, spinning down the edges of said recess into engagement with the head of said screw.

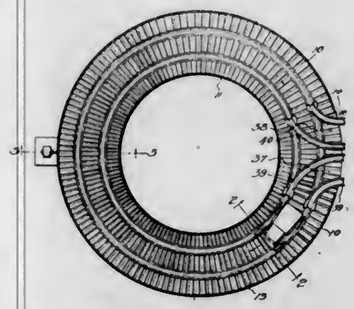
1,827,885. COIN CONTROLLED BASKET BALL GAME. ASA H. EMENHISER, Tulsa, Okla., assignor to W. T. Dimick, Oklahoma City, Okla. Filed Feb. 24, 1930. Serial No. 430,626. 20 Claims. (Cl. 273—85.)



1. In apparatus of the character described including spaced goals and a ball, independent sets of pneumatically actuated plungers for projecting the ball from different angles toward respective goals.

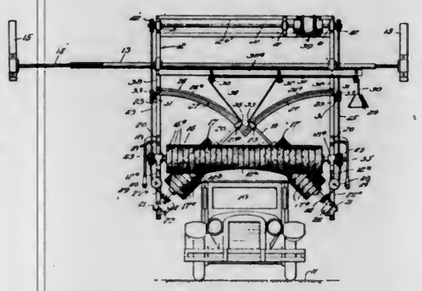
20. In apparatus of the character described including a coin control, spaced goals, a ball, independent sets of pneumatically actuated plungers for projecting the ball from different angles toward a goal, and means for controlling operation of the plungers, including means for predetermining the number of operations of the plunger for each actuation of the operation-controlling means, said operation-controlling means being actuated by the coin control.

1,827,886. APPARATUS FOR CLEANING AND POLISHING AUTOMOBILES. BEE K. GILLESPIE, Chicago, Ill., assignor to Gillespie Auto Laundry System, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 16, 1927. Serial No. 240,487. 25 Claims. (Cl. 104—44.)



1. In apparatus of the character described, disconnected and continuous inner and outer circular and concentric track sections, and a single driving means connected to both said sections in such a manner that both, although traveling relatively different distances, make a complete revolution in the same time.

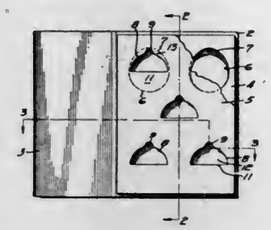
1,827,887. APPARATUS FOR TREATING VEHICLE TOPS. BEE K. GILLESPIE, Chicago, Ill., assignor to Gillespie Auto Laundry System, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 27, 1927. Serial No. 242,754. 23 Claims. (Cl. 15—21.)



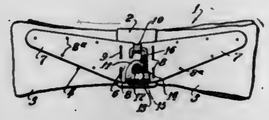
1. In apparatus of the character described, a support, roof cleaning means swingably carried by said support above the path of travel of the vehicle, said means including a roof treating element adapted to engage the roof horizontally, and other roof treating elements having independent swinging supports on said first support and adapted to engage the roof at the edges thereof.

1,827,888. BANK. JOHN H. GREER, San Francisco, Calif., assignor to Bankers Utilities Co., San Francisco, Calif., a Corporation of California. Filed Dec. 4, 1929. Serial No. 411,515. 3 Claims. (Cl. 229—92.9.)

1. In a book form bank, a covering of flexible material adapted to be folded to present the appearance of a book, a flexible sheet having a substantially circular aperture therein secured to said covering, and a second flexible sheet adhesively secured to and superimposed upon said first namd sheet, said second sheet having a substantially semi-circular aperture therein adapted to register with said first named aperture.

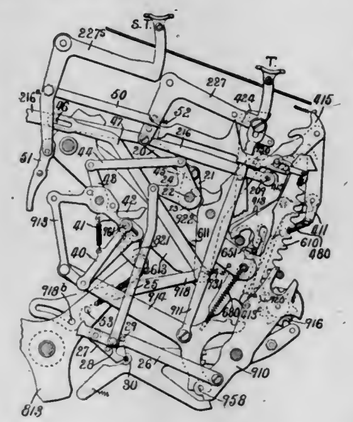


1,827,889. NECKTIE CLASP. FRED G. HERWEG, Chicago, Ill. Filed Aug. 11, 1930. Serial No. 474,507. 5 Claims. (Cl. 24—56.)



4. A tie clasp comprising a supporting plate including a central body portion and side portions forming wings for the plate, said plate including an integral turned back hook at the bottom of the body portion which hook has a side inlet and a length of wire having its mid portion passing through said body portion with one end anchored to the top of said body and with its other and free end formed to provide a yieldable finger normally closing off said side inlet.

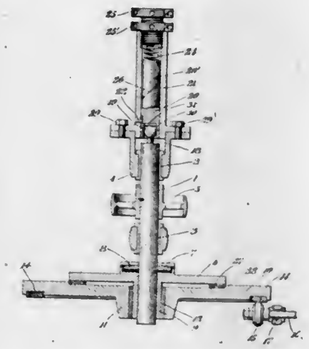
1,827,890. CALCULATING MACHINE. ALLEN A. HORTON, Plymouth, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 12, 1927. Serial No. 212,373. 8 Claims. (Cl. 235—60.)



1. The combination in a calculating machine having actuator racks that are given an extra step of movement in effecting a carry, carry pawls having latches that hold said pawls in tripped position when they are moved to

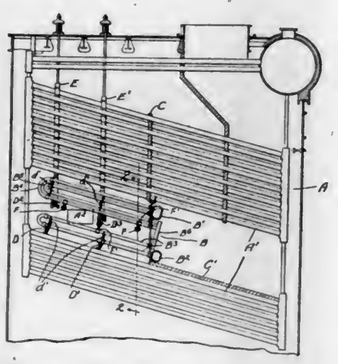
effect a carry, a counter, means for moving the counter into and out of engagement with the racks, a total key having connections for causing the counter to be engaged with the racks at the beginning of operation of the machine in taking a total, and means operated by the total key for moving the counter out of engagement with the racks and for returning the tripped latches to normal; of means for changing the timing of the movement of the counter into engagement with the racks by operation of the machine in taking a total, whereby the actuator racks that have moved an extra step and the tripped carry latches and pawls are returned to normal before the counter is rocked into engagement with the racks.

1,827,891. FRICTION GEARING. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 28, 1926. Serial No. 138,148. 15 Claims. (Cl. 74—26.)



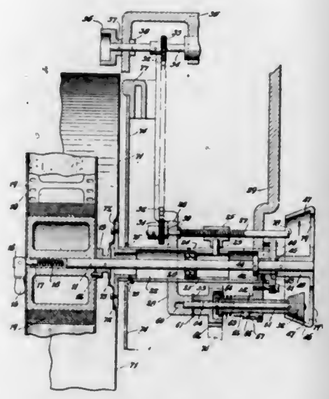
5. In friction gearing, a first pair of power transmitting friction surfaces in rolling contact, and a second pair of power transmitting friction surfaces in face contact and arranged in series relation with said first pair of friction surfaces, and a single self-damping resiliently actuated means for contacting said pairs of surfaces.

1,827,892. SUPERHEATER. WALTER F. KEENAN, Jr., Pelham, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed May 19, 1926. Serial No. 110,100. 7 Claims. (Cl. 122—476.)



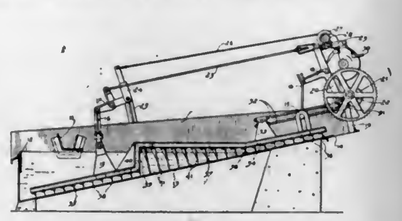
1. In a superheater boiler, a superheater comprising two banks of superheater elements separated by a space sufficient to permit the entrance of a workman between said banks for inspection and repair purposes and adapted to receive elements from either bank without interference with elements in the other bank, and soot blower tubes transversely mounted in said space and supported from one of said banks and adapted to discharge cleaning fluid jets against said elements.

1,827,893. TAKE UP REEL SLIP DEVICE. ALBERT KINDELMANN, Floral Park, and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed July 22, 1930. Serial No. 469,658. 16 Claims. (Cl. 242—75.)



1. A reeling device comprising a substantially horizontal shaft, a bearing supporting said shaft for rotational and vertical movement, a friction element carried by said shaft and a cooperating friction element in driving engagement therewith, the arrangement being such that the weight of material on said shaft tends to cause pivotal movement thereof, whereby said friction elements are maintained in frictional engagement, and resilient means for causing relative movement between said elements to compensate for wear of the friction surfaces.

1,827,894. CLASSIFICATION APPARATUS. ALEXANDER D. MARRIOTT, Denver, Colo., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 29, 1929. Serial No. 335,850. 6 Claims. (Cl. 210—55.)



1. A classifier comprising a settling tank having a sloping bottom and an outlet for supernatant liquid, and means for conveying settled solids upwardly along said bottom to a point of discharge above the liquid level including a series of transverse rake members comprising a raking unit, the members of a section of said series increasing gradually in depth from one end of said section to the other; and means for connecting said rake members to form the raking unit.

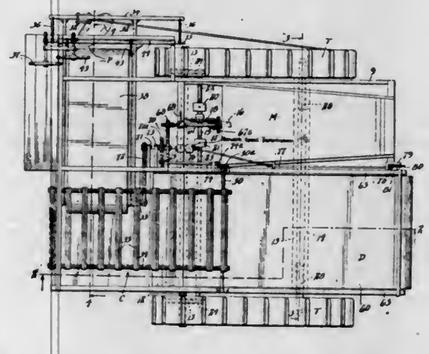
1,827,895. EXPLOSIVE COMPOSITION. WILLIAM LINDSAY MCPHERSON, U. S. Army, Dover, N. J. Filed Apr. 16, 1929. Serial No. 355,652. 6 Claims. (Cl. 52—5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A new explosive embodying nitro derivatives of furane.

1,827,896. DISTILLATION OF COAL. EDWARD S. MEAD, Philadelphia, Pa., assignor of one-half to Jonathan P. Edwards, Philadelphia, Pa. Filed Aug. 12, 1929. Serial No. 385,467. 2 Claims. (Cl. 202—9.)

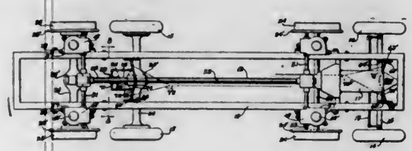
1. The process of making a solid fuel which comprises mixing powdered anthracite coal with sufficient crude oil to form a slightly plastic mixture and destructively distilling the same at temperatures below a maximum of 750° F. for approximately one hour so as to produce a product containing from 14% to 18% volatile matter.

1,827,897. ROAD BUILDING MACHINE. HANS R. MILLER, Fergus Falls, Minn. Filed June 14, 1928. Serial No. 285,388. 5 Claims. (Cl. 37—110.)



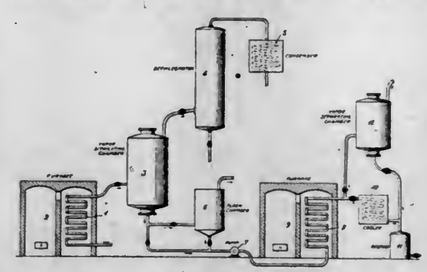
2. In road building machinery, a frame, a pair of tracks for supporting said frame for movement over the ground, a source of power carried by said frame for driving said tracks, a plow carried by said frame, a conveyor receiving from said plow, a dumping conveyor extending longitudinally of said frame, an apron disposed behind said dumping conveyor and adapted to receive material from said first mentioned conveyor, and said apron including a door whereby material may be dropped therethrough without collection thereof.

1,827,898. VEHICLE FOR HIGHWAY AND RAILWAY TRAVEL. RAY K. MOORE, Freeport, Ill., assignor of one-half to William J. Laffey, Chicago, Ill. Filed Nov. 10, 1930. Serial No. 494,628. 12 Claims. (Cl. 105—215.)



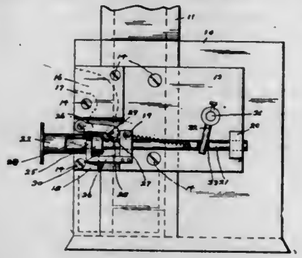
1. A vehicle comprising a set of highway wheels including front and rear wheels and axle means therefor, a set of railway wheels including front and rear wheels and axle means therefor, a plurality of double ended transversely extending operating shafts and worm gear means for adjusting in unison all the wheels and axle means of one set vertically relative to those of the other set and to retain the same in adjusted position whereby to selectively utilize either set of wheels for supporting the vehicle, and means at the ends of said shafts whereby said shafts and the wheels may be adjusted vertically by one person and also by more than one person.

1,827,899. HYDROCARBON OIL CONVERSION. JACQUE C. MORRELL and WARREN F. FARAGHER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 6, 1928. Serial No. 245,040. 1 Claim. (Cl. 196—47.)



The improvement in the residue disposal of oil cracking processes, which consists in reducing the pressure on the hot residue to permit flash distillation thereof, and increasing the fluidity of the remaining residuum by passing it without material positive cooling to a heating zone wherein it is raised to a cracking temperature under superatmospheric pressure.

1,827,900. MACHINE FOR VENDING ARTICLES. GEORGE MORRISON, Poughkeepsie, N. Y. Filed Mar. 19, 1930. Serial No. 437,002. 2 Claims. (Cl. 194—57.)

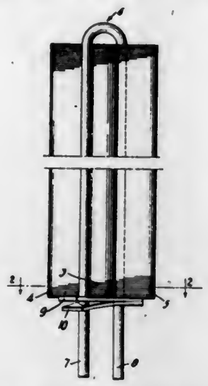


1. In a vending machine, the combination with a push rod adapted to be reciprocated and formed with a cut out and a locking notch, a finger piece formed with a cut out and slidably mounted on said push rod, a detent pivoted above said push rod and adapted to engage the notch in said push rod, a coin chute above said push rod and adapted to guide a coin to the cut out of said push rod, a coin support below said push rod adjacent its cut out, a stop engaging with the cut out of the finger piece to limit its movement, and a return spring for normally retaining said push rod in a locked position.

1,827,901. BLANK HOLDER. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 19, 1927. Serial No. 241,001. 4 Claims. (Cl. 1—56.)

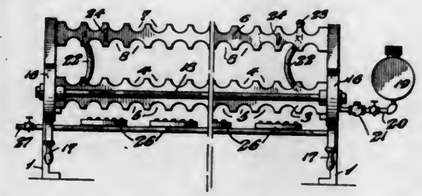
1. A stack holder for a multiplicity of blanks, comprising an open-mouthed staple-like member having the legs

thereof interfitting with the blanks, a holding member removably impaled on the legs of the staple-like member,



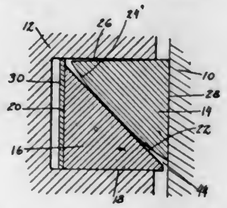
and a locking member also removably impaled on the legs of the staple-like member in frictional binding relation thereto.

1,827,902. MACHINE FOR COOKING SAUSAGES. CHRISTOPHER OFFENHAUSER, Philadelphia, Pa. Filed June 20, 1928. Serial No. 286,958. 1 Claim. (Cl. 53—5.)



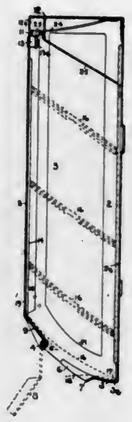
In a cooking machine, relatively movable cooking members having intercommunicating internal chambers, a water supply communicating with one of said chambers, each of said members being of the same construction to render them interchangeable and reversible, each member having opposite faces provided with grooves so that juxtaposed faces when together form recesses, the walls of which surround the articles being cooked, and means to effect relative movement of said members.

1,827,903. PISTON PACKING. GEORGE V. PANYARD, Muskegon, Mich. Filed Jan. 15, 1930. Serial No. 420,829. 10 Claims. (Cl. 74—109.)



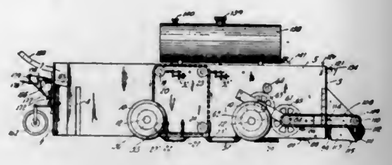
1. In piston packing, a piston having a groove for packing, and a pair of cooperating generally triangular split ring sections mounted within said groove forming in combination a ring substantially rectangular in cross section, said sections having angular meeting faces formed on dissimilar angles arranged along a diagonal of said rectangle and engaged only at about the center of the ring whereby one section is rockably supported upon the other within the groove.

1,827,904. DISPENSING CABINET. PHILIP D. PARSONS, Swarthmore, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Nov. 17, 1928. Serial No. 320,021. 2 Claims. (Cl. 312—60.)



2. In a cabinet for dispensing paper towels and the like, a box body portion open at the front and having at the bottom an oblique closure portion forming a socket between it and the back of the box body portion and providing above and forward of the socket a transverse delivery aperture of approximately the full width of the cabinet, combined with a front cover plate having an angular portion at the bottom extending rearwardly and hinged in advance of the transverse delivery opening forward of the bottom closure portion and at a distance to the rear of the front of the cover plate, and wherein further, the upper interior portion of the box body is provided with an obliquely and rearwardly extending guide plate for insuring the depression of the rear ends of the articles being inserted, whereby said articles incline downwardly.

1,827,905. CLEANING MACHINE. CHARLES PICKER, Albany, N. Y. Filed Oct. 22, 1926. Serial No. 143,483. 6 Claims. (Cl. 15—50.)

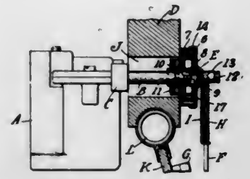


1. In a floor cleaning machine of the character described, the combination with means for collecting comparatively large objects and comprising a revolving brush and means for periodically elevating from and lowering the brush to the floor, of means for collecting small particles of dirt and comprising a revolving brush in continuous contact with the floor and behind said first mentioned brush.

1,827,906. EXTENSION WINDSHIELD WIPER. JACOB J. PITTS, New York, N. Y. Filed May 9, 1929. Serial No. 361,825. 1 Claim. (Cl. 15—255.)

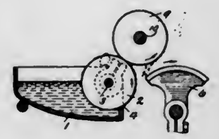
A windshield wiper comprising the combination of an actuating element and a shaft adapted to be rocked by

the actuating element and provided with an opening therein, a pin disposed in the opening, a slotted extension disposed over the shaft and arranged to be engaged



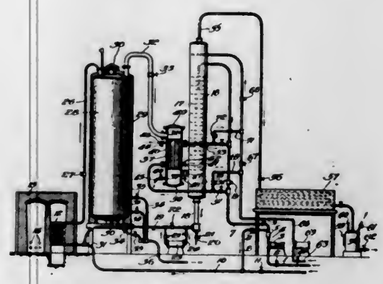
by the pin, a squeegee carried by the extension and a second squeegee disposed at a point remote from the extension and means operated by the extension for operating the second squeegee.

1,827,907. PASTING MECHANISM. ADOLPH POTDEVIN, Garden City, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 17, 1930. Serial No. 428,885. 7 Claims. (Cl. 91—50.)



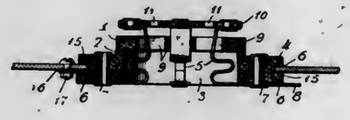
1. In combination a paste roller, a paste pad, a paste collecting roller adapted to receive paste from said pad, said collecting roller being so disposed relatively to the paste roller that the latter will remove the paste therefrom.

1,827,908. METHOD FOR CONVERTING HYDROCARBONS. CLIFTON J. PRATT, Tulsa, Okla., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 4, 1926. Serial No. 146,116. 2 Claims. (Cl. 196—48.)



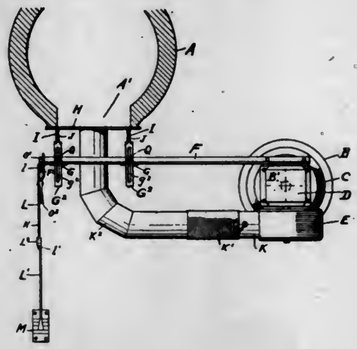
1. A hydrocarbon oil cracking process which comprises continuously passing the oil through a heating zone and heating the same therein to cracking temperature under pressure, discharging the heated oil into an enlarged reaction zone maintained under cracking conditions of temperature and pressure and separating the same therein into vapors and unvaporized oil, separately removing the vapors and unvaporized oil from said reaction zone, cooling the vapors prior to dephlegmation, to below cracking temperature but not substantially below 600° F. by indirect heat exchange with charging oil for the process, then introducing the vapors and said charging oil to the lower and upper portions respectively of a dephlegmating zone and passing them in countercurrent heat exchange relation therein to condense heavier fractions of the vapors as reflux condensate, supplying the reflux condensate and unvaporized charging oil from said dephlegmating zone to said heating zone, and finally condensing the dephlegmated vapors.

1,827,909. VACUUM TUBE SOCKET. WALTER H. PUMPHREY, New York, N. Y. Filed June 30, 1928. Serial No. 289,567. 5 Claims. (Cl. 173—328.)



1. The combination of a tube socket, a supporting member shaped to encircle the socket, means effective on rotation of the socket for releasably securing the socket in interlocked relation to the support, and a member engaging one of the terminals of the socket to form a ground connection and secure the socket against releasing movement.

1,827,910. DRAFT APPLIANCE FOR FURNACES. ARTHUR J. REED, Philadelphia, Pa. Filed July 28, 1930. Serial No. 471,127. 4 Claims. (Cl. 110—69.)

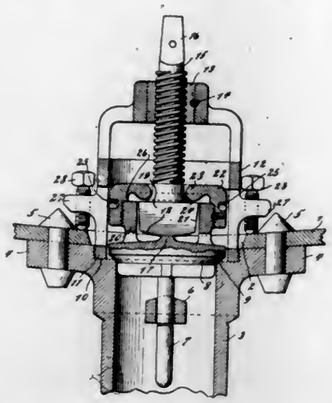


1. A draft appliance for furnaces comprising a pivotal support, a head rotatively supported thereon and supporting a motor and fan, a laterally extending arm secured to and rotated with the head, an ash doorway closure plate adjustably supported on said arm, an air conduit connecting the fan and closure plate and opening through said plate and means for clamping the plate against an ash pit doorway.

1,827,911. VALVE. JOSEPH J. ROOT, Jr., Chicago, Ill. Filed Aug. 16, 1927. Serial No. 213,323. 10 Claims. (Cl. 137—21.)

1. In a device of the class described, a valve casing having a seat therein, a valve adapted to contact with said seat and having a relatively small projection thereon, a cage rigidly secured to said casing and supporting a

nut in fixed position therein, a stem threaded to said nut and having a curved head contacting with said pro-

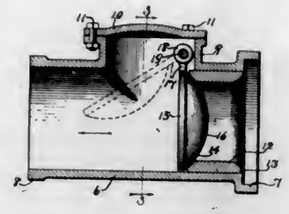


jection on said valve, means loosely holding said head in engagement with said projection, and means to transmit rotation of the head to the valve.

1,827,912. PROCESS OF REMOVING HYDROGEN SULPHIDE FROM OILS AND OTHER SUBSTANCES. LUDWIG ROSENSTEIN, San Francisco, Calif. Filed Apr. 16, 1927. Serial No. 184,434. 7 Claims. (Cl. 196—32.)

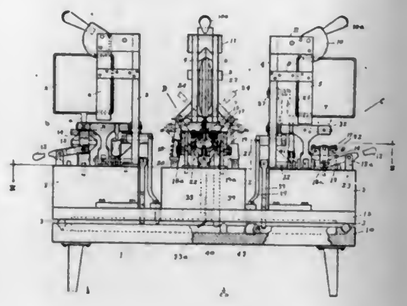
4. A process of removing hydrogen sulphide from hydrocarbon normally in the liquid phase which comprises contacting the hydrocarbon with an aqueous alkaline solution having an adjusted hydroxide ion concentration whereby the solution reacts with the hydrogen sulphide to form water-soluble sulphide, substantially separating the hydrocarbon from contact with the solution, contacting the solution with air in the presence of a minute quantity of a catalyst whereby the solution is regenerated and free sulphur is liberated, and returning the regenerated solution to contact with the hydrocarbon.

1,827,913. BACK WATER AND CHECK VALVE. CECIL H. RYMAL, Chicago, Ill., assignor of one-half to George Milsk, Chicago, Ill. Filed June 28, 1930. Serial No. 464,470. 2 Claims. (Cl. 251—123.)



1. A back-water and check valve comprising a cast iron casing including a main body portion having a tubular end part which has its interior surface smooth and straight from end to end of said part, a tubular branch extending from said casing, a tubular sleeve of non-rustable metal which has its exterior smooth and straight and which extends from the outer end of said part to project inwardly of said branch, being held with a driving fit tightly in said end part, to enable a tool to engage it through said branch to drive it out therefrom and to be replaced therein without injury to the casing or the sleeve, a valve element having a smooth face to fit in said valve seat, an arm on said valve element provided with pivot means on its end, and a pivot pin mounted in said branch and extending through said pivot means to be readily removable for removal of said valve elements.

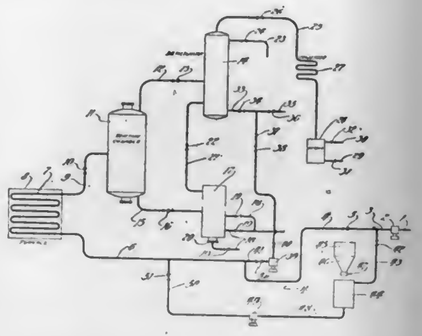
1,827,914. SEALING-OFF MACHINE FOR GLASS OBJECTS. JOHN N. SCISM, Wilkinsburg, Pa. Filed Mar. 28, 1928. Serial No. 265,361. 15 Claims. (Cl. 49—1.)



1. In a machine for exhausting, and sealing off hollow glass objects having a hollow neck thereon, the combination of a nipple connected to an exhaust line, means for raising the nipple to engage the neck on the glass object, means for heating the neck adjacent the said object to its fusion temperature, a mechanical linkage carrying sealing off dies, said dies being shaped to conform to the cross section of the periphery of the glass object, and means for automatically operating said linkage to cause the dies to seal off the aforesaid neck.

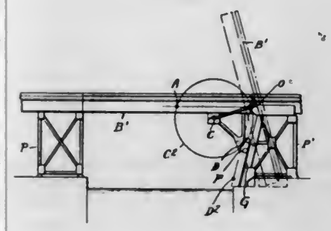
14. In a machine for exhausting and sealing off hollow glass objects the combination of means for connecting the interior of said object to exhausting means, means for heating the glass object at the sealing off region, and opposed sealing off dies, said dies having sealing off faces which are formed to give the sealed portion a shape conforming with the remaining object.

1,827,915. PROCESS FOR TREATING HYDROCARBONS. JEAN DELATTRE SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 25, 1927. Serial No. 170,779. 2 Claims. (Cl. 196—55.)



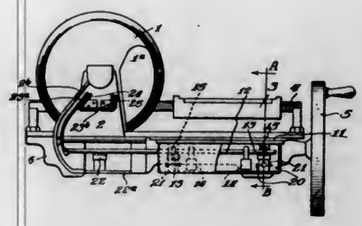
1. Process of conversion of hydrocarbons under heat and pressure in the presence of an adsorbent agent, for the purpose of improving the qualities of the lighter hydrocarbons produced, particularly as to their sulphur content, consisting in mixing the adsorbent agent with the charging oil for the process, subjecting the mixture to cracking conditions of temperature and pressure, separating the vapors from the residual oil in which the spent adsorbent is entrained, and discharging the residual oil and spent adsorbent under a reduced pressure to permit flashing of vapors therefrom, and subjecting the first mentioned vapors and the vapors resulting from flashing to common dephlegmation.

1,827,916. BASCULE BRIDGE. PERLEY E. STEVENS, Chicago, Ill., assignor of one-third to Sylvan E. Hess and one-third to Leopold Pistner, St. Paul, Minn. Filed Sept. 20, 1927. Serial No. 220,677. 7 Claims. (Cl. 14—31.)



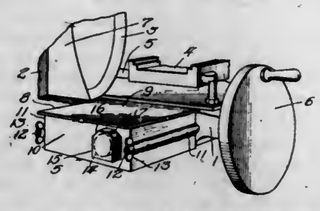
4. In combination with the movable span of a bascule bridge, a track adapted to slidably guide the movement of a point on the heel portion of the span, when the span is tilted, and a link pivotally connected at one end to a support and pivotally connected at its other end to a second point on said span whose level is higher than the level of the first-mentioned point of the span, said second point being between the first-mentioned point of the span and the center of gravity thereof, the distance between said first-mentioned point and the second point of the span being susbtantially equal to the length of said link.

1,827,917. WEIGHING MECHANISM FOR SLICING MACHINES. CORNELIS F. M. VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Jan. 18, 1928, Serial No. 247,509, and in Great Britain Feb. 9, 1927. 14 Claims. (Cl. 265—61.)



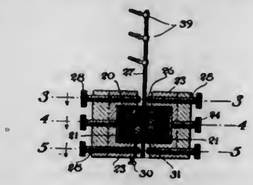
1. In a slicing machine having a frame, a slice receiver, weighing mechanism for weighing slices deposited on said receiver, and a duplex indicator for said weighing mechanism for indicating the weight of said slices both to the operator and the customer adapted to co-operate with stationary means on said slicing machine frame.

1,827,918. COMBINED SLICING AND WEIGHING MACHINE. CORNELIS F. M. VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Apr. 30, 1928, Serial No. 273,933, and in Great Britain May 5, 1927. 9 Claims. (Cl. 265—27.)



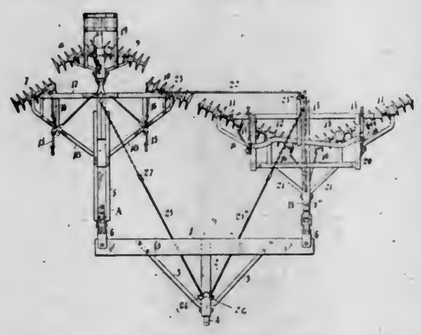
1. The combination with a slicing machine having a slicing knife, of a complete weighing unit, co-operating elements on said slicing machine and weighing device to detachably secure said weighing device on said slicing machine in position to receive the slices formed by said knife.

1,827,919. ELECTROMAGNETIC SOUND-PRODUCING DEVICE. JAMES H. VAN WAGENEN, Washington, D. C. Filed May 10, 1923, Serial No. 638,079. Renewed Apr. 26, 1926. 70 Claims. (Cl. 179—119.)



1. An electro-magnetic actuator for sound reproducing apparatus comprising a magnet, a magnetizable member so positioned within the magnetic field of said magnet as to permit vibratory movements transverse to the longitudinal axis of said member, an elastic cushioning medium in which said member is floatingly disposed without confining the position of a node therein, and an energizing coil surrounding said member and operating to vary the stresses exerted thereon to thereby cause said vibratory movements of said member in said elastic medium.

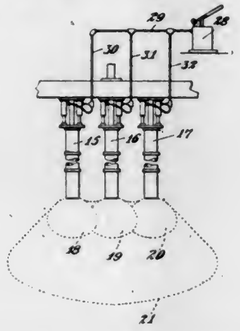
1,827,920. DISK HARROW. TIMOTHY CLARK WARDLEY, Elora, Ontario, Canada, assignor to T. E. Bissell Company Limited, Elora, Canada, a Corporation of Canada. Filed Sept. 17, 1930. Serial No. 482,588. 3 Claims. (Cl. 55—83.)



1. A disk harrow a draft attachment comprising a dragbar and coupling means forward of the dragbar for

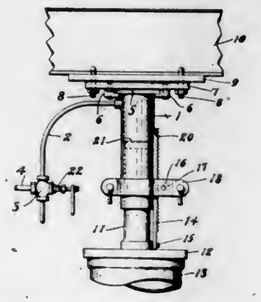
connecting the harrow to the motive power; a plurality of harrow units each comprising a center frame flexibly connected at its forward end to the dragbar for the undulating movements of the unit lengthwise and transversely of the line of draft; a spacing bar flexibly connecting the center frames together in rear of the dragbar for maintaining their spaced relation and permitting of the undulating movement of each unit transversely of the line of draft; and flexible stays each conpected at its forward end with the draft attachment and at its other end with one of the center frames between the dragbar and the spacing bar.

1,827,921. METHOD OF PRODUCING SUBSTRUCTURES FOR STRUCTURES. LAZARUS WHITE, New York, N. Y. Filed May 1, 1929. Serial No. 359,591. 5 Claims. (Cl. 61—51.)



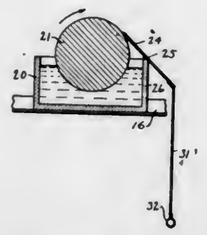
1. The method of providing a substructure for structures, which consists in setting a footing consisting of a plurality of closely adjacent units, loading each unit with a temporary load and maintaining it under such load until settling of the unit ceases, exchanging the temporary load on each unit for the permanent load assigned to it, applying simultaneously to a plurality of units, a common temporary load at least as great as the combined common permanent load such plurality of units is to carry whereby an enlarged pressure bulb common to said plurality of units is formed beneath said plurality of units, and repeating the application of the load to another plurality of the units until settling of that plurality ceases, and while each plurality of units is maintained under its common temporary load, exchanging said load simultaneously as to all the units in that plurality for the common permanent load to be carried by that plurality of units.

1,827,922. HYDRAULIC PILE DRIVING MECHANISM. LAZARUS WHITE, New York, N. Y. Filed May 1, 1929. Serial No. 359,592. 6 Claims. (Cl. 61—76.)



1. In an arrangement for hydraulically driving a pile or the like, the combination of a fixed abutment, a hydraulic cylinder removably secured to and beneath the abutment whereby the abutment absorbs the thrust therefrom, a piston arranged to drive in a downwardly moving direction in the cylinder, and means for retracting the piston away from the top of a pile.

1,827,923. MANUFACTURE OF PAPER. ALEXANDER J. WILDMAN and HOMER H. LATIMER, Hamilton, Ohio, assignors to The Beckett Paper Company, Hamilton, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,548. 13 Claims. (Cl. 92—40.)



1. Means for use in the formation of colored paper comprising a color container, drop formers, and means for feeding color from said container to said drop formers at a controlled rate, said feeding means comprising spaced fabric webs.

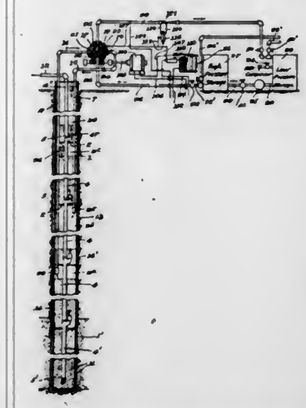
1,827,924. PICTURE PROCESS. FRANK D. WILLIAMS, Los Angeles, Calif. Filed Apr. 9, 1928. Serial No. 268,482. 2 Claims. (Cl. 88—16.)



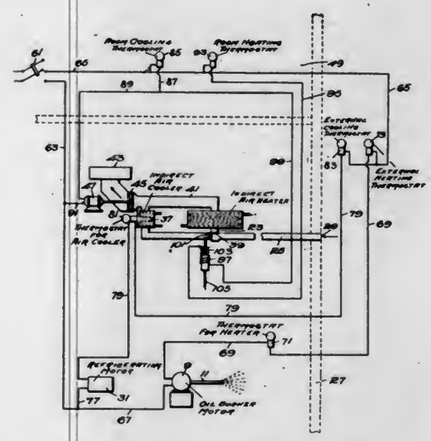
2. In a motion picture process, the method of copying pictures which comprises projecting primary component silhouette pictures of ultimate composite pictures upon an opaque picture perceptive medium, light impressing a sensitized plate with a supplementary component by aid of the light from said medium with the silhouette projected thereon so as to produce a latent stencil area and light impressing the stencil area with a regular picture corresponding to said silhouette.

1,827,925. APPARATUS FOR PUMPING LIQUIDS. EDSON R. WOLCOTT, Los Angeles, Calif. Filed Feb. 18, 1929. Serial No. 340,711. 6 Claims. (Cl. 103—239.)

1. A liquid pumping apparatus comprising a series of superposed pump chambers, liquid conducting passage means connecting the lower portion of each pump chamber to the next higher pump chamber, check valve means in each of said liquid conducting passage means for preventing downflow of liquid therethrough, means for delivering gas to alternate pump chambers to create relatively high pressure therein and means for removing gas from the remaining pump chambers to create relatively low pressure therein so as to cause displacement of liquid from each high pressure chamber through a corresponding passage means to the next higher low pressure chamber valve means for reversing the connections of said pump chambers to said gas delivering and gas removing means so as to change the conditions in the respective pump chambers from relatively high pressure to relatively low pressure and vice versa, float valve means for shutting off communication from each high pressure pump chamber to the corresponding passage means upon substantially complete displacement of liquid from that particular chamber, and means for automatically operating said reversing valve means upon substantial cessation of liquid displacement through the passage means leading from all of said high pressure chambers.



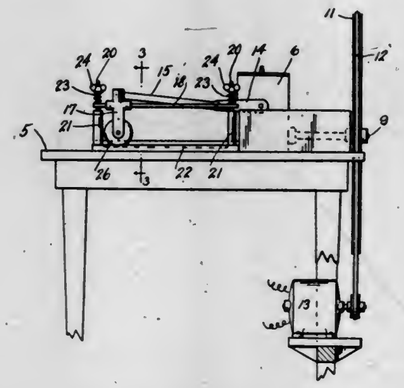
1,827,926. ATMOSPHERE REGULATING SYSTEM. ARTHUR H. BALLARD, Boston, Mass., assignor to Arthur H. Ballard, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 30, 1929. Serial No. 351,282. 18 Claims. (Cl. 257—3.)



8. In a temperature regulating system for buildings, the combination with a refrigerating apparatus adapted to be started and stopped by thermostatic control, of an indirect air cooler supplied with a cooling medium conditioned by said apparatus, means to apply the cooling medium to cool the air in the building space, the temperature of which is to be regulated, said means including a motor-driven power actuated device for moving the air through the indirect air cooler to said space, said device being adapted to be started and stopped by thermostatic control, and thermostatic control means for said refrigerating apparatus and said power-actuated device adapted to start the apparatus and condition the cooling medium in advance of the actuation of said power actuated device.

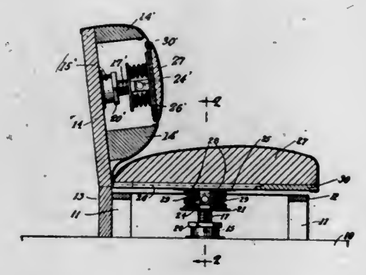
9. In a temperature regulating system for buildings, the combination with an indirect air heater supplied with a heating medium, of a combustion device adapted to be started and stopped by thermostatic control for conditioning said heating medium, a power actuated device for moving air through said heater into said space, a thermostatically controlled valve for applying said heating medium to the effective heating of the air, thermostatically controlled means for starting and stopping said air moving device and for controlling said valve, and thermostatically controlled means for starting and stopping said combustion device to start the latter in advance of the actuation of said air moving device.

1,827,927. PHOTOGRAPH PRINT EMBOSSING MACHINE. JOSEPH L. BARBER, Greeley, Colo. Filed Dec. 22, 1928, Serial No. 328,002. Renewed Aug. 28, 1930. 19 Claims. (Cl. 41—1.)



1. An embossing machine comprising a plate including embossing means, guide means supported adjacent said embossing means, and means movable along said guide means including an embossing element for cooperating with said embossing means.

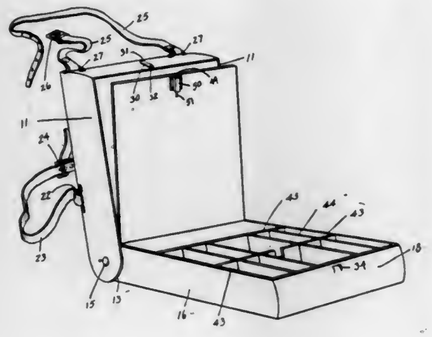
1,827,928. ADJUSTABLE SEAT. LOUIS BERGER, Jamaica, N. Y. Filed July 23, 1928. Serial No. 294,807. 3 Claims. (Cl. 155—50.)



1. An automobile seat comprising in combination a floor, a frame secured to the flooring, a base attached to the flooring centrally of the frame, said base being provided with a central bore, a threaded plunger adapted to slide within the bore, co-acting means on the base and plunger for preventing rotation of the plunger, a rotat-

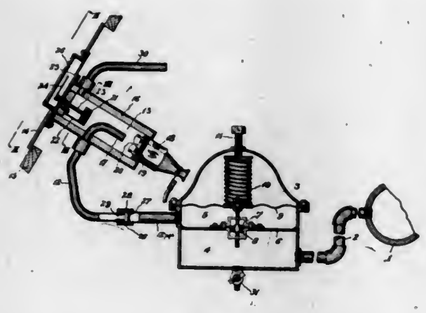
ably free internally threaded element engaging the threaded portion of the plunger by which the plunger may be raised or lowered, a plate seated on the plunger provided with an upwardly-extending lug, a second plate provided with a depending lug, said lugs being in pivotal engagement with each other, compression springs supported on the first mentioned plate forwardly and rearwardly of the lugs, and a seat rest provided with side portions in slidable engagement with said second plate.

1,827,929. LURE KIT. JONAS D. BIGELOW, Indianapolis, Ind. Filed Dec. 31, 1928. Serial No. 329,626. 8 Claims. (Cl. 43—31.)



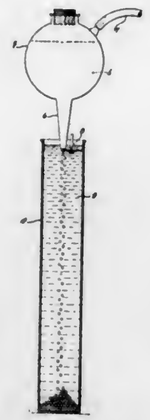
1. In combination a compartment forming bottom, a telescoping cover therefor, a catch in the bottom extending inwardly, a till member receivable by the compartment forming bottom and detachably locked therein by said catch, and a yielding latch on the cover for catch engagement.

1,827,930. FUEL LOSS INDICATOR. RICHARD E. BISSELL, Cleveland Heights, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 16, 1927. Serial No. 175,912. 8 Claims. (Cl. 73—184.)



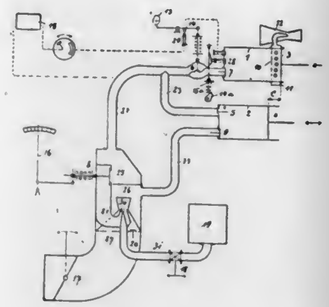
1. In a device for indicating the character of a combustible mixture supplied to an internal combustion engine comprising, in combination, a combustion chamber, means for mixing a minor part of the exhaust gases from the engine with air, means for introducing the commingled gases into the combustion chamber at low velocity, a sparking device for effecting the combustion of the commingled gases, and indicating means responsive to the temperature in the combustion chamber.

1,827,931. METHOD OF PRODUCING CARBON GRANULES. EDWARD EVANS BLANKENSTEIN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 28, 1927. Serial No. 243,011. 2 Claims. (Cl. 202—25.)



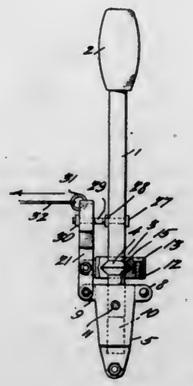
1. A method of producing spherical carbon granules, which comprises extruding a stream of cellulose dissolved in a water solution of zinc chloride, breaking the stream into isolated particles to cause the particles to assume a spherical shape, depositing the particles in a bath of alcohol to solidify them, and carbonizing the spherical particles to form spherical carbon granules.

1,827,932. TWO-STROKE CYCLE INTERNAL COMBUSTION ENGINE. JEAN DAP, Puteaux, France, assignor to Dap-Motor-Patent-Gesellschaft m. b. H., Cologne-Holweide, Germany. Filed June 25, 1927, Serial No. 201,510, and in Germany Aug. 14, 1926. 4 Claims. (Cl. 123—70.)



2. In a two cycle internal combustion engine the combination of a working cylinder, a suction device for evacuating said working cylinder, a pump cylinder timed with respect to said working cylinder, a transfer conduit connecting said pump cylinder with said working cylinder, a carbureter, a suction conduit connecting said carbureter to said pump cylinder, a conduit leading from said transfer conduit and terminating in a nozzle surrounding the fuel nozzle of said carbureter, an adjustable valve in said transfer conduit, and an engine actuated transfer valve in said transfer conduit timed to admit gas to said working cylinder towards the end of its working stroke.

1,827,933. AEROPLANE CONTROL DEVICE. MCCLELLAN DAVIS, Portland, Oreg. Filed Nov. 30, 1928. Serial No. 322,893. 7 Claims. (Cl. 244—29.)



1. In an aeroplane, a joy stick made up of sections, a two-part collar for locking the sections in connected relation, a holding member free of connection with the collar and adapted in one position to lock the parts of the collar together and in another position to free said collar parts relative to each other, and means whereby the holding member may be selectively locked against the collar part release movement.

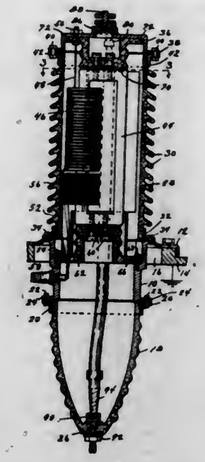
1,827,934. DRAWER PULL AND LABEL HOLDER. GEORGE H. DAWSON, Cambridge, Mass., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Apr. 16, 1930. Serial No. 444,652. 3 Claims. (Cl. 40—8.)



1. In a drawer having a front wall, a tubular sheet metal label holder having a rear flat face welded to said front wall, the front face of said holder having a pair of windows and an intermediate finger slot.

1,827,935. INSULATING BUSHING. WILLIAM S. EDSALL, Belmont, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Nov. 28, 1930. Serial No. 498,667. 29 Claims. (Cl. 175—361.)

1. A high tension bushing having an insulating shell provided with terminals at the ends thereof and an intermediate ground terminal, a stud extended through said shell and connecting said end terminals, and a potential transformer contained within said shell out of contact with said stud and having a primary winding that has a high tension terminal electrically connected with one of said end terminals and a low tension terminal that is connected with said ground terminal, and a low tension secondary winding having terminals extended through



said shell, the potential of said low tension winding varying in accordance with the potential of a high tension terminal of said bushing.

1,827,936. COMBINED INSULATING BUSHING AND TRANSFORMER. WILLIAM S. EDSALL, Belmont, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Nov. 28, 1930. Serial No. 498,668. 24 Claims. (Cl. 175—361.)

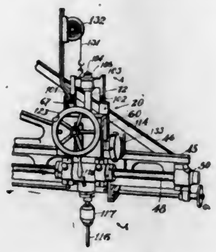


1. A high tension insulating bushing including an insulating enclosing shell having terminals at the ends thereof, a transformer located within said shell having a high tension winding connected with one of said terminals, and a bushing stud which connects both of said terminals and passes through said transformer.

1,827,937. DRILL PRESS FEED. WILLIAM WELTON EDWARDS, Los Angeles, Calif. Filed Nov. 12, 1928. Serial No. 318,650. 1 Claim. (Cl. 77—32.)

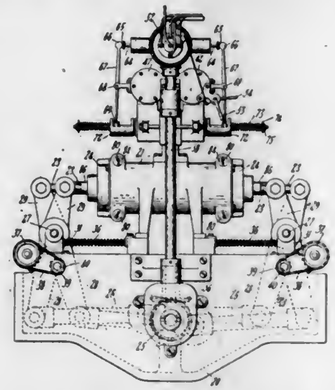
In a drill press feed, a carriage, a pair of rack bars slidable vertically on said carriage, a drill-supporting shaft carried by said rack bars, a housing on said car-

riage having side walls, a shaft journalled in said side walls and extending therebetween, gear connections between said shaft and said rack bars, a worm wheel fixed on said shaft between said side walls, a top plate, a depending face plate on said top plate formed with a slot, said top and face plates being demountably carried on said side walls, a pivoted bearing carried by said top plate, a shaft journalled in said bearing projecting



through the slot in said face plate, a worm carried on said last named shaft adapted to mesh with said worm wheel, a spring carried on said face plate acting on said worm carrying shaft to normally maintain the worm out of engagement with said worm wheel, an arm on said worm carrying shaft, means on said face plate engageable with said arm to hold said worm in engagement with said worm wheel in opposition to said spring, and hand operated means for rotating said worm carrying shaft.

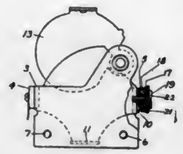
1,827,938. INTERNAL COMBUSTION MOTOR. CARL H. ERICSON, Boston, Mass. Filed Mar. 6, 1929. Serial No. 344,679. 1 Claim. (Cl. 123—48.)



In an internal combustion motor, a piston, a piston rod reciprocable therewith, a crank shaft, a pitman connected to said crank shaft, a walking beam having its ends pivotally attached respectively to said piston rod and pitman and having a fulcrum at fixed distances from said ends, and means for shifting the fulcrum transversely of said walking beam, during the operation of the motor whereby the stroke of the piston is altered.

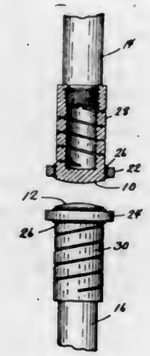
1,827,939. ELECTRICAL CONDENSER. PRESTON E. GILLING, Haddon Heights, N. J., assignor to Radio Condenser Company, Camden, N. J. Filed Jan. 8, 1929. Serial No. 331,144. 2 Claims. (Cl. 175—41.5.)

1. In a main tuning condenser having; end support members fastened together by suitable frame members, at least one of which is an insulator and stationary plates carried by said frame members and movable plates carried between said end support members for cooperation with said stationary plates, means for slightly altering the capacity of the main condenser consisting of a small auxiliary condenser mounted on said insulator frame



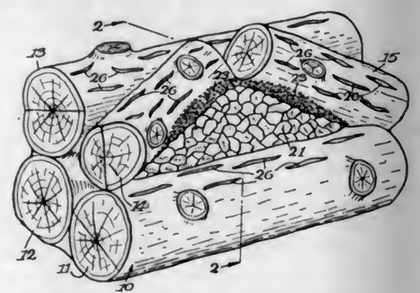
member, said auxiliary condenser having as elements; a plate resting on said insulator frame member and at least one large-headed screw, said screw further assisting in holding the stationary plates to said insulator frame member; said condenser being connected electrically in parallel to the main condenser.

1,827,940. MAGNETICALLY ENGAGED CONTACT MEMBERS FOR ELECTRIC SWITCHES. TALMA T. GREENWOOD, East Templeton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed June 29, 1929. Serial No. 374,840. 10 Claims. (Cl. 200—87.)



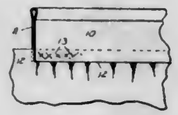
1. An alternating current electric switch having a pair of separable contact members and electromagnetic means creating a magnetic field at said contact-members urging them into engagement at the time the current traversing said contact members is passing through the zero point of the current wave.

1,827,941. ELECTRIC LOG. HENRY JOHN GROSS, Chicago, Ill. Filed Apr. 6, 1928. Serial No. 267,905. 2 Claims. (Cl. 272—8.)



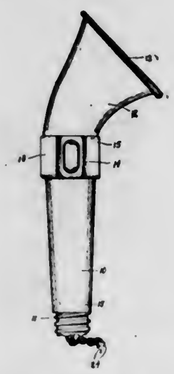
1. In combination, a group of logs comprising front, back and intermediate logs, the intermediate logs being arranged at an angle to each other and forming with said front log a triangular space, said front log having a slit opening upwardly and rearwardly, reticulated material extending upwardly and rearwardly across said space, a plurality of particles of diaphanous material covering said reticulated material and supported thereby, a source of light for illuminating said particles from beneath the same, and a source of light for illuminating the uppermost portions of said particles and portions of said intermediate logs through said slit.

1,827,942. EXTENSIBLE BAND. VICTOR GUINZBURG, New York, N. Y., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Filed Feb. 2, 1929. Serial No. 337,058. 3 Claims. (Cl. 2—237.)



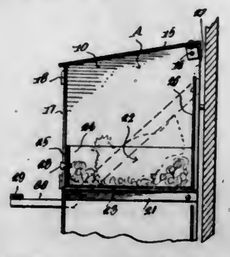
1. As an article of manufacture, a continuous strip of textile material, rubber coated throughout its width and folded longitudinally thereof, the fold forming a soft unfilled tube, the rubber of the two layers at the longitudinal mid portion being integrally adhered together, and the layers along the edge opposite the fold being open.

1,827,943. SOUND RECEIVING DEVICE. ARTHUR A. JOHNSON, Bridgeport, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Apr. 27, 1927. Serial No. 186,947. 13 Claims. (Cl. 200—52.)



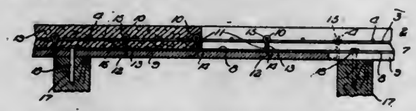
1. A sound-receiving device for dictation machine sound-conveying means and the like, comprising a handle portion and a mouth-piece portion integrally connected to the handle portion and inclined at an angle thereto; a control device comprising a manually operable button; a ring-shaped support for the button rotatably mounted on the handle portion to permit the button to be adjusted about the axis of the handle portion relative to the inclined mouthpiece; current-carrying rings on the handle portion for connection to an electric control device; circuit-closing arms on the button adapted when the button is operated in all adjusted positions of the button about the axis of the handle portion to close a circuit through said current-carrying rings; and spring arms on the button for holding said circuit-closing arms out of contact with said current-carrying rings, and also for frictionally holding the ring-shaped support for the button in adjusted position on the handle portion.

1,827,944. HEN'S NEST. HILDA A. KROGSTAD, Knox, N. Dak. Filed June 24, 1929. Serial No. 373,405. 1 Claim. (Cl. 119—45.)



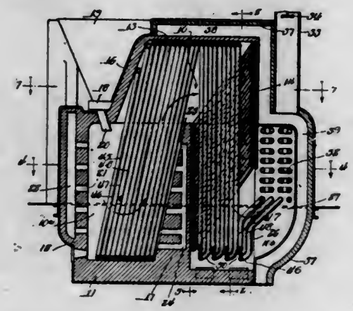
A sanitary hen's nest comprising a casing having an open back, a front wall provided with an entrance opening, and a drawer slidably mounted within the casing through the entrance opening and provided with a rear wall extending above the side and front walls thereof and terminating slightly short of the top wall of the casing defining in connection therewith a ventilating opening when the drawer is closed, said rear wall of the drawer constituting means for engaging the front wall of the casing when the drawer is pulled outward to limit the outward sliding movement thereof.

1,827,945. BASE FOR PLASTIC MATERIAL. GEORGE E. LAND, Pittsburgh, Pa., assignor to H. E. Marks Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 7, 1929. Serial No. 345,109. 13 Claims. (Cl. 72—116.)



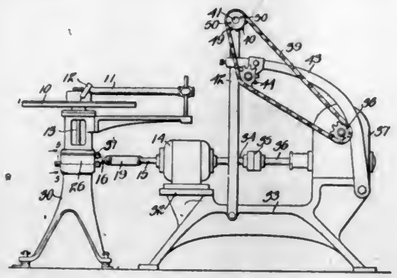
11. A unitary base for plastic materials comprising spaced transverse stiffening members, a backing, wire staples for securing the spaced members and the backing together, said staples having means for maintaining a spaced relation between all parts of the spaced members and the backing.

1,827,946. FURNACE. KARL A. MAYR, Chicago, Ill. Filed Feb. 26, 1927. Serial No. 171,146. 11 Claims. (Cl. 122—235.)



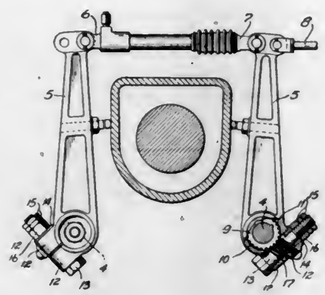
1. A furnace having, in combination, an inverted U-shaped combustion chamber, means for admitting fuel in the upper front part of said chamber and in a downward direction, means for admitting air to the front and rear sides of the front section of said chamber, said means being distributed over substantial portions of said sides and means for drawing off the products of combustion from the lower end of the rear section of said chamber.

1,827,947. SYNCHRONIZING TALKING MOTION PICTURE MACHINES. WILLIAM R. MOORE, Jr., Hagerstown, Md., assignor to Deca Disc Phonograph Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Apr. 29, 1929. Serial No. 359,014. 3 Claims. (Cl. 88—16.2.)



1. Means operably connected to a talking machine and a picture projecting machine to drive them in synchronism comprising a motor, a motor shaft, a worm on said shaft, a flexible connection in said shaft, a record table, a shaft supporting said table, a worm gear on said shaft, and means for adjusting the said worm toward the said worm gear for taking up lost motion between the shaft of the motor and the shaft of the record table, substantially as set forth.

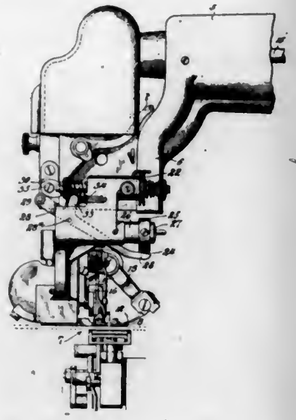
1,827,948. MEANS FOR ADJUSTING BRAKES AND OTHER DEVICES. MATHEW B. MORGAN, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Feb. 23, 1928. Serial No. 256,120. 4 Claims. (Cl. 188—196.)



1. The combination with an axle housing and road wheels rotatable relative thereto and having brake drums thereon, of brake actuating mechanism for each wheel comprising two sets of pivotally mounted brake members for each drum, a cam shaft for each pair of brake members, a lever arm mounted on each cam shaft, and means for adjusting the angular relation of each shaft with relation to its lever arm, said lever arms being on opposite sides of said axle housing and connected together by an elongatable link adapted to spread said lever arms apart to actuate both sets of brake members.

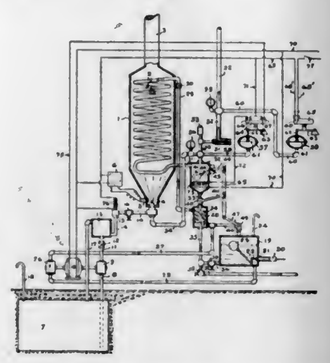
1,827,949. NEEDLE THREAD CONTROLLING MECHANISM. CHARLES W. MUELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed July 24, 1930. Serial No. 470,491. 4 Claims. (Cl. 112—247.)

1. A needle thread controlling mechanism for blind stitch sewing machines comprising in combination, an oscillatory threaded needle and a complemental stitch forming mechanism, a stationary needle-thread tension device, a spring needle-thread controller and guide between the tension device and the needle and normally movable in a direction away from the needle by the needle thread



action during retracting movements of the needle, and means for positively flexing the spring controller towards the tension device during each retracting movement of the needle to reduce the tension on the needle thread during the setting of the stitches.

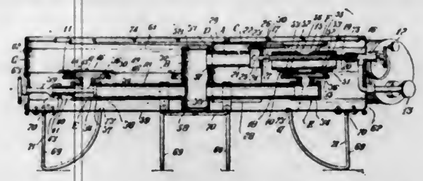
1,827,950. OIL BURNER SYSTEM. PAUL C. MULLIGAN, Seattle, Wash. Filed Mar. 12, 1928. Serial No. 261,103. 8 Claims. (Cl. 122—448.)



1. In apparatus of the class described, a boiler, a steam coil in said boiler, an oil burner nozzle for spraying fuel into said boiler, a receptacle forming a water trap in the discharge line from said steam coil, conduit means connecting said nozzle with the upper portion of said receptacle, an electric heating element in said receptacle for generating steam therein for starting the burner and automatic means for cutting out said electric heating element in response to a rise in the steam pressure within said receptacle.

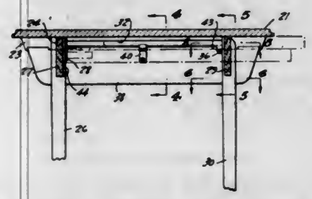
1,827,951. STOVE. CLYDE W. MUMMERY, Detroit, Mich. Filed Sept. 7, 1926. Serial No. 134,011. 12 Claims. (Cl. 158—63.)

1. In a stove, the combination of a generator for liquid fuel, a mixer receiving vapor from the generator, a relatively large distributing chamber to which the mixer delivers adjacent to the top and provided below with a



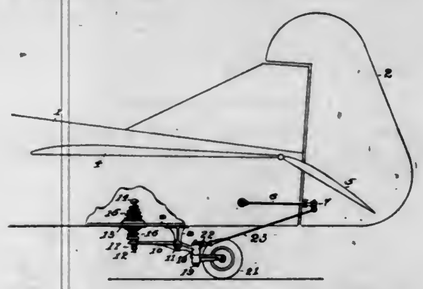
plurality of lateral outlets of small size compared with the chamber, a plurality of burners, and a supply pipe connecting each burner with a lateral outlet.

1,827,952. FOLDING FURNITURE. HAZLEHURST R. NOYES, Los Angeles, Calif. Filed Feb. 5, 1929. Serial No. 337,702. 8 Claims. (Cl. 45—11.)



1. In an article of the character described, a top member, a leg structure hinged to the top member and arranged to be folded so as to extend beneath the top member, another leg structure having a pin and groove connection with the top member, whereby it can be slid in folded position between the top member and the first leg structure, and resilient means for holding the leg structures in either open or closed position.

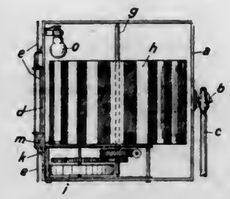
1,827,953. AIRPLANE. CLARA B. O'CONNOR, San Francisco, Calif. Filed Dec. 8, 1928. Serial No. 323,219. 4 Claims. (Cl. 244—2.)



1. A traction gear comprising a cantilever fulcrumed on a vehicle, a traction wheel mounted upon one end of said lever, a spring interposed between said vehicle and the other end of said lever and a bolt passing through said spring and lever.

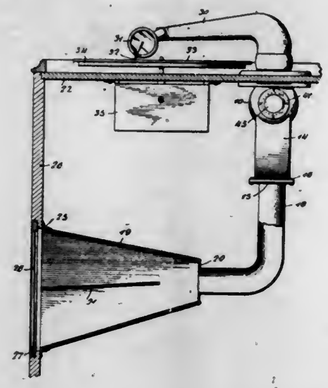
1,827,954. APPARATUS FOR PRODUCING NYSTAGMUS. JOHANNES OHM. Bottrop, Westphalia, Germany. Filed Feb. 24, 1928, Serial No. 256,767, and in Germany Mar. 7, 1927. 4 Claims. (Cl. 88—20.)

1. An apparatus for producing nystagmus, comprising in combination a cubical box having an aperture in its front-wall, a drum rotatably mounted in said box with alternate black and white stripes on its periphery, a spring-motor for rotating said drum, slides in the front-wall of the box to regulate the uncovered portion of said aperture through



which said rotating drum is to be observed, and scales on the front-wall indicating the accurate size of the uncovered portion of said aperture.

1,827,955. SOUND AMPLIFIER AND CLARIFIER. RAMON RODRIGUEZ, New York, N. Y. Filed Apr. 3, 1929. Serial No. 352,144. 6 Claims. (Cl. 274—2.)



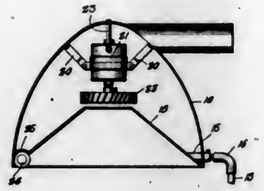
4. A sound amplifier and clarifier comprising a receiving chamber of generally spherical form, an outlet chamber diverging from its inlet toward its outlet end, and sound conducting means located exteriorly between and connecting said receiving and outlet chambers and including a plurality of individual tubes.

6. In a combined phonograph and radio receiver, the combination of a sound receiving chamber of generally spherical form having two inlets adapted for connection respectively with the tone arm of the phonograph and the loud speaker unit of the radio receiver, a transmitting chamber communicating with said receiving chamber and diverging downwardly therefrom, a plurality of individual tubes communicating independently with said transmitting chamber and projecting downwardly therefrom, an outlet chamber common to all of said tubes and diverging therefrom, and a baffle plate of less length and dividing said outlet chamber horizontally for a distance inwardly from its exit end and terminating at a distance from the inlet end of said outlet chamber.

1,827,956. VACUUM VENTILATING STOVE HOOD. CARLTON B. SHARPE, Saginaw, Mich. Filed Sept. 20, 1929. Serial No. 394,024. 2 Claims. (Cl. 126—299.)

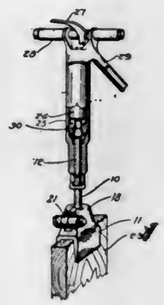
1. A vacuum ventilating stove hood, comprising a hood adapted to be arranged above a stove, means for adjustably supporting the hood, whereby it can be arranged any

desired distance above the stove, a frusto cone shaped deflector arranged within the hood and having an enlarged central opening, an electric motor within the hood, a fan supported by said motor and arranged directly above



said opening in the deflector, whereby a vacuum is created and the heated air and fumes drawn from the cooking surface of the stove into the hood, and an inlet flue projecting from said hood.

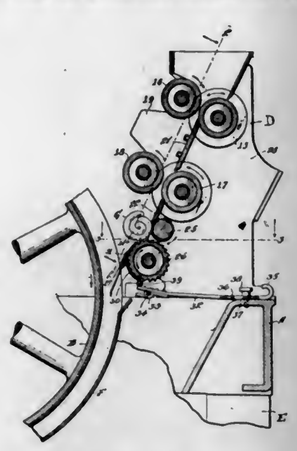
1,827,957. SHEATHING DRIVING TOOL. N. CARTER SHAW, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 11, 1929. Serial No. 339,046. 7 Claims. (Cl. 61—76.)



1. A driving tool including a driving arm and an anvil on the end thereof having a working face in fixed relation to said arm, and a limited ball-and-socket joint between said arm and said anvil, a yieldable element in operative relation to said joint permitting said relation to be altered but constantly tending to restore the same.

1,827,958. ADJUSTABLE CURLER APRON FOR DOUGH MOLDING MACHINES. ORVILLE SISSON, Herington, Kans., assignor, by direct and mesne assignments, of one-half to Thomson Machine Company, a Corporation of New Jersey, and one-half to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 6, 1928. Serial No. 283,164. 1 Claim. (Cl. 107—9.)

In a dough molding machine the combination with a roller and another roller rotating in the same direction to form a sheet of dough into a spiral roll, and kneading means for receiving said roll from said rollers, of an apron for guiding said spiral roll from said rollers to said kneading means, comprising a main plate arranged substantially parallel with the first-mentioned roller and having a guide groove in the side adjacent said first-mentioned roller, an apron plate movable in said guide groove between said main plate and said first-mentioned roller toward and from the second-mentioned roller and covering



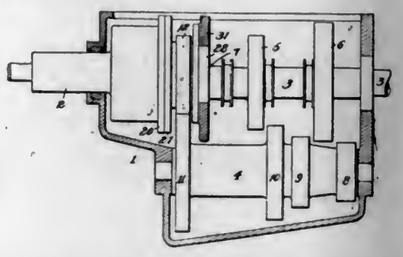
a portion of the surface of said first-mentioned roller, and means for moving said apron plate circumferentially of said first-mentioned roller.

1,827,959. WINDSHIELD WIPER. JAY J. STAHELIN, Chicago, Ill. Filed Nov. 29, 1929. Serial No. 410,390. 4 Claims. (Cl. 74—14.)



3. In a mechanism of the class described, a C-sectioned housing, a sprocket rotatably mounted in the closed side at each end of the housing and carrying an endless chain having projecting pins, a C-sectioned traveler slidably mounted in the housing so that the hub of the sprocket will pass through the aperture, the traveler being slotted vertically or transversely to its movement to receive the pin, and a pin attached to the traveler and projecting through the aperture in the housing.

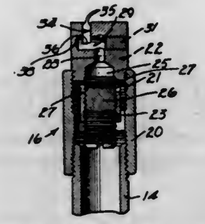
1,827,960. TRANSMISSION. EARL A. THOMPSON, Portland, Oreg. Filed Apr. 15, 1925. Serial No. 23,223. 4 Claims. (Cl. 74—58.)



1. A transmission including a drive shaft and a driven shaft arranged off center one with respect to the other, a housing carried by the drive shaft, a normally freely rotatable member carried by the driven shaft, pivotal means connecting said normally freely rotatable member to the housing whereby it is driven therefrom, an internal gear

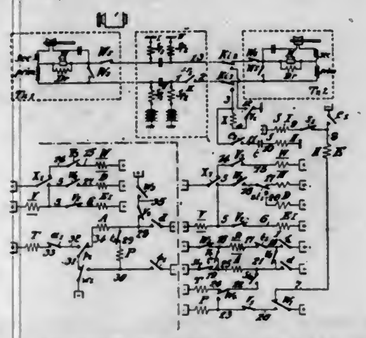
formed on the inner periphery of the housing, and a shiftable member carried by the driven shaft and adapted for engagement with the normally freely rotatable member or the internal gear for securing different drive speeds.

1,827,961. SPRINKLER FOR NARROW AREAS. WALTER VAN E. THOMPSON, Los Angeles, Calif., assignor to Thompson Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 8, 1926. Serial No. 153,277. 4 Claims. (Cl. 299—18.)



1. In a turbulence sprinkler, the combination of; walls forming a vestibule chamber; walls forming a non-constrictive discharge mouth leading from said chamber to the atmosphere at an angle with the longitudinal axis of said chamber; and walls forming a supply passage connecting with said chamber, the cross-sectional area of said supply passage being sufficiently less than that of said chamber to set up a turbulence in said chamber, and the size of said mouth being sufficiently large that liquid broken up by said turbulence is discharged through said mouth in the form of drops, said mouth being a relatively long and narrow slot.

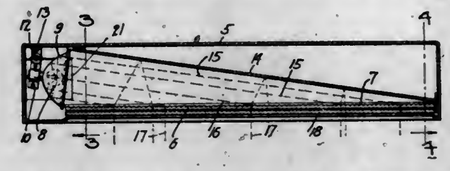
1,827,962. AUTOMATIC CONTRIVANCE FOR RECEIVING WRITTEN MESSAGES BY TELEPHONE. OTTO WATZEKA, Vienna, Austria, assignor to Charles S. Bleicher, New York, N. Y. Filed Nov. 17, 1928, Serial No. 320,026, and in Austria Apr. 21, 1928. 18 Claims. (Cl. 179—2.)



1. In a telephone system, a calling station including means for transmitting electrical impulses, a called station including means for recording said impulses, means associated with the recording apparatus for signaling the calling station that the recording apparatus is operatively connected to the system including a make and break relay circuit, and means for superimposing the electric impulses arising from the making and breaking of said relay circuit on the line of the calling station.

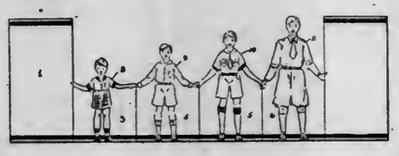
1,827,963. ILLUMINATING DEVICE. JOHN J. WOMPEY, Denver, Colo. Filed Mar. 5, 1929. Serial No. 344,367. 7 Claims. (Cl. 40—132.)

1. An illuminating device comprising a box having an open front, a plate covering the opening of the front, and having a ribbed surface providing a series of prisms adapted for the reflection of light at substantially right angles to the front, a lamp in the box, at an end of the opening, a reflector slantingly disposed to direct the light



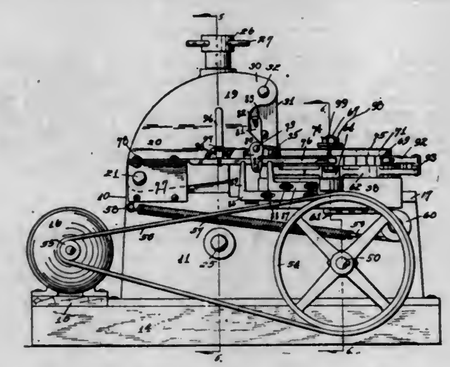
from the lamp toward the opening, and a reflective back slanting from adjacent the lamp toward the opening, to form with the plate a gradually tapering enclosure, adapted to equalize the intensity of the light rays longitudinally of the opening.

1,827,964. ADVERTISING FOLDER AND DISPLAY. NELSON E. AMSDEN, Cleveland Heights, Ohio, assignor to The Kaynee Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 27, 1931. Serial No. 525,682. 3 Claims. (Cl. 40—37.)



1. An advertising device comprising two rectangular cover sections and a series of intermediate folded sections having outlines conforming to figurative representations, said intermediate sections joining said cover sections and having such representations on each side so as to present similar appearances when said device is unfolded in normal or reverse order.

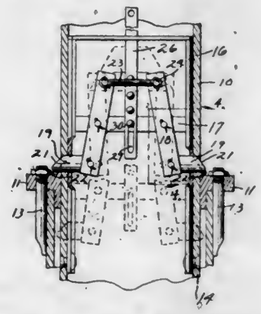
1,827,965. AUTOMATIC SHARPENER. DAVID S. ANTHONY, San Antonio, Tex. Filed July 6, 1926. Serial No. 120,751. 3 Claims. (Cl. 90—24.)



1. In a device of the class described, a base, a table mounted to slide horizontally on said base, a driving shaft rotatively mounted in said base, a vertical shaft beneath said table, gear mechanism for imparting rotary movement from said driving shaft to said vertical shaft, a cam supported on the upper end of said vertical shaft, a roller projecting downwardly from said table to engage said cam for imparting cutting movement to said table in one direction as said cam is rotated, yieldable means for moving said table through its return stroke, an aux-

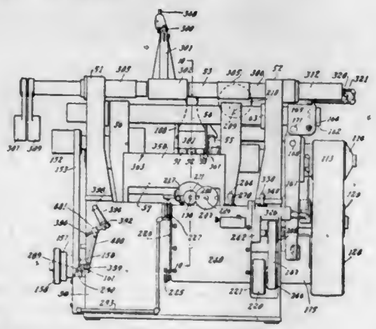
illiary table adjustably mounted for transverse movement on the first table, said auxiliary table being provided with an upwardly projecting pivot, a stock supporting disk rotatively mounted on said pivot and supported on the upper surface of said auxiliary table, said disk having its periphery provided with ratchet teeth, and its central portion provided with an upwardly projecting bolt, a washer slidably mounted on said bolt having its periphery beveled, means for imparting intermittent rotary movement to said disk in one direction, a retaining pawl in contact with said ratchet teeth, and spring actuated means for moving one of said ratchet teeth into firm engagement with said pawl.

1,827,966. SAFETY LATCH FOR AUTOMOBILE LIFTS. CYRUS J. BRISTOL, Des Moines, Iowa, assignor to Globe Machinery & Supply Company, Des Moines, Iowa, a Corporation of Iowa. Filed Sept. 23, 1929. Serial No. 394,459. 5 Claims. (Cl. 254—3.)



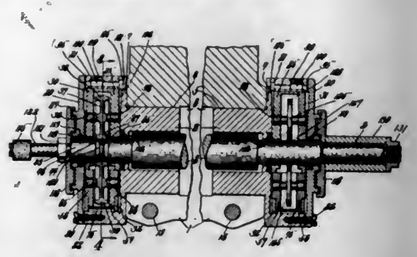
1. In a device of the class described, the combination of an upright cylinder, a piston movable within the cylinder, and a spring actuated slide bolt carried by the piston and yieldingly held in an extended position to engage the top of the cylinder and prevent downward movement of the piston, manually operated means for locking the slide bolt in a withdrawn position to permit the piston to move downwardly within the cylinder, and means actuated by the movement of the piston for automatically releasing the slide bolt from its withdrawn position.

1,827,967. TRUING MECHANISM FOR GRINDING WHEELS. WILLIAM LE ROY BRYANT, Springfield, Vt.; Blanche B. Bryant, Springfield, Vt., administratrix of said William Le Roy Bryant, deceased. Original application filed July 20, 1921, Serial No. 486,080. Divided and this application filed Dec. 26, 1925. Serial No. 77,837. 20 Claims. (Cl. 125—11.)



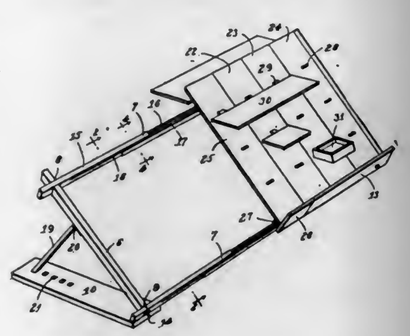
7. A grinding machine comprising a bed, a grinding wheel thereon, a work carrier, a dressing tool carrier pivoted to the bed and swingable to present a dressing tool against the periphery of said wheel, and means for engaging the free end of said tool carrier with said work carrier to hold said tool in operative position against said wheel.

1,827,968. WHEELHEAD AND THE LIKE. WILLIAM LE ROY BRYANT, Springfield, Vt.; Blanche B. Bryant, Springfield, Vt., administratrix of said William Le Roy Bryant, deceased. Filed Nov. 9, 1926. Serial No. 147,340. 4 Claims. (Cl. 308—203.)



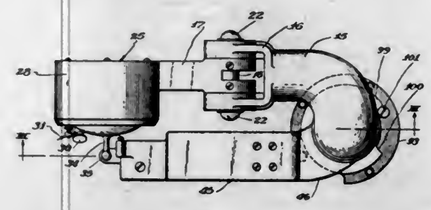
1. A device of the class described, comprising a cage, a pair of rollers having small diameter portions journaled in said cage, a member carried by said cage and adjustable toward and from the journals of said pair of rollers, a roller having small diameter portions journaled in said member, each of said rollers having a large diameter portion, and a shaft extending between said rollers and bearing on the large diameter portions thereof.

1,827,969. ADJUSTABLE DISPLAY RACK. WILLIAM L. CALKINS, Jr., Freeport, Ill. Filed May 13, 1929. Serial No. 362,488. 2 Claims. (Cl. 211—160.)



1. A display stand comprising a frame having base members, a rack comprising cross members, and extensible side members connecting the ends of said cross members, and means for supporting the latter at different degrees of angularity with respect to the former, facing members having openings therein arranged to be positioned upon said frame to form a continuous surface over said frame, bottom flanges positioned at the lower ends of said facing members to form a supporting projection, and shelves arranged to be positioned one above another on the inclined face of said facing members to permit horizontal rows of vertically spaced displays, each having at least one tongue attached thereto adapted to be inserted in any of said openings, said tongues being shaped to support said shelves upon the facing members at any one of a plurality of angles, dependent upon the angularity of said rack with respect to said base members, to support said shelves in a horizontal position.

1,827,970. PICK-UP AND CARRIER THEREFOR. RAYMOND T. CLOUD, Chicago, Ill., assignor to Orchestraphone Company, Chicago, Ill., a Corporation of Delaware. Filed July 16, 1928, Serial No. 293,098. Renewed Aug. 14, 1931. 27 Claims. (Cl. 274—24.)

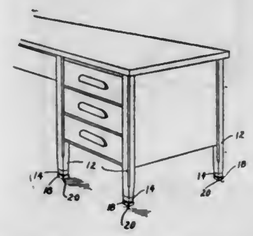


1. In combination, an arm, reproducing means connected to the arm for cooperation with a record, means for holding the reproducing means out of cooperation with the record, means for releasing said holding means so as to allow said reproducing means to move into cooperation with the record, a mounting for said arm, and a mounting for said holding means, said mountings being disposed in axial alignment and arranged so that said arm and holding means are swingable independently of each other.

1,827,971. PROCESS FOR THE EXTRACTION OF MERCURY FROM MERCURY-BEARING ORES OR PRODUCTS. STUART CROASDALE, Denver, Colo. Filed July 9, 1929. Serial No. 377,066. 8 Claims. (Cl. 204—15.)

5. A process for extracting mercury from sulphide ores of mercury, consisting in leaching such ores with a solution consisting of a double salt of an alkaline-metal thiosulphate or alkaline-earth thiosulphate (commonly known and sold on the market as hyposulphite) and a metallic thiosulphate, dissolved in an excess of the alkaline-metal thiosulphate, or alkaline-earth thiosulphate, and recovering the mercury from such lixivium by means of electrolysis.

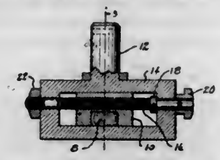
1,827,972. DESK LEG GLIDE SHOE. WALTER RALEIGH DARNELL, Long Beach, Calif. Filed Sept. 16, 1929. Serial No. 392,988. 2 Claims. (Cl. 16—42.)



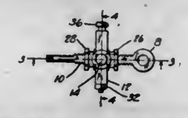
1. A glide shoe for use on an object, comprising a bottom and inwardly sloping walls adapted to frictionally engage and be held in contact with the walls of the object, adjacent walls of the shoe being separated in their upper portions by corner slots or notches which notches normally are of greater width at their lower than at their upper ends.

1,827,973. GAS METER. RICHARD LEE DEZENDORF, Hollis, N. Y. Filed June 4, 1927. Serial No. 196,440. 7 Claims. (Cl. 73—1.)

2. In a gas meter, the combination of a crankshaft, a screw-threaded tangent thereon, a member embracing said tangent, clamping nuts upon said tangent for adjusting said member longitudinally thereon, a tangent-post-carrying member embracing said first member, and an adjusting screw carried by one of said members and making screw-threaded engagement with the other, said screw extending across and at one side of said tangent.

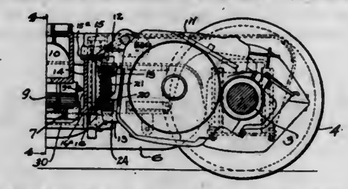


1,827,974. GAS METER. RICHARD LEE DEZENDORF, Hollis, N. Y. Filed July 7, 1928. Serial No. 291,067. 6 Claims. (Cl. 73—1.)



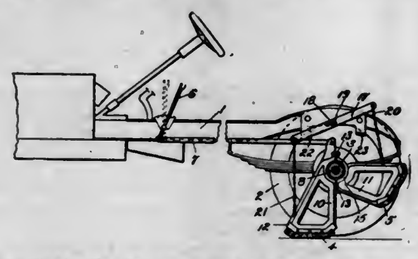
1. In a gas meter the combination of a tangent, an elongated member surrounding the same and carrying a tangent post, a guide laterally movable within said member and having a passage for said tangent, said guide being composed of two parts having abutting faces and lateral flanges, adjusting means engaging the outer faces of said two parts and said tangent and means engaging said guide and said member for adjusting the same relatively to one another.

1,827,975. ELECTRIC MOTOR TRUCK. GEORGE FRED DAIEMEYER, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Jan. 30, 1929. Serial No. 336,256. 19 Claims. (Cl. 105—139.)



1. A railway truck one piece frame comprising a transom having a vertical web, integral top and bottom members extending horizontally inwardly and outwardly from both sides of said web, and an integral motor supporting bracket projecting from said transom beyond the corresponding outer edges of said members.

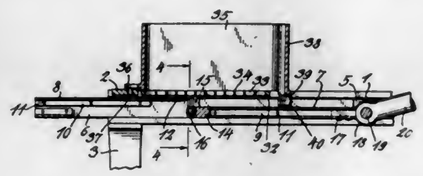
1,827,976. VEHICLE BRAKE. ELMER E. ENOS, Spokane, Wash. Filed July 8, 1929. Serial No. 376,538. 3 Claims. (Cl. 188—5.)



1. A brake device comprising a bearing bushing and means for clamping the bushing on a vehicle axle, a brake

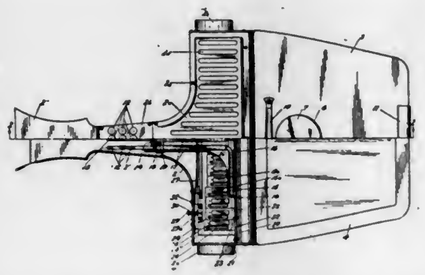
frame journaled on the bushing and angularly disposed shoes on said frame, means for rocking the frame to operative position, a rocker arm pivoted above the frame and suspending chains connecting said arm and frame, and means for limiting the movement of the arm.

1,827,977. VEGETABLE SLICER. OTTO EBL, Oakland, Calif., assignor to Otto Food Machinery Company, Oakland, Calif., a Corporation of California. Filed Dec. 2, 1930. Serial No. 499,458. 1 Claim. (Cl. 146—151.)



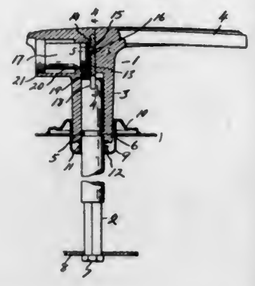
A vegetable slicer comprising, in combination, two parallel spaced guides, a cutter head carried by the guides intermediate the latter, means for reciprocating the cutter head, the cutter head having its upper surface in two vertically spaced planes, the front end of the upper surface being lower than the rear end, a slicing knife located at the front end of the upper surface with its cutting edge above the plane of the lower surface, a plurality of spaced slitting blades secured to the cutter head and extending upwardly from the latter just in front of the knife, a frame removably secured to the guides, a plurality of spaced knives carried by the frame and extending transversely of the space between the guides, the lower edges of the transverse knives lying in a plane directly above the cutting edge of the slicing knife and a hopper removably secured to the guide, the front end of the hopper having a plurality of spaced lugs that extend downwardly into the space between the guides, the lugs being so located that the slitting knives will enter the space between them.

1,827,978. MUSICAL INSTRUMENT. DOSSA DIXON EVINS, Davenport, Iowa. Filed Feb. 15, 1930. Serial No. 428,739. 23 Claims. (Cl. 84—351.)



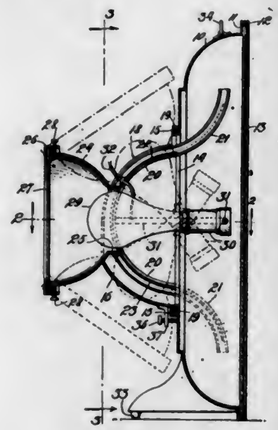
16. A musical instrument comprising a back, a sound chamber united thereto, a neck united to the sound chamber, a pair of bellows mounted upon the back, a spring-held reed block containing a plurality of reed chambers slidingly mounted in the sound chamber, air passages leading from the bellows to the reed block, valves interposed in the air passages, keys mounted upon the neck, levers operatively connecting the keys and the valves and adapted to actuate the valves when the keys are depressed, and a shifting arm united to the reed block by which same may be readily moved longitudinally.

1,827,979. LOCKING HANDLE ASSEMBLY. BURTON S. FLORADAY, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 14, 1929. Serial No. 332,491. 2 Claims. (Cl. 70—91.)



1. The combination with a handle having a pair of recesses arranged substantially at right angles to each other and provided with an opening between the adjacent ends of said recesses, a locking mechanism in one of said recesses, a securing element for said locking mechanism positioned in the other of said recesses and having a portion extending through said opening and engaging said locking mechanism, and a latch actuating spindle in said last-named recess and engaging said securing element for holding the same in place.

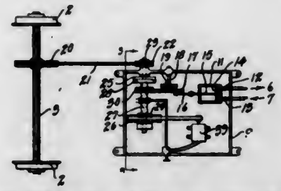
1,827,980. ELECTRIC ADVERTISING DEVICE. JOSEPH GALETZKY, New York, N. Y. Filed July 14, 1931. Serial No. 550,708. 11 Claims. (Cl. 40—132.)



1. In an electric advertising device, the combination of a frame, an illuminable signholder at the front of the frame, a substantially hemispherical shield rotatably mounted at the back of the frame and protruding rearwardly, the shield having an aperture, an apron movably guided on the shield so as to partially cover the aperture, and a spot light mounted on the apron to throw its light in opposite directions through the uncovered part of the aperture and onto the sign holder.

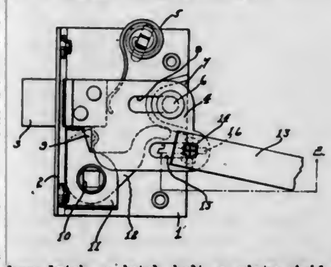
8. In an electric advertising device, the combination of a frame, a shield rotatably mounted on the frame and bulging in a direction away from the frame, the shield having an aperture, an apron movably guided on the shield, so as to partially cover the aperture, and a spot light mounted on the apron to throw its light through the uncovered part of the aperture.

1,827,981. CONTROL MECHANISM FOR REFRIGERATING SYSTEMS. BENJAMIN L. GATES, Spokane, Wash., assignor of one-half to H. Luella Beamish, Spokane, Wash. Filed Oct. 15, 1927. Serial No. 226,341. 3 Claims. (Cl. 192—.02.)



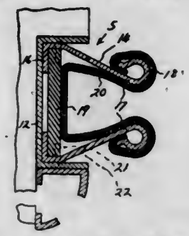
1. In a refrigerating system the combination with a machine, of a car-axle driving mechanism and an electric-motor driving mechanism, a pair of clutch devices and transmission-mechanism between the driving mechanisms and machine, an electric circuit for the motor, a single control rod for the clutch devices, and a circuit maker operatively connected with said control rod for controlling the moter.

1,827,982. DOG RELEASING DEVICE FOR DOOR LATCHES. FLETCHER D. GRUND, Weston, Ohio, assignor to The American Swiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 12, 1930. Serial No. 481,390. 1 Claim. (Cl. 292—169.)



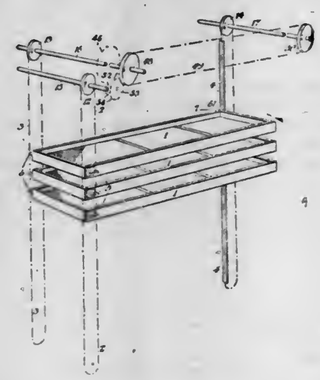
In a door latch, a latch bolt, a plate rigid with said bolt and having therein a slot extending in the direction of movement of said bolt, outside retracting means including a roll back for said bolt having a contact surface movable laterally across said slot when the roll back is operated to retract the bolt, and inside retracting means including a retracting device having a member extending through said slot and the end of said member being in the path of said surface when said member is in the end of the slot toward the projected bolt, the parts being so proportioned that, when movement of the bolt to normal retracted position, said end of the slot forces said member out of the path of said contact surface.

1,827,983. WINDOW GUIDEWAY. HOWARD B. HASKINS, BURTON S. FLORADAY, and DORR MILLER, Toledo, Ohio, assignors, by mesne assignments, to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 24, 1927. Serial No. 221,821. 9 Claims. (Cl. 296—44.5.)



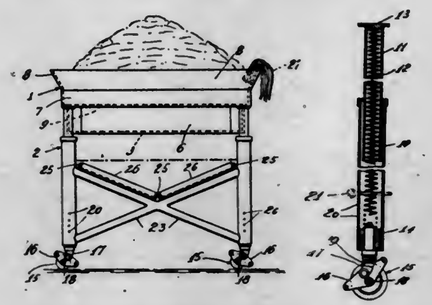
1. A window runway including a flexible channel-shaped lining having its sides formed with rounded portions for engaging the opposite sides of the window, members engaging the rounded portions for holding the same in their normal positions, the members being yieldably held in place to permit movement of the rounded portions from their normal positions away from each other, and a retainer for the lining and members independent of the window frame providing stops at the opposite sides of said lining and members to prevent movement of the rounded portions by the parts of the window frame to which the runway is secured.

1,827,984. INCUBATOR MECHANISM. WILLIAM FINNEY HILLPOT, Frenchtown, N. J. Filed Mar. 26, 1928. Serial No. 264,822. 15 Claims. (Cl. 119—44.)



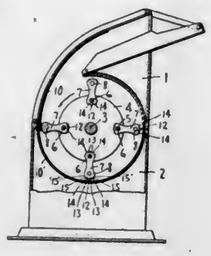
1. In an incubator egg tray supporting mechanism, the combination with a plurality of pendent flexible connectors, arranged to support a tray between them; of a tray having means affording respective points of suspension in engagement with said connectors; shafts arranged to move all of said connectors, simultaneously, to lower said tray and arranged to relatively move said connectors to tilt said tray; the axis of tilting movement of said tray being substantially at one edge thereof; whereby said tray may be selectively tilted up and down, while said axis is held stationary, and while said axis is being lowered, and may be lowered while preserving its angle of inclination.

1,827,985. LAUNDRY SHAKING OUT TABLE. JACOB A. HUNKELE, Pittsburgh, Pa. Filed July 28, 1930. Serial No. 471,192. 6 Claims. (Cl. 68—11.)



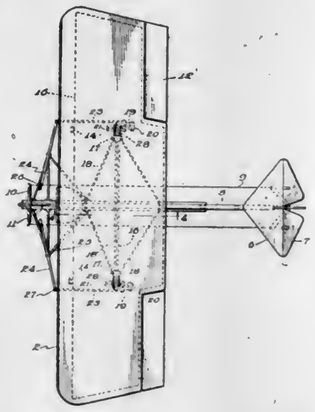
1. In a shaking-out table of the character described, a table-top; supporting legs therefor; means to automatically vary the effective length of said legs inversely to the load applied on said table-top, and means to limit the variation of said effective length.

1,827,986. GRINDING MILL. RICHARD S. IGLEHART, Springfield, Ohio, assignor to The Bauer Brothers Company, Springfield, Ohio, a Corporation of Ohio. Filed Oct. 24, 1929. Serial No. 402,254. 1 Claim. (Cl. 83—11.)



In a grinding mill, a rotary pivoted hammer, the free ends of said hammer having a central tooth and other teeth on each side of said central tooth with notches between said teeth, said central tooth being of greater length than said other teeth, the sides of said hammer adjacent the other teeth being notched to form additional cutting edges, said additional cutting edges being at a lesser distance from the pivotal axis of said hammer than the cutting edges formed on the other teeth and the cutting edges on said central tooth being at a greater distance from the pivotal axis of said hammer than the cutting edges on the adjacent tooth, the notches between the teeth extending throughout the width thereof and being of uniform width.

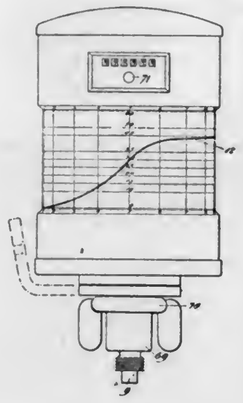
1,827,987. GLIDER. HENRY E. KINGSLEY, Chicago, Ill. Filed May 7, 1931. Serial No. 535,690. 2 Claims. (Cl. 244—17.)



2. An air craft comprising a rigid wing structure, a flexible wing construction hinged to the under side of the rigid wing on a transverse axis along the forward edge of said flexible wing, said flexible wing tapering in thickness from its forward hinged edge toward the trailing edge and toward the sides of the wing, and means for oscillating said flexible wing away from and toward the rigid wing.

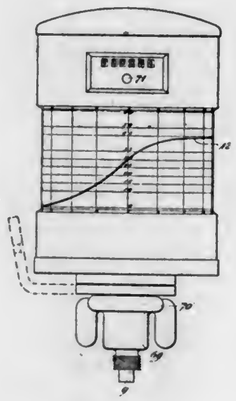
1,827,988. SPEEDOMETER. PER ANDERSSON KOURTZMAN, Vartan, Sweden. Filed Jan. 31, 1929, Serial No. 336,364, and in Sweden Feb. 8, 1928. 3 Claims. (Cl. 234—31.)

1. A speedometer for vehicles, comprising a diagram cylinder mounted for rotation proportionately to the distance covered by the vehicle, a flexible member encircling said cylinder, a fixed transparent wall disposed adjacent to the cylinder, said cylinder being provided on its periphery with means for engaging said flexible member and retaining it between the cylinder and said wall, a band member traversing said cylinder in a direction at right angles



to the direction of rotation of the cylinder, means carried by said band member in loose engagement with said flexible member, centrifugal means rotatable with the cylinder for moving said band member in one direction proportionately to the rotary movement of the cylinder, and means automatically operative to move the band member in the opposite direction.

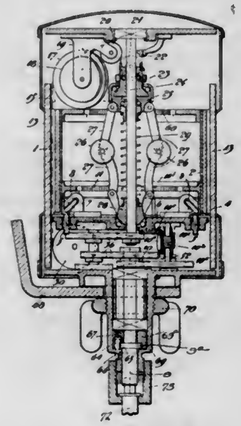
1,827,989. ALARM APPARATUS FOR SPEEDOMETERS FOR VEHICLES. PER ANDERSSON KOURTZMAN, Vartan, Sweden. Original application filed Jan. 31, 1929, Serial No. 336,364, and in Sweden Feb. 8, 1928. Divided and this application filed Apr. 1, 1930. Serial No. 440,830. 1 Claim. (Cl. 116—57.)



In a speedometer for vehicles, an alarm apparatus comprising a rotatable member geared for receiving motion at a speed proportionate to the speed of the vehicle, a pair of counterbalancing weights mounted in said member for slidable movement radially thereof under centrifugal force, springs opposing outward movement of said weights, a

pin carried by one of said weights and adapted to project beyond the periphery of said rotatable member under the centrifugal movement of said weight, and a signaling device disposed in the path of said pin and adapted to be actuated thereby to produce an audible signal.

1,827,990. LOCKING DEVICE FOR SPEEDOMETERS FOR VEHICLES. PER ANDERSSON KOURTZMAN, Vartan, Sweden. Original application filed Jan. 31, 1929, Serial No. 336,364, and in Sweden Feb. 8, 1928. Divided and this application filed Apr. 1, 1930. Serial No. 440,831. 2 Claims. (Cl. 188—69.)



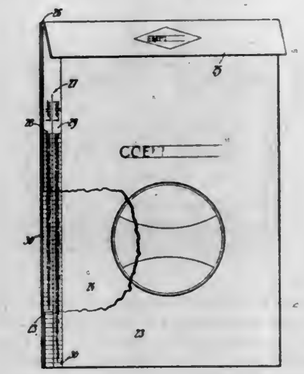
1. In a speedometer, the combination of a shaft mounted for rotation and provided with a collar having an axially extending peripheral groove, a tubular stationary member encircling said shaft and having an exteriorly threaded sleeve portion forming a coupling connection for the shaft, a spring-pressed bolt slidable axially in said tubular member and having an offset portion normally in engagement with said groove thereby to retain the shaft against rotation, the threaded portion of said sleeve having an axially extending groove for the reception of one end of the bolt when in shaft-retaining position, and a coupling member threaded on said sleeve connection and adapted to move said bolt against the tension of its spring thereby to carry said offset portion out of engagement with the collar groove.

1,827,991. JELLY PREPARATION. ALBERT LEO, Chicago, Ill. Filed Apr. 6, 1929. Serial No. 353,262. 7 Claims. (Cl. 99—11.)

6. A jelly preparation comprising comminuted pectin, sugar, and tartaric acid crystals, said acid crystals having a coating of a fatty nature the melting point of which is less than 218° F.

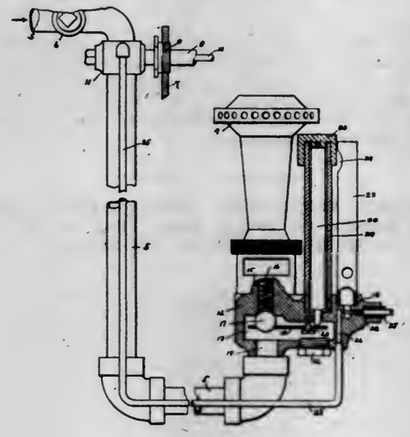
1,827,992. TYPEWRITER BACKING SHEET. STUART H. LINDERMAN, Nutley, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 27, 1930. Serial No. 455,994. 3 Claims. (Cl. 282—29.)

1. A backing sheet for a typewriting machine having a revoluble platen, including, in combination, a sheet of thin pliable celluloid, and a sheet of paper material cemented to said celluloid sheet and having a surface rougher than said



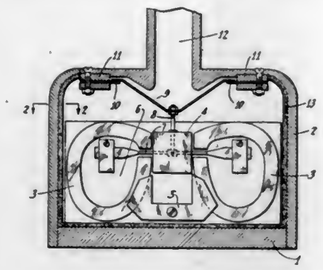
celluloid sheet, said paper sheet underlying said celluloid sheet for engaging next to said platen whereby skewing of said celluloid sheet is prevented.

1,827,993. BURNER CONTROL. EDWIN W. MCKINLEY, Los Angeles, Calif., assignor to Merit Water Heater Co. Ltd., Los Angeles, Calif. Filed May 7, 1930. Serial No. 450,393. 12 Claims. (Cl. 158—117.1.)



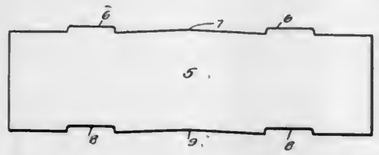
1. A device of the character described comprising a main burner having means for supplying fuel thereto, a valve for controlling the fuel passing to the burner, a spring bearing upon said valve for normally holding it in its open position, a pivoted member supporting said valve, a pilot burner having means for supplying fuel thereto, a thermostat positioned to be heated by the pilot-light while it is burning, said thermostat being adapted to permit the said valve to remain open while the pilot-light is burning and to positively rock the pivoted member and force the valve into its closed position when the pilot-light is extinguished and the thermostat cools.

1,827,994. LOUD SPEAKER. JOHN PRESTON MINTON, White Plains, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 12, 1925. Serial No. 36,568. 12 Claims. (Cl. 181—31.)



1. An acoustic device comprising a sound emitting element, operating mechanism and supporting means therefor and a covering comprising a layer of non-vibratory metallic material and a layer of sound absorbing material on said supporting means.

1,827,995. PRINTING PLATE BLANK. VALENTINE J. MOHLER, River Forest, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 4, 1929. Serial No. 411,415. 3 Claims. (Cl. 101—360.)



1. A blank for the printing plate of a printing device comprising a frame having means for detachably retaining the plate thereon and also having a device for holding the plate in a fixed position in said retaining means, said blank having a wedge projection at one edge for co-operation with said holding device.

1,827,996. VENTILATING DOOR OR LIKE. LARKIN A. MURRAY, Des Moines, Iowa. Filed Oct. 27, 1930. Serial No. 491,451. 2 Claims. (Cl. 98—87.)



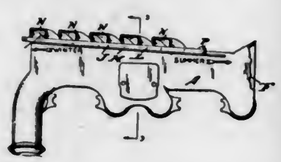
2. In a device of the class described, a frame having an opening, a plurality of spaced apart strips secured at one side of said frame and over said opening, a plurality of spaced apart strips secured on the opposite side of said frame, over said opening and in staggered positions relative to said first mentioned strips, a plurality of flanges formed on each of said strips extending at an angle into said opening, and an extension formed on the marginal edge of one of said flanges, thereby filling the space between that flange and the strip adjacent to it on the opposite side of said opening for the preventing of the existence of a trap to collect undesirable material.

1,827,997. RAILWAY DUMP CAR. WILLIAM H. MUSSEY, Chicago, Ill., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 22, 1929. Serial No. 357,095. 14 Claims. (Cl. 105—240.)



1. In a railway car having side and end load retaining walls, hollow top chord members surmounting said walls and comprising plates of substantial rectilinear configuration having a pair of depending wall engaging flanges in vertically and horizontally spaced planes and laterally extending portions connecting said flanges, said portions forming with the respective wall plates a tubular stress member.

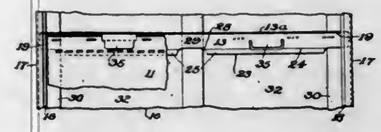
1,827,998. HEATER FOR MOTOR VEHICLES. RALPH B. OTWELL, Detroit, Mich. Filed Dec. 1, 1930. Serial No. 499,185. 5 Claims. (Cl. 257—241.)



1. A device of the character described, comprising a combined exhaust manifold and air heating chamber constructed of cast metal with the air heating chamber disposed above the exhaust manifold, said air heating chamber and exhaust manifold being separated from each other by a horizontal wall integral with the side walls of the device, the air heating chamber being open at each end for the passage of air, with a plurality of spaced openings through its upper wall for the escape of air heated therein; a slidable plate mounted upon the upper wall of the heating chamber having downwardly directed flanges overlapping the side walls of the device, to secure the plate against lateral displacement, said slidable plate having a plurality of openings spaced apart, whereby upon adjustment of the plate in relation to the heating chamber it may open or close the openings through the upper wall of the chamber; and a plurality of louvers integral with the slidable plate and respectively overhanging the openings through said plate, whereby the heated air discharged through said openings is directed away from said device.

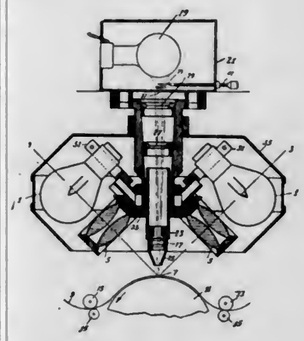
1,827,999. CARD INDEX OR RECORD DEVICE. JAMES H. RAND, Jr., Buffalo, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 6, 1926. Serial No. 146,625. 7 Claims. (Cl. 129—16.)

1. An index or record card, having a body member for receiving record matter and a flap secured at one edge of said body member and having a free part adapted to lie flat against said body member and between which and said body member an edge of another card may be inserted and frictionally held, whereby a plurality of said cards



can be arranged in overlapping, nested relation, said free part having an edge portion extending outwardly in angular relation thereto and to said body member to facilitate the insertion of another card beneath said flap.

1,828,000. ANALYZING SYSTEM FOR PICTURE TRANSMISSION. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 321,821. 11 Claims. (Cl. 178—5.)



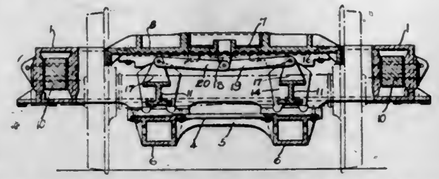
1. An illumination system for illuminating picture surfaces for analyzing purposes in the transmission thereof which includes a plurality of light sources each arranged concentrically with respect to each other, a picture surface for transmission, means for directing the light from each of said concentrically arranged light surfaces to a single point on said picture surface, means for redirecting the light from said picture surface, and photoelectric means for producing electric current variations when subject to the influence of the redirected light rays so as to produce electric currents varied in direct proportion to the varying intensities of light and shade on the picture surface.

1,828,001. PISTON RING. GEORGE SCHNEIDER, Saginaw, Mich., assignor to Wilcox-Rich Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 24, 1931. Serial No. 517,785. 2 Claims. (Cl. 74—109.)



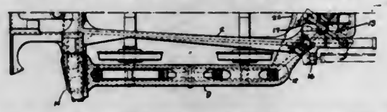
1. A resilient piston ring formed in its outer peripheral face with elongated oil pockets spaced apart from each other endwise and separated by dam portions integral with the ring, slots extending radially through the dam portion of the ring in a plane substantially parallel with the planes of the flat faces of the ring said slots establishing communication between the inner face and the outer face of the ring and connecting adjacent pockets.

1,828,002. RAILWAY TRUCK CENTERING DEVICE. JAMES C. TRAVILLA, Jr., Philadelphia, Pa., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Feb. 2, 1931. Serial No. 513,036. 9 Claims. (Cl. 105—189.)



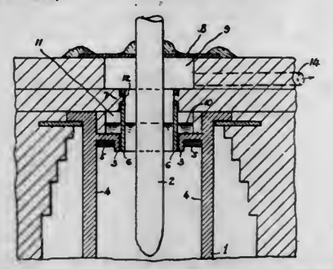
1. A rocker centering device for railway vehicles comprising a rocker and a rocker bearing mounted respectively on vehicle members capable of relative lateral movement, said bearing being inclined downwardly and outwardly on each side of the center thereof, the inclinations being steeper near the center of the bearing than near the outer ends thereof.

1,828,003. LOCOMOTIVE SPRING EQUALIZING SYSTEM. JAMES C. TRAVILLA, Jr., Philadelphia, Pa., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Mar. 6, 1931. Serial No. 520,526. 7 Claims. (Cl. 105—82.)



1. In a locomotive, a main frame, a supporting spring therefor, a lever supported at one end from said spring and extending diagonally inwardly and rearwardly of said spring to a fulcrum point on said frame, a truck frame, a supporting spring therefor, and a truck frame supporting equalizer carried by said truck spring and said lever at a point on the latter between its fulcrum and its support.

1,828,004. ELECTROLYTIC CELL CURTAIN. LOUIS E. WARD, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 10, 1929. Serial No. 369,683. 12 Claims. (Cl. 204—19.)

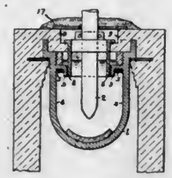


1. In apparatus of the character described, a plate-like curtain member of refractory material adapted to engage a horizontally disposed member of the cell superstructure so as to be suspended vertically therefrom, and capable of being assembled edge to edge with other like plates to form a continuous sectional partition wall or curtain.

1,828,005. CURTAIN FOR ELECTROLYTIC CELLS. LOUIS E. WARD, Midland, Mich., assignor to The Dow Chemical Company. Filed July 29, 1929. Serial No. 381,794. 7 Claims. (Cl. 204—19.)

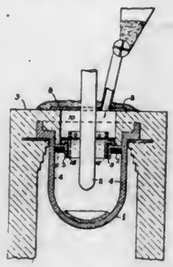
1. In apparatus for electrolyzing a fused salt bath, a closed sectional partition of refractory material to sepa-

rate anode and cathode products comprising a plurality of generally plate-shaped members provided with means



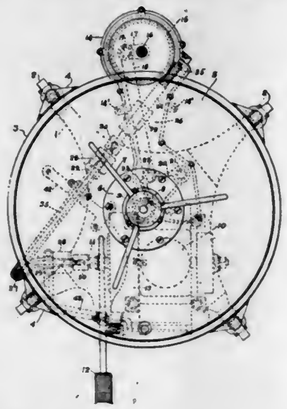
to suspend the same vertically from a support, and strut members disposed transversely between oppositely placed plate members.

1,828,006. CURTAIN FOR ELECTROLYTIC CELLS. LOUIS E. WARD, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 29, 1929. Serial No. 381,795. 6 Claims. (Cl. 204—19.)



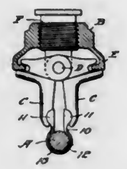
1. In apparatus of the character described, the combination of a cathode pot, an inverted trough-like trap along the upper limit of the principal cathode surface thereof, a projecting rim along the upper side of said trap, and a curtain assembly including a plate-like non-conducting hook-shaped member engaging with said rim as support therefor.

1,828,007. POWER DRIVE DEVICE FOR WASHING MACHINES. ROBERT J. WATERWORTH, Sidney, Ohio, assignor to Prima Manufacturing Company, Inc., Sidney, Ohio, a Corporation of Ohio. Filed Mar. 13, 1930. Serial No. 435,443. 9 Claims. (Cl. 259—101.)



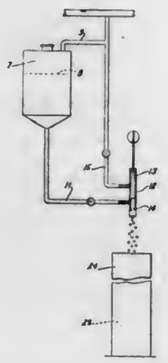
1. In a power drive device, a flexible shaft, a coupling on each end of the shaft, each coupling having in one end a shaft-receiving socket and on the other end a spindle and socket to receive one end of the shaft, an armor for said shaft terminating short of the ends of the shaft, and a bearing attached to each end of the armor to rotatably support the spindle of the coupling on the adjacent end of the shaft.

1,828,008. TROLLEY EAR. GEORGE F. WENNAGEL, Baltimore County, Md. Filed Dec. 31, 1929. Serial No. 417,805. 10 Claims. (Cl. 191—43.)



1. A trolley ear comprising an elongated metallic member substantially U-shaped in cross section engageable upon a trolley wire to extend beneath the same and having its sides provided with thickened means adapted for engagement between the jaws of a suspension clamp.

1,828,009. METHOD OF PRODUCING CARBON GRANULES. TERRENCE ONAS WESTHAFER, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,502. 1 Claim. (Cl. 202—25.)

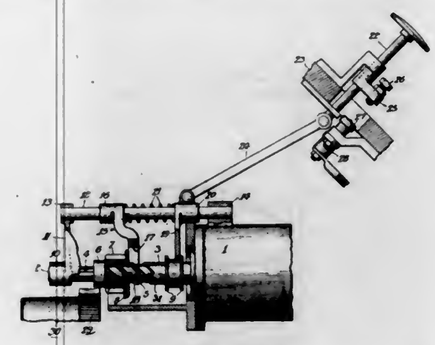


A method of producing spherical carbon granules, which comprises projecting an aqueous solution of cellulose and zinc chloride into the atmosphere so as to break it into a plurality of drops, depositing the drops in a bath of alcohol to harden the drops while their surface tension draws them into spherical shape, and carbonizing the hardened drops to form spherical carbon granules.

1,828,010. ENGINE STARTER. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed July 15, 1927. Serial No. 205,900. 7 Claims. (Cl. 74—7.)

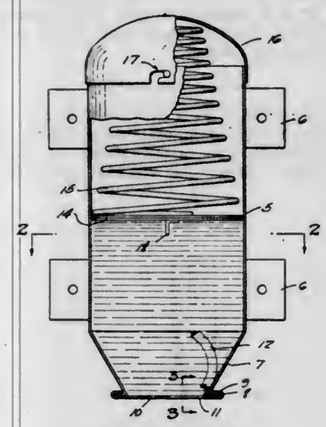
1. An engine starter drive including a rotatable driving shaft, a sleeve shiftable longitudinally thereon and rotated thereby, a driving member mounted on the sleeve for longitudinal movement thereon and rotary movement therewith adapted when advanced longitudinally to engage a member of the engine to be started, an abutment

arranged in the path of the backward longitudinal movement of the driving member and made in the form of a yoke extending on either side of the driving member and



having projections engaged by said driving member, and manually operable means for shifting the sleeve longitudinally.

1,828,011. SOAP DISPENSER. GEORGE D. WIDMAN, Los Angeles, Calif. Filed Jan. 13, 1930. Serial No. 420,407. 9 Claims. (Cl. 146—61.)



1. A soap dispenser for a jelly like charge comprising a reservoir shell with a rotatable bottom section adapted to be gripped and to overlie the palm of the hand, said shell having a tapered lower end, a discharge opening in said bottom section, a scraping lip at the margin of said opening whereby to scrape material to be dispensed from the bottom end of the charge material in said dispenser and direct it through said opening, a scraping flight fixed to said bottom section and ranging from said discharge opening upwardly along the tapered wall of said shell and forwardly in relation to the intended rotation whereby to scrape the material to be dispensed and direct it toward the opening, and means urging the charge of material toward the bottom of said dispenser.

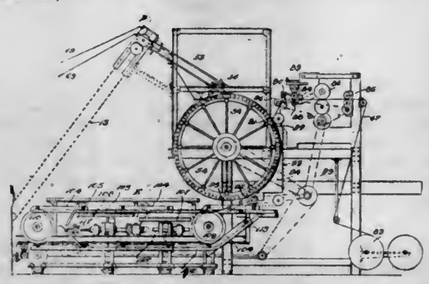
1,828,012. DRAPERY PIN. LAURA A. WRAGG, New London, Conn. Filed July 3, 1930. Serial No. 465,534. 8 Claims. (Cl. 24—150.)

2. A device of the character described consisting of a length of wire having a pointed major shank portion, a loop, a minor shank portion, a bent shoulder for limiting movement of the device bent downwardly toward and then upwardly from said major shank portion, and a second



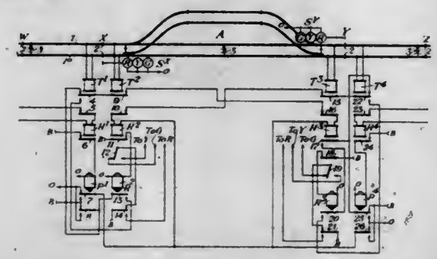
loop for engaging a curtain rod, said second loop terminating in a pointed hook for engaging said major shank portion.

1,828,013. TILE ASSEMBLING AND PASTING MACHINE. FRANK B. YINGLING, Hamilton, Ohio. Filed May 1, 1924. Serial No. 710,383. 10 Claims. (Cl. 154—1.)



2. In a tile assembling machine, the combination with a conveyer and means for feeding tile thereto, of sorting means for receiving all of the tile from the conveyer, and means in the sorting means for distributing some of the sorted tile to the conveyer.

1,828,014. RAILWAY SIGNALING. HENRY S. YOUNG, Wilkinsburg, and CHARLES A. BROOKS, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1929. Serial No. 403,739. 10 Claims. (Cl. 246—33.)

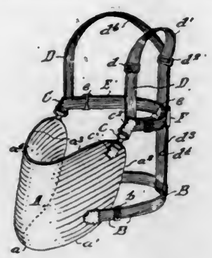


1. In combination, a stretch of single track railway provided with a passing siding, signals at each end of said siding governing traffic through the siding, means normally responsive to a train approaching the siding from either direction for causing the opposing signal to indicate stop, and means for preventing a second train approaching the siding from causing the opposing signal to indicate stop when a first train is already approaching the siding from the other direction.

1,828,015. ABDOMINAL SUPPORTER. AUGUST S. ALLEBACH, North Wales, Pa. Filed Mar. 21, 1930. Serial No. 437,898. 9 Claims. (Cl. 2—41.)

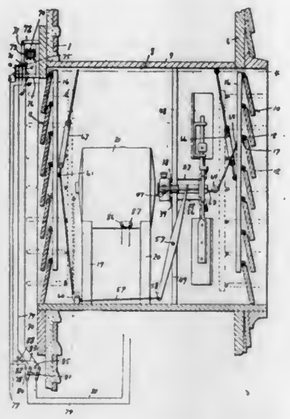
1. An abdominal supporter comprising a supporter proper shaped to encase a pendulous abdomen and having

a border reaching from the os-pubis, following the groins, sideways and upwards to and into the inguinal region, then upwardly over part of the right and left anterior lumbar region, then curving forward to the top of the border, and means to sustain said supporter proper on the body, said means including a band secured to the lower border of said supporter proper at the inguinal region



and encircling the innominate horizontally at a point adjacent the anterior superior spines of the ilia and passing over the sacro-iliac articulation, and a band connected at its ends to said supporter proper at the upper sides thereof and passing over the shoulders downward and along the median line and looped around said first mentioned band.

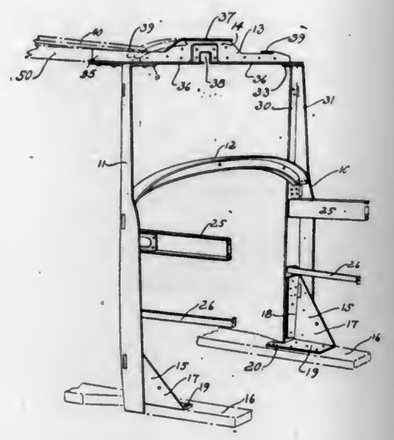
1,828,016. AUTOMATIC KITCHEN VENTILATOR. PETER ANDRES, Belding, Mich. Filed Mar. 12, 1930. Serial No. 435,231. 3 Claims. (Cl. 98—116.)



1. A ventilating apparatus including a ventilating duct in which is mounted a power driven ventilating fan comprising a frame in the duct, a series of shutters mounted in the duct to form a closure therefor, means on the fan blades for opening the shutters when the motor is running, and means connected with the frame and shutters for closing the shutters when the motor is not running.

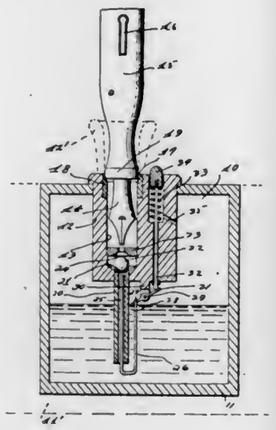
1,828,017. VEHICLE BODY CONSTRUCTION. ERWIN L. BARE, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed May 9, 1928. Serial No. 276,272. 5 Claims. (Cl. 296—28.)

1. In automobile body construction, in combination with a pair of upright forward metal pillars, a metal bar of channel shape in its intermediate portions extending between and secured to the upper ends of said pillars, wood header bars secured to and supported by said metal bar and extending over the length thereof, angle shaped extensions integrally secured to the ends of said metal bar and extending rearwardly from the upper ends of said



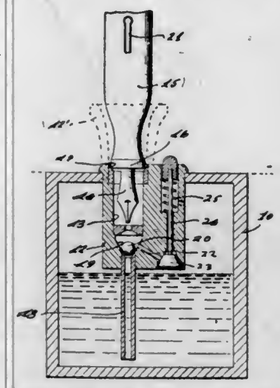
pillars, and wood roof rails having their forward portions supported by and secured to said angle shaped extensions and having their forward ends joined to the ends of said wood header member.

1,828,018. FOUNTAIN PEN FILLING DEVICE. GERALD L. BASSETT, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed July 7, 1930. Serial No. 466,214. 5 Claims. (Cl 120—4.)



1. In a device of the class described, a base formed with a well, a pen receiving receptacle forming a pen support and sealed by the pen when the latter is thus supported, a check valve controlled passageway connecting said receptacle to said well through which ink may be drawn by the suction means of the pen and mechanical means for unseating said check valve to permit drainage of ink from said receptacle back into the said well.

1,828,019. FOUNTAIN PEN FILLING DEVICE. GERALD L. BASSETT, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed July 7, 1930. Serial No. 466,215. 5 Claims. (Cl. 120—4.)



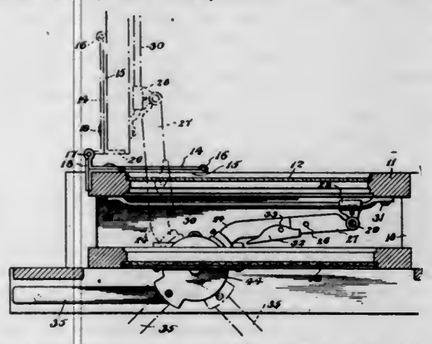
1. In a fountain pen desk set, a base formed with a well, a pen receiving receptacle, a check valve controlled passageway connecting said receptacle to said well and a valve controlled by-pass operable to permit drainage of ink from said receptacle back into said well.

1,828,020. BONDING MOLD. WILLIAM G. BEAUREGARD, Fall River, Mass., assignor, by mesne assignments, to Line Material Company, Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 9, 1928. Serial No. 298,581. 7 Claims. (Cl. 22—116.)



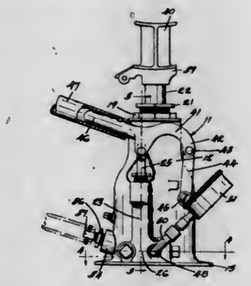
1. A device for attaching a ground wire to a cable, comprising a member having a central opening, means connected with the opposite ends of the member for readily securing the same to the cable with the cable providing the bottom for the opening, and said member having a recess communicating with the opening through which the ground wire projects into the opening where it is held by the member.

1,828,021. WINDOW OPENER. PETER O. BORGESON, Miami, Fla. Filed May 9, 1930. Serial No. 451,095. 8 Claims. (Cl. 268—118.)



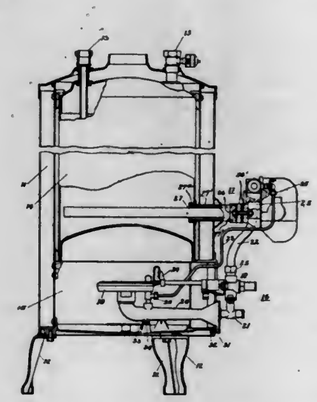
4. A window opener comprising a lever arm, a connecting link, means slidably and pivotally connecting said arm and said link, a pivoted catch normally holding said arm and said link disposed in alignment, a guide rail adapted to be connected to a window casing, an operative connection between said guide rail and said link, an operating lever, a support for the operating lever adapted to be secured to a window casing, means on said support operatively connecting said lever to said arm, and means carried by said support for automatically locking said lever arm against movement.

1,828,022. SCALE. CARL BRAND, Cleveland Heights, Ohio. Filed May 26, 1928. Serial No. 280,853. 7 Claims. (Cl. 265—47.)



1. A portable scale and hydraulic jack unit, comprising: a hydraulic jack having a fluid reservoir, a cylinder, a piston adapted to be engaged with an object to be lifted, a pump, and valve means operable to effect withdrawal of said fluid from said reservoir and to supply said fluid to said cylinder when said pump is operated, and means communicating with the fluid in said cylinder and operable by the pressure of said fluid for indicating the weight of the object so lifted.

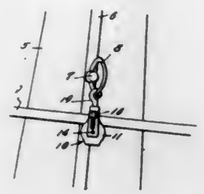
1,828,023. WATER HEATER. ALFRED P. BRILL, Pittsburgh, Pa., assignor to Ruud Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Aug. 10, 1927. Serial No. 211,880. 4 Claims. (Cl. 126—350.)



1. The combination with a water heater having a tank and a burner chamber disposed below the tank, of operating mechanism including a thermostatic member extending into said tank from one side of said heater, a burner tube extending into said chamber from the same side of said heater, positioning means for said burner tube located in said chamber, a grooved member associated with said burner tube so as to cooperate with said positioning means

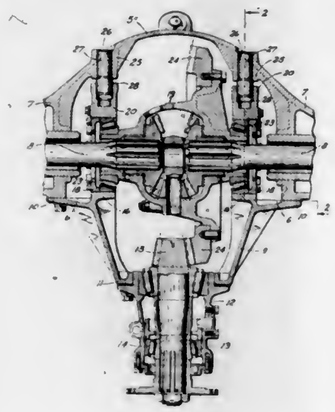
upon movement of said burner tube into said chamber, means for detachably connecting said burner tube and said operating mechanism together so as to form a unitary mechanism movable as a unit into and out of operative position, and means for supporting the unitary mechanism on the heater.

1,828,024. PLOW LINE GUIDE. DAVID H. CAISON, Supply, N. C. Filed June 17, 1930. Serial No. 461,775. 1 Claim. (Cl. 54—73.)



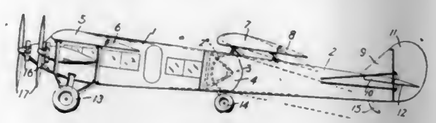
A plow line guide comprising a pulley block, one side wall terminating inwardly of the head of the block to provide an entrance within the block, an attaching member swiveled to the head of the block, a roller rotatably supported within the block inwardly of the entrance, a sliding bolt extending within the aforesaid wall of the block through the wall of said block opposed to the block head, said bolt being of a length when moved toward the head of the block to close the entrance.

1,828,025. DIFFERENTIAL CARRIER. HAROLD D. CHURCH, Cleveland Heights, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 20, 1930. Serial No. 437,528. 3 Claims. (Cl. 74—99.)



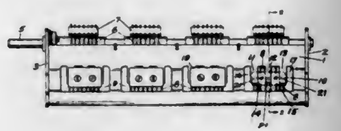
1. In a motor vehicle, the combination with an axle housing having a front wall provided with an opening therethrough and a solid rear wall, a boss integrally formed in said rear wall opposite said opening, a dowel pin projecting from and reinforced by said boss, a closure for said opening having a hanger, a differential supported by said hanger, and a drive shaft assembled in said closure, said closure being adapted to be secured to said housing with said hanger slidably engaging said dowel pin.

1,828,026. AIRCRAFT. WALTER J. CLINE and MARTIN F. WAGNER, San Diego, Calif. Filed Sept. 3, 1929. Serial No. 390,108. 12 Claims. (Cl. 244—12.)



1. In an aircraft of the class described, a long body comprising front and rear sections pivotally connected at their adjacent ends on a horizontal axis extending transversely to the body, horizontal supporting wings positioned at and connected to the forward ends of the front and rear sections.

1,828,027. ELECTRICAL CONDENSER AND PROCESS OF ASSEMBLY THEREOF. STANLEY S. CRAMER, Haddon Heights, N. J., assignor to Radio Condenser Company, Camden, N. J. Filed Feb. 27, 1929. Serial No. 343,200. 8 Claims. (Cl. 175—41.5.)



1. A condenser including a frame structure having end bearing supports, a rotor and shaft carried by said end supports, spaced metallic parts extending from the frame and located on opposite sides of the rotor shaft, a stator consisting of a plurality of plates held together at least in part by a tie bar across opposite ends of said plates, an insulator between each tie plate and said spaced frame parts, an insulator on the opposite side of said spaced frame parts and screws going through both said insulators and between said spaced frame parts into the tie bars for adjustably clamping the stator in position.

1,828,028. PRODUCTION OF SHEATHING BOARDS FROM REDWOOD BARK. ELTON R. DARLING, Danville, Ill., assignor to Pacific Lumber Company, Chicago, Ill., a Corporation of Maine. Filed June 19, 1929. Serial No. 372,224. 6 Claims. (Cl. 92—14.)

1. The process of converting redwood bark into useful products which comprises roughly shredding the bark, leaching the same with water to remove tannins therefrom, treating the leached bark with a dilute alkaline solution under heat and pressure, washing the bark free from alkali, comminuting the same in the presence of water and passing the resultant suspension through riffle tanks to remove "tree-sand" therefrom, beating the fibers further in water and then separating the same therefrom and drying them.

1,828,029. WALL BOARD, SHEATHING LUMBER AND THE LIKE. CARL MARX, Chicago, and ELTON R. DARLING, Danville, Ill., assignors to Pacific Lumber Company, Chicago, Ill., a Corporation of Maine. Filed June 22, 1929. Serial No. 373,052. 6 Claims. (Cl. 154—2.)

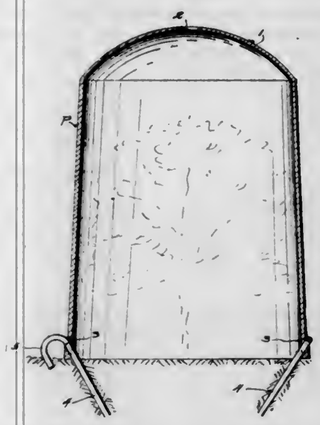
1. A board consisting of an inner layer of compacted felted fibres and an outer layer of similar fibres which individually are encased in a cementitious material, there being insufficient of the latter to form a distinct layer on the surface of the board.

1,828,030. WORKING BARREL PACKING MEANS. RAY L. DAVIS, Wheeling, W. Va. Filed May 25, 1928. Serial No. 280,574. 1 Claim. (Cl. 286—24.)



In a packing, an inner sealing ring transversely split on stepped lines, an outer transversely split ring surrounding said inner ring and of greater axial dimension than the latter, the edges of said outer ring being provided with integral inwardly projecting circumferentially extending flanges, said flanges being stepped at their inner edges to provide annular sealing faces lying against the end faces of the inner ring and to provide annular inwardly facing shoulders to abut the periphery of said inner ring, thereby preventing excessive radial movement of said inner ring within the outer ring, and spring means between the two rings, acting inwardly upon the inner ring and outwardly upon the outer ring.

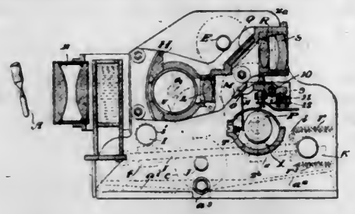
1,828,031. PLANT PROTECTOR. WALTER T. DAVIS, Parkersburg, W. Va. Filed July 31, 1930. Serial No. 472,055. 1 Claim. (Cl. 47—30.)



A plant protector having one end closed, said closed end being provided with an opening, the wall of the protector closely adjacent its open end being provided with an opening, and an anchoring pin insertible through said last named opening, said pin at its outer end being provided with a laterally curved arm, said arm having a bill of a length in excess of the distance between the last named opening and the edge of the protector.

1,828,032. MOVING PICTURE MACHINE. RENÉ DECAUX, Paris, France, assignor to Societe des Etablissements Gaumont, Paris, France, a Corporation of France. Filed May 10, 1929, Serial No. 361,924, and in France May 21, 1928. 7 Claims. (Cl. 88—16.8.)

1. In a moving picture projecting apparatus of the type described, the combination of an oscillating mirror, a platform supporting said mirror, three bosses on said platform forming three supporting points for said mirror, flexible means for applying said mirror against said bosses, an arm for transmitting oscillations to said platform, a cam for

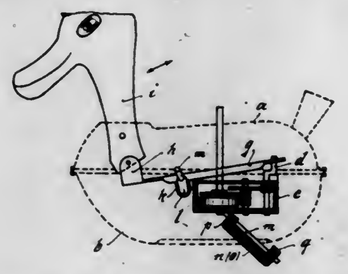


transmitting oscillations to said arm, a pivotally mounted support for the platform, and means adapted for adjusting the angular position of said support.

1,828,033. NEW PRODUCTS OBTAINABLE FROM RESINS. ARNOLD DOSER, Cologne-Mulheim, GUSTAV MAUTHE, Cologne-Holweide, and ALFRED THAUSS, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 20, 1928, Serial No. 263,208, and in Germany Mar. 28, 1927. 6 Claims. (Cl. 260—2.)

1. The process which comprises reacting with an aralkylhalogenide upon a condensation product of a natural resin-acid with a phenol in the presence of a small amount of a suitable dehydrating agent at temperatures ranging from about 100 to 200° C., sulfonating the condensation product and salting out.

1,828,034. TOY SWIMMING ANIMAL. JOHANN EINFALT, Nuremberg, Germany. Filed Sept. 27, 1930, Serial No. 484,801, and in Germany Aug. 6, 1930. 3 Claims. (Cl. 46—40.)



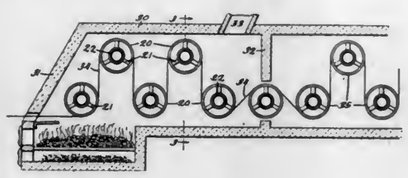
1. A top swimming animal in which to the legs a rowing movement is imparted, comprising in combination with the figure of a swimming bird, a driving mechanism in this figure, a revolving crank forming part of said driving mechanism, a guide bar having a slot to which a reciprocating movement is imparted by the revolving movement of the crank, a transverse crank rod the ends of which are bent downwards, a crank on said transverse rod engaging said guide bar and oscillated by the reciprocating movement of said guide bar and webs fixed to the downwardly bent ends of said transverse rod.

1,828,035. RECOVERY OF OIL FROM SPENT FULLER'S EARTH. CARLETON ELLIS, Montclair, N. J. Filed Feb. 28, 1923, Serial No. 621,929. Renewed Feb. 14, 1931. 6 Claims. (Cl. 87—12.)

1. The process of separating fatty oil from spent fuller's earth which has been used as a bleaching agent for fatty oils, which comprises agitating such spent earth with about an equal amount of a hot aqueous solution con-

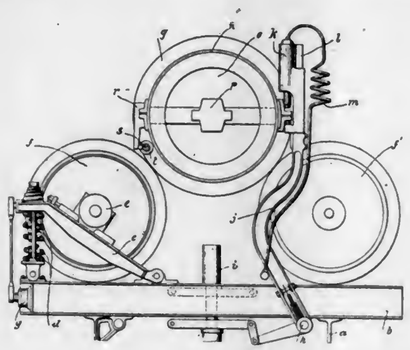
taining approximately 2 per cent of caustic soda and 10 per cent of common salt, adding several volumes of hot water to wash out the oil, allowing the mixture to stand until the oil collects at the top and withdrawing the latter.

1,828,036. PROCESS OF HEAT TREATING. FRANK A. FAHRENWALD, Chicago, Ill. Filed June 25, 1928. Serial No. 287,910. 2 Claims. (Cl. 148—21.5.)



1. The improvement in the continuous process of heat-treating metallic strands which consists of first heating the same to a temperature above the critical point of the metal while supporting the same upon moving masses of metal the contacting portions of which progress at the same speed as the sheets and exhibit substantially the full maintained temperature, and then while still surrounded by aeriform fluid cooling the same quickly below the critical point of such metal while supporting the same upon and in contact with moving masses of metal the contacting portions of which progress at the same speed as the sheets and exhibit a temperature lower than that of the surrounding aeriform fluid.

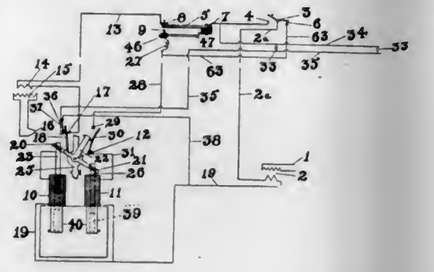
1,828,037. APPARATUS FOR THE MOLDING OF LONG OBJECTS BY CENTRIFUGAL TREATMENT. PAUL FERRIER, Paris, France. Filed Sept. 21, 1928, Serial No. 307,467, and in France Apr. 26, 1928. 5 Claims. (Cl. 25—30.)



1. A centrifugal molding machine for molding elongated parts comprising a frame provided with several pairs of yieldingly mounted rollers carrying the molds through more than two points of their length, the rollers disposed on one side on the frame being driving rollers and imparting a rotary motion to the molds.

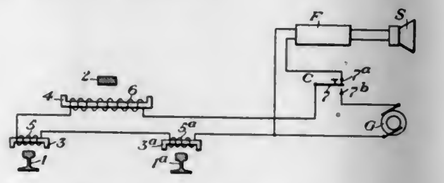
1,828,038. HEATING SYSTEM. SAMUEL E. FOUTS, Los Angeles, Calif. Filed July 6, 1929. Serial No. 376,372. 14 Claims. (Cl. 158—28.)

1. In a heating system, a burner a fuel supply member, a valve for said member, an electro-magnetic device for opening said valve, a second electro-magnetic device for closing the valve, electric circuits leading to and including the respective devices, a thermostat device for automatically switching the current from one circuit to the other in accordance with temperature conditions at said thermostat, a source of electric current, a wall switch in the circuit leading from said source, said switch having two contacts, electric connections leading from one of said contacts to the thermostat device, and electric connections



leading from the other contact of said switch to the circuit which includes the electro-magnetic device for closing the valve, whereby, when the valve is open and the wall switch is moved to break the circuit which is controlled by the thermostat device, the circuit through the valve-closing electro-magnetic device is established, for the purpose specified.

1,828,039. ELECTRIC TRAIN SIGNALING APPARATUS. LARS O. GRONDAHL, Pittsburgh, and PAUL N. BOSSART, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 3, 1930. Serial No. 493,046. 4 Claims. (Cl. 246—63.)

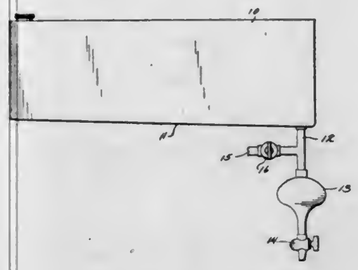


1. Train signaling apparatus of the type comprising three windings on a train disposed in inductive relation to the two track rails and a train coupler respectively, and means for at times connecting said windings in series with a source of alternating current and for at other times connecting them in series with a receiving device, said apparatus being characterized by the fact that the winding associated with the coupler has twice as many turns as each of the other two windings, said windings being so spaced from the rails and the coupler that when they are connected with said source of alternating current the electromotive force induced in the coupler is substantially equal to the electromotive force induced in each rail, whereas, the voltage induced in the coupler winding by a changing magnetic field from an outside source is equal and opposite to the sum of the voltages induced by the same field in the other two windings so that when the windings are connected with the receiving device such field has no effect on the device.

1,828,040. FUEL TANK FOR OUTBOARD MOTORS. GEORGE H. HAHM, Metuchen, N. J. Filed Nov. 19, 1929. Serial No. 408,378. 2 Claims. (Cl. 210—57.)

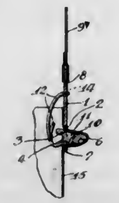
1. The combination with an out-board motor, of a fuel tank therefor having a flat bottom inclined downward and laterally to one corner of the tank whereby one corner of

the tank is disposed at a point lower than any other point of the bottom, a hollow pet-cock body having a pipe connection to the lowest portion of the bottom, to thus permit it to receive sediment and water, the lower end of this



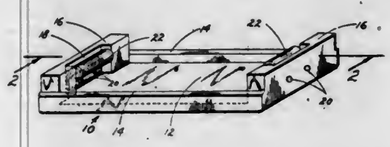
petcock body having a manually operable drainage valve and a pip connection to the carbureter leading from the pipe connection to the hollow pet-cock and provided with a valve.

1,828,041. GARTER CONSTRUCTION. WILHELM HAMACHER, Berlin-Wilmersdorf, Germany. Filed Jan. 19, 1931, Serial No. 509,823, and in Germany July 22, 1930. 5 Claims. (Cl. 24—245.)



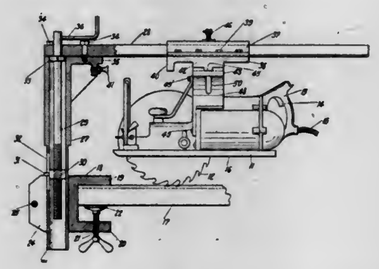
1. A fabric-supporting clamping device comprising the combination of a substantially flat body-plate provided with an oval opening therein and a cut-away portion at one end thereof, garment-grasping means comprising a button of such size that it may be pushed through said opening when tilted to a position wherein the side of the button is in alignment with the larger diameter thereof, a shank on said button having a diameter very slightly smaller than the smaller diameter of the oval opening, and means loosely connecting said button with said body-plate.

1,828,042. REMOVABLE FACEPLATE FOR VISE JAWS. WILLIAM N. HARDING and ARNOLD H. KRUGMAN, Elyria, Ohio. Filed May 22, 1930. Serial No. 454,544. 9 Claims. (Cl. 81—88.)



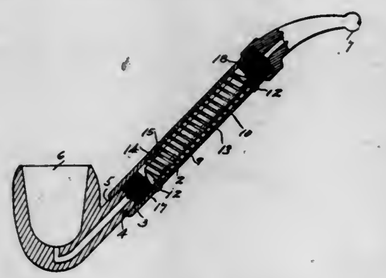
1. A removable face plate for vise jaws comprising a work engaging face, a laterally projecting marginal flange extending around the periphery thereof and frictional means for holding said face plate in operative position on a vise jaw by use of compression springs mounted on the marginal ends of said face plate.

1,828,043. ADJUSTABLE SUPPORT FOR PORTABLE POWER SAWS. THERON L. HEDGPETH, Oakland, Calif., assignor of one-half to Nelson M. Barnhart, Oakland, Calif. Continuation in part of application Serial No. 244,411 filed Jan. 3, 1928, now Patent No. 1,756,121. This application filed May 22, 1928. Serial No. 279,703. 2 Claims. (Cl. 143—6.)



2. In a supporting frame for a portable power driven saw, a vertically adjustable standard, a horizontal arm carried by said standard, a carriage movable along and supported upon said arm said carriage having an exposed arcuate bearing surface, a member adjustable on said carriage, said member being in the form of a segment having a slot in its periphery and having a curvature corresponding to the curvature of the carriage thereby permitting angular adjustment of the saw, and fastening means passing through said slot for holding said member to said carriage.

1,828,044. THERMO-AIR COOLED PIPE STEM. ARTEMAS S. HICKEY, Los Angeles, Calif. Filed June 13, 1930. Serial No. 460,943. 4 Claims. (Cl. 131—12.)



1. A stem, for a tobacco pipe, including an outer jacket and an inner core removable therefrom and having an exterior air channel; the jacket having a system of apertures opening to the said channel.

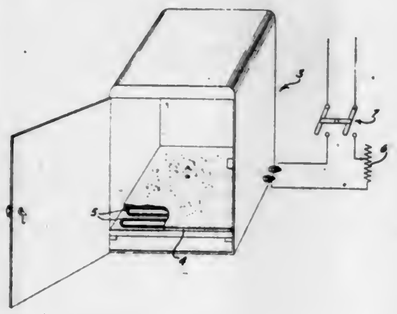
1,828,045. CONSTRUCTIONAL TOY. FRANK HORNBY, Liverpool, England, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed May 2, 1928, Serial No. 274,445, and in Great Britain Nov. 25, 1927. 6 Claims. (Cl. 308—235.)



1. A rolling bearing unit for use with constructional toys comprising stamped sheet metal upper and lower discs having mating races for the rolling elements formed there-

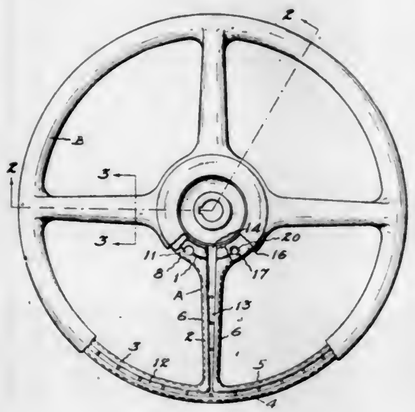
in and an intermediate stamped sheet metal cage or frame carrying the rolling elements in engagement with said mating races, one of said discs being provided with a series of perforations for variable connection of the unit as a part of constructional toys.

1,828,046. METHOD OF PRODUCING CARBON GRANULES. RUSSELL SAMUEL HOWARD, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,503. 4 Claims. (Cl. 202—27.)



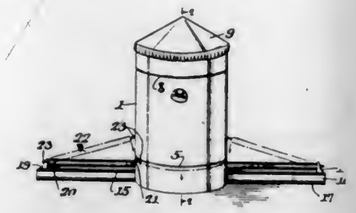
1. A method of producing carbon granules which comprises heating comminuted particles of a fusible solid phenolic condensation product out of contact with each other for a sufficient length of time to harden them, and then carbonizing the particles.

1,828,047. STEERING WHEEL. HARRY A. HUSTED, Cleveland, Ohio, assignor to The H. A. Husted Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 7, 1929. Serial No. 338,165. 8 Claims. (Cl. 74—33.)



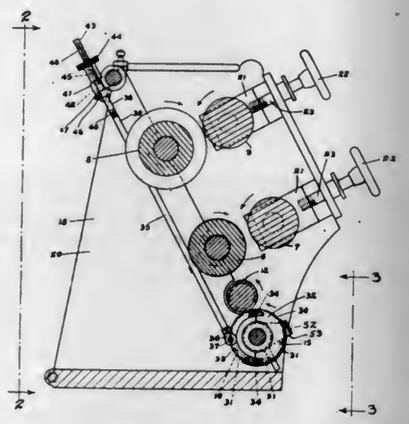
7. In a composition steering wheel having integrally united rim, hub and spoke portions, a reinforcing annulus embedded in said hub portion and having downwardly offset portions formed around the inner edge thereof, and having their lower faces substantially flush with the lower face of said hub portion, and a separately formed hub secured to said wheel in contacting engagement with said lower faces of said offset portions.

1,828,048. BABY CHICK WATERER. WILLIAM JEVONS, Wakefield, Kans. Filed Apr. 11, 1927. Serial No. 182,813. 5 Claims. (Cl. 119—77.)



1. A watering device comprising a trough, a tank separate from the trough having a supporting base straddling the trough, means for the discharge of water from the tank to the trough, said trough being of a length to extend outwardly beyond the base at opposite locations, and means located between the base and opposite ends of the trough relatively positioning the trough underneath the tank.

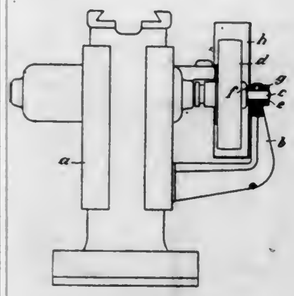
1,828,049. ADJUSTABLE GUIDE FOR DOUGH MOLDERS. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor, by direct and mesne assignments, of one-half to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio, and one-half to Thomson Machine Company, Belleville, N. J., a Corporation of New Jersey. Filed May 9, 1928. Serial No. 276,305. 14 Claims. (Cl. 107—9.)



1. In a device of the class described the combination of a pair of rollers rotatable in close proximity with one another and in the same direction, one of the rollers being so disposed relative to the other that the axis of one roller falls without vertical and horizontal planes containing the axis of the other roller, a normally stationary guide member disposed in close proximity with the lowermost roller, and movable supporting means for moving the guide member concentrically about the lowermost roller.

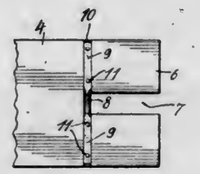
1,828,050. GUARD. FRIEDRICH KLOPP, Wald, Germany. Filed Mar. 6, 1930, Serial No. 433,776, and in Germany Aug. 15, 1929. 1 Claim. (Cl. 74—56.)

A protecting device for the belt drive of a machine having a driving axle carrying a belt pulley and an external bearing for said driving axle fixed to said machine, comprising a bushing in said external bearing, a collar on the inner end of said bushing, a hood on said bushing between said collar and said external bearing, and a ring nut on



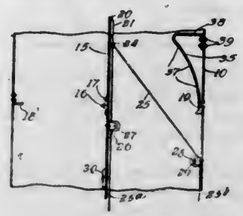
the outer end of said bushing adapted to move said bushing longitudinally to clamp said hood between said collar and said bearing.

1,828,051. IRONING BOARD. FRED KNORR, Denver, Colo. Filed Sept. 15, 1930. Serial No. 481,928. 1 Claim. (Cl. 68—10.)



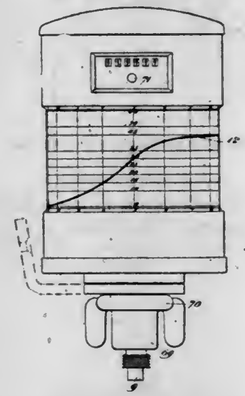
An ironing board having both surfaces formed from unobstructed planes, one end of the board having a notch or opening extending inwardly therefrom, a metal bar secured to the under side of the board and extending transversely of the opening with the bar rounded in the portion extending across the opening, the metal bar lying wholly within the space bounded by the two opposite sides of the board, and a supporting bar having one end extending through the opening, the upper edge of the bar having a plurality of transverse notches adapted to receive the rounded portion of the metal bar and the underside having a rectangular notch at the upper end of the bar.

1,828,052. PIPE DAMPER. HAROLD KNUTSON, Chicago, Ill., assignor to Paul Dickinson, Incorporated, a Corporation of Illinois. Filed Nov. 4, 1929. Serial No. 404,632. 5 Claims. (Cl. 126—286.)



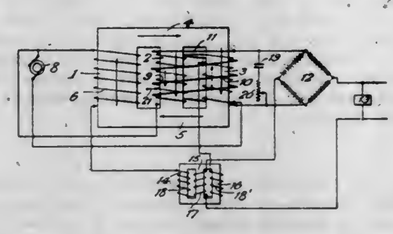
1. The combination with a ventilator or other passageway for air, smoke or other gases, of a damper pivotally connected with the interior of said passageway, a spring pressed latch carried by the damper and provided with an eye, and a flexible member for operating the damper threaded through said eye and through a pair of suitable guides spaced from said eye and respecitvely mounted one upon said damper and the other upon the wall of the passageway.

1,828,053. SPEED LIMIT SIGNAL OR INDICATING DEVICE FOR SPEEDOMETERS FOR VEHICLES. PER ANDERSSON KOURTZMAN, Vartan, Sweden. Original application filed Jan. 31, 1929, Serial No. 336,364, and in Sweden Feb. 8, 1928. Divided and this application filed Apr. 1, 1930. Serial No. 440,829. 4 Claims. (Cl. 116—116.)



1. In a speedometer for vehicles, a pivoted lever, a signalling device carried by said lever, means rotatable at a speed proportionate to the speed of travel of the vehicle and adapted to actuate said lever to move said signalling device into signalling position when the speed of the vehicle exceeds a predetermined limit, and means operative to retain the signalling device in said position during travel of the vehicle over a predetermined distance after the lever-actuating means has become ineffective.

1,828,054. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed May 17, 1929. Serial No. 363,887. 7 Claims. (Cl. 175—363.)

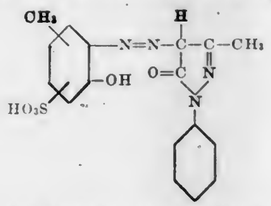


1. The combination of a transformer having a core and a primary winding thereon, an output circuit supplied with energy derived from said transformer, windings on said core to compensate for changes in the supply volt-

age, and a second core having a winding in series in the output circuit and having a winding subjected to the influence of said series winding and affecting the ampere turns of the primary of said transformer.

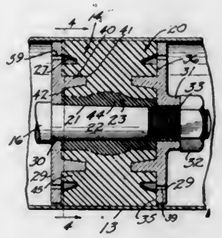
1,828,055. CHROMIFEROUS AZO-DYESTUFFS. HANS KRZIKALLA, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 26, 1930, Serial No. 471,087. and in Germany Aug. 30, 1929. 2 Claims. (Cl. 260—12.)

1. As new articles of manufacture complex chromium compounds of azo dyestuffs corresponding to the formula:



dyeing wool from acid baths even red shades.

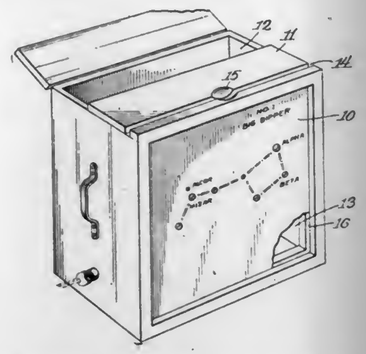
1,828,056. HIGH PRESSURE PUMP PISTON. CHARLES LAMB, Los Angeles, Calif., assignor of one-half to M. G. Brumbly, Walnut Park, Calif. Filed Sept. 26, 1927. Serial No. 222,171. 8 Claims. (Cl. 74—109.)



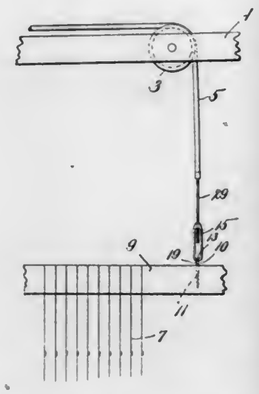
1. In combination: a piston rod; a piston consisting of a composite resilient piston body mounted directly on said rod, said body having a relatively harder and tougher annular core surrounding said rod, said core being diametrically enlarged intermediate its ends; end plates engaging opposite ends of said piston body; and means for causing relative movement of said plates towards each other to axially compress and radially expand said resilient body to working contact with the wall of a cylinder in which it is adapted to operate, and to further axially compress and radially expand said resilient body to compensate for wear.

1,828,057. INSTRUCTION APPARATUS FOR ASTRONOMY. JOSEPH R. LUNT, Wakefield, and DENNIS C. HALEY, Roslindale, Mass., assignors to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed May 19, 1930. Serial No. 453,675. 6 Claims. (Cl. 35—3.)

1. A star chart for instruction in astronomy showing simultaneously the relative position, magnitude and temperature of a represented star, comprising a substantially opaque perforated sheet, the perforations bearing a scalar relation to the actual position and magnitude of the star, and colored transluminescent material covering the perforations, the color of which material bears a relation to the temperature of the star.



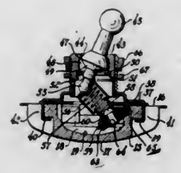
1,828,058. HARNESS CONNECTER FOR LOOMS. VANCE ROBERT MAYNARD, Greensboro, N. C., assignor to The Stafford Company, Readville, Mass., a Corporation of Massachusetts. Filed Oct. 7, 1930. Serial No. 486,956. 19 Claims. (Cl. 139—88.)



1. In a loom, a harness connecter having, in combination, a portion in connection with the harness frame and a portion in connection with the harness supporting and actuating devices, the two portions being adapted for relative rotation about a common axis during engagement and adapted to be disengaged through relative axial and lateral movement.

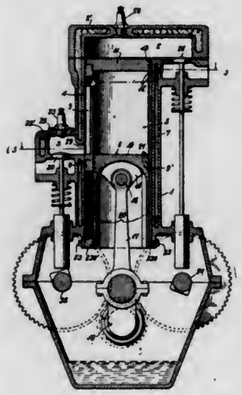
1,828,059. ELECTRIC SNAP SWITCH. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 7, 1929. Serial No. 397,828. 15 Claims. (Cl. 200—67.)

14. In an electric snap switch of the toggle type, in combination, a molded insulating base of substantially rectangular contour, said base having a flat upper face and a longitudinally curved lower face, relatively shallow recesses adjacent to each of the four corners of said base, channels leading outwardly from the respective recesses, abutments forming vertical channels at the adjacent ends of each longitudinally spaced pair of recesses, shallow ledges formed in said first mentioned channels, a relatively larger and deeper central recess opening to said first mentioned recesses, substantially U-shaped resilient contacts seated edgewise under lateral compression within each of said first mentioned recesses, certain of said contacts having resiliently interengaging parts to provide an electrical connection therebetween, three of said contacts being adapted for direct electrical connection to their respective terminal wires, a perforated insulating plate overlying said base and adapted to retain said contacts in position, a metallic cover member secured to said base in clamping engagement with said plate, an exteriorly threaded hollow



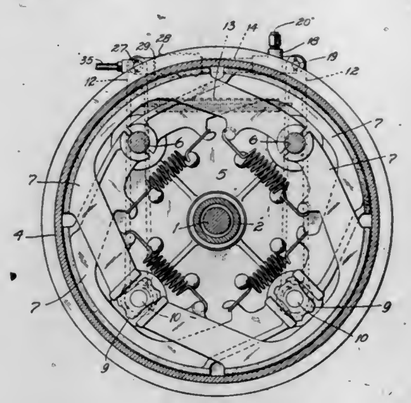
bushing rigidly secured to said cover member, an oscillatable and freely rotatable bridging contactor pivotally supported from said bushing, a toggle lever having a ball and socket connection with said bushing at the upper end of the latter, a metal plate rigidly secured within said bushing and adapted to prevent substantial downward displacement of said lever, said plate having a slot engageable by said lever to limit the latter to oscillatory movement in a single plane, a spiral compression spring interposed between the lower end of said lever and said bridging contactor, and a cup-shaped metal member enclosing the upper end of said spring, said cup-shaped member cooperating with the lower end of said bushing to positively initiate each oscillatory movement of said contactor.

1,828,060. INTERNAL COMBUSTION ENGINE. ARNOLD J. MICHAEL, Plymouth, Vt. Filed Jan. 13, 1930. Serial No. 420,579. 4 Claims. (Cl. 123—68.)



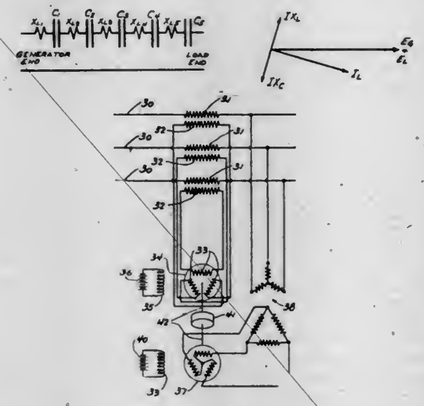
1. In an internal combustion engine of the double acting type, the combination of a cylinder, a combined cylinder and piston member adapted to reciprocate in said cylinder and comprising a cylindrical member closed at one end, a longitudinal channel in the outer wall of said cylindrical member terminating in a port opening into the interior of said cylindrical member, an intake and exhaust port in the wall of said first-mentioned cylinder in alignment with said channel and said first-mentioned port and a stationary compression head within said combined cylinder and piston member.

1,828,061. VEHICLE BRAKE. MATHEW B. MORGAN, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Dec. 27, 1927. Serial No. 242,585. 4 Claims. (Cl. 188—79.)



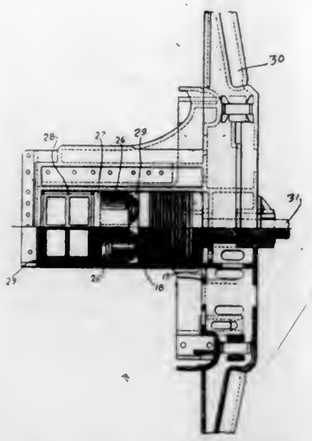
1. A brake comprising a brake drum, a plurality of pairs of brake members operatively related thereto, and each comprising a quadrantal shoe disposed between like shoes of the brake members of the other pair, separate actuating means comprising a lever arm for each pair, a fluid actuated device operatively connected to said lever arms to actuate said pairs simultaneously, and manually operable means operatively connected to one of said lever arms to actuate it independently of the other lever arm and independently of said fluid pressure.

1,828,062. INDUCTIVE REACTIVE POWER COMPOUNDING. THEODORE H. MORGAN, Palo Alto, Calif. Filed Dec. 12, 1927. Serial No. 239,378. 11 Claims. (Cl. 172—246.)



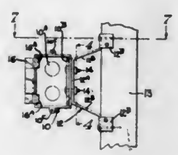
1. A system of power transmission comprising a transmission line, a source of energy connected thereto, a synchronous motor connected to the line at a point remote from said source, and means including a generator having its phase windings connected in series relation with said line and driven by said synchronous motor, said generator being arranged and connected so as to introduce an electro-motive force equal in phase relation to the reactance drop into said line at a point remote from said source to thereby increase the power limit of the system.

1,828,063. SHOCK ABSORBER. WILLIAM H. MUSSEY, Chicago, Ill., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 11, 1929. Serial No. 413,292. 6 Claims. (Cl. 213—40.)



1. In a shock-absorber, the combination comprising rubber spring units of the character described, metal springs serially arranged therewith, a relatively thick follower plate between said rubber and metal springs, and metal division plates of less thickness separating the several rubber spring units.

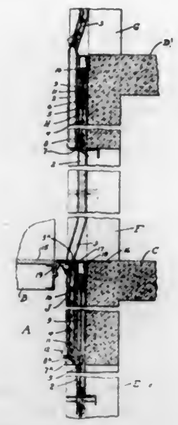
1,828,064. ELECTRICAL OUTLET BOX. BEAUMONT C. PAINE, Glen Ellyn, Ill. Filed Mar. 12, 1928. Serial No. 260,938. 1 Claim. (Cl. 247—21.)



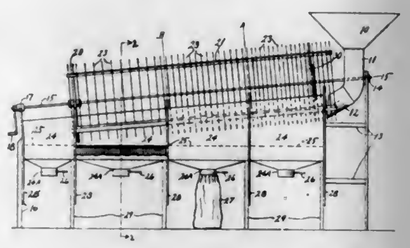
A device for supporting an outlet box or receptacle having a pair of comparatively large openings in each of the side walls thereof, comprising a separate bracket for supporting such box or receptacle in spaced relation from a vertical support, said bracket having a pair of elongated openings therein, said elongated openings being adapted to register with a pair of said wall openings, a plate member adapted for positioning within said box or receptacle and having a pair of openings adapted to register with said elongated openings in said bracket, and means extending through said openings in said bracket and in said plate member for supporting said box or receptacle on said bracket.

1,828,065. ELEVATOR DOOR. ARTHUR C. PALM, San Francisco, Calif., assignor to Kennerson Manufacturing Co., San Francisco, Calif., a Corporation of California. Filed June 25, 1930. Serial No. 463,652. 8 Claims. (Cl. 187—51.)

1. The combination with an elevator and the shaft in which it operates, said shaft having a door opening leading to a floor in a building, of a vertically movable door normally forming a closure for said opening, said door when opened adapted to descend below the sill of the opening, and a trucking platform carried by the upper edge of the door and adapted to completely bridge the space between the sill of the building and the floor of the elevator.



1,828,066. POTATO GRADER. JOHN E. PAULSON, Minneapolis, Minn. Filed May 4, 1929. Serial No. 360,520. 1 Claim. (Cl. 209—288.)



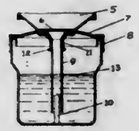
In a vegetable grading device of the class described, an elevated receiving hopper with a downwardly and forwardly directed outlet, an elongated skeletonized rotatable cylinder, and a cylinder shaft therein, said hopper outlet located within the upper end of said cylinder, a main frame supporting said hopper and cylinder and extending longitudinally under the latter, said cylinder comprising a continuous row of rings, the rings at the highest end of the cylinder being spaced apart a predetermined distance in one group and the succeeding lower groups of rings being spaced apart successively in wider spacing, said rings removably mounted concentric of the cylinder shaft, said cylinder comprising a number of circular, skeletonized webs, elongated ring holding bars fixed to said webs, all said bars provided with inwardly opening circularly registering notches to engage the respective rings, and one of said ring holding bars comprising a channel member opening inwardly, the flanges of said channel bar notched to retain each a ring therein near its open part, an integral inwardly extending projection in the web of said channel in alinement between two opposite notches of the said flange to engage in the opening of each loop and to space the adjacent ends thereof.

1,828,067. METHOD OF EMBEDDING STAPLES. ELMER C. PITCHER, Hayward, Calif. Filed July 9, 1928. Serial No. 291,266. 4 Claims. (Cl. 1—2.)



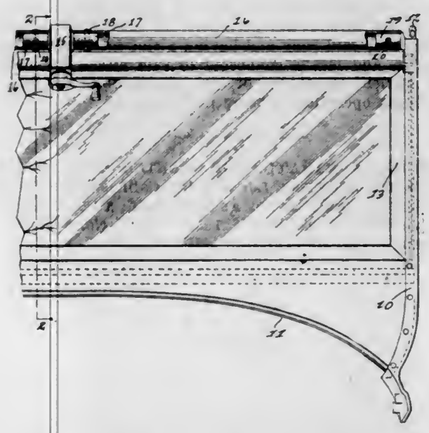
1. The herein described method of securing a staple in a member, which consists in partially embedding the legs of the staple in the member, and then flaring the legs outwardly at an angle.

1,828,068. CIGARETTE EXTINGUISHER. WILLIAM F. PRINGLE, Oakland, Calif., assignor of one-third to James P. Callahan and one-third to Daniel J. Nee. Filed June 22, 1929. Serial No. 372,980. 5 Claims. (Cl. 131—51.)



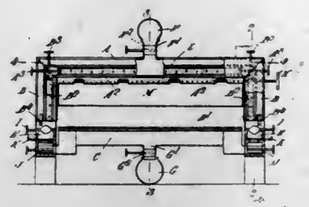
1. A cigarette extinguisher comprising a well, a flexible diaphragm clamped to a top of the well, a cup carried by the diaphragm provided with a perforated bottom open to the underside of the diaphragm, and means within the well adapted to force water from the well upward into the cup upon depressing the same.

1,828,069. WINDSHIELD. WILLIAM S. PRITCHARD, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed May 16, 1927. Serial No. 191,867. 6 Claims. (Cl. 296—84.)



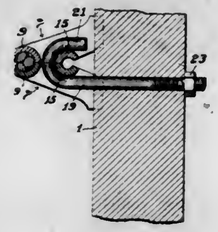
1. The combination with upright stanchions and a windshield swingingly mounted thereon, of an operating mechanism for said windshield, and a supporting member, sectional to facilitate assembly, including means connecting the inner ends of the sections to said operating mechanism and means for securing the outer ends of the sections to said stanchions.

1,828,070. GLASS ANNEALING LEER. ERIC AUGUSTUS COAD PRYOR, Beckenham, and FRANCIS AUGUSTUS HURLBUT, Strand, England, assignors to The United Glass Bottle Manufacturers Limited, London, England. Filed Oct. 27, 1927, Serial No. 229,095, and in Great Britain Oct. 29, 1926. 10 Claims. (Cl. 49—47.)



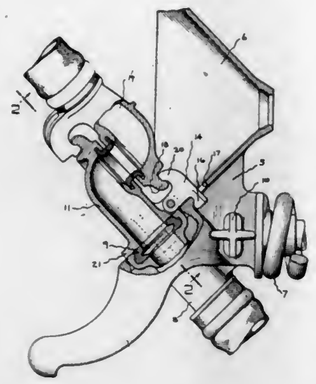
10. A glass annealing leer, comprising a series of transverse metal compartments arranged to form the roof and sides of a tunnel, a series of transverse metal compartments arranged to form the bottom of said tunnel, a supply conduit for temperature controlling medium in communication with the roof and side compartments by separate and independent controllable passages, a supply conduit connected to the bottom compartments by separate and independently controllable passages, outlet ducts communicating with the ends of the said compartments for the outflow of the temperature controlling medium, controlling means associated with said outlet ducts, means whereby any number of the roof and side compartments or the bottom compartments can be cut off from the outflow duct and placed in direct communication with each other, dampers or valves for controlling openings in the inner and outer walls of the said compartments, whereby communication may be established with outside air through the openings in the outer walls when desired and with the interior of the tunnel when desired, a hinged plate located within the tunnel for preventing a medium in any part of the tunnel from passing into another part thereof, and exterior operating means by means of which the said plate can be set to suit the height of the ware passing through the tunnel.

1,828,071. HIGHWAY GUARD RAIL. JOSEPH H. RAMSEY, Albany, N. Y. Filed Aug. 4, 1930. Serial No. 472,777. 4 Claims. (Cl. 248—31.)



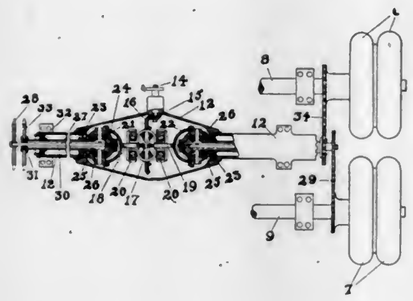
2. A support for a highway guard-rail comprising similar mating members having opposed seats for embracing said guard-rail, a pair of side-frames for supporting the guard-rail in spaced relationship to a post, coupling elements interposed between the side-frames and adapted to be embraced by a securing member, and a clearance provided when the mating members are assembled one with the other to permit introduction of the securing member between the side-frames into its operative position relative to the mating members and the post.

1,828,072. INTERCHANGE DEVICE FOR AUTOMATIC CONNECTERS FOR RAILWAY CARS. JOSEPH ROBINSON, New York, N. Y. Filed June 18, 1928. Serial No. 286,265. 13 Claims. (Cl. 285—58.)



1. An interchange device for automatic train pipe connecters, comprising in combination, a coupling head, an interchange member adapted to be swung across the coupling face of said head into the service position, means movable relative to said member and cooperating with said head for locking the member in the service position only while the hose of an unequipped car is in interchange connection with said member, said means including a part carried by said hose.

1,828,073. DRIVING MECHANISM FOR AUTOMOTIVE VEHICLES. ORVILLE RAYMOND ROBINSON, Ventura, Calif. Filed Nov. 25, 1929. Serial No. 409,463. 8 Claims. (Cl. 180—22.)



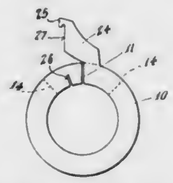
1. In an automotive vehicle, a plurality of driving wheels on each side of the vehicle, a gear casing connected to and extending transversely of the frame of the vehicle, a pair of alined shaft sections within the gear casing, differential gearing within the casing and connecting the adjacent ends of the shaft sections, said differential gearing comprising pinions secured to the respective shaft sections, a master gear connected with the differential gearing, means for driving the master gear, a differential housing connected with each of the shaft sections, bearings within which the shaft sections are journaled, said bearings projecting from the gear casing and supporting the respective shaft sections between the differential housings and the pinions thereon, a set of differential gearing within each of said differential housings, a tubular shaft connected with one set of differential gearing and extending outwardly through one end of the gear casing, a shaft journaled within said tubular shaft, projecting beyond the latter and connected with the same set of differential gearing, means connected with the last mentioned shaft and the tubular shaft for rotating the driving wheels on one side of the vehicle, a second tubular shaft connected with the other set of differential gearing and extending from the latter outwardly through the other end of the gear casing, a shaft journaled within and projecting beyond the latter tubular shaft and connected with the differential gearing thereof, and means connected with the last mentioned tubular shaft and the shaft journaled therein for rotating the driving wheels on the other side of the vehicle.

1,828,074. METHOD AND TOOL FOR LAPPING OR HONING. FREDERICK W. ROEBBEL and HARRY E. ROGERS, St. Louis, Mo. Filed Mar. 24, 1928. Serial No. 264,520. 8 Claims. (Cl. 51—184.3.)



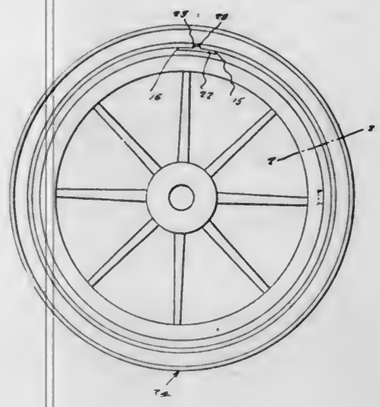
1. In a tool of the class described, a body, a groove in the side of said body, the bottom of said groove being inclined from the axis of said body, a lapping or honing element mounted in said groove and slidable lengthwise and projecting beyond the periphery of said body, a sleeve fitting over said body and having a slot for receiving said element, and means connected to said sleeve for moving said element lengthwise of said groove while the lapping or honing operation is being performed.

1,828,075. APPARATUS FOR CALKING PIPE. WILLIAM HURFORD SAUNDERS, Los Angeles, Calif., assignor to Pacific Clay Products, Los Angeles, Calif., a Corporation of California. Filed May 5, 1928. Serial No. 275,539. 1 Claim. (Cl. 25—127.)



An apparatus for forming joints in bell and spigot pipes comprising, an annular ring of deformable but self-supporting material having an inner diameter adapted to receive the bell end of the pipe, a substantially radial slit in said ring at one portion of its periphery, an arcuate extension connected to the ring adjoining the slit and a short slit in the ring adapted to engage a portion of the arcuate extension on the other side of the substantially radial slit.

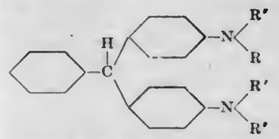
1,828,076. DEMOUNTABLE TIRE RIM. JOHN SCHEIDEMAN, Cincinnati, Ohio. Filed May 29, 1930. Serial No. 457,212. 2 Claims. (Cl. 152—21.)



1. A rim for pneumatic tires comprising a rim base having a fixed side flange at one peripheral edge and an annular channel on its peripheral face adjacent to the other edge, said rim base also having a notch opening out to the last mentioned edge and communicating with the channel, a stop pin in the channel intermediate the ends of the notch, a removable tire flange having a channel on its radially inner face, and a split locking ring for fitting in the channels to hold the removable flange in place on the rim base, the ends of the split ring lying on opposite sides of the stop pin and one of said ends being spaced from said stop pin, anchoring shoulders formed on the ends of the split ring for engaging the end walls of the notches and a flexible tongue connected to one end of the split ring and fitting in the notch when the ring is expanded and adapted to be forced from the notch to permit contraction of the split ring.

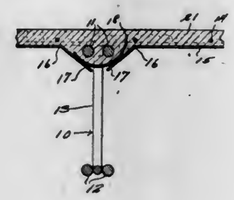
1,828,077. AMINOALKYL DERIVATIVES OF AMINOTRIPHENYLMETHANE COMPOUNDS. WERNER SCHULEMANN, Vohwinkel-Hammerstein, and AUGUST WINGLER and FRITZ SCHÖNHÖFER, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Filed Aug. 24, 1925, Serial No. 52,229, and in Germany Sept. 11, 1924. 2 Claims. (Cl. 260—68.)

1. As new products, aminoalkyl derivatives of aminotriphenylmethane compounds, said products having the general formula:



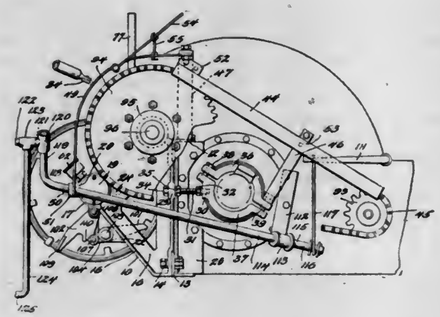
wherein R represents a di-alkyl-amino-ethylene residue, R′ represents one of the substituents alkyl and di-alkyl-amino-ethylene, one R″ stands for an alkyl or an acyl group and the other R″ stands for an alkyl, and wherein the benzene residues of the triphenyl-methane nuclei may bear a substituent of the group consisting of alkyl and dialkyl-amino groups.

1,828,078. METHOD OF MAKING CONCRETE FLOORS OR ROOFS. DAVID A. SEALEY, East Orange, N. J. Filed Apr. 5, 1928. Serial No. 267,724. 3 Claims. (Cl. 72—70.)



1. A method of forming concrete floors supported upon structural metal floor joists consisting in laying wire mesh fabric on the top of the joist, the fabric having a form of thin sheet material attached thereto beneath the same, the sheet being longitudinally slit at each joist, bending down the material at the margin of each slit to a level below the upper chords of the joists, disposing a trough-shaped form below the upper chord of each joist and between the margins of the sheet material, and disposing concrete on the said forms to thereby embed the wire fabric and the upper chords of the joists in the concrete.

1,828,079. TRACTOR EQUIPMENT COMBINATION. WILLIAM D. SHOEMAKER, Drummond, Chevy Chase, Md. Filed Feb. 29, 1928. Serial No. 258,067. 16 Claims. (Cl. 180—53.)

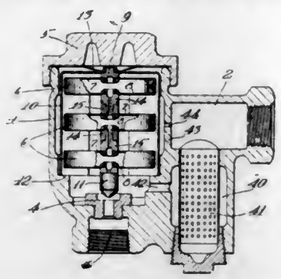


1. In a tractor-equipment combination, a tractor and a piece of equipment in the nature of an attachment adapted to be mounted upon either the front or the rear of the tractor and to be driven from the tractor power plant, said equipment attachment comprising parts possessing the individual characteristic of reversibility to permit the attachment to be mounted upon either of its positions on the tractor.

1,828,080. THERMOSTATIC STEAM TRAP. WILLIAM K. SIMPSON, Waterbury, Conn., assignor to Hoffman Specialty Company, Waterbury, Conn., a Corporation of Illinois. Filed Sept. 25, 1928. Serial No. 308,270. 6 Claims. (Cl. 236—58.)

1. In a thermostat of the character described, complemental diaphragms peripherally connected together to form a drum, said diaphragms having peripheral walls offset toward one another, and outwardly extending webs

in parallel with one another, combined with clamp rings flanking and bearing on the outer sides of said webs and a



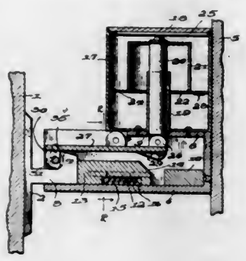
binder ring surrounding said clamp rings and having flanges in pressure exerting engagement against the outer end surfaces of the clamp rings.

1,828,081. HOSIERY PROTECTOR. CORA JANE SMITH, Olympia, Wash. Filed Jan. 18, 1929. Serial No. 338,465. 1 Claim. (Cl. 36—72.)



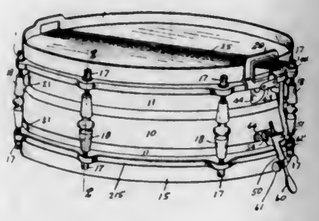
A protector to prevent soiling of hosiery during house work comprising a body having its upper portion shaped to snugly fit around the ankle of the wearer, and its lower portion made flaring or gaiter-shaped to cover the upper portion of a foot and elongated to extend over and below the upper part of the shoe of the wearer, said body consisting of two suitably shaped sections stitched together along the front medial line of the protector and free along the back medial line, the upper and lower edges of the sections being folded inwardly and stitched to the body to provide upper and lower tubular casings or hems respectively, and a spring clasp encased in each casing or hem for securing the protector in position.

1,828,082. DOORCHECK. WILLIAM E. STONEBRIDGE, New York, N. Y. Filed Jan. 10, 1930. Serial No. 419,857. 10 Claims. (Cl. 292—198.)



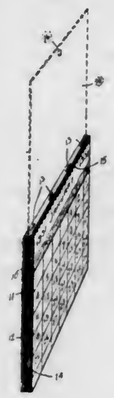
1. A hold-back comprising a casing, a dash-pot mounted above the casing and having a piston rod extending downwardly into the casing, said piston rod partaking of relatively free upward and retarded downward movements, a pivoted latch member mounted within the casing having one end attached to the piston rod, and a catch adapted to enter the casing and to be engaged by the free end of the pivoted latch member to be retained within the casing by the latch member until released by the action of the dash-pot at the completion of the retarded downward movement of the piston rod thereof.

1,828,083. SNARE DRUM. CECIL H. STRUPE, Indianapolis, Ind., assignor to Leedy Manufacturing Company, Indianapolis, Ind., a Corporation. Filed Sept. 20, 1929. Serial No. 393,897. 8 Claims. (Cl. 84—415.)



1. A drum having snares, adjustable levers side by side with which the ends of the snares are individually attached, and a screw for adjusting each lever, whereby the snares may be independently tensioned, substantially as set forth.

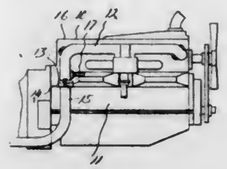
1,828,084. COMBINATION DISPLAY AND INFORMATION BOOK. JAMES M. SWAN, Indianapolis, Ind., assignor to Sentinal Printing Company, Indianapolis, Ind., a Corporation. Filed Apr. 18, 1931. Serial No. 531,159. 3 Claims. (Cl. 281—16.)



1. An article of the character described, comprising a plurality of data pages, a pair of cover sheets embracing said pages and permanently secured thereto, a plurality of display sheets secured to the exterior of one of said covers and display matter on the other cover, said last-mentioned cover being provided with means for hanging the same in extended alignment with the first-mentioned cover to provide a hanging support for the display sheets.

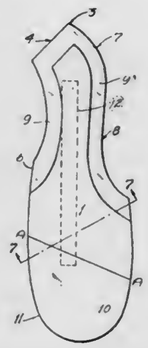
1,828,085. CRANK CASE VENTILATOR. AUGUSTINE J. SYROVY and ROBERT N. JANEWAY, Detroit, Mich., assignors, by mesne assignments, to Chrysler Corporation, a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,754. 3 Claims. (Cl. 123—171.)

1. In a crank case ventilator, a crank case, an exhaust manifold, a conduit for withdrawing gases from the said crank case and discharging the same into the said exhaust manifold, the said conduit having its inlet end communicating with the said crank case and its outlet end within the said exhaust manifold and opening in the direction of flow of the exhaust gases through the said manifold, and means for increasing the velocity of the flow of the ex-



haust gases within the said manifold as they pass the outlet end of the said conduit to increase the suction within the said conduit, said means including a sheet metal tubular member clamped within said exhaust manifold and forming a Venturi passage therein adjacent the outlet end of the said conduit.

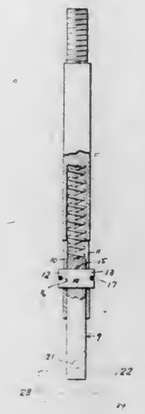
1,828,086. ARCH SUPPORT. CHARLES TWEEDIE, Jefferson City, Mo. Filed Sept. 11, 1929. Serial No. 391,751. 2 Claims. (Cl. 36—71.)



2. The combination with a shoe of an arch support pad comprising a single piece of material adapted to underlie the instep and heel of the foot of a wearer and whose front end is of angular form with the foremost point positioned to lie just back of the position of the anterior head of the second metatarsal whence said front edge extends inwardly and rearwardly substantially parallel with the line of the first and second anterior metatarsal joints to the marginal portion of the insole, the outer front edge extending outwardly and rearwardly substantially parallel with the line passing through the second, third and fourth anterior metatarsal joints, and the outer side edge being positioned below the space between the fourth and fifth metatarsals, the forward portion of said pad being of increasing thickness inwardly from its margins, the heel portion of said pad being of increasing thickness from the rear inner portion thereof, and a longitudinal stiffening member underlying the instep portion of said support.

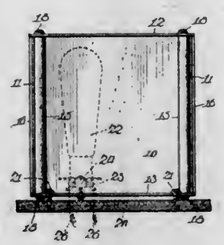
1,828,087. NONCHATTERING VALVE GRINDER STEM. JOHN J. VLCEK, Wilson, Kans. Filed Apr. 1, 1930. Serial No. 440,824. 1 Claim. (Cl. 51—29.)

In a valve grinding tool, a stem composed of a pair of telescoping sections, the outer section having a pair of oppositely arranged longitudinally extending slots therein, a plate passing through the inner section and having its ends extending through the slots, said ends of the plate having notches therein, a ring encircling the outer



section and engaging the notches and a spring in the outer section and bearing against the inner end of the other section.

1,828,088. CONTAINER CONSTRUCTION. WALTER W. ROBINSON, Beloit, Wis., assignor of one-half to Benjamin F. Lyons, Chicago, Ill. Filed Oct. 8, 1928. Serial No. 311,236. 3 Claims. (Cl. 220—75.)

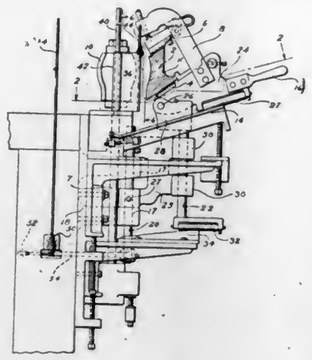


1. Container construction comprising a pair of end plates, corner posts extending between said plates, each of said posts comprising a substantially cylindrical body and a pair of longitudinally extending flanges forming with the cylindrical body a pair of substantially U-shaped ways, the ways being directed angularly with respect to each other and the body being within the angle defined by the ways, side plates respectively extending into ways of adjacent posts and positioned between the end plates, and means holding the end plates upon said posts.

1,828,089. GUARD FOR WOOD-HEEL-TURNING MACHINES. WESLEY JOHN SHAW, Haverhill, Mass., assignor to New England Wood Heel Co., Haverhill, Mass., a Corporation of Massachusetts. Filed Sept. 6, 1927. Serial No. 217,616. 1 Claim. (Cl. 74—105.)

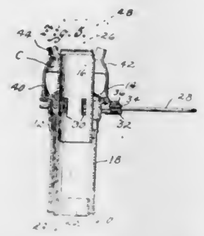
A heel-turning machine having, in combination, two horizontally spaced cutters for respectively turning opposite sides of a heel block, a clamp for holding the heel block, a jack upon which the clamp is mounted, the jack being constructed and arranged to swing from an intermediate position between the cutters toward either cutter, a vertically slidable guard for each cutter, the guards

being interposed between the cutters and the clamp when the jack occupies the intermediate position, and means



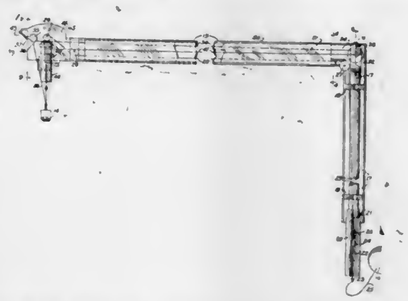
for sliding each guard vertically out of its interposed position when the jack is swung from the intermediate position toward the corresponding cutter.

1,828,090. LANTERN BURNER. ERNEST SHEPARD, Conception Junction, Mo. Filed May 7, 1929. Serial No. 361,193. 4 Claims. (Cl. 67—53.)



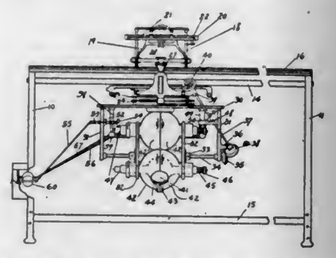
2. In a burner of the character disclosed, a flattened wick tube, a shield therefor surrounding the upper end of the wick tube and spaced therefrom, said shield having notches in the sides thereof extending down from the top edge of the shield and located adjacent the ends of the wick tube, the side portions of the shield between the notches being inflared and the end portions of the shield between the notches being outflared.

1,828,091. GAME APPARATUS. LEWIS B. SPAFFORD, Chicago, Ill. Filed Mar. 22, 1928. Serial No. 263,640. 15 Claims. (Cl. 273—35.)



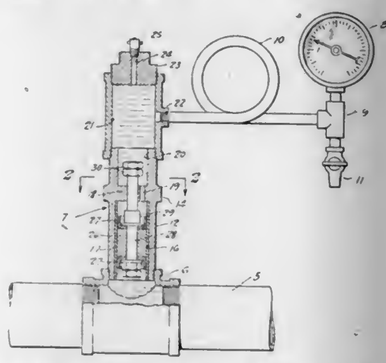
1. A game apparatus comprising, in combination, primary and secondary projectible members, an arm, an impact element carried by the arm, and means carried by the arm whereby the projection of the primary member will cause the impact element to project the secondary member similar to the projection of the primary member with respect to direction, elevation, and distance.

1,828,092. TUBE HOLDER. JULIUS B. WANTZ, Oak Park, and JULIUS J. GROBE, Chicago, Ill., assignors to General Electric X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed Dec. 3, 1926. Serial No. 152,347. 1 Claim. (Cl. 250—34.)



X-ray apparatus comprising a tube having a conducting sleeve and a conducting head insulated therefrom at one end, and a conducting sleeve at its other end, a shiftable holder for such tube, means for moving said holder, and a series of spring actuated contacts for establishing electrical connection with said tube sleeves and head as an incident to such tube being moved into a predetermined operable position.

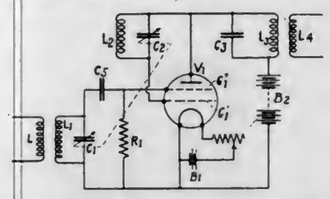
1,828,093. GAUGE PROTECTOR. DAVID E. AILMAN, Willows, Calif. Filed Jan. 3, 1927. Serial No. 158,584. 1 Claim. (Cl. 73—31.)



A gauge protector comprising a hollow cylindrical member adapted to be secured at one end to a source of fluid under pressure, a ported head at the opposite end, a piston responsive to pressure slidably mounted in the bore of said member and arranged to be limited in its travel by the head, a fluid transmission chamber mounted on said cylinder and communicating with the bore of said member through said ports and adapted to be connected to a pressure gauge, and a check valve nipple connected to said chamber for introduction of fluid into said chamber.

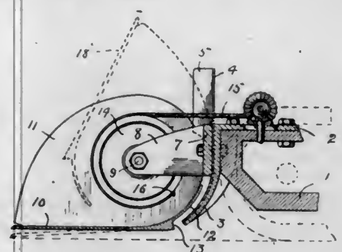
1,828,094. ELECTRICAL FREQUENCY-CHANGING APPARATUS OF THE THERMIONIC TYPE. HUMFREY ANDREWES, Highgate, London, England, assignor of fifty per cent to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1926, Serial No. 92,433, and in Great Britain Mar. 5, 1925. 9 Claims. (Cl. 250—20.)

1. In a radio circuit, a four-electrode tube having a heated cathode, an anode and two grid electrodes, one of which is maintained at a positive potential with respect to the other, a grid leak resistance, an oscillatory circuit in which oscillations of the frequency of and due to the received signals are established, one of the grid electrodes being connected therewith, a local source of oscillations



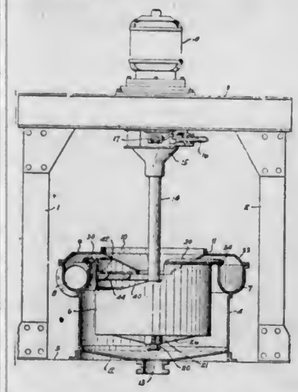
of different frequency, said second grid being subject to potential fluctuations therefrom and connected through said "grid leak" resistance to the cathode of the tube, an oscillatory circuit tuned to the resultant or "beat" frequency, and an anode connected to said last mentioned oscillatory circuit.

1,828,095. MECHANICAL SHOVEL. ROY M. BAKER, Chisholm, Minn. Filed Apr. 5, 1930. Serial No. 441,844. 5 Claims. (Cl. 37—118.)



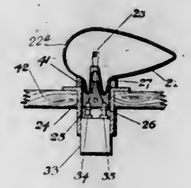
3. A support for a rotary shovel comprising a U-shaped bracket, shovel supporting trunnions in the free ends of the bracket, a shovel upon said trunnions externally of the bracket, and means whereby the shovel is dumped beneath the axis thereof by extreme elevation of the forward end of the shovel.

1,828,096. CENTRIFUGAL PROCESS AND MECHANISM. TANDY A. BAYSON, Troy, N. Y. Filed June 14, 1929. Serial No. 370,967. Renewed Aug. 18, 1930. 35 Claims. (Cl. 233—21.)



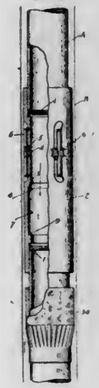
1. The process of purifying fluent material containing impurities of greater or less specific gravity than that of an intermediate product to be purified which comprises rotating a mass thereof to form a hollow cylindrical body of fluid, the radial thickness of material being less than one sixth of the radius of the cylinder, flowing axially a radially intermediate and relatively pure portion of the fluent material, and preventing axial movement of the radially inner and outer portions of the fluent material.

1,828,097. AIRCRAFT NAVIGATION LIGHT. CHARLES H. COLVIN, Brooklyn, N. Y., assignor, by mesne assignments, to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 6, 1923. Serial No. 673,082. 2 Claims. (Cl. 176—16.)



1. A lamp comprising a base, filament means carried by the base, a bulb carried on the base including a transparent light-emitting portion on one side of the filament and a streamline portion on the other side of the filament, and an anchorage means carried by the base by which the axis of the streamline portion is fixed in a predeterminable direction.

1,828,098. WELL CEMENTING. ERD V. CROWELL, Los Angeles, Calif. Filed Mar. 1, 1927. Serial No. 171,851. 1 Claim. (Cl. 166—1.)

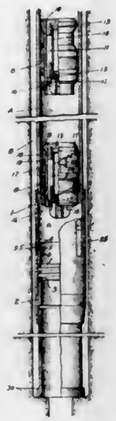


Well casing having an unobstructed open bore throughout its length, a lateral port in the casing, the unobstructed open bore of the casing being recessed below the port with said recess forming a seat, a plug slidable in the bore of the casing and adapted for expansion in the recess to anchor the plug on the seat so as to shut-off the entire bore of the casing below the port and leave the entire bore of the casing unobstructed above the port.

1,828,099. APPARATUS FOR CEMENTING WELLS. ERD V. CROWELL, Los Angeles, Calif. Filed July 26, 1927. Serial No. 208,539. 4 Claims. (Cl. 166—1.)

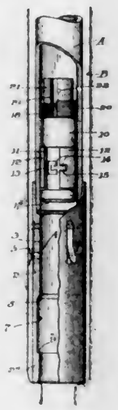
1. Well casing having a ported section with a bore of slightly greater diameter than that of the string of casing a sleeve valve in the bore of the ported section, a spring

adapted to elevate the sleeve valve for closing the port, and a plug adapted for contraction so that it may be lowered in the casing and adapted to expand in the enlarged



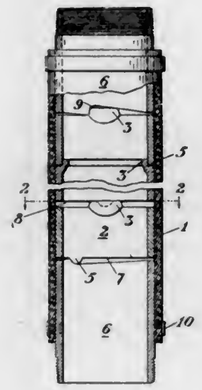
bore of the ported section so as to engage and depress the sleeve valve or opening the port and anchoring the plug on the depressed sleeve with said anchored plug closing the bore of the casing below the open port.

1,828,100. METHOD OF CEMENTING WELLS. ERD V. CROWELL, Los Angeles, Calif. Original application filed Mar. 1, 1927, Serial No. 171,851. Divided and this application filed Jan. 10, 1929. Serial No. 331,411. 14 Claims. (Cl. 166—21.)



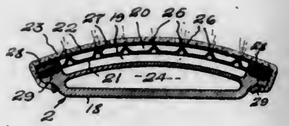
1. The method of cementing wells which consists of lowering into a well a string of casing having an unobstructed open bore, and without subsequently withdrawing the casing establishing fluid circulation downwardly therethrough, continuing said circulation through peripheral ports in the casing in spaced relation above its lower end and thence upwardly in the space outside the casing, introducing a cementing mixture into the casing above the fluid and separated therefrom by a suitable barrier and forcing the cementing mixture downwardly to drive the fluid before it, anchoring the barrier in the unobstructed bore of the casing below the ports, and after introducing a predetermined quantity of the cementing mixture, introducing fluid into the casing above the cementing mixture and separated therefrom by a suitable barrier and forcing said latter barrier downwardly by said fluid for discharging the cementing mixture through the peripheral ports.

1,828,101. FLEXIBLE HOSE. EDWIN S. CULVER, Oakland, Calif., assignor, by mesne assignments, to Oliver United Filters Incorporated, San Francisco, Calif., a Corporation of Nevada. Filed June 18, 1928. Serial No. 286,354. 2 Claims. (Cl. 137—90.)



1. A hose comprising a tubular flexible hose body and a tubular reinforcement extending longitudinally thereof, one snugly embracing the other, said reinforcement including a plurality of relatively indistortable rings detachably assembled to fulcrum on adjacent edges of succeeding rings on axes at right angles to the axis of the hose, and a tubular attaching nipple at each end of the reinforcement, each nipple having bearing contact with its associated ring and adjustable longitudinally of the hose on the imparting of axial rotation thereto relative to the associated rings.

1,828,102. PRESSING MACHINE ELEMENT. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 25, 1929. Serial No. 358,139. 8 Claims. (Cl. 68—9.)

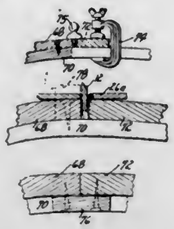


6. In a pressing machine, a pressing element formed with a recessed body portion; a perforated plate overlying the open side of said recess and secured to the body portion; a partition mounted in the recess of the body portion and dividing the recess enclosed by the plate into inner and outer chambers, said partition being formed with jet openings therein located in line with some of the holes in the perforated plate.

1,828,103. BOAT PLANK FITTING METHOD. ARTHUR R. DE WITT, Harbor Springs, Mich., assignor of one-half to Carl L. Wright, Harbor Springs, Mich. Filed Mar. 3, 1930. Serial No. 432,684. 1 Claim. (Cl. 144—309.)

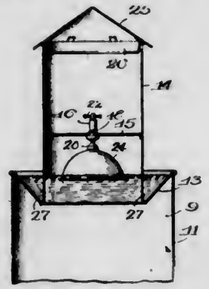
In a boat plank fitting method, the attachment of one or more planks cut to outline shape to a boat frame, temporarily clamping the next plank in proper position on said

frame but in slightly spaced relation to the next adjacent plank, the passage of a cutting tool therebetween whereby



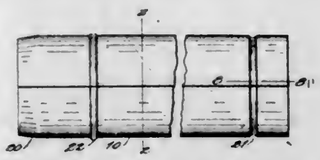
the adjacent edges of said planks are cut parallel with each other and then shifting the latter plank to its final position on the boat frame and securing it.

1,828,104. DRINKING APPARATUS FOR POULTRY. HARVEY J. DIVEKEY, Aurora, Ill., assignor to Illinois Supply Company, Aurora, Ill., a Copartnership composed of Harvey J. Divekey, William M. Willett, sr., and William M. Willett, jr. Filed Sept. 24, 1930. Serial No. 484,060. 4 Claims. (Cl. 119—73.)



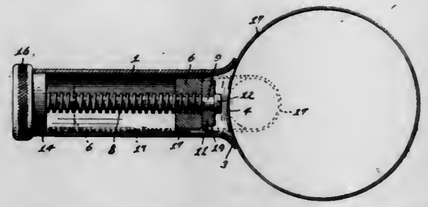
1. A drinking apparatus for poultry comprising a perch and standards for holding the same a suitable distance above the ground, a casing secured centrally of and spaced from said perch, an inverted, truncated, conical top for said casing, a reservoir seated in said top, a transverse partition in said reservoir having a central perforation therein, a tubular valve casing extending through said perforation, said valve casing having an annular interior recess in its lower end, a removable valve seat located in said annular recess, a valve stem extended through said casing, a removable pin extending through said valve stem for preventing the downward withdrawal thereof from said casing, a valve secured to the lower end of said stem and a semispherical float cup secured to the lower surface of said valve.

1,828,105. STOVE PIPE. HERBERT EMBREE, Hamilton, Ontario, Canada. Filed July 11, 1930. Serial No. 467,207. 1 Claim. (Cl. 126—309.)



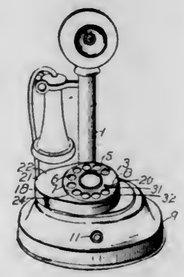
A sheet metal pipe formed from a single sheet of metal bent to bring its longitudinal edges together, one of said edges being provided with an outwardly facing channel for the greater part of its length and with a short inwardly facing channel adjacent one end, the other longitudinal edge having a short inwardly facing channel opposed to the inwardly facing channel of the first edge, said inwardly facing channels each having a side adapted to enter the opposed channel, the side of the second short channel being cut away at one end and bent under the body of the pipe to secure the side of the second channel against springing open.

1,828,106. TOOL. SYLVIO C. ERTOLA, San Francisco, Calif. Filed Apr. 23, 1930. Serial No. 446,627. 2 Claims. (Cl. 81—3.2.)



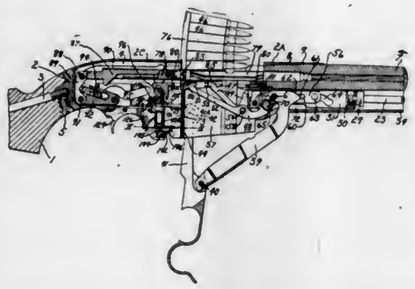
1. A tool comprising a hollow tubular handle provided with a flaring end; a nut slidably mounted within the handle; a bearing rigidly mounted within the flaring end of the handle; an adjusting member mounted within the handle in threaded engagement with the nut and having one end rotatably connected to the bearing and provided with means engaging opposite sides of the bearing to hold the adjusting member against longitudinal movement in either direction within the handle; an actuating knob mounted upon the opposite end of the adjusting member and extending outwardly from the handle, said knob being provided with a bearing portion seating within the end of the handle to form a bearing for the outer end of the adjusting member; and a flexible band having its ends extending inwardly past the bearing and secured to the nut, the intermediate portion of the band extending outwardly in the form of a loop, said ends being movable inwardly and outwardly along the handle with the nut to vary the size of the loop to fit a desired object to be engaged, the flaring ends of the handle being movable to seat against the surface of an object engaged.

1,828,107. REFLECTOR FOR TELEPHONE DIALS. FRANK O. EVERTS, Kansas City, Mo. Filed June 20, 1928. Serial No. 286,860. 11 Claims. (Cl. 240—2.17.)



1. In an automatic telephone dial illuminating device, a bulb supported substantially in the plane of the face of the dial, a reflecting band having a width substantially equal to the width of the dial and comprising a semicircular portion positioned adjacent the dial and an elongated arcuate portion extending on the opposite side of the bulb from the dial, a cover extending over said elongated portion of the band, and means for attaching the band to the dial.

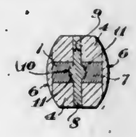
1,828,108. MAGAZINE GUN. THOMAS E. FLOWERS, Memphis, Tenn. Filed Dec. 14, 1929. Serial No. 414,054. 17 Claims. (Cl. 42—3.)



3. In a gun, a receiver, a breech block vertically slidable in said receiver, said breech block having longitudinal guideways therein, means for aligning the axis of said guideways with the barrel of said gun, a cartridge engaging head reciprocatably mounted in said guideways and means for reciprocating said head to place or remove a cartridge from said barrel.

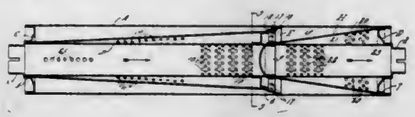
11. In a gun, a receiver, a frame mounted therein, said frame having vertically disposed walls, a magazine disposed in said frame, vertical oppositely disposed ribs extending inward from the walls of said magazine and adapted to engage the extractor grooves of cartridges to be used therewith, a horizontally disposed and vertically reciprocatable floor plate mounted in said magazine, means for imparting vertical movement to said floor plate and means limiting the amount of said movement.

1,828,109. TENNIS RACKET. WILLIAM H. FOX, Minneapolis, Minn. Filed Sept. 13, 1928. Serial No. 305,813. 1 Claim. (Cl. 273—73.)



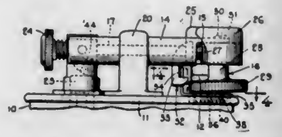
A tennis racket having a wooden handle, said handle having a transverse passageway in the plane of the striking face of the racket, the walls of the passageway being irregular, and a rubber member molded in the passageway, said member filling the passageway and held against removal therefrom by said irregular surfaces into which the rubber member is molded.

1,828,110. MUFFLER. LUCIEN L. HAAS, Buffalo, N. Y., assignor to Buffalo Pressed Steel Company, Buffalo, N. Y. Filed July 29, 1930. Serial No. 471,472. 3 Claims. (Cl. 137—160.)



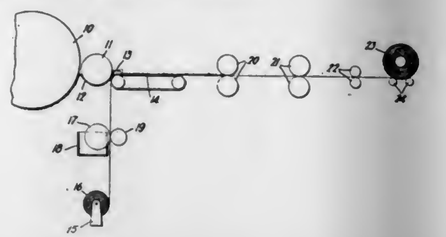
1. A muffler including inner and outer cylindrical shells, a transverse partition between said shells intermediate of the ends thereof, a tapering shell arranged between said inner and outer shells at one side of said transverse partition, and a second tapering shell between said inner and outer shells at the other side of said transverse partition, each tapering shell dividing the space between the inner and outer shells into a pair of chambers of greater cross sectional area at one end thereof than at the other end, and apertures in said shells and partition for discharging gases successively into portions of said chambers of greater cross sectional area and discharging gases from portions of said chambers of lesser cross sectional area.

1,828,111. POCKET CIGAR LIGHTER. CHARLES HARDY, New York, N. Y., assignor to Wales Novelties Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 7, 1927. Serial No. 231,570. 2 Claims. (Cl. 67—7.1.)



1. A pocket lighter comprising, in combination, a fuel receptacle having a holder for a wick, a snuffer arm oscillatable between open and closed positions, resilient means for moving said snuffer arm from its closed to its open position, sparking mechanism for igniting said wick including an operating finger wheel mounted on a vertical spindle, means supporting one end of said spindle, an oscillatable plate provided with a bearing for the other end of said spindle, latch means mounted on said plate for engaging and holding the snuffer arm in closed position, resilient means tending to oscillate said plate in latching position in order to keep the snuffer arm closed, the axis of oscillation of the plate and the axis of rotation of the finger wheel being so eccentrically related that rotative pressure applied to the finger wheel oscillates the plate and releases the snuffer arm to permit ignition of the wick.

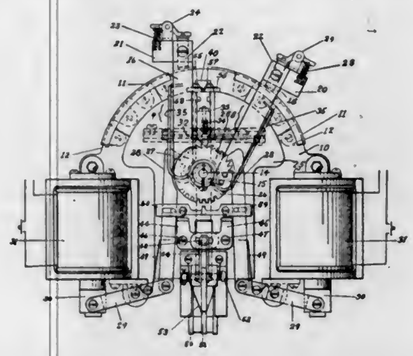
1,828,112. ASBESTOS TAPE AND YARN AND PROCESS OF MAKING THE SAME. JOHN ALLEN HEANY, New Haven, Conn., assignor to World Bestos Corporation, Paterson, N. J., a Corporation of Delaware. Filed May 7, 1927, Serial No. 189,718, and in Canada Oct. 4, 1924. 6 Claims. (Cl. 117—60.)



1. A process of making asbestos yarn which includes securing a layer of asbestos material to a sheet of supporting material by means of adhesive material, separating said sheet into strips, and twining said strips with filaments to form yarn.

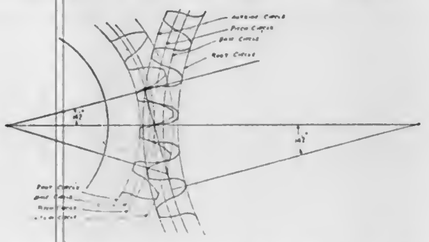
1,828,113. MOTOR CONTROL. FRANK H. HOWARD, Reading, Pa., assignor to The Push Button Electric Control Corporation, Reading, Pa., a Corporation of Pennsylvania. Filed Oct. 12, 1928. Serial No. 312,002. 15 Claims. (Cl. 200—105.)

1. An electric controller comprising two sets of contact rings and segments, a pair of contact fingers adapted to engage said rings and segments, electro-magnetic means for selectively effecting step-by-step relative movement between either finger and a set of contact rings and segments, an additional electro-magnet, and means for re-



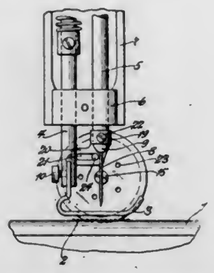
turning either finger to its initial relative position with respect to said rings and segments upon the energization of said last mentioned electro-magnet.

1,828,114. MATING SPUR GEAR. WILLIAM H. HUBBARD, Muncie, Ind. Filed May 29, 1926, Serial No. 112,522. Renewed Mar. 7, 1931. 3 Claims. (Cl. 74—41.)



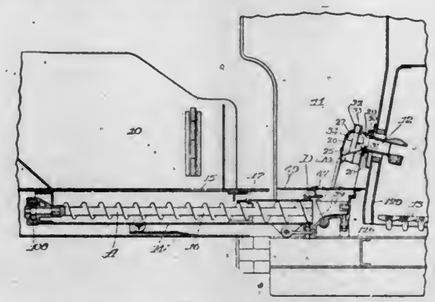
1. A pair of mating involute spur gears, the pinion gear having less than thirty teeth, each of said gears at all times having at least two teeth in contact with the teeth of the other gear and operatng on fixed centers, said gears having a line of action greater than two and inequally divided by the pitch point with the greater length of active profile included in the pinion.

1,828,115. SEWING MACHINE. KARL KLEIN, St. Louis, Mo. Filed July 5, 1929. Serial No. 376,034. 11 Claims. (Cl. 112—128.)



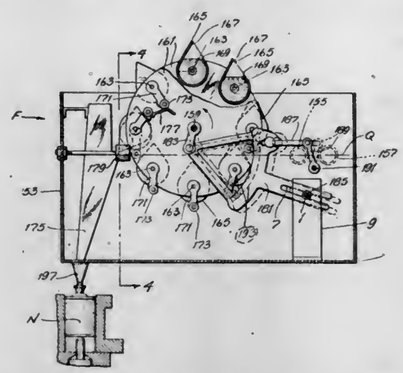
1. In a sewing machine, the combination with a vertically reciprocating bar, of a rigid shear element, a pivoted shear element for coopernting with said rigid shear element to cut material passing under said bar, a bracket supported and operated by said bar, a device projecting from said pivoted shear element and engaging said bracket for operating said pivoted shear element by said bracket, and means for supporting said device in different positions on said pivoted shear element eccentrically of the axis of the pivot on which said pivoted shear element is mounted.

1,828,116. LOCOMOTIVE STOKER. NATHAN M. LOWER, Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 8, 1926. Serial No. 86,843. 22 Claims. (Cl. 198—15.)



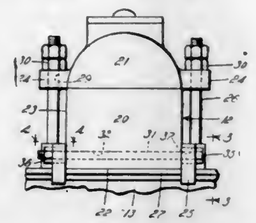
1. In a locomotive stoker, the combination of a casing having an opening to the rear, a plurality of openings at the top and a transverse bore, a transfer conveyor communicating with the rearward opening and including a transfer screw, elevators communicating with the top openings and each including an elevator screw, a worm gear for each elevator screw, a worm in the transverse bore meshing with each of the worm gears, a third worm gear in the casing operatively connected with the transfer screw, and the third worm in the transverse bore meshing with the last-mentioned worm gear.

1,828,117. FILLER MECHANISM. EDWARD MALLINCKRODT, Jr., St. Louis, Mo., assignor to Mallinckrodt Chemical Works, St. Louis, Mo., a Corporation of Missouri. Original application filed June 25, 1926, Serial No. 118,440. Divided and this application filed Dec. 7, 1927. Serial No. 238,349. 12 Claims. (Cl. 226—104.)



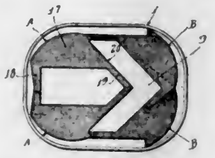
1. A filler comprising a supply tank adapted to contain liquid, means for maintaining said liquid at a given level, a trough, movable depending dippers adapted to dip liquid by moving substantially upwardly through the liquid surface, means for adjusting the angle at which the dippers approach said surface whereby they receive more or less liquid, and means for causing the dippers to tilt to discharge into the trough.

1,828,118. BEARING MOUNTING. WILLIAM H. MAXWELL, Beverly Hills, Calif., assignor to Baash-Ross Tool Company, Incorporated, Los Angeles, Calif., a Corporation of California. Filed Apr. 4, 1929. Serial No. 352,533. 3 Claims. (Cl. 308—59.)



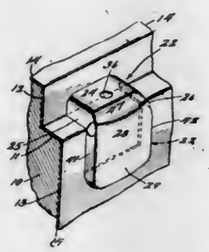
1. A mounting for securing a bearing on a support including, a pair of jaws at each side of the bearing engaging the support, a stem extending upwardly from each pair of jaws through the cap of the bearing, a clamp nut on each stem above the cap, and a bolt extending between the pairs of jaws holding them in place at the bearing.

1,828,119. DIRECTION SIGNAL. HERBERT W. MILLER, Beverly Hills, Calif. Filed June 10, 1929. Serial No. 369,672. 11 Claims. (Cl. 116—47.)



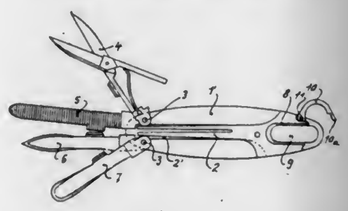
1. A segment including two pairs of pivotally mounted vanes, one pair of the vanes being formed with notches in their edges cooperating to form an opening representing the shank of an arrow in one position and the other pair of vanes having notches in their edges rendering them capable in a corresponding position to cooperate with the first pair of vanes to form an opening representing the head of an arrow, said vanes being formed so that when moved to an opposite position the notches in the edges of the first pair of vanes cooperate with the notches in the edges of the second pair of vanes to form an opening representing the head and shaft of an arrow facing in an opposite direction.

1,828,120. ANTIRATTLER FOR DOORS AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Perry Products, Inc., Elkhart, Ind., a Corporation of Indiana. Filed Nov. 29, 1929. Serial No. 410,487. 10 Claims. (Cl. 16—86.)



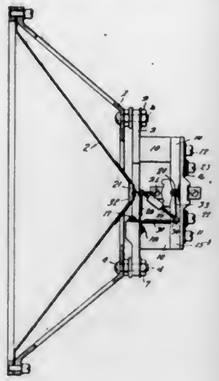
1. The combination with the stanchion of a door jamb, said stanchion being provided with a sill and having a socket reaching inwardly at the position of said sill, and a facing of sheet metal overlying the stanchion at the position of the sill and having an opening registering with the socket of the stanchion, the edge position of the sheet metal overlying the bottom and side faces of the socket, of a sheet metal clip seated into said socket and having a back face portion extending in a direction parallel to the direction of door closing movement and seating against the back face of the socket and having a forwardly extending bottom lug adapted to seat against the edge of the sheet metal facing at the bottom of the socket, said clip having a screw hole elongated in the direction of the door closing movement to receive an attaching screw with the bottom lug aforesaid in engagement with the sheet metal facing and supported thereby, a block of resilient material seated into and connected to said clips, and means for securing said block in place within the clip and permitting the adjustment of said block with respect to the clip and to adjust the amount of projection of the block beyond the sill, said adjustment means being supported against shock by the lug aforesaid, substantially as described.

1,828,121. POCKET MANICURE SET. AUGUSTE EDMOND ADAM, Houilles, and RENÉ JANNING, Nantes, France. Filed Sept. 29, 1930, Serial No. 485,208, and in Belgium Aug. 27, 1930. 2 Claims. (Cl. 132—77.)



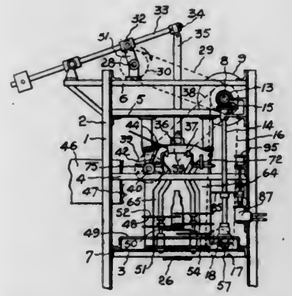
1. In combination with manicure pocket implements, two cheeks to receive, pocket knife-like, said implements, means to rivet said cheeks together, means to articulate said implements within said cheeks, springs to keep said implements in their closed and opened position, a casing between the cheeks, for the polishing stone, and a member for closing said casing.

1,828,122. LOUD SPEAKER UNIT AND DRIVE MECHANISM THEREFOR. JOB R. BARNHART, Lakewood, Ohio, assignor to The Sterling Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 28, 1928. Serial No. 322,335. 6 Claims. (Cl. 179—115.)



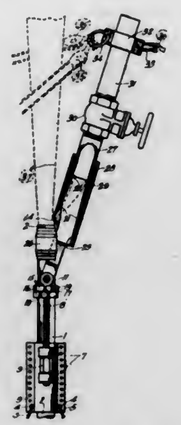
1. In a radio loud speaker unit, the combination of an armature, a conical diaphragm disposed with its axis at right angles to the plane of vibration of said armature, of means for transmitting the vibrations of said armature to said diaphragm without materially diminishing the effective force of said vibrations, said means comprising a triangularly bent strip connected with said diaphragm and armature at the two corners intermediate its ends and resiliently supported for pivotal movement at the other corner so as to oscillate only in a single plane.

1,828,123. BOTTLE WRAPPING MACHINE. PERCY D. BICKFORD, Vancouver, British Columbia, Canada, assignor of one-half to Campbell Gullod Thompson, Vancouver, British Columbia, Canada. Filed Mar. 15, 1930. Serial No. 436,146. 4 Claims. (Cl. 93—2.)



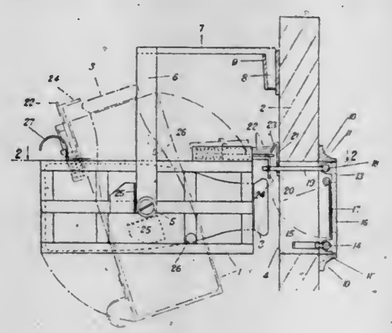
1. In a machine for covering bottles with open ended wrappers, a conveyor belt along which bottles are adapted to be carried, a wrapper delivery mechanism including a pair of inclined guides, a member reciprocable along said guides, a pair of arms fitted with suction cups, carried by said member, means for placing a wrapper between said cups, means for separating the cups to open the wrapper as the member is moved downwards along the guides whereby the wrapper is placed above a bottle upon the conveyor belt and means for controlling a suction to support the wrapper in contact with the cups on the downward stroke of the member.

1,828,124. APPARATUS FOR CONTROLLING OIL AND GAS WELLS. JAMES F. BOWER, Oklahoma City, Okla. Filed Apr. 15, 1930. Serial No. 444,412. 7 Claims. (Cl. 166—15.)



1. In a device of the class described the combination of clamps adapted for encompassing a well casing and seating from the sides of said casing, flanges on said clamps, anchoring means on said flanges, a plurality of perforated lugs on said clamps, adjusting nuts adapted for seating between said lugs, adjusting screws suitable for passing through said perforated lugs and being actuated by said nuts, a hood member, hinge arm bifurcation on said hood and articulating means between said hinge arms and said adjusting screws.

1,828,125. APPARATUS FOR FACILITATING THE DELIVERY OF MILK IN BOTTLES, JOHN BROWN, Glasgow, Scotland, assignor to Scottish Farmers Corporation Limited, Glasgow, Scotland, a Corporation of Great Britain. Filed Jan. 29, 1931, Serial No. 511,962, and in Geat Britain Feb. 10, 1930. 1 Claim. (Cl. 232—41.)

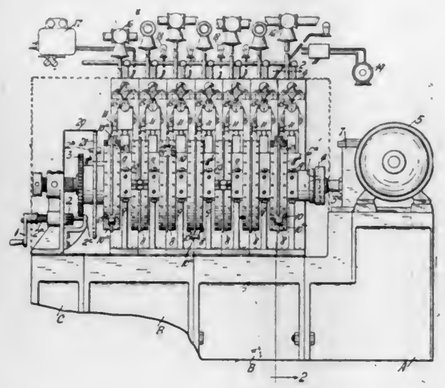


Apparatus for facilitating the delivery of milk in bottles comprising, in combination, a door provided with a letter delivery aperture, a catch on said door, a bottle-receiving cage mounted on the inner side of said door to oscillate against gravity relatively to said door into a position in which bottles housed in said cage lie horizontally opposite said letter-delivery aperture and to oscillate under gravity into a position in which said bottles are substantially vertical, a letter-delivery plate located in register with said aperture and on the outer side of said door and provided with a passage-way permitting access to said cage when said cage is in horizontal position, a gate normally closing said passage-way and provided with a flap-controlled aperture insufficiently large for passage of a milk bottle, a manually-operable latch fitted to said gate so as to be accessible from the outside of said door through said aperture, and an interfering device comprising an automatically operated second latch carried by said gate, a spring-urged cam-member on said cage cooperating with said second latch and so arranged that, when said cage is in substantially vertical position, said second latch is operative to prevent opening movement of the said gate and, when said cage is in horizontal position, said second latch is retracted to permit opening of said gate, and a detent carried by said cam-member and engageable with said catch on said door, said second latch being retracted to permit opening of the gate by movement of said cage to horizontal position and said detent being freed to permit gravity-tilting of said cage into substantially vertical position by closure of said gate.

1,828,126. TIME CONTROLLER. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 14, 1927. Serial No. 161,044. 4 Claims. (Cl. 161—7.)

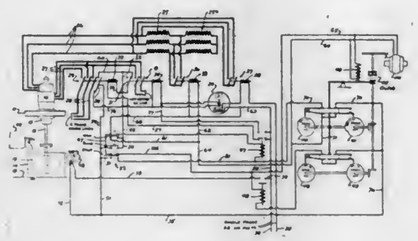
1. A time controller including a time-controlled shaft, one or more wheels having a circumferential series of securing means equally spaced on their outer peripheries and mounted on the shaft, lugs secured on the wheels by certain of said means, means for angularly adjusting the wheels on the shaft over a range at least as great as the spacing of the securing means, means for driving the

shaft in one direction only, means for setting of the shaft in any desired initial angular position, one or more star wheels arranged to be engaged by the lugs, one or more



cams adapted to be rotated by the star wheels, one or more levers operable by the cams, and one or more fluid pressure control valves operable by the levers.

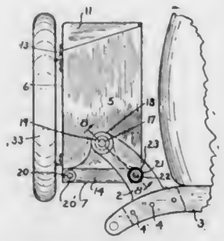
1,828,127. CONTROL SYSTEM FOR SUGAR WASHING APPARATUS AND THE LIKE. CHESTER L. CARLSON, Crockett, Calif. Filed Dec. 29, 1928. Serial No. 329,096. 5 Claims. (Cl. 172—179.)



1. The combination with an induction motor having external resistance in its secondary circuit, of alternating current and direct current sources of power, manual means for controlling the connection of said motor to the alternating current source of power for low speed operation, a second manual means for effecting a control of the external resistance of the motor for high speed operation, a time controlled relay mechanism adapted to be set in operation upon the actuation of said second manual means to automatically disconnect the motor from said alternating current source after a predetermined period of operation and connect the direct current source thereto to thereby stop said motor by effecting a dynamic braking thereof, and connections whereby the resistance control effected by said second manual means will not be disturbed during the braking period.

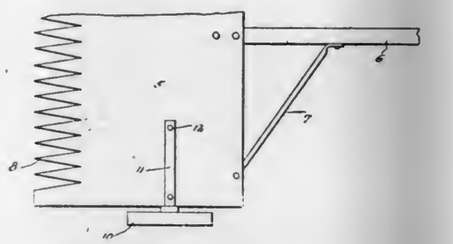
1,828,128. LUGGAGE CARRIER. HARRY J. CRINER, Davenport, Iowa, assignor of one-half to A. G. Bush, Davenport, Iowa. Filed May 6, 1929. Serial No. 360,760. 3 Claims. (Cl. 224—29.)

1. A combined freight and luggage carrier of the class described, comprising a trunk having rigidly connected side, back and bottom plates, a movable front plate secured thereto, a cover hingedly connected to the front upper corners of the side plates when in vertical position, re-inforcing plates secured to the side plates of the trunk near the bottom thereof, pivot pins united to the re-enforcing plates above the bottom of the trunk and approximately midway between the front and back edges of the side plates, front and rear bosses formed integral with the supporting plates near the lower corners thereof, supporting brackets united to the frame of the automobile



bearing the trunk having hubs united to the upper ends thereof in which said pivot pins are movably mounted, a hand-screw threaded into each of the supporting brackets, and openings formed in the bosses adapted to receive the inner ends of the hand-screws when such bosses are brought into line with the hand-screws as the trunk is moved to its vertical or horizontal position respectively.

1,828,129. DANDELION CUTTER. JOHN E. CRITZ, Iowa City, Iowa. Filed May 31, 1930. Serial No. 458,290. 1 Claim. (Cl. 56—229.)

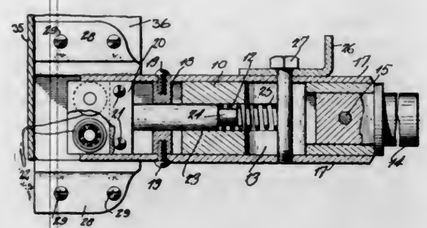


A dandelion cutter comprising a plate having its front edge formed with V-shaped notches to provide V-shaped teeth, said plate having its front part horizontally arranged and its rear part curving upwardly and rearwardly, a handle connected to the rear edge of the plate, an axle forming bar connected to each side part of the plate, and projecting therefrom, a wheel on each bar at the projecting end thereof, said axle forming bars being connected to the plate a slight distance from the point where the plate begins to curve upwardly with said part of the plate to which the handle is connected extending well beyond the parts to which the axle bars are connected.

1,828,130. TANNING HIDES AND SKINS. JEFFREY DENNISS and THOMAS REID, Sydney, New South Wales, Australia. Filed Nov. 29, 1929, Serial No. 410,634, and in Australia Jan. 21, 1929. 1 Claim. (Cl. 149—4.)

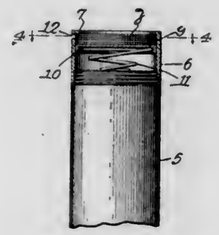
A process of tanning hides and skins, comprising the sequential steps of preliminarily softening and plumping the hides, maintaining the hides in vacuum for from 6 to 12 hours; liming the hides for from 5 to 6 days, dehairing, de-liming, and beaming the hides, immersing the hides in tan liquid at approximately 12° barkometer from 1 to 2 days; packing the hides in tan bark in vacuum for approximately 2 days; immersing the hides in tan liquor for approximately 10 days to 35 days; and finishing the hides; the periods of treatment being varied with regard to the substance of the hides under treatment.

1,828,131. BAND SAW GUIDE. STEVEN DOROGHY, Buffalo, N. Y. Filed Nov. 27, 1929. Serial No. 410,128. 1 Claim. (Cl. 143—162.)



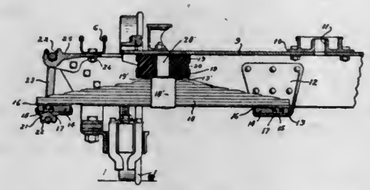
A band saw guide comprising a body member having a vertical slot in its forward end, a second vertical slot in its rear end, a bore extending through the body member between the slots, and longitudinal channels in the upper and lower surfaces of said body member, longitudinally adjustable plates mounted in said body member channels; a forked presser head mounted in the forward slot and having one side removable, ball bearing rollers mounted in said presser head, and adapted to bear against the edge of a band saw, a rearwardly extending stem in the slot-connecting bore and connected with said presser head, a plate secured to and between the said adjustable plates and having an opening through which said stem passes, means for manually adjusting said adjustable plates, a spring bearing against said stem and means positioned in the rear slot for adjusting said spring through the movement of said adjustable plates.

1,828,132. CALENDAR ATTACHMENT FOR FOUNTAIN PENS. DAVID L. DOVER, Seattle, Wash. Filed Mar. 3, 1930. Serial No. 432,945. 1 Claim. (Cl. 40—108.)



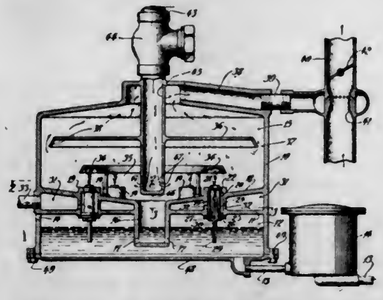
A device of the class described, comprising a circular member having internal threads formed at one end to be positioned on the threaded end of a support, an annular inwardly extended flange formed at one end of the circular member, a follower within the circular member and having a depending annular flange contacting with the inner surface of the circular member, said follower adapted to engage the inwardly extended annular flange to restrict movement of the follower, said circular member adapted to support articles between the inwardly extended annular flange and the follower, said circular member having a slot formed in the side thereof through which articles may be forced, and the ends of the circular member being open to permit the operator to force articles through the slot by pressing on the articles, moving the uppermost coil laterally, and a coiled spring fitted between the follower and support to normally urge the follower in one direction.

1,828,133. TRUCK FOR HIGH SPEED INTERURBAN CARS. JOSEPH H. ELLIOTT and RAGNAR A. NORDOM, Cincinnati, Ohio, assignors to The Cincinnati Car Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed June 5, 1929. Serial No. 368,456. 17 Claims. (Cl. 105—192.)



1. In a car truck, a transverse channel member, a pair of spring members resiliently supported at one end by said transverse member and engaging the under side of said transverse member, between the walls thereof and resilieht means pivotally supported by said car truck and engaging the other end of said springs for supporting the transverse m mber on said car truck.

1,828,134. CARBURETOR. EMERY H. FAHRNEY, Chicago, Ill. Filed Mar. 2, 1929. Serial No. 343,924. 12 Claims. (Cl. 261—40.)



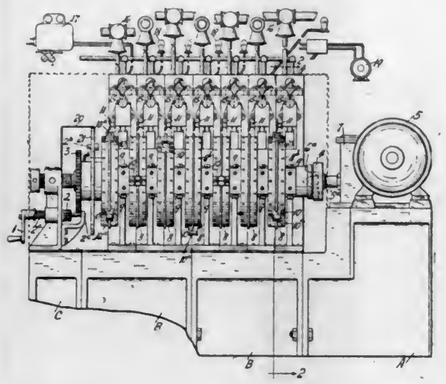
1. A carburetor embodying a casing, a partition dividing the casing into a fuel compartment and a mixing chamber thereabove, means for supplying fuel to said compartment, a plurality of nozzles extending through the partition and through which nozzles the fuel is atomized into the mixing chamber, means for supplying fluid under pressure through the partition and to the nozzles, means for removing the mixture from the mixing chamber, a baffle in the mixing chamber in alinement with the nozzles and against which baffle the atomized fuel from the nozzles strikes for separating the large and small particles of the fuel, and a second baffle within the mixing chamber disposed above and spaced from the first said baffle, the said second baffle being of a greater diameter than the first said baffle.

1,828,135. HORCH. ARTHUR J. FAUSEK and IAWING F. FAUSEK, St. Louis, Mo. Filed June 5, 1929. Serial No. 368,476. 13 Claims. (Cl. 158—27.4.)



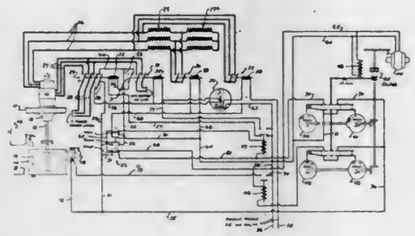
4. In an apparatus of the class described, a handle portion, and a plurality of interchangeable parts adapted for attachment to said handle portion to provide torches

shaft in one direction only, means for setting of the shaft in any desired initial angular position, one or more star wheels arranged to be engaged by the lugs, one or more



cams adapted to be rotated by the star wheels, one or more levers operable by the cams, and one or more fluid pressure control valves operable by the levers.

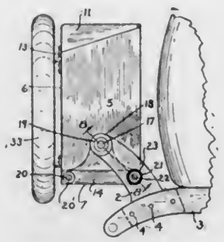
1,828,127. CONTROL SYSTEM FOR SUGAR WASHING APPARATUS AND THE LIKE. CHESTER L. CARLSON, Crockett, Calif. Filed Dec. 29, 1928. Serial No. 329,096. 5 Claims. (Cl. 172—179.)



1. The combination with an induction motor having external resistance in its secondary circuit, of alternating current and direct current sources of power, manual means for controlling the connection of said motor to the alternating current source of power for low speed operation, a second manual means for effecting a control of the external resistance of the motor for high speed operation, a time controlled relay mechanism adapted to be set in operation upon the actuation of said second manual means to automatically disconnect the motor from said alternating current source after a predetermined period of operation and connect the direct current source thereto to thereby stop said motor by effecting a dynamic braking thereof, and connections whereby the resistance control effected by said second manual means will not be disturbed during the braking period.

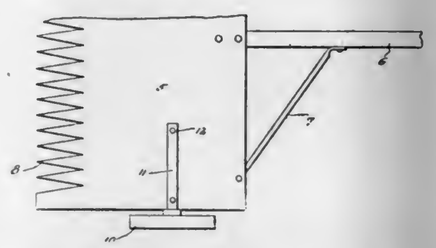
1,828,128. LUGGAGE CARRIER. HARRY J. CRINER, Davenport, Iowa, assignor of one-half to A. G. Bush, Davenport, Iowa. Filed May 6, 1929. Serial No. 360,760. 3 Claims. (Cl. 224—29.)

1. A combined freight and luggage carrier of the class described, comprising a trunk having rigidly connected side, back and bottom plates, a movable front plate secured thereto, a cover hingedly connected to the front upper corners of the side plates when in vertical position, re-inforcing plates secured to the side plates of the trunk near the bottom thereof, pivot pins united to the re-enforcing plates above the bottom of the trunk and approximately midway between the front and back edges of the side plates, front and rear bosses formed integral with the supporting plates near the lower corners thereof, supporting brackets united to the frame of the automobile



bearing the trunk having hubs united to the upper ends thereof in which said pivot pins are movably mounted, a hand-screw threaded into each of the supporting brackets, and openings formed in the bosses adapted to receive the inner ends of the hand-screws when such bosses are brought into line with the hand-screws as the trunk is moved to its vertical or horizontal position respectively.

1,828,129. DANDELION CUTTER. JOHN E. CRITZ, Iowa City, Iowa. Filed May 31, 1930. Serial No. 458,290. 1 Claim. (Cl. 56—229.)

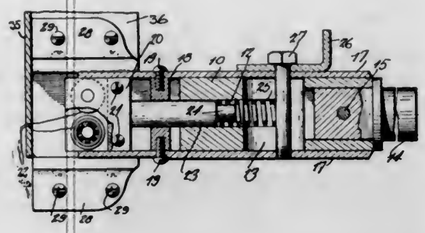


A dandelion cutter comprising a plate having its front edge formed with V-shaped notches to provide V-shaped teeth, said plate having its front part horizontally arranged and its rear part curving upwardly and rearwardly, a handle connected to the rear edge of the plate, an axle forming bar connected to each side part of the plate, and projecting therefrom, a wheel on each bar at the projecting end thereof, said axle forming bars being connected to the plate a slight distance from the point where the plate begins to curve upwardly with said part of the plate to which the handle is connected extending well beyond the parts to which the axle bars are connected.

1,828,130. TANNING HIDES AND SKINS. JEFFREY DENNISS and THOMAS REID, Sydney, New South Wales, Australia. Filed Nov. 29, 1929, Serial No. 410,634, and in Australia Jan. 21, 1929. 1 Claim. (Cl. 149—4.)

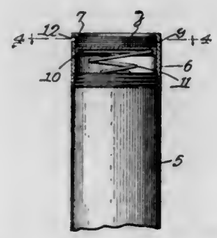
A process of tanning hides and skins, comprising the sequential steps of preliminarily softening and plumping the hides, maintaining the hides in vacuum for from 6 to 12 hours; liming the hides for from 5 to 6 days, dehairing, de-liming, and beaming the hides, immersing the hides in tan liquid at approximately 12° barkometer from 1 to 2 days; packing the hides in tan bark in vacuum for approximately 2 days; immersing the hides in tan liquor for approximately 10 days to 35 days; and finishing the hides; the periods of treatment being varied with regard to the substance of the hides under treatment.

1,828,131. BAND SAW GUIDE. STEVEN DOROGHY, Buffalo, N. Y. Filed Nov. 27, 1929. Serial No. 410,128. 1 Claim. (Cl. 143—162.)



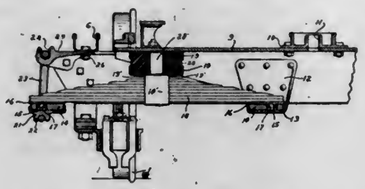
A band saw guide comprising a body member having a vertical slot in its forward end, a second vertical slot in its rear end, a bore extending through the body member between the slots, and longitudinal channels in the upper and lower surfaces of said body member, longitudinally adjustable plates mounted in said body member channels; a forked presser head mounted in the forward slot and having one side removable, ball bearing rollers mounted in said presser head, and adapted to bear against the edge of a band saw, a rearwardly extending stem in the slot-connecting bore and connected with said presser head, a plate secured to and between the said adjustable plates and having an opening through which said stem passes, means for manually adjusting said adjustable plates, a spring bearing against said stem and means positioned in the rear slot for adjusting said spring through the movement of said adjustable plates.

1,828,132. CALENDAR ATTACHMENT FOR FOUNTAIN PENS. DAVID L. DOVER, Seattle, Wash. Filed Mar. 3, 1930. Serial No. 432,945. 1 Claim. (Cl. 40—108.)



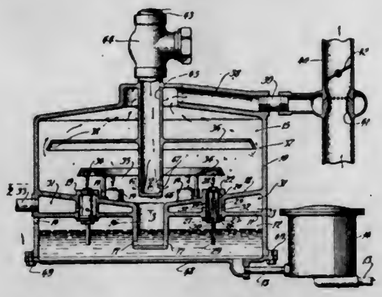
A device of the class described, comprising a circular member having internal threads formed at one end to be positioned on the threaded end of a support, an annular inwardly extended flange formed at one end of the circular member, a follower within the circular member and having a depending annular flange contacting with the inner surface of the circular member, said follower adapted to engage the inwardly extended annular flange to restrict movement of the follower, said circular member adapted to support articles between the inwardly extended annular flange and the follower, said circular member having a slot formed in the side thereof through which articles may be forced, and the ends of the circular member being open to permit the operator to force articles through the slot by pressing on the articles, moving the uppermost coil laterally, and a coiled spring fitted between the follower and support to normally urge the follower in one direction.

1,828,133. TRUCK FOR HIGH SPEED INTERURBAN CARS. JOSEPH H. ELLIOTT and RAGNAR A. NORBOM, Cincinnati, Ohio, assignors to The Cincinnati Car Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed June 5, 1929. Serial No. 368,456. 17 Claims. (Cl. 105—192.)



1. In a car truck, a transverse channel member, a pair of spring members resiliently supported at one end by said transverse member and engaging the under side of said transverse member, between the walls thereof and resilient means pivotally supported by said car truck and engaging the other end of said springs for supporting the transverse member on said car truck.

1,828,134. CARBURETOR. EMERY H. FAHRNEY, Chicago, Ill. Filed Mar. 2, 1929. Serial No. 343,924. 12 Claims. (Cl. 261—40.)



1. A carburetor embodying a casing, a partition dividing the casing into a fuel compartment and a mixing chamber thereabove, means for supplying fuel to said compartment, a plurality of nozzles extending through the partition and through which nozzles the fuel is atomized into the mixing chamber, means for supplying fluid under pressure through the partition and to the nozzles, means for removing the mixture from the mixing chamber, a baffle in the mixing chamber in alinement with the nozzles and against which baffle the atomized fuel from the nozzles strikes for separating the large and small particles of the fuel, and a second baffle within the mixing chamber disposed above and spaced from the first said baffle, the said second baffle being of a greater diameter than the first said baffle.

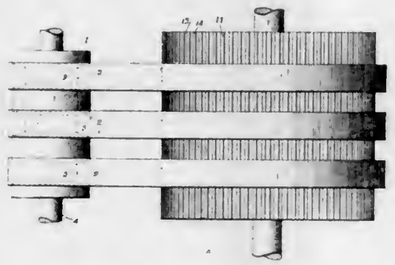
1,828,135. HORCH. ARTHUR J. FAUSEK and IRWING F. FAUSEK, St. Louis, Mo. Filed June 5, 1929. Serial No. 368,476. 13 Claims. (Cl. 158—27.4.)



4. In an apparatus of the class described, a handle portion, and a plurality of interchangeable parts adapted for attachment to said handle portion to provide torches

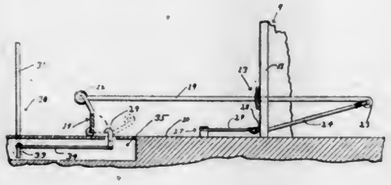
having different characteristics, an element associated with each of said interchangeable parts provided with gas passageways formed therethrough, a pair of extensions on said element arranged to extend into recesses in said handle portion at the joint between said interchangeable part and said handle portion, a gasket positioned adjacent to one of said extensions and arranged for interposition between said interchangeable part and said handle portion, said gasket being provided with apertures formed therethrough and arranged coincident with said gas passageways in said joint element, and means for causing registration of the apertures in said gasket with the gas passageways in said joint element, said means comprising a pin extended from said joint element, and said gasket being provided with an aperture into which said pin projects.

1,828,136. PULLEY. ABRAHAM L. FREEDLANDER, Dayton, Ohio. Filed Apr. 11, 1928. Serial No. 269,182. 1 Claim. (Cl. 74—21.)



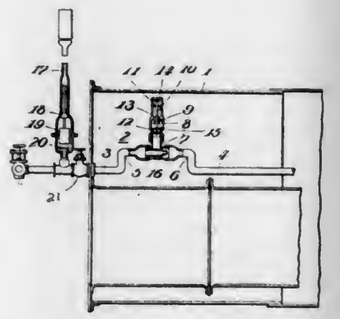
In a transmission apparatus, a plurality of grooved pulleys of substantially uniform shape and cross section having straight internal metallic and sloping driving surfaces of substantially V cross section, an additional pulley having on the periphery thereof a plurality of spaced compressible teeth of uniform cross section in combination with a plurality of belts of fabric and rubber of substantially trapezoidal cross section having substantially straight side driving surfaces, the raw edges of which contact with the driving side walls of said first mentioned pulleys and having on their inner surfaces a plurality of compressible teeth of uniform cross section, said pulley first mentioned and said belts being so shaped that the teeth of said belts are out of contact with the innermost portions of the V's of said pulleys, said teeth of all of said belts meshing with the teeth of said additional pulley and the side portions of said belts being out of contact therewith.

1,828,137. CLOSURE OPERATOR. STEPHEN H. GAY, Dallas, Tex. Filed Nov. 14, 1930. Serial No. 495,759. 4 Claims. (Cl. 268—35.)



1. In a structure of the class described, in combination, a foundation, a garage including a door frame, a door mounted for horizontal swinging in said frame, spring means for normally urging the door to closed position, a pivotally mounted vehicle actuated operating plate on the foundation in advance of the door and frame, said frame being provided with upper and lower guide holes, an operating rod extending through the upper guide hole into the interior of the garage, the outer end of said rod being connected with one end of the plate, a cable connected with the inner end of said rod, a pulley equipped bracket on the outside of the garage, said cable extending out through the remaining guide opening in the frame and being trained over said guide bracket with its terminal fastened to the lower central portion of the door.

1,828,138. MEANS FOR PROTECTING STEAM BOILERS AGAINST FLOWING BACK OF BOILER WATER WHEN FEEDING SYSTEM LEAKS. SOJIRO HAOA, Tokyo-Shi, Japan. Filed Aug. 3, 1929, Serial No. 383,415, and in Japan Dec. 18, 1928. 1 Claim. (Cl. 122—504.2.)



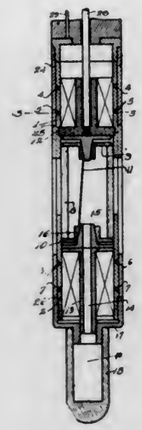
In combination with a steam boiler, a feed water pipe having a check valve therein connected to the boiler and having a portion extending within the same below water level thereof, said portion having parts including an offset portion extending above the water level, said offset portion comprising a horizontal portion and a vertical portion opening into the horizontal portion and into the boiler steam space, a check valve for said vertical portion, and a float controlled alarm device connected to said feed water pipe on the side of the first mentioned check valve most remote from the boiler.

1,828,139. WINDOW CLEANING SQUEEGEE. NYKYFOR HAWRYLASZ, Minot, N. Dak., assignor of one-half to Harry E. Andros, Minot, N. Dak. Filed May 20, 1930. Serial No. 454,122. 2 Claims. (Cl. 15—245.)



1. A squeegee comprising a U-shaped holder, a squeegee strip and a backing strip in the holder, angularly directed fingers on one edge of the holder, the squeegee strip having openings therein to receive the fingers, and said backing strip holding the squeegee strip in position for interlocking engagement with the holder.

1,828,140. APPARATUS FOR TAKING PHOTOS OF THE CAVITIES OF THE BODY. JOSEF HEILPERN and FRANZ GERHARD BACK, Vienna, Austria, assignors, by mesne assignments, to The Photor Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1928, Serial No. 315,001, and in Austria Apr. 23, 1928. 16 Claims. (Cl. 95—11.)



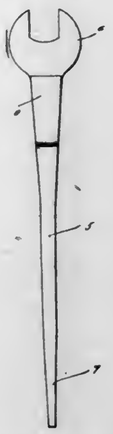
1. Apparatus for photographing cavities, comprising a housing a pair of cameras in said housing, a light source in said housing intermediate the said cameras, and each of said cameras being provided with hole diaphragms.

1,828,141. APPARATUS FOR TAKING PHOTOGRAPHS OF CAVITIES OF THE BODY. FRANZ G. BACK, Stamford, Conn., assignor, by mesne assignments, to The Photor Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 20, 1929. Serial No. 341,310. 17 Claims. (Cl. 95—11.)



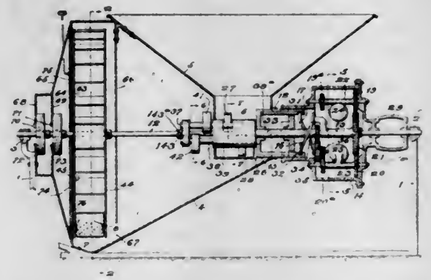
1. In apparatus of the class described, the combination of a pair of tubular cameras, a lighting device intermediate the same, the lighting device being resiliently mounted between the adjacent ends of the cameras.

1,828,142. COMBINATION DRIFT PIN AND WRENCH. GEORGE H. HERDMAN, Erie, Pa. Filed June 26, 1930. Serial No. 464,022. 2 Claims. (Cl. 7—1.)



1. A tool of the character described comprising a shank longitudinally tapered, and at its larger end having integral therewith a head continuing longitudinally with respect to the shank, and said shank at the junction of the head and shank being thickened laterally to provide an impact lug constituting a driving head for the shank.

1,828,143. FEED GRINDER. ELBERT R. HOBBS, Castleford, Idaho, and ARCH V. STOMBAUGH, Holbrook, Nebr. Filed Jan. 14, 1928. Serial No. 246,874. 25 Claims. (Cl. 83—11.)

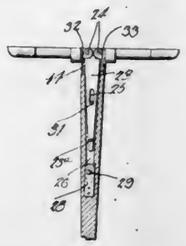


1. The method of reducing materials such as grain and feed, which consists in accumulating the same in a compact mass or pile, at a low point in a circle, intermittently discharging into said pile sufficient energy to reduce the same, and thereafter causing the reduced portion of the grain to be blown out of the periphery of the circle, and the unreduced portion to be returned to the lower portion of the circle for retreatment.

1,828,144. WALKING CANE. WLADYSLAW JASINSKI, Chicago, Ill. Filed Oct. 3, 1929. Serial No. 397,031. 2 Claims. (Cl. 155—135.)

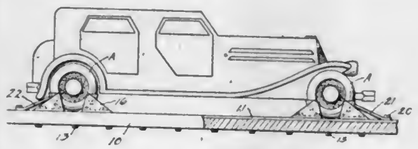
1. A folding walking cane of the character described comprising a two part cane, having a longitudinal rectangular opening in the upper center of the cane formed by mating flat walled depression in the two part, said opening being tapered from its upper end to its lower end, a tapered flat metal shank slidably mounted in the longitudinal opening, a pair of similarly shaped handle sections hinged to the upper end of the shank having complementary faces, adapted to be folded to present the complementary

faces to each other and forming a seat when in their extended position, said opening being laterally enlarged at its lower end, a spring catch set into the lateral enlarge-



ment for engagement with the lower end of the shank to retain the device in cane formation, and means for limiting the longitudinal movement of the sliding shank.

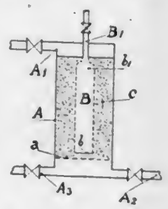
1,828,145. APPARATUS FOR BRACING VEHICLES IN FREIGHT CARS. CLARENCE W. H. JOHNSTON, Dallas, Tex. Filed Nov. 13, 1930. Serial No. 495,332. 5 Claims. (Cl. 105—368.)



1. In an apparatus for bracing vehicles in freight cars, a pair of longitudinal strips and an intermediate longitudinal strip, said strips being adapted to be secured to the floor of a car, ties mounted on the intermediate strip for engaging the axles of the vehicle, and chocks adjustably mounted on the outer strips for engaging the wheels of the vehicle after the vehicle is secured by said ties whereby said vehicle is held in position.

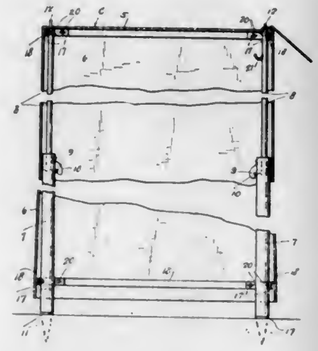
2. In an apparatus for bracing vehicle in freight cars, a pair of longitudinal strips and an intermediate longitudinal strip, said strips being adapted to be secured to the floor of a car, ties mounted in divergent relationship with respect to each other on the intermediate strip for engaging the axles of the vehicle, and chocks adjustably mounted on the outer strips for engaging the wheels of the vehicle after the vehicle is secured by said ties whereby said vehicle is held in position.

1,828,146. APPARATUS FOR THE TREATMENT OF GAS OR A MIXTURE OF GAS AND VAPOR IN THE PRESENCE OF CATALYTIC AGENTS AND FOR THE REACTIVATION OF SUCH AGENTS. ALFRED JOSEPH, Enghein, France, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France, a Limited Joint-Stock Company of France. Filed Dec. 22, 1928, Serial No. 328,011, and in France Aug. 20, 1928. 4 Claims. (Cl. 23—288.)



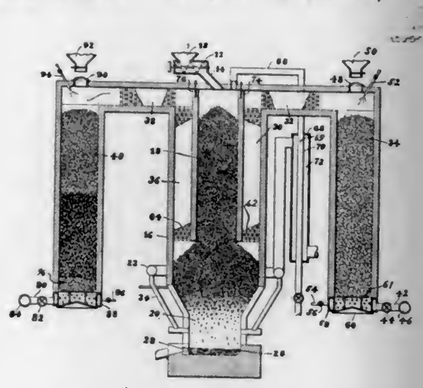
1. Apparatus of the class described comprising a substantially annular reaction chamber having a catalytic mass therein, a plurality of annular nozzles embedded in and distributed uniformly throughout said mass, supply pipes leading to each of said nozzles, and a common trunk to which said supply pipes are connected.

1,828,147. PORTABLE BATH HOUSE. WILLIAM H. KAMMAN, St. Paul, Minn. Filed July 19, 1930. Serial No. 469,193. 2 Claims. (Cl. 135—3.)



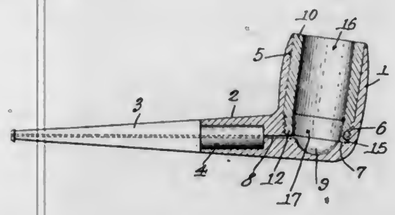
2. A post for a tent frame comprising a pair of tubular sections, the upper section sliding in the lower section, a removable pin fastened to the lower section and forming a seat for the lower end of the upper section, a pointed member threaded into the lower end of the lower section, and a pin threaded in the upper end of the upper section.

1,828,148. PROCESS FOR PRODUCING FUEL GAS AND CARBONIZED COAL. WILBUR G. LAIRD, New York, N. Y., assignor to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 16, 1923. Serial No. 619,375. 14 Claims. (Cl. 202—19.)



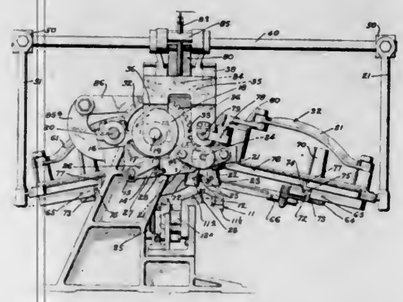
4. A process for producing fuel gas and carbonized coal which comprises continuously passing air through a hot coke body in a gas producer and thereby generating producer gas, passing hot producer gas thus formed downwardly through a stationary body of coal in a coking retort and thereby carbonizing the coal, subsequently passing steam upwardly through the thus carbonized hot coal and thence into said hot coke body and thereby generating water gas, and discharging the carbonized coal passing the resulting hot producer and water gases from the producer downwardly through another body of coal and thereby carbonizing the same.

1,828,149. PIPE. HUGH MALLETT, Bradford, Ill. Filed Mar. 13, 1931. Serial No. 522,352. 2 Claims. (Cl. 131—12.)



1. A pipe comprising a bowl provided with a chamber having internal threads, and a removable insert in the bowl, the insert being externally smooth and being of softer material than the bowl, whereby the threads of the bowl will cut coacting threads in the insert and hold the insert in the bowl.

1,828,150. SAW FILING MACHINE. ERNEST A. MEACHAM, Oakland, Calif. Filed Mar. 25, 1929. Serial No. 349,566. 6 Claims. (Cl. 76—33.)



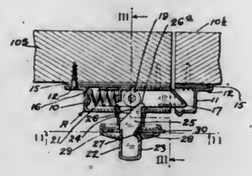
1. A saw filing machine comprising an operative carriage adapted to receive and support a saw, flexible and adjustable means for guiding said carriage in a path identical to the contour of the cutting edge of the saw, file means supported in operative relation to the carriage and adapted to operate on the teeth of a saw carried by the carriage, means for engaging the files with the saw and reciprocating them to file the saw, means for automatically disengaging the files from the saw after a predetermined cycle of operation, and means for advancing the saw with relation to the files during the period the files are disengaged therefrom.

1,828,151. HEARING APPLIANCE. FRANK M. NEFF, Los Gatos, Calif. Filed Dec. 26, 1930. Serial No. 504,949. 3 Claims. (Cl. 181—23.)



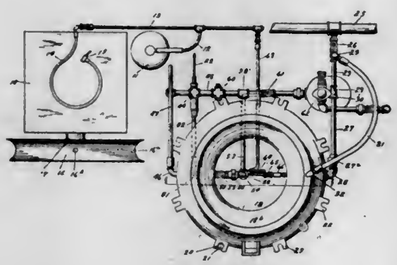
1. A hearing appliance comprising a shell open at that side which contacts the ear, said shell being provided with an opening in its lower wall which communicates with the interior of the shell, and a flange projecting from the shell and circumventing the said opening.

1,828,152. PUSH BUTTON LATCH. WILLIAM B. NONAMAKER, Oakland, Calif. Filed Oct. 31, 1928, Serial No. 316,159. Renewed Aug. 12, 1931. 1 Claim. (Cl. 292—170.)



A latch comprising a latch casing, a keeper socket, a bolt reciprocably mounted in the latch casing, spring means constantly urging the bolt into engagement with the keeper socket, actuating means arranged to reciprocate in a direction at right angles to the bolt, means interposed between the said bolt and actuating means causing withdrawal of the bolt against the spring means when the actuating means is depressed, said spring means automatically returning the bolt and actuating means to normal position when the actuating means is released, a knob mounted contiguous to the actuating means and rotatable with respect thereto, and latch means associated with the knob and actuating means and capable of operation by rotation of the knob to latch the actuating means against operation.

1,828,153. APPARATUS FOR MANIPULATING INNER TUBES. MAX H. FADE, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Oct. 14, 1924, Serial No. 743,547. Divided and this application filed Oct. 12, 1929. Serial No. 399,164. 1 Claim. (Cl. 18—2.)

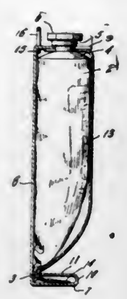


Apparatus of the class described comprising a table, tube inflating means on the table, and an annular tube-former rotatably mounted on the table and adapted to receive a complete, non-vulcanized tube.

1,828,154. COLLAPSIBLE TUBE HOLDER. IVAR E. SIQVELAND, St. Paul, Minn. Filed May 23, 1930. Serial No. 455,079. 3 Claims. (Cl. 221—60.)

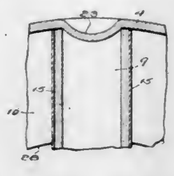
1. A holder for a collapsible tube comprising a main base, an auxiliary base slidably mounted thereon, a standard secured to said main base, an arm formed upon said standard parallel to said bases, said arm being provided with an opening and an auxiliary arm formed upon the main arm parallel to said standard, a protective cover-

ing strip for said tube, the closed end of said tube and an end of said strip adapted to be engaged by the auxiliary



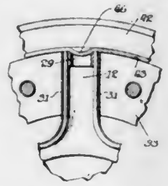
base, the discharge end of the tube being engaged by said opening and the other end of the covering strip being engaged by the tube and the auxiliary arm.

1,828,155. METHOD OF MAKING WHEELS. GEORGE SPATTA, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed May 28, 1928. Serial No. 280,978. 4 Claims. (Cl. 29—174.)



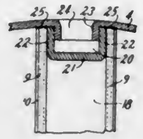
1. The method of connecting a hollow sheet metal spoked spider with a channel shaped rim which comprises clamping the ends of the spokes in a rigid clamp, forcing the clamp and the spider as a whole unit into the rim to tension the rim onto the spider, supporting the rim adjacent a spoke, and pressing the web of the rim into the open end of the spoke.

1,828,156. PROCESS OF MAKING WHEELS. GEORGE SPATTA, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed May 28, 1928. Serial No. 280,981. 9 Claims. (Cl. 29—174.)



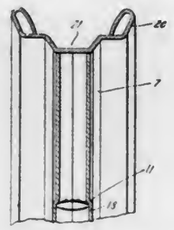
4. The method of forming a sheet metal spider of the class described, which comprises blanking a disc of sheet metal, drawing spokes and a raised hub portion out of the plane of the sheet, drawing a tubular central flange in the center of the hub, trimming the blank to leave flanges in the original plane of the sheet extending out from the sides of the spokes and the crotches between them, curling said flanges, assembling two such blanks with curled edges back to back, applying channel strips to form lock seams, inserting circular metal bands in the open ends of the spokes, and welding said bands to the walls of the spokes.

1,828,157. METHOD OF MAKING WHEELS. GEORGE SPATTA, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Original application filed May 28, 1928, Serial No. 280,979. Divided and this application filed Apr. 15, 1929. Serial No. 355,070. 5 Claims. (Cl. 29—174.)



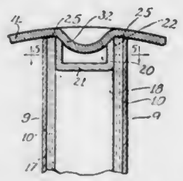
2. The method of making a wheel which comprises forming an endless rim of outwardly facing channel section, forming a spider of two sheet metal stampings, uniting the stampings at their edges by lock seams terminating at the edge of the spider spokes, forcing the completed spider laterally into the rim, piercing the web of the rim to produce flanges extending into the ends of the spokes, welding the flanges to the lock seams, welding the ends of the spokes to the rim and plugging the openings in the web.

1,828,158. METHOD OF MAKING WHEELS. GEORGE SPATTA, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Original application filed May 28, 1928, Serial No. 280,980. Divided and this application filed Apr. 15, 1929. Serial No. 355,071. 4 Claims. (Cl. 29—174.)



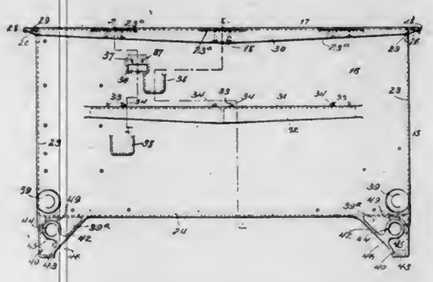
1. The process of making a sheet metal wheel which comprises, uniting two spiders having semicylindrical spokes, pressing the two spiders into an endless circular rim of a slightly smaller diameter than the outside diameter of the spiders to tension the rim onto the spider, and welding the web of the rim to the spiders, thus welding the spiders together at their outer ends.

1,828,159. METHOD OF MAKING WHEELS. GEORGE SPATTA, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Original application filed May 28, 1928, Serial No. 280,979. Divided and application filed Apr. 15, 1929, Serial No. 355,070. Again divided and this application filed May 14, 1930. Serial No. 452,238. 6 Claims. (Cl. 29—174.)



2. The method of connecting a hollow sheet metal spoked spider with a channel shaped rim which comprises inserting into the end of the spokes a thimble which is closed at one end and open at the other, the open end being substantially even with the end of the spokes, clamping the ends of the spokes in a rigid clamp, forcing the clamp and the spider as a whole unit into rim to tension the rim onto the spider, supporting the rim adjacent a spoke, and depressing the web of the rim into the open end of the thimble.

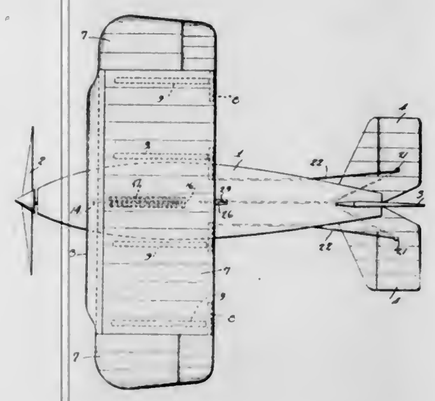
1,828,160. RAILROAD CAR END. GEORGE A. SPILLER and GEORGE T. JOHNSON, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Apr. 3, 1929. Serial No. 352,202. 35 Claims. (Cl. 105—406.)



1. A one-piece metallic car end provided with reinforcing flanges, said flanges being integral with the car end and with each other where they meet.

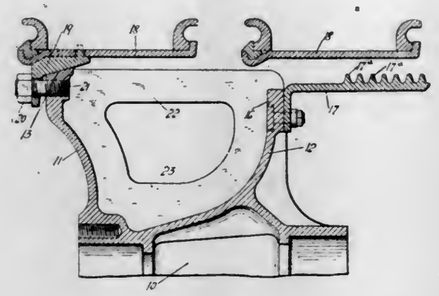
2. A one-piece metallic car end provided with top, bottom and side reinforcing flanges, said bottom flange being integrally united at its ends with the lower ends of the side flanges.

1,828,161. WING BRAKE FOR AEROPLANES. FRANK SUCHOFSKY, Hoboken, N. J. Filed Jan. 12, 1931. Serial No. 508,145. 18 Claims. (Cl. 244—29.)



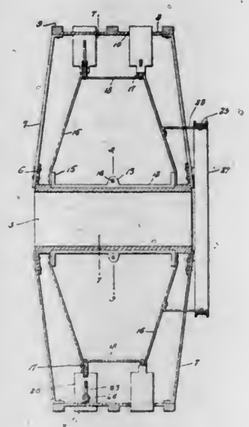
1. In apparatus of the character described, an aeroplane having a wing and elevator, the wing including a hinged brake section, operating means for the elevator, connections between the wing brake section and elevator permitting operation of the elevator by the operating means therefor without releasing the wing brake section, and means for releasing the brake section with the elevator operated by the connections with the brake action.

1,828,162. DUAL WHEEL AND DEMOUNTABLE RIM. JOSEPH G. SWAIN, Akron, Ohio, assignor to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 9, 1925. Serial No. 74,302. 5 Claims. (Cl. 301—36.)



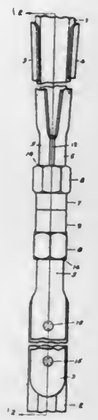
2. In a dual wheel construction, a wheel body comprising spaced apart inner and outer rim-seating portions, said outer seating portion being constructed to permit passing a rim thereover onto the inner seating portion, and means for guiding a rim onto the inner rim-seating portion comprising axially extending members between said seating portions.

1,828,163. WHEEL. ANDREW R. TAYLOR, Pepin, Wis. Filed Dec. 8, 1930. Serial No. 500,883. 1 Claim. (Cl. 301—46.)



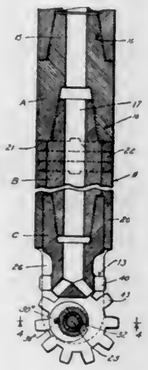
In a wheel of the class described, a rim having a plurality of openings, lugs movable through the openings, a rotary element engageable with the inner ends of the lugs and having notches to receive said inner ends and allowing the lugs to be retracted so that the rotary member may be turned thereby projecting the lugs, arms extending from the lugs and pivotally connected to the interior of the rim, springs on the arms impinging against the interior of the rim to urge the lugs inwardly, a hub, spokes from the hub to the rim, a sleeve rockable on the hub, spokes connecting the sleeve with the rotary member, brackets projecting from the last mentioned spokes, a brake rim on the bracket, and a brake band associated therewith.

1,828,164. WOOD ROD COUPLING. FOREST H. THORPE, Columbus, Ohio, assignor to The Columbus Sucker Rod Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 13, 1929. Serial No. 413,746. 2 Claims. (Cl. 287—127.)



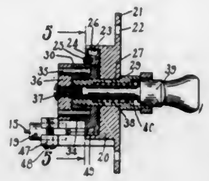
1. In combination, a sucker rod, oppositely disposed plates connected to said sucker rod, a block of metal having connecting means at one of its ends whereby it may be attached to another block of metal, said block of metal first mentioned having a reduced portion at its other end, said reduced portion being larger than the combined internal surfaces of the ends of said plates which are shaped to conform to said reduced portion, whereby when said plates are placed upon the reduced portion of said block they will engage the major portion of said reduced portion with the side edges of said plates spaced from one another, and welding material located between the adjacent side edges of said plates and uniting the same non-rotatably to the reduced portion of said block and to each other.

1,828,165. WELL DRILLING BIT. WALTER A. ABEGG, Los Angeles, Calif. Filed Oct. 9, 1928. Serial No. 311,306. 5 Claims. (Cl. 255—71.)



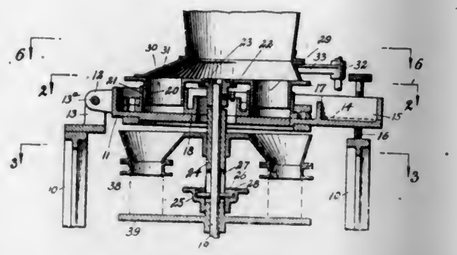
1. A drill of the character described including, a rotatable drive member, a cutter, and means mounting the cutter for rotation about an axis at substantially right angles to the axis of the drive member and for bodily rotation about an axis of the drive member, the drive member and cutter having meshing teeth, the teeth of the cutter having cutting edges.

1,828,166. CURTAIN OPERATING DEVICE FOR AUTOMOBILES AND THE LIKE. WILLIAM S. ATTA, Waterbury, Conn. Filed Jan. 20, 1931. Serial No. 509,915. 10 Claims. (Cl. 156—28.)



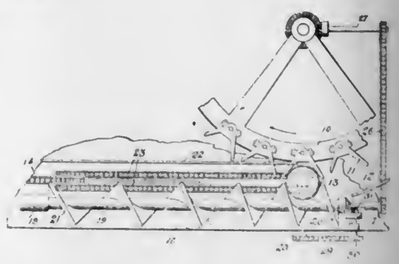
4. In an operating device for the curtains of automobiles, a body member, a shaft rotatably mounted therein, a pulley freely mounted on said shaft, a clutch to connect and disconnect the pulley from the shaft and a push rod to operate the clutch, said shaft being hollow and said push rod being mounted therein.

1,828,167. CANNING MACHINE. CHARLES H. AYARS, Salem, N. J., assignor to Ayars Machine Company, Salem, N. J., a Corporation of New Jersey. Filed Mar. 5, 1929. Serial No. 344,328. 13 Claims. (Cl. 226—102.)



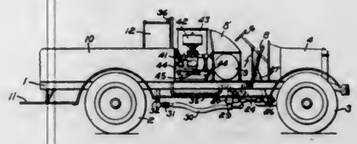
1. In a can filling machine, a pair of rotatable turrets, each having measuring cup sections telescopically related to similar sections on the other turret, and means for angularly adjusting the planes of the turrets to each other.

1,828,168. CAN DELIVERING MECHANISM. CHARLES H. AYARS, Salem, N. J., assignor to Ayars Machine Company, Salem, N. J., a Corporation of New Jersey. Filed Oct. 14, 1930. Serial No. 488,576. 5 Claims. (Cl. 198—22.)



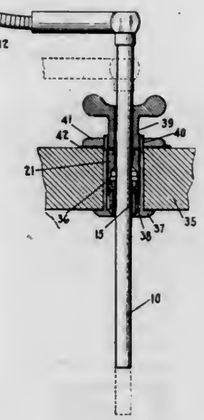
1. In a can delivering mechanism, the combination with spaced units of a traveling member between said units, means carried by one of said units for placing a can upon said traveling member, and restraining means for said can tending to move said can at a speed different from said traveling member and uniformly augmented.

1,828,169. FIRE TRUCK. ARTHUR H. BLANCHARD, Arlington, Mass. Filed Oct. 9, 1930. Serial No. 487,525. 6 Claims. (Cl. 169—24.)



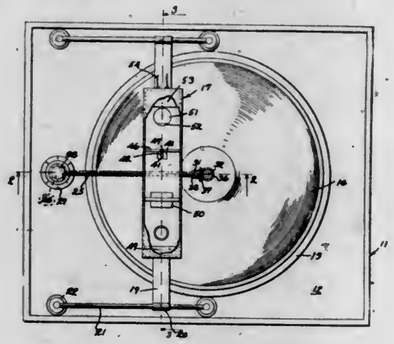
1. A fire truck comprising in combination a chassis with its motor to drive the same; a pump and a support therefor on said chassis; a supply tank to which the suction of said pump is connected; a delivery hose for said pump; and an open top combined hose storage basket and filling tank conveniently placed to receive said hose when the latter is not in use, and provided with an outlet at its bottom communicating with said supply tank for renewing the latter when the pump is at work.

1,828,170. ADJUSTABLE ANCHORING FITTING FOR THERMOMETER BULBS. CARLTON W. BRISTOL, Naugatuck, Conn., assignor to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 8, 1930. Serial No. 442,703. 6 Claims. (Cl. 73—52.)



6. A fitting for a thermometer bulb of the nature set forth, slidable longitudinally over said bulb and adapted to be anchored at any desired position along the length of the bulb, said fitting comprising a sleeve adapted to have a sliding fit over the bulb and being reduced and tapered at its outer end to an extent to afford a yieldable edge, said sleeve also being threaded between its ends, a jam nut fitting over the outer end of said sleeve and engaging the threads thereof to press the yieldable edge against the bulb when the nut is drawn up, said nut having a circumferential shoulder and being provided with external threads beyond said shoulder, a finishing sleeve through which the bulb is adapted to pass and in threaded engagement with the said external threads of the jam nut and its inner edge adapted to abut the said shoulder thereof, a mounting ferrule adapted to support rigidly the anchoring means and bulb and having a head for engagement with the outer surface of the jam nut, means adapted to secure the head to a support into which the ferrule is adapted to be passed, a follower cap for sealing the inner end of the finishing sleeve and adapted for threaded engagement with the ferrule to jam said sleeve therein, and an insert washer of relatively soft metal in the top of the finishing sleeve adapted to spread under the pressure of the follower cap for peripheral and sealing engagement with the bulb.

1,828,171. PHONOGRAPH SOUND REPRODUCER. JAMES H. BUCHANAN, Los Angeles, Calif. Filed June 19, 1929. Serial No. 372,010. 6 Claims. (Cl. 179—100.4.)

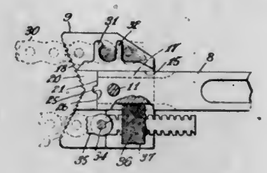


1. A sound reproducer comprising in combination a turntable adapted to support a phonograph record and having a rotatable spindle, a pivotally mounted screw, a stub shaft adapted to engage the spindle, a driving connection between the stub shaft and the screw, a vibratory device having a mounting shiftable by the screw, means to direct a beam of light on an electric light responsive device, the vibratory device being positioned to intercept the beam and cause a variation of the illumination of the light responsive device.

1,828,172. SULPHURIZED-PHENOLS AND PROCESS OF MAKING. EDWARD J. CANAVAN, Woodcliff, N. J., assignor to The Barrett Company, a Corporation of New Jersey. Filed Jan. 29, 1926. Serial No. 84,750. 17 Claims. (Cl. 260—20.)

1. The process which comprises treating tar acid with sulphur at a temperature above the atmospheric boiling point of the mixture.

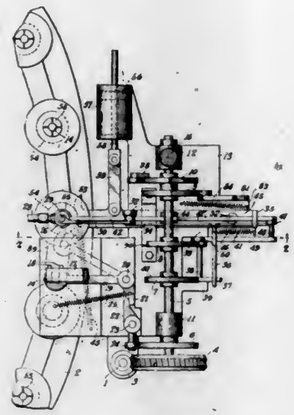
1,828,173. CHAIN PIPE WRENCH. FRANCIS J. CARNELLI, New York, N. Y. Filed Apr. 24, 1930. Serial No. 446,894. 4 Claims. (Cl. 81—65.)



1. In a chain wrench, a body comprising a handle and a pair of jaw plates secured to one end of the handle forming two separated angular plates making an obtuse angle and provided with teeth, each plate having an extension at the middle portion projecting toward the other extension and which extensions abut the end of the handle, said abutting members having a rib on one member with the other member provided with a groove to engage said rib with the rib and groove extending transverse to the said plates, said jaw plate extensions being pro-

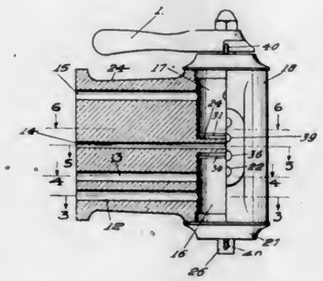
vided with teeth and each forming an angular face aligning with the angular faces of the plates, a link chain, means for attaching one end of the chain to the body at one side of the jaws, and adjustable means for securing the other end portion of the chain to the body on the opposite side of the device.

1,828,174. ATTACHMENT FOR BUTTON MAKING MACHINES. EMANUEL CLEMENS, East Orange, N. J., assignor to New Jersey Button Works, Newark, N. J., a Corporation of New Jersey. Filed Feb. 1, 1930. Serial No. 425,162. 6 Claims. (Cl. 79—17.)



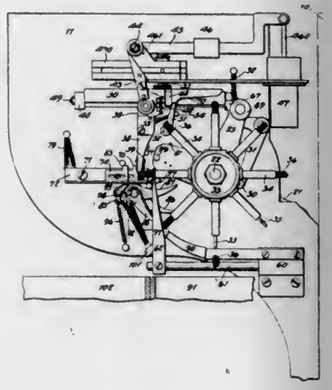
1. In an attachment for feeding blanks to a button making machine having a plurality of chucks moving in an arcuate path, a base, a lever having a pin and slot connection with the base, a shoulder at the extremity of the lever adapted to be engaged by a cylindrical support for a chuck so that the lever will follow the path of the chuck, means for limiting the rotary movement of the lever whereby said lever will be forced to move longitudinally due to the camming action of the chuck support on the shoulder, the longitudinal movement being enabled by the pin and slot connection means on the lever to releasably hold a button aligned with a chuck, and means to return the lever to its initial position.

1,828,175. GANG FAUCET. HARRY E. CROSBY, Huntington Park, Calif., assignor to Mission Dry Corporation, Ltd., Los Angeles, Calif., a Corporation of Delaware. Filed Oct. 20, 1930. Serial No. 489,992. 6 Claims. (Cl. 225—26.)



1. A gang faucet, comprising a casing, a plurality of inlet ports and corresponding outlet ports in the casing, and stop means for the ports in the casing, said stop means comprising rotatable cylinders, said cylinders having channels therein for connecting the inlet and outlet ports, and also for connecting certain selected inlet ports to a common outlet, one of said inlet ports being adapted for connection through the cylinders to any selected one of the remaining inlet ports.

1,828,176. SPRING TESTING MACHINE. LORING P. CROSMAN, Maplewood, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Nov. 19, 1929. Serial No. 408,238. 8 Claims. (Cl. 209—79.)



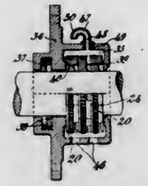
1. A spring testing device including a member formed with a channel, a pair of spring engaging members secured thereto and each formed with a flexible spring-entering portion and a rigid testing portion.

1,828,177. ELECTRIC DISPLAY DEVICE. MERRITT E. CURTISS, Pittsburgh, Pa. Filed Nov. 11, 1929. Serial No. 406,231. 6 Claims. (Cl. 40—132.)



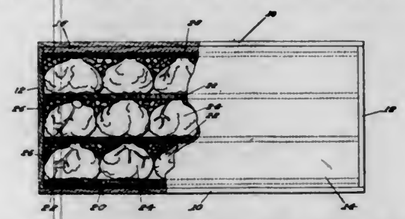
1. In a display device the combination of a poster comprising the representation of a face having a portion of a feature thereof of opaque material and a portion thereof represented by translucent material, with a plurality of intermittent sources of light disposed rearwardly of said poster and at an angle to the feature comprising the translucent material, whereby the intermittent illumination provided by the several light sources imparts the effect of movement to the feature.

1,828,178. PISTON ROD PACKING AND SCRAPING DEVICE. EDGAR N. FOX, Palmyra, N. Y., assignor to The Garlock Packing Company, Palmyra, N. Y., a Corporation of New York. Filed Sept. 1, 1928. Serial No. 303,571. 5 Claims. (Cl. 286—24.)



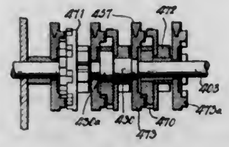
4. A piston rod scraping device comprising scraping means surrounding the piston rod, a casing enclosing the scraping means, a port in the lower wall of said casing to drain away liquid removed from the piston by the scraping means, and an open port at a higher level in the casing to serve as a vent.

1,828,179. REFRIGERATED PRODUCE, PACKAGE. SAMUEL J. GALLAGHER, Brawley, Calif. Filed Oct. 8, 1929. Serial No. 398,179. 3 Claims. (Cl. 62—1.)



1. A refrigerated package for shipping vegetable products, comprising a crate, layers of non-absorbent material at the top and bottom of the crate, a layer of cellu-cotton on the bottom layer of non-absorbent material, a layer of vegetable products on the cellu-cotton, and crushed ice filling the interstices between the vegetable products.

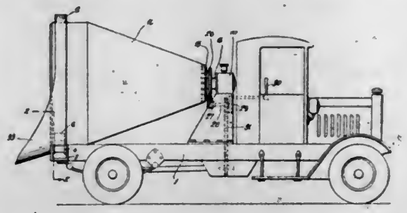
1,828,180. CALCULATING MACHINE. CLYDE GARDNER, deceased, Ebensburg, Pa., by Edna B. Gardner, administratrix, Ebensburg, Pa., assignor to Gardner Company, Ebensburg, Pa., a Corporation of Delaware. Original application filed June 7, 1924, Serial No. 718,678. Divided and this application filed Dec. 5, 1930. Serial No. 500,201. 3 Claims. (Cl. 235—136.)



1. In a register having a series of numeral wheels and differentially movable actuators cooperating therewith; entocyclic gearing providing a constantly meshed direct gear connection between adjacent wheels, including an eccentrically mounted floating gear, and members connecting said entocyclic gearing to said actuators and adapted to equalize the movement imparted by said floating gear.

1,828,181. CONCRETE TRANSPORTING APPARATUS. JAMES P. GILLESPIE, New York, N. Y. Filed Nov. 17, 1928. Serial No. 320,048. 3 Claims. (Cl. 83—73.)

1. In an apparatus of the character described, a suitable vehicle, a bearing rigidly supported on the vehicle, a substantially conical horizonally disposed vessel provided at its small end with a trunnion supported by said bearing, pivotally mounted brackets provided with antifriction means peripherally engaging and supporting the large end of the vessel below the axis thereof, a yoke extending upwardly and over the larger end of the vessel to embrace

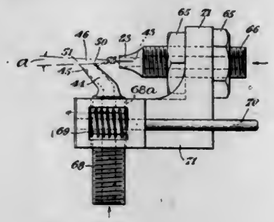


the same, antifriction means carried by the yoke and peripherally engaging the vessel above its axis to preclude lifting of the vessel from the antifriction means of the brackets, and means for rotating the vessel, said vessel being provided at its larger end with a normally closed discharge opening.

1,828,182. SEALING PASTE. BERT Y. GOLDING, Long Beach, and JOHN J. BURKHARD, Anaheim, Calif. Filed Apr. 20, 1929. Serial No. 356,874. 4 Claims. (Cl. 106—8.)

1. A sealing paste comprising 55% graphite and 45% distillery residue, from the treatment of molasses.

1,828,183. OIL BURNER. ALBERT E. GRANT, New York, N. Y., assignor to Caloroil Burner Corporation, a Corporation of Delaware. Original application filed May 2, 1921, Serial No. 466,183. Divided and this application filed May 14, 1927. Serial No. 191,337. 3 Claims. (Cl. 299—142.)

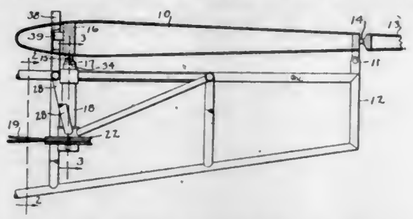


3. In an oil burner the combination with a jet forming orifice, of means for supplying oil to said jet comprising a thin wall tube extending upward into said jet and having its upper discharge end in substantially the plane of the axis of said jet and formed as an elongated opening of greater length than width and with its longer axis extending in the direction of said jet, so that the jet sweeps around the edges of the oil tube opening on smooth lines to draw the jet particles along said edge and prevent dripping of the oil therefrom, said oil tube being adjustable at right angles to the axis of said jet, so that the end of the tube is movable along rectilinear lines across said jet in front of said orifice.

1,828,184. AIRCRAFT. JOSEPH M. GWINN, Jr., Buffalo, N. Y. Filed May 17, 1929. Serial No. 363,843. 4 Claims. (Cl. 244—29.)

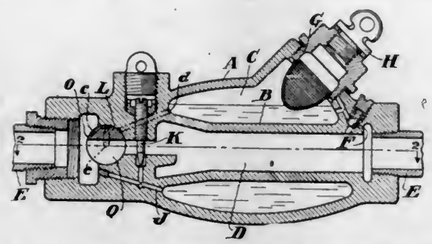
1. An adjustment device for aircraft, of the class described, comprising a rotatable threaded member, operating means for said member, an axially movable member in threaded telescopic engagement with said rotatable mem-

ber, means connecting said axially movable member to a device to be adjusted, a housing fixed to said rotatable threaded member, a collar rotatable with said housing,



and a single bolt extending through said operating means, said collar, said housing and said rotatable threaded member.

1,828,185. AIR LINE OILER. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 27, 1928. Serial No. 273,414. 2 Claims. (Cl. 184—55.)



1. An air line oiler comprising a casing having a wall to divide the casing into a reservoir for oil and a passageway for pressure fluid, said casing having an inlet passage for conveying pressure fluid from the passageway into the reservoir and an outlet passage for conveying oil from the reservoir into the passageway, a valve chamber in the casing, a throttle valve in the valve chamber for controlling the admission of pressure fluid into the passageway, said throttle valve having a groove, and a passage in the casing leading from the reservoir to the valve chamber and registering with the groove in the closed position of the valve for exhausting pressure fluid from the reservoir into the passageway.

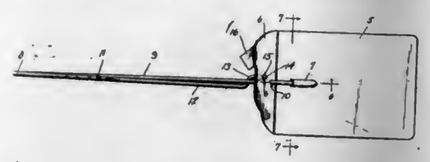
1,828,186. METAL STRAP FOR BOXES, BALES, OR THE LIKE. LEO M. HARVEY, Los Angeles, Calif. Filed Oct. 6, 1928. Serial No. 310,694. 5 Claims. (Cl. 24—20.)



1. A metal strap for forming a binding for boxes, bales, or the like, having a cross-section of such a character that the middle portion of the strap rests upon the face of the box or bale, the material of the edge portions of the strap being displaced upwardly from the plane of the inner face of the strap and of slightly concave-convex form with the concave side disposed toward the box, and uniting to the middle portion of the strap in an ogee curve.

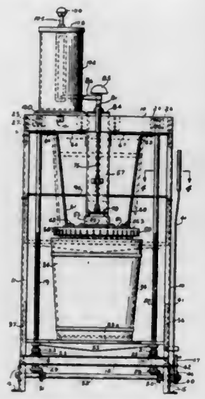
1,828,187. CAKE TURNER. CLINTON HERBERT HOLLAND, Groveland, Mass. Filed Sept. 25, 1929, Serial No. 395,065. Renewed Apr. 20, 1931. 4 Claims. (Cl. 294—8.)

1. A cake turner comprising a blade, said blade being provided at the rear end thereof, with a longitudinally extending socket, a substantially U-shaped handle, said handle having one leg thereof at its free end receivable in said socket, and the other leg of said handle adapted to engage said blade adjacent the rear end of said blade, whereby the said other leg of said U-shaped handle may be moved for rotating the blade about the axis of the



first mentioned leg of said handle, and said blade having formed thereon and disposed at an angle thereto a stop member adapted to engage the said other leg of said handle when said blade is rotated for limiting the rotary movement of said blade.

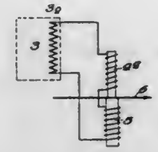
1,828,188. DISPENSING, MEASURING AND COMPUTING DEVICE. MARTIN L. JACKSON and JOHN R. CARTER, Winston-Salem, N. C. Filed Sept. 2, 1930. Serial No. 479,243. 5 Claims. (Cl. 221—95.)



1. In a dispensing device, a framework, a platform in said framework adapted to support a container, means for raising and lowering said platform with said container, an expansible head member mounted in a fixed position in said framework, a member fixed to said member and to said framework and having a passageway therein, a spout member connected to said member and having a passageway therein having communication with the passageway in said first member, a plunger mounted in said passageway in said first member, a gate member adapted at times to close said first passageway, an indicating member associated with said plunger member, a chart associated with said indicator member to indicate the amount of fluid in said first passageway, means for elevating said platform and said container and thereby forcing the fluid into said first passageway, the plunger being adapted to force the fluid in said first passageway out through said spout when said gate is closed.

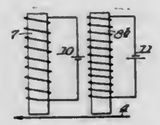
1,828,189. METHOD OF RECORDING AND REPRODUCING WAVE FREQUENCIES. RICHARD B. T. KILIANI, Detroit, Mich., assignor of one-fourth to Arthur Gardner, Detroit, Mich. Filed June 18, 1930. Serial No. 462,068. 11 Claims. (Cl. 179—100.2.)

1. The method of recording and reproducing wave frequencies, which consists in first subjecting a magnetizable body to the action of a magnet connected to suitable means for varying the magnetization of the magnet in accordance with said wave frequencies and which is in light contact with the body, and then subjecting a magnet connected



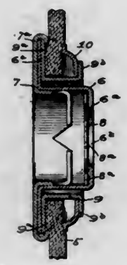
to suitable means for reproducing said wave frequencies and which is on the verge of contact with the body, to the action of the body.

1,828,190. METHOD OF PREPARING A MAGNETIZABLE BODY TO RECEIVE AND REPRODUCE WAVE FREQUENCIES. RICHARD B. T. KILIANI, Detroit, Mich., assignor of one-fourth to Arthur Gardner, Detroit, Mich. Filed June 18, 1930. Serial No. 462,069. 6 Claims. (Cl. 179—100.2.)



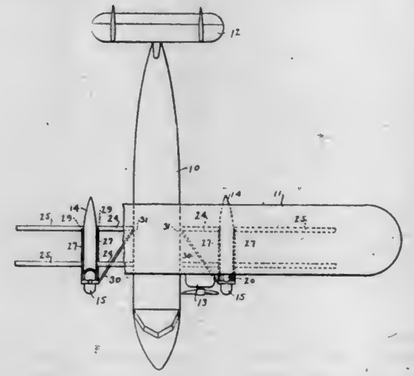
1. The method of preparing a magnetizable body to receive a record of any range of wave frequencies which consists in subjecting the body to the action of three or more magnetic poles of different magnetic effect.

1,828,191. VALVE FOR CUSHION STRUCTURES. CARL L. KNUTSON, Maywood, WILLIAM G. ROBY, Chicago, and ARTHUR W. KIMBELL, Park Ridge, Ill., assignors to Cinch Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Original application filed Dec. 13, 1926, Serial No. 154,457. Divided and this application filed Oct. 24, 1928. Serial No. 314,820. 4 Claims. (Cl. 251—119.)



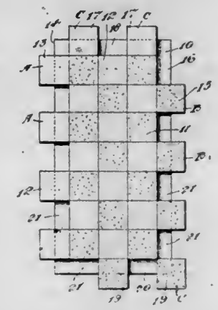
1. In a device of the character described, a valve seat member having an opening and a flange, a valve retainer having an opening and a flange and cooperating with said valve seat member to form a valve chamber, a valve in said chamber, and an attaching member having a flange, the edge of one of said flanges being bent over the edges of said other flanges to hold all of said parts together in a self-contained unit.

1,828,192. AIRCRAFT. ISAAC M. LADDON, Buffalo, N. Y., assignor to Consolidated Aircraft Corporation, Buffalo, N. Y., a Corporation of Delaware. Filed Sept. 13, 1929. Serial No. 392,336. 10 Claims. (Cl. 244—2.)



1. In an aircraft, a body, a fixed float, a ground engaging wheel, said wheel being arranged in front of said float making a streamlined form therewith, and means for moving said wheel downwardly out of streamlined arrangement with said float for landing on the ground on the wheel.

1,828,193. LAMINATED FLOORING. HAROLD L. LEVIN, Nutley, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 24, 1928. Serial No. 301,893. 4 Claims. (Cl. 94—13.)

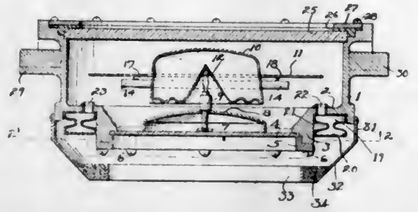


1. As a new article of manufacture, a surface covering comprising a foundation and a wearing layer composed of a plurality of tile-like elements secured in rows to one face of said foundation, an end element of one row, extending beyond the contiguous marginal edge of the foundation and the element at the opposite end of said row terminating inwardly of the opposite contiguous edge of the foundation.

1,828,194. TRANSPARENT MARINER'S COMPASS. ADOLPH LIETZ, San Francisco, Calif. Filed Apr. 11, 1927. Serial No. 182,558. 3 Claims. (Cl. 33—223.)

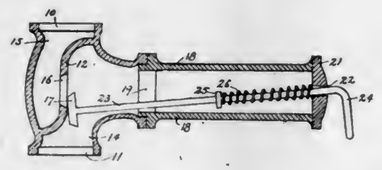
1. In a mariner's compass of the class described comprising a cylindrical shell having an inturned flange, a cylindrical shell of smaller diameter depending from said flange, a glass plate cover on the bottom of said smaller shell, a ring for retaining said glass plate, a transverse bar on the upper side of said glass plate and secured to

said smaller shell, a compass pivot mounted on said bar, a float mounted on said pivot, a convex body approximately the same diameter of said float under said float, a compass



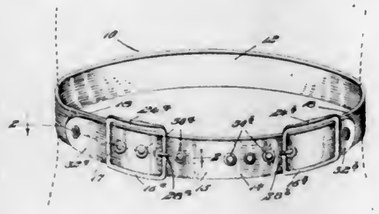
card and magnets on said float, a double annular expansion chamber mounted on the outside of said small shell and under said inturned flange, open tubes in said flange and fixed to said expansion chamber.

1,828,195. BLOW-OFF VALVE FOR HOT WATER SYSTEMS. JOHN FORDYCE MALSBARY, Fresno, Calif. Filed Mar. 30, 1931. Serial No. 526,399. 2 Claims. (Cl. 251—137.)



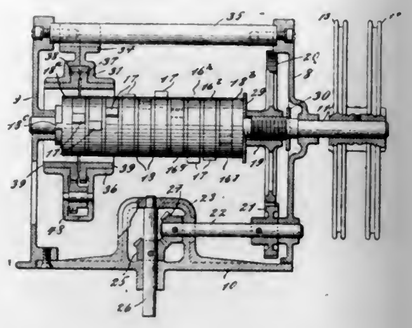
1. A blowoff valve having a housing containing two chambers separated by a partition, one of said chambers having an inlet opening and the other an outlet opening, said partition having an opening connecting said chambers, said opening being faced as a valve seat, a valve adapted to rest in said seat, said valve being attached to a stem, said stem being adapted to extend through, a guide permitting the valve to be positioned in operative relation with the valve seat and in inoperative relation therewith, and spring means adapted to normally hold the valve in the selective position in which it may be placed.

1,828,196. BELT. THOMAS J. MCCANN, Warren, R. I. Filed Oct. 14, 1927, Serial No. 226,213. Renewed Mar. 9, 1931. 3 Claims. (Cl. 241—8.)



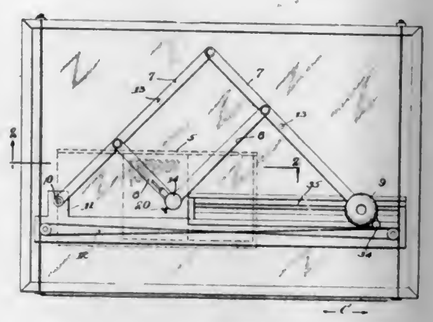
1. A belt comprising a rear section having a looped split hook secured to each end thereof, a front section having a plurality of buckle tang eyelets substantially equidistantly spaced at a distance from the center thereof, and two buckles each comprising a frame having a pivot pin extending transversely substantially centrally thereof adapted to receive the respective split hooks on the ends of the rear belt portion and a tang pivoted thereon, each adapted to be selectively inserted through the eyelets on each respective side of the center of the front belt portion.

1,828,197. RADIO TUNING DEVICE. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed July 12, 1929. Serial No. 377,709. 7 Claims. (Cl. 250—40.)



1. In a radio receiving set, a tuning element, a shaft connected to adjust the tuning element, a plurality of actuating elements independently angularly adjustable on the shaft, common means for simultaneously locking and unlocking the actuating elements with respect to the shaft in any adjusted positions, manual means for selectively operating the actuating elements, a manual device for operating the locking means, and means to connect the manual device to the shaft when the actuating elements are unlocked.

1,828,198. APPARATUS FOR TRANSLATING IMPRESSIONS. ROBERT E. NAUMBURG, Winchester, Mass. Filed Aug. 5, 1927. Serial No. 210,888. 19 Claims. (Cl. 250—1.)

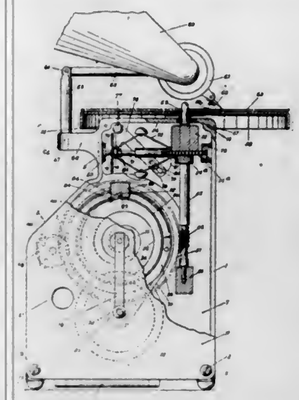


1. In the art of enabling the blind to read ordinary type, the method of letter analysis which comprises dissecting the letter along two or more rectilinear lines extending in different directions and modifying electrical current in accordance with the lines traversed or cut in either direction in an order controlled by the blind operator whereby the letter is identified.

1,828,199. TOY TALKING MOVIE DEVICE. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1928. Serial No. 318,707. 6 Claims. (Cl. 88—16.2.)

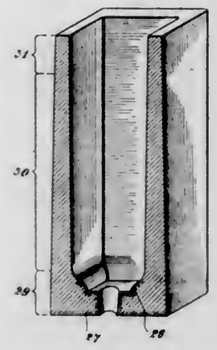
1. A toy talking movie device comprising in combination an intermittent picture strip moving device and a rotatable talking machine record support, a rotatable

driving member, driving connections between said member and the device and support, and means for rotating said



driving member comprising an unrestrained coil spring secured at one end to said member and secured at its opposite end to a spring tensioning device.

1,828,200. INGOT MOLD AND METHOD OF MAKING SAME. JOHN EDMUND PERRY, Sharon, Pa., assignor to Valley Mould and Iron Corporation, Sharpsville, Pa., a Corporation of New York. Original application filed June 18, 1926, Serial No. 116,793. Divided and this application filed Dec. 16, 1926. Serial No. 155,133. 11 Claims. (Cl. 22—139.)



1. An article of manufacture comprising a cast iron ingot mold having a closed bottom and with the most dense cast iron in the lower portion of the mold adjacent the bottom of the matrix face wall, and with the density of the cast iron decreasing upwardly in such manner that the least dense iron is adjacent the mouth of the mold.

1,828,201. PRESS FOR SHEET METAL. CHARLES JOSEPH RHODES, Wakefield, England. Filed Apr. 30, 1929, Serial No. 359,307, and in Great Britain Feb. 15, 1929. 7 Claims. (Cl. 113—46.)

1. In a press for sheet metal a movable die, a fixed die, a draw ring in said fixed die, a pressure table, for supporting said draw-ring, a substantially vertically disposed buffer, supported at the lower end thereof, a body, fixed with relation to said pressure table, a pressure plate, mounted on the top of said buffer and having a recess to hold a lubricant, multiple bell-crank levers, movably connected each at one end thereof to a part on the pressure

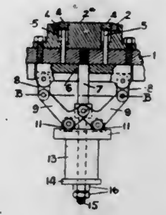
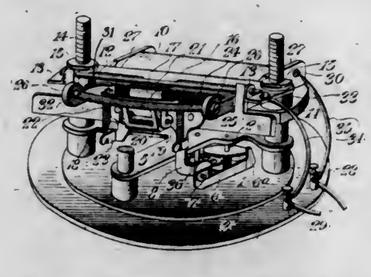


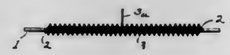
table and at the other end thereof to said body, and rolls upon said levers, for bearing down upon said pressure plate and operable in said recess and in said lubricant, thereby compressing said buffer.

1,828,202. ELECTRICAL TIMING DEVICE. HENRI RODANET, Versailles, France. Filed May 7, 1928, Serial No. 275,789, and in France May 31, 1927. 7 Claims. (Cl. 185—40.)



1. In an electromagnetic stepping device a magnet, an armature, a switch member and a contact therefor, a driving member forming a connection between said switch member and armature and adapted to retract the latter when the magnet is de-energized.

1,828,203. ELECTRON DISCHARGE TUBE. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Tube Company, a Corporation of Delaware. Filed July 11, 1927. Serial No. 205,024. 5 Claims. (Cl. 250—27.5.)

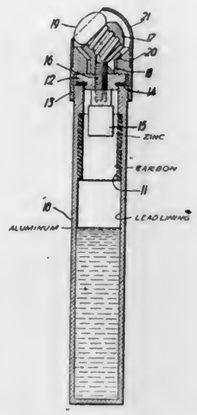


1. A vacuum tube having an anode, a grid, a heater element composed of a refractory metal, an electrically conductive metal body wound upon and in surface contact with and having a relatively higher specific resistance than the heater element, and a metal cathode of relatively higher electron emissivity wound upon and in surface contact with the high resistance body.

1,828,204. ELECTRIC BATTERY. ALFRED SCHMID, Basel, Switzerland. Filed June 9, 1927, Serial No. 197,528, and in Germany Dec. 2, 1926. 12 Claims. (Cl. 136—113.)

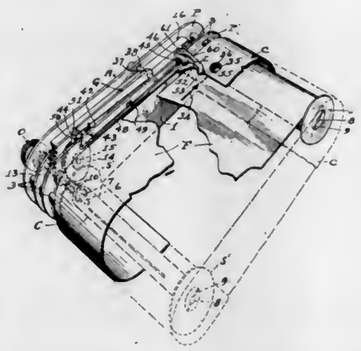
1. A portable self-contained electric light, including a metallic container for a liquid electrolyte, a cover of non-conducting material adapted to hermetically seal said

container, a conductor extending through said cover, an electrode secured to the inner end of said conductor, a lamp



socket connected to the outer end of said conductor, and means for connecting one terminal of the lamp to the wall of the container.

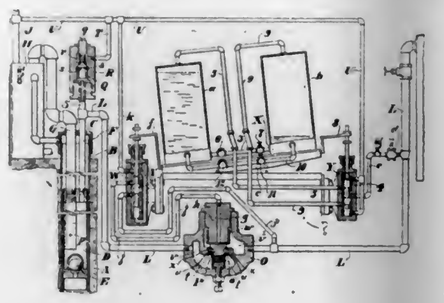
1,828,205. ACTUATING AND LOCKING MEANS FOR CAMERAS. EDWIN B. SCHMITT and ADOLPHE THUILLIER, Los Angeles, Calif. Filed July 18, 1927. Serial No. 206,586. 4 Claims. (Cl. 95—31.)



1. In a camera arranged for moving a film successively into position for exposing different portions thereof, a shaft on which one of the film spools is mounted, a pinion on said shaft, a pair of sprocket shafts, a gear on one of said sprocket shafts in mesh with said pinion, a pair of sprockets secured respectively on said sprocket shafts, a chain extending over said sprockets, a slide, a pawl on said slide for engaging said chain when the slide is moved in one direction for causing said chain, sprockets, gear, pinion and shaft on which said film spool is mounted, to advance the film for taking another picture, and means for locking one of said sprocket shafts against rotation when the film is advanced.

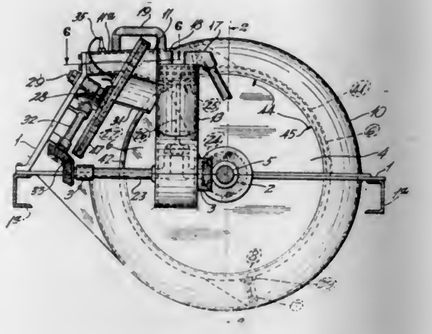
1,828,206. DEVICE FOR PRESSURE FLUID CONTROL VALVES. CHARLES W. SIMMONS, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 2, 1927. Serial No. 230,541. 9 Claims. (Cl. 137—145.)

1. In a timing device, the combination with a pressure fluid supply pipe, of a pressure fluid control valve, an auxiliary valve controlling said valves, and a timing engine operatively connected to actuate the auxiliary valve, comprising a rocker arm, tanks on said arm adapted to alternately contain liquid to overbalance the rocker arm,



a reversing valve connected to be actuated by the rocking of the tanks for controlling the flow of liquid from one tank to the other, whereby the opening of the main control valve is dependent upon the operation of said timing engine.

1,828,207. ROTARY ENGINE. FREDERICK STONE, Rapid City, S. Dak. Filed Aug. 13, 1927, Serial No. 212,637. Renewed Mar. 21, 1931. 4 Claims. (Cl. 123—13.)



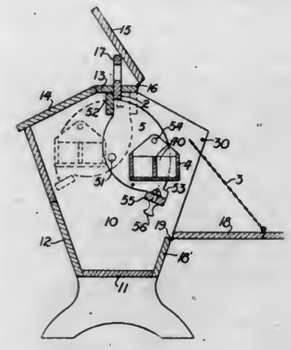
1. A rotary engine of the character described, comprising an annular expansion chamber, a flywheel disposed concentrically said chamber, a piston concentrically engaging said expansion chamber and mounted on said flywheel, a rotatable disc associated with the chamber, the axis of the disc being in the plane of the flywheel and perpendicular to the axis thereof so as to have its face tangentially disposed to the chamber, and an arcuate abutment mounted on the disc, a portion of the chamber being extended to engage said disc and said abutment, and said disc having a port radially outwardly from the abutment adapted to communicate with said chamber.

1,828,208. STORAGE MEANS. LEE J. TAYLOR, Snohomish, Wash. Filed Mar. 13, 1929. Serial No. 346,544. 4 Claims. (Cl. 312—185.)

2. In combination with the walls of a cabinet forming an enclosure, and including top walls sloping from the middle, one of the top walls being hinged to afford access through the front to the interior, a tray, an arm pivoted within each end of the enclosure to swing above its pivot axis, said tray being pivotally dependent from said arms to

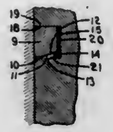
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swing therewith, by gravity, into the forward portion of the enclosure, or into the upper rear portion, and a



strip connecting said arms, at the front thereof, and lying immediately beneath the top wall, rearwardly of the hinged top wall, when the tray lies in its rear position.

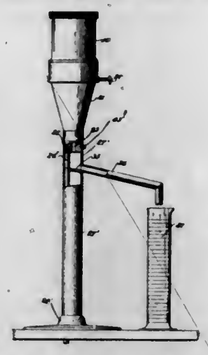
1,828,209. PISTON RING. LESLIE J. THOMAS, Arlington Heights, Mass., assignor to Mrs. Vera C. Batchelder, Arlington, Mass. Filed May 16, 1930. Serial No. 452,931. 3 Claims. (Cl. 74—109.)



1. An expansion member for a piston ring seated in a groove in the piston having at least a portion of one of its end faces inclined at an angle to the adjacent side wall of the groove forming therewith an inwardly opening V-shaped recess comprising a peripheral expanding member of polygonal form and L-shaped in cross section having its lateral section adjacent the inclined face of the body portion, said expanding member engaging the bottom wall of the groove and expanding outwardly against the inner face of said body member to increase the peripheral pressure thereof with the cylinder wall, and a second peripheral expanding member engaging the two concave faces of the L-shaped expanding member and expanding laterally into the said recess acting to wedge the lateral section of the L-shaped expanding member into contact with the adjacent side wall of the groove and simultaneously wedging the body portion into engagement with the opposite side wall of the groove.

1,828,210. FREENESS TESTER. FRANK M. WILLIAMS, Watertown, N. Y. Filed May 11, 1927. Serial No. 190,524. 10 Claims. (Cl. 73—51.)

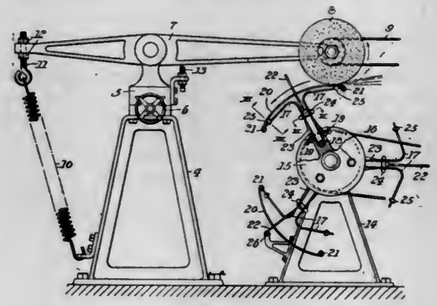
8. In a device for determining the freeness of paper pulp, the combination of a container for a sample of pulp to be tested, a screen through which suspending waters for the pulp are discharged from said container, a second container for receiving the discharged waters from the screen, said second container being formed with two outlets having different cross-sectional areas, means for directing and confining the flow of discharged waters to and through one of said outlets and away from the other of said outlets during such discharge within predetermined limits of flow, and through said other outlet when said flow is in excess of said predetermined flow, measuring means in communication with the other of said outlets for receiving and measuring the waters discharged through said other outlet when the total flow exceeds the predetermined flow, and removable bushings for said outlets having passageways therethrough of different cross-sectional areas.



1,828,211. FIRE AND ACID PROOF ELASTIC SUBSTANCE. AUGUST WOLFSHOLZ, Milan, Italy, assignor to Settiner Chamotte-Fabrik Actien-Gesellschaft vormals Didier, Berlin-Wilmersdorf, Germany, a Corporation of Germany. Filed Sept. 8, 1925, Serial No. 55,164, and in Germany Dec. 21, 1924. 5 Claims. (Cl. 106—9.)

2. The method of producing a fire-proof material which comprises mixing zirconium oxide with a solution of magnesium phosphate in phosphoric acid containing an ammonium compound.

1,828,212. GRINDING APPARATUS. WALLACE N. APPLETON, Crafton, Pa., assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa. Filed Mar. 8, 1928. Serial No. 260,206. 9 Claims. (Cl. 51—108.)

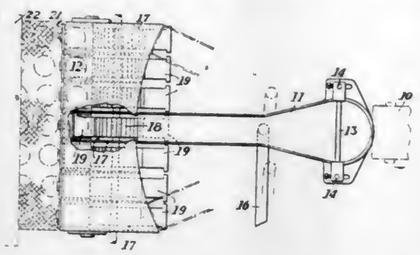


2. Grinding apparatus for bars each having longitudinally-spaced offset portions on its inner side, comprising an abrading element, a rotatable carrier, expansible gripping members rigidly secured on said carrier for engaging said offset portions and supporting the bar in a grinding position, and yoke members secured to the outer ends of said gripping members for supporting said bar against lateral displacement.

1,828,213. GLASS HANDLING APPARATUS. RAYMOND G. BACHELLER, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 28, 1926. Serial No. 112,271. 15 Claims. (Cl. 49—47.)

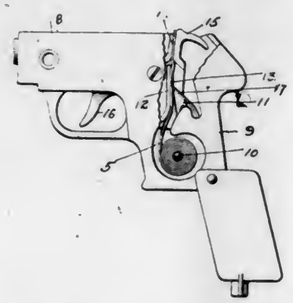
12. Article-handling apparatus, comprising a chute, a conveyor belt having one of its flights disposed at an

angle to the horizontal, a shelf carried by the belt in position to receive articles delivered from said chute, a carrier disposed in position to receive articles transferred



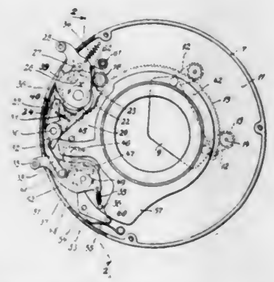
by said belt, and means movable with said belt throughout a portion of the travel thereof, for maintaining said articles in an upright position during the transfer of said articles from said shelf to said carrier.

1,828,214. PISTOL CAP. CLIFFORD B. BACKES, Wallingford, Conn., assignor to M. Backes' Sons Incorporated, Wallingford, Conn., a Corporation of Connecticut. Filed Dec. 23, 1930. Serial No. 504,387. 6 Claims. (Cl. 42—57.)



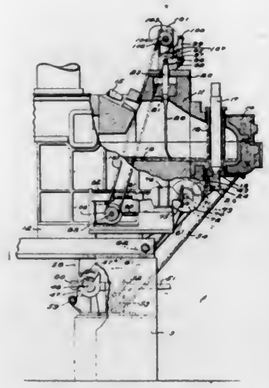
6. A pistol cap composed of a strip of flexible material having one or more powder spots thereon, and one or more spots of paraffin, as a lubricant, upon one side of the strip.

1,828,215. PHOTOGRAPHIC SHUTTER. ÁRPÁD BARÉNYI, Berlin-Lichterfelde, Germany. Filed Dec. 23, 1930, Serial No. 504,298, and in Germany Jan. 9, 1930. 11 Claims. (Cl. 95—63.)



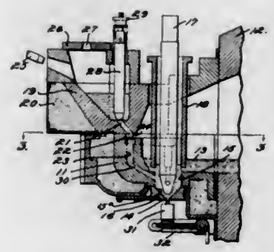
1. In a photographic shutter, the combination, with the shutter blades, the operating mechanism therefor comprising a master member, means for controlling the said master member for instantaneously openink and closing the shutter blades, and means for bodily moving said master member in a direction for opening the shutter blades and returning the same into initial position for closing said shutter blades.

1,828,216. METHOD OF AND APPARATUS FOR FEEDING MOLTEN GLASS. WILLIAM T. BARKER, Jr., Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 29, 1928. Serial No. 302,730. 18 Claims. (Cl. 49—55.)



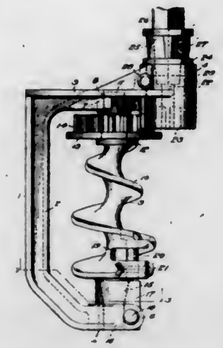
1. The method of obtaining variegated glass charges which comprises flowing molten glass of a base color through a flow channel to a discharge outlet in the bottom of the flow channel, combining with said glass in the flow channel a plurality of smaller streams of glass of a secondary color and discharging the combined streams through the outlet in successive suspended masses, each of such masses having a body formed mainly of glass of the base color and having streaks of glass of the secondary color clearly visible at the surface thereof, twisting each suspended mass about its longitudinal axis during its formation and with respect to the glass entering the outlet to distribute said streaks of glass of the secondary color at the surface of the body of the suspended mass in imitation of the streaks or striations of a body of variegated natural rock, altering different charge masses by varying the durations of the periods of twisting thereof, and severing each suspended mass from the oncoming glass.

1,828,217. METHOD OF AND APPARATUS FOR FEEDING MOLTEN GLASS. WILLIAM T. BARKER, Jr., Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 12, 1928. Serial No. 325,550. 13 Claims. (Cl. 49—55.)



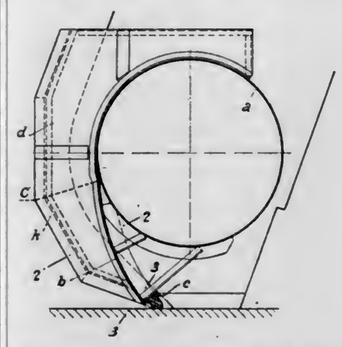
1. Glass feeding apparatus comprising means for flowing molten glass of a given color from the source of supply to a discharge outlet submerged by said glass, means for introducing glass at said outlet of a different color into said first named glass below the level of the latter, and means for successively forming the glass into suspended masses and for twisting each of said masses to distribute the glass of different colors therein.

1,828,218. VOLUTE BRAKE MECHANISM. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed June 3, 1927. Serial No. 196,347. 8 Claims. (Cl. 254—149.)



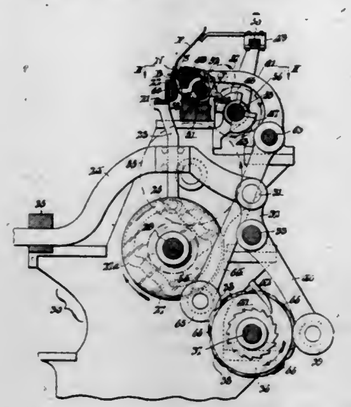
1. In a brake operating mechanism, a support comprising a base apertured to provide a bearing, a depending arm with a bifurcated end underlying the apertured portion of the base, a drum journaled at its upper end within the apertured portion of the base and provided with means for attachment of a flexible member thereto, the drum having a flange and a plurality of convolutions constituting a seat to receive the flexible member, and a bearing block embraced by and connected to the bifurcated end of the support arm and serving to rotatably mount the lower end of the drum.

1,828,219. LATERAL PACKING FOR WEIRS. THEODOR BECHER, Gustavsburg, Germany, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Nuremberg, Bavaria, Germany, a Corporation of Germany. Filed Feb. 17, 1928, Serial No. 255,068, and in Germany Aug. 5, 1927. 5 Claims. (Cl. 61—22.)



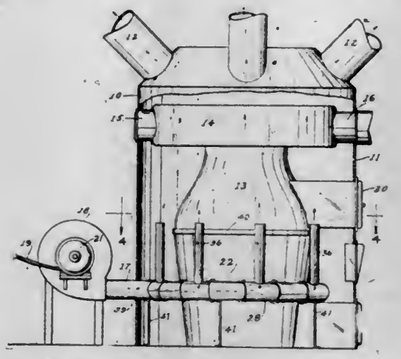
1. In a weir construction, in combination with the closing member and a packing beam for the bottom of the weir carried by said closing member, a sheet-metal plate extending upstream from said closing member, a packing beam carried by said sheet-metal plate, and means connecting said sheet-metal plate to said closing member so as to permit lateral movement of said sheet-metal plate and the beam carried thereby with respect to the closing member under the influence of the water pressure and an angle-piece secured to said packing beam and adapted to slide in grooves provided in said bottom packing beam.

1,828,220. ART OF KNITTING AND IN KNITTING MACHINES. WILHELM BOCK and HOWARD W. MATTHEWS, Lansdale, Pa., assignors to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Jan. 3, 1928. Serial No. 244,089. 7 Claims. (Cl. 66—82.)



1. In a flat knitting machine, a bank of needles, a guide confining the needle bank to reciprocatory movement, cooperating sinkers having a fixed throw, a stationary support for the sinkers, a series of knock-over bits over which the fabric loops are drawn, a pivoted support sustaining the knock-over bits with capacity for sliding movement toward and away from the needles, and an intermittently actuated rotary cam operative to shift the needle bank guide positionally relative to the sinkers for measurement by the latter of more or less yarn for each course of the knitting and to concurrently move the knock-over support compensatively for relative positioning of the knock-over bits to insure uniform drawing of correspondingly larger or smaller fabric loops.

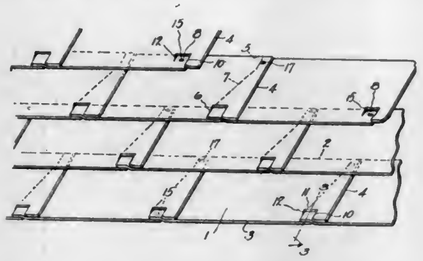
1,828,221. AIR FEED MECHANISM FOR HOT AIR FURNACES. SAMUEL I. BORDO, Cleveland, Ohio. Filed Nov. 27, 1929. Serial No. 410,102. 9 Claims. (Cl. 126—110.)



1. The combination with a furnace having an air chamber between the fire pot and the casing of the furnace, of

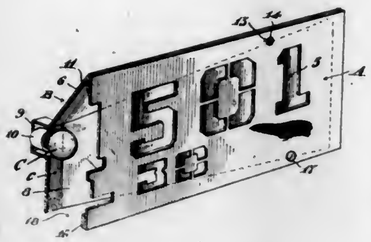
an air tube positioned in the lower portion of said chamber, hollow pipes connected at their lower ends with such tube and having their open upper ends extending in said chamber above the level of the lower wall portion of the fire pot, and mechanism outside the said casing for forcing the outer air through an aperture in the casing into the said air tube.

1,828,222. COMPOSITION ROOFING SHINGLE. OSCAR B. CLOW, Tacoma, Wash. Filed Oct. 21, 1930. Serial No. 490,172. 4 Claims. (Cl. 108—7.5.)



1. A roof comprising shingles of substantially rectangular form laid in horizontal courses; each shingle having its opposite side edge portions, respectively, overlapping and underlapping the edge portions of the next adjacent shingles of the same course, and each shingle being formed near the side edge of its overlapped end portion with a slit extended thereinto from the lower edge and setting off an anchor tab over which the lower edge of the underlapped shingle is extended.

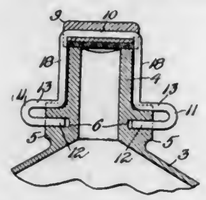
1,828,223. ILLUMINATED NUMBER PLATE FOR VEHICLES. CHARLES E. EMERY, Los Angeles, Calif. Filed Jan. 10, 1930. Serial No. 419,810. 1 Claim. (Cl. 40—133.)



A license plate for vehicles comprising a stenciled plate the openings of which are uncovered, a housing extending rearward of said plate including a flat downwardly inclined top wall and flat side walls converging toward each other from adjacent the ends of said stenciled plate, a lamp located in said housing between the contiguous ends of said side walls, said housing being open throughout on its under side, and means for detachably connecting said plate to said housing.

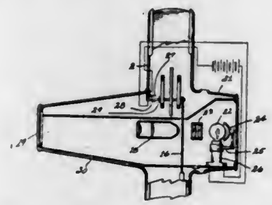
1,828,224. CLOSURE FOR CONTAINERS. SAMUEL FREEMAN, Boston, Mass. Filed May 31, 1930. Serial No. 458,452. 6 Claims. (Cl. 221—60.)

1. In a container, the combination of a spout provided upon opposite sides thereof with sockets; a closure cap adapted to fit against the delivery end of said spout and provided at opposite sides of the latter with legs each of which is made with a trunnion occupying one of said sockets; means for yieldingly holding said cap against the delivery end of said spout, and means on said spout



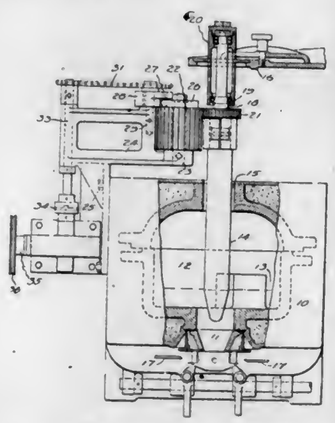
for moving said cap longitudinally relatively to the spout and away from said sockets as said cap is swung laterally away from its spout-closing position.

1,828,225. SCALE INDICATING MEANS. CLARENCE H. HAPGOOD, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Dec. 26, 1919. Serial No. 347,399. 32 Claims. (Cl. 265—62.)



1. In a device of the class described, in combination, weighing mechanism for offsetting a part of the load, weighing mechanism for offsetting the remainder of the load, indicating mechanism co-operating with both of said weighing mechanisms, said indicating mechanism comprising means for projecting an indication of the sum of weights offset by said weighing mechanisms upon a screen.

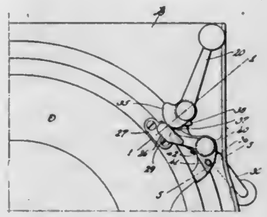
1,828,226. METHOD AND APPARATUS FOR FEEDING GLASS CHARGES OF DIFFERENT COLORS. EVERETT O. HILLER, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 15, 1927. Serial No. 226,322. 9 Claims. (Cl. 49—55.)



1. The method of automatically feeding mold charges of glass from a plurality of glasses of different colors,

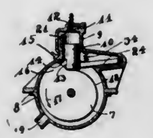
which comprises imparting rotary movement to converging streams of glass of different colors and mixing the glasses to a point short of blending, delivering the resultant glass in suspended masses below a severing plane, and severing charges therefrom.

1,828,227. SAFETY DEVICE FOR CENTRIFUGAL DRIERS. FRED W. JUENGST and OSCAR M. ANDERSON, New Britain, Conn., assignors to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed May 29, 1928. Serial No. 281,451. 6 Claims. (Cl. 192—136.)



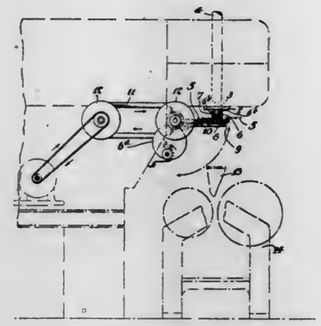
4. In a centrifugal drier, a rotatable receptacle, a cover therefor, a control lever for said receptacle, a locking member for said cover, means fixed to and movable with said control lever and adapted to directly engage said locking member for preventing actuation of said locking member when said lever is in operated position, and means for preventing the power from being thrown onto said receptacle when said cover is open, said means having a portion lying in the path of movement of the cover when the cover is open and adapted to be cammed outwardly when the cover is brought to closed position.

1,828,228. GAS ENGINE. CLARENCE W. KEMPTON, Los Angeles, Calif. Filed Aug. 8, 1927, Serial No. 211,514. Renewed Mar. 18, 1931. 4 Claims. (Cl. 123—15.)



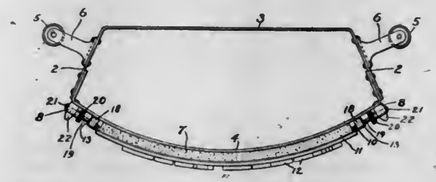
1. In an internal combustion engine, a circular casing, a compression chamber extending radially from said casing and having a valve controlled gas inlet in its outer end, the walls of the compression chamber having a gas passage formed therein with its ends opening into the inner and outer end portions of the chamber, a rotor rotatably mounted in said casing and formed with a substantially radially extending face and having its edge face constituting a cam surface intersecting the ends of the radially extending face, a piston slidable in said compression chamber and extending into said casing and resting upon the edge face of said rotor, said piston having a recess in its lower end moved into and out of communication with the lower end of said gas passage during reciprocation of the piston and disposed opposite the radial face of the rotor when the piston is in a lowered position, and spark forming means to explode a charge of gas between the piston and radial face of the rotor.

1,828,229. FEEDING MOLTEN GLASS. GILBERT C. MARSH, Akron, Ohio, assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 18, 1928. Serial No. 293,679. 9 Claims. (Cl. 49—55.)



9. The method of obtaining variegated charges of molten glass which comprises causing molten glass of a plurality of different colors to issue from a final discharge outlet in successive suspended masses, temporarily mechanically engaging the lower end portion of each of said masses and imparting a lifting movement to such glass at the beginning of the period of formation thereof, imparting a rotary motion to said glass to distribute the colors thereof, controlling the distribution of such colors in said masses by varying the extent of lifting movement and the speed of rotary motion imparted thereto, and severing each mass, when formed, at a plane spaced below said discharge outlet.

1,828,230. STAMP. WILLIAM J. PANNIER, Jr., Pittsburgh, Pa., assignor to Pannier Brothers Stamp Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 9, 1930. Serial No. 459,852. 6 Claims. (Cl. 101—376.)

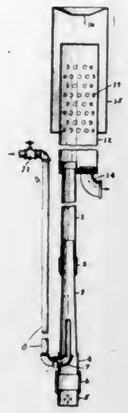


1. A stamp consisting of a rigid holding frame having an outer curved face, a curved cushion thereon, a flexible stamping die having a flexible sheet metal base fixedly connected with the stamping die and provided with hook terminals, transverse bars laid across the face of the base at opposite end portions adapted to engage the hook terminals, and means on the base outwardly from one of the bars for tightening and loosening it and preliminary bearing projections associated therewith.

1,828,231. WATER ELEVATOR. EDWIN S. PATTERSON, Sharon, Pa. Filed Feb. 20, 1930. Serial No. 429,859. 4 Claims. (Cl. 103—260.)

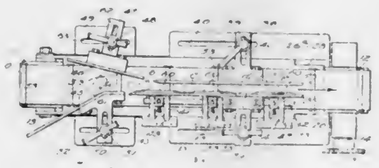
1. A device for elevating liquids comprising a upright pipe, a tapering pipe connected to the lower end of the first

pipe coaxially therewith and having its outlet end within the first pipe and of less diameter than said first pipe, and a jet nozzle disposed axially within the tapered pipe and having a small outlet at its upper end for delivering a fine jet of highly compressed gas axially through said



tapered pipe to entrain a column of liquid, impart velocity thereto and deliver the same under pressure into said upright pipe, said nozzle outlet having a cross-sectional area less than one-fiftieth of that of the outlet end of said tapered pipe.

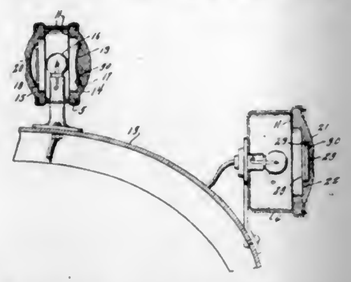
1,828,232. CLEAT CONVEYER. GEORGE E. ROWE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 19, 1927. Serial No. 240,992. 5 Claims. (Cl. 198—29.)



1. A buck for conveying and spotting articles of glassware comprising an endless belt, a plurality of transversely extending cleats fixed to said belt at evenly spaced intervals, means for moving said belt, a longitudinally extending guide rail secured at one side of the path of travel of articles on said belt, and an opposed yieldingly mounted presser shoe adapted to engage said articles to position them laterally against said guide rail, said shoe and said rail frictionally retarding the movement of said articles until they abut against one of said cleats and are positively moved thereby, whereby accurately to spot said articles.

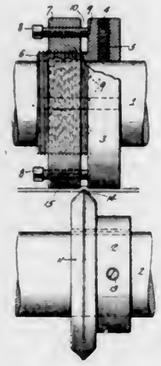
1,828,233. LENS. DAVID C. SMITH, Toledo, Ohio, assignor to Kadon Foundation Inc., Toledo, Ohio, a Corporation of Delaware. Continuation of application Serial No. 606,301, filed Dec. 11, 1922. This application filed May 14, 1928. Serial No. 277,601. 1 Claim. (Cl. 240—8.22.)

A traffic signal glass circular lens having a convex outer side, said lens having rearwardly from said convex outer side a marginally peripherally projecting flange, said lens oppositely from said convex outer side and out of the plane



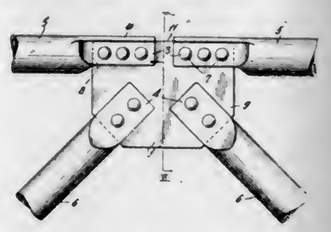
of said flange having in a central region and, integral with said flange a mirror reflecting surface fronting toward the central portion of said convex outer side.

1,828,234. BLANK CREASING DEVICE. GEORGE W. SWIFT, Jr., Bordentown, N. J., assignor to George W. Swift, Jr., Inc., Bordentown, N. J., a Corporation of New Jersey. Filed Mar. 18, 1930. Serial No. 436,767. 16 Claims. (Cl. 93—58.)



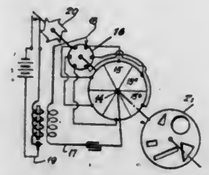
1. In a device of the character described, the combination of a female creasing roll provided with laterally-spaced groove-forming members, and a male creasing roll provided with a beveled surface inclined to the peripheral surface of one of said groove-forming members of the female creasing roll.

1,828,235. JOINT SYSTEM FOR TUBULAR FRAMEWORK OR SIMILAR METAL CONSTRUCTIONS. ARIE VAN HATTUM, The Hague, Netherlands. Filed Nov. 19, 1927, Serial No. 234,436, and in the Netherlands Oct. 14, 1927. 2 Claims. (Cl. 287—54.)



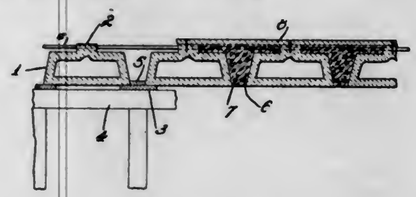
1. Joint system for tubular framework or similar metal constructions, comprising a tubular member, a polygonal junction plate, a slotted flat end on said tubular member forming two flat solid parallel walls embracing a corner of said junction plate and having U-shaped transverse and longitudinal profiles in order to abut two adjacent perpendicular edges of said plate and rivets for securing the joint.

1,828,236. METHOD OF PRODUCING VISUAL EFFECTS. ARTHUR C. WATSON, Marietta, Ohio. Filed Aug. 27, 1929. Serial No. 388,810. 24 Claims. (Cl. 40—52.)



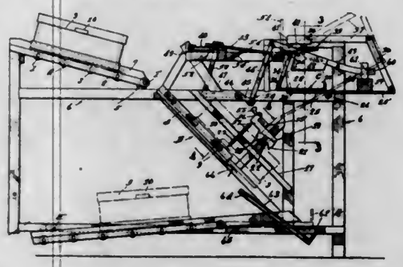
1. The method which consists in causing substantially instantaneous, intermittent illuminations in different positions along a periodic path in rapid succession through repetitive cycles satisfying the critical frequency for continuous visual sensation, producing visual effects of appreciable duration, and modifying the visual effects by interposing a mask between said illuminations and the observer.

1,828,237. FLOOR TILE. CHARLES WILLIAM AKERS, Nashville, Tenn. Filed June 30, 1930. Serial No. 464,989. 4 Claims. (Cl. 72—66.)



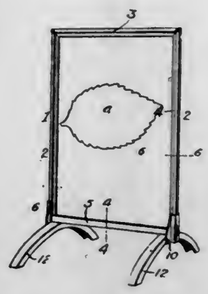
4. A tile for concrete floor construction having a rib extending across one face thereof adapted to project through a body of concrete placed over said face, and means for positioning a reinforce element extending transversely of said rib in spaced relation with respect to both the projecting surface of said rib and the said surface of said tile.

1,828,238. BREAD PACKING MACHINE. AXEL J. ANDERSEN, San Francisco, Calif. Filed Nov. 19, 1928. Serial No. 320,523. 13 Claims. (Cl. 226—14.)



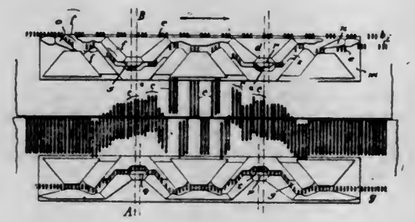
1. A device for packing articles in a container consisting of an article dispenser, and means for delivering a predetermined number of articles to said dispenser, said dispenser being entirely operated by the weight of the articles, said dispenser discharging said articles into the container during each operation.

1,828,239. PORTABLE SIGN FRAME. FRANK BENNETT and HOWARD T. HALLOWELL, Jenkintown, Pa., assignors to Standard Pressed Steel Co., Jenkintown, Pa., a Corporation of Pennsylvania. Filed Apr. 23, 1930. Serial No. 446,721. 4 Claims. (Cl. 40—125.)



1. The combination in a portable sign of a frame having side members and a top member in the form of channels, the flanges of the channels extending inwardly and spaced apart to form guides for a sign, the bottom member of the sign being made of two bars spaced apart for the passage of the sign; brackets secured to the lower end of the frame; and a leg at each side of the frame and secured to the brackets said legs closing the ends of the space between the two bars forming the bottom member of the sign, and acting to lock the sign in the frame.

1,828,240. LOCK FOR PRODUCING PURL WORK ON FLAT KNITTING MACHINES. ERNST OTTO BORN, Rabenstein, near Chemnitz, Germany. Filed Apr. 26, 1928, Serial No. 273,072, and in Germany Apr. 29, 1927. 5 Claims. (Cl. 66—63.)

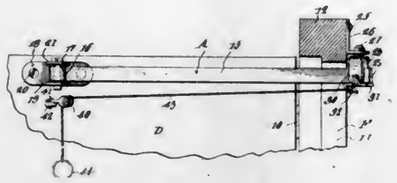


1. In a purl knitting machine, a carriage, a pair of opposed flat needle beds, a plurality of double ended needles in said beds, means for moving some of said needles from one bed into the second bed and for causing said needles to knit in the second bed, and means for moving the needles completely back again into the first bed and for causing the needles to knit in the first bed during a movement of the carriage in either direction whereby the needles knit a complete purl row during movement of the carriage in one direction.

1,828,241. BLENDE SINTERING PROCESS. LOUIS BOSCHERON, Liege, Belgium, assignor to Societe Anonyme la Nouvelle Montagne, Engis, Belgium, a Company of Belgium. Filed Feb. 21, 1930, Serial No. 430,398, and in Belgium Mar. 9, 1929. 12 Claims. (Cl. 75—60.)

1. In a blende sintering process, mixing the ore in a divided condition with zinc sulphate, proportioning the mixture in such manner that the sulphide-sulphur in excess of the amount necessary to ensure combustion is compensated by the presence of sulphate-sulphur, and sintering said mixture under forced draught.

1,828,242. DOOR HOLDER. CHARLES J. CRAWFORD, Toledo, Ohio. Filed Dec. 31, 1929. Serial No. 417,755. 1 Claim. (Cl. 292—265.)

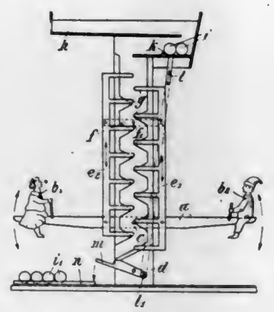


A door holding device comprising a door bracket, a latch bar rockably carried by the bracket, a door frame bracket, a guide member receiving the latch bar swivelly carried by the door frame bracket, a combined latch and pivot bolt extending transversely across the guide member on which the lower edge of the latch bar normally slides, the lower edge of the latch bar being provided with a keeper recess for receiving said combined latch and pivot bolt when the door is in its open position, a trip member rockably mounted upon said combined latch and pivot bolt upon which the latch bar rests when the bolt is in the recess, and a pull cable secured to the trip member for rocking the same, whereby to raise the latch and its recess above said combined latch and pivot bolt.

1,828,243. PULPING FARM WASTES. ELTON RICHMOND DARLING, Danville, Ill., assignor to Cornstalk Products Company, Inc., Danville, Ill., a Corporation of Delaware. Filed Dec. 16, 1929. Serial No. 414,586. 4 Claims. (Cl. 92—13.)

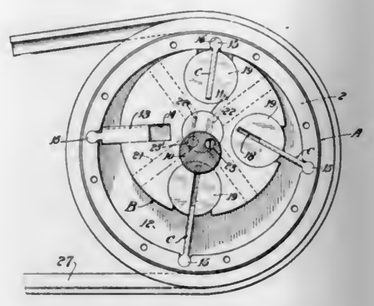
1. In the process of manufacturing cellulosic pulp from comminuted farm wastes by alkaline digestion, the step which comprises separating the partially digested products from the completely digested products, and thereafter subjecting the thus separated partially digested products separately to an alkaline pulping operation.

1,828,244. SEESAW TOY. WILHELM DAVID, Hamburg, Germany, assignor to E. P. Lehmann, Brandenburg-on-the-Havel, Germany. Filed Feb. 3, 1931, Serial No. 513,162, and in Germany Feb. 5, 1930. 3 Claims. (Cl. 46—37.)



1. A toy comprising a frame, a seesaw fulcrumed thereon, a member pivoted on each of the two arms of said seesaw, said two members being hingedly interconnected and having steps staggered with relation to one another and adapted to form a path between them for a ball adapted to alternatively depress said stepped members, and means for feeding single balls to said path.

1,828,245. ROTARY PUMP. WILLIAM WARD DAVIDSON, Evanston, Ill. Filed Dec. 8, 1930. Serial No. 500,892. 4 Claims. (Cl. 103—121.)



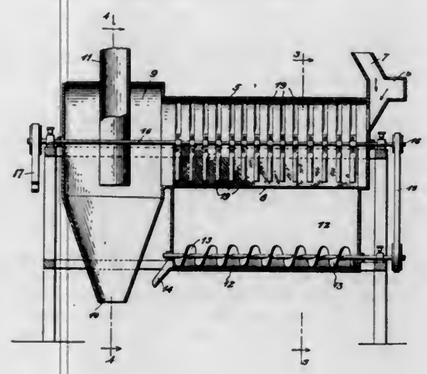
1. In a rotary pump, the combination of a cylinder, heads which close the ends of said cylinder provided with bearings concentric with the bore of the cylinder, means for rotatably mounting said cylinder comprising a frame, a fixed shaft thereon which comprises an eccentric portion which is exposed within said cylinder, a rotor rotatably mounted on the eccentric portion of said shaft in tangential relation to the bore of the cylinder, a plurality of vanes connecting said cylinder and rotor comprising an impelling vane pivoted to one thereof and slidably fitted to a slot formed in the other whereby they will rotate together, and the other vanes being pivoted to one pump member and pivotally and slidably engaged with the other member, said pump being provided with air supply and discharge connections to and from the air chambers of the pump, comprising recesses formed in opposite sides of the eccentric portion of the pump shaft, passageways in said shaft which are in open communication with said recesses, respectively, and ports formed in the rotor arranged for connecting the air chambers of the pump defined by the pump vanes with the recesses in the fixed pump shaft in continuous succession during operation.

1,828,246. HEEL PROTECTOR. JOSEPH J. DESTRO, Cleveland, Ohio. Filed July 18, 1930. Serial No. 468,941. 1 Claim. (Cl. 36—72.)



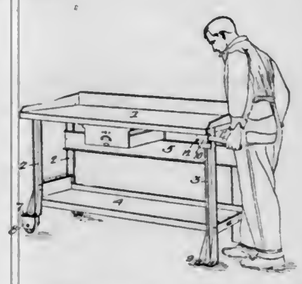
A protector for heels and backs of shoes comprising an elastic member preformed to fit a selected style of heel, said member snugly and completely enclosing the heel and back of the shoe when fitted thereto, the back of said member when positioned on the heel terminating substantially flush with the upper portion of the back of the shoe, and an embedded hook adapted to hook over the edge of the rear upper part of the shoe, said hook being in the form of an inverted U-shaped member, one arm of which is completely embedded in the material forming the back of the protector, the material of the protector being thickened to extend completely around the U-shaped member and forwardly thereof to occupy a position between the stocking and the other arm of the U-shaped hook member when the protector is worn, whereby the stocking is protected against damage.

1,828,247. APPARATUS FOR DISLODGING HARD-PRESSED FLOUR FROM BRAN. THOMAS EDGAR FORSTER, Wichita, Kans. Filed Feb. 27, 1930. Serial No. 431,832. 1 Claim. (Cl. 209—37.)



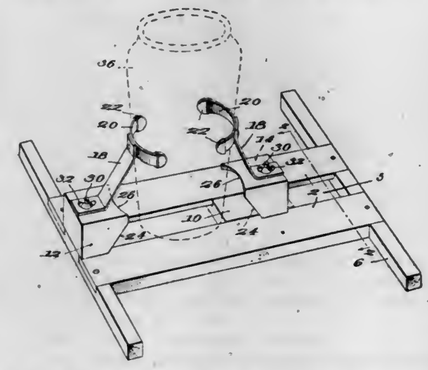
In a machine for removing hard-pressed flour from bran, a horizontal cylinder having a smooth imperforate semi-cylindrical section and a screened semi-cylindrical section, said sections having a common radius, one end of said cylinder having an inlet for air and flour-laden bran, the other end of said cylinder being open, a bran-collecting chamber with which said open end of the cylinder directly communicates, the lower end of said chamber having a bran outlet, an air outlet conduit extending from a point within said chamber to the exterior of the latter, and means extending longitudinally within and out of contact with said cylinder for violently whirling the air and flour-laden bran, causing the latter to be centrifugally held against the cylinder wall and to repeatedly slide alternately upon said smooth cylinder section and said screened cylinder section, thereby insuring that each decrease in the speed of the bran incident to travel upon said screened section, shall be followed by an increase in the speed of the bran while the latter travels upon said smooth section.

1,828,248. PORTABLE WORK BENCH. HOWARD T. HALLOWELL and FRANK BENNETT, Jenkintown, Pa., assignors to Standard Pressed Steel Co., Jenkintown, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1929. Serial No. 399,642. 1 Claim. (Cl. 280—53.)



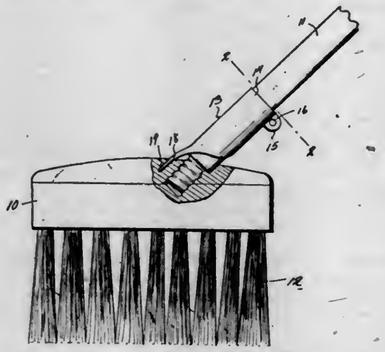
The combination in a work bench having legs at each end, of rollers on one set of legs; a U-shaped plate secured to the outer side of each of the other legs, the back of each U-shaped plate being of greater length than the front; means extending through the elongated back of the plate by which the plate is secured to the legs under the top of the bench; a handle extending into the U-shaped portion of the plate; and a pivot pin at one end of the U-shaped plate on which the handle is pivoted, so that each handle will hang freely from the U-shaped plate and in the position to be raised when desired to move the bench, the U-shaped portions of the plate forming stops for the handle when in the raised position.

1,828,249. HOLDER FOR FLOWER CONTAINERS. GORDON HAMMOND, Ashland, Va. Filed Mar. 25, 1930. Serial No. 438,871. 1 Claim. (Cl. 248—41.)



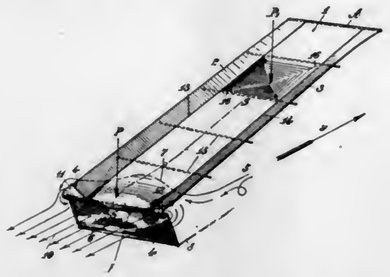
A holder for flower containers comprising a base formed with a guide slot, a stationary clamping block mounted on said base at one end of said slot, a movable clamping block mounted on said base to slide along said slot, the opposed clamping faces of said blocks being undercut to slope inwardly from top to bottom and adapted to engage the periphery of a container therebetween, supplemental clamping elements carried by each of said blocks, said supplemental clamping elements comprising upright portions and curved horizontal portions having end portions for engaging a container at spaced points at a distance above the clamping faces of said blocks, said supplemental clamping elements being mounted on said blocks for rotation about a vertical axis, and common means for securing the blocks to the base and for securing the supplemental clamping means in any position against rotation.

1,828,250. HANDLE CLAMP. ALBERT J. HAWKES, North Cambridge, Mass. Filed Dec. 31, 1929. Serial No. 417,747. 1 Claim. (Cl. 806—29.)



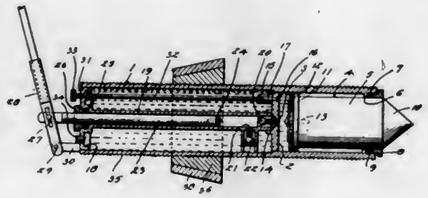
A clamp of the character described, comprising a cylindrical split body adapted to engage about the periphery of a handle, an outstanding apertured ear disposed at each of the free ends of said body, a single integral brush engaging member projecting longitudinally from the body at a point substantially diametrically opposed to said ears, and means engaging said ears whereby to clamp the body about a brush handle.

1,828,251. DEVICE FOR TAKING UP AND SETTING DOWN FLOATING BODIES, PARTICULARLY AIRCRAFT, ON OR FROM PLATFORMS SUCH AS SHIPS OR LANDING STAGES. WOLDEMAR KIWULL, Riga, Latvia. Filed May 24, 1930, Serial No. 455,423, and in Germany June 19, 1929. 10 Claims. (Cl. 114—0.5.)



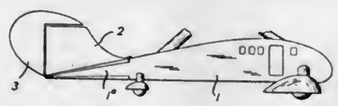
1. A device for taking up and releasing floating bodies, particularly aircraft, onto and from ships and the like, comprising a platform extending from the ship into the water; and means on the end of the platform extending in the water to convert the turbulent flow of water from the propeller of the ship into a laminar flow.

1,828,252. HYDRAULIC GEAR PULLER. JAMES E. LYNCH, Texarkana, Tex. Filed Dec. 31, 1929. Serial No. 417,772. 5 Claims. (Cl. 29—86.)



1. A gear puller comprising a cylinder having a partition therein adjacent one end forming a piston chamber, a piston within said chamber extensible through the adjacent end of the cylinder for engagement with a gear-supporting shaft, the cylinder upon the other side of the partition being adapted to contain a fluid, a tube within the fluid containing portion of the cylinder having a valved inlet from the cylinder adjacent the partition and a valved outlet through the partition into said chamber, a piston within said tube, said cylinder being exteriorly threaded throughout, a two-part collar surrounding and threadably connected with the cylinder, a body surrounding said collar and detachable therefrom carrying laterally projecting arms, and gear engaging rods each adjustably connected with said arms.

1,828,253. AIRCRAFT CONTROL MECHANISM. PAUL MAIWURM, San Diego, Calif. Filed July 29, 1929. Serial No. 381,710. 6 Claims. (Cl. 244—29.)



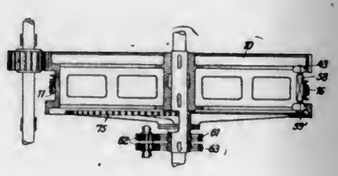
1. In a device of the class described, the combination with a fuselage having a relatively wide, wedge shaped tail portion, of a plurality of controlling surfaces hinged at their forward edges to said fuselage above and below said tail portion and adapted to lie contiguous therewith and flush with the adjoining fuselage surfaces, and means for manipulating each controlling surface independently.

1,828,254. HAIR SLIDE. ALFRED MENDEL and ERNST KLEINMANN, Berlin-Lichtenberg, Germany. Filed Feb. 11, 1931, Serial No. 515,066, and in Germany Sept. 22, 1930. 10 Claims. (Cl. 132—48.)



1. In a hair slide comprising two limbs hinged together, the combination of two series of teeth, one series being fixed in said slide and the other being movable therein, and means actuated upon the opening and closing of said limbs for moving said movable teeth to bring them on the closing of the limbs into a position in which they co-operate with said fixed teeth to grip firmly hair lying between said fixed teeth but on the opening of the limbs to bring said movable teeth into a position in which they allow of release of said hair.

1,828,255. ROPE GEARING AND THE LIKE. OTTO OHNESORGE, Bochum, Germany. Filed May 14, 1930, Serial No. 452,431, and in Germany May 18, 1929. 4 Claims. (Cl. 74—21.)



1. Rope or like gear wherein the pulley has at its circumference a series of worms for traversing the coils of the track chain, and has a centre wheel common to said worms, for driving the same, the said centre wheel being in connection with a stationary part, whereby it is in the course of rotation of the pulley caused to rotate the worms by driving them in parallel.

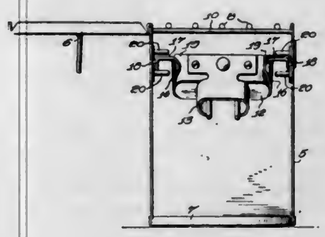
1,828,256. FASTENER SLIDE. DANIEL I. REITER, New York, N. Y. Filed Oct. 18, 1930. Serial No. 489,508. 16 Claims. (Cl. 24—77.)



1. In a combined slide and snap fastener element, a slide member of sheet material, having a pair of spaced transverse slots therein, said slots having smooth, uninterrupted walls for the free passage of a belt therethrough, a snap fastener element on the slide member between said slots adapted to engage a cooperating fastener element, said snap fastener element having an engaging portion upstanding above the upper face of the slide member, the slide member being provided with an

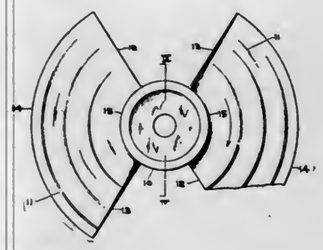
aperture arranged coaxially of the fastener element, and belt-engageable prongs integral with and bent from the sheet material of the slide member and projecting below the other face of the slide member, said prongs being arranged between the slots and the aperture of the slide member and in spaced relation to the walls of the slots, and said prongs being bent laterally from that area of the sheet material of the slide member disposed between the inner walls of the slots and thereby leaving openings in said area.

1,828,257. ELECTRIC-HEATER KIT. MICHAEL A. ROLLMAN, Mount Joy, Pa. Filed July 16, 1929. Serial No. 378,649. 4 Claims. (Cl. 219—19.)



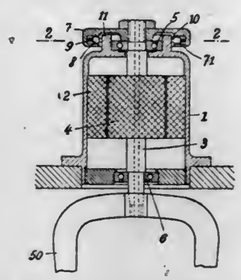
1. In an electric heating kit, a box having an openable top-cover and also a grid within the box near its top edge, supporting elements on the side-walls of the box projecting inwardly at points below the grid, a tray adapted to rest on these supporting elements, and a removable heating-shoe adapted to fit within said tray, for the purpose set forth.

1,828,258. PROPELLER. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 11, 1930. Serial No. 420,213. 9 Claims. (Cl. 170—156.)



1. A propeller embodying a hub and blades, said blades having substantially straight leading and trailing edges which diverge from their root to near their tip portions so as to provide a greater developed length of blade from the leading to the trailing edges near the tip portion than near the root portion, said blades having a substantial uniform radial cross-section from their leading to their trailing edges and said blades having a working surface radially concaved toward the other working surface, the concavity of said working surface being such that the stress areas so progressively increase from the tip of the blade to the root of the blade as to effect minimum stress at the root, the stress area at any radius being the developed length of the blade from the leading edge to the trailing edge at that radius multiplied by the thickness of the blade at that radius.

1,828,259. DRIVING MECHANISM FOR FLYERS. HEINRICH SCHNEIDER, Zurich, Switzerland. Filed June 7, 1930, Serial No. 459,759, and in Germany June 17, 1929. 10 Claims. (Cl. 118—43.)

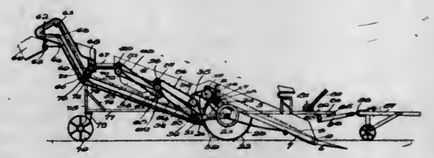


1. In a spinning apparatus, a flyer, a motor for driving the same, a brake block rotatable with said flyer and movable in response to centrifugal action out of braking position, and yieldable means counter-acting said centrifugal action.

1,828,260. REPRODUCING MAGNET FOR TELEGRAPHONES. CURT STILLE, Berlin, Germany, assignor to Telegraphie-Patent-Syndikat G. m. b. H., Berlin, Germany. Filed Apr. 12, 1929, Serial No. 354,684, and in Germany Sept. 26, 1928. 2 Claims. (Cl. 179—100.2.)

1. A reproducing magnet or talking head for telegraphones, capable of allowing the passage of riveted or welded thickened parts of wire, comprising movable jaws carrying the magnets of the telegraphone and having a funnel-shaped inlet end, in combination with means provided at the inlet and outlet end of the talking head for respectively positively opening and closing the said jaws under the control of the said thickened parts of wire.

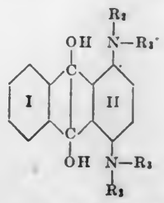
1,828,261. COMBINED POTATO DIGGER AND SORTER. LOUIS STOLTENBERG, Oakland, Calif. Filed Mar. 28, 1930. Serial No. 439,824. 6 Claims. (Cl. 55—51.)



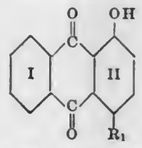
1. A mechanism of the type described comprising a digging plow, an endless vibrating flexible chain associatively mounted above and discharging onto an endless vibratable sorting chain, a second endless vibratable sorting chain onto which first named sorting chain discharges, a transverse continuously moving belt onto which said second named sorting chain discharges, a series of directing chutes below the endless sorting chains and above and discharging onto a flexible continuously moving conveyor-belt having two distinct carrying paths made up of cleats separated by a partitioning means.

1,828,262. PROCESS FOR THE MANUFACTURE AND PRODUCTION OF ANTHRAQUINONE INTERMEDIATES. WILLIAM WYNDHAM TATUM, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed Feb. 10, 1926, Serial No. 87,447, and in Great Britain Jan. 11, 1926. 10 Claims. (Cl. 260—60.)

1. In the manufacture of leuco amino anthraquinone of the general type



the process which comprises simultaneously reacting upon an anthraquinone compound having the general formula

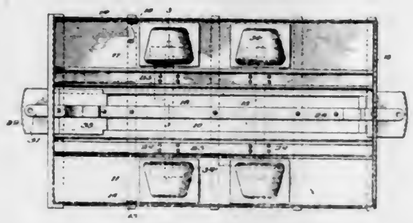


with a compound having the formula



and an alkaline metal hydrosulphite whereby the said anthraquinone compound is simultaneously amidated and reduced to said leuco amino anthraquinone, and in which the benzene nucleus I may be further substituted and wherein R_1 represents NH_2 or OH groups and R_2 and R_3 represent hydrogen or an alkyl group.

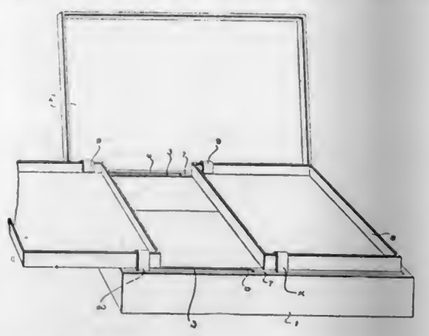
1,828,263. MINE CAR. NÓEL D. VETH, Barnesville, Ohio, assignor to The Watt Car and Wheel Co., Barnesville, Ohio, a Corporation of Ohio. Filed Dec. 9, 1929. Serial No. 412,873. 5 Claims. (Cl. 105—364.)



1. In a mine car and the like, a pair of axles having substantially flat upper surfaces and upwardly offset end portions, wheels journaled on said axles, and a car body mounted on said axles, said body having a central bottom plate supported on the flat upper surfaces of the intermediate portions of said axles and sloping side portions supported directly on the offset end portions of said axles.

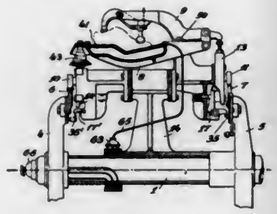
1,828,264. DISPLAY RECEPTACLE. JOSEPH SIDNEY VILLERÉ, Rochester, N. Y., assignor to The E. E. Fairchild Corporation, Rochester, N. Y., a Corporation of New York. Filed July 11, 1930. Serial No. 467,250. 2 Claims. (Cl. 206—44.)

1. The combination with a receptacle body, of a tray arranged in said body and having two opposite side walls spaced from the inner faces of two opposite side walls of the body, and the bottom of the tray spaced from the inner face of the bottom of the body, a tray slidable on the upper edge of the first named tray, and two guides



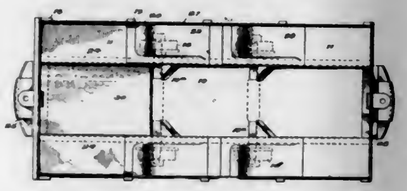
depending from opposite sides of the slidable tray into the spaces between the side walls of the first named tray and the body, said guides having portions operating beneath the bottom of the first named tray in the space between the bottom of said first named tray and the body.

1,828,265. MACHINE FOR THE MANUFACTURE OF GLUED SHOES. HEINRICH WALTHER, Frankfort-on-the-Main-Oberrad, Germany. Filed July 27, 1929, Serial No. 381,472, and in Germany Dec. 20, 1928. 9 Claims. (Cl. 12—37.)



3. In a machine for the manufacture of glued shoes, a rotatable carrier, a plurality of devices for pressing the sole to the lasted shoe, a pressing cushion in every device, an inflatable pressing bag and an electric heating pad in every device, electric ducts leading from the pads to insulated contact rings rotating with the said carrier, a stationary electric switch common to all pads, and spring pressed contacts within the switch sliding on the said contact rings.

1,828,266. MINE CAR. CHARLES W. WATT, Barnesville, Ohio, assignor to The Watt Car and Wheel Co., Barnesville, Ohio, a Corporation of Ohio. Filed Dec. 11, 1929. Serial No. 413,318. 6 Claims. (Cl. 105—364.)



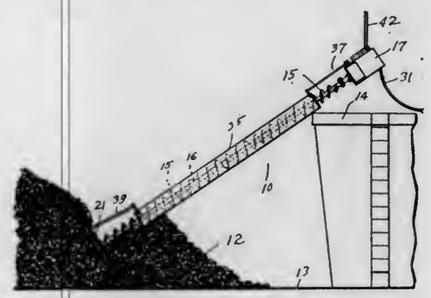
1. In a mine car and the like, a body having a bottom formed of a central portion and elevated side portions, channel irons having their webs vertically disposed and

closing the spaces between said central and side portions of the bottom, axles supporting said car body, the major portion of each axle being located below said channel irons and the ends of said axles being located above the lower edge of said irons, and wheels on said axles.

1,828,267. PRODUCTION OF SEBACIC ACID DINITRILE. FRITZ WILCKE, Berlin-Adlershof, Germany, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Filed Oct. 11, 1928, Serial No. 311,981, and in Germany Oct. 14, 1927. 4 Claims. (Cl. 260—108.)

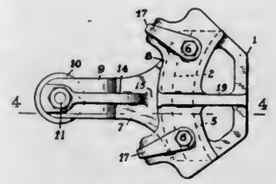
1. The method of producing sebacic acid dinitrile comprising acting on sebacic acid diamide with phosphorus oxychloride.

1,828,268. CONVEYER. TRAUB WILKES, New York, N. Y. Filed Feb. 2, 1931. Serial No. 513,011. 1 Claim. (Cl. 198—213.)



A conveyer for coal comprising a shaft, a spiral affixed about said shaft, a plate at one end of said shaft, a bearing member in said plate for said shaft, an electric motor at the other end of said shaft, a gearing box for operating said shaft from said motor, a U-shaped gutter adapted to be placed about said spiral, a cross bar detachably affixed to one end of said gutter, an end bar on said cross bar, means for affixing the end bar to the motor housing, a yoke detachably affixed to the other end of the gutter, an end bar on said yoke, and means for bolting the latter end bar to said plate.

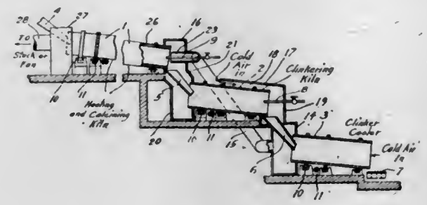
1,828,269. SPUDDING SHOE. CLYDE S. WRIGHT, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 13, 1929. Serial No. 406,948. 4 Claims. (Cl. 255—33.)



1. A spudding shoe having a cable bearing and rigid hooks overlying the bearing at each side of the center thereof.

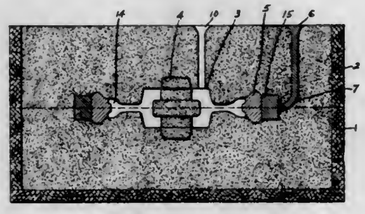
1,828,270. METHOD AND APPARATUS FOR BURNING PORTLAND CEMENT. EVALD ANDERSON, Alhambra, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 14, 1927. Serial No. 168,178. 4 Claims. (Cl. 222—7.)

1. The method of burning Portland cement which comprises subjecting a suitable mixture of cement-forming ingredients to successive heating, calcining, clinkering and cooling operations, pre-heating a supply of air by effecting said cooling operation therewith, pre-heating a separate supply of air by means of heat dissipated from the clinkering operation, delivering one of said supplies of pre-heated air substantially wholly to support combustion of fuel and produce a body of hot combustion gases,



effecting said clinkering operation with said hot combustion gases, delivering the other supply of pre-heated air substantially wholly for combustion of a separate supply of fuel to produce another body of hot combustion gases, mixing therewith said first-named combustion gases leaving the clinkering operation, and effecting said heating and calcining operations with such mixed combustion gases.

1,828,271. METHOD OF MAKING GEARS. EDWIN E. ARNOLD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,302. 8 Claims. (Cl. 22—204.)

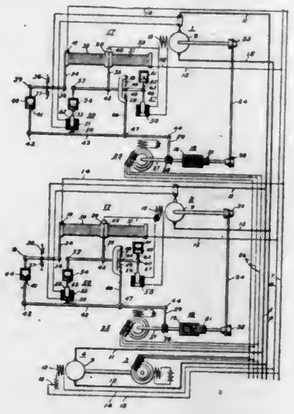


1. The method of manufacturing gear blanks which comprises placing a rim composed of an alloy having a comparatively high coefficient of expansion in a mold to divide the cavity of the mold into an outer annular chamber and an inner chamber, causing said rim to expand by means of molten metal supplied to said outer chamber, pouring molten metal having a comparatively low coefficient of expansion into the central chamber, such heat being supplied to said rim by means of the molten metal that, during the cooling of the blank, there will be a sufficient contraction of the rim in excess of the contraction of the central portion to insure a tight engaging fit between the two members.

1,828,272. REGULATOR SYSTEM. JOHN H. ASHBAUGH, Wilkinsburg, and STEPHEN A. STAEGE, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 15, 1929. Serial No. 340,289. 14 Claims. (Cl. 171—229.)

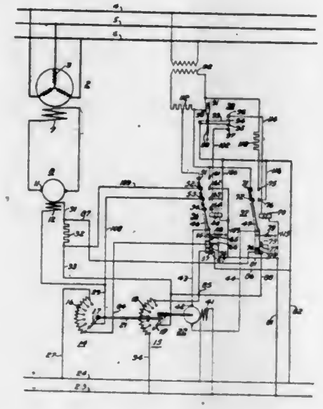
1. In a regulator system, a dynamo-electric machine having a field winding, a variable pressure resistor connected in series with said field winding, means for varying the pressure applied to said resistor comprising an

electromagnet energized in accordance with the voltage of said field winding, an electromagnet energized in ac-



cordance with the load current of said machine, and means actuated in accordance with variations in the regulated quantity from its desired value.

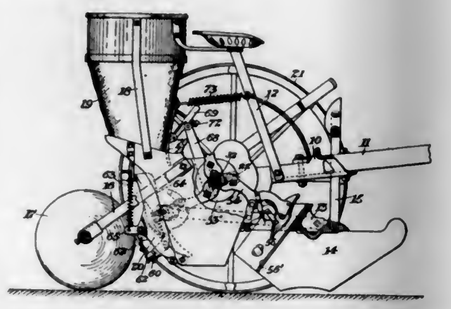
1,828,273. REGULATOR SYSTEM. JOHN H. ASHBAUGH, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,671. 12 Claims. (Cl. 172—246.)



1. In a regulator system, a dynamo-electric machine having a field winding, means for governing the excitation of said field winding comprising two resistors connected in parallel-circuit relation to a source of direct current, the field winding being connected across the resistors and having a normally short-circuited third resistor connected in circuit therewith, means actuated in accordance with an electrical quantity of the dynamo-electric machine for gradually varying the resistance in the field-winding circuit, means for rapidly varying the resistance of the field-winding circuit during predetermined regulating operations, and means for inserting the third resistor into the field circuit during other predetermined regulating operations.

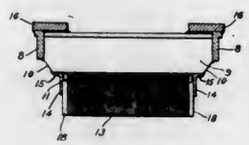
10. In a regulating system, a dynamo-electric machine having a field winding, means for governing the excitation of said field winding comprising two resistors connected in parallel-circuit relation to supply conductors, the field winding being connected between the midpoint of one resistor and a point on the second resistor, means for gradually moving the point of connection on the second resistor in response to a variation in an electrical quantity of the dynamo-electric machine, means for short-circuiting the portion of the second resistor in circuit with the field winding when the point of connection of the field winding is changing in a direction to increase the excitation of said field winding, means for inserting a third resistor in the field circuit when the point of connection of the field winding is changing in the opposite direction, and means for interrupting the circuit of the second resistor before the portion of the second resistor is short-circuited.

1,828,274. POTATO PLANTER. LEWIS AUGUSTUS ASPINWALL, La Crosse, Wis., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed July 27, 1926, Serial No. 125,235. Renewed Oct. 1, 1928. 21 Claims. (Cl. 111—52.)



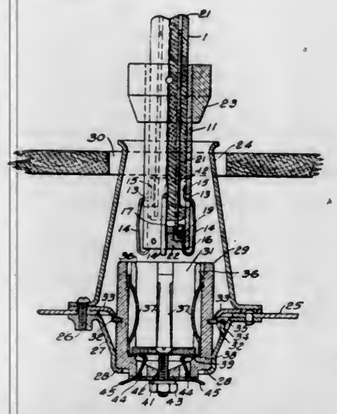
1. In a potato planter, a frame, a drive gear, a picker shaft, a sleeve revolubly mounted on the picker shaft, a gear connected to the picker shaft, a stub shaft fixed in an extension of the said sleeve, a pinion mounted on the stub shaft adapted to mesh with the gear on the picker shaft, a second pinion on the stub shaft adapted to interlock with the first aforesaid pinion on the stub shaft and to mesh with the said drive gear, means for revolubly shifting the said sleeve and the extension thereof to connect and disconnect the said second pinion and drive gear and means carried by said extension and engageable with said frame for locking said second pinion and driving gear in meshing relation.

1,828,275. FABRICATED CONSTRUCTION. HAROLD L. BARNHOLDT, Pittsburgh, and JOHN L. BROWN, Verona, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 17, 1928. Serial No. 278,396. 7 Claims. (Cl. 171—252.)



1. In a dynamo-electric machine, a fabricated stator frame comprising a plurality of annular-shaped plates, a plurality of longitudinally disposed members spacing said plates, round rods secured longitudinally along the inner edge of said longitudinal members, core laminations carried by said rods, and means for holding said laminations in face-to-face relation.

1,828,276. CONNECTING DEVICE. GEORGE L. BEERS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 2, 1926. Serial No. 133,106. 7 Claims. (Cl. 250—83.)



1. In combination, a loop-supporting shaft having contact means connected to the loop, a rotatable socket member having contacts, a cabinet for housing said rotatable socket member, said cabinet having a top, a fixed socket member supported independently of, and in spaced relationship to said top and adapted for supporting said rotatable member, and guiding means on said shaft for centering the shaft in said fixed socket member in operative relation to the movable member.

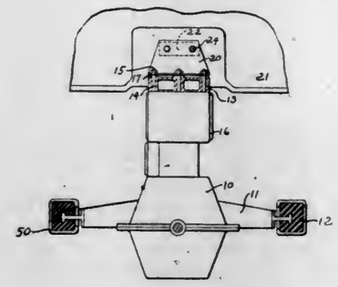
1,828,277. FUSE. MORRIS H. BENNETT, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 13, 1925. Serial No. 68,775. 6 Claims. (Cl. 200—131.)



2. In a renewable fuse, the combination with a casing of non-conducting material, of closures for the ends of the casing, said closures having threaded openings one of which is large enough to permit the insertion and removal of a removable link, a tubular current carrying link so located within the casing that there is an air space between it and the inner wall of the casing, said link having restricted current carrying connectors through which the current passes in multiple, and a body of refractory non-conducting material having the characteristics of rapid heat conductivity and electrical non-conductivity within the connectors, said link having threaded end sections which engage the openings in the closures and hold the link in position.

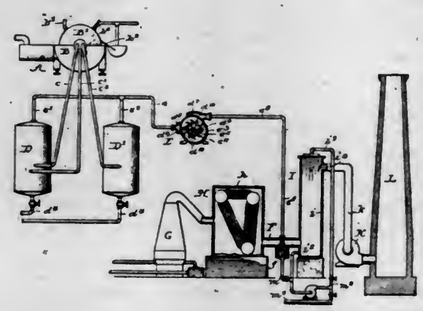
1,828,278. DAMPENER. CARL BREER, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed May 12, 1926. Serial No. 108,516. 3 Claims. (Cl. 180—64.)

1. In a motor vehicle, the combination of an automobile body having a dash, an engine, an angle plate having one side thereof secured to the top of said engine and the other side extending upward and parallel to said dash, a plate,



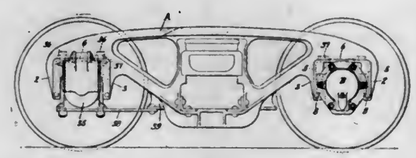
a friction lining attached to said plate and means projecting from said angle plate adapted to press said lining against said dash.

1,828,279. APPARATUS AND METHOD FOR THE RECOVERY OF CHEMICALS FROM PULP MAGMA. HENRY LUTCHER BROWN, Houston, Tex. Filed July 24, 1930. Serial No. 470,256. 17 Claims. (Cl. 92—2.)



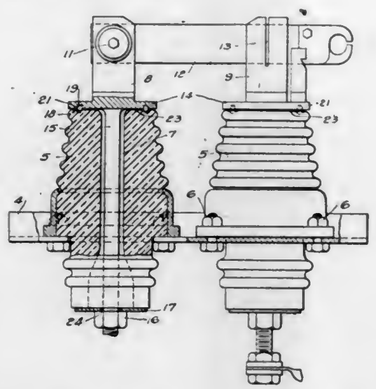
1. That improvement in the recovery of chemicals from digester liquor which consists in separating the foam from the liquid and separately recovering the chemicals from the foam.

1,828,280. RAILWAY TRUCK. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 5, 1928. Serial No. 259,023. 11 Claims. (Cl. 105—223.)



6. A side frame for car trucks of railway cars having associated therewith integral pairs of guides for flexible connection with a roller bearing journal box and bolt-receiving apertures for rigid connection with a plain bearing journal box, said guide means being spaced to receive therebetween said plain bearing journal box.

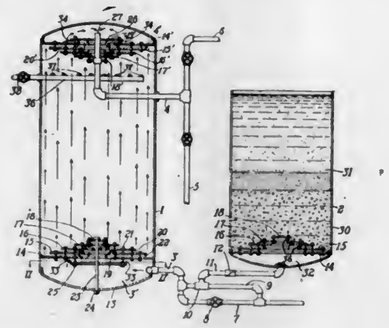
1,828,281. SUPPORT FOR SWITCH MECHANISMS. HERBERT J. CRABBS, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 17, 1928. Serial No. 254,976. 6 Claims. (Cl. 173—318.)



2. The combination with a metal element and a supporting member therefor, each having recessed adjacent surfaces, of a relatively soft metal member disposed between the adjacent faces and adapted to flow into the recesses and lock the element and supporting member against relative movement in the plane of the adjacent faces and means for clamping said members together without affecting relative angular movement thereof.

6. An electrical device comprising an insulating support having an open bore extending therethrough and having a supporting face, an electrical conductor provided with a base and a clamp member extending through the said bore for securing the conductor to the support, and means disposed between the base and the supporting face of the support for holding the base and support in spaced relation to provide an air circulating space between the base and the support, and communicating with the said bore.

1,828,282. WATER SOFTENER. ANDREW J. DOTTERWEICH, Pittsburgh, Pa., assignor to Automatic Water Softener Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 7, 1928. Serial No. 290,960. 4 Claims. (Cl. 210—24.)

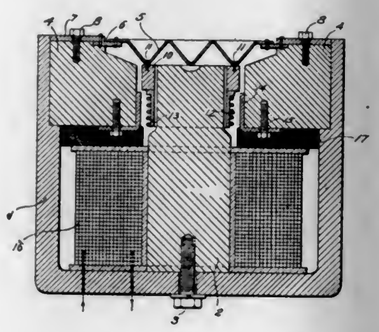


1. Apparatus for softening water comprising a tank having inlet and outlet passages and baffle members disposed between said passages, said baffle members comprising a plurality of plates of different outside diameters arranged in superposed relation and having spaces therebetween, said plates having central openings therein of different diameters, the openings decreasing in size from the larger to the smaller plates.

1,828,283. FOOD PRODUCT. CHARLES N. FREY and ELMER B. BROWN, New York, and COLGATE CRAIG, Peekskill, N. Y., assignors, by mesne assignments, to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed Nov. 28, 1928. Serial No. 322,581. 8 Claims. (Cl. 99—11.)

7. A process of preparing a food product, which comprises hydrolyzing compressed yeast by heating with a miture of hydrochloric and phosphoric acids, removing the residue from the hydrolyzed mass and evaporating the extract; the respective ingredients being present in approximately the proportion of 4 lbs. of yeast to 40 cc. of hydrochloric acid (sp. gr. -.19) and 10 cc. of phosphoric acid (85%); neutralizing the excess of acid prior to the completion of the evaporation, and admixing flavoring ingredients with the product.

1,828,284. VIBRATORY SYSTEM. CLINTON R. HANNA, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 7, 1927. Serial No. 231,509. 5 Claims. (Cl. 179—180.)



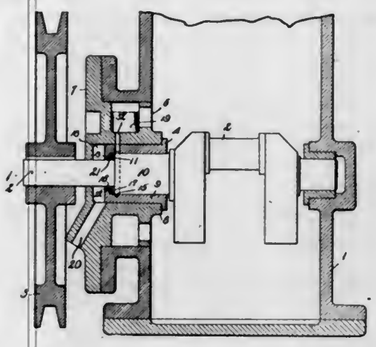
1. In a vibratory system, a magnetic field, a vibratory member, means for vibrating said member in said field to produce an electromotive force, an additional member arranged to be vibrated in said field by said means to produce a damping force proportional to the velocity of said vibrations, and means whereby the currents induced in said second member are prevented from adversely influencing the electromotive forces generated in said first named member.

1,828,285. JOINT FOR LAMINATED PANELS. GEORGE K. LEWIS, Chicago, Ill., assignor to Met-L-Wood Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 28, 1929. Serial No. 403,103. 2 Claims. (Cl. 20—15.)



1. In a unitary laminated panel construction, the combination with a core or body portion; of a plurality of metallic sheets on one side of said core having angular portions at their meeting edges and accommodated in a cut-out provided in said core; and a plate forming an inlay in the surface of the core opposite the cut-out portion for bridging the latter, the meeting edges of said metallic sheets and the outer surface of said inlay being arranged flush with the opposite planes of said panel.

1,828,286. STUFFING BOX. IVAR LUNDGAARD, Worcester, Mass., assignor to Devon Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 5, 1926. Serial No. 127,293. 3 Claims. (Cl. 286—7.)



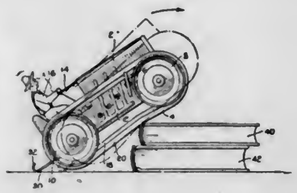
1. A stuffing box construction comprising a shaft adapted to revolve, a relatively fixed casing including a bearing portion through which the shaft extends, a shoulder upon the shaft adjoining one end of the bearing portion, a bushing with its body portion engaging the casing provided with an annular flange in close bearing engagement with the shoulder on the shaft, and an annular paper gasket between the flange and the fixed casing adapted to hold the flange in firm but slightly yieldable engagement with the revolving shoulder.

1,828,287. METHOD OF MAKING BOLTS AND SIMILAR CONNECTING DEVICES. THOMAS LEONARD MACBEAN, New York, N. Y., assignor to Weldbuilt Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 9, 1928. Serial No. 260,467. 2 Claims. (Cl. 10—27.)



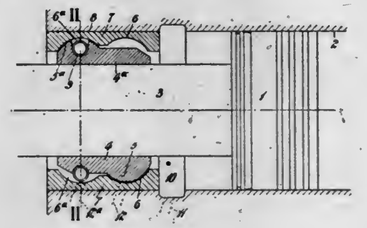
1. A method of forming bolts having flexible shanks and rigid ends, which method consists in uniting by fusion to the strands of a steel cable at spaced points along the length of the cable, masses of metal so as to form with the strands of the cable unitary rigid structures, dividing the cable into lengths by transverse cuts through said structures and subsequently finishing the ends of said lengths to form bolt ends.

1,828,288. TOY. LOUIS MARX, New York, N. Y. Filed Feb. 4, 1930. Serial No. 425,733. 2 Claims. (Cl. 46—48.)



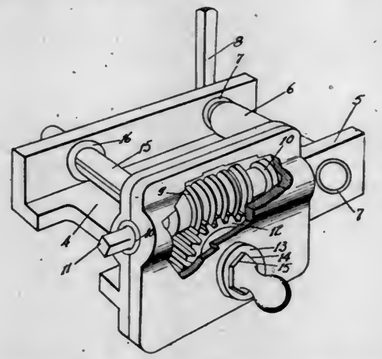
1. A tractor toy comprising a body, a pair of caterpillar treads, wheels on which said treads are mounted, driving means in said body for rotating said wheels and treads, and a trail reciprocably mounted at the rear of the body of the toy and adjustable to bear upon the ground as the toy reaches any desired angle when attempting to climb a relatively steep obstacle, so that said trail will prevent the toy from lifting further to a more unstable angle, and will prevent the toy from turning over backward, said trail also being movable to an inoperative position, permitting the toy to turn over backward.

1,828,289. BUSH FOR RECIPROCATING MEMBERS. ANTHONY GEORGE MALDON MICHELL, Melbourne, Victoria, Australia, assignor, by mesne assignments, to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 8, 1928, Serial No. 252,890, and in Great Britain Feb. 22, 1927. 12 Claims. (Cl. 308—240.)



1. A bush for a reciprocating rod, comprising a plurality of segments pivoted adjacent the ends thereof and having bearing surfaces adapted to engage the rod.

1,828,290. BAND TIGHTENING TOOL. ALVA H. MOON, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Jan. 18, 1928. Serial No. 247,733. 5 Claims. (Cl. 254—51.)

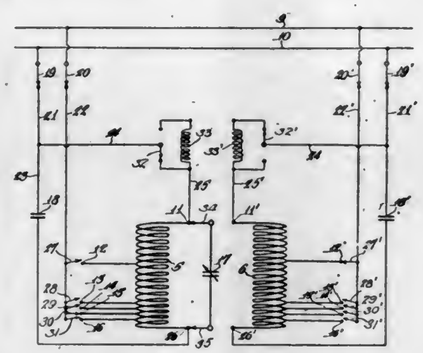


1. A band tightening tool comprising a base with sides, a slotted shaft, and a rotary driving member for said slotted shaft, said shaft being detachably mounted in said rotary driving member intermediate said sides, and detachably journaled in said sides at each of its ends.

1,828,291. ELECTRIC INDUCTION FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Nov. 23, 1929. Serial No. 409,315. 12 Claims. (Cl. 13—26.)

1. The method of operating a plurality of induction electric furnaces and tuning their coils with a minimum of compensative capacity, which consists in utilizing a

main capacity adapted for use, alternatively, with any of the furnaces along with capacity individual to each furnace to make up the complete compensative capacity for a furnace operating under maximum load, shifting the main capacity from furnace to furnace to meet the maxi-

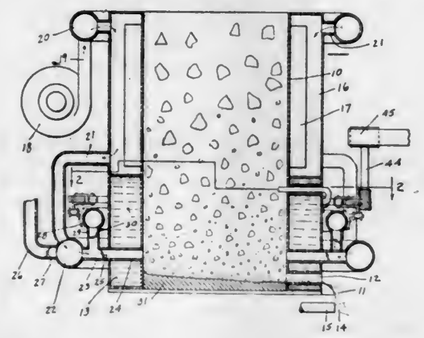


mum load conditions of the different furnaces in turn, and at lower loads in the individual furnace in adding inductance to the furnace coil circuit to a sufficient extent for the individual compensative capacity to tune the individual furnaces at these lower loads.

1,828,292. INSULATING MATERIAL AND PROCESS OF MAKING THE SAME. BAYAN B. PAUL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1928. Serial No. 279,208. 7 Claims. (Cl. 18—47.5.)

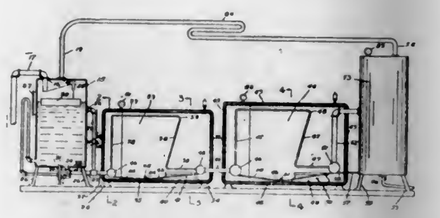
4. The process of producing a dense slate-like material which comprises mixing powdered slate and an alkaline-earth-metal hydroxide together, moistening with water, forming the mass into the desired shape and then treating with steam under sufficient pressure to cause at least a partial reaction between the ingredients.

1,828,293. ECONOMIZER FURNACE FOR MINERAL WOOL PRODUCTION. EDWARD R. POWELL, Alexandria, Ind., assignor to Banner Rock Corporation, Alexandria, Ind., a Corporation of Delaware. Filed Aug. 3, 1928. Serial No. 297,216. 4 Claims. (Cl. 263—21.)



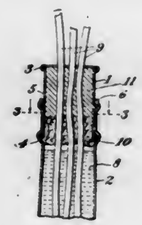
3. In a furnace for the production of mineral fiber, the combination of a retorting chamber, a plurality of means intermittently projectable into said chamber for agitating the charge therein, a plurality of movable means for reciprocating said intermittently projectable means and a common driven member adapted to move said plurality of means.

1,828,294. ELECTRIC HEATING PLANT. ELPHEGE PROVENCAL, St. Hyacinthe, Quebec, Canada. Filed Mar. 31, 1930. Serial No. 440,548. 3 Claims. (Cl. 219—38.)



1. In an electric heating plant, a feed water pipe suitably connected to a supply, a cylinder and a piston head, forming an air dash pot and supported on a bracket extending from said pipe and comprising a spring-held cylinder having an open air hole therethrough and spring held from the piston head, a latch spring-held to said cylinder and adapted to snap thereover in the inner position of said cylinder, a thermostatic device having connections operating said cylinder and said latch, an electric oven having water passages therethrough having a common connection to said feed water pipe, and a common outlet member and a circulatory heat radiating system connected to said common water outlet.

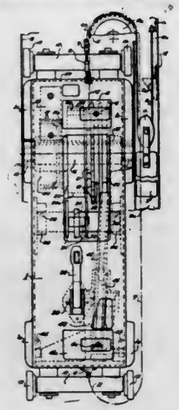
1,828,295. FLOWER HOLDER. WILLIAM ORMISTON ROY, Montreal, Quebec, Canada. Filed Aug. 27, 1929. Serial No. 388,695. 4 Claims. (Cl. 47—41.)



1. A flower holder comprising a flexible sack-body provided with an open neck element adapted to allow the passage of flower stems through it and into the sack-body, and a plastic sealing element closing the space between the stems and the inner face of the neck.

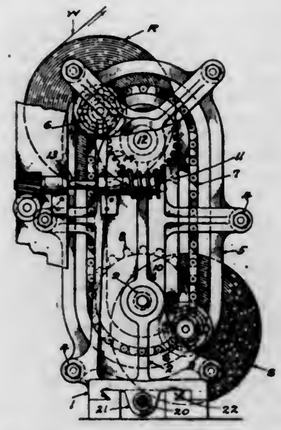
1,828,296. YIELDABLE BARRIER. EMERSON D. SAWYER, Chicago, Ill. Filed Apr. 24, 1930. Serial No. 446,885. 8 Claims. (Cl. 39—1.)

8. A device adapted to stop moving vehicles traveling along a roadway, consisting of a pair of upright members located one on each side of said roadway, a flexible barrier net stretched between said uprights, means for moving said barrier net into and out of operative position across said roadway, a drum rotatably mounted in each of said uprights, payout cables secured to said barrier and said drum, braking means mounted in association



with each of said drums, and means for rendering said braking means inoperative except when said barrier is in operative position.

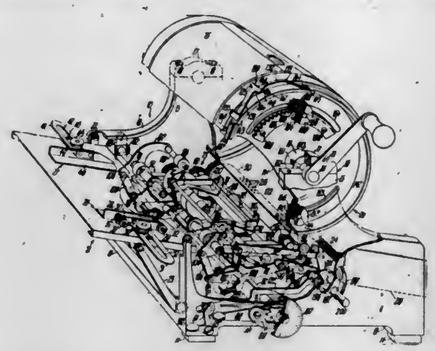
1,828,297. WEB ROLL SUPPORT. LOUIS A. SCHMIDT, Brooklyn, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 17, 1929. Serial No. 355,707. 4 Claims. (Cl. 242—58.)



1. In a web roll support for supporting web rolls as they are fed to the printing machine, the combination of a pair of vertically arranged traveling carriers provided with supporting means engaging in the ends of a web roll in an upper running position and a spare roll in a lower loading position, means for driving the carriers to effect a movement of the web rolls to and from the loading position, means for effecting lateral adjustment of the carriers, means for effecting lateral adjustment of the roll supporting means independently of the carriers and means for limiting the endwise movement of the roll engaging devices to keep the web rolls centered in the carriers.

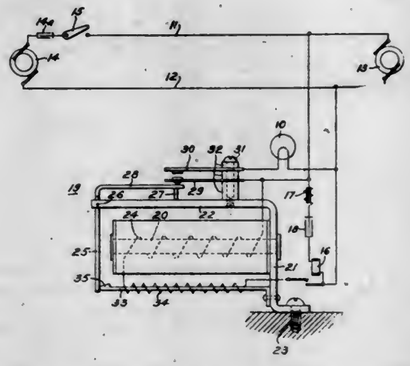
1,828,298. STENCILING MACHINE. JAMES E. SHAVER, Jr., Philadelphia, Pa., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,780. 21 Claims. (Cl. 101—118.)

1. In a stenciling machine, the combination with a stencil-carrying cylinder mounted for continuous rotation, a platen-roller operatively engaging said cylinder to establish a stenciling position for a work-sheet, and a feeding and timing mechanism effective for feeding to said cylinder while the same is being continuously rotated, a plurality of work-sheets, one after another in a predetermined time relation to the stencil-sheet on said



cylinder, of means settable in an operative position for stopping said cylinder after each work-sheet is stenciled, and devices operatively connected to said means and effective upon setting the same in operative position for disabling said mechanism and permitting work-sheets to be inserted directly to said stenciling position.

1,828,299. LATCHING RELAY. PAUL F. SHUEY, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,546. 7 Claims. (Cl. 200—88.)

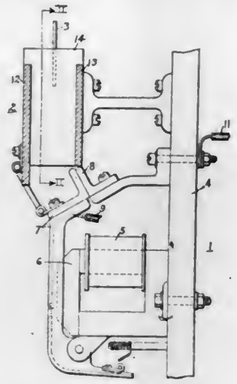


1. The combination with a relay having a contact-closing armature and a magnetizing coil adapted, when energized, to attract said armature, of a thermally responsive latching member having a heating coil, adapted, when at normal temperature, to prevent the attraction of said armature by said magnetizing coil, when at a predetermined temperature, to permit the armature to be attracted and latched, and, when at a different temperature, to release said armature to permit it to return to its normal position.

1,828,300. FLAME SPLITTER. JOSEPH SLEPIAN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1928. Serial No. 264,291. 14 Claims. (Cl. 200—144.)

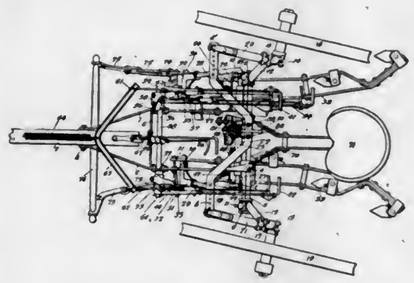
14. In combination with an electrical circuit, a pair of separable electrical contacts in operative relation with

an arc-chute having side walls so closely spaced that the arc drawn between the said contacts cannot remain in stable operation between them, and a partition transverse



to said arc-chute and positioned so far from said contacts that said arc will be extinguished before it can reach said partition.

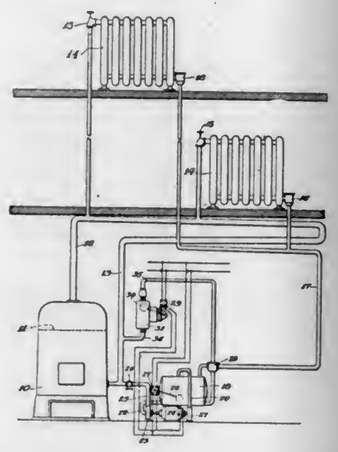
1,828,301. WHEELED CULTIVATOR. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Apr. 17, 1925. Serial No. 23,810. 16 Claims. (Cl. 97—155.)



1. In a cultivator, the combination with a frame, of supporting wheels, crank axles for the supporting wheels having vertical spindles rotatably journaled on the frame, a horizontally disposed yoke-shaped equalizer bar having its ends forwardly disposed and connected with said spindles and movable to rotate said spindles to steer the wheels, an arch slidably supported on the frame and including a central member connected to said equalizer bar and side members slidably mounted on the central member and connected with the gangs, and means operable to actuate the equalizer bar to steer the wheels and simultaneously move said arch and gangs in the same direction.

12. In a cultivator, the combination with a frame, of pivoted axles and supporting wheels, gangs of cultivating devices, laterally movable means connecting the axles and operable to steer the wheels, rack bars connected to said gangs and adjustable in parallelism in opposite directions, a support for the rack bars rigidly mounted on said connecting means, a shaft journaled in said support and cranked at its free end, a pinion rigidly mounted on the opposite end of said shaft meshing with said rack bars and turnable by rotating said shaft to actuate the rack bars whereby the gangs are adjusted toward or from each other, foot levers mounted on the frame and connected with said support and operable to actuate said connecting means to steer the wheels and simultaneously move said rack bars and gangs in the same direction irrespective of the adjustment of said gangs relative to each other.

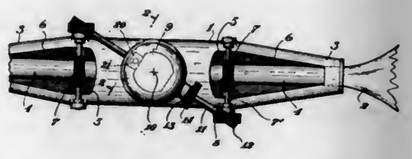
1,828,302. VACUUM HEATING SYSTEM. REUBEN N. TRANE, La Crosse, Wis. Filed July 15, 1927. Serial No. 205,918. 7 Claims. (Cl. 237—9.)



1. A heating system comprising a boiler, a steam supply main therefrom, radiators supplied by the main, a receiver, a return line from the radiators to the receiver, a vacuum pump and a water pump for exhausting the receiver, a driving means for the pumps, a float in the receiver responsive to the water level therein for controlling the driving means, a float chamber for containing water subjected at its bottom to the boiler pressure and at its top to the return line pressure and a float in the chamber responsive to variations in the level of the water in the chamber for controlling the driving means.

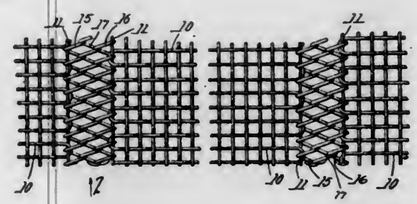
2. A vacuum heating system comprising a boiler, a steam main, radiators supplied therefrom, a return line from the radiators, a receiver for the water from the return line, a pump for pumping water from the receiver to the boiler, a control device for the water pump responsive to the level of water in the boiler, a vacuum pump communicating with the return line, an electric motor for actuating said vacuum pump and means for controlling the vacuum pump comprising a float chamber having a column of water therein subjected to boiler pressure at its lower end to and the return line pressure at its upper end, a float in said chamber responsive to fluctuations in the level of water in the chamber and a switch actuated by said float for starting and stopping said pump.

1,828,303. VARIABLE PITCH PROPELLER. WALLACE R. TURNBULL, Rothesay, New Brunswick, Canada. Filed Aug. 14, 1929. Serial No. 385,784. 4 Claims. (Cl. 170—163.)



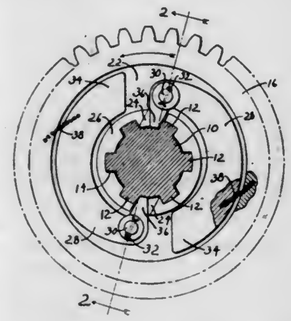
1. In a variable pitch propeller unit an electric motor pitch adjusting mechanism including an electric motor which is bodily rotatable with the propeller with the collecting brushes of the electric motor disposed for adjusting movement in a direction substantially parallel to the axis of the propeller drive shaft.

1,828,304. HINGED CONVEYER BELT. FRANCIS N. WOODMAN, Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1930. Serial No. 434,392. 4 Claims. (Cl. 198—193.)



1. A wire conveyer belt comprising sections of square mesh wire fabric having edge portions extending in adjacent positions transversely of the belt and separate transverse spiral wire members interlaced with said adjacent edge portions, respectively, said spiral wire members being hingedly connected whereby a plurality of axes of hinge movement is provided.

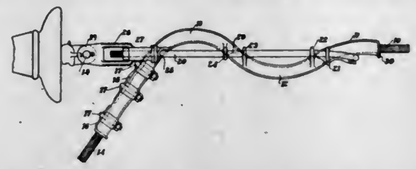
1,828,305. GEAR. JAMES C. ZEDER and OTTO J. BRATZ, Detroit, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 5, 1927. Serial No. 159,191. 9 Claims. (Cl. 64—98.)



4. In a gear of the class described having the inner periphery of its central opening adapted to fit a splined shaft, means carried by said gear movable by centrifugal force to engage the splines on the shaft when said gear is rotated, means for disengaging said last named means from the splines when said gear is quiescent.

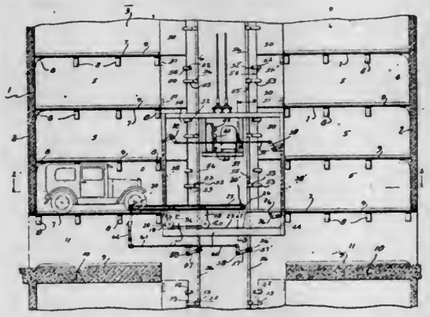
1,828,306. CLAMP FIR CABLES OR THE LIKE. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Feb. 12, 1929. Serial No. 339,305. 9 Claims. (Cl. 24—135.)

1. A cable clamp having a cable seat extended in the general direction of the axis of said cable, different portions of said seat being reversely curved relative to each other, the portion of said seat adjacent the taut end of the cable extending through an arc of less than 90° and passing the cable to the next adjacent portion with the



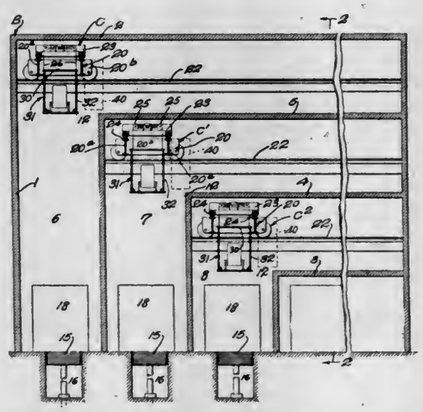
cable continuing in the same general direction as that in which it enters the clamping seat and means for fixing said cable relative to said clamp at one end of said seat.

1,828,307. APPARATUS FOR HANDLING AND STORING. PAUL BEEN, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 6, 1929. Serial No. 360,622. 15 Claims. (Cl. 214—16.1.)



1. An automobile storage apparatus including spaced vertical tiers of storage stalls and an intervening elevator well, an elevator operating in the well, a transfer carriage mounted on the elevator and movable transversely thereof, and a conveyor mounted on the transfer carriage and projecting beyond the ends of the same and having vehicle engaging means.

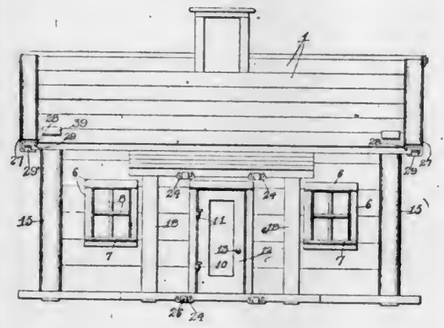
1,828,308. APPARATUS FOR HANDLING AND STORING AUTOMOBILES AND THE LIKE. PAUL BEEN, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 18, 1930. Serial No. 468,813. 8 Claims. (Cl. 214—16.1.)



1. A storage system comprising a building construction having a plurality of floors divided up into rows of storage

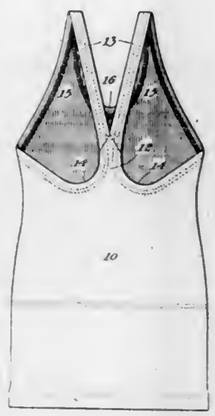
spaces and provided with aisles extending along the rows of storage spaces, said building construction having a well leading from the ground level to each of the upper floors, a loading station at the lower end of each well consisting of a plurality of loading platforms, each loading platform being adapted to receive and support an article to be stored, an overhead crane serving each upper floor and having a grapple adapted to be lowered through the well leading to the upper floor with which the overhead crane is associated and to be engaged with a loading platform at the loading station whereby the cranes may be utilized for transferring platforms with the articles thereon to and from the storage spaces.

1,828,309. STRUCTURAL BUILDING UNIT. GEORGE E. BERGER, Two Rivers, Wis. Filed Aug. 9, 1929. Serial No. 384,770. 1 Claim. (Cl. 46—35.)



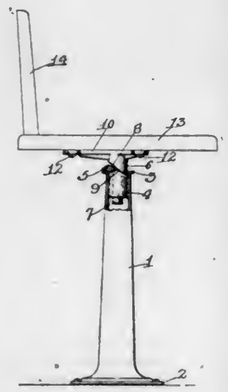
In structural binding units, a plurality of co-mating units having angularly disposed cut out portions adapted to align when the pieces are arranged in juxtaposition, U-shaped members having their flanges adapted to be received within said recesses, and transverse stop lugs carried by the ends of said U-shaped members.

1,828,310. SWIMMING SUIT. PHILIP BERGH, Portland, Oreg., assignor to Jantzen Knitting Mills, Portland, Oreg. Filed Sept. 8, 1930. Serial No. 480,305. 3 Claims. (Cl. 2—67.)



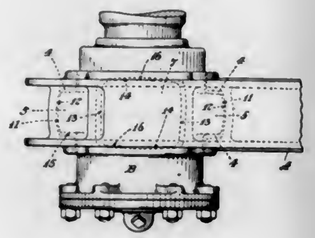
1. A swimming suit comprising a body having an upwardly extending projection at the central back portion; and shoulder straps attached to said projection and diverging thence to pass over the shoulders and being attached to the front of said body at each side, the upper end of said projection being cut in inverted V form and the rear ends of said shoulder straps being shaped to fit said projection and notched at their inner sides to form edges which meet when the inner sides of said straps are folded inwardly.

1,828,311. SUPPORTING BASE FOR STOOLS. THEODORE BINK, Port Washington, Wis., assignor to Gilson-Bolens Manufacturing Company, Port Washington, Wis. Filed Oct. 30, 1929. Serial No. 403,440. 2 Claims. (Cl. 155—95.)



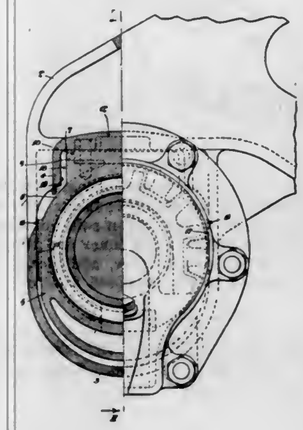
1. In combination with a hollow base standard having an outturned flange at its upper end, a bearing sleeve fitted into the upper end of the standard, a flange on the sleeve to limit the movement of the sleeve in the standard, an inclined bearing face upon the outer end of the sleeve with its loweat point below the upper end of the standard, a seat support including a cylindrical body having an inclined bearing face cooperating with the bearing face on the sleeve with its highest point normally positioned within the standard and a stud projecting from the cylindrical body and extending into the bearing sleeve.

1,828,312. JOURNAL BOX. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 12, 1927, Serial No. 212,446. Renewed July 11, 1931. 9 Claims. (Cl. 105—220.)



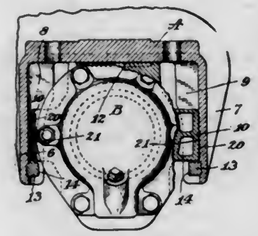
3. The combination of a journal box and a side frame, the box having arc-shaped surfaces substantially at right angles to each other cooperating with similarly shaped surfaces on the frame, the cooperating surfaces being spaced apart to allow limited lateral movement between the box and the frame.

1,828,313. JOURNAL BOX. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 27, 1928, Serial No. 273,235. Renewed Apr. 15, 1931. 11 Claims. (Cl. 105—218.)



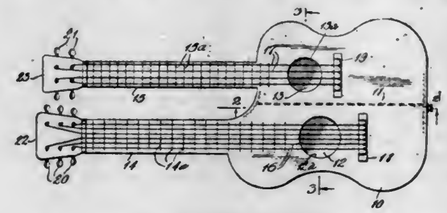
1. The method of adapting a plain bearing, integral box side frame for use with roller bearings comprising removing the end portion of said integral box and inserting, within the remaining portion of said box, a housing containing roller bearings.

1,828,314. JOURNAL BOX CONSTRUCTION. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 22, 1929, Serial No. 364,980. Renewed July 11, 1931. 10 Claims. (Cl. 105—223.)



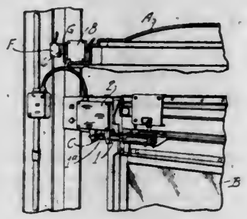
1. The combination of a journal box and a side frame having complementary curved engaging surfaces to permit movement of the box relative to the frame, the two surfaces of each pair of engaging surfaces being of different curvature to permit rocking engagement.

1,828,315. STRINGED MUSICAL INSTRUMENT. DANTE CAVICCHIOLI, New York, N. Y. Filed Feb. 28, 1931. Serial No. 519,008. 8 Claims. (Cl. 84—268.)



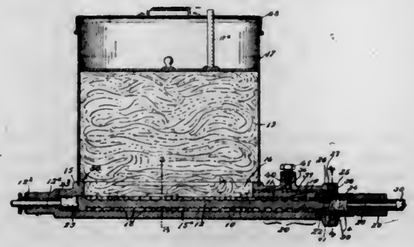
1. A dual stringed musical instrument of the class described comprising a hollow body, means subdividing said body into separate sound chambers, each having a sound opening, two necks extending from said body in radial alinement with the respective sound openings of each sound chamber, and means for placing the sound chambers in communication with each other.

1,828,316. ELEVATOR DOOR LOCKING MECHANISM. FENTON G. CHAPIN, East St. Louis, Ill. Filed Mar. 21, 1929. Serial No. 348,826. 7 Claims. (Cl. 187—31.)



1. In an elevator door locking mechanism, the combination of a shaft door, a latch for said door, an electrically-operated locking device for said latch, a means carried by the elevator car for causing said locking device to become inoperative, a switch in the energizing circuit of the operating mechanism of the car combined with said locking device in such a way that said switch opens when said locking device is rendered inoperative, and a retaining means that holds said switch open and said locking device in an inoperative position, even though the condition of the energizing circuit of the locking device is changed when the door is in its open position.

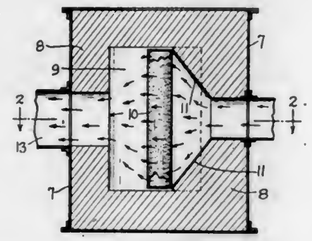
1,828,317. LUBRICATOR. KENNETH S. CLAPP, Cleveland, Ohio. Filed Aug. 21, 1928. Serial No. 301,053. 7 Claims. (Cl. 221—47.1.)



1. A lubricator of the class deacribed comprising a casing having a cylindrical bore, the upper wall of which is removed throughout a portion of the length of the cas-

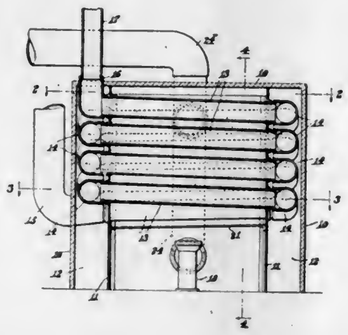
ing to provide a lubricant supply opening of substantial proportions, a lubricant reservoir extending upwardly from the casing and in free communication with said lubricant supply opening, a rotary impeller mounted in the bore and adapted to receive lubricant through said supply opening and force it longitudinally under pressure from the casing, a flexible conduit for conducting the lubricant from the impeller casing, and means for driving the impeller by power, the said impeller being in the form of a screw, the threads of which are of a constant pitch, but those adjacent the discharge end being considerably thicker than those in the supply opening, and said thicker threads having a close running fit within the cylindrical bore of the casing whereby to create a pressure zone.

1,828,318. BURNER FOR THE OXIDATION OF AMMONIA. CYRIL B. CLARK, Scarsdale, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 20, 1930. Serial No. 429,928. 17 Claims. (Cl. 23—288.)



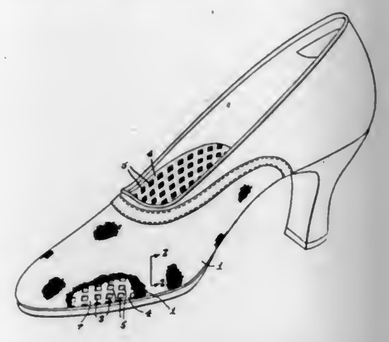
1. A burner for the oxidation of ammonia comprising a catalyst in the form of a hollow gauze cylinder and means for passing the ammonia gas into the inner chamber of the cylinder at right angles to its axis.

1,828,319. HOT AIR HEATER. CHARLES L. CUTLER, Jr., Marlboro, Mass. Filed Feb. 27, 1930. Serial No. 431,744. 10 Claims. (Cl. 126—116.)



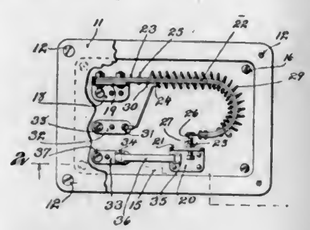
1. The combination of a cabinet having top, side and end walls of insulating material; partitions therein parallel with and spaced from the end walls of said cabinet; a plurality of substantially horizontal pipes extending through both said partitions; unions connecting the projecting ends of said pipes to form a continuous conduit extending upwardly within said cabinet; means for admitting cold air to the lower end of said conduit; an outlet from said conduit extending from the upper end of said cabinet, and a heat producing device directly beneath said conduit.

1,828,320. BOOT OR SHOE AND METHOD OF MAKING SAME. CLAUDE H. DANIELS, Newton Center, Mass. Filed June 17, 1931. Serial No. 544,945. 3 Claims. (Cl. 36—3.)



1. A boot or shoe of the character described comprising an open-work outer section of textile fabric, an inner open-work section to reinforce and stiffen said outer section, at least some of the openings in the inner and the outer sections being alined with each other, and means fastening the sections together in superimposed relation.

1,828,321. CIRCUIT CONTROL. LEONARD HESSE, Plymouth, Wis. Filed Mar. 11, 1929. Serial No. 346,051. 1 Claim. (Cl. 200—122.)

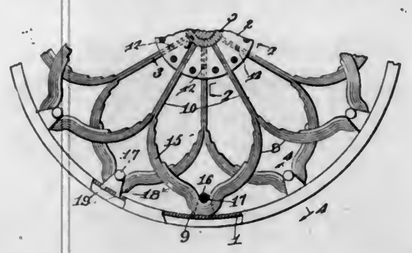


In a delayed circuit control, a housing, a supporting plate in said housing, a pair of spaced angle-shaped brackets secured to the plate on opposite sides of the longitudinal center of said plate, a substantially J-shaped thermostatic member arranged in the housing including a relatively long leg and a relatively short leg, the thermostatic member including layers of metal of different coefficients of expansion, each of said angle plates constituting binding posts, one end of said thermostatic member being rigidly secured to one of the angle brackets, an adjustable contact secured to the other angle bracket, a contact point for engagement with the adjustable contact carried by the outer end of the short leg of the thermostatic member, a contact plate secured to the supporting plate intermediate the angle brackets, and a heating coil around said member having one end connected to the thermostatic member and its opposite end to said contact plate.

1,828,322. SPRING WHEEL. WILLIAM E. KAWALLS, Manitowoc, Wis. Filed Aug. 9, 1929. Serial No. 384,563. 1 Claim. (Cl. 152—50.)

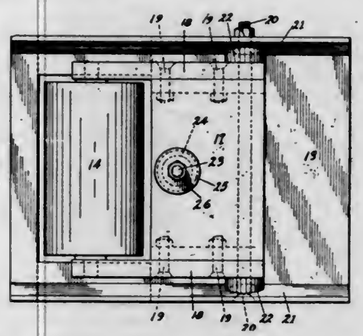
A spring wheel including a hub having radially disposed recesses upon opposite faces thereof and in staggered relation, each recess being intercepted by a key aperture, spring units arranged in overlapping relation upon opposite sides of the peripheral center of the hub, the ends of said spring members being positioned in the hub recesses,

each having a saw toothed notch in one edge thereof, a locking key fitted into each hub aperture having an inclined end face for engagement with the saw toothed notch



of the spring member for locking the end thereof within the hub, and a plate secured to one face of the hub for maintaining the locking keys in their assemblage with relation to the spring members.

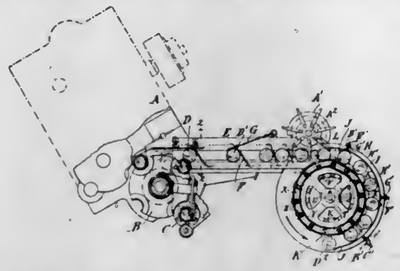
1,828,323. SHEET FEEDING DEVICE. LEONARD H. KRAMER, Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed July 20, 1929. Serial No. 379,742. 12 Claims. (Cl. 80—44.)



12. In a conveyor, opposed supporting members perforated at intervals, rollers mounted upon yokes, the said yokes pivoted upon said supporting members so as to permit said rollers to lie with their peripheries extending partly through the said perforations, and resilient means connecting the said yokes and the said supports whereby the said rollers are yieldingly held in the said position, means for varying the distance between the said supporting members on said conveyor and means for bodily moving said conveyor and said guiding means, comprising a slidable mounting for said conveyor and screw means for varying the position thereof on said mounting, and means for transmitting power to said conveyor irrespective of said movement, said means comprising a power shaft on a fixed support, a shaft on said conveyor and at least one intermediate shaft, said shafts interconnected at fixed distances by pivoted links serving to support said intermediate shaft and variable as to their respective angularity, and means of fixed length for transmitting power between said several shafts serially.

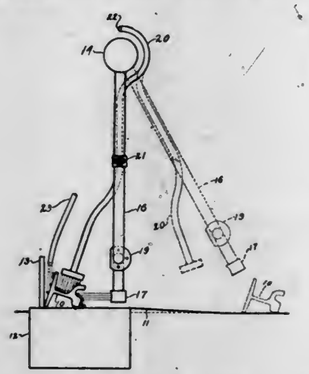
1,828,324. CAN FEEDING MACHINE. PETER KRUSE, Brooklyn, N. Y., assignor to E. W. Bliss Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1927. Serial No. 159,064. 8 Claims. (Cl. 198—22.)

2. A device for feeding cans in spaced relation to a second mechanism acting subsequently on the cans, comprising a rotating support upon which cans are placed in indiscriminate relation at the feed point, and a spacing and controlling mechanism comprising a series of rollers movable around an endless path, means for moving said rollers radially outward to separate the cans, and said rollers being constructed to engage each of the cans on



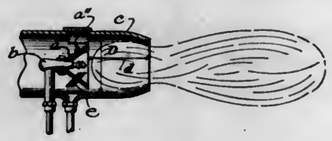
opposite sides so that each can is controlled as to forward and backward movement relatively to the support by said rollers, and at the delivery point is held in proper position for delivery against such forward or backward movement.

1,828,325. PROCESS FOR THE MANUFACTURE OF RAILS WITH HARDENED HEADS. HEINRICH KURS, Duisburg-Ruhrort, Germany. Filed July 7, 1928, Serial No. 291,036, and in Germany Aug. 22, 1927. 8 Claims. (Cl. 148—21.)



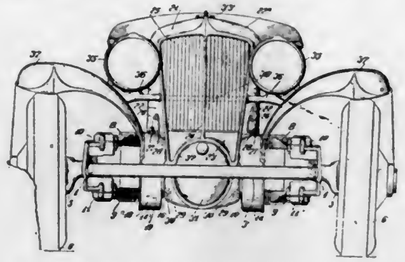
1. A process for hardening the heads of rails by the action of a cooling medium which comprises passing the rail in a longitudinal direction and subjecting only the head thereof to the hardening treatment by means of a substantially horizontal spray of cooling medium.

1,828,326. BURNER. ALFRED LANSER, Corseaux-Vevey, Switzerland. Filed Aug. 10, 1929. Serial No. 885,030. 4 Claims. (Cl. 158—1.5.)



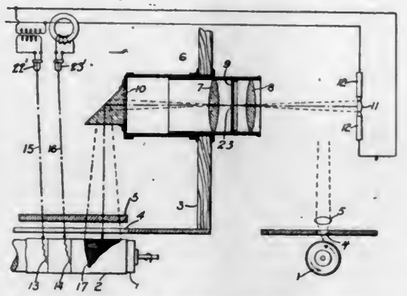
1. An oil burner comprising a combustion tube, a fuel atomizing nozzle in said tube, a substantially frusto-conical deflector surrounding said nozzle having a plurality of openings in the side wall thereof, and apertured sleeves aligned with some of said openings and projecting from the outer wall of said deflector along lines extending toward the larger base of and substantially tangential to the outer periphery of said frusto-conical deflector.

1,828,327. FRONT DRIVE AUTOMOBILE. ALAN H. LEAMY, Auburn, Ind., assignor to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 18, 1930. Serial No. 421,638. 8 Claims. (Cl. 180—68.)



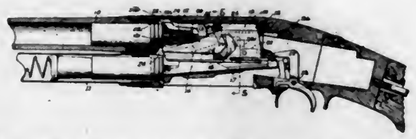
1. A front drive automobile embodying therein a differential gear casing and a radiator shell arranged and supported in a position above the same and including a part covering and conforming to a part of said differential gear casing.

1,828,328. PHOTOGRAPHIC DEVICE. JOSEPH W. LEGG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 25, 1922, Serial No. 531,549. Renewed Feb. 6, 1930. 7 Claims. (Cl. 234—1.)



1. The combination with an oscillograph for co-operation with a light-sensitive element for recording the voltage impressed upon, and the current traversing, a plurality of electrodes and an arc therebetween adapted to be broken by the separation of the electrodes, of means for causing a record to be produced on the element showing instantaneous linear dimensions of the arc in phase with corresponding instantaneous values of the voltage and the current records on the element.

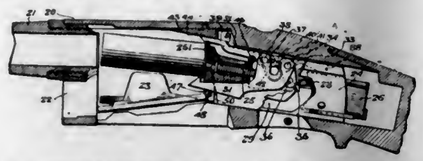
1,828,329. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Oct. 17, 1928. Serial No. 312,960. 14 Claims. (Cl. 42—25.)



6. In an extractor device for firearms an extractor hook adapted to engage the rim of a shell and a tension arm comprising a shell rim engaging notch pivoted to the extractor hook.

13. In a firearm, a breech block, an extractor device carried by said breech block comprising a pivoted extractor claw and a shell rim engaging arm pivoted on said claw.

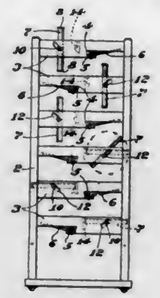
1,828,330. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Oct. 24, 1929. Serial No. 402,008. 20 Claims. (Cl. 42—25.)



1. In combination with the breech block of a firearm, a member pivoted to said breech block, and an extractor claw mounted on said member for movement relative thereto.

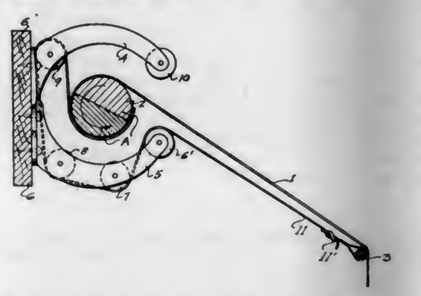
8. In a firearm having a movable breech block, the combination of an extractor device movable in a direction at right angles to the front face of the breech block and adapted to hold a cartridge adjacent said face, and a spring-pressed ejector member pivoted to said breech block positioned to urge the cartridge away from said face.

1,828,331. COMBINATION SHOE RACK. THOMAS F. MATTHEWS, Manchester, N. H. Filed Jan. 10, 1929. Serial No. 331,543. 5 Claims. (Cl. 211—37.)



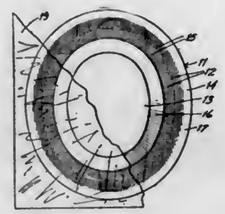
1. In a shoe rack, the combination of a frame, a plurality of reversible shelves supported in said frame, each of said shelves having pivot pins projecting from the opposite ends thereof, said frame having inclined slots to receive said pivot pins, and stationary locks for the shelves, said inclined slots cooperating with said pins to hold the shelves by gravity in cooperative relationship to their respective locks.

1,828,332. AWNING SUPPORT. EDGAR S. MCCANDLISS, Topeka, Kans. Filed June 22, 1931. Serial No. 545,868. 4 Claims. (Cl. 156—44.)



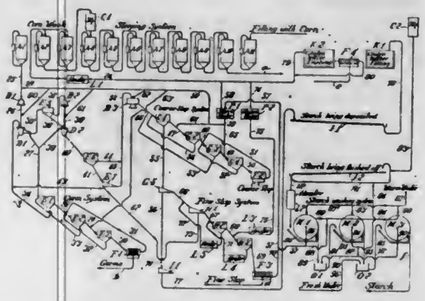
2. In an awning support, two brackets positioned to an awning roller, rollers on the said brackets, a strap connected between the extremity of an awning and its roller and passing over the said rollers on the brackets.

1,828,333. TIRE BOOT. CHARLES P. MCCORMICK, Chicago, Ill. Filed Sept. 5, 1930. Serial No. 479,827. 1 Claim. (Cl. 152—26.)



A tire boot comprising an intermediate fabric layer and pliable rubber layers of substantial thickness secured thereto on each side thereof, the edges of the boot being beveled to expose a substantial peripheral area of the fabric layer between the rubber marginal portions on either side of the exposed peripheral area of the fabric layer whereby the same may be cemented directly to the tire casing between the marginal portions and a substantial peripheral area of a rubber layer extending beyond the fabric layer to completely enclose the same when the boot is cemented to a tire casing.

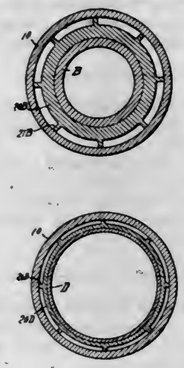
1,828,334. METHOD OF MANUFACTURING STARCH. RUSH O. MCCOY, Berwyn, and OTTO A. SJOSTROM, Chicago, Ill., assignors to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed July 25, 1929. Serial No. 381,041. 3 Claims. (Cl. 127—69.)



1. In the manufacture of starch from corn by a method comprising steeping the corn in water containing SO_2 and comminuting the corn, subjecting the comminuted material in water, repeatedly reused, to germ and coarse and fine slop separations, the starch and gluten to a tabling operation and the starch from the tables to a washing operation to remove solubles: the improvement which consists in returning for reuse gluten water containing SO_2 from the starch tables to the fine slop separation and water from the starch washing filters to the germ and coarse slop separations.

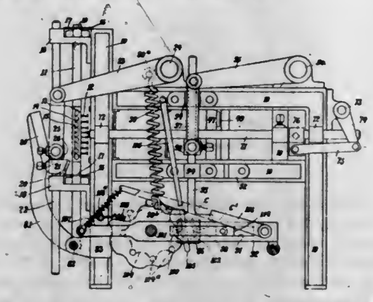
1,828,335. CENTRIFUGAL CASTING METHOD. WILLIAM H. MILLSPAUGH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio, a Corporation of Ohio. Filed Apr. 26, 1929. Serial No. 358,231. 4 Claims. (Cl. 22—65.)

1. The herein described method of making hollow centrifugal castings which comprises providing for outward heat dissipation from molten metal poured into rotatable molds and controlling the rate of said outward heat dissipation, by proportioning the dimensions of the mold



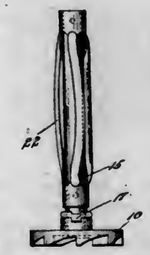
walls in accordance with the character of the castings made therein, to establish the heat conducting characteristics of the molds.

1,828,336. JACQUARD MECHANISM. JAMES MORTON, Cramond Bridge, West Lothian, Scotland. Filed Oct. 27, 1930, Serial No. 491,431, and in Great Britain Nov. 19, 1929. 18 Claims. (Cl. 139—2.)



1. Jacquard mechanism of the type specified for controlling a number of carriers, said mechanism comprising horizontal wires movable endwise to co-operate with parts on the carriers, groups of relatively movable vertical members for rendering selected wires operative, mutually co-operating recesses in said members, a vertically reciprocatory card cylinder mounted below said vertical members and adapted to actuate selected members in the several groups, and means for moving each selected wire endwise.

1,828,337. COP HOLDER. FRANK MOSSBERG, Attleboro, Mass. Filed Jan. 9, 1930. Serial No. 419,551. 6 Claims. (Cl. 242—118.)



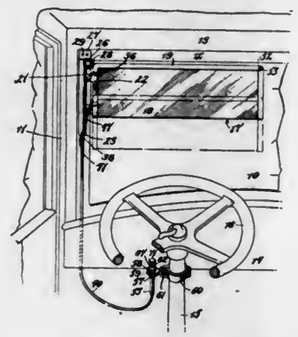
2. In a cop holder, a metal ratchet head having a central opening, a hub around said opening, a central tube

positioned in said opening, an integral flange thereon seated on the hub at one side of the opening, the end of the tube being turned over the edge of the other side of the opening, and cooperating locking means on said flange and hub for preventing relative rotation thereof.

1,828,338. FIBER BLEACHING. JOHN NEUMANN, Chicago, Ill. Filed Mar. 29, 1929. Serial No. 351,127. 3 Claims. (Cl. 8—2.)

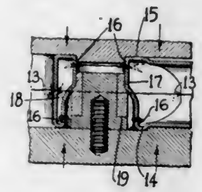
1. The method of bleaching kraft pulp to a dead white color which is characterized by cooking the pulp to free the fibers from the encrusting substances and then treating the pulp with a bleaching agent containing oxalic acid and sodium chloride.

1,828,339. ANTIGLARE SHIELD FOR WINDSHIELDS OR THE LIKE. AMICO MICHAEL PURCHIO, Buffalo, N. Y. Filed Dec. 7, 1929. Serial No. 412,299. 7 Claims. (Cl. 296—97.)



1. A device of the character described, comprising a shield, means for supporting and guiding said shield for substantially parallel movement relative to a windshield or the like, a helical spring arranged parallel to the movement of said shield and carried and supported against lateral displacement solely by said supporting means and interposed between said supporting means and shield to yieldingly hold said shield in one extremity of its guided movement and means for adjustably moving and holding said shield against the resistance of said spring to at least two positions.

1,828,340. HUB CONSTRUCTION. GEORGE B. REED, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1929. Serial No. 390,002. 3 Claims. (Cl. 29—174.)



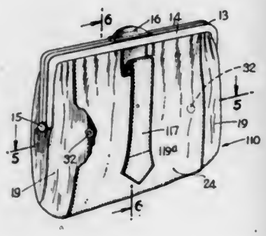
1. A sheet metal wheel including a hollow nave portion having opposite sides provided with bolt receiving openings and reinforcing thimbles received within said bolt receiving openings and inter-connecting the opposite sides of the wheel, said thimbles being flared intermediate their ends to provide a nut receiving seat within the hollow nave portion of the wheel.

1,828,341. GLAZIER'S POINT. JOHN I. ROUTLEDGE, Ettrick, Ontario, Canada. Filed Aug. 14, 1931. Serial No. 557,062. 1 Claim. (Cl. 85—15.)



A glazier's point having a forward tapered entering point, laterally aligned stop shoulders immediately back of the entering point, and laterally aligned knife engaging prongs struck up immediately back of the stop shoulders, the rear edge of the point being cut off parallel with the edges of the aligned stop shoulders and the lateral edges being tapered convergingly from front to back.

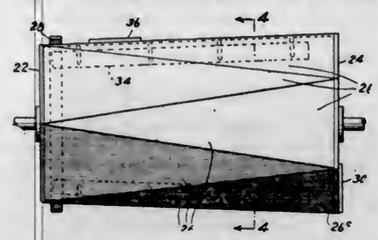
1,828,342. HAND-BAG. MAX SACHS, Far Rockaway, N. Y. Filed Feb. 7, 1929. Serial No. 338,098. 2 Claims. (Cl. 150—36.)



1. A pocket book construction comprising an elongated hinged frame, a body portion secured to the frame to form a pouch bag having a main pocket closed by said frame, said body portion formed of flexible layers, one of said layers being of less width than said body portion, the last mentioned layer having a portion detached from the other layers, another pocket separated from said main pocket, the last mentioned pocket having an opening inwardly from an end of the bag at said detached layer portion and communicating with the exterior side of the bag, said opening extending transversely with respect to the length of the frame, and camouflaging means extending about the rim of said opening to conceal the last mentioned pocket.

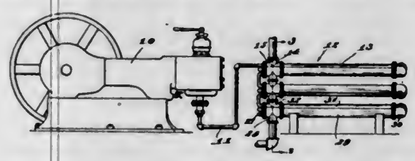
1,828,343. MEANS FOR TRANSPORTING CONCRETE. CARL G. A. SCHMIDT, Jr., Kennett Square, Pa., assignor to American Road Machinery Company, Inc., Kennett Square, Pa., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,314. 2 Claims. (Cl. 83—73.)

1. Means for transporting concrete comprising a motor driven vehicle, a rotary tank mounted on the vehicle and having end walls and an outer wall, one end wall being provided with a discharge opening adjacent its edge, portions of the outer wall forming a trough sloping down-



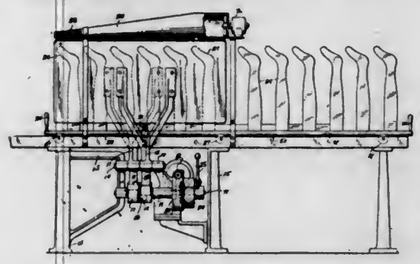
wardly towards the discharge opening when the opening is below the axis of rotation and the axis is horizontal and means for rotating the tank.

1,828,344. WATER HEATER AND CONDENSER. HENRY J. SCHNEIDER, Boston, Mass. Filed May 11, 1929. Serial No. 362,437. 2 Claims. (Cl. 257—247.)



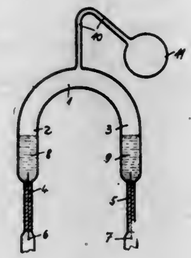
1. In a water heater, a plurality of demountable water jackets connected to each other at one end by a return bend and at the other end by a T, said T closed at one end by a disk provided with a steam tube having its two ends secured in said disk and communicating with the side of the disk remote from said water jacket, a cover plate adjacent said remote side of said disk and held to said jacket by means of bolts passing through said cover plate, and disk and secured to said jacket, steam inlet and outlet openings in said cover plate communicating with chambers formed on the inside of such plate adjacent the said disk, a partition separating said compartments and transversely located between the open ends of said steam tube located in said disk, substantially as shown and described.

1,828,345. HOSIERY PRESS. EDWARD J. SCHREMP, Miami, Fla., assignor, by mesne assignments, to The Prosperity Company, Inc., a Corporation of New York. Filed Apr. 8, 1924, Serial No. 704,943. Renewed Sept. 20, 1928. 25 Claims. (Cl. 223—17.)



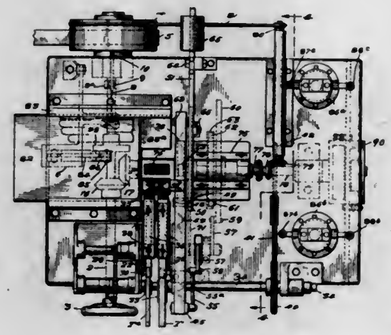
1. A pressing machine comprising upright cooperating pressing jaws, means for opening and closing the jaws, a plurality of garment forms arranged in parallel spaced relation between the jaws leaving air clearance spaces thru the jaws between the parallel forms, and an air nozzle extending the length of the pressing jaw having a discharge slot opening toward the meeting plane of the jaws to deliver air thru the air spaces.

1,828,346. METAL ARC LAMP. HANNS STAMMREICH, Charlottenburg, near Berlin, Germany. Original application filed July 13, 1928, Serial No. 292,348, and in Germany July 19, 1927. Divided and this application filed Aug. 2, 1930. Serial No. 472,578. 1 Claim. (Cl. 176—42.)



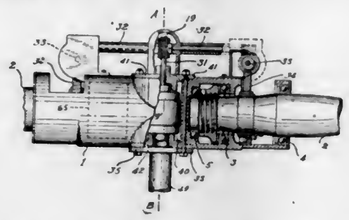
The method of operating a metal arc lamp, which comprises the steps of heating a metal composition and fractionally distilling it, keeping one component distilled out of said metal composition, out of contact with the remainder of such composition during the operation of the arc lamp, and reuniting the components of said metal composition after the operation of the lamp.

1,828,347. MECHANISM FOR CONNECTING PIECES OF MATERIAL. SYLVAN M. STRAUS, Gloversville, N. Y. Filed Apr. 19, 1929. Serial No. 356,588. 8 Claims. (Cl. 154—1.)



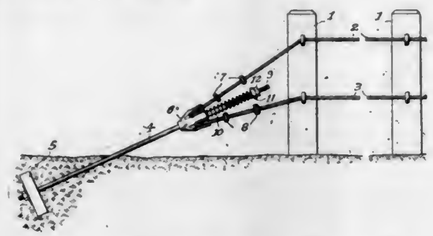
1. In a machine for connecting a first piece of material to a second piece of material by means of an adhesive, a pneumatic head, means adapted to create a vacuum in said head, means adapted to supply air under pressure to said head, first control means adapted to control said vacuum producing means, second control means adapted to control said means for supplying air under pressure, operating mechanism adapted to apply the said pneumatic head to the first piece of material, said first control means being then operative to enable a vacuum to be produced in said head so that the first piece of material clings to said head, adhesive-supplying means, said operating mechanism being adapted to cause the piece of material clinging to said pneumatic head to contact with said adhesive-supplying means so as to produce a film of adhesive upon the exposed face of said first piece of material, said operating means being then adapted to cause said first piece of material to contact with the second piece of material, said first control means being adapted to cause said vacuum producing means to then become inoperative, said second control means being adapted to then cause air under pressure to be supplied to said pneumatic head.

1,828,348. VARIABLE PITCH PROPELLER. WALLACE R. TURNBULL, Rothesay, New Brunswick, Canada. Filed Oct. 4, 1929. Serial No. 397,182. 16 Claims. (Cl. 170—163.)



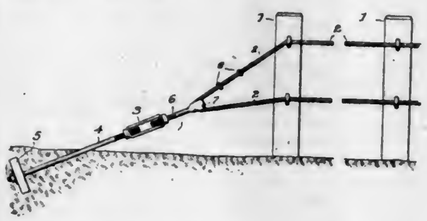
1. A variable pitch aeronautical propeller including an electric motor pitch adjusting drive mechanism wherein the motor is contained within a recess symmetrically disposed at the plane of rotation of the blades and upon the axis of rotation of the propeller, with the motor shaft projecting outside the propeller hub and reduction gearing between the projecting shaft and the variable pitch blades.

1,828,349. AUTOMATIC COMPENSATING DEVICE FOR HIGHWAY GUARD FENCE CABLES. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Dec. 26, 1930. Serial No. 504,907. 2 Claims. (Cl. 256—35.)



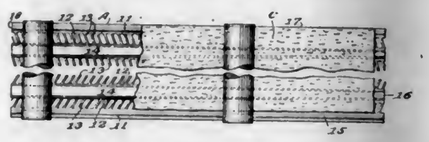
1. An anchoring device for fence cables comprising an anchored rod, a thimble loosely assembled around said rod the latter being threaded at its outer end, means for attaching the fence cables to said thimble, a cup loosely surrounding the rod, a coil spring surrounding the rod and confined between said cup and thimble, and a nut threaded on said rod against said cup whereby the tension of the spring is regulated.

1,828,350. FENCE ANCHOR. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Dec. 26, 1930. Serial No. 504,908. 1 Claim. (Cl. 256—35.)



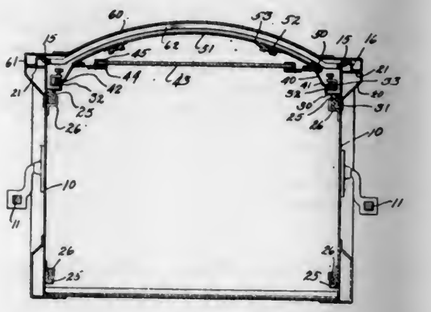
In a highway guard fence means for taking up the slack in the cables at the end posts of sections thereof comprising a turnbuckle, an anchoring rod extending in the ground angularly positioned with respect to the end posts, a rod extending from said anchorage and threaded into the lower end of said turnbuckle, and a rod threaded into the upper end of said turnbuckle and terminating in an eye, the ends of said cables being secured together and passing freely through said eye.

1,828,351. INSULATING METAL LATH. DAVID B. ARNOLD, Brookline, Mass., assignor, by mesne assignments, to Eastern Expanded Metal Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1928. Serial No. 301,192. 4 Claims. (Cl. 92—40.)



1. A process of making building material which comprises laying upon a sheet of metal lath, groove forming members, placing on the sheet semi-liquid fibrous pulp, and withdrawing the groove forming members to form grooves between the fibrous material and the metal lath.

1,828,352. BURIAL VAULT. ROY L. BARR, Detroit, Mich., assignor of one-third to Walter F. Duckwitz and one-third to Howard Van Briggle, Detroit, Mich. Filed Feb. 21, 1930. Serial No. 430,261. 1 Claim. (Cl. 27—6.)

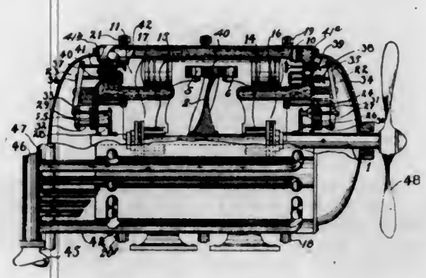


A combined casket and vault comprising a body portion having vertical side walls, a flanged member inside of the body portion near the top thereof and secured to the side walls to provide an inner peripheral shoulder, an open frame fixedly secured to said inner peripheral shoulder, a transparent plate in the opening of said frame, a cover hingedly secured to said frame and adapted to cover the transparent plate, a flanged member outside of the body portion near the top thereof and secured to the side walls to provide an outer peripheral shoulder above the inner peripheral shoulder, a vault lid resting upon the outer shoulder to seal the body portion, and spring projected bolts carried by the lid on its under surface inside the body and adapted to engage a portion of the side walls to lock the lid to the body.

1,828,353. INTERNAL COMBUSTION MOTOR. JOSEPH F. BLESER, Springfield, Ill. Filed Oct. 20, 1928. Serial No. 313,901. 6 Claims. (Cl. 123—58.)

1. In an internal combustion engine, the combination of a plurality of abutting annular cylinder blocks secured together at their abutting edges and having chambers formed therein and communicating at the abutting edges

of said blocks for receiving a cooling fluid, a shaft rotatably mounted in said blocks, oppositely disposed integral pistons slidably mounted in the blocks, and a double faced

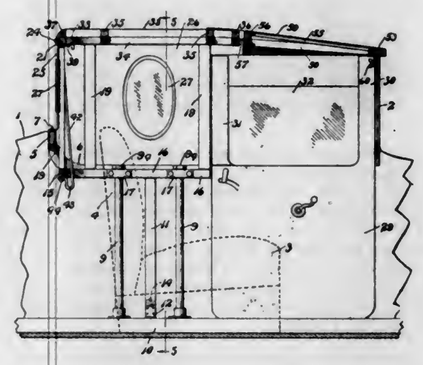


cam secured to said shaft and operatively related to said pistons in a manner to be rotated thereby for imparting a rotary motion to said shaft.

1,828,354. HIGH MELTING POINT WAX. CLIFFORD C. BUCHLER, Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 5, 1928. Serial No. 259,373. 10 Claims. (Cl. 196—17.)

10. In the treatment of petrolatum wax, the steps of distilling the petrolatum wax under conditions characteristic of sub-atmospheric distillation, diluting the wax distillate with an oil miscible diluent to form a product containing between 10 and 65% of the diluent, cooling the diluted distillate to a temperature at which the wax may be separated therefrom, separating the wax therefrom, and sweating the separated wax.

1,828,355. AUTOMOBILE BODY. RALPH W. BULKELEY, Grand Rapids, Mich. Filed Mar. 22, 1927. Serial No. 177,250. 5 Claims. (Cl. 296—107.)

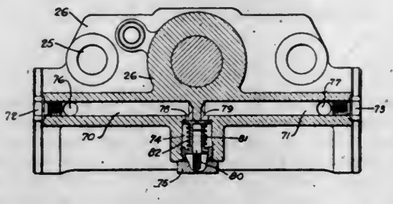


1. In combination, a motor vehicle body, vertical guide rods located within and at each side of the body, heads at the upper ends of the guide rods, an auxiliary body comprising a back and two spaced apart forwardly extending sides slidably mounted on the guide rods for vertical movements, a latch bar hingedly mounted at its lower end at each side of the body and within the same adapted to engage underneath the lower end of each side of the auxiliary body when it is in upper position, and spring means acting on the latch bar to normally move it to engaging position.

1,828,356. PROCESS OF PRODUCING WATER-INSOLUBLE PETROLEUM-SOLUBLE CARBOXYLIC ACIDS AND THE PRODUCT THEREOF. ARTHUR W. BURWELL, Niagara Falls, N. Y., assignor to Alox Chemical Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 20, 1926. Serial No. 156,053. 6 Claims. (Cl. 260—116.)

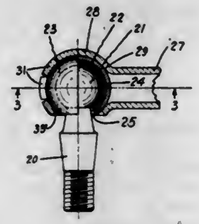
1. Process which comprises contacting an oxidizing gas with a petroleum hydrocarbon mixture in liquid state at a reactive temperature above 100° C. and not substantially above 155° C. and at a pressure greater than atmospheric pressure but substantially not above 350 pounds per square inch, producing thereby oxidation products including water-insoluble, saponifiable carboxylic acids which are soluble in the hydrocarbon mixture, continuing the oxidation so long as to give a maximum yield of said water-insoluble petroleum-soluble carboxylic acids while avoiding the formation of petroleum-insoluble acids, saponifying the said acids, separating the resulting soaps from the hydrocarbon mixture, decomposing the soaps by treatment with an acid and separating the free acids thus obtained from the reaction mixture, and subjecting the said acids to vacuum distillation and a treatment with steam.

1,828,357. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 29, 1929. Serial No. 351,031. 1 Claim. (Cl. 188—88.)



A shock absorber comprising, in combination, a casing providing a cylinder and a fluid reservoir; a piston in said cylinder, having two spaced piston head portions each forming a compression chamber at its respective end of the cylinder; a piston operating member engaging both piston head portions; a valve-chamber in the casing; a duct leading from each compression chamber into the valve-chamber; a valve normally shutting off communication between the ducts and the valve-chamber; and a check-valve in each piston for establishing a flow of fluid from the fluid reservoir into the respective compression chambers.

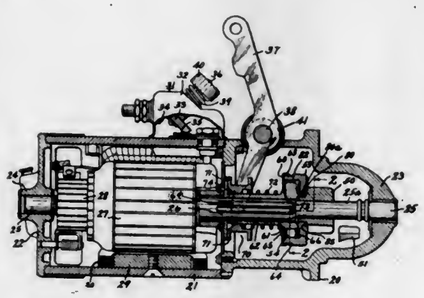
1,828,358. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,733. 2 Claims. (Cl. 287—90.)



1. In a device of the character described, the combination with a member having a ball end; a fibrous covering for said ball end, said covering being impregnated with

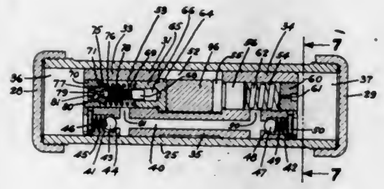
a lubricant; two substantially semi-spherically shaped shells fitting about the fibrous covering of said ball end, said shells providing an opening through which the said member extends; and a link having a tubular end adapted to receive the shells, a portion of the tubular end being formed about the one shell to maintain the shell assembly within the link.

1,828,359. ENGINE STARTING APPARATUS. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Original application filed Mar. 21, 1929, Serial No. 348,969. Divided and this application filed Jan. 2, 1930. Serial No. 418,039. 2 Claims. (Cl. 74—7.)



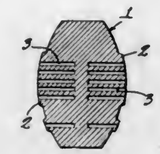
1. An engine starter drive comprising a drive shaft, a pinion slidable along said shaft into mesh with a gear connected with an engine to be started, and a one way roller clutch slidable along the shaft and comprising a cam member splined to the shaft and a shell member attached to the pinion, the shell member having depressions each receiving a portion of a pinion tooth whereby the shell member and pinion are drivingly connected, and means for securing the pinion axially to the shell.

1,828,360. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 8, 1930. Serial No. 473,826. 8 Claims. (Cl. 188—88.)



1. A shock absorber comprising, in combination a casing providing a cylinder, a piston reciprocable in said cylinder and forming a compression chamber therein, said piston having a passage providing a port for the transfer of fluid from one side of the piston to the other; a valve yieldably urged to close said port, said valve having a longitudinal passage; and a metering pin in said valve, for controlling the flow of fluid through the longitudinal passage in the valve, said metering pin providing a support for one end of the valve.

1,828,361. CAKE OF SOAP. CHARLES ARCHIBALD CRARY, Wyoming, and THOMAS F. CRARY, Middleport, Ohio. Filed Oct. 18, 1928. Serial No. 313,328. 2 Claims. (Cl. 87—23.)

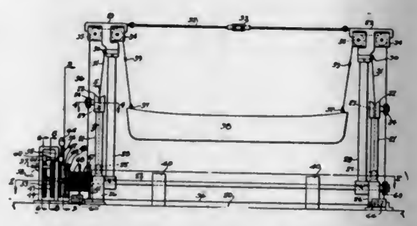


1. A cake of milled soap having bores extending thereinto from opposed portions of the cake, said bores being of small diameter but of sufficient depth and number to render the cake buoyant, the outer ends of the bores being substantially open and the inner ends closed.

1,828,362. PROCESS OF CRACKING PETROLEUM OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 14, 1925, Serial No. 75,195. Renewed Aug. 12, 1930. 2 Claims. (Cl. 260—170.)

1. A process for treating hydrocarbon oil to produce a product containing at least 15% hydrocarbons of the olefine series comprising initially subjecting the liquid oil to pressure distillation so controlled as to yield cracked vapors representing an excess of 50% of the oil treated, subjecting the cracked vapors in a zone free from liquid or steam to a temperature in excess of 1200° F. while under superatmospheric pressure.

1,828,363. DAVIT FOR LIFEBOATS. CHARLES H. FULLER, Portland, Oreg. Filed Jan. 15, 1929, Serial No. 332,726. Renewed Mar. 2, 1931. 5 Claims. (Cl. 9—22.)

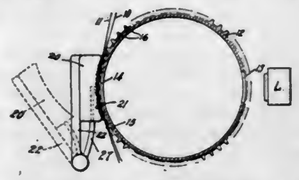


1. A life boat davit having a pair of spaced rigid masts, each of said masts having a pair of sheaves mounted at the outer upper end thereof and having a pair of booms hinged between said masts between which a life boat can pass, a boat line at each end of said davit passing upwardly between the sheaves on the outer side of a mast through the boom end and thence downwardly on the inner side of the boom to the boat, and shaft means connecting said booms for moving said booms to either side of a vertical position.

1,828,364. FILM CONTACT SYSTEM. FRANK E. GARBUTT, Hollywood, Calif., assignor to Paramount Publix Corporation, a Corporation of New York. Filed Jan. 18, 1928. Serial No. 247,586. 7 Claims. (Cl. 95—75.)

1. In a system of photographic printing by the contact method, a sprocket wheel having teeth adapted to fit into the perforations of a developed and a raw film disposed face to face, the two films being registered and supported in a curved plane upon the said teeth, a fluid pressure system, means for exerting said fluid pressure to an area of the films from their convex surface in such a manner that the films are held in contact and register against

the teeth of the sprocket wheel within said area, the pressure being just sufficient to maintain contact of the films and to seat them snugly upon the sprocket teeth without causing buckling of the films between the teeth, means for

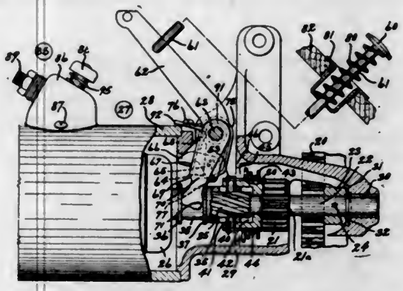


allowing fluid to escape from the system when the fluid pressure rises above a predetermined maximum, and means for illuminating a portion of the developed film within the area under pressure so that light will be transmitted through the developed film to print the raw film.

1,828,365. HEAT INSULATING MATERIAL. HARVEY D. GEYER, ARTHUR H. FLOWER, and JACOB C. HOUSEKEEPER, Dayton, Ohio, assignors to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,936. 10 Claims. (Cl. 18—48.)

1. The steps in the method of making heat insulating material comprising: providing a cellular rubber composition structure, dividing said cellular structure into relatively small particles, and then binding said particles together with a suitable binder.

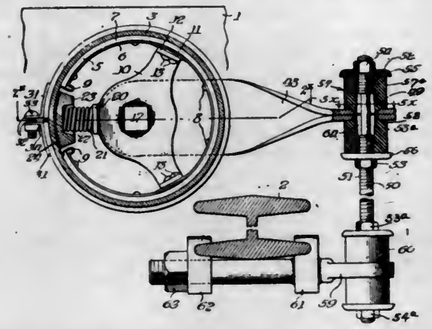
1,828,366. ENGINE STARTING APPARATUS. FREDERICK J. HARDMAN, Dayton, Ohio, assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 28, 1924. Serial No. 728,531. 22 Claims. (Cl. 74—7.)



1. Engine starting apparatus comprising, in combination, a motor; a spirally splined shaft driven thereby; a sleeve threadedly engaging the shaft; a pinion slidable along the shaft into mesh with a gear connected with the engine to be started; a driving connection between the pinion and sleeve permitting endwise movement of the sleeve relative to the pinion whereby, if endwise movement of the pinion is prevented by abutting of the pinion teeth and gear teeth, spiral motion of the sleeve along the shaft may be continued in order to rotate the pinion into registration with the gear; a motor switch; and means for moving the sleeve and pinion and for closing the switch when the pinion is in substantially full engagement with the gear.

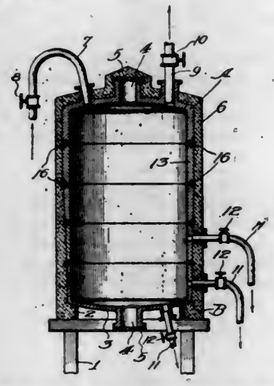
1,828,367. FRICTION SPRING BRAKE. MARK HARRIS, Detroit, Mich., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 20, 1926. Serial No. 155,830. 15 Claims. (Cl. 188—130.)

1. In an energy absorbing device, comprising a drum member, and a band member relatively rotatable and in frictional bearing with each other, a friction shoe also in frictional bearing with the drum member, in the path of the brake member, and adapted to be moved by and



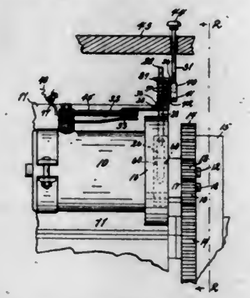
have its frictional resistance added to that of the brake member, in either direction of relative rotation of the said members.

1,828,368. EXPANSION DRUM. RALPH R. HERRICK, Pittsburgh, Pa., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 29, 1926. Serial No. 144,975. 11 Claims. (Cl. 196—133.)



10. An expansion drum for use in oil cracking systems comprising a pressure-tight shell of greater thickness at its upper portion than at its lower portion.

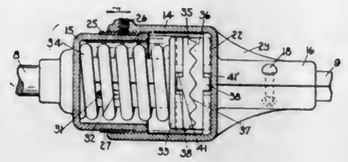
1,828,369. ENGINE STARTER. VERA C. HODGES, Los Angeles, Calif. Filed Oct. 24, 1928. Serial No. 314,593. 4 Claims. (Cl. 74—7.)



1. A starter for an internal combustion engine having a rotative element including a pinion, an arm upon which

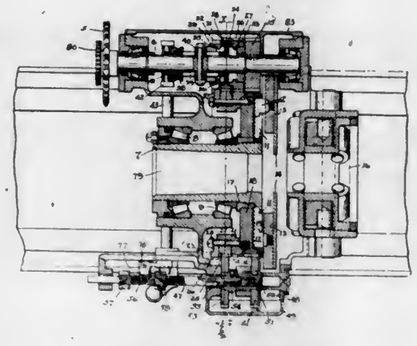
it is mounted that is pivotally mounted at one end so that the pinion may be moved into and out of engagement with said rotative element, pedal actuated means for positively moving said arm and pinion into engagement, said means including a pedal actuated plunger, a dog fulcrumed at one end to said arm and having a projection at the other end adapted to be engaged by said plunger and pushed thereby for moving the arm and pinion into engagement with the said rotative element and then the plunger into further movement to disengage said dog so that the arm and pinion may be returned to normal position out of engagement with said rotative element.

1,828,370. SLIP CLUTCH. EDWIN FREDERICK HUDDLE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 19, 1928. Serial No. 247,972. 13 Claims. (Cl. 64—106.)



1. In a slip clutch, the combination of driving and driven members, two clutch discs having coacting clutch teeth on their front faces adapted to transmit rotation between said discs, and radially disposed shoulders on the rear faces of said discs adapted to engage releasably with radially disposed shoulders on said members for transmitting rotation between said members and said discs.

1,828,371. MACHINE FOR CUTTING OFF PIPE BAR STOCK, AND THE LIKE. RALPH E. HYDE, Cleveland, and DANIEL SCHAPPI, Lakewood, Ohio, assignors to The Oster Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 18, 1928. Serial No. 255,363. 6 Claims. (Cl. 164—60.)

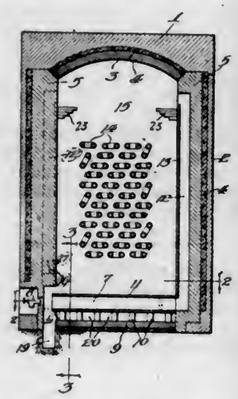


1. In a cut-off machine, a spindle and a scroll plate, means including a gear for rotating said spindle at a given speed, means for selectively rotating said scroll plate at speeds greater, less, and equal to the speed of said spindle, said selective means including a slidable clutch pinion selectively engageable with differentially sized gears connected to said scroll plate, and automatic means for actuating said selective means.

1,828,372. PRODUCTION OF ACETALDEHYDE AND ACETIC ACID. HERMANN JOCHHEIM, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 10, 1927, Serial No. 232,475, and in Germany Dec. 13, 1926. 11 Claims. (Cl. 260—116.)

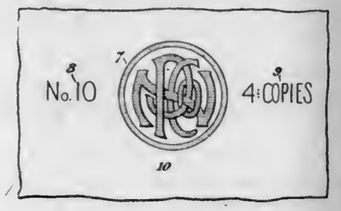
3. The process of producing acetaldehyde and acetic acid, which comprises passing a gas containing acetylene, methane and gases containing the elements of water, namely hydrogen and a gas furnishing oxygen, over a catalyst having both oxidizing and hydrating properties at temperatures of 40° to 300° C.

1,828,373. METHOD OF HEATING AND FURNACE USED THEREWITH. LEV A. MEKLER, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 11, 1927. Serial No. 174,683. 4 Claims. (Cl. 263—43.)



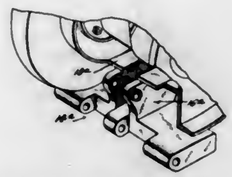
1. A furnace comprising, in combination, walls forming a heating chamber, one of said walls having a heat generating and distributing flue, means for feeding fuel to said heat generating and distributing flue, means for conducting the products of combustion from the latter into a similar flue in an adjacent wall, said flues having heat radiant portions so arranged as to radiate the heat from the products of combustion passing therethrough to the heating chamber, means to discharge the gases of combustion from the radiant flues into the heating chamber to heat same by convection.

1,828,374. METHOD OF TRADE MARKING CARBON PAPER. WILLIAM MENDEL, Beverly, N. J. Original application filed June 6, 1920, Serial No. 368,993. Divided and this application filed June 30, 1930. Serial No. 464,956. 2 Claims. (Cl. 282—28.)



1. The process of marking carbon paper, which process consists in applying the desired design to the supporting paper or tissue with a cellulose nitrate solvent including ethylene glycol mono ethyl ether acetate.

1,828,375. WHEEL GUIDE. JOHN TURNER MOORE, Reading, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y., a Corporation of New York. Filed Feb. 26, 1929. Serial No. 342,812. 6 Claims. (Cl. 305—8.)

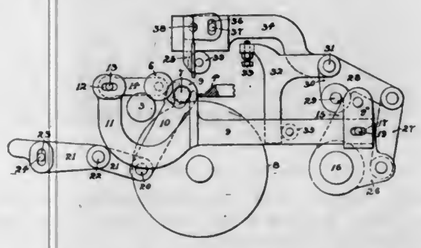


6. In an endless track mechanism, the combination of a pair of wheels coaxially arranged in spaced relation to each other, an annular rib on each of said wheels, said ribs being opposed to each other, extending into the space between the wheels at a fixed distance from the peripheries of the wheels, a series of tread links having laterally extending shoe portions which ride upon the peripheries of said wheels, and rib portions which extend radially inwardly into the space between said wheels with their inner ends extending between and guided by the opposed annular ribs of said wheels.

1,828,376. MANUFACTURE OF IRON CARBONYL. MARTIN MÜLLER-CUNRADI, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Aug. 10, 1925, Serial No. 49,452, and in Germany Aug. 11, 1924. 2 Claims. (Cl. 23—203.)

1. The process of manufacturing iron carbonyl which comprises causing carbon monoxid to react at a temperature between about 50 degrees and 250 degrees centigrade and at an increased pressure on iron in the form of porous lumps while taking care that the iron carbonyl formed is removed from the iron in the course of the process.

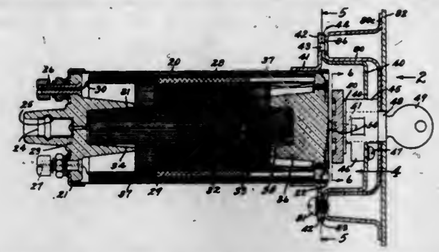
1,828,377. COMBING MACHINE. JOHN WILLIAM NASMITH, Heaton Mersey, England. Filed Jan. 28, 1930, Serial No. 424,050, and in Great Britain Dec. 18, 1929. 8 Claims. (Cl. 19—121.)



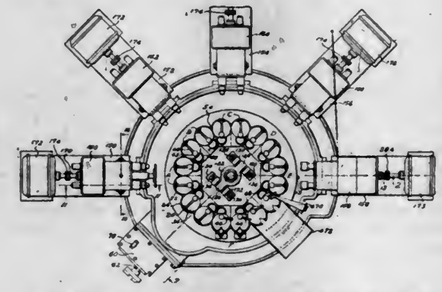
1. In a combing machine a combing cylinder segment and a detaching roller co-acting to form a detaching nip, a piecing element, bearings for the roller and for the piecing element, and means for moving such piecing element to and from the machine nipper.

1,828,378. IGNITION APPARATUS. HARRY E. NORVIEL, Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 25, 1926. Serial No. 97,457. 13 Claims. (Cl. 175—361.)

1. Ignition apparatus comprising, in combination, an ignition coil having a housing providing a switch case member; a second switch case member; means for attaching together the switch case members; an ignition switch enclosed by said members; means enclosed by the housing for electrically connecting a coil winding with the switch; means for rendering the attaching means inaccessible for removal; and a key controlled device for operating the switch and for locking said last means in operative position.



1,828,379. METAL WORKING MACHINE. LORA E. POOLE, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed July 22, 1929. Serial No. 380,168. 3 Claims. (Cl. 29—38.)



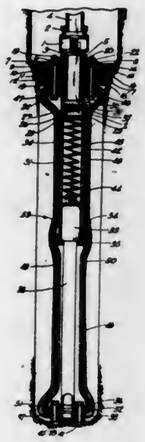
1. A machine for operating upon field pole pieces comprising in combination, tools for operating upon the pole pieces, a rotary dial for presenting the pole pieces to the operating tools, said rotary dial including seats for supporting the tips of the pole shoes, a pair of fingers for gripping and aligning each pole piece in said seat, cam means for causing the fingers to grip and align the core of the pole piece, said fingers being carried by the rotary dial.

2. A machine for operating upon field poles comprising, in combination, a tool for operating upon said field pole; a rotary dial for presenting the field pole to the operating tool, clamping means for clamping the field pole to the dial, said clamping means including a pair of clamps each clamp comprising a finger and a lobe; cam means engaging each lobe thereby causing the fingers to grip the core of the field pole; a Geneva gear driving mechanism for indexing the dial so as to present the field pole to the operating tool; and elliptical gears for driving the Geneva gear driving mechanism, said elliptical gears being so arranged as to require a short integral of time to index the rotary dial so as to leave more time for the tool to operate upon the field pole during the rest period of the dial.

1,828,380. CATALYTIC PROCESS. HANS RÖTGER and FRITZ STOEWENER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 28, 1928, Serial No. 296,091, and in Germany July 30, 1927. 8 Claims. (Cl. 23—175.)

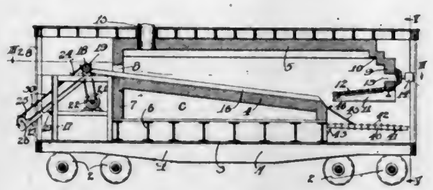
1. The process of carrying out a catalytic process in the gas or vapor phase which comprises passing the initial material through a layer of a porous catalytic substance, the pores of which decrease in size in the direction of the current of the initial material.

1,828,381. SELF ADJUSTING AND EXPANDING PLUG FOR WELLS AND THE LIKE. ROBERT J. SCHUYLER, Duncan, Okla., assignor to Frank Shipley, Lawton, Okla. Filed Feb. 23, 1929. Serial No. 342,224. 7 Claims. (Cl. 166—13.)



1. A plug, as described, for plugging a well, adapted at its top for removably connecting the lower end of a tubing or a drill stem thereabove, means for anchoring same in said well, resilient means adapted for connecting said anchoring means and for being laterally inflated within said well and for receiving a cementitious element, means for automatically vertically adjustably positioning said resilient means, and means for protecting said resilient means.

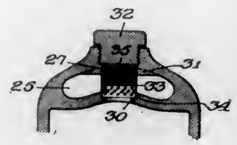
1,828,382. MOBILE REFORMING PLANT. LAWRENCE S. WILBUR, Evanston, Ill., assignor to National Rail Joint Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 7, 1929. Serial No. 397,879. 14 Claims. (Cl. 104—2.)



1. In a mobile reforming plant of the class described, the combination of two railway cars, a furnace in one of said cars for heating the objects to be reformed, a reforming press and a cooling bath in the other car, conveyor mechanism for conveying to said furnace the objects to be heated, a detachable chute for conveying the heated objects from the furnace to the press, conveyor mechanism for receiving the reformed objects from the press and for conveying them to the cooling bath and for discharging the objects from said bath, and means for receiving and delivering the discharged objects.

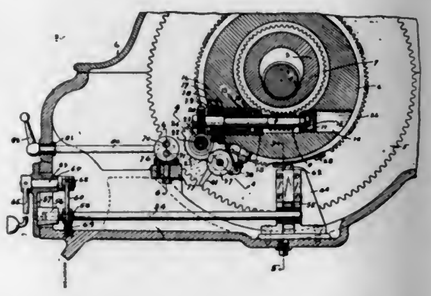
1,828,383. DASHPOT MECHANISM. OSCAR W. ANDERSEN, Oak Park, Ill., assignor to Pettibone Mulliken Company, Chicago, Ill., a Corporation of Delaware. Filed May 3, 1929. Serial No. 360,083. 8 Claims. (Cl. 188—100.)

1. A cylinder device for the purpose set forth, comprising a chamber containing an opening through which it communicates with the interior of the cylinder, said chamber having a filler-opening in its top, a tubular member interposed in the space between said openings and



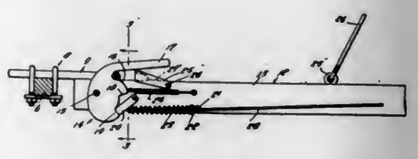
having an opening in its side in communication with said chamber and cylinder, and a screen associated with said member and extending above said first-named opening.

1,828,384. GRINDING MACHINE. WILLIAM J. BAUMBERGER, Davenport, Iowa, assignor to Micro Machine Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Jan. 18, 1929. Serial No. 333,475. 24 Claims. (Cl. 51—90.)



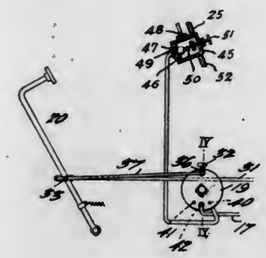
1. In an orbital grinding machine, a rotatable head, a spindle member eccentrically and rotatably mounted in the head and adapted to eccentrically support a spindle, means for driving the head, a gear coaxial with the head and rotatably mounted thereon, a gear fixed to said spindle carrying member, reduction gearing carried by the rotatable head and forming a driving connection between said gears, and means for causing said first mentioned gear to turn with respect to the head to turn said spindle carrying member in the head.

1,828,385. DRAFT BAR. OSCAR BERGEMANN, Good Thunder, Minn. Filed May 16, 1930. Serial No. 452,994. 2 Claims. (Cl. 280—33.44.)



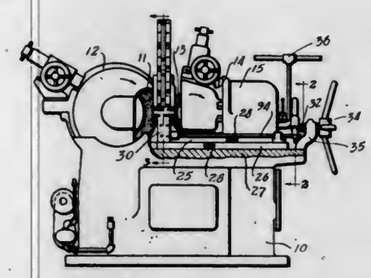
1. In a coupling device, a draw bar, a coupling head eccentrically pivoted to the draw bar for swinging movement and having its outer face provided with an arcuate surface and its inner face above and at one side of the pivot with a keeper seat and a lock shoulder below the seat and pivot, a cam surface leading toward said seat, a spring holding the coupler head in a normal drawing position, a pivoted lock pawl normally engaging the lock shoulder, and means for actuating the lock pawl.

1,828,386. BRAKE MECHANISM FOR MOTOR VEHICLES. WILLIAM J. BESLER, Plainfield, N. J. Filed May 18, 1928. Serial No. 278,721. 6 Claims. (Cl. 188—152.)



2. A braking system for vehicles comprising a brake, a fluid-pressure motor for applying the brake, a pipe connection leading to said motor and a pressure-reducing valve in said connection for decreasing the effectiveness of the motor by a predetermined constant amount.

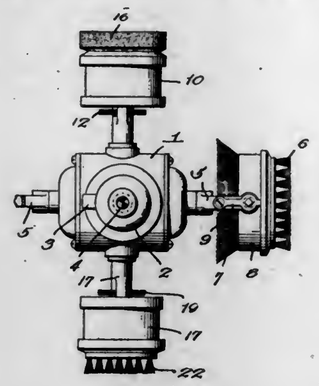
1,828,387. GRINDING MACHINE. CLEMENT BOOTH, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 28, 1930. Serial No. 478,419. 14 Claims. (Cl. 51—103.)



1. In a device of the class described the combination with a pair of opposed grinding and regulating wheels forming a grinding throat therebetween, and a work rest blade within the throat supporting the work for simultaneous engagement with the wheels, of means for placing the work on the work rest blade and removing same therefrom comprising a vertically shiftable carrier, a pair of arms carried by the carrier having fingers at one end thereof for supporting the work during movement toward and from the work rest blade, and means for effecting movement of the carrier.

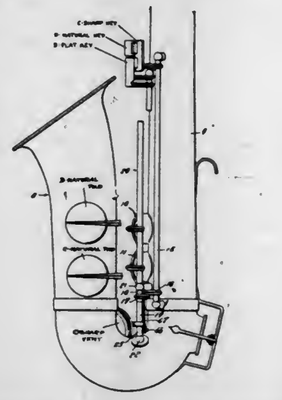
1,828,388. SHOE CLEANING MACHINE. JORGE BUSTOS, Santiago, Chile. Filed May 18, 1927. Serial No. 192,433. 2 Claims. (Cl. 15—28.)

1. A polishing machine comprising a motor, a shaft driven by said motor, a member having work engaging portions on the opposite faces thereof, pins carried by said member and pivotally connected with the shaft permitting said member to be turned to successively present the respective work engaging portions for use, one of said ends having a polygonal extremity, and a spring member



having an aperture conforming in shape to the polygonal extremity of said pin and normally engaged with the latter to prevent pivotal movement of said member.

1,828,389. SAXOPHONE. FULVIO CALVANI, Newark, N. J. Filed May 17, 1930. Serial No. 453,280. 6 Claims. (Cl. 84—385.)

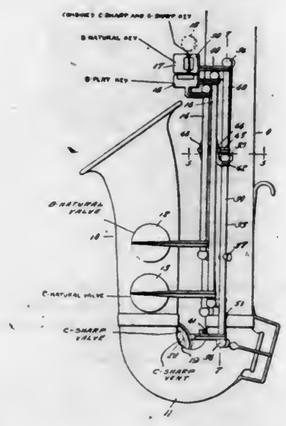


2. In a saxophone, a tubular body terminating in a bell and provided adjacent said bell with a D-natural vent and a C-sharp vent, a D-natural pad for closing said D-natural vent, a C-sharp pad for closing said C-sharp vent, both of said pads being normally unseated and open, finger actuated means for simultaneously closing said pads, independent finger actuated means for separately closing said D-natural pad, and multiple spring means for automatically opening said pads, said first named means being operable by the little finger of the right hand, and said second named means being controlled by the little finger of the left hand to permit the D-natural pad to be closed from a conventional C-sharp key, and to permit both of said pads to be simultaneously closed from the C-natural key.

1,828,390. SAXOPHONE. FULVIO CALVANI, Newark, N. J. Filed Aug. 28, 1930. Serial No. 478,447. 6 Claims. (Cl. 84—385.)

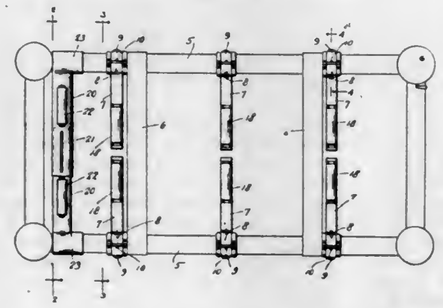
5. In a saxophone, a tubular body terminating in a bell and provided adjacent said bell with a C-sharp vent, the intermediate portion of said body having a G-sharp vent,

a C-sharp valve for closing said C-sharp vent, a G-sharp valve for closing said G-sharp vent, spring means for normally urging said G-sharp valve to open position, said means including a laterally directed stop finger, a sectional shaft mounted for oscillation on said tubular body and provided at its upper end with a combined G-sharp and C-sharp key, the upper section being provided with a finger engageable with said first named finger for main-



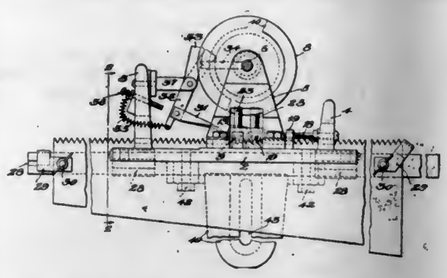
taining the G-sharp valve normally closed, the lower section being provided with a finger engageable beneath said last named finger for permitting the two sections of the shaft to be oscillated independently or in unison, an arm carried by the lower end of said lower section, said C-sharp valve being connected rigidly to said arm, and spring means cooperable with said lower section for normally oscillating the complete shaft in a direction to close said C-sharp valve.

1,828,391. CASKET LOWERING APPARATUS. WALTER A. CANADAY, Bridgeport, Nebr. Filed Apr. 10, 1931. Serial No. 529,226. 1 Claim. (Cl. 27—32.)



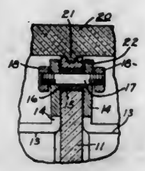
In combination with a casket lowering apparatus, wherein the apparatus includes a pair of rotatable shafts and belts having ends windable on said shafts, a plurality of arms on the shafts extending inwardly therefrom, and pawl and ratchet means connecting the arms with the shafts so that the arms will swing downwardly between the shafts as the shaft rotates and may be swung upwardly for resetting at will, rollers journalled on said arms adjacent their free ends, a member comprising a pair of telescopically associated elements with hook shaped ends to engage over the shafts, and rollers journalled on said elements.

1,828,392. SAW SETTING MACHINE. PURDOM CARPENTER, Barrington, R. I. Filed June 6, 1929. Serial No. 368,824. 3 Claims. (Cl. 76—66.)



1. In a saw setting machine, a bed composed of spaced sections, bridge members connecting the sections, opposed anvils rigidly secured to the sections and formed to engage opposite sides of a saw, means to support a saw in said space between the bed sections, a pair of slidable hammers carried by the respective sections and formed to engage adjacent teeth on opposite sides of the saw, means for advancing the saw including a spring tensioned lever, a screw for limiting the idling movement of the lever, a pivoted feed pawl carried by the lever and formed to engage the teeth of the saw, a cam having a groove in which an end of the lever operates, an adjustable screw carried by the cam to engage the lever, so as to actuate and control the extent of working movement of the lever, projections on the hammers formed to engage opposite sides of the cam, said opposite sides of the cam being formed to alternately actuate the hammers, and a single spring connected to each of the hammers for holding same under tension.

1,828,393. STORAGE BATTERY. RALPH H. CHILTON, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 20, 1928. Serial No. 307,230. 4 Claims. (Cl. 136—134.)

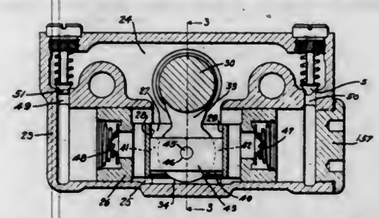


1. A storage battery comprising: a container having a partition therein forming a plurality of cells, battery elements in two adjacent cells each having a post projecting upward adjacent opposite sides of said partition and extending over a hole in said partition, a soft rubber bushing in the hole in said partition and compressed by said opposing posts, and a metal connector extending through said bushing and connected to and clamping said posts against said bushing whereby said bushing is expanded in diameter and seals said hole.

1,828,394. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 17, 1930. Serial No. 444,993. 5 Claims. (Cl. 188—88.)

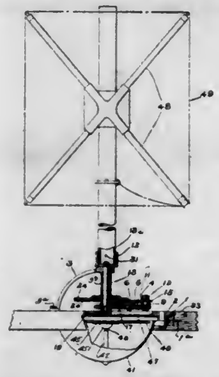
1. A shock absorber comprising in combination, a casing presenting a cylinder; a piston in said cylinder; a lever for operating said piston, said lever being rotatably supported by the casing and having a rounded, free end; and a saddle for said lever, said saddle comprising

opposite branches the adjacent sides of which are rounded to fit the rounded end of the lever, the outer, or more



remote surfaces of said branches being substantially parallel and flat for engaging cooperating walls in the piston.

1,828,395. RADIO COMPASS CORRECTING DEVICE. GEORGE H. CLARK, New York, N. Y., and GEORGE Y. ALLEN, Pittsburgh, Pa., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 19, 1921. Serial No. 453,855. 56 Claims. (Cl. 250—11.)



13. In combination a directional antenna system, an indicator associated therewith for indicating the bearing of signaling currents in said system and means associated with said indicator for applying predetermined corrections to its readings.

1,828,396. UMBRELLA. EMILE CORNIC, Paris, France. Filed Dec. 11, 1930, Serial No. 501,631, and in France June 18, 1930. 3 Claims. (Cl. 135—28.)



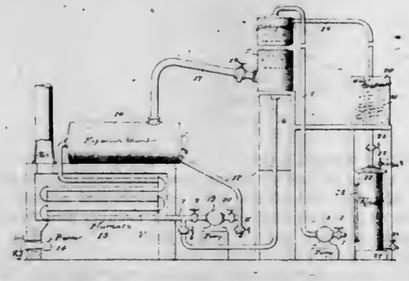
1. Umbrella comprising a stem the end of which opposite to the handle has a reduced portion and a shoulder,

a sleeve secured on the said reduced portion and having a flange at its outer end, a nut slidably mounted on the said sleeve and having an inner ledge, a spring about this sleeve and compressed between the flange of the latter and the inner ledge of the said nut, a movable cap covering the said spring and the said sleeve and connected to the said sliding nut, and ribs pivoted on the said sliding nut.

1,828,397. STIFFENING FABRIC AND METHOD OF MAKING THE SAME. CAMILLE DREYFUS, New York, N. Y. Filed Dec. 15, 1927. Serial No. 240,350. 5 Claims. (Cl. 28—1.)

1. In the process of producing a stiffening material, the steps of imparting stiffness to a fabric containing filaments of organic derivatives of cellulose by treatment with an organic solvent or softening agent for said organic derivatives of cellulose at least partially to coalesce the filaments and then removing the solvent or softening agent.

1,828,398. PROCESS FOR TREATING OILS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 17, 1921. Serial No. 445,670. 3 Claims. (Cl. 196—58.)

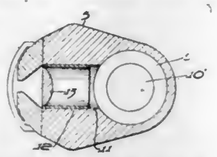


1. In the art of cracking hydrocarbons, a process which comprises the initial steps of supplying charging oil to a heating coil and expansion chamber, heating the heating coil and pumping the charge of oil from said chamber to the coil and back into said chamber, controlling the discharge of vapors evolved from the oil from said chamber, to gradually increase the pressure in the system to the desired operating pressure, continuing the pumping operation to and from said expansion chamber, to gradually increase the temperature of the charge, then proceeding with the normal operations of the process, which include preventing the escape of liquid from said expansion chamber to said pump, pumping a stream of hydrocarbon liquid from a source of supply and forcing the hydrocarbon liquid through said heating coil and into said expansion chamber, passing the vapors through a reflux condenser to a final condenser, continuously permitting reflux condensate to commingle with the hydrocarbon liquid coming from the source of supply, to be forced therewith through said heating coil and into said expansion chamber, regulating the admission of the charging oil from said source of supply, and removing carbonaceous residue as it accumulates in said expansion chamber.

1,828,399. PHOTOELECTRIC CELL LIGHT RAY CONDENSER. CHARLES W. EBELING, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 18, 1930. Serial No. 482,828. 1 Claim. (Cl. 179—100.31.)

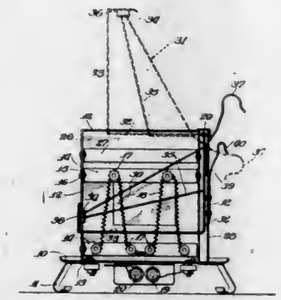
The combination with a slit block unit having a film guiding surface with an aperture therethrough, a cylindrical bore leading from said aperture toward the rear of the block and a larger bore transversely thereto through the

block, the latter constituting a photoelectric cell receptacle, of means for collecting rays of light projected



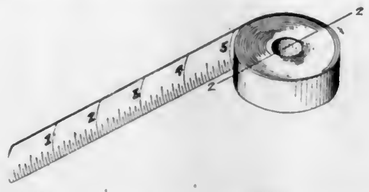
through the aperture of the slit block, mounted in the first bore and including a removable tube, and a condensing lens carried by said tube.

1,828,400. TOASTER. CHARLES ENDORF, Chicago, Ill. Filed Jan. 20, 1930. Serial No. 421,898. 5 Claims. (Cl. 53—5.)



1. In a toaster, a base, a back member rising from said base, a pair of spaced frames carrying heating means on said base in front of said back member, and a carrier for a slice of bread pivoted to said back member and normally disposed between said frames, means for pivoting said carriage above said frames, and means for maintaining said carriage in elevated position, whereby the toasted bread may be kept warm without burning until utilized.

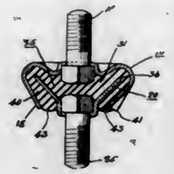
1,828,401. RESILIENT RULE. HIRAM A. FARRAND, Berlin, N. H., assignor to Hiram A. Farrand, Inc., Berlin, N. H., a Corporation of New Hampshire. Filed Oct. 21, 1926. Serial No. 143,267. 21 Claims. (Cl. 33—137.)



1. A collable resilient rule comprising a metallic core of concavo-convex cross sectional form and a sheathing thereon of non-corrosive metal, and markings formed by omissions of said sheathing and extending from the face thereof to the underlying face of the said core.

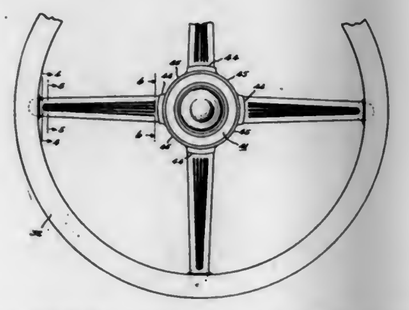
1,828,402. FLEXIBLE CONNECTER. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 3, 1928. Serial No. 266,938. 16 Claims. (Cl. 29—148.)

12. The steps in the method of making a flexible connecter comprising: assembling a soft rubber member between an outer metal casing member and an inner metal member so as to isolate said metal members, forcing said metal members toward each other to substantially compress the soft rubber therebetween, and then closing the



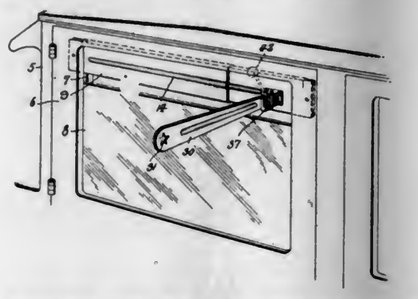
side walls of said metal casing member inwardly by deforming the metal to cause it to partially overlie said inner metal member and maintain said metal members in clamped together relation.

1,828,403. STEERING WHEEL AND HORN BUTTON MOUNTED THEREIN. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 16, 1928. Serial No. 319,981. 5 Claims. (Cl. 74—33.)



1. A handwheel comprising: a hub having a central bore for fixing to a shaft and having a central recess of substantial depth at its top adapted to receive actuating mechanism, a pressed sheet metal spider overlying and fixed to said hub and having a central hole registering with said central recess, and a drawn metal cup fitting within said recess and having a marginal flange overlying said pressed metal spider and adapted to be clamped down upon said hub by a nut threaded to the shaft.

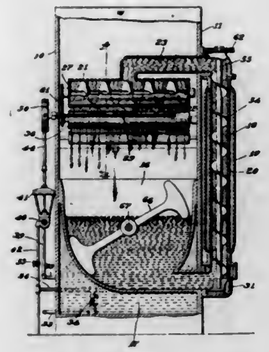
1,828,404. DIRECTION INDICATING SIGNAL. HERMAN GOLDBERG, Washington, D. C. Filed June 11, 1931. Serial No. 543,702. 7 Claims. (Cl. 116—52.)



1. A direction indicating signal including a pivoted indicating member, a lever for moving said indicating member to a signalling position, spring means for returning said indicating member to its normal position, and means

for momentarily checking the return movement of said lever to retard the movement of said indicating member to its normal position and adapted to hold said lever and indicating member in their normal positions.

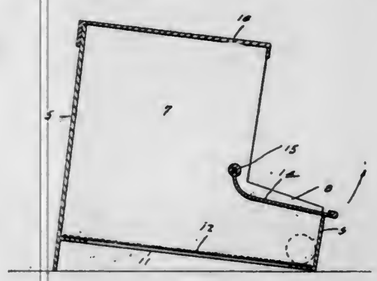
1,828,405. CONFECTION COATING MACHINE. FREDERICK W. GREER, Cambridge, Mass. Filed Jan. 10, 1929. Serial No. 331,434. 8 Claims. (Cl. 91—3.)



1. In a coating machine, in combination, a conveyor apron, a coating supply tank, a tubular receptacle above said apron and provided with an end wall having a discharge opening and having a slot in its lower side for depositing the coating material upon articles carried by the apron, a spiral scraper mounted in said receptacle, and means for rotating the scraper to cause it to scrape the walls of the receptacle and to force lumps of the coating material through the opening in said end wall.

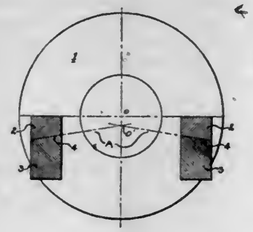
6. In a coating machine, in combination, a conveyor apron, a coating supply tank, a receptacle above the apron and provided with an opening for depositing the coating material upon articles carried by the apron, means for feeding the coating material from the tank to the receptacle, power driven rolls positioned below said apron to apply the coating material to the bottoms of said articles, and temperature control means for automatically regulating the temperature of the coating materials, including a thermostat the sensitive element of which is supported between said rolls and apron in position to cause the rolls and apron to remove deposited coating material from said element.

1,828,406. EGG SAVER TRAP. ALBERT GRILL, Watkins, Minn. Filed June 28, 1929. Serial No. 374,425. 1 Claim. (Cl. 119—48.)



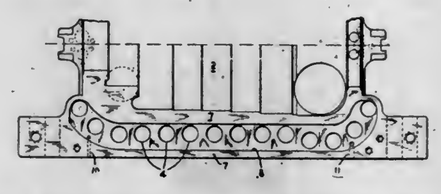
An apparatus of the character described comprising an elongated housing having an open bottom and including an upwardly and forwardly inclined rear wall, an integral, forwardly projecting flange on said rear wall in spaced relation to the lower edge thereof, spaced, parallel, opposed partition walls extending forwardly and downwardly from the rear wall and connected thereto above the flange, integral extensions projecting forwardly and downwardly from the lower portions of the partition walls, an inclined front wall secured to the free ends of the extensions and terminating below the upper edges thereof, an integral inturned flange on the front wall extending beneath the extensions, foraminous bottoms removably disposed on the flanges between the partition walls, a horizontally disposed rod extending transversely through the forward portions of the partition walls above the horizontal plane of the extensions, a plurality of lids disposed between the extensions and having upwardly curved inner end portions disposed between the partition walls and hingedly connected to the rod, the opposite end portions of the lids engageable for rest on the upper edge of the front wall and projecting therebeyond, and a removable top on the apparatus.

1,828,407. TURBINE SUPPORT. HENRY LEWIS GUY, Hale, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 28, 1929, Serial No. 374,542, and in Great Britain July 19, 1928. 4 Claims. (Cl. 253—39.)



1. A turbine comprising a cylinder, a supporting structure having bearing surfaces inclined relative to each other, and lugs carried by the casing and resting on said bearing surfaces, the intersection of said surfaces lying in the vertical plane of the turbine axis and near to the axis but spaced therefrom an amount compensating for the difference in expansion between the body of the cylinder and the bearing portion of the lug due to difference in temperature of the cylinder and the lug.

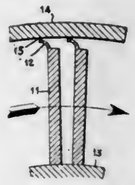
1,828,408. ELASTIC FLUID TURBINE CASING. HENRY LEWIS GUY, Hale, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 8, 1929, Serial No. 405,782, and in Great Britain Dec. 8, 1928. 1 Claim. (Cl. 253—39.)



An elastic fluid turbine casing for operation at high pressure and high temperature, said casing being divided into parts having flange portions at the meeting faces, bolts extending through openings in the flange portions for securing the parts together, one of the meeting faces of the flange portions being formed with a recess extend-

ing the full length of the fluid-enclosing portion of the casing and extending to said bolts, and means for conveying, through said recess, heating fluid at substantially the temperature of the motive fluid admitted to the turbine, into contact with the bolts, whereby the bolts are heated to the same temperature as the flange portions and straining thereof is avoided.

1,828,409. REACTION BLADING. BENJAMIN V. DENSMORE, Ridley Park, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 11, 1929. Serial No. 331,906. 2 Claims. (Cl. 253—77.)



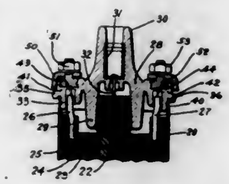
1. In a turbine, the combination of a rotor and a casing, a turbine blade carried by one of said parts with its tip end adjacent the other of said parts, said tip end being formed with a relatively thin extension bendable longitudinally of the blade and having close sealing clearance with said other part, said extension being bent backwardly with respect to the direction of rotation of the blade relative to said other part.

1,828,410. WINDSHIELD CLEANER. FREDERICK J. HARDMAN, Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 23, 1929. Serial No. 349,437. 8 Claims. (Cl. 15—253.)



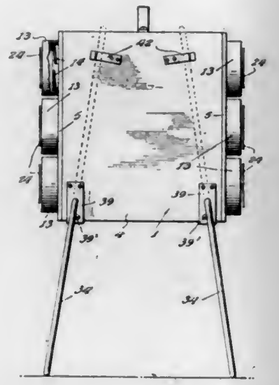
1. In a windshield cleaner, the combination comprising, a wiper mechanism, an electric driving motor therefor, motion translating mechanism connecting the motor with the wiper mechanism, a support for the wiper mechanism, the driving motor and the translating mechanism, a contact device movably carried by said support, and optionally engageable with and separable from the translating mechanism for controlling the operation of the driving motor.

1,828,411. IGNITION COIL. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 23, 1930. Serial No. 455,084. 2 Claims. (Cl. 175—361.)



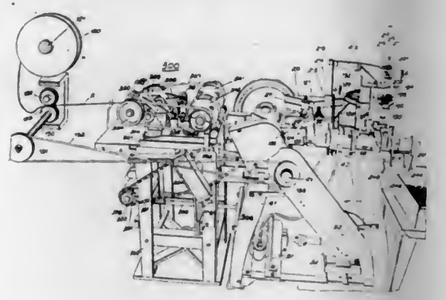
1. In a device of the character described, the combination with an insulating body having a cylindrical portion provided with an annular groove in its outer surface; an annular flange on said body provided with an annular recess; and a cylindrical metal case fitting about the cylindrical metal case fitting about the cylindrical portion of the insulating body and into the recess in its flange, an annular portion of said case being pressed into said annular groove to secure the insulating body to the case.

1,828,412. CARRIER. LOUIS W. HASSENSALL, Toledo, Ohio. Filed July 12, 1929. Serial No. 377,784. 15 Claims. (Cl. 224—45.)



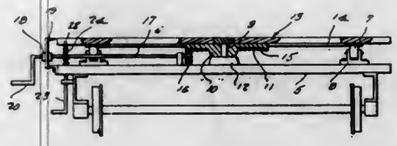
1. A carrier comprising a body, a partition in said body dividing the same into compartments, walls for the body constituting outer walls for the compartments and being formed with openings communicating therewith, containers in said compartments having their inner ends secured against said partition and having open outer ends projecting through the openings, and removable closures, for the outer ends of said containers.

1,828,413. APPARATUS FOR MAKING COILS OF INSULATED WIRE. JOHN Q. HOLMES, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 440,974. 6 Claims. (Cl. 140—71.)



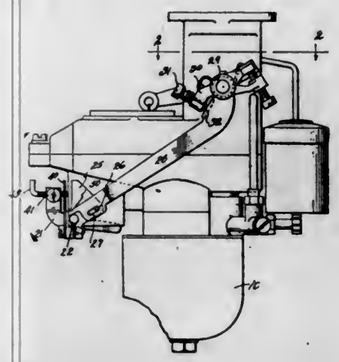
1. Apparatus for making coils of insulated wire for electrical instruments, comprising in combination, means for stripping the insulation from the wire at portions spaced at regular intervals, means for winding the insulated portion of the wire into a coil, and means for severing the wire intermediate the extremities of the stripped portion of the wire whereby the apparatus produces coils of insulated wire having bared end portions.

1,828,414. TURNTABLE. WILLIAM ILLINGWORTH and WILLIAM HENRY ILLINGWORTH, Scarborough, Ontario, Canada. Filed May 10, 1930. Serial No. 451,396. 1 Claim. (Cl. 125—25.)



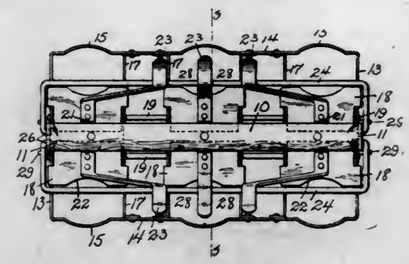
In a device of the class described, in combination, a portable support comprising a wheel supported platform, a bearing member located thereon and including an upstanding journal forming axle, a plate including a bearing part resting on said first named bearing member and a central hole therein receiving the axle, said plate being provided with marginal gear teeth constituting a ring gear, a circular turn table having its central part fastened on said plate, anti-friction and rolling means interposed between the platform and the turn table, a pointer carried by said platform and including a bearing, a shaft mounted for rotation in said bearing, the shaft having a crank handle at its outer end, a pinion on the inner end of said shaft meshing with said ring gear, the top part of the turn table having radiating lines thereon for cooperating with said pointer and holes in its under face alining with said lines and a spring pressed plunger carried by the platform adapted to engage with any one of said holes for holding a line opposite the pointer.

1,828,415. CARBURETOR. CHESTER F. JOHNSON, Detroit, Mich. Filed Dec. 20, 1928. Serial No. 327,409. 4 Claims. (Cl. 261—52.)



1. In a carburetor having a throttle and a choke valve, a spring means tending to hold the choke valve closed, means for operating the choke valve, means for operating the throttle valve, and means connecting the two last mentioned sets of means whereby when the choke valve is being moved to closing position the throttle valve is moved to an open position, said connecting means including a pivotally mounted arm operatively connected to the choke valve operating means, and a pivotally mounted link operatively connected to the throttle valve operating means, the arm and the link being operatively connected to each other.

1,828,416. BOTTLE CARRIER. GEORGE A. KANE, South Orange, and JAMES E. MCCAFFERTY, Newark, N. J. Filed July 8, 1931. Serial No. 549,388. 5 Claims. (Cl. 294—87.)



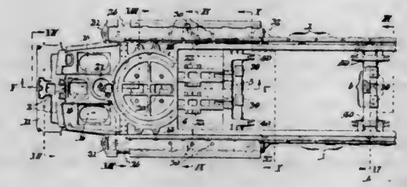
1. A bottle carrier comprising a handle having laterally extending bracket with outer jaws for grasping bottles, inner jaws to co-operate with the outer jaws for holding purposes, finger pieces attached each to an inner jaw for individual manipulation, and loops common to all the finger pieces for simultaneous operation.

1,828,417. MAIL HOLDER. MICHAEL RAYMOND KELEHER, Norfolk, Nebr., assignor to Emma Keleher, Norfolk, Nebr. Filed June 5, 1929, Serial No. 368,657. Renewed Mar. 12, 1931. 2 Claims. (Cl. 24—81.)



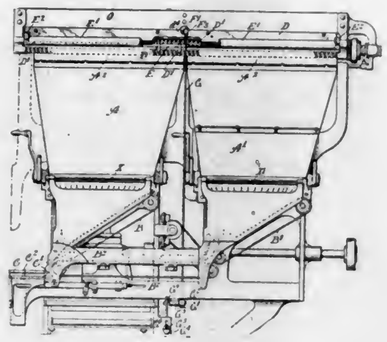
1. A holder of the character specified comprising a back plate having its lower end curved forwardly, other plates disposed one in front of the other and having their lower ends curved toward the back plate and independently hinged to the forwardly curved lower end thereof, and springs exterior to the hinge joint between the plates and independently connecting the outer plates to the back plate.

1,828,418. LOCOMOTIVE FRAME. WILLIAM F. KIESEL, Jr., Hollidaysburg, Pa. Filed Apr. 17, 1930. Serial No. 445,004. 29 Claims. (Cl. 105—172.)



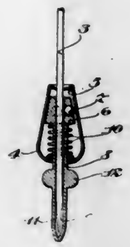
1. A locomotive frame casting including, in an integral piece, main longitudinal side members, bottom plates and transverse members connecting said side members and forming therewith an end compartment for liquid storage, occupying the full space between said side members at the ends thereof.

1,828,419. TYPOGRAPHICAL DISTRIBUTING MACHINE. GEORGE P. KINGSBURY, Hollis, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Nov. 23, 1929. Serial No. 409,220. 15 Claims. (Cl. 199—44.)



1. A typographical distributing mechanism including, in combination, a distributor bar formed with a plurality of like matrix releasing combinations located at different points along the bar, and adjustable means associated with the distributor bar whereby matrices having corresponding combinations may be released in course of distribution by one or another of the said releasing combinations, as required.

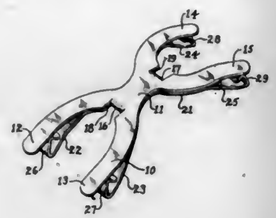
1,828,420. SCARFPIN SAFETY CLUTCH AND POINT PROTECTOR. ERNST A. KIRCHNER, Minneapolis, Minn. Filed Oct. 16, 1930. Serial No. 489,115. 2 Claims. (Cl. 24—155.)



2. A device of the class described comprising an open ended casing, a relatively movable clutch in the casing having a long stem of a constant diameter that extends through the outer end of the casing and materially outward thereof, said clutch and stem having an axial pin passageway, the outer end portion of the stem being contracted to form a long blunt point that closes said passageway and encases the point of a pin therein, and a finger-piece on the stem in the form of an annular collar that is closely associated with the respective end of the casing.

1,828,421. COLLAR HOLDER. STANLEY LEVINSKY, Naugatuck, Conn. Filed Apr. 9, 1931. Serial No. 528,752. 8 Claims. (Cl. 24—81.)

8. In a clasp for holding the side flaps of a soft collar, a pair of sheet metal body members, each of said body members having a pair of oppositely extending forks, the arms of said forks being alined to grip upon the opposite faces of said flaps, the arms of the forks of one of said



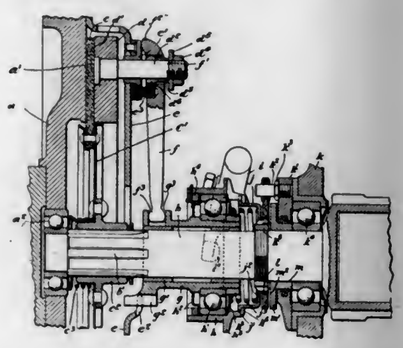
body members having inwardly and rearwardly bent extremities to form V-shaped openings with the corresponding arms of the forks of the other body member to resiliently receive said collar flaps.

1,828,422. TOOTHBRUSH. LEO LEVY, Kaiserslautern, Germany. Filed July 29, 1930, Serial No. 471,469, and in Germany Aug. 26, 1929. 3 Claims. (Cl. 15—190.)



1. A tooth-brush comprising a metal plate completely embedded in the material forming the head of the brush, and tufts of bristles inserted through one side of the head and anchored in the said metal plate.

1,828,423. CLUTCH BRAKE. BRUNO LOEFFLER, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 8, 1929. Serial No. 405,585. 5 Claims. (Cl. 192—13.)



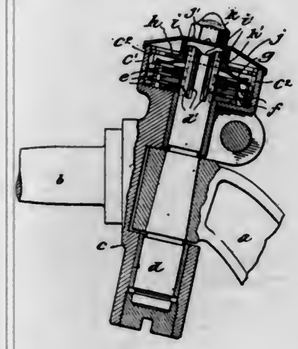
1. In a clutch brake construction, a rotating clutch element, a shaft mounting the same, a braking element on the shaft, a sleeve on the shaft to actuate the clutch, means to move the sleeve axially of the shaft, a retaining flange on the sleeve, a cup shaped braking element, a flange on the cup-shaped braking element engaging the retaining flange, a spring normally urging the flanges together, a stop pin mounted on a relatively stationary element, and a brake disc between the braking elements and carried by the stop pin.

1,828,424. VALVE CONTROLLING MEANS. LUTHER D. LOVEKIN, Wynnewood, Pa., assignor to Kitson Company, Philadelphia, Pa., a Corporation of West Virginia. Filed Feb. 21, 1928. Serial No. 255,900. 7 Claims. (Cl. 158—117.2.)



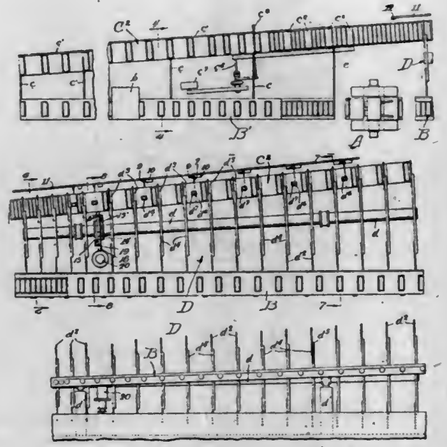
4. In fluid controlling means, the combination of a valve body and a valve mounted within said body, a casing mounted upon said valve body, the said valve having a stem projecting therefrom into the said casing, means for moving the said valve into open position, a heat responsive element normally in position to engage the stem of said valve and hold the latter in open position, a second heat responsive element mounted within said casing and extending longitudinally thereof, and an element projecting from the outer end of said casing which element is adapted to be heated, the heat thereof adapted to be transmitted by conduction to both of the said heat responsive elements whereby movement of the second named heat responsive element is effected to cause engagement thereof with the said stem to hold the said valve in open position and simultaneous movement of the first named heat responsive element out of engagement with said stem to release the same.

1,828,425. STABILIZING DEVICE FOR STEERING KNUCKLES. PHILIP E. MATTHEWS, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,232. 7 Claims. (Cl. 280—89.)



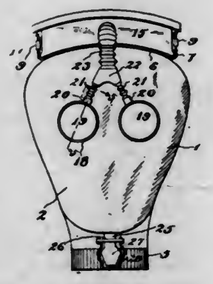
1. A device of the character describer comprising relatively movable steering elements, a housing formed on one of the elements, discs carried by the housing, the other element being co-axial to the housing and discs, cooperating discs carried by the second element and spaced between the first discs, means to urge the discs together, a plate carried by the first element and serving as a seat or the means to urge the discs together, a plurality of cams disposed annularly, a plurality of cooperating cams annularly disposed and normally engaging the first cams, a cover for the housing, and adjustable means on the cover for maintaining the discs under compression through the cams.

1,828,426. ROLLING MILL INSTALLATION. MILLER A. MCCREARY, Danville, Ill., assignor to The Hegeler Zinc Company, Danville, Ill., a Corporation of Illinois. Filed Apr. 14, 1930. Serial No. 444,258. 26 Claims. (Cl. 80—44.)



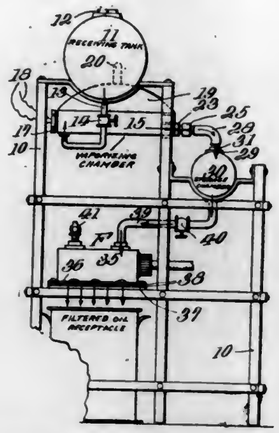
1. In a rolling mill installation of the type specified, the combination of a roller's table, a catcher's table, a return table spaced laterally from and positioned below said roller's and catcher's tables, and power actuated transfer means for removing slabs from said return table and automatically discharging them upon the roller's table.

1,828,427. MASK. FLOYD J. MCMICHAEL, Brownsville, Tex. Filed Dec. 20, 1928. Serial No. 327,351. 3 Claims. (Cl. 128—149.)



1. A device of the class described comprising a mask of hook-like form and including a front section and a crown section, a plate fixed to the crown section, a canister, catches carried by the canister, spring restrained hooks connected with the plate for detachably and yieldably engaging the catches to hold the canister upon the plate, and means for conducting air from the canister into the mask.

1,828,428. METHOD OF RECLAIMING CONTAMINATED OILS. HENRY H. MORETON, Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to Charles F. Craig, Los Angeles, Calif. Filed Feb. 18, 1928. Serial No. 255,406. 7 Claims. (Cl. 196—16.)



5. A method of reclaiming contaminated lubricating oils comprising providing a normally stationary, paste-like filter bed which includes gypsum as a constituent so that mechanical impurities suspended in the oil will be physically attracted to said filter bed, and causing the oil to filter through said bed.

1,828,429. METHOD OF TREATING OILS TO REMOVE SUSPENDED IMPURITIES. HENRY H. MORETON, Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to Charles F. Craig, Los Angeles, Calif. Filed Oct. 8, 1928. Serial No. 311,239. 3 Claims. (Cl. 196—44.)

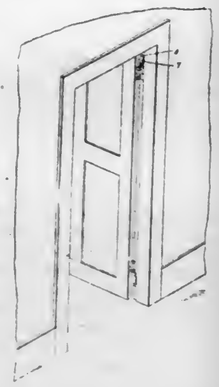
3. The method of treating oils to remove solids which are mechanically suspended therein comprising bringing the oil into contact with gypsum unassociated with other materials so as to attract the suspended solid particles and render them readily separable from the oil, the proportion of gypsum required to clarify the oil being determined by the extent of precipitation of the solids as the oil and gypsum are brought into contact, and finally filtering the oil to separate said solids therefrom.

1,828,430. METHOD OF PURIFYING OILS. HENRY H. MORETON, Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to Charles F. Craig, Los Angeles, Calif. Filed Oct. 8, 1928. Serial No. 311,242. 6 Claims. (Cl. 196—23.)

1. The method of purifying oil comprising producing a mechanical mixture of sulphuric acid and silica so that the silica becomes a carrier for the acid, then mechanically mixing a calcareous cement therewith, and bringing the final mixture into contact with the oil so as to attract and precipitate solids which are mechanically suspended in the oil, the proportion of said final mixture required to clarify the oil being determined by the extent of precipitation of the solids as the oil and mixture are brought into contact, and finally separating the solids from the oil.

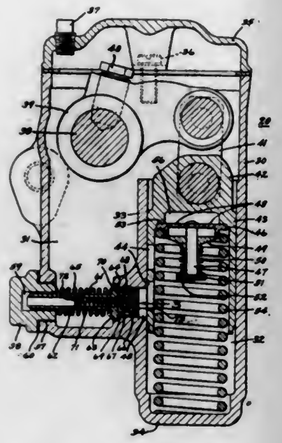
1,828,431. DOOR SILENCER. OSCAR F. NELSON, Chicago, Ill. Filed Dec. 13, 1930. Serial No. 502,197. 1 Claim. (Cl. 16—86.)

Means for silencing the closing action of a door comprising a flat plate of elongated form having its ends bent to provide loops to form pockets at the ends of the plate, a rubber strip of greater length than the plate and having its ends placed in the pocket whereby the intermediate portion of the strip is pulled outwardly from the



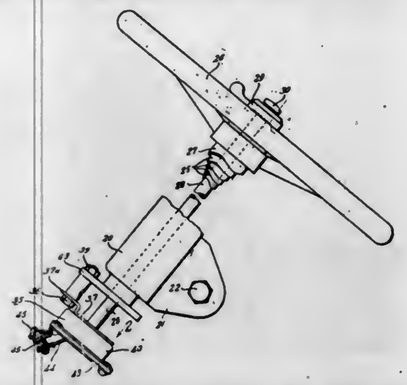
plate, and fastening elements passing through the looped ends of the plate and through the ends of the strip into a part of the door to hold the device on the door and to hold the ends of the strip in the pocket.

1,828,432. REGULATING SAFETY VALVE FOR HYDRAULIC SHOCK ABSORBERS. CARL NIEDERMAYER, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 12, 1928. Serial No. 284,820. 7 Claims. (Cl. 267—8.)



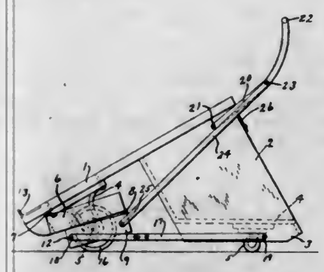
1. A shock absorber having a casing providing a chamber containing a fluid which is subject to variations in pressure, a port leading from said chamber, a tubular valve presenting a longitudinal passage and communicating transverse passages, a spring normally urging the portion of said valve having the transverse passages, into the port to close the transverse passages, and a spring-loaded valve slidably supported in the said longitudinal passage, and having an orifice substantially coaxial of, and smaller in diameter than, the said longitudinal passage, said spring-loaded valve being adapted increasingly to restrict the flow of fluid through the tubular valve when the fluid pressure within the chamber exceeds a certain value.

1,828,433. SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,549. 7 Claims. (Cl. 200—11.)



1. An electric switch comprising in combination, a housing, a contact actuating mechanism therewithin, a driving plate, and means for coupling the same to said contact device, a detent plate, and means disposed between said driving plate and detent plate urging the latter into cooperable relation with the enclosing housing.

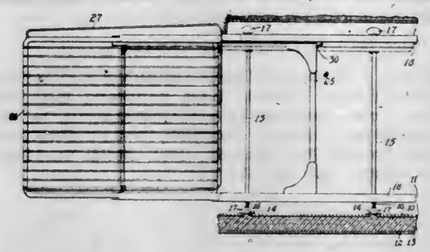
1,828,434. COMBINED TABLE AND TRUCK. ALBERT B. ODELL, Cleveland, Ohio, assignor to The Strong, Carlisle & Hammond Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1930. Serial No. 435,757. 5 Claims. (Cl. 280—30.)



1. In a device of the character described, a combined table top and truck bed, leg structures for supporting the table top and truck bed as a table, one of said leg structures being collapsible, front and rear truck rollers, carried by the device normally out of supporting position when said collapsible leg structure is in non-collapsed position, means for collapsing the collapsing leg structure to incline the table top and truck bed into inclined arrangement, and for transferring the load from the leg structures onto the rollers.

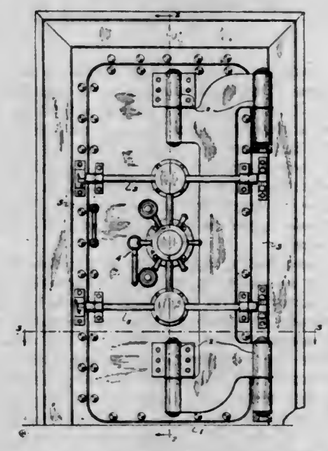
1,828,435. REFRIGERATOR TRAY SUPPORT. OTHO M. OTTE, Tarentum, Pa. Filed Aug. 21, 1930. Serial No. 476,809. 10 Claims. (Cl. 312—177.)

1. Means for supporting tray structures in refrigerator compartments having unbroken side walls consisting of struck-up portions in said side walls, supporting rods threaded at their ends extending between said struck-up



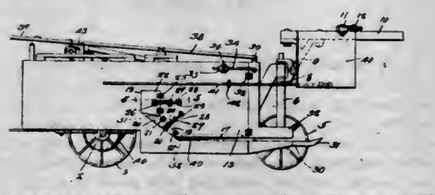
portions, members on the ends of said rods for engaging said struck-up portions, and guideways connected to said rods for slidably receiving the tray structures.

1,828,436. VAULT DOOR. JOHN P. PACA, Canton, Ohio, assignor to Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 11, 1926. Serial No. 134,863. 6 Claims. (Cl. 109—1.)



1. A vault door, including a door case having a front wall and side, top, and bottom walls integral with the front wall and having inwardly converging inner faces, a one piece front drill resisting plate closely adjacent the front wall thereof and extending substantially across the full area of the front case wall, a torch resisting filler block in the case spaced from the drill resisting plate, and extending substantially across the full area of the front case wall and filler material such as concrete between the plate and the block.

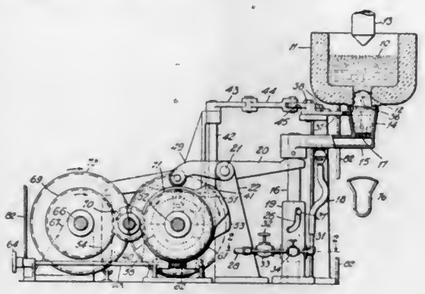
1,828,437. BEAN HARVESTER. ROBERT LEE PARK, Darden, Tenn. Filed Feb. 2, 1931. Serial No. 512,968. 7 Claims. (Cl. 56—1.)



1. In a bean harvester the combination with a portable housing having front and side inlet openings and a closure

for a portion of the side opening, of thrashing means within the housing, and means for deflecting bean plants laterally into the front and side openings for ultimate engagement with the closure to open it.

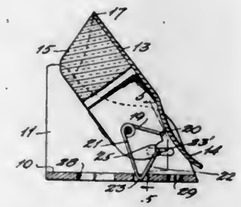
1,828,438. METHOD OF AND APPARATUS FOR FEEDING MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 25, 1922. Serial No. 546,552. 19 Claims. (Cl. 49—55.)



1. The method of segregating molten glass to form mold charges of weights varying in a regular order in periodically recurring cycles, which comprises intermittently discharging the glass through an outlet intermittently retarding issuance of glass from the outlet by an implement movable below the outlet, periodically severing mold charges from the discharged glass, and periodically varying the length of the successive discharge periods in each of said cycles in accordance with the schedule of weights desired.

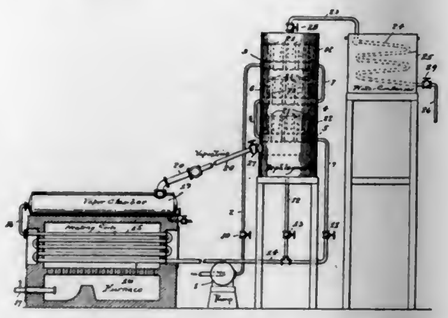
16. In glass feeding apparatus, a container for molten glass having an outlet in its base, a movable supporting member adjacent to said container, a discharge regulating member outside of said container and movable with said supporting member from said outlet, a periodically operated member for periodically actuating said supporting member to move said discharge regulating member toward the outlet, and means adjustable on said supporting member for cooperating with said actuating member to vary the position of the path of movement of said discharge regulating member relatively to the outlet.

1,828,439. SASH LOCK. FRANK PEKAR, Bridgeport, Conn. Filed Oct. 7, 1930. Serial No. 487,065. 4 Claims. (Cl. 292—228.)



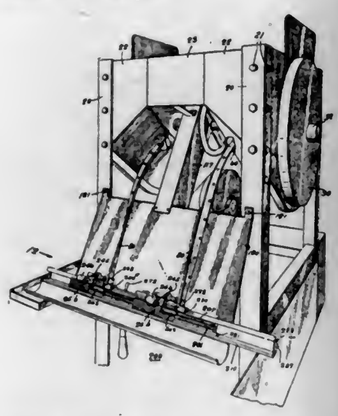
1. In a sash latch, a U-shaped housing having a bottom and sides, a pivot pin extending between the sides of said housing, a pawl pivotally mounted on said pin, said housing having means for mounting on a window sash, said pawl projecting forwardly to engage a relatively fixed object adjacent the sash, a spring surrounding said pin and having one end engaging said pawl, one side of the housing having a slot therein, said spring having its other end projecting through said slot and extending horizontally within the housing, and means on the pawl releasably engaged by the last mentioned end of the spring upon the front end of the pawl being raised.

1,828,440. PROCESS AND APPARATUS FOR TREATING HYDROCARBON OIL. ROBERT T. POLLOCK, Boston, Mass., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed May 12, 1920. Serial No. 380,745. 6 Claims. (Cl. 196—48.)



2. A process for cracking hydrocarbon oil comprising subjecting oil to cracking conditions of temperature and pressure while flowing in a restricted stream through a heating coil, delivering the heated oil to an enlarged reaction chamber from which no unvaporized oil is permitted to return to said coil, subjecting vapors evolved from the oil to a reflux condensing action by causing such vapors to pass first in heat interchange relation but out of physical contact with a moving body of charging oil for the process, and to thereafter pass in intimate physical contact through a collected body of reflux condensate, maintaining said body of reflux condensate in heat interchange relationship with said moving body of charging oil, and delivering reflux condensate and charging oil from said bodies to said heating coil.

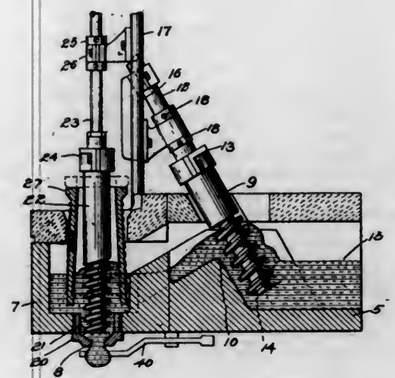
1,828,441. APPARATUS FOR MAKING COMMUTATORS. LORA E. POOLE and JOHN Q. HOLMES, Anderson, and LOUIS C. GOAD, Muncie, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,154. 25 Claims. (Cl. 29—84.)



14. Apparatus for feeding bars of material the transverse sectional thickness of which is variable, comprising

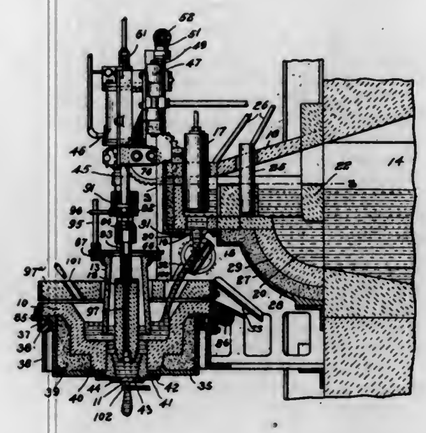
in combination, a chute, and a stationary member spaced from the chute so as to permit the bars to pass flatwise down the chute and shaped so as to divert from the chute the bars which descend other than flatwise.

1,828,442. GLASS FEEDER. CARL H. RANKIN, Wellsburg, W. Va., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 20, 1923. Serial No. 613,877. 23 Claims. (Cl. 49—55.)



1. In combination in a feeder for molten glass, a receptacle for molten glass, an orifice through which glass from said receptacle is delivered, and a reversible pump mechanism rendered effective by its rotation to control positively the flow of glass through said orifice.

1,828,443. APPARATUS FOR FEEDING MOLTEN GLASS. CARL H. RANKIN, Wellsburg, W. Va., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 14, 1923. Serial No. 674,604. 16 Claims. (Cl. 49—55.)

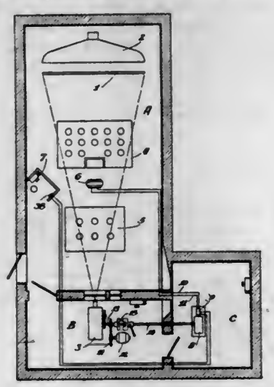


3. In combination with an apparatus for feeding molten glass, a rotatable receptacle having a flow orifice formed in the bottom thereof and at the center of rotation thereof, a reciprocable plunger projecting into said receptacle and aligned with said orifice, a sleeve surrounding said plunger and projecting into said orifice, and means for rotating said receptacle, said plunger and said sleeve at the same angular velocity.

4. The combination in a melting tank for glass, an extension having a communication with said tank by a passage opening through the bottom of said extension and provided with two glass delivery passages for receiving glass from said tank through said first named passage, and a valve in each of said second named passages.

14. Apparatus for feeding molten glass comprising a discharge receptacle for the glass having a discharge outlet in its bottom, a plunger depending into the glass in the receptacle and reciprocable toward and from the outlet to control discharge of glass through the outlet, a tube surrounding said plunger for regulating the flow of glass to said outlet, a hinged supporting member extending above said receptacle and carrying both said plunger and said tube, and means also carried by said hinged supporting member for adjusting the positions of said reciprocable plunger and said tube with respect to said outlet.

1,828,444. METHOD OF AND APPARATUS FOR RECORDING SOUND ON MOTION PICTURE FILMS. WILLIAM ROM, Berwyn, Ill. Filed Nov. 15, 1928. Serial No. 319,515. 3 Claims. (Cl. 88—16.2.)

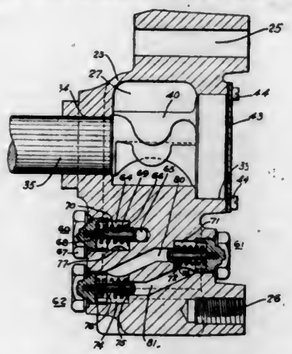


1. A method of recording sound on a moving picture film which consists in utilizing two positive films of the same picture and projecting one positive film onto a screen for guidance in applying sound to a negative film made from the other positive film of the same picture, driving said other positive of said film in synchronism with the projected film, masking a portion of said other positive to thereby provide an area for the sound record, driving a negative film in synchronism and printing relation with said other positive and with the sound area of said other positive masked as to said negative, and simultaneously recording sound on the sound area of said new negative, the sound record being applied to the sound area of said negative in accordance with the projected positive of the same picture.

1,828,445. SHOCK ABSORBER. EDWIN F. ROSSMAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 12, 1929. Serial No. 370,267. 7 Claims. (Cl. 267—8.)

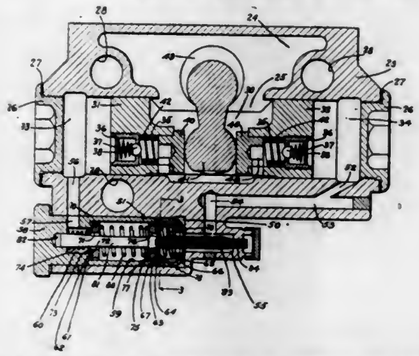
1. A shock absorber comprising in combination, a casing presenting a fluid reservoir and two cylinders; a piston in each cylinder forming a compression chamber therein; a plurality of passages in the casing providing communication between the compression chambers, one of said passages providing such communication only during a portion of the range of movement of the piston; check valves in certain of said passages, adapted to act successively to establish flows of fluid from the one cylinder, through their respective passages into the other cylinder

in response to increased fluid pressures in said one cylinder; and a check valve in another of said passages, operable to



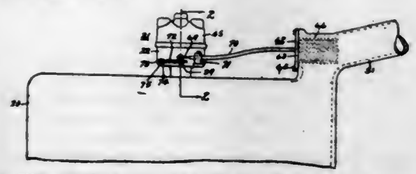
establish a return flow of fluid into the first mentioned cylinder in response to a predetermined increase in fluid pressure within the second mentioned cylinder.

1,828,446. SHOCK ABSORBER. EDWIN F. ROSSMAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 4, 1930. Serial No. 418,638. 23 Claims. (Cl. 188—88.)



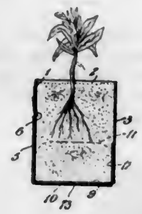
1. A shock absorber comprising in combination, a casing presenting a cylinder and a fluid reservoir; a piston in said cylinder forming a compression chamber at each end thereof; a valve chamber in communication with both compression chambers; compound valve mechanisms in said valve chamber, each mechanism having two oppositely acting pressure release valves; and a single resilient member urging said valve mechanisms into normal position.

1,828,447. METHOD AND APPARATUS FOR OPERATING AN INTERNAL-COMBUSTION ENGINE. HERMAN SCHWARZE, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 30, 1928. Serial No. 296,201. 12 Claims. (Cl. 123—117.)



1. The method of operating an internal combustion engine which comprises controlling the timing of the ignition spark in accordance with the temperature of the engine.

1,828,448. CARDBOARD PLANT BOX. GOTTHELF M. SEIDEL, Northampton, Mass. Filed Aug. 20, 1929, Serial No. 387,155. Renewed Sept. 9, 1931. 1 Claim. (Cl. 47—37.)

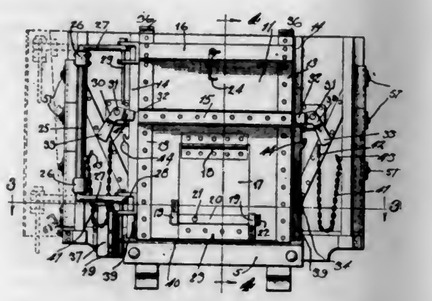


A plant cup of the class described comprising a rectangular box made of a single blank of stiff paper and having an open upper end; a double bottom wall composed of scored extensions in adjacent side walls having bracing tabs inserted in the box against the other adjacent side walls; and said bottom wall portions having registering apertures which constitute a drain opening.

1,828,449. COMPOSITION CONTAINING A DERIVATIVE OF CELLULOSE. GEORGE WILBUR SEYMOUR, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 15, 1929. Serial No. 399,884. 13 Claims. (Cl. 134—26.)

1. A composition of matter containing a derivative of cellulose and a resin formed by the condensation of formalglycerol with a hydroxy aromatic alcohol.

1,828,450. END GATE FOR TRUCKS AND OTHER VEHICLES. CHARLES M. SHAFFER, Deep River, Iowa. Filed Nov. 21, 1929. Serial No. 408,825. 4 Claims. (Cl. 296—51.)

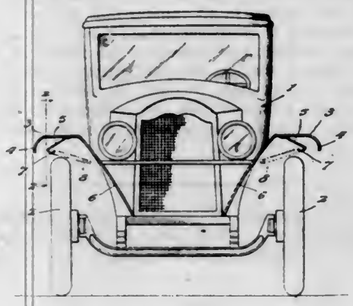


1. In an end gate construction of the character described, an end wall having an opening therein and a closure gate for the opening hinged to the end wall and adapted to be moved to a position laterally and forwardly of the end wall, means on the end wall to engage opposite sides of the gate for holding the same in closed position, the hinge connection between the gate and end wall being separable to permit downward swinging movement of the gate on its lower edge, means for holding the gate engaged with the lower edge of the end wall, and means for holding the lowered gate at different inclinations for use as a chute, shovel board or runway.

1,828,451. AUTOMOBILE FENDER. ELWYNE O. SHREFFLER, Manteno, Ill. Filed Aug. 16, 1929. Serial No. 386,414. 4 Claims. (Cl. 280—152.)

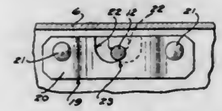
1. A fender for a vehicle wheel, a strip extending longitudinally of said fender beneath the same and adapted to

deflect material thrown upwardly from a wheel away from the outer side edge of the fender, and a gutter extending



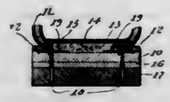
from the forward end of said strip toward the inner side of the fender and having its free end portion bent rearwardly to extend between the fender and a wheel.

1,828,452. AUXILIARY SPRING FOR AN ENGINE SUPPORT. WILLIAM WESTLING, Minneapolis, Minn. Filed Oct. 29, 1930. Serial No. 491,986. 7 Claims. (Cl. 267—1.)



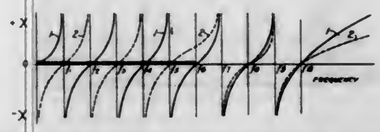
1. A device of the class described comprising two spring leaves assembled the one upon the other and each having a notch intermediate of its ends, the notches in the two leaves being formed and arranged, whereby the entrance to the notch in one leaf is closed by the other leaf to leave a central hole through the two leaves.

1,828,453. SHOE. ELBERT W. ALLEN, Milwaukee, Wis. Filed June 10, 1929. Serial No. 369,551. 1 Claim. (Cl. 36—17.)



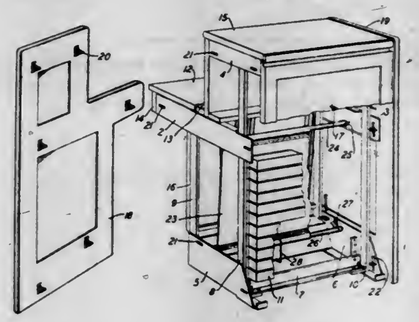
In a Goodyear welt shoe having an inseamed heel seat, an outer sole, a cushion member extending between the inseam ridges of the heel seat, a U-shaped metal plate disposed between the inseam ridge and the outsole at the heel seat, a heel, and fastening means for the heel extending through said outer sole and clenched against said plate.

1,828,454. TRANSMISSION NETWORK. HENDRIK W. BODE, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 3, 1930. Serial No. 465,522. 12 Claims. (Cl. 178—44.)



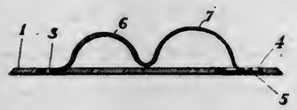
4. The method of obtaining a linear phase characteristic in a broad frequency range in a wave transmission network having multiple resonant branch impedances which comprises locating the resonance and anti-resonance frequencies of said impedances with respect to one another to provide free transmission in the desired range and spacing the said resonance and anti-resonance frequencies evenly throughout the major portion of said range and progressively more closely towards the limits of said range in the remainder of the range.

1,828,455. TELEPHONE SWITCHBOARD. CHARLES BORGMANN, Great Neck, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 23, 1930. Serial No. 490,640. 4 Claims. (Cl. 179—91.)



1. In a switchboard, the combination with a framework, of removable front and rear panels, removable side panels and locking means for quickly attaching and freeing said side panels.

1,828,456. HOLDER FOR SMALL ARTICLES. CLAUDE W. BOTSFORD, Los Angeles, Calif., assignor to William W. Odell, Pittsburgh, Pa. Filed Dec. 31, 1929. Serial No. 417,687. 8 Claims. (Cl. 24—66.)

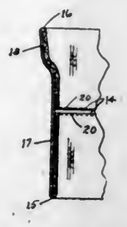


8. A holder for small articles adapted to be fastened to the backs of theatre seats and other solid surfaces and when so fastened adapted to hold small articles, comprising a base plate and a strip of spring metal one extremity of which is rigidly fastened thereto, the other extremity being free for limited motion away therefrom under spring tension by the application of a force, said strip of metal having a thickness greater at said rigid portion than at the free portion; said strip being shaped to form a plurality of arches convex to and coacting with said base plate forming a plurality of depositories for small articles; said base plate having a hole therein adapted to receive said free extremity of said strip of metal in a countersunk position, and having means for attachment to a solid surface.

1,828,457. DOUBLE CUFF FOR KNICKERS AND THE LIKE, AND PROCESS FOR ITS MANUFACTURE. MOLLIE BRAUNSTEIN, Cedarhurst, N. Y. Filed Feb. 26, 1931. Serial No. 518,339. 6 Claims. (Cl. 66—172.)

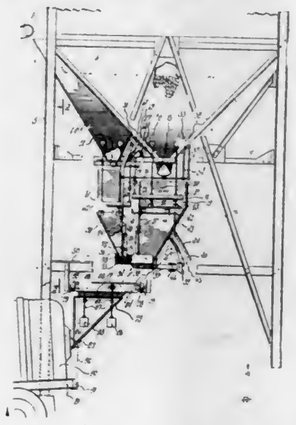
4. A double cuff for knickers and the like, comprising a single thickness of knitted material of substantially tu-

bular form and having a section a portion of which diverges and the other portion converges, both ends of said



tubular form being turned inwards and one of said ends being bent along the line dividing the diverging and converging portions.

1,828,458. MATERIAL HANDLING EQUIPMENT. MORGAN R. BUTLER, Waukesha, Wis. Filed Feb. 11, 1929. Serial No. 339,080. 13 Claims. (Cl. 83—44.)



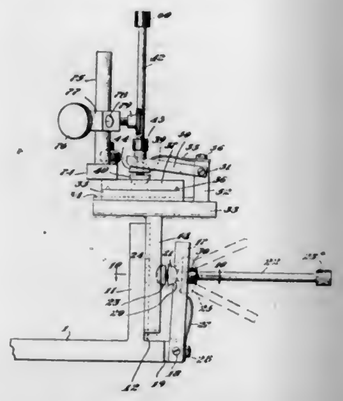
1. In a device of the character described, including a plurality of hoppers for receiving different materials and discharges leading from the hoppers to a common receptacle, a single means for closing all of said discharges and whereby upon being opened the different materials from the hoppers may be simultaneously discharged into the receptacle, and means independent of the means for closing the discharges for adjusting the areas of the discharges whereby the different materials retain a predetermined proportion throughout their discharge.

1,828,459. TUBE-FLANGING TOOL. EDWARD S. CORNELL, Jr., Watertown, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Dec. 26, 1929. Serial No. 416,473. 7 Claims. (Cl. 153—79.)



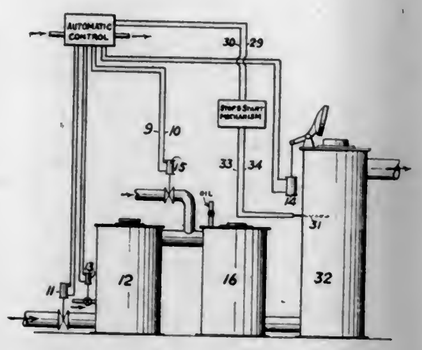
1. In a flanging-tool, the combination with a mandrel-member provided at one end with a tube-deflecting surface; of a separately-formed stop-sleeve axially removable from and adapted to embrace a portion of the said mandrel-member and provided with an inwardly-extending annular flange terminating in an annular stop-shoulder located in close proximity to the deflecting-surface of the said mandrel-member to limit and determine the flaring of a tube or similar article thereby, the said annular stop-shoulder constituting the smallest internal diameter of the said sleeve, whereby a flanged tube may be separated from the tool without requiring the demounting of the stop-sleeve from the mandrel-member.

1,828,460. MICRO-MANIPULATOR. JOHN H. EMERSON, Cambridge, Mass. Filed Sept. 9, 1930. Serial No. 480,635. 19 Claims. (Cl. 88—40.)



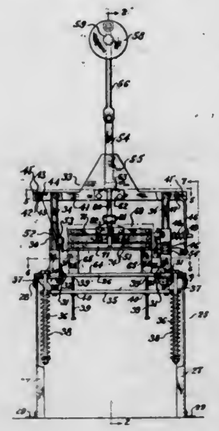
1. Apparatus of the class described comprising a swinging lever, an element holder, a support for the holder, a part providing a pivot about which the lever swings, and a pivotal connection between the lever and support, said pivot and pivotal connection being in close juxtaposition, whereby the support and holder have a minute movement in response to the lever movement through a substantial distance.

1,828,461. MANUFACTURE OF WATER GAS. OWEN B. EVANS, Philadelphia, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 24, 1924. Serial No. 688,209. 1 Claim. (Cl. 48—205.)



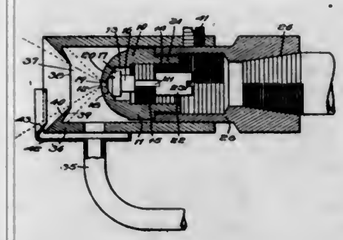
A method of making carburetted water gas in a water gas set including a water gas generator, a carburetter, and a superheater, which comprises; air blasting a solid fuel bed in the generator until a predetermined temperature is attained in the superheater, automatically terminating the air blasting when the predetermined temperature in the superheater is attained, then running steam through the heated fuel bed and carburetting the generated water gas until a predetermined temperature in the superheater is attained, and then automatically terminating the steam run when the predetermined temperature is attained.

1,828,462. CERAMIC BLOCK CUTTING APPARATUS AND PROCESS. CHARLES A. FRY, CLARENCE HARSH, and RALPH M. SCHORY, Minerva, Ohio, assignors to The Metropolitan Paving Brick Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 1, 1930. Serial No. 492,784. 18 Claims. (Cl. 25—105.)



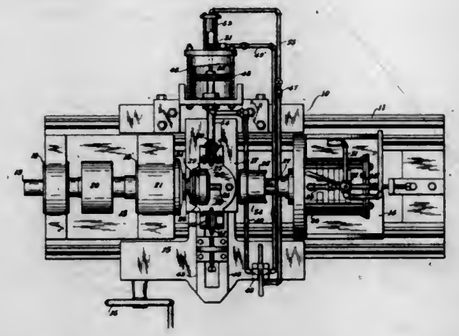
2. Apparatus for forming rabbeted corners and the like in ceramic blocks and the like, the apparatus including a cutting member movable from and to a stationary position, block guide means at one side of the cutting member and extending cross-wise thereof, and yielding means normally maintaining the cutting member at the stationary position.

1,828,463. MEANS FOR RESTRICTING ATOMIZED FLUID DISCHARGE. MORGAN J. HAMMERS, Wilmette, Ill. Filed Dec. 6, 1929. Serial No. 412,104. 7 Claims. (Cl. 299—122.)



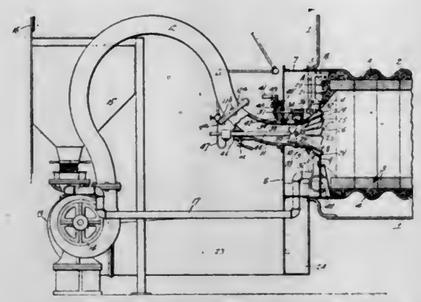
1. In combination with a nozzle adapted to deliver a spray jet of liquid, a restrictor provided with an intercepting edge located in advance of the point of discharge from the nozzle, and in position to intercept a portion of the spray discharged therefrom, and having means for directing the back flow of the liquid so intercepted, the restrictor being adjustable longitudinally with respect to the point of discharge from the nozzle.

1,828,464. ROLLER SPUN METAL MANUFACTURE. WILLIAM R. HARRISON, Massillon, Ohio, assignor to The Spun Steel Corporation, Canton, Ohio, a Corporation of Ohio. Filed May 19, 1928. Serial No. 279,029. 9 Claims. (Cl. 113—52.)



1. Roller spinning apparatus including a rotatable spinning head, means for rotating the head, a tailstock cylinder, a double-acting piston operatively mounted in the cylinder, a piston rod extending from said piston toward said spinning head, a rotatable pressure spinning head mounted on said piston rod adapted to cooperate with said first mentioned head to clamp material to be worked therebetween and to press the clamped material toward said first mentioned head, a second cylinder, a double-acting piston operatively mounted in said second cylinder, a piston rod extending from said second cylinder generally in a direction toward said spinning heads, a pressure spinning roller rotatably mounted on said second cylinder piston rod movable in a direction angular with respect to the axis of rotation of said spinning heads, compressible means for operating said pistons for applying a yielding pressure between said spinning heads and for applying a yielding pressure to said pressure roller against the yieldingly pressed spinning heads, and valves for admitting the compressible medium to said cylinders adapted to regulate the volume of compressible medium admitted and to vary the direction in which the compressible medium is rendered effective on the double-acting pistons.

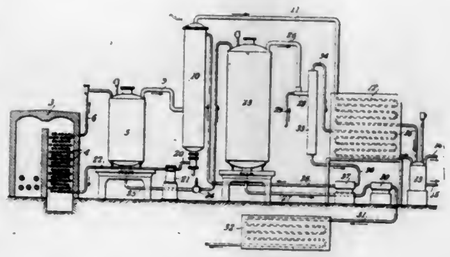
1,828,465. PULVERIZED COAL BURNER. GEORGE P. HAYNES, Brooklyn, N. Y., assignor to Todd Dry Dock, Engineering & Repair Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 22, 1929. Serial No. 356,922. 3 Claims. (Cl. 110—104.)



1. The combination with a furnace having a diaphragm forming the boundary for the entrance to the combustion chamber, and a pulverized fuel supply, of means providing an extended passage-way upon said diaphragm, means

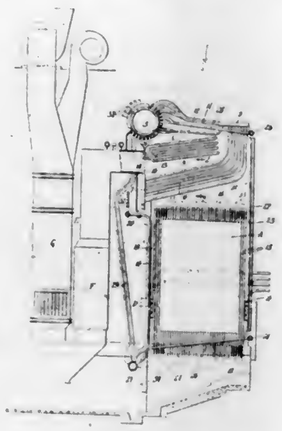
for introducing a stream of air into said passage-way, to effect exchange of heat with said diaphragm, and means for conducting the heated air from said passage-way to the fuel supply.

1,828,466. OIL REFINING. CURTIS L. HENDERSON, Wichita, Kans. Filed Aug. 12, 1927. Serial No. 212,376. 9 Claims. (Cl. 196—49.)



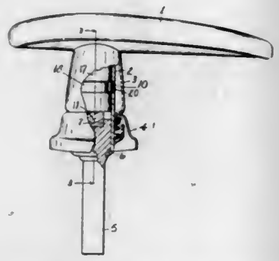
1. A process of cracking oil which comprises heating hydrocarbon oil to cracking temperature under pressure in a long cracking coil to crack the oil exetensively while flowing the oil through said coil at a sufficiently rapid rate to carry out the carbon formed in suspension, passing the cracked oil and suspended carbon into the upper portion of an enlarged zone to effect the separation of the light cracked products by distillation, removing the separated vapors, separately withdrawing the liquid from said enlarged zone at a rate adequate to prevent accumulation of substantially any oil therein, stripping the lighter fractions of the discharged residual oil by suddenly expanding it at low pressure into a flash chamber where copious vaporization by its contained heat takes place, and withdrawing a high grade fuel oil from the bottom of said flash chamber.

1,828,467. STEAM GENERATING INSTALLATION. GEORGE P. JACKSON, Flushing, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed June 1, 1929. Serial No. 367,668. 4 Claims. (Cl. 122—235.)



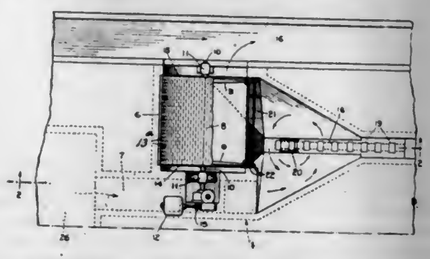
1. A steam generating installation comprising, in combination; a boiler including a steam and water drum, vertical headers therebelow, tubes connecting the water spaces of the drum with said headers, horizontal headers to one side of the drum and located substantially at the level of the horizontal center line of said drum, tubes connecting said horizontal headers with the steam space of the drum, tubes connecting said horizontal headers with the water space of the drum, and a bank of bent boiler tubes connecting the vertical headers with the horizontal headers; a combustion chamber located beneath said boiler; sets of boiler tubes in said combustion chamber and marginal of combustion space thereof; downcomer tubes leading from the water space of the boiler drum to said sets of boiler tubes; upcomer tubes leading from said sets of boiler tubes to the steam space of the boiler drum; means for introducing fuel into the combustion chamber to be burned therein; said boiler being of a depth from front to back approximately equal to the depth of the combustion chamber; a superheater located in the space provided between said bent boiler tubes and the drum, an offtake from said space and economizer means in said offtake.

1,828,468. LOCKING LATCH. GEORGE E. KEELER and ALBERT L. BIRDSALL, Grand Rapids, Mich., assignors to Keeler Brass Company, Grand Rapids, Mich. Filed June 27, 1928. Serial No. 288,589. 4 Claims. (Cl. 70—91.)



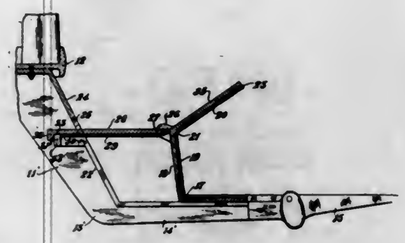
1. The combination of a hand piece provided with a sleeve having opposed openings therein, a latch operating spindle provided with a head rotatably associated with the inner end of said sleeve, said head having a recess in the end thereof, the recess having a notchd wall, a bolt disposed in said recess in said spindle for movement transversely thereof and provided with oppositely projecting lugs coacting with said openings in said sleeve and with a groove disposed transversely relative to said lugs, one of said lugs being adapted to engage said notch in said spindle head when the bolt is in latch locking position, a key actuated lock unit rotatable in said sleeve and provided with an eccentric pin engaging said groove in said bolt whereby the bolt is actuated upon the rotation of said lock unit, and a spring acting to urge said bolt to latch unlocking position by locking said sleeve and spindle together.

1,828,469. ROTARY DRUM SCREEN. ARTHUR M. KIVARI, Los Angeles, Calif., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,892. 11 Claims. (Cl. 210—173.



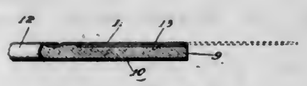
1. In apparatus for screening sewage and the like, the combination with a drum screen receiving sewage from the side thereof and discharging screened effluent endwise therefrom, and rotatable to discharge screened solids by cascade action at the rising side thereof, a a sedimentation basin having at one end a screen chamber with a closed outer side adjacent to the descending side of the screen and also having a main portion into which the rising side of the screen projects, an elevator with foraminous buckets at the opposite end of the basin from the screen and means for supplying sewage across the main portion of said basin to permit settling of solids in the basin and to cause floating solids, between the rising side of the screen and said elevator, to move to said elevator.

1,828,470. AUXILIARY FOOT REST. EDWARD L. MONNOT, Canton, Ohio, assignor to The Harvard Company, Canton, Ohio, a Corporation of Ohio. Filed July 18, 1928. Serial No. 293,769. 5 Claims. (Cl. 155—171.)



1. In a dental chair and the like including a seat having a foot rest frame, a foot rest platform having a normally horizontally disposed lower panel and an upper panel extending angularly from the lower panel and normally inclined toward the seat, the foot rest platform being pivotally mounted on the foot rest frame at the outer edge of the lower panel, and means for holding the foot rest platform when moved about its pivotal mounting to a position in which the upper panel is inclined outwardly away from the seat and is spaced above the normal horizontal position of the lower panel.

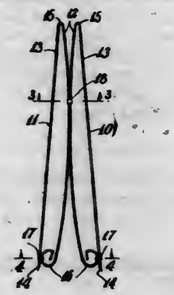
1,828,471. GASKET. FRANK J. OVEN, Chicago, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1931. Serial No. 520,859. 4 Claims. (Cl. 288—1.)



1. A gasket comprising a layer of compressible gasket material having a metal layer thereon, said metal layer being folded upon itself to form an integral hem lying snugly on one side thereof and extending along one edge of the gasket.

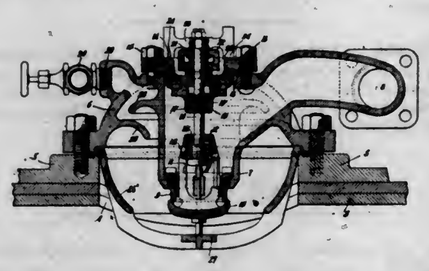
1,828,472. RESHAPING DEVICE FOR TIES. PASCUAL PEREZ, New York, N. Y. Filed Feb. 14, 1931. Serial No. 515,735. 8 Claims. (Cl. 223—19.)

1. A reshaping device for ties, comprising a pair of wire frames in the same plane and having adjacent sides curved away from each other and outer sides straight and diverging from their front ends to their rear ends, and means rigidly connecting a pair of adjacent points on said



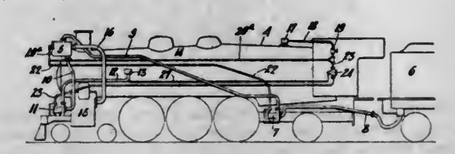
adjacent sides whereby said pair of wire frames may pivot resiliently to fit within ties having various sloping sides.

1,828,473. FEED WATER HEATING APPARATUS. EUGENE L. SCHELLENS, Ridgewood, N. J., assignor to C-S Engineering Company, Englewood, N. J., a Corporation of Delaware. Filed Dec. 17, 1929. Serial No. 414,635. 7 Claims. (Cl. 122—438.)



1. In a heater of the character described, the combination of a casing adapted to be secured to a locomotive boiler, a water inlet to said casing, a spray valve associated with said inlet for controlling the flow of the incoming water, a spindle extending to the outside of and threaded into said casing, opposing shoulders on valve and spindle, a spring interposed between said shoulders yieldingly holding the valve in closed position and means for turning the spindle to compress said spring and being said shoulders into contact to lock the valve in closed position.

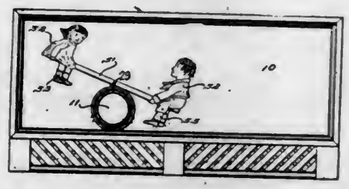
1,828,474. LOCOMOTIVE FEED WATER APPARATUS. EUGENE L. SCHELLENS, Ridgewood, and ROBERT P. PECKETT, Jr., Englewood, N. J., assignors to C-S Engineering Company, Englewood, N. J., a Corporation of Delaware. Filed Jan. 3, 1930. Serial No. 418,280. 4 Claims. (Cl. 122—442.)



1. Locomotive feed water apparatus including in combination an open type feed water heater, steam actuated means for supplying the heater with water, a steam supply line for said means, second steam actuated means for delivering heated water from the heater to the locomotive

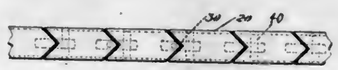
boiler, a steam supply line for said second means, a valve for controlling the supply of steam to both of said lines, supplemental valve means in the steam supply line for the hot water delivery means adapted to restrict the flow of the steam, and means for opening said supplemental valve means so as to permit a full flow of steam to the hot water delivery means, said means for opening the supplemental valve means being actuated by the pressure developed in the hot water delivery line.

1,828,475. ANIMATED ADVERTISING APPARATUS. IRVING H. SEGAL, Detroit, Mich. Filed Feb. 24, 1931. Serial No. 517,767. 6 Claims. (Cl. 40—126.)



1. The combination of an outdoor flat walled sign board, a portable animated advertising unit, and means to detachably secure said unit to the front face of said sign board.

1,828,476. ARTICULATED DEVICE. HYMAN SEIDMAN and HENRY COHAN, Brooklyn, N. Y., assignors to Seidman & Cohan, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 433,247. 5 Claims. (Cl. 59—80.)



1. An articulated structure of the general character specified, comprising a plurality of hingedly associated links each comprising a substantially tubular member having a substantially V-shaped conformation at one of its ends.

1,828,477. PLATE APPARATUS FOR HEAT EXCHANGES. RICHARD SELIGMAN, Wimbledon, England. Filed Mar. 9, 1929, Serial No. 345,836, and in the Netherlands Apr. 25, 1928. 1 Claim. (Cl. 257—245.)

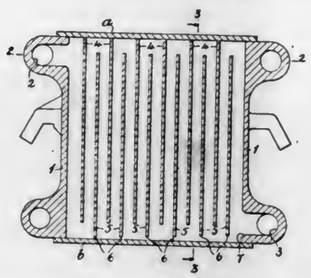
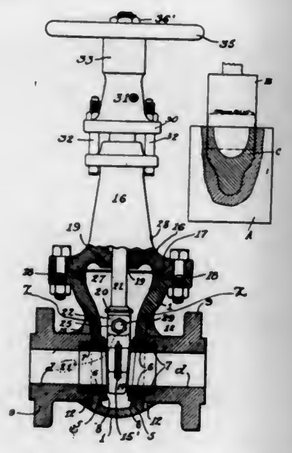


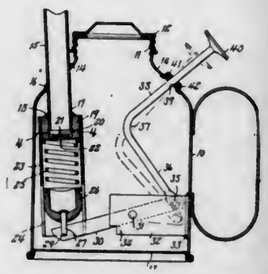
Plate heat exchange apparatus which comprises plates having a frame part, parallelly disposed ribs forming baffles within the frame part and to-and-fro long continuous zig-zag communicating passages for the conduction of the liquid to be treated and the treating medium and having the ribs which form the last mentioned passages connected to the frame part of the plate at one end and spaced therefrom at the other end and certain of the ribs provided with apertures at the lower end to permit the escape of condensate, the plates also having admission and exhaust ports and communicating passages therefrom to the aforesaid liquid and medium conducting passages.

1,828,478. GATE VALVE AND METHOD OF MAKING SAME. STANLEY W. SPARKS, Summit, N. J., assignor to The Columbus Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed May 19, 1925, Serial No. 31,289. Renewed July 6, 1931. 15 Claims. (Cl. 29—157.1.)



1. The method of making a forged steel valve which consists in subjecting a steel billet of the desired composition and of a thickness too great to admit of the extrusion of the same to the desired shape to a forging temperature and then preforming a cavity therein to admit of the thorough heating of the walls of said billet during the subsequent extrusion operation, then elevating the temperature to an extrusion point which is sufficient to render the metal plastic but insufficient to melt the same and extruding the desired valve body in a die block of a shape which is capable of producing the desired valve body while subjecting the same to high pressure from a die plunger member of a substantially rectangular cross-section adjacent its lower end, the entire shaping of the valve chamber and the external wall of the valve body proper being accomplished by a single stroke of said plunger.

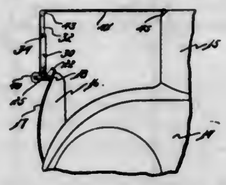
1,828,479. PUMP-TYPE OILER. FRED L. V. SPRING, Waterbury, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Jan. 31, 1931. Serial No. 512,580. 7 Claims. (Cl. 221—51.)



1. In a pump-type oiler, the combination with the oil-reservoir and spout thereof; of a pump-cylinder formed with one or more laterally-opening longitudinal slot-like

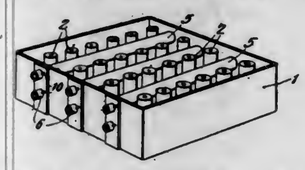
ports; a piston reciprocating in the said cylinder and constructed and arranged to alternately open and close communication through said ports between the said reservoir and that portion of the interior of the said cylinder located between the piston and the said spout; and means including a member moving in one of said slot-like ports for manually actuating the said piston.

1,828,480. DETACHABLE VEHICLE TOP. HOMER STACKS, Detroit, Mich. Filed Nov. 10, 1930. Serial No. 494,461. 4 Claims. (Cl. 296—98.)



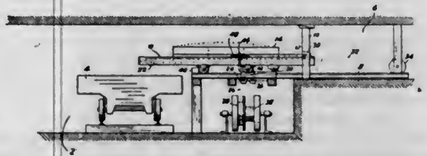
1. In a device of the class described adapted for use in a vehicle seat: brackets secured to and projecting laterally outwardly from and rearwardly of said seat; a connecting link connected to said bracket and projecting rearwardly therefrom; a supporting plate connected to said link and projected rearwardly therefrom; a shaft rotatably mounted on said supporting plate; and a roller fixedly mounted on said shaft.

1,828,481. METHOD OF MAKING ARTICLES FROM ORGANIC DISPERSIONS. GEOFFREY WILLIAM TROBRIDGE, Sutton Coldfield, EDWARD ARTHUR MURPH, Erdington, Birmingham, DOUGLAS FRANK TWISS, Wylde Green, and WALTER GEORGE GORHAM, Erdington, Birmingham, England, assignors to Dunlop Rubber Company Limited, Birmingham, England, a British Company. Filed May 26, 1930, Serial No. 455,694, and in Great Britain May 28, 1929. 9 Claims. (Cl. 18—53.)



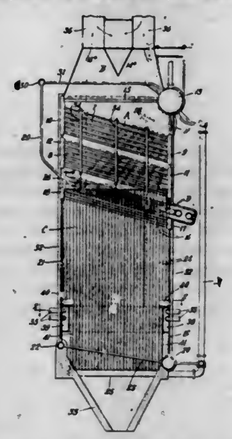
1. A method of making sponge articles in an integral mass which comprises molding a froth of a dispersion of rubber material to the desired dimensions, heating said molded mass from the exterior, and conveying heat into the interior of said mass in closely spaced parallel paths.

1,828,482. CONVEYER. JOHN WILLIAM WETTER, Philipsburg, Pa., assignor to Madeira, Hill & Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 22, 1928. Serial No. 263,658. 4 Claims. (Cl. 214—58.)



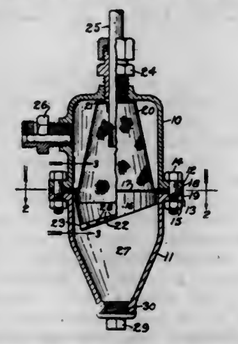
1. In combination, a carriage having a platform, a frame having upright walls mounted on said carriage to confine material upon the platform, and means for moving said carriage from a loading to a discharging position and for discharging material therefrom, including a sheave carried by the carriage, a second sheave carried by the carriage rearwardly of the first sheave, a flexible member connected to the frame and trained successively about the first and second sheaves, means for taking up the flexible member, and means for arresting forward movement of the carriage at the discharging position, whereby continued taking up of the flexible member after the carriage reaches the discharging position serves to move the frame forwardly beyond the platform to discharge the material.

1,828,483. ART OF STEAM GENERATION. WILFRED R. WOOD, London, England, assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed June 30, 1927. Serial No. 202,546. 3 Claims. (Cl. 122—235.)



1. In combination, a tubular boiler unit having downcomer and return connection with a steam and water space, a second tubular boiler unit the tubes of which are arranged in the form of a six-sided chamber, said unit being approximately below and spaced from the first unit and having downcomer and return connection with steam and water space, a superheater between the two units, and means for tangentially introducing and burning finely divided fuel in the space defined by the second unit, the parts being arranged to provide a single pass, together with an offtake above the first unit.

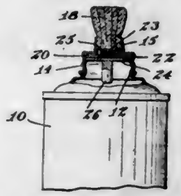
1,828,484. FILTERING DEVICE. BENJAMIN FRANKLIN ZIMMERMAN, New Haven, Conn., assignor to Flora Edson Bigelow, Detroit, Mich. Filed Jan. 23, 1928. Serial No. 248,576. 14 Claims. (Cl. 210—165.)



1. In a filtering device, a casing comprising an upper part having an outlet opening and a lower part, a baffle

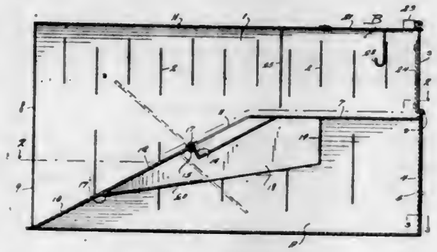
element secured between said parts and dividing the interior thereof into a pair of chambers connected by a restricted opening in said element, a filtering element carried by said baffle element extending from said baffle element in an upwardly direction, and means for directing liquid entering said casing centrally of said filtering element and into direct contact with said baffle element.

1,828,485. APPLICATOR FOR DISPENSING LIQUIDS FROM CONTAINERS. WILLIAM Y. ALLEN, Berkeley, Calif. Filed July 30, 1928. Serial No. 296,126. 6 Claims. (Cl. 15—134.)



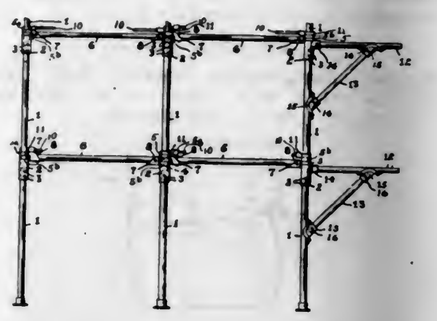
1. A dispensing cap for a liquid container, comprising a cap body adapted to be fastened over the mouth of the container, and having a portion overlying said mouth; a plurality of separate laminæ of porous material assembled together to form a flexible, laminated, porous spreader mass on the outer face of the cap; and a removable and replaceable disk, adapted for arrangement within the cap and large enough to be engaged between container rim and cap; there being a small perforation in the face of the cap, opposite the mouth of the container, for restricted outflow of liquid to moisten said porous spreader mass; said disk constituting a closure adapted by its said removal to permit liquid supply to the spreader, and by its said replacement to arrest said supply, during inversion of the container and while said moistened spreader may continue to be manipulated in use.

1,828,486. ANIMAL TRAP. JULIAN BRYAN, Lafleur, Wash. Filed Aug. 12, 1930. Serial No. 474,809. 1 Claim. (Cl. 43—69.)



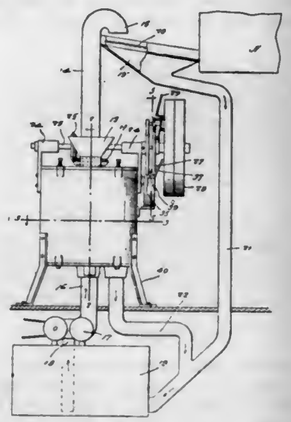
A trap of the class described comprising in combination a housing having an entrance opening in a wall thereof, a runway within the housing extending upwardly from the entrance opening, said runway having a portion cut out, a platform coacting with said cut out portion of the runway, means for pivotally mounting the platform for swinging movement, one end portion of the platform being downwardly offset with respect to the other, and one end portion of the platform being heavier than the opposite end portion to normally maintain the platform in closed position with respect to the cut out portion of the runway, a horizontal partition intersecting an end portion of the housing and to which the runway leads, a portion of the housing above the partition constituting a bait chamber, and depending members carried by the top wall of the housing separating the bait chamber from the remaining portion of the housing.

1,828,487. SCAFFOLD. EDWARD F. BOOSER, Homestead, Pa., assignor of forty per cent to Robert M. Smeltzer, Pittsburgh, Pa. Filed May 2, 1929. Serial No. 359,754. 3 Claims. (Cl. 304—2.)



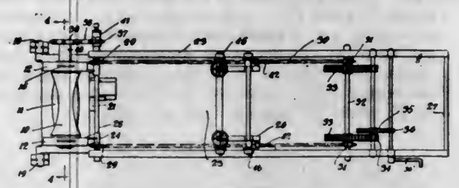
1. In a knock-down scaffold or tower, posts each comprising superimposed pipes of uniform diameter arranged end to end and short lengths of pipe fastened to one end of each pipe and forming sockets which contain the unsleeved ends of other pipes, in combination with horizontal girders having terminal eyes superimposed on the tops of the short lengths of pipes and surrounding the lower ends of the pipes which are in the sockets.

1,828,488. ELEVATING DEVICE. MEAD SPENCER CARMICHAEL, Sparta, Wis. Filed Jan. 24, 1928. Serial No. 249,035. 4 Claims. (Cl. 302—14.)



1. In an elevator system for vegetables and the like and of the character described, a closed drum, a unit mounted for rotation within the drum and including a plurality of tubes, a water inlet pipe communicating with the bottom of the drum, an outlet and elevator conveyor pipe extending from the top of the drum, said tubes one at a time being adapted to register conjointly with said inlet and said outlet pipe as moved therebetween, means upon the top of said drum whereby the tubes may be loaded, means for rotating the unit, and a source of water under pressure adapted to discharge the material upwardly from the tubes when the same are disposed between said inlet and outlet pipes.

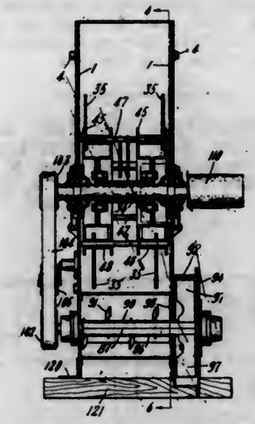
1,828,489. METHOD AND MACHINE FOR FORMING SHEETS. EDMUND B. CAIRNS, New York, N. Y., assignor to Cairns Development Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 22, 1929. Serial No. 357,036. 14 Claims. (Cl. 153—58.)



2. The method of forming compound curved sheets comprising pulling a sheet through means for imparting a transverse curvature to said sheet and simultaneously moving said means in a direction across the direction of pull.

6. An apparatus for bending sheets comprising a transverse bending means, a sheet pulling means, and means for moving bodily the transverse bending means.

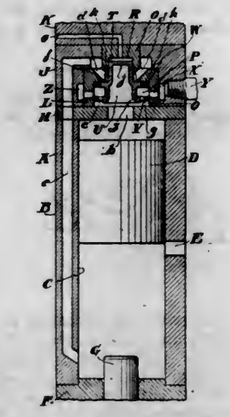
1,828,490. HAMMER MILL. WALTER J. CLEMENT, New Hartford, N. Y., assignor to The Bossert Corporation, Utica, N. Y., a Corporation of New York. Filed Nov. 13, 1929. Serial No. 406,843. 7 Claims. (Cl. 83—11.)



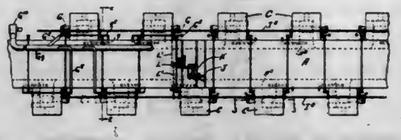
1. A machine of the class described comprising a casing having side walls provided with oppositely disposed openings, a journal bearing fixed in each of said openings substantially in the plane of the side walls, bearing supports extending inwardly of said walls, a shaft journaled in said bearings, and hammers carried by said shaft between said side walls, certain of said hammers being positioned outwardly of the inner faces of said bearing supports.

1,828,491. VALVE FOR ROCK DRILLS. JOHN C. CURTIS, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 1, 1929. Serial No. 404,010. 6 Claims. (Cl. 121—19.)

1. In a fluid actuated rock drill, the combination of a cylinder having a piston chamber and a piston in the piston chamber, an exhaust port in the cylinder, a valve chest having a valve chamber, inlet chambers leading from the ends of the valve chamber to the piston chamber, a valve in the valve chamber controlling the inlet passages and having a pair of flanges, a supply passage for supplying pressure fluid to the valve chamber between the flanges, pressure surfaces on the flanges, ports in the flanges to supply pressure fluid to the pressure surfaces for throwing the valve and for supplying pressure fluid to the inlet passages, and an extension on one end of the valve forming a bearing portion for the valve.

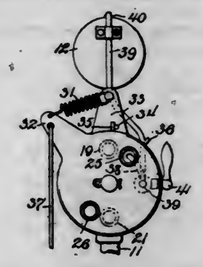


1,828,492. KILN HEATING. PHILIP D'HUC DRESSLER, Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1928. Serial No. 262,221. 20 Claims. (Cl. 25—142.)



1. The combination in a continuous kiln having a kiln chamber with an inlet at one end and an outlet at its opposite end for the insertion and removal of material treated in the kiln chamber and means for moving said material through the kiln chamber from said inlet to said outlet, of a plurality of combustion chambers at the sides of the kiln chamber for supplying heated gases to the latter at points distributed along the length of the kiln chamber between said inlet and outlet, and automatic stokers for feeding solid fuel into the different combustion chambers.

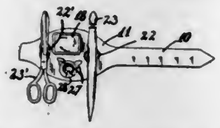
1,828,493. DISK VALVE FOR BURNERS. CHARLES EISLER, Newark, N. J., assignor to Eisler Electric Corporation, Newark, N. J. Filed June 17, 1930. Serial No. 461,673. 2 Claims. (Cl. 251—87.)



1. An attachment for burners comprising a pair of valve elements of disk like form, one mounted so as to partially rotate relative to the other, the members having inlets

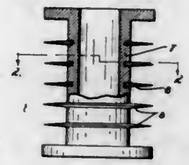
in one and outlets in the other and adapted to be placed in register when the one is partially rotated and a passage in one valve member for feeding a pilot light, said passage being disposed to be in communication with one inlet of the rotatable member when said member is in normal position.

1,828,494. TAILORING IMPLEMENT-SET. LOUIS FASULO, Brooklyn, N. Y. Filed Jan. 15, 1930. Serial No. 420,867. 5 Claims. (Cl. 223—58.)



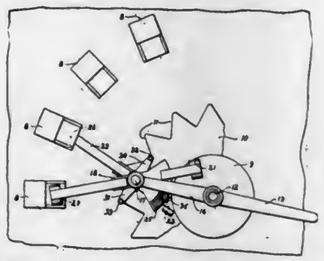
1. A tailoring implement-set, including a strap with an intermediate proturberance, and a magnetized clip bracket attached thereon for supporting a thimble, said clip bracket for the thimble consisting of a base with several vertical fingers having out-turned top ends forming one polarity of the magnetized clip and one vertical finger with an inturned top end forming the other polarity of the said magnetized clip, said last finger capable of extending over the top edge of the thimble for holding it in place.

1,828,495. CASTING. WILLIAM G. GOODWIN, Royal Oak, Mich. Filed Sept. 10, 1928. Serial No. 304,959. 1 Claim. (Cl. 257—261.)



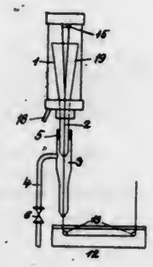
A casting of the class described, comprising: a main body having an inner and an outer surface, the outer surface being free from outwardly extending projections; a plurality of radiating members projecting outwardly from the outer surface of said main body and extending inwardly of said main body and terminating between the inner surface and the outer surface thereof, the portion of each of said members within said casting being of greater volume in proportion to radial length relative to said casting than the portion exterior of said casting.

1,828,496. TAP SWITCH. ARNOLD HALLER, Baden, and SIGURD RUMP, Zurich, Switzerland, assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 10, 1929, Serial No. 361,930, and in Germany May 25, 1928. 5 Claims. (Cl. 171—119.)



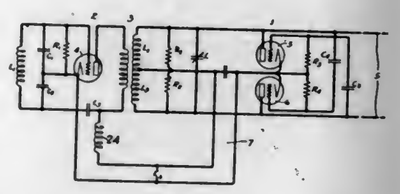
1. In a switch for changing the tap connections of a transformer under load, a plurality of tap contacts, a plurality of brushes, and means for alternately and intermittently moving said brushes in sequence over the taps and simultaneously moving said brushes relative to each other.

1,828,497. SPINNING CUPRAMMONIUM SILK BY THE STRETCH PROCESS. AUGUST HARTMANN, Wuppertal-Oberbarmen, and WALTER HÖFINGHOFF, Wuppertal-Barmen, Germany, assignors to American Bemberg Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 3, 1930, Serial No. 479,512, and in Germany Aug. 29, 1929. 17 Claims. (Cl. 18—54.)



1. A process for producing cellulosic filaments, comprising extruding a cellulosic solution to form filaments, stretching the extruded filaments by the motion of a stream of precipitating liquid, and diverting the precipitating liquid from the filaments while containing the movement of the filaments in the same direction.

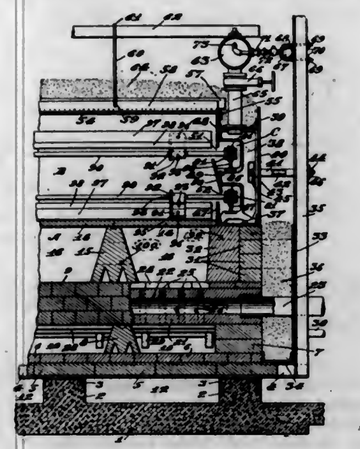
1,828,498. OSCILLATION CIRCUITS. RAYMOND A. HEISING, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 26, 1928. Serial No. 280,697. 2 Claims. (Cl. 250—36.)



1. In combination, a source of alternating current, an oscillator comprising two electric discharge devices each having an anode, a cathode, and a controlling electrode, a frequency determining circuit constituted by a parallel relation of inductance and capacity elements, means connecting the cathodes of said devices in common to a point in said inductance intermediate its ends, means for connecting the termini of the inductance and capacity elements constituting said frequency determining circuit between the anode and controlling electrode of said devices in relatively reverse order, and a resistance connected between the anode and cathode of at least one of said devices.

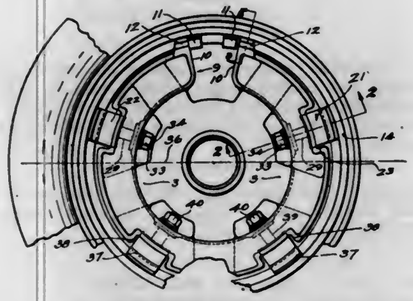
1,828,499. RETORT. GEORGE MCD. JOHNS, Sappington, Mo. Filed May 6, 1927. Serial No. 189,308. 17 Claims. (Cl. 202—103.)

1. In a retort, a vaporizing chamber, a vapor-collecting chamber flanking the vaporizing chamber, and a wall comprising series of longitudinally disposed plates disposed intermediate the chambers, said series of plates being spaced one from the other and affording communication



between the chambers, the intermediate series of plates being disposed obliquely to the upper and lower series of plates.

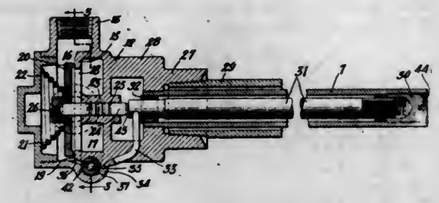
1,828,500. TRUCK WHEEL. LLOYD D. KAY, Los Angeles, Calif. Filed July 16, 1928. Serial No. 293,186. 4 Claims. (Cl. 301—13.)



1. In a truck wheel, the combination of a wheel body having a rim with a relatively fixed seat for the tire-rim formed rigid with the wheel body, a pair of seat members disposed one on each side of the relatively fixed seat adjacent the rim of the wheel and mounted on the wheel for outward radial movement on the wheel and having means for limiting the said outward movement to hold the said seat members, at a predetermined point in their outward movement so that the said movable seat members will cooperate with the relatively fixed seat to center the tire-rim when applied to the wheel, and means on the edge of the wheel opposite the relatively fixed seat mounted to move outwardly and engage the tire-rim to secure the same in its centered position.

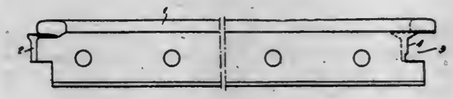
1,828,501. THERMOSTATIC CONTROL VALVE. JOHN H. KOLTS, Crafton, Pa., assignor to Pittsburg Water Heater Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 24, 1928. Serial No. 264,325. 2 Claims. (Cl. 236—102.)

1. In a device of the character described, a valve, an internally threaded thermostatic expansion tube, an externally threaded valve operating member extending into the tube, the threads in said tube having a different pitch than those on said valve operating member, and an internally and externally threaded member associated with



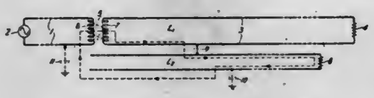
said tube and said valve operating member and cooperating with their threads to provide an adjustment of the said operating member with respect to the said tube.

1,828,502. RAIL-JOINT. KARL ANDREAS LAGERGREN, Stockholm, Sweden. Filed Sept. 19, 1929, Serial No. 393,663, and in Sweden Oct. 1, 1928. 5 Claims. (Cl. 238—237.)



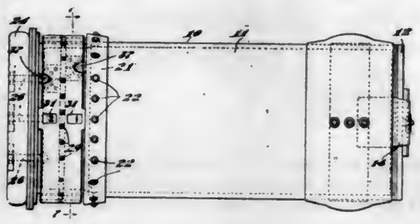
1. In a rail joint, the combination of a stud formed at one rail end and having upper and lower surfaces extending substantially in parallel to the longitudinal direction of the rails, a recess in the other rail end, adapted to receive said stud to compel both rails to follow one another at the same level, and a wedge or wedges between the bearing surfaces between said stud and said recess of the adjacent rail ends to control the mutual level between the rails.

1,828,503. MEANS FOR REDUCING INTERFERENCE IN ELECTRICAL CIRCUITS. KAREL LUTOMIRSKI, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1928. Serial No. 273,078. 12 Claims. (Cl. 179—170.)



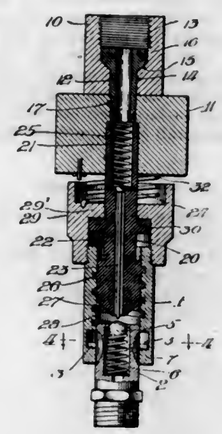
1. In combination, a source of alternating current waves, a circuit having a primary portion connected to said source, and a secondary portion, a transmission device comprising elements respectively connected to and coupling said primary portion and said secondary portion of said circuit for a desired transmission of said waves therebetween, said device providing a leakage path for alternating currents between said primary portion and said secondary portion of said circuit, a second circuit for transmitting electrical waves and coupled respectively to said primary portion and said secondary portion of the first mentioned circuit through leakage paths for alternating currents, and means inherent in said device for reducing the amount of leakage alternating current transmitted between the first mentioned circuit and said second circuit over said leakage path including means for substantially reducing the amount of alternating current transmitted between said primary portion and said secondary portion of said first-mentioned circuit due to the capacitive coupling therebetween.

1,828,504. CARRIER FOR DISPATCH SYSTEMS. FRANK W. MACMARTIN, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Feb. 24, 1930. Serial No. 430,496. 29 Claims. (Cl. 40—96.)



1. A carrier of the class described comprising a body, a flexible endless index-carrying band embracing the body and movable relatively thereto and a shield fixed upon said body and surrounding said band.

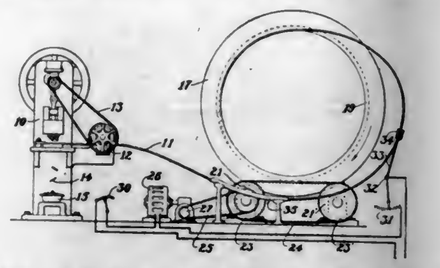
1,828,505. COUPLING. BURTON J. MAHONEY, Chicago, Ill., assignor to Hoffman High Pressure Equipment Company, a Corporation of Illinois. Filed Sept. 6, 1928. Serial No. 304,223. 1 Claim. (Cl. 285—176.)



In combination, a sleeve adapted to be slipped over a receptacle and be interlocked therewith, a tubular element screw-threaded into the sleeve and having one end constructed and arranged to effect a seal between the same and the receptacle when said tubular element is screwed into the sleeve after the latter has been attached to the receptacle, a head fixed to the other end of said tubular element, a block overlying the head and constructed for attachment to a supply conduit, a tubular headed screw extending axially through said block and into said head, and means for locking the screw to the head in position to permit the block to turn freely about the screw.

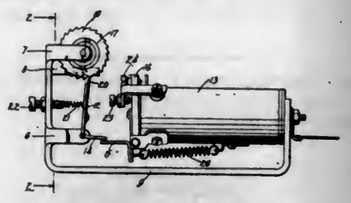
1,828,506. CHAIN MANUFACTURE. FRANK L. MORSE, Ithaca, N. Y. Filed Dec. 22, 1928. Serial No. 327,872. 2 Claims. (Cl. 242—75.)

2. In unreeling apparatus, the combination of a reel inside of which a metallic strip is coiled, means for rotating said reel, means for guiding the material in a loop under compression from the inside of the coil to a constant speed feeding device, and means adapted to be operated



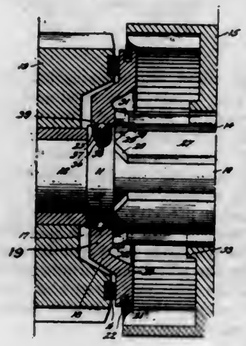
by said loop to vary the speed of rotation of the reel on change in diameter of the coil so that the linear rate of feed of the material is maintained constant.

1,828,507. CIRCUIT CONTROLLING DEVICE. PAUL B. MURPHY, Nyack, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 14, 1927. Serial No. 198,786. 8 Claims. (Cl. 200—91.)



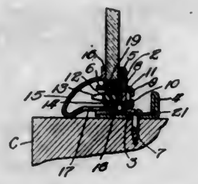
1. In a relay, an electromagnet, an armature actuated thereby, and a time consuming mechanism actuated by said armature embodying means for rendering said relay selectively responsive to currents of predetermined frequencies.

1,828,508. SYNCHRONIZER DEVICE. HOWARD J. MURRAY, Brooklyn, N. Y. Filed Apr. 25, 1928. Serial No. 272,850. 11 Claims. (Cl. 192—53.)



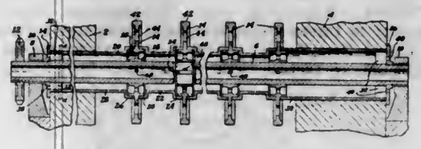
7. In a synchronizing device, the combination of axially movable elements forming a mechanical clutch, each provided with recesses facing each other, a synchronizer therebetween for causing one of the elements to approach the speed of the other, said synchroniser including axially offset rings and a frusto-conical web connecting the rings, one of said rings contained in one of the recesses and the other ring projecting therefrom into the other recess when the clutch elements are in their juxtaposed but unclutched position.

1,828,509. STORE FRONT CONSTRUCTION. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed May 11, 1929. Serial No. 362,365. 14 Claims. (Cl. 20—564.)



1. In a store front construction, a pane seating section comprising a sheet of metal bent upon itself to form a support for a pane of glass, a backing member for bearing against said pane, and a base having an upstanding rib for providing a gutter between said rib and backing member; a moulding, and readily adjustable means in the pane seating section for drawing said moulding into contacting engagement with said pane, said adjustable means bearing against the support for additionally supporting the same.

1,828,510. SHAFT FOR HEAT-TREATING FURNACES. JOSEPH SAMMON, Kearny, N. J., assignor to Driver-Harris Company, Harrison, N. J., a Corporation of New Jersey. Filed Dec. 17, 1927. Serial No. 240,707. 5 Claims. (Cl. 263—6.)



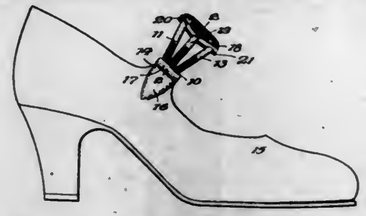
1. In a conveyor roll for a furnace for heat-treating metallic sheets, the combination of a central shaft, a series of disks mounted thereon, and tubular shields of heat resisting metal engaging said disks, each shield surrounding said shaft and being spaced away therefrom so as to form an air chamber, said disks having perforations opening into the chambers within said shields so as to connect said chambers.

1,828,511. METHOD OF PRODUCING CELLULOSE. BROR NATANAEL SEGERFELT, Bohmisch Krumau, Czechoslovakia. Filed Apr. 21, 1928, Serial No. 271,985, and in Sweden Apr. 23, 1927. 4 Claims. (Cl. 92—9.)

1. The method of producing cellulose which comprises digesting cellulosic material with digester liquor and afterwards washing the cellulose produced in diffusors, evaporating the strongest waste liquor obtained from the diffusors from a previous boiling, and adding such evaporated waste liquor as supplemental liquor to the fresh digester liquor for obtaining the required quantity of liquid in the digester.

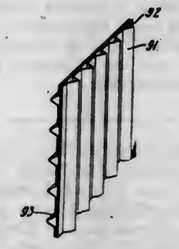
1,828,512. SHOE STRAP. JOHN SERLA, Brooklyn, N. Y. Filed Dec. 7, 1929. Serial No. 412,377. 5 Claims. (Cl. 36—58.5.)

1. A shoe strap comprising a plurality of elastic strands each of which is of sufficient length to extend from opposite margins of the shoe across the instep of the wearer, a metal unit provided with a series of spaced openings on the longitudinal sides thereof, said strands passing



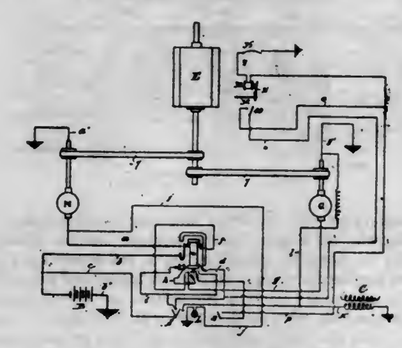
through said openings and over said metal unit, and an ornamental stone secured in said metal unit so as to conceal the strands passing over said metal unit.

1,828,513. SOUND REPRODUCER. EDWIN H. SMYTHE, Evanston, Ill. Original application filed Aug. 17, 1926, Serial No. 129,731. Divided and this application filed Dec. 21, 1928. Serial No. 327,732. 8 Claims. (Cl. 181—32.)



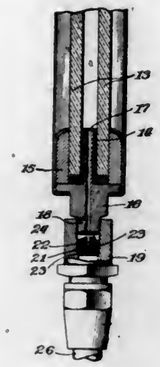
1. A diaphragm for a sound reproducer comprising a pair of corrugated sheets secured together, said sheets having plane portions between the corrugations.

1,828,514. ELECTRIC STARTING SYSTEM FOR AUTOMOBILES. SAMUEL CARROLL SPIVEY, Birmingham, Ala. Filed Apr. 16, 1927, Serial No. 184,382. Renewed Mar. 9, 1931. 13 Claims. (Cl. 290—37.)



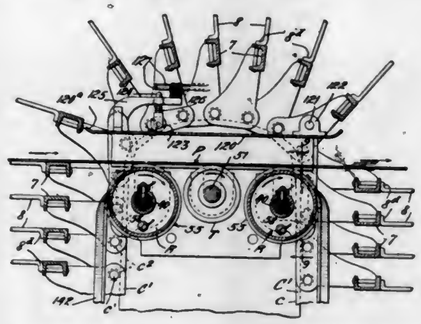
1. A starter for internal combustion engines including a storage battery, electric motor and generator, a circuit connecting the storage battery to the motor, and a circuit connecting the generator to the storage battery, of a polarzed relay having an operating coil in the circuit from the generator to the storage battery, means controlled by said relay for opening the circuit between the storage battery and motor, and an electromagnet in the circuit from the generator and responsive to the operation of the polarized relay for maintaining the circuit to the motor open.

1,828,515. WINDOW FOR MOTOR VEHICLES. EARL A. STONE, Detroit, Mich., assignor of one-half to Don O. Scott. Filed Mar. 13, 1929. Serial No. 346,569. 6 Claims. (Cl. 20—40.5.)



1. In a motor vehicle, a window comprising a double pane having a sealed space therebetween, and a tube connected to said space and leading to the manifold of the vehicle whereby air will be withdrawn from said space when the motor is in operation.

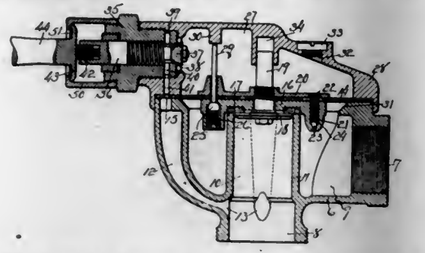
1,828,516. DRYING APPARATUS FOR PLATES OF METAL AND OTHER MATERIAL. CHARLES WAGNER, Grantwood, and AUGUST HORMEL, Jersey City, N. J., assignors to Charles Wagner Litho. Machinery Company, Inc., a Corporation of New York. Original application filed Sept. 14, 1925, Serial No. 56,120. Divided and this application filed Aug. 1, 1929. Serial No. 382,691. 6 Claims. (Cl. 198—41.)



2. Apparatus for handling wet plates, embodying, in combination, plate-carrying mechanism having members mounted to move in spaced paths, a roller having a peripheral surface carrying a magnetic charge, and means for rotating said roller whereby the bottom surface of a metal plate contacting with said roller will be attracted upon contact with the roller and will be shifted over said roller upon rotation thereof from a member moving in one of said paths to a member moving in the other of said paths.

1,828,517. FLUSH VALVE. GORDON W. WHITE, West Hartford, Conn. Filed Nov. 20, 1924. Serial No. 751,136. 16 Claims. (Cl. 137—93.)

1. A flush valve body having an inlet and an outlet chamber with a communicating passage between them, said body also having a cushioning chamber opening inwardly from said outlet chamber and closed at its inner end, a diaphragm overlying said passage, a valve carried by said diaphragm to control said passage, a cap overlying said diaphragm, means for relieving the pressure

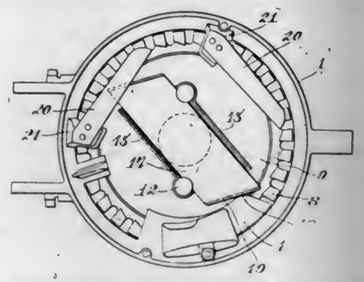


in said pressure chamber and means for directing said pressure through said diaphragm into said cushioning chamber.

1,828,518. PROCESS FOR THE PRESERVATION OF FRESH FRUITS AND VEGETABLES FROM MOLD AND DECAY. ANSEL S. WYSONG, Los Angeles, Calif., assignor of one-half to Charles H. Popenoe, Silver Spring, Md. Filed Apr. 2, 1930. Serial No. 441,173. 13 Claims. (Cl. 99—1.)

4. A process for the preservation of fruits or vegetables consisting of subjecting them to the action of a preservative fluid containing substantial amounts of a fungicide containing an iron ion, an aliphatic alcohol, and a free acid capable of preventing the combination of any ions of the fungicide with the organic salts contained in such fruits or vegetables.

1,828,519. AGITATOR FOR DISPENSING MECHANISMS. WILLIAM L. BEALL, Chattanooga, Tenn., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 1, 1929. Serial No. 375,155. 8 Claims. (Cl. 221—120.)



1. An agitating device comprising a rotating plate, an agitating member above said plate and mounted for transverse movement with respect thereto, and a single means for reciprocating said member with respect to the plate.

1,828,520. SOLDERING CUP. ROBERT L. BRUCE, Chicago, Ill., assignor to White Brass Castings Company, a Corporation of Illinois. Filed Nov. 2, 1929. Serial No. 404,258. 7 Claims. (Cl. 22—86.)



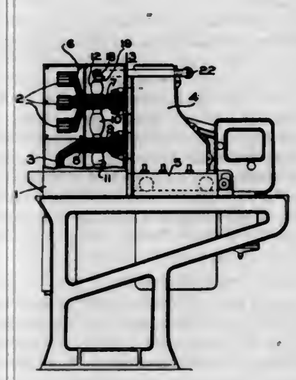
1. A soldering ladle in which the cup is pivotally supported in a stirrup and the stirrup rotatably supported on a handle to permit the cup to remain upright during movement of the handle in all directions.

1,828,521. AUTOMATIC PENCIL. DE FOREST Q. CRIMMINS, Tonawanda, N. Y. Filed May 30, 1930. Serial No. 457,652. 17 Claims. (Cl. 120—18.)



1. In an automatic pencil, a shell, a magazine stationarily disposed therein, a slotted guide tube rotatably mounted in said magazine, said magazine being adapted to receive and support leads in a substantially stationary series extending about said guide tube with the first lead disposed in said guide tube and the slot in the latter facing the next lead of said series, means for diverting said next lead through said slot into said guide tube when said first lead has been used, and means for rotating said tube in said magazine to cause its slot to face towards the succeeding lead of the series.

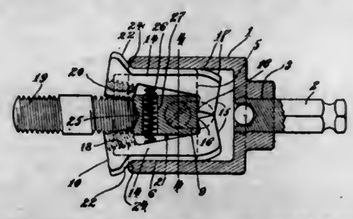
1,828,522. SWITCH MECHANISM. DAVID REGINALD DAVIES, Didsbury, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1927, Serial No. 192,574, and in Great Britain June 16, 1926. 9 Claims. (Cl. 175—298.)



1. A switch mechanism comprising a stationary structure having a bus bar disposed therein, aligned sets of terminal members for the bus bar, a movable structure having disposed thereon a circuit breaker, terminal members for engaging and co-operating with the terminal members in the stationary structure, and positive clamp means for maintaining the contact members carried by the movable structure in firm contact relation with the contact member disposed in the stationary structure when the structures are in operative position, said clamp means including a cam for insulating spacers between the terminals of a set and between the cam and a terminal.

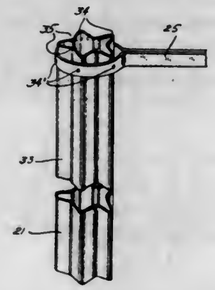
1,828,523. STUD SETTER. ALONZO GALLOWAY DECKER, Baltimore County, Md., assignor to Black & Decker Manufacturing Company, a Corporation of Maryland. Filed Aug. 15, 1925. Serial No. 50,531. 2 Claims. (Cl. 81—53.)

1. A stud setting chuck having a chuck body with a cylindrical bore, jaws therein and a sliding carrier fitting the bore and apertured to receive the jaws, which have means engaging the carrier from above, the carrier serving as an abutment to be engaged by the upper end of the stud to close the jaws which are provided with closing surfaces at their lower ends, the chuck body having co-operating closing surfaces whereby the jaws are closed as the chuck is formed down against the stud, the



jaws being provided near their upper ends with curved surfaces which rock on the inner cylindrical surface of the chuck body.

1,828,524. HEATER TYPE VACUUM TUBE. DANIEL J. DELANEY, East Newark, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Mar. 7, 1928. Serial No. 259,647. 5 Claims. (Cl. 250—27.5.)

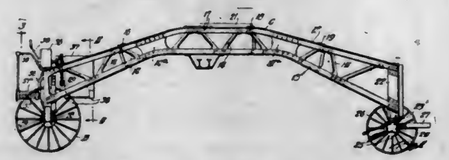


2. A cathode for thermionic tubes comprising an elongated shell having longitudinal corrugations around the entire surface thereof providing alternate depressions and ridges thereby both materially increasing the surface area and rigidity of said shell throughout its circumference.

1,828,525. IODINE ADDITION PRODUCTS OF QUINOLINE CARBOXYLIC ACIDS AND DERIVATIVES THEREOF. JOSEPH EBERT, Westmont, N. J., assignor to The Farastan Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 30, 1929. Serial No. 417,604. 6 Claims. (Cl. 260—41.)

1. Iodine addition products of quinoline carboxylic acids and esters in which the iodine is loosely coupled with the nitrogen of the pyridine nucleus.

1,828,526. ROAD GRADER MAIN FRAME. CLYDE B. FAVERTY, Chicago, Ill., assignor to Ryan Mnfg. Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 28, 1928. Serial No. 295,865. 16 Claims. (Cl. 37—156.)



3. In a road grader a front axle assembly, a rear axle assembly, a main apparatus carrying frame with a universal joint connection with the front axle and a pivotal connection to the rear axle and being supported only

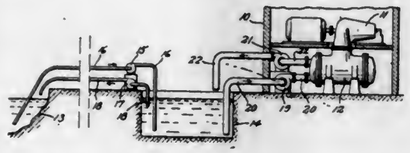
by the axles at these two points, a gear segment secured integral with the rear axle, a gear carried by the frame, and power means carried by the grader frame for turning said gear in either direction to incline the frame with respect to said axles.

1,828,527. PENCIL. HOWARD L. FISCHER, St. Paul, Minn. Filed Oct. 19, 1922. Serial No. 595,606. 18 Claims. (Cl. 120—18.)



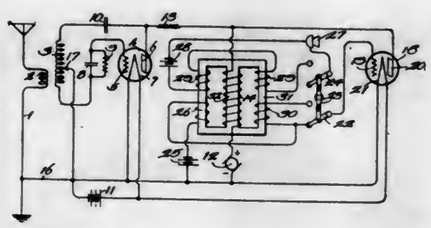
6. A pencil comprising a composition barrel, a threaded member having a writing tip formed thereon adapted to be removably held in said barrel and a lead carrying operating member removably held in the rear end of said pencil adapted to cooperate with and hold said threaded member centrally within the rear end of said barrel.

1,828,528. POWER PLANT. CARL FÖHL, Berlin, Germany, assignor to Ruthsaccumulator Aktiebolag, Berlin, Germany, a Corporation of Sweden. Filed Oct. 30, 1929, Serial No. 403,433, and in Germany Nov. 13, 1928. 5 Claims. (Cl. 257—24.)



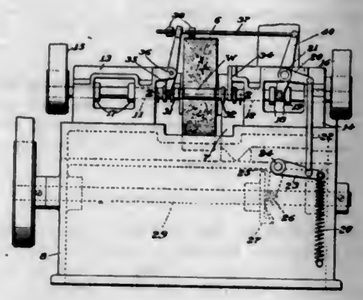
1. Power plant apparatus of the kind operating to take care of sudden demands for power a short period comprising a member requiring cooling, water holding means having sufficient capacity to store enough water to cool said member during the aforesaid short period, means for conducting water from said water holding means to said member and from said member to said water holding means, means for continuously withdrawing heated water from said water holding means and means for continuously supplying said water holding means with cold water.

1,828,529. SYSTEM OF RADIO COMMUNICATION. HENRY C. FORBES, Chicago, Ill., assignor to Zenith Radio Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 16, 1926. Serial No. 135,824. 8 Claims. (Cl. 250—17.)



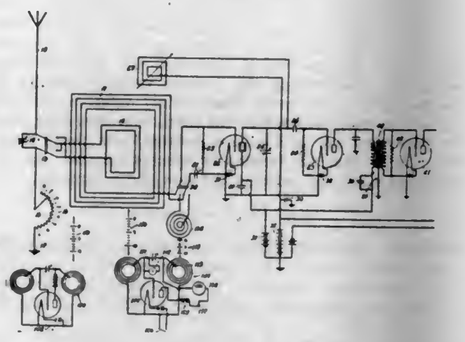
1. In a radio system of communication, the combination with an antenna and a circuit having means therein for generating and impressing upon said antenna a wave form carrier current; of a telephonic circuit including a telephonic transmitter; a signaling circuit including a thermionic valve individual to said wave form carrier current circuit and serving as a generator of audio frequency signaling current; and means for disconnecting said valve from said signaling circuit and associating it with said telephonic circuit to serve as a modulator under the control of the telephonic currents.

1,828,530. WORK SUPPORTING MECHANISM FOR GRINDING MACHINES. WARREN F. FRASER, Westboro, Mass. Filed Sept. 8, 1927. Serial No. 218,196. 4 Claims. (Cl. 51—103.)



1. In a machine for operating on metal articles of work having bored ends, the combination of two rotatable work supporting members having portions adapted to enter the holes in opposite ends of an article of work and to center said article, one of said members being tapered to fit tightly in the hole and drive the work, mechanism for rotating the latter member, means for moving said driving member axially toward and from the other work supporting member to engage and disengage the work, strippers for releasing the work from both of said members, parts supporting one of said strippers for operative movement relatively to its cooperating work supporting member, and connections between said means and the latter stripper for operating it.

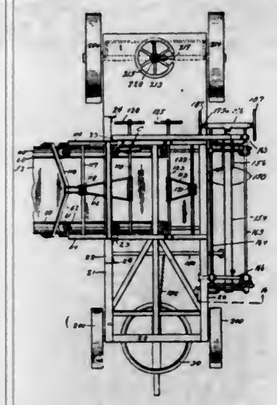
1,828,531. RADIANT ENERGY DISTANCE DETERMINING SYSTEM AND APPARATUS. EDWARD G. GAGE, Brooklyn, N. Y., assignor of one-half to Electrical Industries Manufacturing Company, New York, N. Y., a Corporation of New York, and one-half to Leon Attinger, New York, N. Y. Filed Dec. 26, 1930. Serial No. 504,843. 26 Claims. (Cl. 250—2.)



1. The method of determining, by radiant energy, the distance between transmitting and receiving units thereof, which comprises radiating alternately from the transmitting unit two electromagnetic waves respectively from

a concentrated field and from a relatively distributed field, receiving the respective waves, and ascertaining the difference between their effects as a measure of the distance sought.

1,828,532. ELEVATING GRADER. AXEL EDWARD GUSTAFSON, Salem, S. Dak. Filed May 11, 1929. Serial No. 362,287. 4 Claims. (Cl. 37—110.)



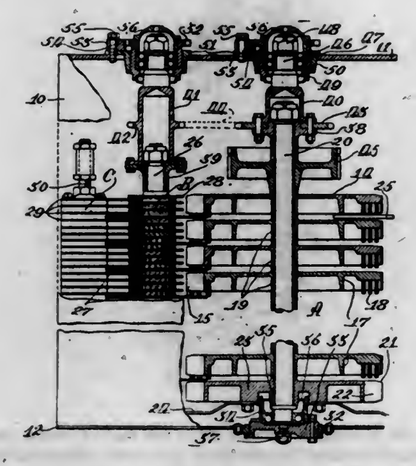
1. In an elevating grader, a grader frame, a plow beam, a pair of shafts journalled in the frame above and parallel to the beam, a cross arm secured to the plow beam near its rear extremity, a pair of support arms secured to the shafts and extending laterally therefrom, a pair of links connecting said support arms to the cross arm at points disposed on either side of the beam, a forward support arm secured to one of the shafts above the forward region of the beam, a link connecting said forward support arm to the beam near its forward end, and means to rotate the shafts in unison, or to rotate one of the shafts by itself.

1,828,533. FULL FASHIONED STOCKING AND METHOD OF PRODUCING SAME. HENRY W. HOFFMANN, Weissport, Pa., assignor to Ajax Hosiery Mills, Phoenixville, Pa., a Corporation of Pennsylvania. Filed Aug. 28, 1931. Serial No. 559,861. 10 Claims. (Cl. 66—173.)



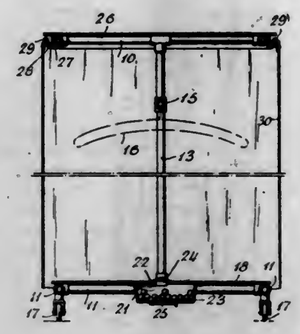
1. A full-fashioned stocking having at its upper end a welt both walls of which are of plain knitting and which in the completed stocking has a picot edge and below the same two closely adjacent bands of plain loops knitted from threads other than the body thread and contrasting therewith, the fabric of the stocking between said bands being composed of a thread non-contrasting with the body of the stocking but having single laterally transferred loops at closely recurrent intervals about the stocking.

1,828,534. DOFFING MECHANISM FOR COTTON PICKERS. EDWARD A. JOHNSTON and DAVID B. BAKER, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Nov. 8, 1929. Serial No. 405,574. 6 Claims. (Cl. 56—44.)



1. A doffer for cotton pickers of the spindle type, comprising an upright shaft, superposed disks on the shaft spaced apart to admit passage of spindles therebetween, each disk having one side formed as a plain surface and its other side provided with a circumferential series of arcuate ribs extending outwardly from the central portion of the disk, and means adjacent the outer end of each rib for dislodging cotton from moving spindles.

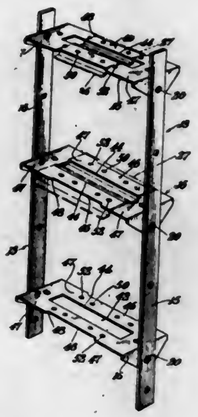
1,828,535. PORTABLE DISPLAY STAND. JULIUS KASS, New York, N. Y. Filed Apr. 2, 1931. Serial No. 527,097. 2 Claims. (Cl. 312—3.)



1. A stand comprising upper and lower frames, standards connecting said frames, clothing-supporting means carried by said standards, cover plates for said upper and

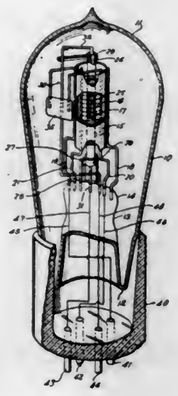
lower frames, the lower plate having perforations therein, a flexible curtain suspended from the edges of said upper plate, and a receptacle mounted on the underside of the lower plate adjacent said perforations, said receptacle having an inlet and an outlet opening, said inlet opening being formed in the lower plate and the outlet opening being in the bottom of said receptacle, and closures for said openings.

1,828,536. TRACKWAY FOR TOY RAILWAYS. JOHN C. KOERBER, South Orange, N. J. Filed Jan. 30, 1929. Serial No. 336,028. 24 Claims. (Cl. 104—56.)



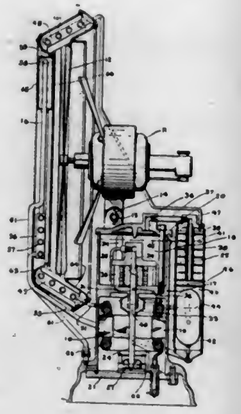
1. An elevated trackway structure for toy trains comprising side supporting members, cross-bars connecting said members, sheet metal ties having longitudinal bottom channels secured to said cross-bars with said cross-bars extending through said channels, and track rails secured to the tops of said ties, the tops of said ties being cut to form lugs which are bent around the rails to secure them in position.

1,828,537. THERMIONIC TUBE. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Harrison, N. J., a Corporation of Delaware. Filed June 30, 1927. Serial No. 202,539. 7 Claims. (Cl. 250—27.5.)



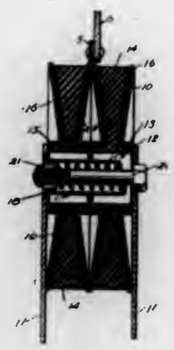
7. In a thermionic tube construction, the combination of an envelope; a support stem within the envelope; anode and control elements within the tube and mounted on said stem; a cathode having one end mounted from the stem; a heating filament positioned within the cathode and having one end mounted from the stem; and elongated means at the end of the said cathode and filament away from the stem extending away from both the cathode and the filament to reduce heating of said cathode by conduction from said filament.

1,828,538. REFRIGERATOR FAN. ANDREW A. KUCHER, Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1924. Serial No. 750,805. 12 Claims. (Cl. 62—115.)



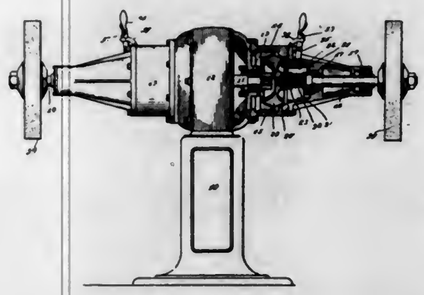
1. The combination with a fan for creating a current of air, of a refrigerating apparatus including evaporating and condensing elements, said evaporating and condensing elements being disposed in respective portions of the air current, and means for directing the portion of the air current passing over the condensing element in a direction different from the portion of the air current passing over the evaporating element.

1,828,539. VIBRATION DAMPENER. HUGH C. LORD, Erie, Pa. Filed Dec. 10, 1926. Serial No. 153,875. 4 Claims. (Cl. 188—130.)



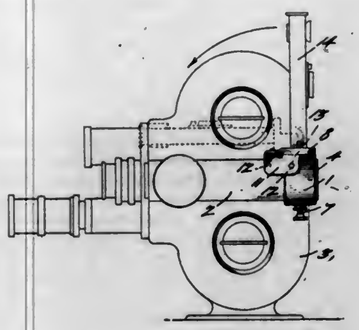
1. In a vibration dampener, the combination of two relatively movable members; and a friction member backed by the movable members and rubbing with at least one of the movable members, the friction member being formed with a pad of resilient rubber and a comparatively non-resilient wearing portion.

1,828,540. BUFFER OR GRINDER. WILLIAM A. MARSCHKE, Indianapolis, Ind., assignor to Marschke Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 11, 1926. Serial No. 87,657. 1 Claim. (Cl. 192—18.)



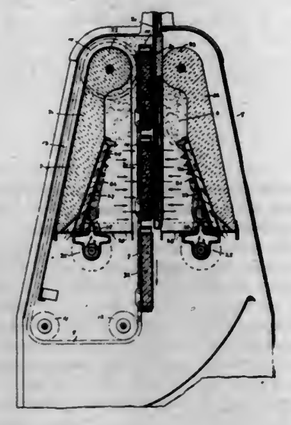
The combination for the purposes described of a drive shaft, a driven shaft, a driven clutch member on said driven shaft and rotatable therewith, a driving clutch member on said drive shaft, a stationary member, said driven clutch member being axially slidable along said driven shaft to engage either said stationary member or said driving clutch member, spring means normally controlling said driven clutch member as to its engagement with said driving clutch member, said driven clutch member being provided with a hub having an annular groove, a slidable shifting-yoke having a portion lying in said groove, that portion of said shifting-yoke which lies in said groove being less in thickness than the width of said groove, an abutment for limiting the movement of said yoke, spring means acting on said yoke to hold it against said abutment, said abutment being located so that when said yoke engages it the portion of said yoke which lies in the peripheral groove in said hub will be free from contact with the walls of said groove, and means for shifting said yoke.

1,828,541. MOUNT FOR RANGE FINDERS OR OTHER ATTACHMENTS. MONROE L. MELETIO, Washington, D. C. Filed Apr. 5, 1930. Serial No. 441,905. 4 Claims. (Cl. 88—16.)



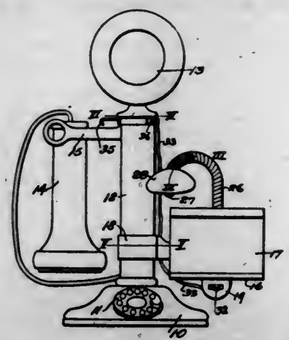
1. A supporting mount for a range finder or other attachment for a camera adapted to be detachably positioned upon the view finder barrel of a camera, means on said mount cooperating with the eye piece of the view finder for locking the same thereon, additional means carried by the mount engageable with the barrel for further, locking the same in position, and means for selectively changing the relative position between the range finder and said mount.

1,828,542. METHOD OF TOASTING. LESTER E. PADELFORD, Buffalo, N. Y., assignor to The Republic Metalware Company, Buffalo, N. Y., a Corporation of New York. Filed Feb. 11, 1930. Serial No. 427,595. 5 Claims. (Cl. 99—10.)



2. A method of toasting slices of bread, consisting in passing the slices through an oven, exposing both sides of the slice to moist convected heat, and then subjecting the moistened slice to intense radiant heat, whereby the moisture is sealed into the finished toast.

1,828,543. TELEPHONE LIGHT. CHARLES C. PHILLIPS, Memphis, Tenn., assignor to The K-D Lamp Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 8, 1929. Serial No. 345,265. 2 Claims. (Cl. 240—2.17.)



1. Illuminating means for a telephone, having a receiver hook, automatically movable on removal of said receiver, said illuminating means comprising a battery box, means for detachably securing said box to the telephone, a flexible metal tube grounded to and leading from said box, a bulb socket secured in the end of said tube and grounded thereto, a bulb in said socket, a battery cell disposed in and insulated from said box, an insulated wire within said tube connecting said bulb and a pole of said cell, an insulated member, having an integral contact disposed in the path of movement of said receiver hook, and an insulated member connecting said contact member with the opposite pole of said cell, whereby on removal of the telephone receiver said hook will ground said cell through said telephone parts and complete the circuit through said bulb.

1,828,544. LOCK. JAMES CHARLES RALLS, Sheffield, England. Filed Apr. 26, 1928, Serial No. 278,030, and in Great Britain May 26, 1927. Renewed Mar. 28, 1931. 1 Claim. (Cl. 70—69.)



A lock of the kind specified comprising a casing, a plurality of lever plates mounted about a pivot pin fixed to the casing, said lever plates having opposing contact faces approximately centrally of their structure for engagement by an extraneous key, said lever plates being movable radially thereby adjacently in opposite directions both inwardly and outwardly of one another, a member longitudinally slidable over the pivot pin and between one of said lever plates and a face of the lock casing, interengaging means between the slidable member and the lever plates operable at a determinable position of the lever plates, opposed twin locking members pivoted to the lock casing and operable within the structural limits thereof across a staple receiving opening in said lock casing, laterally projecting means on the slidable member for operating in its movement said twin locking members, said means being arranged to take up a position between the twin locking members and a side of the lock casing when said locking members are closed across the staple receiving opening, the slidable member having a key receiving aperture providing walls for engagement by a key and key positioning means on the lock casing.

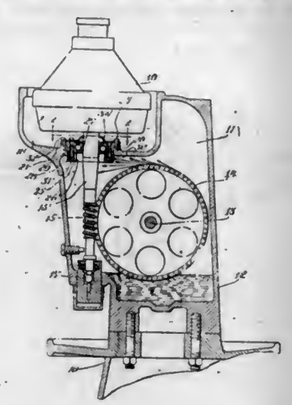
1,828,545. VACUUM TUBE AND ITS ELEMENTS. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Tube Company, a Corporation of Delaware. Filed Aug. 26, 1927. Serial No. 215,753. 8 Claims. (Cl. 250—27.5.)



2. A sealed evacuated envelope containing, a grid, an anode, an indirectly heated cathode having a coating of alkaline earth oxides and a heater element for heating the cathode to emission temperature, comprising a conductive filament mounted upon a conductive member having a specific resistance higher than that of said conductive filament.

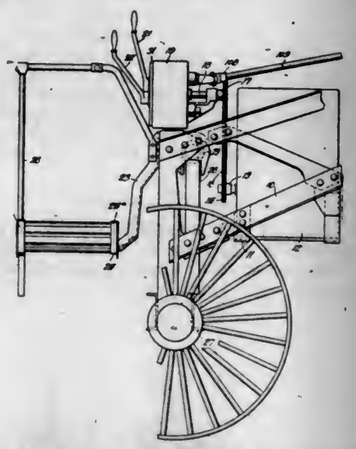
1,828,546. CREAM SEPARATOR. FELIX C. SANDSTROM, Milwaukee, Wis., assignor to International Harvester Company, a Corporation of New Jersey. Filed Nov. 24, 1928. Serial No. 321,555. 4 Claims. (Cl. 184—13.)

3. The combination with a cream separator housing having a vertical opening through which is passed a bowl carrying spindle, of a collar provided with means for securing the same to the housing within the opening, a vertically arranged ring included in the collar and spaced inwardly from the side thereof to form an annular pocket, a neck bearing for the spindle carried on the ring, and a spring cushioned support for the neck bearing arranged in said pocket to position the said neck bearing yieldingly



on the ring, there being openings in the collar to receive and cause oil to be circulated to the bearing and the spindle.

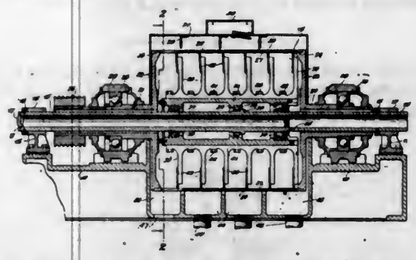
1,828,547. GEAR BOX CONTROL. WILLIAM J. SCHLACKS, Chicago, Ill., assignor to Ryan Mnfg. Corporation, Chicago, Ill., a Corporaiton of Illinois. Filed July 28, 1928. Serial No. 295,913. 8 Claims. (Cl. 87—156.)



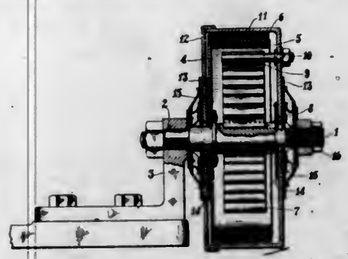
1. In a power adjusted road grader, a main frame with a plurality of adjustable grader elements thereon, a motor secured on the frame, a gear box positioned behind the motor, an operator's platform immediately behind the gear box, and a double row of reversing clutches forming a part of said gear box mechanism adapted to be operated to cause the motor to move any one of said adjustable elements in either direction, said clutch mechanism being operated by correspondingly placed operating levers at the rear of the gear box within easy reach of an operator standing on the platform.

1,828,548. CENTRIFUGAL MACHINE. COOPER SHAPLEY, Bishop, Calif. Continuation of application Serial No. 282,459, filed June 2, 1928. This application filed Aug. 3, 1929. Serial No. 383,309. 6 Claims. (Cl. 210—69.)

1. In a centrifugal machine for separating solid material from a liquid, an outer rotary screen member and an inner rotary member provided with a helical worm conveyor, means for forcibly rotating the outer screen member, and means for utilizing the solid material for rotating the inner member at a higher rate of speed than the outer member.

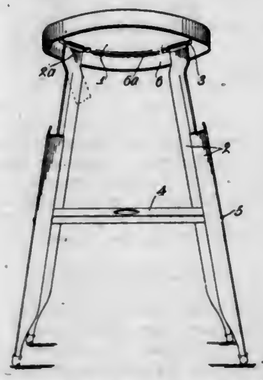


1,828,549. SHOCK ELIMINATOR. EDWARD SLADE, New York, N. Y., assignor to Marshall Asbestos Corporation, Troy, N. Y., a Corporation of Delaware. Filed Apr. 14, 1927. Serial No. 183,743. 10 Claims. (Cl. 267—10.)



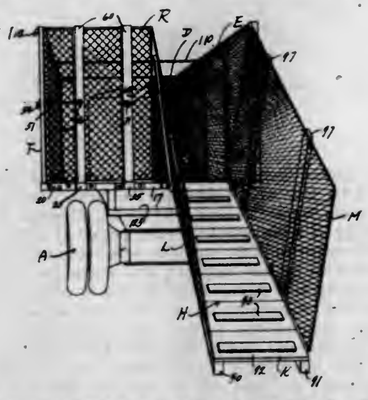
10. A shock absorber comprising an inner fixed drum, an outer drum mounted for radial movement with respect to the same, friction material between the drums, a spring within the drum, tending to turn one about the other, a strap connected with the outer drum tending to turn it against the spring, in such a manner that as a pull is exerted on the strap the outer drum will be pressed towards one side of the inner drum causing resistance to rotation, due to the friction material.

1,828,550. LEG FASTENING FOR STOOLS AND THE LIKE. SYLVESTER A. SOMMERS, Frankenmuth, Mich., assignor to Sommers Bros. Appliance Co., Saginaw, Mich. Filed July 19, 1930. Serial No. 469,059. 1 Claim. (Cl. 155—194.)



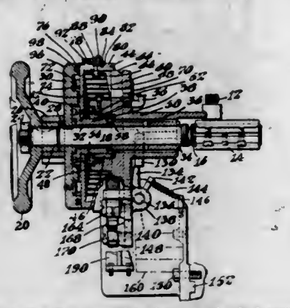
In combination a seat plate having a peripherally curved flange connected thereto by a fillet-shaped part, a strap-like keeper of curved cross-sectional shape and curved lengthwise in conformity with the said fillet-shaped part, its ends fixed to said fillet, said strap defining with the fillet a slot of double curvature, an edge of said keeper conforming to the curve of the flange, the other edge conforming to the plane of the seat plate, the main or body part of the keeper conforming to the curved face of the fillet, and a sheet metal leg formed with a hooked end shaped to conform to the curvature of the slot, the part of the leg adjacent the hooked end being curved to conform to the inner face of the flange, said leg adapted to be engaged in said slot, and a spreader holding the leg in position.

1,828,551. STOCK RACK FOR VEHICLES. JESSE H. WALTERS, Hebron, Ohio. Filed Sept. 18, 1928. Serial No. 306,764. 3 Claims. (Cl. 296—12.)



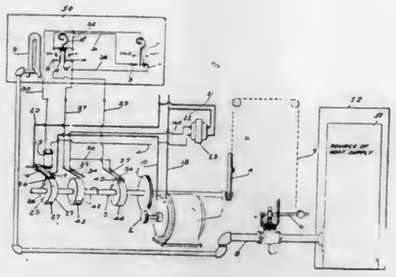
1. In a cross feeding mechanism, a shaft having threads, ing a platform, front and side walls for the body, a detachable rear wall structure having means to open the rack at one side or the other of the center of the rear wall structure, a loading chute, and means to cooperatively position the chute in a loading relation with the platform and rear wall structure entirely to one side of the medial center line of the vehicle.

1,828,552. FEED MECHANISM. JAMES F. WILLIAMS, Lyndhurst, and RAYMOND H. CRAMER, Newark, N. J., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,848. 17 Claims. (Cl. 51—165.)



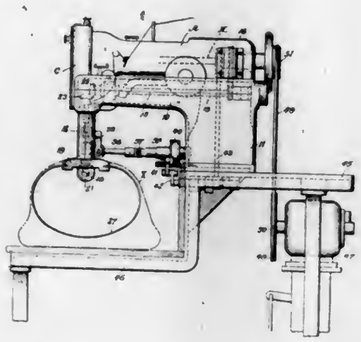
1. In a cross feeding mechanism, a shaft having threads, a shiftable nut engaging the threads, a threaded sleeve rotatably journalled on the shaft, a bracket, a nut fixed to the bracket and threaded on the sleeve, means for simultaneously turning the rotary sleeve and the shaft to produce a coarse feed of the shiftable nut, and means for turning the shaft independently of the rotary sleeve for producing a fine feed of the shiftable nut; substantially as described.

1,828,553. HEAT REGULATING DEVICE. WILLIAM ELLISON WORTH, North Pelham, N. Y., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Sept. 10, 1927. Serial No. 218,836. 5 Claims. (Cl. 236—37.)



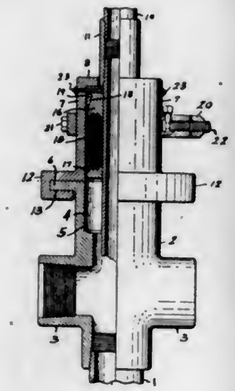
1. A system including a furnace, a radiator, pipe connections for delivering heat from the furnace to the radiator, a valve for controlling heat supply through the pipe, a plurality of thermostatic devices placed at different distances from the radiator and both adapted to be affected by heat delivered by said radiator, and means for controlling said valve by said thermostatic devices to control radiator temperature independently of the temperature of the source of heat supply, so that both thermostatic devices must be sufficiently cold to close in order to open the valve and so that when either thermostatic device is sufficiently hot the valve is closed and so that that thermostatic device nearest the radiator can obtain opening and closing of the valve when the other thermostatic device is sufficiently cold to close.

1,828,554. MACHINE FOR FORMING TUBULAR FABRICS. HORACE M. BUNKER, New York, N. Y., assignor to H. M. Bunker & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 15, 1929. Serial No. 347,305. 3 Claims. (Cl. 112—63.)



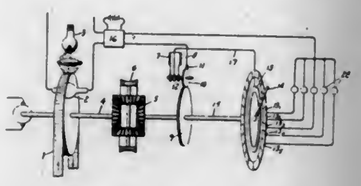
1. In a machine for forming tubular material from a strip, a stitching mechanism including a shuttle disposed within the confines of the tubiformed strip at the point of stitching, a motion transmitting element for the shuttle extending into the tubiformed strip between the spaced edges thereof and means in rear of the stitching mechanism for feeding the material including an idler feed element arranged within the confines of the tubiformed strip and a driven feed element cooperating therewith disposed beyond the confines of said tubiformed strip.

1,828,555. CASING HEAD FOR OIL AND GAS WELLS. WALTER L. CHURCH, Houston, Tex. Filed Mar. 8, 1929. Serial No. 345,411. 13 Claims. (Cl. 166—14.)



1. A casing head including a tubular spider adapted to be connected to a casing in a well bore, a bowl at the upper end of the spider having an internal seat therein, a sectional holder on the upper end of the spider formed of confronting sections having a slidable connection with the spider and movable toward and from each other, arcuate sealing means in the holder sections formed to surround an inner pipe and adapted to lodge on said seat, and means for actuating the holder sections toward and from each other.

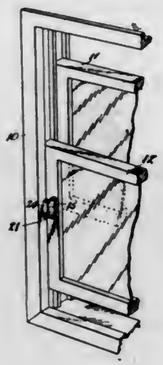
1,828,556. METHOD OF RAPID TRANSMISSION OF SIGNALS AND MESSAGES. MICHEL CRÉMER, Paris, France, assignor to General Electric Company, a Corporation of New York. Filed Dec. 14, 1929, Serial No. 414,190, and in France Jan. 10, 1929. 4 Claims. (Cl. 178—53.)



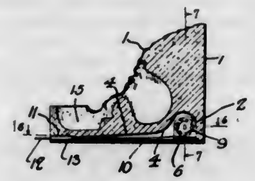
1. A signal transmitting system including movable means for producing electrical impulses dependent on the signals, movable means for recording said signals, a differential mechanism interposed between said movable means, and means responsive to the phase relation of said signals and said recording means for varying said differential mechanism.

1,828,557. WINDOW SASH FASTENER. WILLIAM N. CROPPER, Lexington, Ky. Filed June 9, 1930. Serial No. 460,027. 8 Claims. (Cl. 292—153.)

1. In a ventilating device for a window having upper and lower sliding sashes, the lower sash having an opening extending therethrough at a point spaced from its upper end, a bolt arranged in said opening and extending beyond the outer face of the sash for a substantial distance, a guard plate pivoted to the inner face of the lower sash adjacent the bolt and adapted to be swung over the inner end of the bolt to prevent its removal, and means to secure the pivoted guard plate in its operative position.



1,828,558. PHOTOGRAPH HOLDER. WALTER L. DANIEL, Lubbock, Tex. Filed Sept. 19, 1929. Serial No. 393,770. 4 Claims. (Cl. 40—85.)



1. An article of manufacture comprising a base and a representation of an object of interest carried thereby, a recess in said base shaped to receive a roller and having a narrow slot extending to the exterior, a spring roller mounted in said recess, a flexible strip wound on said roller having one end secured thereto and its free end extending through said slot, and a stiffening element on said free end normally housed in said slot to close its open end.

1,828,559. REFRIGERANT. CHRISTIAN DANTSIZEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 21, 1929. Serial No. 364,942. 1 Claim. (Cl. 252—5.)

A refrigerating system comprising a compressor, said system having oil therein for lubricating the parts of said compressor, a condenser, an evaporator, and a refrigerant circulated through the system by said compressor and coming in contact with said lubricating oil, said refrigerant consisting of methyl formate without admixture with ether or any other substance which would cause it to become miscible to any substantial extent with said lubricating oil.

1,828,560. POLYMERIZATION PRODUCT OF ACETYLENE AND PROCESS OF PRODUCING THE SAME. WILLEM CORNELIS DE LIEFDE, Amsterdam, Netherlands, assignor to Naamlooze Vennootschap: Electro Zuurstofen, Waterstoffabriek, Amsterdam, Netherlands. Filed Jan. 4, 1929, Serial No. 330,411, and in the Netherlands Jan. 9, 1928. 4 Claims. (Cl. 260—170.)

1. A process of manufacturing products with highly adsorptive properties from acetylene which comprises passing acetylene over cuprene to which a small amount of magnesium has been added, the said cuprene being at a temperature between 200 and 400° C.

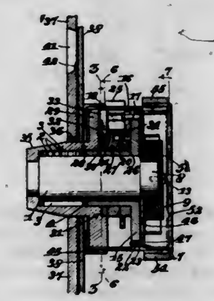
2. A process for manufacturing products with high adsorptive properties from acetylene, consisting in passing the acetylene over a catalyst from the group containing copper, nickel, iron and their oxides, to which substance a small amount of magnesium has been added, the said catalyst having a temperature between 200 and 400° C.

1,828,561. WRENCH. VANCE C. GARRISON, Nebish, Minn. Filed Nov. 11, 1930. Serial No. 494,962. 2 Claims. (Cl. 81—157.)



1. A quick adjustable wrench of the type described comprising a handle portion carrying a stationary jaw and a jaw guide, a jaw movable on said guide for cooperation with said stationary jaw, a transverse opening in said handle portion below said guide, an angularly disposed socket communicating through one vertical wall of said opening, a freely mounted pin, a spring in said socket for carrying one end of said pin, a worm screw rotatable on said pin, a ramp engaging face on the other end of the pin, and a ramp mounted in the wall of said opening opposite said socket, said movable jaw provided with a bevel toothed rack on its under edge for cooperation with said worm screw, said spring adapted to normally urge said pin for projecting the worm screw into cooperation with the toothed rack of the movable jaw, and causing the said ramp engaging face to climb the said ramp for increasing the locking effect of said worm screw with the rack substantially proportionally to the pressure brought to bear upon the work.

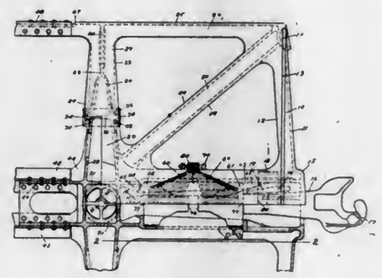
1,828,562. IGNITION CIRCUIT AND OTHER LOCK. VICTOR L. GILPIN, Baltimore, Md. Filed Nov. 12, 1930. Serial No. 495,240. 8 Claims. (Cl. 200—44.)



1. A lock switch comprising a contactor, circuit terminals, carrying means by which said contactor is supported,

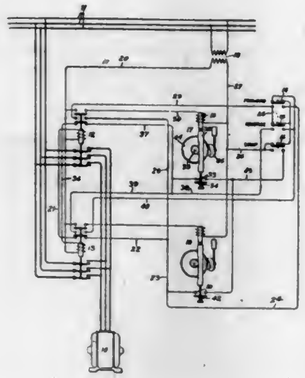
combination mechanism for moving the carrying means thus to shift the contactor into terminal engaging and disengaging positions, means establishing a connection between said mechanism and carrying means thus to enable the movement, and means for displacing the connecting means from said mechanism and enable independent movement of said carrying means.

1,828,563. CAR CONSTRUCTION. ERNEST G. GOODWIN, Pelham, N. Y., assignor to Standard Coupler Company, New York, N. Y., a Corporation of New Jersey. Filed May 1, 1930. Serial No. 449,043. 6 Claims. (Cl. 105—415.)



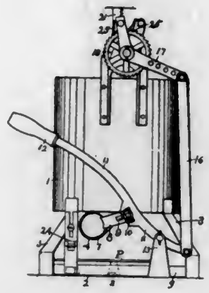
1. In an underframe, a one-piece casting including a channel-shaped end sill, a pair of channel-shaped side sills, a bolster, and diagonal channel-shaped braces extending from the bolster center to the junction of each side sill with the end sill, said diagonal braces having their webs continuous with the upper flange of each channel member and having their two vertical flanges extending to the web of the side sill and end sill.

1,828,564. SYSTEM OF MOTOR CONTROL. LLEWELLYN C. HAADESTY, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 26, 1929. Serial No. 342,749. 7 Claims. (Cl. 172—179.)



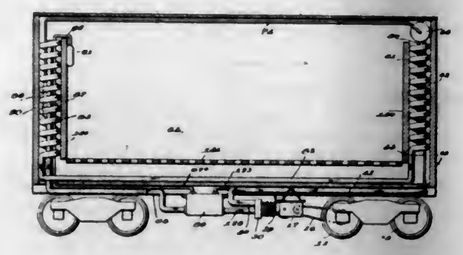
1. A system of motor control comprising a motor, means for establishing running connections for said motor for both directions of rotation, a stop device and means controlled thereby for interrupting said running connections and establishing plugging connections irrespectively of the previous direction of rotation, and time element means controlled by said stop means for opening said plugging connections after a predetermined interval.

1,828,565. CUP-CAKE DROPPING MACHINE. MARTIN HELLAND, Tacoma, Wash. Filed Jan. 18, 1930. Serial No. 421,847. 5 Claims. (Cl. 107—28.)



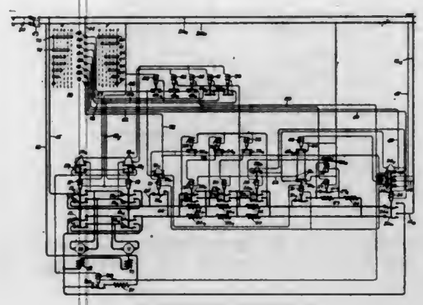
1. A cup-cake dropping machine including a dough container having an outlet opening, a cylinder associated with the opening for receiving dough from the container, a rotary valve within the cylinder for transmitting dough from the container to a receptacle placed therebeneath, means for exerting a constant pressure on the dough within the container, and means the initial movement of which simultaneously operates the valve into dough transmitting position and the pressure means whereby the pressure will be the same at each discharge of dough and the final movement of which closes the valve and cuts off the dough.

1,828,566. AUTOMATIC CONTROL FOR REFRIGERATORS. SAMUEL G. HOUSE and REX C. SNELL, Miami, Fla., assignors, by mesne assignments, to American Refrigerator Car Company, Miami, Fla., a Corporation of Florida. Filed Apr. 26, 1930. Serial No. 447,435. 11 Claims. (Cl. 62—115.)



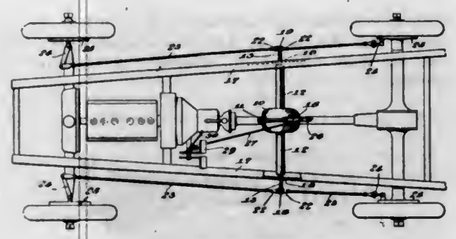
1. In a refrigerating unit, a compressor, condensing coils connected with the compressor, expansion coils having restricted communication with the condensing coils, a return pipe connecting the expansion coils with the intake of the compressor, a pressure control unit interpolated in the return pipe and including a valve, means associated with the expansion coils for actuating the valve for restricting the return of a refrigerating medium from the expansion coils to the compressor in accordance with a drop in temperature of the medium surrounding the expansion coils.

1,828,567. CONTROLLER FOR ELECTRIC MOTORS. BENJAMIN W. JONES and WILLIAM J. FLEMING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 9, 1929. Serial No. 398,509. 3 Claims. (Cl. 172—179.)



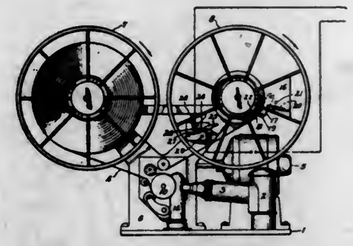
1. A controller for a plurality of series motors comprising a current limiting device, means for establishing line connections for the motors with their armatures in parallel and their field windings in series, means for subsequently establishing reverse line connections of the motors with their armatures and field windings in series with said current limiting device, a resistance device, means responsive to the establishment of reverse line connections to connect said resistance device in parallel circuit with the field windings to reduce the plugging voltage of the motors, and means for responding to a predetermined decrease in countervoltage to open said parallel circuit to increase the plugging torque of the motors.

1,828,568. BRAKE MECHANISM. HENRY F. KAPPERMAN, Bassett, Nebr. Filed Nov. 3, 1928. Serial No. 316,954. 1 Claim. (Cl. 188—204.)



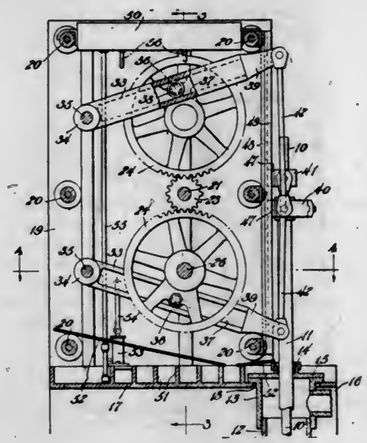
In a brake mechanism for automobiles or the like, a pair of shafts alined transversely of the chassis of an automobile and projecting outwardly thereof, levers secured at their centers on the outer ends of said shafts and operatively connected at their free ends to the brake members at the sides of the chassis to which they are complemental, a differential gearing operatively connecting the inner adjacent ends of said shafts, a housing enclosing said differential gearing and having the intermediate gear of the latter journaled at its inner side, said housing having oppositely extending portions to enclose the portions of the shafts extending between said gearing and the opposite sides of the said chassis and to give substantial support to both the housing and shafts, and means for rocking said housing to operate said differential gearing to first equalize the said brake members and to thereafter effectively apply the same.

1,828,569. FILM STOPPING APPARATUS. EDWARD W. KELLOGG, Moorestown, N. J., assignor to General Electric Company, a Corporation of New York. Filed June 30, 1930. Serial No. 464,865. 4 Claims. (Cl. 242—55.)



1. In reproducing apparatus employing a record film, a reel having a flange portion and a relatively rotatable hub portion upon which the film is adapted to be wound, and means responsive to a predetermined unwinding of the film for causing the cessation of further movement of the flange portion of the reel.

1,828,570. OPERATING UNIT FOR DOUBLE-ACTING PUMPS. ALBERT H. KENNEDY, Rockport, Ind. Filed Jan. 13, 1930. Serial No. 420,531. 5 Claims. (Cl. 74—14.)

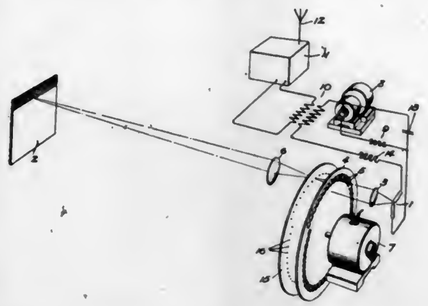


1. In a double-acting, overlapping stroke pump, a pair of concentric sucker rods each having a crosshead near its upper end; a frame; a crosshead guide mounted on the frame; separate driving gears between the sides of the frame; rocker arms arranged one above the other in the frame; anti-friction wrist pin connections between the rocker arms and the gears; yokes on the ends of said arms straddling said crosshead guide; a pair of pivoted links connecting the yoke of the lower arm to the upper crosshead; and a pair of links connecting the upper arm to the lower crosshead, one pair of links being arranged to operate between the other.

1,828,571. PICTURE TRANSMISSION APPARATUS. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 17, 1930. Serial No. 453,367. 3 Claims. (Cl. 178—6.)

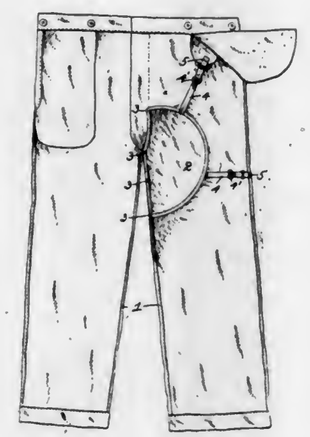
1. Picture receiving apparatus comprising an arc lamp of the flaming arc type, means for modulating the cur-

rent supplied to the lamp in accordance with the received signal, a screen, means adapted to be operated in synchronism with the sending apparatus for projecting on



the screen a spot of light from the arc of said lamp, and means for excluding from the screen light from the electrodes.

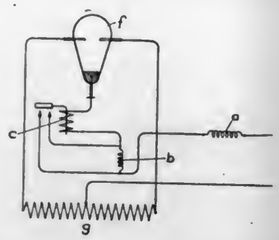
1,828,572. ADJUSTABLE TROUSERS PROTECTOR. MAUDE S. LAWRENCE, Alameda, Calif. Filed Oct. 15, 1930. Serial No. 488,904. 2 Claims. (Cl. 2—231.)



1. A detachable protector for men's trousers, comprising a water-proof sheet, means carried by one part of said sheet for detachably connecting the protector to the inside of a leg of trousers in the region of the crotch thereof, and adjustable tapes, each having one of its ends attached to another part of the protector and its other end provided with means for its detachable connection to the inside of a leg of the trousers at a point distant from the crotch, thereby to hold the protector against the inside of the trousers leg.

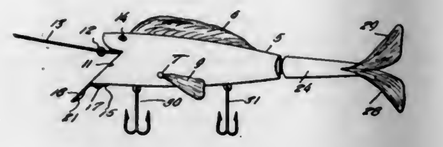
1,828,573. ELECTRICAL APPARATUS. GUSTAV W. MÜLLER, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 6, 1928, Serial No. 317,644, and in Germany Feb. 25, 1928. 3 Claims. (Cl. 175—363.)

2. In combination, alternating current terminals and a direct current circuit, a mercury arc rectifier connected to transmit power between said terminals and said circuit, two inductance coils connected in series with said circuit, one of said coils being capable of carrying the full load current in said circuit and the other of said coils being capable of carrying only a predetermined percentage



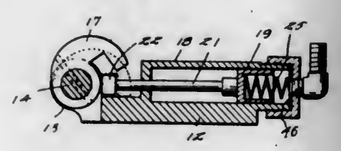
thereof, and means for short-circuiting said other coil when the load current exceeds said predetermined percentage.

1,828,574. MINNOW PLUG BAIT. JOSEPH NEUKAM, Jasper, Ind. Filed Sept. 12, 1930. Serial No. 481,559. 3 Claims. (Cl. 43—46.)



1. A lure comprising a jointed buoyant body, snaring hooks connected to the body, a plate on the forward portion of the body declining forwardly from the body, said plate having a notch therein, and the edges of the notch being turned inwardly to cause the body to wabble.

1,828,575. STARTER MECHANISM LOCK. CLAUDE NOLAN and WILLIAM J. RAY, Jacksonville, Fla. Filed Dec. 3, 1928. Serial No. 323,529. 7 Claims. (Cl. 74—83.)

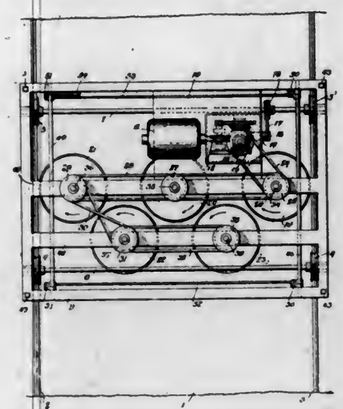


1. In a locking device for the starting mechanism of an automobile, a rock shaft, means for rocking the shaft, a switch operating arm on the shaft a forked arm on the shaft, and a block operable by the suction of an automobile engine into position to be engaged by the furcations of said arm and thereby prevent rocking of the shaft, and means for operating said block into a position out of the path of said furcations, to permit rocking of the shaft.

1,828,576. TROWELING MACHINE. THOMAS PALATINI, Belmar, N. J. Filed May 20, 1929. Serial No. 364,528. 3 Claims. (Cl. 94—45.)

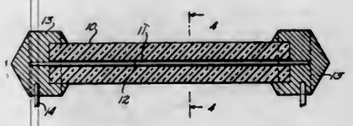
1. In a troweling machine, a plurality of troweling disks, means for rotating said disks and a pair of frames

for supporting and moving the disks during their operation, one of said frames being provided with traction wheels and the other frame being provided with threaded members for varying the distance between the respective



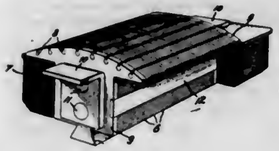
frames, and means coacting with both frames for quickly elevating one frame and all of said disks, whereby the machine may be moved from one plate to another without the disks contacting with the ground.

1,828,577. ELECTRICAL RESISTANCE DEVICE. HAROLD PENDER, Merion, Pa., assignor to International Resistance Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 4, 1929. Serial No. 360,343. 3 Claims. (Cl. 201—75.)



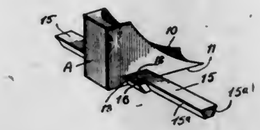
1. In an electrical resistance, in combination, a rod of insulating substance of good heat conducting quality having a capillary passage longitudinally therethrough, a resistance element in said passage comprising a filament of insulating substance coated with carbon, and molded metal end pieces on the ends of the rod sealing the ends of the capillary passage and having the filament embedded therein said molded metal embracing the outside of the said rod, said resistance element being in substantial contact with the wall of and substantially fitting the capillary passage.

1,828,578. SYNCHRONOUS MOTOR. LELAND W. RIGGS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 9, 1929. Serial No. 406,033. 5 Claims. (Cl. 172—120.)



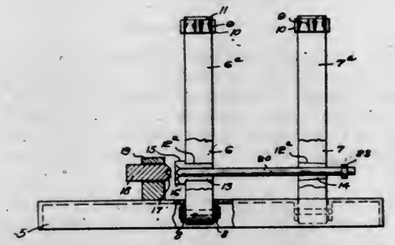
2. In a synchronous motor comprising a rotor of the open end ring type, a starting winding incorporated in each of the individual pole structures of the rotor comprising a short circuiting connection for the currents induced in the pole face by substantially all the cross axis flux.

1,828,579. WHEEL CHOCK. CLIFFORD L. SNYDER, Detroit, Mich., assignor to Evans Products Company, Detroit, Mich. Filed Aug. 15, 1930. Serial No. 475,601. 8 Claims. (Cl. 188—32.)



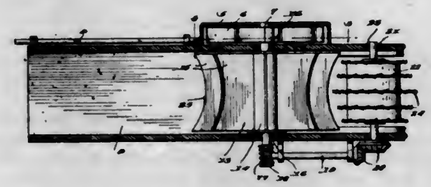
1. The combination with an anchored rail, of a chock block having a bottom groove received on the rail, and means cooperating with the rail and block to anchor the block on the rail.

1,828,580. DEVICE FOR SHARPENING ROCK DRILLS. BRADY S. VETTER, Moorefield, W. Va. Filed July 3, 1929. Serial No. 375,868. 6 Claims. (Cl. 76—5.)



1. A device of the character described, comprising a pair of gripping members adapted to grip a drill shank and disposed in such spaced relation with respect to each other that one of said gripping elements grips the hot portion of the shank while the other grips the cold portion of the shank, a guide and a dolly movable through said guide toward the drill held by said clamps.

1,828,581. COTTON PICKER HEAD. FRANK H. WATSON, Jonesboro, Ark. Filed Jan. 15, 1930. Serial No. 420,963. 10 Claims. (Cl. 56—32.)

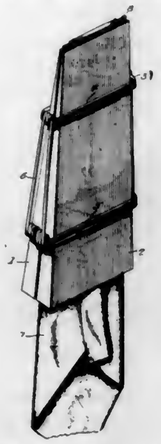


1. In a picker head, an active picking element being of an oval barrel-shape and having serrations.

1,828,582. PRESSING DEVICE. ANTHONY E. WEINGARTNER, Bethlehem, Pa. Filed Dec. 27, 1929. Serial No. 416,882. 3 Claims. (Cl. 100—57.)

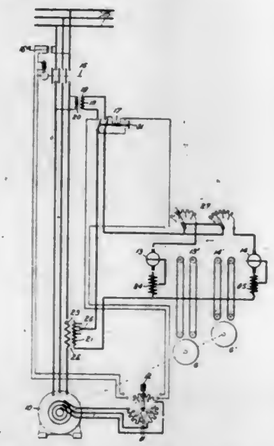
3. In a press, a plurality of compression members having opposed pressing faces, said members when assembled with said faces in operative relation forming a tapered

body, and means for holding said members together under pressure including a pair of substantially rigid bands



adapted respectively to closely embrace said tapered body at spaced points longitudinally thereof, and means for flexibly connecting said bands.

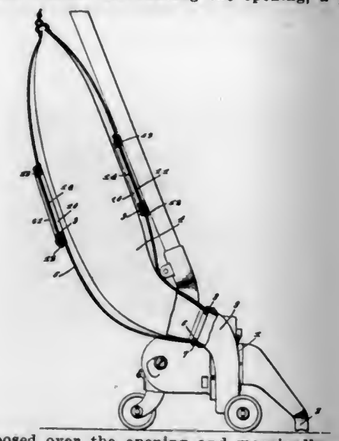
1,828,583. MOTOR CONTROL SYSTEM. PAUL WEISKE and KONRAD RUPPRECHT, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Original application filed Jan. 27, 1925, Serial No. 5,042, and in Germany Feb. 11, 1924. Divided and this application filed May 12, 1930. Serial No. 451,549. 11 Claims. (Cl. 172—239.)



7. In a motor control system, the combination of a driving motor, a pair of feed motors arranged to separately impose load upon the driving motor, each of said feeding motors being of the single phase alternating current commutator type and having windings arranged to vary the speed of the motor inversely with variations in load thereon, whereby the separate loads imposed upon said driving motor by said feeding motors are automatically equalized.

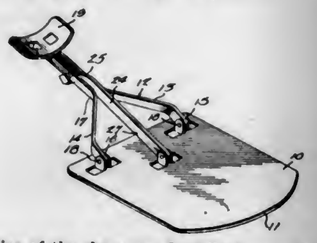
1,828,584. ATTACHMENT FOR VACUUM CLEANERS. PETER J. ANDERSEN, San Francisco, Calif. Filed Apr. 18, 1930. Serial No. 445,446. 4 Claims. (Cl. 183—51.)

1. A vacuum cleaner bag unit comprising an inner bag of pervious material, an outer bag of impervious material within which the inner bag is arranged, the bags having mouths for connection to the delivery end of the suction spout of the cleaner, the outer bag having an opening therein, a frame member surrounding the opening, a pervious



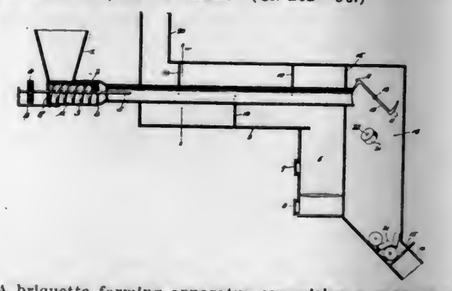
sheet disposed over the opening and marginally retained in place by the said frame member, and means upon the said sheet for supporting a pad impregnated with disinfectant.

1,828,585. UNDERTAKER'S DEVICE. EVERETTE W. APPLING, Joplin, Mo. Filed May 2, 1930. Serial No. 449,284. 2 Claims. (Cl. 27—13.)



1. A device of the character described comprising a body pad, a pair of spaced arms pivotally connected at one end to said pad, a head support adjustably secured adjacent the other ends of said arms, the space between the portions of said arms adjacent said head support being substantially less than the space between the portions of said arms adjacent their pivot points, a member connected between said arms in the first mentioned space, and a supporting tongue pivotally connected at one end to said pad, said tongue being provided with means for engaging said connecting member to secure said arms in selected positions.

1,828,586. APPARATUS FOR MAKING BRIQUETTES. HUGH ARCHBALD, Philipsburg, Pa. Filed May 14, 1925. Serial No. 30,343. 1 Claim. (Cl. 202—96.)



A briquette forming apparatus comprising a passage, a chamber surrounding said passage, a furnace connected

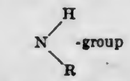
with said chamber, means for feeding briquette forming material through said passage from one end thereof to the other end thereof, a coking chamber for receiving the discharge from said passage, and means adjacent said other end for severing the discharge from said passage.

1,828,587. MANUFACTURE OF FACTICE AND THE LIKE. JEAN BAER, Basel, Switzerland. Filed June 10, 1929, Serial No. 369,940, and in Switzerland June 19, 1928. 2 Claims. (Cl. 106—23.)

2. A process for the manufacture of sulphuretted oils, in particular factice soluble in hydro-carbons, consisting in heating oils with a caoutchouc like body obtained from the reaction of ethylenedichloride and calcium polysulphide.

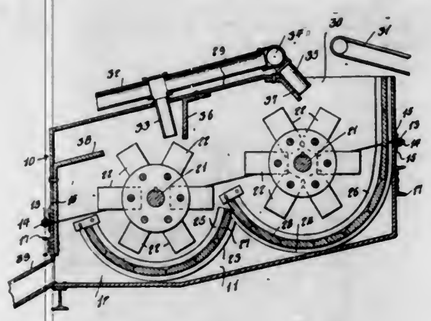
1,828,588. AMINOANTHRAQUINONE DERIVATIVES AND PROCESS OF MAKING SAME. OSCAR BALLY and PAUL GROSSMANN, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Aug. 13, 1927, Serial No. 212,838, and in Switzerland Aug. 26, 1926. 4 Claims. (Cl. 260—60.)

1. As a step in the production of α-amino anthraquinone derivatives, the conversion of an NH_2-group to an



(R being alkyl or aralkyl) by heating an α-aminoanthraquinone with an aldehyde and formic acid.

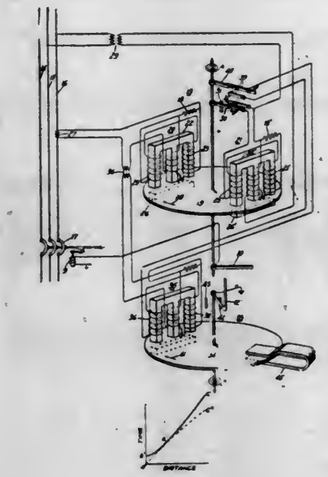
1,828,589. CLAY BALL DISINTEGRATOR. LEE O. BATES, Dallas, Tex. Filed July 3, 1930. Serial No. 465,730. 3 Claims. (Cl. 83—11.)



1. A disintegrator of the class described comprising a trough, a disintegrator operable therein, said trough having a top wall open at a portion thereof to form a filling opening, means to supply water into the trough, plate means adjacent the latter means carried by the roof of the trough to avoid undue splashing of the water and ejection of the contents of the trough, said trough having a discharge pipe, and a guard plate above said discharge pipe and within the trough.

1,828,590. PROTECTIVE APPARATUS. JOSEF BIERMANNS, Karlshorst, Germany, assignor to General Electric Company, a Corporation of New York. Filed Sept. 19, 1928, Serial No. 306,951, and in Germany Oct. 6, 1927. 9 Claims. (Cl. 175—294.)

1. In combination with an electric circuit and circuit interrupting means therefor a relay for controlling said interrupting means including a movable member, a cooperating member arranged for a limited movement, means connected to be energized in accordance with a current and a voltage of the circuit for actuating said movable mem-



ber and means operative substantially simultaneously with the actuation of said movable member for moving the cooperating member away from the movable member.

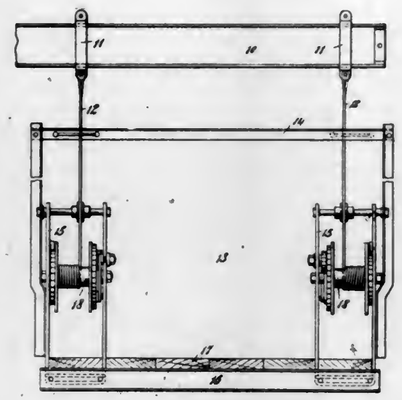
1,828,591. PROCESS OF TREATING FATTY MATERIALS TO OBTAIN FATS OR OILS THEREFROM. HENRIK BULL, Bergen, Norway. Filed Dec. 8, 1927, Serial No. 238,726, and in Norway Dec. 11, 1926. 3 Claims. (Cl. 87—6.)

1. Process for the manufacture of oils from fish livers and blubber of sea animals comprising the steps of producing an intimate mixture of the oil bearing material in a finely disintegrated condition and a considerable proportion of a solid salt readily soluble in water and able to combine chemically with water, the proportion of solid waterbinding salt being at least sufficient to produce with the water of the oil bearing material a saturated solution, and subjecting the said intimate mixture of oil bearing material and salt to centrifugal treatment to separate the liquid matter of said mixture, the said liquid matter comprising oil, from the solid residuum containing the cell tissue of the treated oil bearing material.

1,828,592. PREPARATION OF DYESTUFFS WHICH ARE OF VALUE FOR OBTAINING FAST TINTS ON THE DIFFERENT FIBERS AND PROCESS OF MAKING SAME. MAX BOMMER, GUILLAUME DE MONTMOLLIN, and JAROSLAW FRÖHLICH, Basel, and FRITZ GRIESHABER, Riehen, near Basel, and WOLFGANG JAECK, Basel, and FRIEDRICH FELIX, Riehen, near Basel, Switzerland, assignors to the Firm: Society of Chemical Industry in Basle, Basel, Switzerland. Filed Mar. 11, 1926, Serial No. 94,082, and in Switzerland Mar. 20, 1925. 7 Claims. (Cl. 8—6.)

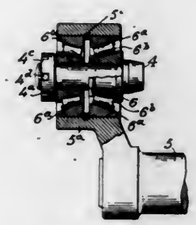
1. As new articles of manufacture the dry in water easily dispersable preparations containing in mixture dry water insoluble dyestuffs as well as at least 20 per cent. of dry sulfite cellulose waste liquor as principal constituents, which products form yellow to dark brown, red, blue and green powders, which, when introduced into lukewarm water, yield yellow to orange, red, violet, blue and green colloidal solutions or suspensions.

1,828,593. ROTATING MEANS. PATRICK J. CANNON, New York, N. Y. Filed June 8, 1929. Serial No. 369,435. 6 Claims. (Cl. 304—18.)



1. A machine comprising a frame, an element rotatably mounted in said frame, and a lever system pivoted in said frame, in combination with separate ratchet mechanism carried by said lever system operated through different effective lever arms and adapted to cooperate with said element to rotate the latter at different speeds and for different loads.

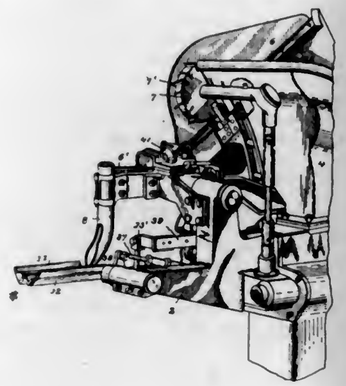
1,828,594. STEERING GEAR ROLLER PIN. FRANKLIN F. CHANDLER, La Fayette, Ind., assignor to Ross Gear & Tool Company, La Fayette, Ind., a Corporation of Indiana. Filed Sept. 30, 1929. Serial No. 396,227. 1 Claim. (Cl. 74—79.)



In a steering gear having a spirally grooved actuating member, a rocker shaft, and an arm on said shaft projecting beside the actuating member and having an opening parallel with the rocker shaft and opposite the actuating member, and an annular groove in the wall of said opening intermediate its ends; anti-friction bearings disposed in said opening at opposite sides of said groove, a roller pin having a shank rotatably mounted in said bearings and a tapered head engaging the groove in the actuating member; means securing the roller pin in the anti-friction bearings, and a spring-ring in said groove cooperating with said means to prevent axial movement of the pin and bearings in the opening.

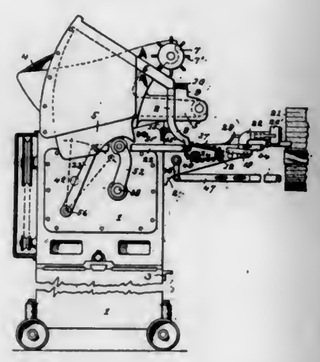
1,828,595. FEEDING MECHANISM. ROBERT C. DANLY, Chicago, Ill., assignor to Danly Machine Specialties, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1930, Serial No. 425,172. Renewed Sept. 3, 1931. 23 Claims. (Cl. 51—215.)

1. In a feeding mechanism of the type described, the combination of primary and secondary work receiving troughs pivotally mounted on the base of the mechanism, a hinge connection securing the troughs together in side by side relation, the secondary trough adapted for aligned relation with the grinding throat of a grinding mechanism, and the primary trough adapted for aligned relation with a supply source of unfinished work, means for imparting



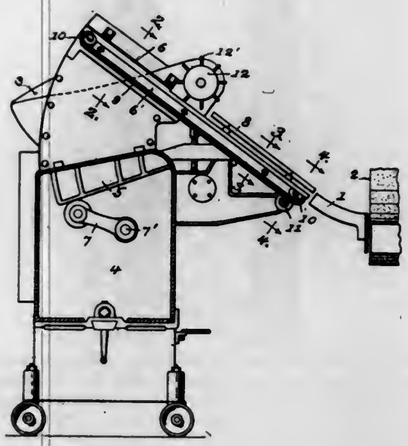
an upward tilting movement to said troughs, means for effecting a tilting movement of the primary trough towards the secondary trough, and a reciprocable plunger moving in the secondary trough and adapted to move a piece of work from the same into the grinding throat of a grinding mechanism.

1,828,596. FEEDING MECHANISM. ROBERT C. DANLY, Chicago, Ill., assignor to Danly Machine Specialties, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1930, Serial No. 425,173. Renewed Sept. 3, 1931. 25 Claims. (Cl. 51—215.)



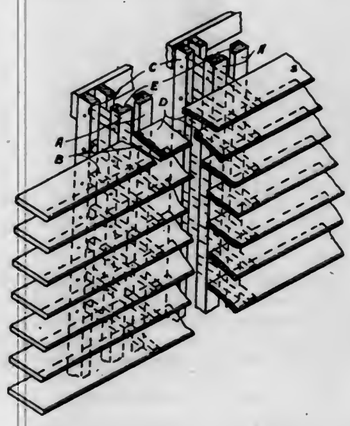
1. In a feeding mechanism of the type described, the combination of a supporting base, a horizontal work holding platform mounted on said base, a single delivery supply means mounted on said base in operative relation to said platform, a reciprocating carrier associated with said mechanisms, and provided with work grasping jaws of the yieldingly held closed type, means for imparting a rising initial movement and a final falling movement to the jaw carrying end of said carrier in its delivery stroke, and corresponding reverse movements on its return stroke, and means for closing the grasping jaws in the return condition of the carrier and for opening said jaws in the delivery condition of the carrier.

1,828,597. FEEDING MECHANISM. ROBERT C. DANLY, Chicago, Ill., assignor to Danly Machine Specialties, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1930, Serial No. 425,174. Renewed Aug. 28, 1931. 6 Claims. (Cl. 51—215.)



1. In a feeding mechanism of the type described, the combination of a work holding hopper and its vertically moving selector slide, of an inclined runway, comprising a fixed longitudinal section formed with an inclined upper face and a longitudinal section mounted on the inclined face of the fixed section and having lateral adjustment on the inclined face of said section.

1,828,598. VENETIAN BLIND. LOUIS ERWIN D'ARX, Clayfield, Brisbane, Queensland, Australia. Filed Feb. 21, 1929, Serial No. 341,730, and in Australia Aug. 2, 1928. 2 Claims. (Cl. 156—17.)

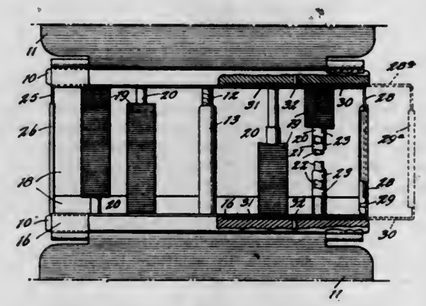


2. In a Venetian blind including uprights having downwardly facing notches, levers pivoted to said uprights, one above the other, vertical rods connected to the ends of said levers, and horizontal slats secured on the other ends of the levers, a handle member pivotally connecting one of the uprights and one of the rods, and a pawl pivotally connected at the pivotal connection between the handle member and rod, and engaging said notches to retain the blind in adjusted position.

1,828,599. AZO-DYESTUFFS OF THE PYRAZOLONE SERIES AND PROCESS OF MAKING SAME. GUILLAUME DE MONTMOLLIN, Basel, and MAX SCHMID, Riehen, near Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Dec. 16, 1927, Serial No. 240,617, and in Switzerland Dec. 24, 1926. 6 Claims. (Cl. 260—87.)

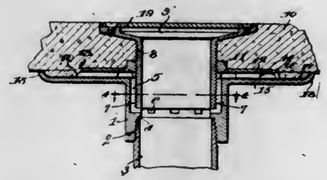
1. Process for the manufacture of new azo-dyestuffs, consisting in coupling such aromatic, unsulphonated diazo-compounds of the benzene series, which contain in the aryl nucleus in o-position to the diazo-group a nitro-group, with 3-methyl-5-pyrazolone.

1,828,600. LOOSE LEAF LEDGER BINDER. CHARLES A. FINLEY, Rutherford, N. J., assignor to Boorum & Pease Company, New York, N. Y., a Corporation of New York. Filed Nov. 15, 1929. Serial No. 407,535. 11 Claims. (Cl. 129—36.)



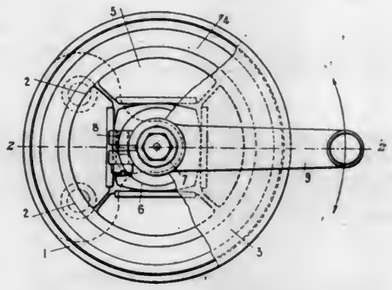
1. In a loose leaf binder having a pair of clamping bars, means on the clamping bars outside the sheets adapted to move said clamping bars relatively to each other, in combination with a pair of telescopic guide posts mounted on said clamping bars outside said sheets and in a plane approximately at right-angles to the length of the clamping bar, and adapted to keep the planes of the clamping bars parallel to each other.

1,828,601. FLOOR DRAIN. RICHARD T. FRYE, Blauvelt, N. Y. Filed Mar. 18, 1929. Serial No. 347,956. 3 Claims. (Cl. 285—37.)



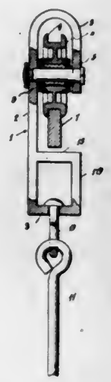
1. A drain comprising a hollow body with interiorly threaded end portions confronting a shoulder formed with an outlet communicating with a seepage channel formed in one of the threaded portions, a flange on the body having a curled up peripheral edge defining a dish into which a sheet of water-proofing material is to be lapped, a drain receiver having a nipple with a full-length thread screwed upon one of the threaded ends and defining a side closure for the channel, and a clamp screwed upon the threads of the nipple, being peripherally curled down to bind upon said sheet of material and define a seepage chamber with which the channel has communication and having an opening for the admission of seepage to said chamber.

1,828,602. SHOCK ABSORBER FOR VEHICLES. DANTE GROSSO, Sagliano, Micca, Biella, Italy, assignor to Officine Meccaniche Fratelli Grosso & Tribola, Sagliano Micca, Biella, Italy. Filed Oct. 12, 1928, Serial No. 312,079, and in Italy Oct. 13, 1927. 12 Claims. (Cl. 188—130.)



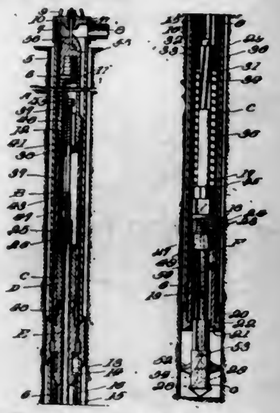
1. In a device of the class described the combination, with a member having a circumferential frictional surface, of a member provided with an eccentric surface pivotally mounted concentrically of said frictional surface, and a floating shoe member interposed between said eccentric surface and said frictional surface, said shoe member being frictionally engaged by said eccentric surface and being adapted to follow its angular displacements in both directions, and normally having a limited portion of its surface outwardly movable in relation to said pivotally mounted member, towards said frictional surface, when the tangential force exerted by said eccentric surface is sufficient to overcome the frictional resistance between said surface and the surface of said shoe member.

1,828,603. TROLLEY MEAT HOOK. CECIL C. HOLLEY, Charleston, W. Va. Filed Sept. 18, 1930. Serial No. 482,901. 1 Claim. (Cl. 105—150.)



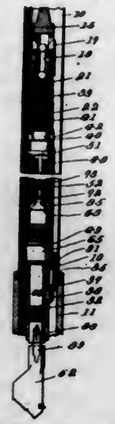
A trolley meat hook, comprising a bar having one of its ends formed into a U-shaped portion, a bearing axle supported by said U-shaped portion, a wheel journaled on said axle and provided with a circumferentially grooved tread adapted to travel on an overhead track, the other end of said bar having an eye portion consisting of a laterally offset portion adapted to support a meat hook, an upturned angular extension on the extremity of said offset portion having a side extended towards the bar and adapted to be positioned under the track to prevent the wheel leaving the track.

1,828,604. HYDRAULIC DRILL. IRA B. HUMPHREYS, Denver, Colo. Filed Sept. 19, 1924. Serial No. 738,672. 18 Claims. (Cl. 121—30.)



4. In a drill, means for supplying liquid pressure to said drill, a cylinder, a piston adapted for reciprocation in said cylinder and provided with a piston rod carrying a drill, said pressure acting constantly on said piston to lift the same, means to alternately direct a portion of said pressure above the said piston, and resilient means compressed by the upward movement of said piston and adapted to drive said piston downwardly at a predetermined time.

1,828,605. DRILLING MECHANISM. IRA B. HUMPHREYS, Denver, Colo. Filed July 29, 1925. Serial No. 46,769. 21 Claims. (Cl. 121—30.)

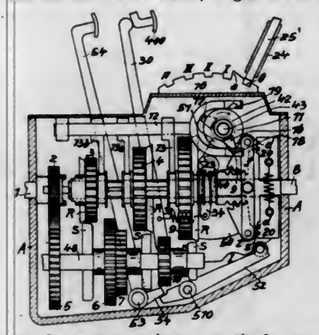


1. In a hydraulic drill, a reciprocating piston in operative engagement with a drill bit, means to raise said piston, and a cylindrical helical spring compressed by the upward movement of the piston for rotating the drill and for driving said piston and drill bit downwardly.

1,828,606. AUTOMATIC VARIABLE SPEED GEAR. EDUARD JANIK, Vienna, Austria. Filed Dec. 22, 1930, Serial No. 504,124, and in Austria Dec. 31, 1929. 11 Claims. (Cl. 74—97.)

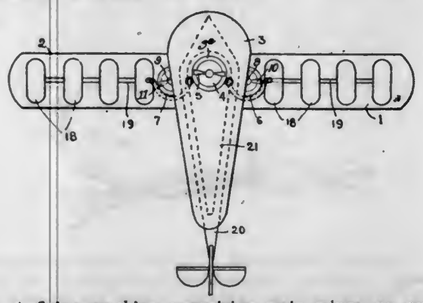
1. In combination with a variable speed gear comprising a driving shaft, a driven shaft, a clutch and a transmission shaft intermediate the first named two shafts, a gear wheel on the driving shaft and a gear wheel on the intermediate shaft engaging into the said gear wheel on the driving shaft, gear wheels slidably mounted on the driven shaft, gear wheels mounted on the intermediate

shaft, a centrifugal governor mounted on the driven shaft and means operatively connected to the said governor for displacing the gear wheels on the driven shaft whereby any one of these last named gear wheels may be brought into and out of engagement with the associated gear wheel on the intermediate shaft; a gas lever and means



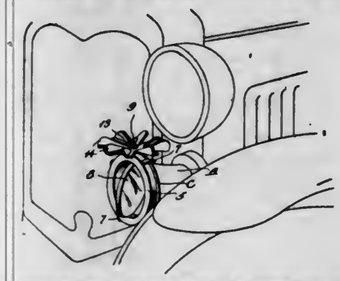
comprising at least one spring operatively connecting the said gas lever and the said centrifugal governor and means for increasing the tension put on the said spring progressively as the gas lever is moved progressively in one direction whereby the resistance to the centrifugal force of the said centrifugal governor is progressively increased.

1,828,607. DIRIGIBLE HELICOPTER. YOUNG HO KOUN, New York, N. Y. Filed July 10, 1928. Serial No. 291,586. 3 Claims. (Cl. 244—7.)



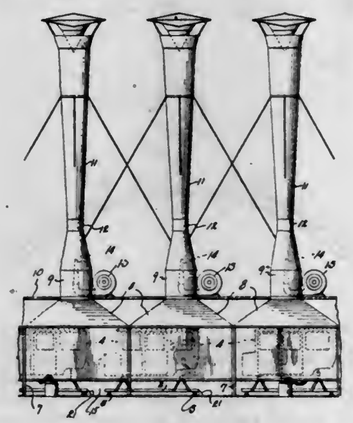
1. A flying machine comprising main wings, an auxiliary wing above said main wings, all of said wings having openings, a motor beneath each of said openings, said motors having a propeller, means for rotating said motors upon horizontal axis, gas bags mounted upon said wings, a fuselage beneath the main wings, a gas tank beneath said fuselage, tubes connecting said gas bags and said tank and landing wheels beneath said tank.

1,828,608. INTERRUPTER FOR WARNING SIGNALS. RICHARD F. MACK, Astoria, N. Y. Filed Mar. 12, 1930. Serial No. 435,285. 4 Claims. (Cl. 116—137.)



1. The combination with an audible signaling device including a horn of the vibratory air column type for producing a signal, of means movably mounted in the horn outlet for interrupting the propagation of the vibrations of the air column to vary the quality and character of the sound emitted.

1,828,609. SPRAY BOOTH. RUSSELL C. MAHON, Detroit, Mich., assignor to The R. C. Mahon Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 21, 1928. Serial No. 307,485. 12 Claims. (Cl. 91—60.)



1. A tunnel type spray booth consisting of a pair of spaced substantially parallel side walls, a series of hoods arranged in succession and connecting the side walls at the top, a discharge stack for each hood, the said side walls being each spaced from the floor line providing for ingress of air on opposite sides inwardly and upwardly through the discharge stacks, a track way for articles extending through the tunnel thus formed substantially equi-distantly between the side walls and providing a space for operators each side of the track way wherein the operator is positioned in the air current, each side wall being provided with a series of apertures near the top, and an artificial light mounted exteriorly of the spray booth and arranged in such relation with each aperture as to illuminate the articles on the track way.

1,828,610. RESTRAINING DEVICE. CANUTE H. MICKELSEN, Lava Hot Springs, Idaho. Filed May 19, 1930. Serial No. 453,826. 4 Claims. (Cl. 119—142.)



4. A bull restraining device including a yoke which is U-shaped in cross section which has its ends directed at an outward angle therefrom and terminating in ball heads, a metal head plate having a U-shaped end received in the yoke and removably and adjustably secured thereto, a pad on the yoke below the head plate, a removable poke fixed on the said end the head plate, a face plate having its

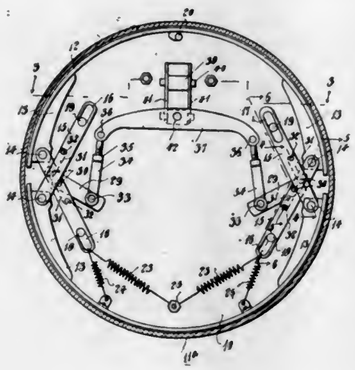
upper end merging into a poke removably and adjustably secured to the head plate, a bar, means for adjustably securing the bar to the face plate, a U-shaped element swivelly supported on the bar, flexible elements between the ends of the bar and the sides of the yoke, and a throat latch removably and adjustably secured to the side arms of the yoke.

1,828,611. GARMENT HANGER. ARCHIE R. MIKOTA, Minneapolis, Minn., assignor of one-half to Mae V. Landis, St. Paul, Minn. Filed Apr. 7, 1930. Serial No. 442,120. 2 Claims. (Cl. 223—64.)



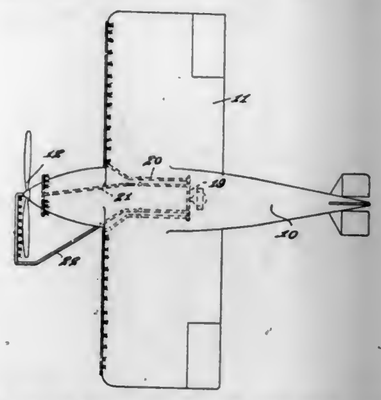
1. A garment hanger comprising a main bow-shaped supporting member having at its crown suspending means and on its ends a pair of inturned secondary supporting members which overlie the main supporting member, are vertically spaced therefrom and substantially concentric therewith, said secondary supporting members having on their inner ends raised stops spaced materially from said suspending means to permit a sleeveless garment to be placed on the main supporting member under the secondary supporting members and held by the transverse portions of the hanger between its main and secondary members from sliding therefrom, said stop being arranged to prevent a garment on the secondary members from sliding thereon toward the suspending means.

1,828,612. BRAKE MECHANISM. RAY C. MOUNTZ, Altoona, Pa. Filed Aug. 21, 1930. Serial No. 476,912. 6 Claims. (Cl. 188—78.)



1. Mechanism for operating adjacent brake shoe portions, comprising anchor links pivoted to the brake shoe portions, a support, pin and slot connections between said support and said links, an operating member, means to move the operating member, and links connected to the operating member and to the said anchor links.

1,828,613. ICE REMOVING SYSTEM. SWAN E. NORTON, Rockford, Ill. Filed July 26, 1930. Serial No. 470,983. 2 Claims. (Cl. 244—31.)



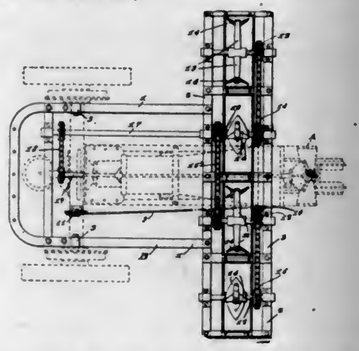
1. A coating system for vehicles comprising a pressure dispensing receptacle, pipe sections leading therefrom, and a spray pipe having communication with the pipe sections having discharge openings located immediately in advance of the propeller blade and terminating at the axis thereof.

1,828,614. ELECTRIC CONDUCTOR. CARL F. OBERMAIER, York, Pa., assignor to General Electric Company, a Corporation of New York. Filed Mar. 10, 1926. Serial No. 93,712. 4 Claims. (Cl. 173—264.)



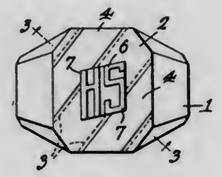
1. The combination with a multiple conductor cord comprising a plurality of insulated conductors, of an attenuated flexible member wrapped around one of said conductors so as to reduce the friction between said conductors and thereby increase the flexibility of the cord, and an outer covering surrounding said conductors.

1,828,615. COTTON CHOPPER. ALLEN A. PEARCE, Beeville, Tex. Filed Nov. 1, 1930. Serial No. 492,843. 2 Claims. (Cl. 97—47.)



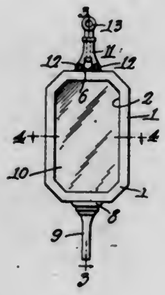
1. In combination with a tractor, a frame comprising a rear part and a transversely arranged front part, means for pivotally connecting the rear part to the rear part of the tractor, a plurality of shafts journaled in the transverse part, choppers carried by the shafts, means for rotating one of the shafts from the engine of the tractor, means for communicating the movement of this shaft to the other shafts and means for adjusting the front part of the frame toward and away from the ground.

1,828,616. FINGER RING AND THE LIKE. HENRY W. PETERS, Boston, Mass. Filed Sept. 16, 1929. Serial No. 393,048. 4 Claims. (Cl. 63—15.)



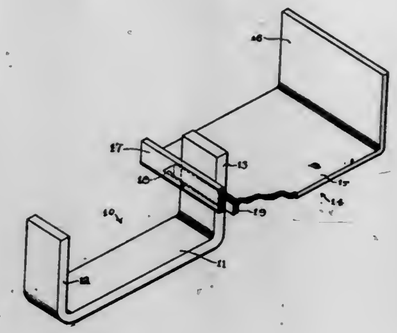
1. An article of jewelry including a base having a groove open at its ends, an object insertable endwise into and adapted to fit snugly within the groove, said object having a notch or the like in one edge, a signet plate soldered on the base and having a portion overlying the notched portion of the object, and means depending from the signet plate and seated in the notch for holding said object against withdrawal.

1,828,617. KEY CHARM. HENRY W. PETERS, Boston, Mass. Filed Sept. 16, 1929. Serial No. 393,049. 3 Claims. (Cl. 63—23.)



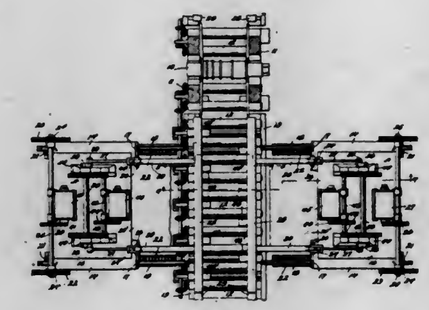
1. A key charm including connected frames forming a box closed at the sides, a stem connected to one end of the box and bridging the same, a member insertable into the box through the other end and bearing against the stem and the sides, said member and box being coextensive in length and flush at their ends and removable means fixedly connected to that end of the box remote from the stem for retaining the inserted member and for connecting the box to a support.

1,828,618. ANCHOR FOR FURNACE LINING. IVON S. PIETERS, Chicago, Ill., assignor to Plibrico Jointless Firebrick Company, Chicago, Ill., a Corporation of Illinois. Filed July 21, 1926. Serial No. 123,825. 14 Claims. (Cl. 72—101.)



1. In a furnace, a retaining wall, a lining therefor, and anchor means holding the lining to the wall, said anchor means being adapted to permit expansion and contraction of the lining independently of the wall.

1,828,619. MANIPULATOR FOR INGOTS, BLOOMS AND THE LIKE. JOHN D. PUGH, Baltimore, Md. Filed Sept. 16, 1926. Serial No. 135,913. 31 Claims. (Cl. 80—48.)

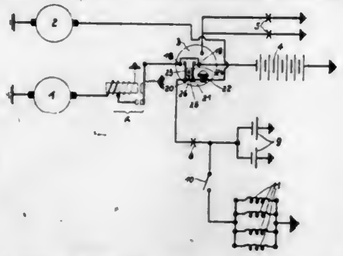


2. A manipulator unit for rolling mills comprising a trolley mounted on tracks at the side of the mill table, a side guard mounted on said trolley for vertical movements, a rack parallel with the track, a pinion on the trolley meshing with said rack, an electric motor on the trolley geared to said pinion, and a second electric motor on the trolley for independently operating said guard rail.

1,828,620. ELECTRICAL IGNITION SYSTEM FOR INTERNAL COMBUSTION ENGINES. MAX RALL, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed June 29, 1928, Serial No. 289,166, and in Germany July 14, 1927. 4 Claims. (Cl. 290—37.)

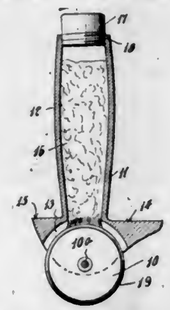
1. An electrical ignition system for internal combustion engines comprising in combination a dynamo, a start-

ing motor, an accumulator battery and connections for charging said battery from said dynamo, a circuit for operating said starting motor from said battery, a plurality of incandescent-wire ignition plugs, an auxiliary accumulator of less voltage than the first mentioned accumulator



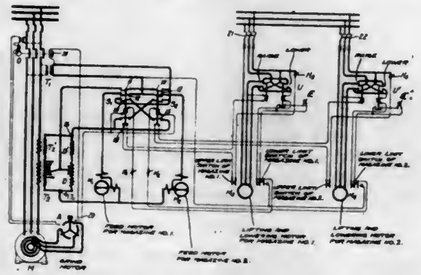
battery, a circuit for energizing said plugs from said auxiliary accumulator, means to make and break said energizing circuit, and connections including an automatic switch for charging said auxiliary accumulator from said dynamo.

1,828,621. ROOFING PAPER CUTTER. JOHN A. ROBERTS, Rolfe, Iowa. Filed Aug. 13, 1930. Serial No. 475,083. 5 Claims. (Cl. 164—84.)



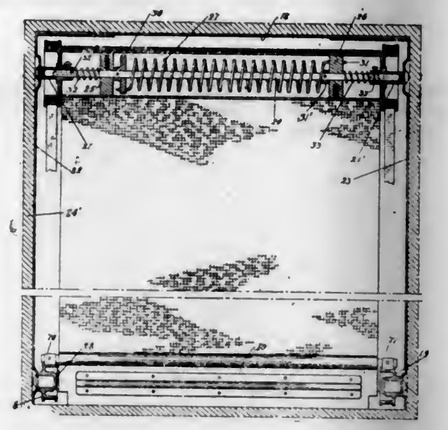
1. A cutter device of the class described comprising a cutter member, a hollow handle carrying said cutter member, and applicator means in the handle to apply material to the cutting edge of the cutter to prevent adhesion thereto during cutting operation.

1,828,622. AUTOMATIC GRINDER CONTROL. KONRAD RUPPRECHT, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 13, 1927, Serial No. 191,244, and in Germany June 8, 1926. 5 Claims. (Cl. 83—75.)



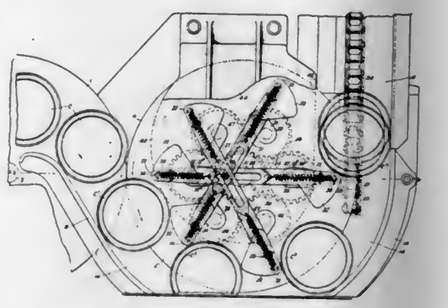
1. In combination, in a system of control for a grinder, a motor for operating feed mechanism for the grinder, a second motor for raising the grinder magazine, and electrical connections through which said second motor is automatically energized to raise the magazine when said feed motor is deenergized.

1,828,623. WINDING MECHANISM FOR ROLLING SCREENS. GUIDO M. SACERDOTE, Bayside, N. Y., assignor to Belknap McLaughlin, Flushing, N. Y. Filed Dec. 2, 1925. Serial No. 72,760. 4 Claims. (Cl. 156—39.)



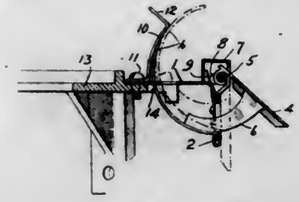
2. In a device of the class described, comprising two side frame members, a shaft rotatably mounted between said members, a roller rotatably mounted upon said shaft, a screen adapted to be wound upon said roller, two side pulleys fixed upon said shaft restraining the same against axial movements in relation to said side members, flexible elements attached at one end to the free end of said screen and at the other end to said pulleys and a spring inserted within said roller connecting said roller to said shaft, causing said flexible members to be wound upon said pulleys as said screen is unwound from said roller, and means interposed between said pulleys and said roller for centering said roller upon said shaft in relation to said side pulleys.

1,828,624. FEEDING AND TIMING MECHANISM FOR CONTAINERS. MATHEW M. SEDWICK, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,431. 12 Claims. (Cl. 198—22.)



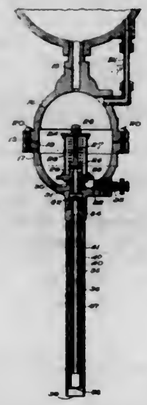
2. A feeding and timing mechanism for containers comprising a rotating support, a series of pairs of rotatable shafts mounted in said support and disposed symmetrically relative to the center of the support and at a distance therefrom, each shaft having a crank, a bar mounted on each pair of cranks and having each end thereof disposed so as to form a timing finger, said cranks being so disposed on the shafts that said bars cross each other at a fixed point located between the center of rotation of the support and the point where the containers are delivered to the timing mechanism.

1,828,625. GLOBE HOLDER. ARTHUR E. SHAW, Philadelphia, Pa., assignor to Pennsylvania Globe Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1931. Serial No. 532,834. 4 Claims. (Cl. 240—135.)



1. A globe holder comprising, in combination, a base having spaced openings, finger pieces pivoted to the base and provided with curved fingers movable through said openings, and shoes projecting from the base and arranged for contact with the curved fingers.

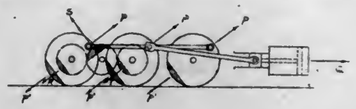
1,828,626. REMOVAL OF MOISTURE FROM COMPRESSED AIR. JOSEPH E. SWENDEMAN, Boston, Mass., assignor, by mesne assignments, to The Leavitt Machine Company, Orange, Mass., a Corporation of Massachusetts. Filed July 3, 1928. Serial No. 290,253. 11 Claims. (Cl. 183—111.)



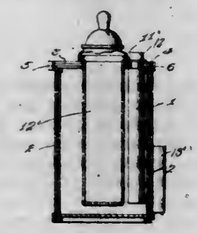
6. In an apparatus for removing moisture from a flowing stream of compressed air, the combination of means providing an inlet for the stream, a conduit downwardly directed from said inlet and having a much larger cross-sectional area than said inlet to reduce the velocity of the stream very substantially, means providing a precipitating chamber below the outlet of said conduit and into which said stream flows and in which the moisture is precipitated, a second conduit about the first and leading in an upward direction from said chamber, and a second chamber below and communicating with said precipitating chamber to receive moisture therefrom, said second chamber having a constantly open outlet for moisture and compressed air.

1,828,627. MEANS FOR BALANCING STEAM LOCOMOTIVES. ERNEST L. THEARLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 7, 1930. Serial No. 494,081. 5 Claims. (Cl. 105—84.)

1. In a system of power transmission, the combination of a reciprocating power developing motor, rotors, shafts for the rotors, reciprocating members which transmit motion from the motor to the rotors, balancing weights on the rotors for counterbalancing the effect of the mass of the members thereon, a balancing weight acting in opposition to the added weights on the rotors for counterbalancing the mass of the reciprocating parts, and means for rotating the last mentioned mass in synchronism with the first mentioned balancing weights and maintaining said weights in predetermined angular relation.

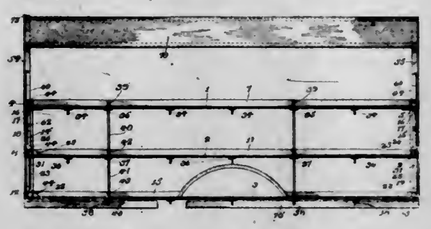


1,828,628. BABY BOTTLE STEAM HEATER. THEODORE C. TORGERSON, Alexander, N. Dak. Filed Nov. 23, 1928. Serial No. 321,497. 2 Claims. (Cl. 126—261.)



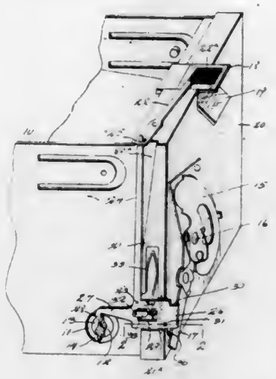
1 In a device for the purpose set forth, a cylindrical receptacle, a hinged closure for the top of the receptacle including arcuate shaped members to engage about the beaded neck of a milk bottle, and an insulated housing for a removable thermometer pivotally connecting the arcuate shaped members of the hinged closure.

1,828,629. TRUCK BODY. SIMEON E. TRAVIS, Jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co., a Corporation of Mississippi. Filed Jan. 26, 1928. Serial No. 249,693. 8 Claims. (Cl. 296—3.)



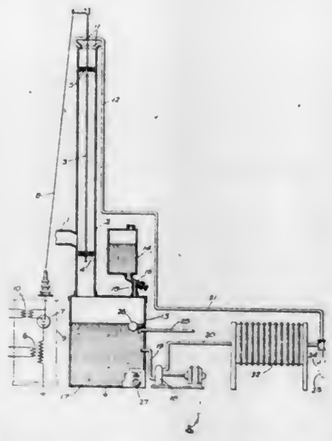
1. A truck body comprising an upper, an intermediate and a lower deck, each of said decks including side and end rails of angle shaped cross section to provide vertical and horizontal portions and with the latter extending inwardly from the lower end of the former, each of said decks further including a flooring terminating at and directly secured to the horizontal portions of said side and end rails and positioned below the top edges of said vertical portion, corner rails common to the side and end rails of the said several decks, spaced supporting braces between the sides of the flooring of the intermediate deck and the sides of the flooring of said upper and lower decks, said braces disposed on the end edges thereof, said end edges extending transversely with respect to said floorings and having their lower ends positioned below the top edges of the vertical portions of the side rails of the intermediate and lower decks and secured to the sides of the floorings of such decks.

1,828,630. PHOTOGRAPHIC CAMERA. CYRUS W. UNDERWOOD, Crowley, La. Filed July 8, 1930. Serial No. 466,499. 7 Claims. (Cl. 95—31.)



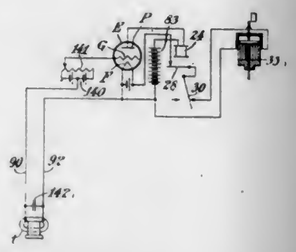
1. In a camera, the combination with a shutter mechanism, an actuating device therefor, and a film winding shaft having lugs, a locking member disposed on the side of the camera, and having a rearward extension provided with a hook, a spring projecting the locking member into the path of movement of the shutter actuating device to bring the hook on the locking member into a position where it may be engaged by one of the lugs on the shaft when the latter is rotated to wind up an exposed portion of film, means on the locking member holding the locking member so retracted, the shutter actuating device having means whereby to release the locking member from its retracted position and permit its projection again into a locking position by said spring.

1,828,631. SOOT DISPOSAL PROCESS AND APPARATUS. WILLIS R. WHITNEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 13, 1928. Serial No. 261,357. 8 Claims. (Cl. 183—7.)



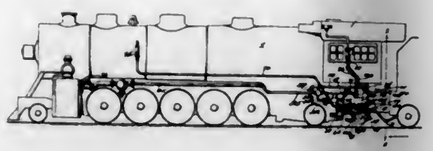
1. The process of removing soot particles from suspension in a gas which comprises carrying away said particles with water containing a solvent for oily matter which is associated with said particles, thereby causing said particles to be wetter by and to mingle with the water.

1,828,632. TRAIN CONTROL SYSTEM. ARBA G. WILLIAMSON, Carnegie, Pa., assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Nov. 10, 1926, Serial No. 147,403. Divided and this application filed June 21, 1929. Serial No. 372,567. 16 Claims. (Cl. 246—63.)



1. A continuously acting train control system including: traffic rails arranged in blocks, a train, a train-carried electron tube having a plate, a grid and a filament, a train-carried plate-filament circuit having a current source that asymmetrical with respect to the original average value direct-current relay means responsive to the influence of the change in the average value of current flowing in the plate-filament circuit, that is produced by current impulses, created in said current, the influence of which is asymmetrical with respect to the original average value of said current, means associated with the electron tube to create said asymmetrical current impulses in response to symmetrical variations in the potential of the grid with respect to the filament, and a trackway current source that supplies to said rails, under proceed traffic conditions, a current that by its influence produces symmetrical variations in the potential of the grid.

1,828,633. INJECTOR FOR FEEDING WATER TO STEAM BOILERS. BELVIN T. WILLISTON and FREDERICK W. WALCH, Somerville, Mass., and CHAUNCEY D. ALLEN, Philadelphia, Pa., assignors to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 16, 1929. Serial No. 386,321. 19 Claims. (Cl. 122—442.)

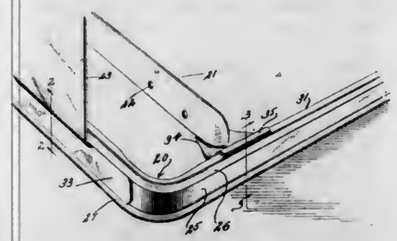


18. In an apparatus for feeding water to engine steam boilers, a pump having steam operated means as the power side of the pump, and a water impeller as the lifter side of the pump associated with and operated by the power side, an injector including a forcer tube receiving water from the lifter side of pump, and means connected to a source of live steam from the engine with the injector for entraining the water through the forcer tube.

1,828,634. CUSHION SEAT CONSTRUCTION. HARRY E. WOLF, Pittsburgh, Pa., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1928. Serial No. 316,196. 5 Claims. (Cl. 155—180.)

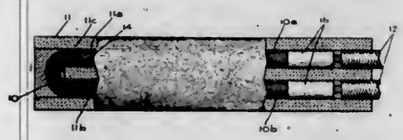
1. A cushion seat comprising a lower border frame having a vertical web and exterior upper and lower flanges, one of said flanges inclined towards the other,

thereby forming a recess to receive a seat cover, a clamping strip adapted to be inserted between the flanges to



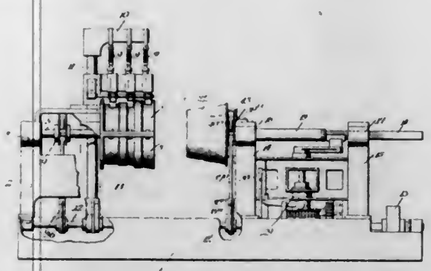
secure the cover to the frame, the other flange being reversed and bent to form a socket for the end of a cross-bar and a cross-bar having an end in said socket.

1,828,635. ELECTRIC HEATER. CHARLES C. ABBOTT, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 29, 1929. Serial No. 358,786. 17 Claims. (Cl. 219—19.)



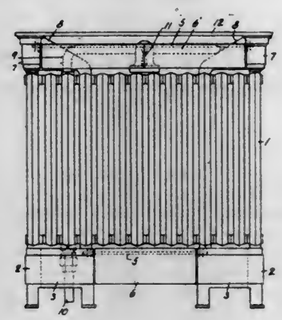
1. A heating unit comprising a supporting member, a resistance conductor wound upon said supporting member and a terminal member compressed about a portion of said supporting member in contact with the conductor turns wound upon said portion.

1,828,636. MACHINE FOR MANUFACTURING RECEPTACLES. JOHN J. BACON, Gasport, N. Y. Filed Sept. 2, 1930. Serial No. 479,877. 7 Claims. (Cl. 147—47.)



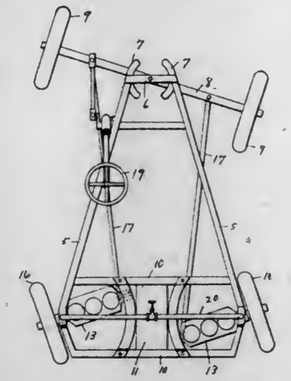
1. In a machine for making a basket or similar receptacle, the combination of a reciprocating basket former rotatably mounted and adapted to engage the inside of the receptacle, a stationary mold into which the former is movable, means rotatably mounted for effecting a pressing of the bottom of the basket being formed against the end of the former, at least one ring rotatably mounted in the mold having its inner periphery adapted to grip the outer surface of the basket, separate means for positively rotating each the formerd and the pressing means intermittently, means for feeding hoops to the desired position along the basket, and stapling mechanism for driving staples through the hoops and the side walls of the basket.

1,828,637. RADIATOR CONSTRUCTION. ROBERT SCHÖNFELDT BAKKEKILDE, Odense, Fyen, Denmark. Filed Aug. 3, 1929, Serial No. 383,411, and in Denmark Aug. 3, 1928. 4 Claims. (Cl. 257—151.)



3. In combination, a radiator including pipe connections and regulating means for the supply and discharge of heating liquid, and a base and a top, said radiator resting on the base and supporting the top thereon, said base and top being hollow and forming chambers accommodating and concealing the pipe connections and regulating means, said base and top each including a plurality of parts and movable front member connecting said parts, and hollow intermediate members connecting the superposed parts of the base and top and being of hollow form.

1,828,638. VEHICLE PROPULSION AND STEERING MECHANISM. GEORGE E. BARRETT, Fort Wayne, Ind. Filed Jan. 26, 1928, Serial No. 249,647. Renewed July 15, 1931. 2 Claims. (Cl. 180—42.)

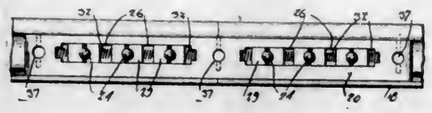


1. In a vehicle comprising front and rear pairs of wheels, a common axle shaft for the front pair of wheels, a stub shaft for each of the rear pair of wheels, the rear wheels being positioned on the outer ends of the said stub shafts, pivotal connections between the outer end portions of the stub shafts and the vehicle, a connecting rod interposed between the inner end of each stub shaft and the adjacent end portion of the front shaft, a crank, a connecting rod between the crank and the front shaft, and manual means for actuating the crank.

1,828,639. RAIL JOINT. MIKE BARTUS, Harrison City, Pa. Filed Apr. 10, 1931. Serial No. 529,227. 6 Claims. (Cl. 238—250.)

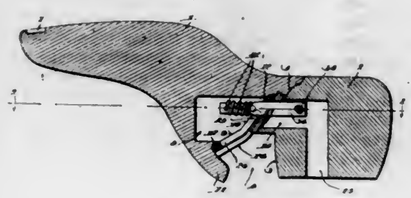
1. In a rail joint of the character described, meeting rail ends, a fish plate at each side thereof, headed pins

carried by one fish plate extending through the rail webs, spring latches carried by the other fish plate for inter-



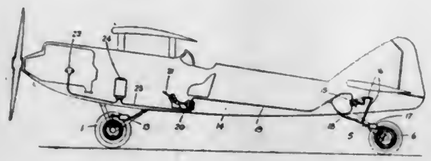
locking engagement with the headed pins, and means to prevent access to the pins and latches with the fish plates retained in assembled relation on the rail ends.

1,828,640. COLLAPSIBLE SHOE LAST. ALBERT W. BENNETT, Newark, Ohio. Filed Apr. 4, 1929. Serial No. 352,498. 7 Claims. (Cl. 12—136.)



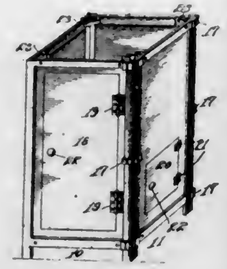
4. A shoe last comprising a fore-part, a separate heel part, a connecting link extending from the fore-part to the heel part said link having a slot in proximity to one end, abutment means movably occupying the slot, yieldable means carried by the link acting on the abutment means to urge it toward one end of the slot, abutable means carried by one of the sections for engagement by the abutment means, and means to pivotally connect the other end of the link with the other section.

1,828,641. BRAKING APPARATUS FOR AIRCRAFT. MICHEL BERGERON, Paris, France. Filed Oct. 6, 1930, Serial No. 486,794, and in France Oct. 12, 1930. 3 Claims. (Cl. 244—2.)



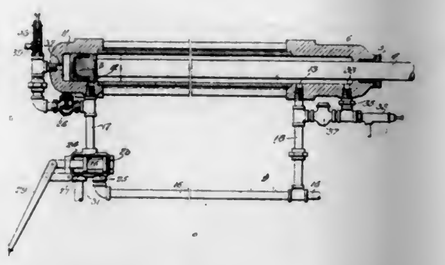
1. In braking apparatus for aircraft the combination of a member for supporting the rear portion of the aircraft, front and rear brakes for controlling the movement of the aircraft along the ground, means actuated by fluid under pressure for operating said brakes, a valve device for controlling the supply of fluid under pressure to said front brakes, means for operating said valve device in accordanc ewith the pressure exerted upon said member by said rear portion, and a second valve device under the control of the pilot for controlling the supply of fluid under pressure to said first valve device and to said rear brakes.

1,828,642. SCREEN. FRANK P. BUNKER, North Manchester, Ind. Filed Mar. 9, 1929. Serial No. 345,692. 1 Claim. (Cl. 45—106.)



In a fireproof screen or the like, a plurality of open metal frames, arranged in edge to edge relation, two-way hinge connections between adjacent edges of said frames, whereby the latter may be placed in any desired angular relation one with respect to the other, a panel closing the opening in each of said frames, certain of said panels having an opening in each of the same, a closure for each of said panel openings, and detachable corner braces for securing adjacent side edges of said frames together, when the same are disposed in a selected angular relation.

1,828,643. HYDRAULIC OPERATING MECHANISM. EARL CANNON, Philadelphia, Pa., assignor to American Fluid Motors Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 26, 1926. Serial No. 97,797. 3 Claims. (Cl. 60—52.)

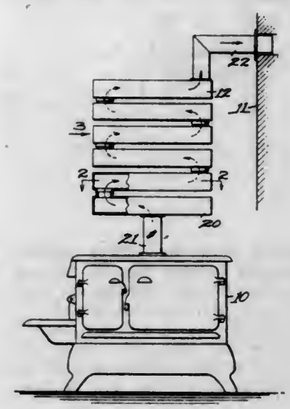


1. A fluid motor having a pair of main ports, and a fluid-impelled member having different effective pressure areas respectively operatively related with said ports; a pump having a discharge port and a suction port, means for connecting said discharge port to that one of said main ports related to the lesser of said effective pressure areas and the other main port to said suction port and thereafter connecting said discharge port to both of said main ports, auxiliary ports adjacent to said main ports, means including relief valves for connecting said auxiliary ports to said suction port, and means including check valves, whereby said auxiliary ports may be connected to said pump discharge port.

1,828,644. HEATING DEVICE. STANISLAW J. CHLAPOWSKI, Gardner, and PETER P. CHLAPOWSKI, Webster, Mass. Filed May 9, 1930. Serial No. 451,097. 1 Claim. (Cl. 257—176.)

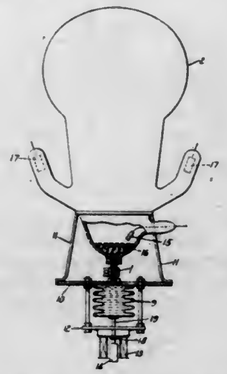
A flue gas heating unit adapted to be interposed in a flue gas passage and comprising a top heating unit, a

bottom heating unit and a plurality of intermediate heating units, the bottom unit and each intermediate unit having a single opening in the top side thereof and adjacent one end thereof with an upwardly projecting sleeve surrounding each such opening, the top unit and each intermediate unit having a single opening in the bottom side thereof and adjacent the opposite end thereof, with a downwardly projecting sleeve surrounding each such open-



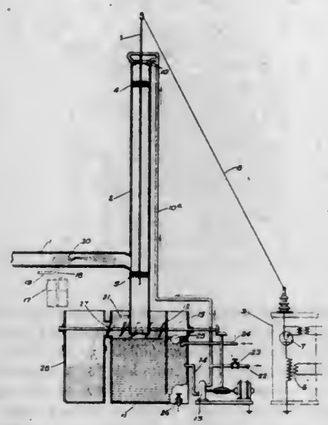
ing, the upwardly and downwardly projecting sleeves of adjacent units telescoping and fitting closely one within the other and supporting said units in spaced relation, said top heating unit having an exit opening in its top side, and said bottom heating unit having an inlet opening in its bottom side located substantially midway of its length, whereby said heating device is disposed and supported substantially symmetrical with respect to the vertical axis of the inlet opening.

1,828,645. ELECTRICAL APPARATUS. MICHEL CRÉMER, Paris, France, assignor to General Electric Company, a Corporation of New York. Filed Aug. 2, 1927, Serial No. 210,184, and in France Dec. 30, 1926. 3 Claims. (Cl. 250—27.5.)



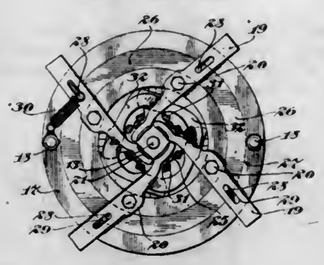
1. An electrical device comprising an evacuated vessel, a solid electrode mounted within said vessel, a hollow electrically conductive member, an elastic receptacle connected with said vessel by means of said hollow electrically conductive member, a liquid electrode extending between said vessel and said receptacle, means for applying to a wall of said vessel a pressure which may be varied to control the spacing between said electrodes, and means for locking said elastic receptacle in such a position that said liquid electrode is withdrawn from said vessel.

1,828,646. APPARATUS FOR AND PROCESS OF REMOVING SOOT. CHRISTIAN DANTSIZEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 14, 1928. Serial No. 254,315. 9 Claims. (Cl. 183—7.)



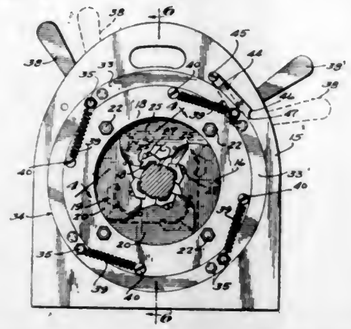
1. A smoke precipitation apparatus comprising means for introducing oil in atomized form into the smoke to be treated, means for precipitating soot in said smoke, means for carrying away the precipitated soot with water, and flotation means for separating the precipitated soot from the water.

1,828,647. CUTTER HEAD FOR CORN CUTTING MACHINES. FRANK W. DOUTHITT, Ortonville, Minn. Filed June 27, 1928. Serial No. 288,648. 1 Claim. (Cl. 180—9.)



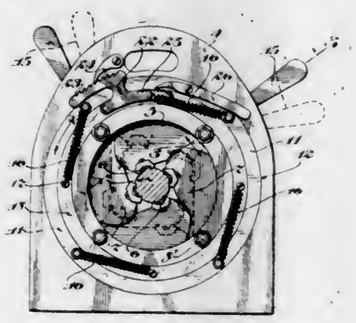
A cutter head for a corn cutting machine comprising a non-rotating supporting plate having a central opening therethrough, a series of levers pivotally attached to said supporting plate and movable in a plane parallel with the face of the supporting plate, each lever at its inner end having a seat for a cutter blade, a cutter blade having a supporting tang attached to the seat on each lever, each blade being narrow and spirally arranged to form a cutting cylinder, said lever having arms thereon projecting in front of the cutting blades, a depth gage supported on each arm and shiftable radially of the cutter head to different set positions on said arms, said supporting plate having an annular channel formed in one face thereof inwardly from the peripheral edge of said plate, a ring disposed in said annular channel, devices carried by said ring and connected to said levers for shifting the levers simultaneously to contract or expand the cutting cylinder, and spring means connected to said ring and having connection with said plate for shifting said ring so as to yieldingly hold the cutting blades in their contracted position.

1,828,648. CUTTER HEAD FOR CORN CUTTING MACHINES. FRANK W. DOUTHITT, Ortonville, Minn. Filed Sept. 18, 1929. Serial No. 393,430. 4 Claims. (Cl. 130—9.)



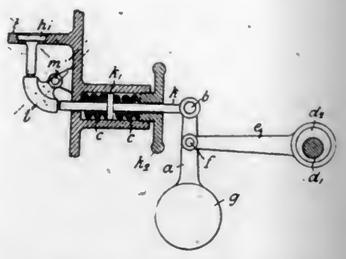
1. A cutter head for a corn cutting machine comprising a supporting plate having a central opening therethrough, a series of levers pivotally attached to the front face of said supporting plate and movable in a plane parallel with the face of said plate, each lever at its inner end having a seat for a cutting blade, a cutting blade having a supporting tang attached to the seat of each lever, said blades extending spirally from the supporting tang and forming a series of overlapping spiral cutting edges, said levers having arms thereon projecting in front of the cutting blade, a depth gauge supported on each arm, said supporting plate having a channel in the rear face thereof concentric to the center of the opening through the plate and having slots through the plate in alinement with said channel, a ring located in said channel, devices carried by the ring and extending through said slots and connected to said levers, and yielding means connected to said ring and to said plate at the rear thereof for normally holding said levers with the cutting blades in contracted position.

1,828,649. CUTTER HEAD FOR CORN CUTTING MACHINES. FRANK W. DOUTHITT, Ortonville, Minn. Filed Nov. 25, 1929. Serial No. 409,505. Renewed Mar. 6, 1931. 9 Claims. (Cl. 130—9.)



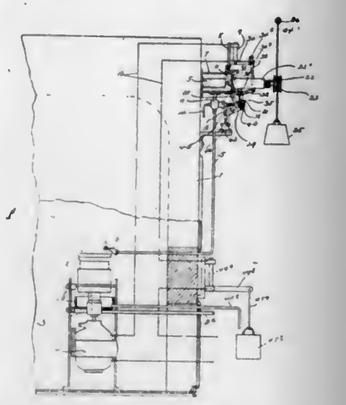
2. A head of the class described, comprising a body member, a shift ring and anchor ring relatively turnably mounted on the body member, an iris-like cutter mounted on the body member, the members of said cutter being connected to the shift ring and held thereby for common opening and closing movements, a spring connecting said two rings and under strain to normally hold the shift ring with the iris-like cutter contracted, and a ratchet on the anchor ring and a cooperating pawl on the body member for holding the anchor ring from turning in respect to the body member, and for holding the anchor ring in different circumferential adjustments to vary the tension of the springs.

1,828,650. REGULATING DEVICE FOR ENGINES. VICTOR DUER and OLUF SINIUS HASSING, Copenhagen, Denmark; said Hassing assignor to said Duer. Filed Aug. 17, 1928, Serial No. 300,358, and in Denmark July 25, 1927. 3 Claims. (Cl. 123—106.)



3. A regulating device for engines including an oscillatory pendulum-like member, movable fulcrum means suspending said pendulum-like member for oscillatory movement, a guide member connected with the pendulum-like member and constituting in part the means movably suspending said member, adjustable means biasing the fulcrum means to a normal position, regulating means associated with the guide member and including an engine valve.

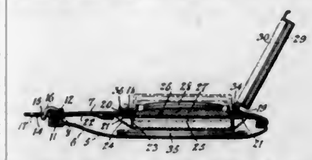
1,828,651. CONTROL MECHANISM FOR BURNERS. EDWIN R. EVANS, Chicago, Ill. Filed Apr. 1, 1924, Serial No. 703,385. Renewed Mar. 7, 1930. 21 Claims. (Cl. 236—1.)



1. In a thermostatic control mechanism, the combination with a movable element of a thermostat movable responsive to temperature changes, of a switch controlled by said thermostat, a lever having a plurality of arms, one of which is engageable by said movable element to rock said lever, a spring engaged with said arm extending adjacent the pivot of said lever and movable across said pivot by rocking of said lever between limiting positions thereof, and a link forming an actuating connection between another arm of said lever and said switch.

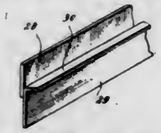
1,828,652. VANITY CASE. LEONARD FRIEDBERG, New York, N. Y., asignor to Furlager Manufacturing Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 8, 1930. Serial No. 494,411. 10 Claims. (Cl. 132—83.)

1. A vanity case having a hollow body, a gauze member for dividing the body into two compartments, the body having two openings for reaching the compartments respectively, a box member for closing one of the openings, the other opening serving to permit of the introduction



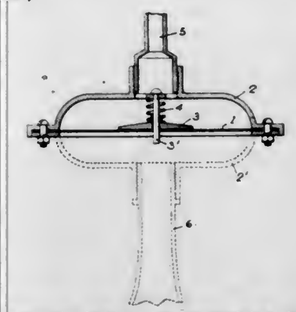
of a powder puff into a compartment, a lid for closing the box member, and means for closing the said other opening.

1,828,653. COMPOSITE FLOOR DIVIDING STRIP. PASQUALE GALASSI, New York, N. Y. Filed July 8, 1929. Serial No. 376,808. 5 Claims. (Cl. 94—17.)



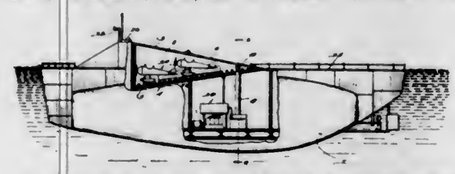
1. A unitary divider strip for terrazzo floors or the like, comprising an upper and a lower section, said two sections being composed of two different metals and being welded to each other along their inner edges.

1,828,654. ACOUSTIC INSTRUMENT. ANTONIO GALBARINI, Milan, Italy. Filed Apr. 26, 1930, Serial No. 447,737, and in Germany May 2, 1929. 9 Claims. (Cl. 116—142.)



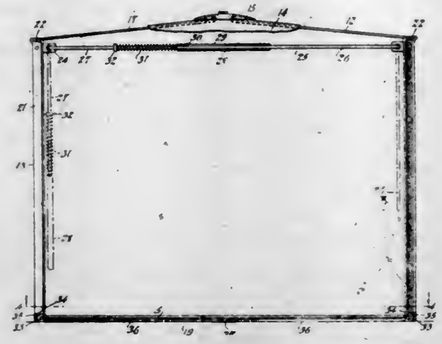
1. An acoustic instrument comprising in combination a base member, a membrane with a central aperture forming an air passage connected to said base member a disc closing the aperture in the membrane, a guide associated with said disc extending from the base member, a spring interposed between the membrane and base member and a cover secured to the base member enclosing the membrane.

1,828,655. SUBMARINE AIRCRAFT CARRIER. EMIL NICK GREUNIESEN, Sioux City, Iowa. Filed May 13, 1930. Serial No. 451,985. 6 Claims. (Cl. 114—0.5.)



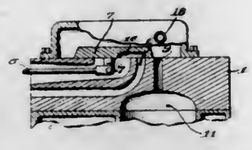
1. An aircraft carrier comprising a submarine having a plane carrying chamber provided with an entrance opening in the top equipped with a door, and a plunger for opening said door, and a ramp forming the floor of said chamber and extending through said opening.

1,828,656. TENT. OSCAR HANDLER, New York, N. Y. Filed Apr. 16, 1931. Serial No. 530,686. 7 Claims. (Cl. 135—4.)



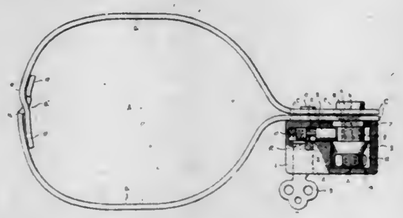
1. A tent including a rectangular supporting frame, said supporting frame comprising upper and lower foldable frame sections, a supporting post at each corner between said sections and peripheral stiffening braces connecting the upper ends of said posts.

1,828,657. MOTOR. JOHN B. HAWTHORN and SAM L. LEVAR, Cairo, Ga. Filed Feb. 16, 1927. Serial No. 168,691. 1 Claim. (Cl. 121—165.)



In a cylinder head for converting a gas engine to a fluid pressure motor, a pressure chamber having an intake port, an exhaust port, a cylinder connecting passage, and a laternally extending passage, a slide valve for controlling said exhaust port and said cylinder connecting passage having a depression in the lower surface thereof communicating with said exhaust port and said cylinder connecting passage, a lug projecting from said lower surface adjacent said depression and a pitman connected to said lug for moving said valve alternately, to connect said cylinder connecting passage to said pressure chamber and to said exhaust port.

1,828,658. ANTITHEFT TIRE LOCK. FREDERICK W. HENKE, Jr., Philadelphia, Pa., assignor to Fox Automotive Products Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,945. 2 Claims. (Cl. 70—90.)



1. An anti-theft tire locking device comprising a nut adapted to be applied to a screw-threaded stud, the nut

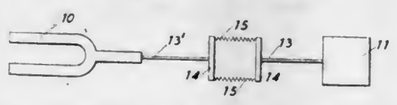
having a circumferential groove near its inner end, a conical portion outside of the groove and a portion to be engaged by a wrench outside the conical part, and a guard for covering and housing the nut having a body in one portion of which is a cavity for the nut and in another portion of which is a key-operated lock, the lock having a plunger the end of which extends into the nut chamber of the housing, the plunger being spring-operated and arranged to engage with the conical part of the nut and to be moved against the spring as the guard is applied to the nut and adapted also to engage with the grooved portion of the nut through the action of the spring when such end passes said conical part and the guard comes to proper position to house the nut.

1,828,659. ELECTRIC FUSE. HENRY P. HINDS, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 18, 1929. Serial No. 415,011. 9 Claims. (Cl. 200—127.)



6. A fuse barrel comprising a tube of insulating material, a fusible element therein, a contact terminal provided with means for engaging an end of said fusible element and hermetically closing one end of said tube, a second contact terminal secured adjacent the other end of said tube and provided with a knurled conical surface for positive clamping engagement with the other end of said fusible element, and a clamping nut threaded upon said second terminal and adapted to force the fusible element into intimate contact with said knurled conical surface thereof.

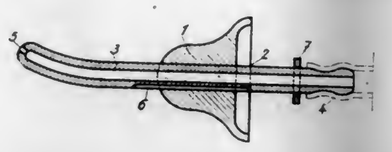
1,828,660. METHOD OF AND APPARATUS FOR DRIVING TUNING FORKS. EDWARD C. HOMER and WILLIAM D. BUCKINGHAM, Southampton, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 12, 1930. Serial No. 474,859. 5 Claims. (Cl. 84—409.)



3. The combination with a tuning fork, of a vibration producing motor, and a coupling adapted to transmit vibrations between said motor and said fork, said coupling having a vibration regulator interposed therein.

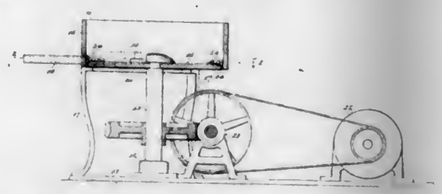
1,828,661. SYRINGE. FRIEDRICH JENSEN, Hanover, Germany. Filed Feb. 7, 1931, Serial No. 514,236, and in Germany Jan. 22, 1927. 2 Claims. (Cl. 128—241.)

1. A syringe comprising a plug having a passage through it and a tube extending through the passages in the plug, the tube having on its outer face a longitudinally extending groove forming a longitudinally extending straight channel open at both ends and greater in



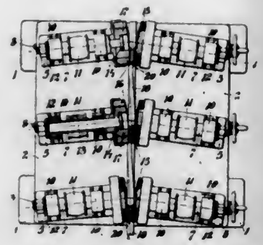
length than the length of the plug, the plug being longitudinally shiftable upon the tube to a position where it will entirely close one end of the channel or partially close this end.

1,828,662. FEEDER. ALLAN H. JONES, Trenton, N. J., assignor to Roller Bearing Company of America, Trenton, N. J., a Corporation of New Jersey. Filed Feb. 19, 1930. Serial No. 429,800. 3 Claims. (Cl. 51—215.)



1. In a feeder, the combination of a disk rotor of stepped construction, a stator shell surrounding said rotor, said shell having a discharge passageway extending tangentially with respect to the periphery of the rotor, to receive and guide articles delivered thereto from the rotor by the rotational movement of the rotor.

1,828,663. MACHINE FOR GRINDING SIMULTANEOUSLY TWO OPPOSED SURFACES OF ARTICLES OF PRISMATIC OR OTHER SHAPE, ESPECIALLY NUTS. AUGUST JOPP, Zella-Mehlis, Germany. Filed Apr. 22, 1929, Serial No. 357,188, and in Germany May 15, 1928. 3 Claims. (Cl. 51—112.)



1. A machine of the class described comprising a series of grinding wheels arranged in a row with their axes parallel and at an obtuse angle to the line of advance of articles to be ground, said wheels each having a conical grinding surface, said wheels having concentric portions of different degrees of fineness, a tube through which said articles pass and having openings opposite said wheels enabling grinding engagement of the wheels with the articles below the axes of the wheels so that the wheels will feed the articles, and said tube having twisted portions between the wheels whereby the articles will be turned on their axes as they pass through the tube from one pair of wheels to another.

1,828,664. HOT AIR HAIR WAVING DEVICE. HEINZ KAHLHOFER, Vienna, Austria. Filed Mar. 26, 1931, Serial No. 525,452, and in Austria Aug. 3, 1929. 3 Claims. (Cl. 132—36.)



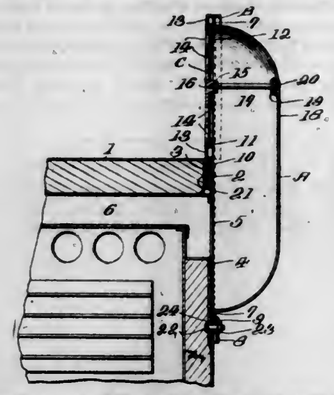
1. A heater for hair curlers consisting of a pair of spaced walls arcuate in cross section, the inner of said walls being imperforate throughout and the outer of said walls having a central inlet opening and a pair of outlet openings disposed each adjacent a respective end of the outer wall, end walls entirely closing the spaces between the ends of the concentric walls, edge walls entirely closing the spaces between the lateral edges of the concentric walls, and baffles each located between the inlet opening and a respective outlet opening, said baffles each consisting of an arcuate wall fixed between the middle portions of the arcs of the concentric walls and terminating in spaced relation to the edge walls.

1,828,665. GAS RANGE CONSTRUCTION. LESTER S. KAUFFMAN, Richmond Heights, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,269. 19 Claims. (Cl. 126—39.)

1. A gas range construction, comprising an oven having concealed therein a burner and a fuel delivery pipe therefor, an air extension conduit for said burner, said conduit comprising a tubular sleeve having an open end communicating with the burner and carrying at its opposite end a ported cover plate externally of the oven, and said plate and sleeve supported in position upon said fuel supply pipe.

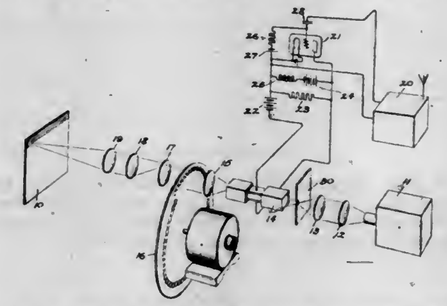
1,828,666. OVEN FLUE OUTLET. LESTER S. KAUFFMAN, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Apr. 3, 1930. Serial No. 441,290. 1 Claim. (Cl. 126—299.)

A range having a flue outlet in its rear vertical wall, of an outside flue having its inner side flat vertically and fitting against the said rear vertical wall of the range substantially half its length, the lower vertical flat portion having a horizontal opening communicating with the said flue opening and its upper flat portion extending above



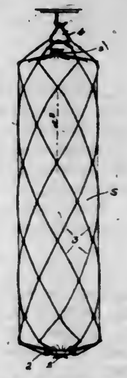
the said wall substantially in a vertical line with the rear vertical wall of the range and the said extension having an opening, the parts operating as specified.

1,828,667. TRANSMISSION OF PICTURES. RAY D. KELL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 8, 1929. Serial No. 376,592. 3 Claims. (Cl. 88—61.)



1. The method of utilizing a Kerr cell to control light in accordance with signal impulses which includes biasing said cell to one of its higher volt-light characteristics, and applying said impulses to said cell.

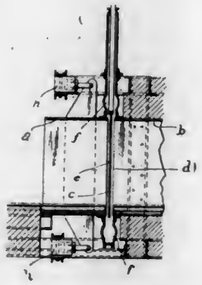
1,828,668. HOLDER. LILLIAN M. KERN, Portland, Me. Filed Sept. 16, 1930. Serial No. 482,197. 2 Claims. (Cl. 99—9.)



2. A method for axially suspending a sausage, bologna or like encased food article in a manner to automatically

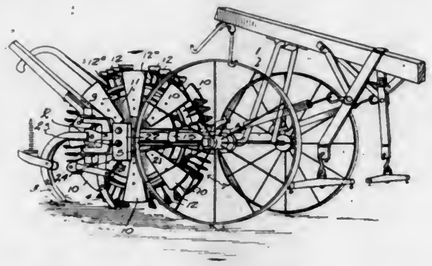
re-enforce its encasement both longitudinally and transversely, consisting in providing an adjustable substantially cylindrical meshwork having a closed lower end and an open upper end designed to be hung upon a support, expanding said meshwork to freely receive the encased article and then contracting said meshwork uniformly about said article by permitting said article to bear downwardly upon said closed end in response to the action of gravity.

1,828,669. CLOSING SHUTTER FOR TUNNEL OVENS. MSTISLAV KULZINSKI, Reval, Tallinn, Estonia, assignor to Eesti Patendi Aktsiaselts, Tallinn, Estonia. Filed Dec. 27, 1928. Serial No. 328,749. 6 Claims. (Cl. 25—142.)



1. In a closing shutter for tunnel ovens, of the type wherein a slide is employed for closing the inlet of the oven or dividing the oven into separate sections or forming together with another similar slide a lock-chamber, a slide receiving diaphragm box joined at one end with the fixed and at the other with the movable part of the oven.

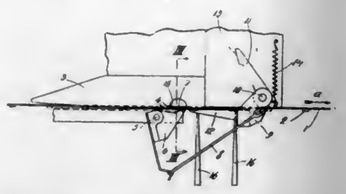
1,828,670. AGRICULTURAL APPARATUS. LOUIS AUGUST LAAS, Maxwell, Tex., assignor of one-half to Herm. Conrads, Caldwell County, Tex. Filed Aug. 15, 1930. Serial No. 475,613. 3 Claims. (Cl. 97—22.)



3. An attachment for cultivators comprising a V-shaped frame, a wheel journalled in the frame, a rim-like felly arranged about the wheel, members spacing the felly from the wheel, plate-like spokes carried by the wheel and extending beyond the felly, chopping blades mounted on the felly between the circumferentially spaced spokes, draft means secured to the frame, and bracing members connecting the frame and the implement beams.

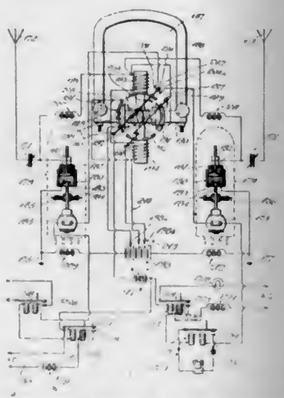
1,828,671. DISCHARGING ARRANGEMENT IN SHARPENING MACHINES FOR RAZOR BLADES. SVEN LARSSON, Sandviken, Sweden. Filed Apr. 13, 1928, Serial No. 269,830, and in Sweden Apr. 29, 1927. 7 Claims. (Cl. 51—76.)

7. A discharging mechanism comprising a conveyor having a catching member on the under side for engaging a hole in the razor blade, a movable thrust member for pushing the blade off of the catching member and away from the conveyor, and a feeler movably mounted below the



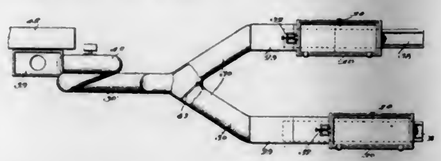
conveyor for movement of the thrust member toward the blade during passage of the blade over the feeler toward the thrust member.

1,828,672. RADIO CONTROL SYSTEM. SEARCY L. MCFADIN, Borger, Tex., assignor to Edward W. Hines, trustee, Cordell, Okla. Filed Sept. 3, 1929. Serial No. 390,148. 14 Claims. (Cl. 250—2.)



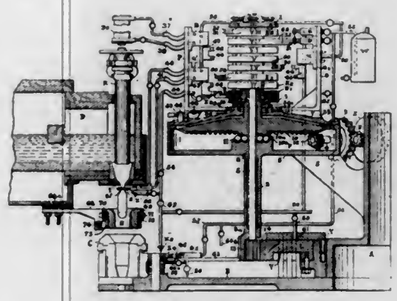
1. In a remote control system, a high frequency oscillation generator, a radiating system, means for establishing connection between said high frequency generator over predetermined time periods for transmitting signals from said radiating system comprising a fixed contact member, a movable contact member, means for shifting said movable contact member while in electrical connection with said fixed contact member for rendering said oscillation generator effective upon said radiating system for predetermined time intervals, means for reversing the direction of movement of said movable contact member with respect to said fixed contact for restoring said movable contact member to its original position while maintaining said oscillation generator ineffective with respect to said radiating system.

1,828,673. PAD FILLING APPARATUS. THOMAS L. MCJOYNT, Janesville, Wis. Filed Feb. 4, 1930. Serial No. 425,874. 13 Claims. (Cl. 226—43.)



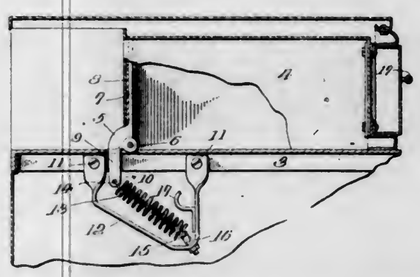
1. In a pad filling apparatus, a filler material discharge means, air pressure means for feeding the material to said discharge means, and movable means for supporting a pad envelope in position for the engagement of the open end thereof with said discharge means when said supporting means is moved toward the latter, said supporting means being adapted to be moved away from said discharge means under the action of the air pressure and progressively throughout the filling operation.

1,828,674. MECHANISM FOR MANUFACTURING GLASSWARE. WILLIAM J. MILLER, Swissvale, Pa., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Connecticut. Original application filed May 29, 1924, Serial No. 716,835. Divided and this application filed Aug. 15, 1928. Serial No. 299,731. 7 Claims. (Cl. 49—55.)



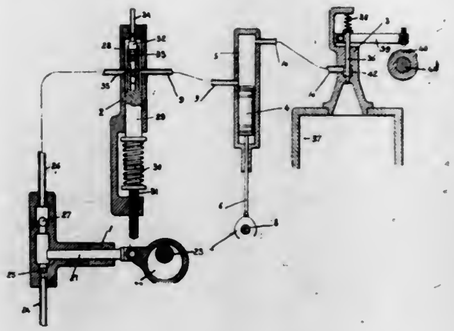
7. The combination with a feeder mechanism for producing mold charges of molten glass and which comprises a receptacle for the molten glass having a submerged discharge outlet, mechanically operated shears arranged periodically to open and close beneath the outlet to sever the masses of glass depending from the outlet and means for timing the operation of the shears, of a nozzle arranged to discharge lubricant upon the cutting portions of the shears, a supply of lubricant under pressure connected to said nozzle, an interrupter interposed in said connection, means for periodically actuating said interrupter to admit lubricant to said nozzle, and means for regulating the timing of such actuations independently of the timing of the operations of the shears.

1,828,675. COUNTERBALANCING DEVICE. HENRY MOECKER, Jr., Flossmoor, and HAROLD B. ISAAC, Harvey, Ill., assignors to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 25, 1930. Serial No. 470,714. 12 Claims. (Cl. 126—191.)



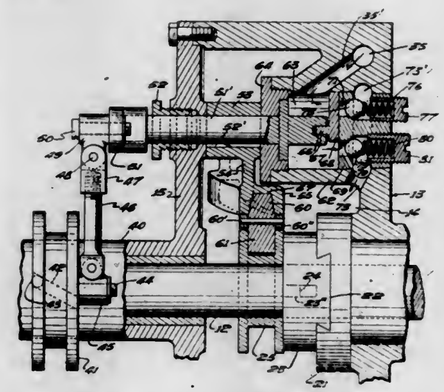
1. A counter-balancing device for a hinge comprising a coil spring, said coil spring being under tension when the hinge is in one extreme position, and means in the path of travel of said spring to distort the spring to put it under tension when the hinge is moved to its other extreme position.

1,828,676. DEVICE FOR INJECTING FUEL INTO INTERNAL COMBUSTION ENGINES. ANDRÉ ADOLPHE MORTON, Paris, France, assignor to Societe d'Installation de Lumiere et de Force Electriques, Paris, France. Filed July 28, 1926, Serial No. 125,526, and in France July 28, 1925. 4 Claims. (Cl. 123—139.)



1. Device for injecting fuel in Diesel engines, including a fuel pump with relatively high capacity and operating at a relatively slow speed, a mechanically controlled injection valve, a fuel accumulator between the pump and the valve, a pulsating member, inserted in the fuel pipe under pressure between the accumulator and the valve, moved periodically by the engine, so that during each injection, the advancing stroke of the said member diminishes the capacity of the fuel pipe under pressure, the phase of compression of the pulsator being greater than the phase of injection in the cylinder of the engine and commencing before and terminating after the phase of injection.

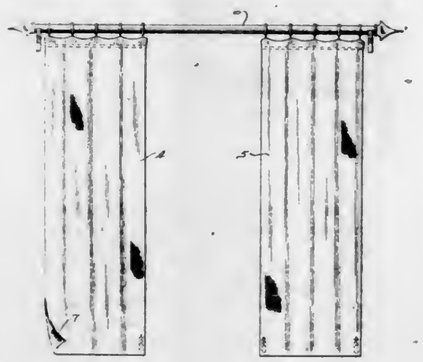
1,828,677. HYDRAULIC CLUTCH. FRANK R. OBERDIER, Lafayette, Ohio, assignor, by mesne assignments, to himself and William D. Wood, Lafayette, Ohio. Filed Mar. 15, 1929. Serial No. 347,291. 6 Claims. (Cl. 192—60.)



1. A hydraulic clutch, including a shaft and a fluid-containing casing rotatable on said shaft, one of said parts constituting the driving element and the other the driven element; a plurality of pumps within and carried by said casing, each of said pumps having a non-return valve communicating with the casing; an operating element for said pumps actuated by said shaft; a non-return outlet valve in the outlet of each of said pumps; a chamber to which the outlets of said pumps are connected and hav-

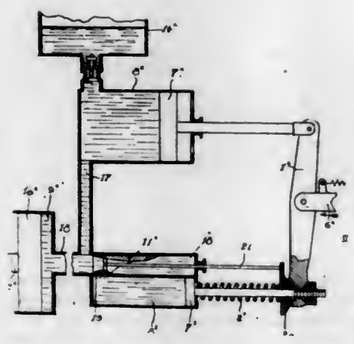
ing a pair of outlet ports discharging into said casing; an outlet valve in each of the outlet ports of said chamber; and means associated with each of the last-named valves for normally holding same in closed position, the holding means of one of said valves being stronger than the holding means of the other of said valves.

1,828,678. WEIGHTED PIN FOR DRAPERIES, CURTAINS, AND THE LIKE. RALPH B. PETERMAN, Lansing, and FRANK V. STEVENSON, East Lansing, Mich. Filed Feb. 14, 1931. Serial No. 515,797. 4 Claims. (Cl. 156—33.)



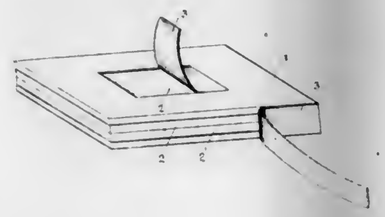
3. A removable drapery weight comprising a weighted portion of such size and shape as to permit of inconspicuous attachment to a drapery in the folds or hem thereof, and a pin secured to the top of said weighted portion, said pin being bent back upon itself and extending on a line parallel to the adjacent face of said weighted portion.

1,828,679. TRANSMISSION SYSTEM. HENRI PIEPER, Brussels, Belgium. Filed Mar. 30, 1927. Serial No. 179,700, and in Belgium Apr. 23, 1926. 7 Claims. (Cl. 60—54.5.)



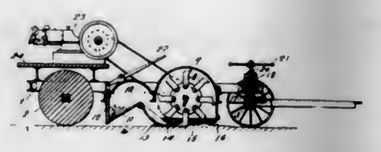
1. The combination, with companion driving and driven members of an interposed transmission system comprising: two separate hydraulic connections between said members; an elastic element acting to render one of said connections operative until the resistance opposed by the driven member to motion has reached a predetermined value; and a valve operated by one of said companion members for breaking the said hydraulic connection and simultaneously establishing the other hydraulic connection so as to change the transmission ratio, the operation of said valve being permitted by the deformation of the elastic element.

1,828,680. METHOD OF ATTACHING SEALING OR LABELING STRIPS OR THE LIKE TO BOXES, CASES, AND WRAPPINGS MADE OF METAL-FOIL-COVERED PAPER, CARDBOARD, AND THE LIKE. LEOPOLD RADO, Berlin-Halensee, Germany. Filed Sept. 17, 1928, Serial No. 306,615, and in Germany Sept. 24, 1927. 5 Claims. (Cl. 216—62.)



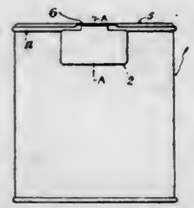
4. The method of attaching labels to metal foil covered fibrous material which comprises cutting narrow strips of foil from the main portion thereof and attaching a label by means of an adhesive to the said fibrous material in such a manner that it covers the said strips.

1,828,681. ROAD PLANING MACHINE. HENRY M. REINKING, San Francisco, Calif., assignor of one-half to Oliver J. Williams, San Francisco, Calif. Filed Nov. 13, 1930. Serial No. 495,342. 4 Claims. (Cl. 37—108.)



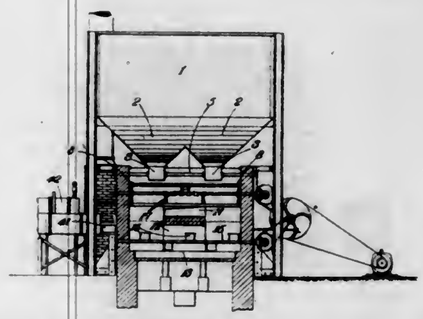
1. A road planing machine comprising a portable carrying frame having front carrying wheels and a rear roller, a rotor comprising pivoted hammers, means to drive said rotor, a covering casing for the rotor open at the bottom, means to adjust said hammers to and from the road, and a delivery box located between the rotor and rear roller and having an automatically adjustable apron adjacent to the operating hammers to receive the road material and allow its deposit in front of said roller.

1,828,682. MOUNTING OF TAGS FOR CAN-LIKE CONTAINER. FREDERICK GUY ROBINSON, Kingston-upon-Hull, England. Filed Feb. 4, 1931, Serial No. 513,400, and in Great Britain Feb. 15, 1930. 4 Claims. (Cl. 40—7.)



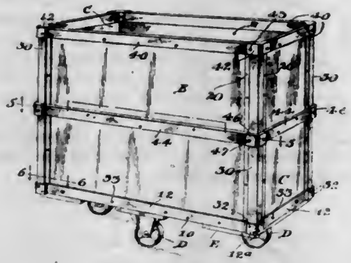
1. The combination with a can-like container having its lid provided with an apertured lip, of a device for identifying a characteristic of the contents of the container having a tongue which extends through the aperture in the lid and is bent laterally above the lid.

1,828,683. DISTILLATION OR HEAT TREATMENT OF CARBONACEOUS OR LIKE MATERIALS. EDOARDO MICHELE SALERNI, Paris, France, assignor to E. M. S. Industrial Processes Limited, London, England, a Corporation of England. Filed Jan. 6, 1927, Serial No. 159,401, and in Great Britain Sept. 15, 1926. 2 Claims. (Cl. 202—22.)



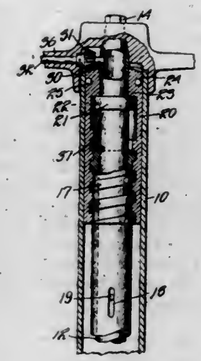
1. A method of distilling solid carbonaceous materials which consists in crushing the material to pass an approximately ½" square mesh screen substantially as described, whereby an adequate degree of surface contact for subsequent heat treatments is insured, a sufficient exposed superficial surface for evaporation and distillation is provided, and an even and easy flow of the material is secured; introducing the crushed material in a positive manner and at a controlled rate correlated to the rate at which the material passes through all subsequent stages of its treatment to an atmosphere inert to the material being treated and having a temperature adapted to cause evaporation of water from the material but lower than a distillation temperature, moving the material slowly in successive superimposed horizontal planes through said atmosphere until the material is relatively dry; subjecting the material toward the end of at least one of the successive horizontal movements to the action of mechanically disruptive force; feeding the dry material into a gas seal and from the gas seal into an atmosphere heated to the distillation temperature; moving the material in a generally horizontal direction and under agitation through said atmosphere under the influence of progressively increasing temperatures to cause the evolution of products of distillation, the water vapor released from the material during its drying treatment being continuously removed at a plurality of points, each located closely adjacent a definite portion of the material under treatment, discharging the spent solid product and collecting the distillate; and correlating the rate at which the material is passed through the drying operation to the rate at which the material is passed through the distilling operation so that there will be fed through the seal a relatively constant supply of the dried material at a rate consonant with that of the distilling operation.

1,828,684. COLLAPSIBLE TRUCK. GEORGE B. SCARLETT, Kennett Square, Pa., assignor to Fibre Specialty Manufacturing Company, Kennett Square, Pa., a Corporation of Pennsylvania. Filed Nov. 11, 1929. Serial No. 406,387. 15 Claims. (Cl. 296—27.)



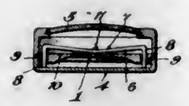
1. In a collapsible truck, a bottom forming unit, opposite side and end walls detachably mounted on, secured to and supported by said bottom unit, and corner members slidably and removably engaged with and locking said side and end walls together at the adjacent corner forming ends of said walls.

1,828,685. GAS CONTROL FOR MOTOR VEHICLES. PERCY F. SCHOFIELD, Miami, Fla. Filed June 16, 1930. Serial No. 461,602. 3 Claims. (Cl. 74—39.)



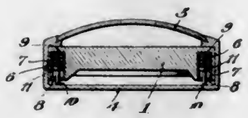
1. Gas feeding mechanism for motor vehicles comprising a tube slidably mounted on the steering rod of the motor vehicle, operative connection between said tube and the throttle valve of the vehicle, a sleeve screw threaded on the upper end of the said tube and secured against axial movement, means for preventing rotation of the tube but to permit axial movement of the same, and means for rotating the said sleeve to move the tube axially to operate the throttle valve of the motor vehicle, substantially as set forth.

1,828,686. WATCH. RUDOLPH J. SCHWARZ, Providence, R. I., assignor to American Standard Watchcase Company, Providence, R. I. Filed Oct. 23, 1929. Serial No. 401,817. 5 Claims. (Cl. 58—88.)



1. In a watch, a center composed of a body having a central opening and having diametrically opposed pairs of spaced holes extended transversely through the body, and having slots in its upper face connecting the holes of the pairs, a substantially U-shaped spring member for each pair of holes having its base in the slot connecting the pair and having its legs slidable through the holes a pin for each member extending transversely across the central portion of the base and engaged therewith and holding said portion engaged with the bottom of the slot, and a front and a back for the body, the back being engaged with the free ends of the legs of the member to urge the body toward the front.

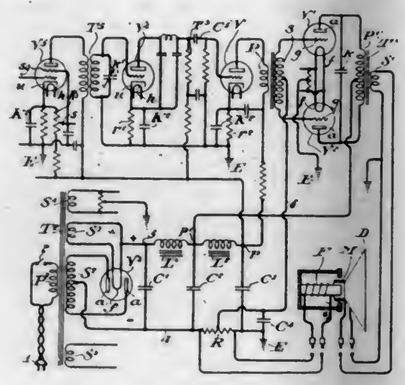
1,828,687. WATCH. RUDOLPH J. SCHWARZ, Providence, R. I., assignor to American Standard Watchcase Company, Providence, R. I. Filed Oct. 23, 1929. Serial No. 401,818. 1 Claim. (Cl. 58—88.)



In a watch, a center having a body formed with upper and lower side faces and with two pairs of diametrically opposed transverse openings, said openings terminating inwardly of the upper side face of the body to form sockets having outer open ends and closed bottoms, a tube frictionally fitted in each socket and having its inner end seated against the closed bottom of the socket and having its outer end turned inwardly and disposed substantially flush with the lower side face of the body, a pin in each tube having a head on its inner end slidable in the tube and engageable with the inturned portion thereof, a coil spring in each tube seated at one end against the bottom of the socket and engaging the head of the pin at its opposite end, and a back and a front for the center, the pins haoving free ends which project beyond said lower side face of the body and engage the back to urge the body toward the front.

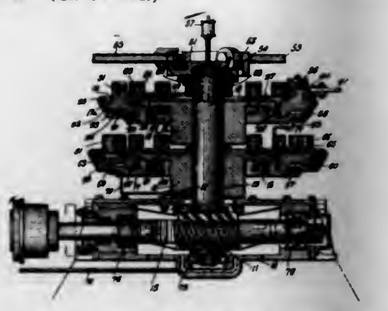
1,828,688. AMPLIFYING SYSTEM. ALBERT D. SILVA, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed May 10, 1929, Serial No. 361,910. Divided and this application filed Feb. 25, 1931. Serial No. 518,097. 14 Claims. (Cl. 250—27.)

1. A system comprising an electrodynamic speaker having a movable coil and a field winding, a thermionic tube, means to effect flow of current in a path including said field winding and tube electrode structure in series, a conductive impedance of high resistance in shunt to said winding, and connections from tube input electrodes to points, at least one of which is intermediate the termi-



nals of said impedance, between which exists difference of potential resulting from flow of current through said field winding.

1,828,689. PUMPING POWER. ALVA L. SKINNER, Bridgeport, Ill., assignor to The Ohio Oil Company, Findlay, Ohio, a Corporation of Ohio. Original application filed Feb. 4, 1929, Serial No. 337,514. Divided and this application filed July 15, 1930. Serial No. 468,162. 5 Claims. (Cl. 74—14.)



1. A pumping power unit including a shaft, an eccentric channeled member mounted on the shaft, a power ring seated within the channel of the member, and a retaining ring disposed between the power ring and the eccentric member and having a head secured to the eccentric member and overlying the power ring.

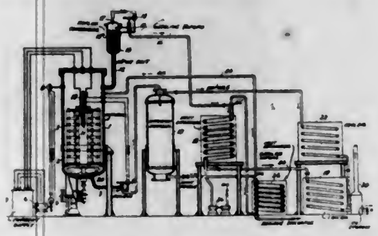
1,828,690. METHOD OF UTILIZING MAGNESIAN ROCK IN THE PREPARATION OF CALCIUM-MAGNESIUM BISULPHITE LIQUOR IN TOWERS. DANIEL WALLACE STEWART, Ottawa, Ontario, Canada. Filed May 26, 1928. Serial No. 280,957. 7 Claims. (Cl. 23—132.)

1. A method for the utilization of magnesium containing rock in the preparation of magnesium-calcium bisulphite liquors in towers which comprises calcining the magnesium containing rock, feeding the calcine and water to the top of a tower and passing sulphur dioxide through said tower countercurrent to said water and calcine to react with the latter.

7. A method for the utilization of magnesium containing rock in the preparation of bisulphite liquors in towers which comprises calcining the magnesium containing rock, reducing the calcined rock to a fine state of division, introducing the calcined rock into the top of a tower through which sulphur dioxide and water flow in counter

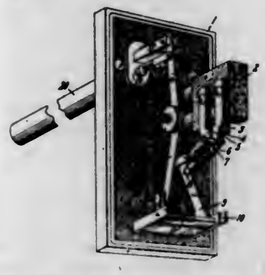
current relation, and controlling the combined-acid content of the liquor by regulating only the quantity of calcined magnesia rock introduced to the tower.

1,828,691. PROCESS AND APPARATUS FOR CRACKING HYDROCARBON OILS OR THEIR DISTILLATES BY DISTILLATION UNDER PRESSURE. SIEGMUND STRANSKY and FRITZ HANSGIRG, Vienna, Austria. Filed Mar. 1, 1927, Serial No. 171,859, and in Austria Mar. 18, 1926. 13 Claims. (Cl. 196—48.)



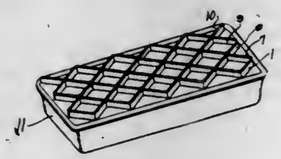
12. A process in the art of distilling liquid hydrocarbons under superatmospheric pressure for the purpose of obtaining therefrom products having lower boiling points which consists in continuously charging the hydrocarbons to a converter, heating the liquid hydrocarbons up to a temperature just sufficient to initiate a cracking of the material under treatment in the converter without the aid of hydrogenizing agents or catalysts, by electrical heating means having a large amount of metallic heating surfaces and automatically controlled in response to the pressure in the converter to a temperature not considerably surmounting that of the liquid undergoing cracking, a self-imposed pressure corresponding to the temperature just sufficient for initiating cracking being generated thereby in the converter, maintaining the volume ratio of liquid to vapor constant in said converter by continuously drawing off residuum through discharge means automatically controlled in response to the liquid level therein and starting an immediate spontaneous distillation of the formed lower boiling point hydrocarbons by permitting vapors of predetermined volatility to permanently escape through vapor discharging means automatically controlled in response to the volatility of the evolved vapors but independently from the pressure existing within the converter into a condensing system being under a lower pressure than that existing in the heated system, and while returning the heavier constituents of the evolved vapors by reflux condensation directly to the bulk of the liquid under treatment.

1,828,692. ROLLER DOUBLE CONTACT MECHANISM. GEORGE R. TOWNSEND, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 2, 1930. Serial No. 417,923. 6 Claims. (Cl. 200—187.)



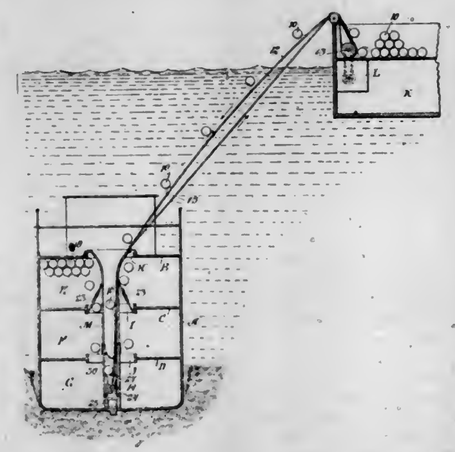
1. In a flame-responsive control device, a switch mechanism comprising spaced apart stationary contacts and a circuit controlling roller contact movable to cooperate therewith, relatively movable members connected to said movable contact and to each other for moving said roller contact to contact with different of said stationary contacts and an element responsive to flame conditions connected to said relatively movable members causing movement of the same to move said movable circuit controlling roller contact in response to flame conditions.

1,828,693. APPARATUS FOR MOLDING ICE. HARRY R. VAN DEVENTER, New York, N. Y., assignor, by mesne assignments, to Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 15, 1926. Serial No. 135,496. 20 Claims. (Cl. 62—108.5.)



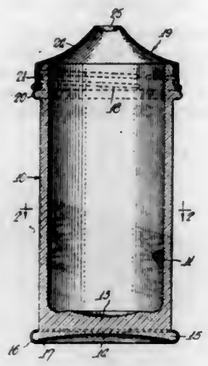
16. An ice freezing tray adapted for use with domestic refrigerators which comprisea a receptacle for containing water and a removable resilient partition therein for dividing the ice into separate blocks, said partition being of such special shape as to materially increase the flexibility thereof beyond the inherent flexibility of the material thereof to facilitate the removal of the frozen ice blocks therefrom.

1,828,694. SALVAGING APPARATUS FOR SUNKEN SHIPS. GEORGE W. WINKLER, Grantwood, N. J. Filed Apr. 7, 1931. Serial No. 528,429. 12 Claims. (Cl. 114—50.)



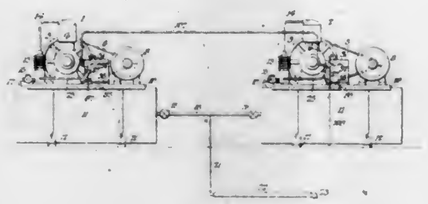
1. A salvaging apparatus for sunken craft including a plurality of buoyant elements, a device emplaceable in the hatch of the sunken craft for admitting said elements therethrough to the hold of the sunken craft and for preventing their escape therefrom, an endless conveyor extending from a surface craft to the sunken craft and through said device, means for connecting said elements to said conveyor and means carried by said device for releasing the elements from the conveyor within the hold of the sunken craft.

1,828,695. SUGAR DISPENSING CONTAINER. MILTON J. WOLFERMAN, New York, N. Y., assignor to Continental Silver Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 7, 1931. Serial No. 520,803. 6 Claims. (Cl. 221—61.)



1. A sugar spill comprising a transparent jar having a spill cover, a unitary outstanding bead at the bottom of the jar and a soft metal protective ring about the bead.

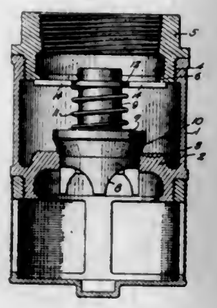
1,828,696. FLUID DISPENSING APPARATUS. JOSEPH C. WOODFORD, Ardmore, Pa., assignor to Service Station Equipment Company, Conshohocken, Pa., a Corporation of Delaware. Filed Nov. 28, 1930. Serial No. 498,697. 7 Claims. (Cl. 230—1.)



1. In fluid dispensing apparatus; the combination with a plurality of unit fluid compressors; of individual electric motors connected to respectively operate said compressors; a manifold connected in common to the discharge outlets of said compressors; electric switch means adapted to selectively energize one or more of said compressors simultaneously; automatically operative means controlling said switches, including parts adapted to be stressed in one direction by spring means and to be stressed in the opposite direction by the fluid compressed; and fluid conducting means coordinately connecting said units, adapted to energize the motor of one unit in accordance with the fluid pressure at another unit.

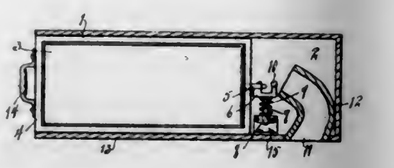
1,828,697. CHECK VALVE STRUCTURE. FARNHAM YARDLEY, West Orange, N. J., assignor to Jenkins Bros., New York, N. Y., a Corporation of New Jersey. Filed Oct. 5, 1929. Serial No. 397,685. 1 Claim. (Cl. 251—144.)

A check valve structure comprising a casing having a transverse wall with a valve seat opening therein and a removable top section, a valve disk member having guide feathers on its bottom cooperating with the seat opening and a stem on its top, a spring surrounding the stem, and a guide plate having a central opening engaged by the



stem and lateral members held in engagement with the top section by said spring, said plate being shorter than the internal diameter of the casing to permit limited movement of the plate transversely of the axis of the valve disk.

1,828,698. MATCH BOX. LOUIN BENAY, Fort Worth, Tex. Filed Apr. 1, 1930. Serial No. 440,658. 2 Claims. (Cl. 206—1.5.)



1. A match box comprising a receptacle and a carrier removably mounted therein, a match container mounted in said container mounted in said carrier, an eye attached to the end of said carrier, a manually operable spring latch secured to the interior of said receptacle and concealed therein, said receptacle having an opening in the side thereof, and a tubular curved passage rigid with said receptacle leading from said opening, and terminating in close proximity to said spring latch.

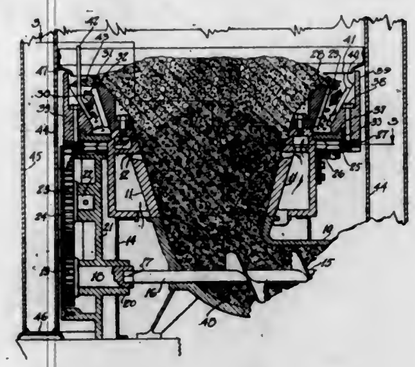
1,828,699. METHOD FOR THE PREPARATION OF SULPHUR DYES. ALBERT C. BURRAGE, Jr., Ipswich, Mass. Filed Jan. 25, 1927. Serial No. 163,576. 5 Claims. (Cl. 260—17.)

1. A water soluble black dye characterized by being composed of the reaction product of sulphur black with sulphur and 35% to 70% of alkali metal sulphide, and by being readily and completely soluble in water.

1,828,700. APPARATUS FOR REMOVING INCOMBUSTIBLES FROM STOKERS. HASKELL C. CARTER, Portland, Oreg., assignor to Iron Fireman Manufacturing Company, Portland, Oreg. Filed Jan. 4, 1930. Serial No. 418,474. 4 Claims. (Cl. 110—45.)

1. In a stoker the combination of a retort through which coal can be fed upwardly, a stationary circular grinding element forming an outlet for said retort, a rotatable

grinding element mounted outside of said stationary grinding element, said grinding elements having grinding ribs

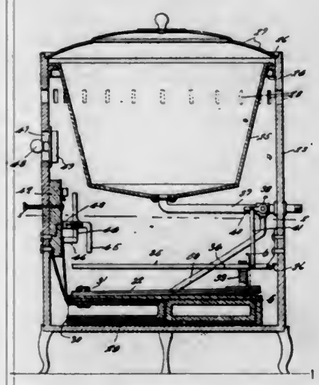


on their adjacent faces between which the overflow from said retort must pass, and means for rotating said rotatable grinding element.

1,828,701. METHOD OF IMPROVING METALS, AND PRODUCT THEREOF. ERNEST S. FISHER, Salt Lake City, Utah, assignor to Utah Metals Flux Company, Salt Lake City, Utah, a Corporation of Utah. Filed June 25, 1924. Serial No. 722,409. 22 Claims. (Cl. 75—17.)

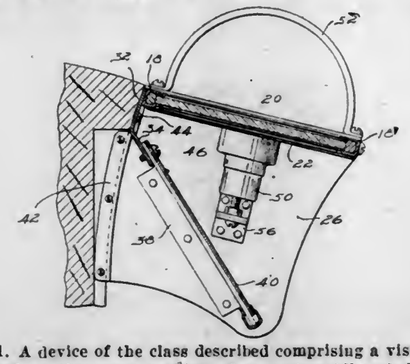
1. The method of improving metals which comprises contacting the same in heated state with a composition substantially identical with the carbonaceous shale found in the northern central portion of Emery County, Utah, south of Price River and Desert Lake.

1,828,702. AUTOMATIC HUMIDIFIER. LEE SING FOO, Manchester, N. H. Filed Sept. 16, 1930. Serial No. 482,341. 5 Claims. (Cl. 219—38.)



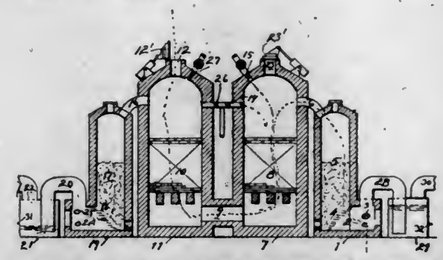
1. Means for moistening air in a room or the like comprising an electrical heating element, a circuit for the same, a switch in the circuit, means for closing the circuit when the air becomes dry, a water supply pipe discharging on the heating element, a valve in said pipe and means actuated by the heat from the element for opening the valve whereby the water flowing on to the heating element is converted into steam and after the air is moistened by the steam the switch operating means returns to normal position and the switch is opened.

1,828,703. ADVERTISING SIGN. FREDERICK H. JOHNSON, Detroit, Mich. Filed Oct, 16, 1929. Serial No. 400,127. 8 Claims. (Cl. 40—130.)



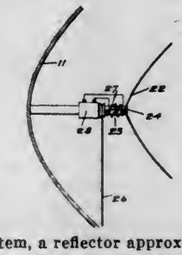
1. A device of the class described comprising a visor disposed at the upper portion of an automobile windshield extending at an angle thereto, and a stencil above said visor extending at an angle to the panel and to the windshield, the upper surface of said visor having a reflecting surface.

1,828,704. APPARATUS FOR THE MANUFACTURE OF GAS FROM OIL. LEON B. JONES, San Francisco, Calif., assignor to Jones Gas Process Corporation, a Corporation of California. Filed Mar. 21, 1927. Serial No. 176,957. 4 Claims. (Cl. 48—74.)



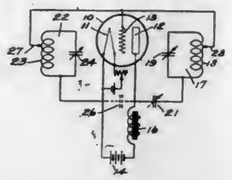
1. An oil gas making apparatus comprising: a pair of oil gas generating chambers directly interconnected at their lower ends; a separate fuel bed chamber connected to the upper end of each of said generating chambers; means for heating said generating chambers from said fuel beds; means for introducing a liquid hydrocarbon into said generating chambers to form an oil gas; and means for causing said oil gas to flow downwardly through one of said fuel beds.

1,828,705. RADIO SYSTEM. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed May 21, 1928. Serial No. 279,243. 1 Claim. (Cl. 250—11.)



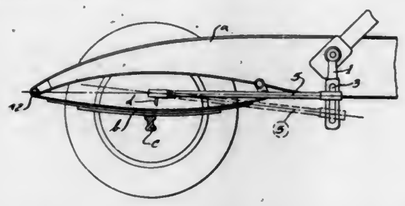
In a radio system, a reflector approximating a paraboloid and formed of conducting material, antenna means disposed near the focal center of the reflector, and means for rotating said antenna means.

1,828,706. OSCILLATION GENERATOR AND METHOD. FREDERICK A. KOLSTER and GEOFFREY GOTTLIEB KRUESI, Palo Alto, Calif., assignors to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Oct. 30, 1928. Serial No. 316,037. 8 Claims. (Cl. 250—36.)



1. An oscillation generator comprising an electron relay having grid, anode, and cathode electrodes, a closed reactive circuit having points of different potential thereof connected to the grid and anode of the relay, and another closed reactive circuit having points of different potential connected to the grid and cathode.

1,828,707. ADJUSTABLE CONNECTION FOR STEERING GEAR MEMBERS. ALFRED B. SANDERS, Pontiac, Mich., assignor of one-tenth to The American Forging and Socket Company, Pontiac, Mich., a Corporation of Michigan. Filed Aug. 20, 1928. Serial No. 300,749. 1 Claim. (Cl. 280—87.)



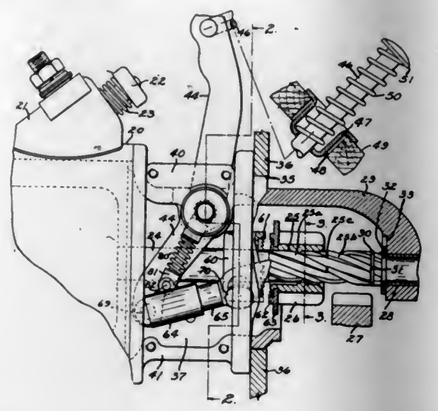
In an automobile the combination of an axle, a chassis, a spring that has become deformed in use so that the drag link is in a relative position as to the other parts that causes irregularity of movement of the steering wheels, a knuckle arm on said axle, a steering arm depending from the chassis, and a drag link attached at one end to said knuckle arm and at the other end attached adjustably to said steering arm longitudinally thereof and capable of being moved and secured at a point of the latter at which said irregularity of movement of the steering wheels is obviated.

1,828,708. PREVENTION OF THE DEVELOPMENT OF RANCIDITY IN VEGETABLE OILS. HAROLD JAMES TATTERSALL, Swinton, Manchester, England, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Filed Mar. 5, 1930, Serial No. 433,507, and in Great Britain Mar. 7, 1929. 7 Claims. (Cl. 87—9.)

1. Method of treating a vegetable oil containing an unsaturated glyceride to prevent rancidity which comprises intimately mixing said oil with a compound selected from the group comprising peracetic acid and derivatives of peracetic acid.

1,828,709. ENGINE STARTING APPARATUS. WILFORD H. TEETER, Dayton, Ohio, assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 14, 1928. Serial No. 285,490. 15 Claims. (Cl. 74—7.)

1. An engine starter drive comprising a rotatable driving member axially movable into engagement with a rotatable part connected with an engine to be started; and manually operable means for moving the driving member axially and for turning it when necessary to effect its engagement with the engine part, said means including a device for engaging said driving member to axially move and turn the same, a part movable longi-

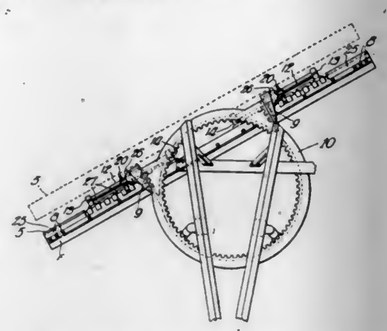


tudinally with respect to the axis of the driving member, a spring for transmitting motion from the part to the device in a direction oblique to and eccentric to the axis of the driving member, and manually operable means for moving said part.

1,828,710. METHOD FOR PRODUCING TITANIUM COMPOUNDS. FOORD VON BICHOWSKY, Glendale, Calif., assignor to Titania Corporation, Los Angeles, Calif., a Corporation of California. Filed May 22, 1929. Serial No. 365,233. 7 Claims. (Cl. 23—202.)

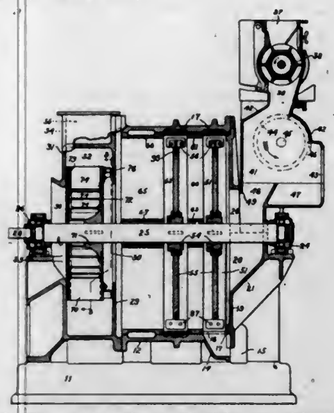
1. Method for producing titanium compounds which consists in stabilizing the interaction of nitric acid and titanium nitrogen compounds by carrying out the reaction in the presence of a phosphate ion.

1,828,711. DOUBLE REVERSIBLE MOLDBOARD FOR GRADERS. CLYDE B. FAVERTY, Hammond, Ind., and WILLIAM J. SCHLACKS, Chicago, Ill., assignors to Ryan Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1927. Serial No. 188,805. 9 Claims. (Cl. 37—156.)



1. In a road grader, mold board supporting brackets, a mold board, means for pivotally attaching the mold board to said brackets to swing the mold board on the brackets from one facing position into an opposite facing position relative to the brackets while supported thereby, and adjusting means for tiltably adjusting and holding the mold board in various tilted positions while in either said facing position.

1,828,712. OUTFEEDING MEANS FOR FUEL PULVERIZING MACHINES. PAUL ARTHUR HIRSCH, New York, N. Y. Filed June 1, 1926. Serial No. 112,956. 5 Claims. (Cl. 302—37.)

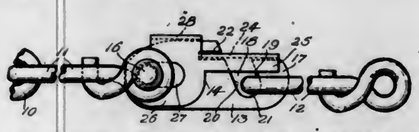


1. Outfeeding means for pulverizing machines comprising a casing, a shaft rotatable therein, a disk on the shaft separating the interior of the casing into a dust chamber and an air chamber, dust blades at the dust side of the disk and air blades at the opposite side of the disk, the dust blades being angularly disposed with reference to the air blades.

1,828,713. DUAL WIPER WINDSHIELD CLEANER. HENRY HUEBER, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Mar. 11, 1929. Serial No. 346,096. 4 Claims. (Cl. 15—255.)

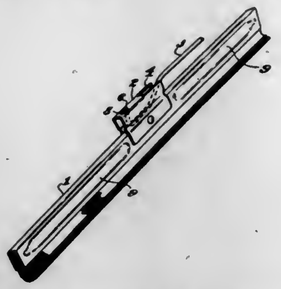
1. A dual wiper windshield cleaner comprising a support having a front wall, an overhanging top wall and an open bottom to form a housing, said front wall having three spaced openings, a pair of shafts journalled in two of the openings and each having a crank arm extending upwardly beneath the overhanging top wall, wiper supporting arms carried by the said shafts and extending downwardly through said open bottom, a motor mounted on the support and having an operating shaft extending through the third opening of the front wall, a crank arm carried by the motor shaft and extending upwardly beneath said overhanging wall, and a rigid link extending alongside of said front wall and connecting the several crank arms.

1,828,714. TIRE CHAIN KEEPER. GLEN KLINTWORTH, Scribner, Nebr. Filed Sept. 25, 1930. Serial No. 484,401. 4 Claims. (Cl. 24—242.)



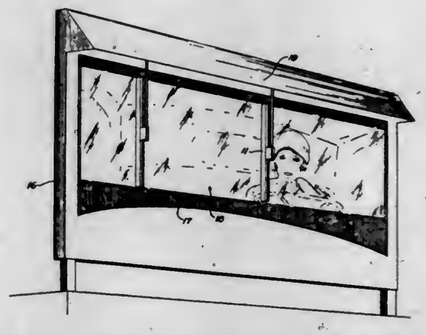
1. An improved clip comprising a plate having an elongated slot at one end and a hook at the other end with a notch extending above and between said slot and hook, and a slotted keeper pivotally and slidably mounted upon said plate and having wings extending therefrom adapted to extend over said hook and into said notch.

1,828,715. SLEET BLADE. JOHN R. OISHEI, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Dec. 22, 1927. Serial No. 241,784. 2 Claims. (Cl. 15—255.)



1. A wiper blade comprising a channeled holder having a relatively shallow bulge in one side wall forming a chamber, an absorbing wiping body clamped between the side walls of the channel, and a dry chemical, dissoluble in water, contained within the chamber-forming bulge and in contact with the wiping body, the side of the chamber which opens into the channel of the holder being open for substantially the entire width of the chamber, said absorbing wiping body constituting substantially the entire side of the chamber whereby the dry chemical will be retained within the chamber until dissolved.

1,828,716. SIGN. WILLIAM E. OISHEI and FRANK WIELAND, Buffalo, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Mar. 14, 1929. Serial No. 346,926. 9 Claims. (Cl. 40—126.)

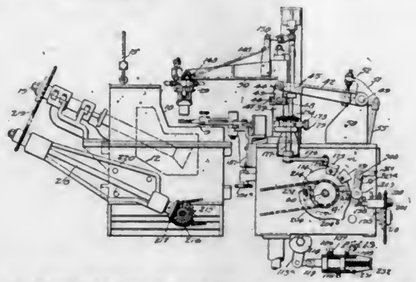


1. An advertising device comprising a sign body, a representation of an automobile windshield having a substantially rectangular cleaned portion bordered by an uncleaned portion provided on a flat surface thereof, a trackway mounted in parallel relation to said flat surface, a carriage slidably mounted on said trackway, a pair of wiper simulating members rigidly mounted on said carriage, said carriage being guided by said trackway to support the wiper simulating members in spaced relation to said surface, and means for imparting movement to said carriage whereby each of the wiper simulating members traverses its respective portion of the cleaned portion so that said portion appears to have been cleaned by said members.

1,828,717. SUCTION FEEDER. KARL E. PEILER, West Hartford, and WILLIAM T. BARKER, Jr., Hartford, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 9, 1927. Serial No. 218,398. 25 Claims. (Cl. 49—5.)

3. In glass gathering apparatus, a receptacle having an open end, means for periodically moving said receptacle

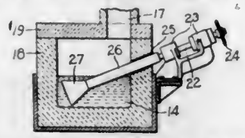
to and from position to dip at its open end into a body of molten glass, means for initiating a period of suction in the receptacle each time the receptacle dips into the glass and for subsequently terminating said period of suction, and separate means for independently adjusting the times of beginning and cessation of the period of suction in the receptacle for any selected cycle of operations of the receptacle.



8. In glass feeding apparatus, a forehearth having a gathering opening through which portions of glass may be gathered periodically from the surface of a supply body of molten glass in the forehearth, said forehearth having its bottom wall inclined adjacent to the gathering station, and means operating in the glass in the forehearth for moving glass of said supply body on said inclined bottom wall and at said gathering station.

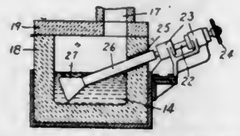
14. In glass gathering apparatus, a glass holding member having a normal cycle of movement when charged from a starting position to a plurality of discharge stations in series, and back to said starting position, and means for predetermining the particular discharge station at which the outward movement of said receptacle from the starting position will be stopped to permit discharge of its contents.

1,828,718. CONICAL STIRRER. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 26, 1928. Serial No. 272,956. 6 Claims. (Cl. 49—56.)



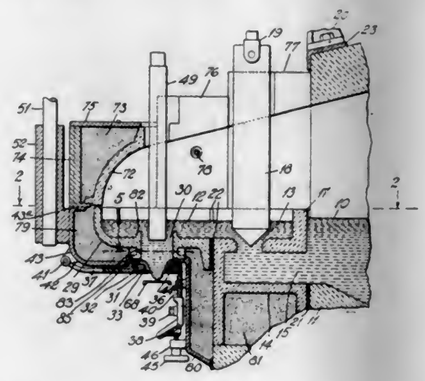
6. The method of circulating molten glass in a gathering pool from the surface of which charges of glass are successively gathered in a gathering zone, which comprises projecting a rigid implement into the glass beneath said gathering zone, maintaining the implement in adhesive contact with the glass beneath said zone, and rotating the implement to move upper layers of the glass in one direction and lower layers of the glass in an opposite direction in a path confined within the gathering pool.

1,828,719. CONICAL STIRRER. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original application filed Apr. 26, 1928, Serial No. 272,956. Divided and this application filed July 19, 1929. Serial No. 379,363. 11 Claims. (Cl. 49—56.)



1. A stirrer for molten glass, comprising a rotating stem passing through the surface of the glass and inclined thereto, said stem having an enlarged head at the lower end thereof immersed in the glass, said head having alternate projections and recesses.

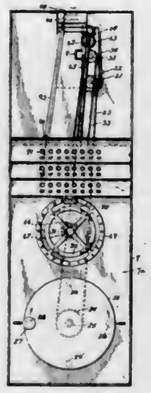
1,828,720. APPARATUS FOR FEEDING MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 20, 1922. Serial No. 545,082. 21 Claims. (Cl. 49—55.)



1. In apparatus for feeding molten glass, the combination with a glass melting container, of a basin for the glass provided with a discharge outlet, a gate block having a vertical flow passage therein, a flow passage having walls diverging from the vertical passage to the container, a flow passage having walls diverging from the vertical passage to the basin, and an adjustable gate member for controlling the flow of glass through the vertical passage.

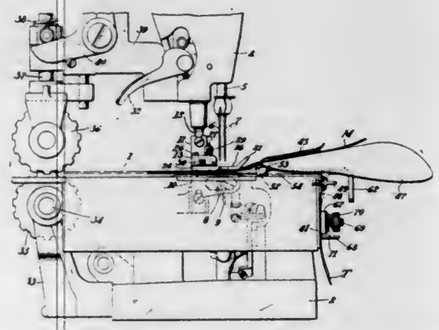
16. Apparatus for discharging molten glass from an outlet in a container, having in combination an outlet ring, a pivotally mounted carrier therefor, a lever having an end adapted to swing beneath the carrier as it approaches final position, and means for securing the lever in position to hold the carrier in operative relation to the outlet.

1,828,721. DOOR LOCKING AND OPERATING MECHANISM. ABRAHAM PERLMAN, New York, N. Y., assignor to A. Perlman Iron Works, Inc., a Corporation of New York. Filed May 22, 1931. Serial No. 539,292. 5 Claims. (Cl. 189—8.)



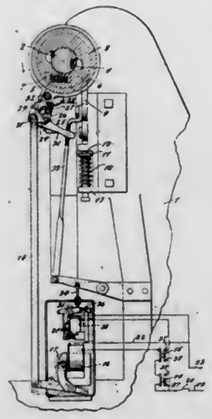
5. Door locking and operating mechanism of the class described comprising the combination with a number of cell doors adapted to be moved into open or closed position, means for selectively connecting any one or more of said doors with an actuating bar, an actuating bar for operating said doors connected thereto, means for locking said doors selectively in open or closed position, controlling means associated with said locking means whereby said doors may be selectively locked or unlocked in either open or closed position, means for operating said actuating bar, and means for locking said last named operating means in any one of a number of intermediate positions.

1,828,722. WORK GUIDING MEANS FOR SEWING MACHINES. RUDOLPH J. SAILER, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Feb. 28, 1929. Serial No. 343,533. 6 Claims. (Cl. 112—126.)



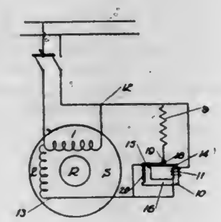
1. The combination with the stitch-forming mechanism of a sewing machine, of an edge-folder, a tape-guide extending within said edge-folder to direct a tape within a marginal fold formed in a body material by said edge-folder, and a sliding support for said tape-guide extending in a direction substantially parallel with the line of seam formation permitting retraction of the tape-guide from the edge-folder.

1,828,723. SAFETY DEVICE. EDMUND J. VON HENKE, Chicago, Ill., assignor to Automatic Safety Trip Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1927. Serial No. 173,659. 13 Claims. (Cl. 192—131.)



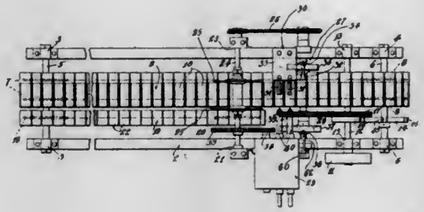
5. Means for tripping the clutch of punch presses having a fly-wheel, comprising an actuator on the fly-wheel, a pivoted lever, an electromagnetic relay for moving the lever into the path of said actuator, means requiring both hands of the operator for energizing said relay, means controlled by said lever for tripping the clutch, and means rendered effective upon the tripping of said clutch for preventing the repeating of said press.

1,828,724. ALTERNATING CURRENT MOTOR. NORMAN S. YOST, Howell, Mich., assignor to Howell Electric Motors Company, Howell, Mich., a Corporation of Michigan. Filed Aug. 6, 1928. Serial No. 297,726. 6 Claims. (Cl. 172—278.)



1. In combination, a single phase motor having a plurality of windings; a phase advancing means; a circuit for one of said windings adapted to be connected across a source of current; another of the windings being connected with said phase advancing means, said winding and said phase advancing means forming a parallel circuit with said first mentioned winding; and means responsive to the voltage variations of the winding connected to the phase advancing means for rendering ineffective the second winding and the phase advancing means.

1,828,725. FISH CLEANING MACHINE. WESLEY A. MULLER, Monterey, and BURT C. YOUMAN, San Francisco, Calif., assignors to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed May 21, 1929. Serial No. 364,746. 3 Claims. (Cl. 17—3.)



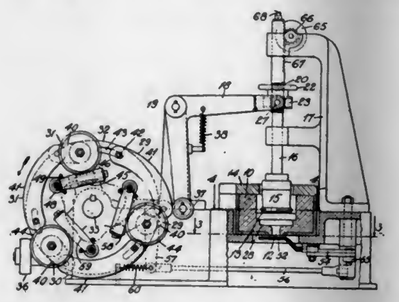
1. A fish cleaning machine comprising revolvable entrail removing members, means for axially advancing said entrail removing member during fish cleaning operations

while rotating the same, and a guard for said entrail removing members operative to prevent the entrail removing members cutting the fish.

1,828,726. METHOD OF AND APPARATUS FOR FEEDING MOLTEN GLASS. WILLIAM A. LORENZ, Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 5, 1921. Serial No. 467,154. 16 Claims. (Cl. 49—55.)

1. In apparatus for separating mold charges from a mass of molten glass in a container having an outlet, the combination of a plunger movable toward and from the outlet to control the discharge of glass therethrough, a rotatable carrier, a plurality of cam members mounted on the carrier, and a lever actuated by the cam members and connected to move the plunger, each of said cam members being adapted to cause a reciprocation of the plunger, and means for independently adjusting the cam members during the operation of the apparatus.

8. The method of feeding molten glass from a delivery outlet of a glass container in mold charges in successive cycles, each cycle covering the discharge of a plurality of successive masses of independently regulable sizes, which comprises accelerating and retarding discharge of glass through the outlet a plurality of times in each cycle, regulating the relative sizes of the respective masses of glass discharged through the outlet in that cycle and in



each subsequent cycle by regulating the time intervals between successive periods of accelerated and retarded discharge in a cycle, and severing a mold charge from each of said discharged masses.

Patents Nos. 1,828,727 to 1,829,723

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THE

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Patents	997—No.	1,828,727 to No.	1,829,723,	inclusive.
Total	1,368			

Disclaimer

1,820,333.—*Hugo H. Wermine*, Villa Park, Ill. ELECTRIC CONNECTER PLUG. Patent dated August 25, 1931. Disclaimer filed October 9, 1931, by the assignee, *Belden Manufacturing Company*.

Hereby enters this disclaimer to the subject matter of:

Claim 1 of said Letters Patent, except insofar as said claim relates to an electric connecter plug having a terminal concealed or enclosed within a recess in the main body portion for receiving in contact therewith, within said recess, a prong of another connecter;

Claim 2 of said Letters Patent, except insofar as said claim relates to an electric connecter plug having a contact member exposed on the exterior of the structure, and in which the terminal and contact member are separate and distinct elements, each of which is provided with means engaging the auxiliary body member.

Adjudicated Patents

(C. C. A. Wis.) Miller patent, No. 1,184,979, for flexible binder-post for loose-leaf binders, claims 1 and 9 *Held* invalid. *Siekert & Baum Stationery Co.* v. *Stationers Loose Leaf Co.*, 51 F.(2d) 326.

(D. C. Md.) Tomlinson patent, No. 1,820,662, for doughnut-machine, claims 1 and 2 *Held* valid and infringed. *Doughnut Mach. Corporation* v. *Demco, Inc.*, 51 F.(2d) 364.

(D. C. Md.) Sherman and Morris patent, No. 1,414,718, for cooking apparatus, claims 3, 4, and 12 *Held* valid but not infringed. *Id.*

(D. C. N. Y.) Hewes patent, No. 1,419,137, for men's neckwear, *Held* valid and infringed. *Hewes & Potter* v. *Meyerson*, 51 F.(2d) 405.

(D. C. Md.) Bergner patent, No. 1,492,541, for cooking apparatus, claims 1, 6, 7, 51, and 58, *Held* valid and infringed. *Doughnut Mach. Corporation* v. *Demco. Inc.*, 51 F.(2d) 364.

(D. C. Mich.) Fairbairn patent, No. 1,559,520, for putting green and similar playing surface, *Held* valid and infringed. *National Pipe Products Corporation* v. *National Golf Course Co.*, 51 F.(2d) 423.

(D. C. Md.) Nye patent, No. 1,599,916, for doughnut frying machine, claim 4 *Held* valid and infringed. *Doughnut Mach. Corporation* v. *Demco. Inc.*, 51 F.(2d) 364.

(D. C. N. Y.) Rocke patent, No. 1,602,346, for method and apparatus for attaching separable fastener tapes, claims 1, 2, 9, 11, 12, 13, 15, 18, 19, 22, 23, 24 *Held* invalid. *Hook & Eye Devices Corporation* v. *Belfit Brassiere Co.*, 51 F.(2d) 410.

(D. C. Md.) Bergner patent, No. 1,665,017, for cooking apparatus, *Held* not infringed. *Doughnut Mach. Corporation* v. *Demco. Inc.*, 51 F.(2d) 364.

(D. C. Md.) Bergner patent, No. 1,665,017, for cooking apparatus, claims 12, 18, and 19 *Held* valid and claim 12 *Held* infringed. *Id.*

(D. C. N. Y.) Alexander patent, No. 1,701,940, for tire mirror, claims 1, 2, 3, and 4 *Held* not infringed. *McGrath Holding Corporation* v. *Anzell*, 51 F.(2d) 407.

(D. C. N. Y.) Alexander patent, No. 1,719,821, for rear-view mirror bracket, claim 1 *Held* valid and infringed and claim 2 *Held* not infringed. *Id.*

(D. C. N. Y.) Writer patent, No. 1,725,500, for pressing machine, claims 8, 9, 10, and 11 *Held* valid and infringed. *Anderson & Writer Corporation* v. *Kane*, 51 F.(2d) 425.

Condition of Applications Under Examination at Close of Business October 10, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 93,274; Trade-Mark Division, 1,018. Oldest new case, Feb. 11, 1931; oldest amended, Feb. 12, 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	May 18	May 19	843
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Apr. 13	Apr. 16	1,422
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	June 6	June 5	987
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 4	May 7	878
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Apr. 15	Apr. 18	699
318	6. LEWERS, A. M., Carbon Chemistry	Mar. 2	Mar. 9	2,259
106	7. JARBOE, C. O., Optics; Photography	Mar. 26	Mar. 26	2,025
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Mar. 10	Mar. 11	1,616
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	May 1	May 2	1,209
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Apr. 13	Apr. 27	1,170
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	May 11	May 13	717
380	12 HENRY, C. C., Machine Elements	Mar. 14	Mar. 16	1,053
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Apr. 11	Apr. 16	1,203
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Apr. 20	May 8	1,057
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Mar. 27	Mar. 27	2,469
242*	16. SPENCER, C. J., Telegraphy; Telephony	June 29	June 20	881
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Mar. 16	Mar. 20	1,558
229	18 PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	May 1	May 2	1,100
236	19 KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Feb. 20	Feb. 23	2,193
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	May 23	June 2	980
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Apr. 10	Apr. 30	974
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion	May 25	June 13	793
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Feb. 25	Feb. 13	1,096
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Apr. 10	Apr. 16	966
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Apr. 15	Apr. 17	1,600
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Apr. 14	Apr. 13	965
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Apr. 14	Apr. 10	1,168
225	28. BENSON, A. R., Internal-Combustion Engines	Mar. 12	Mar. 16	1,841
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	June 8	June 10	589
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	May 11	June 22	831
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Feb. 11	Feb. 12	2,550
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	May 11	May 11	1,213
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Apr. 14	Apr. 10	2,304
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	May 30	June 4	910
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Aug. 3	July 6	685
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Feb. 28	Feb. 26	2,194
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 30	Mar. 31	1,543
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	June 13	June 18	578
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Apr. 11	Apr. 18	1,670
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Mar. 12	Mar. 21	3,207
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	June 4	June 11	720
223*	42. CUTTING, H. O., Electric Signaling	Mar. 11	Mar. 11	1,556
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Apr. 15	Apr. 27	1,485
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Feb. 11	Feb. 12	2,125
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Mar. 14	Mar. 14	2,130
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Apr. 23	Apr. 29	1,043
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Apr. 11	Apr. 11	2,160
212*	48. ROEPKE, O. B., Electricity, General Applications	Apr. 14	Apr. 11	1,074
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Apr. 10	Apr. 10	1,528
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Feb. 12	Feb. 20	2,615
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Mar. 5	Mar. 7	2,093
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings	Apr. 26	May 2	1,344
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	May 12	May 15	697
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Feb. 24	Feb. 25	2,936
102	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	Aug. 12	Aug. 11	283
	{Designs	Sept. 17	Sept. 26	241
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Mar. 13	Mar. 14	1,927
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Apr. 10	Apr. 10	934
270*	58. DOWELL, E. F., Abrading; Typewriting	Mar. 11	Mar. 11	1,631
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Apr. 13	Apr. 15	1,729
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Mar. 10	Mar. 10	2,117
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Feb. 13	Mar. 9	2,070
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Feb. 18	Feb. 18	2,513
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Mar. 2	Mar. 2	2,327
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks	Sept. 11	Sept. 28	950
	{Labels and Prints	Sept. 19	Oct. 1	68

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE CARLSON

No. 2,712. Decided April 29, 1931

PATENTABILITY—CHILD'S BIB.

Claims for a child's bib *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Howard L. Fischer and *Mr. A. Ponack* for Carlson.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

This is an ex parte appeal from a decision of the Board of Appeals of the United States Patent Office, rejecting claims 1, 2, 3 and 4 in appellant's application for an invention relating to a child's bib, the lower front part of which contains a tray construction.

The application discloses a child's bib containing at the bottom a pocket or tray which is for the purpose of catching particles of food dropped by the child when eating. The exhibit of the goods which appellant is merchandising is made in accordance with her application disclosure, and is made from a light colored cloth, which is starchy and more or less stiff. The body of the bib lies flat against the child's chest and the lower edge is arcuated so that a crescent-shaped pocket or tray member stands out from the flat portion of the bib. The character of standing out and forming a pocket is brought about by the more or less stiff character of the cloth and the fact that the pocket member contains more cloth and is longer from side to side than the distance between the two sides when measured in a straight line. The particular structure which causes the pocket to project, we think, is aptly described in the claims and it is the one feature of the claims which appellant earnestly urges is not disclosed in any of the references cited.

Claim 3 is illustrative and reads as follows:

3. A child's bib formed of liquid resisting material including, a body portion, an arcuated edge formed along the lower side of said body portion, a tray portion having arcuated edges of different radiuses, each of which are greater than the radius on said body portion, said edges converging into each other to form pointed ends, and means for attaching one of said arcuated edges of said tray portion to the arcuated edge of said body portion to cause said tray portion to project in an arcuated formation throughout its entire length from said body portion.

The rejection was based upon the following references: Clayton, 193,077, July 17, 1877; Spies, 358,367, February 22, 1887; Small, 636,462, November 7, 1899; Newlin, 704,206, July 8, 1902.

The "liquid resisting material" feature of the claim is old and it is not seriously contended that it is new.

We think the Board of Appeals was correct in its conclusion that the references clearly anticipated the disclosure of appellant's application and the claims were properly rejected.

Appellant urges that no reference, except Clayton, discloses the curved pocket effect and that Clayton is in a non-analogous art, being a patent for a bathing shoe.

We think Spies anticipates the projecting pocket feature of appellant's disclosure. The drawing and specification in Spies shows that if the top of the pocket should be wider than the body of the bib, the pocket would project. The drawing shows and the specification recites that if the bottom, which is wider than the body of the bib, is drawn up and fastened to the body, a projecting pocket will result.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

J. P. HEILBRONN CO. *v.* HAMMERMILL PAPER CO.

No. 2,720. Decided April 29, 1931

1. TRADE-MARKS—ALTERNATIVES.

A mark consisting of the word "Luna" *Held* not the mere alternative of a mark consisting of the representation of crescent with a man's face in the concave portion thereof and the representation of a five-pointed star inclosing the letter "H".

2. SAME—SIMILARITY.

Appellee was entitled to register the term "Luna" as a trade-mark for bond writing paper, and the prior use by appellant of a mark consisting of the representation of a crescent having a face therein with the representation of a five-pointed star inclosing the letter "H" as a trade-mark for paper such as pads, wrappers, etc., affords no ground for canceling that registration.

APPEAL from the Patent Office. Affirmed.

Mr. Warren I. Cubberley for Heilbronn Co.

Mr. Merrell E. Clark for Hammermill Paper Co.

BLAND, *J.*:

This appeal involves a petition for the cancellation of appellee's trade-mark. The petition was dismissed by the Examiner of Interferences and his decision was affirmed by the Commissioner of Patents, and from the latter's decision this appeal is taken.

The Hammermill Paper Co., of Erie, Pa., hereafter called Hammermill, on March 31, 1925, registered the trade-mark "Luna" for bond writing paper. The date of the first use of this trade-mark of the registrant in interstate commerce was in February, 1924, and ever since that date Hammermill has shipped large and increasing quantities of bond writing paper bearing the trade-mark "Luna Bond, Made in U. S. A." into various States and into many different countries of the world.

In December, 1924, appellant, J. P. Heilbronn Co., hereafter known as Heilbronn, placed upon the market in competition with Hammermill its own bond writing paper bearing the trade-mark "Luna Bond", the words being printed in the same style as that of Hammermill and accompanied by a crescent or half-moon with the outline of a face in the hollow of the crescent.

The Oregon Pulp and Paper Co., of the State of Oregon, was the manufacturer of the paper for Heilbronn. When Hammermill objected to the said paper company manufacturing the paper, Heilbronn gave the paper company an indemnity bond and then proceeded to petition for cancellation.

Heilbronn's first ground for cancellation is based upon the fact that prior to the use of the word "Luna" by Hammermill, appellant had used, upon other kinds of paper such as pads, wrappers, booklets, etc., a trade-mark which was described by the Commissioner in his decision as:

> * * * the representation of a crescent within the concave portion of which appears a representation of a man's face, and a representation of a five-pointed star enclosing the letter "H" appears hung or suspended from the upper horn of the moon crescent * * *.

Heilbronn's position is that since that symbol includes the crescent and since it claims that "Luna" is the Spanish word for moon, the use of the Hammermill trade-mark "Luna" will lead to confusion and to the damage of Heilbronn; that since "Luna" means moon in Spanish, appellee's mark "Luna" in Spanish countries will be confused by the paper-purchasing public with appellant's so-called crescent mark.

Appellant further contends that appellee has not shown "clean hands" as based upon facts which will be briefly stated. American Paper Exports, Inc., was the selling agency for Hammermill, and S. Allen Presby was the agent and customer of said American Paper Exports, Inc., in the Philippine Islands. In 1924 when a shipment of Hammermill's "Luna" goods, shipped by American Paper Exports, Inc., arrived in the Philippines, Heilbronn brought suit against Presby and another, for injunction and damages, basing its suit on Heilbronn's Philippine registered trade-mark, which mark consisted of the crescent and the star inclosing the letter "H". In settlement of the suit it was agreed that Presby would not import paper bearing the "Luna" trade-mark into the Philippines, and that the mark "Luna" or "Luna Bond", in the Philippines, was owned by Heilbronn.

This evidence was evidently offered on the theory that it amounted to an admission by Hammermill that by the use of its trade-mark "Luna", it was infringing appellant's mark. It is nowhere shown that the parties to the contract had any authority to contract with reference to appellee's trade-mark rights and we regard it of no importance in the determination of the issues before us.

The record shows that appellee sold its goods in Cuba prior to any sale of the same being made in the Philippines and that the word "Luna" is the name of a party in Cuba who ordered some of appellee's goods.

The word "Luna", both in the English and Spanish languages, has reference to the moon. Appellant states that "Luna" means moon; that it means a moon goddess and that "Lunar" is defined as "pertaining to or resembling the moon, orbed or crescent."

Appellant argues that under a long line of decisions, which it cites, the use of a word has the same effect as the use of a picture, if the word means the same as the picture. One of the leading cases on this subject is *In re Maclin-Zimmer-McGill Tobacco Co., Inc.*, 49 App. D. C. 181, 271 O. G. 688, where it was held that the right to employ a symbol necessarily included the right to employ the word. Another case cited is *G. Sindenberg and Co.* v. *W. H. Childs and Son*, 146 M. D. 345, 15 T. M. Rep. 237, where the word "Capitol" was refused registration by reason of the registered trade-mark consisting of a picture of the capitol.

[1] The difficulty with appellant's contention in this regard is that his trade-mark does not consist of a moon. It does not purport to be the representation of a moon. A portion of it may be said to be a crescent or part of a moon with a grotesque face accompanied by a star hanging to the upper horn in which star is the letter "H". There is no evidence of consequence in the record that appellant ever used the word "Moon" or the picture of a moon or the word "Luna" in connection with the sale of its goods prior to appellees use of the word "Luna". Conceding that appellant had the right to the exclusive use of the trade-mark used by it prior to the date of appellee's use of its "Luna" mark, appellee had the right to register its mark and appellant's cancellation proceeding must fail if it is not likely that confusion will result from the concurrent use of both marks on goods of the same descriptive properties.

[2] Appellant's mark which was used prior to appellee's use of its "Luna" mark, we think was used upon goods of the same descriptive properties as those of appellee, yet it is conceded that they were not exactly the same kind of goods. The marks being neither similar in appearance nor sound, we do not believe there is now or was on the date appellee registered its mark any likelihood of confusion arising from the concurrent use of both marks. The record as a whole shows no actual confusion or circumstances and facts which would indicate likelihood of confusion. The right of appellee to use in connection with its mark a picture or a representation of a moon or any part of the same or to characterize its goods as moon goods either here or in Latin countries is not before us. Its registration is for the use of the word "Luna" on bond writing paper and we are unable to see how appellant could be damaged in the use of its combination mark.

We agree with the decision of the Commissioner of Patents and the same is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MURRAY

No. 2,730. Decided May 25, 1931

PATENTABILITY—HEAT CONDUCTING TUBES.

Claims for an improvement in heat-conducting tubes *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Milans & Milans and *Messrs. Usina & Rauber* for Murray.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

Appellant has appealed to this court from a decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner, refusing to allow all the claims in his application, which are numbered 10 to 13 inclusive.

The alleged invention relates to heat-conducting tubes in steam boiler construction.

Claims 10 and 13 are illustrative and follow:

> 10. A heat-conducting unit for generating steam in boilers, said unit constituting a complete article of manufacture and comprising a tubular member with longitudinal flanges at opposite sides, said flanges having curved portions with their faces engaging the tube and making close contact across the entire width, so as to provide a broad path for the transmission of heat from the flange to the tube, said curved portion being welded to the tube and the outer portions of the flanges being free.
>
> 13. The combination of a plurality of separate heat-conducting units for generating steam in a boiler, each unit comprising members alongside of and parallel to each other with longitudinal flanges at its opposite sides, each flange having a portion overlapping and welded to its tube and having an outer portion which is free and which overlaps a free edge of a flange on the adjacent tube, the widths of the respective flanges and the extent of the overlap being such as to expose substantially equal widths of the two flanges between each two tubes.

The claims were rejected upon the following references: Junkers, 1,125,113, January 19, 1915. White and Baker, British, 21,066 of 1892.

Appellant's disclosure shows the ordinary boiler tube to which are welded flanges, the description of which in the claims is regarded as sufficient for our purposes. The application and claims disclose two different structures which accomplish the same result and which result appellant claims is useful and a great advancement in the art. In one structure more of the surface of the tube is covered by the welded flange than is covered in the other. Appellant's counsel argues that the welding of the flat surface of the flange to the tube affords a better conducting agency for conducting the heat from the tube to the flanges than obtains where the projection or flange is part of the tube itself.

The Examiner cited five references. The Board of Appeals contented itself with relying upon two of the references referred to by the Examiner.

Junkers is a patent for a boiler tube structure in which the flanges are welded to the pipe, the welded surface covering approximately one-half of the tube, substantially the same as is shown in Figure 6 of appellant's application. The flanges, however, in both of appellant's structures are not welded to each other, but overlap, which, according to appellant's contention, takes care of the expansion caused by the heat. The flanges in Junkers are welded to each other.

White and Baker, a British patent, shows five different methods of boiler construction, and in Figure 3, shows the flanges, which are projections or extensions of the tube, placed in overlapping positions without being welded.

In the two reference patents are disclosed the two claimed features of appellant's application. If appellant has made an invention, it rests in the combination of the two features taught by Junkers, and White and Baker.

The Board of Appeals concluded that combining the two features as appellant did, did not necessitate the exercise of inventive genius.

We agree with the conclusion of the Board that what appellant did called for no more than mechanical skill and that the useful results which may flow from such a combination would be obvious to one skilled in the art. It seems clear to us that no new and useful result, not inherent in the two structures, is obtained by the combination of the two old features.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE GREEN

No. 2,705. Decided April 27, 1931

PATENTABILITY—CATCH-BASIN TRAPS.

Claims for a catch-basin trap including an L-shaped member connected with a tubular sleeve by a bayonet-slot joint *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Arthur B. Marsh and *Mr. Arlon V. Cushman* for Green.

Mr. T. A. Hostetler for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting claims 7, 8, and 9 in appellant's application for a patent relating to a catch-basin trap, comprising a tubular sleeve, adapted to be imbedded in the masonry of the catch basin, and an L-shaped member connected with the tubular sleeve by means of a bayonet joint, the joint being so constructed that the L-shaped member is capable of being rotated relative to the sleeve. The L-shaped member is held in gas-tight relation to the sleeve by a packing of plastic material such as heavy grease.

Claim 7 is illustrative. It reads:

> 7. A catch basin trap comprising a tubular sleeve adapted to be fixed in the wall of a catch basin and having an exterior circumferential rib, intermediate its ends, which is shaped to form a groove internally of the sleeve, and a channel leading from said groove to the inner end of the sleeve, and an L-shaped member telescopically related to said sleeve and provided with an exterior tongue adapted to pass through the channel in the sleeve and fit within the circumferential groove at the inner end thereof, for the purpose described.

The references are: Holleran, 578,927, March 16, 1897; Finch, 788,200, April 25, 1905; Johnson, 788,721, May 2, 1905; Beattie, 1,353,559, September 21, 1920.

The basic reference is the patent to Johnson. It discloses a catch-basin trap structure, comprising a tubular sleeve adapted to be fixed to the wall of the basin and an L-shaped member attached to the sleeve.

In its decision, the Board of Appeals said:

> Johnson discloses the same combination broadly, but he employs a different type of joint between the L and the off take pipe, namely, a flange on the L retained in a depression in the end of the pipe by means of a covering ring fastened to the mouth of the pipe. Johnson's L is, however, made with a loose fit so that the L can be rotated by means of a hooked rod.

Claim 7 requires only the very broad substitution of a bayonet joint in place of Johnson's plain flange joint. Finch has been cited to show stove pipe joints of the bayonet type, and clearly anticipates each detail of the joint itself. The sleeve 15 shown in Figure 2 of Finch is fully equivalent to the sleeve 1 of applicant, the lugs 19 being equivalent to the rib 5.

It is considered that no patentable novelty is involved in the broad substitution of a joint like Finch's for the joint shown by Johnson. The rejection of claim 7 is affirmed.

Claim 8 requires that the joint of the bayonet type be of sufficiently loose fit to permit packing to be placed between the parts. In view of the general use of packing in most pipe joints as shown by Holleran and Beattie, no patentable novelty is thought to be involved in its use in a bayonet joint. The rejection of claim 8 is affirmed.

Claim 9 positively includes the packing as an element but presents the same question of patentability as claim 8 and this claim also is therefore without patentable novelty over the citations.

The patent to Finch relates to stove pipe joints of the bayonet type. It is argued by counsel for appellant that this reference is from a nonanalogous art and is, therefore, not a pertinent reference.

We are unable to agree with counsel for appellant that the patent to Finch is not a proper reference. In our opinion, the applicability of the bayonet joint disclosed by Finch and the slight change resulted to adapt it to its new use would occur to a person of ordinary mechanical skill. *Potts* v. *Creager et al.*, 155 U. S. 597, 70 O. G. 494.

The patents to Holleran and Beattie disclose that the use of a packing material in pipe joints is old.

We are of opinion that the conclusion reached by the tribunals of the Patent Office is right. Accordingly, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

VAN CAMP SEA FOOD CO., INC., *v.* WESTGATE SEA PRODUCTS CO.

No. 2,709. Decided April 29, 1931

TRADE-MARKS—SIMILARITY—"BREAST O' CHICKEN"—"CHICKEN OF THE SEA."

The term "Breast O' Chicken" used as a trade-mark for canned fish *Held* confusingly similar to the term "Chicken of the Sea" used upon the same goods.

APPEAL from the Patent Office. Reversed.

Mr. Albert J. Fihe for Van Camp Sea Food Co., Inc.

Mr. James M. Naylor, Mr. Chas. R. Allen, and *Mr. Wm. S. Graham* for Westgate Sea Products Co.

HATFIELD, *J.:*

This is an appeal in a trade-mark opposition proceeding from the decision of the Commissioner of Patents affirming the decision of the Examiner of Interferences dismissing the opposition of appellant and holding that appellee was entitled to the registration of the trade-mark "Breast O' Chicken" for use on canned fish.

In its application for registration filed December 13, 1926, appellee alleged that it had used the trade-mark since November 4, 1926.

It appears from the record that appellant is the owner of trade-mark registration No. 97,192, issued to the White Star Canning Company, May 19, 1914, of the trade-mark "Chicken of the Sea" for use on tuna fish; that appellant and its predecessor have used the registered trade-mark continuously on tuna fish throughout the United States and in foreign countries since prior to 1914; and that appellant has expended large sums of money in advertising its product and its trade-mark.

Several witnesses for appellant testified that, in their opinion, the use by appellee of its mark "Breast O' Chicken" would cause confusion in trade.

It further appears from the record that appellant filed suit against appellee in the United States District Court, Southern District California, Southern Division, in which it was alleged that the use by appellee of its trade-mark was an infringement of appellant's registered trade-mark. This suit was dismissed by the district court on motion by appellee. On appeal to the Circuit Court of Appeals, Ninth Circuit, the decree of the district court was affirmed. *Van Camp Sea Food, Inc.* v. *Westgate Sea Products*, 28 F.(2d) 957.

In its decision, the circuit court of appeals stated that both parties had caused their trade-marks to be registered. Thereupon, the court, among other things, said:

> Were the word "chicken," common to the two trade-marks, a purely fanciful term, and made equally prominent in both, we might have a case of sufficient doubt to warrant a hearing of evidence. But, as registered, the two combinations are similar neither in appearance nor in sound, and if, as appellant contends, it be conceded that "chicken" is the dominant word in its combination, it cannot be said to have such prominence in that of the defendant. Moreover, "chicken," as used by the plaintiff, is not a purely fanciful term, but is measurably descriptive. True, in its primary or most popular meaning, it designates the young of the domestic hen, and less commonly the young of wild birds, but it is sometimes used to denote living things of the sea as well as of the land. Its application has been so extended apparently because in a figurative sense it has come to signify something young and tender.

After some further discussion of the question of the descriptiveness of the involved trade-marks, the court stated that its decision should not be understood as holding that appellant's trade-mark registration was invalid. However, it is evident from its decision that the court was of opinion that both marks were descriptive. To what extent it was influenced in holding that the involved marks were not confusingly similar, by its views that they were descriptive, we do not know. But, however that may be, if the involved marks are descriptive, the tribunals below erred in holding that appellee was entitled to have its mark registered.

Appellee concedes that appellant's trade-mark is valid, and that question is, therefore, not before the court in this case.

The question of the descriptiveness, or misdescriptiveness of appellee's mark is involved in the issue of the right of registration. However, in view of the conclusion we have reached as to the confusing similarity of the marks, we find it unnecessary to consider other issues.

Appellant has popularized its goods and its trade-mark. It has expended thousands of dollars in advertising them throughout the United States, and its trade-mark "Chicken of the Sea" is undoubtedly of very great value. Although its goods possessed the same descriptive properties, and were sold in the same market and in the same stores as the canned fish of appellant, appellee, in 1926, adopted and used the trade-mark "Breast O' Chicken" on canned fish.

It is true, as argued by counsel for appellee, that the involved trade-marks are not identical either in appearance or in sound. However, the mark of appellee includes, as its dominant feature, one of the dominant features of appellant's mark—the word "Chicken"—and closely simulates appellant's trade-mark.

The law does not require that, in order that confusion, mistake, and deceit may be avoided, trade-marks used on such a common and widely-used article of food as canned fish, shall be carefully analyzed and dissected by the consuming public. *Lever Brothers Co.* v. *Riodela Chemical Co. (Now by Change of Name the Tex Co.)*, 17 C. C. P. A. (Patents) 1272, 41 F.(2d) 408, 398 O. G. 356.

The general purpose of the law of trade-marks is to prevent "one person from passing off his goods or his business as the goods or busines of another." *California Packing Corporation* v. *Tillman & Bendel*, 17 C. C. P. A. (Patents) 1048, 40 F.(2d) 108, 394 O. G. 789; *The B. F. Goodrich Co.* v. *Hockmeyer et al.*, 17 C. C. P. A. (Patents) 1068, 40 F.(2d) 99, 394 O. G. 795, and cases cited.

Although there is nothing in the record to establish affirmatively that appellee designedly simulated appellant's trade-mark, nevertheless, considering the similarity of the marks and other facts and circumstances of record, it would seem to be clear that the use by appellee of its trade-mark concurrently with the use by appellant of its trade-mark would cause confusion in the mind of the public, and would result in appellee trading on appellant's good will and popularity, with corresponding damage to both the public and appellant.

The decision is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

LANGFIELD *v.* SOLVIT-ALL CORPORATION

No. 2,715. Decided April 29, 1931

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES.

   A sanitary solvent for cleaning toilet bowls *Held* goods of the same descriptive properties as the cleaning preparation used, when mixed with gasoline, for cleaning garments, fabrics, automobile seats, etc.

2. SAME—SIMILARITY—"SOLVIT-ALL", "SOLVITE".

   The term "Solvit-All" *Held* confusingly similar to the term "Solvite".

APPEAL from the Patent Office. Reversed.

Mr. Edward S. Rogers, Mr. Allen M. Reed, Mr. William T. Woodson, Messrs. Browne & Phelps, and *Mr. Thomas L. Mead, jr.,* for Langfield.

Messrs. Ward & Crosby and *Mr. Joshua Ward* for Solvit-All Corporation.

HATFIELD, *J.:*

This is an appeal in a trade-mark opposition proceeding from the decision of the Commissioner of Patents affirming the decision of the Examiner of Interferences dismissing the opposition of appellant and holding that appellee was entitled to the registration of the trade-mark "Solvit-All" for use on sanitary solvents for cleaning, disinfecting, and deodorizing toilet bowls and similar articles.

In its application for registration filed March 29, 1928, appellee alleged that it had used its trade-mark since November 17, 1927.

It appears from the record that appellant has used its trade-mark "Solvite" since 1924 on a cleaning preparation, used, when mixed with gasoline, for cleaning garments, draperies, fabrics, rugs, carpets, automobile seats, and other articles from which it is desired to remove "greasy and other substances"; that appellant's product is in the form of paste and is sold throughout the United States in small cartons to drug stores, grocery stores, department stores, hardware stores, hospitals, garages, corset companies, and other concerns; and that appellant has expended large sums of money in advertising its product and its trade-mark. It also appears from the record that appellee's product is sold to grocery and department stores, and that appellee has made some effort to sell it to drug stores.

Appellee's product is in liquid form, is sold in small containers, and is applied with a brush to the surfaces to be cleaned and deodorized.

The tribunals below concurred in holding that appellant was the first to adopt and use its mark; that the goods of the parties were not of the same descriptive properties; and that the involved marks were not confusingly similar.

[1] It is true that the goods of the parties do not possess, entirely, the same essential characteristics. Nevertheless, the purposes for which they are used are of the same general nature and are closely associated and related. They are both used for cleaning purposes by the general public, are sold in the same stores, and, although a purchaser would not confuse the two products, confusion as to their origin would probably result should the parties use their trade-marks concurrently.

We are of opinion, therefore, that the goods are of the same general class and possess the same descriptive properties within the principles heretofore announced by this court. *California Packing Corporation* v. *Tillman & Bendel*, 17 C. C. P. A. (Patents) 1048, 40 F.(2d) 108, 394 O. G. 789; *B. F. Goodrich Co.* v. *Hockmeyer (Zipon Mfg. Co., Substituted)*, 17 C. C. P. A. (Patents) 1068, 40 F.(2d) 99, 394 O. G. 795; *Sun-Maid Raisin Growers of California* v. *American Grocer Co.*, 17 C. C. P. A. (Patents) 1034, 40 F.(2d) 116, 395 O. G. 3; *Check-Neal Coffee Co.* v. *Hal Dick Mfg. Co.*, 17 C. C. P. A. (Patents) 1103, 40 F.(2d) 106, 395 O. G. 10; *Cluett, Peabody & Co. Inc.* v. *Hartogensis (Arrow Emblem Co., Inc., Substituted)*, 17 C. C. P. A. (Patents) 1166, 41 F.(2d) 94, 396 O. G. 707; *Kotex Co.* v. *McArthur*, 18 C. C. P. A. (Patents) ——, 45 F.(2d) 256, 404 O. G. 4; *Revere Sugar Refinery* v. *Salvato*, 18 C. C. P. A. (Patents) ——, 48 F.(2d) 400, 409 O. G. 562.

[2] That the marks are confusingly similar is evident and requires no discussion.

For the reasons stated the decision of the Commissioner of Patents is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE WOOD

No. 2,722. Decided April 29, 1931

PATENTABILITY—METHOD AND APPARATUS FOR SHAPING PRINTING PLATES.

Claims for a method and claims for an apparatus for shaping printing plates *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Southgate Fay & Hawley, Mr. Albert E. Fay, Mr. Chas. E. Riordon, and *Mr. C. Russell Riordon* for Wood.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying claims 3, 7, 8, and 13 in appellant's application for a patent for an alleged invention relating to a method and an apparatus for accurately shaping printing plates. The object of the alleged invention, as stated in appellant's specification, is to provide a method and a means for forcing low spots on the printing plate against an accurately-shaped surface so that the printing surfaces of the plate will be uniform.

Claims 3, 8, and 13 are illustrative. They read:

3. The method of shaping printing plates which consists in applying pressure to the back of the plate at a series of points along it to force all thin areas of the plate against a surface on the front side and plowing through the backs of the thick parts of the plate so that the entire front surface of the plate will conform accurately and uniformly to the desired shape.

8. The method of shaping printing plates which consists in holding a plate against a surface of the desired shape, passing along the grooves in the rear surface of the plate a solid body having a longitudinally convex but laterally tapering edge for the purpose of forcing thin spots in the grooves on the plate back against the said surface and bringing the grooves to a uniform shape.

13. In an apparatus for shaping a stereotype plate, the combination of a surface of the shape which is desired for the printing surface of the plate, and a series of cutters extending across the plate under it and having tapering edges engaging the rear of the plate and capable of forcing the plate back against said surface or of plowing through the plate where they encounter thick portions or projections on the plate.

The references are: Wood, 1,009,209, November 21, 1911; Wood, 1,269,239, June 11, 1918; Wood, 1,009,206, November 21, 1911.

It is claimed by appellant that the involved claims define patentable improvements over the references.

The Primary Examiner held that the "ears 525" of the reference No. 1,009,209 are used to force the printing plate—

against backing arch and if a thick spot in plate presented itself, they would plow through it and still further force the plate against backing. The Patent #1,269,239 states clearly that the knife in that construction forces plate to conform to arch backing and if such a knife with ears 525 attached were used, it is fair to assume that the action would be more complete and in case of a thick spot in the metal, these fingers would plow through and force plate still more firmly against backing.

With reference to the method of passing along the rear surface of the printing plate a solid body having a tapering edge of a character that will not cut into a chilled plate, as defined in claim 7, the Primary Examiner said:

The Patent #1,009,209 shows such solid body in ears 525 although not tapered, but it is considered that these ears will act to force thin parts of the plate back against surface and plow through thick spots leaving marks on bottom of the grooves the same distance from the front of plate as recited. The distinction over the reference seems structural and slight only.

Claim 8 relates to a method of holding a printing plate against a surface of the desired shape and passing a solid body having a longitudinally-convex but laterally-tapering edge along the grooves of the rear surface of the plate for the purpose of bringing the grooves to a uniform shape. With reference to this claim, the Primary Examiner held that the "ears 525" of Patent No. 1,009,209, although not having a tapered edge, conform substantially to the method set out in claim 7, and that the method was not patentably distinguishable over the reference.

An apparatus for carrying out the alleged improved method, defined in claim 13, was held by the Primary Examiner to be unpatentable over the reference No. 1,009,209.

The decision of the Primary Examiner holding the method and apparatus defined in the involved claims to be unpatentable over the references of record was affirmed by the Board of Appeals.

After careful consideration of the issues and the arguments of counsel for appellant, we have reached the conclusion that the tribunals of the Patent Office were not in error in rejecting the involved claims.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

MOORE *v.* GREENE

No. 2,721. Decided April 29, 1931

1. INTERFERENCE — PRIORITY — RIGHT TO MAKE THE CLAIMS.

Record reviewed and *Held* that priority as to certain counts was properly awarded to G. on the ground that the invention thereof was disclosed in G's earlier application.

2. SAME—SAME—SAME.

Record reviewed and *Held* that G.'s earlier application did not disclose the invention of count 9, which is for a process, since that application disclosed a mechanism and it contains nothing to indicate any understanding or appreciation by G, that that mechanism might be used to carry out the process of the count.

APPEAL from the Patent Office. Modified.

LENROOT, *J.*, dissenting.

Mr. William L. Symons for Moore.

Messrs. Pennie, Davis Marvin & Edmonds, Mr. Merton W. Sage, and *Mr. Clarence M. Fisher* for Greene.

GARRETT, *J.:*

This is an interference proceeding relating to four counts, numbers 1 and 4 being mechanical, and numbers 8 and 9 being for the method. We here quote numbers 1 and 4:

1. A polyphase arc electric furnace comprising a plurality of arcing, electrodes, and means for unbalancing the current or voltage of one or more of the polyphase arcs.

4. A polyphase electric furnace, comprising a plurality of arcing electrodes, a polyphase circuit connected with said electrodes, and means for unbalancing the voltage supplied to one of said electrodes.

The history of the case to date is as follows:

On January 3, 1913, appellee filed an application for a patent (Serial No. 740,034) for improvements in electrical induction furnaces. There was a renewal application on December 19, 1917 (Serial No. 207,966), and patent was issued thereon August 16, 1927, being No. 1,639,340, entitled "Combination induction furnace." On September 8, 1919, he filed another application for patent for "Electric arc furnace control and apparatus therfor," in which he said:

This application is a continuation, in part of my application for patent, * * * Serial No. 740,034, filed January 3, 1913; * * *.

In the meantime appellant had, on August 9, 1918, filed an application which, on July 8, 1919, ripened into Patent No. 1,309,045, for "Electric furnace and process of operating same." This patent contained the claims which constitute the counts at issue.

Appellee copied these and other claims of the patent, seeking an interference which was declared. The Examiner of the United States Patent Office awarded priority to appellant, Moore, upon six of the counts, and to appellee, Greene, upon seven. The Board of Appeals reversed the Examiner as to three of the counts awarded Greene and awardd them to Moore, but affirmed as to the four in issue and Moore appealed to this court.

It is the claim of the appellee, sustained by both tribunals of the Patent Office, that the disclosures of the Greene application of January 3, 1913, comprehended the subject matter of the counts in issue, thereby entitling him to make same as a part of his application of September 8, 1919. Appellant denies that same was disclosed in the early application, and this constitutes the issue.

The mechanism of the Moore patent is one for melting and refining metal by means of heat generated by an electric current, or electric currents, being passed through the mass of material, including a current through the bottom of a polyphase arc electric furnace.

It seems that prior to the Moore patent the system, as used in the art, supplied the electric current to all of the electrodes at substantially equal voltages. The Moore patent disclosed means for "unbalancing the current or voltage of one or more of the polyphase arcs" (count 1), or (count 4), "means for unbalancing the voltage supplied to one of said electrodes."

In the final analysis the question before us as to counts 1 and 4 is quite simple and we have only to inquire whether Greene's application of January 3, 1913, discloses such means as are recited in the Moore patent.

It is a general rule, frequently announced by the Court of Appeals of the District of Columbia and other courts, that the meaning of counts in an interference, if there be any ambiguity, is to be determined by the specification of the application or patent in which the claims originated. *McIntyre* v. *Dodge*, 58 App. D. C. 273, 29 F.(2) 861, 379 O. G. 3; *General Electric Co.* v. *Steinberger*, 214 Fed. 781. In *Brayden* v. *Slater*, 17 C. C. R. A. (Patents) 1241, 1242, 40 F.(2d) 988, 399 O. G. 630, this court said:

All of the counts in issue originated in appellee's application, and it is well established that the meaning given to the counts, if there be any ambiguity, must be that disclosed in the specification of the party first to make the claim. *Seymour* v. *Molyneux*, 49 App. D. C. 216.

It is also the well-established rule that in an interference proceeding the claims of a patent involved therein will be given the broadest interpretation which they reasonably will support. *Stern et al.* v. *Schroeder et al.*, 17 C. C. P. A. (Patents) 690, 36 F.(2d) 515, 393 O. G. 3. But this rule does not warrant disregard of expressly-defined limitations. *In re Joseph Bijur*, 17 C. C. P. A. (Patents) 1134, 40 F.(2d) 999, 398 O. G. 355, citing *Slattery* v. *Larner*, 17 C. C. P. A. (Patents) 725, 36 F.(2d.) 298, 393 O. G. 249.

The instant case is to be considered in the light of these two general rules.

In the Moore patent specification it is said:

A further object of my invention is to provide a novel process or method of varying the current and thereby regulating the heat, by unbalancing one or more of the polyphase arcs. As will be seen hereinafter, this may be done in a number of ways, the effect in each case being to regulate the current flow through the bottom of the furnace and through the bath.

There is then a description of operation which it is not deemed necessary to quote.

In the specification of Greene's 1913 application, it is said:

* * * Taps are shown as taken off the four lower turns which constitute the heavy portion of the primary winding and any number of these turns may be connected to the top electrode 5 by means of the switch 10. In this way it is possible to apply any desired voltage to the arc furnace circuit between the bottom electrode 6 and the top electrode 5.

The specification also contains the following:

In the use of 3 phase current, the primary windings may be connected in delta instead of star and the terminals from the heavy sections of the primary may be led to suitable electrodes for generating an arc or other form of resistance heat. The several voltages may be controlled independently of each other as shown in Fig. 1.

The Examiner in his decision, referring to Greene's Figure 2, says:

The figure shows a three phase electric induction furnace including three star connected primary windings. The neutral point of these windings is connected to an electrode in the bottom of the furnace. Three electrodes are provided in the top of the furnace, each of them being connected with one of the windings, at a point intermediate the ends thereof. The original specification states that these last named connections may be adjustable so that "the several voltages may be controlled independently." It seems clear that, by changing the point at which one upper electrode is connected to its winding, while leaving the other two electrode connections unchanged, an unbalancing of the voltage of one of the arcs would be effected, * * *

* * * * * * *

Moore contends that, since said application does not expressly state that the voltage is to be unbalanced, the subject matter of the counts is not disclosed therein. However, since it is expressly stated that the several voltages may be varied independently, and since any variation of one independently of the others would produce an unbalancing, it is thought that there is a full disclosure of means for unbalancing the voltage of one or more arcs.

We also quote the following from the decision of the Board of Appeals:

It is thought there is no real dispute as to the construction disclosed in Greene's earlier case or that he shows a three-phase arc electric furnace in his Figure 2 with which

a switch such as shown at 10 and 11 in Figure 1 may be connected to the separate phases of the polyphase autotransformer of Figure 2. With this construction we are unable to reach any other conclusion than that the presence of the independent switches was intended to result in independent adjustments, otherwise they would not have been independent of each other. Whenever one such switch is adjusted, the function described in these counts necessarily results. We agree with the Examiner of Interferences that the statement "the several voltages may be controlled independently" in Greene's application, means that by changing one of these switches only, or differently from the others, an unbalancing of the voltage of one or more of the arcs would be affected.

We are unable to accept the view of Moore that this statement of Greene concerning independently controlling the voltages has relation to controlling the arc voltages "independently of those of the inductive part of the furnace", as contended by Moore in his brief.

Appellant has not convinced us that the holdings of the tribunals of the Patent Office as to counts 1 and 4 are erroneous. There does not appear to be any ambiguity in the counts and they are sufficiently broad, it seems to us, for the disclosures of the Greene application to read upon them. There is no limitation in the counts themselves which confines them strictly to the disclosures of the patentee, Moore. Unbalancing seems inherent in controlling the voltages supplied the different electrodes independently of each other.

The method claims, numbers 8 and 9, read as follows:

8. The herein described process of controlling the current flow through the bottom of a polyphase arc electric furnace of the neutral star connected type, which consists in unbalancing the current or voltage of one or more of the polyphase arcs.

9. The herein described process of controlling the current flow through the bottom of a polyphase arc electric furnace of the neutral star connected type, which consists in unbalancing the voltage in one or more of the arcs while maintaining the length of the arcs equal or balanced.

It will be observed that they differ only in the fact that No. 9 calls for controlling the current "while maintaining the length of the arc equally balanced."

It is noted that the Board of Appeals awarded priority to Moore on counts 2, 3 and 5 of the interference as it originally stood. These were article claims and called for a "conducting bottom". The Board held that Greene's application of January 3, 1913, did not disclose a bottom which was itself of conductive material, or conducting, but that his means consisted of an electrode inserted in the bottom. Moore had previously been awarded priority by the Examiner upon article claims, numbers 6 and 7, and process claims, 10 to 13, inclusive, and Greene did not appeal.

Discussing the process claims here in issue, the Board says:

As to claims 8 and 9, we do not construe the terms "controlling the current flow through the bottom" as restricted to a furnace having a bottom which is conducting. These are method counts and are realized in Greene's construction in which the current is conducted through the bottom by means of the electrodes which project therethrough.

In so far as count 8 is concerned, we agree with the Board. It is a method count and the term "controlling the current flow through the bottom", by the means recited, is the essential feature or element to be looked to and it does not, as regards the method, appear to be important whether it is control of a current passing directly through a conductive bottom or control of one passing through an electrode inserted in the bottom. It is true that the Moore specification seems to limit his *device* to a conducting bottom, but this limitation of the specification when the count itself is expressed simply in the words "through the bottom", without limiting it to a conducting bottom, does not seem to us to make applicable the rule of interpreting the count in the light of the specification in which it originated. The broad rule of interpretation above stated applies.

This reasoning applies to the similar elements of count 9, and our holding would be the same relative thereto, but for the fact that the count calls for the feature of unbalancing the voltage in one or more of the arcs *while maintaining the length of the arcs equal or balanced.*

The Board makes no reference to this additional feature. The Examiner in his decision said:

While it is not specifically stated in the specification of [Greene's] application No. 207,966 that the arcs are to be maintained of equal length, it is thought that such an arrangement may fairly be implied, this being the normal arrangement and the entire disclosure relative to the device shown by Figure 2 of said application being such as to lead to the conclusion that the arc structures are identical.

It seems to us that in view of the fact that this is a method claim, there should be, under the authorities, a clearer showing of anticipation than we are able to discover in Greene's disclosure. Greene presented no process claims in his original application, and we are loath to hold that the count is met by a mechanism application which, while it *might* carry out the process, yet, contains nothing to indicate any understanding or appreciation of it by Greene in 1913, and gives no intimation of any directions for accomplishing it.

In *Deppe et al.* v. *General Motors Corporation*, 15 F. (2d) 419, 428, it was said:

* * * as most of the claims in issue are process claims, it follows, as already said, that the showing of an earlier apparatus, which might carry out the process, cannot constitute anticipation, unless accompanied with directions in the patent for the same. "A process patent can only be anticipated by a similar process. It is not sufficient to show a piece of mechanism by which the process might have been performed." *Carnegie* v. *Cambria*, 185 U. S. 424.

The decision of the Board of Appeals is modified, being affirmed as to counts 1, 4 and 8, and reversed as to count 9, priority as to the latter being awarded to Moore.

Modified.

LENROOT, *J.*, dissents as to count 9.

U. S. Court of Customs and Patent Appeals

IN RE KOBSEFF

No. 2,724. Decided April 29, 1931

PATENTABILITY—NEW MATTER.

Claims for a process of producing an antiincrustation substance for steam boilers including a treatment with wet steam *Held* unpatentable since the original application as filed does not disclose the use of wet steam.

APPEAL from the Patent Office. Affirmed.

Mr. Martin T. Fisher, Mr. George F. Scull, and *Mr. Daniel L. Morris* for Kobseff.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.:*

Appellant seeks patent upon alleged new and useful improvements in a process for preventing incrustation in steam boilers.

All of the claims, 10 to 18 inclusive, were rejected by an Examiner of the United States Patent Office and his decision was affirmed by the Board of Appeals. From the latter decision appeal was taken to this court.

Claims 10 and 16 are typical:

10. The method of producing an antiincrustation substance for steam boilers, which includes treating vegetable seeds containing mucilaginous constituents and oil with wet steam under superatmospheric pressure and out of contact with air, to form a mucilaginous emulsion substantially free from oil.

16. The method of producing an antiincrustation substance for steam boilers, which includes adding soda to vegetable seeds containing mucilaginous constituents, the soda being approximately one per cent of the weight of the seeds, and treating the mixture with wet steam under superatmospheric pressure and out of contact with air, to form a mucilaginous emulsion substantially free from oil.

The references are: Brun, French, 369,904, November 29, 1906; Brun, British, 20,245, of 1909; Lowther, British, 21,075, of 1900.

In the decisions of the Examiner and of the Board of Appeals reference was also made to a British patent to Dine et al. It is insisted by appellant that this is not a proper reference because dated July 3, 1922. This was subsequent to appellant's original filing date of October 17, 1921, and the insistence is that—

a foreign patent becomes a reference only when it is issued or is open to the public as a publication.

Dine is not cited by the Solicitor in his brief or oral argument. Under the view we take of the case it is unnecessary to determine whether Dine was properly referred to by the tribunals of the Patent Office.

While all of appellant's claims are process claims, he discloses drawings of an apparatus in which the method is carried out. It is appellant's plan to treat vegetable seeds, such as flaxseed, hemp seed, etc., so as to form a mucilaginous emulsion, substantially free from oil which emulsion when applied to inner boiler surfaces will prevent incrustation thereon, or will remove such incrustation when formed.

The method is conceded to be novel and useful, and to have had widespread commercial success, but the tribunals of the Patent Office held there was no invention involved, in view of the state of the prior art, it being also held that the claims in their final form included new matter—that is, matter not disclosed or claimed in the original application.

The drawings of the apparatus disclose a device consisting of a cylindrical vessel having a cover and a perforated inner cylinder in which latter the seeds are placed, together with small quantities of soda and starch. Below the outer or condensing vessel is a boiler connected with said vessel by two pipes, one a steam pipe extending upward from the boiler at the side of and entering into the top of the vessel, and the other a pipe extending downward from the bottom of the vessel into the boiler. Each of the pipes is equipped with a valve to be operated by hand. There is also a pipe or tube running through the inner cylinder whose purpose, in part, is to cause a suction of steam from the valve in the steam pipe and promote circulation of the steam through the seeds in the perforated inner cylinder.

In operation, according to the specifications, the inner cylinder is first filled with the required quantities of seed, soda and starch, the pipe valves being closed. The valve in the pipe leading from the bottom of the vessel to the boiler water is then opened to its fullest extent for about five minutes and hot water rises from the boiler into the seed-containing, inner cylinder whereby the seed are soaked. Then the valve in the steam pipe is opened and steam from the boiler fills the condensing vessel or outer cylinder. This condensing cylinder is equipped with fins whose radiating capacity causes a certain condensation of the steam. This condensed steam passes into the seed-containing cylinder, through the perforations, and contacts with the soaked vegetable seed, taking up the mucilaginous substance and producing the emulsion, which emulsion passes down into the boiler through means provided therefor and saturates the boiler water. The specification says that—

the emulsion mixed with the boiler water envelopes the nascent saline deposits resulting from the evaporation of the boiler water and sinks with these deposits to the bottom of the boiler, whence it is an easy matter to remove them in any suitable known manner.

It is not recited in the specification, but it is argued by appellant that, according to natural laws, when the valve in the steam pipe is opened the pressure at the top and bottom of the condensing vessel is equalized, and that the hot water admitted for soaking the seed for the 5 minutes period (if this soaking step be used at all) flows back into the boiler, and the soaked seed are thus left to be acted upon solely by the wet steam.

The applicant states in argument that the soaking process does not have to be used; that the seeds may be left in their dry state in the cylinder, and the wet steam applied to them in this state with the same result produced. It is further said that the production of the emulsion may require as much as 24 hours. The claims as they now read do not embrace the step of soaking by the admission of the hot water from the boiler, but are limited to treating by wet steam under superatmospheric pressure and out of contact with the air.

A reading of that part of the specification which describes the operation, however, does show that the valve in the hot water pipe is opened and remains open for about five minutes before the steam pipe valve is opened. As of course, when the former valve is opened it is done to admit the hot water, and the specifications recite no process which does not include the opening of the hot water valve.

The record does not contain the original claims made in the application filed October 17, 1921. It does disclose that on November 2, 1927, apparently after there had been some adverse action by the Patent Office, appellant moved to cancel *all* claims and add those now before us.

This was followed on May 3, 1928, by the Examiner's rejection and he said in his decision:

The matter in these claims relative to a treatment of the seeds with "wet steam" is clearly new matter not warranted by the original disclosure. Refer to page 5, lines 11 to 16 of the original specification, are the claims ap-

pended thereto, which discloses and claims a treatment with "condensed steam" (water) condensed by action of the fins on cylinder 1.

Since one of the issues of this case is that the amended claims contain new matter—that is matter not disclosed in the original application, it might have been helpful to the court, in construing the original specification, had the original claims been included in the record.

It may be here said that the Examiner seems to have held that by omitting soda from all the claims except No. 16, appellant introduced new matter. The Board did not pass upon this specifically, but the Solicitor for the Patent Office conceded, in oral argument, that this *omission* does not constitute new matter and that the claims are not vitiated by it. Since this is not a matter of importance here, we deem it unnecessary further to discuss it.

The serious question relative to new matter grows, not out of the omission of the soda element, but in inserting into the new claims the element of "wet" steam.

The specification does not refer to "wet" steam, but to "condensed" steam.

In the arts in which steam is used we understand different kinds of steam are well recognized and have well understood meanings and uses, such as "pure steam", "dry steam", "high-pressure steam", "superheated steam," etc.

In Knight's American Mechanical Dictionary "wet steam" is defined as steam—

in which portions of water have passed off with the vapor, and are held in mechanical suspension.

We have found no mechanical definition of the phrase "condensed steam", but the definition given by Funk & Wagnalls New Standard Dictionary of "condense", as a verb, is:

To change from the gaseous or vaporous to the solid or liquid state, as by cooling or compression.

While it might be difficult to draw a line of demarcation so as arbitrarily to determine when wet steam, by reason of saturation with water, ceases to be wet steam and becomes something else, there is evidently a clear and well understood distinction between *wet* steam and *condensed* steam, of which notice must be taken in patent proceedings such as the case at bar.

In the description of the operation or process of appellant given by his learned counsel, arguing in the light of natural laws, a very plausible contention is maintained to the effect that this method must be by means of wet steam, but the court is compelled to measure the issue, not by the argument, but by the claims themselves, and determine whether the specification supports them, or discloses matter upon which they may be based.

Because of the evident success and value of appellant's contribution to the art, it is with some reluctance that we feel compelled to hold that the disclosures of the specification referring only to condensed steam, which is water, do not support claims for the wet steam process and that when "wet steam" was inserted, it brought new matter into the application, as held by the tribunals of the Patent Office.

Whether, if the disclosure of the specification did form a legal basis for the claims, they are anticipated by the prior art need not be here considered.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FAGEOL

No. 2,717. Decided April 29, 1931

PATENTABILITY—ROAD VEHICLES.

Certain claims for a road vehicle which relate to the location of the pivot about which the trucks of the vehicle swing *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Messrs. Strauch & Hoffman, Mr. Jas. A. Hoffman, and *Mr. Wm. A. Strauch* for Fageol.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Comissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, denying patentability, in view of the prior art, of claims 4, 5, 6, 7, 8, 11, and 15 to 19 inclusive, and claims 21, 23, 24, 30 and 31 of appellant's application.

Claims 4, 11, 19, 23 and 31 are illustrative of the claims in issue and read as follows:

4. A road vehicle comprising a frame; a pair of substantially parallel axles disposed at one end of said frame; a pair of ground engaging wheels supporting each of said axles; springs interconnecting said axles and said frame; said springs being pivoted to the frame intermediate their ends and connected to said axles at their ends the axes of said connections and pivot lying substantially in the same plane under normal load conditions whereby substantial rocking movement of the frame in a horizontal plane due to road irregularities is prevented.

11. The combination as set forth in claim 8 together with brake and steering actuating members carried by said wheels independently of said frame; brake and steering control members carried by said frame; and connections between said frame and said wheel carried members compensating for the relative motion of said wheels with relation to said frame, said connections being made to said frame at points that are approximately in transverse alignment with the points of connection between the frame and springs.

19. A road vehicle comprising a frame; a pair of axles at each end of said frame; means resiliently connecting said axles to said frame; dirigible wheels on one pair of said axles; non-dirigible wheels on said other pair of axles adjacent non-dirigible wheels on the same side of the vehicle being spaced so that their peripheries are relatively close together; resilient tires on said non-dirigible wheels; and means to simultaneously steer the dirigible wheels.

23. A road vehicle comprising a frame, a plurality of axles supporting each end of said frame, springs interconnecting said frame and the axles at each end thereof in a manner permitting substantial swinging movement of said axles relative to spaced frame supported axes located substantially in the same horizontal plane, wheels on said axles, means to steer said vehicle carried by the frame, means to brake said vehicle carried by the frame, and elements coupling said steering and braking means to said wheels, said elements being arranged to swing substantially about said axes, whereby the swinging movement of the wheels and axles is substantially unrestricted by the elements that couple the steering and braking means to the wheels.

31. A road vehicle comprising a frame, a pair of substantially parallel axles supporting one end of said frame, springs interconnecting said axles and frame, said springs being pivoted to the frame between the ends thereof on an axis transverse to the frame and being secured to said axles at their ends whereby the axles are capable of substantial swinging movement about said axis, brake control mechanism on said frame, brake mechanism supported by each axle and means connecting said control mechanism and the brakes of adjacent axles at the same side of the vehicle comprising an equalizing link extending transversely of the frame and pivoted between its ends on an axis that lies substantially in the vertical plane containing said first named axis, and arms of substantially equal length each arm being pivotally connected adjacent one end to an end of said equalizing lever and being connected at its opposite end to the brake mechanism on one of said axles.

The references are: Woods, 884,882, April 14, 1908; Pratt, 888,737, May 26, 1908; Hallner, 1,234,014, July 17, 1917; Sarasin et al., 1,281,847, Oct. 15, 1918; Mustad, 1,332,949, March 9, 1920; Holle, 1,500,320, July 8, 1924; Ford, 1,503,454, July 29, 1924; Rivas; 1,534,810, April 21, 1925; Templin, 1,565,526, December 15, 1925; Wilkinson (British), 183,510, August 3, 1922; French Patent, 553,431, February 9, 1923.

The alleged invention is described in the decision of the Board of Appeals as follows:

This application relates to the construction of an 8-wheeled automobile having two non-dirigible wheels at the rear on each side arranged in tandem and two dirigible wheels on each side at the front arranged in tandem. The axles for both the front and rear wheels of the vehicles are secured between the outer ends of two substantially parallel leaf springs and the springs support the frame by a bracket pivotally connected to them midway between the axles and substantially in alinement with the axles when the vehicle is loaded. There are ball and socket connections between the outer ends of the springs and the axles. The brake actuating means and the steering means are supported in such a manner as to apply the power substantially at the point of pivotal connection between the frame bracket and the springs in order to prevent application of the brakes or interference with the steering gear as the frame moves, due to the spring action when inequalities in the road are encountered.

Certain of the claims of appellant's application were allowed.

While there are a large number of claims here involved, and each claim contains a large number of elements, the questions before us are quite simple and involve but few elements.

Appellant in his brief has divided the claims into four groups, as all of the claims in each group involve the same question.

We will consider each group separately; the first group comprises claims 4, 5, 6, 7, 8, 17, 18 and 21. The element in each of said claims, which appellant contends constitutes invention, is that which provides that the pivot about which the trucks of the vehicle swing shall be placed at a point which is substantially in the plane of the wheel centers.

It is contended by appellant that in the prior art said pivots or trunnions were located substantially above said plane and that a very objectionable fore and aft movement resulted therefrom; that appellant has practically eliminated this objectionable movement by positioning the pivot as above indicated.

This group of claims was, so far as this element is concerned, rejected by the Board upon the references Mustad, Sarasin and Ford. The disclosures in both the Mustad and Sarasin patents show said pivot placed substantially above the plane of the wheel centers, and it is clear to us that the fore and aft movement above mentioned must result from so positioning the pivot. The Ford reference discloses a railway car in which a pair of wheels are pivotally connected by springs above and below the axles to a suspension frame; here the pivot is placed substantially upon a line with the center of the wheels. It is observed, however, that this pivot is at the end of a transverse spring bolster. While the Board did not consider this a material distinction, we think it should be considered in connection with the fact that a railway car, running over smooth rails, does not meet obstacles which a vehicle running upon the ground meets, and Ford apparently had no purpose or thought or appreciation that the particular location of his pivot would serve any purpose of preventing any fore and aft motion, and there is nothing in the patent to suggest that it would do so.

We do not think that Ford is a proper reference to the element now under discussion.

With respect to the Mustad and Sarasin references, it is conceded that the position of the pivot is substantially higher than shown in appellant's disclosure, but the Board was of the opinion that—

it is entirely obvious that the nearer the supports are located to the lines between the axles from the frames, the more this objectionable motion will be eliminated.

This is the crucial question upon this branch of the case. We cannot agree with the Board that this was entirely obvious, and that any skilled mechanic, observing this objectionable motion, would remedy it by placing the pivot where appellant has placed it. At least, there is such substantial doubt concerning it that it should be resolved in appellant's favor.

This conclusion is supported by the fact that three of the references involve a somewhat similar construction to that of appellant, and in each of said patents the pivot is placed at a point substantially above the plane of the center of the wheels. If the desirability of placing the pivot at the point that appellant has placed it was obvious, it would seem that some of the inventors in the prior art would have so placed it.

We hold that the Board of Appeals erred in rejecting this first group of claims.

The next group of claims comprises claims 15, 16, 30 and 31.

These claims were rejected on the French patent to Goodyear, in view of the United States patent to Holle. The Board held that the elements of these claims were disclosed by Goodyear except as to the equalizing link referred to in claim 31, and equivalent descriptions in the other claims of this group. It further held that the reference Holle discloses an equalizer of similar construction, and that it would not involve invention to employ such an equalizer with the structure of the Goodyear patent.

We agree with the conclusion of the Board that this group of claims is not patentable for the reasons stated by it in its decision.

The next claim to be considered is claim 19. This claim is very broad and was held by the Board to be an unpatentable combination. As to this claim, the Examiner rejected it upon the references Rivas, Woods and Wilkinson. We have carefully examined these references and agree that patentability of this claim does not exist, either as to any of the elements described therein, or in their combination.

The remaining claims are termed by appellant "combination claims." They are claims 11, 23 and 24.

Since we find that claim 8 should be allowed, because of the element of the positioning of the pivot described therein, and as claim 11 incorporates claim 8 as a part of it, we think claim 11 should be allowed.

As to claims 23 and 24, we do not consider that the element of positioning the pivot of the springs (the element found patentable in the first group of claims) is stated therein, and we cannot say that a new and useful result has been produced by the combination of elements stated in said elements. Therefore, we find no error in the rejection of claims 23 and 24.

The decision of the Board of Appeals is affirmed as to claims 15, 16, 19, 23, 24, 30 and 31, and is reversed as to claims 4, 5, 6, 7, 8, 11, 17, 18 and 21.

Modified.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,236,533, F. A. Black, Axle stretcher stover and bender; 1,299,292, S. F. Borkey, Axle stretching machine (to annul); 1,353,987, same, Method of forming axles (to annul), D. C., W. D. Mich., S. Div., Doc. E 2459, *F. A. Black* v. *S. F. Borkey*. Discontinued Sept. 8, 1931.

1,258,634, E. E. Neal, Taper roller bearing, filed Sept. 11, 1931, D. C., E. D. Mich., S. Div., Doc. 4965, *The Timken Roller Bearing Co.* v. *Bower Roller Bearing Co.*

1,298,183, F. E. d'Humy, Garage, filed Sept. 12, 1931, D. C., S. D. Ill. (Springfield), Doc. 1572, *Ramp Buildings Corp.* v. *Tulsa Oil Co. et al.*

1,299,292. (See 1,236,533.)

1,307,733, A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, filed Sept. 8, 1931, D. C. Kans., 2d Div., Doc. E 656–N, *Alemite Corp.* v. *F. Cavanee et al.* (*C. & S. Auto Supply Co.*).

1,307,734. (See 1,307,733.) 1,353,987. (See 1,236,533.)

1,369,751, A. B. Leech, Apparatus for producing illuminated motion effects; 1,761,802, A. Sabath, Transparency filed Sept. 9, 1931, D. C., S. D. N. Y., Doc. E 62/13, *Scene-In-Action Corp.* v. *L. Rose* (*Rose Merchandise Trading Co.*).

1,369,910. (See 1,801,917.) 1,475,980. (See 1,307,733.)

1,516,281, A. Elsner, Rack, filed Sept. 10, 1931, D. C., S. D. N. Y., Doc. E 62/18, *Chelsea Garment Rack Co., Inc.*, v. *Berman Hardware Co., Inc., et al.*

1,526,982, E. W. Hill, Stencil sheet, filed Sept. 8, 1931, D. C., S. D. N. Y., Doc. E 61/399, *A. B. Dick Co.* v. *Duplicating Machine & Supply Corp. et al.*

1,593,302, E. B. Hiatt, Basket liner, appeal filed Sept. 12, 1931, C. C. A., 2d Cir., Doc. 11666, *Carpenter-Hiatt Sales Co.* v. *Clark-Stek-O Corp.*

1,594,490, E. C. Bertolet, Method of dyeing bone and the product produced thereof, C. C. A., 3d Cir., Doc. 4487, *G. K. Hale Mfg. Co.* v. *Hafleigh & Co. et al.* Decree affirmed Sept. 9, 1931.

1,615,813, R. T. Romine, Method of handling material; 1,644,278, same. Bracing apparatus for sheet metal; 1,745,054, same, Apparatus and method for handling metal, D. C., S. D. Ohio, W. Div., Doc. E 669, *R. T. Romine* v. *American Rolling Mill Co.* Dismissed Sept. 2, 1931.

1,644,278. (See 1,615,813.)

1,650,540, R. T. Romine, Method and apparatus for handling material, D. C., S. D. Ohio, W. Div., Doc. E 640, *R. T. Romine* v. *American Rolling Mill Co.* Dismissed Sept. 2, 1931.

1,680,268, G. Weiss, Absorbent pad machine; 1,794,358, W. Bauer, Pad making machine, filed Sept. 10, 1931, D. C. M. D. Pa., Doc. 853, *International Cellucotton Products Co.* v. *Celedonia Cellulose Co., Inc.*

1,744,016, A. P. Steckel, Metal rolling; 1,779,195, same, Method and apparatus for rolling thin sheet-like material, filed Sept. 9, 1931, D. C., N. D. Ohio, E. Div., Doc. 3953, *Mesta Machine Co.* v. *The Cold Metal Process Co.*

1,745,047, R. T. Romine, Car loading apparatus; 1,745,055, 1,745,050, same, Method and apparatus for handling material; 1,745,056, same, Method and apparatus for shipping metal, D. C., S. D. Ohio, W. Div., Doc. E 670, *R. T. Romine* v. *American Rolling Mill Co.* Dismissed Sept. 2, 1931.

1,745,050. (See 1,745,047.) 1,745,054. (See 1,615,813.)

1,745,055. (See 1,745,047.) 1,745,056. (See 1,745,047.)

1,761,802. (See 1,369,751.)

1,771,797, D. L. Lewis, Apparatus for opening cement sacks and dumping the cement into cement mixers, filed Aug. 22, 1931, D. C., W. D. Okla. (Oklahoma City), Doc. E 1264, *Halliburton Oil Well Cementing Co.* v. *Independent Oil Well Cementing Co.*

1,779,195. (See 1,744,016.)

1,784,466, O. Rensonnet, Steering sight adapted to be fitted to mud guards of motor vehicles, filed Sept. 8, 1931, D. C., S. D. N. Y., Doc. E 62/3, *Casco Products Corp. et al.* v. *S. Kenny* (*Chrome Products Co.*).

1,794,358. (See 1,680,268.)

1,795,167, L. Gross, Successive immersion device, filed Sept. 10, 1931, D. C., S. D. N. Y., Doc. E 62/17, *L. Gross et al.* v. *Klett Mfg. Co., Inc., et al.*

1,801,917, S. W. Hayes, Scotch block; 1,369,910, J. E. Whilt, Safety anchoring block, filed Sept. 11, 1931, D. C., S. D. N. Y., Doc. E 62/29, *Hayes Track Appliance Co.* v. *The Q & C Co.*

Re. 17,885, J. H. Hanowitch, Shirt collar stiffener, filed Sept. 10, 1931, D. C., S. D. N. Y., Doc. E 62/27, *Lakewood's Patents Corp.* v. *Beauer Shirt Co., Inc.*

Interference Notice

U. S. PATENT OFFICE, *Washington, Oct. 3, 1931.*

Joseph Johnson, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent of Joseph Johnson, 8 East Fordham Road, Bronx, New York, N. Y., No. 1,579,944, granted April 6, 1926, and an application for patent filed by Edward G. Gage, 41 Garden Place, Brooklyn, N. Y., and the notice of such declaration sent by registered mail to said Johnson at said address having been returned by the post office undeliverable, notice is hereby given that unless said Johnson, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, Oct. 3, 1931.*

Fred C. Zimmermann, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, of 43 Leon Street, Boston, Mass., to effect the cancellation of the trade-mark registration of Fred C. Zimmermann, of Boyle and Olive Streets, St. Louis, Mo., No. 113,214, dated October 10, 1916, and the notice of such proceeding sent by registered mail to the said Zimmermann at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Zimmermann, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, OCTOBER 27, 1931

[VOL. 411. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 279,415. L. B. MCLEOD, Williston, Fla. Filed Feb. 15, 1929.

CAC-O-SHELL

For Poultry Mineral.
Claims use since Dec. 10, 1928.

Ser. No. 314,266. BIENENFIELD IMPORTING CORPORATION, Chicago, Ill. Filed May 7, 1931.



No claim is made to the word "Purity" apart from the mark shown on the drawing.

For Granulated Peat Moss, Sanitary Poultry Litter, Stable Bedding.
Claims use since October, 1929.

Ser. No. 318,606. UNITED STATES GYPSUM COMPANY, Chicago, Ill. Filed Aug. 31, 1931.

CALOPONE

For Finely Ground Gypsum Used as Paper Filler, Paint Filler, Rubber Filler and Textile Filler.
Claims use since May 4, 1931.

Ser. No. 318,812. A. H. NIRENBERG TRADING CORPORATION, New York, N. Y. Filed Sept. 5, 1931.



The word "Quality" is disclaimed apart from the mark as shown.

For Dyed Animal Pelts.
Claims use since Aug. 26, 1931.

Ser. No. 318,902. W. D. BYRON & SONS, INC., Williamsport, Md. Filed Sept. 10, 1931.



For Leather.
Claims use since May 25, 1931.

Ser. No. 318,904. GEORGE W. CURRAN, St. Louis, Mo. Filed Sept. 10, 1931.

ELSFIRE

The drawing is lined for red color.
For Pitch Carbon Coke.
Claims use since Feb. 1, 1931.

CLASS 2

Receptacles

Ser. No. 318,654. KNAPP-MONARCH COMPANY, Belleville, Ill. Filed Sept. 2, 1931.

"K-M"

For Insulated Jugs and Vacuum Bottles.
Claims use since December, 1929.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 304,411. CHAS. F. KELLOM & CO., INC., Philadelphia, Pa. Filed Aug. 9, 1930.

INVADE-X

For Non-Explosive Liquid for Use as a Cleaner for All Fabrics, Gloves, Hats, and Leather and Fabric Shoes, Said Preparation Having Incidental Properties, as an Insecticide.
Claims use since Mar. 28, 1930.

Ser. No. 314,846. MARTIN GRIFFITH, doing business as Worthmore Products Co., Shenandoah, Iowa. Filed May 21, 1931.

WORTHMORE

For Auto Cleaner.
Claims use since Apr. 1, 1930.

Ser. No. 317,597. BARNET EPSTEIN, doing business as Modern-Method Laboratories, Cleveland, Ohio. Filed Aug. 3, 1931.

HY-DEX

For Washing Tablets, Washing Powder, Cleansing Compounds for Fabrics, Furniture, Glass.
Claims use since July 23, 1931.

Ser. No. 317,827. THE SWANN CORPORATION, Birmingham, Ala. Filed Aug. 3, 1931.



For Artificial Abrasives—Namely, Aluminous Oxide Abrasive Grain, Silicon Carbide Abrasive Grain, and Firesand.
Claims use since Apr. 10, 1931.

Ser. No. 318,057. FOLEY MANUFACTURING COMPANY, Minneapolis, Minn. Filed Aug. 17, 1931.

Electrakeen

For Abrasive Lawn Mower Sharpening Compounds.
Claims use since Mar. 10, 1929.

Ser. No. 318,240. J. GROSSMITH & SON, LIMITED, London, England. Filed Aug. 20, 1931.

SHEM EL NESSIM

For Toilet Soap.
Claims use since January, 1907.

Ser. No. 318,349. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Aug. 24, 1931.



The lining on the drawing denotes the color blue. No claim to the exclusive use of the representation of a carton per se appearing on the drawing or to the representation of the goods or to any of the words appearing upon the said trade-mark other than "Colgate's" and "Handy Grip," the exclusive use of the word "Grip" being disclaimed except in connection with the word "Handy."
For Shaving Soap and Shaving Sticks.
Claims use since Aug. 15, 1916.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 318,399. GOLDIE FEINSTEIN, doing business as Zorex Chemical Company, Philadelphia, Pa. Filed Aug. 25, 1931.

ZOREX

For Preparation for Cleaning Tile, Enamelware, Woodwork, and to Dissolve Grease.
Claims use since July 10, 1931.

CLASS 5

Adhesives

Ser. No. 318,867. ERMINIE MANUFACTURING CO., Miami, Fla. Filed Sept. 9, 1931.

ERMINIE

For Glue.
Claims use since May 18, 1931.

Ser. No. 318,890. WELDTITE PRODUCTS COMPANY, Mishawaka, Ind. Filed Sept. 9, 1931.

Weldtite

For Bottles of Glue.
Claims use since May 1, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 281,309. THE MERITOL CORPORATION, Des Moines, Iowa. Filed Mar. 25, 1929.

Isa
Meritol
Perle

For Shampoo, Face Powder, Talcum Powder, Face Creams, Cold Cream, Vanishing Cream, Bleach Cream, Toilet Waters, and Perfumes.
Claims use since Aug. 7, 1915.

Ser. No. 301,926. HOUSE OF TRE-JUR, INC., New York, N. Y. Filed May 31, 1930.

Vitamized

For Face Creams.
Claims use since May 2, 1930.

Ser. No. 304,350. THE SLANLUS COMPANY, INC., Covington, Ky. Filed Aug. 7, 1930.

SLANLUS

For Preparation for Hay Fever, Nasal Catarrh, Asthma, and Head Colds.
Claims use since July 11, 1930.

Ser. No. 305,491. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn. Filed Sept. 9, 1930.

SUPERMALT

No claim is made to the word "Malt" apart from the mark as shown.
For Malt General Tonic.
Claims use since Aug. 14, 1930.

Ser. No. 305,952. ORANGE MANUFACTURING COMPANY, Orlando, Fla. Filed Sept. 22, 1930.

BUGOL

For Insecticide Household Spray.
Claims use since Aug. 18, 1930.

Ser. No. 313,256. NIACET CHEMICALS CORPORATION, Niagara Falls, N. Y. Filed Apr. 11, 1931.

FASTAN

For Synthetic Tanning Materials.
Claims use since Dec. 18, 1929.

Ser. No. 314,017. THE ROGOLA CHEMICAL COMPANY, Reading, Pa. Filed Apr. 30, 1931.



For Medicinal Preparation for Coughs, Congestion of the Throat, Bronchial Tubes, and Lungs.
Claims use since Apr. 23, 1931.

Ser. No. 314,367. THE HUBINGER CO., Keokuk, Iowa. Filed May 9, 1931.

QUICK
ELASTIC
HOT STARCH
IN 30 SECONDS



The drawing is lined for red. The lining shown on the representation of the flat iron is for shading only. No claim is made to the words "Quick" and "Hot Starch in 30 Seconds" apart from the mark as shown. The applicant is the owner of registration 205,630 dated Nov. 10, 1925.
For Starch.
Claims use since Feb. 28, 1931.

Ser. No. 315,547. OVELA J. MITCHELL, doing business as Ovee's Co., Hartford, Conn. Filed June 8, 1931.



For Salve for Piles.
Claims use since Jan. 21, 1931.

Ser. No. 315,625. BUFFALO ELECTRO-CHEMICAL CO., INC., Tonawanda, N. Y. Filed June 10, 1931.



For Hydrogen Peroxide, Ammonium Persulphate, and Potassium Persulphate.
Claims use since December, 1928.

Ser. No. 315,880. TIGER PRODUCTS CO., INC., Buffalo, N. Y. Filed June 15, 1931.



For Drain Pipe Solvent and Chemical Toilet Bowl Cleaner.
Claims use since Mar. 23, 1931.

Ser. No. 315,940. SONTAG CHAIN STORES CO. LTD., doing business as Studio Products Co., and Emdee Laboratories Co., Los Angeles and Hollywood, Calif. Filed June 16, 1931.

BLESSON

For Toilet Preparations—Namely, Shampoos.
Claims use since Oct. 1, 1930.

Ser. No. 315,970. IMPERIAL TYPE METAL COMPANY, Philadelphia, Pa. Filed June 17, 1931.

VITAFLUX

For Compound Used as a Flux for Removing Dross from Type Metal.
Claims use since Jan. 1, 1931.

Ser. No. 316,719. MARIA LUISA BONELL, doing business as Bonell's Laboratories, New York, N. Y. Filed July 8, 1931.

CABEY'O

For Preparation Used in the Treatment of the Hair and Scalp.
Claims use since May 1, 1931.

Ser. No. 316,798. JOHN F. MISNER, Kokomo, Ind. Filed July 9, 1931.

SEX-TEX

For an Anaphrodisiac.
Claims use since June 22, 1931.

Ser. No. 316,825. Dr. J. L. BLISS BATES, Washington, D. C., and Revere, Mass. Filed July 11, 1931.

CRA-Z-CORN
"Sane in a jiffy"

The word "Corn" is disclaimed apart from the mark shown on the drawing.
For Medicinal Preparations for the Treatment of the Feet.
Claims use since July 9, 1931.

Ser. No. 316,919. THE CAREY SALT COMPANY, Hutchinson, Kans. Filed July 14, 1931.

SAL'

EL TOREADOR

Applicant disclaims the right to the exclusive use of the word "Sal" apart from the trade-mark as shown in the drawing.
For Salt.
Claims use since May 27, 1931.

Ser. No. 317,130. WILFRED S. MCKEON, doing business as Sulphur Products Company, Greensburg, Pa. Filed July 20, 1931.

"Liquid Sulpho"

The word "Liquid" is disclaimed apart from the mark as shown.
For Medicinal Product for Internal Dosage to Sweeten the Stomachs of Poultry.
Claims use since Apr. 1, 1931.

Ser. No. 317,139. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed July 20, 1931.

CHEX

For Chemical Rust Preventive, Chemical Preparations for the Prevention of Rust.
Claims use since June 26, 1931.

Ser. No. 317,165. IRVING A. EDELSTEIN, doing business as London Pharmacal Co., New York, N. Y. Filed July 21, 1931.

UBAC

For Ointment for External Use for Ringworm, Eczema, and Other Skin Diseases.
Claims use since May 27, 1931.

Ser. No. 317,376. EDWARD J. ROCHE, San Francisco, Calif. Filed July 25, 1931.



All the wording on the drawing with the exception of "Vivaglands" is disclaimed.
For an Endocrine-Glandular Product Used for the Purpose of Correcting Glandular Imbalance and Glandular Disorders and Used in the Form of Rectum Suppositiories.
Claims use since Jan. 1, 1929.

Ser. No. 317,453. DOMINGOS F. CHAVES, Cambridge, Mass. Filed July 30, 1931.



SILGO MAGIC SALVE

The word "Salve" is disclaimed except when used in connection with the other features of the mark.
For Healing Salve.
Claims use since July 21, 1931.

Ser. No. 317,522. JOHN C. LEKOWSKY, doing business as John's Barber Shop, Sioux City, Iowa. Filed July 31, 1931.



The lining on the drawing indicates blue, red, and gold. The exclusive right to the use of the words "A Guaranteed Scalp Preparation" and "Supported by the Tonsorial Profession" is disclaimed apart from their use with the other features of the mark shown on the drawing.

For Ointment for Relieving Dry and Itching Condition of the Scalp.

Claims use since July 1, 1931.

Ser. No. 317,529. ODORA COMPANY, INC., New York, N. Y. Filed July 31, 1931.

TWO-IN-ONE

For Moth Preventative.

Claims use since Apr. 20, 1931.

Ser. No. 317,574. ERNEST G. RUBUP, doing business as Scientific Laboratories of America, San Francisco, Calif. Filed Aug. 1, 1931.

Dr. Ernest's



The drawing is lined for blue and red.

For Preparations in Liquid and Tablet Form for the Treatment and Relief of Digestive Disturbances and Stomachic Disorders.

Claims use since July 1, 1917.

Ser. No. 317,677. GEO. T. PENNY, doing business as Penny's Chemical Co., Greensboro, N. C. Filed Aug. 5, 1931.

HEP-U-RUB

No claim is made to the word "Rub" apart from the remainder of the mark.

For Medicinal Preparation Intended for Colds.

Claims use since July 2, 1931.

Ser. No. 317,714. GEIGY COMPANY, INC., New York, N. Y. Filed Aug. 6, 1931.

INOCYL

For Dyestuffs, Lakes, and Chemical Products Suitable for Dyeing Purposes.

Claims use since July 25, 1931.

Ser. No. 317,849. ADA MCGINNIS, doing business as Triple Value Products Co., St. Louis, Mo. Filed Aug. 10, 1931.



The drawing is lined to show the colors green, blue, and yellow. The words "Triple Value" are disclaimed apart from the mark as shown.

For Vanishing Cream, Skin Lotion, and Hair Gloss.

Claims use since June 10, 1930.

Ser. No. 317,952. PAPIER POUDRÉ, LIMITED, London, England. Filed Aug. 13, 1931.

POPPŒA

For Vanishing Cream, Toilet Cream, Perfume, Lipstick, Rouge Compact, Talcum Powder, Shampoo Powder, and Rouge.

Claims use since 1909.

Ser. No. 318,143. CAROLYN A. GREENERT, Louisville, Ky. Filed Aug. 19, 1931.

Aunt Frances

For Salve for Use in the Treatment of Open Wounds, Sores, Ulcers, Etc.

Claims use since Aug. 1, 1931.

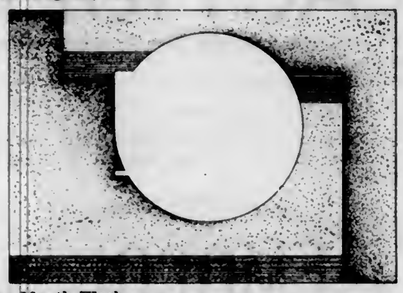
Ser. No. 318,171. SANTONINE COMPANY OF AMERICA, INC., doing business as Vermisan Company, New York, N. Y. Filed Aug. 19, 1931.

VERMISAN

For a Preparation for the Destruction and Expulsion of Roundworms (Ascarids), Whipworms, and Stomach Worms from the Intestinal Tract of Humans, Domestic Animals, and Poultry, in Capsules, Pills, Liquid, and Tablet Form.

Claims use since Aug. 4, 1931.

Ser. No. 318,184. TRENT LABORATORIES, Cleveland, Ohio. Filed Aug. 19, 1931.



For Mouth Wash.

Claims use since May 9, 1931.

Ser. No. 318,237. GEORGE B. EDMUNDS, doing business as Dixie Rush Company, New York, N. Y. Filed Aug. 20, 1931.

DIXIE RUSH

For Laxative in the Form of a Drink Made with Orange Juice.

Claims use since May 23, 1931.

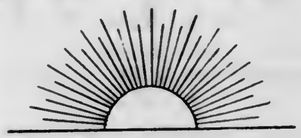
Ser. No. 318,247. MCCLELLAN PRODUCTS, LTD., Los Angeles, Calif. Filed Aug. 20, 1931.

MOTH NIP

For Mouth Spray in Liquid and Block Form.

Claims use since Sept. 1, 1926.

Ser. No. 318,324. WONG SUN, Billings, Mont. Filed Aug. 22, 1931.



SUN'S
CANCERO

For Preparation for the Treatment of Cancer.

Claims use since July 15, 1931.

Ser. No. 318,394. DIXIE CHEMICAL CO., Cincinnati, Ohio. Filed Aug. 25, 1931.

TOXA ROSE

For Disinfectant and Insecticide in Liquid and Powder Form.

Claims use since June 1, 1931.

Ser. No. 318,400. WALTER FERRY, New York, N. Y. Filed Aug. 25, 1931.

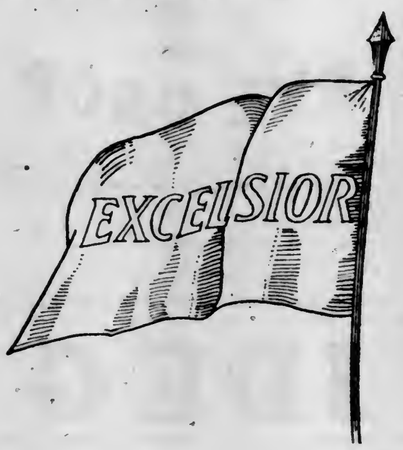
PINE-RAY

No claim is made to the word "Pine" apart from the mark as shown on the drawing.

For Hair Shampoo.

Claims use since Aug. 3, 1931.

Ser. No. 318,407. NATIONAL AMMONIA COMPANY, INC., Wilmington, Del. Filed Aug. 25, 1931.



For Carbonate of Ammonia and Bicarbonate of Ammonia.

Claims use since 1897 on carbonate of ammonia and 1916 on bicarbonate of ammonia.

Ser. No. 318,443. FRANCIS L. GAVER, doing business as Nas-O-Dent Co., Washington, D. C. Filed Aug. 26, 1931.



For Dentifrice.

Claims use since May 15, 1931.

Ser. No. 318,461. THE RECESS COMPANY, Cincinnati, Ohio. Filed Aug. 26, 1931.

RECESS



For Salt.
Claims use since June, 1926.

Ser. No. 318,528. MIRACLE EYE DROP COMPANY, Detroit, Mich. Filed Aug. 28, 1931.

MIRACLE



EYE DROP

The words "Trade Mark" and "Eye Drop" are disclaimed apart from the mark shown, and the representation of applying the product is disclaimed apart from the mark shown.
For Eye Medicine.
Claims use since July 22, 1931.

Ser. No. 318,578. MORRIS ADLER, New York, N. Y. Filed Aug. 31, 1931.

IDEG

For Preparations for the Relief of Epilepsy and Nervousness.
Claims use since Aug. 1, 1930.

Ser. No. 318,583. E. L. BRUCE COMPANY, Memphis, Tenn. Filed Aug. 31, 1931.

TERMINIX

For Insecticides.
Claims use since Nov. 1, 1928.

Ser. No. 318,588. FRERES LABORATORIES, INC., New York, N. Y. Filed Aug. 31, 1931.

V-10

For Skin Lotions and Skin Creams.
Claims use since June 1, 1931.

Ser. No. 318,662. SAMUEL LEVY, doing business as Laboratoires Ladell, New York, N. Y. Filed Sept. 2, 1931.

ASTRIUM

For Liquid Tonic for the Skin.
Claims use since July, 1930.

Ser. No. 318,664. SAMUEL LEVY, doing business as Laboratoires Ladell, New York, N. Y. Filed Sept. 2, 1931.

LACTIUM

For Lotion with a Powder Base for the Treatment of the Skin.
Claims use since July, 1930.

Ser. No. 318,670. FELIX MORGENSTERN, doing business as Morgenstern Chemical Co., New York, N. Y. Filed Sept. 2, 1931.

EMOCOL
MORGENSTERN

The surname "Morgenstern" is disclaimed apart from the mark.
For Medicinal Preparation Used as a Cathartic or Laxative Powder for the Relief of Chronic Constipation of Toxemia, of Obesity, of Pregnancy, of Hemorrhoids.
Claims use since Aug. 26, 1931.

Ser. No. 318,927. UNITED SHOE MACHINERY CORPORATION, Paterson, N. J., and Boston, Mass. Filed Sept. 10, 1931.

SILHOUWELT

For Cement Solvent or Softener.
Claims use since Aug. 17, 1931.

Ser. No. 319,041. SHAWINIGAN PRODUCTS CORPORATION, New York, N. Y. Filed Sept. 14, 1931.

GELVA

For Synthetic Resinous Material.
Claims use since Sept. 7, 1929.

Ser. No. 319,214. SAMUEL LEVY, doing business as Laboratoires Ladell, New York, N. Y. Filed Sept. 19, 1931.

VALORIUM

For After Shaving Lotion.
Claims use since November, 1930.

CLASS 7

Cordage

Ser. No. 318,071. PACIFIC WIRE ROPE COMPANY, Los Angeles, Calif. Filed Aug. 17, 1931.



No claim is made to the representation of a section of wire strand. The mark consists in painting the central single core wire yellow. The drawing is lined for yellow.
For Wire Strand.
Claims use since July 15, 1931.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 318,821. COLUMBUS FIREWORKS DISPLAY COMPANY, INC., Newfield, N. J. Filed Sept. 8, 1931.



The drawing is lined for red and blue.
For Torpedoes in the Nature of Firecrackers.
Claims use since Nov. 1, 1930.

CLASS 11

Inks and Inking Materials

Ser. No. 318,590. GENERAL PRINTING INK CORPORATION, Wilmington, Del. Filed Aug. 31, 1931.

L N F

For Printing-Ink.
Claims use since February, 1908.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 315,003. MUELLER BRASS CO., Port Huron, Mich. Filed May 25, 1931.

STREAMLINE

For Plumbing, Steam-Fitting and Gas-Fitting Valves, Pipe Hangers and Screw Machine Parts—Namely, Nuts, Glands, Stems, Couplings, Caps, Knobs, Nozzle Connections, Metal Pipe Fittings, Hand Rails, Bushings, Valve Handles, Needle Valve Seats, Bracket Supports, Fusible Plugs, Service Box Screws, Adapter Fittings, Inlet Flanges, Plugs, and Piping Header Plates.
Claims use since Nov. 20, 1930, on valves; since Apr. 27, 1931, on pipe hangers; since Mar. 12, 1931, on torches; and since Dec. 18, 1930, on screw machine parts.

Ser. No. 318,434. APEX REGULATOR COMPANY, Marshalltown, Iowa. Filed Aug. 26, 1931.



For Automatic Controlling Equipment—Namely, Constant Pressure Pump Governors, Hydraulic Pressure Pump Governors, Safety Stop Valves or Governors, Compound Governors, Excess or Differential Pump Governors, Gravity Pump Governors, Vacuum Pump Governors, Receiver Tank Pump Governors, By-Pass Valves, Reducing Valves, Pressure Regulators, Back Pressure Valves, Relief Valves, Atmospheric Relief Valves, Reverse Flow or Check Valves, Steam Traps, Gasoline Traps, Gas-Water Traps, Grease Traps, Condensate Drainers, Oil or Gas Eliminating Traps, Condensate Receivers, Strainers, Lever Valves, Float Valves, Tank Controllers, Floats, Liquid Level Controllers, Vacuum Regulators, Fluid Mixers, Blower Governor Valves, Hydraulically Operated Valves, Boiler Pressure Governors, Fan Engine or Stoker Engine Regulating Valves, Control Valves, Steam Separators, Oil Separators, Drip Pockets or Sediment Pockets, Exhaust Heads, Boiler Compound Feeders, Vacuum Fluid Extractors or Vacuum Traps, Vapor Pressure Controllers, Auxiliary Actuated Regulator Valves, Engine Fuel Regulators, Suction Pressure Regulators, Valves for Use with Motor or Solenoid Control, By-Pass Relief Valves, Pressure Control Water Regulators, Condensing Water Regulators, Ammonia Pressure Control Water Regulators, Expansion Valves, Ammonia Back Pressure Valves, Swing Joints, Oil Drain Valves, Tank Wagon Handhole Covers, Float Cages, Combination Pressure and Vacuum Relief Valves, Non-Freezing Drain Valves, Hot-Water Heating System Pressure Control Units and Other Units in the Nature of Valves for Controlling the Flow, Liquid Level, Temperature, Speed, Differential Pressure, Relief Pressure, Reduced Pressure, Humidity, and Volumes of Such Fluids as Steam, Air, Gas, Water, Oil Ammonia.
Claims use since November, 1928.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 304,319. ERIE MALLEABLE IRON COMPANY, Erie, Pa. Filed Aug. 7, 1930.

ERMAL

For Ferrous Metal Castings.
Claims use since June 14, 1930.

Ser. No. 318,501. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Filed Aug. 28, 1931.

PREMIER

For Wire, and More Particularly Spring Wire.
Claims use since 1902.

CLASS 15

Oils and Greases

Ser. No. 317,569. PENN-STATE PETROLEUM COMPANY, Warren, Pa. Filed Aug. 1, 1931.

DOUBLE-PENN

The syllable "Penn" is disclaimed apart from the mark shown in the drawing.
For Lubricating Oils.
Claims use since July 9, 1931.

Ser. No. 317,762. GENERAL PETROLEUM CORPORATION OF CALIFORNIA, Los Angeles, Calif. Filed Aug. 7, 1931.

THERMREX

For Lubricating Greases.
Claims use since July 6, 1931.

Ser. No. 317,908. THE UNION REFINING COMPANY, Denver, Colo. Filed Aug. 12, 1931.

PENNFAR-GO

No claim is made to the exclusive use of the word "Penn" aside from the mark as shown in the drawing.
For Motor Oils and Greases for Lubricating Purposes.
Claims use since June 30, 1931.

Ser. No. 318,492. SOCONY SPECIALTIES, INC., New York, N. Y. Filed Aug. 27, 1931.

Upperlub

For Gasoline, Blended Gasoline, Motor Fuel Compounds for Internal Combustion Engines, Motor Fuel Oils, and Lubricating Oils and Greases.
Claims use since July 2, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 301,680. N. V. MAATSCHAPPIJ "De Veluwe", Nunspeet, Netherlands. Filed May 29, 1930.

Veluvine

For Paints, Paint Enamels, and Varnishes.
Claims use since 1909.

Ser. No. 318,596. HENRY KLIBANOW, doing business as Ethyl Laboratories, Dallas, Tex. Filed Aug. 31, 1931.

ETHYL

For Automobile Cleaner and Polish.
Claims use since December, 1930.

Ser. No. 319,216. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed Sept. 19, 1931.

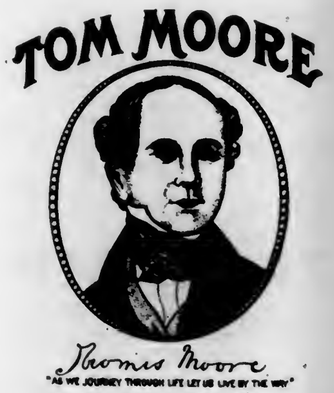
SNOLEAD

For Liquid and Paste Paints, Primers, and Paint Enamels.
Claims use since June 24, 1931.

CLASS 17

Tobacco Products

Ser. No. 304,920. KLEINER CIGAR MANUFACTURING COMPANY, Detroit, Mich. Filed Aug. 22, 1930.



The picture forming a portion of the mark sought to be registered is that of Thomas Moore.
For Cigars.
Claims use since 1858.

Ser. No. 304,921. KLEINER CIGAR MANUFACTURING COMPANY, Detroit, Mich. Filed Aug. 22, 1930.

TOM MOORE

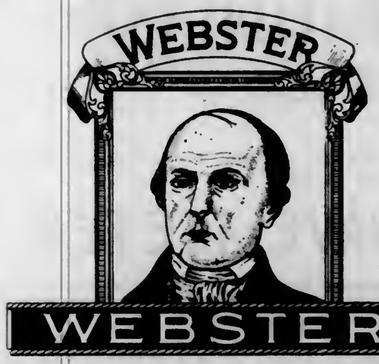
For Cigars.
Claims use since 1858.

Ser. No. 304,922. KLEINER CIGAR MANUFACTURING COMPANY, Detroit, Mich. Filed Aug. 22, 1930.

LITTLE TOM

For Cigars.
Claims use since 1899.

Ser. No. 304,933. WEBSTER CIGAR COMPANY, New York, N. Y. Filed Aug. 22, 1930.



The picture forming a part of the mark sought to be registered is that of Daniel Webster.
For Cigars.
Claims use since 1882.

Ser. No. 304,934. WEBSTER CIGAR COMPANY, New York, N. Y. Filed Aug. 22, 1930.



No claim to registration is made herein to the word "Superiores" apart from the mark as shown on the drawing.
For Cigars.
Claims use since 1882.

Ser. No. 318,510. DE NOBILI CIGAR COMPANY, Long Island City, N. Y. Filed Aug. 28, 1931.



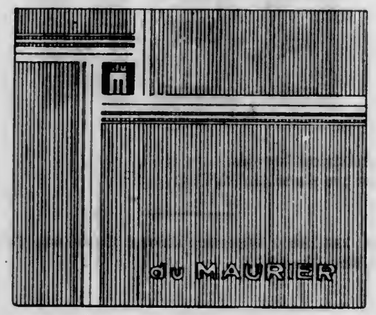
The lining on the drawing indicates the colors green and red.
For Cigars.
Claims use since Nov. 15, 1906.

Ser. No. 318,537. JOHN H. SWISHER & SON, INC., Jacksonville, Fla. Filed Aug. 28, 1931.

RED RANGER

For Cigars.
Claims use since Jan. 29, 1900.

Ser. No. 318,651. PETER JACKSON (TOBACCO MANUFACTURER) LIMITED, London, England. Filed Sept. 2, 1931.



The mark is limited to the colors red, silver, and black. The vertical lining in the drawing represents red, and the white represents silver color.
For Cigarettes, Smoking Tobacco, Cigars, and Snuff.
Claims use since June 4, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 301,756. GAS AND ELECTRIC HEATER CO., La Porte, Ind. Filed May 30, 1930.

FauceHot

For Electric Water Heaters.
Claims use since Apr. 4, 1930.

Ser. No. 314,730. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

BABY

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 314,731. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

BABY BEN

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 314,732. WESTERN CLOCK COMPANY, Peru Ill. Filed May 18, 1931.

BEN

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 314,733. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

BEN FRANKLIN

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 314,734. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

BIG BEN

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 314,735. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

BINGO

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 314,737. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

IRONCLAD

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 314,738. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

MONITOR

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 314,739. WESTERN CLOCK COMPANY, Peru, Ill. Filed May 18, 1931.

WAVEMEETER

For Electrical Motors.
Claims use since Apr. 1, 1931.

Ser. No. 315,818. HAROLD BAUER, New York, N. Y. Filed June 15, 1931.

THE Harold Bauer LAMP

The words "The" and "Lamp" are disclaimed descriptively. The mark is a facsimile of the signature of the applicant.
For Electric Lamp.
Claims use since May 26, 1931.

Ser. No. 315,845. KNAPP-MONARCH COMPANY, Belleville, Ill. Filed June 15, 1931.

"K-M"

For Electrical Goods Consisting of Electric Heaters, Grill Stoves, Hot Plates, Flat Irons, Heat Pads for General Use, Waffle Irons, Corn Poppers, Bread Toasters, Curling Irons, Egg Cookers, Fans, Motor Egg Whips, Motor Batter Beaters, Motors and Parts Thereof.
Claims use since December, 1929.

Ser. No. 317,253. ILLINOIS ZINC COMPANY, Chicago, Ill. Filed July 23, 1931.

ERAYDO

For Radio Shields for Condensers and Radio Apparatus, Incandescent Lamps and Electron Tubes and Bases and Sockets Therefor, Bases for Radio Receiving Sets, Condenser Coils, Containers for Electrolytic Condensers, Terminals, Conductor Wire, Partition Plates for Shielding, Control Switch Boxes, and Condenser Blades.
Claims use since Dec. 12, 1929.

Ser. No. 318,367. K. L. G. SPARKING PLUGS, LIMITED, London, England. Filed Aug. 24, 1931.

K.L.G

For Sparking Plugs.
Claims use since 1912.

Ser. No. 318,403. HEBCO, INC., New York, N. Y. Filed Aug. 25, 1931.

"ELEKTROSPARK"

For Emergency Induction Coil Kit for Connection with the Ignition System of an Internal Combustion Engine.
Claims use since July 27, 1931.

Ser. No. 318,946. GILBY WIRE COMPANY, Newark, N. J. Filed Sept. 11, 1931.

HI-LO

For Radio Filament Wires.
Claims use since July 14, 1931.

Ser. No. 319,080. RCA VICTOR COMPANY, INC., Camden, N. J. Filed Sept. 15, 1931.

TERMINET

For Line Terminating Units, Resistor Units, Resistor-Capacitance Terminating Units.
Claims use since April, 1931.

Ser. No. 319,090. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed Sept. 15, 1931.

ARISTOCRAT

For Electric Toasters.
Claims use since July, 1928.

Ser. No. 319,091. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed Sept. 15, 1931.

DEBON-AIR

For Electric Fans.
Claims use since Jan. 17, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 276,290. BRONX JOBBING HOUSE, New York, N. Y. Filed Dec. 5, 1928.

BRONX SPECIAL B. J. H BRAND

No claim is made for the words "Bronx Special Brand" apart from the mark shown in the drawing.
For Self-Propelled and Other Toy Vehicles, Dolls, Educational and Mechanical Toys; Toy Furniture, Dishes, and the Like; Table and Board Games Played with Pieces, Cards, and the Like; Indoor and Outdoor Games Played with Pieces and Sold as a Unit.
Claims use since August, 1928.

Ser. No. 316,626. BALLETTE AMUSEMENT CO. INC., Birmingham, Ala. Filed July 6, 1931.

BALL-ETTE

The word "Ball" is disclaimed apart from the other features of the mark shown in the drawing.
For Miniature Pool Game.
Claims use since September, 1930.

Ser. No. 319,130. AMERICAN CHARACTER DOLL CO. INC., New York, N. Y. Filed Sept. 17, 1931.

FLEX-O-FLESH

For Dolls.
Claims use since Aug. 1, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 309,445. SNAP-ON TOOLS, INC., Kenosha, Wis. Filed Dec. 29, 1930.

NUT SPINNERS

For Wrenches, Wrench Sets, Wrench Sockets, Tool Handles, and Screw Drivers.
Claims use since Aug. 1, 1929.

Ser. No. 317,689. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., and New York, N. Y. Filed Aug. 8, 1931.

15K

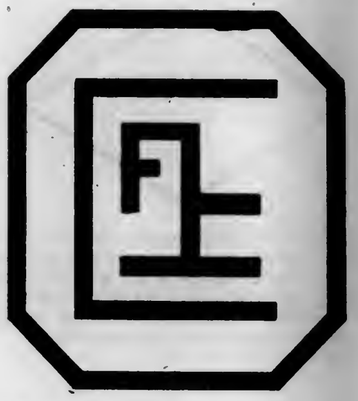
For Sewing Machines, Their Parts, and Attachments.
Claims use since Feb. 9, 1914.

Ser. No. 318,980. THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed Sept. 12, 1931.

Ediphone

For Machines for Shaving Sound Record Tablets and Accessories Therefor.
Claims use since Dec. 17, 1927.

Ser. No. 319,059. F. L. & J. C. CODMAN COMPANY, Boston and South Boston, Mass. Filed Sept. 15, 1931.



For Buffing Wheel Disks.
Claims use since July 28, 1931.

Ser. No. 319,141. HEPPENSTALL COMPANY, Pittsburgh, Pa. Filed Sept. 17, 1931.

HARDTEM

For Razor Blades.
Claims use since Sept. 15, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 309,436. LYNN A. LYON, Findlay, Ohio. Filed Dec. 29, 1930.



No claim is made to the word "Washer" apart from the mark shown. The drawing is lined for red.
For Laundry Washing Machines.
Claims use since Sept. 1, 1930.

Ser. No. 318,693. B & G MACHINERY CO., INC., Indianapolis, Ind. Filed Sept. 3, 1931.

HANDY HATTER

For Hat Ironing Machines.
Claims use since Apr. 1, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 304,593. U. S. POSTAL METER CORPORATION, New York, N. Y. Filed Aug. 13, 1930.

POSTAL METER

Applicant makes no claim to the words "Postal Meter" except as in combination with the remainder of the trade-mark as shown.
For Metering Machines—Namely, a Unitary Machine for Post Marking and Sealing Envelopes and Counting the Postage Used.
Claims use since June 15, 1930.

Ser. No. 311,629. STERLING ENGINEERING COMPANY, Milwaukee, Wis. Filed Mar. 2, 1931.

THERMOTROL

For Thermostatic Temperature Regulator.
Claims use since May 5, 1925.

CLASS 27

Horological Instruments

Ser. No. 318,695. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed Sept. 3, 1931.

EMPRESS EUGENIE

For Wrist or Strap Watches.
Claims use since June 5, 1931.

Ser. No. 318,696. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed Sept. 3, 1931.

Martha Washington

For Wrist or Strap Watches.
Claims use since Jan. 23, 1931.

Ser. No. 318,697. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed Sept. 3, 1931.

PRINCESS EUGENIE

For Wrist or Strap Watches.
Claims use since July 29, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 318,807. MARATHON COMPANY, Attleboro, Mass. Filed Sept. 4, 1931.

SLYDA

For Cases Consisting of Cigarette Cases, Compact Cases, Powder Cases, All Made of or Plated with Precious Metal.
Claims use since Aug. 1, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 317,507. CHICAGO GRANITINE MANUFACTURING COMPANY, Chicago, Ill. Filed July 31, 1931.

GRANITINE

For Concrete Garden and Landscape Furniture—Namely, Benches, Seats, Chairs, and Tables.
Claims use since Apr. 1, 1925.

Ser. No. 318,715. MILLER FURNITURE COMPANY, Lebanon, Pa. Filed Sept. 3, 1931.



No claim is made to the representation of the goods apart from the mark shown.
For Chest of Drawers, Dressing Table, and Chifforobe Combined.
Claims use since May 15, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 314,558. "DIAMCO" AKT. GES. FÜR GLÜHLICHT, Berlin, Germany. Filed May 14, 1931.

AIDA

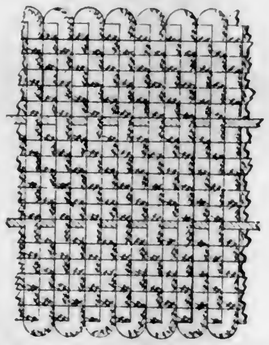
The words "Registered Trade Mark—Eingetragene Schutzmarke" are disclaimed.
For Incandescent Mantles of Every Kind.
Claims use since January, 1929.

Ser. No. 317,675. ORR & SEMBOWER, INC., Reading, Pa. Filed Aug. 5, 1931.

VICTOR

For Under Feed Stoker Mechanism for Boilers Employed for Industrial Uses.
Claims use since Nov. 1, 1930.

Ser. No. 317,852. NATIONAL ENAMELING & STAMPING CO., Milwaukee, Wis. Filed Aug. 10, 1931.



The trade-mark comprises a pair of spaced parallel green stripes running longitudinally of the wick, which green stripes are woven directly therein. The drawing is lined for green. The representation of the goods is disclaimed.
For Woven Wicks.
Claims use since Nov. 1, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 313,308. THE SHALER COMPANY, Waupun, Wis. Filed Apr. 13, 1931.



The word "Improved" and the words "Rapid Hot Patches" are disclaimed apart from the mark as shown. In the drawing the solid black within alternate diamond shaped outlines and the white field within the other diamond shaped outlines indicate contrast, it being the custom of the petitioner to prepare its labels in black and yellow or blue and yellow or red and yellow for the alternate diamond shaped fields, as well as black and white.
For Pneumatic Vehicle Tires and Portable Tire Repair Kits.
Claims use since Apr. 11, 1931.

Ser. No. 313,309. THE SHALER COMPANY, Waupun, Wis. Filed Apr. 13, 1931.



For Pneumatic Vehicle Tires and Portable Tire Repair Kits.
Claims use since January, 1927.

Ser. No. 319,026. HASTINGS MANUFACTURING COMPANY, Hastings, Mich. Filed Sept. 14, 1931.

DUBL-CHECK

For Piston Rings.
Claims use since Aug. 15, 1931.

Ser. No. 319,151. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio. Filed Sept. 17, 1931.

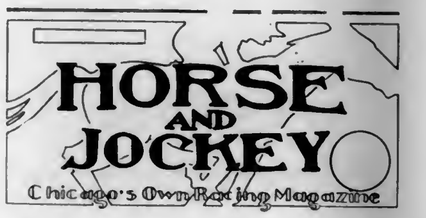
COMRADE

For Pneumatic Rubber Tires for Vehicles.
Claims use since Sept. 1, 1930.

CLASS 38

Prints and Publications

Ser. No. 316,099. THE PHOENIX PUBLISHING CO., Chicago, Ill. Filed June 20, 1931.



The words "Chicago's Own Racing Magazine" are disclaimed apart from the mark as shown.
For Magazines Published Every Month.
Claims use since Dec. 20, 1930.

Ser. No. 316,854. THE SUN PRINTING & PUBLISHING ASSOCIATION, New York, N. Y. Filed July 11, 1931.

(The Old Scout)

For a Nom De Plume for a Column Printed Daily in a Newspaper.
Claims use since July 15, 1925.

Ser. No. 316,955. AMERICAN REMOUNT ASSOCIATION, Washington, D. C. Filed July 15, 1931.

The HORSE

For Monthly Periodical.
Claims use since January, 1931.

Ser. No. 318,872. ILLUSTRATED FASHION FEATURES, INC., New York, N. Y. Filed Sept. 9, 1931.

ILLUSTRATED HOME SEWING

For Magazine.
Claims use since Aug. 20, 1931.

Ser. No. 318,942. WM. L. DEMING, Salem, Ohio. Filed Sept. 11, 1931.

METRIWAY

For Maps.
Claims use since July 31, 1931.

Ser. No. 318,950. EMMA MARIE LA DUE, doing business as American Fur Breeder Publishing Company, St. Peter, Minn. Filed Sept. 11, 1931.

AMERICAN FUR BREEDER

For Periodical.
Claims use since July, 1928.

Ser. No. 319,012. UNITED STATES STEEL CORPORATION, New York, N. Y. Filed Sept. 12, 1931.

The STEEL MAKER

For House Organ Published Quarterly or at Other Intervals.
Claims use since May 29, 1931.

Ser. No. 319,038. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Sept. 14, 1931.

The AMERICAN FIRESIDE

For Magazine Distributed to the Public.
Claims use since Aug. 7, 1931.

CLASS 39

Clothing

Ser. No. 306,641. DALTON HAT CO., INC., Yonkers, N. Y. Filed Oct. 11, 1930.

Aristo-Lite

For Men's Hats.
Claims use since Sept. 15, 1930.

Ser. No. 311,908. ARGUS KNITTING MILLS, INC., Brooklyn, N. Y. Filed Mar. 9, 1931.

NEVASHEEN

For Men's, Women's, and Children's Outer Body Garments—Namely, Hats, Caps, Coats, Suits, Scarfs, and Gloves of Leather, Rubber, and Fabrics and Combinations of These Materials.
Claims use since Oct. 29, 1930.

Ser. No. 316,222. THE SELBY SHOE COMPANY, Portsmouth, Ohio. Filed June 24, 1931.

Selby ARCH PRESERVER SHOE

No claim is made to the exclusive use of the word "Shoe" apart from the mark as shown in the drawing.
For Women's, Misses', and Children's Shoes.
Claims use since April, 1929.

Ser. No. 316,226. TOTEM HAT COMPANY, New York, N. Y. Filed June 24, 1931.

Raggie

For Ladies', Misses', and Children's Hats.
Claims use since June 15, 1931.

Ser. No. 316,265. GRANT APPAREL MFG. CO. LTD., Los Angeles, Calif. Filed June 25, 1931.

"STYLE FAME"

For Women's and Children's Dresses, Smocks, Aprons, Slips, and Ensembles Consisting of Combination Dress and Coat, Combination Skirt and Coat, or Combination Skirt, Blouse, and Coat.
Claims use since Jan. 12, 1931.

Ser. No. 317,156. CAMERON AND COMPANY, Napa, Calif. Filed July 21, 1931.

"Camolin"

For Men's and Boys' Dress and Negligee Shirts.
Claims use since Feb. 10, 1931.

Ser. No. 317,486. SHRAGE & PINES, New York, N. Y. Filed July 30, 1931.

REG'LAR



For Boys' Blouses and Outer Shirts.
Claims use since June 1, 1931.

Ser. No. 317,533. POIRETTE CORSETS, INC., New York, N. Y. Filed July 31, 1931.

FREE-FLEX COMPACT

For Corsets, Brassières, and Combinations of the Same.
Claims use since May 15, 1931.

Ser. No. 317,678. REGAL KNITTING CO. INC., New York, N. Y. Filed Aug. 5, 1931.

IGLOO

For Garments—Namely, Snow Suits for Children from 1 to 16 Years of Age.
Claims use since July 23, 1931.

Ser. No. 317,973. ANNETTE COWEN, New York, N. Y. Filed Aug. 14, 1931.

WEE LASSIE

For Infants' and Children's Dresses, Underwear, Coats, Hats, Hosiery, and Leather or Fabric Shoes.
Claims use since July 10, 1929.

Ser. No. 318,079. SAKOWITZ BROTHERS, Houston, Tex. Filed Aug. 17, 1931.

Du Clair

For Ladies', Misses', and Junior Hosiery, Underwear, Pajamas, Gowns, Lounging and Bath Robes, Sweaters, Frocks, Dresses, and Gowns.
Claims use since Mar. 1, 1931.

Ser. No. 318,106. HANES HOSIERY MILLS CO., Winston-Salem, N. C. Filed Aug. 18, 1931.

GRANDEUR

For Hosiery.
Claims use since July 30, 1931.

Ser. No. 318,146. HENRIETTA SHOPPE, INC., New York, N. Y. Filed Aug. 19, 1931.

Henrietta

For Underwear for Men, Women, and Children; and Dresses.
Claims use since January, 1923.

Ser. No. 318,279. ARTHUR A. KATTEN CO. INC., New Orleans, La. Filed Aug. 21, 1931.

Gayly

For Men's, Youths', and Boys' Outer Clothing Consisting of Coats, Suits, Trousers, and Vests.
Claims use since Aug. 18, 1931.

Ser. No. 318,404. J. SCHOENEMAN, INCORPORATED, Baltimore, Md. Filed Aug. 26, 1931.

AIR COOLED

For Coats, Vests, Trousers, Knickerbockers, Top Coats, and Overcoats for Men, Youths, and Boys.
Claims use since February, 1931.

Ser. No. 318,570. SIEGEL BROS. KIKI MAID KOATS INC., New York, N. Y. Filed Aug. 29, 1931.

Kragshire

For Girls', Juniors', Misses', Little Women's, and Ladies' Coats.
Claims use since July 25, 1931.

Ser. No. 318,598. MINNEAPOLIS KNITTING WORKS, Minneapolis, Minn. Filed Aug. 31, 1931.

BYE-BI-KNIT

No claim is made to the word "Knit" apart from the rest of the mark.
For Infants' and Children's Underwear and Sleeping Garments, Infants' Shirts and Bands, Children's Knitted Shirts and Pants, Children's Knitted Union Suits and Waist Union Suits.
Claims use since Mar. 1, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 309,982. B. PRIESTLEY & CO., INC., New York, N. Y. Filed Jan. 15, 1931.

Roseberry

For Cotton Fabrics in the Piece.
Claims use since Jan. 1, 1907.

Ser. No. 316,610. PEPPERELL MANUFACTURING COMPANY, Boston, Mass. Filed July 3, 1931.

Lord PEPPERELL

For Broadcloth in the Piece Made of Cotton.
Claims use since Oct. 15, 1930.

Ser. No. 316,611. PEPPERELL MANUFACTURING COMPANY, Boston, Mass. Filed July 3, 1931.



Applicant hereby disclaims exclusive use of the words "Trade Mark" and "Fabrics" apart from the mark as shown in the drawing. The lining on the drawing indicates the colors red and blue.
For Sheetings, Shirtings, Denims, Twills, and Other Similar Fabrics of Cotton.
Claims use since July 1, 1931.

Ser. No. 317,159. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed July 21, 1931.

SILKANCEL

Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since July 18, 1931.

Ser. No. 317,160. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed July 21, 1931.

SILKCEL

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since July 18, 1931.

Ser. No. 318,398. EMPIRE SILK COMPANY, New York, N. Y. Filed Aug. 25, 1931.

Craft O' Loom Crepe

No claim is made to the exclusive use of the word "Crepe" apart from the mark as shown in the drawing.
For Piece Goods of Silk and Rayon and Mixtures Thereof.
Claims use since May 18, 1931.

Ser. No. 318,631. WELLINGTON SEARS COMPANY, Boston, Mass. Filed Sept. 1, 1931.



For Twilled Piece Goods.
Claims use since July 18, 1930.

Ser. No. 318,632. WELLINGTON SEARS COMPANY, Boston, Mass. Filed Sept. 1, 1931.



For Twilled Piece Goods.
Claims use since Aug. 20, 1930.

Ser. No. 318,646. ETABLISSEMENTS TRIPETTE & RENAUD FILS SOCIETE ANONYME, Paris, France. Filed Sept. 2, 1931.



For Silk Bolting Cloth and Silk Grit Gauze in the Piece and on Rolls.
Claims use since Aug. 1, 1870.

Ser. No. 319,204. F. DUCHARNE SILK CO. INC., New York, N. Y. Filed Sept. 19, 1931.

SATIN NESSUS

No rights are asserted to the exclusive use of the word "Satin" apart from the trade-mark as shown in the drawing.
For Silk Piece Goods.
Claims use since Sept. 1, 1931.

Ser. No. 319,236. CARNAC COTTONS, INC., New York, N. Y. Filed Sept. 21, 1931.

CARNAC
PERMAFIT

For Cotton Piece Goods.
Claims use since Sept. 9, 1931.

Ser. No. 319,237. CARNAC COTTONS, INC., New York, N. Y. Filed Sept. 21, 1931.

PERMAFIT

The line defining the outline of the label does not form a part of the mark sought to be registered.
For Cotton Piece Goods.
Claims use since Sept. 9, 1931.

Ser. No. 319,296. RIVERSIDE & DAN RIVER COTTON MILLS, INC., Danville, Va. Filed Sept. 22, 1931.

MEEKONG

For Cotton Broadcloth in the Piece.
Claims use since July 24, 1931.

Ser. No. 319,297. RIVERSIDE & DAN RIVER COTTON MILLS, INC., Danville, Va. Filed Sept. 22, 1931.

TIBER

For Cotton Broadcloth in the Piece.
Claims use since July 21, 1931.

Ser. No. 319,298. RIVERSIDE & DAN RIVER COTTON MILLS, INC., Danville, Va. Filed Sept. 22, 1931.

TIGRIS

For Cotton Broadcloth in the Piece.
Claims use since July 21, 1931.

CLASS 43

Thread and Yarn

Ser. No. 319,158. W. WARREN THREAD WORKS, Westfield, Mass. Filed Sept. 17, 1931.

EELSKIN

For Thread.
Claims use since Aug. 12, 1931.

Ser. No. 319,218. MAX POLLACK & CO. INC., New York, N. Y. Filed Sept. 19, 1931.



"TECLA"

For Sewing Threads.
Claims use since Apr. 28, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 307,794. RAYMOND L. BARKER, doing business as Le Barque Company, Chicago, Ill. Filed Nov. 12, 1930.

KOLDPAK

For Body Massaging Devices.
Claims use since Nov. 1, 1930.

Ser. No. 314,843. FILLKWIK COMPANY, Attleboro, Mass. Filed May 21, 1931.

"VAN-MIST"

For Combination Perfume Atomizers and Compacts.
Claims use since Feb. 11, 1931.

Ser. No. 318,310. HOLLAND-RANTOS CO., INC., New York, N. Y. Filed Aug. 22, 1931.

H-R

For Vaginal Diaphragms.
Claims use since May 1, 1931.

Ser. No. 318,525. JOHNSON & JOHNSON, New Brunswick, N. J. Filed Aug. 28, 1931.

STERIPADS

For Surgical Dressings.
Claims use since Jan. 7, 1930.

Ser. No. 319,064. JACOB G. GROSS, doing business as National Latex Company, Southgate, Calif. Filed Sept. 15, 1931.

SILVER SILKS

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Sept. 2, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 309,430. HOFFMAN BEVERAGE COMPANY, Newark, N. J. Filed Dec. 29, 1930.



The trade-mark consists of a plurality of goblets disposed in a circle around the upper part of the neck of a bottle.
For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Nov. 11, 1930.

Ser. No. 317,122. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Filed July 20, 1931.

Satonia Club

For Non-Alcoholic, Maltless Beverage Sold as Soft Drinks, Particularly Ginger Ale.
Claims use since June 25, 1931.

Ser. No. 317,123. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Filed July 20, 1931.

Rocky
River

For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks, Particularly Orange Soda, Lemon Lime Soda, and Root Beer.
Claims use since June 25, 1931.

Ser. No. 318,404. INDIAN MINERAL WELLS, INC., St. Matthews, Ky. Filed Aug. 25, 1931.



For Nonalcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since July 1, 1931.

Ser. No. 318,717. HOMER NEER AND WILLIAM DUANE MORGAN, Springfield, Ohio. Filed Sept. 3, 1931.

NE-MO

For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since Dec. 1, 1930.

Ser. No. 318,742. LEVIN & ROOT, New York, N. Y. Filed Sept. 4, 1931.

SLOPPY JOE'S

LOCO COCO

No claim is made to the word "Coco" apart from the association shown on the drawing.
For Nonalcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since Aug. 1, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 298,133. ARROW WHOLESALE GROCERY CO., Chicago, Ill. Filed Mar. 31, 1930.

UNION PARK

For Canned Vegetables—Namely, Tomatoes, Peas, Corn, Spinach, Lima Beans, Green Beans, Wax Beans, Pork and Beans, Red Kidney Beans, Sauerkraut, Cut Beets, Whole Beets, Asparagus Tips; Canned Fish; Canned Fruits—Namely, Peaches, Pineapple, Royal Anne Cherries, Apricots, Pears, Fruits for Salad, Blackberries, Red Raspberries, Strawberries; Canned Tomato Purée, Fruit Preserves.
Claims use since February, 1928.

Ser. No. 306,883. DUFFY-MOTT COMPANY, INC., New York, N. Y. Filed Oct. 18, 1930. Under section 5b of the act of 1905 as amended in 1920.

MOTT'S

The trade-mark consists merely in the word "Mott's."
For Apple Products—Namely, Vinegar and Apple Sauce.
Claims use since 1842 on vinegar and since Sept. 17, 1930, on apple sauce.

Ser. No. 312,340. OTTO GEIGER, Jersey City, N. J. Filed Mar. 20, 1931.



Applicant disclaims the word "Pies" apart from the mark as shown in the drawing.
For Pies and Tarts.
Claims use since July 1, 1930.

Ser. No. 313,093. RAISIN CRISP CO., NOT INC., Chicago, Ill. Filed Apr. 8, 1931.



Applicant makes no claim to the exclusive use of the word "Raisin."
For Candy Popcorn and Raisin Confection.
Claims use since Mar. 1, 1931.

Ser. No. 313,441. BLANCHE MASON, Phoenix, Ariz. Filed Apr. 16, 1931.

CITRUS CHOCS

The descriptive word "Citrus" is disclaimed apart from the other features of the mark shown in the drawing.
For Chocolate Covered Citrus Fruit.
Claims use since Jan. 15, 1931.

Ser. No. 314,246. NATIONAL C. M. A. STORES, INC., New York, N. Y. Filed May 6, 1931.

CMA

For Coffee and Wheat Flour.
Claims use since Oct. 15, 1930.

Ser. No. 314,848. HALL BROTHERS, Wallingford, Conn. Filed May 21, 1931.

Hall's Chicks
WELL BRED FROM WELL BREEDERS

No claim being made to the word "Chicks" nor the slogan "Well Bred from Well Breeders" apart from the mark shown in the drawing.
For Live Chicks.
Claims use since Mar. 16, 1931.

Ser. No. 315,302. DAI NIHON JINZOHIRYO KABUSHIKI KAISHA, Tokyo, Japan. Filed June 2, 1931.

Soyament

For Soy in Liquid Form, Liquid Sauce, Vinegar, and Liquid Condiment for Seasoning Food.
Claims use since 1927.

Ser. No. 316,938. OWENSBORO MILLING CO. INCORPORATED, Owensboro, Ky. Filed July 14, 1931.

TRUTEST

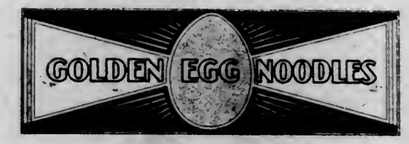
For Wheat Flour, Stock and Poultry Feeds.
Claims use since May 27, 1931.

Ser. No. 317,655. YUMA MESA FRUIT GROWERS ASSOCIATION, Yuma, Ariz. Filed Aug. 4, 1931.

DESERT CHIEF

For Fresh Grapefruit.
Claims use since Nov. 1, 1929.

Ser. No. 317,764. GOLDEN AGE CORPORATION, New York, N. Y. Filed Aug. 7, 1931.



Applicant is the owner of registrations 79,650 and 79,821, under the ten-year proviso, the drawing being stippled to indicate the color gold, and no claim being made to the exclusive use of the word "Noodles" apart from the mark as shown in the drawing without, however, waiving applicant's common law right to the use of this word to form the complete mark.
For Noodles.
Claims use since Nov. 15, 1930.

Ser. No. 317,887. ALFRED BIRD AND SONS, LIMITED, Birmingham, England. Filed Aug. 12, 1931.



For Custard Powder.
Claims use since Mar. 25, 1929.

Ser. No. 318,142. JAMES P. GRAZIANO, Chicago, Ill. Filed Aug. 19, 1931.

BACHERIA



For Olive Oil.
Claims use since June 30, 1926.

Ser. No. 318,150. THE KUNER PICKLE COMPANY, Brighton, Colo. Filed Aug. 19, 1931.

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For Peas, Green Lima Beans, Sugar Corn, Sauerkraut, Sauerkraut Juice, Pumpkin, Red Pitted Cherries, Pork and Beans, Hominy, Red Kidney Beans, Beet Salad, Whole Beets, Sliced Beets, Quartered Beets, Green Stringless Beans, Wax Beans, Sweet Relish, Sweet Pickles, Sweet Mixed Pickles, Sour Pickles, Dill Pickles, Ketchup, Prepared Mustard, Tomato Purée, Sliced Sweet Pickles, Sliced Dill Pickles, Sliced Sour Pickles, Sweet Gherkins, and Tomatoes, Packed in Cans, Bottles, Kegs and Barrels.
Claims use since Jan. 1, 1902.

Ser. No. 318,151. THE KUNER PICKLE COMPANY, Brighton, Colo. Filed Aug. 19, 1931. Under 10-year proviso.

Kuner's

The lining is disclaimed apart from the mark as shown.
For Peas, Green Lima Beans, Sugar Corn, Sauerkraut, Sauerkraut Juice, Pumpkin, Red Pitted Cherries, Pork and Beans, Hominy, Red Kidney Beans, Beet Salad, Whole Beets, Sliced Beets, Quartered Beets, Green Stringless Beans, Wax Beans, Sweet Relish, Sweet Pickles, Sweet Mixed Pickles, Sour Pickles, Dill Pickles, Ketchup, Prepared Mustard, Tomato Purée, Sliced Sweet Pickles, Sliced Dill Pickles, Sliced Sour Pickles, Sweet Gherkins, and Tomatoes Packed in Cans, Bottles, Kegs, and Barrels.
Claims use since Jan. 1, 1884.

Ser. No. 318,626. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Sept. 1, 1931.



For Ice Cream.
Claims use since July 10, 1931.

Ser. No. 319,021. T. G. ENDO, doing business as Okuhira Produce Co., Los Angeles, Calif. Filed Sept. 14, 1931.



For Fresh Deciduous Fruits and Vegetables.
Claims use since May 10, 1924.

Ser. No. 319,155. MCDANIEL MILLING CO., Carthage, Mo. Filed Sept. 17, 1931.



For Wheat Flour, Plain and Self-Rising.
Claims use since June, 1927.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 316,831. SIR ROBERT BURNETT & COMPANY, LIMITED, London, England. Filed July 11, 1931. Under 10-year proviso.



For Gin.
Claims use since Mar. 9, 1888.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 317,879. JOHN GRIMBERG, New York, N. Y. Filed Aug. 8, 1931.

GRIM'S Pres-Gard

For Garment Hangers.
Claims Use since Oct. 1, 1930.

Ser. No. 318,724. "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria. Filed Sept. 3, 1931.

BELINDE

For Bathing Mats of All Kinds Made of India Rubber, Particularly Made of India Rubber Having a Sponge-Like Appearance.
Claims use since May 5, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

OCTOBER 27, 1931

288,307. MEDICINAL COMPOUNDS FOR THE TREATMENT OF ANÆMIA. GREGORY B. STOLBERG, doing business as Stolberg Laboratories, New York, N. Y.
Filed May 2, 1931. Serial No. 314,133. PUBLISHED AUGUST 4, 1931. Class 6.

288,308. COLD CREAMS, VANISHING CREAMS, DEPILATORIES, ETC. IRENE D. COTÉ, New York, N. Y.
Filed May 11, 1931. Serial No. 314,397. PUBLISHED AUGUST 11, 1931. Class 6.

288,309. A CHEMICAL PREPARATION FOR USE AS A CREAM NEUTRALIZER. THE SOLVAY PROCESS COMPANY, Syracuse, N. Y.
Filed May 14, 1931. Serial No. 314,584. PUBLISHED AUGUST 4, 1931. Class 6.

288,310. TALKING MACHINES, ELECTRICALLY-OPERATED TALKING MACHINES, AUTOMATIC RECORD SHIFTING DEVICES, ETC. STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY, Rochester, N. Y.
Filed May 15, 1931. Serial No. 314,634. PUBLISHED AUGUST 4, 1931. Class 36.

288,311. DENTAL POWDER USED AS A HEALING ANTISEPTIC AND DEODORANT APPLICATION FOR THE TEETH, MOUTH, AND GUMS. MCKINLEY STEPHENS, doing business as The McK. Stephens Company, St. Louis, Mo.
Filed May 14, 1931. Serial No. 314,588. PUBLISHED AUGUST 4, 1931. Class 6.

288,312. FROZEN CONFECTION COMPRISING MILK, YEAST, FLAVORING, ETC. GREGORY A. SPRALEY, Dayton, Ohio.
Filed May 15, 1931. Serial No. 314,628. PUBLISHED AUGUST 4, 1931. Class 46.

288,313. MEDICINE FOR TREATMENT OF FUNGOUS INFECTIONS. THEODORE J. BENDLAGE, doing business as Tenex Laboratories, Cedar Rapids, Iowa.
Filed May 18, 1931. Serial No. 314,680. PUBLISHED AUGUST 4, 1931. Class 6.

288,314. SMOKING PIPES. THE HOUSE OF CRANE, Indianapolis, Ind.
Filed May 18, 1931. Serial No. 314,696. PUBLISHED JULY 14, 1931. Class 8.

288,315. POLISH FOR AUTOMOBILES AND FURNITURE. J. A. TUMBLER LABORATORIES, doing business as Ray-Glo Chemical Company, Baltimore, Md.
Filed May 18, 1931. Serial No. 314,726. PUBLISHED AUGUST 11, 1931. Class 16.

288,316. ELECTRICAL MOTORS. WESTERN CLOCK COMPANY, Peru, Ill.
Filed May 18, 1931. Serial No. 314,736. PUBLISHED AUGUST 4, 1931. Class 21.

288,317. ELECTRICAL MOTORS. WESTERN CLOCK COMPANY, Peru, Ill.
Filed May 18, 1931. Serial No. 314,740. PUBLISHED AUGUST 4, 1931. Class 21.

288,318. ELECTRICAL MOTORS. WESTERN CLOCK COMPANY, Peru, Ill.
Filed May 18, 1931. Serial No. 314,741. PUBLISHED AUGUST 4, 1931. Class 21.

288,319. MILK, CREAM, BUTTER, EGGS, CHEESE, BUTTERMILK, LARD, DRESSED POULTRY, ACIDOPHILUS MILK, CONDENSED MILK, POWDERED MILK, ICE CREAM. HENRY BECKER & SON, INC., Roseland, N. J.
Filed May 19, 1931. Serial No. 314,746. PUBLISHED AUGUST 4, 1931. Class 46.

288,320. CIGARS. UNITED STATES CIGAR CO. INC., York, Pa.
Filed April 29, 1931. Serial No. 313,982. PUBLISHED JULY 28, 1931. Class 17.

288,321. WINDOW CLEANING DEVICES, IN THE NATURE OF HAND-OPERATED SQUEEGEES. MARVEL WINDOW CLEANER INCORPORATED, Cleveland, Ohio.
Filed April 30, 1931. Serial No. 314,005. PUBLISHED AUGUST 11, 1931. Class 29.

288,322. PERFUMERY—NAMELY, EXTRACTS, TOILET WATERS, AND TOILET PREPARATIONS FOR SCENTING, BEAUTIFYING, AND PRESERVING THE SKIN AND HAIR. PARFUMERIE ROGER ET GALLET, SOCIÉTÉ ANONYME, Paris, France.
Filed April 30, 1931. Serial No. 314,010. PUBLISHED AUGUST 11, 1931. Class 6.

288,323. PLANT FOOD. THE ROGERS & HUBBARD COMPANY, Portland, Conn.
Filed April 29, 1931. Serial No. 314,032. PUBLISHED JULY 14, 1931. Class 10.

288,324. PREPARATION USED AS A DISINFECTANT, INSECTICIDE, AND DEODORANT. PERMOZONE INC., New York, N. Y.
Filed May 1, 1931. Serial No. 314,072. PUBLISHED AUGUST 4, 1931. Class 6.

288,325. DISINFECTANTS, DEODORANTS, AND GERMICIDES. JOSEPH A. WEINSTEIN, doing business as The M D Laboratories, Cleveland, Ohio.
Filed May 1, 1931. Serial No. 314,088. PUBLISHED AUGUST 4, 1931. Class 6.

288,326. GASOLINE, LUBRICATING OIL, AND LUBRICATING GREASE. RADIAL OIL CORPORATION, Oklahoma City, Okla.
Filed May 2, 1931. Serial No. 314,126. PUBLISHED AUGUST 4, 1931. Class 15.

288,327. WHEAT FLOUR. CHARLES BANKS STOUT, doing business as Washington Flour Mill, Washington, Mo.
Filed September 26, 1929. Serial No. 290,285. PUBLISHED NOVEMBER 5, 1929. Class 46.

288,328. PERFUMES, TOILET WATERS, FACE POWDERS, FACE ROUGE, AND LIPSTICKS. HELLER-DELTAH COMPANY, INC., New York, N. Y.
Filed October 26, 1929. Serial No. 291,616. PUBLISHED JULY 28, 1931. Class 6.

288,329. TINSEL, TINSEL RIBBON, TINSEL CORD, TINSEL GIFT DRESSINGS, TINSEL GARLANDS, TINSEL PENDANTS, LEAD FOIL ICICLES, MICA SNOW, LAHN, VISCA RIBBON, AND CHRISTMAS TREES MADE IN WHOLE OR IN PART OF TINSEL. GENERAL CABLE CORPORATION, New York, N. Y.
Filed June 12, 1929. Serial No. 285,453. PUBLISHED JULY 21, 1931. Class 50.

288,330. WATCHES, WATCHCASES, WATCH MOVEMENTS, AND PARTS OF THE SAME. FILS DE R. PICARD & CIE., La Chaux-de-Fonds, Switzerland.
Filed April 16, 1929. Serial No. 282,467. PUBLISHED JULY 21, 1931. Class 27.

288,331. NON-ELECTRICAL ADVERTISING SIGNS. ENAMELED STEEL SIGN COMPANY, Chicago, Ill.
Filed February 2, 1929. Serial No. 278,785. PUBLISHED JULY 21, 1931. Class 50.

288,332. FILLED POWDER COMPACTS. PINAUD INCORPORATED, New York, N. Y.
Filed January 29, 1929. Serial No. 278,603. PUBLISHED DECEMBER 31, 1929. Class 6.

288,333. MACARONI. CHICAGO MACARONI CO., Chicago, Ill.
Filed December 17, 1930. Serial No. 309,064. PUBLISHED AUGUST 4, 1931. Class 46.

288,334. FLAVORING COMPOUNDS FOR FOODS AND FOOD SYRUPS. JOHN C. LEHNE, doing business as John C. Lehne Sales Company, New York, N. Y.
Filed December 18, 1930. Serial No. 309,135. PUBLISHED AUGUST 11, 1931. Class 46.

288,335. COAL. FULLERTON LUMBER COMPANY, Minneapolis, Minn.
Filed December 29, 1930. Serial No. 309,424. PUBLISHED FEBRUARY 10, 1931. Class 1.

288,336. HAIR POMADE. THE FRENCH MFG. COMPANY, Chicago, Ill.
Filed January 12, 1931. Serial No. 309,927. PUBLISHED AUGUST 4, 1931. Class 6.

288,337. READY-MIXED PAINTS. KOPPERS PRODUCTS COMPANY, Pittsburgh, Pa.
Filed January 20, 1931. Serial No. 310,178. PUBLISHED AUGUST 11, 1931. Class 16.

288,338. OPACIFYING MATERIALS FOR USE IN VITREOUS ENAMELS. RÖHM & HAAS COMPANY, Philadelphia, Pa.
Filed February 2, 1931. Serial No. 310,660. PUBLISHED MAY 26, 1931. Class 16.

288,339. PREPARATION IN THE FORM OF WOOD SHAVINGS FOR USE IN REPELLING MOTHS. MAX MURRAY ALBERTS, doing business as The Airelt Co., Brooklyn, N. Y.
Filed January 20, 1931. Serial No. 310,151. PUBLISHED AUGUST 4, 1931. Class 6.

288,340. FOOT LOTION. ROSE ANN BROWN, doing business as Brown Mfg. Co., St. Paul, Minn.
Filed January 29, 1931. Serial No. 310,508. PUBLISHED AUGUST 4, 1931. Class 6.

288,341. DISINFECTANTS, LIQUIDS, AND SOLUTIONS AND PREPARATIONS FOR RENDERING HARMLESS POISONS AND NICOTINE. BONICOT WARENVERTRIEBSGESELLSCHAFT M. B. H., Vienna, Austria.
Filed February 11, 1931. Serial No. 310,933. PUBLISHED JULY 14, 1931. Class 8.

288,342. PERFUMES, TOILET WATERS, FACE POWDERS, FACE ROUGE, AND LIPSTICKS. HELLER-DELTAH COMPANY, INC., New York, N. Y.
Filed October 26, 1929. Serial No. 291,617. PUBLISHED JULY 28, 1931. Class 6.

288,343. MOUTH WASH. RALPH HERMAN LANGE, doing business as K-Mol Laboratories, Chicago, Ill.
Filed February 11, 1931. Serial No. 311,013. PUBLISHED AUGUST 11, 1931. Class 6.

288,344. MEDICINAL PREPARATIONS IN LIQUID, POWDER, CAPSULE, TABLET, AND SUPPOSITORY FORMS AS DIURETICS AND FOR THE TREATMENT OF URINARY CALCULI. FREDERICK A. UPSHER SMITH, doing business as Upsher Smith Company, Minneapolis, Minn.
Filed February 16, 1931. Serial No. 311,114. PUBLISHED AUGUST 4, 1931. Class 6.

288,345. MEDICINE PREPARATION, PARTICULARLY AS A MEDICINE FOR INDIGESTION AND DYSPEPSIA AND AS A STOMACH TONIC. TOSHIO SHIMIZU, Los Angeles, Calif.
Filed February 16, 1931. Serial No. 311,120. PUBLISHED AUGUST 4, 1931. Class 6.

288,346. CHEMICAL DISINFECTANT AND GERMICIDE. THE HUGHES CHEMICAL COMPANY, Cleveland, Ohio.
Filed February 20, 1931. Serial No. 311,310. PUBLISHED AUGUST 11, 1931. Class 6.

288,347. METALS AND/OR ALLOYS COMMONLY KNOWN AS "GETTERS", FOR ELIMINATING OR MINIMIZING RESIDUAL GASES IN EVACUATED ELECTRIC LIGHT BULBS, RADIO TUBES, AND THE LIKE. KEMET LABORATORIES COMPANY, INC., New York, N. Y.
Filed March 5, 1931. Serial No. 311,785. PUBLISHED JULY 14, 1931. Class 14.

288,348. MINCE MEAT. ROBERT C. SHADDICK, doing business as Woods Mince Meat Co., Baltimore, Md.
Filed March 7, 1931. Serial No. 311,890. PUBLISHED AUGUST 11, 1931. Class 46.

288,349. TOOTH POWDER. CHARLES L. POPE, doing business as The Tannol Company, Yonkers, N. Y.
Filed March 9, 1931. Serial No. 311,925. PUBLISHED AUGUST 4, 1931. Class 6.

288,350. LIQUID TONIC FOR THE TREATMENT OF THE HAIR. PACATÁ HAIR REMEDY, San Francisco, Calif., assignor to Rafael R. Jaramillo, San Francisco, Calif.
Filed March 10, 1931. Serial No. 312,027. PUBLISHED AUGUST 11, 1931. Class 6.

288,351. GASEOUS CONTENT GLOW LAMPS FOR ADVERTISING SIGNS AND NOVELTIES. R. G. FISHEL INC., Chicago, Ill.
Filed March 12, 1931. Serial No. 312,047. PUBLISHED AUGUST 4, 1931. Class 21.

288,352. ARCH SUPPORT. KOM-FUT ARCH SUPPORT CO., INC., New York, N. Y.
Filed March 13, 1931. Serial No. 312,105. PUBLISHED AUGUST 4, 1931. Class 44.

288,353. BUTTER, EGGS, JAM, JELLIES, ETC. FRED WOLFERMAN, INCORPORATED, Kansas City, Mo.
Filed March 13, 1931. Serial No. 312,120. PUBLISHED AUGUST 4, 1931. Class 46.

288,354. BOTTLE CAPS AND STOPPERS. CROWN CAP MANUFACTURING COMPANY, INC., Dover, Del., and Brooklyn, N. Y.
Filed March 19, 1931. Serial No. 312,325. PUBLISHED JULY 7, 1931. Class 50.

288,355. PREPARATIONS FOR EXTERNAL USE IN THE TREATMENT OF DISEASES OR DISORDERS OF THE SKIN. CHEMISCHE FABRIK FLÖRSHEIM DR. H. NOERDLINGER A. G., Florsheim-on-the-Main, Germany.
Filed March 19, 1931. Serial No. 312,291. PUBLISHED AUGUST 11, 1931. Class 6.

288,356. JAMS, MARMALADES, PRESERVES (FOR FOOD); CHRISTMAS PUDDING, MINCEMEAT; PRESERVED, CANNED, BOTTLED, CRYSTALLIZED, AND DRIED FRUITS, VEGETABLES, FISH, AND MEATS. ST. MARTIN PRESERVING COMPANY LIMITED, London, England.
Filed March 26, 1931. Serial No. 312,574. PUBLISHED AUGUST 4, 1931. Class 46.

288,357. COMPOUNDS FOR USE IN THE CALCIUM THERAPY. STICKSTOFFWERKE GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Berlin, Germany.
Filed March 26, 1931. Serial No. 312,577. PUBLISHED AUGUST 4, 1931. Class 6.

288,358. TOOTH BRUSHES. SEISHIN KITA, Los Angeles, Calif.
Filed March 25, 1931. Serial No. 312,584. PUBLISHED JULY 21, 1931. Class 29.

288,359. SHOWER CURTAINS AND WINDOW DRAPES IN SETS OF WATERPROOFED FABRICS. I. B. KLEINERT RUBBER COMPANY, New York, N. Y.
Filed April 7, 1931. Serial No. 313,042. PUBLISHED JULY 21, 1931. Class 50.

288,360. CALCIUM ARSENATE, A PREPARATION FOR THE DUSTING OF COTTON PLANTS, TOMATO, POTATO, CABBAGE, STRAWBERRY PLANTS, AND LIKE TRUCK FARMING PRODUCTS. COMMERCIAL CHEMICAL COMPANY OF TENNESSEE, Memphis, Tenn.
Filed April 6, 1931. Serial No. 313,108. PUBLISHED JULY 28, 1931. Class 6.

288,361. SPECIAL PUBLICATIONS—NAMELY, SCRATCH SHEETS AND FOR NEWSPAPER AND MAGAZINE COLUMNS RELATING TO RACING MATTERS. CLARENCE M. MEEHAN, Philadelphia, Pa.
Filed April 9, 1931. Serial No. 313,143. PUBLISHED JULY 21, 1931. Class 38.

288,362. A MEDICINE IN TABLET FORM FOR TREATING GENERAL DEBILITY AND SEXUAL WEAKNESS. OKASA G. M. B. H., Berlin, Germany.
Filed April 9, 1931. Serial No. 313,148. PUBLISHED AUGUST 4, 1931. Class 6.

288,363. CLEANSING CREAM AND TOILET POWDER. EN-VÉ INCORPORATED, Detroit, Mich.
Filed January 13, 1930. Serial No. 294,716. PUBLISHED JULY 28, 1931. Class 6.

288,364. SERVICE-RECORDING ATTACHMENTS FOR AUTOMOBILES AND THE LIKE. THERMO INSTRUMENT COMPANY, INC., Norfolk, Va.
Filed January 17, 1930. Serial No. 294,901. PUBLISHED MAY 27, 1930. Class 19.

288,365. ANTISEPTIC IN JELLY FORM FOR USE IN VAGINAL HYGIENE. GERTRUDE CLARK, doing business as Alpha Laboratory, Chicago, Ill.
Filed January 25, 1930. Serial No. 295,207. PUBLISHED JULY 8, 1930. Class 6.

288,366. DEODORANT. LUDLOW LABORATORIES, INC., Chicago, Ill.
Filed February 3, 1930. Serial No. 295,523. PUBLISHED MARCH 18, 1930. Class 6.

288,367. MEDICAMENT AND LUBRICANT FOR TREATMENT OF SINUS AILMENTS. EDWARD SHINN, doing business as Sinol Company, Darby, Pa.
Filed March 11, 1930. Serial No. 297,153. PUBLISHED AUGUST 19, 1930. Class 6.

288,368. QUICK DRYING WRITING INK THAT IS USED FOR WRITING WITH STEEL PENS AND FOUNTAIN PENS. BOON MANUFACTURING CO., INC., New York, N. Y.
Filed April 4, 1930. Serial No. 298,372. PUBLISHED SEPTEMBER 9, 1930. Class 11.

288,369. BRONZE IN THE FORM OF CASTINGS, SHEET, STRIP, ROD, AND WIRE. BRIDGEPORT BRASS COMPANY, Bridgeport, Conn.
Filed April 5, 1930. Serial No. 298,427. PUBLISHED APRIL 7, 1931. Class 14.

288,370. DISPLAY DEVICES FOR SPOOLS OF THREAD. THE SPOOL COTTON COMPANY, New York, N. Y.
Filed May 1, 1930. Serial No. 299,808. PUBLISHED JULY 14, 1931. Class 50.

288,371. CAKES INCLUDING FRIED CAKES, DEVIL'S FOOD CAKES, AND ANGEL FOOD CAKES. DOUGHERTY CAKE PRODUCTS, INCORPORATED, Muncie, Ind.
Filed May 5, 1930. Serial No. 299,961. PUBLISHED JULY 14, 1931. Class 46.

288,372. MUSTARD. VLADIMIR K. KEDROVICH, doing business as Old Dutch Mustard Company, New York, N. Y.
Filed May 14, 1930. Serial No. 300,527. PUBLISHED AUGUST 4, 1931. Class 46.

288,373. BACTERIOLOGICAL AND BIOLOGICAL STAINS AND REAGENTS. SAMUEL J. COHEN, doing business as American Chemical Products Co., Rochester, N. Y., assignor to Richard M. Freer, doing business as The Biosol Products Company, Rochester, N. Y.
Filed May 29, 1930. Serial No. 301,584. PUBLISHED JULY 8, 1930. Class 6.

288,374. FROZEN CONFECTIONS. OSCAR FORGES, Binghamton, N. Y.
Filed May 31, 1930. Serial No. 302,014. PUBLISHED AUGUST 11, 1931. Class 46.

288,375. NON-FERROUS LIGHT METAL ALLOYS AND CASTINGS AND FORGINGS THEREOF. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed June 4, 1930. Serial No. 302,164. PUBLISHED AUGUST 12, 1930. Class 14.

288,376. ELECTRICAL HEADLIGHTS. AMBER ALLIS, Milwaukee, Wis.
Filed June 11, 1930. Serial No. 302,313. PUBLISHED AUGUST 4, 1931. Class 21.

288,377. PREPARATION FOR THE TREATMENT OF ECZEMA. FRANK H. BALDWIN, Ticonderoga, N. Y.
Filed June 21, 1930. Serial No. 302,665. PUBLISHED AUGUST 11, 1931. Class 6.

288,378. CIGARETTES. BATT BROTHERS, New York, N. Y.
Filed June 21, 1930. Serial No. 302,666. PUBLISHED JULY 21, 1931. Class 17.

288,379. BRACELETS AND WRIST BANDS AND STRAPS FOR WRIST WATCHES, SAID WRIST BANDS AND STRAPS BEING COMPLETELY FITTED WITH ATTACHING MEANS. BULOVA WATCH COMPANY, INC., New York, N. Y.
Filed June 21, 1930. Serial No. 302,671. PUBLISHED AUGUST 4, 1931. Class 28.

288,380. TOMATO JUICE FOOD DRINK. THE A. J. LEHMAN COMPANY, doing business as A. J. Lehman & Company, Cincinnati, Ohio.
Filed June 26, 1930. Serial No. 302,861. PUBLISHED AUGUST 11, 1931. Class 46.

288,381. TOMATO JUICE FOOD DRINK. THE A. J. LEHMAN COMPANY, Cincinnati, Ohio.
Filed June 26, 1930. Serial No. 302,862. PUBLISHED AUGUST 11, 1931. Class 46.

288,382. MASCARA AND EYE SHADOW CREAM. GUSTAVE GLATZER, New York, N. Y.
Filed July 9, 1930. Serial No. 303,280. PUBLISHED AUGUST 11, 1931. Class 6.

288,383. WATCHES, WATCH MOVEMENTS, AND WATCH CASES. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill.
Filed September 5, 1930. Serial No. 305,348. PUBLISHED JULY 28, 1931. Class 27.

288,384. SILVER ALLOYS FOR DENTAL USE. DEUTSCHE GOLD- UND SILBER-SCHEIDEANSTALT VORMALS ROESSLER, Frankfort-on-the-Main, Germany.
Filed September 17, 1930. Serial No. 305,780. PUBLISHED AUGUST 4, 1931. Class 44.

288,385. SILVER ALLOYS FOR DENTAL USE. DEUTSCHE GOLD- UND SILBER-SCHEIDEANSTALT VORMALS ROESSLER, Frankfort-on-the-Main, Germany.
Filed September 17, 1930. Serial No. 305,781. PUBLISHED AUGUST 4, 1931. Class 44.

288,386. DENTAL METALS AND ALLOYS. DEUTSCHE GOLD- UND SILBER-SCHEIDENSTALT VORMALS ROESSLER, Frankfort-on-the-Main, Germany.
Filed September 18, 1930. Serial No. 305,806. PUBLISHED AUGUST 4, 1931. Class 44.

288,387. WHITE BELT PASTEURIZED MILK AND CREAM AND WHITE BELT RAW MILK. J. G. DU PUIS, doing business as White Belt Dairy. Miami, Fla.
Filed September 26, 1930. Serial No. 306,117. PUBLISHED APRIL 28, 1931. Class 46.

288,388. EGGS. THE RHODES RANCH EGG COMPANY, Denver, Colo.
Filed November 7, 1930. Serial No. 307,631. PUBLISHED DECEMBER 30, 1930. Class 46.

288,389. SKIN FRESHENER, LOTION FOR LINES AND WRINKLES, EMULSION FOR REDUCING PURPOSES, TISSUE CREAMS, CLEANSING CREAM, LIQUID BANDAGE, REDUCING CREAM, FINISHING LOTION, ROUGE, LIPSTICKS. A. BRESLAUER, INC., New York, N. Y.
Filed December 8, 1930. Serial No. 308,720. PUBLISHED AUGUST 4, 1931. Class 6.

288,390. [WITHDRAWN.]

288,391. CLOCKS. IRVING MILLER COMPANY, New York, N. Y.
Filed June 19, 1931. Serial No. 316,046. PUBLISHED JULY 28, 1931. Class 27.

288,392. PAINTED AND WATERPROOF FABRICS FOR AWNINGS, TENTS, AND WAGON COVERS. THE SUNTEX CORPORATION, Brooklyn, N. Y.
Filed June 19, 1931. Serial No. 316,058. PUBLISHED AUGUST 4, 1931. Class 50.

288,393. NON-ALCOHOLIC, MALTLESS SYRUPS USED IN THE PREPARATION OF FROZEN CONFECTIONS. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y.
Filed June 18, 1931. Serial No. 316,074. PUBLISHED AUGUST 11, 1931. Class 46.

288,394. FERTILIZER. ATLANTIC & GULF FERTILIZER CO., Jacksonville, Fla.
Filed June 20, 1931. Serial No. 316,076. PUBLISHED AUGUST 4, 1931. Class 10.

288,395. LAWN AND PLANT FOOD. N. S. KOOS & SON CO., Kenosha, Wis.
Filed June 20 1931. Serial No. 316,093. PUBLISHED AUGUST 11, 1931. Class 10.

288,396. BLACK SHEETS, ANNEALED SHEETS, PLAIN SHEETS, ETC. GULF STATES STEEL COMPANY, Birmingham, Ala.
Filed June 22, 1931. Serial No. 316,144. PUBLISHED AUGUST 4, 1931. Class 14.

288,397. CARBON PAPER, TYPEWRITER RIBBONS, WRITING INKS, AND INK FOR PADS. JOHN MCCABE, doing business as John McCabe & Co., New York, N. Y.
Filed June 23, 1931. Serial No. 316,158. PUBLISHED AUGUST 11, 1931. Class 11.

288,398. COMBINATION OF BANANAS, OTHER CANNED FRUITS, FLAVORS AND COLORS FOR USE IN FLAVORING ICE CREAM, SHERBETS, AND ICES, AS TOPPING ON WHAT IS KNOWN AS ICE CREAM SUNDAES, AND MIXED WITH ICE CREAM AND CARBONATED WATER IN WHAT IS KNOWN AS ICE CREAM SODAS, FOR SPECIAL FLAVOR. BOWEY'S, INC., Chicago, Ill.
Filed June 24, 1931. Serial No. 316,185. PUBLISHED AUGUST 11, 1931. Class 46.

288,399. BEARING METAL. FRICTIONLESS METAL COMPANY, St. Louis, Mo.
Filed June 24, 1931. Serial No. 316,199. PUBLISHED AUGUST 4, 1931. Class 14.

288,400. PYROXYLIN OR OTHERWISE COATED FABRICS—NAMELY, LEATHER CLOTH. THE ZAPON COMPANY, Wilmington, Del.
Filed June 25, 1931. Serial No. 316,234. PUBLISHED AUGUST 4, 1931. Class 50.

288,401. HOT CHOCOLATE POWDER. BOWEY'S, INC., Chicago, Ill.
Filed June 25, 1931. Serial No. 316,248. PUBLISHED AUGUST 11, 1931. Class 46.

288,402. SANDWICH SPREAD. PARKER PRODUCTS CO., Needham Heights, Mass.
Filed June 25, 1931. Serial No. 316,296. PUBLISHED AUGUST 11, 1931. Class 46.

288,403. PROCESS PRINTING INKS. THE INTERNATIONAL PRINTING INK CORPORATION, New York, N. Y.
Filed June 26, 1931. Serial No. 316,327. PUBLISHED AUGUST 11, 1931. Class 11.

288,404. TOOL STEEL. UDDEHOLM COMPANY OF AMERICA, INC., New York, N. Y.
Filed June 26, 1931. Serial No. 316,346. PUBLISHED AUGUST 11, 1931. Class 14.

288,405. TOOL STEEL. UDDEHOLM COMPANY OF AMERICA, INC., New York, N. Y.
Filed June 26, 1931. Serial No. 316,347. PUBLISHED AUGUST 11, 1931. Class 14.

288,406. CIGARS. MUNSON STEAMSHIP LINE, New York, N. Y.
Filed June 27, 1931. Serial No. 316,371. PUBLISHED AUGUST 11, 1931. Class 17.

288,407. CIGARETTE PAPER AND CIGARETTE BOOKLETS. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky.
Filed June 30, 1931. Serial No. 316,477. PUBLISHED AUGUST 11, 1931. Class 8.

288,408. SMOKING AND CHEWING TOBACCO. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky.
Filed June 30, 1931. Serial No. 316,479. PUBLISHED AUGUST 11, 1931. Class 17.

288,409. MALT SYRUP. EMPIRE MALT PRODUCTS CO., Los Angeles, Calif. and Brooklyn, N. Y.
Filed June 30, 1931. Serial No. 316,483. PUBLISHED AUGUST 11, 1931. Class 46.

288,410. MALT SYRUP FOR FOOD PURPOSES. GOLDBLATT BROS., INC., Chicago, Ill.
Filed July 3, 1931. Serial No. 316,589. PUBLISHED AUGUST 11, 1931. Class 46.

288,411. SURGICAL RUBBER GOODS. TOM W. GRACE COMPANY, Dallas, Tex.
Filed June 4, 1931. Serial No. 315,403. PUBLISHED AUGUST 11, 1931. Class 44.

288,412. COMPOUNDS USED IN SOFTENING TEXTILE FABRICS. E. F. HOUGHTON & CO., Philadelphia, Pa.
Filed June 5, 1931. Serial No. 315,456. PUBLISHED AUGUST 4, 1931. Class 6.

288,413. CERTAIN NAMED PAINT PRODUCTS. MAUTZ PAINT & GLASS CO., Green Bay and Madison, Wis.
Filed June 5, 1931. Serial No. 315,466. PUBLISHED AUGUST 11, 1931. Class 16.

288,414. HYDROGEN PEROXIDE, AMMONIUM PERSULPHATE, AND POTASSIUM PERSULPHATE. BUFFALO ELECTRO-CHEMICAL CO., INC., Tonawanda, N. Y.
Filed June 10, 1931. Serial No. 315,624. PUBLISHED AUGUST 4, 1931. Class 6.

288,415. METALLIC DEVICES FOR FACILITATING THE APPLICATION OF ELASTIC HOSIERY. WILLIAM H. HORN & BROTHER, INCORPORATED, Philadelphia, Pa.
Filed June 10, 1931. Serial No. 315,637. PUBLISHED AUGUST 11, 1931. Class 44.

288,416. MEDICAL PREPARATION FOR THE RELIEF OF CERTAIN CHRONIC CONDITIONS PECULIAR TO WOMEN. WALTER M. BROWN, doing business as The Mapo Company, Yakima, Wash.
Filed June 11, 1931. Serial No. 315,669. PUBLISHED AUGUST 4, 1931. Class 6.

288,417. ELECTRICAL DISPLAY SIGNS. CINE-A-GRAPH CORPORATION, New York, N. Y.
Filed June 11, 1931. Serial No. 315,674. PUBLISHED AUGUST 4, 1931. Class 21.

288,418. COMBINED AUTOMOBILE BODY POLISH AND CLEANER. CHEVROLET MOTOR COMPANY, Detroit, Mich.
Filed June 13, 1931. Serial No. 315,787. PUBLISHED AUGUST 11, 1931. Class 16.

288,419. SILK PIECE GOODS. EMPIRE SILK COMPANY, New York, N. Y.
Filed June 13, 1931. Serial No. 315,794. PUBLISHED AUGUST 11, 1931. Class 42.

288,420. MEDICINAL PREPARATION CONSISTING OF AN OINTMENT FOR TREATING ATHLETE'S FOOT. UNITED DRUG COMPANY, Boston, Mass.
Filed June 15, 1931. Serial No. 315,883. PUBLISHED AUGUST 4, 1931. Class 6.

288,421. PERMANENT WAVING PADS. AMERICAN YVETTE COMPANY, INC., New York, N. Y.
Filed June 17, 1931. Serial No. 315,959. PUBLISHED AUGUST 11, 1931. Class 44.

288,422. P-CARBAMINO-PHENYL ARSONIC ACID TO BE USED IN THE TREATMENT OF AMEBIC DYSENTERY. ELI LILLY AND COMPANY, Indianapolis, Ind.

Filed June 18, 1931. Serial No. 316,013. PUBLISHED AUGUST 4, 1931. Class 6.

288,423. CHEMICALS AND COMPOSITIONS USED FOR PRESERVING RUBBER COMPOSITIONS, AND FOR ALTERING THE PHYSICAL AND CHEMICAL PROPERTIES OF RUBBER COMPOSITIONS. BINNEY & SMITH COMPANY, New York, N. Y.

Filed June 22, 1931. Serial No. 316,117. PUBLISHED AUGUST 4, 1931. Class 6.

288,424. MEDICAL PREPARATION FOR USE IN TREATING RHEUMATISM, SPRAINS, AND SORENESS OF THE MUSCLES. SERAFINO TROIANI, Newton, Mass.

Filed June 23, 1931. Serial No. 316,171. PUBLISHED AUGUST 4, 1931. Class 6.

288,425. DENTAL COMPOUNDS. SCHERING-KAHLBAUM, A. G., Berlin, Germany.

Filed June 24, 1931. Serial No. 316,220. PUBLISHED AUGUST 4, 1931. Class 44.

288,426. PAINTS. LA VERN P. JONES, doing business as Liquilox Company, Burbank, Calif., assignor to Liquilox Company, Ltd., Los Angeles, Calif., a Corporation of California.

Filed July 3, 1931. Serial No. 316,597. PUBLISHED AUGUST 11, 1931. Class 16.

288,427. ROOFING DECK. ST. CLAIR RUBBER COMPANY, Marysville and Detroit, Mich.

Filed May 25, 1931. Serial No. 315,019. PUBLISHED AUGUST 4, 1931. Class 50.

288,428. CIGARS. CIGARETTES, AND SMOKING AND CHEWING TOBACCO. CONDOSSIS TOBACCO CORPORATION, New York, N. Y.

Filed May 26, 1931. Serial No. 315,036. PUBLISHED JULY 28, 1931. Class 17.

288,429. UNGUENT FOR USE IN THE TREATMENT OF BURNS AND VARIOUS SKIN AFFLICTIONS AND AILMENTS INCLUDING SKIN AND CUTICLE AFFLICTIONS RESULTING FROM CONTACT WITH POISON OAK, POISON IVY AND THE LIKE. LANCASTER CO. LTD., Los Angeles, Calif.

Filed May 26, 1931. Serial No. 315,054. PUBLISHED AUGUST 4, 1931. Class 6.

288,430. UNGUENT FOR THE TREATMENT OF BURNS. LANCASTER CO. LTD., Los Angeles, Calif.

Filed May 26, 1931. Serial No. 315,055. PUBLISHED AUGUST 4, 1931. Class 6.

288,431. LIQUID LAXATIVE PREPARATIONS. MILLER WHOLESALE DRUG COMPANY, Cleveland, Ohio.

Filed May 26, 1931. Serial No. 315,060. PUBLISHED AUGUST 4, 1931. Class 6.

288,432. CALCIUM COMPOUND FOR DISEASES ON THE BASIS OF CALCIUM DEFICIENCY (EXUDATIVE DIATHESIS, SERUM SICKNESS ANAPHYLAXIS, GENERAL INFLAMMATIONS, AND RELATIVE CONDITIONS). I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.

Filed May 27, 1931. Serial No. 315,099. PUBLISHED AUGUST 4, 1931. Class 6.

288,433. CHEMICALS FOR CLARIFYING WATER OF RUST, SEDIMENT, IMPURITIES, AND THE LIKE. AMERICAN COLLOID CORPORATION, New York, N. Y.

Filed May 29, 1931. Serial No. 315,175. PUBLISHED AUGUST 4, 1931. Class 6.

288,434. ICE CREAM. BEATRICE CREAMERY COMPANY, Chicago, Ill.

Filed May 29, 1931. Serial No. 315,182. PUBLISHED AUGUST 11, 1931. Class 46.

288,435. SALAD DRESSING. EARL R. HARTSUCH, doing business as Hartsuch, Chicago, Ill.

Filed May 29, 1931. Serial No. 315,198. PUBLISHED AUGUST 4, 1931. Class 46.

288,436. PREPARATION USED AS AN ALKALINE GARGLE FOR VINCENT'S ANGINA AND RELATED INFECTIONS OF THE MOUTH, GUMS, AND THROAT. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y.

Filed June 1, 1931. Serial No. 315,253. PUBLISHED AUGUST 4, 1931. Class 6.

288,437. CLEANSING CREAM. MAY GRAFF, doing business as Bluekamel Manufacturing Company, Detroit, Mich.

Filed June 1, 1931. Serial No. 315,258. PUBLISHED AUGUST 4, 1931. Class 6.

288,438. NOSE CREAMS. MAY GRAFF, doing business as Bluekamel Manufacturing Company, Detroit, Mich.

Filed June 1, 1931. Serial No. 315,260. PUBLISHED AUGUST 4, 1931. Class 6.

288,439. IDENTIFICATION TAGS FOR POULTRY AND ANIMALS. JOSEPH HAAS, doing business as National Poultry Band Co., Newport, Ky.

Filed May 27, 1931. Serial No. 315,094. PUBLISHED JULY 14, 1931. Class 50.

288,440. SALT SUBSTITUTE FOR SALT FREE DIET. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.

Filed May 27, 1931. Serial No. 315,098. PUBLISHED AUGUST 4, 1931. Class 6.

288,441. PREPARATION USED IN THE TREATMENT OF HEART AFFECTIONS. THE PAINE DRUG COMPANY, Rochester, N. Y.

Filed May 28, 1931. Serial No. 315,159. PUBLISHED AUGUST 4, 1931. Class 6.

288,442. FLAG AND RADIO MASTS OF STEEL OR IRON. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.

Filed May 29, 1931. Serial No. 315,222. PUBLISHED JULY 14, 1931. Class 50.

288,443. INSECTICIDE. BI-BI PRODUCTS COMPANY, Tulsa, Okla.

Filed June 2, 1931. Serial No. 315,299. PUBLISHED AUGUST 4, 1931. Class 6.

288,444. PREPARATION USED FOR TREATING VARIOUS FORMS OF INFECTION WITH TRICHOPHYTON OR EPIDERMOPHYTON. FREDERICK STEARNS & COMPANY, Detroit, Mich.

Filed June 2, 1931. Serial No. 315,334. PUBLISHED AUGUST 4, 1931. Class 6.

288,445. CIGARETTES. A. BATSCHARI CIGARETTENFABRIK A. G., Baden-Baden, Germany.

Filed June 3, 1931. Serial No. 315,337. PUBLISHED AUGUST 11, 1931. Class 17.

288,446. CORK STOPPERS. PADDOCK CORK COMPANY, INC., New York and Brooklyn, N. Y.

Filed June 3, 1931. Serial No. 315,365. PUBLISHED JULY 28, 1931. Class 50.

288,447. ANTISEPTIC, GERMICIDAL, AND THERAPEUTIC COMPOSITION OF THE TYPE EMPLOYED FOR VAGINAL DOUCHING. ELMER M. SOMLYO, doing business as San-O-Tabs Co., Los Angeles, Calif.

Filed June 3, 1931. Serial No. 315,371. PUBLISHED AUGUST 4, 1931. Class 6.

288,448. MEDICINE IN LIQUID OR CAPSULE FORM TAKEN INTERNALLY FOR RELIEF OF GONORRHEA. JOSEPH LAZAROS, Detroit, Mich.

Filed June 8, 1931. Serial No. 315,543. PUBLISHED AUGUST 4, 1931. Class 6.

288,449. FERTILIZERS. LEFFINGWELL RANCHO COMPANY, Whittier, Calif.

Filed June 8, 1931. Serial No. 315,544. PUBLISHED JULY 21, 1931. Class 10.

288,450. STEEL AND IRON RODS, STEEL AND IRON WIRE, STEEL AND IRON SINGLE WIRE STRAND, WELDING FILLER METAL, AND WIRE METAL PRODUCTS—NAMELY, SPRING WIRE, HIGH AND LOW CARBON WIRE, AND WIRE ROD. PAGE STEEL AND WIRE COMPANY, Adrian, Mich., and Bridgeport, Conn.

Filed June 8, 1931. Serial No. 315,552. PUBLISHED JULY 21, 1931. Class 14.

288,451. A MEDICINE IN TABLET FORM FOR TREATING GENERAL DEBILITY AND SEXUAL WEAKNESS. OKASA G. M. B. H., Berlin, Germany.

Filed April 9, 1931. Serial No. 313,149. PUBLISHED AUGUST 4, 1931. Class 6.

288,452. CLEANING DEVICES FOR GENERAL HOUSEHOLD PURPOSES. K. P. & B. Co., Decatur, Ill.

Filed April 10, 1931. Serial No. 313,191. PUBLISHED JULY 14, 1931. Class 29.

288,453. MEDICINAL PREPARATION CONTAINING ACETYL, SALICYLIC ACID USED FOR HEADACHES, COLDS, NEURALGIA, AND GRIPPE. SAYELL LABORATORIES, New York, N. Y.

Filed April 13, 1931. Serial No. 313,307. PUBLISHED AUGUST 4, 1931. Class 6.

288,454. BOTTLE CAPS. ARROW BOTTLE CAP CORP., Brooklyn, N. Y.

Filed April 20, 1931. Serial No. 313,526. PUBLISHED JUNE 9, 1931. Class 50.

288,455. RADIO RECEIVING SETS AND PARTS THEREOF AND ACCESSORIES THERETO—NAMELY, LOUD SPEAKERS, VACUUM TUBES, SWITCHES, AND AERIAL AND GROUND APPARATUS. DWARF RADIO MANUFACTURING CO. LTD., Los Angeles, Calif.

Filed April 20, 1931. Serial No. 313,538. PUBLISHED AUGUST 4, 1931. Class 21.

288,456. PAINTERS' BRUSHES. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.

Filed April 20, 1931. Serial No. 313,554. PUBLISHED JULY 21, 1931. Class 29.

288,457. PAINTERS' BRUSHES. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.

Filed April 20, 1931. Serial No. 313,555. PUBLISHED JULY 21, 1931. Class 29.

288,458. PAINTERS' BRUSHES. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.

Filed April 20, 1931. Serial No. 313,557. PUBLISHED JULY 21, 1931. Class 29.

288,459. PAINTERS' BRUSHES. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.

Filed April 20, 1931. Serial No. 313,558. PUBLISHED JULY 21, 1931. Class 29.

288,460. PREPARATION FOR THE TREATMENT, RELIEF AND HEALING OF BURNS. COOK & LEARY, Brooklyn, N. Y.

Filed April 21, 1931. Serial No. 313,589. PUBLISHED AUGUST 11, 1931. Class 6.

288,461. HAIR COLOR RESTORER AND TONIC. GRAFREE PRODUCTS COMPANY, Long Beach, Calif.

Filed April 23, 1931. Serial No. 313,710. PUBLISHED AUGUST 4, 1931. Class 6.

288,462. ACNE OR PIMPLE LOTION, CLEANSING CREAM, HAIR TONIC, ETC. MARTHA MATILDA HARPER, INC., Rochester, N. Y.

Filed April 25, 1931. Serial No. 313,782. PUBLISHED JULY 28, 1931. Class 6.

288,463. SULPHOPHENYLIC AMINOBENZOIDETHYLESTER (GERMAN DESIGNATION: PHENOLSULPHOSAURER AMINOBENZOESAUREAETHYLESTER.) EDUARD RITSERT, doing business as Dr. Eduard Ritsert, Fabrik Pharmazeutischer Praparate, and Fa. Dr. E. Ritsert, Frankfurt A. M., Frankfort-on-the-Main, Germany.

Filed April 25, 1931. Serial No. 313,799. PUBLISHED AUGUST 4, 1931. Class 6.

288,464. HYGIENIC POWDER USED AS A DOUCHE FOR FEMININE HYGIENE, AS A FOOT BATH, AND AS A GARGLE; LAXATIVE PILLS FOR CONSTIPATION, ETC. TAKARA LABORATORIES, Portland, Oreg.

Filed April 25, 1931. Serial No. 313,812. PUBLISHED AUGUST 4, 1931. Class 6.

288,465. BLEACHING WATER. WORCESTER BLEACHING WATER CO., Worcester, Mass.

Filed April 27, 1931. Serial No. 313,878. PUBLISHED AUGUST 11, 1931. Class 6.

288,466. CIGARS. ABRAHAM A. GREEKWALD, doing business as Jacob Stahl Jr. & Co., New York, N. Y.

Filed April 28, 1931. Serial No. 313,914. PUBLISHED JULY 14, 1931. Class 17.

288,467. CIGARS. ABRAHAM A. GREENWALD, doing business as Jacob Stahl Jr. & Co., New York, N. Y.

Filed April 28, 1931. Serial No. 313,915. PUBLISHED AUGUST 4, 1931. Class 17.

288,468. CIGARS. ABRAHAM A. GREENWALD, doing business as Jacob Stahl Jr. & Co., New York, N. Y.

Filed April 28, 1931. Serial No. 313,917. PUBLISHED JULY 14, 1931. Class 17.

288,469. ELECTRIC FANS. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn.

Filed April 29, 1931. Serial No. 313,966. PUBLISHED AUGUST 4, 1931. Class 21.

288,470. CIGARS. UNITED STATES CIGAR CO., INC., York, Pa.

Filed April 29, 1931. Serial No. 313,981. PUBLISHED JULY 28, 1931. Class 17.

288,471. PLANT FOOD AND FERTILIZING PREPARATION. THE GREINER CHEMICAL CORPORATION, Fort Wayne, Ind.

Filed May 19, 1931. Serial No. 314,756. PUBLISHED JULY 28, 1931. Class 10.

288,472. ANALGESIC. STERLING PRODUCTS (INCORPORATED), Wheeling, W. Va.

Filed May 19, 1931. Serial No. 314,776. PUBLISHED AUGUST 4, 1931. Class 6.

288,473. ANALGESIC. STERLING PRODUCTS (INCORPORATED), Wheeling, W. Va.

Filed May 19, 1931. Serial No. 314,777. PUBLISHED AUGUST 4, 1931. Class 6.

288,474. LIPSTICKS. YBRY, INC., New York, N. Y.

Filed May 19, 1931. Serial No. 314,781. PUBLISHED AUGUST 4, 1931. Class 6.

288,475. PREPARATION FOR THE TREATMENT OF DYSPEPSIA, INDIGESTION, RHEUMATISM, AND STOMACH DISORDERS. ANTHONY K. ZALLY, doing business as Cascadon Laboratories, Jersey City, N. J.

Filed May 19, 1931. Serial No. 314,783. PUBLISHED JULY 28, 1931. Class 6.

288,476. JELLY MISCIBLE WITH WATER CONTAINING TANNIC ACID AND MERTHIOLATE WHICH IS INTENDED FOR USE ON BURNS TO PROMOTE HEALING. ELI LILLY AND COMPANY, Indianapolis, Ind.

Filed May 20, 1931. Serial No. 314,812. PUBLISHED AUGUST 4, 1931. Class 6.

288,477. JEWELRY FOR PERSONAL WEAR NOT INCLUDING WATCHES. THE NATIONAL SOCIAL SCIENCE HONOR SOCIETY, PI GAMMA MU, INCORPORATED, Winfield, Kans.

Filed May 20, 1931. Serial No. 314,815. PUBLISHED AUGUST 4, 1931. Class 28.

288,478. SALVE FOR THE RELIEF OF MUSCLE STRAIN AND SORENESS. ETIENNE BEJEAN, doing business as The Bejean Laboratories, New York, N. Y.

Filed May 21, 1931. Serial No. 314,837. PUBLISHED AUGUST 4, 1931. Class 6.

288,479. PREPARATION FOR THE TREATMENT OF CONSTIPATION. BRE-CARBO MFG. CO., New York, N. Y.
Filed May 22, 1931. Serial No. 314,890. PUBLISHED JULY 28, 1931. Class 6.

288,480. CIGARS. LOUIS B. GRABOSKY, Philadelphia, Pa.
Filed May 22, 1931. Serial No. 314,908. PUBLISHED JULY 14, 1931. Class 17.

288,481. FLUORINATED HYDROCARBONS USED AS REFRIGERANTS, PROPELLANTS, AND FIRE EXTINGUISHING PREPARATIONS. KINETIC CHEMICALS, INC., Wilmington, Del.
Filed May 22, 1931. Serial No. 314,913. PUBLISHED AUGUST 4, 1931. Class 6.

288,482. VARNISHES AND PAINT ENAMELS. THE WATSON-STANDARD CO., Pittsburgh, Pa.
Filed May 22, 1931. Serial No. 314,936. PUBLISHED AUGUST 11, 1931. Class 16.

288,483. FACE CREAMS, MANICURE AND HAIR PREPARATIONS, ETC. Y-AGE COSMETICS, INC. New York, N. Y.
Filed May 22, 1931. Serial No. 314,938. PUBLISHED JULY 28, 1931. Class 6.

288,484. PROPHYLACTIC RUBBER ARTICLES. ROBERT J. PIERCE, INC., New York, N. Y.
Filed May 23, 1931. Serial No. 314,962. PUBLISHED AUGUST 11, 1931. Class 44.

288,485. FACE POWDER, LIP STICK, FACE ROUGE, CLEANSING CREAM, COLD CREAM, FOUNDATION CREAM, ASTRINGENT LOTION, NAIL POLISH, NAIL POLISH REMOVER AND TISSUE CREAM, MASCARA, EYE SHADOW, HAND LOTION, CUCUMBER FACE CREAM. HARRY D. KOENIG, doing business as Harry D. Koenig & Co., New York, N. Y.
Filed May 25, 1931. Serial No. 314,996. PUBLISHED AUGUST 4, 1931. Class 6.

288,486. CLEANSING CREAM. THE PETEB CORPORATION, New York, N. Y.
Filed May 26, 1931. Serial No. 315,062. PUBLISHED AUGUST 11, 1931. Class 6.

288,487. METAL ALLOY FOR TEMPORARY DENTAL RESTORATIONS. ELPHA E. BAILEY, Denver, Colo.
Filed June 1, 1931. Serial No. 315,240. PUBLISHED AUGUST 4, 1931. Class 44.

288,488. SALT. WORCESTER SALT COMPANY, New York, N. Y.
Filed June 1, 1931. Serial No. 315,289. PUBLISHED JULY 28, 1931. Class 6.

288,489. MEDICINAL PREPARATION HAVING LAXATIVE PROPERTIES. BERNARD BOEKER, New York, N. Y.
Filed June 4, 1931. Serial No. 315,383. PUBLISHED AUGUST 4, 1931. Class 6.

288,490. PREPARATION FOR TREATING PILES. GLY-TEX CO., Brookville, Ind.
Filed June 4, 1931. Serial No. 315,402. PUBLISHED AUGUST 4, 1931. Class 6.

288,491. MALT SYRUP. THE BALLIF DISTRIBUTING COMPANY, Portland, Oreg.
Filed June 9, 1931. Serial No. 315,588. PUBLISHED AUGUST 4, 1931. Class 46.

288,492. MEDICINE FOR COUGHS AND COLDS. THE STANDARD MEDICINE COMPANY, Lakeland, Fla.
Filed June 9, 1931. Serial No. 315,619. PUBLISHED AUGUST 4, 1931. Class 6.

288,493. FROZEN CONFECTION. WILLIAM O. CHAPMAN, Washington, D. C.
Filed June 10, 1931. Serial No. 315,630. PUBLISHED AUGUST 11, 1931. Class 46.

288,494. PERFUMES. THE ANDREW JERGENS COMPANY, Cincinnati, Ohio.
Filed June 10, 1931. Serial No. 315,639. PUBLISHED AUGUST 4, 1931. Class 6.

288,495. PREPARATION FOR THE TREATMENT OF MALARIA. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed June 10, 1931. Serial No. 315,656. PUBLISHED AUGUST 4, 1931. Class 6.

288,496. DYES AND DYESTUFFS. GENERAL DYESTUFF CORPORATION, New York, N. Y.
Filed June 11, 1931. Serial No. 315,681. PUBLISHED AUGUST 4, 1931. Class 6.

288,497. SOLID PERFUME. EMMA B. NASON, Santa Monica, Calif.
Filed June 11, 1931. Serial No. 315,694. PUBLISHED AUGUST 4, 1931. Class 6.

288,498. SOLID PERFUME. EMMA B. NASON, Santa Monica, Calif.
Filed June 11, 1931. Serial No. 315,695. PUBLISHED AUGUST 4, 1931. Class 6.

288,499. DISINFECTANT. RALSTON PURINA COMPANY, St. Louis, Mo.
Filed June 11, 1931. Serial No. 315,698. PUBLISHED AUGUST 4, 1931. Class 6.

288,500. DISINFECTANT. RALSTON PURINA COMPANY, St. Louis, Mo.
Filed June 11, 1931. Serial No. 315,699. PUBLISHED AUGUST 4, 1931. Class 6.

288,501. DENTAL CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed June 12, 1931. Serial No. 315,729. PUBLISHED AUGUST 4, 1931. Class 6.

288,502. CAPSULES FOR REDUCING CONGESTION OF MUCOUS MEMBRANES OF THE NOSE AND FOR TREATING HEAD COLDS, ASTHMA AND HAY FEVER. HARRIS DRUG CO. INC., New York, N. Y
Filed June 12, 1931. Serial No. 315,746. PUBLISHED AUGUST 4, 1931. Class 6.

288,503. MALT SYRUP. LOS ANGELES BREWING CO., Los Angeles, Calif.
Filed June 12, 1931. Serial No. 315,752. PUBLISHED AUGUST 11, 1931. Class 46.

288,504. PERFUME, TOILET WATER, FACE POWDER DUSTING POWDER, BATH CRYSTALS, SKIN FRESHENER, CLEANSING CREAM, TISSUE CREAM, FINISHING CREAM, AND HAIR TONIC. BOURJOIS, INC., New York, N. Y.
Filed June 13, 1931. Serial No. 315,784. PUBLISHED AUGUST 4, 1931. Class 6.

288,505. WATCHES. BULOVA WATCH COMPANY, INC., New York, N. Y.
Filed June 15, 1931. Serial No. 315,822. PUBLISHED JULY 28, 1931. Class 27.

288,506. PLANT STIMULANT TABLETS IN THE NATURE OF A FERTILIZER. THE RHODEY CORPORATION, Baltimore, Md.
Filed June 15, 1931. Serial No. 315,887. PUBLISHED JULY 28, 1931. Class 10.

288,507. FROZEN CONFECTIONS. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y.
Filed June 16, 1931. Serial No. 315,924. PUBLISHED AUGUST 11, 1931. Class 46.

288,508. MEDICINE FOR THE TREATMENT OF INFLAMMATORY CONDITION OF THE NOSE AND THROAT. WILLIAM H. ROBER INC., Philadelphia, Pa.
Filed June 16, 1931. Serial No. 315,927. PUBLISHED AUGUST 4, 1931. Class 6.

288,509. MEDICINE USED IN CONNECTION WITH SPASMS OF THE UTERUS AND PARTICULARLY AT THE START OF ANTICIPATED MONTHLY PEROIDS. WILLIAM H. ROBER INC., Philadelphia, Pa.
Filed June 16, 1931. Serial No. 315,929. PUBLISHED AUGUST 4, 1931. Class 6.

288,510. CIGARS. BROWARD CIGAR COMPANY, Pompano, Fla.
Filed June 18, 1931. Serial No. 315,987. PUBLISHED AUGUST 11, 1931. Class 17.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

288,511. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) C. SALADINO & SONS. Chelsea, Mass. Filed Jan. 15, 1931. Serial No. 309,993.

NOFRAY

For Racket Strings.
Claims use since Oct. 1, 1928.

288,512. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) M. LINKMAN & COMPANY, Chicago, Ill. Filed Jan. 16, 1931. Serial No. 310,018.

Doctor Grabow

For Smoking Pipes.
Claims use since Aug. 10, 1930.

288,513. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) KATAKURA SESHI BOSEKI KABUSHIKI KAISHA, New York, N. Y. Filed Apr. 14, 1931. Serial No. 313,319.

MINORIKAWA

For Raw Silk.
Claims use since Sept. 6, 1924.

288,514. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE E. INGRAHAM COMPANY, Bristol, Conn. Filed May 15, 1931. Serial No. 314,618.

INGRAHAM

For Clocks and Watches.
Claims use since Aug. 13, 1930.

288,515. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE HILLWOOD MANUFACTURING COMPANY, Cleveland, Ohio. Filed June 2, 1931. Serial No. 315,311.



For Nails.
Claims use since Sept. 5, 1930.

288,516. (CLASS 30. CROCKERY, EARTHENWARE, AND PORCELAIN.) THE S. A. WELLER CO., Zanesville, Ohio. Filed Nov. 5, 1927. Serial No. 257,131.

GRAYSTONE

For Pottery.
Claims use since 1912.

288,517. (CLASS 37. PAPER AND STATIONERY.) THE COATED PAPER PRODUCTS COMPANY, Minerva, Ohio. Filed June 26, 1929. Serial No. 286,157.

HEVI-WAX

The drawing is lined for blue and yellow.
For Paraffin Paper.
Claims use since Oct. 7, 1928.

288,518. (CLASS 37. PAPER AND STATIONERY.) PACKAGE PAPER COMPANY, Holyoke, Mass. Filed Feb. 6, 1930. Serial No. 295,694.

BAGWAX

For Waxed Paper.
Claims use since Nov. 5, 1929.

288,519. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) THE HOZFORM COMPANY, Los Angeles, Calif. Filed Mar. 4, 1930. Serial No. 296,809.

HOZFORM

For Garment Drying Forms.
Claims use since Nov. 29, 1929.

288,520. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE PORTER CHEMICAL COMPANY, Hagerstown, Md. Filed Apr. 9, 1930. Serial No. 298,590.

Mastercraft

For Painting Sets Comprising Paints, Crayons, Brushes, Pictures or Drawings to Color, Containers for Water and/or for Mixing Colors, Palettes, Drawing Paper, Etc.
Claims use since Mar. 12, 1930.

288,521. (CLASS 32. FURNITURE AND UPHOLSTERY.) BARKER BROS. INCORPORATED, Los Angeles, Calif. Filed May 14, 1930. Serial No. 300,459.)

TUSCANY

For Furniture and Upholstery for Office, Library, and Household Use—Namely, Beds, Bed Panels, Dressers, Dressing Tables, Occasional Tables, Bookcases, Lockers in the Nature of Clothing Cabinets, Filing Cabinets, Chairs, Benches, Radiator Inclosures and Covers of Wood and Metal Construction, Cedar Chests, Window Seats, Hall Trees, Bed Springs, Library, Desk, and Household Tables, Divans, Davenports, Book Ends, Picture Frames, Magazine Racks, Knockdown Furniture, Medicine Cabinets, Kitchenette Units, Foot Rests, Chair Seats, Cushions, Desks, Secretaries, Easels, Ferneries, Mattresses, Mirrors, Clothing Racks, Consoles and Cabinets for Radio Apparatus, Tea Wagons, Bathroom and Kitchen and Office Stools, Settees, Lounges, Buffets, Wardrobes.
Claims use since Apr. 15, 1930.

288,522. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) J. B. SEDBERRY, INC., Utica, N. Y. Filed July 24, 1930. Serial No. 303,789.

CRACKERJACK

For Mills for Grinding Various Materials as Grains, Coal, Clay Products, Fertilizers, Chemicals, Charcoal, Drugs, Spices, Straw, Shells, Etc.
Claims use since November, 1929.

288,523. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) NATHANIEL GINSBURG, doing business as Para Rubber Company, Newark, N. J., assignor to Para Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 309,520.

Chrystaline

For Chemically Treated Fabrics Used in the Manufacture of Shower Curtains, Fabrics for Window Drapings, and Various Draperies.
Claims use since July 15, 1930.

288,524. (CLASS 27. HOROLOGICAL INSTRUMENTS.) R. H. MACY & CO., INC., New York, N. Y. Filed July 7, 1930. Serial No. 303,196.

La Forge

For Watches.
Claims use since June 24, 1930.

288,525. (CLASS 30. CROCKERY, EARTHENWARE, AND PORCELAIN.) ABRAHAM & STRAUS, INC., New York, N. Y. Filed Aug. 8, 1930. Serial No. 304,360.

Serv-8-Set

For China Dinner Sets.
Claims use since July 20, 1930.

288,526. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) ANIMAL TRAP COMPANY OF AMERICA, Lititz, Pa. Filed Aug. 12, 1930. Serial No. 304,483.

STA KAWT

For Animal Traps.
Claims use since July 16, 1930.

288,527. (CLASS 37. PAPER AND STATIONERY.) THE CRYSTAL TISSUE COMPANY, Middletown, Ohio. Filed Aug. 30, 1930. Serial No. 305,160.

MIAMI

For Light Weight Waxed and Tissue Papers.
Claims use since 1910.

288,528. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill. Filed Aug. 30, 1930. Serial No. 305,173.

Style Line

For Watches, Watch Movements, and Watch Cases.
Claims use since Aug. 12, 1930.

288,529. (CLASS 37. PAPER AND STATIONERY.) WHITE-WASHBURNE COMPANY, INC., Hinsdale, N. H. Filed Sept. 12, 1930. Serial No. 305,645.

SAFE-TINT

Color is not an essential feature of the trade-mark, and the lining on the drawing is merely for the purpose of shading.
For Toilet Paper, Paper Towels, and Paper Napkins.
Claims use since Sept. 2, 1930.

CARNEGIE LIBRARY OF ATLANTA

288,530. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) H. R. REDMOND, Bassfield, Miss. Filed Sept. 19, 1930. Serial No. 305,878.

REDMOND'S SPECIAL

For Internal Medicine for Liver and Stomach.
Claims use since Aug. 1, 1930.

288,531. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BENJAMIN F. MEFFERT, New York, N. Y., assignor to Amory, Brown & Company, New York, N. Y., a Firm composed of John W. Burd, Benjamin Meffert, Jacques Bramball, and George W. Henderson. Filed Sept. 24, 1930. Serial No. 306,008.

VATDI

For Cotton Piece Goods.
Claims use since Sept. 2, 1930.

288,532. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DR. P. PHILLIPS COMPANY, Orlando, Fla. Filed Nov. 14, 1930. Serial No. 307,901.

FANCI-CUT

For Canned Grapefruit.
Claims use since September, 1930.

288,533. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) UNDERWOOD ELLIOTT FISHER COMPANY, New York, N. Y. Filed Nov. 14, 1930. Serial No. 307,908.

UNDERWOOD TYPEWRITER

SPEEDS THE WORLDS BUSINESS

For Typewriting Machines and Typewriting Machine Parts.
Claims use since Aug. 31, 1929.

TRADE-MARK REGISTRATIONS RENEWED

37,319. MOLASSES CANDY. Registered November 19, 1901. WALTER W. CANDY. Renewed November 19, 1931, to Busy Bee Candy Company, St. Louis, Mo., a Corporation of Missouri, assignee.

37,602. ANIMAL TRAPS AND TACK HAMMERS. Registered December 31, 1901. ANIMAL TRAP CO., Abingdon, Ill. Renewed December 31, 1931, to Animal Trap Company of America, Lititz, Pa., a Corporation of Pennsylvania, assignee by mesne assignments.

37,851. CREAM OF TARTAR. Registered February 2, 1902. ROYAL BAKING POWDER CO., Jersey City, N. J. Renewed February 2, 1932, to Royal Baking Powder Company, of New York, N. Y., a Corporation of New Jersey.

37,923. EAU DE COLOGNE, SOAPS, WATERS, AND LOTIONS FOR TOILET PURPOSES. Registered March 11, 1902. NAAMLOOZE VENNOOTSCHAP EAU DE COLOGNE FABRIEK VOORHEEN J. C. BOLDOOT. Renewed March 11, 1932, to Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands, a Corporation of the Netherlands, by change of name.

81,969. LIGHTNING-RODS. Registered May 23, 1911. "ELECTRA" LIGHTNING ROD CO. Renewed May 23, 1931, to Electra Manufacturing Company, Chicago, Ill., a Corporation of Illinois, by change of name.

82,189. MONTHLY MAGAZINES. Registered June 6, 1911. WESTERN MAGAZINES CO., INC. Renewed June 6, 1931, to The H. & S. Publishing Company, Chicago, Ill., a Corporation of Illinois, successor.

83,220. CERTAIN MACHINERY AND PARTS THEREOF. Registered August 29, 1911. J. I. CASE PLOW WORKS, Racine, Wis. Renewed Aug. 29, 1931, to The Massey-Harris Company, Baltimore, Md., and Racine, Wis., a Corporation of Maryland, assignee.

83,431. BRASS-POLISH AND OIL-POLISH. Registered September 12, 1911. MILFORD HERBERT OACHS, New York, N. Y. Renewed September 12, 1931.

83,503. SAWS. Registered September 19, 1911. MARKT & HAMMACHER COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed September 19, 1931.

83,506. INTERIOR AND EXTERIOR VARNISHES AND OIL-FINISHES. Registered September 19, 1911. EUGENE E. NICE, Philadelphia, Pa. Renewed September 19, 1931.

83,715. PORTABLE FORGES AND BLOWERS THEREFOR. Registered October 10, 1911. CHAMPION BLOWER & FORGE CO., Lancaster, Pa., a Corporation of Pennsylvania. Renewed October 10, 1931.

83,828. POOL-TABLES. Registered October 17, 1911. WILLIAM FULD. Renewed October 17, 1931, to William A. Fuld, doing business as William Fuld, Baltimore, Md., successor.

83,840. CANNED CORN. Registered October 17, 1911. THE ILLINOIS CANNING CO., Hoopeston, Ill., a Corporation of Illinois. Renewed October 17, 1931.

83,889. CRACKERS. Registered October 24, 1911. BISHOP & COMPANY, Los Angeles, Calif. Renewed October 24, 1931, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey, assignee.

84,005. CANNED CORN. Registered October 31, 1911. THE ILLINOIS CANNING CO., Hoopeston, Ill., a Corporation of Illinois. Renewed October 31, 1931.

84,035. HOSIERY. Registered October 31, 1911. PARAMOUNT KNITTING COMPANY, Chicago, Ill. Renewed October 31, 1931, to Bear Brand Hosiery Co., Kankakee, Ill., a Corporation of Illinois, assignee.

84,052. SOAP. Registered October 31, 1911. AUGUST W. STADLER. Renewed October 31, 1931, to The Cuyahoga Soap Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

84,096. HAIR-TONICS. Registered November 7, 1911. MARTHA MATILDA HARPER. Renewed November 7, 1931, to Martha Matilda Harper, Inc., Rochester, N. Y., a Corporation of New York, assignee.

84,181. AUTOMOBILE-TRUNKS. Registered November 14, 1911. ISIDORE SIDNEY KALLIS. Renewed November 14, 1931, to Ajax Trunk & Sample Case Co., Inc., New York, N. Y., a Corporation of New York, successor.

84,487. CERTAIN TOILET PREPARATIONS. Registered December 19, 1911. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed December 19, 1931.

84,645. SEINE-TWINES. Registered December 26, 1911. THE LEES MANUFACTURING CO., New York, N. Y., and Westport, Conn. Renewed December 26, 1931, to The Lees Manufacturing Co., New York, N. Y., a Corporation of Connecticut.

84,658. NATURAL SPRING DRINKING-WATER. Registered December 26, 1911. NATIONAL WATER COMPANY. Renewed December 26, 1931, to White Rock Mineral Springs Company, Waukesha, Wis., and New York, N. Y., a Corporation of Wisconsin, by change of name.

84,727. MANILA AND SISAL ROPE. Registered January 2, 1912. COLUMBIAN ROPE COMPANY, Auburn, N. Y., a Corporation of New York. Renewed January 2, 1932.

84,816. FIRE-BRICK AND FIRE-BRICK FOR HEAT-RESISTING PURPOSES. Registered January 9, 1912. CHICAGO RETORT & FIRE BRICK CO., Chicago and Ottawa, Ill., a Corporation of Illinois. Renewed January 9, 1932.

84,829. CANNED PINEAPPLE. Registered January 9, 1912. HAWAIIAN PINEAPPLE COMPANY, LTD., Honolulu, Territory of Hawaii, and San Francisco, Calif., a Corporation of the Territory of Hawaii. Renewed January 9, 1932.

84,847. WHEAT-FLOUR. Registered January 9, 1912. MONTANA FLOUR MILLS CO., Harlowton, Mont. Renewed January 9, 1932, to Montana Flour Mills Company, Great Falls, Mont., a Corporation of Montana.

84,848. WHEAT-FLOUR. Registered January 9, 1912. MONTANA FLOUR MILLS CO., Harlowton, Mont. Renewed January 9, 1932, to Montana Flour Mills Company, Great Falls, Mont., a Corporation of Montana.

84,898. MEN'S CLOTHES. Registered January 9, 1912. BURK, FRIED & COMPANY, Baltimore, Md. Renewed January 9, 1932.

84,914. HOSIERY. Registered January 9, 1912. PARAMOUNT KNITTING COMPANY, Chicago, Ill. Renewed January 9, 1932, to Bear Brand Hosiery Co., Kankakee, Ill., a Corporation of Illinois, assignee.

84,957. LINEN AND HEMP PIECE GOODS. Registered January 16, 1912. THE GOUROCK ROPEWORK COMPANY, LIMITED, Port Glasgow, Scotland, a Corporation of Great Britain. Renewed January 16, 1932.

85,008. KNITTED UNDERSHIRTS. Registered January 16, 1912. RUBENS & MARBLE. Renewed January 16, 1932, to Rubens & Marble, Inc., Chicago, Ill., a Corporation of Illinois, successor.

85,113. CANNED PINEAPPLE. Registered January 30, 1912. HAWAIIAN PINEAPPLE COMPANY, LTD., Honolulu, Territory of Hawaii, and San Francisco, Calif., a Corporation of Territory of Hawaii. Renewed January 30, 1932.

85,117. A THINNER FOR PAINTS AND VARNISHES. Registered January 30, 1912. HILDRETH VARNISH CO. Renewed January 30, 1932, to Hildreth Varnish Company, Inc., New York, N. Y., a Corporation of New York, successor.

85,131. CANDY. Registered January 30, 1912. FRANZ G. JENSEN. Renewed January 30, 1932, to F. G. Jensen & Sons, Incorporated, Springfield, Mass., a Corporation of Massachusetts, assignee.

85,132. TOILET SOAP. Registered January 30, 1912. THE ANDREW JERGENS CO., New York, N. Y., and Cincinnati, Ohio. Renewed January 30, 1932, to The Andrew Jergens Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

85,133. CERTAIN TOILET PREPARATIONS. Registered January 30, 1912. THE ANDREW JERGENS CO., New York, N. Y., and Cincinnati, Ohio. Renewed January 30, 1932, to The Andrew Jergens Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

85,246. CARBONS FOR ELECTRIC LAMPS AND CARBON ELECTRODES FOR SMELTING PURPOSES. Registered February 6, 1912. HERMANN M. HIRSCHBERG, New York, N. Y. Renewed February 6, 1932, to Siemens-Planiawerke A. G. für Kohlefabrikate, Berlin-Lichtenberg, Germany, a Corporation of Germany, assignee by mesne assignments.

85,247. AUTOMOBILES. Registered February 6, 1912. HUPP MOTOR CAR CO. Renewed February 6, 1932, to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia, assignee.

85,286. CANNED FRUITS. Registered February 6, 1912. H. G. PRINCE & COMPANY, Fruitvale, Calif. Renewed February 6, 1932, to California Packing Corporation, San Francisco, Calif., a Corporation of New York, assignee.

85,287. CANNED FRUITS. Registered February 6, 1912. H. G. PRINCE & COMPANY, Fruitvale, Calif. Renewed February 6, 1932, to California Packing Corporation, San Francisco, Calif., a Corporation of New York, assignee.

85,486. HOUSEHOLD UTENSILS AND CERTAIN PLUMBING SUPPLIES. Registered February 20, 1912. PORCELAIN ENAMELING ASS'N OF AMERICA. Renewed February 20, 1932, to Polar Ware Company, Sheboygan, Wis., a Corporation of Wisconsin, by change of name.

85,509. TENNIS-RACKETS. Registered February 20, 1912. A. G. Spalding & Bros., Jersey City, N. J., and New York, N. Y., a Corporation of New Jersey. Renewed February 20, 1932.

85,615. COCOA. Registered February 27, 1912. JOHN O. POWERS, Nutley, N. J., and New York, N. Y. Renewed February 27, 1932, to A. N. Stollwerck, Inc., Camden, N. J., a Corporation of New Jersey, assignee.

85,617. HOSIERY. Registered February 27, 1912. RICHMOND HOSIERY MILLS, Chattanooga, Tenn., and Rossville, Ga. Renewed February 27, 1932, to Richmond Hosiery Mills, Rossville, Ga., a Corporation of Georgia.

85,642. VELVET RUGS. Registered March 5, 1912. THE BEATTIE MANUFACTURING COMPANY, Little Falls, N. J., a Corporation of New Jersey. Renewed March 5, 1932.

85,666. MATZOS, BEING FLAT SQUARES OF UNLEAVENED BREAD. Registered March 5, 1912. BEHR MANISCHEWITZ. Renewed March 5, 1932, to The B. Manischewitz Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

85,679. WORSTED CLOTHS. Registered March 5, 1912. PERSEVERENCE WORSTED COMPANY, Woonsocket, R. I., a Corporation of Rhode Island. Renewed March 5, 1932.

85,684. COTTON, LINEN, SILK, AND WOOLEN PIECE GOODS AND ADMIXTURES. Registered March 5, 1912. E. ROSENFELD & COMPANY. Renewed March 5, 1932, to The Faultless Manufacturing Company, Baltimore, Md., a Corporation of Maryland, assignee by mesne assignments.

85,688. BLENDED COFFEE. Registered March 5, 1912. WILLIAM S. SCULL COMPANY, Camden, N. J., a Corporation of New Jersey. Renewed March 5, 1932.

85,695. WHEAT-FLOUR. Registered March 5, 1912. THE TWIN FALLS MILLING & ELEVATOR CO., Twin Falls, Idaho. Renewed March 5, 1932, to The Colorado Milling & Elevator Company, Denver, Colo., and Twin Falls, Idaho, a Corporation of Colorado, assignee.

85,778. WHEAT-FLOUR. Registered March 12, 1912. THE TWIN FALLS MILLING & ELEVATOR CO., Twin Falls, Idaho. Renewed March 12, 1932, to The Colorado Milling & Elevator Company, Denver, Colo., and Twin Falls, Idaho, a Corporation of Colorado, assignee.

85,832. COFFEE AND BLENDED COFFEE. Registered March 19, 1912. WILLIAM S. SCULL COMPANY, Camden, N. J., a Corporation of New Jersey. Renewed March 19, 1932.

LABELS

REGISTERED OCTOBER 27, 1931

39,941.—*Title:* HIMYAR. For Cigarette Tobacco. THE AXTON-FISHER TOBACCO CO., INC., Louisville, Ky. Published September 21, 1931.

39,942.—*Title:* T N T. For Pop Corn Cakes. THE BARTELDES SEED COMPANY, Lawrence, Kans. Published May 21, 1931.

39,943.—*Title:* BLUE ROCK TITESEAL. For Joint Sealing Compound. BLUE ROCK CHEMICAL CORPORATION, Norfolk, Va. Published February 1, 1930.

39,944.—*Title:* BORDEN'S GRADE B MILK. For Pasteurized Fluid Milk. BORDEN'S FARM PRODUCTS COMPANY, INC., New York, N. Y. Published August 15, 1931.

39,945.—*Title:* GENUINE. For Malt Syrup. COLOMBO EXTRACT CO., New York, N. Y. Published July 1, 1926.

39,946.—*Title:* TRIO LEFT—N. Y. CORLISS LIMB SPEC. CO.—RIGHT. For Surgical Stocking. N. Y. CORLISS LIMB SPEC. CO. INC., New York, N. Y. Published July 21, 1931.

39,947.—*Title:* 'GOOD MORNING' MARMALADE. For Marmalade. CROSSE & BLACKWELL INC., Baltimore, Md. Published June 1, 1931.

39,948.—*Title:* 'GOOD MORNING' PURE PRESERVE. For Preserves. CROSSE & BLACKWELL INC., Baltimore, Md. Published June 1, 1931.

39,949.—*Title:* MELBETTS. For Toast. CUBBISON CRACKER COMPANY, INC., Los Angeles, Calif. Published September 15, 1931.

39,950.—*Title:* WUNDERBAR. For Candy. THE CURTISS CANDY COMPANY, Chicago, Ill. Published September 1, 1931.

39,951.—*Title:* ORANGE MELBA. For Dry Compounds from Which Beverages are Prepared. M. B. ECCLES, Omaha, Nebr. Published August 15, 1931.

39,952.—*Title:* NURSERY RHYME STITCHDOWNS. For Stitchdowns. ETTELBRICK SHOE CO., Greenup, Ill. Published December 29, 1930.

39,953.—*Title:* LUSIAN BRAND. For Cut Stringless Beans. EVANGELINE PARISH PRODUCTS CO., INC., Ville Platte, La. Published April 24, 1931.

39,954.—*Title:* ATTENTION. For Fresh Tomatoes. FLICK & KUPFER, Los Angeles, Calif. Published March 21, 1931.

39,955.—*Title:* LA STELLA. For Cans for Medicinal Compounds. JOSEPH FORLIZZO, Brooklyn, N. Y. Published September 1, 1931.

39,956.—*Title:* TELL HER WITH CANDY. For Candy. M. B. GOSNELL, Minneapolis, Minn. Published August 4, 1931.

39,957.—*Title:* JAMES McCREERY & CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 13, 1931.

39,958.—*Title:* TOM TUCKER. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 3, 1930.

39,959.—*Title:* THE MAY COMPANY, LOS ANGELES. For Footwear. HOLMAN PAPER BOX CO., INC., St. Louis, Mo. Published September 21, 1931.

39,960.—*Title:* JOHNSON'S AIRTITE BRUSH KEEPER. For Container for Keeping Brushes. ROBERT F. JOHNSON, Wenatchee, Wash. Published August 14, 1931.

39,961.—*Title:* POLAR-PAK. For Ice Cream. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Published July 10, 1931.

39,962.—*Title:* CB—351. For Caramel Layers. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,963.—*Title:* CB—354. For Toasted Cocoanut Cakes. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,964.—*Title:* CB—355. For Caramel Cakes. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,965.—*Title:* CB—357. For Devilsfood Bars. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,966.—*Title:* CB—358. For Chocolate Layer Cake. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,967.—*Title:* CB—362. For Orange Loaf Cake. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published August 7, 1931.

39,968.—*Title:* SNOWBALLS. For Cakes. OSWALD JAEGER BAKING CO., Milwaukee, Wis. Published August 12, 1931.

39,969.—*Title:* CRAZY CRYSTALS. For Mineral Water Crystals. POLLOCK PAPER & BOX COMPANY, Dallas, Tex. Published September 15, 1931.

39,970.—*Title:* FEE-LINE FISH CAT FOOD. For Fish Cat Food. PATRICK F. PRENDERGAST, Pasadena, Calif. Published August 15, 1931.

39,971.—*Title:* REGLA-FIT. For Boxes. REISMAN, GLASS, FITZGERALD SHOE COMPANY, Boston, Mass. Published June 16, 1930.

39,972.—*Title:* RAP UP'S. For Boxes. REISMAN, GLASS, FITZGERALD SHOE COMPANY, Boston, Mass. Published August 5, 1930.

39,973.—*Title:* CREAM. For Self Rising Biscuit Flour. SYLVESTER E. SANTANGELO, Youngstown, Ohio. Published September 8, 1931.

39,974.—*Title:* MOUNTAIN MIST QUILTING COTTON. For Cotton Filling for Quilts. THE STEARNS & FOSTER CO., Cincinnati, Ohio. Published July 15, 1931.

PRINTS

REGISTERED OCTOBER 27, 1931

13,453.—*Title:* BORDEN'S RICHER MALTED MILK. For Malted Milk. THE BORDEN COMPANY, New York, N. Y. Published May 12, 1931.

13,454.—*Title:* PERFECTION. For Preparation for Removing Corrosion from Automobile Radiators. CHEMICAL ACCESSORIES COMPANY, Des Moines, Iowa. Published August 10, 1931.

13,455.—*Title:* LATEX PRO-MEDICA. For Rubber Goods. COMET ENVELOPE & PRINTING COMPANY, New York, N. Y. Published August, 14, 1931.

13,456.—*Title:* CORN FLY. For Preparation for Corns and Bunions. HI-GENE COMPANY, Newark, N. J. Published September 15, 1929.

13,457.—*Title:* TUDOR PLATE THREE PIECE CHILD'S SET $2.00 EACH. For Silver Plated Flatware. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Published June 20, 1931.

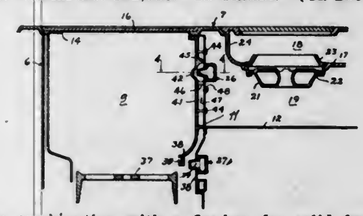
13,458.—*Title:* TUDOR PLATE BABY SPOON. For Baby Spoons. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Published June 20, 1931.

13,459.—*Title:* VAN RAALTE 1931 HOSIERY COLORS AUTUMN-WINTER. For Stockings. VAN RAALTE COMPANY, New York, N. Y. Published August 10, 1931.

REISSUES

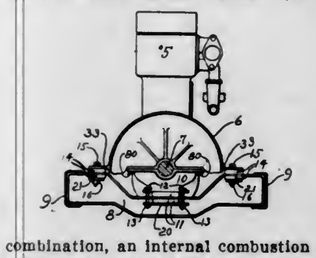
OCTOBER 27, 1931

18,235. KINDLING BURNER INSTALLATION. FREDERICK A. GERCICH, Oakland, and WALTER M. BERRY, Los Angeles, Calif., assignors to Hammer-Bray Company, Oakland, Calif., a Corporation of California. Original No. 1,728,165, dated Sept. 10, 1929, Serial No. 238,527, filed Dec. 8, 1927. Application for reissue filed Feb. 24, 1930. Serial No. 431,039. 12 Claims. (Cl. 126—36.)



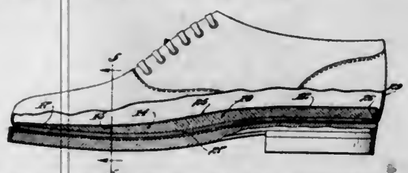
1. In combination with a fire-box for solid fuel, a gas burner disposed at a side of the fire box generally outwardly thereof and providing a nozzle for directing a stream of fuel into the fire box, a lining member disposed in front of said nozzle and having an opening opposite said nozzle to permit the discharge of said fuel stream therethrough, and means operative to provide from behind the member the secondary supply of air for effecting the combustion of the fuel of said stream within the combustion space of the fire box.

18,236. ENGINE MOUNTING. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Original No. 1,788,878, dated Jan. 13, 1931, Serial No. 220,027, filed Sept. 16, 1927. Application for reissue filed Mar. 12, 1931. Serial No. 522,113. 16 Claims. (Cl. 248—14.2.)



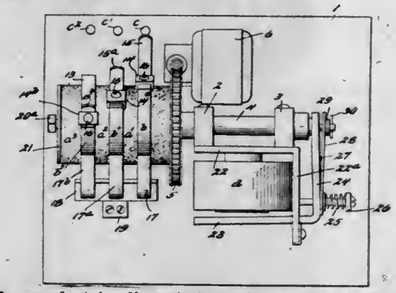
11. In combination, an internal combustion engine having irregular torque impulses, a frame carrying said engine, front and rear non-metallic resilient engine mountings connected to the engine and frame for supporting the engine, said mountings being positioned between the longitudinal side lines of the engine cylinder block.

18,237. CUSHIONING INSOLE FOR BOOTS AND SHOES. MATIE C. MESSLER, Providence, R. I., assignor to Madge Messler, Providence, R. I. Original No. 1,807,341, dated May 26, 1931, Serial No. 229,637, filed Oct. 29, 1927. Application for reissue filed Aug. 25, 1931. Serial No. 559,252. 6 Claims. (Cl. 36—28.)



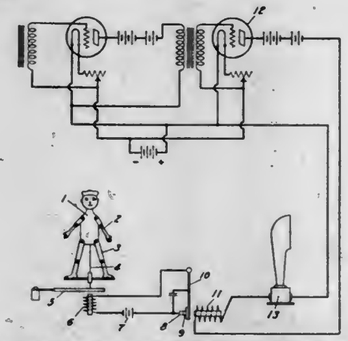
4. A cushioning insole of soft and compressible rubber for boots and shoes provided with heel and shank portions of substantial and uniform thickness and a ball portion having a part thereof of substantially the same thickness as the shank and heel portions, said insole tapering from the intermediate part of the ball portion to reduced edges, said heel and shank portions and a part of the ball portion normally having substantially flat upper and lower surfaces, and being of substantial and uniform thickness to enable the heel portion to be substantially depressed by the heel of the foot to cushion the said heel, said shank portion conforming to and supporting the longitudinal arch of the foot, when the heel portion is depressed.

18,238. FRICTION SWITCH MECHANISM. GEORGE H. WHITTINGHAM, Baltimore, Md., assignor to Monitor Controller Company, Baltimore, Md., a Corporation of Maryland. Original No. 1,806,377, dated May 19, 1931, Serial No. 447,317, filed Apr. 25, 1930. Application for reissue filed July 14, 1931. Serial No. 550,806. 14 Claims. (Cl. 200—17.)



1. In an electric slip-switch mechanism, a shaft, means for rotating the shaft, a stationary switch-member, a movable circuit-controlling member comprising a metal body journaled upon the shaft and having a part adapted to engage said stationary member, said movable member being biased away from said stationary member, friction devices on opposite sides of said body, said devices secured to the shaft so as to rotate therewith and being relatively movable longitudinally of the shaft, and means for clamping said devices frictionally against said body to cause rotation of the movable member into engagement with the stationary member.

18,239. ELECTRODYNAMICALLY-CONTROLLED FIGURE. RAYMOND FRANCIS YATES, Buffalo, N. Y., assignor, by mesne assignments, to Tobe Deutschmann, trustee. Original No. 1,726,283, dated Aug. 27, 1929, Serial No. 36,207, filed June 10, 1925. Application for reissue filed Aug. 26, 1931. Serial No. 559,580. 11 Claims. (Cl. 46—49.)

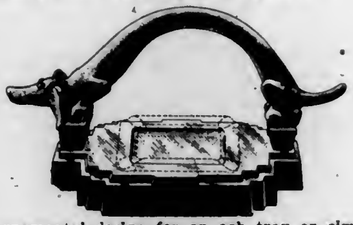


1. In a device of the class described, a toy figure, and means for agitating said figure in direct response to the variations of an electric current varying at audio frequencies, said means comprising a vibratile armature mechanically connected to said figure, an electro-magnet associated with said armature, and means for electrically connecting said electromagnet with a source of variant currents of audio frequency.

DESIGNS

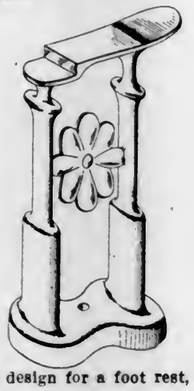
OCTOBER 27, 1931

85,411. ASH TRAY OR SIMILAR ARTICLE. MAX ABEL, Bronx, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 3, 1931. Serial No. 41,008. Term of patent 3½ years.



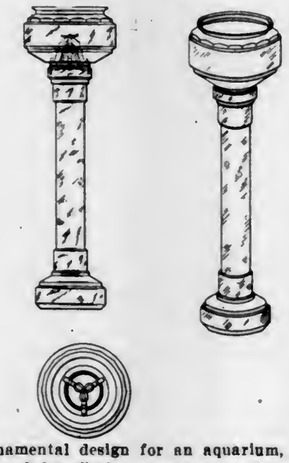
The ornamental design for an ash tray or similar article, substantially as shown.

85,412. FOOT REST. NICHOLAS BENENATI, New York, N. Y. Filed Sept. 15, 1931. Serial No. 41,111. Term of patent 3½ years.



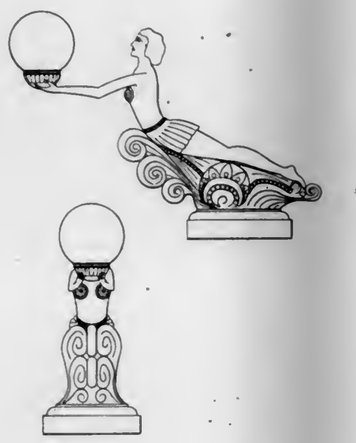
The ornamental design for a foot rest, as shown.

85,413. AQUARIUM. ROY E. CASTETTER, Wyoming, Ohio. Filed July 16, 1931. Serial No. 40,567. Term of patent 7 years.



The ornamental design for an aquarium, substantially as shown and described.

85,414. ORNAMENT FOR AUTOMOBILE RADIATOR CAP OR THE LIKE. DORA FOLEY, Los Angeles, Calif. Filed Mar. 23, 1931. Serial No. 39,207. Term of patent 3½ years.



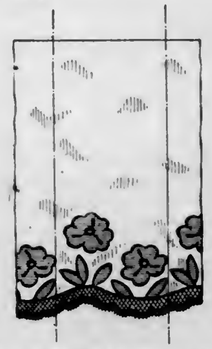
The ornamental design for an ornament for automobile radiator cap, or the like, as shown.

85,415. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,096. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,416. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,097. Term of patent 3½ years.



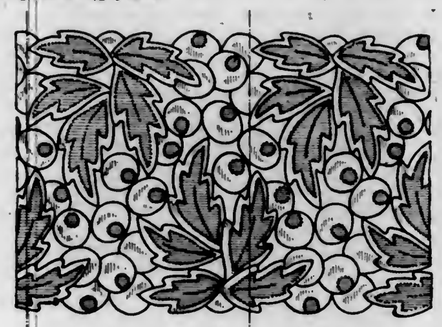
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,417. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,098. Term of patent 3½ years.



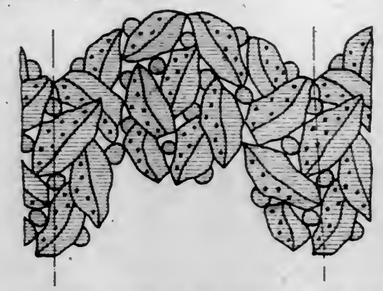
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,418. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,099. Term of patent 3½ years.



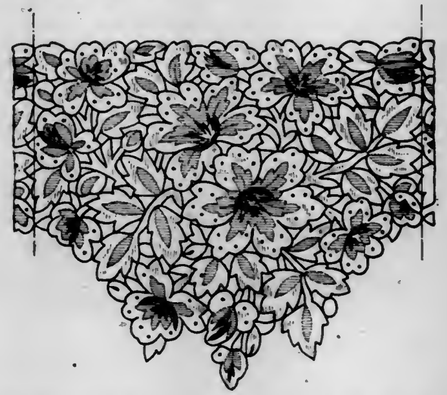
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,419. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,100. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,420. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,101. Term of patent 3½ years.



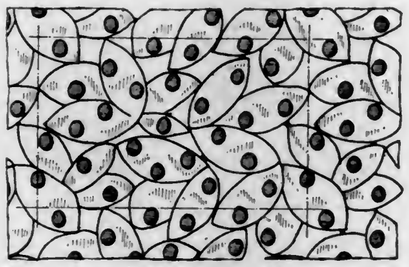
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,421. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,102. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,422. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,103. Term of patent 3½ years.



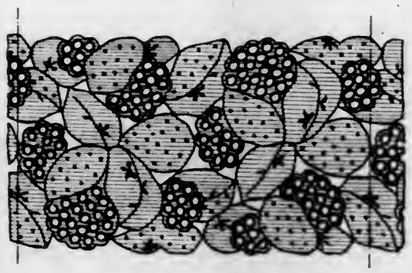
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,423. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,104. Term of patent 3½ years.



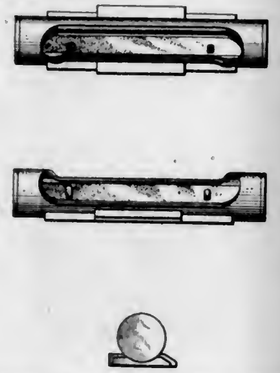
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,424. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Sept. 15, 1931. Serial No. 41,105. Term of patent 3½ years.



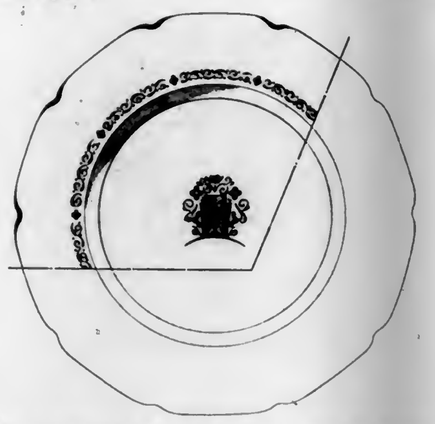
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

85,425. WATCH DISPLAY BOX. SYLVAN WOLFSHEIM, New York, N. Y. Filed Aug. 3, 1931. Serial No. 40,758. Term of patent 7 years.



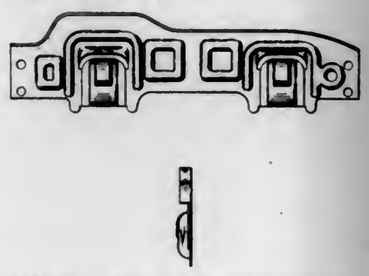
The ornamental design for a watch display box, as shown.

85,426. DISH OR SIMILAR ARTICLE. WILLIAM H. GEETH, New York, N. Y., assignor to Oneida Community Limited, Oneida, N. Y., a Corporation of New York. Filed Sept. 15, 1931. Serial No. 41,117. Term of patent 14 years.



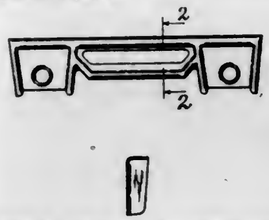
The ornamental design for a dish or similar article as shown and described.

85,427. CONSTRUCTION TOY ELEMENT. ALFRED C. GILBERT, North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Aug. 29, 1931. Serial No. 40,954. Term of patent 14 years.



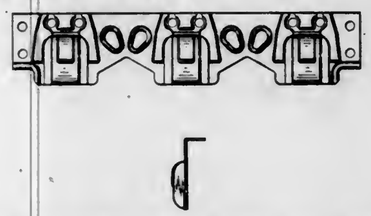
The ornamental design for a construction toy element substantially as shown.

85,428. CONSTRUCTION TOY ELEMENT. ALFRED C. GILBERT, North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Aug. 29, 1931. Serial No. 40,955. Term of patent 14 years.



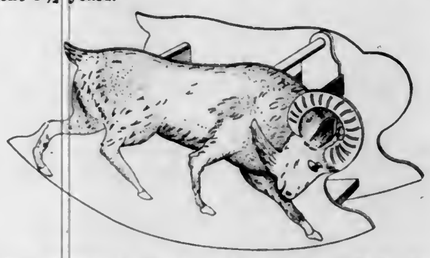
The ornamental design for a construction toy element substantially as shown.

85,429. CONSTRUCTION TOY ELEMENT. ALFRED C. GILBERT, North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Aug. 29, 1931. Serial No. 40,956. Term of patent 14 years.



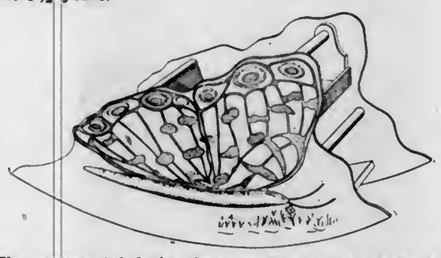
The ornamental design for a construction toy element substantially as shown.

85,430. ROCKING TOY. HARRY G. GOULD, Oshkosh, Wis. Filed Aug. 24, 1931. Serial No. 40,919. Term of patent 3½ years.



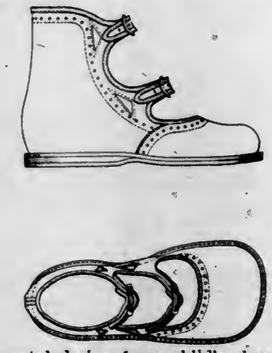
The ornamental design for a rocking toy, as shown and described.

85,431. ROCKING TOY. HARRY G. GOULD, Oshkosh, Wis. Filed Aug. 24, 1931. Serial No. 40,920. Term of patent 3½ years.



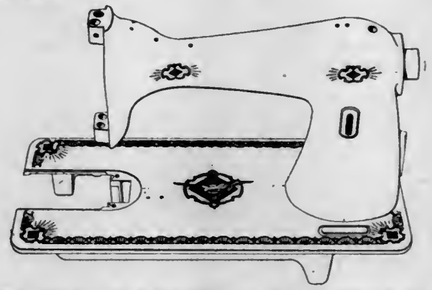
The ornamental design for a rocking toy, as shown and described.

85,432. CHILD'S SHOE. WILLIAM GEORGE HEIBER, Rochester, N. Y. Filed July 22, 1931. Serial No. 40,625. Term of patent 14 years.



The ornamental design for a child's shoe, as shown.

85,433. SEWING MACHINE FRAME. WILLIAM HOPPER, Old Kilpatrick, Scotland, assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 18, 1931, Serial No. 40,588, and in Great Britain Mar. 18, 1931. Term of patent 14 years.



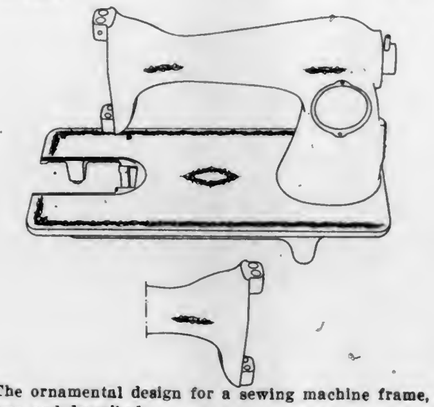
The ornamental design for a sewing machine frame, as shown and described.

85,434. DECALCOMANIA TRANSFER SHEET. WILLIAM HOPPER, Old Kilpatrick, Scotland, assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Sept. 12, 1931, Serial No. 41,071, and in Great Britain Aug. 26, 1931. Term of patent 14 years.



The ornamental design for a decalcomania transfer sheet, as shown.

85,435. SEWING MACHINE FRAME. WILLIAM HOPPER, Old Kitpatrick, Scotland, assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Sept. 12, 1931, Serial No. 41,072, and in Great Britain Aug. 26, 1931. Term of patent 14 years.



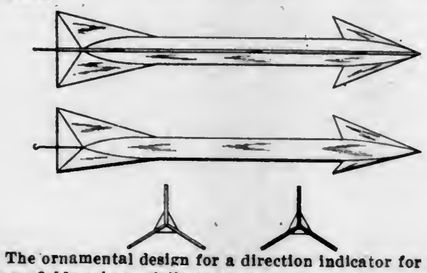
The ornamental design for a sewing machine frame, as shown and described.

85,436. TOILET ACCESSORY CONTAINER. GUSTAV B. JENSEN, New York, N. Y., assignor to Vadsco Sales Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1930. Serial No. 36,666. Term of patent 7 years.



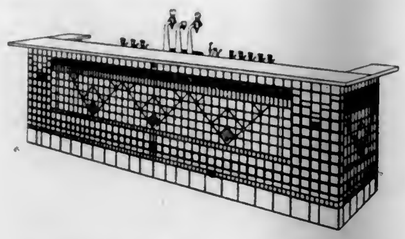
The ornamental design for a toilet accessory container as shown.

85,437. DIRECTION INDICATOR FOR AEROPLANE FIELDS. LA VERNE R. JONES, Oneida, N. Y. Filed Mar. 30, 1931. Serial No. 39,289. Term of patent 7 years.



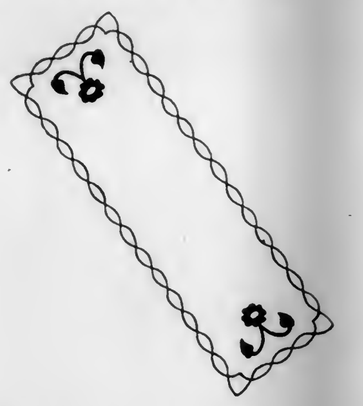
The ornamental design for a direction indicator for aeroplane fields substantially as shown.

85,438. SODA FOUNTAIN. GEORGE R. LIPPITT, Cleveland, Ohio, assignor to The Bishop & Babcock Mfg. Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 27, 1931. Serial No. 40,939. Term of patent 7 years.



The ornamental design for a soda fountain as shown.

85,439. EMBROIDERED SCARF. JOHN R. LUNDBERG, Maplewood, N. J. Filed Aug. 18, 1931. Serial No. 40,880. Term of patent 3½ years.



The ornamental design for an embroidered scarf as shown.

85,440. SHOE. CHARLES MILLER and LEO SHOLTZ, New York, N. Y. Filed Sept. 4, 1931. Serial No. 41,021. Term of patent 3½ years.



The ornamental design for a shoe, or similar article substantially as shown and described.

85,441. SHOE. CHARLES MILLER and LEO SHOLTZ, New York, N. Y. Filed Sept. 4, 1931. Serial No. 41,022. Term of patent 3½ years.



The ornamental design for a shoe, or similar article substantially as shown and described.

85,442. LAMP STANDARD. LESLIE R. NEED, South Bend, Ind., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1930. Serial No. 34,191. Term of patent 14 years.



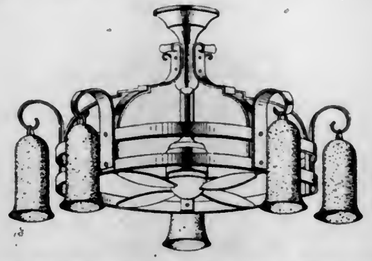
The ornamental design for a lamp standard substantially as shown and described.

85,443. LIGHTING FIXTURE. JOSEPH E. PRIMAKOW, Milwaukee, Wis. Filed Apr. 17, 1931. Serial No. 39,523. Term of patent 3½ years.



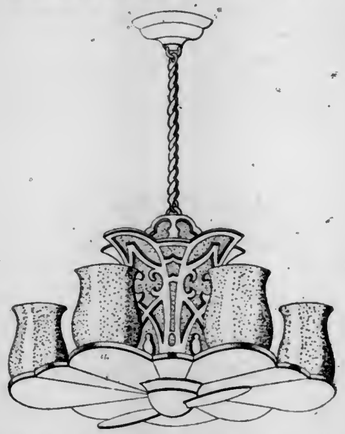
The ornamental design for a lighting fixture substantially as shown and described.

85,444. LIGHTING FIXTURE. JOSEPH E. PRIMAKOW, Milwaukee, Wis. Filed Apr. 17, 1931. Serial No. 39,524. Term of patent 3½ years.



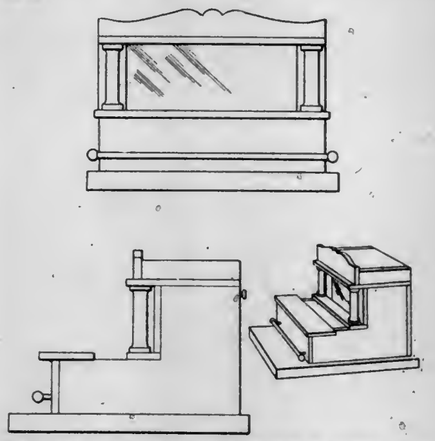
The ornamental design for a lighting fixture substantially as shown.

85,445. LIGHTING FIXTURE. JOSEPH E. PRIMAKOW, Milwaukee, Wis. Filed Apr. 17, 1931. Serial No. 39,525. Term of patent 3½ years.



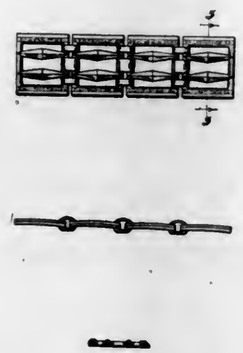
The ornamental design for a lighting fixture substantially as shown and described.

85,446. CABINET. EDWARD F. REED, Neosho, Mo. Filed May 19, 1931. Serial No. 39,909. Term of patent 7 years.



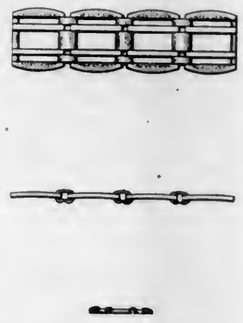
The ornamental design for a cabinet as shown.

85,447. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I. Filed Aug. 25, 1931. Serial No. 40,927. Term of patent 3½ years.



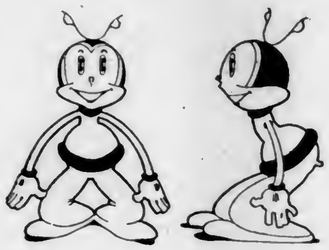
The ornamental design for a bracelet chain, substantially as shown.

85,448. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I. Filed Aug. 25, 1931. Serial No. 40,928. Term of patent 3½ years.



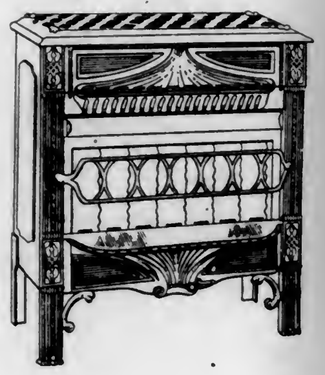
The ornamental design for a bracelet chain, substantially as shown.

85,449. DOLL OR SIMILAR ARTICLE. JOHN V. SPINA, New York, N. Y. Filed May 16, 1931. Serial No. 39,871. Term of patent 14 years.



The ornamental design for a doll or similar article, as shown.

85,450. RADIANT HEATER. ADOLF STEFFEN, Pittsburgh, Pa., assignor to Adams Bros. Mfg. Co., Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 28, 1931. Serial No. 39,280. Term of patent 3½ years.



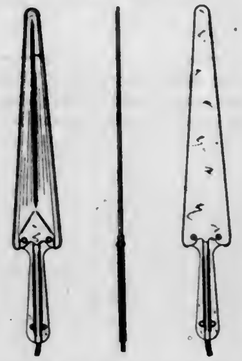
The ornamental design for a radiant heater as shown.

85,451. TEXTILE FABRIC. HOLBROOK WHITEHEAD, Baltimore, Md., assignor to J. L. Stifel & Sons, Inc., Wheeling, W. Va., a Corporation of West Virginia. Filed Aug. 19, 1931. Serial No. 40,885. Term of patent 3½ years.



The ornamental design for textile fabric, substantially as shown and described.

85,452. ELECTRIC NECKTIE RESTORER. DAVID M. BENFORD, New York, N. Y. Filed Jan. 30, 1931. Serial No. 38,504. Term of patent 14 years.



The ornamental design for an electric necktie restorer, as shown.

85,453. KNITTED FABRIC. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1931. Serial No. 41,026. Term of patent 14 years.



The ornamental design for a knitted fabric as shown.

85,454. KNITTED FABRIC. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1931. Serial No. 41,027. Term of patent 14 years.



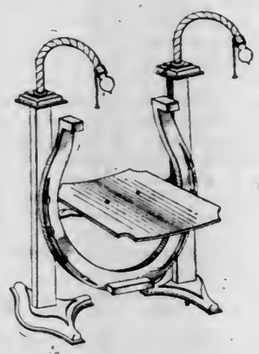
The ornamental design for a knitted fabric as shown.

85,455. KNITTED FABRIC. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1931. Serial No. 41,030. Term of patent 14 years.



The ornamental design for a knitted fabric as shown.

85,456. DISPLAY STAND. SAMUEL F. BOYCE, New York, N. Y. Filed Sept. 15, 1931. Serial No. 41,112. Term of patent 7 years.

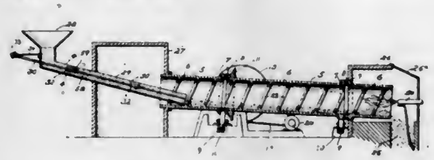


The ornamental design for a display stand, as shown.

PATENTS

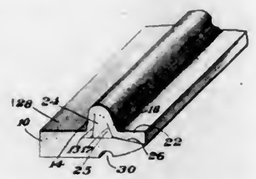
GRANTED OCTOBER 27, 1931

1,828,727. ROTARY KILN. JOHN ANDREWS, Oakland, Calif. Filed May 24, 1928. Serial No. 280,326. 1 Claim. (Cl. 263—22.)



In an apparatus for treating ores, the combination of a cylindrical furnace, means for rotating the furnace, said furnace having a spiral flange on its inner face to form a worm for feeding the material being treated through the furnace as the latter is rotated, said flange also operating to cascade the material within the furnace, means for introducing heated gases into the delivery end of the furnace, a dust chamber of large volumetric capacity communicating with the material receiving end of the furnace, a feed spout and tube of large cross-area extending through the dust chamber to empty into the material receiving end of the furnace, said conduit having extensive heat-exchange surface within the dust chamber and means for slowly propelling the material through the feed spout and tube, the slow movement of the material through the feed spout and tube tending to fill the same to close the opening therethrough to the exterior of the dust chamber, and said slow movement of the material and the extensive heat-exchange surface of the conduit operating to preheat the material within the dust chamber before the material is discharged into the cylindrical furnace.

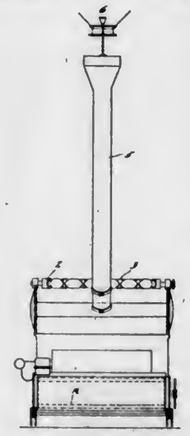
1,828,728. SHOE WELTING AND PROCESS OF ITS MANUFACTURE. PEARL C. ARNOLD, West Hanover, and WILLIAM C. VIZARD, Brockton, Mass., assignors to Perley E. Barbour, Quincy, Mass., trading as Barbour Welting Company, Brockton, Mass. Filed Apr. 8, 1930. Serial No. 442,544. 8 Claims. (Cl. 36—78.)



1. Beaded shoe welting comprising a body having a thinned sewing edge, a face flap integral with the body having a bead core at its under face and a thickened free edge at the innerside of said core, said flap being folded about its core to form a bead and an innerseam edge, said thinned sewing edge and thickened flap edge being joined to build up an innerseam edge.

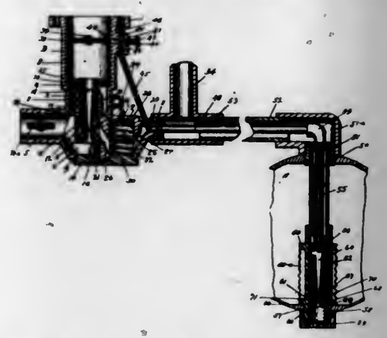
1,828,729. DISTRIBUTING MEANS FOR FUEL TO STOKERS. HERBERT HENRY BAKER, Monkseaton, Northumberland, and CHRISTOPHER SAMUEL DAVY, Dulwich, London, England, assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 30, 1919, Serial No. 334,508, and in Great Britain Nov. 27, 1918. 4 Claims. (Cl. 110—101.)

4. In combination with an automatic stoker having a hopper, a swinging coal-feeding chute for feeding coal into and distributing it along said hopper, a member movable along said hopper, said member being connected to said chute, a rotatable shaft, driving means for rotating said



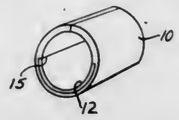
shaft constantly in one direction, and periodically reversible power-transmission mechanism operatively interconnecting said shaft and said member to cause reciprocation of said member and chute along the hopper.

1,828,730. FUELING SYSTEM. THEODORE BOSSARD, Salt Lake City, Utah, assignor to Research Engineering Laboratories, Inc., a Corporation of Utah. Filed Aug. 14, 1929. Serial No. 385,714. 2 Claims. (Cl. 261—72.)



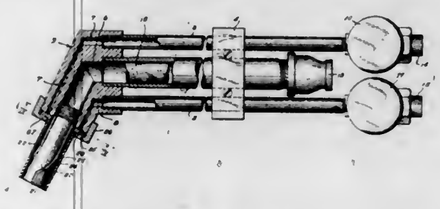
1. In a fuel system for automobiles the combination of a cylindrical body portion having a valve seat formed therein; an air cushioned valve carried therein and adapted to close said seat; a concentric casting within said casing; a jet carried in said casting; having the bore thereof tapered from the top to the bottom; another jet spaced therefrom within said casting forming an annular chamber therebetween, said chamber being in open connection with the fuel supply line; a spring controlled injector in said supply line adapted to be actuated by sudden increased suction from the motor when accelerated; means to introduce idling fuel into said casing adjacent the throttle valve; a throttle valve to control the entire system; and a booster immersed in fuel in the fuel supply tank to vaporize the fuel and increase the suction through the lead line connected therewith.

1,828,731. METHOD OF MAKING PARTIALLY LINED BEARINGS. JOSEPH BRINCIL, Reading, Pa. Original application filed Mar. 26, 1928, Serial No. 264,666. Divided and this application filed Jan. 21, 1929. Serial No. 333,878. 4 Claims. (Cl. 29—149.5.)



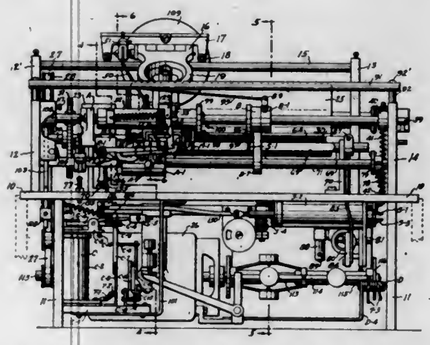
1. The method of making a partially lined bearing which comprises forming a recess in a strip of base metal, then tinning the recessed surface, then uniting to the tinned recess surface a bearing metal by means of heat and pressure, then cutting the combined base and bearing metal strip into parts of the required lengths, and forming the said parts into cylindrical form.

1,828,732. SPRAY GUN. PHILIP S. CASE, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed June 4, 1929. Serial No. 368,298. 8 Claims. (Cl. 91—45.)



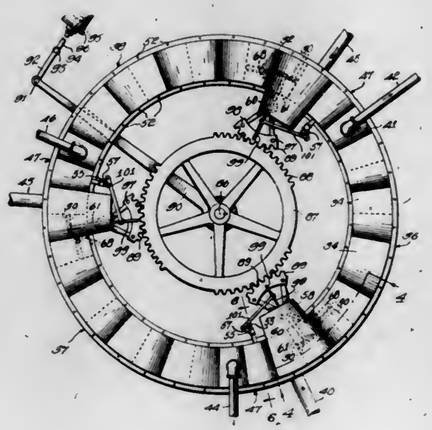
1. A spray gun comprising a head having a bore for conducting gas, a bore for conducting liquid and a bore for conducting a mixture of solids and gas, a terminal member on the head having a discharge orifice for the mixture of solids and gas, said member having a groove therein to conduit gas, a groove to conduct liquid and a communicating groove to mix gas and liquid, and means in said head to form connections between the grooves in said projecting member and the liquid and gas bores in the head.

1,828,733. AUTOMATIC TELEPHONE RESPONDING APPARATUS. JAMES L. COLLINS, Dallas, Tex. Filed Oct. 3, 1929. Serial No. 397,079. 30 Claims. (Cl. 179—6.)



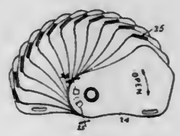
1. In a telephone responding apparatus, sound recording and reproducing means, means for actuating said means, an element movable on said recording and reproducing means to receive and transmit messages carried thereby, a switch for controlling the actuating means, means connected in the telephone circuit to actuate said switch, means for limiting the travel of said movable element after reproduction of a message and means to automatically stop the same upon its return to operative position.

1,828,734. GAS AND VAPOR TREATING APPARATUS. JAMES L. DORMON, Shreveport, La., assignor to Basic Patents Corporation, Shreveport, La., a Corporation of Louisiana. Filed Sept. 13, 1928. Serial No. 305,774. 14 Claims. (Cl. 196—46.)



1. Apparatus of the character described comprising a closed circular casing divided into first, second and third stages of operation, a rotatable member in said casing comprising a plurality of cells each adapted to contain a material capable of acting on a fluid and to be changed by such action, means for passing a fluid through the cells of the first stage, means for rotating said member to move successive cells through said stages, means for passing a fluid through the cells of the second stage substantially simultaneously with the passing of the fluid into the first stage for altering said material as it passes through said second stage, and means for passing a fluid through the cells of the third stage substantially simultaneously with the passing of the fluids into the first and second stages for restoring the material to its original condition in the third stage.

1,828,735. PLAYING CARD HOLDER. WILLIAM GIVONE, East Paterson, and HERBERT JAHN, Garfield, N. J. Filed July 8, 1930. Serial No. 466,436. 7 Claims. (Cl. 273—150.)



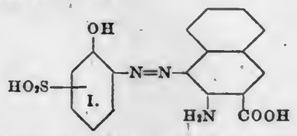
1. A device for holding cards or the like comprising a laminated series of leaves to receive the cards between them and pivoted together so that each leaf is movable independently of the others in its own plane, said series having a series of means to limit the pivotal movement of the leaves, each with respect to the neighboring leaf, in the direction to extend the series.

1,828,736. DEGUMMING SILK. NORMAN D. HARVEY, Jr., Pittsburgh, Pa., assignor to Carbide & Carbon Chemicals Corporation, a Corporation of New York. Filed Feb. 3, 1930. Serial No. 425,727. 3 Claims. (Cl. 8—2.)

1. Process of degumming silk which comprises dissolving the sericin in a solution containing a monoethanolamine soap, and an excess of the amine.

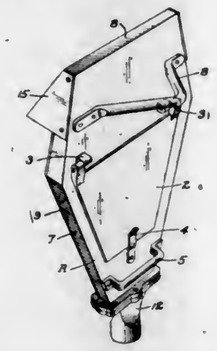
1,828,737. MONOAZODYESTUFFS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, RUDOLF KNOCHE, Leverkusen-on-the-Rhine, and ERNEST TIETZE, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 23, 1928, Serial No. 321,512, and in Germany Nov. 29, 1927. 4 Claims. (Cl. 260—90.)

1. As new compounds, o-hydroxy-mono-azo dyestuffs capable of being chromed, having in their free form the probable general formula:



wherein the nucleus marked I. may be substituted by halogen, said dyestuffs being in form of their alkali metal salts reddish brown powders, easily soluble in water with red colorations, dyeing wool from an acid bath red shades, which change to green by after-chroming, yielding when treated with stannous chloride and hydrochloric acid an o-amino-phenol-sulfonic acid and 1.2-naphthylenediamine-3-carboxylic acid.

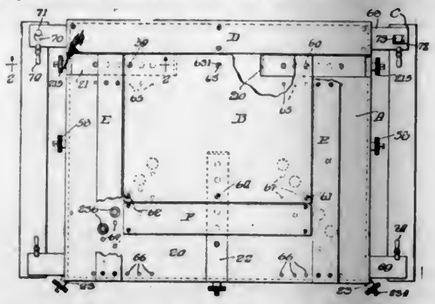
1,828,738. MORTAR SPREADER. ROBERT D. HOOD, Sausalito, Calif. Filed Apr. 29, 1929. Serial No. 358,817. 3 Claims. (Cl. 72—130.)



1. A mortar spreader comprising a flattened casing provided with an intake connection at its lower end adapted to be connected with a source of mortar supply under pressure, said casing having an elongated discharge opening formed in the upper end, a pair of handle members on the spreader, a pair of side flanges secured to the spreader one at each end of the discharge opening, and a trowel plate secured between said flanges and disposed on an angle to the flattened surface of the spreader.

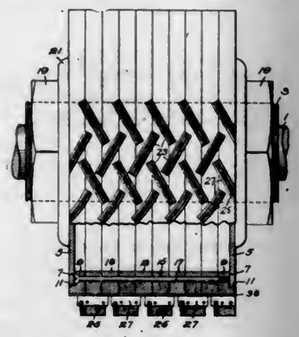
1,828,739. PLATE HOLDER FOR PHOTOGRAPHIC PRINTING MACHINES. WILLIAM C. HUEBNER, Chicago, Ill., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y., a Corporation of New York. Filed Aug. 8, 1928, Serial No. 298,256. Renewed Mar. 14, 1931. 16 Claims. (Cl. 95—73.)

1. In a press plate holder, the combination with a supporting bed for a rectangular plate; of a pair of members oppositely adjustably mounted on said bed in substantially the same line substantially parallel to one edge of the



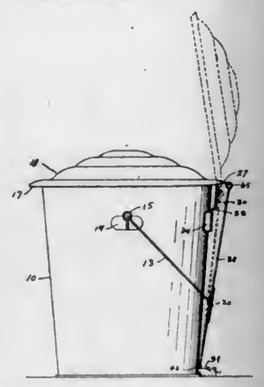
plate; two diagonally adjustably mounted members on said bed; and means for attaching adjacent portions of the plate to each of said members.

1,828,740. TOOL FOR CUTTING STONE. PETER S. LEGGE, Pompton Lakes, N. J. Filed Oct. 30, 1928. Serial No. 316,072. 5 Claims. (Cl. 51—206.)



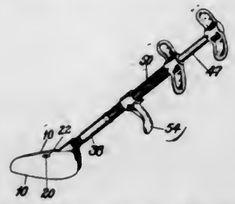
1. A rotary tool for cutting stone comprising a series of members each assembled coaxially of said tool, each member presenting an annular series of cutting portions inclined to the axis of said tool.

1,828,741. WASTE CAN. GEORGE ROSS LE SAUVAGE, Buffalo, N. Y. Filed July 19, 1930. Serial No. 469,150. 9 Claims. (Cl. 220—36.)



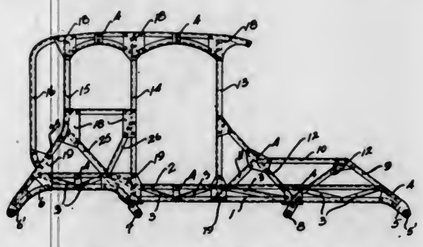
1. A waste can comprising a single receptacle, a hinged cover for the receptacle, means for detachably securing the cover to the receptacle, means for actuating the cover, and a bail for the receptacle, the bail being engageable with the actuating means for guiding the same.

1,828,742. SHOE STRETCHER. JOHN W. LONEY, Brockton, Mass., assignor to O. A. Miller Treeing Machine Company, Portland, Me., a Corporation of Maine. Filed May 29, 1928. Serial No. 281,456. 11 Claims. (Cl. 12—128.3.)



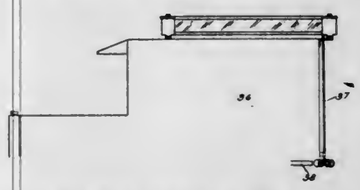
1. In a shoe stretcher, a pair of separable fore part members, an operating mechanism constructed and arranged to separate the fore part members, each of said fore part members being pivotally connected to the operating mechanism solely at a point substantially distant from its ends in such manner as to permit free movement about a vertical axis and the operating mechanism being arranged to preserve unchanged the longitudinal location of the said intermediate pivoted points relatively to the operating mechanism as the mechanism is operated to separate the fore part members.

1,828,743. BODY FRAME. JOHN G. LOVELL, Spokane, Wash. Filed July 8, 1929. Serial No. 376,562. 1 Claim. (Cl. 296—28.)



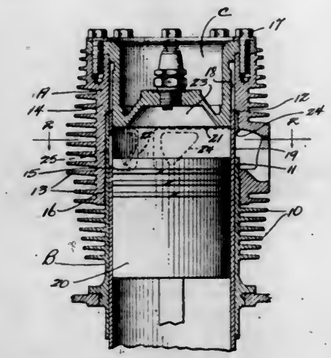
A combined chassis and body frame comprising a pair of side beams, said beams each consisting of a pair of vertically spaced, longitudinal bars extending the full length of the chassis, down-turned horns forming the front and rear terminals of said beams, a plurality of inverted U-bars mounted transversely of the beams at the rear portion of the chassis, a roof frame on the U-bars, a longitudinally extending truss mounted on the forward part of each side beam, and braces connecting said trusses with the forward U-bar.

1,828,744. ADVERTISING DISPLAY APPARATUS. GUSTAVE O. MATTER, Portland, Oreg. Filed Apr. 2, 1929. Serial No. 351,850. 2 Claims. (Cl. 40—38.)



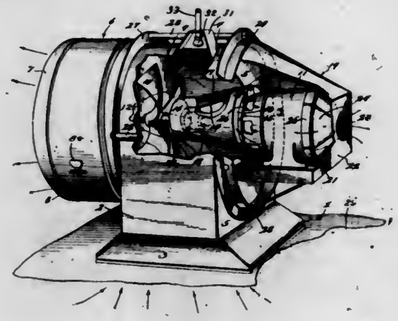
1. Advertising display apparatus, consisting of an appliance applicable to any automobile and embodying the combination of a movable endless legend-display exhibitor, with driving means consisting of an aeromotor having vanes adapted to be operated by impact of pneumatic energy derived wholly from means employed for driving the vehicle.

1,828,745. ENGINE CONSTRUCTION. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Jan. 30, 1928. Serial No. 250,370. 12 Claims. (Cl. 123—173.)



1. Cylinder construction for sleeve valve engines comprising in combination, a lower member formed with an upwardly extending cylinder portion provided with intake and exhaust ports, an upper member having a downwardly extending portion surrounding the lower member and secured thereto, said upper member having an annular recess receiving the cylinder portion of the lower member and also having intake and exhaust chambers open to the said cylinder ports, ported sleeve valve means within the cylinder portion, and a cylinder head carried by the upper member depending therewith to provide a sleeve pocket.

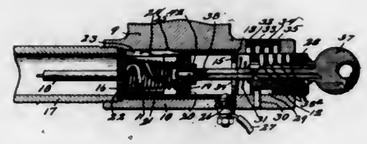
1,828,746. EXPLOSIONPROOF VENTILATING UNIT. JENS A. PAASCHE, Wilmette, Ill. Filed July 25, 1929. Serial No. 380,922. 3 Claims. (Cl. 230—117.)



1. A ventilating unit for the purpose specified comprising in combination an L shaped flue having inlet and delivery connections at right angles to each other, the delivery connection having a circular opening for the accommodation of the ventilating fan, a motor opening in the structure opposite to said fan opening and in line therewith, a motor housing located outside of said flue and surrounding the motor opening, a motor supported in said housing, a drive shaft on the motor concentric with said motor opening and reaching across the flue to the fan opening, a fan on said drive shaft located in said fan opening, a conical extension on the motor reaching through the motor opening in alignment with the fan opening, an outboard shaft bearing on said conical extension the motor end of said conical extension being of smaller size than the motor opening to thereby leave an annular clearance between these parts, a shield surrounding said conical extension and separated therefrom to establish an annular

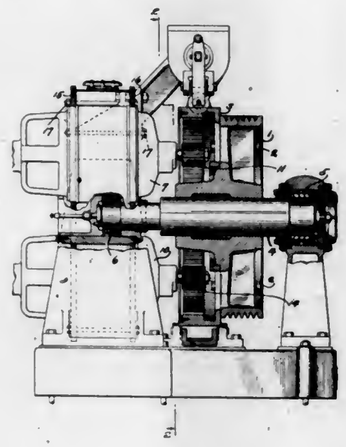
passage in conjunction therewith, the inner end of said passage communicating exclusively with the motor housing through said annular clearance and the outer end of said passage terminating adjacent to the back side of the fan, substantially as described.

1,828,747. IGNITION LOCK AND THE LIKE. IRA D. PERRY, Chicago, Ill. Filed Feb. 20, 1930. Serial No. 429,941. 3 Claims. (Cl. 200—42.)



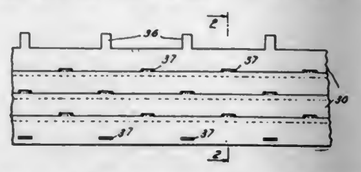
1. In a device of the class described, the combination with a lock having a longitudinally movable lock cylinder and tumblers normally locking said cylinder against such movement, together with a key for insertion into the lock cylinder to line up the tumblers and unlock the cylinder, of a contact carrier movable towards and from the lock cylinder, an ejector pin connected to said contact carrier and having its forward end working into the key opening of the lock cylinder, spring means tending to move the contact carrier and ejector pin forwardly to carry the pin into the key opening for the purpose of expelling the key therefrom, a ground contact carried by the contact carrier and establishing a ground connection except when the contact carrier is moved to its forward position adjacent to the lock cylinder, and a current supply connection adjacent to said forward position to make contact with the contact carrier when the same is moved fully forward, substantially as described.

1,828,748. HOISTING APPARATUS. CHARLES R. PRATT, Upper Montclair, N. J. Filed July 26, 1928. Serial No. 295,539. 4 Claims. (Cl. 74—7.)



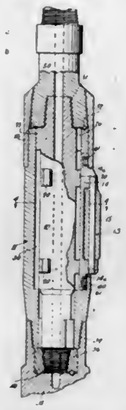
1. A hoisting machine comprising a traction sheave, a gear secured thereto, a shaft for mounting the traction sheave, a pair of plates providing a bearing for said shaft, a plurality of electric motors so mounted in said plates that the plates provide bearings for the housings of said motors, to provide a unitary structure with the motors disposed symmetrically about said shaft, and a pinion mounted on and driven by the armature shaft of each motor, all of said pinions meshing with said gear.

1,828,749. MOTION PICTURE SCREEN. ALBERT L. RAVEN, Mount Vernon, N. Y. Filed July 11, 1930. Serial No. 467,149. 10 Claims. (Cl. 88—24.)



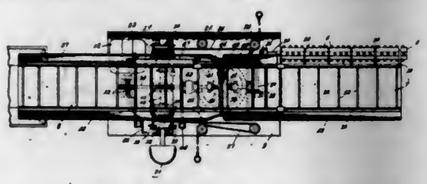
2. A screen for the projection of pictures accompanied by sound comprising a plurality of wavy horizontal strips arranged with the upper edge of each strip overlapping the lower edge of the next higher strip, and the peaks of the waves in said strips opposite one another, and means for securing the strips to one another at said peaks whereby numerous sound passages are provided between said points of attachment extending upwardly from the rear toward the front of the screen.

1,828,750. UNDERREAMER. EDWARD F. RAYMOND, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Jan. 24, 1931. Serial No. 510,978. 7 Claims. (Cl. 255—74.)



1. In an expansive reamer, the combination of a tubular slotted body, cutters movable inwardly and outwardly in the body slots, a relatively rotatable mandrel extending longitudinally in the body and having cams acting on the cutters to move the cutters out by virtue of relative mandrel rotation, the body having at one end of the slots a wall overhanging the cutter ends, and a sleeve mounted on the mandrel and overhanging the cutter ends at the other end of the body slots.

1,828,751. MATERIAL HANDLING APPARATUS. ARTHUR SHELBURNE, Terre Haute, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 15, 1922. Serial No. 553,123. Renewed Jan. 29, 1929. 11 Claims. (Cl. 198—9.)

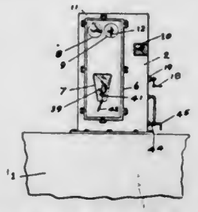


1. In coal handling apparatus, the combination of a horizontally positioned oblong support, means on said support for advancing it in the direction of its breadth, and coal loading mechanism carried by said support comprising a conveyor travelling in the direction of the length of the support, a pick-up cylinder adjacent one edge of said conveyor and mounted on an axis below its receiving surface, and means adjacent the opposite edge of said conveyor for retaining material thereon.

1,828,752. DESULPHURIZING NICKEL-CONTAINING MATTE. ARTHUR SCOTT SHOFFSTALL, WILLIAM ALVIN MUDGE, AARON BYSAR BAGSAR, and CLARENCE GEORGE BIEBER, Huntington, W. Va., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 3, 1928. Serial No. 274,963. 11 Claims. (Cl. 75—66.)

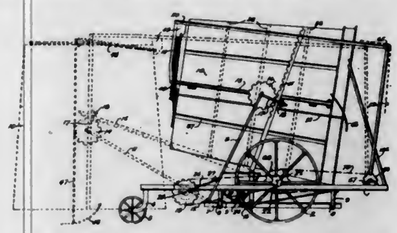
1. In the Bessemerizing of a nickel-containing matte or material, the step consisting of blowing with a desulphurizing gaseous blast of which superheated steam forms the major portion.

1,828,753. METHOD AND APPARATUS FOR OBTAINING AVERAGE SAMPLES AND TEMPERATURE OF TANK LIQUIDS. RICHARD B. SPIKES, San Francisco, Calif., assignor, by mesne assignments, to Roscoe E. Jordan, Alameda County, Calif. Filed July 31, 1929. Serial No. 382,511. 14 Claims. (Cl. 137—18.)



1. In apparatus of the character described, a receptacle, means arranged for lowering and raising the receptacle in a tank of liquid so as to get a sample of the liquid, means for gaging the speed of lowering in relation to the depth of liquid.

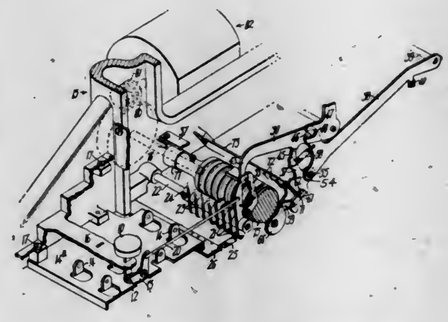
1,828,754. GRAIN STOOKING MACHINE. WILLIAM TORRANCE, Calgary, Alberta, Canada. Filed May 17, 1929. Serial No. 363,822. 14 Claims. (Cl. 56—422.)



1. In a stooker, a tiltable member forming the stook and depositing it and having a sheaf entrance and closure therefor and a sling member gathering the sheaves in its loop and drawing the closure to its shut position on the completion of the stook.

1,828,755. TYPEWRITING MACHINE. RICHARD VON REPPERT, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 10, 1928. Serial No. 318,407. 18 Claims. (Cl. 197—17.)

1. Power-mechanism for typewriters and the like, comprising a constantly rotating power-roller, a series of main levers to actuate the typing devices connected thereto, an actuating lever pivotally connected to each main lever, a spring tending to hold the actuating lever in normal position against a stop on the main lever, actuating means mounted on the actuating lever and adapted to be co-

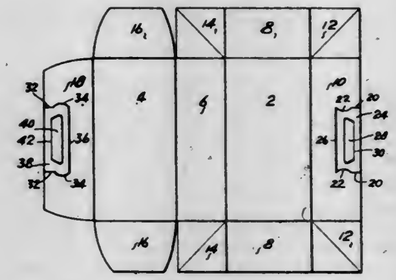


operatively connected with the power-roller to be actuated thereby, and keys adapted to be selectively operated to connect the selected one of the actuating levers with the power-roller to transfer movement to the main lever through the spring and thereby actuate the typing devices.

1,828,756. PROCESS FOR THE REFINING OF CHROMIUM ORES. PAUL WEISE, Wiesdorf-on-the-Rhine, and FRANZ SPECHT, Cologne-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 30, 1928, Serial No. 266,098, and in Germany Apr. 16, 1927. 6 Claims. (Cl. 75—17.)

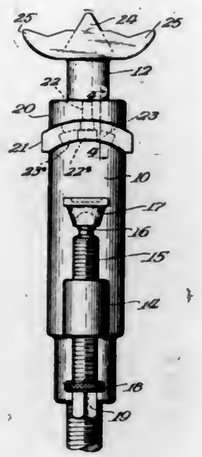
1. In a process for the concentration of chromium ores, the step which comprises treating an ore at temperatures above 100° C. with an alkali in the absence of oxygen.

1,828,757. BOX. HOWARD A. WOLF, Philadelphia, Pa., assignor to Benjamin Wolf, Louis Wolf, Albert Wolf, Howard A. Wolf, and Elias Wolf, Copartners trading as Wolf Brothers, Philadelphia, Pa. Filed May 2, 1929. Serial No. 359,809. 10 Claims. (Cl. 229—52.)



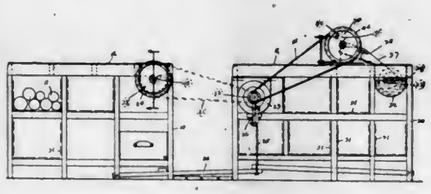
1. A box comprising a bottom portion and a cover portion arranged to overlap the bottom portion to close the box, each of said portions having a side, the sides being arranged to assume parallel relationship when the box is closed, the outer side having an opening extending inwardly from its free end and the inner side having a handle arranged to enter the opening when the box is closed, the opening being restricted outwardly of the handle to yieldingly maintain the handle in position in the opening to hold the box closed.

1,828,758. SPRING JACK. HERMAN W. ZIMMERMAN, Chicago, Ill., assignor to Automotive Maintenance Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed July 20, 1929. Serial No. 379,646. 17 Claims. (Cl. 29—87.1.)



1. In a device of the character described, a sleeve member adapted for direct attachment to the vehicle spring, and a jack-stem-unit screw-threadedly passing through said sleeve, said unit including at one end a head member having a plurality of engaging surfaces for engagement of said head with the frame of the vehicle or the shackle members.

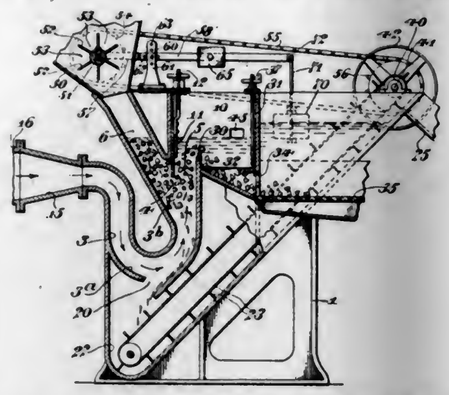
1,828,759. POSTER COPY CONDITIONING MACHINE. WILLIAM REX BELL, Terre Haute, Ind. Filed June 25, 1927. Serial No. 201,369. 1 Claim. (Cl. 91—46.)



In a poster copy conditioning machine the combination of a frame, a reticulated surface for sheet support, a tank, roll driving and supporting means therein, a roll support detachably associated with the driving and supporting means, a power means for rotating the driving and supporting means to roll the sheet while immersed in the tank.

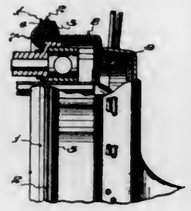
1,828,760. APPARATUS FOR WASHING COAL. FRANCIS H. BLATCH, Hazleton, Pa. Filed Dec. 6, 1927. Serial No. 238,013. 7 Claims. (Cl. 209—158.)

1. In apparatus for washing coal, the combination of a conduit having downwardly and upwardly extending portions, to the upper end of the former of which a washing medium is adapted to be supplied continuously and at substantially constant pressure, the said conduit having a port in the convex side thereof, and the upper portion of the upwardly extending portion of said conduit being enlarged from front to rear and being divided into two branches, means for supplying coal to be washed to one of said branches, the said coal in its descending movement meeting the upwardly flowing stream of water in the said enlarged portion and being carried thereby upwardly through the other of said branches into a compartment from which it is discharged, and means whereby the varia-



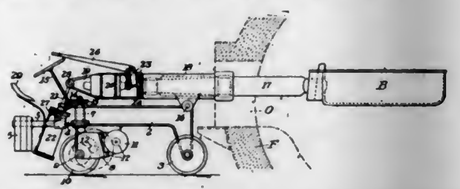
tion of the resistance offered by the coal which is being washed to the upwardly flowing stream of water operates to control the supply of coal to said branch.

1,828,761. BRAKE SHIELD. GEORGE H. BRAWNER, Dallas, Tex., assignor of one-third to William J. Bryan and one hundred and fifty-one three-hundredths to J. Earl Sellers, Dallas, Tex. Filed Nov. 25, 1929. Serial No. 409,532. 5 Claims. (Cl. 188—218.)



1. A brake shield for motor vehicles comprising a band having an annular flange thereon and a bead arranged around the outer periphery of said band.

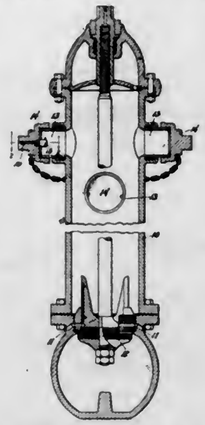
1,828,762. MATERIAL HANDLING APPARATUS. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed Apr. 3, 1925. Serial No. 20,378. 18 Claims. (Cl. 214—26.)



1. In a furnace charging machine, a supporting frame, a peel carried thereby, fluid pressure operating means for said peel, and means for cooling said peel by the action of said operating means, substantially as described.

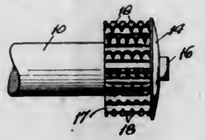
1,828,763. FIRE HYDRANT VENT VALVE. JAMES R. CARNES, Knoxville, Tenn., assignor of one-fourth to Cary F. Spence and one-fourth to Harry R. Burke, Knoxville, Tenn. Filed Mar. 13, 1928. Serial No. 261,376. 2 Claims. (Cl. 137—13.)

1. In combination with a fire hydrant having a control valve, a drain opening near the bottom of the hydrant above said valve, a plurality of outlets and a cap for each outlet; a vent valve in one of the caps, said cap having a vent opening therein, said vent valve comprising a body portion adopted to be screw-threaded in to the inner end of the vent opening in the cap and projecting inwardly



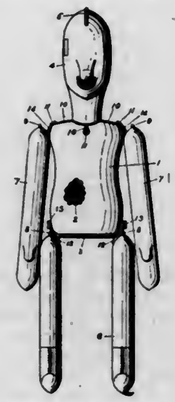
therefrom; said body portion having a longitudinal bore through its outer end and in communication with the vent opening in the cap and having a larger bore through its inner end; a valve seat formed between the two bores; and a valve in said larger bore adapted to co-act with said valve seat.

1,828,764. STITCH PICKING DEVICE. LOUIS CITRANO, Huntsville, Ala. Filed Apr. 8, 1930. Serial No. 442,619. 1 Claim. (Cl. 12—17.)



A stitch picker comprising a rotatable cylindrical member, and stitch picking teeth arranged in axial rows on the periphery of said cylindrical member, the teeth in adjacent rows being arranged in staggered relation relative to each other.

1,828,765. DOLL. RUTH A. CRIST, Fortville, Ind. Filed May 15, 1930. Serial No. 452,569. 3 Claims. (Cl. 46—40.)



1. A doll comprising a torso having a button on each shoulder, a head member having loops which engage the shoulder buttons, and arms having loops which also engage the same shoulder buttons; whereby the same buttons serve to disengagably secure the head portion and arms to the torso.

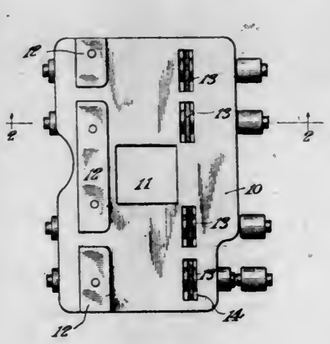
1,828,766. PRODUCTION OF STENCIL SHEETS FOR USE IN DUPLICATING. ARMAND DE WAELE, London, England, assignor to D. Gestetner, Limited, London, England. Filed Nov. 22, 1928, Serial No. 321,275, and in Great Britain Dec. 6, 1927. 11 Claims. (Cl. 41—38.6.)

1. A stencil sheet coating which includes a cellulose ester and a hydroxy fatty acid of the ricinoleic series in the free state as the tempering agent therefor.

1,828,767. PROCESS OF GLAZING REFRACTORY ARTICLES. GRANT S. DIAMOND, Hamburg, N. Y., assignor to Electro Refractories Corporation, Buffalo, N. Y. Filed Oct. 3, 1928. Serial No. 310,194. 10 Claims. (Cl. 91—70.)

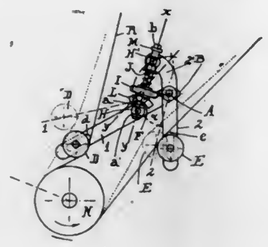
6. A process of impregnating porous articles with a glazing solution, including subjecting the articles while hot to a solution of the glazing composition at an elevated temperature but below the boiling point of the solution, said solution being saturated with said glazing material and containing glazing material in suspension when the artcle is subjected thereto.

1,828,768. FILM GUIDE. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1927. Serial No. 218,927. 1 Claim. (Cl. 88—17.)



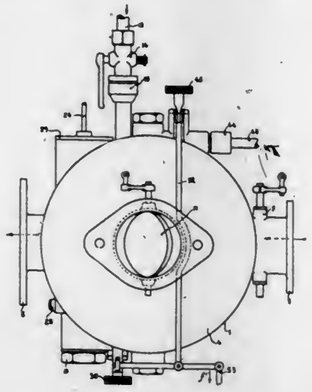
In combination with an aperture plate having an aperture therein, a film guide for said plate comprising an elongated stationary bar mounted adjacent said aperture and adapted to direct one edge of a film past said aperture and additional guiding bars mounted above and below said first mentioned bar and spaced therefrom to permit passage of extraneous material whereby said material is prevented from interfering with the alignment of the film as the film passes said aperture, the corners of said bars normally contacting with the edge of the film being rounded and a plurality of rotating guides mounted behind said plate and slidable axially and extending through openings in said plate in a position to engage the other edge of said film and resilient means for maintaining said rotating members in engagement with said edge, said guiding means engaging only the edges of said film as the film passes over said plate.

1,828,769. AUTOMATIC TENSIONING DEVICE FOR FLEXIBLE TRANSMISSION MEMBERS. MICHEL DUHAMEL, Roubaix, France. Filed May 13, 1927, Serial No. 191,101, and in France May 15, 1926. 2 Claims. (Cl. 64—5.)



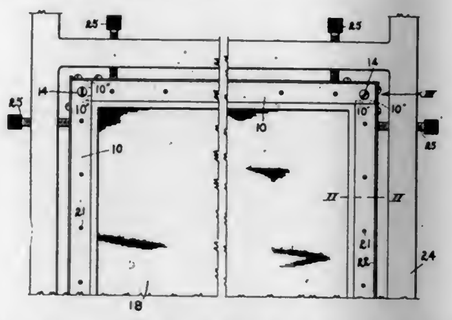
1. An automatic tensioning device for belts and other flexible transmission members which extend around spaced pulleys, said device including a fixed pivot disposed intermediate said pulleys and between the opposite portions of a belt extending thereabout, an arm carried by said pivot for movement about the same, a second arm carried by said pivot at an angle to the first named arm and having an extension thereon, rollers on said arms engageable with the outer surface of said belt, and a spring connecting said extension with an intermediate point of the first named arm and controlled by the variations in the load on said belt while the same is being driven to cause said arms to change their angular position relative to each other whereby to vary the amount of engagement of the belt with a driving element.

1,828,770. CARBURETOR FOR HEAVY FUELS IN INTERNAL COMBUSTION ENGINES. JOSEPH ESCAFFRE, Courbevoie, France. Filed Apr. 11, 1927, Serial No. 182,849, and in France Apr. 14, 1926. 5 Claims. (Cl. 261—18.)



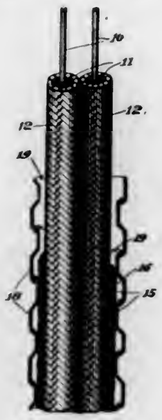
1. A carburetor for thick oils, comprising a body having inner and outer walls spaced apart and forming an oil heating chamber therebetween, the space bounded by the inner wall forming a heating chamber, means to supply oil to said oil heating chamber, a mixing tube extending through the heating chamber, a nozzle extending into said mixing tube and also through said oil heating chamber and a fuel duct leading from said oil heating chamber to said nozzle, so that the oil heated in said oil heating chamber is additionally heated as it passes from said oil heating chamber to said nozzle.

1,828,771. STENCIL PRINTING APPARATUS. JAMES FLOCKHART, San Francisco, Calif., assignor to The Flockhart Co., Inc., San Francisco, Calif., a Corporation of California. Filed Mar. 24, 1930. Serial No. 438,504. 8 Claims. Cl. 101—126.)



1. A stencil frame having grooves therein; flexible rods in said grooves and flexing means on said frame engaging said rods.

1,828,772. ELECTRIC CONDUCTOR. OTTO A. FREDERICKSON, Wethersfield, Conn., assignor to National Electric Products Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Sept. 19, 1928. Serial No. 306,976. 5 Claims. (Cl. 173—267.)

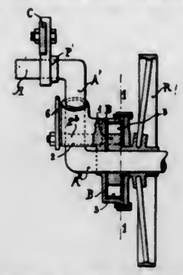


1. An armored electric conductor comprising in combination, an insulated conductor, a protecting covering wound about the insulated conductor and formed of a soft, crumpled, readily compressible strand of paper wound about the insulated conductor which has tapered edges that extend into overlapping relation with the adjacent coils, and an armored outer sheath formed of metal wound about the soft paper covering in engagement therewith so that the coils of the armor may sink into the soft paper covering sufficiently to prevent sliding movement of the conductor within the armored sheath.

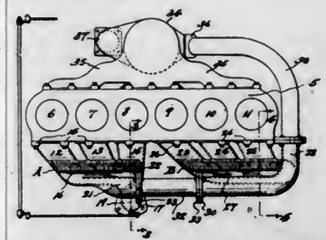
1,828,773. AGRICULTURAL MACHINE. ANDRÉ GARRIC, Layrac, France. Filed June 10, 1929, Serial No. 369,742, and in France June 13, 1928. 2 Claims. (Cl. 97—73.)

1. In a machine of the class described, a frame, a cranked axle having its intermediate portion mounted in bearings with which the frame is provided, supporting wheels mounted on spindles with which the arms of the cranked axle are provided, a toothed disc attached to and revoluble with each supporting axle, bearing members

on the arms of the cranked axle and keys revolubly mounted in said bearing members and engageable with or disengaged from the teeth of the discs according to the direction in which said keys are turned, and means for turning said keys.

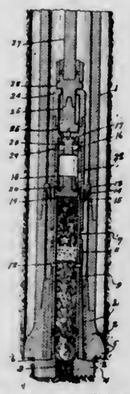


1,828,774. EXHAUST MANIFOLD FOR INTERNAL COMBUSTION ENGINES. ERNEST R. GODWARD, New York, N. Y. Filed June 6, 1929. Serial No. 368,745. 4 Claims. (Cl. 123—52.)



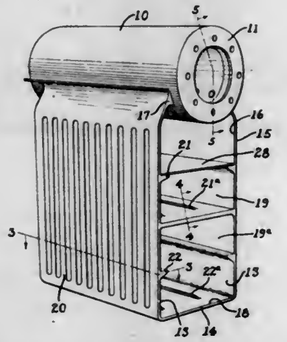
1. An exhaust manifold for internal combustion engines, comprising branches to connect respectively with the engine cylinder exhaust ports, a common discharge conduit communicating with the outer ends of said branches, said branches being pitched toward said discharge conduit at an angle and also laterally inclined in the directon of the outlet from said discharge conduit so that the passages of said branches and conduit merge with streamline effect, and said conduit having an internal capacity in excess of that of the several branches.

1,828,775. SAMPLE TAKING APPARATUS. GRANVILLE A. HUMASON, Houston, Tex., assignor of one-half to J. A. Logan, Harris County, Tex. Filed Feb. 16, 1929. Serial No. 340,491. 4 Claims. (Cl. 255—72.)



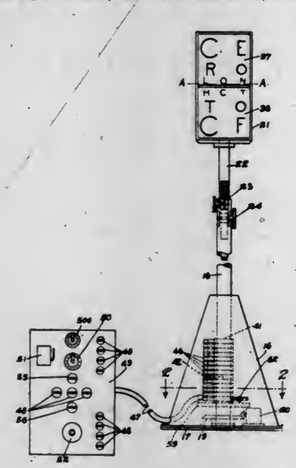
4. A coring apparatus comprising a drill stem, a barrel therein, means operative through the actuation of the barrel for serving a core in the barrel, interlocking means between the barrel and stem, and impact means through which the barrel may be actuated to effect the operation of said severing means, said actuating means including also a release sleeve for releasing said interlocking means and means for withdrawing the apparatus from a well bore.

1,828,776. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 31, 1927. Serial No. 229,910. 6 Claims. (Cl. 62—126.)



1. A fabricated sheet metal evaporator for refrigerating apparatus comprising a container forming a reservoir for liquid refrigerant and one or more hollow walls connected to the container for circulating the refrigerant, a hollow shelf interconnecting said walls for supporting an ice making receptacle within the enclosure formed by said walls and shelf, said shelf being in communication at its opposite ends with the hollow walls for circulating refrigerant in thermal contact with the receptacle, said container having an opening and being adapted to cooperate with a removable closure for closing said opening, and said evaporator being constructed of sheet metal of substantially uniform thickness to permit uniform heating of the entire evaporator to an enameling temperature.

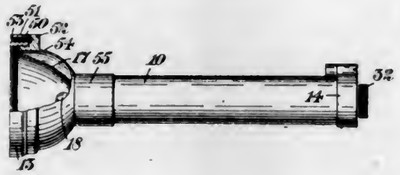
1,828,777. OPHTHALMIC TEST CHART APPARATUS. JULIUS H. LEVENTHAL, Cincinnati, Ohio. Filed July 21, 1927. Serial No. 207,443. 6 Claims. (Cl. 88—20.)



1. In an ophthalmic test unit comprising a cabinet, a base rotatably supporting the cabinet, independently il-

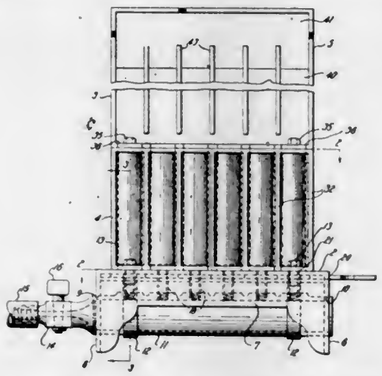
luminable translucent charts on the cabinet, means for automatically turning the cabinet whereby to face successive charts in a given direction, a source of illumination for the several charts and means for automatically connecting said source of illumination with the successive charts as they are moved to face in said given direction.

1,828,778. ELECTRIC TORCH. JOHN LISTER, London, England, assignor to The Ever Ready Company (Great Britain) Limited, London, England. Filed July 25, 1929, Serial No. 380,806, and in Great Britain Apr. 15, 1929. 3 Claims. (Cl. 240—10.6.)



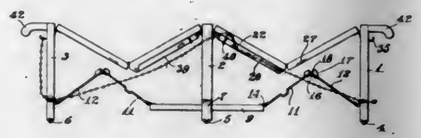
1. An electric torch comprising in combination a battery container which is completely closed in a gas-tight manner, a gas-tight removable end-cap giving access to the interior of the container, a lamp socket within the container near said end-cap, a reflector carried by said end-cap, a switch whereof a movable switch member is available from the outside of the torch but extends into the interior thereof in a gas-tight manner, locking means for preventing unauthorized removal of the end-cap, means for permitting endwise movement of the reflector along the torch for focussing the beam of light at will after the end-cap has been locked in position, and at least one stop for permitting only a limited endwise movement of the reflector along the torch and for preventing the parts from being separated until the container is opened, otherwise than by removal of end-cap.

1,828,779. BURNER. PASQUALE MARASCO, Newark, N. J. Filed Oct. 2, 1929. Serial No. 396,655. 6 Claims. (Cl. 158—106.)



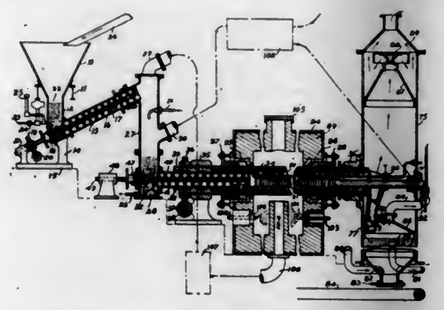
6. A burner for gaseous fuels comprising a base, a fuel supply pipe carried by said base and having a jet projecting through an aperture in said base, mixing blocks mounted on said base and having opposed mixing grooves aligned with said jet, a dividing plate separating said mixing blocks and overlying said jet, said base having inlet apertures therein for supplying air to said mixing grooves, an air supply regulating slide underlying said inlet apertures for controlling the rate of flow of air therethrough, and a chimney mounted upon said mixing blocks, said chimney having directing ribs formed thereon for elongating the path of combustion of the fuel burned in said burner.

1,828,780. COLLAPSIBLE CONVEYER. SAMUEL H. MCKNIGHT, Jersey City, N. J., assignor to Troy Laundry Machinery Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 15, 1927. Serial No. 233,467. 14 Claims. (Cl. 45—116.)



12. A collapsible conveyer comprising a pair of end supports, a table top member having each of its ends hinged to a corresponding one of said supports, said top member being also hinged intermediate its ends, a spacer frame member having one end hinged to one of said supports at points below said top, said frame member being also hinged intermediate its ends, and a locking element pivotally connected to one of said members and adapted positively to space said members apart.

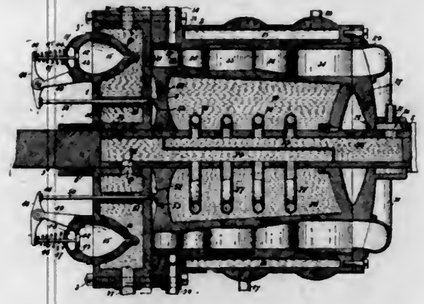
1,828,781. APPARATUS FOR DISTILLING SOLID CARBONACEOUS MATERIAL. RALPH LORING MERRILL, Brooklyn, N. Y., assignor, by mesne assignments, to Merrill Super-Power System, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1926. Serial No. 90,490. 10 Claims. (Cl. 202—117.)



1. In an apparatus for the distilling of volatiles from carbonaceous material, a substantially horizontal elongated retort rotatable upon its longitudinal axis, a casing extending into one end of the said retort, means within the casing for conveying material to be treated and delivering the same to the interior of the said retort, an electrical heater within the said retort, the said electrical heater comprising a hollow shell means for flowing a fluid hrough the hollow shell, an insulating covering for the hollow shell, electrical-resistance coils in the said insulating covering, a plurality of metallic bands set in the exterior portion of the said insulating cover, and means for conveying an electric current to the said coils.

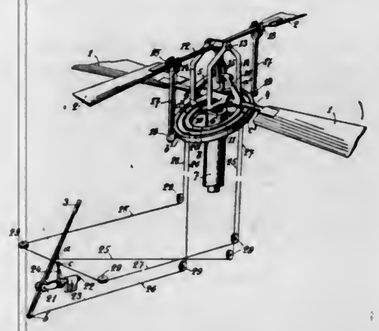
1,828,782. GAS TURBINE. BRAYTON MORTON, Fall River, and GEORGE P. WELCH, Cambridge, Mass. Filed May 18, 1925. Serial No. 31,049. 4 Claims. (Cl. 60—41.)

1. In a gas turbine, the combination comprising a chambered head, a chambered rotor arranged adjacent said head in substantial extension thereof, explosion chambers arranged inside the head with outlets therefrom effective for directing exploded charges to the rotor for rotating it, a chambered shaft driven by the rotor, said shaft extending into the rotor and into said head, a partition within the chamber of said shaft dividing the chamber thereof into separate compartments, one an inlet compartment and the other an outlet compartment, each in communication with the chambered interior of the rotor, a connection between the chambered interior of the head and the inlet compartment of said shaft, a radiator, a connection between the chamber of said head and the



outlet end of the radiator, and a connection between the outlet compartment of said shaft and the inlet end of the radiator.

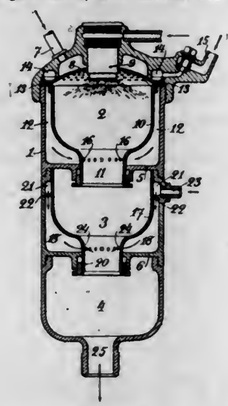
1,828,783. LIFTING DEVICE. ETIENNE OEHMICHEN, Valentigney, France. Filed Aug. 12, 1929, Serial No. 385,140, and in France June 18, 1926. 3 Claims. (Cl. 170—163.)



1. Lifting device comprising the combination of a system of lifting blades continuously rotating about a main axis of rotation and the incidence of which is variable, and means for controlling the incidence of the said blades, these means comprising levers controlling the incidence of the said lifting blades, an operating member universally jointed about a point of the said main rotary axis and serving to control the said levers, a steering lever adapted to be operated by the pilot and connecting members between the said lever and the said operating member, the incidence of each system of lifting blades being rendered maximum or minimum when the said blades pass through a plane at right angles to the reversing plane of the system of blades.

1,828,784. PRESSURE FLUID GENERATOR. RENÉ PERRIN, Toulon, France, assignor to The State of France, represented by the Minister of the National Navy, Paris, France. Filed Aug. 16, 1927, Serial No. 213,403, and in France, Nov. 28, 1923. 2 Claims. (Cl. 60—46.)

1. In a pressure fluid generator adapted to be supplied with a liquid fuel and a gaseous comburant, the combination of a receptacle with resisting wall and divided by means of partitions into three successive compartments, a hollow body with a thin wall in the two first compartments and adapted to provide between itself and the wall of the receptacle an annular space, the said hollow body being provided with an outlet nozzle which opens into the following compartment through the respective partition, and the said nozzle having in its wall orifices for causing the annular space to communicate with the interior of the said nozzle, means for injecting the whole of the comburant and part of the liquid fuel into the hollow body of the first compartment, and means for introducing the



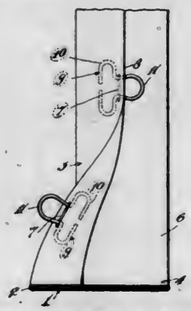
rest of the fuel into the annular space around the first hollow body, and for introducing a cooling liquid around the last hollow body, the said liquids being adapted to become heated in the said annular spaces and to cool the said hollow bodies.

1,828,785. CONTACT BUTTON FOR AUTOMOBILE HORNS. OSCAR H. RIDGEWAY, Sacramento, Calif. Filed Dec. 26, 1928. Serial No. 328,346. 2 Claims. (Cl. 33—222.)



1. As an article of manufacture, a combined horn switch button and compass housing comprising a hollow transparent body having a cylindrical portion that is provided with an outwardly disposed flange to slidably engage a switch mounting member mounted upon an automobile steering post in coaxial relation to said post; a platform angularly disposed within the transparent body, said platform being disposed at an angle relative to the cylindrical axis of the hollow body equal to the normal inclination of the steering post; and means to mount a compass needle upon the platform.

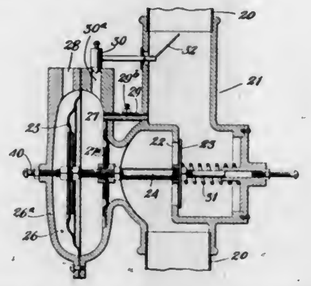
1,828,786. FASTENER TAPE. LEO ROSEMAN, Newark, N. J. Filed May 5, 1930. Serial No. 449,751. 10 Claims. (Cl. 2—265.)



1. Fastener tape comprising a single strip of fabric folded longitudinally to form two overlapping flaps, the

edge portion of one of said flaps being turned under to form two plies, said turned under portion having slits disposed between the fold formed by said turned under edge portion and the edge thereof to receive fastener elements, and fastener elements each having a base arranged between two of said plies and an engaging portion projecting through one of said slits and exposed.

1,828,787. PNEUMATIC DISPATCH TUBE SYSTEM. JOSEPH J. STOETZEL, Bellaire, N. Y., assignor to G. & G. Atlas Systems, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 17, 1925. Serial No. 62,965. 11 Claims. (Cl. 243—12.)

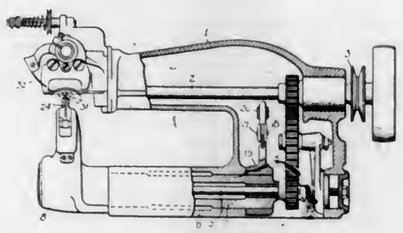


1. Pneumatic dispatch apparatus comprising a conduit and an exhauster connected therewith, a controlling valve located in the conduit, a minimum flow of air through the conduit being permitted when the valve is in closed position, a pneumatic exposed at one side to the pressure obtaining in the conduit and permanently exposed at the opposite side to atmospheric pressure, said pneumatic being adapted to open the air controlling valve when the pressure within the conduit is reduced due to the checking of said minimum flow by introducing a carrier into the conduit, and means responsive to increased flow of air through the conduit such as occurs when the carrier is discharged for equalizing the pressure upon opposite sides of the pneumatic to permit the valve to close.

1,828,788. EXPLOSIVE. BUREN I. STOOPS, Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 8, 1927. Serial No. 238,719. 7 Claims. (Cl. 52—5.)

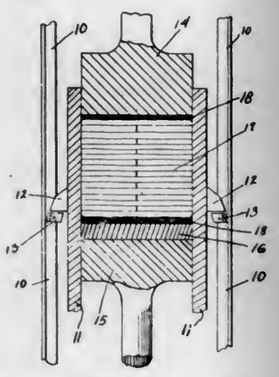
1. An explosive including as ingredients a liquid explosive substance admixed with carbonaceous material having wax impregnated therein.

1,828,789. BLINDSTITCH SEWING MACHINE. ALFONS STROBEL, Munich, Germany. Filed Aug. 20, 1928, Serial No. 300,835, and in Germany Nov. 21, 1927. 5 Claims. (Cl. 112—177.)



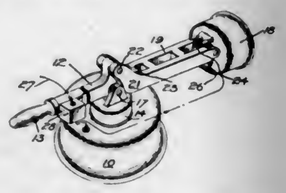
1. A blind stitch sewing machine, comprising in combination with a frame, an arm oscillatable on said frame, a pivot sleeve for said oscillatory arm, a finger extending from said pivot sleeve, a spring-controlled pressing element acting upon said finger, a lever upwardly extending from said pivot sleeve, a stop screw for limiting the backward oscillation of said lever, a pawl hingedly mounted on said lever, a spring controlling said pawl, and an abutment behind which said pawl hooks when said oscillatory arm is in its lowest position.

1,828,790. METHOD AND MEANS OF COMPRESSING TOBACCO. HENRY P. TAYLOR, Winston-Salem, N. C. Filed Sept. 8, 1927. Serial No. 218,257. 1 Claim. (Cl. 131—14.)



That method of pressing and packing manufactured tobacco which comprises impregnating two sheets of fibrous comminuted material with a solidified oil, then placing one of said sheets in the bottom of a press, then placing a mass of tobacco in the press, then placing the other of said sheets in the press on top of the mass of tobacco, then pressing the tobacco and pads together at one operation, then placing the pads and tobacco in a caddy having sidewalls only and confining the tobacco and pads in the caddy to cause the pads to serve as head and bottom members of the caddy.

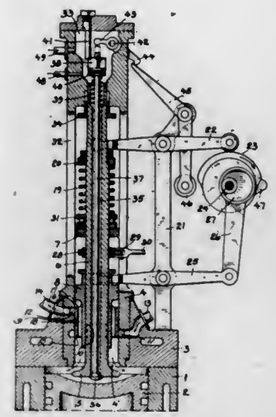
1,828,791. POSITIONING DEVICE. JOSEPH S. THOMPSON, San Francisco, Calif. Filed Mar. 2, 1927. Serial No. 171,974. 5 Claims. (Cl. 77—63.)



1. A device for positioning articles comprising an electromagnet adapted to be magnetically clamped against a fixed support, another electromagnet adapted to be clamped to an article to be positioned, and mechanism interconnecting said electromagnets for effecting relative movement between the other magnet and the fixed support.

1,828,792. VALVE FOR INTERNAL COMBUSTION ENGINES AND THE LIKE. HÅKON AKSEL PEDERSEN TVERBAKK, Kjerringoy in Salten, Norway. Filed Apr. 23, 1930, Serial No. 446,708, and in Norway Aug. 22, 1927. 2 Claims. (Cl. 123—79.)

1. In a valve arrangement for internal combustion engines, the combination of a cylinder cover, a sleeve arranged in said cover having inlet and exhaust passages, the lower end of said sleeve forming a seat for a poppet valve, vertical extensions connecting the sleeve with a top portion containing a fuel chamber, into which the stem of the poppet valve extends, a packing box for said stem, a reciprocating valve adapted to control the exhaust fitting



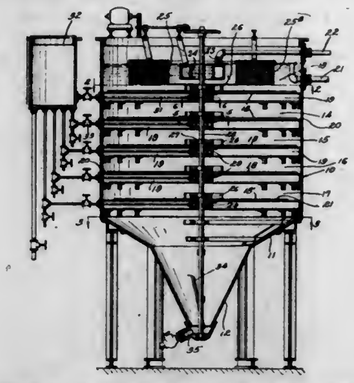
snugly in said sleeve, a fuel admission valve situated in a bore in the poppet valve and means for actuating all of said valves from a common cam shaft.

1,828,793. APPARATUS FOR FEEDING AND CUTTING MATERIAL. JOHN VAN BUREN, Brooklyn, N. Y. Filed Apr. 9, 1928, Serial No. 268,724. Renewed Sept. 1, 1931. 7 Claims. (Cl. 25—110.)

1. The combination, means for continuously feeding a body of material, guiding means for said material, an endless carrier comprising a plurality of spaced cutting elements, means to vary the spacing of said elements on said carrier means for guiding said elements successively into cutting relation to said body of material, said carrier and elements being fed by the material.

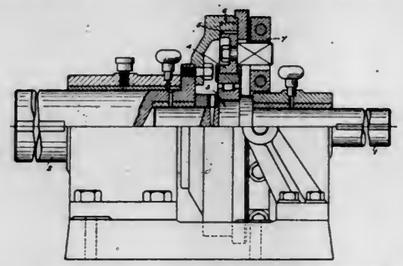
1,828,794. SETTLING TANK. HERBERT SAMUEL WALKER, Bacolod, Occidental Negros, P. I. Filed Nov. 5, 1927. Serial No. 231,166. 8 Claims. (Cl. 210—55.)

1. An apparatus for separating the finely divided solids from liquids in which they are suspended which comprises a container, a set of superposed flat horizontal partitions therein so formed as to provide circumscribing passage-ways for the downward flow of liquid between the partitions and the enclosing wall of the container only, means for delivering liquid to be separated onto the upper partition and adjacent to the center thereof whereby it may flow outwardly and over the edge of said partition to produce gravitational separation of the finely divided solids and the liquid as the solids successively flow through the passage-ways between the partitions and the wall of the tank, and means adjacent the center of the partitions and at the tops of the successive compartments formed thereby



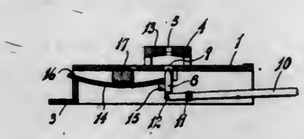
for drawing off the liquid from which the suspended solids have separated said means including a screened annulus to prevent rapid currents at the draw-off points.

1,828,795. FORM OF REDUCTION GEAR. GEORGE WILLIAM CUTLER WEBB, London, England, assignor of one-half to Stanley Carlton Smith, Bedfordshire, England. Filed Oct. 6, 1928, Serial No. 310,746, and in Great Britain Oct. 17, 1927. 3 Claims. (Cl. 74—35.)



1. A reduction gear comprising a driving member, a driven member, a high speed rotating eccentric integral with said driving member, a toothed strap mounted on and adapted to be rocked by said eccentric, a ring of teeth concentric with the axis of rotation of said eccentric adapted to be engaged by said toothed strap and to transmit the motion of said strap to the driven member at a reduced speed, the number of teeth on said strap being fewer than the number of teeth in said ring, the teeth of one of said gear members having the portion of their profiles receiving the main thrust substantially corresponding to a hypocycloidal curve generated by a point in the circumference of a rolling circle with a diameter substantially equal to the difference in the pitch circle diameter of said strap and said ring of teeth.

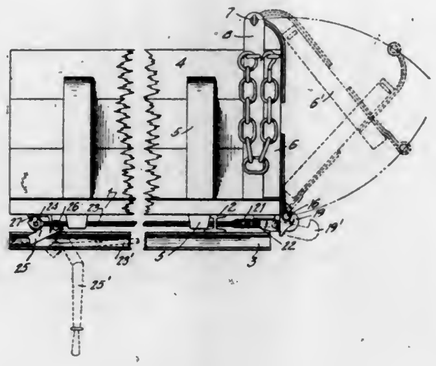
1,828,796. TILE BREAKER. WILLIAM AITCHISON, Compton, Calif. Filed Nov. 15, 1930. Serial No. 495,893. 5 Claims. (Cl. 125—23.)



3. A tile breaker comprising a top plate and depending sides, a tile holding plate spaced above the top plate, means adjustably mounting said tile holding plate, said

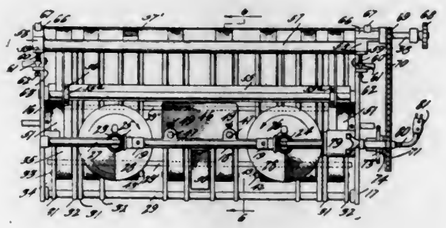
tile holding plate having a slot therein, said top plate having a slot therein below the first named slot, a breaker strip adapted to extend through the slot in the top plate, a handle attached to the breaker strip, means pivotally mounting the handle whereby said breaker strip is moved upwardly through the slot in the top plate and against the tile.

1,828,797. TAIL GATE LATCH. GEORGE F. BECKER, Albany, N. Y. Filed Apr. 19, 1928. Serial No. 271,288. 1 Claim. (Cl. 296—51.)



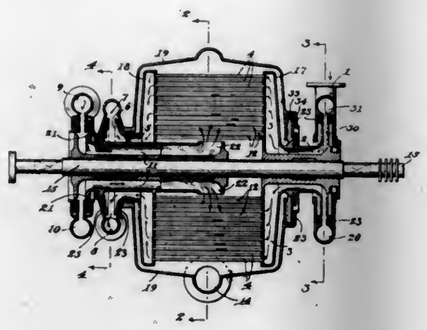
In a tail gate latch, comprising a hinge pin and a fixed element having a recess therein adapted to receive said pin, a hook element slidably mounted in a passage provided in said fixed element below the recess, and adapted to be moved toward and away from said recess; said hook element closely fitting said passage when in proximity to the recess but being tapered to drop downwardly as it is moved away therefrom.

1,828,798. FILM TREATING APPARATUS. GEORGE C. BEIDLER, Rochester, N. Y. Filed July 12, 1930. Serial No. 467,599. 11 Claims. (Cl. 95—94.)



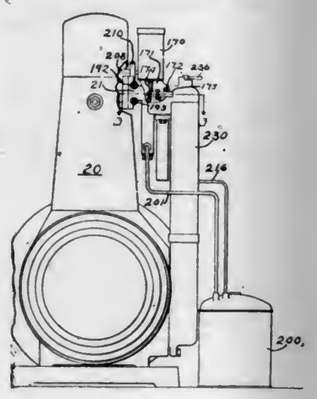
1. In a film treating apparatus, rotatively mounted vertically disposed spiral submergers operative to move film downwardly and release it, a radial rib at the bottom of each submerger, each of said submergers having an aperture in its lower end extending at the rib, wheels one of which is rotatively mounted in operative relation to a rib and aperture of one of said submergers for imparting movement to the film released by the submerger, and means for rotating the wheels.

1,828,799. HEAT EXCHANGER. CARL THOMAS CARLSON, Erie, Pa. Filed Mar. 16, 1931. Serial No. 523,017. 8 Claims. (Cl. 257—28.)



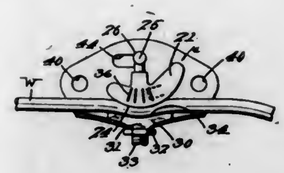
1. In a heat exchanger, the combination with a fixed casing having an inlet and an outlet for one fluid, of a revolvable container enclosed therein having an inlet and an outlet for another fluid, and adapted by its revolution to dislodge condensate therefrom by centrifugal force.

1,828,800. CARBURETOR FOR INTERNAL COMBUSTION ENGINES. JOSEPH C. FEDERLE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 23, 1922. Serial No. 590,002. 21 Claims. (123—180.)



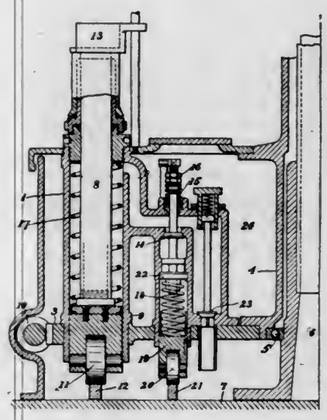
1. A charge forming device for an internal combustion engine comprising in combination a reservoir for containing fuel; a well for receiving fuel from said reservoir; a member having a Venturi passage adapted to be connected with an engine intake; a nozzle for conducting fuel from the well to the Venturi passage; means permitting fuel to gravitate from the reservoir to the well whereby to accumulate a height of fuel in said well desirable for an initially rich mixture; and suction controlled means rendered operative when said height of fuel has been materially reduced for withdrawing fuel from said reservoir in amounts such as to maintain a substantially constant fuel level in the well during engine running.

1,828,801. CABLE CLAMP. FRANK M. FINLAYSON, Worcester, Mass. Filed Aug. 6, 1930. Serial No. 473,457. 13 Claims. (Cl. 24—134.)



5. A cable clamp comprising a frame member having inwardly projecting spring pawls formed integral therewith, and a clamping member pivotally mounted in said frame member and having grooves in its side faces positioned for engagement by said pawls.

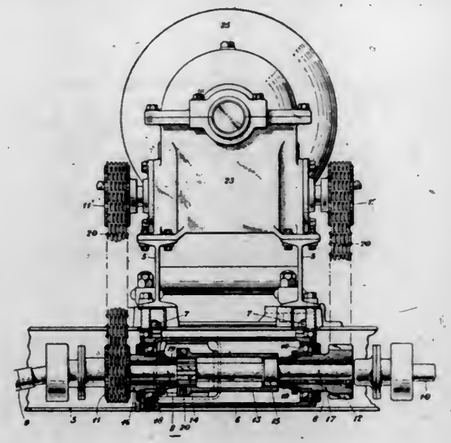
1,828,802. BOTTLE FILLING AND CROWNING MACHINE. JOHN WALTER FLOWER, Wimborne, England. Filed May 27, 1930, Serial No. 456,232, and in Great Britain Nov. 1, 1929. 6 Claims. (Cl. 226—84.)



1. In a bottling machine with a hydraulic cylinder formed with inlet and outlet ports and a ram reciprocating in the cylinder for lifting bottles to and from the head of the machine, the provision within the said cylinder of a piston of larger effective area than the ram, and cam mechanism for reciprocating the piston to produce pressure in the hydraulic fluid within the cylinder, said fluid when under such pressure forcing the ram longitudinally of the cylinder.

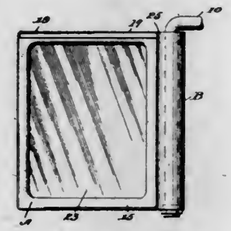
1,828,803. MULTIPLE DRIVE APPARATUS. ALBERT E. FREEMAN, East Orange, and WILLIAM T. LIVERMORE, Westfield, N. J., assignors to American Telephone and Telegraph Company, a Corporati n of New York. Filed Feb. 26, 1930. Serial No. 431,618. 1 Claim. (Cl. 74—21.)

A multiple drive apparatus comprising a casing, a driving shaft journaled therein, sprocket members on such shaft, hub members for the sprocket members having gear portions extending into said casing, a tubular sliding member mounted on said shaft between said hub members and having internal teeth, external machinery connected with each sprocket, and means for moving said tubular sliding member to cause its teeth to engage the teeth of



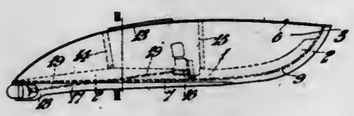
one of said hub members to operate the external machinery connected there to the exclusion of the external machinery connected with the other sprocket.

1,828,804. MIRROR BRACKET. RALPH D. HORTON, Gregory, S. Dak. Filed Dec. 10, 1930. Serial No. 501,425. 8 Claims. (Cl. 45—97.)



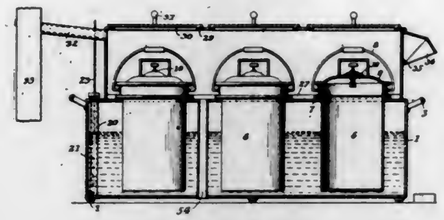
1. A combined mirror bracket and frame having a flexible rubber portion connecting the same, and means on said bracket to receive a support.

1,828,805. COLLAPSIBLE HULL FOR LIGHT BOATS, FLOATS FOR AIRCRAFT AND THE LIKE. RICHARD JOHN HARRINGTON HUDSON, London, England. Filed Aug. 8, 1930, Serial No. 473,945, and in Great Britain Aug. 22, 1929. 9 Claims. (Cl. 9—2.)



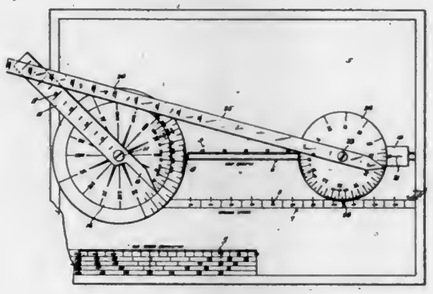
1. A collapsible hull or float comprising a keel, folding sides hingedly connected to said keel, a true stem rigidly connected to said keel, a yieldable stem to which said folding sides are hingedly connected and which is adapted to be moved towards and into solid engagement with said true stem, and a deck formed in two parts hinged to said folding sides.

1,828,806. SANITARY COOKING VESSEL. RUDOLPH KANIA, Bowers Hill, Va., assignor of fifty per cent to Antony Urayasz, Bowers Hill, Va. Filed Feb. 5, 1930. Serial No. 426,128. 2 Claims. (Cl. 53—1.)



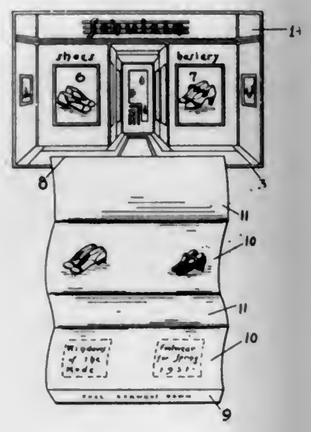
1. In a structure of the class described, a water receptacle, a partition arranged vertically therein dividing the receptacle into independent chambers, said partition being formed with an opening in the upper portion thereof, a water trough rockably supported in the opening, the ends of the trough extending into the respective chambers, a water supply pipe having its discharge end disposed above one end of the pivoted trough, and a float attached to the other end of the trough as and for the purpose described.

1,828,807. COMPASS COURSE AND GROUND SPEED INDICATOR. ROBERT E. KENNEDY, Los Angeles, Calif. Filed Jan. 29, 1930. Serial No. 424,326. 3 Claims. (Cl. 33—76.)



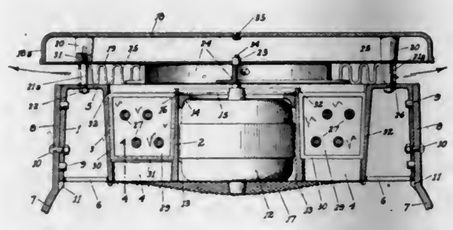
1. In an instrument of the class described, a relatively flat base plate, a map course scale extending inwardly from one end of said plate, a member movable over said plate longitudinally of said scale, a ground speed scale on said plate extending inwardly from said one end of the plate in spaced parallelism to said first mentioned scale, a pointer carried by said movable member adapted to be read against the graduations of said ground speed scale, a compass card rotatable about a fixed axis on said movable member, an arrow on said movable member adapted to be red against the graduations on said compass card, a second compass card rotatably mounted on said plate in spaced relation to the inner end of the first mentioned scale and capable of turning about a fixed axis passing through the longitudinal axis of the first mentioned scale, a ring concentrically of said second compass card having graduations thereon corresponding to a compass degree scale mounted for rotation around the last referred to compass card, a wind arm mounted for rotation about the axis of said second compass card, and an air speed arm mounted for rotation about the axis of the compass card on said movable member.

1,828,808. CHANGEABLE EXHIBITOR. CHARLES H. KIMBLE, Jr., Spokane, Wash., assignor to C. W. Hill Printing Company, Spokane, Wash. Filed Dec. 15, 1930. Serial No. 502,457. 3 Claims. (Cl. 40—102.)



1. The combination with a two-piece envelope having a closure and fastening means therefor and provided with a window and a slot in its front wall, of a strip of flexible material folded in a series of leaves one of which is anchored to the back wall of the envelope, a pull-tab on the strip passed through said slot, and said strip adapted to be pulled through said slot for successively displaying leaves back of the window.

1,828,809. ELECTRIC HEATER. HUGH G. LANDIS, Los Angeles, Calif. Filed July 19, 1929. Serial No. 379,433. 8 Claims. (Cl. 219—39.)

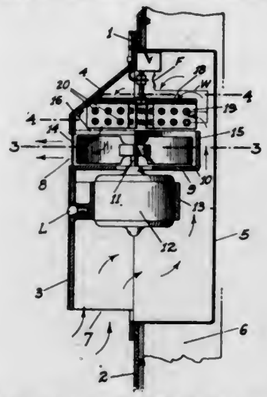


1. An electric heater including a body having a pair of circular walls concentric with and spaced from each other, legs supporting the body from the floor in clearance relation thereto, an electric motor mounted in the inner wall area, electric heating elements mounted in the space between said walls, said space being freely open to the atmosphere both at top and bottom of the body, and a centrifugal fan mounted on the motor shaft above the body and overhanging the space between said walls.

1,828,810. ELECTRIC WALL HEATER. HUGH G. LANDIS, Los Angeles, Calif. Filed Nov. 2, 1929. Serial No. 404,303. 11 Claims. (Cl. 219—39.)

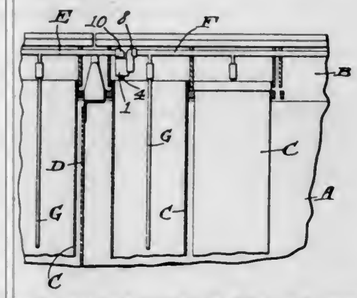
1. An electric wall heater including a front panel adapted to abut against and be secured to a wall, means forming with said panel an air chamber behind the same, the panel having an air discharge opening disposed in a vertical

plane, and an air intake opening below the discharge opening, means in the chamber for positively circulating



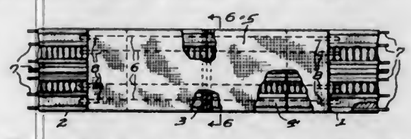
air from the intake to the discharge opening, and a heating element in said chamber to which the air is subjected during its passage through the chamber.

1,828,811. COUPLER FOR ICE MANUFACTURING APPARATUS. GEORGE LANGE, New York, N. Y., assignor to Knickerbocker Stamping Company, Parkersburg, W. Va. Filed July 12, 1930. Serial No. 467,559. 3 Claims. (Cl. 62—159.)



1. In an ice manufacturing machine, the combination with coaxial alining headers detachably mounted for rotation, and drop tubes carried thereby for suspension in the cores of ice blocks, of a casing opening into and supported by one header and extending radially therefrom, said casing having a tapered bore the axis of which intersects the axis of the headers, a valve in the casing normally closing communication between the bore and the header on which the casing is mounted, and a tubular stem opening into and supported by the other header, said stem extending radially from its head and adapted to seat in the bore and hold the valve unseated, there being a port in the stem for opening into the casing adjacent to the unseated valve, the header being shiftable bodily out of coaxial relation to the other header and in the direction of the length of its depending tubes to withdraw the stem from the bore.

1,828,812. SPLICE FOR ELASTIC WEBBING. BENJAMIN LASKIN, Philadelphia, Pa. Filed Dec. 20, 1930. Serial No. 503,696. 8 Claims. (Cl. 2—243.)



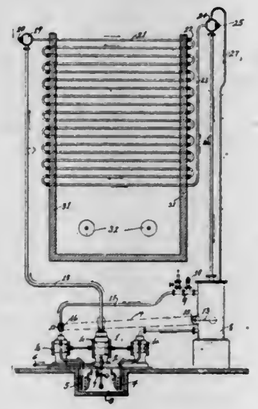
1. The combination with two ends of elastic webbing to be secured together with their elastic threads substantially matching, of an inelastic backing strip bridging the joint between such ends, and stitching arranged parallel to and between adjacent elastic threads of webbing and extending through the backing strip and said webbing ends, on opposite sides of the joint.

1,828,813. AIR EXTRACTOR AND TUBE REPAIRING TOOL. PAUL H. LEHMANN, Dallas, Tex. Filed July 28, 1930. Serial No. 471,178. 1 Claim. (Cl. 152—27.)



As a new article of manufacture, a tube repairing device including a flat body having a series of perforations therein to provide an abrading surface, the side edges of said body being turned abruptly upward, a handle for said body being formed from the material of which said body is composed and extending at an angle from said body, said handle being shaped into tubular form by turning the sides of the material inwardly whereby the handle will be gradually reduced in diameter and terminate in a point.

1,828,814. SINGLE CIRCUIT WATER TUBE BOILER. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 3, 1927. Serial No. 158,468. 16 Claims. (Cl. 122—356.)

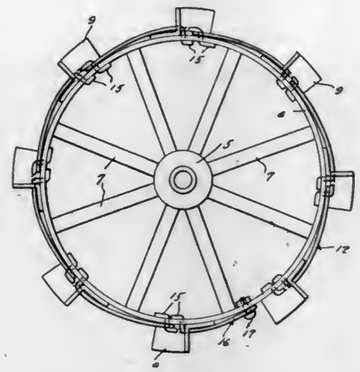


1. The process of steam generation which comprises forcing water in excess through a heated zone, withdrawing steam and unevaporated water from said zone, separating said steam and water and utilizing said separated water in the forcing of water through said zone.

1,828,815. LUG FASTENING MEANS. FRANK H. OLTHOFF, Pearl City, Ill. Filed Dec. 17, 1930. Serial No. 503,077. 1 Claim. (Cl. 301—44.)

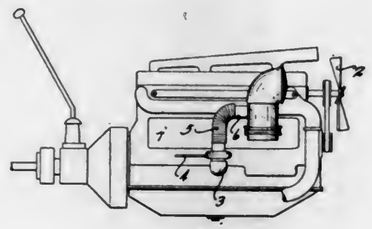
In combination with a wheel having a plurality of pairs of holes in its rim, a plurality of lugs having holes therein, a plurality of links each of V-shape with the limbs passing through the holes in the lugs and the extremities of the limbs being of substantially right angled shape to

pass through the holes in the rim to engage the inner circumference of the rim, means for detachably connecting



the bight of one link with the rim, and the bight portions of the other links each receiving a bent extremity of one limb of the preceding link.

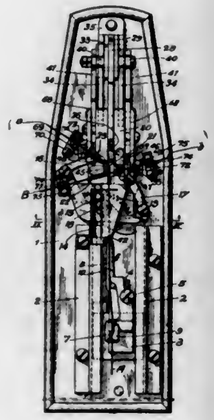
1,828,816. AIR FILTER. CHARLES U. PIERSON, Moscow, Idaho, assignor of one-half to Luther Johnson, Spokane, Wash. Filed Aug. 16, 1930. Serial No. 475,732. 3 Claims. (Cl. 183—10.)



1. In an air filter, the combination with a casing having a central funnel therein and an inlet hood for the funnel, of a bottom cup for the casing having a central conical deflecting wall below the smaller end of the funnel, a stop screen and a filtering material in the space between the casing and funnel and a bottom screen for the material, an inverted cup surrounding the lower end of the funnel, means for securing the inverted cup to the funnel for compressing the filtering material, and an air outlet pipe from the casing above the filtering material.

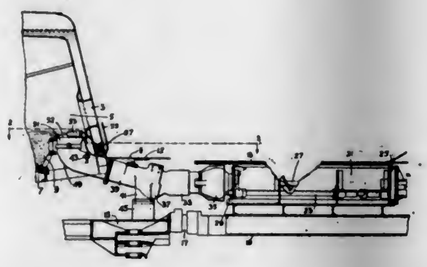
1,828,817. THREAD KNOTTING DEVICE. ALBERT RAMSEIER, Zurich, Switzerland, assignor to Albert Quendoz, Zurich, Switzerland. Filed May 28, 1930, Serial No. 456,431, and in Switzerland June 20, 1929. 7 Claims. (Cl. 289—3.)

2. In a device for tying threads in a weaver's knot, in combination, a bed for accommodating the threads in intercrossed position, a clamping appliance for the one thread displaceable relatively to said bed for forming a loop with said thread about the other, thread cutting means combined with said bed and adapted to cut the ends of the crossed threads in the requisite length for the finished knot to be formed, means for holding the crossed threads against said bed at their place of junction while said loop is formed, means for bending the cut thread ends into the form of a hooklet, a base for said bed, a hammer-shaped clamping head for each hook-shaped thread end, a shank provided on each clamping head and extending through a throughbore in said bed beyond the underside of said base, two compression springs of differ-



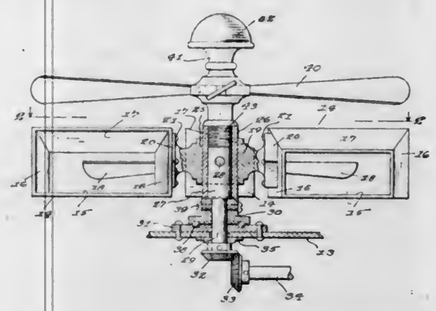
ent strength, one for each shank to surround the same between the underside of said base and the lower end of the shank for urging said clamping heads against said bed into locking position with different pressure adapting said heads to release the thread ends successively and releasing means for said clamping heads.

1,828,818. STOKER. FRANK P. ROESCH, Chicago, Ill., and ANDREW M. HUNT, New York, N. Y., assignors to Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Apr. 15, 1924. Serial No. 706,651. 11 Claims. (Cl. 110—101.)



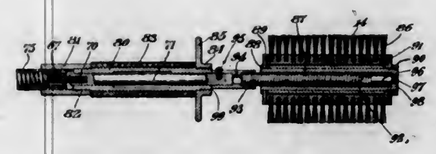
1. In combination, a furnace comprising a fire box having an upstanding wall formed with a space above the level of the lowermost portion of the said wall for passing a fuel carrying conduit, an upwardly inclined fuel conveyor tube passing through said space into said fire box and having at its end a relatively short delivery portion curved to turn the fuel upward to the point of delivery, means within the inclined conveyor tube terminating adjacent the curved base of said delivery portion for advancing and raising the fuel to said delivery portion and forcing it up therethrough to said point of delivery, and means at the upper end of said delivery portion for distributing the fuel over the fire.

1,828,819. FLYING MACHINE. SANDOR ROSENBERG, New York, and JACOB HOCHMAN, Brooklyn, N. Y. Filed Feb. 25, 1930. Serial No. 431,247. 8 Claims. (Cl. 244—19.)



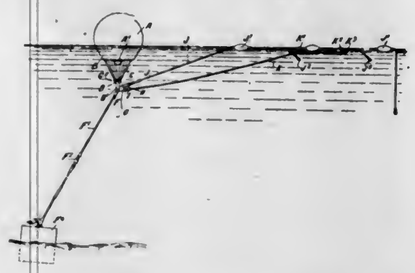
5. A device of the character described comprising a rotatable support, a box-like compressor borne by said support, said compressor having a forward edge of greater width than the retreating edge and an angularly disposed blade positioned behind said retreating edge.

1,828,820. SHOE SHINING INSTALLATION AND THE ELEMENTS THEREOF. HERMAN E. SCHULSE, New York, N. Y., assignor to H. E. Schulse Inc., a Corporation of New York. Filed Jan. 17, 1927. Serial No. 161,497. 11 Claims. (Cl. 15—23.)



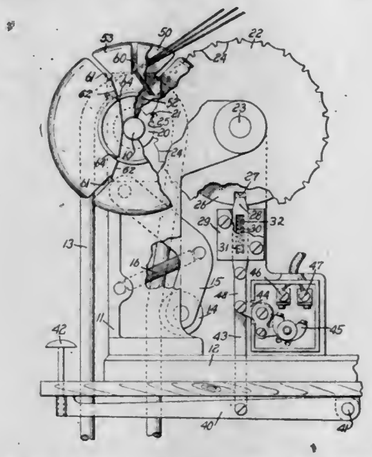
1. A power driven brush, having a drive shaft including a laterally yielding resilient torque transmitting member at the outer end of said drive shaft, a brush having a hub encircling said resilient member, extending substantially the length thereof and affixed to the outer or free end thereof, and a handle adjacent said brush through which said drive shaft extends.

1,828,821. MOORING BUOY. ALBERT EUSTACE SHORT and HUGH OSWALD SHORT, Rochester, England. Filed Feb. 12, 1931, Serial No. 515,331, and in Great Britain Nov. 11, 1930. 13 Claims. (Cl. 114—230.)



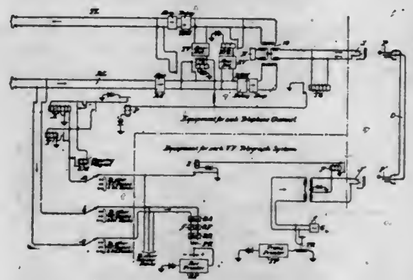
1. A mooring buoy, comprising a hollow, air-tight and flexible body constructed of light-weight, pliable material, said body having a prolongation; and a stopper on said prolongation forming an attachment for a mooring cable.

1,828,822. COIL WINDING MACHINE. AURILE T. SMITH, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 5, 1929. Serial No. 397,579. 7 Claims. (Cl. 140—92.2.)



1. A coil winding machine having a rotatable spool upon which a coil may be wound, locking means normally preventing rotation of said spool, means for rotating the spool, and controlling means acting when manipulated to unlock the locking means and set said rotating means into operation, said locking means acting automatically to stop and lock said spool after a given number of turns of wire have been wound thereon.

1,828,823. COMBINED TELEPHONE AND TELEGRAPH SYSTEM. EDMUND R. TAYLOR, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 18, 1930. Serial No. 436,796. 7 Claims. (Cl. 179—4.)

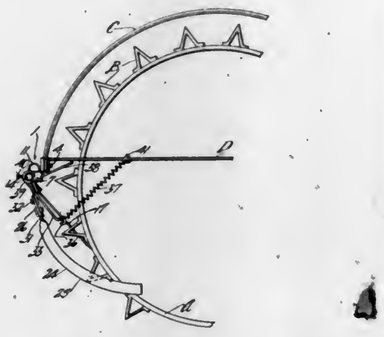


1. In a transmission system, a four-wire telephone circuit comprising a transmitting line and a receiving line connected to a two-wire terminal, a telegraph apparatus comprising a telegraph transmitter and a telegraph receiver, means to connect the telegraph transmitter to the two-wire terminal of the telephone circuit at the will of the operator, and means automatically responding to such connection to connect the telegraph receiver to the receiving side of the four-wire circuit.

1,828,824. SCRAPER FOR TRACTOR WHEELS. KARL VON BRETHORST, Loda, Ill. Filed Apr. 3, 1930. Serial No. 441,233. 1 Claim. (Cl. 280—158.)

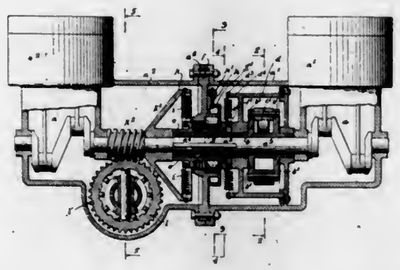
In combination with a tractor wheel, fender and frame, a device of the kind described, comprising a bracket secured to the fender, hangers extended rearwardly from the

lower margin of the bracket, U-shaped open loops at the ends of the brackets, arms extended from the lower margin of the bracket to the lower bight of the loops, a shaft seated in the loops, clamping plates adapted to overlie the said loops and retain the shaft therein, bolts passed rigidly through the rear ends of the clamping plates and formed into finger loops at their upper ends, the lower portions of the said bolts being passed loosely downward through the hangers and arms, nuts on the lower ends of the bolts, expansion coil springs braced between the said nuts and the arms, a wheel center scraping blade



mounted on the shaft, an arcuate wheel edge scraping blade operatably mounted on the shaft in alignment with the edge of the tractor wheel, a spring arm secured on the shaft, a coil spring stretched between the said spring arm and the tractor frame, and adapted to normally rotate the shaft to bring the wheel center and edge scraping blades into operative position relative to the tractor wheel, and a stop arm adjustably secured to the shaft and adapted to engage the tractor frame whereby to limit the said rotation of the shaft under the influence of the said spring and hold the wheel center scraping blade out of actual contact with the tractor wheel.

1,828,825. TRANSMISSION DEVICE. CARL W. WEISS, Brooklyn, N. Y. Filed Mar. 27, 1930. Serial No. 439,296. 8 Claims. (Cl. 74—14.)

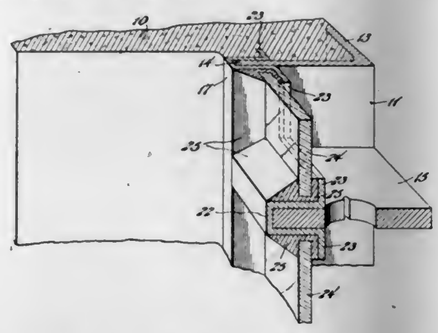


1. A power transmission device comprising a rotatable driving member, a centrifugal body revolving with the driving member, a concentric elliptical contact member with which the centrifugal body coacts, an intermediate member, connections between the contact member and the intermediate member, a driven member, connections between the intermediate member and the driven member, and means to prevent rotation of the intermediate member in one direction while permitting rotation in the opposite direction.

1,828,826. PROCESS FOR THE PRODUCTION OF SOAP THREADS. ADOLF WELTER, Krefeld-Rheinhafen, Germany. Filed June 4, 1928, Serial No. 282,889, and in Germany June 10, 1927. 6 Claims. (Cl. 87—16.)

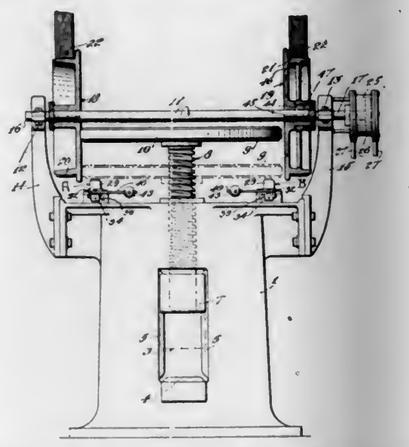
1. A process for the production of soap in the form of very fine threads, which will be rapidly soluble in cold water consisting in adding to soap mass so much of an alkali salt that no softening or salting-out occurs, and then converting the solid mass into threads having a diameter less than 1.5 mm. by extrusion.

1,828,827. WINDOW FOR JAILS AND THE LIKE. LLOYD J. WHITE, San Antonio, Tex., assignor to Southern Prison Company, San Antonio, Tex., a Corporation of Texas. Filed May 15, 1930. Serial No. 452,695. 9 Claims. (Cl. 189—64.)



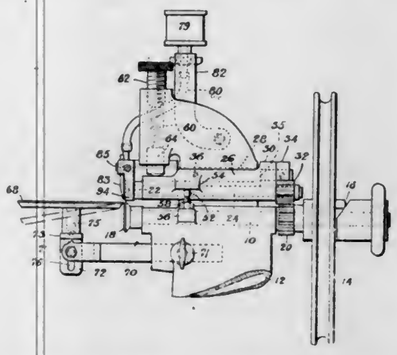
1. A combined guard and window for jails and the like, comprising, in combination, a rectangular metal frame; a plurality of spaced flat metal bars extending across the frame and secured to its sides; a plurality of spaced vertical bars extending between the top and bottom of the frame and through the flat bars; rabbeted metal channels secured to the sides, top and bottom of the frame and to the flat bars; and lights secured in the rabbets of the channels.

1,828,828. EMERGENCY STOP FOR FRICTION SCREW PRESSES. EDMUND W. ZEH, Newark, N. J. Filed Oct. 21, 1930. Serial No. 490,182. 3 Claims. (Cl. 188—110.)



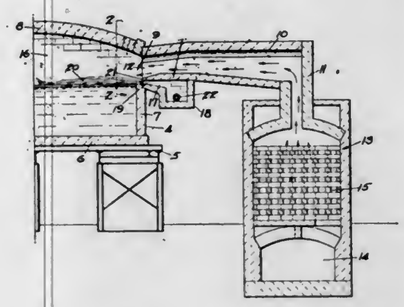
1. In a press, a frame, a screw mounted in said frame, a friction wheel on said screw, drive discs to engage the edge of said friction wheel, and an emergency stop for said friction wheel comprising a brake head movably mounted on said frame in the path of movement of said friction wheel so as to be engaged thereby when said friction wheel passes beyond the limit of its normal stroke, and fluid means connected to said brake head to yieldingly resist movement of said brake head when the latter is engaged by said friction wheel so as to stop movement of said friction wheel.

1,828,829. TRIMMING MACHINE. JOHN HENRY BROWN, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 4, 1928, Serial No. 323,762, and in Great Britain Dec. 10, 1927. 5 Claims. (Cl. 164—63.)



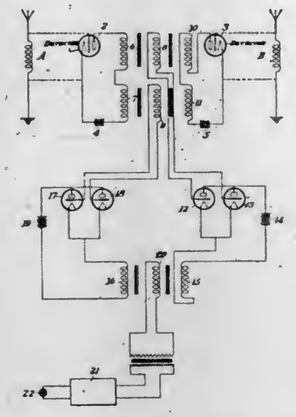
1. A trimming machine comprising two rotary circular disk cutters each having a narrow circumferential surface and a front face at a non-acute angle thereto and forming therewith a sharp circular edge at their line of intersection, means arranged to maintain said cutters nearly but not quite in contact with each other with said edges in a common plane and with said circumferential surfaces in registering relation, and means for rotating one of said cutters.

1,828,830. GLASS MELTING FURNACE. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to The Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 17, 1925. Serial No. 56,829. 11 Claims. (Cl. 158—7.5.)



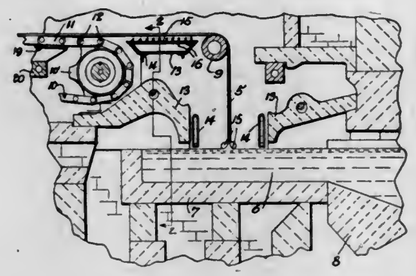
11. A glass melting furnace, including a melting tank having a plurality of air intake ports, a plurality of regenerators, one communicating with each of said ports by means of a substantially horizontal passage for supplying air thereto, and a plurality of relatively small gas boxes, one being provided beneath each of said passages inwardly of its respective regenerator and closely adjacent the furnace, said boxes communicating with the furnace in proximity to said ports for supplying gas thereto.

1,828,831. METHOD AND APPARATUS FOR BROADCASTING AND RECEIVING RADIO SIGNALS. HENRY C. DE VORE, Monongahela, Pa., assignor to Henry B. De Vore, Wilmington, Del. Filed Aug. 24, 1926. Serial No. 131,182. 7 Claims. (Cl. 250—10.)



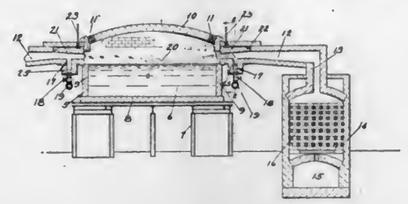
2. A system for receiving and translating radio signals which are simultaneously broadcast on a plurality of different wave lengths while neutralizing any signals not common to all of the wave lengths being received including means for rectifying received signal impulses on separate wave lengths, a circuit responsive to all impulses which are rectified, a circuit responsive only to signals which are not common to all of the wave lengths being received, said circuits being oppositely coupled to a translating circuit whereby signal impulses in the second circuit are neutralized by the corresponding impulses in the first circuit.

1,828,832. SHEET GLASS APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 27, 1926. Serial No. 144,429. 4 Claims. (Cl. 49—17.)



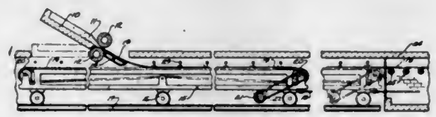
4. In combination in sheet glass apparatus, a horizontal traveling endless conveyor of link construction, for drawing a sheet vertically from a mass of molten glass, sprocket means about which the conveyor is trained at the opposite ends of its loop, a bending member for deflecting the sheet from the vertical into the horizontal plane, said bending member being positioned slightly above the level of the adjacent end of the upper horizontal sheet supporting run of said conveyor and means positioned beneath the sheet between the conveyor and bending member and adjacent the former for creating an air cushion beneath the sheet to support the same and to cause it to contact initially with said conveyor inwardly of the buckling-up point of the links as the said links pass about the sprocket means into the horizontal plane.

1,828,833. GLASS MELTING FURNACE. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 6, 1926. Serial No. 152,759. 2 Claims. (Cl. 49—54.)



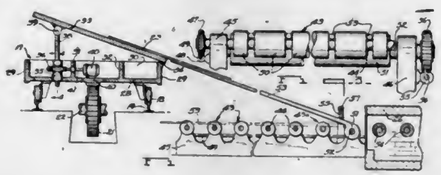
1. In a glass melting furnace, an elongated melting tank of greater length than width and being provided with oppositely disposed longitudinally extending ports in the side walls thereof, cooperative regenerators at the sides of the tank having substantially horizontal air passages communicating with the respective ports and being of a width substantially equal to the length thereof, a gas box positioned beneath each horizontal air passage and being in communication therewith the entire width of said horizontal passage, each gas box being provided with a plurality of spaced openings in its bottom wall, a gas pipe positioned beneath the gas box and extending longitudinally thereof and having a plurality of outlets in communication with the respective openings, and separate means for independently controlling the supply of gas to each opening.

1,828,834. PROCESS OF PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 27, 1928. Serial No. 295,630. 10 Claims. (Cl. 49—87.)



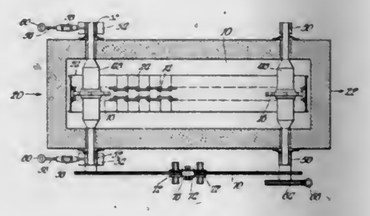
10. The process of producing sheet glass, consisting in forming the sheet at a relatively high rate of speed, laying the sheet as it is formed upon a conveying means, carrying said conveying means bodily forwardly at a speed substantially equal to the speed of formation of the sheet to receive the same thereupon, in stopping the forward bodily movement of said conveying means, and in then driving said conveying means independently of its forward bodily movement to deliver the sheet therefrom into an annealing chamber at a speed relatively less than its speed of formation.

1,828,835. METHOD AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE and WILLIAM E. NORDE, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 20, 1928. Serial No. 327,235. 15 Claims. (Cl. 49—3.)



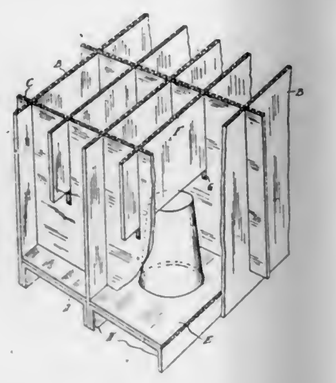
15. In combination in apparatus for the manufacture of sheet glass, means for forming the sheet, a glass supporting table having a tiltable top adapted to receive the sheet thereupon from the forming means while disposed in a substantially horizontal position, an annealing leer, means interposed between said table and leer for receiving the sheet from the former and delivering it into the latter including a series of rotatable members, each member including a plurality of transversely spaced roll sections, a plurality of spaced supporting bars pivotally mounted and adapted to be tilted upwardly to receive the sheet from the table when the top of said table is also inclined and adapted to be lowered to deposit the sheet upon said members, and means for rotating said members to advance the sheet into the leer, said bars when lowered being received within the spaces between the roll sections.

1,828,836. METALLURGICAL FURNACE. FRANK A. FAHRENWALD, Chicago, Ill. Filed June 17, 1929. Serial No. 371,613. 20 Claims. (Cl. 263—8.)



13. High temperature equipment comprising a hot chamber; a movable endless conveyor inside said chamber; and a power transmission for delivering power to said conveyor at a plurality of spaced points; said power transmission including spaced sprockets outside said chamber; a chain connecting said sprockets, and yielding take-up means in the tension or load transmitting reach of said chain.

1,828,837. CARTON. THOMAS H. GAGEN, Sandusky, Ohio, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio, a Corporation of Ohio. Filed June 24, 1929. Serial No. 373,410. 5 Claims. (Cl. 206—65.)



1. In a carton, the combination with an outer receptacle and an inner structure formed of longitudinal and cross partitions forming a series of separate cells, of a strip extending beneath a series of cells recessed to receive the articles in the individual cells, and a strip engaging registering slots in the partitions between cells, of a width

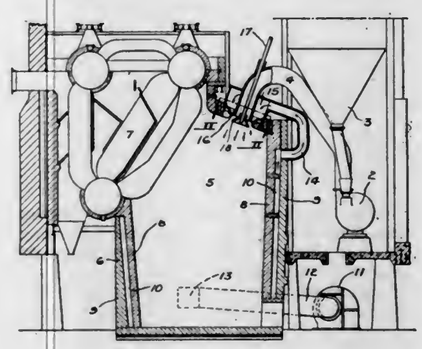
corresponding to the dimension between the top of the outer receptacle and the tops of the articles within the cells to hold said articles in engagement with said recesses.

1,828,838. APPARATUS FOR TESTING OIL SANDS. JOHN C. HAMPTON, Ardmore, and EMMETT D. SHELL, Healdton, Okla. Filed Apr. 26, 1929. Serial No. 358,331. 6 Claims. (Cl. 166—1.)



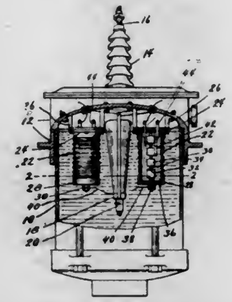
1. A testing apparatus of the character described, comprising a body portion to enter the well, an expansible sealing element carried by the body portion, a fluid receiving chamber arranged beneath the sealing element and connected with the body portion, a covering tube connected with the chamber and having packing means, and a longitudinally adjustable testing tube extending through the body portion and into the covering tube and having its lower end closed and provided in its side with an opening, said opening being arranged to be moved into said chamber when the testing tube is raised.

1,828,839. FURNACE AND METHOD OF OPERATING THE SAME. CLARENCE E. HAWKE, Metuchen, N. J., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Continuation of application filed May 2, 1923. Serial No. 636,146. This application filed Jan. 5, 1928. Serial No. 244,734, and in Canada June 15, 1926. 10 Claims. (Cl. 110—1.)



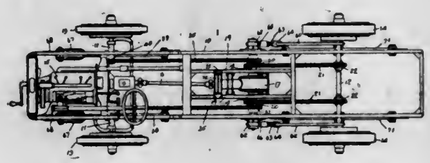
1. In a furnace, a refractory wall subject to slag erosion formed of a silicon carbide refractory, said wall having a closed air circulating passage back of the exposed face thereof, and means providing a forced flow of air through said passage by means of which the rate of air circulation may be varied to vary the cooling of the wall and protect it from slag erosion.

1,828,840. ELECTRIC SWITCH AND CONDENSER. GUSTAV E. JANSSON, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 21, 1928. Serial No. 279,406. 5 Claims. (Cl. 200—150.)



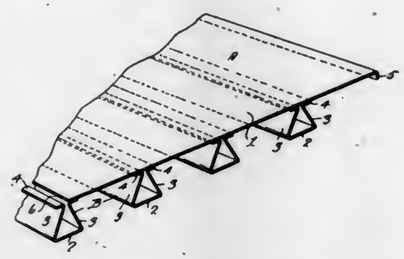
1. A high tension electric switch comprising an oil containing-enclosing casing, stationary switch members carried by said casing and having their lower ends immersed in the oil therein, said stationary switch members each consisting of an insulating bushing having a contact member at its lower end, a movable switch member cooperating with said contact members, and high tension electric condensers carried by said casing and immersed in the oil therein and having their high tension terminals under the oil adjacent and connected directly to said contact members and having their low tension terminals connected electrically with said casing, said condensers each having an insulated intermediate terminal which supplies a potential that is less than that of the high tension terminal.

1,828,841. FOUR WHEEL DRIVE VEHICLE CONSTRUCTION. HENRY M. KINGSLEY, Indianapolis, Ind., assignor, by mesne assignments, to Automotive Development Corporation, Dover, Del. Filed July 7, 1928. Serial No. 290,937. 5 Claims. (Cl. 180—44.)



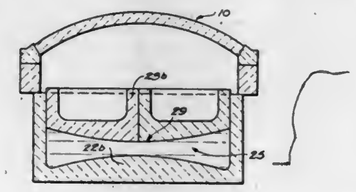
2. In a four-wheel drive self-propelled vehicle, the combination with a pair of front driving wheels and rear driving wheels, of a power unit for driving the same, a drive shaft driven by said power unit, a driving member operated by said shaft for driving one pair of wheels, a second driving member loosely mounted on said shaft for driving the other wheels, and inter-engaging lugs on said members adapted to remain in spaced relation during the normal driving action and brought into engagement for causing the first mentioned member to drive the loosely mounted member upon a variation in traction of the wheels, whereby all of said wheels will be driven from said power unit.

1,828,842. BUILDING CONSTRUCTION. JAMES F. LOUCKS, Cleveland, Ohio, assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 18, 1926. Serial No. 142,322. 11 Claims. (Cl. 72—70.)



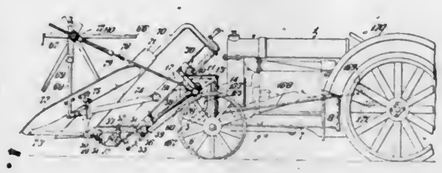
4. A sheet metal foundation for building construction, the same comprising a continuous metal sheet, and a plurality of spaced hollow triangular sheet metal reenforcing ribs secured to one side of the said sheet, the said ribs projecting beyond one end of the said sheet and having their opposite ends behind or overhung by the opposite end of the sheet.

1,828,843. FURNACE CONSTRUCTION. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 1, 1928. Serial No. 251,084. 6 Claims. (Cl. 49—54.)



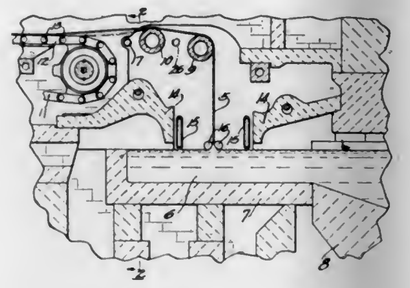
1. A furnace adapted to contain a mass of molten glass and including a melting end and a working end for receiving the molten glass from said melting end, the bottom of said furnace being formed with a raised portion at substantially the transverse center thereof, and a floater having a depending portion also at substantially the transverse center of said furnace and positioned directly above the raised portion, said floater cooperating with said raised portion to form a throat through which the glass passes from said melting end into said working end.

1,828,844. HARVESTER. EDGAR E. METCALF, Moville, Iowa, assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 22, 1929. Serial No. 372,906. 23 Claims. (Cl. 56—22.)



1. In a harvesting machine, an upwardly and rearwardly inclined stalk conveyor, a sickle disposed in proximity to the lower edge of the conveyor, a butt shelf in rear of and adjacent the sickle and disposed to support the butts of cut stalks supported by the conveyor, and a butt conveyor operating between the stalk conveyor and the shelf and comprising stalk engaging fingers extending forwardly therefrom and inclined transversely of the butt shelf and rearwardly thereof in the direction opposite to their direction of travel, said fingers extending forwardly beyond the shelf and above the sickle for engaging the stalks as they are cut and urging them rearwardly toward the stalk conveyor.

1,828,845. SHEET GLASS DRAWING APPARATUS. JOSEPH M. NEENAN, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 15, 1926. Serial No. 154,863. 5 Claims. (Cl. 49—17.)



1. In sheet glass apparatus, means for drawing a sheet from a mass of molten glass, an air pipe extending transversely of the sheet for directing a supply of air onto said sheet prior to its engagement with said drawing means, and means for preventing sagging of said pipe.

1,828,846. MANUFACTURE OF BLANC FIXE. JAMES B. PIERCE, Jr., Charleston, W. Va. Filed May 16, 1928. Serial No. 278,353. 9 Claims. (Cl. 23—122.)

1. The method of manufacturing blanc fixe which comprises bringing together sodium acid sulfate and barium carbonate in the form of an aqueous slurry, and separating the resulting barium sulfate particles from the sodium sulfate liquor.

1,828,847. FOLDING EYEGLASS FRAME. JACOB J. POMERANZ, Brooklyn, N. Y. Filed Mar. 18, 1929. Serial No. 347,936. 2 Claims. (Cl. 88—44.)

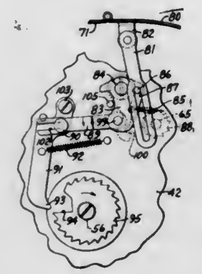


1. Foldable eye-glass frames comprising, non-metallic lens rims, a flexible bridge spring interconnecting said lens rims, each lens rim having an integral outwardly projecting lug at its outer side and in the plane thereof, foldable temples, metallic hinge structures to pivotally connect said temples to said lens rims including hinge leaves superimposed on the inner faces of said lugs and fixedly secured thereto, a lock-stud threaded into the thus arranged hinge leaf of one lens rim to project at right angles to the plane of the latter, and the other lens rim having means to engage said lock-stud when the such lens rim is folded over said first mentioned lens rim to thereby releasably retain the lens rims in folded together relation.

1,828,848. PRODUCTION OF CHEMICAL WOOD PULPS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 9, 1929, Serial No. 345,869. Renewed Mar. 27, 1931. 6 Claims. (Cl. 92—9.)

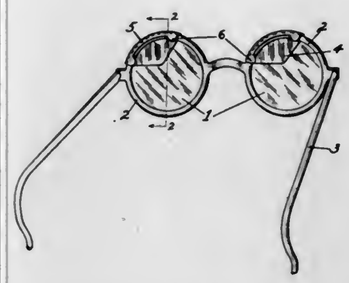
1. A process which comprises cooking raw cellulosic material in a solution of caustic soda short of effecting fiber liberation, and then cooking in a solution of sodium sulphide to complete fiber liberation.

1,828,849. CASH REGISTER. PASCAL SBURLINO, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed July 25, 1928. Serial No. 294,645. 7 Claims. (Cl. 235—130.)



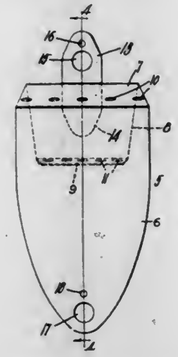
1. In a machine of the class described, the combination with a totalizer; actuators for the totalizer; a drive shaft; manipulative means to operate the actuators and the shaft; and a shiftable closure to normally prevent access to the totalizer; of safeguards to prevent mismanipulation of the totalizer, when the closure is opened, including normally idle means to lock the totalizer, and normally idle means to lock the drive shaft; and a device, including a plurality of sliding connections, one connection being intermediate the closure and the locking means for the totalizer, and another connection intermediate said one connection and the locking means for the drive shaft, all connections operable under control of the closure to enable the means for locking the totalizer to become effective irrespective of the means for locking the drive shaft.

1,828,850. EYEGLASS SHIELD. HARRY W. SHRYOCK, Seattle, Wash. Filed Dec. 22, 1928. Serial No. 327,776. 1 Claim. (Cl. 88—41.)



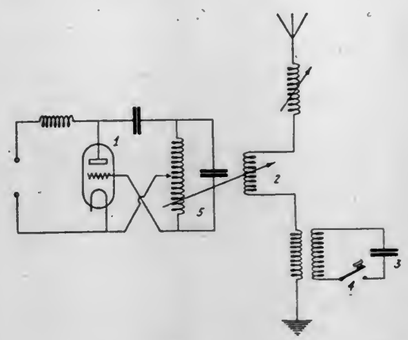
A clip-shield of semi-transparent, resilient material having a quadrant-shaped blade adapted to conform to the exterior face of a lens, an arcuate flange curled over the inner side of the blade and adapted to frictionally engage a lens-rim, and spaced retaining ears at the ends of said flange adapted to frictionally engage the inner face of the lens.

1,828,851. FLAG HOLDER. GEORGE L. SMITH, Hyde Park, Mass. Filed June 26, 1929. Serial No. 373,745. 3 Claims. (Cl. 248—37.)



2. A flag holder having, in combination, a forwardly inclined front portion provided with a hole therein to receive a fastening device, a top portion projecting rearwardly from the top of said front portion and provided with a series of holes therein, a rear portion at the rear of said top portion and provided with a hole therein to receive a fastening device and a bottom portion projecting forwardly from the bottom of said rear portion and also provided with a series of holes therein, said bottom portion being adapted to be flexed to permit a flag staff projecting downwardly from a hole in the top portion to be inserted in a hole in the bottom portion, and finally gripping the staff and clamping the latter in said last-named hole, and the front portion being adapted to be flexed to vary the distance between the holes provided for the fastening device.

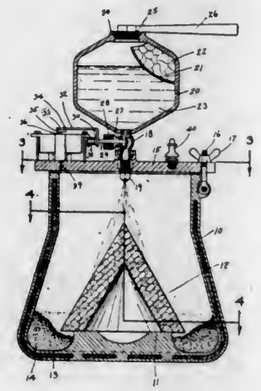
1,828,852. TUBE TRANSMITTER KEYING METHOD. ERICH TOD, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed July 11, 1925, Serial No. 42,864, and in Germany July 25, 1924. 2 Claims. (Cl. 250—19.)



1. In a wireless transmission system in combination with a high frequency oscillation generating circuit includ-

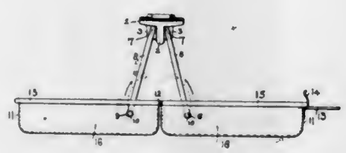
ing a thermionic generator having input and output electrodes and an oscillation circuit connected to the output electrodes thereof, an aerial circuit coupled to said oscillation circuit, a tuned circuit including an inductance coupled to an inductance in said aerial circuit, said circuit being normally adapted to transfer a resistance effect to said antenna and from said antenna to said oscillation circuit, and means for completely interrupting said tuned circuit whereby, when said circuit is open, signals are generated by said oscillation generator and radiated from said aerial, and when said circuit is closed no current flows in said tuned circuit.

1,828,853. PROCESS AND APPARATUS FOR COOLING OR FREEZING ICE CREAM AND THE LIKE. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers, Inc., Louisville, Ky., a Corporation. Filed Oct. 21, 1927. Serial No. 227,667. 18 Claims. (Cl. 62—114.)



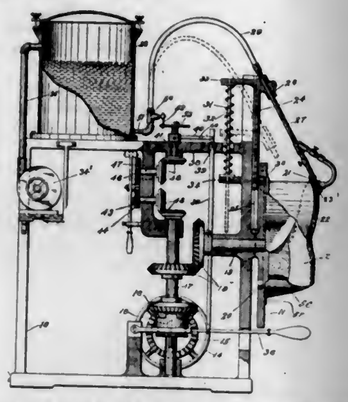
6. The process of cooling or freezing a liquid consisting in discharging the same in the form of a fine spray upon a surface of solidified carbon dioxide.

1,828,854. FOLDING SHOE BLACKING KIT. ROSS WINSHIP, Valparaiso, Ind. Filed June 15, 1928. Serial No. 285,589. 4 Claims. (Cl. 15—265.)



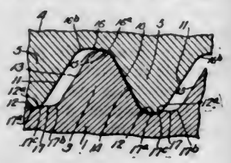
1. In folding shoe polishing kits, a pair of flanged members, a foot rest positioned above said members and held by a pair of bails both of which are in pivotal relation to the flanges of the members and the foot rest, and means for separately hinging the flanged members to each other adapting the same to encase the foot rest when the members are closed.

1,828,855. SHOE SURFACE COATING. STEPHEN W. BOURN, Bristol, R. I., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 5, 1924. Serial No. 724,342. 32 Claims. (Cl. 12—80.)



1. In a shoe surface coating machine, means for rotatably supporting a shoe, means for rotating said supporting means, a spreader for applying fluid to the shoe, and means for reciprocating said spreader towards and from the axis of rotation of the shoe as the latter rotates to keep the spreader in contact with the shoe.

1,828,856. SCREW-THREAD COUPLED MEMBER. LEWIS B. BRIDGES, Brooklyn, N. Y., assignor, by mesne assignments, to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 18, 1928. Serial No. 247,594. 9 Claims. (Cl. 151—14.)

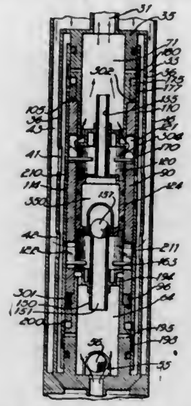


1. A self-locking fastening device of the bolt and nut type, comprising a bolt having a head at one end and an external screw thread of constant pitch with a root of greater diameter at the side of the thread which faces the bolt head than at the side facing the nut receiving end of the bolt, and a nut having a symmetrical internal screw thread of the same pitch as the external bolt thread, said external and internal threads having sufficient space between the convolutions thereof to permit substantial crosswise movement of the nut thread relatively to the bolt thread while interfitted therewith, and the minor diameter of the symmetrical internal thread of the nut being such that when the threads are interfitted the nut screws freely along the bolt with its thread at one limit of said crosswise movement of the nut thread and frictionally binds tightly about the root of the bolt thread at the opposite limit of said crosswise movement of the nut thread.

1,828,857. DEEP WELL FLUID MOTOR PUMP. CLARENCE J. COBERLY, Los Angeles, Calif., assignor to Kobe, Inc., Huntington Park, Calif., a Corporation of California. Filed Apr. 5, 1926. Serial No. 99,729. 35 Claims. (Cl. 103—46.)

1. A device of the class described having: a continuous peripheral wall; heads formed at the opposite ends of said wall to form a closed power chamber therein; a power piston slidingly disposed in said chamber; upper and lower pump plungers slidingly disposed in upper and lower pump barrels formed in said heads, said pump

plungers being unitarily formed with said piston and coaxially slidable therewith; means for introducing a fluid under pressure alternately into opposite ends of said power chamber to cause the reciprocation of said power piston, a valved passageway being formed longitudinally through said unitary piston and plunger structure, a valved pumped fluid inlet chamber being formed in one of said



heads to communicate with one end of said piston-plunger passageway, and a pumped fluid discharge chamber being formed in the other of said heads to communicate with the other end of said piston-plunger passageway; and means for exhausting fluid from said power chamber, before said piston, into said inlet or said discharge chambers in a manner to wash a friction surface of said motor pump.

1,828,858. SIDE-CHAIN CHLORINATION OF BENZENE DERIVATIVES. EARL BIDDLE CONKLIN, Syracuse, N. Y., assignor, by mesne assignments, to The Solvay Process Company, Solvay, N. Y., a Corporation of New York. Filed Dec. 26, 1923. Serial No. 682,712. 6 Claims. (Cl. 260—160.)



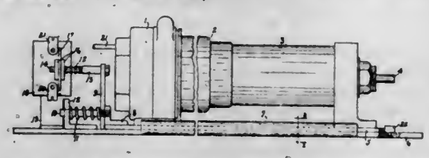
1. In the art of chlorinating a hydrocarbon of the type of toluol, the process which consists in exposing a flowing stream of the material to be chlorinated to an oppositely flowing stream of chlorine gas and simultaneously feeding the stream of material to be chlorinated past a zone of effective light rays and maintaining the material during this treatment in a condition of liquidity and intimate contact with the chlorine gas while the gaseous chlorine and liquid hydrocarbon are in reactive relation with each other.

1,828,859. CHLORINATION APPARATUS. EARL BIDDLE CONKLIN, Syracuse, N. Y., assignor, by mesne assignments, to The Solvay Process Company, Solvay, N. Y., a Corporation of New York. Original application filed Dec. 26, 1923, Serial No. 682,712. Divided and this application filed Apr. 3, 1926. Serial No. 99,545. 4 Claims. (Cl. 23—288.)



1. An apparatus for the catalytic chlorination of liquids which comprises a tower, external means for supporting it, the tower as a whole being of such great elongation as contrasted with its width as to be incapable of self-support, requiring the named external supporting means to maintain it in position, said tower being composed of a multiplicity of tubular sectons composed of heat-resisting transparent glass, the sectons being joined end to end by chlorine-resisting cement means for emitting rays adapted to catalyze the chlorination positioned adjacent to said transparent glass sections, said tower having an inlet for a liquid starting material at its upper end and an inlet for chlorine gas at its lower end and an outlet for product at its lower end, said tower containing filling material resistant to the chemicals traveling through the same and having also an outlet near its upper end for the gaseous products of the reaction.

1,828,860. MECHANISM FOR REVERSING MOTIVE DEVICES FOR OPERATING DOORS AND THE LIKE. ROSCOE D. CONKLIN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed June 7, 1929. Serial No. 369,205. 5 Claims. (Cl. 268—50.)

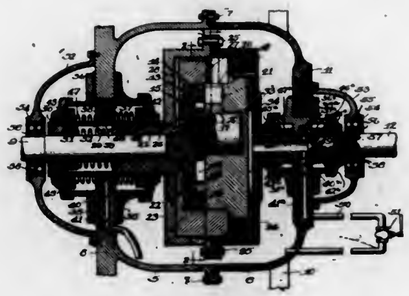


1. In an apparatus for operating doors and the like, the combination comprising a motive device, means for slidably supporting the motor, and means including a control member adapted to be closed when the door connected to the motor strikes an obstruction and causes the motor to slide on its supporting means.

1,828,861. HYDRAULIC CLUTCH. CHARLES B. DE HART, Chicago, Ill., assignor of one-half to Charles W. De Hart, Chicago, Ill. Filed Mar. 29, 1930. Serial No. 439,907. 2 Claims. (Cl. 192—58.)

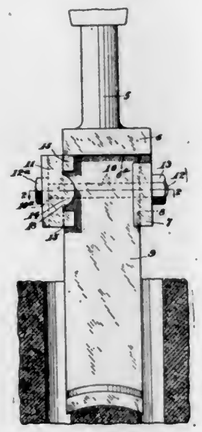
1. An hydraulic coupling, comprising a drive and a driven shaft, a disc fixed to said drive shaft, a casing surrounding said disc and permitting the rotation of said disc

thereon, means associated with said disc within said casing for securing a flow of fluid, a second rotatably mounted casing to which the driven shaft is secured within which said first mentioned casing is mounted, said cas-



ings having provided therebetween channels for the supply and discharge of fluid to and from said flow producing elements, and means included in said discharge channel for controlling the flow therethrough.

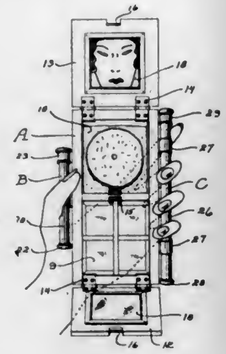
1,828,862. CHUCK FOR BROACHING STEEL. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 5, 1929. Serial No. 405,019. 5 Claims. (Cl. 279—44.)



1. A chuck comprising a head having a shank thereon, an abutment on the head forming a stop for one end of a working implement, a locking key having a recessed portion forming a clearance for the working implement, a key portion on the locking key projecting from said recessed portion and having a cam surface to engage the working implement, means to secure the locking key to the head whereby the key portion will engage the working implement and move the end thereof against the stop to prevent longitudinal movement of said working implement relative to the head, and means for preventing transverse movement of the working implement with respect to the head.

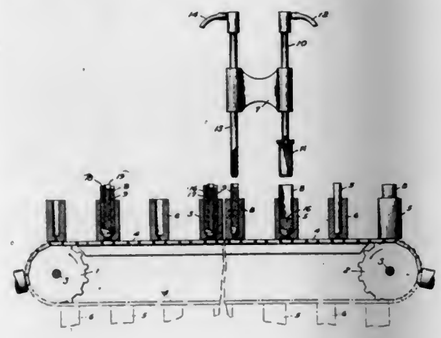
1,828,863. VANITY CASE. CHARLES HARP, Barnesville, Ohio. Filed Nov. 5, 1930. Serial No. 493,605. 3 Claims. (Cl. 132—83.)

1. In a vanity case, the combination with a main container, of a minor tubular container having a removable cosmetic holder, means mounting the minor container longitudinally of one side wall of the main container, a tubular reserve container having a removable closure cap for one end therof, and means mounting the reserve container longitudinally of the opposite side wall of the



main container, said first and second means projecting outwardly beyond the periphery of said tubular containers.

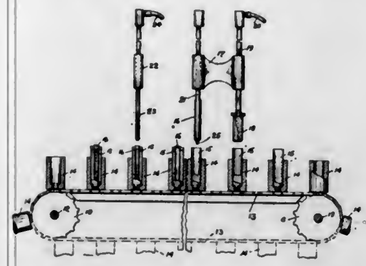
1,828,864. METHOD OF FILLING BICOMPARTMENT COLLAPSIBLE TUBES. NEVIL MONROE HOPKINS, New York, N. Y., assignor, by mesne assignments, to Gilmont Products Corporation. Filed Feb. 20, 1923. Serial No. 620,284. 7 Claims. (Cl. 226—100.)



7. The process of assembling and filling plural compartment collapsible tubes comprising an inner collapsible tube adapted to be centered inside of an outer collapsible tube which includes, partially filling said outer tube, placing the inner tube inside of the outer tube through the open bottom of the latter to displace the partially filling contents thereof, while said inner tube is supported against inward collapse, and positioning the discharge openings of the two tubes adjacent each other whereby the contents of both tubes may be discharged substantially together.

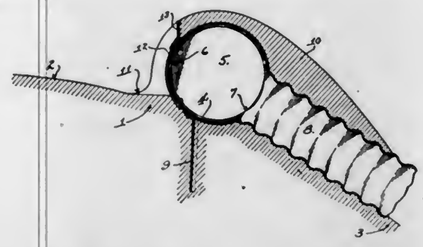
1,828,865. APPARATUS FOR FILLING MULTICOMPARTMENT CONTAINERS. NEVIL MONROE HOPKINS, New York, N. Y., assignor, by mesne assignments, to Gilmont Products Corporation. Original application filed Feb. 20, 1923, Serial No. 620,284. Divided and this application filed Sept. 22, 1928. Serial No. 307,763. 4 Claims. (Cl. 225—100.)

1. The process of filling material into a multi-compartment collapsible tube including an inner collapsible container and an outer collapsible container which includes temporarily providing said inner container with a rigid core member while separated from said outer container; partially filling to a predetermined degree said outer container; inserting into the contents of said partially filled



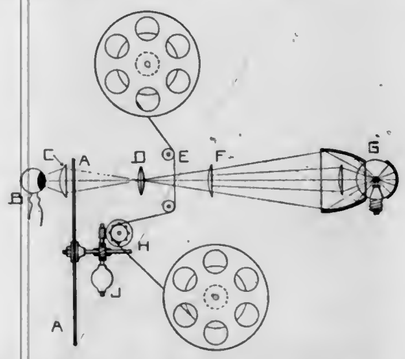
outer container said inner container supported by its temporary rigid core; withdrawing said core from said inner container; and filling said inner container.

1,828,866. DRAIN CULVERT. ARTHUR R. HUTTON, Berkeley, Calif., assignor to California Corrugated Culvert Co., Berkeley, Calif., a Corporation of California. Filed Feb. 19, 1930. Serial No. 429,576. 6 Claims. (Cl. 61—16.)



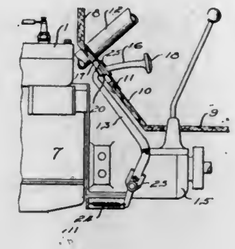
1. A drain culvert comprising a drum like head having an inlet at one side and an outlet, and a conduit connected with and leading away from said outlet.

1,828,867. SCANNING DEVICE. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Filed May 2, 1929. Serial No. 359,846. 4 Claims. (Cl. 178—6.)



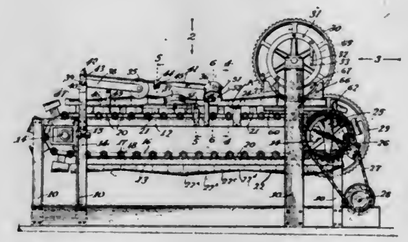
1. In combination a light source, a motion picture film, a scanning disc having a series of square scanning openings, means for projecting a magnified image of each picture frame on the scanning field of said disc, the openings in said disc being enlarged in proportion to the magnification of said image.

1,828,868. CLOSURE FOR PEDAL SHANK OPENINGS. HAROLD A. KING, Birmingham, Mich. Filed Oct. 28, 1930. Serial No. 491,760. 14 Claims. (Cl. 180—90.6.)



1. In a motor vehicle, the combination of a toe board having an opening therethrough, a pedal shank extending through said opening with clearance therearound and means carried on said pedal shank for closing said clearance space, said means and toe board having lateral abutting engagement for bracing said pedal shank against side shake.

1,828,869. TILE-SHAPING AND TRIMMING MACHINE. GUSTAF LARSON, Hollywood, Calif., assignor to Los Angeles Brick Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 22, 1930. Serial No. 503,932. 21 Claims. (Cl. 25—42.)

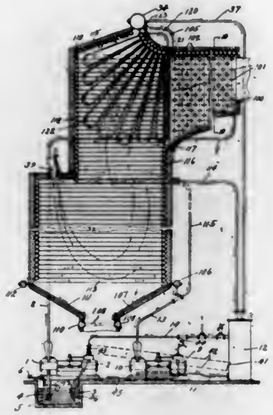


1. A tile forming machine comprising a conveyor carrying a plurality of tile forming blocks undercut on their reverse sides, means to aline a series of said blocks, the outer forming faces of the blocks being inclined with respect to said reverse sides, the longitudinal undercut edges of said series of blocks lying in a common plane when said series is alined, and stationary knives at opposite sides of the alined blocks for trimming the longitudinal edges of the tiles carried on such blocks.

1,828,870. DOUBLE CIRCUIT FORCED CIRCULATION WATER TUBE BOILER. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 3, 1927. Serial No. 158,469. 7 Claims. (Cl. 122—235.)

1. A steam generating system having in combination a boiler furnace, steam generating wall tubes spirally arranged within said furnace so as to enclose the combustion chamber thereof, steam generating wall tubes spirally arranged so as to enclose the outlet flue, a circulating pump for forcing water into each group of said tubes, a separate connection from said pump to each group of said tubes, an economizer section, a steam and water collector for receiving steam and water from said second

group and water from said economizer, a feed pump for forcing water through said economizer into said collector, a steam and water separating chamber connected to said



first group and to said collector, and a connection for supplying said circulating pump with water from said separating chamber.

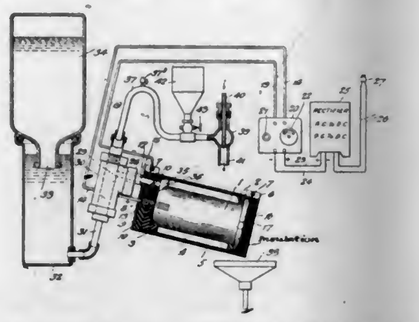
1,828,871. PENCIL. JOHN P. LYNN, Chicago, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1930. Serial No. 493,502. 15 Claims. (Cl. 120—18.)



1. A pencil comprising a body having an axial opening, a lead guide tube receivable within said opening, means for propelling a lead in the guide tube, and resilient means carried by the body for securing the tube in the opening.

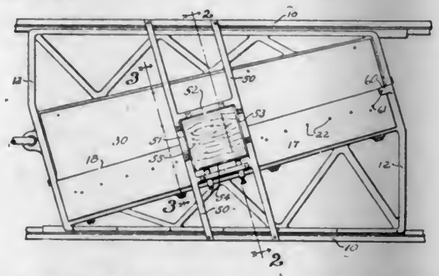
12. A pencil having a body to one end of which is applied an operating unit in the form of a hollow tapered tip having one portion of its walls internally extended cylindrically to provide a bearing of substantial length wherein is fitted a cylindrical lead guide tube deriving axial support from its mounting within the cylindrical wall portion of the tip, and means cooperating with the body and tip for propelling a lead through the tip.

1,828,872. ELECTROLYTIC CELL. CLARENCE W. MARSH, Coscob, Conn. Filed Apr. 7, 1924. Serial No. 704,640. 10 Claims. (Cl. 204—58.)



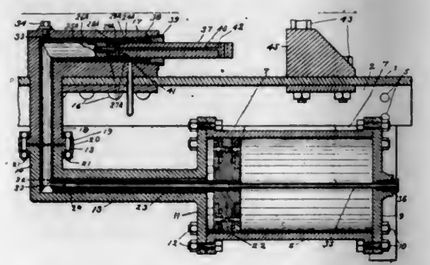
3. An electrolytic unit comprising a cell having a relatively long concentric anode and cathode, and means for supporting said cell with its anode and cathode making a considerable angle to the vertical, whereby the gas bubbles will move along the cathode and not along the anode to any material extent.

1,828,873. RIVING MACHINE. EDWARD MILLER, Huntington Park, Calif., assignor to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed June 24, 1929. Serial No. 373,158. 23 Claims. (Cl. 144—162.)



1. In a riving machine, in combination, a movable knife, a substantially straight cutting edge on said knife and means for so holding a block of wood positioned to be operatively acted upon by said knife to remove strips therefrom that the grain of said wood extends at an angle of less than 45 degrees to the path of movement of said knife, and parallel to said cutting edge of said knife at all points in said path of movement.

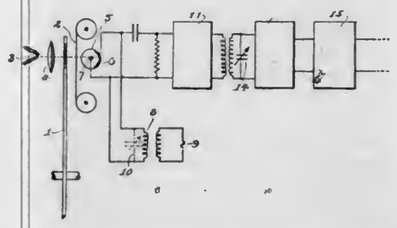
1,828,874. HYDRAULIC RIVETING AND BENDING MACHINE. FREDERICK J. MYERS, Kansas City, Kans. Filed July 1, 1929. Serial No. 375,176. 1 Claim. (Cl. 138—10.)



In a hydraulic riveting and bending machine, a main cylinder with a piston therein operated by compressed

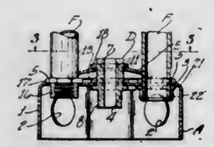
air, a closing cylinder head on one end of said cylinder, the opposite end of said cylinder closed by a cylinder head provided with an elongated hub forming a hydraulic intensifying pressure cylinder opening into said main cylinder, a piston in said pressure cylinder presenting the cupped side of a hydraulic packing cup in each direction of the length of said cylinders, a ring between said packing cups provided with an external annular groove and an internal annular groove and a radially disposed hole connecting said grooves; in combination with a hollow piston rod connecting said pistons and provided with a hole connecting with said internal annular groove, and a tube secured in said closing cylinder head and telescoping into said piston rod and forming communication from said annular grooves to the exterior of said cylinders.

1,828,875. ELECTROOPTICAL TRANSLATION SYSTEM. CHARLES H. W. NASON, New York, N. Y., assignor to Jenkins Television Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Feb. 10, 1930. Serial No. 427,272. 13 Claims. (Cl. 178—6.)



5. In a signalling system employing a carrier wave the combination of a source of light variations, means for translating said variations into photo-capacitance variations, and a tuned circuit controlled by said photo-capacitance variations, said circuit being sharply tuned to resonance at the carrier frequency.

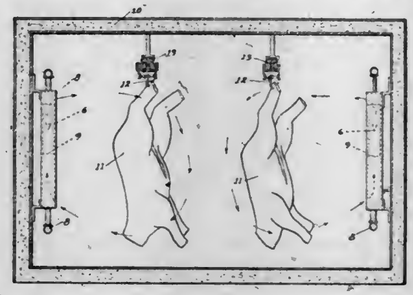
1,828,876. ELECTRIC CONDUIT SECURING DEVICE. FREDERICK G. ROHN, St. Louis, Mo., assignor of one-half to Daniel R. Cohen, St. Louis, Mo. Filed Mar. 13, 1929. Serial No. 346,567. 3 Claims. (Cl. 247—25.)



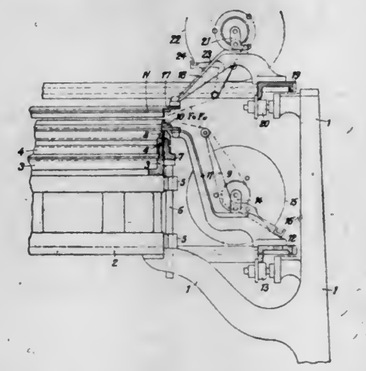
1. In combination, a junction-box having an end wall provided with an aperture, a stud upon the box having a portion presented outwardly of and at an angle to said end wall, an apertured clamping-disk disposed over said end wall and fitting at its said aperture upon the stud for securing connection with a conduit projected into the box through sad end wall aperture, and a nut threaded upon the stud into engaging relation with the disk for securing the same in conduit-clamping engagement.

1,828,877. REFRIGERATING SYSTEM. ELMER SCOTT, Dayton, Ky. Filed Sept. 23, 1929. Serial No. 394,462. 2 Claims. (Cl. 261—116.)

1. In a refrigerating system for a meat storage room having means for suspending meat medially of the room, air cooling means having an intake at its bottom, located at the side of the room, said cooling means having air current inducing means for projecting cooling air currents outwardly from the tops of said inducing means toward the top portions of the suspended meat so that it will waft in large volume down around the meat and be drawn in at the bottom of said inducing means.



1,828,878. CIRCULAR KNITTING MACHINE. OTTO SEIFERT, Burgstadt, Germany, assignor to Maratti Société Anonyme, Geneva, Switzerland, a Company of Switzerland. Filed July 27, 1928, Serial No. 295,764, and in Germany Aug. 1, 1927. 3 Claims. (Cl. 66—81.)

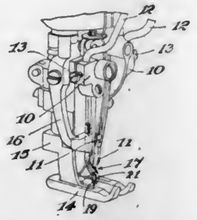


1. In a circular warp knitting machine, two series of warp bobbin carriers arranged annularly with respect to two thread guide rings and spaced axially with respect to one another, each series of warp bobbin carriers being mounted on an annular member connected to the corresponding thread guide ring so as to form therewith an annular closed unit, a needle carrying ring, means for leading the two warps entirely separately to their respective thread guide rings and thence to the needles so as to leave a clear space free of fixed or moving parts between the threads of the two warps, and means for causing each of said units to execute back and forth step by step movements during each complete stitch forming operation, the movements being such that for each unit the forward step exceeds the backward step by one needle space, the forward direction for the two units being in opposite senses.

1,828,879. HEMSTITCH ATTACHMENT FOR SEWING MACHINES. VICTOR J. SIGODA, Brooklyn, N. Y. Filed Aug. 19, 1929. Serial No. 386,837. 10 Claims. (Cl. 112—81.)

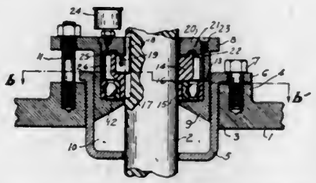
1. In a hemstitch sewing machine, embodying stitch forming mechanism including right and left needles for producing right and left courses of stitching in the direc-

tion of the feed of the work, and a gathering device coacting with the needles, its construction including blades having piercing points curving in opposite directions for



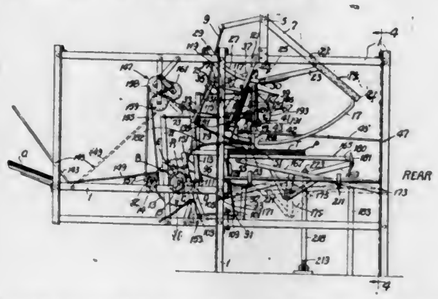
forming in advance of the stitching, groups of fibers, so disposed relative to each other as to produce a serpentine hemstitch pattern.

1,828,880. BALL-BEARING STUFFING BOX. MARSHALL CHARLOCK SMITH, Philadelphia, Pa., assignor to The Barrett Company, a Corporation of New Jersey. Filed Apr. 6, 1921. Serial No. 458,950. 5 Claims. (Cl. 308—168.)



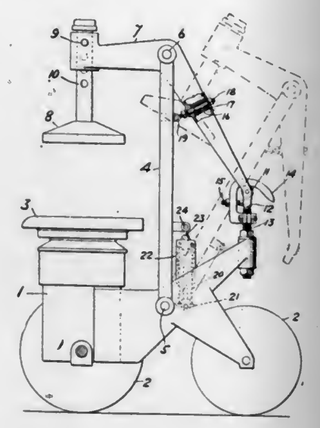
4. In combination, a stuffing box, a packing gland for said stuffing box, a ball-bearing having its outer race immovably positioned in said gland, a ring carried by the inner race of said ball-bearing having an annular rim upon the upper edge thereof and a fitting for said stuffing box covering said packing gland and having an annular groove on the underside thereof in which said rim rotatably resides, all of the aforementioned elements being adapted to receive a shaft therethrough and said ring being adapted to be slidably but non-rotatably secured to said shaft.

1,828,881. BAG TURNING APPARATUS. CHARLES F. SPARKS, St. Louis, Mo. Filed Jan. 21, 1931. Serial No. 510,086. 20 Claims. (Cl. 223—20.)



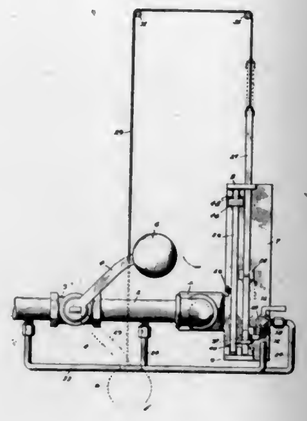
1. Bag turning apparatus comprising a member adapted to move to and from the surface of a stack of bags upon which it is to operate, a linkage causing said movement, means associated with the member adapted to move the upper layer of material in said stack, said last-named means comprising an element having a normal force against said stack which is independent of force causing movement of said linkage and at least one point on said member adapted to pierce said upper layer of material.

1,828,882. ADJUSTABLE HINGED YOKE FOR SQUEEZING MACHINES. LEROY TABOR, Riverton, N. J., and FRANK R. WALLACE, Philadelphia, Pa., assignors to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 6, 1931. Serial No. 520,609. 6 Claims. (Cl. 22—43.)



1. A squeezing machine including a base, a support, a yoke pivotally mounted on said support, said yoke having a portion adapted to withstand the squeezing pressure, and a stop member on said base cooperating with the end of said yoke to withstand said squeezing pressure.

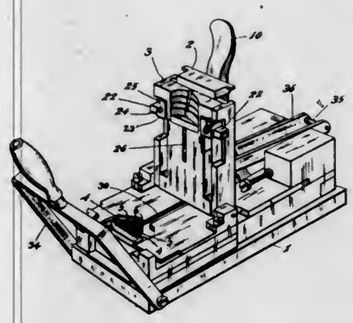
1,828,883. FUEL SUPPLY CONTROL MECHANISM FOR GAS BURNERS. GEORGE A. TUCK, San Francisco, Calif. Filed June 26, 1929. Serial No. 373,855. 16 Claims. (Cl. 158—117.2.)



1. A fuel supply control mechanism comprising the combination with a gas burner provided with a fuel supply connection having a main valve movable to shut off the supply of fuel to the burner, of means for normally moving the valve to closed position; a pilot mounted adjacent the burner; pilot fuel supply connections connecting the pilot with the burner supply connection upon opposite sides of the main valve; valve means for directing fuel from either pilot supply connection to the pilot; latch means for holding the valve closing means in open position when

the pilot is burning and to automatically release said closing means to valve closing position when the pilot is extinguished; and means actuated by the pilot valve to render the latch means operative when fuel is directed from the delivery side of the main valve to the pilot and for rendering said latch means inoperative when said pilot valve is set to direct fuel from the supply side of said main valve to the pilot.

1,828,884. WIRE BENDING MACHINE. VICTOR J. VERPENT, Jersey City, N. J., assignor to De Forest Radio Telephone & Telegraph Company, Jersey City, N. J., a Corporation of Delaware. Filed Apr. 30, 1924. Serial No. 709,963. 18 Claims. (Cl. 153—16.)

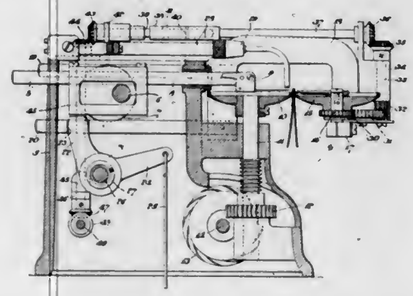


1. In a machine of the character described, the combination with a block having a series of grooves for supportnently bending said wires, means to retain said wires in ing a plurality of wires, of means for initially and permasaid initial bending means and secondary bending means adapted to bend certain wires in the plane of all of the wires and simultaneously bend one of the wires out of said plane.

1,828,885. COMPOSITION OF MATTER FOR PUTTY. LEON WEISBERG, Philadelphia, Pa. Filed Jan. 14, 1930. Serial No. 420,816. 1 Claim. (Cl. 106—8.)

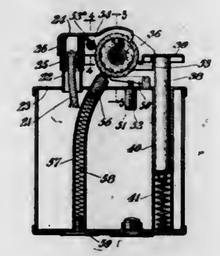
A composition of matter of the kind indicated containing the following ingredients as designated,—marble dust 10%, whiting 70%, heavy body pure linseed oil 2%, paraffin oil 15%, asbestos 2½% and machine oil ½%.

1,828,886. SEWING MACHINE. HARRY WEISNER, Philadelphia, Pa. Filed Sept. 3, 1929. Serial No. 389,916. 1 Claim. (Cl. 112—18.)



In a sewing machine, a framework, an inner feed disk, a vertical shaft upon which said feed disk is mounted, said vertical shaft being journaled in said framework, a horizontal shaft also journaled in said frame-work, and gearing for transmitting the motion of said horizontal shaft to the aforesaid vertical shaft, a bracket arm slidably mounted with respect to the framework, an outer feed disk rotatably carried by said bracket arm, means for normally retracting said bracket arm to cause the outer feed disk carried thereby to press toward the inner feed disk thereby to grip the material between said feed disks during the sewing operation, and means for causing the outer feed disk to be positively actuated in unison with the inner feed disk, said means comprising gearing including a gear wheel secured to the outer feed disk and a pinion, a vertical shaft upon the lower end of which said pinion is mounted, said vertical shaft being located forwardly and to one side of the axis of the outer feed disk, a horizontal telescopic shaft, said shaft extending adjacent the slidable bracket arm which carries the outer feed disk, gearing connecting said telescopic shaft and the vertical shaft which carries the pinion for actuating the outer feed disk, and means for rotating said telescopic shaft comprising gearing and shafting driven by the horizontal shaft which actuates the inner feed disk.

1,828,887. LIGHTER CONSTRUCTION. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Nov. 17, 1928. Serial No. 320,042. 7 Claims. (Cl. 67—7.1.)

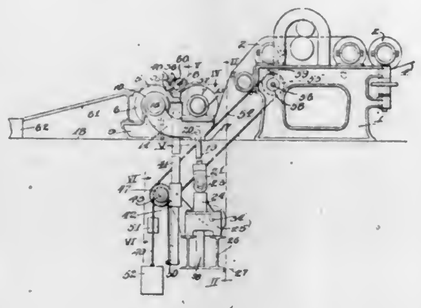


5. In a lighter, a casing, a wick projecting therefrom, a snuffer for said wick having side walls, a gear fastened to a side wall of the snuffer, a depressible head, a rack on said head meshing with said gear on the snuffer to elevate the snuffer as the head is depressed, ratchets disposed within the side walls of the snuffer, a sparking wheel disposed between said ratchets, one of said ratchets being connected to the sparking wheel, the second ratchet being rotatable independently of the sparking wheel, a pawl on the snuffer engaging said second ratchet to move it with the snuffer, a spring interconnecting said ratchets, a pawl engaging said first ratchet to hold it stationary as the snuffer is being elevated and while said spring is being tensioned, and a release member operated by said head to release said holding pawl from said second ratchet when the snuffer is elevated a predetermined amount to permit the spring to operate the sparking wheel with a snap action.

1,828,888. PAPER WINDING APPARATUS. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis. Filed April 26, 1926. Serial No. 104,546. 29 Claims. (Cl. 242—66.)

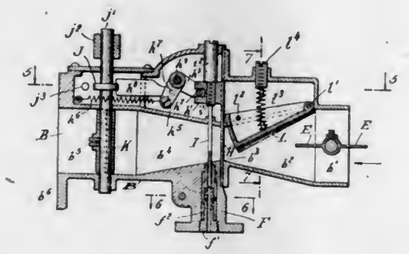
1. In a paper winder machine, a pair of under drums, one of said drums being pivotally mounted with respect

to the axis of the other of said drums for bodily movement out of the horizontal plane of said axis, and a paper receiving shaft cooperatively associated with said under



drums and adapted to be revolved thereby whereby the web of paper is caused to be wound upon said receiving shaft.

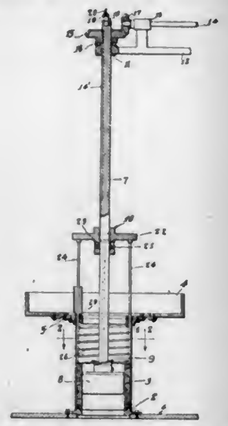
1,828,889. CARBURETOR. ERNESTO F. CIGLIA, Scarsdale, and LOUIS F. PELLETIER, East Bronx, New York, assignors of one-fourth to Walter W. Irwin, New York, N. Y., and one-fourth to Victor von Schlegell, White Plains, N. Y. Filed July 23, 1925, Serial No. 45,582. Renewed Mar. 7, 1931. 5 Claims. (Cl. 261—44.)



1. In a carburetor of an internal combustion engine, a shell formed with a forwardly pointing approximately cone-shaped air accelerating chamber forming a throat at the inner end, fuel inlet means near the throat, said accelerating chamber being provided with an elongated rectangular opening in its walls, a suction operated air valve movable independently of said fuel inlet means, pivoted at its outer end in said opening, and having its inner end and sides engaging edges of the opening at all positions of the valve, a housing situated above said chamber and air valve, means between said housing and valve yieldably pressing said valve inwardly, said suction operated valve having its position determined by the degrees of suction of said engine.

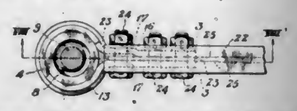
1,828,890. METHOD AND APPARATUS FOR MAKING REENFORCED PIPE. HARRY COOK, Huntington Park, Calif., assignor to Charles E. Maris, jr., and Robert M. Hadley, Los Angeles, Calif. Filed June 25, 1928. Serial No. 287,996. 6 Claims. (Cl. 25—30.)

1. In a pipe making machine of the character described, the combination of a vertical mold jacket, packer head means adapted to rotate and move in and out of said mold jacket, a plurality of laterally immovable spacing rods adjoining the inner surface of the mold jacket and means



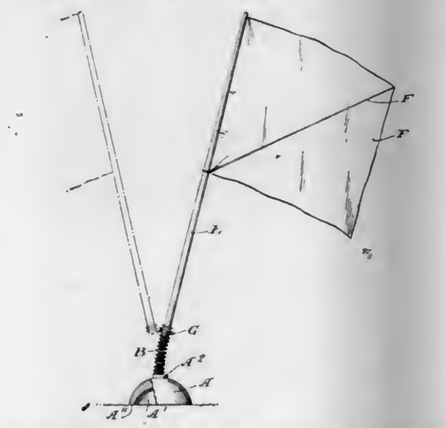
for moving the spacing rods in a substantially fixed vertical plane in and out of the said mold jacket in substantial synchronism with the movement of the packer head.

1,828,891. TIE-ROD CONSTRUCTION. FREDERICK C. CRAWFORD and MATTHEW P. GRAHAM, Detroit, Mich., assignors to Thompson Products Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 20, 1926. Serial No. 90,900. 3 Claims. (Cl. 287—90.)



1. In a connecting rod, the combination with a ball seat having an outer cylindrical contour and a lower flange, of an intermediate member, a strap having a loop encircling the cylindrical surface of said ball seat with its lower edge resting upon the lower flange of said ball seat and means securing the ends of said strap to said intermediate member, said means clamping said loop about said ball seat.

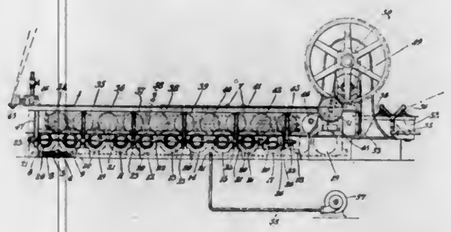
1,828,892. WARNING SIGNAL. WILLIAM T. FELTON, Buffalo, N. Y. Filed Oct. 9, 1929. Serial No. 398,305. 4 Claims. (Cl. 116—173.)



1. An article of the character described, comprising a base, a spring attached to the base, and an attention-

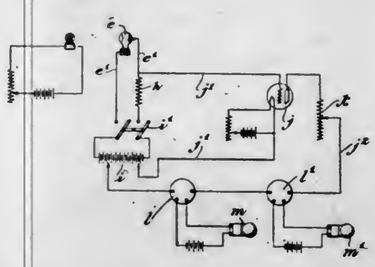
attracting device connected with said spring and having its center of gravity to one side of the center of gravity of the spring, said device being of a weight sufficient to overcome the tension of the spring and cause such spring to be normally bent to one side.

1,828,893. APPARATUS FOR TREATING FABRICS. JACOB FISCH, Wattwil, Switzerland, assignor to Heberlein Patent Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1925. Serial No. 70,415. 16 Claims. (Cl. 8—18.)



2. In apparatus for treating fabric, the combination of a thermally insulated tank for holding a liquid reagent at a substantially predetermined level, means for maintaining the reagent at substantially a constant relatively low temperature, means for stretching said fabric laterally before treatment, and means in said tank for holding said fabric in stretched condition and for moving said fabric through the said reagent in said tank below the level at which said liquid is adapted to be maintained during substantially the entire period of such treatment with said reagent.

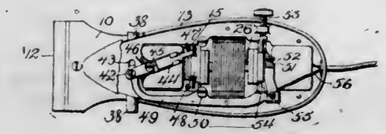
1,828,894. SUPERVISORY SYSTEM FOR DETECTING SUSPENDED MATTER IN FLUIDS. GUSTAV GEORGE FREYGANG, Weehawken, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 30, 1928. Serial No. 316,095. 6 Claims. (Cl. 177—311.)



2. The method of detecting suspended matter in fluids which consists in causing light rays to fall upon a photo-electric element directly and continually to produce a normal condition, providing a beam of light, directing the fluid stream to cause light from the beam to be reflected and refracted upon the element to cause an abnormal and changed condition, and causing a changed condition to produce an alarm signal.

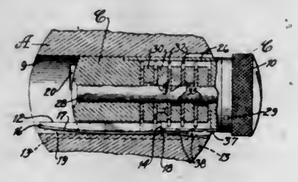
6. Means for detecting the presence of suspended matter in fluids comprising a photo-electric element, means to direct light rays normally upon the element to maintain a normal resistance value thereof, an alarm control circuit connected to the element through which a supervisory current normally flows due to the resistance of the element, a light source, means to conduct the fluid in a path to cause the suspended matter carried thereby to reflect and refract light upon the photo-electric element to increase the current in the circuit, and an alarm operating means in the alarm control circuit responsive to increases and decreases of current therein.

1,828,895. ELECTRIC MOTOR. JOHN A. HANLEY, Irvington, N. J., assignor, by mesne assignments, to Schick Dry Shaver, Inc., Stamford, Conn., a Corporation of Delaware. Filed June 18, 1930. Serial No. 461,865. 2 Claims. (Cl. 172—36.)



1. An electric motor for hand tools with a laterally reciprocating element at the end thereof, the motor comprising a field member in the form of a frame, coils on the ends of the field member, an armature rotatable on a shaft in the longitudinal centre of the handle, a direct lever connection at one end of the shaft for reciprocating the element, a make and break device at the other end of the shaft, and a switch rod connected with the shaft for starting it and connected with the make and break device for controlling the current supply to the motor.

1,828,896. INDICATOR. ORVILLE S. HERSHEY, Waukegan, Ill., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Mar. 13, 1930. Serial No. 435,422. 9 Claims. (Cl. 40—68.)

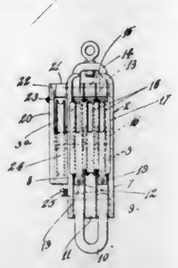


1. In an indicator, the combination of a body having a through opening communicating with a second opening in one face of the body, a wheel with peripheral numbers mounted for axial movement in the through opening and adapted in one axial position to expose a single number through the second opening, means engaging the wheel, when in the position noted, to lock the same against rotation, the wheel being freed for rotative adjustment only when shifted to another position, and operating means in yielding frictional connection with the wheel and protruding exteriorly of the through opening for manipulation to adjust the wheel when the wheel is shifted to adjusting position.

1,828,897. TRAVELING BLOCK AND SYSTEM. HOMER J. HOLLINGSWORTH, Long Beach, Calif., assignor to Erle P. Halliburton, Los Angeles, Calif. Filed Jan. 9, 1929. Serial No. 331,246. 2 Claims. (Cl. 254—188.)

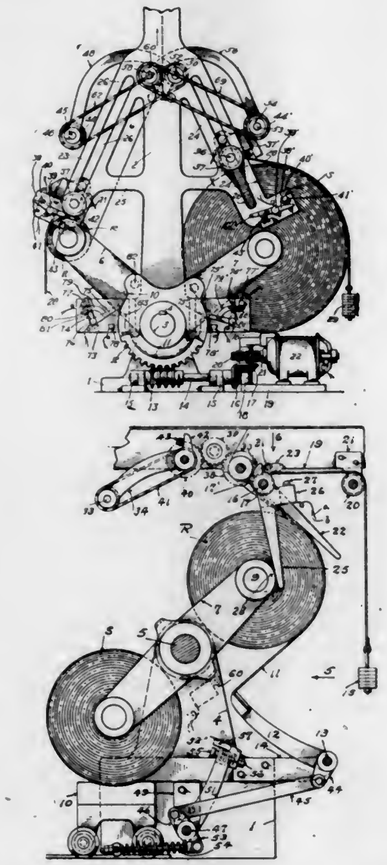
1. A traveling block comprising a frame including side members and end pins, an axle supported by the side members intermediate the end pins, a plurality of sheaves rotatable on said axle between said side plates and end pins, a further sheave rotatably mounted exteriorly of

said frame, a guard member for said exterior sheave mounted independently of said axle and movable to and



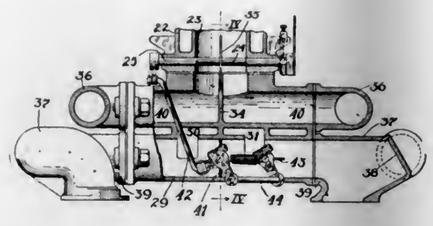
from a closed position, whereby on movement of the guard to open position a line looped about said exterior sheave may be withdrawn as a loop therefrom.

1,828,898. WEB ROLL CONTROLLING MECHANISM. HARRY V. BALL, Concord, Mass., and ALBERT J. HORTON, White Plains, N. Y., assignors to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 30, 1926. Serial No. 151,756. 34 Claims. (Cl. 242—58.)



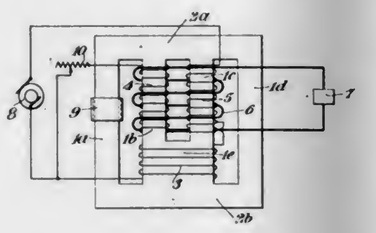
1. In a web renewing mechanism, the combination of means for supporting a running web roll and a spare roll, and means engaging with and controlled by the expiring roll for automatically uniting the web therefrom with the new roll.

1,828,899. CARBURATION SYSTEM. CHARLES H. KIRBY, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed Aug. 12, 1929. Serial No. 385,381. 20 Claims. (Cl. 123—122.)



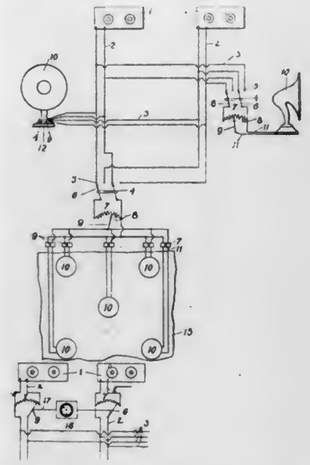
1. A carburation system for V type internal combustion engines comprising a down draft carbureter having a jacketed throttle location, said throttle carrying a division disc, an intake member having a central inlet connection for said carbureter with a partition member therein in alignment with the throttle disc, side outlet connections in said member, intake manifolds connected to said side outlets, a divided heating jacket for said member communicating with the common throttle jacket, each division thereof being connected to separate exhaust manifolds whereby to obtain a surging flow of gases from one exhaust manifold to the other, a by-pass passage directly connecting the divisions of said heating jacket, a valve controlling said bypass passage and a second valve controlling the admission of exhaust gases to said heating jacket.

1,828,900. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Oct. 26, 1929. Serial No. 402,612. 25 Claims. (Cl. 171—119.)



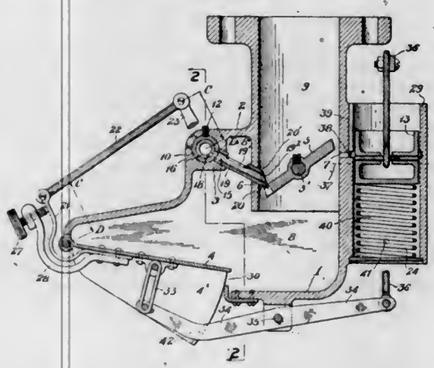
1. Alternating current controlling apparatus comprising a core, an alternating current exciting winding embracing a portion of said core, an alternating current exciting winding embracing another portion of said core and acting in opposition to said first-named winding, a damping device embracing another portion of said core and subjected to magnetic flux created by said first-named winding, and an output circuit subjected to resultant magnetic effects.

1,828,901. MULTIPLE RADIO CONTROL. ALFRED J. MACY, Evanston, Ill., assignor, by direct and mesne assignments, of nineteen sixtieths to Joseph L. Lynch, Oak Park, Ill., and forty-one sixtieths to Baritone Radio Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1929. Serial No. 346,838. 2 Claims. (Cl. 179—1.)



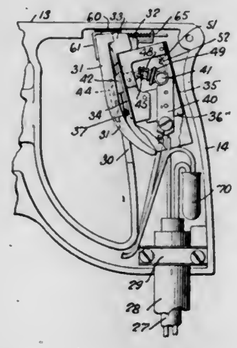
2. The method of distributing sound in a room having a ceiling, which consists in arranging a plurality of reproducers in the ceiling to direct sound downwardly with a small horizontal component, toward the floor of the room, and adjusting the sound output of the reproducers so that sound is distributed uniformly through the room.

1,828,902. CARBURETOR. CLAYTON E. MONOSMITH and DAVID J. MONOSMITH, Spencer, Ohio, assignors of one-fourth to George W. Saywell, Cleveland, Ohio; Clayton E. Monosmith, administrator of said David J. Monosmith, deceased, assignor of three-eighths to Clayton E. Monosmith. Filed Apr. 13, 1928. Serial No. 269,624. 20 Claims. (Cl. 261—45.)



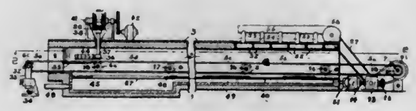
1. In carburetors, the combination of a main casing formed with a mixture outlet and with an air-opening; a suction-actuated air valve for said opening, said valve being loaded to maintain a vacuum between predetermined minimum and maximum vacuum limits; a throttle valve between said mixture outlet and said air valve and dividing said casing into a high vacuum chamber and a low vacuum chamber; a port formed in the casing adjacently rearward of the edge of said throttle valve when the latter is in its closed position; an auxiliary casing forming an auxiliary chamber communicating with the main casing through the said port and also communicating with the main casing between said throttle valve and said air valve; means forming a conduit adapted to communicate with a source of fuel supply and having a fuel port and a movable valve member controlling said fuel port; means forming a conduit subject to the vacuum of said auxiliary chamber and adapted to convey fuel from said fuel port to said first-mentioned port; means connecting said air valve and said fuel valve to move the latter proportionately to the movements of the former; and means for increasing the amount of fuel at substantially full air-valve opening relative to the amount of air.

1,828,903. ELECTRIC TOOL. WHITFIELD MORETTI, Montague, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed June 16, 1928. Serial No. 285,940. 4 Claims. (Cl. 200—157.)



1. In an electric tool having a handle portion including a hollow pistol-grip, the combination with said pistol-grip, of a trigger member pivotally mounted therein and extending along said grip, a switch supporting frame disposed in said hollow portion and removably secured in said grip, a pair of stationary contacts on said frame, a contactor guide in said frame, a movable contactor mounted to move on said guide into and out of a bridging position across said contacts, a snap-actuating lever mounted on said frame extending into engagement with said trigger member, and electrical connections disposed in said grip connected to said contacts and leading from a source of current to said tool.

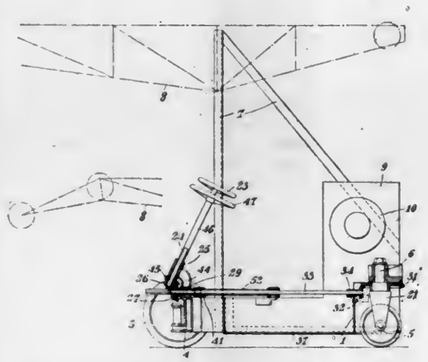
1,828,904. HEAT-TREATMENT CHAMBER. WILLIAM A. MORTON, Pittsburgh, and PAUL L. GEER, Bellevue, Pa., assignors to Amco, Incorporated, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1928. Serial No. 256,856. 13 Claims. (Cl. 49—47.)



1. The combination with a heat-treatment chamber of means for causing the articles to be treated to travel through the chamber and comprising a plurality of con-

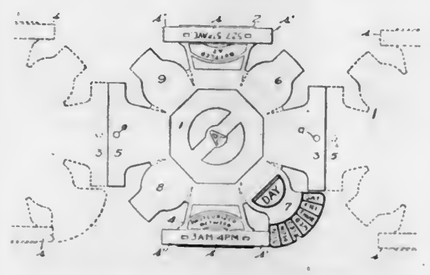
veyer elements arranged to successively receive the articles, the speed of movement of said conveyer elements increasing progressively toward the discharge end of the chamber.

1,828,905. MOTOR PROPELLED CRANE. PAUL ALPHONSE HUBERT MOSSAY, Ipswich, England, assignor to Mossay & Company, Limited, London, England, a Corporation. Filed Mar. 3, 1927, Serial No. 172,481, and in Great Britain Mar. 8, 1926. 12 Claims. (Cl. 280—87.)



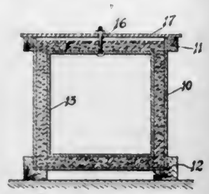
1. In a railless motor propelled crane, a carriage, a plurality of ground wheels having substantially horizontal axes, means supporting said carriage from said wheels and permitting the latter to swivel about axes substantially vertical to and substantially intersecting said horizontal axes, and a steering control mechanism including hand operated connection to said supporting means adapted to move said ground wheels around said vertical axes into a predetermined angular relation to each other for straight translational movements of said carriage or into a different angular relation to each other for curvilinear slewing movements of said carriage or into a still different angular relation to each other for traverse movements of said carriage at right angles to said first mentioned translational movements thereof.

1,828,906. CONTAINER COVER AND METHOD OF FORMING AND APPLYING SAME. FRANK O'NEILL, Jr., New York, N. Y., assignor to Empire Hood Seal Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 19, 1929. Serial No. 400,820. 9 Claims. (Cl. 215—38.)



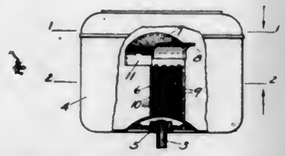
1. A container cover blank comprising a central body portion adapted to overlie the mouth of a container; a plurality of fingers projecting from said central portion and adapted to be folded down about the neck of the container into overlapping relation with each other, alternate ones of said fingers being provided with lateral extensions of a material adapted to retain a given shape, the adjacent and overlapping portions of said fingers being adapted to be rolled together to form a permanent union therebetween and to form a constricted band about the neck of the container to maintain the cover on the container.

1,828,907. METHOD OF CONSTRUCTION. OSCAR A. PEDERSEN, New York, N. Y. Filed Jan. 14, 1929. Serial No. 332,289. 4 Claims. (Cl. 25—155.)



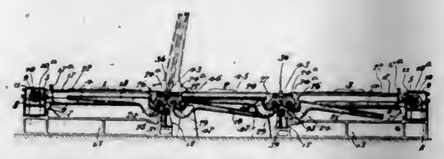
4. The method as characterized, which comprises assembling removable outer mold members of smooth material such as glass, to form a mold having bottom and sides, suspending a box-like element, composed at least in part of cold insulating material, from a temporary support on said mold members and in spaced relation from the sides and bottom thereof, pouring a cementitious material within the spaces between the sides and bottoms of the box-like element and mold members and above the top of the box-like element, and removing the temporary support, mold members, and suspension element after the material has set.

1,828,908. TUB. JULIAN L. PERKINS, West Springfield, and JOHN OAKLEY and HIRAM D. CROFT, Springfield, Mass., assignors to Perkins Machine & Gear Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 10, 1928. Serial No. 260,595. 3 Claims. (Cl. 68—15.)



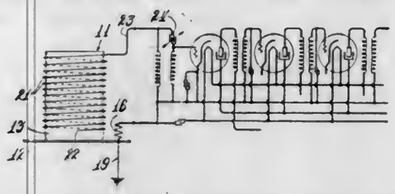
1. The combination with a cylindrical upright tub having an imperforate wall, of an upwardly extending paddle wall projecting inwardly from the wall of the tub, a ledge at the upper side of said paddle wall overhanging at one side thereof and a pocket having a downwardly disposed opening which is located between the other side of said paddle wall and the wall of said tub.

1,828,909. PLATE TURNOVER MECHANISM. EDWARD T. PETERSON, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1928. Serial No. 319,527. 9 Claims. (Cl. 198—33.)



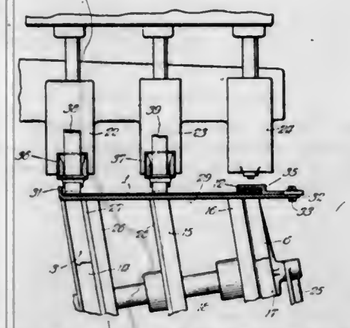
1. In mechanism of the class described, the combination with a plurality of rollers for advancing a plate of metal through the said mechanism, of means disposed in contiguous relation to the said rollers for engaging and lifting the said plate from the said rollers and for turning over the said plate, said plate being slidable on said means, and movable means for engaging an edge of said plate to control the sliding movement thereof on said means.

1,828,910. AERIAL ELIMINATOR. JOHN W. SPEAKER and ANTON SELSEMEYER, Whitefish Bay, Wis. Filed Jan. 25, 1930. Serial No. 423,370. 1 Claim. (Cl. 250—33.)



A device of the character described comprising a metallic plate conductively connected to a metallic core in the form of a cylinder, a winding mounted on said core, a resistance element secured to said plate, said resistance element including a carbon rod extending substantially parallel with said core but spaced therefrom, said plate being conductively connected to said resistance element and having a ground connection, the said winding having an open circuit and an end connected electromagnetically and electrostatically with the input circuit of a radio receiving apparatus.

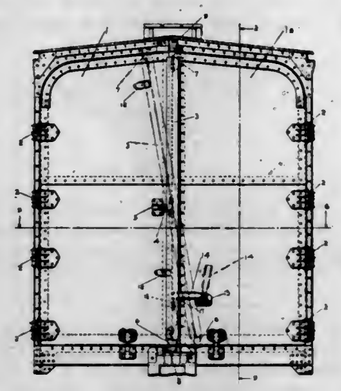
1,828,911. APPARATUS FOR MAKING BASKETS OR OTHER RECEPTACLES. CLYDE SWIGERT, St. Joseph, Mich., assignor, by mesne assignments, to St. Joseph Iron Works, St. Joseph, Mich., a Corporation of Michigan. Filed Sept. 16, 1925. Serial No. 56,560. 7 Claims. (Cl. 147—47.)



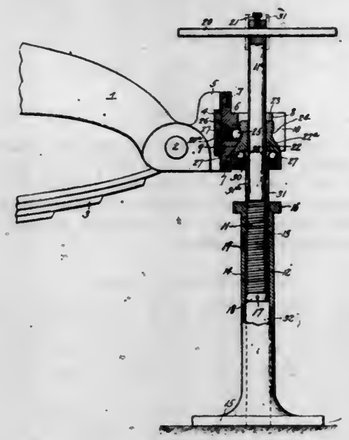
1. In a machine of the class described, the combination of a rotatable form, a support extending laterally from the form and from which a strip of material provided with a longitudinal rib is wound on the form, a guide adapted to engage the longitudinal rib on the strip of material for guiding the latter onto the form, and mechanism co-operating with the form for applying fasteners to the strip of material on the form.

1,828,912. LOCKING MEANS FOR CAR DOORS. KENNETH J. TOBIN and CARL E. EKLIND, Chicago, Ill., assignor to Camel Company, a Corporation of Illinois. Filed Apr. 9, 1928. Serial No. 268,463. 3 Claims. (Cl. 292—259.)

1. In a house car having a pair of cooperative swingable doors with overlapping frontal margins, a latching bar pivoted intermediate its ends to the overlapping door, a keeper above said doors having an outwardly flaring flange with an inwardly extending lip, and a keeper below said doors having an outwardly flaring flange with an inwardly directed lip, said latching bar having terminals with outwardly directed lips for engaging under the lips upon said keepers, whereby said latching bar serves as a post for tieing the upper and lower parts of the car together.



1,828,913. AUTOMOBILE JACKING DEVICE. JEREMIAH F. TOOMEY, New York, and JOSEPH F. MCNALLY, Brooklyn, N. Y. Filed Sept. 13, 1929. Serial No. 392,458. 11 Claims. (Cl. 254—86.)

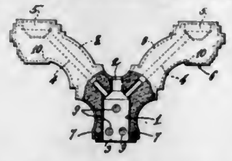


2. In a device of the character described, the combination of a bracket adapted to engage a part to be lifted, said bracket being provided with a socket opening, an abutment member movably mounted in said socket opening, a pedestal, and a thrust rod threaded into said pedestal and movably engaging said abutment member.

1,828,914. APPARATUS FOR FORMING CEMENTITIOUS BODIES. RALPH WAGGONER, Los Angeles, Calif., assignor to Marbelite Corporation of America, Los Angeles, Calif., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,400. 4 Claims. (Cl. 25—45.)

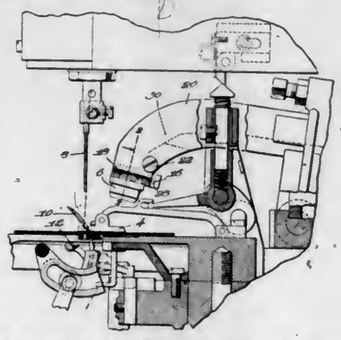
3. A machine for compacting hydraulic cementitious compositions in irregular shaped molds comprising in combination a base, a vertically extending frame positioned on said base and end thereof, pillow blocks mounted in alignment on said base and frame and adapted to receive

a vertical shaft, a shaft journaled in said pillow blocks, a table mounted on the upper end of said shaft, thrust bearings between said table and a pillow block, means for rotating said shaft and table, a vertically extending substantially circular cage provided with diametrically op-



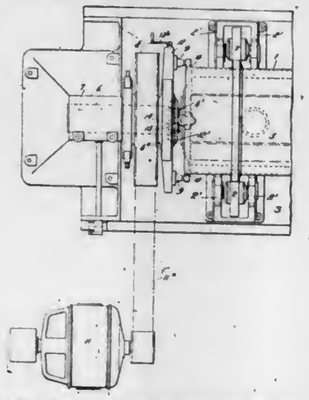
posed vertical openings therein mounted on said table, such vertical openings terminating short of said table and being adapted to receive a mold therethrough and means cooperating with said cage adapted to lock a mold therewithin.

1,828,915. BUTTONHOLE MAKING MACHINE. FRANK T. WENTWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 1, 1928. Serial No. 258,222. 4 Claims. (Cl. 164—17.5.)



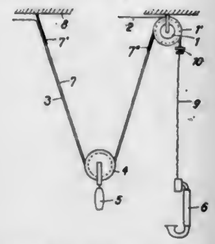
1. In a buttonhole making machine the combination with a cutter lever of a cutter having the shape of a flattened tube, a socket clamp formed in the cutter lever, and clamping members arranged on opposite sides of the cutter adapted to be held in the socket clamp to clamp the cutter rigidly in position.

1,828,916. APPARATUS FOR MOLDING HOLLOW BODIES BY CENTRIFUGAL FORCE. RALPH ALEXANDER WHITSON, Glasgow, Scotland. Filed Jan. 7, 1929, Serial No. 330,855, and in France Jan. 10, 1928. 8 Claims. (Cl. 25—30.)



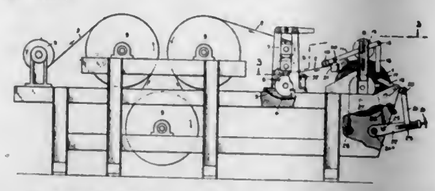
1. Apparatus for molding hollow bodies by centrifugal force embodying, in combination, a mold mounted for rotation, a driving element for said mold, means for rotating said driving element, and coupling means for coupling said driving element to said mold comprising coupling members having a loose or floating connection whereby the mold and driving element are permitted to rotate with their axes out of alignment.

1,828,917. CONTACT DEVICE FOR MOVABLE ELECTRICAL APPARATUS. ALEXANDER ARCHANGELSKY and RUDOLF GOLDBERG, Berlin, Germany. Filed June 4, 1928, Serial No. 282,807, and in Germany Dec. 4, 1926. 1 Claim. (Cl. 200—52.)



A contact device for movable electric apparatus, comprising in combination a current conductor insulated throughout and being in conductive relation by its ends to one side of an electric source of energy and to one pole of the movable apparatus respectively, a second current conductor uninsulated throughout a part of its length but having a part thereof covered with insulation and being secured at one end to a support and at the other end to the other pole of the movable apparatus, a stationary roller having a conducting circumference supporting said second conductor and being connected conductively to the other side of the source of energy, a weight applied to said second conductor for drawing its insulated portion onto said roller, and a stop on said second conductor for holding it in this position, so that a pull on the apparatus will move the last named insulated portion off said roller and complete a circuit by bringing the uninsulated portion of the second conductor onto said roller.

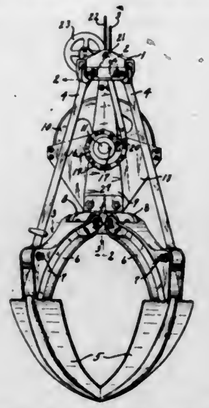
1,828,918. YARN TENSIONING DEVICE. ARTHUR BALTHASAR, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,564. 6 Claims. (Cl. 28—28.)



1. In apparatus for treating yarn, means for unwinding yarn from a package and means for maintaining uniform tension of the yarn in transit comprising means for imposing a tension upon the yarn, a floating support for said tension imposing means, and a braking device operating upon said package, said braking device being operatively connected to said tension imposing means.

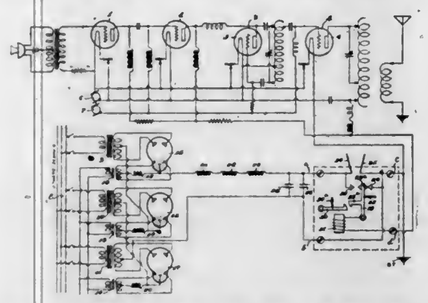
1,828,919. GRAPPLE. HOWARD C. BARBOUR and ROY H. ZEILMAN, Lorain, Ohio, assignors to The Thew Shovel Company, Lorain, Ohio, a Corporation of Ohio. Filed May 22, 1930. Serial No. 454,695. 5 Claims. (Cl. 294—111.)

1. A device of the character described comprising an upper head, means connected thereto for making an operative connection with a grapple lifting means, a lower head movable relative to said upper head and having means connected therewith for moving said lower head towards and away from said upper head to bring about a closing and opening of said grapple, a plurality of struts pivotally connected to said upper head and depending downwardly therefrom, a plurality of curved blades, and blade supporting arms curved generally with the same



curvature as that of the blades pivotally connected to said lower head and to the lower ends of said struts, the angle between a line drawn from the free point of each blade and the point of connection between the blade supporting arm and a strut and a line drawn through the pivotal points of the blade supporting arm being such that the free points of the blades are in a plane at a lower level when in closed position that the plane they occupy in open position.

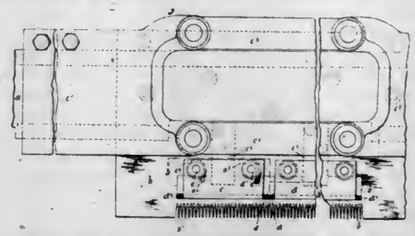
1,828,920. RADIO TRANSMISSION SYSTEM. WILLIAM ELLISON BRANCH, Fort Worth, Tex. Filed Jan. 3, 1930. Serial No. 418,387. 11 Claims. (Cl. 250—27.)



1. A power supply system for radio transmitters comprising in combination a source of electrical energy, a circuit breaker associated with said source and with said radio transmitter, said circuit breaker being provided with contact members adapted to short circuit the power circuits of said radio transmitter when said source is disassociated therewith.

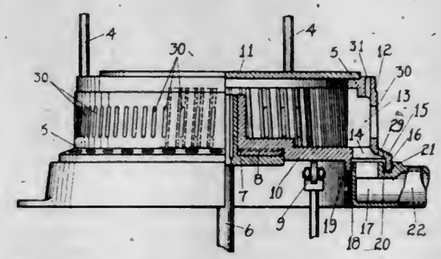
1,828,921. TUFT-CUTTING MECHANISM OF AXMINSTER CARPET AND OTHER TUFTED-FABRIC LOOMS. CECIL CHARLES BRINTON, Kidderminster, England, assignor of one-half to Brintons Limited, Kidderminster, England, a British Company. Filed Sept. 13, 1929, Serial No. 392,432, and in Great Britain Sept. 14, 1928. 7 Claims. (Cl. 139—2.)

1. A tuft-cutting mechanism for tufted fabric looms comprising in combination a stationary knife-comb, a moving cutter-comb made up of a gang of interchangeable toothed cutter-plates, a common operating bar with which said cutter-plates are detachably interconnected and which



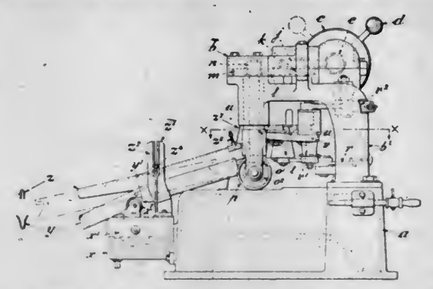
cutter-plates are independently adjustable in relation to said bar and a fixed guide bar upon which the operating bar of the moving cutter-comb assembly is slidably mounted and to which the stationary comb-plate is attached.

1,828,922. WIRE DRAWING CAPSTAN. WILLIAM E. CARROLL, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 13, 1929. Serial No. 377,958. 3 Claims. (Cl. 205—20.)



1. In a wire drawing block, a hollow rotary capstan portion, a storage portion concentric with and overlying said capstan portion, to receive and accumulate in mass formation the convolutions of wire pushed up from the capstan portion by succeeding convolutions drawn thereon, and means for air cooling the interior of said capstan portion, the latter having a circular series of upwardly-opening apertures adjacent to and substantially surrounding the base of said storage portion, for the impingement of said cooling air against the individual convolutions of wire as they move off said capstan portion onto said storage portion.

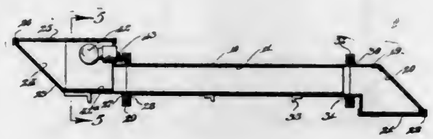
1,828,923. SINGLE OR STAND-UP COLLAR IRONING AND CURLING MACHINE. JOHN CHANT, Felixstowe, England. Filed Mar. 5, 1931, Serial No. 520,421, and in Great Britain Feb. 26, 1930. 2 Claims. (Cl. 68—9.)



1. A stand-up collar edge-ironing and curling machine, comprising a base part with sloping floor, and an overhanging bracket at one end of said base part, a horizontal power

shaft journaled in said bracket, and a vertical spindle also journaled in said bracket, a train of gear wheels intermediate of the power shaft and the vertical spindle, the first gear wheel receiving motion from the power shaft and the last wheel transmitting rotary motion to the vertical spindle certain of the other gear wheels transmitting rotary motion to two further vertical spindles, a further and horizontal spindle adjacent to the lower end of the first-named vertical spindle, bevel gear wheels for transmitting motion from said vertical spindle to the horizontal spindle, a peripherally grooved ironing roller on the horizontal spindle, and two further rollers on the lower ends of said further vertical spindles lying below the said overhanging bracket, a lever pivoted on said overhanging bracket, and a conical curling roller journaled on a vertical pivot at one end of said lever, the narrower end of said further roller being uppermost, a rubber tyre for the other two of said rollers, and means for holding the three rollers normally in yielding contact, a stationary curved block adjacent the conical roller and carried by the same supporting lever, whereby the collars, after being curled, are directed on to the said sloping floor of the machine base, as set forth.

1,828,924. COMBINATION SPOTLIGHT AND OBSERVATION DEVICE. JAMES J. CHARDELL and LOUIS J. FERDINAND, Hazleton, Pa. Filed Mar. 1, 1927. Serial No. 171,847. 11 Claims. (Cl. 88—1.)



1. In an observation device having a tube, means for mounting the device including a support, a hinge member secured to the support, a slide abutting the hinge member and having a slot, a brace secured to the tube and having a slot, and a bolt extending through the slot in the brace, the hinge member, and the slot in the slide.

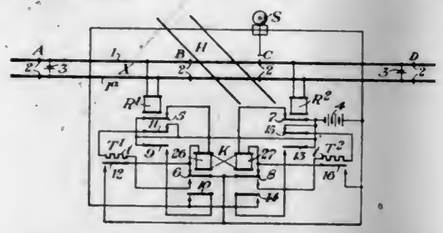
9. A device of the class described including an outer tube, a gear mounted on the outer tube, an extension on one of the tube, an inner tube telescoping into the other end of the outer tube, an extension on the outer end of the inner tube, said tubes and extensions being provided with annular flanges, channeled collars revolubly connecting said flanges, mirrors mounted in the extensions at an angle to the centerline of the tubes, a rack on the inner tube meshing with the gear, a housing formed on the outer tube for enclosing the rack, and means for actuating the gear.

1,828,925. JOINTS AND METHODS OF MAKING THE SAME. WILLIAM G. CHRISTOPHERSON, Grosse Pointe Park, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed July 19, 1930. Serial No. 469,183. 10 Claims. (Cl. 154—42.)



1. In the method of joining the edges of adjacent layers of adhesive material, the steps comprising superimposing layers of adhesive material having tapered edges with the tapered edges in an offset relation, stitching said layers along the outer edge of the inner layer to form a seal, and then applying pressure between the layers to produce a relative turning movement about said stitch between said edges to bring them together.

1,828,926. CONTROLLING APPARATUS FOR HIGHWAY CROSSING SIGNALS. PAUL H. CRAGO, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 29, 1930. Serial No. 471,459. 9 Claims. (Cl. 246—130.)



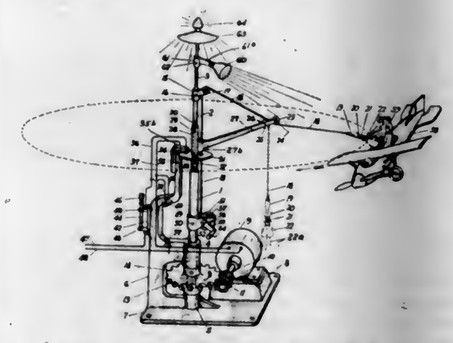
1. In combination, a stretch of railway track divided into two spaced sections, a signal, a first signal operating means operable by a car entering said first section, a second signal operating means operable by a car entering said second section, a third signal operating means operable by said first and second signal operating means, and means operable by said first and second signal operating means for preventing an operation of said third signal operating means during the time required for a car to pass from either section to the other.

1,828,927. DOOR LATCH MECHANISM. WILLIAM C. DEVEREAUX, Detroit, Mich., assignor to Ferro Stamping & Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 28, 1930. Serial No. 471,369. 14 Claims. (Cl. 292—195.)



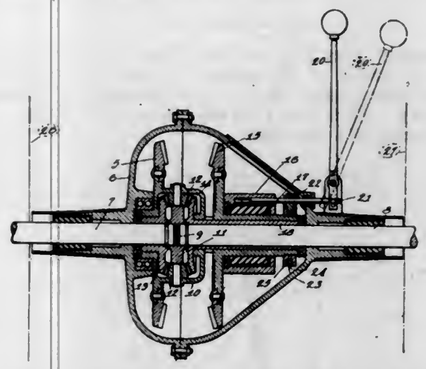
1. In a door latch mechanism, the combination with a latch bolt, of remote control means for actuating said bolt, including a rockshaft engageable with the bolt, a stub shaft at substantially right angles to said rockshaft, and a driving connection between said shaft including a cam on the stub shaft engageable with the rockshaft.

1,828,928. AERIAL DELIVERY DEVICE. ROY FISHER, Montebello, Calif. Filed Dec. 11, 1929. Serial No. 413,302. 19 Claims. (Cl. 258—1.)



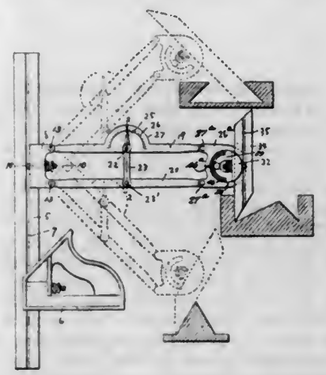
1. A delivery apparatus adapted to deliver articles to aeroplanes while in flight comprising a support adapted to support detachably and in an elevated position a moving article to be delivered, and means to rotate said support to cause said article to move in an orbital path accessible to an aeroplane while in flight.

1,828,929. TRACTOR ATTACHMENT. GUIDO GHISELLI, San Francisco, Calif. Filed Aug. 3, 1929. Serial No. 383,401. 2 Claims. (Cl. 180—9.2.)



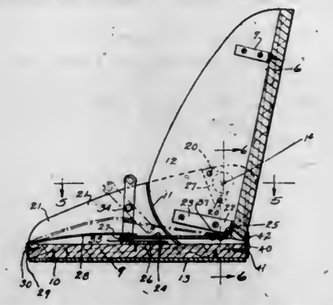
1. The combination with a differential for a tractor connected to two driven shafts, a driving gear operatively connected to the differential, a gear having a sleeve slidably and non-rotatably mounted on one of said shafts, a bearing for supporting the sleeve, and means for moving the last named gear into and out of mesh with the driving gear, said means including a collar secured to the sleeve, a ring rotatable in the collar, a rod secured to the ring and being slidable in a recess in the bearing, and a lever connected to the rod for moving the rod in the direction of its length.

1,828,930. COMBINATION SQUARE AND PROTRACTOR. WESELY GROZI, Indianapolis, Ind. Filed Feb. 24, 1928. Serial No. 256,641. 3 Claims. (Cl. 33—79.)



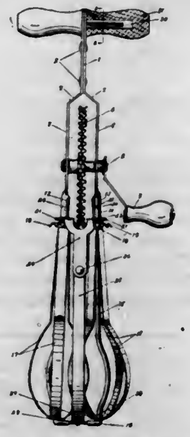
1. In a device of the class described, a slide member, a pair of spaced parallel arms of equal length pivoted at one end to said slide member, a head member pivoted to the free ends of said arms, the distance between the pivots of the respective pairs of pivots being equal, one of said arms being provided with an arcuate series of graduations, a pointer pivoted to said arms and adapted to be read against said graduations, a member rockably mounted on said head and provided with a slot, a blade operable in said slot, means for retaining said blade in a predetermined adjusted position in said slot and for movement with said member for angular adjustment relative to said head.

1,828,931. CONVERTIBLE VEHICLE SEAT. ALFRED R. HAUBER, Cleveland, Ohio. Filed May 16, 1930. Serial No. 452,836. 5 Claims. (Cl. 155—7.)



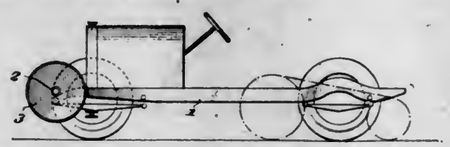
1. An adjustable vehicle seat having each seat end positioned in a vertical plane and divided to form a forward and a rear section, a back rest rigidly secured to each rear section, a seat bottom, including vertical supports upon which the rear sections are pivoted to permit the latter and the back rest to swing into a reclined position.

1,828,932. EGG BEATER. CHARLES E. KAIL, Binghamton, N. Y., assignor to A & J Manufacturing Company, Binghamton, N. Y. Filed Apr. 13, 1929. Serial No. 354,896. 2 Claims. (Cl. 259—131.)



1. An egg beater comprising a beater frame and a gear frame secured together, bearings in said gear frame, a shaft rotatable in said bearings and a sleeve on said shaft carrying a driving gear, said shaft having a notch into which is crimped a portion of the metal of said sleeve whereby said sleeve and shaft are secured for rotation together.

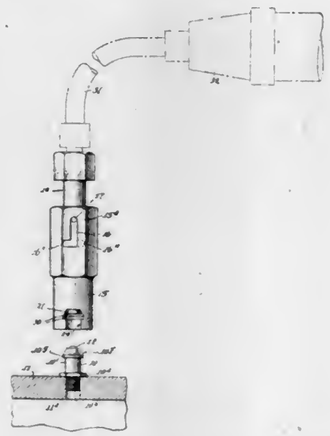
1,828,933. SHOCK ABSORBING ROLL FOR MOTOR VEHICLES. ADOLPHE KÉGRESSE, Courbevoie, France. Filed Oct. 21, 1929, Serial No. 401,341, and in France Oct. 27, 1928. 2 Claims. (Cl. 293—17.)



1. In a shock-absorbing device for use on cross-country motor vehicles, a chassis embodying side bars extending

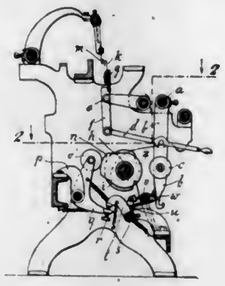
beyond the ends of the body of the chassis, vehicle wheels, a cross-piece connected at its ends to the side bars and forming a brace for the same, and a shock-absorbing wheel located above and in front of the centers of the vehicle wheels.

1,828,934. LUBRICATING APPARATUS FOR AUTOMOBILES AND THE LIKE. GEORGE KRAMER, New York, N. Y., assignor to Marie Selma Kramer, New York, N. Y. Filed Dec. 11, 1929. Serial No. 413,376. 4 Claims. (Cl. 285—143.)



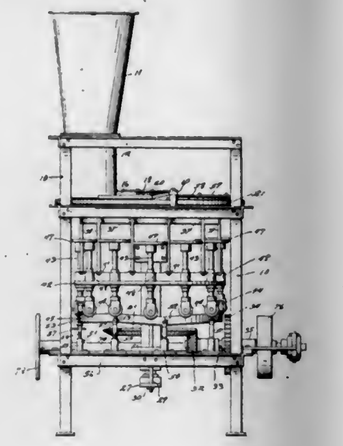
1. In a device for attaching a pressure lubricator to a part to be lubricated the combination of a nipple provided with a conical surface and a shoulder and including a check valve; a barrel movable in a direction transverse to its axis to engage said nipple, said barrel being provided with a conical surface and shoulder complementary to the surface and shoulder on said nipple; spring urged means for holding said barrel in engagement with said nipple; and means comprising a member capable of movement in two directions relative to said barrel for the purpose of holding said barrel in locking engagement.

1,828,935. MEANS FOR PRODUCING FASHIONED GOODS ON STRAIGHT BAR KNITTING MACHINES. PAUL LIEBERKNECHT, Einsiedel, near Chemnitz, Germany, assignor of one-half to Maschinen-Fabrik Einsiedel Gesellschaft mit beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Filed May 29, 1929. Serial No. 367,088. 1 Claim. (Cl. 66—89.)



In a straight-bar knitting machine, the combination with knitting needles and transfer points, with a cam follower lever controlling said knitting needles, and with a cam normally controlling said lever, of a plunger adapted to co-operate with the cam follower lever, a bell-crank controlling said plunger, an additional cam adapted to act on said bell-crank during the transfer period so as to apply the plunger to the lever and determine the position of the knitting needles relative to the transfer points during such period, and means for regulating the position of the plunger relative to the bell-crank.

1,828,936. CAN FILLING MACHINE. EDWARD D. MILLER, Inwood, W. Va., assignor to The C. H. Musselman Company, Biglerville, Pa., a Corporation of Pennsylvania. Filed July 11, 1929. Serial No. 377,426. 11 Claims. (Cl. 226—71.)



1. In a can filling mechanism, a plurality of can supports movable in a closed path, each can support being vertically movable independently of any other support, a plate mounted above the can supports and movable coincidently therewith and having openings disposed immediately above the can supports and collars attached to the plate and depending from said openings which collars are larger in internal diameter than the exterior diameter of the cans and within which collars the upper ends of the cans on said supports may be carried, the collars normally extending upward above the several cans to permit the cans to be overfilled to an extent corresponding to the height of the collars above the cans, means at one point for discharging fruit into a collar and the corresponding can, a pressure plate disposed above the first named plate, and means acting to lift the successive can supports upward to carry the can mounted thereon upward through a collar and toward the pressure plate to thus compress the material within the can, said means then acting to lower said can support to carry the can out of said collar.

1,828,937. BOOT TREE. ANDREW NIEMI, Hancock, Mich. Filed Feb. 10, 1931. Serial No. 514,862. 12 Claims. (Cl. 12—117.)

1. A boot leg-shaping form divided vertically into front and rear sections, the upper and lower end faces of said sections being provided with grooves, plates lying slidably against said upper and lower end faces of said sections and provided with ribs slidably received in said grooves,



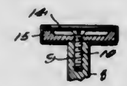
said plates having openings, and means for spreading said sections, embodying actuators passing through said openings.

1,828,938. COMBINATION SUCKER ROD SOCKET. WALTER A. O'BANNON, Tulsa, Okla., assignor to Walter O'Bannon Co., a Corporation of Oklahoma. Original application filed Mar. 6, 1928, Serial No. 259,544. Divided and this application filed May 23, 1929. Serial No. 365,396. 13 Claims. (Cl. 294—102.)



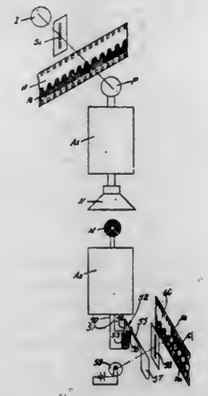
1 A sucker rod socket comprising a barrel, having a slip seat at one end thereof, a slip unit mounted in said barrel and cooperating with said seat, a second slip unit disposed over the first unit, each of said units being composed of complemental sections, and means cooperating with the sections tending to hold them in expanded positions.

1,828,939. TYPEWRITER KEYBOARD. JOSEPH METHOD OSTREY, Los Angeles, Calif. Filed Sept. 23, 1929. Serial No. 394,506. 4 Claims. (Cl. 197—100.)



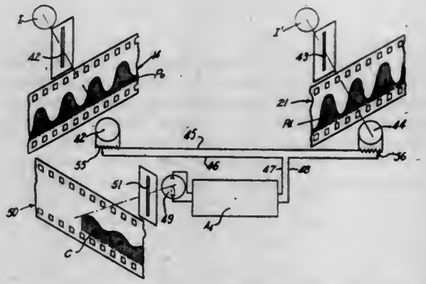
1. In a typewriter key board, the combination of a key lever, and a head adjustably mounted on the end of the key lever for adjustment in a direction transverse to the lever.

1,828,940. SYSTEM FOR CORRECTING SOUND RECORDS. ROY J. POMEROY, Hollywood, Calif. Filed May 22, 1928. Serial No. 279,789. 17 Claims. (Cl. 179—100.3.)



1. The method of making sound records that comprises, making a photographic record having a sound track area of varying total opacity of the undistorted sound, and adding to this record a band of opacity which varies from a band of constant width by the amount of and oppositely to the distortions impressed upon the sound in the operations leading to final audible reproduction of the said photographic sound record.

1,828,941. SYSTEM FOR CORRECTING SOUND RECORDS. ROY J. POMEROY, Los Angeles, Calif. Filed May 22, 1928, Serial No. 279,790. Renewed Mar. 13, 1931. 6 Claims. (Cl. 179—100.3.)

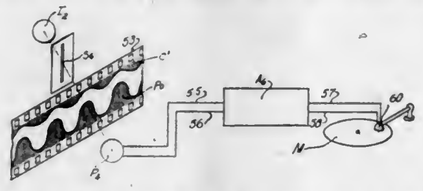


1. The method of modifying sound records that includes, making an original record of audible sound, audibly reproducing the sound with the distortions of reproduction, making a distortion record of the distorted sound as so reproduced, synchronously producing electrical sound currents from the original and the distortion records, differentially combining the sound currents so obtained in such a manner that the sound currents are neutralized except for a distortion-representing current, making a correction record of the distortion-representing current, and making a distortion-corrected record by modifying the original record with the correction record in such a manner as to alter the original record by the amount of and in a sense opposite to the distortions introduced in reproduction.

1,828,942. PRODUCTION OF CORRECTED SOUND RECORDS. ROY J. POMEROY, Los Angeles, Calif. Filed May 22, 1928, Serial No. 279,791. Renewed Sept. 5, 1931. 10 Claims. (Cl. 179—100.3.)

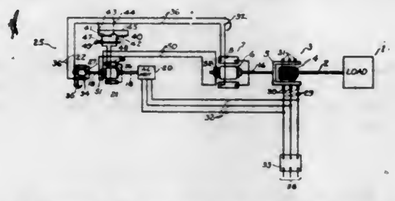
5. The method of compensating sound records that includes, making original substantially undistorted photo-

graphic and mechanical sound records of the original sound, audibly reproducing sound from the mechanical record, said sound having distortions, differentially combining a representation of the distorted sound with a representation of original sound, thus producing a representation of distortion, combining a representation of the original photo-



graphic sound record with the representation of distortion in such a manner that the resultant sound representation is distorted negatively relatively to the normal distortions, and making from said negatively distorted sound representation a distortion compensated mechanical record, said compensated mechanical record being distorted negatively to the distortions of its audible reproduction.

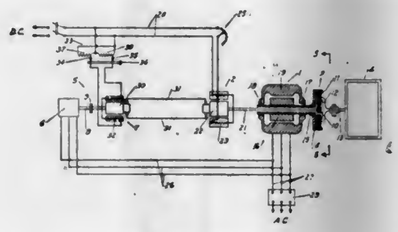
1,828,943. ADJUSTABLE SPEED DRIVE. ALLEN M. ROSSMAN, Chicago, Ill., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed May 7, 1928. Serial No. 275,641. 6 Claims. (Cl. 172—239.)



1. A system of adjustable speed alternating current drive comprising an alternating current drive motor of a constant speed type, an alternating current supply line therefor, a load shaft to be driven at controllable speeds throughout a range of speeds extending partly above and partly below a speed corresponding to the constant speed of the alternating current drive motor, an auxiliary direct current drive motor having a separately excited field and having its armature connected to an adjustable speed drive shaft, said alternating current motor being connected in differential drive relation between the drive shaft of the direct current motor and the load shaft, means for controlling the speed and direction of motion of the direct current motor comprising a direct current generator operated at a constant speed by an alternating current motor connected to said supply line, said generator having a separately excited field and an armature which is connected electrically in series with the armature of the direct current motor, and means for gradually changing the polarity and strength of the field excitation of the direct current generator to govern the polarity and voltage generated in the armature thereof, said changes of generated voltage and polarity controlling the speed and direction of rotation of the direct current motor and governing the interchange of power between the alternating current supply line and the load.

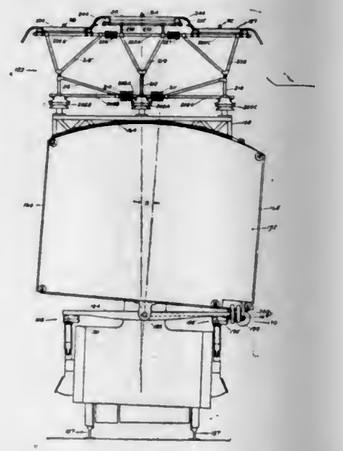
1,828,944. ADJUSTABLE SPEED DRIVE. ALLEN M. ROSSMAN, Chicago, Ill., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Jan. 31, 1929. Serial No. 336,446. 9 Claims. (Cl. 172—239.)

1. In combination, a main alternating current motor, a direct current motor, a load device, a differential gear connecting said motors to said load device, a motor generator set comprising an auxiliary alternating current motor connected electrically in parallel with said main alternating current motor and a direct current generator,



said direct current generator having an armature circuit connected in series with said direct current motor and means for controlling the power flowing in said armature circuit to vary the speed and direction of said direct current motor and thereby to vary the speed of the load.

1,828,945. TROLLEY SYSTEM FOR ELECTRIC RAILWAYS. ALLEN M. ROSSMAN, Chicago, Ill., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Apr. 23, 1929. Serial No. 357,538. 23 Claims. (Cl. 191—3.)

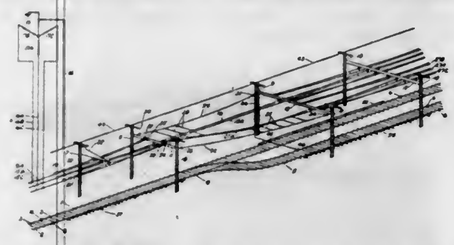


1. In combination, a three phase trolley having a central trolley conductor disposed above the outer trolley conductors, said outer trolley conductors being disconnected at a track crossover or turnout and the central conductor being continuous past the crossover or turnout, a current collector cooperating with the trolley comprising a central contact shoe and shoes on each side thereof, and means for preventing the rise of said outer shoes where they pass off of the outer trolley conductors for crossovers and turnouts.

1,828,946. TRACK AND CHANGE-OVER MECHANISM FOR ELECTRIC RAILWAY SYSTEMS. ALLEN M. ROSSMAN, Chicago, Ill., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Apr. 23, 1929. Serial No. 357,539. 34 Claims. (Cl. 191—3.)

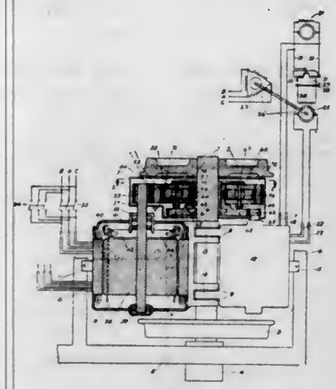
1. In an electric railway system the combination of a track consisting of sections, a three phase trolley for one section of said track, a single phase trolley for another section of said track, a motor driven car adapted to run

on said sections of track and having a motor adapted to operate on single phase or on three phase, and means for



automatically switching the motor from three phase to single phase when said car moves from one section of the track to another.

1,828,947. DRIVE. ALLEN M. ROSSMAN, Chicago, Ill., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Apr. 23, 1929. Serial No. 357,540. 24 Claims. (Cl. 105—100.)

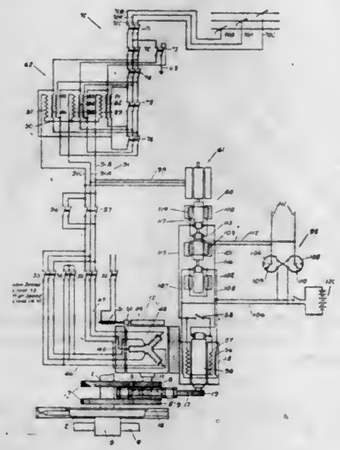


1. In combination an axle bearing railroad track engaging wheels, a pair of electric motors having driving shafts parallel to the axle and a three element differential gear lying at the same side of both motors and connecting said shafts and said axle said motors drawing power from the same source of electric supply.

1,828,948. ADJUSTABLE SPEED DRIVE ADAPTED FOR TRACTION PURPOSES. ALLEN M. ROSSMAN, Wilmette, Ill., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1929. Serial No. 360,400. 28 Claims. (Cl. 172—239.)

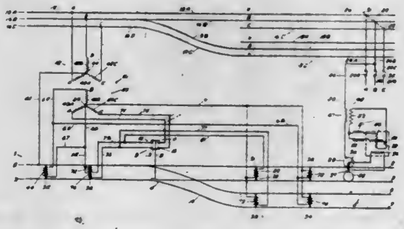
3. The method of accelerating a load through a predetermined range of speed which comprises accelerating the load from standstill by an adjustable speed motor driving in a forward direction, then applying the torque of a fixed speed motor to the load and to the adjustable speed motor and dividing the speed of said fixed speed motor between the load and the adjustable speed motor driven in reverse direction, then decelerating the adjustable speed motor to cause increase of speed of the load and then accelerating the forward speed of said adjustable speed motor and adding the speed of the same to the load.

28. An adjustable speed A. C. drive adapted for traction purposes comprising the combination of means for supplying alternating current, a load shaft adapted to be connected to a live load, a D. C. motor having a drive shaft, a main A. C. motor of the fixed speed type connected in differential relation between the drive shaft of the D. C. motor and the load shaft, a motor generator set having an A. C. motor connected to said A. C. supply means and having a D. C. generator connected in series with the D. C. motor, a separately excited field for said D. C. motor, a separately excited field for said D. C. generator, a controlling rheostat for controlling by grad-



ual steps the polarity and intensity of the excitation of the D. C. generator, braking means for holding the parts of the A. C. motor against relative rotation to permit the load to be started by the D. C. motor, the D. C. motor being operable additively as a motor and subtractively as a generator in combination with the A. C. motor for either driving the load or for regeneratively braking the same.

1,828,949. ELECTRIC TRACTION. ALLEN M. ROSSMAN, Wilmette, Ill., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed May 27, 1929. Serial No. 366,231. 47 Claims. (Cl. 191—3.)

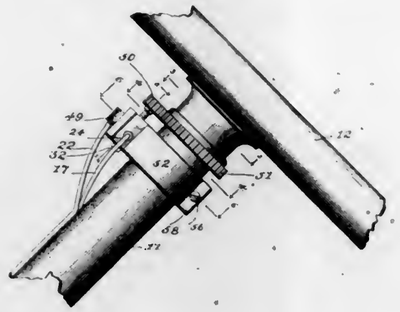


1. In an electric traction system, a track having a track switch, a three phase three wire trolley on each side of the switch, two of said trolley wires being continued throughout and over the switch.

1,828,950. TURNING SIGNAL SWITCH. WALTER M. ROY, Devon, Pa. Filed Apr. 29, 1929. Serial No. 358,832. 1 Claim. (Cl. 200—59.)

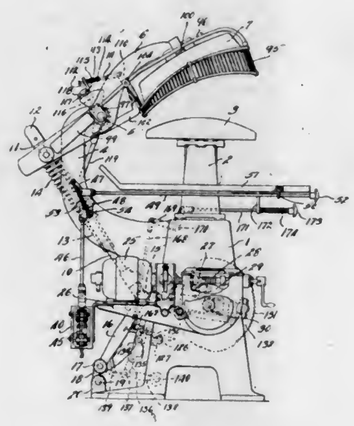
A switch mechanism comprising an insulating body having a wholly enclosed slideway therein, a block of conducting material mounted to slide in the slideway, a terminal midway of the slideway in sliding contact with the block, other terminals spaced from said first mentioned terminal and adapted to make sliding contact

electively with the block upon its movement in either direction from a mean position the while continuing con-



tact with the first mentioned terminal, a worm extended through said slideway and said block, and means to rotate the worm.

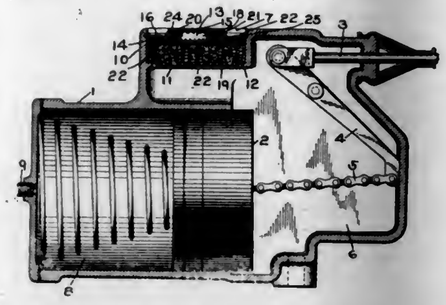
1,828,951. GARMENT PRESS. JAMES H. TAYLOR, New York, N. Y., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 12, 1924. Serial No. 712,585. 8 Claims. (Cl. 68—9.)



1. A pressing machine, comprising relatively movable pressing members, main toggle members for producing pressure between them, power means, actuating mechanism operatively connecting the power means to said toggle members, an emergency member connected to said main toggle members and movable into operative and safety inoperative positions, and power operated means for actuating said emergency member including a controlling part operatively associated with a part actuated by said power means.

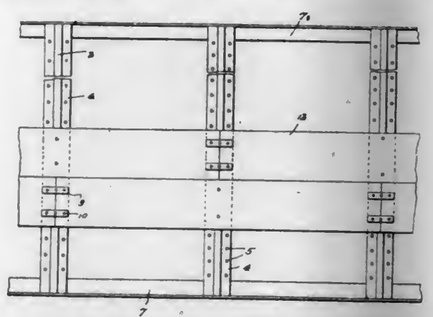
5. A garment press, comprising relatively movable pressing members, toggle members for actuating the same, a power source, and connections therefrom to the toggle members for operating the same, an emergency pressure releasing member cooperating with said toggle members, and means for actuating said pressure releasing member, including a part in the connections from said power source to the toggle members.

1,828,952. STRAINER BAFFLE. STEPHEN VORECH, Wilmerding, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 4, 1930. Serial No. 433,057. 2 Claims. (Cl. 183—48.)



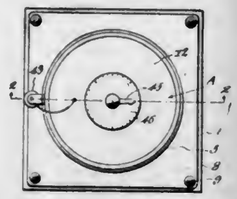
1. A cover for an air strainer comprising a plurality of plates forming a passageway through which an air stream flows to said strainer, and lugs on one of said plates extending through and bent into engagement with the other of said plates to secure said plates together.

1,828,953. BUILDING STUD. JOHN WISSHEIER, West Philadelphia, Pa. Filed Oct. 30, 1929. Serial No. 403,515. 2 Claims. (Cl. 72—115.)



1. A building stud of the character described comprising a pair of channel bars and a filler strip interposed therebetween, the opposite ends of said bars and filler strip being transversely slotted and substantially T-shaped anchoring plate on said opposite ends having a portion slidably engaged in the slot and being further provided with means for anchoring the same to a support.

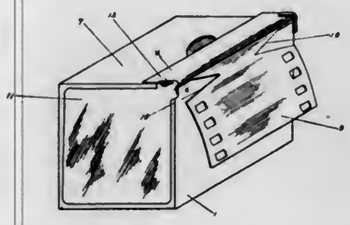
1,828,954. GRAVITY CALCULATOR. MCMASTER SYLVESTER BLACKBURN, San Antonio, Tex., assignor to Geophysical Petroleum Corporation, San Antonio, Tex., a Corporation of Texas. Filed May 21, 1930. Serial No. 454,460. 11 Claims. (Cl. 73—4.)



1. A device for measuring anomalies in gravity comprising a liquid column, means for protecting said column against temperature and atmospere changes, a carriage

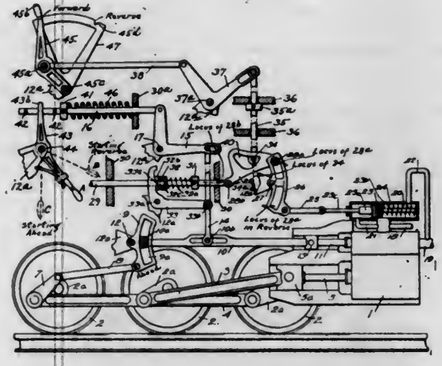
slidable relative to the column having an indicator for alignment with the top of the liquid column, and means including a precision measuring instrument for adjusting said carriage.

1,828,955. FILM PACKAGE. CARL BORNMANN, Binghamton, N. Y., assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed May 16, 1927. Serial No. 191,790. 2 Claims. (Cl. 206—52.)



1. A wood container, designed and shaped to receive a coil of film, said container having a coating of silicate of soda on the inside walls thereof.

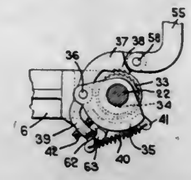
1,828,956. APPARATUS FOR CONTROL OF VARIABLE CUT-OFF VALVE GEARS. ROBERT EARLL BRUCKNER, Hastings-on-Hudson, N. Y. Filed Oct. 11, 1926. Serial No. 140,907. 8 Claims. (Cl. 121—148.)



7. In a motor, the combination of a motor cylinder having inlet and exhaust passages; a variable cut-off valve gear therefor; a pressure device connected with the fluid passages of the cylinder and responsive to pressure differences therein varying the cut-off; means limiting the range of cut-off in response to the action of said device; and means manually controlling the valve gear, said manual means being adapted to extend or vary the cut-off beyond the range of variations of the cut-off in response to the device.

1,828,957. POSITIVE LET-BACK MECHANISM FOR LOOMS. HORACE H. BURDETT, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed July 30, 1930. Serial No. 471,702. 12 Claims. (Cl. 139—313.)

1. A take-up mechanism for a loom comprising a shaft normally held stationary and acting when rotated to shift the position of the fell, means connected to the shaft by which it may be manually rotated to shift the position of the fell, and means normally held out of operative engagement with the said shaft and acting upon the

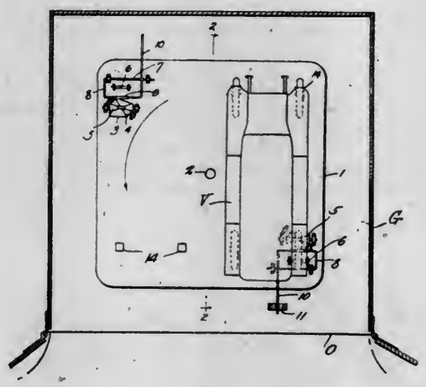


occurrence of a filling fault momentarily and operatively to engage the shaft and positively to rotate the same in the direction to effect let-back.

1,828,958. METHOD OF PRODUCING POLYCHROMATIC SCREENS AND THE LIKE. ALLEN A. CANTON, New York, N. Y. Filed May 23, 1929. Serial No. 365,578. 7 Claims. (Cl. 95—81.5.)

1. The process of manufacturing polychromatic films for color photography which consists in applying varicolored magnetic particles to the surface of the film whereby to transfer the color from said particles to said film and then removing said particles by means of a magnet, said particles being initially prepared by dividing the same into several groups respectively stained with differently colored dye-stuffs.

1,828,959. TURNTABLE. EGBERT C. COOK, Puente, Calif. Filed Aug. 22, 1930. Serial No. 477,121. 6 Claims. (Cl. 104—41.)

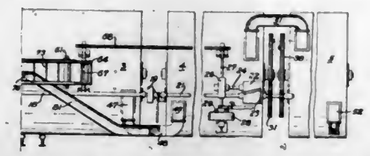


1. A device of the class described including a platform mounted for rotation about a central pivot, a roller carried thereby for supporting a portion of the platform, a roller above and frictionally engaging the same to drive the platform about its pivot, and a roller carried by the platform and cooperating with the upper drive roller to support a power-driven vehicle wheel.

1,828,960. PROCESS FOR THE PREPARATION OF DIAZONIUM PERCHLORATES OF AMINODIPHENYL. TENNEY L. DAVIS and ERNEST H. HUNTRESS, Cambridge, Mass., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Jan. 27, 1930. Serial No. 423,879. 3 Claims. (Cl. 260—69.)

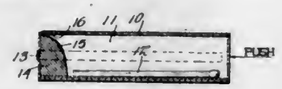
1. The process of producing a diazonium perchlorate of a diphenyl derivative comprising diazotizing an aminoderivative of diphenyl, reacting the diazotized diphenyl in acid solution with perchloric acids, and removing the precipitated diazonium perchlorate from solution.

1,828,961. COOKING APPARATUS. WILLIAM DE BACK, San Leandro, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill., a Corporation of Delaware. Filed Jan. 22, 1927. Serial No. 162,912. 14 Claims. (Cl. 126—272.)



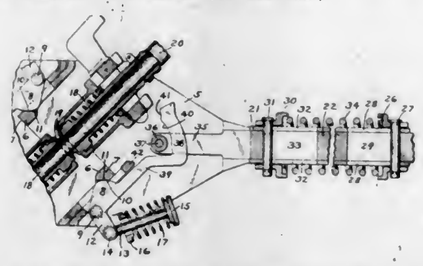
5. In an apparatus for treating packaged goods, a plurality of drums, a conveyer in each drum for carrying the packages therethru, means for optionally connecting the conveyers in adjacent drums for rotation together, and means for optionally varying the speed of rotation of the connected conveyers.

1,828,962. MATCH BOX. MITCHELL N. DREW, Quincy, Fla. Filed Mar. 18, 1929. Serial No. 348,070. 2 Claims. (Cl. 206—34.)



1. A match box comprising an open-ended outer box section, a tray forming an inner box section, a striking paper mounted on a curved block between the contiguous edges of the ends of the tray and a flat striking paper mounted on the underside of the top of the outer section, resilient means normally holding the box sections in closed position for forcing a match head against said striking paper when the same is drawn between said sections, substantially as set forth.

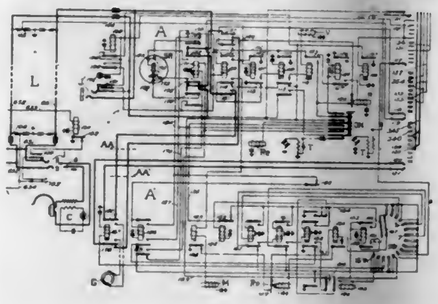
1,828,963. AUTOMATIC TRAIN PIPE COUPLING. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 10, 1928. Serial No. 324,861. 5 Claims. (Cl. 285—58.)



1. A device of the class described comprising a train pipe coupling having a rearwardly extending sleeve section and a lever for locking the coupling head in its coupled position, a stem mounted in said sleeve section and having one end anchored to the car and having a roller at the other end, and an arm projecting from said lever and extending across said stem in the path of the roller.

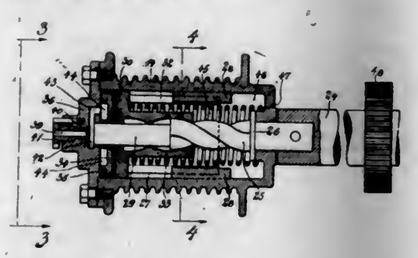
1,828,964. TELEPHONE SYSTEM. HERBERT M. FRIENDLY, Portland, Oreg.; Milton S. Friendly and Central Trust Company of Illinois executors of said Herbert M. Friendly, deceased. Filed Mar. 5, 1923. Serial No. 622,783. 92 Claims. (Cl. 179—27.)

1. In an automatic telephone system, a group of waiting group-selecting switches, a group of lines commonly accessible to the said switches, a group of group test contacts multiply accessible to each switch indicative if all the lines of the group are busy as well as the number of switches in waiting relation thereto, independent test contacts multiply accessive to each switch corresponding to the individual lines of the group to indicate their respective busy or idle state, means for operating the respective switches into testing engagement with the group test contact group, means for setting-up a successive order-of-access in the respective switches with respect to the group being tested corresponding to the order in which



the testing switches which have an order of access tested the group of group test contacts whereby when a line of the group becomes idle the switch having the remotest antecedent order-of-access will self-initiate its hunting operation with respect to the lines of the group and seize the first idle line tested, means for maintaining the order-of-access existing in the waiting switches until the hunting switch seizes an idle line, means for restoring the hunting switch to its last waiting condition if it fails to find a disengaged line, and means for advancing the numerical order-of-access of each waiting switch by one order consequent upon the hunting switch seizing.

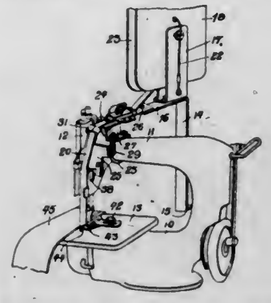
1,828,965. DIPPER TRIP. FRANK A. FULLER and CARL M. MOORE, Erie, Pa., assignors to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 23, 1929. Serial No. 334,516. 13 Claims. (Cl. 254—172.)



1. In a mechanical movement, the combination of: a cylinder; a piston therein; a cylinder head; a helical element, helically keyed to the piston; and means for introducing fluid under pressure into the cylinder between the cylinder head and the piston, whereby to cause relative translation, and hence relative rotation, between the piston and the helical element.

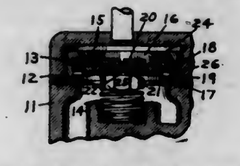
1,828,966. SEWING MACHINE ATTACHMENT. SAMUEL HALBERG and HARRY L. HALBERG, Brooklyn, N. Y. Filed June 4, 1928. Serial No. 282,846. 6 Claims. (Cl. 112—152.)

1. A tape guiding attachment for sewing machines including a generally L-shaped member including an approximately horizontal portion to be disposed over a sewing machine arm and receive tape from a roll, a substantially vertical portion for guiding the tape to the sewing mechanism, tape guiding straps on each portion of



the L-shaped member, and a toothed tensioned spring finger under one strap preventing retrograde movement of the tape.

1,828,967. CHECK VALVE. ELLIS E. HEWITT, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 6, 1928. Serial No. 324,146. 1 Claim. (Cl. 251—144.)

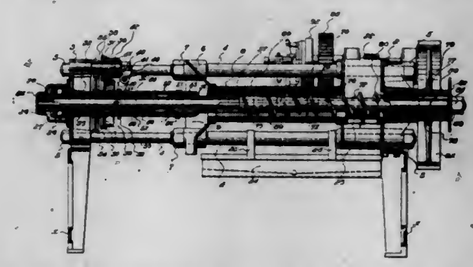


In a fluid pressure apparatus, the combination with a chamber provided with a seat rib, of a valve device mounted in the chamber and adapted to engage the seat rib, said valve device comprising a plurality of superposed disks, one of which has a diameter corresponding approximately to the diameter of the chamber, the other disk constituting a seat for engaging the seat rib, the larger disk being provided with peripheral notches, a perforation formed centrally in each disk, the perforation in the smaller disk being greater in area than the perforation in the larger disk, a bolt having a head engaging the smaller disk, said bolt having a shank of two diameters, the largest portion of the shank being disposed in the perforation in the smaller disk, the remaining portion of the shank being threaded and passing through the larger disk, a nut mounted on the threaded shank of said bolt and bearing against the larger disk for clamping the two disks together, and an expansible coil spring bearing at one end against the face of the larger disk for forcing the smaller disk against the seat rib, said spring encircling said nut whereby said valve is maintained correctly positioned in said chamber.

1,828,968. SCREW PRESS. STANLEY HILLER, Oakland, Calif., and ARTHUR E. OZOUF, Chicago, Ill. Filed June 23, 1926. Serial No. 117,997. 6 Claims. (Cl. 100—48.)

3. A unitary detachable press barrel for high pressure presses comprising a plurality of relatively thin plates; each of said plates provided with a semi-circular opening, a pair of recesses, and spacing projections adjacent said opening and said recesses; said recesses adapted to register to provide a pair of laterally disposed longitudinally extending knife bar receiving recesses; a knife bar disposed in each of said recesses; and means for clamping said plates into a cylindrical barrel formation with said knife bars firmly clamped in said recesses.

5. A press comprising a body portion; a screw shaft extending through said body portion; an externally threaded sleeve journaled for rotation on said shaft and immovable longitudinally thereof; a discharge cone driven by said shaft and movable longitudinally thereof; an internally threaded cone supporting sleeve secured to said discharge cone and co-operating with said externally threaded sleeve; means for causing rotation of said ex-



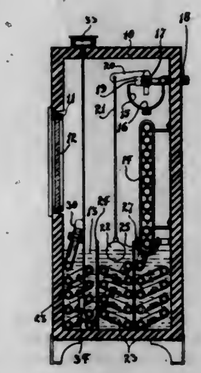
ternally threaded sleeve for moving said discharge cone away from the discharge end of said body portion; and means for preventing rotation of said externally threaded sleeve for moving said discharge cone toward the discharge end of said body portion.

1,828,969. WALL CONSTRUCTION. HERMAN W. HOFFER, Watervliet, N. Y. Filed May 8, 1929. Serial No. 361,469. 4 Claims. (Cl. 72—30.)



2. A method of erecting walls consisting in arranging in spaced parallel and end to end relation a plurality of wall slabs, arranging vertically disposed pairs of transverse partition elements between the inner and outer wall slabs on opposite sides of the juncture of the ends of said slabs, temporarily clamping the wall slabs and partition elements in said relation by exerting external inward pressure thereagainst, and pouring a plastic substance into the space defined between each pair of partition strips and the inner and outer wall slabs, to form columns within the confines of the wall structure for strengthening the same and for joining and supporting the slabs.

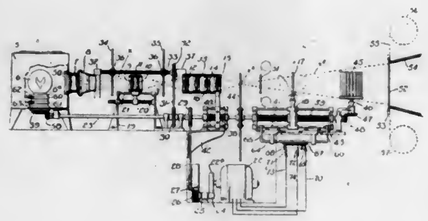
1,828,970. WATER COOLER. GEORGE J. HUNTLEY, Baltimore, Md., assignor to Crown Cork & Seal Company, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1929. Serial No. 356,364. 14 Claims. (Cl. 62—141.)



1. A water cooler embodying therein a heat insulated casing, having a storage compartment toward the bottom

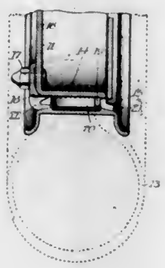
thereof, a refrigerating coil above said compartment, a feed water source communicating with said casing above said coil, means distributing water from said feed water source and delivering it in small volume upon said coil, refrigerating means within said storage compartment, means supplying a refrigerating medium to said refrigerating coil and said refrigerating means, and an offtake adjacent the bottom of said compartment.

1,828,971. METHOD AND APPARATUS FOR PROJECTING MULTICOLOR RAYS. WILLIAM L. ISBILLS, Westfield, N. J. Filed June 21, 1928, Serial No. 287,322. Renewed Jan. 21, 1931. 20 Claims. (Cl. 88—24.)



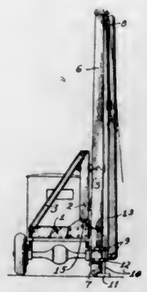
1. An apparatus for projecting color rays onto a screen or receiving body comprising a source of illumination, a plurality of lenses disposed in the ray path emanating from said source, predetermined lenses being arranged in chromatic aberration with respect to each other, and means involving a driving mechanism for automatically moving one of said lenses longitudinally of the ray path during the operation of the apparatus.

1,828,972. VEHICLE WHEEL. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 27, 1925. Serial No. 11,935. 5 Claims. (Cl. 301—6.)



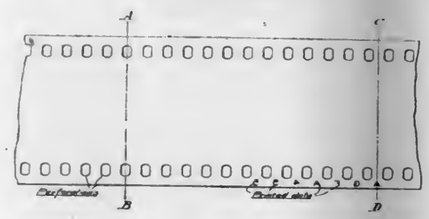
1. In a vehicle wheel, a brake drum, a tire rim supported by the drum in radially separated relation thereto, and means interposed in the space between the drum and the rim for inducing currents of air to flow across the outer face of the drum between the drum and rim when the wheel is rotated.

1,828,973. PORTABLE GIN POLE STRUCTURE. GROVER D. LEISTER, San Francisco, Calif. Filed May 1, 1929. Serial No. 359,538. 5 Claims. (Cl. 254—139.)



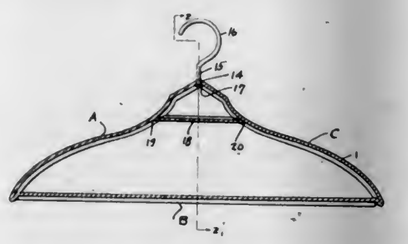
1. A portable gin pole structure comprising a vehicle; a frame extending upwardly therefrom and at one side thereof, a gin pole pivoted to the frame beyond the vehicle side for swinging movement into a vertical position, and tackle operatively associated with one end of the gin pole.

1,828,974. PHOTOGRAPHIC FILM WITH VISIBLE REPRODUCIBLE INSCRIPTIONS. HERMANN LUMMERZHEIM, Dessau-Ziebigk, and EDUARD SCHNITZLER, Dessau in Anhalt, Germany, assignors, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Oct. 29, 1927, Serial No. 229,791, and in Germany Mar. 16, 1927. 4 Claims. (Cl. 134—28.)



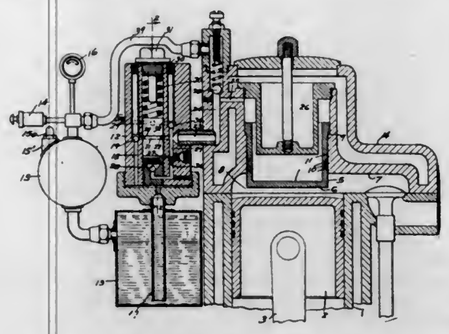
1. As an ink for continuous printing on photographic film strips, a mixture containing a dyestuff and glycol acetate.

1,828,975. COAT HANGER. MASICK C. MAGARIAN, Fresno, Calif. Filed July 5, 1928. Serial No. 290,589. 2 Claims. (Cl. 223—62.)



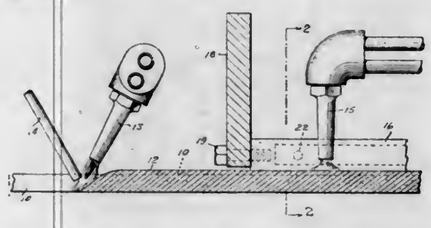
2. A coat hanger comprising a single strip of metal having a central piece curved in cross section to form a trouser-supporting strut and two end pieces curved in cross-section and bent upon the strut and joined at their free ends to form an arch over the strut, the material of the strip being reduced at the bends and said reduced portions being disposed in the hollow of the end pieces.

1,828,976. CONSTANT COMPRESSION COMBUSTION ENGINE. ROBERT PETER MCNAUGHT, San Francisco, Calif. Filed Apr. 11, 1927. Serial No. 182,820. 5 Claims. (Cl. 123—78.)



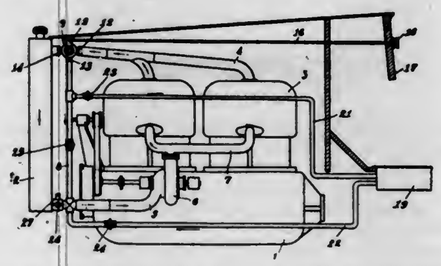
1. In a device of the type described, a valve, a displacement piston, a storage tank, communications between said displacement piston and said tank and controlled by said valve for admitting fluid from said tank to said piston, and means controlled by the pressure against said displacement piston for causing said valve to cut off communication between said tank and said piston.

1,828,977. METHOD OF ANNEALING FUSION WELDS. SAMUEL W. MILLER, Hollis, N. Y., assignor to Oxweld Acetylene Company, a Corporation of West Virginia. Filed Oct. 5, 1928. Serial No. 310,595. 6 Claims. (Cl. 148—21.5.)



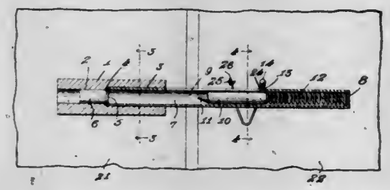
1. Process of annealing a fusion weld in ferrous metal, which comprises cooling a freshly formed weld to a temperature just below the lower critical temperature of the metal, heating the so-cooled weld to a temperature just above the upper critical temperature of the metal, and then cooling the weld through the critical range.

1,828,978. WATER COOLING SYSTEM FOR INTERNAL COMBUSTION ENGINES. CARL L. MOE, Salinas, Calif. Filed July 11, 1928. Serial No. 291,761. 1 Claim. (Cl. 123—174.)



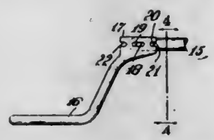
A water-circulating system for an internal combustion engine comprising a water jacket, a radiator, a conduit for conveying water from the jacket to the top of the radiator, a second conduit for conveying water from the radiator to the water jacket, a pump disposed in the second conduit, a by-pass communicating with said conduits, a manually-controlled valve for causing the water from the jacket to flow through the by-pass when actuated and an inlet valve in said second conduit for permitting warm water to be placed into the system, said warm water being circulated through said jacket by said pump and being discharged into said radiator for thawing the same when frozen, or circulated through the by-pass upon actuation of the manually-controlled valve.

1,828,979. ALARM. SAMUEL S. NEWMAN, Winfield, Kans. Filed Aug. 22, 1930. Serial No. 477,110. 1 Claim. (Cl. 116—87.)



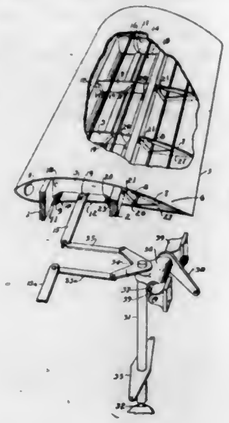
An alarm comprising a barrel having a bore leading in from one end and a counterbore leading in from the opposite end said bores being concentric and the counter-bore being of greater diameter than the bore whereby a shoulder is provided interiorly of the barrel at the inner ends of the bores, the counter-bore being threaded, a tube having an exterior thread adapted to engage the thread of the counter-bore, said tube having a passageway substantially of the same diameter as the bore and adapted to aline with the bore of the barrel when inserted therein, said tube having an angle slot, a pin slidably mounted in the tube, said pin being substantially of the same diameter as the bore, a spring interposed between the outer end of the pin and the outer end of the tube and a stud mounted upon the pin and disposed through said slot.

1,828,980. CRANK MEANS FOR BED OPERATING MECHANISM. MOSES C. NIXON and ALEXANDER F. KAPTULLER, Chicago, Ill., said Kaptuller assignor to said Nixon. Filed Apr. 7, 1930. Serial No. 442,230. 10 Claims. (Cl. 74—33.)



10. In operative means for a pivoted section of a bed of the class described, the combination of a rotatable member, a crank having a hub provided with a slot and mounted on said member, an element carried by the rotatable member and extending into said slot for pivotally and slidably securing the crank on the rotatable member, a member extending laterally from the rotatable member, and means carried on opposite ends of the crank hub, one of which is adapted to coengage with said extending member upon sliding the crank on the rotatable member for holding the crank in operative position, and the other of which is adapted also to coengage with said extending member upon reversal of position of the crank and sliding it on said member for holding the crank in non-operative position.

1,828,981. AEROPLANE. FRANCIS F. PARKER, Los Gatos, Calif., assignor of one-half to Robert G. Fowler, San Jose, Calif. Filed Dec. 2, 1929. Serial No. 411,032. 6 Claims. (Cl. 244—12.)

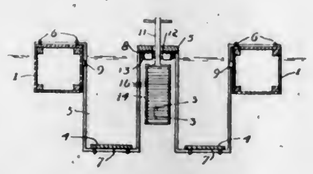


1. An airfoil having fixed entering edge and top portions and flexible trailing edge and bottom portions, and means for simultaneously flexing the trailing edge and bottom portions in opposite directions.

1,828,982. PROCESS FOR ACTIVATING CELLULOSE BEARING MATERIAL PREPARATORY TO HYDROLYSIS. JOHN PEEL, Los Angeles, Calif., assignor to M. M. Cory, San Diego, Calif. Filed June 15, 1925. Serial No. 37,350. 16 Claims. (Cl. 127—37.)

1. In the art of hydrolysis of cellulose bearing materials, before hydrolysis, the step of activating such materials comprising the subjecting of said materials to the action of organic fatty acids in amounts insufficient to hydrolize.

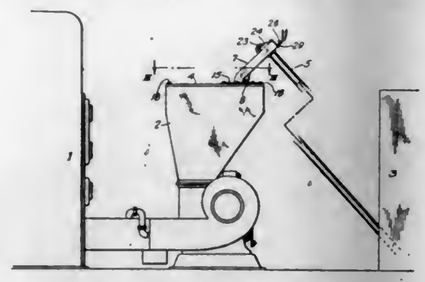
1,828,983. FLOAT. WILLIAM E. RAWLINGS, Santa Clara County, Calif. Filed Aug. 27, 1930. Serial No. 478,105. 1 Claim. (Cl. 115—31.)



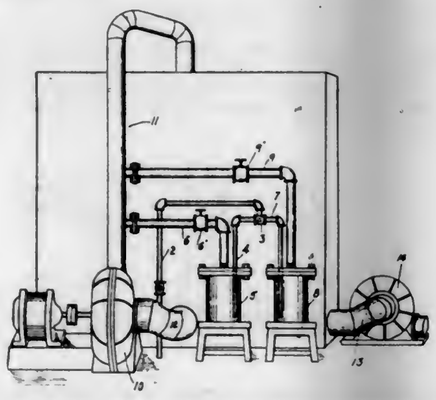
A float comprising a plurality of spaced parallel buoyant members, W shaped suspension bars pivotally mounted thereon, a seat member and foot rest members mounted on the bars, means for locking the bars in a given position, and means for propelling the float.

1,828,984. COAL CONVEYER. WILLIAM MOORE SCHWEICKART, Ramsey, N. J., assignor to Automatic Coal Burner Company, Seattle, Wash., a Corporation of Washington. Filed May 9, 1930. Serial No. 450,968. 6 Claims. (Cl. 198—49.)

1. The combination of a coal receiver of the kind indicated, a coal conveyer for conveying coal from a coal bin to said receiver comprising a reach, a delivery snout fixed to the receiver end of the reach and delivering into the receiver, a snout plate and means hinging the snout to the snout plate on an axis extending substantially horizontally and transversely of the reach, and means permitting adjustment around a vertical line passing through the snout plate for supporting the snout plate on said receiver.



1,828,985. METHOD OF SUPERFICIALLY FINISHING RUBBER ARTICLES. SEAPHES D. SHINKLE, New Haven, Conn., assignor to L. Candee & Company, New Haven, Conn., a Corporation of Connecticut. Filed Dec. 13, 1926. Serial No. 154,619. 16 Claims. (Cl. 91—70.)



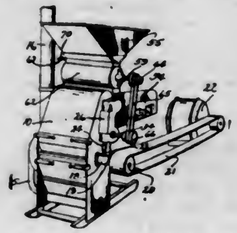
1. The method of finishing vulcanizable articles which comprises coating a rubber article with a varnish comprising an oxidizable oil, and both heat curing, and subjecting the coated article to a superficial treatment with a medium containing a low concentration of a halogen-supplying material.

1,828,986. DILATING IRRIGATOR. GOLDER E. STEVENS, Seminole, Okla. Filed Sept. 26, 1929. Serial No. 395,883. 1 Claim. (Cl. 128—291.)



1. A dilating irrigator comprising an L-shaped tube, one branch thereof forming a combined handle and discharge portion and the other branch providing a comparatively long syringe portion to be inserted in a passage of a person, a control valve in the combined handle and discharge portion, a perforated disk located in the free end of the syringe portion and having a centrally arranged bearing opening, a bushing formed on the tube at the bend thereof and having the bore of said bushing in alinement with the bearing opening, a second tube slidable in the bushing and bearing opening and having one end flared to receive a syringe, a hollow conical-shaped head formed on the other end of the second tube and having discharge openings directed toward the perforated disk, flexible strips connected to the head and to the free end of the syringe portion to be flexed by the movement of the head relative to the free end of the syringe portion, and a nut threaded to the second tube and bearing against the bushing for varying the head relative to the free end of the syringe portion and to expand the walls of the passage adjacent the head by flexing the strips.

1,828,987. FEED-PREPARING APPARATUS. RICHARD STRESAU, Wauwatosa, Wis., assignor to Swifton Manufacturing Company, West Allis, Wis., a Corporation of Wisconsin. Filed May 15, 1929. Serial No. 363,277. 2 Claims. (Cl. 146—106.)



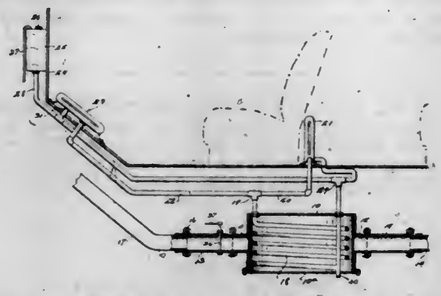
1. In a feed mill, the combination with a cutter, of means for feeding fodder thereto, means for feeding grain to the machine to mix with the fodder, means for automatically stopping the feed of fodder to the cutter when the same falls below a certain predetermined speed, and means for simultaneously stopping the feeding of grain on the automatic stoppage of said fodder-feeding means.

1,828,988. HAM HANGER. WAYLAND J. VINSON, Portsmouth, Va. Filed Feb. 21, 1930. Serial No. 430,347. 1 Claim. (Cl. 17—44.)



A ham hanger comprising spaced side members, means for connecting the opposite end portions of the side members to maintain the same in desired relation, supporting means carried by one end portion of the device, and outstanding loop members carried by the side members, one of said loop members being of a size to receive the hock of a ham and the other of a size to receive the upper portion of the ham, the extremities of the side members remote from the supporting means being provided with lugs disposed in a direction opposite to that of the loop members.

1,828,989. HEATING SYSTEM FOR AUTOMOBILES. WILLIAM J. WADE, Fort Madison, Iowa, assignor of one-half to Murdock J. Campbell, Fort Madison, Iowa. Filed Apr. 23, 1929. Serial No. 357,584. 1 Claim. (Cl. 257—241.)

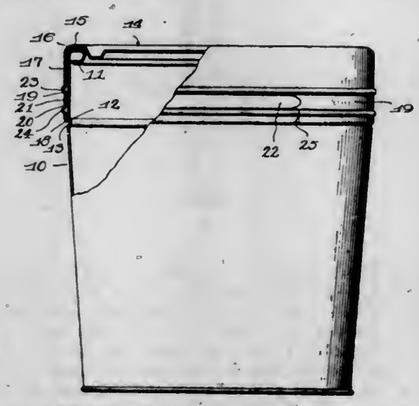


An automobile heater including a casing having a removable bottom wall, oppositely disposed flanged nipples formed as part of the casing and adapted to be connected in the length of an engine exhaust pipe, and a water heating coil disposed within the casing having its opposite ends extending out through the top of the casing and adapted to be connected to a radiator system, the radiator coil having a drainage portion extending downward through the removable bottom wall.

1,828,990. METHOD OF MAKING RUBBER ARTICLES BY DEPOSITION. PARKE H. WATKINS, Leonia, and ALBERT W. HOLMBERG, South Orange, N. J., assignors to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed Apr. 4, 1927. Serial No. 180,903. 4 Claims. (Cl. 18—58.)

2. The method of making articles of rubber composition which comprises continuously building up a deposit of rubber composition of a porous form by maintaining the form in contact with a body of aqueous rubber dispersion and withdrawing the dispersing agent through the form, building up additional deposits of rubber composition by alternately contacting localized portions of the deposit with a rubber dispersion and with coagulant, depositing an additional layer of rubber composition by contacting the previously formed article with rubber dispersion, drying and vulcanizing.

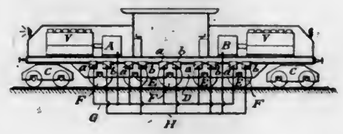
1,828,991. RECEPTACLE AND COVER CONSTRUCTION. SAMUEL E. ALLERTON, Chicago, Ill.; Marion Hopkins administrator of said Samuel E. Allerton, deceased. Filed Jan. 9, 1930. Serial No. 419,530. 3 Claims. (Cl. 220—58.)



1. A receptacle having a circumferential channel therein and a cover provided with a depending skirt the lower edge

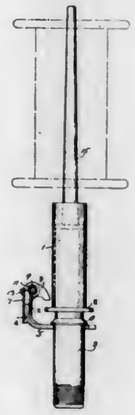
of which is adapted to be pressed into said channel to retain the cover in position, said skirt having upper and lower circumferential scores providing a tearing strip and a slit extending downwardly from said lower score and terminating slightly above the lower edge of said skirt whereby when said strip is removed said pressed-in portion of said skirt will be released as a split ring from engagement with said channel.

1,828,992. DIESEL-ELECTRIC LOCOMOTIVE. EDOUARD ATTESLANDER, Winterthur, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed May 2, 1931, Serial No. 534,606, and in Switzerland May 8, 1930. 2 Claims. (Cl. 105—35.)



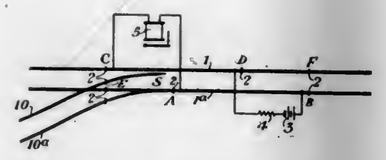
1. In a Diesel-electric locomotive the combination with two internal combustion engines, of two electric generators one for each internal combustion engine and of driving axles each driven by two electric traction motors, one motor of each pair being supplied with current from one generator and the other motor of each pair being supplied with current from the other generator.

1,828,993. WHORL LATCH. ROBERT J. BARTHOLOMEW, Germantown, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1931. Serial No. 513,627. 2 Claims. (Cl. 118—65.)



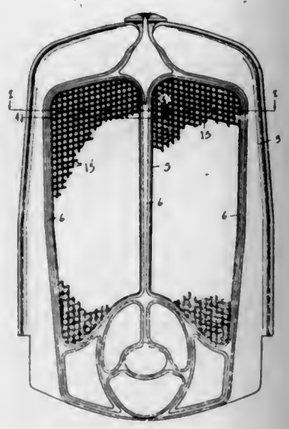
1. In whorl latching mechanism the combination of a bracket having a bifurcated free end, a latch bifurcated at one end and straddling the bifurcated end of the bracket, a pivot pin passing through the bifurcated ends of the latch and bracket, a coil spring upon said pin, said spring being under tension and having one end engaging the inside of the bracket and its other end engaging the outer face of the latch, to hold the latch under tension on said pin.

1,828,994. RAILWAY TRACK CIRCUITS. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 14, 1931. Serial No. 530,020. 2 Claims. (Cl. 246—41.)



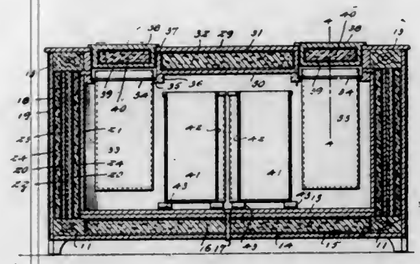
1. A railway switch detector track circuit comprising staggered insulated sections in the two track rails overlapping by an amount greater than the distance between the inner wheels of the two trucks of a standard freight car but less than the distance between the inner wheels of the two trucks of a special steel freight car, a source of current connected across said sections at one end, and a track relay connected across said sections at the other end.

1,828,995. COMBINED RADIATOR AND GUARD. JAMES L. BROWNELL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed July 28, 1930. Serial No. 471,328. 7 Claims. (Cl. 293—54.)



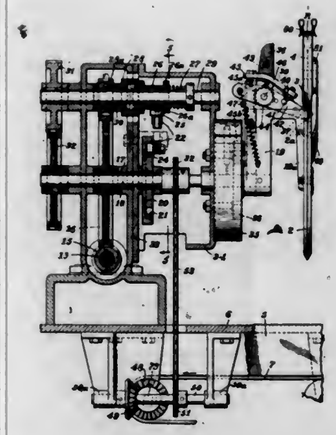
1. The combination with a radiator, of a sheet metal shell or housing for said radiator open at the front and having a central vertical bar of inwardly facing stepped channel cross section, said bar being formed at the edges of the opening to provide outwardly projecting beads of stepped cross section and inwardly facing channels, grid attaching strips having threaded openings therein secured on the inner sides of said shell in opposed relation to said channels, said strips constituting reinforcing members for the shell, woven wire grids disposed with their edges in overlapping relation to said attaching strips, and screws arranged through said grids from the inside thereof and threaded into said threaded openings of said attaching strips.

1,828,996. ICE CABINET. PHILIP H. CHRISTOPHER, Fairmont, W. Va. Filed July 6, 1929. Serial No. 376,469. 1 Claim. (Cl. 62—83.)



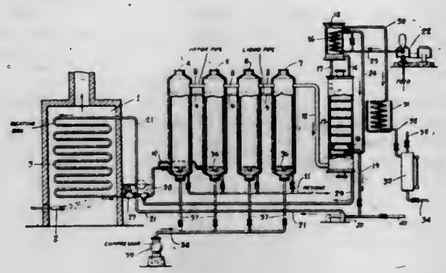
An ice cabinet of the character described, having side walls, a bottom and a top wall of heat insulating material, there being openings in the top wall adjacent the end walls of the cabinet within which openings packing cans may be disposed, covers of insulating material for said openings, packing cans insertable through said openings, the wall of the opening and the wall of the packing can being so formed that the cans are supported in spaced relation to the inner surface of the walls of the ice cabinet, ice cans disposed within the cabinet between the packing cans, the ice cans having a length nearly equal to the width of the interior of the cabinet and being approximately rectangular in cross section, the confronting faces of the cans being concave, and means for supporting said cans in spaced relation to the floor of said cabinet.

1,828,997. APPARATUS FOR REENFORCING THE SEAMS OF BATHING CAPS AND OTHER ARTICLES. ARTHUR E. COLLINS, Cuyahoga Falls, Ohio, assignor, by mesne assignments, to The Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,545. 20 Claims. (Cl. 154—42.)



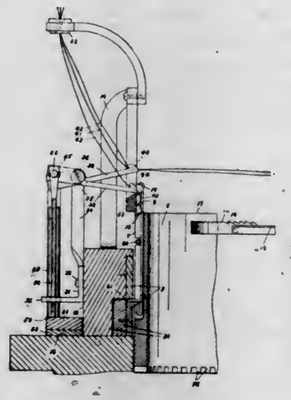
1. Apparatus for applying a surface strip of rubber to a seamed sheet comprising a pair of coacting power-driven rolls, one having a female or channeled periphery and the other a corresponding periphery of male formation, and means coacting therewith for automatically supplying a ribbon strip to said rolls under uniform tension coincident with the passage of the seamed sheet therebetween.

1,828,998. PROCESS FOR DECOMPOSING ORGANIC MATERIALS. RICHARD J. DEARBORN, Summit, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 22, 1926. Serial No. 103,794. 10 Claims. (Cl. 196—65.)



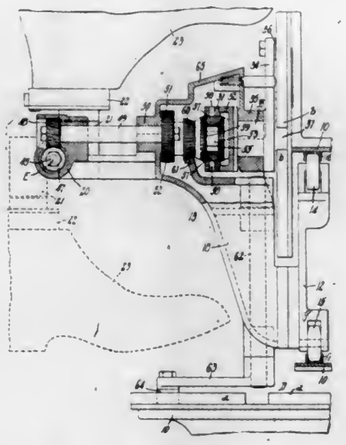
10. In the process of producing motor fuel, the steps which comprise effecting pyrogenic decomposition of a liquid hydrocarbon oil relatively difficult to decompose at temperatures of the order of 900° F. or over and pressures of the order of 800 pounds per square inch or over, mixing the thus treated oil with a heavier oil relatively easy to decompose, and without intermediate loss of heat, effecting decomposition of the mixed oils in a liquid state in the presence of an oxidizing gas while still under a pressure of about 300 to 600 pounds per square inch and a temperature of not less than about 600° F.

1,828,999. KNITTING MACHINE. ELIJAH L. FLOYD, Cincinnati, Ohio, assignor to The Adler Underwear and Hosiery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 27, 1930. Serial No. 431,785. 5 Claims. (Cl. 66—134.)



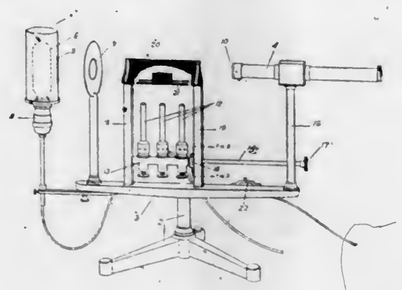
1. In a device of the class described the combination of a frame, a needle cylinder rotatable relation to the frame, needles carried by the cylinder, each needle having a thread receiving portion, a plurality of thread guides for the needles each thread guide being movable to operative and inoperative positions relative to the thread receiving portions of the needles, a single movable cam for cooperation with the thread guides for movement of the thread guides to the operative and inoperative positions, said cam being arranged to move an operatively positioned thread guide to the inoperative position after having first moved another thread guide to the operative position.

1,829,000. LASTING JACK POSITIONING DEVICE. EDWARD E. FOSTER, Beverly, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Sept. 13, 1928. Serial No. 305,751. 47 Claims. (Cl. 12—1.)



35. An apparatus for manufacturing shoes and the like having, in combination, a conveyor, a lasting jack driven by said conveyor and embodying therein a rocking member, a last holder upon said rocking member, a differential gear mechanism operatively connected to said rocking member and embodying therein a driving gear, means to rotate said driving gear, means to actuate said last-named means, another driving gear embodied in said differential gear mechanism and operatively connected to said last holder, means to rotate said last-named driving gear, and means for actuating said last-named means.

1,829,001. SPECTRA DEMONSTRATOR. HERCULES WALLACE GEROMANOS, Boston, Mass. Filed Dec. 23, 1927. Serial No. 242,262. 9 Claims. (Cl. 88—14.)



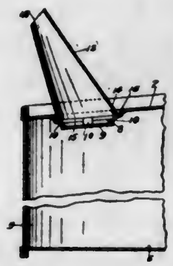
6. In a spectra demonstrator, the combination of a spectroscope, a source of light in line with said spectroscope, a burner mounted between said spectroscope and said source of light and arranged to produce a flame in the line between said spectroscope and said source of light, and means including a device located in proximity to the observer's position and operable at the will of the observer to remove the effect of said flame in the spectrum and restore it again while the observer continues his observation of the spectrum.

1,829,002. BALL SHAPER FOR NURSERYMEN. JOHN M. GILLOOLY, Orange, Calif. Filed Nov. 4, 1929. Serial No. 404,618. 4 Claims. (Cl. 55—18.)



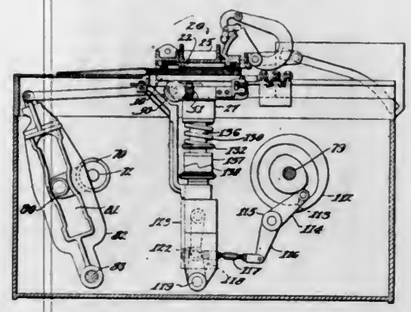
1. A balling tool for nurserymen comprising: a thin semi-cylindrical blade having its lower edge adapted for earth cutting; a pair of circularly curved reinforcing bands secured one inside and one outside the upper edge of said blade; a relatively long handle extending upwardly from the back part of said blade in parallel alignment with the axis of said blade so that said handle is thereby adapted to use as an aligning means for said blade, said handle having its lower end flattened and extended down the back of said blade; a reinforcing bar extending from the upper portion of the inner face of said blade to the front part of said handle; and securing means extending through the lower flattened end of said handle, said blade, and said reinforcing bar so as to secure these members operatively together.

1,829,003. CONTAINER OR THE LIKE. JAMES A. HARPS, Greenfield, Ohio. Filed June 28, 1930. Serial No. 464,637. 7 Claims. (Cl. 221—11.)



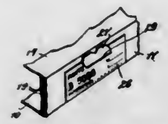
1. In a device of the class described the combination with a container, of a head for the container having a filling opening and a fluid discharge opening therein, a baffle plate on the head substantially parallel thereto and disposed in spaced relations with the plane of the head and adjacent to the fluid discharge opening to preclude splashing out of the fluid contents of the container when the container is transported, a closure member for the filling opening, and a spout on the head encircling the fluid discharge opening.

1,829,004. PRINTING PRESS. STANLEY R. HOWARD, East Milton, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 20, 1930. Serial No. 430,012. 8 Claims. (Cl. 101—407.)



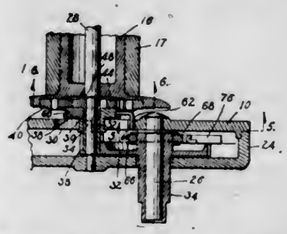
1. A printing press having, in combination, a printing element, a work supporting platen, actuating mechanism for relatively moving the printing element and the supporting platen to perform the printing operation, and means for supporting the platen having provision whereby the platen may be supported on a longitudinal axis, and means for effecting adjustment of said supporting axis transversely of the platen to permit the support to coincide with the center of pressure produced during the printing operation.

1,829,005. FOLDING BOX. JOSEPH KALNITZ, Buffalo, N. Y. Filed July 18, 1928. Serial No. 292,525. 1 Claim. (Cl. 229—361.)



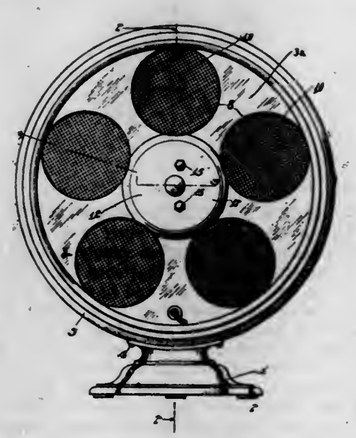
A paper box composed of a single sheet of cardboard or the like which is scored and folded to provide a bottom, walls, a cover, and flaps forming a second wall behind one of said side walls, said last mentioned wall being cut to provide an upwardly projecting tongue which tongue is surrounded by said wall and provided with an enlarged head at its upper end, said tongue being adapted to receive a perforated tag whereby said tag is supported against the outside of said wall.

1,829,006. FREE-SPOOL FISHING REEL. JOE KAUTZKY, Jr., Fort Dodge, Iowa. Filed Aug. 4, 1930. Serial No. 472,811. 8 Claims. (Cl. 242—84.5.)



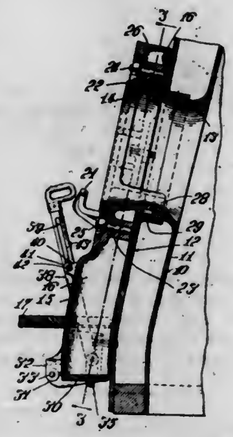
1. In a fishing reel, a frame, a winding member having a hand crank thereon, a gear on said winding member, a spool mounted for rotation in said frame, clutch means for connecting said spool with said gear whereby the spool may be rotated in one direction when said crank is turned, a clamp device frictionally engaging said winding member and composed of a pair of clamp members pivotally connected and a spring for applying tension to said clamp members, means to limit movement of said clamp device with the winding member in both directions, and a retractile spring connected with said clamp device and acting to produce a snap reverse movement of said gear for disconnecting the clutch connections to said spool, when force is released voluntarily from said crank.

1,829,007. RADIO SPEAKER. ARTHUR ATWATER KENT, Ardmore, and RUSSELL T. KINGSFORD, Wyncote, Pa.; said Kingsford assignor to said Arthur Atwater Kent. Filed Jan. 31, 1928. Serial No. 250,789. 8 Claims. (Cl. 181—31.)



1. A housing for a conical sound-reproducing diaphragm of large area having a freely vibratory periphery, comprising walls on opposite sides of said diaphragm, each having substantial area of opening therethrough in a plane parallel to the base of said conical diaphragm.

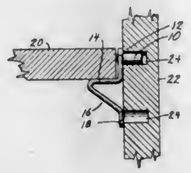
1,829,008. FIRE DOOR. HOWARD H. LANNING, Topeka, Kans. Filed July 3, 1929. Serial No. 375,809. 4 Claims. (Cl. 110—175.)



1. A fire box provided with a fire door opening, a hollow ring disposed about said opening and secured to the fire box, said ring providing an air chamber about all

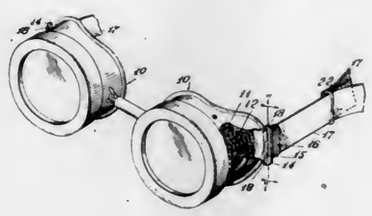
sides of the opening and entirely open to said opening, an air conducting extension secured to the lower side of said ring and leading to a point beneath the firing deck of the fire box and open at the bottom, a pivotally mounted closure member for the open bottom of said extension; and a reciprocatingly mounted lever for controlling said closure member.

1,829,009. SHELF REST. SERN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Inc., Clinton, Iowa. Filed Nov. 19, 1929. Serial No. 408,295. 1 Claim. (Cl. 248—19.)



For use with a shelf and a solid shelf end member having an opening therein, a shelf rest comprising a round pin adapted to be received snugly in said opening, a shelf supporting member of flattened bar cross section secured to one end of said pin and having a first portion extending downwardly therefrom to lie along said shelf end member on one side and engage the end of said shelf on the other side to hold said pin in place, said bar being bent to form a second portion extending horizontally from the lower end of the first portion and extending beneath said shelf and a third portion extending downwardly from the outer end of the second portion in an angular direction toward and adapted to engage the surface of said shelf end member at a point spaced below said first portion.

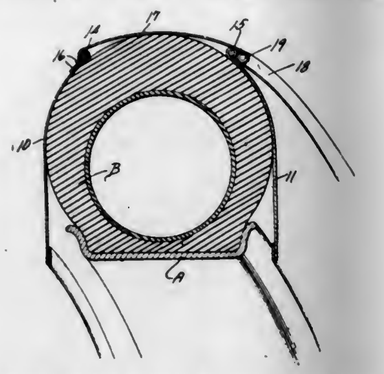
1,829,010. GOGGLE HEADBAND FASTENING MEANS. ROBERT MALCOM, Chicago, Ill. Filed Oct. 17, 1930. Serial No. 489,275. 3 Claims. (Cl. 2—14.)



1. In combination with the head straps of a goggle, holding means composed of a blank of sheet metal provided at its top and bottom marginal edges and intermediate of its ends with extensions, the blank being folded back upon itself with the ends of the straps therebetween.

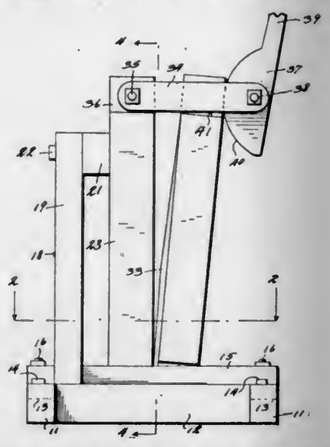
1,829,011. TIRE COVER. THOMAS J. MCCORMICK, Detroit, Mich. Filed Jan. 17, 1930. Serial No. 421,345. 1 Claim. (Cl. 150—54.)

A tire cover comprising flat side members, each having an annular bead-forming distending ring in an outer edge thereof, and an annular cover member, said cover member being stitched at one edge to the edge of one of said side



members, and having an annular bead-forming spring ring in its other edge, said last named edge being adapted to be snapped over a beaded edge on the other side.

1,829,012. PIPE CRIMPING DEVICE. HERSCHEL E. PATTON, Grangeville, Idaho. Filed Mar. 18, 1930. Serial No. 436,856. 1 Claim. (Cl. 113—34.)

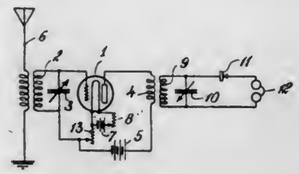


A crimping device of the character described comprising a base, a fixed crimping member mounted on the base, said fixed member having a concave inner edge portion, a rockable crimping member, said rockable member having a horizontally disposed slot in the lower end thereof, said rockable crimping member having a convex eccentric inner edge portion whereby to rockably clamp an annular article within the concave inner edge portion of said fixed member, resilient means engaging the lower end of said rockable member whereby to constantly urge the lower end toward said fixed member, and an eccentric lever swingably carried by said fixed member and adapted for engagement with said rockable member whereby to position said rockable member against said fixed member.

1,829,013. MEANS AND METHOD FOR CONTROLLING OR PREVENTING OSCILLATIONS IN VACUUM TUBE CIRCUITS. BOYD PHELPS, Grasmere, Staten Island, N. Y., assignor, by mesne assignments, to R. E. Thompson Manufacturing Company, a Corporation of New Jersey. Filed Oct. 13, 1924. Serial No. 743,269. 16 Claims. (Cl. 179—171.)

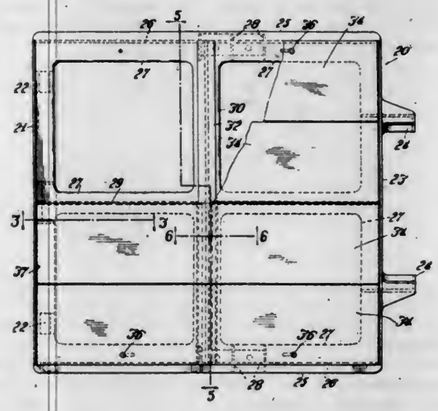
12. An amplifying system comprising a plurality of vacuum tubes, input and output circuits for said tubes

including radio frequency portions, and impedance means associated with the inpu circuit of one tube and with the radio frequency portion of the output circuit of another tube, and serving to impress a radio frequency potential



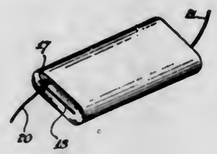
drop between the input electrodes of certain of said tubes in opposition to the corresponding potential drop impressed therebetween as a result of undesirable feed back action.

1,829,014. METAL DOOR. JOHN PURCELL, Chicago, Ill. Filed Mar. 24, 1930. Serial No. 438,321. 7 Claims. (Cl. 105—280.)



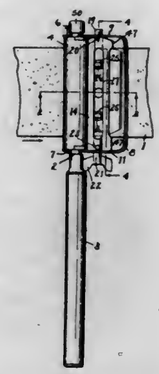
1. Metal doors of the character described comprising frame members describing the general contour of the doors; and separate panel members adapted to rest on the frame members; the frame members and the panel members being provided with interengaging portions whereby the panel members are endwisely slid into place; and means whereby the panel members are locked in position.

1,829,015. ELECTRIC CONDENSER. MARTIN HOELZER REIHER, Glenside, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1929. Serial No. 400,471. 2 Claims. (Cl. 175—41.)



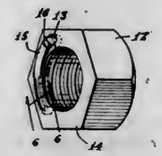
1. A condenser comprising a roll of alternate layers of paper and foil, and a terminal card wound into said roll comprising terminal strips held between flexible insulating material and reversely bent into engagement with said foil during winding of the condenser.

1,829,016. SHARPENING DEVICE FOR SAFETY RAZOR BLADES AND THE LIKE. JAY B. RHODES, Kalamazoo, Mich. Filed Mar. 24, 1930. Serial No. 438,299. 20 Claims. (Cl. 51—153.)



1. In a sharpening device, the combination with a spindle provided with a handle disposed axially of the spindle, of a roller rotatable on the spindle and provided with radial pivot lugs at its ends, a U-shaped blade carrier having its arms pivotally mounted on the outer sides of said lugs so that the roller may swing between the arms of the carrier, and a blade holder comprising a pair of inwardly bowed resilient members mounted on the arms of said carrier, the ends of said blade holders when clamped upon a blade constituting springs and being provided with roller supporting shoulders disposed so that upon a work stroke the roller rests upon the blade and said holder.

1,829,017. LOCK NUT. WILLIAM E. SABEN, Taunton, Mass., assignor to Saben Lock Nut Co., Inc., Taunton, Mass., a Corporation of Massachusetts. Filed July 3, 1930. Serial No. 465,481. 1 Claim. (Cl. 151—37.)

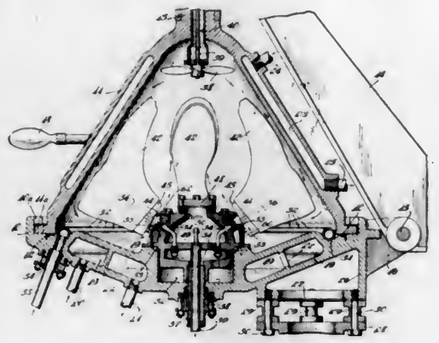


In combination, a nut having a groove in one face thereof located between the central aperture of the nut and a side of the latter, and within said groove a nut-locking spring pawl bar that is bowed outwardly away from the face of the nut so as to engage an abutment and adapted by engagement with the latter to be flexed inwardly into the groove, the side walls of said groove overlying the opposite inner end portion of said spring pawl bar thereby to oppose outward displacement of said end portion under flexing stresses imposed upon the outer end of said bar, and the inner end of the bar being in abutting engagement with the adjacent end wall of the groove.

1,829,018. VULCANIZING METHOD AND APPARATUS. JAMES W. SCHADE, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 20, 1929. Serial No. 364,428. 11 Claims. (Cl. 18—6.)

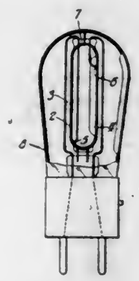
9. Footwear-vulcanizing apparatus comprising means for supporting an article of footwear with its outer surface exposed, a steam-jacketed hood member adapted to be

lowered over an article of footwear mounted on said supporting means to enclose the article and so positioned as to heat the sole portion thereof by radiation, the said



hood being hinged and counterbalanced, and sealing means interposed between the hinged hood and the supporting means.

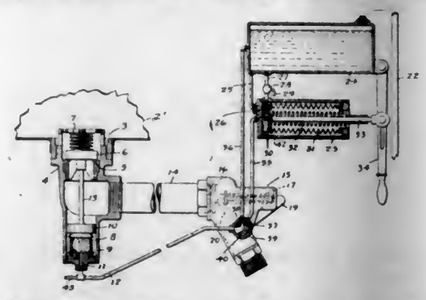
1,829,019. PHOTO-ELECTRIC TUBE. GILBERT T. SCHMIDLING, Chicago, Ill., assignor to Alva J. Carter, Chicago, Ill. Filed July 26, 1929. Serial No. 381,226. 4 Claims. (Cl. 250—275.)



1. A photo-electric tube construction comprising an inner sealed envelope having therein a light sensitive cathode and an anode and having a translucent wall portion through which light may pass from the exterior to said cathode, an outer sealed evacuated envelope in which said inner envelope is supported in spaced relation to the walls of said outer envelope, and lead in wires extending from said cathode and anode to the exterior of said outer envelope.

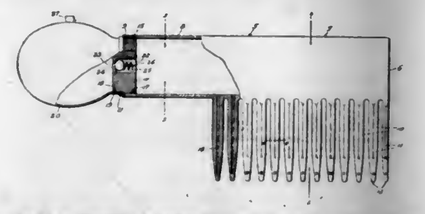
1,829,020. FLUID PRESSURE CONTROL OF VEHICLE TANK VALVES. PAUL S. SHIELD, Cincinnati, Ohio, assignor to Augustine Davis, jr., Cincinnati, Ohio. Filed Aug. 20, 1925. Serial No. 51,365. 6 Claims. (Cl. 137—21.)

1. In combination with a vehicle tank having an outlet in the bottom wall thereof, a delivery pipe leading from said outlet to provide a gravity discharge conduit for said tank, a normally closed safety valve commanding the discharge from tank to conduit, and a second valve in the delivery pipe at a point remote from the safety valve, a fluid-pressure actuated device for operating said safety valve, control valve means interconnected with the second valve controlling the application and release of fluid pressure on said device, a reservoir, a fluid-pressure chamber connected with said reservoir, pressure and return conduits connecting said control valve means with the fluid-pressure chamber and the reservoir respectively, spring-actuated means for exerting pressure upon fluid in



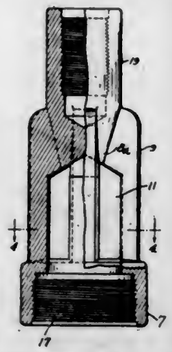
the fluid-pressure chamber, and means for retracting said spring-actuated means, said fluid-pressure chamber and spring-actuated means being of capacity for repeated operations of the delivery valve and safety valve system.

1,829,021. HEAVY LIQUID APPLICATOR. WILLIAM S. SINCLAIR, Phoenix, Ariz. Filed Dec. 7, 1929. Serial No. 412,542. 1 Claim. (Cl. 132—13.)



A heavy liquid applicator comprising an elongated hollow casing closed at one end and open at its other end, a plug threadably secured in said open end, an axial passageway in said plug, said passageway reduced in area toward one end to provide a valve seat, a spring pressed valve disposed within said passageway and normally abutting said seat, a flexible bulb mounted on the plug and having an air intake passage communicating therewith, and a check valve controlling the air passage in a manner to prevent the escape of air therethrough from the bulb.

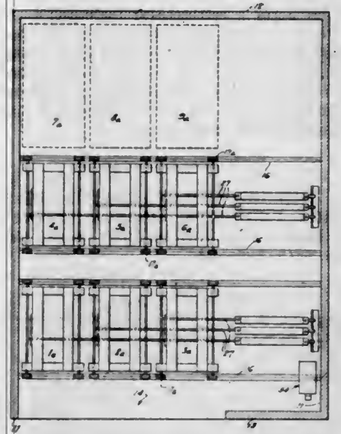
1,829,022. METHOD OF CONSTRUCTING VALVE CAGES. EDWARD E. STEVENSON, Los Angeles, Calif., assignor to Emsco Derrick and Equipment Company, Los Angeles, Calif. Filed Jan. 3, 1930. Serial No. 418,205. 4 Claims. (Cl. 29—157.1.)



4. The method of constructing a valve cage which consists in forming a body having substantially cylindrical

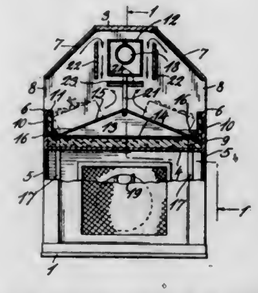
end portions axially in line with each other and spaced apart from each other, one of said cylindrical end portions being of greater diameter than the other, there being a plurality of longitudinal ribs located between said cylindrical end portions, the diameters of said body between said ribs being less than the diameter of the smaller of said cylindrical end portions; and finally in boring a chamber through the larger of said cylindrical end portions thence through said ribbed portion and into the smaller of said cylindrical end portions, the diameter of the bore being greater than the diameter of the ribbed portion of the body between the ribs thereof.

1,829,023. AUTOMOBILE STORAGE APPARATUS. ROSS E. SWARTOUT, Los Angeles, Calif. Filed June 30, 1930. Serial No. 464,994. 4 Claims. (Cl. 214—16.1)



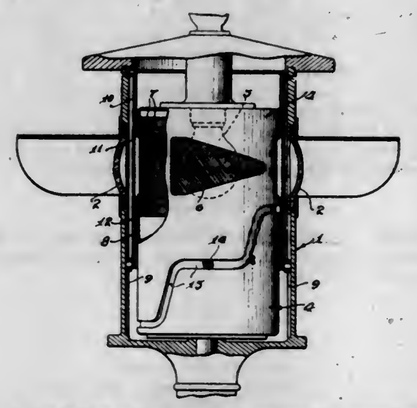
1. In an apparatus of the kind described, a track, a plurality of trucks mounted upon and adapted to travel along said track, said trucks being adapted to have self-propelled vehicles driven on to and off from them, each of said trucks having a piston rod connected thereto, a separate piston for each of said rods, a piston cylinder for each of said pistons, a fluid pressure supply to operate said pistons, and a manually controllable means adapted to selectively direct fluid to one or more of said pistons as desired for the purpose of moving said trucks to provide a clearance in the row of trucks at the point desired.

1,829,024. REFRIGERATOR AND HYDRATOR FOR FRUITS AND VEGETABLES. DANIEL O. TEASLEY, Denver, Colo. Filed No. 7, 1930. Serial No. 494,066. 1 Claim. (Cl. 62—95.)



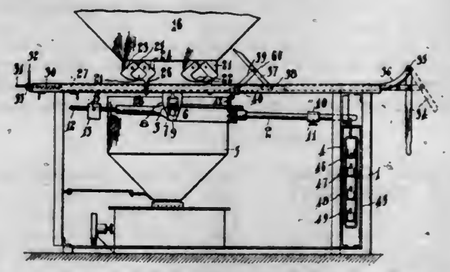
A combined refrigerator and hydrator comprising in combination a casing having a refrigerating chamber, two brine tanks in the chamber, said tanks being located one above the other and spaced apart, a cooling coil located in the upper tank, a pipe located at one end of the tank and connecting the lower portions of the tanks, and a second pipe located at the other end of the tanks and connecting the upper portions of the tanks whereby the brine will circulate through the two tanks in series when a difference in temperature exists betwen the brine in the tanks, the lower tank having a triangular cross section, one side forming the bottom and the other two forming the top, the lower edges of the top sections being bent so as to form drains.

1,829,025. TRAFFIC SIGNAL. GEORGE C. WALKER, Wayne, Mich., assignor of one-half to Thomas M. Lucking, Detroit, Mich. Filed Oct. 6, 1930. Serial No. 486,541. 15 Claims. (Cl. 116—63.)



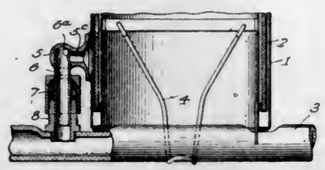
1. A traffic signal of the type described, comprising a movable indicating field, certain sides of which are shaped to indicate the rate of change of said indicating field.

1,829,026. APPARATUS FOR PROPORTIONING THE COMPONENTS OF AGGREGATE MATERIAL BY WEIGHT MEASUREMENT. CLAUDE V. WEIR, Toronto, Ontario, Canada. Filed July 19, 1930. Serial No. 469,144. 4 Claims. (Cl. 249—14.)



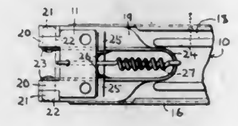
1. An apparatus for proportioning the components of aggregate material by weight measurement, comprising a plurality of scale beams, each operable independently of or unitedly with the others, means for selectively rendering each beam either operative or inoperative, a rockable lever connected with said beams, a weighing bin pivotally suspended from said lever, a storage bin having a plurality of compartments each provided with a gate for controlling the delivery of its contents to the weighing bin, operable means controlled by the lever for automatically closing the gates and instantaneously stopping the delivery of material to the weighing bin when its weight balances or overbalances the poise of the operative scale beam or beams.

1,829,027. OIL BURNER. LEWIS T. WILCOX, Peekskill, N. Y., assignor to Wilcox Patents Corporation, a Corporation of New York. Filed Oct. 12, 1929. Serial No. 399,156. 1 Claim. (Cl. 285—27.)



Connecting means for joining a fuel pipe to an oil burner comprising a fitting adapted to be fabricated entirely by machine processes and having an axial and a lateral bore, the end remote from the lateral bore having an axially extending flange surrounded by a plane annular shoulder portion, said shoulder being adapted to be abutted against a boss having a plane surface and a central aperture formed on the wall of said burner, and said axial flange being adapted to be bent rearwardly of that portion of the wall of the boss surrounding said aperture.

1,829,028. ACCELERATOR PEDAL. OLIVER C. RITZ WOLLER, Chicago, Ill. Filed Sept. 26, 1930. Serial No. 484,527. 13 Cairns. (C. 74—81.)



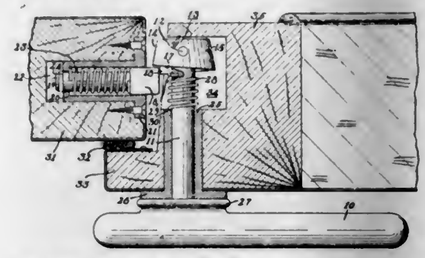
1. A device of the type described, comprising in combination a bracket member, a pedal member, hinging means fixedly mounted on said members respectively and covered by said pedal member when in normal operating position, and pivot pins underlying said pedal member and movably mounted on one of said members in substantial alignment with each other adapted by cooperation with said first named hinging means to pivotally connect said pedal with said bracket when said pins are moved to their separated positions with respect to each other and adapted to permit removal of the pedal from the bracket when the pins are moved out of normal position toward each other.

1,829,029. COMPOSITION OF MATTER AND METHOD OF MAKING SAME. WILLIAM F. ZIMMERLI, Akron, and WALDO L. SEMON, Cuyahoga Falls, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1927. Serial No. 224,759. 16 Claims. (Cl. 99—11.)

3. As a chicle substitute, a plastic, waxy composition substantially free from water-soluble colloids comprising an admixture of rubber with a liquid oil and an innocuous water-insoluble pigment, the oil and the pigment each occupying a greater proportion by volume of the mixture than the rubber.

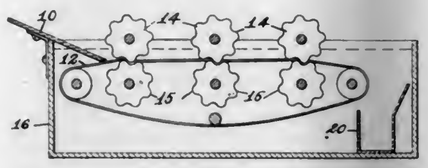
11. The method of producing a chicle substitute which comprises admixing an aqueous dispersion of rubber with substantial proportions of a liquid oil, thoroughly dispersing in the rubber-oil mix substantial proportions of an innocuous pigment, and subjecting the resulting mix to an evaporative action to remove in major part the liquid of the rubber dispersion, in the substantial absence of water-soluble colloids.

1,829,030. FASTENING MECHANISM. JAMES C. ARNOLD, Los Angeles, Calif., assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,365. 11 Claims. (Cl. 292—242.)



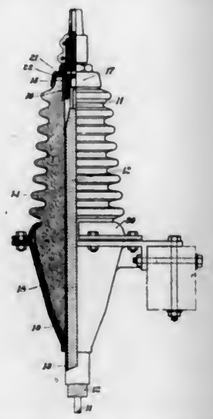
1. In a latch for a refrigerator including a door and a frame therefor, a yieldable keeper, a cam member adapted to slide post said yieldable keeper and to be engaged thereby and a surface on said cam movable independently of the door and coacting with said keeper for increasingly engaging said keeper and adapted to force said door tighter into engagement with said frame.

1,829,031. METHOD AND APPARATUS FOR PRODUCING MICA PRODUCTS. FRANCIS CLARKE ATWOOD, Newton, Mass. Filed July 16, 1928. Serial No. 293,024. 7 Claims. (Cl. 125—24.)



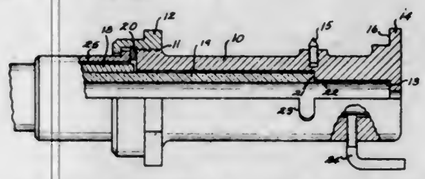
1. The method of laminating mica which consists in introducing a lubricant between the crystals of a body of mica by flexing and thereafter separating the crystals.

1,829,032. OUTLET FOR HIGH POTENTIAL CABLES. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Aug. 5, 1926. Serial No. 127,273. 18 Claims. (Cl. 247—6.)



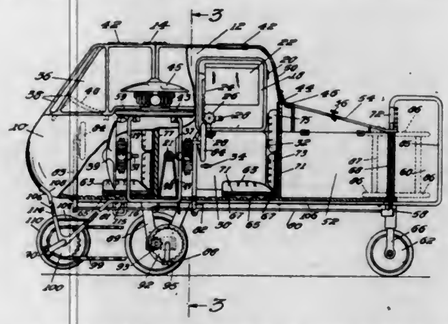
15. The combination with a cable having an insulating covering and an outer metal sheath of a dielectric sleeve of solid material connected at one end thereof directly to said sheath and a terminal member connected with the end of said cable and mounted on the other end of said dielectric sleeve.

1,829,033. TOOL AND JIG FOR CABLE WORK. CHARLES ANDREW BAY, Morristown, N. J., assignor to James R. Kearney Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 333,877. 7 Claims. (Cl. 7—1.)



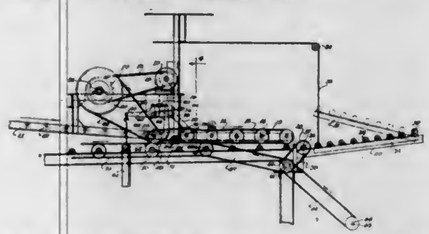
1. In a tool for preparing an insulated conductor for securement to a holding member having a threaded portion, an element for receiving an end portion of the conductor, a threaded portion on said element adapted to position the holding member with respect thereto, and combined gauge and stripping means carried by said element.

1,829,034. TOY AIRCRAFT LINER. FREDERICK A. BERG, Chicago, Ill. Filed Mar. 10, 1928. Serial No. 260,673. 37 Claims. (Cl. 208—42.)



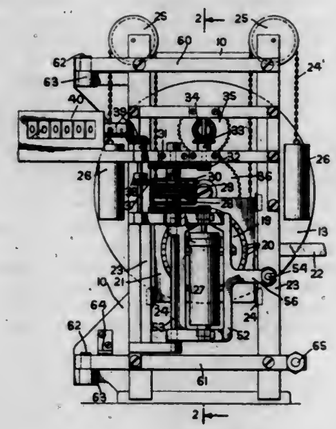
1. A toy aircraft liner, including in combination, a fuselage, supporting and steering wheels for the fuselage simulating, landing gear, and a dual control for the steering wheels, said supporting wheels having drive means for propelling the vehicle, and a tandem drive for the supporting wheels, together with a pair of compartments for the occupants of the vehicle, and hinged doors for one of said compartments together with a removable top for the vehicle, hinged means providing ingress and egress to the other of said compartments.

1,829,035. BOARD CONTROL MECHANISM. JOSEPH A. BESAL and LE ROY MEDARIS, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1929. Serial No. 349,025. 11 Claims. (Cl. 198—30.)



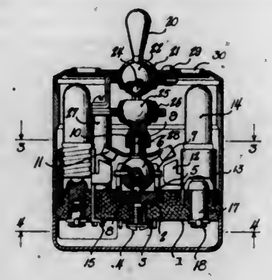
1. In a sheet-handling mechanism, a conveyor adapted to convey sheets of material, means positioned adjacent said conveyor adapted to stop the motion of said sheets until a predetermined number of said sheets are lined up abreast on said conveyor, and automatic means for releasing said sheets simultaneously for further movement along said conveyor when said predetermined number of sheets have lined up abreast.

1,829,036. INTEGRATING DEVICE. LOUIS A. BIEHLER, Stanhope, N. J. Filed Aug. 15, 1927. Serial No. 212,988. 8 Claims. (Cl. 235—61.)



1. An integrating mechanism comprising a rotatable friction member and a cooperating wheel driven thereby, said wheel being normally disposed with its axis of rotation intersecting the axis of rotation of said member and means for causing the axis of rotation of said wheel to extend at an angle to the normal line thereof, whereby said member causes said wheel to automatically move radially thereof until said axis again assumes its normal line.

1,829,037. SWITCH FOR SIGNALING SYSTEMS. BARNETT L. BOBROFF, Racine, Wis. Filed July 12, 1929. Serial No. 377,822. 4 Claims. (Cl. 200—6.)

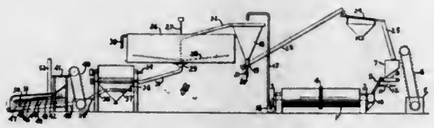


1. A switch for a signaling system comprising a body portion, a movable member universally mounted upon said body portion, an operating lever universally carried by said body portion, an intermediate universally mounted lever coupling said operating lever and said movable member, whereby said movable member rocks in same direction as said operating member, a plurality of movable contacts carried by said movable member and a plurality of stationary contacts adapted to cooperate with said movable contact.

1,829,038. MIXED ESTER OF BENZOPHENONE-POLY CARBOXYLIC ACID. HERMAN ALEXANDER BRUSON, Philadelphia, Pa., assignor to Röhm & Haas Company, Philadelphia, Pa. Filed Mar. 10, 1931. Serial No. 521,508. 17 Claims. (Cl. 260—8.)

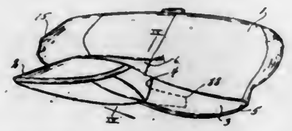
1. The process of preparing a resin which comprises heating to reaction temperature a mixture of a natural acidic gum, a polyhydric alcohol, and a polycarboxylated diaryl ketone of the type $R-\overset{O}{\overset{\|}{C}}-R'$ where R and R' are aromatic nuclei.

1,829,039. PROCESS FOR PRODUCING MICA POWDER. JOHN DAVENPORT, Franklin, N. C. Filed Nov. 30, 1928. Serial No. 322,734. 7 Claims. (Cl. 209—2.)



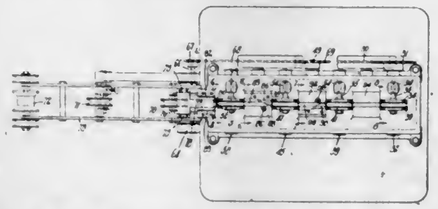
1. The process of producing mica powder, without substantially impairing the light-reflecting surfaces of the particles thereof, which comprises triturating fragmentary sheets of mica in a liquid by a rubbing action and without substantial impact or abrasion operable to delaminate said sheets by relative slippage of adjacent laminations thereof.

1,829,040. HEADWEAR. JOHN EMERSON, Toledo, Ohio. Filed Dec. 1, 1928. Serial No. 323,150. 2 Claims. (Cl. 2—197.)



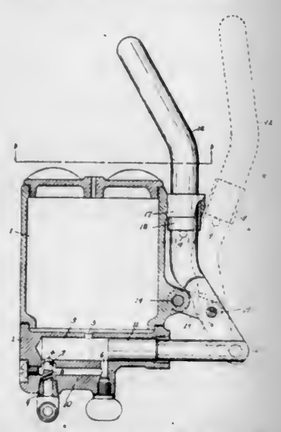
2. A cap having a visor providing a form-holding front head band section, and a rear head band section providing sockets, there being intermediate flexible cap portions between the head band sections, said front section having extensions therefrom, stitching in said extensions as form retaining means therefor, flexible pyroxylin stiffening strips incorporated within said extensions, said strips of a character offering no abnormal resistance against any part of said stitching passing therethrough while adding sufficient stiffness to said extensions to maintain such in the sockets of the rear head band section in holding the head band sections aligned and determining defeating of sag at the flexible cap portions between the sections.

1,829,041. TIRE BEAD COVERING MACHINE. FRED D. FOWLER, Newton, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Jan. 7, 1928. Serial No. 245,124. 5 Claims. (Cl. 154—9.)



1. A tire bead covering machine having, in combination, means for feeding a strip of fabric and a core of rubber compound superimposed thereon comprising a pair of feed rolls, means to guide the core to said strip of fabric, an auxiliary feed roll positioned in advance of said pair of feed rolls, means to guide said strip of fabric to said auxiliary feed roll, and means to rotate said auxiliary feed roll at a greater surface speed than that of said pair of feed rolls.

1,829,042. PUMP FOR LUBRICATING SYSTEMS AND THE LIKE. THEODORE W. HALLERBERG, Battle Creek, Mich., assignor to Lubrication Devices, Incorporated, Battle Creek, Mich. Filed May 13, 1929. Serial No. 362,540. 6 Claims. (Cl. 184—28.)



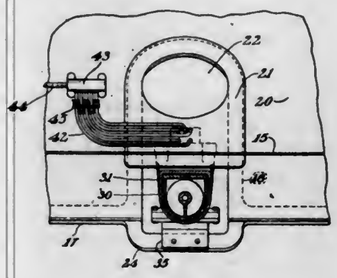
3. In a pump for lubricating systems, the combination of a lubricant reservoir provided with a bottom having a bore therein constituting a pump cylinder, there being a discharge port provided with a check valve at the inner end of said cylinder, a pressure relief port substantially spaced from said discharge port, an inlet port from said reservoir located between said discharge and relief ports, and a delivery passage in communication with said discharge and relief ports, a plunger constituting a valve for said relief and inlet ports, and means for limiting the strike of said plunger to prevent the opening of said relief port.

1,829,043. SPRAYER. WILLIAM L. HAMILTON, Bangor, Mich. Filed Apr. 13, 1927, Serial No. 183,360. Renewed Jan. 5, 1931. 13 Claims. (Cl. 299—117.)



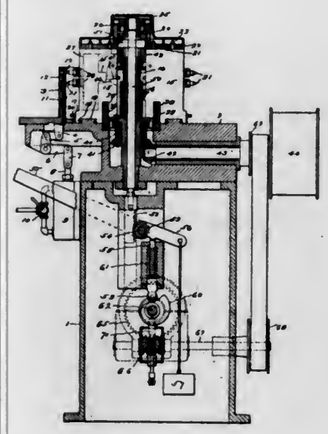
1. A sprayer comprising a chambered head provided with a nozzle tip having a central delivery opening therein, said head having a transverse wall spaced from said tip and having a central port aligned with the nozzle delivery opening and oppositely disposed slot-like auxiliary ports extending laterally from said central port and opening thereto and through the face of said transverse wall to the space between said tranverse wall and said nozzle tip, and a valve for said central port aligned with said nozzle delivery opening.

1,829,044. LOCOMOTIVE. MELLEN C. M. HATCH, Boston, Mass., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Nov. 6, 1928. Serial No. 317,620. 11 Claims. (Cl. 122—369.)



1. A locomotive having a boiler including a firebox, a foundation ring bounding the lower margins of the walls of the firebox, such ring having an integral upstanding arch portion, said portion and ring entirely bounding a fuel admission opening in the backhead of the firebox.

1,829,045. INTERNAL RADIAL MULTIPLE SPINDLE DRILLING MACHINE. JOSEPH S. LACH, Bridgeport, Conn. Filed Feb. 1, 1929. Serial No. 836,861. 7 Claims. (Cl. 77—26.)



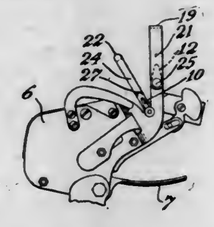
1. A multiple spindle drilling machine having a table, means on said table for holding a curved piece of work, a central supporting column extending upward from the table, a plurality of heads having arms pivotally mounted on said column and independently angularly adjustable about the axis thereof, a housing carried by each head and movable radially of the axis of the column, a block carried by each housing and adjustable parallel with the axis of the column, a tool spindle mounted in each block, common mechanism for reciprocating said spindles, and common mechanism for rotating said spindles.

1,829,046. CATALYTIC PROCESS OF HYDROGENATING AND DEHYDROGENATING CARBON COMPOUNDS. WILBUR A. LAZIER, Elmhurst, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 415,832. 7 Claims. (Cl. 260—156.)

1. In a catalytic process of forming organic compounds in a three-component reaction system comprising an oxygen-containing carbon compound capable of hydrogenation, an oxygen-containing carbon compound capable of dehydrogenation, and hydrogen, the step which comprises passing the reactants over a heated catalyst prepared by igniting an exothermic double chromate of a nitrogen base and manganese.

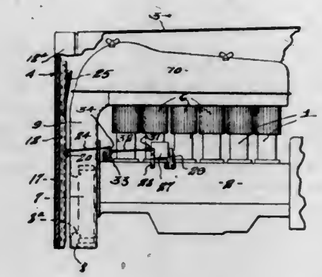
6. The process of catalytically synthesizing methanol from a mixture of carbon monoxide and hydrogen which comprising passing the reactants at a temperature of about 350–475° C. and at a pressure of about 279–900 atmospheres over a catalyst prepared by heating a double chromate of a nitrogen base and manganese to its spontaneous decomposition temperature.

1,829,047. KNOTTER. HARLEN V. LEWIS, Camp Kilby, Ala. Filed June 9, 1927. Serial No. 197,742. 15 Claims. (Cl. 289—3.)



7. An attachment for knotters comprising thread separating guides and an interposed tying head, the attachment having an inner transverse guide overhanging the said thread separating guides and tying head, and an outer stop rising substantially above the inner guide.

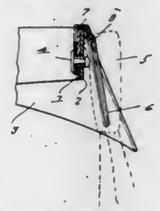
1,829,048. THERMOSTATICALLY OPERATED SHUTTER FOR AIR COOLED ENGINES. EDWARD S. MARKS, Syracuse, N. Y., assignor, by mesne assignments, to Franklin Development Corporation, Syracuse, N. Y., a Corporation of New York. Filed Feb. 2, 1929. Serial No. 337,097. 2 Claims. (Cl. 123—171.)



1. The combination of an air cooled internal combustion engine, of a motor vehicle, a hood enclosing the engine and having an open front wall, the engine cylinder having upright heat radiating fins and a jacket around the fins, the fins and jacket terminating above the crank case of the engine, the engine also having means for blowing air downwardly through the jacket, said means having an inlet opening toward the said front wall, shutters

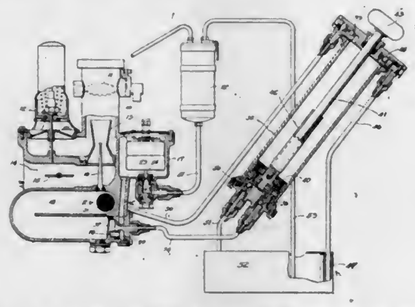
mounted adjacent said front wall and extending across the air inlet, a thermostat mounted on the engine adjacent the cylinder and below the jacket thereof in the path of the heated air passing from the jacket, the thermostat having a casing for shielding it from the air under the hood and having an opening presented toward the cylinder and in the path of the air projected from the jacket and motion transmitting means between the thermostat and the shutters to operate them.

1,829,049. NECKTIE SUPPORTER. LELIA MARSHALL, Buffalo, N. Y. Filed Aug. 6, 1930. Serial No. 473,398. 2 Claims. (Cl. 24—56.)



2. A necktie supporter of the character described comprising, in combination, a pair of flat, flexible strips, one of said strips being formed of elastic material, the other of the strips being formed of inelastic material, said strips being folded upon themselves transversely at their middle and having their ends stitched together in a manner to provide connected loops, the folds of the free end portion of the inelastic loop having aligned buttonholes therein for receiving a collar button.

1,829,050. MEANS FOR OPERATING INTERNAL COMBUSTION ENGINES. HARRY W. MCCLURE, Ann Arbor, Mich. Filed Aug. 18, 1928. Serial No. 300,423. 10 Claims. (Cl. 123—180.)



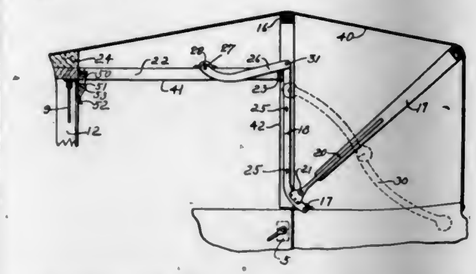
1. In a carburetor for an internal combustion engine, a float bowl and a fuel nozzle, a reservoir having a relatively large capacity located between said float bowl and nozzle and communicating therewith, said reservoir being normally completely filled with fuel, and means connected with said reservoir for withdrawing the major portion of the fuel normally contained therein and substituting therefor another and more volatile fuel.

1,829,051. HYDRAULIC RAM SYSTEM. WILLIAM K. MCFARLIN, East Orange, N. J. Filed Apr. 1, 1929. Serial No. 351,591. 2 Claims. (Cl. 103—78.)



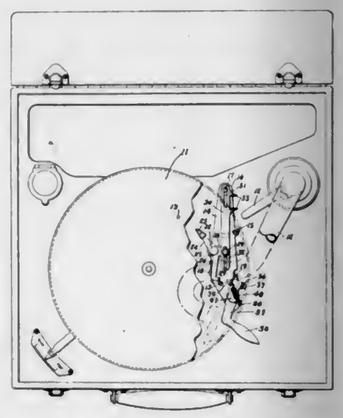
1. A hydraulic ram system comprising a ram, a drive pipe therefor, a control pipe connected to the drive pipe, and an air pressure tank disposed between the control and the drive pipes.

1,829,052. VEHICLE BODY CONSTRUCTION. AMOS E. NORTHUP, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed Jan. 28, 1927. Serial No. 164,146. 1 Claim. (Cl. 296—107.)



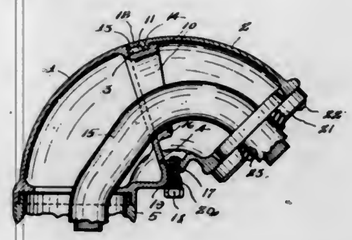
In a vehicle body having a passenger section and a windshield closing the forward end of said section above the cowl, the combination of a door having a forward pillar extending above the upper edge thereof to the top of the windshield and hingedly secured to the side of the windshield structure, a transparent window panel carried by and vertically slidable in said door with its forward edge guided in said forward door pillar and its rear edge movable in a vertical plane forward of the rear edge of said door, and a collapsible top for said passenger section having in addition to a transverse front member adjacent said windshield and one-piece rails secured thereto, both a bow member movably connected to said body at the rear edge of said door opening, and adapted when in vertical position to overhang the rear margin of said door and provide an abutment for the rear vertical edge of said window panel when it is raised above the top of said door; and links extending between straight portions of said bow and said rails,—inner faces of said straight portions being each provided with a longitudinally extending bracket whose respective ends are provided with pivots, a lower pivot thereof serving to provide the mentioned movable connection and an upper pivot thereof serving to secure said links.

1,829,053. AUTOMATIC STOP DEVICE. FRANK OBERST, Fosterdale, N. Y., assignor to Wilbur Products Company, a Corporation of New York. Filed Apr. 27, 1929. Serial No. 358,454. 4 Claims. (Cl. 192—118.)



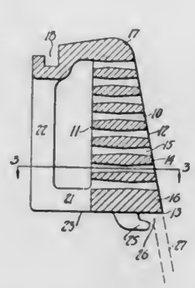
1. An automatic phonograph stop including a brake, a projection on the turntable, a projection movable with the tone arm, and inter-engaging means actuated jointly by said projections to move said brake, said means including a controller engageable at a predetermined position of the tone arm by the projection movable therewith.

1,829,054. CONDUIT OUTLET BOX. RAYMOND H. OLLEY, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Mar. 19, 1928. Serial No. 262,773. 6 Claims. (Cl. 247—6.)



1. A conduit outlet box comprising sections abutting end to end and means for joining the sections together, including a clamping member extending at an angle to the planes of the abutting faces, wedge means carried by the sections whereby upon operation of the clamping member, the sections are caused to slide one upon the other and lock the wedge means to secure the sections together.

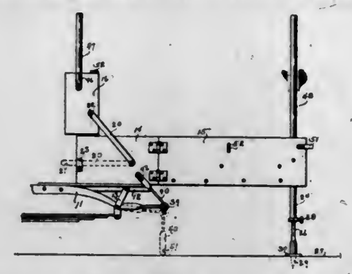
1,829,055. TUYÈRE. CYRUS J. PARKER, Portland, Oreg.; Mary E. Parker, executrix of said Cyrus J. Parker, deceased, assignor to Iron Fireman Manufacturing Company, Portland, Oreg, a Corporation. Filed May 16, 1927. Serial No. 191,609. 1 Claim. (Cl. 110—104.)



A tuyère member adapted to be arranged in an upright position to form a section of the upper portion of a fuel retort of an underfeed stoker, and having when in such position, two upright portions, spaced apart, one of which is wider than the other, a narrow portion connecting the lower ends of said portions and a top portion of the same width as said wider portion connecting the upper ends of said portions, said wider portions having a continuous fuel-engaging surface, the outer portion of the top of the member being provided with a groove and the bottom with a retaining lug, said wider upright portion being provided in its lateral edges with channels extending from surface to surface and flaring from their middle portions to said surfaces, the upright fuel-engaging face being slightly inclined outwardly and upwardly and the fuel-engaging face of the top being inclined downwardly and outwardly.

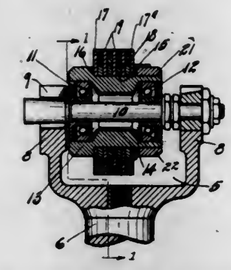
1,829,056. CAMPING DEVICE FOR MOTOR VEHICLES. EDWARD PETERSEN, Des Moines, Iowa. Filed May 17, 1928. Serial No. 278,410. 6 Claims. (Cl. 190—2.)

1. A trunk designed to be secured to the rear end of a vehicle, a hinged door in one side of said trunk, an angle iron pivoted to the end of said trunk, a leg secured to said door for supporting the same when in an operating position, a leg secured to said angle iron for supporting it when it is



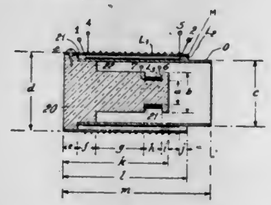
in an extended position, and a folding bed in said trunk and capable of being unfolded and supported upon said door and said angle iron.

1,829,057. COMBINATION DRESSING AND GRINDING WHEEL. ROLAND P. PLACE, Midland, Mich., assignor to Roland P. Place Co., Midland, Mich., a Corporation of Michigan. Filed July 2, 1928. Serial No. 289,773. 6 Claims. (Cl. 125—37.)



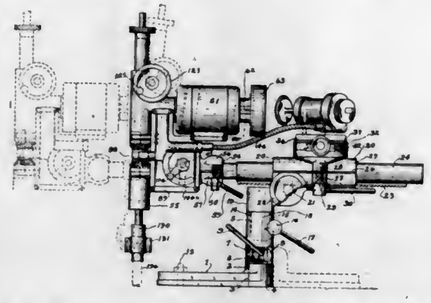
1. A combination dressing and grinding tool comprising a plurality of spaced apart, hardened cutter disks, and an abrading material filling the interstices between said cutter disks.

1,829,058. HIGH FREQUENCY TRANSFORMER. JACKSON H. PRESSLEY, Marion, Ind., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Aug. 3, 1929. Serial No. 383,214. 10 Claims. (Cl. 175—359.)



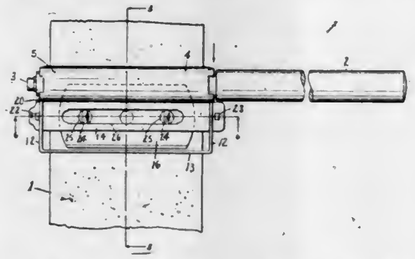
1. A high-frequency transformer comprising a secondary distributed cylindrical winding, a first primary distributed cylindrical winding of few turns relative to and closely wound about the secondary for providing a high degree of magnetic coupling therewith, and a second primary annular winding of compact structure of many turns relative to and positioned within said secondary and of sufficiently smaller diameter than said secondary to provide a moderate degree of magnetic coupling therewith, the aforesaid couplings between said primary and secondary windings being obtainable consistent with a relatively low degree of magnetic coupling between said primary windings resultant upon the positioning thereof on opposite sides of said secondary winding.

1,829,059. VALVE GRINDING REFACING AND RESEATING DEVICE. LOUIS A. PRESTEK, Seattle, Wash. Filed June 24, 1930. Serial No. 463,508. 14 Claims. (Cl. 51—245.)



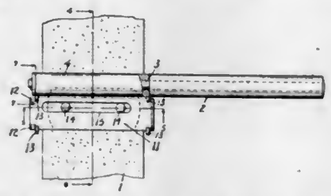
1. In an apparatus of the class described, a tool arbor shaft adapted for the reception of different tools, mechanism for imparting rotary reciprocatory movement to the shaft, means whereby the shaft is momentarily elevated during such rotary reciprocatory movement, and means whereby the rotary reciprocatory movement may be converted into a uni-directional drive for the shaft.

1,829,060. SHARPENING DEVICE FOR SAFETY RAZOR BLADES AND THE LIKE. JAY B. RHODES, Kalamazoo, Mich. Filed Feb. 4, 1929. Serial No. 337,326. 7 Claims. (Cl. 15—153.)



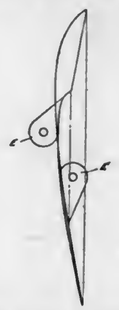
1. In a sharpening device, the combination with a handle, of a spindle carried by said handle, the handle being disposed axially of the spindle, a roller rotatable on the spindle and notched at its ends to provide spaced stops at each end and provided with radial pivot lugs disposed centrally relative to said stops, and a blade carrier pivotally mounted on said lugs and provided with a blade holder arranged to support a blade substantially in the plane of the axis of the carrier pivots and with its edge to be sharpened in lapping relation to the roller when the carriage is in engagement with the roller stops.

1,829,061. SHARPENING DEVICE FOR RAZOR BLADES. JAY B. RHODES, Kalamazoo, Mich. Filed Feb. 4, 1929. Serial No. 337,327. 6 Claims. (Cl. 51—153.)



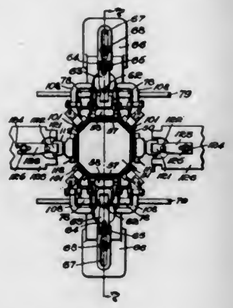
1. In a sharpening device, the combination with a handle, of a roller rotatably mounted on said handle and provided with radially projecting ears and having a recess in its periphery between said ears, and a blade carrier pivotally mounted on said ears, said roller being provided with stops limiting the swinging movement of said blade carrier, said carrier being adapted to support a blade with the edge thereof to be sharpened adjacent the roller and positioned to be engaged by one edge of said recess.

1,829,062. WIND-WHEEL VANE. HENRY C. SCHNEIDER, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 8, 1926. Serial No. 153,390. 5 Claims. (Cl. 170—79.)



1. In a windwheel, a blade element of trapezoidal shape and formed of a substantially uniform thickness of sheet material, said element being transversely curved and having a progressively decreasing curvature from the leading edge toward the trailing edge of said element, and being longitudinally dished, on a substantially uniform radius.

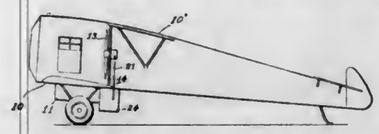
1,829,063. MACHINE FOR COVERING BOXES. RICHARD P. SECKENDORF, Somerville, Mass., assignor to The Cambridge Paper Box Co., Cambridge, Mass., a Corporation of Massachusetts. Filed June 29, 1929. Serial No. 374,871. 8 Claims. (Cl. 93—54.)



1. A machine for covering boxes and the like that have oblique side walls, comprising in combination supporting means for the box and the covering blank, wipers mounted for oblique operation to wipe the cover against the oblique wall or walls, and one or more wing wipers having both inward and oblique movements cooperating with said oblique wall wipers.

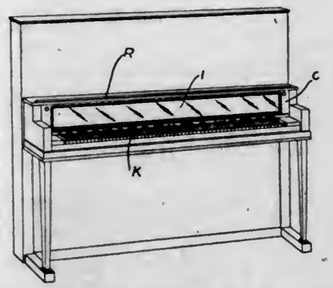
1,829,064. AIRCRAFT PROPELLING MEANS. JOSEPH B. SHAINLINE, Norristown, Pa., assignor of one-half to Harold Slemmer, Norristown, Pa. Filed Sept. 21, 1929. Serial No. 394,187. 1 Claim. (Cl. 244—14.)

An aircraft comprising a fuselage, a power plant, wings adjacent to the lower forward parts of the fuselage and extending in substantial alinement upon opposite sides thereof, wings adjacent to the upper limits of the fuselage and extending in substantial alinement upon opposite sides thereof, said upper wings having their forward edges approximately coinciding with a vertical plane through the



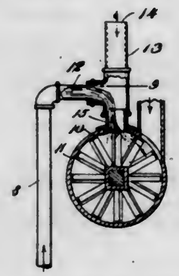
rear edges of the lower wings, propellers journaled upon opposite sides of the fuselage to rotate approximately in said plane, their orbits being less in diameter than the vertical distance between the wings, and means to drive the propellers from the power plant.

1,829,065. PIANO KEY REFLECTING DEVICE. MEAVE W. SHARMAN, San Diego, Calif. Filed Nov. 30, 1929. Serial No. 410,690. 3 Claims. (Cl. 84—177.)



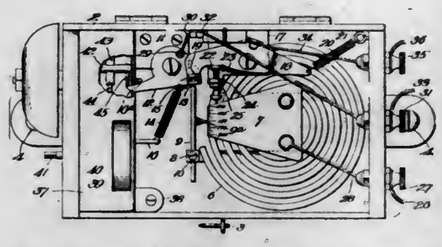
1. The combination with the keys and key cover of a piano of a mirror securely fastened to said cover so as to form a panel above and adjacent to said keys when said cover is open.

1,829,066. COLD MOLASSES FEEDER. HARRY J. SHELTON, University City, Mo. Filed Oct. 14, 1929. Serial No. 399,616. 4 Claims. (Cl. 99—2.)



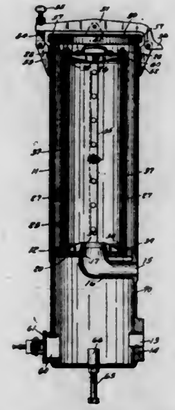
4. A device of the character described comprising a feed mixer, means to supply a continuous stream of feed material thereto, a vertically disposed relief pipe communicating by its lower end with the top of said mixer and open to the atmosphere at its upper end, a horizontally disposed pipe communicating with said vertical disposed pipe above its lower end, a supply pipe connected to said horizontally disposed pipe, means to force cold molasses up through said supply pipe, and spirally arranged beaters rotatably mounted in said mixer adapted to break up the gravitating stream of cold molasses as it enters the mixer and to mix it with the feed, substantially as described.

1,829,067. AUTOMATIC FIRE ALARM. ROBERT B. SHRYOCK and JAMES A. BALL, Fort Worth, Tex. Filed Dec. 31, 1928. Serial No. 329,641. 1 Claim. (Cl. 200—138.)



In an automatic fire alarm, a casing, a bracket therein, a spirally wound thermostat carried by the bracket and adapted to expand or contract under variations of heat, a push rod carried by the thermostat for endwise movement in one direction or the other as the thermostat expands or contracts, a contact lever having an upstanding lug held yieldingly adjacent one end of said rod, a second lever suitably mounted and in superposed but spaced relation with the first-named lever and provided with a lug, a spring holding the second lever with its lug adjacent the lug of the first-named lever, and means to limit movement of the second lever toward the lug of the first-named lever.

1,829,068. GAS PURIFICATION. HARRY F. SMITH, Dayton, Ohio, assignor to The Gas Research Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 14, 1926. Serial No. 141,544. 11 Claims. (Cl. 183—66.)

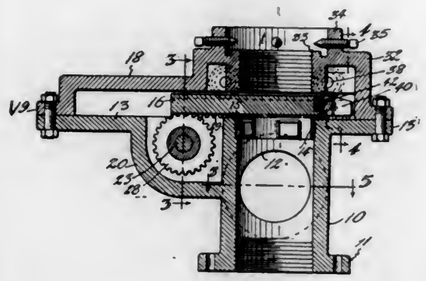


1. A purifying apparatus, comprising a housing, a gas inlet and a gas outlet therefor, an upright perforate partition within said housing interposed between said inlet and said outlet and dividing the housing into a gas-receiving chamber and a gas-discharge chamber, a layer of filamentous cloth associated with said perforate partition, and a layer of finely divided filtering material supported by said filamentous cloth at an angle substantially greater than the normal angle of repose of said filtering material.

1,829,069. CONTROL VALVE. HARVEY RICHARD STANDLEE, Tulsa, Okla. Filed Sept. 15, 1928. Serial No. 306,156. 6 Claims. (Cl. 251—54.)

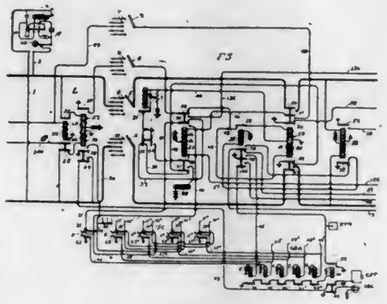
1. In a control valve, a casing head, a housing in the head, an annular valve seat in the housing, a valve gate

slidable across said seat and having parallel bearing faces at opposite sides and parallel racks alined with said faces, anti-friction rollers in the housing holding the valve to



its seat by contact with said faces, a gearing in the housing engaging said racks for sliding the gate, and means for operating the gearing.

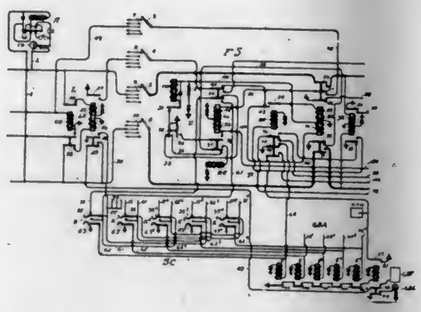
1,829,070. TELEPHONE SYSTEM. MICHAEL B. STAZAK, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 29, 1929. Serial No. 403,292. 13 Claims. (Cl. 179—27.)



1. In an automatic telephone system of the character described, a plurality of telephone lines terminating at a private automatic exchange, a group of finder switches for locating a calling line, a group of connector switches associated with said finder switches, a calling device, said connector switch operable upon the actuation of said calling device to connect said calling line to a called line, a common starting conductor for said finder switches, means for extending said common conductor to the next finder switch of the group, a busy group alarm comprising a plurality of busy relays each associated with a finder switch, means in said finder switches for operating the associated busy relay in said busy group alarm when said finder switch locates a calling line.

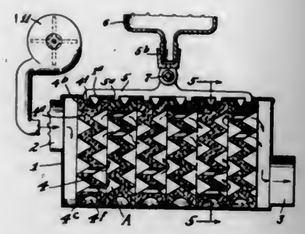
1,829,071. TELEPHONE SYSTEM. MICHAEL B. STAZAK, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 29, 1929. Serial No. 403,293. 10 Claims. (Cl. 179—27.)

1. In a telephone system a private automatic exchange, an automatic main exchange, telephone lines terminating at said main exchange, telephone lines terminating at said private automatic exchange, a finder switch and a connector switch for interconnecting the telephone lines at



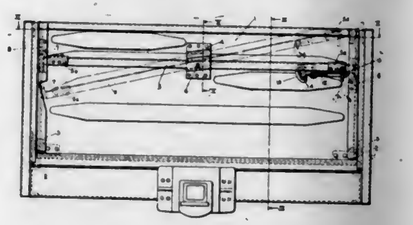
said private automatic exchange, and a two way trunk line for interconnecting the telephone lines at said private automatic exchange and said automatic main exchange.

1,829,072. COOLING APPARATUS. WILLIAM H. SWEETLAND, San Diego, Calif. Filed May 22, 1929. Serial No. 365,184. 16 Claims. (Cl. 62—139.)



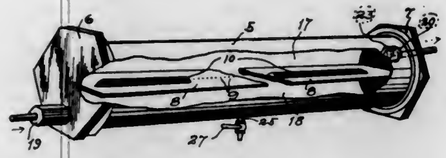
1. In an apparatus of the class described, a receptacle having inlet and discharge openings, and a plurality of porous members positioned side by side therein, there being provided between said porous members air passages connected at their opposite ends to alternate adjacent air passages forming a substantially circuitous zigzag air passage between the inlet and the outlet openings.

1,829,073. LATCHING MEANS FOR DROP END GONDOLA CARS. KENNETH J. TOBIN and AXEL WASBERG, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed May 6, 1929. Serial No. 360,768. 5 Claims. (Cl. 105—308.)



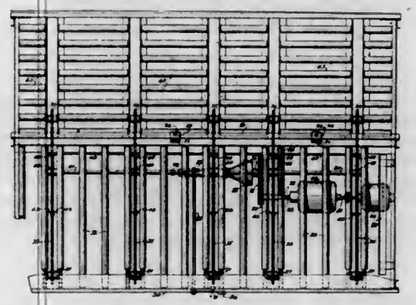
1. In a car having a drop end door, a latch bar pivoted intermediate its ends to said door, said latch bar having flanged terminals and keepers on the sides of the car for engaging the ends of said latch bar, said keepers having flanges under which the flanged ends of said latch bar engage for tying the sides of the car together against spreading.

1,829,074. METHOD AND APPARATUS FOR USING CRUDE OIL AS A MOTOR FUEL. WILFRED J. TORRANCE, Cleveland, Ohio. Filed May 11, 1925. Serial No. 29,398. 1 Claim. (Cl. 210—165.)



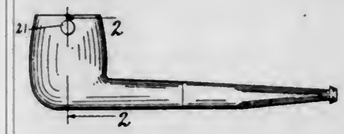
An apparatus for filtering and heating motor fuels comprising a cylindrical casing, a partition plate subdividing said casing horizontally throughout its entire length into two compartments, a series of minute apertures formed along a central line of said partition plate, a plurality of screens of fine mesh secured above the upper ends of said apertures, connections between the lower side of said casing and a source of fuel supply, an outlet from the upper side of said casing adapted to be connected to a line communicating with a carbureting device, and a drain connection on the under side of said casing.

1,829,075. BOARD CUTTING MACHINE. NICHOLAS J. VOGEL and FLOYD R. QUICK, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 6, 1929. Serial No. 352,948. 4 Claims. (Cl. 164—61.)



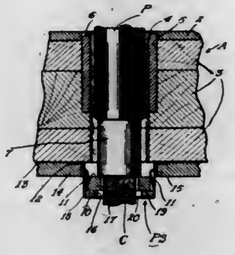
1. In a trimming machine, a pair of parallel beams in spaced relation, adjustable U-shaped holders positioned on said beams, rotary cutting knives on said holders adapted to be adjusted longitudinally of said beams, and means for moving sheet material past said cutting knives to accomplish the cutting thereof.

1,829,076. ATTACHMENT FOR SMOKING PIPES. HARRY A. WEBB, Hamden, Conn., assignor to The Wemith Corporation, New Haven, Conn., a Corporation of Connecticut. Filed Feb. 21, 1929. Serial No. 341,690. 7 Claims. (Cl. 131—12.)



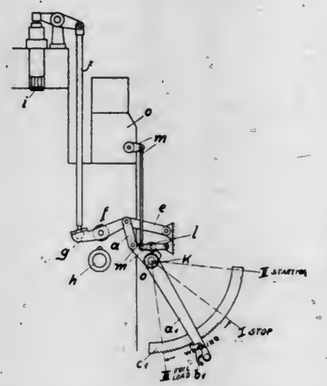
1. The combination with a smoking pipe, of a relatively flat imperforate charge-supporting disk or follower, and supporting means for said disk or follower having removable connection with the bowl rim and attached to said disk or follower substantially centrally thereof at the upper face of said disk.

1,829,077. PLUG SEAT. GEORGE R. WILLET, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 23, 1929. Serial No. 334,441. 10 Claims. (Cl. 179—95.)



7. A telephone switchboard comprising in combination a connecting plug and cord therefor, a plug shelf having an orifice therein and cushioning means secured in said orifice upon which said plug rests.

1,829,078. GEARING DEVICE FOR INTERNAL COMBUSTION MULTICYLINDER OIL ENGINES. KARL WINTTERLIN, Cologne, Germany, assignor to Motorenfabrik Deutz, Aktiengesellschaft, Cologne-Deutz, Prussia, Germany. Filed July 8, 1927, Serial No. 204,329, and in Germany June 23, 1927. 5 Claims. (Cl. 60—16.)

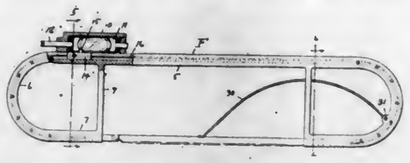


1. In a multicylinder liquid fuel internal combustion engine having its cylinders arranged in groups of one or more cylinders, in combination, air starting operating mechanism; fuel supply controlling mechanism; a controlling member to operate said air starting operating and fuel supply controlling mechanism in respect to one group of cylinders; a controlling member to operate said air starting operating and fuel supply controlling mechanism in respect to another group of cylinders; coupling means whereby said controlling members may be coupled to be operable in unison by movement of one of said controlling members to operate said air starting operating and fuel supply controlling mechanism in respect to both groups of cylinders; separate locking means for said controlling members; and means to render one of said locking means inoperative when said levers are coupled.

1,829,079. MEAT SAW. JAMES A. YOUNG and FRED BRYAN, Scio, Oreg. Filed June 17, 1930. Serial No. 461,770. 3 Claims. (Cl. 143—60.)

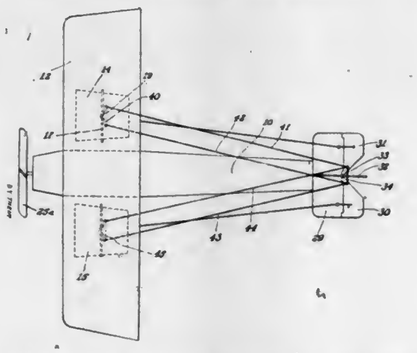
1. A saw structure of the type embodying an elongated frame having an upper hollow elongated straight rail

merging at its ends into arcuate end rail channeled construction which in turn merge into inwardly directed bottom channeled rail sections terminating in spaced relation to each other, a plurality of guide pulleys journalled along the curve of the end rails, cables in the rails trained over the pulleys, a saw between the ends of the cables, and



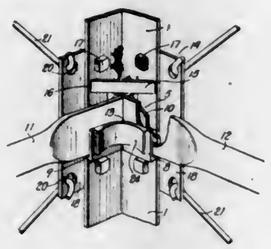
means in the form of a rotor disposed longitudinally upon the upper rail and having a double spiral groove therein for receiving a pin projecting from a block slidably disposed thereunder in the upper rail to which the said cable is secured, whereby to reciprocate a saw blade slidably maintained between the mentioned bottom channeled sections.

1,829,080. AIRCRAFT. JOHN BAYERLEIN, Maspeth, and ANTON A. SEILER, New York, N. Y. Filed Oct. 25, 1930. Serial No. 491,112. 9 Claims. (Cl. 244—29.)



1. In an aircraft, cylinders mounted on the wings of the aircraft adapted to have the air stream pass therethrough, means for adjusting the positions of said funnels for controlling the maneuvering of the aircraft, means for baffling the air stream passing through said cylinders, and means connected to the steering surfaces of said aircraft and said funnels for attaining simultaneous movement of the steering surfaces and said funnels.

1,829,081. DERRICK. FRED D. BEARLY, Oklahoma City, Okla. Filed Oct. 20, 1930. Serial No. 489,924. 6 Claims. (Cl. 189—19.)

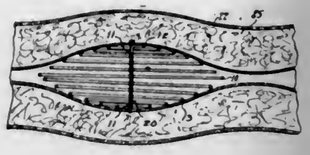


1. In combination with a derrick leg including abutting sections, a connector plate joining the sections, a coupling member at one end of the sections, having transverse grooves and a seat, girth members adapted to engage said grooves, an abutment plate at the lower ends of the sections for retaining said girth members in the grooves, a reinforcing leg adapted to engage said seat, and means for clamping said reinforcing leg into engagement with the seat.

1,829,082. PROCESS OF MANUFACTURING COLORED PORTLAND CEMENT. GUSTAV BERGEN, FELIX ENGELHARDT, and RICHARD STECKHAN, Brunswick, Germany. Filed Feb. 26, 1927, Serial No. 171,367, and in Germany Jan. 27, 1927. 8 Claims. (Cl. 106—25.)

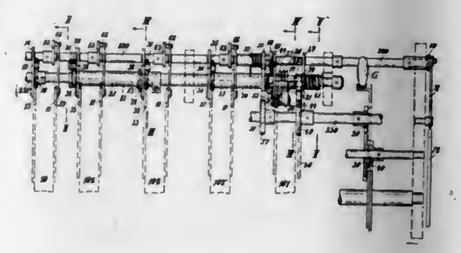
1. A process of making colored Portland cement comprising the steps of incorporating with the ground limestone and clay a flux of the group consisting of phosphates, borates, and halogen compounds, also adding thereto a compound of the group consisting of oxides of chromium, nickel, cobalt and copper to react with the flux to form coloring compounds and then burning the mixture to form clinkers.

1,829,083. SPRING MATTRESS. EDWARD B. BIRKENBEUEL, Portland, Oreg. Filed Mar. 5, 1928. Serial No. 259,231. 4 Claims. (Cl. 5—353.)



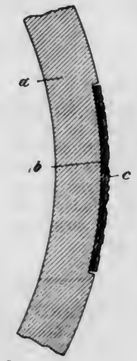
1. An insert for a mattress consisting of a plurality of disconnected ellipsoidal spring units arranged in rows and files, a sheet of fabric above and a sheet of fabric below all of said units and smoothly in contact therewith, means for securing the two sheets together between the units to form square pockets of such size as to permit a slight lateral movement to each unit within its pocket while retaining the units in rows and files.

1,829,084. BLOCKING THE SETTING MEANS OF CASH REGISTERS. ERNST BREITLING, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Apr. 15, 1929, Serial No. 355,374, and in Germany Apr. 25, 1928. 8 Claims. (Cl. 235—130.)



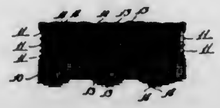
1. A blocking arrangement for the setting mechanism of cash registers, fitted with a plurality of groups of totalizer keys, a group of amount keys and a group of motor keys, in which is provided an independent locking member for each of said groups of totalizer keys and for the group of amount keys, a locking mechanism for said motor keys, each of said locking members being in the path of said locking mechanism to block the same against movement, means actuated by the depression of a key in each of said totalizer and amount key groups for moving its associated locking member from the path of said locking mechanism, said locking mechanism locking said motor keys as long as a key of each of said totalizer and amount key groups is not depressed.

1,829,085. PRINTING PLATE. HANS BUSCHMANN, Stettin, Germany. Filed June 24, 1929, Serial No. 373,480, and in Germany July 21, 1928. 4 Claims. (Cl. 101—382.)



1. A device for securing a printing plate to a cylinder or flat bed of a printing machine, comprising a sheet of vulcanizable material interposed between the cylinder and the printing plate, said sheet being vulcanized to the cylinder or bed and the plate.

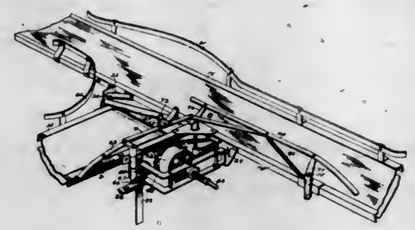
1,829,086. SUPPORTING MEANS FOR HOSIERY, ETC. ANDERSON C. GRASHAM, Burlington, N. C., assignor of one-half to George D. Smith, Burlington, N. C. Filed Aug. 2, 1930. Serial No. 472,670. 2 Claims. (Cl. 66—172.)



1. In combination with a stocking having a ribbed upper portion, of means for supporting the stocking in place comprising lengths or strands of elastic extending around the upper end of said ribbed portion and knitted with the yarn of the fabric for interlocking engagement therewith, the ends of said strands of elastic being turned abruptly backward and also knitted in the fabric.

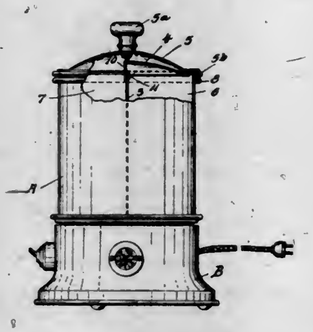
1,829,087. CONVEYER CONTROL. EARL G. GRIFFITH, Glendale, Calif. Filed Apr. 15, 1930. Serial No. 444,408. 8 Claims. (Cl. 198—21.)

1. In combination: a primary conveyer; a secondary conveyer disposed to feed articles onto said primary conveyer; means for arresting said secondary conveyer; means for controlling said arresting means and including an article contacting member, said article contacting member being adapted to be actuated by an article on said secondary conveyer when properly positioned in the path of said article; means for positioning said control means to permit such actuation, said positioning means



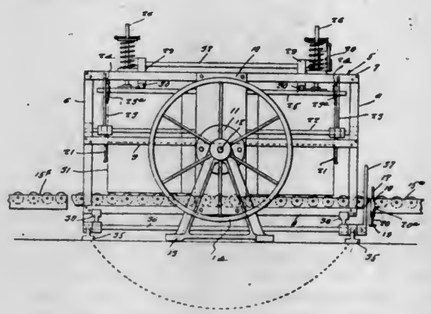
being operated by an article traveling upon said primary conveyer and including an article contacting member and a link directly connecting said article contacting member.

1,829,088. WIENER STEAMER. WILLIS A. HALE, Cleveland, Ohio. Filed May 31, 1930. Serial No. 458,221. 2 Claims. (Cl. 53—2.)



1. In a wiener steamer, comprising, a chamber, a partition dividing the chamber into compartments, an inner closure provided with means for closing one of the compartments, a flange formed on said means to contact with the partition, a tongue projecting from said flange and adapted to interlock the partition and said closure, and an outer closure for the chamber extending over and resting partly on the inner closure.

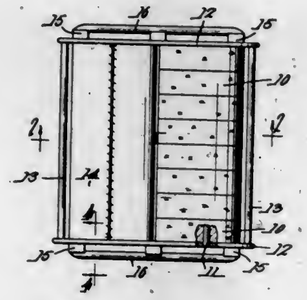
1,829,089. MIXER. HERBERT E. HALL, Rumford, Me. Filed Sept. 25, 1930. Serial No. 484,453. 2 Claims. (Cl. 259—56.)



1. A device of the class described comprising a frame supported for rocking movement and adapted to hold a

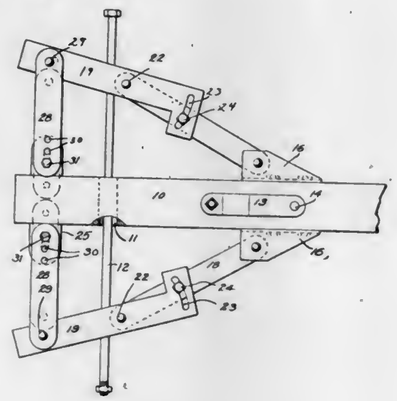
case of bottled goods, a follower carried by the top of the frame for engaging the top of the case, spring means for normally holding the follower in raised position, a shaft journalled in the top of the frame, arms attached to the shaft and having rollers at their lower ends engaging the follower, when the shaft is moved to a position with the arms depending therefrom, and a hand-lever connected with the shaft for rocking the same.

1,829,090. SWIMMING FLOAT. CARL C. HARRIS, Orange, Mass. Filed Oct. 13, 1930. Serial No. 488,205. 9 Claims. (Cl. 9—11.)



1. As an article of manufacture, a float and life preserver comprising a series of blocks of light material, rods passing through the series on which the blocks are secured firmly in position, a pair of side pieces to which these rods are secured at their ends and a handle spaced from the float and parallel with one edge thereof.

1,829,091. WAGON TONGUE HOUND. HENRY J. HEIDER, Carroll, Iowa. Filed July 14, 1930. Serial No. 467,654. 1 Claim. (Cl. 280—139.)



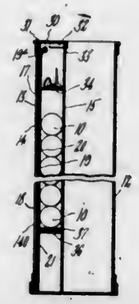
An improved wagon tongue hound comprising two angle bars, shaped to be fitted against the sides of a tongue with their upper flanges projected laterally from the sides of a tongue and substantially flush with the top of a tongue, a brace mounted on top of each angle bar, means for adjustably securing the brace to the angle bar, a wagon tongue hound member pivotally connected to the outer ends of each of said braces, two bars each pivotally connected with one of the hound members near the central portion of the hound member and extended forwardly and inwardly, means for pivotally connecting each of said bars to a tongue, and means for adjustably connecting the forward end of each hound member to the central portion of each of said bars, for the purposes stated.

1,829,092. VEHICLE TONGUE COUPLING. HENRY J. HEIDER, Carroll, Iowa. Filed Dec. 8, 1930. Serial No. 500,847. 5 Claims. (Cl. 278—36.)



1. A coupling device for vehicle tongues comprising two angle bars designed to be fitted against the sides and bottom of a forward tongue member and to be projected over a portion of the rear tongue member, and a supporting device designed to be fixed to a rear tongue member and shaped to engage the under surface of the angle bars to limit the up and down movement of the tongue members relative to each other.

1,829,093. GOLF BAG AND ATTACHMENT THEREFOR. FREDERICK E. HOLLINS, Winchester, Mass. Filed Aug. 9, 1930. Serial No. 474,129. 7 Claims. (Cl. 150—1.5.)

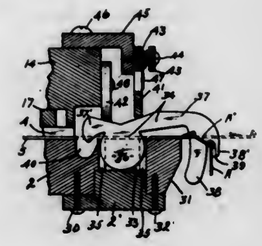


1. A golf-bag attachment comprising an outer and an inner wall forming a pocket adapted to extend lengthwise of a golf bag and hold a column of balls, said attachment having flanges projecting oppositely from the pocket and attachable to a bag, the outer wall having a ball inlet at one end and a ball outlet at the opposite end, and a slide valve movable on the inner side of the outer wall and having an upper ball port arranged to register with said inlet and permit the insertion of balls in the pocket, and a lower ball port arranged to register with said outlet and permit removal of balls from the pocket, the arrangement being such that the valve closes the pocket when balls are being inserted, and is adapted to close both the inlet and the outlet to confine the balls in the pocket.

1,829,094. KNITTING MACHINE. WILLIS ADOLPHUS INGALLS, Syracuse, N. Y. Filed June 16, 1930. Serial No. 461,563. 5 Claims. (Cl. 66—106.)

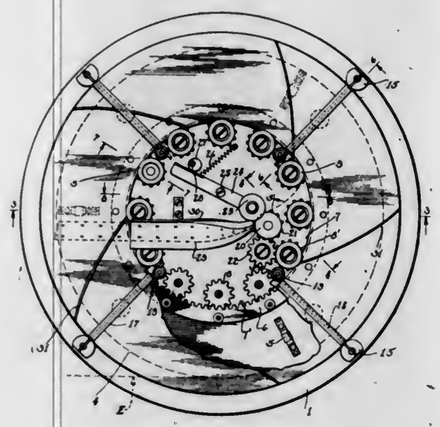
1. In a knitting machine, a web-holding detent comprising a circular bearing member journaled on the machine, an arm extending from one side of the bearing

member having a pendent fork member adapted to engage the fabric, and means alternately engaging the detent at



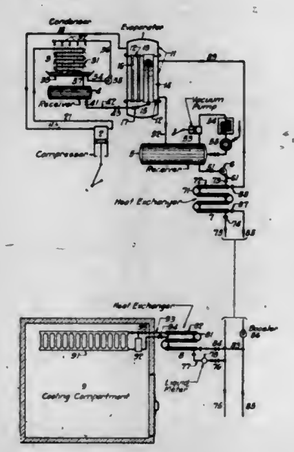
opposite sides of the axis of the bearing member to rotate said arm into and out of holding engagement with the knitted fabric.

1,829,095. FILM REEL. WALTER G. KING and MAX E. KRAUSE, Chicago, Ill. Filed June 10, 1929. Serial No. 369,663. 7 Claims. (Cl. 88—18.7.)



1. A film reel comprising a normally stationary plate, a rotatable film-supporting plate mounted upon the supporting plate and in close proximity thereto, bearing means disposed between said plates, said film-supporting plate being provided with an opening, a plurality of film-spools provided with gears and mounted upon said supporting plate, said film spools being positioned within the opening in the film-supporting plate and adjacent the edge of the opening, the spools being provided with flanges projecting beyond the edge of the opening, a gear secured to the movable film-supporting plate and arranged in mesh with the gears associated with said spools, said gear being positioned between the film-supporting plate and said supporting plate, one of said film spools being connectible with a source of power, a film feeding sprocket mounted upon said supporting plate and positioned within the opening in the film-supporting plate, a connecting element between the film feeding sprocket, a gear associated with one of said film sprockets, and a guard roller mounted upon the supporting plate and positioned within the opening in said rotatable film-supporting plate, said guard roller being arranged in operative relation with said film feeding sprocket and provided with an eccentric adjusting device.

1,829,096. REFRIGERATING SYSTEM. GUSTAV A. KRAMER, Concord, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Sept. 26, 1928. Serial No. 308,402. 5 Claims. (Cl. 62—115.)



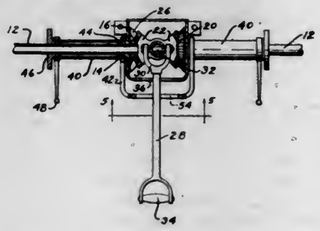
2. In a refrigerating system in which a fluid is alternately evaporated and condensed in a heat transmission cycle the steps of heating respectively the condensate leaving the condenser and the vapors leaving the evaporator by heat exchange respectively with the incoming vapors and liquid, and subjecting said condensate to pressure to prevent its ebullition due to said heating.

1,829,097. METHOD OF AND MEANS FOR DETERMINING HEADLIGHT ADJUSTMENTS. STATES LEE LEBBY, Corning, N. Y. Filed Sept. 17, 1929. Serial No. 393,299. 4 Claims. (Cl. 88—23.)



1. Means for use in adjusting headlights comprising a screen positioned to receive the light from said headlights, a comparison screen shielded from said headlights by the first mentioned screen and so placed as to have at least a portion thereof visible from a given point simultaneously with the first named screen, and means for illuminating said comparison screen to a predetermined intensity.

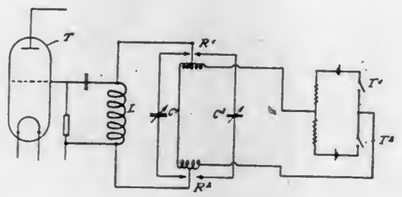
1,829,098. INVERTED STICK CONTROL. FLAVIUS E. LOUDY, Akron, Ohio. Filed Sept. 4, 1930. Serial No. 479,775. 1 Claim. (Cl. 244—29.)



In an airplane having a main supporting surface and ailerons for the lateral control thereof spaced rods con-

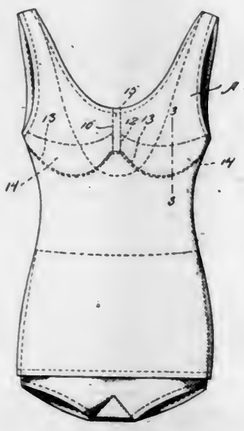
nected at their outer ends to said ailerons and being disposed longitudinally of said main surface, a gear box, gearing disposed within said gear box and interconnecting said rods, a shaft operatively connected to said gearing and rotatably mounted in said gear box and a manually operated control stick depending from said shaft and passing through an opening in the gear housing.

1,829,099. ELECTRO-ACOUSTIC MUSICAL INSTRUMENT. JÖRG MAGER, Berlin-Neukölln, Germany. Filed Mar. 21, 1928, Serial No. 263,450, and in Germany Oct. 29, 1925. 9 Claims. (Cl. 84—1.)



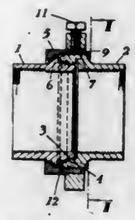
7. An electro-acoustic musical instrument comprising an oscillation circuit, a condenser in said circuit, a lever for adjusting said condenser, a switch on said lever for cutting said condenser in and out, a second oscillation circuit, a condenser in said second circuit, a lever for adjusting said second condenser, a switch on said second lever adapted to cut in and out said second condenser, said switches being related in such manner as to prevent cutting in of both condensers at a time, and a tube to which said two oscillation circuits are connected.

1,829,100. BATHING SUIT. WILLIAM G. MAIER, Los Angeles, Calif. Filed Sept. 13, 1930. Serial No. 481,780. 1 Claim. (Cl. 2—67.)



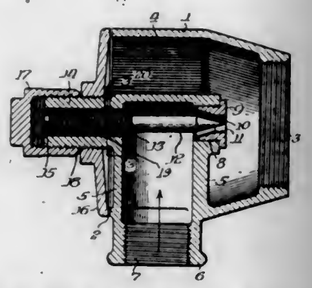
In a bathing suit, a bust-supporter including a piece of material having substantially crescent-shaped end portions and a reduced intermediate portion, stitching securing the ends of said material and the lower edge thereof to the waist portion of the suit, thereby providing the latter with spaced breast-receiving pockets, and a reinforcing tape extending from the neck portion of the suit to the lower edge of the intermediate portion of the material and stitched thereto along its longitudinal edges for the purpose specified.

1,829,101. CONNECTION FOR PIPES, TUBES, BARS, AND THE LIKE. JAMES AUGUST MCGEORGE, New Cross, London, England, assignor to The London Valve Company, Limited, Great Bridge, Staffordshire, England. Filed May 18, 1929, Serial No. 364,064, and in Great Britain May 25, 1928. 1 Claim. (Cl. 285—122.)



Union comprising interfitting pipe ends one of said ends being threaded to receive a securing nut said nut and the other of said ends being provided with coacting surfaces, said nut having tongues formed by pairs of slots cut in its threaded wall and carrying a detachable ring holding set-screws to engage said tongues on one of said pipe ends to lock said nut on said threaded end in any position to which it has been adjusted.

1,829,102. FUEL MIXING DEVICE. GARNET W. MCKEE, Rockford, Ill. Filed Feb. 26, 1927. Serial No. 171,333. 10 Claims. (Cl. 48—180.)



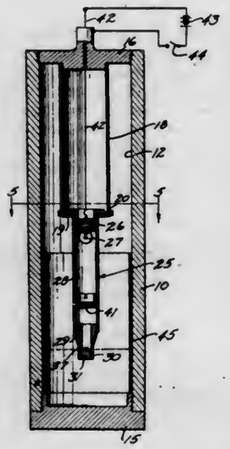
1. In a fuel mixing device, a casing having a chamber, a gas intake conduit having a port in one wall thereof, means extending through a wall of said conduit to the exterior of the casing for regulating gas flow through said port, a guide member for said means having a chamber through which the regulating means extends for collecting any leaking gas which may be flowing alongside said means toward the exterior of the casing, means for admitting an air stream into said casing chamber, and a duct leading from the guide member chamber into proximity with said air stream whereby said stream will draw from the duct and guide member chamber accumulations of leaking gas.

1,829,103. LOADING DEVICE FOR VIEW-TAKING CINEMATOGRAPHIC APPARATUS. ANDRÉ NOËL MERLE, Vincennes, France, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Filed June 9, 1928, Serial No. 284,209, and in France June 23, 1927. 4 Claims. (Cl. 242—71.)



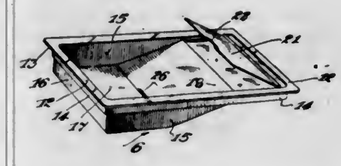
1. A loading case for cinematographic films comprising a hollow box open at one end and having at least one outcut portion formed at said open end in the edge of the inner face of the lateral wall of said box, a cover for said box having its outer portion adapted to bear on the open face of the box and its inner portion depressed and adapted to project into the hollow space of said box, said depressed portion having on its periphery at least one extension whose innermost face is in the same plane as the innermost face of said depressed portion and is adapted to be engaged in said cut out portion, in order to prevent the film to be inserted between said depressed portion and said hollow box.

1,829,104. INCLINATION RECORDING DEVICE. ROBERT H. MILLER, Los Angeles, Calif., assignor to Shell Oil Company, San Francisco, Calif., a Corporation of California. Filed Aug. 8, 1927. Serial No. 211,416. 10 Claims. (Cl. 234—1.5.)



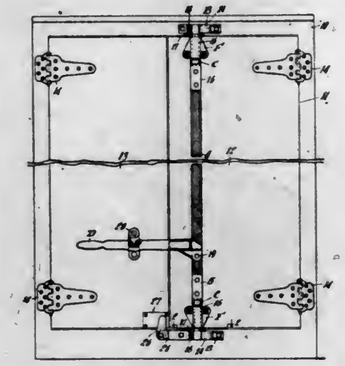
1. An inclination recording device comprising: a supporting structure; a light-sensitive cylindrical film carried by said supporting structure; a pendulum carried by said supporting structure, said pendulum carrying a plurality of mirrors adapted to reflect light rays outwardly onto said film; and means for defining the size of beam reflected from said mirrors.

1,829,105. VANITY BOX. WILLIAM M. MILNE, Jr., Brooklyn, N. Y. Filed Oct. 27, 1928. Serial No. 315,487. 6 Claims. (Cl. 132—83.)



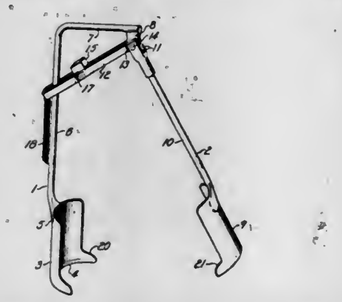
6. A vanity box comprising an elongated casing, a powder compartment at one end of the casing, a puff compartment at the other end of the casing, the powder and puff compartments lying side-by-side in substantially the same plane, an inclined partition separating the powder compartment from the puff compartment, the partition extending across the bottom of the box near the middle thereof and extending over a substantial portion of the powder compartment, said partition having an aperture admitting powder from the powder compartment to the bottom of the puff compartment.

1,829,106. DOOR OPERATING MECHANISM. HENRY A. MINER, Evanston, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,157. 6 Claims. (Cl. 268—72.)



1. In a door operating mechanism, the combination with a member having a door opening and a swinging door; of a pair of keepers fixed to said door member adjacent the edges of the door, each of said keepers having spaced inner and outer abutment faces; an operating shaft rotatably supported on the door; means for rotating said shaft; keeper-engaging means fixed to opposite ends of said shaft, said keeper-engaging means being of fork shape, the arms of said fork members successively engaging respectively said abutment faces of the keepers to force the door open when said shaft is rotated in one direction.

1,829,107. TRANSPLANTER. FREDERICK W. NUERWELL, Tulsa, Okla. Filed Oct. 11, 1930. Serial No. 488,018. 12 Claims. (Cl. 55—68.)

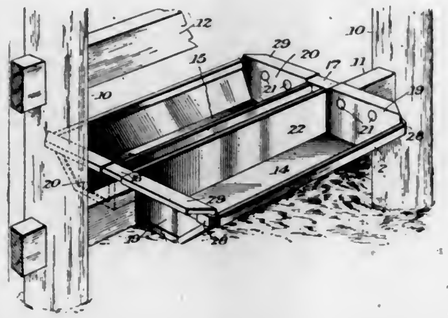


1. In a transplanter, a stationary member including a shovel, a handle secured to said shovel and terminating in a laterally extending grip portion having a downwardly depending ear, a movable member including a complementary shovel, a handle secured to the complementary shovel, and having a laterally extending grip portion including a free end engageable with the first named handle to limit downward movement of the last named grip portion, and means for pivotally connecting the movable member to said ear.

1,829,108. TWIN HOG TROUGH. LESLIE T. PETERSEN, Denison, Iowa. Filed June 29, 1928. Serial No. 289,165. 1 Claim. (Cl. 119—61.)

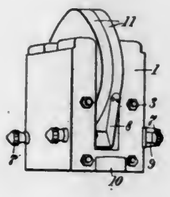
A twin hog trough for suspension over a fence rail or the like, comprising a pair of independent troughs, each trough having a straight rear wall and a downwardly and inwardly sloping front wall and opposite end walls con-

necting said rear and front walls together, the upper portion of the front and rear walls of each trough being rolled over, reinforcing strips gripped by the rolled over portions of the front and rear walls, the upper portions of the end walls being bent at right angles to the planes of the end walls, and angle irons engaged by the bent portions of the end walls and secured to the upper portions of the end



walls at each end of the troughs to hold the troughs together in spaced apart relation with the straight rear walls of the troughs facing one another, defining a socket to receive therein a fence rail or the like, bounded by the straight rear walls and the angle irons, said straight rear walls providing relatively large flat surfaces adapted to snugly engage the fence rail.

1,829,109. ELECTRIC CIRCUIT COUPLING DEVICE. GEORGES EDOUARD ARMAND POHU, London, England. Filed Feb. 2, 1928, Serial No. 251,444, and in Great Britain Feb. 2, 1927. 10 Claims. (Cl. 250—16.)

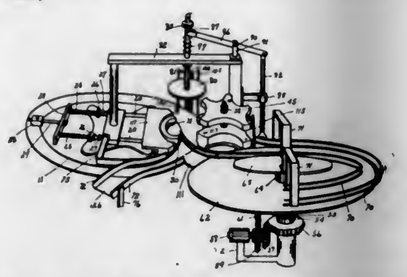


1. In an electric circuit coupling device, the combination of a holder having a recess therein, terminals on said holder, contacts on walls of said recess, connected to said terminals, and a plurality of coupling units adapted to be removably inserted side by side within said recess and carrying contact means adapted to engage with said holder contacts, said units containing electric devices of desired characteristics so chosen as to constitute together a complete coupling device.

1,829,110. PURIFICATION OF CELLULOSE FIBER. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 28, 1930. Serial No. 456,803. 6 Claims. (Cl. 92—9.)

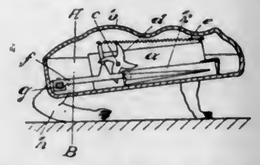
1. A process which comprises treating cellulose fiber with a cuprammonium solution of a sufficiently low chemical concentration to be capable of effecting a substantially selective action on the non-alpha cellulose components of the fiber.

1,829,111. COVER ASSEMBLING MACHINE. JOHN ROSS, Utica, N. Y.; Jean R. Ross, executrix of said John Ross, deceased, assignor to Fonda Container Company, Inc., Utica, N. Y., a Corporation of New York. Filed Mar. 12, 1930. Serial No. 435,333. 2 Claims. (Cl. 93—55.)



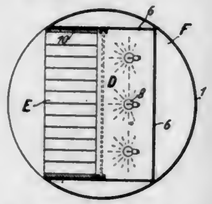
1. In a cover assembling machine, a rotary member for carrying covers, another rotary member for carrying containers, a star shape member disposed adajcent to said rotary members, means for intermittently actuating said star shape member, whereby to dispose said containers over said covers and means co-operating with said star shaped member for holding said cover and container in pre-determined position and another member for forcing said container into said cover.

1,829,112. TOY FIGURE. GEORG SCHMIDT, Ludenscheid, Germany. Filed Aug. 8, 1929, Serial No. 384,396, and in Germany Dec. 14, 1928. 1 Claim. (Cl. 46—40.)



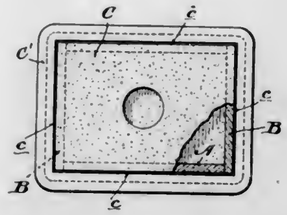
Mechanically moved toy figure having a driving mechanism arranged within the figure body, comprising in combination a driven shaft actuated by said driving mechanism, a multi-contact cam disk fixed on said driven shaft and provided with radial bow-shaped arms ending in a point, a shaft journalled in the frame of said driving mechanism and adapted to carry the toy figure, a pair of legs fixed outwards of the body on said shaft, a lever having a lateral projection and being located on said shaft and so co-acting with said arms of the cam disk, a spring adapted to pull on said lever, a projecting arm connected with said lever, a bellows being actuated by said arm.

1,829,113. DISPLAY APPARATUS. AUGUST SCHREIBER, Friedersdorf, near Jagerndorf, Czechoslovakia. Filed June 8, 1928, Serial No. 283,838, and in Germany June 11, 1927. 7 Claims. (Cl. 40—137.)



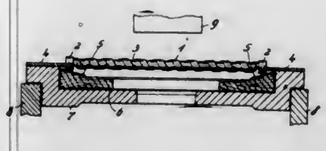
1. In a display device, the combination of a rotary support, a picture on said support, and a blind on said support subdividing the picture into a plurality of sections rendered consecutively visible during a small fraction of each revolution of said support.

1,829,114. MOLD FOR CASTING REFRACTORIES. FREDERIC W. SCHROEDER, Louisville, Ky., assignor to Corhart Refractories Company, Louisville, Ky., a Corporation of Delaware. Filed July 9, 1930. Serial No. 466,788. 2 Claims. (Cl. 49—65.)



1. In a device of the character described, the combination of a mold composed of baked slabs, of a flask within which the mold fits, and a layer of freely flowing sand approximately one-eighth of an inch thick interposed between the slabs and the inner surface of the walls of the flask.

1,829,115. DECORATING LEAD PENCILS. AUGUST SCHWARZ, Nuremberg, Germany, assignor to the Firm: J. S. Staedtler, Nuremberg, Germany. Filed Mar. 15, 1929, Serial No. 347,229, and in Germany Oct. 29, 1927. 2 Claims. (Cl. 101—114.)



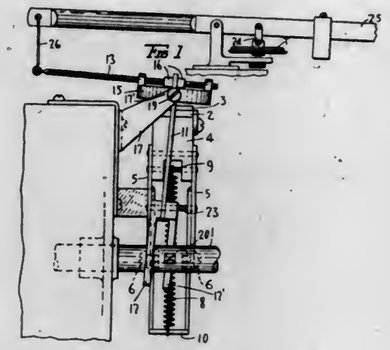
1. An apparatus for stenciling rod-shaped objects comprising a stencil adapted to receive one of said objects, a frame, means on said frame for engaging the opposite ends of said stencil, a race for supporting said stencil, said race and said frame being adapted to be displaced with respect to each other, and means for applying coloring matter to said objects.

1,829,116. PROCESS FOR THE COATING OF METALS UPON CEMENT SURFACES. SPERANZA SEAILLES, née CALOGEROPOULOS, and JEAN SEAILLES, Paris, France, assignors, by mesne assignments, to Alfred P. Bourquardez. Filed Sept. 25, 1924, Serial No. 739,919, and in France Sept. 29, 1923. 1 Claim. (Cl. 18—60.)

A process for the coating of metals upon cement surfaces in which the metal is disposed upon the walls of a mould in the form of a powder mixed with a volatile substance offering no prejudice to the setting of the cement, the cement being then run into he mould, subjeced to compression by suitable means, allowed to dry, and finally removed from the mould.

1,829,117. CIRCUIT MAKER AND BREAKER. FRANK E. STOVER, Springfield, Ohio, assignor of one-half to Dennis T. Igou, Springfield, Ohio. Filed June 10, 1929. Serial No. 369,539. 17 Claims. (Cl. 200—140.)

1. In a circuit maker and breaker, a movable contact member, a continuously moving member, and intermediate connections between said contact member and continuously moving member for positively actuating said contact member to either open or closed position, together with thermostatic means for placing said connections and said continuously moving member in operative relation

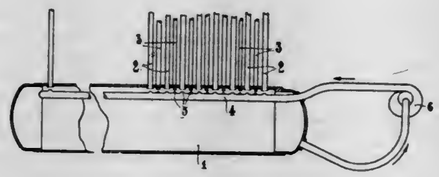


with each other at predetermined changes in temperature to cause said contact member to either make or break an electric circuit.

1,829,118. PROCESS FOR MAKING STEEL INSENSIBLE TO THE ACTION OF HOT GASES AND VAPORS. BENNO STRAUSS, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Nov. 18, 1926, Serial No. 149,282, and in Germany Apr. 1, 1926. 5 Claims. (Cl. 148—21.5.)

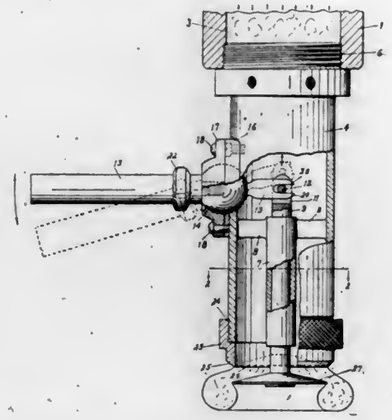
1. The process of treating steel containing about ½ to 4 per cent of nickel, ½ to 2 per cent of chromium and 0.1 to 0.39 per cent of carbon to render the same insensible to the action of hot gases and vapors, which consists in refining the grains and the oxide particles lying between them by heating the steel above the point of recalescence, Ac 3, quickly cooling it from above the point and reheating it up to about 600° to 650° C.

1,829,119. WATER TUBE BOILER. RENÉ VICTOR STANISLAS THÉRY, St. Nazaire, France, assignor to Compagnie de Fives-Lille, Paris, France, a French Company. Filed Dec. 13, 1928, Serial No. 325,872, and in France Dec. 19, 1927. 2 Claims. (Cl. 122—406.)



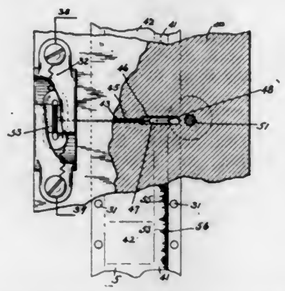
1. A method of preventing scale formation and improving the operation of a water-tube boiler or like heat-exchanging apparatus, consisting in injecting jet pulsations of water into the tubes of the boiler to impart a pulsating motion to the water already in the tubes in the direction of normal circulation, such motion having a mean velocity other than zero, and the pulsations imparted to the water in the tubes being in consonance with the vibration of the tubes.

1,829,120. DOUGH FORMER. PETER J. TOEWS, New York, N. Y. Filed July 22, 1930. Serial No. 469,701. 2 Claims. (Cl. 107—14.)



1. In combination, a receptacle, a tube attached to an outlet of said receptacle and communicating therewith, a guide secured within said tube, a rod reciprocally movable in said guide and carrying a valve adapted to open or close an end of said tube according to the position of said rod, and an actuating lever pivotally mounted laterally with respect to said tube, extending into and operatively connected with said rod within said tube.

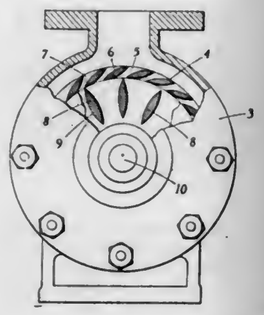
1,829,121. SOUND RECORDING APPARATUS. ELLIOTT R. VINSON, Cottage Grove, Oreg. Filed June 15, 1929. Serial No. 371,289. 3 Claims. (Cl. 179—100.3.)



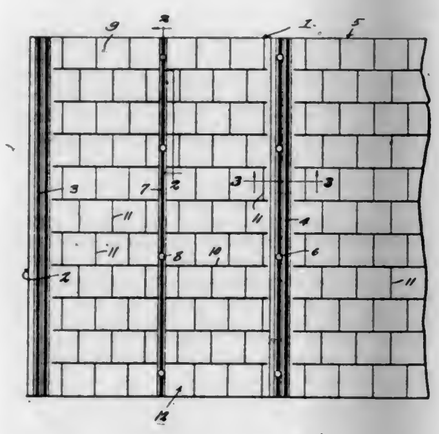
1. In photo-recording apparatus, in combination with a film-strip having a photosensitized light-track thereon, and means for actuating the film in continuous movement, of a panel against which said film moves having an exposure-slit extending transversely of and in register with said light-track, a shutter formed with a V-shaped notch at its outer end, said shutter masking said slit and mounted for vibratile movements longitudinally of the slit to expose portions of said light-track, and electromagnetic means for effecting the vibration of said shutter.

1,829,122. TURBINE PUMP AND THE LIKE. JETHRO THOMAS WADE, High Wycombe, England. Filed July 28, 1928, Serial No. 295,990, and in Great Britain Aug. 10, 1927. 2 Claims. (Cl. 103—103.)

1. A turbine pump of the type set forth comprising a casing with an inlet and outlet for fluid, bearings carried by the said casing, a rotor shaft mounted in the said bearings, a rotor mounted on the said shaft, having a plurality of radial blades spaced at equiangular distances apart, each of said blades being of double convex form and so arranged that the outer edges of the blades are at the periphery of the rotor, the inner edges thereof being spaced from the center of rotation, and a stator comprising a plurality of blades of double convex section arranged at desired distances apart and tangential to the periphery of the rotor, so that outlet passages are formed between the stator blades, the blades of the rotor in cross section having an outline bounded by curves of equal radius and knife edges at the extremities of said curves and coincident with the axial radii of said blades and the tangentially arranged blades of the stator also having an outline bounded by curves of equal radius and knife edges at the extremities of said curves.

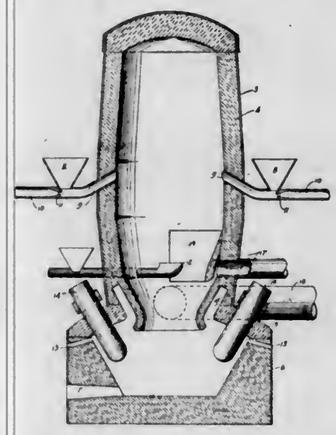


1,829,123. IMITATION SHINGLE ROOF. WILLIAM CLIFTON WARREN, Austell, Ga. Filed Oct. 8, 1930. Serial No. 487,329. 1 Claim. (Cl. 108—17.)



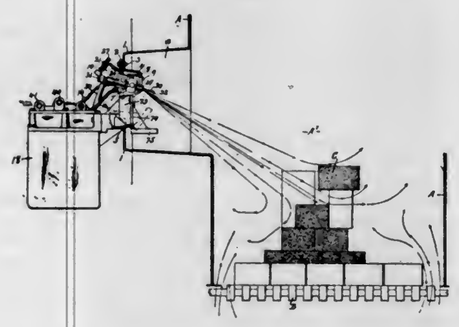
In an imitation shingle roof, a sheet of material provided at its outer edges with corrugations shaped to interlock with the corresponding corrugations of a like sheet and raised to prevent leakage when a nail is driven through them, the sheet being provided, intermediate said edges, with a rib disposed approximately parallel to said edges and raised to prevent leakage when a nail is driven through it; the sheet having inclined portions connected end to end by short angularly-arranged walls, the length of which is disposed approximately at right angles to said edges, the walls extending unbrokenly from the corrugations to the rib, said inclined portions being disposed in staggered relation in the direction of their length, the sheet having depressed ribs, of less depth than the corrugations, the last-specified ribs joining the sides of each of the inclined portions to the sides of the next adjoining inclined portion, the inclined portions, the last-specified ribs and the walls serving to simulate shingles, and the last-specified ribs being disposed approximately parallel to said edges.

1,829,124. METALLURGICAL PROCESS. LEROY A. WILSON, Salt Lake City, Utah. Filed Nov. 11, 1927. Serial No. 232,666. 7 Claims. (Cl. 75—14.)



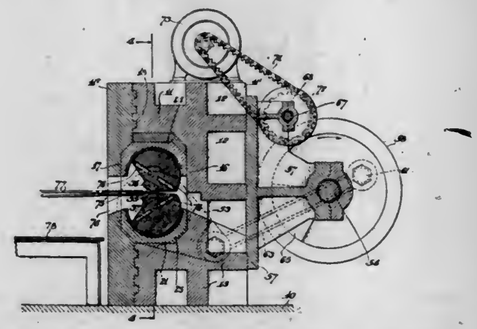
1. A metallurgical process comprising the steps of injecting comminuted carbonaceous fuel and ore of a metal into a furnace in an upward direction in such a way as to produce vortical clouds of said particles, and burning said fuel in a deficiency of oxygen while the said particles are suspended in said vortices.

1,829,125. OIL BURNING HEATER. ARTIS CHESTER BRYAN, Syracuse, N. Y. Filed Mar. 14, 1928. Serial No. 261,537. 6 Claims. (Cl. 158—2.)



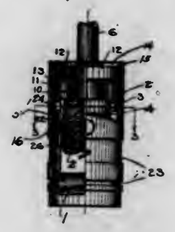
5. An oil-burning unit comprising a plate adapted to be secured in the fuel opening of a heater and provided with an upright portion and a horizontal portion, a burner tiltably mounted in an opening in the upright portion of the plate and provided with a fuel-discharge nozzle and a pair of electrodes arranged at opposite sides of said nozzle and having their ignition terminals disposed in a plane above said nozzle, a fuel supply tank mounted on the horizontal portion and connected to said nozzle, and a transformer for the current to the electrodes mounted on said horizontal portion and connected to said electrodes.

1,829,126. ROLLING MILL. EDWARD G. BUDD, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 23, 1928. Serial No. 256,129. 3 Claims. (Cl. 80—16.)



1. In a rolling machine, a frame, a pair of opposed oscillating rolls extending inwardly from the opposite sides of the frame, and having outer portions of cylindrical form mounted in corresponding bearings at the sides of the frame, and inner parti-cylindrical extensions of said outer portions having opposed working faces within the projected surface of the rolls, and means on said frame for supporting the cylindrical parts of said parti-cylindrical surfaces.

1,829,127. LAMP SOCKET. HORACE CAMMACK, St. Louis, Mo. Filed Dec. 7, 1927. Serial No. 238,409. 7 Claims. (Cl. 173—322.)

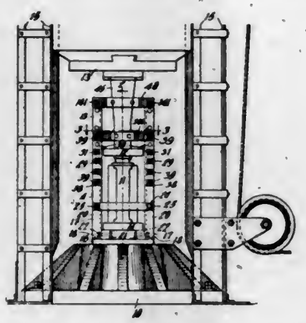


1. In a case for engaging an electric lamp socket and its base, longitudinally spaced shoulders on the inner surface of the case and facing one end of the latter, one of said shoulders being adapted to engage a downwardly facing surface on a socket base, means for gripping an insulation cable, an element above said means and engaging the latter and the other of said shoulders, and means detachably engaging the case wall near said end of the case for engaging the other side of said element.

1,829,128. APPARATUS FOR TESTING DRAFT GEARS. ARNOLD E. DENTLER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 2, 1927. Serial No. 188,076. 7 Claims. (Cl. 265—13.)

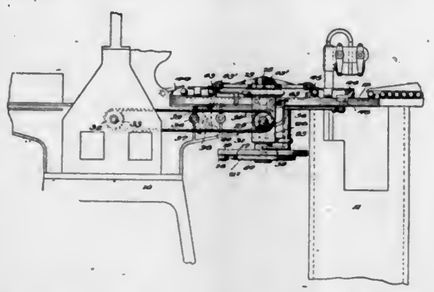
7. In a testing apparatus, the combination with a main frame comprising spaced side members; means for rigidly connecting said members, including a detachable strap; abutment elements at the opposite ends of each of said members, said abutment elements corresponding to the

front and rear stop lugs of a railway draft rigging, the abutment elements at one end of said side elements being displaceable; locking means for said displaceable abutment elements; a second frame detachably connected to said first frame, said second frame comprising side members forming continuations of the side members of said first frame and cut out to permit operation of said displaceable abutment elements; spaced means rigidly connecting the side mem-



bers of said second frame; and spaced guiding elements adapted for the slidable reception of a column member corresponding in dimensions to a standard coupler to permit transmission of a blow on said column member to said draft gear, said guide elements being in the form of spaced pairs of oppositely disposed channel members, said pairs of channel members being of sizes proportionate to the conformation of a standard coupler.

1,829,129. TRANSFER MECHANISM. ALBERT F. DILLON, Richmond, Va., assignor to P. Lorillard Company, Richmond, Va., a Corporation of New Jersey. Filed Aug. 17, 1929. Serial No. 386,628. 2 Claims. (Cl. 198—210.)

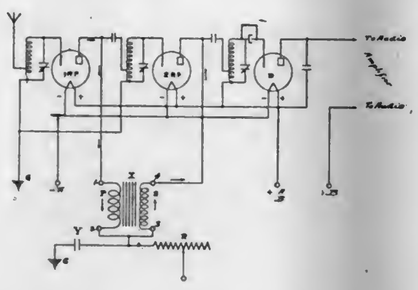


2. In a transfer mechanism, the combination of a revolving series of article supports, a pivoted clamp for each support, a slide, means on said slide for moving articles onto and off of said supports, and means operable by said slide for moving said clamps to an inoperative position as articles are moved onto said supports.

1,829,130. DYEING OR COLORING OF CELLULOSE ACETATE. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 3, 1925, Serial No. 60,341, and in Great Britain Oct. 8, 1924. 18 Claims. (Cl. 8—5.)

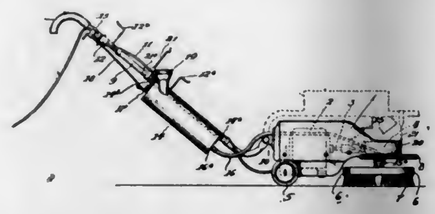
1. Process for dyeing materials comprising cellulose acetate, said process comprising treating said materials with a base being an azo compound containing alphanaphthylamine as an end component, diazotizing said base within the material and coupling with a developer.

1,829,131. RADIO RECEIVING SYSTEM. LOCKE ETHERIDGE, Louisville, Ky., assignor of one-half to Joseph M. Rogers, Louisville, Ky. Filed July 17, 1929. Serial No. 379,025. 6 Claims. (Cl. 179—171.)



1. In a receiver of the tuned radio frequency type including two or more radio frequency stages, an audio amplifying transformer coupling inductively the plate circuits of successive stages.

1,829,132. FLOOR TREATING MACHINE. WALTER S. FINNELL, Hannibal, Mo., assignor to Finnel System, Inc., Hannibal, Mo., a Corporation of Delaware. Filed June 16, 1926. Serial No. 116,371. 20 Claims. (Cl. 15—50.)



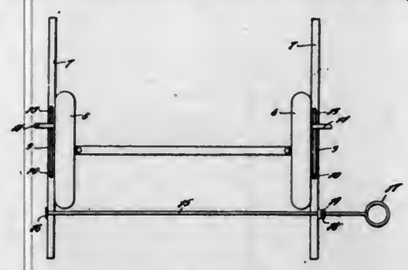
2. In floor treating apparatus adapted for scrubbing, the combination of driving mechanism, rotary brush ring structure operatively connected to said driving mechanism and embodying a brush head carrying brush means adapted to contact with the surface under treatment, a housing for said driving mechanism having its rear end mounted on wheels, the front of said housing being supported by said brush means, a folding handle attached to said housing for propelling the machine along the floor, a cleaning fluid tank carried by said handle and having manually operated means for controlling the flow of fluid therefrom, a conduit leading to a centrally disposed well formed in said brush ring structure, and guides in said brush ring structure for directing the flow of fluid from said conduit to the surface under treatment interiorly of said brush ring.

10. In a floor treating machine, a rotary brush holder having a centrally disposed cylindrical pocket having a convex bottom and a plurality of openings therein, brushes carried by said holder, means for feeding a fluid through said openings, and means for positively directing the fluid which passes through said openings interiorly of said brushes and away from the top part thereof.

1,829,133. WHEEL ALIGNING DEVICE. AUGUST FRYKMAN, Bottineau, N. Dak. Filed Aug. 1, 1929. Serial No. 382,787. 2 Claims. (Cl. 33—203.)

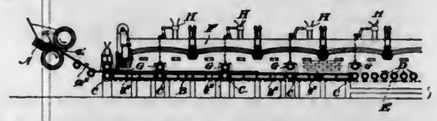
1. A device for facilitating the truing up of vehicle wheels comprising a pair of bars of greater length than the diameter of the wheels, means for suspending the

bars from the hubs of a pair of opposed wheels with the bars contacting the outer faces of the wheels, a cross rod



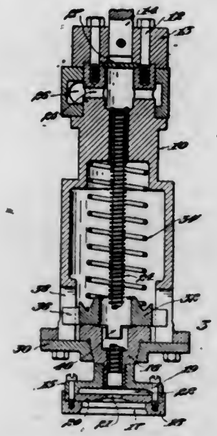
having a head at one end for engaging an outer edge of one of the bars and a member adjustably connected with the rod for engaging the outer edge of the other bar.

1,829,134. TAKE-OFF AND LEERING CONVEYER FOR SHEET GLASS FORMING MACHINES. RICHARD GENENGER, Aachen-Forst, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed Apr. 4, 1929, Serial No. 352,487, and in Germany Apr. 7, 1928. 7 Claims. (Cl. 49—3.)



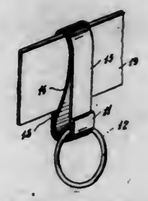
7. The combination with a sheet glass forming machine, of a leer for the glass formed thereby, a bed within the leer adapted to support the sheets, and consisting of a series of blocks with serrated upper faces, idler rollers interposed in the bed, and driven rolls above the idler rolls, with means for lifting and lowering the upper rolls.

1,829,135. CLOSURE HOLDING DEVICE. HENRY A. GUSTAFSON, Dorchester, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Nov. 28, 1927. Serial No. 236,039. 4 Claims. (Cl. 226—88.)



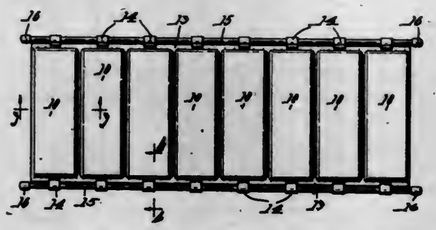
1. A chuck for a rotary closure applying machine comprising a housing provided with a downwardly tapering hole in the bottom wall thereof, a closure holding member carried by the housing comprising a supporting piece located within the housing and having a tapered portion extended through and fitting into the tapered hole in the housing, means for connecting the housing with the supporting piece to permit rotation of said closure holding member when the housing is rotated, and a compression spring within the housing acting upon the top of the supporting piece.

1,829,136. KEY RING RETAINER. ELTON P. HALLEY, Sanderson, Tex. Filed Oct. 9, 1930. Serial No. 487,608. 5 Claims. (Cl. 24—3.)



4. A device of the class described comprising a strip of metal bent upon itself to provide a hook of double thickness, one portion of the metal from the hook forming a bar, said bar being returned to provide a closure tongue for the hook, the other portion of the metal from the hook being cambered and in engagement with the inner surface of the tongue, said latter portion at its terminal having a lug secured to the first mentioned arm.

1,829,137. BATHING FLOAT. CARL C. HARRIS, Orange, Mass. Filed May 3, 1929. Serial No. 360,185. 2 Claims. (Cl. 9—11.)

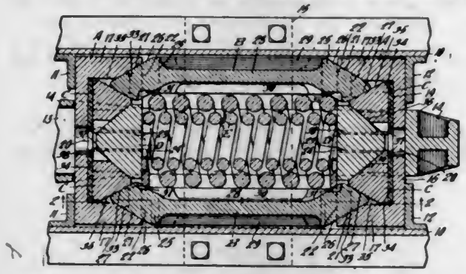


1. As an article of manufacture, a bathing float comprising a series of floats, each one covered with canvas and the canvas covering extending continuously about a series of them and sewed together between the floats, the canvas on each float having a loop connected therewith at the end and said loops being in alignment along both sides, and a pair of rods passing through the loops along each side, whereby the float is kept in flat condition by the rods and upon removal of the rods the float can be folded into small compass.

1,829,138. FRICTION SHOCK ABSORBING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 15, 1929. Serial No. 347,315. 1 Claim. (Cl. 213—26.)

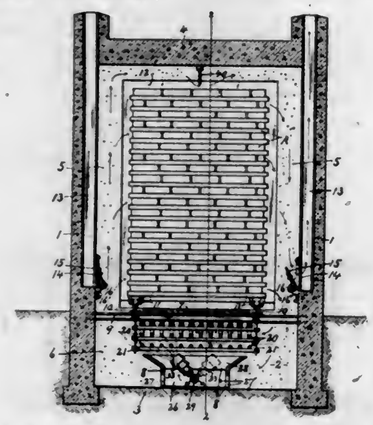
In a friction shock absorbing mechanism, the combination with front and rear follower casings having opposed interior wedge faces at opposite sides thereof and top and bottom interior retaining ribs adjacent said wedge faces; column members at opposite sides of the mechanism, having top and bottom retaining lugs at opposite ends thereof, having shouldered engagement with the retaining ribs of the front and rear casings, each of the column members having wedging engagement with the wedge faces of said front and rear follower casings at the same side of the mechanism; a pair of friction wedge blocks at each end

of the mechanism, having frictional engagement with the corresponding casing and wedging engagement with the column members; a central wedge at each end of the



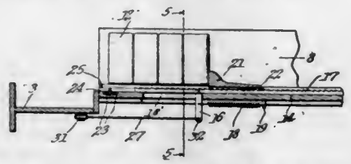
mechanism, having wedging engagement with the corresponding pair of friction wedge blocks; and a main spring resistance interposed between the central wedge blocks.

1,829,139. DRY KILN. HIRAM L. HENDERSON, Syracuse, N. Y. Filed May 31, 1929. Serial No. 367,372. 8 Claims. (Cl. 34—46.)



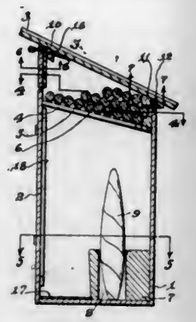
1. A dry-kiln having a heating chamber, a drying chamber above the heating chamber, a heater within the heating chamber, a fresh air conduit below the heating chamber having communication with the external air and provided with an outlet discharging into and through the heating chamber and means for projecting stem through the outlet for humidifying the air in transit from said conduit through the heating chamber and thence upwardly through the drying chamber, said means being movable in opposite directions to different angles for changing its direction of circulation of the air and steam through said drying chamber.

1,829,140. STORE SERVICE APPARATUS. ALBERT HITCHMAN, Butler, Ohio. Filed Dec. 7, 1928. Serial No. 324,385. 3 Claims. (Cl. 312—35.)



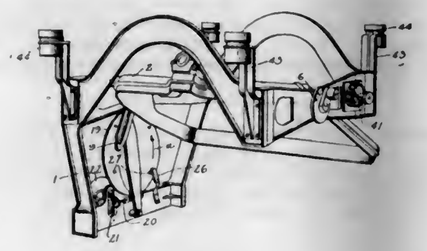
1. In a device of the class described, a storage shelf, a ratchet bar slidably mounted on said shelf, an ejector operatively associated with said ratchet bar, and means for varying the forward limit of movement of said bar.

1,829,141. CIGAR AND CIGARETTE HOLDER. JAMES F. HIXON, Los Angeles, Calif. Filed July 12, 1930. Serial No. 467,583. 1 Claim. (Cl. 312—73.)



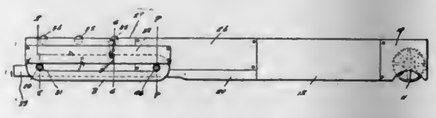
In a cigar and cigarette holder of the class described, a casing provided with an upper and lower compartment, the floor of said upper compartment sloping downwardly towards the rear and provided with a cut-out portion, and a hinged door providing access to both of said compartments, the upper compartment including a front wall member, the bottom edge of said wall member being spaced above the top of said sloping floor and forming a passage for the cigarettes, the top edge of said hinged door extending above said sloping floor and substantially abutting the said bottom edge of said front wall member.

1,829,142. AERIAL CAMERA MOUNT. CARL HYDEN, Dayton, Ohio. Filed May 8, 1925. Serial No. 28,837. 10 Claims. (Cl. 88—16.)



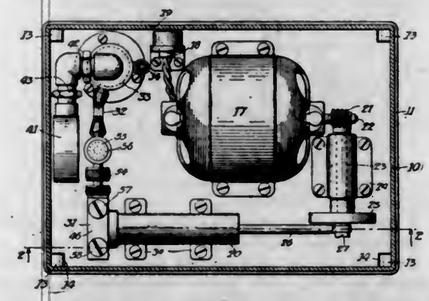
1. In an aerial camera mount, in combination a mounting base, a camera support pivoted thereon and adapted to hold a camera with its axis normally vertical, mechanism for oscillating said support from side to side, means for temporarily arresting the oscillation of said support, and means for operating the camera shutter while the support is temporarily stationary.

1,829,143. CONDUIT TRACTOR. JAMES R. JORDAN, South Bend, Ind. Filed May 31, 1929. Serial No. 367,597. 1 Claim. (Cl. 175—377.)



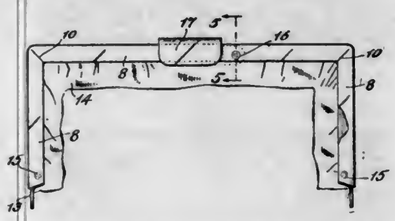
A conduit tractor comprising an elongated body having a forwardly disposed portion of circular cross section and a rearwardly disposed portion of T-shaped cross section, said T-shaped portion being of relatively smaller cross section than the forwardly disposed portion, endless traction belts on opposite sides of the said rearwardly disposed portion and extending for the full length of said rearwardly disposed portion, a motor in the said forwardly disposed portion, a driving connection between the said motor and the said traction belts, and belt guards on opposite sides of the said rearwardly disposed T-shaped portion of the body and forming continuations of the head of the T, said belt guards and traction belts having outer arcuate surfaces in conformity with the circular cross section of the said forwardly disposed portion of the tractor.

1,829,144. ASPIRATING AND EMBALMING DEVICE. ERNEST KAISER, Chicago, Ill., assignor to Frigid Fluid Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 18, 1930. Serial No. 421,788. 12 Claims. (Cl. 27—24.)



1. In an aspirating and embalming device, the combination of a pump for creating air pressures above and below atmospheric pressure, a motor for driving the pump, a tubular element and valve means for connecting the pump with said tubular element to respectively provide air pressures above and below atmospheric pressure in said tubular element, and means for independently varying the respective pressures.

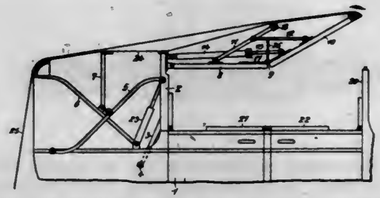
1,829,145. ORNAMENTAL TRIM FOR HAND BAGS AND SIMILAR ARTICLES. DAVID KARRON, Brooklyn, N. Y. Filed Feb. 5, 1929. Serial No. 337,628. 5 Claims. (Cl. 150—29.)



4. In a hand bag of the character set forth, a pouch, a pair of frame jaws constructed of a brittle material and having a continuous groove on the inner edges thereof and a common means serving to respectively establish a hinged connection between the jaws and to secure the marginal edges of the pouch within the grooved portions of the jaws.

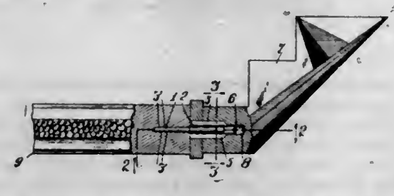
1,829,146. TOP STRUCTURE FOR VEHICLES. ALEXIS KELLNER, Berlin, Germany. Filed Oct. 23, 1929, Serial No. 401,761, and in Germany Jan. 11, 1929. 1 Claim. (Cl. 296—116.)

Folding top structure for a vehicle having a windshield comprising columns pivotally connected to the body of the vehicle to fold thereon, cant rails each comprising a member hinged at one end to one of said columns and a second member hinged at one end to the free end of said first member and adapted to be secured at its other end to the windshield, telescoping members each hinged at one end to one of said columns and at the other end to one of said second cant rail members, a spring housed in one



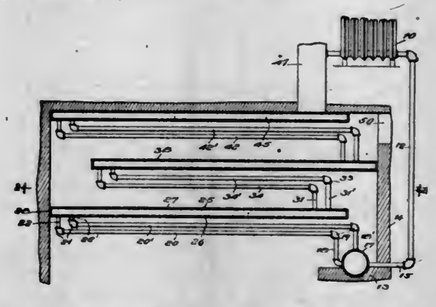
of said telescoping members tending to hold said members in extended relation, and means for limiting the relative separating movement of said telescoping members whereby said members act as a tension member when in extended relation to support said second cant rail members.

1,829,147. COUPLING OR SPLICING DEVICE FOR CURTAIN POLES AND ORNAMENTS THEREFOR. CHARLES W. KIRSCH, Sturgis, Mich., assignor to Kirsch Company, Sturgis, Mich., a Corporation of Michigan. Filed Apr. 14, 1930. Serial No. 444,325. 9 Claims. (Cl. 156—19.)



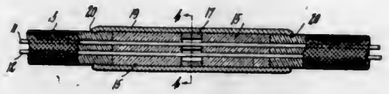
4. A coupling device comprising a flexible polygonal sheet metal sleeve adapted to be snugly received in a cylindrical bore of an element to be coupled, a cylindrical male member adapted to be mounted upon the other of the elements to be coupled, said male element being of slightly larger diameter than said female member.

1,829,148. BOILER. EDWARD C. KLINE, Streator, Ill. Filed Mar. 11, 1929. Serial No. 346,186. 7 Claims. (Cl. 122—260.)



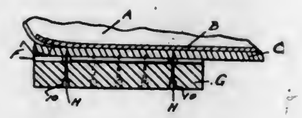
1. In a boiler of the class described, a setting, a plurality of relatively thin hollow baffles arranged in said setting so as to cause the gases of combustion to follow to circuitous path, and tubular means forming the sole outlet of each of said baffles and serving to conduct fluid therefrom to the adjacent baffle thereabove, said tubular means being so arranged that given quantity of heating fluid will be caused to circulate throughout substantially the entire length of each of said baffles in the same direction.

1,829,149. THERMOSTAT. WILLIAM K. MASON, Malden, and EDWARD STEVENS, Cambridge, Mass., assignors to American Electrical Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 20, 1927, Serial No. 214,284. Renewed Apr. 6. 1931. 8 Claims. (Cl. 200—142.)



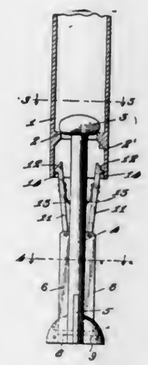
1. A thermostat comprising a pair of spaced conductors, a member of low melting point metal surrounding said conductors and arranged to fall against the conductors when melted, and means for holding said member normally spaced from said conductors, no portion of said holding means being between said conductors and said member.

1,829,150. SHOE HEEL BASE. VINCENT MENINNO, Nashua, N. H. Filed Mar. 7, 1929. Serial No. 345,059. 8 Claims. (Cl. 36—34.)



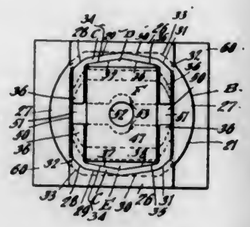
1. A heel base formed to be interposed between the outer face of the heel end portion of a shoe outsole and the top face of a heel attached to the sole, said heel base comprising a heel-shaped layer composed of two similarly shaped pieces, placed together at their respective straight edges, each piece having two half nail holes which adjoin those on the other piece thereby forming two holes along a middle line from front to back; a connecting strip of thin material cemented over the adjoining middle face portions of said sections; and a curved rand which tapers in height from the outside to the inside, said rand being cemented along the top outside edge of said two united sections.

1,829,151. BAILER. LEO H. MOAN and MILLER WADDELL, Wichita, Kans. Filed Nov. 3, 1930. Serial No. 493,109. 8 Claims. (Cl. 166—19.)



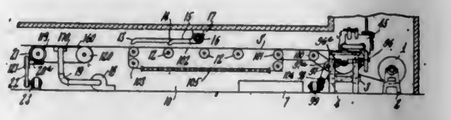
1. In combination with a bailer and its valve, strips connected to opposite sides of the shank of the valve, a latch pivoted at its lower end to the upper end of each strip, each latch having a head formed with a beveled upper part and a shoulder at its lower part whereby the latches will be forced inwardly by the valve seat when the bailer moves downwardly over the shank of the valve so that the heads of the latches will pass through the opening in the valve seat and the shoulders engage the top thereof to hold the valve in open position and a spring on each latch engaging the valve stem for holding the latches in their outward position.

1,829,152. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,156. 1 Claim. (Cl. 213—32.)



In a friction shock absorbing mechanism, the combination with a friction shell having opposed side walls; of a pair of liners bearing on said side walls, said liners having means at inner ends having shouldered engagement with the shell to anchor the same to the shell; a pair of friction shoes having frictional contact with the liners, each liner having inturned integral retaining fingers at the outer end thereof; a main spring resistance within the shell opposing inward movement of the shoes; and a block having wedging engagement with the shoes, said block having retaining lugs thereon directly engaging with the retaining fingers of the liners to limit outward movement of the wedge and hold the parts of the mechanism assembled.

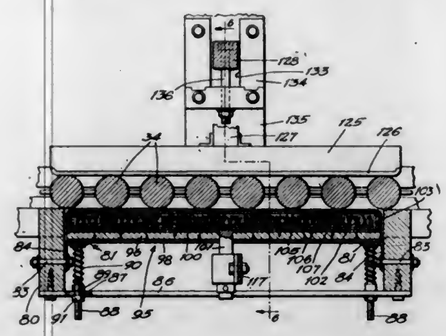
1,829,153. APPARATUS FOR COATING AND TREATING SHEET MATERIAL. AZARIAH Y. PEARL, Windsor, Vt., assignor to Laboratories Sevigne-Pearl, Windsor, Vt., a Corporation of Vermont. Original application filed July 2, 1926, Serial No. 120,196. Divided and this application filed Oct. 31, 1928. Serial No. 316,143. 28 Claims. (Cl. 91—43.)



2. In combination a cold and a hot room, in which continuous sheet material is successively treated, means for supporting the sheet material in flat, unwrinkled condition in said cold room, means for applying a coating of substantially uniform, predetermined thickness to said sheet while thus supported, means in said cold room for supporting the sheet during the setting of the coating, means for looping or festooning said sheet in said hot room, and means for propelling said sheet through said rooms.

5. A coating device comprising a box for containing liquid coating material, a fixed, vertical gate extending from one side of the box to the other and having a plurality of slots therein, an adjacent, movable, vertical gate having slots registerable to greater or less degree with said fixed gate to regulate the rate of flow of material through said gates, and means for moving said movable gate.

1,829,154. DRIER ROLL POLISHING DEVICE. CHARLES W. POST and ELLSWORTH L. MOUNT, Orange, Calif. Filed Nov. 21, 1928. Serial No. 320,842. 10 Claims. (Cl. 198—229.)



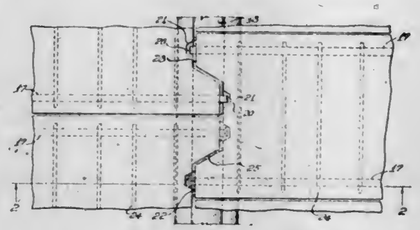
7. In a device for polishing the rolls of a traveling rotating roller conveyer, the combination of: means for polishing said rollers as they pass a given point; and means engaging said rollers, opposite the place where said polishing means is applied, for causing a reverse rotation of said rollers from that which they would take in a rolling contact with said polishing means.

1,829,155. ELEVATOR DOOR. JAROSLAV RAK, Chicago, Ill., assignor to Variety Fire Door Company, a Corporation of Illinois. Filed Oct. 8, 1927. Serial No. 224,877. 1 Claim. (Cl. 189—46.)



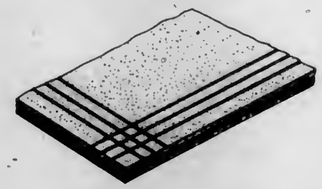
The combination with an elevator shaft having a door opening in the wall thereof with a building floor adjacent said opening, of a door section movable adjacent the wall of the shaft from closed position with its upper edge a substantial distance above the building floor to open position with its upper edge in substantial register with the building floor, said door having a frame, and means for arresting the movement of the door and for holding the door against separation from the wall when the bottom of the door has moved down into position a substantial distance below the floor and the top of the door is in substantial register with the floor, said means comprising a flat bar attached to the wall and extending across substantially the entire width of the door and having an inclined upper edge and a cooperating flat bar carried by the door for movement therewith and having an inclined lower edge cooperable with the inclined upper edge of said first bar outside the door frame and wholly within the space between the door frame and the adjacent wall, said cooperating bar extending across substantially the entire width of the door with its inclined edge cooperating with the inclined edge of said first bar substantially completely across the door opening.

1,829,156. BUILDING CONSTRUCTION. HERBERT W. REEL, Hinsdale, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 21, 1928. Serial No. 327,549. 4 Claims. (Cl. 72—68.)



3. In a building construction, a series of rails in spaced parallel relation, a plurality of tiles supported by said rails, said tiles having substantially horizontal integral surfaces bearing directly on different portions of said rail, reinforcing members extending through said tiles and coacting with said rails to form a continuous reinforcing system, and grout associated with said tiles and rails so as to form a monolithic structure.

1,829,157. COMPOSITE SHEET MATERIAL. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 29, 1928. Serial No. 309,300. 7 Claims. (Cl. 154—46.)



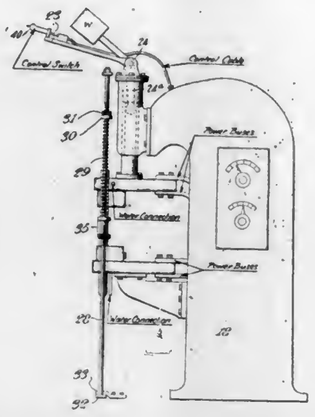
1. Composite sheet material comprising a waterlaid ply of substantially unbeaten cellulose fibers in a loosely felted condition, and a ply of cellulose fibers bonded together with gelatinized cellulose.

4. Impregnated composite sheet material comprising a ply of substantially unbeaten fibers in a loosely felted condition, and a papr ply, one of the plies carrying rubber as the impregnating agent and the other carrying nitrocellulose, said plies being united by an adhesive bonding the rubber to the nitrocellulose.

1,829,158. METALLURGICAL APPARATUS. ADRIAN P. ROUX, Oriskany, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed June 28, 1929. Serial No. 374,428. 8 Claims. (Cl. 13—20.)

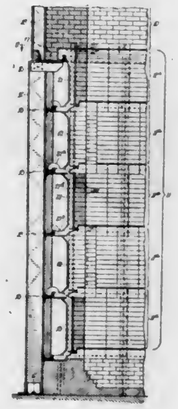
1. Apparatus for sintering metal alloys comprising in combination, spaced electrodes having disposed therebetween a mold containing the material to be sintered, a plunger resting upon the material in the mold, and means to apply pressure on said plunger including a pressure bar resting on said plunger, guide rods providing slidable movement of said pressure bar therealong, springs on said rods acting upon said pressure bar, means on said rods

for adjusting said springs, an anchor bar fixed to the lower ends of said rods, anchor plates beneath which said anchor bar may be moved to bring said pressure bar down



upon said plunger, and means for measuring the drop of said pressure bar including a scale and cooperating pointer, one of which is disposed on the pressure bar and the other on a fixed part.

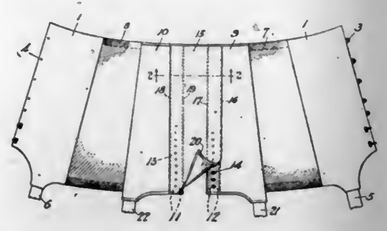
1,829,159. FURNACE CONSTRUCTION. FRANK I. SHEAHAN, Chicago, Ill., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 9, 1927. Serial No. 238,851. 12 Claims. (Cl. 72—102.)



2. In a furnace construction, in combination, a row of columns ranged alongside the furnace chamber, a hollow furnace chamber wall supported laterally on the columns, and a superimposed wall supported entirely by the columns above the hollow wall and forming an upward continuation thereof.

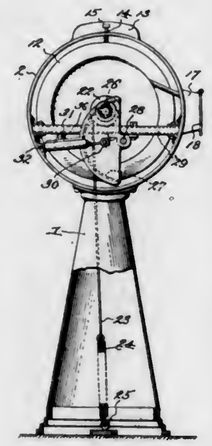
1,829,160. GIRDLE. JOSEPH SIEGEL, Detroit, Mich. Filed Nov. 5, 1928. Serial No. 317,258. 2 Claims. (Cl. 2—38.)

2. A girdle comprising two halves, each half comprising vertical elastic and inelastic portions, the adjacent marginal vertical edges of the two halves being provided with a row of eyelets, a strip of bridging material normally connecting the two halves of the garment and the eyelets being normally covered, the said strip of bridging material normally making the article a one-piece garment to be worn as such, and the said strip of bridging



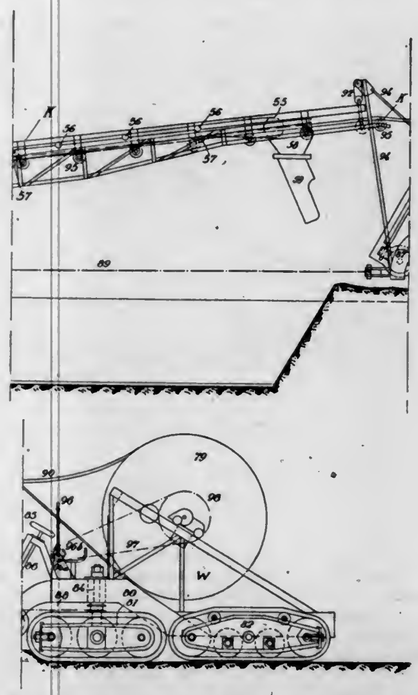
material adapted to be easily removed after the elastic portions of the garment have deteriorated, and the eyelets then capable of receiving a lace to hold the two respective halves of the garment together.

1,829,161. REEL. WILLIAM D. SMITHSON and JOSEPH L. HAIR, Wichita Falls, Tex.; said Smithson assignor to O. G. Stephens, C. V. Stephens, M. D. Stephens, L. W. Stephens, and M. L. Stephens, Wichita County, Tex. Filed Oct. 2, 1929. Serial No. 396,865. 4 Claims. (Cl. 299—78.)



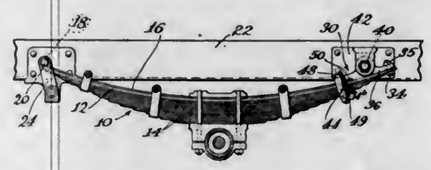
2. A hose reel for the purpose set forth including a stand having a water conducting pipe leading thereto, a shaft having a hollow portion to which the end of the pipe is connected, bearings for the shaft, a hub fixed on the shaft and having a tubular portion extending from the shaft and to which one end of a hose is designed to be connected, a reel body fixed on the hub and having a peripheral bifurcated portion to receive the wound hose therein, spring influenced stop means for normally holding the reel from turning, said stand having an outlet provided with an opening, into which the nozzle end of the hose is directed, guide means for said end of the hose, a spring influenced door for closing the outlet, spring means for returning the reel to initial position when the hose is wound therefrom, and a hydraulic brake actuated by the turning of the reel for checking the same when returned by the spring means to initial position, and means on the hub for equalizing the tension of the spring means during the unwinding of the hose.

1,829,162. CABLE LAYING MACHINE AND METHOD OF LAYING CABLE. HUGO SÖLTER and HERMANN CORNELIUS; Bad Oeynhausen, Germany, assignors to Eisenwerk Weserhütte Aktiengesellschaft, Bad Oeynhausen, Germany. Filed Oct. 11, 1928, Serial No. 311,913, and in Germany Oct. 11, 1927. 17 Claims. (Cl. 111—5.)



3. The combination comprising a trench excavating machine, a conveyor associated with said excavating machine to re-deposit the excavated soil into the trench at a point spaced from said excavating machine, a vehicle carrying a cable supply, and means for advancing said vehicle and said excavating machine, the vehicle and excavating machine being connected whereby the vehicle is caused to follow the excavating machine in the course of its progress.

1,829,163. VEHICLE SPRING CONSTRUCTION. WILLIAM J. SPRONG, Alhambra, Calif., assignor to United States Spring and Bumper Company, Inc., Los Angeles, Calif., a Corporation of California. Filed Dec. 23, 1929. Serial No. 415,925. 4 Claims. (Cl. 267—54.)



1. In a vehicle spring construction including a main leaf, a plurality of leaves therebelow, a member formed of hardened metal having an opening therein for the reception of the usual pin projecting from the chassis of a vehicle, lugs formed on each side of said member and extending along the side faces of the main leaf and leaves therebelow, and a strap extending across the underside of the lowermost of the leaves below the main leaf, and means for securing said strap to said lugs.

1,829,164. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,400. 5 Claims. (Cl. 108—5.4.)



1. In a roof for railway cars, the combination with a plurality of carlines, of roof sheets respectively associated with and spanning the spaces between the carlines, a beam member extending longitudinally of the car in spaced relation to the roof sheets, said beam having a substantially vertical portion and a top flange, brackets connecting said beam to the carlines, filler members interposed between said beam and roof sheets for suypporting the latter, and clips secured to said beam and having flanges respectively engaging said filler members to prevent movement of the latter longitudinally of the beam.

1,829,165. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,401. 9 Claims. (Cl. 108—5.4.)



1. In a roof for railway cars, the combination with a plurality of carlines, of roof sheets respectively associated with and spanning the spaces between the carlines, a beam member extending longitudinally of the car in spaced relation to the roof sheets, brackets connecting the beam member and carlines, and a plurality of roof sheet supporting members, each of said members having a plate-like portion spaced above the beam in engagement with the underside of the associated roof sheet and being provided with downwardly offset portions rigidly secured to adjacent brackets.

1,829,166. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,403. 12 Claims. (Cl. 108—5.4.)



1. In a roof for railway cars, the combination with a plurality of carlines each having a web and downwardly extending legs, roof sheets respectively associated with and spanning the spaces between the carlines, and a beam member extending longitudinally of the car, each of said carlines being provided with a pair of brackets secured to the beam member for supporting the latter in spaced relation to the roof sheets, said brackets being secured to the legs of the carlines.

1,829,167. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,404. 7 Claims. (Cl. 108—5.4.)

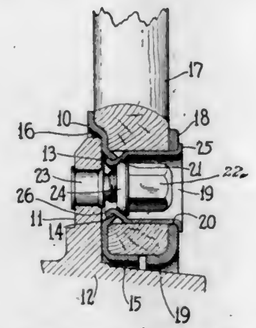
1. In a roof for railway cars, the combination with a plurality of carlines, of roof sheets respectively associated

with and spanning the spaces between the carlines, a beam member secured to said carlines in spaced relation to the



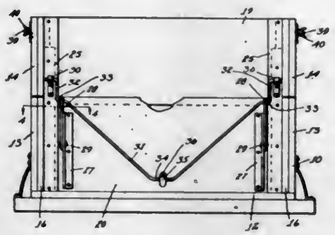
roof sheets, and means overlapping the tops of said carlines for supportingly engaging the undersides of adjacent portions of neighboring roof sheets.

1,829,168. WHEEL. JOHN P. TARBOX, Philadelphia, Pa., and CAROLUS L. EKSERGIAN and WARREN H. FARR, Detroit, Mich., assignors to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 1, 1929. Serial No. 382,696. 6 Claims. (Cl. 301—9.)



6. A wheel comprising an inner flange engaging wall having bolt holes and depressed portions surrounding the bolt holes, an outer wall, and thimbles interconnecting said walls, and having reduced portions juxtaposed to the edges of said bolt holes and constituting seats for bolt attaching means, and inner edges flared into said depressed portions.

1,829,169. END GATE FOR WAGON BOXES. WILLIAM B. THIEMAN, Albert City, Iowa. Filed Feb. 11, 1929. Serial No. 339,185. 1 Claim. (Cl. 296—52.)



An end gate, comprising an upper gate member having the outer ends of its lower edge provided with downwardly extending strips, a cleat secured to the outer face of each end of said upper gate member and to the outer face of said downwardly extending strips, the upper end of said cleat terminating some distance below the upper edge of said upper gate member, a plate secured to the outer face of each of said cleats and projecting beyond the inner edge of said cleats to form a groove between each of said strips and said plate, a lower gate member slidably mounted in said grooves, means for elevating and lowering said lower gate member, means for detachably mounting said gate in a wagon box, the last said means comprising an upright channel mounted between each plate and said upper gate member and adjacent to the upper end of each of said cleats, the web of said channel being provided with a vertical slot, a bolt at each of said slots, and a thumb nut for each of said bolts.

1,829,170. STUDIO DRESS. MARGARET E. VAN EPPS, Floral Park, N. Y., assignor of one-third to Robert C. Birkhahn, Woodmere, Long Island, N. Y. Filed Feb. 28, 1930. Serial No. 432,121. 2 Claims. (Cl. 2—74.)



1. A dancing dress adopted to be slipped on over the head, comprising a waist front having integral therewith a narrow central panel flared outwardly at the bottom, and forming part of the skirt, a waist back having a V-shaped lower edge, said waist front and back being sewed together at the sides and shoulder edges forming a bodice shaped to conform snugly to the contour of the body, a pair of like segments sewed to the waist front along the edges of said panel and forming therewith a full skirt front, and a full skirt back including a pair of like segments sewed to the V-shaped edge of the waist back and having their adjacent lateral edges sewed together and their opposite lateral edges sewed to the lateral edges of said front segments.

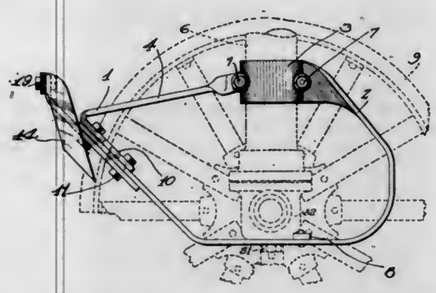
1,829,171. STUDIO DRESS. MARGARET E. VAN EPPS, Floral Park, N. Y., assignor of one-third to Robert C. Birkhahn, Woodmere, Long Island, N. Y. Filed Feb. 28, 1930. Serial No. 432,122. 1 Claim. (Cl. 2—74.)



A dancing dress adapted to be slipped on over the head, comprising front and back yokes sewed together at the sides and shoulders and having their lower edges pointed

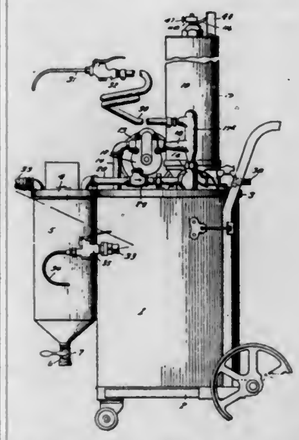
at the center forming a bodice with a continuous circumferentially extending lower edge which is higher at the sides than at the front and back, and a full substantially circular skirt made in one piece having a hexagonal opening in the center elongated in the direction of the sides of the skirt and having the edge of said opening sewed to the lower edge of the bodice with the points of the bodice positioned substantially centrally of the elongated sides of the hexagonal opening, the outer circumference of said skirt being proportioned with respect to the length of said hexagonal edge to cause the folds of the skirt to fall symmetrically from the sides of the garment.

1,829,172. WHEEL SCRAPING ATTACHMENT FOR TRACTORS. HORACE WALTERS, Center Township, Calhoun County, Iowa. Filed June 11, 1928. Serial No. 284,609. 5 Claims. (Cl. 280—158.)



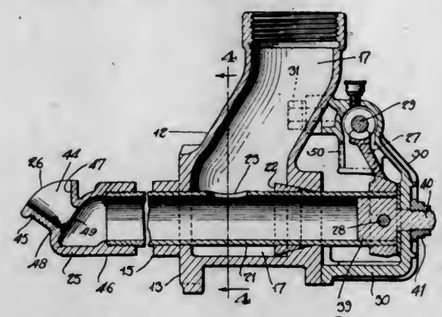
3. The combination with a tractor having an upright bolster, a steering axle rotatably connected to said bolster and carrying steering wheels, of a sectional collar loosely mounted upon said bolster, a brace having one end connected to said collar, means for securing said brace to the axle of the tractor, scrapers carried by the outer end of said brace, and a connector for connecting the outer end of said brace to said collar substantially as and for the purpose specified.

1,829,173. COMBINED FLUSHER AND LUBRICANT DISPENSER. AUSTIN L. WERTZ, Lakewood, Ohio. Filed Nov. 17, 1928. Serial No. 320,057. 19 Claims. (Cl. 184—15.)



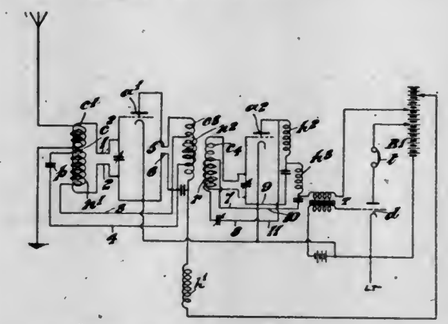
1. An apparatus of the class described comprising in combination, a tank, a pump, an intake pipe for said pump leading into said tank, a discharge conduit leading from said pump having an injector therein, a container, a connection leading from said injector to said container, a lubricant supply reservoir carried by said tank and means for operating said pump to decrease the pressure within said container, said means being operable to dispense lubricant from said lubricant supply reservoir.

1,829,174. SOOT BLOWER. FRANK J. WHELAN, New York, N. Y., and THOMAS FRANCIS DWYER, Jr., Cambridge, Mass., assignors to Superior Engineering Company, Boston, Mass. Filed Aug. 13, 1926. Serial No. 128,978. 2 Claims. (Cl. 122—391.)



1. In a boiler flue cleaner, the combination of a main casing provided with an induction passage and having a cylindrical nipple on one side, with a pipe journaled in the casing and extending through the cylindrical nipple in axial alinement therewith and provided with a port to register with the induction passage, a nozzle on the end of the pipe extending outside of the nipple, a plug fixed in the other end of the pipe to close the same and provided at its outer end with a reduced extension forming a journal in axial alinement with the pipe, an auxiliary housing detachably mounted on the outer side of the main casing to abut the closed end of the pipe and providing a bearing for the journal projecting from said end of the pipe, a gear fixed on the closed end of the pipe, a shaft journaled in the auxiliary housing and provided with a worm engaging the gear, and means for rotating in either direction the shaft carrying the worm to move the gear back and forth to impart oscillatory movement to the pipe and the nozzle carried by said pipe.

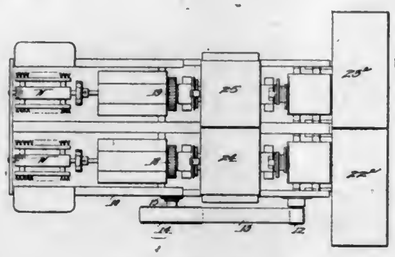
1,829,175. RADIO RECEIVING SET. PETER WILLIAM WILLANS, Pattishall, Towcester, and FREDERICK JOHN HENRY CHARMAN, Bedford, England. Filed Feb. 2, 1928, Serial No. 251,400, and in Great Britain July 21, 1927. 5 Claims. (Cl. 179—171.)



1. In a radio receiving apparatus a transformer winding of relatively few turns and means completing a cir-

cuit therethrough, said means comprising connecting leads extending from said winding close to, and parallel with one another, whereby the area of the loop constituted by said circuit is reduced.

1,829,176. DOUBLE-BARRELED AUTO SHAVER. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 27, 1926. Serial No. 84,107. Renewed Mar. 5, 1930. 2 Claims. (Cl. 29—21.)



1. In a stereotype plate shaving machine, the combination in a single machine, of two shafts, means for supporting two pieces of work concentric with said shafts, a shaving blade fixed on each shaft and extending throughout the length of the work to shave the interior thereof during a half revolution, and connections between said shafts for keeping the shaving blades in opposite positions on the two shafts.

1,829,177. ELECTROLYTE FOR ELECTROLYTIC CONDENSERS. VICTOR YNGVE, Niagara Falls, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed Mar. 29, 1930. Serial No. 440,167. 12 Claims. (Cl. 175—315.)

1. An electrolyte for an electrolytic condenser comprising a wax-like base, an emulsifying agent, an ionogen, and a solvent for said ionogen.

12. A composition of matter suitable for use as electrolyte in an electrolytic condenser comprising 80 parts of paraffin, 10 parts of a 12% solution of diethylamine oleate in water, and 10 parts of a solution of diethylamine borate in ethylene glycol.

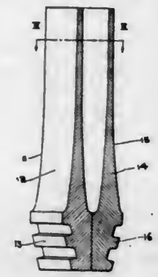
1,829,178. ELECTROLYTE FOR ELECTROLYTIC CONDENSERS. VICTOR YNGVE, Niagara Falls, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed Mar. 29, 1930. Serial No. 440,168. 8 Claims. (Cl. 175—315.)

1. An electrolyte for an electrolytic condenser comprising a solution of an alkali metal salt of a fatty acid containing at least five carbon atoms, the concentration of said solution being sufficient to form a gel.

8. An electrolyte for an electrolytic condenser comprising 20 parts of sodium stearate, 10 parts of diethylamine stearate, 95 parts of glycerine, and 5 parts of water.

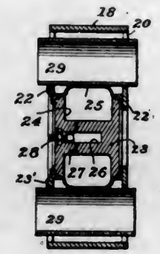
1,829,179. METHOD OF MAKING TURBINE BLADES. GOLDIE BACK, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 11, 1929. Serial No. 331,896. 4 Claims. (Cl. 29—156.8.)

1. The method of making a turbine blade which comprises forming the respective concave and convex portions of the blade from separate blanks and as complementary elements which are adapted to fit together, making those portions of the root of each of the respective concave and convex portions as integral parts of each of the respective concave and convex portions, making the root portions so formed with contact faces complementary to each other



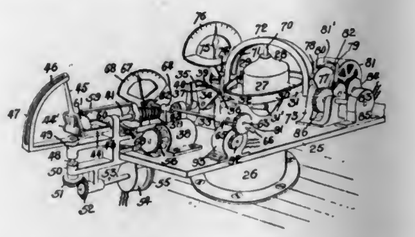
so that they may fit together, and joining the respective concave and convex portions together along their longitudinal edges by fusion of metal.

1,829,180. CHUCK. JAMES BAILEY and JOHN LELAND MILLER, Corning, N. Y., assignors to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Nov. 30, 1929. Serial No. 410,800. 7 Claims. (Cl. 279—2.)



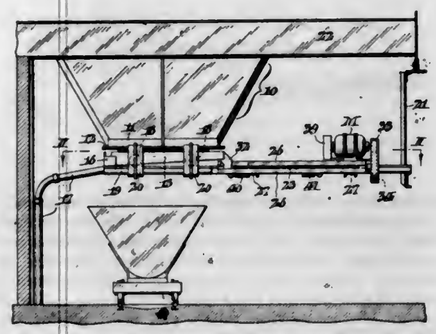
1. A chuck for holding glass articles which includes seats against which the articles rest and a tubular expansible member for holding the articles in said seats.

1,829,181. GUN FIRE CONTROL SYSTEM. MORTIMER F. BATES, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., a Corporation of New York. Filed June 8, 1923. Serial No. 644,136. 45 Claims. (Cl. 89—41.)



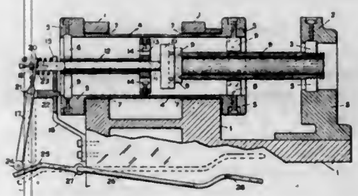
41. A gun, a mount on which the gun is adjustable about a set of axes varying in angular position with variations in the angular position of said mount, and means, settable with reference to a fixed set of planes to control the adjustments of the gun about at least one of said axes, for automatically generating corrections in the movements of the gun about said axis in its various positions.

1,829,182. HOPPER GATE ACTUATING MECHANISM. ROBERT H. BEAUMONT, Radnor, Pa., assignor to Beaumont Manufacturing Company, Philadelphia, Pa., a Corporation of New Jersey. Filed May 6, 1926. Serial No. 107,100. 1 Claim. (Cl. 221—145.)



A mechanism of the character described comprising a sliding gate, a guideway adjacent said gate comprising a pair of opposed channels, bearings mounted between said channels, a motor-operated screw mounted in said bearings and housed in said guideway, and a follower nut on said screw in said guideway connected to said gate between the flanges of said channels.

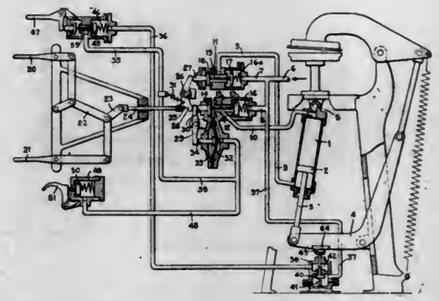
1,829,183. PIPE THREADING MACHINE. EUGENE W. BLANCHARD, Tulsa County, Okla., assignor of one-half to D. S. Bowers, Tulsa, Okla. Filed May 29, 1930. Serial No. 457,171. 2 Claims. (Cl. 10—128.)



1. The combination of a pipe threading machine adapted to thread pipe nipples, consisting of a revolvably mounted barrel having a chuck thereon for holding a pipe nipple to be threaded by said machine; a threading die adapted to engage and thread said nipple while the same is chucked in said machine; a chamfering bit located in said barrel and positioned at the opposite side of said chuck from where said threading die is located, and held stationary with reference to the revolution of said barrel; and means for moving said chamfering bit longitudinal of said barrel to cause said chamfering bit to engage and disengage one end of said pipe nipple while at the same time the other end of said pipe nipple may be threaded by said threading die.

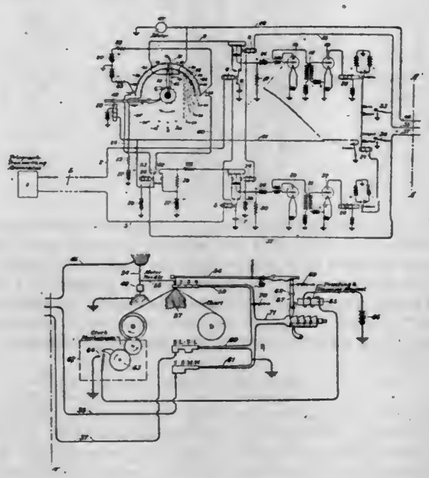
1,829,184. POWER ACTUATING MECHANISM. JOSEPH P. DALY, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed May 13, 1926. Serial No. 108,966. 2 Claims. (Cl. 121—38.)

1. In a pressing machine having an opening and closing movement, cooperative pressing elements and operating mechanism therefor including a cylinder, a double acting piston movable in the cylinder, actuating mechanism between the piston and one of the pressing elements, a combined intake and exhaust pipe leading to each end of the cylinder, a valve casing connected in each of said pipes and having valve means therein for controlling the flow of motive fluid therethrough, the valve means in one valve casing being arranged to normally close its companion pipe against the intake of motive fluid and open said pipe to the exhaust of motive fluid, the valve means in the other valve casing being arranged to normally open the latter pipe to the intake of motive fluid and close it to the exhaust of motive fluid, manual means for operating the valve means in each casing to simultaneously open the



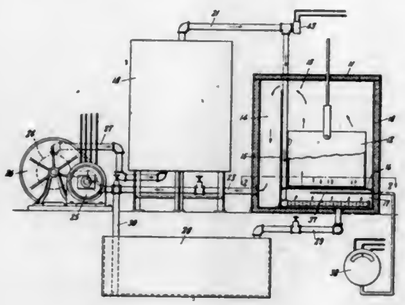
normally closed valve means and close the normally open valve means, and means to retain said valve means to their normal position and to restore them to their initial normal position so as to apply power behind the piston to open the machine if the operator releases the manual means before the machine completes its operation, holding means to hold the valves in their operated position after the press reaches closed position, and manual means for releasing the holding means.

1,829,185. METHOD AND MEANS FOR MEASURING DISTORTION OF TELEGRAPH SIGNALS. JOSEPH HERMAN, Westfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 17, 1930. Serial No. 453,279. 10 Claims. (Cl. 178—69.)



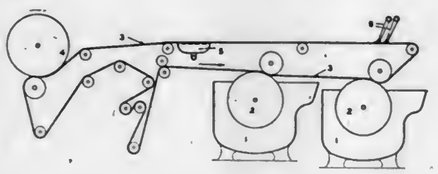
1. In a system for measuring the distortion of telegraph signal impulses, the combination with a source of marking and spacing impulses, of a medium over or through which the impulses may be transmitted, and means for recording the maximum distortion of the said impulses resulting from their propagation from the said source as a percentage of the unit length of the said impulses.

1,829,186. APPARATUS FOR SUPPLYING HEATED OIL. KRISTIAN A. JUTHE, Newton, and ALBERT J. HANSON, Arlington, Mass., assignors to American Electric Furnace Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1928. Serial No. 244,288. 5 Claims. (Cl. 263—1.)



5. Apparatus for heat-treating metal objects, comprising a tank for hot liquid, means outside of said tank for heating liquid, a pump, piping connecting said tank, pump and heating means for continuous circulation of liquid therethrough, a thermostatic element in said tank, means responsive to said element for regulating said heating means, a second thermostatic element in the pipe between the heating means and the tank, and means responsive to said second element for rendering the heating means inoperative when the liquid in the pipe containing said second element exceeds a predetermined temperature.

1,829,187. METHOD OF MAKING COLORED COMPOSITION SLABS. GEORGES PIESSEVAUX, St. Louis, Mo., assignor to Eternit, Inc., St. Louis, Mo., a Corporation of Delaware. Filed Nov. 14, 1929. Serial No. 407,028. 7 Claims. (Cl. 92—41.)

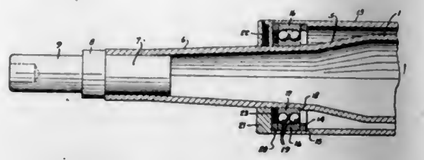


1. The method of producing a colored surfaced slab from a mixture of water and cementitious material which comprises reducing said mixture to sheet form and spraying on one surface thereof a liquid containing a pigment of a color differing from that of the cementitious material, said spray being applied while the mixture contains a substantial quantity of water and before the cementitious material has hardened.

1,829,188. MAKING BARIUM SULPHIDE. FRIEDRICH RÜSBERG, Berlin-Niederschoneweide, and PAUL SCHMID, Berlin-Baumschulenweg, Germany, assignors to Kali-Chemie Aktiengesellschaft, Berlin, Germany. Filed July 22, 1929, Serial No. 380,250, and in Germany Aug, 7, 1928. 1 Claim. (Cl. 23—137.)

A method for making barium sulphide from heavy spar with visible crystalline structure which consists in disintegrating the heavy spar to a powder of a fineness of at least 0.2 mm. mixing the disintegrated heavy spar with reducing coal, forming into briquets, and heating this mixture in a revolving furnace to reduction temperatures.

1,829,189. INKING ROLLER. HANS C. SCHROEDER, La Grange, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Mar. 12, 1928. Serial No. 260,979. 6 Claims. (Cl. 91—67.8.)

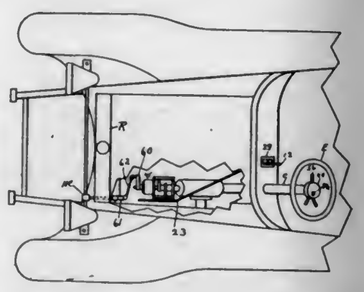


1. An inking roller or the like including in combination an inner stationary tubular supporting member having its median portion of maximum diameter and its ends decreasing outwardly, a tubular roller medianly enclosing said supporting member, ball bearings mounted on said decreased tubular parts of the supporting member and within the ends of the tubular roller, and solid pintles fitted within and projecting from the hollow ends of said supporting member.

1,829,190. PROCESS FOR THE WORKING UP OF CENTRIFUGE SILK. WALTER SCHULZ and HELLMUT HOFFMANN, Sydowsaue, near Stettin, Germany, assignors, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 30, 1929, Serial No. 389,604, and in Germany Apr. 10, 1929. 12 Claims. (Cl. 28—1.)

1. In the production of textile goods from centrifugally spun artificial silk the method in which the spun cake produced in the centrifuge after being freed from injurious chemicals and dried, is set up directly on the textile machine and used thereon.

1,829,191. COMBINATION SWITCH AND HEAD LAMP CONTROL. OTTO R. SELL, Colorado Springs, Colo. Filed Apr. 29, 1930. Serial No. 448,348. 9 Claims. (Cl. 240—7.1.)



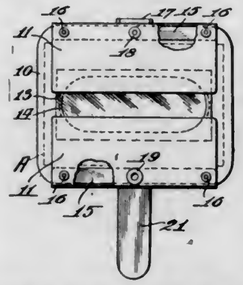
1. In combination with an automobile panel having a rectangular aperture, a base plate; an operating lever, provided with a long and short arm, pivoted on said base plate; brackets on said base plate secured to said panel adjacent to said rectangular aperture; a panel plate, provided with an extruded portion curved concentrically with the pivotal point of said operating lever, and secured to said automobile panel, adjacent to said rectangular aperture, said extruded portion being provided with a peripheral slot through which said long arm of said operating lever operates, and a peripheral windsw; an index sheet, curved concentrically with the pivotal point of said operating lever and mounted on said lever so as to travel in the extruded portion of said panel plate and to be read through said peripheral window.

1,829,192. FOLDING IMPLEMENT. ADOLPH F. SHAFTER, Decatur, Ill., assignor to U. S. Manufacturing Corporation, Decatur, Ill., a Corporation of Illinois. Filed Jan. 4, 1930. Serial No. 418,484. 4 Claims. (Cl. 30—5.)



1. A knockdown device of the character described including a handle member having a socket formed in one end, a loop element secured to the same end of the handle member and extending beyond the edge thereof, an extension member formed with a loop at its inner end embracing the said loop element and to frictionally fit within the socket in the handle member, said extension of the loop element cooperating with the end of the loop of the extension member to provide a hinge to one side of the handle member so that the extension member can be folded back upon the handle member.

1,829,193. CERTIFICATE HOLDER. LESTER L. SHERWOOD, Los Angeles, Calif. Filed May 5, 1930. Serial No. 449,793. 2 Claims. (Cl. 40—10.)



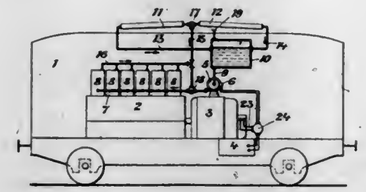
1. In a certificate holder, a body formed from a single piece of flexible material and comprising an intermediate portion in which is formed an opening and a pair of side portions that are folded against the rear face of the intermediate portion, a section of flexible transparent material overlying the opening in the intermediate portion, reenforcing strips of thin flat flexible material having their ends secured to the end portions of the folded side portions and readily releasable means for connecting the sides of the body of the holder and securing the same in position upon a support.

1,829,194. CIRCUIT CONTROLLING DEVICE. MILTON H. SHOENBERG and LESTER SCHON, San Francisco, Calif.; said Schon assignor to said Shoenberg. Filed Feb. 8, 1927. Serial No. 166,661. 4 Claims. (Cl. 200—122.)



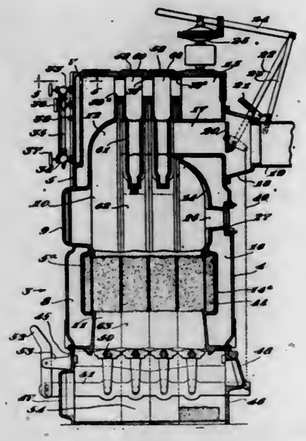
1. A device of the class described comprising a relatively flat member adapted to be removably inserted within a lamp socket or receptacle, contacts exposed upon opposite faces of said member for cooperating with one of the contacts of the socket and one of the contacts of a connection device inserted in the socket, a thermostatic control element mounted upon said member and associated with said terminal contacts, said element including a bi-metallic strip and a pair of contacts controlled by flexing of said strip, a heating resistance, and a metallic heat conducting strip interconnecting the heating resistance and said bi-metallic strip whereby current supplies to the socket will be repeatedly varied at a relatively slow rate.

1,829,195. COOLING OF INTERNAL COMBUSTION ENGINES FOR VEHICLES. OSCAR SIMMEN, Erlach, Switzerland, assignor to Firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed July 8, 1930, Serial No. 466,493, and in Germany July 8, 1929. 8 Claims. (Cl. 123—174.)



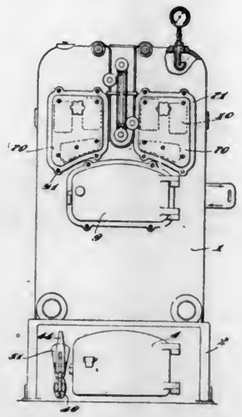
1. In an automotive vehicle, an internal combustion engine, an electric generator driven thereby, a cooling system for the engine, a cooling fluid pump in said system, an electric motor for driving said pump, connections between the generator terminals and the motor, an independent source of current interposed between the generator and the motor, and means in said circuit for automatically alternately connecting the generator and the said independent source to said motor, whereby the cooling fluid may be circulated when the generator is inoperative and vice versa.

1,829,196. BOILER. STANLEY K. SMITH, Westfield, Mass., assignor to The H. B. Smith Company, Westfield, Mass., a Corporation of Massachusetts. Filed Dec. 14, 1927. Serial No. 239,969. 13 Claims. (Cl. 122—225.)



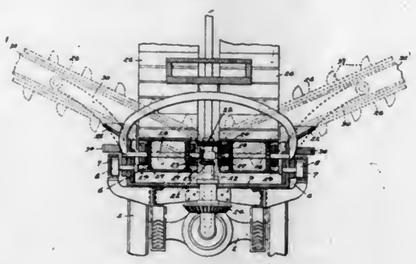
13. A boiler of the class described comprising assembled transverse sections one of said sections being a front section and another being a rear section, each of the sections being of internal one piece construction having spaced inner and outer walls defining a steam and water space, the inner wall of the front section being shaped to define the front part of a combustion chamber and the entrance to an educt flue, said front section having a door opening directly into the combustion chamber, the lower part of the inner wall of the front section having a recess for the reception of refractory lining material and the rear section having a passage defining the rear end of the educt flue and another passage leading directly from the outer air to the combustion chamber.

1,829,197. COMBUSTION APPARATUS. STANLEY K. SMITH, Westfield, Mass., assignor to The H. B. Smith Company, Westfield, Mass., a Corporation of Massachusetts. Filed May 24, 1929. Serial No. 365,629. 11 Claims. (Cl. 126—176.)



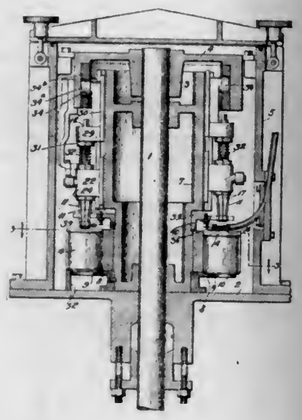
1. Combustion apparatus of the class described comprising a housing, a plurality of grate bars extending across the same, said grate bars being mounted for limited pivotal movement, a link normally holding the bars in place, and retaining means exterior of the ash-pit holding the link in normal position wherein it operatively engages the bars to impart movement thereto, said retaining means being removable, whereby the link may be moved out of its normal position to allow the bars to be removed.

1,829,198. DELIVERY MECHANISM FOR SNOW-PLOWS. CLARENCE SPEER, San Francisco, Calif. Original application filed July 29, 1929. Serial No. 381,866. Divided and this application filed Aug. 18, 1930. Serial No. 475,957. 3 Claims. (Cl. 198—100.)



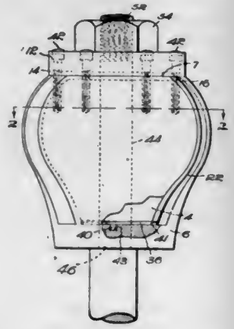
1. Delivery mechanism for snow plows comprising a hopper mounted upon a movable carriage to receive snow from elevating means mounted upon the carriage; a power shaft axially disposed within the hopper; a pair of conveyor shafts mounted within the hopper in axial alinement upon opposite sides of the power shaft; a pair of parallel endless conveyors supported upon the hopper and having their inner ends connected to the conveyor shafts; a bevel gear mounted upon the power shaft and a gear mounted upon one of the conveyor shafts in meshing relation with said bevel gear; a second bevel gear mounted upon the power shaft and a gear mounted upon the other conveyor shaft in meshing relation therewith, said second bevel gear and its meshing gear being of the same ratio, but of different diameter, with respect to the first bevel gear and its driven gear, whereby the conveyor shafts are actuated simultaneously in the same direction and at the same speed; and means to turn the hopper about its vertical axis to direct the conveying means in a desired direction independently of the movement of the carriage and its elevating means.

1,829,199. MACHINE FOR CLOSING CANS. ALSON J. SPRAGUE, Middletown, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed July 3, 1929. Serial No. 375,655. 7 Claims. (Cl. 113—18.)



1. In a machine for sealing cans each having a hole in one end with caps each having a dish-shaped body and being formed at its upper edge to overlie the part of the corresponding can end around said hole the combination of means to feed cans in succession through the machine and along a definite path, cap inserting and swaging means including a device movable along said path over a corresponding can and in register therewith, means to present a cap between such device and can, a single operating cam, and means controlled by said cam for inserting such device in a cap thus presented, inserting the cap in the hole at the end of a can and swaging the cap to secure it in said opening.

1,829,200. CUTTING TOOL. SYDNEY E. TAFT, Framingham, Mass., assignor to Gulliford Wood Heel Company, Lynn, Mass., a Firm composed of Archibald T. Gulliford and Pearce H. Gulliford. Filed July 9, 1929. Serial No. 376,914. 5 Claims. (Cl. 12—94.)



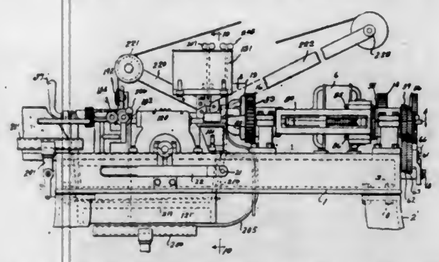
1. A rotary cutter, comprising a cutter holder having lateral recesses, a cutter arranged in each recess and movable longitudinally and laterally therein, a series of wedges of uniform angularity one for each recess to tilt said cutters to predetermined angles with respect to the face of said cutter holder, means to position said wedges in uniform positions, radially in their respective recesses, including lugs and cooperating recesses in said wedges and cutter holder respectively, and individual clamping means for said cutters.

1,829,201. ICE CREAM CONE. WERD W. TURNBULL, Dayton, Ohio, assignor to McLaren-Consolidated Cone Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 23, 1927. Serial No. 242,117. 3 Claims. (Cl. 99—10.)



2. An ice cream cone having a substantially cylindrical top portion, a conical body, the maximum outside diameter of the body being less than the inside diameter of the top, an abrupt shoulder connecting the top and body, the height of the top portion being approximately one-eighth to one-sixth of the height of the cone, and the thickness and taper of the body being such that the shoulder of one cone will engage the mouth of another cone into which it is inserted and hold the side walls of the cones out of pressure contact.

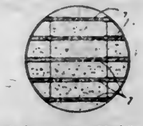
1,829,202. MACHINE FOR MAKING RADIATING TUBES. JOHN W. VANCE, Detroit, Mich. Filed Nov. 8, 1926. Serial No. 146,932. 20 Claims. (Cl. 113—1.)



1. In a machine for continuously winding and securing a metal fin edgewise upon metal tubing, a tube feeding mechanism comprising a rotating member having an axial passage therethrough, a pair of chain driving units positioned in said rotating member on either side of said axial passage for driving a tube through said machine and for holding said tube for rotation with said rotating member, each of said chain driving units comprising a chain, chain support and driving means and each of said units being removable as a unit from said member without dismounting said member.

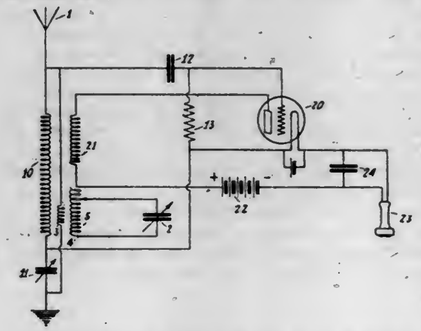
1,829,203. CARBON GRAIN MICROPHONE. ROELOF VERMEULEN, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 5, 1930, Serial No. 433,213, and in the Netherlands May 3, 1929. 2 Claims. (Cl. 179—127.)

1. A carbon grain microphone comprising a container, a layer of carbon grains in said container, a pair of electrodes in intimate contact with said layer of carbon grains, a diaphragm separate from said electrodes for closing said container, and means extending from said diaphragm to the



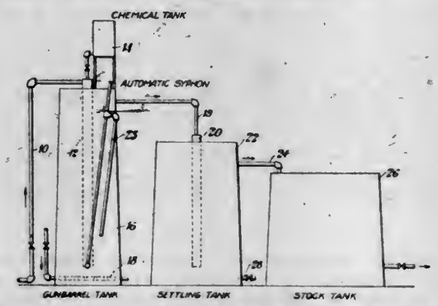
bottom of said container to divide said layer of carbon grains into a plurality of sections extending between said electrodes, said means consisting of a plurality of partitions of elastic material.

1,829,204. INTERFERENCE ELIMINATION. GEORG VON ARCO, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed July 28, 1925, Serial No. 46,535, and in Germany Aug. 29, 1924. 7 Claims. (Cl. 250—20.)



1. In combination, a receiving conductor adapted to receive desired signals and disturbances, a receiving circuit including an electron discharge tube coupled to said conductor, an auxiliary circuit for decreasing the effect of said disturbances on said receiving circuit, means for coupling said auxiliary circuit to said conductor including a transformer having a variable and relatively high transformation ratio, and means including a feed-back circuit from said tube for decreasing the damping in said auxiliary circuit.

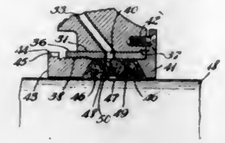
1,829,205. METHOD OF TREATING OIL-WATER EMULSIONS. JOHN C. WALKER, Eldorado, Kans., assignor to Empire Oil and Refining Company, Dover, Del., a Corporation of Delaware. Filed Nov. 4, 1926. Serial No. 146,177. 12 Claims. (Cl. 196—4.)



7. A method of breaking an emulsion of oil and water which comprises mixing with the emulsion an ammonium sulpho compound, comprising the reaction product of ammonia and a sulfuric acid derivative of a fatty acid.

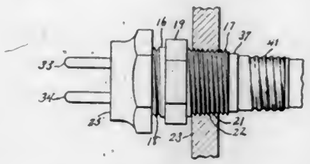
9. A process of breaking a petroleum emulsion, characterized by subjecting the emulsion to the action of a demulsifying agent comprising an ammonium salt of sulpho stearic acid.

1,829,206. STUFFING BOX. GEORGE F. WILSON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 5, 1928. Serial No. 310,606. 3 Claims. (Cl. 286—19.)



1. In a stuffing box assembly the combination of a shaft, a stuffing box therefor, a pair of packing members in the stuffing box for confining fluid on one side thereof, a spacer-ring positioned between said packing members and standing clear of the shaft so as to define a passage for fluid thereabout, and means for conducting fluid to and from the spacer-ring, said spacer-ring being provided with means adapted to prevent the flow of fluid from the inlet to the outlet except by way of the passage, to effect circulation of the fluid within the passage and being formed on its outer periphery with a pair of circumferential grooves in communication with a fluid and inlet respectively and having a plurality of radially-directed fluid passages extending from said grooves to the inner periphery of the ring, the fluid passages from the respective grooves being disposed in alternation circumferentially of the ring.

1,829,207. ELECTRICAL SOCKET. MARTIN M. ADLEMAN, Putnam, Conn. Filed Aug. 22, 1930. Serial No. 476,982. 6 Claims. (Cl. 173—339.)



1. In an article of the character described, an insulating core, a metal attaching sleeve surrounding a portion of the core, a clamping cap detachably engaging the sleeve and surrounding one end of the core, electrical conduction rods fast in the core longitudinally disposed therein, and a conduction shell supported upon the other end of the core.

1,829,208. PROCESSES OF PRODUCING ACRYLIC ACID ESTERS. WALTER BAUER, Darmstadt, Germany, assignor to Röhm & Haas Aktiengesellschaft, Darmstadt, Germany, a Corporation of Germany. Filed May 27, 1929, Serial No. 366,536, and in Germany June 18, 1928. 3 Claims. (Cl. 260—106.)

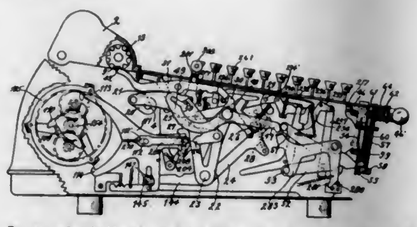
1. The process of producing acrylic acid ester which consists in converting aliphatic β-hydroxy-nitriles into unsaturated esters in the presence of aliphatic monohydroxy alcohol and an acid medium which splits off water.

1,829,209. INSULATION. CHARLES R. BOGGS, Waban, Mass., assignor to Simplex Wire & Cable Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 7, 1928. Serial No. 317,883. 1 Claim. (Cl. 173—264.)



An improved insulated wire product which comprises a conductor insulated with a continuous coating less than 0.016 inches in thickness of a rubber insulating compound, said compound being the coagulated deposition product of an aqueous dispersion including substantially uncoagulated vulcanized rubber.

1,829,210. AUTOMATIC CARRIAGE SHIFTING MECHANISM FOR CALCULATORS. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Jan. 5, 1927. Serial No. 159,155. 23 Claims. (Cl. 235—63.)

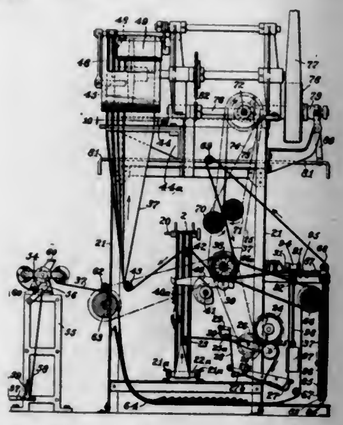


1. In a calculating machine having a transversely shiftable carriage, numeral wheels mounted thereon, and reversible differential ordinal actuating means for said wheels, means operable by said actuating means in the movement thereof in a single given direction for shifting the carriage in one or alternatively in the other direction.

8. In a calculating machine having a transversely shiftable carriage, numeral wheels thereon, and actuating means for said numeral wheels, means operated by said actuating means for shifting said carriage, and multiplier mechanism including digital multiplier keys controlling said carriage shifting means and a zero multiplier key controlling said carriage shifting means.

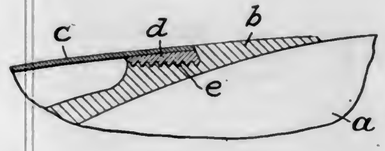
19. In a calculating machine having a transversely shiftable carriage, numeral wheels thereon, reversible differential actuating means for said numeral wheels, multiplier mechanism, and division mechanism; automatic carriage shifting means periodically controlled by said actuating means and including devices settable by the multiplier and by the division mechanism to determine the shift.

1,829,211. METHOD OF AND APPARATUS FOR MAKING BATHING CAPS AND SIMILAR ARTICLES. ARTHUR E. COLLINS, Cuyahoga Falls, Ohio, assignor, by mesne assignments, to The Miller Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,544. 19 Claims. (Cl. 154—2.)



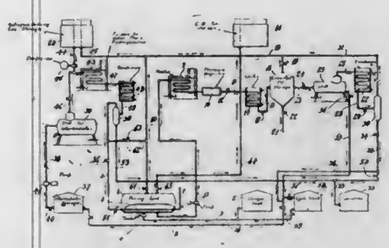
1. The bereindescribed continuous method of making bathing caps and the like articles which comprises progressively applying ornaments to a moving plastic band, progressively applying said band to a plastic body sheet while the sheet is advanced, simultaneously pinch cutting said band to said stock sheet along the central longitudinal line of said band, folding the margins of the band and body sheet into opposite directions to form two justaposed sheets, and pinch cutting the articles from the juxtaposed sheets thus formed during the advancing movement.

1,829,212. PROJECTILE PROVIDED WITH WINDSHIELD. JOHN L. COX and BERNARD M. FINE, Philadelphia, Pa. Filed Oct. 11, 1930. Serial No. 488,035. 7 Claims. (Cl. 102—28.)



1. A projectile having a circumferential forwardly facing shoulder, in combination with a windshield of drawn steel whose rear end is of substantially no greater thickness than its main body, a ring permanently secured within the rear end of the windshield, and means for detachably attaching the ring to the projectile, the rear end of the windshield as well as the rear end of the ring abutting against said shoulder.

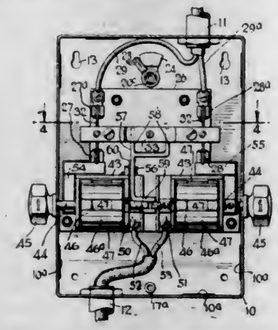
1,829,213. PROCESS OF TREATING HYDROCARBONS. RICHARD F. DAVIS, Berkeley, Calif., assignor by mesne assignments, to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed June 15, 1925. Serial No. 37,175. 3 Claims. (Cl. 196—9.)



1. The process of treating hydrocarbons, consisting in mixing together hydrocarbons which are gaseous at ordinary temperatures and pressures and a hydrocarbon oil heavier than the product desired, and a compound of nickel soluble in the hydrocarbons, and subjecting the mixture to temperature and pressure conditions capable of causing cracking of the hydrocarbons to take place substantially in the liquid phase.

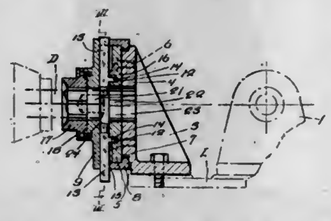
1,829,214. FUSE AND SWITCH BOX. CHARLES DRIEST, Marlboro, N. J. Filed Mar. 9, 1929. Serial No. 345,689. 17 Claims. (Cl. 200—114.)

6. A switch device of the class described comprising a casing, means for admitting circuit feed and supply wires to the casing, a switch element within the casing and comprising a bar having switch blades disposed at the end portions thereof adapted to open and close the circuit through said wires, tensional devices cooperating with the end portions of the bar to normally support the same in open circuit position, a knob arranged outwardly of the casing and in operative engagement with said bar, means whereby the rotation of said knob in one direction will move said bar and switch blades into closed circuit position and retain the same in such position against the action of said tensional devices and whereby the rotation of the



knob in the opposite direction will quickly release and move said bar and blades into open circuit position, two independently rotatable fuse supporting members mounted in said casing, portions of said members being exposed through one wall of the casing, means exposed through the casing for rotating said members, and the peripheral surfaces of said members having bores exposed through said surfaces and opposite sides of said members, fuses adapted to be assembled into said bores through one ide thereof when exposed externally of the casing and retained in position by the cross sectional contour of the bores.

1,829,215. METHOD AND MEANS FOR PRODUCING CASTELLATED NUTS AND THE LIKE. DAVID FOX, Bronx, N. Y. Filed Mar. 10, 1927. Serial No. 174,123. 8 Claims. (Cl. 29—57.)

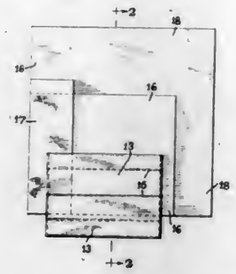


1. Means for castellating the end of a piece of rotating bar stock, said means comprising a plurality of cutters, a carrier for said cutters arranged to engage the bar stock to rotate therewith and to thereby rotate the cutters with the bar stock, and means whereby rotation of the cutters will cause the cutters to move with respect to the stock and to each thereby cut a groove in the stock.

4. Means for castellating the end of a piece of rotating bar stock, said means comprising a standard, a cam plate carried by said standard, said standard and said cam plate each having an opening through which the bar stock may extend, a cover plate rotatably mounted upon said standard having an opening aligned with the mentioned openings also to receive the stock therethrough, means by which said cover plate may be connected with the bar stock to rotate therewith, a plurality of cutters carried by said cover plate to rotate therewith each having a cutter portion arranged to extend into said opening for

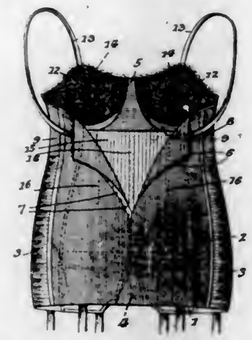
operating upon the bar stock, a cam slot provided in said cam plate eccentric to said mentioned openings, and each of said cutters having a lug engaging within said cam slot to thereby drive the cutters during rotation thereof with respect to the cam plate.

1,829,216. HAIR TREATING DEVICE. ERNEST O. FREDERICS, New York, N. Y., assignor to E. Frederics, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 25, 1926. Serial No. 97,363. 12 Claims. (Cl. 132—36.2.)



1. As an article of manufacture, a hair-treating pad, including a container for hair-treating substance, and a sheet of insulating material arranged beyond said container and secured thereto, said sheet extending beyond the rear edge of said container and terminating at a point short of the forward edge thereof.

1,829,217. COMBINATION FOUNDATION GARMENT. HARRY W. FRIELAND, Newark, N. J. Filed Sept. 29, 1930. Serial No. 485,254. 6 Claims. (Cl. 2—30.)

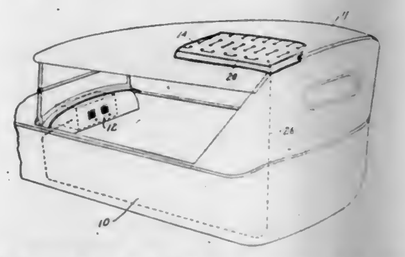


1. A foundation garment comprising a body constituting a girdle, and having front and rear panels connected by side panels, the front and rear panels projecting upwardly above the side panels, a brassière having a front section overlying the upper portion of the front panel and side sections secured to side edges of the upper portion of the rear panel and extending downwardly and secured to upper edges of the side panels, the brassière being provided with forwardly projecting bust receiving pockets, and the front panel having its upper end secured to the upper edge of the front section between said pockets.

1,829,218. METAL CONCRETE FOR HEARTH PLATES AND THE LIKE. HENRY H. HARRIS, Detroit, Mich. Refiled for abandoned application Serial No. 725,089, filed July 9, 1924. This application filed May 9, 1928. Serial No. 276,512. 5 Claims. (Cl. 263—46.)

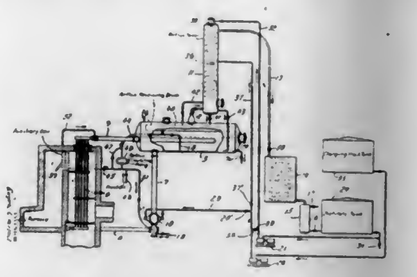
1. As a new article of manufacture, a metal concrete adapted for use in furnace hearths, linings, and the like, which is substantially infrangible, highly wear resisting and resistant to high temperatures, and comprises pieces of relatively frangible filler highly resistant to wear and to high temperatures, and a cast binder of an alloy consisting principally of nickel and chromium having such filler imbedded therein, said binder being resistant to high temperatures, and relatively strong and infrangible at such temperatures.

1,829,219. PORTABLE RADIO APPARATUS. WILLIAM M. HEINA, Long Island City, N. Y., assignor, by mesne assignments, to Transitone Automobile Radio Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 15, 1929. Serial No. 332,620. 3 Claims. (Cl. 250—33.)



3. In combination with the collapsible top of a vehicle, a radio antenna comprising a wire carried by said top and arranged to form a plurality of spaced lengths extending back and forth in succession and transversely of said top.

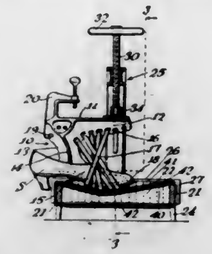
1,829,220. OPERATION OF PRESSURE STILLS. EUGENE C. HERTHEL, Chicago, Ill, assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Original application filed Nov. 21, 1924, Serial No. 751,213. Divided and this application filed Feb. 27, 1928. Serial No. 257,353. 5 Claims. (Cl. 196—48.)



1. An improved method of cracking hydrocarbon oils, which comprises heating a body of the oil to a cracking temperature under pressure in a pressure still by circulation over externally heated surfaces, subjecting the vapors from the still to a refluxing operation in direct contact with a distillate including constituents corresponding in character to the desired distillate, positively circulating the reflux from the refluxing operation through a heater and separately heating it to the cracking temperature therein and then introducing it into the main body of oil being heated in the still.

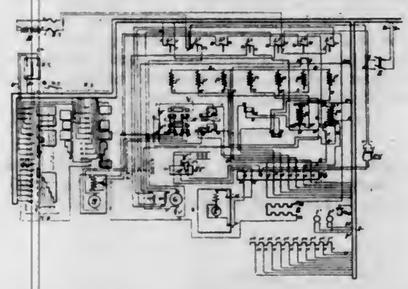
1,829,221. RUBBER BAND CUSHION SHOE SOLE PRESS. CULLEN L. HUNTOON, Los Angeles, Calif. Filed July 12, 1928. Serial No. 292,225. 10 Claims. (Cl. 12—33.)

5. A device of the class described, comprising a bed frame, means providing a series of elastic strands on the bed frame forming an elastic bed, a yoke mounted on the bed frame, and a hand screw threadedly mounted upon



a yoke and having a follower connected thereto by a swivel connection, said follower having a slidable, but non-rotatable connection with the yoke.

1,829,222. MANUAL CONTROL OF ELECTRIC TRANSMISSIONS FOR GAS ELECTRIC DRIVES. WILLIAM B. JUPP, New York, N. Y., and FRANK E. QUEENEY, Teaneck, N. J., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1927. Serial No. 216,126. 25 Claims. (Cl. 290—17.)

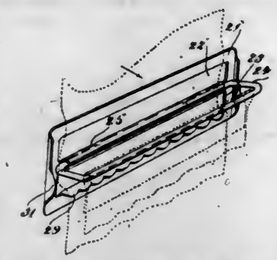


1. A device of the character described comprising a power means, a generator driven thereby, driving motors driven by the generator, a battery, a plurality of fields for the generator, means to energize certain of the fields and connect the generator to function as a motor to start the power means and cause the power means to drive the generator at an idling speed to charge the battery, means to connect other of the fields to generate a higher voltage to operate the driving motors when the power source is speeded up, and means to speed upon the engine to normal speed and simultaneously operate the last named means.

4. A device of the character described comprising an internal combustion engine having a throttle, a generator driven thereby and having generator field connections, control means to connect the generator to start the engine and then be driven by the engine to generate current, and means operated by the last named means to vary progressively, the throttle setting of the engine predetermined amounts and simultaneously vary the generator field connections to increase the output thereof.

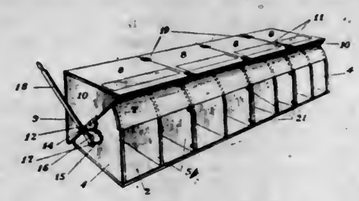
1,829,223. BUCKLE WITH LOOP AND LOCK. ALLEN H. KERNGOOD, Baltimore, Md., assignor to Alma Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Mar. 17, 1931. Serial No. 523,209. 8 Claims. (Cl. 24—191.)

1. A buckle or clasp for a strap or band having a central bar with an opening on each side of the bar, an eye adapted for the attachment thereto of an end of the strap, the eye being pivotally mounted adjacent to said bar, a clamping member on the opposite side of said opening from said bar and fastening means for said eye



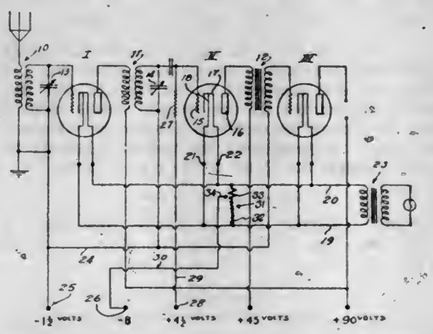
tending to hold it in clamping contact with said member the end of the material engaging the eye and an intermediate portion of the strap being pressed together and clamped between said eye and said member.

1,829,224. SLIPPING-BOX FOR HOUNDS. CHARLES A. KITZMILLER, Oakland, Calif. Filed Aug. 25, 1928. Serial No. 301,959. 5 Claims. (Cl. 119—15.5.)



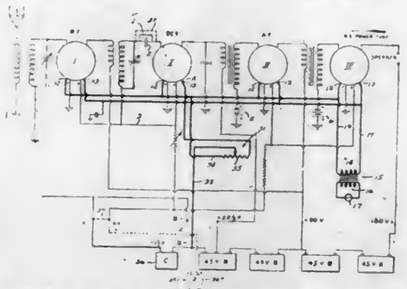
1. A slipping-box for hounds consisting of a box provided with non-communicating compartments, a movable front for said box, means for lifting said front consisting of two intermeshing segment-gears, the first of greater radius than the second and mounted on one of the ends of said box, the second of lesser radius than the first and mounted on one of the ends of said cover, journals for said segment-gears, and means for actuating said gears.

1,829,225. COMPENSATING DEVICE AND METHOD OF COMPENSATING. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Dec. 30, 1927. Serial No. 243,501. 14 Claims. (Cl. 250—27.)



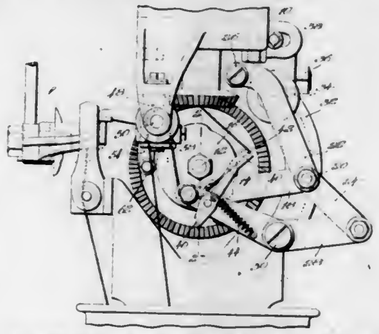
1. In a radio circuit comprising alternating current heater type tubes in which the cathodes and heater circuits have a common connection, said connection introducing an alternating current potential drop therein, and means for compensating for said alternating current drop of said common connection.

1,829,226. POWER CONVERSION MEANS FOR RADIO APPARATUS. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Mar. 10, 1928. Serial No. 260,747. 1 Claim. (Cl. 250—27.)



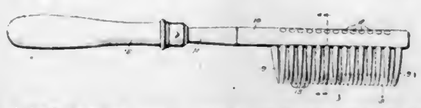
A means to convert a direct current radio set to alternating current operation which comprises a cable, a pair of wires in said cable adapted to be connected to the heater terminals of alternating current tubes, a relatively large resistance connected to one of said wires, a relatively small resistance connected between the end of said first resistance and the other of said pair of wires, a third wire connected to a point on said small resistance, and means to vary the resistance to which said wire is attached.

1,829,227. TAKE-UP MECHANISM FOR SEWING MACHINES. BERNARD T. LEVEQUE, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Feb. 18, 1927, Serial No. 169,203. Divided and this application filed Mar. 29, 1928. Serial No. 265,541. 4 Claims. (Cl. 112—57.)



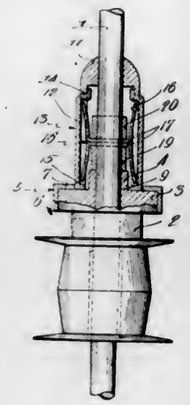
4. A sewing machine having, in combination, a take-up mechanism comprising a take-up lever, a bracket, a toggle having one arm connected to the take-up lever and the other arm mounted on the bracket, means including a crank for flexing the toggle to actuate the take-up lever, and means for positioning the bracket relatively to the crank to adjust the throw of the take-up lever.

1,829,228. COMB. CHARLES LEWIS, New York, N. Y. Filed May 15, 1931. Serial No. 537,711. 5 Claims. (Cl. 132—11.)



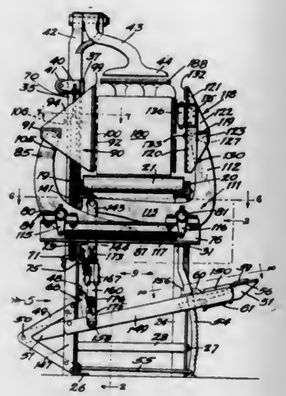
1. A hair heating comb, comprising a back having longitudinal sets of openings therein, the openings in one set being staggered with relation to the openings in the other set, and teeth having parts inserted within said openings.

1,829,229. BOBBIN CLUTCH. GEORGE H. MAGRATH, Whitinsville, Mass. Filed Sept. 11, 1930. Serial No. 481,113. 8 Claims. (Cl. 242—46.6.)



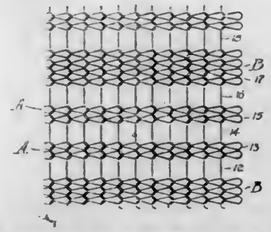
1. A device of the character described comprising a blade, a whirl on the blade, a case on the blade having a head in spaced relation to the whirl and having longitudinal slots intermediate the head and whirl, elongate contact pieces movable in said slots for engaging the interior of a bobbin, and spring means pressing outwardly on each piece with approximately equal pressure on opposite sides of a point approximately midway between the ends of its bobbin-engaging surface.

1,829,230. METHOD OF PACKING FRUIT. EDWARD F. MEER, Monrovia, Calif. Filed June 24, 1929. Serial No. 373,098. 10 Claims. (Cl. 100—57.)



9. A method of packing fruit in a box having a lid, base members and a pressure member applied to said base members by nails, said method consisting in making up said box with said pressure member spaced from one or more of said base members and with said nails, at said spaced points being driven through said pressure member and into said one or more of said base members, packing the fruit relatively loosely in said box while open, and confining said fruit relatively tightly by pressing in said pressure member so as to drive said nails further into said one or more of said base members and lidding said box.

1,829,231. SANITARY NAPKIN. CHARLES B. MERGENTIME, New York, N. Y., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Filed Jan. 24, 1930. Serial No. 423,085. 1 Claim. (Cl. 66—170.)



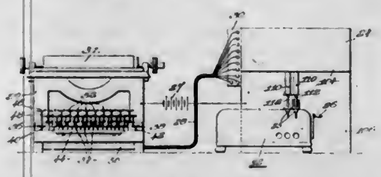
A knitted bandage for a sanitary napkin, comprising alternate longitudinally disposed groups of needle wales and drop stitches, the number of needle wales being varied in the different groups.

1,829,232. CLASP. EUGENE MOREHOUSE, Providence, R. I., assignor to B. A. Ballou & Co., Inc., a Corporation of Rhode Island. Filed Mar. 25, 1931. Serial No. 525,122. 12 Claims. (Cl. 24—237.)



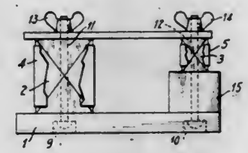
1. A clasp for a chain or the like comprising a band-shaped body member apertured to admit a narrowed neck portion secured to an enlarged end, and having a resilient tongue to obstruct the entrance or exit to said aperture and movable from such obstruction position.

1,829,233. MACHINE FOR PREPARING TYPEWRITTEN COPY. EDWARD L. MORSS, Needham, ARTHUR W. BUCKWELL, Quincy, and CARL G. SMITH, Watertown, Mass., assignors to Ginn and Company, a Copartnership, Boston, Mass. Filed Sept. 18, 1928. Serial No. 306,761. 13 Claims. (Cl. 197—1.)



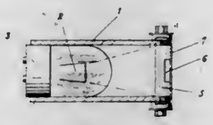
5. A type layout machine having, in combination, a typewriter adapted to type characters of indifferent widths and having shift devices to type upper or lower case characters, an adding mechanism, actuating means for setting up numerical values on the adding mechanism, a control device associated with each typewriter key, connections between the control devices and the actuating means, and means for altering said connections upon operation of the shift devices.

1,829,234. PIEZO-ELECTRIC CRYSTAL TRANSFORMER. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 25, 1927. Serial No. 163,325. 3 Claims. (Cl. 171—327.)



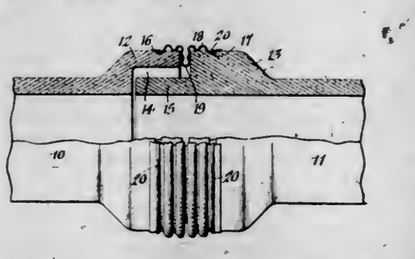
1. A piezo-electric transformer comprising, in combination, a piezo-electric crystal device, means for impressing electromotive forces thereon, a second piezo-electric crystal device associated with said first device, in a manner to be stressed by vibration of said first device, means for multiplying the motion of said first device interposed therebetween and means for withdrawing the electromotive force generated by said second crystal.

1,829,235. SLIT-FORMING DEVICE FOR PHOTOGRAPHIC SOUND APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1929. Serial No. 409,866. 9 Claims. (Cl. 179—100.31.)



1. In a photographic sound apparatus, a slit forming member comprising a transparent prism having a base and an apex opposite said base, and means for preventing passage of light through said prism from the base to said apex at a central predetermined portion of the length of said prism.

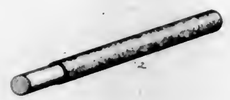
1,829,236. PIPE JOINT. ALBERT G. PERKINS, Buffalo, N. Y. Filed Mar. 15, 1927. Serial No. 175,490. 5 Claims. (Cl. 285—114.)



1. In a joint of the character described, the combination of a pair of spaced pipe-sections, and a coupling sleeve of flexible metal having attaching portions at its ends fitted over the opposing ends of said sections and provided intermediate its ends with an inwardly-directed fold arranged in the space between said sections for interlocking engage-

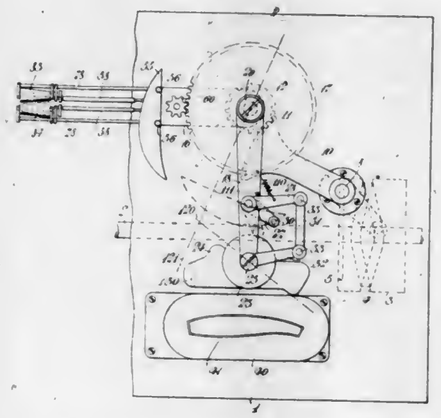
ment therewith, the side walls of the fold having concentric corrugations and normally bearing against the end faces of the respective pipe-sections and forming a spacer therebetween and permitting them to flex freely to compensate for relative movements of the pipe-sections.

1,829,237. HEATER ELEMENT AND METHOD OF MAKING IT. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Tube Company, a Corporation of Delaware. Filed Oct. 11, 1928. Serial No. 311,952. 2 Claims. (Cl. 250—27.5.)



1. A method of making a heater element for an electrical discharge device having an indirectly heated cathode element, which consists in coating a refractory metal body with a mixture of calcined aluminum oxide and sodium silicate and heating in a reducing atmosphere until the aluminum oxide crystallizes and forms corundum.

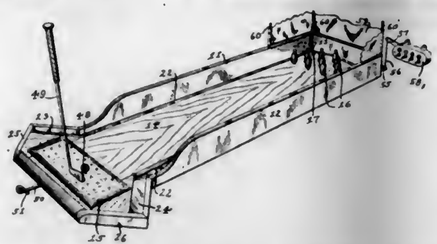
1,829,238. CIGAR MACHINE. IVAR OSKAR ENGELBREKT SANDBERG, Stockholm, Sweden. Filed Jan. 30, 1931, Serial No. 512,440, and in Sweden Feb. 6, 1930. 7 Claims. (Cl. 131—49.)



1. In a cigar wrapping machine, a swinging arm, wrapping rollers carried by said arm and adapted to be moved thereby between a bunch receiving position and a cigar delivering position, a wrapper carrier mounted in the path of said wrapping rollers and arranged to cooperate therewith to wrap a bunch during the movement between said two positions, wrapper cutters carried by said arm and movable therewith, and a cutting edge normally situated in the path of said cutters to cooperate therewith to cut a wrapper during the movement between said two positions and movable back and forth between the path of said cutters and said wrapper carrier to transfer the wrapper cut to said wrapper carrier.

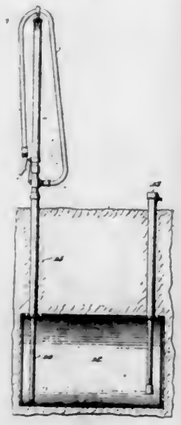
1,829,239. GOLF BOWLING GAME. CHARLES R. SCHNITMAN, Waterbury, Conn. Filed Oct. 24, 1930. Serial No. 491,062. 3 Claims. (Cl. 273—32.)

1. In a game board, a runway having a set of pins located at the rear end thereof, an upwardly spring-pressed pin-resetting plate located beneath said runway, means for connecting each of said pins with said plate, a rod extending under said runway and having a lateral arm engageable with the top of said plate, said rod having



a lateral pedal at its front end for rocking said rod after each stroke to force said plate downwardly to reset the pins.

1,829,240. DISPENSING PUMP. CLARENCE SCHOCK, Mount Joy, Pa. Filed Mar. 16, 1928. Serial No. 262,311. 5 Claims. (Cl. 103—221.)

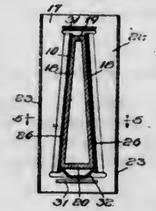


1. A lift dispensing pump comprising a cylinder, a pump rod and piston thereon reciprocable in said cylinder, a storage tank into which said cylinder extends, a discharge outlet communicating with the pump cylinder, a conduit leading from said discharge outlet to a point of dispensing at a higher level, an upstanding pipe above said discharge outlet forming a continuation of said pump cylinder extending a substantial distance above the upper limit of the pump stroke, a stuffing box in said cylinder above the upward limit of the piston stroke and above the discharge outlet for preventing undue leakage of liquid there-beyond into the upstanding pipe, a vent formed in the wall of said cylinder in communication with the storage tank at a level below the pump discharge outlet, whereby liquid remaining undispensed after a pumping operation as well as that which has leaked beyond the stuffing box will drain back to the storage tank, and a tubular hand grip concentrically encircling the upstanding pipe and attached to the piston rod, the said hand grip being freely slidable over and guided by the upstanding pipe to effect reciprocation of the piston and consequent actuation of the pump.

1,829,241. PROCESS OF ASSEMBLING RADIATORS. WILFRED SHURTLEFF, Moline, Ill., assignor to The Herman-Nelson Corporation, Moline, Ill., a Corporation of Illinois. Original application filed Dec. 29, 1926, Serial No. 157,658, and in Great Britain Mar. 1, 1927. Divided and this application filed Feb. 1, 1930. Serial No. 425,099. 7 Claims. (Cl. 29—157.3.)

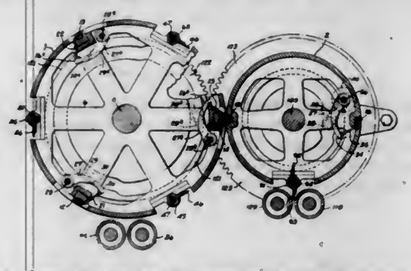
1. The process of assembling radiator fins on radiator cores having wedging surfaces, which consists in forming

said fins with openings and with flanges at the edge of said openings disposed at an angle to the plane of the fin, grouping said fins on the core with the core extending through the openings and with the flange of each fin in



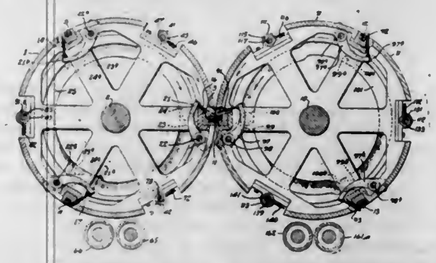
engagement with the flange of an adjacent fin, and applying pressure on the fins in the direction of the plane of fins to a degree sufficient to force the flanges into intimate contact with and in parallel relation to the wedging surfaces of the core.

1,829,242. SHEET FOLDING AND DELIVERING MECHANISM. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, a Corporation of Illinois. Filed Mar. 28, 1930. Serial No. 439,627. 61 Claims. (Cl. 270—10.)



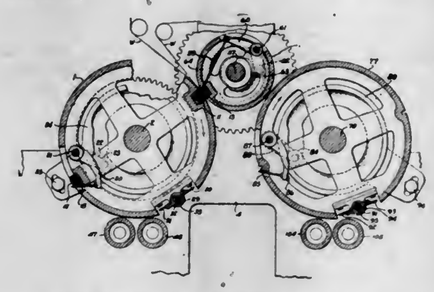
1. A sheet folding and delivery mechanism including in combination a plurality of cooperating folding cylinders, a plurality of delivery mechanisms, and means for delivering the entire folded product to one delivery mechanism or a part thereof to each of a plurality of delivery mechanisms and for collecting a part of the product.

1,829,243. SHEET FOLDING AND DELIVERING MECHANISM. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, a Corporation of Illinois. Filed Mar. 28, 1930. Serial No. 439,628. 49 Claims. (Cl. 270—10.)



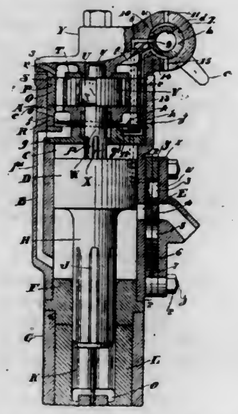
1. A sheet folding and delivering mechanism including in combination two coacting cylinders each provided with a plurality of sheet holding and releasing devices and a plurality of folding devices, a plurality of delivery devices, and means whereby the total folded products may be delivered either to one or a plurality of the delivery devices.

1,829,244. SHEET FOLDING AND DELIVERING MECHANISM. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, a Corporation of Illinois. Filed Mar. 28, 1930, Serial No. 439,629. Renewed Sept. 5, 1931. 49 Claims. (Cl. 270—77.)



1. A sheet folding and delivering mechanism including in combination a plurality of folding cylinders, a cylinder cooperating alternatively with one folding cylinder as a collecting cylinder or with another folding cylinder as a transfer cylinder.

1,829,245. BLOWING DEVICE FOR ROCK DRILLS. WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 29, 1929. Serial No. 374,768. 4 Claims. (Cl. 121—6.)

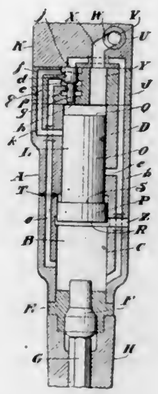


1. In a blowing device for rock drills, the combination of a cylinder having a piston chamber and a hammer piston in the piston chamber, an exhaust port for the piston chamber, a pressure actuated valve for controlling the exhaust port, a distributing value for the piston chamber, and means including passages and a throttle valve therefor to simultaneously vent one side of the distributing valve to atmosphere and close the pressure actuated valve.

1,829,246. PERCUSSIVE TOOL. WILLIAM A. SMITH, Sr., Easton, Pa., and WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignors to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 27, 1929. Serial No. 381,504. 2 Claims. (Cl. 121—18.)

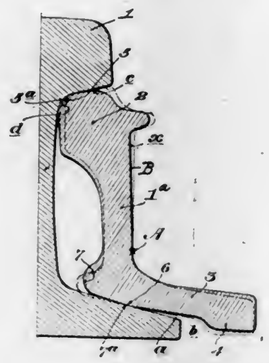
1. A fluid actuated percussive tool, comprising a cylinder having an enlarged bore and a smaller bore to form a piston chamber, a piston in the piston chamber having a head and a stem, a pressure surface on the stem constantly exposed to pressure fluid for driving the piston forwardly, a pressure surface on the front end of the head intermit-

tently exposed to pressure fluid for returning the piston, a valve chamber, a valve in the valve chamber having differential actuating surfaces, the smaller of which is constantly exposed to pressure fluid tending to close the valve and the actuating surface of larger area being intermittently exposed to pressure fluid for opening the valve, a supply passage leading from the smaller bore to the valve chamber and controlled by the stem, an inlet passage leading from the valve chamber to the front end of the enlarged bore and communicating with the supply passage in the open position of the valve, a port affording



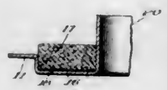
communication between the smaller bore and the inlet passage and controlled by the stem to expose the last said pressure surface to pressure fluid for starting the piston on its return stroke and to simultaneously open the valve, thus permitting the flow of pressure fluid from the smaller bore through the supply passage and the inlet passage into the front end of the enlarged bore to complete the rearward stroke of the piston, an exhaust port in the cylinder to exhaust a portion of the fluid from the front end of the piston chamber, and an exhaust passage in the cylinder controlled by the valve for completing the exhaust of fluid from the same end of the piston chamber.

1,829,247. METHOD OF REFORMING OLD RAIL JOINT BARS. WILLIAM PATON THOMSON, New York, N. Y., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Jan. 28, 1929. Serial No. 335,708. 12 Claims. (Cl. 29—169.)



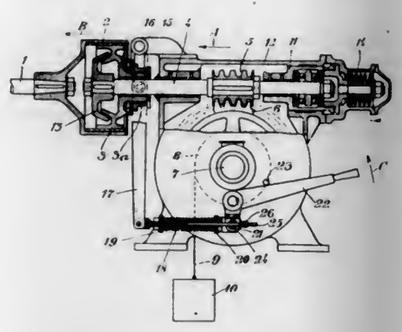
1. A method of reforming head-contact rail joint bars which consists in subjecting the bar to a pressing operation which gives to it a primary tilted forging position and subsequently subjecting the bar to a finishing operation which causes inward deflection of the upper inner corner, downward and outward depression of its top surface, upward tilting of the foot flange, and downward followed by upward and outward displacement of the inner projection of the foot of the bar.

1,829,248. GASKET. JOHN H. VICTOR, Evanston, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 24, 1930. Serial No. 497,667. 6 Claims. (Cl. 288—1.)



1. A gasket including a holder having port openings therein and provided with cupped annuli surrounding said openings and depressed beyond one face of said holder, said annuli including portions extended through said openings and providing walls therefor, and rings of gasket material in said annuli and extending beyond the other face of said holder for localizing the sealing action of the gasket about the ports.

1,829,249. GEAR PROTECTION. GUSTAV VON BEULWITZ, Bremen, Germany, assignor to the Firm Atlas-Werke Aktiengesellschaft, Bremen, Germany. Filed Jan. 30, 1931, Serial No. 512,412, and in Germany Feb. 3, 1930. 3 Claims. (Cl. 74—36.)



1. Gear protecting means, consisting in combination of a driving shaft, an axially displaceable worm shaft, a clutch casing revolving with the driving shaft, a clutch member revolving with the clutch casing but axially displaceable upon the worm shaft, a bearing member for the worm shaft, slidable in a casing, a clutch member mounted fast upon the end of the worm shaft, a spring tending to keep the last-mentioned clutch member in contact with the first-mentioned clutch member by means of the bearing member and the worm shaft, a worm on the worm shaft, a worm wheel meshing with the worm, connected with a shaft, a resilient device acting upon the clutch member of the driving shaft that is displaceable upon the worm shaft, preventing a release of the clutch members at a slight overload but permitting a release in the event of a heavy load, and permitting a release by hand at any time.

1,829,250. NONREADABLE CARBON PAPER. CRAWFORD J. WALKER, Indianapolis, Ind., assignor to The Protectu Corporation, Indianapolis, Ind. Filed June 28, 1930. Serial No. 463,010. 7 Claims. (Cl. 282—28.)



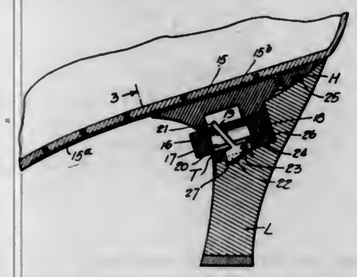
1. A paper for preventing the reading of characters impressed thereon including a transferring medium on one side, and on the other a plurality of lines produced by horizontal and vertical rows of upper case letters of an alphabet, the letters in each row being adjacent the letters of the next row.

1,829,251. ENGINE MOUNTING FOR AUTOMOTIVE VEHICLES. LOUIS E. WHITTINGTON and EDWIN A. TUTHILL, Silvis, Ill. Filed Aug. 18, 1930. Serial No. 475,918. 3 Claims. (Cl. 180—64.)



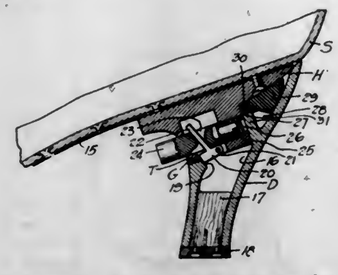
1. In a motor vehicle having a primary frame and front axle, a secondary engine frame loosely mounted within the primary frame and supported at its frontal end upon the axle of the vehicle through leaf springs, and resilient connections between the corners of the secondary frame and primary frame, the said resilient connections at the frontal corners of the secondary frame being loosely mounted on the primary frame whereby to permit lateral movement of the frontal end of the said secondary frame.

1,829,252. DETACHABLE HEEL. JOSEPH D. ZUBIA and MANUEL S. GUTIERREZ, Los Angeles, Calif. Filed Apr. 21, 1930. Serial No. 446,087. 4 Claims. (Cl. 36—42.)



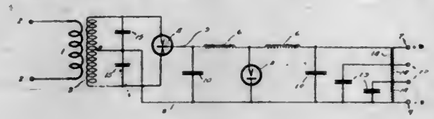
1. In combination, a shoe, a head secured to the shoe, a tongue on the head, a heel having a groove therein for receiving the tongue, a keeper on the heel within the groove, a latch on the tongue yieldably urged to a projected position for engaging the keeper to secure the tongue against removal from the groove, and a plunger movable in the tongue to retract the latch out of engagement with the keeper.

1,829,253. DETACHABLE SHOE HEEL. JOSEPH D. ZUBIA and MANUEL S. GUTIÉRREZ, Los Angeles, Calif. Filed June 10, 1930. Serial No. 460,222. 6 Claims. (Cl. 36—42.)



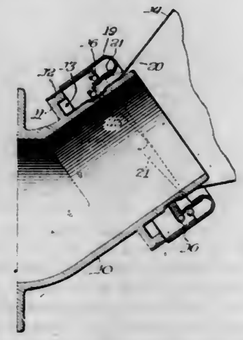
1. In combination, a shoe, a heel, coacting means on the heel and shoe for detachably securing the heel to the shoe, a rubber body carried by the heel so as to be compressed when the heel is attached to the shoe to prevent transverse movement of the heel on the shoe, and an extension on the rubber body compressible to prevent longitudinal movement of the heel on the shoe.

1,829,254. REGULATING DEVICE. ABRAHAM B. ASCH, New York, N. Y. Filed Apr. 5, 1927. Serial No. 181,143. 1 Claim. (Cl. 178—44.)



The combination of a circuit containing choke coils in series and condensers in parallel for smoothing out fluctuating current in said circuit, and a gas tube connected across the circuit between said coils to regulate the output of the circuit.

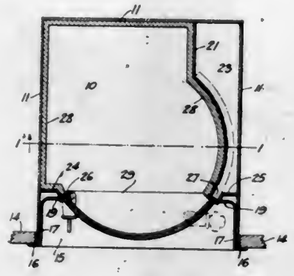
1,829,255. SUCTION CLEANER. HARRY R. BALLOU, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Feb. 7, 1929. Serial No. 338,290. 7 Claims. (Cl. 285—177.)



1. In a retaining and attaching means for suction cleaner dust bags, the combination with a neck, a ring rotatably mounted upon and spaced from said neck, and

yieldable means controlled by the operation of said ring for forming yielding bag securing means said ring having means thereon for positively deflecting said yielding means away from said neck.

1,829,256. TABERNACLE SAFE. BERNARD A. BENZIGER, South Orange, N. J. Filed Feb. 28, 1929. Serial No. 343,322. 1 Claim. (Cl. 312—189.)



A tabernacle safe comprising an open faced casing, a horizontal partition within said casing parallel to and spaced from the top wall of the casing, a vertical partition within the casing spaced from a side wall thereof and forming a chamber therewith in communication with said first mentioned chamber, a part of said vertical partition being arcuate in horizontal cross section, a slidable arcuate door, said arcuate portion of the partition serving as a guide for said door, an arm rotatably positioned within said first chamber and attached to said door and carrying the weight thereof, an inwardly extending ledge mounted on said side wall adjacent the free edge of said vertical partition and forming therewith a guide for the door, and a ledge on the opposite side wall forming a jamb for the door.

1,829,257. COMBINED LEVEL AND INCLINOMETER. ALFRED EDGNA BEST and JOHN CHRISTIAN ZOOK, Conshohocken, Pa., assignors of one-half to John Kearns and E. Arnold Forrest, Conshohocken, Pa. Filed Feb. 28, 1929. Serial No. 343,314. 4 Claims. (Cl. 33—213.)



4. In a device of the class described, an elongated body portion I-shaped in cross section and having the longitudinal side edges parallel to each other, means adjacent the ends of the body portion for indicating vertical parallelism of surfaces with respect to the longitudinal side edges, a single means in the body portion equidistant from the ends and adjacent one of the longitudinal sides thereof for indicating horizontal parallelism of surfaces with respect to the longitudinal side edges of the body portion, said body portion being provided with an arcuate slot intermediate the ends and the longitudinal side edges thereof, a shuttle member slidably mounted in the slot, means on the shuttle member for detachably fixing said shuttle at any desired point on the slot, said body portion being provided with markings adjacent the said slot, and means on said shuttle and cooperating with said markings to indicate the inclination of said body portion, said arcuate slot being formed with a twelve inch radius, and said last-mentioned means including a bubble tube and a pointer.

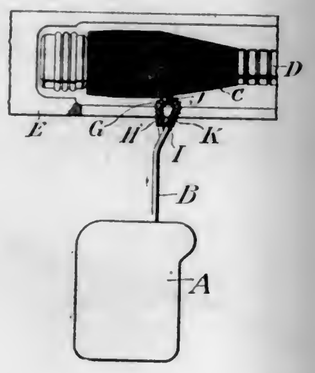
1,829,258. PROCESS OF RETARDING THE SETTING OF CASEIN GLUE AND DRY GLUE BASE FOR USE IN SUCH PROCESSES. LAWRENCE BRADSHAW and HENRY V. DUNHAM, Bainbridge, N. Y., assignors, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1926. Serial No. 99,423. 12 Claims. (Cl. 87—17.)

1. A new dry base for use in making an adhesive material comprising casein as a substantial ingredient together with a substantial amount of a protein-rich seed meal, incorporated with an alkaline earth oxide and a water-soluble alkali metal salt which reacts alkaline to litmus, and which salt is capable of reacting in the presence of water, with such alkaline earth oxide, which base is adapted upon being subsequently mixed with sufficient water, to produce a fluid adhesive of spreadable consistency.

1,829,259. PROCESS OF MAKING SLOW-SETTING CASEIN GLUE, AND DRY BASE FOR USE IN SUCH PROCESSES. LAWRENCE BRADSHAW and HENRY V. DUNHAM, Bainbridge, N. Y., assignors, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y., a Corporation of Delaware. Filed May 19, 1926. Serial No. 110,298. 13 Claims. (Cl. 87—17.)

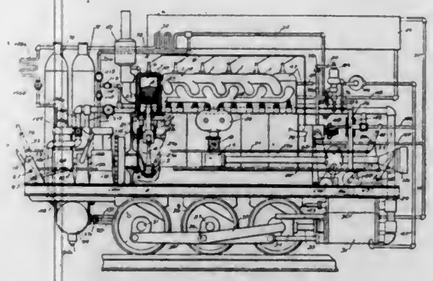
1. A dry glue base containing a quantity of casein, a smaller quantity of soybean meal and an alkaline earth oxide together with a water-soluble alkali metal salt which can react with lime in the presence of water to form caustic alkali and a precipitate, the said salt and alkaline earth oxide being in amounts sufficient for the reaction products and water to dissolve the casein and the proteids of the soybean meal, such base being adapted, upon mixing with water, to form an adhesive, which adhesive will have a longer period of workable viscosity than would a similar composition without the soybean meal and with the casein correspondingly increased.

1,829,260. WEFT FEELER FOR LOOMS. CARL D. BROWN, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 31, 1929. Serial No. 367,470. 5 Claims. (Cl. 139—287.)



1. A side slipping weft feeler looped at its rear end and having a coiled resilient wire surrounding all portions of the loop which are presented to the weft, each convolution of the wire being capable of independently yielding sidewise and frontwardly under the impact of the weft and the forward yielding being limited by the loop.

1,829,261. POWER TRANSMITTING MECHANISM. ROBERT EARLL BRUCKNER, Hastings-on-Hudson, N. Y. Filed Sept. 22, 1926. Serial No. 137,158. 22 Claims. (Cl. 60—19.)



2. In a power transmitting apparatus, the combination of an internal combustion engine; a compressor driven by the engine; a motor; a normally closed pressure circuit between the compressor and motor, said compressor having a clearance creating a constant compressor torque throughout a flange of variation of motor torque and within the maximum torque of the engine; means for maintaining said pressure above atmospheric pressure; and means controlling the speed of the engine to control the speed of the motor.

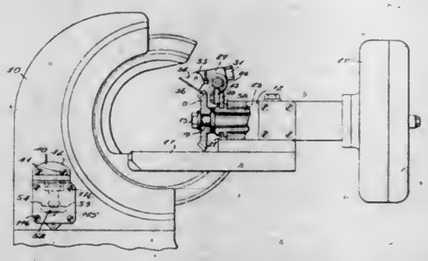
17. In a power transmitting apparatus, the combination of a combustion engine; a compressor driven by the engine; a gaseous fluid actuated motor; and a closed circuit between the compressor and the motor; means maintaining a pressure above atmospheric on the low pressure side of the circuit, said engine and compressor being directly connected and the intake stroke of the compressor being directly opposed to a compression stroke of the engine whereby the pressure of the low pressure side of the circuit operates to compress the combustion fluid.

1,829,262. METHOD OF ORNAMENTING SURFACES. ALICE J. CADE, Luray, Kans. Filed Dec. 28, 1929. Serial No. 417,146. 1 Claim. (Cl. 41—24.)



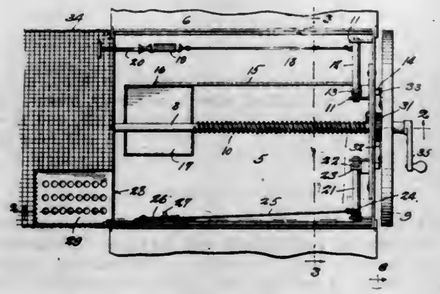
A method of forming a surface ornamenting material, which consists in thoroughly wetting a paper body, then working and crushing the same after partial drying thereof, then completely drying the paper, then applying to the dried paper a heavy coating of a paste of a character to become hard upon drying out, then applying the paper and paste to a suitable base and working the same into a desired design, then partly drying the paste soaked paper, then applying suitable coloring materials to the partly dried surface, then thoroughly drying the same, and finally coating the body with a moisture proof substance.

1,829,263. GEAR CUTTING MACHINE. LEONARD O. CARLSEN, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Dec. 15, 1930. Serial No. 502,475. 6 Claims. (Cl. 90—1.)



1. In a machine for producing gears, the combination with a work spindle and drive means for the work spindle, of a stock-dividing gauge adapted to be positioned on the work spindle for locating a gear blank angularly on the spindle, and a device normally preventing operation of the drive means but adapted to be rendered inoperative by the stock-dividing gauge when said gauge is brought into engagement therewith, said device being so located on the machine that the stock-dividing gauge must be removed from the work spindle in order to be brought into engagement with the device.

1,829,264. ANIMAL TRAP. BOWEN E. CLARKSON, Kingstree, S. C. Filed Oct. 1, 1930. Serial No. 485,781. 4 Claims. (Cl. 43—73.)

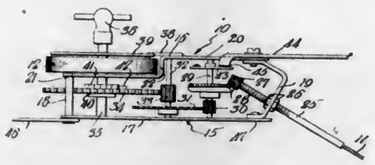


1. A trap comprising a body portion, a cage communicating with the body portion at one end thereof, a rotary closure operating at one end of the body portion, means for rotating the closure, stops on the closure, sliding pins lying in the path of travel of the stops for stopping the closure in its open or closed position, means controlled by the action of an animal passing into the body portion for operating one of the sliding pins to release the closure to allow the closure to move to its closed position, and means controlled by the action of the animal passing into the cage, for releasing the closure to allow the closure to move to its open position.

1,829,265. SPRING MOTOR. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed June 19, 1931. Serial No. 545,392. 6 Claims. (Cl. 185—45.)

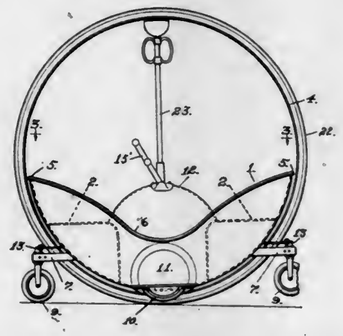
1. A spring motor comprising a frame having upper and lower plates, a shaft carried by said plates, one end of which shaft projects beyond the upper plate, a coil

spring mounted above the upper plate on the projecting portion of the shaft, a second shaft, and a train of gear-



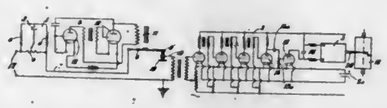
ing mounted between the plates and including a gear driven by the first shaft by which the impulse of the spring is transmitted to the second shaft.

1,829,266. AMUSEMENT DEVICE. WILLIAM F. DREW and JAMES W. MARTINET, Los Angeles, Calif. Filed Sept. 26, 1928. Serial No. 308,548. 11 Claims. (Cl. 208—1.)



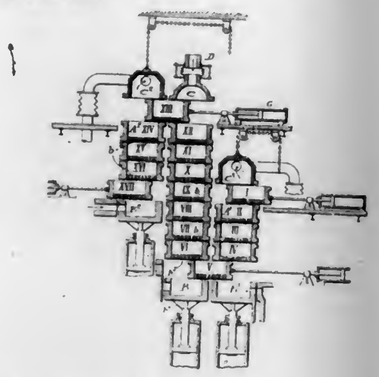
1. In an occupant propelled vehicle, a hoop, a body within said hoop, seats secured to said body, means, operable by said occupant, to propel said vehicle, and means on said body to maintain said vehicle and said hoop in a substantially vertical position while said vehicle is in motion.

1,829,267. APPARATUS FOR RECORDING ELECTRIC CURRENTS PRODUCED BY LIVING ORGANISMS. PIERRE DUCHOSAL, Pregny-Village, Switzerland, assignor of one-half to Robert Luthi, Geneva, Switzerland. Filed Jan. 10, 1930, Serial No. 419,997, and in Switzerland Jan. 12, 1929. 2 Claims. (Cl. 234—1.5.)



1. An apparatus for recording electric currents produced by living organisms, comprising a polarizer provided with terminals, electrodes adapted to make contact with the organism of which the currents are to be recorded and to be connected with said terminals, an electromagnet, a ticker having a vibrating blade, a second vibrating blade having the same period of oscillation as said first mentioned blade and adapted to be acted upon by said electromagnet and to control the circuit thereof, an insulating member connecting said two blades, an amplifier having triode lamps, a rectifying device, and an oscillograph adapted to record the currents produced by said organism.

1,829,268. SHAFT FURNACE FOR TREATING SOLID MATERIALS WITH GASES. EMIL EDWIN, Trondhjem, Norway, assignor to Norsk Staal Elektrisk-Gas-Reduktion, Oslo, Norway. Filed Aug. 17, 1928, Serial No. 300,293, and in Norway Aug. 22, 1927. 11 Claims. (Cl. 263—36.)



1. In a metallurgical shaft furnace for treatment of ores with reaction gases, a reaction chamber built up of a plurality of superimposed ore containers having perforated bottoms, means to supply a reducing gas to one end of the shaft and discharge gaseous products of reaction at the other end.

1,829,269. LINING FOR HATS. JESSE H. EPSTEIN, Larchmont, N. Y. Filed Nov. 13, 1929. Serial No. 406,806. 2 Claims. (Cl. 139—384.)



1. As a new article of manufacture, a hat lining ribbon woven in a single width of three different weaves extending lengthwise of the ribbon, one part extending along one edge being of heavy weave, an intermediate part of lighter weave, and a third part woven in tubular form extending along the other edge of the ribbon.

1,829,270. PHYSIOLOGICAL MUCIN PREPARATION. SAMUEL J. FOGELSON, Chicago, Ill. Filed Dec. 18, 1930. Serial No. 503,236. 10 Claims. (Cl. 167—74.)

1. A physiologically active gastric mucin preparation comprising a substantially neutral alkali metal compound of the said mucin.

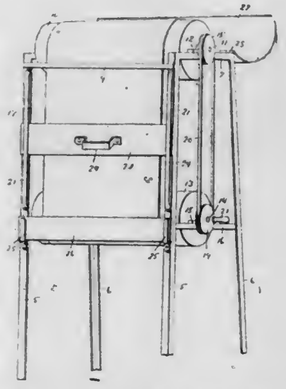
1,829,271. PICKLE TONGS. WILLIAM H. FREYE, Springfield, Ohio. Filed Jan. 31, 1931. Serial No. 512,727. 3 Claims. (Cl. 294—99.)



1. Tongs comprising elastic legs arranged in forwardly divergent relation and increasing in thickness and width from their transverse centers towards their ends, a rivet

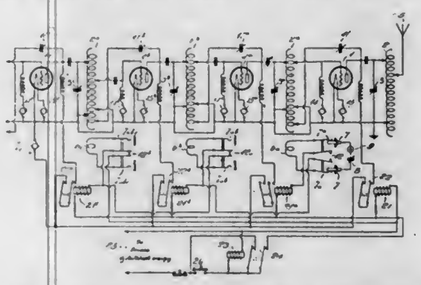
passing through the rear ends of the legs to secure them together, a wedge positioned between the rear ends of the legs and secured in place by the rivet to maintain the legs in said relation, and prongs carried by the front ends of the legs and extending therefrom at right angles to their inner or opposing surfaces.

1,829,272. RECORDER. ORA F. FULLER, South Bend, Ind. Filed Dec. 18, 1929. Serial No. 415,084. 1 Claim. (Cl. 281—7.)



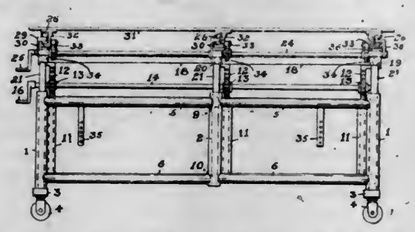
A recording device comprising a stand, upper and lower rollers journaled in the stand, a backing board mounted in the stand tangentially between said rollers, a data sheet movable over the backing board and having its opposite ends secured to said rollers, manually controlled means for simultaneously rotating said rollers to feed said record across said board, spaced longitudinally extending guides secured to said stand adjacent opposite sides of said backing board, a sliding entry-finder extending transversely of said backing board with its opposite ends constrained to slide within said guides, a transverse roller shielding member extending across said stand adjacent the lower end of said backing board and in front of the lowermost roller, and a cover shield hingedly secured to said frame at the upper end thereof and conformably fitting over the upper portion of the uppermost roller.

1,829,273. NEUTRALIZING SYSTEM FOR RADIO TRANSMITTERS. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,989. 10 Claims. (Cl. 179—171.)



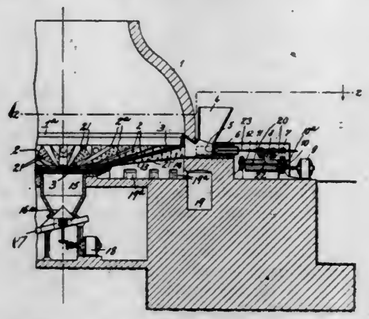
1. A method for neutralizing radio transmitters employing a multiplicity of coupled thermionic tube circuits comprising the steps of adjusting the frequency characteristics of the input circuit of a selected tube, simultaneously deenergizing the anode supply circuit of the selected tube, connecting a circuit to said input or output circuit for determining the relative energy therein, adjusting the frequency characteristics of the input and output circuits to obtain a maximum indication of energy, adjusting the relative capacity between said input and output circuits to obtain a relatively minimum value of energy in said output circuit restoring the anode supply circuit and repeating the above mentioned steps with each of said multiplicity of coupled thermionic tubes.

1,829,274. PATIENT'S TRANSFER CARRIAGE. MYLES J. GILROY, Wilkinsburg, Pa. Filed Feb. 11, 1929. Serial No. 338,938. 2 Claims. (Cl. 296—20.)



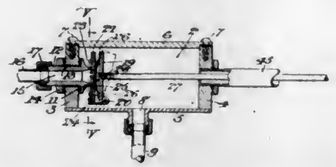
1. In a transfer stretcher, a frame having rigid transverse bars supported at their ends, transverse channel members spaced above said transverse bars, a rigid support for one end of each channel member fixed to the corresponding end of the respective cross bar, a bracket connecting each channel member with a respective cross bar adjacent their remaining ends, the several brackets having alined journals formed therein, a stretcher including transversely extending C-bars embracing said channels and slidable therealong, racks each secured to the web of a respective C-bar and facing downwardly, a shaft extending through said journals, gears on said shaft meshing with respective racks, and a crank on one end of said shaft.

1,829,275. AUTOMATIC STOKER FOR CIRCULAR GRATES. HANS GLEICHMANN, Falkenhain, near Spandau, and WILHELM GUMZ, Berlin-Charlottenburg, Germany, assignors to Siemens-Schuckertwerke, Gesellschaft mit beschrankter Haftung, in Liquidation, Berlin-Siemensstadt, Germany, a Corporation of Germany. Original application filed Oct. 7, 1926. Serial No. 140,188. Divided and this application filed Sept. 20, 1929, Serial No. 393,968, and in Germany May 3, 1926. 5 Claims. (Cl. 110—44.)



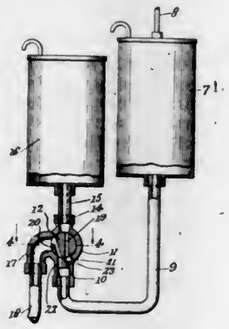
1. An automatic stoker device for furnaces or the like, comprising a circular grate divided radially into a plurality of retorts, means for feeding fuel to said retorts including a radially disposed piston for each retort adapted to push the fuel, supplied, in the direction of the grate center, a circular cam rail rotatably disposed around said grate, and suitable connection between said cam rail and said pistons to reciprocate the latter when said cam rail is rotated around said grate.

1,829,276. DEVICE FOR CONTROLLING THE GASOLINE SUPPLY TO INTERNAL COMBUSTION ENGINES. GEORGE L. GUTHMULLER, Jersey City Heights, N. J., assignor of one-third to Frederick R. Follmer, River Vale, N. J., and one-third to Emile Peter Follmer, Jersey City Heights, N. J. Filed Dec. 30, 1929. Serial No. 417,402. 4 Claims. (Cl. 251—125.)



1. A valve for controlling the supply of gasoline to an internal combustion engine, comprising a chamber having an inlet and outlet for the passage of gasoline through said chamber, a valve seat adjustably secured in said outlet, a flat valve hinged in the chamber in position to move toward and away from said seat, a removable face piece loosely mounted on said valve and arranged to coact with the seat, a resilient means interposed between the valve and face piece, a rod pivoted to the valve and movable longitudinally in the chamber, and a spring actuated means connected with the rod for moving the valve and face piece away from its seat, said means being manually controlled to close the valve on the seat.

1,829,277. GASOLINE RESERVE SUPPLY DEVICE. FREDERICK ALBERT HAASE and AUGUST H. WEWERKA, Baltimore, Md. Filed Sept. 5, 1929. Serial No. 390,611. 2 Claims. (Cl. 158—46.5.)



1. In combination with a fuel line, a reserve tank, a valve casing in said fuel line having an inlet branch with a plurality of passages, an outlet branch and a branch to the reserve tank, a check valve in one of said passages opening toward the tank, and a rotary valve in the casing having a pair of ports, said ports being disposed on opposite sides of the center of the valve, said valve adapted in one position to place the check valve passage in communication with the tank and to open the fuel line and in a subsequent position to close the fuel line and open the tank to the carburetor.

1,829,278. BUCKLE. MICHAEL HAWIE, Greens Farms, Conn. Filed June 19, 1930. Serial No. 462,235. 1 Claim. (Cl. 24—186.)

A one piece buckle for attachment and threading of a web, comprising a relatively narrow flat upper transverse bar portion and a wider lower bar portion separated by a slot, said lower bar portion having a forwardly disposed web gripping transverse edge and having at its other transverse edge a web attaching lip bendable toward the rear surface of said lower bar, end flanges connecting and disposed rearwardly at a right angle to said bar portions and enclosing the edges of the web



attaching lip, the end of a length of web adapted to be gripped between said lower bar portion and said lip, and said web adapted to be passed through said slot beneath said upper bar.

1,829,279. BUCKLE. MICHAEL HAWIE, Greens Farms, Conn. Filed Oct. 7, 1930. Serial No. 486,891. 2 Claims. (Cl. 24—163.)

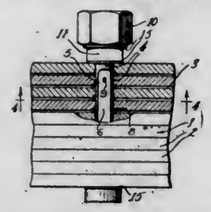


1. A buckle for attachment and threading of a web, comprising a sheet metal member and an attached wire frame member forming a round upper transverse bar having depending and inwardly disposed aligned end portions, a lower bar portion formed of the sheet metal member bent longitudinally to close tightly around the aligned wire end portions forming a relatively long front bar member and a relatively short rear clamping member, the two said members being disposed upward and secured against opposite faces of the side portions of the wire frame member and both members having forwardly disposed upper gripping edges, there being a transverse opening between the round upper transverse bar and the lower sheet metal bar portion, the rear member forming a web attaching member bendable toward the rear surface of said front bar member and against the wire frame member, the end of a length of webbing adapted to be gripped to the rear side of the buckle between said longer bar member and said attaching member and thereupon looped downwardly over said attaching member and forwardly and upwardly over said longer bar and its gripping edge and from front to rear through said opening beneath said round upper bar.

1,829,280. VEHICLE SPRING. MANLEY P. HEMPHILL, Los Angeles, Calif. Filed May 28, 1928. Serial No. 281,258. 6 Claims. (Cl. 267—50.)

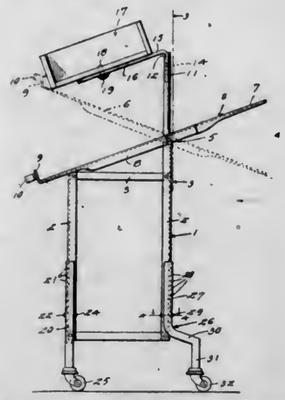
2. A spring having a plurality of leaves with aligning bolt openings, a bolt fitting in said aligned openings so as to center and align the leaves of the spring, said bolt having a duct on its side face and said leaves having annular grooves pressed into the faces of the leaves

at the edges of the openings and having longitudinal grooves in their faces communicating with the said grooves,



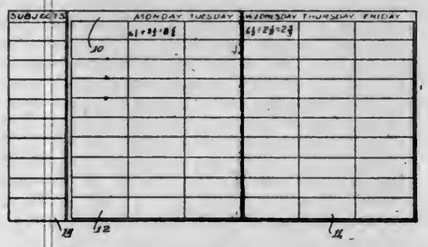
said bolt having a passage for the lubricant also communicating with said first-named duct, with means for connecting a grease pump to said passage.

1,829,281. PACKING STAND. DENNIE B. HENLEY, Yakima, Wash. Filed June 11, 1929. Serial No. 370,141. 7 Claims. (Cl. 226—129.)



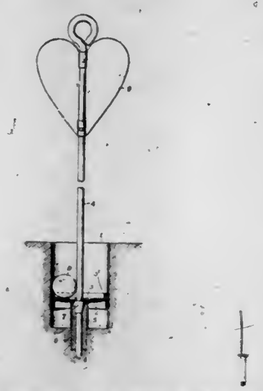
1. A packing stand of the character described comprising a base structure having a pair of upright members projecting a substantial distance above the main portion of the base, a platform between and pivotally attached at opposite sides to said extended upright members and resting upon the base to position at an inclination, and means for maintaining a receptacle upon the platform.

1,829,282. DAILY PLAN BOOK. EUGENE F. IRWIN, Medford, Mass. Filed July 3, 1929. Serial No. 375,771. 2 Claims. (Cl. 283—63.)



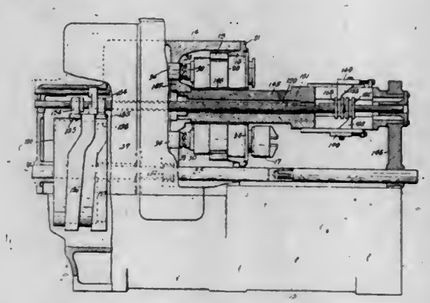
1. A planning book comprising a cover, pages secured therein and having their upper edge extending below the upper edge of the cover, said pages being provided with spaced vertical lines to form a plurality of columns, said cover being provided with written indicia above said columns and a vacant column at the outer edge of each page and being provided with intercepting horizontal lines to form a plurality of subject columns, and a flap formed integrally with one edge of said cover, and adapted to fold inwardly, said flap being provided with a plurality of horizontal lines on the surface which is uppermost when the flap is folded inwardly adapted to register with the horizontal lines of said pages forming columns for the subjects, said flap being provided with indicia between said horizontal lines and said flap being adapted to overlie the said vacant vertical column to conceal any data thereon and to serve as a book mark when folded inwardly.

1,829,283. GOLF CUP. FREDERIC E. KIP, Montclair, N. J. Filed Nov. 7, 1929. Serial No. 405,401. 1 Claim. (Cl. 273—34.)



In combination, a putting-cup, a member secured to the inner wall thereof, a staff and a pan secured thereto, said member constituting a seat for said pan and having a depending cylindrical flange extending to substantially the plane of the lower end of the cup, a collar on said staff below the pan, and a bushing within said flange, said bushing having a seat to receive the staff collar.

1,829,284. CHUCKING MACHINE. ARTHUR J. LEWIS, Stratford, Conn., assignor to The Baird Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 14, 1929. Serial No. 362,974. 22 Claims. (Cl. 29—38.)

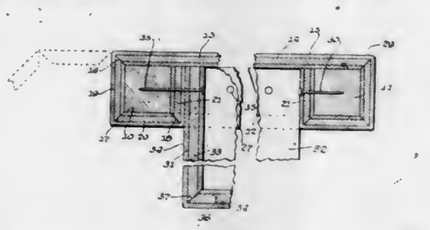


1. In a machine of the class described, a frame having an opening therein, a bearing member having an extension removably mounted in said frame opening, said member having a shoulder to engage a shoulder on the frame to position the member, a turret rotatably mounted in said member, a central support passing through the turret and having a central bearing therefor, the central bearing and the external bearing member forming the sole support for the turret, a plurality of work holders mounted in said turret, and means for rotating the turret with a step by step movement.

14. In a machine of the character described, a frame, a rotatable turret in the frame, work spindles in the turret,

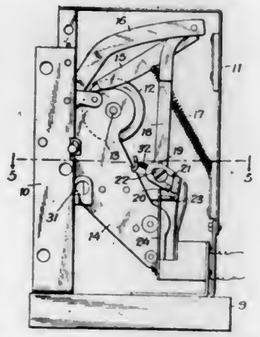
a plurality of driving spindles in alignment with the work spindles, supporting bearing sleeves for the driving spindles mounted to slide longitudinally in the frame, complementary clutch members on the work and driving spindles, springs tending to shift the sleeves toward the work spindles, lugs on said sleeves, a slidable member having a flange to engage said lugs, a lever for sliding said member, a control shaft, means operated by said shaft to shift said lever and indexing means for the turret controlled by said shaft.

1,829,285. COUNTER CONSTRUCTION. GEORGE K. LEWIS, Chicago, Ill., assignor to Met-L-Wood Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1928. Serial No. 270,222. 4 Claims. (Cl. 45—140.)



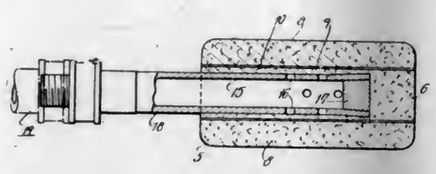
1. In a structure of the character described, the combination with top frame members each polygonal in cross section; of a composite, horizontally disposed panel, comprising laminations of fibrous material and steel, the fibrous material being cut out at intervals to permit bending of the steel lamination, the sections defined by the cut-out portions being wrapped about each polygonal frame member, and the sections corresponding to the sides of each member; supporting means including vertically disposed walls, each comprising a composite panel of fibrous material and steel for supporting the top panel and frame members in elevated position; and securing elements extending through the upper edges of said vertically disposed walls, through the end sections of the top panel and into said frame members, whereby said securing elements simultaneously secure the enumerated parts in position.

1,829,286. CONTROL DEVICE FOR RECEIPT PRINTING MACHINE. WILLIAM E. LONG, New York, N. Y. Filed Nov. 6, 1929. Serial No. 405,264. 4 Claims. (Cl. 242—57.)



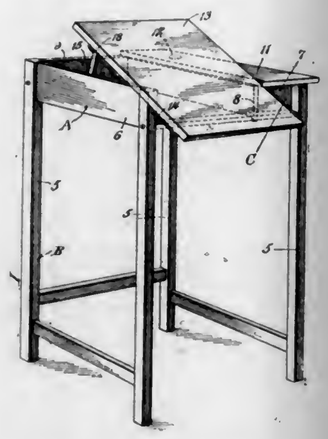
1. The combination with a machine including a reel, a shiftable plunger, and an electric circuit closer, of a control apparatus therefor comprising a locking bar for the plunger, a reel follower, an arm carried by the reel follower, and a device carried by the arm having portions adapted to simultaneously engage with and break the circuit closer and to shift the plunger locking bar, for the purpose set forth.

1,829,287. CLEANING DEVICE. DANIEL M. LOVETT, Trenton, N. J. Filed May 22, 1930. Serial No. 454,687. 1 Claim. (Cl. 15—130.)



A cleaning device of the character described comprising a main body portion of sponge rubber, supplemental layers of sponge rubber secured to opposite sides of said main body portion, a perforated sheet of rubber between and securing said supplemental layers to the main body portion, and means for supplying cleaning fluid to said main body portion, said last mentioned means comprising a nozzle mounted in said main body portion, and means comprising a valve associated with said nozzle for controlling the supply of cleaning fluid to said nozzle.

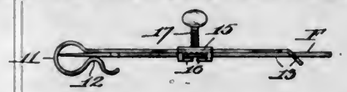
1,829,288. DRAFTING TABLE. EDWARD A. MAY, Scranton, Pa., assignor to Technical Supply Company, Scranton, Pa., a Corporation of New Jersey. Filed Nov. 28, 1930. Serial No. 498,860. 6 Claims. (Cl. 45—109.)



1. In a drafting table, the combination with a top including spaced vertical walls, a drafting board movably supported on said walls, and link connections between the walls and board whereby the latter may be swung forwardly at an inclination to rest against the front of the top and to be retained at said inclination, said link connections including a pair of front and rear links connecting the board and each wall, the rear links being longer than the front links and normally extending forwardly from their pivotal connections with the board, and all of the links being swingable upwardly and backwardly past the vertical planes containing the pivotal connections between the links and the walls.

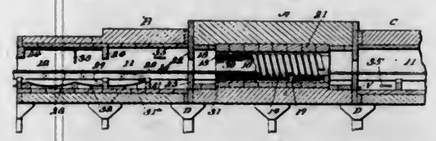
1,829,289. LAWN MOWER SHARPENER. DONALD H. MCMURTRY, Los Angeles, Calif. Filed Oct. 9, 1928. Serial No. 311,282. 7 Claims. (Cl. 76—82.1.)

1. The combination with a standard double face flat file, of a bar adapted to be applied to and overlie said file, a bearing on one end of said bar, the opposite end of the bar being provided with an aperture for the reception of said file, a loop adjustably mounted on said bar and file, the lower plate of which loop is provided with an opening



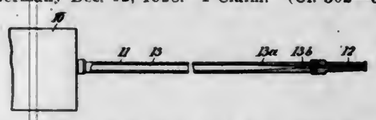
for the reception of a lawn mower blade, and means for locking said loop to said bar and file in differently adjusted positions.

1,829,290. ELECTRIC KILN. JOSIAH L. MERRILL, Media, Pa. Filed June 5, 1929. Serial No. 368,678. 15 Claims. (Cl. 25—142.)



1. A kiln of the character described comprising a middle muffle section formed with two independent parallel muffle chambers, and two independent end sections connected to the opposite ends of said middle section, each end section having a single combined preheating and cooling chamber communicating with the adjacent ends of both muffle chambers, means supporting said muffle chambers so that their ends are free to expand and contract, and means for causing the ware to travel in opposite directions through the kiln, so that cold ware travelling in one direction toward a muffle chamber is preheated by radiation from cooling ware leaving the other muffle chamber.

1,829,291. CONDUIT FOR PROJECTING SAND. OTTO NAGEL and WILHELM KAEMPFER, Durlach, Germany, assignors to Badische Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff, Durlach, Bade, Germany. Filed Mar. 2, 1929, Serial No. 344,082, and in Germany Dec. 12, 1928. 1 Claim. (Cl. 302—59.)

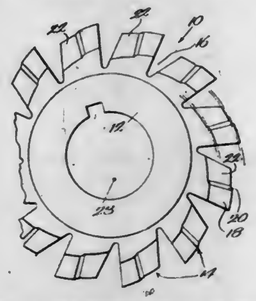


In a device for projecting sand, the combination therewith, of a sand chest and a nozzle having a uniform bore, of a conduit connected to establish communication from the chest to the nozzle and provided with a uniform bore at the sand chest end and tapered to its smallest diameter corresponding with the bore of the nozzle at the nozzle end, whereby sand is carried by air under pressure from said sand chest through said uniform and tapered bore of the conduit until it has reached its greatest velocity at the nozzle end.

1,829,292. HOB CUTTER AND METHOD OF MAKING SAME. CARL G. OLSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed May 3, 1929. Serial No. 360,136. 10 Claims. (Cl. 29—103.)

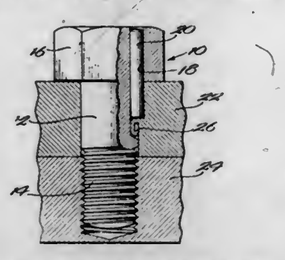
1. In a rotary cutter of the class described, a body portion, and a plurality of relieved cutting teeth thereon, the forward peripheral surface of each tooth being ground and the rearward portion of each tooth being unground, said unground rearward portion having the same degree of eccentricity as the forward ground portion, the thickness of the ground portion being greater than the thickness of the unground portion.

6. The method of relieving cutter teeth which consists in rotating the cutter, applying a cutting tool to the teeth and causing relative movement between the cutter and the tool so as to cause the forward peripheral portions of a tooth to be relieved with a given degree of eccentricity, radially shifting the relative positions of the cutter and tool and then imparting a relief to the rearward portion



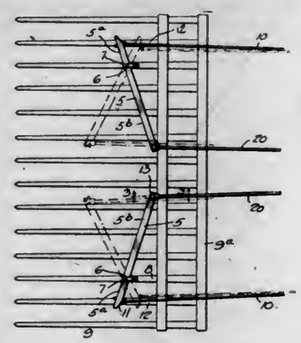
of the tooth which has substantially the same degree of eccentricity as the relief imparted to the forward portion of the tooth.

1,829,293. SCREW LOCK. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed May 17, 1929. Serial No. 363,731. 6 Claims. (Cl. 151—32.)



1. A bolt having a threaded shank and a head, said bolt having an eccentrically positioned recess therein extending through the head and terminating within a peripheral section of the shank, whereby access to the work is obtained when the bolt has been positioned against the work so as to enable a portion of said work to be displaced into the portion of said recess within the shank to thereby secure said bolt and work against relative rotation.

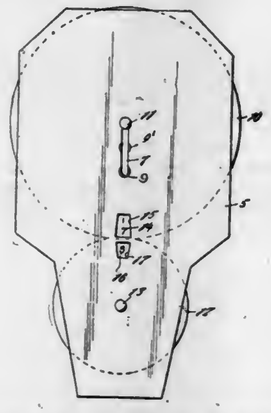
1,829,294. AGRICULTURAL IMPLEMENT. WILLIAM H. PAWSON, Hemet, Calif. Filed Oct. 23, 1929. Serial No. 401,814. 5 Claims. (Cl. 56—395.)



1. The combination, with a push rake, of a load ejector therefor consisting of a plurality of identical ejector levers pivoted adjacent their outer ends to the opposite sides of the rake so that each lever is provided with a long end

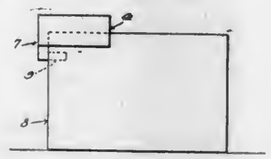
and a short end, the said levers being angularly related to one another so that a line drawn longitudinally through one lever will intersect a line drawn longitudinally through the other lever at a point about medially of the rake, a vertical head carried by and extending from the long end of each ejector lever, a balancing member extending rearwardly from each ejector lever and adapted to move with the head and over a portion of the rake, and a draft line extending from the short end of each lever.

1,829,295. DEVICE FOR TEACHING ARITHMETIC. FLOYD OTIS PHAGANS, Ryan, Okla. Filed Aug. 27, 1929. Serial No. 388,740. 2 Claims. (Cl. 35—2.)



1. In a device of the class described, an elongated plate, a relatively large disc rotatable and slidable on the plate adjacent one end of the plate, a relatively smaller disc rotatable on the plate adjacent the other end of the plate, the first mentioned disc having a plurality of columns of numbers radially disposed thereon, the columns being arranged in annular rows the second mentioned disc having the total of the respective columns arranged thereon in a circular manner, said plate being provided with a pair of sight openings, said first mentioned disc being adapted for rotation for selectively displaying to view, through one of said openings, a predetermined column of numbers on said disc and by sliding the disc a column in any one of the rows can be brought opposite the window or opening, and said second mentioned disc adapted to be rotated for selectively displaying certain of the totals thereon to view, through the other of said openings, and identifying means on the respective discs for indicating whether or not the number displayed is the total for the column of numbers displayed through the first mentioned opening.

1,829,296. BARREL FILLING DEVICE. REX R. RANDALL, Gibbon, Nebr. Filed July 8, 1930. Serial No. 466,500. 1 Claim. (Cl. 226—38.)



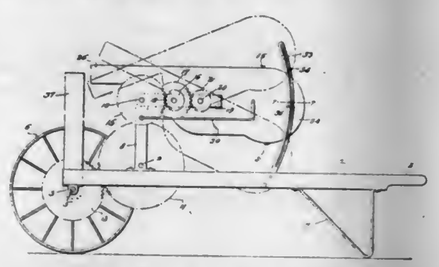
In a barrel filler of the class described, a substantially rectangular longitudinally elongated pan having an upwardly directed V-shaped bottom, a depending substantially V-shaped overflow receptacle at one end of the pan provided at its apex portion with a port and having an integral spout attached thereto, the V-shaped bottom of the pan constituting a rest for the filler on the barrel, and the receptacle portion constituting an abutment for engagement with the adjacent head of the barrel to aid in maintenance of the filler on the barrel.

1,829,297. DEVICE FOR DRAWING CURTAINS AND THE LIKE. AUGUST RAPP, Iserlohn, Germany. Filed Feb. 4, 1931, Serial No. 513,389, and in Germany Dec. 6, 1929. 6 Claims. (Cl. 156—20.)



4. In a device for drawing curtains and the like, a hollow rod having a slit along its underside, holders for the curtains running inside the hollow rod, a carrier rail having a vertical web connected to said hollow rod by a horizontal flange and having a further horizontal flange at its upper end, the cross section of said runner conforming to the cross section of said hollow rod and of said carrier rail, a runner slidable along said hollow rod, said runner engaging underneath said upper flange of said carrier rail, and a curtain holder and a tongue for attaching a cord arranged on said runner.

1,829,298. PLANT SPRAYING APPARATUS. JAMES E. RIMEDIO, Dover, Ohio. Filed Oct. 14, 1929. Serial No. 399,511. 4 Claims. (Cl. 43—148.)



1. In a plant spraying apparatus and in combination, a blower casing having eduction means, a chamber arranged adjacent said blower casing, a substantially horizontal tube disposed in said chamber for conducting substance to be sprayed from the chamber to the blower casing, the said tube communicating at its forward end with the interior of the blower casing and having its upper portion removed adjacent to its rear end a blower in the blower casing, reciprocatory means in said tube for forcing substance to be sprayed from said chamber into said blower casing, and means for simultaneously operating said blower and said reciprocatory means.

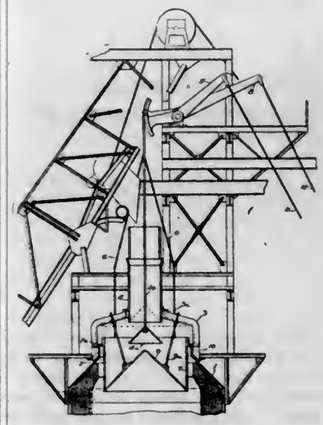
1,829,299. WOVEN FABRIC. CHARLES ROSENSTEIN, Paterson, N. J., assignor to Rosenstein Bros. & Hook, New York, N. Y., a Corporation of New Jersey. Filed Oct. 25, 1929. Serial No. 402,481. 3 Claims. (Cl. 139—420.)



1. A textile fabric including a body of flat, ribbonlike composite threads of artificial cellulose and fiber, and

stiffening threads interlaced with threads of said body at suitable intervals and extending substantially straight through the fabric.

1,829,300. MEANS FOR CHARGING BLAST FURNACES AND THE LIKE. CLYDE M. RUTTER, Massillon, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Oct. 2, 1929. Serial No. 396,687. 3 Claims. (Cl. 214—36.)



1. The combination with a blast furnace of a seal mounted thereon consisting of laminations of thin sheet metal.

1,829,301. COMBINATION CLOTHES HANGER. ALLEN L. SACKIN, New York, N. Y. Filed Nov. 27, 1929. Serial No. 410,189. 4 Claims. (Cl. 223—61.)

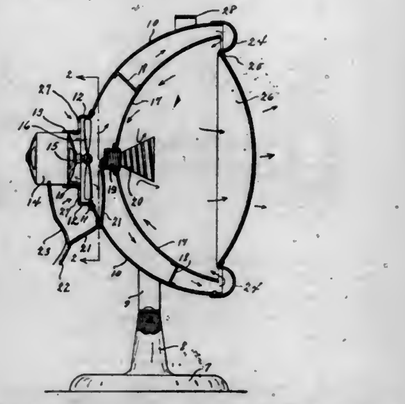


3. A combination clothes hanger, comprising a coat and trouser supporting section, a shirt and the like clothes supporting section, and a hat supporting section, all of these sections being in different vertical planes for supporting their clothes in different vertical planes and having a common top bar, a support hook mounted on said top bar, and means for adjustably supporting said support hook for balancing the clothes hanger to maintain vertical position according to the clothes engaged thereon.

1,829,302. METHOD OF MAKING PATENT, JAPAN, AND ENAMEL LEATHERS. SAMUEL S. SADTLER, Springfield Township, Montgomery County, and EUGENE F. CAYO, Philadelphia, Pa. Filed Mar. 19, 1927. Serial No. 176,834. 4 Claims. (Cl. 91—68.)

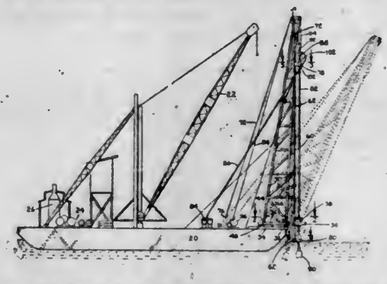
3. The method of enameling leathers from which the oils and greases normally present in leathers have not been extracted, which consists in applying to the surface of said leather, a coating comprising a solution of a flexible shellac-like substance insoluble and immiscible in oils and greases, and containing an inert filler having substantially no pigmental properties and operative to fill the pores of said leather, thereby greatly checking the absorption of said solution into said leather, permitting the coating so applied to dry by the volatilization of the solvent and then applying successive coatings of the usual patent leather enameling material and baking the same after the application of each coat thereof.

1,829,303. HEATER. RALPH F. SCHABER, Detroit, Mich. Filed May 17, 1930. Serial No. 453,135. 5 Claims. (Cl. 219—39.)



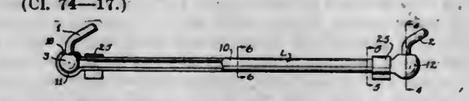
1. In a heater of the class described: a supporting shell; a reflecting shell mounted inwardly of said supporting shell; a heating element carried by said reflecting shell; means for producing a current of air between said shells directed toward the open ends thereof; and a deflecting member mounted on the open edge of one of said shells for deflecting the current of air passing from between said shells inwardly of said reflecting shell.

1,829,304. DRILLING APPARATUS. FREDERICK A. SCHROEDER, Rochelle Park, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 19, 1929. Serial No. 333,688. 7 Claims. (Cl. 255—51.)



1. In an apparatus for drilling holes for piles in ground below water level, a drill rod, means above the water level for rotating the drill rod, a drill on the lower end of said rod, and a bearing supported by said apparatus adjacent the ground for guiding said drill rod for rotation whereby said drill is held on the desired drilling line.

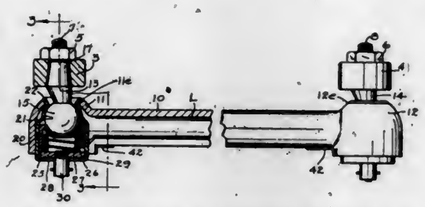
1,829,305. TIE ROD. JOHN SNEED, Ferndale, Mich. Filed July 2, 1928. Serial No. 289,671. 16 Claims. (Cl. 74—17.)



1. A link comprising two like parts each having a central channel section and cupped ends, the parts being

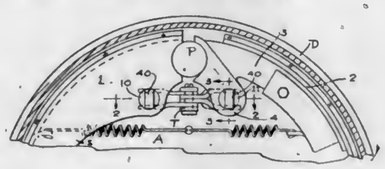
removably secured together with the open faces of the channels and cupped ends proximate and lying in one plane and forming substantially full closed sockets in the ends for reception of members having ball parts, and means for holding said first parts together.

1,829,306. TIE ROD. JOHN SNEED, Ferndale, Mich. Filed July 16, 1928. Serial No. 293,107. 12 Claims. (Cl. 74—17.)



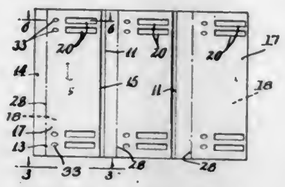
1. A link comprising a stamping pressed from one piece of sheet stock having cupped ends whose axes are parallel and an integrally formed longitudinally extending part joining said ends and extending at right angles to said axes.

1,829,307. BRAKE ASSEMBLY. JOHN SNEED, Ferndale, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Refiling of abandoned application Serial No. 295,011, filed July 24, 1928. This application filed Nov. 5, 1929. Serial No. 405,023. 15 Claims. (Cl. 188—78.)



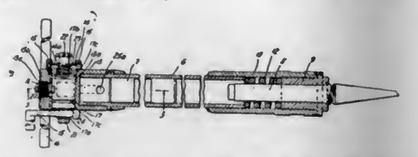
1. The combination of a brake shoe, a thrust pin journalled in the shoe, and an anti-friction bearing part disposed between the thrust pin and the shoe.

1,829,308. SAMPLE TAB CARD. ANDREAS SOEHNER, Westwood, N. J. Filed Feb. 8, 1930. Serial No. 427,031. 6 Claims. (Cl. 206—80.)



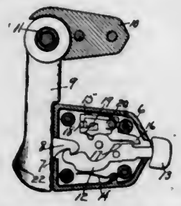
1. A sample card mat, comprising a cover member creased to form several panels, a sample holding member attached along one edge to each panel so that access may be had to the rear side thereof and comprising a top sheet portion and a bottom sheet portion connected together along opposite edges, and one of said edges constituting said edge which is attached to the said cover member, said top sheet portion being formed with a plurality of openings, and said bottom sheet portion being formed with a plurality of openings directly beneath and larger than said openings and formed with inclined corners forming sides of smaller length than the width of said large openings so that a display tab of a length substantially equal to the length of the large openings may be placed behind each large opening and reduced ends of said tabs of a width equal to said smaller sides to be inserted between said top and bottom sheet portions for maintaining its position so that the display tab is viewable from the front of the sample holding member and removable from the rear.

1,829,309. RIVET CUTTING GUN. EDWARD W. STEVENS, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed June 19, 1928. Serial No. 286,621. 1 Claim. (Cl. 121—21.)



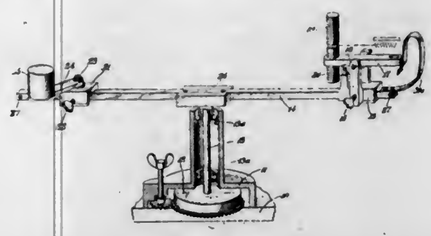
A fluid pressure hammer comprising a cylinder providing a piston chamber, a piston reciprocable therein, a back head on said cylinder having a tapered cylindrical valve chamber disposed transversely of the axis of said cylinder, a closure for one end of said valve chamber having a reduced bore, a tapered valve fitting said valve chamber and disposed therein, said valve having reduced portions at its opposite ends, a handle on one reduced end to provide for manual operation of said valve, a securing member on the other reduced end of said valve to engage said closure and limit the projection of said valve within said valve chamber, resilient means interposed between said valve and said closure yieldingly to urge said valve toward the small end of said valve chamber, said back head having ports and passages for the pressure fluid, and means substantially centrally of said valve for controlling said ports and passages comprising a deep arcuate groove in said valve always in communication with a port leading to the rear end of said piston chamber for connecting the latter either to the pressure fluid supply or to atmosphere and a small and shallow groove at a few degrees of rotation from said first groove for registration with the pressure fluid supply to seal the same when said valve is in neutral position and in other positions to direct pressure fluid in limited amount to the forward end of the piston chamber or to vent pressure fluid therefrom, said valve having annular grooves containing lubricant and disposed on opposite sides of said controlling means for lubricating said valve and for providing a seal against leakage of the pressure fluid.

1,829,310. SUIT CASE LOCK. ELMER B. STONE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed June 22, 1928. Serial No. 287,444. 2 Claims. (Cl. 70—2.)



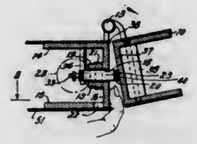
1. A lock including a lock casing having an opening in its side edge, a keeper within said casing, means for operating said keeper, a hasp support, a hasp pivotally attached at one end to said support and adapted to project along said side edge of said lock casing for substantially the full width thereof to constitute a shield therefor, and a bolt secured to and spaced from the end of said hasp to enter said opening and engage said keeper.

1,829,311. APPARATUS FOR INVESTIGATING AND DEMONSTRATING THE LAWS OF CENTRIFUGAL FORCE. PETER L. TEA, Yonkers, N. Y. Filed May 28, 1929. Serial No. 366,686. 5 Claims. (Cl. 35—12.)



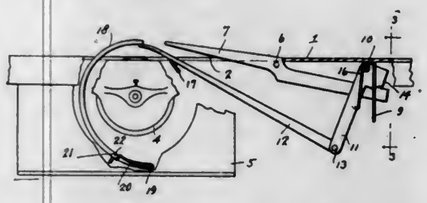
1. In an apparatus for demonstrating the laws of centrifugal force, a rotatable support, a radially arranged lever pivotally mounted on said support, said lever extending toward and terminating short of the axis of said support, a weight carried by the inner end of said lever, and means to limit movement of said inner end of said lever toward said support.

1,829,312. SAFETY DOOR. ADOLPH A. THOMAS, New York, N. Y. Filed Nov. 24, 1928. Serial No. 321,528. 15 Claims. (Cl. 16—82.)



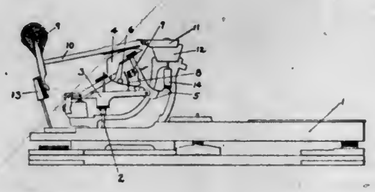
1. The combination of a door casing and a door hinged thereto, a stop normally in position to permit closing of the door, and mechanism controlled by the pressure of fingers placed against the edge of the casing to move said stop into the path of the door and thereby prevent closing thereof, said stop and actuating mechanism being mounted on said door casing.

1,829,313. WOODWORKING MACHINE. JESSE JAMES TOMPKINS, Houston, Tex. Filed Dec. 5, 1930. Serial No. 500,361. 7 Claims. (Cl. 144—251.)



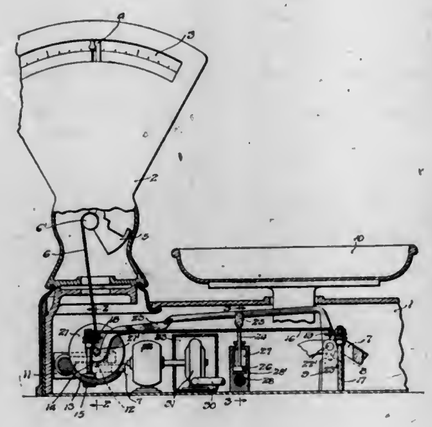
1. A woodworking machine of the character described comprising, in combination, a table having a longitudinal slot therein and further having a transverse opening communicating with the slot, a rotary cutter operable in the opening, a lever pivoted intermediate its ends, one end portion of the lever being operable through the slot for engagement and actuation by the work on the table, the other end portion of the lever extending beneath the table, an arm pivotally mounted for swinging movement beneath the table, means operatively connecting the arm to the rear end portion of the lever for engagement by said lever upon swinging movement of the lever in one direction, a spring operatively engaged with the arm for moving said arm in the opposite direction, a guard finger pivotally connected to the arm for actuation by said arm and having one end portion operable through the slot for disposition above the cutter, and a bar mounted transversely beneath the table for slidably supporting said one end portion of the guard fingers, said means for operatively connecting the arm to the lever comprising an integral head on the arm, and a lug mounted on the head and disposed in the path of travel of the lever for engagement by said lever.

1,829,314. GRAND PIANO ACTION. CARL TRINKLE, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Nov. 24, 1930. Serial No. 497,795. 3 Claims. (Cl. 84—239.)



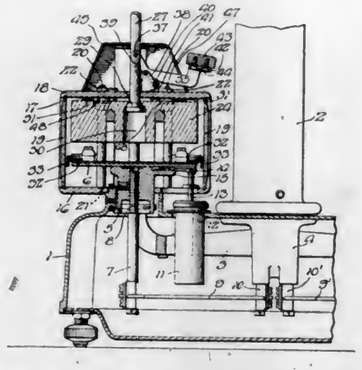
1. In a grand piano action, a hammer head swung on a straight hammer shank, a cam lever, controlled by a jack, operating the straight hammer shank and means for causing the jack to escape under the cam lever, and the hammer head to return part way to starting position.

1,829,315. WEIGHING APPARATUS. CORNELIS F. M. VAN BERKEL, Wassenaar, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of the Netherlands. Filed Apr. 10, 1929, Serial No. 353,924, and in Great Britain Apr. 19, 1928. 22 Claims. (Cl. 265—60.)



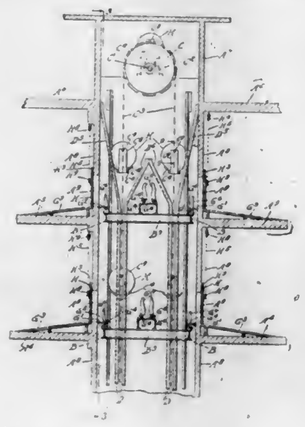
1. In a weighing apparatus, the combination of a weigh beam operatively connected at its opposite ends to a scale pan and to an indicating means, and a series of weights adapted to be applied to said weigh beam in a predetermined order by fluid actuated means to increase the normal capacity of said weighing apparatus.

1,829,316. WEIGHING APPARATUS. ADRIANUS WILHELMUS VAN BERKEL, Rotterdam, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of the Netherlands. Filed Oct. 30, 1920, Serial No. 403,407, and in Great Britain Nov. 2, 1928. 10 Claims. (Cl. 265—60.)



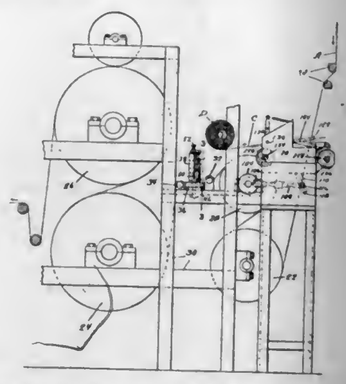
1. A weighing apparatus comprising a weight platform operatively connected to the weighing mechanism of said weighing apparatus, a plurality of weights, a casing enclosing said weight platform and weights, said weights being suspended within said casing by rods extending through said casing, said rods having means connected thereto for holding them in such a position that the weights suspended thereon can be selectively arranged in positions in which the weights will rest on said platform or will be totally out of engagement therewith.

1,829,317. LOADING AND UNLOADING MECHANISM FOR ELEVATORS. FERDINAND F. WAECHTER, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed May 14, 1927. Serial No. 191,507. 14 Claims. (Cl. 198—157.)



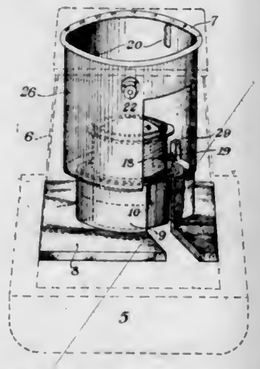
1. In an elevator, a conveyor, a carrier member positioned on said conveyor, stations positioned along the line of movement of said conveyor, said stations including each a plurality of fingers projecting into the line of movement of said conveyor, the fingers being positioned to permit the carrier member to pass therethrough without contacting them, and means for moving the supporting fingers into and out of the path of movement of said carrier member, including a shaft upon which the supporting fingers are mounted, segmental gears associated with said shafts, worms in mesh with said gears and means for rotating said worms.

1,829,318. FABRIC MEASURING APPARATUS AND METHOD. ERNEST DEAN WALEN, Andover, Mass., assignor to Pacific Mills, Lawrence, Mass., a Corporation of Massachusetts. Filed May 27, 1929. Serial No. 366,156. 29 Claims. (Cl. 234—1.)



1. The combination with means for moving a length of fabric consisting of short sections connected together by seams, of means for measuring and recording in succession the length of the sections between seams, and means actuated by the seams in the fabric for controlling the operation of said measuring and recording means.

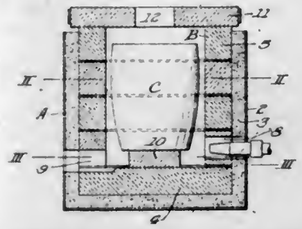
1,829,319. CAMERA. ARTHUR WHEELER, Rochester, N. Y., assignor to Folmer Graflex Corporation, Rochester, N. Y., a Corporation of Delaware. Filed May 14, 1930. Serial No. 452,211. 7 Claims. (Cl. 95—45.)



1. In combination with a camera, a lens unit, an adjustable support for said lens unit, a shield attached to said camera and enclosing said lens unit, and means actuated at one end of said shield for adjusting said support whereby the focusing of said lens unit is readily effected.

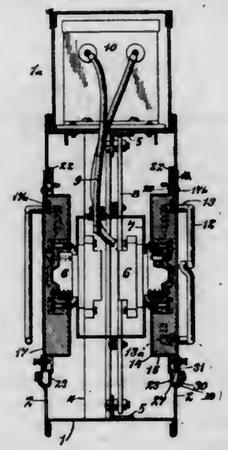
1,829,320. CRUCIBLE FURNACE LINING. HAROLD E. WHITE, Butler, Pa., assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 3, 1929. Serial No. 330,108. 1 Claim. (Cl. 263—14.)

A crucible melting furnace comprising a casing open at the top, a lining for the casing, said casing having a bottom supporting said lining and adapted to support a crucible, said lining comprising superposed rings of refractory material insertible through said top, one of said rings and side wall of the casing having a burner opening and a slag opening therethrough, and the rings having their



bores of the same diameter and with the walls thereof in flush relation, the lining thus avoiding laterally-separable sections and affording a substantially smooth and uninterrupted surface for the passage of the gases of combustion thereover.

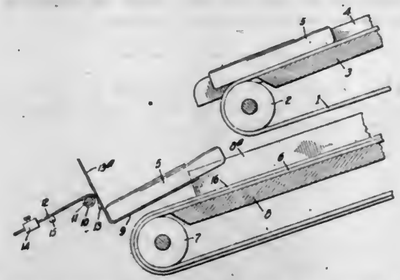
1,829,321. ELECTRIC SIGN. ROY R. WILEY, Buffalo, N. Y., assignor to Flexlume Corporation, Tonawanda, N. Y., a Corporation of New York. Filed May 2, 1928. Serial No. 274,459. 5 Claims. (Cl. 40—130.)



1. In an electric sign, in combination, a supporting structure having connector receptacle means connected to a source of electrical energy and a display unit comprising an electroluminescent tube, a casing removably attachable to said supporting structure, insulating material in said casing, said tube having terminal portions embedded in said insulating material, and connector receptacle means carried by said casing for engaging cooperation with the first named receptacle means when the casing is mounted on said supporting structure.

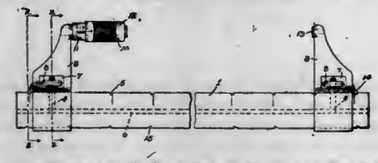
1,829,322. CONVEYING MEANS. HARRISON R. WILLIAMS, New York, N. Y. Filed May 4, 1929. Serial No. 360,353. 2 Claims. (Cl. 198—20.)

1. In a package conveying, stacking and counting mechanism, in combination, an upper conveyor, a transfer device pivotally mounted below and beyond the end of said conveyor in position to receive packages therefrom, and a lower conveyor running directly beneath the transfer device and in proximity to it, the transfer device being operable in response to the weight of a predetermined number of packages stacked upon it by the upper conveyor to move from a raised position in which it receives the packages from the upper conveyor, to a lower position in which it rests upon the lower conveyor and sets the stacked packages upon it, said transfer device including



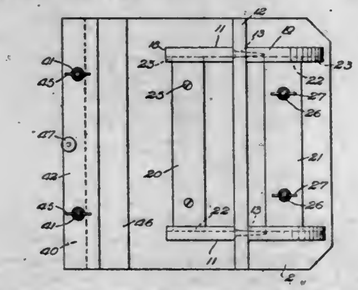
a skeleton bottom through which the lower conveyor may engage the lowermost of the packages supported by the transfer device to remove the stack of packages quickly from the transfer device.

1,829,323. MICROMETER. VICTOR F. WITTER, Akron, and URBAN A. FREDERICK, Fremont, Ohio. Filed May 12, 1928. Serial No. 277,153. 1 Claim. (Cl. 33—165.)



In an instrument of the class described, a beam having a series of notches along one edge and having a longitudinal groove in one face thereof, a pair of arms projecting laterally from the beam, at least one of said arms being adjustable lengthwise of the beam, a pawl carried by said adjustable arm and selectively engageable with said notches to determine the position of adjustment of said arm relative to said beam, a threaded locking stem carried by said adjustable arm and disposed longitudinally thereof, said adjustable arm being provided in its face adjacent the beam with a groove in which the locking stem fits, a lug on said stem extending into the groove in the beam, a nut threaded on the stem and having a shoulder opposed to said lug, said nut being adjustable to bring the shoulder into engagement with a surface of the beam, said lug and said shoulder cooperating to clamp the arm to the beam, and a micrometer head carried by one of said arms and cooperating with the other arm for obtaining precise measurements.

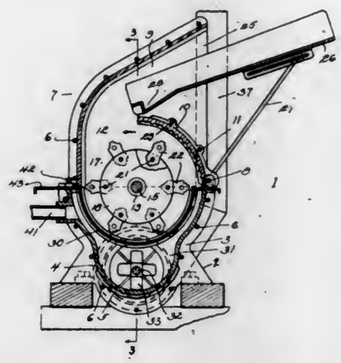
1,829,324. WINDOW SEAT. THOMAS V. ALAND and FLORENZ O. ALAND, West View Borough, Allegheny County, Pa. Filed May 31, 1930. Serial No. 458,578. 6 Claims. (Cl. 304—24.)



1. A window seating device comprising a seat having at its rear end means for securing it to the ledge of a

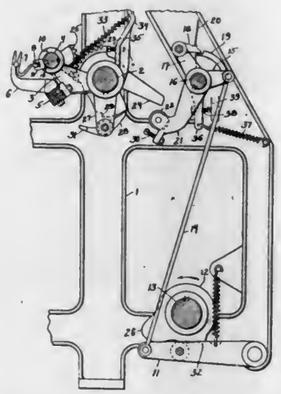
window casing, a support for the seat adjustable relative thereto for fitting window casings of different widths, a support guide extending transversely of and secured to the under side of the seat, and means for clamping the support to the seat in adjusted position.

1,829,325. HAMMER MILL. THEODORE C. ALFRED, Lancaster, Ohio. Filed July 17, 1928. Serial No. 293,400. 1 Claim. (Cl. 83—11.)



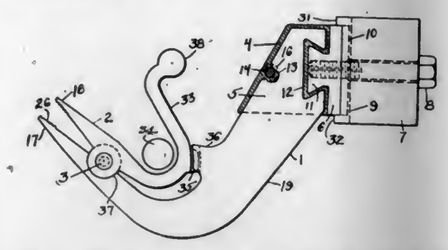
In a hammer mill, a casing, a reduction rotor mounted for rotation in said casing, a semi-cylindrical screen in said casing below said rotor, said screen serving to divide the interior of said casing into a rotor chamber and a discharge chamber, said casing being formed to include an opening parallel with and adjacent one horizontal edge of said screen, adjustable means for effecting the closure of said opening and a conduit connected with said casing below said opening for admitting air into said discharge chamber.

1,829,326. GRIPPER LOCKING AND UNLOCKING MECHANISM. CHARLES CLINTON ALVORD, Worcester, Mass., assignor to Worcester Loom Works, Worcester, Mass. Filed June 15, 1929. Serial No. 371,152. 7 Claims. (Cl. 139—9.)



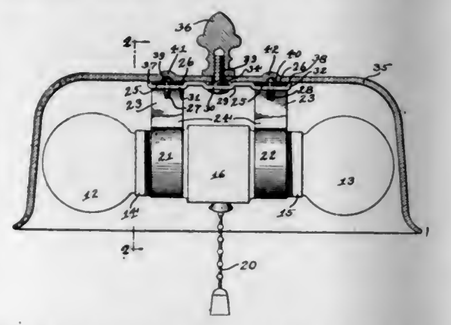
1. In a loom for weaving tufted fabrics, a series of grippers having movable jaws, a shaft operatively contacting said jaws to open and close them, a quick-releasable catch to retain the jaws in closed position, a gear on said shaft and mechanism adapted to engage said gear whereby said shaft may be operatively oscillated.

1,829,327. GRIPPER FOR TUFT WEAVING. CLINTON ALVORD, Worcester, Mass., assignor to Worcester Loom Works, Worcester, Mass. Filed Oct. 10, 1929. Serial No. 398,644. 6 Claims. (Cl. 139—7.)



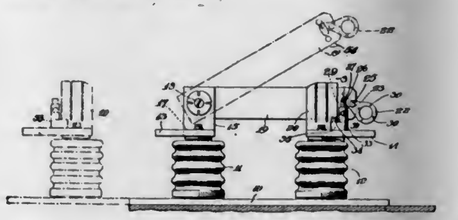
1. In combination, a plurality of gripper units each composed of a multiplicity of grippers for tuft weaving that are spaced and permanently held together by solder, each unit being provided at its base with a registering spline, and a slotted gripper shaft on which said units are spaced by means of the co-acting splines and slots and to which said units are quickly attached and readily removed.

1,829,328. TWIN SOCKET LAMP FIXTURE. LAURITZ W. ANDERSEN, Waterbury, Conn. Filed May 29, 1930. Serial No. 456,961. 8 Claims. (Cl. 240—73.)



1. In an electric lamp fixture, a shade, a shade holder having a pair of spaced continuous clamping bands for rotatably clamping around the opposed sockets of a twin socket, the upper parts of said bands engaging the under surface of said shade, and means for detachably locking said shade to said shade holder, said clamping bands completely encircling said sockets.

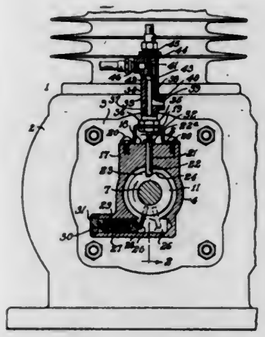
1,829,329. SWITCH LOCK. HARVEY B. AUSTIN, Wayne, Pa., assignor to The Pringle Electrical Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 26, 1928. Serial No. 315,214. 12 Claims. (Cl. 200—169.)



1. A switch blade recessed on opposite sides near its movable end, a pull ring movably mounted on the end

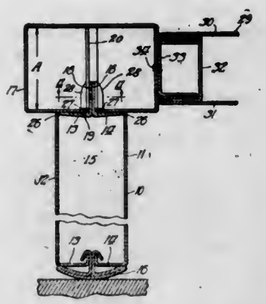
of the blade, stationary abutments having opposing faces in positions respectively adjacent opposite sides of the blade end when the blade is closed, lock members having stationary bearing support upon opposite sides of the switch in the abutments and means operative by closure of the blade for moving the lock members partially out of their bearings laterally into the recesses in the switch blade.

1,829,330. POSITIVE UNLOADING DEVICE. CLEMENT BAHNER, Wilmington, and CHARLES H. GRADY, Springfield, Ohio, assignors to The Auto Compressor Company, Wilmington, Ohio, a Corporation of Ohio. Filed Apr. 27, 1931. Serial No. 533,212. 7 Claims. (230—27.)



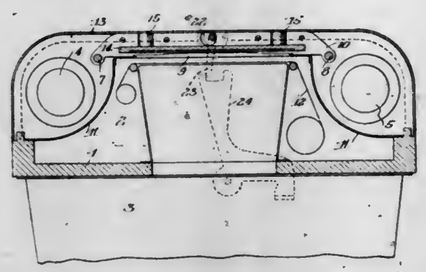
1. In a positive unloading device for an air compressor, a crank shaft for the compressor, an unloading valve for the latter, a cam for actuating the unloading valve, friction means operated by the crank shaft for actuating the cam, means for stopping the cam at a predetermined point, and means for actuating it in a reverse direction when the crank shaft ceases its rotation, for the purpose specified.

1,829,331. CONSTRUCTION UNIT. HARRY E. BARKER and ARTHUR F. BAUM, Elkhart, Ind., assignors to Henry Weis Manufacturing Company, Inc., Elkhart, Ind., a Corporation of Indiana. Filed Jan. 8, 1930. Serial No. 419,253. 12 Claims. (Cl. 189—34.)



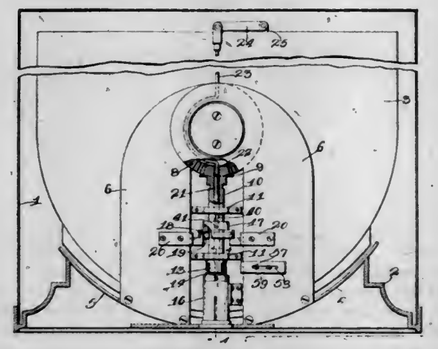
1. A partition unit comprising in combination, a panel having a projecting flange along a side edge, a hollow post having a side longitudinally slotted, an anchor device connected to said flange and spaced from the side of the panel a distance slightly less than the thickness of said post adjacent said slot, said flange projecting into said slot and said anchor engaging the interior of said post adjacent said slot and distorting said panel side slightly to effect a tight engagement with said post.

1,829,332. METHOD OF AND APPARATUS FOR HOLDING PHOTOGRAPHIC FILMS IN FLAT POSITION DURING EXPOSURE. ALWIN H. BECK, Rochester, N. Y., assignor to Folmer Graflex Corporation, Rochester, N. Y., a Corporation of Delaware. Filed Mar. 17, 1930. Serial No. 436,816. 11 Claim. (Cl. 95—31.)



1. The method of drawing a section of flexible photographic strip into substantially flat position during exposure which comprises first stretching the section at separated points, and then continuing the stretching along a portion of the additional space between the separated points.

1,829,333. SAFE. FREDERICK J. BERGS, Milwaukee, Wis., assignor to Bergs Manufacturing Company, Milwaukee, Wis. Filed Nov. 13, 1930. Serial No. 495,404. 3 Claims. (Cl. 109—3.)

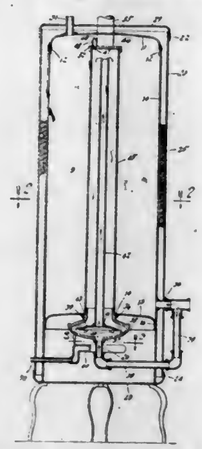


1. A safe structure including movable doors adapted to be swung to an open or closed position, means for locking said doors in a closed position, a rotatably mounted locking cylinder, means forming operative connection between the cylinder and the doors, whereby rotation of the cylinder will move said doors to an open or closed position, a reciprocating rod movable longitudinally of the cylinder, means forming operative connection between the rod and the locking means, and means adapted to be engaged by a key inserted in the locking cylinder whereby to move said rod longitudinally for releasing said locking means to permit open movement of the doors.

1,829,334. WATER HEATER. FRED W. BIRTCH, Lexington, Mich. Filed May 2, 1928. Serial No. 274,534. 6 Claims. (Cl. 122—18.)

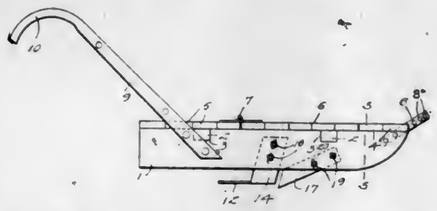
6. In combination with a water storage tank, a device for heating said tank comprising a receptacle and means adjacent thereto for heating water therein, means for delivering heated water from said receptacle to a point within said tank, said means maintaining the delivered

water separate from that in the tank, and means surrounding said delivery means for returning said heated water to said receptacle and maintaining said circulating



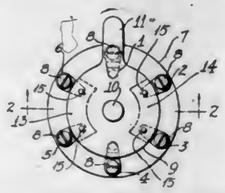
water separate from the water in said tank, and a connection between said circulatory system and said tank for equalizing pressures therein.

1,829,335. SOD CUTTER. JAMES W. BLUE, Fife Lake, Mich. Filed Nov. 13, 1930. Serial No. 495,511. 1 Claim. (Cl. 97—226.)



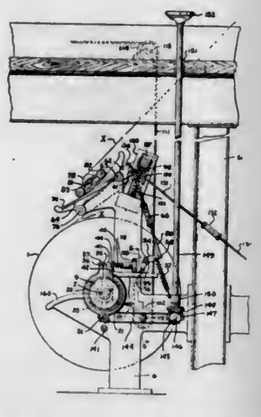
A sod cutter comprising runners, front and rear cover sections secured upon the runners, a door positioned between said sections upon the runners and hinged to one of said sections, horizontal blades located below the door and extending inwardly from the runners, and vertical blades located below the door and extending downwardly and rearwardly and having their lower ends arranged in advance of and below the outer ends of said first blades.

1,829,336. ANTICAPACITY SWITCH. CHANCE E. BOHNER, East Orange, and ARTHUR M. TROGNER, Maplewood, N. J., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1930. Serial No. 430,189. 4 Claims. (Cl. 200—11.)



1. An anti-capacity switch comprising, a mounting member, a plurality of contact terminals mounted thereon, each of said contact terminals comprising a flat metallic member having an off-set portion extending away from said mounting member, a second mounting member, a plurality of contacting sectors mounted thereon, said contacting sectors being disposed between and in a plane parallel with said mounting members, spacing members interposed between the said contacting sectors and the said second mounting member, said spacing members having a total cross sectional area substantially less than the area of said sectors, and means for moving the said contacting sectors with reference to the said contact terminals.

1,829,337. WEB SUPPLYING AND CONTROLLING MECHANISM. MARTIN W. BRUESHABER, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Aug. 6, 1924. Serial No. 730,378. 3 Claims. (Cl. 242—75.)



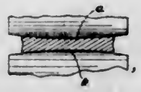
2. A web feeding and controlling mechanism for printing press having a series of printing units and a folder including in combination, means for rotatably supporting a pair of web rolls, a roller coacting with the web and movable by the tension of the web, a brake for each web roll mechanically connected with the roller and instantly responsive to movements of the roller and means on the press and acting on the brakes independently of the roller for controlling the tension of the web, whereby a workman while observing the operation of the folder can vary the tension of the web.

1,829,338. AUTO CHIROPODIST. HUGH R. BYNUM, Memphis, Tenn. Filed Dec. 15, 1930. Serial No. 502,332. 4 Claims. (Cl. 132—73.)



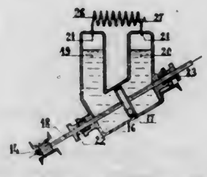
1. An abrasive tool, comprising supplementary elongated hollow parts, hinged together along one longitudinal edge of each, a sheet of abrasive material having a main portion coextensive with the external surface of said parts, and having integral inwardly folded strips along the side edges of said sheet engaging over the unhinged edges of said parts, clamps within said hollow parts, hinged one to each of said parts and respectively engaging each an inwardly folded strip, means resiliently urging said clamps against said strips, and releasable means for holding the unhinged edges of said parts together.

1,829,339. PROCESS OF ROLLING METAL. MICHAEL C. CORRIGAN, Massillon, and DAVID E. JENKINS, Canton, Ohio, assignors, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed July 17, 1929. Serial No. 378,906. 18 Claims. (Cl. 29—18.)



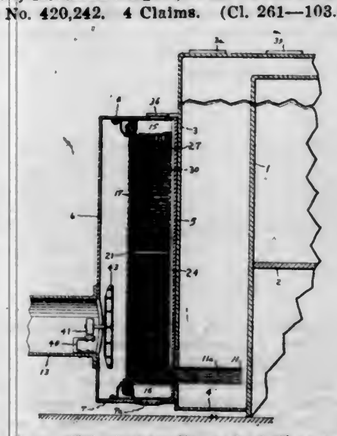
17. A continuous process of converting metal into sheet form which comprises repeatedly subjecting a piece of metal initially of substantially rectangular transverse cross-section and having one concave surface to roll pressures exerted on opposite surfaces of the piece, one of which surfaces is the said concave surface, and gradually and progressively increasing the radius of curvature of the said concave surface, until said surface is substantially flat.

1,829,340. CUSHIONING DEVICE FOR RECIPROCATING SIEVES AND OTHER APPARATUS. JEAN COUTIN, Nogent-sur-Marne, France, assignor to Préparation Industrielle des Combustibles (Société Anonyme), Nogent-sur-Marne, France. Filed May 11, 1928, Serial No. 277,021, and in France May 14, 1927. 3 Claims. (Cl. 188—97.)



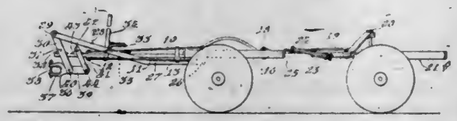
1. A device for cushioning the forces of inertia of reciprocating masses and for restoring a part of the energy accumulated during the cushioning, said device comprising a piston connected to one of the masses and a cylinder connected to the other mass, said piston moving in said cylinder, two vertical tubes extending respectively from the ends of the cylinder, said tubes and cylinder inclosing a liquid and a gas, the latter being contained in the upper portions of said tubes, with the levels of separation of the liquid and gas in the same horizontal plane, and a bypass pipe having a large external surface adapted to be cooled connecting said vertical tubes.

1,829,341. AIR CONDITIONING DEVICE. WILLIAM C. DENISON, Cleveland Heights, Ohio. Filed Jan. 11, 1930. Serial No. 420,242. 4 Claims. (Cl. 261—103.)



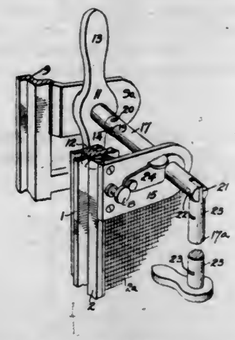
1. An air conditioning appliance including an air conduit, an air chamber and an air filter in said chamber through which all air conditioned by the device must flow, said filter being of considerable area whereby air will be delivered therethrough, at a low velocity, and said appliance including a humidifying fabric in close juxtaposition to said filter and means for causing air to pass through said filter and then adjacent said humidifying fabric, the area of said humidifying fabric being of the same order of magnitude as that of said filter.

1,829,342. DISK HARROW. WILLIAM D. DEWEND, South Bend, Ind., assignor to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Mar. 25, 1929. Serial No. 349,538. 5 Claims. (Cl. 55—83.)



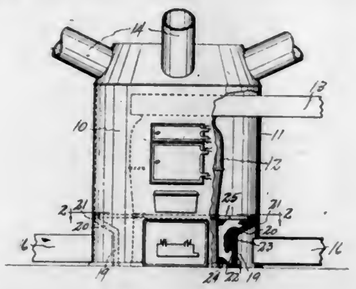
1. In combination with a disk harrow, of a frame therefor, disk gangs pivoted to said frame, relatively fixed longitudinally extending draft members forming a part of said frame, relatively movable and longitudinally extending draft members connected to the free ends of said gangs, a lever pivoted to said fixed draft members and having one end connected to the other ends of said movable draft members, a draft clevis pivotally connected to the other end of said lever and a link having one end pivoted to said relatively fixed draft member and the other end pivoted to said draft clevis for maintaining said clevis in its movement in parallel relation with respect to said relatively fixed draft members.

1,829,343. SCREENED WINDOW OPERATING DEVICE. LOUISE E. DODDS and WILBERT J. DODDS, Detroit, Mich., assignors to The W. J. Baker Company Incorporated, Newport, Ky., a Corporation of Kentucky. Filed Apr. 27, 1929. Serial No. 358,724. 7 Claims. (Cl. 268—92.)



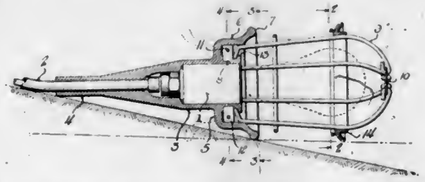
1. In a window screen arrangement, the combination of a window frame having a screen with an opening therethrough mounted adjacent one side of said frame, a sash pivoted in said window frame adapted to open away from said screen, a pivoted latch member carried by said sash adapted to engage said frame and hold said sash in closed position, a projection on said latch member, a rod extending through said screen opening pivoted on said latch member projection and so connected thereto that it causes the latter to turn when it is turned, said rod being adapted to be moved longitudinally through said screen opening to open and close said sash, and means on said rod cooperating with said screen for holding said rod and sash against accidental movement when the sash has been opened to various predetermined positions.

1,829,344. AIR FILTER. MERLE P. DURREN, Dowagiac, Mich. Filed Sept. 19, 1930. Serial No. 482,973. 12 Claims. (Cl. 183—51.)



1. The combination with a hot air furnace having a casing, an air duct communicating with said casing, of an air filter mounted in said casing, said air filter cooperating with said casing to form a closed passage-way in said casing communicating with said air duct whereby the air from said duct passes through said passage-way and filter in entering said casing.

1,829,345. BUMPER FOR ELECTRIC LAMPS. JOSEPH P. EASTMAN, Manitowoc, Wis. Filed June 3, 1929. Serial No. 367,912. 7 Claims. (Cl. 240—54.)



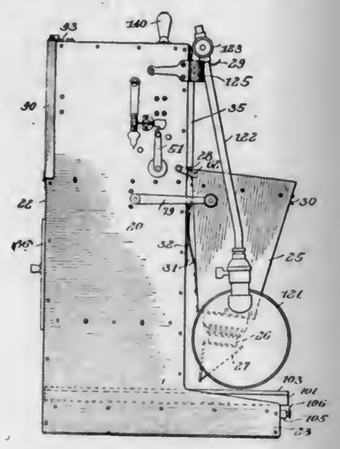
1. An electric lamp unit comprising a socket, a lamp, a safety sleeve surrounding said socket, a rear bumper of resilient material surrounding said sleeve and constituting a balancing point, a cage surrounding said lamp, and a forward bumper of resilient material surrounding said cage and located forwardly of said balancing point.

1,829,346. STEPLADDER. JAMES G. FROMMEYER, Cincinnati, Ohio. Filed June 13, 1928. Serial No. 285,184. 5 Claims. (Cl. 228—17.)



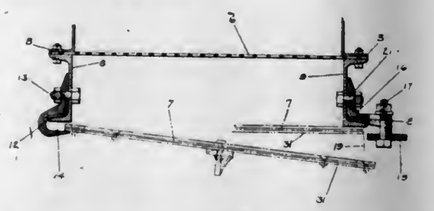
1. A device of the class described, comprising, a step frame, a support frame, a pair of links pivoted to and spacing the upper ends of said frames, said links disposed one at each side of the joined structure, a platform hinged to one frame adjacent the top thereof, and means for slidably mounting the swinging end of said platform in the other frame for limited downward movement of the platform.

1,829,347. PHOTOGRAPHIC APPARATUS. JOHN S. GREENE and ARTHUR W. CAPS, Rochester, N. Y., assignors to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 19, 1928. Serial No. 307,018. 4 Claims. (Cl. 95—90.)



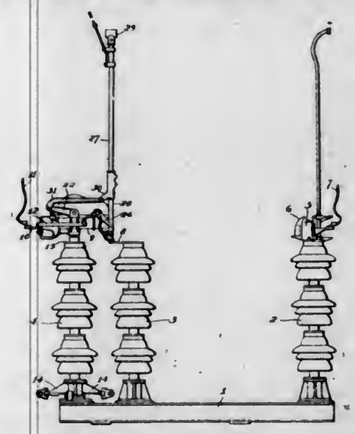
1. In a photographic apparatus, the combination with walls forming a dark chamber, of sheet feeding mechanism therein, means for severing a sheet fed by said mechanism, and a receptacle within said dark chamber below said severing means for receiving a sheet severed thereby, said receptacle comprising a drawer removable from said dark chamber, one portion of said drawer forming part of a wall of said dark chamber when the drawer is in place therein, said portion having a slot therethrough for insertion of a closure for said drawer prior to its removal from said dark chamber, and a yieldable member normally extending across said slot to exclude light from said dark chamber, said member being displaceable by insertion of said closure.

1,829,348. SCREENING APPARATUS. CARL A. GUSTAFSON, Minneapolis, Minn., assignor, by mesne assignments, to Pioneer Gravel Equipment Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed June 4, 1928. Serial No. 282,692. 8 Claims. (Cl. 209—405.)



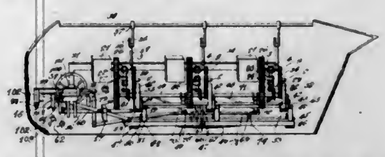
1. The combination of a frame comprising spaced side beams, a screen, a plurality of inwardly turned hook elements secured to one of said beams and having their lower portions spaced from the bottom thereof to provide a seat for the screen, means secured to said beams to provide a seat for the forward end of said screen, a plurality of brackets secured to the other side beam, extending outwardly therefrom, and each having a clamping element slidably mounted therein and adapted to engage the opposite side of the screen, said hook elements, plate and clamping elements co-operating to demountably secure the screen to said beams, and permitting removal of the screen from the frame without detaching any of said parts therefrom.

1,829,349. SWITCH. LESTER C. HART, Cleveland, Ohio, assignor to Hi-Voltage Equipment Company, a Corporation of Pennsylvania. Filed Jan. 19, 1931. Serial No. 509,558. 4 Claims. (Cl. 200—48.)



1. In combination in switch operating mechanism, a support, an operating shaft journalled in the support, a second shaft journalled in the support parallel to the first shaft, a lever arm secured to the second shaft so as to move therewith, a switch arm pivotally mounted on the free end of the lever arm, a crank arm carried by each of the shafts so as to turn therewith, a link having its ends pivoted to the ends of the crank arms, a lever secured to the operating shaft so as to turn therewith, a connecting rod pivoted at one end to the lever and at its other end to the switch arm intermediate its ends, and means for rotating the operating shaft.

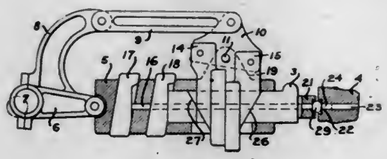
1,829,350. FLYING MACHINE. FRANCIS DAVID HEALY, Newark, N. J. Filed Dec. 8, 1928. Serial No. 324,618. 9 Claims. (Cl. 244—14.)



4. In a flying machine, the combination of one row of motors parallel with the length of the fuselage, a main shaft parallel with the length of the fuselage, main shaft wheels rotatably mounted on said main shaft, outer motor wheels geared to drive said main shaft wheels, inner motor wheels positioned to drive said outer motor wheels and to be driven by said motors, and clutches for connecting and disconnecting said outer motor wheels and said inner motor wheels.

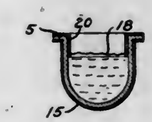
1,829,351. APPARATUS FOR HEADING BLANKS. RICHARD M. HEAMES, Grosse Pointe, and BIEGER W. LINDQUIST, Detroit, Mich. Filed Apr. 23, 1928. Serial No. 272,011. 2 Claims. (Cl. 10—15.)

1. In a header, a stationary die formed to snugly laterally confine the shank end of a blank, an element normally separated from said die for the insertion of a blank therebetween, said element being movable toward said die during the entire heading operation and having a bore formed to snugly laterally confine the opposite end of the blank prior to head thereof, a rod movable within said bore to



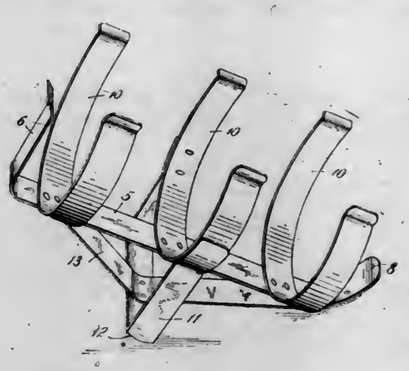
apply initial heading pressure against the end of a blank confined therein, and means for simultaneously moving said element and said rod relatively to each other and toward said die to remove the blank end from said bore and to apply final heading pressure against said blank end after removal thereof from said bore.

1,829,352. HEATING DEVICE. RICHARD M. HEAMES, Grosse Pointe, and HAROLD STARK, Detroit, Mich. Filed July 13, 1928. Serial No. 292,476. 2 Claims. (Cl. 263—48.)



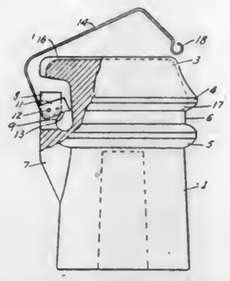
1. In combination, a relatively thick pot for directly confining molten material, a thin shell snugly fitting and covering the entire external surface of said pot, and a thin skirt snugly fitting and covering the internal surface of said pot above the normal level of molten material therein, said pot being formed of corrosive material and said shell and skirt being detachable from said pot and being formed of corrosion resistant metal.

1,829,353. SUPPORT FOR LIQUID RECEPTACLES. GEORGE FRANCIS HOGAN, Chicago, Ill. Filed Oct. 15, 1930. Serial No. 488,789. 4 Claims. (Cl. 248—55.)



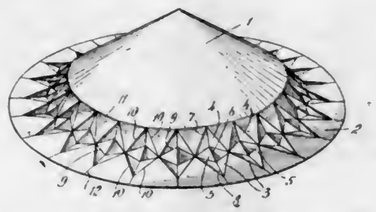
1. A tilting support for receptacles such as bottles comprising a longitudinal member having one end bent to engage the bottom and the other shaped to engage the shoulder of a bottle, a plurality of resilient bands secured to the member to embrace the bottle, and a supporting leg secured between the ends of the longitudinal member.

1,829,354. INSULATOR. VICTOR FREDERICK HOUDE, Winnipeg, Manitoba, Canada, assignor of one-half to Ferdinand Ritchie La Fleche, Headingly, Manitoba, Canada. Filed June 21, 1930. Serial No. 462,914. 4 Claims. (Cl. 173—313.)



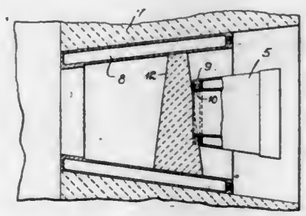
1. An insulator comprising a body provided with a projecting shoulder with a pair of spaced apart lugs upwardly extending therefrom, the upper face of said shoulder forming a transverse wire receiving socket intervening between said lugs and body, a clamp pivoted in said lugs and adapted to bear against a wire received in said socket and a resilient locking member on said clamp engageable on said body.

1,829,355. ACOUSTIC DIAPHRAGM. VERNON T. HOUGHTON, Bronxville, N. Y., assignor to Lektophone Corporation, Jersey City, N. J., a Corporation of Delaware. Filed July 29, 1930. Serial No. 471,455. 19 Claims. (Cl. 181—32.)



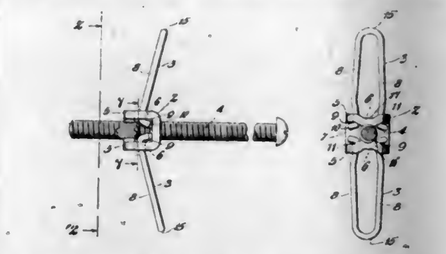
1. An acoustic diaphragm comprising a conical portion made of paper, and a rim portion extending in a plane substantially at right angles to the axis of the conical portion, and means which fenders the circumference of the base of the conical portion expansible and contractible.

1,829,356. TUYÈRE. GEORGE H. HUGHES, Monessen, Pa. Filed July 15, 1930. Serial No. 468,007. 6 Claims. (Cl. 266—41.)



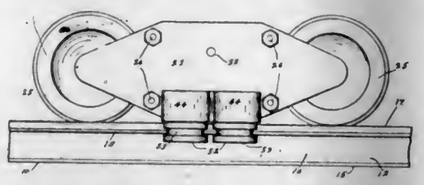
6. A device for use in furnace walls, comprising a metal member having a lip at its inner end for supporting a refractory, and inwardly-extending tongues carried by said body having laterally-turned ends positioned to retain a refractory in place on said lip, the said tongues being spaced apart.

1,829,357. SPRING TOGGLE. JOHN KARITZKY, Garwood, N. J., assignor to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed July 9, 1930. Serial No. 466,636. 12 Claims. (Cl. 85—3.)



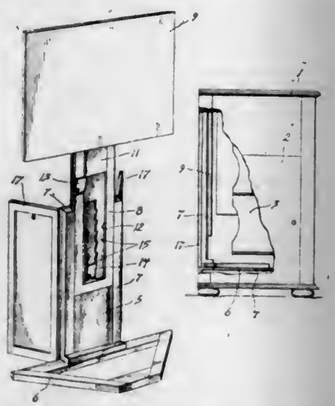
1. The combination in a spring toggle of a nut provided with opposed aligned slots, integral resilient spring arms mounted in the slots both ends of each resilient spring arm mounted in a common slot, means to place the resilient spring arms under tension when they are moved substantially parallel to a bolt cooperating with the nut, and a bolt.

1,829,358. RAILROAD TRACK AND RAILROAD TRUCK. ALCUIN E. KINTNER, Painesville, Ohio. Filed Feb. 18, 1929. Serial No. 340,672. 16 Claims. (Cl. 104—247.)



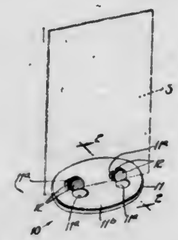
1. In a system of the character described, a rail structure having spaced apart ways, and a device having wheels adapted for coacting with such ways, other wheels angularly positioned and movable with respect to said wheels, and motor means for controllably increasing the traction by said last-named wheels.

1,829,359. PICTURE PROJECTING MACHINE CABINET. RUFUS W. KITTREDGE, Chicago, Ill. Filed Jan. 14, 1929. Serial No. 332,248. 5 Claims. (Cl. 312—20.)



1. The combination with a cabinet provided with an opening, of a panel forming a closure for said opening and comprising panel members hinged together for facewise angular movement into a common plane to form said closure and out of said common plane for forming a self-supporting stand, means whereby a projection screen is carried with one of said panel members for movement from a position overlying the inner face of said panel to an operative position extended from said panel members, and means whereby said panel is removably mounted on said cabinet to close said opening and with said screen in said cabinet and overlying the inner face of said panel.

1,829,360. CARD STAND OR HOLDER. JOSEPH E. LAMBERT, New York, N. Y. Filed Sept. 23, 1930. Serial No. 483,776. 3 Claims. (Cl. 40—149.)



1. A one-piece stamping of sheet material comprising a base having clip portions struck-out from said base, said portions being bent in spaced pairs to upstand from said base forming retaining means for a card, said pairs being positioned in non-aligned relation.

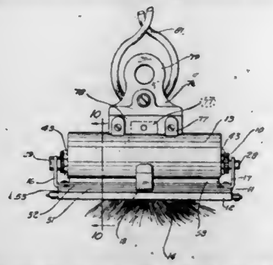
1,829,361. PRONGED TUFTING BUTTON. RICHARD D. LANE, Augusta, Ky., assignor to The F. A. Neider Company, Augusta, Ky., a Corporation of Kentucky. Filed Sept. 13, 1930. Serial No. 481,739. 4 Claims. (Cl. 24—94.)



1. A prong structure for tufting buttons comprising a prong member having a substantially triangular head formed intermediate the ends of the prong member, the triangular head having sides terminating at the prongs and another side forming with the first mentioned sides a pair of anchor portions and a button mounting ring having an upstanding flange and a perforate base the prongs extending through the perforation in the base and the anchor portions being clinched between the base and the flange.

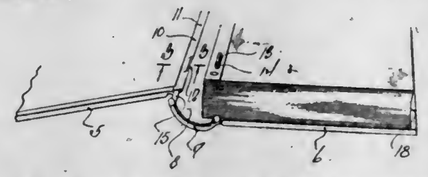
1,829,362. HAIR WAVING HEATER. WILBUR STANLEY LEWIS, Cleveland, Ohio, assignor to The Nestle-Le Mur Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 7, 1929. Serial No. 345,036. 10 Claims. (Cl. 132—36.)

1. In an apparatus for waving hair by the application of heat, a clamp comprising two separable elements mutually hinged at one end, and a locking member for said elements at the other end, said hinge and said locking member each being of unitary construction, permanently secured to said clamp, and providing supports at the ends of said clamp, a mandrel, trunnions upon the ends of said mandrel to rest in said supports, one of said trunnions having squared faces and constituting an arbor upon which



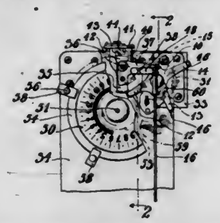
said mandrel turns, connecting means between said arbor and said mandrel permitting rotation of said mandrel in one direction only.

1,829,363. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to Stationers Loose Leaf Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 7, 1929. Serial No. 412,343. 3 Claims. (Cl. 129—24.)



1. A loose leaf binder comprising a back member, a cover, a hinge plate secured to the cover, a binder post, means pivotally and removably connecting the binder post with the hinge plate of the cover, flexible means connecting the cover with the back member, and a second plate cooperating with the hinge plate to secure said flexible means longitudinally along the hinge plate at a point close to the inner marginal edge thereof and to limit movement of the cover in one direction with respect to the back member.

1,829,364. SWITCH CONTROLLING MECHANISM. JOSEF METTLER, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Limited Joint-Stock Company of Switzerland. Filed Feb. 28, 1929, Serial No. 343,286, and in Switzerland Mar. 1, 1928. 6 Claims. (Cl. 200—40.)

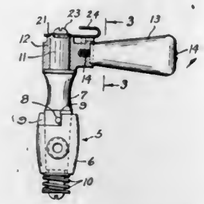


1. Switch controlling mechanism including in combination a plurality of rotatably mounted arms, a stop positioned in the path of the arms, a clock driven member, and a plurality of variably positionable means on said member to move the stop different distances for releasing different arms.

1,829,365. SAFETY GAS COCK. CHARLES F. MEYER, Bridgeport, Conn. Filed May 2, 1930. Serial No. 449,223. 8 Claims. (Cl. 251—09.)

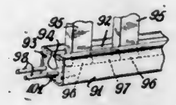
1. In a safety gas cock, a body, a plug within the body for turning on and shutting off the flow of gas there-

through, a spindle member for operating said plug, a handle member freely rotatable on said spindle, a notch in one of said members, a flat spring secured to and



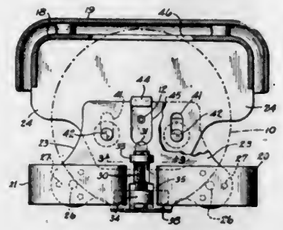
movable with the other of said members, and said spring adapted to be depressed without depressing the handle, to move the spring partially into the notch to lock the handle member and spindle member together.

1,829,366. ENSEMBLE UNIT FOR FURNITURE AND THE LIKE. SAMUEL S. MITTLEBURG, Brooklyn, N. Y. Filed Nov. 11, 1929. Serial No. 406,242. 7 Claims. (Cl. 5—280.)



1. In an ensemble unit of the class described, a hollow bar with a groove, a filler engaged in the hollow and having a groove aligning with said groove, vertical strips with tongues engaged in said grooves, spacers within the grooves for holding the strips in spaced condition, and means for joining sections of said bar, comprising projections on one of the sections, and engageable in complementary openings in the other of the sections, and a lock tongue projecting from one of the sections engageable in an opening in the other of the sections.

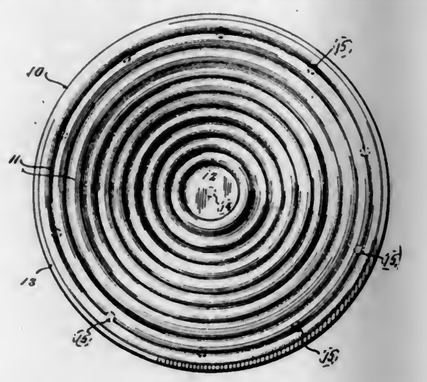
1,829,367. ELECTRICITY METER. RICCARD PUDELKO and PAUL MOOS, Zug, Switzerland, assignors to Landis & Gyr, A.-G., a Corporation of Switzerland. Filed Jan. 11, 1930, Serial No. 420,101, and in Switzerland Jan. 22, 1929. 6 Claims. (Cl. 171—264.)



1. Braking means for the movable disc of an electricity meter including in combination a pair of braking magnets, a movable plate on which the magnets are supported, means for moving the plate and magnets relatively to the disc and guide means for preventing movement of the plate out of a straight path.

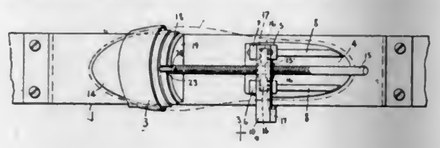
1,829,368. HEAT DISTRIBUTOR AND TOASTER. JACOB RANZ, St. Louis, Mo. Filed Apr. 10, 1929. Serial No. 354,151. 4 Claims. (Cl. 126—215.)

1. A heat distributor and toaster comprising in combination a pair of sheet metal plates, each of said plates having concentric convolutions thereby providing one face of each plate with two surfaces disposed at different horizontal planes, the edge and central portions of each plate being in the same horizontal plane with the inner surface of the apices of inwardly presented convolutions,



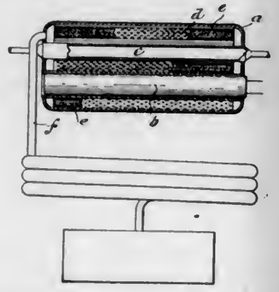
said plates being arranged with said inner surfaces of said convolutions and said edges and said central portions contacting and welded together at a plurality of spaced points.

1,829,369. SHOE STRETCHER AND TREE. MARION T. ROBISON, Springfield, Ohio. Filed Dec. 23, 1929. Serial No. 415,945. 5 Claims. (Cl. 12—128.6.)



1. In a device of the character described, a stationary support for a shoe, a clamping head adapted to be inserted in the heel of a shoe, a clamping device connected with said head and cooperating with said support to clamp the heel end of the shoe to said support, a toe piece adapted to be inserted in the toe of the shoe, and means operable independently of the clamping device carried by said head for forcing said toe piece into the toe of the shoe.

1,829,370. REFRIGERATING APPARATUS. HANS RÖHL, Mannheim, Germany, assignor to Schwarzwaldwerke Lanz, G. m. b. H., Mannheim, Germany. Filed June 16, 1928, Serial No. 285,830, and in Germany Dec. 24, 1927. 6 Claims. (Cl. 62—118.)



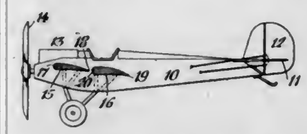
1. In refrigerating apparatus of the type described, an absorption-expulsion vessel comprising a casing interiorly sub-divided by perforated metallic partitions into a plurality of longitudinal chambers, each of relatively small sectional area, which are separated from each other only by the partitions and are alternately charged with absorption material and left open for the passage of the refrigerating medium.

1,829,371. VALVE HANDLE. WALLACE B. ROSS, Syracuse, N. Y., assignor to Diemolding Corporation, Canastota, N. Y., a Corporation of New York. Filed Mar. 7, 1931. Serial No. 520,849. 6 Claims. (Cl. 251—150.)



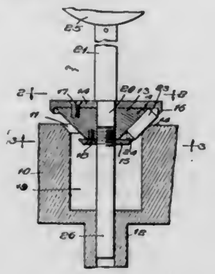
3. A handle for rotary valve stems and the like comprising a main body having a recess in its inner end eccentric to the axis of the handle, and a plate having a plurality of sockets of different sizes for receiving valve stems of corresponding sizes, said plate being movable into and out of the recess and adjustable, when removed, for registering any one of the sockets with the axis of the handle.

1,829,372. AIRPLANE. JOSEPH ROTHSCHILD, Buffalo, N. Y. Filed May 29, 1929. Serial No. 366,845. 6 Claims. (Cl. 244—12.)



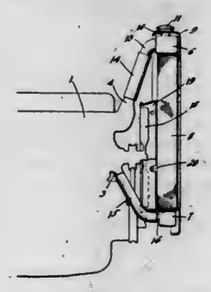
1. An airplane, comprising a fuselage, and front and rear wings disposed laterally of the fuselage in edgewise relation and at different angles to the longitudinal axis of the fuselage, the rear wings being of a higher camber than the front wings.

1,829,373. VALVE BURNISHING TOOL. FRANK N. SAMSON, Elgin, Ill. Filed May 31, 1929. Serial No. 367,273. 4 Claims. (Cl. 29—90.)



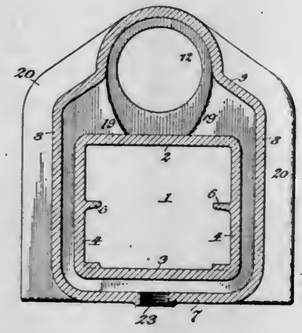
1. A device of the kind described comprising a frusto conical body having an axial bore, the conical face of said body having a plurality of longitudinal grooves extending substantially its full length, a plurality of cylindrical rollers having conical ends mounted one in each of said grooves, said grooves encircling substantially one half of said rollers, an annular projection on each end of said body against which the corresponding conical ends of the rollers revolve, one of said annular members having a flange which cooperates with said annular projections to prevent longitudinal movement of the rollers, said flange and projection together forming an angular runway closely fitting the adjacent conical faces of the rollers.

1,829,374. FAN HOUSING. LAURENCE P. SAUNDERS, Lockport, N. Y., assignor to Harrison Radiator Corporation, Lockport, N. Y., a Corporation of New York. Filed Oct. 31, 1929. Serial No. 403,844. 6 Claims. (Cl. 123—174.)



1. In combination, a radiator, an air circulating fan, and a shroud surrounding the fan adapted to confine fan blast to a fractional portion only of the radiating area.

1,829,375. COOLING TANK FOR DOMESTIC REFRIGERATOR SYSTEMS. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 1, 1925. Serial No. 59,764. 1 Claim. (Cl. 62—95.)

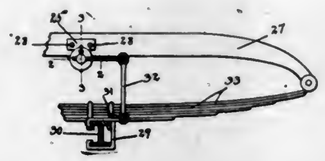


A refrigerant evaporator adapted to be placed in a domestic refrigerator comprising an integral casting having an ice making chamber therein, a liquid receiving chamber above said ice making chamber, the walls about said ice making chamber being hollow and forming a jacket, integral partitions dividing said jacket into a plurality of ducts communicating with said liquid receiving chamber, and ribs integral with and external to said jacket and adjacent and parallel to said ducts.

1,829,376. SPRING CHECKING DEVICE. HAROLD J. STEAD, Geneva, N. Y., assignor to Steadfast Mfg. Co., Inc., Geneva, N. Y., a Corporation of New York. Filed Sept. 12, 1927. Serial No. 219,077. 1 Claim. (Cl. 188—130.)

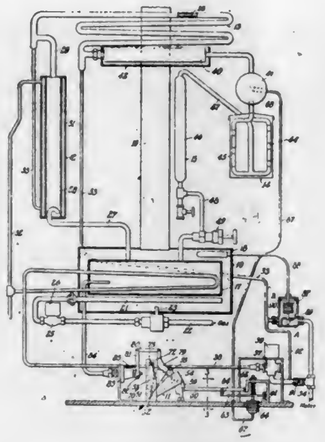
In a device of the class described, a casing, a plurality of rigid brake shoes in the casing in frictional contact

therewith, a rotatable member having opposed flat surfaces respectively engaging the brake shoes at points spaced from one end of the brake shoes when rotated in



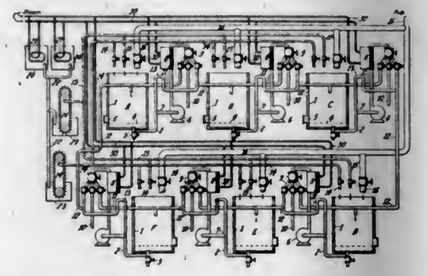
one direction and engaging the brake shoes at points adjacent their opposite ends when rotated in the other direction, and means for rotating such rotatable member whereby the brake shoes will be moved in relation to the casing.

1,829,377. REFRIGERATING APPARATUS. ARCHIE HUGH STRONG, Flushing, N. Y., assignor to Master Domestic Refrigerating Company, Inc., a Corporation of New York. Filed Mar. 20, 1928. Serial No. 263,118. 5 Claims. (Cl. 62—118.)



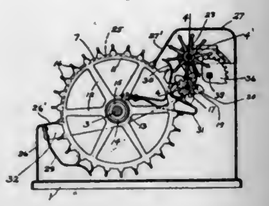
1. In a refrigerating apparatus, a generator for a refrigerant, periodically operated means for heating the contents of the generator, a condenser for condensing the evaporated refrigerant, an evaporator, a separator located intermediate of and communicating with the generator and the evaporator for freeing the evaporated refrigerant of water vapor prior to the entrance of the refrigerant into the condenser, and a water trap connected with the evaporator for trapping during a given generating period such water as may have remained in the evaporator upon completion of the last preceding evaporating period, the means connecting said water trap with the evaporator continually affording unrestricted communication, and thus continually permitting any ammonia in said trap to be vaporized and returned to the evaporator; a conduit extending from said trap to the generator; and a valve in said conduit below said trap; whereby communication of said trap with said generator is normally prevented, but may be established, at the will of the operator, to drain the trapped water into the generator.

1,829,378. TREATMENT OF CELLULOSE MATERIALS. ANDRIÉ THIRIET, Lyon, France, assignor to Papeteries Navarre, Lyon, France, a Limited Liability Company. Filed Mar. 17, 1931, Serial No. 523,223, and in France Feb. 15, 1928. 28 Claims. (Cl. 92—13.)



1. Process of purifying cellulose-bearing material, comprising treating the material with alkali liquors free from alkaline-earth salts whereby the dissolving of the impurities is unimpeded by the presence of such salts and the impurities when dissolved are retained in solution.

1,829,379. COMPUTING MACHINE. ANDERS VETHE, Oslo, Norway. Filed Oct. 20, 1926. Serial No. 142,953. 5 Claims. (Cl. 235—80.)

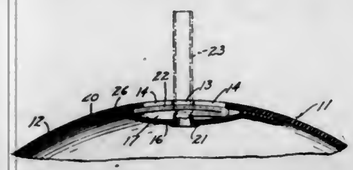


1. In an adding and subtracting machine, the combination of a housing, a plurality of toothed operating wheels revolubly mounted upon a common axis in said housing with at least nine of the teeth of each operating wheel projecting from the housing for manual operation of the wheels thereby, a plurality of sets of mechanism cooperating with said operating wheels respectively and each comprising rotary driving means revolubly mounted in said housing in position to be rotated in either direction by the operating wheel of the same set of mechanism, a rotary device in each set of mechanism revolubly mounted in said housing, driving connections between the rotary device and the rotary driving means of each set of mechanism, and means in connection with each set of mechanism and each carried around by the rotary device of said set adapted by engagement with the rotary driving means of the next adjacent set of mechanism to give said rotary driving means of said other set and the mechanism driven thereby a single step movement upon the movement of said rotary device past a predetermined critical point.

1,829,380. MARGINAL REENFORCEMENT FOR POCKETS OF RUBBER BALLS. WILLIAM J. VOIT, Los Angeles, Calif. Filed July 24, 1928. Serial No. 294,970. 8 Claims. (Cl. 273—65.)

1. In an object of the class described the combination of: a shell having an opening; a pocket-member having its periphery joined with said shell in air-tight relationship so as to form a pocket inside said shell, with which pocket said opening is connected; an inflation-tube joined

to said pocket-member, by means of which inflation-tube said shell is inflated; and a reenforcing means consisting of a band defining an area including said opening and

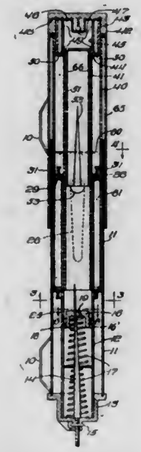


being of sufficiently larger size than said opening to permit flexibility of the portions of said shell adjacent to said opening.

1,829,381. METHOD OF MAKING POROUS CEMENT. ERNEST WALTER, Newark, N. J. Filed July 31, 1926. Serial No. 126,339. 2 Claims. (Cl. 106—18.)

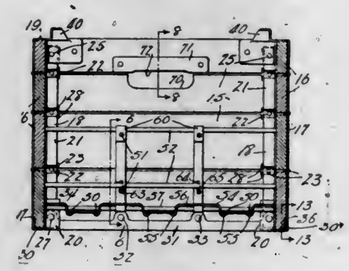
1. The process of making artificial stone which comprises mixing a plastic mass of cementitious material containing a small amount of free alkali with water and a small amount of liquid not soluble in water and which is more highly volatile than water, adding a small quantity of about one one-hundredth of the weight of cement, of metallic powder that will produce hydrogen when mixed with water and the alkali in the cement at a temperature of less than 100° C., heating the mass whereby the powder initiates a large number of gas bubbles and continued heating causes a further expansion by the volatile material.

1,829,382. SHOCK ABSORBER. GEORGE F. YEVSEYEFF, Detroit, Mich. Filed May 13, 1929. Serial No. 362,467. 7 Claims. (Cl. 188—88.)



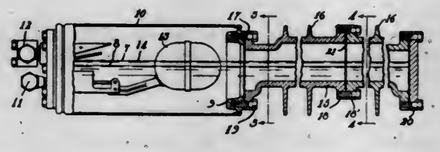
1. A shock absorber comprising a pair of concentric tubes spaced apart and closed at one end, a second pair of spaced concentric tubes closed at one end and adapted to be telescoped into the first pair with the members of the second pair fitting closely within the corresponding members of the first pair, a valve carried by the free end of the outer member of the second pair, a second valve carried by the free end of the inner member of the first pair, said valves adapted to permit inflow of fluid to the space between said valves from above and below said space, variable openings in said inner tube members adapted to register to permit flow from said space into said inner tubes, there being other openings to permit passages of fluid from said inner tubes into the spaces between the outer tubes above and below said valves, and a body of liquid in said device with its level below the top of the outer member of said first pair.

1,829,383. CRATE OR CASE. EDWARD ROY ALLING, Kenmore, N. Y., assignor to Rice & Adams Corporation, Buffalo, N. Y. Filed Feb. 24, 1928. Serial No. 256,714. 3 Claims. (Cl. 217—69.)



1. A case comprising side and end walls, and having pairs of longitudinal bottom wires, a horizontal spacing strip for supporting said bottom wires including a seating part extending beneath each pair of said wires and having seats therefor, said strip also having upbent parts projecting between said pairs of wires and connecting said seating parts, and a horizontal securing wire extending between and fixed to opposite walls of said case and which passes through holes in said spacing strip so as to extend under said upbent parts thereof and over said seating parts against said bottom wires for holding the same securely in said seats.

1,829,384. REFRIGERATING APPARATUS. FRANK W. ANDREWS, Fort Wayne, Ind., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 29, 1927. Serial No. 243,439. 6 Claims. (Cl. 62—95.)

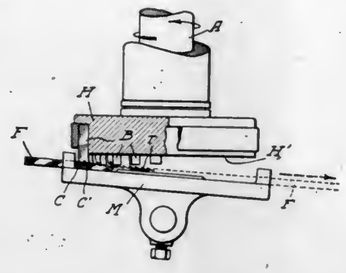


2. A refrigerating element for mechanically refrigerated cabinets comprising a relatively long and narrow chamber, means for maintaining a predetermined level of volatile liquid refrigerant in said chamber and means for preventing the formation of liquid waves within said chamber, said wave-preventing means comprising baffles adapted substantially to prevent the formation of waves and to break up such waves when formed.

1,829,385. FILE CUTTING APPARATUS AND METHOD OF MAKING FILES. ERNEST A. ANHEUSER, Milwaukee, Wis., assignor to Heller Brothers Company, Newcomerstown, Ohio, a Corporation of Ohio. Filed Apr. 25, 1927. Serial No. 186,477. 5 Claims. (Cl. 76—21.)

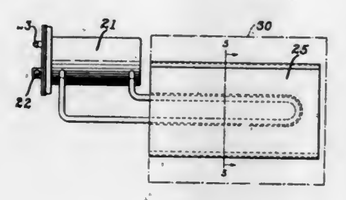
1. A file cutting apparatus having in combination a circular rotating cutter head, cutting bits forming pairs of cutting teeth disposed about a part of the circumference

of said head to provide projecting inner and outer concentric rows of cutting teeth, a work support adapted to receive a bar file blank disposed beneath and inclined to said head.



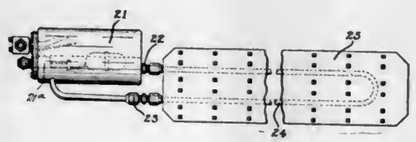
5. The herein described method of forming a curved tooth file which consists in forming the outer face of the file tooth by a finishing cut of a cutter operating in a circular path and forming at least the lateral portions of the front face of the file tooth by a finishing cut of a cutter operating in a circular path of relatively smaller radius to produce a finished tooth of convex curvature transversely of the blank.

1,829,386. REFRIGERATING APPARATUS. JAMES C. ARNOLD, Los Angeles, Calif., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,731. 4 Claims. (Cl. 62—95.)



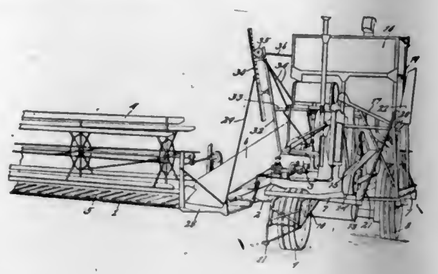
3. A refrigerator having a header and a refrigerant loop, and a fin fitting over said loop, said fin having a cavity for the reception of said loop.

1,829,387. REFRIGERATING APPARATUS. JAMES C. ARNOLD, Los Angeles, Calif., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,732. 4 Claims. (Cl. 62—95.)



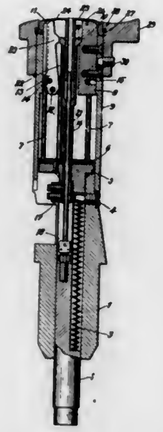
1. A refrigerating element comprising a header, a looped duct, a vertical cooling fin, means for detachably connecting said looped duct to said header, and means for detachably connecting said fin to said duct.

1,829,388. ONE MAN CONTROLLED COMBINED HARVESTER AND THRASHER. JAMES T. ASHTON, Battle Creek, Mich., assignor, by mesne assignments, to Oliver Farm Equipment Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 9, 1927. Serial No. 232,009. 14 Claims. (Cl. 56—20.)



1. In a combined harvester having a thrashing means, means including a receptacle for receiving thrashed material, a platform adjacent said receptacle and so located that the operator standing on said platform may readily inspect the contents in the receptacle and operate means for controlling the discharge of the contents from said receptacle, and means for controlling said discharge.

1,829,389. FASTENER-INSERTING MECHANISM. WILLIAM RODERICK BARCLAY and WILLIAM THOMAS BUCKINGHAM ROBERTS, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 23, 1927, Serial No. 208,009, and in Great Britain Sept. 3, 1926. 21 Claims. (Cl. 1—32.)

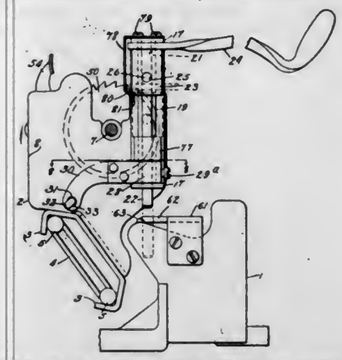


1. In a fastener-inserting mechanism, fastener-driving means, a movable member furnishing a wall of a passage for the driving means at the point of emergence of the fasteners from said passage, and means acting during the movement of the driving means for changing the position of the member.

1,829,390. TYPEWRITER AND THE LIKE. JOHN H. BARR, Ithaca, N. Y., assignor to Barr-Morse Corporation, a Corporation of New York. Filed Mar. 7, 1927. Serial No. 173,271. 28 Claims. (Cl. 197—114.)

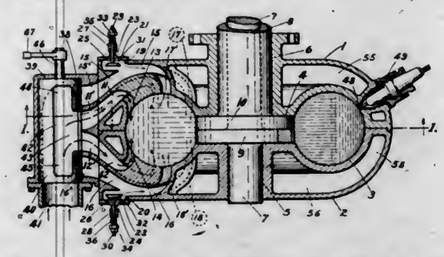
2. In a typewriting machine or the like, a frame part, a carriage part movable relatively to said frame part for

letter spacing purposes, escapement means controlling the relative movement of said parts, and means carried by



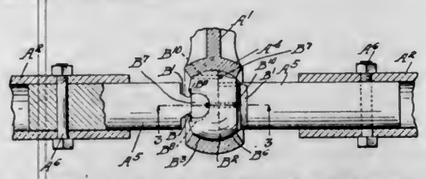
one of said parts and co-acting with the other of said parts for locking together said parts against relative movement in a partial space position of said escapement.

1,829,391. ROTARY INTERNAL COMBUSTION ENGINE. FRANK A. BULLINGTON, Kansas City, Mo., assignor to Bullington Motors, Kansas City, Mo., a Common-Law Trust consisting of Solomon Stoddard, Ernest E. Howard, and Frank A. Bullington. Filed Jan. 14, 1927, Serial No. 161,123. Renewed Mar. 20, 1931. 10 Claims. (Cl. 123—11.)



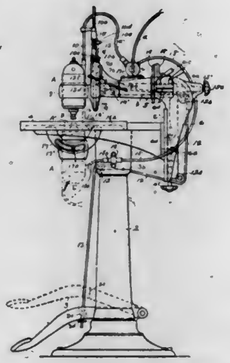
10. In an engine of the character described, a cylinder casing, an annular cylinder therein, pistons rotatable in the cylinder, working chambers formed by the pistons, the cylinder casing having a fuel inlet control valve and inlet passages leading from the fuel inlet valve to oppositely spaced cylinder inlet ports, and secondary volumetric fluid inlet means controlled by said fuel inlet valve to be effective in introducing fuel fluid and secondary volumetric fluid into the working chambers in strata and to supply a constant initial charge volume to said working chambers.

1,829,392. FLEXIBLE BEARING FOR SCREW CONVEYERS. FRANK B. CALDWELL, Oak Park, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 7, 1926. Serial No. 133,792. 8 Claims. (Cl. 64—89.)



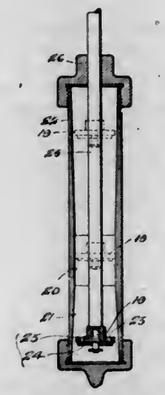
1. A flexible bearing for conveyer flights and the like comprising a spherical bearing socket, a ball mounted for oscillation and rotation therein, two cylindrical sockets in the ball whose axes are at right angles to each other, and cylindrical bearing members in said sockets free to oscillate about the socket axes, the sockets being closed at each end to prevent lateral displacement of the cylindrical members, the closure at one end of each socket being removable.

1,829,393. COMBINED ROUTER AND SHAPER. RAY L. CARTER, Phoenix, N. Y., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 28, 1929. Serial No. 402,986. 8 Claims. (Cl. 90—14.)



1. A combined routing and shaping machine comprising a motor and a tool driven thereby, in combination with a pedestal and a table supported by the pedestal, a support for the motor comprising a member having a horizontal arm that overlies the table, and a vertical arm that over-laps the rear end of the table, said horizontal arm being rotatably supported by the vertical arm, a head to directly support the motor, guide means for rendering the head reciprocable at right angles to the axis of the horizontal arm, a plunger in said horizontal arm, means to connect the plunger with said head, tension means to move said plunger in the direction for raising the head and motor relatively to the table, and means independent of the plunger and of the means which connects the plunger and head and controlled by the operator for moving the motor and head towards the table.

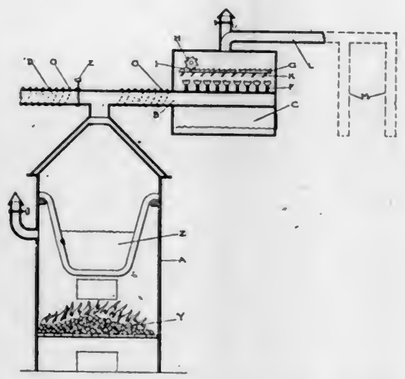
1,829,394. HEAD CHECKING MEANS FOR POWER OPERATED PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Dec. 12, 1927. Serial No. 239,389. 6 Claims. (Cl. 68—9.)



4. In a pressing machine, the combination of a fixed pressing element, a movable pressing element, actuating

mechanism for said movable element, means cooperating with said actuating mechanism to retard the motion of said movable element during a part of its movement in each direction.

1,829,395. FINELY DIVIDED METALLIC COMPOUNDS AND PROCESS THEREFOR. REGINALD H. EAGLES, Hastings-on-Hudson, N. Y. Filed Jan. 11, 1927. Serial No. 160,392. 3 Claims. (Cl. 134—78.)



3. The process of producing finely divided zinc oxide which comprises the vaporization of zinc, the dilution of said vapors with another gas in such manner as to control the concentration of the metallic vapors so as to attain the optimum conditions for producing the smallest sized particles in the finished product; burning said vapors and causing the products of said burning to impinge against a relatively cool surface in the region of condensation of the metallic vapors to the condition of solid particles and giving said particles an irregular shape by such impingement.

1,829,396. WINDSHIELD WIPING MECHANISM. RALPH B. GRAY, Chicago, Ill. Filed Dec. 3, 1928. Serial No. 323,276. 10 Claims. (Cl. 15—253.)

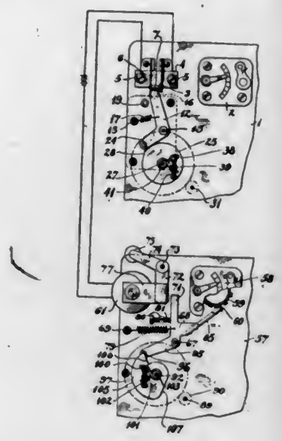


1. Wind shield wiping mechanism comprising a hollow casing rectangular in cross section, a reciprocal member in said casing adapted to carry a wind shield wiping element, means for actuating said member, and antifriction means on said member for bearing against each wall of said casing, said antifriction means being arranged in sets, one set adjacent each end of said reciprocal member comprising a pair of vertical rollers secured at one side of said member, one roller being arranged to bear against the bottom wall of said casing and the other against the top wall thereof.

1,829,397. METHOD OF FORMING BLANKS. RICHARD M. HEAMES, Grosse Pointe, Mich. Filed Feb. 1, 1928. Serial No. 251,229. 4 Claims. (Cl. 10—27.)

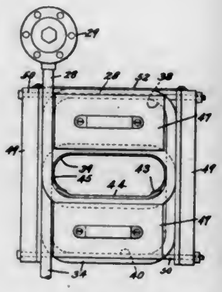
1. The method of forming headed blanks, which comprises, severing previously undrawn rod stock of an approximate diameter transversely of its grain into pieces, directly drawing a portion of each piece longitudinally of said grain to accurate finished diameter, and directly upsetting another portion of each piece to form a head.

1,829,398. SYNCHRONIZING MEANS FOR TIME MEASURING MECHANISM. OTTO HESS, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Joint Stock Company of Switzerland. Filed Mar. 29, 1926, Serial No. 98,225, and in Switzerland Apr. 1, 1925. 3 Claims. (Cl. 58—24.)



1. A secondary clock including in combination, a clock movement, a stop pin resiliently urged into contact with a moving part of the clock to stop the clock, a weight normally holding said stop pin out of contact with the moving part, a cam preventing movement of the stop pin into contact with the moving part except at predetermined times and an electromagnet adapted to be momentarily energized to retract the weight and allow the stop pin to be moved into contact with the moving part.

1,829,399. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed June 2, 1925. Serial No. 34,358. 15 Claims. (Cl. 62—95.)

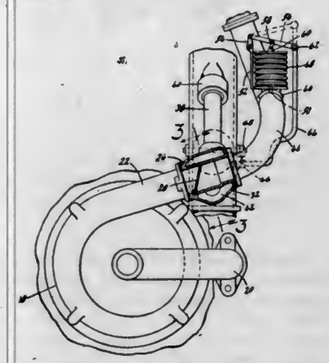


9. A cooling unit comprising in combination, a conduit for cooling medium formed into a coil, and a heat-absorbing body including a flat surface on one side and a plurality of fins projecting from the other side, said flat surface being in contact with the convolutions of the coil to provide a relatively small thermal contact surface between the member and the conduit.

15. A cooling unit for refrigerating apparatus, comprising in combination, a refrigerant conveying coil having the loops thereof spaced from one another, a refrigerant conveying coil having the loops thereof extending within

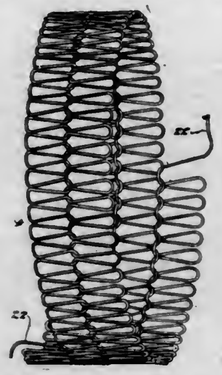
the spaces between the loops of the first group to provide an enclosure between the interlaced portions of said loops adapted to receive an ice-making receptacle and means for delivering refrigerant to said groups of loops.

1,829,400. SUPERCHARGER. ROLAND V. HUTCHINSON, Lansing, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 6, 1927. Serial No. 211,150. 5 Claims. (Cl. 123—119.)



1. In combination with an internal combustion engine having a carburetor, a supercharger positioned between the carburetor and engine, a heater for the carburetted fuel independent of the supercharger and positioned at the supercharger outlet, means for conducting the fuel to the engine, and means in the heater for pulverizing the unvolatilized fuel.

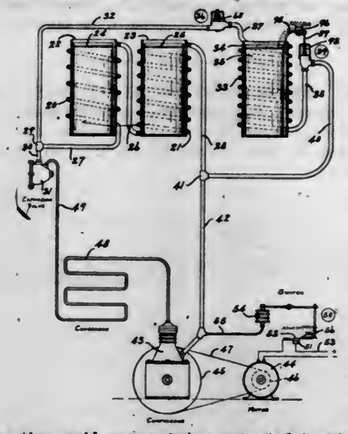
1,829,401. AIR CLEANER. HERBERT GEORGE KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 9, 1928. Serial No. 245,404. 4 Claims. (Cl. 183—45.)



1. The method of forming a dust-collecting medium for use in an air cleaner which includes, knitting a tube from flat metallic ribbon, and rolling the tube upon itself to form a cartridge.

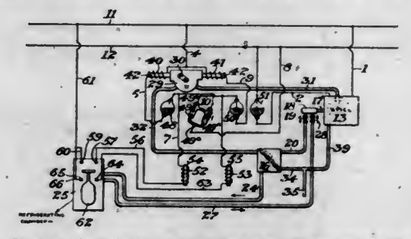
1,829,402. REFRIGERATING APPARATUS. LLOYD M. KEIGHLEY, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Jan. 18, 1926. Serial No. 81,902. 12 Claims. (Cl. 62—8.)

1. A refrigerating system comprising in combination, a cooling unit, means for supplying a volatile liquid refrigerant to, and withdrawing gaseous refrigerant from said cooling unit, said means including an exhaust conduit, means located in said exhaust conduit for rendering said



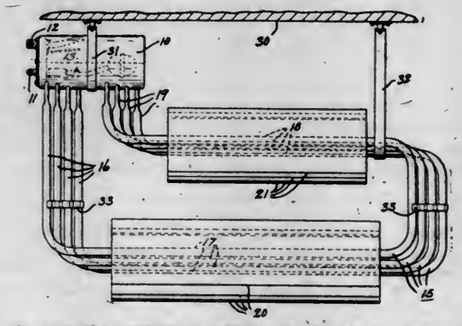
unit operative, said means being actuated by the act of moving an object to be cooled into communication with said cooling unit.

1,829,403. ELECTRICAL CONTROL SYSTEM FOR REFRIGERATION. FREDERICK G. KEYES, Cambridge, Mass., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 10, 1923. Serial No. 673,931. 5 Claims. (Cl. 62—5.)



1. In an electrical control system, the combination of two switches for opening and closing electrical circuits therethrough, means for moving said switches to simultaneously close a circuit through one switch and open another circuit through another switch, and liquid level controlled means for closing and opening alternately the circuit of said first named means.

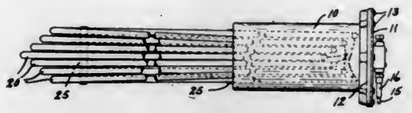
1,829,404. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Feb. 6, 1926. Serial No. 86,589. 14 Claims. (Cl. 62—95.)



1. A cooling unit for mechanical refrigerators comprising, an elongated header containing a quantity of volatile

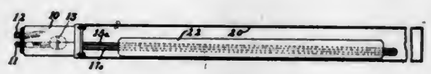
liquid refrigerating medium, a plurality of duct loops depending from said header and connected thereto in parallel, said loops projecting longitudinally beyond said header, and metal fins thermally connected with said loops.

1,829,405. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Feb. 6, 1926. Serial No. 86,591. 20 Claims. (Cl. 62—126.)



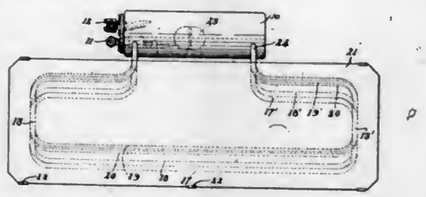
1. A cooling unit for mechanical refrigerators comprising: an elongated header tank adapted to contain liquid refrigerant at a substantially constant level, a plurality of duct loops each having a plurality of legs connected to said header, one of said legs being connected to one end wall of said tank and projecting a substantial distance in the longitudinal direction of said tank.

1,829,406. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,719. 7 Claims. (Cl. 62—95.)



1. Refrigerating means for mechanically refrigerated cabinets comprising a brine tank having an opening in an end wall, a header disposed externally to said brine tank and attached to an end wall thereof and providing a cover for said opening, refrigerant circulating ducts within said brine tank and connected to said header.

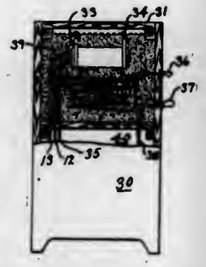
1,829,407. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,722. 9 Claims. (Cl. 62—95.)



3. Refrigerating means for mechanically refrigerated cabinets comprising an elongated header, and a plurality of duct loops connected with said header and extending longitudinally beyond opposite ends of said header.

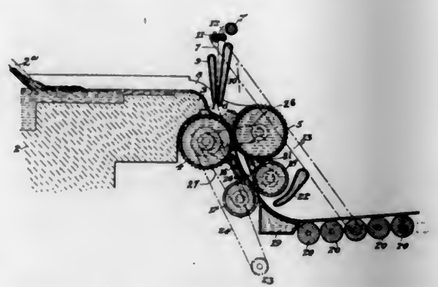
1,829,408. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,406. 4 Claims. (Cl. 62—141.)

1. A liquid cooler comprising a refrigerant level maintaining header, a depending pipe system associated therewith including a plurality of pipes, one telescoping with the other, one of said pipes being connected to said header at both ends to maintain refrigerant liquid circulating within



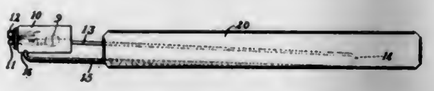
said pipe and the other of said pipes being adapted to circulate the liquid to be cooled within said pipe, the liquid in one of said pipes being in contact with the other pipe.

1,829,409. METHOD AND APPARATUS FOR PRODUCING SHEET GLASS. CHARLES B. KINGSLEY, Clairton, Pa., assignor to Mississippi Glass Company, a Corporation of New York. Filed Feb. 28, 1927. Serial No. 171,473. 4 Claims. (Cl. 49—86.)



1. The method of producing reinforced wire glass, which comprises feeding molten metal to a sheet forming pass, cooling one surface of the metal before it reaches said pass whereby said cooled surface is stiffened, feeding reinforcing wire into said metal after said stiffened surface is formed, and limiting the depth of penetration of said wire into said metal by the thickness of said stiffening surface.

1,829,410. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,720. 6 Claims. (Cl. 62—95.)



4. An evaporator disposed in the path of air for directly cooling the air, said evaporator comprising a finned section forming the greater part of the length of the evaporator and the greater part of the metallic heat absorbing surface of the evaporator, said finned section including a plurality of vertically extending fins and a compact group of long slender and horizontally disposed refrigerant conveying tubes intimately connected with the fins, certain of said tubes being disposed at higher planes than others and certain being arranged to the side of

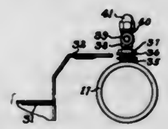
others, and a cylindrical header containing a quantity of volatile liquid refrigerant, certain of said tubes being connected with an end wall of the header and certain of said tubes being connected with the cylindrical wall of the header.

1,829,411. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,721. 7 Claims. (Cl. 62—95.)



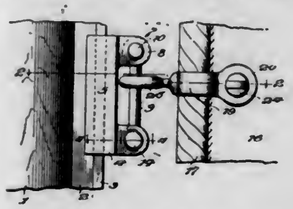
7. A horizontally elongated spike-like evaporator disposed in the path of air for directly cooling the air, comprising a finned section forming the greater part of the horizontal length of the evaporator and the greater part of the metallic heat absorbing portion of the evaporator, said finned section including a compact group of long slender and horizontally disposed refrigerant conveying tubes forming the major heat transfer section of the evaporator contacting with the refrigerant, some of said tubes being arranged on a higher plane than others, said finned section also including a plurality of vertically extending fins each of said fins being intimately connected with a lower and an upper tube, and a header containing a quantity of volatile liquid refrigerant, said upper and lower tubes being each connected with a vertically extending wall of the header in fluid exchange relationship with the interior of said header.

1,829,412. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1929. Serial No. 367,165. 4 Claims. (Cl. 62—115.)



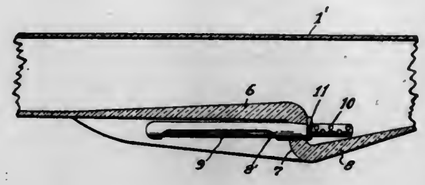
1. In combination, a platform adapted to support a refrigerant liquefying unit, a receiver spaced from said platform, a plurality of brackets attached to said platform, said brackets being slotted, an inlet means and an outlet means for the liquefied refrigerant on said receiver, said means adapted to be inserted in said slots and to thereby support said receiver in said spaced relation.

1,829,413. RIGGING FOR SAILBOATS. CLARENCE V. KOZLAY, New York, N. Y. Filed Mar. 22, 1930. Serial No. 438,187. 5 Claims. (Cl. 114—112.)



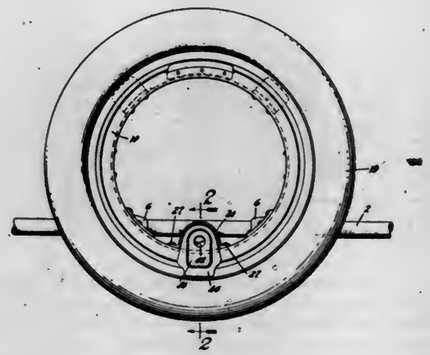
2. A slide for use in a rigging for a sail-boar, comprising, binding means adapted to be attached to a sail, a body having track-engaging portions, an arm for connection with said binding means having one end pivoted to said body, and spring means for detachably securing the other end of said arm to the body.

1,829,414. HOT WATER BOTTLE THERMOMETER. HARRY D. LAPKIN, San Francisco, Calif. Filed Apr. 10, 1928. Serial No. 268,910. 4 Claims. (Cl. 73—52.)



2. A flexible container having a thickened wall at one portion thereof, said thickened wall being distorted to form a recess capable of maintaining its formation, said thickened wall having an aperture therethrough, a shell having one end projecting through said aperture to the interior of the flexible container and a thermometer located in said shell so that the bulb thereof is situated in the portion of said shell located at the interior of the container.

1,829,415. TIRE CARRIER LOCK. FRANK H. LE JEUNE, Jackson, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 18, 1929. Serial No. 333,309. 4 Claims. (Cl. 70—90.)

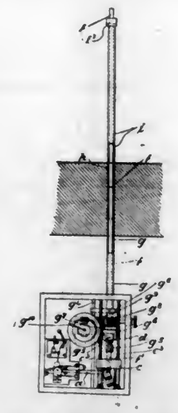


1. In a tire carrier lock, a frame for supporting the tire, means for removably securing the rim and frame together, a closure pivoted to and extending over the operable part of said means in locked position, an extension on said closure slidably and rotatably mounted in said means, means for limiting the sliding movement, a lock in said closure for locking said closure over said operable part, said closure adapted to partake of said slidable and rotary movement when in unlocked position.

1,829,416. CONTROL OF TEMPERATURE IN ELECTRIC FURNACES AND THE LIKE. ALFRED GLYNNE LOBLEY, Chapel-en-le-Frith, England, assignor of one-half to Birmingham Electric Furnaces Limited, Erdington, Birmingham, England. Filed Sept. 22, 1926, Serial No. 136,963, and in Great Britain Oct. 1, 1925. 7 Claims. (Cl. 200—137.)

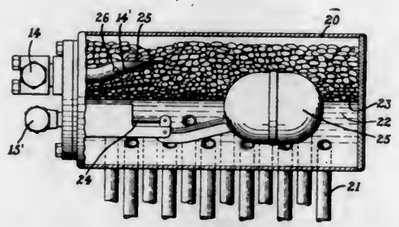
1. A temperature control installation for a furnace, comprising a thermostat having a high-expansion element, a displacement switch member outside the furnace con-

nected to one end of said element, a low expansion element connected at one end to the first element within the fur-



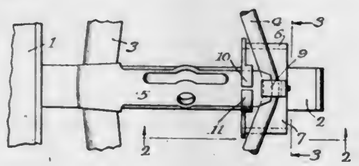
nace, and loading spring means associated with the elements to keep the high expansion element under tension and the low expansion element under compression.

1,829,417. REFRIGERATING APPARATUS. RALPH K. MILLER, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,717. 10 Claims. (Cl. 62—178.)



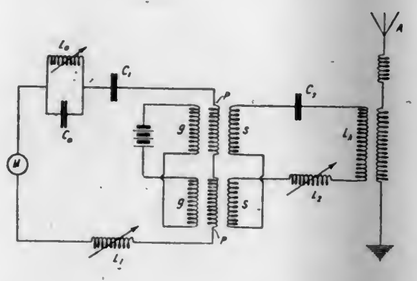
1. The method of operating refrigerating apparatus which consists in circulating through the apparatus a volatile refrigerant and oil capable of forming sustained bubbles in the presence of the refrigerant.

1,829,418. BRAKE BEAM SUPPORT. AMBROSE C. MOORE, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 6, 1928. Serial No. 244,787. 3 Claims. (Cl. 188—213.)



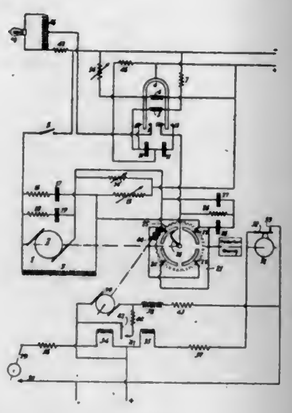
1. A brake beam support, comprising the combination with a brake beam of a supporting track, a shoe arranged between the tension member of the brake beam and the track, said shoe having a lower portion provided with a slot materially wider than the track for retaining it in engagement with the track while permitting a free transverse movement of the shoe with respect to the track, and having on top of said lower portion a seat to receive the tension member of the brake beam, and means for engaging said tension member comprising bendable means integral with said shoe and adapted to retain the shoe on the tension member on both forward and backward movement thereof and to prevent the lifting of the tension member from engagement with the shoe.

1,829,419. FREQUENCY MULTIPLICATION. MENDEL OSNOS, Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Sept. 21, 1926, Serial No. 136,770, and in Germany Oct. 20, 1925. 8 Claims. (Cl. 250—17.)



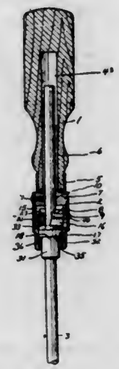
1. In combination, a direct current magnetized generator of harmonics, a source of energy at a fundamental frequency connected thereto thru a circuit tuned to the fundamental frequency, an output circuit coupled thereto tuned to a harmonic of the fundamental, and a utilization circuit coupled to the output circuit and tuned in combination with said coupling circuit to a harmonic of the aforesaid harmonic of the fundamental.

1,829,420. SYNCHRONIZATION OF FACSIMILE TELEGRAPH APPARATUS. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 19, 1925. Serial No. 51,191. 24 Claims. (Cl. 178—69.5.)



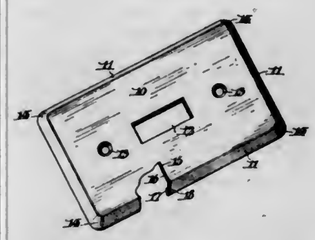
1. A method of synchronizing apparatus used in the transmission and reception of messages by radio which is unaffected by static which consists in adjusting the driving apparatus of the transmitter and receiver independent of connecting channels therebetween to substantially constant speeds at relatively frequent intervals, and in applying secondary adjustments to the driving apparatus of the transmitter and receiver also independently of each other at relatively widely separated time intervals.

1,829,421. SCREW DRIVER. WILLIAM C. ROE, Elyria, Ohio, assignor to Telkor, Inc., Elyria, Ohio, a Corporation of Ohio. Filed Oct. 2, 1929. Serial No. 396,688. 8 Claims. (Cl. 145—76.)



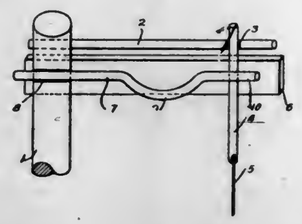
1. In a ratchet screw driver, a handle, a bit provided with a shank supported in and longitudinally movable in the handle, a lug on the handle, a ratchet clutch movable on the shank, a first and a second ratchet tooth on the clutch each provided with a driving face and a cam face, the faces being so positionable that when the handle is turned in one direction, the lug on the handle may clear the first tooth and engage the driving face of the second tooth to turn the clutch in one direction and when the handle is turned in the other direction the said lug may clear the second tooth and engage the driving face of the first tooth to turn the clutch in the other direction, a tongue and groove connection between the clutch and shank, whereby said driving movement given to the clutch in either direction may be transmitted to the bit to turn it and means for rocking the clutch on the shank in alternate directions to bring alternately the first or second tooth of the clutch in position to be engaged by the said lug.

1,829,422. FACE-PLATE FOR FLUSH RECEPTACLES AND THE LIKE AND ITS MANUFACTURE. ALEXANDER SELTZER, Philadelphia, Pa. Filed Apr. 26, 1930. Serial No. 447,404. 7 Claims. (Cl. 247—23.)



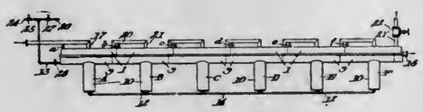
3. A face plate of the character described comprising a sheet metal backing with margins deflected rearward, and a pyralin facing sheet over said backing, said facing sheet having its original integral margins turned around and behind the margins of the backing, and being shrunk on the backing and thus tautly stretched over the same.

1,829,423. FILAMENT SUPPORT. LEE SUTHERLIN, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 2, 1924. Serial No. 717,391. 4 Claims. (Cl. 250—27.5.)



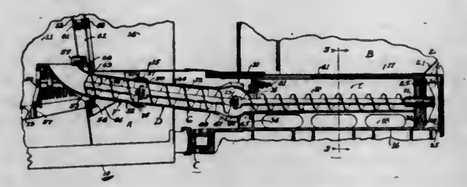
1. In a filament support, a fixed arm, a yieldable arm, a filament end piece separating said arms and means resiliently acting on said filament end piece to tension the filament.

1,829,424. APPARATUS FOR CONDENSING HYDROCARBON VAPORS AND THE LIKE. JOHN C. SWAN, Marietta, Ohio. Filed Mar. 25, 1929. Serial No. 349,717. 12 Claims. (Cl. 62—122.)



1. Apparatus for separating vapors from their carrier-gases by condensation, including a hollow body, means forming a series of condenser chambers communicating with said body but separated from each other, jackets surrounding said chambers and by means of which a refrigerating medium may be maintained in contact with said chambers, means for introducing gas into said apparatus wherein its carried vapors may be condensed, means for conducting the residual gas and vapors from each chamber to the chamber next adjacent to it in the series, and an outlet from said apparatus for the final residual gas.

1,829,425. LOCOMOTIVE AND TENDER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Nov. 20, 1929. Serial No. 408,484. 17 Claims. (Cl. 110—101.)



1. As a new article of manufacture, a locomotive mud ring having a stoker conduit section formed therewith.

1,829,426. DEVICE FOR USE WHEN TESTING OR ADJUSTING BRAKES. WALTER HENRY WELCH, Bristol, England. Filed June 21, 1929, Serial No. 372,712, and in Great Britain July 4, 1928. 1 Claim. (Cl. 265—1.)

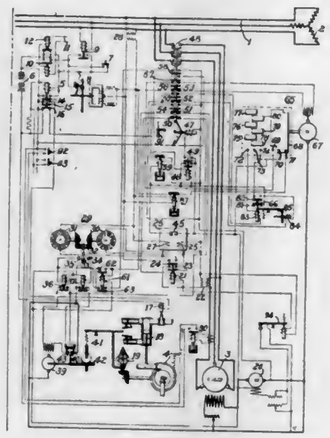
A device for the purpose set forth, comprising in combination a bracket arranged for engagement with a brake-

pedal, an externally screw-threaded rod pivotally connected to said bracket, a rotatable tube, a nut-member connected to the said tube to turn therewith and having screw-threaded engagement with the said rod, a sleeve on the end of said tube remote from the aforesaid pivotal connection, which tube is rotatably and slidably mounted



in said sleeve, means for limiting for the purpose set forth, the endwise movement of said tube in the sleeve, a force-responsive device to indicate force applied thereto, and a part operatively connected to the force-responsive device and arranged to be actuated by the endwise movement of the tube aforesaid.

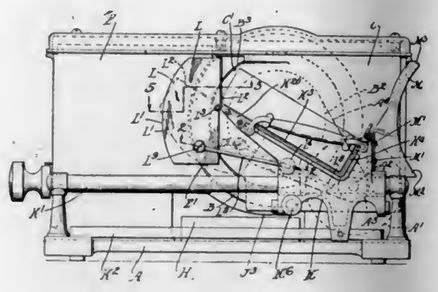
1,829,427. AUTOMATIC HYDROELECTRIC GENERATING STATION. ROY J. WENSLEY, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 23, 1923, Serial No. 614,391. Renewed July 2, 1929. 15 Claims. (Cl. 290—4.)



9. The combination with an alternating-current distribution system, a generator for supplying electrical energy thereto, a prime mover for the generator and a source of energy for driving the prime mover, of means for automatically starting the generator from rest, synchronizing the generator with the system and then connecting the generator to the system, and a plurality of electromagnetic controlling devices for controlling said automatic means, the operation of the respective controlling devices being a direct function of a coincident electrical condition of the generator and being dependent upon the proper functioning of the preceding operation in the sequence.

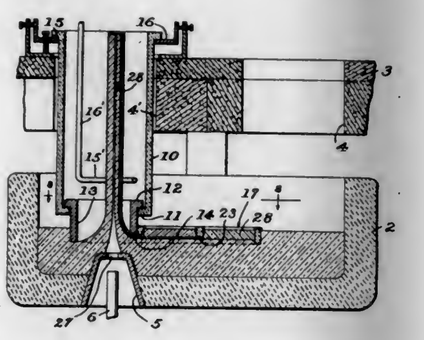
14. An automatic generating station comprising, in combination, a distribution system, means for imposing power of a predetermined frequency on the distribution system, a power-driven generator disposed to be connected to the distribution system, and means automatically operable upon a predetermined change in frequency of the power flowing in the distribution system to initiate the operation of the power-driven generator and accelerate it to a speed at which it generates a voltage in synchronism with that of the distribution system.

1,829,428. SLICING MACHINE. WALLACE B. WOLFF, Chicago, Ill., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed May 4, 1929. Serial No. 360,401. 8 Claims. (Cl. 146—102.)



1. In association with a slicing machine including a rotary knife and means for rotating it, a work supporting member and means for guiding it for movement past the cutting edge of the knife, said work supporting member including a plurality of work engaging elements in angular relation, and an extension for one of said work engaging elements, pivoted thereto.

1,829,429. DRAWING GLASS. WILLIAM J. WOODS, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Apr. 9, 1929. Serial No. 353,890. 14 Claims. (Cl. 49—17.1.)

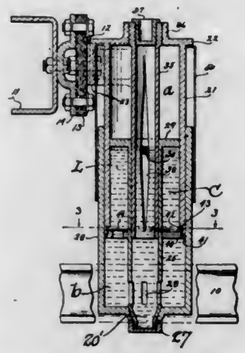


14. In an apparatus for drawing glass, the combination with a container for a bath of molten glass, means for drawing glass from the bath, means submerged below the surface of the glass for shaping it as it is drawn and means for cooling that portion of the glass from which the draw takes place, of a frame within the container for receiving glasses of a different character and retaining them in a restricted zone on the surface of the glass bath in such a position that when the draw takes place all glasses will be drawn simultaneously.

1,829,430. SHOCK ABSORBER FOR VEHICLES. GEORGE F. YEVSEYEFF, Detroit, Mich. Filed May 17, 1928. Serial No. 278,407. 5 Claims. (Cl. 188—88.)

1. A shock absorber comprising telescoping cups adapted to be secured respectively to two relatively movable members, an axially located tube in each cup also adapted to telescope, the outer tube carrying a piston slidable in the inner of said cups and dividing the space in the cups, said tubes being provided with registering openings, the

opening in said inner tube extending for a considerable portion of the length thereof and decreasing in width toward its ends, a body of liquid in said cups, and means



actuated by relative movement of said cups, to cause flow of liquid from one side of said piston to the other through said openings in said tubes.

1,829,431. CONDIMENTATION OF GROUND MEATS. HUGH E. ALLEN, Chicago, Ill., assignor of one-half to Albert G. McCaleb, Evanston, Ill. Filed Dec. 4, 1930. Serial No. 499,976. 3 Claims. (Cl. 99—11.)

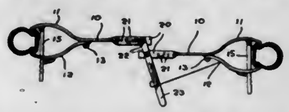
1. A seasoning material for ground meats comprising essential oils of spices, oleo-resins of peppers, an oleaginous protective agent in which said oils and oleo-resins are dissolved, and a relatively large quantity of semi-pulverulent sugar upon the particles of which said substances are distributed.

1,829,432. FASTENING DEVICE. THEODORE BERNARD ANDRE, London, England. Filed Oct. 23, 1929, Serial No. 401,726, and in Great Britain Nov. 16, 1928. 4 Claims. (Cl. 292—80.)



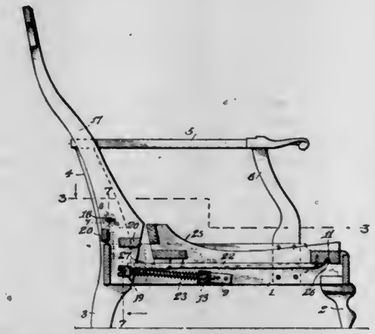
1. A fastening device formed wholly of india rubber and comprising an elastic shank, a hard vulcanized head portion adapted to engage a separate complementary member, and a similarly hardened base portion.

1,829,433. TIRE CHANGER. GEORGE J. ARMSTRONG, Maple Creek, Saskatchewan, Canada. Filed Apr. 7, 1931. Serial No. 528,609. 1 Claim. (Cl. 157—1.)



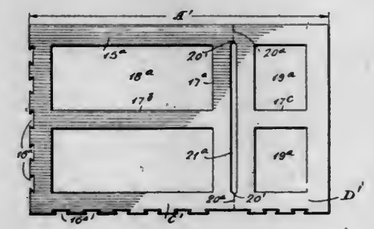
A rim tool of the character described comprising a pair of arms, adjustable jaws at the outer ends of said arms adapted to grip the sides of the rim, means connected with the inner ends of said arms for expanding and contracting the arms, a rack bar having one end pivotally connected to one side of said jaws and its opposite end extending through a slot in the other side of the jaws for regulating the adjustment of the jaws, said bar being disposed adjacent the mouth of said jaws and adapted to bear against the bottom of the rim when the arms are expanded, and a cam for holding said rack bar in engagement with said slot.

1,829,434. CHAIR. JACOB D. BAIR, Montgomery, Pa. Filed Mar. 21, 1930. Serial No. 437,822. 1 Claim. (Cl. 155—116.)



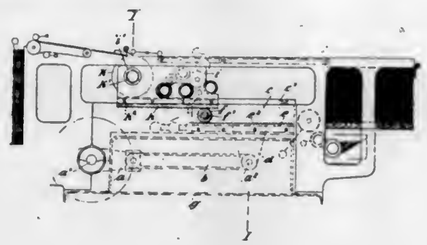
The combination with a chair frame and a cross-bar removably and rotatively mounted therein, of a back frame removably and pivotally supported by the chair frame, a cross-rod carried by the back frame below the pivot thereof, a slidable removable connection between the cross-rod and the bar and yielding means carried by said connection for exerting a thrust against the rod to hold the back frame normally in a predetermined position, said back frame being movable to shift the rod past a dead center and release the back frame bar, and slidable connection for separation for removal from the chair frame.

1,829,435. HOLLOW BUILDING BLOCK. VERN A. BARNHART, Millington, N. J., assignor to Utility Block, Inc., Newark, N. J., a Corporation of New York. Filed Sept. 21, 1929. Serial No. 394,164. 3 Claims. (Cl. 72—41.)



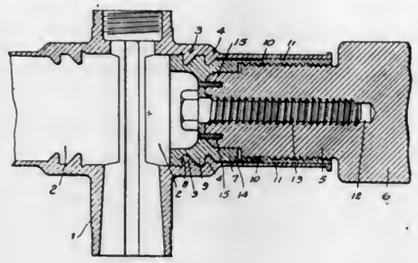
1. A hollow building block for end set construction comprising a shell dimensioned in proportion to standard brick sizes, a double web dividing said shell to form vertical cells, said web being provided with a cleavage opening, said web and cleavage opening being located at a distance from one end of the block substantially equal to one-third of the complete block length whereby the block may be divided into two sections, one of which is substantially half the length of the other and both of which correspond substantially to at least one dimension of said standard brick sizes, said web and cells forming an easily gripped portion whereby it may be grasped with one hand for placing it in end set position.

1,829,436. CYLINDER PRINTING PRESS. ARTUR BÜTTNER, Heidelberg, Germany, assignor to Schnellpressenfabrik Aktiengesellschaft Heidelberg, Heidelberg, Germany, a Corporation of Germany. Filed Mar. 8, 1928, Serial No. 260,089, and in Germany Oct. 27, 1926. 1 Claim. (Cl. 101—269.)



In a printing press the combination of a machine frame, horizontally arranged guideways in said frame, a form bed reciprocating on said guide ways, means for moving said form bed, and a toothed rack fixed on either length side of said form bed, a horizontally arranged guide way on each length side of said machine frame, two side parts carrying the impression cylinder and sliding on and supported by the last said guide ways, an axle connecting said two side parts, said impression cylinder being turnable on said axle, a toothed rack firmly connected to each of said two side parts, a fixed bearing provided on either length side of the machine frame, and a toothed wheel journalled in each bearing, said toothed wheels being arranged between and engaging the toothed racks on said form bed and impression cylinder side parts, substantially as and for the purpose set forth.

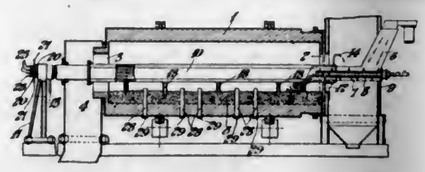
1,829,437. PROPELLER. NOBLE S. CLAY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 9, 1927. Serial No. 238,842. 4 Claims. (Cl. 170—173.)



1. In a propeller comprising a hollow hub member and a blade member having a threaded opening therein extending longitudinally thereof, holding means comprising a fastening member engaging the hub member and threaded directly into the opening in said blade member.

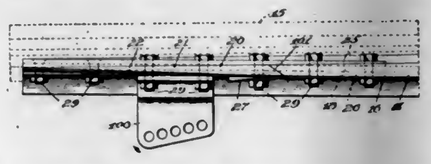
1,829,438. REDUCTION OF ORES, OXIDES, AND THE LIKE. HENRY EDWIN COLEY, London, England. Filed Jan. 5, 1931. Serial No. 506,731. 4 Claims. (Cl. 75—17.)

1. In the reducing of ores, oxides and the like effecting the reduction by bringing a hydrocarbon in a non-cracked condition into contact with material to be reduced which has been heated to its reducing temperature by keeping the same artificially cooled whereby such hydrocarbon is cracked by reason of contact with such heated material



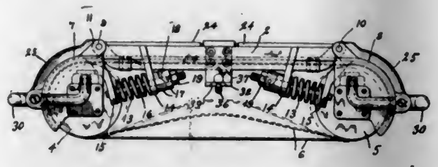
and maintaining the reducing temperature of the material by burning the combustible vapours produced by the cracking of the hydrocarbon with separately introduced air.

1,829,439. SWITCH POINT-RAIL. AUGUST ENSTROM, Chicago, Ill., assignor to Pettibone Mulliken Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,751. 12 Claims. (Cl. 246—437.)



1. A point-rail comprising a point-rail proper containing a recess in the upper portion of its pointed end, and a separate point-section comprising a body portion located in said recess and having depending flanges integral therewith by means of which said point-section straddles said point-rail proper, the joint between the end wall of said recess and the adjacent end of said point-section being inclined relative to the sides of said point-rail proper.

1,829,440. PORTABLE GRINDING AND POLISHING DEVICE. EDWARD S. ERICKSON, Salem, Ohio. Filed Sept. 14, 1929. Serial No. 392,630. 6 Claims. (Cl. 51—170.)

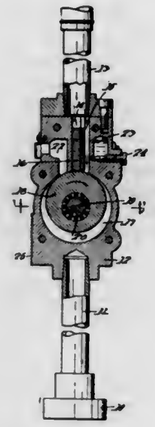


1. In a device of the character described, a portable rigid longitudinal frame, spaced pulleys carried thereby movable relative to the frame and movable toward and away from each other, elements on said frame movably supporting said pulleys, an abrasive belt on said pulleys having a freely unbacked run therebetween, yieldable means for tensioning the belt, and manually controlled means for moving the pulleys relative to the frame and toward each other.

1,829,441. VIBRATOR. ERNEST L. FICKETT, Fitchburg, Mass., and ALBERT W. MUNSELL, Teaneck, N. J., assignors, by mesne assignments, to said Albert W. Munsell. Filed Nov. 25, 1929. Serial No. 409,475. 1 Claim. (Cl. 259—72)

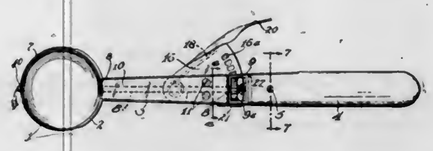
In a vibrator for the purpose described, the combination of a casing having serrations along one side, means for securing the casing to the surface of a concrete form and forcing the serrations into said surface for transmitting

the motion of the casing thereto, said casing having a circular chamber therein, a rotor mounted to rotate about a horizontal axis in said chamber parallel with said surface but eccentrically located thereon and having its edge, at the greatest distance from its center of rotation, sub-



stantially in contact with the wall of the chamber, whereby the rotor in its rotation moves toward and from said surface, an abutment in contact with the rotor to prevent passage of fluid backwardly around it and means for introducing fluid under pressure on one side of the abutment for turning the rotor.

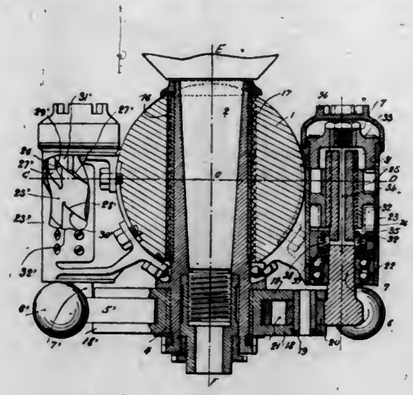
1,829,442. ICE CREAM DISHER. HARRISON D. FLEGEL, Racine, Wis., assignor, by mesne assignments, to Hamilton Beach Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 27, 1926. Serial No. 131,827. 13 Claims. (Cl. 107—48.)



12. In an ice cream dipper, the combination of a bowl, a scraper movable about an axis extending transversely of the bowl, a body member comprising a shank projecting from the bowl, and having a handle, a member for holding the shaft in bearings, one of said members being formed with bearings open at one side, and actuating means for the shaft including a lever pivoted to the body, and having a detachable connection with the shaft.

1,829,443. PROPELLER. ROBERT RICHARD GOBEREAU and LUCIEN EDOUARD MAUJOLE, Paris, France. Filed June 29, 1928, Serial No. 289,255, and in France July 2, 1927. 5 Claims. (Cl. 170—162.)

1. A variable pitch propeller comprising, in combination with a power shaft, a hub or support rotatably mounted upon said shaft, propeller blades orientatably mounted on said hub, an entraining member secured to the shaft, centrifugal masses pivotably mounted on said hub and variably connected to said entraining member whereby the radial displacement of the centrifugal masses controls the angular displacement of the entraining member with relation to the said hub, and means for connecting said entraining member and said orientatable blades so as to vary the blade pitch when said angular displacement occurs,—



all said means being arranged so as to maintain a substantially constant balance between the resisting couple of the propeller and the engine torque.

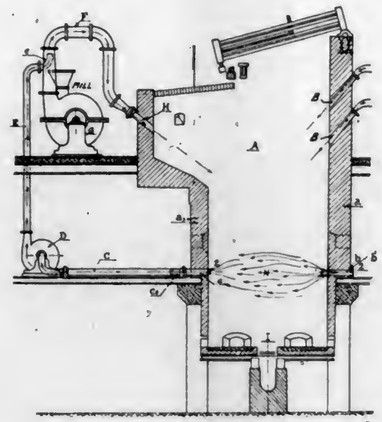
1,829,444. DIAL COVER. CLAYTON J. GOEBEL and CARL BARTELS, Hamilton, Ohio, assignors to The Mosler Safe Company, Hamilton, Ohio, a Corporation of New York. Filed Mar. 12, 1930. Serial No. 435,088. 5 Claims. (Cl. 70—56.)

1. A shield for use upon safes and the like provided with dials having plate and knob portions, said shield comprising an apertured cup member adapted to be superimposed over the dial for substantially covering the plate portion thereof and for permitting projection of the knob through the aperture in the cup member, and a pair of complementary housing members pivotally mounted upon the cup member and adapted to be locked together for enclosing the knob, when the shield is in position.

1,829,445. PULVERIZED-FUEL FURNACE AND METHOD OF OPERATING THE SAME. EMILE HAVEAUX, Valenciennes, France, assignor to Societe d'Electricite de la Region de Valenciennes-Anzin, Paris, France, a Company of France. Filed Mar. 7, 1928, Serial No. 259,778, and in France and Great Britain Mar. 26, 1927. 8 Claims. (Cl. 110—28.)

1. In combination with a furnace for pulverized fuel said furnace comprising an upper combustion zone portion and a lower neutral zone portion, a burner, means for

forcing pulverized fuel to said burner, a connecting pipe leading from said forcing means to said burner, means



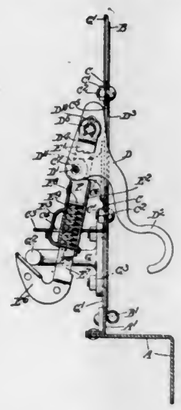
for producing a continuous flow of free air across the lower zone of said furnace, and means for causing said air to enter said connecting pipe.

1,829,446. CHENILLE YARN. STANLEY H. HINLEIN, Elkins Park, Pa., assignor to J. H. Hinlein & Sons, Philadelphia, Pa., a Firm composed of Joseph H. Hinlein, Milton J. Hinlein, and Stanley H. Hinlein. Filed July 25, 1930. Serial No. 470,734. 13 Claims. (Cl. 117—54.)



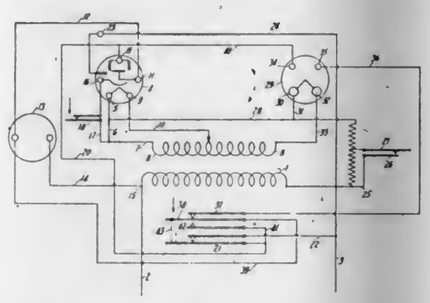
1. A chenille yarn characterized by the presence therein of a relatively stiff resilient core.

1,829,447. HOOD LATCH. DIBRELL P. HYNES, Chicago, Ill., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1930. Serial No. 480,356. 4 Claims. (Cl. 292—113.)



1. In a hood fastener or the like the combination with a hinged door member to be latched, of a keeper mounted within the hood, a latch carried by the hood door and mounted therewithin for longitudinal and lateral movement in relation to the keeper, guiding means positioned interiorly of the door adapted to guide the movement of the latch, said guiding means being provided with an aperture of a length substantially greater than the thickness of the latch extending transversely of the latch, the latch being freely movable laterally within the limits of said aperture, and a unitary door handle and latch operating member positioned upon said door and extending on each side thereof, and a frictional connection between said member and the latch, said frictional connection functioning to cooperatively move the latch by the handle within the limits defined by said aperture of the guide.

1,829,448. TUBE TESTING DEVICE. PAUL F. JACKSON, Dayton, Ohio, assignor to The Radio Products Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 15, 1930. Serial No. 502,371. 7 Claims. (Cl. 250—27.)



1. In a device for testing a tube having a filament, a cathode and a plate, a transformer having means for connecting the primary thereof with a source of current, a circuit connecting said filament with the secondary of said transformer, a circuit connecting said plate with said source of current, a meter in the plate circuit, a connection between said cathode and said secondary, and means for interrupting the connection between said cathode and said secondary to cause said meter to indicate any leakage between the filament and the cathode.

1,829,449. TABLE DESK. MORGAN D. KALBACH, Silver Spring, Md. Filed May 23, 1930. Serial No. 455,074. 1 Claim. (Cl. 242—55.)



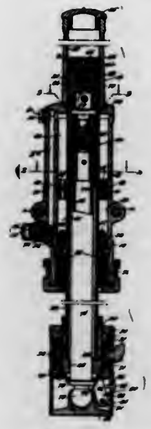
A device of the character described comprising a frame having opposed walls, one wall being provided with pintle receiving sockets, the other wall being formed with an opening and with pintle receiving sockets disposed opposite the sockets of the first wall, the sockets of the second wall being in the form of slots leading from front and rear edges of the opening formed therein, a latch strip pivoted at one end to the last mentioned wall and extending longitudinally thereof in crossed relation to the opening and slots and having recesses leading from its lower edge to register with inner portions of the slots when the latch is closed, and paper carrying rollers extending between the walls and having pintles at their ends rotatably engaged in said sockets of the walls, the pintles engaged in the slots having turning means at their outer ends and the rollers being removable through the opening formed in the second wall when released from the sockets.

1,829,450. AIR PRESSURE WATER SYSTEM FOR PASSENGER CARS. ALDEN B. LAWSON, Baltimore, Md. Filed Jan. 17, 1930. Serial No. 421,551. 4 Claims. (Cl. 137—79.)



1. In combination, in an air pressure water system for passenger cars, a water tank, an inlet connection to said tank, a valve controlling the supply of water through said inlet connection to said tank, a water conduit extending from each side of the car to said valve device, a valve operating element, a retainer at each side of the car, and a device at each side of the car for operating said element, said device having a slip joint and clutch connection with said element whereby each operating device may be shifted from an operative to an inoperative position and vice versa, and engaged in its inoperative position with its retainer.

1,829,451. HYDRAULIC JACK OR SHOCK ABSORBER FOR VEHICLES. ALEXANDER MCNAB, Bridgeport, Conn., assignor to McNab Absorbolift, Inc., New York, N. Y., a Corporation of New York. Filed June 15, 1928. Serial No. 285,559. 7 Claims. (Cl. 254—93.)

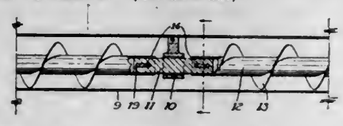


1. A vehicle shock absorber comprising a piston barrel adapted for connection with one part of the vehicle, said piston barrel having one portion thereof formed with a cylinder of relatively small diameter; said piston barrel having another portion thereof formed with a cylinder of larger diameter; a smaller piston element operative within said smaller cylinder; an extension on said piston element extending through said larger cylinder and adapted for connection with another part of the vehicle; a further piston element mounted on said piston extension and operative within said larger cylinder; said smaller cylinder and smaller piston element therein forming a closed pneumatic chamber; said larger cylinder forming an auxiliary hydraulic chamber between said larger piston element and the end of said smaller cylinder; said larger cylinder forming a main hydraulic chamber between said larger piston element and the end of said larger cylinder remote from said smaller cylinder; and means permitting a controlled flow of fluid from said auxiliary hydraulic chamber to said main hydraulic chamber and from said main hydraulic chamber to said auxiliary hydraulic chamber.

1,829,452. PROCESS FOR THE PRODUCTION OF 1-(M-AMIDOPHENYL-) 1-HYDROXY-2-METHYLAMIDO-PROPANE. MAX OBERLIN, Darmstadt, Germany. Filed Apr. 26, 1930, Serial No. 447,777, and in Germany May 14, 1929. 2 Claims. (Cl. 260—128.5.)

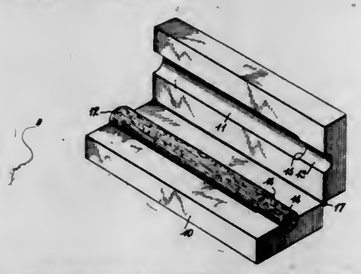
1. A process for the production of 1-(m-amidophenyl-1), 1-hydroxy-2-methylamido-propane which consists in the treatment of a salt of 1-phenyl-,1-keto-2-methylamido-propane with nitric acid of a specific gravity of more than 1,4 separating the so formed nitrate of the nitro derivative by crystallization; isolating the so formed nitric salt of the nitro derivative and reducing it in a suitable way, finally precipitating the 1-(m-amidophenyl-),1-hydroxy-2-methylamido-propane by alkalizing the solution.

1,829,453. EXPANSION COUPLING FOR SCREW CONVEYERS. JOHN N. PARKER, Fort Dodge, Iowa, assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 5, 1928. Serial No. 310,470. 3 Claims. (Cl. 64—89.)



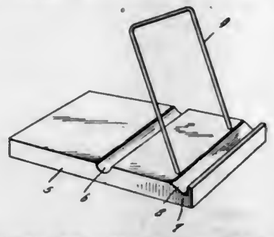
1. In an expansion bearing for screw conveyers, a bearing support, an elongated bar rotatably supported by said bearing support, a screw conveyer tube telescoping over each end of said bar, said tube and bar being provided with registering slots passing diametrically therethrough, a flattened key passing through each of said slots, each key having a width considerably less than the length of the slots, but having a thickness substantially equal to that of the slots so as to permit axial but not substantial circumferential movement of said tube relative to said bar, and a laterally extending member associated with each end of said key adapted to prevent the accidental removal of said key from said slot.

1,829,454. METHOD OF PRODUCING CIGARS, CIGARETTES, OR THE LIKE. WILLIAM F. PRIDE, Tampa, Fla. Filed Dec. 29, 1930. Serial No. 505,898. 5 Claims. (Cl. 131—52.)



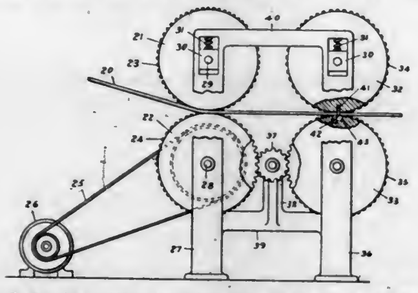
1. The method of forming a smoking article which comprises pre-forming a bunch with a reduced portion, fitting a mouthpiece upon said reduced portion without compression of the material of the portion thereby and applying a wrapper to said bunch and a portion of the mouthpiece and over the joint therebetween.

1,829,455. SCORE PAD HOLDER. FRANK W. RILEY, Pensacola, Fla. Filed Feb. 10, 1931. Serial No. 514,858. 1 Claim. (Cl. 40—146.)



A holder of the class described comprising a base block having a transverse groove adjacent its front edge, said groove having its front wall vertically arranged and its rear wall sloping upwardly and rearwardly from said front wall, said block having a pair of holes therein spaced slightly rearwardly from the groove and arranged one adjacent each side edge of the block, and a yoke-shaped member having the extremities of its limbs slightly bent and engaging the holes whereby the major portion of said yoke-shaped member slopes upwardly and rearwardly from the block.

1,829,456. TAKE-OFF MECHANISM FOR WIRE CUTTING MACHINES. WILLIAM H. ROBBINS and RAYMOND F. BOEHLER, Jr., Springfield, Ohio, assignors to The Williams Company, London, Ohio, a Corporation of Ohio. Original application filed Mar. 24, 1928, Serial No. 264,413. Divided and this application filed Jan. 16, 1929. Serial No. 332,911. 4 Claims. (Cl. 140—146.)



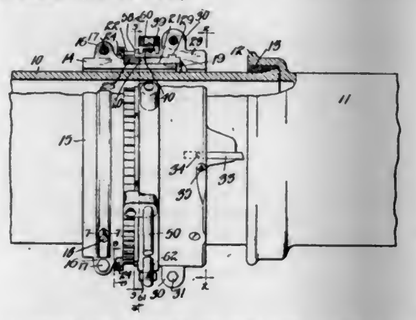
1. In a wire cutting machine, wire take-off means, superimposed wire engaging take-off drums, gear means on one side of said drums to gear said drums together and acting in part as guides for said means to drive said gears, yielding means for accommodating the inequalities of the wire and the relative position of said drums, interconnected cut-off drums synchronously driven with the take-off drums, and cut-off means associated therewith for cutting off said wire after it has been taken off at intervals.

1,829,457. ELECTRIC SOLDERING MEANS. WALTER SCHMIDT, Denver, Colo., assignor, by mesne assignments, to Eugene T. Auger, Denver, Colo. Filed May 27, 1929. Serial No. 366,160. 3 Claims. (Cl. 219—12.)



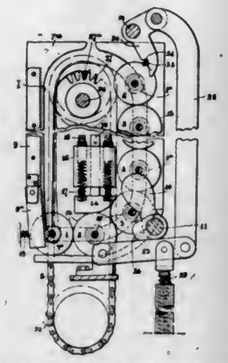
1. Electric soldering means comprising an interrupted low voltage circuit, material to be soldered connected with and forming a part of one side of said circuit, a manually-operable tool connected with and forming a part of the other side of said circuit, said tool comprising an electrically-insulated handle, a metallic stem axially within and slidable longitudinally of said handle, electrical connections between one side of said circuit and said stem within said handle, a hollow sleeve axially alined with and removably and replacably carried by said stem without said handle and a tip of material heatable by the passage of electric current therethrough and to which solder will not adhere frictionally held within and extending axially from said sleeve, said tool being operable to close said circuit and heat said tip through contact of said tip with said material to be soldered.

1,829,458. PIPE JOINT REAMER. REB M. SCOGGINS, Shreveport, La. Filed Feb. 10, 1930. Serial No. 427,378. 3 Claims. (Cl. 77—32.)



1. A device for reaming the lead out of bell joints of pipes comprising a sleeve adapted to be secured upon the pipe and having exterior screw-threads on one end, a second sleeve threaded upon the first sleeve, a ring mounted upon the second sleeve, said ring having reaming tools axially positioned therein, said second ring having ratchet teeth cut on the exterior of one end, a second ring rotatably mounted upon the first named ring, said second ring having manually reversible dogs engageable with the first named ring and with the ratchet teeth of the said sleeve for rotating the ring and the sleeve, and an annular flange with spaced arcuate notches about its interior for holding the dogs out of engagement with the ratchet teeth of the said sleeve except at predetermined spaced areas about the said second sleeve whereby rotation of the said second ring will rotate the first-named ring at each oscillation of the said second ring but will rotate the said sleeve only after a predetermined number of oscillations of the said second ring, substantially as set forth.

1,829,459. ADVERTISING OR DISPLAY APPARATUS. JOHN SHANNON, Birmingham, England, assignor to Postermatic Limited, Birmingham, England. Filed Apr. 17, 1930, Serial No. 445,118, and in Great Britain Apr. 20, 1929. 8 Claims. (Cl. 40—84.)



1. An advertising or display apparatus comprising a plurality of display sheets, a rotatably mounted anchor roller to which one end of each display sheet is fixed, display rollers to which the other end of each display sheet is fixed,

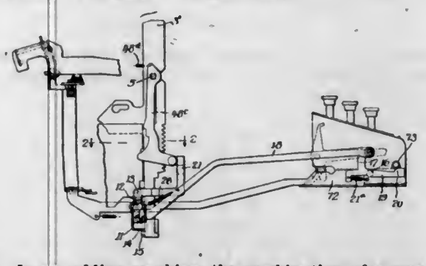
a frame having guide grooves in which the adjustable rollers travel, a rack, toothed wheels on the display rollers which engage the rack to wind the sheets thereon, means for positively and successively moving the toothed wheels on the display rollers into engagement with the toothed rack before the rollers are engaged by the lifting means, and means for lifting the rollers after the toothed wheels thereon have been engaged with the said rack.

1,829,460. HOT CATHODE ELECTRON DISCHARGE TUBE. LEE SUTHERLIN, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 14, 1926. Serial No. 129,121. 9 Claims. (Cl. 250—27.5.)



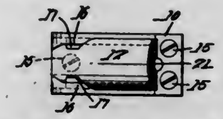
1. In an electron-discharge tube, a ribbon-shape filament, an anode having substantially plane, active surfaces spaced apart by a distance greater than the width of said ribbon, the anode enclosing said filament being so supported that the flat sides thereof are exposed to the surface of said anode throughout substantially the entire active length of said filament.

1,829,461. MEANS TO CONTROL PRINTING OF SIGNALS. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 19, 1928. Serial No. 327,056. 8 Claims. (Cl. 235—60.)



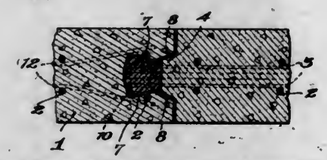
1. In an adding machine, the combination of a movable signal type carrier, means normally effective to prevent movement of said type carrier, a movable member which normally occupies a certain position at the end of a cycle of operations of the machine, and means controlled by said member to disable said movement preventing means.

1,829,462. DOOR ALIGNING AND CUSHIONING DEVICE. JOSEPH SWANSKI, Worcester, Mass. Filed Apr. 23, 1930. Serial No. 446,683. 1 Claim. (Cl. 16—85.)



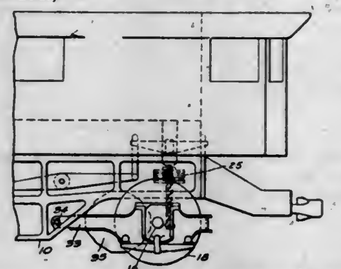
A door aligning device comprising a sheet metal base plate to be secured to a fixed supporting structure and having a middle portion of the body of the plate struck up to form a lug and having side portions of said plate bent upward and inward to form guiding flanges, a sliding member having the form of a segment of a cone and having side grooves to receive said guiding flanges, said member being substantially semi-circular in cross section at its larger end and having a recess in the under side of its body portion at the larger end, a spring positioned in said recess and engaging the inner end of said recess and one side of said lug, and a guiding member to be secured to a second and relatively movable supporting structure and having a segmental conical recess to receive said sliding member, said guiding member and said sliding member cooperating with a cam action to align and cushion said movable structure with respect to said fixed structure.

1,829,463. CONCRETE RETAINING WALL. CARL WEBER, Jacksonville, Fla., assignor to Shore-Line Builders, Inc., Jacksonville, Fla., a Corporation of Florida. Filed Aug. 9, 1930. Serial No. 474,242. 3 Claims. (Cl. 61—39.)



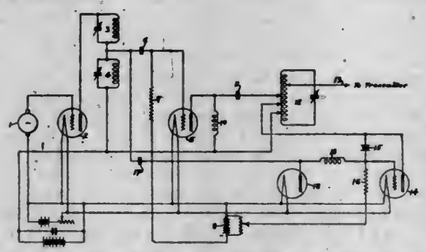
1. A retaining wall composed of a plurality of reinforced concrete slab piles, each having a double dovetail groove in one vertical edge and a relatively short truncated tongue on the other, and an extension on the lower end of said tongue of the same shape as the groove the free spaces of the grooves above said extensions being filled with a cement key.

1,829,464. LOCOMOTIVE TRUCK. BRIAN WHEELER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 19, 1930. Serial No. 503,441. 15 Claims. (Cl. 105—174.)



1. A connection for supporting a locomotive center-pin head on a truck frame comprising, in combination, a support having spaced projections for seating on the truck frame to oppose oscillatory movements of the connection, a spring carried by the support, and supporting members carried by the ends of the spring and connected to the center-pin head.

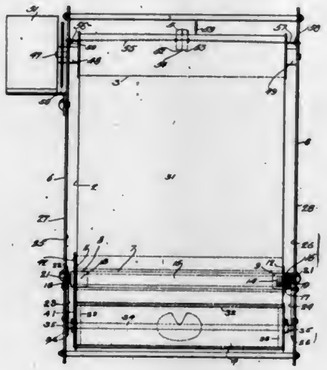
1,829,465. RADIO SYSTEM. LESTER J. WOLF, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 23, 1927. Serial No. 235,374. 7 Claims. (Cl. 250—17.)



7. In a radio system, two controlling devices for determining a carrier-wave frequency and means responsive

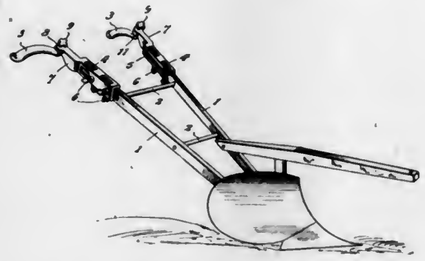
to energy delivered by one of said devices for preventing the simultaneous control of the carrier-wave frequency by both of said devices.

1,829,466. DRIVING MECHANISM FOR RECORDING APPARATUS. EDWARD J. ALBERT, Philadelphia, Pa., assignor to Thwing Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1926. Serial No. 149,783. 1 Claim. (Cl. 242—75.)



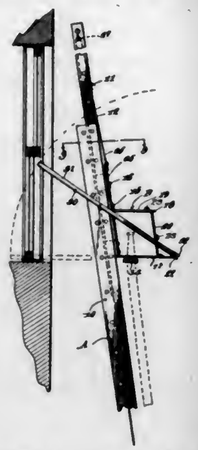
In a recording instrument, in combination, a pair of co-acting rolls having a desired material interposed therebetween, at least one of said rolls being so formed as to have substantially a point contact with one element of the other roll to prevent displacement of the interposed material axially of the roll, and a spring wire for supporting one of said rolls to establish the necessary pressure between the rolls.

1,829,467. PLOW HANDLE. DANIEL E. ATKINSON, Tallahassee, Fla. Filed May 28, 1930. Serial No. 456,691. 1 Claim. (Cl. 97—191.)



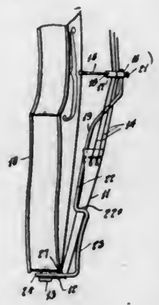
A handle for agricultural implements of the character specified, the same comprising an elongated hollow body longitudinally slotted along its inner side and having its outer side provided with threaded openings, clamp screws for securing the body to the handle bar of the implement in the required and adjusted position engaged through the threaded openings, a shank extending rearwardly from the body and terminating in a head at its rear end having its under face formed with teeth, a grip terminating at its front end in a head disposed beneath the head of the shank and having its upper face formed with teeth adapted to engage with the teeth of the head of the shank, and a clamp bolt passing through the mating heads of the shank and grip to adjustably connect the grip to the shank of said body and to permit the grip to be adjusted transversely thereof in a horizontal plane.

1,829,468. LADDER AND CARRIER THEREFOR. WILLIAM BARNETT, Los Angeles, Calif. Filed Apr. 25, 1929. Serial No. 357,999. 1 Claim. (Cl. 227—12.)



The combination with an extension fire ladder including a lower section and an upper section, each section including rails spaced from one another, of an attachment therefor including a carriage, inwardly extending guides carried by the rear face of the carriage adapted to engage the inner faces of the rails of one section of the ladder and the outer faces of the rails of the other section of the ladder and to slide between said faces of the rails of the ladder at the meeting point thereof, and means for raising and lowering said carriage.

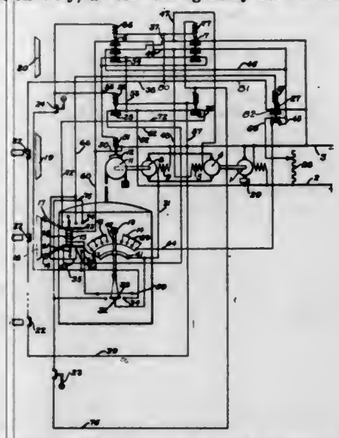
1,829,469. VIOLIN MUTE. WILLIAM BINGHAM, Newllano, La. Filed Jan. 9, 1930. Serial No. 419,641. 4 Claims. (Cl. 84—311.)



1. In combination with a stringed musical instrument, a tail piece, a loop on the tail piece and engageable with a button on the body of the instrument, a mute engageable with the bridge of the instrument, a holder for said mute having a hook and an extension adapted to engage respectively said button and a portion of the instrument body to hold the mute in position, and said holder provided with means adapted for engagement by a musician's chin to hold the mute in engagement with the bridge.

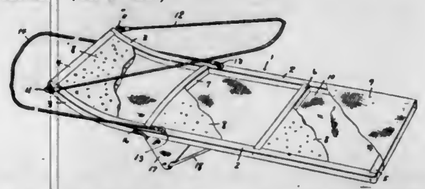
1,829,470. ELEVATOR CONTROL SYSTEM. EDGAR M. BOUTON, East Pittsburgh, and FRANK E. LEWIS, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1921. Serial No. 509,059. 13 Claims. (Cl. 172—152.)

1. The combination with a hoisting motor and controlling means therefor comprising a car switch, of a self-holding relay for effecting the operation of the motor in one direction only, a self-holding relay for controlling re-



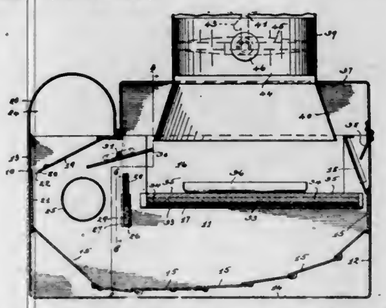
verse operation of said motor, independently of the car switch, and means controlled by said relays for regulating the motor speed.

1,829,471. SURF SLED. LEE H. BRIMHALL, Jacksonville, Fla. Filed Dec. 11, 1930. Serial No. 501,697. 3 Claims. (Cl. 9—11.)



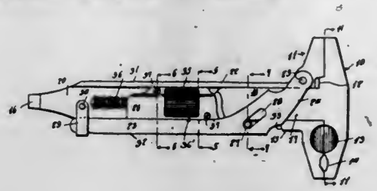
1. A surf sled of the character described comprising a frame including spaced, parallel, longitudinal side bars having upwardly curved forward end portions, end cross bars extending between the side bars, a pair of spaced, intermediate cross bars extending between the side bars, one of said intermediate cross bars being arcuated upwardly and disposed adjacent the upwardly curved portions of the side bars, the intermediate cross bars dividing the frame into a series of compartments, waterproof fabric covers secured on the upper and lower sides of the frame, and a buoyant filler disposed in the compartment between the upper and lower covers.

1,829,472. COLONY COUNTING APPARATUS FOR LABORATORY USE. THEODORE C. BUCK, Jr., Baltimore, Md. Filed Feb. 23, 1927. Serial No. 170,404. 10 Claims. (Cl. 88—39.)



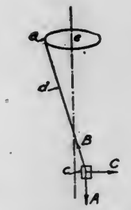
9. In a colony counting device the combination with a casing closed to exclude external light and having a sight opening at its upper side, of a transparent plate supported in the closed casing beneath the sight-opening and on which the substance to be tested may be supported, magnifying means above the transparent plate, illuminating means in the casing and adjustable reflector means also in the closed casing between the illuminating means and the plate to regulate the light directed about the plate.

1,829,473. WRENCH. YEE LAIN CHEW, Gopeng, Perak, Federated Malay States. Filed July 25, 1929. Serial No. 381,020. 2 Claims. (Cl. 81—88.)



1. A tool of the class described comprising a first jaw member, a second jaw member, said second jaw member telescoping into the first jaw member and having a screw, a nut threaded on said screw, a bracket slidable on the first jaw member, a lever pivoted to the first jaw member, said lever having a slot, a pin on said bracket disposed in said slot, said nut and pin being slidable as a unit with said bracket, said second jaw member being movable relatively to the first jaw member by the nut, the bracket during the latter operation being temporarily fixed to the first mentioned jaw by means of said pin and slot, and said lever being tiltable so that the pin and slot connection will cause said pin, nut and bracket to move downwardly as a unit.

1,829,474. METHOD AND DEVICE FOR ESTABLISHING COMMUNICATION BETWEEN AIRCRAFT IN FULL FLIGHT AND THE GROUND. CONSTANTIN CHILOWSKY, Paris, France. Filed July 9, 1929, Serial No. 377,023, and in France July 10, 1928. 6 Claims. (Cl. 244—2.)

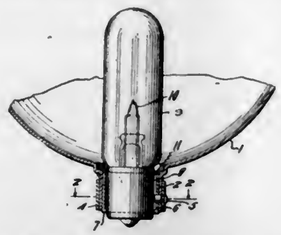


1. Method for establishing a cable communication between an aircraft in the air and a limited area on the ground which consists in lowering a weighted cable from the aircraft and causing said aircraft to describe circles about a vertical axis passing through the center of said area, whereby the weighted end of the cable describes circles, at a limited speed, close above said area.

1,829,475. PROJECTING LAMP BULB. GEORGE H. CUSHING, Washington, D. C. Filed Nov. 23, 1929. Serial No. 409,333. 1 Claim. (Cl. 240—41.)

In combination with an electric bulb having a filament and base with a tubular holder therefor provided with an opening in its periphery, a tubular adapter having a bayonet slot and a resilient split ring provided with a pin, said adapter having an internal diameter greater than that of the bulb base, and such an external diameter as to provide a tight fit with the interior of said holder, one end of said adapter turned inwardly to provide a flange

whose diameter is such as to allow axial and lateral adjustment of the bulb base when inserted therein, said flange also providing a compartment closed at one end between the bulb base and the adapter for solder by which



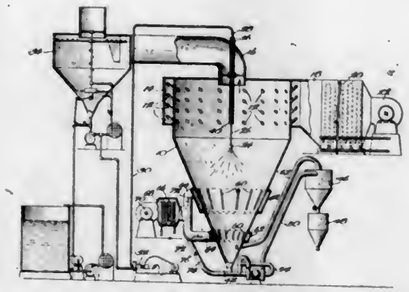
the adapter is secured to the bulb base in predetermined position, said adapter with bulb secured thereto being maintained within said holder by said split ring encircling the holder and its pin cooperating with the opening therein and the bayonet slot of the adapter.

1,829,476. SUBMARINE RESCUE DEVICE. ROCCO DICOLA, Forest City, Pa., assignor of twenty-five per cent to himself, twenty per cent to Uric J. McHale, Forest City, Pa., eighteen and one-third per cent to Frank Renda, eighteen and one-third per cent to Vito Varano, and eighteen and one-third per cent to Domenick Coroniti, Scranton, Pa. Filed Apr. 8, 1930. Serial No. 442,617. 2 Claims. (Cl. 114—16.7)



1. In a submarine rescue device of the class described, an open-ended canvas tube defining a refuge container, clamping means at the lower end of the tube for fluid tight connection with an exit tube in the submarine, manually manipulated mechanism for actuating said clamping means, a fluid tight closure associated with said clamping means for closing the lower end of the container, a discharge closure mounted on the upper end of the container, and including a rigid cap provided with a plurality of radial arms, pontoons mounted on said arms, and life boats mounted on said arms.

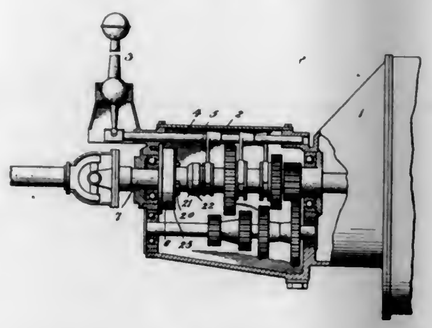
1,829,477. PROCESS OF AND APPARATUS FOR DRYING LIQUIDS. FRANK HOWARD DOUTHITT, Chicago, Ill. Filed Dec. 30, 1925. Serial No. 78,313. 18 Claims. (Cl. 159—4.)



2. The method of treating substances which comprises producing a longitudinally advancing spiral current of treating gas, causing said current to return in the opposite longitudinal direction internally of its path of advancing movement, introducing the substance to be treated in finely divided condition substantially centrally of said returning current of gas to pass outwardly therethrough and into said advancing spiral gas current, and withdrawing treated substance adjacent the locus of reversal of movement of said gas current.

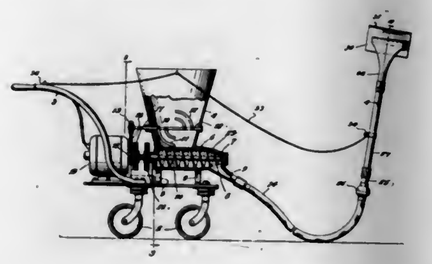
11. In combination, a spray drying apparatus embodying a drying chamber having a main drying zone and a zone to which the substantially dried particles pass therefrom, means for withdrawing a stream of gas and particles from said last named zone, means for separating the bulk of said particles from said stream, and means for returning the unseparated particles to said last named zone without again exposing them in said main drying zone.

1,829,478. SAFETY DEVICE. JOSEPH J. EHEMANN, Sr., and BENJAMIN F. SINGER, Lancaster, Pa. Filed Mar. 23, 1929. Serial No. 349,474. 2 Claims. (Cl. 192—4.)



1. In a safety device, the combination of a stationary case, a hub rotatable within the case and having a tapered recess in its periphery, a roller disposed freely in said recess, a yieldably mounted presser plate carried by the hub and engaging the roller to hold the same in engagement with the walls of the recess and the case to prevent reverse movement of the hub, a crank pivoted between its ends on an end of the hub, a pin carried by the outer end of the crank and extending within the recess parallel with the axis of the roller, the roller being between the presser and the pin, and means acting on the inner end of the crank to rock the same whereby to overcome the presser and permit reverse movement of the hub.

1,829,479. PLASTERING MACHINE. HARRY H. ELKINS, Philadelphia, Pa. Filed June 14, 1929. Serial No. 370,958. 8 Claims. (Cl. 72—130.)



2. A plastering machine comprising a trowel provided with a plaster-supporting flange along its upper edge disposed at an angle to its face and projecting away from its face, and means for feeding plaster to the trowel.

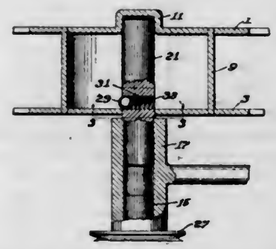
1,829,480. ORGANIC ESTER AND PROCESS OF MAKING THE SAME. IVAN GUBELMANN and CLYDE O. HENKE, South Milwaukee, Wis., assignors to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed July 2, 1928. Serial No. 290,025. 12 Claims. (Cl. 260—98.)

6. As a new article of commerce, tetrahydronaphthol abietate.

1,829,481. PROCESS FOR PREPARING AN ESTER. IVAN GUBELMANN and CLYDE O. HENKE, South Milwaukee, Wis., assignors to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed July 2, 1928. Serial No. 290,026. 13 Claims. (Cl. 260—98.)

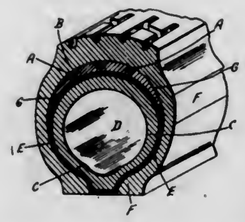
1. The process of preparing ethyl abietate, which comprises heating a commercial grade of ethyl alcohol of less strength than absolute with abietic acid containing material in the presence of a condensing agent to effect esterification and recovering the ethyl abietate.

1,829,482. MOTION PICTURE PROJECTOR. ARTHUR C. HAYDEN, Brockton, Mass. Filed Feb. 19, 1927. Serial No. 169,618. 1 Claim. (Cl. 242—70.)



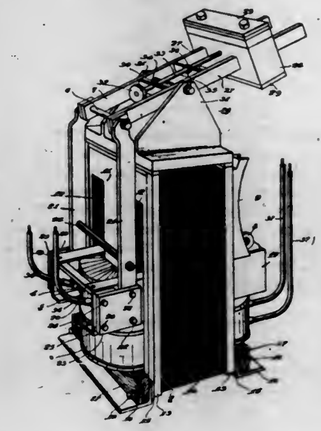
A film reel for motion picture apparatus comprising a pair of plates and a hub between said plates adapted to have a film wound thereon, one of said plates having a hole therein and the other of said plates having a cup integral therewith, pressed therefrom and in axial alinement with the hole, said hole and cup being adapted to receive a spindle of motion picture apparatus, said hole being formed for driving engagement with the spindle, and said cup insuring application of the reel to the spindle with the hole plate in advance of the cup plate.

1,829,483. PNEUMATIC TIRE. ERNEST HIBBERT, Goulburn, New South Wales, Australia, assignor to The Pioneer Cell Tyre Company Limited, Sydney, New South Wales, Australia, a Corporation of New South Wales. Filed Oct. 24, 1929, Serial No. 402,277, and in Australia Nov. 1, 1928. 3 Claims. (Cl. 154—15.)



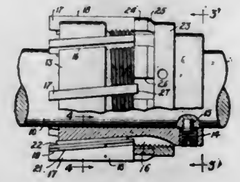
1. The process for making a tube for pneumatic tires, consisting in forming a laminated tube of sheet soft air holding rubber upon removable core, expanding said tube by air at a suitable pressure to the full internal diameter of the cover intended to be used therewith, applying to the expanded tube a coating of junction rubber, applying a binding of sheet rubber to the so formed tube, placing strips of tough tread rubber on the binding adjacent to the position to be occupied by the tread of the tire, moulding air cells in the tread rubber and vulcanizing the built up product while under internal pressure.

1,829,484. CONSTANT-CURRENT REGULATOR. HAROLD G. HYDE, Masury, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 1, 1929. Serial No. 404,007. 21 Claims. (Cl. 171—119.)



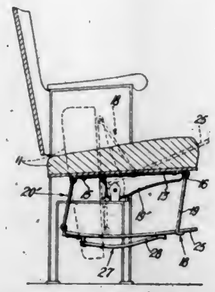
1. In a constant-current transformer, a magnetic core having a winding leg, a plurality of windings encircling said winding leg and adapted to change their relative positions along said winding leg in response to magnetic interaction between the windings, mounting means for said windings, means for maintaining the planes of the windings, substantially parallel and normal to the axis of the winding leg.

1,829,485. ADJUSTABLE REAMER. CHARLES L. KESSLER, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed July 23, 1927. Serial No. 207,832. 8 Claims. (Cl. 77—75.5.)



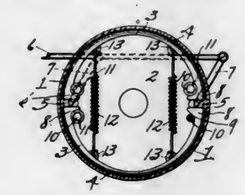
1. A reamer having, in combination, a body having a plurality of generally longitudinal grooves, a plurality of blades, one blade mounted in each of said grooves, means for clamping said blades in said grooves, said blades being longitudinally and radially adjustable in said grooves, a pilot member removably mounted on the rear end of said body in abutting relation with the rear ends of said blades, said pilot member having a diameter slightly less than the cylinder of revolution of the blades, having a beveled nose on its rear end, having a plurality of lateral notches in registration with the ends of said blades, and having a key connection with one of said blades to hold said notches in registration with said blades, and a lock ring threaded onto the rear end of said body against the nose of said pilot member.

1,829,486. HAT AND COAT HOLDER. LOUIS KIMBRIG, Brooklyn, and MAX GALUTEN, New York, N. Y. Filed Feb. 16, 1929. Serial No. 340,630. 3 Claims. (Cl. 155—190.)



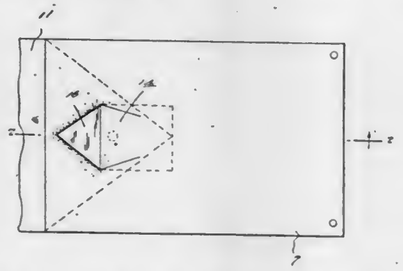
1. In combination, spaced parallel attaching rails having aligned eyes at opposite ends, a substantially U-shape bail swingingly mounted in the eyes at the front ends of said attaching rails, a substantially V-shape bail swingingly mounted in the aligned eyes at the rear of said rails, a shelf hinged to said V-shape bail and freely resting upon said U-shape bail, said shelf being recessed laterally to accommodate the legs of the U-shaped bail and the ends of the recesses providing stops for said legs.

1,829,487. BRAKE. JOHN J. KUREK, South Bend, Ind.; Frank Wisniewski administrator of said John J. Kurek, deceased. Filed Sept. 27, 1928. Serial No. 308,860. 7 Claims. (Cl. 188—78.)



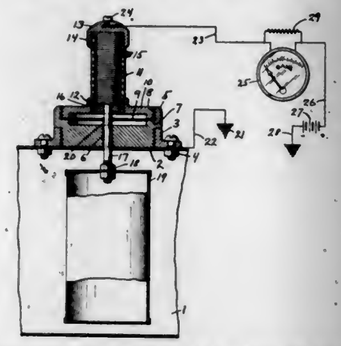
1. In a brake, a brake drum, spaced flexible brake shoes extending substantially the entire circumference of the drum within the drum, a cuneal head formed at each end of said shoes, a brake actuating member disposed between the ends of said brake shoes, a face plate, and roller members carried by said face plate against which one face of each cuneal head bears.

1,829,488. ROOF COVERING. EARL CLARENCE MILLER, Gadsden, Ala. Filed Mar. 27, 1930. Serial No. 439,367. 2 Claims. (Cl. 108—9.)



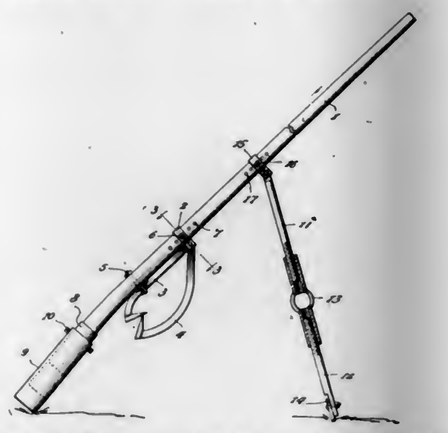
1. In a structure of the class described, in combination, a roof, a strip of flexible roofing material nailed along its upper edge, a second strip having its upper edge underlying the lower edge of said first named strip, said lower edge of the first named strip having an inturned extension tongue overlying the top of the second named strip of material, the lower edge portion of said first named strip having a longitudinal slot formed therein, a fastening plate at the inner end portion projecting through the slot and having its outer end portion exposed and overlying the top of said first named strip, and a fastener passing through said tongue, second named strip, and into the roof for securing the plate in position.

1,829,489. GASOLINE GAUGE FOR AUTOMOBILES. JOHN W. MULARKEY, Fernandina, Fla. Filed May 2, 1928. Serial No. 274,576. 2 Claims. (Cl. 201—48.)



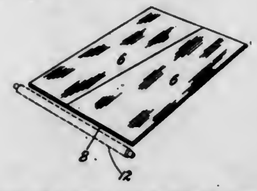
2. The combination with a tank provided with an opening, of a casing disposed on top of said tank for closing said opening, a diaphragm arranged in said casing, said casing being composed of a plurality of superposed members threaded together, a diaphragm arranged in said casing between two of said members and dividing the interior of the same into a plurality of superposed chambers, a rod passing through said diaphragm and connected to the latter by a fluid tight joint, a float carried by the lower end of said rod within said tank, a plunger fixed on the upper end of said rod, and a rheostat arranged in one of said chambers above said plunger.

1,829,490. LOG LIFTER AND HOLDER. WASHINGTON B. PARRISH, Kenbridge, Va., assignor of one-half to Robert B. Parrish, Nassawadox, Va., and one-half to Thomas W. Fowlkes, Victoria, Va. Filed Nov. 18, 1930. Serial No. 496,459. 7 Claims. (Cl. 294—17.)



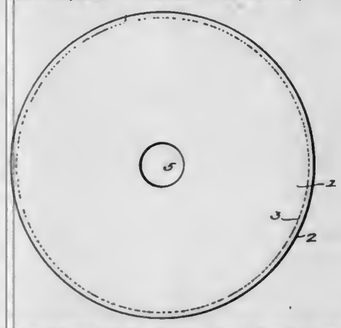
1. A log lifter comprising a lever, a clip adjustable thereon, a hook attached at one end to the clip and formed with a straight shank lying close against the lever, a fastening applied to the lever and engaging the straight shank of the hook which is adapted to slide relatively thereto, and a companion hook pivoted to said clip.

1,829,491. CEMENT PIPE. ANDREW THYNE REID, Camellia, near Sydney, New South Wales, Australia. Filed Oct. 24, 1929, Serial No. 402,297, and in Australia Nov. 29, 1928. 2 Claims. (Cl. 154—2.)



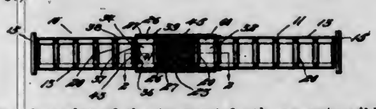
1. The process of making an asbestos cement pipe from two or more green asbestos cement sheets having one of their longitudinal edges disposed diagonally to their transverse edges, which consists in placing the respective diagonal edges of the sheets side by side and their transverse edges parallel to a mandrel, and simultaneously rolling the so placed sheets upon the mandrel to form a pipe wherein the reinforcing fibres incorporated in the said sheets are disposed to a greater extent transversely to the longitudinal axis of the pipe.

1,829,492. LEATHER POLISHING WHEEL. CORNELIUS L. RETTMAN, Merchantville, N. J. Filed Oct. 25, 1929. Serial No. 402,529. 1 Claim. (Cl. 69—1.)



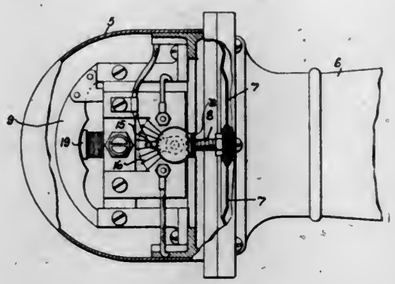
A leather polishing wheel composed of a hard wood known as lignum-vitæ having a natural oil at its heart, the axis of the wheel being substantially coincident with the said heart of the wood, and the grain of the wood extending substantially parallel to the axis of the wheel.

1,829,493. BRACELET. FERDINAND ARMBRUST, North Providence, R. I., assignor to Armbrust Chain Company, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 16, 1931. Serial No. 509,067. 2 Claims. (Cl. 63—5.)



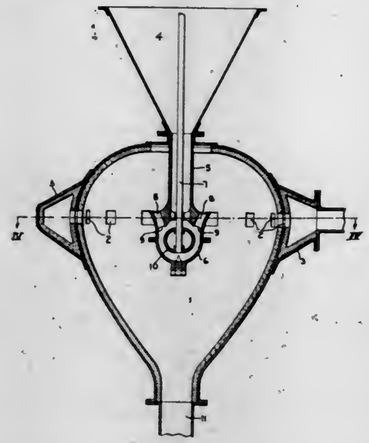
1. In a bracelet of the type set forth, an extensible connector comprising leaves hingedly connected at their adjacent ends, and sleeves upon their remote ends, means for detachably engaging the sleeves, a series of pivotally connected unit links having an end link loosely attached to one sleeve, a unit link pivotally engaging the second sleeve, a casing carried by the last mentioned unit link and adapted to abut against the extensible connector, a slide yieldingly mounted in the casing, and a series of unit links pivotally attached to the slide.

1,829,494. MOTOR HORN. JOHN M. AUFIERO, Brooklyn, N. Y. Filed Nov. 12, 1926. Serial No. 147,932. 4 Claims. (Cl. 177—7.)



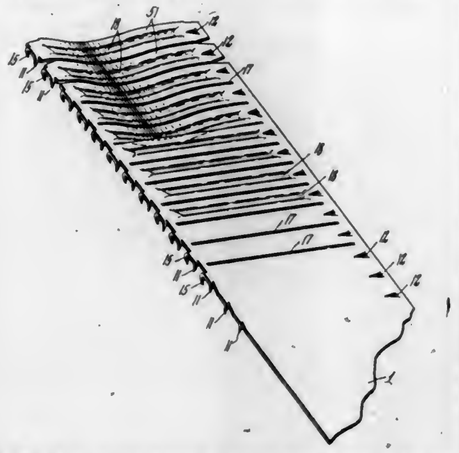
1. An electrical signalling device comprising a diaphragm, a magnetic plunger attached to said diaphragm, a motor armature and a motor field pole in such magnetic relation to said plunger that it vibrates upon rotation of said armature at a speed which is a function of the speed of rotation of the armature and with an amplitude of motion proportional to the combined magnetic force exerted on it by said armature and said field pole, and means for varying the speed of rotation of said armature to change the frequency of vibration of said plunger while holding the combined magnetic force exerted by said armature and said field pole on said plunger substantially constant.

1,829,495. APPARATUS FOR THE HEAT TREATMENT OF PULVERULENT MATERIALS. JAMES NICOLSON BAILEY, Chorlton-Cum-Hardy, England, assignor to Metropolitan-Vickers Electrical Company Limited, a Company of Great Britain. Filed Mar. 28, 1928, Serial No. 265,256, and in Great Britain Mar. 29, 1927. 7 Claims. (Cl. 202—99.)



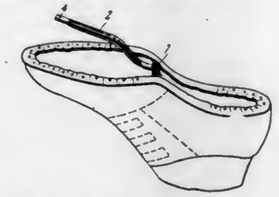
1. In apparatus for the heat treatment of pulverulent material, a heating chamber, means for admitting hot gases to the chamber, means for creating a vortex with said gases therein, and means for feeding and distributing sad pulverulent material therein, comprising a conduit extending towards the centre of the chamber and terminating in a nozzle device for the ejection of pulverulent material supplied through said conduit.

1,829,496. METHOD OF MANUFACTURING SHOE SHANK STIFFENERS. REINHARD B. BARTELS, Melrose, Mass. Filed May 8, 1929. Serial No. 361,390. 4 Claims. (Cl. 113—42.5.)



1. The step in the manufacture of shoe shank stiffeners with integral prongs, said stiffeners comprising strip portions severed widthwise from a strip of a width substantially equal to the length of the stiffeners, which comprises striking each of said prongs from stock of its strip portion and from that next adjacent thereto, the material of the prongs for adjacent strip portions extending past each other in side by side lapping relation before the prongs are struck.

1,829,497. SHOE HAVING SHANK STIFFENERS AND METHOD OF MAKING SUCH SHOES. REINHARD B. BARTELS, Marblehead, Mass. Filed Nov. 1, 1929. Serial No. 403,999. 2 Claims. (Cl. 36—76.)

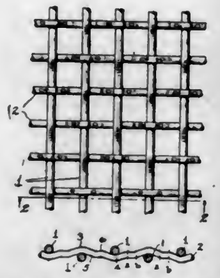


1. In combination, a shoe sole, a shank stiffener, and means for fixing one end of said stiffener to said sole adjacent to its break line against relative longitudinal displacement and for relative pivotal movement from and toward superposed facial contacting relation.

1,829,498. WOVEN WIRE SCREEN AND METHOD OF MAKING SAME. JOHN BOEHM, Cleveland, Ohio, assignor to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 27, 1927. Serial No. 242,721. 7 Claims. (Cl. 245—8.)

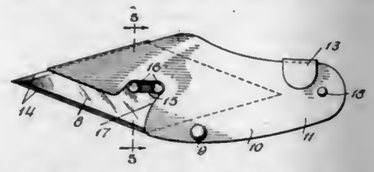
1. A precrimped warp wire for use in combination with chute wires of woven wire screens, having heavy and light crimps therein, said light crimps facing oppositely and being between said heavy crimps, said heavy crimps facing oppositely and having their engaging faces spaced in a plane at right angles to that of the screen less than the thickness of the wire to be interwoven therewith.

3. A woven wire screen consisting of series of warp and chute wires, one of said series being formed of hard drawn wire and being provided with spaced oppositely facing obtuse-angled crimps having their engaging faces spaced in a plane at right angles to that of the screen a distance less than the thickness of the wires of said other series, and having also light intermediate crimps, said light crimps facing oppositely and being between said obtuse-angled crimps.



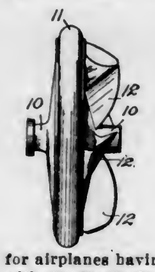
5. In a method of precrimping screen wires, the steps which consist in forming successively a deep downwardly facing crimp, a shallow upwardly facing crimp, a shallow downwardly facing crimp and a deep upwardly facing crimp, repeating these steps so as to make a wire, for use in screens, having oppositely facing light crimps between oppositely facing deep crimps, the wire-engaging faces of said deep crimps being spaced less than the thickness of a wire to be interwoven therewith.

1,829,499. FUR KNIFE. WILLIAM BOOS, Mineola, N. Y. Filed Apr. 8, 1931. Serial No. 528,510. 3 Claims. (Cl. 30—9.)



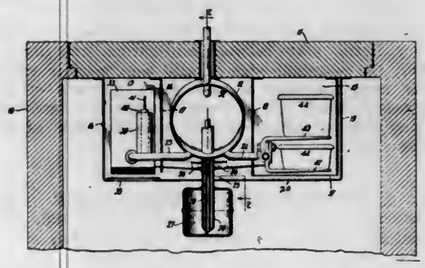
1. A knife for cutting fur, comprising a mounting plate having a handle portion at one end and its other end provided with a cut-out portion, spaced studs projecting from said plate, a blade having pairs of cutting edges and a slot, said blade being mountable upon said plate with the studs thereof projecting through said slot and with either pair of said edges in cutting position relative to said plate, one edge of either pair being exposed by the cut-out portion of said plate and a part of the other edge of the pair extending beyond the adjacent end of the plate, and a guard pivoted to said plate for movement in a plane parallel thereto, said guard having a handle portion adapted to align with the handle portion of said plate and further having a retaining flange which combines with an adjacent portion of said guard to form a slot for receiving parts of said plate and blade therebetween to retain the latter in position on said plate when said handle portions are aligned.

1,829,500. LANDING WHEEL. WILLIAM BROWN, Irvington, N. J. Filed Aug. 2, 1929, Serial No. 383,052. Renewed Aug. 13, 1931. 1 Claim. (Cl. 244—2.)



A landing wheel for airplanes having a disc body with a rim and a hub and with the disc inclined to the hub to provide a cone-shaped surface, and blades projecting laterally from the disc and extending from the rim to the hub and thus co-operating with the face of the disc to form pockets utilizing the whole face of the disc.

1,829,501. EVAPORATOR FOR REFRIGERATING APPARATUS. LAWRENCE BRUEHL, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa., a Corporation of Delaware. Filed Jan. 28, 1928. Serial No. 248,660. 12 Claims. (Cl. 62—05.)



1. A refrigerator having a main storage space and two compartments in the upper part thereof, one of said compartments being open at the upper and lower ends thereof for air circulation therethrough, a conduit in the lower portion of said last mentioned compartment and extending lengthwise thereof and provided with heat absorbing fins, and a refrigerant receiver in the other compartment having connection with opposite ends of said conduit.

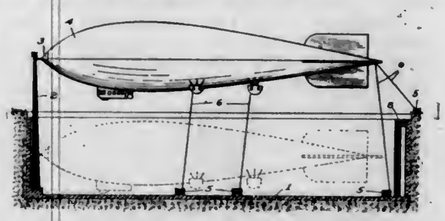
1,829,502. RUBBER-LIKE PRODUCT AND PROCESS OF MAKING SAME. WILLIAM S. CALCOTT, Pennsgrove, FREDERICK B. DOWNING, Carneys Point, and DONALD H. POWERS, Pennsgrove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 12, 1927, Serial No. 212,606. Renewed June 13, 1931. 43 Claims. (Cl. 260—6.)

1. In the process of making a rubber-like material the step which comprises polymerizing acetylene to a rubber-like body.

9. The process of making a rubber-like material which comprises coagulating an emulsion of polymerized divinylacetylene.

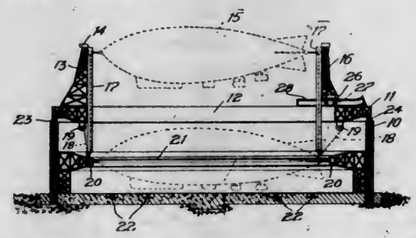
40. A synthetic rubber-like material comprising a divinylacetylene polymer showing, under the X-ray, a diffraction pattern of the type ordinarily considered characteristic of a crystalline body.

1,829,503. HANGAR FOR DIRIGIBLES. CHARLES J. CARLOTTI, New York, N. Y. Filed June 22, 1929. Serial No. 372,857. 1 Claim. (Cl. 244—2.)



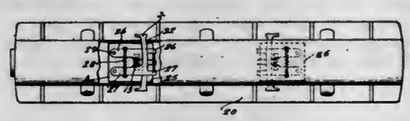
A sub-surface hangar as characterized comprising in combination, a plurality of flatwise slidable truss roof sections, a telescopic mooring mast extending up beyond the top of the hangar when in use, connecting mechanism on the upper end of said telescopic mooring mast for securing an end of a dirigible thereto, a plurality of winches on the bottom of the hangar, and on the ground above the hangar, cables on said winches for engaging the dirigible thereto whereby the dirigible may be lowered into the hangar and the mooring mast collapsed simultaneously with the winches in operation, and the plurality of said flatwise slidable truss roof sections brought inwardly towards each other to close the hangar when the dirigible is housed therein.

1,829,504. HANGAR. CHARLES J. CARLOTTI, New York, N. Y. Filed July 1, 1930. Serial No. 465,227. 12 Claims. (Cl. 244—2.)



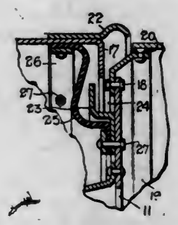
1. A hangar for aircraft comprising a peripheral enclosure and a rotatable roof for said enclosure, said roof having an opening therein adapted to receive an aircraft therethrough.

1,829,505. REMOVABLE ROOF FOR TOY CARS. MARIO CARUSO, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 3, 1931. Serial No. 513,096. 18 Claims. (Cl. 46—48.)



1. In a toy car, a car body, a cross brace carried at the top thereof, a car-roof forming stamping for covering the car body, a longitudinally extending, deck-forming stamping secured to the roof stamping to simulate the appearance of a standard railway car, the cross brace carrying an upwardly extending anchorage device passing through the roof stamping and entering the space within the deck-forming stamping, and roof securing means carried by the roof forming stamping and housed within the deck-forming stamping, the securing means including spring actuated members normally interengageable with the anchorage device to prevent removal of the roof.

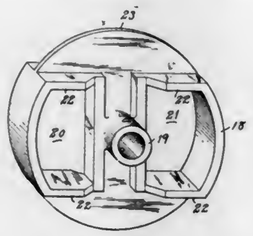
1,829,506. AUTOMOBILE. HAROLD D. CHURCH, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 27, 1929. Serial No. 343,002. 8 Claims. (Cl. 296—28.)



1. In an automobile, the combination of a body and a dash having spaced adjacent edges, a strip of flexible dust-impervious material extending loosely between the

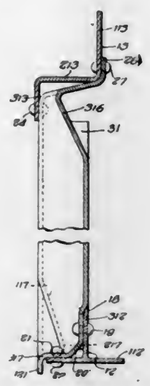
inner surface of said body and the rear surface of said dash, and means forming with said dash a trough adapted to receive and carry to the lower portion of the automobile, any water gaining entrance between said body and said dash, said means being located intermediate said strip and the aforesaid edges of the body and dash.

1,829,507. GOVERNOR. IRVING M. CRAFTS, Gildersleeve, Conn., assignor to The Pickering Governor Company, Portland, Conn., a Corporation. Filed Mar. 28, 1930. Serial No. 439,601. 5 Claims. (Cl. 264—17.)



1. In a governor, the combination with a spindle, a sleeve fixed to the spindle, a collar movable on said spindle, springs connecting the sleeve and collar, weights mounted on said springs, and cages within which the said weights closely fit and may move radially but by which torque of the springs is prevented.

1,829,508. METAL WALL STRUCTURE FOR CARS. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Co., Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 28, 1928. Serial No. 328,937. 23 Claims. (Cl. 105—410.)



1. In a metal wall structure for cars, the combination with a metal rolled frame element having an attaching section disposed perpendicular to the general plane of the wall; and a wall-forming sheet having strengthening indentations therein extended to said flange and provided also with an integral flange section extending across the ends of said indentations engaging and secured to said attaching flange of the frame element.

2. In a metal wall structure for cars, the combination with a metal rolled frame element having a horizontally disposed securing flange; of a wall-forming sheet having vertically disposed corrugations therein extended to said securing flange and provided with an integral flange at the terminii of said corrugations engaging and secured to said horizontal flange.

1,829,509. HARDWARE FIXTURE. ANDREW EKMAN, Grand Rapids, Mich., assignor to Grand Rapids Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Mar. 27, 1929. Serial No. 350,158. 3 Claims. (Cl. 16—128.)



1. In a device of the class described, the combination of a sheet metal base member adapted to be secured to a finished surface, the marginal edge of said base member being turned inwardly to the plane thereof, a plurality of shoulders formed on the inner side of said marginal edge, and a protector plate between said surface and the base member, the marginal edge of said base member resting on the marginal edge of said plate, portions of said plate being struck up to form tongues for detachably engaging said shoulders on the marginal edge of said base member.

1,829,510. DETACHABLE CURTAIN FIXTURE. ADOLF FINKBEINER, Woodmont, Conn. Filed Oct. 20, 1930. Serial No. 489,821. 2 Claims. (Cl. 156—24.)



2. A combined detachable and adjustable curtain and shade fixture, comprising in combination with an L-shaped supporting member formed with a rearwardly bent end provided with a series of holes therein, and an adjustable gripping member slidably mounted on said L-shaped member and formed with a series of holes and means for locking said members together, of a pair of lugs formed on said L-shaped member, a locking lever mounted therein and adapted to engage the holes in said gripping member, a hooked arm slidably mounted on the rearwardly bent portion of the L-shaped member, and a stud secured to said hooked arm and adapted to engage one of the holes in the rearwardly bent portion of the L-shaped member.

1,829,511. LEATHER COMPOSITION. GUSTAVE DANIEL FORTMAN, Philadelphia, Pa. Filed Mar. 21, 1928. Serial No. 263,603. 6 Claims. (Cl. 106—38.)

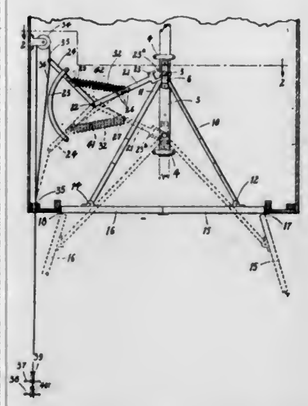
1. A composition of matter, which is noncorrosive and inodorous, including comminuted leather particles comminuted to such a degree that a mass thereof seems to be of uniform texture when passed between the fingers of the operator, said particles being connected by a binding medium including the residue of casein alkalinated and acidulated to a chemically neutral state and dissolved in a volatile hydrocarbon.

1,829,512. BUSHING FOR ARMORED CABLE. OTTO A. FREDERICKSON, Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 2, 1930. Serial No. 472,654. 3 Claims. (Cl. 247—43.)



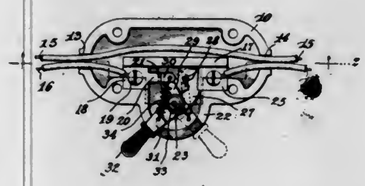
1. An insulating bushing for an armored cable provided with a curled over lip portion, a tapered split shank portion and sloping edge portions which extend to a flat bottom part of the bushing and provide clearance at one side of the bushing shank for a part of its length for facilitating the introduction of the bushing into an armored cable.

1,829,513. DOOR OPERATING MEANS. GUY M. FRENCH, Renfrew, Ontario, Canada. Filed Dec. 22, 1930. Serial No. 503,991. 4 Claims. (Cl. 268—62.)



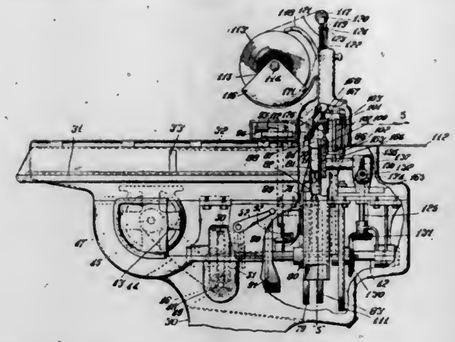
1. Mechanism for operating doors comprising connecting rods, one end of each connected to one of said doors respectively; a lever arm, to which the other ends of said rods are operatively connected; a tension spring, one end of which is connected to said lever arm; an operating lever, to which the other end of said tension spring is connected, said operating lever being pivotally mounted in such a manner as to pivotally move said tension spring to an angular position at opposite sides of said lever arm, upon movement of said operating lever in opposite directions; means for moving said operating lever in opposite directions and said spring adapted to tensionally pivot said lever arm to cause said doors to open or close according to the direction of movement of said operating lever.

1,829,514. SNAP SWITCH. JACOB J. GROSSMAN and JOSEPH J. STEINHARTER, New York, N. Y., assignors to Cable Radio Tube Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed Sept. 23, 1926. Serial No. 137,197. 1 Claim. (Cl. 200—67.)



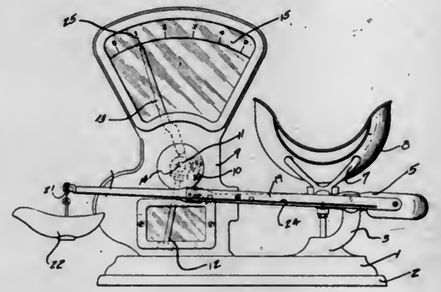
In a snap switch, a body formed of insulating material, a stud having its head buried in the material of the body, a unitary terminal, bridge and stop member formed of a single piece of sheet material and having an arm extending over the stud and a stop member formed thereon integral with and bent up from said unitary member intermediate said arm adjacent said stud, a second terminal member formed with a contact face, a switch arm pivoted upon the stud and having an extension adapted to alternately contact with the contact face and with the stop member, an operating arm pivoted upon the stud, and a tension spring attached to opposite parts of the switch arm and the operating arm and adapted to pass across the dead center of the pivot to move the switch arm with a snap action.

1,829,515. WRAPPING MACHINE PAPER FEED MECHANISM. EDWARD C. HEGG, Buffalo, N. Y., assignor to Mojonnier Bros. Co., a Corporation of Illinois. Original application filed May 10, 1927, Serial No. 190,359. Divided and this application filed Apr. 6, 1929. Serial No. 353,044. 12 Claims. (Cl. 93—2.)



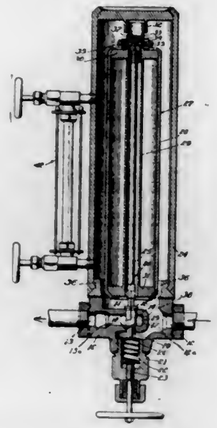
1. In a machine of the character described, feed mechanism comprising an endless carrier having an operative stretch arranged adjacent to a web of material to be fed, a plurality of grippers mounted on said carrier, and having relatively stationary and movable jaws which are adapted to receive an edge of the web between them, said stationary jaw being fixed on the carrier and said movable jaw consisting of a rotatable rod journaled on the carrier and provided with high and low peripheral faces and to be moved alternately opposite the companion stationary jaw, closing and opening tappets projecting laterally in opposite directions from said movable jaw rod, and closing and opening trip members arranged in the path of said closing and opening tappets and to successively turn said gripper rod for closing and opening the respective gripper.

1,829,516. WEIGHING AND COUNTING SCALE. HALVOR O. HEM, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Mar. 26, 1930. Serial No. 438,969. 8 Claims. (Cl. 265—30.)



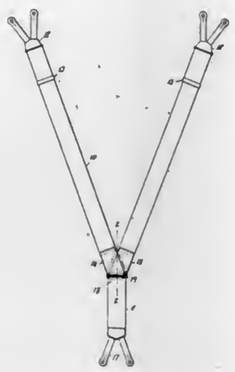
1. In a device of the class described, in combination, a frame, a lever fulcrumed thereon, load counterbalancing and indicating mechanism connected to said lever, commodity receiver supported on said lever, a specimen pan connected to said lever so that the weight of articles placed therein is offset by said load counterbalancing mechanism, a support connected to the lever and adapted to receive an article as a counter at different distances from the fulcrum pivot of the lever, said commodity receiver, specimen pan and support being located on the same side of the fulcrum of said lever.

1,829,517. AUTOMATIC VALVE. GEORGE HILGER, Chicago, Ill. Filed July 11, 1928. Serial No. 291,746. 4 Claims. (Cl. 62—3.)



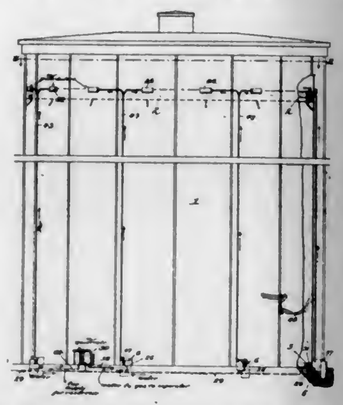
1. In a refrigeration system, the combination with a source of refrigerant supply and an expansion valve, of means for controlling the flow of liquid refrigerant to said expansion valve, comprising a casing having a passage therethrough, means providing a float chamber above said passage and in communication therewith, a float responsive to the level of liquid refrigerant in said chamber for opening and closing said passage, means permitting access of gas to the upper part of said float chamber to effect a closing of said passage by said float, and means connecting the upper end of said float chamber with the outlet side of said passage whereby slowly to exhaust the gas from said chamber.

1,829,518. SUSPENDERS. JOSEPH JACOBS, Bridgeport, Conn., assignor to The A. J. Donahue Corporation. Filed Mar. 14, 1931. Serial No. 522,641. 2 Claims. (Cl. 241—19.)



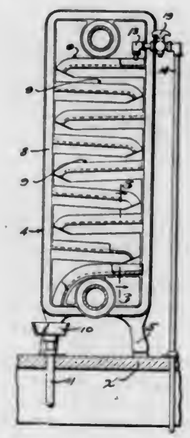
1. A pair of suspenders comprising two shoulder-straps, each provided with a loop, each loop having a fold which extends at an obtuse angle to the outer longitudinal edge of the shoulder-strap to which the respective loop is attached, a back-member formed with a loop, and a coupling-member detachably connecting the shoulder-straps with the back-member.

1,829,519. GASOMETER. KONRAD JAGSCHITZ, Mainz, Germany, and PAUL M. KUEHN, Baltimore, Md., assignors of one-half to Maschinenfabrik Augsburg-Nurnberg, A. G., Nuremberg, Germany, a Corporation of Germany, and one-half to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Mar. 10, 1927. Serial No. 174,347. 12 Claims. (Cl. 48—176.)



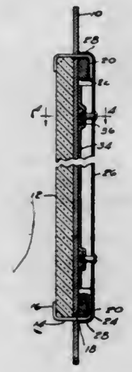
1. In a gas holder the combination of a shell or body; a piston like closure therefor; sealing means carried by the closure acting against the face of the body in conjunction with a liquid sealing medium; a gutter located in the lower portion of the holder in which the down-flowing liquid collects; a series of pumps located at intervals about the holder, the intakes of said pumps being connected to the gutter for withdrawal of water which lies upon the sealing medium within the gutter; a settling tank adapted to contain sealing medium, and into which tank the water is discharged; and means for conducting sealing liquid from the tank to the holder as such liquid is displaced by the water.

1,829,520. HUMIDIFYING-RADIATOR UNIT. ARTHUR W. KAPLAN and HENRY F. HAUSER, Minneapolis, Minn., assignors to Ace Humidifying, Ventilating, and Sheet Metal Works, a Copartnership consisting of Henry F. Hauser, T. D. Dynes, and Frank A. Luther, Minneapolis, Minn. Filed Sept. 13, 1930. Serial No. 481,704. 11 Claims. (Cl. 257—151.)



9. A radiator column that is hollow from top to bottom for the circulation of a heating medium therethrough, said column having on one of its sides an evaporating passageway arranged for a gravity flow of water therein on the exterior of the hollow shell of the column, said passageway comprising a series of vertically spaced reversely inclined troughs arranged to progressively empty, the one into the other, from the uppermost downwardly, and means for supplying water to the passageway.

1,829,521. MIRROR DOOR. AARON KATZMAN and LOUIS KATZMAN, Brooklyn, N. Y. Filed Dec. 21, 1929. Serial No. 415,694. 4 Claims. (Cl. 45—18.)

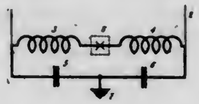


1. A door having openings therethrough, a mirror, clip members extending through the openings in the door from the back and having fingers engaging the mirror, resilient cushion means reacting against the door-back and serving to exert thrust on the clip members behind the door to thereby clamp the mirror by the clip fingers snugly but yieldably against the door, said resilient cushion means comprising a cross-bar and a resilient cushion, said cross-bar connecting certain of the clip members behind the door and being recessed on the side toward the door-back, with said resilient cushion in said recess and exerting thrust against the door-back.

1,829,522. DETERGENTS AND IN WASHING. HERBERT A. KERN, Hinsdale, and GAIL J. FINK, Oak Park, Ill., assignors to National Aluminate Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,262. 1 Claim. (Cl. 87—5.)

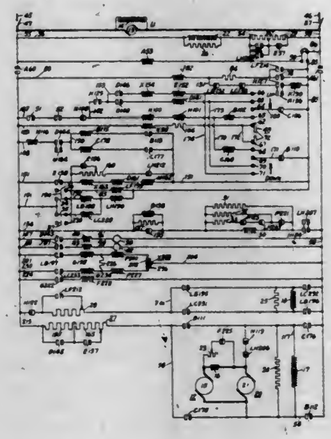
Process of preventing the adherence of precipitates of manganese and iron hydroxides to fabrics when laundering the latter which comprises adding to the laundering fluid a composition containing 85 parts of soda ash and 15 parts of sodium aluminate.

1,829,523. MEANS FOR PREVENTING INTERFERENCE. FRED H. KROGER, Ridgewood, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 18, 1929. Serial No. 333,481. 3 Claims. (Cl. 250—36.)



2. A method of preventing energy originating in apparatus, including an inherent source of transient energy, from setting up undesirable oscillations in adjacent radio apparatus which consists in confining said oscillations to a circuit tuned to a frequency which will not affect the adjacent radio apparatus.

1,829,524. ELEVATOR CONTROL SYSTEM. GEORGE W. LAUTRUP, Yonkers, N. Y., and GEORGE N. CRABBE, Cresskill, N. J., assignors to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 9, 1925. Serial No. 55,298. 10 Claims. (Cl. 172—152.)



1. In combination, an elevator car, a hoisting motor therefor, means for energizing said motor to operate the car at normal full speed, means for causing said motor to bring the car to a level with a desired landing in stopping, means for energizing said motor to operate the car at a speed not exceeding a speed considerably lower than normal full speed during the leveling operation a car gate, a hatchway door, mechanism for causing the opening of said gate and door, means responsive to the operation of the leveling means for causing the operation of said mechanism to effect the opening of said gate and door, and means for preventing the energization of the motor to operate the car above said lower speed during the opening of said gate and door.

10. In an electric elevator, the combination with an electric hoisting motor, and a car driven thereby, of a motor generator connected to the motor, the generator being provided with a high-speed field and a low-speed field, means for automatically cutting in resistance in the high-speed field to automatically slow the car, means for automatically transferring the control of the car from the high-speed field to the low-speed field before stopping the car, and means operative through the low-speed field to accurately level the car with a landing.

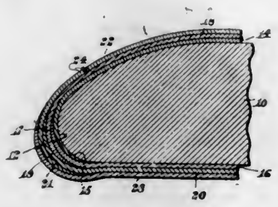
1,829,525. AIR LOCK METHOD OF INCREASING TUNNEL CAPACITIES. CHARLES A. LEE, Jr., Westport, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1930. Serial No. 430,092. 5 Claims. (Cl. 137—78.)



1. The method of increasing the liquid flow capacity of a conduit of moderate slope which comprises, establishing a hydrostatic head on the conduit sufficient to cause

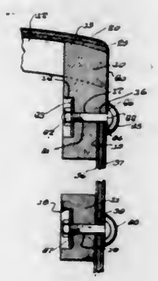
it to run full of liquid, and maintaining a series of shallow air pockets between the roof of the conduit and the surface of the liquid flowing therethrough.

1,829,526. CLOSET SEAT AND THE LIKE. HOWARD C. LESLIE, Milton, Mass., assignor to B R E Manufacturing Co., Hyde Park, Mass., a Corporation of Massachusetts. Filed Sept. 25, 1929. Serial No. 395,042. 3 Claims. (Cl. 91—68.)



1. The method of coating water closet seats and the like which consists in spraying a plurality of films of enamel paint to the top and bottom thereof with the edge portions of each film on one side of said seat overlapping the edge portions of one of the films on the opposite side of said seat and in direct contact therewith.

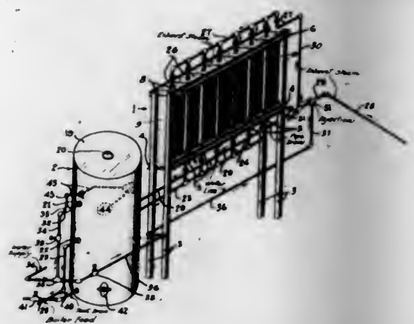
1,829,527. VEHICLE BODY CONSTRUCTION. GEORGE K. LEWIS, Chicago, Ill., assignor to Met-L-Wood Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1928. Serial No. 270,221. 5 Claims. (Cl. 296—30.)



1. In a side wall structure for a vehicle body, comprising upper and lower frame members, the upper of said frame members being rabbeted; of a laminated panel having a marginal portion disposed within the rabbeted portion of said upper frame member and adapted to lie against the lower frame member; securing elements extending through said frame members and serving to clamp said panel thereto; exterior exposed reinforcing strips held in position by said securing members and serving to conceal portions thereof and to reinforce the structure, and a top wall having a metal sheathing overlapping said frame adjacent said rabbeted portion and secured by said securing means.

1,829,528. PORTABLE STEAM CONDENSING APPARATUS. FRANK X. LOEFFLER, Oklahoma City, Okla. Filed July 3, 1930. Serial No. 465,542. 5 Claims. (Cl. 257—36.)

1. Apparatus for the purposes described, embodying a cooling tower comprised of removable cooling units for interiorly receiving steam, removable means for rigidly supporting said units, a closed reservoir having a steam outlet in its top, said reservoir connected by pipes to all of said units, and means for automatically controlling



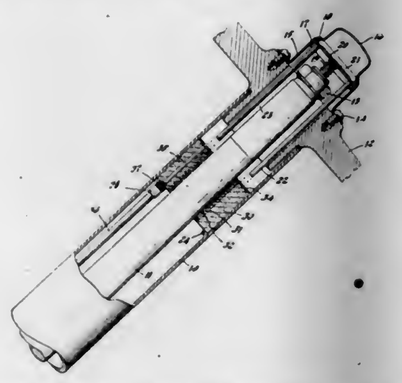
the amount of supply water entering said reservoir in accordance with the amount of water condensed by said units and the amount of water used out of said reservoir.

1,829,529. METHOD OF AND APPARATUS FOR PRESERVING ETHER. EDWARD MALLINCKRODT, Jr., St. Louis, and HENRY V. FARR, Ferguson, Mo., assignors to Mallinckrodt Chemical Works, St. Louis, Mo., a Corporation of Missouri. Original application filed Nov. 17, 1927, Serial No. 233,980. Divided and this application filed Oct. 31, 1928. Serial No. 316,217. 10 Claims. (Cl. 23—240.)

8. The method of packaging ether which comprises forming a container, oxidizing the entire interior surface thereof with a flame, and introducing ether therein.

10. The ether package comprising a metallic can having its interior surface entirely flame-oxidized, said can containing ether.

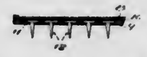
1,829,530. STEERING COLUMN BUSHING. FRED C. MORRIS, San Francisco, Calif. Filed Apr. 22, 1929. Serial No. 357,156. 10 Claims. (Cl. 200—59.)



1. In combination, a steering column bushing formed of moldable material, and a metallic contact member inserted in one end of said bushing in flush relation with said end.

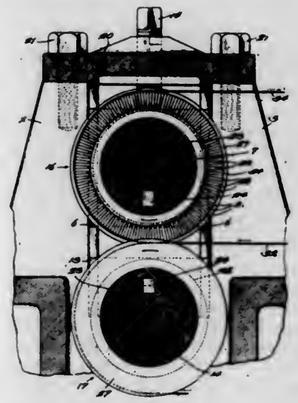
1,829,531. SCRAPER. PETER C. NEILSEN, Chicago, Ill., assignor of twenty-five per cent to Christian Stokholm and twenty-five per cent to Ole K. Simonsen, Chicago, Ill. Filed Jan. 9, 1930. Serial No. 419,719. 12 Claims. (Cl. 144—115.)

2. In a device of the kind described and in combination, two spaced flexible metal members, a plurality of headed inflexible scraper elements loosely supported by said members, the size of the heads of said elements and the space between said members being of a character to permit said elements to rock a limited distance, and means consist-



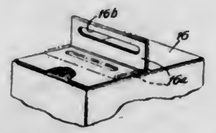
ing of a sheet of compressible material arranged between said spaced members for engaging the heads of said elements to normally maintain said elements perpendicular with respect to said members.

1,829,532. ROTARY CUTTING APPARATUS. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 14, 1928. Serial No. 254,257. 6 Claims. (Cl. 164—64.)



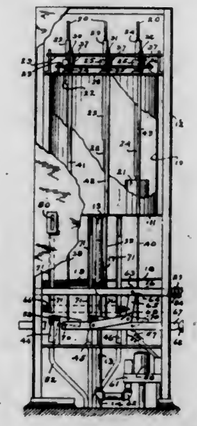
1. In material forming apparatus of the class described, having cooperating rotary die units adapted to sever material delivered therebetween longitudinally, one of the severed portions being carried and advanced by one die unit and another of the severed portions being carried and advanced by another of the die units, and shiftable means carried by the die units for automatically shedding the severed portions of the material advanced by each unit.

1,829,533. PACKAGE HANDLE. ADOLPH ONDRICEK, Astoria, N. Y. Filed May 29, 1928. Serial No. 281,894. 1 Claim. (Cl. 229—52.)



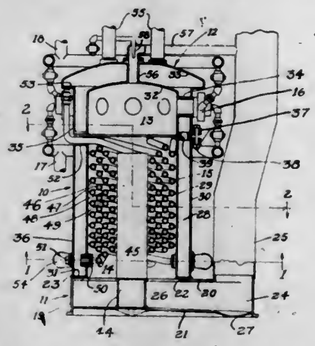
A cardboard container of the class described having closed and sealed end walls, another wall member integral with one side wall of the container and arranged outwardly of the upper sealed end walls of said container, part of said member lying upon and being directly secured to said upper sealed end walls and the other part of said wall member forming a free end portion normally resting upon said sealed upper end walls and detachably fixed thereto and adapted to be moved into an extended position arranged at right angles to the upper end wall and extending from one side of the attached portion of said member and from the central part of the end wall to form thereof a handle member, and said handle member being composed of two thicknesses of cardboard arranged one directly upon the other.

1,829,534. COIN CONTROLLED GASOLINE PUMP. CHARLES F. OVERPECK and FRANCIS MARIAN ALLEN, Greensburg, Ind. Filed Aug. 16, 1930. Serial No. 475,776. 10 Claims. (Cl. 194—13.)



1. In a liquid dispensing device, a movable coin bucket, a switch actuated upon travel of the bucket, a motor pump adapted to be controlled by said switch, a measuring tank adapted to receive the discharge from the pump, a float in the tank, a coin gate across said bucket, and operating means between said float and said gate whereby a predetermined travel of the float will actuate said gate.

1,829,535. WATER HEATER. CHARLES B. PAGE, Evanston, and ALBERT C. KALK, Chicago, Ill., assignors, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill., a Common Law Trust. Filed Nov. 2, 1928. Serial No. 316,699. 10 Claims. (Cl. 122—160.)

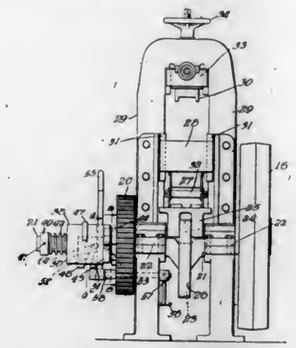


4. A heater comprising, in combination, a heating chamber, a central core in said chamber, burner means in one end of said chamber, and a series of concentrically arranged coils disposed about said core, the spacing between the turns in said coils decreasing progressively from said heating means toward the other end of said chamber.

1,829,536. CLUTCH AND BRAKE. JOSEPH O. POLLACK, Chicago, Ill. Filed Nov. 24, 1930. Serial No. 497,710. 18 Claims. (Cl. 192—24.)

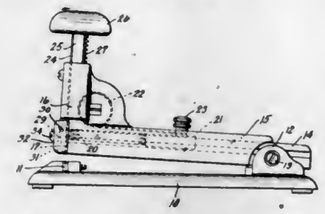
1. A shaft, a driving member, a clutch member slidably mounted upon the shaft and movable to operatively connect and disconnect the shaft and driving member, spring means yieldingly holding the clutch member in operative engagement with the driving member, one side of the clutch member providing two parallel spiralled edge faces, a pair

of cam members movable to respectively cooperate with said spiralled edges, means operable to move said cam members into and out of the path of the spiralled faces, one of said cam members having rolling contact with



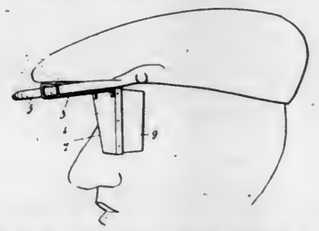
its cooperating spiralled edge face and the other of said cam members having sliding contact with its cooperating edge face when said cam members are moved into the path of said faces.

1,829,537. STAPLING MACHINE. FRIDOLIN POLZER, South Norwalk, Conn. Filed Oct. 4, 1930. Serial No. 486,307. 22 Claims. (Cl. 1—3.)



1. In a staple driving machine including a raceway, means for feeding a staple strip toward said raceway, a plunger operable in said raceway to drive the staples of the strip one at a time, and staple locking means operated by a staple in a raceway to engage a second staple and prevent its entering the raceway until the first staple to enter the raceway has been removed therefrom.

1,829,538. EYESHADE FOR USE IN PLAYING GOLF. PERCY TOM PRICHARD, Dannevirke, New Zealand. Filed May 17, 1929, Serial No. 363,908, and in New Zealand Apr. 15, 1929. 1 Claim. (Cl. 2—10.)



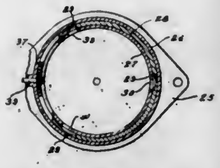
An eye shade comprising a shade member, a spring clip for attaching said shade to a normally substantially horizontally disposed forwardly extending portion of a head covering, said spring clip being formed from a single length of wire bent to provide upper and lower jaw portions for engagement with upper and lower surfaces of the forwardly extending portion of the head covering, a pivotal connection between said shade member and the lower jaw portion of said clip, and a tongue on said shade member disposed at substantially right angles to the plane of the latter so as to lie flat against the underside of the head covering when the shade member is disposed normally vertically to hold the shade member in such position, and to engage at its edge with the underside of the head covering to hold the shade member in a substantially horizontal inoperative position.

1,829,539. METHOD OF TREATING BRINE. CARL F. PRUTTON, Cleveland, Ohio, assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 4, 1928. Serial No. 303,839½. 9 Claims. (Cl. 23—90.)

1. The method of separating magnesium chloride and calcium chloride from mixed solutions thereof, which comprises the steps of separating the magnesium chloride as dodecahydrate crystals at temperatures between −20.7° C. and −52° C., and separating the calcium as hexahydrate crystals from solutions in which it predominates by cooling to a temperature between 22° and −30° C.

9. In a method of separating magnesium chloride and calcium chloride from mixed solutions thereof in which the proportion of magnesium chloride is in excess of that of calcium chloride, the steps which consist in concentrating the solution to the point that when cooled to a temperature between −20.7° and −52° C. crystals of $MgCl_2.12H_2O$ will salt out in a mother liquor saturated therewith but unsaturated with $CaCl_2.6H_2O$, cooling such solution to a temperature between −20.7° and −52° C., separating the crystals thereby formed from the mother liquor, concentrating such mother liquor so that when cooled to a temperature between 22° C. and −30° C. crystals of $CaCl_2.6H_2O$ will salt out, cooling to a temperature between 22° C. and −30° C., separating the crystals thereby formed and repeating the foregoing steps for the alternate separation of further quantities of $MgCl_2.12H_2O$ and $CaCl_2.6H_2O$ crystals, respectively.

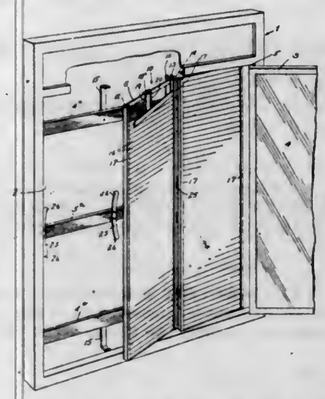
1,829,540. DASHPOT FOR WEIGHING SCALES. ORWELL C. REEVES, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed June 30, 1927. Serial No. 202,519. 6 Claims. (Cl. 188—97.)



1. In a device of the class described, in combination, a dash pot comprising a receptacle adapted to contain a damping fluid a fixed tubular member within said receptacle, a piston in said receptacle within said tubular member, a cylindrical member in said receptacle provided with a groove, and means for rotarily adjusting said cylindrical member to regulate the damping effect of said fluid on said piston.

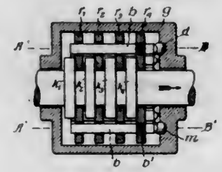
1,829,541. DIRECTORY BOARD FOR OFFICE BUILDINGS. GRANVILLE S. RIDER, Flushing, N. Y., assignor to Nathan Schoenthal, New York, N. Y. Filed Feb. 7, 1930. Serial No. 426,474. 4 Claims. (Cl. 40—63.)

1. A card exhibiting or directory structure comprising a casing having a panel opening, a panel pivotally mounted therein, the panel having card holding means, a door pivotally mounted in the casing and closing the panel opening and having a cover glass, and means for securing the door in closed position to thereby retain the panel in closed position, a spring mounted on a frame member of the casing and acting on the panel at its free side, the spring being compressed by closing of the door and acting when the door is released to move the panel and the door



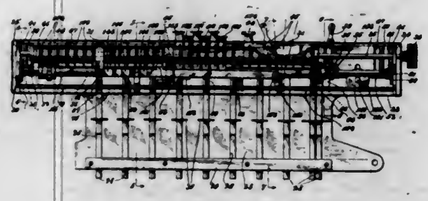
initially outward, the panel having a vertical cushion strip engaging behind cards or slips retained by said card holding means, the cushion strip being so dimensioned that when the door is closed it is compressed and holds the cards or slips resiliently against the door glass.

1,829,542. THRUST BEARING. LUDWIG ROEBEL, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 13, 1926, Serial No. 108,763, and in Germany July 1, 1925. 9 Claims. (Cl. 308—160.)



1. Thrust bearing construction comprising the combination with a thrust member and a supported member, of collars carried by the latter in axially spaced relationship, thrust rings abutting the collars, studs connected to respective thrust rings and movable longitudinally through the other rings and equalizing members cooperating with the studs.

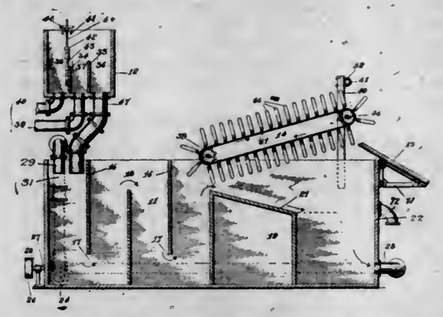
1,829,543. MULTIPLE TOTALIZER ATTACHMENT FOR TYPEWRITERS. MAURICE SAMBURG and JULIUS C. HOCHMAN, New York, N. Y. Filed Jan. 24, 1920, Serial No. 353,830. Renewed May 12, 1928. 27 Claims. (Cl. 235—5.9.)



2. A combined typewriter and computing mechanism comprising a typewriting mechanism, a self-contained computing unit secured to said typewriting mechanism, means for operating the number keys of said typewriting mechanism independently of the computing mechanism, means for operating the computing mechanism concurrently with the numeral type bars of the typewriting mechanism, said computing mechanism having a plurality of totalizers, means for clearing certain of said totalizers collectively, and means for clearing one of said totalizers by subtraction and simultaneously printing the total registered by the typewriting mechanism.

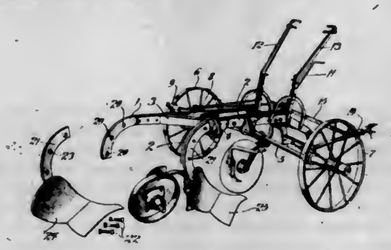
27. A computing mechanism engaged with a typewriter, comprising a casing, totalizers movable therein, means for simultaneously actuating a predetermined group of said totalizers and said typewriter, said means permitting arrangement of the computed numerals in any position on a typed sheet.

1,829,544. SEPARATOR. FREDERICK SCHILLING, Philadelphia, Pa., and CHARLES HOWARD KIRCOAF, West Collingswood, N. J. Filed July 1, 1929. Serial No. 374,997. 9 Claims. (Cl. 92—28.)



1. A separator for felt stock comprising a tank, means within the tank to cause the stock to flow substantially vertically upwardly, and fibre removing means engaging the stock at the limit of its upward flow.

1,829,545. VARIABLE-WIDTH PLOW. JOHN P. SEAHOLM, Moline, Ill., assignor to Minneapolis-Moline Power Implement Company, Moline, Ill., a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 397,508. 8 Claims. (Cl. 97—93.)

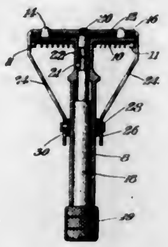


1. A plow having a plow beam provided with a downwardly curved rear end, a curved connecting piece detachably connected to the side of the curved portion of said beam, and a plow body detachably connected to said connecting piece.

1,829,546. SAFETY RAZOR FRAME. HYMAN R. SEGAL, New York, N. Y., assignor to Segal Safety Razor Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1928. Serial No. 327,005. 1 Claim. (Cl. 30—12.)

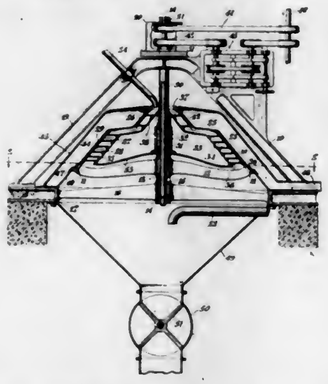
A safety razor including, in combination, a handle, a guard, studs mounted upon said guard for projecting

upwardly therefrom, a clamping plate for association with said guard, said plate being formed with holes for the reception of said studs, a rod for engaging said clamping plate and slidable within said handle, a circular slot formed in said rod near the plate engaging end thereof, a pin projecting inwardly from said handle and riding



within said slot to limit the sliding movement of said rod, downwardly extending side arms forming a part of said plate, said arms having slots at their lower ends, and means carried by said handle and extending through said last-named slots for engaging said arms whereby the movement of said clamping plate with respect to said guard is limited.

1,829,547. CENTRIFUGAL PROCESS AND APPARATUS. LAURENCE P. SHARPLES, Chester, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 11, 1927. Serial No. 174,721. 8 Claims. (Cl. 210—74.)

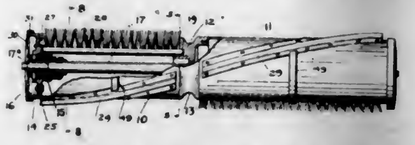


1. In the centrifugal treatment of mixtures of liquids and solids the process comprising subjecting the mixture to centrifugal force in a centrifugal rotor and thereby separating the mixture into its liquid and solid constituents and centrifugally discharging the solid constituent in dispersed form, and flowing treating gas into contact with the solid constituent, while it is in the dispersed form in which it is discharged, prior to contacting such gas with the mixture or the liquid constituent thereof.

1,829,548. SUCTION SWEEPER. DONALD G. SMELLIE, Maywood, Ill., and HARRY B. WHITE and MARVIN E. NULSEN, Canton, Ohio, assignors to The Hoover Company, a Corporation of Ohio. Filed Jan. 12, 1926. Serial No. 80,731. 33 Claims. (Cl. 15—179.)

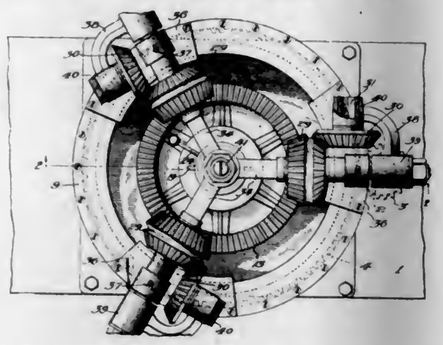
15. In a suction sweeper, a cylindrical revolubly mounted body having a relatively deep depression formed in its periphery, and a brush comprising a back provided with rows of bristles and mounted in said depression so that a substantial part of said brush is located below the periphery of said body to render the brush practically non-fouling.

31. In a rotary agitator for a suction cleaner, a substantially continuous body the surface of which is extended to a plurality of radial distances from its axis of rotation, a portion at the greatest radial distance extending longitudinally, characterized by the fact that in a transverse



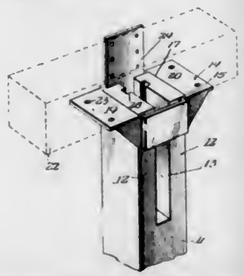
cross section perpendicular to the axis of rotation the said portion at the greatest radial distance is enclosed by an angle of 180 degrees at the axis of rotation and is adapted to contact the element undergoing cleaning upon rotation.

1,829,549. AUXILIARY UNIT FOR MINING MACHINES. BENJAMIN W. SNODGRASS, Denver, Colo. Filed Feb. 2, 1929. Serial No. 336,032. 18 Claims. (Cl. 79—7.)



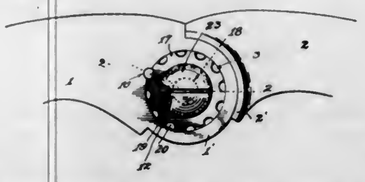
1. An auxiliary unit adapted to be connected to a mining machine, comprising a casing having a projecting boss, a driving gear having a hub around said boss, and a driven gear having a hub mounted for rotation within the hub of said driving gear and about said boss.

1,829,550. SHORE. ARTHUR H. SYMONS, Chicago, Ill., assignor to Symons Clamp & Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1929. Serial No. 340,021. 14 Claims. (Cl. 248—30.)



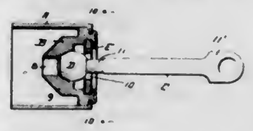
1. In a shore, the combination of a shore-member adapted to support an auxiliary member at the upper end thereof, a flat plate at the said upper end of the shore-member embodying means whereby it may be attached to one side of the auxiliary member, and means associated with the shore-member for supporting said plate so that it may be shifted from an operative position above the shore-member into an inoperative position wherein it is disposed completely beneath the extreme upper end of the shore-member.

1,829,551. KNEE-JOINT FOR ARTIFICIAL LIMBS. WILLIAM H. WAMBSGANS, Peoria, Ill., assignor to Joint Manfg. Co., Peoria, Ill., a Corporation of Illinois. Filed Aug. 9, 1930. Serial No. 474,145. 1 Claim. (Cl. 287—101.)



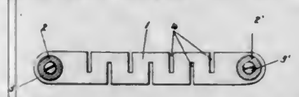
A knee joint for artificial limbs comprising, in combination, two portions each a part of a limb section, one overlying the other and one of them having a threaded bore, a sleeve having a threaded bore and externally threaded to engage in the said threaded bore of the portion, the same being free to be adjusted relatively to both the named portions, said sleeve having a recess in the wall of its threaded extremity, a member having a bore adapted to receive the sleeve and including a part extending into its said bore in the plane of said member adapted to engage in the recess, a part seated in the portion having the threaded bore, and said member having a series of indentations encircling its bore any one of which is adapted to engage the last named part, and a headed screw adapted to engage in the threaded bore of the sleeve, its head adapted to bear upon said member.

1,829,552. PISTON AND CONNECTING ROD. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Feb. 13, 1930. Serial No. 428,037. 9 Claims. (Cl. 74—108.)



1. A piston, comprising a cylindrical shell, a separate head interlocked with said shell, and a ring-shaped coupling member united with said head.

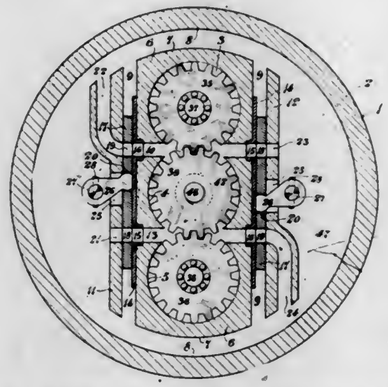
1,829,553. CONDUCTOR OF HIGH NEGATIVE TEMPERATURE COEFFICIENT. HENRI G. ANDRÉ, Paris, France. Filed Apr. 30, 1928, Serial No. 274,110, and in France June 17, 1927. 5 Claims. (Cl. 201—76.)



1. An electrical conductor comprising a body portion of a metal supersaturated with a more fusible metalloid of the sulphur class, and means for breaking the continuity of the longitudinal veins of said body portion.

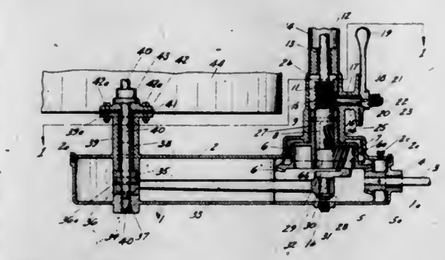
1,829,554. HYDRAULIC ROTARY POWER TRANSMITTER. WILLIAM W. BAKER, Cincinnati, Ohio. Filed June 14, 1928. Serial No. 285,469. 1 Claim. (Cl. 192—61.)

A hydraulic rotary power transmitter of the class described having a cylindrical housing containing a fluid medium such a very thin oil and having a central body portion provided with a plurality of communicating gear chambers with gears in said chambers, in combination with a plurality of fluid passageways intersecting said body portions and gear chambers, respectively, between the meshed portions of said gears, a plurality of valves for closing each end of each passageway simultaneously to positively trap the fluid within said passageways, the openings in said valves at one end of each passageway being smaller in area than the openings in the valves at the other end of each passageway and whereby when said valves are moved so that the opening thereof aline with



said fluid passageways said fluid is permitted to freely flow therethrough and whereby when said openings in said valves are moved out of registry with said passageways said fluid is trapped within said passageways and prevented from entering or leaving said passageways at either end thereof, substantially as set forth and for the purposes specified.

1,829,555. DRIVING MECHANISM FOR WASHING MACHINES. HARRY J. CRINER, Davenport, Iowa, assignor of one-half to A. G. Bush, Davenport, Iowa. Filed Feb. 17, 1930. Serial No. 428,948. 9 Claims. (Cl. 74—38.)

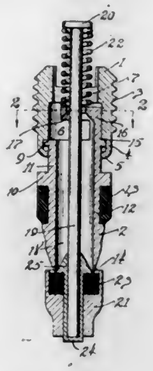


1. An adjustable driving mechanism for a reciprocating element comprising a column, a combined gear and housing having an upwardly extending sleeve revolvably mounted in the column, a gear block slidingly mounted in the sleeve and rotatable therewith, the lower end of said gear block having spiral teeth cut therein and the upper end of the gear block having a rack formed thereon, a rotatable gear mounted in the housing adjacent the gear block and having spiral teeth in mesh with the teeth of the gear block, a crank united to the rotatable gear, and means for shifting the vertical position of the gear block relative to the rotatable gear whereby the rotatable gear may be rotated in its housing and the throw of the crank thereby varied.

1,829,556. VALVE INSIDE. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 16, 1929. Serial No. 347,469. 2 Claims. (Cl. 152—12.)

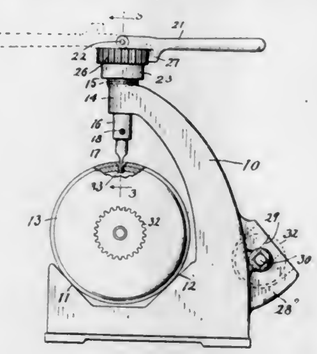
1. A valve insides comprising a body member having a central air passageway, a valve pin extending through

said passageway, a valve member cooperating with the lower edge of said body member, said valve member being



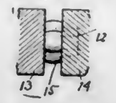
provided with an axially arranged sleeve having an enlarged portion at its upper end forming a valve ball, and said valve pin being secured within said sleve.

1,829,557. TOOL. HERBERT O. EWING, Middleport, Ohio, assignor of one-half to Thomas W. Field, Charleston, W. Va. Filed Jan. 7, 1931. Serial No. 507,098. 1 Claim. (Cl. 144—32.)



A tool, for removing and replacing the screws of generators and the like, consisting of a one-piece substantially C-shaped frame the base portion of which is provided with upwardly diverging surfaces on its upper side to form a seat for the generator or the like, said frame also having an integral externally threaded vertically extending sleeve arranged above said surfaces and with its axis centrally thereof, a shaft rotatably and slidably mounted in said sleeve, the lower end of said shaft being adapted to have a screwdriver attached thereto and the upper end having a shoulder, an internally threaded cap engaging the external threads of said sleeve and having its upper end closed by a wall through which the upper end of said shaft projects, a lever pivoted to the upper end of said shaft and cooperating with said shoulder to loosely secure said cap to the shaft, said cap being provided with a series of peripheral lugs and said lever having means to engage said lugs and form an interlocking connection between the lever and the cap whereby said shaft and cap may be rotated as a unit by said lever, said lever being adapted to be swung in a vertical plane about its pivoted connection with said shaft to a position in which it is disengaged from said lugs and the shaft and said cap may be independently rotated as and for the purpose described.

1,829,558. METHOD OF MAKING NUT BLANKS. LEE A. FRAYER and CARL L. HARVEY, Kent, Ohio, assignors to Roy H. Smith, Kent, Ohio. Filed June 27, 1930. Serial No. 464,246. 7 Claims. (Cl. 10—86.)



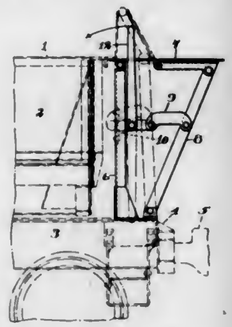
1. A method of making nut blanks from cold stock, which comprises cutting from a bar of polygonal cross section a length of stock, compressing said length endwise between flat faced anvils without confining its side walls, whereby its side walls are bowed outwardly, and then pressing the blank through a reducing die of substantially the same shape as the original stock, and piercing it.

1,829,559. CIGARETTE AND METHOD OF MAKING SAME. JAMES DANIEL GILLIAM, London, England, assignor to British-American Tobacco Company, Limited, New York, N. Y., a Corporation of Great Britain. Filed Sept. 13, 1927. Serial No. 219,361. 4 Claims. (Cl. 131—52.)



1. A blended cigarette comprising a paper or like wrapper and a filler composed of different species of tobacco in the conventional shredded or finely divided form ordinarily used for cigarettes, each species being disposed in a separate stratum or layer throughout the entire length of the cigarette.

1,829,560. DUMP CAR. OSCAR E. KANTENWEIN, Oak Park, Ill., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 8, 1930. Serial No. 426,899. 5 Claims. (Cl. 105—239.)

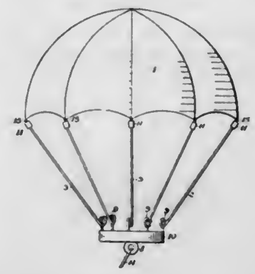


1. The combination with a dump car having an end platform, of an apron member mounted hingeably on said car and extending over said platform to prevent spilling of lading on the platform as the car is loaded.

1,829,561. AUTOMATICALLY OPENING PARACHUTE. SAMUEL H. KNIGHT, Lancaster, Pa., assignor to Follmer, Clogg & Co., a Corporation of New York. Filed Apr. 2, 1928. Serial No. 266,708. 9 Claims. (Cl. 244—21.)

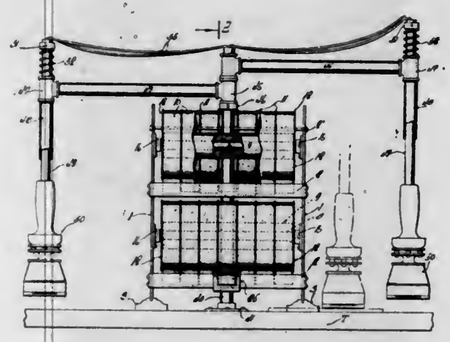
1. An automatically opening parachute in which suspending cords are replaced by said unfurling springs in combination with the sail of the parachute, and sheets secured to said sail, of unfurling springs for said sail each

having a pair of arms extending upward and springing outwardly, said arms being connected together by a link-



ing portion integral with said arms at the lower ends of said arms, and means for attaching said sheets to the upper ends of such arms.

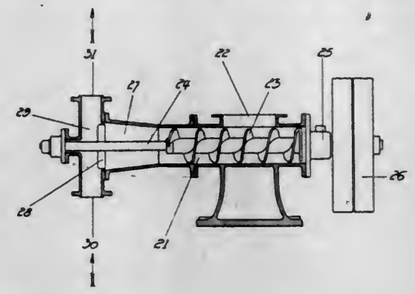
1,829,562. TRANSFER PRINTING MACHINE. IRVIN J. KOHLWEY, Milwaukee, Wis., assignor to Phoenix Hosiery Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 9, 1930. Serial No. 474,109. 11 Claims. (Cl. 41—1.)



1. A transfer printing machine comprising a frame open at its ends, a plurality of rows of reels of transfer tape at each end of the machine, means for supporting the rows of reels of transfer tape one above another and with the individual reels of each row freely rotatable, a cross bar embodied in the frame adjacent each row of reels of transfer tape, a combined guide and cutter selectively cooperable with the cross bar at each end of the machine and selectively cooperable with the transfer tape of any reel at its end of the machine, a pair of transfer irons, one for each end of the machine, and means for supporting each transfer iron for swinging movement in a horizontal plane and for movement in a horizontal plane and for movement in a vertical plane whereby the transfer irons may be advantageously employed with the tape of any transfer reel.

1,829,563. CONVEYING DEVICE FOR PAPER PULP. RICHARD T. LANG, Weehawken, N. J., assignor to American Voith Contact Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 4, 1927. Serial No. 165,774. 2 Claims. (Cl. 92—20.)

1. In apparatus for treating paper pulp stock, a stock receiving trough and a pressure chamber at one end thereof, a stock transporting screw in said trough to feed the stock into said pressure chamber, means connecting said trough with the ingress side of said pressure chamber for the accumulation of a stock mass beyond the end of the transporting screw exceeding the capacity of



said pressure chamber, means on the screw shaft at the ingress side of the pressure chamber acting upon the stock to disintegrate the same, and pneumatic means connected with said pressure chamber to discharge the disintegrated stock therefrom.

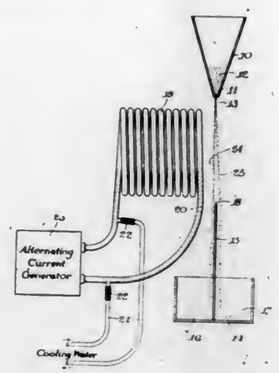
1,829,564. LUNCH ROOM STOOL. SAMUEL F. LEDERER, Chicago, Ill., assignor to Jac. Lederer, Inc., Chicago, Ill., a Corporation of Illinois. Filed June 17, 1929. Serial No. 371,377. 4 Claims. (Cl. 155—95.)

1. A device of the class described comprising a hollow upright post, a seat having a back rest rotatably mounted on said post, supports on said seat and post respectively having opposed inclined cam surfaces, an upright bolt connected to said seat and extending downwardly through said cam surfaces, and a spring connected at one extremity to the lower end of said bolt and at the other extremity to the lower end of said post for urging said cam surfaces together to yieldably retain said seat and back rest in a predetermined position relative to said post.

1,829,565. ORE CONCENTRATION. ROYAL LEE, Milwaukee, Wis., assignor to Lee Engineering Research Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 20, 1925. Serial No. 24,451. 11 Claims. (Cl. 209—212.)

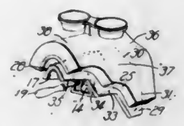
1. In an ore concentrator, the combination of means for producing a freely falling stream of comminuted ore material, and an air core inductor disposed laterally adjacent said stream with its axis directed transversely

thereof for establishing an alternating field acting on conductive particles in said freely falling stream to deflect them laterally from the stream in a direction away from said inductor.



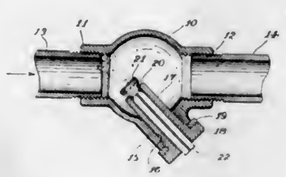
9. The method of separating ore from a crushed mixture of gangue and ore which comprises, flowing the crushed mixture through an alternating magnetic field having a frequency greater than 500 cycles per second.

1,829,566. PRESSING BUCK. ARCHIE O. LONG, Kansas City, Mo. Filed Feb. 18, 1929. Serial No. 340,886. 6 Claims. (Cl. 68—9.)



1. In a laundry press, a pedestal, a frame movable on the pedestal and adapted to support a padded bed, said padded bed having a rear portion comprising downwardly diverging elongated wings adapted to receive the yoke of a shirt, an intermediate portion comprising shortened arms adapted to receive a cuff, and a front portion having arms shorter than the arms of said intermediate portion to provide a front vertical edge on said intermediate portion with which the sleeve-attached edge of a cuff is adapted to register, the front portion being adapted for pressing the portion of the sleeve to which the cuff is attached, and a bed-receiving head having portions complementary to said portions of the padded bed.

1,829,567. VACUUM RELIEF VALVE. JOSEPH A. MAYNARD, Boston, Mass. Filed June 4, 1928. Serial No. 282,584. 3 Claims. (Cl. 251—127.)



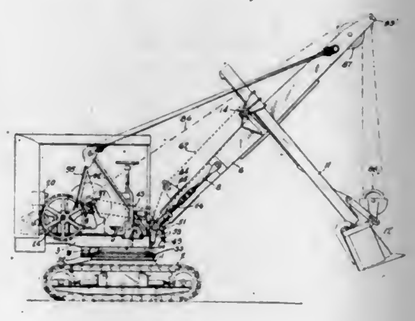
2. A relief device for a water supply line or the like, comprising a casing having an inlet and an outlet and a passage for the flow of fluid therebetween, and a vacuum valve extending into said passage and facing angularly toward said inlet, said valve being positively actuated by the flow of fluid to assist in opening and closing the same.

1,829,568. PROCESS OF MAKING EDIBLE BAR BRITTLES. EDWARD MESSER, Cincinnati, Ohio. Filed Jan. 25, 1930. Serial No. 423,477. 5 Claims. (Cl. 107—54.)



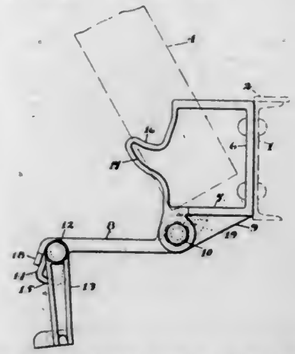
5. The herein described process of producing an edible candy bar which consists in forming hard candy, with or without nuts, then breaking said hard candy into small chips or flakes, then mixing said chips or flakes of hard candy with heavy liquid chocolate, then painting a mold of any desired shape with melted chocolate candy, then placing the mixture of liquid chocolate and chips and flakes of hard candy within said mold, then cooling said mixture and mold whereupon the bar of candy may be readily released therefrom.

1,829,569. EXCAVATOR CRANE. HOLGER L. MITCHELL and ROLF LJUNGKULL, Milwaukee, Wis., assignors to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 21, 1927. Serial No. 169,703. 11 Claims. (Cl. 214—135.)



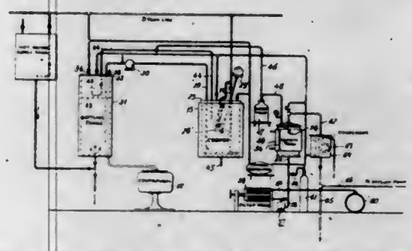
1. An excavator crane comprising a platform, a boom pivotally mounted on the platform, a dipper stick mounted on the boom, crowding mechanism mounted on the boom and operatively associated with the dipper stick, a hoist line associated with the boom and operatively associated with the dipper stick, a digging drum, a hoisting drum operatively connected with the hoist line, a single shaft on which the digging drum and hoisting drum are mounted, a sleeve shaft rotatably mounted about the axis of the boom foot, means for rotating said sleeve shaft from the digging drum including a pair of bracket arms adjustably mounted on the axis of the boom foot a shaft rotatably mounted on said bracket arms, a sprocket wheel fixed to said shaft, a sprocket wheel fixed to the digging drum, a sprocket chain engaged with said sprocket wheels, means coacting with the bracket arms for tensioning the sprocket chain, gearing between the shaft mounted on the bracket arms and the sleeve shaft, and chain and sprocket gearing between the sleeve shaft and the crowding mechanism.

1,829,570. STAKE RELEASING POCKET. HARRY C. MOLL, Honolulu, Territory of Hawaii, assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Jan. 10, 1930. Serial No. 419,841. 5 Claims. (Cl. 105—383.)



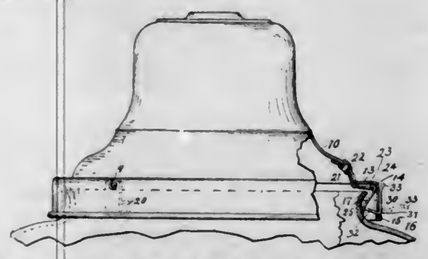
1. A stake pocket having a door hinged thereto and opening outwardly and downwardly and means on said door engaging with the stake pocket for preventing the downward movement of the door beyond the stake releasing position.

1,829,571. PRODUCTION OF COD-LIVER OIL. FERDINAND W. NITARDY, Brooklyn, N. Y., assignor to E. R. Squibb and Sons, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1926. Serial No. 98,410. 1 Claim. (Cl. 87—13.)



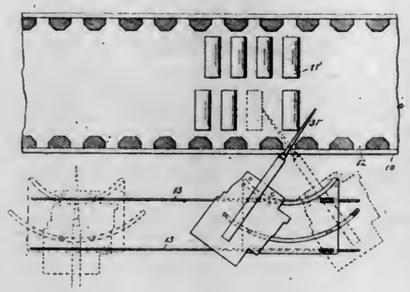
In the process of producing a medicinal cod liver oil, the step of atomizing the oil and simultaneously heating it under reduced pressure to remove moisture therefrom, filtering the heated oil to remove solid impurities therefrom, and delivering the filtered oil to storage receptacles, all of the said steps being carried out in the absence of air and in the presence of an inert gas.

1,829,572. GLOBE HOLDER. PAUL J. PFEIFER, Cleveland Heights, Ohio, assignor to The John C. Virden Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 15, 1930. Serial No. 468,002. 7 Claims. (Cl. 240—132.)



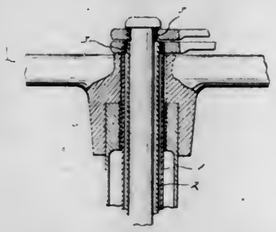
1. In a device of the class described, a holder, a lever spring fixed at one end to said holder, a retaining member biased by said spring and held on said holder by said spring, and means for moving said retaining member against the action of said spring.

1,829,573. INGOT TURNING MACHINE. FORD L. SAMIN, Cleveland Heights, Ohio, assignor to The Wellman Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 18, 1926. Serial No. 136,232. 3 Claims. (Cl. 214—32.)



1. In combination with an ingot heating furnace having a door in the side thereof, an ingot shifting machine comprising a curved track, the center of curvature of which is substantially in the plane of the said door, a carriage movable bodily upon said curved track and supported exclusively thereby, said carriage being provided with a turning bar which is insertible through said door and which swings with the carriage.

1,829,574. SELF-LUBRICATING FABRIC BUSHING AND METHOD OF FORMING THE SAME. NEWTON SKILLMAN, Highland Park, Mich., assignor to O. & S. Bearing Co., Detroit, Mich., a Corporation of Michigan. Filed Apr. 26, 1926. Serial No. 104,786. 10 Claims. (Cl. 308—238.)

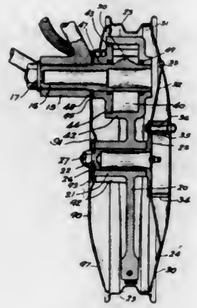


1. In a steering gear, the combination with concentric spaced control tubes, of a bushing insertable between said tubes and firmly engaging the same, said bushing comprising a cylindrical body impregnated with lubricant and formed of fibrous material and having its inner surface expanded to a diameter equal to that of the inner tube and its outer surface compressed to a diameter slightly greater than that of the inner surface of the outer tube, whereby the fibers of the annular body are forced into a close and firm contact with each other.

1,829,575. WHEEL. JOHN WILLIAM WHITE, Buffalo, N. Y., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Jan. 3, 1929. Serial No. 330,106. 11 Claims. (Cl. 244—2.)

1. A ground wheel for aircraft including an arm pivotally mounted adjacent one end thereof upon an axle rig-

idly secured to the craft, the end of the arm being enlarged to form a chamber into which the axle enters and which contains shock absorber elements, one element being fixed to the axle and another being fixed to the wall of the chamber whereby the movement of the arm upon the axle is controlled and a shaft for the wheel rotatably mounted upon the arm intermediate its ends.



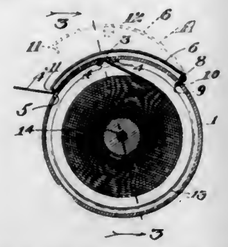
11. A ground wheel for aircraft including an arm pivotally connected adjacent one end to a support for oscillation relative to the latter, means carried by the arm at a point spaced from the pivotal connection aforesaid for rotatably supporting the wheel upon the arm permitting both oscillation and rotation of the wheel, and means carried by said arm for controlling the rotation and oscillation of said wheel.

1,829,576. MECHANICAL OVERLOAD RELEASE MECHANISM. FREDERICK W. YOST, Cleveland, Ohio. Filed June 19, 1929. Serial No. 372,173. 29 Claims. (Cl. 192—56.)



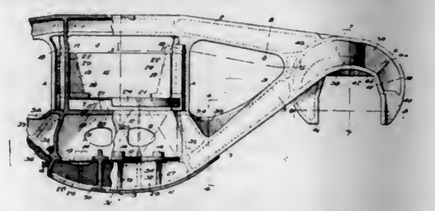
1. In a mechanism of the character described, a driving member, a driven member, teeth associated with one of said members, a plurality of toggle linkages associated with the other of said members and having overload means cooperating with said teeth, and means operatively cross-connecting said toggle linkages.

1,829,577. ADHESIVE TAPE OR BANDAGE BOX. ARTHUR J. ANDERSON, Binford, N. Dak. Filed Aug. 1, 1930. Serial No. 472,420. 4 Claims. (Cl. 206—59.)



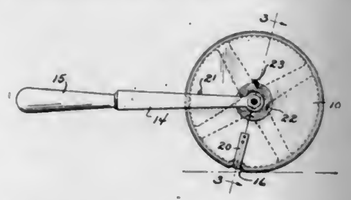
1. In a device of the class described, the combination of a casing provided with a tape guiding slot and a knife receiving slot, and a knife over said tape guiding slot and adapted to enter said knife receiving slot.

1,829,578. CAR TRUCK. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Sept. 14, 1926. Serial No. 135,430. 20 Claims. (Cl. 105—197.)



1. A side frame comprising a compression member, a tension member, bolster guide columns interposed between said compression and tension members and spaced to leave a window opening, those portions of the tension member, beyond the bolster guide columns, extending diagonally upward and outward to join with the compression member adjacent the ends thereof, and a girder connecting the lower portions of said bolster guide columns, those portions of the bolster guide columns, beneath the top of the girder, being deflected outwardly and downwardly to meet the diagonal portions of the tension member at substantially right angles.

1,829,579. DUPLICATING MACHINE. JOHN R. BEACH, Lawrenceville, Va.; E. P. Barrow administrator of said John R. Beach, deceased. Filed Aug. 8, 1928, Serial No. 298,322. Renewed June 3, 1931. 1 Claim. (Cl. 101—119.)



In a hand operated duplicating machine, a cylinder having a depression in its periphery, a stencil secured to the periphery of said cylinder for movement over a surface to be printed when the cylinder is revolved in one direction, a bar having one of its ends pivotally secured to one end of the cylinder at one end of the depression, a spring latch secured to the other end of the cylinder for removable engagement with the other end of the bar to clamp the stencil upon the cylinder, a handle for said cylinder,

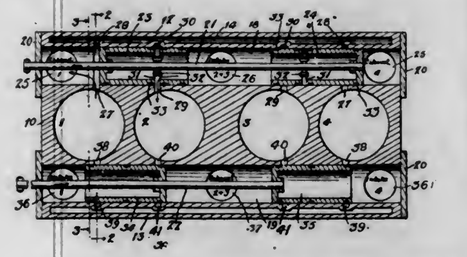
means carried by the cylinder and engaging the handle to limit rotation of the cylinder in opposite directions, and means to yieldingly resist rotation of said cylinder in one direction and return said cylinder to starting position at the completion of each printing operation.

1,829,580. CONDUIT FOR LAYING ELECTRIC CABLES. CHARLES JAMES BEAVER, Bowdon, England, assignor to W. T. Glover and Company Limited, Manchester, England. Filed Feb. 2, 1928, Serial No. 251,278, and in Great Britain Feb. 5, 1927. 1 Claim. (Cl. 247—27.)



An electrical cable installation adapted to be laid in a trench and comprising a bottom layer of asphalt, a transverse bridge piece resting thereon, insulated electrical cables resting on said bridge pieces in side by side relation, an electrical cable arranged above and in parallel relation to the first mentioned cables, the three cables being in spaced relation to each other and located relatively as the apices of a triangle, bridge pieces positioned in the space separating the cables, and a filler of asphalt in which the cables are embedded, said asphalt filler being reinforced with embedded wire netting.

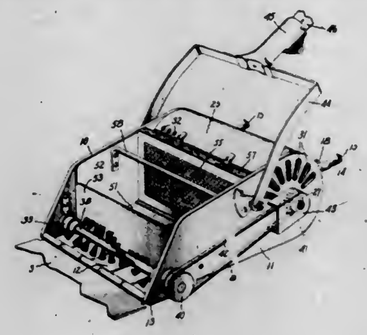
1,829,581. VALVE SYSTEM FOR INTERNAL COMBUSTION ENGINES. GEORGE C. BUCK, Hickman, Ky. Filed Aug. 30, 1929. Serial No. 389,541. 4 Claims. (Cl. 123—59.)



1. In a multi-cylinder engine having cylinders arranged in pairs, a pair of valve casings extending longitudinally of the engine, said casings having intake and exhaust openings therein and intake and exhaust ports communicating with said cylinders, the intake and exhaust ports of each cylinder opening into a different valve casing and the exhaust port of one cylinder in each pair of cylinders opening into a different valve casing than the exhaust port of the other cylinder of the pair, valves slidably arranged in each of the valve casings, each casing having one piston valve for each pair of cylinders, the closed end of each valve facing the adjacent exhaust opening in its casing, and means to reciprocate the valves in the casings whereby each valve will cover and uncover the ports of the adjacent pair of cylinders.

1,829,582. VACUUM CLEANER. JESSE F. CARSON, Cleveland, Ohio, assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio, a Corporation of New York. Filed Dec. 31, 1928. Serial No. 329,576. 4 Claims. (Cl. 15—8.)

1. In a vacuum cleaner, the combination of a casing having a bottom and side walls, the bottom and side walls defining part of a nozzle, a cover for the casing which is pivotally supported by the side walls at its front end and which also forms the front wall of the nozzle, a suction fan, a motor for driving the fan both located at the rear

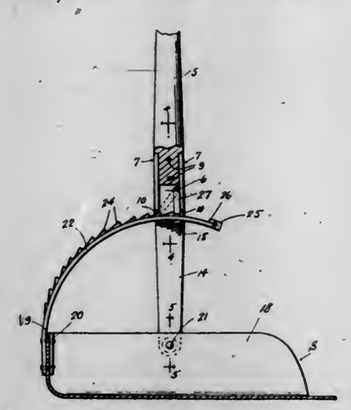


end of the casing, and a separator for the dust-laden air which is located within the casing between the nozzle and fan and extends transversely of the casing and engages the walls and cover thereof and forms a partition.

1,829,583. PROCESS OF REMOVING FINISH COATINGS. JOSEPH G. DAVIDSON, Yonkers, N. Y., and ERNEST W. REID, Pittsburgh, Pa., assignors to Carbide and Carbon Chemicals Corporation, a Corporation of New York. Filed Nov. 5, 1928. Serial No. 317,477. 3 Claims. (Cl. 87—5.)

3. In a process of removing finish coatings from surfaces, the step of disintegrating the coating by attacking an organic constituent thereof with a solvent containing an ethanol amine, a glycol ether, and an alkyl benzene having a side chain with a plurality of carbon atoms.

1,829,584. SHOVEL. ALBERT DEMARY, Endicott, N. Y. Filed July 15, 1930. Serial No. 468,181. 2 Claims. (Cl. 55—71.)

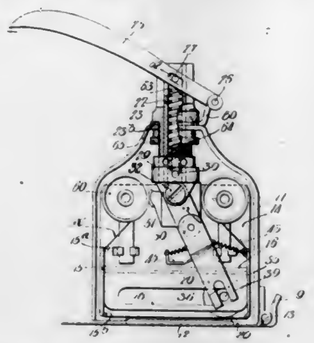


1. In an apparatus of the class described, an elongated handle, a shovel rockably engaged with the handle, and a pawl and ratchet mechanism for controlling the rocking movement of the shovel with respect to the handle, said mechanism comprising means for forming a socket at the lower end of the handle with the pawl in said socket, and a rack bar of arcuate construction on the shovel movable through the socket and engageable by the pawl the teeth on said bar terminating an appreciable distance from the free end thereof and a projection on said free end engaging the pawl to move said pawl to its ratcheting position.

1,829,585. METHOD OF PREPARING IMPREGNATED PAPER PRODUCTS. CAMILLE DREYFUS, New York, N. Y., and GEORGE W. MILES, Boston, Mass., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 29, 1927. Serial No. 236,580. 13 Claims. (Cl. 92—21.)

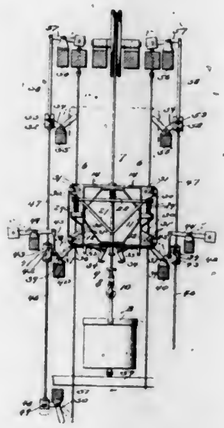
1. Process of preparing an impregnated paper product comprising adding a cellulose derivative in a fibrous form to a paper stock, forming the same into sheets and fixing the said cellulose derivative therein.

1,829,586. STAMPING DEVICE. RICHARD M. DUGDALE, Dedham, Mass., assignor to Farrington Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 11, 1929. Serial No. 391,788. 26 Claims. (Cl. 101—274.)



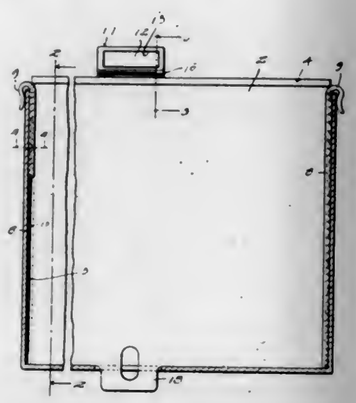
1. A printing device of the class described comprising a plate holder adapted to hold a printing plate, a casing carrying a roller progressively movable over sheets disposed on the printing plate, a longitudinal guide carried by the casing, said guide having guideways engageable with axial bearing surfaces at the ends of the roller, and means for moving the roller transversely of the casing progressively to impress the indicia of said plate upon the sheets.

1,829,587. SAFETY DEVICE FOR MINE BUCKETS. THOMAS FISHER, Carl Junction, Mo., assignor of one-third to James H. Bennett, Carl Junction, Mo. Filed May 20, 1929. Serial No. 364,537. 5 Claims. (Cl. 187—96.)



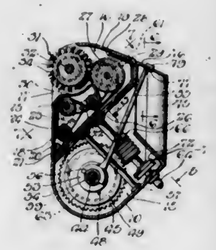
1. In a hoisting apparatus, a cross head movable into and out of a shaft past a landing, a hoisting cable movable through said cross head, a bucket-supporting member attached to the lower end of the cable, a pair of pivoted levers attached to the lower portion of the cross head and adapted to engage the bucket-supporting member and support the same from the cross head in the event the cable parts, means movable into and out of the path of said pivoted levers and normally disposed in said path to engage and release said pivoted levers from said bucket-supporting means in the descent of said cross head and permit the lowering of said cable and bucket-supporting means independently of the cross head, and means including a member shiftable lengthwise of the shaft and operable by the movement of the cross head for moving said lever engaging means out of the path of said levers.

1,829,588. FILE GUIDE. HARRY FORSYTH, Prosser, Wash. Filed Apr. 15, 1930. Serial No. 444,533. 6 Claims. (Cl. 129—16.7.)



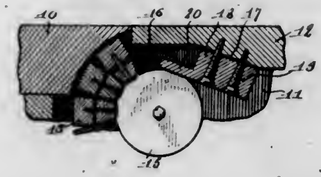
1. A file cabinet guide, comprising a pair of longitudinally grooved supporting members each being adapted to be secured in upright position against the inner face of a file cabinet drawer, a guide plate designed to extend transversely of the cabinet drawer and to have its end edges slidably engaged in the grooves of the adjacent supporting members, and means carried at the end edges of the plate and engaging the guide members for preventing the lateral separation of the latter.

1,829,589. PAINTING APPARATUS. JOHN N. GEORGAS, Gary, Ind. Filed Apr. 27, 1929. Serial No. 358,615. 2 Claims. (Cl. 91—28.)



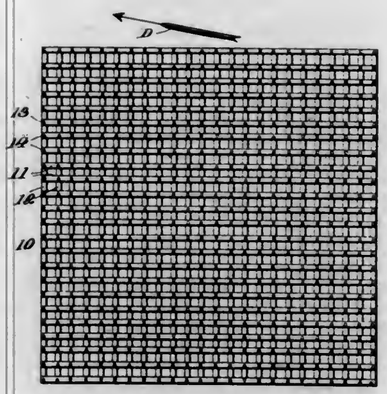
1. In a device of the character stated, a housing having compartments therein, a container, means for supporting said container in one of said compartments, a brush in said compartment having said container therein, means for supporting said brush, means for supplying material in said container to said brush, means for operating said brush and said material supplying means, said last named means including motive power means, means in another of the compartments in said housing for controlling the operation of said operating means, said last named means including oppositely rotating members, and means for connecting said operating means to either of said rotating members to cause rotation of said brush and supplying means in opposite directions.

1,829,590. TABLE. NAPOLEON GIARD, Rougemont, Quebec, Canada. Filed Mar. 19, 1929. Serial No. 348,255. 1 Claim. (Cl. 45—114.)



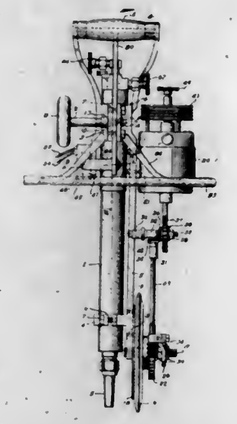
In a table top construction including a fixed top bar, a rigid slidable top portion, a flexible top portion having a series of transversely extending bars and a flexible member connecting the bars, said flexible member being formed with an extension at one end, means for connecting the said extension to the rigid top portion inwardly of the inner edge to provide an unattached portion below the margin adjacent the inner edge, and resilient means for supporting the initial bar of the flexible top portion intermediate its ends and flush with the rigid portion when the top is extended.

1,829,591. ROAD FILE. CHARLES F. GODDARD, Denver, Colo., assignor to The Automobile Storage Elevator Company, Denver, Colo., a Corporation of Colorado. Filed Mar. 25, 1930. Serial No. 438,792. 20 Claims. (Cl. 37—143.)



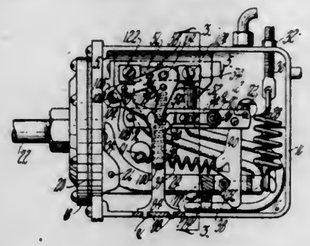
1. A road tool comprising a frame member, said member being flexible relative to the road surface and having a plurality of road engaging projections thereon, and effective to remove road surface inequalities.

1,829,592. BLOWPIPE APPARATUS. FRANK C. HASSE, La Grange, Ill., assignor to The Oxweld Railroad Service Company, Chicago, Ill., a Corporation of Delaware. Filed June 1, 1929. Serial No. 367,796. 16 Claims. (Cl. 266—23.)



1. In a portable blowpipe apparatus, the combination of a frame; a means for supporting said apparatus upon the work at one point only comprising a wheel journalled on one end of the frame whereby the apparatus may travel along the surface of the work; a handle at the other end of the frame for guilding and carrying the apparatus; and a blowpipe mounted on and extending lengthwise of said frame.

1,829,593. COMPRESSOR CONTROL STRUCTURE. MALCOLM E. HENNING, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Original application filed Nov. 3, 1930, Serial No. 493,011. Divided and this application filed Aug. 25, 1931. Serial No. 559,267. 6 Claims. (Cl. 230—4.)

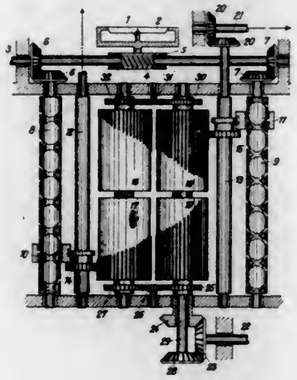


1. In a compressor control structure, the combination of switch contacts and an unloader valve, common actuating mechanism therefor, automatically operable by pressure produced by the compressor and a combination manual and thermal control also operable to move said common actuating mechanism for simultaneously operating said switch contacts and said unloader valve.

1,829,594. DEVICE FOR CONTINUOUSLY RECORDING THE PATH OF FLIGHT OF AIRCRAFT. REINHARD HUGERSHOFF, Dresden, Germany, assignor to the Firm Ikarus Internationale Patentverwertungs-Aktien-Gesellschaft, Vaduz, Liechtenstein. Filed Aug. 30, 1929, Serial No. 389,593, and in Germany July 27, 1929. 5 Claims. (Cl. 234—8.)

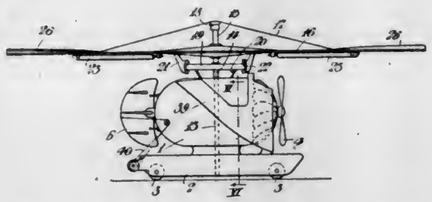
1. Means for actuating the two cross slide elements of apparatus for continuously recording the path of flight of aircraft, comprising two shafts, one driving each of the

two cross slide elements, a speedometer shaft adapted to drive both the cross slide elements at variable speeds,



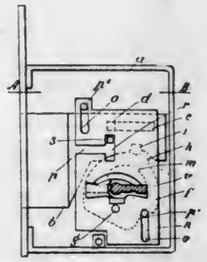
and a pair of stepped rollers interposed between the speedometer shaft and the shafts driving the cross slide elements.

1,829,595. FLYING MACHINE. DAVID KLINGBERG JETTE, Midskog, Sweden. Filed Sept. 22, 1930, Serial No. 483,629, and in Sweden Sept. 17, 1929. 7 Claims. (Cl. 244—15.)



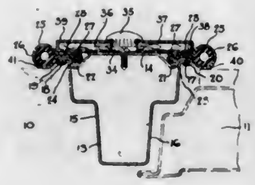
1. In a flying machine having a body and a propulsive propeller, a shaft connected with said body by means of an articulation, a supporting plane rotatably journalled on said shaft, wings arranged obliquely on the under side of said supporting plane and adapted to be actuated by the air resistance at the motion of the flying machine, by wind pressure and by the air-current from said propulsive propeller, and oblique fixed surfaces on said supporting plane to give the latter a tendency of moving upwards when rotated by said wings.

1,829,596. LOCK. GEORG LALITY and NANDOR KARPATI, Budapest, Hungary. Filed Feb. 6, 1929, Serial No. 337,987, and in Hungary Feb. 9, 1928. 1 Claim. (Cl. 70—76.)



A springless safety lock comprising a casing having a keyhole therein, a lock-bolt in said casing, tumblers in said casing capable of being raised and lowered vertically by a key-web, and apertures in each of said tumblers for the passage of the key-web, the apertures in the tumblers being formed and arranged so that when the tumblers are in the raised position only sufficient opening is left in the said apertures for the passage of the key-shank whereby forced opening of the lock is prevented.

1,829,597. WINDBREAK AND SECURING MEANS THEREFOR. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 3, 1928. Serial No. 258,701. 7 Claims. (Cl. 296—28.)



1. In a vehicle body, a frame member arranged at the edge of a closure opening and having the main body of its inner surface relatively plane, but formed with a longitudinal recess adjacent the edge of the opening and a slightly offset portion extending from said recess to the edge of the opening, a windbreak having an enlarged edge portion seated in said recess and an intermediate body portion seated against said offset portion and having its opposite edge portion extending into the closure opening, and a trim member applied and secured against the inner surface of said frame member and having its edge extended substantially to the edge of said frame member adjacent said opening, said trim member and frame member cooperating to securely clamp the windbreak in position against longitudinal and lateral displacement.

1,829,598. BOX COVER FASTENER. CARL A. LIND, Marathon, Iowa. Filed May 31, 1930. Serial No. 458,234. 2 Claims. (Cl. 292—91.)

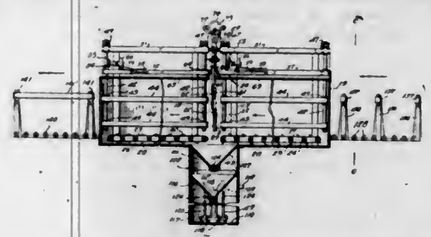


1. A box fastener comprising wear plates of angular formation arranged adjacent to and overlying the ends of the lid therefor, fastening elements swingably supported upon the wear plates beyond the ends of the lid and out of alignment with the outer surface the latter, and the ends of the fasteners being shaped for bitting engagement with the box.

1,829,599. METHOD AND APPARATUS FOR CLEANING SHEET METAL. HAROLD E. MCCREERY, Apollo, Pa., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 15, 1927. Serial No. 240,310. 7 Claims. (Cl. 51—8.)

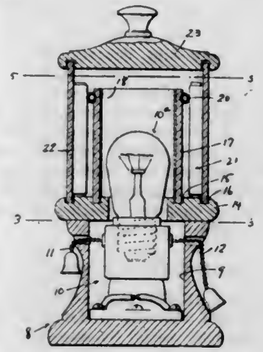
1. Apparatus of the character described comprising a casing through which a metal sheet is adapted to travel in a vertical position, said casing including a bottom wall, horizontal endless belt conveying means extending through the lower portion of said casing and adapted to engage the lower edge of the sheet to wholly support the weight thereof, means arranged on opposite sides of the path of travel of the sheet for impacting abrasive material against the

surfaces of the sheet, a source of abrasive material for said impacting means, and means forming a part of said



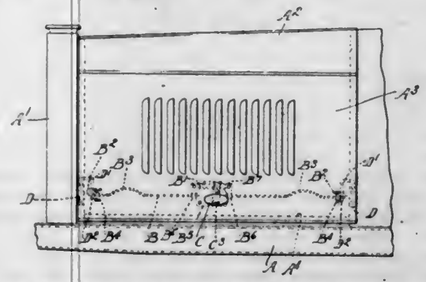
conveying means for collecting discharged abrasive material from the bottom wall of said casing and returning it to said source.

1,829,600. ANÆSTHETIC HOLDING AND HEATING ACCESSORY. ARCHIE G. MCGREGOR, Caldwell, Ohio. Filed June 26, 1930. Serial No. 463,988. 3 Claims. (Cl. 128—192.)



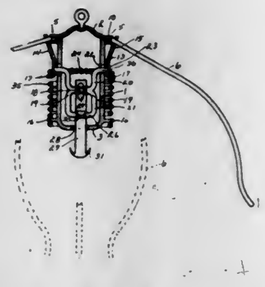
2. In a structure of the class described, a base, a casing mounted thereon, a cylinder disposed in said casing in spaced relation thereto to provide a compartment therebetween to accommodate anæsthetic containers to be heated, a heater on the base projecting into the cylinder, and an elastic retention swing surrounding the cylinder and cooperating with the tubes for maintaining the tubes in perpendicular relationship.

1,829,601. HOOD LATCH. NORTON A. MEARS and DIBRELL P. HYNES, Chicago, Ill., assignors to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 6, 1930. Serial No. 418,834. 9 Claims. (Cl. 292—215.)



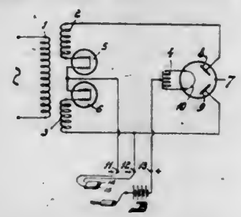
1. A latching device for the hinged section of an automobile hood, which includes a rock shaft mounted on the inner face of the hood, a plurality of yielding latch abutments positioned within and spaced laterally inwardly from the hood, offset portions associated with the rock shaft, adapted for engagement with said abutments, said abutments including upwardly and inwardly inclined relatively extended cam portions along which the off set portions of the rock shaft are slidable, and means for rotating said rock shaft, including an additional offset portion intermediate the ends of the shaft, a handle mounted on the hood, and an actuating connection between said handle and said last mentioned intermediate offset.

1,829,602. ANIMAL TRAP. MATTHEW MUHVIC, Cleveland, Ohio. Filed May 20, 1929. Serial No. 364,388. 2 Claims. (Cl. 43—89.)



1. In an animal trap, a head, a plurality of trap jaws pivotally mounted on the head, and moved from an opened to a closed position to embrace an animal therebetween by jaw actuating means reciprocatively mounted on the head, spring means mounted upon said actuating means moving said actuating means in jaw closing direction, means for restraining the actuating means in the opened jaw position, said means comprising a trigger mounted on the head, a cam follower on a trigger, and a stem provided with a cam surface engaging the cam follower, the cam releasing the trigger and permitting the jaws to move to the closed position upon movement of the stem in either of opposite directions.

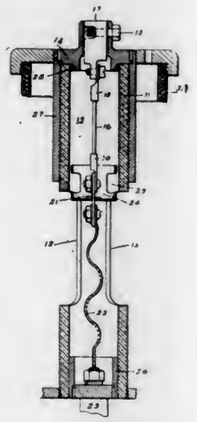
1,829,603. RECTIFYING INSTALLATION. JOHANNES GIJSBERTUS WILHELM MULDER and EKKO OOSTERHUIS, Eindhoven, Netherlands, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Nov. 18, 1927, Serial No. 234,274, and in Belgium Jan. 29, 1927. 3 Claims. (Cl. 175—363.)



2. An alternating current rectifying installation adapted for full wave rectification, comprising a supply transformer having primary and secondary windings, the secondary winding being split into two parts and having an intermediate connection, a direct current load having a positive and a negative terminal, a rectifier valve, having at least two anodes and a cathode, each anode of the said rectifier being connected to a separate free end of the said secondary winding, and the cathode being connected to the positive terminal of the said load, the negative terminal of the said load being connected to the said

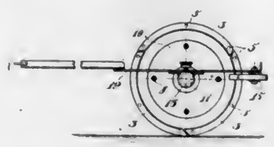
intermediate connection of the said secondary winding, a second negative terminal for the said load adapted for connection to a free end of one of the secondary transformer windings and a plug socket common to the said negative terminals for connection of the direct current load to the rectifying installation.

1,829,604. OIL IMMERSED FUSE. FRIEDRICH NATALIS, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 5, 1925, Serial No. 67,013, and in Germany Jan. 23, 1925. 4 Claims. (Cl. 200—120.)



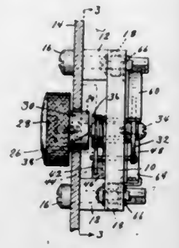
1. In an electric fuse, the combination of a receptacle adapted to contain insulating liquid, a tubular member made of insulating material and disposed within said receptacle, said tubular member having large openings providing communication between the interior of the tubular member and the liquid-containing portion of the receptacle, a closure for said tubular member spaced from the openings, said tubular member forming a chamber between the closure and said openings, a piston disposed within said tubular member, a fusible element disposed within the chamber and normally supporting the piston at the end of said chamber adjacent said openings, said fusible element being fusible by the passage of an excess electric current therethrough, whereby, upon melting of said fusible element, the pressure of the gas generated thereby will propel the piston away from said chamber to permit the insulating liquid to enter through said openings into said chamber to extinguish the arc.

1,829,605. ROLLER FOR CRUSHING CLODS. ABEL NORDSTRÖM, Buenos Aires, Argentina. Filed Dec. 12, 1929, Serial No. 413,590, and in Argentina Aug. 5, 1929. 5 Claims. (Cl. 55—77.)



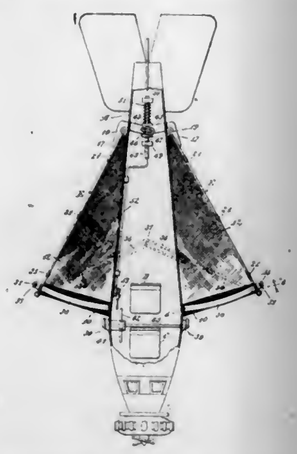
1. A pulverizer comprising a plurality of wheels, each of said wheels including two flat disks having flanges at the peripheries thereof, a U-shaped segment adapted to overlap said flanges and means securing said segment and flanges together.

1,829,606. ROTARY CONTROL SWITCH. GEORGE W. O'KEEFFE, Milton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed July 20, 1929. Serial No. 379,744. 10 Claims. (Cl. 200—8.)



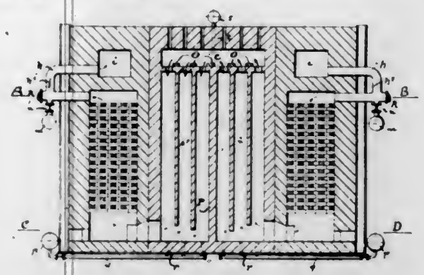
1. A rotary control switch including a rotary bridging disc having means for holding it yieldingly in a normal position and for returning it to such position when moved in either direction therefrom, said disc having opposed short and long peripheral contact faces and opposed short and long notches interposed between said contact faces, and three fixed contact members peripherally disposed about said contact disc and engageable therewith, two of said contact members being close together and the third contact member being approximately diametrically opposed thereto, said plate holding means being arranged to position said plate normally in engagement with said third contact member and one of said other contact members, and said plate being movable in one direction to break engagement with said third contact member and in the opposite direction to make engagement with all three contact members.

1,829,607. SAFETY ATTACHMENT FOR AEROPLANES. JOHN FRANCIS O'MALLEY, Flushing, N. Y. Filed Dec. 7, 1929. Serial No. 412,486. 3 Claims. (Cl. 244—29.)



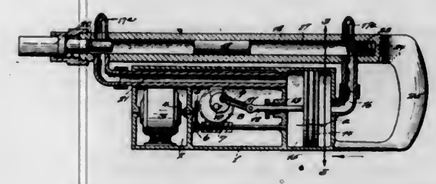
1. A safety attachment for aeroplanes including a pocket forming structure having its mouth disposed forwardly of the aeroplane and adapted to produce a supplemental head resistance when the pocket is opened, said pocket forming structure being substantially the frustum of a rectangular pyramid with its closed reduced rear end disposed rearwardly of the plane, normally restrained means for opening the pocket, means for locking the same in a normally closed condition and manually controlled means for releasing said locking means.

1,829,608. VERTICAL CHAMBER COKE OVEN. CARL OTTO, Essen-Ruhr, Germany. Filed Oct. 14, 1926, Serial No. 141,599, and in Germany Oct. 14, 1925. 6 Claims. (Cl. 202—123.)



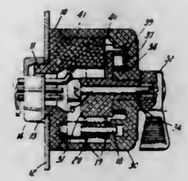
1. In a vertical chamber oven provided with a series of alternate vertical oven chambers having narrow sides and heating walls therefor arranged side by side, each of said heating walls being provided with continuous, vertical combustion flues extending substantially throughout the height of the wall, a vertical partition in each of said walls extending transverse thereto from the bottom of the wall upwardly, subdividing each of said walls into communicating halves, a bridge passage above the flues of each of said walls communicably connecting the upper ends of the flues of the halves of the wall, a series of regenerators arranged along each of the two sides of the series, channels communicably connecting the lower end of each regenerator of one of the series of regenerators with the ower ends of the flues of one half of each of two of the adjacent heating walls, a waste gas channel located above each series of regenerators and means communicably connecting the regenerators of each of the series of regenerators with one of the waste gas channels.

1,829,609. PNEUMATIC HAMMER. FRANK R. ROBINSON, Philadelphia, Pa. Filed May 6, 1929. Serial No. 360,810. 1 Claim. (Cl. 125—34.)



In a pneumatic hammer, a pair of adjacent cylinders, a tool loose in and having limited movement in one end of one cylinder, a piston hammer operative in the cylinder having a tool and adapted for striking cooperation with the tool, the other cylinder having a pressure chamber in communication with the first cylinder adjacent the ends of the piston hammer cylinder, said other cylinder having a compartment, a piston operable in the pressure chamber and adapted for creating air compression on one side of the piston hammer and for rarefying or creating a vacuum on the opposite side of the piston hammer, and a motor driven mechanism in said compartment for imparting movement to the piston in the pressure chamber, and means comprising check valves operative in communication with the interior of the first cylinder incident to the compression and the rarefication adjacent opposite ends of the piston hammer, one of said check valves being located at the end of the first cylinder remote from the tool, said piston hammer adapted to substantially override the check valve remote from the tool and to override one of the communications between said other cylinder and the first cylinder, and means in the first cylinder to urge the piston hammer from overriding position of the remote check valve and the adjacent communication between the first and second cylinders.

1,829,610. SWITCH. CLAUDE C. RUNNER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 17, 1928. Serial No. 278,591. 7 Claims. (Cl. 200—5.)

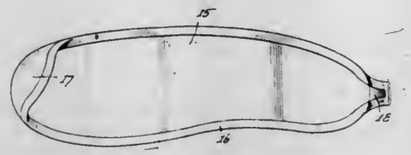


1. An enclosed master switch adapted for mounting in knockout holes and the like comprising a plurality of selectively operable contacts, a separable two-part enclosing casing therefor having the said contacts and wiring terminals therefor mounted in spaced relation on one part thereof within the casing and having operating means extending exterially of the casing for selectively operating the contacts, said casing being provided with a cylindrical threaded mounting boss extending from the said one part of the casing and adapted for mounting in a knockout hole or the like to support the entire switch thereon and said boss having an opening extending through the said one part of the casing adjacent said terminals for receiving the wiring connections for said terminals through the knockout hole or the like.

1,829,611. COMPOSITION. EDWIN P. RYAN, Somersworth, N. H. Filed Jan. 27, 1930. Serial No. 423,905. 1 Claim. (Cl. 134—22.)

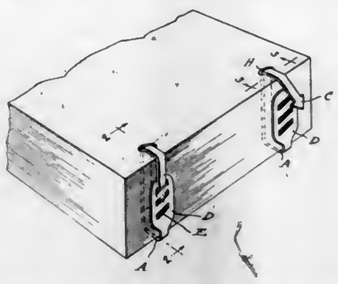
A cloth finishing composition for the purpose stated comprising an intimate mixture of the following ingredients:—Stearic acid, 70 lbs; soluble castor oil, 2 gal; soluble wax, 1 gal; ammonia, 1 gal; tapioca flour, 5 pints; turpentine, 2 gal; and water, 75 gal.

1,829,612. AUXILIARY INSOLE. RYUJI SATO, New York, N. Y. Filed Oct. 8, 1929. Serial No. 398,227. 1 Claim. (Cl. 36—71.)



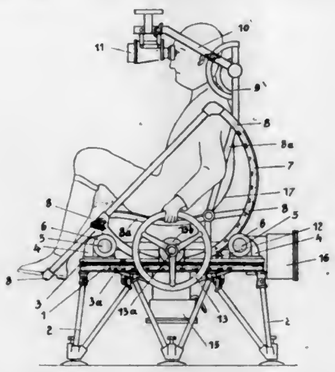
An insertable insole for protecting hose and reducing foot friction with a shoe, consisting of a blank formed of highly polished and friction reducing plastic material and formed on the forward end thereof with a molded toe cup having soft moldable padding therein and on its rear end with a terminal tongue forming shoe horn means, said blank being also formed with a plurality of upset wavy portions forming yielding foot arch supports and provided with an edge binding coextensive with the blank, the toe cup and the terminal tongue.

1,829,613. FASTENER. RYUJI SATO, New York, N. Y. Filed Nov. 2, 1929. Serial No. 404,364. 1 Claim. (Cl. 24—153.)



A binding device consisting of a band of flexible material formed with a coupling head on one end thereof, and provided with a series of slots spaced from each other, each of the slots being disposed diagonally in the head, the other end of the band being formed with a locking tongue of arrow shape insertable in either one of the slots and adapted to slide against the end of the slot under the tension of paper sheets around which the band is placed, the band being folded upon itself to provide rounded side edges.

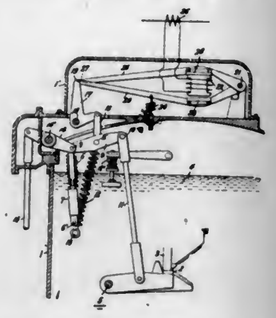
1,829,614. VERTICAL AND HORIZONTAL ANGLE MEASURER. JOHANN SCHIEB, Vienna, Austria, assignor to C. P. Goerz Optische Anstalt Aktiengesellschaft Akciova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia. Filed Oct. 22, 1928, Serial No. 314,274, and in Germany Oct. 27, 1927. 8 Claims. (Cl. 33—69.)



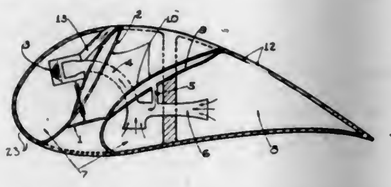
1. In means for supporting observation instruments, a frame, a member mounted on said frame for substantially horizontal rotation, circular arcs having chords and comprising a second frame and having a center internal to their chords mounted in said member to swing about their centers as an axis, and a seat for an observer mounted in said second frame.

1,829,615. CIRCUIT CONTROLLING MECHANISM. CHARLES F. SCHWENNKER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 1, 1929. Serial No. 404,142. 1 Claim. (Cl. 200—91.)

1. In circuit interrupting apparatus comprising relatively movable contact structure, the combination of operating means, means normally biasing said operating means towards an open circuit position, and means for restraining said operating means in a closed circuit position, said restraining means being responsive to predetermined overload conditions for releasing the operating means so that the contacts are opened at, or near, the minimum value of the current traversing the same.

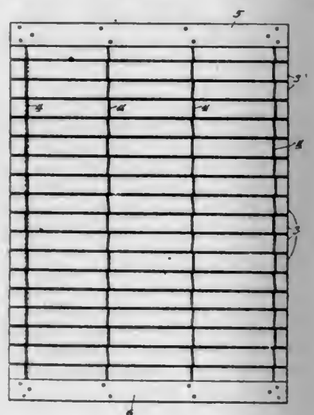


1,829,616. AIRPLANE. EDWARD A. STALKER, Ann Arbor, Mich. Filed Mar. 28, 1929. Serial No. 350,537. 7 Claims. (Cl. 244—12.)



1. A wing having a passage through a portion thereof with the exit of the passage at the upper surface of the wing, a prime mover in said passage operated by the flow of air therethrough, openings in the walls of said passage, and means operated by said prime mover for withdrawing air through said openings into the wing.

1,829,617. WOOD SPLINT SHADE. LEROY J. STEFFEN, Evanston, Ill., assignor to Hough Shade Corporation, a Corporation of Connecticut. Filed Dec. 21, 1929. Serial No. 415,650. 3 Claims. (Cl. 156—16.)

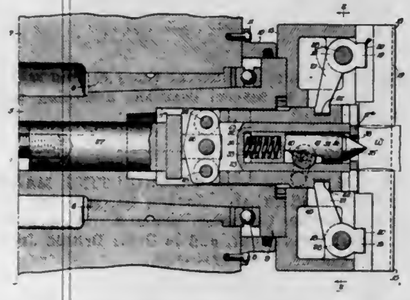


2. In a window shade, a support, a plurality of cords rigidly attached thereto, a plurality of wooden slats maintained in position by the cords, said cords being composed of wool.

1,829,618. FILTER MATERIAL AND PROCESS OF MAKING IT. CLAIR W. STUDER, North Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Aug. 2, 1929. Serial No. 383,179. 2 Claims. (Cl. 183—51.)

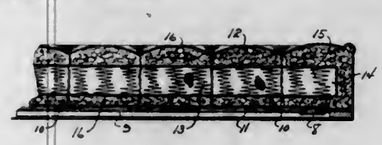
1. An air-porous dust-separating bag for use with a suction cleaner, comprising a sheet formed of cellulose fibers coated with a resin in an amount insufficient to lessen materially the permeability of the sheet.

1,829,619. CHUCK. ERNEST J. SVENSON, Rockford, Ill., assignor to Sundstrand Machine Tool Co., Rockford, Ill., a Corporation of Illinois. Filed Oct. 5, 1927. Serial No. 224,033. 21 Claims. (Cl. 82—40.)



1. A lathe chuck comprising a rotatable chuck body, a pair of opposed chuck jaws mounted externally of said body and movable radially thereof, a pair of bell cranks mounted in said body and having one arm of each engaging one of said jaws, and the other arm of each extending radially inwardly of said chuck body, a pair of members mounted for longitudinal slidable movement in said body on opposite sides of the axis thereof, each of said members engaging the radially extending arm of one of said bell cranks, an equalizing bar pivotally connecting said members, an operating means pivoted to said bar midway between said members, a longitudinally slidable center pin mounted in said body axially thereof and between said members, spring means urging said center pin outwardly of said body, spring pressed cam means operable to engage said pin to lock the same against movement, and a cam surface associated with said operating means and operable to engage said cam means to render said cam means inoperative when said chuck jaws are unclamped.

1,829,620. MATTRESS. CHARLES H. VAN TASSEL, Philadelphia, Pa. Filed Sept. 12, 1928. Serial No. 305,498. 3 Claims. (Cl. 5—351.)



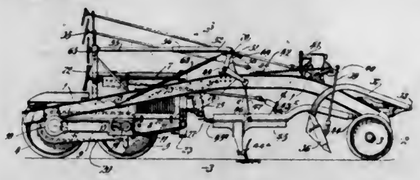
1. A mattress including a body covering, a fabric compartment arranged therein and having its walls spaced from the adjacent walls of said covering, means for holding the walls of said compartment distended, a soft flexible filling arranged between the walls of the compartment and the adjacent walls of said covering, tufting cords passing through the top and bottom walls of the mattress covering and also through the adjacent walls of said compartment, a wooden frame upon which said mattress is supported, and longitudinal and transverse webbing strips secured to the frame and through which said tufting cords are passed and tied.

1,829,621. DEVICE FOR HOLDING FIRE HOSE NOZZLES. GUY L. WHITEFORD, Salina, Kans. Filed Mar. 30, 1929. Serial No. 351,443. 1 Claim. (Cl. 299—112.)



A device for holding fire hose nozzles comprising a bar having one end pointed, a handle formed intermediate its ends with the outer end of the bar, a hose attaching means located on the bar intermediate the ends of the latter, spaced rings on the bar at opposite sides of the hose attaching means, adjustable shoulder straps having one end of each strap connected to the rings at one side of the hose attaching means and the other end of each strap connected to the rings at the opposite side of the hose clamping means with the straps passing over opposite shoulders of persons supporting the bar horizontally and in front thereof.

1,829,622. FOUR WHEEL DRIVE ROAD MACHINE. FRED D. WILSON, Harvey, Ill., assignor to Austin Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 20, 1928. Serial No. 313,730. 7 Claims. (Cl. 37—145.)

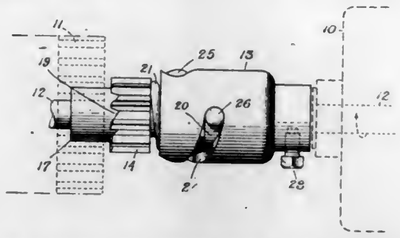


1. In a self propelled road grader, in combination a grader blade, an elongated frame on which the blade is adjustably mounted, steering wheels supporting the front portion of said frame in front of the blade, a power plant connected to said frame in a position behind the blade, a pair of ground-engaging drive wheels driven from said power plant and positioned adjacent the rear end of the power plant, and a second pair of ground-engaging drive wheels also driven from said power plant, said second pair of drive wheels being spaced forwardly from the first pair and positioned a substantial amount nearer to the grader blade than the first pair but behind it, so as to provide additional traction, and also providing a substantial resistance to the tendency of the side draft to force the machine out of its normal course.

1,829,623. PROCESS OF TREATING METALS. JAMES G. E. WRIGHT, Alplaus, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 16, 1929. Serial No. 407,795. 6 Claims. (Cl. 91—70.1.)

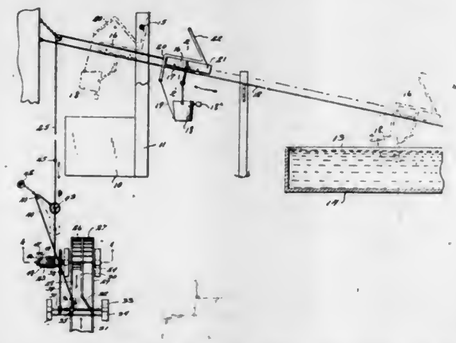
1. The process of protecting metallic articles from oxidation or corrosion which consists in covering the surface of the article with a mixture of another metal in powdered form and a substantially volatilizable alkyd resin binder, and then firing at a temperature which will cause the powdered metal to alloy with the metal of the article.

1,829,624. ENGINE STARTER. ROLLIN ABELL, Milton, Mass. Filed Apr. 3, 1924. Serial No. 703,935. 14 Claims. (Cl. 74—7.)



1. An engine-starter comprising a rotary transmission unit, two pairs of clutch members arranged thereon in series, the two outer clutch members being rigidly related to said unit and the two inner clutch members being loose relatively thereto, a compression spring arranged between the two inner clutch members to keep them against the outer clutch members respectively, and means for driving one of said inner clutch members, the other one of said inner clutch members having gear teeth to engage a gear of the engine, said clutch members having cooperative clutch teeth formed to develop end-thrust against said spring and one of said pairs of clutch members being organized to be declutched automatically.

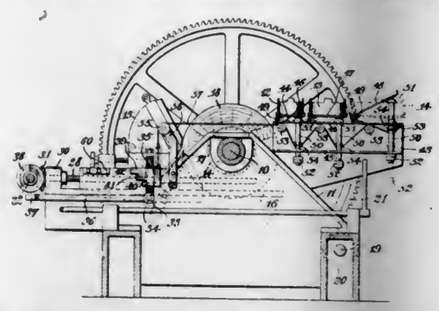
1,829,625. AUTOMATIC WATER CONVEYER OR CARRIER. SAMUEL L. ADAMS and DANIEL B. ADAMS, Pickens, S. C. Filed Dec. 6, 1930. Serial No. 500,656. 5 Claims. (Cl. 104—124.)



1. The combination with a bucket supporting carrier and an inclined trackway on which the carrier moves, of means for automatically shifting the carrier alternately in opposite directions including two reversely bladed water wheels mounted on a common shaft, a winding drum operatively engaged by the shaft for rotation therewith, a cable on the winding drum and connected to the carrier, and means controlled by the movement of the cable on the winding drum whereby to direct water alternately over one or the other of said drums.

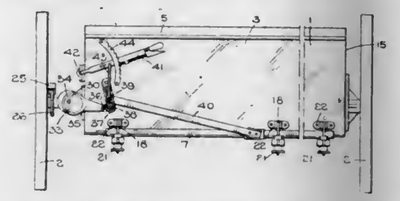
1,829,626. AUTOMATIC SAFETY STOP MECHANISM. WILLIS J. ANTHONY, Escanaba, Mich. Filed May 13, 1930. Serial No. 452,016. 10 Claims. (Cl. 144—209.)

1. The combination with a lathe including work holding rotary chucks, a knife carriage mounted for movement toward and away from said chucks, and means to operate said carriage; of means operated by said carriage to stop the operation of the first mentioned means to stop the movement of the carriage during its travel toward said chucks in a predetermined position, so as to prevent the knife thereof from coming in contact with said chucks, and means including various additional chucks which serve as various counterbalancing weights to regulate the second mentioned means so that it will operate the



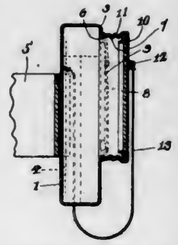
first mentioned means at different times to stop said carriage in any one of several positions according to the sizes of chucks used.

1,829,627. MACHINE FOR DISTRIBUTING MANURE OR OTHER MATERIAL. JOSEPH BAMFORD and CYRIL JOSEPH BAMFORD, Uttoxeter, England. Filed Dec. 18, 1929, Serial No. 415,087, and in Great Britain Jan. 12, 1929. 10 Claims. (Cl. 221—126.)



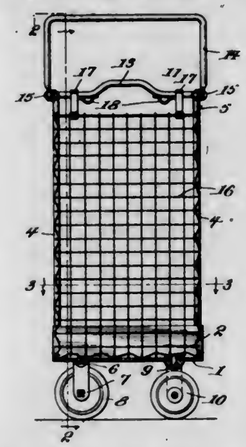
1. A machine for distributing manure or other material of the type specified having a hopper, means adapted to control the discharge of material from said hopper, comprising a stationary grid, a movable upper grid above said stationary grid, a movable lower grid below said stationary grid, said upper and lower grids each being divided longitudinally, means connecting each of the upper grid parts with the lower grid part directly beneath it, and means for reciprocating said upper and lower grid parts, the openings in the upper grid parts being out of register with the openings in the lower grid parts disposed beneath them.

1,829,628. CIGARETTE AND MATCH CONTAINER. MORITZ BEHR, Houston, Tex. Filed Mar. 11, 1930. Serial No. 434,973. 1 Claim. (Cl. 206—37.)



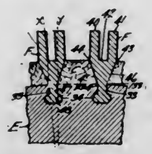
A container comprising, a body portion forming a compartment adapted to contain cigarettes and having its forward wall formed with an opening, an externally threaded flange projecting forwardly a substantial distance from the body portion in circumferential relation to the opening and forming a compartment in communication with the body portion compartment adapted to contain matches and providing a retaining means for the cigarettes, and a cover for said compartments including an internally threaded flange threaded onto the externally threaded flange, said externally threaded flange terminating at its free edge in an inturned bead providing a retaining means for the matches and bearing against the inner face of the cover when the latter is in closure position to provide a seal.

1,829,629. CARRYING DEVICE. GEORGE BETANCOURT, Alhambra, Calif. Filed Feb. 28, 1931. Serial No. 519,222. 1 Claim. (Cl. 280—50.)



A carrying device comprising a portable base, vertical uprights secured to the base, side and end members connecting the vertical uprights at their upper ends, said side members offset intermediate their ends to form hand grips, a handle pivoted to the end members intermediate their ends, and a container suspended from the side members within the vertical uprights and over the base and removable from said side members.

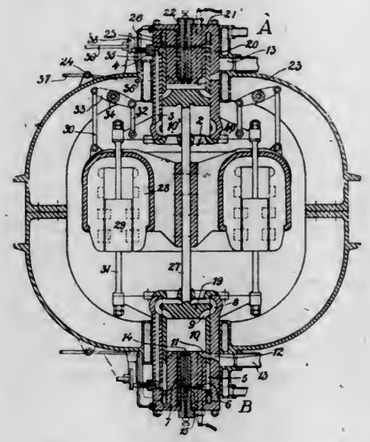
1,829,630. PAPER MAKING ROLL AND PROCESS OF COVERING IT. ARCHER LE ROY BOLTON, North Andover, Mass., assignor to John W. Bolton and Sons, Inc., Lawrence, Mass., a Corporation of Massachusetts. Filed Mar. 31, 1927. Serial No. 179,981. 12 Claims. (Cl. 92—27.)



1. The combination with a Jordan engine plug having a curved surface in which are longitudinal slots; of a plurality of bars fastened so as to stand alone in said slots each having a part which projects from and is thicker outside than it is at the plug surface; and wooden separators of wedge shape longitudinally each of which is thicker at its bottom surface than at its top surface positioned between the bars and resting on the curved surface of the plug.

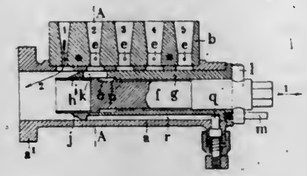
3. The process of assembling Jordan engine plugs which consists of attaching bars to the plug body by their bottom edges, each of which bars projects along its middle portion, and of then driving from the large ends, wedge shaped separators between adjoining bars and the plug body below said projections.

1,829,631. EXPLOSIVE ENGINE. EMIL BURHOP, Geneva, Switzerland. Filed Oct. 15, 1927, Serial No. 226,456, and in Germany Dec. 13, 1926. 5 Claims. (Cl. 123—50.)



1. In an explosive engine having explosion cylinders arranged in pairs and provided with pistons, intermediary members for transmitting power from the pistons to the apparatus to be driven, said members being arranged so as to make exclusively reciprocating or swiveling motion, and means whereby each one of the explosions in a cylinder of a given pair causes all the members controlled by said pair to move.

1,829,632. CARBURETOR. AUGUSTE CHANARD, Rueil, France. Filed May 25, 1928, Serial No. 280,568, and in France June 3, 1927. 5 Claims. (Cl. 261—41.)

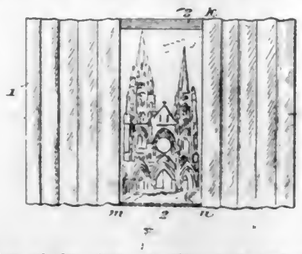


1. In a carburetor, air inlets arranged in pairs, multiple gasoline inlets having calibrated orifices, each supplying a pair of inlets, gasoline expansion chambers communicating with the calibrated orifices for the expansion of the gasoline, and conduits for conducting the expanded gasoline to the air inlets to produce the carbureted mixture.

1,829,633. PROCESS FOR TAKING OR PROJECTING PHOTOGRAPHIC OR CINEMATOGRAPHIC PANORAMIC VIEWS OR VIEWS EXTENDING IN HEIGHT. HENRI CHRETIEN, St. Cloud, France, assignor to Societe Anonyme Francaise dite Societe Technique d'Optique et de Photographie (S. T. O. P.), St. Onen, France. Filed Jan. 9, 1928, Serial No. 245,558, and in France Apr. 29, 1927. 3 Claims. (Cl. 88—16.)

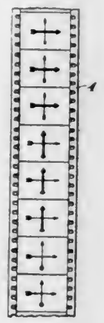
3. The improvement in the art of projected pictures which comprises first determining what portion of a view other than any having the relative dimensions of the image space of the film is desirable for reproduction, then photographing such portion while optically compressing the image in one dimension sufficiently to make it correspond to the relative dimensions of the image space, and

thereafter projecting the image while optically restoring the image in said dimension to give it the dimensions of



said portion of the view, whereby projected pictures may be given the dimensions best suited for framing the view without regard to the image spaces on the film.

1,829,634. TAKING AND PROJECTION OF MOTION PICTURES AND FILMS THEREFOR. HENRI CHRETIEN, St. Cloud, France. Filed Jan. 28, 1929, Serial No. 335,564, and in France Apr. 29, 1927. 4 Claims. (Cl. 88—19.5.)



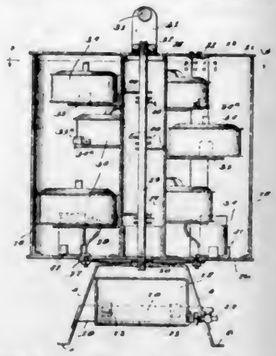
1. A motion picture film having thereon a plurality of series of images, each image being of the same area, the images of one or more of said series all having proportions normal with those of the object and the images of another or others of said series all being optically compressed in one given direction whereby by projecting the film on the screen with ordinary enlargement of the images of some of the series and with suitable differential enlargement of images of the other series, pictures in natural proportions but of different sizes and shapes best suited to the nature of the view may be made to appear upon the screen.

1,829,635. METHOD OF MAKING ALLOYS. WHEELER P. DAVEY, State College, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1929. Serial No. 366,768. 6 Claims. (Cl. 75—18.)

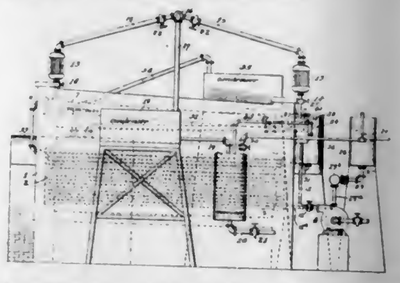
1. The method of making an alloy from normally base forming metals which consists in converting a mixture of mutually non-reactive solutions of compounds of the metals desired in the alloy to an intimate physical non-colloidal mixture of mutually non-reactive compounds which are reducible, and then reducing said mixture to the metallic state.

1,829,636. PORTABLE LUNCH CARRIER. AUGUST DE FREITAS, Honolulu, Territory of Hawaii. Filed Apr. 3, 1930. Serial No. 441,324. 5 Claims. (Cl. 206—4.)

1. In combination a cabinet, a tubular member extending vertically therein, a plurality of article supporting brackets radiating from the tubular member and having their inner ends extended through the walls of the tubular member, and a rod extending through the tubular member and engaged with the ends of the brackets to hold them in place.

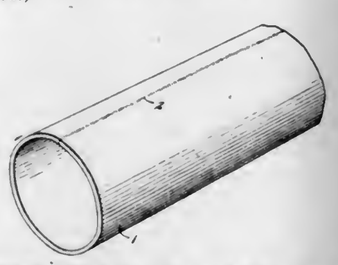


1,829,637. PROCESS FOR CONVERTING HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed July 24, 1918. Serial No. 246,438. 7 Claims. (Cl. 196—49.)



4. A process for cracking hydrocarbon oil, consisting in maintaining a plurality of independent bodies of hydrocarbon oil under cracking conditions of heat and pressure, in continuously supplying hydrocarbon oil from a primary source of supply to said bodies and in maintaining the volume of the oil in each of said bodies substantially constant by automatically admitting to said bodies additional oil from an auxiliary source of supply in the event that the volume of oil in said bodies decreases.

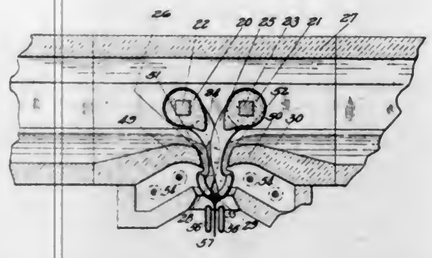
1,829,638. ELECTRICALLY WELDED JARRED STEEL PIPE. ANDREW G. EGLER, Youngstown, Ohio. Filed Jan. 13, 1931. Serial No. 508,560. 1 Claim. (Cl. 137—75.)



Electrically welded steel pipe made from "jarred" steel that is substantially free from slag and other non-metallic inclusions along the welding line and in the body of the pipe.

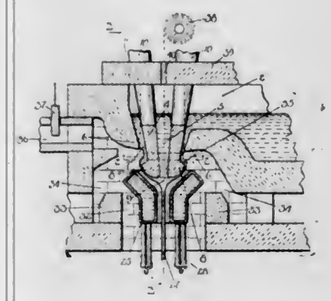
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1,829,639. METHOD AND APPARATUS FOR DRAWING SHEET GLASS. ENOCH T. FERNGREN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 12, 1922, Serial No. 593,962. Renewed May 14, 1930. 30 Claims. (Cl. 49—17.)



26. In an apparatus for forming continuous sheet glass, a receptacle for molten glass having an orifice in its bottom, a pair of directing members extending down through the orifice, the molten glass flowing down in three separated streams, one between the members, and one between each member and the adjacent side of the orifice, and means for mounting the members whereby they may yield toward or from one another to vary the proportionate volumes of the side and central streams.

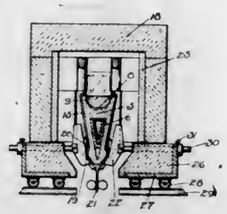
1,829,640. METHOD AND APPARATUS FOR FORMING SHEET GLASS. ENOCH T. FERNGREN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 24, 1924, Serial No. 701,305. Renewed Nov. 29, 1929. 16 Claims. (Cl. 49—17.)



2. The process of drawing a sheet of glass which consists in merging three descending glass streams within a heated zone, in checking the descent of two of the streams above their merging point to increase their quantity adjacent to said point, and in drawing a sheet from the merging point of the glass stream.

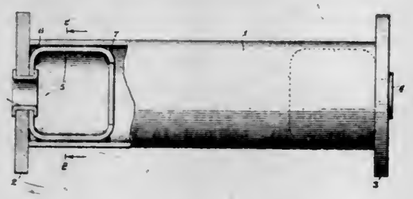
8. In an apparatus for forming continuous sheet glass, a pair of similar directing members arranged adjacent one another so as to provide an open passage therebetween, means for flowing molten glass onto the upper edges of the members, the glass flowing down between the members, and also down the outer sides thereof, the three streams uniting below the members and being drawn away in sheet form, the members being provided on their outer faces with means for retaining a supply body of glass in each outer stream adjacent the point where the streams merge, means for applying heating to these glass supplies, and means for locally cooling the glass where the three streams unite.

1,829,641. DOWNFLOW SHEET DRAWING APPARATUS. ENOCH T. FERNGREN, Toledo, Ohio, assignor to The Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 29, 1924, Serial No. 746,655. Renewed Oct. 16, 1929. 23 Claims. (Cl. 49—17.)



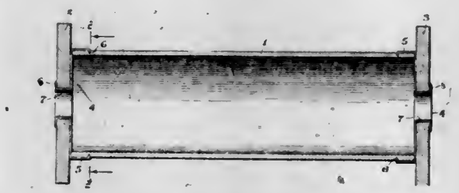
2. In the art of drawing sheet glass, a slab, having downwardly convergent sides, means to flow glass down both sides of the slab and to draw the streams from the slab in sheet form, and means projecting outwardly from the slab to build up a reservoir of glass between its introduction to the slab and the point where it is drawn from the slab to produce a smooth uniform sheet of glass.

1,829,642. PAPER PACKING SPOOL. CLARENCE H. FORNEY, Jersey City, N. J., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed Mar. 28, 1930. Serial No. 439,764. 2 Claims. (Cl. 242—119.)



1. A spool consisting of a paper barrel, a pair of paper end disks, a sleeve of paper at each end of said barrel fitting snugly therein, each of said sleeves having a turned-in end fitting flatwise against the end disk, a hollow eyelet extending through each of said turned-in ends and through the respective disks, each of said eyelets having a flange at each end for clamping the respective end disks to the respective turned-in ends of said sleeves and adhesive for securing the respective sleeves to said barrel.

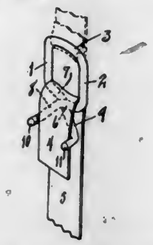
1,829,643. PAPER PACKING SPOOL. CLARENCE H. FORNEY, Jersey City, N. J., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed Mar. 28, 1930. Serial No. 439,765. 4 Claims. (Cl. 242—119.)



1. A spool comprising a barrel, a pair of end members, each end member having an aperture therein and a connecting member for each end member, each of said connecting members being formed of metal and having a peripheral flange positioned with its edge crimped to

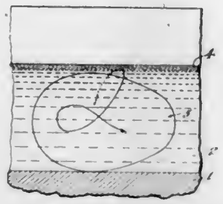
extend into the barrel for gripping the barrel, said flange telescoping over the end of the barrel so that the crimped edge extends inwardly into the barrel and with a tubular projection bent to grip an end member, said tubular projection substantially straddling the end member at said aperture.

1,829,644. BALE-TIE BUCKLE. EZRA A. FRANTZ, Fort Worth, Tex. Filed Apr. 14, 1931. Serial No. 530,085. 3 Claims. (Cl. 24—22.)



3. A bale tie buckle comprising a steel wire in combination with a bale tie, said wire being bent to approximately quadrangular form having a tie engaging member and side bars at substantially right angles thereto and then projected approximately parallel to said tie engaging member within and substantially to the middle point of said band and then crossed and then extended at angles away from the buckle and to the lateral edges of the tie and then projected inwardly at approximately right angles to the free end of the tie form locking means to prevent lateral shifting of the tie, and for exerting friction against the bale.

1,829,645. METHOD OF AND PREPARATION FOR COLORING EGGS OR THE LIKE. EMMA RIEHL GIBBENS, Godfrey, Ill., assignor to Paas Dye Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 17, 1930. Serial No. 502,977. 4 Claims. (Cl. 8—5.)



1. The method of coloring an egg consisting in immersing the egg to be colored in a preparation consisting of a coloring liquid having a layer of oily substance on its surface which adheres to portions of the egg and prevents contact of said coloring liquid with said portions of the egg, and then wiping dry the egg.

1,829,646. METALLIFEROUS AZO-DYESTUFFS AND PROCESS OF MAKING SAME. HANS GUBLER and GUILLAUME DE MONTMOLLIN, Basel, and JOSEPH SPIELER, Laufen, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Nov. 30, 1929, Serial No. 410,868, and in Switzerland Dec. 11, 1928. 11 Claims. (Cl. 260—12.)

1. A manufacture of metalliferous azo-dyestuffs suitable for dyeing vegetable fibers, artificial fibers and animal fibers, by treating with agents yielding metals capable of forming complexes the azo-dyestuffs of the general formula

$$(R_1-N=N-R_2-N=N-)_xR_2$$

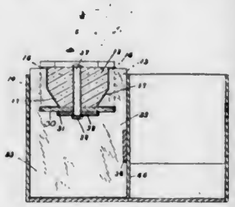
in which R_1 is the residue of a diazotizing component consisting of a sulfonated nucleus of the benzene or naphthalene series, R_2 is an unsulfonated nucleus of the benzene series which consists in ortho-position to the second azo-group an OH-group, one of these two substituents being in para-position to the first azo-group, R_2 is the residue of a coupling component which can couple once up to three times, and x is a whole number which is not higher than three.

1,829,647. METHOD OF MAKING THE BORDER SEAL OF LAMINATED GLASS. ROBERT W. HACKETT, Kirklyn, and ARTHUR G. WORSALL, Wyncote, Pa., assignors to Louis J. Kolb, Philadelphia, Pa., trading as Safetee Glass Company. Original application filed May 25, 1928, Serial No. 280,518. Divided and this application filed Aug. 5, 1930. Serial No. 473,186. 1 Claim. (Cl. 49—81.)



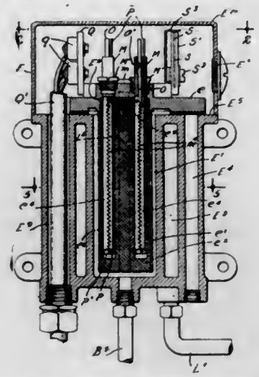
The herein described method of sealing the edges of laminated glass composed of two glass sheets with an interposed celluloid sheet, which consists in the removal of the perimeter edges of the celluloid sheet to a short distance by the employment of the cutting action of a rapidly rotating fine wire brush whereby the abrading action thoroughly cleans the binding material from the faces of the glass sheets forming the side walls of the groove, and thereafter introducing a sealing substance into the groove whereby it seals the same and attaches itself to the glass and celluloid surfaces therein.

1,829,648. ELECTRIC RECEPTACLE BAFFLE. NORBERT G. HAERING, Cincinnati, Ohio, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 31, 1929. Serial No. 417,715. 16 Claims. (Cl. 247—16.)



14. An attachment plug receptacle having a plurality of outlets, partitioning means recessed at one edge, slots cut into the sides of said receptacle for the reception of those edges of said partitioning means which are around the recess, whereby when said partitioning means and receptacle are placed in a housing said partitioning means completely isolates the outlets of the receptacle from one another.

1,829,649. ELECTRICAL GAS ANALYZING APPARATUS. THOMAS RANDOLPH HARRISON, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 12, 1925. Serial No. 68,650. 38 Claims. (Cl. 73—51.)

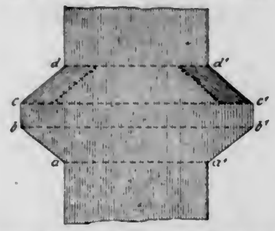


1. A cell block for use in measuring the thermal conductivity of a gas comprising a body of lead with a gas cell therein and a support for said body made of metal which is stronger than lead and formed with a hole in register with one end of said cell, and a resistor support mounted in said hole.

6. A cell structure for use in determining the thermal conductivity of a gas comprising a metallic body member formed with a chamber, a water jacket space surrounding said chamber, and a cell block removably received in said chamber and separated from the surrounding wall thereof by a gas receiving temperature equalizing space.

16. In gas analysis apparatus comprising a cell chamber, a resistor located in said cell chamber, and adjustable means for varying the heat dissipating capacity of the resistor.

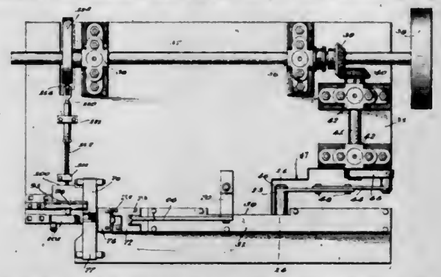
1,829,650. METHOD OF KNITTING HOSIERY ON FLAT KNITTING MACHINES. WOLDEMAR HEINITZ, Chemnitz, Germany, assignor to Schubert & Salzer Maschinenfabrik, Aktiengesellschaft, Chemnitz, Germany. Filed Oct. 24, 1928, Serial No. 314,805, and in Germany Oct. 2, 1928. 2 Claims. (Cl. 66—187.)



1. The herein described method of manufacturing hosiery in one operation upon flat knitting machines, comprising beginning the goods at the welt, widening the upper part of the heel portion by increasing the successive courses alternately by two needles for each course while one loop is struck, knitting several straight courses, and then narrowing the lower part of the heel portion without subsequent wedge-like covering.

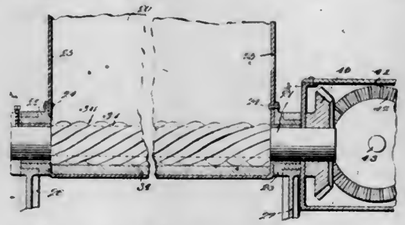
1,829,651. ASSEMBLING MACHINE. ELLIS W. HENDERSON, Charlotte, N. C. Filed May 16, 1928. Serial No. 278,306. 19 Claims. (Cl. 29—87.1.)

1. An assembling machine for clothes pins comprising a magazine for storing pairs of clamping arms of the pins, a plunger for forcing pairs of the arms of the pins into a position for the application of a torsion spring, means for actuating periodically the plunger, a plunger bar for forcing the torsion spring into clamping relation with the arms, means operatively connecting the operating means for the plunger with the plunger bar for causing periodic reciprocation of said bar, said plunger bar including a pair



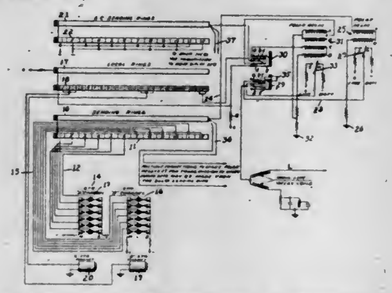
of spaced forks, a magazine for the torsion springs, one of the forks being adapted to remove a torsion spring from the second mentioned magazine, the other fork being employed for forcing the torsion springs into clamping relation with the arm.

1,829,652. ATTACHMENT FOR TRUCKS. ADA A. HILL, Cleveland, Ohio. Filed Dec. 1, 1930. Serial No. 499,388. 6 Claims. (Cl. 275—2.)



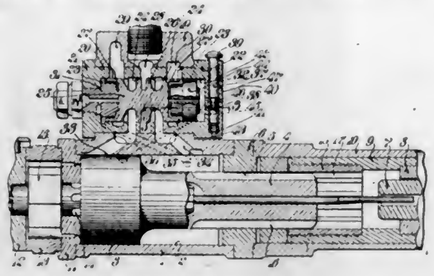
1. In a truck, a shaft mounted on the rear end of the truck, a dump body pivotally mounted on the shaft and adapted to carry materials for distribution over a roadbed, the shaft intermediate the ends being provided with spirally arranged ribs and intermediately disposed grooves, a tail-gate having the lower end spaced from the bottom of the body, the spirally-ribbed portion of the shaft being fitted neatly within the space, and means for rotating the shaft.

1,829,653. MEANS FOR SENDING ALTERNATING CURRENTS TO MULTIPLEX LINES. RAY HOOVER, North Plainfield, N. J., and ROBERT F. DIRKES, Jamaica, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Apr. 23, 1930. Serial No. 446,630. 9 Claims. (Cl. 178—52.)



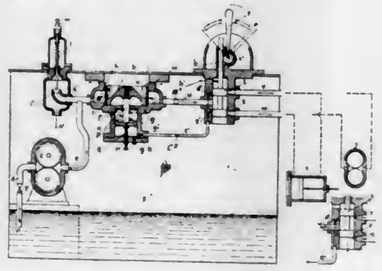
1. In a multiplex telegraph system, a distributor having means for transmitting intelligence signals to a multiplicity of lines and means for simultaneously transmitting current reversals to other lines.

1,829,654. ROCK DRILL. MERVIN C. HUFFMAN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 7, 1928. Serial No. 245,174. 3 Claims. (Cl. 121—6.)



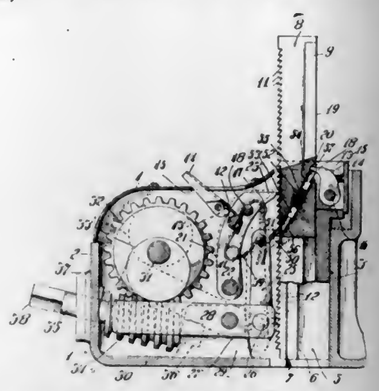
1. In a fluid actuated rock drill of the hammer type, the combination of a cylinder having a bore and a piston reciprocable therein, means operative in a predetermined relative position of said piston with respect to said cylinder to conduct fluid to a hollow drill steel to blow the hole, a valve chest having a chamber and a fluid distributing valve in said chamber controlling both the supply and exhaust for said cylinder, valve throwing passages between the opposed spaces in the valve chest chamber at the ends of the distributing valve and the cylinder bore for supplying pressure fluid for actuating said valve, and a hole blowing device including a fluid actuated plunger projecting in the valve chest chamber at one end of said valve and normally constituting a stop for the valve, said plunger also forming an end wall for the valve chest chamber and means under operator control for supplying fluid to actuate said plunger, said plunger being movable to effect shifting of the fluid distributing valve against the resisting throwing pressure and for holding said distributing valve immovable in a position to maintain the piston in a position to effect a hole blowing operation.

1,829,655. APPARATUS FOR DISTANT HYDRAULIC CONTROL. ALBERT HUGUENIN, Paris, France. Filed June 5, 1929, Serial No. 368,723, and in France Oct. 18, 1928. 2 Claims. (Cl. 60—52.)



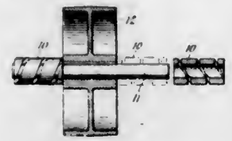
1. In a distant hydraulic control, the combination of a vessel for a liquid, a pump for sucking and delivering the said liquid, a servo-motor adapted to be actuated in either direction by the liquid delivered by the said pump, a slide valve actuated by hand and serving to control the admission and escape of the liquid delivered by the pump, respectively to both sides of the servo-motor a distributer causing the delivery conduit of the pump to alternatively communicate with the said vessel and with the slide valve, and control means for actuating the said distributer, these means being actuated in one direction by a spring, and in the opposite direction, by the liquid delivered by the pump, the said slide valve being adapted to admit the liquid delivered by the pump into the said control means a short time before admitting it into the servo-motor, substantially as illustrated and described and for the purpose set forth.

1,829,656. LIFTING JACK. ALVIN L. JOHNSON, Worcester, Mass., assignor to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 24, 1927. Serial No. 215,103. 8 Claims. (Cl. 254—111.)



1. A lifting jack comprising a standard, a pair of vertically movable ratchet bars, a dog movably mounted in one bar and adapted to engage a locking recess in the other bar when a predetermined relative movement has taken place between the bars, a pivoted locking pawl and a vertically reciprocating lifting pawl mounted to engage the teeth on the bars, and a plunger mounted in one of the bars and having a portion projecting into the space adjacent the ratchet teeth so that it will be engaged and moved by the lifting pawl to release the dog, the locking pawl being provided with a cutaway portion to avoid engagement with the plunger.

1,829,657. SECURING ELEMENT. ALLAN HETRICK JONES, Trenton, N. J., assignor to Roller Bearing Company of America, Trenton, N. J., a Corporation of New Jersey. Filed Dec. 7, 1929. Serial No. 412,501. 1 Claim. (Cl. 287—52.)

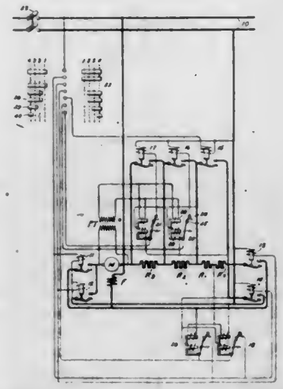


The combination with a cross-sectionally round part and a second part to be secured in place on the first part, of an element of tubular form, round in cross section made of a helically wound strip of flat spring metal, to present convolutions normally spaced, the internal diameter of said element being smaller than the diameter of said first part, said element being forced thereon in engagement with the second part, to secure the second part in place by reason of the fact that said element by contraction frictionally grips said first part.

1,829,658. MOTOR CONTROL. BENJAMIN W. JONES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 9, 1922. Serial No. 527,840. 43 Claims. (Cl. 172—179.)

6. A control system for electric motors comprising a plurality of resistors, normally closed successively operated electromagnetic switches for controlling the resistors, each of the switches having a winding for opening the switch which is deenergized by the closing of a preceding switch and a winding for controlling the closing of the switch which is energized in accordance with the rate of change of a motor operating condition.

14. A control system for electric motors comprising electro-responsive motor controlling means, a transformer having its primary connected across the motor armature, and connections whereby the said means is energized from the secondary of the transformer to control the motor.



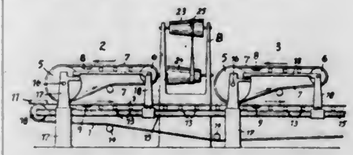
13. A control system for electric motors comprising a resistor, switch mechanism for controlling the resistor, means responsive to the value of the motor current for opening said switch mechanism, and electroresponsive means separate from said first means responsive to the potential difference between points in the motor circuit for controlling the closing of said switch mechanism to short circuit the resistor an interval of time after said potential difference has substantially ceased to change.

1,829,659. TUBULAR SAW. ALBERT F. KEFFLO, Muscatine, Iowa. Filed June 22, 1931. Serial No. 546,105. 4 Claims. (Cl. 143—85.)



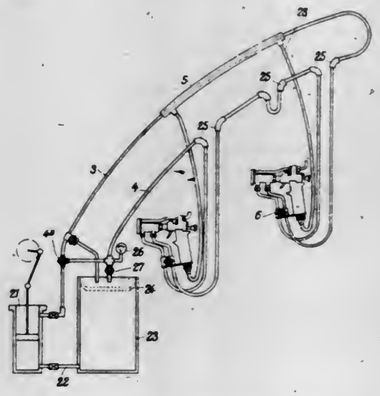
1. A saw comprising a tubular body adapted to rotate about a fixed center and having a polygonal contour with teeth formed in its ends, whereby setting of the teeth for clearance is obviated.

1,829,660. MACHINE FOR MANUFACTURING MULTIPLE-COURSE PAPERS, CARDBOARDS, AND THE LIKE. GUMAL KNOPP, Berlin-Wilmersdorf, Germany. Filed Oct. 10, 1929, Serial No. 398,718, and in Germany Nov. 21, 1924. 2 Claims. (Cl. 92—39.)



1. In a multiple wire paper-machine, the combination with a Fourdrinier wire and a rigid support therefor, of a plurality of individual upper wire units; each of said units comprising a movable frame and a rigid support therefor, an upper wire and rollers in said frame; means for shaking each upper wire unit independent of the Fourdrinier wire through the intermediary of said frame, and other means directing the delivery of pulp from each upper wire to the Fourdrinier wire.

1,829,661. SPRAYING OR SQUIRTING PROCESS AND APPARATUS THEREFOR. ALBERT KRAUTZBERGER, Holzhausen, near Leipzig, Germany. Filed Jan. 25, 1930, Serial No. 423,440, and in Germany Jan. 10, 1929. 2 Claims. (Cl. 91—45.)



1. A device of the class described comprising a main tube, a spraying head fitted in one end thereof, paint supply tubes connected with said tube, point conduits communicating with the paint supply tubes, a container for supplying paint to the conduits and said tubes for circulation in the main tube, a pipe surrounding one of the paint conduits adapted to receive heated air, and a regulator between the paint supply tubes and paint conduits for controlling the circulation of paint through the main tube.

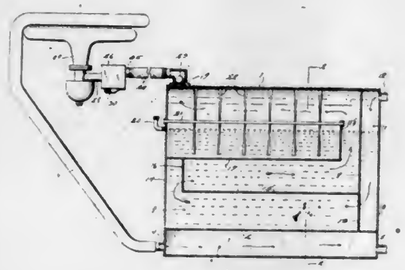
1,829,662. LIFTING JACK. WILLIAM F. KRENZKE, Racine, Wis., assignor to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 3, 1928. Serial No. 297,239. 6 Claims. (Cl. 254—102.)



1. In a lifting jack, a supporting member comprising a base plate and a hollow upright standard carried thereby, a driving pinion mounted in one wall of the standard intermediate the ends thereof, a cup shaped driving gear consisting of a horizontal base, a substantially cylindrical

portion arising therefrom adjacent the inner side walls of the standard, and an annular series of gear teeth formed at the upper end of the cylindrical portion and adapted to mesh with the driving pinion, an annular bearing inset in the outer edge portion of the driving gear for supporting same from the base plate with the gear base positioned closely adjacent the base plate, an upright hollow cylindrical driving member mounted centrally in the gear base and secured thereto, the upper end portion of this member being interiorly threaded, a lifting screw meshing with these threads and adapted to telescope within the driving member, an exteriorly threaded head on the upper end of the screw, a hollow interiorly threaded lifting member in which the head meshes, a hollow guide sleeve formed with an outwardly projecting hollow vertical rib at one side thereof, the upper portion of the standard being formed to slidably receive the sleeve and rib, the lower end of the lifting member having a projection thereon adapted to slide vertically in the hollow rib, stop members on the standard and sleeve, and a spring latch mounted in the upper portion of the hollow rib of the sleeve and detachably engaging the lifting member so that the sleeve will be carried up with the lifting member until further upward movement thereof is prevented by the engagement of the stop members.

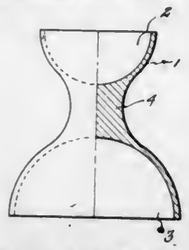
1,829,663. APPARATUS FOR GENERATING OIL GAS. ALBERT B. MAST, Shanesville, Ohio. Filed Dec. 28, 1929. Serial No. 417,192. 3 Claims. (Cl. 48—107.)



1. An oil gas generator of the character described, comprising an elongated oil gas generating chamber having an air inlet in the upper part of one end wall and an oil gas outlet in the upper part and at the other end thereof, a vertical partition arranged adjacent the end wall through which the air inlet opens, a perforated member extending from the lower end of said partition to the bottom of the casing, a longitudinally extending partition leading from the upper part of said screen to a point adjacent the front of the casing, an upwardly extending perforated member projecting from the forward end of said longitudinal partition, a second longitudinal partition extending from the front wall of the casing over the upper edge of the second mentioned perforated member and terminating in an upwardly extending plate arranged in spaced relation with the vertical partition, a shaft extending longitudinally of the casing between the upper portion of said plate and the forward wall of the casing, a plurality of slotted disks rotatably mounted on said shaft, the casing being designed to contain volatile oil to a level with the top of said plate, and means for conducting off oil gas from the upper part of the chamber.

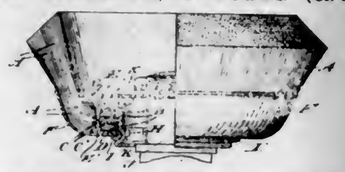
1,829,664. CITROUS FRUIT HOLDER. DONALD MCKAY, Flatonia, Tex. Filed Oct. 4, 1929. Serial No. 397,270. 3 Claims. (Cl. 65—13.)

1. A citrous fruit holder of rigid material, comprising a cup-shaped portion at one end thereof, another cup-shaped portion at the other end thereof, a neck portion integrally united with the bottoms of said cup-shaped portions, said cup-shaped portions being of different diameters whereby to hold a citrous fruit in one of the cup-shaped



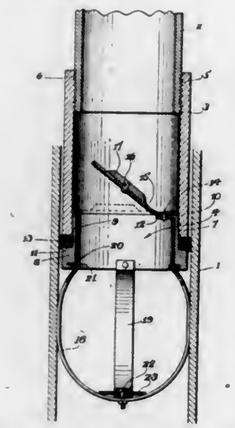
portions while the juice is being extracted therefrom by pressure on a juice squeezer, the other portion serving as a handle therefor.

1,829,665. CUP SHAPED ROTARY BRUSH. ROBERT G. MERTES, Cleveland, Ohio, assignor, by mesne assignments, to The Pittsburgh Plate Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 28, 1930. Serial No. 471,304. 4 Claims. (Cl. 15—181.)



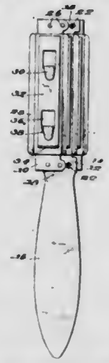
1. A cup shaped bristle brush comprising a brush body and parallel plates having their central portions clampingly secured together one plate having a flange surrounding the other plate and extending at least to the plane of the said other plate and clamping the brush body between said flange and the outer periphery of the other plate.

1,829,666. VALVE STRUCTURE. NORMAN P. MINSTER, Parma, Idaho. Filed Nov. 19, 1929. Serial No. 408,377. 6 Claims. (Cl. 166—10.)



5. A valve structure for connection to a suction line including a body portion of annular form for positioning in a well casing, said body portion having a peripherally threaded upper part of reduced outer diameter thereby providing a circumferential seat, a coupling member attached to said part for connecting said body portion to the suction line, a compressible, expansible element carried by said seat and extending circumferentially of said part and compressed and extended by said member and engaging when compressed said casing to provide an air tight seal between the casing and body portion, a weighted flap valve member connected to and seated on the top of said part, and resilient holding means depending from and connected to said body portion and engageable with the casing to prevent the turning of the body portion during the compression of said element.

1,829,667. TONSORIAL DEVICE. ALFONSO FLORES MIRAFUENTES, Guadalupe, Mexico. Filed Dec. 11, 1930. Serial No. 501,705. 11 Claims. (Cl. 30—12.)

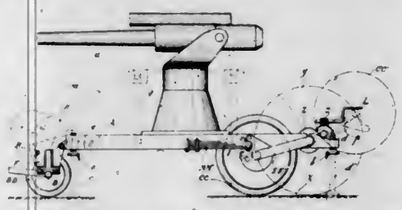


11. In a tonsorial implement having upper, intermediate and lower blade supporting members, said blade supporting members being disposed in stepped relation, means for varying the stepped relation, said means including a plurality of spaced elements on the upper and lower blade supporting members, and means on said intermediate member for positively engaging said elements.

1,829,668. ALUMINUM ALLOY. WESTON MORRILL, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 4, 1931. Serial No. 513,455. 3 Claims. (Cl. 75—1.)

1. An alloy containing about 8% manganese, about 8% silicon, the remainder of the alloy consisting substantially of aluminum.

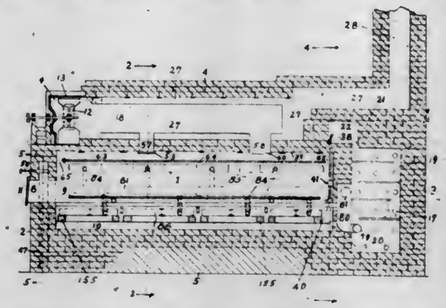
1,829,669. VEHICLE FOR THE TRANSPORT OF ARTILLERY AND ESPECIALLY ANTIAERIAL ARTILLERY. UGO PAVESI, Milan, Italy. Filed May 27, 1930, Serial No. 456,200, and in Italy Mar. 31, 1930. 4 Claims. (Cl. 89—40.)



1. A gun supporting frame having a set hingedly connected to the front end thereof, an axle pivotally connected with the set, wheels on the axle, said set having bolts thereon for detachable engagement with the frame, said bolts when engaged with the frame serving to hold the wheels in ground engaging position.

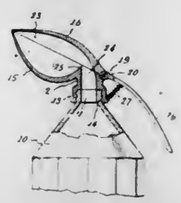
1,829,670. BAKING OVEN. LOUIS CHARLES REESE, Saginaw, Mich., assignor to Baker Perkins Company, Incorporated, Saginaw, Mich., a Corporation of New York. Filed May 2, 1930. Serial No. 449,199. 18 Claims. (Cl. 107—55.)

2. A baking oven of the type described having in combination an elongated baking chamber enclosed therein, supports provided in said baking chamber for the articles to be baked, a plurality of spaced outlets arranged longitudinally in the ceiling of said baking chamber, a reheater arranged at one end of said baking chamber, means for circulating the gaseous contents of said baking chamber drawn from said outlets through said reheater, a main connected to the latter for carrying the reheated gases back to said baking chamber, two rows of separate heat



distributors for spreading the reheated gases in the latter, one row being located between the tops of the articles being baked and the ceiling of said baking chamber, and the other one between the bottom of the latter and the said supports, branch pipes extending from said main, and connecting the latter with said heat distributors, and means provided in said branch pipes for controlling the quantity of reheated gases passing through the same.

1,829,671. DISPENSER. LUCIEN RIBERA, New York, N. Y. Filed Feb. 28, 1931. Serial No. 519,183. 4 Claims. (Cl. 221—98.)



1. A dispensing device including the combination with a vessel having a neck portion, of a nozzle body secured to said vessel neck, said nozzle body having an upwardly inclined spoon shaped portion, a complementary cover for said upwardly inclined spoon shaped portion, said cover member being pivotally mounted on said nozzle body, said nozzle body having a passage affording communication between the interior of the vessel and the interior of said complementary spoon shaped portion and cover, whereby to permit contents of said vessel to enter said spoon shaped portion when said vessel is tilted, means to normally hold said cover closed, and a handle on said cover for opening the latter to dispense the contents of said spoon shaped portion.

1,829,672. MANUFACTURE OF SUBSTANTIVE POLYAZO-DYESTUFFS. BERNHARD RICHARD, Basel, Switzerland, assignor to Firm of J. R. Geigy S. A., Basel, Switzerland. Filed Nov. 17, 1930, Serial No. 496,336, and in Germany Nov. 29, 1929. 8 Claims. (Cl. 260—70.)

1. A process for the manufacture of substantive polyazo-dyestuffs, consisting in coupling a disazo-compound of a disazo-dyestuff of the type

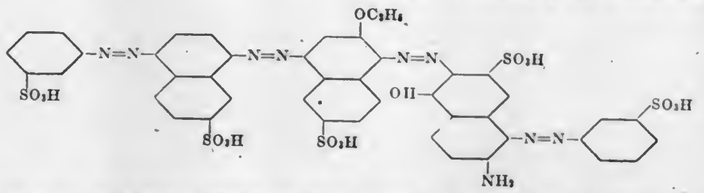
$$A-N=N-M_1-N=N-M_2-NH_2,$$

in which A is the residue of a benzene or naphthalene sulphonic or carboxylic acid and M_1 and M_2 are the resi-

due of α-naphthylamine or 1-naphthylamine-6-or-7-sulphonic acid, with a monoazo-dyestuff obtainable by coupling in acid solution a diazo body of the benzene and naphthalene series with 2:5-aminonaphthol-7-monosulphonic acid.

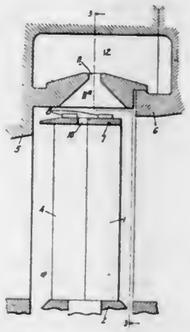
1,829,673. MANUFACTURE OF SUBSTANTIVE POLYAZO-DYESTUFFS. BERNHARD RICHARD, Basel, Switzerland, assignor to Firm J. R. Geigy S. A., Basel, Switzerland. Filed Nov. 17, 1930, Serial No. 496,337, and in Germany Nov. 29, 1929. 8 Claims. (Cl. 260—70.)

6. As new article of manufacture, the herein described substantive polyazo-dyestuff as obtained according to claim 2 and having probably the formula:



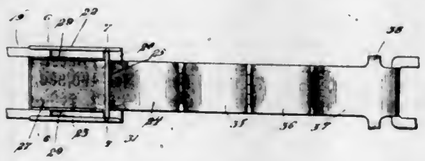
said dyestuff dyeing cotton blue green tints fast to light.

1,829,674. ELASTIC FLUID TURBINE AND THE LIKE. OTTO ROSENLÖCHER, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 15, 1929, Serial No. 407,518, and in Germany Dec. 8, 1928. 3 Claims. (Cl. 253—76.)



1. In an elastic fluid turbine, a rotor having buckets the backs of which are provided with radially extending passages, a bucket cover having openings communicating with said passages, and walls providing an annular chamber surrounding the bucket cover and a passage in line with said openings and in communication with said chamber.

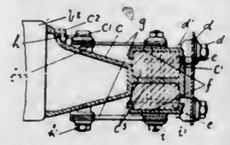
1,829,675. FOLDABLE EXTENSION DEVICE. WILFRID J. ROY, East Orange, N. J., assignor to Gemex Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 30, 1930. Serial No. 448,561. 11 Claims. (Cl. 24—71.)



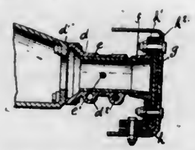
1. In an extension device, a plurality of sections hinged together to fold one upon the other, a member hingedly connected to one of said sections upon the hinge connection between two of said sections, means for detachably securing a bracelet end to said member, and means for securing the other end of the bracelet to one of said sections.

1,829,676. SUSPENSION OF ENGINES FOR SELF PROPELLED ROAD VEHICLES. FREDERICK HENRY ROYCE, Elmstead, West Wittering, near Chichester, England, assignor to Rolls Royce Limited, Derby, England. Filed Jan. 16, 1929, Serial No. 332,972, and in Great Britain Feb. 1, 1928. 4 Claims. (Cl. 248—14.2.)

1. The combination of a self propelled road vehicle having a frame comprising side girders, an engine for propelling the same, and means for mounting the engine on the girders comprising one or more pairs of brackets projected, one on each side, from the engine, each of such brackets terminating in a flat horizontal part with circular recesses on the upper and lower faces thereof, and having formed thereon suitably positioned vertically perforated bosses, a like number of brackets projected from the side girders, each formed with jaws embracing respectively the sides of one of the flat parts of the before mentioned brackets, and having formed at the end of such jaws vertically perforated bosses, suitably shaped blocks of india rubber located in the said recesses, and protruding thereout, suitably shaped metal plates across the outer faces of each of the blocks of india rubber and extending across the jaws of the associated bracket projected from a girder, with perforations registering with the perforations of the said jaws, metal plates extending over the upper and lower ends of the perforated bosses on each of the brackets projected from the engine and the jaws of the associated bracket projected from the girder with perforations corresponding to the perforations in all such bosses, and bolts passing through the perforations of the bosses and the plates and secured therein by nuts.

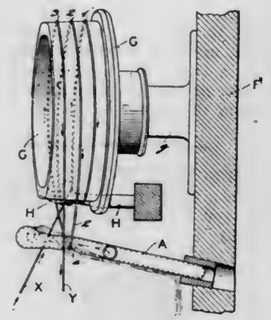


1,829,677. MOUNTING ENGINES IN MOTOR VEHICLES. FREDERICK HENRY ROYCE, Elmstead, West Wittering, near Chichester, England, assignor to Rolls Royce Limited, Derby, England. Filed Feb. 13, 1930, Serial No. 428,118, and in Great Britain Feb. 25, 1929. 5 Claims. (Cl. 248—14.2.)



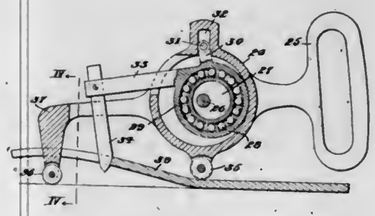
5. In a self propelled road vehicle having two longitudinal channelled side girders, means for mounting the engine in the vehicle comprising a plate with a vertical part and a horizontal part adapted to be secured to the vertical and under horizonal sides of the channelled girder, means for so rigidly securing the said plate, another plate with a vertical part and a horizontal part adapted to lie between the channelled girder and the said other plate, means for rigidly securing the secondly mentioned plate to the engine, a sheet of compressible resilient material interposed between both parts of the secondly mentioned plate and the channelled girder, and a sheet of compressible resilient material interposed between both parts of the said two plates.

1,829,678. MEANS FOR TREATING YARN. PHILIP G. RUST, Wilmington, Del., assignor to The Viscose Company, Marcus Hook, Del., a Corporation of Pennsylvania. Filed Aug. 2, 1928. Serial No. 297,075. 2 Claims. (Cl. 18—8.)



1. A tubular thread guide with an outlet for liquid on its upper side, and a thread depression on its under side adapted to contact with the thread and to be flooded by flowing liquid.

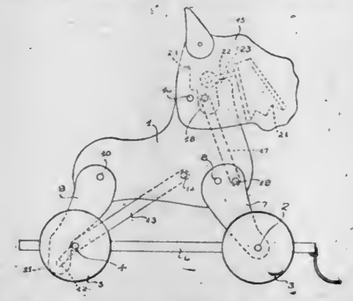
1,829,679. CUTTING, SAWING, SLOTTING, AND SIMILAR APPARATUS. JOHAN HENDRIK SCHELL, Rotterdam, Netherlands. Filed Feb. 21, 1929. Serial No. 341,785. 3 Claims. (Cl. 164—74.)



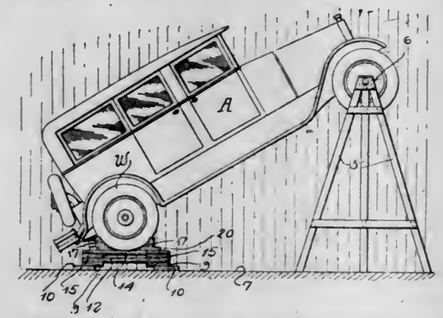
1. In cutting apparatus the combination of a support, a shaft having an eccentric thereon mounted in said support, a strap surrounding said eccentric, a cutting tool supported by said strap and guiding means cooperating with said strap and said support for guiding the said strap and the tool carried thereby.

1,829,680. FIGURE TOY. HELEN M. SCHELLE and HERMAN G. FISHER, Rochester, NELSON BARNHAM, Churchville, and EDWARD S. SAVAGE, Rochester, N. Y. Filed Oct. 17, 1930. Serial No. 489,426. 11 Claims. (Cl. 46—45.)

1. A figure toy comprising a body, a head pivoted thereto, a sound emitting device having a bellows mounted on the head, an arm projecting from a movable side of the bellows, two abutments on the body, and means for moving the head on the body to cause the arm to engage one abutment to expand the bellows and the other abutment to collapse the bellows.

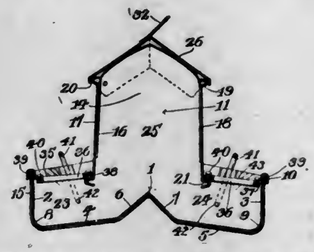


1,829,681. STAGING OR SEMIDECKING APPARATUS FOR AUTOMOBILE SHIPPING. FAY L. SEELEY, Detroit, Mich., assignor to Evans Products Company, Detroit, Mich., a Corporation. Filed Apr. 25, 1929. Serial No. 358,037. 4 Claims. (Cl. 248—41.)



1. A semi-decking construction for supporting the lower end of a motor vehicle that is inclined on decking apparatus during shipment, comprising a semi-decking member having an upper face for supporting the tire on the lower end of the vehicle with the downwardly extended parts of the lower end of the vehicle spaced from the car floor, the semi-decking member including a plurality of superposed layers to form an elevated structure with the lower layers extended outwardly to provide anchoring heels for the member.

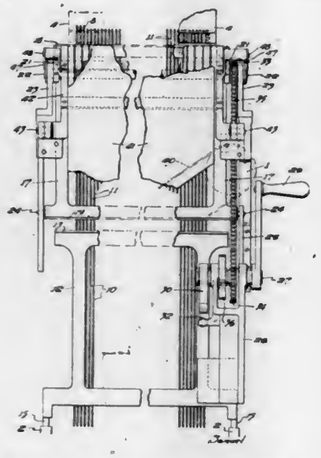
1,829,682. POULTRY FEEDER. DANIEL E. SPEICHER, Urbana, Ind., assignor to The Cyclone Manufacturing Company, Urbana, Ind., a Corporation. Filed Jan. 3, 1929. Serial No. 330,004. 9 Claims. (Cl. 119—52.)



1. A poultry feeder comprising a pair of oppositely disposed, open top feed containers each including end and

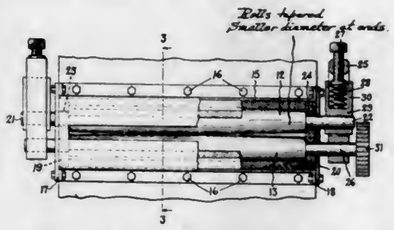
outer side walls, a feed hopper common to said containers and including side walls each having its lower end formed with an outwardly directed ledge, a combined feed grate and catch tray forming element arranged in the top of each container between the end walls of the latter, said elements having their inner sides provided with depending flanges supported by said ledges and their outer sides formed with upstanding combined hanger and attaching means for overlapping the outer side walls of said containers whereby said elements are detachably connected to the latter, and the end walls of said containers being provided with spaced, inwardly extending lugs for overlapping the ends of said elements for retaining them in the position set within the containers.

1,829,683. TYPOGRAPHICAL MACHINE. SAMUEL E. SPERRY, Hollis, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 19, 1929. Serial No. 415,291. 10 Claims. (Cl. 199—19.)



1. In a typographical machine embodying a plurality of matrix magazines having matrix releasing escapements, actuating reeds shiftable at their upper ends in an arcuate path the center of which is above said path and below the height of the escapements and the radius of which is shorter than the length of said reeds, to bring said ends of the reeds into cooperative relation with the escapements of one or another of the magazines.

1,829,684. FURNACE. NUMAN R. STANSEL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 21, 1929. Serial No. 387,515. 5 Claims. (Cl. 263—3.)



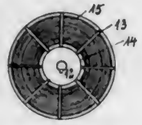
1. A closure for furnaces comprising a pair of cooperating rotary members between which the charge is passed into said furnace, at least one of said rotary members being tapered from its center to each end so that oppositely disposed sides of said rotary members closely engage a charge passing between them.

1,829,685. PROCESS FOR PRODUCING THERMAL AND ELECTRICAL INSULATING PADS. BARNET STONE, HERBERT REDSHAW and JOHN WESLEY NUNNS, Georgetown, Ontario, Canada, assignors to Smith & Stone Limited, Georgetown, Ontario, Canada. Filed June 1, 1928. Serial No. 282,211. 1 Claim. (Cl. 25—156.)



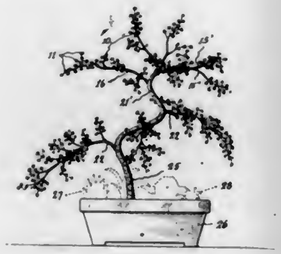
A process for making pads of the type described without the use of fugitive materials which consists of pulverizing and thoroughly mixing ball clay, china clay and potters flint to form a spur body, mixing said spur body with raw sil-o-cel (diatomaceous earth), adding water to make a solution, thoroughly agitating said solution, filtering the solution, drying and then grinding the resultant mixture, adding a binder to the ground mixture, molding the mixture under pressure into partially perforated pads, and finally baking the pads.

1,829,686. INDUCTION MOTOR. JOHAN WALFRED SWENDSEN, Oslo, Norway. Filed May 28, 1929, Serial No. 366,733, and in Norway June 2, 1928. 1 Claim. (Cl. 172—280.)



Induction motor with disk shaped stator and rotor comprising magnetic elements consisting of a long strip of sheet metal wound into a disk shaped magnetic element with a hole in the middle, concentrically arranged around the axis of the motor, characterized by the fact that the metal strip forming the rotor elements consists of copper with an intermediate section of good magnetic iron in the middle, in such a manner that when the strip is wound into a disk-like member, the copper will first form an inner short circuiting ring, then the iron will form the magnetic core, an outside short circuiting ring, radially disposed copper bars electrically connected with said inner and outer rings, said rings and the iron core having radially arranged apertures for receiving said bars.

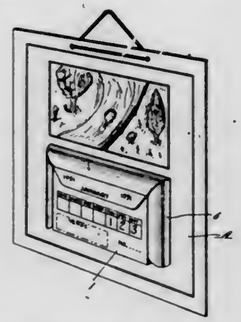
1,829,687. ARBOREAL ARTICLE. PAUL TAKIGUCHI, New York, N. Y. Filed Jan. 12, 1931. Serial No. 508,245. 3 Claims. (Cl. 41—15.)



1. An arboreal article simulating a natural growing dwarfed tree including in combination, a plurality of desiccated natural floral elements, a flexible metal wire stem foundation for each of said desiccated floral elements, a flexible fabric gum treated tape wound about said wire foundation and about said stem portion to simulate a

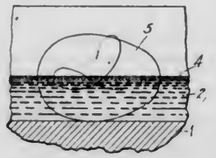
complete natural stem and to secure said floral element in place on said stem, a second flexible fabric gum treated tape, of greater width than said first tape, wound about a plurality of said stems in simulation of a natural branch and upper tree-trunk portion, a plurality of stems disposed alongside said branch portion, a third flexible fabric gum treated tape, of greater width than said second tape, wound about said branch portion and said overlying plurality of stems, in simulation of the enlarged diameter base portion of a tree-trunk, whereby the outer surfaces of said tape-wound stem, branch and trunk portions present a gnarled appearance simulating the corresponding portions of a natural growing tree while said desiccated floral elements constitute actual natural plant portions imparting a natural living appearance to said article.

1,829,688. CALENDAR PAD. PAUL C. THOMAS, Scranton, Pa. Filed Jan. 6, 1931. Serial No. 506,931. 1 Claim. (Cl. 40—121.)



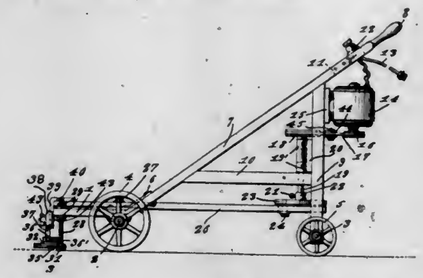
A calendar pad comprising fifty two envelopes each representing a week of a year with data on the flap side of the envelope indicating the year, the month, and the days of the week and the dates and data on the other side of the envelope giving the name of the organization to which payments are made, etc., a base to which the pad is connected and a frame attached to the base and surrounding the ends and top of the pad said frame being of hollow construction and composed of a flat base wall, a straight inner wall and a curved outer wall connected with the edges of the base and inner walls and the frame forming a three-sided recess for receiving the pad.

1,829,689. METHOD OF COLORING EGGS OR THE LIKE. PHILIP B. TOWNLEY, Rumson, and WILLIAM R. TOWNLEY, East Orange, N. J., assignors to Paas Dye Company, a Corporation of New Jersey. Filed Nov. 15, 1930. Serial No. 495,898. 5 Claims. (Cl. 8—5.)



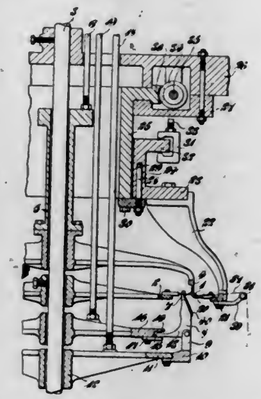
1. The method of coloring an egg consisting in immersing the egg to be colored in a preparation consisting of a coloring liquid including a coloring material dissolved in water and having a layer of a substance on its surface which will adhere to the egg and repel said liquid, so that the egg is only partially submerged in the preparation and said substance adheres to portions of the egg and prevents contact of said coloring liquid with said portions of the egg while the color takes effect upon the other portions of the egg, and then wiping dry the egg.

1,829,690. ELECTRIC LAWN MOWER. ALVIN M. TURNER, Spartansburg, S. C. Filed Jan. 12, 1931. Serial No. 508,285. 1 Claim. (Cl. 56—25.)



A lawn mower, including a wheeled frame, angle handle bars arising from the frame, vertical supports between the frame and bars, an electric motor fixed on the supports, a switch for the motor carried by the handle bars, said motor having a pulley wheel on the shaft thereof, a depending shaft journaled through bearings supported on the uprights and having a pulley wheel, a belt trained around both named pulley wheels, a spring influenced tightener engaging one of the leads of the belt, a disc adjustably secured on the lower end of the last mentioned shaft and having spaced threaded openings therethrough, a lever pivotally secured at the forward end of the frame and having an elongated slot through the rear end thereof, a pitman passing through the slot and having a threaded end to engage with one of the openings in the disc, bolt members passing through the sides of the frame at the forward end thereof and engaged by nuts which contact with the upper and lower faces of the said frame, a finger bar to which the lower ends of the bolts are secured, a cutter bar arranged over the finger bar and provided with spaced elongated slots, bolt members passing through the finger bar and through the said slot, rollers on the bolts, nuts screwed on the bolts, a socket on the upper face of the cutter bar at the center thereof, an angle bracket on the outer end of the lever having a depending arm, a finger received in the socket of the cutter bar and having a widened or flanged portion receiving the depending arm of the bracket therein and means for adjustably securing the finger to the said arm of the bracket.

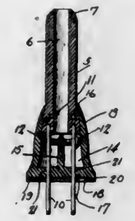
1,829,691. CIRCULAR KNITTING MACHINE. FRIEDRICH WAGNER, Limbach, Germany. Filed July 20, 1929, Serial No. 379,749, and in Germany July 23, 1928. 4 Claims. (Cl. 66—81.)



4. A circular knitting machine comprising a circular row of radially disposed stationary needles, a row of thread guides concentric with said needles, means for moving the

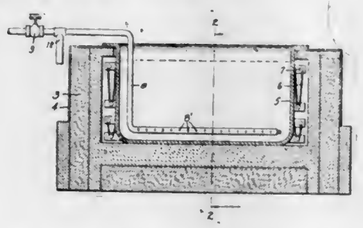
said guides to lap thread across the said needles, hooked thread controlling members positioned between the said needles, and members having movement only in the direction of the axis of the machine adapted to engage with the said hooked members to displace the said hooked members radially of the machine and raise and lower the said members so as to use them to move threads longitudinally of the stationary needles and knock over the knitted stitches.

1,829,692. ELECTRIC PLUG. LAWRENCE D. WALKER, Pawtucket, R. I., assignor to Collyer Insulated Wire Co., a Corporation of Rhode Island. Filed Dec. 10, 1930. Serial No. 501,368. 7 Claims. (Cl. 173—361.)



1. A contact device of the character described, comprising a flexible tubular element, a central bore formed in the flexible tubular element, a pair of male contact members embedded in one end of the flexible tubular element, and a thimble formed of a similar material frictionally held to one end of the tubular member whereby the contact members may project through openings in the closed end of the thimble.

1,829,693. CAUSTIC BATH. MONTAGUE WESNEY WARD, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Sept. 29, 1930. Serial No. 485,052. 4 Claims. (Cl. 23—184.)



1. In the process of disintegrating siliceous material by chemical combination with fused caustic alkali the step which consists in revivifying the chemical activity of caustic alkali by adding water thereto.

4. The process of removing fused enamel from metal objects which comprises subjecting said objects to the chemical effect of a bath of caustic alkali at a working temperature within the range of about 550° to 600° C. and maintaining said bath chemically active by continuously supplying the same with steam at its working temperature.

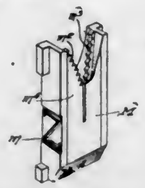
1,829,694. DEVICE FOR BALANCING BODIES HAVING A RISING AND FALLING MOVEMENT. HARRY RILEY WEBB and HARRY NEWTON WEBB, Grantham, England. Filed June 8, 1929, Serial No. 369,475, and in Great Britain Feb. 5, 1929. 9 Claims. (Cl. 16—198.)

1. A device for balancing bodies adapted for a rising and falling movement by means of an inconstant balancing moment, comprising a compensating spindle movable with the body to be balanced, intextensible flexible connecting means adapted to be wound onto or from said compensating spindle on movement of the body to be balanced, a stationary member to which the free end of said flexible connecting means is secured, means for applying a balancing



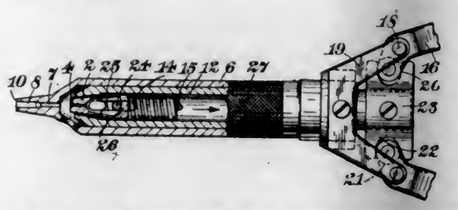
moment to said compensating member and means whereby equilibrium is attained between the opposing moments through the range of movement of the body.

1,829,695. MATRIX FOR TYPOGRAPHICAL MACHINES. LE ROY W. WILLIS, Stamford, Conn., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 17, 1931. Serial No. 523,327. 5 Claims. (Cl. 199—64.)



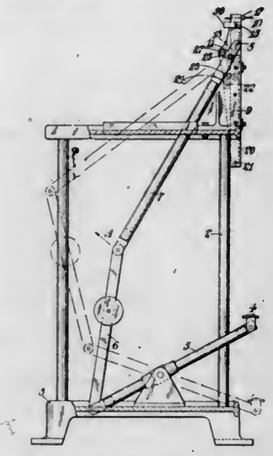
1. A matrix for typographical machines having a notch with convergent walls, and distributor teeth on said walls, the teeth on one of said walls lying in a vertical plane parallel to a side of the matrix and the teeth on the other wall extending obliquely across a portion of said wall and through the center of weight of the matrix.

1,829,696. RIVETING TOOL. HAMILTON NEIL WYLIE and PERCY GEORGE CRABBE, Coventry, England, assignors to Sir W. G. Armstrong Whitworth Aircraft Limited, Coventry, England. Filed Mar. 3, 1931, Serial No. 519,858, and in Great Britain Apr. 7, 1930. 7 Claims. (Cl. 218—19.)



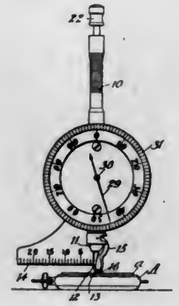
1. A tool for affixing a pierced or tubular rivet by drawing a mandrel into it, comprising a collet, an axially-slidable member, and means whereby axial movement of the latter in one direction causes the collet to grip the mandrel and then to move the collet and mandrel together.

1,829,697. RIVETING MACHINE. HAMILTON NEIL WYLIE and PERCY GEORGE CRABBE, Coventry, England, assignors to Sir W. G. Armstrong Whitworth Aircraft Limited, Coventry, England. Filed Mar. 3, 1931, Serial No. 519,859, and in Great Britain Apr. 7, 1930. 8 Claims. (Cl. 218—1.)



1. A machine for use in fixing a tubular rivet by drawing a mandrel into it, comprising two elements, an actuating member, and means whereby, on rotation of said actuating member in one direction, the mandrel is first clamped between said two elements and then drawn substantially axially.

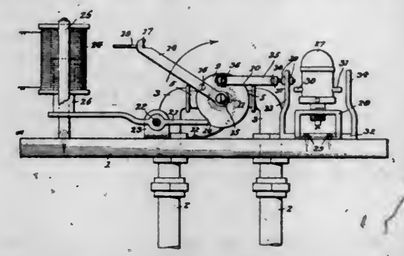
1,829,698. WATCHMAKER'S MICROMETRIC GAUGE. ALFRED A. ZAJTMAN, New York, N. Y. Filed Feb. 10, 1928. Serial No. 253,418. 2 Claims. (Cl. 33—148.)



1. A gauge of the class described, including a standard having a forked lower end and a centrally apertured upper end, a fixed gauge member mounted between the forks of said lower end and a pivoted gauge member pivotally mounted between said forks whereby the position of the same relative to the fixed member may be varied, a plunger axially movable in the upper end of said standard, a dial on said standard, a pointer on said standard movable in relation to the face of the dial, and means operated by the movement of the plunger to cause the pivotal movement of the pivoted gauge member and also to rotate said pointer.

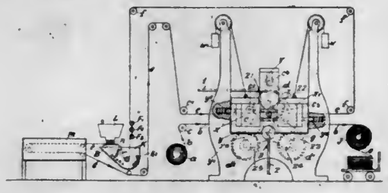
1,829,699. CONTROL FOR VALVES AND SWITCHES. PHILIP ZIGELMAN and MORRIS ROSE, New York, N. Y. Filed Aug. 14, 1930. Serial No. 475,306. 4 Claims. (Cl. 137—139.)

1. In a structure of the character described, a valve having a rotary stem, a spring yieldably resisting rotation of the stem in one direction, a disk carried by said stem, and having a turning handle, a latch to engage said disk and hold the stem in a set position, electrically energized means to move the latch to a releasing position, a switch having opposed push buttons, a bar slidably mount-



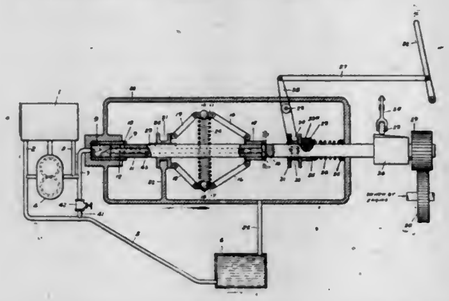
ed and having arms at opposite sides of said switch for engaging said buttons, and a pitman pivoted to said disk and connected to one arm to slide the bar and move one arm into engagement with a button to adjust the switch when the disk is turned.

1,829,700. PRINTING TEXTILE FABRICS. FRIEDRICH ADLER, Hamburg, Germany. Filed Jan. 22, 1929, Serial No. 334,284, and in Germany Apr. 13, 1828. 9 Claims. (Cl. 101—212.)



1. Apparatus for printing webs of fabric according to a pattern, comprising a printing cylinder, a printing form in relief on the convex surface of the printing cylinder, means for heating the cylinder, means for passing the web to be printed upon uniformly around at least half the periphery of the printing cylinder, a resist web, and means for passing the resist web around the printing cylinder along with the web of fabric.

1,829,701. OIL RELAY GOVERNOR. HARRY A. COWARDIN, Marion, Ohio, assignor of one-half to Samuel P. Cowardin, Richmond, Va. Filed Jan. 20, 1928. Serial No. 248,260. 22 Claims. (Cl. 123—140.)



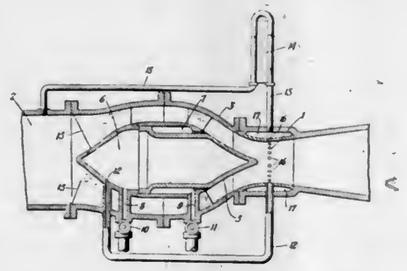
1. In combination with an engine, a cam shaft, an oil pressure system adapted to move said cam shaft axially, and governor means rotating with said cam shaft to regulate said oil pressure to control the axial movement of the cam shaft.

1,829,702. METHOD OF TREATING FIBROUS MATERIAL. LEO A. GOODMAN, New York, N. Y. Filed Apr. 7, 1930. Serial No. 442,443. 21 Claims. (Cl. 17—45.)

1. The method of treating a fibrous base prepared from mitzumata, kodzu, gampi and other similar plants, which comprises impregnating the base with a soluble cellulose derivative, a solution of which is prepared by dissolving in inert organic solvents, and then substantially or completely regenerating the cellulose in a hydrated condition as an insoluble deposition upon the fibrous base.

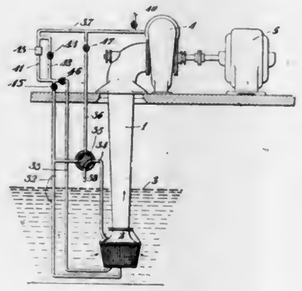
17. As an article of manufacture, a casing for food products comprising a fibrous base prepared from mitzumata, kodzu, gampi and other similar plants and having thereon a deposit of regenerated cellulose prepared from de-esterified acetated cellulose.

1,829,703. VALVE. CHESTER W. LARNER, Philadelphia, Pa. Original application filed July 22, 1919, Serial No. 312,559. Divided and this application filed Mar. 17, 1925. Serial No. 16,109. 21 Claims. (Cl. 137—139.)



1. In combination with a conduit, a valve comprising a casing, a hollow member within the casing having a plunger, means for shifting said plunger to open and close the valve, and means adapted when in open position to prevent creeping of the valve in a closing direction, said means extending to the exterior of the valve for maintaining within said hollow member substantially the same pressure that exists on the nose of the plunger.

1,829,704. INTAKE PIPE AND VALVE. OTTO V. KRUSE, St. Davids, and CHESTER W. LARNER, Philadelphia, Pa., assignors to I. P. Morris & De La Vergne, Incorporated, a Corporation of Delaware. Filed Feb. 4, 1926. Serial No. 85,815. 63 Claims. (Cl. 103—40.)

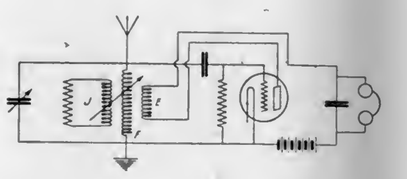


1. The combination in a pumping system, comprising an intake pipe gradually flaring in the direction of normal flow therethrough, and means forming a bellmouth at the smaller end thereof.

1,829,705. PREVENTION OF CORROSION IN OIL WELLS. JOHN C. WALKER, Eldorado, Kans., assignor to Empire Oil & Refining Company, Dover, Del., a Corporation of Delaware. Filed Mar. 12, 1925. Serial No. 14,938. 6 Claims. (Cl. 166—21.)

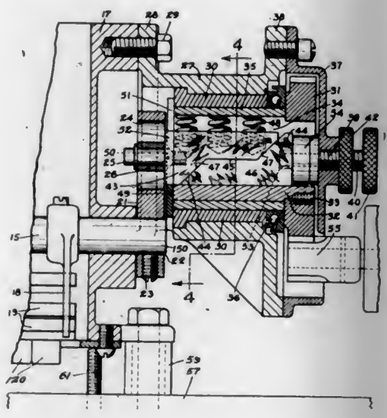
3. A method of preventing corrosion from oil well liquids comprising neutralizing the acid components of the well liquids and inhibiting electrolytic corrosive action with sodum cresylate.

1,829,706. DAMPING CONTROL. NEWSOME HENRY CLOUGH, Hanwell, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 24, 1926, Serial No. 124,763, and in Great Britain July 31, 1925. 4 Claims. (Cl. 250—20.)



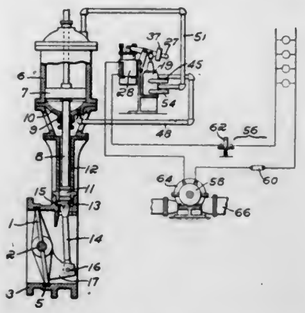
1. Means for controlling damping in an oscillatory circuit without altering the resonant frequency thereof including an untuned closed damping circuit composed of an inductive coil of high resistance wire coupled to said oscillatory circuit.

1,829,707. SIFTER STRUCTURE. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 27, 1927. Serial No. 201,660. 4 Claims. (Cl. 74—38.)



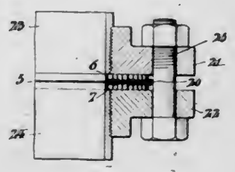
1. In a device of the class described the combination of a rotatably mounted hub having a radial opening along one side, a stud bar in said opening, a wedge bar in the opening, each of said bars having a pair of spaced inclined faces, the inclined faces of said bars being adapted to ride upon one another, means for effecting longitudinal movement of the wedge bar for effecting radial movement of the stud bar and a stud projecting from the stud bar and movable therewith through the agency of the adjusting means to positions ranging from concentricity with the axis of the hub to various degrees of eccentricity therewith.

1,829,708. CONTROLLING DEVICE FOR POWER OPERATED VALVES. DONALD M. BELCHER, Arlington, Mass., assignor to Coffin Valve Company, Neponset, Mass., a Corporation of Maine. Filed Nov. 18, 1927. Serial No. 234,169. 1 Claim. (Cl. 137—139.)



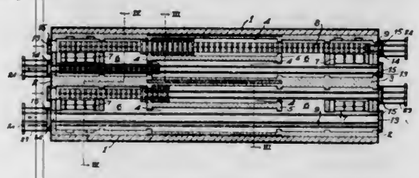
In combination, a pivot valve, fluid operated means for opening and closing said pivot valve, a control valve for said fluid, manual means for operating said control valve from a proximate point, electrical means for operating said control valve from a remote point to maintain said control valve in a position to hold said valve open, weight means for returning said control valve to said closed position upon the deenergizing of said electrical means, and means for cushioning said control valve upon its return to normal position.

1,829,709. GASKET. HENRY BOHMER, Jr., Haddonfield, N. J., assignor to Flexitallic Gasket Co., Camden, N. J., a Corporation of New Jersey. Filed Apr. 12, 1930. Serial No. 443,699. 3 Claims. (Cl. 288—1.)



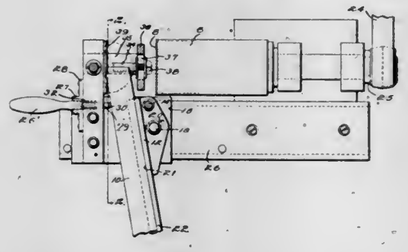
1. A gasket formed of strip metal spirally wound with non-metallic packing interposed between its convolutions, certain successive intermediate convolutions of the strip metal being fixedly secured together to form closed reinforcing bands amongst the convolutions of the gasket, thereby limiting radial expansion of the convolutions.

1,829,710. CARBURIZING AND ANNEALING FURNACE. ALAN D. DAUCH, Pittsburgh, Pa., and JOSEPH SANDBERG, Detroit, Mich., assignors to George J. Hagan Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 11, 1928. Serial No. 325,372. 4 Claims. (Cl. 263—28.)



1. A furnace structure comprising in combination a plurality of passages divided into heating, preheating and cooling chambers, means for conducting materials in rows moving in alternately opposed directions through said passages, means for providing heat zones of different temperatures in the several heating chambers with the highest temperature zone at the end of the heating chamber which the material enters in passing through the furnace, and electrically controlled means for automatically maintaining the temperatures of the respective zones at predetermined limits.

1,829,711. MACHINE FOR FORMING HEEL BLOCKS. NICHOLAS L. GULLIFORD, Peabody, Mass.; Archibald T. Gulliford, administrator of said Nicholas L. Gulliford, deceased, assignor to Gulliford Wood Heel Company, a Firm composed of Archibald T. Gulliford, and Pearce H. Gulliford, Lynn, Mass. Filed Mar. 15, 1927. Serial No. 175,526. 2 Claims. (Cl. 143—85.)



1. A machine for making heel blocks comprising, in combination, a horizontally disposed cylindrical saw, a work carrier, means to create relative movement between said work carrier and said saw in a direction axially of said saw, means for guiding the work across the cutting edge of said saw, work clamping means and guard means independent of said work clamping means for preventing the hurling of the severed end of the work by said saw.

1,829,712. PROCESS FOR PURIFYING DIELECTRIC LIQUIDS. LEE HINCHMAN CLARK, Rosemont, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 5, 1925. Serial No. 13,373. 9 Claims. (Cl. 196—16.)

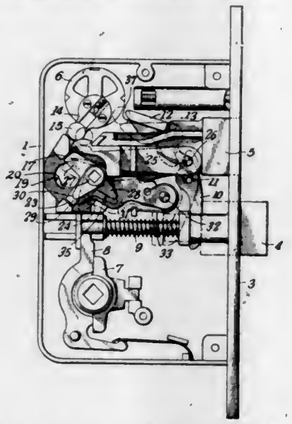
9. The process for preparing for use as a dielectric, oil contaminated by suspended finely-divided solid particles and with soluble products tending to promote emulsification, comprising adding to the oil in divided form a carbon-adherent solid having an electric charge opposite to that of the suspended solid particles in the oil, removing from the oil the added solid and adhering solid particles, then adsorbing from the oil in adsorptive earth the soluble emulsion-promoting impurities.

1,829,713. LOCK. NORMAN B. HURD, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 13, 1929. Serial No. 354,723. 11 Claims. (Cl. 70—92.)

1. In a lock, a latch-bolt, a dead-bolt, a combined dead-bolt operating and blocking roll-back, manually operable means to turn said roll-back from the inside of a door to which the lock is applied and key operable means to turn said roll-back from the outside of such a door, stop shoulders on the dead bolt and blocking means on opposite sides of the hub of said roll-back for endwise cooperation with said stop shoulders for the purpose described.

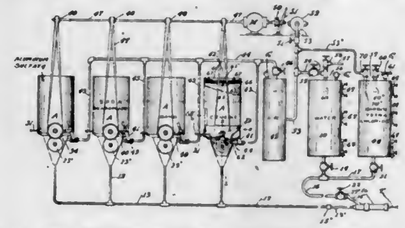
11. In a lock, a reciprocable dead-bolt, a roll-back for manually advancing and retracting the same and for blocking the same in its advanced and its retracted position, a key operable means for releasing said roll-back from its blocking positions and for reciprocating said dead-bolt, connecting means between said dead-bolt and roll-back for rotating the latter from one blocking position to the

other blocking position, and a spring latch bolt, said key operable means including a roll back operable by one key



to operate said latch bolt, and also including a shiftable roll back head operable by a different key to reciprocate said dead bolt and to also operate said latch bolt.

1,829,714. ART OF FIRE FIGHTING AND FIRE PROTECTION. ROBERT L. MCELROY, Daytona, Fla., and JOHN E. SHEPHERD, Charlottesville, Va., assignors to McElroy, Shepherd & Company, Dover, Del., a Corporation of Delaware. Filed May 26, 1921, Serial No. 472,804. Renewed Feb. 14, 1931. 40 Claims. (Cl. 169—15.)



1. A fire fighting method comprising forming a fire-killing-gas-emitting pourable plastic mass, by introducing undissolved gas-producing reagents and a retarding material into jetted water, said mass being capable of emitting sufficient gas for fire fighting, and then pouring said plastic mass at the fire zone while the mass is still emitting gas and forming a fire-fighting blanket therewith.

9. The method of producing and delivering foam, which consists in flowing water from a source of supply toward the point of discharge of the foam, simultaneously introducing into the flowing water, in advance of the point of discharge, a foam-stabilizer and acid and basic gas-generating reagents in solid form, and in quantities requisite to produce a mixture of foam and undissolved particles of said reagents, so that foam is formed when some of each reagent has been dissolved in water and has reacted with the other, and transmitting the resulting mixture through a suitable distance simultaneously to effect the transfer of the foam to a remote point and the dissolving and reaction in transit of undissolved particles.

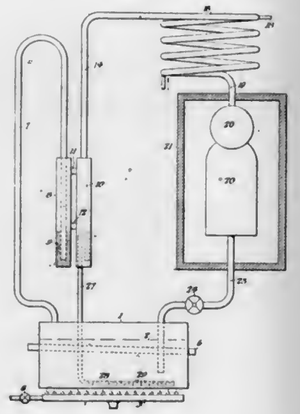
10. The method of extinguishing fire which consists in separately feeding towards a flowing water supply, a plurality of granular substances of different chemical content, from external sources and separately inert, and delivering them into the flowing water, at substantially the same locus, said substances being maintained inert until contact is had with said water, and forming when combined therewith a suitable foam, and blanketing a fire with the foam.

16. In a method of fighting fire, the steps which consist in bringing into contact with substantially enclosed moving water acting under pressure a plurality of substances coacting with said water to form a fire-extinguishing gas and means retarding liberation of said gas from the resultant mix, said gas-forming substances being delivered simultaneously from separate sources of supply through constricted passages communicating with said water and combining said water and substances to form a lather-like coating of constant foam, of tenuous, tenacious adhering quality, containing carbon dioxide gas.

1,829,715. PROCESS OF PRODUCING FOAM FROM FOAM GENERATING SUBSTANCES. RUDOLF SCHNABEL, Berlin, Germany, assignor, by mesne assignments, to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed Apr. 23, 1927, Serial No. 186,165, and in Germany Sept. 30, 1925. 4 Claims. (Cl. 23—1.)

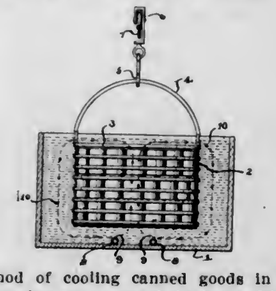
4. The process of producing foam from foam generating substances which consists in passing the foam generating substances including a foam generating liquid together with a gas under pressure through a turbine the rotor of which is driven by one of the substances flowing in under pressure.

1,829,716. REFRIGERATOR. ARCHIE HUGH STRONG, Norristown, Pa., assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa., a Corporation of New York. Filed June 11, 1929. Serial No. 370,116. 7 Claims. (Cl. 62—118.)



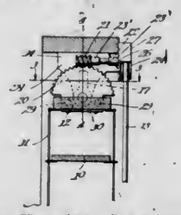
1. In a refrigerator of the absorption type; the combination with a generator, a condenser and an evaporator; of means adapted to alternately heat and cool said generator; conduit means connecting said generator with said evaporator, thru said condenser; a rectifier in said conduit, between said generator and said condenser, and including two chambers, separated at their lower portions, but communicating at their upper portions; a liquid seal in the rectifier chamber next to said generator, adapted to permit the flow of refrigerant gas from that chamber to the other rectifier chamber, but to prevent back flow of the refrigerant past said seal; a conduit adapted to discharge liquid from the bottom of said other chamber, and extending from the bottom of the second rectifier chamber, into said generator, beneath the residual liquid in said generator, and having a plurality of perforations adapted to segregate in bubbles in that liquid, the refrigerant gas returned to said generator from said evaporator, thru said second chamber.

1,829,717. METHOD OF COOLING CANNED GOODS AND APPARATUS USED IN SUCH METHOD. WALTER F. WEGNER, East Williamson, N. Y., assignor to Fruit Belt Preserving Company, East Williamson, N. Y., a Corporation of New York. Filed Dec. 10, 1927. Serial No. 239,249. 4 Claims. (Cl. 62—104.)



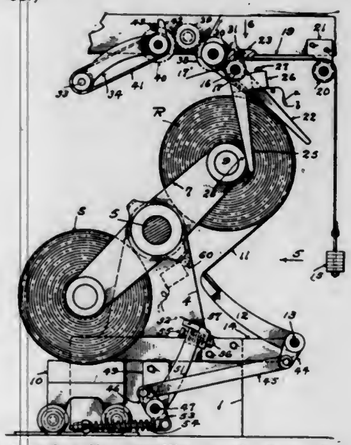
1. A method of cooling canned goods in bulk which consists of moving an openwork basket bodily through a body of cold liquid with the cans submerged in such liquid, and creating a current upwardly between the cans from the bottom of the receptacle.

1,829,718. VENETIAN BLIND BRACKET. EDWIN ANDERSON, Los Angeles, Calif. Filed July 26, 1930. Serial No. 470,973. 13 Claims. (Cl. 156—17.)



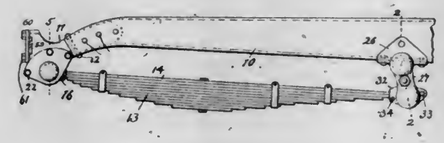
4. A bracket for Venetian blinds comprising a bracket plate, a rotatable member mounted on said plate, and an attaching member securable to the header of said blind and having a pair of spaced projections removably insertable in openings in said rotatable member and means for actuating said rotatable member.

1,829,719. WEB ROLL CHANGER. ALBERT J. HORTON, White Plains, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed July 16, 1927. Serial No. 206,209. 14 Claims. (Cl. 242—58.)



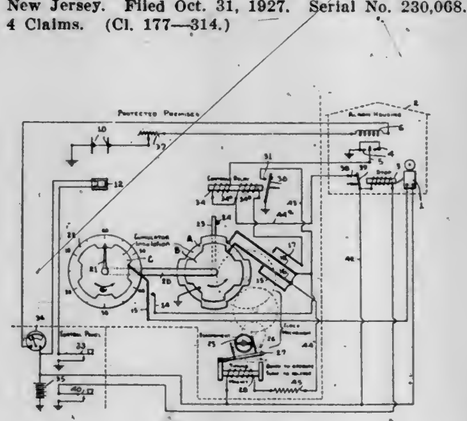
1. In a web roll controlling mechanism, the combination of a rotary support capacitated to carry a running web roll and a spare web roll, friction means engaging the surface of the running web roll to control it while unwinding, and means controlled by the running roll for automatically rotating the support to bring the spare web roll from loading position to pasting position, running position and again to loading position.

1,829,720. PIVOTAL CONNECTION. HOWARD C. HARRIS, Akron, Ohio. Filed Apr. 6, 1927. Serial No. 181,349. 11 Claims. (Cl. 267—54.)



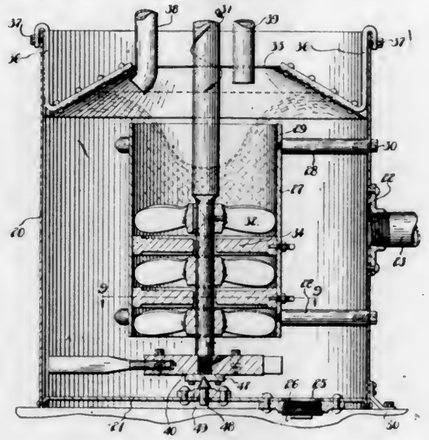
1. In vehicles, the combination of a frame, a bracket on said frame, a multiple-leaf spring having an eye at one end, a member on said spring and secured against movement relative thereto by means including a bolt passing through said eye, and means connecting said member with said bracket, having a pivotal connection with said member, the axis of which is located inwardly along said spring from said eye.

1,829,721. ALARM SYSTEM AND CUMULATIVE CONTROL DEVICE THEREFOR. RICHARD M. HOPKINS, Rutherford, N. J., assignor to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 31, 1927. Serial No. 230,068. 4 Claims. (Cl. 177—314.)



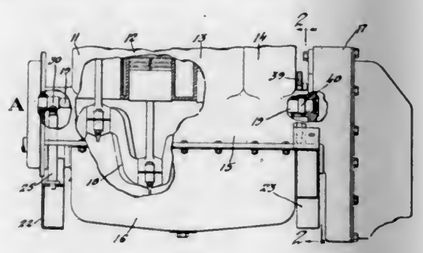
1. In an alarm system, a microphonic device responsive to sound or mechanical disturbances, an electrically actuated alarm means, a cumulative timing mechanism having a rotary member provided with alternate cam projections and recesses, a normally open alarm circuit having contact elements positioned to be closed by said cam projections and to be opened while traversing said recesses, motor means controlled by said device and operating to move said rotary member a fraction of the length of a recess after each operation of the device, thereby closing the alarm circuit after a predetermined number of either continuous or intermittent vibrtions of said device, and means causing the motor to operate continuously while the contacts engage a cam projection and until the contacts are disengaged therefrom.

1,829,722. PROCESS OF MAKING AQUEOUS BITUMINOUS EMULSIONS. LESTER KIRSCHBRAUN, Leonia, and FREDERICK C. OVERBURY, Hillsdale, N. J; said Overbury assignor of his entire right to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 8, 1919, Serial No. 343,392. Renewed Aug. 25, 1923. 46 Claims. (Cl. 134—1.)



1. The herein described process, which consists in circulating an emulsified body of bitumen, colloid and water through a confined space, feeding into said space streams of an aqueous colloidal suspension and a bitumen, and rapidly agitating the mass in said confined space.

1,829,723. ENGINE MOUNTING. CALEB E. SUMMERS and ROGER KENNETH LEE, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 26, 1925. Serial No. 77,885. 17 Claims. (Cl. 123—192.)



1. A mounting for bodies subject to vibrations, comprising the combination of a base means for supporting the body from the base and means for moving said supporting means in synchronism with the said vibrations and in a direction to such extent as to permit the body to vibrate without transmission of the energy of such vibrations through the supporting means to the base.

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